

**FCC Test Report** 

Equipment : 2x2 802.11a/b/g/n +BT Module(SiP)

Brand Name : Qualcomm Atheros

Model No. : QCA6234

FCC ID : PPD-QCA6234

Standard : 47 CFR FCC Part 15.407

Operating Band : 5150 MHz – 5250 MHz

5250 MHz - 5350 MHz 5470 MHz - 5725 MHz

FCC Classification: NII

Applicant : Dell Inc.

Manufacturer One Dell Way, Round Rock, Texas 78682, USA

The product sample received on Sep. 04, 2013 and completely tested on Sep. 13, 2013. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2009 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:

Wayne Hsu / Assistant Manager

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Report Version : Rev. 01

SPORTON INTERNATIONAL INC.



# FCC Test Report

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# **Summary of Test Result**

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	Conformance Test Specifications							
Report Clause	Ref. Std. Clause	Description	Measured	Limit	Result			
1.1.1	15.203	Antenna Requirement	Antenna connector mechanism complied	FCC 15.203	Complied			
3.1	15.407(a)	RF Output Power (Maximum Conducted (Average) Output Power)	Power [dBm] 5150-5250MHz:13.14 5250-5350MHz:13.00 5470-5725MHz:13.31	Power [dBm] 5150-5250MHz:17 5250-5350MHz:24 5470-5725MHz:24	Complied			
3.2	15.407(b)	Transmitter Bandedge Emissions	Restricted Bands [dBuV/m at 1m]: 5147.90MHz 69.45 (Margin 14.09dB) - PK 56.36 (Margin 7.18dB) - AV	Non-Restricted Bands: ≤ -27dBm (77.84dBuV/m@1m) Restricted Bands: FCC 15.209	Complied			
3.3	15.407(b)	Transmitter Radiated Unwanted Emissions	Restricted Bands [dBuV/m at 1m]: 6906.00MHz 62.93 (Margin 20.61dB) – PK 61.01 (Margin 2.53dB) – AV	Non-Restricted Bands: ≤ -27dBm (68.3dBuV/m@3m) Restricted Bands: FCC 15.209	Complied			

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# **Revision History**

Report No.: FR381242AN

Report No.	Version	Description	Issued Date
FR381242AN	Rev. 01	Initial issue of report	Sep. 17, 2013

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# 1 General Description

### 1.1 Information

### 1.1.1 RF General Information

RF General Information					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N <sub>TX</sub> )	RF Output Power (dBm)
5150-5250	а	5180-5240	36-48 [4]	2	12.85
5250-5350		5260-5320	52-64 [4]	2	12.91
5470-5725		5500-5720	100-144 [9]	2	13.28
5150-5250	n (HT20)	5180-5240	36-48 [4]	2	13.14
5250-5350		5260-5320	52-64 [4]	2	13.00
5470-5725		5500-5720	100-144 [9]	2	12.99
5150-5250	n (HT40)	5190-5230	38-46 [2]	2	11.86
5250-5350		5270-5310	54-62 [2]	2	12.72
5470-5725		5510-5710	102-142 [4]	2	13.31

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Note 1: RF output power specifies that Maximum Conducted (Average) Output Power. Note 2: 802.11a/n uses a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.

### 1.1.2 Antenna Information

	Antenna Category
$\boxtimes$	Integral antenna (antenna permanently attached)
	□ Temporary RF connector provided
	No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path.

	Antenna General Information					
No.	Ant. Cat.	Ant. Type	Gain (dBi)			
1	Integral	PIFA	1.07			
2	Integral	PIFA	-0.25			

# 1.1.3 EUT Operational Condition

Supply Voltage		□ DC	
Type of DC Source	☐ Internal DC supply		

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# 1.2 Support Equipment

	Support Equipment- Radiated Emission Test						
No.	Equipment	Brand Name	Model Name				
1	Notebook	DELL	E5520				
2	AC Adaptor (For Tablet PC use)	DVE	HA24NM130				
3	Tablet PC (Built in Qualcomm Atheros module)	DELL	T06G/T06G001 ("." Can be 0-9, A-Z or blank)				

# 1.3 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2009
- FCC KDB 789033
- FCC KDB 644545 D01
- FCC KDB 662911
- FCC KDB 412172

# 1.4 Testing Location Information

	Testing Location							
	HWA YA	ADD	:		lo. 52, Hwa Ya 1 <sup>st</sup> Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, ao Yuan Hsien, Taiwan, R.O.C.			
		TEL	:	86-3-327-3456 FAX : 886-3-327-0973				
Test Condition				Test Site No.	Test Engineer	Test Environment		
Radiated Emission				03CH03-HY	Eddie	23.7°C / 54.5%		

# 1.5 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Measurement Uncertainty					
Test It	Test Item				
All emissions, radiated	30 – 1000 MHz	±2.56 dB	N/A		
	1 – 18 GHz	±3.59 dB	N/A		
	18 – 40 GHz	±3.82 dB	N/A		
	40 – 200 GHz	N/A	N/A		
Duty Cycle	·	±1.42 %	N/A		

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2 Test Configuration of EUT

# 2.1 The Worst Case Measurement Configuration

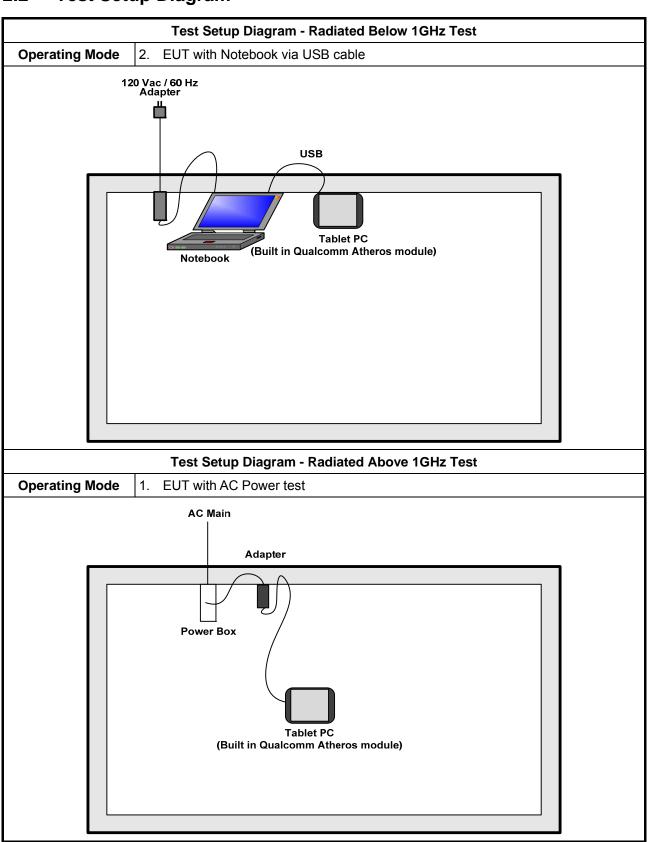
Th	The Worst Case Mode for Following Conformance Tests				
Tests Item	1	nsmitter Radiated Unwansmitter Radiated Band			
Test Condition	Rac	liated measurement			
		EUT will be placed in	fixed position.		
User Position		EUT will be placed in mobile position and operating multiple positi shall be performed two orthogonal planes. The worst planes is X.			
	EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions. EUT shall be performed two or three orthogonal planes.				
Operating Mode < 1GHz	□ 1. EUT with AC Power test				
	$\boxtimes$	☑ 2. EUT with Notebook via USB cable			
	For operating mode 2 is the worst case and it was record in this test report.				
Operating Mode > 1GHz	$\boxtimes$	1. EUT with AC Pow	er test		
Modulation Mode	11a, HT20, HT40				
		X Plane	Y Plane	Z Plane	
Orthogonal Planes of EUT					

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2.2 Test Setup Diagram



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# 3 Transmitter Test Result

# 3.1 RF Output Power

# 3.1.1 RF Output Power Limit

	Maximum Conducted Output Power Limit
UNI	I Devices
	For the 5.15-5.25 GHz band, the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 50 mW or 4 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX}$ > 6 dBi, then $P_{Out}$ = 17 – ( $G_{TX}$ – 6).
$\boxtimes$	For the 5.25-5.35 GHz band, the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX}$ > 6 dBi, then $P_{Out}$ = 24 – ( $G_{TX}$ – 6).
$\boxtimes$	For the 5.47-5.725 GHz band, the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX}$ > 6 dBi, then $P_{Out}$ = 24 – ( $G_{TX}$ – 6).
	For the 5.725-5.825 GHz band:
	Point-to-multipoint systems (P2M): the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 1 W or 17 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 30 - (G_{TX} - 6)$ .
	Point-to-point systems (P2P): the maximum conducted output power ( $P_{Out}$ ) shall not exceed the lesser of 1 W or 17 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 23$ dBi, then $P_{Out} = 30 - (G_{TX} - 23)$ .
LĖ-	LAN Devices
$\boxtimes$	For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the $99\%$ emission bandwidth in MHz.
	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log B$ , dBm, whichever power is less. B is the 99% emission bandwidth in MHz
	For the 5.725-5.825 GHz band, the maximum e.i.r.p. shall not exceed 4.0 W or 23 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
	Point-to-multipoint systems (P2M): the maximum e.i.r.p. shall not exceed 4.0 W or 23 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
	Point-to-point systems (P2P): the maximum e.i.r.p. shall not exceed 4.0 W or 23 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. If e.i.r.p. > 36 dBm, $G_{TX} \le P_{Out}$
	= maximum conducted output power in dBm, = the maximum transmitting antenna directional gain in dBi.

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# 3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

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# 3.1.3 Test Procedures

		Test Method
$\boxtimes$	Max	imum Conducted Output Power
	[duty	/ cycle ≥ 98% or external video / power trigger]
	$\boxtimes$	Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).
		Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
	duty	cycle < 98% and average over on/off periods with duty factor
		Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
		Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wide	eband RF power meter and average over on/off periods with duty factor
		Refer as FCC KDB 789033, clause E Method PM (using an RF average power meter).
$\boxtimes$	For	conducted measurement.
	$\boxtimes$	The EUT supports single transmit chain and measurements performed on this transmit chain.
		The EUT supports diversity transmitting and the results on transmit chain port 1is the worst case.
		The EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
		If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) EIRP <sub>total</sub> = $P_{total} + DG$

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# 3.1.4 Test Setup

RF Output Power (Spectrum Analyzer)					
Spectrum Analyzer	EUT				

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### 3.1.5 Directional Gain for Power Measurement

	Directional Gain (DG) Result							
Transmit Chains No.	1	2	-	-				
Maximum G <sub>ANT</sub> (dBi)	1.07	-0.25	-	-				
Modulation Mode	N <sub>TX</sub>	N <sub>SS</sub> (Min.)	Array Gain (dB)	Power DG (dBi) Note <sup>3</sup>				
11a,6-54Mbps	2	2	-	0.46				
HT20,M8-M15	2	2	0	0.46				
HT40, M8-M15	2	2	0	0.46				

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- Note 1: For all transmitter outputs with equal antenna gains, directional gain is to be computed as follows:

  Any transmit signals are correlated, Directional Gain =  $G_{ANT}$  + 10 log( $N_{TX}$ )

  All transmit signals are completely uncorrelated, Directional Gain =  $G_{ANT}$
- Note 2: For all transmitter outputs with unequal antenna gains, directional gain is to be computed as follows: Any transmit signals are correlated, Directional Gain =10 log[ $(10^{G1/20} + ... + 10^{GN/20})^2 /N_{TX}$ ] All transmit signals are completely uncorrelated, Directional Gain = 10 log[ $(10^{G1/10} + ... + 10^{GN/10})/N_{TX}$ ]
- Note 3: For Spatial Multiplexing, Directional Gain (DG) =  $G_{ANT}$  + 10 log( $N_{TX}/N_{SS}$ ), where Nss = the number of independent spatial streams data.
- Note 4: For CDD transmissions, directional gain is calculated as power measurements: Directional Gain (DG) =  $G_{ANT}$  + Array Gain, where Array Gain is as follows: Array Gain = 0 dB (i.e., no array gain) for  $N_{TX} \le 4$ ; Array Gain = 0 dB (i.e., no array gain) for channel widths  $\ge 40$  MHz for any  $N_{TX}$ ;

### 3.1.6 Test Result of Maximum Conducted Output Power

			Maximum Co	onducted Outp	ut Power Resu	lt				
Condi	tion			RF Output Power (dBm)						
Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power		
11a	2	5180	9.55	10.12	12.85	17.00	0.46	13.31		
11a	2	5200	9.70	9.82	12.77	17.00	0.46	13.23		
11a	2	5240	9.76	9.51	12.65	17.00	0.46	13.11		
HT20	2	5180	9.80	10.30	13.07	17.00	0.46	13.53		
HT20	2	5200	9.95	10.30	13.14	17.00	0.46	13.60		
HT20	2	5240	9.91	9.90	12.92	17.00	0.46	13.38		
HT40	2	5190	3.97	6.28	8.29	17.00	0.46	8.75		
HT40	2	5230	7.91	9.63	11.86	17.00	0.46	12.32		
Resu	ılt			Complied						

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	Maximum Conducted Output Power Result										
Condit	ion		RF Output Power (dBm)								
Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power			
11a	2	5260	9.92	9.05	12.52	24.00	0.46	12.98			
11a	2	5300	10.26	9.51	12.91	24.00	0.46	13.37			
11a	2	5320	9.97	9.46	12.73	24.00	0.46	13.19			
HT20	2	5260	10.50	9.40	13.00	24.00	0.46	13.45			
HT20	2	5300	10.31	9.62	12.99	24.00	0.46	13.45			
HT20	2	5320	9.94	9.88	12.92	24.00	0.46	13.38			
HT40	2	5270	9.47	9.93	12.72	24.00	0.46	13.18			
HT40	2	5310	5.29	6.42	8.90	24.00	0.46	9.36			
Resu	ılt				Com	plied					

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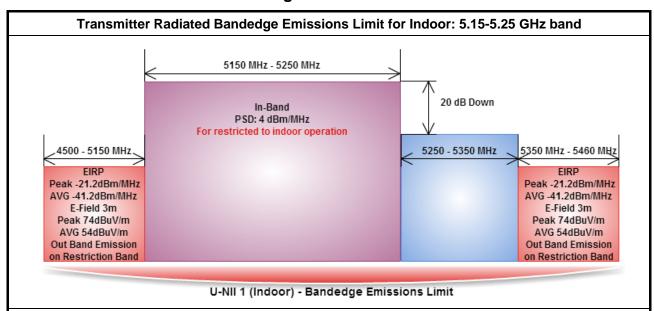
			Maximum Co	nducted Outp	ut Power Resu	lt				
Condit	ion		RF Output Power (dBm)							
Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Chain Port 1	Chain Port 2	Sum Chain	Power Limit	DG (dBi)	EIRP Power		
11a	2	5500	9.80	9.63	12.73	24.00	0.46	13.19		
11a	2	5580	10.11	10.42	13.28	24.00	0.46	13.74		
11a	2	5700	10.34	9.69	13.04	24.00	0.46	13.50		
11a	2	5720	10.22	10.16	13.20	24.00	0.46	13.66		
HT20	2	5500	9.85	9.97	12.92	24.00	0.46	13.38		
HT20	2	5580	9.12	9.89	12.53	24.00	0.46	12.99		
HT20	2	5700	10.39	8.48	12.55	24.00	0.46	13.01		
HT20	2	5720	10.10	9.85	12.99	24.00	0.46	13.45		
HT40	2	5510	6.61	8.55	10.70	24.00	0.46	11.16		
HT40	2	5550	9.49	10.99	13.31	24.00	0.46	13.77		
HT40	2	5670	9.32	9.78	12.57	24.00	0.46	13.03		
HT40	2	5710	9.46	9.15	12.32	24.00	0.46	12.78		
Resu	ilt				Com	plied				

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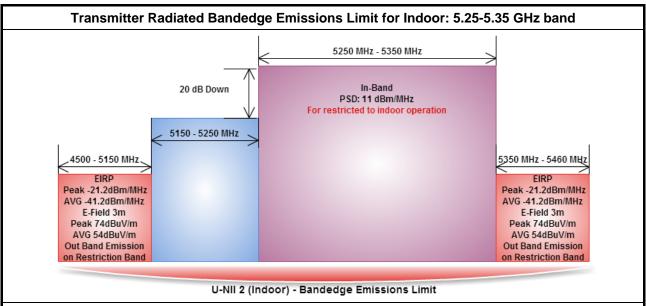
3.2 Transmitter Radiated Bandedge Emissions

### 3.2.1 Transmitter Radiated Bandedge Emissions Limit



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Refer as FCC KDB 789033, G)2)c)(i) specifying that if a non-restricted-band out-of-band emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm or -17 dBm peak emission limit. Reason for change: to ensure that emission requirements in the non-restricted bands are not more stringent than those in the restricted bands.



Refer as FCC KDB 789033, G)2)c)(i) specifying that if a non-restricted-band out-of-band emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm or -17 dBm peak emission limit. Reason for change: to ensure that emission requirements in the non-restricted bands are not more stringent than those in the restricted bands.

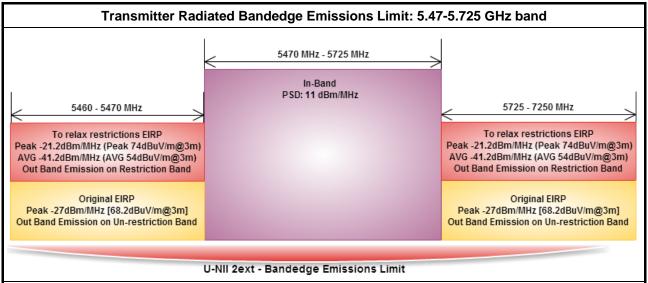
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Transmitter Radiated Bandedge Emissions Limit for indoor/outdoor: 5.25-5.35 GHz band 5250 MHz - 5350 MHz In-Band 4500 - 5150 MHz 5150 MHz - 5250 MHz PSD: 11 dBm/MHz 5350 MHz - 5460 MHz For not restricted to indoor operation To relax restrictions EIRP Peak -21.2dBm/MHz FIRP (Peak 74dBuV/m@3m) FIRP Peak -21.2dBm/MHz Peak -21.2dBm/MHz AVG -41.2dBm/MHz AVG -41.2dBm/MHz AVG -41.2dBm/MHz (AVG 54dBuV/m@3m) F-Field 3m E-Field 3m Out Band Emission on Peak 74dBuV/m Peak 74dBuV/m Restriction Band AVG 54dBuV/m AVG 54dBuV/m EIRP Out Band Emission Out Band Emission Peak -27dBm/MHz on Restriction Band on Restriction Band [68.2dBuV/m@3m] Out Band Emission on Un-restriction Band U-NII 2 - Bandedge Emissions Limit

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Refer as FCC KDB 789033, G)2)c)(i) specifying that if a non-restricted-band out-of-band emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm or -17 dBm peak emission limit. Reason for change: to ensure that emission requirements in the non-restricted bands are not more stringent than those in the restricted bands.



Refer as FCC KDB 789033, G)2)c)(i) specifying that if a non-restricted-band out-of-band emission satisfies both the average and peak limits of 15.209, it is not required to satisfy the -27 dBm or -17 dBm peak emission limit. Reason for change: to ensure that emission requirements in the non-restricted bands are not more stringent than those in the restricted bands.

### 3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

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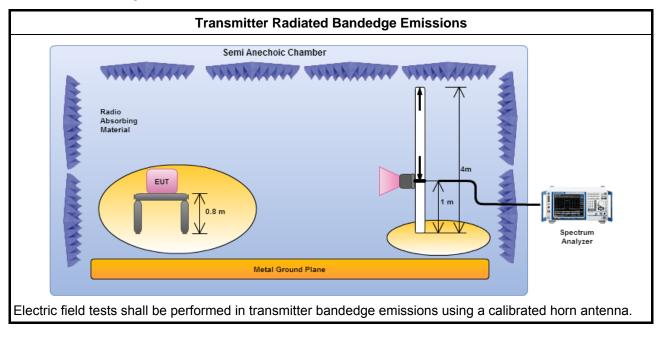
# 3.2.3 Test Procedures

		Test Method
	perfo equi extra dista mea	issurements may be performed at a distance other than the limit distance provided they are not ormed in the near field and the emissions to be measured can be detected by the measurement pment. When performing measurements at a distance other than that specified, the results shall be applicated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear ance for field-strength measurements, inverse of linear distance-squared for power-density issurements). Measurements in the bandedge are typically made at a closer distance 1m, because instrumentation noise floor is typically close to the radiated emission limit.
$\boxtimes$	The	average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].
		er as ANSI C63.10, clause 6.9.2.2 bandedge testing shall be performed at the lowest frequency nnel and highest frequency channel within the allowed operating band.
	char will o at lo	UT operate in adjacent contiguous bands, bandedge testing performed at the lowest frequency much at lower-band and highest frequency channel at higher-band. Transmitter in-band emissions consist of adjacent contiguous bands (e.g., IEEE 802.11ac VHT160 The lowest frequency channel ower-band and highest frequency channel at higher-band in-band emissions will consist of two cent contiguous bands.)
		Operating in 5.15-5.25 GHz band (lower-band) and 5.25-5.35 GHz band (higher-band).
		Operating in 5.47-5.725 GHz band (lower-band) and 5.725-5.825 GHz band (higher-band).
	char	JT operate in individual non-contiguous bands, bandedge testing performed at the lowest frequency nnel and highest frequency channel within lower-band and higher-band. (e.g., (e.g., IEEE 802.11ac 160)
		Operating in 5.25-5.35 GHz band (lower-band) and 5.47-5.725 GHz band (higher-band).
		Operating in 5.15-5.25 GHz band (lower-band) and 5.725-5.825 GHz band (higher-band).
$\boxtimes$	For	the transmitter unwanted emissions shall be measured using following options below:
	$\boxtimes$	Refer as FCC KDB 789033, clause H)2) for unwanted emissions into non-restricted bands.
	$\boxtimes$	Refer as FCC KDB 789033, clause H)1) for unwanted emissions into restricted bands.
		Refer as FCC KDB 789033, H)6) Method AD (Trace Averaging).
		Refer as FCC KDB 789033, H)6) Method VB (Reduced VBW).
		Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
		Refer as FCC KDB 789033, clause H)5) measurement procedure peak limit.
		Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.
$\boxtimes$	For	the transmitter bandedge emissions shall be measured using following options below:
		Refer as FCC KDB 789033, clause H)3)d) for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).
	$\boxtimes$	Refer as ANSI C63.10, clause 6.9.2 for band-edge testing.
		Refer as ANSI C63.10, clause 6.9.3 for marker-delta method for band-edge measurements.
$\boxtimes$	For	radiated measurement, refer as ANSI C63.10, clause 6.5 for radiated emissions from above 1 GHz.

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### **Test Setup** 3.2.4



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# 3.2.5 Transmitter Radiated Bandedge Emissions (with Antenna)

Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Freq. (MHz) AV	Level (dBuV/m) AV	Limit (dBuV/m) AV	Pol.
11a	2	5180	1	5142.60	69.95	83.54	5121.90	55.32	63.54	V
11a	2	5240	1	5117.40	68.44	83.54	5147.40	55.81	63.54	V
HT20, M8-15	2	5180	1	5139.40	69.45	83.54	5147.90	56.36	63.54	V
HT20, M8-15	2	5240	1	5118.90	68.11	83.54	5147.70	56.11	63.54	V
HT40, M8-15	2	5190	1	5148.73	69.44	83.54	5147.85	55.66	63.54	V
HT40, M8-15	2	5230	1	5147.40	68.14	83.54	5147.40	56.05	63.54	V

Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Freq. (MHz) AV	Level (dBuV/m) AV	Limit (dBuV/m) AV	Pol.
11a	2	5260	1	5364.90	68.06	83.54	5356.20	55.39	63.54	V
11a	2	5320	1	5372.30	68.78	83.54	5381.90	55.23	63.54	V
HT20, M8-15	2	5260	1	5394.90	67.86	83.54	5381.70	55.95	63.54	V
HT20, M8-15	2	5320	1	5381.80	68.98	83.54	5381.90	55.81	63.54	V
HT40, M8-15	2	5270	1	5382.90	68.16	83.54	5381.70	55.51	63.54	V
HT40, M8-15	2	5310	1	5379.46	68.95	83.54	5350.03	54.94	63.54	V

Modulation Mode	N <sub>TX</sub>	Freq. (MHz)	Measure Distance (m)	Freq. (MHz) PK	Level (dBuV/m) PK	Limit (dBuV/m) PK	Freq. (MHz) AV	Level (dBuV/m) AV	Limit (dBuV/m) AV	Pol.
11a	2	5500	1	5460.32	68.51	83.54	5460.00	55.38	63.54	V
11a	2	5700	1	5733.56	69.62	83.54	5725.00	56.06	63.54	V
11a	2	5720	1	5856.86	68.80	83.54	5853.26	55.50	63.54	V
HT20, M8-15	2	5500	1	5431.44	68.90	83.54	5433.76	55.89	63.54	V
HT20, M8-15	2	5700	1	5725.00	72.67	77.84	-	-	-	V
HT20, M8-15	2	5720	1	5857.58	69.27	83.54	5861.72	55.42	63.54	V
HT40, M8-15	2	5510	1	5469.90	68.94	83.54	5469.99	56.06	63.54	V
HT40, M8-15	2	5670	1	5737.00	69.60	77.84	-	-	-	V
HT40, M8-15	2	5720	1	5852.36	66.45	83.54	5853.26	53.41	63.54	V

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### 3.3 Transmitter Radiated Unwanted Emissions

### 3.3.1 Transmitter Radiated Unwanted Emissions Limit

Unwanted emiss	Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit								
Frequency Range (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)						
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300						
0.490~1.705	24000/F(kHz)	33.8 - 23	30						
1.705~30.0	30	29	30						
30~88	100	40	3						
88~216	150	43.5	3						
216~960	200	46	3						
Above 960	500	54	3						

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Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

	Un-restricted band emissions above 1GHz Limit							
Operating Band	Limit							
5.15 - 5.25 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]							
5.25 - 5.35 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]							
5.47 - 5.725 GHz	e.i.r.p27 dBm [68.2 dBuV/m@3m]							
5.725 - 5.825 GHz	5.715 5.725 GHz: e.i.r.p17 dBm [78.2 dBuV/m@3m] 5.825 5.835 GHz: e.i.r.p17 dBm [78.2 dBuV/m@3m] Other un-restricted band: e.i.r.p27 dBm [68.2 dBuV/m@3m]							

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

### 3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

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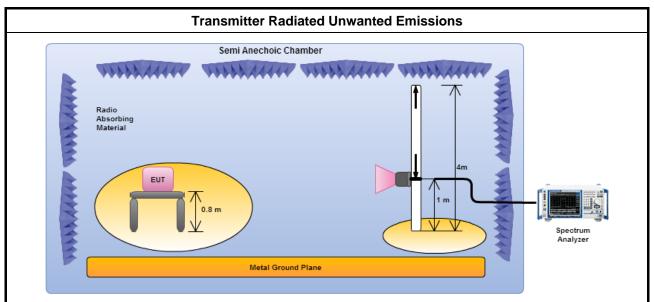
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# 3.3.3 Test Procedures

		Test Method											
	performance in the education of the educ	surements may be performed at a distance other than the limit distance provided they are not be ormed in the near field and the emissions to be measured can be detected by the measurement pment. Measurements shall not be performed at a distance greater than 30 m for frequencies we 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less impractical. When performing measurements at a distance other than that specified, the results shall extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance-squared for power-density surements).											
	$\boxtimes$	because the instrumentation noise floor is typically close to the radiated emission limit.											
		because the instrumentation noise floor is typically close to the radiated emission limit.											
	$\boxtimes$	distance 0.5m, because the instrumentation noise floor is typically close to the radiated emission limit.											
$\boxtimes$	The	average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].											
$\boxtimes$	For	the transmitter unwanted emissions shall be measured using following options below:											
	$\boxtimes$	Refer as FCC KDB 789033, clause H)2) for unwanted emissions into non-restricted bands.											
	$\boxtimes$	Refer as FCC KDB 789033, clause H)1) for unwanted emissions into restricted bands.											
		Refer as FCC KDB 789033, H)6) Method AD (Trace Averaging).											
		Refer as FCC KDB 789033, H)6) Method VB (Reduced VBW).											
		☐ Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.											
		Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.											
		Refer as FCC KDB 789033, clause H)5) measurement procedure peak limit.											
		Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.											
$\boxtimes$	For	radiated measurement.											
	$\boxtimes$	Refer as ANSI C63.10, clause 6.4 for radiated emissions from below 30 MHz.											
	$\boxtimes$	Refer as ANSI C63.10, clause 6.5 for radiated emissions from 30 MHz to 1000 MHz.											
	$\boxtimes$	Refer as ANSI C63.10, clause 6.6 for radiated emissions from above 1 GHz.											

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### 3.3.4 Test Setup



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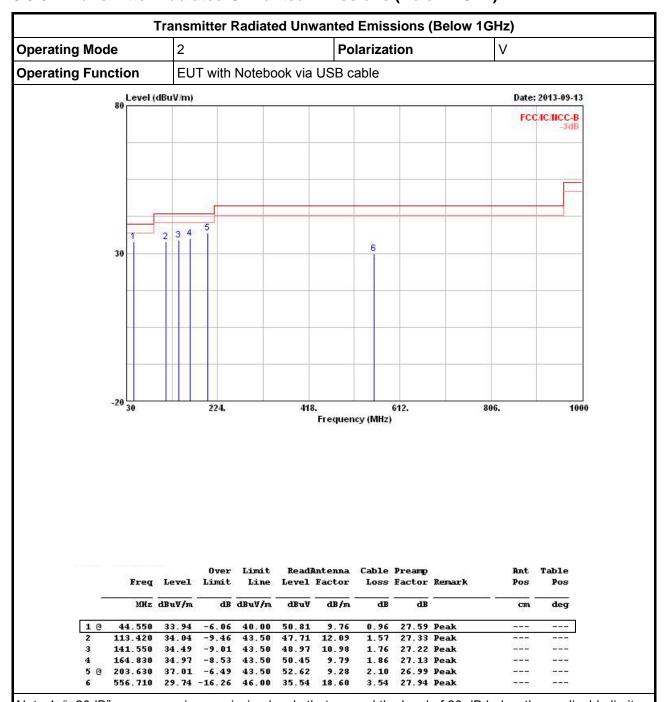
Magnetic field tests shall be performed in the frequency range of 9 kHz to 30 MHz using a calibrated loop antenna. Electric field tests shall be performed in the frequency range of 30 MHz to 1000 MHz using a calibrated bi-log antenna and the frequency range of 1 GHz to 40 GHz using a calibrated horn antenna.

### 3.3.5 Transmitter Radiated Unwanted Emissions (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

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### 3.3.6 Transmitter Radiated Unwanted Emissions (Below 1GHz)



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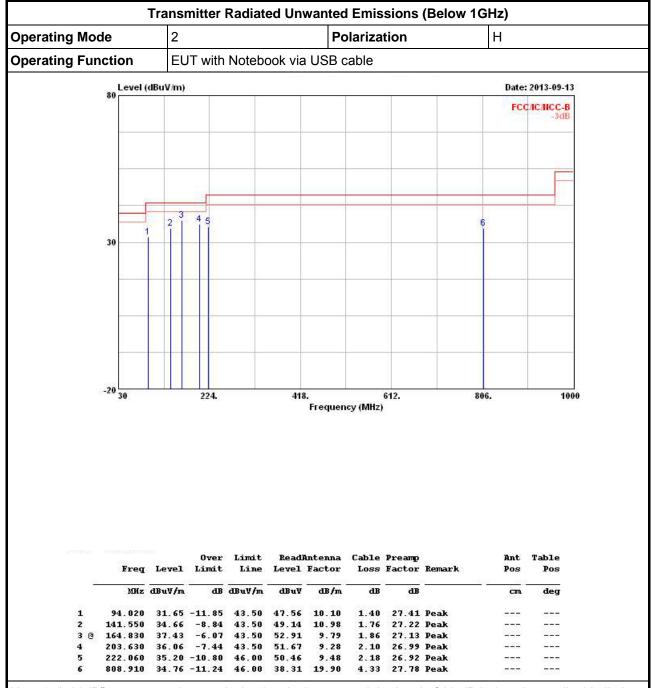
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

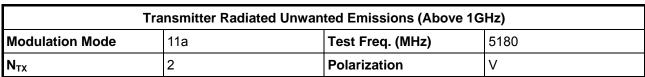
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

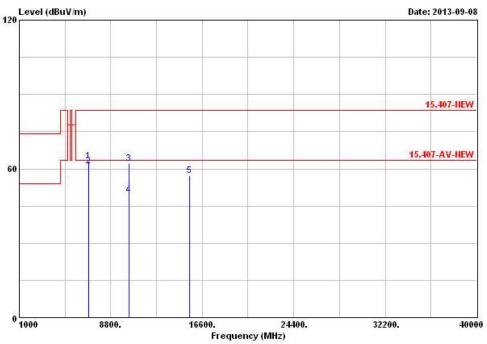
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

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### 3.3.7 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 5150-5250MHz

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		Level	Over Limit	14500		Antenna Factor		됐었는 없는 프라	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	<u>ав</u>	dB	~	cm	deg
1	6906.000	62.93	-20.61	83.54	54.71	36.35	4.43	32.56	Peak		1555
2	@ 6906.000	61.01	-2.53	63.54	52.79	36.35	4.43	32.56	Average	000000	1000
3	10360.000	62.11	-21.43	83.54	50.01	39.60	5.27	32.77	Peak	200	X20000
4	10366.000	49.56	-13.98	63.54	37.46	39.60	5.27	32.77	Average		
5	15540.000	57.10	-26.44	83.54	43.83	38.04	7.43	32.20	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

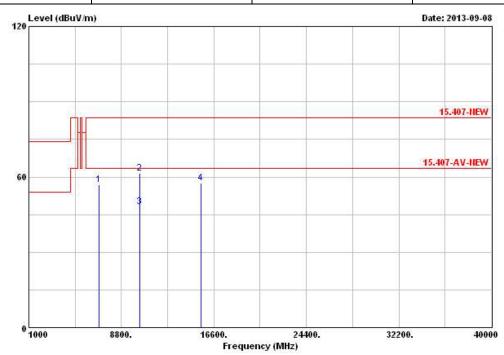
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	11a	Test Freq. (MHz)	5180							
N <sub>TX</sub>	2	Polarization	Н							



	Freq	Level	Over Limit	4550		Antenna Factor		PAGE 101 25		Ant Pos	Table Pos
		dBuV/m	<u>ав</u>	dBuV/m	dBuV	dB/m	dB	dB	·		deg
1	6906.000	56.86	-26.68	83.54	48.64	36.35	4.43	32.56	Peak		
2	10360.000	61.48	-22.06	83.54	49.38	39.60	5.27	32.77	Peak	-	
3	10360.000	48.19	-15.35	63.54	36.09	39.60	5.27	32.77	Average	1000	
4	15540.000	57.65	-25.89	83.54	44.38	38.04	7.43	32.20	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

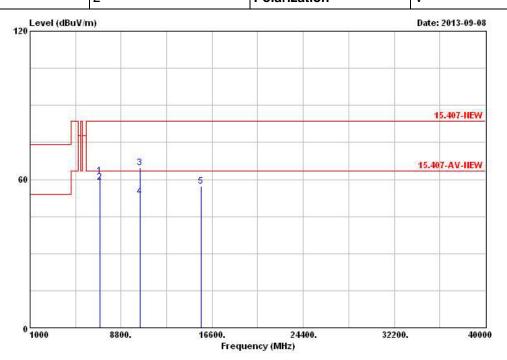
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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-	Fransmitter Radia	ated Unwanted Emissions (Above	1GHz)
Modulation Mode	11a	Test Freq. (MHz)	5200
N <sub>TV</sub>	2	Polarization	V



20000000	Freq	Level	Over Limit			Antenna Factor		했었는 병에 독자	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	· ·	cm	deg
1	6958.000	61.32	-22.22	83.54	53.01	36.48	4.40	32.57	Peak		1555
2 (	9 6958.000	58.84	-4.70	63.54	50.53	36.48	4.40	32.57	Average	10000	
3	10440.000	64.82	-18.72	83.54	52.68	39.60	5.25	32.71	Peak	1000	
4	10440.000	52.86	-10.68	63.54	40.72	39.60	5.25	32.71	Average		
5	15660.000	57.37	-26.17	83.54	44.24	37.82	7.54	32.23	Peak		1777

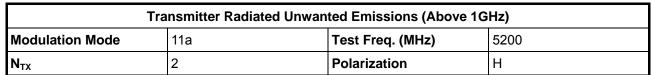
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

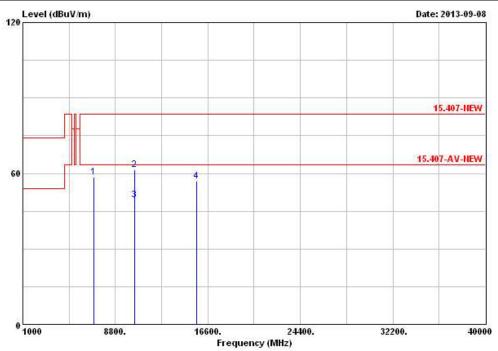
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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	3 <u>44</u> 2		0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	1	cm.	deg
1	6958.000	58.58	-24.96	83.54	50.27	36.48	4.40	32.57	Peak		1555
2	10440.000	61.56	-21.98	83.54	49.42	39.60	5.25	32.71	Peak	10.750	10000
3	10440.000	49.54	-14.00	63.54	37.40	39.60	5.25	32.71	Average	2.00	
4	15660.000	56.90	-26.64	83.54	43.77	37.82	7.54	32.23	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

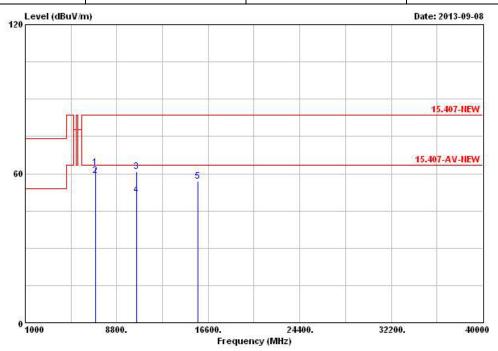
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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FCC Test Report

Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	11a	Test Freq. (MHz)	5240							
N <sub>TX</sub>	2	Polarization	V							

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			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB	7	car.	deg
1	6986.000	62.29	-21.25	83.54	53.91	36.56	4.40	32.58	Peak		1555
2	@ 6986.000	59.25	-4.29	63.54	50.87	36.56	4.40	32.58	Average		
3	10480.000	60.71	-22.83	83.54	48.55	39.60	5.23	32.67	Peak	1111	
4	10480.000	51.36	-12.18	63.54	39.20	39.60	5.23	32.67	Average		
5	15720.000	57.07	-26.47	83.54	44.04	37.70	7.58	32.25	Peak		15005

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

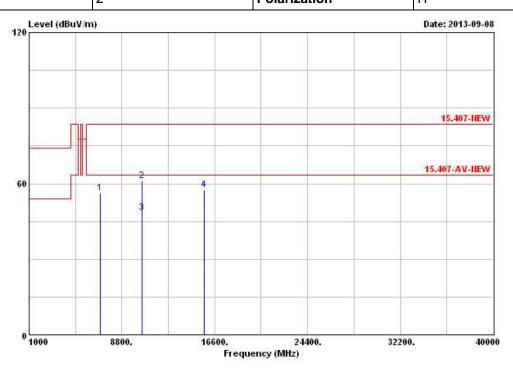
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5240

N<sub>TX</sub> 2 Polarization H

Report No.: FR381242AN



	34 <u>2</u> 24		0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	7 <u> </u>	cm.	deg
1	6986.000	56.21	-27.33	83.54	47.83	36.56	4.40	32.58	Peak		8555
2	10480.000	61.08	-22.46	83.54	48.92	39.60	5.23	32.67	Peak	0.0000	
3	10480.000	48.35	-15.19	63.54	36.19	39.60	5.23	32.67	Average	1000	
4	15720.000	57.64	-25.90	83.54	44.61	37.70	7.58	32.25	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

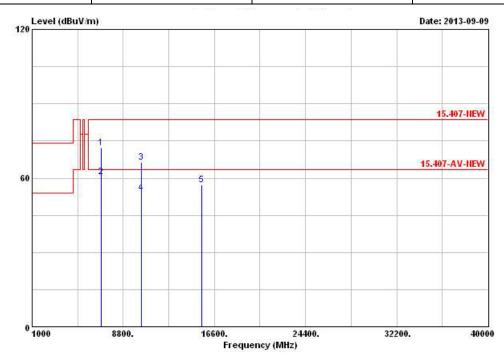
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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FCC Test Report

Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	HT20	Test Freq. (MHz)	5180							
N <sub>TX</sub>	2	Polarization	V							

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2000000	\$7	Freq		Level	Over Limit	14500		Antenna Factor				Ant Pos	Table Pos
			MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	- дв	dB	1	cm	deg
1	6	906.	000	72.32	-11.22	83.54	64.10	36.35	4.43	32.56	Peak		1555
2	@ 6	906.	000	60.33	-3.21	63.54	52.11	36.35	4.43	32.56	Average	1000	
3	10	360.	000	66.47	-17.07	83.54	54.37	39.60	5.27	32.77	Peak	1000	
4	10	360.	000	53.94	-9.60	63.54	41.84	39.60	5.27	32.77	Average		
5	15	540.	000	57.12	-26.42	83.54	43.85	38.04	7.43	32.20	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

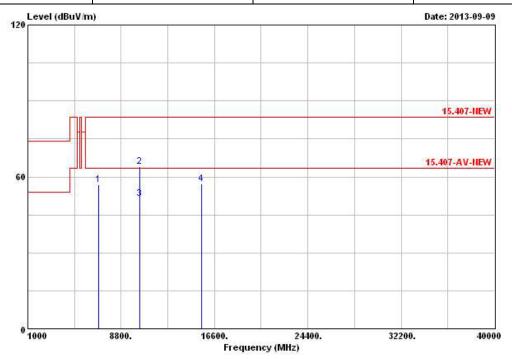
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	HT20	Test Freq. (MHz)	5180							
N <sub>TX</sub>	2	Polarization	Н							



			Over	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBu∀	dB/m	dB	dB	1	CIN.	deg
1	6906.000	56.92	-26.62	83.54	48.70	36.35	4.43	32.56	Peak		1777
2	10360.000	63.92	-19.62	83.54	51.82	39.60	5.27	32.77	Peak	10.000	0.000
3	10360.000	51.38	-12.16	63.54	39.28	39.60	5.27	32.77	Average	1000	
4	15540.000	57.35	-26.19	83.54	44.08	38.04	7.43	32.20	Peak	3449	

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

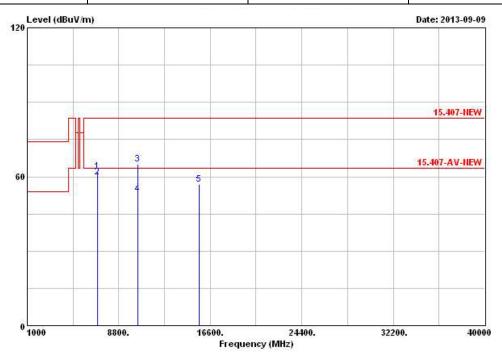
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)											
Modulation Mode	HT20	Test Freq. (MHz)	5200								
N <sub>TX</sub>	2	Polarization	V								



	Freg	Level	Over Limit	2.550		Antenna Factor			Remark	Ant Pos	Table Pos
	rreq	rever	шшс	TIME	rever	FACCUE	LUSS	Factor	Kenark	PUS	PUS
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	^	cm	deg
1	6960.000	61.96	-21.58	83.54	53.61	36.52	4.40	32.57	Peak		lane.
2	@ 6960.000	59.80	-3.74	63.54	51.45	36.52	4.40	32.57	Average	0.00000	
3	10440.000	65.07	-18.47	83.54	52.93	39.60	5.25	32.71	Peak	1000	
4	10440.000	52.87	-10.67	63.54	40.73	39.60	5.25	32.71	Average		
5	15660.000	56.87	-26.67	83.54	43.74	37.82	7.54	32 23	Peak		-

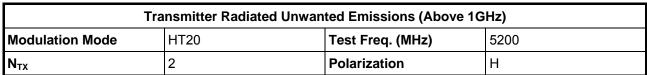
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

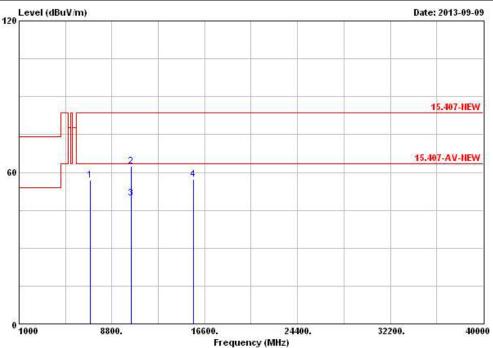
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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	Freq	Level	Over Limit	12533		Antenna Factor		POST 00 450	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	— dB	dBuV/m	dBuV	dB/m	dB	dB			deg
1	6960.000	56.89	-26.65	83.54	48.54	36.52	4.40	32.57	Peak		
2	10440.000	62.44	-21.10	83.54	50.30	39.60	5.25	32.71	Peak	0.00000	
3	10440.000	49.86	-13.68	63.54	37.72	39.60	5.25	32.71	Average		
4	15660.000	57.26	-26.28	83.54	44.13	37.82	7.54	32.23	Peak		

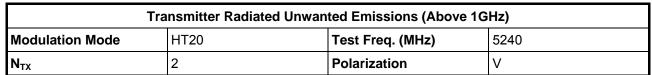
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

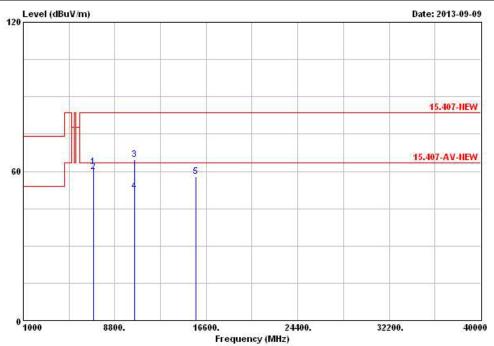
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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					0ver	3.550		Antenna		건강에 되어 주었다.		Ant	Table
		1	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	ā		MHz	dBuV/m	ав	dBuV/m	dBuV	dB/m	dВ	dB	^ <u></u>	cm	deg
1		6986	. 000	61.88	-21.66	83.54	53.50	36.56	4.40	32.58	Peak		1555
2	0	6986	. 000	59.83	-3.71	63.54	51.45	36.56	4.40	32.58	Average	0.00000	
3		10480	. 000	64.73	-18.81	83.54	52.57	39.60	5.23	32.67	Peak	200	
4		10480	.000	51.96	-11.58	63.54	39.80	39.60	5.23	32.67	Average		
5		15720	.000	57.94	-25.60	83.54	44.91	37.70	7.58	32.25	Peak		mme

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

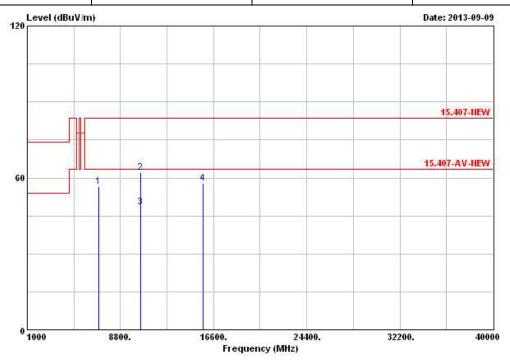
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5240

N<sub>TX</sub> 2 Polarization H



			0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	*1 <u> </u>	cm.	deg
1	6988.000	56.73	-26.81	83.54	48.36	36.56	4.39	32.58	Peak		1000
2	10480.000	62.01	-21.53	83.54	49.85	39.60	5.23	32.67	Peak	10,000	10000
3	10480.000	48.43	-15.11	63.54	36.27	39.60	5.23	32.67	Average	1233	
4	15720.000	58.02	-25.52	83.54	44.99	37.70	7.58	32.25	Peak		

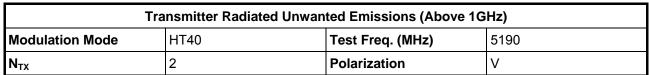
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

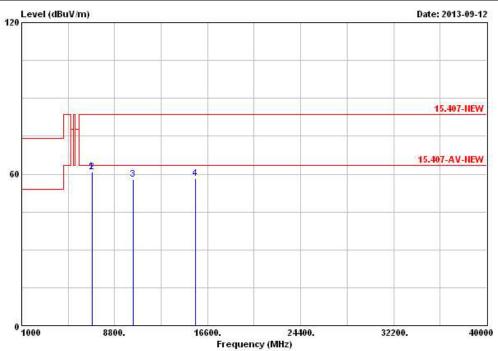
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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		Freq	Level	Over Limit			Antenna Factor			Remark	Ant Pos	Table Pos
	-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	7 <u> </u>	cm.	deg
1	6918	. 000	60.82	-22.72	83.54	52.57	36.39	4.42	32.56	Peak		1555
2	@ 6918	.000	60.66	-2.88	63.54	52.41	36.39	4.42	32.56	Average	-	
3	10380	. 000	58.00	-25.54	83.54	45.89	39.60	5.26	32.75	Peak	1000	
4	15570	. 000	58.24	-25.30	83.54	44.99	37.98	7.47	32.20	Peak		

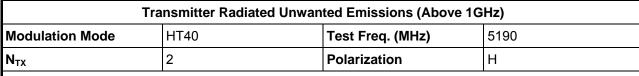
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

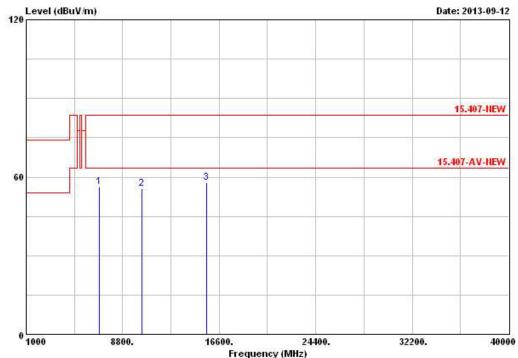
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB	-	cm.	deg
1	6918.000	56.33	-27.21	83.54	48.08	36.39	4.42	32.56	Peak		1555
2	10379.380	55.60	-27.94	83.54	43.48	39.60	5.27	32.75	Peak	-	
3	15570 000	57 79	-25 75	83 54	44 54	37 98	7 47	32 20	Deak	1000	

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

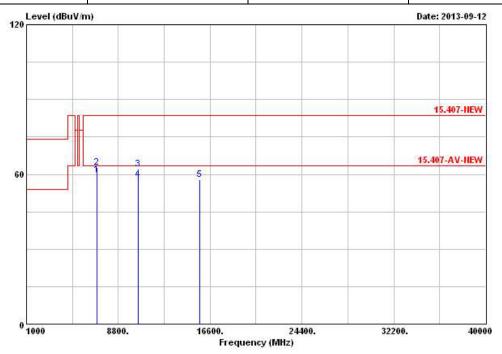
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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FCC Test Report

Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)											
Modulation Mode HT40 Test Freq. (MHz) 5230												
N <sub>TX</sub>												

Report No.: FR381242AN



				0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table
		Free	I Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	9	мн	dBuV/m	dB	dBuV/m	dBuV	dB/m	<u>ав</u>	dB	* <u> </u>	cm.	deg
1	@ 69	73.33	59.76	-3.78	63.54	51.41	36.52	4.40	32.57	Average		1777
2	65	73.33	62.89	-20.65	83.54	54.54	36.52	4.40	32.57	Peak	000000	
3	104	60.00	62.13	-21.41	83.54	49.99	39.60	5.23	32.69	Peak		
4	@104	60.00	57.80	-5.74	63.54	45.66	39.60	5.23	32.69	Average		
5	156	590.00	57.89	-25.65	83.54	44.79	37.76	7.58	32.24	Peak		

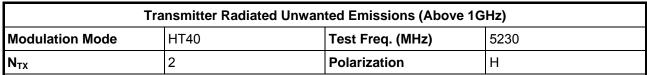
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

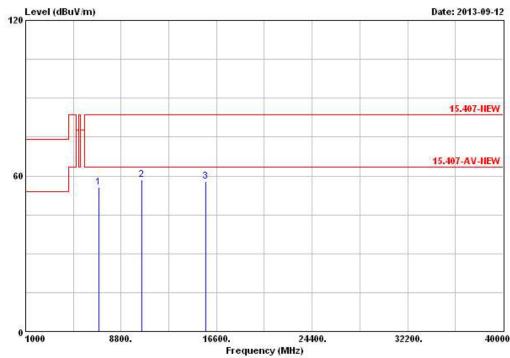
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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		Freq	Lev	re1	3.55	ver mit			Antenna Factor		맛있다. 어제 그래?		Ant Pos	Table Pos
	<u> </u>	MHz	dBul	//m		dВ	dBuV/m	dBuV	dB/m	dB	dB	1	cm.	deg
1	6972	.000	55.	72	-27	82	83.54	47.37	36.52	4.40	32.57	Peak		1555
2	10460	.000	58.	64	-24	90	83.54	46.50	39.60	5.23	32.69	Peak	000000	17.77
3	15690	. 620	58.	01	-25	.53	83.54	44.91	37.76	7.58	32.24	Peak	1000	

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

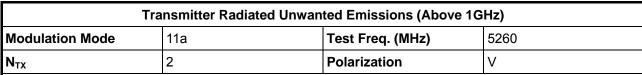
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

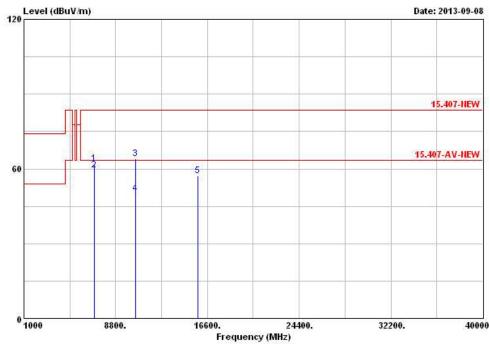
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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## 3.3.8 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 5250-5350MHz

Report No.: FR381242AN





				0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
		Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	a .	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	1	cm.	deg
1	7013	. 000	62.03	-21.51	83.54	53.61	36.62	4.39	32.59	Peak		1555
2	@ 7013	.000	59.39	-4.15	63.54	50.97	36.62	4.39	32.59	Average	10000	
3	10520	.000	63.93	-19.61	83.54	51.77	39.59	5.22	32.65	Peak	12.00	
4	10520	. 000	50.11	-13.43	63.54	37.95	39.59	5.22	32.65	Average		
5	15780	.000	57.16	-26.38	83.54	44.17	37.60	7.66	32.27	Peak		1000

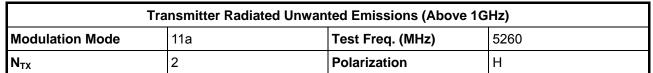
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

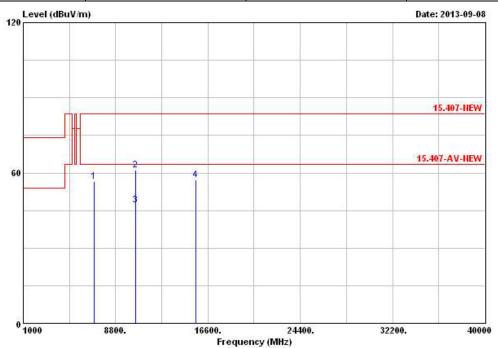
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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		Level	Over Limit			Antenna Factor			Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB	7	cm.	deg
1	7013.000	56.72	-26.82	83.54	48.30	36.62	4.39	32.59	Peak		1555
2	10520.000	61.20	-22.34	83.54	49.04	39.59	5.22	32.65	Peak	000000	40.000
3	10520.000	47.25	-16.29	63.54	35.09	39.59	5.22	32.65	Average	<b>HOICK</b>	
4	15570.000	57.18	-26.36	83.54	43.93	37.98	7.47	32.20	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

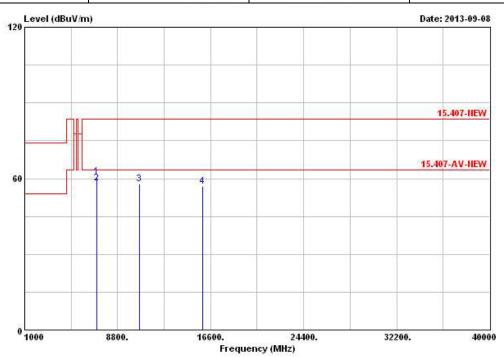
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)											
Modulation Mode	11a	Test Freq. (MHz)	5300								
N <sub>TX</sub> 2 Polarization V											



			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	7	cm.	deg
1	7066.000	60.93	-22.61	83.54	52.48	36.70	4.35	32.60	Peak		1555
2	@ 7066.000	58.30	-5.24	63.54	49.85	36.70	4.35	32.60	Average	0.0000	-
3	10600.000	57.76	-25.78	83.54	45.75	39.52	5.10	32.61	Peak	1000	
4	15900.000	57.05	-26.49	83.54	44.19	37.39	7.77	32.30	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

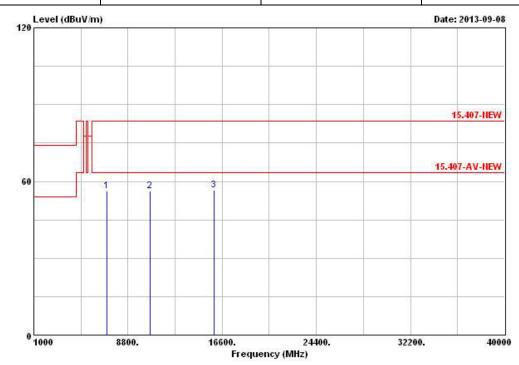
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)											
Modulation Mode	11a	Test Freq. (MHz)	5300								
N <sub>TX</sub> 2 Polarization H											



	Freq	Level	Over Limit			Antenna Factor			Remark	Ant Pos	Table Pos
	MHz	dBuV/m	фВ	dBuV/m	dBuV	dB/m	dB	- dB	1	cm.	deg
1	7066.000	56.39	-27.15	83.54	47.94	36.70	4.35	32.60	Peak		1555
2	10600.000	56.19	-27.35	83.54	44.18	39.52	5.10	32.61	Peak	10.000	40000
3	15900.000	56.47	-27.07	83.54	43.61	37.39	7.77	32.30	Peak	1000	

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

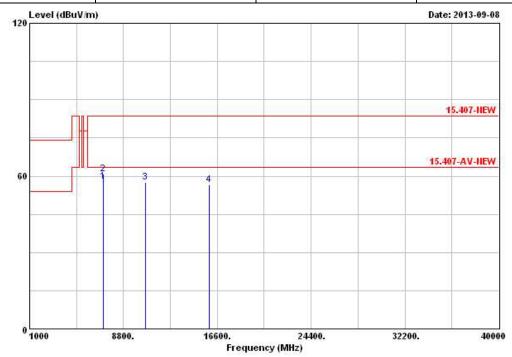
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)											
Modulation Mode	Modulation Mode 11a Test Freq. (MHz) 5320											
$N_{TX}$	N <sub>TX</sub> 2 Polarization V											



			Level	Over Limit	32550		Antenna Factor				Ant Pos	Table Pos
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	1		deg
1	@ 709	3.000	57.99	-5.55	63.54	49.53	36.72	4.35	32.61	Average		
2	709	3.000	60.65	-22.89	83.54	52.19	36.72	4.35	32.61	Peak	0.00000	10000
3	1064	0.000	57.46	-26.08	83.54	45.51	39.49	5.04	32.58	Peak	1000	
4	1596	0.000	56.71	-26.83	83.54	43.92	37.26	7.85	32 32	Peak		

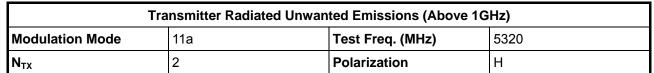
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

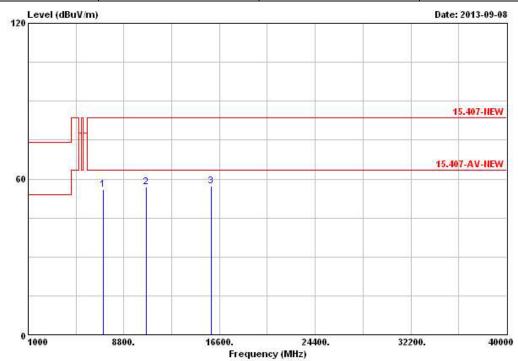
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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	Freq Lev	Level	Over Limit	450		Antenna Factor		했대 - 4여 - 프린	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	* <u> </u>	cm.	deg
1	7093.000	55.94	-27.60	83.54	47.48	36.72	4.35	32.61	Peak		1000
2	10640.000	56.90	-26.64	83.54	44.95	39.49	5.04	32.58	Peak	10000	-55
3	15960.000	57.31	-26.23	83.54	44.52	37.26	7.85	32.32	Peak	122	

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

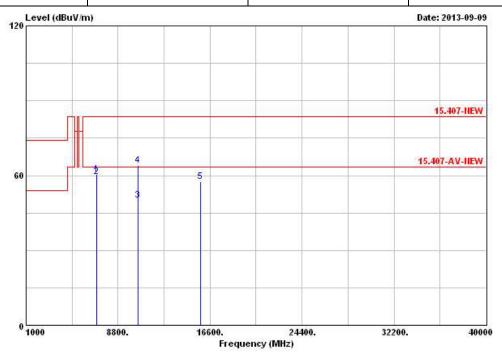
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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	Transmitter Radia	ated Unwanted Emissions (Above	1GHz)
Modulation Mode	HT20	Test Freq. (MHz)	5260
N <sub>TX</sub>	2	Polarization	V



			0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	- dB	dBuV/m	dBuV	dB/m	dB	dB	*1 <u> </u>		deg
1	7013.000	60.33	-23.21	83.54	51.91	36.62	4.39	32.59	Peak		1555
2	@ 7013.000	59.52	-4.02	63.54	51.10	36.62	4.39	32.59	Average	30,000	
3	10520.000	50.21	-13.33	63.54	38.05	39.59	5.22	32.65	Average	144	2000
4	10520.000	64.17	-19.37	83.54	52.01	39.59	5.22	32.65	Peak		
5	15780.000	57.44	-26.10	83.54	44.45	37.60	7.66	32.27	Peak		1777

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

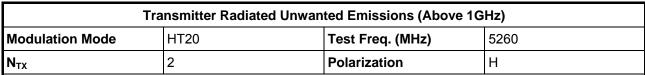
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

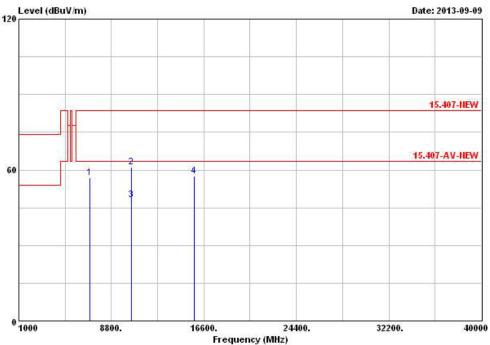
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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FCC Test Report Report No.: FR381242AN





	Freq	Level	Over Limit	255		Antenna Factor		맛있는 4번 프린		Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	- dB	1	cm	deg
1	7012.000	56.89	-26.65	83.54	48.47	36.62	4.39	32.59	Peak		1555
2	10520.000	61.20	-22.34	83.54	49.04	39.59	5.22	32.65	Peak	100000	
3	10520.000	47.98	-15.56	63.54	35.82	39.59	5.22	32.65	Average		
4	15780.000	57.67	-25.87	83.54	44.68	37.60	7.66	32.27	Peak		

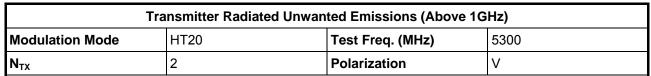
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

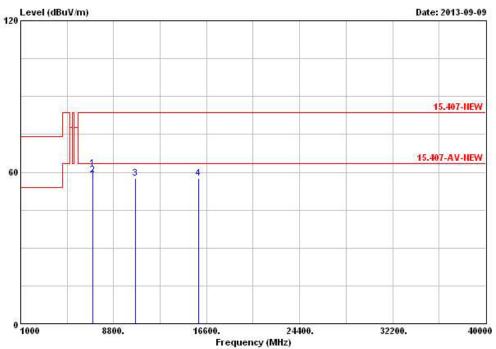
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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	787 167 <u>NE</u> S		0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table	
		Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	-	Mtz	dBuV/m	dВ	dBuV/m	dBuV	dB/m	фВ	dB	^ <u> </u>	cm	deg
1	70	66.000	61.44	-22.10	83.54	52.99	36.70	4.35	32.60	Peak		1555
2	@ 70	66.000	58.84	-4.70	63.54	50.39	36.70	4.35	32.60	Average	10.000	
3	106	00.000	57.50	-26.04	83.54	45.49	39.52	5.10	32.61	Peak	144	
4	159	00.000	57.51	-26.03	83.54	44.65	37.39	7.77	32.30	Peak		

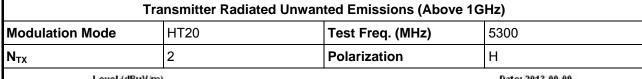
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

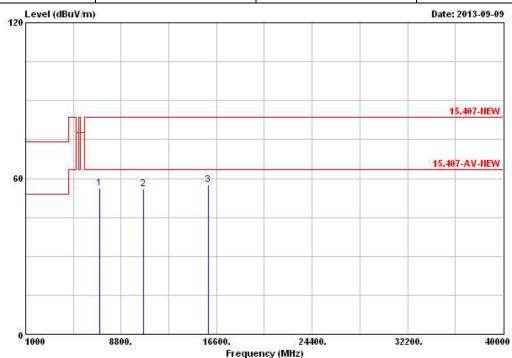
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dВ	dBuV/m	dBuV	dB/m	₫В	- дв	· ·	cm	deg
1	7066.000	56.25	-27.29	83.54	47.80	36.70	4.35	32.60	Peak		1000
2	10600.000	56.08	-27.46	83.54	44.07	39.52	5.10	32.61	Peak	10000	10000
3	15900.000	57.69	-25.85	83.54	44.83	37.39	7.77	32.30	Peak	1000	

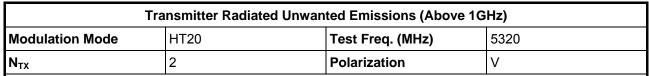
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

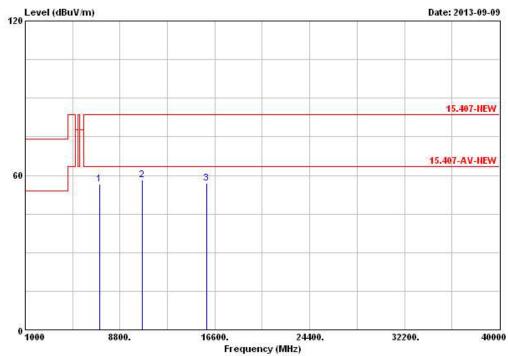
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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		Level	Over Limit			Antenna Factor		됐대 - 4번 - 프린	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	· · · · · · · · · · · · · · · · · · ·	cm	deg
1	7093.000	56.60	-26.94	83.54	48.14	36.72	4.35	32.61	Peak		1555
2	10640.000	58.07	-25.47	83.54	46.12	39.49	5.04	32.58	Peak	100000	07070
3	15960.000	56.82	-26.72	83.54	44.03	37.26	7.85	32.32	Peak	125	200

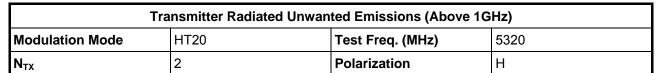
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

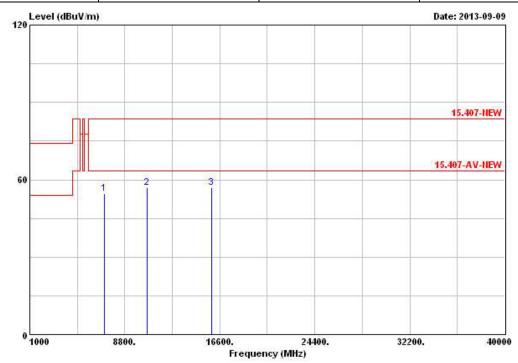
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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		Level	Over Limit			Antenna Factor		[맛대] - (어 - 프랑)		Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	7	cm	deg
1	7093.000	54.73	-28.81	83.54	46.27	36.72	4.35	32.61	Peak		1555
2	10640.000	56.77	-26.77	83.54	44.82	39.49	5.04	32.58	Peak	-	
3	15960.000	56.89	-26.65	83.54	44.10	37.26	7.85	32.32	Peak	1000	

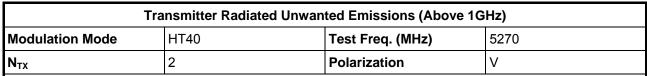
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

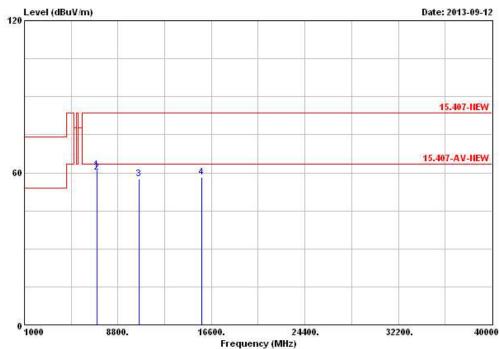
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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		Freq	Level	Over Limit			Antenna Factor		[맛개 - 50 - 폭]	Remark	Ant Pos	Table Pos
	i i	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB	~	cm	deg
1	702	5.000	61.04	-22.50	83.54	52.64	36.62	4.37	32.59	Peak		
2 8	702	5.000	60.22	-3.32	63.54	51.82	36.62	4.37	32.59	Average	(7),77(7)	5757
3	1054	0.000	57.47	-26.07	83.54	45.38	39.57	5.16	32.64	Peak	501016	2000
4	1581	0.000	58.29	-25.25	83.54	45.33	37.54	7.70	32.28	Peak		

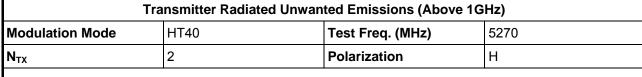
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

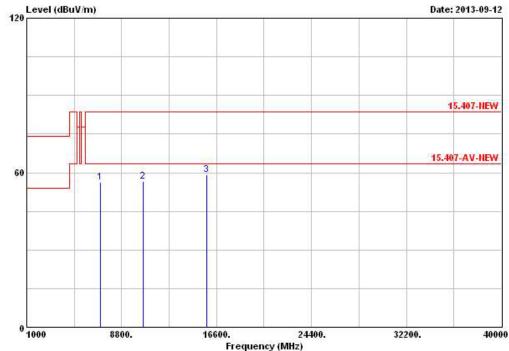
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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		eq	Level	Over Limit	2.556		Antenna Factor		맛있는 (1) 프라	Remark	Ant Pos	Table Pos
	M	Иz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	7	cm	deg
1	7026.0	000	56.37	-27.17	83.54	47.97	36.62	4.37	32.59	Peak		1777
2	10540.0	000	56.54	-27.00	83.54	44.45	39.57	5.16	32.64	Peak	1000	10000
3	15810.3	880	59.08	-24.46	83.54	46.12	37.54	7.70	32.28	Peak		222

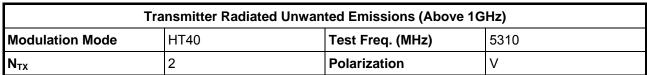
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

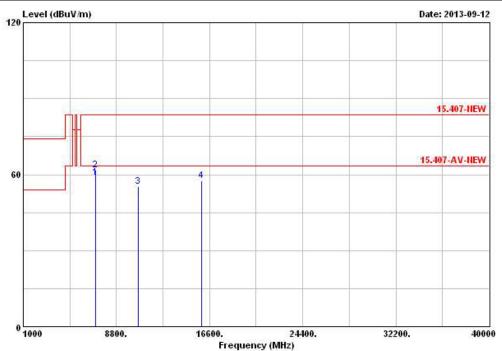
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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		Freq	Level	Over Limit	0.500		Antenna Factor		됐었는데 이 주었		Ant Pos	Table Pos
	<u>iā</u>	MHz	dBuV/m	- dB	dBuV/m	dBuV	dB/m	dB	dB	7		deg
1	@ 707	9.940	58.79	-4.75	63.54	50.32	36.72	4.35	32.60	Average		inne.
2	707	9.940	61.91	-21.63	83.54	53.44	36.72	4.35	32.60	Peak	(1000000	
3	1062	0.000	55.43	-28.11	83.54	43.48	39.50	5.04	32.59	Peak	1000	
4	1592	9.380	57.57	-25.97	83.54	44.75	37.32	7.81	32.31	Peak		

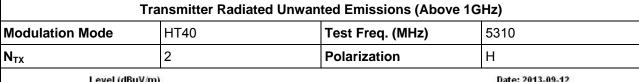
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

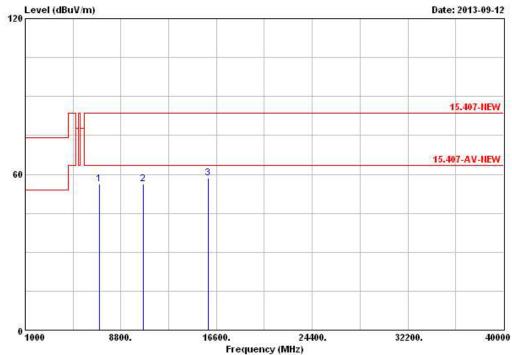
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dВ	dBuV/m	dBuV	dB/m	dB		1	cm.	deg
1	7080.000	56.27	-27.27	83.54	47.80	36.72	4.35	32.60	Peak		1555
2	10620.380	56.31	-27.23	83.54	44.36	39.50	5.04	32.59	Peak	10000	
3	15930.620	58.63	-24.91	83.54	45.82	37.32	7.81	32.32	Peak		222

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

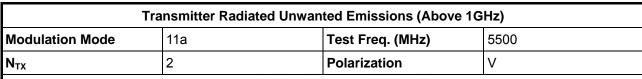
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

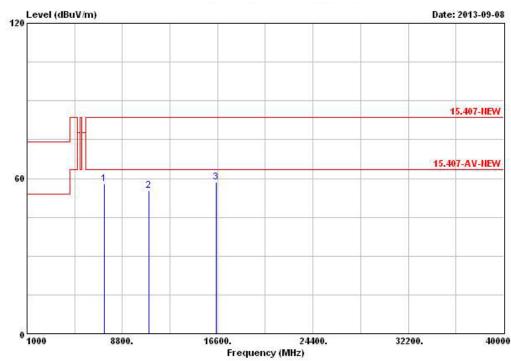
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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## 3.3.9 Transmitter Radiated Unwanted Emissions (Above 1GHz) for 5470-5725MHz

Report No.: FR381242AN





		Level	Over Limit			Antenna Factor			Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dВ	dBuV/m	dBuV	dB/m	dB	dB		cm	deg
1	7333.000	57.77	-25.77	83.54	49.13	37.08	4.23	32.67	Peak		1000
2	11000.000	55.29	-28.25	83.54	43.95	39.20	4.51	32.37	Peak	1777	
3	16500.000	58.64	-24.90	83.54	43.47	39.10	8.01	31.94	Peak	222	

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

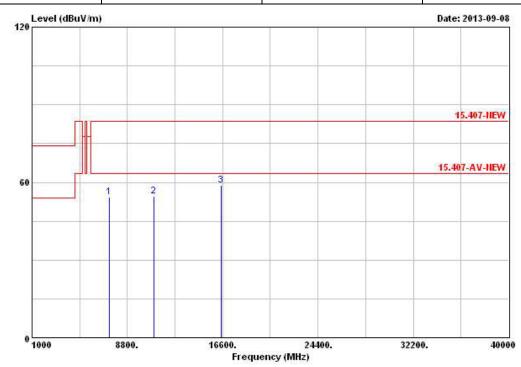
Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	11a	Test Freq. (MHz)	5500						
N <sub>TX</sub> 2 Polarization H									



		req	Level	Over Limit	Limit Line		Antenna Factor		없었다. 여러 그래?		Ant Pos	Table Pos
		ОHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	- dB	· ·	cm	deg
1	7333.0	000	54.29	-29.25	83.54	45.65	37.08	4.23	32.67	Peak		1,575.5
2	11000.0	000	54.61	-28.93	83.54	43.27	39.20	4.51	32.37	Peak	1777	
3	16500.0	000	58.78	-24.76	83.54	43.61	39.10	8.01	31.94	Peak		

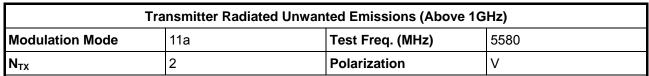
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

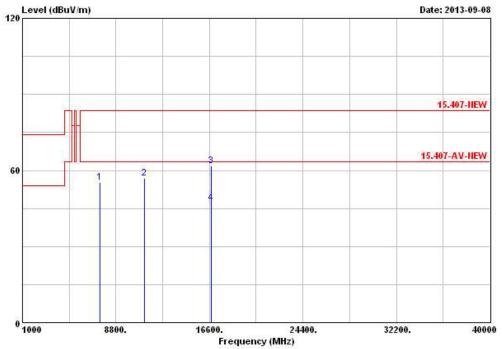
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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				0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Fr	eq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	м	Ηz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	1	cm	deg
1	7439.0	00	55.13	-28.41	83.54	46.44	37.23	4.17	32.71	Peak		1555
2	11160.0	00	57.03	-26.51	83.54	45.33	39.50	4.56	32.36	Peak	50,000	
3	16740.0	00	61.73	-21.81	83.54	44.79	40.40	8.18	31.64	Peak	1000	
4	16740.0	00	47.08	-16.46	63.54	30.14	40.40	8.18	31.64	Average		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

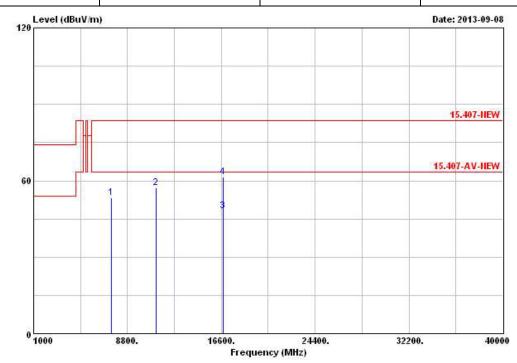
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode 11a Test Freq. (MHz) 5580

N<sub>TX</sub> 2 Polarization H

Report No.: FR381242AN



			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dВ	dBuV/m	dBuV	dB/m	dВ	dB	1	cm	deg
1	7439.000	53.19	-30.35	83.54	44.50	37.23	4.17	32.71	Peak		1555
2	11160.000	57.35	-26.19	83.54	45.65	39.50	4.56	32.36	Peak		
3	16740.000	48.07	-15.47	63.54	31.13	40.40	8.18	31.64	Average		
4	16740.000	61.43	-22.11	83.54	44.49	40.40	8.18	31.64	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

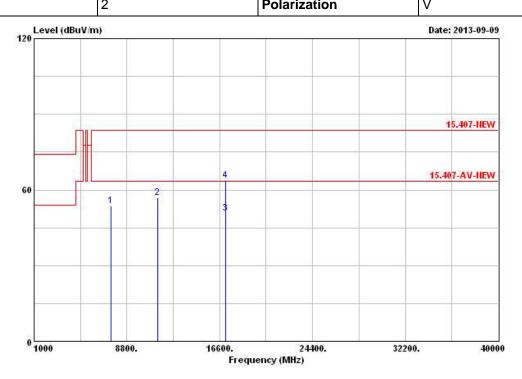
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Tra	Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	11a	Test Freq. (MHz)	5700							
N <sub>TX</sub>	2	Polarization	V							



			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	1	cm.	deg
1	7479.000	53.69	-29.85	83.54	44.97	37.28	4.15	32.71	Peak		1555
2	11400.000	56.88	-26.66	83.54	44.70	39.92	4.61	32.35	Peak		40.000
3	17100.000	50.85	-12.69	63.54	30.98	42.66	8.55	31.34	Average	1000	
4	17100.000	63.65	-19.89	83.54	43.78	42.66	8.55	31.34	Peak		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

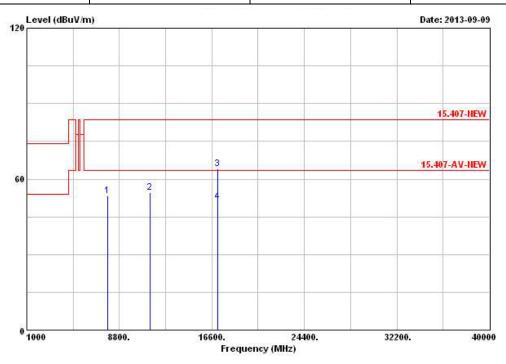
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	Modulation Mode 11a Test Freq. (MHz) 5700									
N <sub>TX</sub> 2 Polarization H										



	Freg	Level	Over Limit	145500	- 835 T - 08459	Antenna Factor		200 00 00		Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB	···	cm	deg
1	7798.000	53.39	-30.15	83.54	44.67	37.60	3.89	32.77	Peak		lane
2	11400.000	54.62	-28.92	83.54	42.44	39.92	4.61	32.35	Peak	10/2401	
3	17100.000	64.17	-19.37	83.54	44.30	42.66	8.55	31.34	Peak		
4	17100.000	50.98	-12.56	63.54	31.11	42.66	8.55	31.34	Average		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

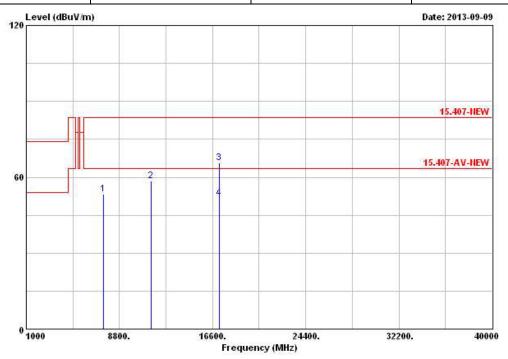
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Transmitter Radiated Unwanted Emissions (Above 1GHz)										
Modulation Mode	Modulation Mode 11a Test Freq. (MHz) 5720									
TX 2 Polarization V										



	Fron	Level	Over	0.550		Antenna Factor				Ant Pos	Table Pos
	rieg	PEACT	шис	DIME	Deser	Factor	LUSS	Factor	Kenark	FUS	FUA
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dВ	7	cm	deg
1	7436.000	53.32	-30.22	83.54	44.62	37.23	4.17	32.70	Peak		1000
2	11440.000	58.69	-24.85	83.54	46.43	39.98	4.62	32.34	Peak	10000	10000
3	17160.000	65.78	-17.76	83.54	45.29	43.23	8.62	31.36	Peak		
4	17160.000	51.84	-11.70	63.54	31.35	43.23	8.62	31.36	Average		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

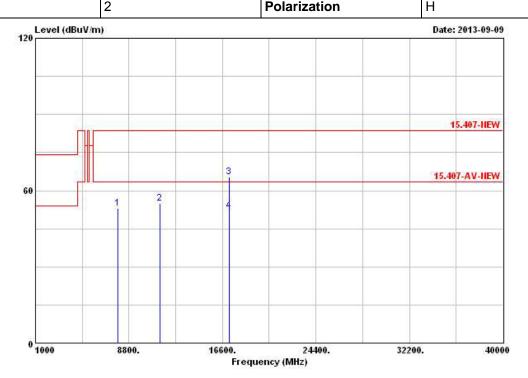
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Tra	ansmitter Radiated Unwan	ted Emissions (Above 1G	Hz)
Modulation Mode	11a	Test Freq. (MHz)	5720
N <sub>TX</sub>	2	Polarization	Н



			0ver			Antenna		맛있는 사이 목다		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB	·	cm	deg
1	7860.000	53.10	-30.44	83.54	44.39	37.67	3.82	32.78	Peak		1555
2	11400.000	54.80	-28.74	83.54	42.62	39.92	4.61	32.35	Peak	10.000	40000
3	17160.000	65.43	-18.11	83.54	44.94	43.23	8.62	31.36	Peak	1232	
4	17160.000	51.98	-11.56	63.54	31.49	43.23	8.62	31.36	Average		

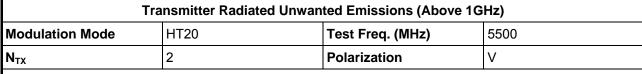
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

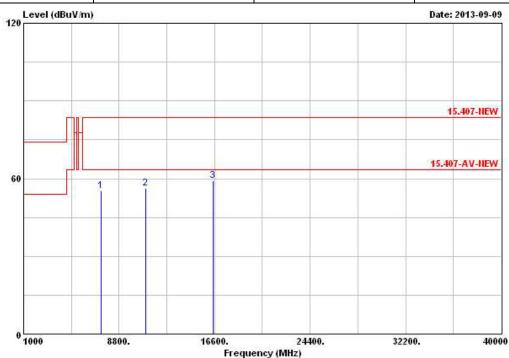
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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	Freq	Level	Over Limit			Antenna Factor		맛있다. 이어 모두		Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		can.	deg
1	7332.000	55.34	-28.20	83.54	46.72	37.06	4.23	32.67	Peak		1555
2	11000.000	56.35	-27.19	83.54	45.01	39.20	4.51	32.37	Peak	000000	
3	16500.000	59.06	-24.48	83.54	43.89	39.10	8.01	31.94	Peak	1000	

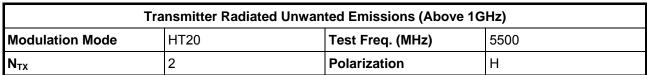
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

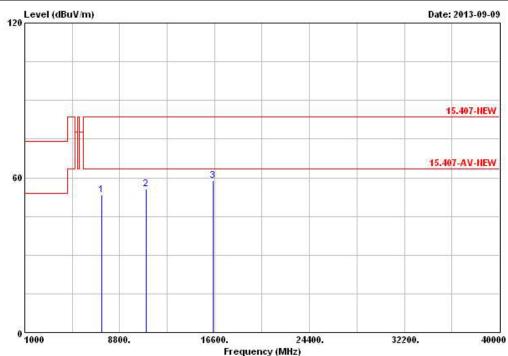
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Free	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	мн	dBuV/m	dВ	dBuV/m	dBuV	dB/m	₫В	- дв		cm.	deg
1	7332.00	53.25	-30.29	83.54	44.63	37.06	4.23	32.67	Peak		1555
2	11000.00	55.59	-27.95	83.54	44.25	39.20	4.51	32.37	Peak	(5.000)	1000
3	16500.00	58.84	-24.70	83.54	43.67	39.10	8.01	31.94	Peak	222	

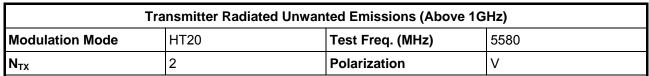
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

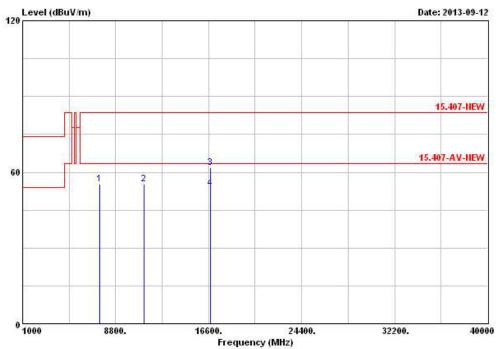
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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			0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dВ	dBuV/m	dBuV	dB/m	фВ	dB	* <u> </u>	cm.	deg
1	7440.000	55.33	-28.21	83.54	46.64	37.23	4.17	32.71	Peak		1555
2	11160.000	55.30	-28.24	83.54	43.60	39.50	4.56	32.36	Peak	10.000	-555
3	16740.620	61.70	-21.84	83.54	44.76	40.40	8.18	31.64	Peak	245	
4	16740.620	53.70	-9.84	63.54	36.76	40.40	8.18	31.64	Average		

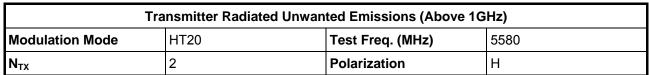
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

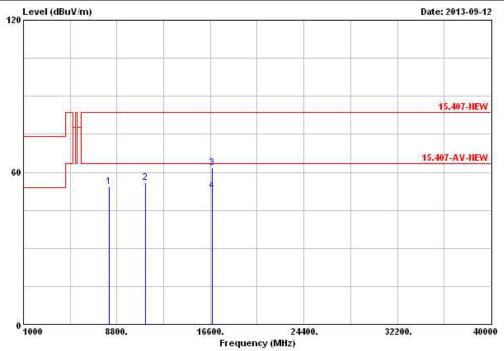
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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	Freq	Level	Over Limit			Antenna Factor		[위원 - 원인 - 폭]	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	<u>— ав</u>	dBuV/m	dBuV	dB/m	dB	dB	4	cm.	deg
1	8142.000	54.36	-29.18	83.54	45.30	38.05	3.81	32.80	Peak		1555
2	11160.000	55.86	-27.68	83.54	44.16	39.50	4.56	32.36	Peak		
3	16740.000	61.78	-21.76	83.54	44.84	40.40	8.18	31.64	Peak		
4	16740.000	52.66	-10.88	63.54	35.72	40.40	8.18	31.64	Average		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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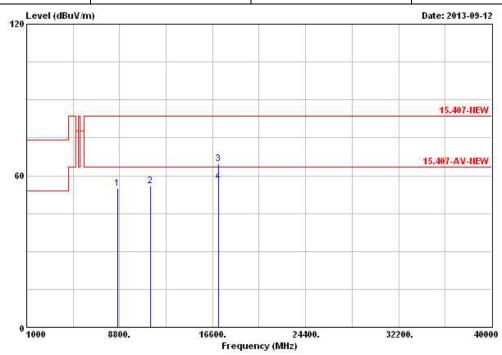
## FCC Test Report

Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5700

N<sub>TX</sub> 2 Polarization V

Report No.: FR381242AN



			0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB	1	cm.	deg
1	8628.000	54.99	-28.55	83.54	44.91	38.54	4.39	32.85	Peak		1555
2	11400.000	55.83	-27.71	83.54	43.65	39.92	4.61	32.35	Peak	100000	1000
3	17098.780	64.57	-18.97	83.54	44.70	42.66	8.55	31.34	Peak	1111	
4	@17098.780	57.51	-6.03	63.54	37.64	42.66	8.55	31.34	Average		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

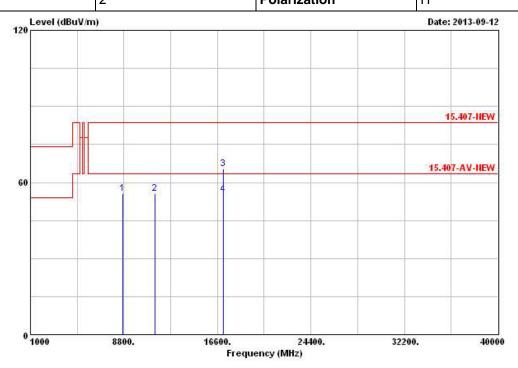
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TEL: 886-3-327-3456 Report Version : Rev. 01

Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5700

N<sub>TX</sub> 2 Polarization H

Report No.: FR381242AN



			0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dВ	dBuV/m	dBuV	dB/m	dB	dB	~ <u></u>	cm	deg
1	8706.000	55.48	-28.06	83.54	45.32	38.46	4.58	32.88	Peak		lane.
2	11398.780	55.59	-27.95	83.54	43.41	39.92	4.61	32.35	Peak	50,000	40000
3	17101.220	65.45	-18.09	83.54	45.58	42.66	8.55	31.34	Peak	1000	
4	17101.220	55.44	-8.10	63.54	35.57	42.66	8.55	31.34	Average		

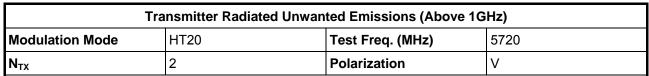
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

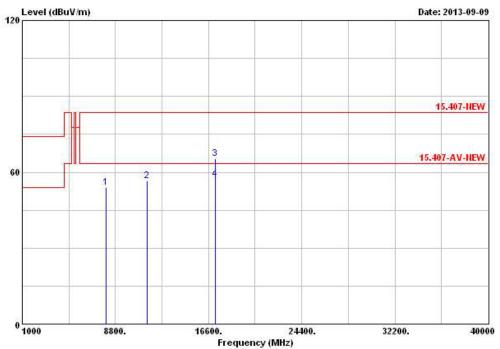
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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		Freq	Level		Limit Line		Antenna Factor		했다. 이번 주의		Ant Pos	Table Pos
	-	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB	·	cm	deg
1	8028	. 000	54.06	-29.48	83.54	45.29	37.83	3.74	32.80	Peak		1000
2	11440	. 000	56.60	-26.94	83.54	44.34	39.98	4.62	32.34	Peak		
3	17160	. 000	65.38	-18.16	83.54	44.89	43.23	8.62	31.36	Peak	_11	
4	@17160	. 000	57.36	-6.18	63.54	36.87	43.23	8.62	31.36	Average		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

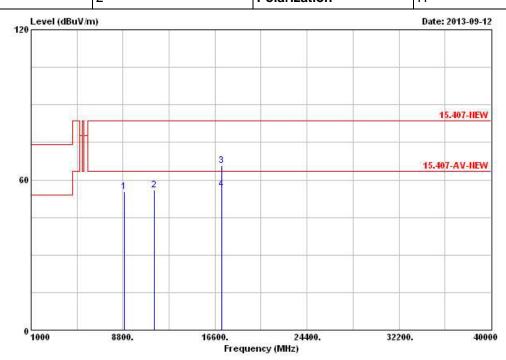
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT20 Test Freq. (MHz) 5720

N<sub>TX</sub> 2 Polarization H

Report No.: FR381242AN



			0ver	Limit	Readi	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	~ <u></u>	cm.	deg
1	8940.000	55.38	-28.16	83.54	45.01	38.18	5.14	32.95	Peak		1555
2	11441.220	55.82	-27.72	83.54	43.56	39.98	4.62	32.34	Peak	0.00000	47.000
3	17161.220	65.66	-17.88	83.54	45.17	43.23	8.62	31.36	Peak	10101	
4	17161.220	56.33	-7.21	63.54	35.84	43.23	8.62	31.36	Average		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

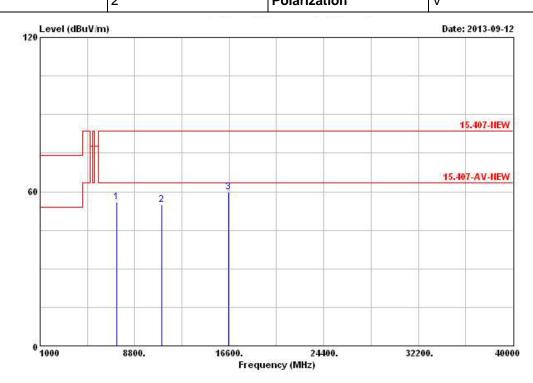
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Transmitter Radiated Unwanted Emissions (Above 1GHz)

Modulation Mode HT40 Test Freq. (MHz) 5510

N<sub>TX</sub> 2 Polarization V

Report No.: FR381242AN



				0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	I	req	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	4	cm.	deg
1	7344	000	55.79	-27.75	83.54	47.18	37.08	4.21	32.68	Peak		1000
2	11019	580	54.87	-28.67	83.54	43.49	39.23	4.52	32.37	Peak	000000	#E15-770
3	16530	000	59.79	-23.75	83.54	44.37	39.29	8.04	31.91	Peak	222	

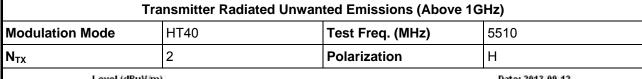
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

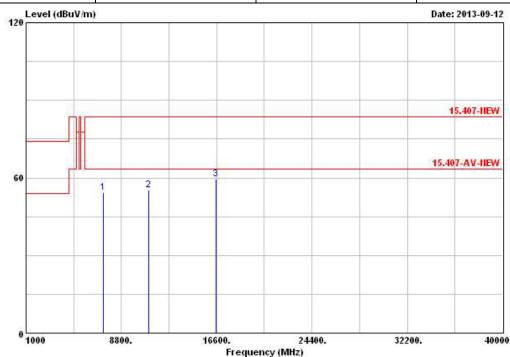
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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		Level	Over Limit	3.5555		Antenna Factor		됐대 - 6이 - 프린	Remark	Ant Pos	Table Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	1	can	deg
1	7344.000	54.40	-29.14	83.54	45.79	37.08	4.21	32.68	Peak		1000
2	11020.420	55.19	-28.35	83.54	43.81	39.23	4.52	32.37	Peak	17.77	0.000
3	16529.580	59.57	-23.97	83.54	44.15	39.29	8.04	31.91	Peak	1232	

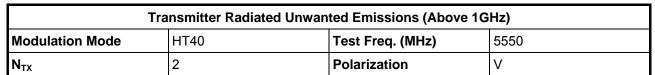
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

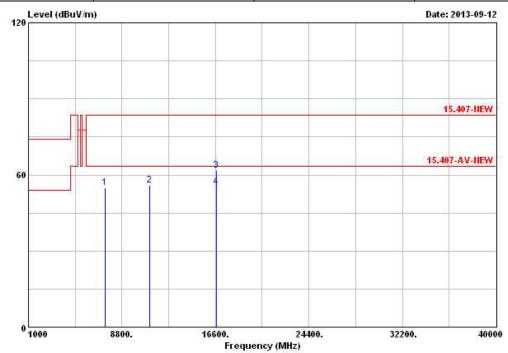
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	7		deg
1	7398.000	55.05	-28.49	83.54	46.39	37.16	4.19	32.69	Peak		
2	11100.000	55.89	-27.65	83.54	44.33	39.38	4.54	32.36	Peak	000000	
3	16650.380	61.78	-21.76	83.54	45.47	39.94	8.11	31.74	Peak	1000	
4	16650.380	55.21	-8.33	63.54	38.90	39.94	8.11	31.74	Average		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

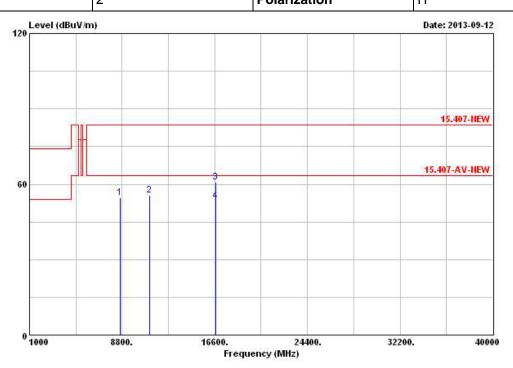
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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Tra	nsmitter Radiated Unwan	ted Emissions (Above 1G	Hz)
Modulation Mode	HT40	Test Freq. (MHz)	5550
N <sub>TX</sub>	2	Polarization	Н



			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	7	cm	deg
1	8610.000	54.62	-28.92	83.54	44.60	38.56	4.30	32.84	Peak		1000
2	11100.620	55.69	-27.85	83.54	44.13	39.38	4.54	32.36	Peak	0.0000	100000
3	16650.620	60.92	-22.62	83.54	44.61	39.94	8.11	31.74	Peak	1000	222
4	16650.620	53.21	-10.33	63.54	36.90	39.94	8.11	31.74	Average		

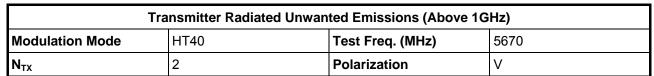
Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

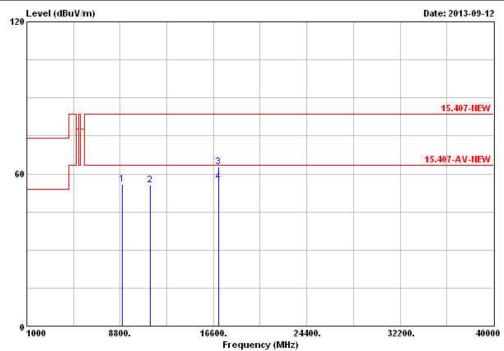
Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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			Over	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB	*\	cm.	deg
1	9000.000	55.93	-27.61	83.54	45.58	38.10	5.23	32.98	Peak		inne.
2	11338.780	55.56	-27.98	83.54	43.52	39.80	4.59	32.35	Peak	100000	10000
3	17009.780	62.72	-20.82	83.54	43.70	41.94	8.40	31.32	Peak	1000	200
4	@17009.780	57.05	-6.49	63.54	38.03	41.94	8.40	31.32	Average	1222	

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

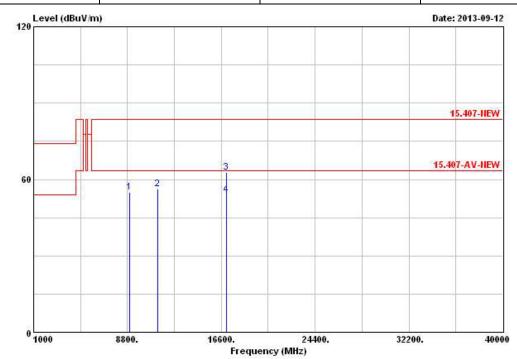
Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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FCC Test Report

Transmitter Radiated Unwanted Emissions (Above 1GHz)									
Modulation Mode	HT40	Test Freq. (MHz)	5670						
N <sub>TX</sub>	2	Polarization	Н						

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			0ver	Limit	Read	Antenna	Cable	Preamp		Ant	Table
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Remark	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dВ	dB	·	cm.	deg
1	8988.000	55.02	-28.52	83.54	44.64	38.12	5.23	32.97	Peak		1000
2	11341.220	56.17	-27.37	83.54	44.13	39.80	4.59	32.35	Peak	10000	
3	17010.000	62.74	-20.80	83.54	43.72	41.94	8.40	31.32	Peak	1111	
4	17010.000	54.07	-9.47	63.54	35.05	41.94	8.40	31.32	Average		

Note 1: ">20dB" means spurious emission levels that exceed the level of 20 dB below the applicable limit.

Note 2: "N/F" means Nothing Found spurious emissions (No spurious emissions were detected.)

Note 3: Measurement receive antenna polarization: H (Horizontal), V (Vertical)

Note 4: For restricted bands, the peak measurement is fully sufficient, as the max field strength as measured with the Peak-Detector meets the AV-Limit so that the AV level does not need to be reported in addition.

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4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	Dec. 01, 2012	Radiation (03CH03-HY)
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	May. 03, 2013	Radiation (03CH03-HY)
Amplifier	Agilent	8449B	3008A02364	1GHz ~ 26.5GHz	May. 06, 2013	Radiation (03CH03-HY)
Receiver	R&S	ESU26	1302.6005.26	20Hz ~ 26.5GHz	Apr. 02, 2013	Radiation (03CH03-HY)
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30MHz ~ 1GHz	Sep. 22, 2012	Radiation (03CH03-HY)
Horn Antenna	EMCO	3115	6741	1GHz ~ 18GHz	May 31, 2013	Radiation (03CH03-HY)
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15GHz ~ 40GHz	Jan. 08, 2013	Radiation (03CH03-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	9MHz ~ 1GHz	Jan. 17, 2013	Radiation (03CH03-HY)
RF Cable-high	SUHNER	SUCOFLEX 106	03CH03-HY	1GHz ~ 40GHz	Jan. 17, 2013	Radiation (03CH03-HY)
Turn Table	EM Electronics	EM Electronics	060615	0 ~ 360 degree	N/A	Radiation (03CH03-HY)
Antenna Mast	MF	MF-7802	MF780208179	1 ~ 4 m	N/A	Radiation (03CH03-HY)

Report No.: FR381242AN

Note: Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Amplifier	EM	EM18G40G	060572	18GHz ~ 40GHz	Jan. 20, 2013	Radiation (03CH03-HY)
Loop Antenna	TESEQ	HLA 6120	31244	9 kHz - 30 MHz	Dec. 02, 2012	Radiation (03CH03-HY)

Note: Calibration Interval of instruments listed above is two year.

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