

FCC TEST REPORT (15.407)

REPORT NO.: RF120926C25H

MODEL NO.: WAP561

FCC ID: PD5-WAP561

RECEIVED: Feb. 26, 2014

TESTED: Jan. 29 ~ Feb. 10, 2015

ISSUED: Feb. 13, 2015

APPLICANT: Delta Networks, Inc.

ADDRESS: No.252, Shanying Rd., Guishan Dist., Taoyuan
City 333, Taiwan (R.O.C.)

ISSUED BY: Bureau Veritas Consumer Products Services
(H.K.) Ltd., Taoyuan Branch

LAB ADDRESS: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist.,
New Taipei City, Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei
Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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A D T

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120926C25H	Original release.	Feb. 13, 2015

1. CERTIFICATION

PRODUCT: Wireless AP with PoE
MODEL: WAP561
BRAND: CISCO
APPLICANT: Delta Networks, Inc.
TESTED: Jan. 29 ~ Feb. 10, 2015
TEST SAMPLE: ENGINEERING SAMPLE
STANDARDS: **FCC Part 15, Subpart E (Section 15.407)**
ANSI C63.10-2009

The above equipment (model: WAP561) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Maggie Wu , **DATE :** Feb. 13, 2015
Maggie Wu / Specialist

APPROVED BY : Ken Liu , **DATE :** Feb. 13, 2015
Ken Liu / Senior Manager

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407 UNDER NEW RULE)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.407(b)(6)	AC Power Conducted Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -4.21dB at 0.38808MHz.
15.407(b)(1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -1.0dB at 5714.90MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(e)	6dB bandwidth	PASS	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connector is IPEX not a standard connector.

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.59 dB
	200MHz ~ 1000MHz	3.60 dB
	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Wireless AP with PoE
MODEL NO.	WAP561
POWER SUPPLY	48Vdc (from POE)
MODULATION TYPE	64QAM, 16QAM, QPSK, BPSK
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300.0Mbps
OPERATING FREQUENCY	5150 ~ 5250MHz & 5725 ~ 5850MHz
NUMBER OF CHANNEL	5150 ~ 5250MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 5725 ~ 5850MHz: 5 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40)
OUTPUT POWER	5150 ~ 5250MHz: 18.174mW 5725 ~ 5850MHz: 60.138mW
ANTENNA TYPE	Refer to note
ANTENNA CONNECTOR	Refer to note
DATA CABLE	NA
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	NA

NOTE:

1. This report is issued as a supplementary report of the original BV ADT report no.: RF120926C25A and RF120926C25A-1.
2. This report is prepared for FCC class II permissive change. The difference compared with the original report is updating standard to FCC new rule for U-NII 1 and U-NII-3 Band. Therefore, all test items have been re-tested in this report.
3. The EUT incorporates a MIMO function. Physically, the EUT provides three completed transmitters and three receivers.

MODULATION MODE	TX FUNCTION
802.11a	3TX
802.11n (HT20)	3TX
802.11n (HT40)	3TX

4. The built-in sensor of the EUT selects which antenna to be used when the EUT is placed on X-plane or Z-plane. The available configurations are list as below:

Antenna item	Antenna type	Connector	Gain (dBi)		X-plane		Z-plane	
			2.4GHz	5GHz	WLAN 0	WLAN 1	WLAN 0	WLAN 1
1	PIFA	IPEX	5.0	5.6	√		√	
2	PIFA		4.5	5.8		√		√
3	PIFA		3.3	4.5	√			
4	PIFA		4.3	4.8			√	
5	PIFA		3.7	5.2	√			
6	PIFA		5.0	5.8			√	
7	PIFA		4.2	4.5		√		
8	PIFA		4.9	5.4				√
9	PIFA		4.4	5.0		√		
10	PIFA		5.5	5.5				√

*For EUT position on X-plane, chosen highest antenna gain **WLAN 1** for final test.

*For EUT position on Z-plane, chosen highest antenna gain **WLAN 1** for final test.

5. The EUT consumes power from the following POE (provided as support unit only).

Brand	PowerDsine
Model	PD-9001G
Input Power	100-250Vac, 50/60Hz, 0.8A
Output Power	55Vdc, 0.6A

6. The above EUT information is declared by manufacturer and for more detailed feature description, please refer to the manufacturer's specifications or user's manual.

3.2 DESCRIPTION OF TEST MODES

FOR 5150 ~ 5250MHz

4 channels are provided for 802.11a, 802.11n (HT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

2 channels are provided for 802.11n (HT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

FOR 5725 ~ 5850MHz

5 channels are provided for 802.11a, 802.11n (HT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745MHz	161	5805MHz
153	5765MHz	165	5825MHz
157	5785MHz		

2 channels are provided for 802.11n (HT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE $\geq$ 1G	RE<1G	PLC	APCM	
A	√	√	-	-	Positioned on X-plane
B	√	√	√	√	Positioned on Z-plane

Where **RE $\geq$ 1G**: Radiated Emission above 1GHz **RE<1G**: Radiated Emission below 1GHz
PLC: Power Line Conducted Emission **APCM**: Antenna Port Conducted Measurement

NOTE: "-" means no effect.

RADIATED EMISSION TEST (ABOVE 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A, B	802.11a	5150-5250	36 to 48	36, 40, 48	OFDM	BPSK	6.0
A, B	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	BPSK	7.2
A, B	802.11n (HT40)		38 to 46	38, 46	OFDM	BPSK	15.0
A, B	802.11a	5725-5850	149 to 165	149, 157, 165	OFDM	BPSK	6.0
A, B	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	BPSK	7.2
A, B	802.11n (HT40)		151 to 159	151, 159	OFDM	BPSK	15.0

RADIATED EMISSION TEST (BELOW 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A, B	802.11a	5150-5250	36 to 64	36	OFDM	BPSK	6.0
		5725-5850	149 to 165		OFDM	BPSK	6.0

POWER LINE CONDUCTED EMISSION TEST:

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
B	802.11a	5150-5250	36 to 64	36	OFDM	BPSK	6.0
		5725-5850	149 to 165		OFDM	BPSK	6.0

ANTENNA PORT CONDUCTED MEASUREMENT:

- ☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
B	802.11a	5150-5250	36 to 48	36, 40, 48	OFDM	BPSK	6.0
B	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	BPSK	7.2
B	802.11n (HT40)		38 to 46	38, 46	OFDM	BPSK	15.0
B	802.11a	5725-5850	149 to 165	149, 157, 165	OFDM	BPSK	6.0
B	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	BPSK	7.2
B	802.11n (HT40)		151 to 159	151, 159	OFDM	BPSK	15.0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
RE≥1G	21deg. C, 65%RH	120Vac, 60Hz	Alan Wu Chris Lin
RE<1G	24deg. C, 64%RH	120Vac, 60Hz	Alan Wu
PLC	18deg. C, 70%RH	120Vac, 60Hz	Nick Hsu
APCM	25deg. C, 60%RH	120Vac, 60Hz	Frank Liu

3.3 DUTY CYCLE OF TEST SIGNAL

802.11a: Duty cycle of test signal is > 98 %, duty factor is not required.

802.11n (HT20), 802.11n (HT40): Duty cycle of test signal is < 98%, duty factor shall be considered.

802.11a: Duty cycle = $2.058/2.090 = 0.985$

802.11n (HT20): Duty cycle = $1.928/2.055 = 0.938$, Duty factor = $10 * \log(1/0.938) = 0.28$

802.11n (HT40): Duty cycle = $0.777/0.805 = 0.965$, Duty factor = $10 * \log(1/0.965) = 0.15$



3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

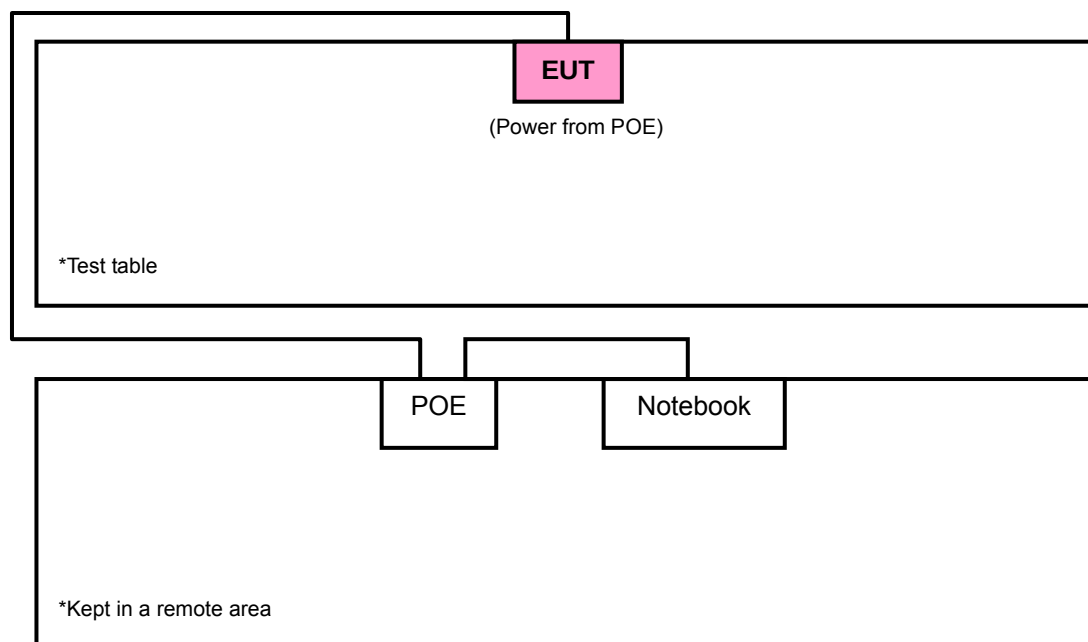
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Notebook	DELL	E5410	1HC2XM1	FCC DoC Approved
2	POE	PowerDsine	PD-9001G	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	3m non-shielded Cat5e cable
2	3m non-shielded Cat5e cable

NOTE:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item 1 acted as a communication partner to transfer data.
3. Item 2 was provided by the manufacturer.

3.4.1 CONFIGURATION OF SYSTEM UNDER TEST



3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specification of the EUT declared by the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart E (15.407)

789033 D02 General UNII Test Procedures New Rules v01

662911 D01 Multiple Transmitter Output v02r01

ANSI C63.10-2009

All test items have been performed and recorded as per the above standards.

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

APPLICABLE TO	LIMIT	
789033 D02 General UNII Test Procedures New Rules v01	FIELD STRENGTH AT 3m	
	PK: 74 (dBuV/m)	AV: 54 (dBuV/m)
APPLICABLE TO	EIRP LIMIT	EQUIVALENT FIELD STRENGTH AT 3m
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBuV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	PK: -27 (dBm/MHz) ^{*1} PK: -17 (dBm/MHz) ^{*2}	PK: 68.2 (dBuV/m) ^{*1} PK: 78.2 (dBuV/m) ^{*2}

NOTE: ^{*1} beyond 10MHz of the band edge ^{*2} within 10 MHz of band edge

The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts).}$$

4.1.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Oct. 06, 2014	Oct. 05, 2015
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Feb. 11, 2014	Feb. 10, 2015
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Feb. 26, 2014 Feb. 06, 2015	Feb. 25, 2015 Feb. 05, 2016
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-1170	Aug. 28, 2014	Aug. 27, 2015
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Feb. 20, 2014 Feb. 09, 2015	Feb. 19, 2015 Feb. 08, 2016
Preamplifier Agilent	8449B	3008A01961	Oct. 18, 2014	Oct. 17, 2015
Preamplifier Agilent	8447D	2944A10738	Oct. 18, 2014	Oct. 17, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309220/4	Aug. 09, 2014	Aug. 08, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250724/4	Aug. 09, 2014	Aug. 08, 2015
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	295012/4	Aug. 09, 2014	Aug. 08, 2015
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table BV ADT	TT100.	TT93021704	NA	NA
Turn Table Controller BV ADT	SC100.	SC93021704	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 18, 2014	Oct. 17, 2015
High Speed Peak Power Meter	ML2495A	0824011	Jul. 26, 2014	Jul. 25, 2015
Power Sensor	MA2411B	0738171	Jul. 26, 2014	Jul. 25, 2015
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 09, 2014	Jun. 08, 2015

- NOTE:** 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 4.
3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 460141.
5. The IC Site Registration No. is IC7450F-4.

4.1.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

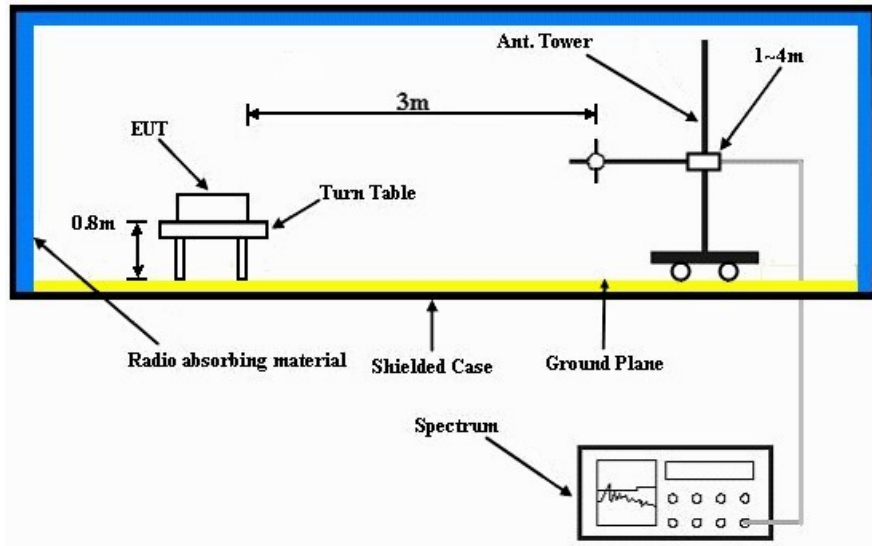
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.5 DEVIATION FROM TEST STANDARD

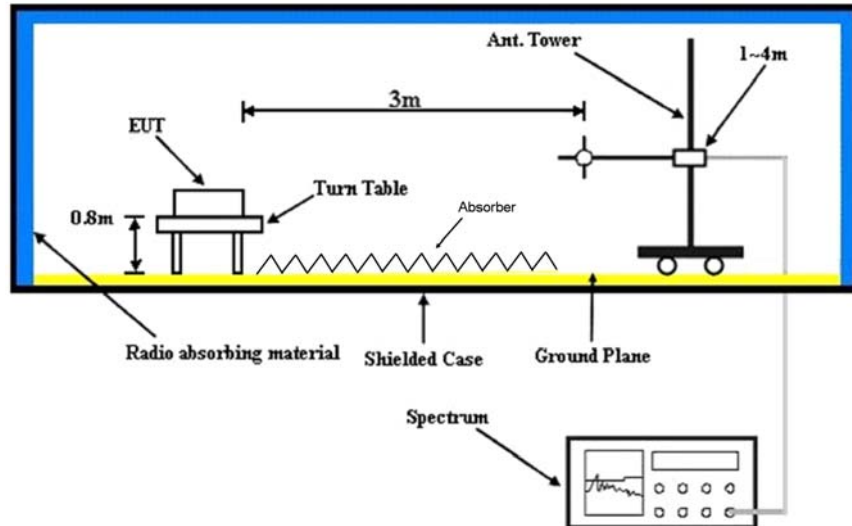
No deviation.

4.1.6 TEST SETUP

Frequency range 30MHz~1GHz



Frequency range above 1GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.7 EUT OPERATING CONDITION

- a. Placed the EUT on the testing table.
- b. Prepared a notebook and a POE to act as communication partners and placed them outside of testing area.
- c. The POE was connected with the EUT and the notebook via RJ45 cables and the notebook ran a test program (provided by manufacturer) to enable the EUT under transmission condition continuously at specific channel frequency.
- d. The communication partners sent data to EUT by command "PING".

4.1.8 TEST RESULTS

TEST MODE A

ABOVE 1GHz DATA:

802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.8 PK	74.0	-16.2	1.00 H	220	52.10	5.70
2	5150.00	44.2 AV	54.0	-9.8	1.00 H	220	38.50	5.70
3	*5180.00	97.8 PK			1.00 H	222	58.30	39.50
4	*5180.00	87.8 AV			1.00 H	222	48.30	39.50
5	#10360.00	61.7 PK	74.0	-12.3	1.00 H	108	43.20	18.50
6	#10360.00	48.3 AV	54.0	-5.7	1.00 H	108	29.80	18.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.3 PK	74.0	-15.7	1.00 V	172	52.60	5.70
2	5150.00	45.0 AV	54.0	-9.0	1.00 V	172	39.30	5.70
3	*5180.00	99.9 PK			1.00 V	173	60.40	39.50
4	*5180.00	90.4 AV			1.00 V	173	50.90	39.50
5	#10360.00	62.5 PK	74.0	-11.5	1.00 V	183	44.00	18.50
6	#10360.00	48.9 AV	54.0	-5.1	1.00 V	183	30.40	18.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	98.0 PK			1.11 H	221	58.40	39.60
2	*5200.00	87.8 AV			1.11 H	221	48.20	39.60
3	#10400.00	62.1 PK	74.0	-11.9	1.00 H	107	43.80	18.30
4	#10400.00	48.5 AV	54.0	-5.5	1.00 H	107	30.20	18.30
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	99.6 PK			1.00 V	169	60.00	39.60
2	*5200.00	89.8 AV			1.00 V	169	50.20	39.60
3	#10400.00	63.2 PK	74.0	-10.8	1.00 V	142	44.90	18.30
4	#10400.00	48.8 AV	54.0	-5.2	1.00 V	142	30.50	18.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	97.2 PK			1.00 H	226	57.60	39.60
2	*5240.00	87.0 AV			1.00 H	226	47.40	39.60
3	5350.00	57.6 PK	74.0	-16.4	1.00 H	223	51.80	5.80
4	5350.00	44.1 AV	54.0	-9.9	1.00 H	223	38.30	5.80
5	#10480.00	61.8 PK	74.0	-12.2	1.00 H	114	44.10	17.70
6	#10480.00	48.0 AV	54.0	-6.0	1.00 H	114	30.30	17.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	99.0 PK			1.00 V	186	59.40	39.60
2	*5240.00	89.5 AV			1.00 V	186	49.90	39.60
3	5350.00	57.9 PK	74.0	-16.1	1.00 V	187	52.10	5.80
4	5350.00	44.7 AV	54.0	-9.3	1.00 V	187	38.90	5.80
5	#10480.00	62.9 PK	74.0	-11.1	1.00 V	151	45.20	17.70
6	#10480.00	48.7 AV	54.0	-5.3	1.00 V	151	31.00	17.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5714.90	58.0 PK	74.0	-16.0	1.00 H	173	51.50	6.50
2	#5714.90	44.2 AV	54.0	-9.8	1.00 H	173	37.70	6.50
3	#5722.90	63.8 PK	78.2	-14.4	1.00 H	173	57.30	6.50
4	*5745.00	104.6 PK			1.00 H	175	64.20	40.40
5	*5745.00	98.2 AV			1.00 H	175	57.80	40.40
6	11490.00	62.5 PK	74.0	-11.5	1.00 H	128	45.00	17.50
7	11490.00	49.0 AV	54.0	-5.0	1.00 H	128	31.50	17.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5714.90	58.4 PK	74.0	-15.6	1.00 V	163	51.90	6.50
2	#5714.90	44.8 AV	54.0	-9.2	1.00 V	163	38.30	6.50
3	#5722.90	64.4 PK	78.2	-13.8	1.00 V	163	57.90	6.50
4	*5745.00	104.8 PK			1.00 V	160	64.40	40.40
5	*5745.00	95.3 AV			1.00 V	160	54.90	40.40
6	11490.00	63.0 PK	74.0	-11.0	1.00 V	189	45.50	17.50
7	11490.00	49.5 AV	54.0	-4.5	1.00 V	189	32.00	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	106.1 PK			1.04 H	162	65.50	40.60
2	*5785.00	96.0 AV			1.04 H	162	55.40	40.60
3	11570.00	63.1 PK	74.0	-10.9	1.00 H	133	45.60	17.50
4	11570.00	48.7 AV	54.0	-5.3	1.00 H	133	31.20	17.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	104.9 PK			1.00 V	170	64.30	40.60
2	*5785.00	95.1 AV			1.00 V	170	54.50	40.60
3	11570.00	63.5 PK	74.0	-10.5	1.00 V	184	46.00	17.50
4	11570.00	49.4 AV	54.0	-4.6	1.00 V	184	31.90	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	105.2 PK			1.49 H	166	64.50	40.70
2	*5825.00	94.7 AV			1.49 H	166	54.00	40.70
3	#5852.10	57.8 PK	78.2	-20.4	1.47 H	163	51.00	6.80
4	#5860.10	57.6 PK	74.0	-16.4	1.47 H	163	50.80	6.80
5	#5860.10	44.8 AV	54.0	-9.2	1.47 H	163	38.00	6.80
6	11650.00	62.5 PK	74.0	-11.5	1.47 H	163	44.50	18.00
7	11650.00	48.7 AV	54.0	-5.3	1.47 H	163	30.70	18.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	104.4 PK			1.00 V	160	63.70	40.70
2	*5825.00	94.5 AV			1.00 V	160	53.80	40.70
3	#5852.10	57.6 PK	78.2	-20.6	1.00 V	162	50.80	6.80
4	#5860.10	57.4 PK	74.0	-16.6	1.00 V	162	50.60	6.80
5	#5860.10	44.4 AV	54.0	-9.6	1.00 V	162	37.60	6.80
6	11650.00	62.9 PK	74.0	-11.1	1.00 V	132	44.90	18.00
7	11650.00	49.3 AV	54.0	-4.7	1.00 V	132	31.30	18.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

802.11n (HT20)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.5 PK	74.0	-14.5	1.05 H	357	53.80	5.70
2	5150.00	45.1 AV	54.0	-8.9	1.05 H	357	39.40	5.70
3	*5180.00	98.3 PK			1.00 H	357	58.80	39.50
4	*5180.00	87.3 AV			1.00 H	357	47.80	39.50
5	#10360.00	61.4 PK	74.0	-12.6	1.00 H	125	42.90	18.50
6	#10360.00	47.9 AV	54.0	-6.1	1.00 H	125	29.40	18.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.8 PK	74.0	-14.2	1.00 V	188	54.10	5.70
2	5150.00	45.4 AV	54.0	-8.6	1.00 V	188	39.70	5.70
3	*5180.00	100.8 PK			1.00 V	185	61.30	39.50
4	*5180.00	90.9 AV			1.00 V	185	51.40	39.50
5	#10360.00	62.2 PK	74.0	-11.8	1.00 V	155	43.70	18.50
6	#10360.00	48.7 AV	54.0	-5.3	1.00 V	155	30.20	18.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	96.9 PK			1.00 H	350	57.30	39.60
2	*5200.00	86.6 AV			1.00 H	350	47.00	39.60
3	#10400.00	61.7 PK	74.0	-12.3	1.00 H	112	43.40	18.30
4	#10400.00	48.4 AV	54.0	-5.6	1.00 H	112	30.10	18.30
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	100.2 PK			1.00 V	186	60.60	39.60
2	*5200.00	90.5 AV			1.00 V	186	50.90	39.60
3	#10400.00	62.6 PK	74.0	-11.4	1.00 V	124	44.30	18.30
4	#10400.00	48.7 AV	54.0	-5.3	1.00 V	124	30.40	18.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	98.6 PK			1.00 H	176	59.00	39.60
2	*5240.00	88.5 AV			1.00 H	176	48.90	39.60
3	5350.00	59.0 PK	74.0	-15.0	1.00 H	174	53.20	5.80
4	5350.00	44.0 AV	54.0	-10.0	1.00 H	174	38.20	5.80
5	#10480.00	61.5 PK	74.0	-12.5	1.00 H	105	43.80	17.70
6	#10480.00	48.4 AV	54.0	-5.6	1.00 H	105	30.70	17.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	100.4 PK			1.00 V	172	60.80	39.60
2	*5240.00	90.2 AV			1.00 V	172	50.60	39.60
3	5350.00	59.4 PK	74.0	-14.6	1.00 V	170	53.60	5.80
4	5350.00	44.6 AV	54.0	-9.4	1.00 V	170	38.80	5.80
5	#10480.00	62.5 PK	74.0	-11.5	1.00 V	152	44.80	17.70
6	#10480.00	48.4 AV	54.0	-5.6	1.00 V	152	30.70	17.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5714.90	58.6 PK	74.0	-15.4	1.00 H	203	52.10	6.50
2	#5714.90	45.1 AV	54.0	-8.9	1.00 H	203	38.60	6.50
3	#5722.90	65.0 PK	78.2	-13.2	1.00 H	203	58.50	6.50
4	*5745.00	106.7 PK			1.00 H	207	66.30	40.40
5	*5745.00	96.2 AV			1.00 H	207	55.80	40.40
6	11490.00	62.0 PK	74.0	-12.0	1.00 H	67	44.50	17.50
7	11490.00	48.5 AV	54.0	-5.5	1.00 H	67	31.00	17.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5714.90	57.7 PK	74.0	-16.3	1.04 V	192	51.20	6.50
2	#5714.90	44.4 AV	54.0	-9.6	1.04 V	192	37.90	6.50
3	#5722.90	64.5 PK	78.2	-13.7	1.04 V	192	58.00	6.50
4	*5745.00	104.9 PK			1.02 V	193	64.50	40.40
5	*5745.00	95.1 AV			1.02 V	193	54.70	40.40
6	11490.00	62.4 PK	74.0	-11.6	1.00 V	125	44.90	17.50
7	11490.00	48.7 AV	54.0	-5.3	1.00 V	125	31.20	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	108.1 PK			1.05 H	172	67.50	40.60
2	*5785.00	96.9 AV			1.05 H	172	56.30	40.60
3	11570.00	62.5 PK	74.0	-11.5	1.00 H	55	45.00	17.50
4	11570.00	48.4 AV	54.0	-5.6	1.00 H	55	30.90	17.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	106.2 PK			1.02 V	200	65.60	40.60
2	*5785.00	95.9 AV			1.02 V	200	55.30	40.60
3	11570.00	63.3 PK	74.0	-10.7	1.00 V	121	45.80	17.50
4	11570.00	48.9 AV	54.0	-5.1	1.00 V	121	31.40	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	107.9 PK			1.07 H	204	67.20	40.70
2	*5825.00	97.4 AV			1.07 H	204	56.70	40.70
3	#5852.10	59.7 PK	78.2	-18.5	1.09 H	208	52.90	6.80
4	#5860.10	58.6 PK	74.0	-15.4	1.09 H	208	51.80	6.80
5	#5860.10	45.9 AV	54.0	-8.1	1.09 H	208	39.10	6.80
6	11650.00	61.9 PK	74.0	-12.1	1.00 H	22	43.90	18.00
7	11650.00	48.3 AV	54.0	-5.7	1.00 H	22	30.30	18.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	104.9 PK			1.03 V	200	64.20	40.70
2	*5825.00	95.2 AV			1.03 V	200	54.50	40.70
3	#5852.10	59.1 PK	78.2	-19.1	1.01 V	199	52.30	6.80
4	#5860.10	57.9 PK	74.0	-16.1	1.01 V	199	51.10	6.80
5	#5860.10	45.0 AV	54.0	-9.0	1.01 V	199	38.20	6.80
6	11650.00	62.6 PK	74.0	-11.4	1.00 V	94	44.60	18.00
7	11650.00	48.7 AV	54.0	-5.3	1.00 V	94	30.70	18.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

802.11n (HT40)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.8 PK	74.0	-14.2	1.00 H	344	54.10	5.70
2	5150.00	45.3 AV	54.0	-8.7	1.00 H	344	39.60	5.70
3	*5190.00	94.3 PK			1.00 H	347	54.80	39.50
4	*5190.00	83.8 AV			1.00 H	347	44.30	39.50
5	#10380.00	61.3 PK	74.0	-12.7	1.00 H	121	42.90	18.40
6	#10380.00	47.3 AV	54.0	-6.7	1.00 H	121	28.90	18.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.1 PK	74.0	-13.9	1.00 V	189	54.40	5.70
2	5150.00	45.8 AV	54.0	-8.2	1.00 V	189	40.10	5.70
3	*5190.00	98.6 PK			1.00 V	187	59.10	39.50
4	*5190.00	88.6 AV			1.00 V	187	49.10	39.50
5	#10380.00	61.9 PK	74.0	-12.1	1.00 V	142	43.50	18.40
6	#10380.00	48.3 AV	54.0	-5.7	1.00 V	142	29.90	18.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	95.2 PK			1.00 H	174	55.60	39.60
2	*5230.00	84.1 AV			1.00 H	174	44.50	39.60
3	5350.00	59.2 PK	74.0	-14.8	1.00 H	170	53.40	5.80
4	5350.00	44.3 AV	54.0	-9.7	1.00 H	170	38.50	5.80
5	#10460.00	61.3 PK	74.0	-12.7	1.00 H	115	43.50	17.80
6	#10460.00	47.4 AV	54.0	-6.6	1.00 H	115	29.60	17.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	97.3 PK			1.00 V	171	57.70	39.60
2	*5230.00	87.0 AV			1.00 V	171	47.40	39.60
3	5350.00	59.5 PK	74.0	-14.5	1.00 V	173	53.70	5.80
4	5350.00	44.9 AV	54.0	-9.1	1.00 V	173	39.10	5.80
5	#10460.00	62.0 PK	74.0	-12.0	1.00 V	154	44.20	17.80
6	#10460.00	48.1 AV	54.0	-5.9	1.00 V	154	30.30	17.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5714.90	67.7 PK	74.0	-6.3	1.00 H	204	61.20	6.50
2	#5714.90	52.6 AV	54.0	-1.4	1.00 H	204	46.10	6.50
3	#5722.90	72.1 PK	78.2	-6.1	1.00 H	204	65.60	6.50
4	*5755.00	103.6 PK			1.00 H	213	63.10	40.50
5	*5755.00	93.2 AV			1.00 H	213	52.70	40.50
6	11510.00	61.5 PK	74.0	-12.5	1.00 H	125	44.10	17.40
7	11510.00	48.2 AV	54.0	-5.8	1.00 H	125	30.80	17.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5714.90	63.2 PK	74.0	-10.8	1.00 V	237	56.70	6.50
2	#5714.90	49.0 AV	54.0	-5.0	1.00 V	237	42.50	6.50
3	#5722.90	68.4 PK	78.2	-9.8	1.00 V	237	61.90	6.50
4	*5755.00	102.3 PK			1.00 V	235	61.80	40.50
5	*5755.00	92.4 AV			1.00 V	235	51.90	40.50
6	11510.00	62.0 PK	74.0	-12.0	1.00 V	151	44.60	17.40
7	11510.00	48.5 AV	54.0	-5.5	1.00 V	151	31.10	17.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	105.2 PK			1.06 H	166	64.60	40.60
2	*5795.00	94.9 AV			1.06 H	166	54.30	40.60
3	#5852.10	58.7 PK	78.2	-19.5	1.05 H	187	51.90	6.80
4	#5860.10	57.8 PK	74.0	-16.2	1.05 H	187	51.00	6.80
5	#5860.10	44.4 AV	54.0	-9.6	1.05 H	187	37.60	6.80
6	11590.00	61.6 PK	74.0	-12.4	1.00 H	87	44.10	17.50
7	11590.00	48.1 AV	54.0	-5.9	1.00 H	87	30.60	17.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	102.6 PK			1.00 V	201	62.00	40.60
2	*5795.00	92.9 AV			1.00 V	201	52.30	40.60
3	#5852.10	58.0 PK	78.2	-20.2	1.00 V	207	51.20	6.80
4	#5860.10	57.1 PK	74.0	-16.9	1.00 V	207	50.30	6.80
5	#5860.10	43.8 AV	54.0	-10.2	1.00 V	207	37.00	6.80
6	11590.00	62.0 PK	74.0	-12.0	1.00 V	99	44.50	17.50
7	11590.00	48.4 AV	54.0	-5.6	1.00 V	99	30.90	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

BELOW 1GHz WORST-CASE DATA: 802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	39.60	32.1 QP	40.0	-7.9	1.49 H	79	46.70	-14.60
2	88.11	29.6 QP	43.5	-13.9	1.99 H	119	49.10	-19.50
3	249.17	36.6 QP	46.0	-9.4	1.24 H	335	51.00	-14.40
4	499.48	34.1 QP	46.0	-11.9	1.49 H	153	43.00	-8.90
5	625.60	35.4 QP	46.0	-10.6	1.24 H	151	41.60	-6.20
6	749.79	36.5 QP	46.0	-9.5	1.00 H	241	40.10	-3.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	39.60	38.7 QP	40.0	-1.3	1.00 V	28	53.30	-14.60
2	161.85	30.3 QP	43.5	-13.2	1.00 V	246	44.00	-13.70
3	249.17	30.5 QP	46.0	-15.5	1.00 V	59	44.90	-14.40
4	499.48	31.0 QP	46.0	-15.0	1.00 V	239	39.90	-8.90
5	625.60	31.4 QP	46.0	-14.6	1.00 V	221	37.60	-6.20
6	749.79	34.2 QP	46.0	-11.8	1.24 V	175	37.80	-3.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

TEST MODE B

ABOVE 1GHz DATA:

802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.9 PK	74.0	-15.1	1.00 H	211	53.20	5.70
2	5150.00	45.1 AV	54.0	-8.9	1.00 H	211	39.40	5.70
3	*5180.00	97.3 PK			1.00 H	215	57.80	39.50
4	*5180.00	87.1 AV			1.00 H	215	47.60	39.50
5	#10360.00	61.2 PK	74.0	-12.8	1.00 H	154	42.70	18.50
6	#10360.00	48.2 AV	54.0	-5.8	1.00 H	154	29.70	18.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.3 PK	74.0	-14.7	1.00 V	151	53.60	5.70
2	5150.00	45.6 AV	54.0	-8.4	1.00 V	151	39.90	5.70
3	*5180.00	101.0 PK			1.00 V	158	61.50	39.50
4	*5180.00	91.8 AV			1.00 V	158	52.30	39.50
5	#10360.00	62.0 PK	74.0	-12.0	1.00 V	123	43.50	18.50
6	#10360.00	48.7 AV	54.0	-5.3	1.00 V	123	30.20	18.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	97.8 PK			1.00 H	212	58.20	39.60
2	*5200.00	88.2 AV			1.00 H	212	48.60	39.60
3	#10400.00	61.5 PK	74.0	-12.5	1.00 H	124	43.20	18.30
4	#10400.00	47.9 AV	54.0	-6.1	1.00 H	124	29.60	18.30
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	100.2 PK			1.00 V	150	60.60	39.60
2	*5200.00	91.0 AV			1.00 V	150	51.40	39.60
3	#10400.00	62.4 PK	74.0	-11.6	1.00 V	194	44.10	18.30
4	#10400.00	48.5 AV	54.0	-5.5	1.00 V	194	30.20	18.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	97.9 PK			1.00 H	213	58.30	39.60
2	*5240.00	88.0 AV			1.00 H	213	48.40	39.60
3	5350.00	58.1 PK	74.0	-15.9	1.00 H	211	52.30	5.80
4	5350.00	44.0 AV	54.0	-10.0	1.00 H	211	38.20	5.80
5	#10480.00	61.3 PK	74.0	-12.7	1.00 H	89	43.60	17.70
6	#10480.00	47.5 AV	54.0	-6.5	1.00 H	89	29.80	17.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	100.9 PK			1.08 V	150	61.30	39.60
2	*5240.00	91.2 AV			1.08 V	150	51.60	39.60
3	5350.00	58.7 PK	74.0	-15.3	1.06 V	158	52.90	5.80
4	5350.00	44.6 AV	54.0	-9.4	1.06 V	158	38.80	5.80
5	#10480.00	62.3 PK	74.0	-11.7	1.00 V	125	44.60	17.70
6	#10480.00	48.2 AV	54.0	-5.8	1.00 V	125	30.50	17.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5714.90	56.9 PK	74.0	-17.1	1.00 H	19	50.40	6.50
2	#5714.90	43.8 AV	54.0	-10.2	1.00 H	19	37.30	6.50
3	#5722.90	63.5 PK	78.2	-14.7	1.00 H	19	57.00	6.50
4	*5745.00	101.6 PK			1.00 H	14	61.20	40.40
5	*5745.00	90.9 AV			1.00 H	14	50.50	40.40
6	11490.00	59.5 PK	74.0	-14.5	1.00 H	141	42.00	17.50
7	11490.00	45.3 AV	54.0	-8.7	1.00 H	141	27.80	17.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5714.90	57.7 PK	74.0	-16.3	1.00 V	309	51.20	6.50
2	#5714.90	44.4 AV	54.0	-9.6	1.00 V	309	37.90	6.50
3	#5722.90	64.3 PK	78.2	-13.9	1.00 V	309	57.80	6.50
4	*5745.00	107.2 PK			1.00 V	302	66.80	40.40
5	*5745.00	97.0 AV			1.00 V	302	56.60	40.40
6	11490.00	59.8 PK	74.0	-14.2	1.00 V	325	42.30	17.50
7	11490.00	45.8 AV	54.0	-8.2	1.00 V	325	28.30	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	100.1 PK			1.00 H	14	59.50	40.60
2	*5785.00	89.5 AV			1.00 H	14	48.90	40.60
3	11570.00	59.9 PK	74.0	-14.1	1.00 H	146	42.40	17.50
4	11570.00	45.8 AV	54.0	-8.2	1.00 H	146	28.30	17.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	107.6 PK			1.00 V	304	67.00	40.60
2	*5785.00	96.9 AV			1.00 V	304	56.30	40.60
3	11570.00	60.4 PK	74.0	-13.6	1.00 V	326	42.90	17.50
4	11570.00	46.4 AV	54.0	-7.6	1.00 V	326	28.90	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	99.4 PK			1.00 H	218	58.70	40.70
2	*5825.00	89.5 AV			1.00 H	218	48.80	40.70
3	#5852.10	57.4 PK	78.2	-20.8	1.00 H	216	50.60	6.80
4	#5860.10	58.2 PK	74.0	-15.8	1.00 H	216	51.40	6.80
5	#5860.10	44.3 AV	54.0	-9.7	1.00 H	216	37.50	6.80
6	11650.00	59.1 PK	74.0	-14.9	1.00 H	143	41.10	18.00
7	11650.00	45.2 AV	54.0	-8.8	1.00 H	143	27.20	18.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	106.8 PK			1.00 V	304	66.10	40.70
2	*5825.00	96.1 AV			1.00 V	304	55.40	40.70
3	#5852.10	58.1 PK	78.2	-20.1	1.00 V	307	51.30	6.80
4	#5860.10	59.0 PK	74.0	-15.0	1.00 V	307	52.20	6.80
5	#5860.10	44.9 AV	54.0	-9.1	1.00 V	307	38.10	6.80
6	11650.00	60.2 PK	74.0	-13.8	1.00 V	322	42.20	18.00
7	11650.00	46.2 AV	54.0	-7.8	1.00 V	322	28.20	18.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

802.11n (20MHz)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.1 PK	74.0	-14.9	1.00 H	185	53.40	5.70
2	5150.00	45.2 AV	54.0	-8.8	1.00 H	185	39.50	5.70
3	*5180.00	98.1 PK			1.00 H	183	58.60	39.50
4	*5180.00	87.5 AV			1.00 H	183	48.00	39.50
5	#10360.00	61.1 PK	74.0	-12.9	1.00 H	124	42.60	18.50
6	#10360.00	48.0 AV	54.0	-6.0	1.00 H	124	29.50	18.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.9 PK	74.0	-14.1	1.00 V	172	54.20	5.70
2	5150.00	45.7 AV	54.0	-8.3	1.00 V	172	40.00	5.70
3	*5180.00	100.7 PK			1.00 V	173	61.20	39.50
4	*5180.00	90.5 AV			1.00 V	173	51.00	39.50
5	#10360.00	61.8 PK	74.0	-12.2	1.00 V	88	43.30	18.50
6	#10360.00	48.5 AV	54.0	-5.5	1.00 V	88	30.00	18.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	98.1 PK			1.00 H	218	58.50	39.60
2	*5200.00	87.0 AV			1.00 H	218	47.40	39.60
3	#10400.00	61.6 PK	74.0	-12.4	1.00 H	156	43.30	18.30
4	#10400.00	48.1 AV	54.0	-5.9	1.00 H	156	29.80	18.30
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	100.4 PK			1.00 V	175	60.80	39.60
2	*5200.00	90.2 AV			1.00 V	175	50.60	39.60
3	#10400.00	62.2 PK	74.0	-11.8	1.00 V	171	43.90	18.30
4	#10400.00	49.0 AV	54.0	-5.0	1.00 V	171	30.70	18.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	97.9 PK			1.00 H	213	58.30	39.60
2	*5240.00	87.4 AV			1.00 H	213	47.80	39.60
3	5350.00	58.2 PK	74.0	-15.8	1.00 H	217	52.40	5.80
4	5350.00	44.1 AV	54.0	-9.9	1.00 H	217	38.30	5.80
5	#10480.00	60.9 PK	74.0	-13.1	1.00 H	152	43.20	17.70
6	#10480.00	47.6 AV	54.0	-6.4	1.00 H	152	29.90	17.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	100.9 PK			1.05 V	149	61.30	39.60
2	*5240.00	90.8 AV			1.05 V	149	51.20	39.60
3	5350.00	59.0 PK	74.0	-15.0	1.02 V	142	53.20	5.80
4	5350.00	44.7 AV	54.0	-9.3	1.02 V	142	38.90	5.80
5	#10480.00	61.3 PK	74.0	-12.7	1.00 V	125	43.60	17.70
6	#10480.00	48.2 AV	54.0	-5.8	1.00 V	125	30.50	17.70

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5714.90	58.7 PK	74.0	-15.3	1.00 H	320	52.20	6.50
2	#5714.90	44.5 AV	54.0	-9.5	1.00 H	320	38.00	6.50
3	#5722.90	67.9 PK	78.2	-10.3	1.00 H	320	61.40	6.50
4	*5745.00	101.5 PK			1.43 H	324	61.10	40.40
5	*5745.00	91.4 AV			1.43 H	324	51.00	40.40
6	11490.00	59.6 PK	74.0	-14.4	1.00 H	146	42.10	17.50
7	11490.00	46.0 AV	54.0	-8.0	1.00 H	146	28.50	17.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5714.90	59.1 PK	74.0	-14.9	1.00 V	15	52.60	6.50
2	#5714.90	45.2 AV	54.0	-8.8	1.00 V	15	38.70	6.50
3	#5722.90	68.3 PK	78.2	-9.9	1.00 V	15	61.80	6.50
4	*5745.00	106.6 PK			1.00 V	15	66.20	40.40
5	*5745.00	96.8 AV			1.00 V	15	56.40	40.40
6	11490.00	60.3 PK	74.0	-13.7	1.00 V	324	42.80	17.50
7	11490.00	46.5 AV	54.0	-7.5	1.00 V	324	29.00	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	101.0 PK			1.00 H	6	60.40	40.60
2	*5785.00	90.4 AV			1.00 H	6	49.80	40.60
3	11570.00	60.1 PK	74.0	-13.9	1.00 H	140	42.60	17.50
4	11570.00	46.2 AV	54.0	-7.8	1.00 H	140	28.70	17.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	106.1 PK			1.00 V	289	65.50	40.60
2	*5785.00	96.3 AV			1.00 V	289	55.70	40.60
3	11570.00	60.9 PK	74.0	-13.1	1.00 V	320	43.40	17.50
4	11570.00	46.7 AV	54.0	-7.3	1.00 V	320	29.20	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	100.8 PK			1.00 H	175	60.10	40.70
2	*5825.00	90.7 AV			1.00 H	175	50.00	40.70
3	#5852.10	60.4 PK	78.2	-17.8	1.00 H	179	53.60	6.80
4	#5860.10	57.4 PK	74.0	-16.6	1.00 H	179	50.60	6.80
5	#5860.10	43.7 AV	54.0	-10.3	1.00 H	179	36.90	6.80
6	11650.00	60.4 PK	74.0	-13.6	1.00 H	149	42.40	18.00
7	11650.00	46.3 AV	54.0	-7.7	1.00 H	149	28.30	18.00
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	106.3 PK			1.02 V	66	65.60	40.70
2	*5825.00	96.8 AV			1.02 V	66	56.10	40.70
3	#5852.10	61.1 PK	78.2	-17.1	1.03 V	63	54.30	6.80
4	#5860.10	57.7 PK	74.0	-16.3	1.03 V	63	50.90	6.80
5	#5860.10	44.3 AV	54.0	-9.7	1.03 V	63	37.50	6.80
6	11650.00	60.7 PK	74.0	-13.3	1.00 V	326	42.70	18.00
7	11650.00	46.8 AV	54.0	-7.2	1.00 V	326	28.80	18.00

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

802.11n (40MHz)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.1 PK	74.0	-13.9	1.00 H	213	54.40	5.70
2	5150.00	46.1 AV	54.0	-7.9	1.00 H	213	40.40	5.70
3	*5190.00	95.0 PK			1.00 H	217	55.50	39.50
4	*5190.00	84.8 AV			1.00 H	217	45.30	39.50
5	#10380.00	60.3 PK	74.0	-13.7	1.00 H	174	41.90	18.40
6	#10380.00	47.2 AV	54.0	-6.8	1.00 H	174	28.80	18.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.9 PK	74.0	-13.1	1.00 V	177	55.20	5.70
2	5150.00	46.7 AV	54.0	-7.3	1.00 V	177	41.00	5.70
3	*5190.00	97.3 PK			1.00 V	177	57.80	39.50
4	*5190.00	87.5 AV			1.00 V	177	48.00	39.50
5	#10380.00	61.2 PK	74.0	-12.8	1.00 V	171	42.80	18.40
6	#10380.00	48.2 AV	54.0	-5.8	1.00 V	171	29.80	18.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	95.3 PK			1.00 H	264	55.70	39.60
2	*5230.00	85.0 AV			1.00 H	264	45.40	39.60
3	5350.00	59.4 PK	74.0	-14.6	1.00 H	260	53.60	5.80
4	5350.00	45.2 AV	54.0	-8.8	1.00 H	260	39.40	5.80
5	#10460.00	60.2 PK	74.0	-13.8	1.00 H	164	42.40	17.80
6	#10460.00	47.1 AV	54.0	-6.9	1.00 H	164	29.30	17.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	97.2 PK			1.00 V	178	57.60	39.60
2	*5230.00	86.9 AV			1.00 V	178	47.30	39.60
3	5350.00	59.8 PK	74.0	-14.2	1.00 V	173	54.00	5.80
4	5350.00	45.7 AV	54.0	-8.3	1.00 V	173	39.90	5.80
5	#10460.00	60.6 PK	74.0	-13.4	1.00 V	165	42.80	17.80
6	#10460.00	48.0 AV	54.0	-6.0	1.00 V	165	30.20	17.80

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5714.90	59.9 PK	74.0	-14.1	1.00 H	217	53.40	6.50
2	#5714.90	45.1 AV	54.0	-8.9	1.00 H	217	38.60	6.50
3	#5722.90	59.6 PK	78.2	-18.6	1.00 H	217	53.10	6.50
4	*5755.00	98.6 PK			1.00 H	220	58.10	40.50
5	*5755.00	88.4 AV			1.00 H	220	47.90	40.50
6	11510.00	59.0 PK	74.0	-15.0	1.00 H	142	41.60	17.40
7	11510.00	44.5 AV	54.0	-9.5	1.00 H	142	27.10	17.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5714.90	70.1 PK	74.0	-3.9	1.00 V	13	63.60	6.50
2	#5714.90	53.0 AV	54.0	-1.0	1.00 V	13	46.50	6.50
3	#5722.90	73.8 PK	78.2	-4.4	1.00 V	13	67.30	6.50
4	*5755.00	104.2 PK			1.00 V	16	63.70	40.50
5	*5755.00	95.1 AV			1.00 V	16	54.60	40.50
6	11510.00	59.5 PK	74.0	-14.5	1.00 V	321	42.10	17.40
7	11510.00	44.9 AV	54.0	-9.1	1.00 V	321	27.50	17.40

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	99.6 PK			1.00 H	347	59.00	40.60
2	*5795.00	88.9 AV			1.00 H	347	48.30	40.60
3	#5852.10	57.4 PK	78.2	-20.8	1.00 H	342	50.60	6.80
4	#5860.10	57.6 PK	74.0	-16.4	1.00 H	342	50.80	6.80
5	#5860.10	43.9 AV	54.0	-10.1	1.00 H	342	37.10	6.80
6	11590.00	58.9 PK	74.0	-15.1	1.00 H	147	41.40	17.50
7	11590.00	44.8 AV	54.0	-9.2	1.00 H	147	27.30	17.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	104.8 PK			1.00 V	290	64.20	40.60
2	*5795.00	94.7 AV			1.00 V	290	54.10	40.60
3	#5852.10	58.1 PK	78.2	-20.1	1.00 V	295	51.30	6.80
4	#5860.10	58.3 PK	74.0	-15.7	1.00 V	295	51.50	6.80
5	#5860.10	44.5 AV	54.0	-9.5	1.00 V	295	37.70	6.80
6	11590.00	59.6 PK	74.0	-14.4	1.00 V	324	42.10	17.50
7	11590.00	45.8 AV	54.0	-8.2	1.00 V	324	28.30	17.50

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

BELOW 1GHz WORST-CASE DATA: 802.11a

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	39.60	32.4 QP	40.0	-7.6	1.49 H	96	47.00	-14.60
2	86.17	30.5 QP	40.0	-9.5	1.99 H	272	49.80	-19.30
3	249.17	36.6 QP	46.0	-9.4	1.00 H	187	51.00	-14.40
4	470.37	33.3 QP	46.0	-12.7	1.99 H	12	42.70	-9.40
5	499.48	35.0 QP	46.0	-11.0	1.49 H	223	43.90	-8.90
6	749.79	37.4 QP	46.0	-8.6	1.00 H	203	41.00	-3.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	39.60	38.5 QP	40.0	-1.5	1.25 V	7	53.10	-14.60
2	88.11	29.7 QP	43.5	-13.8	1.49 V	199	49.20	-19.50
3	249.17	31.0 QP	46.0	-15.0	1.99 V	24	45.40	-14.40
4	499.48	33.5 QP	46.0	-12.5	1.99 V	150	42.40	-8.90
5	625.60	33.5 QP	46.0	-12.5	1.49 V	198	39.70	-6.20
6	749.79	34.4 QP	46.0	-11.6	1.24 V	180	38.00	-3.60

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

NOTE: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCI	100612	Sep. 30, 2014	Sep. 29, 2015
RF signal cable Woken	5D-FB	Cable-HYC01-01	Dec. 26, 2014	Dec. 25, 2015
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Feb. 13, 2014	Feb. 12, 2015
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 21, 2014	Jul. 20, 2015
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HwaYa Shielded Room 1.

3. The VCCI Site Registration No. is C-2040.

4.2.3 TEST PROCEDURES

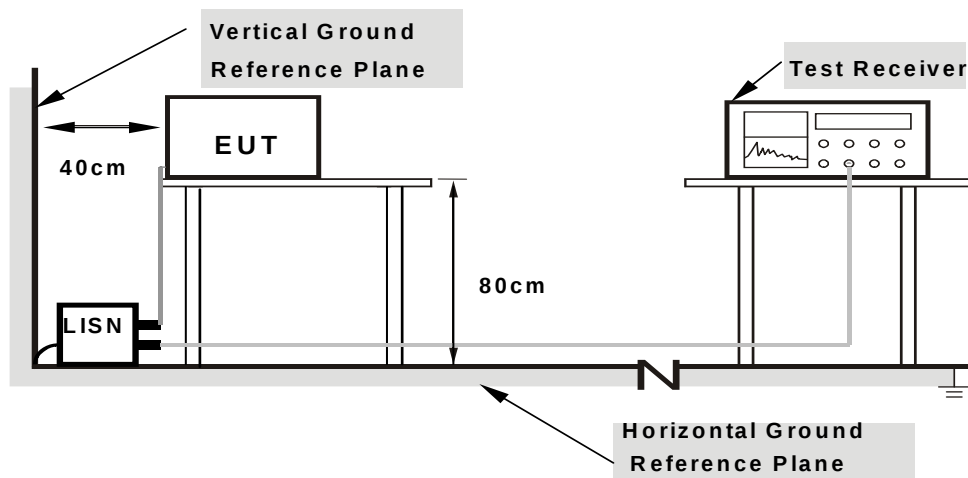
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

4.2.7 TEST RESULTS

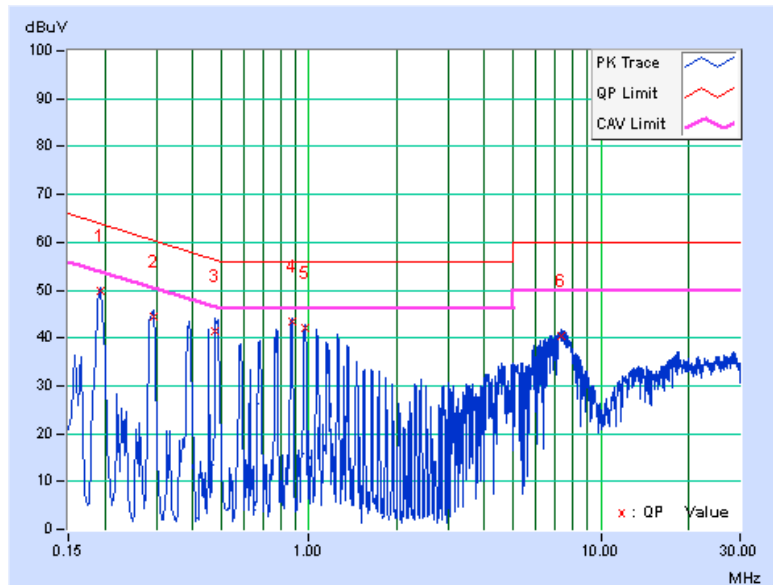
CONDUCTED WORST-CASE DATA: 802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19305	0.07	49.71	46.80	49.78	46.87	63.90	53.90	-14.12	-7.03
2	0.29351	0.07	44.23	41.56	44.30	41.63	60.42	50.42	-16.12	-8.79
3	0.47915	0.08	41.30	38.03	41.38	38.11	56.35	46.35	-14.97	-8.24
4	0.87335	0.10	43.25	41.33	43.35	41.43	56.00	46.00	-12.65	-4.57
5	0.97084	0.11	42.01	38.22	42.12	38.33	56.00	46.00	-13.88	-7.67
6	7.34831	0.39	40.10	30.45	40.49	30.84	60.00	50.00	-19.51	-19.16

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

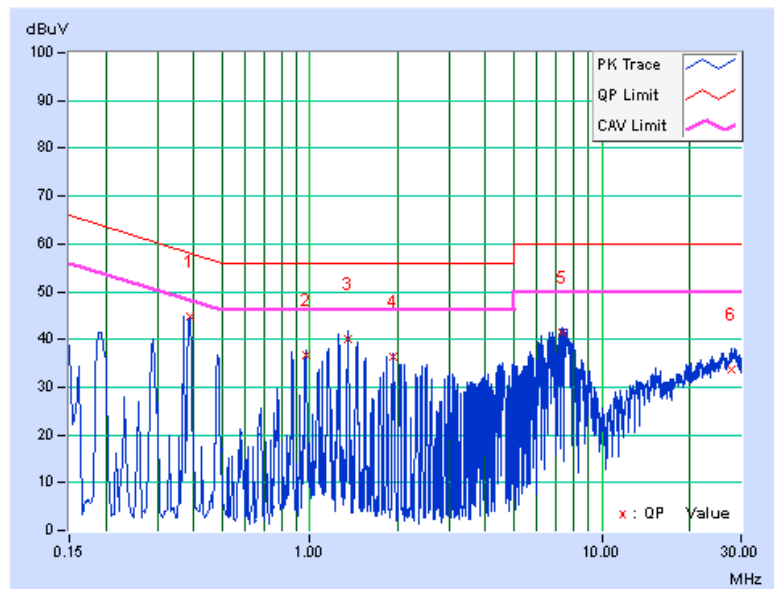


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.38808	0.07	44.82	43.83	44.89	43.90	58.10	48.10	-13.22	-4.21
2	0.96719	0.09	36.55	35.34	36.64	35.43	56.00	46.00	-19.36	-10.57
3	1.35428	0.11	39.79	35.88	39.90	35.99	56.00	46.00	-16.10	-10.01
4	1.93296	0.14	36.17	32.97	36.31	33.11	56.00	46.00	-19.69	-12.89
5	7.33658	0.34	40.96	31.02	41.30	31.36	60.00	50.00	-18.70	-18.64
6	27.93055	1.08	32.51	22.19	33.59	23.27	60.00	50.00	-26.41	-26.73

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



4.3 TRANSMIT POWER MEASUREMENT

4.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW (21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
	√	Indoor Access Point	1 Watt (30 dBm)
		Mobile and Portable client device	250mW (24 dBm)
U-NII-2A		---	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C		---	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	√	---	1 Watt (30 dBm)

*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 D01 Multiple Transmitter Output v02r01 Method of conducted output power measurement on IEEE 802.11 devices,

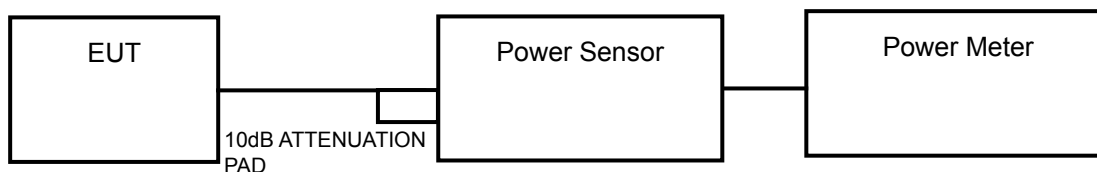
Array Gain = 0 dB (i.e., no array gain) for NANT $\leq$ 4;

Array Gain = 0 dB (i.e., no array gain) for channel widths $\geq$ 40 MHz for any NANT;

Array Gain = 5 log(NANT/NSS) dB or 3 dB, whichever is less for 20-MHz channel widths with NANT $\geq$ 5.

For power measurements on all other devices: Array Gain = 10 log(NANT/NSS) dB.

4.3.2 TEST SETUP



4.3.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.3.4 TEST PROCEDURE

FOR AVERAGE POWER MEASUREMENT

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

4.3.5 DEVIATION FROM TEST STANDARD

No deviation.

4.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

4.3.7 TEST RESULTS

POWER OUTPUT:

802.11a

CHAN.	CHAN. FREQ. (MHz)	MAXIMUM CONDUCTED POWER (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
36	5180	8.38	7.26	6.76	16.950	12.29	30	PASS
40	5200	8.29	7.63	6.34	16.844	12.26	30	PASS
48	5240	8.27	7.92	6.44	17.314	12.38	30	PASS
149	5745	12.84	11.59	11.27	47.049	16.73	30	PASS
157	5785	12.59	11.53	11.14	45.380	16.57	30	PASS
165	5825	12.69	11.70	11.17	46.461	16.67	30	PASS

802.11n (HT20)

CHAN.	CHAN. FREQ. (MHz)	MAXIMUM CONDUCTED POWER (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
36	5180	8.64	7.75	6.76	18.010	12.56	30	PASS
40	5200	8.57	7.43	6.65	17.352	12.39	30	PASS
48	5240	8.32	7.17	6.37	16.339	12.13	30	PASS
149	5745	14.05	12.28	12.51	60.138	17.79	30	PASS
157	5785	13.99	12.40	12.05	58.471	17.67	30	PASS
165	5825	13.72	12.62	11.82	57.036	17.56	30	PASS

802.11n (HT40)

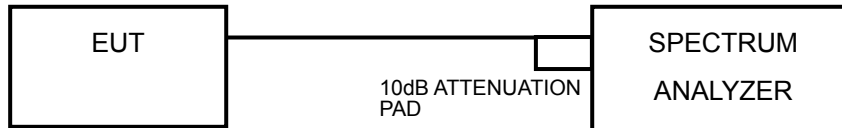
CHAN.	CHAN. FREQ. (MHz)	MAXIMUM CONDUCTED POWER (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
38	5190	8.42	7.45	6.44	16.915	12.28	30	PASS
46	5230	8.86	7.47	6.90	18.174	12.59	30	PASS
151	5755	13.85	12.23	12.76	59.857	17.77	30	PASS
159	5795	13.51	12.80	12.41	58.912	17.70	30	PASS

4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
	√	Indoor Access Point	
		Mobile and Portable client device	11dBm/ MHz
U-NII-2A		---	11dBm/ MHz
U-NII-2C		---	11dBm/ MHz
U-NII-3	√	---	30dBm/ 500kHz

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.4.4 TEST PROCEDURES

For U-NII-1 band:

Without duty factor

Using method SA-1

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 30 kHz, Set VBW ≥ 1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to “free run”.
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value

With duty factor

Using method SA-2

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 30 kHz, Set VBW $\geq$ 1 MHz, Detector = RMS
- 3) Set Channel power measure = 1MHz
- 4) Sweep time = auto, trigger set to “free run”.
- 5) Trace average at least 100 traces in power averaging mode.
- 6) Record the max value and add $10 \log (1/\text{duty cycle})$

For U-NII-3 band:

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 500 kHz, Set VBW $\geq$ 3 RBW, Detector = RMS
- 3) Sweep time = auto, trigger set to “free run”.
- 4) Trace average at least 100 traces in power averaging mode.
- 5) Record the max value and add $10 \log (1/\text{duty cycle})$
- 6) Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where $\text{BWCF} = 10\log(500 \text{ kHz}/300\text{kHz})$

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 EUT OPERATING CONDITIONS

Same as 4.3.6.

4.4.7 TEST RESULTS

For U-NII-1 Band

802.11a

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)			TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2			
36	5180	-3.23	-5.14	-5.07	0.39	12.66	PASS
40	5200	-3.42	-4.10	-4.08	0.92	12.66	PASS
48	5240	-3.22	-4.61	-4.05	0.85	12.66	PASS

NOTE:

- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For U-NII-1 Band:**
Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 10.34\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(10.34-6) = 12.66\text{dBm}$.

802.11n (HT20)

CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)			TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2					
36	5180	-3.59	-4.41	-4.99	0.76	0.28	1.04	12.66	PASS
40	5200	-3.80	-4.74	-4.36	0.77	0.28	1.05	12.66	PASS
48	5240	-4.02	-5.56	-4.66	0.35	0.28	0.63	12.66	PASS

NOTE:

- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For U-NII-1 Band:**
Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 10.34\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(10.34-6) = 12.66\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

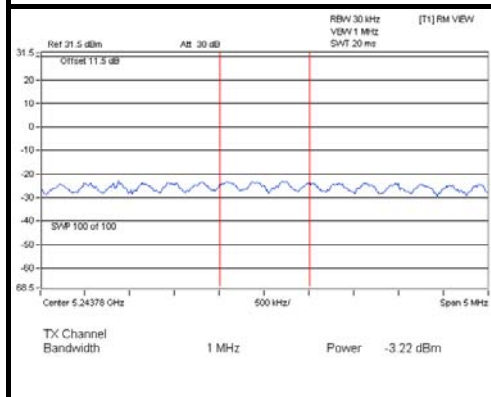
CHAN.	CHAN. FREQ. (MHz)	PSD (dBm)			TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2					
38	5190	-8.45	-7.24	-7.05	-2.61	0.15	-2.46	12.66	PASS
46	5230	-7.25	-6.85	-6.81	-2.04	0.15	-1.89	12.66	PASS

NOTE:

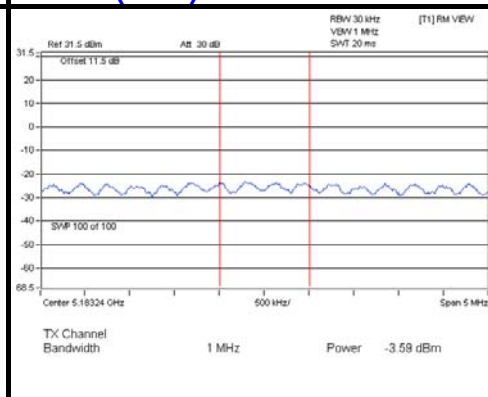
- Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
- For U-NII-1 Band:**
Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 10.34\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $17-(10.34-6) = 12.66\text{dBm}$.
- Refer to section 3.3 for duty cycle spectrum plot.

SPECTRUM PLOT OF WORST VALUE

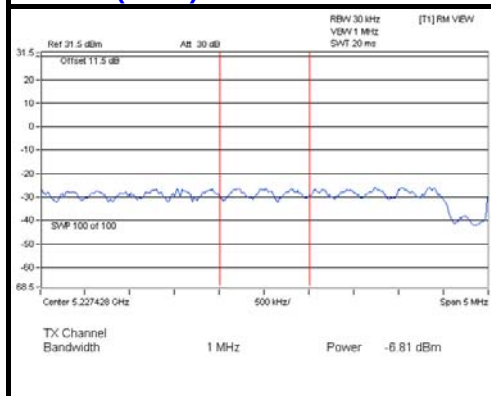
802.11a



802.11n (HT20)



802.11n (HT40)



For U-NII-3 Band

802.11a

TX chain	Channel	Freq. (MHz)	PSD (dBm/300 kHz)	PSD (dBm/500 kHz)	10 log (N=3) dB	Total PSD (dBm/500 kHz)	Limit (dBm/500 kHz)	PASS /FAIL
0	149	5745	-8.62	-6.40	4.77	-1.63	25.66	PASS
	157	5785	-8.32	-6.10	4.77	-1.33	25.66	PASS
	165	5825	-8.81	-6.59	4.77	-1.82	25.66	PASS
1	149	5745	-8.40	-6.18	4.77	-1.41	25.66	PASS
	157	5785	-8.60	-6.38	4.77	-1.61	25.66	PASS
	165	5825	-9.10	-6.88	4.77	-2.11	25.66	PASS
2	149	5745	-8.99	-6.77	4.77	-2.00	25.66	PASS
	157	5785	-8.84	-6.62	4.77	-1.85	25.66	PASS
	165	5825	-9.13	-6.91	4.77	-2.14	25.66	PASS

NOTE: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 10.34\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (10.34 - 6) = 25.66\text{dBm}$.

802.11n (HT20)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300 kHz)	PSD (dBm/500 kHz)	10 log (N=3) dB	Duty Factor	Total PSD (dBm/500 kHz)	Limit (dBm/500 kHz)	PASS /FAIL
0	149	5745	-7.74	-5.52	4.77	0.28	-0.19	25.66	PASS
	157	5785	-7.95	-5.73	4.77	0.28	-0.40	25.66	PASS
	165	5825	-7.92	-5.70	4.77	0.28	-0.37	25.66	PASS
1	149	5745	-7.66	-5.44	4.77	0.28	-0.11	25.66	PASS
	157	5785	-8.04	-5.82	4.77	0.28	-0.49	25.66	PASS
	165	5825	-8.25	-6.03	4.77	0.28	-0.70	25.66	PASS
2	149	5745	-7.39	-5.17	4.77	0.28	0.16	25.66	PASS
	157	5785	-7.74	-5.52	4.77	0.28	-0.19	25.66	PASS
	165	5825	-8.25	-6.03	4.77	0.28	-0.70	25.66	PASS

NOTE:

1. Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 10.34\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (10.34 - 6) = 25.66\text{dBm}$.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

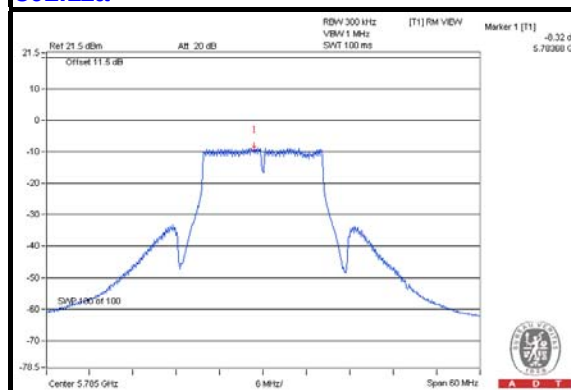
TX chain	Channel	Freq. (MHz)	PSD (dBm/300 kHz)	PSD (dBm/500 kHz)	10 log (N=3) dB	Duty Factor	Total PSD (dBm/500 kHz)	Limit (dBm/500 kHz)	PASS /FAIL
0	151	5755	-9.58	-7.36	4.77	0.15	-2.44	25.66	PASS
	159	5795	-9.88	-7.66	4.77	0.15	-2.74	25.66	PASS
1	151	5755	-9.60	-7.38	4.77	0.15	-2.46	25.66	PASS
	159	5795	-10.10	-7.88	4.77	0.15	-2.96	25.66	PASS
2	151	5755	-9.87	-7.65	4.77	0.15	-2.73	25.66	PASS
	159	5795	-10.09	-7.87	4.77	0.15	-2.95	25.66	PASS

NOTE:

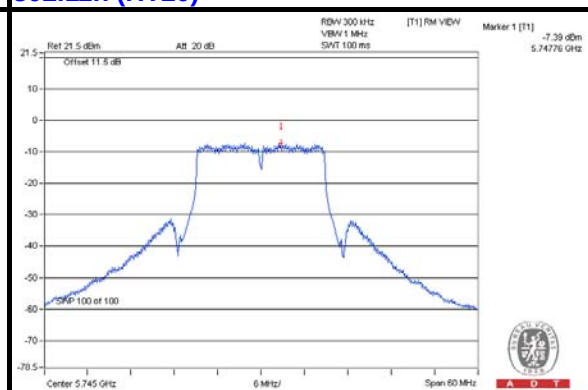
1. Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 10.34\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30-(10.34-6) = 25.66\text{dBm}$.
2. Refer to section 3.3 for duty cycle spectrum plot.

SPECTRUM PLOT OF WORST VALUE

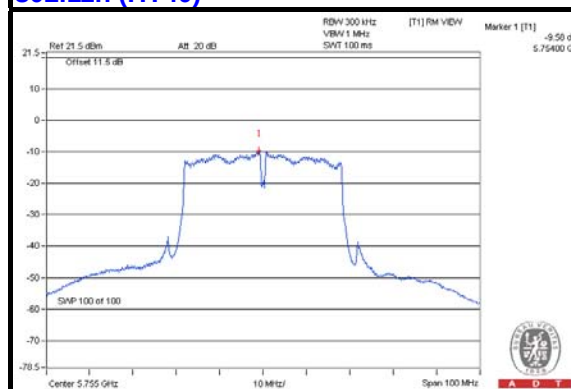
802.11a



802.11n (HT20)



802.11n (HT40)

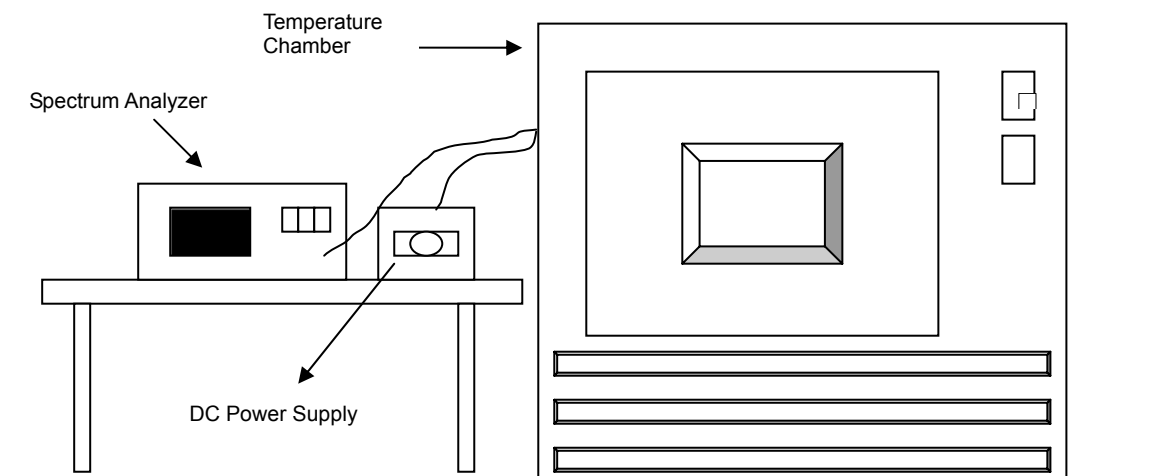


4.5 FREQUENCY STABILITY

4.5.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency of the carrier signal shall be maintained within band of operation.

4.5.2 TEST SETUP



4.5.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.5.4 TEST PROCEDURE

- a. The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
- b. Turn the EUT on and couple its output to a spectrum analyzer.
- c. Turn the EUT off and set the chamber to the highest temperature specified.
- d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
- e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITION

Set the EUT transmit at un-modulation mode to test frequency stability.

4.5.7 TEST RESULTS

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5240MHz									
TEMP. (°C)	POWER SUPPLY (Vdc)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
50	55	5240.0156	0.00030	5240.0143	0.00027	5240.0135	0.00026	5240.0127	0.00024
40	55	5239.9977	-0.00004	5239.9968	-0.00006	5239.997	-0.00006	5239.9982	-0.00003
30	55	5239.9928	-0.00014	5239.992	-0.00015	5239.9918	-0.00016	5239.9958	-0.00008
20	55	5239.9841	-0.00030	5239.9838	-0.00031	5239.9831	-0.00032	5239.9871	-0.00025
10	55	5239.9842	-0.00030	5239.9887	-0.00022	5239.9892	-0.00021	5239.9865	-0.00026
0	55	5240.0093	0.00018	5240.0111	0.00021	5240.0107	0.00020	5240.0126	0.00024
-10	55	5239.9925	-0.00014	5239.9929	-0.00014	5239.9967	-0.00006	5239.9923	-0.00015
-20	55	5240.0217	0.00041	5240.02	0.00038	5240.0218	0.00042	5240.0181	0.00035
-30	55	5239.9784	-0.00041	5239.9806	-0.00037	5239.9773	-0.00043	5239.976	-0.00046

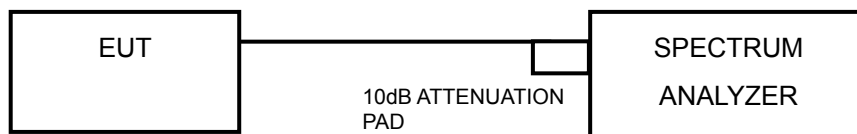
FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5240MHz									
TEMP. (°C)	POWER SUPPLY (Vdc)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
20	63.25	5239.9835	-0.00031	5239.9843	-0.00030	5239.9828	-0.00033	5239.988	-0.00023
	55	5239.9841	-0.00030	5239.9838	-0.00031	5239.9831	-0.00032	5239.9871	-0.00025
	46.75	5239.984	-0.00031	5239.9841	-0.00030	5239.9822	-0.00034	5239.9878	-0.00023

4.6 6dB BANDWIDTH MEASUREMENT

4.6.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

4.6.2 TEST SETUP



4.6.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.6.4 TEST PROCEDURE

- Set resolution bandwidth (RBW) = 100kHz
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

4.6.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.6.7 TEST RESULTS

802.11a

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
149	5745	16.42	16.41	16.43	0.5	PASS
157	5785	16.46	16.42	16.49	0.5	PASS
165	5825	16.45	16.43	16.44	0.5	PASS

802.11n (HT20)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
149	5745	17.67	17.68	17.64	0.5	PASS
157	5785	17.66	17.68	17.62	0.5	PASS
165	5825	17.67	17.66	17.65	0.5	PASS

802.11n (HT40)

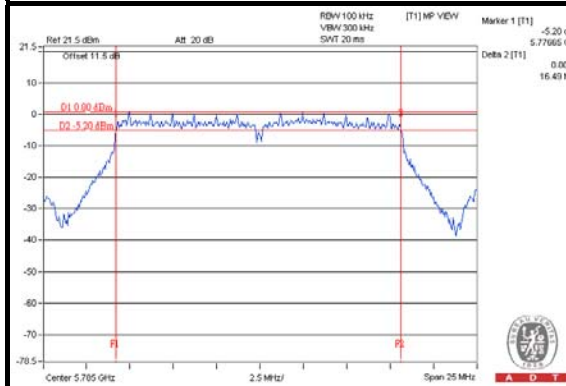
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
151	5755	36.36	36.44	36.44	0.5	PASS
159	5795	35.77	36.47	36.45	0.5	PASS



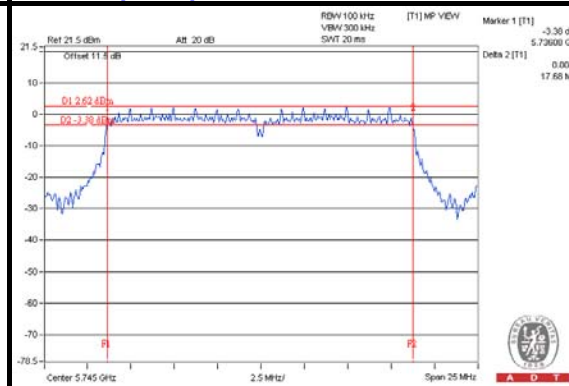
A D T

SPECTRUM PLOT OF WORST VALUE

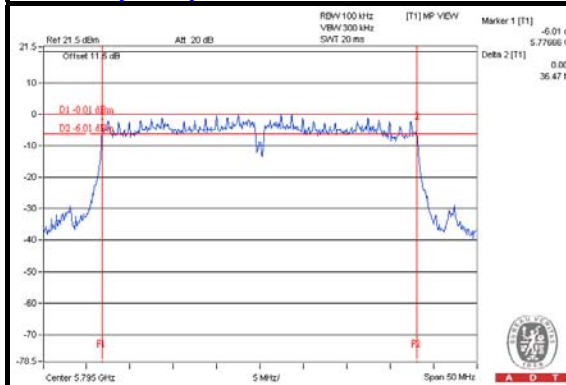
802.11a



802.11n (HT20)



802.11n (HT40)



5. PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

6. INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab:

Tel: 886-3-5935343

Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Lab:

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

7. APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

---END---