

Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Legends Ultimate Home Arcade

Trade Mark: N/A

Test Model: HA8800

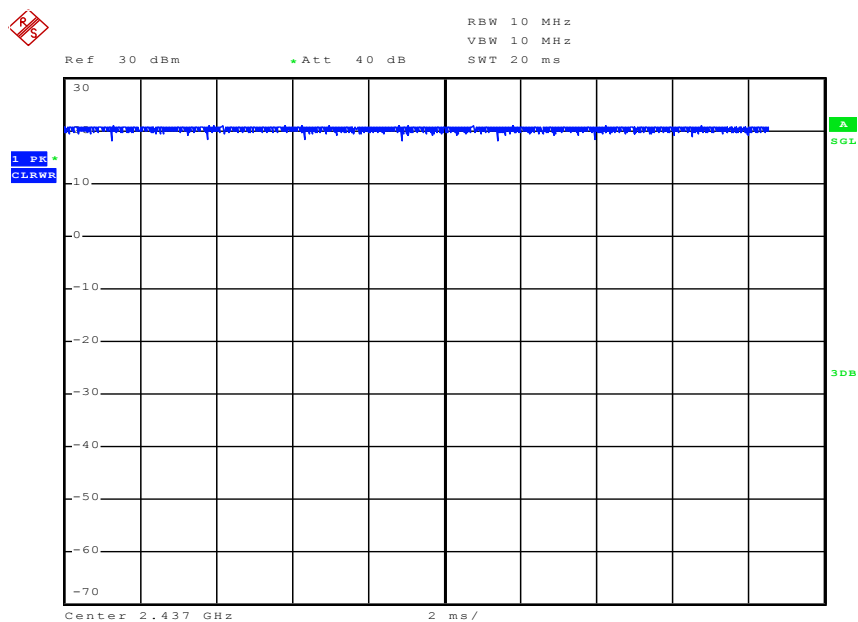
Environmental Conditions

Temperature:	24.9 ° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	JK ZHOU
Supervised by:	Wang Chuang

C.1 Duty Cycle

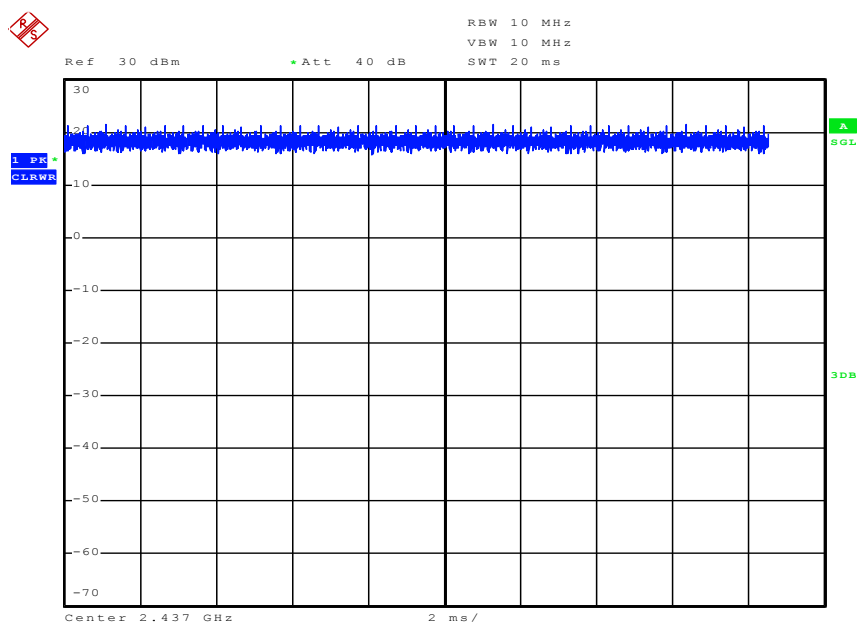
Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
11B	2437	Ant1	100	PASS
11G	2437	Ant1	100	PASS
11N20SISO	2437	Ant1	100	PASS
11N40SISO	2437	Ant1	100	PASS

Duty Cycle_11B_2437_Ant1



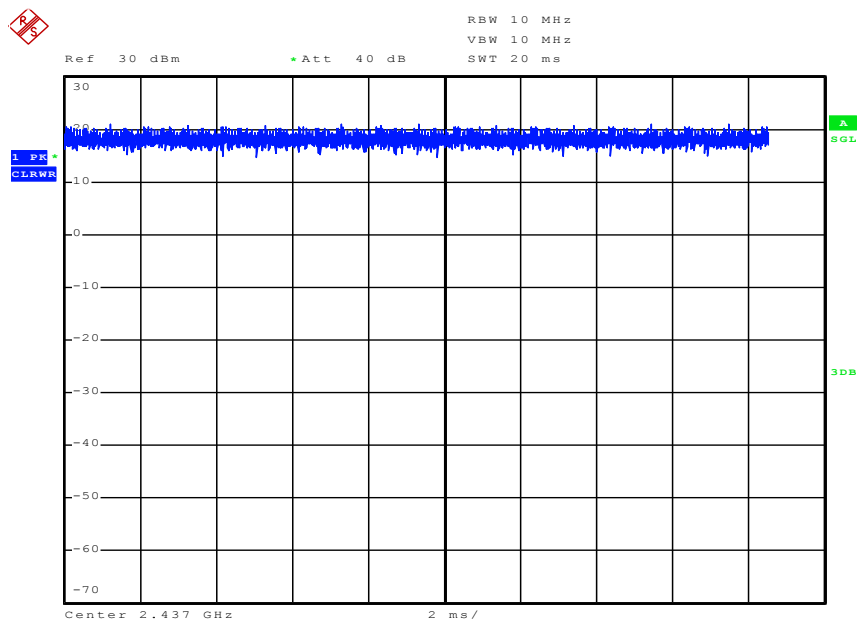
Date: 6.AUG.2019 20:44:37

Duty Cycle_11G_2437_Ant1



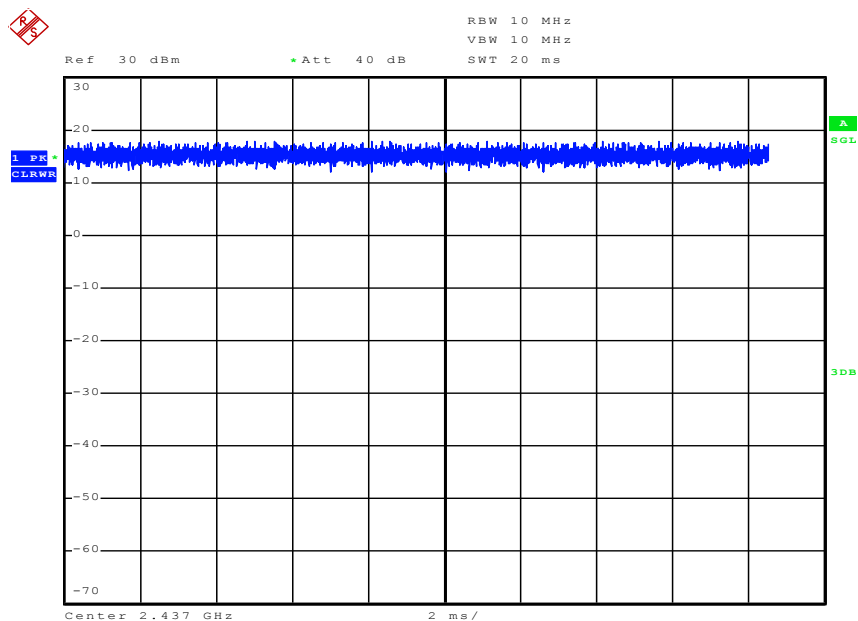
Date: 6.AUG.2019 20:45:14

Duty Cycle_11N20SISO_2437_Ant1



Date: 6.AUG.2019 20:46:01

Duty Cycle_11N40SISO_2437_Ant1



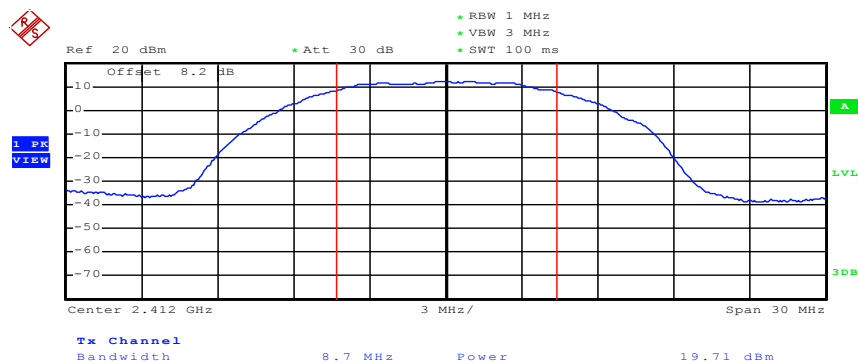
Date: 6.AUG.2019 20:46:42

C.2 Maximum Conducted Output Power

Mode	Channel	Meas.Level [dBm]	Limit [dBm]	Verdict
11B	LCH	19.71	30	PASS
	MCH	18.63	30	PASS
	HCH	17.7	30	PASS
11G	LCH	19.16	30	PASS
	MCH	18.36	30	PASS
	HCH	17.79	30	PASS
11N20SISO	LCH	19.51	30	PASS
	MCH	18.56	30	PASS
	HCH	17.96	30	PASS
11N40SISO	LCH	20.06	30	PASS
	MCH	19.02	30	PASS
	HCH	18.83	30	PASS

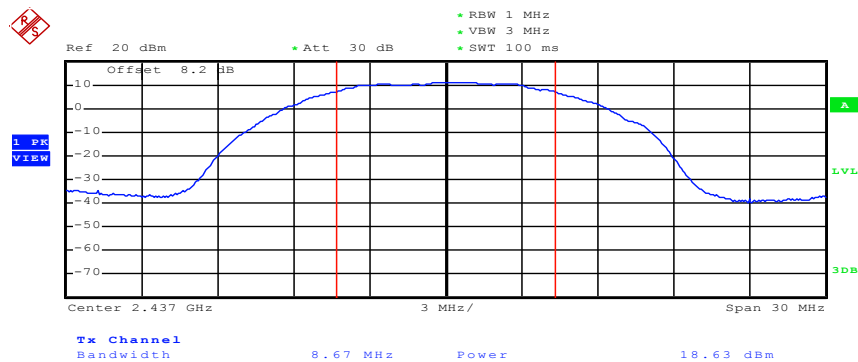
Test Graphs

11B/LCH



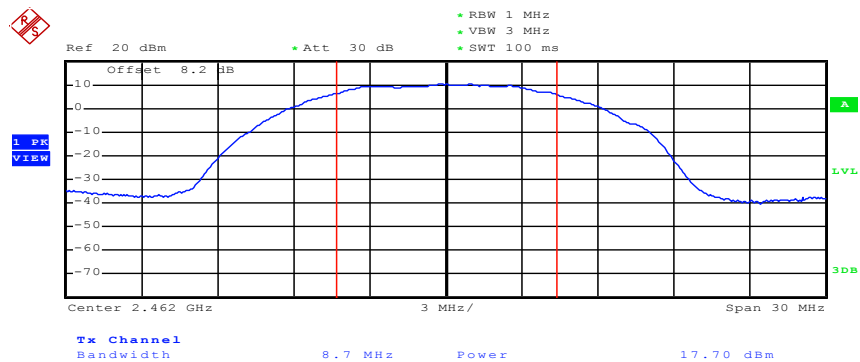
Date: 6 AUG 2019 20:12:11

11B/MCH



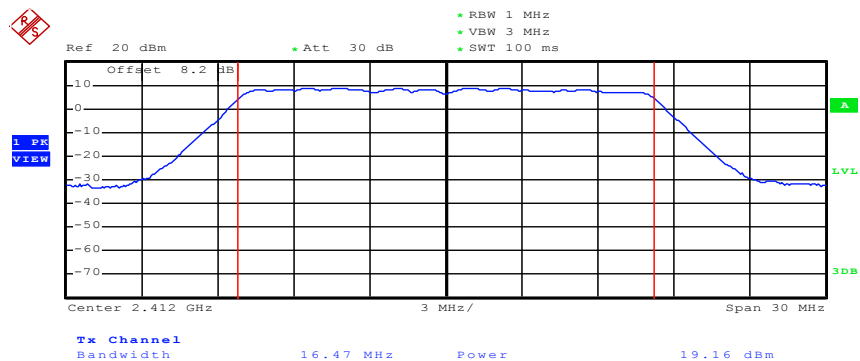
Date: 6 AUG 2019 20:16:15

11B/HCH



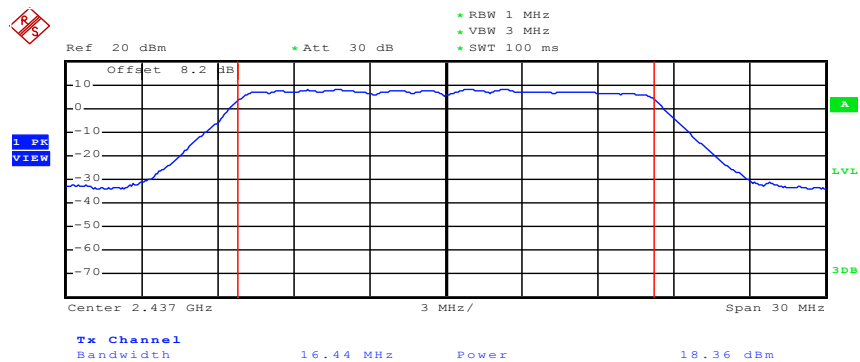
Date: 6.AUG.2019 20:18:11

11G/LCH



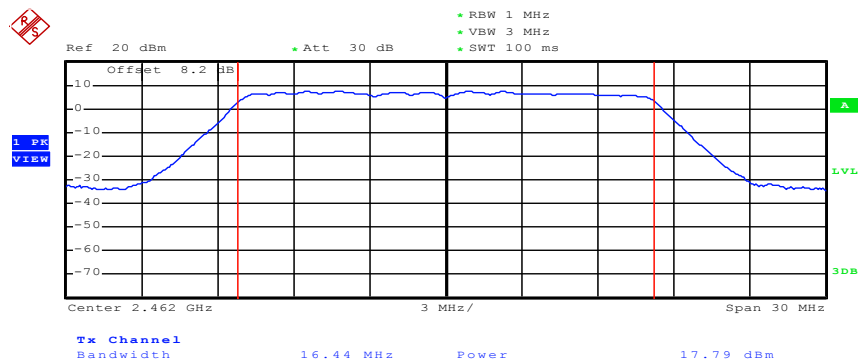
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11G/MCH



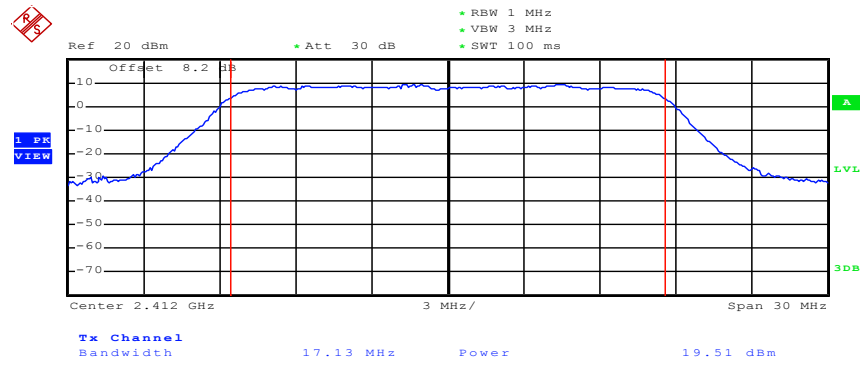
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11G/HCH



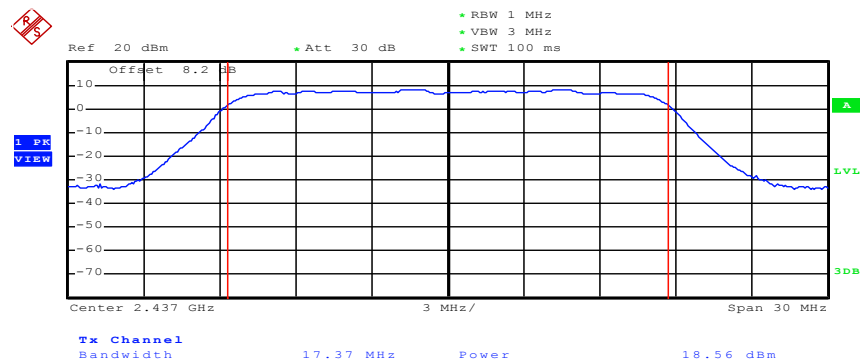
Date: 6.AUG.2019 20:25:47

11N20SISO/LCH



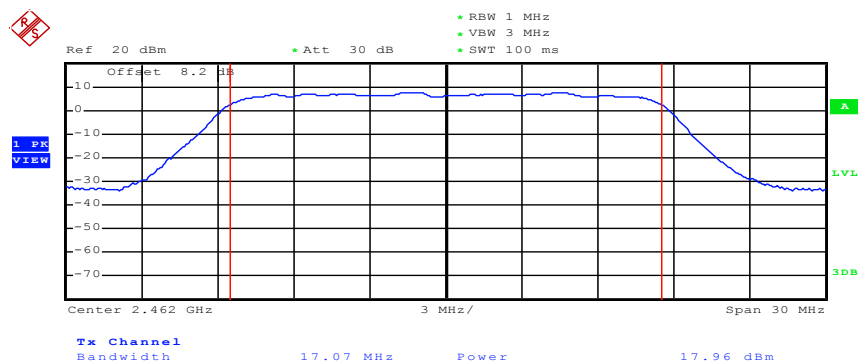
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11N20SISO/MCH



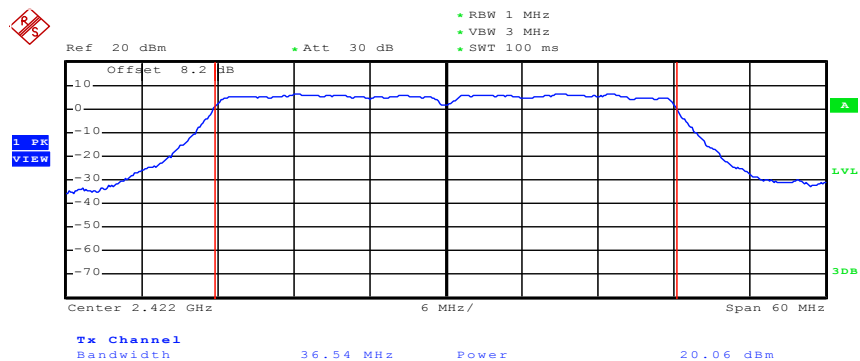
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11N20SISO/HCH



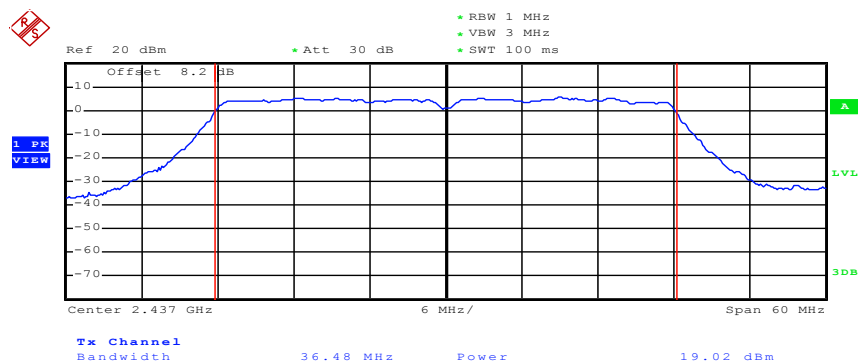
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11N40SISO/LCH



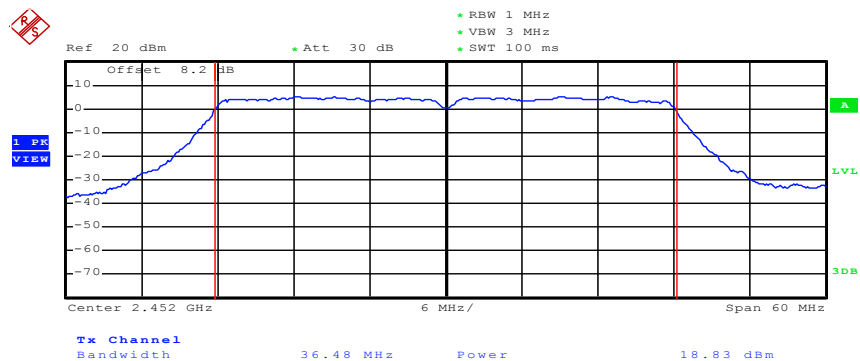
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11N40SISO/MCH



Date: 6.AUG.2019 20:39:11

11N40SISO/HCH



Date: 6 AUG 2019 20:41:01

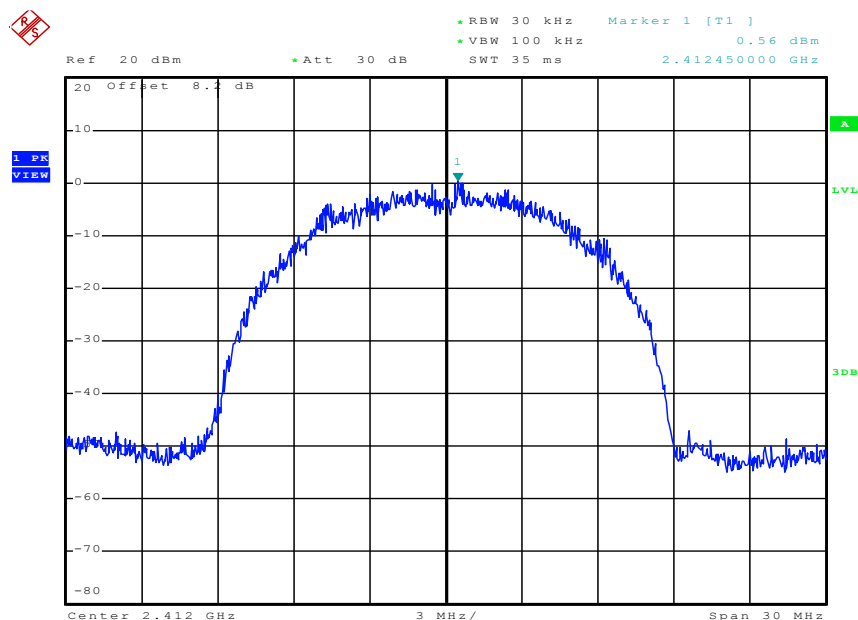
C.3 Maximum Power Spectral Density

Mode	Channel	Meas.Level [dBm/30KHz]	Meas.Level [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
11B	LCH	0.560	-9.44	8	PASS
	MCH	-1.040	-11.04	8	PASS
	HCH	-1.340	-11.34	8	PASS
11G	LCH	-4.620	-14.62	8	PASS
	MCH	-5.330	-15.33	8	PASS
	HCH	-5.960	-15.96	8	PASS
11N20SISO	LCH	-5.010	-15.01	8	PASS
	MCH	-5.960	-15.96	8	PASS
	HCH	-6.330	-16.33	8	PASS
11N40SISO	LCH	-7.810	-17.81	8	PASS
	MCH	-8.680	-18.68	8	PASS
	HCH	-9.000	-19.00	8	PASS

Calculate formula: Meas.Level [dBm/3KHz] = Meas.Level [dBm/30KHz] - 10

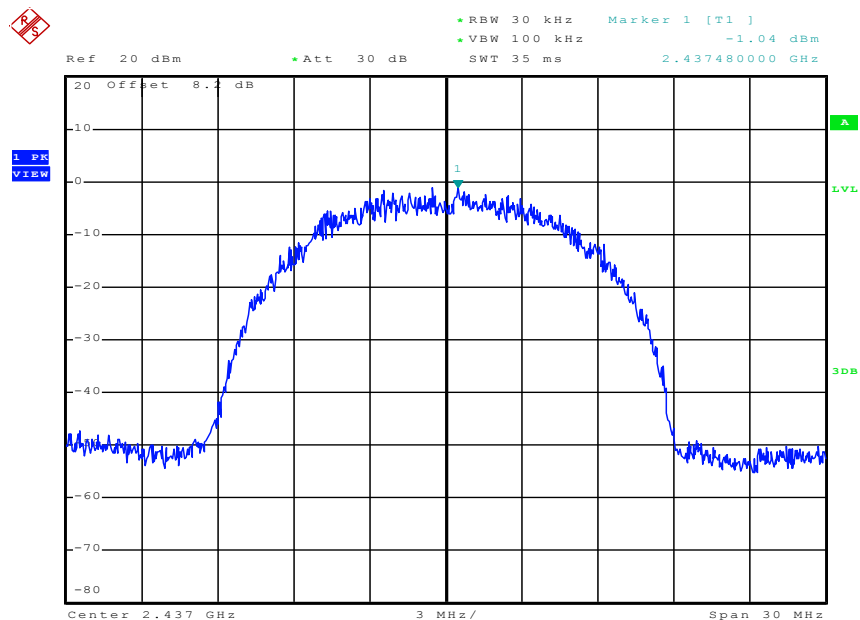
Test Graphs

11B/LCH



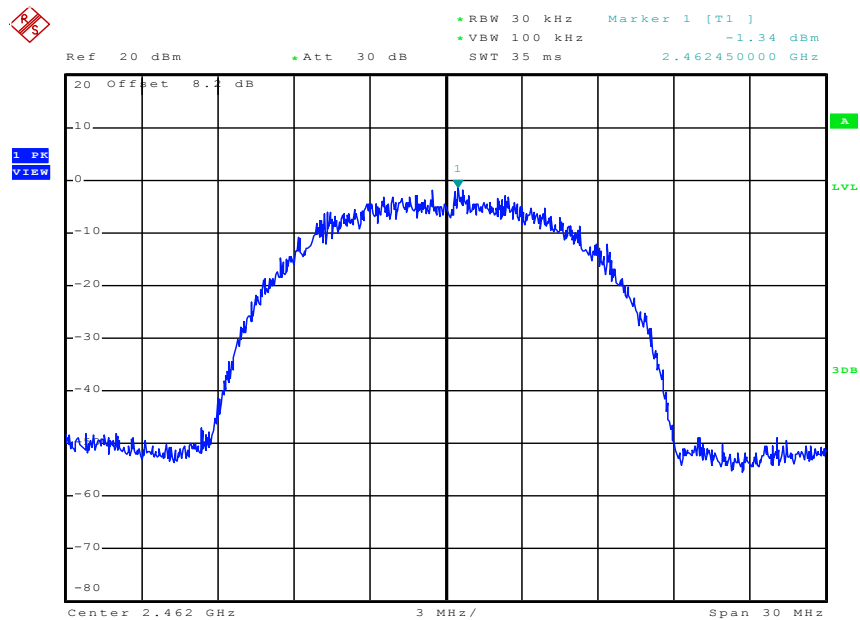
Date: 6.AUG.2019 20:12:23

11B/MCH



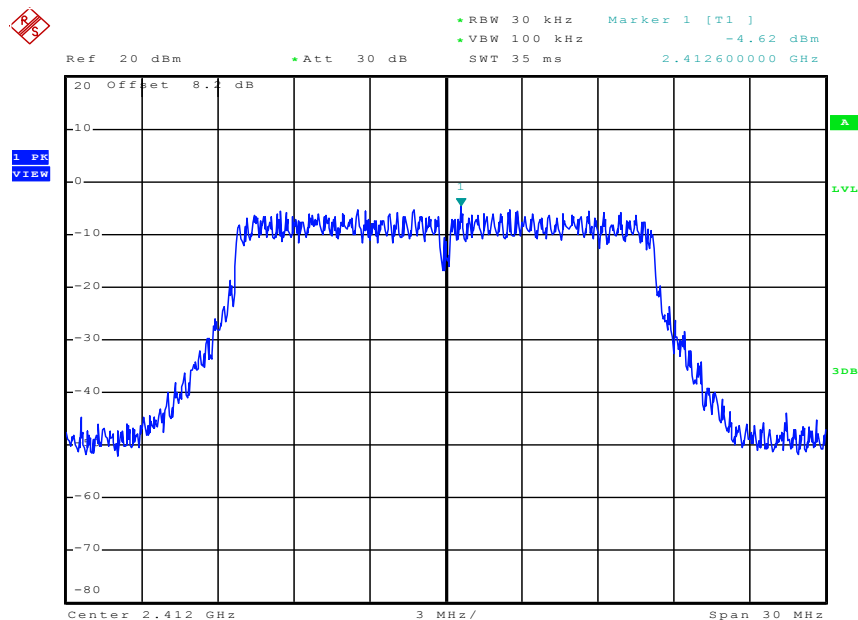
Date: 6.AUG.2019 20:16:27

11B/HCH



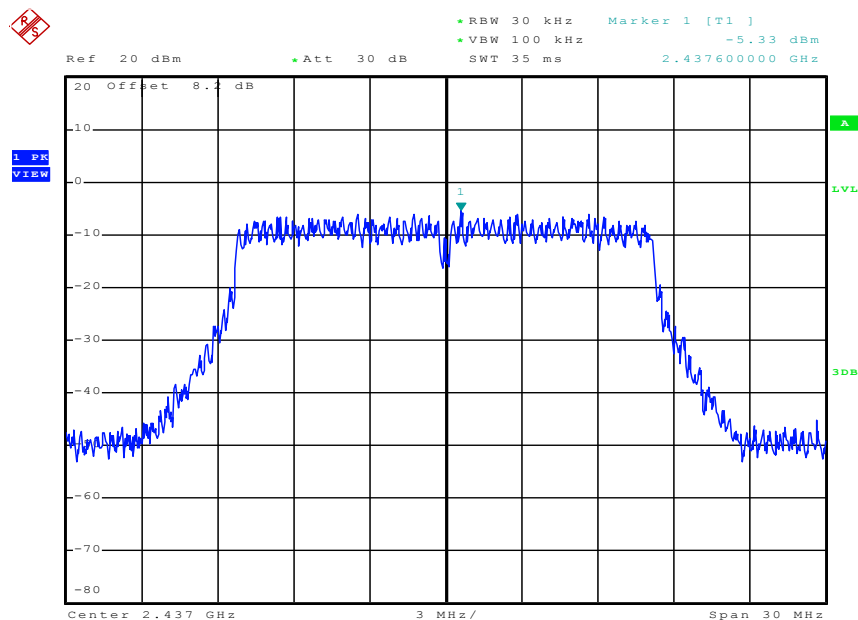
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11G/LCH



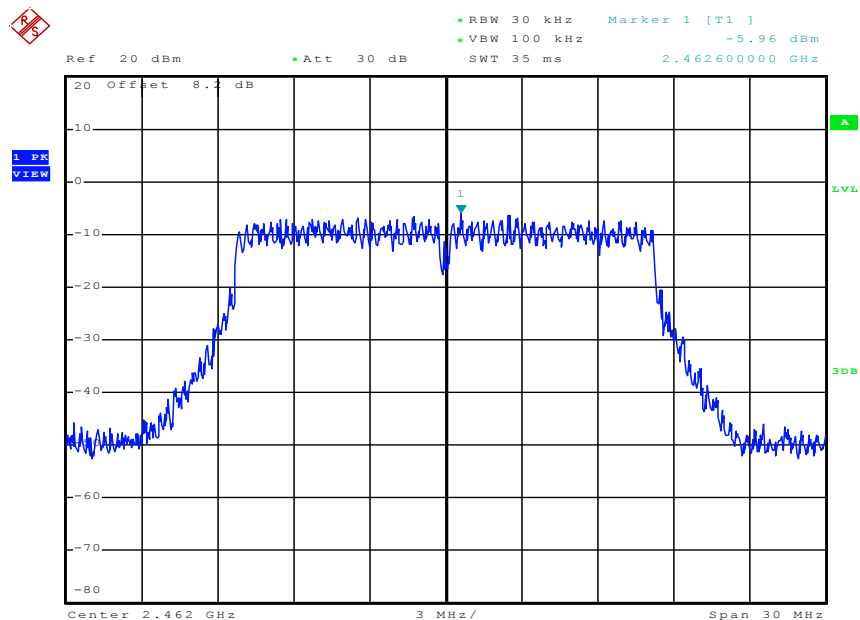
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11G/MCH



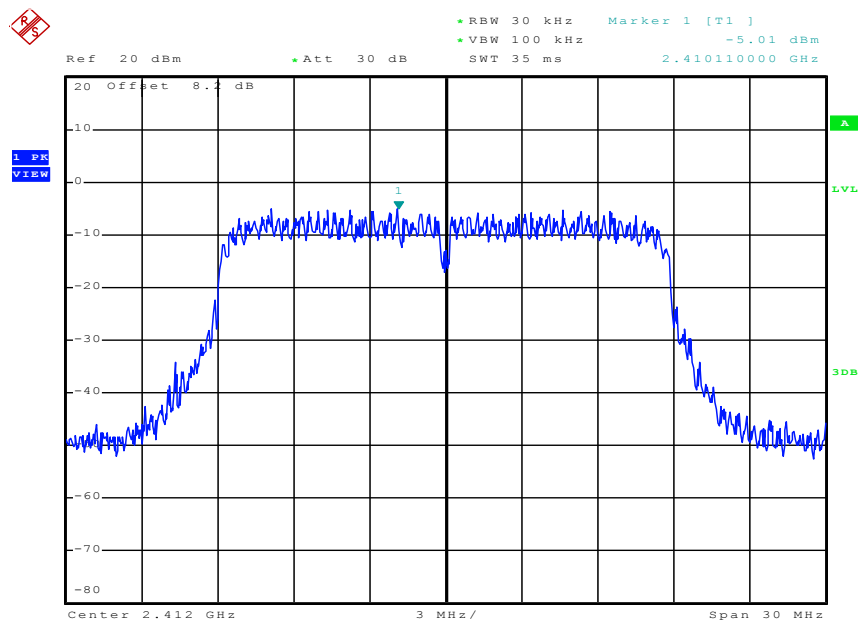
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11G/HCH



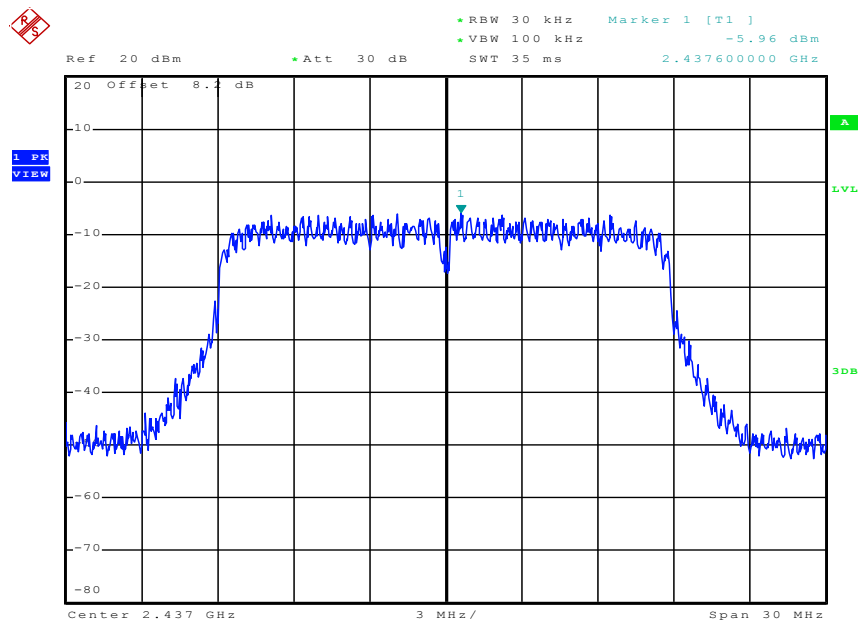
Date: 6.AUG.2019 20:26:00

11N20SISO/LCH



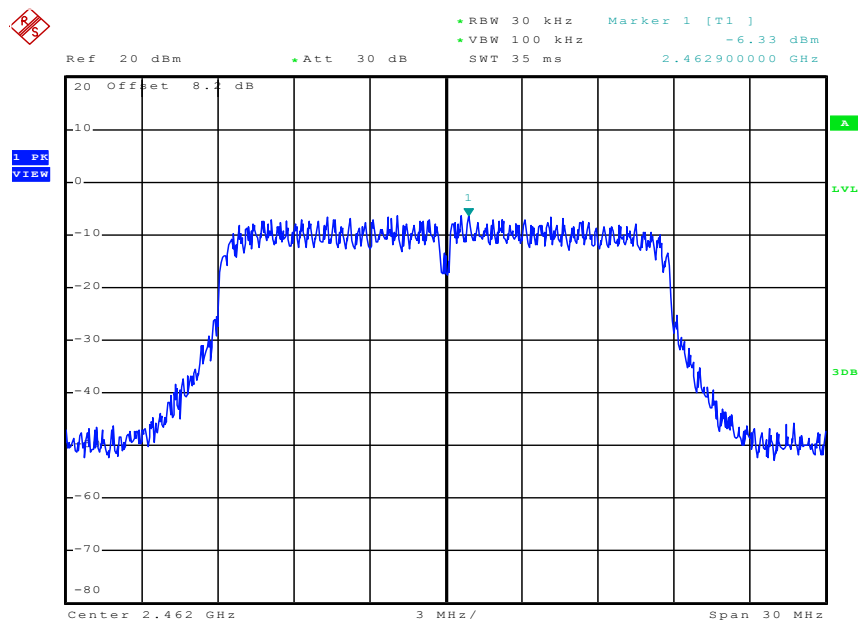
Date: 6.AUG.2019 20:28:57

11N20SISO/MCH



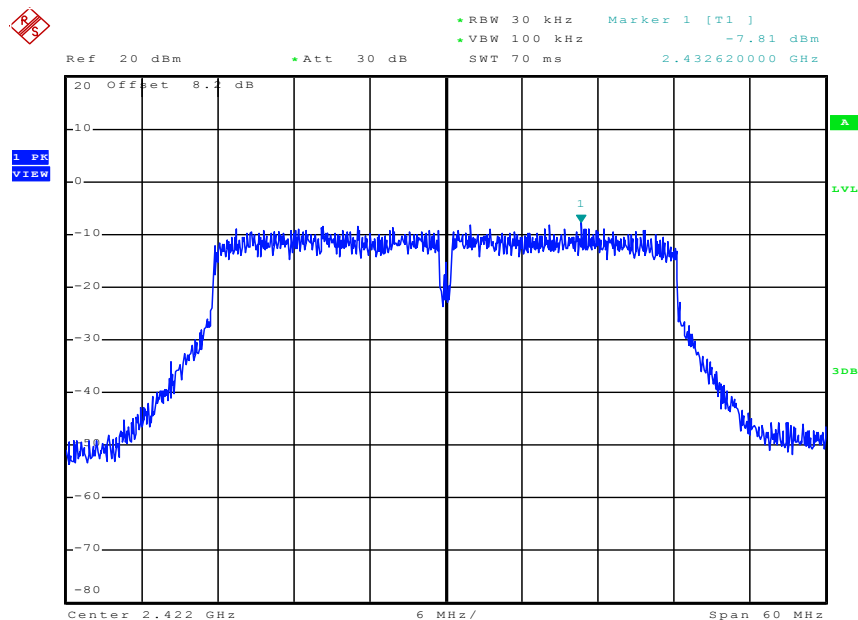
Date: 6.AUG.2019 20:31:31

11N20SISO/HCH



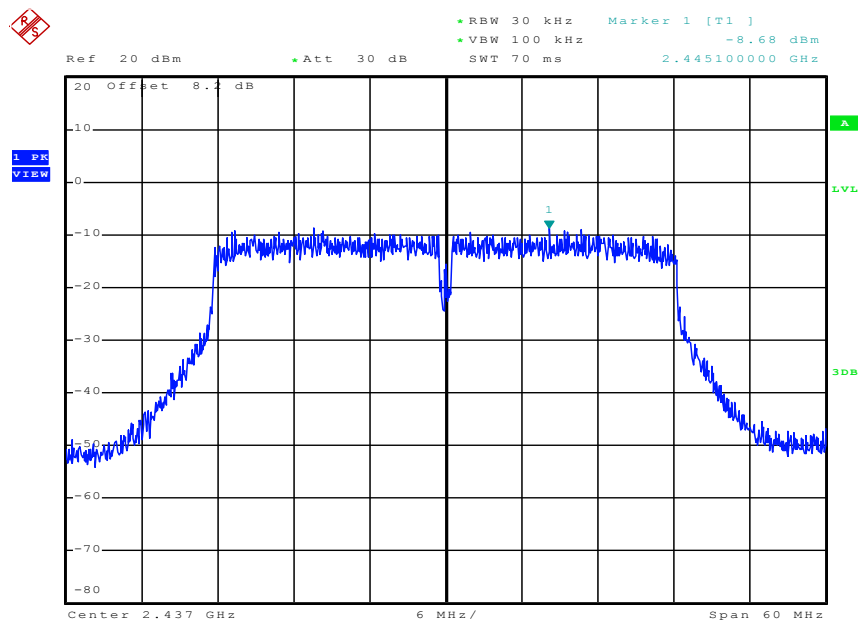
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11N40SISO/LCH



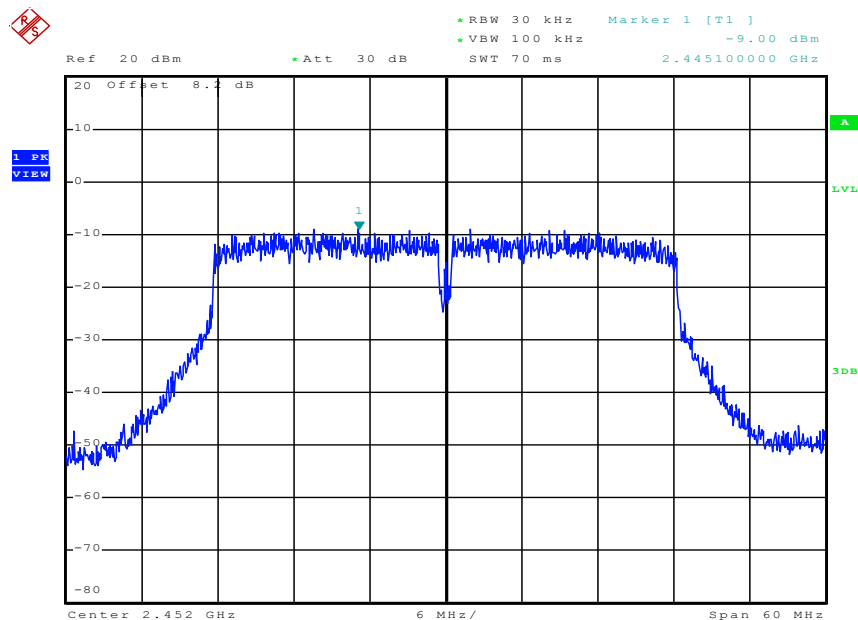
Date: 6.AUG.2019 20:36:42

11N40SISO/MCH



Date: 6.AUG.2019 20:39:24

11N40SISO/HCH



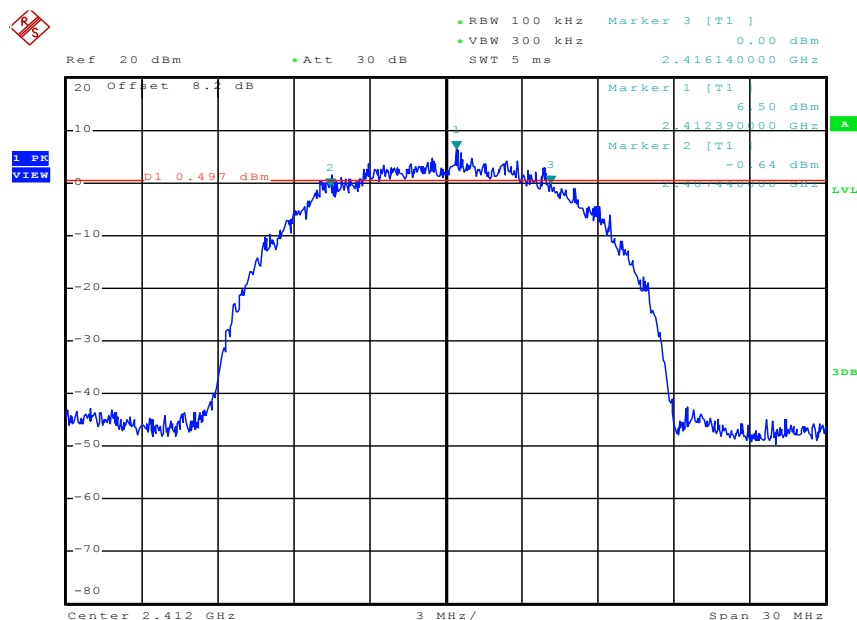
Date: 6.AUG.2019 20:41:14

C.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
11B	LCH	8.700	≥ 0.5	PASS
	MCH	8.670	≥ 0.5	PASS
	HCH	8.700	≥ 0.5	PASS
11G	LCH	16.470	≥ 0.5	PASS
	MCH	16.440	≥ 0.5	PASS
	HCH	16.440	≥ 0.5	PASS
11N20SISO	LCH	17.130	≥ 0.5	PASS
	MCH	17.370	≥ 0.5	PASS
	HCH	17.070	≥ 0.5	PASS
11N40SISO	LCH	36.540	≥ 0.5	PASS
	MCH	36.480	≥ 0.5	PASS
	HCH	36.480	≥ 0.5	PASS

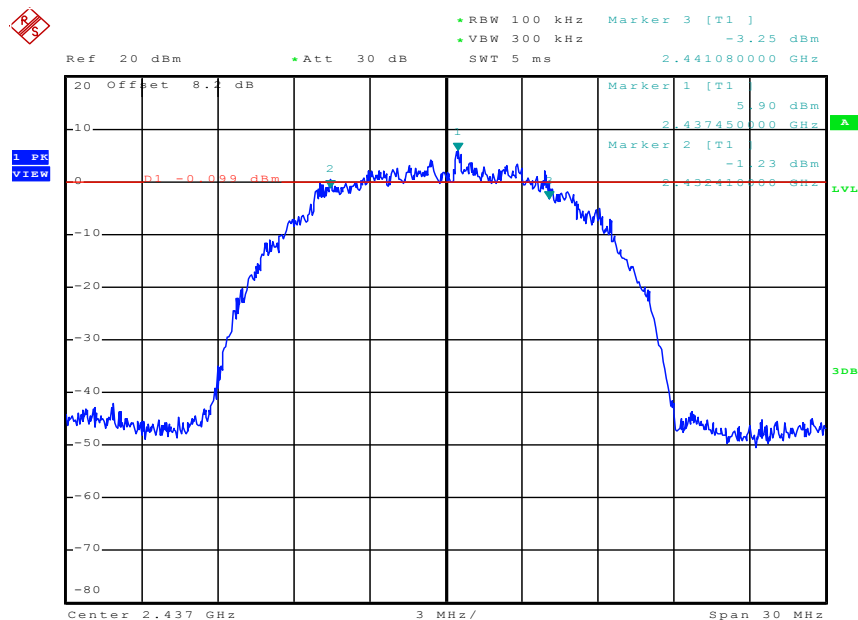
Test Graphs

11B/LCH



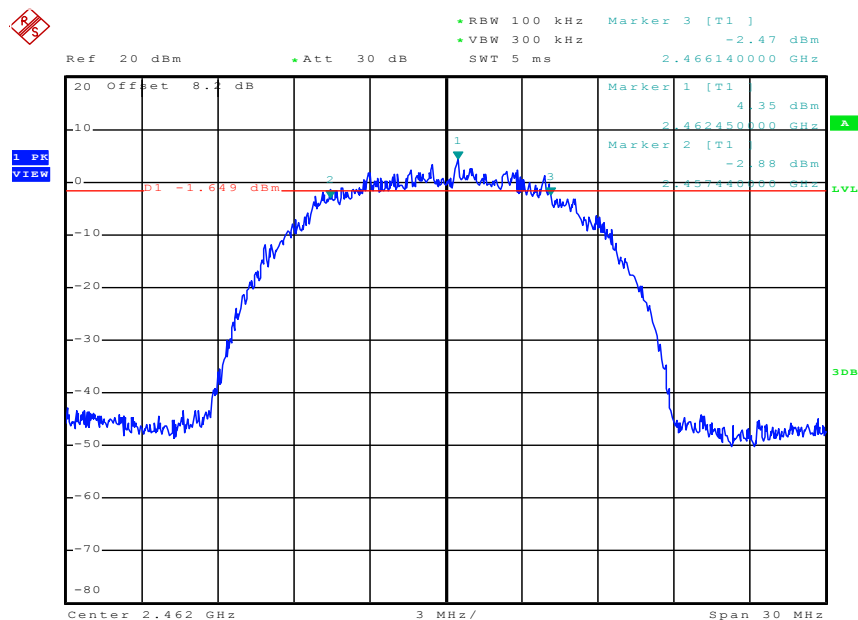
Date: 6.AUG.2019 20:11:37

11B/MCH



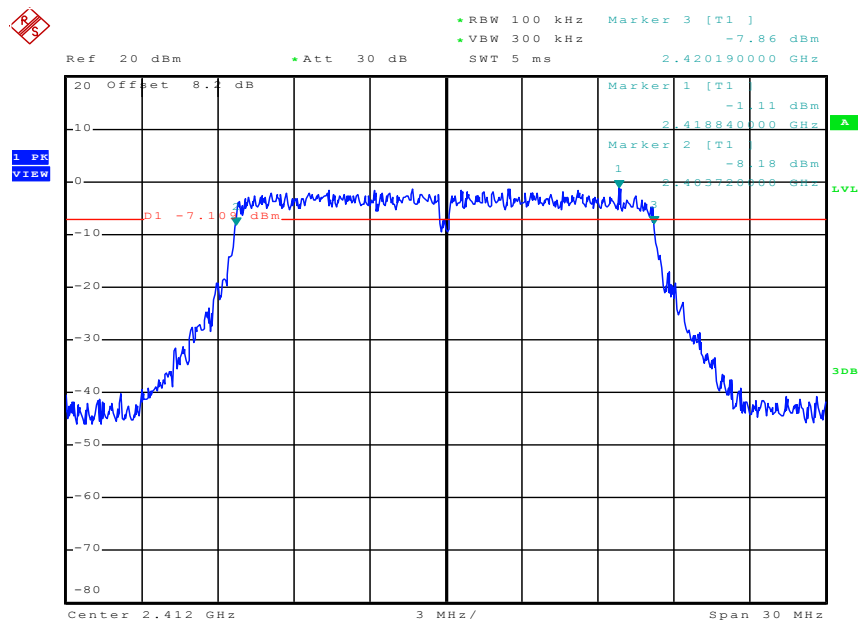
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11B/HCH



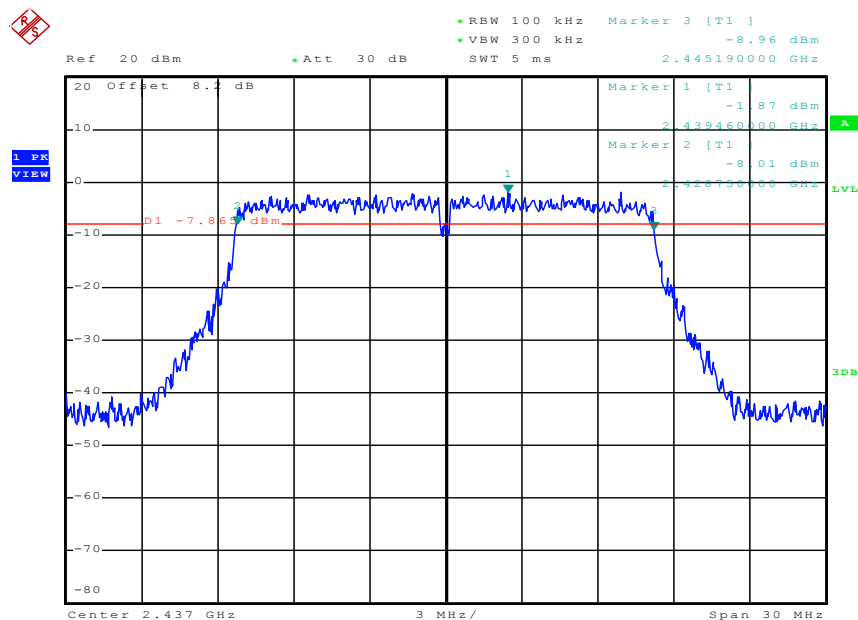
Date: 6.AUG.2019 20:17:37

11G/LCH



Date: 6.AUG.2019 20:20:37

11G/MCH



Date: 6.AUG.2019 20:23:18

1 PR VIEW

Ref 20 dBm Att 30 dB RBW 100 kHz VBW 300 kHz SWT 5 ms

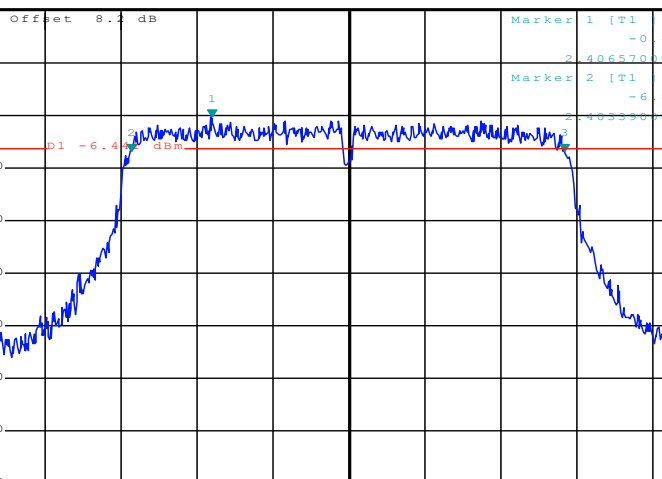
Marker 3 [T1] 2.468840000 GHz -2.44 dBm

Marker 2 [T1] 2.453756466 GHz -8.80 dBm

Marker 1 [T1] 2.453756466 GHz -8.43 dBm

Center 2.462 GHz Span 30 MHz

Date: 6.AUG.2019 20:25:13



1. PK VIEW

Ref 20 dBm Att 30 dB RBW 100 kHz VBW 300 kHz SWT 5 ms

Marker 3 [T1] -6.91 dBm 2.420520000 GHz

Marker 1 [T1] -0.44 dBm 2.406570800 GHz

Marker 2 [T1] -6.88 dBm 2.408330700 GHz

D1 -6.4 dBm

1

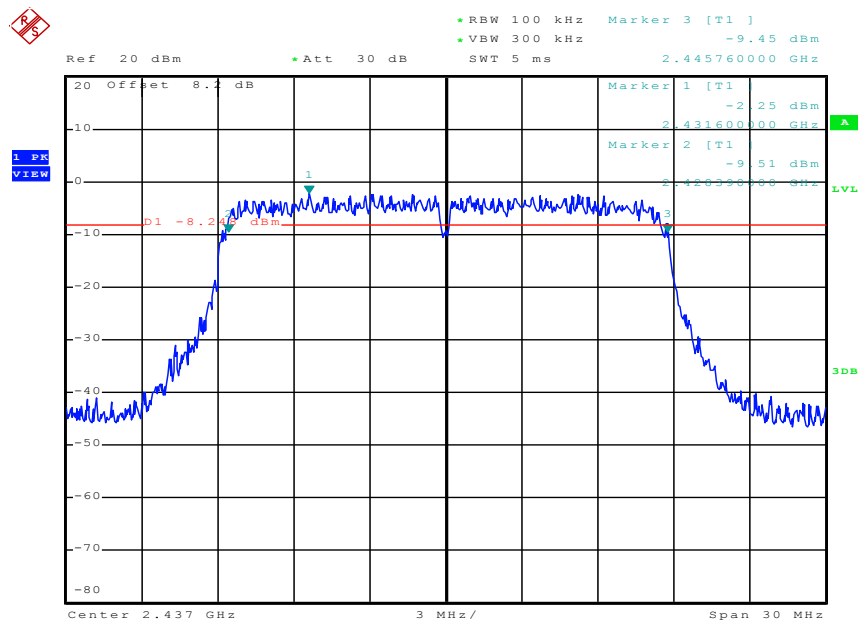
2

3 dB

Center 2.412 GHz Span 30 MHz

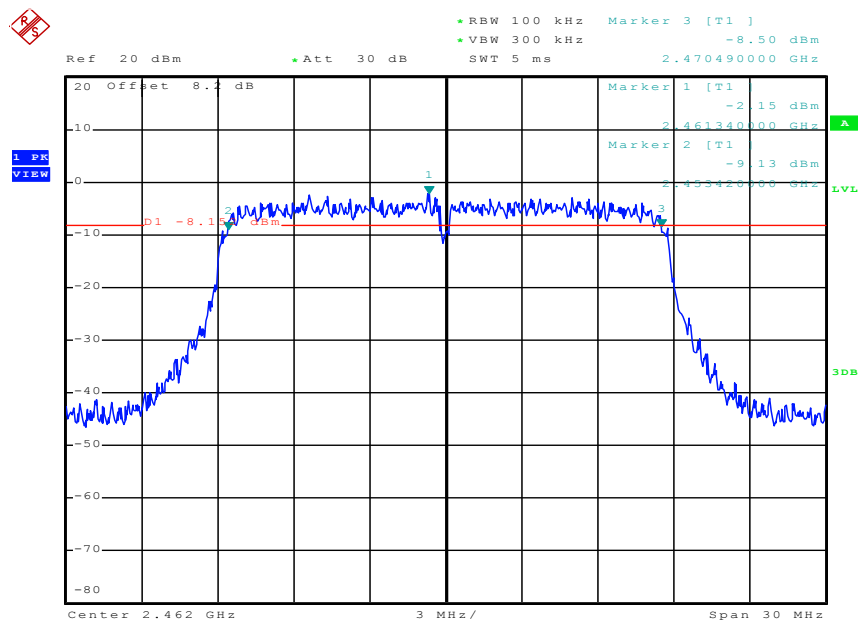
Date: 6 AUG 2019 20:28:10

11N20SISO/MCH



Date: 6.AUG.2019 20:30:44

11N20SISO/HCH



Date: 6.AUG.2019 20:32:33

RBW 100 kHz
 VBW 300 kHz
 Att 30 dB
 Ref 20 dBm
 Center 2.422 GHz
 Span 60 MHz
 Marker 3 [T1]
 -11.53 dBm
 2.440240000 GHz
 1 PR
 VIEW

1. PM VIEW

Ref 20 dBm Att 30 dB RBW 100 kHz VBW 300 kHz SWT 10 ms

Marker 1 [T1] -5.32 dBm 2.427880800 GHz
Marker 2 [T1] -11.50 dBm 2.418768700 GHz
Marker 3 [T1] -12.75 dBm 2.455240000 GHz

2.437 GHz 6 MHz/ Span 60 MHz

RBW 100 kHz
 VBW 300 kHz
 Att 30 dB
 SWT 10 ms
 Marker 3 [T1]
 -12.93 dBm
 2.470240000 GHz

Ref 20 dBm
 Offset 8.2 dB

1 PK VIEW

Marker 1 [T1]
 -5.43 dBm
 2.461360000 GHz
 Marker 2 [T1]
 -11.47 dBm
 2.433700000 GHz

Center 2.452 GHz
 Span 60 MHz
 6 MHz/

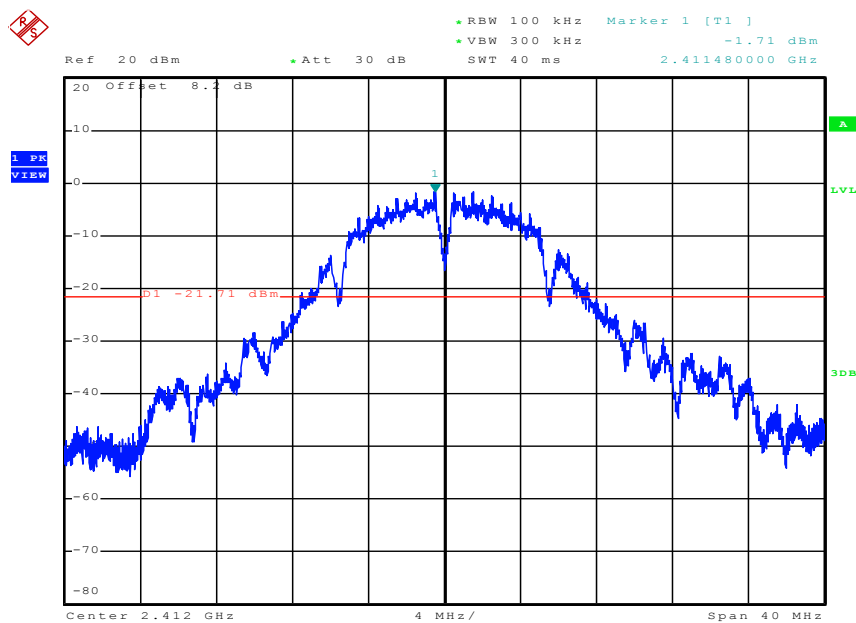
Date: 6.AUG.2019 20:40:27

C.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	LCH	-2.09	-32.420	-22.090	PASS
	MCH	-2.51	-32.010	-22.510	PASS
	HCH	-0.3	-32.280	-20.300	PASS
11G	LCH	-4.75	-32.080	-24.750	PASS
	MCH	-1.97	-31.880	-21.970	PASS
	HCH	-1.76	-31.900	-21.760	PASS
11N20 SISO	LCH	-3.82	-31.840	-23.820	PASS
	MCH	-2.65	-30.880	-22.650	PASS
	HCH	-1.8	-30.250	-21.800	PASS
11N40 SISO	LCH	-4.16	-32.400	-24.160	PASS
	MCH	-2.77	-32.410	-22.770	PASS
	HCH	-5	-30.520	-25.000	PASS

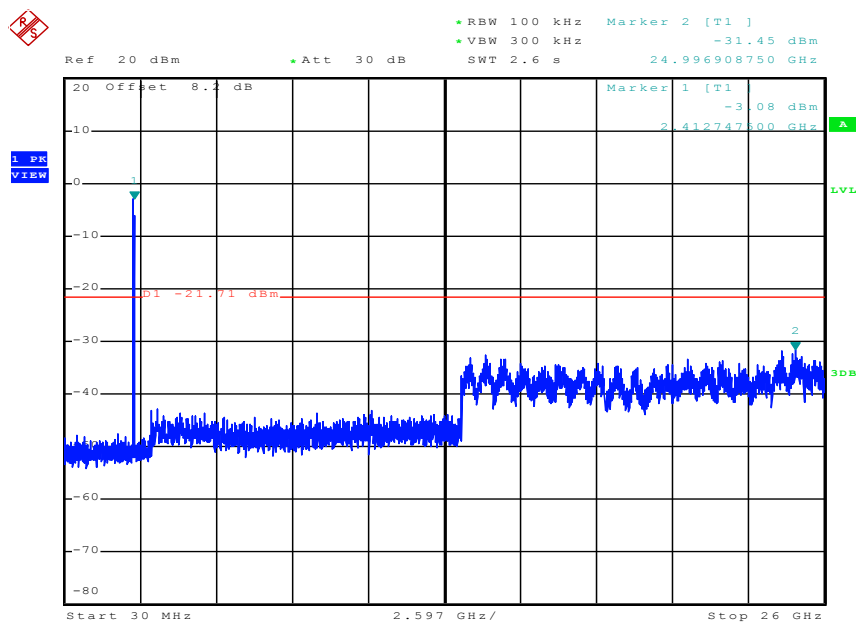
11B_LCH_Graphs

Pref/11B/LCH



Date: 21 SEP 2019 11:21:16

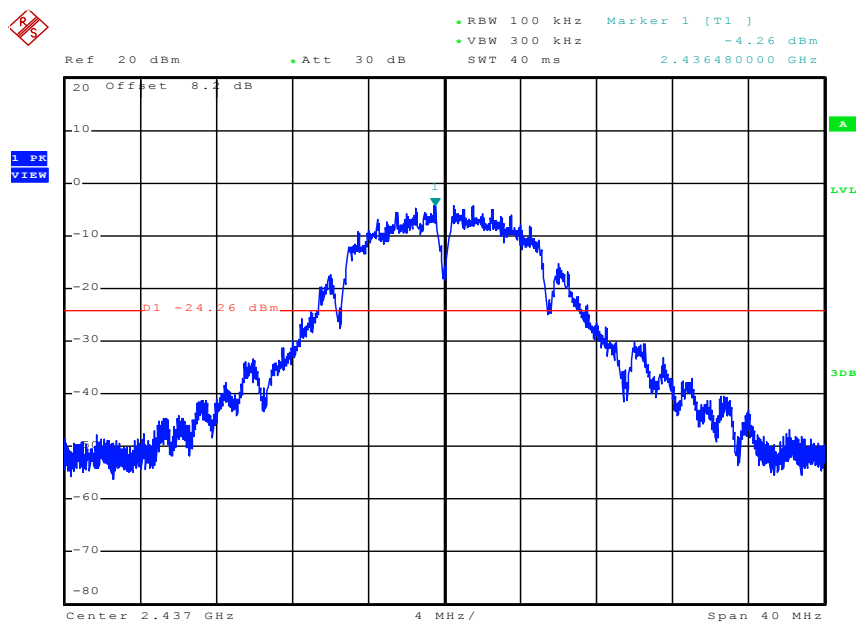
Puw/11B/LCH



Date: 21.SEP.2019 11:21:31

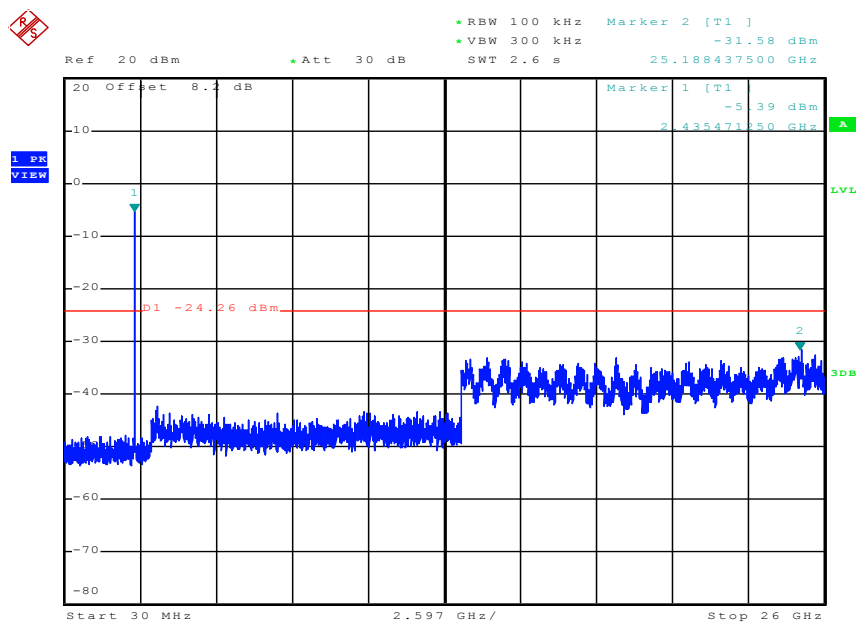
11B_MCH_Graphs

Pref/11B/MCH



Date: 21 SEP 2019 11:23:37

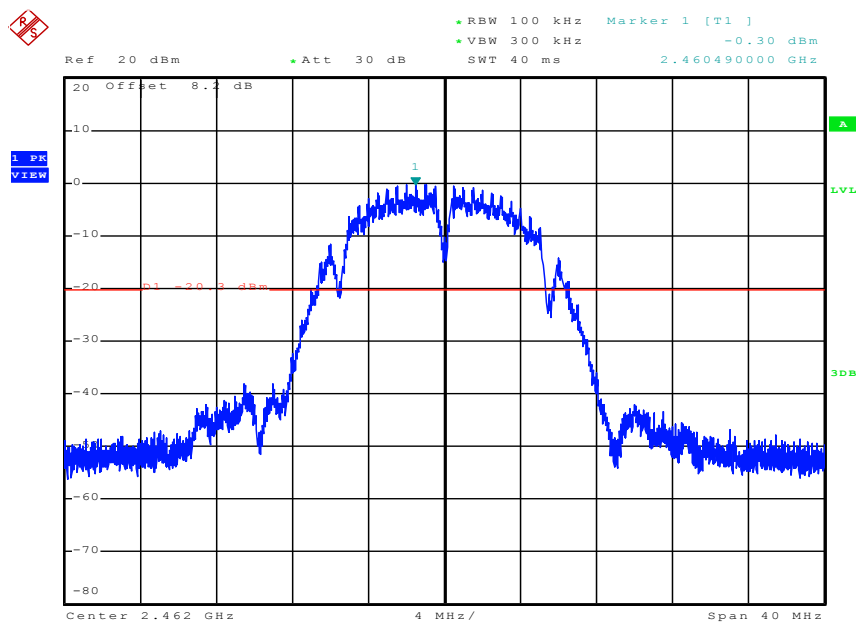
Puw/11B/MCH



Date: 21 SEP 2019 11:23:51

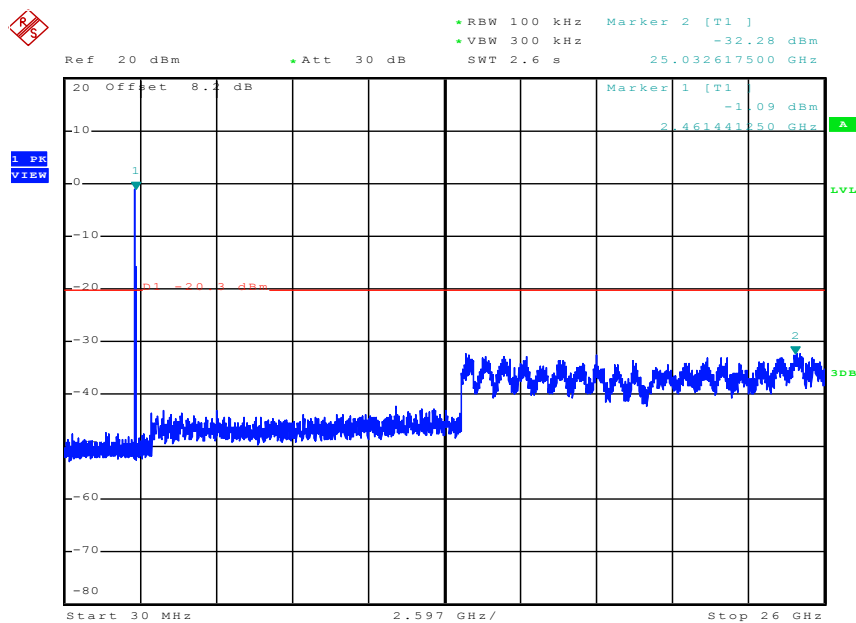
11B_HCH_Graphs

Pref/11B/HCH



Date: 27.AUG.2019 14:05:06

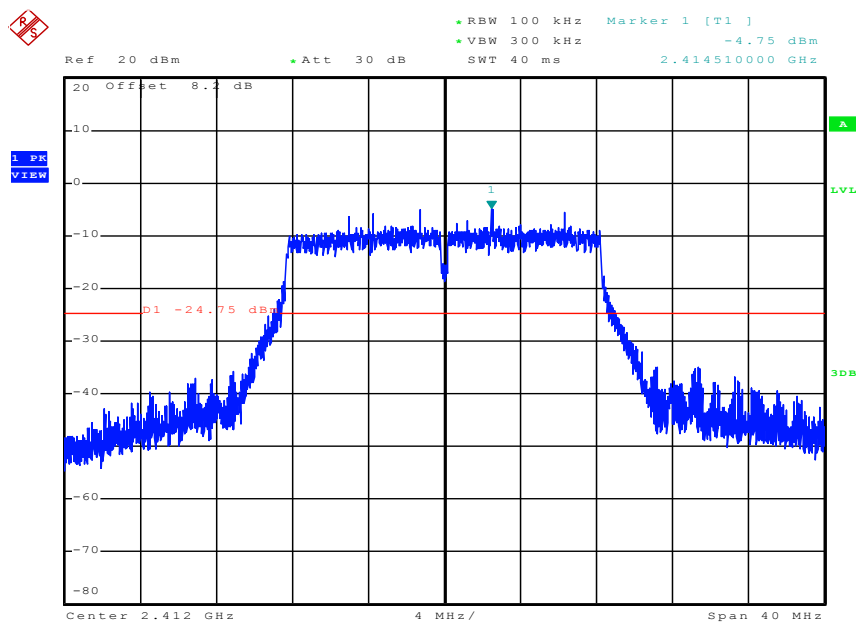
Puw/11B/HCH



Date: 27.AUG.2019 14:05:32

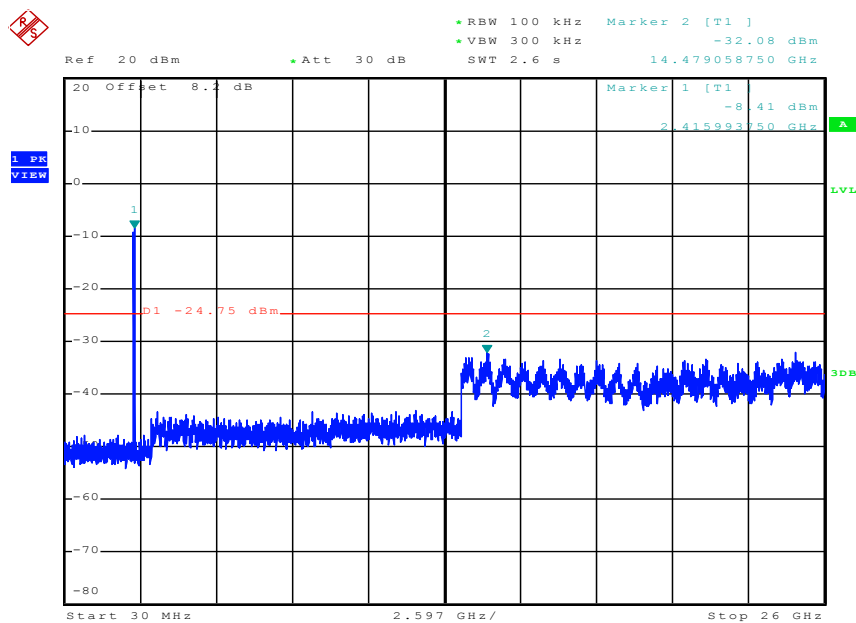
11G_LCH_Graphs

Pref/11G/LCH



Date: 27 AUG 2019 14:06:11

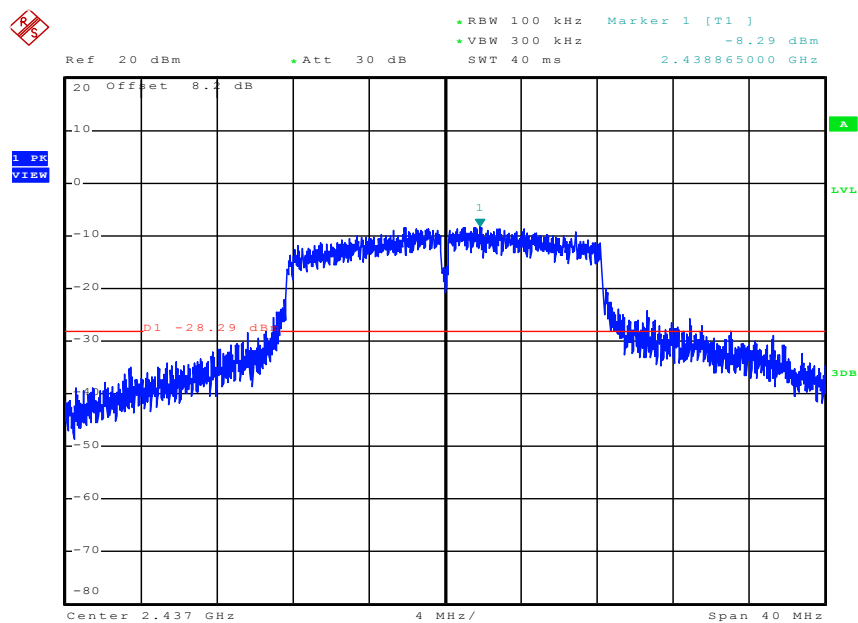
Puw/11G/LCH



Date: 27 AUG 2019 14:06:28

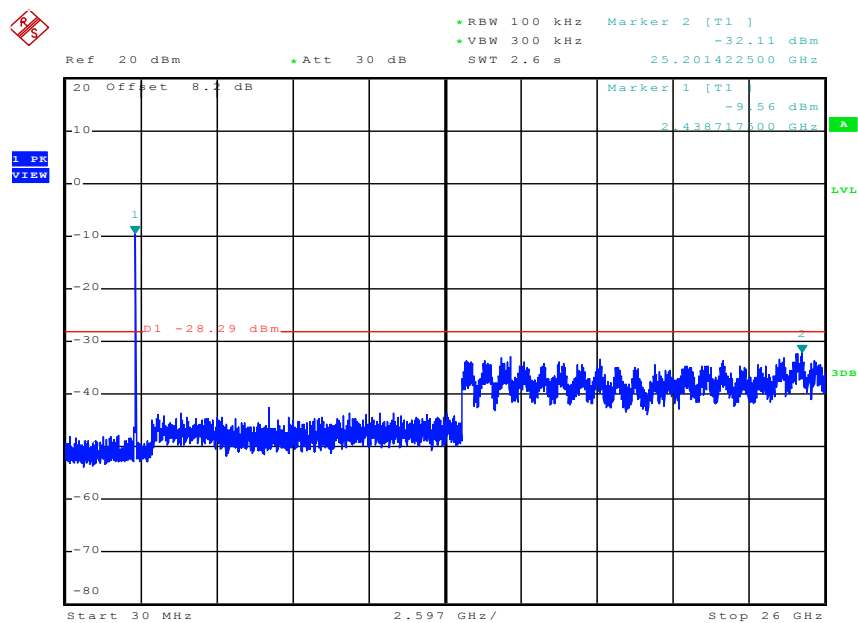
11G_MCH_Graphs

Pref/11G/MCH



Date: 21 SEP 2019 11:30:43

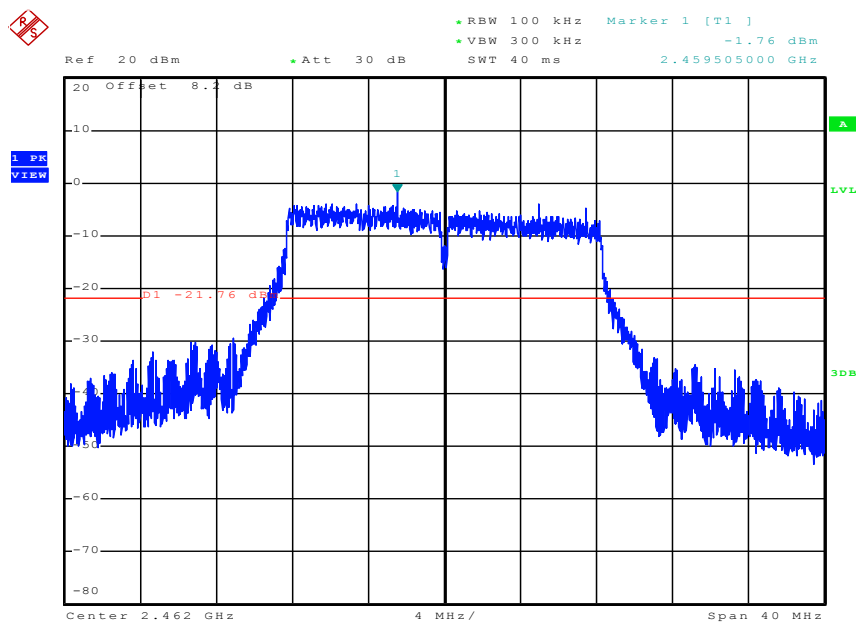
Puw/11G/MCH



Date: 21 SEP 2019 11:30:58

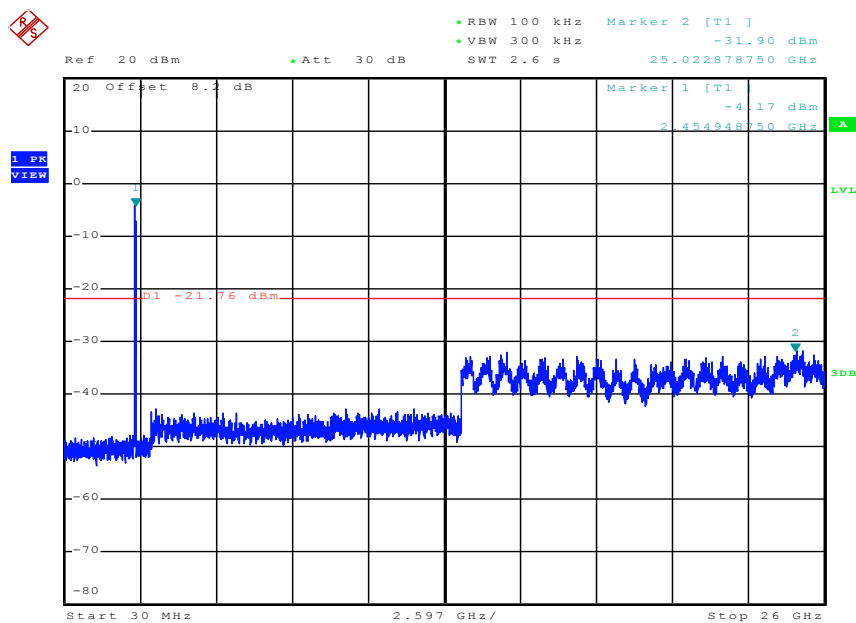
11G_HCH_Graphs

Pref/11G/HCH



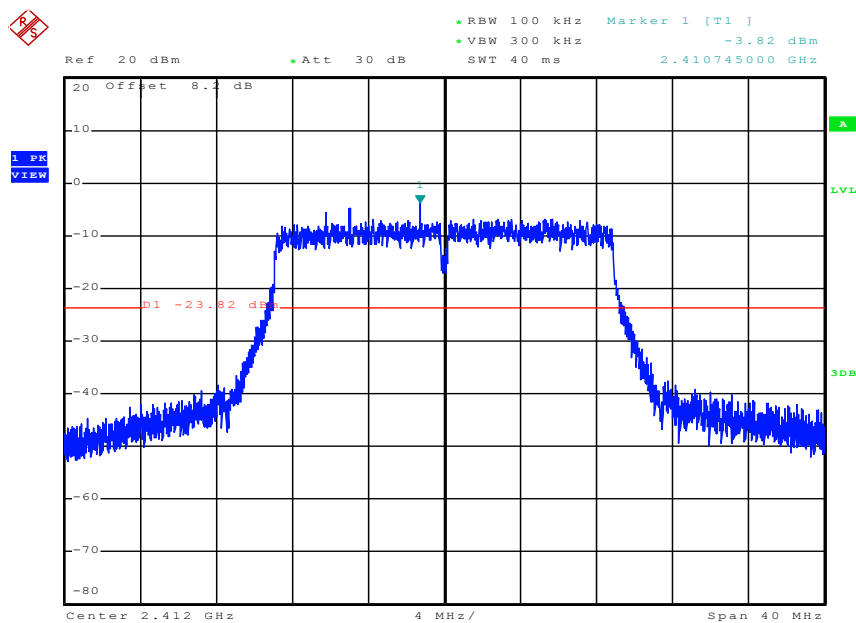
Date: 27 AUG 2019 14:09:22

Puw/11G/HCH

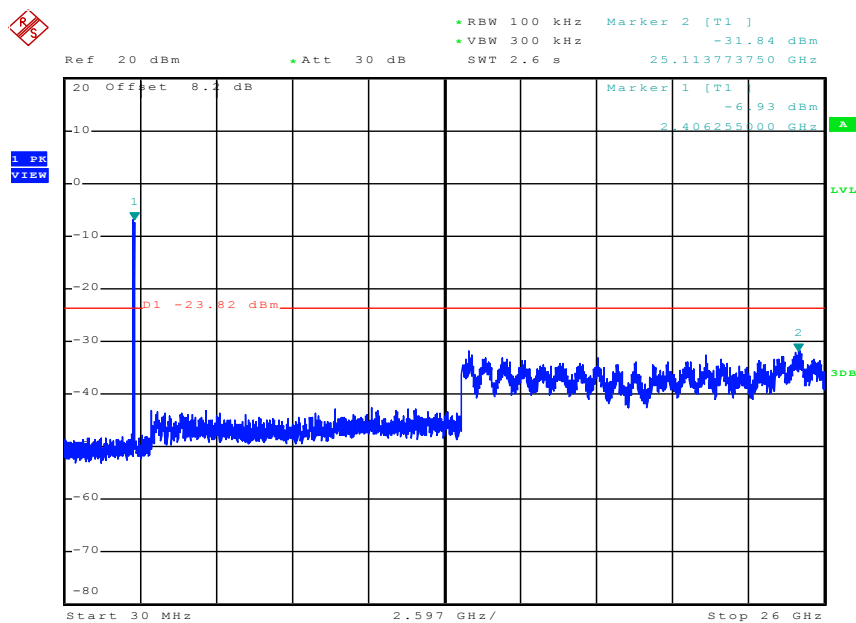


Date: 27 AUG 2019 14:09:46

11N20SISO_LCH_Graphs

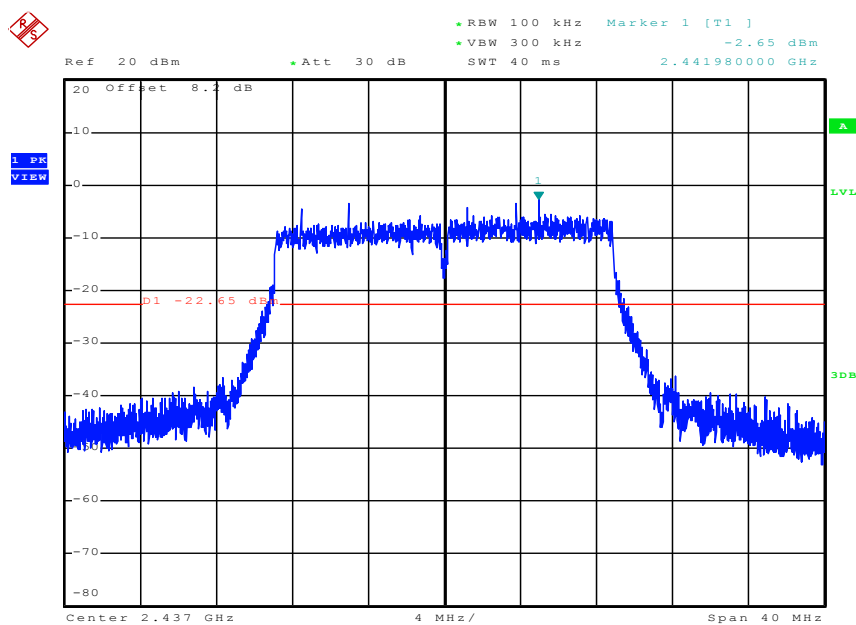
Pref/11N20SIS
O/LCH

Date: 27 AUG 2019 14:11:16

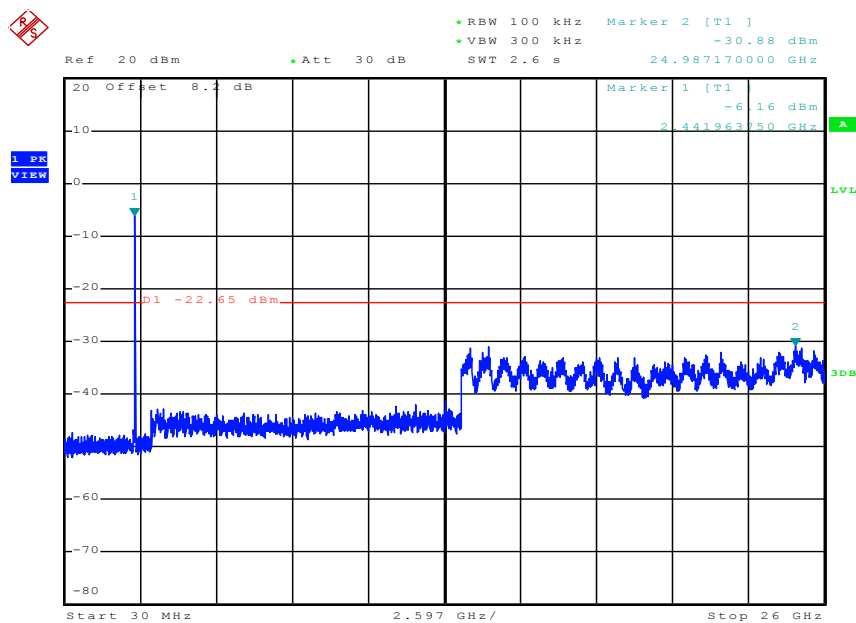
Puw/11N20
SISO/LCH

Date: 27 AUG 2019 14:11:40

11N20SISO_MCH_Graphs

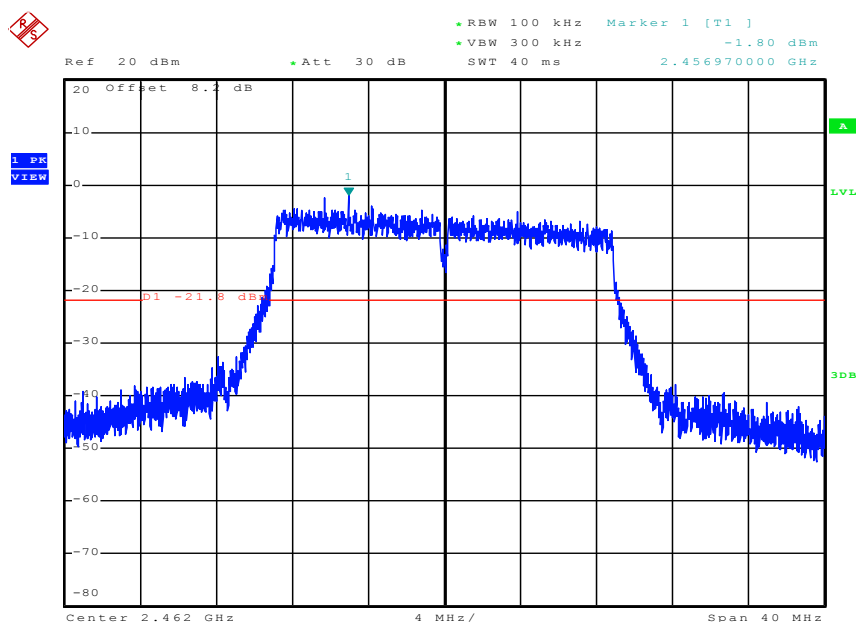
Pref/11N20
SISO/MCH

Date: 27 AUG 2019 14:12:13

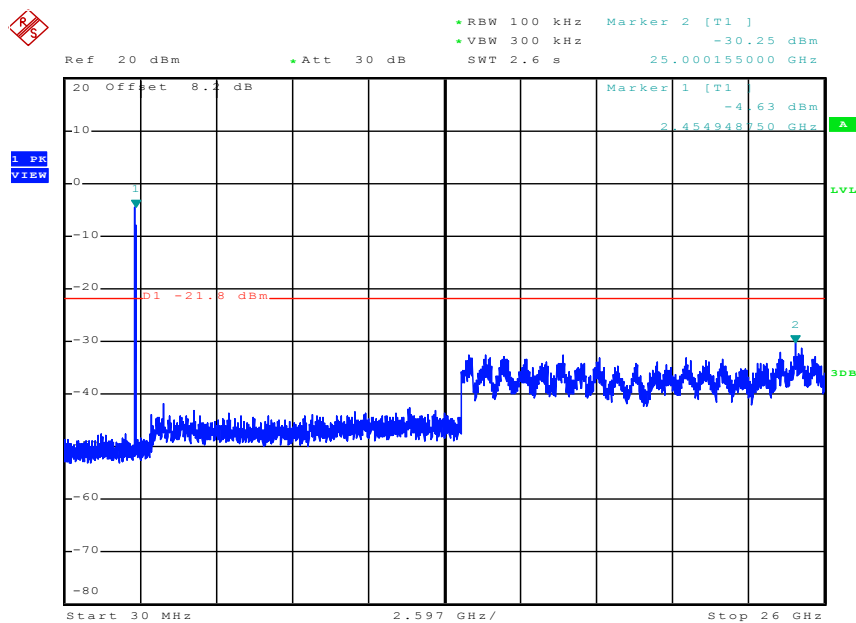
Puw/11N20
SISO/MCH

Date: 27 AUG 2019 14:13:03

11N20SISO_HCH_Graphs

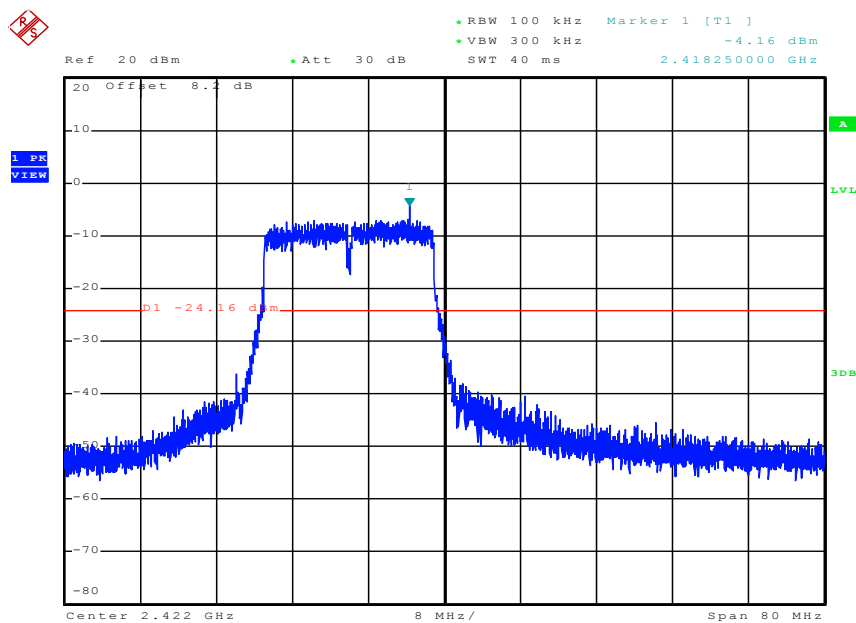
Pref/11N20
SISO/HCH

Date: 27 AUG 2019 14:13:40

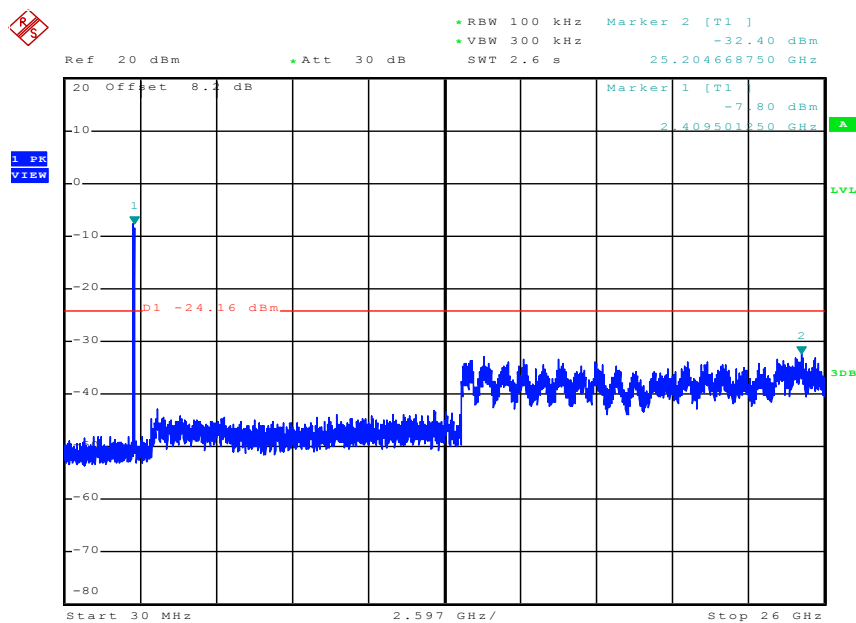
Puw/11N20
SISO/HCH

Date: 27 AUG 2019 14:14:00

11N40SISO_LCH_Graphs

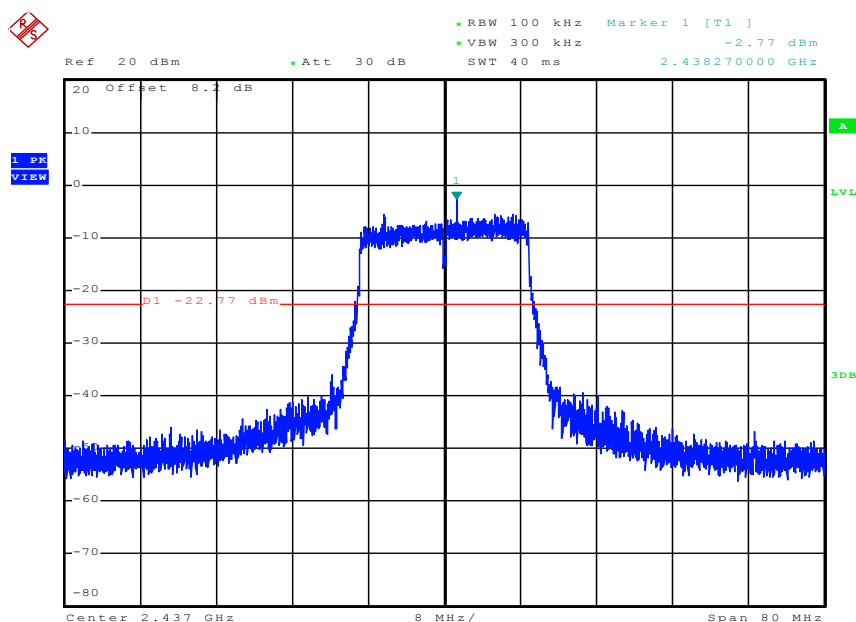
Pref/11N40
SISO/LCH

Date: 27 AUG 2019 14:15:34

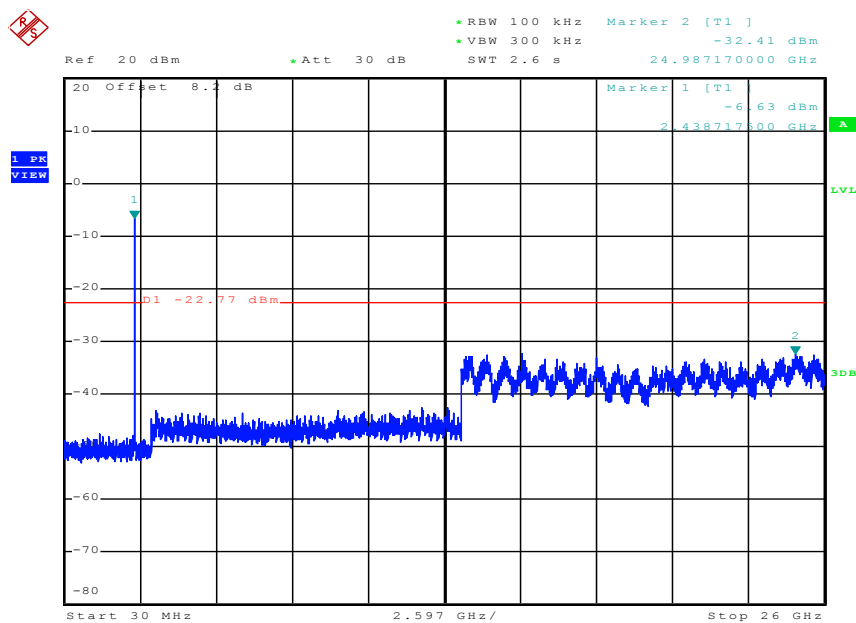
Puw/11N40
SISO/LCH

Date: 27 AUG 2019 14:15:53

11N40SISO_MCH_Graphs

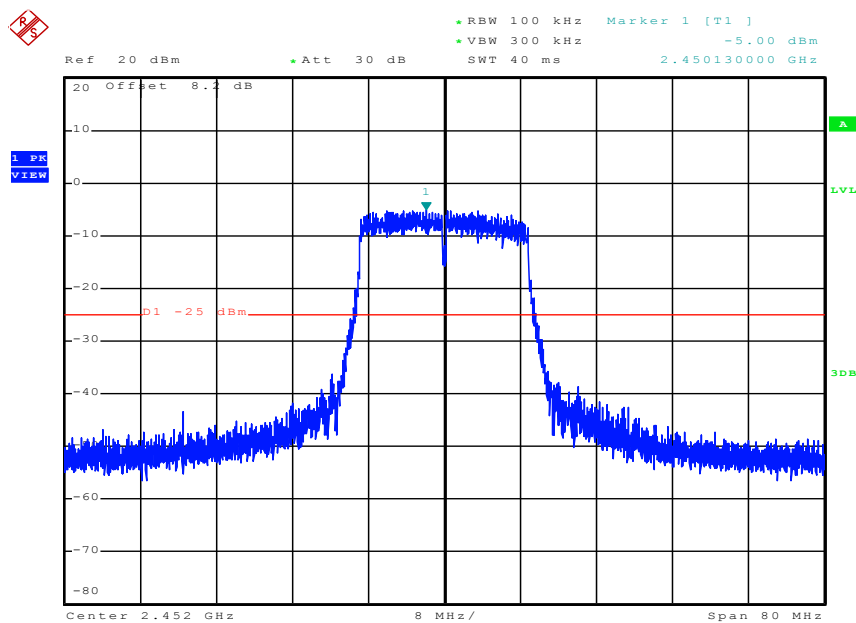
Pref/11N40
SISO/MCH

Date: 27 AUG 2019 14:16:28

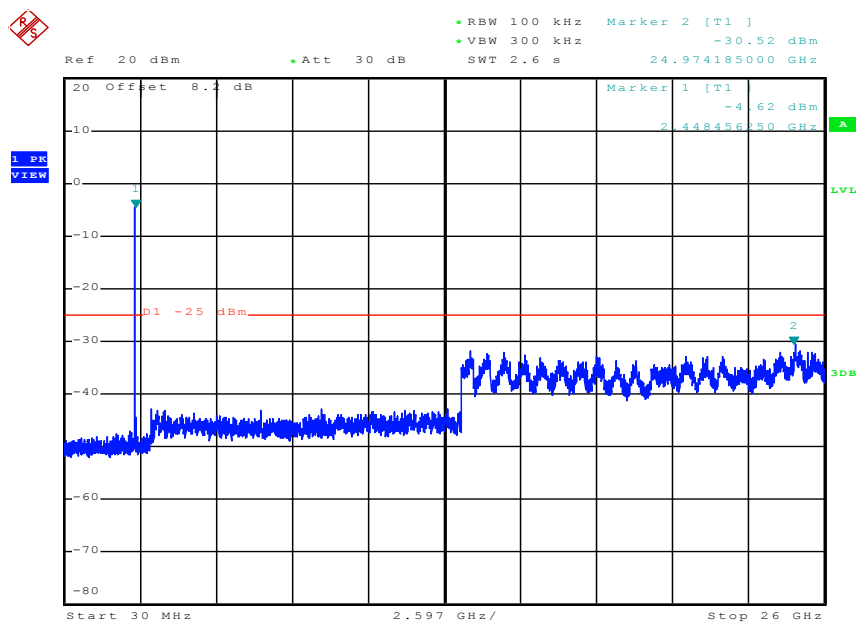
Puw/11N40
SISO/MCH

Date: 27 AUG 2019 14:16:49

11N40SISO_HCH_Graphs

Pref/11N40
SISO/HCH

Date: 27 AUG 2019 14:17:21

Puw/11N40
SISO/HCH

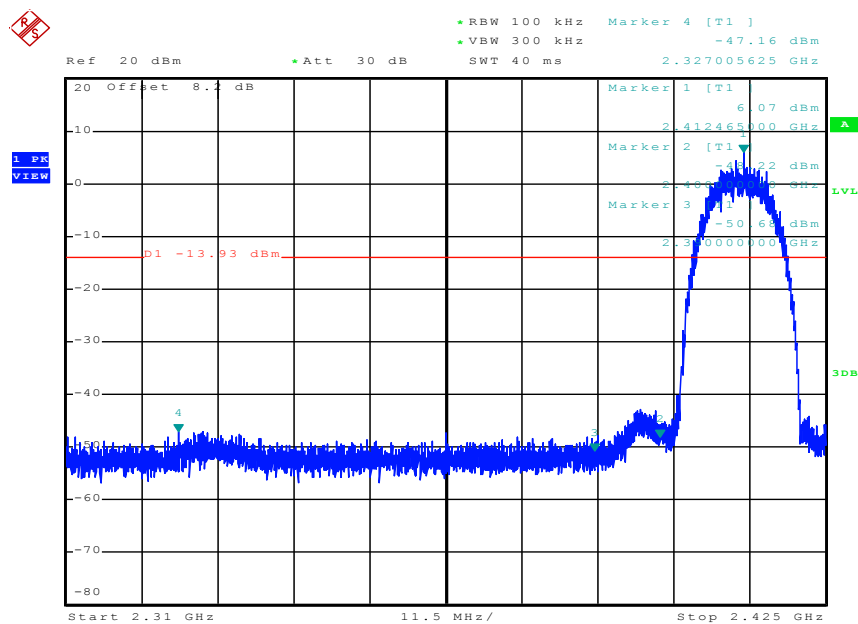
Date: 27 AUG 2019 14:17:59

C.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	6.070	-47.163	-13.93	PASS
	HCH	4.500	-47.883	-15.5	PASS
11G	LCH	-1.550	-45.438	-21.55	PASS
	HCH	-2.660	-46.784	-22.66	PASS
11N20SISO	LCH	-1.020	-45.662	-21.02	PASS
	HCH	-2.490	-44.365	-22.49	PASS
11N40SISO	LCH	-5.190	-43.678	-25.19	PASS
	HCH	-5.540	-40.669	-25.54	PASS

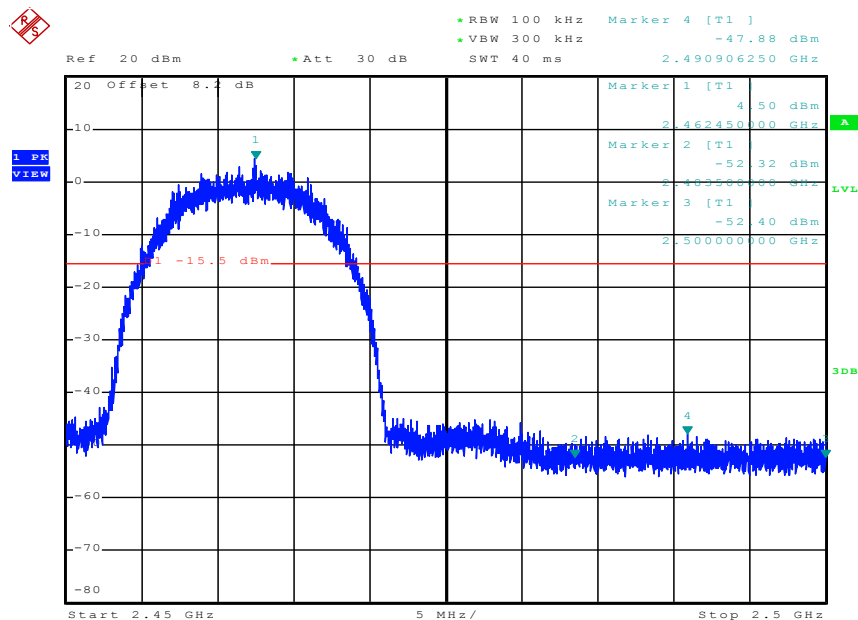
Test Graphs

11B/LCH



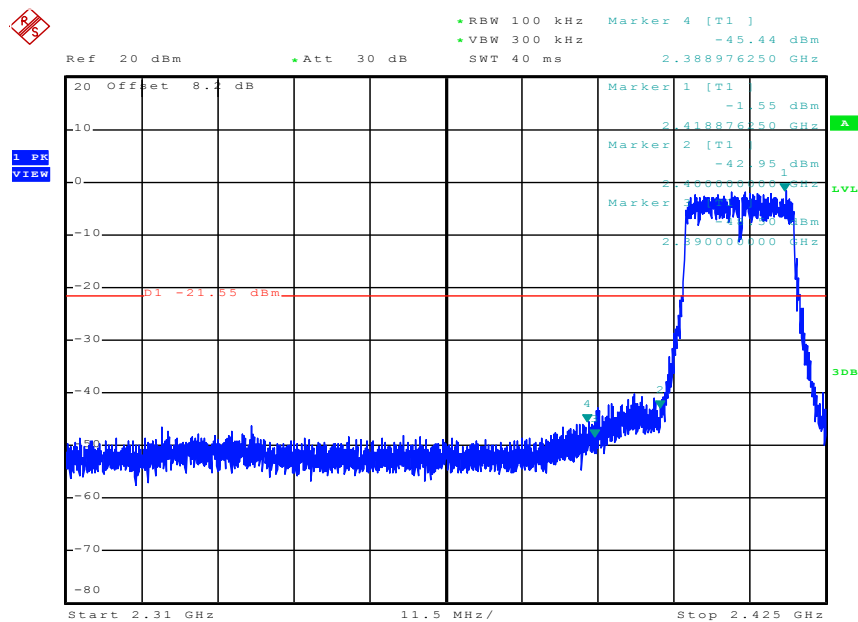
Date: 6.AUG.2019 20:12:36

11B/HCH



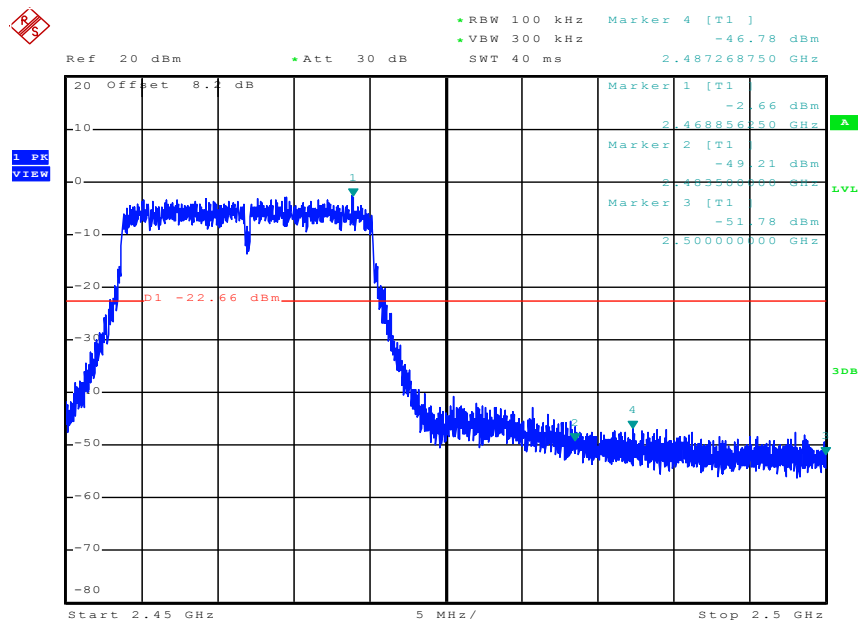
Date: 6 AUG 2019 20:18:36

11G/LCH



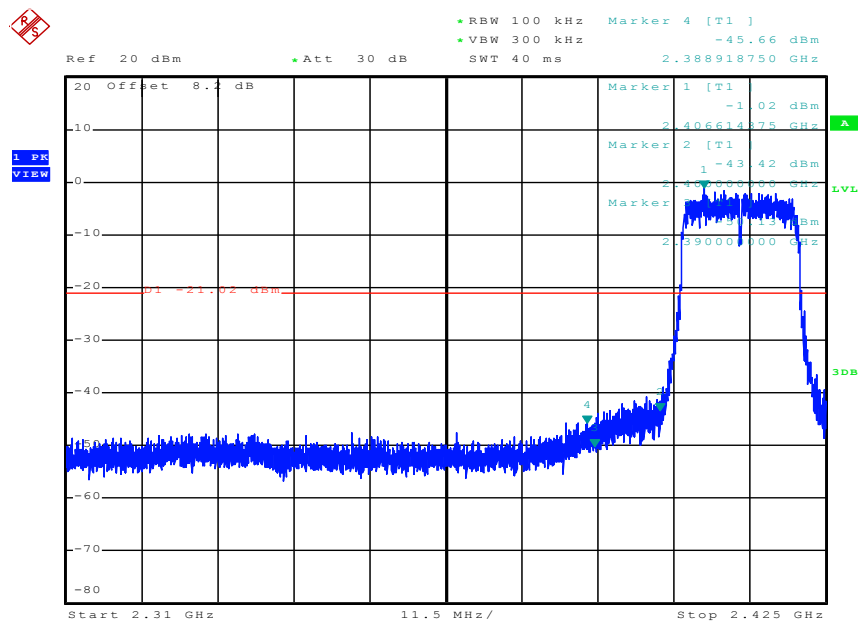
Date: 6 AUG 2019 20:21:36

11G/HCH



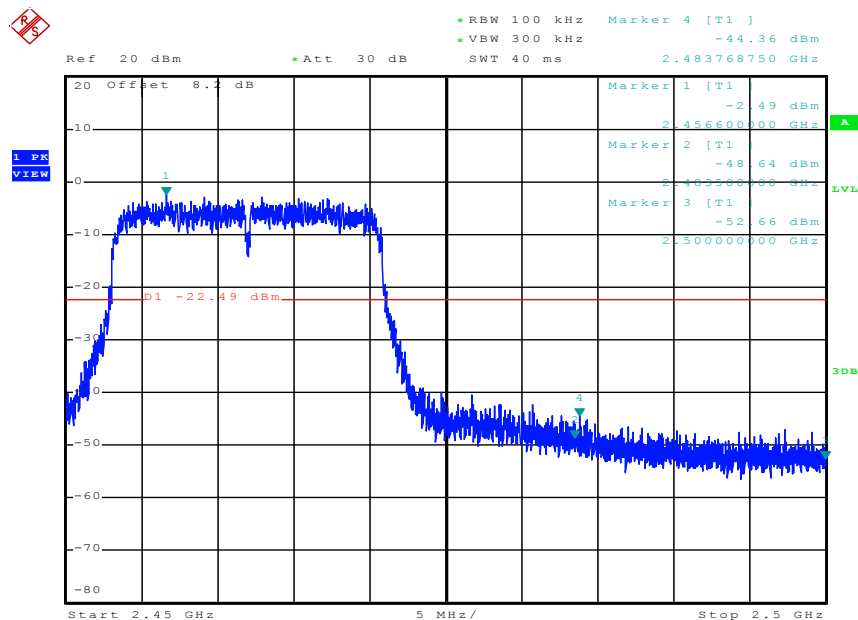
Date: 6.AUG.2019 20:26:12

11N20SISO/LCH



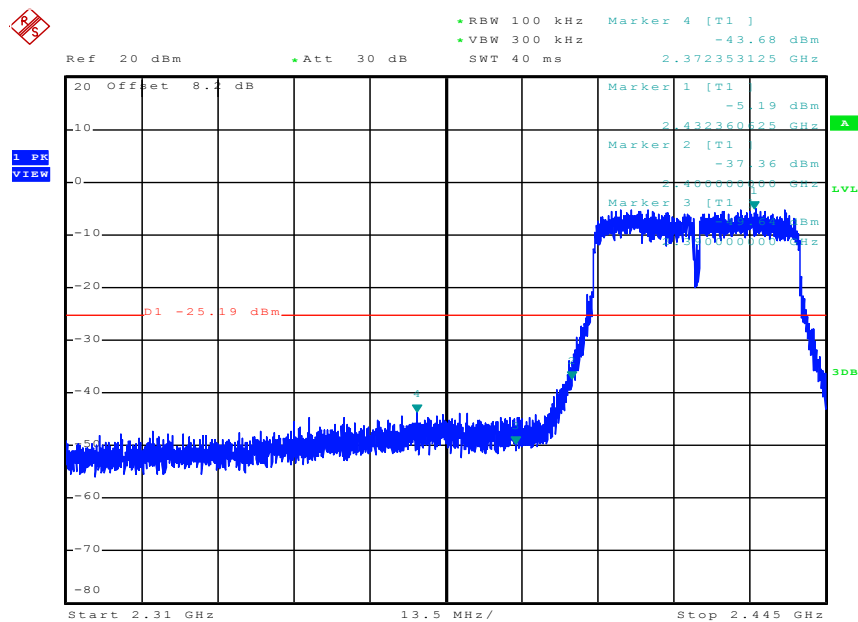
Date: 6.AUG.2019 20:29:10

11N20SISO/HCH



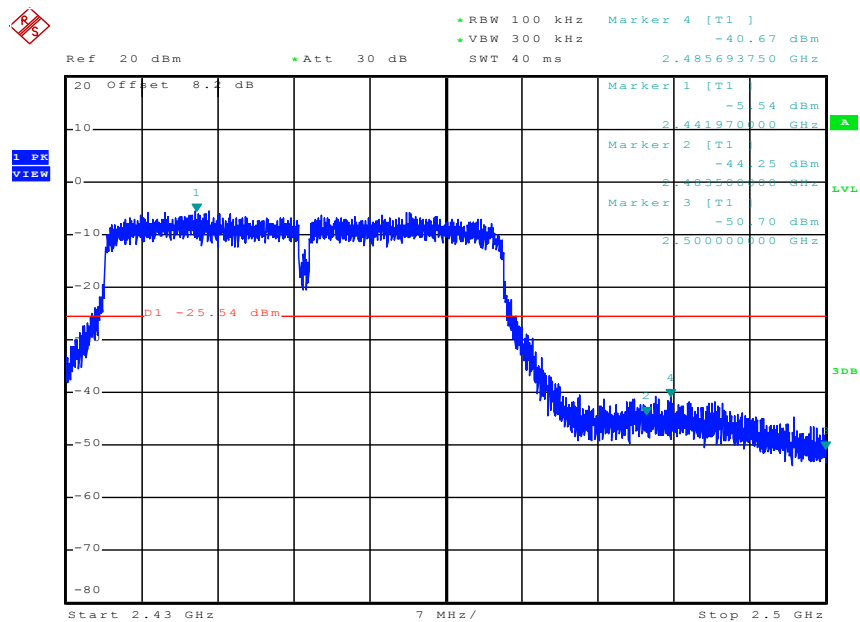
Date: 6.AUG.2019 20:33:33

11N40SISO/LCH



Date: 6.AUG.2019 20:36:55

11N40SISO/HCH



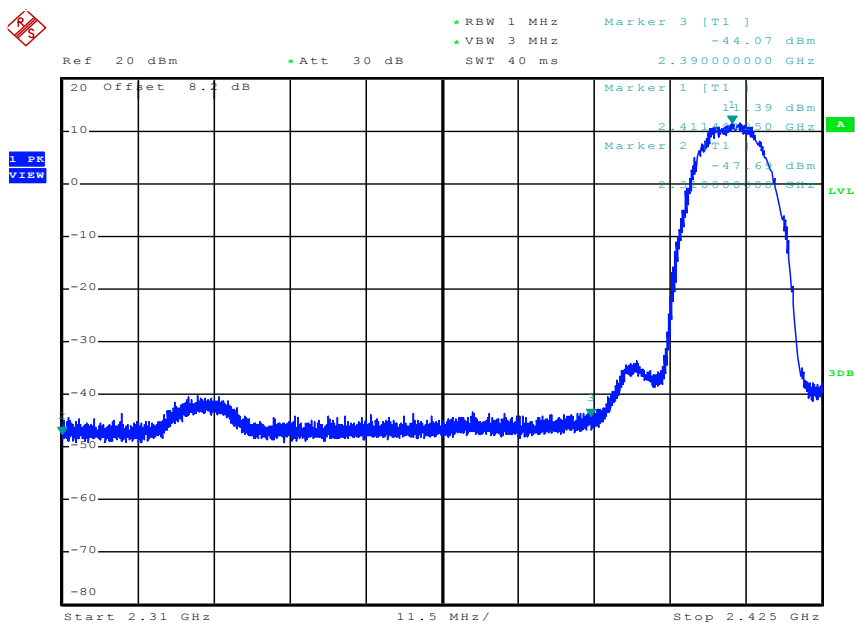
Date: 6.AUG.2019 20:41:27

C.7 Restrict-band band-edge measurements

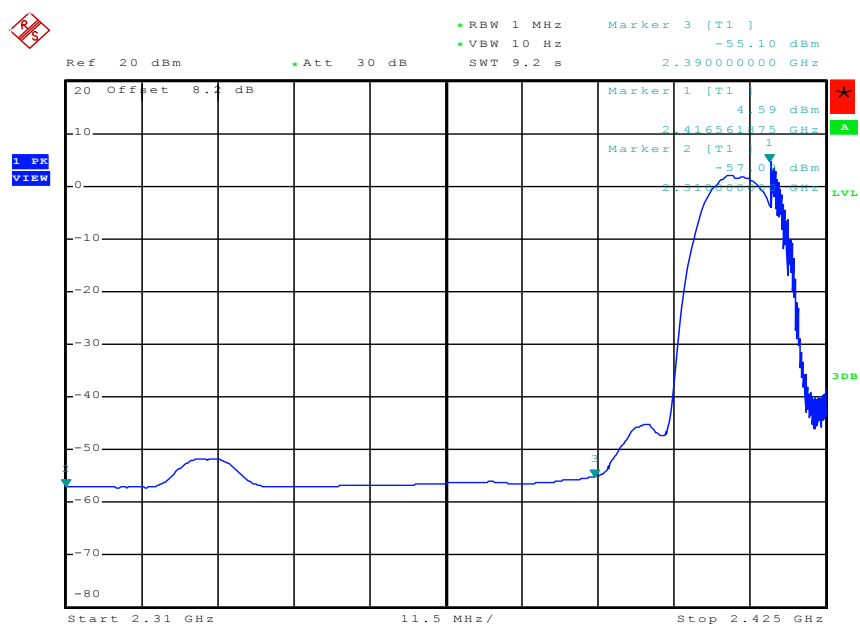
Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
11B	2412	Ant1	2310.0	-47.69	2.0	0	47.57	PEAK	74	PASS
	2412	Ant1	2310.0	-57.09	2.0	0	38.17	AV	54	PASS
	2412	Ant1	2390.0	-44.07	2.0	0	51.19	PEAK	74	PASS
	2412	Ant1	2390.0	-55.10	2.0	0	40.16	AV	54	PASS
	2462	Ant1	2483.5	-46.78	2.0	0	48.48	PEAK	74	PASS
	2462	Ant1	2483.5	-56.35	2.0	0	38.91	AV	54	PASS
	2462	Ant1	2500.0	-47.12	2.0	0	48.14	PEAK	74	PASS
	2462	Ant1	2500.0	-56.97	2.0	0	38.29	AV	54	PASS
11G	2412	Ant1	2310.0	-46.42	2.0	0	48.84	PEAK	74	PASS
	2412	Ant1	2310.0	-57.07	2.0	0	38.19	AV	54	PASS
	2412	Ant1	2390.0	-37.51	2.0	0	57.75	PEAK	74	PASS
	2412	Ant1	2390.0	-49.07	2.0	0	46.19	AV	54	PASS
	2462	Ant1	2483.5	-37.52	2.0	0	57.74	PEAK	74	PASS
	2462	Ant1	2483.5	-50.99	2.0	0	44.27	AV	54	PASS
	2462	Ant1	2500.0	-48.33	2.0	0	46.93	PEAK	74	PASS
	2462	Ant1	2500.0	-57.03	2.0	0	38.23	AV	54	PASS
11N20 SISO	2412	Ant1	2310.0	-48.42	2.0	0	46.84	PEAK	74	PASS
	2412	Ant1	2310.0	-57.11	2.0	0	38.15	AV	54	PASS
	2412	Ant1	2390.0	-36.17	2.0	0	59.09	PEAK	74	PASS
	2412	Ant1	2390.0	-48.28	2.0	0	46.98	AV	54	PASS
	2462	Ant1	2483.5	-37.30	2.0	0	57.96	PEAK	74	PASS
	2462	Ant1	2483.5	-50.05	2.0	0	45.21	AV	54	PASS
	2462	Ant1	2500.0	-47.50	2.0	0	47.76	PEAK	74	PASS
	2462	Ant1	2500.0	-56.95	2.0	0	38.31	AV	54	PASS
11N40 SISO	2422	Ant1	2310.0	-47.90	2.0	0	47.36	PEAK	74	PASS
	2422	Ant1	2310.0	-56.93	2.0	0	38.33	AV	54	PASS

	2422	Ant1	2390.0	-38.79	2.0	0	56.47	PEAK	74	PASS
	2422	Ant1	2390.0	-47.74	2.0	0	47.52	AV	54	PASS
	2452	Ant1	2483.5	-34.16	2.0	0	61.10	PEAK	74	PASS
	2452	Ant1	2483.5	-44.62	2.0	0	50.64	AV	54	PASS
	2452	Ant1	2500.0	-41.91	2.0	0	53.35	PEAK	74	PASS
	2452	Ant1	2500.0	-52.62	2.0	0	42.64	AV	54	PASS

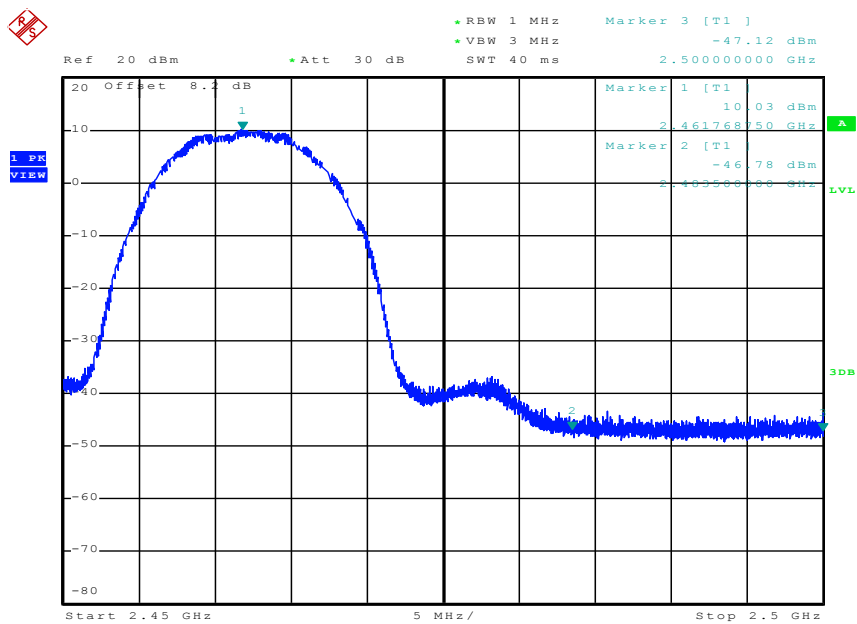
Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



Restrict-band band-edge measurements_11B_2412_Ant1_AV

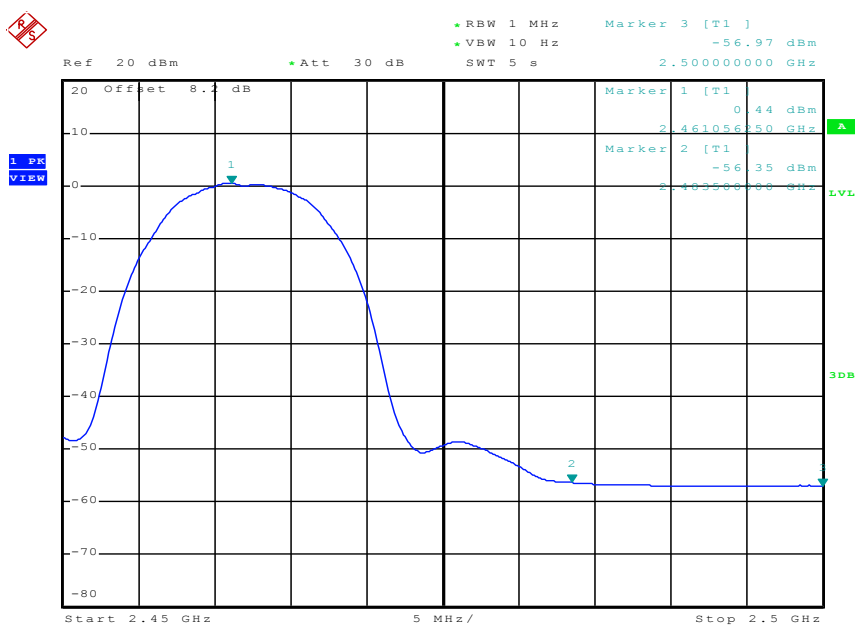


Restrict-band band-edge measurements_11B_2462_Ant1_PEAK



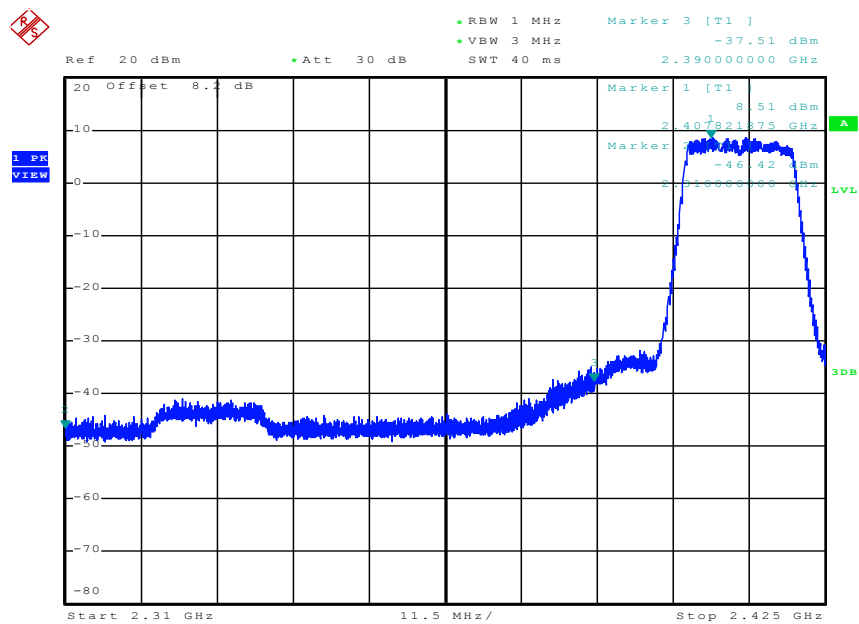
Date: 6.AUG.2019 20:19:20

Restrict-band band-edge measurements_11B_2462_Ant1_AV



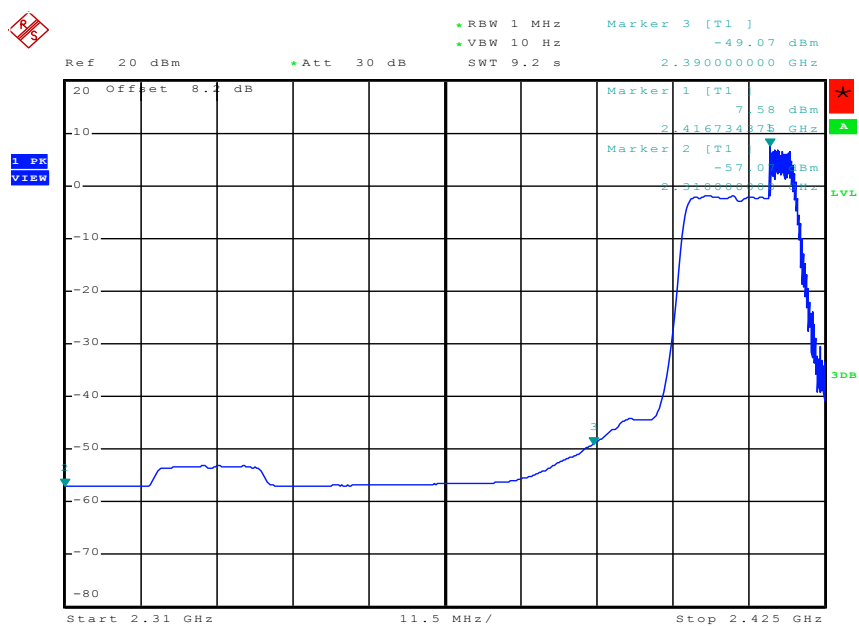
Date: 6.AUG.2019 20:19:34

Restrict-band band-edge measurements_11G_2412_Ant1_PEAK

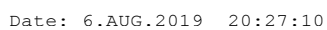


Date: 6.AUG.2019 20:22:20

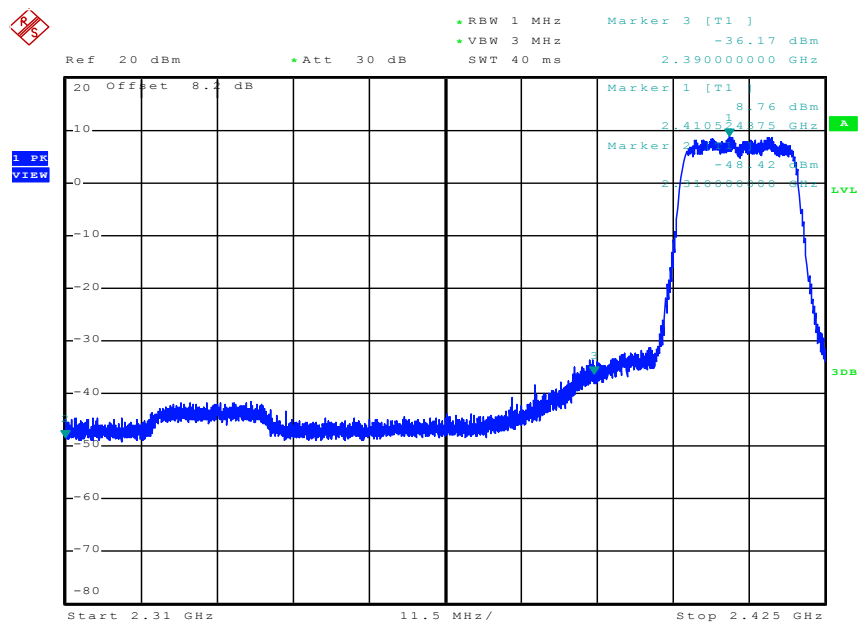
Restrict-band band-edge measurements_11G_2412_Ant1_AV



Date: 6.AUG.2019 20:22:34

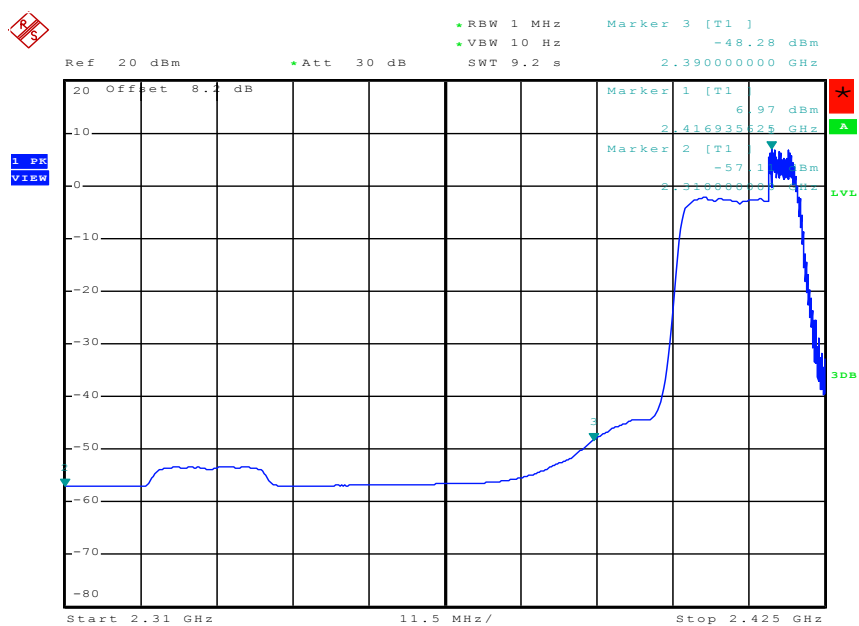


Restrict-band band-edge measurements_11N20SISO_2412_Ant1_PEAK



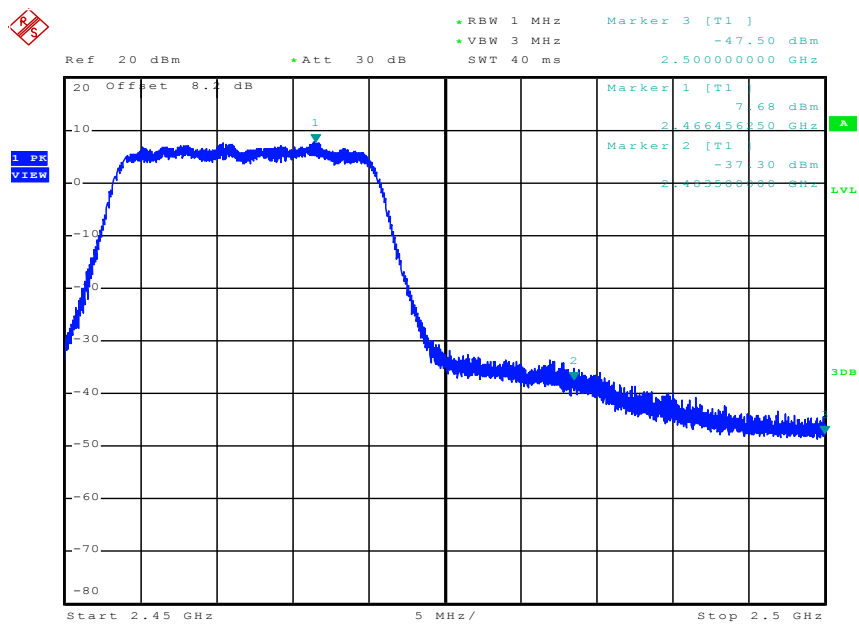
Date: 6.AUG.2019 20:29:52

Restrict-band band-edge measurements_11N20SISO_2412_Ant1_AV



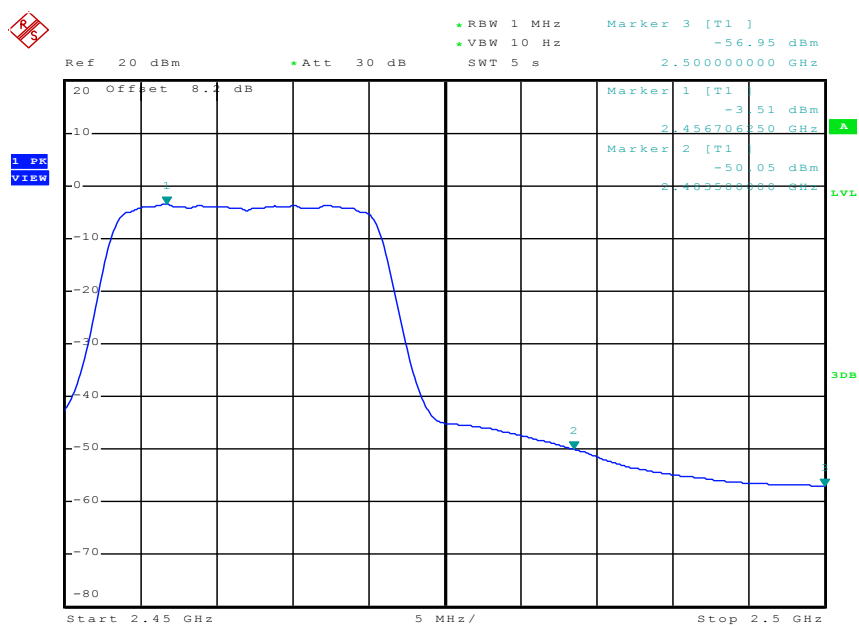
Date: 6.AUG.2019 20:30:07

Restrict-band band-edge measurements_11N20SISO_2462_Ant1_PEAK



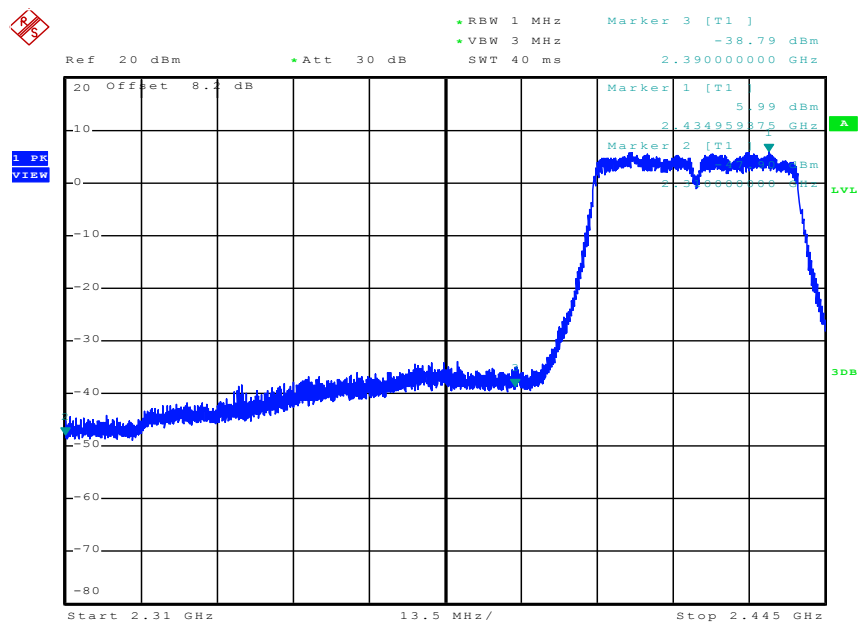
Date: 6.AUG.2019 20:34:17

Restrict-band band-edge measurements_11N20SISO_2462_Ant1_AV



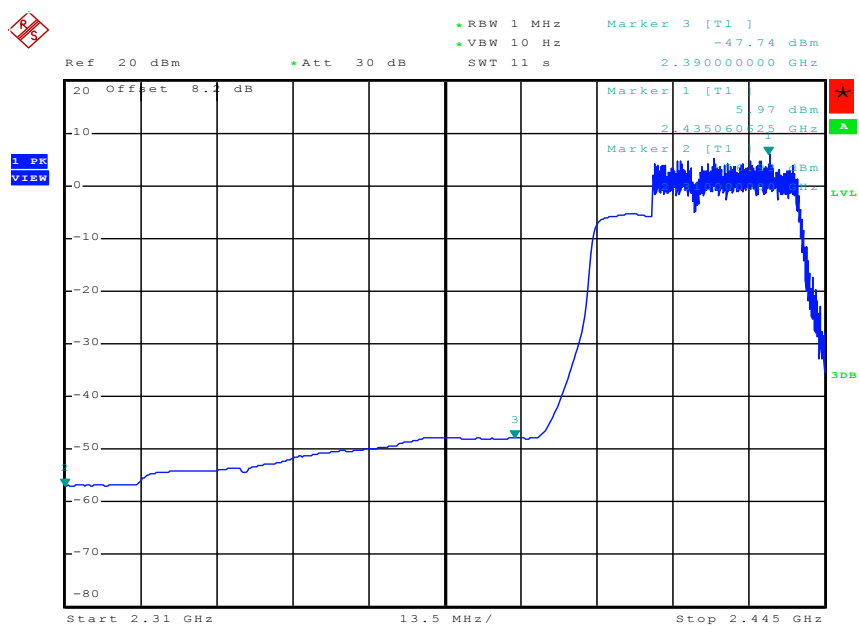
Date: 6.AUG.2019 20:34:31

Restrict-band band-edge measurements_11N40SISO_2422_Ant1_PEAK



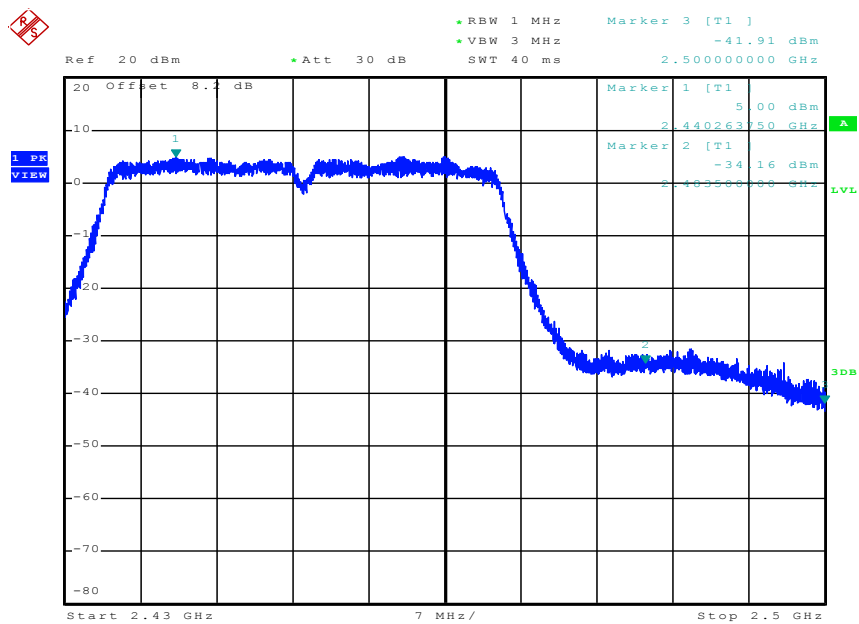
Date: 6.AUG.2019 20:37:38

Restrict-band band-edge measurements_11N40SISO_2422_Ant1_AV



Date: 6.AUG.2019 20:37:53

Restrict-band band-edge measurements_11N40SISO_2452_Ant1_PEAK



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_AV

