

☐ Test Plots (26 dB Bandwidth)

802.11n(HT40) UNII Band



802.11ac(VHT40) UNII Band



802.11ac(VHT80) UNII Band



10.7.2 6 dB Bandwidth

[Ant.1]

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11a	UNII3	5720	144	5728.16	3.16	> 0.5
802.11n(HT20)				5728.88	3.88	> 0.5
802.11ac(VHT20)				5728.88	3.88	> 0.5
802.11n(HT40)	UNII3	5710	142	5727.92	2.92	> 0.5
802.11ac(VHT40)				5728.24	3.24	> 0.5
802.11ac(VHT80)	UNII3	5690	138	5727.92	2.92	> 0.5

[Ant.2]

Mode	Band	Frequency [MHz]	Channel	Measured Frequency [MHz]	6dB Bandwidth [MHz]	Limit [MHz]
802.11a	UNII3	5720	144	5728.20	3.20	> 0.5
802.11n(HT20)				5728.88	3.88	> 0.5
802.11ac(VHT20)				5728.88	3.88	> 0.5
802.11n(HT40)	UNII3	5710	142	5727.92	2.92	> 0.5
802.11ac(VHT40)				5727.92	2.92	> 0.5
802.11ac(VHT80)	UNII3	5690	138	5727.76	2.76	> 0.5

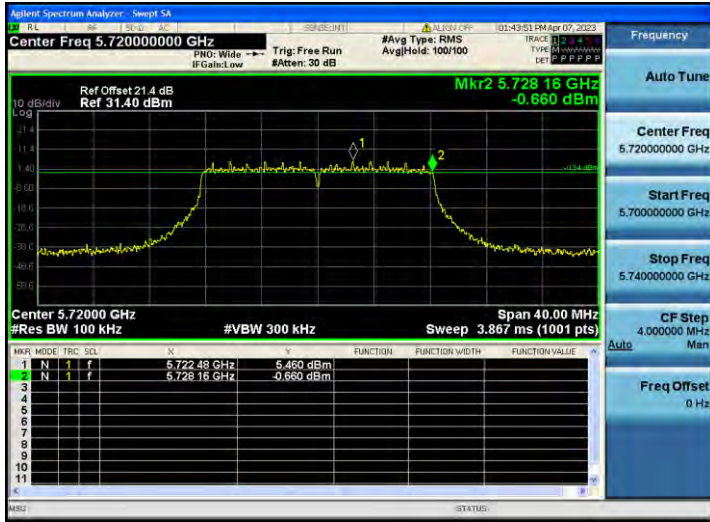
Note:

6 dB Bandwidth = Measured Frequency[MHz] – 5 725MHz

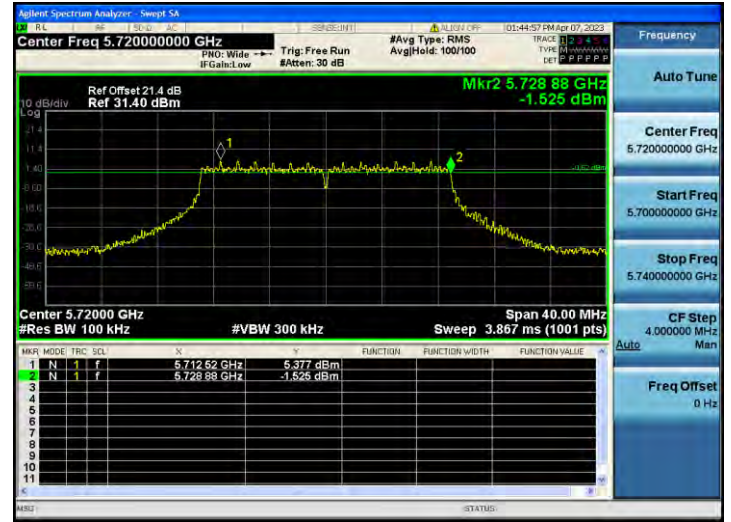
[Ant.1]

☐ Test Plots(UNII 3 Band 6 dB Bandwidth)

802.11a CH.144



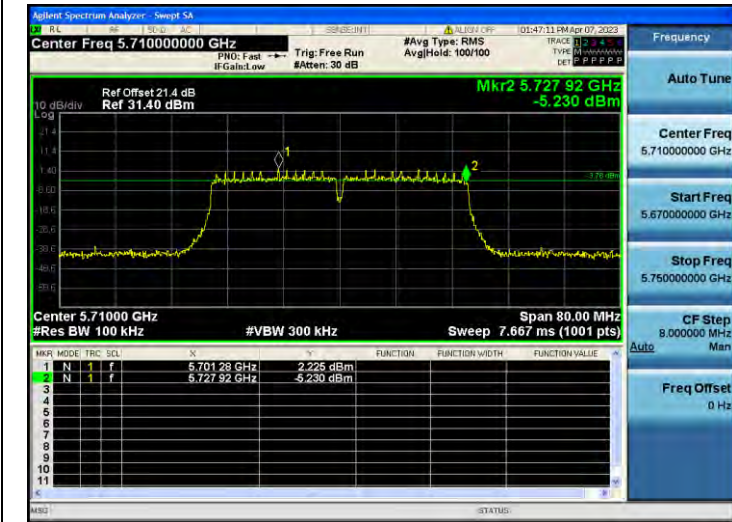
802.11n_HT20 CH.144



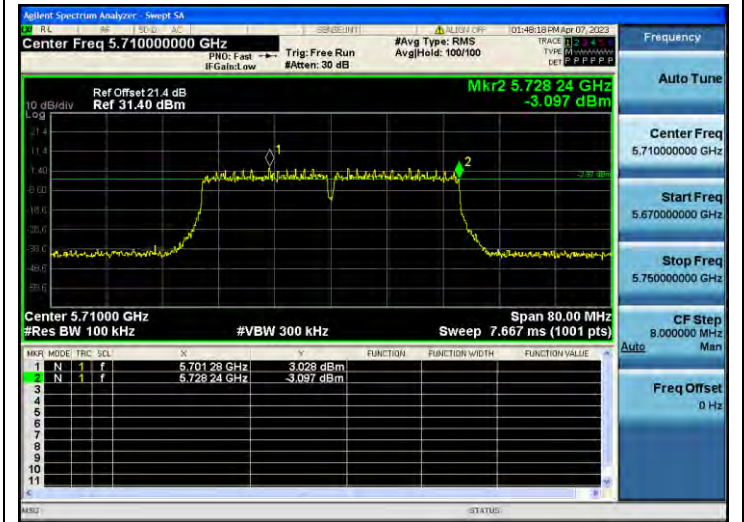
802.11ac_VHT20 CH.144



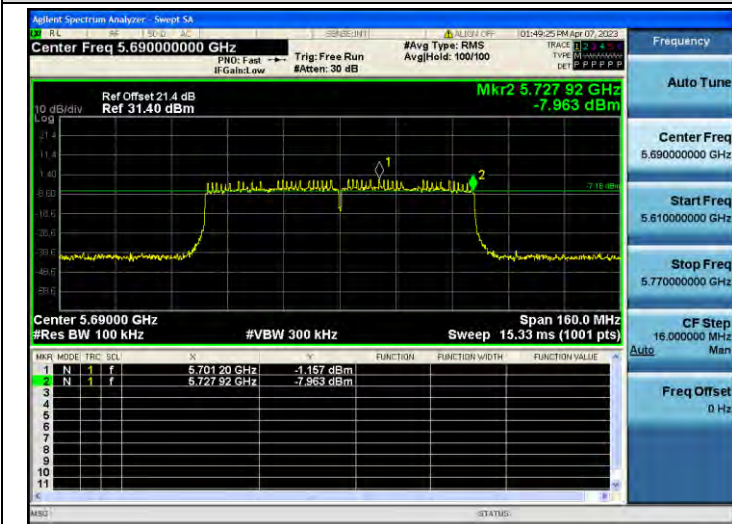
802.11n_HT40 CH.142



802.11ac_VHT40 CH.142



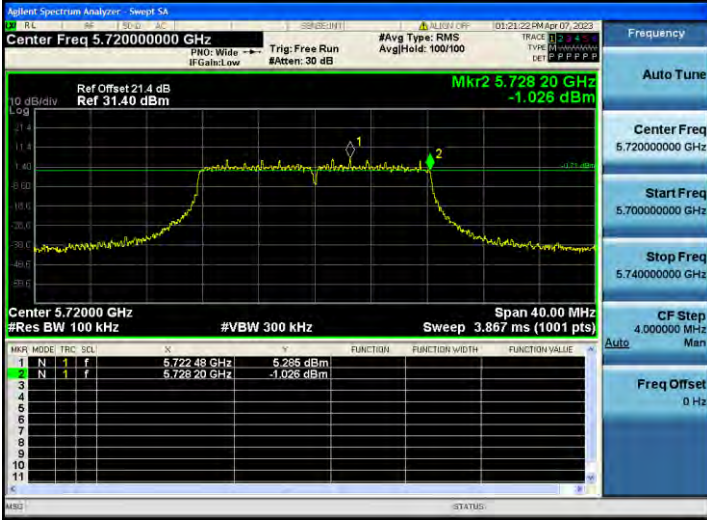
802.11ac_VHT80 CH.138



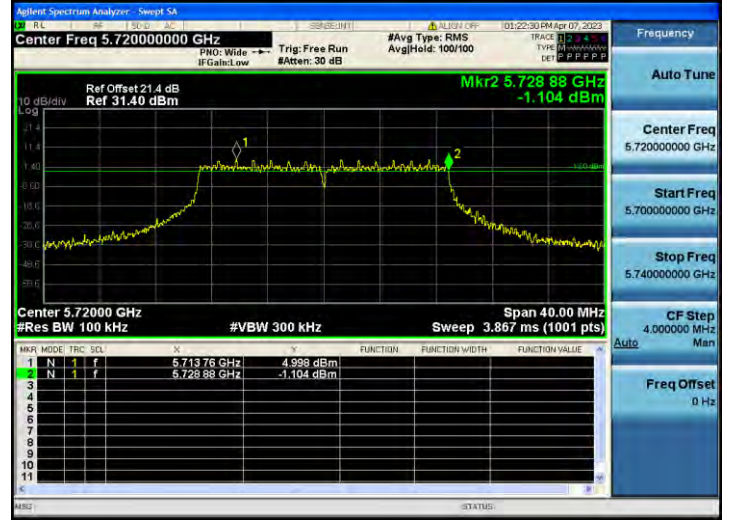
[Ant.2]

☐ Test Plots(UNII 3 Band 6 dB Bandwidth)

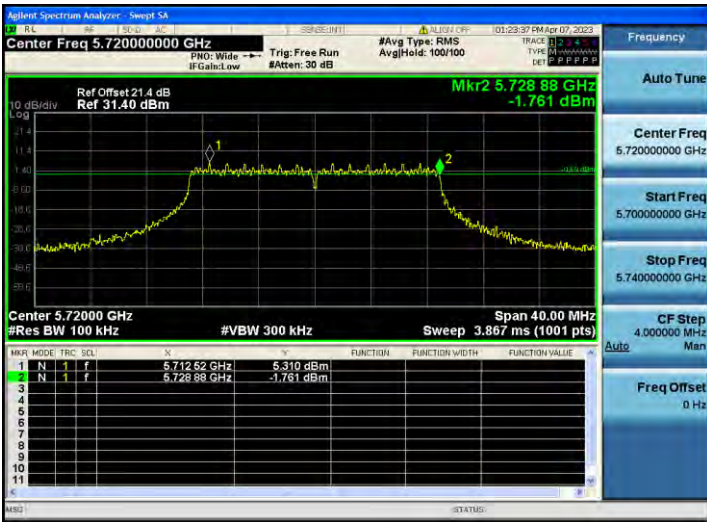
802.11a CH.144



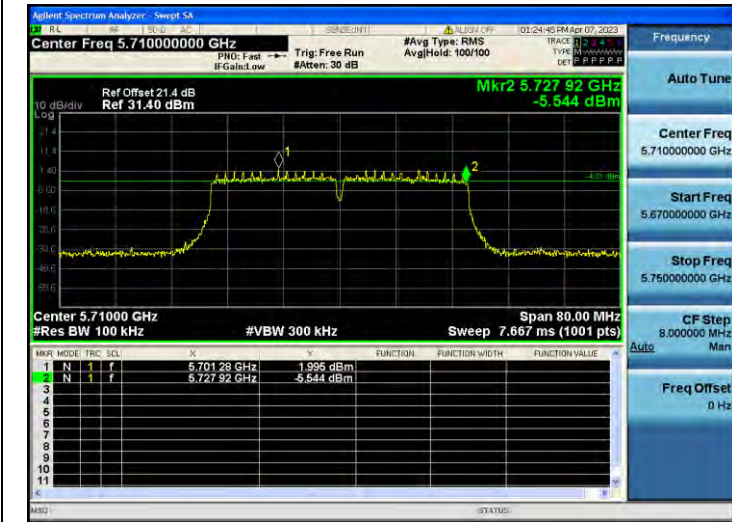
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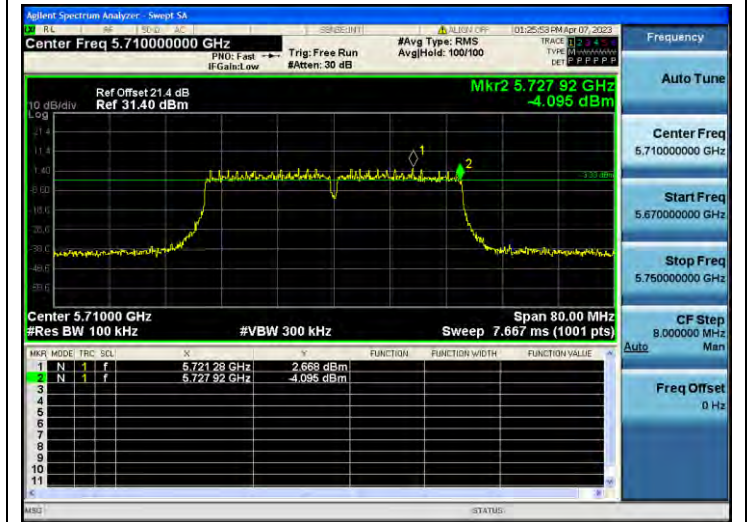
802.11ac_VHT20 CH.144



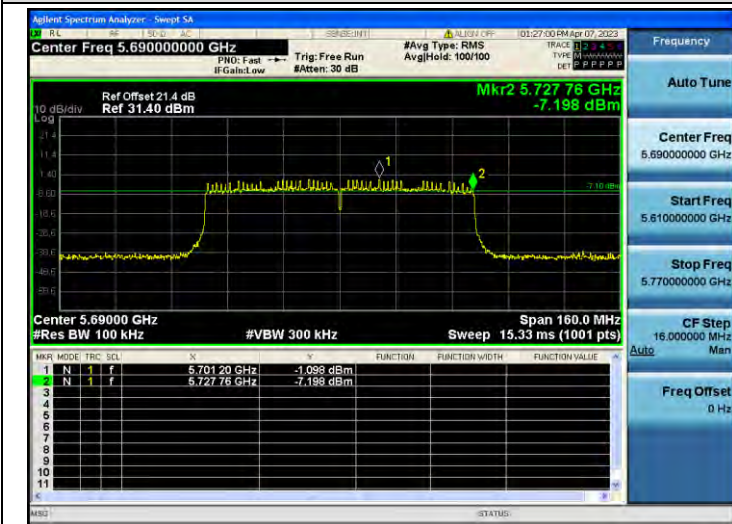
802.11n_HT40 CH.142



802.11ac_VHT40 CH.142



802.11ac_VHT80 CH.138



10.7.3 Output Power

[Ant.1]

Mode	Frequency [MHz]	Channel	Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase Datarate
802.11a	5720	144	15.06	0.755	15.81	22.64	18 Mbps
802.11n(HT20)	(UNII 2C		14.06	1.474	15.53	22.91	MCS4
802.11ac(VHT20)	Band)		14.14	1.513	15.66	23.11	MCS4
802.11a	5720	144	8.74	0.755	9.49	30.00	18 Mbps
802.11n(HT20)	(UNII 3		8.77	1.474	10.25	30.00	MCS4
802.11ac(VHT20)	Band)		8.76	1.513	10.28	30.00	MCS4

Mode	Frequency [MHz]	Channel	Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase Datarate
802.11n(HT40)	5710	142	14.39	1.181	15.57	23.98	MCS1
802.11ac(VHT40)	(UNII 2C Band)		13.96	2.447	16.41	23.98	MCS3
802.11n(HT40)	5710	142	3.80	1.181	4.98	30.00	MCS1
802.11ac(VHT40)	(UNII 3 Band)		3.47	2.447	5.91	30.00	MCS3

Mode	Frequency [MHz]	Channel	Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase Datarate
802.11ac(VHT80)	5690 (UNII 2C Band)	138	12.37	3.255	15.63	23.98	MCS1
	5690 (UNII 3 Band)	138	-1.51	3.255	1.75	30.00	MCS1

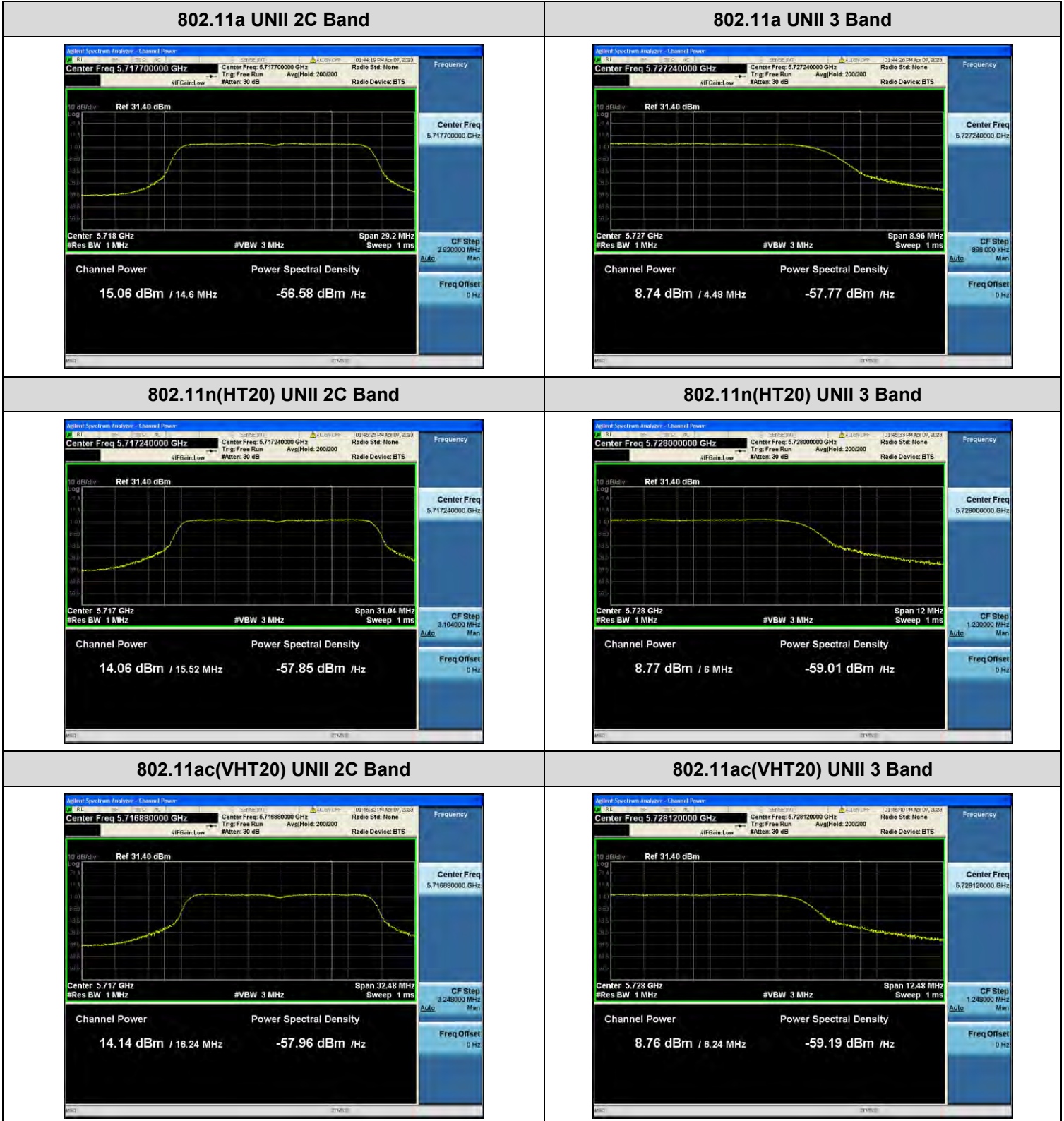
[Ant.2]

Mode	Frequency [MHz]	Channel	Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase Datarate
802.11a	5720	144	14.84	0.755	15.60	22.63	18 Mbps
802.11n(HT20)	(UNII 2C		13.95	1.474	15.43	22.94	MCS4
802.11ac(VHT20)	Band)		13.86	1.513	15.37	23.11	MCS4
802.11a	5720	144	8.45	0.755	9.21	30.00	18 Mbps
802.11n(HT20)	(UNII 3		8.50	1.474	9.97	30.00	MCS4
802.11ac(VHT20)	Band)		8.52	1.513	10.03	30.00	MCS4

Mode	Frequency [MHz]	Channel	Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase Datarate
802.11n(HT40)	5710	142	14.27	1.181	15.45	23.98	MCS1
802.11ac(VHT40)	(UNII 2C Band)		13.79	2.447	16.24	23.98	MCS3
802.11n(HT40)	5710	142	3.53	1.181	4.71	30.00	MCS1
802.11ac(VHT40)	(UNII 3 Band)		3.25	2.447	5.70	30.00	MCS3

Mode	Frequency [MHz]	Channel	Measured Power [dBm]	Duty Cycle Factor [dB]	Total Power [dBm]	Limit [dBm]	Worstcase Datarate
802.11ac(VHT80)	5690 (UNII 2C Band)	138	12.25	3.255	15.50	23.98	MCS1
	5690 (UNII 3 Band)	138	-1.88	3.255	1.38	30.00	MCS1

[Ant.1]
Test Plots



802.11n(HT40) UNII 2C Band



802.11n(HT40) UNII 3 Band



802.11ac(VHT40) UNII 2C Band



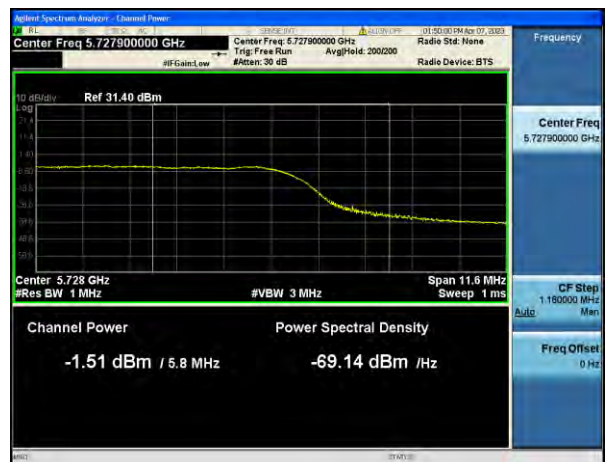
802.11ac(VHT40) UNII 3 Band



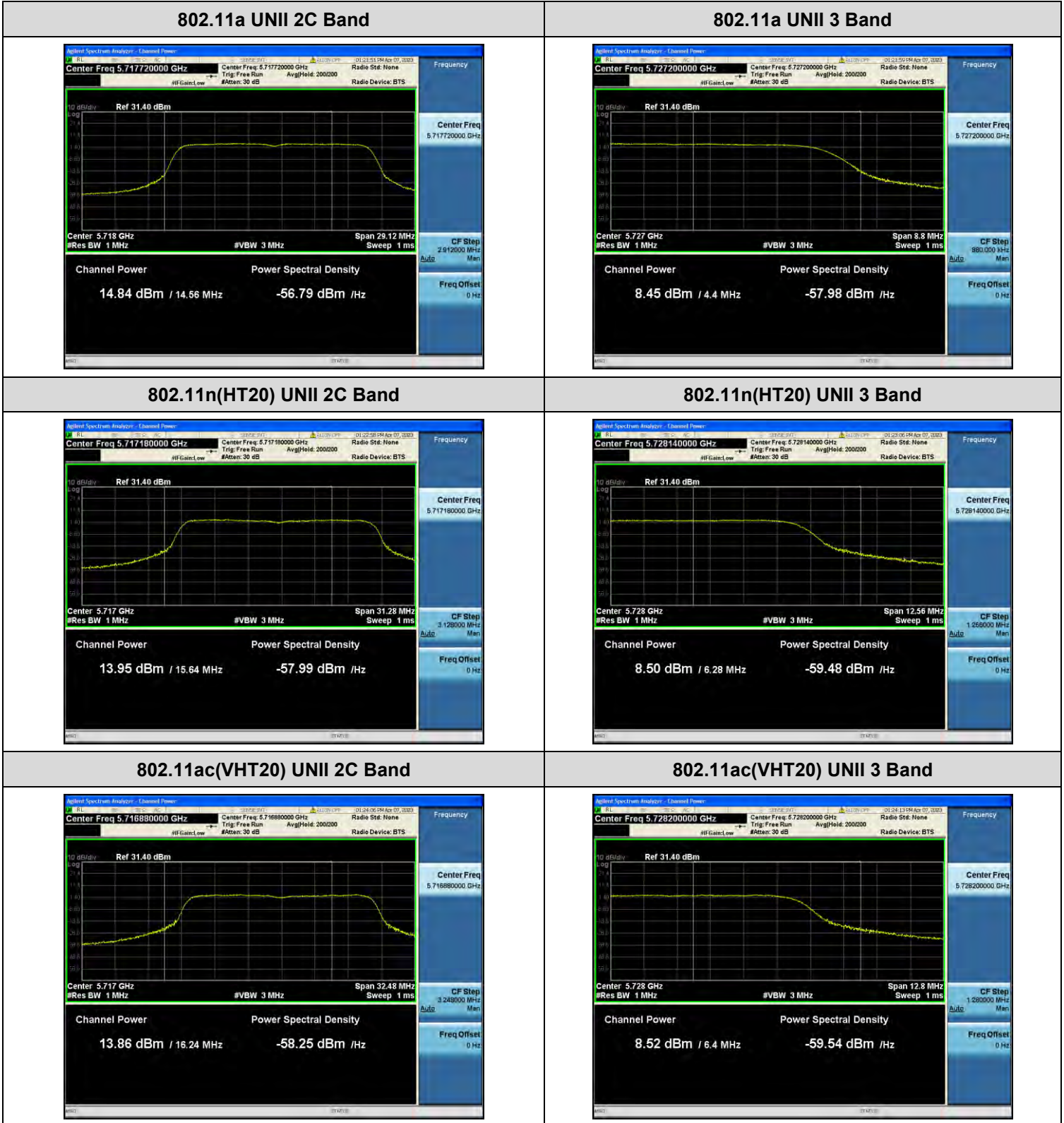
802.11ac(VHT80) UNII 2C Band



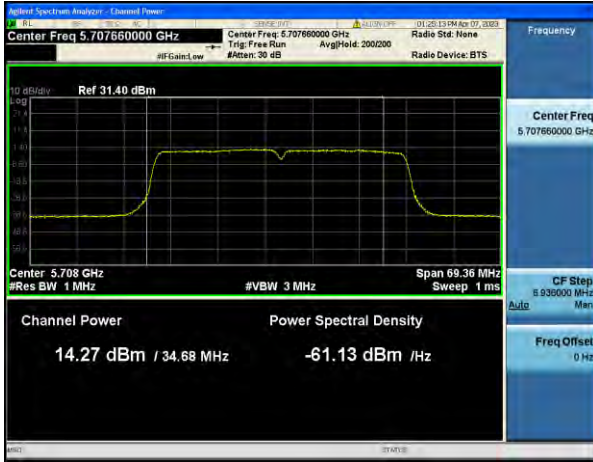
802.11ac(VHT80) UNII 3 Band



[Ant.2]
 Test Plots



802.11n(HT40) UNII 2C Band



802.11n(HT40) UNII 3 Band



802.11ac(VHT40) UNII 2C Band



802.11ac(VHT40) UNII 3 Band



802.11ac(VHT80) UNII 2C Band



802.11ac(VHT80) UNII 3 Band



10.7.4 Power Spectral Density

[Ant.1]

Mode	Frequency [MHz]	Channel	Measured Density [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Limit [dBm]	Worstcase Datarate
802.11a	5720	144	4.859	0.755	5.615	11 dBm/ MHz	18 Mbps
802.11n(HT20)	(UNII 2C		3.675	1.474	5.150		MCS4
802.11ac(VHT20)	Band)		3.815	1.513	5.328		MCS4
802.11a	5720	144	1.608	0.755	2.363	30 dBm/ 500 kHz	18 Mbps
802.11n(HT20)	(UNII 3		1.056	1.474	2.530		MCS4
802.11ac(VHT20)	Band)		1.071	1.513	2.584		MCS4

Mode	Frequency [MHz]	Channel	Measured Density [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Limit [dBm]	Worstcase Datarate
802.11n(HT40)	5710	142	0.330	1.181	1.511	11 dBm/ MHz	MCS1
802.11ac(VHT40)	(UNII 2C Band)		0.039	2.447	2.486		MCS3
802.11n(HT40)	5710	142	-3.561	1.181	-2.380	30 dBm/ 500 kHz	MCS1
802.11ac(VHT40)	(UNII 3 Band)		-4.401	2.447	-1.954		MCS3

Mode	Frequency [MHz]	Channel	Measured Density [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Limit [dBm]	Worstcase Datarate
802.11ac(VHT80)	5690	138	-4.748	3.255	-1.493	11 dBm/ MHz	MCS1
	(UNII 2C Band)						
	5690	138	-8.921	3.255	-5.666	30 dBm/ 500 kHz	MCS1
	(UNII 3 Band)						

[Ant.2]

Mode	Frequency [MHz]	Channel	Measured Density [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Limit [dBm]	Worstcase Datarate
802.11a	5720	144	4.698	0.755	5.454	11 dBm/ MHz	18 Mbps
802.11n(HT20)	(UNII 2C		3.408	1.474	4.883		MCS4
802.11ac(VHT20)	Band)		3.597	1.513	5.110		MCS4
802.11a	5720	144	1.187	0.755	1.943	30 dBm/ 500 kHz	18 Mbps
802.11n(HT20)	(UNII 3		0.581	1.474	2.056		MCS4
802.11ac(VHT20)	Band)		0.798	1.513	2.310		MCS4

Mode	Frequency [MHz]	Channel	Measured Density [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Limit [dBm]	Worstcase Datarate
802.11n(HT40)	5710	142	0.246	1.181	1.427	11 dBm/ MHz	MCS1
802.11ac(VHT40)	(UNII 2C Band)		0.362	2.447	2.809		MCS3
802.11n(HT40)	5710	142	-4.110	1.181	-2.929	30 dBm/ 500 kHz	MCS1
802.11ac(VHT40)	(UNII 3 Band)		-3.557	2.447	-1.110		MCS3

Mode	Frequency [MHz]	Channel	Measured Density [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Limit [dBm]	Worstcase Datarate
802.11ac(VHT80)	5690	138	-4.985	3.255	-1.730	11 dBm/ MHz	MCS1
	(UNII 2C Band)						
	5690	138	-9.771	3.255	-6.516	30 dBm/ 500 kHz	MCS1
	(UNII 3 Band)						

[Ant.1]

Test Plots

802.11a UNII 2C Band



802.11a UNII 3 Band



802.11n(HT20) UNII 2C Band



802.11n(HT20) UNII 3 Band



802.11ac(VHT20) UNII 2C Band



802.11ac(VHT20) UNII 3 Band



802.11n(HT40) UNII 2C Band



802.11n(HT40) UNII 3 Band



802.11ac(VHT40) UNII 2C Band



802.11ac(VHT40) UNII 3 Band



802.11ac(VHT80) UNII 2C Band



802.11ac(VHT80) UNII 3 Band



[Ant.2]
Test Plots

802.11a UNII 2C Band



802.11a UNII 3 Band



802.11n(HT20) UNII 2C Band



802.11n(HT20) UNII 3 Band



802.11ac(VHT20) UNII 2C Band



802.11ac(VHT20) UNII 3 Band



802.11n(HT40) UNII 2C Band



802.11n(HT40) UNII 3 Band



802.11ac(VHT40) UNII 2C Band



802.11ac(VHT40) UNII 3 Band



802.11ac(VHT80) UNII 2C Band



802.11ac(VHT80) UNII 3 Band



10.8 RADIATED SPURIOUS EMISSIONS

Frequency Range : 9 kHz – 30 MHz

Frequency	Measured Value	A.F+D.F+C.L	POL	Total	Limit	Margin
[MHz]	[dBµV]	[dB/m]	[H/V]	[dBµV/m]	[dBµV/m]	[dB]
No Critical peaks found						

Note:

1. The Measured Value of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
2. Distance extrapolation factor = $40\log(\text{specific distance} / \text{test distance})$ (dB)
3. Limit line = specific Limits (dBµV) + Distance extrapolation factor

Frequency Range : Below 1 GHz

Frequency	Measured Value	A.F+C.L	POL	Total	Limit	Margin
[MHz]	[dBµV]	[dB/m]	[H/V]	[dBµV/m]	[dBµV/m]	[dB]
No Critical peaks found						

Note:

1. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode

[Ant.1&Ant.2_MIMO(CDD)]

Frequency Range : Above 1 GHz

Band : UNII 1
 Operation Mode: 802.11n(HT20)
 Transfer MCS Index: 0
 Operating Frequency 5180 MHz
 Channel No. 36 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10360	50.73	8.52	V	59.25	68.20	8.95	PK
15540	48.34	13.29	V	61.63	73.98	12.35	PK
15540	28.01	13.29	V	41.30	53.98	12.68	AV
10360	50.55	8.52	H	59.07	68.20	9.13	PK
15540	48.16	13.29	H	61.45	73.98	12.53	PK
15540	27.82	13.29	H	41.11	53.98	12.87	AV

Band : UNII 1
 Operation Mode: 802.11n(HT20)
 Transfer MCS Index: 0
 Operating Frequency 5200 MHz
 Channel No. 40 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10400	51.42	8.86	V	60.28	68.20	7.92	PK
15600	50.03	13.36	V	63.39	73.98	10.59	PK
15600	27.23	13.36	V	40.59	53.98	13.39	AV
10400	51.16	8.86	H	60.02	68.20	8.18	PK
15600	50.21	13.36	H	63.57	73.98	10.41	PK
15600	27.51	13.36	H	40.87	53.98	13.11	AV

Band : UNII 1
Operation Mode: 802.11n(HT20)
Transfer MCS Index: 0
Operating Frequency 5240 MHz
Channel No. 48 Ch

Frequency [MHz]	Measured Value [dB μ V]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
10480	51.84	9.22	V	61.06	68.20	7.14	PK
15720	50.87	13.27	V	64.14	73.98	9.84	PK
15720	27.36	13.27	V	40.63	53.98	13.35	AV
10480	51.69	9.22	H	60.91	68.20	7.29	PK
15720	51.03	13.27	H	64.30	73.98	9.68	PK
15720	27.62	13.27	H	40.89	53.98	13.09	AV

Band : UNII 2A
Operation Mode: 802.11n(HT20)
Transfer MCS Index: 0
Operating Frequency 5260 MHz
Channel No. 52 Ch

Frequency [MHz]	Measured Value [dB μ V]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
10520	52.03	9.29	V	61.32	68.20	6.88	PK
15780	50.21	13.27	V	63.48	73.98	10.50	PK
15780	27.56	13.27	V	40.83	53.98	13.15	AV
10520	51.77	9.29	H	61.06	68.20	7.14	PK
15780	50.50	13.27	H	63.77	73.98	10.21	PK
15780	27.82	13.27	H	41.09	53.98	12.89	AV

Band : UNII 2A
Operation Mode: 802.11n(HT20)
Transfer MCS Index: 0
Operating Frequency 5300 MHz
Channel No. 60 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10600	50.72	10.19	V	60.91	73.98	13.07	PK
10600	36.61	10.19	V	46.80	53.98	7.18	AV
15900	50.93	12.93	V	63.86	73.98	10.12	PK
15900	28.40	12.93	V	41.33	53.98	12.65	AV
10600	50.46	10.19	H	60.65	73.98	13.33	PK
10600	36.32	10.19	H	46.51	53.98	7.47	AV
15900	50.67	12.93	H	63.60	73.98	10.38	PK
15900	28.15	12.93	H	41.08	53.98	12.90	AV

Band : UNII 2A
Operation Mode: 802.11n(HT20)
Transfer MCS Index: 0
Operating Frequency 5320 MHz
Channel No. 64 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10640	51.15	9.80	V	60.95	73.98	13.03	PK
10640	36.77	9.80	V	46.57	53.98	7.41	AV
15960	47.15	12.63	V	59.78	73.98	14.20	PK
15960	27.72	12.63	V	40.35	53.98	13.63	AV
10640	50.82	9.80	H	60.62	73.98	13.36	PK
10640	36.22	9.80	H	46.02	53.98	7.96	AV
15960	46.78	12.63	H	59.41	73.98	14.57	PK
15960	27.49	12.63	H	40.12	53.98	13.86	AV

Band :	UNII 2C
Operation Mode:	802.11n(HT20)
Transfer MCS Index:	0
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Measured Value [dB μ V]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
11000	47.16	10.95	V	58.11	73.98	15.87	PK
11000	33.25	10.95	V	44.20	53.98	9.78	AV
16500	43.22	12.45	V	55.67	68.20	12.53	PK
11000	46.85	10.95	H	57.80	73.98	16.18	PK
11000	33.01	10.95	H	43.96	53.98	10.02	AV
16500	43.01	12.45	H	55.46	68.20	12.74	PK

Band :	UNII 2C
Operation Mode:	802.11n(HT20)
Transfer MCS Index:	0
Operating Frequency	5580 MHz
Channel No.	116 Ch

Frequency [MHz]	Measured Value [dB μ V]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
11160	43.82	10.83	V	54.65	73.98	19.33	PK
11160	30.77	10.83	V	41.60	53.98	12.38	AV
16740	43.48	13.07	V	56.55	68.20	11.65	PK
11160	43.64	10.83	H	54.47	73.98	19.51	PK
11160	30.48	10.83	H	41.31	53.98	12.67	AV
16740	43.22	13.07	H	56.29	68.20	11.91	PK

Band : UNII 2C
 Operation Mode: 802.11n(HT20)
 Transfer MCS Index: 0
 Operating Frequency 5720 MHz
 Channel No. 144 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11440	42.12	11.07	V	53.19	73.98	20.79	PK
11440	29.08	11.07	V	40.15	53.98	13.83	AV
17160	41.32	13.93	V	55.25	68.20	12.95	PK
11440	41.86	11.07	H	52.93	73.98	21.05	PK
11440	28.81	11.07	H	39.88	53.98	14.10	AV
17160	41.51	13.93	H	55.44	68.20	12.76	PK

Band : UNII 3
 Operation Mode: 802.11n(HT20)
 Transfer MCS Index: 0
 Operating Frequency 5745MHz
 Channel No. 149 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11490	43.13	11.30	V	54.43	73.98	19.55	PK
11490	29.16	11.30	V	40.46	53.98	13.52	AV
17235	42.06	14.50	V	56.56	68.20	11.64	PK
11490	42.87	11.30	H	54.17	73.98	19.81	PK
11490	28.96	11.30	H	40.26	53.98	13.72	AV
17235	42.35	14.50	H	56.85	68.20	11.35	PK

Band : UNII 3
 Operation Mode: 802.11n(HT20)
 Transfer MCS Index: 0
 Operating Frequency 5785 MHz
 Channel No. 157 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11570	42.35	10.55	V	52.90	73.98	21.08	PK
11570	29.92	10.55	V	40.47	53.98	13.51	AV
17355	41.20	15.81	V	57.01	68.20	11.19	PK
11570	42.11	10.55	H	52.66	73.98	21.32	PK
11570	29.68	10.55	H	40.23	53.98	13.75	AV
17355	41.49	15.81	H	57.30	68.20	10.90	PK

Band : UNII 3
 Operation Mode: 802.11n(HT20)
 Transfer MCS Index: 0
 Operating Frequency 5825 MHz
 Channel No. 165 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11650	42.71	10.07	V	52.78	73.98	21.20	PK
11650	30.18	10.07	V	40.25	53.98	13.73	AV
17475	39.99	17.40	V	57.39	68.20	10.81	PK
11650	42.46	10.07	H	52.53	73.98	21.45	PK
11650	29.82	10.07	H	39.89	53.98	14.09	AV
17475	40.12	17.40	H	57.52	68.20	10.68	PK

Band : UNII 4

Operation Mode: 802.11n(HT20)

Transfer MCS Index: 0

Operating Frequency 5845 MHz

Channel No. 169 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11690	42.98	10.09	V	53.07	73.98	20.91	PK
11690	29.81	10.09	V	39.90	53.98	14.08	AV
17535	45.09	17.76	V	62.85	68.20	5.35	PK
11690	42.62	10.09	H	52.71	73.98	21.27	PK
11690	29.66	10.09	H	39.75	53.98	14.23	AV
17535	45.35	17.76	H	63.11	68.20	5.09	PK

Band : UNII 4

Operation Mode: 802.11n(HT20)

Transfer MCS Index: 0

Operating Frequency 5865 MHz

Channel No. 173 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11730	42.99	9.71	V	52.70	73.98	21.28	PK
11730	30.33	9.71	V	40.04	53.98	13.94	AV
17595	43.12	18.11	V	61.23	68.20	6.97	PK
11730	42.73	9.71	H	52.44	73.98	21.54	PK
11730	30.02	9.71	H	39.73	53.98	14.25	AV
17595	43.35	18.11	H	61.46	68.20	6.74	PK

Band :	UNII 4
Operation Mode:	802.11n(HT20)
Transfer MCS Index:	0
Operating Frequency	5885 MHz
Channel No.	177 Ch

Frequency [MHz]	Measured Value [dB μ V]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
11770	43.65	9.33	V	52.98	73.98	21.00	PK
11770	30.23	9.33	V	39.56	53.98	14.42	AV
17655	43.36	18.44	V	61.80	68.20	6.40	PK
11770	43.27	9.33	H	52.60	73.98	21.38	PK
11770	30.05	9.33	H	39.38	53.98	14.60	AV
17655	43.52	18.44	H	61.96	68.20	6.24	PK

Band : UNII 4
 Operation Mode: 802.11 a
 Transfer Rate: 6 Mbps
 Operating Frequency 5845 MHz
 Channel No. 169 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11690	43.40	10.09	V	53.49	73.98	20.49	PK
11690	30.01	10.09	V	40.10	53.98	13.88	AV
17535	45.09	17.76	V	62.85	68.20	5.35	PK
11690	43.15	10.09	H	53.24	73.98	20.74	PK
11690	29.74	10.09	H	39.83	53.98	14.15	AV
17535	45.32	17.76	H	63.08	68.20	5.12	PK

Band : UNII 4
 Operation Mode: 802.11 a
 Transfer Rate: 6 Mbps
 Operating Frequency 5865 MHz
 Channel No. 173 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11730	42.91	9.71	V	52.62	73.98	21.36	PK
11730	30.26	9.71	V	39.97	53.98	14.01	AV
17595	43.31	18.11	V	61.42	68.20	6.78	PK
11730	42.67	9.71	H	52.38	73.98	21.60	PK
11730	30.02	9.71	H	39.73	53.98	14.25	AV
17595	43.50	18.11	H	61.61	68.20	6.59	PK

Band :	UNII 4
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5885 MHz
Channel No.	177 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11770	43.45	9.33	V	52.78	73.98	21.20	PK
11770	30.12	9.33	V	39.45	53.98	14.53	AV
17655	43.56	18.44	V	62.00	68.20	6.20	PK
11770	43.25	9.33	H	52.58	73.98	21.40	PK
11770	29.78	9.33	H	39.11	53.98	14.87	AV
17655	43.76	18.44	H	62.20	68.20	6.00	PK

Band :	UNII 4
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5845 MHz
Channel No.	169 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11690	42.68	10.09	V	52.77	73.98	21.21	PK
11690	29.34	10.09	V	39.43	53.98	14.55	AV
17535	43.05	17.76	V	60.81	68.20	7.39	PK
11690	42.43	10.09	H	52.52	73.98	21.46	PK
11690	29.12	10.09	H	39.21	53.98	14.77	AV
17535	43.22	17.76	H	60.98	68.20	7.22	PK

Band :	UNII 4
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5865 MHz
Channel No.	173 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11730	42.56	9.71	V	52.27	73.98	21.71	PK
11730	29.62	9.71	V	39.33	53.98	14.65	AV
17595	42.67	18.11	V	60.78	68.20	7.42	PK
11730	42.31	9.71	H	52.02	73.98	21.96	PK
11730	29.48	9.71	H	39.19	53.98	14.79	AV
17595	42.84	18.11	H	60.95	68.20	7.25	PK

Band :	UNII 4
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5885 MHz
Channel No.	177 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11770	43.08	9.33	V	52.41	73.98	21.57	PK
11770	29.45	9.33	V	38.78	53.98	15.20	AV
17655	41.36	18.44	V	59.80	68.20	8.40	PK
11770	42.84	9.33	H	52.17	73.98	21.81	PK
11770	29.23	9.33	H	38.56	53.98	15.42	AV
17655	41.59	18.44	H	60.03	68.20	8.17	PK

Band :	UNII 4
Operation Mode:	802.11 n_HT40
Transfer MCS Index:	0
Operating Frequency	5835 MHz
Channel No.	167 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11670	42.85	10.07	V	52.92	73.98	21.06	PK
11670	30.21	10.07	V	40.28	53.98	13.70	AV
17505	40.88	17.57	V	58.45	68.20	9.75	PK
11670	42.50	10.07	H	52.57	73.98	21.41	PK
11670	29.80	10.07	H	39.87	53.98	14.11	AV
17505	40.92	17.57	H	58.49	68.20	9.71	PK

Band :	UNII 4
Operation Mode:	802.11 n_HT40
Transfer MCS Index:	0
Operating Frequency	5875 MHz
Channel No.	175 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11750	42.71	9.46	V	52.17	73.98	21.81	PK
11750	30.37	9.46	V	39.83	53.98	14.15	AV
17625	41.25	18.17	V	59.42	68.20	8.78	PK
11750	42.71	9.46	H	52.17	73.98	21.81	PK
11750	29.89	9.46	H	39.35	53.98	14.63	AV
17625	41.60	18.17	H	59.77	68.20	8.43	PK

Band : UNII 4
 Operation Mode: 802.11 ac_VHT40
 Transfer MCS Index: 0
 Operating Frequency 5835 MHz
 Channel No. 167 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11670	42.27	10.07	V	52.34	73.98	21.64	PK
11670	29.74	10.07	V	39.81	53.98	14.17	AV
17505	40.18	17.57	V	57.75	68.20	10.45	PK
11670	42.47	10.07	H	52.54	73.98	21.44	PK
11670	29.84	10.07	H	39.91	53.98	14.07	AV
17505	40.70	17.57	H	58.27	68.20	9.93	PK

Band : UNII 4
 Operation Mode: 802.11 ac_VHT40
 Transfer MCS Index: 0
 Operating Frequency 5875 MHz
 Channel No. 175 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11750	42.44	9.46	V	51.90	73.98	22.08	PK
11750	29.99	9.46	V	39.45	53.98	14.53	AV
17625	41.20	18.17	V	59.37	68.20	8.83	PK
11750	42.43	9.46	H	51.89	73.98	22.09	PK
11750	29.97	9.46	H	39.43	53.98	14.55	AV
17625	40.89	18.17	H	59.06	68.20	9.14	PK

Band :	UNII 4
Operation Mode:	802.11 ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5855 MHz
Channel No.	171 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11710	43.03	9.95	V	52.98	73.98	21.00	PK
11710	30.26	9.95	V	40.21	53.98	13.77	AV
17565	41.02	18.25	V	59.27	68.20	8.93	PK
11710	42.54	9.95	H	52.49	73.98	21.49	PK
11710	30.36	9.95	H	40.31	53.98	13.67	AV
17565	40.84	18.25	H	59.09	68.20	9.11	PK

Band :	UNII 3&4
Operation Mode:	802.11 ac_VHT160
Transfer MCS Index:	0
Operating Frequency	5815 MHz
Channel No.	163 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11630	41.75	10.03	V	51.78	73.98	22.20	PK
11630	30.83	10.03	V	40.86	53.98	13.12	AV
17445	40.22	16.80	V	57.02	68.20	11.18	PK
11630	41.65	10.03	H	51.68	73.98	22.30	PK
11630	30.79	10.03	H	40.82	53.98	13.16	AV
17445	40.39	16.80	H	57.19	68.20	11.01	PK

[RSDB]

Scenario 2

WLAN 2.4 GHz MIMO(802.11b Ch.1) + WLAN 5 GHz MIMO(802.11n20 Ch.169)

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11690	42.88	10.09	V	52.97	73.98	21.01	PK
11690	29.79	10.09	V	39.88	53.98	14.10	AV
17535	44.01	17.76	V	61.77	68.20	6.43	PK
11690	42.68	10.09	H	52.77	73.98	21.21	PK
11690	29.51	10.09	H	39.60	53.98	14.38	AV
17535	44.25	17.76	H	62.01	68.20	6.19	PK

Note :

1. DTS RSDB Data refer to [DTS] Test Report.

Scenario 3

BT Ant.1(GFSK Ch.78) + WLAN 2.4 GHz Ant.2(802.11b, Ch.1) + WLAN 5 GHz MIMO(802.11n20, Ch.169)

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11690	42.90	10.09	V	52.99	73.98	20.99	PK
11690	29.75	10.09	V	39.84	53.98	14.14	AV
17535	44.31	17.76	V	62.07	68.20	6.13	PK
11690	42.68	10.09	H	52.77	73.98	21.21	PK
11690	29.62	10.09	H	39.71	53.98	14.27	AV
17535	46.26	17.76	H	64.02	68.20	4.18	PK

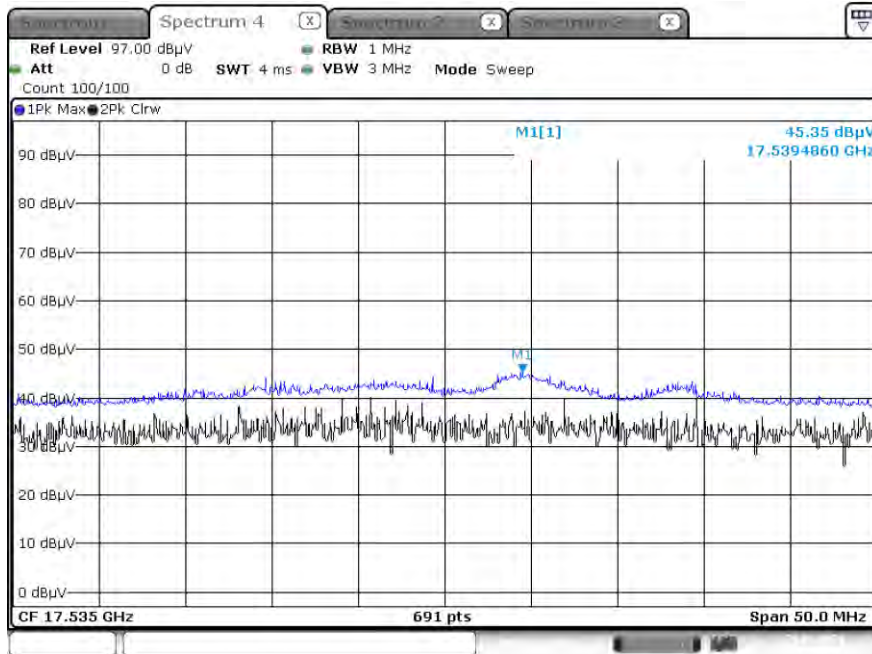
Note :

1. DTS, BT RSDB Data refer to [DTS], [BT] Test Report.

▣ Test Plots

[Ant.1&Ant.2_MIMO(CDD)]

Radiated Spurious Emissions plot – Peak Result (802.11n(HT20), Ch.169 Spurious Emissions, 3rd, Y-H)



Note:

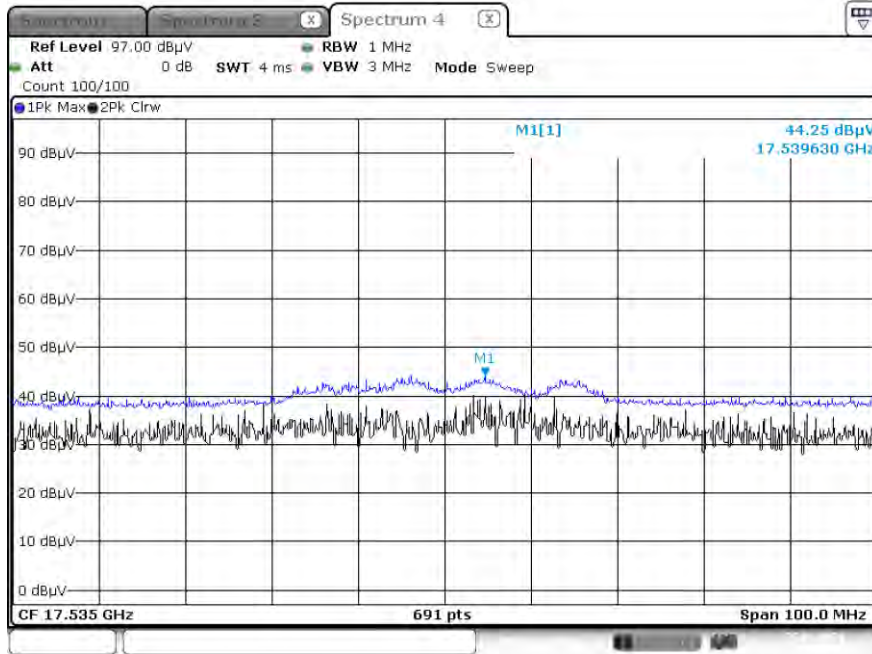
Only the worst case plots for Radiated Spurious Emissions.

[RSDB]

Scenario 2

WLAN 2.4 GHz MIMO(802.11b Ch.1) + WLAN 5 GHz MIMO(802.11n20 Ch.169)

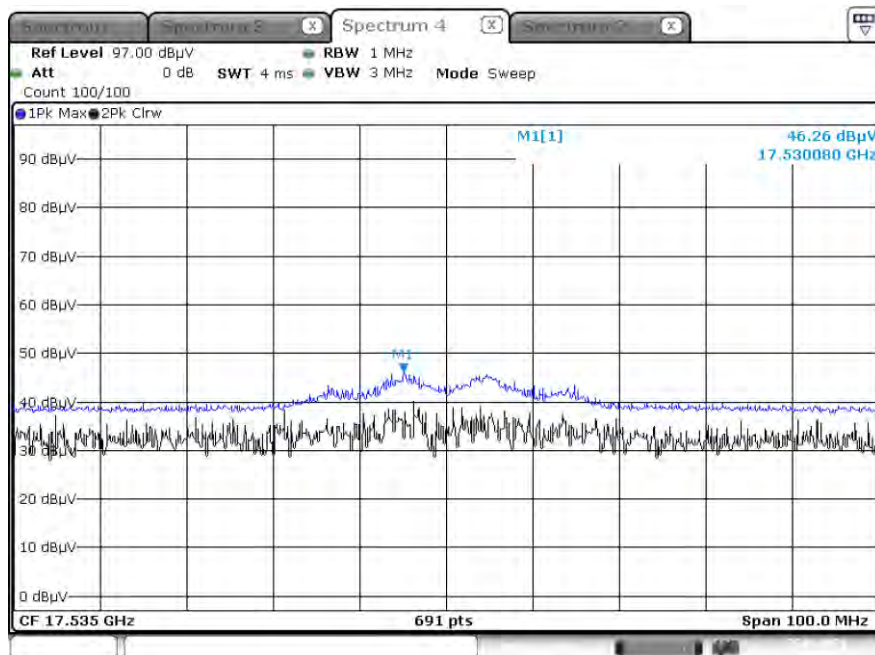
Radiated Spurious Emissions plot – Peak Result (802.11n(HT20), Ch.169 Spurious Emissions, 3rd)



Scenario 3

BT Ant.1(GFSK Ch.78) + WLAN 2.4 GHz Ant.2(802.11b, Ch.1) + WLAN 5 GHz MIMO(802.11n20, Ch.169)

Radiated Spurious Emissions plot – Peak Result (802.11n(HT20), Ch.169 Spurious Emissions, 3rd)



Note: Only the worst case plots for Radiated Spurious Emissions.

10.9 RADIATED RESTRICTED BAND EDGE

[Ant.1&Ant.2_MIMO(CDD)]

Band :	UNII 1
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	45.30	14.58	H	59.88	73.98	14.10	PK
5150	31.71	14.58	H	46.29	53.98	7.69	AV
5150	45.01	14.58	V	59.59	73.98	14.39	PK
5150	31.43	14.58	V	46.01	53.98	7.97	AV

Band :	UNII 2A
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	48.45	14.21	H	62.66	73.98	11.32	PK
5350	32.32	14.21	H	46.53	53.98	7.45	AV
5350	48.13	14.21	V	62.34	73.98	11.64	PK
5350	32.05	14.21	V	46.26	53.98	7.72	AV

Band :	UNII 2C
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	46.05	14.98	H	61.03	73.98	12.95	PK
5460	30.07	14.98	H	45.05	53.98	8.93	AV
5470	46.69	14.95	H	61.64	68.20	6.56	PK
5460	45.78	14.98	V	60.76	73.98	13.22	PK
5460	29.82	14.98	V	44.80	53.98	9.18	AV
5470	46.33	14.95	V	61.28	68.20	6.92	PK

Band :	UNII 1
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Measured Value [dB μ V]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
5150	45.22	14.58	H	59.80	73.98	14.18	PK
5150	31.99	14.58	H	46.57	53.98	7.41	AV
5150	44.89	14.58	V	59.47	73.98	14.51	PK
5150	31.54	14.58	V	46.12	53.98	7.86	AV

Band :	UNII 2A
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Measured Value [dB μ V]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
5350	47.32	14.21	H	61.53	73.98	12.45	PK
5350	32.21	14.21	H	46.42	53.98	7.56	AV
5350	47.00	14.21	V	61.21	73.98	12.77	PK
5350	31.88	14.21	V	46.09	53.98	7.89	AV

Band :	UNII 2C
Operation Mode:	802.11 n_HT20
Transfer MCS Index:	0
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	45.51	14.98	H	60.49	73.98	13.49	PK
5460	30.62	14.98	H	45.60	53.98	8.38	AV
5470	45.99	14.95	H	60.94	68.20	7.26	PK
5460	45.01	14.98	V	59.99	73.98	13.99	PK
5460	30.12	14.98	V	45.10	53.98	8.88	AV
5470	45.65	14.95	V	60.60	68.20	7.60	PK

Band :	UNII 1
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	45.32	14.58	H	59.90	73.98	14.08	PK
5150	31.42	14.58	H	46.00	53.98	7.98	AV
5150	44.98	14.58	V	59.56	73.98	14.42	PK
5150	31.13	14.58	V	45.71	53.98	8.27	AV

Band :	UNII 2A
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5320 MHz
Channel No.	64 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	47.12	14.21	H	61.33	73.98	12.65	PK
5350	30.69	14.21	H	44.90	53.98	9.08	AV
5350	46.72	14.21	V	60.93	73.98	13.05	PK
5350	30.22	14.21	V	44.43	53.98	9.55	AV

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT20
Transfer MCS Index:	0
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	45.35	14.98	H	60.33	73.98	13.65	PK
5460	29.49	14.98	H	44.47	53.98	9.51	AV
5470	45.57	14.95	H	60.52	68.20	7.68	PK
5460	44.96	14.98	V	59.94	73.98	14.04	PK
5460	29.08	14.98	V	44.06	53.98	9.92	AV
5470	45.18	14.95	V	60.13	68.20	8.07	PK

Band : UNII 1
 Operation Mode: 802.11 n_HT40
 Transfer MCS Index: 0
 Operating Frequency 5190 MHz
 Channel No. 38 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	49.02	14.58	H	63.60	73.98	10.38	PK
5150	36.56	14.58	H	51.14	53.98	2.84	AV
5150	48.67	14.58	V	63.25	73.98	10.73	PK
5150	36.12	14.58	V	50.70	53.98	3.28	AV

Band : UNII 2A
 Operation Mode: 802.11 n_HT40
 Transfer MCS Index: 0
 Operating Frequency 5310 MHz
 Channel No. 62 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	52.64	14.21	H	66.85	73.98	7.13	PK
5350	35.93	14.21	H	50.14	53.98	3.84	AV
5350	52.16	14.21	V	66.37	73.98	7.61	PK
5350	35.64	14.21	V	49.85	53.98	4.13	AV

Band :	UNII 2C
Operation Mode:	802.11 n_HT40
Transfer MCS Index:	0
Operating Frequency	5510 MHz
Channel No.	102 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	44.98	14.98	H	59.96	73.98	14.02	PK
5460	30.17	14.98	H	45.15	53.98	8.83	AV
5470	49.57	14.95	H	64.52	68.20	3.68	PK
5460	44.67	14.98	V	59.65	73.98	14.33	PK
5460	29.82	14.98	V	44.80	53.98	9.18	AV
5470	49.02	14.95	V	63.97	68.20	4.23	PK

Band :	UNII 1
Operation Mode:	802.11 ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5190 MHz
Channel No.	38 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	50.30	14.58	H	64.88	73.98	9.10	PK
5150	36.21	14.58	H	50.79	53.98	3.19	AV
5150	49.79	14.58	V	64.37	73.98	9.61	PK
5150	35.86	14.58	V	50.44	53.98	3.54	AV

Band :	UNII 2A
Operation Mode:	802.11 ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5310 MHz
Channel No.	62 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	51.78	14.21	H	65.99	73.98	7.99	PK
5350	36.49	14.21	H	50.70	53.98	3.28	AV
5350	51.37	14.21	V	65.58	73.98	8.40	PK
5350	36.17	14.21	V	50.38	53.98	3.60	AV

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT40
Transfer MCS Index:	0
Operating Frequency	5510 MHz
Channel No.	102 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	45.78	14.98	H	60.76	73.98	13.22	PK
5460	30.54	14.98	H	45.52	53.98	8.46	AV
5470	49.87	14.95	H	64.82	68.20	3.38	PK
5460	45.48	14.98	V	60.46	73.98	13.52	PK
5460	30.16	14.98	V	45.14	53.98	8.84	AV
5470	49.55	14.95	V	64.50	68.20	3.70	PK

Band :	UNII 1
Operation Mode:	802.11 ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5210 MHz
Channel No.	42 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	47.61	14.58	H	62.19	73.98	11.79	PK
5150	36.31	14.58	H	50.89	53.98	3.09	AV
5150	47.23	14.58	V	61.81	73.98	12.17	PK
5150	35.99	14.58	V	50.57	53.98	3.41	AV

Band :	UNII 2A
Operation Mode:	802.11 ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5290 MHz
Channel No.	58 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	51.34	14.21	H	65.55	73.98	8.43	PK
5350	36.99	14.21	H	51.20	53.98	2.78	AV
5350	51.04	14.21	V	65.25	73.98	8.73	PK
5350	36.74	14.21	V	50.95	53.98	3.03	AV

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5530 MHz
Channel No.	106 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	47.46	14.98	H	62.44	73.98	11.54	PK
5460	35.07	14.98	H	50.05	53.98	3.93	AV
5470	49.45	14.95	H	64.40	68.20	3.80	PK
5460	47.11	14.98	V	62.09	73.98	11.89	PK
5460	34.75	14.98	V	49.73	53.98	4.25	AV
5470	49.08	14.95	V	64.03	68.20	4.17	PK

Band : UNII1 & 2A
 Operation Mode: 802.11 ac_VHT160
 Transfer MCS Index: 0
 Operating Frequency 5250 MHz
 Channel No. 50 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	45.84	14.58	H	60.42	73.98	13.56	PK
5150	35.92	14.58	H	50.50	53.98	3.48	AV
5150	45.42	14.58	V	60.00	73.98	13.98	PK
5150	35.54	14.58	V	50.12	53.98	3.86	AV

Band : UNII1 & 2A
 Operation Mode: 802.11 ac_VHT160
 Transfer MCS Index: 0
 Operating Frequency 5250 MHz
 Channel No. 50 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	47.46	14.21	H	61.67	73.98	12.31	PK
5350	35.93	14.21	H	50.14	53.98	3.84	AV
5350	47.13	14.21	V	61.34	73.98	12.64	PK
5350	35.76	14.21	V	49.97	53.98	4.01	AV

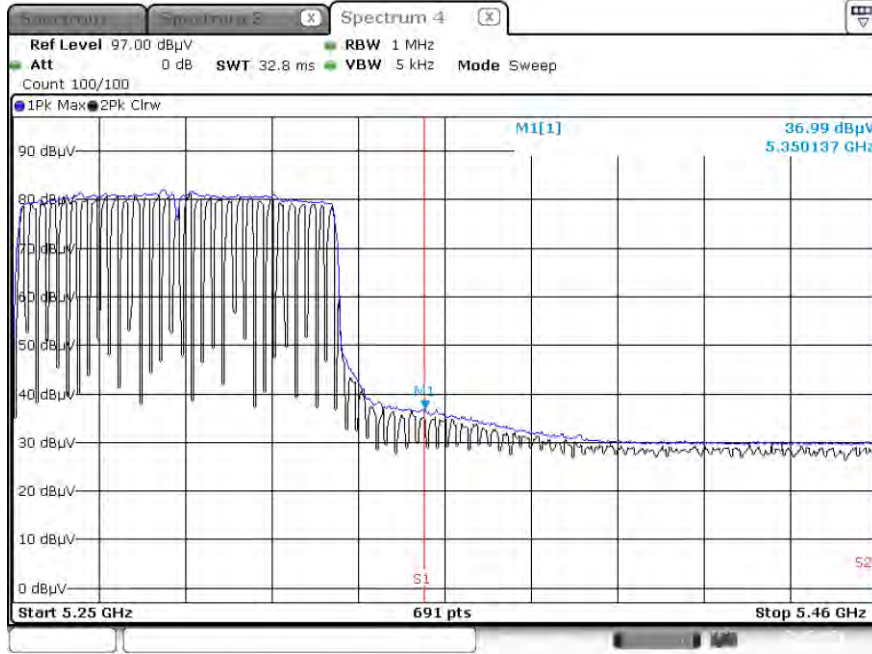
Band :	UNII 2C
Operation Mode:	802.11 ac_VHT160
Transfer MCS Index:	0
Operating Frequency	5570 MHz
Channel No.	114 Ch

Frequency [MHz]	Measured Value [dBμV]	A.F+C.L- A.G+ATT+D.F [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	46.92	14.98	H	61.90	73.98	12.08	PK
5460	35.67	14.98	H	50.65	53.98	3.33	AV
5470	44.84	14.95	H	59.79	68.20	8.41	PK
5460	46.58	14.98	V	61.56	73.98	12.42	PK
5460	35.28	14.98	V	50.26	53.98	3.72	AV
5470	44.43	14.95	V	59.38	68.20	8.82	PK

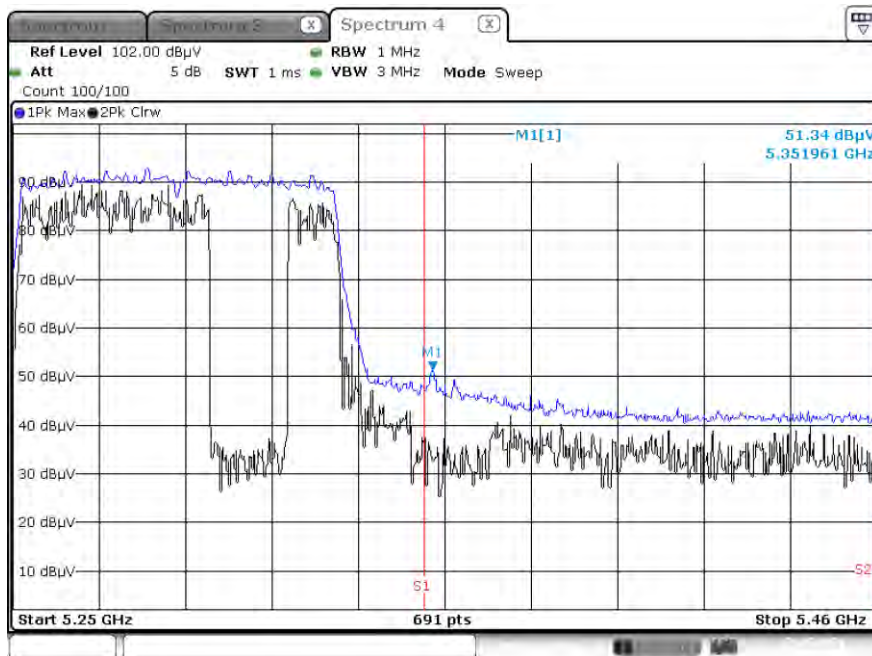
[Ant.1&Ant.2_MIMO(CDD)]

☑ Test Plots(UNII 1, 2A, 2C)

Average Result (802.11 ac_VHT80_MCS0, Ch.58, Z-H)



Peak Result (802.11 ac_VHT80_MCS0, Ch.58, Z-H)

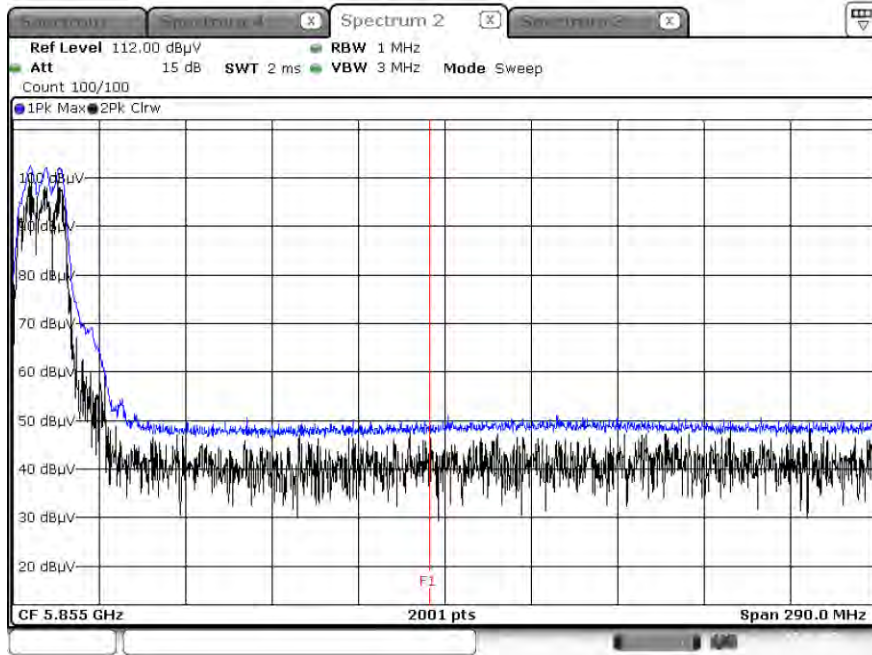


Note:

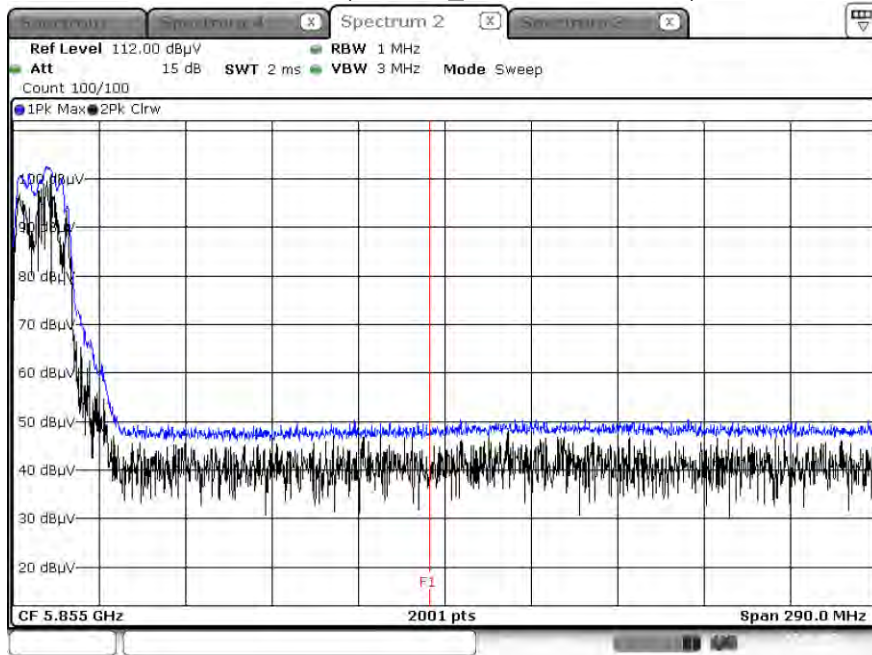
Only the worst case plots for Radiated Restricted Band Edge.

▣ Test Plots(Straddle Channel)

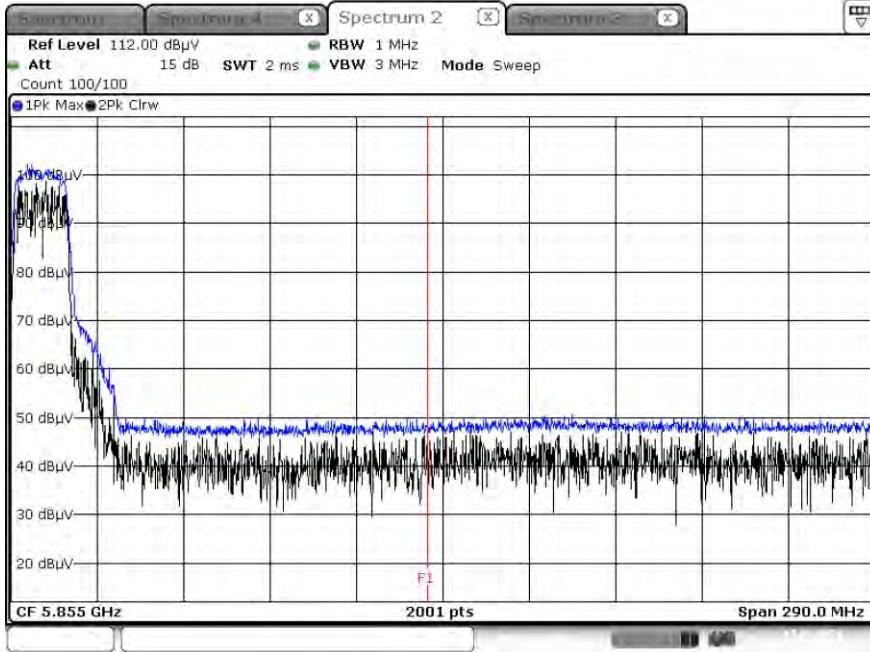
Peak Result (802.11a, Ch.144, Z-H)



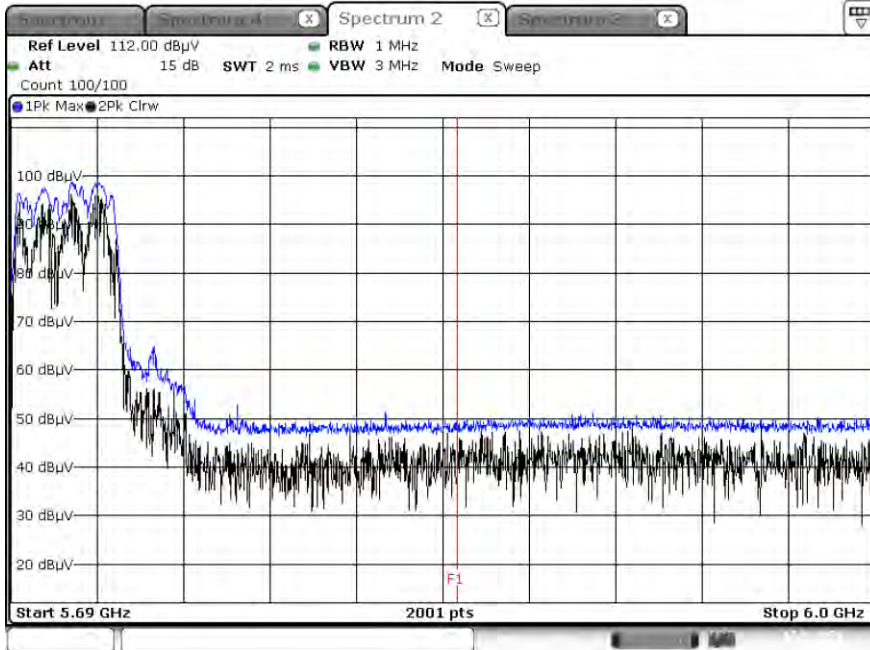
Peak Result (802.11n_HT20, Ch.144, Z-H)



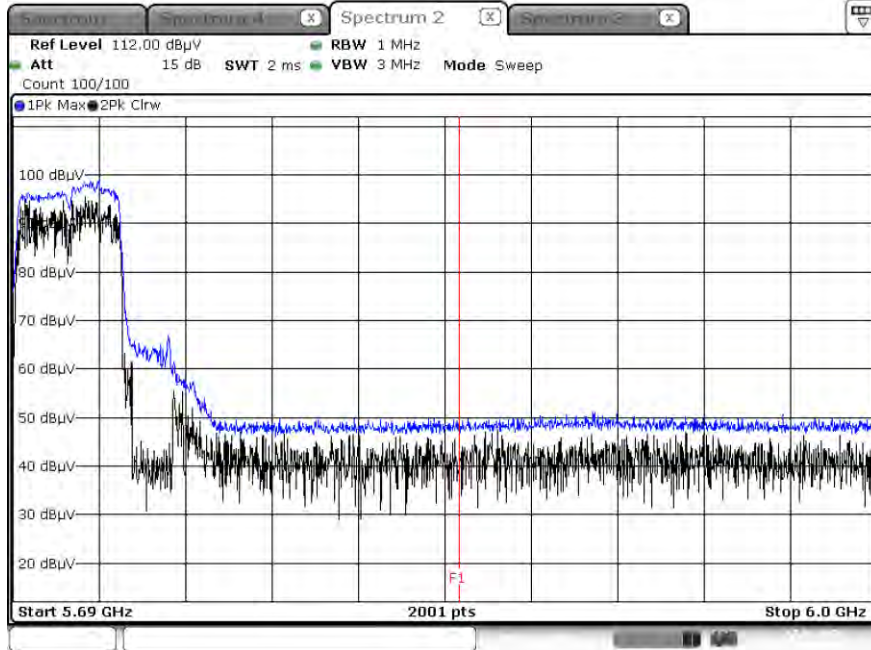
Peak Result (802.11ac_VHT20, Ch.144, Z-H)



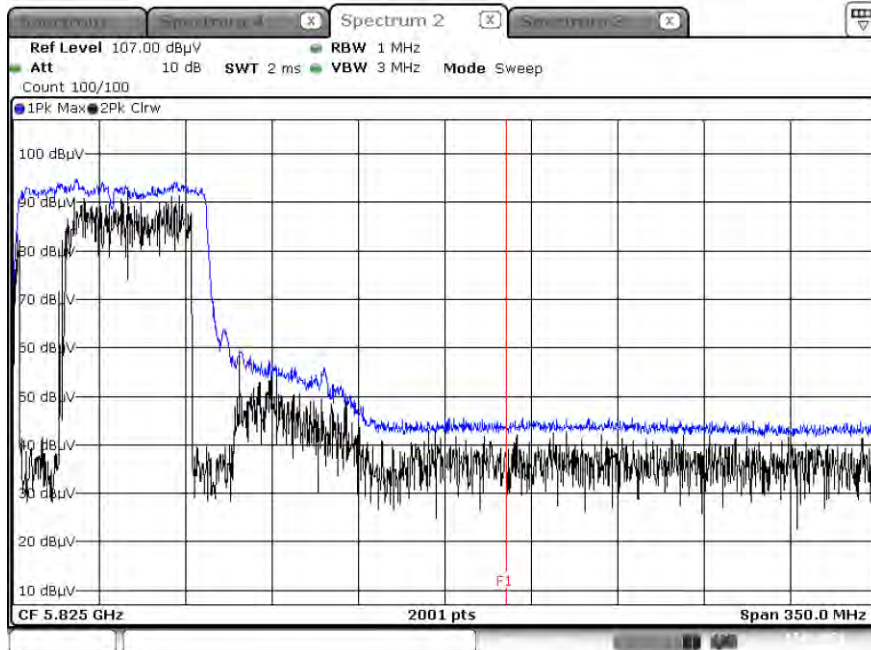
Peak Result (802.11n_HT40, Ch.142, Z-H)



Peak Result (802.11ac_VHT40, Ch.142, Z-H)



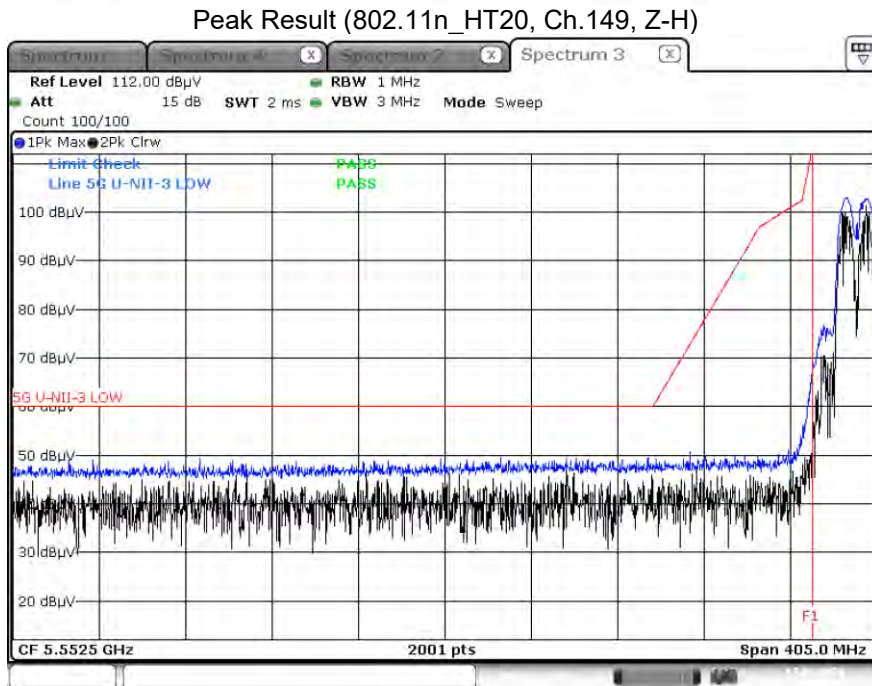
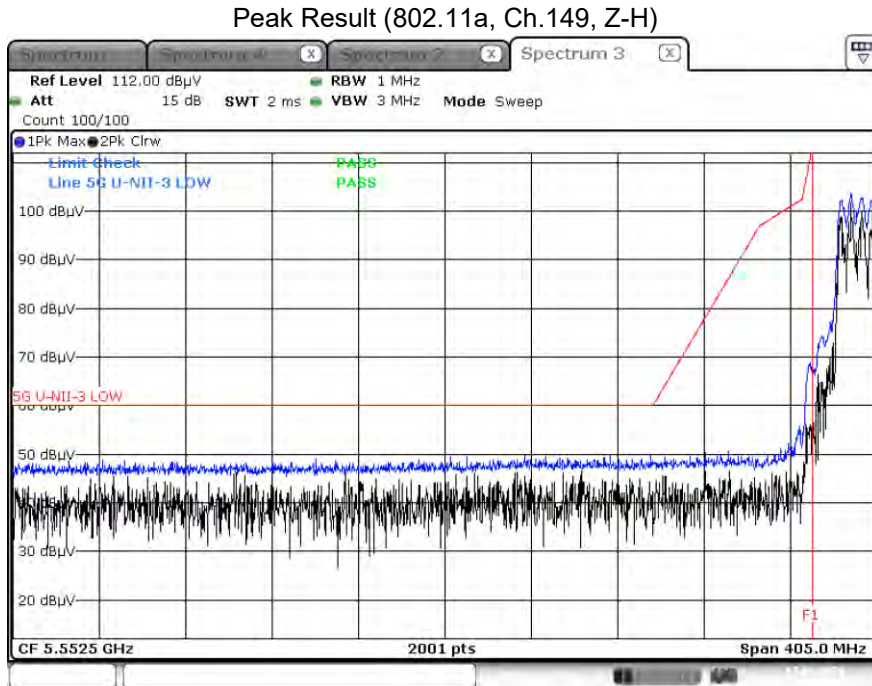
Peak Result (802.11ac_VHT80, Ch.138, Z-H)



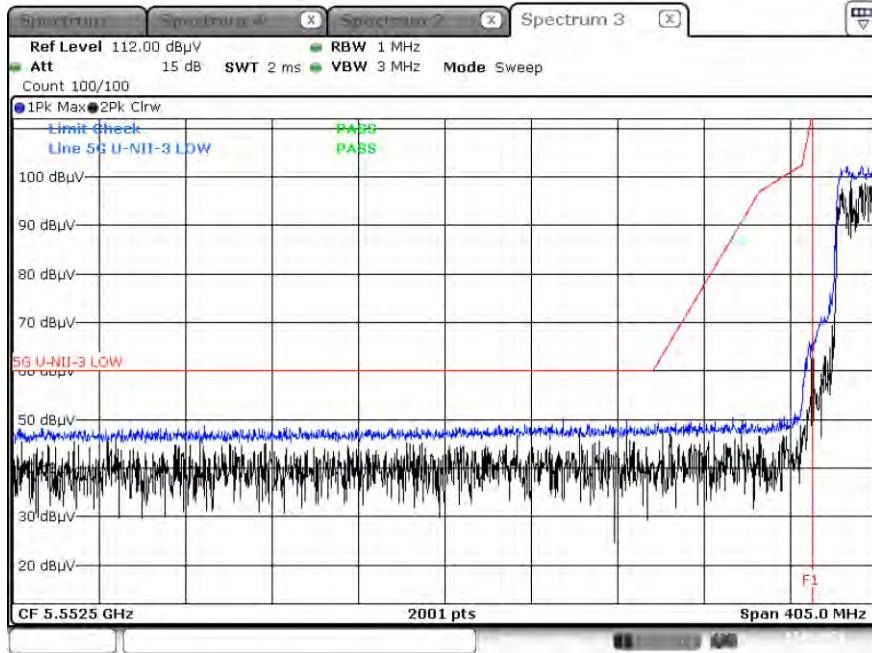
Note :

1. Only the worst case plots for Radiated Restricted Band Edge.
2. Red line : 5 850 MHz
3. Ambient Noise (Because of ambient noise, We attached only the worst plot without a data table)

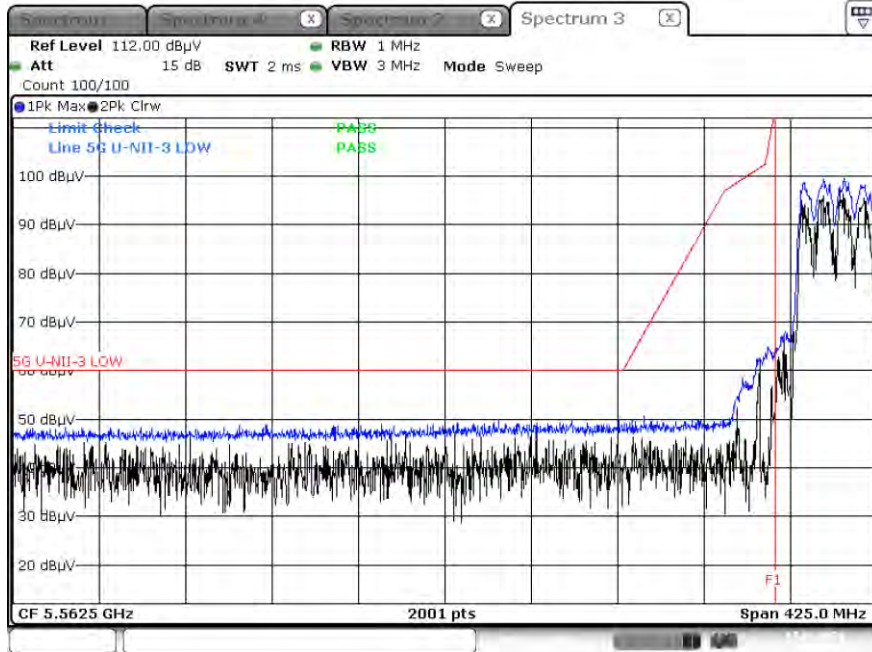
▣ Test Plots(UNII 3)



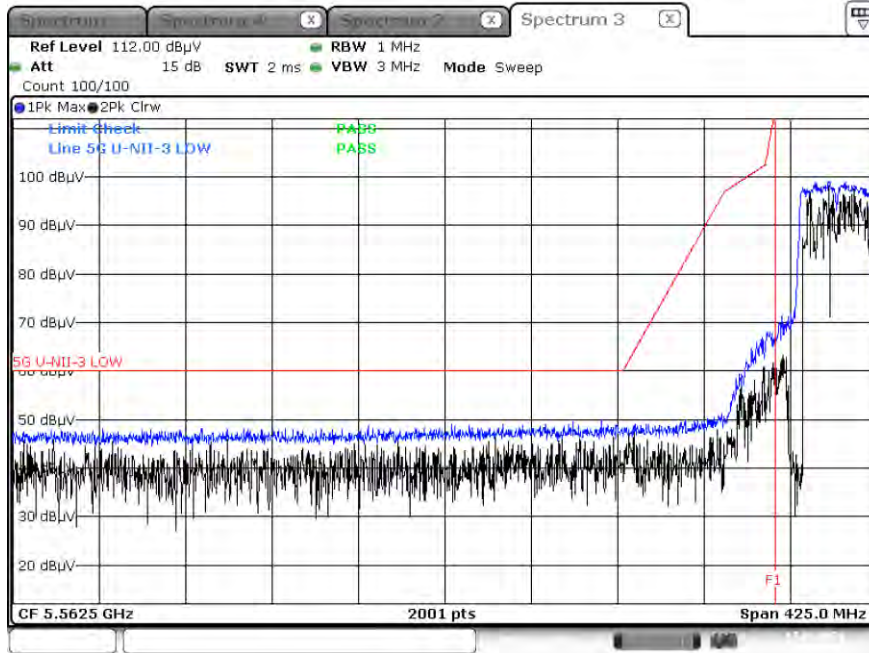
Peak Result (802.11ac_VHT20, Ch.149, Z-H)



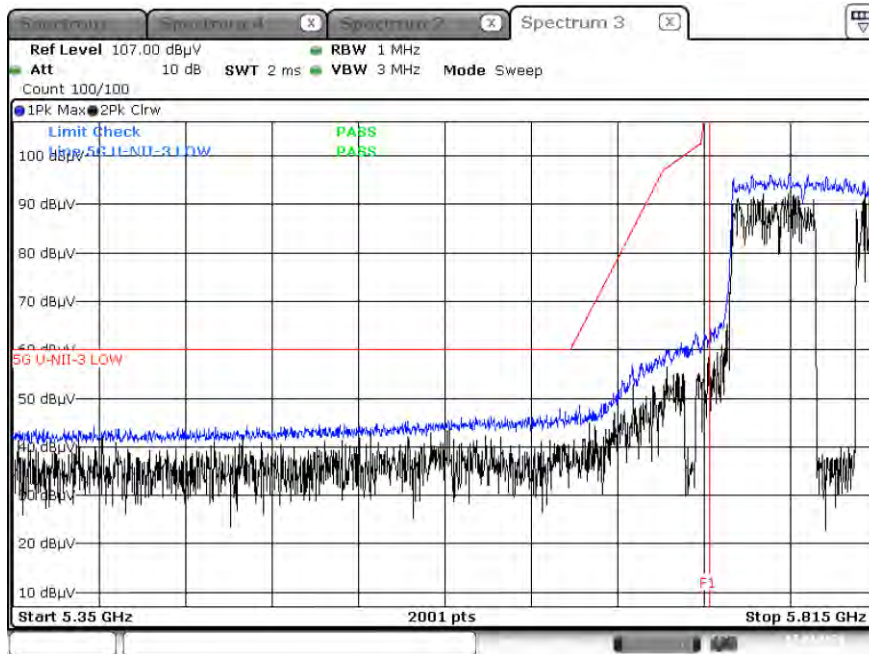
Peak Result (802.11n_HT40, Ch.151, Z-H)



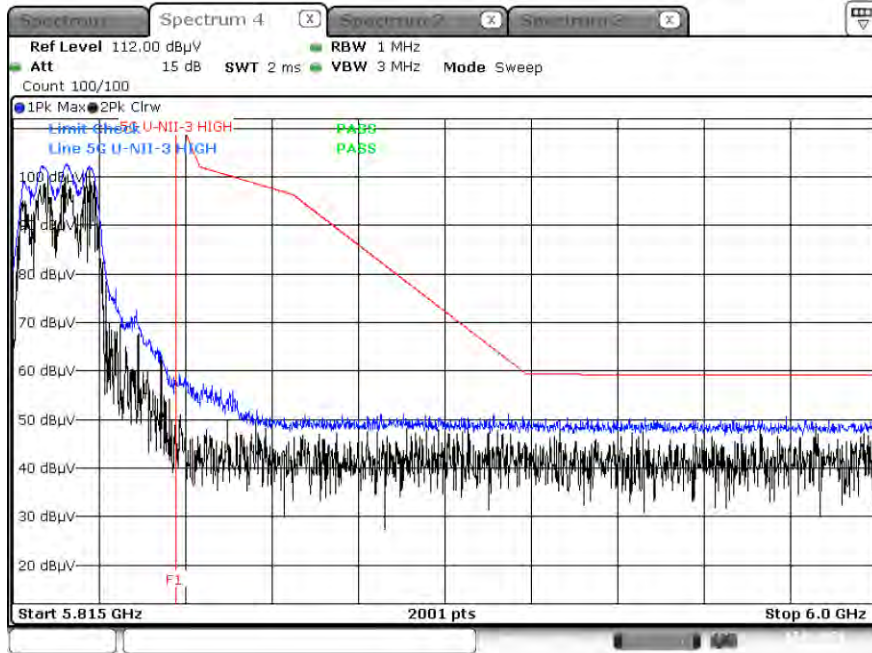
Peak Result (802.11ac_VHT40, Ch.151, Z-H)



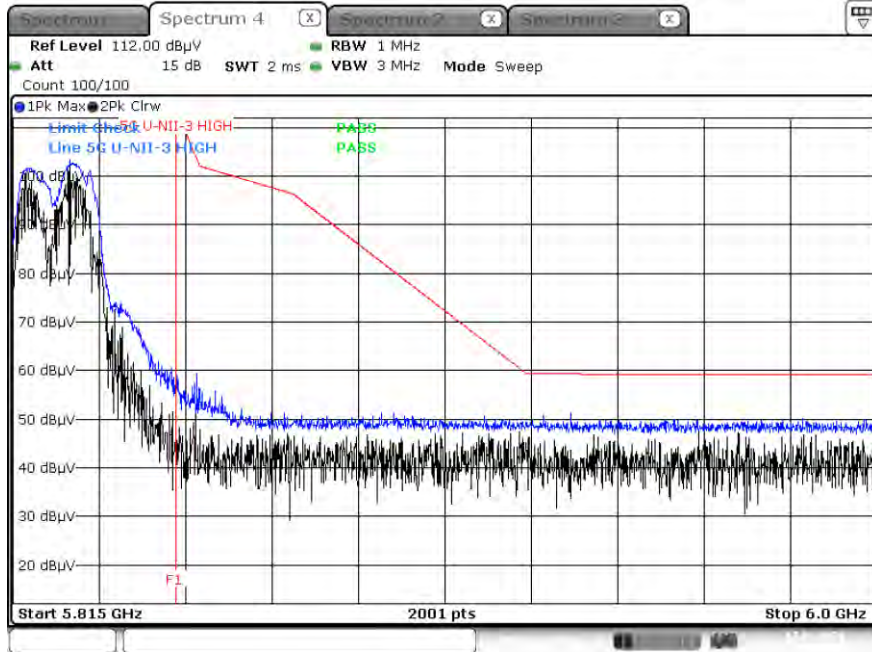
Peak Result (802.11ac_VHT80, Ch.155, Z-H)



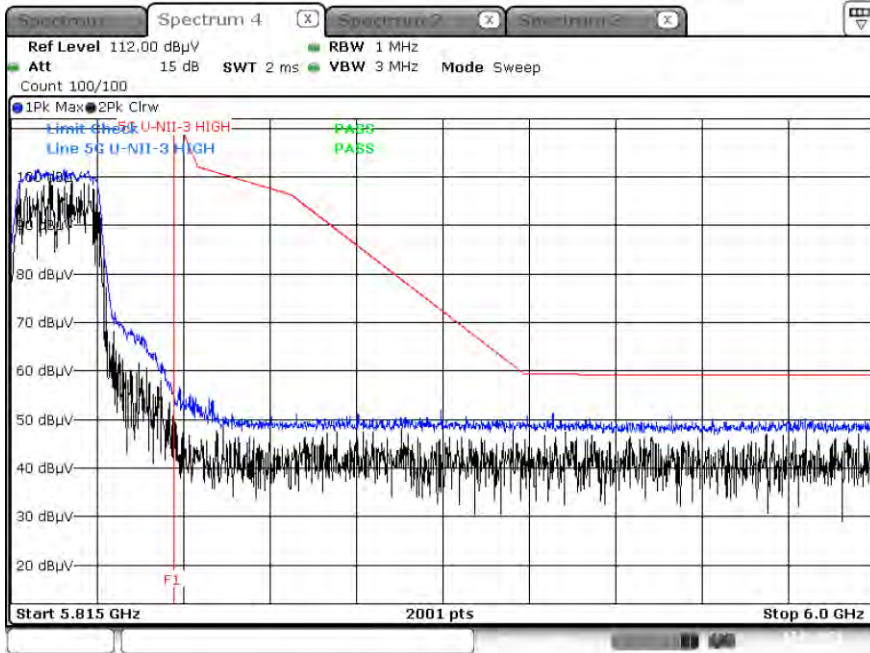
Peak Result (802.11a, Ch.165, Z-H)



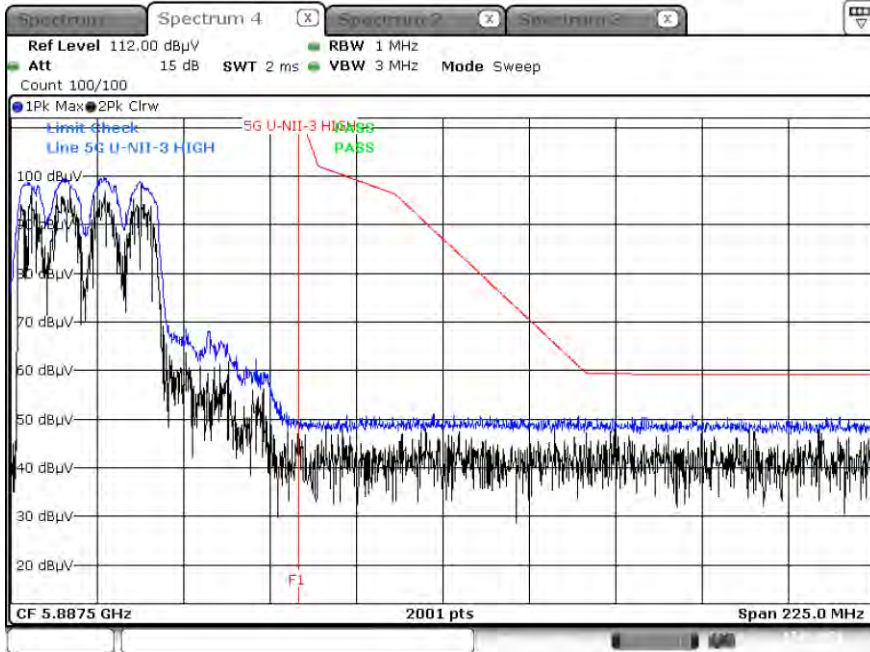
Peak Result (802.11n_HT20, Ch.165, Z-H)



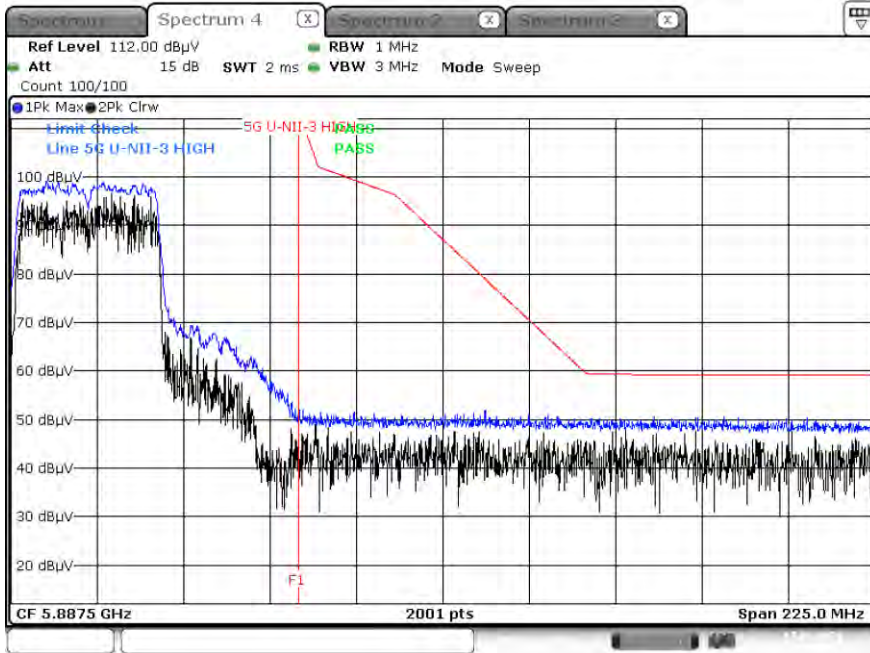
Peak Result (802.11ac_VHT20, Ch.165, Z-H)



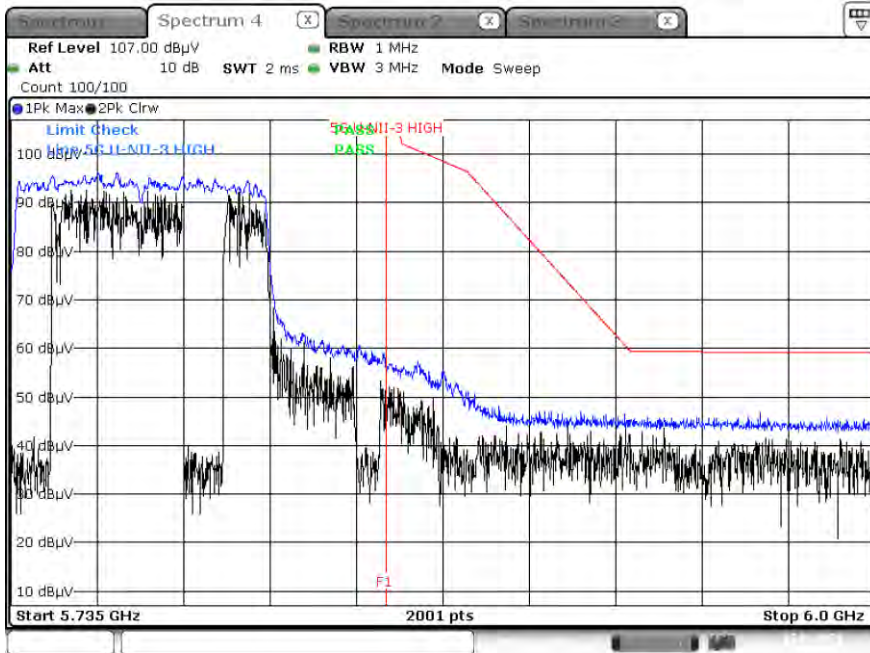
Peak Result (802.11n_HT40, Ch.159, Z-H)



Peak Result (802.11ac_VHT40, Ch.159, Z-H)



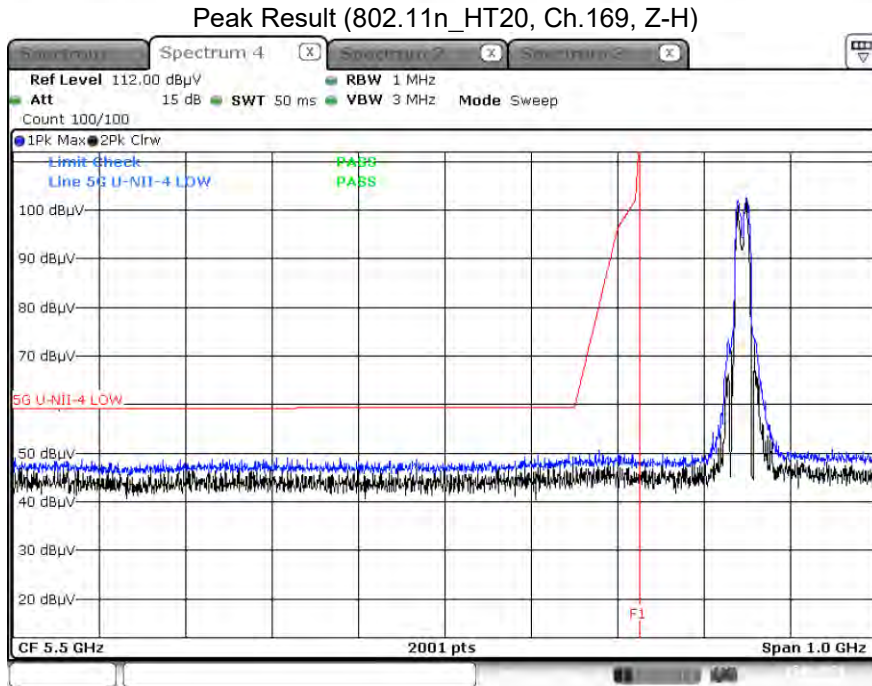
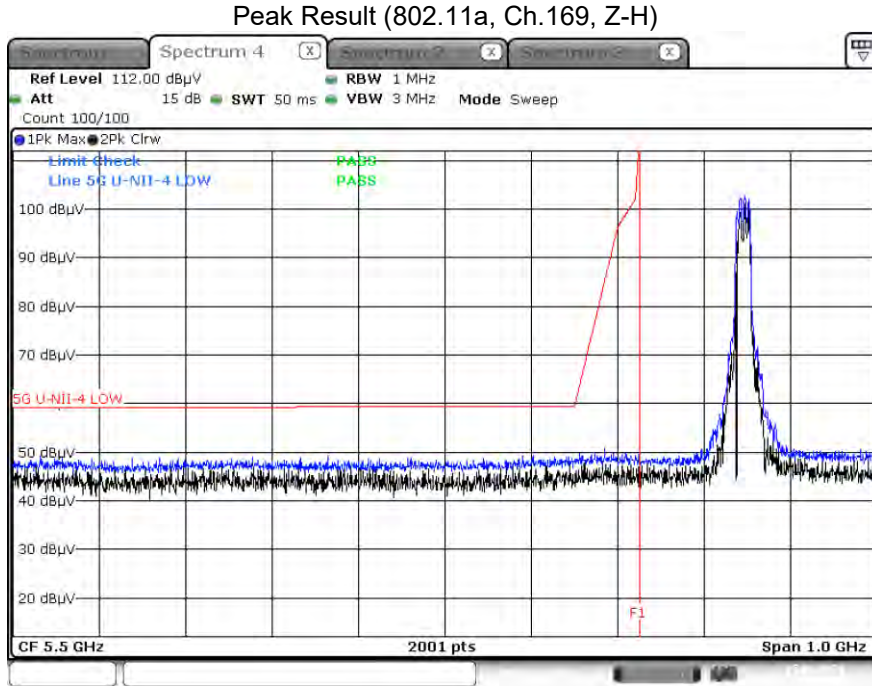
Peak Result (802.11ac_VHT80, Ch.155, Z-H)



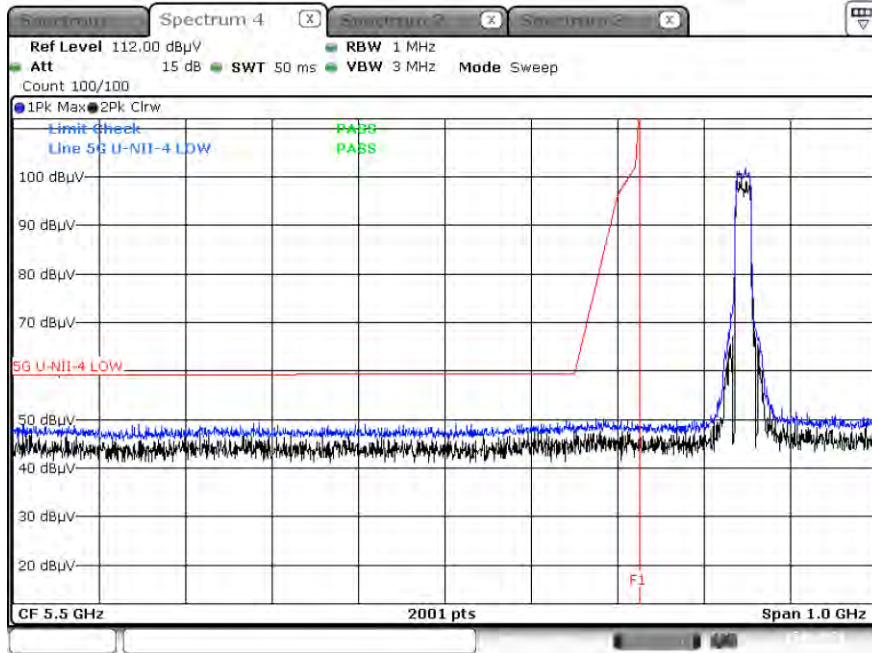
Note :

1. Only the worst case plots for U-NII-3 Out of Band e.i.r.p Emission.
2. U-NII-3 Low & High Band Edge RedLine is Final Test Limit about factor value compensation.

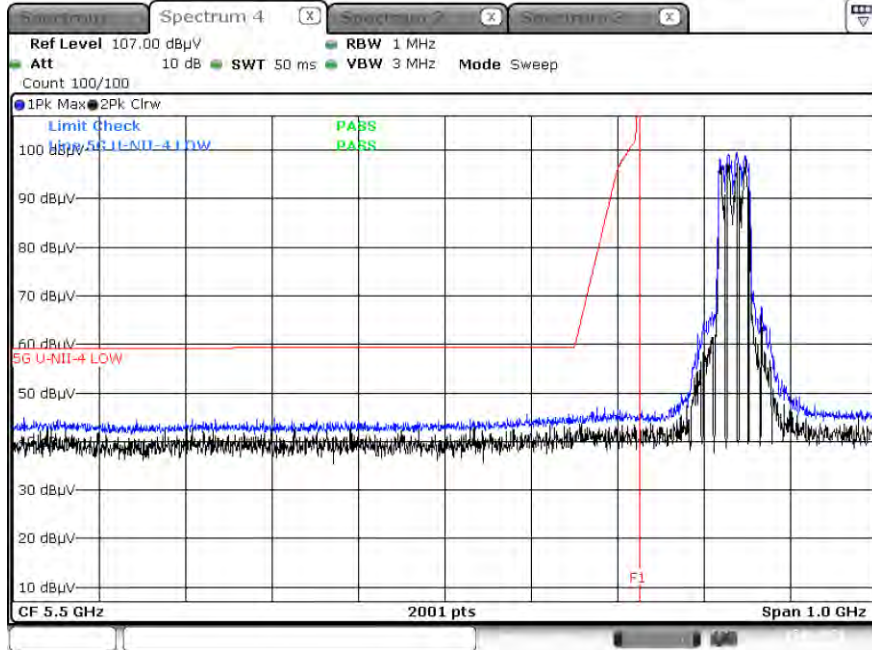
▣ Test Plots(UNII 4) – O.O.B.E



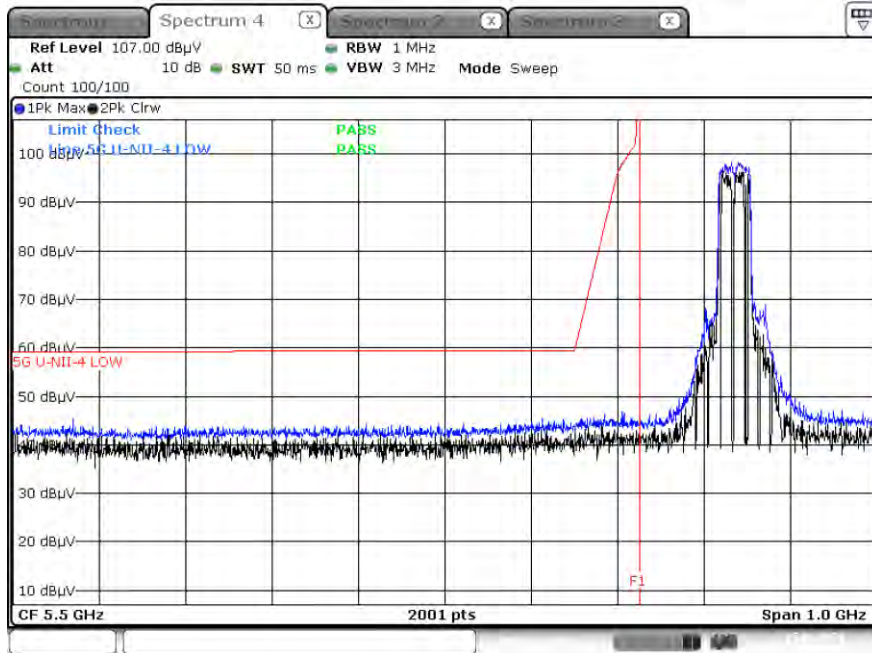
Peak Result (802.11ac_VHT20, Ch.169, Z-H)



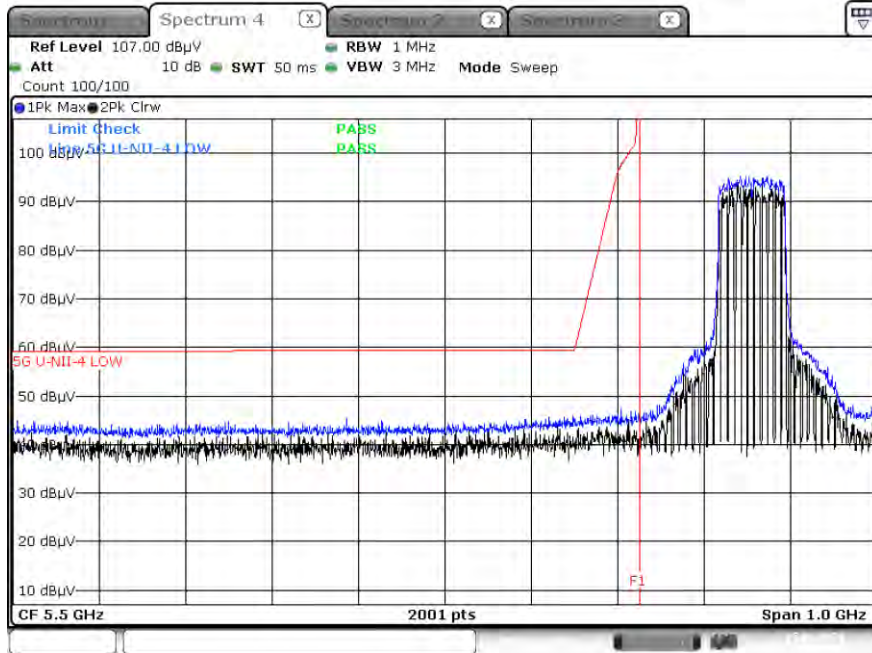
Peak Result (802.11n_HT40, Ch.167, Z-H)

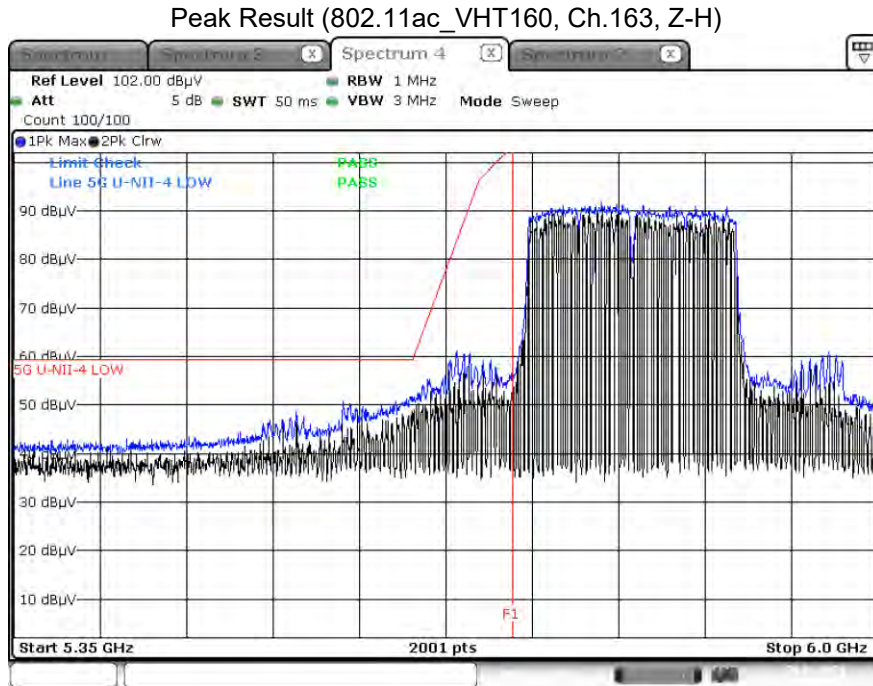


Peak Result (802.11ac_VHT40, Ch.167, Z-H)



Peak Result (802.11ac_VHT80, Ch.171, Z-H)

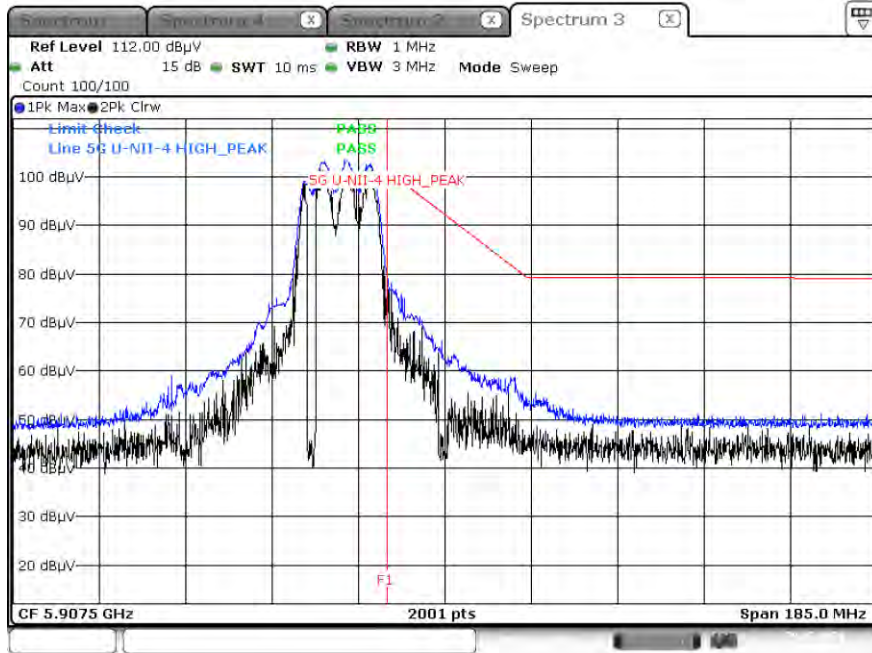




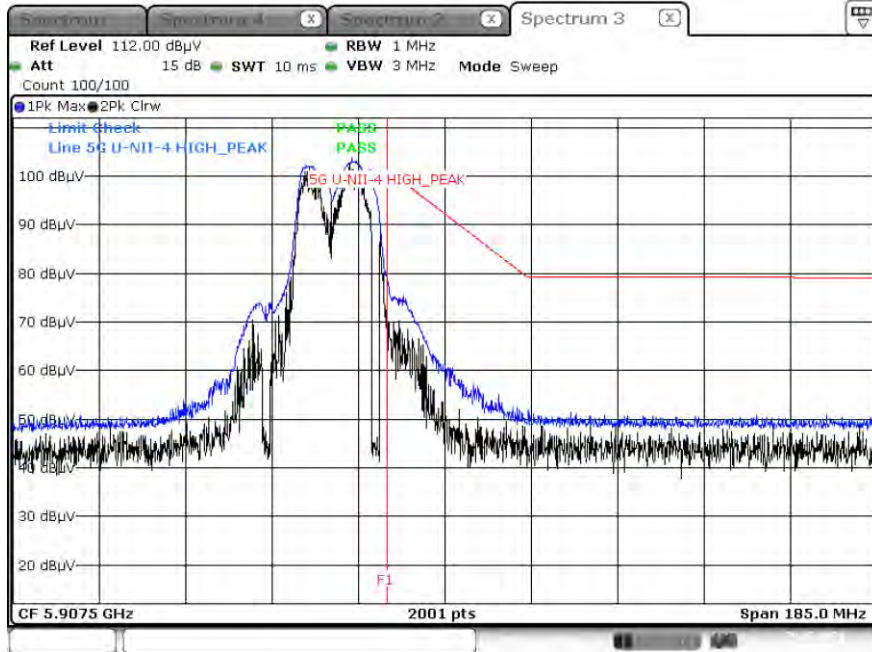
Note :

1. Only the worst case plots for U-NII-4 O.O.B.E
2. U-NII-4 Low & High O.O.B.E RedLine is Final Test Limit about factor value compensation.

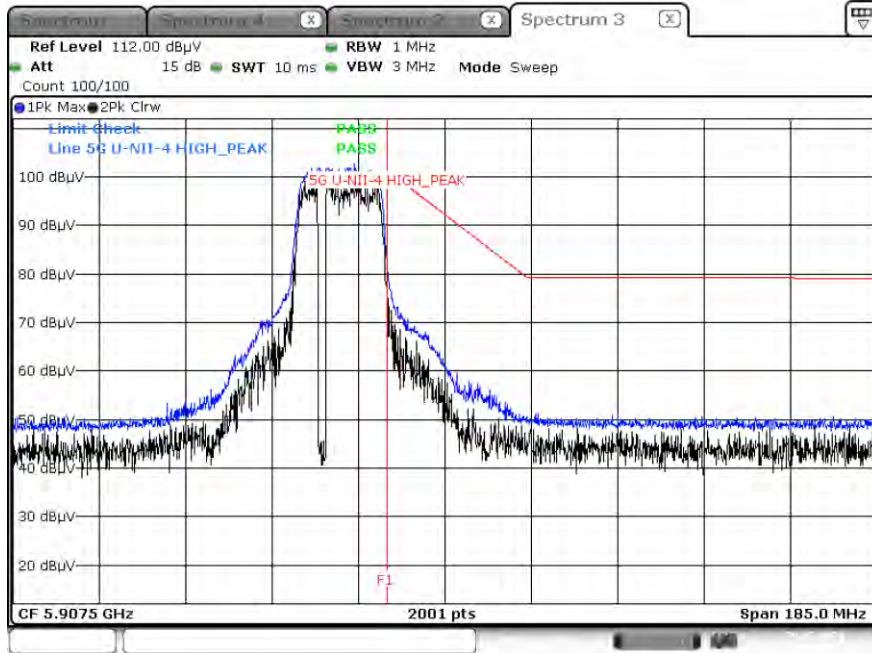
Peak(max) Result (802.11a, Ch.177, Z-H)



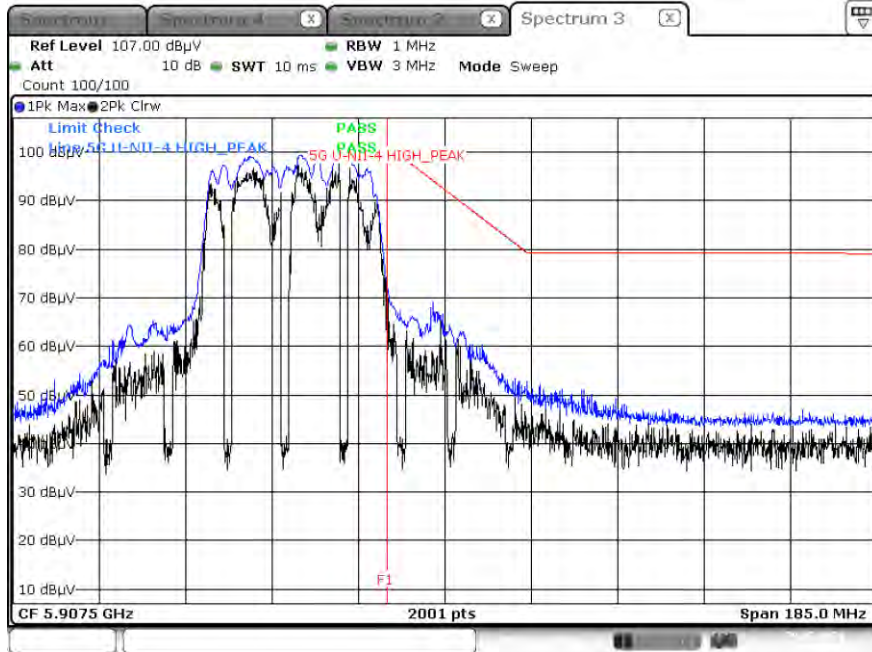
Peak(max) Result (802.11n_HT20, Ch.177, Z-H)



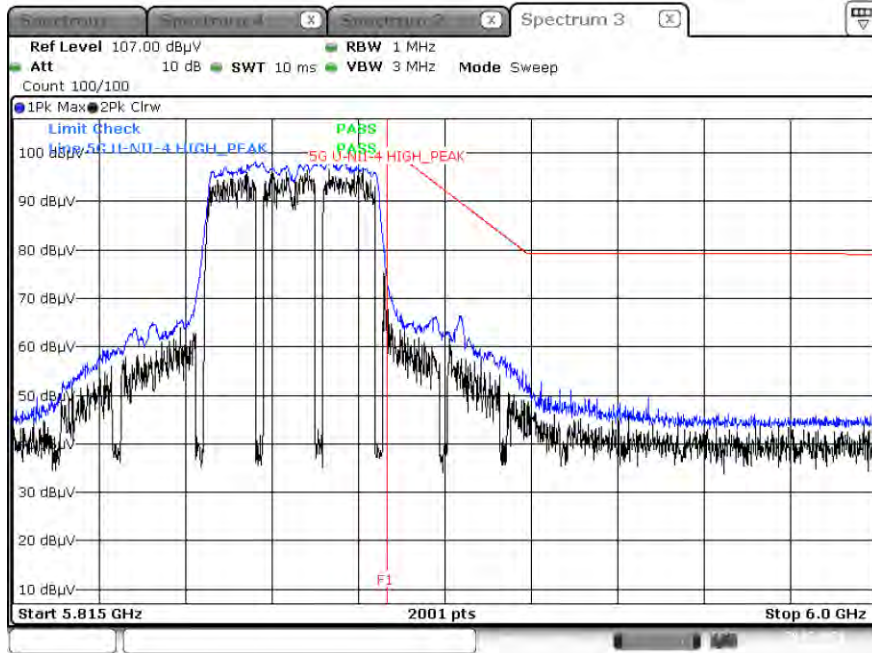
Peak(max) Result (802.11ac_VHT20, Ch.177, Z-H)



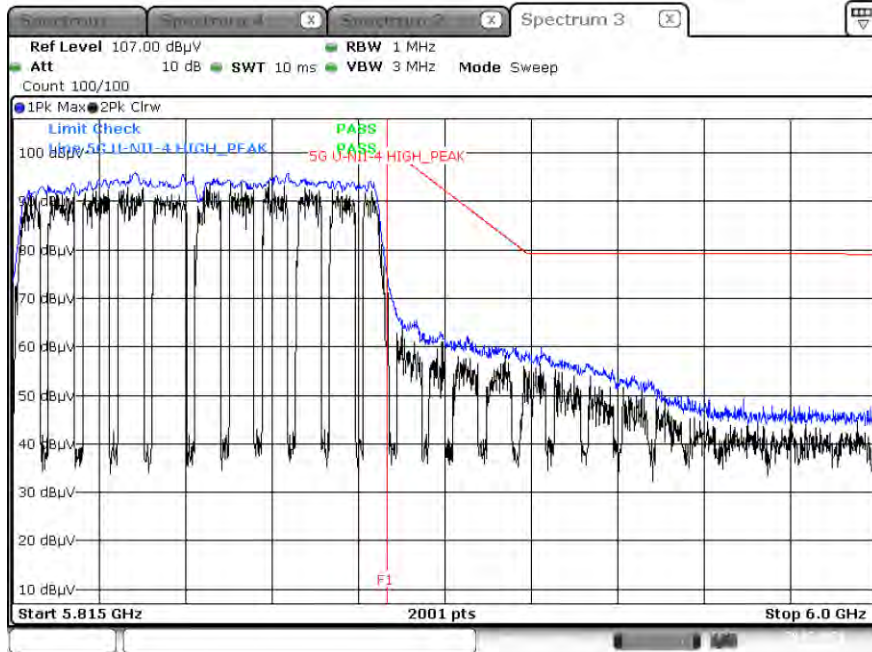
Peak(max) Result (802.11n_HT40, Ch.175, Z-H)



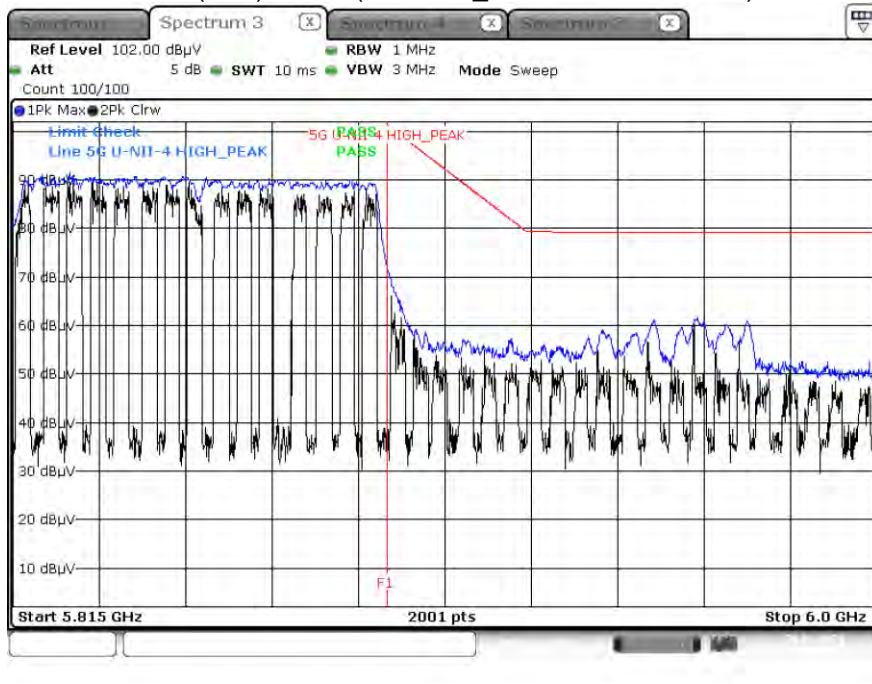
Peak(max) Result (802.11ac_VHT40, Ch.175, Z-H)



Peak(max) Result (802.11ac_VHT80, Ch.171, Z-H)



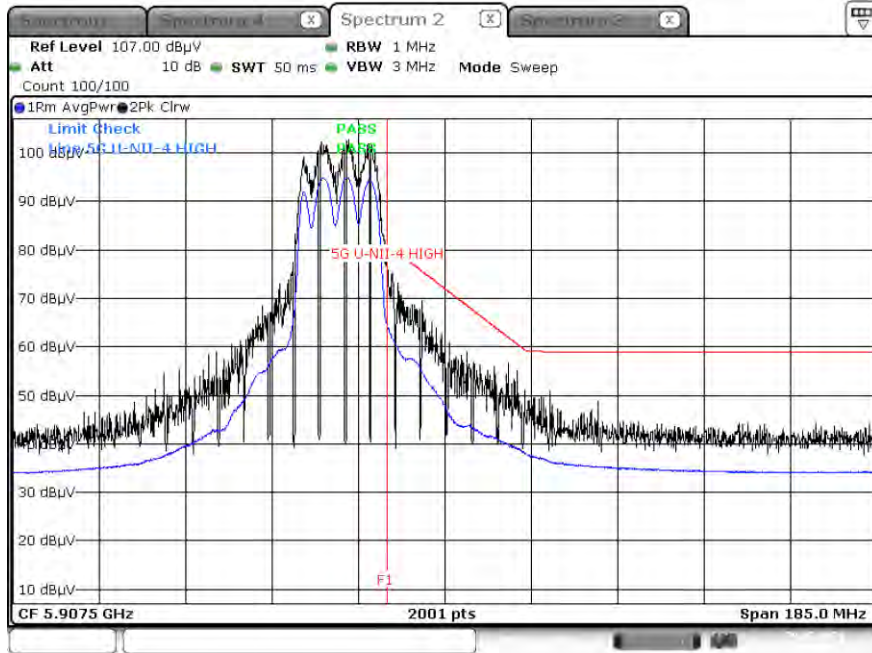
Peak(max) Result (802.11ac_VHT160, Ch.163, Z-H)



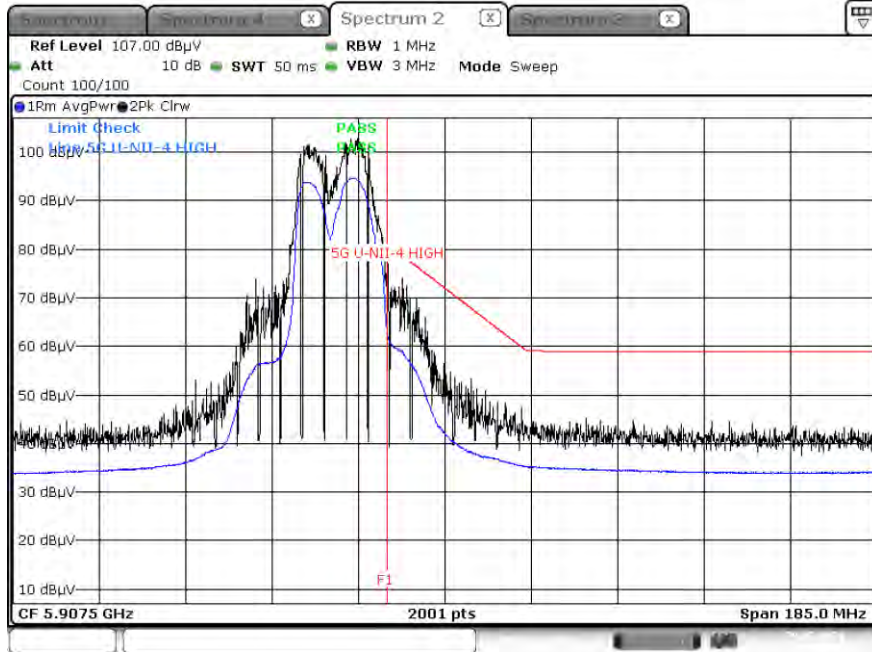
Note :

1. Only the worst case plots for U-NII-4 O.O.B.E
2. U-NII-4 Low & High O.O.B.E RedLine is Final Test Limit(Peak) about factor value compensation.

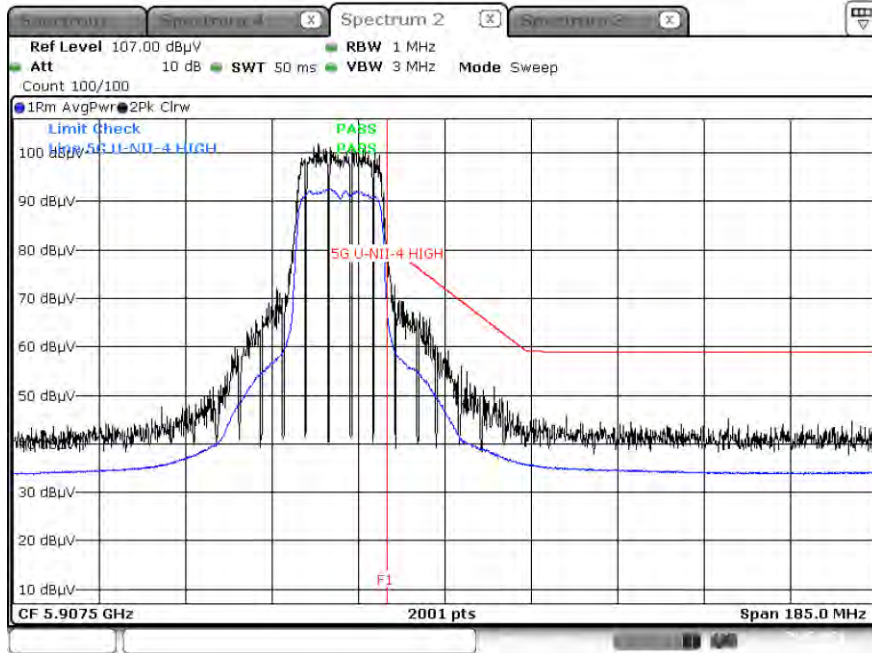
Average Result (802.11a, Ch.177, Z-H)



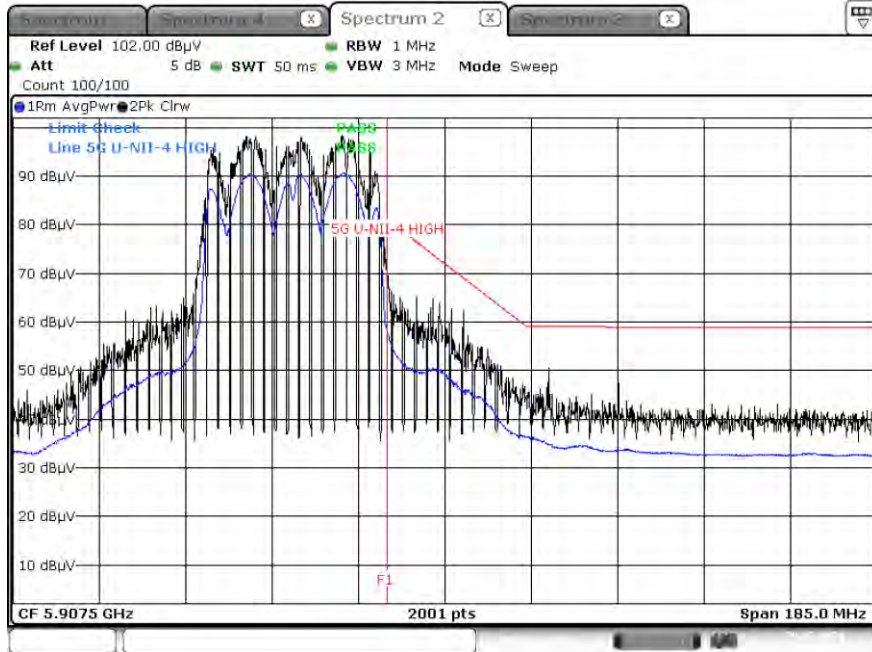
Average Result (802.11n HT20, Ch.177, Z-H)



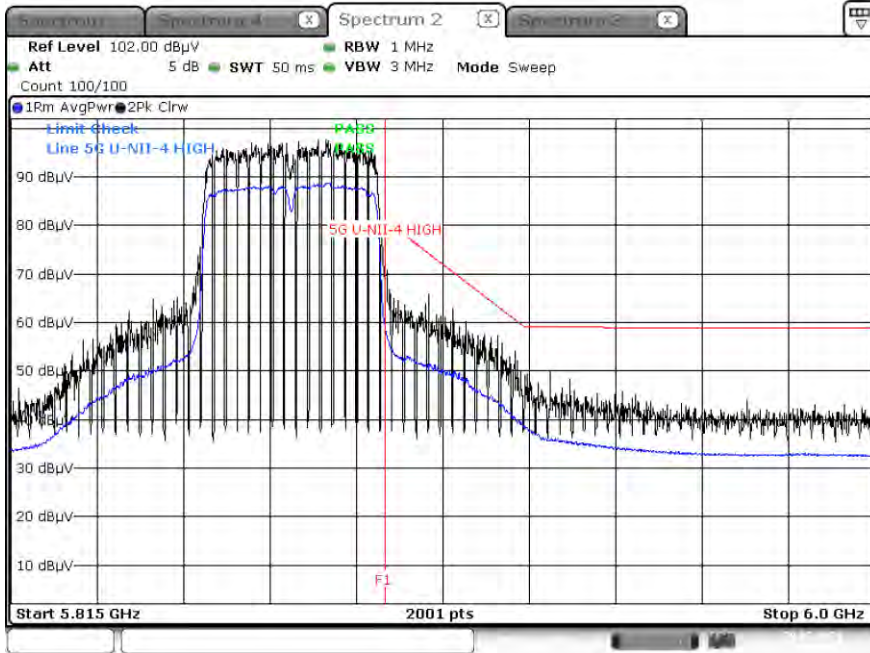
Average Result (802.11ac_VHT20, Ch.177, Z-H)



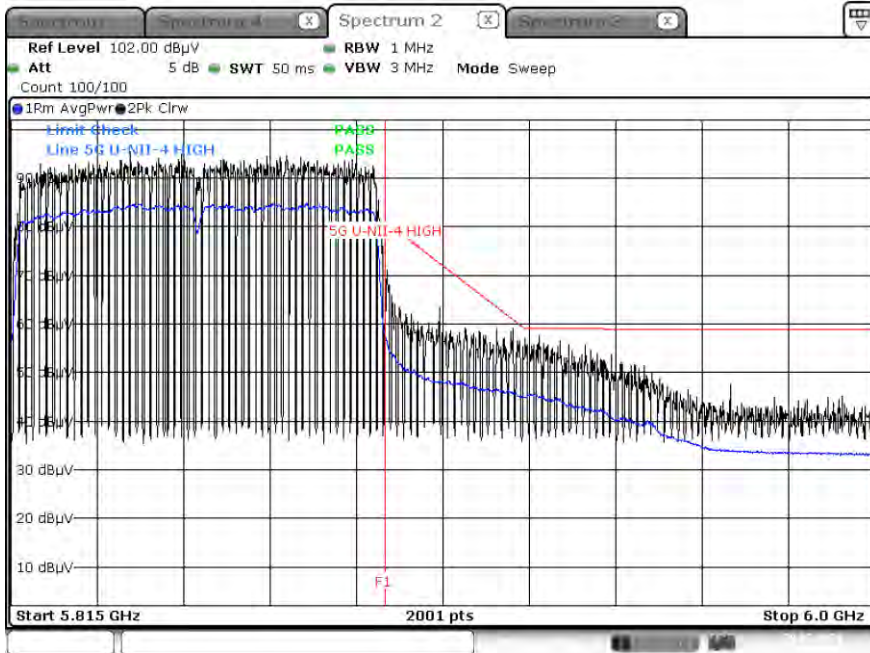
Average Result (802.11n_HT40, Ch.175, Z-H)

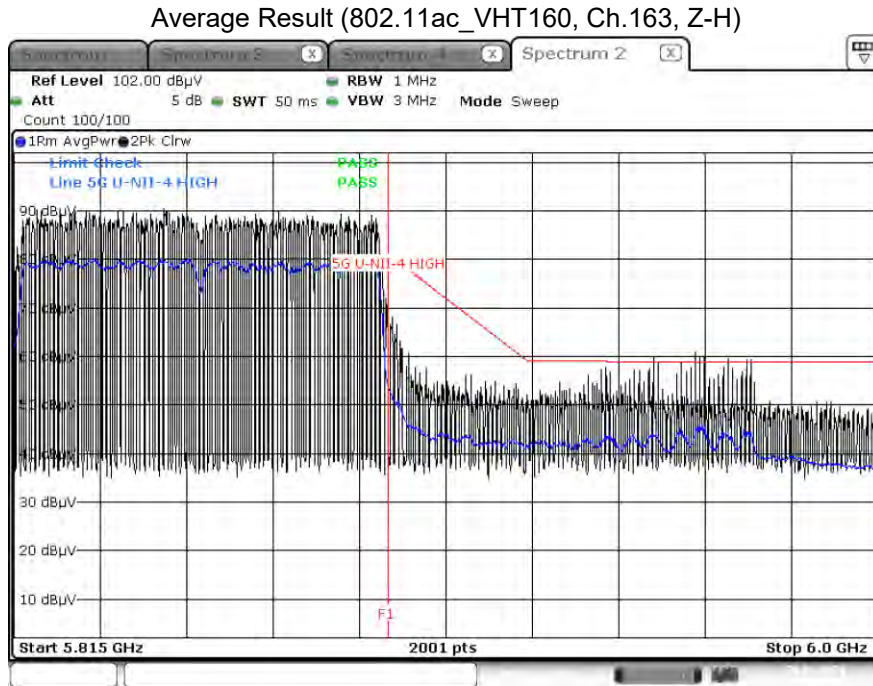


Average Result (802.11ac_VHT40, Ch.175, Z-H)



Average Result (802.11ac_VHT80, Ch.171, Z-H)





Note :

1. Only the worst case plots for U-NII-4 O.O.B.E
2. U-NII-4 Low & High O.O.B.E RedLine is Final Test Limit(Average) about factor value compensation.

10.10 POWERLINE CONDUCTED EMISSIONS

Conducted Emissions

Test

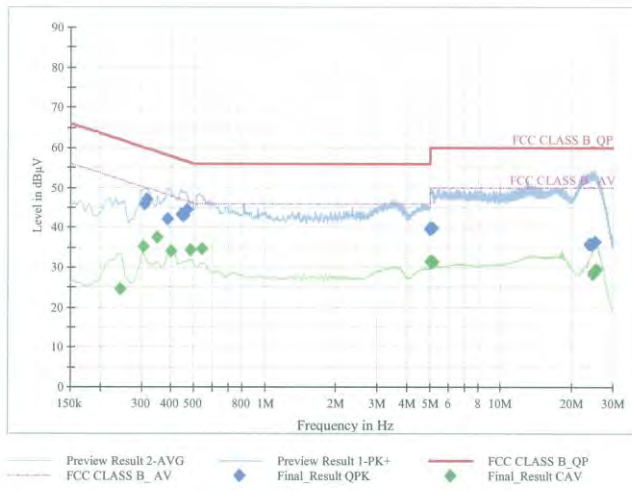
1 / 2

Test Report

Common Information

EUT : SM-X818U
 Operating Conditions : 5G WLAN Mode
 Comment :

Full Spectrum



Final Result QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.3098	45.91	59.98	14.06	1000.0	9.000	L1	OFF	9.7
0.3143	47.14	59.86	12.72	1000.0	9.000	L1	OFF	9.7
0.3863	41.99	58.14	16.15	1000.0	9.000	L1	OFF	9.7
0.4403	43.36	57.06	13.70	1000.0	9.000	L1	OFF	9.7
0.4515	42.99	56.85	13.86	1000.0	9.000	L1	OFF	9.7
0.4673	44.34	56.56	12.22	1000.0	9.000	L1	OFF	9.7
5.0090	39.78	60.00	20.22	1000.0	9.000	L1	OFF	9.8
5.0428	39.59	60.00	20.41	1000.0	9.000	L1	OFF	9.8
5.0653	39.73	60.00	20.27	1000.0	9.000	L1	OFF	9.8
5.0743	39.78	60.00	20.22	1000.0	9.000	L1	OFF	9.8
5.0788	39.89	60.00	20.31	1000.0	9.000	L1	OFF	9.8
5.1575	39.78	60.00	20.22	1000.0	9.000	L1	OFF	9.8
23.6323	35.69	60.00	24.31	1000.0	9.000	N	OFF	10.6
24.3590	35.79	60.00	24.21	1000.0	9.000	N	OFF	10.6
24.4805	35.76	60.00	24.24	1000.0	9.000	N	OFF	10.6
24.6470	36.17	60.00	23.83	1000.0	9.000	N	OFF	10.6
24.7483	36.14	60.00	23.86	1000.0	9.000	N	OFF	10.6
25.0678	36.22	60.00	23.78	1000.0	9.000	N	OFF	10.6

2023-04-18

오전 1:48:33

Test

2 / 2

Final Result CAV

Frequency (MHz)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.2423	24.64	52.02	27.38	1000.0	9.000	L1	OFF	9.7
0.3053	35.16	50.10	14.94	1000.0	9.000	L1	OFF	9.7
0.3480	37.55	49.01	11.46	1000.0	9.000	L1	OFF	9.7
0.3998	34.09	47.86	13.76	1000.0	9.000	L1	OFF	9.7
0.4808	34.24	46.33	12.09	1000.0	9.000	L1	OFF	9.7
0.5405	34.50	46.00	11.50	1000.0	9.000	L1	OFF	9.7
5.0000	31.35	46.00	14.65	1000.0	9.000	L1	OFF	9.8
5.0225	31.39	50.00	18.61	1000.0	9.000	L1	OFF	9.8
5.0675	31.42	50.00	18.58	1000.0	9.000	L1	OFF	9.8
5.0968	31.27	50.00	18.73	1000.0	9.000	L1	OFF	9.8
5.1058	31.22	50.00	18.78	1000.0	9.000	L1	OFF	9.8
5.1328	31.34	50.00	18.66	1000.0	9.000	L1	OFF	9.8
24.6110	28.17	50.00	21.83	1000.0	9.000	N	OFF	10.6
24.6718	28.44	50.00	21.56	1000.0	9.000	N	OFF	10.6
24.7550	28.67	50.00	21.33	1000.0	9.000	N	OFF	10.6
24.7978	28.73	50.00	21.27	1000.0	9.000	N	OFF	10.6
25.0205	29.16	50.00	20.84	1000.0	9.000	N	OFF	10.6
25.2253	29.30	50.00	20.70	1000.0	9.000	N	OFF	10.6

2023-04-18

오전 1:48:33

11. LIST OF TEST EQUIPMENT

Conducted Test

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
LISN	ENV216	Rohde & Schwarz	102245	08/22/2023	Annual
EMI Test Receiver	ESR	Rohde & Schwarz	101910	06/07/2023	Annual
Temperature Chamber	SU-642	ESPEC	0093008124	02/22/2024	Annual
Signal Analyzer	N9030A	Agilent	MY49432108	03/02/2024	Annual
Power Measurement Set	OSP 120	Rohde & Schwarz	101231	06/14/2023	Annual
Power Meter	N1911A	Agilent	MY45100523	03/06/2024	Annual
Power Sensor	N1921A	Agilent	MY57820067	03/06/2024	Annual
Directional Coupler	87300B	Agilent	3116A03621	11/02/2023	Annual
Power Splitter	11667B	Hewlett Packard	10545	02/06/2024	Annual
DC Power Supply	E3632A	HP	KR75303243	04/24/2024	Annual
Attenuator(10 dB) (DC-26.5 GHz)	8493C	HP	08285	06/21/2023	Annual
Attenuator(20 dB)	18N-20dB	Rohde & Schwarz	8	03/08/2024	Annual
Software	EMC32	Rohde & Schwarz	N/A	N/A	N/A
FCC WLAN&BT&BLE Conducted Test Software v3.0	N/A	HCT CO., LTD.	N/A	N/A	N/A
Bluetooth Tester	CBT	Rohde & Schwarz	100808	02/16/2024	Annual

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

Radiated Test

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
Controller(Antenna mast)	CO3000	Innco system	CO3000-4p	N/A	N/A
Antenna Position Tower	MA4640/800-XP-EP	Innco system	N/A	N/A	N/A
EM1000 / Controller	EM1000	Audix	060520	N/A	N/A
Turn Table	N/A	Audix	N/A	N/A	N/A
Amp &Filter Bank Switch Controller	FBSM-01B	TNM system	TM19050002	N/A	N/A
Loop Antenna	FMZB 1513	Rohde & Schwarz	1513-333	03/17/2024	Biennial
Hybrid Antenna	VULB 9168	Schwarzbeck	9168-0895	08/16/2024	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck	9120D-1300	01/18/2024	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck	9120D-2296	05/18/2024	Biennial
Horn Antenna(15 GHz ~ 40 GHz)	BBHA9170	Schwarzbeck	BBHA9170342	09/29/2024	Biennial
Spectrum Analyzer	FSV(10 Hz ~ 40 GHz)	Rohde & Schwarz	101055	05/16/2023	Annual
Band Reject Filter	WRCJV2400/2483.5-2370/2520-60/12SS	Wainwright Instruments	2	01/05/2024	Annual
Band Reject Filter	WRCJV12-4900-5100-5900-6100-50SS	Wainwright Instruments	5	06/13/2023	Annual
Band Reject Filter	WRCJV12-4900-5100-5900-6100-50SS	Wainwright Instruments	6	06/13/2023	Annual
High Pass Filter(7 GHz ~ 18 GHz)	WHKX10-7150-8000-18000-50SS	Wainwright Instruments	1	03/02/2024	Annual
Power Amplifier	CBL18265035	CERNEX	22966	12/01/2023	Annual
Power Amplifier	CBL26405040	CERNEX	25956	03/02/2024	Annual
Bluetooth Tester	TC-3000C	TESCOM	3000C000175	03/28/2024	Annual
HPF(3~18GHz)+LNA1(1~18GHz)	FMSR-05B	TNM system	F6	01/17/2024	Annual
ATT(10dB) + LNA1(1~18GHz)	FMSR -05B	TNM system	None	01/17/2024	Annual
ATT(3dB) + LNA1(1~18GHz)	FMSR -05B	TNM system	None	01/17/2024	Annual
LNA1(1~18GHz)	FMSR -05B	TNM system	25540	01/17/2024	Annual
HPF(7~18GHz)+LNA2(6~18GHz)	FMSR -05B	TNM system	28550	01/17/2024	Annual
Thru(30MHz ~ 18GHz)	FMSR -05B	TNM system	None	01/17/2024	Annual

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.
3. Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5(Version : 2017).

12. ANNEX A_ TEST SETUP PHOTO

Please refer to test setup photo file no. as follows;

No.	Description
1	HCT-RF-2305-FC038-P