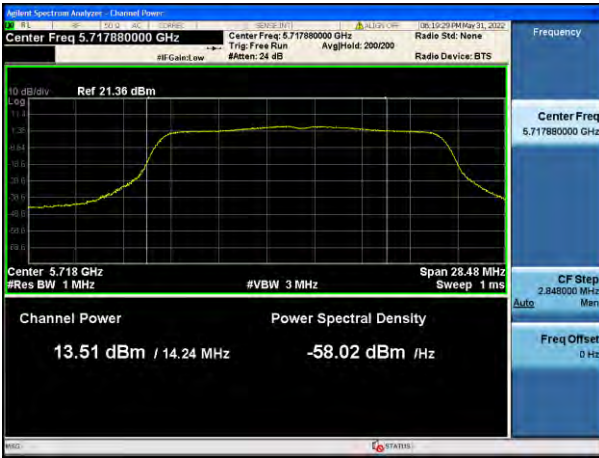


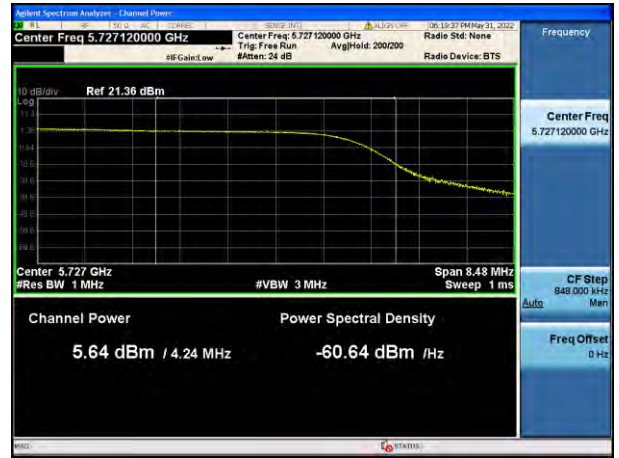
[Ant.1]

☑ Test Plots

802.11a UNII 2C Band



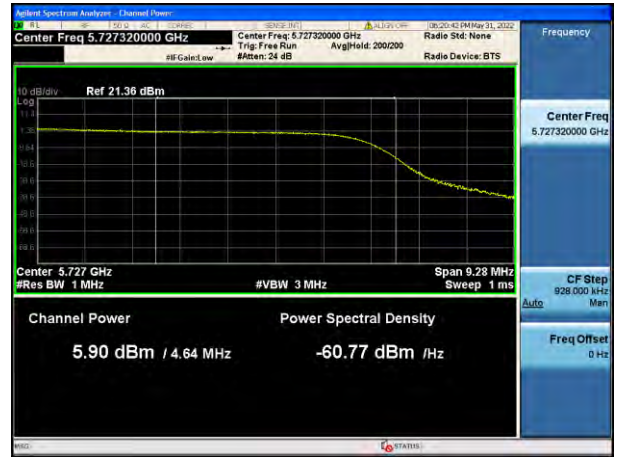
802.11a UNII 3 Band



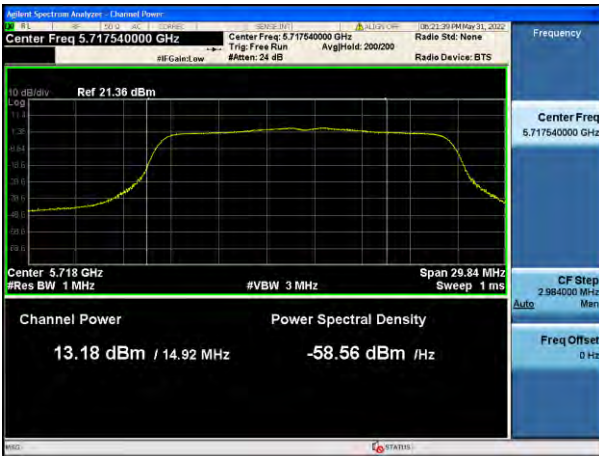
802.11n(HT20) UNII 2C Band



802.11n(HT20) UNII 3 Band



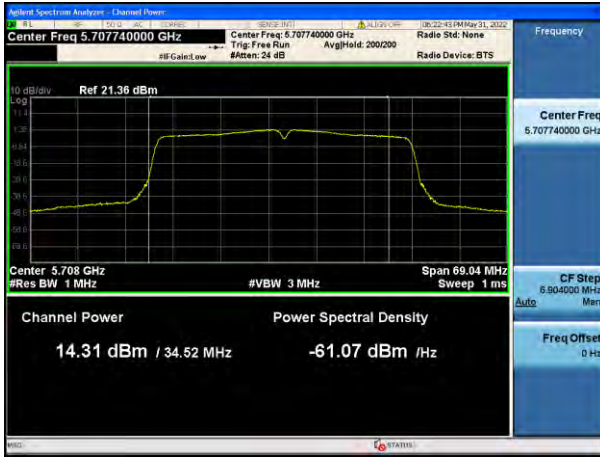
802.11ac(VHT20) UNII 2C Band



802.11ac(VHT20) UNII 3 Band



802.11n(HT40) UNII 2C Band



802.11n(HT40) UNII 3 Band



802.11ac(VHT40) UNII 2C Band



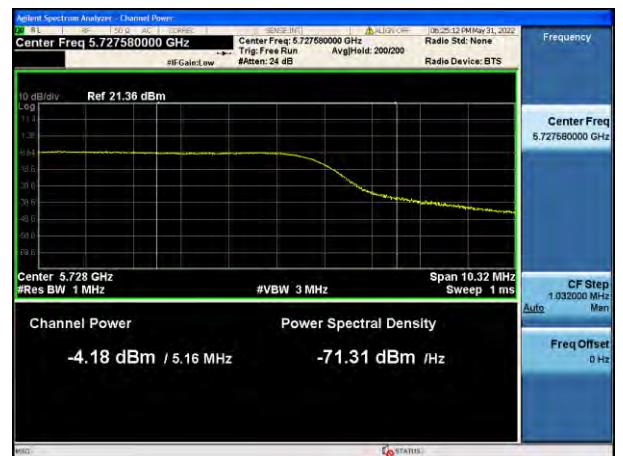
802.11ac(VHT40) UNII 3 Band



802.11ac(VHT80) UNII 2C Band



802.11ac(VHT80) UNII 3 Band



[Ant.2]

☑ Test Plots

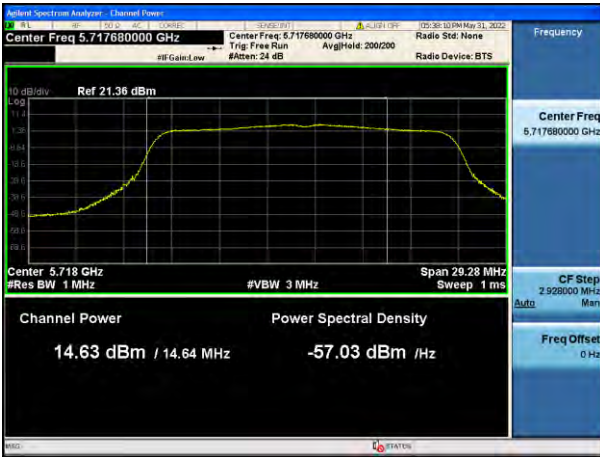
802.11a UNII 2C Band



802.11a UNII 3 Band



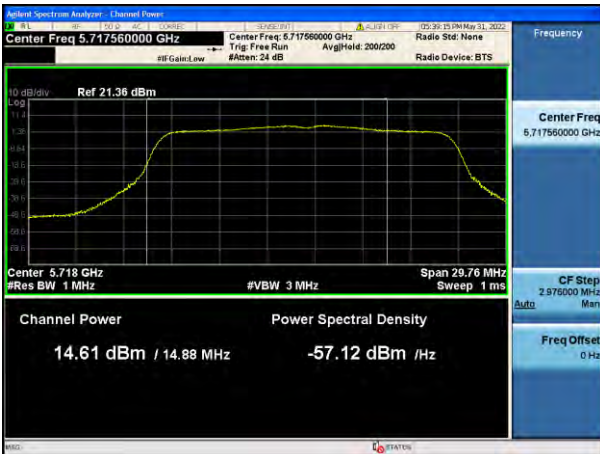
802.11n(HT20) UNII 2C Band



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



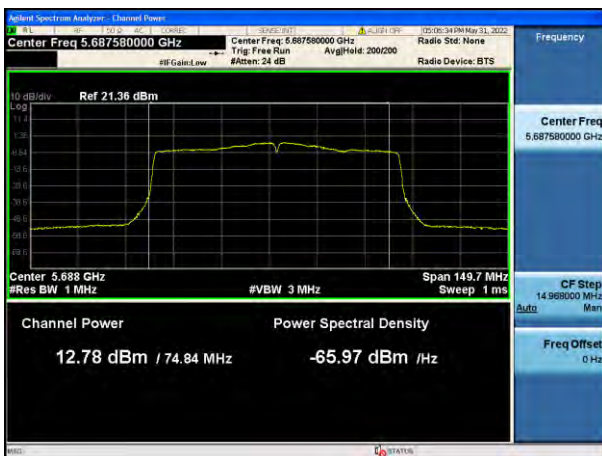
802.11ac(VHT40) UNII 2C Band



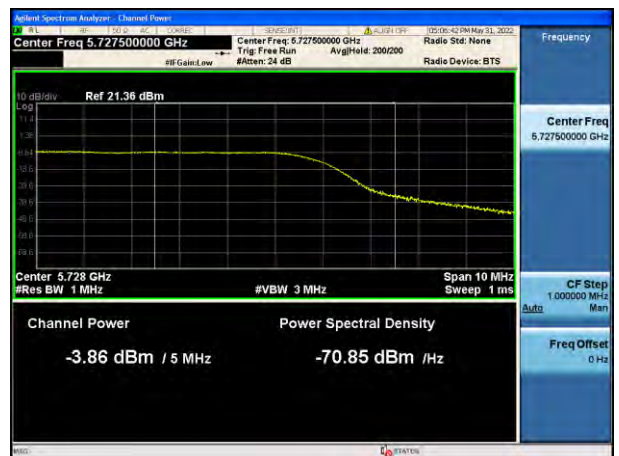
802.11ac(VHT40) UNII 3 Band



802.11ac(VHT80) UNII 2C Band



802.11ac(VHT80) UNII 3 Band



10.7.4 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	4.153	0.292	4.444	11 dBm/ MHz	6 Mbps
802.11n(HT20)	(UNII 2C		4.007	0.339	4.347		MCS0
802.11ac(VHT20)	Band)		4.363	0.322	4.685		MCS0
802.11a	5720	144	-1.496	0.292	-1.205	30 dB/ 500 kHz	6 Mbps
802.11n(HT20)	(UNII 3		-1.484	0.339	-1.145		MCS0
802.11ac(VHT20)	Band)		-1.856	0.322	-1.534		MCS0

Mode	Frequency [MHz]	Channel	Measured Density [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Limit [dBm]	Worstcase Datarate
802.11n(HT40)	5710	142	1.610	0.624	2.234	11 dBm/ MHz	MCS0
802.11ac(VHT40)	(UNII 2C Band)		0.737	0.654	1.391		MCS0
802.11n(HT40)	5710	142	-5.049	0.624	-4.425	30 dBm/ 500 kHz	MCS0
802.11ac(VHT40)	(UNII 3 Band)		-6.127	0.654	-5.472		MCS0

Mode	Frequency [MHz]	Channel	Measured Density [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Limit [dBm]	Worstcase Datarate
802.11ac(VHT80)	5690	138	-2.623	1.178	-1.445	11 dBm/ MHz	MCS0
	(UNII 2C Band)						
	5690	138	-11.067	1.178	-9.890	30 dBm/ 500 kHz	MCS0
	(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	5.646	0.292	5.938	11 dBm/ MHz	6 Mbps
802.11n(HT20)	(UNII 2C		5.459	0.339	5.798		MCS0
802.11ac(VHT20)	Band)		5.471	0.322	5.793		MCS0
802.11a	5720	144	0.049	0.292	0.340	30 dBm/500 kHz	6 Mbps
802.11n(HT20)	(UNII 3		-0.203	0.339	0.137		MCS0
802.11ac(VHT20)	Band)		-0.260	0.322	0.062		MCS0

Mode	Frequency [MHz]	Channel	Measured Density [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Limit [dBm]	Worstcase Datarate
802.11n(HT40)	5710	142	2.943	0.624	3.566	11 dBm/ MHz	MCS0
802.11ac(VHT40)	(UNII 2C Band)		2.109	0.654	2.763		MCS0
802.11n(HT40)	5710	142	-3.788	0.624	-3.164	30 dBm/ 500 kHz	MCS0
802.11ac(VHT40)	(UNII 3 Band)		-4.655	0.654	-4.001		MCS0

Mode	Frequency [MHz]	Channel	Measured Density [dBm]	Duty Cycle Factor [dB]	Total PSD [dBm]	Limit [dBm]	Worstcase Datarate
802.11ac(VHT80)	5690	138	-2.376	1.178	-1.199	11 dBm/ MHz	MCS0
	(UNII 2C Band)						
	5690	138	-11.270	1.178	-10.092	30 dBm/ 500 kHz	MCS0
	(UNII 3 Band)						

[Ant.1]

☑ Test Plots

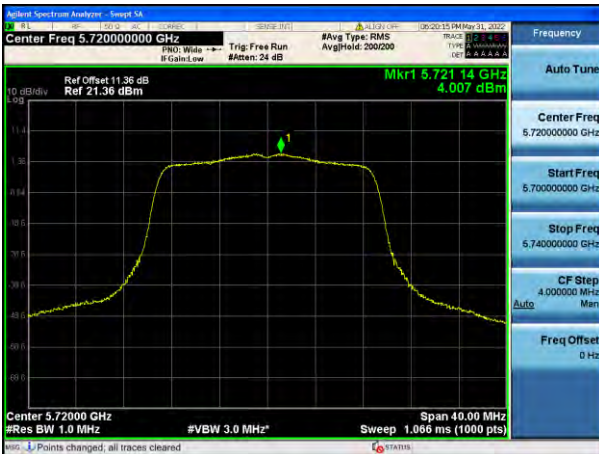
802.11a UNII 2C Band



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

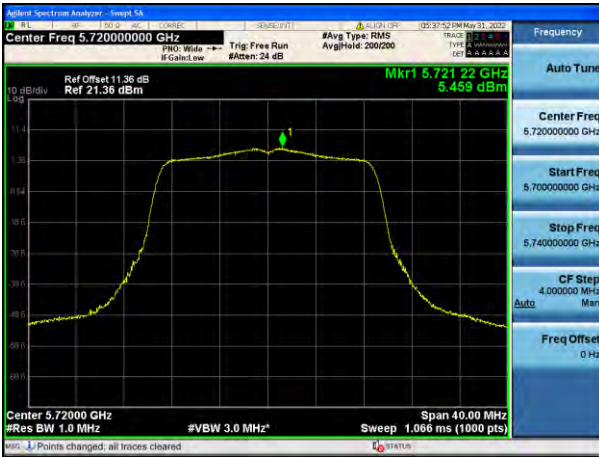
802.11a UNII 2C Band



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



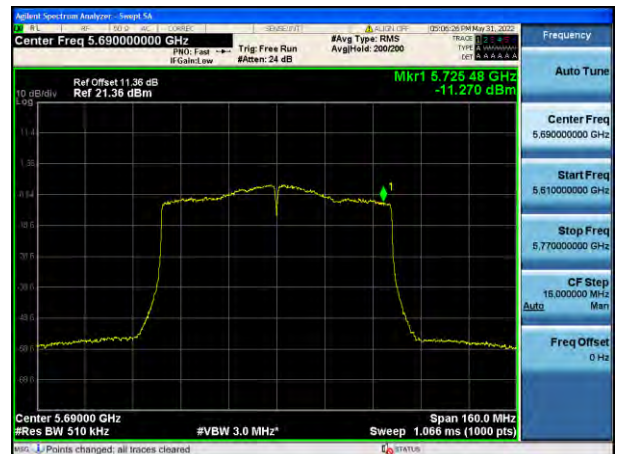
802.11ac(VHT40) UNII 3 Band



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:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5180 MHz
Channel No.	36 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
10360	56.42	-0.94	V	55.48	68.20	12.72	PK
15540	50.33	1.57	V	51.90	73.98	22.08	PK
15540	37.41	1.57	V	38.98	53.98	15.00	AV
10360	57.59	-0.94	H	56.65	68.20	11.55	PK
15540	50.97	1.57	H	52.54	73.98	21.44	PK
15540	37.58	1.57	H	39.15	53.98	14.83	AV

Band :	UNII 1
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5200 MHz
Channel No.	40 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
10400	56.37	-0.07	V	56.30	68.20	11.90	PK
15600	50.12	1.52	V	51.64	73.98	22.34	PK
15600	37.07	1.52	V	38.59	53.98	15.39	AV
10400	55.31	-0.07	H	55.24	68.20	12.96	PK
15600	50.04	1.52	H	51.56	73.98	22.42	PK
15600	37.28	1.52	H	38.80	53.98	15.18	AV

Band :	UNII 1
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
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	57.73	-0.97	V	56.76	68.20	11.44	PK
15720	50.05	0.64	V	50.69	73.98	23.29	PK
15720	37.35	0.64	V	37.99	53.98	15.99	AV
10480	55.62	-0.97	H	54.65	68.20	13.55	PK
15720	50.07	0.64	H	50.71	73.98	23.27	PK
15720	37.35	0.64	H	37.99	53.98	15.99	AV

Band : UNII 2A
 Operation Mode: 802.11 a
 Transfer Rate: 6 Mbps
 Operating Frequency 5260 MHz
 Channel No. 52 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
10520	60.81	-1.06	V	59.76	68.20	8.45	PK
15780	50.44	0.59	V	51.03	73.98	22.95	PK
15780	37.59	0.59	V	38.18	53.98	15.80	AV
10520	57.44	-1.06	H	56.39	68.20	11.82	PK
15780	50.91	0.59	H	51.50	73.98	22.48	PK
15780	37.63	0.59	H	38.22	53.98	15.76	AV

Band : UNII 2A
 Operation Mode: 802.11 a
 Transfer Rate: 6 Mbps
 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	60.26	-0.61	V	59.65	73.98	14.33	PK
10600	46.47	-0.61	V	45.86	53.98	8.12	AV
15900	51.27	0.25	V	51.52	73.98	22.46	PK
15900	38.00	0.25	V	38.25	53.98	15.73	AV
10600	56.92	-0.61	H	56.31	73.98	17.67	PK
10600	44.74	-0.61	H	44.13	53.98	9.85	AV
15900	50.37	0.25	H	50.62	73.98	23.36	PK
15900	38.04	0.25	H	38.29	53.98	15.69	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]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10640	59.63	-0.73	V	58.90	73.98	15.08	PK
10640	45.46	-0.73	V	44.73	53.98	9.25	AV
15960	52.61	0.53	V	53.14	73.98	20.84	PK
15960	38.14	0.53	V	38.67	53.98	15.31	AV
10640	56.86	-0.73	H	56.13	73.98	17.85	PK
10640	43.88	-0.73	H	43.15	53.98	10.83	AV
15960	50.86	0.53	H	51.39	73.98	22.59	PK
15960	38.14	0.53	H	38.67	53.98	15.31	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]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11000	53.93	-0.18	V	53.75	73.98	20.23	PK
11000	41.00	-0.18	V	40.82	53.98	13.16	AV
16500	50.68	0.60	V	51.28	68.20	16.92	PK
11000	53.47	-0.18	H	53.29	73.98	20.69	PK
11000	40.58	-0.18	H	40.40	53.98	13.58	AV
16500	50.94	0.60	H	51.54	68.20	16.66	PK

Band :	UNII 2C
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5600 MHz
Channel No.	120 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
11200	54.78	-1.01	V	53.77	73.98	20.21	PK
11200	41.73	-1.01	V	40.72	53.98	13.26	AV
16800	51.33	-0.07	V	51.26	68.20	16.94	PK
11200	53.40	-1.01	H	52.39	73.98	21.59	PK
11200	40.79	-1.01	H	39.78	53.98	14.20	AV
16800	50.95	-0.07	H	50.88	68.20	17.32	PK

Band :	UNII 2C
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
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	55.03	-0.52	V	54.51	73.98	19.47	PK
11440	42.07	-0.52	V	41.55	53.98	12.43	AV
17160	50.26	0.64	V	50.90	68.20	17.30	PK
11440	52.66	-0.52	H	52.14	73.98	21.84	PK
11440	40.76	-0.52	H	40.24	53.98	13.74	AV
17160	51.22	0.64	H	51.86	68.20	16.34	PK

Band : UNII 3

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

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	53.64	-0.38	V	53.26	73.98	20.72	PK
11490	41.74	-0.38	V	41.36	53.98	12.62	AV
17235	50.76	1.04	V	51.80	68.20	16.40	PK
11490	52.85	-0.38	H	52.47	73.98	21.51	PK
11490	40.02	-0.38	H	39.64	53.98	14.34	AV
17235	50.95	1.04	H	51.99	68.20	16.21	PK

Band : UNII 3

Operation Mode: 802.11 a

Transfer Rate: 6 Mbps

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	53.23	-0.29	V	52.94	73.98	21.05	PK
11570	41.20	-0.29	V	40.91	53.98	13.08	AV
17355	50.94	1.14	V	52.08	68.20	16.13	PK
11570	51.73	-0.29	H	51.44	73.98	22.55	PK
11570	39.82	-0.29	H	39.53	53.98	14.46	AV
17355	51.03	1.14	H	52.17	68.20	16.04	PK

Band : UNII 3
 Operation Mode: 802.11 a
 Transfer Rate: 6 Mbps
 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	53.26	-1.16	V	52.10	73.98	21.88	PK
11650	41.07	-1.16	V	39.91	53.98	14.07	AV
17475	50.47	2.16	V	52.63	68.20	15.57	PK
11650	54.16	-1.16	H	53.00	73.98	20.98	PK
11650	40.13	-1.16	H	38.97	53.98	15.01	AV
17475	50.95	2.16	H	53.11	68.20	15.09	PK

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	59.12	-0.94	V	58.18	68.20	10.02	PK
15540	50.53	1.57	V	52.10	73.98	21.88	PK
15540	37.73	1.57	V	39.30	53.98	14.68	AV
10360	58.81	-0.94	H	57.87	68.20	10.33	PK
15540	50.91	1.57	H	52.48	73.98	21.50	PK
15540	37.23	1.57	H	38.80	53.98	15.18	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	57.71	-0.07	V	57.64	68.20	10.56	PK
15600	50.32	1.52	V	51.84	73.98	22.14	PK
15600	37.34	1.52	V	38.86	53.98	15.12	AV
10400	55.65	-0.07	H	55.58	68.20	12.62	PK
15600	50.52	1.52	H	52.04	73.98	21.94	PK
15600	36.92	1.52	H	38.44	53.98	15.54	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	59.20	-0.97	V	58.23	68.20	9.97	PK
15720	50.13	0.64	V	50.77	73.98	23.21	PK
15720	37.39	0.64	V	38.03	53.98	15.95	AV
10480	57.64	-0.97	H	56.67	68.20	11.53	PK
15720	50.19	0.64	H	50.83	73.98	23.15	PK
15720	37.21	0.64	H	37.85	53.98	16.13	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	61.46	-1.06	V	60.41	68.20	7.80	PK
15780	50.20	0.59	V	50.79	73.98	23.19	PK
15780	37.74	0.59	V	38.33	53.98	15.65	AV
10520	58.76	-1.06	H	57.71	68.20	10.50	PK
15780	50.65	0.59	H	51.24	73.98	22.74	PK
15780	37.66	0.59	H	38.25	53.98	15.73	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 [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
10600	61.30	-0.61	V	60.69	73.98	13.29	PK
10600	46.33	-0.61	V	45.72	53.98	8.26	AV
15900	51.19	0.25	V	51.44	73.98	22.54	PK
15900	38.05	0.25	V	38.30	53.98	15.68	AV
10600	58.30	-0.61	H	57.69	73.98	16.29	PK
10600	44.52	-0.61	H	43.91	53.98	10.07	AV
15900	51.31	0.25	H	51.56	73.98	22.42	PK
15900	37.92	0.25	H	38.17	53.98	15.81	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 [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
10640	59.53	-0.73	V	58.80	73.98	15.18	PK
10640	45.02	-0.73	V	44.29	53.98	9.69	AV
15960	51.73	0.53	V	52.26	73.98	21.72	PK
15960	38.04	0.53	V	38.57	53.98	15.41	AV
10640	58.02	-0.73	H	57.29	73.98	16.69	PK
10640	43.59	-0.73	H	42.86	53.98	11.12	AV
15960	50.77	0.53	H	51.30	73.98	22.68	PK
15960	37.70	0.53	H	38.23	53.98	15.75	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 [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
11000	54.51	-0.18	V	54.33	73.98	19.65	PK
11000	40.66	-0.18	V	40.48	53.98	13.50	AV
16500	50.46	0.60	V	51.06	68.20	17.14	PK
11000	52.93	-0.18	H	52.75	73.98	21.23	PK
11000	39.88	-0.18	H	39.70	53.98	14.28	AV
16500	50.68	0.60	H	51.28	68.20	16.92	PK

Band : UNII 2C
 Operation Mode: 802.11n(HT20)
 Transfer MCS Index: 0
 Operating Frequency 5600 MHz
 Channel No. 120 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
11200	54.19	-1.01	V	53.18	73.98	20.80	PK
11200	40.95	-1.01	V	39.94	53.98	14.04	AV
16800	50.23	-0.07	V	50.16	68.20	18.04	PK
11200	54.54	-1.01	H	53.53	73.98	20.45	PK
11200	40.80	-1.01	H	39.79	53.98	14.19	AV
16800	50.43	-0.07	H	50.36	68.20	17.84	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 [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
11440	55.68	-0.52	V	55.16	73.98	18.82	PK
11440	41.77	-0.52	V	41.25	53.98	12.73	AV
17160	50.91	0.64	V	51.55	68.20	16.65	PK
11440	53.95	-0.52	H	53.43	73.98	20.55	PK
11440	40.44	-0.52	H	39.92	53.98	14.06	AV
17160	51.03	0.64	H	51.67	68.20	16.53	PK

Band :	UNII 3
Operation Mode:	802.11n(HT20)
Transfer MCS Index:	0
Operating Frequency	5745MHz
Channel No.	149 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
11490	54.81	-0.38	V	54.43	73.98	19.55	PK
11490	41.43	-0.38	V	41.05	53.98	12.93	AV
17235	51.44	1.04	V	52.48	68.20	15.72	PK
11490	52.55	-0.38	H	52.17	73.98	21.81	PK
11490	39.93	-0.38	H	39.55	53.98	14.43	AV
17235	50.56	1.04	H	51.60	68.20	16.60	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 [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
11570	54.81	-0.29	V	54.52	73.98	19.47	PK
11570	41.08	-0.29	V	40.79	53.98	13.20	AV
17355	50.77	1.14	V	51.91	68.20	16.30	PK
11570	52.23	-0.29	H	51.94	73.98	22.05	PK
11570	39.91	-0.29	H	39.62	53.98	14.37	AV
17355	50.91	1.14	H	52.05	68.20	16.16	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 [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
11650	53.62	-1.16	V	52.46	73.98	21.52	PK
11650	40.87	-1.16	V	39.71	53.98	14.27	AV
17475	50.13	2.16	V	52.29	68.20	15.91	PK
11650	52.68	-1.16	H	51.52	73.98	22.46	PK
11650	39.78	-1.16	H	38.62	53.98	15.36	AV
17475	50.25	2.16	H	52.41	68.20	15.79	PK

Band :	UNII 2A
Operation Mode:	802.11n(HT40)
Transfer MCS Index:	0
Operating Frequency	5270 MHz
Channel No.	54 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
10540	55.52	-0.88	V	54.64	68.20	13.56	PK
15810	50.70	0.67	V	51.37	73.98	22.61	PK
15810	38.61	0.67	V	39.28	53.98	14.70	AV
10540	54.12	-0.88	H	53.24	68.20	14.96	PK
15810	50.31	0.67	H	50.98	73.98	23.00	PK
15810	38.34	0.67	H	39.01	53.98	14.97	AV

Band :	UNII 2A
Operation Mode:	802.11n(HT40)
Transfer MCS Index:	0
Operating Frequency	5310 MHz
Channel No.	62 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
10620	56.21	-1.12	V	55.10	73.98	18.89	PK
10620	43.93	-1.12	V	42.82	53.98	11.17	AV
15930	50.62	0.40	V	51.02	73.98	22.96	PK
15930	38.66	0.40	V	39.06	53.98	14.92	AV
10620	54.84	-1.12	H	53.73	73.98	20.26	PK
10620	43.19	-1.12	H	42.08	53.98	11.91	AV
15930	50.52	0.40	H	50.92	73.98	23.06	PK
15930	38.64	0.40	H	39.04	53.98	14.94	AV

Band : UNII 2A
 Operation Mode: 802.11ac(VHT20)
 Transfer MCS Index: 0
 Operating Frequency 5260 MHz
 Channel No. 52 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
10520	59.09	-1.06	V	58.04	68.20	10.17	PK
15780	50.71	0.59	V	51.30	73.98	22.68	PK
15780	37.79	0.59	V	38.38	53.98	15.60	AV
10520	56.49	-1.06	H	55.44	68.20	12.77	PK
15780	50.63	0.59	H	51.22	73.98	22.76	PK
15780	37.51	0.59	H	38.10	53.98	15.88	AV

Band : UNII 2A
 Operation Mode: 802.11ac(VHT20)
 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	59.05	-0.61	V	58.44	73.98	15.54	PK
10600	44.75	-0.61	V	44.14	53.98	9.84	AV
15900	51.61	0.25	V	51.86	73.98	22.12	PK
15900	38.04	0.25	V	38.29	53.98	15.69	AV
10600	56.24	-0.61	H	55.63	73.98	18.35	PK
10600	43.35	-0.61	H	42.74	53.98	11.24	AV
15900	50.53	0.25	H	50.78	73.98	23.20	PK
15900	37.77	0.25	H	38.02	53.98	15.96	AV

Band :	UNII 2A
Operation Mode:	802.11ac(VHT20)
Transfer MCS Index:	0
Operating Frequency	5320 MHz
Channel No.	64 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
10640	57.60	-0.73	V	56.87	73.98	17.11	PK
10640	43.95	-0.73	V	43.22	53.98	10.76	AV
15960	50.93	0.53	V	51.46	73.98	22.52	PK
15960	37.97	0.53	V	38.50	53.98	15.48	AV
10640	57.21	-0.73	H	56.48	73.98	17.50	PK
10640	42.63	-0.73	H	41.90	53.98	12.08	AV
15960	50.99	0.53	H	51.52	73.98	22.46	PK
15960	37.80	0.53	H	38.33	53.98	15.65	AV

Band :	UNII 2A
Operation Mode:	802.11ac(VHT40)
Transfer MCS Index:	0
Operating Frequency	5270 MHz
Channel No.	54 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
10540	54.78	-0.88	V	53.90	68.20	14.30	PK
15810	50.94	0.67	V	51.61	73.98	22.37	PK
15810	38.51	0.67	V	39.18	53.98	14.80	AV
10540	53.63	-0.88	H	52.75	68.20	15.45	PK
15810	50.16	0.67	H	50.83	73.98	23.15	PK
15810	38.54	0.67	H	39.21	53.98	14.77	AV

Band :	UNII 2A
Operation Mode:	802.11ac(VHT40)
Transfer MCS Index:	0
Operating Frequency	5310 MHz
Channel No.	62 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
10620	54.47	-1.12	V	53.36	73.98	20.63	PK
10620	42.38	-1.12	V	41.27	53.98	12.72	AV
15930	51.30	0.40	V	51.70	73.98	22.28	PK
15930	38.66	0.40	V	39.06	53.98	14.92	AV
10620	53.49	-1.12	H	52.38	73.98	21.61	PK
10620	41.59	-1.12	H	40.48	53.98	13.51	AV
15930	51.31	0.40	H	51.71	73.98	22.27	PK
15930	38.47	0.40	H	38.87	53.98	15.11	AV

Band :	UNII 2A
Operation Mode:	802.11ac(VHT80)
Transfer MCS Index:	0
Operating Frequency	5290 MHz
Channel No.	58 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
10580	53.98	-0.63	V	53.35	68.20	14.85	PK
15870	50.94	0.47	V	51.41	73.98	22.57	PK
15870	39.27	0.47	V	39.74	53.98	14.24	AV
10580	52.92	-0.63	H	52.29	68.20	15.91	PK
15870	50.88	0.47	H	51.35	73.98	22.63	PK
15870	39.04	0.47	H	39.51	53.98	14.47	AV

[DBS Mode]

Mode : Bluetooth (GFSK) CH.0 & 802.11n(HT20) MCS0 ch.52

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10520	61.36	-1.06	V	60.31	68.20	7.90	PK
15780	50.27	0.59	V	50.86	73.98	23.12	PK
15780	36.88	0.59	V	37.47	53.98	16.51	AV
10520	60.56	-1.06	H	59.51	68.20	8.70	PK
15780	50.16	0.59	H	50.75	73.98	23.23	PK
15780	36.33	0.59	H	36.92	53.98	17.06	AV

[RSDB Mode]

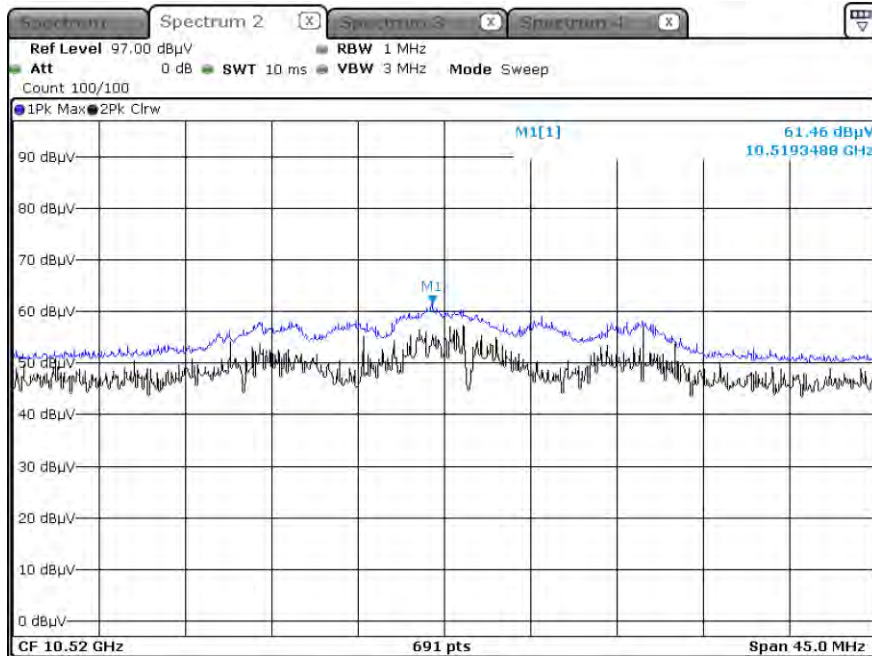
Mode : 802.11g 6 Mbps ch.6 & 802.11n(HT20) MCS0 ch.52

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG [dB/m]	POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
10520	60.11	-1.06	V	59.06	68.20	9.15	PK
15780	49.45	0.59	V	50.04	73.98	23.94	PK
15780	37.04	0.59	V	37.63	53.98	16.35	AV
10520	59.67	-1.06	H	58.62	68.20	9.59	PK
15780	51.22	0.59	H	51.81	73.98	22.17	PK
15780	37.21	0.59	H	37.80	53.98	16.18	AV

▣ Test Plots

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

Peak Result (802.11n(HT20), Ch.52 Spurious Emissions, Z-V)



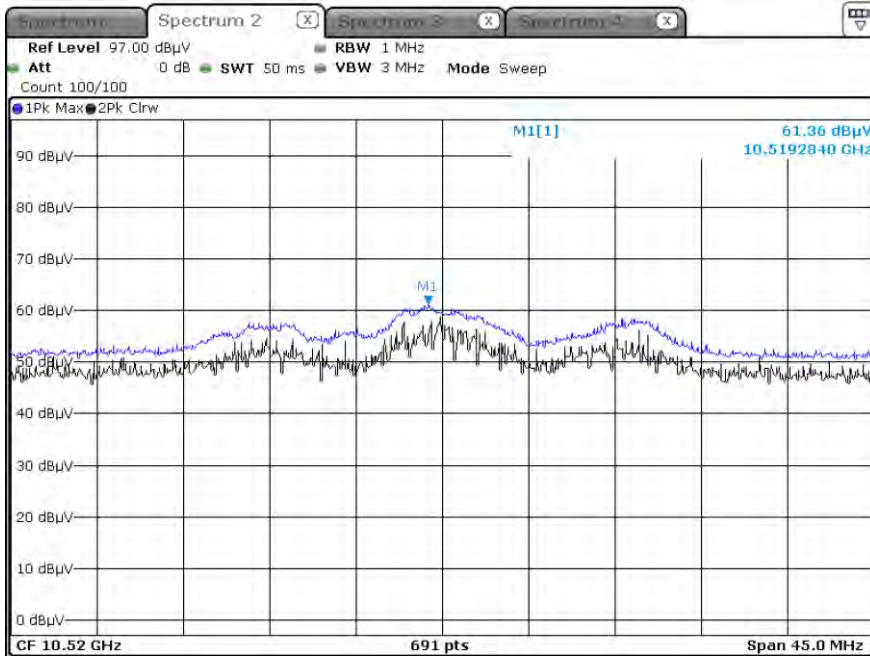
Note:

Only the worst case plots for Radiated Spurious Emissions.

RESULT PLOTS(DBS)

Mode : Bluetooth (GFSK) CH.0 & 802.11n(HT20) MCS0 ch.52

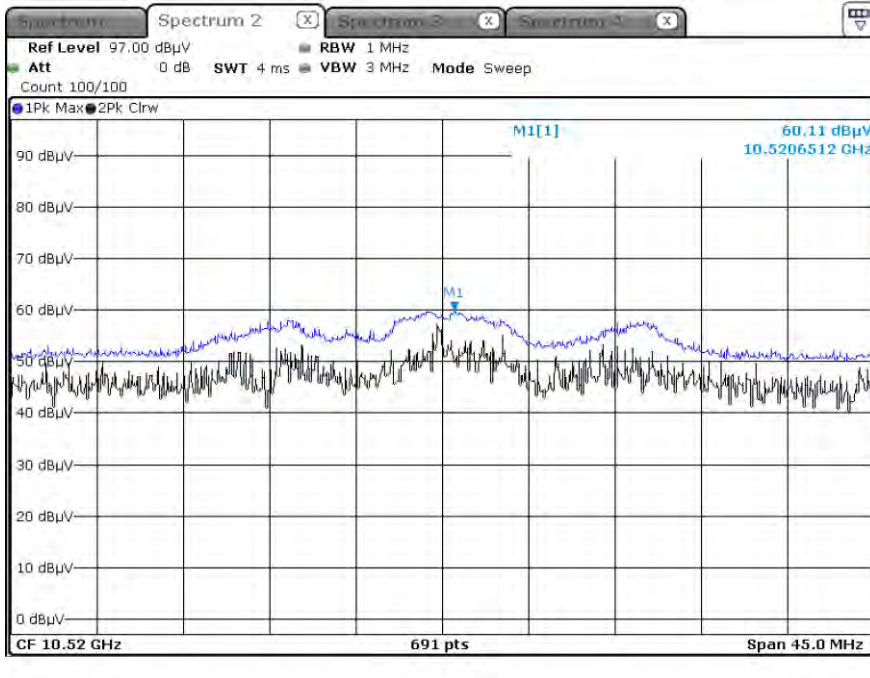
Radiated Spurious Emissions plot – Peak Result (Spurious Emissions, Harmonic)



[RDBS Mode]

Mode : 802.11g 6 Mbps ch.6 & 802.11n(HT20) MCS0 ch.52

Radiated Spurious Emissions plot – Peak Result (Spurious Emissions, Harmonic)



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]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	42.25	13.64	H	55.89	73.98	18.09	PK
5150	30.12	13.64	H	43.76	53.98	10.22	AV
5150	41.02	13.64	V	54.66	73.98	19.32	PK
5150	29.98	13.64	V	43.62	53.98	10.36	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]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	40.44	14.22	H	54.66	73.98	19.32	PK
5350	27.86	14.22	H	42.08	53.98	11.90	AV
5350	40.04	14.22	V	54.26	73.98	19.72	PK
5350	27.71	14.22	V	41.93	53.98	12.05	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 [dB μ V]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
5460	40.15	14.69	H	54.84	73.98	19.14	PK
5460	27.41	14.69	H	42.10	53.98	11.88	AV
5470	40.24	15.03	H	55.27	68.20	12.93	PK
5460	38.73	14.69	V	53.42	73.98	20.56	PK
5460	27.33	14.69	V	42.02	53.98	11.96	AV
5470	39.19	15.03	V	54.22	68.20	13.98	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]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
5150	42.06	13.64	H	55.70	73.98	18.28	PK
5150	30.34	13.64	H	43.98	53.98	10.00	AV
5150	41.96	13.64	V	55.6	73.98	18.38	PK
5150	29.86	13.64	V	43.5	53.98	10.48	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]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
5350	40.24	14.22	H	54.46	73.98	19.52	PK
5350	27.84	14.22	H	42.06	53.98	11.92	AV
5350	39.64	14.22	V	53.86	73.98	20.12	PK
5350	27.52	14.22	V	41.74	53.98	12.24	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 [dB μ V]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
5460	39.37	14.69	H	54.06	73.98	19.92	PK
5460	27.46	14.69	H	42.15	53.98	11.83	AV
5470	40.53	15.03	H	55.56	68.20	12.64	PK
5460	39.25	14.69	V	53.94	73.98	20.04	PK
5460	27.32	14.69	V	42.01	53.98	11.97	AV
5470	40.26	15.03	V	55.29	68.20	12.91	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]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	42.56	13.64	H	56.20	73.98	17.78	PK
5150	30.20	13.64	H	43.84	53.98	10.14	AV
5150	41.14	13.64	V	54.78	73.98	19.20	PK
5150	29.97	13.64	V	43.61	53.98	10.37	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]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	40.38	14.22	H	54.60	73.98	19.38	PK
5350	28.02	14.22	H	42.24	53.98	11.74	AV
5350	40.22	14.22	V	54.44	73.98	19.54	PK
5350	27.97	14.22	V	42.19	53.98	11.79	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]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	40.08	14.69	H	54.77	73.98	19.21	PK
5460	27.68	14.69	H	42.37	53.98	11.61	AV
5470	40.22	15.03	H	55.25	68.20	12.95	PK
5460	39.45	14.69	V	54.14	73.98	19.84	PK
5460	27.41	14.69	V	42.10	53.98	11.88	AV
5470	39.72	15.03	V	54.75	68.20	13.45	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]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	42.79	13.64	H	56.43	73.98	17.55	PK
5150	30.41	13.64	H	44.05	53.98	9.93	AV
5150	41.77	13.64	V	55.41	73.98	18.57	PK
5150	29.90	13.64	V	43.54	53.98	10.44	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]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	43.73	14.22	H	57.95	73.98	16.03	PK
5350	31.05	14.22	H	45.27	53.98	8.71	AV
5350	42.53	14.22	V	56.75	73.98	17.23	PK
5350	30.24	14.22	V	44.46	53.98	9.52	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]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	40.05	14.69	H	54.74	73.98	19.24	PK
5460	28.99	14.69	H	43.68	53.98	10.30	AV
5470	41.68	15.03	H	56.71	68.20	11.49	PK
5460	39.61	14.69	V	54.30	73.98	19.68	PK
5460	28.84	14.69	V	43.53	53.98	10.45	AV
5470	40.97	15.03	V	56.00	68.20	12.20	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]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	42.23	13.64	H	55.87	73.98	18.11	PK
5150	30.29	13.64	H	43.93	53.98	10.05	AV
5150	41.34	13.64	V	54.98	73.98	19.00	PK
5150	29.96	13.64	V	43.60	53.98	10.38	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]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	41.08	14.22	H	55.30	73.98	18.68	PK
5350	29.23	14.22	H	43.45	53.98	10.53	AV
5350	40.97	14.22	V	55.19	73.98	18.79	PK
5350	28.88	14.22	V	43.1	53.98	10.88	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 [dB μ V]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Measurement Type
5460	40.94	14.69	H	55.63	73.98	18.35	PK
5460	28.69	14.69	H	43.38	53.98	10.60	AV
5470	41.72	15.03	H	56.75	68.20	11.45	PK
5460	39.95	14.69	V	54.64	73.98	19.34	PK
5460	29.04	14.69	V	43.73	53.98	10.25	AV
5470	41.36	15.03	V	56.39	68.20	11.81	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]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5150	42.92	13.64	H	56.56	73.98	17.42	PK
5150	31.48	13.64	H	45.12	53.98	8.86	AV
5150	42.17	13.64	V	55.81	73.98	18.17	PK
5150	30.52	13.64	V	44.16	53.98	9.82	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]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5350	46.39	14.22	H	60.61	73.98	13.37	PK
5350	34.79	14.22	H	49.01	53.98	4.97	AV
5350	45.14	14.22	V	59.36	73.98	14.62	PK
5350	33.93	14.22	V	48.15	53.98	5.83	AV

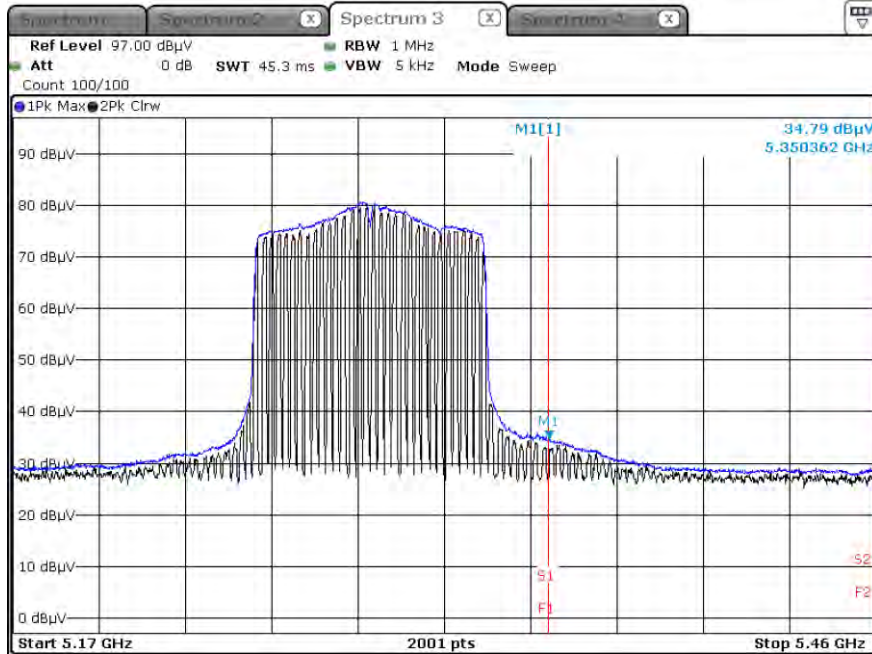
Band :	UNII 2C
Operation Mode:	802.11 ac_VHT80
Transfer MCS Index:	0
Operating Frequency	5530 MHz
Channel No.	106 Ch

Frequency [MHz]	Measured Value [dBμV]	CL+AF+DF-AG+ATT [dB/m]	ANT. POL [H/V]	Total [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Measurement Type
5460	42.30	14.69	H	56.99	73.98	16.99	PK
5460	30.11	14.69	H	44.80	53.98	9.18	AV
5470	43.03	15.03	H	58.06	68.20	10.14	PK
5460	41.92	14.69	V	56.61	73.98	17.37	PK
5460	29.83	14.69	V	44.52	53.98	9.46	AV
5470	42.50	15.03	V	57.53	68.20	10.67	PK

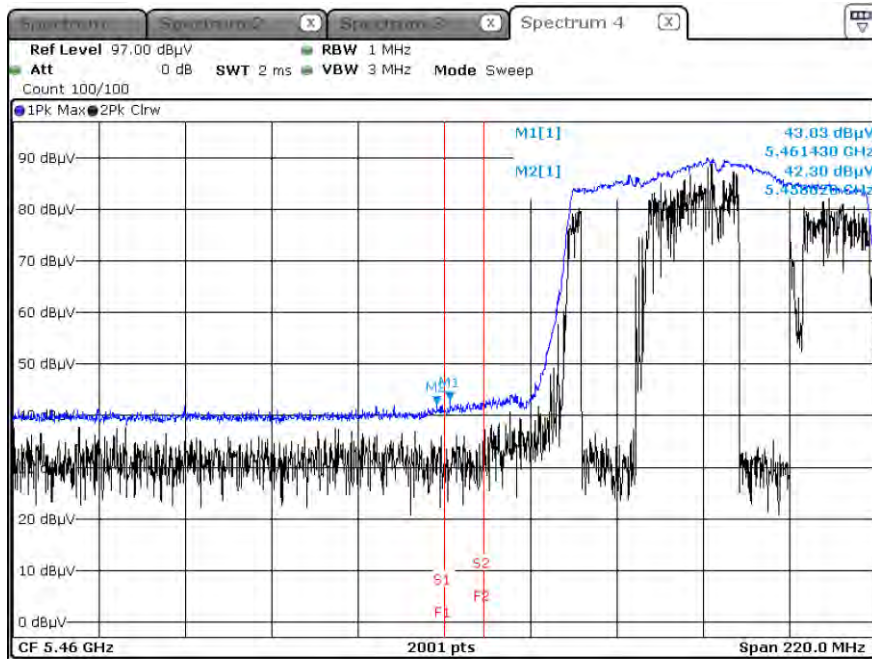
[Ant.1&Ant.2_MIMO(CDD)]

☑ Test Plots(UNII 1, 2A, 2C)

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



Peak Result (802.11 ac_VHT80_MCS0, Ch.106, X-H)

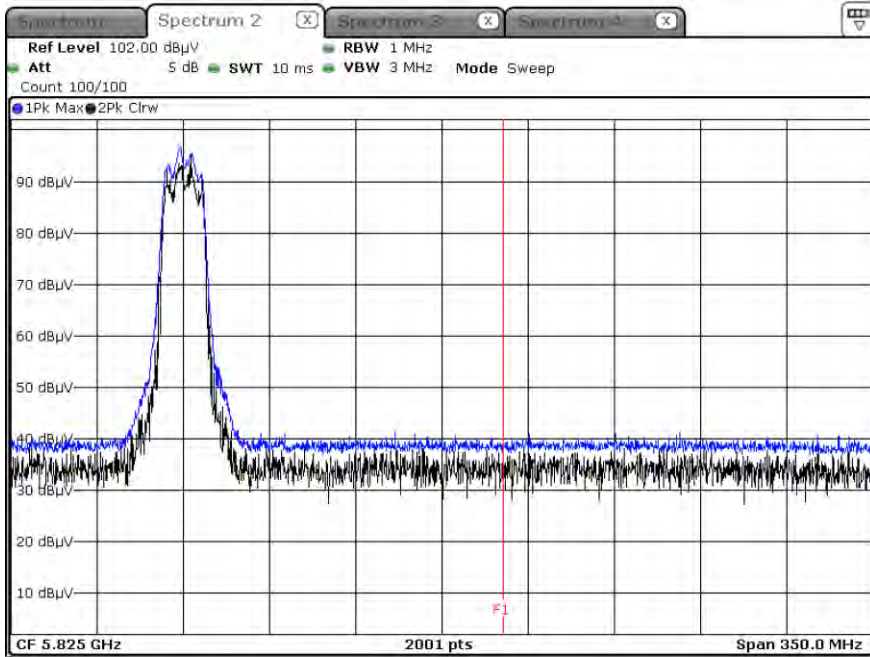


Note:

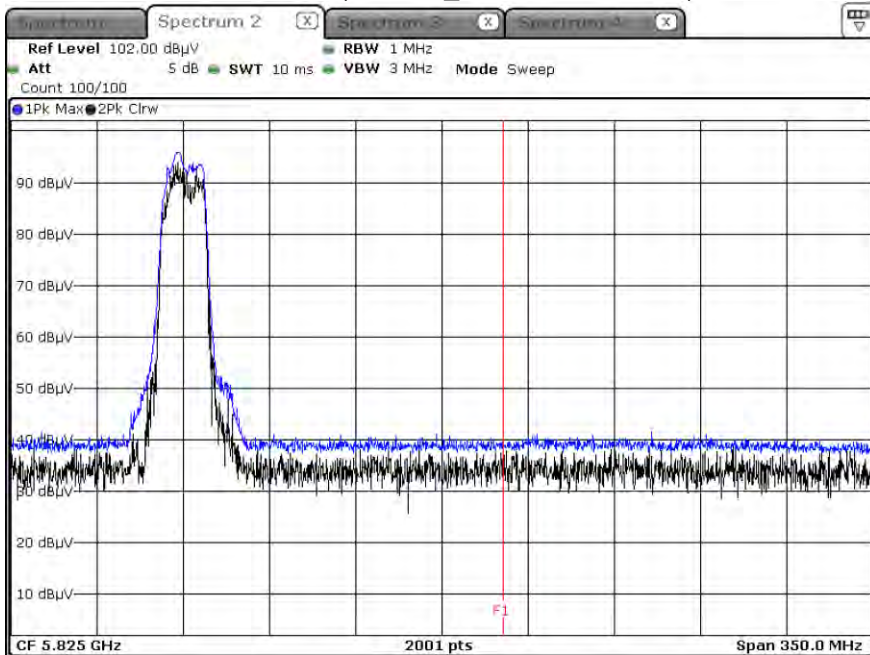
Only the worst case plots for Radiated Restricted Band Edge.

▣ Test Plots(Straddle Channel)

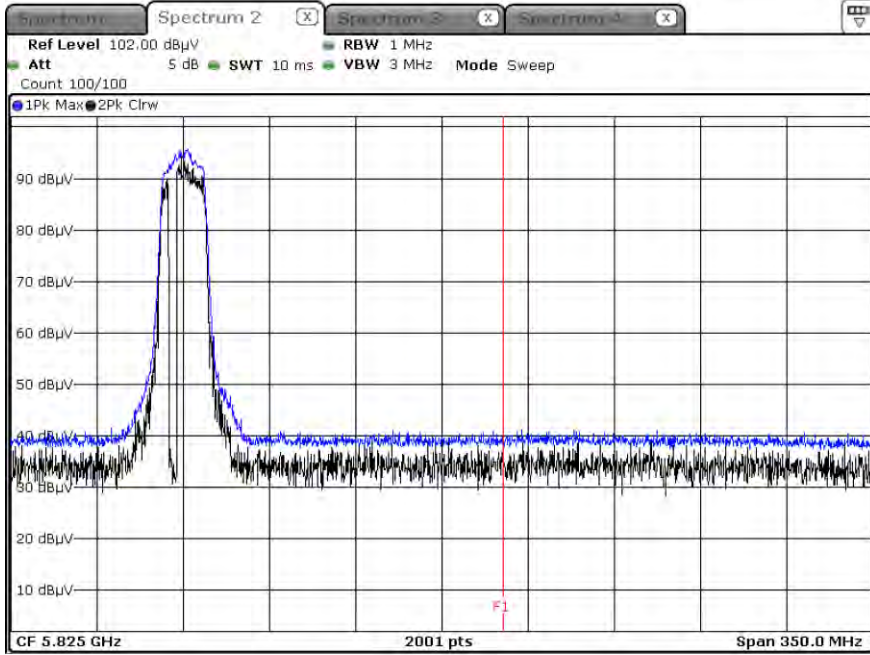
Peak Result (802.11a, Ch.144, X-H)



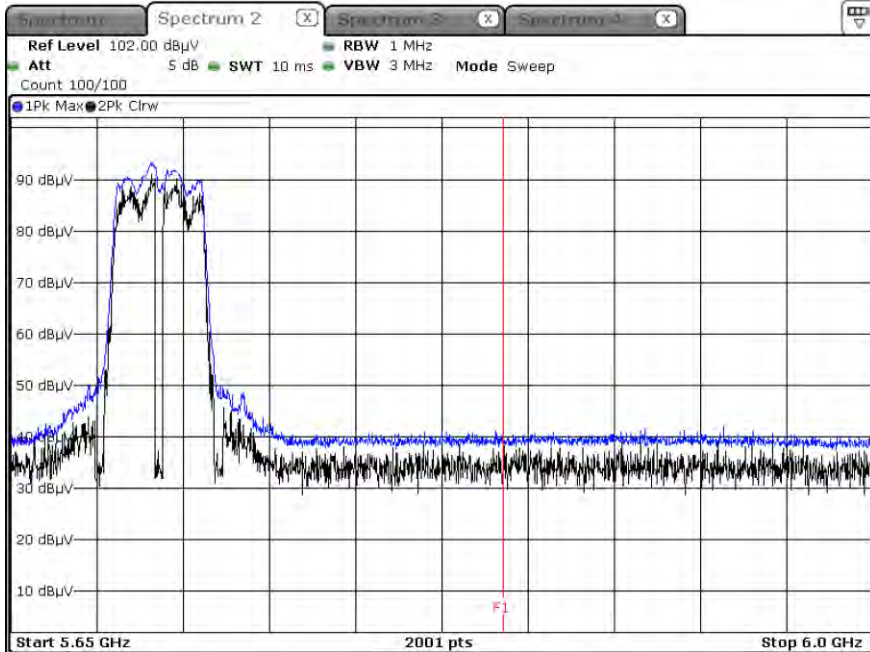
Peak Result (802.11n_HT20, Ch.144, X-H)



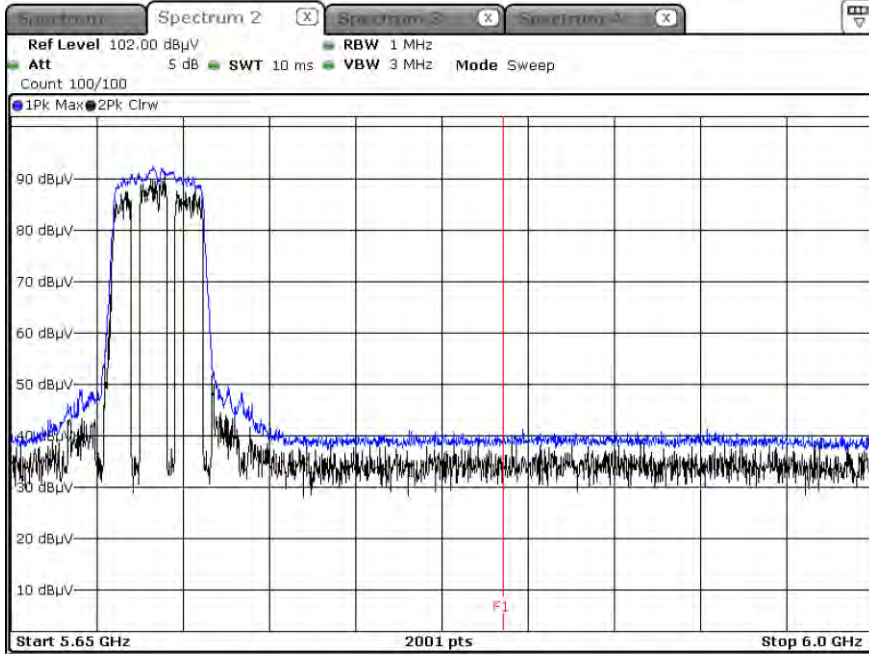
Peak Result (802.11ac_VHT20, Ch.144, X-H)



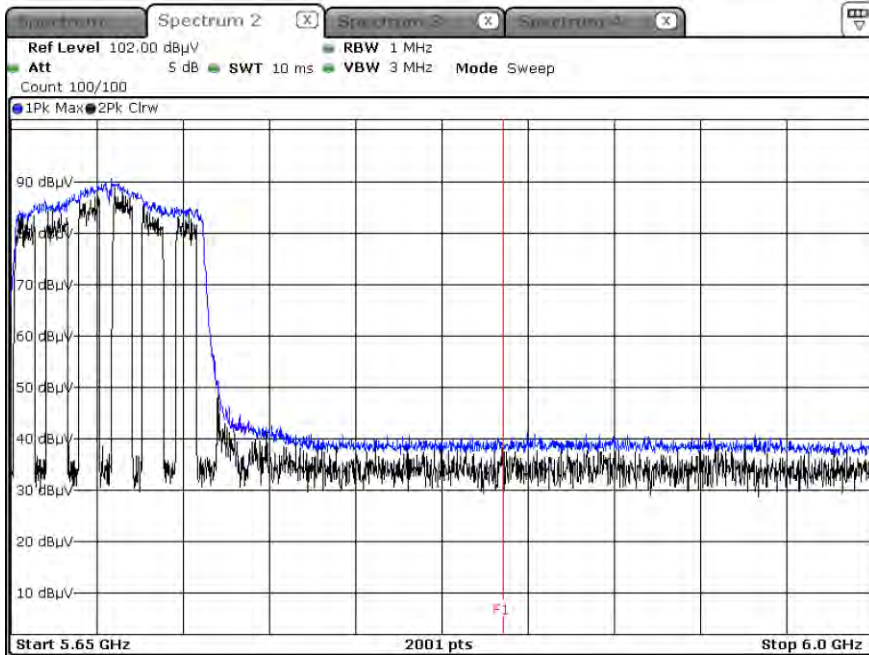
Peak Result (802.11n_HT40, Ch.142, X-H)



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



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

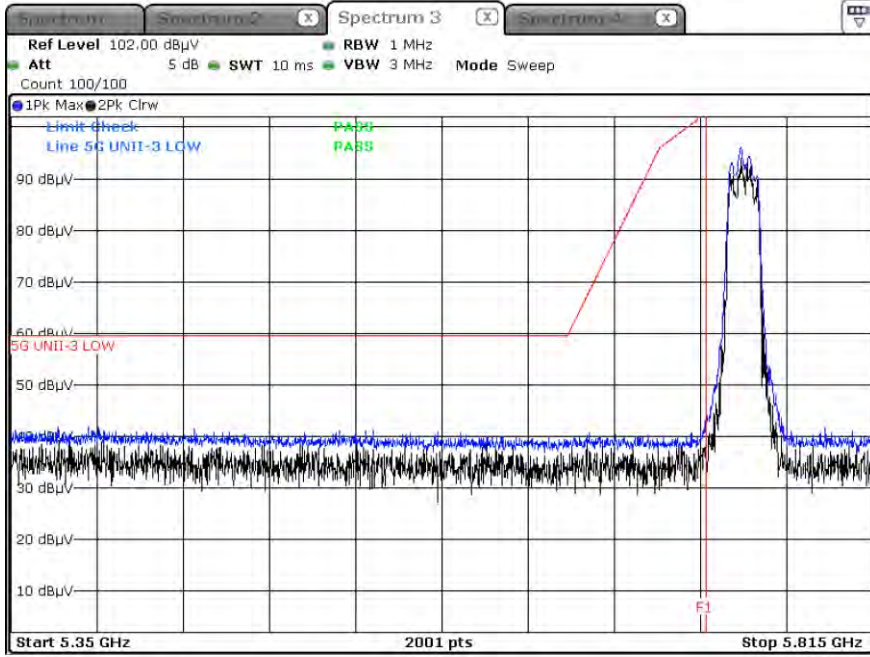


Note :

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)

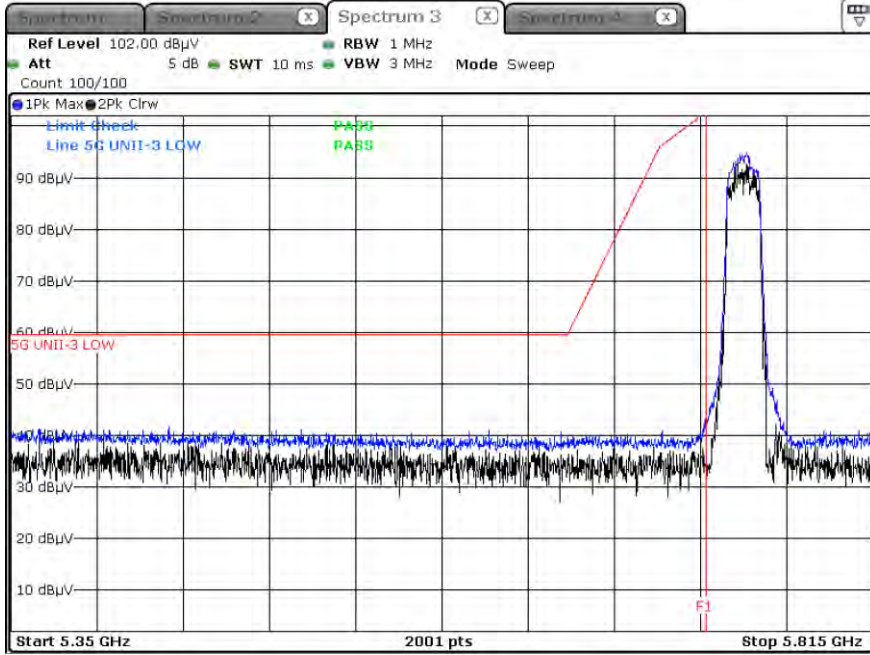
Peak Result (802.11a, Ch.149, X-H)



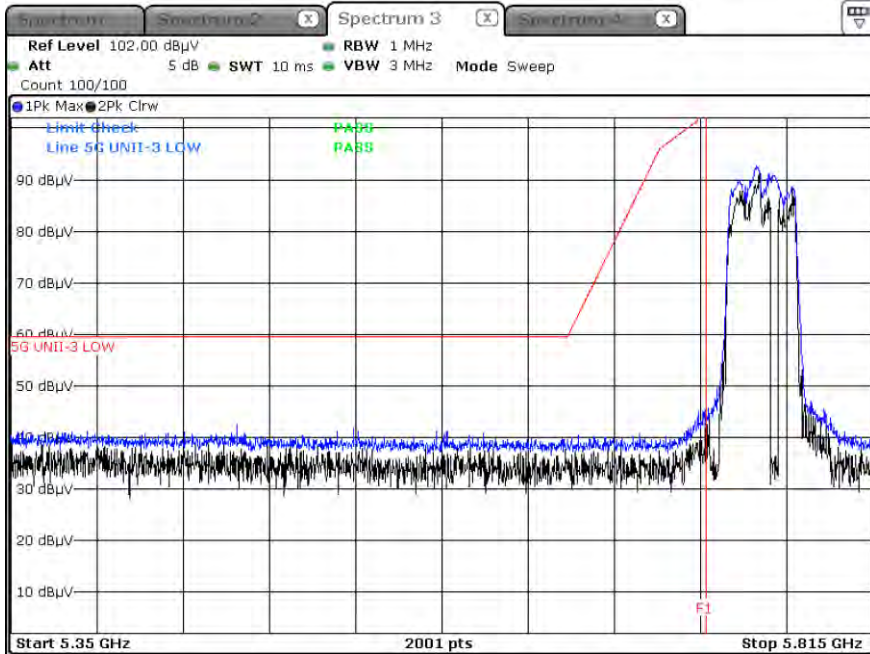
Peak Result (802.11n_HT20, Ch.149, X-H)



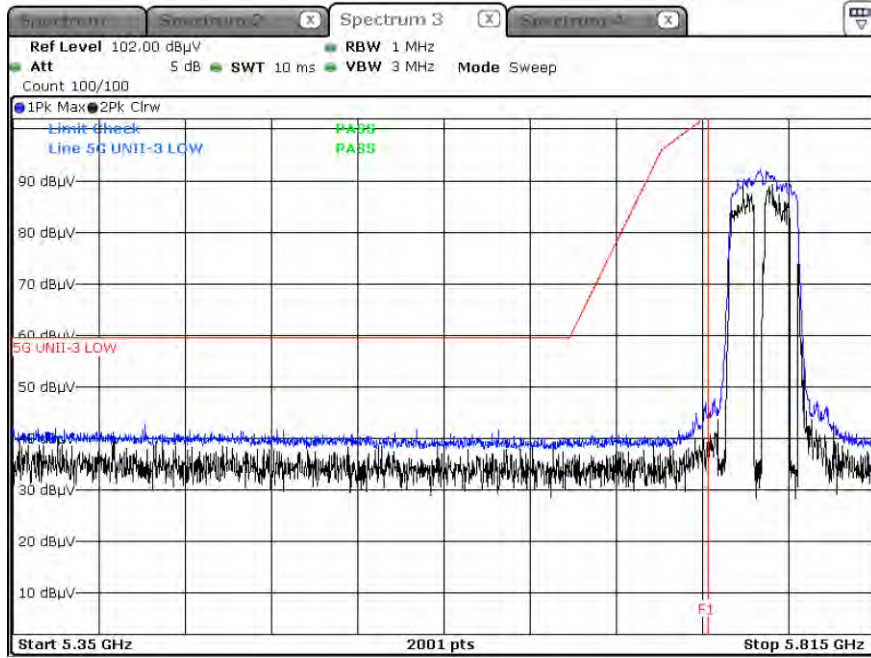
Peak Result (802.11ac_VHT20, Ch.149, X-H)



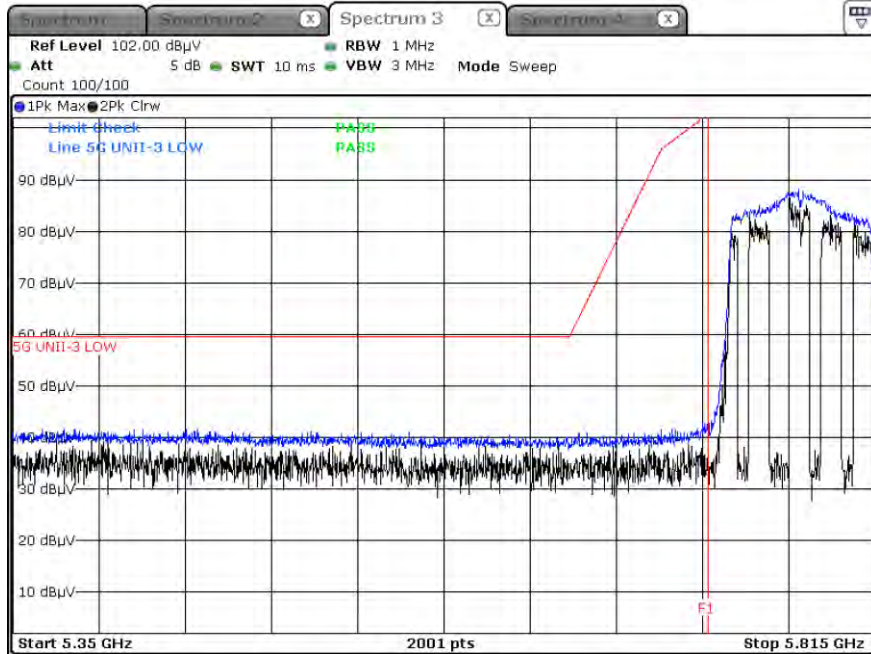
Peak Result (802.11n_HT40, Ch.151, X-H)



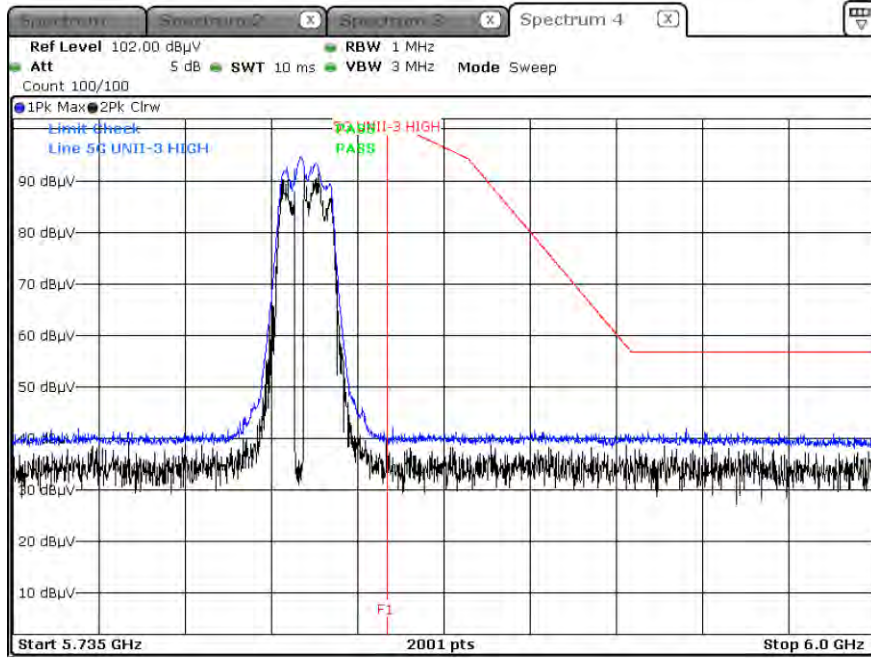
Peak Result (802.11ac_VHT40, Ch.151, X-H)



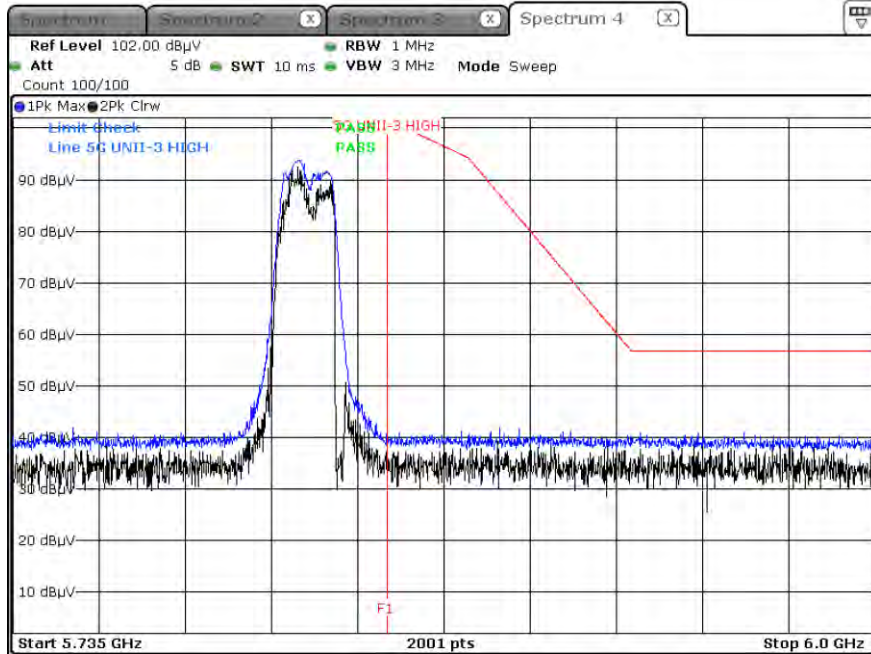
Peak Result (802.11ac_VHT80, Ch.155, X-H)



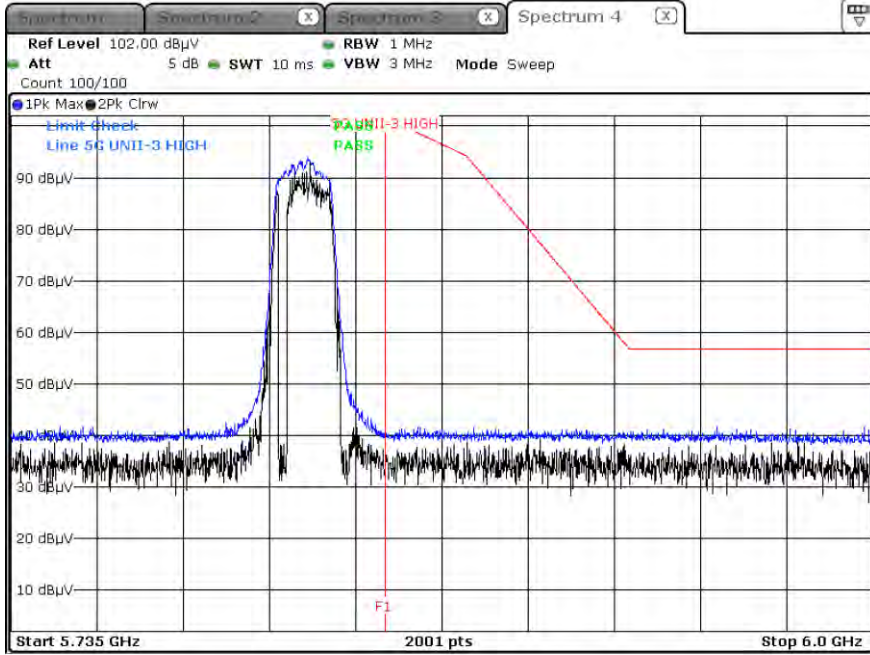
Peak Result (802.11a, Ch.165, X-H)



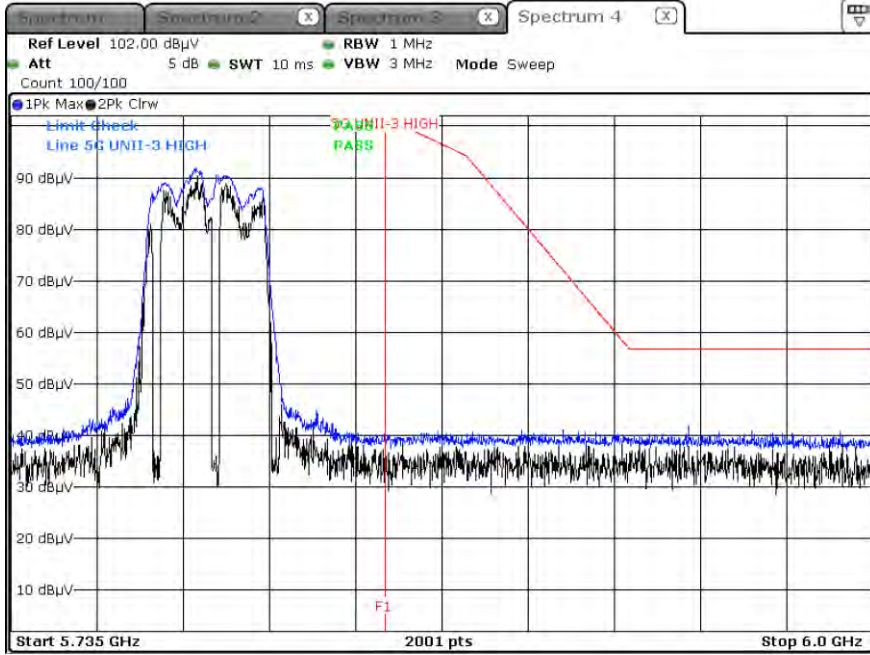
Peak Result (802.11n_HT20, Ch.165, X-H)



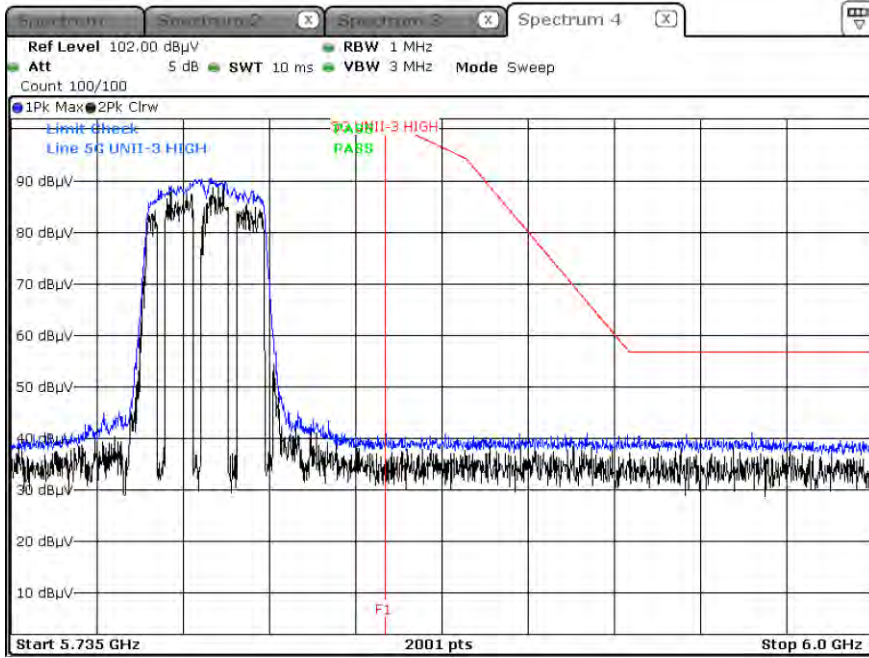
Peak Result (802.11ac_VHT20, Ch.165, X-H)



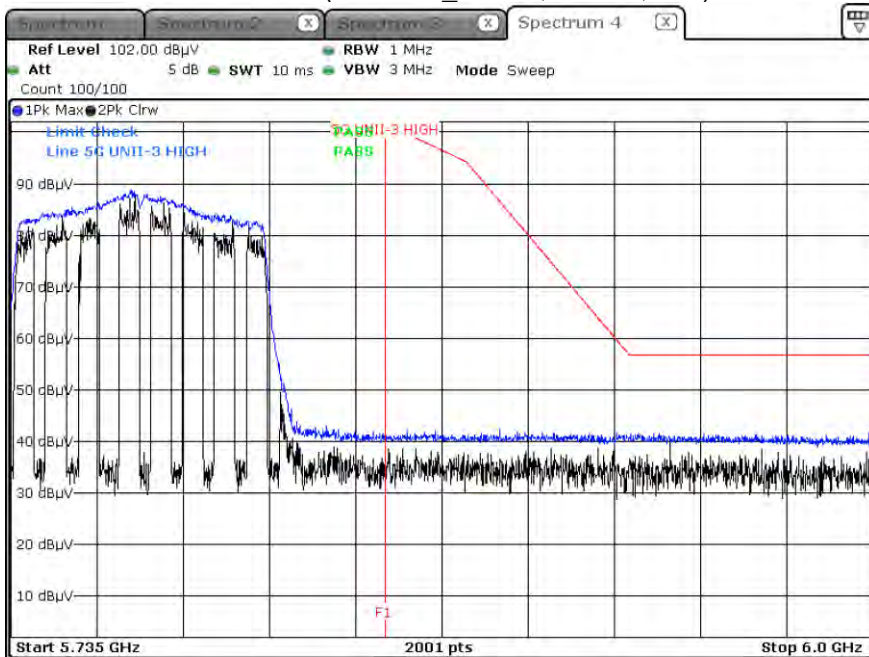
Peak Result (802.11n_HT40, Ch.159, X-H)



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



Peak Result (802.11ac_VHT80, Ch.155, X-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.

10.10 POWERLINE CONDUCTED EMISSIONS

Conducted Emissions (Line 1)

Test

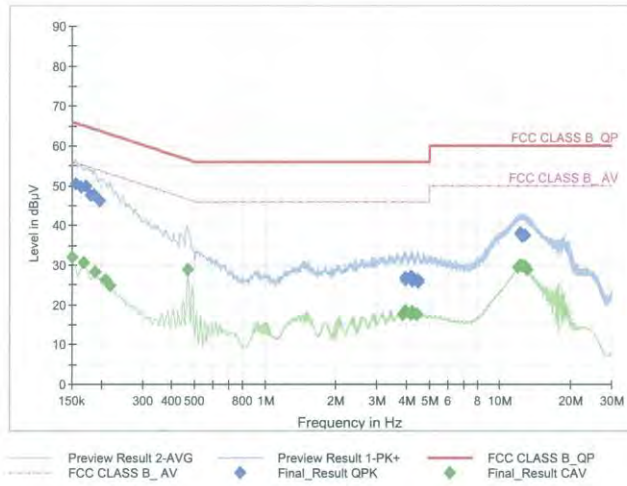
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Test Report

Common Information

EUT : SM-G990B2/DS
 Manufacturer : SAMSUNG Electronics Co., Ltd.
 Test Site: SHIELD ROOM
 Operating Conditions : 5G WLAN_L1 mode
 Operator Name:
 Comment:

Full Spectrum



Final Result QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.1545	50.51	65.75	15.24	9.000	L1	OFF	9.6
0.1635	49.70	65.28	15.59	9.000	L1	OFF	9.6
0.1725	49.98	64.84	14.86	9.000	L1	OFF	9.6
0.1793	47.72	64.52	16.80	9.000	L1	OFF	9.6
0.1860	47.72	64.21	16.50	9.000	L1	OFF	9.6
0.1973	46.08	63.73	17.64	9.000	L1	OFF	9.6
3.9470	26.29	56.00	29.71	9.000	L1	OFF	9.8
3.9515	26.96	56.00	29.04	9.000	L1	OFF	9.8
4.1743	27.02	56.00	28.98	9.000	L1	OFF	9.8
4.2418	25.95	56.00	30.05	9.000	L1	OFF	9.8
4.4645	26.22	56.00	29.78	9.000	L1	OFF	9.8
4.4690	25.79	56.00	30.21	9.000	L1	OFF	9.8
12.2315	37.79	60.00	22.21	9.000	L1	OFF	10.1
12.2563	38.19	60.00	21.81	9.000	L1	OFF	10.1
12.4813	37.26	60.00	22.74	9.000	L1	OFF	10.1
12.5015	37.21	60.00	22.79	9.000	L1	OFF	10.1
12.5308	37.54	60.00	22.46	9.000	L1	OFF	10.1
12.7625	37.50	60.00	22.50	9.000	L1	OFF	10.1

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Test

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Final Result CAV

Frequency (MHz)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.1500	31.98	56.00	24.02	9.000	L1	OFF	9.6
0.1680	30.63	55.06	24.43	9.000	L1	OFF	9.6
0.1883	28.19	54.11	25.93	9.000	L1	OFF	9.6
0.2085	26.24	53.27	27.02	9.000	L1	OFF	9.6
0.2175	24.88	52.91	28.03	9.000	L1	OFF	9.6
0.4673	28.90	46.56	17.67	9.000	L1	OFF	9.7
3.8840	17.51	46.00	28.49	9.000	L1	OFF	9.8
3.9515	18.41	46.00	27.59	9.000	L1	OFF	9.8
3.9740	18.25	46.00	27.75	9.000	L1	OFF	9.8
4.1743	17.66	46.00	28.34	9.000	L1	OFF	9.8
4.2170	18.24	46.00	27.76	9.000	L1	OFF	9.8
4.4375	17.66	46.00	28.34	9.000	L1	OFF	9.8
11.9863	29.47	50.00	20.53	9.000	L1	OFF	10.1
12.2540	30.02	50.00	19.98	9.000	L1	OFF	10.1
12.4543	29.81	50.00	20.19	9.000	L1	OFF	10.1
12.4768	29.83	50.00	20.17	9.000	L1	OFF	10.1
12.7625	29.65	50.00	20.35	9.000	L1	OFF	10.1
13.0415	28.84	50.00	21.16	9.000	L1	OFF	10.1

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Conducted Emissions (Line 2)

Test

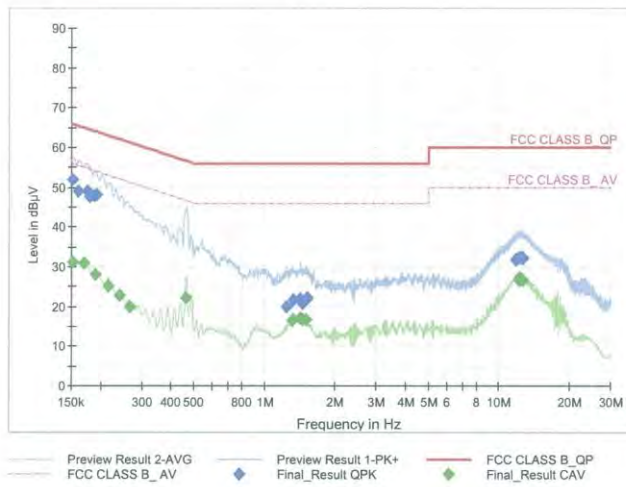
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Test Report

Common Information

EUT : SM-G990B2/DS
 Manufacturer : SAMSUNG Electronics Co., Ltd.
 Test Site: SHIELD ROOM
 Operating Conditions : 5G WLAN_N mode
 Operator Name:
 Comment:

Full Spectrum



Final Result QPK

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.1523	52.07	65.88	13.81	9.000	N	OFF	9.6
0.1613	48.90	65.40	16.50	9.000	N	OFF	9.6
0.1748	49.14	64.73	15.60	9.000	N	OFF	9.6
0.1793	47.50	64.52	17.02	9.000	N	OFF	9.6
0.1883	47.95	64.11	16.16	9.000	N	OFF	9.6
0.1928	48.16	63.92	15.76	9.000	N	OFF	9.6
1.2403	19.77	56.00	36.23	9.000	N	OFF	9.7
1.3258	21.77	56.00	34.23	9.000	N	OFF	9.7
1.4225	22.06	56.00	33.94	9.000	N	OFF	9.7
1.4518	20.87	56.00	35.13	9.000	N	OFF	9.7
1.5035	21.73	56.00	34.27	9.000	N	OFF	9.7
1.5283	22.25	56.00	33.75	9.000	N	OFF	9.7
11.8198	31.67	60.00	28.33	9.000	N	OFF	10.1
12.0830	32.03	60.00	27.97	9.000	N	OFF	10.1
12.3440	32.18	60.00	27.82	9.000	N	OFF	10.2
12.3733	32.20	60.00	27.80	9.000	N	OFF	10.2
12.6365	32.25	60.00	27.75	9.000	N	OFF	10.2
12.6658	32.03	60.00	27.98	9.000	N	OFF	10.2

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Test

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Final Result CAV

Frequency (MHz)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.1523	31.12	55.88	24.75	9.000	N	OFF	9.6
0.1703	30.85	54.95	24.09	9.000	N	OFF	9.6
0.1905	28.10	54.02	25.92	9.000	N	OFF	9.6
0.2153	25.04	53.00	27.96	9.000	N	OFF	9.6
0.2400	22.78	52.10	29.32	9.000	N	OFF	9.6
0.2648	20.00	51.28	31.28	9.000	N	OFF	9.6
0.4628	22.23	46.64	24.41	9.000	N	OFF	9.7
1.3145	16.35	46.00	29.65	9.000	N	OFF	9.7
1.3258	16.64	46.00	29.36	9.000	N	OFF	9.7
1.4225	17.06	46.00	28.94	9.000	N	OFF	9.7
1.4473	16.65	46.00	29.35	9.000	N	OFF	9.7
1.5058	16.86	46.00	29.14	9.000	N	OFF	9.7
12.1753	26.68	50.00	23.32	9.000	N	OFF	10.1
12.2518	26.98	50.00	23.02	9.000	N	OFF	10.2
12.3013	26.95	50.00	23.05	9.000	N	OFF	10.2
12.3170	26.97	50.00	23.03	9.000	N	OFF	10.2
12.4115	26.90	50.00	23.10	9.000	N	OFF	10.2
12.5578	26.58	50.00	23.42	9.000	N	OFF	10.2

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11. LIST OF TEST EQUIPMENT

Conducted Test

Equipment	Model	Manufacturer	Serial No.	Due to Calibration	Calibration Interval
LISN	ENV216	Rohde & Schwarz	102245	08/23/2022	Annual
EMI Test Receiver	ESR	Rohde & Schwarz	101910	06/07/2023	Annual
Temperature Chamber	SU-642	ESPEC	0093008124	03/04/2023	Annual
Signal Analyzer	N9030A	Agilent	MY49431210	01/11/2023	Annual
Power Measurement Set	OSP 120	Rohde & Schwarz	101231	06/14/2023	Annual
Power Meter	N1911A	Agilent	MY45100523	03/24/2023	Annual
Power Sensor	N1921A	Keysight	MY57820067	03/24/2023	Annual
Directional Coupler	87300B	Agilent	3116A03621	11/02/2022	Annual
Power Splitter	11667B	Hewlett Packard	05001	05/18/2023	Annual
DC Power Supply	E3646A	Agilent	MY40002937	12/14/2022	Annual
Attenuator(10 dB)	8493C	Hewlett Packard	07560	06/18/2022	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

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
Controller	EM1000	Audix	060520	N/A	N/A
Turn Table	N/A	Audix	N/A	N/A	N/A
Loop Antenna	FMZB 1513	Rohde & Schwarz	1513-333	03/17/2024	Biennial
Hybrid Antenna	VULB 9168	Schwarzbeck	760	02/22/2023	Biennial
Horn Antenna	BBHA 9120D	Schwarzbeck	02299	03/24/2024	Biennial
Horn Antenna (15GHz ~ 40 GHz)	BBHA9170	Schwarzbeck	BBHA9170342	10/13/2022	Biennial
Spectrum Analyzer	FSV40-N	Rohde & Schwarz	102168	07/05/2022	Annual
Signal Analyzer	N9030A	Agilent	MY49431210	01/11/2023	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
Band Reject Filter	WRCJV2400/2483.5-2370/2520-60/12SS	Wainwright Instruments	2	01/06/2023	Annual
Band Reject Filter	WRCJV5100/5850-40/50-8EEK	Wainwright Instruments	1	02/07/2023	Annual
High Pass Filter	WHK3.0/18G-10EF	Wainwright Instruments	8	01/21/2023	Annual
High Pass Filter	WHKX8-6090-7000-18000-40SS	Wainwright Instruments	25	01/21/2023	Annual
Attenuator (3 dB)	18B-03	Api tech.	1	01/21/2023	Annual
Attenuator(10 dB)	8493C-10	Agilent	08285	01/21/2023	Annual
Power Amplifier	CBLU1183540	CERNEX	22964	01/21/2023	Annual
Power Amplifier	CBL06185030	CERNEX	22965	01/21/2023	Annual
Power Amplifier	CBL18265035	CERNEX	22966	12/02/2022	Annual
Power Amplifier	CBL26405040	CERNEX	25956	03/11/2023	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-2206-FC012-P