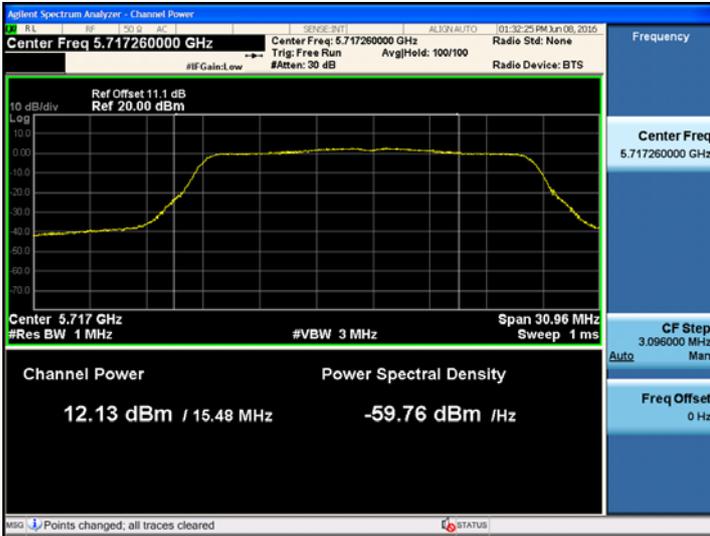


Straddle channels TEST Plot for 802.11ac_VHT20

802.11ac_VHT20 UNII 2C Band Average Power CH.144



802.11ac_VHT20 UNII 3 Band Average Power CH.144



■ Straddle channels TEST RESULTS

Conducted Output Power Measurements (802.11n_HT40/ac_VHT40 Mode: UNII 2C Band 5710MHz)

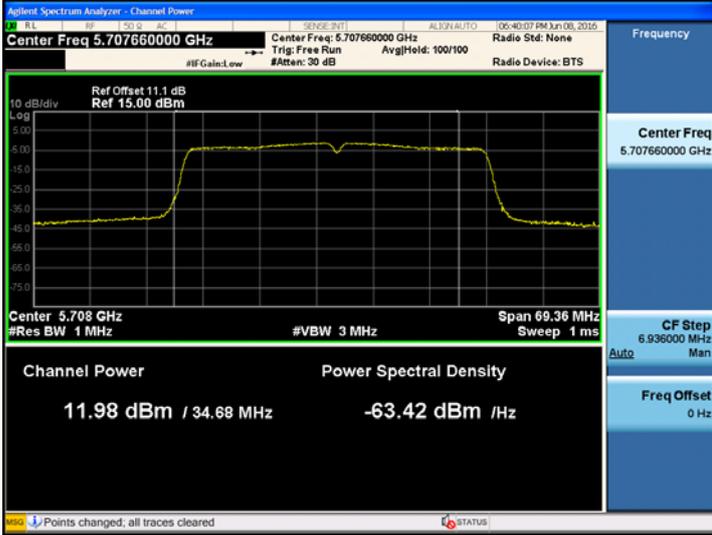
Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11n	5710	142	11.98	0.15	12.13	23.39
802.11ac			11.90	0.20	12.10	23.41

Conducted Output Power Measurements (802.11n_HT40/ac_VHT40 Mode: UNII 3 Band 5710MHz)

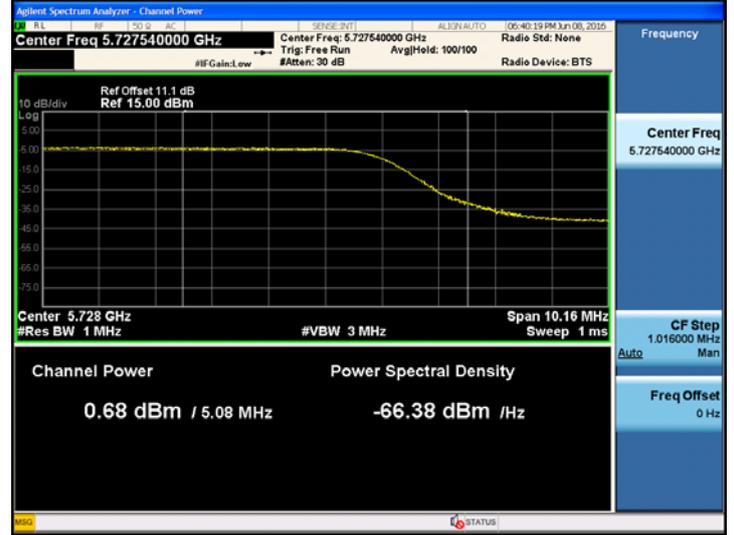
Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11n	5710	142	0.68	0.15	0.83	21.06
802.11ac			0.60	0.20	0.80	20.89

Straddle channels TEST Plot for 802.11n_HT40/ac_VHT40

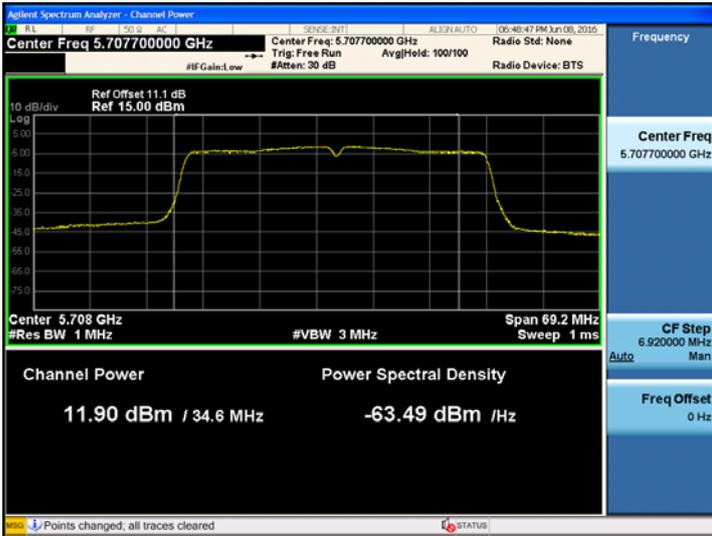
802.11n_HT40 UNII 2C Band Average Power CH.142



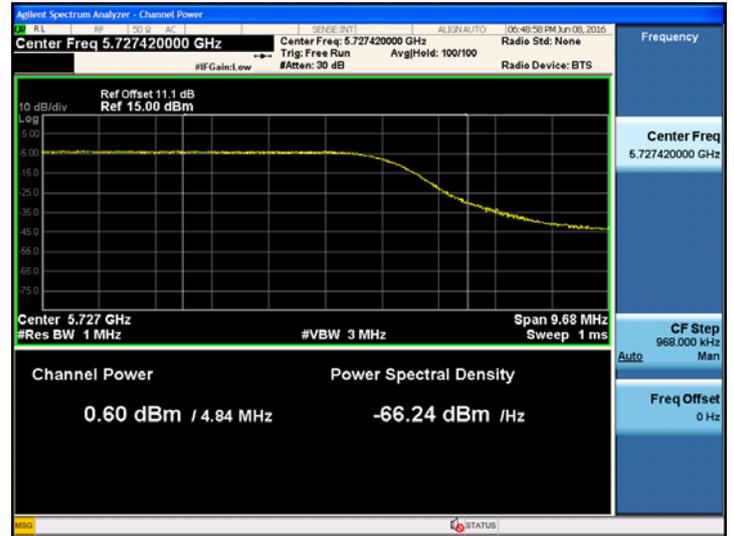
802.11n_HT40 UNII 3 Band Average Power CH.142



802.11ac_VHT40 UNII 2C Band Average Power CH.142



802.11ac_VHT40 UNII 3 Band Average Power CH.142



Straddle channels TEST RESULTS

Conducted Output Power Measurements (802.11ac_VHT80 Mode: UNII 2C Band 5690MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11ac	5690	138	10.87	0.49	11.36	23.66

Conducted Output Power Measurements (802.11ac_VHT80 Mode: UNII 3 Band 5690MHz)

Mode	Frequency [MHz]	Channel No.	Measured Power (dBm)	Duty Cycle Factor (dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
802.11ac	5690	138	-4.21	0.49	-3.72	18.46

Straddle channels TEST Plot for 802.11ac_VHT80

802.11ac_VHT80 UNII 2C Band Average Power CH.138



802.11ac_VHT80 UNII 3 Band Average Power CH.138



9.4 POWER SPECTRAL DENSITY

The peak power density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating in transmission mode at the appropriate frequencies. The maximum permissible peak power spectral density is 11 dBm/ MHz for UNII 1,2A, 2C and 30 dBm/500 kHz for UNII 3.

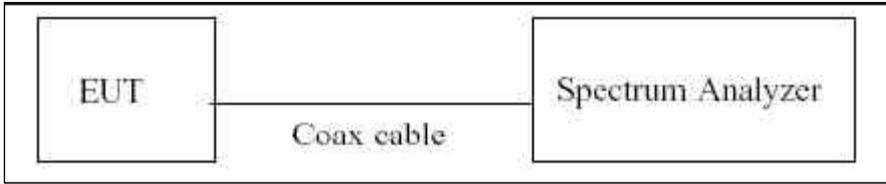
■ Limit

Power Spectral Density

Band	Mode	Limit
UNII 1	802.11 a,n,ac	11 dBm/MHz
UNII 2A	802.11a,n,ac	11 dBm/MHz
UNII 2C	802.11a,n,ac	11 dBm/MHz
UNII 3	802.11a,n,ac	30 dBm/500 kHz

Note : According to KDB644545 D03 v01, emission for band straddle channels in each shall comply with the PSD limits applicable to that band under the appropriate rule section.

■ **TEST CONFIGURATION**



■ **TEST PROCEDURE**

We tested according to Method in KDB 789033 D02 v01r02.

The spectrum analyzer is set to :

1. Set span to encompass the entire emission bandwidth(EBW) of the signal.
2. RBW = 1 MHz(510 kHz for UNII 3)
3. VBW ≥ 3 MHz
4. Number of points in sweep ≥ 2*span/RBW.
5. Sweep time = auto.
6. Detector = RMS(i.e., power averaging), if available. Otherwise, use sample detector mode.
7. Do not use sweep triggering. Allow the sweep to “free run”.
8. Trace average at least 100 traces in power averaging(RMS) mode
9. Use the peak search function on the spectrum analyzer to find the peak of the spectrum.
10. If Method SA-2 was used, add $10 \log(1/x)$, where x is the duty cycle, to the peak of the spectrum.

■ **Sample Calculation**

PSD = Reading Value + ATT loss + Cable loss(1 ea) + Duty Cycle Factor

Output Power = 5 dBm + 10 dB + 0.8 dB + 0.21 dB = 16.01 dBm

Note :

1. Spectrum reading values are not plot data. The PSD results in plot is already including the actual values of loss for the attenuator and cable combination.
2. Spectrum offset = Attenuator loss + Cable loss
3. We apply to the offset in the 5.2 GHz, 5.3 GHz and 5.6 GHz range that was rounded off to the closest tenth dB. Actual value of loss for the attenuator and cable combination is below table.

Band	Loss(dB)
UNII 1, 2A , 2C, 3	11.1

(Actual value of loss for the attenuator and cable combination)

■ 802.11a

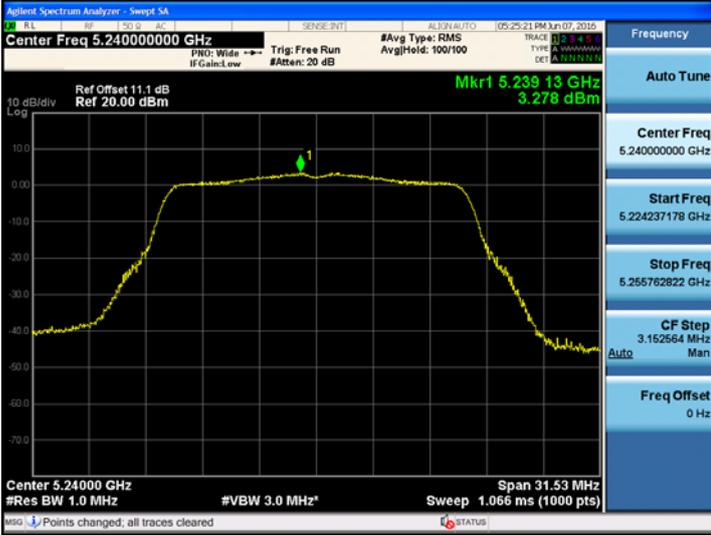
■ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5180	36	802.11a	2.728	0.059	2.787	11	Pass
5200	40		3.058	0.062	3.120		Pass
5240	48		3.278	0.059	3.337		Pass
5260	52		3.492	0.109	3.601	11	Pass
5300	60		3.233	0.062	3.295		Pass
5320	64		3.398	0.092	3.490		Pass
5500	100		3.146	0.109	3.255	11	Pass
5580	116		3.291	0.109	3.400		Pass
5720	144		3.597	0.109	3.706		Pass
5745	149		1.135	0.092	1.227	30	Pass
5785	157		0.965	0.062	1.027		Pass
5825	165		0.961	0.059	1.020		Pass

TEST Plot for 802.11a

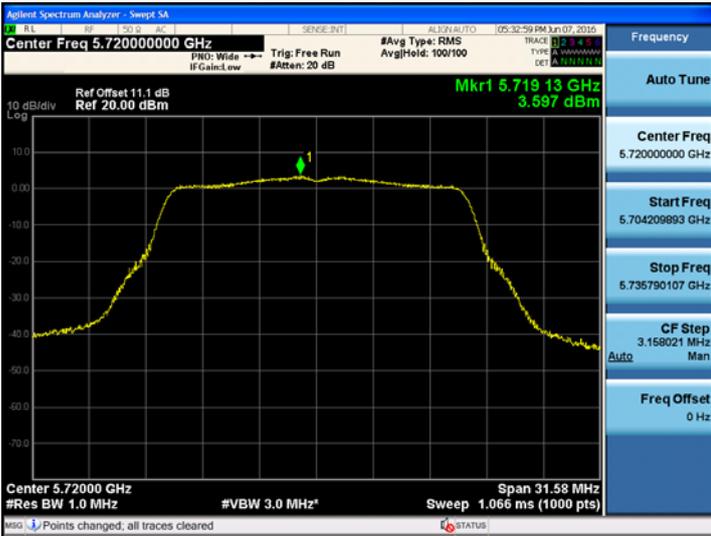
802.11a UNII 1 BAND PSD CH 48



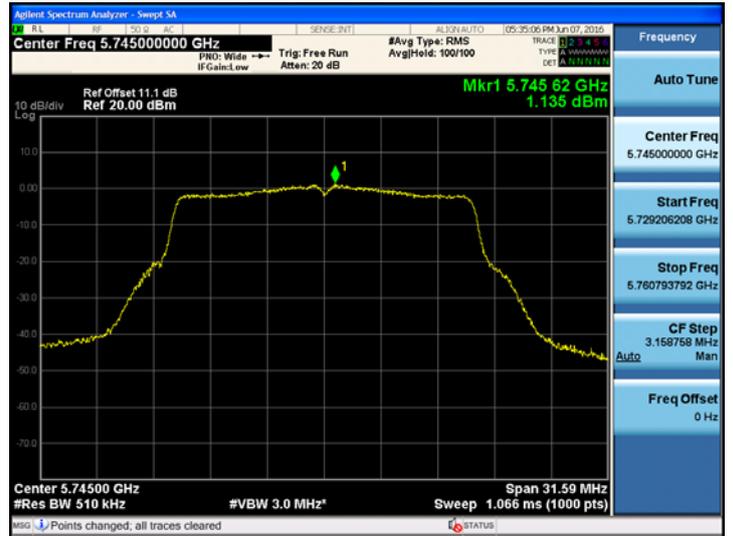
802.11a UNII 2A BAND PSD CH 52



802.11a UNII 2C BAND PSD CH 144



802.11a UNII 3 BAND PSD CH 149



■802.11n_HT20

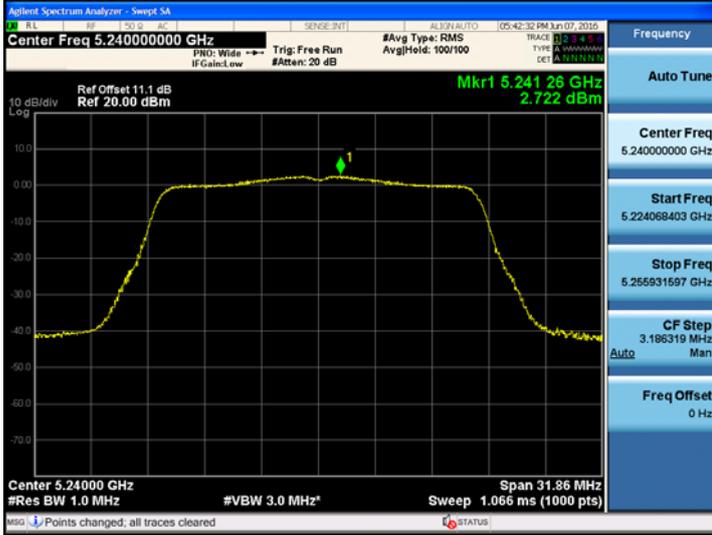
■ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5180	36	802.11n _HT20	2.024	0.050	2.074	11	Pass
5200	40		2.540	0.125	2.665		Pass
5240	48		2.722	0.050	2.772		Pass
5260	52		2.615	0.125	2.740	11	Pass
5300	60		2.817	0.050	2.867		Pass
5320	64		2.880	0.125	3.005		Pass
5500	100		2.351	0.220	2.571	11	Pass
5580	116		2.951	0.220	3.171		Pass
5720	144		2.812	0.220	3.032		Pass
5745	149		0.301	0.220	0.521	30	Pass
5785	157		0.624	0.050	0.674		Pass
5825	165		0.483	0.050	0.533		Pass

TEST Plot for 802.11n_HT20

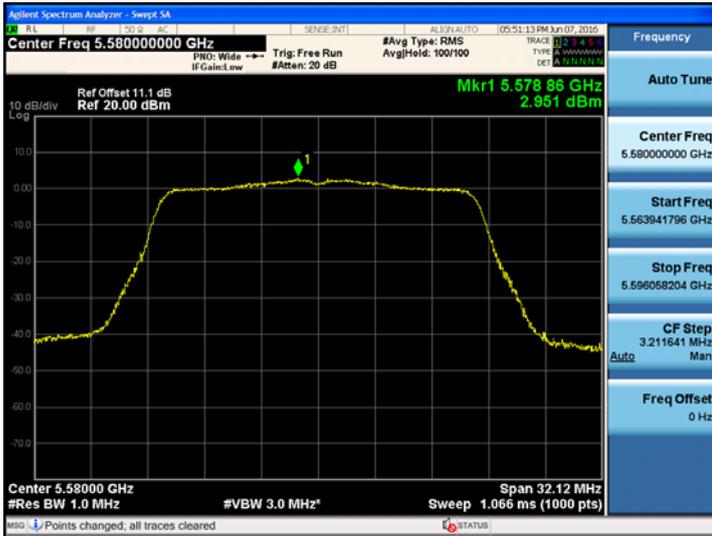
802.11n_HT20 UNII 1 BAND PSD CH 48



802.11n_HT20 UNII 2A BAND PSD CH 64



802.11n_HT20 UNII 2C BAND PSD CH 116



802.11n_HT20 UNII 3 BAND PSD CH 157



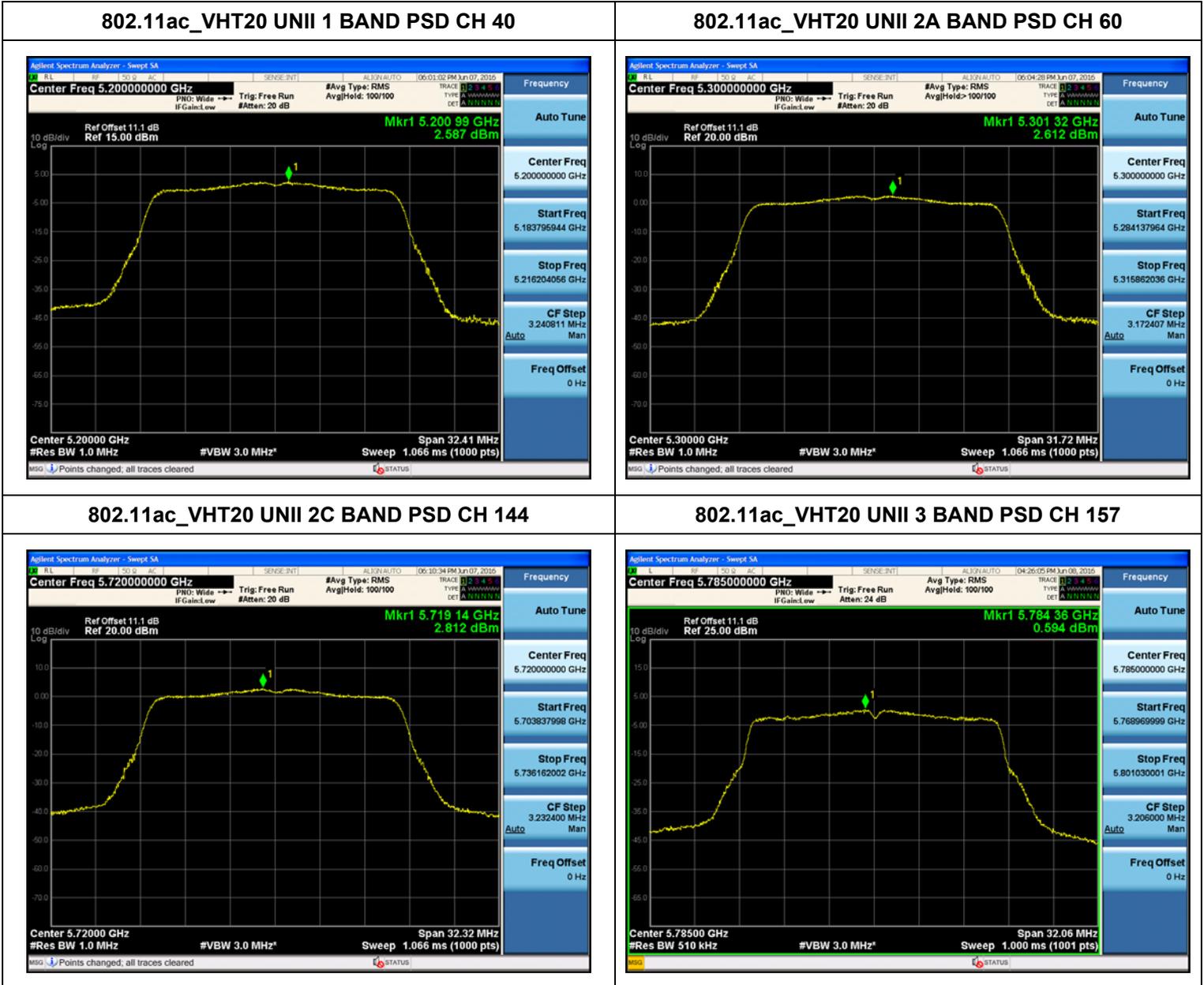
■802.11ac_VHT20

■ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5180	36	802.11ac_VHT20	2.123	0.218	2.341	11	Pass
5200	40		2.587	0.218	2.805		Pass
5240	48		2.563	0.130	2.693		Pass
5260	52		2.536	0.114	2.650	11	Pass
5300	60		2.612	0.114	2.726		Pass
5320	64		2.590	0.130	2.720		Pass
5500	100		2.327	0.050	2.377	11	Pass
5580	116		2.576	0.130	2.706		Pass
5720	144		2.812	0.156	2.968		Pass
5745	149		-0.578	0.218	-0.360	30	Pass
5785	157		0.594	0.218	0.812		Pass
5825	165		0.427	0.114	0.541		Pass

TEST Plot for 802.11ac_VHT20



■ 802.11n_HT40

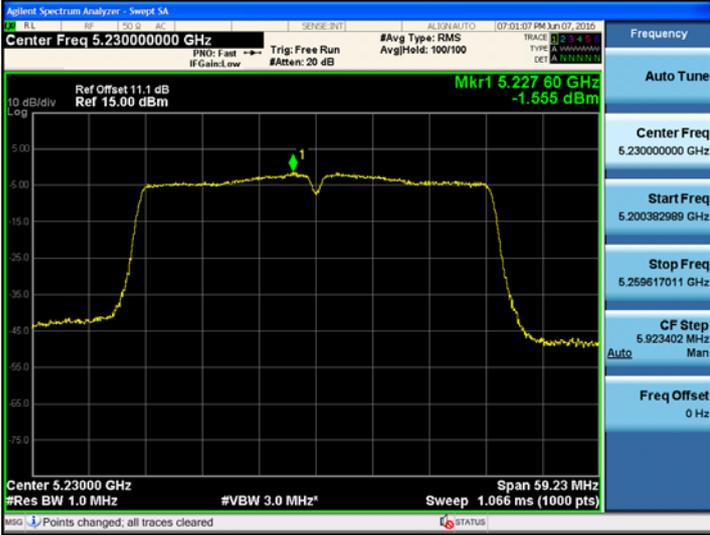
■ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5190	38	802.11n _HT40	-3.487	0.210	-3.277	11	Pass
5230	46		-1.555	0.268	-1.287		Pass
5270	54		-1.700	0.210	-1.490	11	Pass
5310	62		-1.464	0.286	-1.178		Pass
5510	102		-1.836	0.268	-1.568	11	Pass
5550	110		-1.230	0.072	-1.158		Pass
5710	142		-1.292	0.152	-1.140		Pass
5755	151		-3.748	0.072	-3.676	30	Pass
5795	159		-3.664	0.116	-3.548		Pass

TEST Plot for 802.11n_HT40

802.11n_HT40 UNII 1 BAND PSD CH 46



802.11n_HT40 UNII 2A BAND PSD CH 62



802.11n_HT40 UNII 2C BAND PSD CH 142



802.11n_HT40 UNII 3 BAND PSD CH 159



■ 802.11ac_VHT40

■ TEST RESULTS

Conducted Power Density Measurements

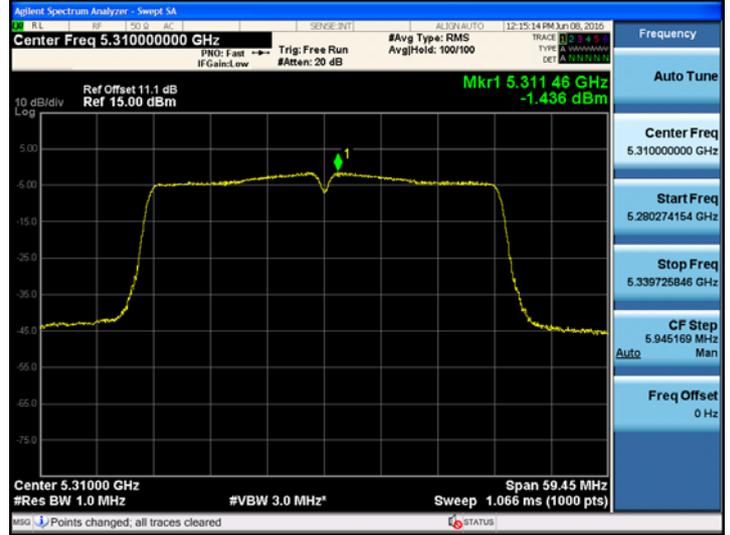
Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5190	38	802.11ac_VHT40	-3.436	0.265	-3.171	11	Pass
5230	46		-1.670	0.199	-1.471		Pass
5270	54		-1.679	0.138	-1.541	11	Pass
5310	62		-1.436	0.072	-1.364		Pass
5510	102		-1.711	0.072	-1.639	11	Pass
5550	110		-1.672	0.199	-1.473		Pass
5710	142		-1.326	0.199	-1.127		Pass
5755	151		-3.534	0.072	-3.462	30	Pass
5795	159		-3.620	0.100	-3.520		Pass

TEST Plot for 802.11ac_VHT40

802.11ac_VHT40 UNII 1 BAND PSD CH 46



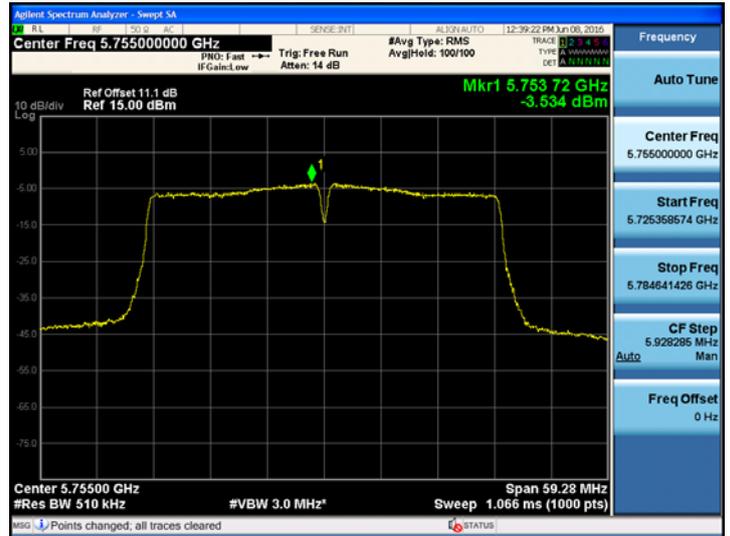
802.11ac_VHT40 UNII 2A BAND PSD CH 62



802.11ac_VHT40 UNII 2C BAND PSD CH 142



802.11ac_VHT40 UNII 3 BAND PSD CH 151



■ 802.11ac_VHT80

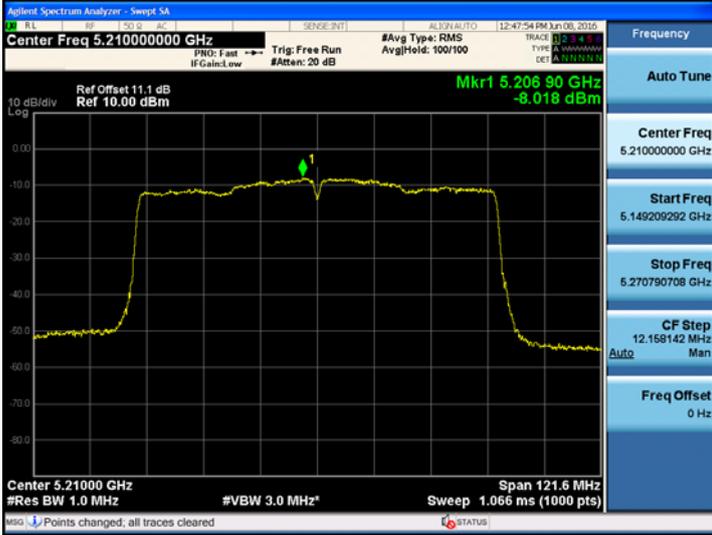
■ TEST RESULTS

Conducted Power Density Measurements

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5210	42	802.11ac_VHT80	-8.018	0.490	-7.528	11	Pass
5290	58		-5.938	0.490	-5.448		Pass
5530	106		-5.862	0.548	-5.314		Pass
5690	138		-5.406	0.490	-4.916		Pass
5775	155		-8.036	0.490	-7.546	30	Pass

TEST Plot for 802.11ac_VHT80

802.11ac_VHT80 UNII 1 BAND PSD CH 42



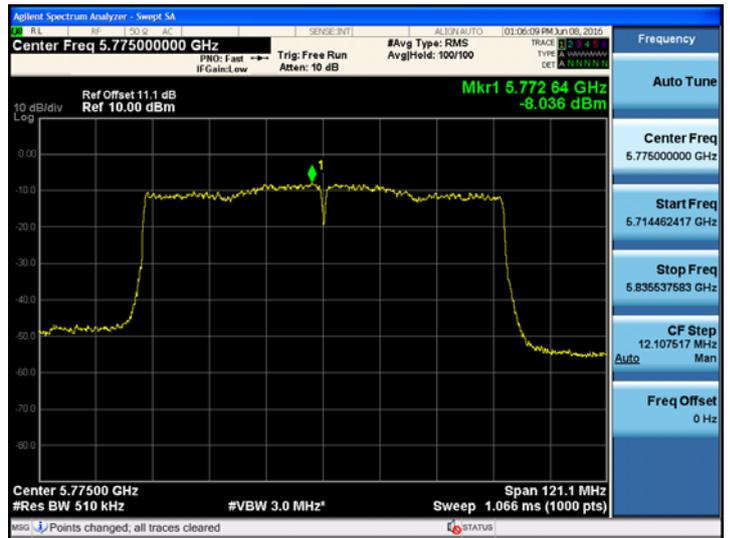
802.11ac_VHT80 UNII 2A BAND PSD CH 58



802.11ac_VHT80 UNII 2C BAND PSD CH 138



802.11ac_VHT80 UNII 3 BAND PSD CH 155



■ Straddle channels TEST RESULTS for 802.11a/n_HT20/ac_VHT20

Conducted Power Density Measurements (UNII 2C Band 5720MHz)

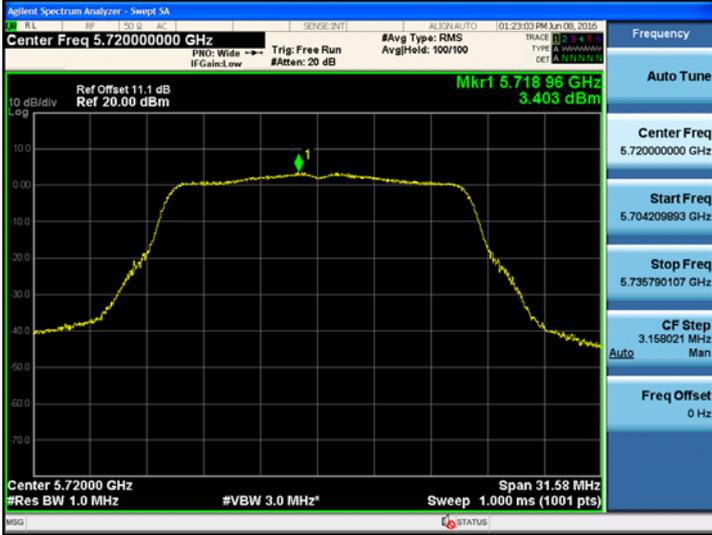
Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5720	144	802.11a	3.403	0.109	3.512	11	Pass
		802.11n	2.894	0.220	3.114	11	Pass
		802.11ac	2.735	0.156	2.891	11	Pass

Conducted Power Density Measurements (UNII 3 Band 5720MHz)

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5720	144	802.11a	-1.885	0.109	-1.776	30	Pass
		802.11n	-2.452	0.220	-2.232	30	Pass
		802.11ac	-2.387	0.156	-2.231	30	Pass

☐ Straddle channels TEST Plot for 802.11a/n_HT20/ac_VHT20

802.11a UNII 2C Band PSD CH.144



802.11a UNII 3 Band PSD CH.144



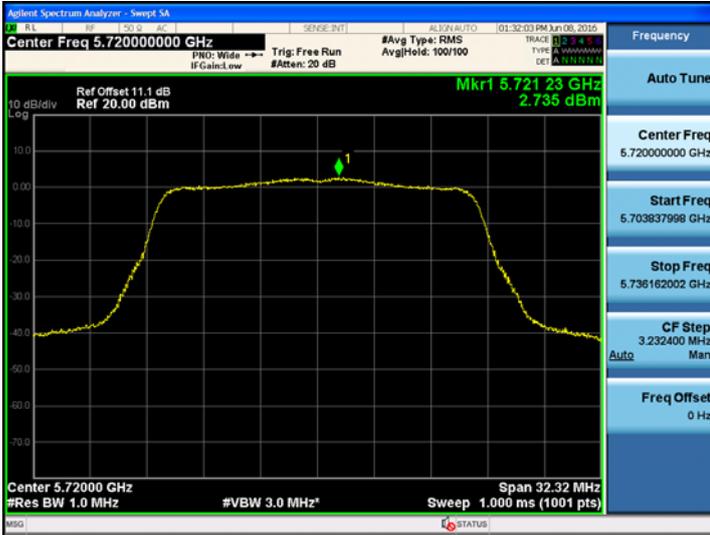
802.11n_HT20 UNII 2C Band PSD CH.144



802.11n_HT20 UNII 3 Band PSD CH.144



802.11ac_VHT20 UNII 2C Band PSD CH.144



802.11ac_VHT20 UNII 3 Band PSD CH.144



■ Straddle channels TEST RESULTS for 802.11n_HT40/ac_VHT40

Conducted Power Density Measurements (UNII 2C Band 5710MHz)

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5710	142	802.11n	-0.827	0.152	-0.675	11	Pass
		802.11ac	-0.875	0.199	-0.676	11	Pass

Conducted Power Density Measurements (UNII 3 Band 5710MHz)

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5710	142	802.11n	-6.728	0.152	-6.576	30	Pass
		802.11ac	-6.533	0.199	-6.334	30	Pass

☐ Straddle channels TEST Plot for 802.11n_HT40/ac_VHT40

802.11n_HT40 UNII 2C Band PSD CH.142



802.11n_HT40 UNII 3 Band PSD CH.142



802.11ac_VHT40 UNII 2C Band PSD CH.142



802.11ac_VHT40 UNII 3 Band PSD CH.142



Straddle channels TEST RESULTS

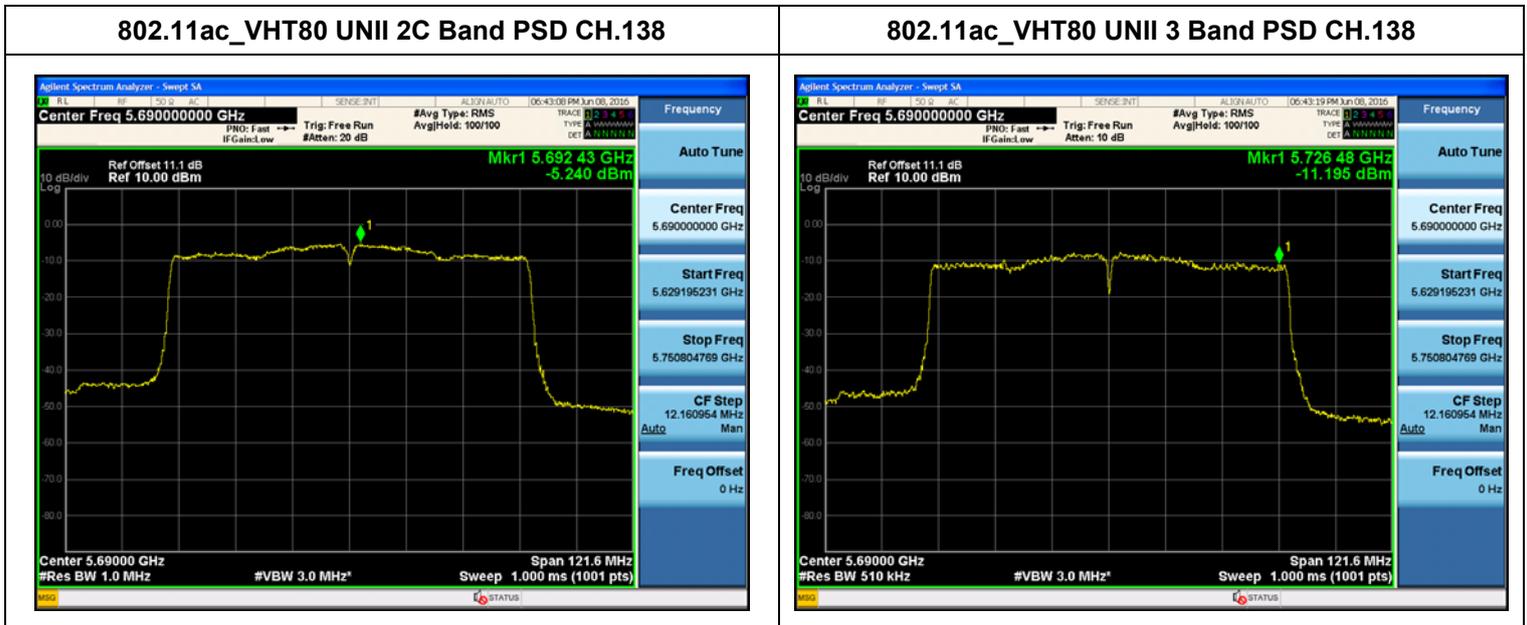
Conducted Power Density Measurements (UNII 2C Band 5690MHz)

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5690	138	802.11ac	-5.240	0.490	-4.75	11	Pass

Conducted Power Density Measurements (UNII 3 Band 5690MHz)

Frequency (MHz)	Channel No.	Mode	Test Result				
			Measured Power Density (dBm)	Duty Cycle Factor (dB)	Measured Power Density(dBm) + Duty Cycle Factor	Limit (dBm)	Pass/Fail
5690	138	802.11ac	-11.195	0.490	-10.705	30	Pass

Straddle channels TEST Plot for 802.11ac_VHT80



9.5 FREQUENCY STABILITY.

The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between -30 °C and 50 °C. The temperature was incremented by 10 °C intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.

20 MHz BW

OPERATING BAND: UNII Band 1
 OPERATING FREQUENCY: 5,180,000,000 Hz
 CHANNEL: 36
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5180042.58	42.58
100%		-30	5180024.16	24.16
100%		-20	5180027.51	27.51
100%		-10	5180030.84	30.84
100%		0	5180033.51	33.51
100%		+10	5180037.49	37.49
100%		+30	5180045.67	45.67
100%		+40	5180048.99	48.99
100%		+50	5180051.24	51.24
115%	4.35	+20	5180043.12	43.12
Batt. Endpoint	3.6	+20	5180042.97	42.97

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2A
 OPERATING FREQUENCY: 5,260,000,000 Hz
 CHANNEL: 52
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5260041.78	41.78
100%		-30	5260023.15	23.15
100%		-20	5260027.84	27.84
100%		-10	5260031.22	31.22
100%		0	5260034.56	34.56
100%		+10	5260037.99	37.99
100%		+30	5260043.57	43.57
100%		+40	5260049.65	49.65
100%		+50	5260053.44	53.44
115%	4.35	+20	5260042.18	42.18
Batt. Endpoint	3.6	+20	5260043.22	43.22

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2C
 OPERATING FREQUENCY: 5,500,000,000 Hz
 CHANNEL: 100
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5500043.23	43.23
100%		-30	5500023.48	23.48
100%		-20	5500028.94	28.94
100%		-10	5500032.15	32.15
100%		0	5500035.48	35.48
100%		+10	5500038.12	38.12
100%		+30	5500046.79	46.79
100%		+40	5500049.19	49.19
100%		+50	5500054.62	54.62
115%	4.35	+20	5500044.15	44.15
Batt. Endpoint	3.6	+20	5500043.17	43.17

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 3
 OPERATING FREQUENCY: 5,745,000,000 Hz
 CHANNEL: 149
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5745044.66	44.66
100%		-30	5745024.55	24.55
100%		-20	5745028.94	28.94
100%		-10	5745032.15	32.15
100%		0	5745035.66	35.66
100%		+10	5745040.15	40.15
100%		+30	5745048.08	48.08
100%		+40	5745051.26	51.26
100%		+50	5745054.63	54.63
115%	4.35	+20	5745045.17	45.17
Batt. Endpoint	3.6	+20	5745044.95	44.95

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

40 MHz BW

OPERATING BAND: UNII Band 1
 OPERATING FREQUENCY: 5,190,000,000 Hz
 CHANNEL: 38
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5190040.10	40.10
100%		-30	5190021.49	21.49
100%		-20	5190024.65	24.65
100%		-10	5190028.52	28.52
100%		0	5190033.15	33.15
100%		+10	5190037.46	37.46
100%		+30	5190043.84	43.84
100%		+40	5190048.51	48.51
100%		+50	5190053.22	53.22
115%		4.35	+20	5190041.12
Batt. Endpoint	3.6	+20	5190040.98	40.98

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2A
 OPERATING FREQUENCY: 5,270,000,000 Hz
 CHANNEL: 54
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5270040.36	40.36
100%		-30	5270021.95	21.95
100%		-20	5270024.63	24.63
100%		-10	5270027.48	27.48
100%		0	5270031.22	31.22
100%		+10	5270035.78	35.78
100%		+30	5270043.21	43.21
100%		+40	5270046.09	46.09
100%		+50	5270049.87	49.87
115%	4.35	+20	5270041.62	41.62
Batt. Endpoint	3.6	+20	5270042.18	42.18

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2C
 OPERATING FREQUENCY: 5,510,000,000 Hz
 CHANNEL: 102
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5510042.06	42.06
100%		-30	5510022.54	22.54
100%		-20	5510027.48	27.48
100%		-10	5510031.52	31.52
100%		0	5510034.88	34.88
100%		+10	5510037.95	37.95
100%		+30	5510045.16	45.16
100%		+40	5510048.52	48.52
100%		+50	5510052.18	52.18
115%	4.35	+20	5510043.10	43.10
Batt. Endpoint	3.6	+20	5510042.84	42.84

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 3
 OPERATING FREQUENCY: 5,755,000,000 Hz
 CHANNEL: 151
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5755043.61	43.61
100%		-30	5755023.15	23.15
100%		-20	5755027.51	27.51
100%		-10	5755030.08	30.08
100%		0	5755035.16	35.16
100%		+10	5755038.54	38.54
100%		+30	5755048.19	48.19
100%		+40	5755052.94	52.94
100%		+50	5755055.62	55.62
115%	4.35	+20	5755043.15	43.15
Batt. Endpoint	3.6	+20	5755044.08	44.08

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

80 MHz BW

OPERATING BAND: UNII Band 1
 OPERATING FREQUENCY: 5,210,000,000 Hz
 CHANNEL: 42
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5210039.61	39.61
100%		-30	5210021.74	21.74
100%		-20	5210024.56	24.56
100%		-10	5210029.05	29.05
100%		0	5210033.21	33.21
100%		+10	5210036.59	36.59
100%		+30	5210043.21	43.21
100%		+40	5210047.58	47.58
100%		+50	5210050.28	50.28
115%		4.35	+20	5210043.26
Batt. Endpoint	3.6	+20	5210044.09	44.09

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2A
 OPERATING FREQUENCY: 5,290,000,000 Hz
 CHANNEL: 58
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5290040.04	40.04
100%		-30	5290024.51	24.51
100%		-20	5290028.55	28.55
100%		-10	5290030.15	30.15
100%		0	5290034.57	34.57
100%		+10	5290037.95	37.95
100%		+30	5290044.15	44.15
100%		+40	5290048.56	48.56
100%		+50	5290052.84	52.84
115%	4.35	+20	5290041.07	41.07
Batt. Endpoint	3.6	+20	5290039.54	39.54

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 2C
 OPERATING FREQUENCY: 5,530,000,000 Hz
 CHANNEL: 106
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5530042.71	42.71
100%		-30	5530022.99	22.99
100%		-20	5530025.48	25.48
100%		-10	5530029.61	29.61
100%		0	5530033.28	33.28
100%		+10	5530037.45	37.45
100%		+30	5530044.51	44.51
100%		+40	5530048.62	48.62
100%		+50	5530051.27	51.27
115%	4.35	+20	5530043.07	43.07
Batt. Endpoint	3.6	+20	5530041.99	41.99

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

OPERATING BAND: UNII Band 3
 OPERATING FREQUENCY: 5,775,000,000 Hz
 CHANNEL: 155
 REFERENCE VOLTAGE: 3.85 VDC

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency (kHz)	Frequency Error (kHz)
100%	3.85	+20(Ref)	5775043.77	43.77
100%		-30	5775024.51	24.51
100%		-20	5775029.51	29.51
100%		-10	5775031.25	31.25
100%		0	5775037.45	37.45
100%		+10	5775046.25	46.25
100%		+30	5775049.51	49.51
100%		+40	5775053.26	53.26
100%		+50	5775055.17	55.17
115%	4.35	+20	5775043.02	43.02
Batt. Endpoint	3.6	+20	5775042.18	42.18

Note:

Based on the results of the frequency stability test shown above the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency error noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

9.6 RADIATED MEASUREMENT

9.6.1 RADIATED SPURIOUS EMISSIONS.

Test Requirements and limit, §15.205, §15.209, §15.407

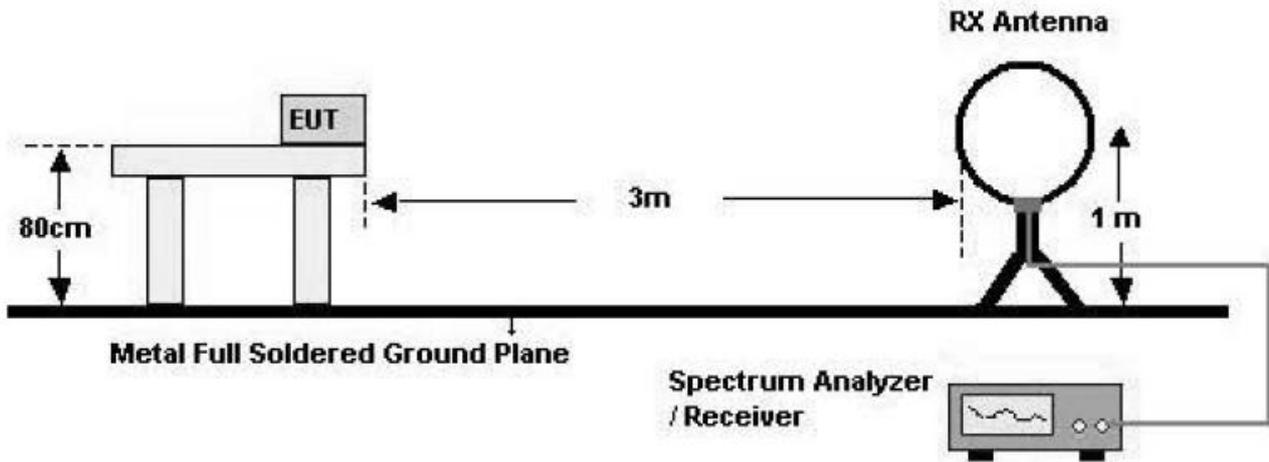
Frequency (MHz)	Field Strength (uV/m)	Measurement Distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

■ §15.407, KDB 789033 D02

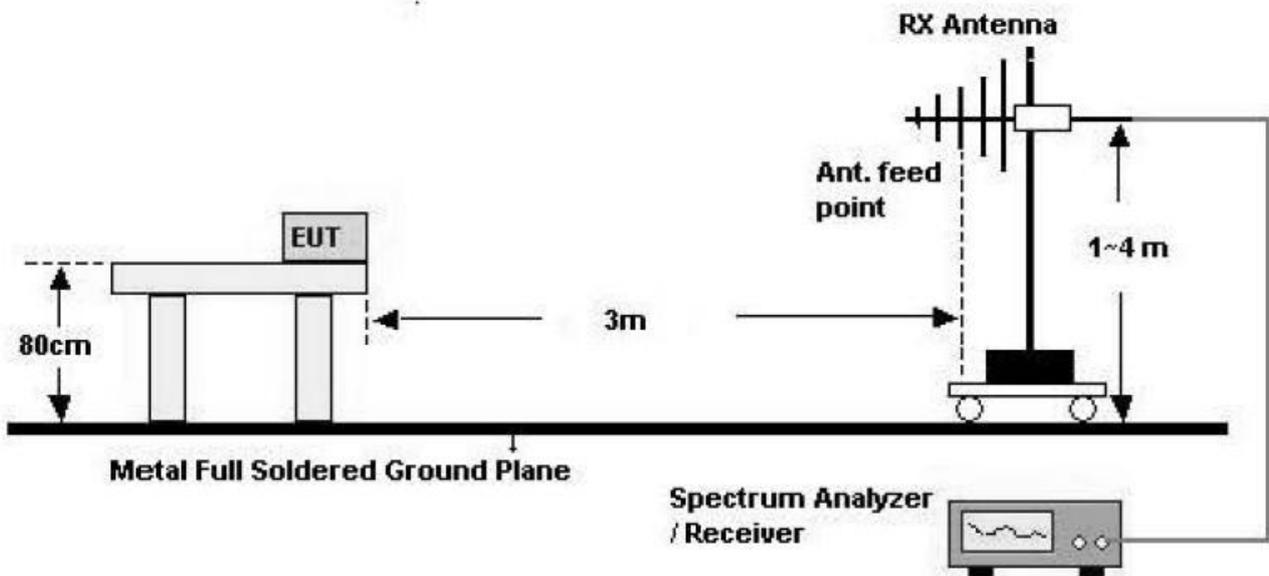
All harmonics that do not lie in a restricted band are subject to a peak limit of -27 dBm/MHz. At a distance of 3 meters the field strength limit in dBµV/m can be determined by adding a “conversion” factor of 95.2 dB to the EIRP limit of -27 dBm/MHz to obtain the limit for out of band spurious emissions of 68.2 dBµV/m. Especially, for transmitter operating in the 5725 Mhz – 5850 MHz : all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequency 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

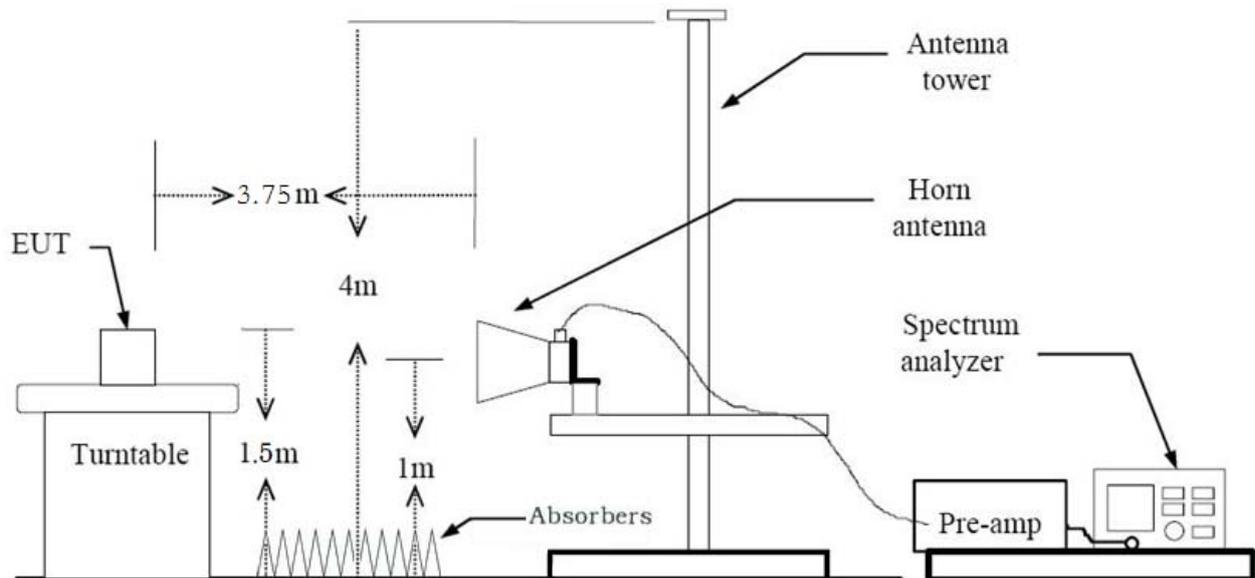
Test Configuration

Below 30 MHz



30 MHz - 1 GHz



Above 1 GHz**TEST PROCEDURE USED**

ANSI C63.10:2013

Method G)5) in KDB 789033 D02 v01r02 (Peak)

Method G)6)d) in KDB 789033 D02 v01r02 (Average)

. Spectrum setting:

- Peak.

1. RBW = 1 MHz

2. VBW \geq 3 MHz

3. Detector = Peak

4. Sweep Time = auto

5. Trace mode = max hold

6. Allow sweeps to continue until the trace stabilizes.

7. Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately $1/x$, where x is the duty cycle.

- Average (Method VB :Averaging using reduced video bandwidth)

1. RBW = 1 MHz

2. VBW

2.1. If the EUT is configured to transmit with duty cycle \geq 98 percent, set $VBW \leq RBW/100$ (i.e., 10 kHz) but not less than 10 Hz.2.2. If the EUT duty cycle is $<$ 98 percent, set $VBW \geq 1/T$, where T is the minimum transmission duration.

3. The analyzer is set to linear detector mode.
4. Detector = Peak.
5. Sweep time = auto.
6. Trace mode = max hold.
7. Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98 percent duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of 1/x, where x is the duty cycle.

Note :

1. We used the Method VB for 802.11a/n_HT20, ac_VHT20, n_HT40, ac_VHT40, ac_VHT80 mode to perform the average filed strength measurements.
2. The actual setting value of VBW for 802.11a/n_HT20, n_HT40, ac_VHT80
3. According to SVSWR requirement in ANSI 63.4-2014, We performed the radiated test at 3.75 m distance from center of turn table. So, we applied the distance factor(reference distance : 3 m).
4. Distance extrapolation factor = $20 \log (\text{test distance} / \text{specific distance})$ (dB)

Mode	Worst Data rate (Mbps)	T _{on} (ms)	T _{total} (ms)	Duty Cycle (%)	VBW(1/T) (Hz)	The actual setting value of VBW (Hz)
a	6	2.787	2.825	98.65	359	1000
n_HT20	MCS 0	2.590	2.620	98.85	386	1000
ac_VHT20	MCS 0	2.600	2.630	98.86	385	1000
n_HT40	MCS 0	2.486	2.511	99.00	402	1000
ac_VHT40	MCS 0	2.490	2.511	99.16	402	1000
ac_VHT80	MCS 0	1.170	1.192	98.15	855	1000

TEST RESULTS

9 kHz – 30MHz

Operation Mode: Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dB μ V	dB /m	dB	(H/V)	dB μ V/m	dB μ V/m	dB
No Critical peaks found							

Notes:

1. Measuring frequencies from 9 kHz to the 30MHz.
2. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
3. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
4. Limit line = specific Limits (dBuV) + Distance extrapolation factor
5. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

TEST RESULTS**Below 1 GHz****Operation Mode:** Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dB μ V	dB /m	dB	(H/V)	dB μ V/m	dB μ V/m	dB
No Critical peaks found							

Notes:

1. Measuring frequencies from 30 MHz to the 1 GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

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]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10360	62.17	-4.06	V	58.11	68.20	10.09	PK
15540	62.77	-4.19	V	58.58	73.98	15.40	PK
15540	49.04	-4.19	V	44.85	53.98	9.13	AV
10360	61.87	-4.06	H	57.81	68.20	10.39	PK
15540	62.41	-4.19	H	58.22	73.98	15.76	PK
15540	48.76	-4.19	H	44.57	53.98	9.41	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 1
 Operation Mode: 802.11 a
 Transfer Rate: 6 Mbps
 Operating Frequency 5200 MHz
 Channel No. 40 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10400	62.12	-4.09	V	58.03	68.20	10.17	PK
15600	62.99	-4.77	V	58.22	73.98	15.76	PK
15600	49.34	-4.77	V	44.57	53.98	9.41	AV
10400	62.43	-4.09	H	58.34	68.20	9.86	PK
15600	63.33	-4.77	H	58.56	73.98	15.42	PK
15600	49.45	-4.77	H	44.68	53.98	9.30	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 1
 Operation Mode: 802.11 a
 Transfer Rate: 6 Mbps
 Operating Frequency 5240 MHz
 Channel No. 48 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	62.45	-4.26	V	58.19	68.20	10.01	PK
15720	64.04	-4.52	V	59.52	73.98	14.46	PK
15720	49.68	-4.52	V	45.16	53.98	8.82	AV
10480	63.34	-4.26	H	59.08	68.20	9.12	PK
15720	63.36	-4.52	H	58.84	73.98	15.14	PK
15720	49.77	-4.52	H	45.25	53.98	8.73	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11 n_20 MHz BW
Transfer MCS Index:	0
Operating Frequency	5180 MHz
Channel No.	36 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10360	61.88	-4.06	V	57.82	68.20	10.38	PK
15540	62.48	-4.19	V	58.29	73.98	15.69	PK
15540	48.96	-4.19	V	44.77	53.98	9.21	AV
10360	61.63	-4.06	H	57.57	68.20	10.63	PK
15540	62.17	-4.19	H	57.98	73.98	16.00	PK
15540	48.64	-4.19	H	44.45	53.98	9.53	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is MCS0 in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11 n_20 MHz BW
Transfer MCS Index:	0
Operating Frequency	5200 MHz
Channel No.	40 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10400	61.83	-4.09	V	57.74	68.20	10.46	PK
15600	62.70	-4.77	V	57.93	73.98	16.05	PK
15600	49.26	-4.77	V	44.49	53.98	9.49	AV
10400	62.19	-4.09	H	58.10	68.20	10.10	PK
15600	63.09	-4.77	H	58.32	73.98	15.66	PK
15600	49.33	-4.77	H	44.56	53.98	9.42	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is MCS0 in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 1
 Operation Mode: 802.11 n_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5240 MHz
 Channel No. 48 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	62.16	-4.26	V	57.90	68.20	10.30	PK
15720	63.75	-4.52	V	59.23	73.98	14.75	PK
15720	49.60	-4.52	V	45.08	53.98	8.90	AV
10480	62.84	-4.26	H	58.58	68.20	9.62	PK
15720	63.12	-4.52	H	58.60	73.98	15.38	PK
15720	49.65	-4.52	H	45.13	53.98	8.85	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is MCS0 in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 1
 Operation Mode: 802.11 ac_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5180 MHz
 Channel No. 36 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10360	62.00	-4.06	V	57.94	68.20	10.26	PK
15540	62.59	-4.19	V	58.40	73.98	15.58	PK
15540	48.88	-4.19	V	44.69	53.98	9.29	AV
10360	61.76	-4.06	H	57.70	68.20	10.50	PK
15540	62.32	-4.19	H	58.13	73.98	15.85	PK
15540	48.72	-4.19	H	44.53	53.98	9.45	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_20 MHz BW. Worst case is MCS0 in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 1
 Operation Mode: 802.11 ac_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5200 MHz
 Channel No. 40 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10400	61.95	-4.09	V	57.86	68.20	10.34	PK
15600	62.81	-4.77	V	58.04	73.98	15.94	PK
15600	49.38	-4.77	V	44.61	53.98	9.37	AV
10400	62.32	-4.09	H	58.23	68.20	9.97	PK
15600	63.24	-4.77	H	58.47	73.98	15.51	PK
15600	49.41	-4.77	H	44.64	53.98	9.34	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_20 MHz BW. Worst case is MCS0 in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 1
 Operation Mode: 802.11 ac_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5240 MHz
 Channel No. 48 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10480	62.82	-4.26	V	58.56	68.20	9.64	PK
15720	63.86	-4.52	V	59.34	73.98	14.64	PK
15720	49.52	-4.52	V	45.00	53.98	8.98	AV
10480	63.23	-4.26	H	58.97	68.20	9.23	PK
15720	63.27	-4.52	H	58.75	73.98	15.23	PK
15720	49.73	-4.52	H	45.21	53.98	8.77	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_20 MHz BW. Worst case is MCS0 in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11n_40 MHz BW
Transfer MCS Index:	0
Operating Frequency	5190 MHz
Channel No.	38 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10380	61.81	-3.73	V	58.08	68.20	10.12	PK
15570	62.60	-3.92	V	58.68	73.98	15.30	PK
15570	49.58	-3.92	V	45.66	53.98	8.32	AV
10380	61.53	-3.73	H	57.80	68.20	10.40	PK
15570	63.08	-3.92	H	59.16	73.98	14.82	PK
15570	49.61	-3.92	H	45.69	53.98	8.29	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is MCS0 in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11n_40 MHz BW
Transfer MCS Index:	0
Operating Frequency	5230 MHz
Channel No.	46 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10460	62.88	-4.26	V	58.62	68.20	9.58	PK
15690	64.13	-4.40	V	59.73	73.98	14.25	PK
15690	49.97	-4.40	V	45.57	53.98	8.41	AV
10460	63.16	-4.26	H	58.90	68.20	9.30	PK
15690	64.47	-4.40	H	60.07	73.98	13.91	PK
15690	50.09	-4.40	H	45.69	53.98	8.29	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is MCS0 in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11ac_40 MHz BW
Transfer MCS Index:	0
Operating Frequency	5190 MHz
Channel No.	38 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10380	61.91	-3.73	V	58.18	68.20	10.02	PK
15570	62.45	-3.92	V	58.53	73.98	15.45	PK
15570	49.52	-3.92	V	45.60	53.98	8.38	AV
10380	61.11	-3.73	H	57.38	68.20	10.82	PK
15570	63.05	-3.92	H	59.13	73.98	14.85	PK
15570	49.58	-3.92	H	45.66	53.98	8.32	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_40 MHz BW. Worst case is MCS0 in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 1
 Operation Mode: 802.11ac_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5230 MHz
 Channel No. 46 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10460	63.02	-4.26	V	58.76	68.20	9.44	PK
15690	63.98	-4.40	V	59.58	73.98	14.40	PK
15690	49.91	-4.40	V	45.51	53.98	8.47	AV
10460	63.21	-4.26	H	58.95	68.20	9.25	PK
15690	64.44	-4.40	H	60.04	73.98	13.94	PK
15690	50.06	-4.40	H	45.66	53.98	8.32	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_40 MHz BW. Worst case is MCS0 in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 1
Operation Mode:	802.11ac_80 MHz BW
Transfer MCS Index:	0
Operating Frequency	5210 MHz
Channel No.	42 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10420	62.35	-3.99	V	58.36	68.20	9.84	PK
15630	62.81	-4.84	V	57.97	73.98	16.01	PK
15630	48.99	-4.84	V	44.15	53.98	9.83	AV
10420	61.79	-3.99	H	57.80	68.20	10.40	PK
15630	62.15	-4.84	H	57.31	73.98	16.67	PK
15630	49.02	-4.84	H	44.18	53.98	9.80	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_80 MHz BW. Worst case is MCS0 in 802.11ac_80 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11 a
Transfer MCS Index:	6 Mbps
Operating Frequency	5260 MHz
Channel No.	52 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10520	61.85	-4.06	V	57.79	68.20	10.41	PK
15780	63.65	-4.40	V	59.25	73.98	14.73	PK
15780	49.54	-4.40	V	45.14	53.98	8.84	AV
10520	62.50	-4.58	H	57.92	68.20	10.28	PK
15780	63.36	-4.40	H	58.96	73.98	15.02	PK
15780	49.61	-4.40	H	45.21	53.98	8.77	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2A
 Operation Mode: 802.11 a
 Transfer Rate: 6 Mbps
 Operating Frequency 5300 MHz
 Channel No. 60 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10600	61.13	-4.06	V	57.07	73.98	16.91	PK
10600	49.21	-4.06	V	45.15	53.98	8.83	AV
15900	63.48	-4.76	V	58.72	73.98	15.26	PK
15900	49.45	-4.76	V	44.69	53.98	9.29	AV
10600	60.22	-4.06	H	56.16	73.98	17.82	PK
10600	48.92	-4.06	H	44.86	53.98	9.12	AV
15900	63.96	-4.76	H	59.20	73.98	14.78	PK
15900	49.74	-4.76	H	44.98	53.98	9.00	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

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

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10640	62.53	-3.66	V	58.87	73.98	15.11	PK
10640	48.66	-3.66	V	45.00	53.98	8.98	AV
15960	62.96	-4.87	V	58.09	73.98	15.89	PK
15960	48.86	-4.87	V	43.99	53.98	9.99	AV
10640	62.67	-3.66	H	59.01	73.98	14.97	PK
10640	48.83	-3.66	H	45.17	53.98	8.81	AV
15960	62.65	-4.87	H	57.78	73.98	16.20	PK
15960	48.89	-4.87	H	44.02	53.98	9.96	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11 n_20 MHz BW
Transfer MCS Index:	0
Operating Frequency	5260 MHz
Channel No.	52 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10520	61.56	-4.06	V	57.50	68.20	10.70	PK
15780	63.36	-4.40	V	58.96	73.98	15.02	PK
15780	49.46	-4.40	V	45.06	53.98	8.92	AV
10520	62.26	-4.58	H	57.68	68.20	10.52	PK
15780	63.12	-4.40	H	58.72	73.98	15.26	PK
15780	49.49	-4.40	H	45.09	53.98	8.89	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is MCS0 in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2A
 Operation Mode: 802.11 n_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5300 MHz
 Channel No. 60 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10600	60.84	-4.06	V	56.78	73.98	17.20	PK
10600	49.13	-4.06	V	45.07	53.98	8.91	AV
15900	63.19	-4.76	V	58.43	73.98	15.55	PK
15900	49.37	-4.76	V	44.61	53.98	9.37	AV
10600	59.98	-4.06	H	55.92	73.98	18.06	PK
10600	48.80	-4.06	H	44.74	53.98	9.24	AV
15900	63.72	-4.76	H	58.96	73.98	15.02	PK
15900	49.62	-4.76	H	44.86	53.98	9.12	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is MCS0 in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2A
 Operation Mode: 802.11 n_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5320 MHz
 Channel No. 64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10640	62.24	-3.66	V	58.58	73.98	15.40	PK
10640	48.58	-3.66	V	44.92	53.98	9.06	AV
15960	62.67	-4.87	V	57.80	73.98	16.18	PK
15960	48.78	-4.87	V	43.91	53.98	10.07	AV
10640	62.43	-3.66	H	58.77	73.98	15.21	PK
10640	48.71	-3.66	H	45.05	53.98	8.93	AV
15960	62.41	-4.87	H	57.54	73.98	16.44	PK
15960	48.77	-4.87	H	43.90	53.98	10.08	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is MCS0 in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2A
 Operation Mode: 802.11 ac_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5260MHz
 Channel No. 52 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10520	61.68	-4.06	V	57.62	68.20	10.58	PK
15780	63.47	-4.40	V	59.07	73.98	14.91	PK
15780	49.38	-4.40	V	44.98	53.98	9.00	AV
10520	62.39	-4.58	H	57.81	68.20	10.39	PK
15780	63.27	-4.40	H	58.87	73.98	15.11	PK
15780	49.57	-4.40	H	45.17	53.98	8.81	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_20 MHz BW. Worst case is MCS0 in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2A
 Operation Mode: 802.11 ac_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5300 MHz
 Channel No. 60 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10600	60.96	-4.06	V	56.90	73.98	17.08	PK
10600	49.08	-4.06	V	45.02	53.98	8.96	AV
15900	63.30	-4.76	V	58.54	73.98	15.44	PK
15900	49.59	-4.76	V	44.83	53.98	9.15	AV
10600	60.11	-4.06	H	56.05	73.98	17.93	PK
10600	48.87	-4.06	H	44.81	53.98	9.17	AV
15900	63.87	-4.76	H	59.11	73.98	14.87	PK
15900	49.70	-4.76	H	44.94	53.98	9.04	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_20 MHz BW. Worst case is MCS0 in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2A
 Operation Mode: 802.11 ac_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5320 MHz
 Channel No. 64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10640	62.36	-3.66	V	58.70	73.98	15.28	PK
10640	48.63	-3.66	V	44.97	53.98	9.01	AV
15960	62.78	-4.87	V	57.91	73.98	16.07	PK
15960	48.70	-4.87	V	43.83	53.98	10.15	AV
10640	62.56	-3.66	H	58.90	73.98	15.08	PK
10640	48.78	-3.66	H	45.12	53.98	8.86	AV
15960	62.56	-4.87	H	57.69	73.98	16.29	PK
15960	48.85	-4.87	H	43.98	53.98	10.00	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_20 MHz BW. Worst case is MCS0 in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11n_40 MHz BW
Transfer MCS Index:	0
Operating Frequency	5270 MHz
Channel No.	54 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10540	62.55	-3.74	V	58.81	68.20	9.39	PK
15810	63.30	-5.45	V	57.85	73.98	16.13	PK
15810	49.31	-5.45	V	43.86	53.98	10.12	AV
10540	62.37	-3.74	H	58.63	68.20	9.57	PK
15810	63.33	-5.45	H	57.88	73.98	16.10	PK
15810	49.43	-5.45	H	43.98	53.98	10.00	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is MCS0 in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11n_40 MHz BW
Transfer MCS Index:	0
Operating Frequency	5310 MHz
Channel No.	62 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10620	63.28	-4.06	V	59.22	73.98	14.76	PK
10620	48.85	-4.06	V	44.79	53.98	9.19	AV
15930	62.92	-4.74	V	58.18	73.98	15.80	PK
15930	49.16	-4.74	V	44.42	53.98	9.56	AV
10620	62.88	-4.06	H	58.82	73.98	15.16	PK
10620	48.94	-4.06	H	44.88	53.98	9.10	AV
15930	62.76	-4.74	H	58.02	73.98	15.96	PK
15930	49.34	-4.74	H	44.60	53.98	9.38	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is MCS0 in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11ac_40 MHz BW
Transfer MCS Index:	0
Operating Frequency	5270 MHz
Channel No.	54 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10540	62.69	-3.74	V	58.95	68.20	9.25	PK
15810	63.15	-5.45	V	57.70	73.98	16.28	PK
15810	49.25	-5.45	V	43.80	53.98	10.18	AV
10540	62.42	-3.74	H	58.68	68.20	9.52	PK
15810	63.30	-5.45	H	57.85	73.98	16.13	PK
15810	49.40	-5.45	H	43.95	53.98	10.03	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_40 MHz BW. Worst case is MCS0 in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2A
 Operation Mode: 802.11ac_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5310 MHz
 Channel No. 62 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10620	63.42	-4.06	V	59.36	73.98	14.62	PK
10620	48.75	-4.06	V	44.69	53.98	9.29	AV
15930	62.77	-4.74	V	58.03	73.98	15.95	PK
15930	49.10	-4.74	V	44.36	53.98	9.62	AV
10620	62.93	-4.06	H	58.87	73.98	15.11	PK
10620	48.87	-4.06	H	44.81	53.98	9.17	AV
15930	62.73	-4.74	H	57.99	73.98	15.99	PK
15930	49.31	-4.74	H	44.57	53.98	9.41	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_40 MHz BW. Worst case is MCS0 in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2A
Operation Mode:	802.11ac_80 MHz BW
Transfer MCS Index:	0
Operating Frequency	5290 MHz
Channel No.	58 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
10580	62.47	-3.79	V	58.68	68.20	9.52	PK
15870	62.39	-4.87	V	57.52	73.98	16.46	PK
15870	49.36	-4.87	V	44.49	53.98	9.49	AV
10580	62.39	-3.79	H	58.60	68.20	9.60	PK
15870	62.85	-4.87	H	57.98	73.98	16.00	PK
15870	49.43	-4.87	H	44.56	53.98	9.42	AV

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_80 MHz BW. Worst case is MCS0 in 802.11ac_80 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

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

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11000	62.20	-2.67	V	59.53	73.98	14.45	PK
11000	48.32	-2.67	V	45.65	53.98	8.33	AV
16500	63.18	-2.16	V	61.02	68.20	7.18	PK
11000	62.59	-2.67	H	59.92	73.98	14.06	PK
11000	48.56	-2.67	H	45.89	53.98	8.09	AV
16500	62.12	-2.16	H	59.96	68.20	8.24	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2C
 Operation Mode: 802.11 a
 Transfer Rate: 6 Mbps
 Operating Frequency 5580 MHz
 Channel No. 116 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11160	62.25	-3.33	V	58.92	73.98	15.06	PK
11160	48.72	-3.33	V	45.39	53.98	8.59	AV
16740	62.03	-1.29	V	60.74	68.20	7.46	PK
11160	62.69	-3.33	H	59.36	73.98	14.62	PK
11160	48.81	-3.33	H	45.48	53.98	8.50	AV
16740	63.09	-1.29	H	61.80	68.20	6.40	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2C
 Operation Mode: 802.11 a
 Transfer Rate: 6 Mbps
 Operating Frequency 5720 MHz
 Channel No. 144 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11440	61.89	-3.47	V	58.42	73.98	15.56	PK
11440	48.07	-3.47	V	44.60	53.98	9.38	AV
17160	61.51	0.98	V	62.49	68.20	5.71	PK
11440	62.31	-3.47	H	58.84	73.98	15.14	PK
11440	48.36	-3.47	H	44.89	53.98	9.09	AV
17160	62.62	0.98	H	63.60	68.20	4.60	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11 n_20 MHz BW
Transfer MCS Index:	0
Operating Frequency	5500 MHz
Channel No.	100 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11000	61.91	-2.67	V	59.24	73.98	14.74	PK
11000	48.24	-2.67	V	45.57	53.98	8.41	AV
16500	62.89	-2.16	V	60.73	68.20	7.47	PK
11000	62.35	-2.67	H	59.68	73.98	14.30	PK
11000	48.44	-2.67	H	45.77	53.98	8.21	AV
16500	61.88	-2.16	H	59.72	68.20	8.48	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is MCS0 in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2C
 Operation Mode: 802.11 n_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5580 MHz
 Channel No. 116 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11160	61.96	-3.33	V	58.63	73.98	15.35	PK
11160	48.64	-3.33	V	45.31	53.98	8.67	AV
16740	61.74	-1.29	V	60.45	68.20	7.75	PK
11160	62.45	-3.33	H	59.12	73.98	14.86	PK
11160	48.69	-3.33	H	45.36	53.98	8.62	AV
16740	62.85	-1.29	H	61.56	68.20	6.64	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is MCS0 in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2C
 Operation Mode: 802.11 n_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5720 MHz
 Channel No. 144 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11440	61.60	-3.47	V	58.13	73.98	15.85	PK
11440	47.99	-3.47	V	44.52	53.98	9.46	AV
17160	61.22	0.98	V	62.20	68.20	6.00	PK
11440	62.07	-3.47	H	58.60	73.98	15.38	PK
11440	48.24	-3.47	H	44.77	53.98	9.21	AV
17160	62.38	0.98	H	63.36	68.20	4.84	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is MCS0 in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11 ac_20 MHz BW
Transfer MCS Index:	0
Operating Frequency	5500MHz
Channel No.	100 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11000	62.03	-2.67	V	59.36	73.98	14.62	PK
11000	48.49	-2.67	V	45.82	53.98	8.16	AV
16500	62.89	-2.16	V	60.73	68.20	7.47	PK
11000	62.48	-2.67	H	59.81	73.98	14.17	PK
11000	48.51	-2.67	H	45.84	53.98	8.14	AV
16500	62.43	-2.16	H	60.27	68.20	7.93	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_20 MHz BW. Worst case is MCS0 in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11 ac_20 MHz BW
Transfer MCS Index:	0
Operating Frequency	5580 MHz
Channel No.	116 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11160	62.08	-3.33	V	58.75	73.98	15.23	PK
11160	48.59	-3.33	V	45.26	53.98	8.72	AV
16740	61.85	-1.29	V	60.56	68.20	7.64	PK
11160	62.58	-3.33	H	59.25	73.98	14.73	PK
11160	48.76	-3.33	H	45.43	53.98	8.55	AV
16740	62.59	-1.29	H	61.30	68.20	6.90	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_20 MHz BW. Worst case is MCS0 in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2C
 Operation Mode: 802.11 ac_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5720 MHz
 Channel No. 144 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11440	61.72	-3.47	V	58.25	73.98	15.73	PK
11440	47.94	-3.47	V	44.47	53.98	9.51	AV
17160	62.28	0.98	V	63.26	68.20	4.94	PK
11440	62.20	-3.47	H	58.73	73.98	15.25	PK
11440	48.13	-3.47	H	44.66	53.98	9.32	AV
17160	62.53	0.98	H	63.51	68.20	4.69	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_20 MHz BW. Worst case is MCS0 in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2C
 Operation Mode: 802.11n_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5510 MHz
 Channel No. 102 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11020	62.14	-2.85	V	59.29	73.98	14.69	PK
11020	48.08	-2.85	V	45.23	53.98	8.75	AV
16530	61.99	-1.95	V	60.04	68.20	8.16	PK
11020	62.18	-2.85	H	59.33	73.98	14.65	PK
11020	47.93	-2.85	H	45.08	53.98	8.90	AV
16530	61.70	-1.95	H	59.75	68.20	8.45	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is MCS0 in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11n_40 MHz BW
Transfer MCS Index:	0
Operating Frequency	5550 MHz
Channel No.	110 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11100	61.30	-3.52	V	57.78	73.98	16.20	PK
11100	48.01	-3.52	V	44.49	53.98	9.49	AV
16650	63.03	-1.22	V	61.81	68.20	6.39	PK
11100	61.43	-3.52	H	57.91	73.98	16.07	PK
11100	48.17	-3.52	H	44.65	53.98	9.33	AV
16650	62.51	-1.22	H	61.29	68.20	6.91	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is MCS0 in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2C
 Operation Mode: 802.11n_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5710 MHz
 Channel No. 142 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11420	62.25	-2.80	V	59.45	73.98	14.53	PK
11420	48.51	-2.80	V	45.71	53.98	8.27	AV
17130	61.95	0.48	V	62.43	68.20	5.77	PK
11420	61.99	-2.80	H	59.19	73.98	14.79	PK
11420	48.47	-2.80	H	45.67	53.98	8.31	AV
17130	62.02	0.48	H	62.50	68.20	5.70	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is MCS0 in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2C
 Operation Mode: 802.11ac_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5510 MHz
 Channel No. 102 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11020	62.28	-2.85	V	59.43	73.98	14.55	PK
11020	47.98	-2.85	V	45.13	53.98	8.85	AV
16530	61.84	-1.95	V	59.89	68.20	8.31	PK
11020	62.23	-2.85	H	59.38	73.98	14.60	PK
11020	47.86	-2.85	H	45.01	53.98	8.97	AV
16530	61.67	-1.95	H	59.72	68.20	8.48	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_40 MHz BW. Worst case is MCS0 in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11ac_40 MHz BW
Transfer MCS Index:	0
Operating Frequency	5550 MHz
Channel No.	110 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11100	61.44	-3.52	V	57.92	73.98	16.06	PK
11100	47.91	-3.52	V	44.39	53.98	9.59	AV
16650	62.88	-1.22	V	61.66	68.20	6.54	PK
11100	61.48	-3.52	H	57.96	73.98	16.02	PK
11100	48.10	-3.52	H	44.58	53.98	9.40	AV
16650	62.48	-1.22	H	61.26	68.20	6.94	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_40 MHz BW. Worst case is MCS0 in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2C
 Operation Mode: 802.11ac_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5710 MHz
 Channel No. 142 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11420	62.39	-2.80	V	59.59	73.98	14.39	PK
11420	48.41	-2.80	V	45.61	53.98	8.37	AV
17130	61.80	0.48	V	62.28	68.20	5.92	PK
11420	62.04	-2.80	H	59.24	73.98	14.74	PK
11420	48.40	-2.80	H	45.60	53.98	8.38	AV
17130	61.99	0.48	H	62.47	68.20	5.73	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_40 MHz BW. Worst case is MCS0 in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 2C
 Operation Mode: 802.11ac_80 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5530 MHz
 Channel No. 106 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11060	61.76	-3.16	V	58.60	73.98	15.38	PK
11060	48.21	-3.16	V	45.05	53.98	8.93	AV
16590	62.20	-1.25	V	60.95	68.20	7.25	PK
11060	62.09	-3.16	H	58.93	73.98	15.05	PK
11060	48.14	-3.16	H	44.98	53.98	9.00	AV
16590	62.73	-1.25	H	61.48	68.20	6.72	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_80 MHz BW. Worst case is MCS0 in 802.11ac_80 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 2C
Operation Mode:	802.11ac_80 MHz BW
Transfer MCS Index:	0
Operating Frequency	5690 MHz
Channel No.	138 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11380	61.68	-3.06	V	58.62	73.98	15.36	PK
11380	48.30	-3.06	V	45.24	53.98	8.74	AV
17070	62.21	0.54	V	62.75	68.20	5.45	PK
11380	62.10	-3.06	H	59.04	73.98	14.94	PK
11380	48.12	-3.06	H	45.06	53.98	8.92	AV
17070	61.67	0.54	H	62.21	68.20	5.99	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_80 MHz BW. Worst case is MCS0 in 802.11ac_80 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 3
 Operation Mode: 802.11 a
 Transfer Rate: 6 Mbps
 Operating Frequency 5745MHz
 Channel No. 149 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11490	62.90	-3.49	V	59.41	73.98	14.57	PK
11490	48.87	-3.49	V	45.38	53.98	8.60	AV
17235	62.53	0.64	V	63.17	68.20	5.03	PK
11490	62.71	-3.49	H	59.22	73.98	14.76	PK
11490	49.12	-3.49	H	45.63	53.98	8.35	AV
17235	62.18	0.64	H	62.82	68.20	5.38	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 3
 Operation Mode: 802.11 a
 Transfer Rate: 6 Mbps
 Operating Frequency 5785 MHz
 Channel No. 157 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11570	62.83	-3.47	V	59.36	73.98	14.62	PK
11570	48.82	-3.47	V	45.35	53.98	8.63	AV
17355	62.26	1.54	V	63.80	68.20	4.40	PK
11570	62.63	-3.47	H	59.16	73.98	14.82	PK
11570	48.73	-3.47	H	45.26	53.98	8.72	AV
17355	62.21	1.54	H	63.75	68.20	4.45	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11 a
Transfer Rate:	6 Mbps
Operating Frequency	5825 MHz
Channel No.	165 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	62.42	-3.49	V	58.93	73.98	15.05	PK
11650	48.72	-3.49	V	45.23	53.98	8.75	AV
17475	62.26	1.66	V	63.92	68.20	4.28	PK
11650	61.96	-3.49	H	58.47	73.98	15.51	PK
11650	48.69	-3.49	H	45.20	53.98	8.78	AV
17475	62.38	1.66	H	64.04	68.20	4.16	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11a. Worst case is 6 Mbps in 802.11a.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 3
 Operation Mode: 802.11 n_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5745 MHz
 Channel No. 149 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11490	62.61	-3.49	V	59.12	73.98	14.86	PK
11490	48.79	-3.49	V	45.30	53.98	8.68	AV
17235	62.24	0.64	V	62.88	68.20	5.32	PK
11490	62.47	-3.49	H	58.98	73.98	15.00	PK
11490	49.00	-3.49	H	45.51	53.98	8.47	AV
17235	61.94	0.64	H	62.58	68.20	5.62	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is MCS0 in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 3
 Operation Mode: 802.11 n_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5785 MHz
 Channel No. 157 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11570	62.54	-3.47	V	59.07	73.98	14.91	PK
11570	48.74	-3.47	V	45.27	53.98	8.71	AV
17355	61.97	1.54	V	63.51	68.20	4.69	PK
11570	62.39	-3.47	H	58.92	73.98	15.06	PK
11570	48.61	-3.47	H	45.14	53.98	8.84	AV
17355	61.97	1.54	H	63.51	68.20	4.69	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is MCS0 in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 3
 Operation Mode: 802.11 n_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5825 MHz
 Channel No. 165 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	62.13	-3.49	V	58.64	73.98	15.34	PK
11650	48.64	-3.49	V	45.15	53.98	8.83	AV
17475	62.07	1.66	V	63.73	68.20	4.47	PK
11650	61.72	-3.49	H	58.23	73.98	15.75	PK
11650	48.57	-3.49	H	45.08	53.98	8.90	AV
17475	61.77	1.66	H	63.43	68.20	4.77	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_20 MHz BW. Worst case is MCS0 in 802.11n_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 3
 Operation Mode: 802.11 ac_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5745 MHz
 Channel No. 149 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11490	62.73	-3.49	V	59.24	73.98	14.74	PK
11490	48.84	-3.49	V	45.35	53.98	8.63	AV
17235	62.35	0.64	V	62.99	68.20	5.21	PK
11490	62.60	-3.49	H	59.11	73.98	14.87	PK
11490	49.07	-3.49	H	45.58	53.98	8.40	AV
17235	62.09	0.64	H	62.73	68.20	5.47	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_20 MHz BW. Worst case is MCS0 in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 3
 Operation Mode: 802.11 ac_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5785 MHz
 Channel No. 157 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11570	62.66	-3.47	V	59.19	73.98	14.79	PK
11570	48.69	-3.47	V	45.22	53.98	8.76	AV
17355	62.08	1.54	V	63.62	68.20	4.58	PK
11570	62.52	-3.47	H	59.05	73.98	14.93	PK
11570	48.68	-3.47	H	45.21	53.98	8.77	AV
17355	62.12	1.54	H	63.66	68.20	4.54	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_20 MHz BW. Worst case is MCS0 in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11 ac_20 MHz BW
Transfer MCS Index:	0
Operating Frequency	5825 MHz
Channel No.	165 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11650	62.25	-3.49	V	58.76	73.98	15.22	PK
11650	48.59	-3.49	V	45.10	53.98	8.88	AV
17475	62.08	1.66	V	63.74	68.20	4.46	PK
11650	61.85	-3.49	H	58.36	73.98	15.62	PK
11650	48.64	-3.49	H	45.15	53.98	8.83	AV
17475	62.24	1.66	H	63.90	68.20	4.30	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_20 MHz BW. Worst case is MCS0 in 802.11ac_20 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII3
Operation Mode:	802.11n_40 MHz BW
Transfer MCS Index:	0
Operating Frequency	5755 MHz
Channel No.	151 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11510	63.17	-3.29	V	59.88	73.98	14.10	PK
11510	48.89	-3.29	V	45.60	53.98	8.38	AV
17265	61.42	0.82	V	62.24	68.20	5.96	PK
11510	62.50	-3.29	H	59.21	73.98	14.77	PK
11510	49.07	-3.29	H	45.78	53.98	8.20	AV
17265	61.94	0.82	H	62.76	68.20	5.44	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is MCS0 in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band :	UNII 3
Operation Mode:	802.11n_40 MHz BW
Transfer MCS Index:	0
Operating Frequency	5795 MHz
Channel No.	159 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11590	62.39	-3.41	V	58.98	73.98	15.00	PK
11590	48.59	-3.41	V	45.18	53.98	8.80	AV
17385	61.57	1.84	V	63.41	68.20	4.79	PK
11590	62.25	-3.41	H	58.84	73.98	15.14	PK
11590	48.67	-3.41	H	45.26	53.98	8.72	AV
17385	62.54	1.84	H	64.38	68.20	3.82	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11n_40 MHz BW. Worst case is MCS0 in 802.11n_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 3
 Operation Mode: 802.11ac_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5755 MHz
 Channel No. 151 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11510	63.31	-3.29	V	60.02	73.98	13.96	PK
11510	48.79	-3.29	V	45.50	53.98	8.48	AV
17265	61.27	0.82	V	62.09	68.20	6.11	PK
11510	62.55	-3.29	H	59.26	73.98	14.72	PK
11510	49.00	-3.29	H	45.71	53.98	8.27	AV
17265	61.81	0.82	H	62.63	68.20	5.57	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_40 MHz BW. Worst case is MCS0 in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 3
 Operation Mode: 802.11ac_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5795 MHz
 Channel No. 159 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11590	62.53	-3.41	V	59.12	73.98	14.86	PK
11590	48.49	-3.41	V	45.08	53.98	8.90	AV
17385	61.42	1.84	V	63.26	68.20	4.94	PK
11590	62.30	-3.41	H	58.89	73.98	15.09	PK
11590	48.60	-3.41	H	45.19	53.98	8.79	AV
17385	61.90	1.84	H	63.74	68.20	4.46	PK

*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_40 MHz BW. Worst case is MCS0 in 802.11ac_40 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

Band : UNII 3
 Operation Mode: 802.11ac_80 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5775 MHz
 Channel No. 155 Ch

Frequency [MHz]	Reading dBuV	AN.+CL-Amp G.+D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
11550	61.46	-3.46	V	58.00	73.98	15.98	PK
11550	48.42	-3.46	V	44.96	53.98	9.02	AV
17325	61.84	1.00	V	62.84	68.20	5.36	PK
11550	62.08	-3.46	H	58.62	73.98	15.36	PK
11550	48.50	-3.46	H	45.04	53.98	8.94	AV
17325	62.77	1.00	H	63.77	68.20	4.43	PK

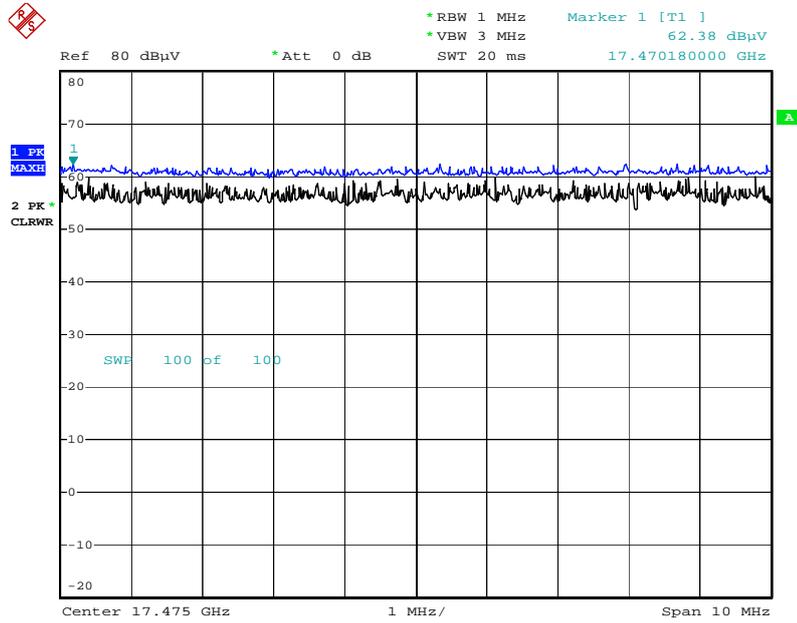
*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

Notes:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
4. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + Distance Factor
5. We have done all data rate in 802.11ac_80 MHz BW. Worst case is MCS0 in 802.11ac_80 MHz BW.
6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
7. Distance extrapolation factor = 20 log (test distance / specific distance) (dB)

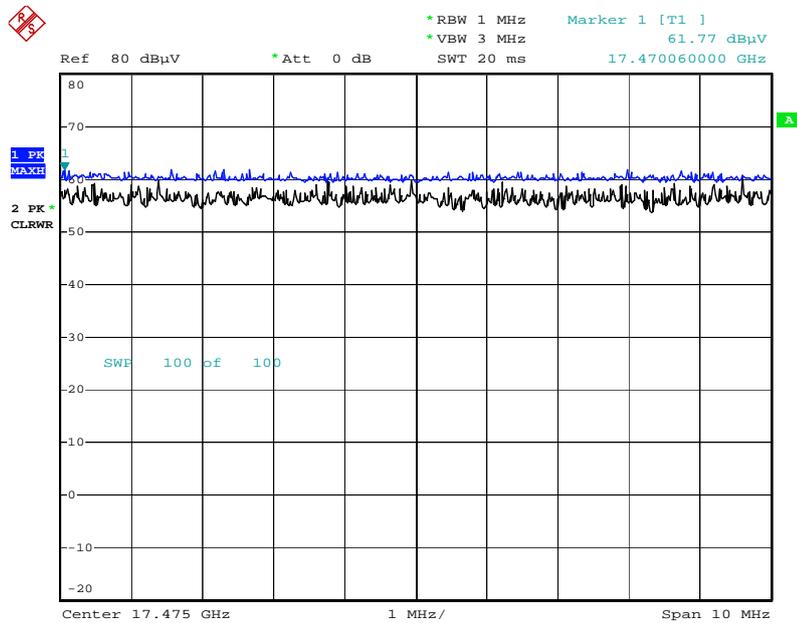
■ **RESULT PLOTS**

Radiated Spurious Emissions plot –Peak Reading (802.11a, Ch.165 3rd Harmonic, X-H)



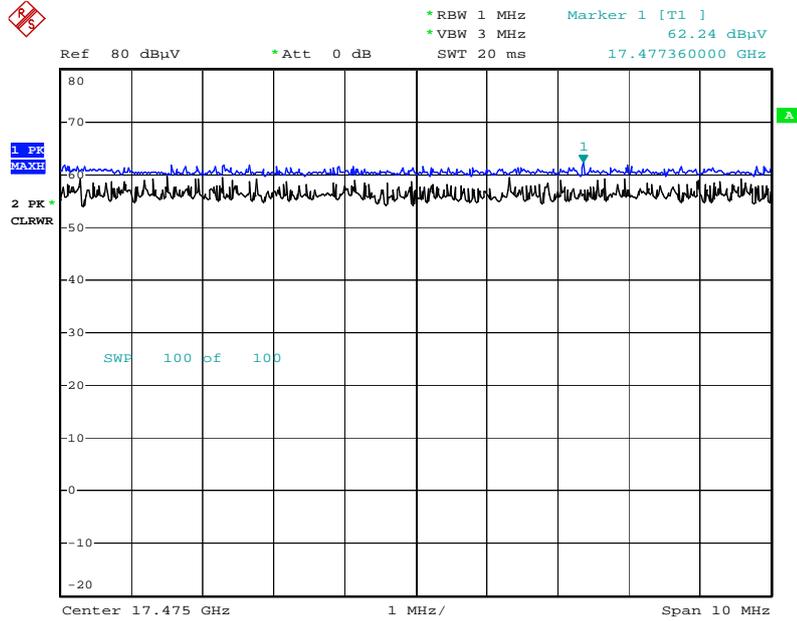
Date: 31.MAY.2016 15:50:46

Radiated Spurious Emissions plot – Peak Reading(802.11n_HT20, Ch.165 3rd Harmonic, X-H)



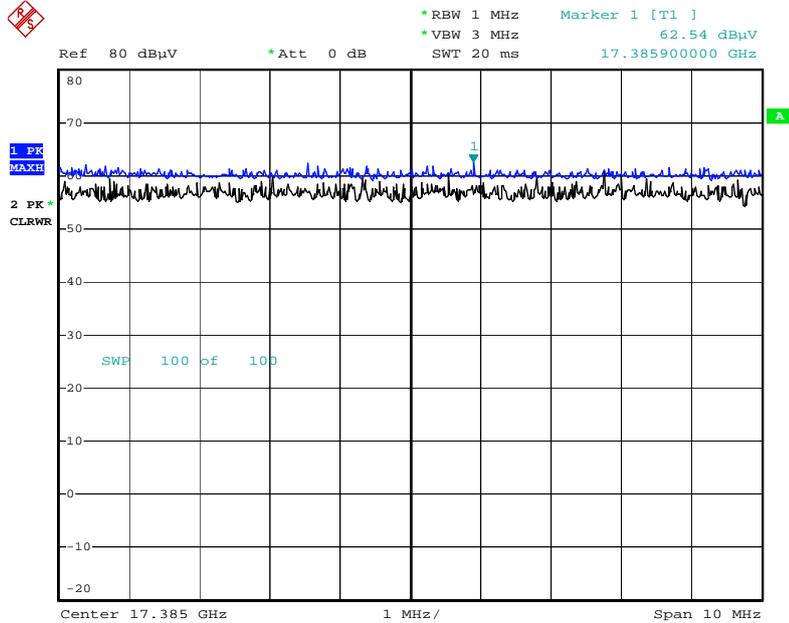
Date: 9.JUN.2016 14:59:03

Radiated Spurious Emissions plot –Peak Reading (802.11ac_VHT20, Ch.165 3rd Harmonic, X-H)



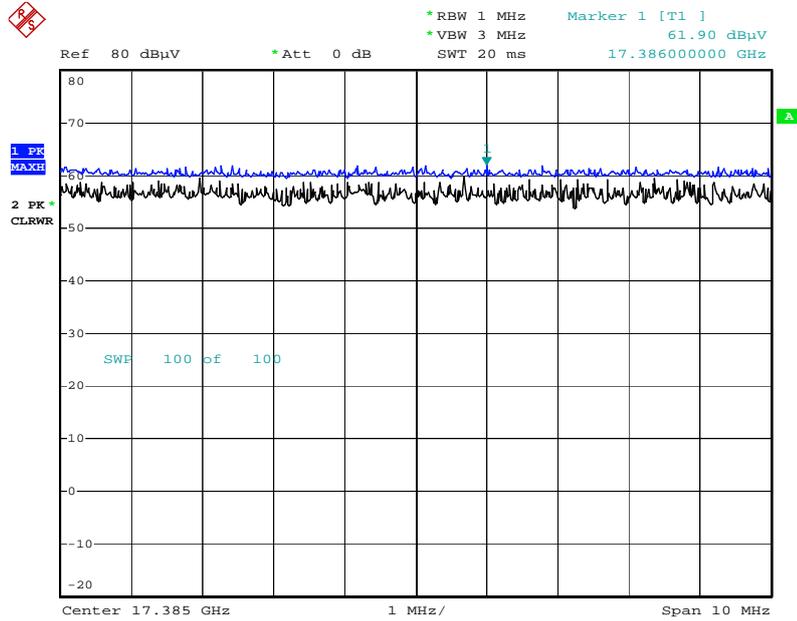
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Radiated Spurious Emissions plot –Peak Reading (802.11n_HT40, Ch.159 3rd Harmonic, X-H)



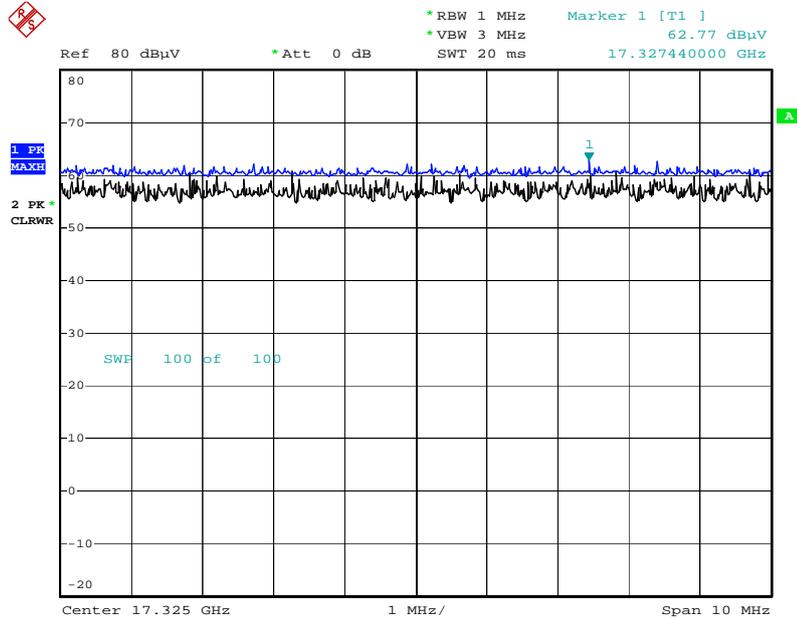
Date: 31.MAY.2016 15:57:24

Radiated Spurious Emissions plot – Peak Reading (802.11ac_VHT40, Ch.159 3rd Harmonic, X-H)



Date: 9.JUN.2016 15:01:23

Radiated Spurious Emissions plot –Peak Reading (802.11ac_VHT80, Ch.155 3rd Harmonic, X-H)



Date: 31.MAY.2016 16:03:58

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

9.6.2 RADIATED RESTRICTED BAND EDGE MEASUREMENTS

Test Requirements and limit, §15.247(d) §15.205, §15.209

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in section 15.209(a) (See section 15.205(c)).

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

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	59.83	10.12	H	69.95	73.98	4.03	PK
5150	38.38	10.12	H	48.5	53.98	5.48	AV
5150	57.25	10.12	V	67.37	73.98	6.61	PK
5150	37.49	10.12	V	47.61	53.98	6.37	AV

Band : UNII 1
 Operation Mode: 802.11 n_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5180 MHz
 Channel No. 36 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	58.17	10.12	H	68.29	73.98	5.69	PK
5150	38.75	10.12	H	48.87	53.98	5.11	AV
5150	57.56	10.12	V	67.68	73.98	6.30	PK
5150	38.82	10.12	V	48.94	53.98	5.04	AV

Band : UNII 1
 Operation Mode: 802.11 ac_20Mz BW
 Transfer MCS Index: 0
 Operating Frequency 5180 MHz
 Channel No. 36 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	58.27	10.12	H	68.39	73.98	5.59	PK
5150	38.27	10.12	H	48.39	53.98	5.59	AV
5150	57.38	10.12	V	67.5	73.98	6.48	PK
5150	37.45	10.12	V	47.57	53.98	6.41	AV

Band : UNII 1
 Operation Mode: 802.11 n_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5190 MHz
 Channel No. 38 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	54.77	10.12	H	64.89	73.98	9.09	PK
5150	39.50	10.12	H	49.62	53.98	4.36	AV
5150	54.08	10.12	V	64.2	73.98	9.78	PK
5150	38.76	10.12	V	48.88	53.98	5.10	AV

Band : UNII 1
 Operation Mode: 802.11 ac_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5190 MHz
 Channel No. 38 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	53.73	10.12	H	63.85	73.98	10.13	PK
5150	39.70	10.12	H	49.82	53.98	4.16	AV
5150	52.99	10.12	V	63.11	73.98	10.87	PK
5150	38.83	10.12	V	48.95	53.98	5.03	AV

Band : UNII 1
 Operation Mode: 802.11 ac_80 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5210 MHz
 Channel No. 42 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5150	53.58	10.12	H	63.70	73.98	10.28	PK
5150	39.55	10.12	H	49.67	53.98	4.31	AV
5150	52.71	10.12	V	62.83	73.98	11.15	PK
5150	38.57	10.12	V	48.69	53.98	5.29	AV

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

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	56.81	10.89	H	67.70	73.98	6.28	PK
5350	38.63	10.89	H	49.52	53.98	4.46	AV
5350	55.91	10.89	V	66.8	73.98	7.18	PK
5350	37.76	10.89	V	48.65	53.98	5.33	AV

Band : UNII 2A
 Operation Mode: 802.11 n_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5320 MHz
 Channel No. 64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	56.85	10.89	H	67.74	73.98	6.24	PK
5350	37.09	10.89	H	47.98	53.98	6.00	AV
5350	56.00	10.89	V	66.89	73.98	7.09	PK
5350	36.61	10.89	V	47.5	53.98	6.48	AV

Band : UNII 2A
 Operation Mode: 802.11 ac_20Mz BW
 Transfer MCS Index: 0
 Operating Frequency 5320 MHz
 Channel No. 64 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	55.99	10.89	H	66.88	73.98	7.10	PK
5350	37.75	10.89	H	48.64	53.98	5.34	AV
5350	55.21	10.89	V	66.1	73.98	7.88	PK
5350	37.10	10.89	V	47.99	53.98	5.99	AV

Band : UNII 2A
 Operation Mode: 802.11 n_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5310 MHz
 Channel No. 62 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	58.68	10.89	H	69.57	73.98	4.41	PK
5350	39.22	10.89	H	50.11	53.98	3.87	AV
5350	57.91	10.89	V	68.8	73.98	5.18	PK
5350	38.16	10.89	V	49.05	53.98	4.93	AV

Band : UNII 2A
 Operation Mode: 802.11 ac_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5310 MHz
 Channel No. 62 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	58.49	10.89	H	69.38	73.98	4.60	PK
5350	39.10	10.89	H	49.99	53.98	3.99	AV
5350	58.13	10.89	V	69.02	73.98	4.96	PK
5350	38.71	10.89	V	49.6	53.98	4.38	AV

Band : UNII 2A
 Operation Mode: 802.11 ac_80 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5290 MHz
 Channel No. 58 Ch

Frequency [MHz]	Reading dBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5350	56.33	10.89	H	67.22	73.98	6.76	PK
5350	39.84	10.89	H	50.73	53.98	3.25	AV
5350	55.80	10.89	V	66.69	73.98	7.29	PK
5350	39.15	10.89	V	50.04	53.98	3.94	AV

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

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	50.61	11.56	H	62.17	73.98	11.81	PK
5460	36.03	11.56	H	47.59	53.98	6.39	AV
*#5470	56.16	11.46	H	67.62	73.98	6.36	PK
*#5470	37.07	11.46	H	48.53	53.98	5.45	AV
5460	50.14	11.56	V	61.7	73.98	12.28	PK
5460	35.85	11.56	V	47.41	53.98	6.57	AV
*#5470	55.37	11.46	V	66.83	73.98	7.15	PK
*#5470	36.53	11.46	V	47.99	53.98	5.99	AV

Band : UNII 2C
 Operation Mode: 802.11 n_20MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5500 MHz
 Channel No. 100 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	48.87	11.56	H	60.43	73.98	13.55	PK
5460	35.80	11.56	H	47.36	53.98	6.62	AV
*#5470	52.87	11.46	H	64.33	68.20	3.87	PK
5460	48.80	11.56	V	60.36	73.98	13.62	PK
5460	35.76	11.56	V	47.32	53.98	6.66	AV
*#5470	52.15	11.46	V	63.61	68.20	4.59	PK

Band : UNII 2C
 Operation Mode: 802.11 ac_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5500 MHz
 Channel No. 100 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	49.75	11.56	H	61.31	73.98	12.67	PK
5460	35.81	11.56	H	47.37	53.98	6.61	AV
*#5470	53.18	11.46	H	64.64	68.20	3.56	PK
5460	49.51	11.56	V	61.07	73.98	12.91	PK
5460	35.83	11.56	V	47.39	53.98	6.59	AV
*#5470	52.63	11.46	V	64.09	68.20	4.11	PK

Band : UNII 2C
 Operation Mode: 802.11 n_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5510 MHz
 Channel No. 102 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	50.62	11.56	H	62.18	73.98	11.80	PK
5460	36.01	11.56	H	47.57	53.98	6.41	AV
*5470	56.10	11.46	H	67.56	73.98	6.42	PK
*5470	39.19	11.46	H	50.65	53.98	3.33	AV
5460	50.24	11.56	V	61.8	73.98	12.18	PK
5460	35.89	11.56	V	47.45	53.98	6.53	AV
*5470	55.28	11.46	V	66.74	73.98	7.24	PK
*5470	38.45	11.46	V	49.91	53.98	4.07	AV

Band : UNII 2C
 Operation Mode: 802.11 ac_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5510 MHz
 Channel No. 102 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	49.51	11.56	H	61.07	73.98	12.91	PK
5460	36.02	11.56	H	47.58	53.98	6.40	AV
*5470	55.40	11.46	H	66.86	73.98	7.12	PK
*5470	38.86	11.46	H	50.32	53.98	3.66	AV
5460	49.07	11.56	V	60.63	73.98	13.35	PK
5460	35.87	11.56	V	47.43	53.98	6.55	AV
*5470	55.13	11.46	V	66.59	73.98	7.39	PK
*5470	38.62	11.46	V	50.08	53.98	3.90	AV

Band : UNII 2C
 Operation Mode: 802.11 ac_80 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5530 MHz
 Channel No. 106 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	53.63	11.56	H	65.19	73.98	8.79	PK
5460	38.73	11.56	H	50.29	53.98	3.69	AV
*5470	53.73	11.46	H	65.19	68.20	3.01	PK
5460	53.21	11.56	V	64.77	73.98	9.21	PK
5460	38.33	11.56	V	49.89	53.98	4.09	AV
*5470	53.42	11.46	V	64.88	68.20	3.32	PK

Band : UNII 3
 Operation Mode: 802.11 a
 Transfer Rate: 6 Mbps
 Operating Frequency 5825 MHz
 Channel No. 165 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
*5850	56.30	13.41	H	69.71	78.20	8.49	PK
*5850	55.29	13.41	V	68.70	78.20	9.50	PK
*5860	50.26	13.41	H	63.67	68.20	4.53	PK
*5860	49.41	13.41	V	62.82	68.20	5.38	PK

Band : UNII 3
 Operation Mode: 802.11 n_20MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5825 MHz
 Channel No. 165 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
*5850	55.74	13.41	H	69.15	78.20	9.05	PK
*5850	54.96	13.41	V	68.37	78.20	9.83	PK
*5860	49.96	13.41	H	63.37	68.20	4.83	PK
*5860	49.23	13.41	V	62.64	68.20	5.56	PK

Band : UNII 3
 Operation Mode: 802.11 ac_20 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5825 MHz
 Channel No. 165 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
*5850	54.17	13.41	H	67.58	78.20	10.62	PK
*5850	53.28	13.41	V	66.69	78.20	11.51	AV
*5860	49.23	13.41	H	62.64	68.20	5.56	PK
*5860	48.52	13.41	V	61.93	68.20	6.27	AV

Band : UNII 3
 Operation Mode: 802.11 n_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5795 MHz
 Channel No. 159 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
*5850	48.82	13.41	H	62.23	78.20	15.97	PK
*5850	48.15	13.41	V	61.56	78.20	16.64	PK
*5860	48.06	13.41	H	61.47	68.20	6.73	PK
*5860	47.75	13.41	V	61.16	68.20	7.04	PK

Band : UNII 3
 Operation Mode: 802.11 ac_40 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5795 MHz
 Channel No. 159 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
*5850	48.86	13.41	H	62.27	78.20	15.93	PK
*5850	48.24	13.41	V	61.65	78.20	16.55	AV
*5860	47.85	13.41	H	61.26	68.20	6.94	PK
*5860	47.77	13.41	V	61.18	68.20	7.02	AV

Band : UNII 3
 Operation Mode: 802.11 ac_80 MHz BW
 Transfer MCS Index: 0
 Operating Frequency 5755 MHz
 Channel No. 155 Ch

Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
*5850	49.45	13.41	H	62.86	78.20	15.34	PK
*5850	49.27	13.41	V	62.68	78.20	15.52	PK
*5860	48.26	13.41	H	61.67	68.20	6.53	PK
*5860	48.08	13.41	V	61.49	68.20	6.71	PK

Notes:

1. Total = Reading Value + Antenna Factor + Cable Loss - Amp Gain + ATT + Distance Factor
2. We have done all data rate in 802.11a/n/ac mode test. . Worst case of EUT is lowest data rate in 802.11a/n/ac.
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
4. '*' is radiated band edge test frequency.(not restricted band emissions)
5. The mark '#' is tested according to II.G.2.c in KDB 789033 D02 v01r02

II. MEASUREMENT PROCEDURES

G. Unwanted Emission Measurement

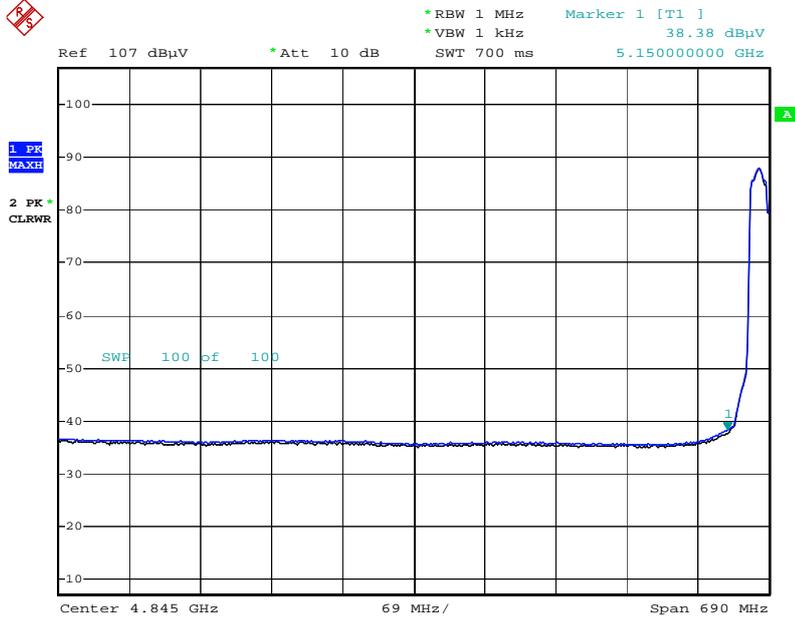
2. Unwanted Emissions that fall Outside of the Restricted Bands

c) At frequencies above 1000 MHz, use the procedure for maximum emissions described in section II.G.5., "Procedure for Unwanted Maximum Unwanted Emissions Measurements Above 1000 MHz".

As specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the peak and average limits of § 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz maximum emission limit.

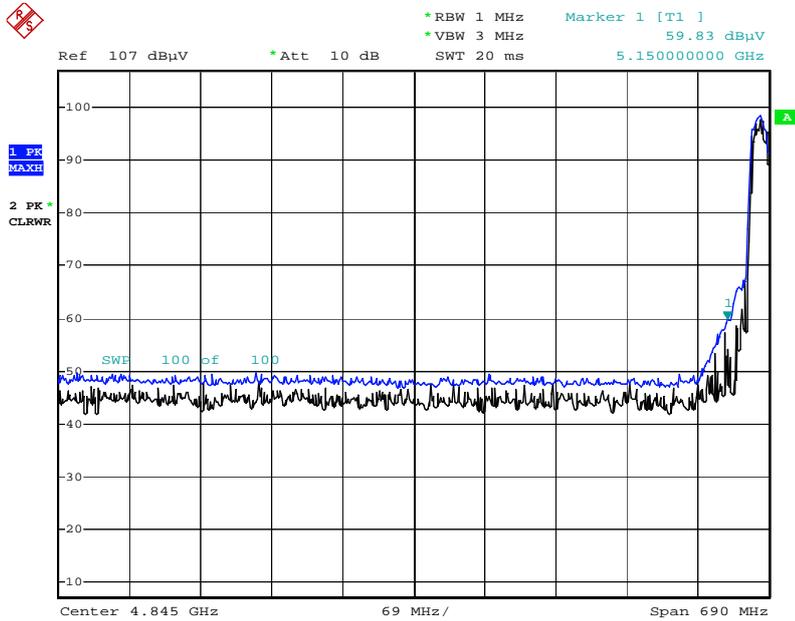
■ **RESULT PLOTS**

Radiated Restricted Band Edges plot – Average Reading (802.11a, Ch.36, X-H)



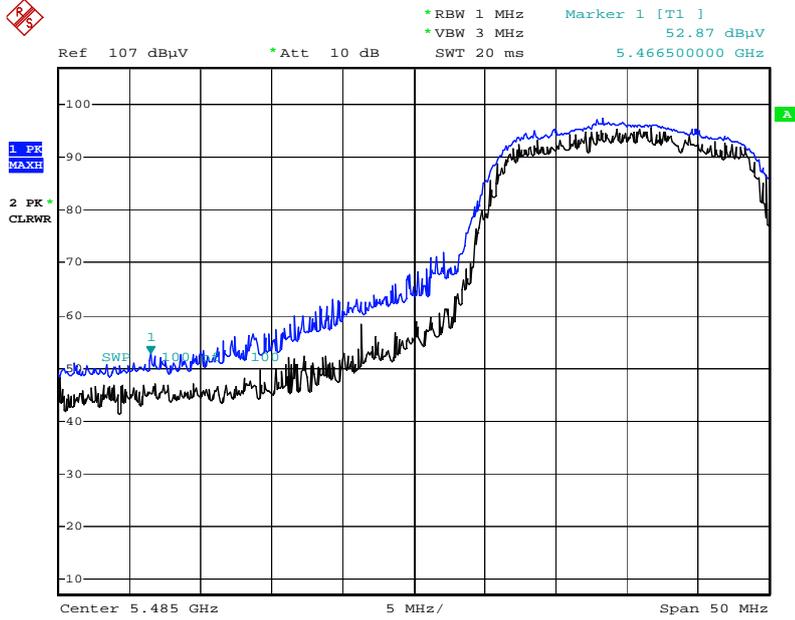
Date: 9.JUN.2016 15:11:55

Radiated Restricted Band Edges plot – Peak Reading (802.11a, Ch.36, X-H)



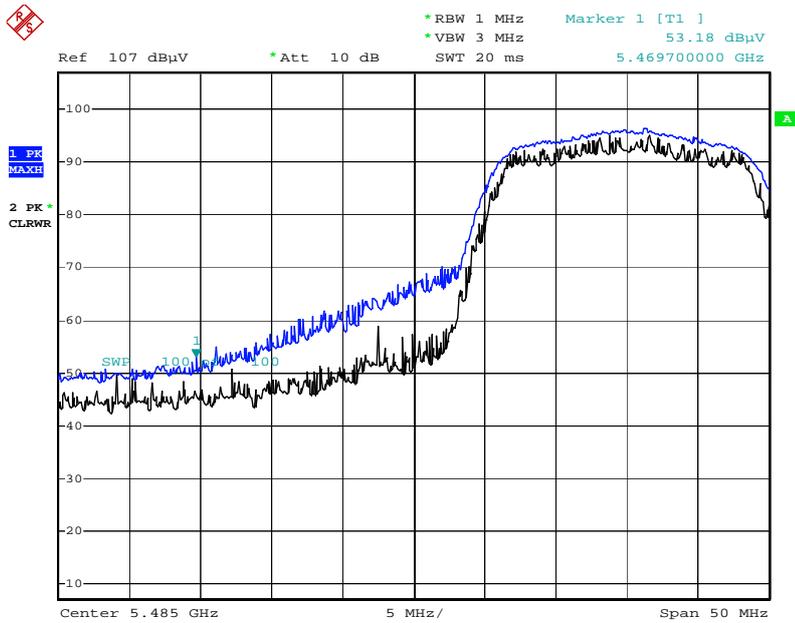
Date: 9.JUN.2016 15:08:38

Radiated Restricted Band Edges plot – Peak Reading (802.11n_20M, Ch.100, X-H)



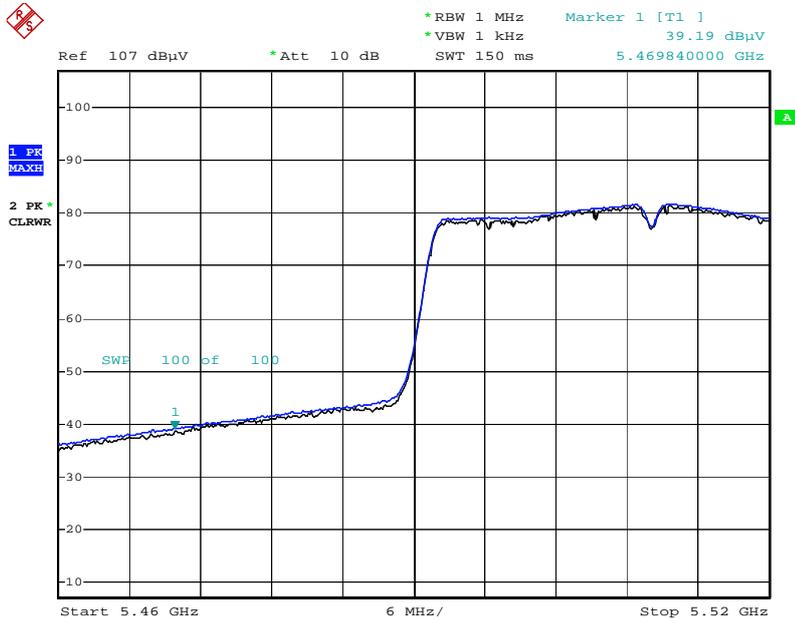
Date: 31.MAY.2016 16:45:56

Radiated Restricted Band Edges plot – Peak Reading (802.11ac_20M, Ch.100, X-H)



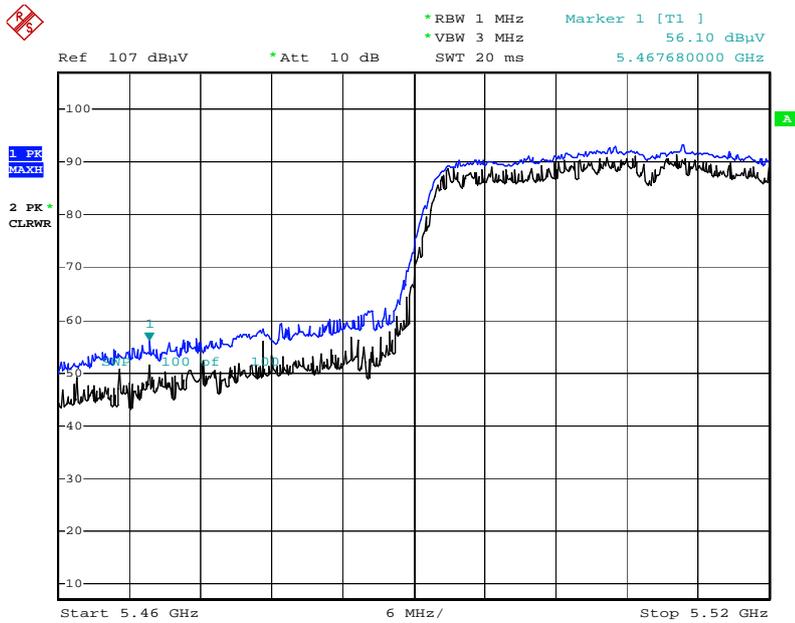
Date: 9.JUN.2016 15:16:37

Radiated Restricted Band Edges plot –Average Reading (802.11n_40M, Ch.102, X-H)



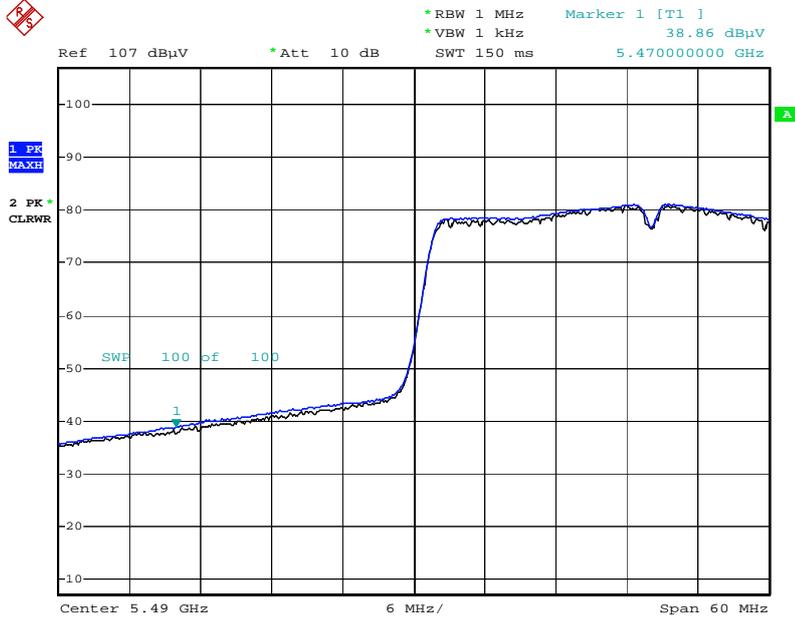
Date: 30.MAY.2016 16:41:32

Radiated Restricted Band Edges plot – Peak Reading (802.11n_40M, Ch.102, X-H)



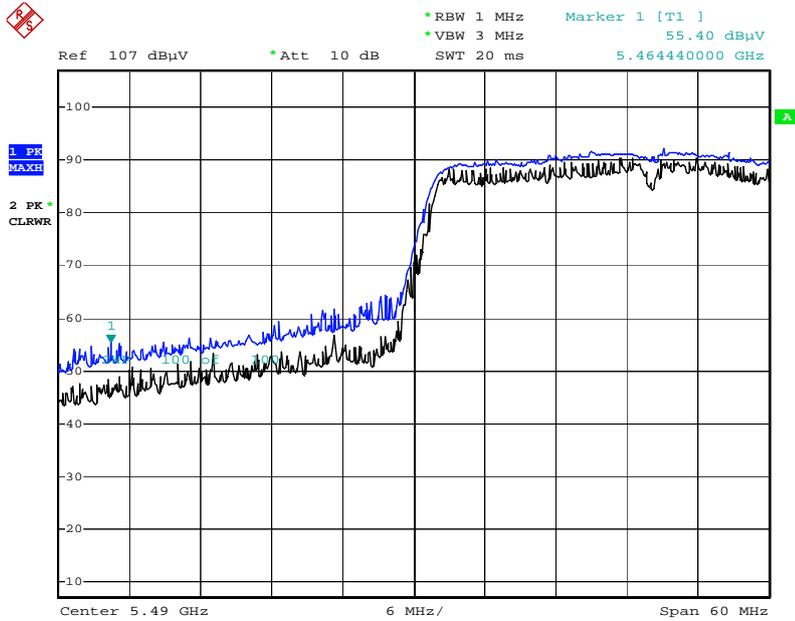
Date: 30.MAY.2016 16:40:24

Radiated Restricted Band Edges plot –Average Reading (802.11ac_40M, Ch.102, X-H)



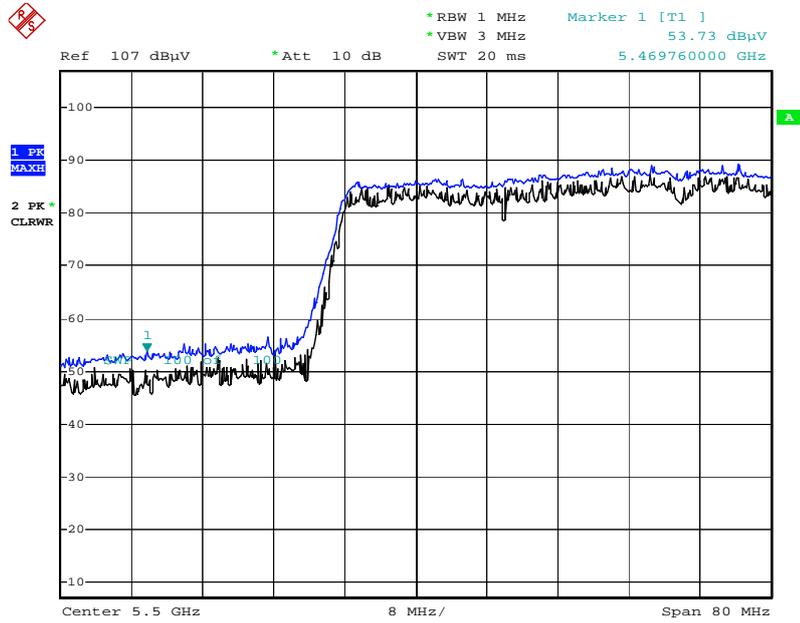
Date: 9.JUN.2016 15:24:46

Radiated Restricted Band Edges plot – Peak Reading (802.11ac_40M, Ch.102, X-H)



Date: 9.JUN.2016 15:25:50

Radiated Restricted Band Edges plot – Peak Reading (802.11ac_80M, Ch.106, X-H)



Date: 30.MAY.2016 18:14:56

9.7 POWERLINE CONDUCTED EMISSIONS

Test Requirements and limit, §15.207

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

Frequency Range (MHz)	Limits (dBµV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Configuration

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

TEST PROCEDURE

1. The EUT is placed on a wooden table 80 cm above the reference groundplane.
2. The EUT is connected via LISN to a test power supply.
3. The measurement results are obtained as described below:
4. Detectors – Quasi Peak and Average Detector.

Sample Calculation

Quasi-peak(Final Result) = Reading Value + Correction Factor

■ **RESULT PLOTS**

Conducted Emissions (Line 1)

WLAN MODE 5G L1

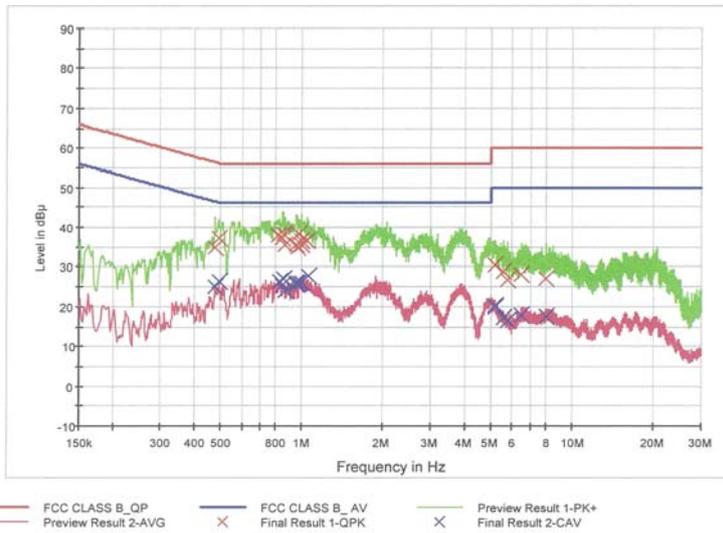
1/2

HCT TEST Report

Common Information

EUT: LG-K600
 Manufacturer: LG
 Test Site: SHIELD ROOM
 Operating Conditions: WLAN MODE_5G

FCC CLASS B



Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.478000	35.0	9.000	Off	L1	9.7	21.4	56.4
0.494000	37.4	9.000	Off	L1	9.7	18.7	56.1
0.820000	37.9	9.000	Off	L1	9.7	18.1	56.0
0.848000	37.2	9.000	Off	L1	9.7	18.8	56.0
0.852000	38.2	9.000	Off	L1	9.7	17.8	56.0
0.866000	35.5	9.000	Off	L1	9.7	20.5	56.0
0.956000	35.7	9.000	Off	L1	9.7	20.3	56.0
0.960000	34.9	9.000	Off	L1	9.7	21.1	56.0
0.980000	38.3	9.000	Off	L1	9.7	17.7	56.0
0.994000	35.4	9.000	Off	L1	9.7	20.6	56.0
0.998000	36.7	9.000	Off	L1	9.7	19.3	56.0
1.048000	36.8	9.000	Off	L1	9.7	19.2	56.0
5.182000	30.6	9.000	Off	L1	9.9	29.4	60.0
5.190000	30.4	9.000	Off	L1	9.9	29.6	60.0
5.578000	28.7	9.000	Off	L1	9.9	31.3	60.0
5.778000	26.9	9.000	Off	L1	9.9	33.1	60.0
6.504000	28.1	9.000	Off	L1	9.9	31.9	60.0
7.962000	27.2	9.000	Off	L1	10.0	32.8	60.0

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WLAN MODE 5G L1

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Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.478000	25.0	9.000	Off	L1	9.7	21.4	46.4
0.494000	26.4	9.000	Off	L1	9.7	19.7	46.1
0.826000	26.5	9.000	Off	L1	9.7	19.5	46.0
0.848000	25.3	9.000	Off	L1	9.7	20.7	46.0
0.854000	27.1	9.000	Off	L1	9.7	18.9	46.0
0.866000	24.2	9.000	Off	L1	9.7	21.8	46.0
0.950000	26.2	9.000	Off	L1	9.7	19.8	46.0
0.956000	25.6	9.000	Off	L1	9.7	20.4	46.0
0.974000	26.1	9.000	Off	L1	9.7	19.9	46.0
0.994000	26.0	9.000	Off	L1	9.7	20.0	46.0
1.000000	26.1	9.000	Off	L1	9.7	19.9	46.0
1.054000	27.9	9.000	Off	L1	9.7	18.1	46.0
5.182000	20.3	9.000	Off	L1	9.9	29.7	50.0
5.190000	20.1	9.000	Off	L1	9.9	29.9	50.0
5.584000	17.1	9.000	Off	L1	9.9	32.9	50.0
5.778000	16.5	9.000	Off	L1	9.9	33.5	50.0
6.504000	17.8	9.000	Off	L1	9.9	32.2	50.0
7.962000	17.4	9.000	Off	L1	10.0	32.6	50.0

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Conducted Emissions (Line 2)

WLAN MODE 5G N

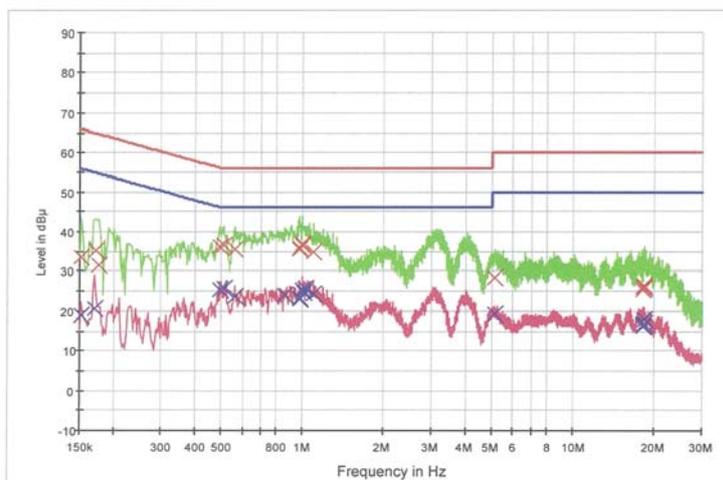
1 / 2

HCT TEST Report

Common Information

EUT: LG-K600
 Manufacturer: LG
 Test Site: SHIELD ROOM
 Operating Conditions: WLAN MODE _ 5G

FCC CLASS B



— FCC CLASS B_QP — FCC CLASS B_AV — Preview Result 1-PK+
 — Preview Result 2-AVG × Final Result 1-QPK × Final Result 2-CAV

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.152000	33.4	9.000	Off	N	9.6	32.5	65.9
0.172000	35.2	9.000	Off	N	9.6	29.7	64.9
0.176000	31.5	9.000	Off	N	9.6	33.2	64.7
0.492000	36.4	9.000	Off	N	9.6	19.7	56.1
0.510000	36.5	9.000	Off	N	9.6	19.5	56.0
0.562000	35.7	9.000	Off	N	9.6	20.3	56.0
0.970000	35.7	9.000	Off	N	9.7	20.3	56.0
0.974000	35.6	9.000	Off	N	9.7	20.4	56.0
0.980000	36.1	9.000	Off	N	9.7	19.9	56.0
0.992000	36.8	9.000	Off	N	9.7	19.2	56.0
0.998000	36.5	9.000	Off	N	9.7	19.5	56.0
1.098000	35.0	9.000	Off	N	9.7	21.0	56.0
5.156000	28.4	9.000	Off	N	9.8	31.6	60.0
18.178000	25.5	9.000	Off	N	10.2	34.5	60.0
18.234000	26.0	9.000	Off	N	10.2	34.0	60.0
18.282000	26.0	9.000	Off	N	10.2	34.0	60.0
18.290000	25.9	9.000	Off	N	10.2	34.1	60.0
18.300000	26.4	9.000	Off	N	10.2	33.6	60.0

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WLAN MODE 5G N

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Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	18.9	9.000	Off	N	9.6	37.0	55.9
0.170000	20.6	9.000	Off	N	9.6	34.4	55.0
0.492000	25.4	9.000	Off	N	9.6	20.8	46.1
0.510000	25.8	9.000	Off	N	9.6	20.2	46.0
0.562000	23.6	9.000	Off	N	9.6	22.4	46.0
0.854000	24.1	9.000	Off	N	9.7	21.9	46.0
0.970000	23.4	9.000	Off	N	9.7	22.6	46.0
0.974000	22.9	9.000	Off	N	9.7	23.1	46.0
0.998000	25.3	9.000	Off	N	9.7	20.7	46.0
1.014000	24.6	9.000	Off	N	9.7	21.4	46.0
1.018000	25.6	9.000	Off	N	9.7	20.4	46.0
1.098000	24.2	9.000	Off	N	9.7	21.8	46.0
5.156000	19.1	9.000	Off	N	9.8	30.9	50.0
18.178000	16.3	9.000	Off	N	10.2	33.7	50.0
18.234000	16.6	9.000	Off	N	10.2	33.4	50.0
18.282000	16.9	9.000	Off	N	10.2	33.1	50.0
18.290000	16.8	9.000	Off	N	10.2	33.2	50.0
18.300000	18.0	9.000	Off	N	10.2	32.0	50.0

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10. LIST OF TEST EQUIPMENT

10.1 LIST OF TEST EQUIPMENT(Conducted Test)

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
Rohde & Schwarz	ENV216 / LISN	12/28/2015	Annual	100073
Rohde & Schwarz	ESCI / Test Receiver	12/28/2015	Annual	100584
Agilent	N9020A / Signal Analyzer	06/24/2016	Annual	MY51110085
Agilent	N9030A / Signal Analyzer	11/24/2015	Annual	MY49431210
Agilent	N1911A / Power Meter	03/11/2016	Annual	MY45100523
Agilent	N1921A / Power Sensor	03/11/2016	Annual	MY52260025
Agilent	87300B / Directional Coupler	11/30/2015	Annual	3116A03621
Hewlett Packard	11667B / Power Splitter	06/14/2016	Annual	05001
Hewlett Packard	E3632A / DC Power Supply	03/09/2016	Annual	KR75303962
Agilent	8493C / Attenuator(10 dB)	07/21/2015	Annual	07560
ESPAC.	SH-642 / Temp & Humidity Chamber	07/23/2015	Annual	93000717

10.2 LIST OF TEST EQUIPMENT(Radiated Test)

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
Audix	AM4000 / Antenna Position Tower	N/A	N/A	N/A
Audix	Turn Table	N/A	N/A	N/A
Audix	EM1000 / Controller	N/A	N/A	060520
Rohde & Schwarz	Loop Antenna	02/23/2016	Biennial	1513-175
Schwarzbeck	VULB 9168 / Hybrid Antenna	04/15/2015	Biennial	255
Schwarzbeck	BBHA 9120D / Horn Antenna	05/07/2015	Biennial	937
Schwarzbeck	BBHA9170 / Horn Antenna(15 GHz ~ 40 GHz)	09/03/2015	Biennial	BBHA9170541
Rohde & Schwarz	FSP / Spectrum Analyzer	09/24/2015	Annual	100688
Rohde & Schwarz	FSV40-N / Spectrum Analyzer	09/23/2015	Annual	101068-SZ
Wainwright Instruments	WHK3.0/18G-10EF / High Pass Filter	06/24/2016	Annual	8
Wainwright Instruments	WHFX7.0/18G-8SS / High Pass Filter	05/13/2016	Annual	29
Wainwright Instruments	WRCJV2400/2483.5-2370/2520-60/12SS / Band Reject Filter	07/06/2015	Annual	2
Wainwright Instruments	WRCJV5100/5850-40/50-8EEK / Band Reject Filter	01/26/2016	Annual	2
Agilent	8493C-10 / Attenuator(10 dB)	08/20/2015	Annual	76649
CERNEX	CBLU1183540 / Power Amplifier	07/21/2015	Annual	22964
CERNEX	CBL06185030 / Power Amplifier	07/21/2015	Annual	22965
CERNEX	CBL18265035 / Power Amplifier	07/27/2015	Annual	22966
CERNEX	CBL26405040 / Power Amplifier	07/09/2015	Annual	25956