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)

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	0.708	1.747	2.455	11	Pass
		802.11ac	-1.351	2.936	1.585	11	Pass

Conducted Power Density Measurements (UNII 3 Band)

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	-3.662	1.747	-1.915	30	Pass
		802.11ac	-4.466	2.936	-1.530	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)

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	-4.526	3.112	-1.414	11	Pass

Conducted Power Density Measurements (UNII 3 Band)

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	-8.188	3.112	-5.076	30	Pass

▣Straddle channels TEST Plot for 802.11ac_VHT80

802.11ac_VHT80 UNII 2C Band PSD CH.138	802.11ac_VHT80 UNII 3 Band PSD CH.138
	

9.5 FREQUENCY STABILITY.

The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between -30 ℃ and 50 ℃. The temperature was incremented by 10 ℃ 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: 4.00 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.00	+20(Ref)	5180028.32	28.32
100%		-30	5180026.69	26.69
100%		-20	5180031.35	31.35
100%		-10	5180034.55	34.55
100%		0	5180037.67	37.67
100%		+10	5180040.94	40.94
100%		+30	5180049.70	49.70
100%		+40	5180054.33	54.33
100%		+50	5180059.37	59.37
High	4.20	+20	5180041.88	41.88
Low	3.50	+20	5180039.25	39.25

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: 4.00 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.00	+20(Ref)	5260030.79	30.79
100%		-30	5260024.84	24.84
100%		-20	5260029.48	29.48
100%		-10	5260032.77	32.77
100%		0	5260036.77	36.77
100%		+10	5260039.98	39.98
100%		+30	5260048.52	48.52
100%		+40	5260052.57	52.57
100%		+50	5260057.58	57.58
High	4.20	+20	5260036.29	36.29
Low	3.50	+20	5260041.00	41.00

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: 4.00 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.00	+20(Ref)	5500032.41	32.41
100%		-30	5500026.35	26.35
100%		-20	5500029.75	29.75
100%		-10	5500033.51	33.51
100%		0	5500036.98	36.98
100%		+10	5500040.25	40.25
100%		+30	5500048.52	48.52
100%		+40	5500053.56	53.56
100%		+50	5500056.87	56.87
High	4.20	+20	5500037.03	37.03
Low	3.50	+20	5500041.53	41.53

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: 4.00 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.00	+20(Ref)	5745040.56	40.56
100%		-30	5745024.91	24.91
100%		-20	5745028.34	28.34
100%		-10	5745032.22	32.22
100%		0	5745036.92	36.92
100%		+10	5745040.95	40.95
100%		+30	5745049.24	49.24
100%		+40	5745052.72	52.72
100%		+50	5745057.05	57.05
High	4.20	+20	5745036.46	36.46
Low	3.50	+20	5745040.30	40.30

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: 4.00 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.00	+20(Ref)	5190037.62	37.62
100%		-30	5190024.31	24.31
100%		-20	5190027.79	27.79
100%		-10	5190032.20	32.20
100%		0	5190036.53	36.53
100%		+10	5190041.27	41.27
100%		+30	5190049.55	49.55
100%		+40	5190054.64	54.64
100%		+50	5190059.63	59.63
High	4.20	+20	5190036.75	36.75
Low	3.50	+20	5190040.67	40.67

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: 4.00 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.00	+20(Ref)	5270042.13	42.13
100%		-30	5270024.58	24.58
100%		-20	5270028.78	28.78
100%		-10	5270033.33	33.33
100%		0	5270036.78	36.78
100%		+10	5270041.64	41.64
100%		+30	5270049.67	49.67
100%		+40	5270053.18	53.18
100%		+50	5270057.65	57.65
High	4.20	+20	5270041.55	41.55
Low	3.50	+20	5270038.00	38.00

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: 4.00 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.00	+20(Ref)	5510043.56	43.56
100%		-30	5510025.89	25.89
100%		-20	5510029.74	29.74
100%		-10	5510033.65	33.65
100%		0	5510038.33	38.33
100%		+10	5510041.57	41.57
100%		+30	5510048.77	48.77
100%		+40	5510053.16	53.16
100%		+50	5510056.89	56.89
High	4.20	+20	5510037.42	37.42
Low	3.50	+20	5510040.32	40.32

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: 4.00 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.00	+20(Ref)	5755048.95	48.95
100%		-30	5755023.37	23.37
100%		-20	5755027.39	27.39
100%		-10	5755032.19	32.19
100%		0	5755036.92	36.92
100%		+10	5755040.36	40.36
100%		+30	5755048.32	48.32
100%		+40	5755052.08	52.08
100%		+50	5755056.39	56.39
High	4.20	+20	5755035.51	35.51
Low	3.50	+20	5755040.27	40.27

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: 4.00 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.00	+20(Ref)	5210038.69	38.69
100%		-30	5210025.22	25.22
100%		-20	5210028.51	28.51
100%		-10	5210033.58	33.58
100%		0	5210036.81	36.81
100%		+10	5210041.74	41.74
100%		+30	5210049.26	49.26
100%		+40	5210054.11	54.11
100%		+50	5210059.10	59.10
High	4.20	+20	5210037.84	37.84
Low	3.50	+20	5210041.77	41.77

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: 4.00 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.00	+20(Ref)	5290042.11	42.11
100%		-30	5290025.52	25.52
100%		-20	5290030.61	30.61
100%		-10	5290033.86	33.86
100%		0	5290037.84	37.84
100%		+10	5290041.32	41.32
100%		+30	5290048.34	48.34
100%		+40	5290051.49	51.49
100%		+50	5290055.41	55.41
High	4.20	+20	5290037.20	37.20
Low	3.50	+20	5290041.02	41.02

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: 4.00 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.00	+20(Ref)	5530047.34	47.34
100%		-30	5530026.87	26.87
100%		-20	5530030.30	30.30
100%		-10	5530033.72	33.72
100%		0	5530037.96	37.96
100%		+10	5530041.31	41.31
100%		+30	5530048.71	48.71
100%		+40	5530052.76	52.76
100%		+50	5530057.76	57.76
High	4.20	+20	5530037.43	37.43
Low	3.50	+20	5530040.76	40.76

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: 4.00 VDC

Voltage (%)	Power (VDC)	Temp. (℃)	Frequency (kHz)	Frequency Error (kHz)
100%	4.00	+20(Ref)	5775050.01	50.01
100%		-30	5775022.61	22.61
100%		-20	5775027.05	27.05
100%		-10	5775030.79	30.79
100%		0	5775035.80	35.80
100%		+10	5775040.12	40.12
100%		+30	5775048.55	48.55
100%		+40	5775052.60	52.60
100%		+50	5775056.66	56.66
High	4.20	+20	5775039.99	39.99
Low	3.50	+20	5775034.34	34.34

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

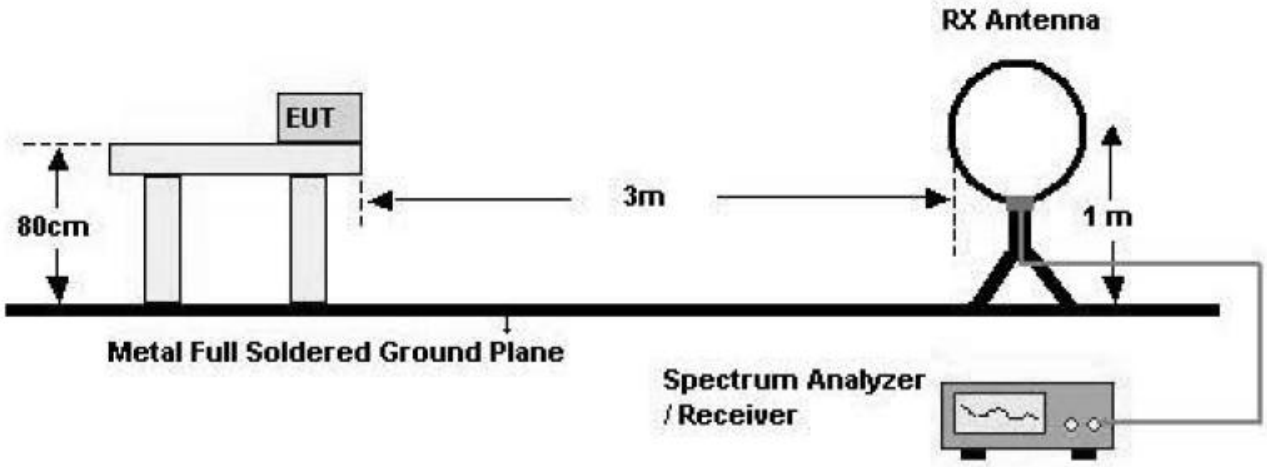
Frequency (MHz)	Field Strength (uV/m)	Measurement Distance (m)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

▣ §15.407, KDB 789033 D02v02

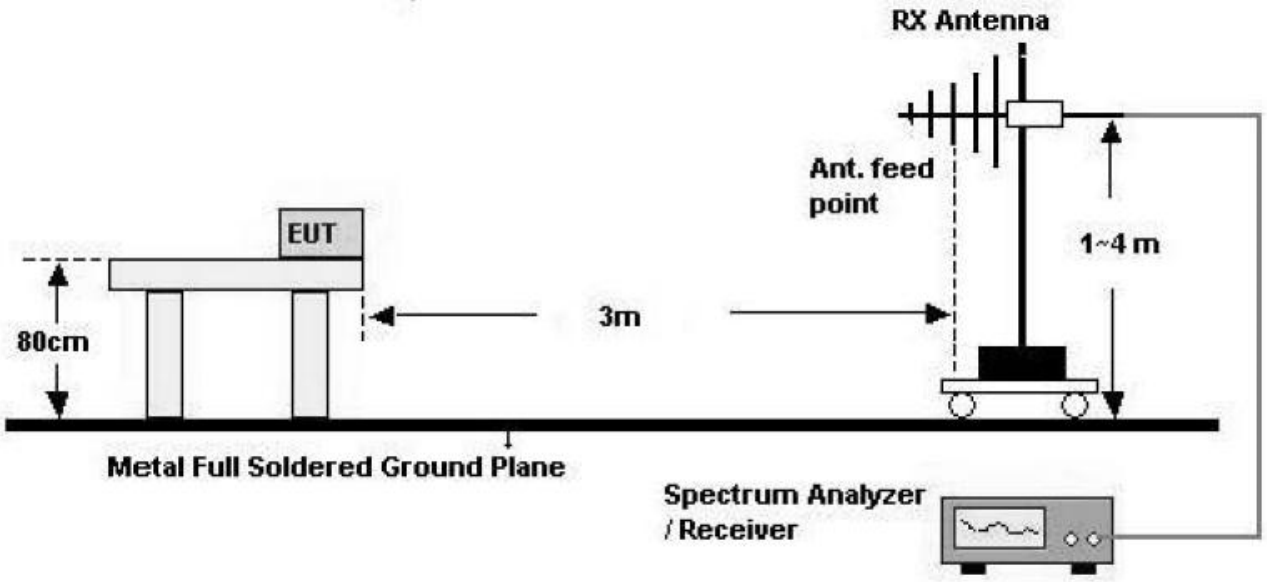
All harmonics that do not lie in a restricted band are subject to a peak limit of -27 dBm/MHz. At a distance of 3 meters the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2 dB to the EIRP limit of -27 dBm/MHz to obtain the limit for out of band spurious emissions of 68.2 dBμV/m. Espectally, for transmitter operating in the 5725 Mhz – 5850 MHz : All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Test Configuration

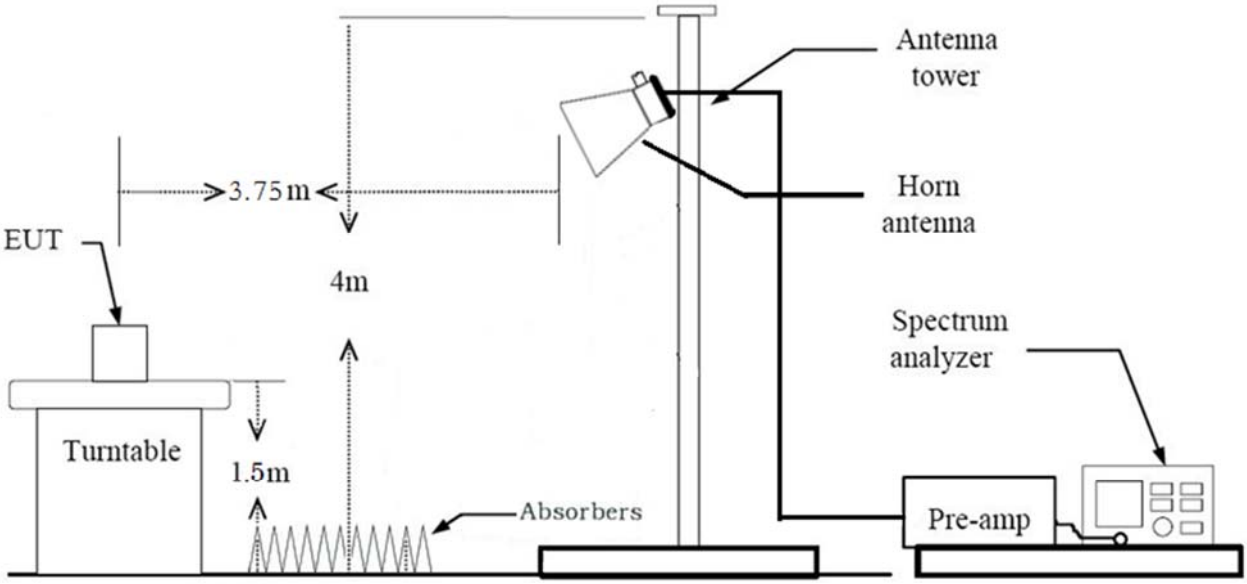
Below 30 MHz



30 MHz - 1 GHz



Above 1 GHz



TEST PROCEDURE USED

ANSI C63.10:2013

Method G)5) in KDB 789033 D02 v02r01 (Peak)

Method G)6)d) in KDB 789033 D02 v02r01 (Average)

. Spectrum setting:

- Peak.

1. RBW = 1 MHz
2. VBW ≥ 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 ≥ 98 percent, set VBW ≤ RBW/100(i.e., 10 kHz) but not less than 10 Hz.
   2.2. If the EUT duty cycle is < 98 percent, set VBW ≥ 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 minimym 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, n_HT40, ac_VHT20, 40, 80 mode to perform the average filed strength measurements.
2. The actual setting value of VBW for 802.11a/n_HT20, n_HT40, ac_VHT20, 40, 80
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 (test distance / 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**	**1.432**	**1.527**	**0.93775167**	**698**	**1000**
n_HT20	**MCS 0**	**1.340**	**1.446**	**0.92647272**	**746**	**1000**
ac_VHT20	**MCS 0**	**1.350**	**1.435**	**0.94076655**	**741**	**1000**
n_HT40	**MCS 0**	**0.665**	**0.752**	**0.88368750**	**1505**	**3000**
ac_VHT40	**MCS 0**	**0.674**	**0.758**	**0.88918206**	**1484**	**3000**
ac_VHT80	**MCS 0**	**0.612**	**0.712**	**0.85987351**	**1635**	**10000**

TEST RESULTS

9 kHz – 30MHz

Operation Mode: Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
㎒	dB㎶	dB /m	dB	(H/V)	dB㎶/m	dB㎶/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
㎒	dB㎶	dB /m	dB	(H/V)	dB㎶/m	dB㎶/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_Normal Charging
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	58.33	-1.02	V	57.31	68.20	10.89	PK
15540	52.85	-1.27	V	51.58	73.98	22.40	PK
15540	39.32	-1.27	V	38.05	53.98	15.93	AV
10360	57.34	-1.02	H	56.32	68.20	11.88	PK
15540	52.45	-1.27	H	51.18	73.98	22.80	PK
15540	39.12	-1.27	H	37.85	53.98	16.13	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_Normal Charging
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	55.79	-0.29	V	55.50	68.20	12.70	PK
15600	52.80	-3.24	V	49.56	73.98	24.42	PK
15600	39.21	-3.24	V	35.97	53.98	18.01	AV
10400	55.31	-0.29	H	55.02	68.20	13.18	PK
15600	52.65	-3.24	H	49.41	73.98	24.57	PK
15600	39.18	-3.24	H	35.94	53.98	18.04	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 802.11a. 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_Normal Charging
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	58.66	-3.09	V	55.57	68.20	12.63	PK
15720	53.32	-3.17	V	50.15	73.98	23.83	PK
15720	39.54	-3.17	V	36.37	53.98	17.61	AV
10480	58.14	-3.09	H	55.05	68.20	13.15	PK
15720	52.49	-3.17	H	49.32	73.98	24.66	PK
15720	39.45	-3.17	H	36.28	53.98	17.70	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_HT20_Normal Charging
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	57.03	-1.02	V	56.01	68.20	12.19	PK
15540	52.57	-1.27	V	51.30	73.98	22.68	PK
15540	39.15	-1.27	V	37.88	53.98	16.10	AV
10360	56.46	-1.02	H	55.44	68.20	12.76	PK
15540	52.48	-1.27	H	51.21	73.98	22.77	PK
15540	39.07	-1.27	H	37.80	53.98	16.18	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_HT20. Worst case is MCS0 in 802.11n_HT20.
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_HT20_Normal Charging
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	55.30	-0.29	V	55.01	68.20	13.19	PK
15600	53.01	-3.24	V	49.77	73.98	24.21	PK
15600	39.17	-3.24	V	35.93	53.98	18.05	AV
10400	55.14	-0.29	H	54.85	68.20	13.35	PK
15600	51.85	-3.24	H	48.61	73.98	25.37	PK
15600	39.10	-3.24	H	35.86	53.98	18.12	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_HT20. Worst case is MCS0 in 802.11n_HT20.
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_HT20_Normal Charging
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	57.65	-3.09	V	54.56	68.20	13.64	PK
15720	53.49	-3.17	V	50.32	73.98	23.66	PK
15720	39.51	-3.17	V	36.34	53.98	17.64	AV
10480	57.14	-3.09	H	54.05	68.20	14.15	PK
15720	52.48	-3.17	H	49.31	73.98	24.67	PK
15720	39.42	-3.17	H	36.25	53.98	17.73	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 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
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_VHT20_Normal Charging
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	56.75	-1.02	V	55.73	68.20	12.47	PK
15540	52.97	-1.27	V	51.70	73.98	22.28	PK
15540	39.18	-1.27	V	37.91	53.98	16.07	AV
10360	56.14	-1.02	H	55.12	68.20	13.08	PK
15540	52.85	-1.27	H	51.58	73.98	22.40	PK
15540	39.11	-1.27	H	37.84	53.98	16.14	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_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
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_VHT20_Normal Charging
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	55.41	-0.29	V	55.12	68.20	13.08	PK
15600	52.61	-3.24	V	49.37	73.98	24.61	PK
15600	39.28	-3.24	V	36.04	53.98	17.94	AV
10400	53.79	-0.29	H	53.50	68.20	14.70	PK
15600	51.31	-3.24	H	48.07	73.98	25.91	PK
15600	39.11	-3.24	H	35.87	53.98	18.11	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_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
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_VHT20_Normal Charging
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	57.34	-3.09	V	54.25	68.20	13.95	PK
15720	52.78	-3.17	V	49.61	73.98	24.37	PK
15720	39.46	-3.17	V	36.29	53.98	17.69	AV
10480	57.01	-3.09	H	53.92	68.20	14.28	PK
15720	51.16	-3.17	H	47.99	73.98	25.99	PK
15720	39.33	-3.17	H	36.16	53.98	17.82	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_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
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_HT40_Normal Charging
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	55.05	-1.29	V	53.76	68.20	14.44	PK
15570	52.64	-1.21	V	51.43	73.98	22.55	PK
15570	39.86	-1.21	V	38.65	53.98	15.33	AV
10380	54.26	-1.29	H	52.97	68.20	15.23	PK
15570	50.84	-1.21	H	49.63	73.98	24.35	PK
15570	39.74	-1.21	H	38.53	53.98	15.45	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 802.11n_HT40. Worst case is MCS0 in 802.11n_HT40.
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_HT40_Normal Charging
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	56.44	-1.52	V	54.92	68.20	13.28	PK
15690	53.29	-1.90	V	51.39	73.98	22.59	PK
15690	40.10	-1.90	V	38.20	53.98	15.78	AV
10460	55.67	-1.52	H	54.15	68.20	14.05	PK
15690	52.76	-1.90	H	50.86	73.98	23.12	PK
15690	39.94	-1.90	H	38.04	53.98	15.94	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_HT40. Worst case is MCS0 in 802.11n_HT40.
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_VHT40_Normal Charging
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	55.06	-1.29	V	53.77	68.20	14.43	PK
15570	52.74	-1.21	V	51.53	73.98	22.45	PK
15570	39.81	-1.21	V	38.60	53.98	15.38	AV
10380	54.87	-1.29	H	53.58	68.20	14.62	PK
15570	52.35	-1.21	H	51.14	73.98	22.84	PK
15570	39.28	-1.21	H	38.07	53.98	15.91	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_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
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_VHT40_Normal Charging
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	56.03	-1.52	V	54.51	68.20	13.69	PK
15690	52.99	-1.90	V	51.09	73.98	22.89	PK
15690	40.18	-1.90	V	38.28	53.98	15.70	AV
10460	55.43	-1.52	H	53.91	68.20	14.29	PK
15690	51.65	-1.90	H	49.75	73.98	24.23	PK
15690	40.12	-1.90	H	38.22	53.98	15.76	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_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
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_VHT80_Normal Charging
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	55.10	-1.73	V	53.37	68.20	14.83	PK
15630	53.13	-1.86	V	51.27	73.98	22.71	PK
15630	41.61	-1.86	V	39.75	53.98	14.23	AV
10420	54.62	-1.73	H	52.89	68.20	15.31	PK
15630	53.09	-1.86	H	51.23	73.98	22.75	PK
15630	41.56	-1.86	H	39.70	53.98	14.28	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_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
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_Normal Charging
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	58.71	-1.52	V	57.19	68.20	11.01	PK
15780	52.71	-2.64	V	50.07	73.98	23.91	PK
15780	39.40	-2.64	V	36.76	53.98	17.22	AV
10520	57.26	-1.52	H	55.74	68.20	12.46	PK
15780	52.36	-2.64	H	49.72	73.98	24.26	PK
15780	39.24	-2.64	H	36.60	53.98	17.38	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 802.11a. 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_Normal Charging
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	57.85	-1.32	V	56.53	73.98	17.45	PK
10600	44.77	-1.32	V	43.45	53.98	10.53	AV
15900	52.29	-1.51	V	50.78	73.98	23.20	PK
15900	38.29	-1.51	V	36.78	53.98	17.20	AV
10600	56.98	-1.32	H	55.66	73.98	18.32	PK
10600	44.12	-1.32	H	42.80	53.98	11.18	AV
15900	51.79	-1.51	H	50.28	73.98	23.70	PK
15900	38.26	-1.51	H	36.75	53.98	17.23	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_Normal Charging
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	60.18	-1.01	V	59.17	73.98	14.81	PK
10640	45.53	-1.01	V	44.52	53.98	9.46	AV
15960	53.20	-2.17	V	51.03	73.98	22.95	PK
15960	39.28	-2.17	V	37.11	53.98	16.87	AV
10640	58.61	-1.01	H	57.60	73.98	16.38	PK
10640	44.75	-1.01	H	43.74	53.98	10.24	AV
15960	52.94	-2.17	H	50.77	73.98	23.21	PK
15960	39.22	-2.17	H	37.05	53.98	16.93	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_HT20_Normal Charging
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	56.44	-1.52	V	54.92	68.20	13.28	PK
15780	52.62	-2.64	V	49.98	73.98	24.00	PK
15780	39.41	-2.64	V	36.77	53.98	17.21	AV
10520	55.49	-1.52	H	53.97	68.20	14.23	PK
15780	51.79	-2.64	H	49.15	73.98	24.83	PK
15780	39.38	-2.64	H	36.74	53.98	17.24	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_HT20. Worst case is MCS0 in 802.11n_HT20.
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_HT20_Normal Charging
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	58.44	-1.32	V	57.12	73.98	16.86	PK
10600	43.17	-1.32	V	41.85	53.98	12.13	AV
15900	52.48	-1.51	V	50.97	73.98	23.01	PK
15900	38.22	-1.51	V	36.71	53.98	17.27	AV
10600	58.13	-1.32	H	56.81	73.98	17.17	PK
10600	43.01	-1.32	H	41.69	53.98	12.29	AV
15900	52.11	-1.51	H	50.60	73.98	23.38	PK
15900	38.14	-1.51	H	36.63	53.98	17.35	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_HT20. Worst case is MCS0 in 802.11n_HT20.
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_HT20_Normal Charging
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	58.52	-1.01	V	57.51	73.98	16.47	PK
10640	43.67	-1.01	V	42.66	53.98	11.32	AV
15960	52.99	-2.17	V	50.82	73.98	23.16	PK
15960	39.31	-2.17	V	37.14	53.98	16.84	AV
10640	57.94	-1.01	H	56.93	73.98	17.05	PK
10640	43.22	-1.01	H	42.21	53.98	11.77	AV
15960	52.46	-2.17	H	50.29	73.98	23.69	PK
15960	39.25	-2.17	H	37.08	53.98	16.90	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_HT20. Worst case is MCS0 in 802.11n_HT20.
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_VHT20_Normal Charging
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	57.18	-1.52	V	55.66	68.20	12.54	PK
15780	51.88	-2.64	V	49.24	73.98	24.74	PK
15780	39.43	-2.64	V	36.79	53.98	17.19	AV
10520	56.67	-1.52	H	55.15	68.20	13.05	PK
15780	50.81	-2.64	H	48.17	73.98	25.81	PK
15780	39.33	-2.64	H	36.69	53.98	17.29	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 802.11ac_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
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_VHT20_Normal Charging
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	57.27	-1.32	V	55.95	73.98	18.03	PK
10600	42.56	-1.32	V	41.24	53.98	12.74	AV
15900	53.11	-1.51	V	51.60	73.98	22.38	PK
15900	38.29	-1.51	V	36.78	53.98	17.20	AV
10600	56.48	-1.32	H	55.16	73.98	18.82	PK
10600	42.13	-1.32	H	40.81	53.98	13.17	AV
15900	52.73	-1.51	H	51.22	73.98	22.76	PK
15900	38.21	-1.51	H	36.70	53.98	17.28	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_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
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_VHT20_Normal Charging
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	57.34	-1.01	V	56.33	73.98	17.65	PK
10640	43.07	-1.01	V	42.06	53.98	11.92	AV
15960	53.26	-2.17	V	51.09	73.98	22.89	PK
15960	39.38	-2.17	V	37.21	53.98	16.77	AV
10640	56.22	-1.01	H	55.21	73.98	18.77	PK
10640	42.86	-1.01	H	41.85	53.98	12.13	AV
15960	53.18	-2.17	H	51.01	73.98	22.97	PK
15960	39.33	-2.17	H	37.16	53.98	16.82	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_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
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_HT40_Normal Charging
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	56.43	-1.03	V	55.40	68.20	12.80	PK
15810	52.08	-2.29	V	49.79	73.98	24.19	PK
15810	39.94	-2.29	V	37.65	53.98	16.33	AV
10540	55.61	-1.03	H	54.58	68.20	13.62	PK
15810	51.64	-2.29	H	49.35	73.98	24.63	PK
15810	39.90	-2.29	H	37.61	53.98	16.37	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_HT40. Worst case is MCS0 in 802.11n_HT40.
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_HT40_Normal Charging
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	56.27	-2.36	V	53.91	73.98	20.07	PK
10620	43.12	-2.36	V	40.76	53.98	13.22	AV
15930	53.04	-1.95	V	51.09	73.98	22.89	PK
15930	40.04	-1.95	V	38.09	53.98	15.89	AV
10620	55.61	-2.36	H	53.25	73.98	20.73	PK
10620	42.66	-2.36	H	40.30	53.98	13.68	AV
15930	52.84	-1.95	H	50.89	73.98	23.09	PK
15930	39.85	-1.95	H	37.90	53.98	16.08	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_HT40. Worst case is MCS0 in 802.11n_HT40.
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_VHT40_Normal Charging
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	56.15	-1.03	V	55.12	68.20	13.08	PK
15810	51.88	-2.29	V	49.59	73.98	24.39	PK
15810	39.89	-2.29	V	37.60	53.98	16.38	AV
10540	55.28	-1.03	H	54.25	68.20	13.95	PK
15810	50.95	-2.29	H	48.66	73.98	25.32	PK
15810	39.84	-2.29	H	37.55	53.98	16.43	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_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
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_VHT40_Normal Charging
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	55.70	-2.36	V	53.34	73.98	20.64	PK
10620	42.70	-2.36	V	40.34	53.98	13.64	AV
15930	52.89	-1.95	V	50.94	73.98	23.04	PK
15930	40.11	-1.95	V	38.16	53.98	15.82	AV
10620	54.89	-2.36	H	52.53	73.98	21.45	PK
10620	42.61	-2.36	H	40.25	53.98	13.73	AV
15930	52.67	-1.95	H	50.72	73.98	23.26	PK
15930	40.03	-1.95	H	38.08	53.98	15.90	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_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
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_VHT80_Normal Charging
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	54.71	-0.75	V	53.96	68.20	14.24	PK
15870	52.70	-2.64	V	50.06	73.98	23.92	PK
15870	41.22	-2.64	V	38.58	53.98	15.40	AV
10580	53.73	-0.75	H	52.98	68.20	15.22	PK
15870	52.31	-2.64	H	49.67	73.98	24.31	PK
15870	41.15	-2.64	H	38.51	53.98	15.47	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_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
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_Normal Charging
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	61.35	0.37	V	61.72	73.98	12.26	PK
11000	46.77	0.37	V	47.14	53.98	6.84	AV
16500	51.69	0.03	V	51.72	68.20	16.48	PK
11000	59.12	0.37	H	59.49	73.98	14.49	PK
11000	44.86	0.37	H	45.23	53.98	8.75	AV
16500	51.39	0.03	H	51.42	68.20	16.78	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_Normal Charging
Transfer Rate:	6 Mbps
Operating Frequency	5600 MHz
Channel No.	120 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
11200	59.78	-1.31	V	58.47	73.98	15.51	PK
11200	46.34	-1.31	V	45.03	53.98	8.95	AV
16800	51.17	1.66	V	52.83	68.20	15.37	PK
11200	59.29	-1.31	H	57.98	73.98	16.00	PK
11200	46.08	-1.31	H	44.77	53.98	9.21	AV
16800	50.79	1.66	H	52.45	68.20	15.75	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_Normal Charging
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	60.37	0.22	V	60.59	73.98	13.39	PK
11440	46.01	0.22	V	46.23	53.98	7.75	AV
17160	51.94	1.94	V	53.88	68.20	14.32	PK
11440	58.91	0.22	H	59.13	73.98	14.85	PK
11440	45.34	0.22	H	45.56	53.98	8.42	AV
17160	50.95	1.94	H	52.89	68.20	15.31	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_HT20_Normal Charging
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	59.49	0.37	V	59.86	73.98	14.12	PK
11000	44.82	0.37	V	45.19	53.98	8.79	AV
16500	51.48	0.03	V	51.51	68.20	16.69	PK
11000	58.61	0.37	H	58.98	73.98	15.00	PK
11000	44.69	0.37	H	45.06	53.98	8.92	AV
16500	51.30	0.03	H	51.33	68.20	16.87	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_HT20. Worst case is MCS0 in 802.11n_HT20.
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_HT20_Normal Charging
Transfer MCS Index:	0
Operating Frequency	5600 MHz
Channel No.	120 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
11200	59.54	-1.31	V	58.23	73.98	15.75	PK
11200	44.58	-1.31	V	43.27	53.98	10.71	AV
16800	51.15	1.66	V	52.81	68.20	15.39	PK
11200	58.16	-1.31	H	56.85	73.98	17.13	PK
11200	44.18	-1.31	H	42.87	53.98	11.11	AV
16800	49.37	1.66	H	51.03	68.20	17.17	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_HT20. Worst case is MCS0 in 802.11n_HT20.
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_ HT20_Normal Charging
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	59.36	0.22	V	59.58	73.98	14.40	PK
11440	44.42	0.22	V	44.64	53.98	9.34	AV
17160	52.12	1.94	V	54.06	68.20	14.14	PK
11440	58.36	0.22	H	58.58	73.98	15.40	PK
11440	44.13	0.22	H	44.35	53.98	9.63	AV
17160	51.89	1.94	H	53.83	68.20	14.37	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_ HT20. Worst case is MCS0 in 802.11n_ HT20.
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_VHT20_Normal Charging
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	58.62	0.37	V	58.99	73.98	14.99	PK
11000	44.05	0.37	V	44.42	53.98	9.56	AV
16500	50.94	0.03	V	50.97	68.20	17.23	PK
11000	57.94	0.37	H	58.31	73.98	15.67	PK
11000	43.87	0.37	H	44.24	53.98	9.74	AV
16500	52.14	0.03	H	52.17	68.20	16.03	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_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
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_VHT20_Normal Charging
Transfer MCS Index:	0
Operating Frequency	5600 MHz
Channel No.	120 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
11200	58.55	-1.31	V	57.24	73.98	16.74	PK
11200	43.53	-1.31	V	42.22	53.98	11.76	AV
16800	52.12	1.66	V	53.78	68.20	14.42	PK
11200	57.79	-1.31	H	56.48	73.98	17.50	PK
11200	43.45	-1.31	H	42.14	53.98	11.84	AV
16800	51.89	1.66	H	53.55	68.20	14.65	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_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
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_ VHT20_Normal Charging
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	59.27	0.22	V	59.49	73.98	14.49	PK
11440	43.79	0.22	V	44.01	53.98	9.97	AV
17160	52.63	1.94	V	54.57	68.20	13.63	PK
11440	58.26	0.22	H	58.48	73.98	15.50	PK
11440	43.35	0.22	H	43.57	53.98	10.41	AV
17160	51.78	1.94	H	53.72	68.20	14.48	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_ VHT20. Worst case is MCS0 in 802.11ac_ VHT20.
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_HT40_Normal Charging
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	58.13	0.07	V	58.20	73.98	15.78	PK
11020	45.15	0.07	V	45.22	53.98	8.76	AV
16530	52.75	-0.71	V	52.04	68.20	16.16	PK
11020	57.65	0.07	H	57.72	73.98	16.26	PK
11020	44.89	0.07	H	44.96	53.98	9.02	AV
16530	52.49	-0.71	H	51.78	68.20	16.42	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_HT40. Worst case is MCS0 in 802.11n_HT40.
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_ HT40_Normal Charging
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	56.28	-0.15	V	56.13	73.98	17.85	PK
11420	44.03	-0.15	V	43.88	53.98	10.10	AV
17130	50.81	4.39	V	55.20	68.20	13.00	PK
11420	55.71	-0.15	H	55.56	73.98	18.42	PK
11420	43.55	-0.15	H	43.40	53.98	10.58	AV
17130	48.85	4.39	H	53.24	68.20	14.96	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_ HT40. Worst case is MCS0 in 802.11n_ HT40.
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_VHT40_Normal Charging
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	56.44	0.07	V	56.51	73.98	17.47	PK
11020	44.69	0.07	V	44.76	53.98	9.22	AV
16530	52.95	-0.71	V	52.24	68.20	15.96	PK
11020	55.96	0.07	H	56.03	73.98	17.95	PK
11020	44.26	0.07	H	44.33	53.98	9.65	AV
16530	52.67	-0.71	H	51.96	68.20	16.24	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 802.11ac_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
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_ VHT40_Normal Charging
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	55.90	-0.15	V	55.75	73.98	18.23	PK
11420	43.29	-0.15	V	43.14	53.98	10.84	AV
17130	51.34	4.39	V	55.73	68.20	12.47	PK
11420	54.77	-0.15	H	54.62	73.98	19.36	PK
11420	42.91	-0.15	H	42.76	53.98	11.22	AV
17130	51.19	4.39	H	55.58	68.20	12.62	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 802.11ac_ VHT40. Worst case is MCS0 in 802.11ac_ VHT40.
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_VHT80_Normal Charging
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	55.14	-0.38	V	54.76	73.98	19.22	PK
11060	44.47	-0.38	V	44.09	53.98	9.89	AV
16590	51.50	1.18	V	52.68	68.20	15.52	PK
11060	54.56	-0.38	H	54.18	73.98	19.80	PK
11060	44.07	-0.38	H	43.69	53.98	10.29	AV
16590	51.20	1.18	H	52.38	68.20	15.82	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 802.11ac_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
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_VHT80_Normal Charging
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	54.57	-0.42	V	54.15	73.98	19.83	PK
11380	43.42	-0.42	V	43.00	53.98	10.98	AV
17070	51.21	2.52	V	53.73	68.20	14.47	PK
11380	53.90	-0.42	H	53.48	73.98	20.50	PK
11380	43.16	-0.42	H	42.74	53.98	11.24	AV
17070	50.80	2.52	H	53.32	68.20	14.88	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_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
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_Normal Charging
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	60.13	-0.59	V	59.54	73.98	14.44	PK
11490	46.65	-0.59	V	46.06	53.98	7.92	AV
17235	52.30	3.63	V	55.93	68.20	12.27	PK
11490	59.24	-0.59	H	58.65	73.98	15.33	PK
11490	45.97	-0.59	H	45.38	53.98	8.60	AV
17235	51.84	3.63	H	55.47	68.20	12.73	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 802.11a. 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_Normal Charging
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	61.74	-0.97	V	60.77	73.98	13.21	PK
11570	47.87	-0.97	V	46.90	53.98	7.08	AV
17355	51.14	5.02	V	56.16	68.20	12.04	PK
11570	60.88	-0.97	H	59.91	73.98	14.07	PK
11570	47.22	-0.97	H	46.25	53.98	7.73	AV
17355	50.88	5.02	H	55.90	68.20	12.30	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 802.11a. 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_Normal Charging
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	62.36	-1.70	V	60.66	73.98	13.32	PK
11650	49.00	-1.70	V	47.30	53.98	6.68	AV
17475	51.14	5.75	V	56.89	68.20	11.31	PK
11650	61.36	-1.70	H	59.66	73.98	14.32	PK
11650	47.18	-1.70	H	45.48	53.98	8.50	AV
17475	49.82	5.75	H	55.57	68.20	12.63	PK

Band :	UNII 3
Operation Mode:	802.11 a_Fast Charging
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	60.76	-1.70	V	59.06	73.98	14.92	PK
11650	47.08	-1.70	V	45.38	53.98	8.60	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 3
Operation Mode:	802.11 n_HT20_Normal Charging
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	59.15	-0.59	V	58.56	73.98	15.42	PK
11490	44.71	-0.59	V	44.12	53.98	9.86	AV
17235	51.69	3.63	V	55.32	68.20	12.88	PK
11490	57.69	-0.59	H	57.10	73.98	16.88	PK
11490	44.45	-0.59	H	43.86	53.98	10.12	AV
17235	50.61	3.63	H	54.24	68.20	13.96	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_HT20. Worst case is MCS0 in 802.11n_HT20.
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_HT20_Normal Charging
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	61.59	-0.97	V	60.62	73.98	13.36	PK
11570	45.96	-0.97	V	44.99	53.98	8.99	AV
17355	51.38	5.02	V	56.40	68.20	11.80	PK
11570	61.11	-0.97	H	60.14	73.98	13.84	PK
11570	45.38	-0.97	H	44.41	53.98	9.57	AV
17355	50.46	5.02	H	55.48	68.20	12.72	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 802.11n_HT20. Worst case is MCS0 in 802.11n_HT20.
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_HT20_Normal Charging
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	61.81	-1.70	V	60.11	73.98	13.87	PK
11650	47.00	-1.70	V	45.30	53.98	8.68	AV
17475	50.52	5.75	V	56.27	68.20	11.93	PK
11650	60.34	-1.70	H	58.64	73.98	15.34	PK
11650	46.51	-1.70	H	44.81	53.98	9.17	AV
17475	49.84	5.75	H	55.59	68.20	12.61	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_HT20. Worst case is MCS0 in 802.11n_HT20.
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_VHT20_Normal Charging
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	58.58	-0.59	V	57.99	73.98	15.99	PK
11490	43.89	-0.59	V	43.30	53.98	10.68	AV
17235	51.54	3.63	V	55.17	68.20	13.03	PK
11490	57.59	-0.59	H	57.00	73.98	16.98	PK
11490	43.25	-0.59	H	42.66	53.98	11.32	AV
17235	51.11	3.63	H	54.74	68.20	13.46	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_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
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_VHT20_Normal Charging
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	60.49	-0.97	V	59.52	73.98	14.46	PK
11570	45.00	-0.97	V	44.03	53.98	9.95	AV
17355	51.36	5.02	V	56.38	68.20	11.82	PK
11570	59.32	-0.97	H	58.35	73.98	15.63	PK
11570	44.61	-0.97	H	43.64	53.98	10.34	AV
17355	50.49	5.02	H	55.51	68.20	12.69	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_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
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_VHT20_Normal Charging
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	60.77	-1.70	V	59.07	73.98	14.91	PK
11650	46.09	-1.70	V	44.39	53.98	9.59	AV
17475	50.60	5.75	V	56.35	68.20	11.85	PK
11650	58.59	-1.70	H	56.89	73.98	17.09	PK
11650	45.47	-1.70	H	43.77	53.98	10.21	AV
17475	49.33	5.75	H	55.08	68.20	13.12	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_VHT20. Worst case is MCS0 in 802.11ac_VHT20.
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_HT40_Normal Charging
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	56.72	-0.63	V	56.09	73.98	17.89	PK
11510	44.59	-0.63	V	43.96	53.98	10.02	AV
17265	51.12	4.53	V	55.65	68.20	12.55	PK
11510	55.99	-0.63	H	55.36	73.98	18.62	PK
11510	44.21	-0.63	H	43.58	53.98	10.40	AV
17265	50.66	4.53	H	55.19	68.20	13.01	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_HT40. Worst case is MCS0 in 802.11n_HT40.
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_HT40_Normal Charging
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	57.58	-0.53	V	57.05	73.98	16.93	PK
11590	45.88	-0.53	V	45.35	53.98	8.63	AV
17385	50.70	4.95	V	55.65	68.20	12.55	PK
11590	57.44	-0.53	H	56.91	73.98	17.07	PK
11590	45.38	-0.53	H	44.85	53.98	9.13	AV
17385	50.12	4.95	H	55.07	68.20	13.13	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_HT40. Worst case is MCS0 in 802.11n_HT40.
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_VHT40_Normal Charging
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	55.94	-0.63	V	55.31	73.98	18.67	PK
11510	44.09	-0.63	V	43.46	53.98	10.52	AV
17265	51.41	4.53	V	55.94	68.20	12.26	PK
11510	54.82	-0.63	H	54.19	73.98	19.79	PK
11510	43.62	-0.63	H	42.99	53.98	10.99	AV
17265	50.16	4.53	H	54.69	68.20	13.51	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_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
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_VHT40_Normal Charging
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	57.71	-0.53	V	57.18	73.98	16.80	PK
11590	45.17	-0.53	V	44.64	53.98	9.34	AV
17385	50.13	4.95	V	55.08	68.20	13.12	PK
11590	56.31	-0.53	H	55.78	73.98	18.20	PK
11590	44.88	-0.53	H	44.35	53.98	9.63	AV
17385	49.35	4.95	H	54.30	68.20	13.90	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_VHT40. Worst case is MCS0 in 802.11ac_VHT40.
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_VHT80_Normal Charging
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	55.48	-0.48	V	55.00	73.98	18.98	PK
11550	44.71	-0.48	V	44.23	53.98	9.75	AV
17325	51.02	5.28	V	56.30	68.20	11.90	PK
11550	55.18	-0.48	H	54.70	73.98	19.28	PK
11550	44.56	-0.48	H	44.08	53.98	9.90	AV
17325	50.49	5.28	H	55.77	68.20	12.43	PK

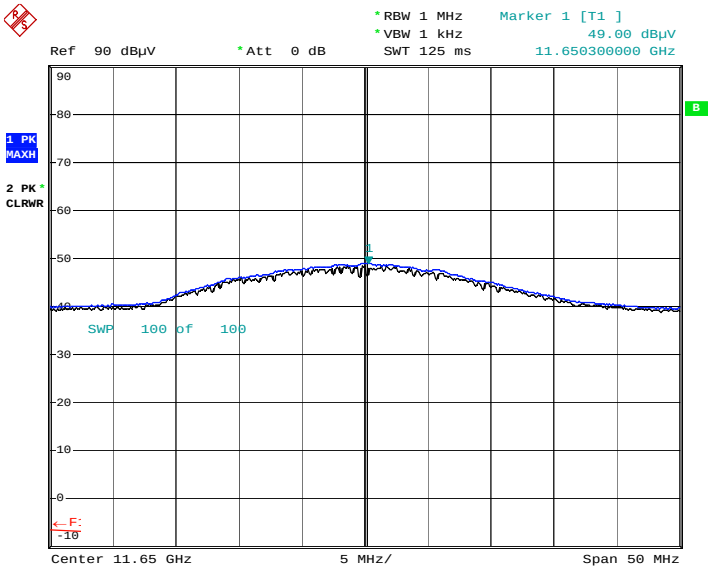
*AN. : Antenna Factor / CL : Cable Loss / Amp.G. : Amplifier Gain / D.F. : Distance Factor

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_VHT80. Worst case is MCS0 in 802.11ac_VHT80.
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)

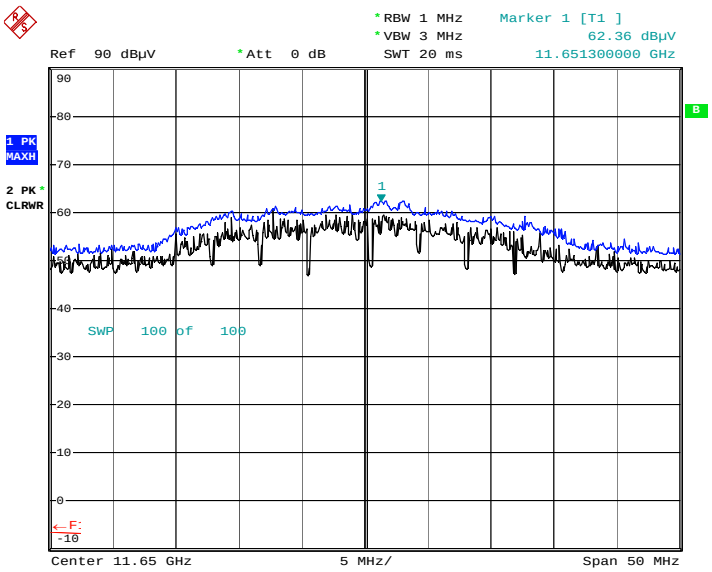
▣ RESULT PLOTS_Normal Charging

Radiated Spurious Emissions plot –Average Reading (802.11a, Ch.165 2nd Harmonic, Y-V)



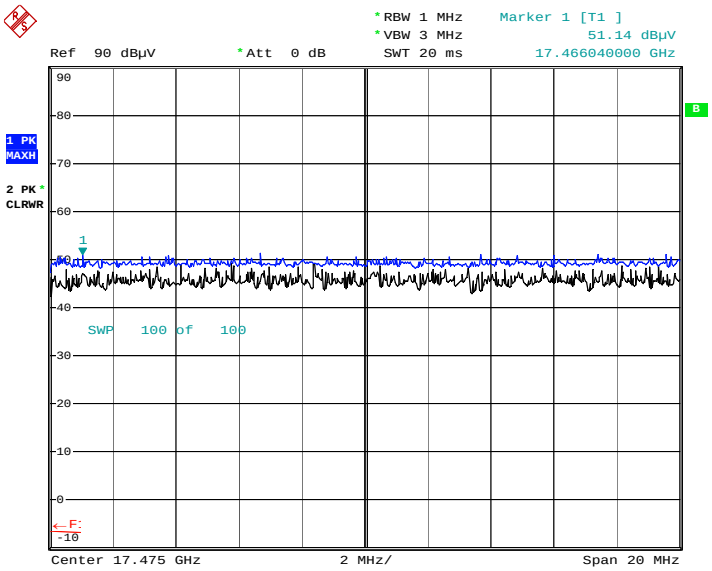
Date: 19.APR.2018 14:39:39

Radiated Spurious Emissions plot –Peake Reading (802.11a, Ch.165 2ne Harmonic, Y-V)



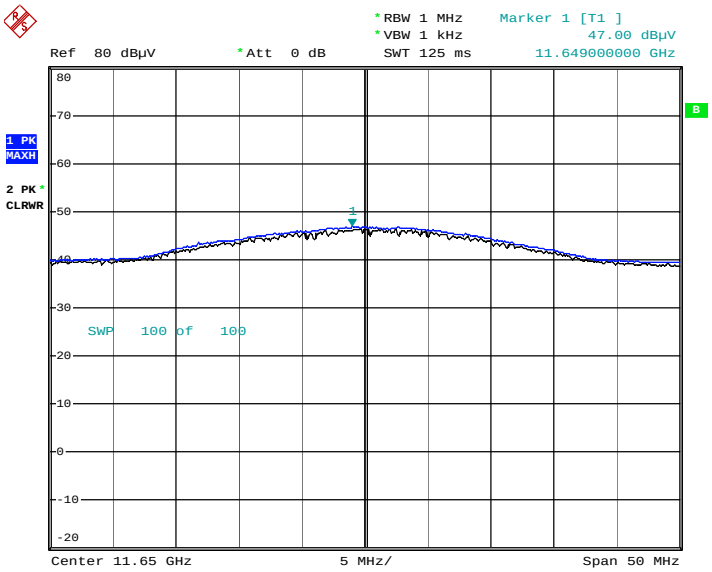
Date: 19.APR.2018 14:40:15

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



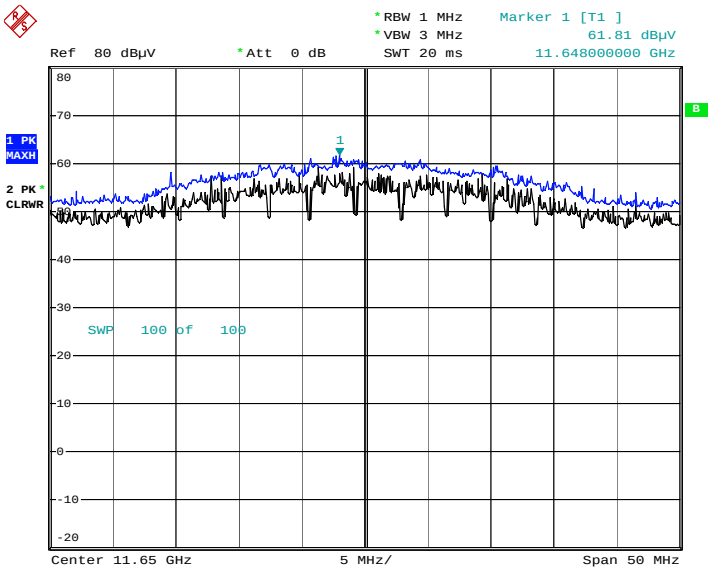
Date: 19.APR.2018 14:40:48

Radiated Spurious Emissions plot –Average Reading (802.11n_HT20, Ch.165 2nd Harmonic, Y-V)



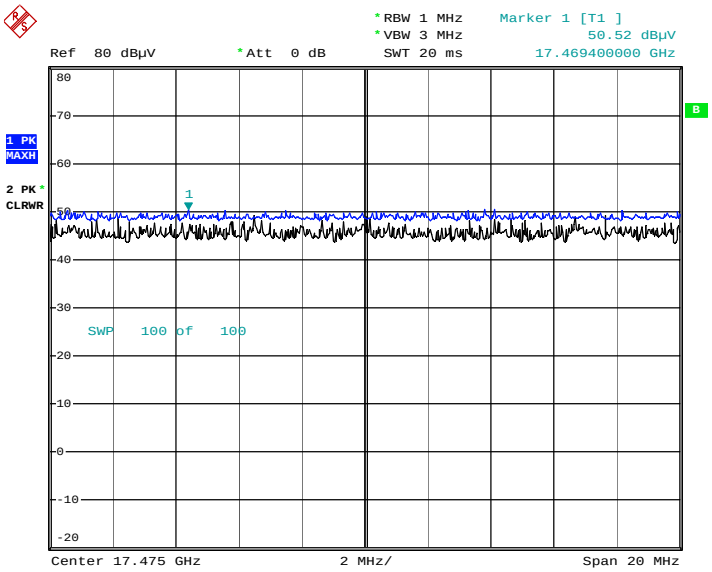
Date: 17.APR.2018 11:37:32

Radiated Spurious Emissions plot –Peake Reading (802.11n_HT20, Ch.165 2nd Harmonic, Y-V)



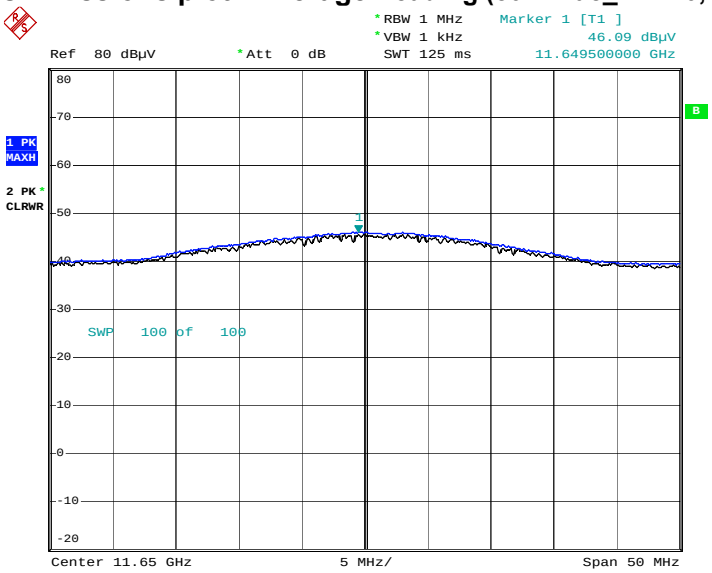
Date: 17.APR.2018 11:36:50

Radiated Spurious Emissions plot –Peake Reading (802.11n_HT20, Ch.165 3rd Harmonic, Y-V)



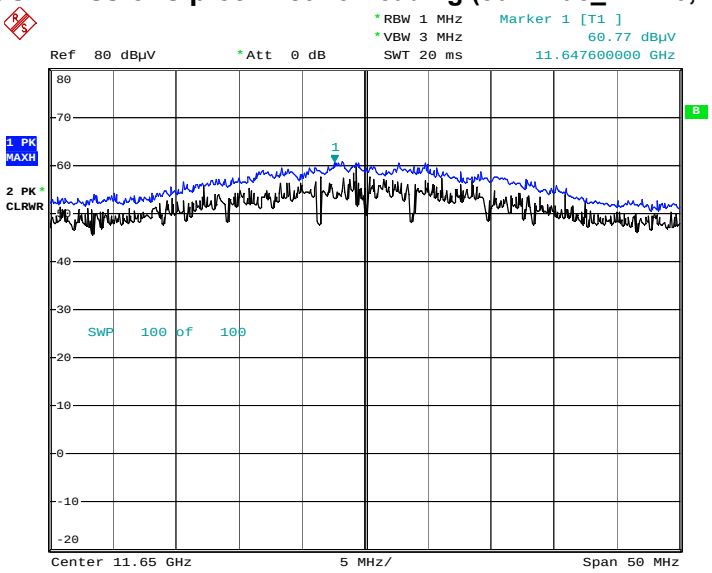
Date: 17.APR.2018 11:36:24

Radiated Spurious Emissions plot –Average Reading (802.11ac_VHT20, Ch.165 2nd Harmonic, Y-V)



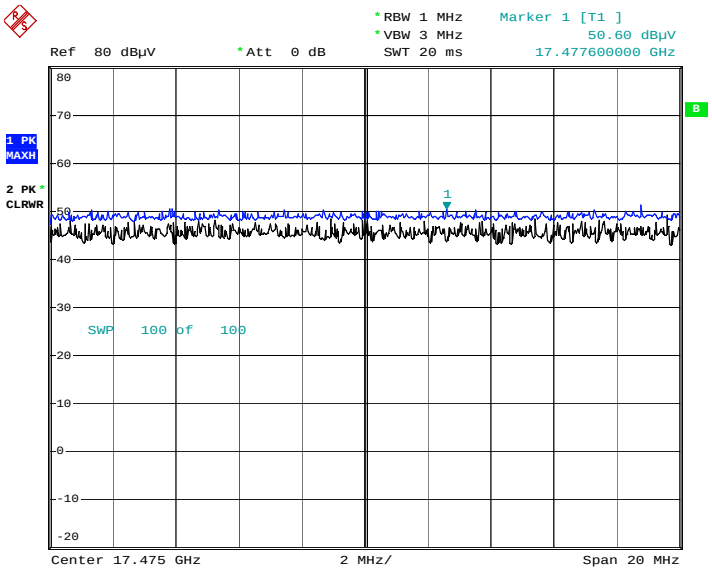
Date: 17.APR.2018 11:38:29

Radiated Spurious Emissions plot –Peake Reading (802.11ac_VHT20, Ch.165 2nd Harmonic, Y-V)



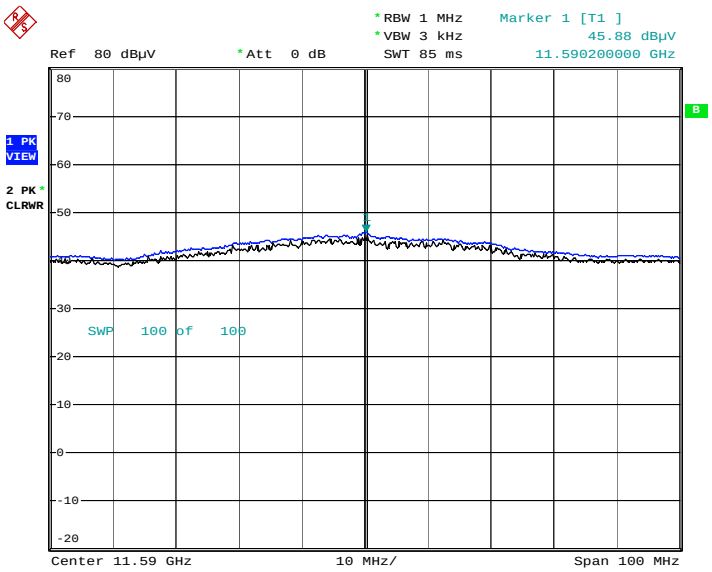
Date: 17.APR.2018 11:39:15

Radiated Spurious Emissions plot –Peake Reading (802.11ac_VHT20, Ch.165 3rd Harmonic, Y-V)



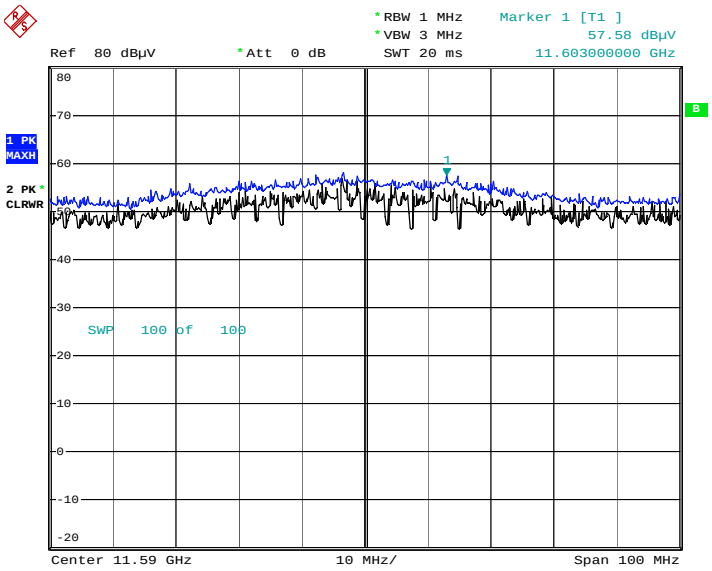
Date: 17.APR.2018 11:39:37

Radiated Spurious Emissions plot –Average Reading (802.11n_HT40, Ch.159 2nd Harmonic, Y-V)



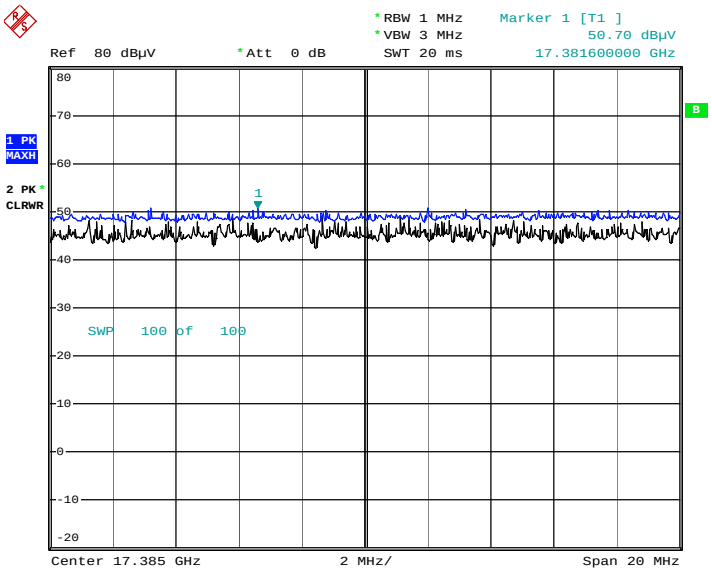
Date: 17.APR.2018 11:43:48

Radiated Spurious Emissions plot –Peake Reading (802.11n_HT40, Ch.159 2nd Harmonic, Y-V)



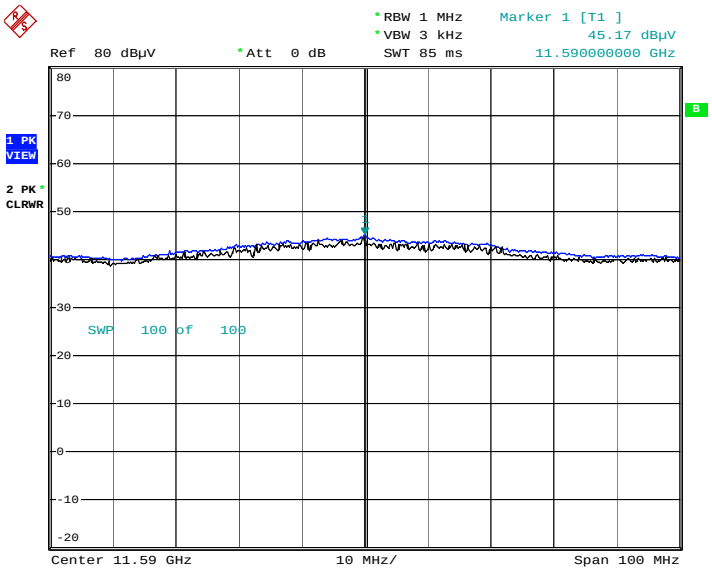
Date: 17.APR.2018 11:44:19

Radiated Spurious Emissions plot –Peake Reading (802.11n_HT40, Ch.159 3rd Harmonic, Y-V)



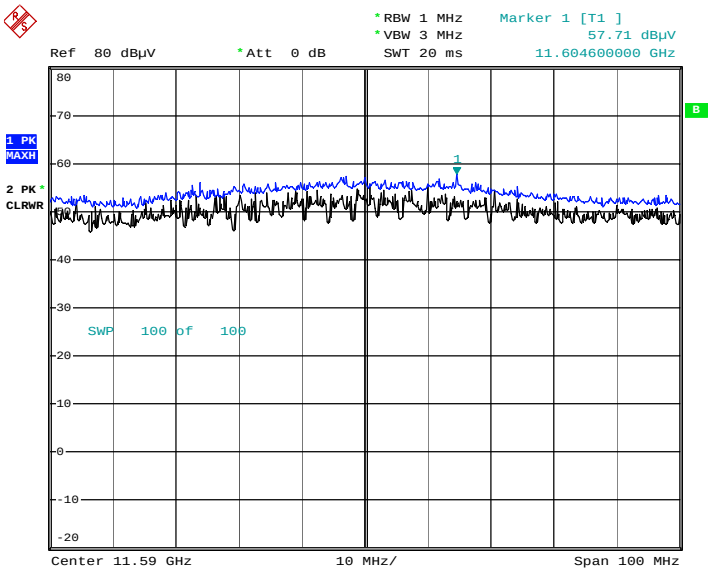
Date: 17.APR.2018 11:44:40

Radiated Spurious Emissions plot –Average Reading (802.11ac_VHT40, Ch.159 2nd Harmonic, Y-V)



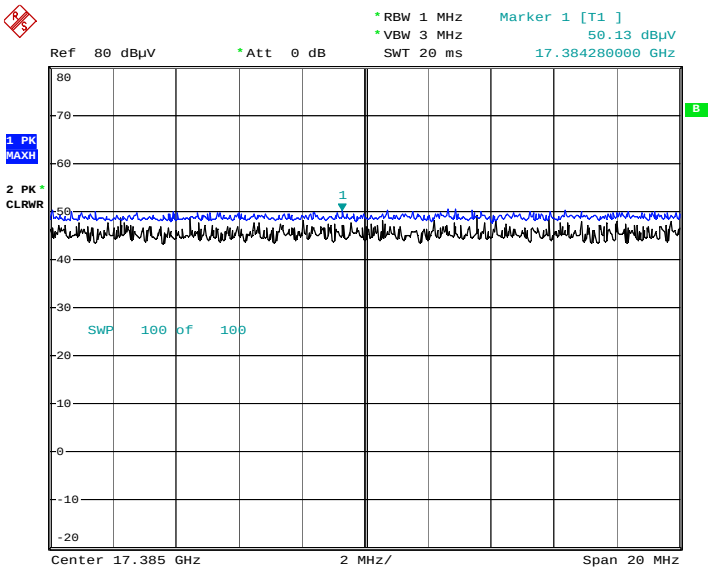
Date: 17.APR.2018 11:47:07

Radiated Spurious Emissions plot –Peake Reading (802.11ac_VHT40, Ch.159 2nd Harmonic, Y-V)



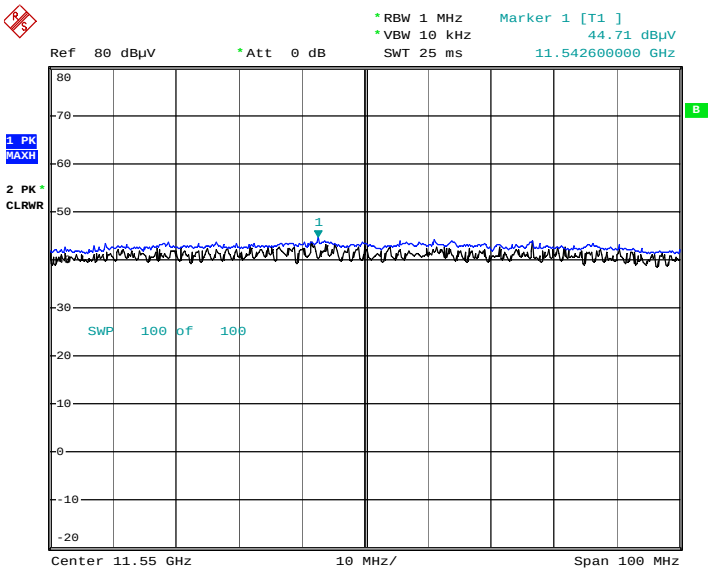
Date: 17.APR.2018 11:47:48

Radiated Spurious Emissions plot –Peake Reading (802.11ac_VHT40, Ch.159 3rd Harmonic, Y-V)



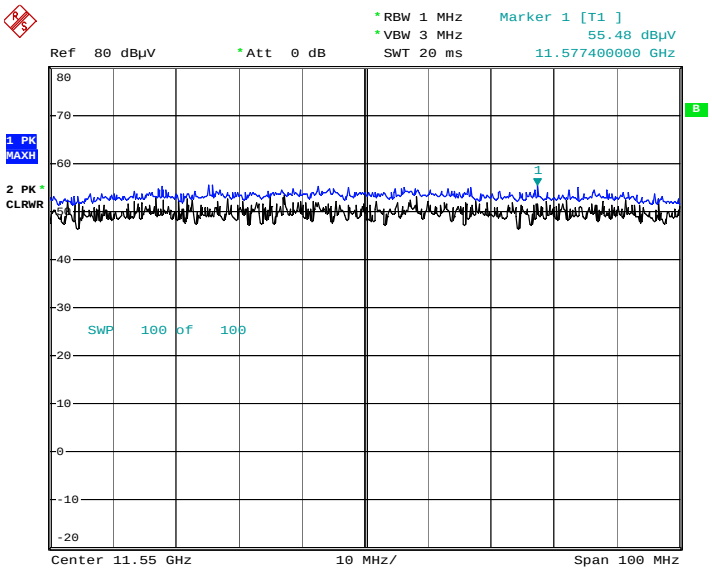
Date: 17.APR.2018 11:48:12

Radiated Spurious Emissions plot –Average Reading (802.11ac_VHT80, Ch.155 2nd Harmonic, Y-V)



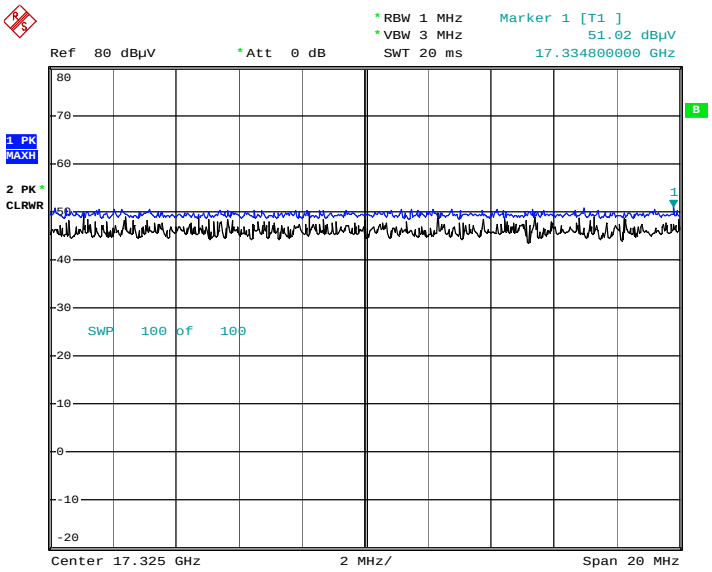
Date: 17.APR.2018 11:51:04

Radiated Spurious Emissions plot –Peake Reading (802.11ac_VHT80, Ch.155 2nd Harmonic, Y-V)



Date: 17.APR.2018 11:51:35

Radiated Spurious Emissions plot –Peake Reading (802.11ac_VHT80, Ch.155 3rd Harmonic, Y-V)



Date: 17.APR.2018 11:50:30

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_Normal Charging
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	55.94	5.07	H	61.01	73.98	12.97	PK
5150	40.08	5.07	H	45.15	53.98	8.83	AV
5150	55.13	5.07	V	60.2	73.98	13.78	PK
5150	39.46	5.07	V	44.53	53.98	9.45	AV

Band :	UNII 1
Operation Mode:	802.11 n_HT20_Normal Charging
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	56.17	5.07	H	61.24	73.98	12.74	PK
5150	39.04	5.07	H	44.11	53.98	9.87	AV
5150	55.43	5.07	V	60.5	73.98	13.48	PK
5150	38.59	5.07	V	43.66	53.98	10.32	AV

Band :	UNII 1
Operation Mode:	802.11 ac_VHT20_Normal Charging
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	52.44	5.07	H	57.51	73.98	16.47	PK
5150	38.36	5.07	H	43.43	53.98	10.55	AV
5150	50.83	5.07	V	55.9	73.98	18.08	PK
5150	37.89	5.07	V	42.96	53.98	11.02	AV

Band :	UNII 1
Operation Mode:	802.11 n_HT40_Normal Charging
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	57.95	5.07	H	63.02	73.98	10.96	PK
5150	44.66	5.07	H	49.73	53.98	4.25	AV
5150	56.78	5.07	V	61.85	73.98	12.13	PK
5150	43.95	5.07	V	49.02	53.98	4.96	AV

Band :	UNII 1
Operation Mode:	802.11 ac_VHT40_Normal Charging
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	56.40	5.07	H	61.47	73.98	12.51	PK
5150	42.70	5.07	H	47.77	53.98	6.21	AV
5150	55.31	5.07	V	60.38	73.98	13.60	PK
5150	42.10	5.07	V	47.17	53.98	6.81	AV

Band :	UNII 1
Operation Mode:	802.11 ac_VHT80_Normal Charging
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	56.84	5.07	H	61.91	73.98	12.07	PK
5150	45.77	5.07	H	50.84	53.98	3.14	AV
5150	56.18	5.07	V	61.25	73.98	12.73	PK
5150	45.12	5.07	V	50.19	53.98	3.79	AV

Band :	UNII 1
Operation Mode:	802.11 ac_VHT80_Fast Charging
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	52.98	5.07	H	58.05	73.98	15.93	PK
5150	42.35	5.07	H	47.42	53.98	6.56	AV

Band :	UNII 2A
Operation Mode:	802.11 a_Normal Charging
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	57.43	4.42	H	61.85	73.98	12.13	PK
5350	40.65	4.42	H	45.07	53.98	8.91	AV
5350	55.24	4.42	V	59.66	73.98	14.32	PK
5350	38.98	4.42	V	43.4	53.98	10.58	AV

Band :	UNII 2A
Operation Mode:	802.11 n_HT20_Normal Charging
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	57.96	4.42	H	62.38	73.98	11.60	PK
5350	39.65	4.42	H	44.07	53.98	9.91	AV
5350	56.17	4.42	V	60.59	73.98	13.39	PK
5350	38.37	4.42	V	42.79	53.98	11.19	AV

Band :	UNII 2A
Operation Mode:	802.11 ac_VHT20_Normal Charging
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	54.63	4.42	H	59.05	73.98	14.93	PK
5350	37.76	4.42	H	42.18	53.98	11.80	AV
5350	52.69	4.42	V	57.11	73.98	16.87	PK
5350	37.02	4.42	V	41.44	53.98	12.54	AV

Band :	UNII 2A
Operation Mode:	802.11 n_HT40_Normal Charging
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	57.80	4.42	H	62.22	73.98	11.76	PK
5350	41.80	4.42	H	46.22	53.98	7.76	AV
5350	55.84	4.42	V	60.26	73.98	13.72	PK
5350	40.93	4.42	V	45.35	53.98	8.63	AV

Band :	UNII 2A
Operation Mode:	802.11 ac_VHT40_Normal Charging
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	55.87	4.42	H	60.29	73.98	13.69	PK
5350	41.75	4.42	H	46.17	53.98	7.81	AV
5350	54.27	4.42	V	58.69	73.98	15.29	PK
5350	41.33	4.42	V	45.75	53.98	8.23	AV

Band :	UNII 2A
Operation Mode:	802.11 ac_VHT80_Normal Charging
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	55.89	4.42	H	60.31	73.98	13.67	PK
5350	44.48	4.42	H	48.9	53.98	5.08	AV
5350	55.31	4.42	V	59.73	73.98	14.25	PK
5350	44.02	4.42	V	48.44	53.98	5.54	AV

Band :	UNII 2C
Operation Mode:	802.11 a_Normal Charging
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	53.06	5.72	H	58.78	73.98	15.20	PK
5460	36.28	5.72	H	42	53.98	11.98	AV
5470	54.35	5.26	H	59.61	68.20	8.59	PK
5460	52.23	5.72	V	57.95	73.98	16.03	PK
5460	35.87	5.72	V	41.59	53.98	12.39	AV
5470	52.70	5.26	V	57.96	68.20	10.24	PK

Band :	UNII 2C
Operation Mode:	802.11 n_HT20_Normal Charging
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	48.76	5.72	H	54.48	73.98	19.50	PK
5460	34.87	5.72	H	40.59	53.98	13.39	AV
5470	51.16	5.26	H	56.42	68.20	11.78	PK
5460	48.21	5.72	V	53.93	73.98	20.05	PK
5460	34.32	5.72	V	40.04	53.98	13.94	AV
5470	50.44	5.26	V	55.7	68.20	12.50	PK

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT20_Normal Charging
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	49.60	5.72	H	55.32	73.98	18.66	PK
5460	34.64	5.72	H	40.36	53.98	13.62	AV
5470	50.94	5.26	H	56.2	68.20	12.00	PK
5460	48.61	5.72	V	54.33	73.98	19.65	PK
5460	34.35	5.72	V	40.07	53.98	13.91	AV
5470	48.95	5.26	V	54.21	68.20	13.99	PK

Band :	UNII 2C
Operation Mode:	802.11 n_HT40_Normal Charging
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	54.18	5.72	H	59.90	73.98	14.08	PK
5460	37.75	5.72	H	43.47	53.98	10.51	AV
5470	56.03	5.26	H	61.29	68.20	6.91	PK
5460	53.29	5.72	V	59.01	73.98	14.97	PK
5460	37.45	5.72	V	43.17	53.98	10.81	AV
5470	55.08	5.26	V	60.34	68.20	7.86	PK

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT40_Normal Charging
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	51.06	5.72	H	56.78	73.98	17.20	PK
5460	37.04	5.72	H	42.76	53.98	11.22	AV
5470	55.41	5.26	H	60.67	68.20	7.53	PK
5460	50.91	5.72	V	56.63	73.98	17.35	PK
5460	36.88	5.72	V	42.6	53.98	11.38	AV
5470	54.76	5.26	V	60.02	68.20	8.18	PK

Band :	UNII 2C
Operation Mode:	802.11 ac_VHT80_Normal Charging
Transfer MCS Index:	0
Operating Frequency	5530 MHz
Channel No.	106 Ch

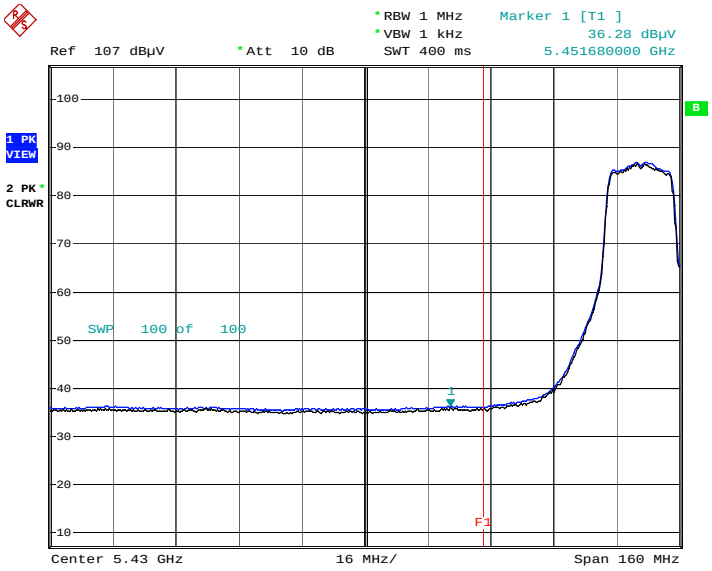
Frequency [MHz]	Reading DBuV	AN.+CL+AMP+ATT. +D.F. [dB]	ANT. POL [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
5460	53.79	5.72	H	59.51	73.98	14.47	PK
5460	41.71	5.72	H	47.43	53.98	6.55	AV
5470	55.36	5.26	H	60.62	68.20	7.58	PK
5460	53.16	5.72	V	58.88	73.98	15.10	PK
5460	41.11	5.72	V	46.83	53.98	7.15	AV
5470	54.94	5.26	V	60.2	68.20	8.00	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.

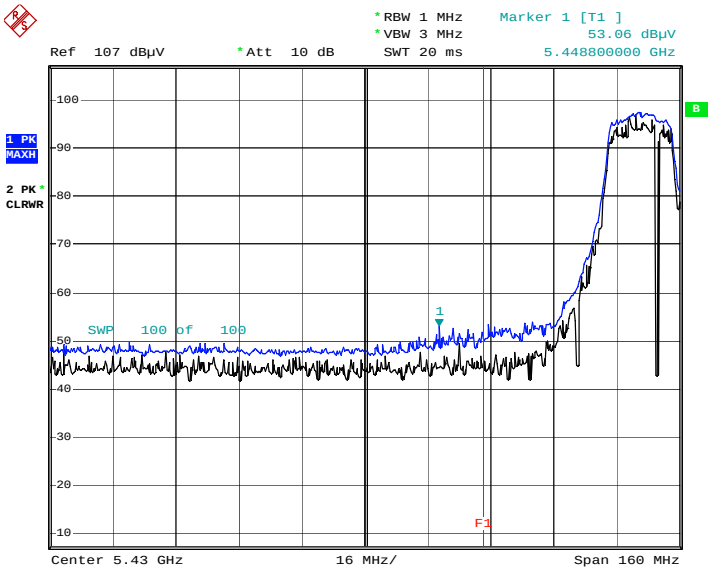
▣ RESULT PLOTS_Normal Charging

Radiated Restricted Band Edges plot – Average Reading (802.11a, Ch.100, Z-H)



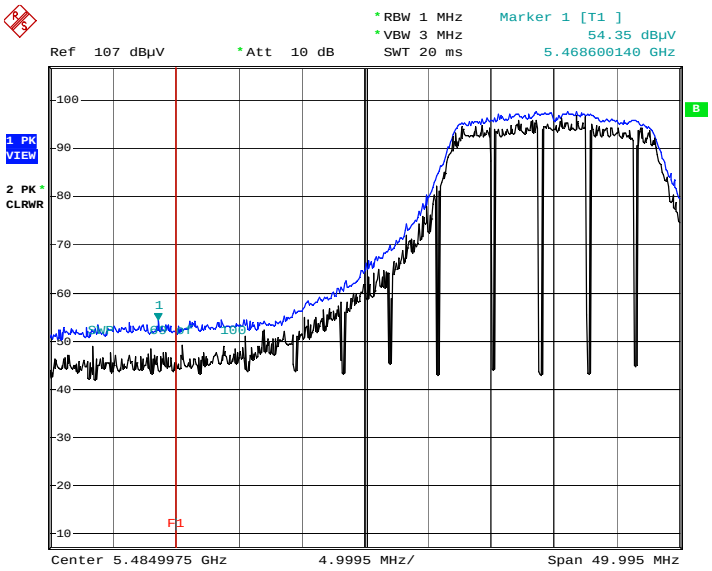
Date: 16.APR.2018 19:50:25

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



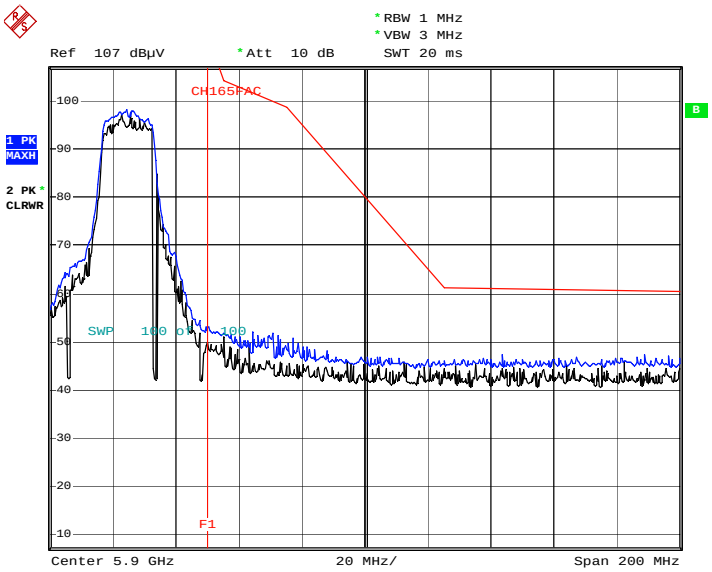
Date: 16.APR.2018 19:35:28

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



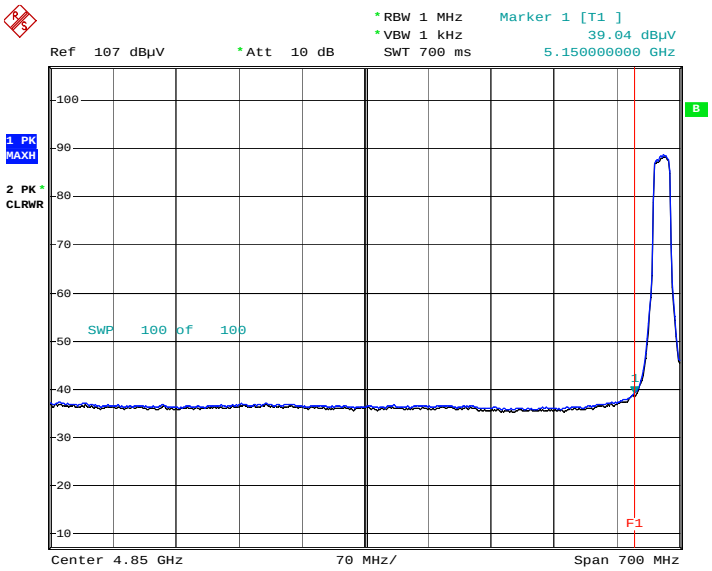
Date: 16.APR.2018 19:54:57

Radiated Restricted Band Edges plot – Peak Reading (802.11a, Ch.165)



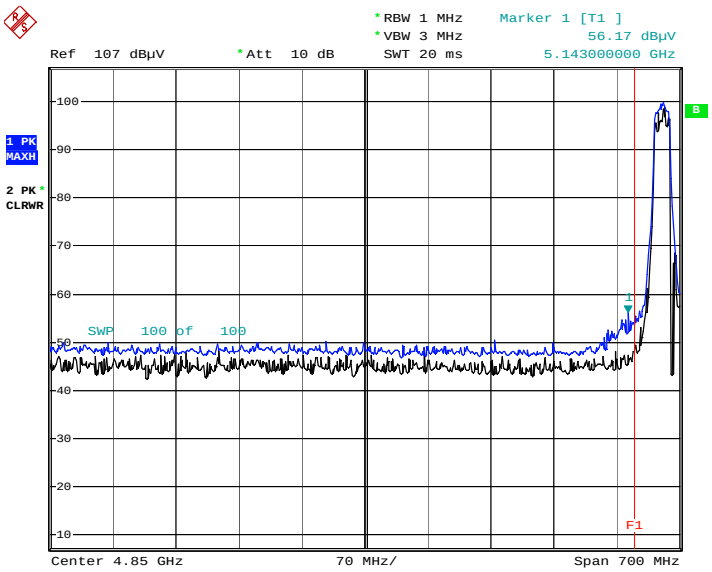
Date: 16.APR.2018 20:27:33

Radiated Restricted Band Edges plot – Average Reading (802.11n_HT20, Ch.36, X-H)



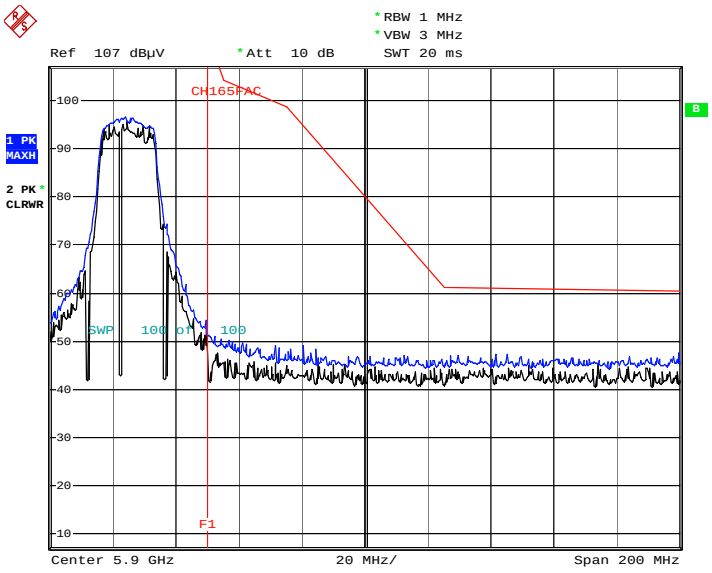
Date: 16.APR.2018 20:00:56

Radiated Restricted Band Edges plot – Peak Reading (802.11n_HT20, Ch.36, X-H)



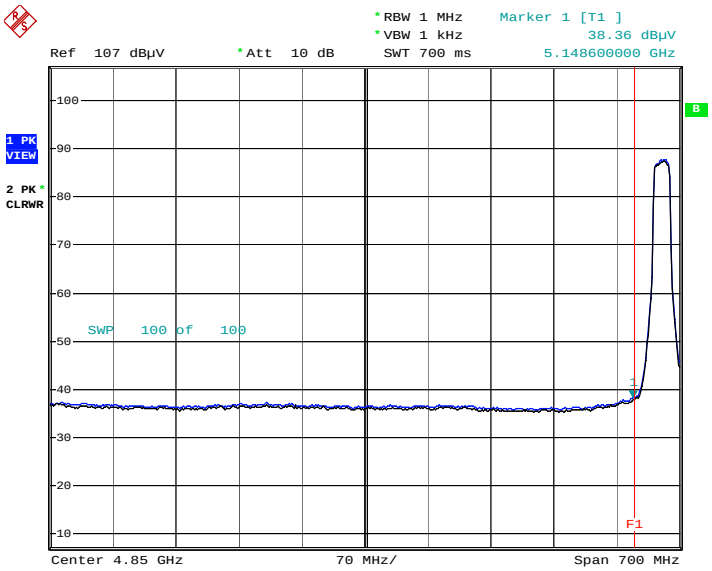
Date: 16.APR.2018 20:01:38

Radiated Restricted Band Edges plot – Peak Reading (802.11n_HT20, Ch.165)



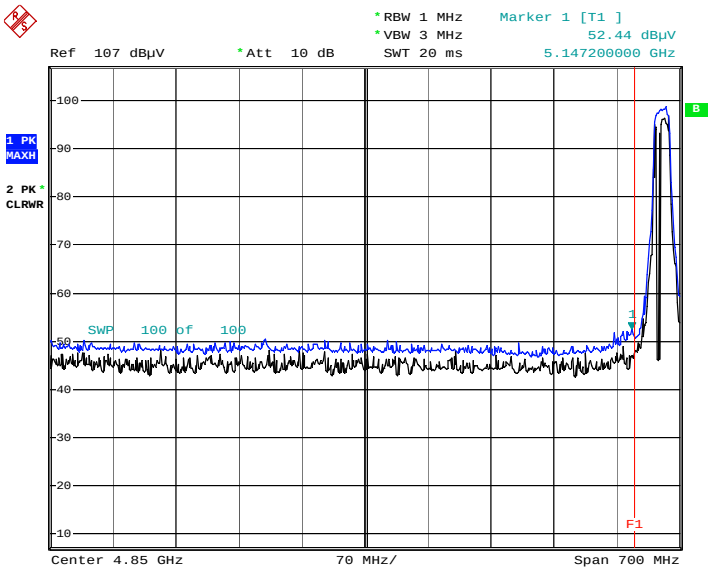
Date: 16.APR.2018 20:28:16

Radiated Restricted Band Edges plot – Average Reading (802.11ac_VHT20, Ch.36, X-H)



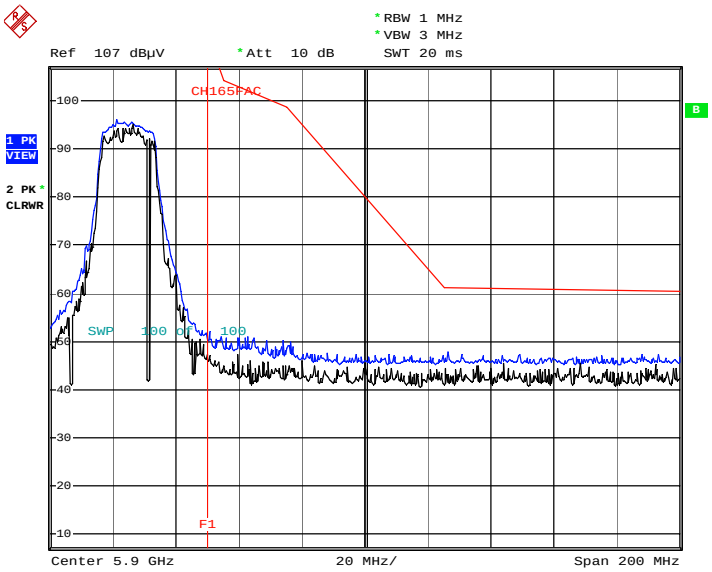
Date: 16.APR.2018 20:07:48

Radiated Restricted Band Edges plot – Peak Reading (802.11ac_VHT20, Ch. 36, X-H)



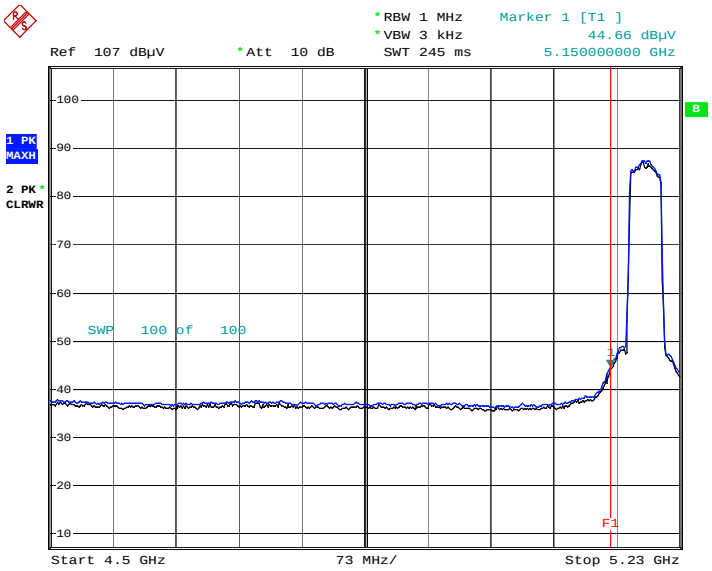
Date: 16.APR.2018 20:08:34

Radiated Restricted Band Edges plot – Peak Reading (802.11ac_VHT20, Ch.165)



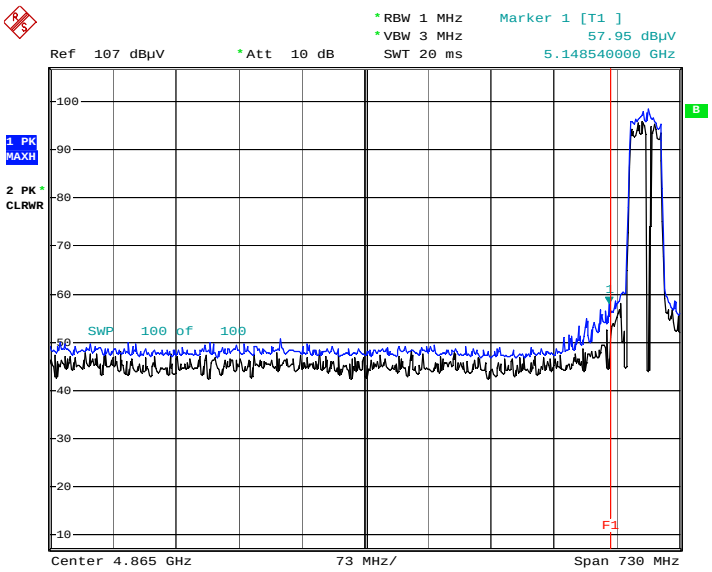
Date: 16.APR.2018 20:29:15

Radiated Restricted Band Edges plot – Average Reading (802.11n_HT40, Ch.38, X-H)



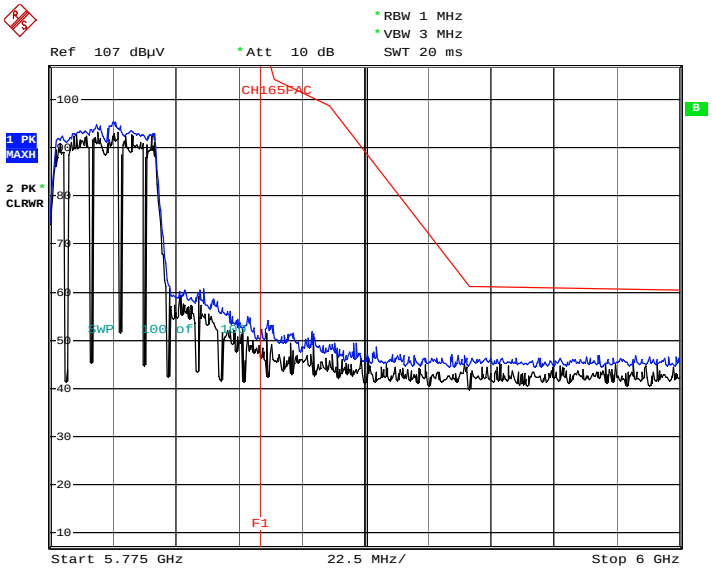
Date: 16.APR.2018 20:10:53

Radiated Restricted Band Edges plot – Peak Reading (802.11n_HT40, Ch.38, X-H)



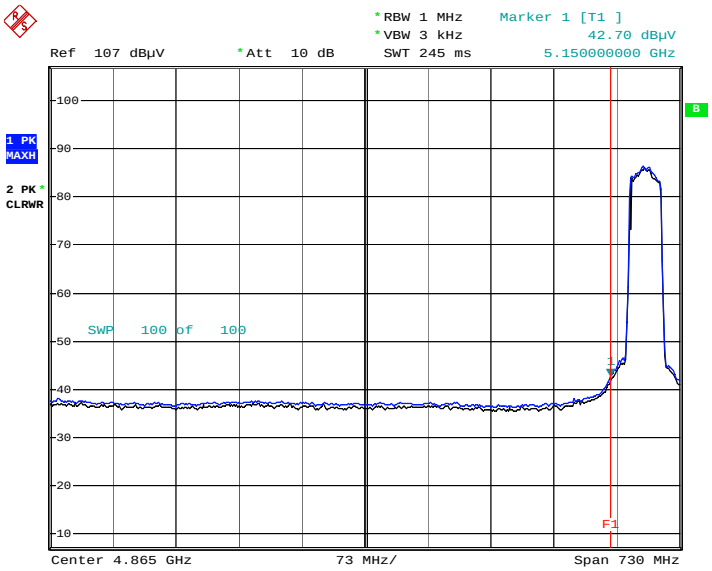
Date: 16.APR.2018 20:11:25

Radiated Restricted Band Edges plot – Peak Reading (802.11n_HT40, Ch.159)



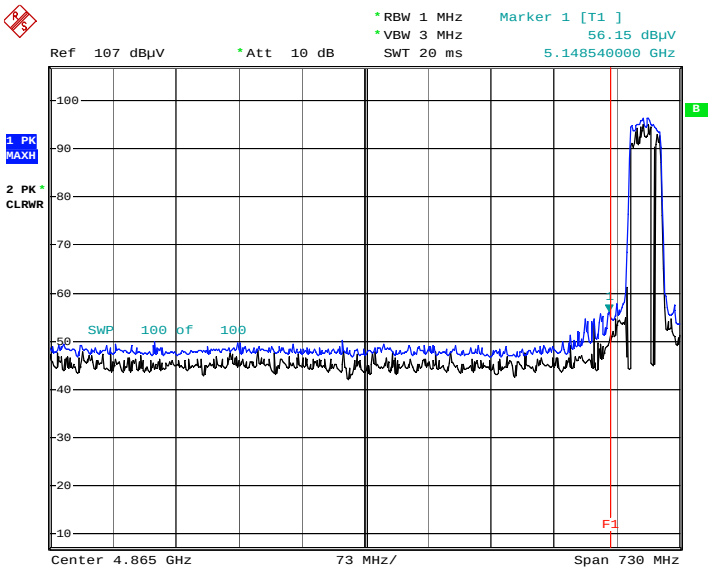
Date: 16.APR.2018 20:29:57

Radiated Restricted Band Edges plot – Average Reading (802.11ac_VHT40, Ch.38, X-H)



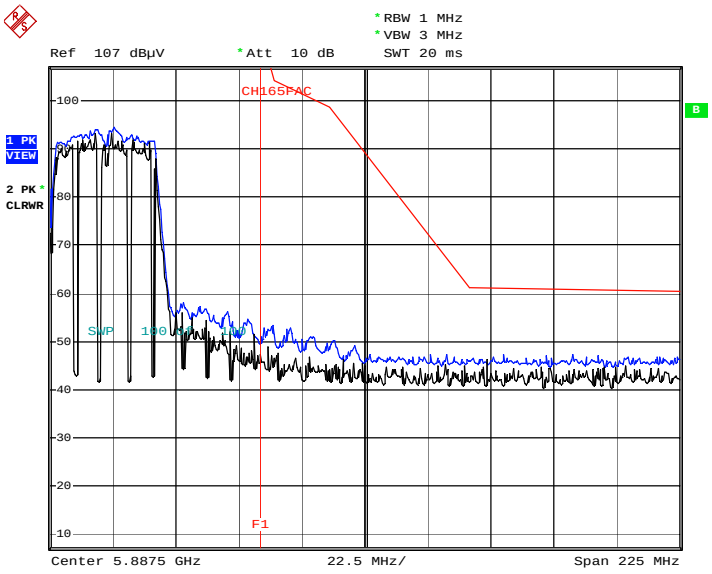
Date: 16.APR.2018 20:17:09

Radiated Restricted Band Edges plot – Peak Reading (802.11ac_VHT40, Ch.38, X-H)



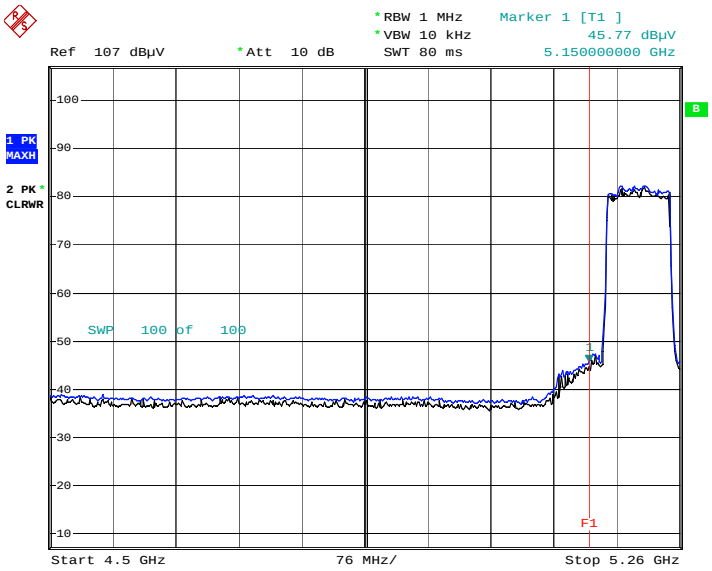
Date: 16.APR.2018 20:17:35

Radiated Restricted Band Edges plot – Peak Reading (802.11ac_VHT40, Ch.159)



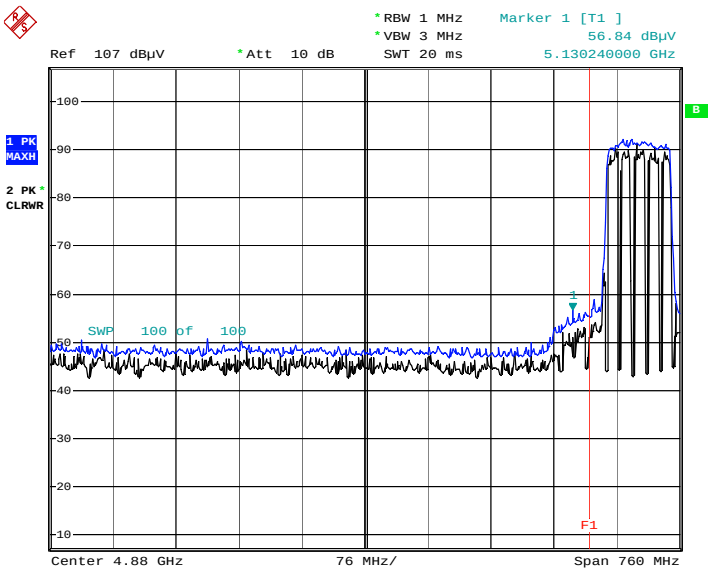
Date: 16.APR.2018 20:30:58

Radiated Restricted Band Edges plot – Average Reading (802.11ac_VHT80, Ch.42, X-H)



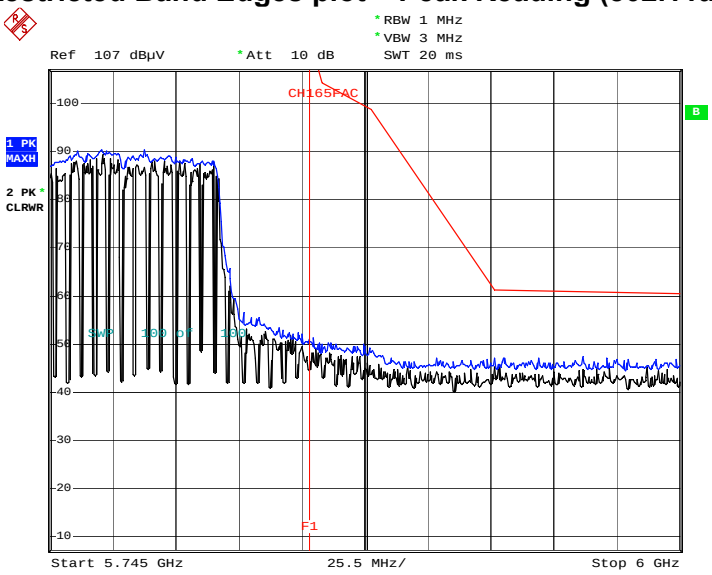
Date: 16.APR.2018 20:18:53

Radiated Restricted Band Edges plot – Peak Reading (802.11ac_VHT80, Ch.42, X-H)



Date: 16.APR.2018 20:19:29

Radiated Restricted Band Edges plot – Peak Reading (802.11ac_VHT80, Ch.155)



Date: 16.APR.2018 20:31:42

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_Normal Charging

Conducted Emissions (Line 1)

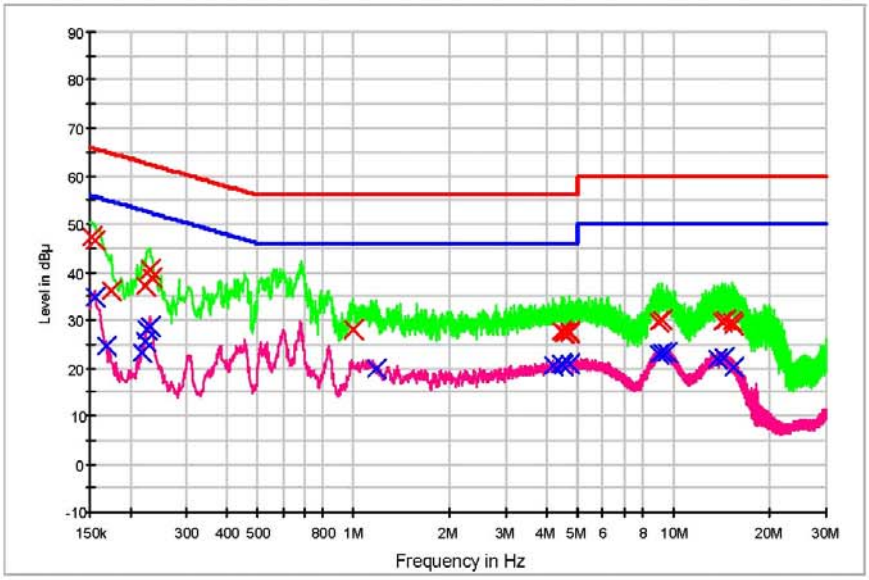
EMI Auto Test(20) 1 / 2

HCT TEST Report

Common Information

EUT:	SM-G8750
Manufacturer:	SAMSUNG
Test Site:	SHIELD ROOM
Operating Conditions:	WLAN 5G MODE

FCC CLASS B_Exten Cable



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

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.152000	47.3	9.000	Off	N	9.7	18.6	65.9
0.156000	46.7	9.000	Off	N	9.7	19.0	65.7
0.174000	36.0	9.000	Off	N	9.7	28.8	64.8
0.222000	37.1	9.000	Off	N	9.7	25.7	62.7
0.230000	40.6	9.000	Off	N	9.7	21.9	62.4
0.234000	38.8	9.000	Off	N	9.7	23.5	62.3
0.998000	28.1	9.000	Off	N	9.8	27.9	56.0
4.482000	27.5	9.000	Off	N	10.0	28.5	56.0
4.506000	27.4	9.000	Off	N	10.0	28.6	56.0
4.590000	27.2	9.000	Off	N	10.0	28.8	56.0
4.720000	27.5	9.000	Off	N	10.0	28.5	56.0
4.742000	27.4	9.000	Off	N	10.0	28.6	56.0
8.974000	29.7	9.000	Off	N	10.2	30.3	60.0
9.236000	30.1	9.000	Off	N	10.2	29.9	60.0
14.148000	29.6	9.000	Off	N	10.4	30.4	60.0
14.468000	30.0	9.000	Off	N	10.4	30.0	60.0
15.244000	29.5	9.000	Off	N	10.5	30.5	60.0
15.382000	29.0	9.000	Off	N	10.5	31.0	60.0

2018-04-04 오후 3:54:27

EMI Auto Test(20) 2 / 2

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.156000	34.7	9.000	Off	N	9.7	20.9	55.7
0.168000	24.4	9.000	Off	N	9.7	30.6	55.1
0.218000	23.2	9.000	Off	N	9.7	29.7	52.9
0.222000	25.6	9.000	Off	N	9.7	27.1	52.7
0.226000	27.9	9.000	Off	N	9.7	24.7	52.6
0.230000	28.6	9.000	Off	N	9.7	23.8	52.4
1.174000	19.8	9.000	Off	N	9.8	26.2	46.0
4.216000	20.6	9.000	Off	N	10.0	25.4	46.0
4.482000	20.7	9.000	Off	N	10.0	25.3	46.0
4.506000	20.6	9.000	Off	N	10.0	25.4	46.0
4.720000	20.8	9.000	Off	N	10.0	25.2	46.0
4.742000	20.9	9.000	Off	N	10.0	25.1	46.0
8.974000	23.0	9.000	Off	N	10.2	27.0	50.0
9.236000	23.3	9.000	Off	N	10.2	26.7	50.0
9.506000	23.2	9.000	Off	N	10.2	26.8	50.0
13.640000	22.0	9.000	Off	N	10.4	28.0	50.0
14.312000	22.2	9.000	Off	N	10.4	27.8	50.0
15.382000	20.3	9.000	Off	N	10.5	29.7	50.0

2018-04-04 오후 3:54:27

Conducted Emissions (Line 2)

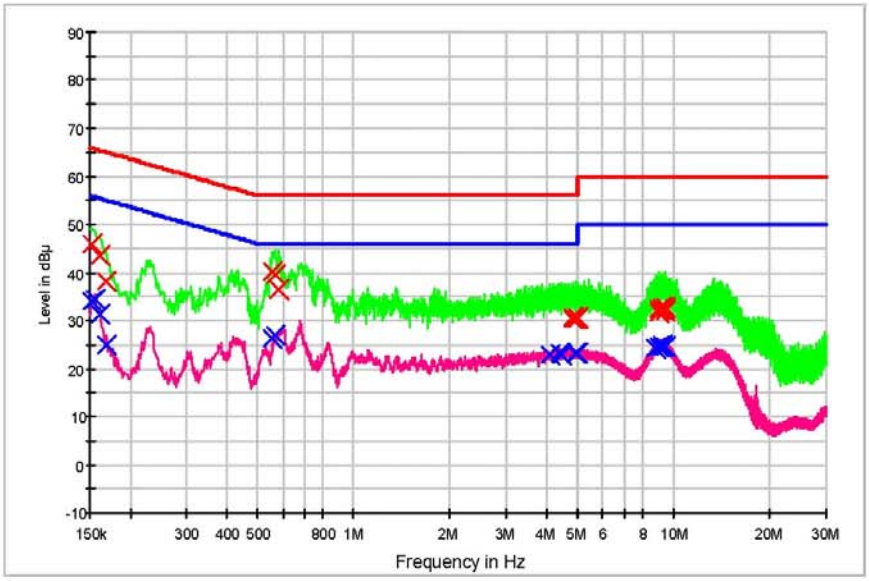
EMI Auto Test(20) 1 / 2

HCT TEST Report

Common Information

EUT:	SM-G8750
Manufacturer:	SAMSUNG
Test Site:	SHIELD ROOM
Operating Conditions:	WLAN 5G MODE

FCC CLASS B_Exten Cable



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

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.152000	46.1	9.000	Off	L1	9.7	19.8	65.9
0.160000	43.7	9.000	Off	L1	9.7	21.8	65.5
0.168000	38.1	9.000	Off	L1	9.7	27.0	65.1
0.556000	40.2	9.000	Off	L1	9.7	15.8	56.0
0.568000	39.5	9.000	Off	L1	9.7	16.5	56.0
0.584000	36.6	9.000	Off	L1	9.7	19.4	56.0
4.824000	30.3	9.000	Off	L1	10.0	25.7	56.0
4.850000	30.3	9.000	Off	L1	10.0	25.7	56.0
4.858000	30.5	9.000	Off	L1	10.0	25.5	56.0
4.936000	30.4	9.000	Off	L1	10.0	25.6	56.0
5.004000	30.2	9.000	Off	L1	10.0	29.8	60.0
5.012000	30.6	9.000	Off	L1	10.0	29.4	60.0
8.948000	31.8	9.000	Off	L1	10.1	28.2	60.0
9.042000	32.3	9.000	Off	L1	10.1	27.7	60.0
9.176000	32.6	9.000	Off	L1	10.1	27.4	60.0
9.220000	32.3	9.000	Off	L1	10.1	27.7	60.0
9.446000	32.1	9.000	Off	L1	10.1	27.9	60.0
9.478000	32.6	9.000	Off	L1	10.1	27.4	60.0

2018-04-04 오후 4:04:39

EMI Auto Test(20) 2 / 2

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	34.0	9.000	Off	L1	9.7	21.9	55.9
0.156000	34.3	9.000	Off	L1	9.7	21.4	55.7
0.160000	31.3	9.000	Off	L1	9.7	24.2	55.5
0.168000	24.9	9.000	Off	L1	9.7	30.2	55.1
0.556000	26.1	9.000	Off	L1	9.7	19.9	46.0
0.568000	27.0	9.000	Off	L1	9.7	19.0	46.0
4.098000	22.9	9.000	Off	L1	9.9	23.1	46.0
4.398000	23.1	9.000	Off	L1	9.9	22.9	46.0
4.458000	23.0	9.000	Off	L1	10.0	23.0	46.0
4.936000	23.2	9.000	Off	L1	10.0	22.8	46.0
5.004000	23.2	9.000	Off	L1	10.0	26.8	50.0
5.012000	23.2	9.000	Off	L1	10.0	26.8	50.0
8.776000	24.2	9.000	Off	L1	10.1	25.8	50.0
8.794000	24.3	9.000	Off	L1	10.1	25.8	50.0
9.042000	24.7	9.000	Off	L1	10.1	25.3	50.0
9.176000	24.8	9.000	Off	L1	10.1	25.2	50.0
9.222000	24.7	9.000	Off	L1	10.1	25.3	50.0
9.446000	24.7	9.000	Off	L1	10.1	25.3	50.0

2018-04-04 오후 4:04:39

▣ RESULT PLOTS_Fast Charging

Conducted Emissions (Line 1)

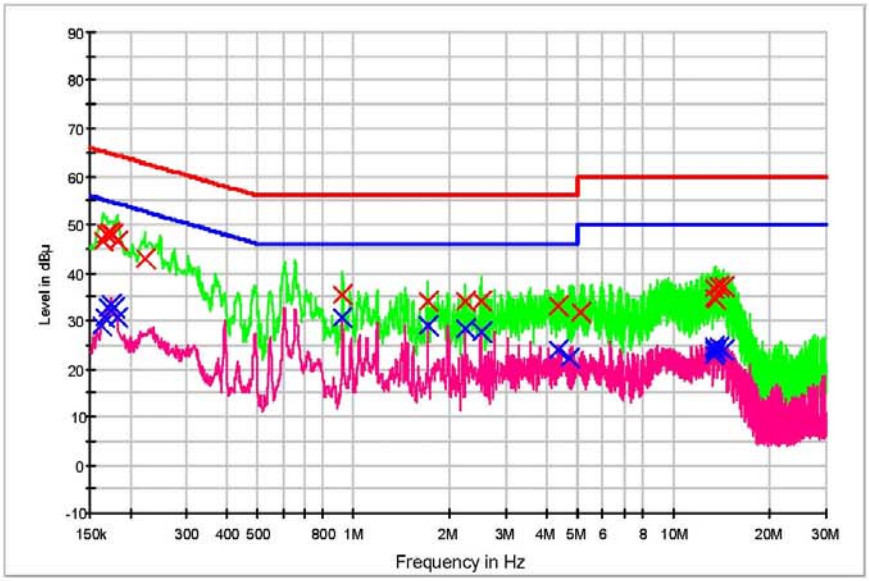
EMI Auto Test(21) 1 / 2

HCT TEST Report

Common Information

EUT:	SM-G8750
Manufacturer:	SAMSUNG
Test Site:	SHIELD ROOM
Operating Conditions:	WLAN 5G MODE (FAST CHARGING)

FCC CLASS B_Exten Cable



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.164000	46.6	9.000	Off	N	9.7	18.7	65.3
0.168000	48.0	9.000	Off	N	9.7	17.1	65.1
0.172000	48.2	9.000	Off	N	9.7	16.7	64.9
0.176000	47.9	9.000	Off	N	9.7	16.7	64.7
0.182000	46.8	9.000	Off	N	9.7	17.6	64.4
0.222000	42.7	9.000	Off	N	9.7	20.0	62.7
0.924000	35.3	9.000	Off	N	9.8	20.7	56.0
1.712000	34.1	9.000	Off	N	9.8	21.9	56.0
2.238000	34.1	9.000	Off	N	9.8	21.9	56.0
2.502000	34.2	9.000	Off	N	9.9	21.8	56.0
4.344000	33.1	9.000	Off	N	10.0	22.9	56.0
5.134000	31.7	9.000	Off	N	10.0	28.3	60.0
13.390000	36.9	9.000	Off	N	10.4	23.1	60.0
13.448000	36.7	9.000	Off	N	10.4	23.3	60.0
13.452000	34.7	9.000	Off	N	10.4	25.3	60.0
13.512000	34.4	9.000	Off	N	10.4	25.6	60.0
13.814000	37.0	9.000	Off	N	10.4	23.0	60.0
14.308000	37.0	9.000	Off	N	10.4	23.0	60.0

2018-04-13 오후 4:15:38

EMI Auto Test(21) 2 / 2

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.162000	28.9	9.000	Off	N	9.7	26.5	55.4
0.166000	30.8	9.000	Off	N	9.7	24.4	55.2
0.170000	32.7	9.000	Off	N	9.7	22.3	55.0
0.174000	33.4	9.000	Off	N	9.7	21.3	54.8
0.178000	32.6	9.000	Off	N	9.7	22.0	54.6
0.182000	30.6	9.000	Off	N	9.7	23.7	54.4
0.922000	30.6	9.000	Off	N	9.8	15.4	46.0
1.710000	29.0	9.000	Off	N	9.8	17.0	46.0
2.238000	28.2	9.000	Off	N	9.8	17.8	46.0
2.502000	27.5	9.000	Off	N	9.9	18.5	46.0
4.344000	23.9	9.000	Off	N	10.0	22.1	46.0
4.708000	22.1	9.000	Off	N	10.0	23.9	46.0
13.392000	22.8	9.000	Off	N	10.4	27.2	50.0
13.448000	24.7	9.000	Off	N	10.4	25.3	50.0
13.452000	24.0	9.000	Off	N	10.4	26.0	50.0
13.512000	23.7	9.000	Off	N	10.4	26.3	50.0
13.872000	24.5	9.000	Off	N	10.4	25.5	50.0
14.308000	23.9	9.000	Off	N	10.4	26.1	50.0

2018-04-13 오후 4:15:38

Conducted Emissions (Line 2)

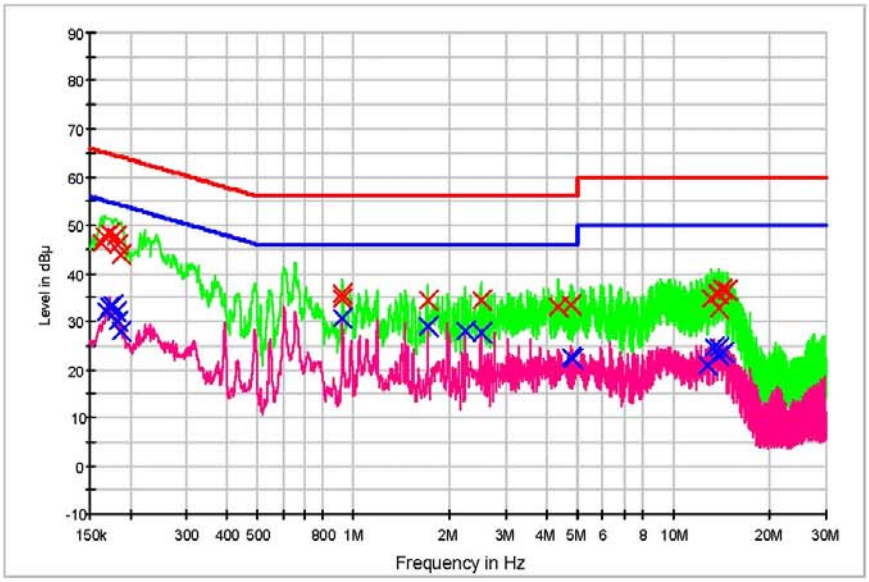
EMI Auto Test(21) 1 / 2

HCT TEST Report

Common Information

EUT:	SM-G8750
Manufacturer:	SAMSUNG
Test Site:	SHIELD ROOM
Operating Conditions:	WLAN 5G MODE (FAST CHARGING)

FCC CLASS B_Exten Cable



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.162000	46.2	9.000	Off	L1	9.7	19.2	65.4
0.166000	47.7	9.000	Off	L1	9.7	17.5	65.2
0.172000	48.5	9.000	Off	L1	9.7	16.4	64.9
0.180000	47.6	9.000	Off	L1	9.7	16.9	64.5
0.184000	46.1	9.000	Off	L1	9.7	18.3	64.3
0.188000	43.9	9.000	Off	L1	9.7	20.2	64.1
0.920000	35.8	9.000	Off	L1	9.8	20.2	56.0
0.924000	34.8	9.000	Off	L1	9.8	21.2	56.0
1.710000	34.4	9.000	Off	L1	9.8	21.6	56.0
2.500000	34.4	9.000	Off	L1	9.9	21.6	56.0
4.344000	33.1	9.000	Off	L1	9.9	22.9	56.0
4.772000	33.4	9.000	Off	L1	10.0	22.6	56.0
13.028000	34.7	9.000	Off	L1	10.2	25.3	60.0
13.762000	35.9	9.000	Off	L1	10.2	24.1	60.0
13.822000	35.8	9.000	Off	L1	10.2	24.2	60.0
13.944000	32.6	9.000	Off	L1	10.2	27.4	60.0
14.250000	36.9	9.000	Off	L1	10.2	23.1	60.0
14.740000	36.4	9.000	Off	L1	10.3	23.6	60.0

2018-04-13 오후 4:27:07

EMI Auto Test(21) 2 / 2

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.168000	32.0	9.000	Off	L1	9.7	23.1	55.1
0.172000	33.2	9.000	Off	L1	9.7	21.6	54.9
0.176000	33.2	9.000	Off	L1	9.7	21.4	54.7
0.180000	32.0	9.000	Off	L1	9.7	22.5	54.5
0.184000	30.0	9.000	Off	L1	9.7	24.3	54.3
0.188000	27.9	9.000	Off	L1	9.7	26.2	54.1
0.922000	30.5	9.000	Off	L1	9.8	15.5	46.0
1.712000	28.8	9.000	Off	L1	9.8	17.2	46.0
2.238000	28.0	9.000	Off	L1	9.8	18.0	46.0
2.500000	27.7	9.000	Off	L1	9.9	18.3	46.0
4.772000	22.5	9.000	Off	L1	10.0	23.5	46.0
4.842000	22.1	9.000	Off	L1	10.0	23.9	46.0
12.718000	21.0	9.000	Off	L1	10.2	29.0	50.0
13.388000	24.5	9.000	Off	L1	10.2	25.5	50.0
13.448000	24.5	9.000	Off	L1	10.2	25.5	50.0
13.820000	24.5	9.000	Off	L1	10.2	25.5	50.0
13.944000	22.7	9.000	Off	L1	10.2	27.3	50.0
14.308000	23.7	9.000	Off	L1	10.2	26.3	50.0

2018-04-13 오후 4:27:07

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	12/20/2017	Annual	102245
Rohde & Schwarz	ESCI / Test Receiver	06/27/2017	Annual	100033
ESPAC	SU-642 /Temperature Chamber	03/30/2018	Annual	0093008124
Agilent	N9020A / Signal Analyzer	06/13/2017	Annual	MY51110085
Agilent	N9030A / Signal Analyzer	11/22/2017	Annual	MY49431210
Agilent	* N1911A / Power Meter	04/16/2018	Annual	MY45100523
Agilent	* N1921A / Power Sensor	04/16/2018	Annual	MY52260025
Agilent	87300B / Directional Coupler	11/20/2017	Annual	3116A03621
Hewlett Packard	11667B / Power Splitter	06/12/2017	Annual	05001
Hewlett Packard	E3632A / DC Power Supply	06/30/2017	Annual	KR75303960
Agilent	8493C / Attenuator(10 dB)	07/10/2017	Annual	07560
Rohde & Schwarz	EMC32 / Software	N/A	N/A	N/A
HCT CO., LTD.	FCC WLAN&BT&BLE Conducted Test Software v3.0	N/A	N/A	N/A

* [Note]_Test date using a Power Meter and Power Sensor : April 02, 2018 ~ April 15, 2018

* Previous Calibration Date : : April 17, 2017

10.2 LIST OF TEST EQUIPMENT(Radiated Test)

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
Innco system	CO3000 / Controller(Antenna mast)	N/A	N/A	CO3000-4p
Innco system	MA4640 /800-XP-ET / Antenna Position Tower	N/A	N/A	N/A
Audix	EM1000 / Controller	N/A	N/A	060520
Audix	Turn Table	N/A	N/A	N/A
Rohde & Schwarz	Loop Antenna	04/06/2017	Biennial	1513-175
Schwarzbeck	VULB 9168 / Hybrid Antenna	04/06/2017	Biennial	760
Schwarzbeck	BBHA 9120D / Horn Antenna	05/02/2017	Biennial	9120D-937
Schwarzbeck	BBHA9170 / Horn Antenna(15 GHz ~ 40 GHz)	12/04/2017	Biennial	BBHA9170541
Rohde & Schwarz	FSP(9 kHz ~ 30 GHz) / Spectrum Analyzer	09/06/2017	Annual	100688
Rohde & Schwarz	FSV40-N / Spectrum Analyzer	09/27/2017	Annual	101068-SZ
Wainwright Instruments	WHK3.0/18G-10EF / High Pass Filter	06/12/2017	Annual	8
Wainwright Instruments	WHFX7.0/18G-8SS / High Pass Filter	05/15/2017	Annual	29
Wainwright Instruments	WRCJV2400/2483.5-2370/2520-60/12SS / Band Reject Filter	06/30/2017	Annual	2
Wainwright Instruments	WRCJV5100/5850-40/50-8EEK / Band Reject Filter	01/03/2018	Annual	2
Api tech.	18B-03 / Attenuator (3 dB)	06/12/2017	Annual	1
Agilent	8493C-10 / Attenuator(10 dB)	07/19/2017	Annual	08285
CERNEX	CBLU1183540 / Power Amplifier	07/11/2017	Annual	22964
CERNEX	CBL06185030 / Power Amplifier	07/11/2017	Annual	22965
CERNEX	CBL18265035 / Power Amplifier	01/10/2018	Annual	22966
CERNEX	CBL26405040 / Power Amplifier	06/30/2017	Annual	25956