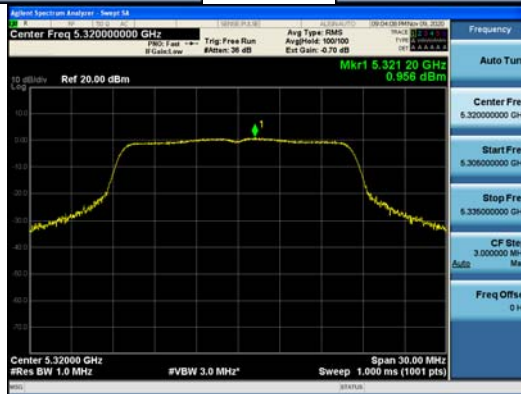
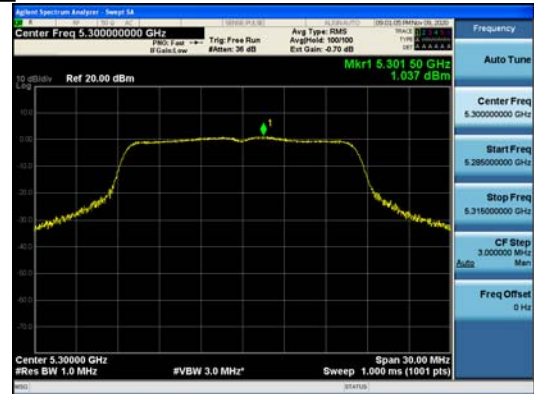
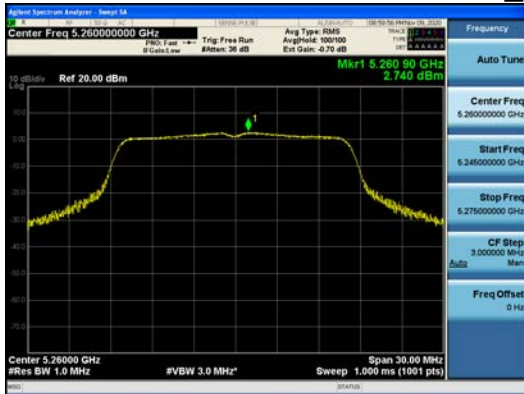
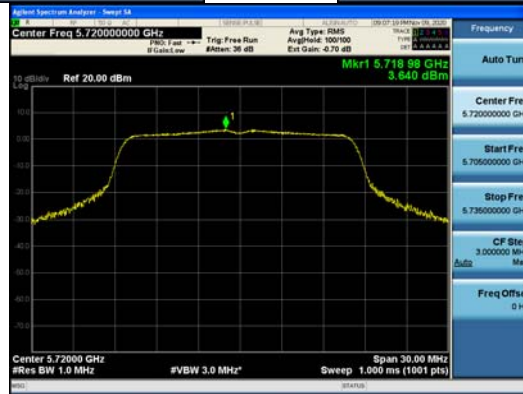
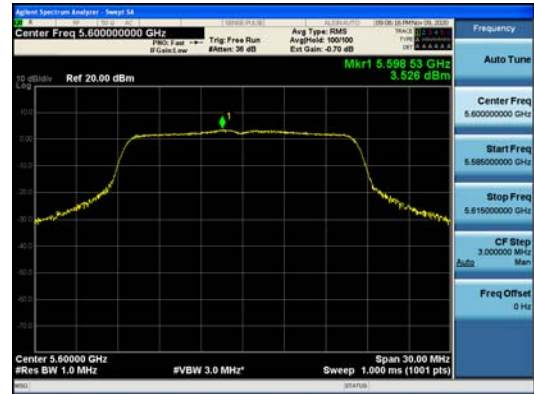
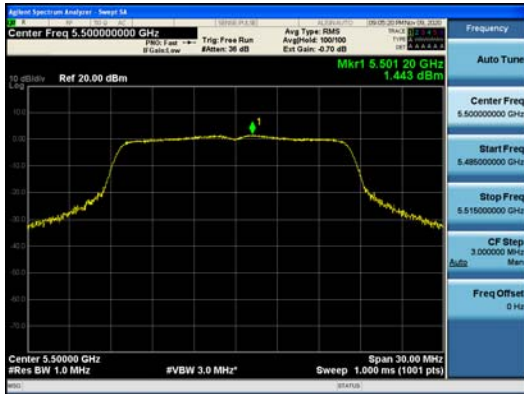


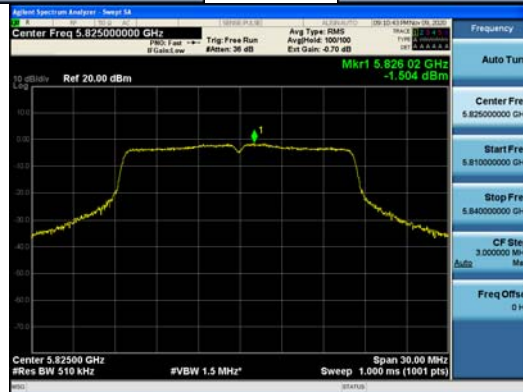
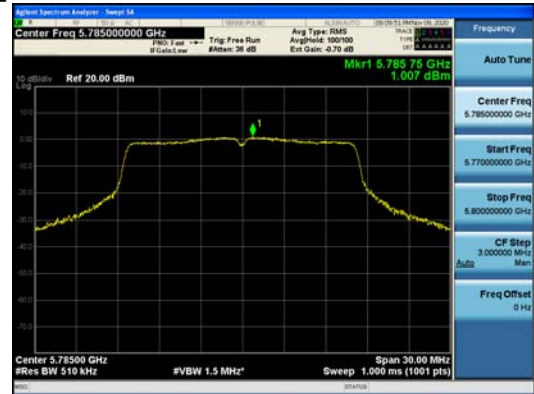
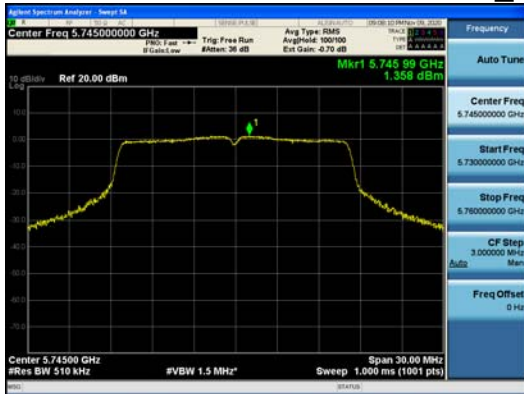
ANT1_802.11a_UNII 1



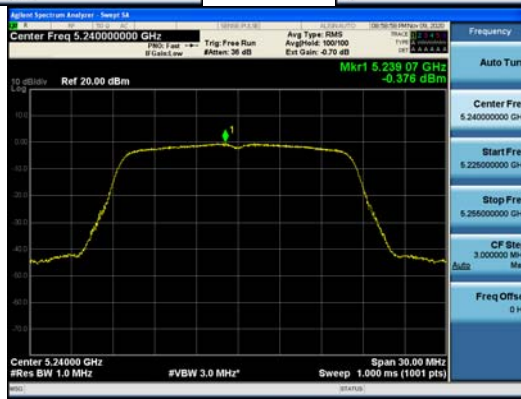
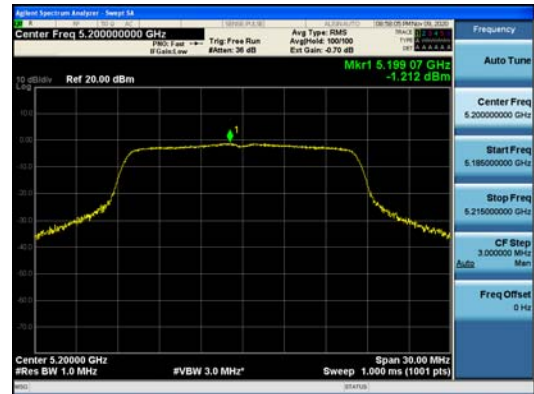
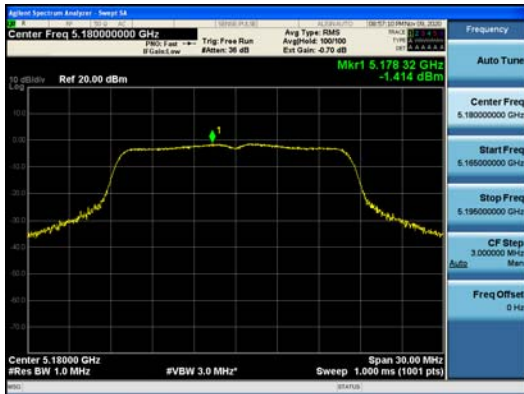
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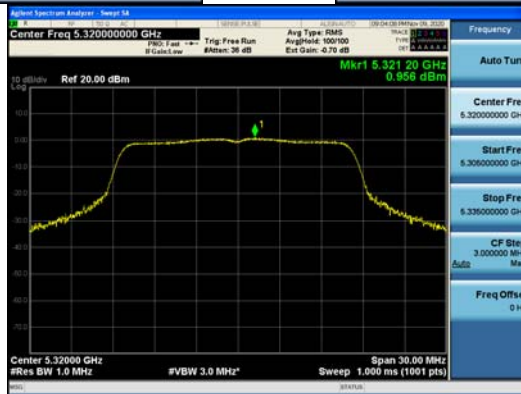
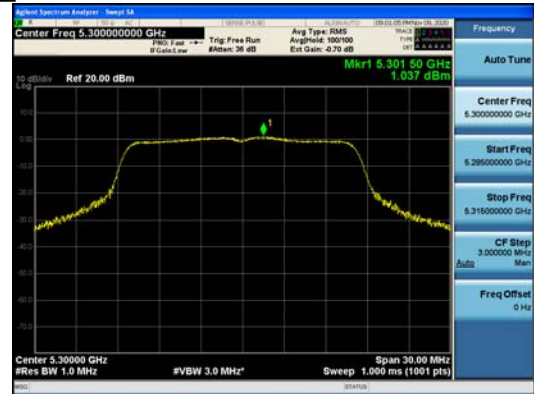
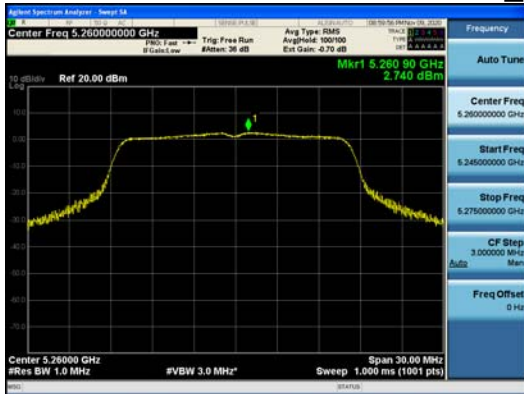
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ANT1_802.11a_UNII 3



ANT2_802.11a_UNII 1

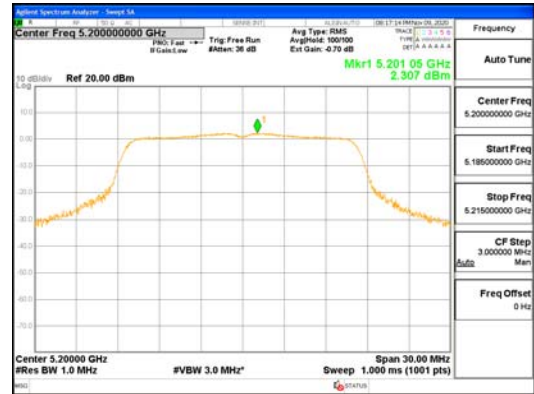
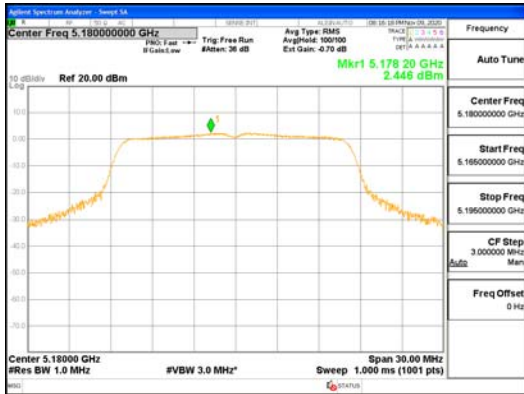


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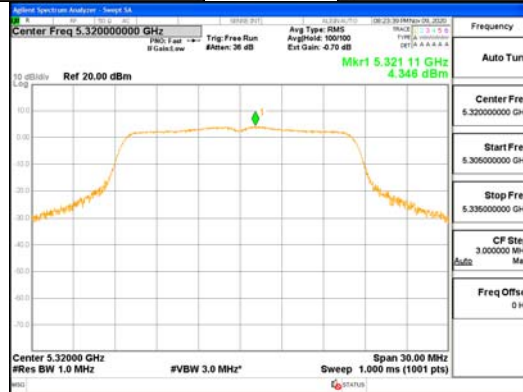
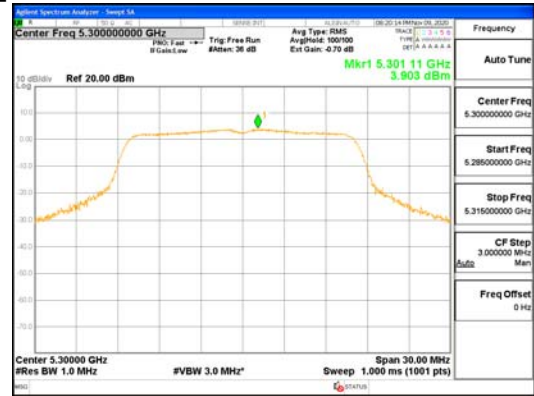
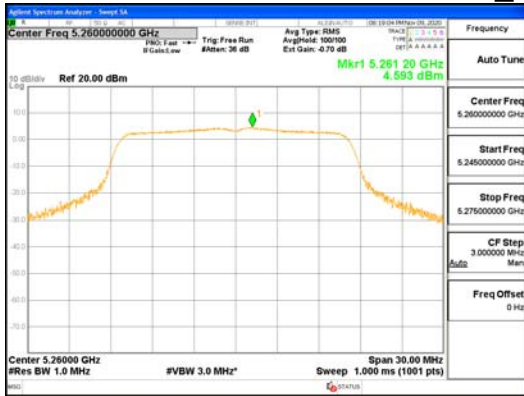


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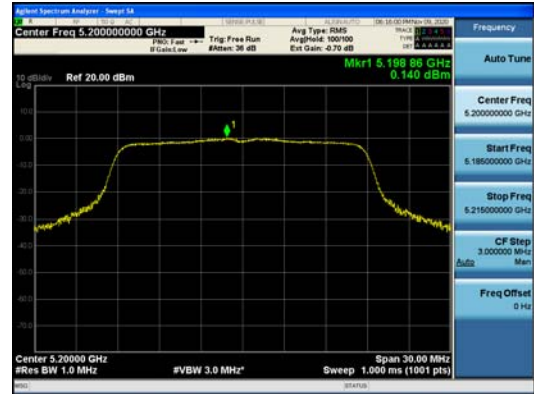
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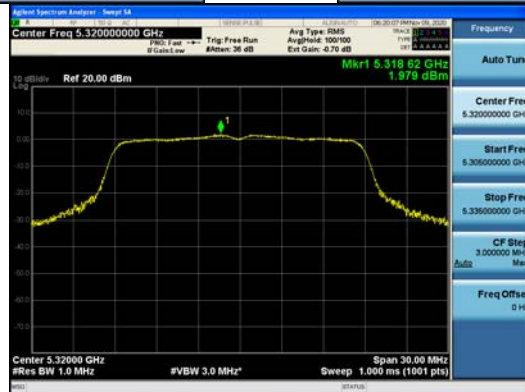
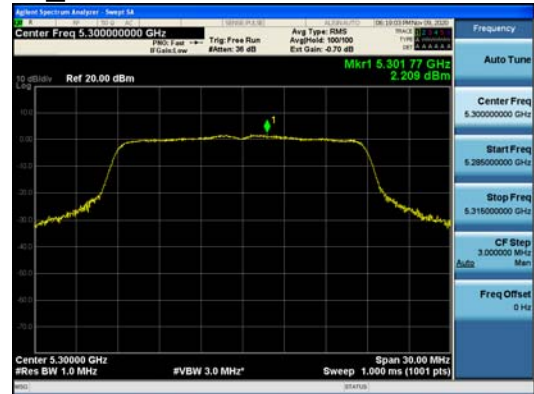
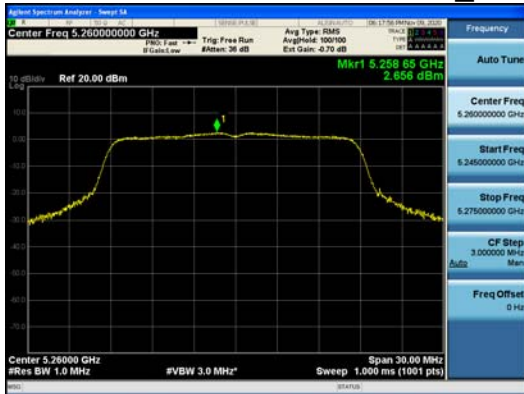
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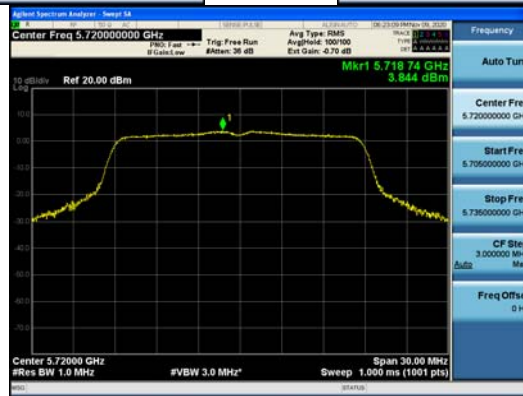
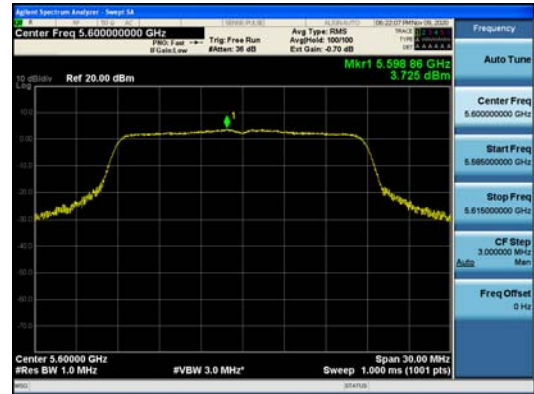
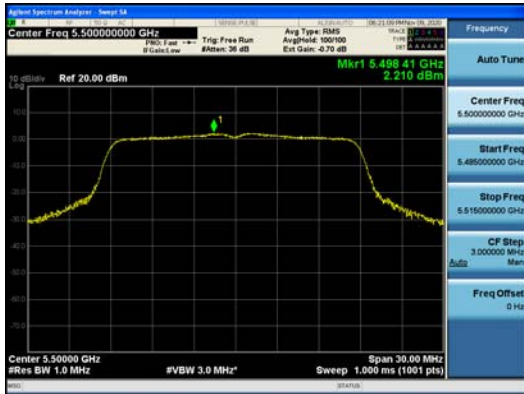
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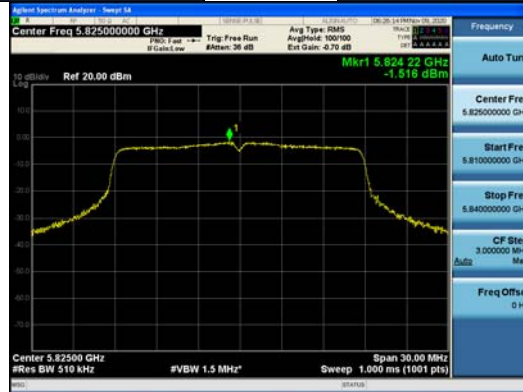
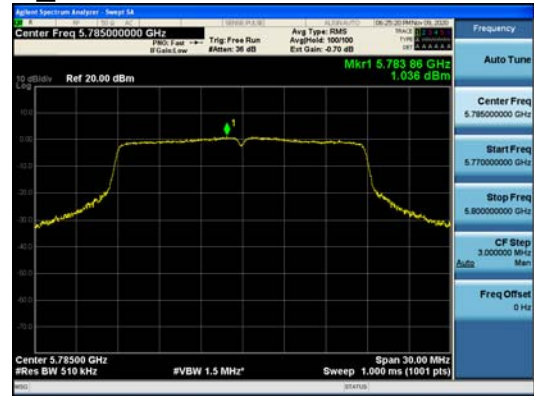
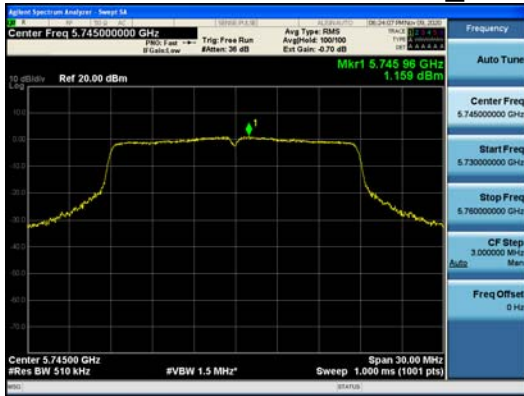
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ANT1_802.11n_HT20_UNII 2A



ANT1_802.11n_HT20_UNII 2C

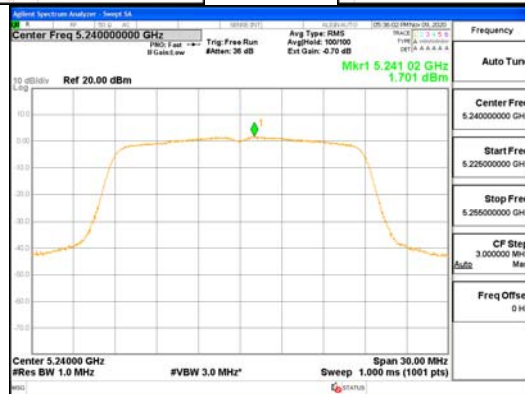
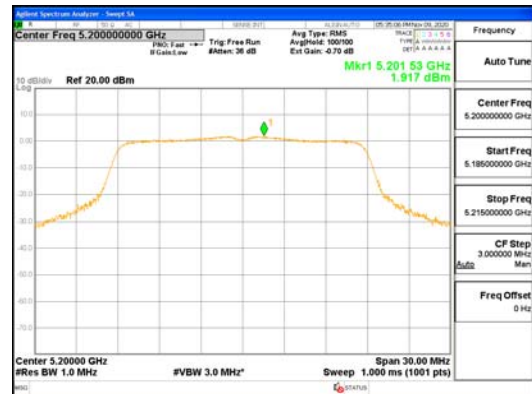
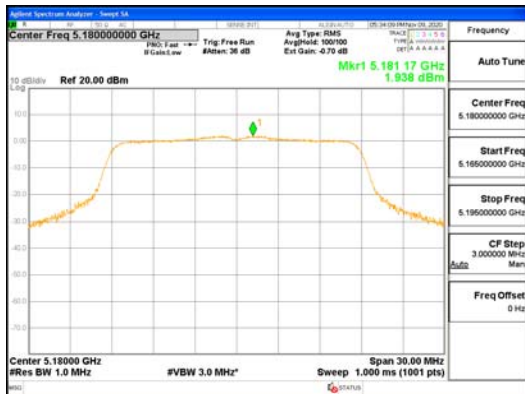


ANT1_802.11n_HT20_UNII 3

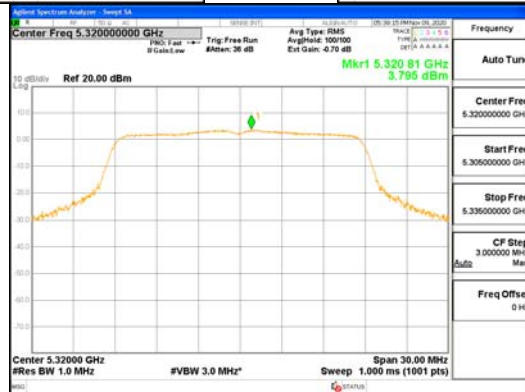
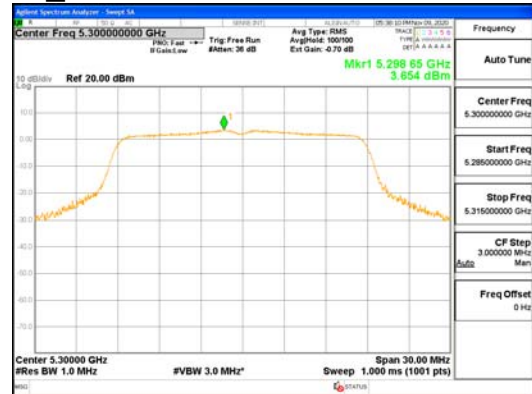
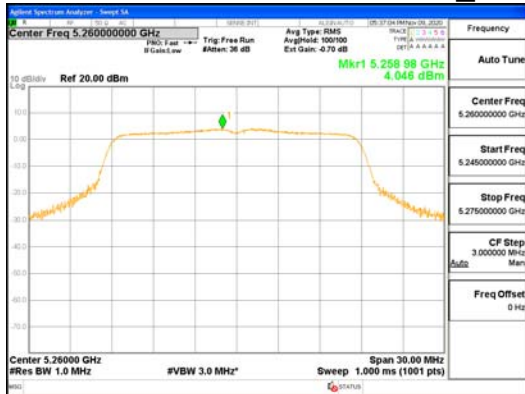


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ANT2_802.11n_HT20_UNII 1

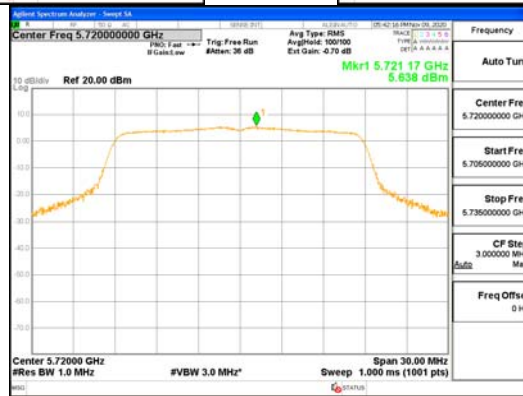
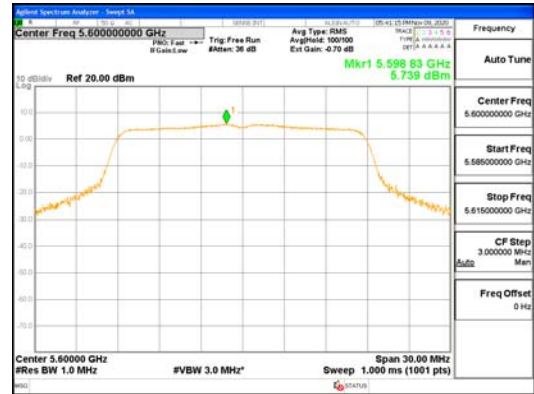


ANT2_802.11n_HT20_UNII 2A

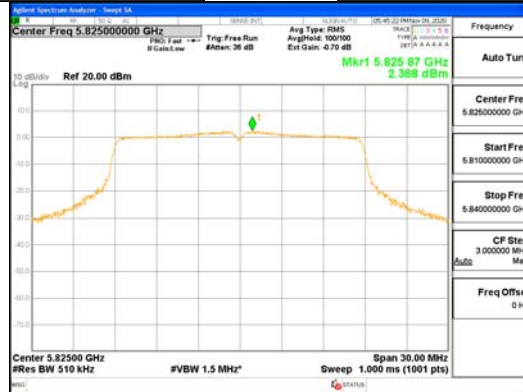
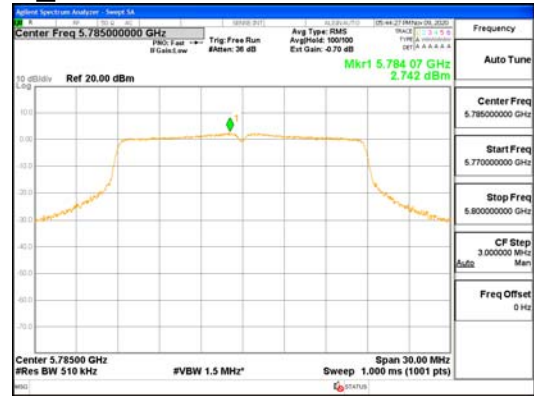
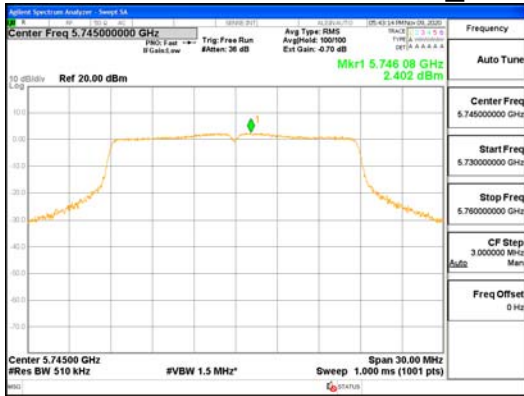


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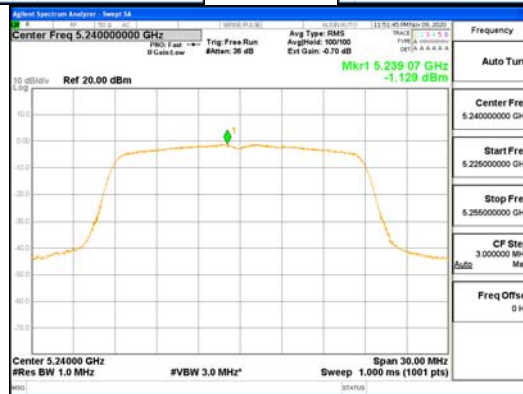
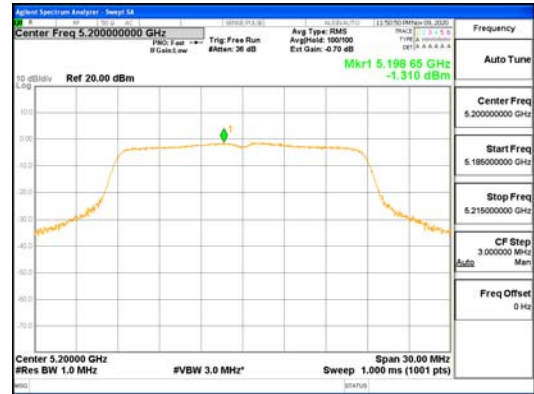
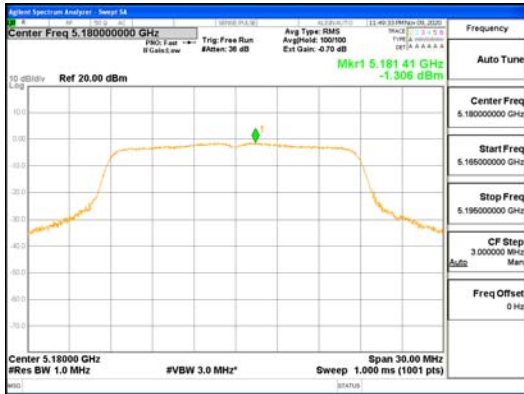
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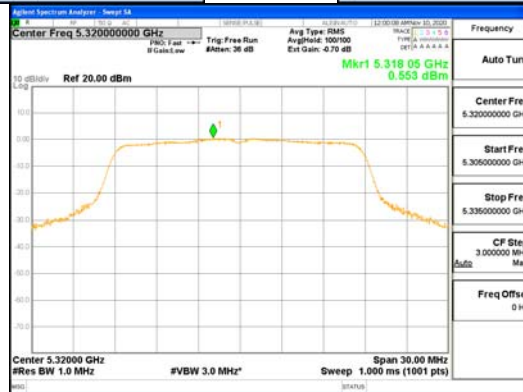
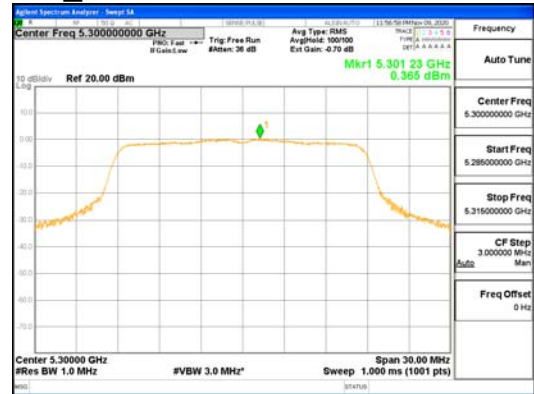
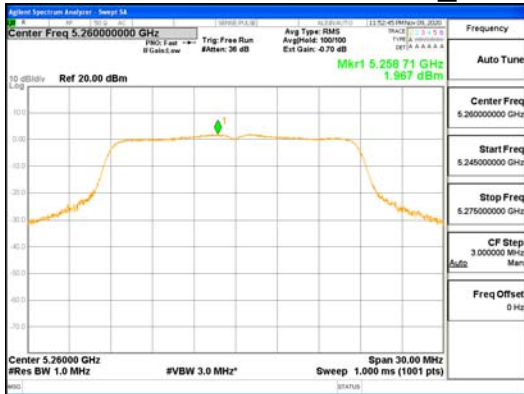
ANT2_802.11n_HT20_UNII 2C



ANT2_802.11n_HT20_UNII 3



ANT1_802.11ac_VHT20_UNI1 1

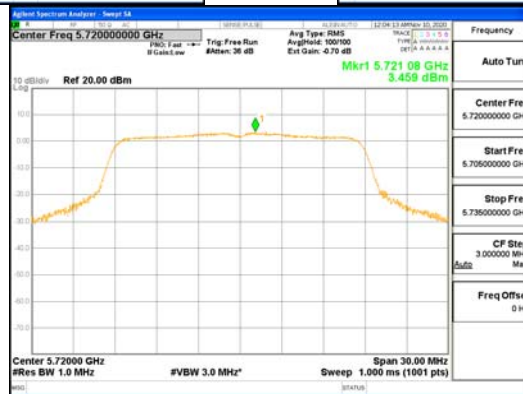
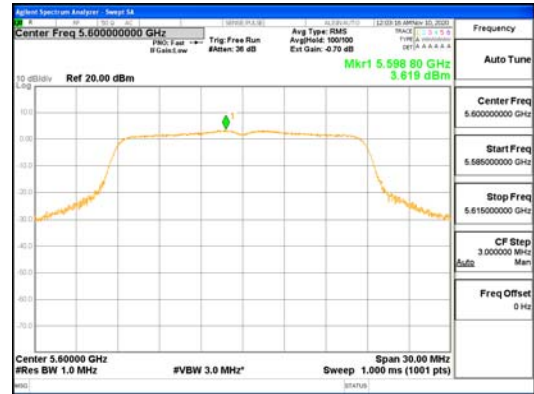
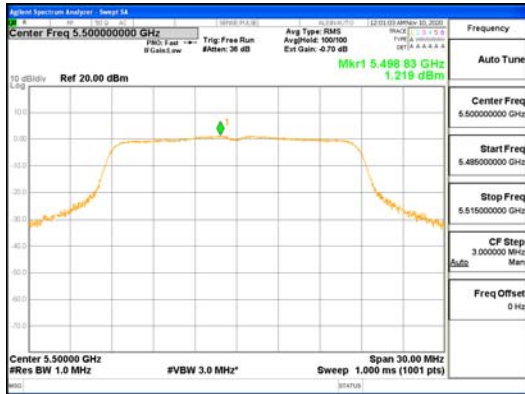


ANT1_802.11ac_VHT20_UNI1 2A

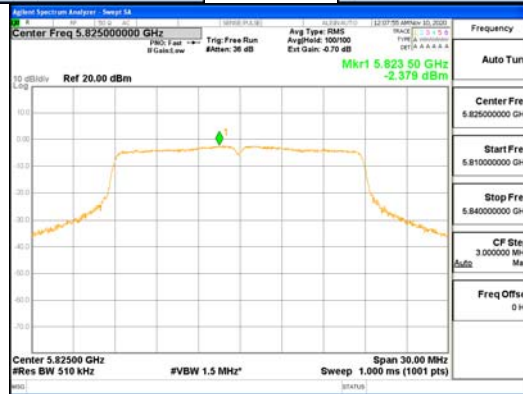
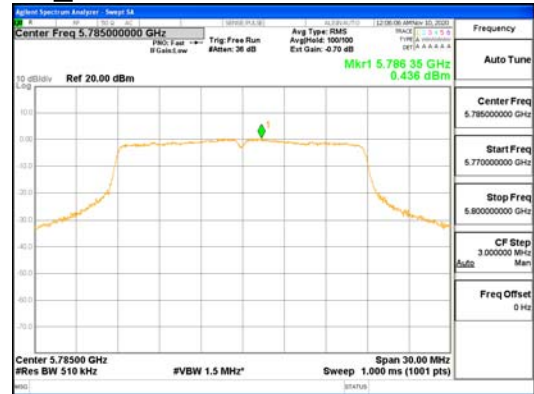
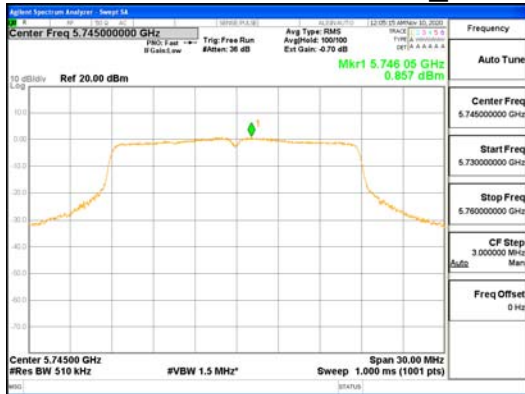


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ANT1_802.11ac_VHT20_UNII 2C

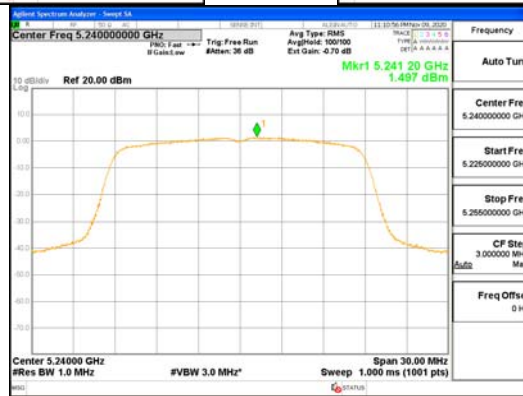
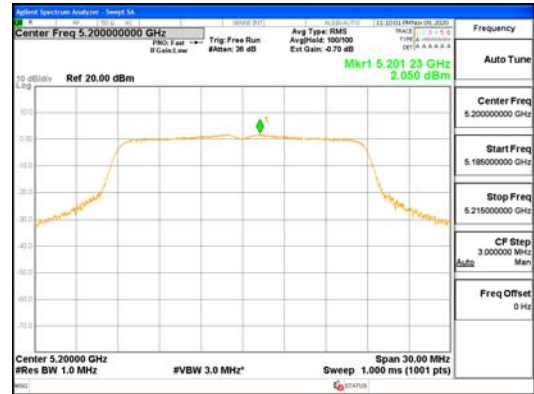
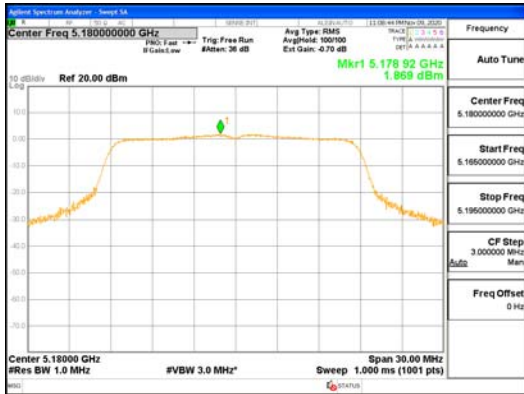


ANT1_802.11ac_VHT20_UNII 3

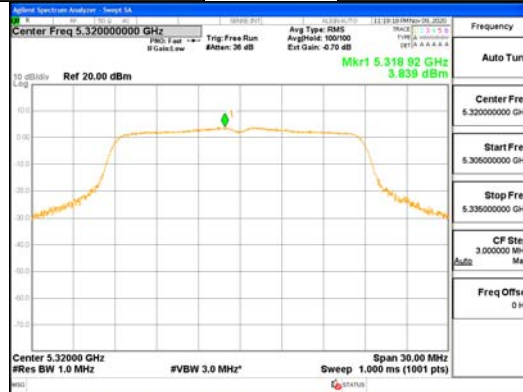
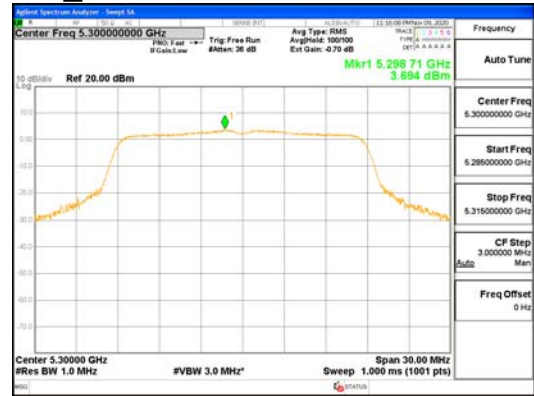


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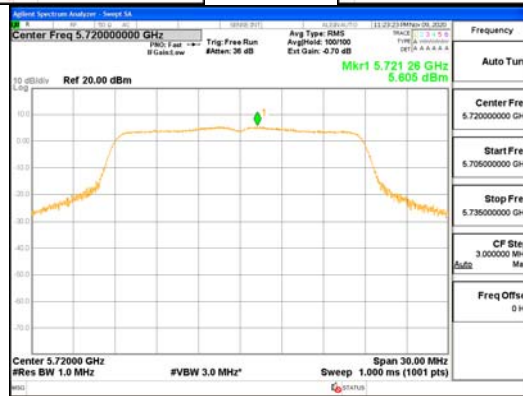
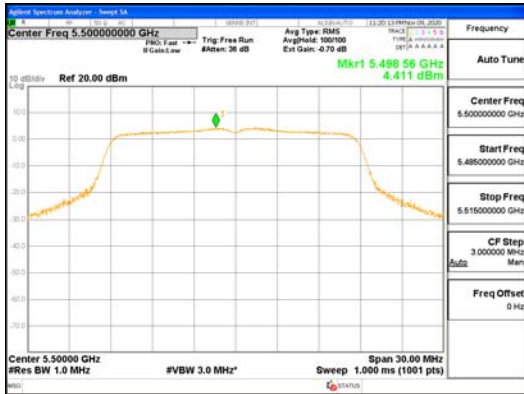
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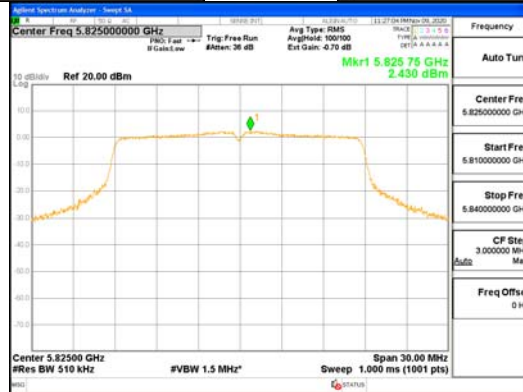
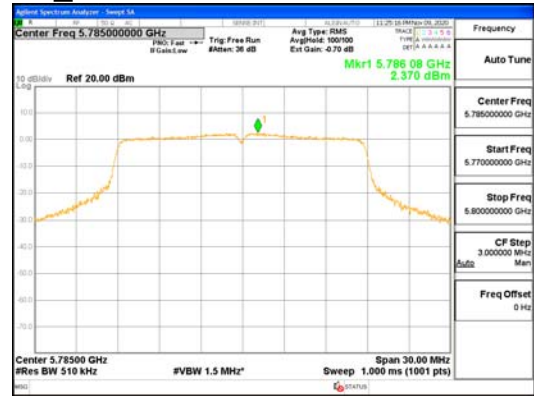
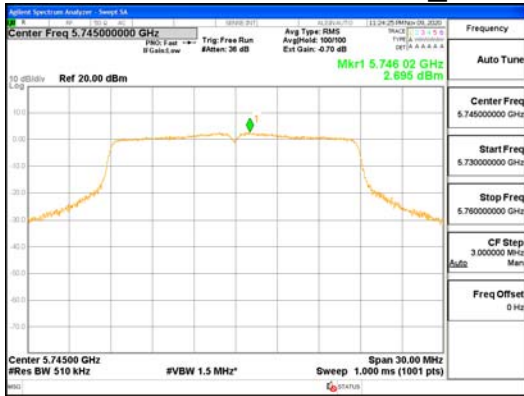
ANT2_802.11ac_VHT20_UNII 1



ANT2_802.11ac_VHT20_UNII 2A



ANT2_802.11ac_VHT20_UNII 2C

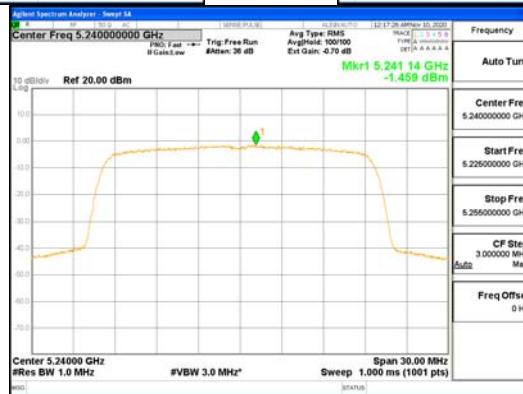
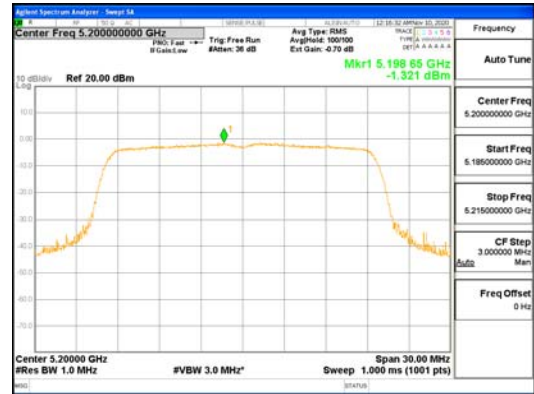
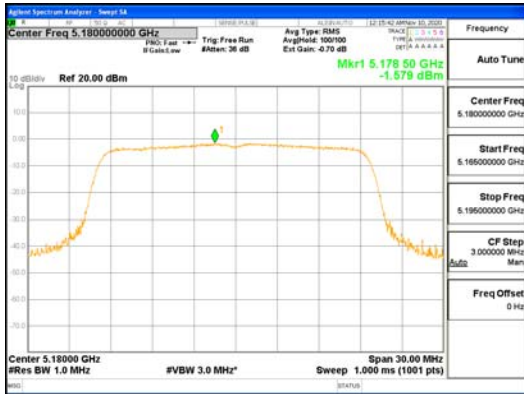


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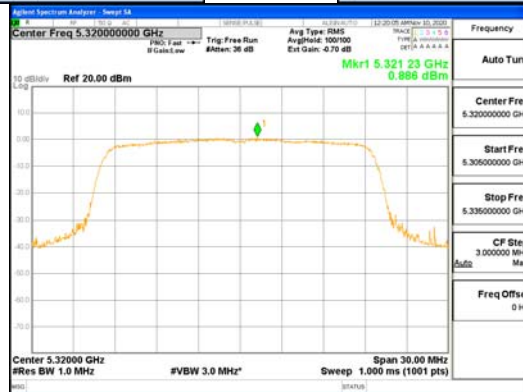
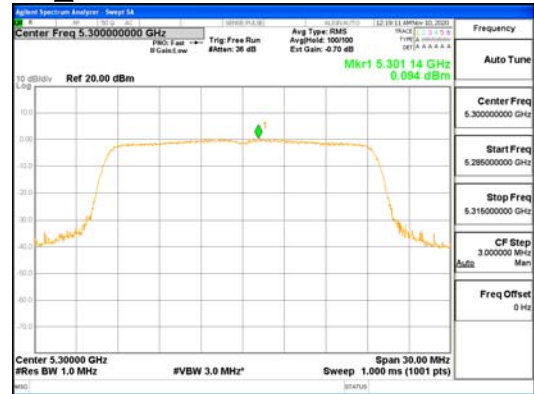
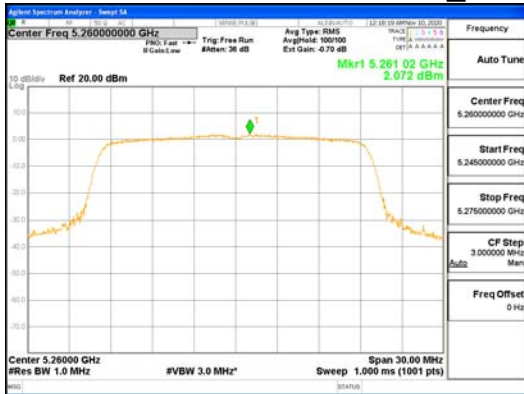


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ANT1_802.11ax_HE20_UNII 1

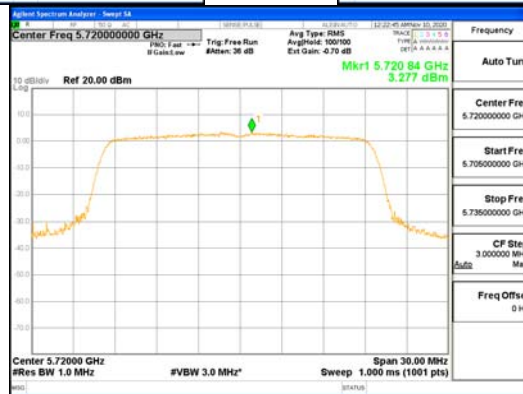
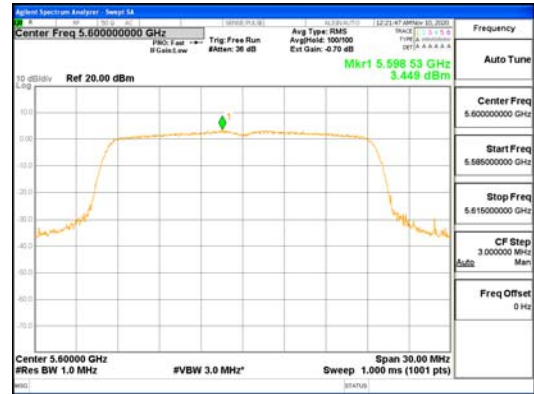
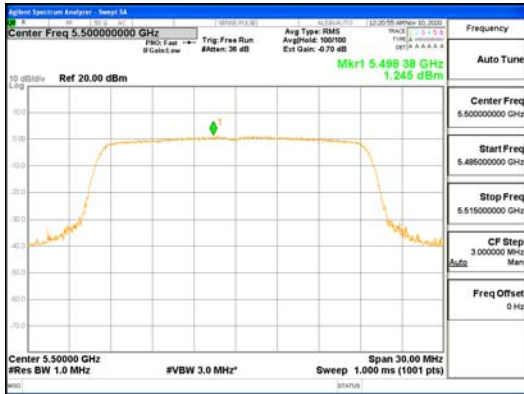


ANT1_802.11ax_HE20_UNII 2A

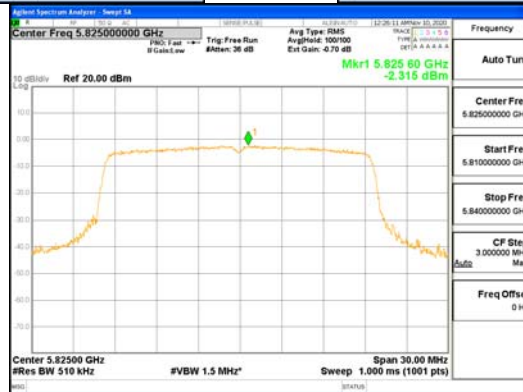
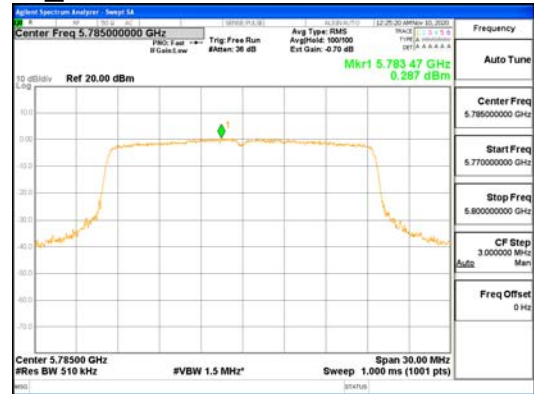
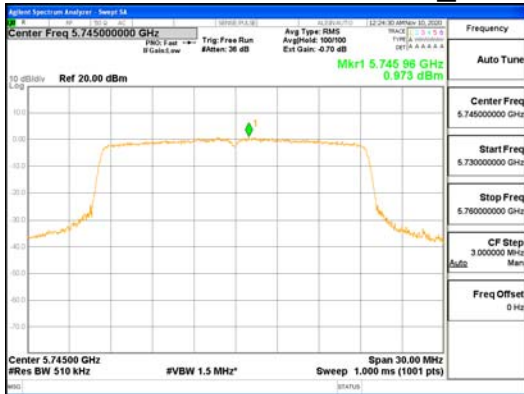


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ANT1_802.11ax_HE20_UNII 2C

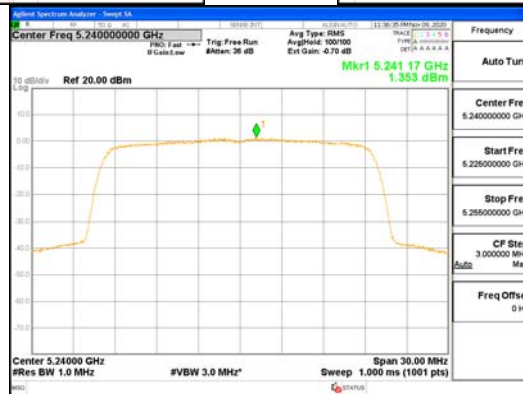
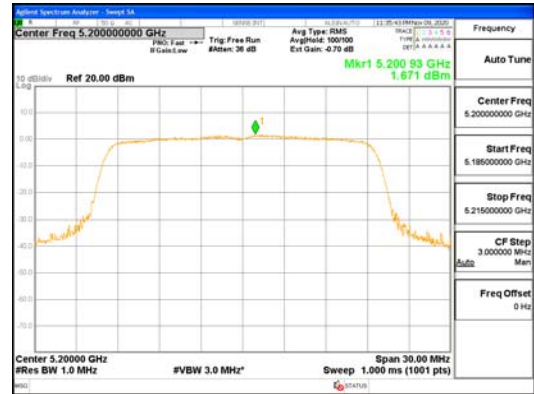
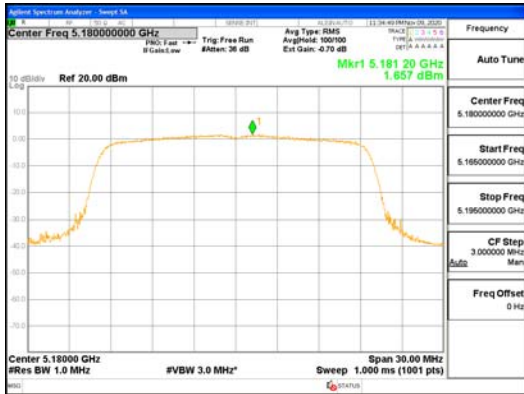


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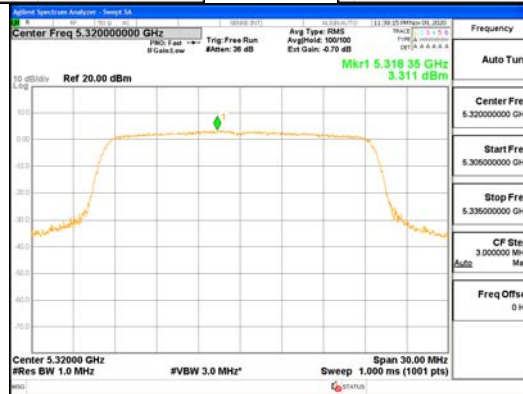
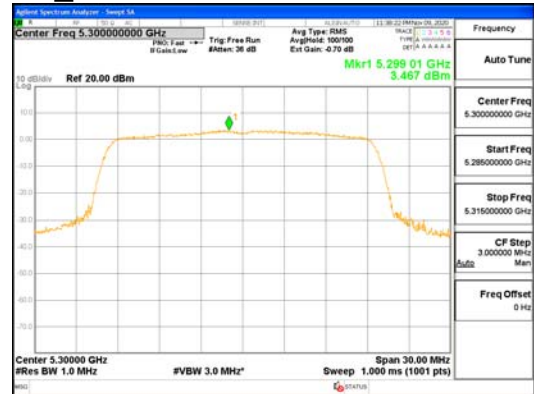


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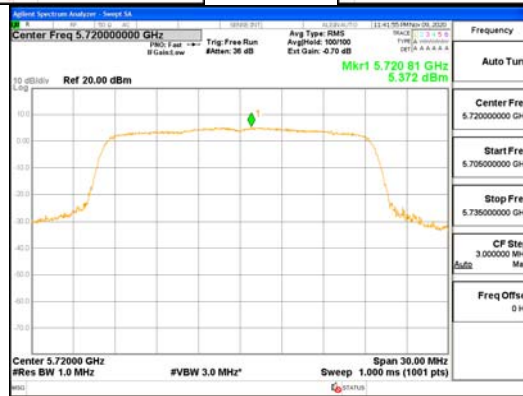
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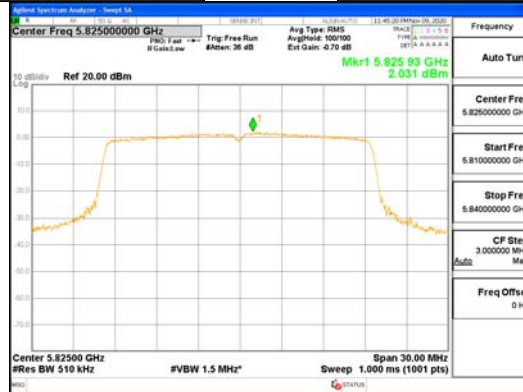
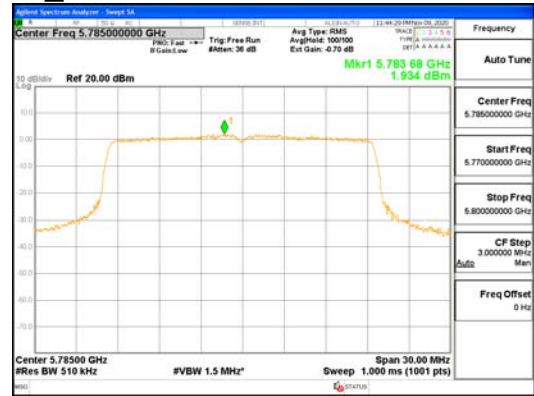
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ANT2_802.11ax_HE20_UNII 2C

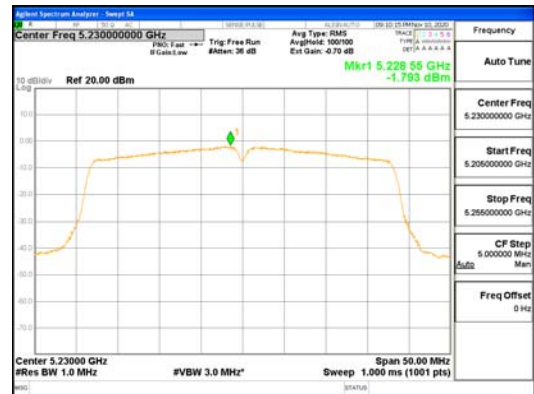
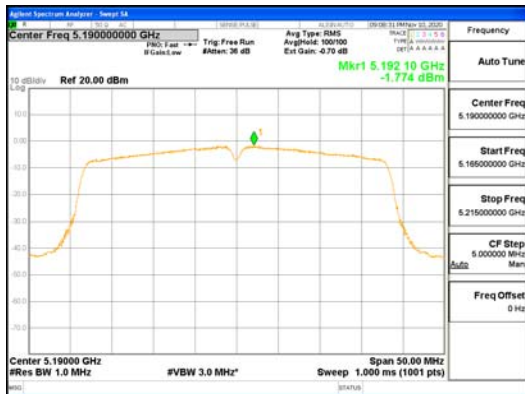


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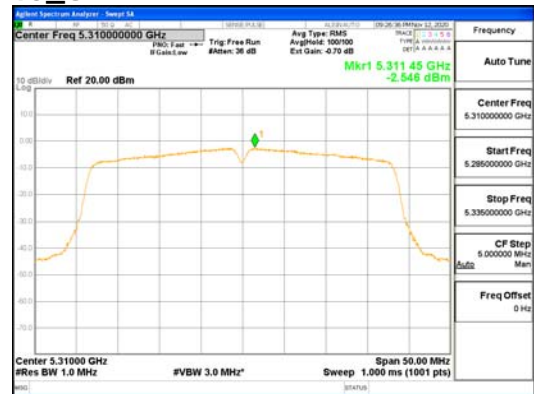


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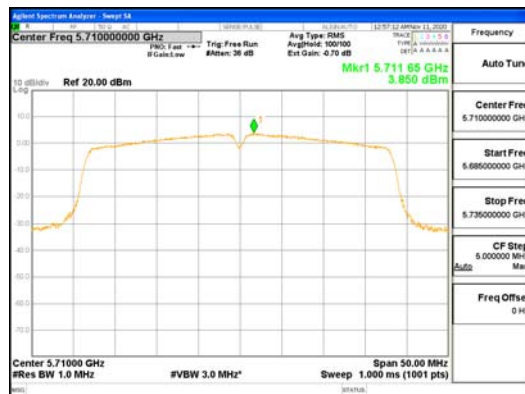
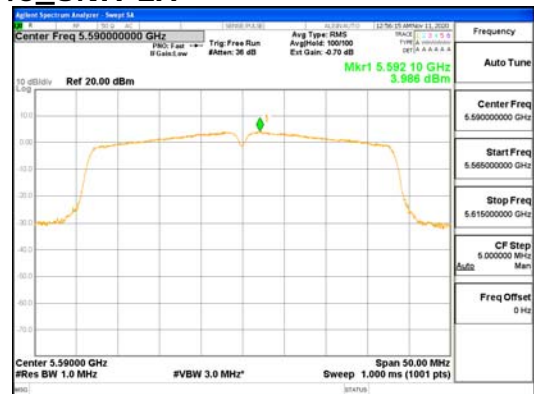
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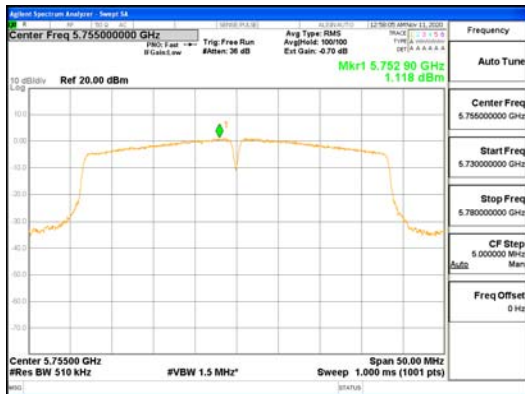


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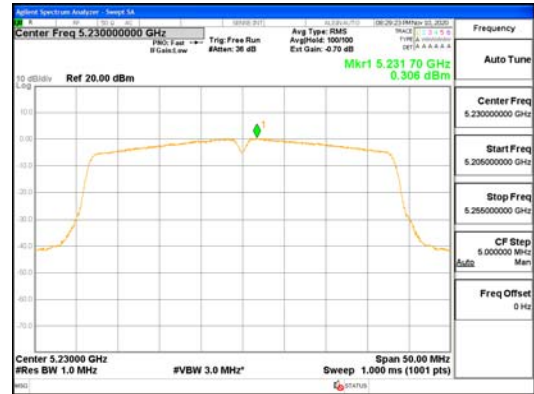
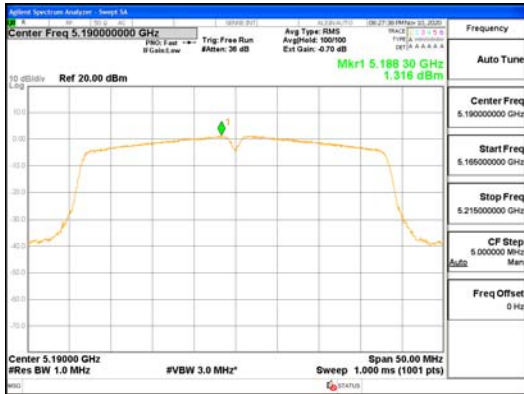


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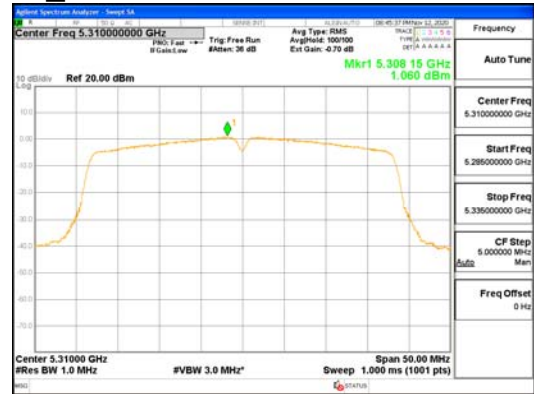
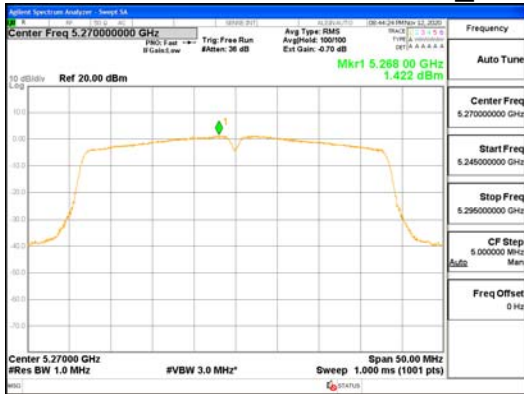
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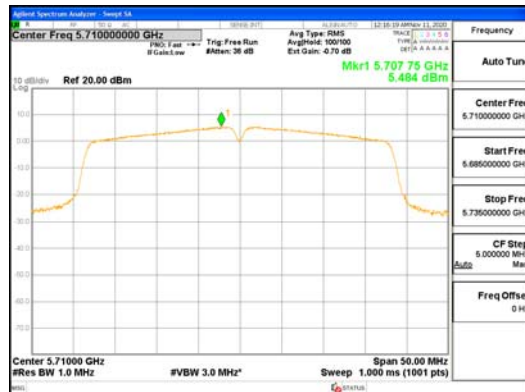
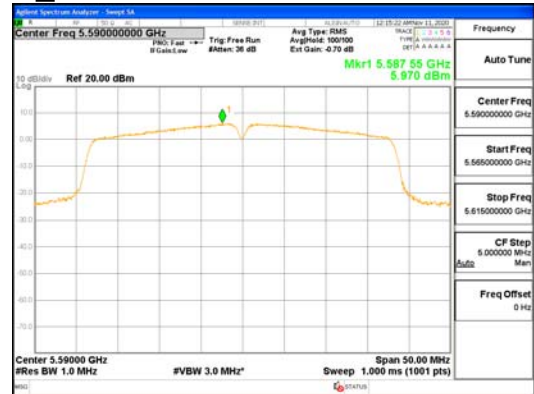
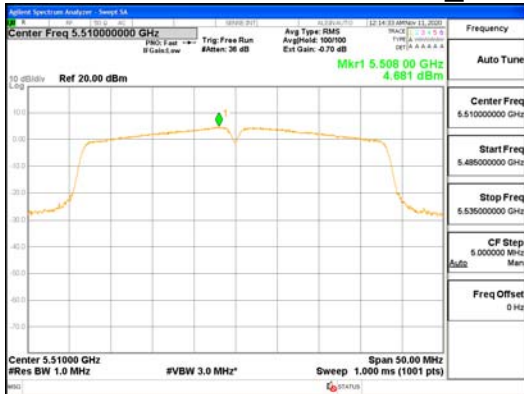
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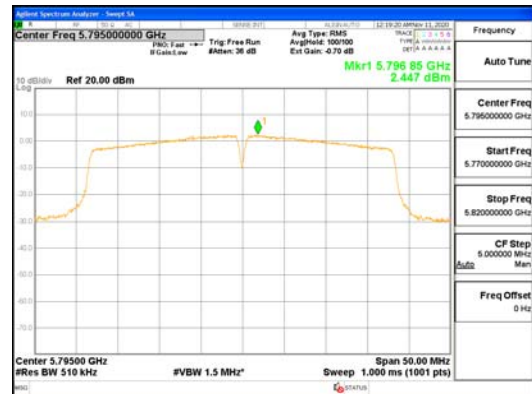
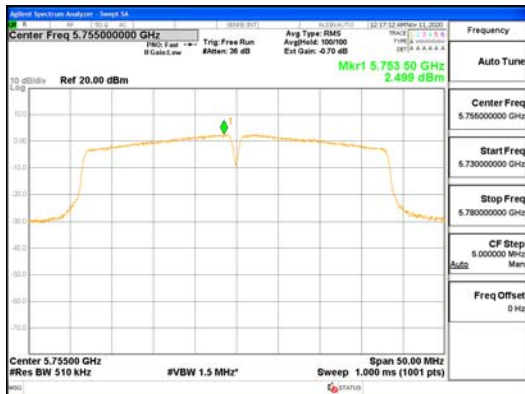


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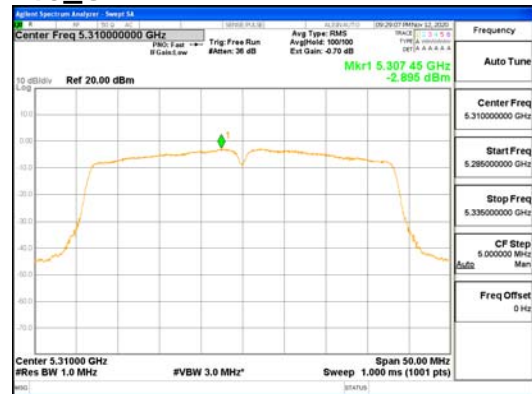
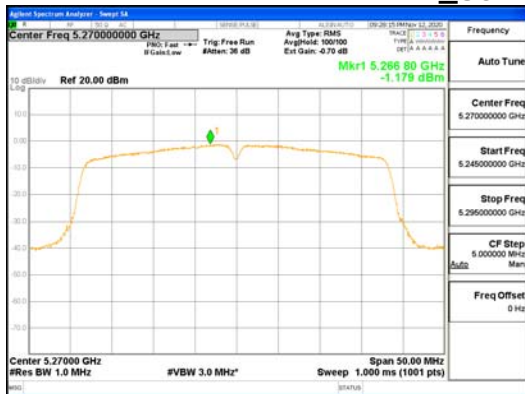


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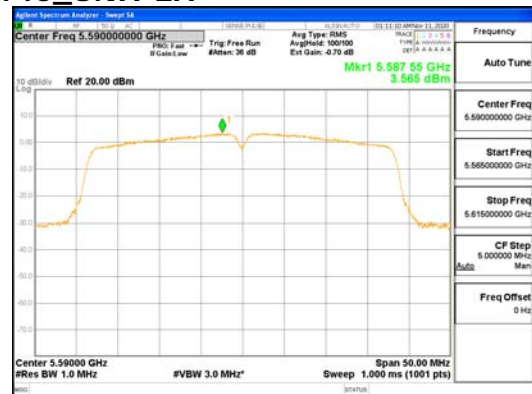
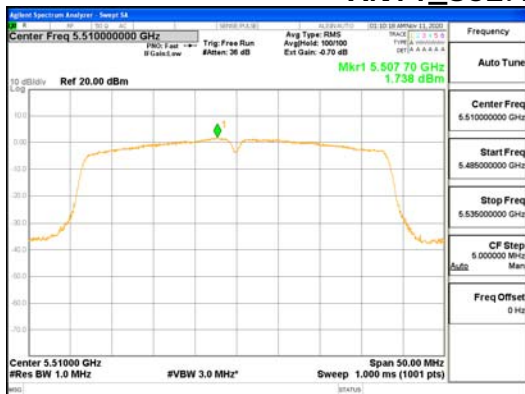
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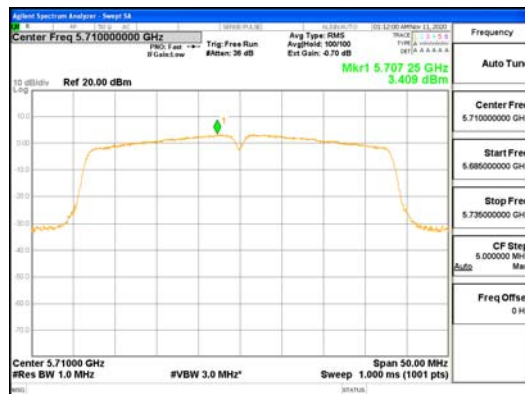
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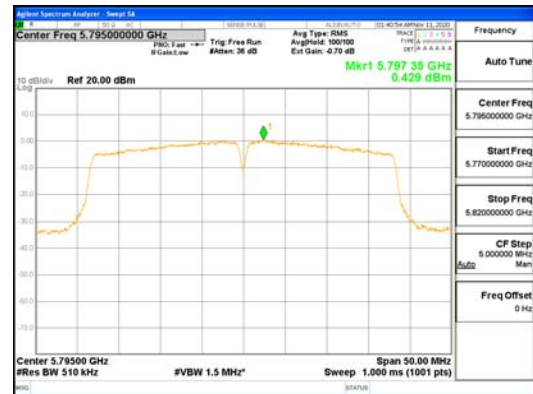
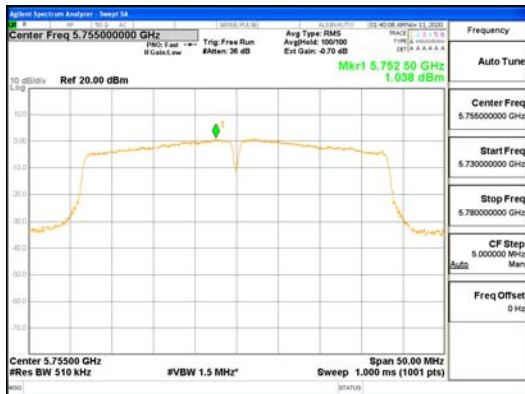
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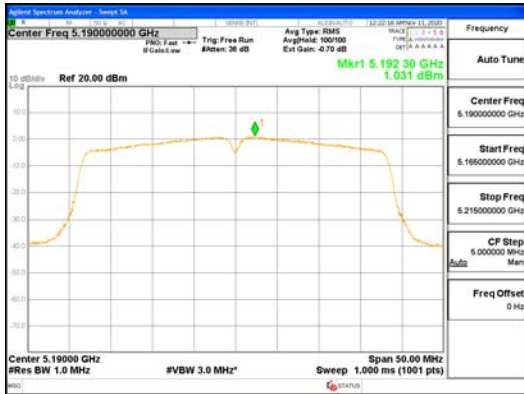


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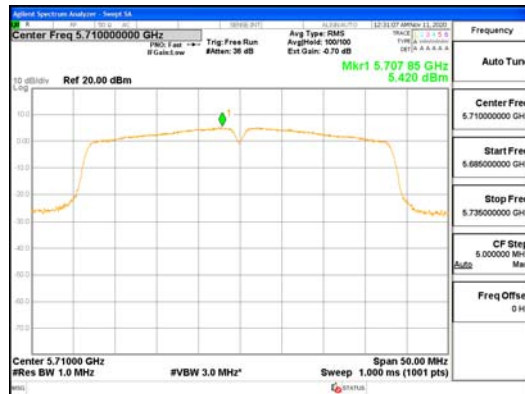
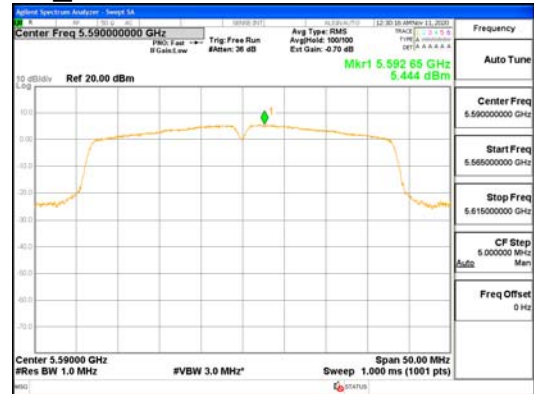
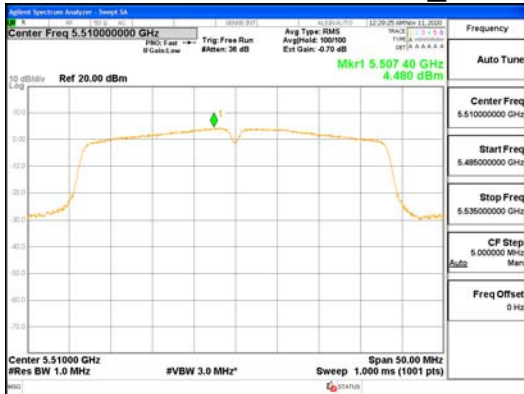
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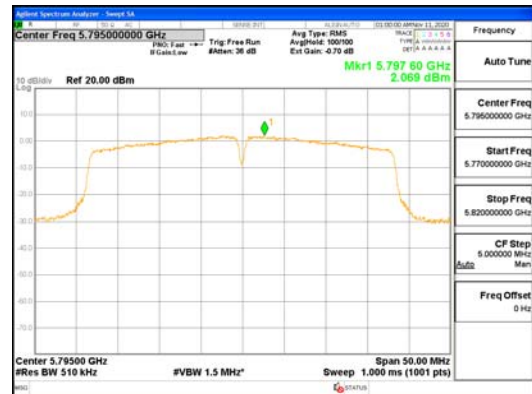
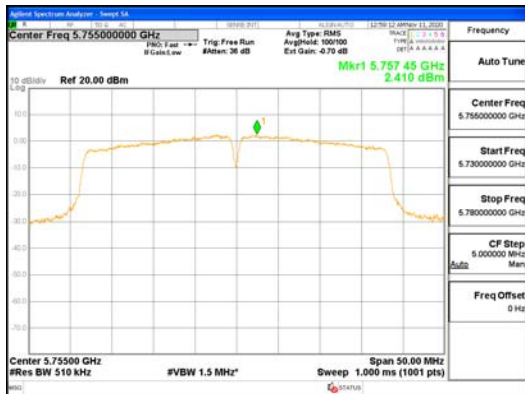


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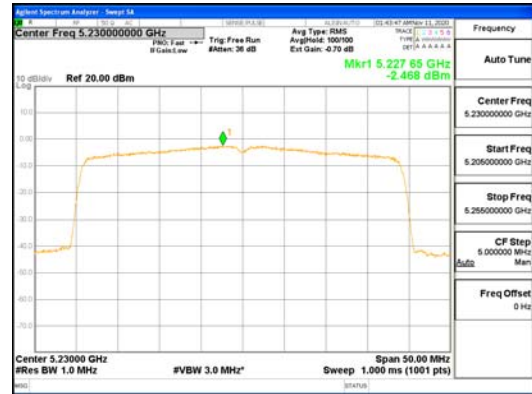
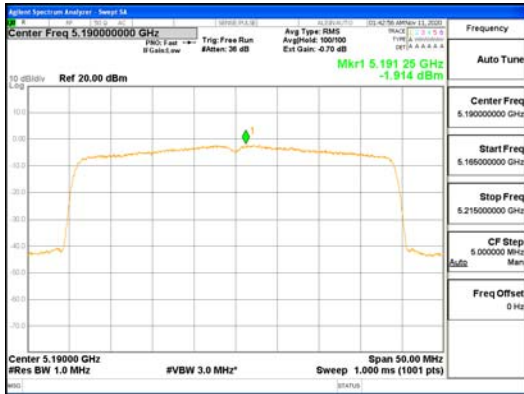


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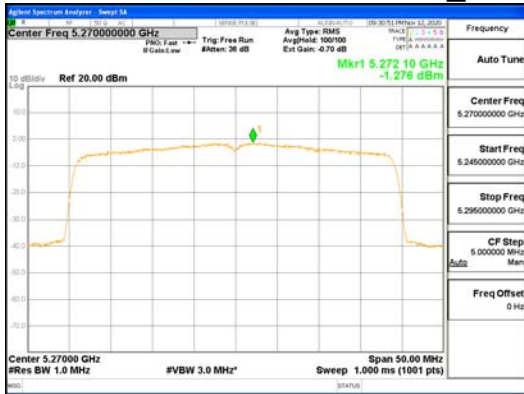
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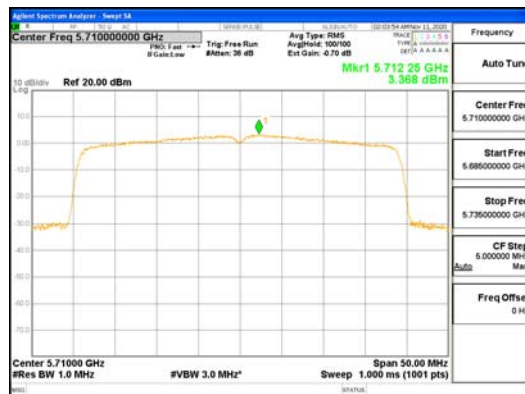
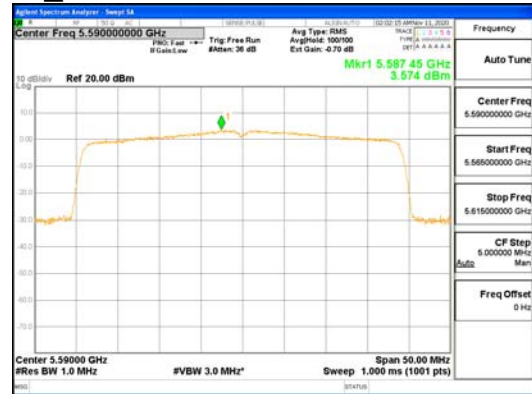
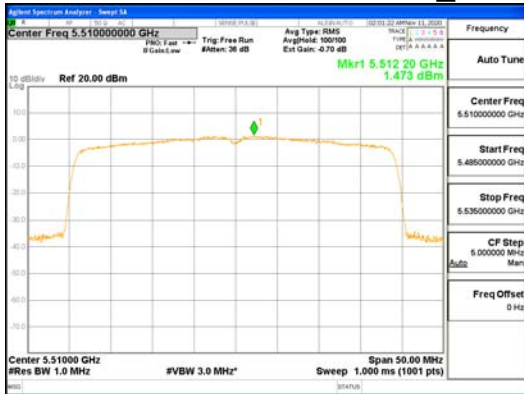
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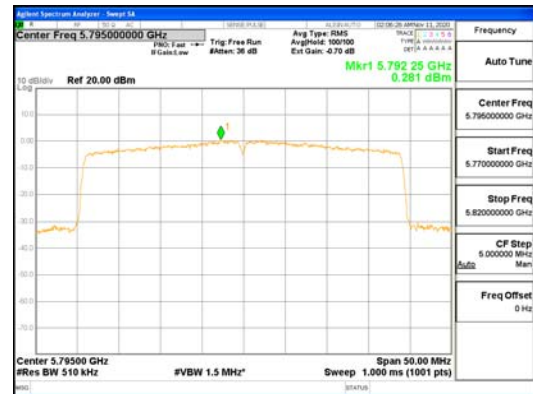
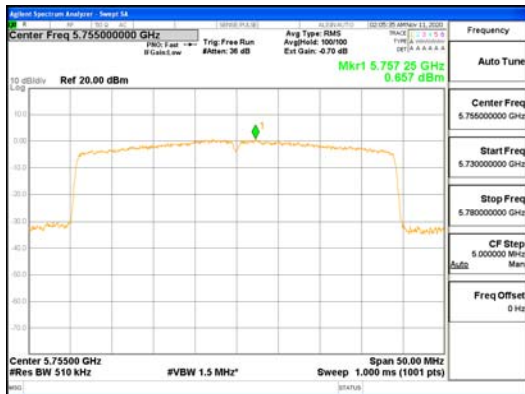


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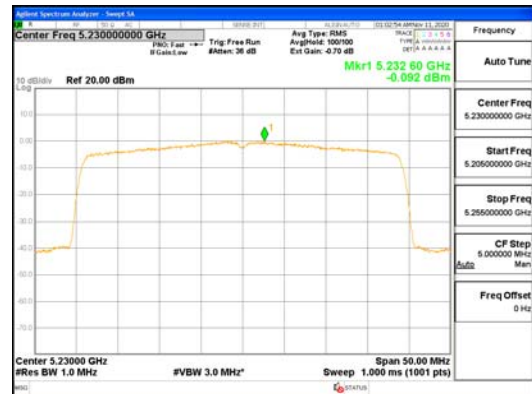
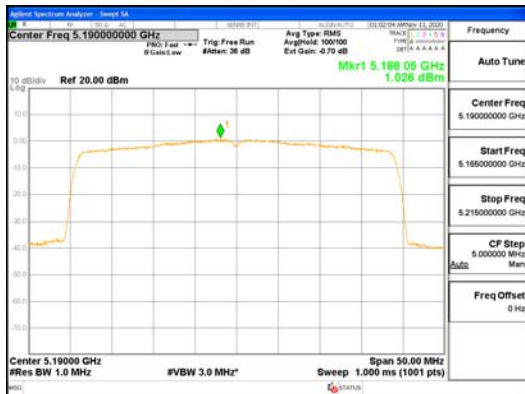


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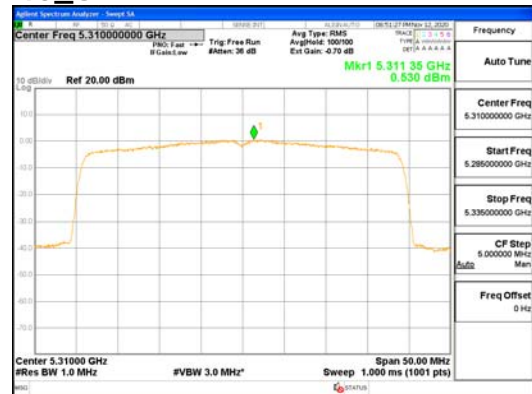
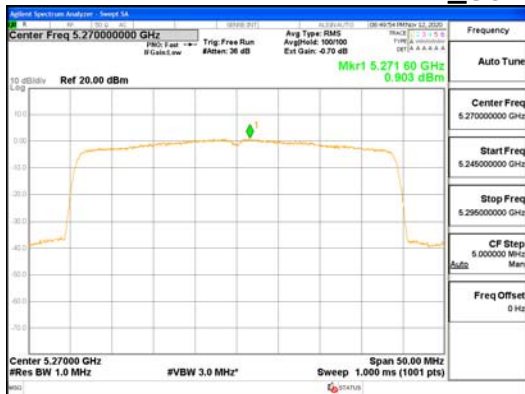


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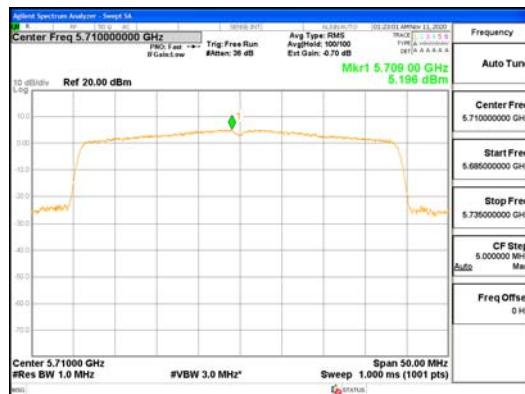
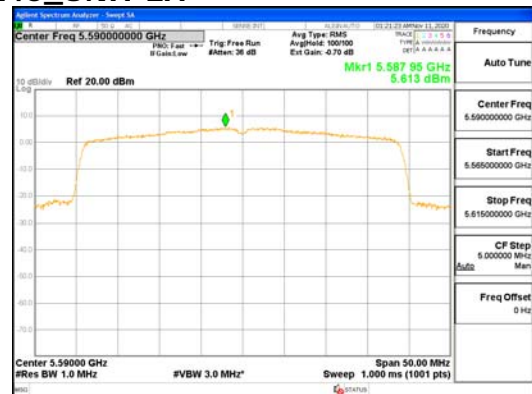
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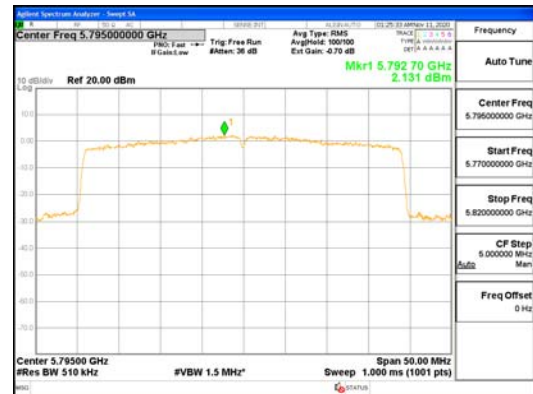
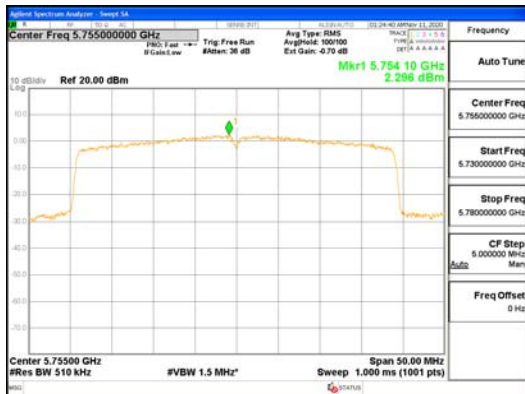


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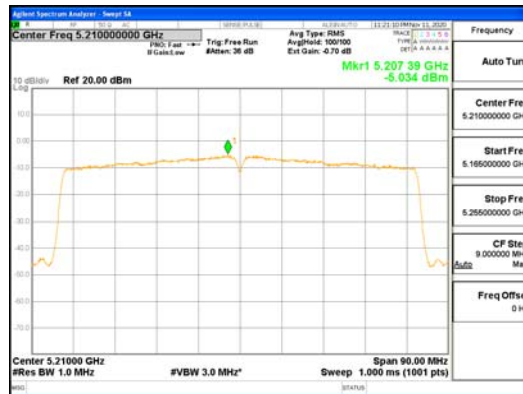


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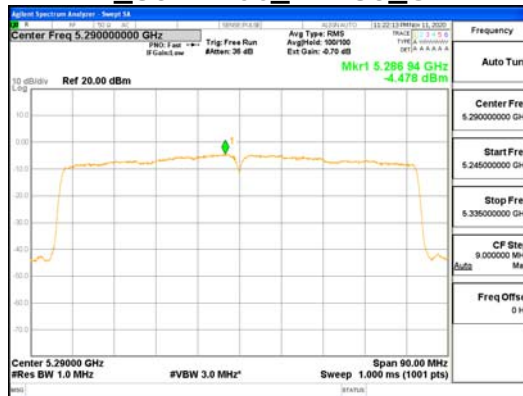
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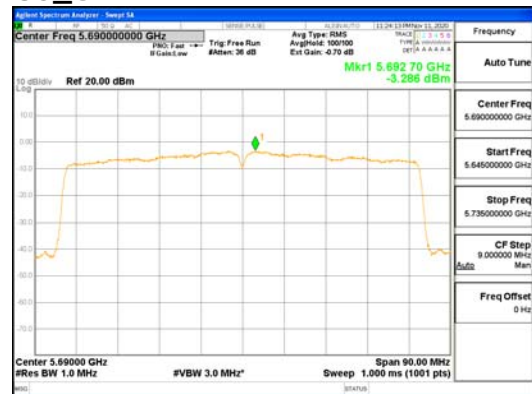
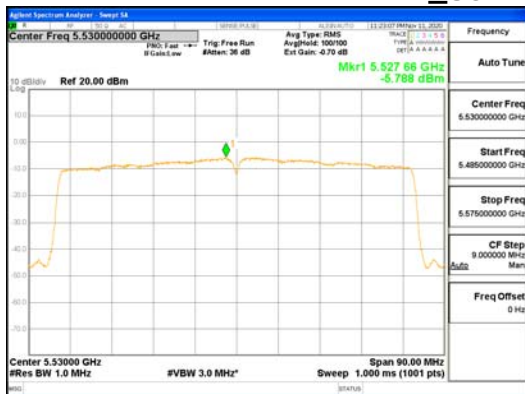
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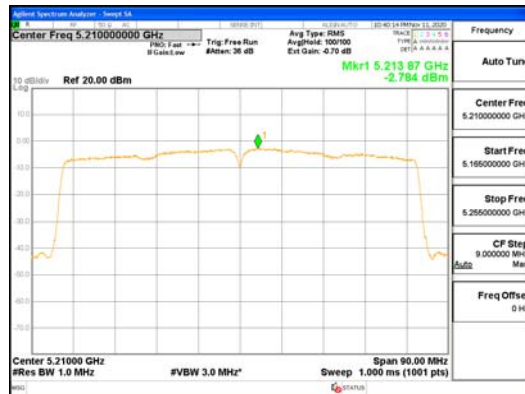
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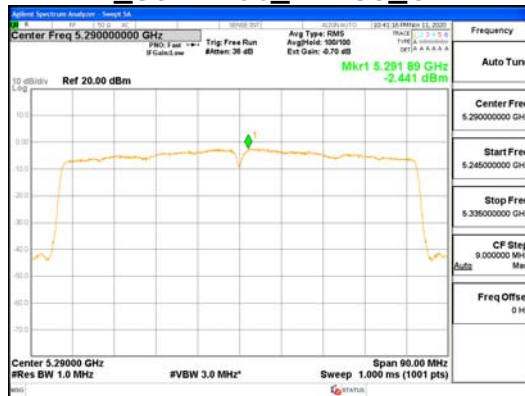
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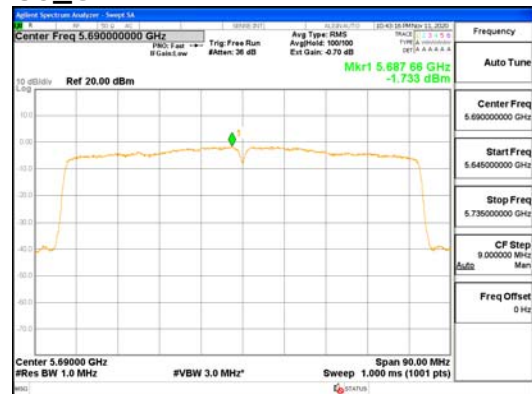
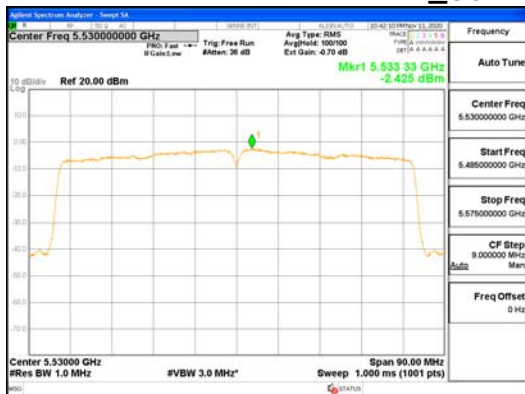
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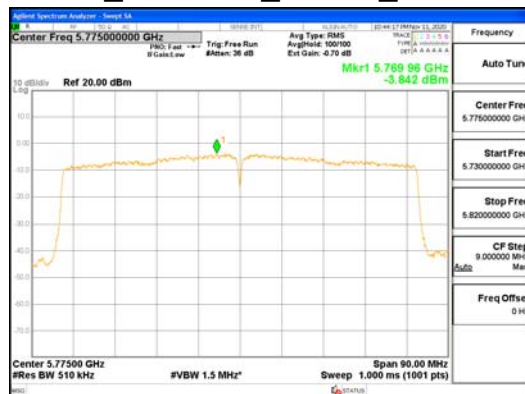
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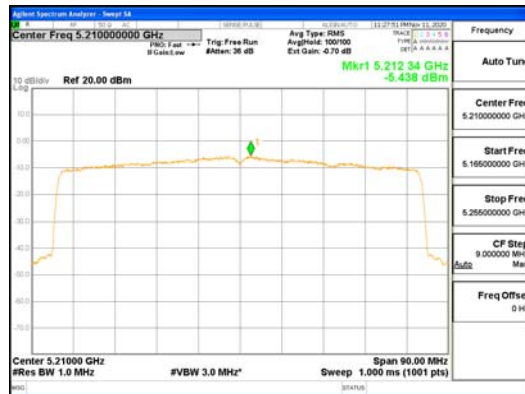
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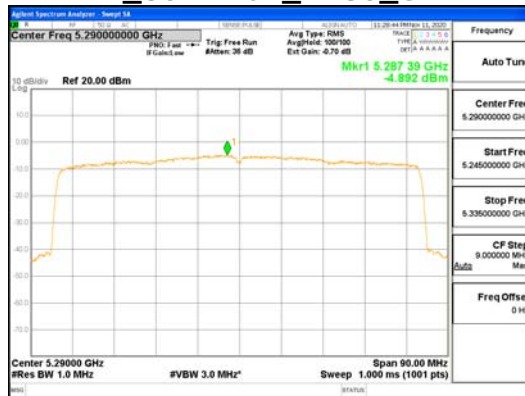
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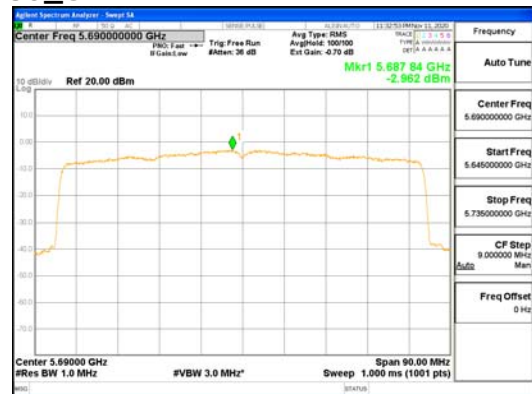
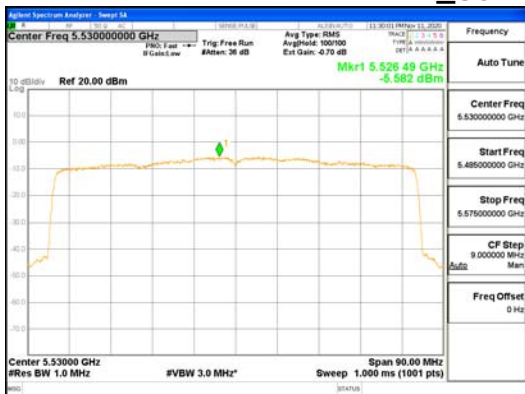
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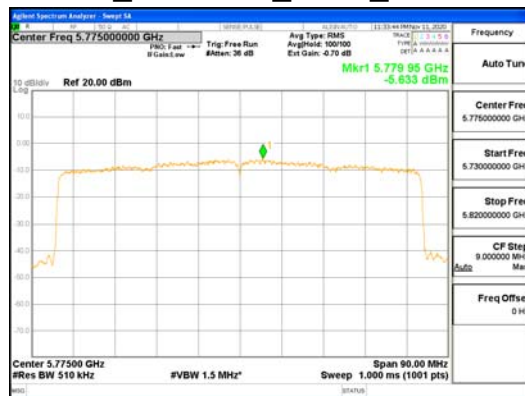
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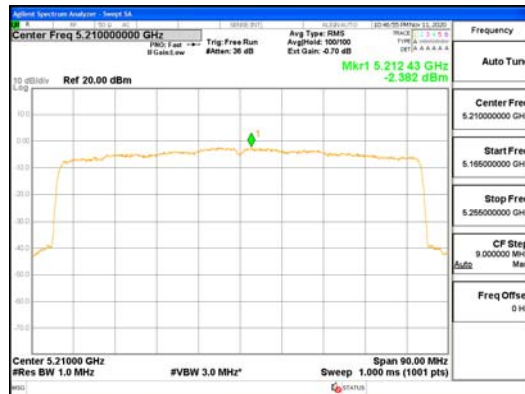
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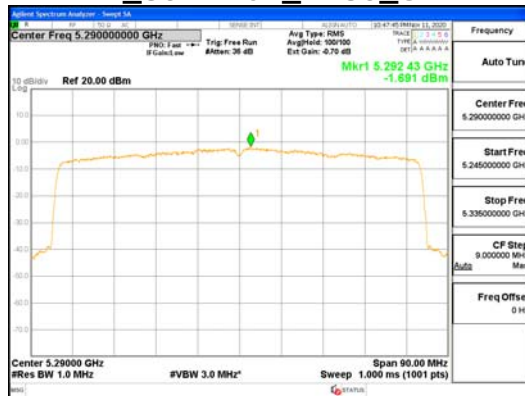
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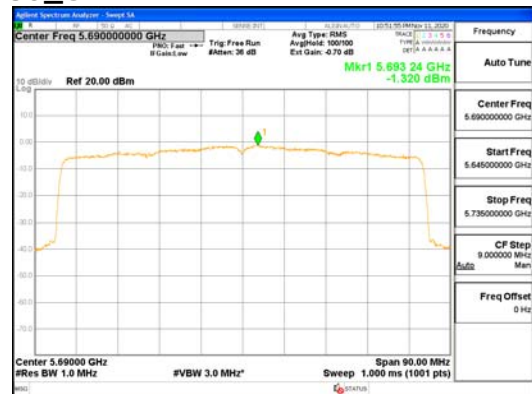
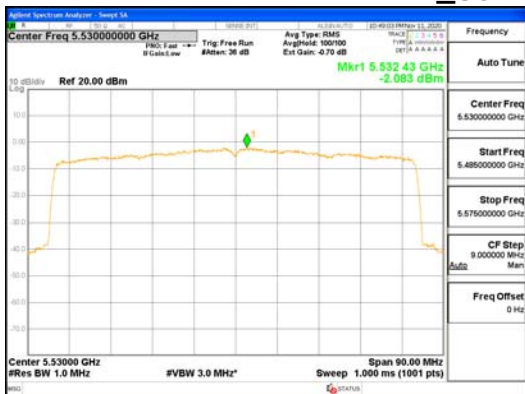
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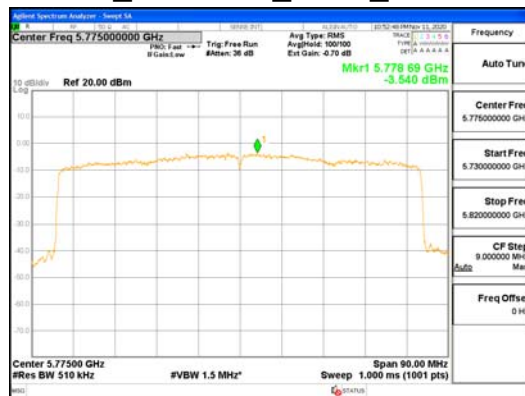
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ANT2_802.11ax_HE80_UNII 2A



ANT2_802.11ax_HE80_UNII 2C



ANT2_802.11ax_HE80_UNII 3

4.5 Frequency Stability

Test Procedures

KDB 789033 – Section A.3

The EUT was placed inside of an environmental chamber as the temperature in the chamber was varied between -20 °C and +50 °C (Declaration by the Manufacturer). The temperature was incremented by 10 °C intervals and the unit was allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.

Data for the worst case channel is shown below.

Temperature (°C)	-20	-10	0	10	20	30	40	50
Frequency	Measured Frequency Error (kHz)							
5 180 MHz	10.671	8.447	-2.331	-20.019	-40.109	-60.624	-76.750	-86.879
5 200 MHz	10.975	8.410	-2.687	-20.059	-39.902	-59.384	-76.773	-87.040
5 240 MHz	10.874	8.589	-3.191	-19.822	-39.588	-60.270	-77.268	-87.126
5 260 MHz	11.103	8.683	-2.830	-19.724	-40.519	-60.211	-77.549	-87.416
5 300 MHz	11.065	8.838	-2.878	-20.343	-40.618	-60.653	-77.980	-88.129
5 320 MHz	11.219	9.055	-2.856	-19.849	-40.582	-60.692	-78.322	-88.489
5 500 MHz	11.502	9.143	-2.688	-19.887	-41.829	-62.834	-81.040	-91.410
5 600 MHz	11.588	9.935	-1.667	-18.518	-40.907	-62.160	-81.281	-92.287
5 720 MHz	11.954	10.391	-1.251	-18.361	-41.263	-63.402	-82.255	-94.179
5 745 MHz	11.961	15.047	-0.958	-19.279	-41.252	-63.197	-82.390	-94.038
5 785 MHz	11.925	10.525	-1.075	-19.640	-42.086	-63.401	-82.821	-94.912
5 825 MHz	11.977	10.624	-0.533	-19.614	-42.235	-64.252	-83.474	-95.393

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 deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature range as tested.



4.6 Unwanted Emissions

Test Location

- 10 m SAC (test distance : 10 m, 3 m)
 3 m SAC (test distance : 3 m)

Test Procedures

KDB 789033 - Section G

- 1) In the frequency range of 9 kHz to 30 MHz, magnetic field is measured with Loop Antenna. The Test Antenna is positioned with its plane vertical at 1m distance from the EUT. The center of the Loop Test Antenna is 1m above the ground. During the measurement the Loop Test Antenna rotates about its vertical axis for maximum response at each azimuth about the EUT.
- 2) In the frequency range above 30 MHz, Bi-Log Test Antenna(30 MHz to 1 GHz) and Horn Test Antenna(above 1 GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is carried from 1m to 4m above the ground to determine the maximum value of the field strength. The emissions levels at both horizontal and vertical polarizations should be tested.

Test Settings:

Frequency Range = 9 kHz ~ 1 GHz

- a) RBW = 100 kHz for $f < 1$ GHz, 9 kHz for $f < 30$ MHz
b) VBW \geq RBW
c) Detector = CISPR Quasi-peak
d) Sweep time = auto couple

- Peak

Frequency Range = 1 GHz ~ 40 GHz

- a) RBW = 1 MHz
b) VBW $\geq 3 \times$ RBW
c) Detector = Peak
d) Sweep time = auto
e) Trace mode = max hold

- Average (duty cycle $\geq 98\%$)

Frequency Range = 1 GHz ~ 40 GHz

- a) RBW = 1 MHz
b) VBW $\geq 3 \times$ RBW
c) Detector = RMS
d) Sweep time = auto
e) Averaging type = power (i.e., RMS)
f) Trace mode = average (at least 100 traces)



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- Average (duty cycle < 98%)

Frequency Range = 1 GHz ~ 40 GHz

a) RBW = 1 MHz

b) VBW ≥ 3 × RBW

c) Detector = RMS

d) Sweep time = auto

e) Averaging type = power (i.e., RMS)

f) Trace mode = average (at least 100 traces)

If power averaging (RMS) mode, then the applicable correction factor is $10 \log(1/x)$, where x is the duty cycle.

Test mode	Duty Cycle Factor (dB)
802.11a	0.13
802.11n_HT20	0.14
802.11n_HT40	0.27
802.11ac_VHT20	0.26
802.11ac_VHT40	0.49
802.11ac_VHT80	0.89
802.11ax_HE20	0.31
802.11ax_HE40	0.53
802.11ax_HE80	0.85

Limit

- 15.209(a)

Frequency(MHz)	Field Strength uV/m@3m	Field Strength dBuV/m@3m	Deasurement Distance (meters)
0.009-0.490	2400/F(kHz)	-	300
0.490-1.705	24000/F(kHz)	-	30
1.705-30	30	-	30
30-88	100**	40	3
88-216	150**	43.5	3
216-960	200**	46	3
Above 960	500	54	3

** Except as provided in 15.209(g).fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72MHz, 76-88MHz, 174-216MHz, 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g.15.231 and 15.241.

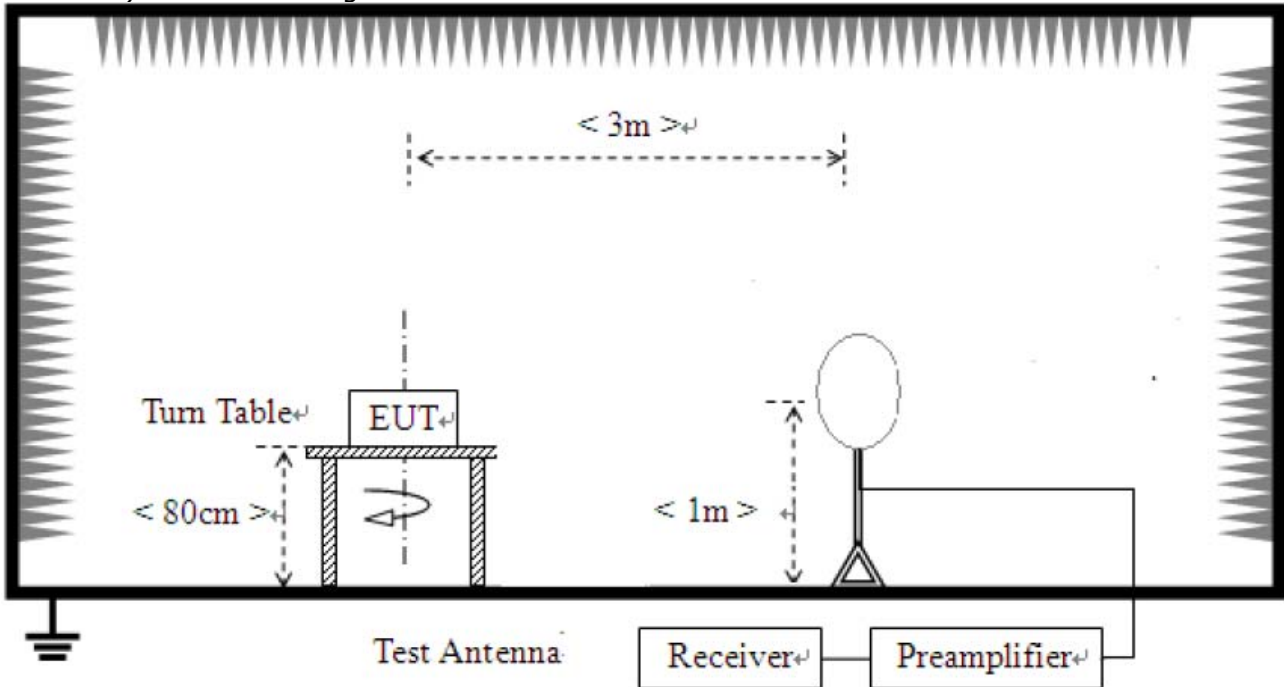
- 15.407, KDB 789033

E.I.R.P -27 dBm/MHz

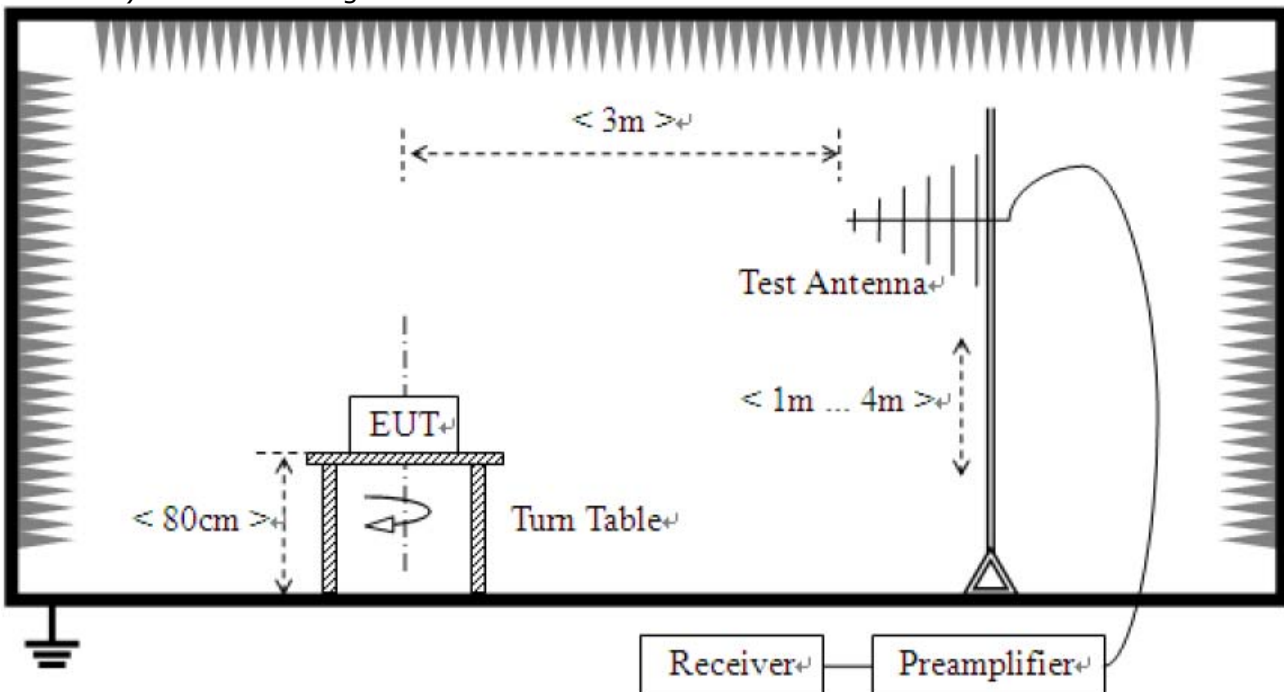
$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2$, for $d = 3\text{m}$

Test Setup:

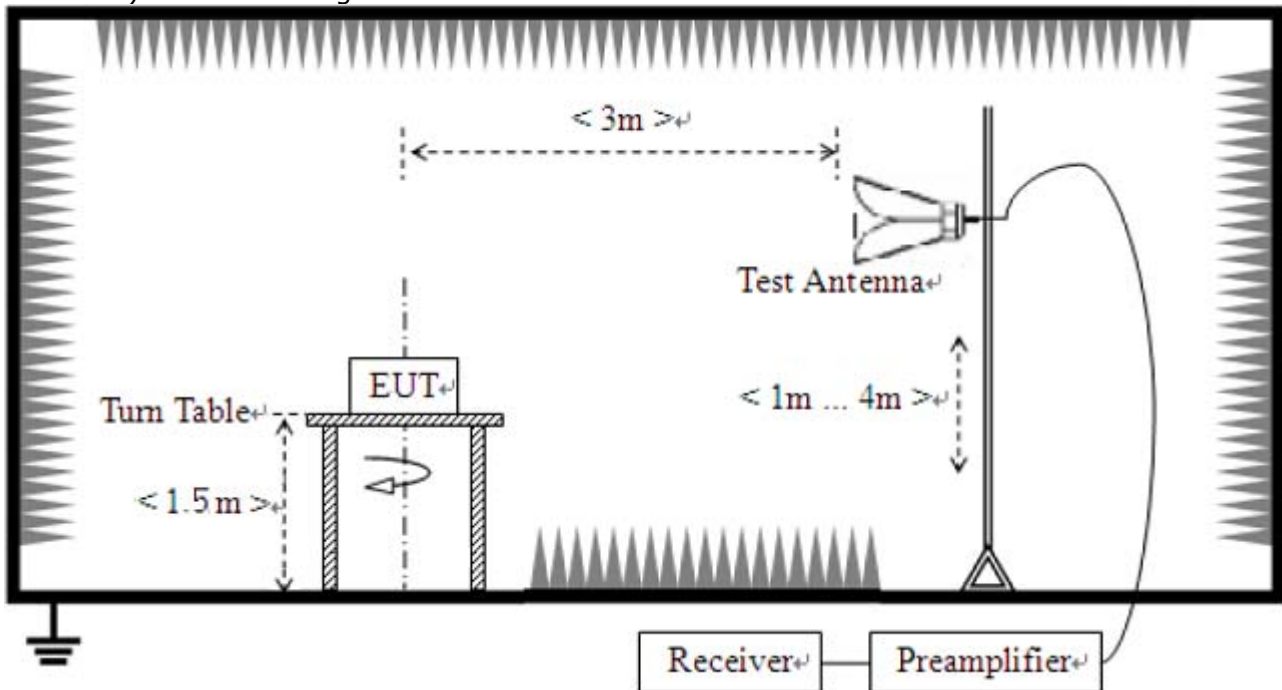
- 1) For field strength of emissions from 9 kHz to 30 MHz



- 2) For field strength of emissions from 30 MHz to 1 GHz



3) For field strength of emissions above 1 GHz



Test Mode

We have done all test mode.

The worst case antenna configuration and Test mode are determined to be as follows.

- 802.11a : ANT1 + ANT2 (MIMO)
- 802.11n : ANT1 + ANT2 (MIMO)
- 802.11ac : ANT1 + ANT2 (MIMO)
- 802.11ax : ANT1 + ANT2 (MIMO)

So the results are only attached worst cases.

Test Results

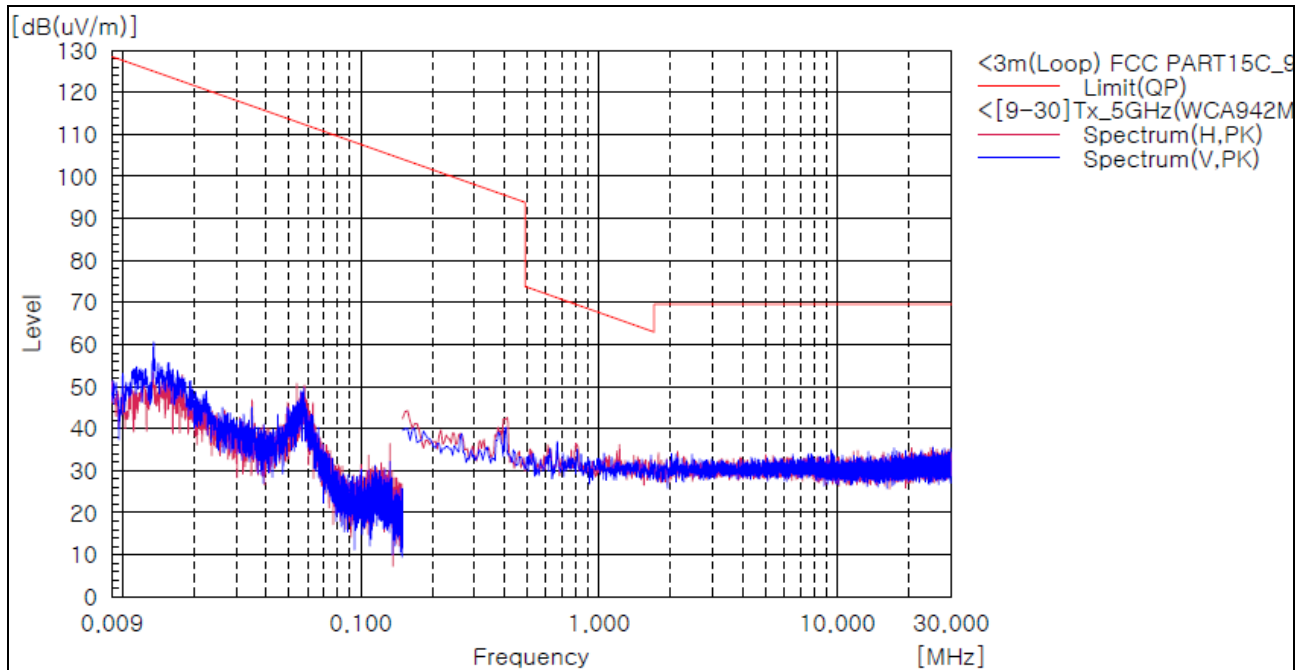
1) 9 kHz to 30 MHz

Test mode : Transmitter (Worst Case)

The requirements are:

Complies

Test Data



Frequency [MHz]	(P)	Reading [dBuV]	c.f [dB(1/m)]	Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
-----------------	-----	----------------	---------------	------------------	------------------	-------------

The emissions 9 kHz to 30 MHz were 20 dB lower than the limit.

Remark :

1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X,Y axis). The worst emission was found in lie-down position(X axis) and the worst case was recorded.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain
4. This data is the Peak(PK) value.

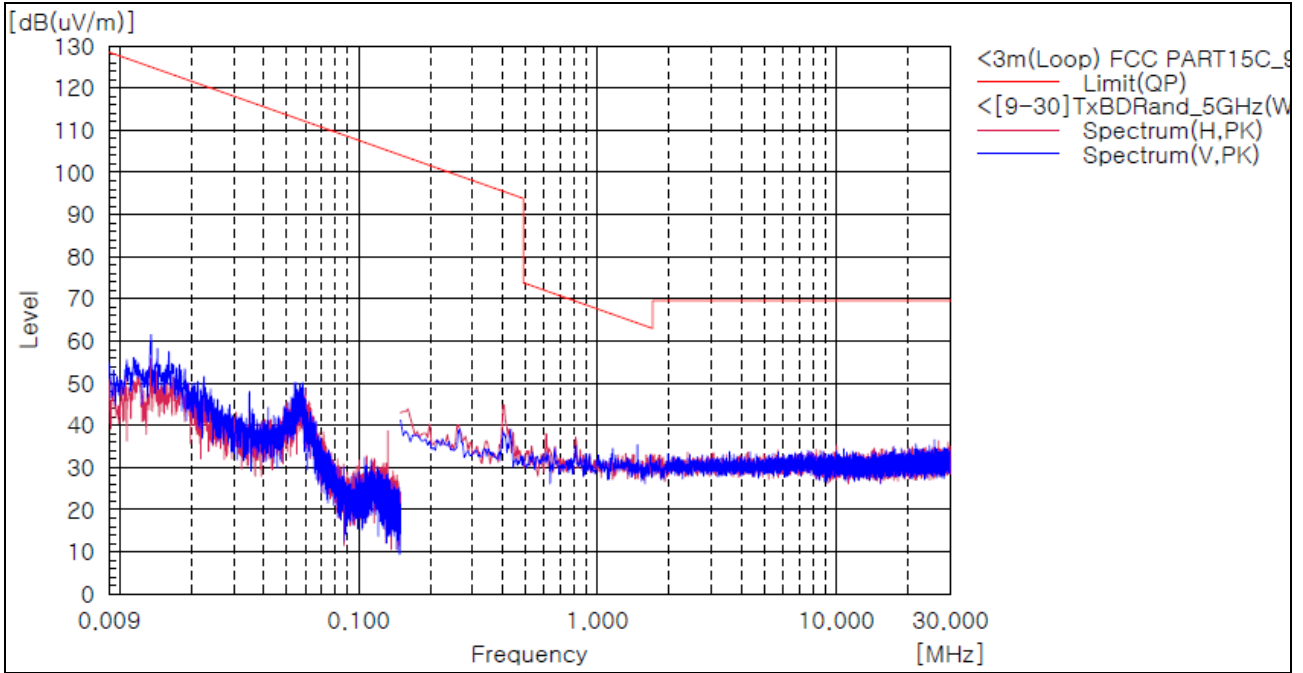


Test mode : Transmitter (simultaneous transmissions BDR+ NII)

The requirements are:

Complies

Test Data



Frequency [MHz]	(P)	Reading [dBuV]	c.f [dB(1/m)]	Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
-----------------	-----	----------------	---------------	------------------	------------------	-------------

The emissions 9 kHz to 30 MHz were 20 dB lower than the limit.

Remark :

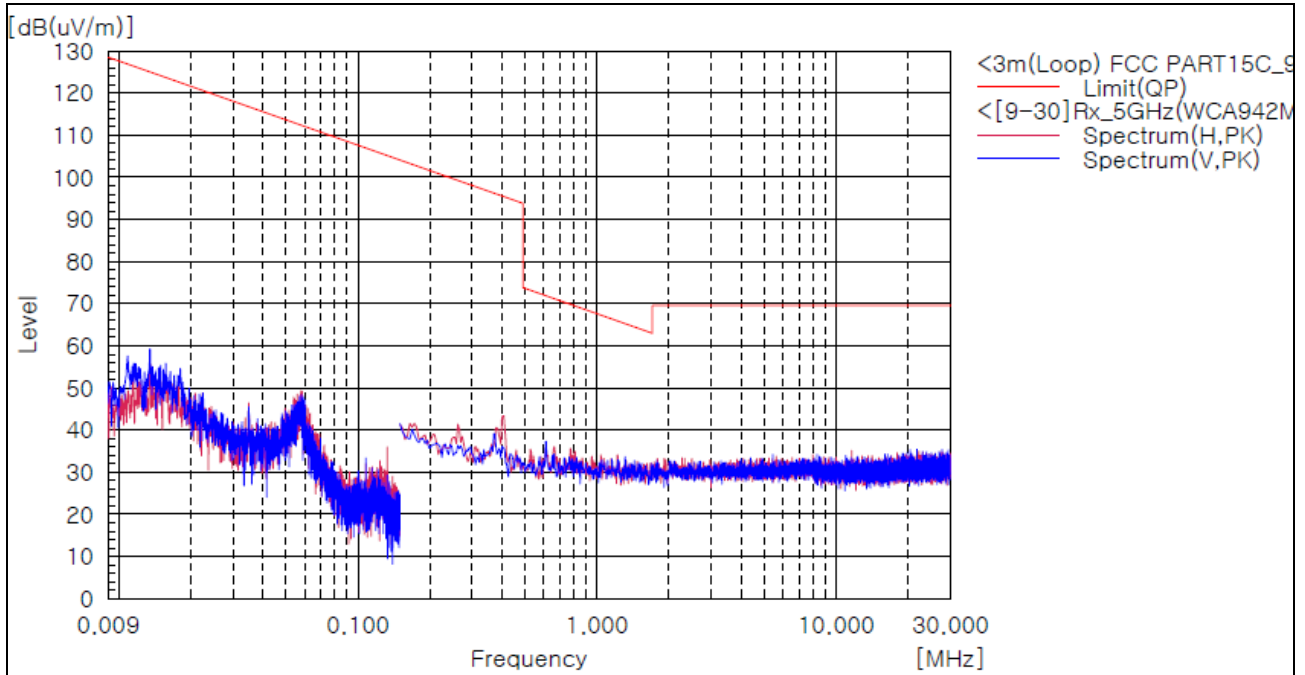
1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down positon(X,Y axis). The worst emission was found in lie-down positon(X axis) and the worst case was recorded.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain
4. This data is the Peak(PK) value.

Test mode : Receiver (Worst Case)

The requirements are:

Complies

Test Data



Frequency [MHz]	(P)	Reading [dBuV]	c.f [dB(1/m)]	Level [dB(uV/m)]	Limit [dB(uV/m)]	Margin [dB]
-----------------	-----	----------------	---------------	------------------	------------------	-------------

The emissions 9 kHz to 30 MHz were 20 dB lower than the limit.

Remark :

1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X,Y axis). The worst emission was found in lie-down position(X axis) and the worst case was recorded.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain
4. This data is the Peak(PK) value.

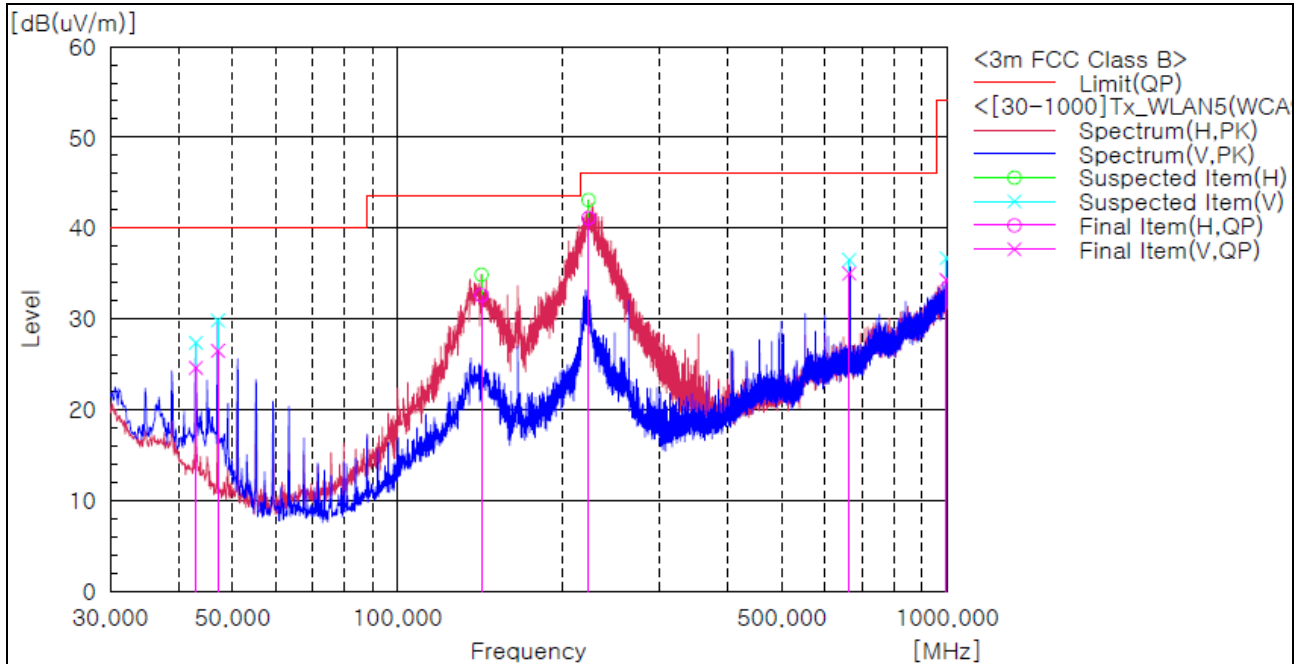
2) 30 MHz to 1 GHz

Test mode : Transmitter (Worst Case)

The requirements are:

Complies

Test Data



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	42.974	V	37.4	-12.8	24.6	40.0	15.4	100.0	81.0
2	47.096	V	41.6	-15.1	26.5	40.0	13.5	100.0	273.0
3	142.156	H	44.5	-11.9	32.6	43.5	10.9	209.0	206.0
4	222.666	H	54.1	-13.0	41.1	46.0	4.9	209.0	37.0
5	664.016	V	34.0	1.0	35.0	46.0	11.0	192.0	214.0
6	997.575	V	25.7	8.6	34.3	54.0	19.7	100.0	269.0

Remark :

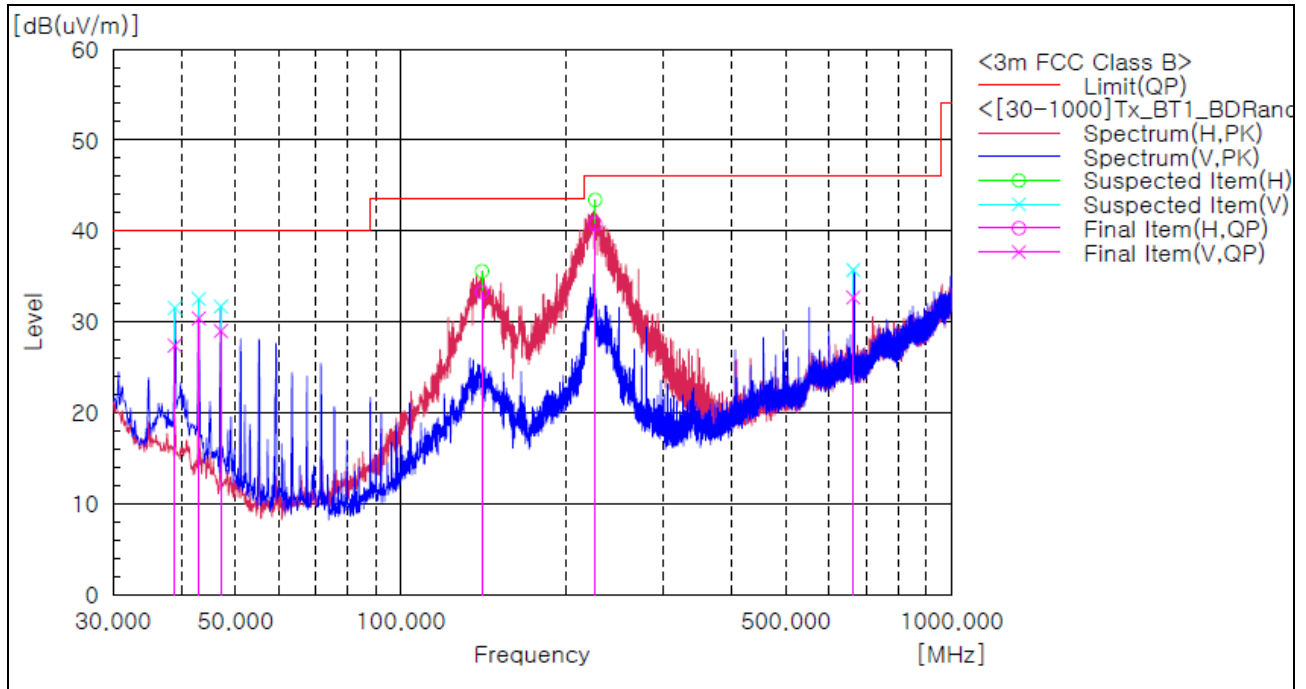
1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X,Y axis). The worst emission was found in lie-down position(X axis) and the worst case was recorded.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Transmitter (simultaneous transmissions BDR + NII)

The requirements are:

Complies

Test Data



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	38.851	V	37.5	-10.1	27.4	40.0	12.6	101.0	356.0
2	42.974	V	43.2	-12.8	30.4	40.0	9.6	101.0	355.0
3	47.096	V	44.1	-15.1	29.0	40.0	11.0	101.0	321.0
4	140.459	H	45.2	-11.9	33.3	43.5	10.2	209.0	211.0
5	225.576	H	53.6	-12.8	40.8	46.0	5.2	101.0	221.0
6	663.774	V	31.7	1.0	32.7	46.0	13.3	191.0	192.0

Remark :

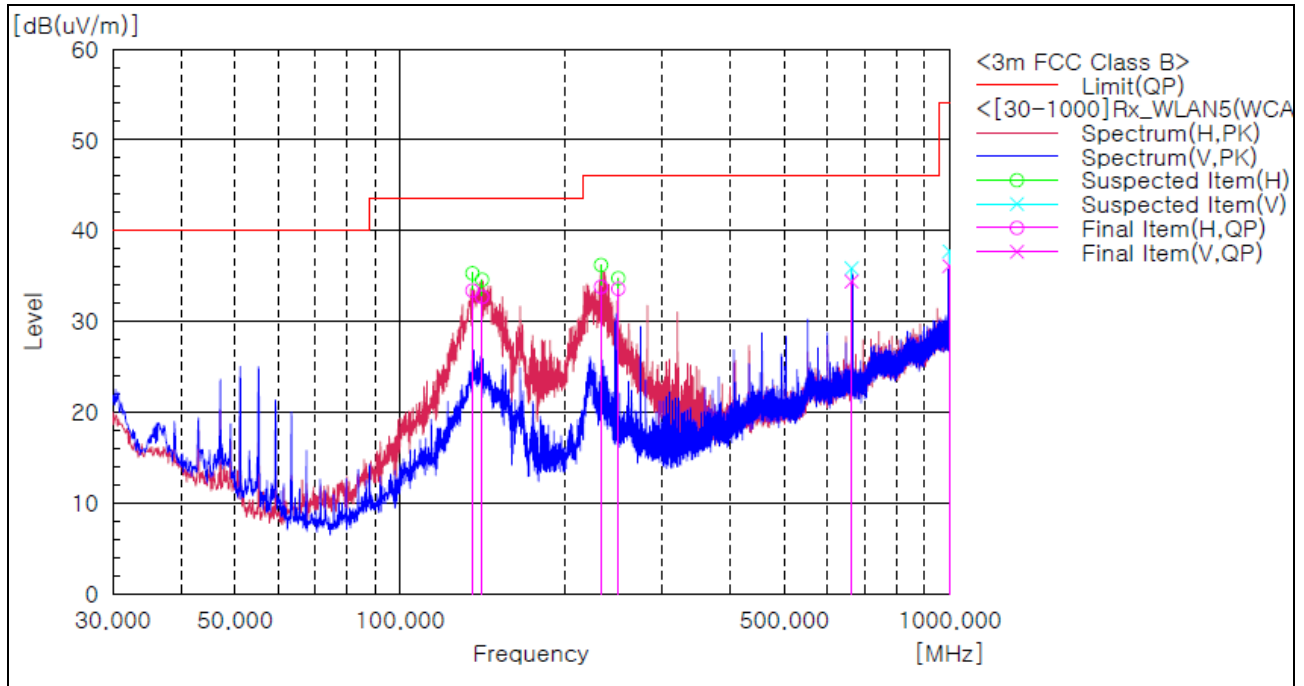
1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X,Y axis). The worst emission was found in lie-down position(X axis) and the worst case was recorded.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Receiver (Worst Case)

The requirements are:

Complies

Test Data



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]
1	135.488	H	45.1	-11.7	33.4	43.5	10.1	205.0	195.0
2	141.065	H	44.6	-11.9	32.7	43.5	10.8	205.0	178.0
3	232.245	H	45.9	-12.1	33.8	46.0	12.2	101.0	356.0
4	249.584	H	43.1	-9.5	33.6	46.0	12.4	205.0	323.0
5	663.774	V	33.4	1.0	34.4	46.0	11.6	195.0	168.0
6	999.273	V	27.5	8.6	36.1	54.0	17.9	101.0	270.0

Remark :

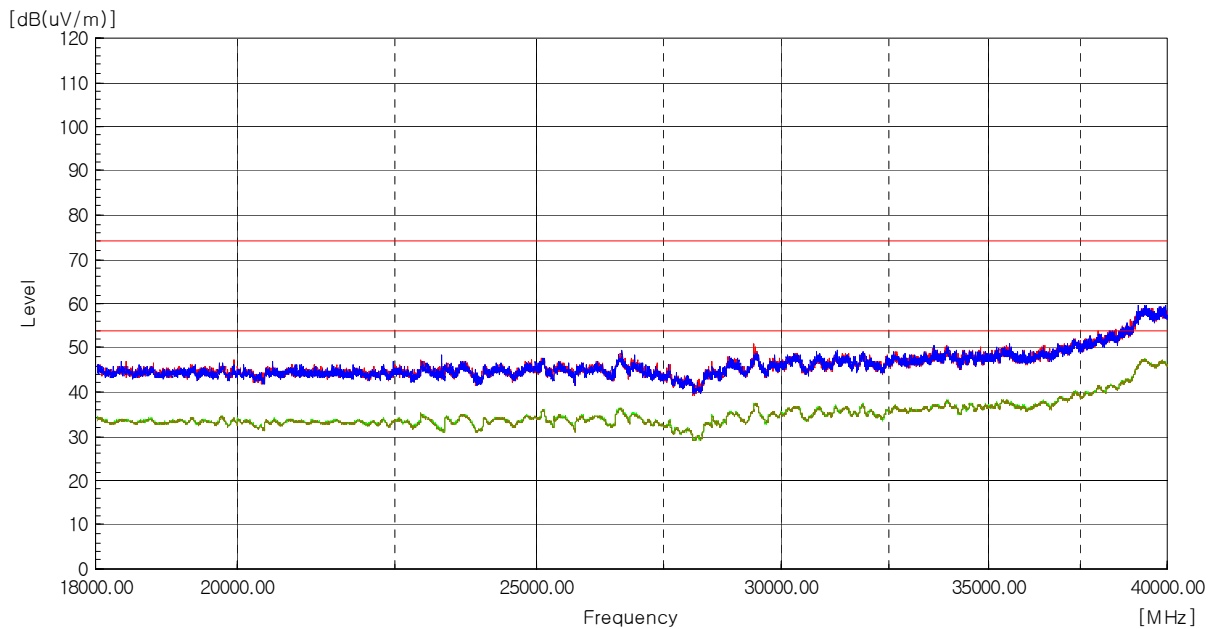
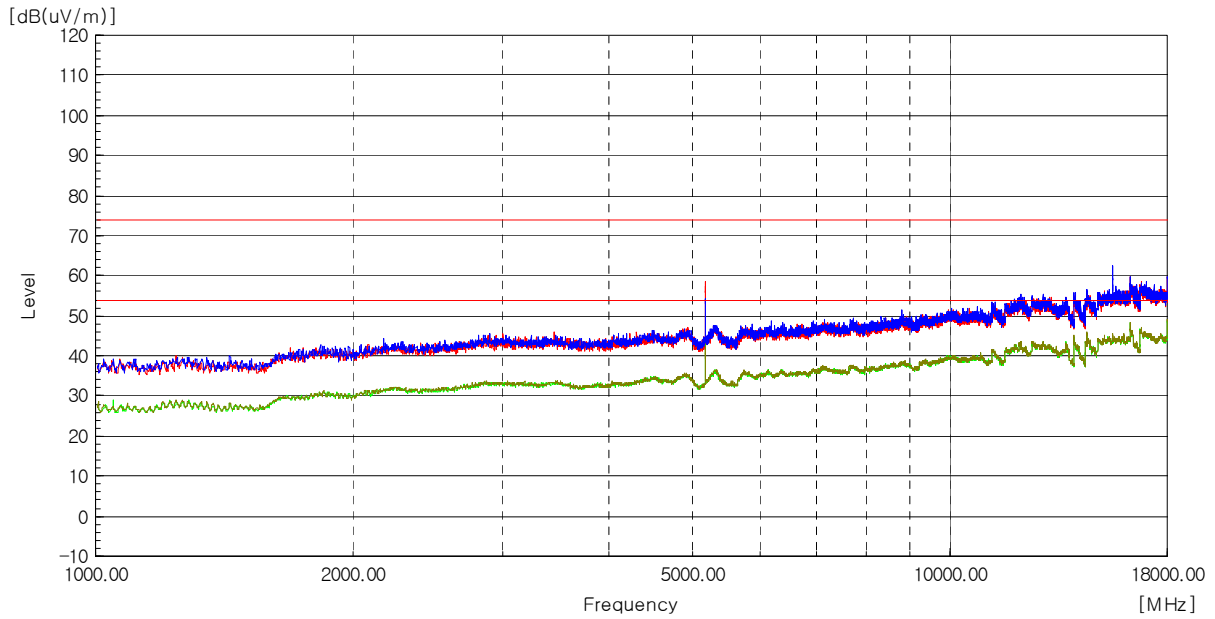
1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down position(X,Y axis). The worst emission was found in lie-down position(X axis) and the worst case was recorded.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

3) above 1 GHz

The requirements are:

Complies

Test Data





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Test mode : Transmitter, 802.11a

The requirements are:

Complies

Test Data

Ch.36(5 180 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 358.69	H	45.8	-----	6.7	52.5	-----	-----	74.0	-----	21.5	-----
10 364.59	H	-----	35.1	6.7	-----	41.8	0.1	-----	54.0	-----	12.1
10 368.64	V	47.0	-----	6.7	53.7	-----	-----	74.0	-----	20.3	-----
10 360.38	V	-----	35.9	6.7	-----	42.6	0.1	-----	54.0	-----	11.3
15 543.92	H	48.0	-----	11.1	59.1	-----	-----	74.0	-----	14.9	-----
15 546.91	H	-----	36.5	11.1	-----	47.6	0.1	-----	54.0	-----	6.3
15 541.67	V	52.7	-----	11.1	63.8	-----	-----	74.0	-----	10.2	-----
15 541.92	V	-----	37.8	11.1	-----	48.9	0.1	-----	54.0	-----	5.0

Ch.40(5 200 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 408.64	H	45.7	-----	6.7	52.4	-----	-----	74.0	-----	21.6	-----
10 398.85	H	-----	34.9	6.7	-----	41.6	0.1	-----	54.0	-----	12.3
10 393.11	V	48.0	-----	6.7	54.7	-----	-----	74.0	-----	19.3	-----
10 400.20	V	-----	35.5	6.7	-----	42.2	0.1	-----	54.0	-----	11.7
15 632.19	H	48.1	-----	11.2	59.3	-----	-----	74.0	-----	14.7	-----
15 608.75	H	-----	37.1	11.1	-----	48.2	0.1	-----	54.0	-----	5.7
15 600.02	V	51.3	-----	11.1	62.4	-----	-----	74.0	-----	11.6	-----
15 599.03	V	-----	37.3	11.1	-----	48.4	0.1	-----	54.0	-----	5.5



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Ch.48(5 240 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 479.01	H	45.9	-----	6.9	52.8	-----	-----	74.0	-----	21.2	-----
10 482.89	H	-----	35.6	6.9	-----	42.5	0.1	-----	54.0	-----	11.4
10 473.94	V	49.5	-----	6.9	56.4	-----	-----	74.0	-----	17.6	-----
10 476.14	V	-----	35.7	6.9	-----	42.6	0.1	-----	54.0	-----	11.3
15 698.03	H	47.9	-----	11.2	59.1	-----	-----	74.0	-----	14.9	-----
15 683.81	H	-----	36.8	11.2	-----	48.0	0.1	-----	54.0	-----	5.9
15 723.71	V	50.3	-----	11.2	61.5	-----	-----	74.0	-----	12.5	-----
15 722.22	V	-----	37.4	11.2	-----	48.6	0.1	-----	54.0	-----	5.3

Ch.52(5 260 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 513.09	H	47.2	-----	7.0	54.2	-----	-----	74.0	-----	19.8	-----
10 523.56	H	-----	36.2	7.0	-----	43.2	0.1	-----	54.0	-----	10.7
10 523.05	V	52.5	-----	7.0	59.5	-----	-----	74.0	-----	14.5	-----
10 514.78	V	-----	36.7	7.0	-----	43.7	0.1	-----	54.0	-----	10.2
15 767.36	H	48.5	-----	11.2	59.7	-----	-----	74.0	-----	14.3	-----
15 709.00	H	-----	36.8	11.2	-----	48.0	0.1	-----	54.0	-----	5.9
15 776.33	V	54.8	-----	11.2	66.0	-----	-----	74.0	-----	8.0	-----
15 781.07	V	-----	40.5	11.2	-----	51.7	0.1	-----	54.0	-----	2.2

Ch.60(5 300 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 598.82	H	46.6	-----	7.2	53.8	-----	-----	74.0	-----	20.2	-----
10 603.38	H	-----	36.0	7.2	-----	43.2	0.1	-----	54.0	-----	10.7
10 602.19	V	49.9	-----	7.2	57.1	-----	-----	74.0	-----	16.9	-----
10 600.67	V	-----	37.3	7.2	-----	44.5	0.1	-----	54.0	-----	9.4
15 880.07	H	49.6	-----	11.5	61.1	-----	-----	74.0	-----	12.9	-----
15 897.03	H	-----	36.9	11.5	-----	48.4	0.1	-----	54.0	-----	5.5
15 900.27	V	52.1	-----	11.5	63.6	-----	-----	74.0	-----	10.4	-----
15 898.78	V	-----	40.0	11.5	-----	51.5	0.1	-----	54.0	-----	2.4

Ch.64(5 320 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 639.32	H	46.9	-----	7.2	54.1	-----	-----	74.0	-----	19.9	-----
10 639.32	H	-----	37.1	7.2	-----	44.3	0.1	-----	54.0	-----	9.6
10 638.81	V	50.6	-----	7.2	57.8	-----	-----	74.0	-----	16.2	-----
10 641.01	V	-----	36.9	7.2	-----	44.1	0.1	-----	54.0	-----	9.8
16 007.00	H	47.5	-----	11.7	59.2	-----	-----	74.0	-----	14.8	-----
16 012.24	H	-----	36.6	11.7	-----	48.3	0.1	-----	54.0	-----	5.6
15 955.13	V	51.2	-----	11.6	62.8	-----	-----	74.0	-----	11.2	-----
15 958.38	V	-----	38.4	11.6	-----	50.0	0.1	-----	54.0	-----	3.9

Ch.100(5 500 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 008.21	H	47.8	-----	7.6	55.4	-----	-----	74.0	-----	18.6	-----
10 998.25	H	-----	36.8	7.6	-----	44.4	0.1	-----	54.0	-----	9.5
11 007.03	V	50.2	-----	7.6	57.8	-----	-----	74.0	-----	16.2	-----
11 007.53	V	-----	36.0	7.6	-----	43.6	0.1	-----	54.0	-----	10.3

Ch.120(5 600 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 201.59	H	48.1	-----	7.9	56.0	-----	-----	74.0	-----	18.0	-----
11 201.42	H	-----	37.6	7.9	-----	45.5	0.1	-----	54.0	-----	8.4
11 201.59	V	49.2	-----	7.9	57.1	-----	-----	74.0	-----	16.9	-----
11 201.09	V	-----	36.0	7.9	-----	43.9	0.1	-----	54.0	-----	10.0
16 819.47	H	46.3	-----	14.4	60.7	-----	-----	74.0	-----	13.3	-----
16 824.21	H	-----	34.8	14.4	-----	49.2	0.1	-----	54.0	-----	4.7
16 810.49	V	47.4	-----	14.3	61.7	-----	-----	74.0	-----	12.3	-----
16 810.99	V	-----	34.7	14.3	-----	49.0	0.1	-----	54.0	-----	4.9



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Ch.144(5 720 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 436.33	H	48.6	-----	8.5	57.1	-----	-----	74.0	-----	16.9	-----
11 441.22	H	-----	37.2	8.5	-----	45.7	0.1	-----	54.0	-----	8.2
11 437.51	V	51.9	-----	8.5	60.4	-----	-----	74.0	-----	13.6	-----
11 441.56	V	-----	36.9	8.5	-----	45.4	0.1	-----	54.0	-----	8.5
17 166.60	H	45.0	-----	14.1	59.1	-----	-----	74.0	-----	14.9	-----
17 155.13	H	-----	34.2	14.2	-----	48.4	0.1	-----	54.0	-----	5.5
17 154.13	V	46.2	-----	14.2	60.4	-----	-----	74.0	-----	13.6	-----
17 163.86	V	-----	33.4	14.2	-----	47.6	0.1	-----	54.0	-----	6.3

Ch.149(5 745 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
The emissions above 1 GHz were 20 dB lower than the limit.											

Ch.157(5 785 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 566.26	H	50.1	-----	8.5	58.6	-----	-----	74.0	-----	15.4	-----
11 566.09	H	-----	37.3	8.5	-----	45.8	0.1	-----	54.0	-----	8.1
11 566.43	V	52.9	-----	8.5	61.4	-----	-----	74.0	-----	12.6	-----
11 566.60	V	-----	39.1	8.5	-----	47.6	0.1	-----	54.0	-----	6.3



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Ch.165(5 825 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 647.43	H	48.4	-----	8.5	56.9	-----	-----	74.0	-----	17.1	-----
11 651.14	H	-----	37.4	8.6	-----	46.0	0.1	-----	54.0	-----	7.9
11 651.48	V	53.4	-----	8.6	62.0	-----	-----	74.0	-----	12.0	-----
11 646.76	V	-----	38.3	8.5	-----	46.8	0.1	-----	54.0	-----	7.1
17 489.29	H	46.2	-----	13.5	59.7	-----	-----	74.0	-----	14.3	-----
17 475.32	H	-----	35.3	13.5	-----	48.8	0.1	-----	54.0	-----	5.1
17 475.32	V	48.8	-----	13.5	62.3	-----	-----	74.0	-----	11.7	-----
17 470.09	V	-----	34.1	13.5	-----	47.6	0.1	-----	54.0	-----	6.3

Remarks

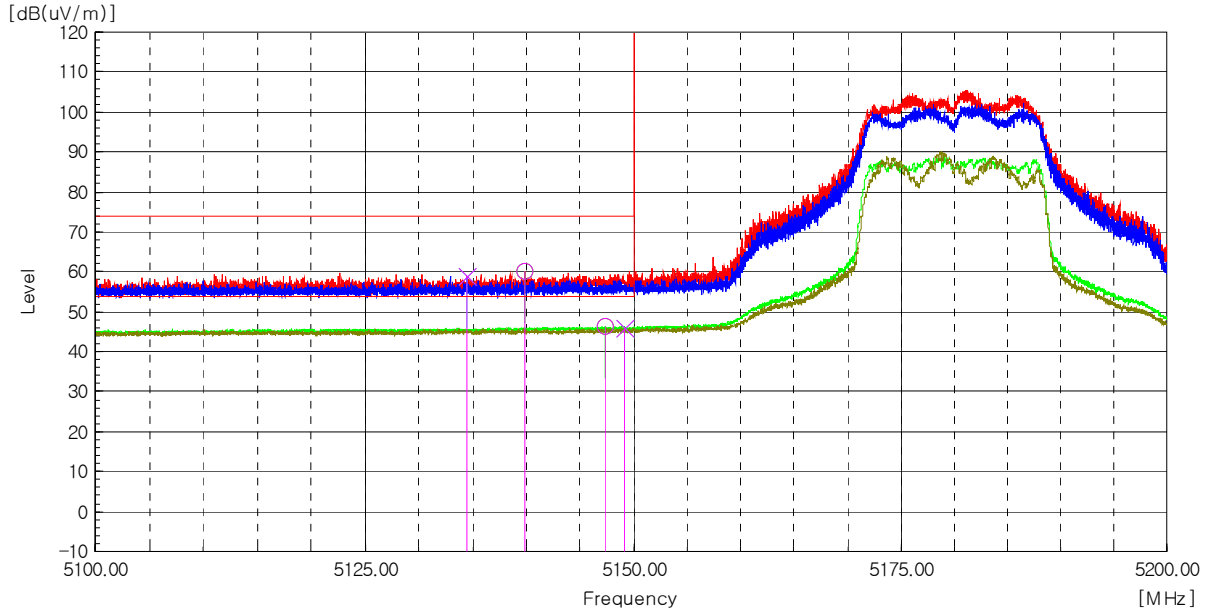
1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down positon(X,Y axis). The worst emission was found in lie-down positon(X axis) and the worst case was recorded.
2. Peak Result = Reading + c.f(Correction factor)
 Average Result = Reading + c.f(Correction factor) + Duty Cycle Factor
3. Correction factor = Antenna factor + Cable loss - Amp Gain



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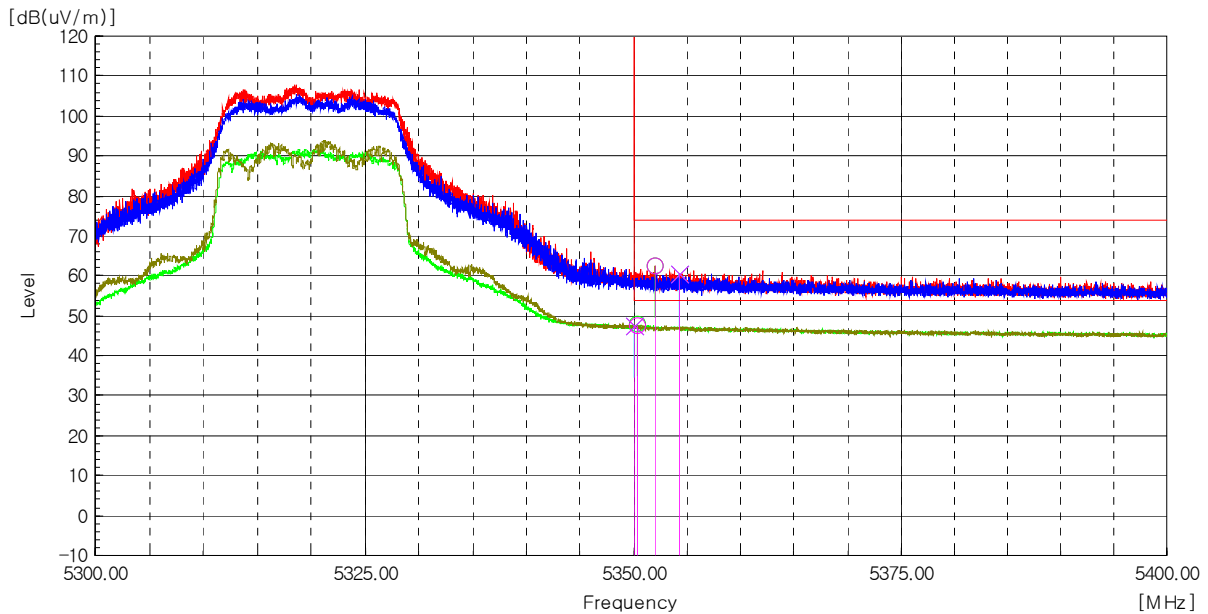
Worst Case Mode :	802.11a
Worst Case Transfer Rate :	6 Mbps
Distance of Measurements :	3 Meters
Operating Frequency :	5 180 MHz
Channel :	36



Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
5 139.83	H	58.8	-----	1.4	60.2	-----	-----	74.0	-----	13.8	-----
5 147.38	H	-----	44.9	1.4	-----	46.3	0.1	-----	54.0	-----	7.6
5 134.41	V	57.7	-----	1.4	59.1	-----	-----	74.0	-----	14.9	-----
5 149.14	V	-----	44.5	1.4	-----	45.9	0.1	-----	54.0	-----	8.0

Radiated Restricted Band Edge Plot

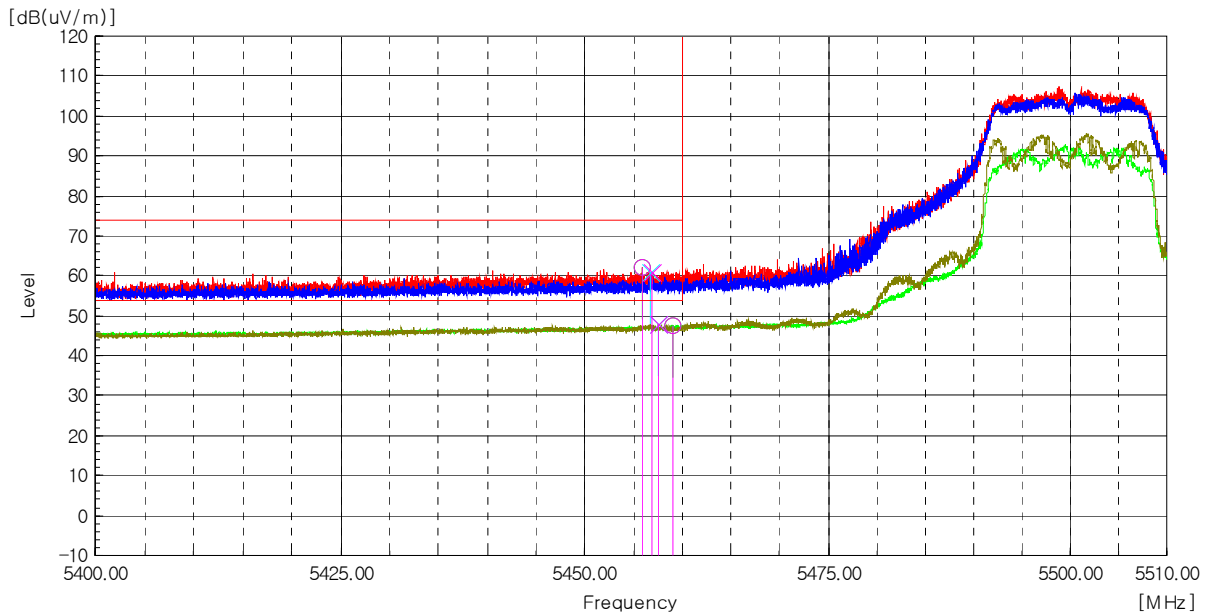
Worst Case Mode :	802.11a
Worst Case Transfer Rate :	6 Mbps
Distance of Measurements :	3 Meters
Operating Frequency :	5 320 MHz
Channel :	64



Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
5 352.03	H	60.3	-----	2.1	62.4	-----	-----	74.0	-----	11.6	-----
5 350.41	H	-----	45.6	2.1	-----	47.7	0.1	-----	54.0	-----	6.2
5 354.30	V	58.3	-----	2.1	60.4	-----	-----	74.0	-----	13.6	-----
5 350.04	V	-----	45.5	2.1	-----	47.6	0.1	-----	54.0	-----	6.3

Radiated Restricted Band Edge Plot

Worst Case Mode :	802.11a
Worst Case Transfer Rate :	6 Mbps
Distance of Measurements :	3 Meters
Operating Frequency :	5 500 MHz
Channel :	100



Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
5 455.94	H	59.9	-----	2.0	61.9	-----	-----	74.0	-----	12.1	-----
5 459.06	H	-----	45.7	2.0	-----	47.7	0.1	-----	54.0	-----	6.2
5 456.79	V	58.9	-----	2.0	60.9	-----	-----	74.0	-----	13.1	-----
5 457.54	V	-----	45.8	2.0	-----	47.8	0.1	-----	54.0	-----	6.1

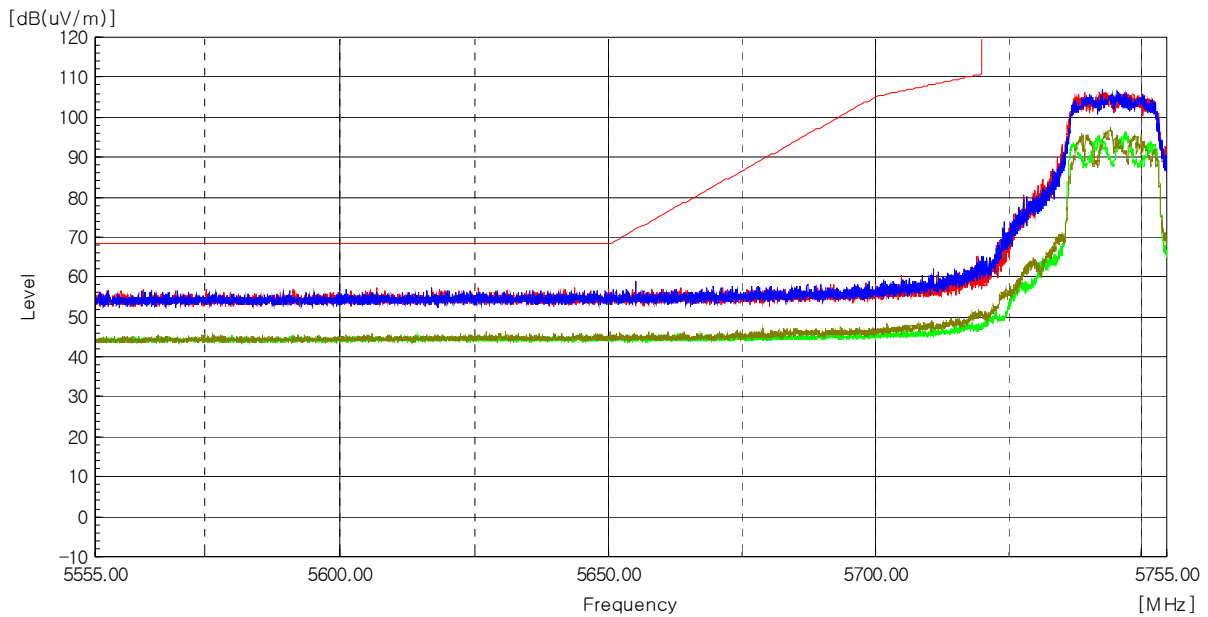
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Worst Case Mode :	802.11a
Worst Case Transfer Rate :	6 Mbps
Distance of Measurements :	3 Meters
Operating Frequency :	5 745 MHz
Channel :	149



Frequency [MHz]	Reading (P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
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The emissions above 1 GHz were 20 dB lower than the limit.

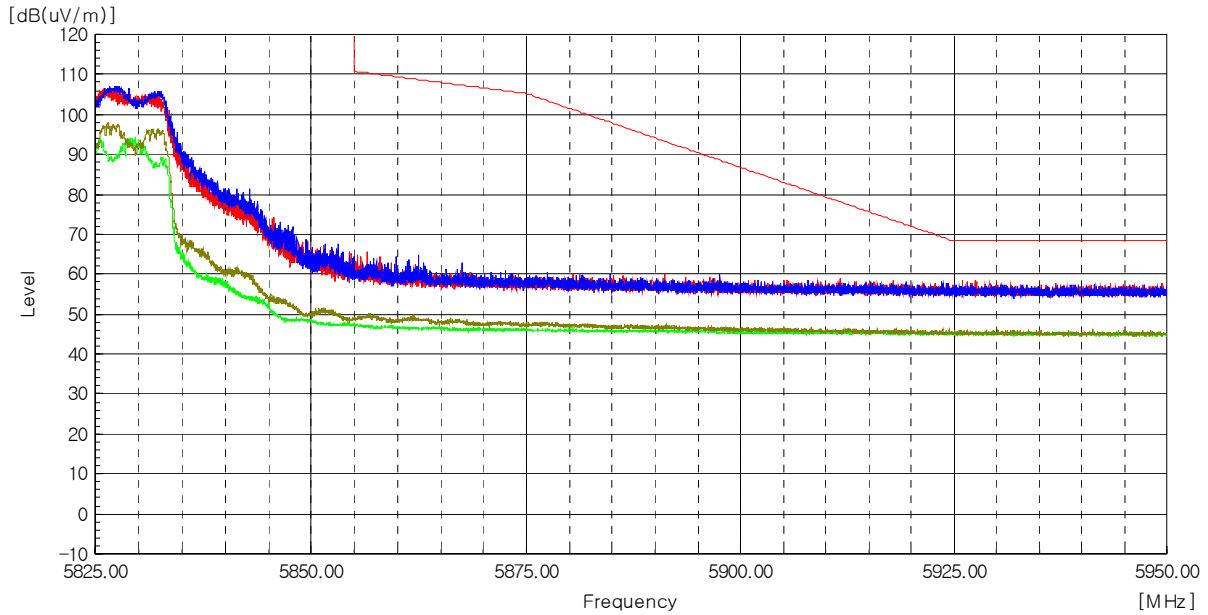
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Worst Case Mode :	802.11a
Worst Case Transfer Rate :	6 Mbps
Distance of Measurements :	3 Meters
Operating Frequency :	5 825 MHz
Channel :	165



Frequency [MHz]	Reading (P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
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The emissions above 1 GHz were 20 dB lower than the limit.

Radiated Restricted Band Edge Plot



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Test mode : Transmitter, 802.11n_HT20

The requirements are:

Complies

Test Data

Ch.36(5 180 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 351.94	H	46.7	-----	6.6	53.3	-----	-----	74.0	-----	20.7	-----
10 362.23	H	-----	35.8	6.7	-----	42.5	0.1	-----	54.0	-----	11.4
10 366.11	V	47.3	-----	6.7	54.0	-----	-----	74.0	-----	20.0	-----
10 357.51	V	-----	35.5	6.7	-----	42.2	0.1	-----	54.0	-----	11.7
15 524.96	H	47.7	-----	11.2	58.9	-----	-----	74.0	-----	15.1	-----
15 569.35	H	-----	37.6	11.0	-----	48.6	0.1	-----	54.0	-----	5.3
15 542.17	V	50.9	-----	11.1	62.0	-----	-----	74.0	-----	12.0	-----
15 536.43	V	-----	37.4	11.1	-----	48.5	0.1	-----	54.0	-----	5.4

Ch.40(5 200 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 396.66	H	46.5	-----	6.7	53.2	-----	-----	74.0	-----	20.8	-----
10 442.56	H	-----	35.3	6.9	-----	42.2	0.1	-----	54.0	-----	11.7
10 406.11	V	48.5	-----	6.7	55.2	-----	-----	74.0	-----	18.8	-----
10 405.26	V	-----	35.7	6.7	-----	42.4	0.1	-----	54.0	-----	11.5
15 599.03	H	48.5	-----	11.1	59.6	-----	-----	74.0	-----	14.4	-----
15 621.97	H	-----	37.0	11.1	-----	48.1	0.1	-----	54.0	-----	5.8
15 594.54	V	52.5	-----	11.0	63.5	-----	-----	74.0	-----	10.5	-----
15 602.52	V	-----	37.5	11.1	-----	48.6	0.1	-----	54.0	-----	5.3

Ch.48(5 240 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 536.38	H	46.2	-----	7.1	53.3	-----	-----	74.0	-----	20.7	-----
10 482.21	H	-----	35.9	6.9	-----	42.8	0.1	-----	54.0	-----	11.1
10 479.17	V	48.7	-----	6.9	55.6	-----	-----	74.0	-----	18.4	-----
10 482.72	V	-----	36.2	6.9	-----	43.1	0.1	-----	54.0	-----	10.8
15 772.59	H	48.3	-----	11.2	59.5	-----	-----	74.0	-----	14.5	-----
15 732.69	H	-----	37.5	11.2	-----	48.7	0.1	-----	54.0	-----	5.2
15 723.46	V	50.4	-----	11.2	61.6	-----	-----	74.0	-----	12.4	-----
15 722.72	V	-----	37.8	11.2	-----	49.0	0.1	-----	54.0	-----	4.9

Ch.52(5 260 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 464.49	H	47.0	-----	6.9	53.9	-----	-----	74.0	-----	20.1	-----
10 522.04	H	-----	35.9	7.0	-----	42.9	0.1	-----	54.0	-----	11.0
10 521.03	V	50.7	-----	7.0	57.7	-----	-----	74.0	-----	16.3	-----
10 520.52	V	-----	36.3	7.0	-----	43.3	0.1	-----	54.0	-----	10.6
15 815.73	H	48.2	-----	11.2	59.4	-----	-----	74.0	-----	14.6	-----
15 789.55	H	-----	37.4	11.2	-----	48.6	0.1	-----	54.0	-----	5.3
15 782.32	V	54.0	-----	11.2	65.2	-----	-----	74.0	-----	8.8	-----
15 782.82	V	-----	39.5	11.2	-----	50.7	0.1	-----	54.0	-----	3.2

Ch.60(5 300 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 596.29	H	48.1	-----	7.2	55.3	-----	-----	74.0	-----	18.7	-----
10 596.79	H	-----	37.2	7.2	-----	44.4	0.1	-----	54.0	-----	9.5
10 601.35	V	51.6	-----	7.2	58.8	-----	-----	74.0	-----	15.2	-----
10 595.95	V	-----	36.6	7.2	-----	43.8	0.1	-----	54.0	-----	10.1
15 899.03	H	48.6	-----	11.5	60.1	-----	-----	74.0	-----	13.9	-----
15 892.29	H	-----	37.0	11.5	-----	48.5	0.1	-----	54.0	-----	5.4
15 899.52	V	51.4	-----	11.5	62.9	-----	-----	74.0	-----	11.1	-----
15 891.79	V	-----	38.6	11.5	-----	50.1	0.1	-----	54.0	-----	3.8



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Ch.64(5 320 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 639.15	H	47.2	-----	7.2	54.4	-----	-----	74.0	-----	19.6	-----
10 638.47	H	-----	36.4	7.2	-----	43.6	0.1	-----	54.0	-----	10.3
10 641.01	V	50.9	-----	7.2	58.1	-----	-----	74.0	-----	15.9	-----
10 638.64	V	-----	37.0	7.2	-----	44.2	0.1	-----	54.0	-----	9.7
15 913.49	H	49.7	-----	11.5	61.2	-----	-----	74.0	-----	12.8	-----
16 028.20	H	-----	37.0	11.7	-----	48.7	0.1	-----	54.0	-----	5.2
15 959.62	V	51.7	-----	11.6	63.3	-----	-----	74.0	-----	10.7	-----
15 959.62	V	-----	38.8	11.6	-----	50.4	0.1	-----	54.0	-----	3.5

Ch.100(5 500 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 999.60	H	48.7	-----	7.6	56.3	-----	-----	74.0	-----	17.7	-----
11 001.46	H	-----	37.2	7.6	-----	44.8	0.1	-----	54.0	-----	9.1
11 001.46	V	50.8	-----	7.6	58.4	-----	-----	74.0	-----	15.6	-----
11 000.95	V	-----	37.2	7.6	-----	44.8	0.1	-----	54.0	-----	9.1
16 520.22	H	46.8	-----	13.3	60.1	-----	-----	74.0	-----	13.9	-----
16 497.03	H	-----	36.1	13.2	-----	49.3	0.1	-----	54.0	-----	4.6
16 495.03	V	48.4	-----	13.2	61.6	-----	-----	74.0	-----	12.4	-----
16 458.62	V	-----	36.0	13.0	-----	49.0	0.1	-----	54.0	-----	4.9

Ch.120(5 600 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 196.19	H	46.3	-----	7.9	54.2	-----	-----	74.0	-----	19.8	-----
11 198.72	H	-----	36.0	7.9	-----	43.9	0.1	-----	54.0	-----	10.0
11 201.26	V	50.3	-----	7.9	58.2	-----	-----	74.0	-----	15.8	-----
11 200.58	V	-----	36.4	7.9	-----	44.3	0.1	-----	54.0	-----	9.6
16 801.01	H	46.4	-----	14.3	60.7	-----	-----	74.0	-----	13.3	-----
16 680.32	H	-----	35.3	14.1	-----	49.4	0.1	-----	54.0	-----	4.5
16 799.77	V	47.6	-----	14.3	61.9	-----	-----	74.0	-----	12.1	-----
16 826.45	V	-----	34.4	14.4	-----	48.8	0.1	-----	54.0	-----	5.1



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Ch.144(5 720 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 445.10	H	48.3	-----	8.5	56.8	-----	-----	74.0	-----	17.2	-----
11 440.21	H	-----	37.0	8.5	-----	45.5	0.1	-----	54.0	-----	8.4
11 440.54	V	51.4	-----	8.5	59.9	-----	-----	74.0	-----	14.1	-----
11 440.21	V	-----	36.5	8.5	-----	45.0	0.1	-----	54.0	-----	8.9

Ch.149(5 745 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 490.83	H	48.9	-----	8.5	57.4	-----	-----	74.0	-----	16.6	-----
11 492.86	H	-----	36.0	8.5	-----	44.5	0.1	-----	54.0	-----	9.4
11 493.03	V	53.2	-----	8.5	61.7	-----	-----	74.0	-----	12.3	-----
11 491.17	V	-----	36.9	8.5	-----	45.4	0.1	-----	54.0	-----	8.5

Ch.157(5 785 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 570.65	H	47.3	-----	8.5	55.8	-----	-----	74.0	-----	18.2	-----
11 570.14	H	-----	35.3	8.5	-----	43.8	0.1	-----	54.0	-----	10.1
11 563.39	V	51.5	-----	8.5	60.0	-----	-----	74.0	-----	14.0	-----
11 570.31	V	-----	36.3	8.5	-----	44.8	0.1	-----	54.0	-----	9.1



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Ch.165(5 825 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 647.77	H	47.4	-----	8.5	55.9	-----	-----	74.0	-----	18.1	-----
11 648.44	H	-----	36.0	8.6	-----	44.6	0.1	-----	54.0	-----	9.3
11 645.91	V	52.3	-----	8.5	60.8	-----	-----	74.0	-----	13.2	-----
11 648.61	V	-----	36.8	8.6	-----	45.4	0.1	-----	54.0	-----	8.5
17 498.27	H	44.7	-----	13.5	58.2	-----	-----	74.0	-----	15.8	-----
17 474.08	H	-----	34.1	13.5	-----	47.6	0.1	-----	54.0	-----	6.3
17 474.83	V	48.3	-----	13.5	61.8	-----	-----	74.0	-----	12.2	-----
17 472.33	V	-----	33.8	13.5	-----	47.3	0.1	-----	54.0	-----	6.6

Remarks

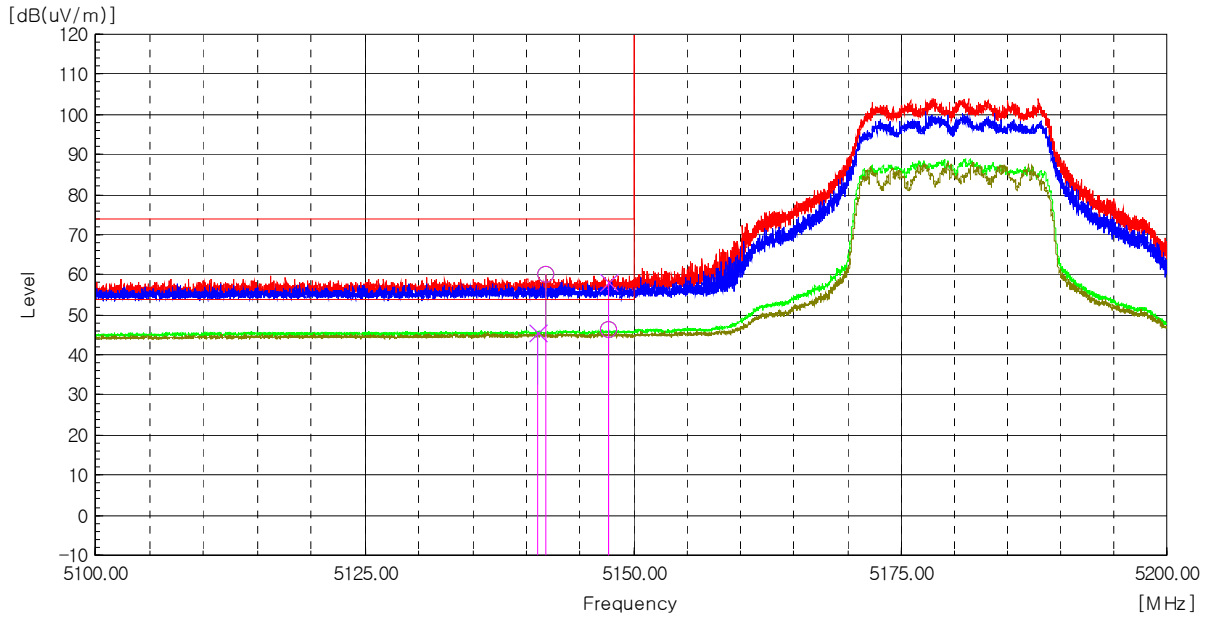
1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down positon(X,Y axis). The worst emission was found in lie-down positon(X axis) and the worst case was recorded.
2. Peak Result = Reading + c.f(Correction factor)
 Average Result = Reading + c.f(Correction factor) + Duty Cycle Factor
3. Correction factor = Antenna factor + Cable loss - Amp Gain



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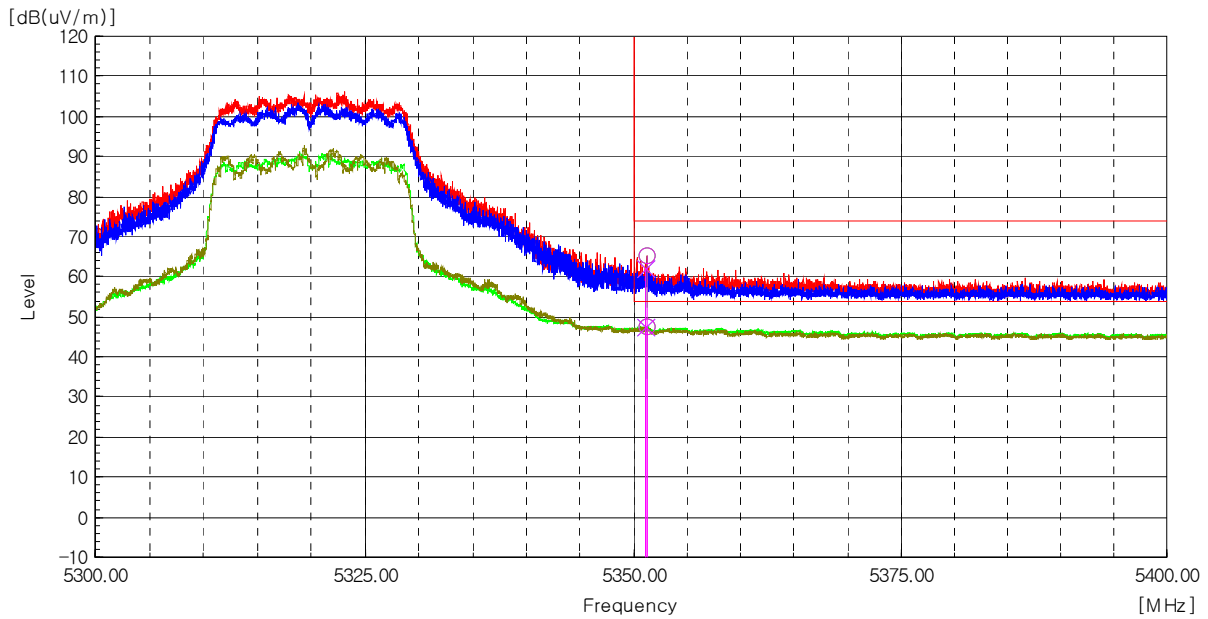
Worst Case Mode :	802.11n_HT20
Worst Case Transfer Rate :	MCS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 180 MHz
Channel :	36



Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
5 141.81	H	58.7	-----	1.4	60.1	-----	-----	74.0	-----	13.9	-----
5 147.69	H	-----	44.8	1.4	-----	46.2	0.1	-----	54.0	-----	7.7
5 147.65	V	56.9	-----	1.4	58.3	-----	-----	74.0	-----	15.7	-----
5 141.08	V	-----	44.3	1.4	-----	45.7	0.1	-----	54.0	-----	8.2

Radiated Restricted Band Edge Plot

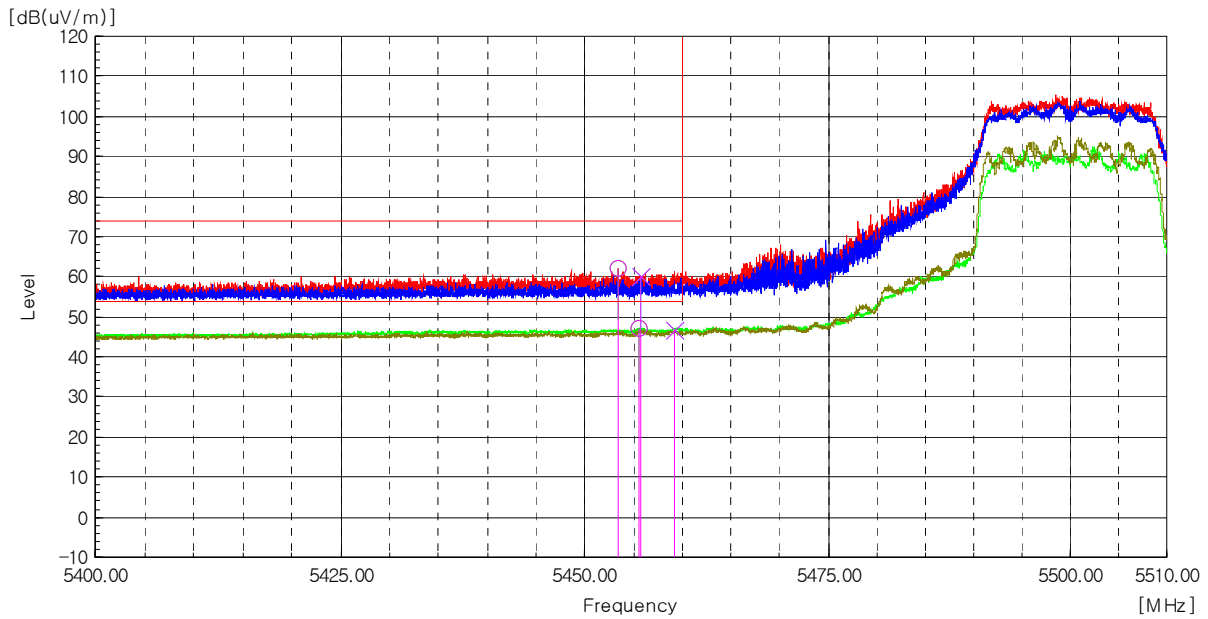
Worst Case Mode :	802.11n_HT20
Worst Case Transfer Rate :	MCS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 320 MHz
Channel :	64



Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
5 351.20	H	63.2	-----	2.1	65.3	-----	-----	74.0	-----	8.7	-----
5 351.21	H	-----	45.4	2.1	-----	47.5	0.1	-----	54.0	-----	6.4
5 351.10	V	60.1	-----	2.1	62.2	-----	-----	74.0	-----	11.8	-----
5 351.05	V	-----	45.5	2.1	-----	47.6	0.1	-----	54.0	-----	6.3

Radiated Restricted Band Edge Plot

Worst Case Mode :	802.11n_HT20
Worst Case Transfer Rate :	MCS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 500 MHz
Channel :	100



Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
5 453.38	H	60.2	-----	2.0	62.2	-----	-----	74.0	-----	11.8	-----
5 455.47	H	-----	45.2	2.0	-----	47.2	0.1	-----	54.0	-----	6.7
5 455.69	V	58.2	-----	2.0	60.2	-----	-----	74.0	-----	13.8	-----
5 459.18	V	-----	44.9	2.0	-----	46.9	0.1	-----	54.0	-----	7.0

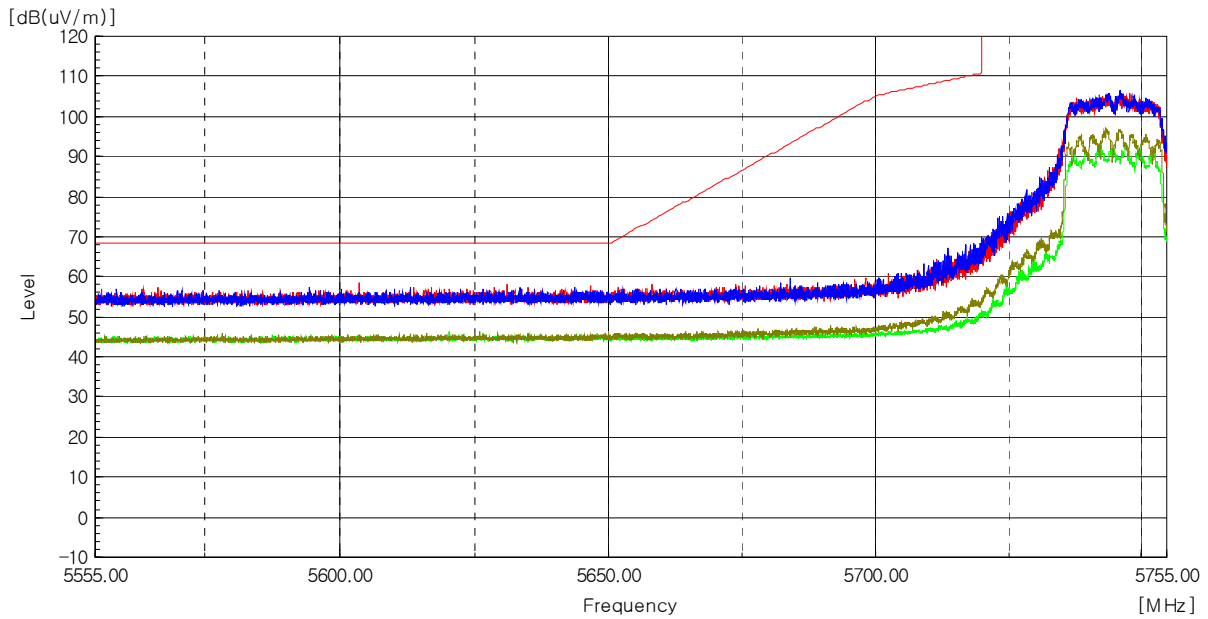
Radiated Restricted Band Edge Plot



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Worst Case Mode :	802.11n_HT20
Worst Case Transfer Rate :	MCS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 745 MHz
Channel :	149

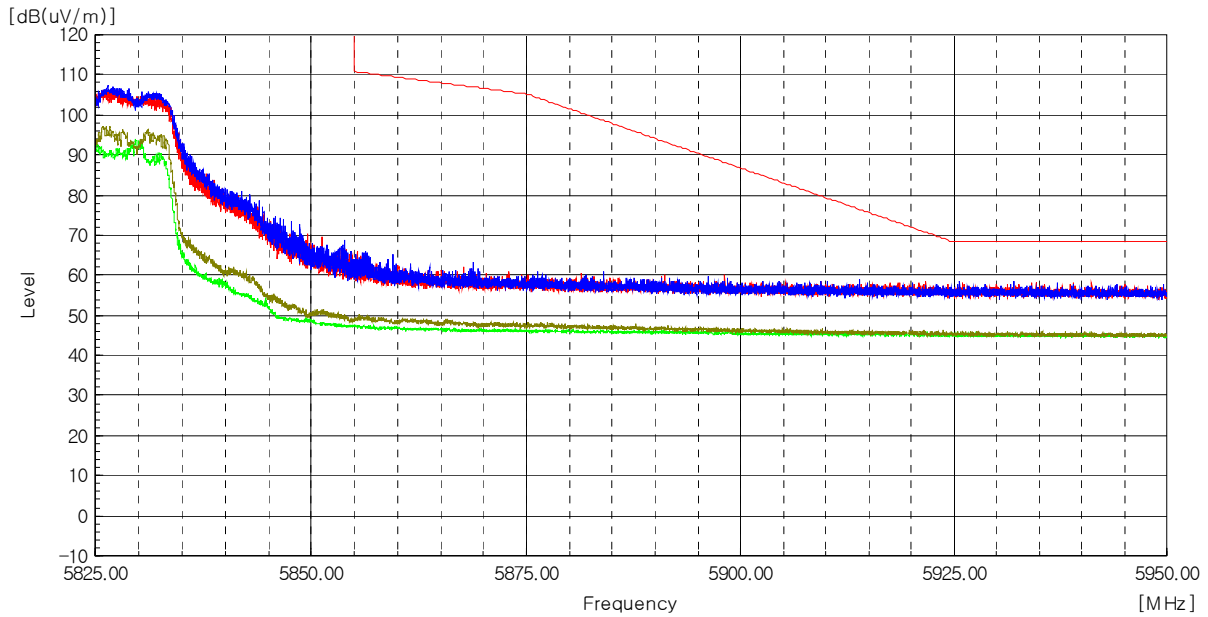


Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
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The emissions above 1 GHz were 20 dB lower than the limit.

Radiated Restricted Band Edge Plot

Worst Case Mode :	802.11n_HT20
Worst Case Transfer Rate :	MCS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 825 MHz
Channel :	165



Frequency [MHz]	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
--------------------	-------------------------	-------------------------	------------------	------------------------	------------------------	---------------------------------	------------------------	------------------------	----------------------	----------------------

The emissions above 1 GHz were 20 dB lower than the limit.

Radiated Restricted Band Edge Plot



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Test mode : Transmitter, 802.11ac_VHT20

The requirements are:

Complies

Test Data

Ch.36(5 180 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 374.21	H	46.0	-----	6.7	52.7	-----	-----	74.0	-----	21.3	-----
10 353.63	H	-----	35.3	6.6	-----	41.9	0.3	-----	54.0	-----	11.8
10 362.23	V	47.3	-----	6.7	54.0	-----	-----	74.0	-----	20.0	-----
10 359.19	V	-----	35.8	6.7	-----	42.5	0.3	-----	54.0	-----	11.2
15 538.43	H	48.2	-----	11.1	59.3	-----	-----	74.0	-----	14.7	-----
15 522.22	H	-----	36.8	11.2	-----	48.0	0.3	-----	54.0	-----	5.7
15 538.93	V	51.0	-----	11.1	62.1	-----	-----	74.0	-----	11.9	-----
15 546.41	V	-----	37.4	11.1	-----	48.5	0.3	-----	54.0	-----	5.2

Ch.40(5 200 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 425.51	H	46.4	-----	6.8	53.2	-----	-----	74.0	-----	20.8	-----
10 404.76	H	-----	35.4	6.7	-----	42.1	0.3	-----	54.0	-----	11.6
10 400.03	V	47.5	-----	6.7	54.2	-----	-----	74.0	-----	19.8	-----
10 404.59	V	-----	35.5	6.7	-----	42.2	0.3	-----	54.0	-----	11.5
15 634.44	H	48.2	-----	11.2	59.4	-----	-----	74.0	-----	14.6	-----
15 630.20	H	-----	37.6	11.2	-----	48.8	0.3	-----	54.0	-----	4.9
15 602.52	V	51.2	-----	11.1	62.3	-----	-----	74.0	-----	11.7	-----
15 597.78	V	-----	37.3	11.1	-----	48.4	0.3	-----	54.0	-----	5.3

Ch.48(5 240 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 469.72	H	46.3	-----	6.9	53.2	-----	-----	74.0	-----	20.8	-----
10 465.67	H	-----	35.5	6.9	-----	42.4	0.3	-----	54.0	-----	11.3
10 479.51	V	48.4	-----	6.9	55.3	-----	-----	74.0	-----	18.7	-----
10 474.79	V	-----	36.2	6.9	-----	43.1	0.3	-----	54.0	-----	10.6
15 715.73	H	47.8	-----	11.2	59.0	-----	-----	74.0	-----	15.0	-----
15 724.96	H	-----	36.6	11.2	-----	47.8	0.3	-----	54.0	-----	5.9
15 720.97	V	51.4	-----	11.2	62.6	-----	-----	74.0	-----	11.4	-----
15 718.98	V	-----	36.8	11.2	-----	48.0	0.3	-----	54.0	-----	5.7

Ch.52(5 260 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 526.76	H	47.1	-----	7.0	54.1	-----	-----	74.0	-----	19.9	-----
10 520.35	H	-----	35.8	7.0	-----	42.8	0.3	-----	54.0	-----	10.9
10 513.60	V	49.7	-----	7.0	56.7	-----	-----	74.0	-----	17.3	-----
10 520.52	V	-----	36.0	7.0	-----	43.0	0.3	-----	54.0	-----	10.7
15 784.56	H	49.3	-----	11.2	60.5	-----	-----	74.0	-----	13.5	-----
15 783.32	H	-----	37.0	11.2	-----	48.2	0.3	-----	54.0	-----	5.5
15 776.58	V	54.1	-----	11.2	65.3	-----	-----	74.0	-----	8.7	-----
15 781.32	V	-----	39.1	11.2	-----	50.3	0.3	-----	54.0	-----	3.4

Ch.60(5 300 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 595.44	H	46.9	-----	7.2	54.1	-----	-----	74.0	-----	19.9	-----
10 598.82	H	-----	36.2	7.2	-----	43.4	0.3	-----	54.0	-----	10.3
10 600.84	V	49.7	-----	7.2	56.9	-----	-----	74.0	-----	17.1	-----
10 599.33	V	-----	36.4	7.2	-----	43.6	0.3	-----	54.0	-----	10.1
15 875.33	H	47.5	-----	11.5	59.0	-----	-----	74.0	-----	15.0	-----
15 916.98	H	-----	36.9	11.6	-----	48.5	0.3	-----	54.0	-----	5.2
15 900.27	V	50.6	-----	11.5	62.1	-----	-----	74.0	-----	11.9	-----
15 904.51	V	-----	38.7	11.5	-----	50.2	0.3	-----	54.0	-----	3.5



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Ch.64(5 320 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
10 642.53	H	47.8	-----	7.2	55.0	-----	-----	74.0	-----	19.0	-----
10 638.81	H	-----	36.2	7.2	-----	43.4	0.3	-----	54.0	-----	10.3
10 635.61	V	50.2	-----	7.2	57.4	-----	-----	74.0	-----	16.6	-----
10 637.13	V	-----	36.9	7.2	-----	44.1	0.3	-----	54.0	-----	9.6
15 954.14	H	48.0	-----	11.6	59.6	-----	-----	74.0	-----	14.4	-----
15 954.64	H	-----	36.7	11.6	-----	48.3	0.3	-----	54.0	-----	5.4
15 957.38	V	51.5	-----	11.6	63.1	-----	-----	74.0	-----	10.9	-----
15 962.87	V	-----	38.2	11.6	-----	49.8	0.3	-----	54.0	-----	3.9

Ch.100(5 500 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 000.95	H	49.1	-----	7.6	56.7	-----	-----	74.0	-----	17.3	-----
10 998.92	H	-----	38.0	7.6	-----	45.6	0.3	-----	54.0	-----	8.1
10 996.06	V	50.8	-----	7.6	58.4	-----	-----	74.0	-----	15.6	-----
10 998.76	V	-----	36.8	7.6	-----	44.4	0.3	-----	54.0	-----	9.3

Ch.120(5 600 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 203.28	H	47.1	-----	7.9	55.0	-----	-----	74.0	-----	19.0	-----
11 201.26	H	-----	36.1	7.9	-----	44.0	0.3	-----	54.0	-----	9.7
11 205.64	V	49.5	-----	7.9	57.4	-----	-----	74.0	-----	16.6	-----
11 200.08	V	-----	36.2	7.9	-----	44.1	0.3	-----	54.0	-----	9.6

Ch.144(5 720 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 439.53	H	47.9	-----	8.5	56.4	-----	-----	74.0	-----	17.6	-----
11 442.06	H	-----	36.4	8.5	-----	44.9	0.3	-----	54.0	-----	8.8
11 440.88	V	52.7	-----	8.5	61.2	-----	-----	74.0	-----	12.8	-----
11 443.92	V	-----	36.7	8.5	-----	45.2	0.3	-----	54.0	-----	8.5

Ch.149(5 745 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 486.44	H	49.6	-----	8.5	58.1	-----	-----	74.0	-----	15.9	-----
11 486.11	H	-----	35.8	8.5	-----	44.3	0.3	-----	54.0	-----	9.4
11 486.78	V	51.4	-----	8.5	59.9	-----	-----	74.0	-----	14.1	-----
11 491.00	V	-----	36.8	8.5	-----	45.3	0.3	-----	54.0	-----	8.4

Ch.157(5 785 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 570.48	H	47.1	-----	8.5	55.6	-----	-----	74.0	-----	18.4	-----
11 567.95	H	-----	35.2	8.5	-----	43.7	0.3	-----	54.0	-----	10.0
11 568.79	V	50.1	-----	8.5	58.6	-----	-----	74.0	-----	15.4	-----
11 569.97	V	-----	36.1	8.5	-----	44.6	0.3	-----	54.0	-----	9.1

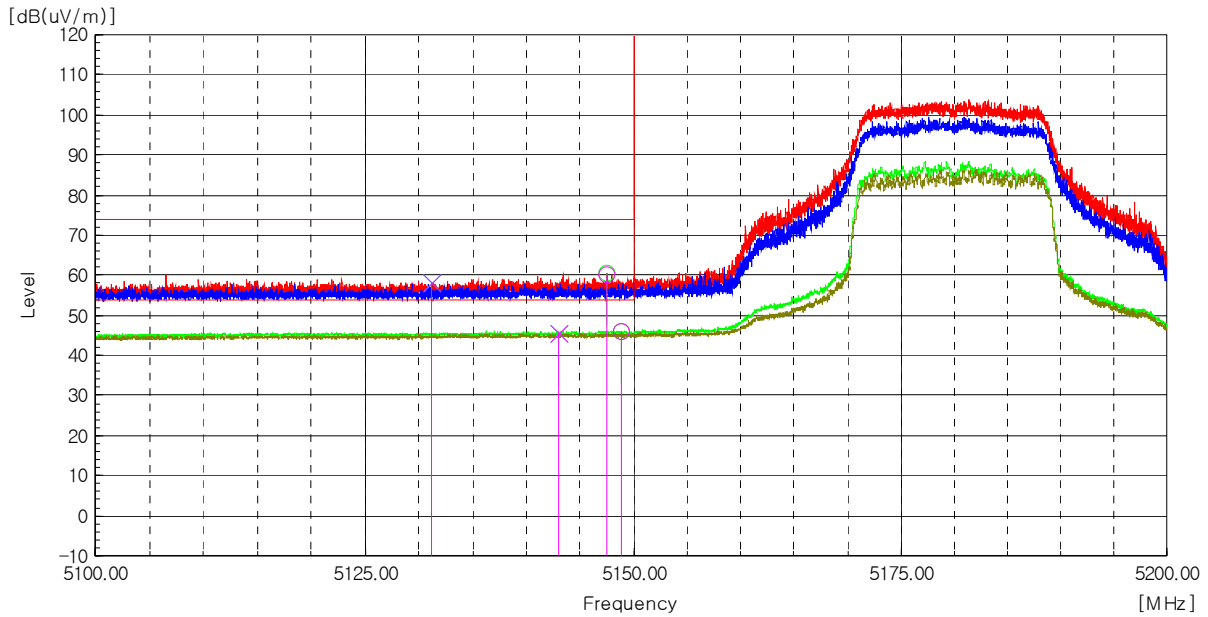
Ch.165(5 825 MHz)

Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
11 646.42	H	49.8	-----	8.5	58.3	-----	-----	74.0	-----	15.7	-----
11 648.78	H	-----	35.5	8.6	-----	44.1	0.3	-----	54.0	-----	9.6
11 646.92	V	50.0	-----	8.5	58.5	-----	-----	74.0	-----	15.5	-----
11 649.96	V	-----	36.7	8.6	-----	45.3	0.3	-----	54.0	-----	8.4

Remarks

1. The unwanted emission was measured in the following position: EUT stand-up position(Z axis), lie-down positon(X,Y axis). The worst emission was found in lie-down positon(X axis) and the worst case was recorded.
2. Peak Result = Reading + c.f(Correction factor)
Average Result = Reading + c.f(Correction factor) + Duty Cycle Factor
3. Correction factor = Antenna factor + Cable loss - Amp Gain

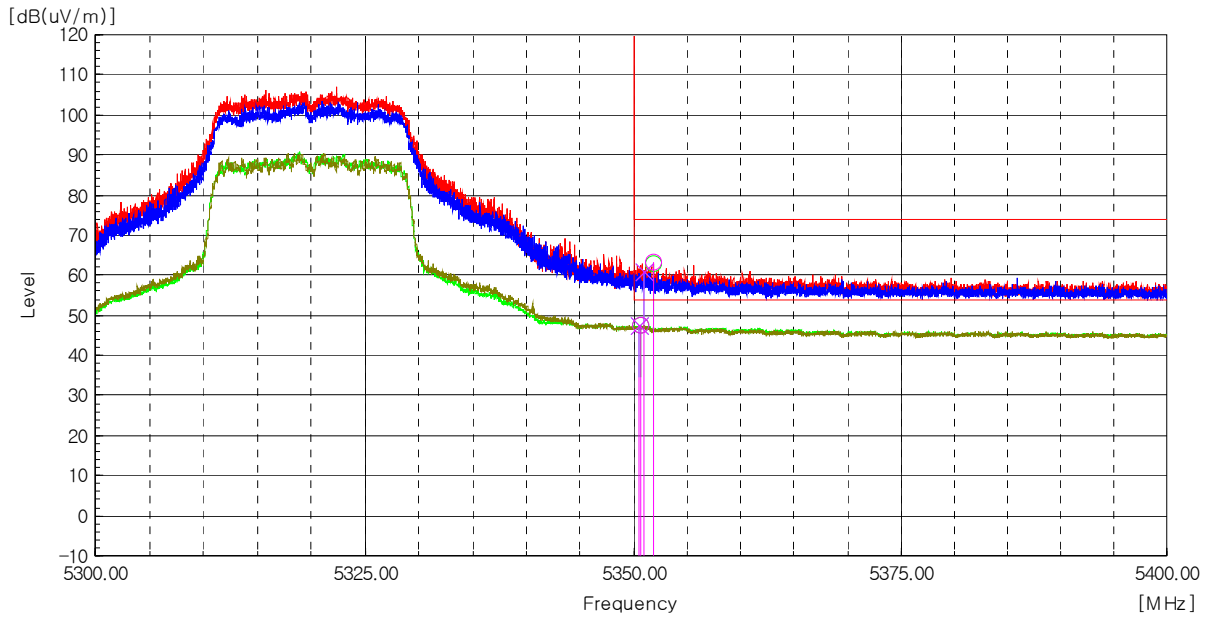
Worst Case Mode :	802.11ac_VHT20
Worst Case Transfer Rate :	MNSS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 180 MHz
Channel :	36



Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
5 147.58	H	58.9	-----	1.4	60.3	-----	-----	74.0	-----	13.7	-----
5 148.86	H	-----	44.7	1.4	-----	46.1	0.3	-----	54.0	-----	7.6
5 131.21	V	56.8	-----	1.4	58.2	-----	-----	74.0	-----	15.8	-----
5 143.03	V	-----	44.1	1.4	-----	45.5	0.3	-----	54.0	-----	8.2

Radiated Restricted Band Edge Plot

Worst Case Mode :	802.11ac_VHT20
Worst Case Transfer Rate :	MNSS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 320 MHz
Channel :	64



Frequency [MHz]	(P)	Reading PK [dBuV]	Reading AV [dBuV]	c.f [dB(1/m)]	Level PK [dB(uV/m)]	Level AV [dB(uV/m)]	Duty Cycle Factor [dB]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin AV [dB]
5 351.86	H	61.0	-----	2.1	63.1	-----	-----	74.0	-----	10.9	-----
5 350.73	H	-----	45.3	2.1	-----	47.4	0.3	-----	54.0	-----	6.3
5 350.91	V	58.7	-----	2.1	60.8	-----	-----	74.0	-----	13.2	-----
5 350.51	V	-----	45.5	2.1	-----	47.6	0.3	-----	54.0	-----	6.1

Radiated Restricted Band Edge Plot