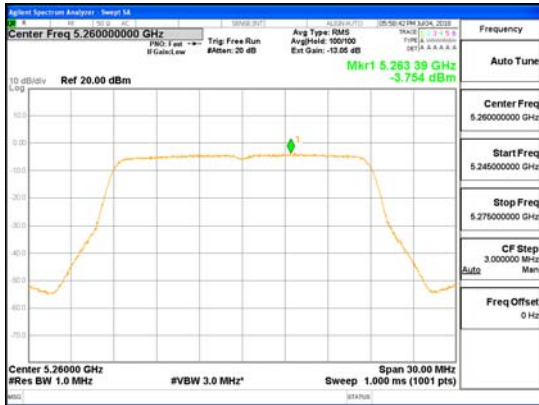


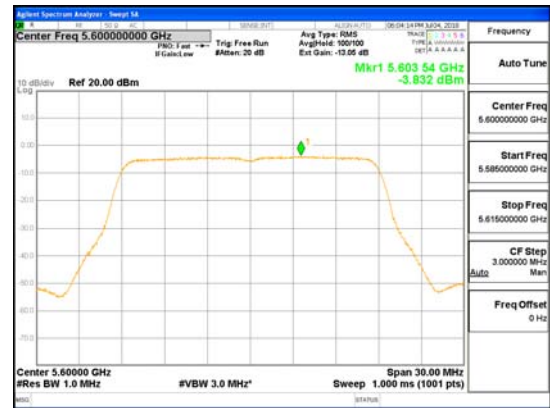
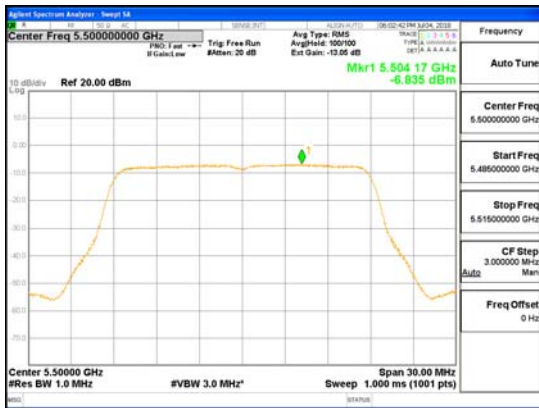


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 (Ho-dong), 113, Yejik-ro, Cheoin-gu,
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 Fax: +82-31-624-9501

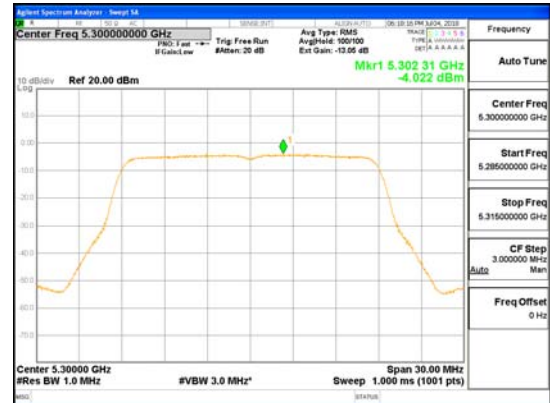
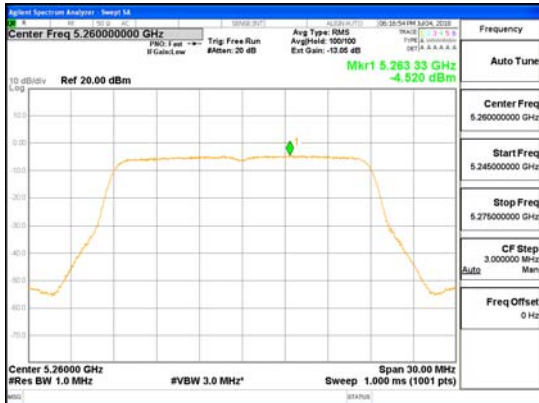
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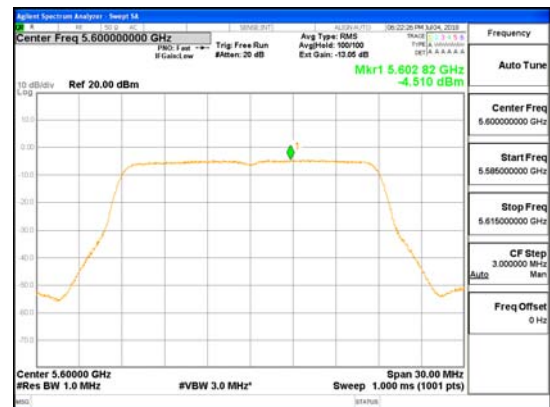
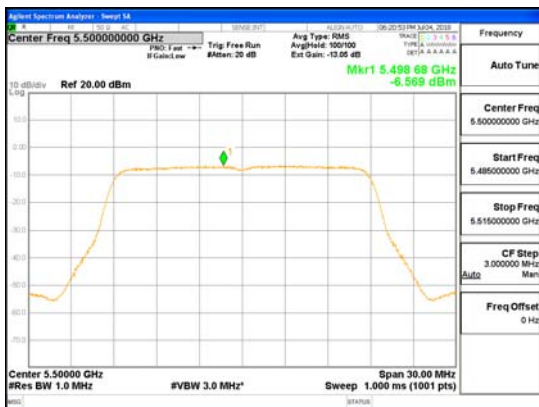
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ANTO_802.11ac_VHT20_UNII 2C



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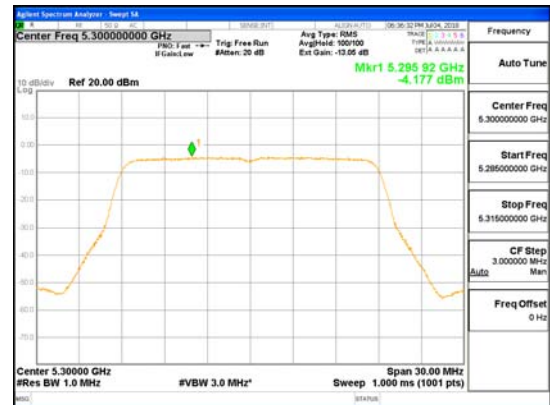
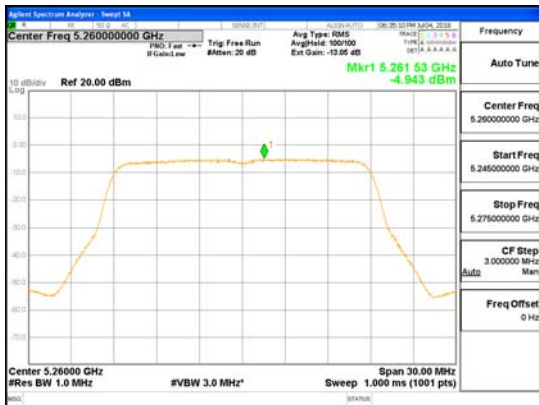


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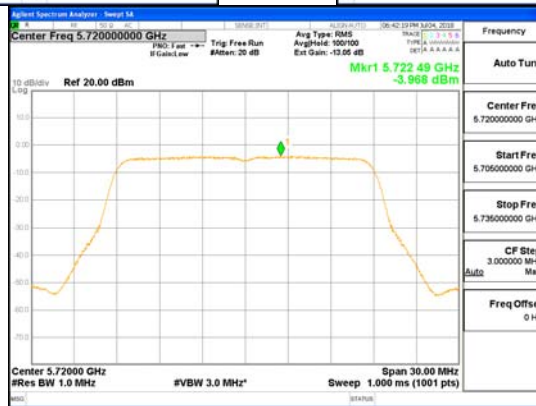
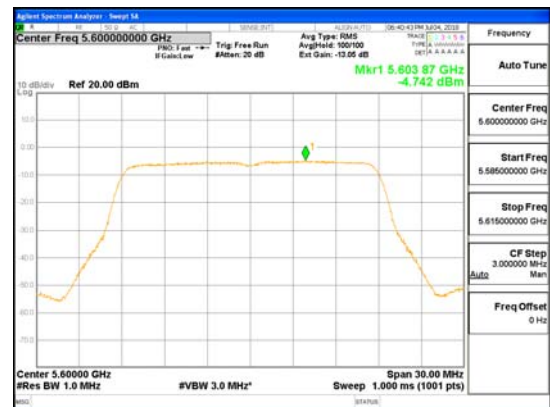
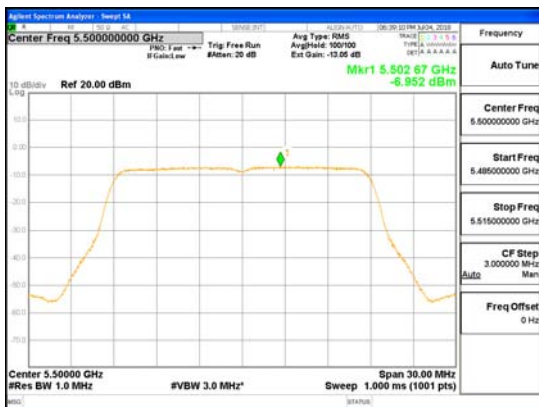


CTK Co., Ltd.
(Ho-dong), 113, Yejik-ro, Cheoin-gu,
Yongin-si, Gyeonggi-do, Korea
Tel: +82-31-339-9970
Fax: +82-31-624-9501

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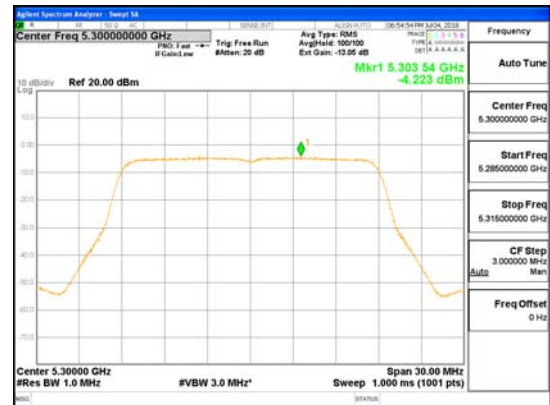
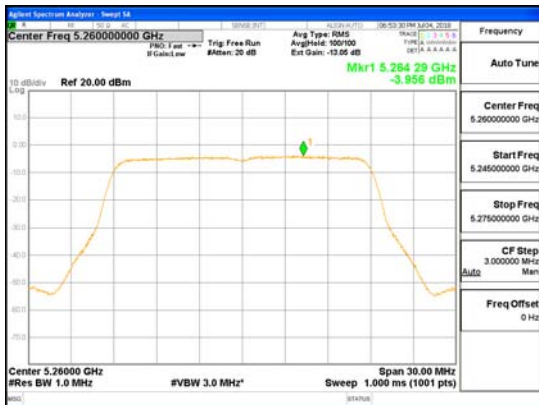


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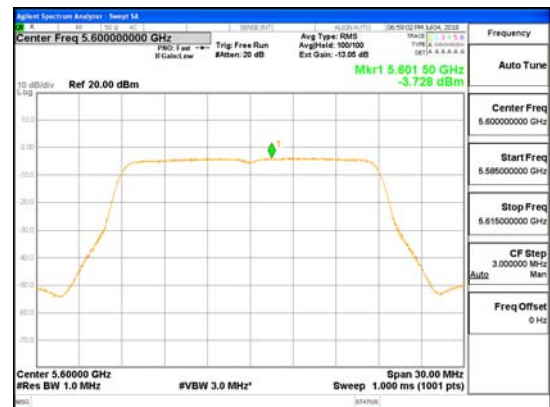
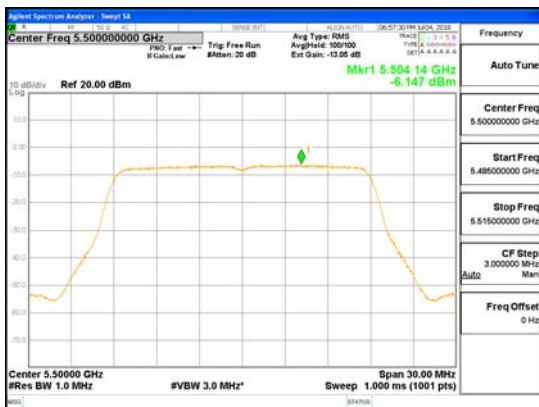


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 Yongin-si, Gyeonggi-do, Korea
 Tel: +82-31-339-9970
 Fax: +82-31-624-9501

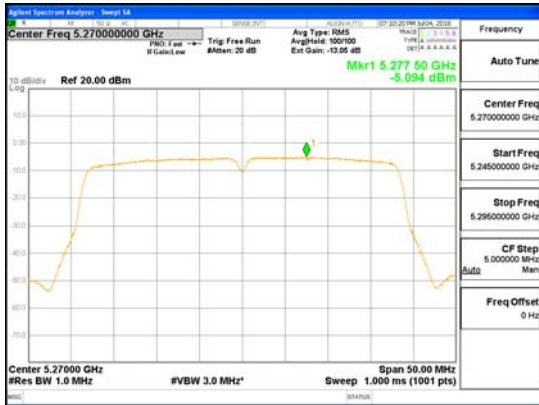
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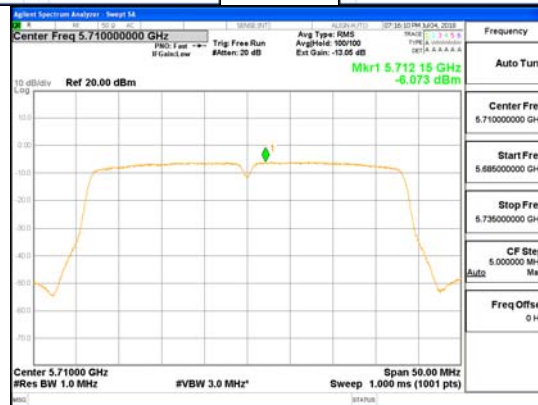
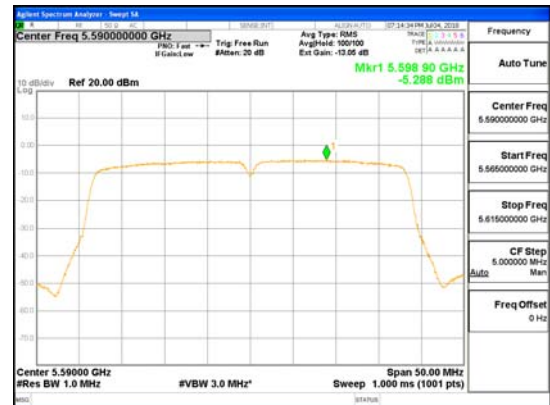
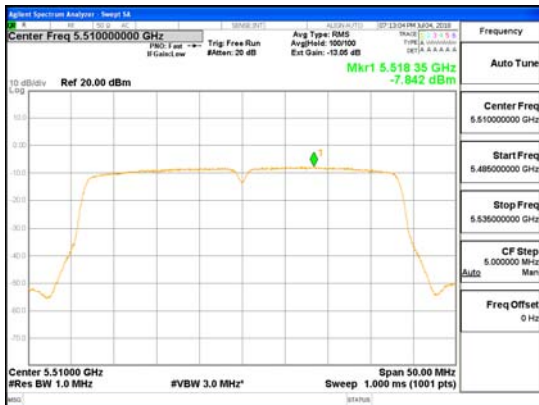
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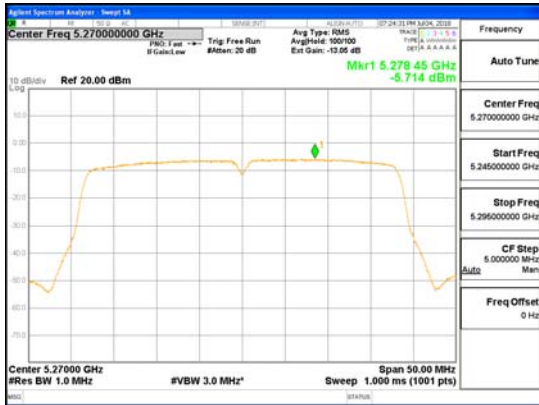
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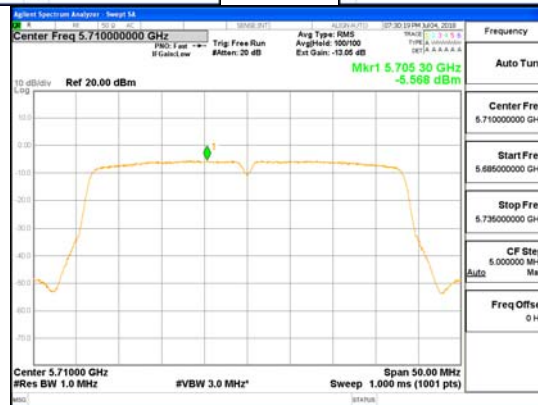
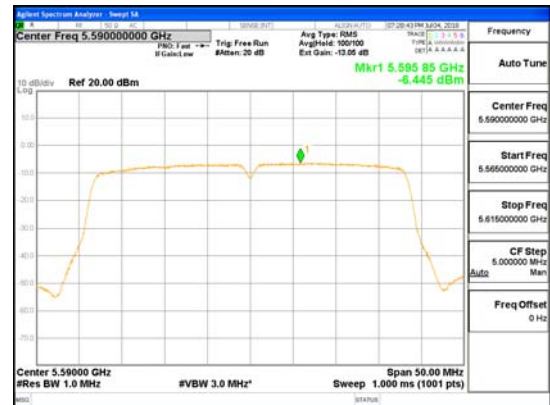
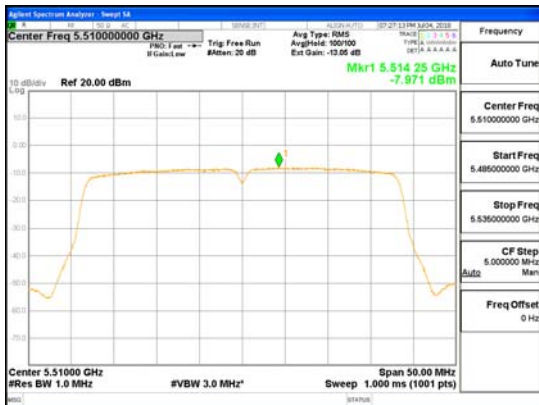
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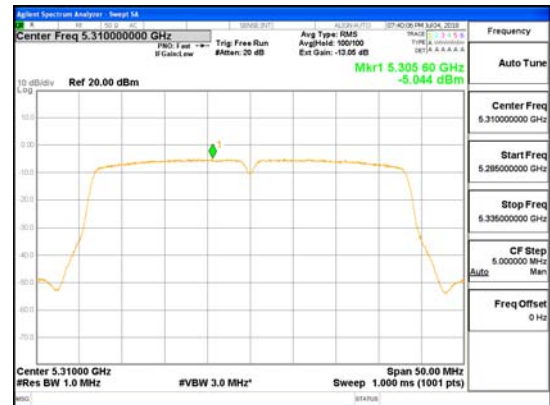
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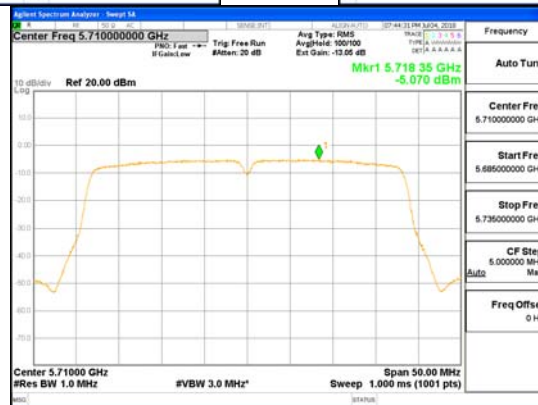
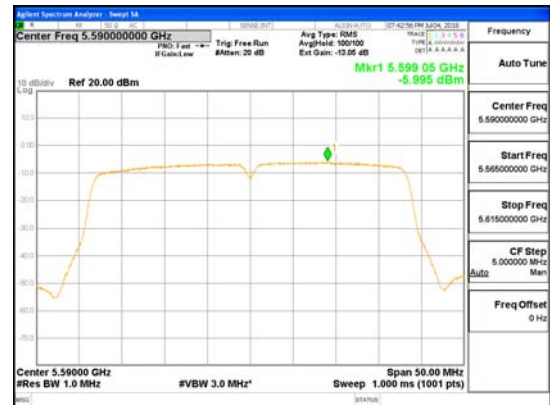
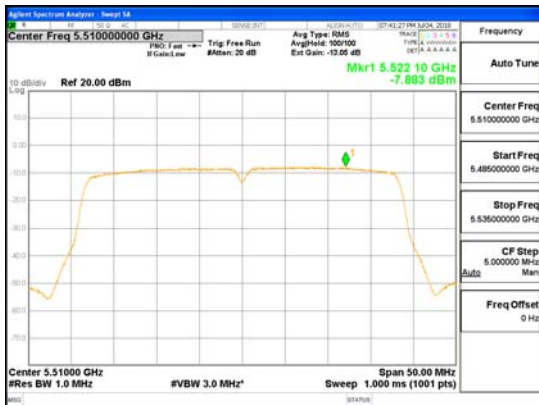
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ANT1_802.11n_HT40_UNII 2C



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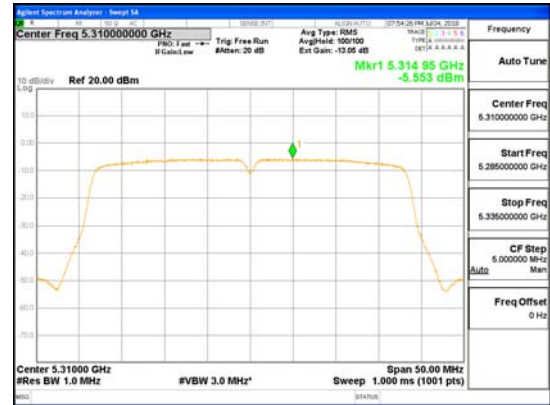


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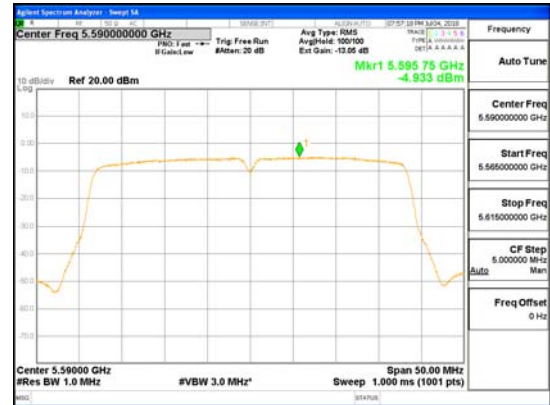


CTK Co., Ltd.
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,
 Yongin-si, Gyeonggi-do, Korea
 Tel: +82-31-339-9970
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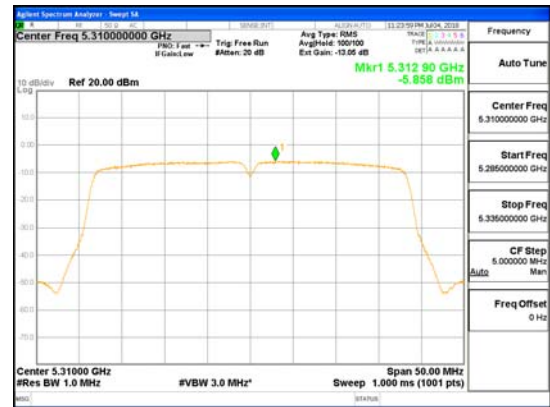
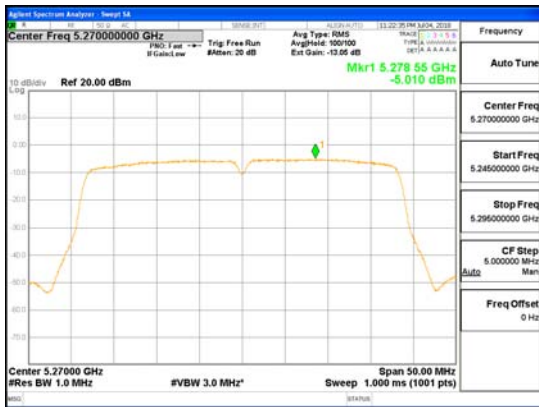


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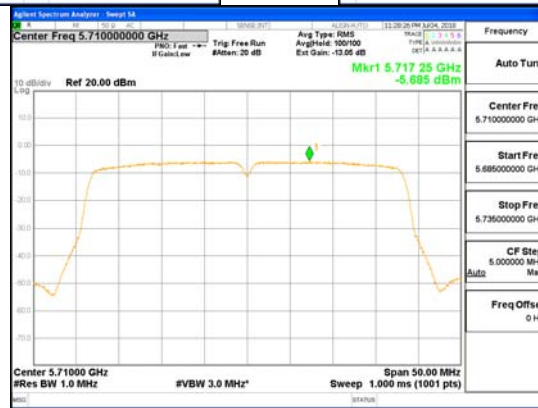
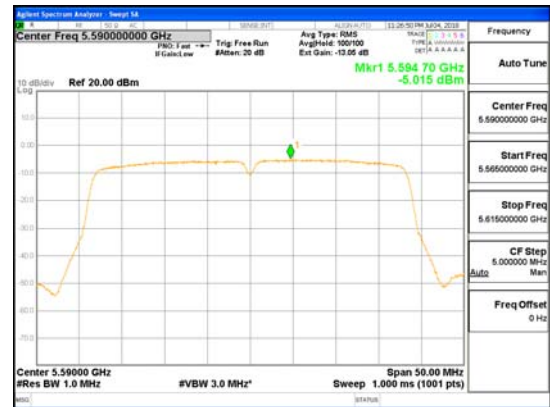
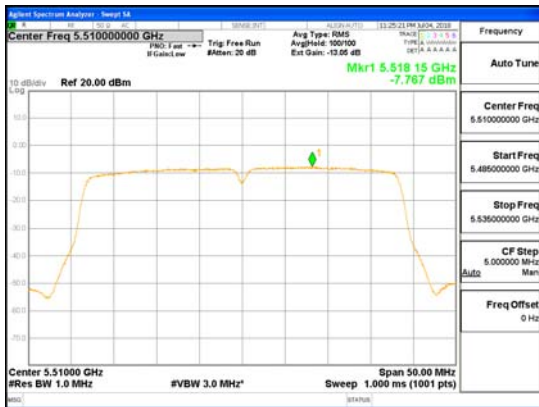


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 Yongin-si, Gyeonggi-do, Korea
 Tel: +82-31-339-9970
 Fax: +82-31-624-9501

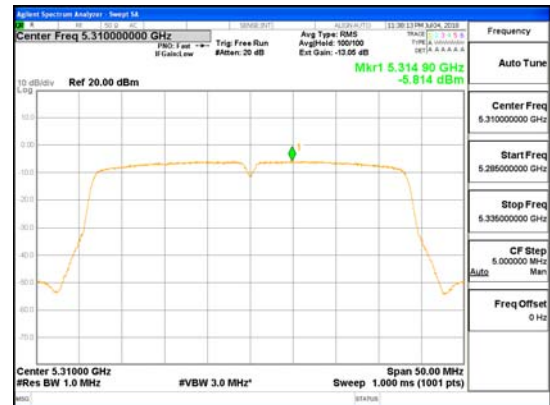
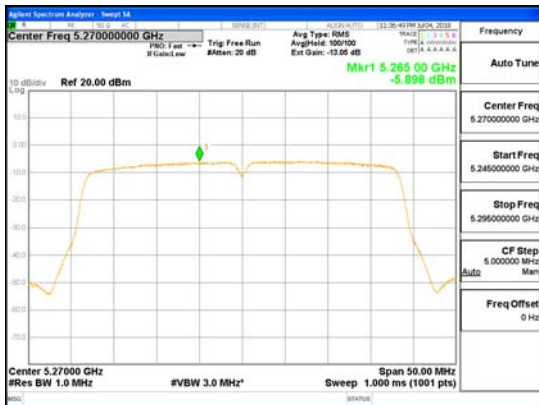
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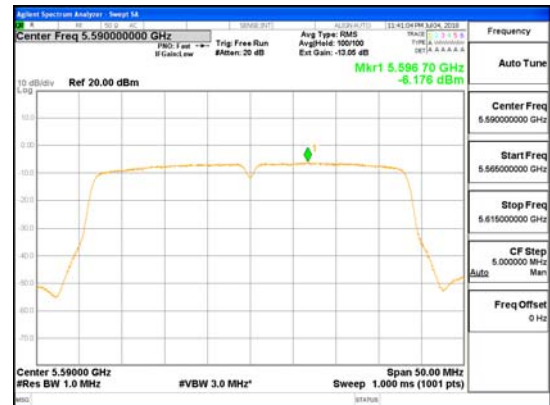
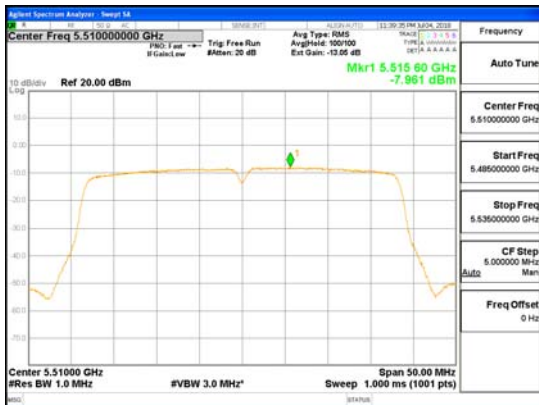
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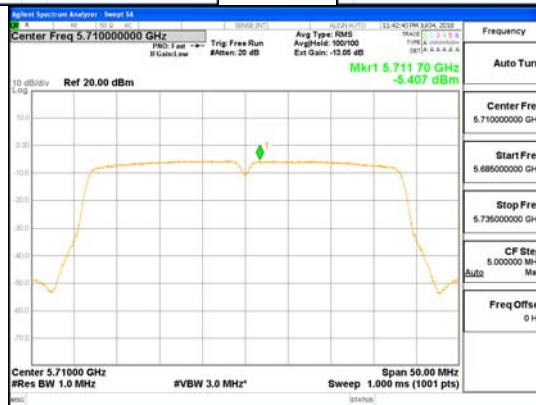
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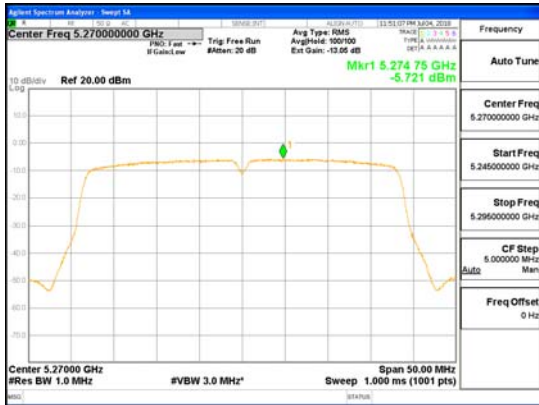
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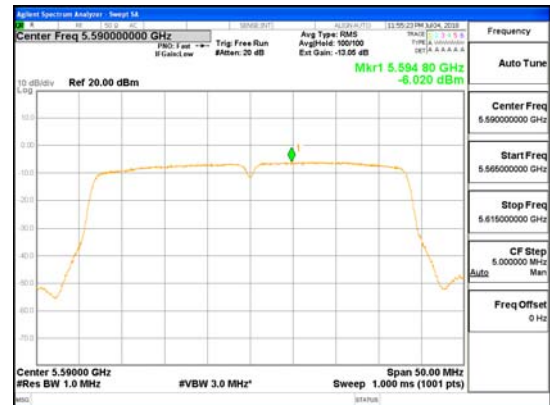


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 Yongin-si, Gyeonggi-do, Korea
 Tel: +82-31-339-9970
 Fax: +82-31-624-9501

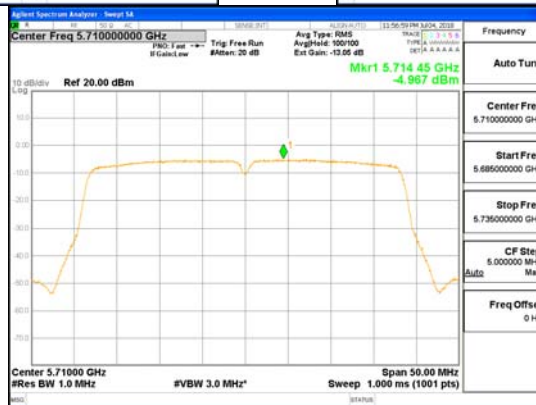
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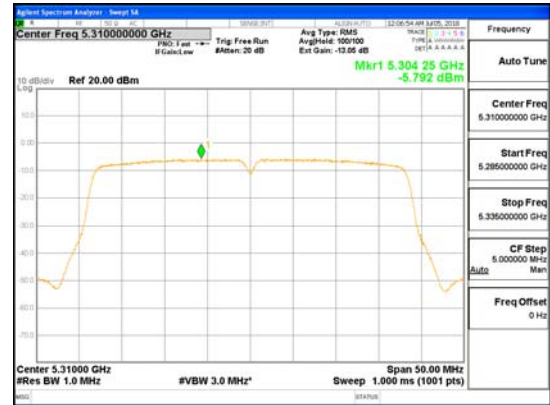
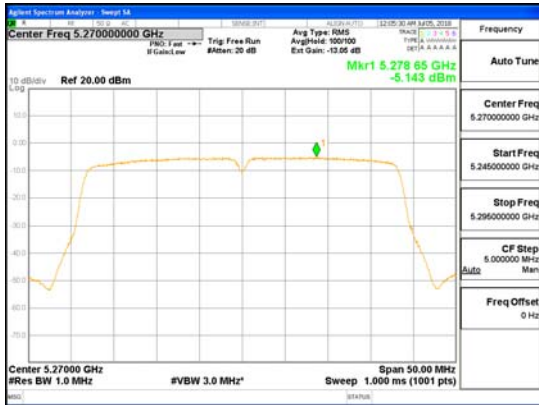
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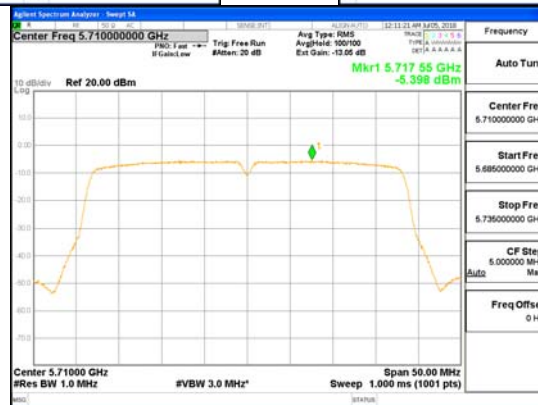
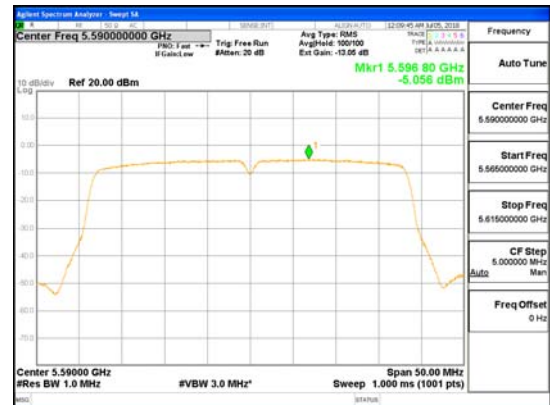
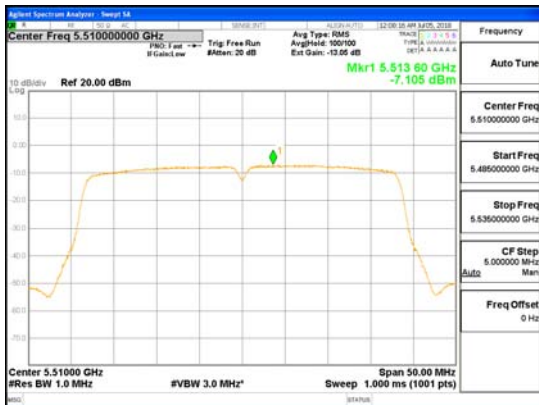


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 (Ho-dong), 113, Yejik-ro, Cheoin-gu,
 Yongin-si, Gyeonggi-do, Korea
 Tel: +82-31-339-9970
 Fax: +82-31-624-9501

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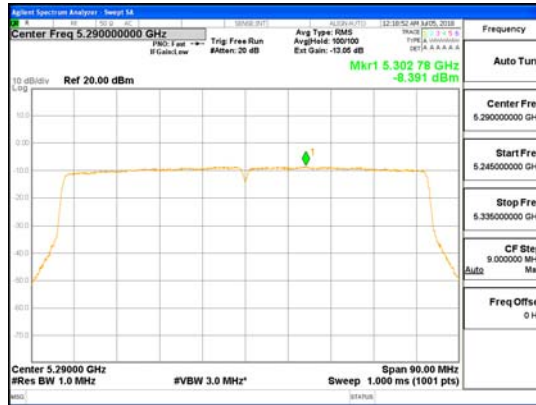


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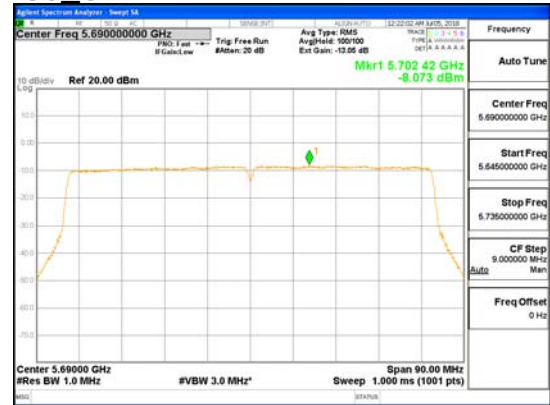
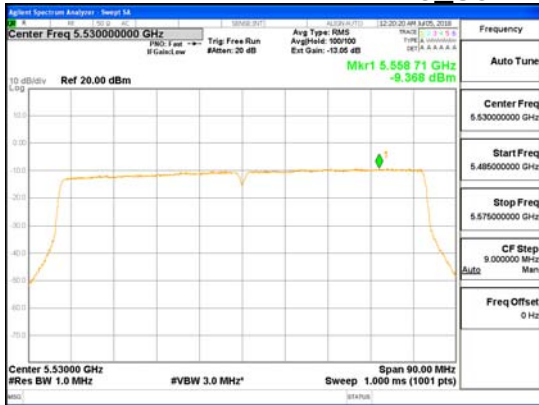


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Yongin-si, Gyeonggi-do, Korea
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Fax: +82-31-624-9501

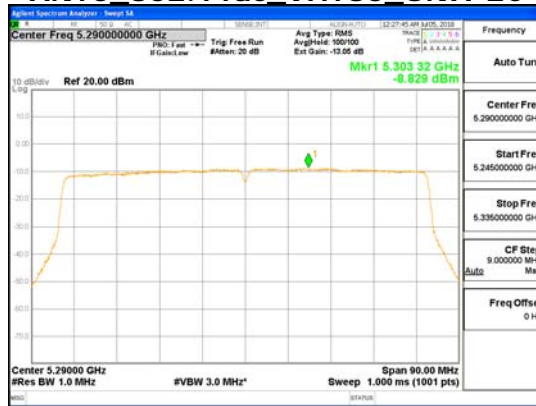
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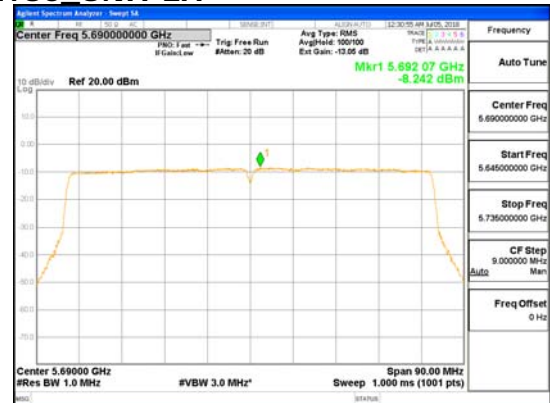
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ANTO_802.11ac_VHT80_UNII_2C



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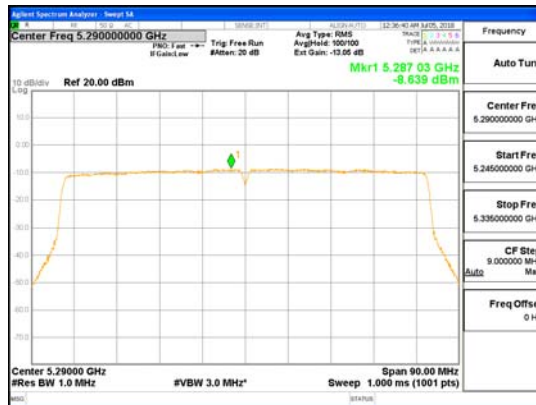


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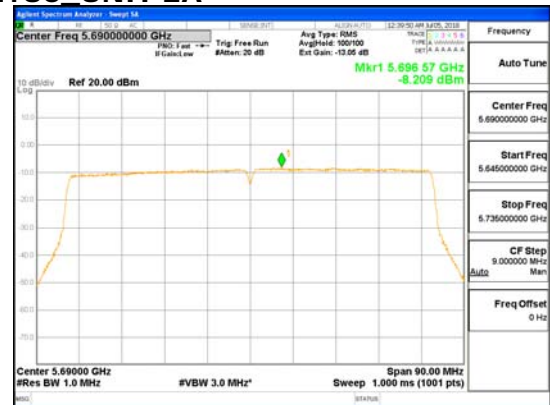


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 Tel: +82-31-339-9970
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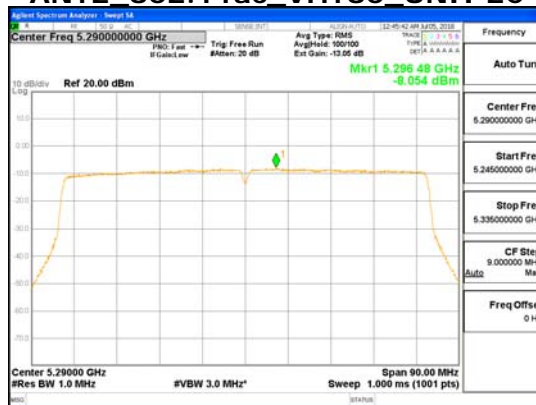
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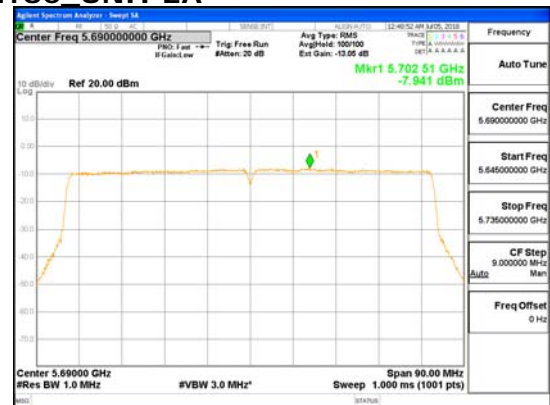
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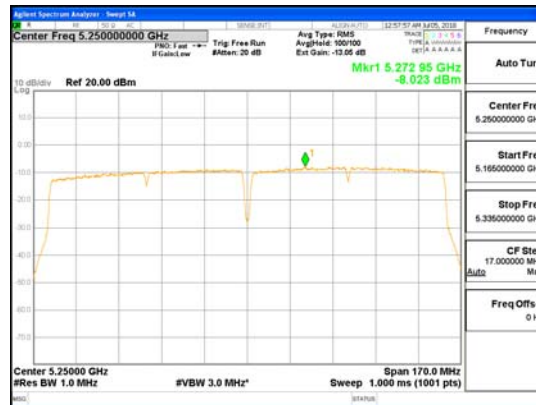
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ANT3_802.11ac_VHT80_UNII_2A



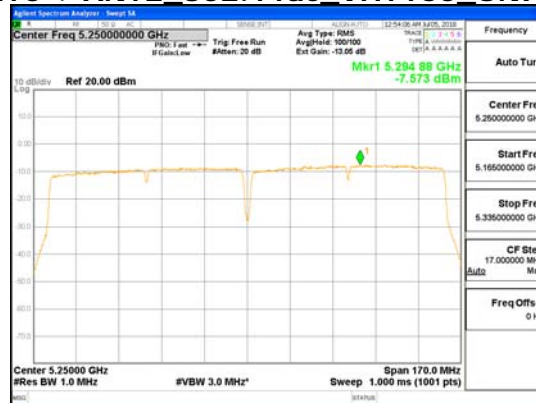
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ANTO + ANT2_802.11ac_VHT160_UNII 2A



ANTO + ANT2_802.11ac_VHT160_UNII 2C



ANT1 + ANT3_802.11ac_VHT160_UNII 2A



ANT1 + ANT3_802.11ac_VHT160_UNII 2C

4.4 Frequency Stability

Test Procedures

The EUT was placed inside of an environmental chamber as the temperature in the chamber was varied between -40°C and +65°C (Declaration by the Manufacturer). The temperature was incremented by 10°C (5°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)	-40	-30	-20	-10	0	10
Frequency	Measured Frequency Error (kHz)					
5 260 MHz	-21.000	14.604	33.808	40.87	36.750	42.870
5 300 MHz	-20.932	14.854	34.234	41.104	36.975	43.130
5 320 MHz	-21.042	14.874	34.328	41.216	37.199	43.279
5 500 MHz	-21.872	15.374	35.364	42.758	38.453	44.716
5 600 MHz	-21.983	15.721	36.089	43.487	39.149	45.464
5 720 MHz	-22.405	16.047	37.035	44.331	39.985	46.420

Temperature (°C)	20	30	40	50	60	65
Frequency	Measured Frequency Error (kHz)					
5 260 MHz	15.114	-7.738	-25.425	-39.696	-46.257	-45.253
5 300 MHz	15.223	-7.767	-25.668	-40.016	-46.581	-45.609
5 320 MHz	15.242	-7.831	-25.766	-40.162	-46.780	-45.773
5 500 MHz	15.744	-8.119	-26.647	-41.544	-48.361	-47.253
5 600 MHz	15.898	-8.300	-27.159	-42.343	-49.230	-48.172
5 720 MHz	16.183	-8.498	-27.783	-43.265	-50.255	-49.139

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.

4.5 Unwanted Emissions

Test Location

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

Test Procedures

- 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)



- Average (duty cycle < 98%)

Frequency Range = 1 GHz ~ 40 GHz

a) RBW = 1 MHz

b) VBW ≥ 3 x 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	0.11
802.11n_HT20	0.00
802.11n_HT40	0.10
802.11ac_VHT20	0.00
802.11ac_VHT40	0.09
802.11ac_VHT80	0.24
802.11ac_VHT160	0.11

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.

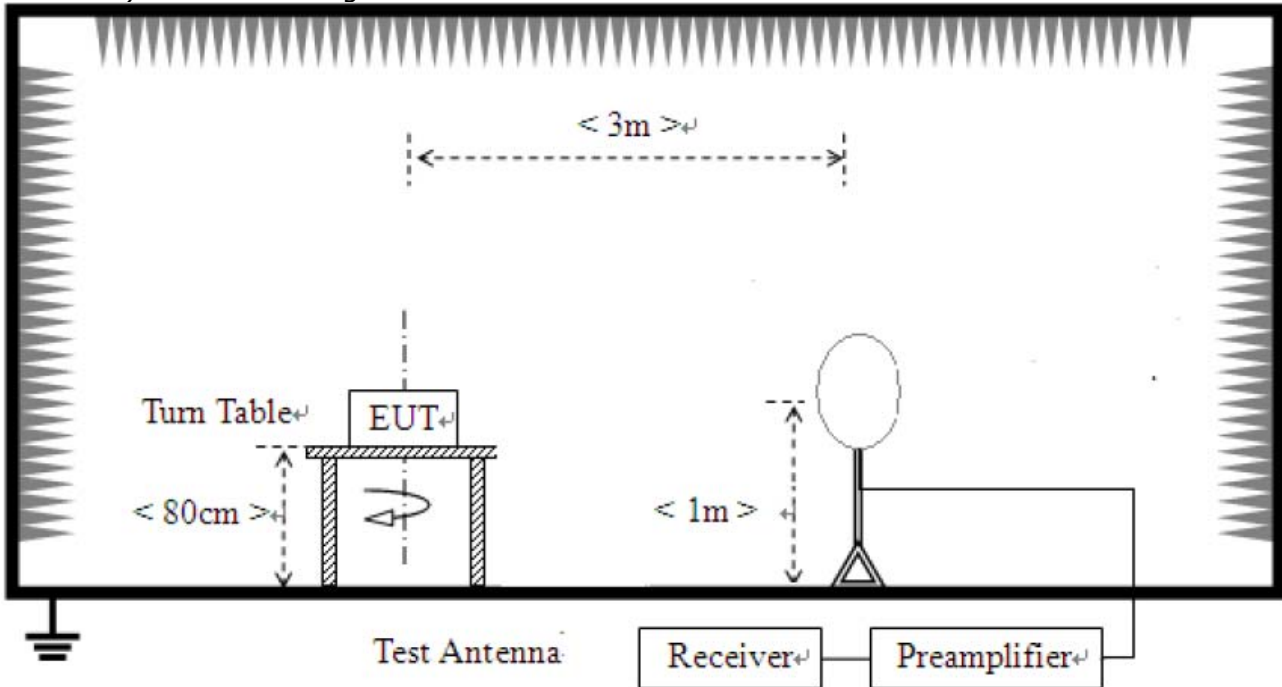
- 15.407, KDB 789033

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

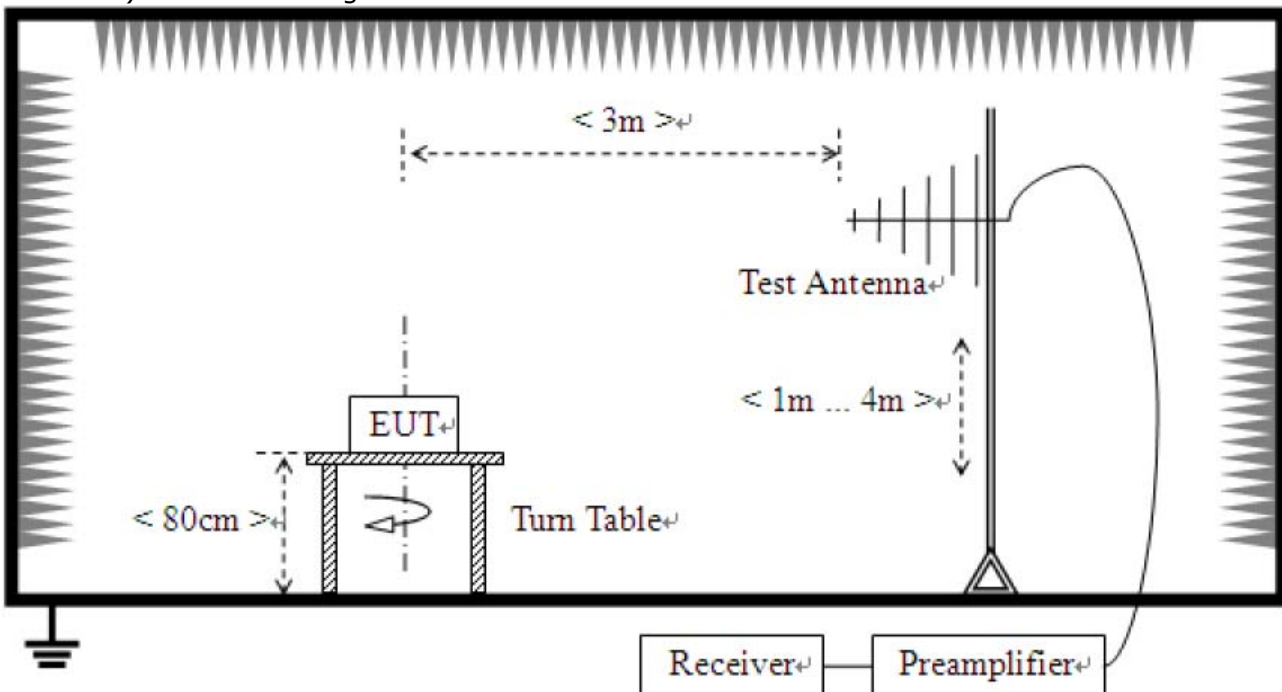
$E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2$, for $d = 3\text{m}$

Test Setup:

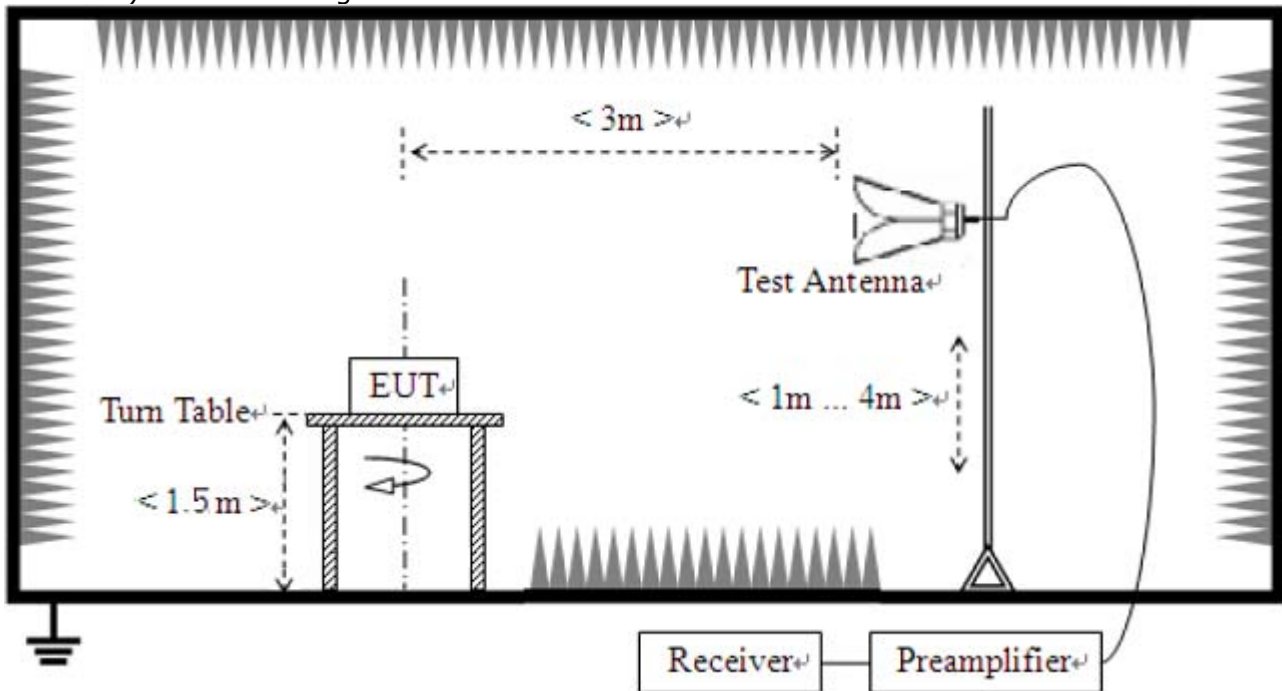
- 1) For field strength of emissions from 9 kHz to 30 MHz



- 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 are determined to be as follows for each mode.

- 802.11a : ANT0 + ANT1 + ANT2 + ANT3 (MIMO)
- 802.11n : ANT0 + ANT1 + ANT2 + ANT3 (MIMO)
- 802.11ac : ANT0 + ANT1 + ANT2 + ANT3 (MIMO)

So the results are only attached worst cases.



CTK Co., Ltd.
(Ho-dong), 113, Yejik-ro, Cheoin-gu,
Yongin-si, Gyeonggi-do, Korea
Tel: +82-31-339-9970
Fax: +82-31-624-9501

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Test Results

1) 9 kHz to 30 MHz

Test mode : Transmitter, Receiver, 802.11a, 802.11n, 802.11ac (Worst case)

The requirements are:

Complies

Frequency (MHz)	Measured Data (dBuV/m)	Margin (dB)	Remark
-	-	-	See note

Note :

The amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB)

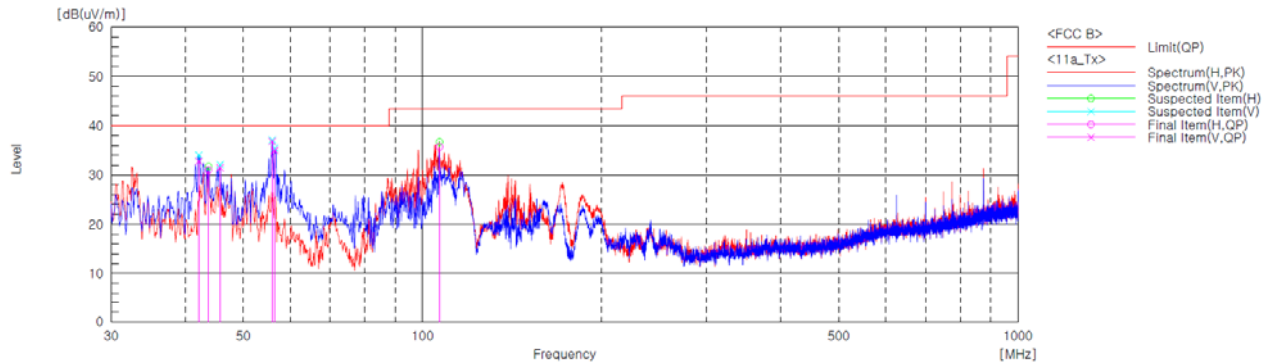
2) 30 MHz to 1 GHz

Test mode : Transmitter, 802.11a(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]	Remark
1	42.084	V	45.5	-12.7	32.8	40.0	7.2	99.8	328.7	
2	43.717	H	43.5	-12.5	31.0	40.0	9.0	99.8	198.9	
3	45.677	V	43.9	-12.4	31.5	40.0	8.5	99.8	92.2	
4	55.911	V	49.8	-13.0	36.8	40.0	3.2	99.8	228.5	
5	56.455	V	48.1	-13.1	35.0	40.0	5.0	99.8	270.8	
6	106.752	H	50.1	-14.4	35.7	43.5	7.8	99.8	317.3	

Remark :

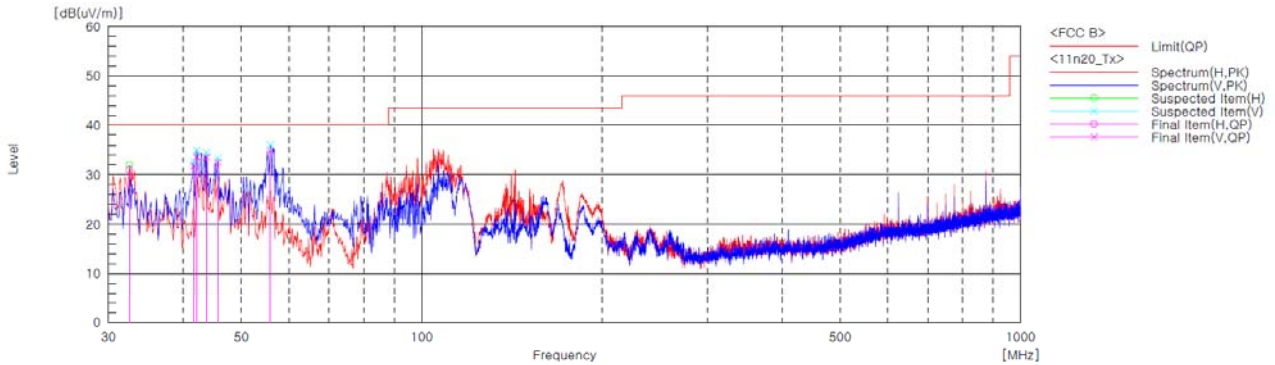
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Transmitter, 802.11n_HT20(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 [dB]	Height [cm]	Angle [deg]	Remark
1	32.504	H	46.1	-15.1	31.0	40.0	9.0	99.8	147.6	
2	41.649	V	44.6	-12.8	31.8	40.0	8.2	99.8	349.3	
3	42.084	V	46.3	-12.7	33.6	40.0	6.4	99.8	14.8	
4	43.717	V	46.1	-12.5	33.6	40.0	6.4	99.8	91.5	
5	45.677	V	44.9	-12.4	32.5	40.0	7.5	99.8	35.6	
6	55.911	V	47.9	-13.0	34.9	40.0	5.1	99.8	202.2	

Remark :

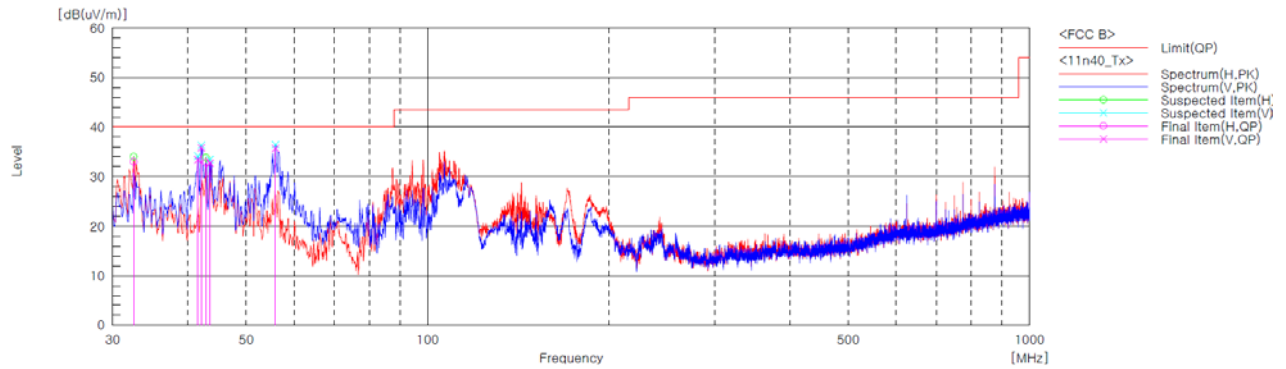
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Transmitter, 802.11n_HT40(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]	Remark
1	32.504	H	48.1	-15.1	33.0	40.0	7.0	99.8	145.0	
2	41.540	V	46.3	-12.9	33.4	40.0	6.6	99.8	328.3	
3	42.084	V	48.5	-12.7	35.8	40.0	4.2	99.8	268.3	
4	42.846	H	45.5	-12.6	32.9	40.0	7.1	99.8	168.8	
5	43.500	V	45.2	-12.5	32.7	40.0	7.3	99.8	90.7	
6	55.911	V	48.7	-13.0	35.7	40.0	4.3	99.8	236.0	

Remark :

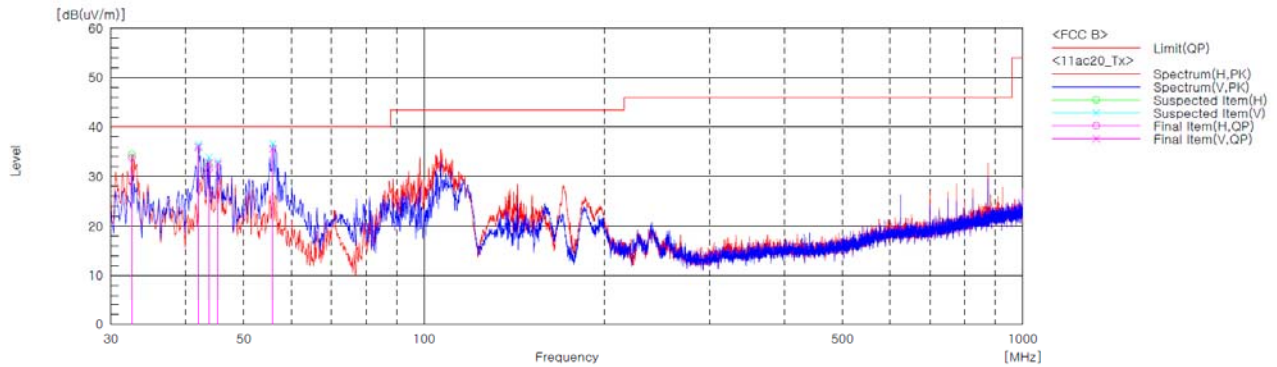
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Transmitter, 802.11ac_VHT20(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]	Remark
1	32.504	H	48.9	-15.1	33.8	40.0	6.2	99.8	144.3	
2	41.975	V	48.8	-12.8	36.0	40.0	4.0	99.8	304.1	
3	43.717	V	45.3	-12.5	32.8	40.0	7.2	99.8	68.4	
4	43.717	H	43.9	-12.5	31.4	40.0	8.6	99.8	198.5	
5	45.241	V	45.0	-12.4	32.6	40.0	7.4	99.8	44.9	
6	55.911	V	48.6	-13.0	35.6	40.0	4.4	99.8	281.1	

Remark :

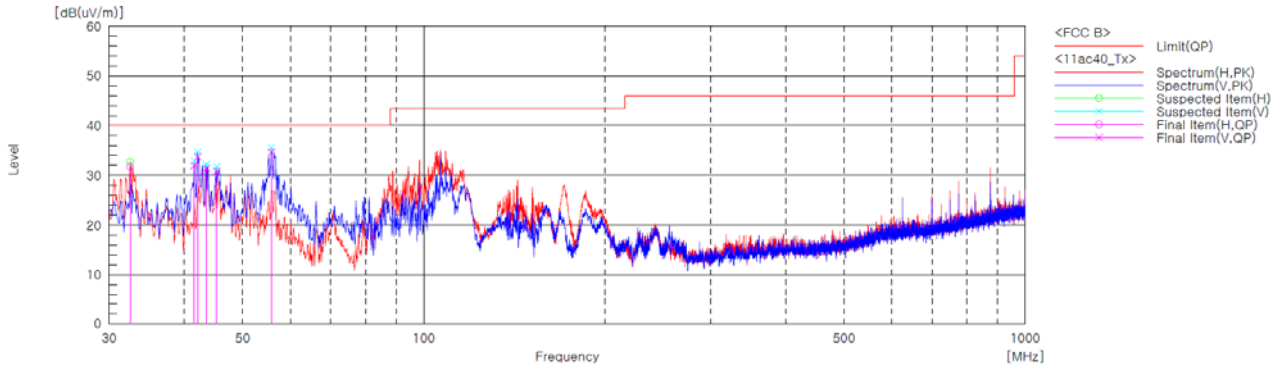
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Transmitter, 802.11ac_VHT40(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]	Remark
1	32.504	H	46.9	-15.1	31.8	40.0	8.2	99.8	133.3	
2	41.540	V	44.9	-12.9	32.0	40.0	8.0	99.8	350.5	
3	42.084	V	46.5	-12.7	33.8	40.0	6.2	99.8	317.7	
4	43.500	V	44.0	-12.5	31.5	40.0	8.5	99.8	107.0	
5	45.241	V	43.3	-12.4	30.9	40.0	9.1	99.8	70.2	
6	55.802	V	47.6	-12.9	34.7	40.0	5.3	99.8	221.0	

Remark :

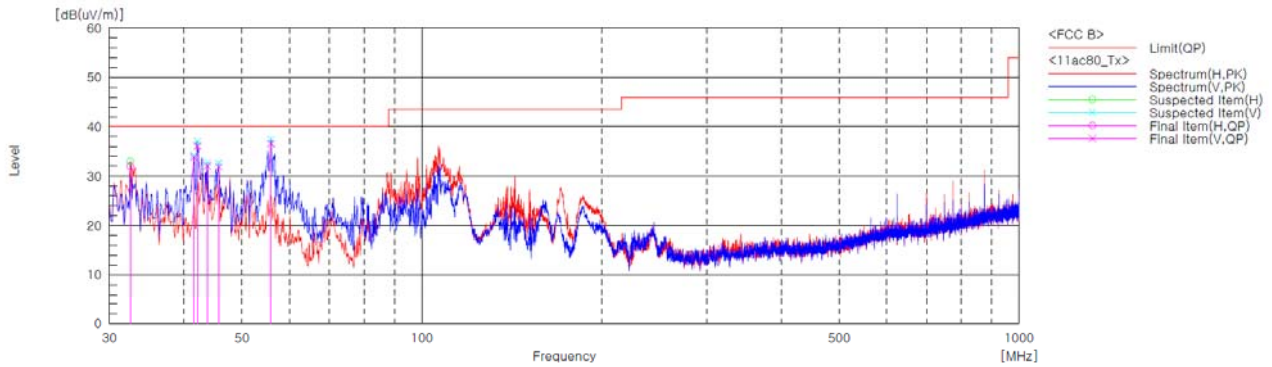
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Transmitter, 802.11ac_VHT80(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]	Remark
1	32.504	H	47.1	-15.1	32.0	40.0	8.0	99.8	127.1	
2	41.540	V	46.7	-12.9	33.8	40.0	6.2	99.8	306.7	
3	42.084	V	48.8	-12.7	36.1	40.0	3.9	99.8	224.0	
4	43.717	V	44.6	-12.5	32.1	40.0	7.9	99.8	79.2	
5	45.677	V	44.3	-12.4	31.9	40.0	8.1	99.8	99.5	
6	55.911	V	49.6	-13.0	36.6	40.0	3.4	99.8	213.1	

Remark :

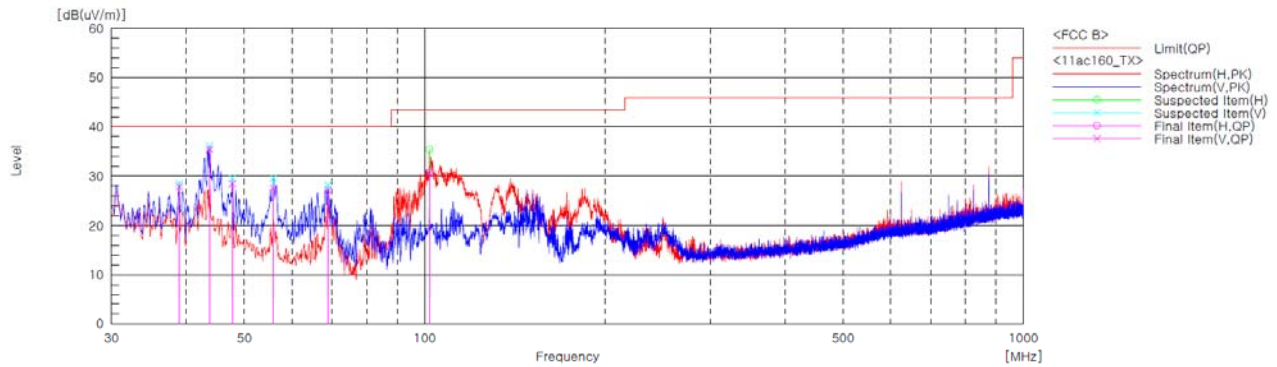
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Transmitter, 802.11ac_VHT160(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]	Remark
1	38.927	V	41.7	-13.8	27.9	40.0	12.1	99.8	219.2	
2	43.717	V	48.0	-12.5	35.5	40.0	4.5	99.8	313.8	
3	47.745	V	40.9	-12.4	28.5	40.0	11.5	99.8	10.2	
4	55.911	V	40.6	-13.0	27.6	40.0	12.4	99.8	229.2	
5	68.975	V	43.4	-16.2	27.2	40.0	12.8	99.8	301.5	
6	101.853	H	44.9	-14.1	30.8	43.5	12.7	99.8	349.8	

Remark :

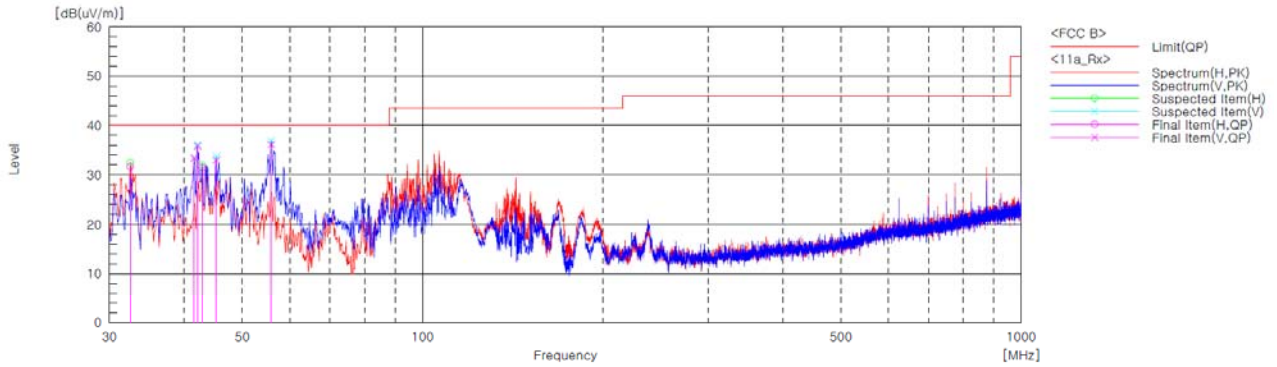
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Receiver, 802.11a(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]	Remark
1	32.504	H	46.8	-15.1	31.7	40.0	8.3	99.8	156.9	
2	41.540	V	46.3	-12.9	33.4	40.0	6.6	99.8	337.4	
3	42.084	V	48.5	-12.7	35.8	40.0	4.2	99.8	317.2	
4	42.846	H	44.1	-12.6	31.5	40.0	8.5	99.8	180.6	
5	45.241	V	45.4	-12.4	33.0	40.0	7.0	99.8	67.3	
6	55.911	V	49.2	-13.0	36.2	40.0	3.8	99.8	224.9	

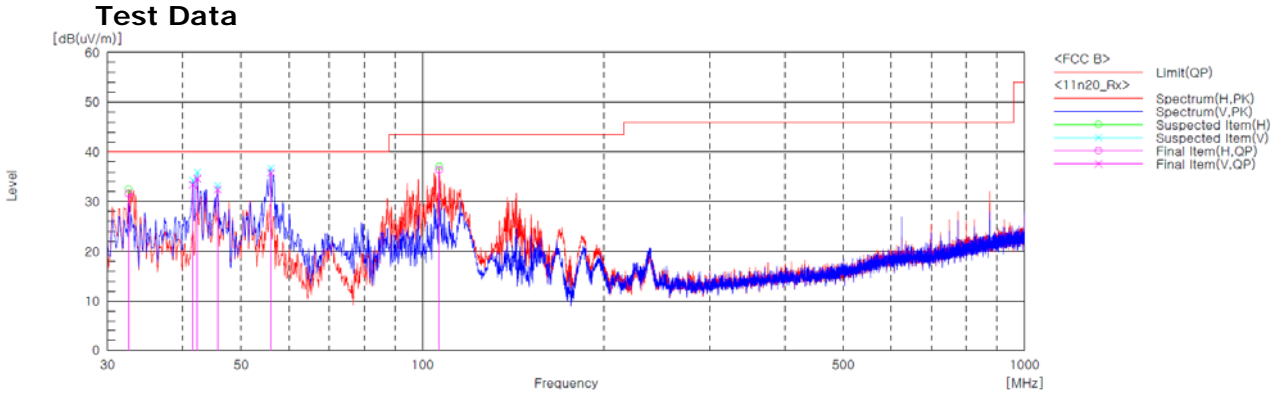
Remark :

1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Receiver, 802.11n_HT20(Worst Case)

The requirements are:

Complies



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]	Remark
1	32.504	H	46.7	-15.1	31.6	40.0	8.4	99.8	309.4	
2	41.540	V	46.3	-12.9	33.4	40.0	6.6	99.8	223.4	
3	42.302	V	47.3	-12.7	34.6	40.0	5.4	99.8	223.4	
4	45.677	V	44.8	-12.4	32.4	40.0	7.6	99.8	83.8	
5	56.019	V	48.8	-13.0	35.8	40.0	4.2	99.8	223.4	
6	106.643	H	50.8	-14.4	36.4	43.5	7.1	99.8	309.4	

Remark :

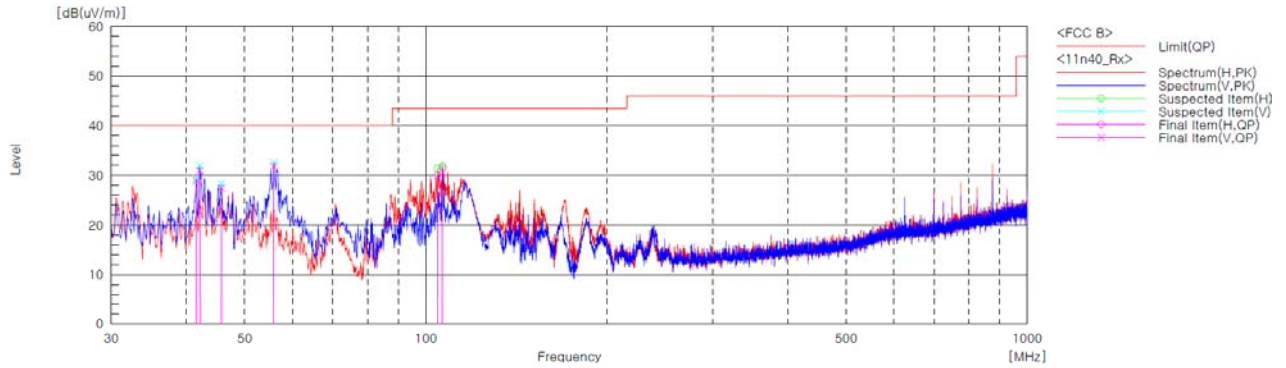
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Receiver, 802.11n_HT40(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]	Remark
1	41.540	V	41.8	-12.9	28.9	40.0	11.1	99.8	283.6	
2	42.084	V	43.7	-12.7	31.0	40.0	9.0	99.8	250.9	
3	45.677	V	39.9	-12.4	27.5	40.0	12.5	99.8	65.1	
4	55.911	V	44.9	-13.0	31.9	40.0	8.1	99.8	203.5	
5	104.574	H	44.2	-14.2	30.0	43.5	13.5	99.8	325.1	
6	106.643	H	45.9	-14.4	31.5	43.5	12.0	99.8	315.1	

Remark :

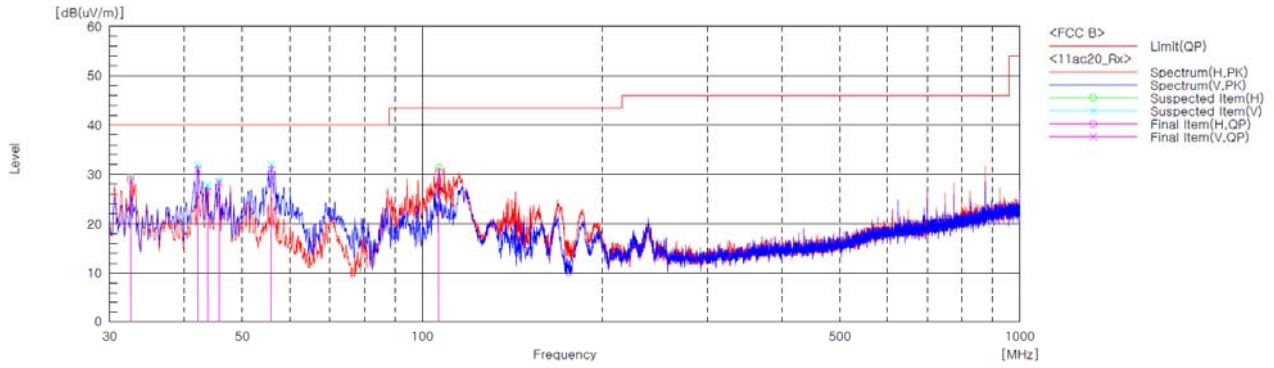
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Receiver, 802.11ac_VHT20(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]	Remark
1	32.504	H	44.1	-15.1	29.0	40.0	11.0	99.8	126.0	
2	42.084	V	43.8	-12.7	31.1	40.0	8.9	99.8	271.7	
3	43.717	V	39.0	-12.5	26.5	40.0	13.5	99.8	87.1	
4	45.677	V	40.7	-12.4	28.3	40.0	11.7	99.8	87.1	
5	55.911	V	44.0	-13.0	31.0	40.0	9.0	99.8	284.1	
6	106.643	H	44.9	-14.4	30.5	43.5	13.0	99.8	291.9	

Remark :

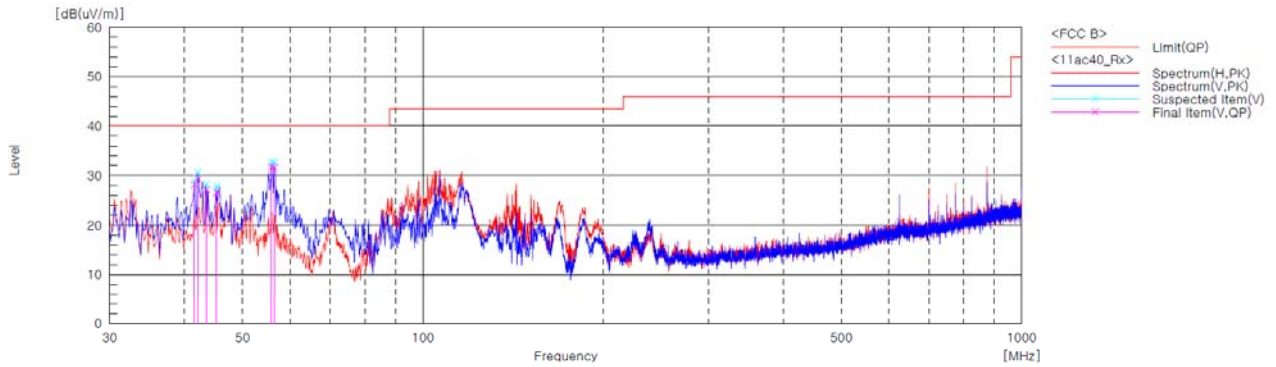
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Receiver, 802.11ac_VHT40(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]	Remark
1	41.540	V	41.1	-12.9	28.2	40.0	11.8	99.8	285.6	
2	42.084	V	42.1	-12.7	29.4	40.0	10.6	99.8	349.7	
3	43.500	V	39.7	-12.5	27.2	40.0	12.8	99.8	81.6	
4	45.241	V	39.0	-12.4	26.6	40.0	13.4	99.8	69.2	
5	55.911	V	44.8	-13.0	31.8	40.0	8.2	99.8	205.1	
6	56.455	V	44.8	-13.1	31.7	40.0	8.3	99.8	238.6	

Remark :

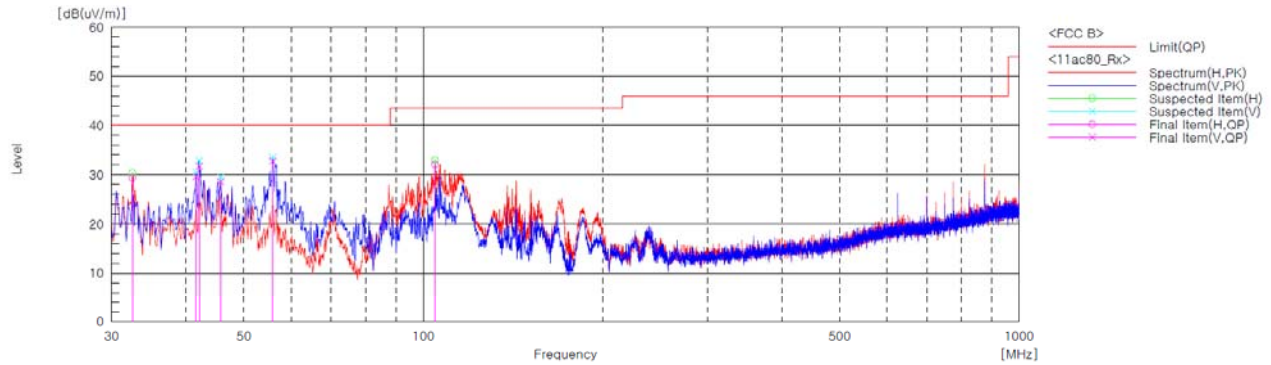
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Receiver, 802.11ac_VHT80(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]	Remark
1	32,504	H	44,5	-15,1	29,4	40,0	10,6	99,8	149,9	
2	41,540	V	42,5	-12,9	29,6	40,0	10,4	99,8	327,3	
3	42,084	V	44,5	-12,7	31,8	40,0	8,2	99,8	278,3	
4	45,677	V	41,0	-12,4	28,6	40,0	11,4	99,8	96,0	
5	55,911	V	45,8	-13,0	32,8	40,0	7,2	99,8	255,2	
6	104,683	H	46,3	-14,2	32,1	43,5	11,4	99,8	341,4	

Remark :

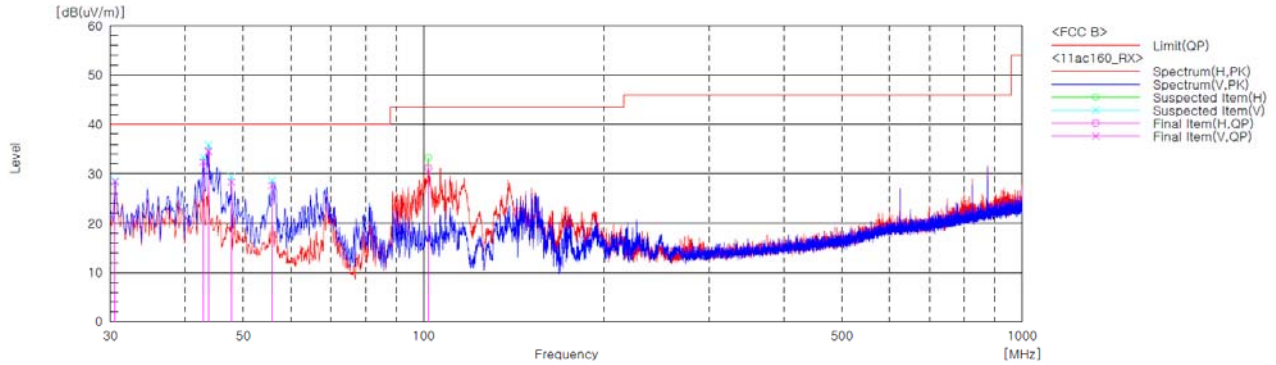
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain

Test mode : Receiver, 802.11ac_VHT160(Worst Case)

The requirements are:

Complies

Test Data



Final Result

No.	Frequency [MHz]	(P)	Reading OP [dB(uV)]	c.f [dB(1/m)]	Result OP [dB(uV/m)]	Limit OP [dB(uV/m)]	Margin OP [dB]	Height [cm]	Angle [deg]	Remark
1	30.544	V	43.6	-15.2	28.4	40.0	11.6	99.8	250.0	
2	42.846	V	45.0	-12.6	32.4	40.0	7.6	99.8	359.4	
3	43.717	V	47.1	-12.5	34.6	40.0	5.4	99.8	307.5	
4	47.745	V	40.8	-12.4	28.4	40.0	11.6	99.8	18.9	
5	55.802	V	40.6	-12.9	27.7	40.0	12.3	99.8	205.1	
6	101.853	H	45.3	-14.1	31.2	43.5	12.3	99.8	349.4	

Remark :

1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.
2. Result = Reading + c.f(Correction factor)
3. Correction factor = Antenna factor + Cable loss + 6 dB attenuator - Amp Gain



3) above 1 GHz

Test mode : Transmitter, 802.11a

The requirements are:

Complies

Ch.52(5 260 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Ch.60(5 300 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Ch.64(5 320 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
5 376.20	H	54.00	74.00	41.81	52.00	12.19	22.00
5 364.20	V	54.00	74.00	42.61	54.20	11.39	19.80

Ch.100(5 500 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
5 443.46	H	54.00	74.00	41.51	52.30	12.49	21.70
5 455.05	V	54.00	74.00	42.31	52.80	11.69	21.20

Ch.120(5 600 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Ch.144(5 720 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Remarks

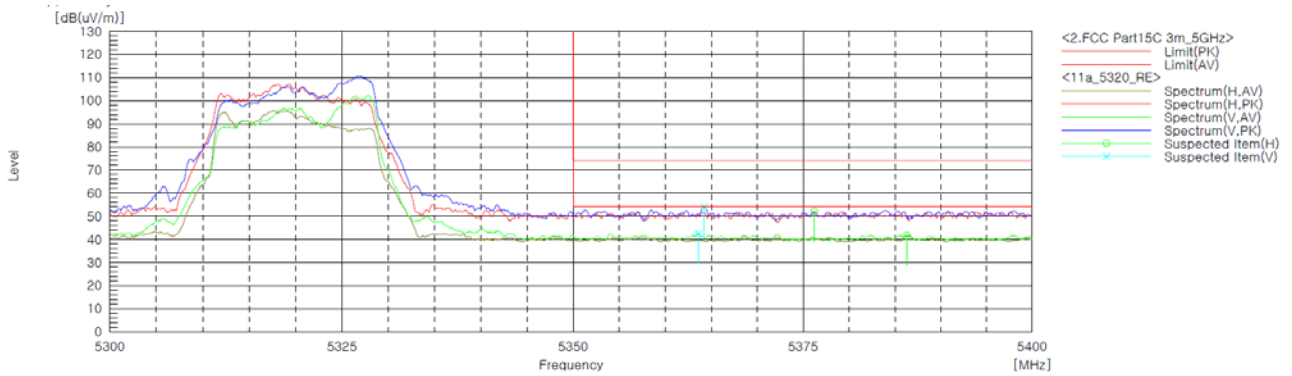
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.



CTK Co., Ltd.
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,
 Yongin-si, Gyeonggi-do, Korea
 Tel: +82-31-339-9970
 Fax: +82-31-624-9501

Report No. :
 CTK-2018-02348
 Page (127) / (151) Pages

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



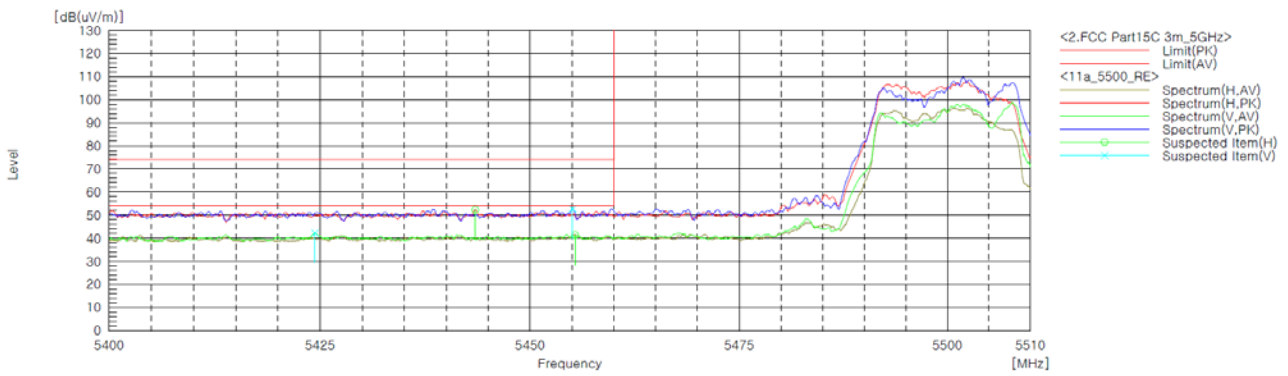
Radiated Restricted Lower Band Edge Plot



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 (Ho-dong), 113, Yejik-ro, Cheoin-gu,
 Yongin-si, Gyeonggi-do, Korea
 Tel: +82-31-339-9970
 Fax: +82-31-624-9501

Report No. :
 CTK-2018-02348
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Worst Case Mode :	802.11a
Worst Case Transfer Rate :	6 Mbps
Distance of Measurements :	3 Meters
Operating Frequency :	5 500 MHz
Channel :	100



Radiated Restricted Lower Band Edge Plot



Test mode : Transmitter, 802.11n_HT20

The requirements are:

Complies

Ch.52(5 260 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Ch.60(5 300 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Ch.64(5 320 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
5 382.99	H	54.00	74.00	42.20	52.80	11.80	21.20
5 353.33	V	54.00	74.00	43.70	54.20	10.30	19.80

Ch.100(5 500 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
5 451.01	H	54.00	74.00	42.20	53.50	11.80	20.50
5 451.35	V	54.00	74.00	42.70	53.30	11.30	20.70

Ch.120(5 600 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Ch.144(5 720 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Remarks

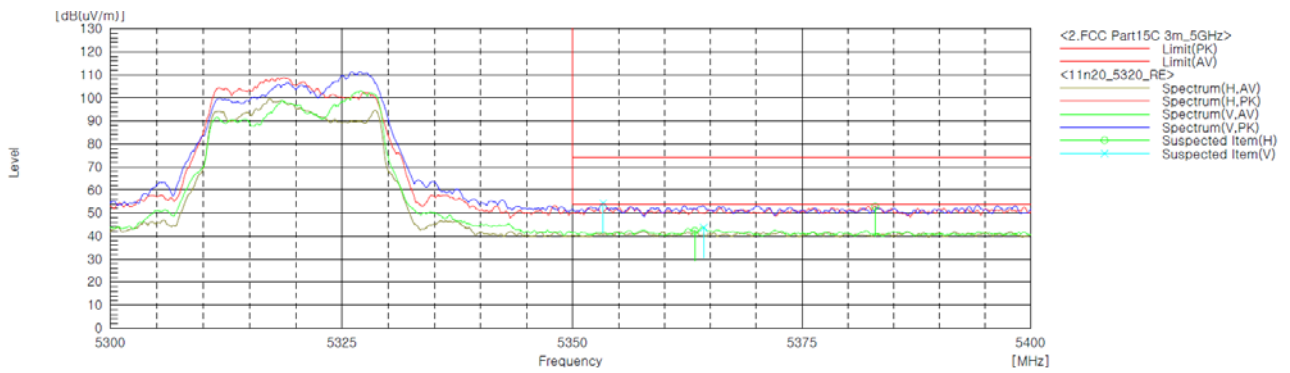
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.



CTK Co., Ltd.
(Ho-dong), 113, Yejik-ro, Cheoin-gu,
Yongin-si, Gyeonggi-do, Korea
Tel: +82-31-339-9970
Fax: +82-31-624-9501

Report No. :
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Worst Case Mode :	802.11n_HT20
Worst Case Transfer Rate :	MCS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 320 MHz
Channel :	64



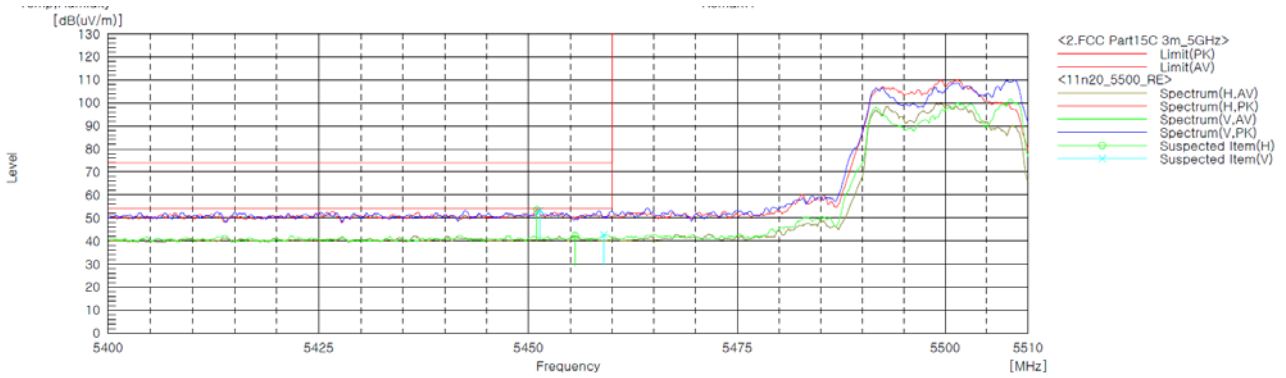
Radiated Restricted Lower Band Edge Plot



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(Ho-dong), 113, Yejik-ro, Cheoin-gu,
Yongin-si, Gyeonggi-do, Korea
Tel: +82-31-339-9970
Fax: +82-31-624-9501

Report No. :
CTK-2018-02348
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Worst Case Mode :	802.11n_HT20
Worst Case Transfer Rate :	MCS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 500 MHz
Channel :	100



Radiated Restricted Lower Band Edge Plot

Test mode : Transmitter, 802.11ac_VHT20

The requirements are:

Complies

Ch.52(5 260 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Ch.60(5 300 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
--------------------	-----	-------------------------	-------------------------	--------------------------	--------------------------	----------------------	----------------------

No emissions were detected at a level greater than 20dB below limit.

Ch.64(5 320 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
5 392.89	H	54.00	74.00	43.10	53.30	10.90	20.70
5 364.83	V	54.00	74.00	43.30	54.40	10.70	19.60

Ch.100(5 500 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
5 423.01	H	54.00	74.00	42.70	53.00	11.30	21.00
5 443.46	V	54.00	74.00	42.80	53.40	11.20	20.60

Ch.120(5 600 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Ch.144(5 720 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Remarks

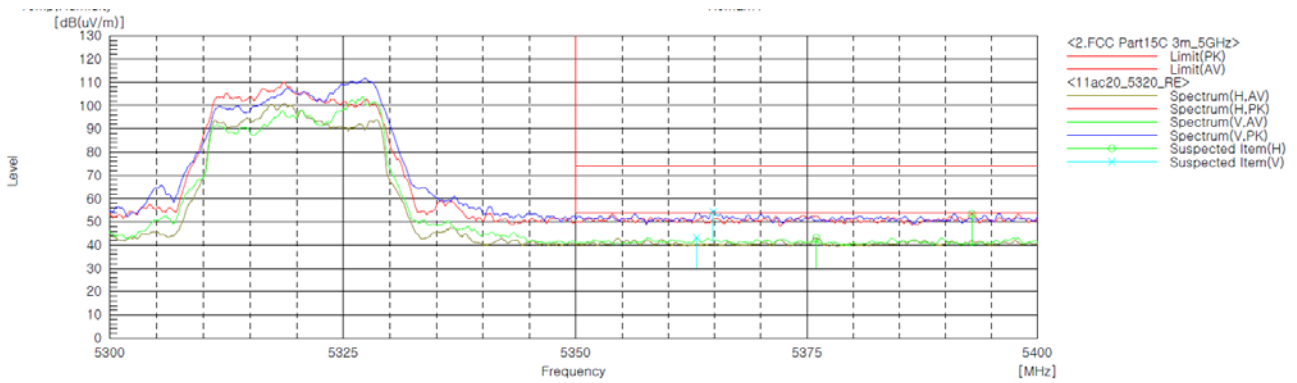
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.



CTK Co., Ltd.
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,
 Yongin-si, Gyeonggi-do, Korea
 Tel: +82-31-339-9970
 Fax: +82-31-624-9501

Report No. :
 CTK-2018-02348
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Worst Case Mode :	802.11ac_VHT20
Worst Case Transfer Rate :	MNSS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 320 MHz
Channel :	64



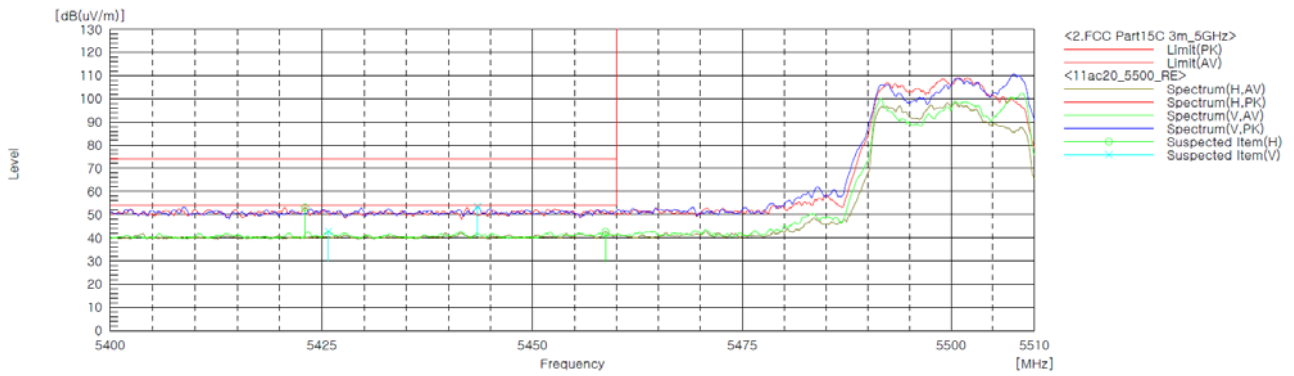
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 (Ho-dong), 113, Yejik-ro, Cheoin-gu,
 Yongin-si, Gyeonggi-do, Korea
 Tel: +82-31-339-9970
 Fax: +82-31-624-9501

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Worst Case Mode :	802.11ac_VHT20
Worst Case Transfer Rate :	MNSS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 500 MHz
Channel :	100



Radiated Restricted Lower Band Edge Plot



Test mode : Transmitter, 802.11n_HT40

The requirements are:

Complies

Ch.54(5 270 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Ch.62(5 310 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
5 351.29	H	54.00	74.00	43.70	53.50	10.30	20.50
5 350.57	V	54.00	74.00	46.10	56.80	7.90	17.20

Ch.102(5 510 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
5 439.52	H	54.00	74.00	42.20	53.40	11.80	20.60
5 439.57	V	54.00	74.00	43.30	54.00	10.70	20.00

Ch.118(5 590 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Ch.142(5 710 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Remarks

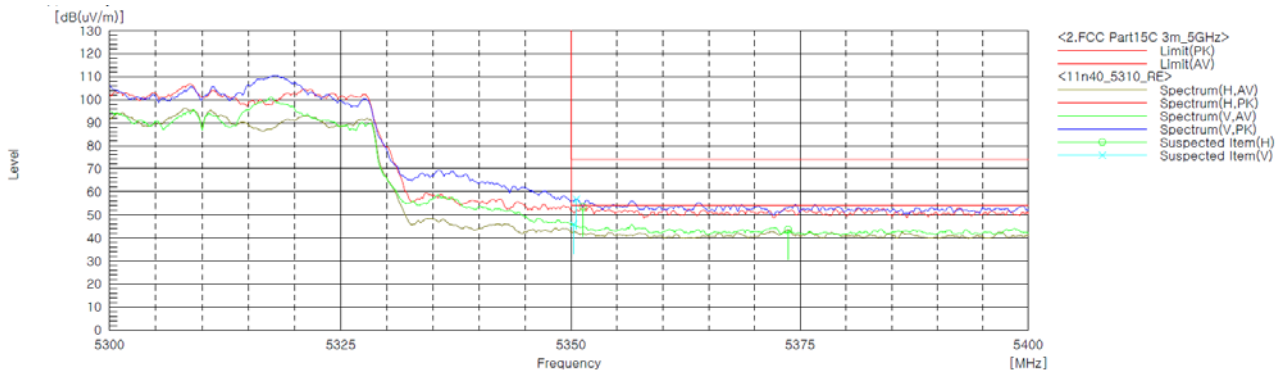
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.



CTK Co., Ltd.
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,
 Yongin-si, Gyeonggi-do, Korea
 Tel: +82-31-339-9970
 Fax: +82-31-624-9501

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Worst Case Mode :	802.11n_HT40
Worst Case Transfer Rate :	MCS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 310 MHz
Channel :	62



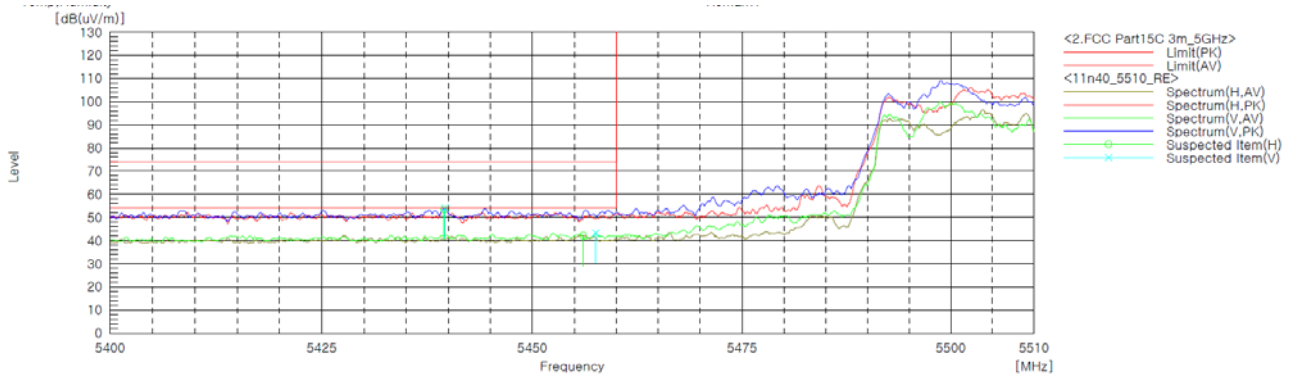
Radiated Restricted Lower Band Edge Plot



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Yongin-si, Gyeonggi-do, Korea
Tel: +82-31-339-9970
Fax: +82-31-624-9501

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Worst Case Mode :	802.11n_HT40
Worst Case Transfer Rate :	MCS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 510 MHz
Channel :	102



Radiated Restricted Lower Band Edge Plot



Test mode : Transmitter, 802.11ac_VHT40

The requirements are:

Complies

Ch.54(5 270 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
-----------------	-----	-------------------	-------------------	--------------------	--------------------	----------------	----------------

No emissions were detected at a level greater than 20dB below limit.

Ch.62(5 310 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
5 354.00	H	54.00	74.00	43.59	53.50	10.41	20.50
5 350.00	V	54.00	74.00	46.29	57.60	7.71	16.40

Ch.102(5 510 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
5 419.63	H	54.00	74.00	41.99	52.50	12.01	21.50
5 426.22	V	54.00	74.00	43.29	53.60	10.71	20.40

Ch.118(5 590 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Ch.142(5 710 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Remarks

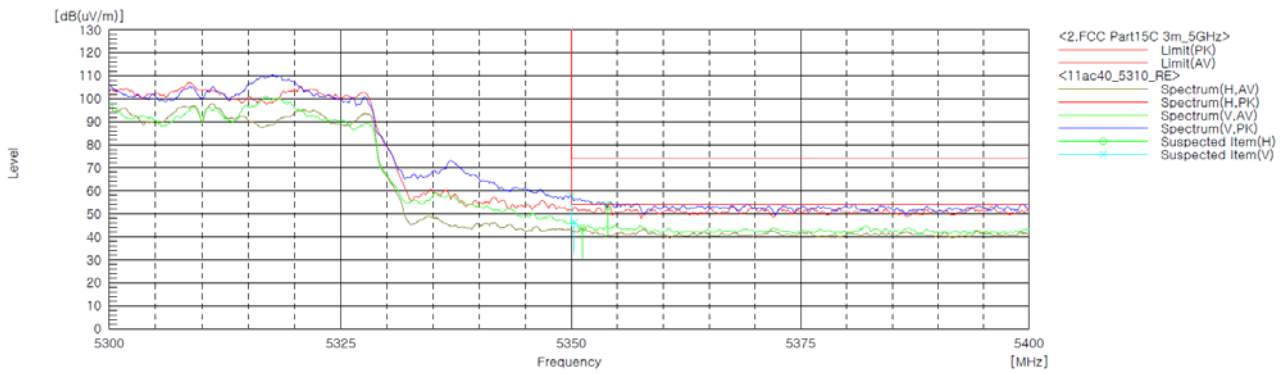
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.



CTK Co., Ltd.
(Ho-dong), 113, Yejik-ro, Cheoin-gu,
Yongin-si, Gyeonggi-do, Korea
Tel: +82-31-339-9970
Fax: +82-31-624-9501

Report No. :
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Worst Case Mode :	802.11ac_VHT40
Worst Case Transfer Rate :	MNSS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 310 MHz
Channel :	62



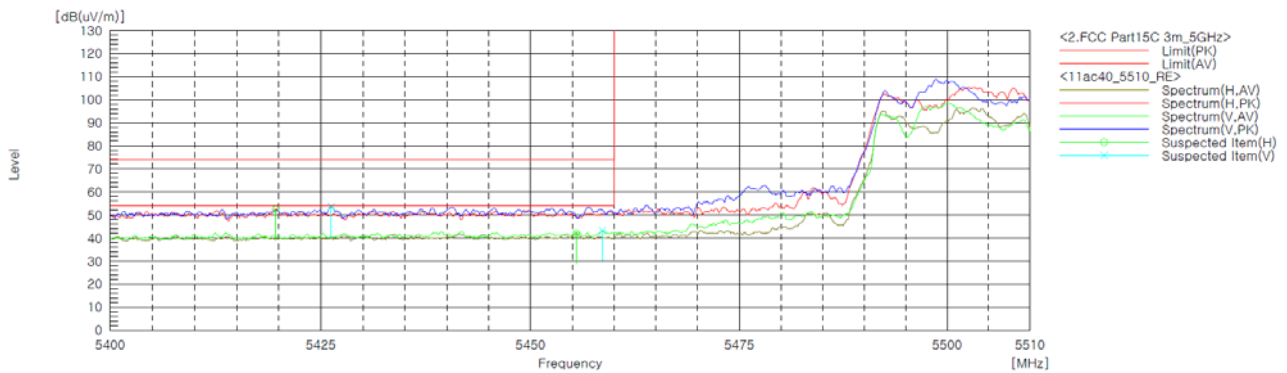
Radiated Restricted Lower Band Edge Plot



CTK Co., Ltd.
(Ho-dong), 113, Yejik-ro, Cheoin-gu,
Yongin-si, Gyeonggi-do, Korea
Tel: +82-31-339-9970
Fax: +82-31-624-9501

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Worst Case Mode :	802.11ac_VHT40
Worst Case Transfer Rate :	MNSS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 510 MHz
Channel :	102



Radiated Restricted Lower Band Edge Plot



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(Ho-dong), 113, Yejik-ro, Cheoin-gu,
Yongin-si, Gyeonggi-do, Korea
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Test mode : Transmitter, 802.11ac_VHT80

The requirements are:

Complies

Ch.58(5 290 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
5 362.11	H	54.00	74.00	45.54	57.10	8.46	16.90
5 354.34	V	54.00	74.00	51.94	64.60	2.06	9.40

Ch.106(5 530 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
5 419.15	H	54.00	74.00	44.04	53.90	9.96	20.10
5 456.41	V	54.00	74.00	47.14	56.80	6.86	17.20

Ch.138(5 690 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
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No emissions were detected at a level greater than 20dB below limit.

Remarks

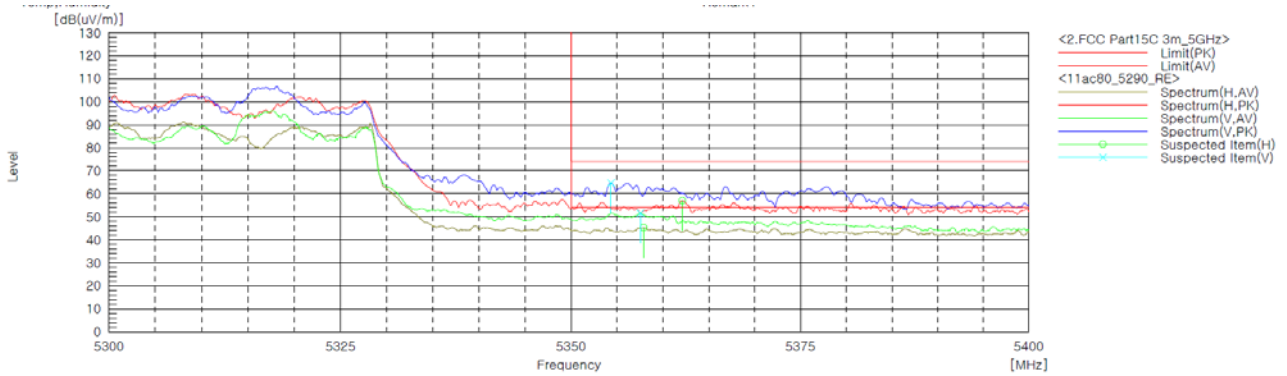
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.



CTK Co., Ltd.
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,
 Yongin-si, Gyeonggi-do, Korea
 Tel: +82-31-339-9970
 Fax: +82-31-624-9501

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 CTK-2018-02348
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Worst Case Mode :	802.11ac_VHT80
Worst Case Transfer Rate :	MNSS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 290 MHz
Channel :	58



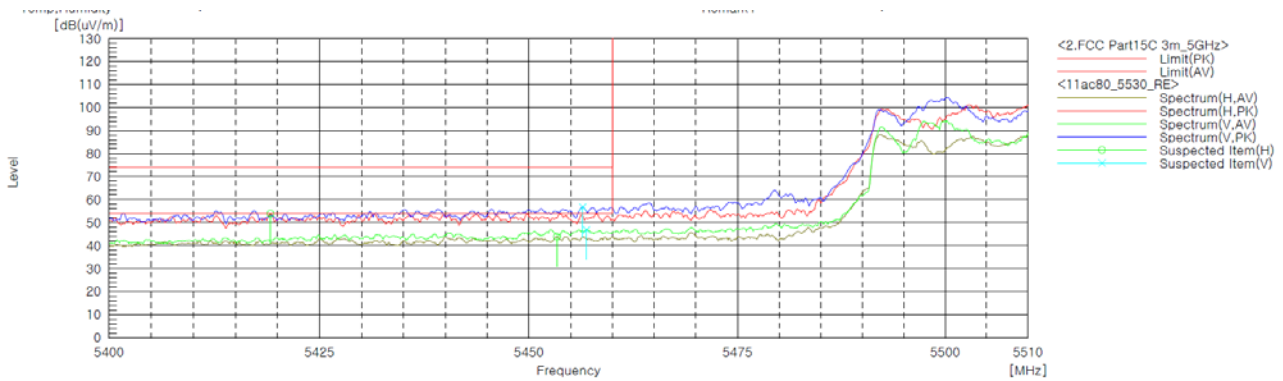
Radiated Restricted Lower Band Edge Plot



CTK Co., Ltd.
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,
 Yongin-si, Gyeonggi-do, Korea
 Tel: +82-31-339-9970
 Fax: +82-31-624-9501

Report No. :
 CTK-2018-02348
 Page (143) / (151) Pages

Worst Case Mode :	802.11ac_VHT80
Worst Case Transfer Rate :	MNSS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 530 MHz
Channel :	106



Radiated Restricted Lower Band Edge Plot



CTK Co., Ltd.
(Ho-dong), 113, Yejik-ro, Cheoin-gu,
Yongin-si, Gyeonggi-do, Korea
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Test mode : Transmitter, 802.11ac_VH160

The requirements are:

Complies

Ch.50(5 250 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
5 134.94	H	54.00	74.00	45.61	57.90	8.39	16.10
5 147.60	V	54.00	74.00	48.31	65.90	5.69	8.10
5 355.62	H	54.00	74.00	45.71	56.90	8.29	17.10
5 376.06	V	54.00	74.00	52.31	65.00	1.69	9.00

Ch.114(5 570 MHz)

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
5 453.98	H	54.00	74.00	45.81	60.60	8.19	13.40
5 458.66	V	54.00	74.00	50.91	63.60	3.09	10.40

Remarks

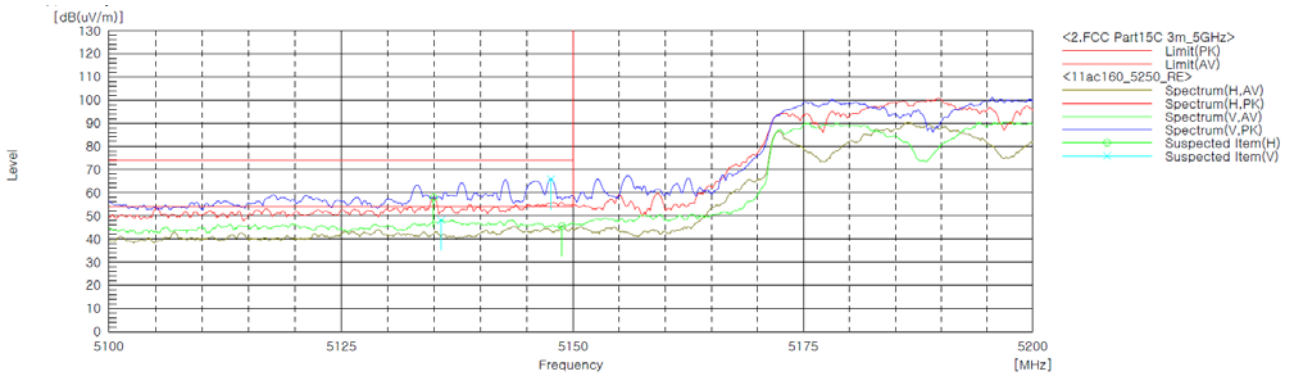
1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.



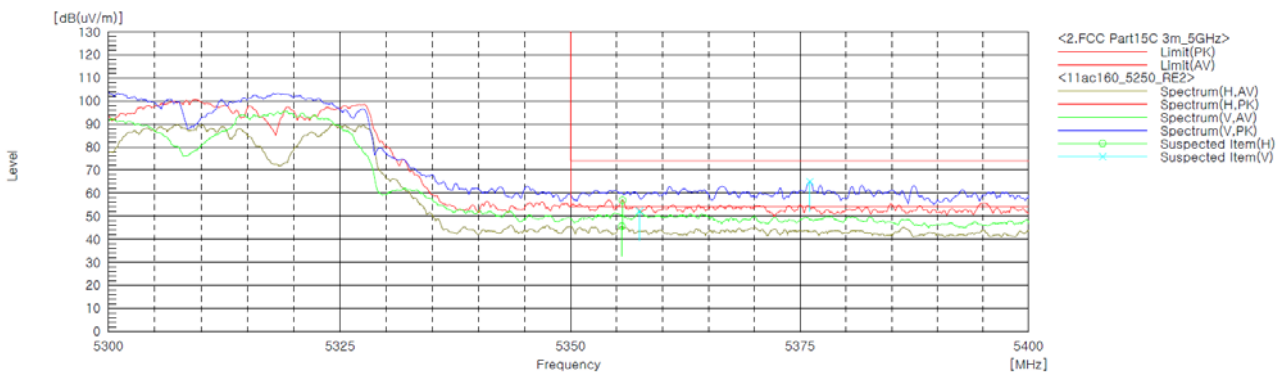
CTK Co., Ltd.
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,
 Yongin-si, Gyeonggi-do, Korea
 Tel: +82-31-339-9970
 Fax: +82-31-624-9501

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Worst Case Mode :	802.11ac_VHT160
Worst Case Transfer Rate :	MNSS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 250 MHz
Channel :	50



Radiated Restricted Lower Band Edge Plot



Radiated Restricted Lower Band Edge Plot 2



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(Ho-dong), 113, Yejik-ro, Cheoin-gu,
Yongin-si, Gyeonggi-do, Korea
Tel: +82-31-339-9970
Fax: +82-31-624-9501

Report No. :
CTK-2018-02348
Page (146) / (151) Pages

Worst Case Mode :	802.11ac_VHT160
Worst Case Transfer Rate :	MNSS 0
Distance of Measurements :	3 Meters
Operating Frequency :	5 570 MHz
Channel :	114



Radiated Restricted Lower Band Edge Plot



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Report No. :
CTK-2018-02348
Page (147) / (151) Pages

Test mode : Receiver

The requirements are:

Complies

Frequency [MHz]	(P)	Limit AV [dBuV/m]	Limit PK [dBuV/m]	Result AV [dBuV/m]	Result PK [dBuV/m]	Margin AV [dB]	Margin PK [dB]
--------------------	-----	-------------------------	-------------------------	--------------------------	--------------------------	----------------------	----------------------

No emissions were detected at a level greater than 20dB below limit.

Remarks

1. The EUT was tested in three orientations in order to determine that "Z axis" was the worst case.



4.6 AC Conducted Emissions

Test Location

Shielded Room

Frequency Range of Measurement

150 kHz to 30 MHz

Instrument Settings

IF Band Width: 9 kHz

Test Procedures

The EUT was placed on a non-metallic table 0.8m above the metallic, grounded floor and 0.4m from the reference ground plane wall. The distance to other metallic surfaces was at least 0.8m.

Amplitude measurements were performed with a quasi-peak detector and an average detector.

Limit

- 15.207(a)

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56*	56 to 46*
0.5 ~ 5	56	46
5 ~ 30	60	50

* Decreases with the logarithm of the frequency.

Test Results

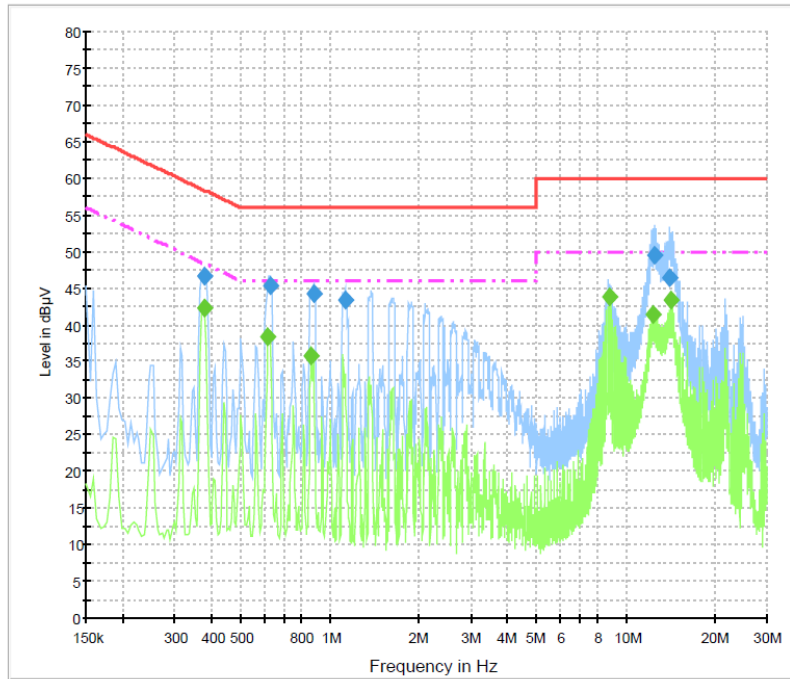
The requirements are:

Complies

Test Data

[LINE]

Class B_L1



Final Result 1

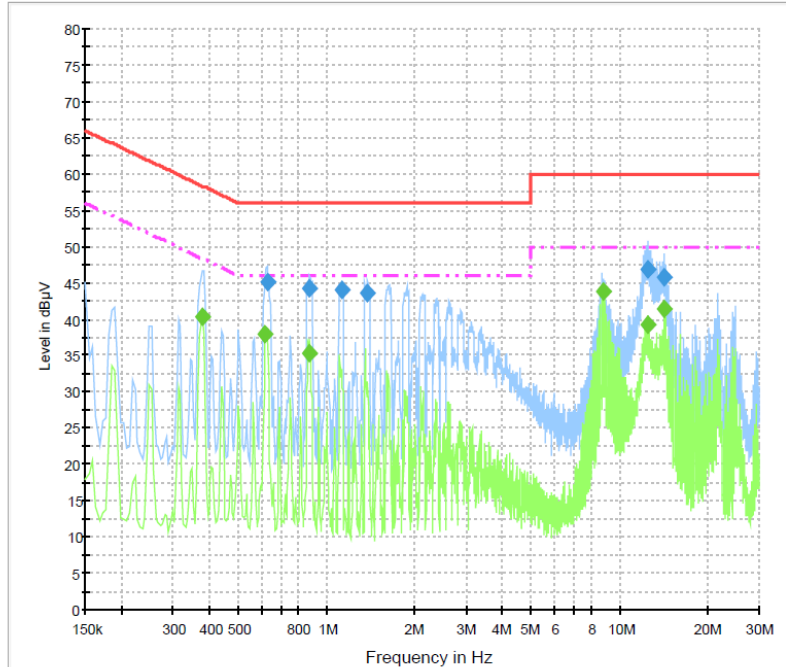
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.375000	46.6	1000.0	9.000	On	L1	9.9	11.8	58.4
0.627000	45.3	1000.0	9.000	On	L1	9.9	10.7	56.0
0.879000	44.3	1000.0	9.000	On	L1	9.8	11.7	56.0
1.126500	43.4	1000.0	9.000	On	L1	9.8	12.6	56.0
12.547500	49.4	1000.0	9.000	On	L1	9.9	10.6	60.0
14.064000	46.5	1000.0	9.000	On	L1	10.0	13.5	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.375000	42.3	1000.0	9.000	On	L1	9.9	6.1	48.4
0.618000	38.3	1000.0	9.000	On	L1	9.9	7.7	46.0
0.865500	35.8	1000.0	9.000	On	L1	9.8	10.2	46.0
8.839500	43.7	1000.0	9.000	On	L1	9.9	6.3	50.0
12.426000	41.3	1000.0	9.000	On	L1	9.9	8.7	50.0
14.212500	43.3	1000.0	9.000	On	L1	10.0	6.7	50.0

[NEUTRAL]

Class B_N



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.627000	45.1	1000.0	9.000	On	N	9.9	10.9	56.0
0.874500	44.2	1000.0	9.000	On	N	9.8	11.8	56.0
1.131000	44.0	1000.0	9.000	On	N	9.8	12.0	56.0
1.383000	43.7	1000.0	9.000	On	N	9.7	12.3	56.0
12.484500	46.9	1000.0	9.000	On	N	9.9	13.1	60.0
14.212500	45.8	1000.0	9.000	On	N	10.0	14.2	60.0

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.375000	40.3	1000.0	9.000	On	N	9.9	8.1	48.4
0.618000	37.9	1000.0	9.000	On	N	9.9	8.1	46.0
0.874500	35.3	1000.0	9.000	On	N	9.8	10.7	46.0
8.839500	43.8	1000.0	9.000	On	N	9.9	6.2	50.0
12.484500	39.3	1000.0	9.000	On	N	9.9	10.7	50.0
14.212500	41.4	1000.0	9.000	On	N	10.0	8.6	50.0



CTK Co., Ltd.
 (Ho-dong), 113, Yejik-ro, Cheoin-gu,
 Yongin-si, Gyeonggi-do, Korea
 Tel: +82-31-339-9970
 Fax: +82-31-624-9501

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APPENDIX A – Test Equipment Used For Tests

	Name of Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	Signal Analyzer	Agilent	N9020A	MY48011598	2017-11-01	2018-11-01
2	Signal Generator	Rohde & Schwarz	SMB100A	175528	2017-11-01	2018-11-01
3	EMI Test Receiver	Rohde & Schwarz	ESCI7	100814	2017-10-25	2018-10-25
4	Bilog Antenna	Schaffner	CBL6111C	2551	2018-05-10	2020-05-10
5	Active Loop Antenna	SCHWARZBECK	FMZB 1513	1513-125	2018-05-02	2020-05-02
6	6dB Attenuator	R&S	DNF	272.4110.50-2	2017-10-25	2018-10-25
7	AMPLIFIER	SONOMA	310	291721	2018-02-02	2019-02-02
8	EMI Test Receiver	Rohde & Schwarz	ESU40	100336	2018-02-01	2019-02-01
9	LISN	Rohde & Schwarz	ENV216	101235	2018-01-31	2019-01-31
10	Preamplifier	Agilent	8449B	3008A02011	2017-11-30	2018-11-30
11	Horn Antenna	ETS-Lindgren	3116	00062504	2017-12-04	2019-12-04
12	Horn Antenna	ETS-Lindgren	3117	00154525	2017-02-17	2019-02-17
13	Singnal Canditioning Unit	R&S	SCU-40	10023	2017-11-01	2018-11-01
14	Band Reject Filter	Micro Tronics	BRM50716	G184	2018-01-26	2019-01-26
15	Temp&Humi Chamber	ESPEC CORP.	SH-242	93012243	2018-03-09	2019-03-09
16	Combiner/Divider	Weinschel	1580	SQ369	2018-11-01	2019-11-01
17	RF Cable	Canare Corporation	L-5D2W	N/A	-	-
18	RF Cable	Junkosha Inc.	MWX221	1510S085	-	-
19	RF Cable	HUBER+SUHNER	SUCOFLEX 102	MY073/2	-	-
20	RF Cable	HUBER+SUHNER	SUCOFLEX 102	MY4728/2	-	-
21	RF Cable	HUBER+SUHNER	SUCOFLEX 104	MY27558/4	-	-
22	RF Cable	HUBER+SUHNER	SUCOFLEX 104	N/A	-	-
23	RF Cable	HUBER+SUHNER	SUCOFLEX 104	MY27573/4	-	-
24	RF Cable	HUBER+SUHNER	SUCOFLEX 106	N/A	-	-