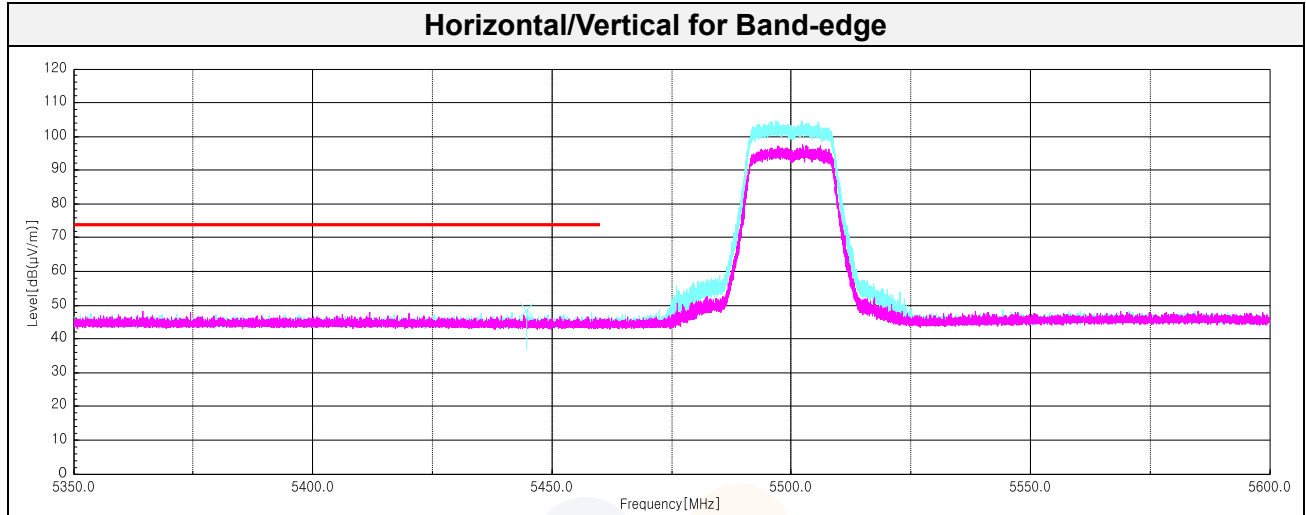
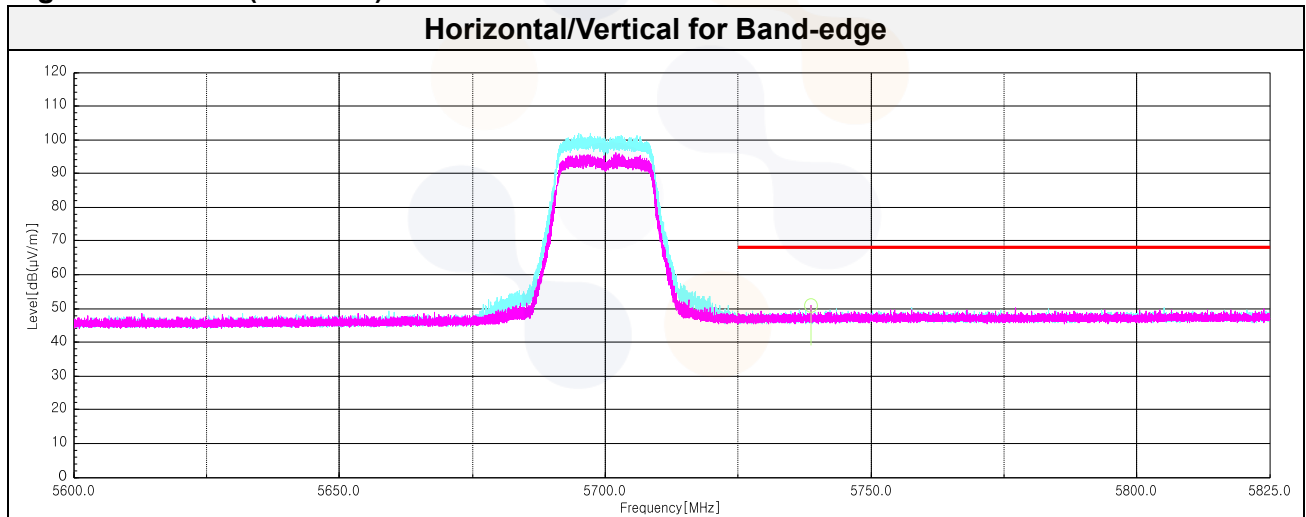


**802.11ac VHT20 UNII-2C**

**Lowest Channel (5 500 MHz)**



**Highest Channel (5 700 MHz)**



### 802.11ac VHT40 UNII-2C

#### Lowest Channel (5 510 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu V$ ))	(dB)	(dB)	(dB)	(dB( $\mu V/m$ ))	(dB( $\mu V/m$ ))	(dB)
<b>Peak data</b>								
5 459.07 <sup>1)</sup>	V	45.60	32.98	-30.13	-	48.45	74.00	25.55
10 929.03 <sup>1)</sup>	V	54.10	39.24	-46.03	-	47.31	74.00	26.69
16 422.58	V	54.70	38.35	-44.01	-	49.04	68.20	19.16
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

#### Middle Channel (5 590 MHz)

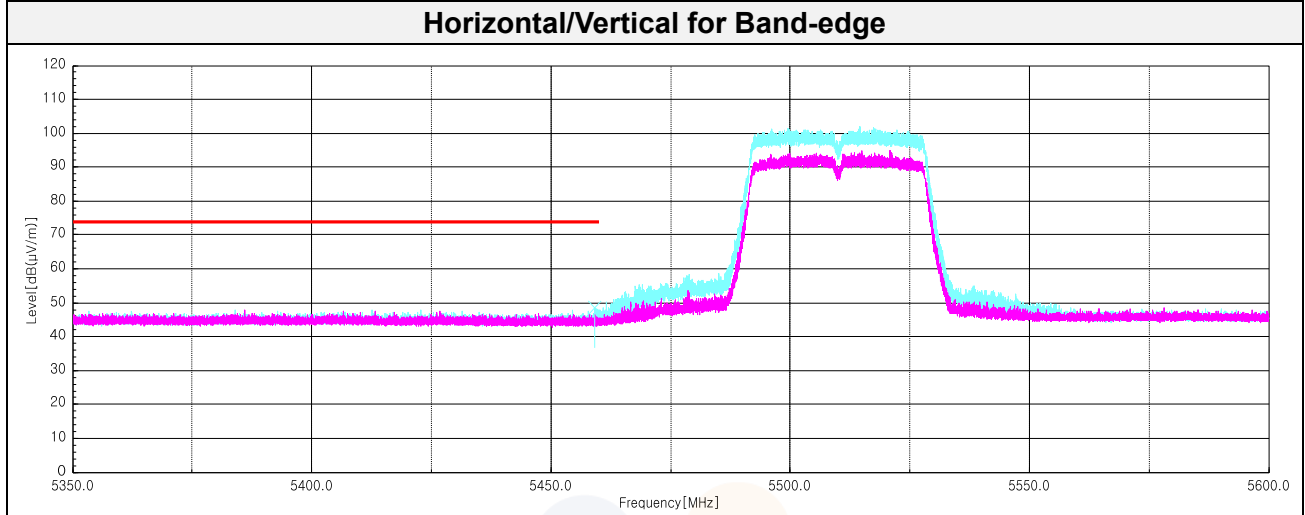
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu V$ ))	(dB)	(dB)	(dB)	(dB( $\mu V/m$ ))	(dB( $\mu V/m$ ))	(dB)
<b>Peak data</b>								
11 288.98 <sup>1)</sup>	H	54.10	39.20	-45.93	-	47.37	74.00	26.63
16 766.05	H	55.00	38.30	-43.95	-	49.35	68.20	18.85
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

#### Highest Channel (5 670 MHz)

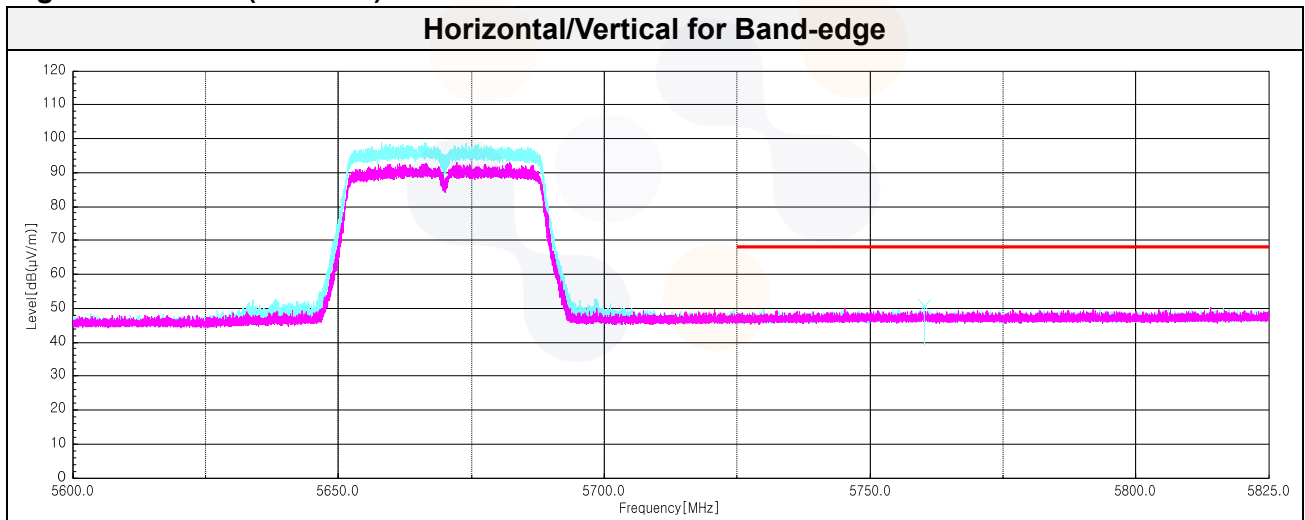
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu V$ ))	(dB)	(dB)	(dB)	(dB( $\mu V/m$ ))	(dB( $\mu V/m$ ))	(dB)
<b>Peak data</b>								
5 760.23	V	45.90	33.76	-29.19	-	50.47	68.20	17.73
11 311.60 <sup>1)</sup>	H	54.10	39.32	-45.95	-	47.47	74.00	26.53
17 102.62	V	56.00	38.41	-43.91	-	50.50	68.20	17.70
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

**802.11ac VHT40 UNII-2C**

**Lowest Channel (5 510 MHz)**



**Highest Channel (5 670 MHz)**



### **802.11ac VHT80 UNII-2C**

#### **Lowest Channel (5 530 MHz)**

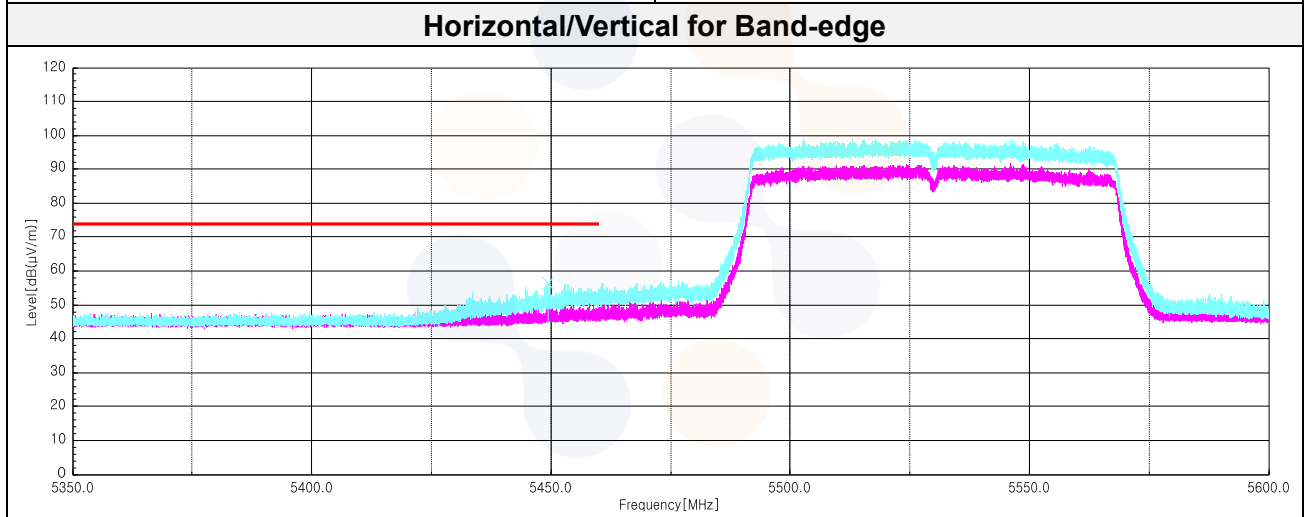
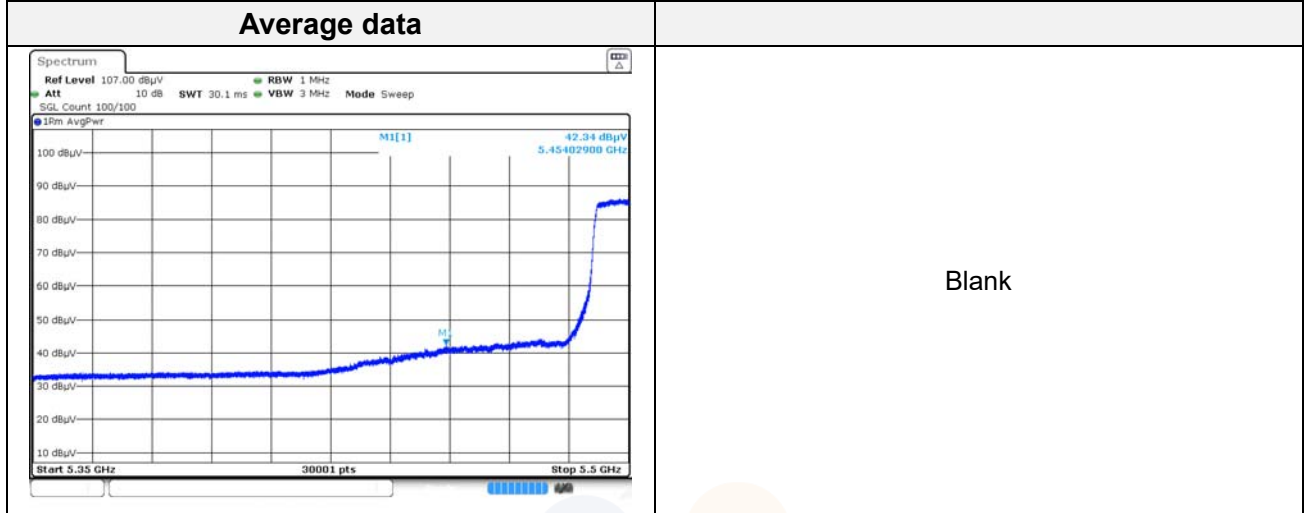
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu$ V))	(dB)	(dB)	(dB)	(dB( $\mu$ V/m))	(dB( $\mu$ V/m))	(dB)
<b>Peak data</b>								
5 454.03 <sup>1)</sup>	V	53.20	32.99	-30.14	-	56.05	74.00	17.95
11 225.35 <sup>1)</sup>	V	54.20	39.20	-45.90	-	47.50	74.00	26.50
16 646.07	V	55.00	38.40	-43.96	-	49.44	68.20	18.76
<b>Average Data</b>								
5 454.03 <sup>1)</sup>	V	42.34	32.99	-30.14	0.65	45.84	54.00	8.16

#### **Highest Channel (5 610 MHz)**

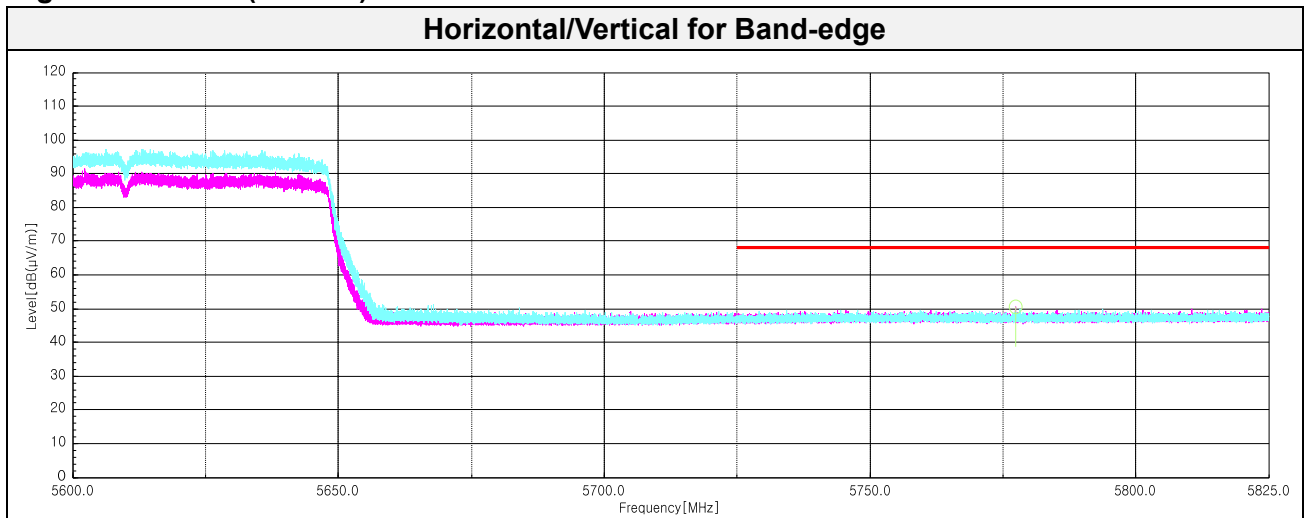
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu$ V))	(dB)	(dB)	(dB)	(dB( $\mu$ V/m))	(dB( $\mu$ V/m))	(dB)
<b>Peak data</b>								
5 777.33	H	45.80	33.86	-29.23	-	50.43	68.20	17.77
11 288.98 <sup>1)</sup>	V	54.40	39.20	-45.93	-	47.67	74.00	26.33
16 855.75	V	55.60	38.19	-43.95	-	49.84	68.20	18.36
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

**802.11ac VHT80 UNII-2C**

**Lowest Channel (5 530 MHz)**



**Highest Channel (5 610MHz)**

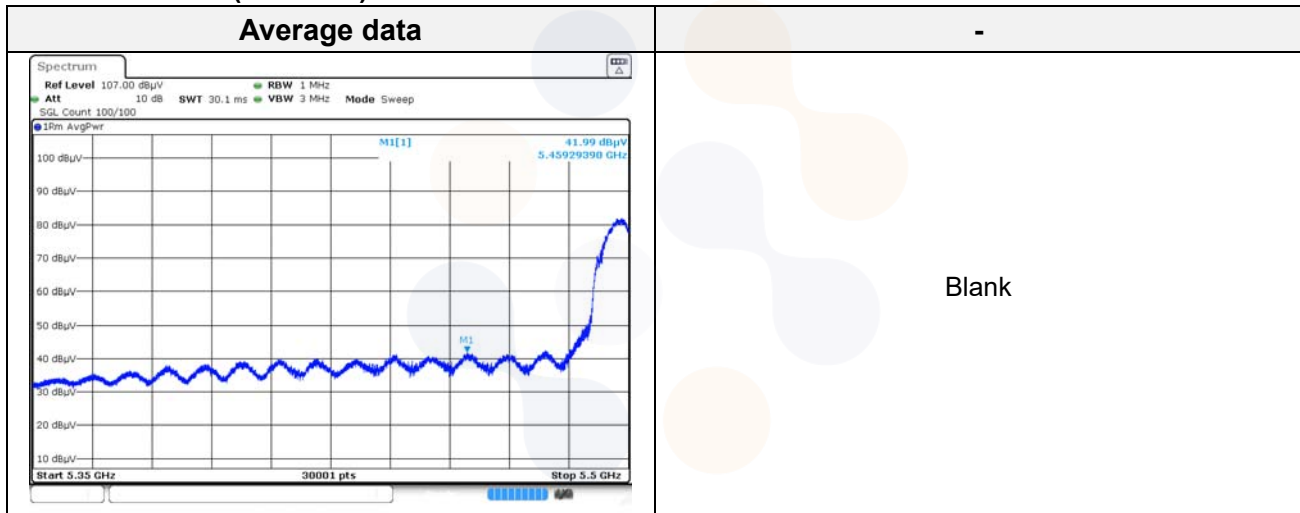


**802.11ac VHT160 UNII-2C**

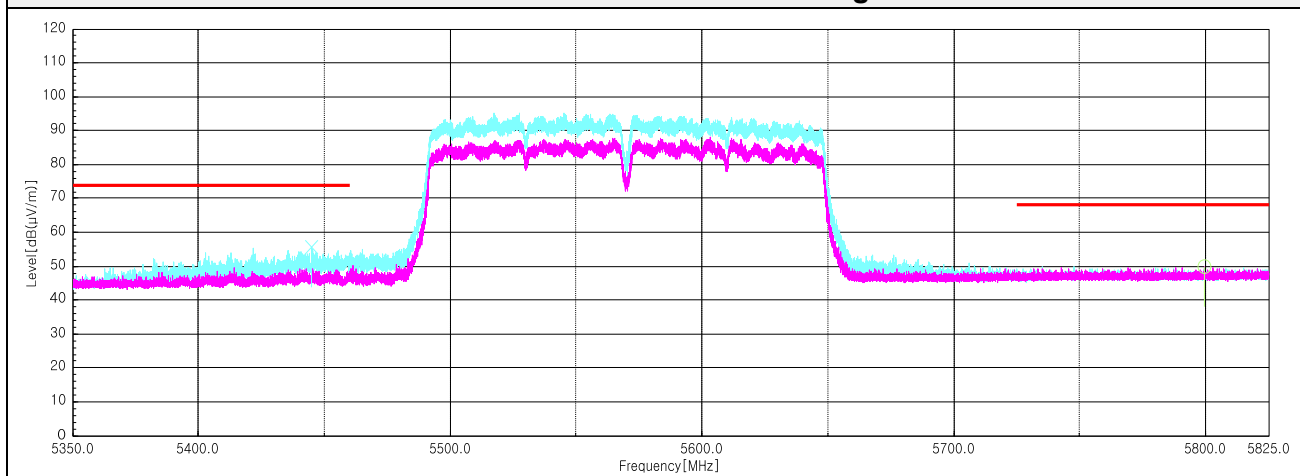
**Middle Channel (5 570 MHz)**

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
<b>Peak data</b>								
5 459.29 <sup>1)</sup>	V	52.70	32.98	-30.13	-	55.55	74.00	18.45
5 799.43	H	45.30	34.00	-29.28	-	50.02	68.20	18.18
11 282.08 <sup>1)</sup>	V	54.10	39.20	-45.93	-	47.37	74.00	26.63
16 616.17	H	54.70	38.40	-43.96	-	49.14	68.20	19.06
<b>Average Data</b>								
5 459.29 <sup>1)</sup>	V	41.99	32.98	-30.13	1.17	46.01	54.00	7.99

**Middle Channel (5 570 MHz)**



**Horizontal/Vertical for Band-edge**

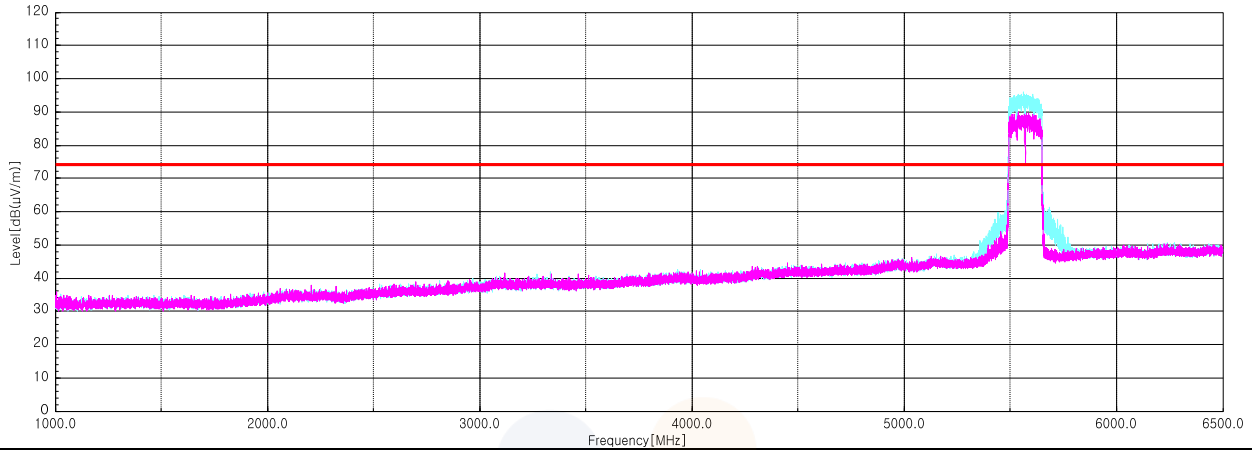


### Plot of Harmonics and Spurious Emissions

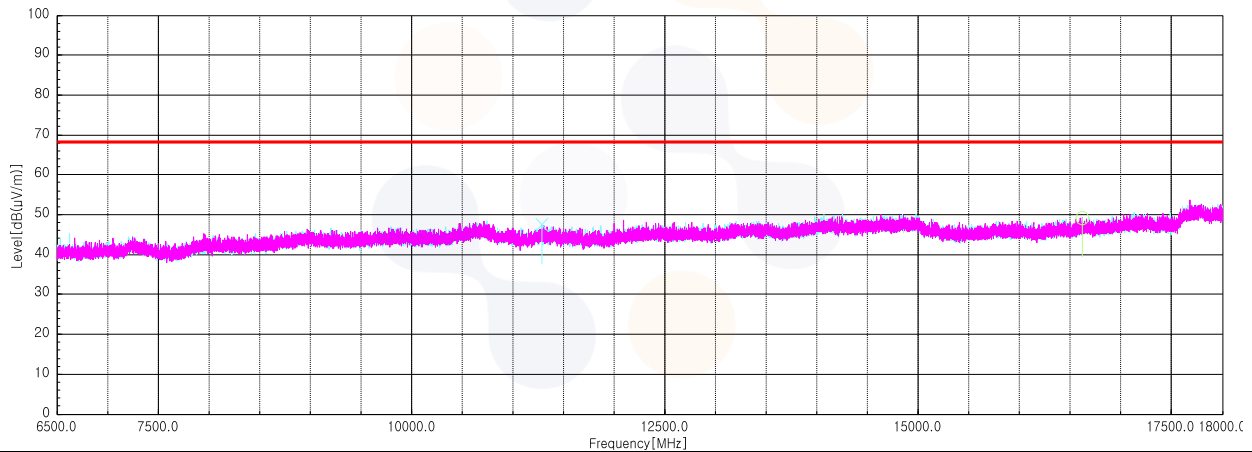
In order to simplify the report, attached plots were only the lowest margin condition

#### 802.11ac VHT160\_UNII-2C\_Middle Channel (5 570 MHz)

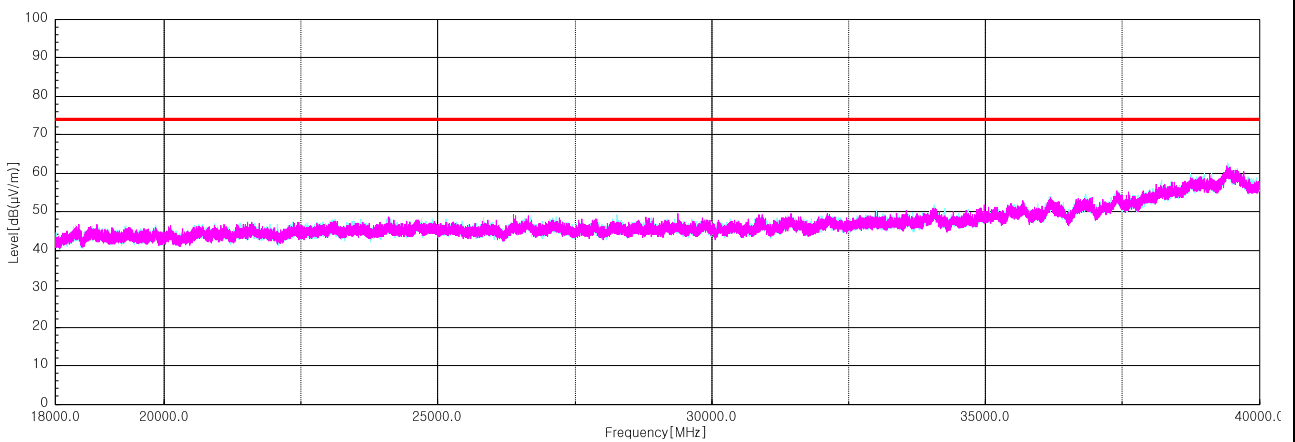
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



### Straddle Channel

#### 802.11a (5 720 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu$ V))	(dB)	(dB)	(dB)	(dB( $\mu$ V/m))	(dB( $\mu$ V/m))	(dB)
<b>Peak data</b>								
11 405.52 <sup>1)</sup>	H	54.20	39.30	-45.99	-	47.51	74.00	26.49
17 262.47	H	56.20	38.85	-43.86	-	51.19	68.20	17.01
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

#### 802.11n HT20 (5 720 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu$ V))	(dB)	(dB)	(dB)	(dB( $\mu$ V/m))	(dB( $\mu$ V/m))	(dB)
<b>Peak data</b>								
11 464.93 <sup>1)</sup>	H	54.00	39.17	-46.02	-	47.15	74.00	26.85
17 080.38	V	55.50	38.36	-43.91	-	49.95	68.20	18.25
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

#### 802.11n HT40 (5 710 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu$ V))	(dB)	(dB)	(dB)	(dB( $\mu$ V/m))	(dB( $\mu$ V/m))	(dB)
<b>Peak data</b>								
11 548.12 <sup>1)</sup>	V	54.20	39.20	-45.90	-	47.50	74.00	26.50
17 139.42	V	55.80	38.48	-43.90	-	50.38	68.20	17.82
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

#### 802.11ac VHT20 (5 720 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu$ V))	(dB)	(dB)	(dB)	(dB( $\mu$ V/m))	(dB( $\mu$ V/m))	(dB)
<b>Peak data</b>								
11 427.37 <sup>1)</sup>	H	54.40	39.30	-46.00	-	47.70	74.00	26.30
17 054.32	V	56.00	38.31	-43.92	-	50.39	68.20	17.81
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								



**802.11ac VHT40 (5 710 MHz)**

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
<b>Peak data</b>								
11 337.67 <sup>1)</sup>	V	53.90	39.38	-45.96	-	47.32	74.00	26.68
17 147.47	H	56.20	38.49	-43.89	-	50.80	68.20	17.40
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

**802.11ac VHT80 (5 690 MHz)**

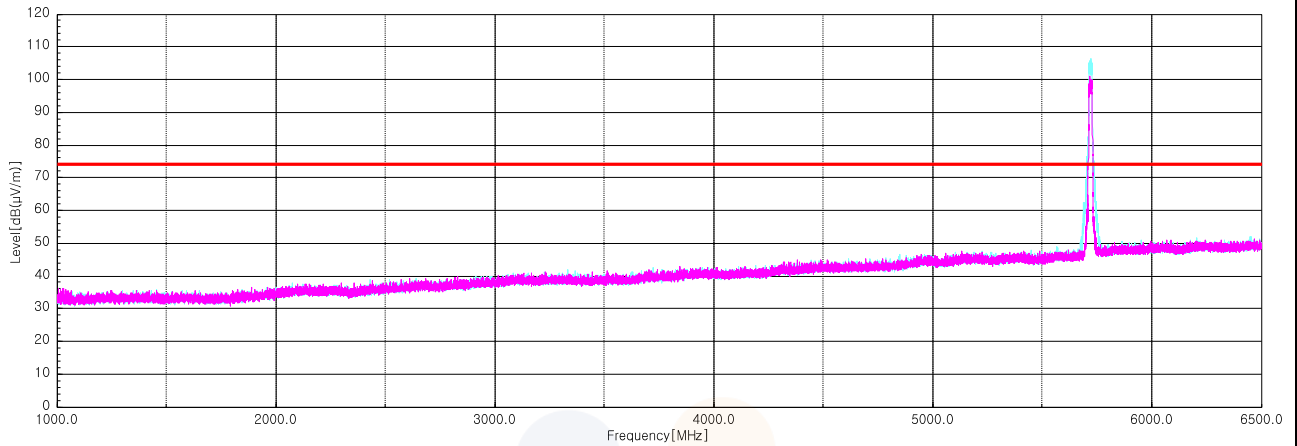
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB(μV))	(dB)	(dB)	(dB)	(dB(μV/m))	(dB(μV/m))	(dB)
<b>Peak data</b>								
11 219.22 <sup>1)</sup>	V	54.10	39.20	-45.90	-	47.40	74.00	26.60
17 122.55	H	55.40	38.45	-43.90	-	49.95	68.20	18.25
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

### Plot of Harmonics and Spurious Emissions

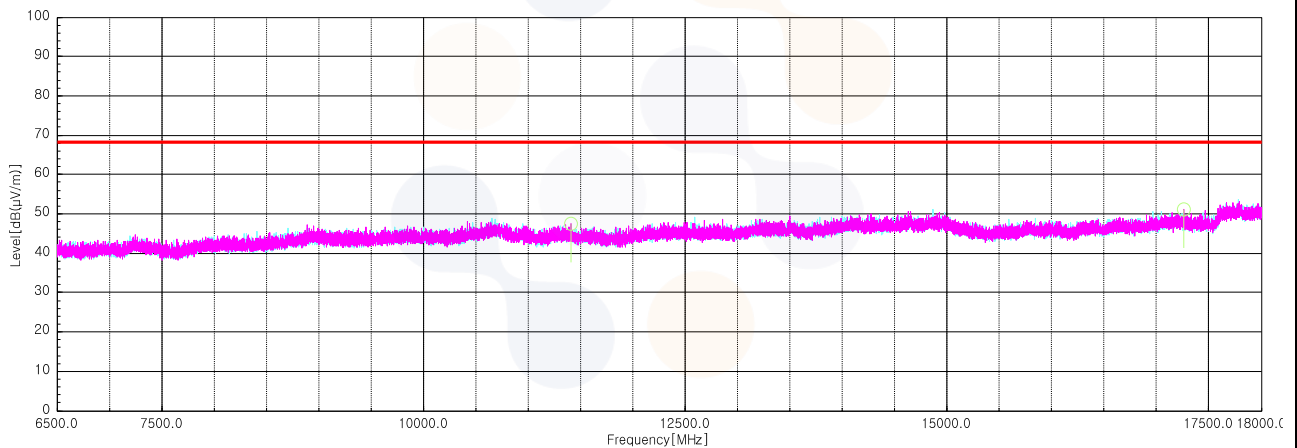
In order to simplify the report, attached plots were only the lowest margin condition

#### 802.11a\_Straddle Channel (5 720 MHz)

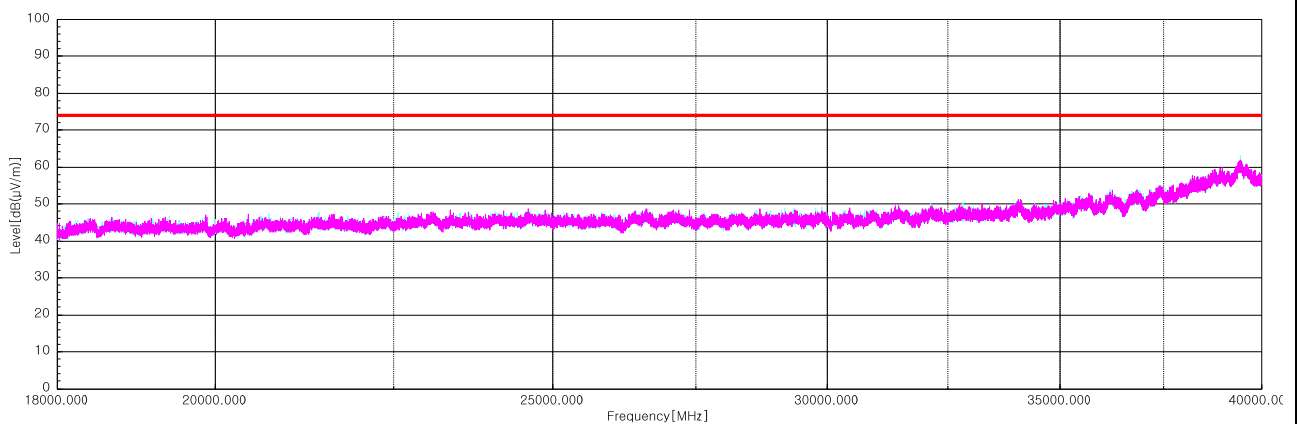
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



### 802.11a UNII-3

#### Lowest Channel (5 745 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu V$ ))	(dB)	(dB)	(dB)	(dB( $\mu V/m$ ))	(dB( $\mu V/m$ ))	(dB)
<b>Peak data</b>								
5 724.44	V	52.00	33.45	-29.11	-	56.34	120.90	64.56
11 422.77 <sup>1)</sup>	H	53.40	39.30	-46.00	-	46.70	74.00	27.30
17 277.80	H	55.30	38.91	-43.85	-	50.36	68.20	17.84
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

#### Middle Channel (5 785 MHz)

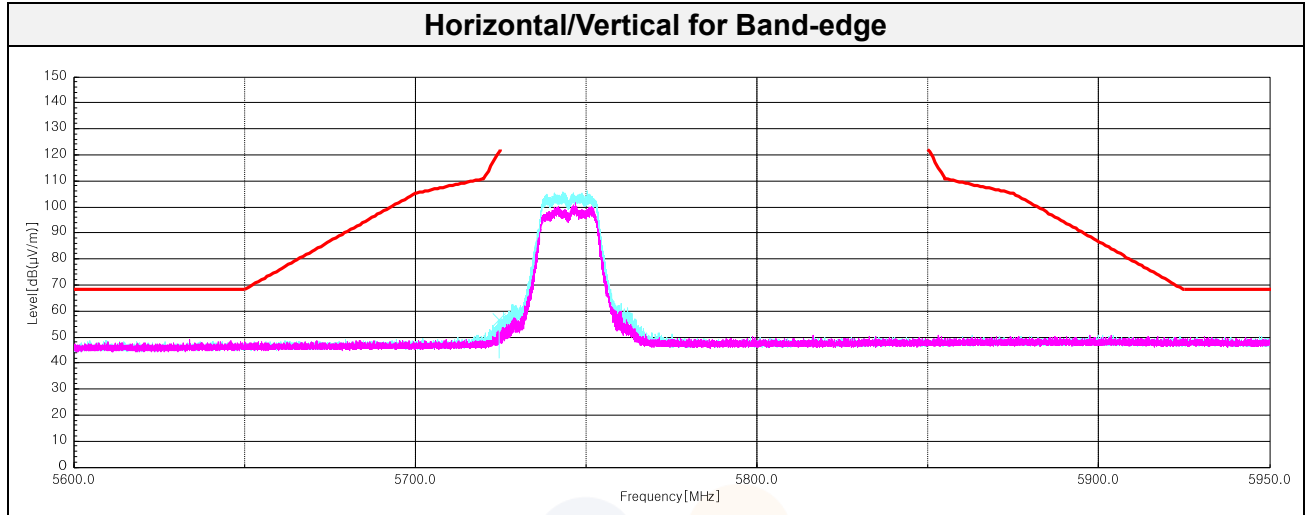
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu V$ ))	(dB)	(dB)	(dB)	(dB( $\mu V/m$ ))	(dB( $\mu V/m$ ))	(dB)
<b>Peak data</b>								
11 490.62 <sup>1)</sup>	V	53.50	39.12	-46.04	-	46.58	74.00	27.42
17 439.57	V	54.20	39.74	-43.80	-	50.14	68.20	18.06
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

#### Highest Channel (5 825 MHz)

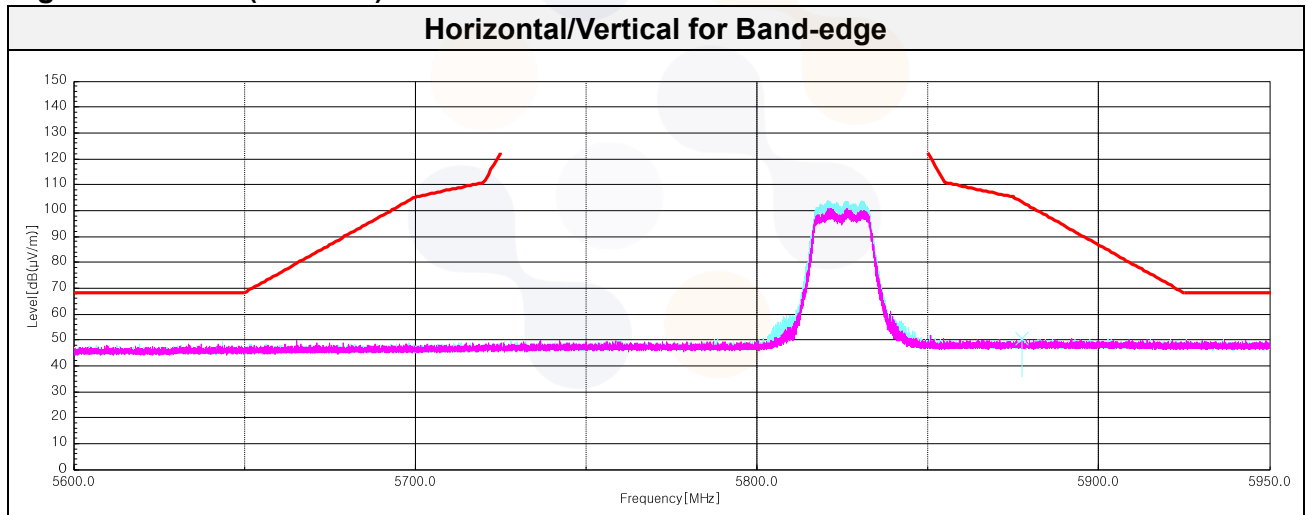
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu V$ ))	(dB)	(dB)	(dB)	(dB( $\mu V/m$ ))	(dB( $\mu V/m$ ))	(dB)
<b>Peak data</b>								
5 877.49	V	46.00	34.15	-29.57	-	50.58	103.30	52.72
11 850.18 <sup>1)</sup>	V	53.00	38.90	-45.04	-	46.86	74.00	27.14
17 437.65	V	54.80	39.73	-43.80	-	50.73	68.20	17.47
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

### 802.11a UNII-3

#### Lowest Channel (5 745 MHz)



#### Highest Channel (5 825 MHz)



### 802.11n HT20 UNII-3

#### Lowest Channel (5 745 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu$ V))	(dB)	(dB)	(dB)	(dB( $\mu$ V/m))	(dB( $\mu$ V/m))	(dB)
<b>Peak data</b>								
5 724.48	V	53.70	33.45	-29.11	-	58.04	121.00	62.96
11 393.63 <sup>1)</sup>	V	53.50	39.30	-45.99	-	46.81	74.00	27.19
17 282.02	H	55.10	38.93	-43.85	-	50.18	68.20	18.02
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

#### Middle Channel (5 785 MHz)

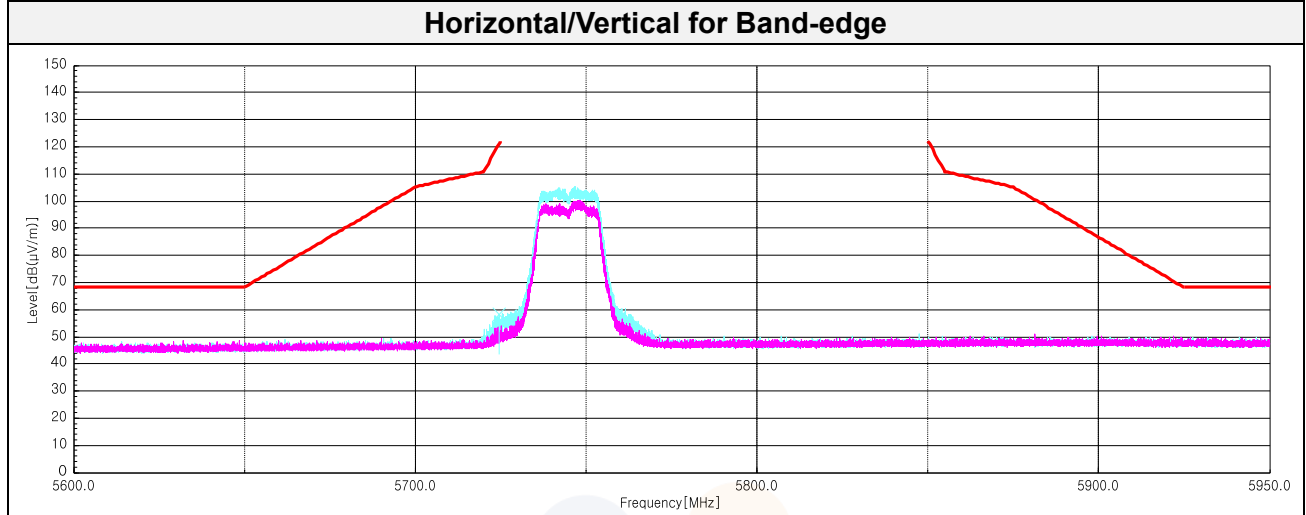
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu$ V))	(dB)	(dB)	(dB)	(dB( $\mu$ V/m))	(dB( $\mu$ V/m))	(dB)
<b>Peak data</b>								
11 514.77 <sup>1)</sup>	V	53.80	39.20	-46.00	-	47.00	74.00	27.00
17 306.55	H	55.20	39.03	-43.84	-	50.39	68.20	17.81
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

#### Highest Channel (5 825 MHz)

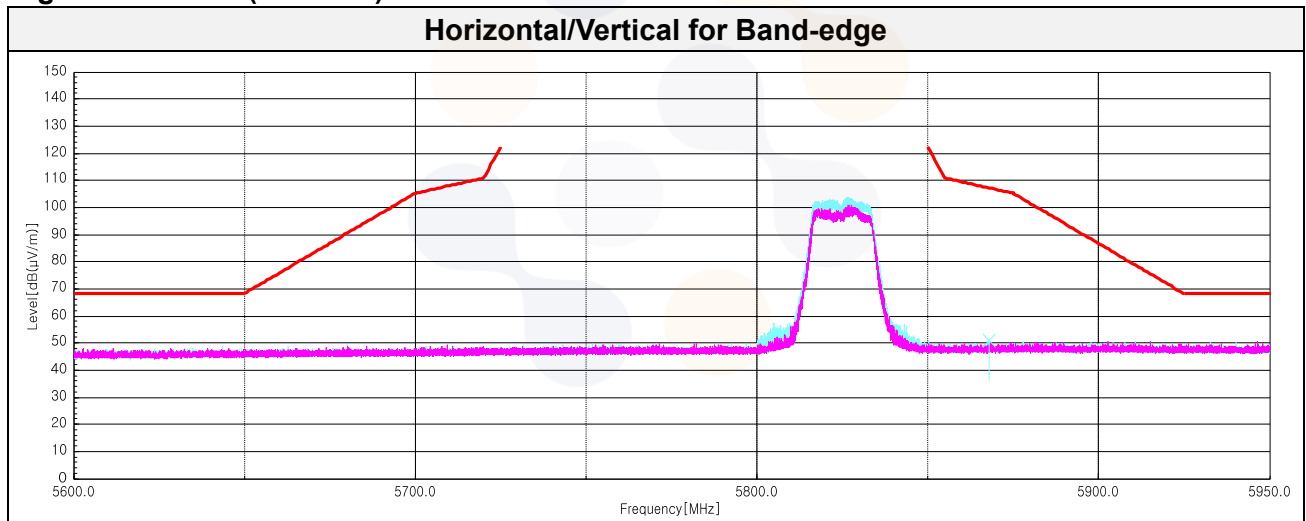
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu$ V))	(dB)	(dB)	(dB)	(dB( $\mu$ V/m))	(dB( $\mu$ V/m))	(dB)
<b>Peak data</b>								
5 867.97	V	46.40	34.14	-29.53	-	51.01	107.20	56.19
11 623.63 <sup>1)</sup>	H	53.50	38.95	-45.69	-	46.76	74.00	27.24
17 433.05	V	54.00	39.70	-43.80	-	49.90	68.20	18.30
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

**802.11n HT20 UNII-3**

**Lowest Channel (5 745 MHz)**



**Highest Channel (5 825 MHz)**



### 802.11n HT40 UNII-3

#### Lowest Channel (5 755 MHz)

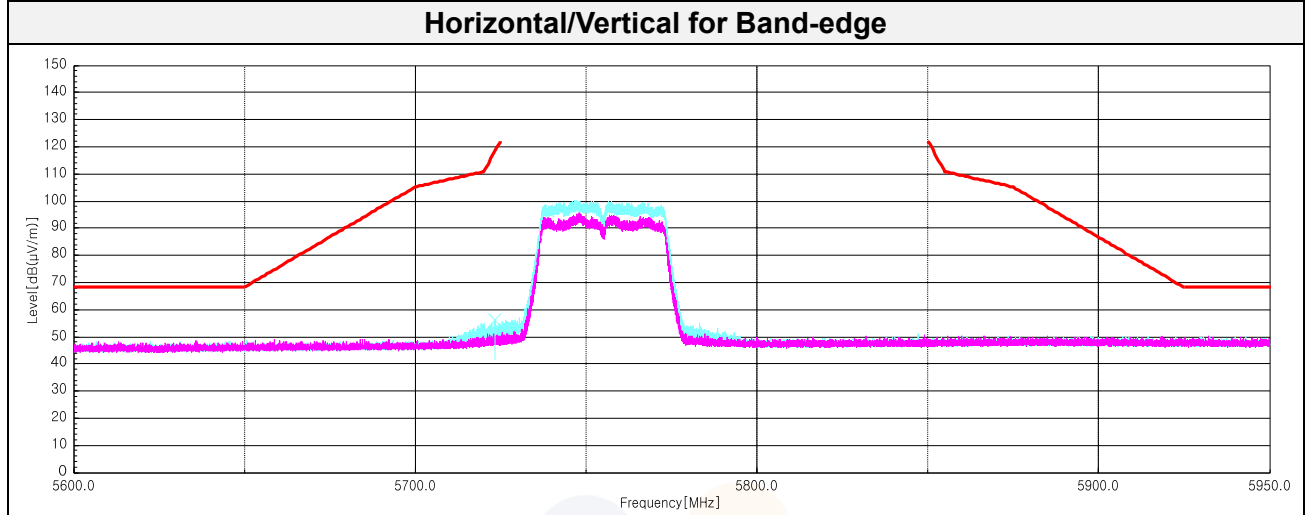
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu V$ ))	(dB)	(dB)	(dB)	(dB( $\mu V/m$ ))	(dB( $\mu V/m$ ))	(dB)
<b>Peak data</b>								
5 723.45	V	51.90	33.45	-29.11	-	56.24	118.70	62.46
11 461.48 <sup>1)</sup>	H	54.30	39.18	-46.02	-	47.46	74.00	26.54
17 201.13	V	56.20	38.60	-43.88	-	50.92	68.20	17.28
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

#### Highest Channel (5 795 MHz)

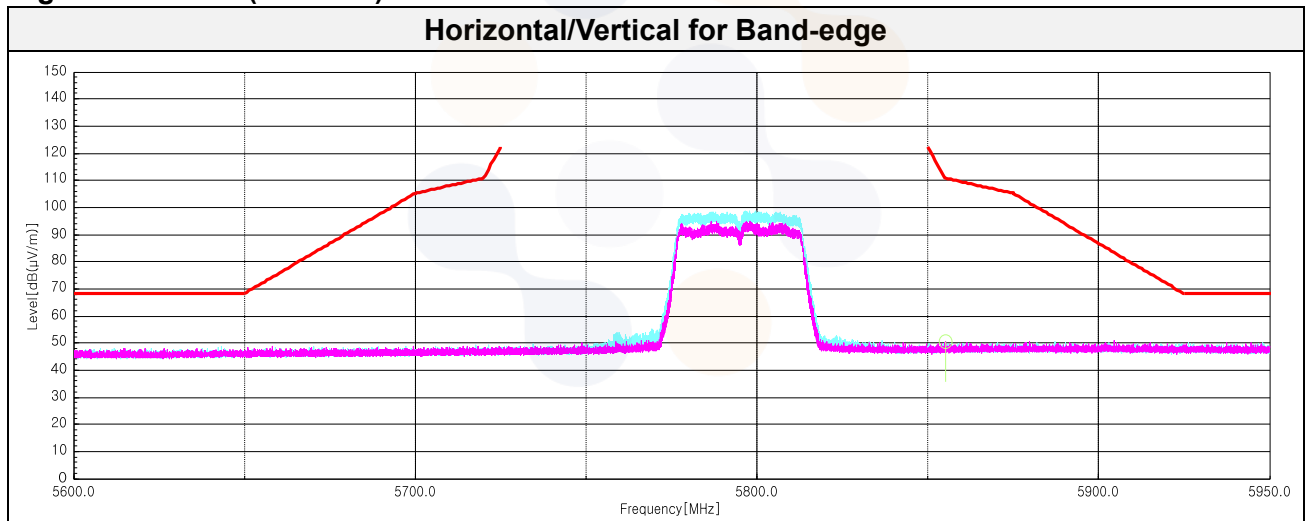
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu V$ ))	(dB)	(dB)	(dB)	(dB( $\mu V/m$ ))	(dB( $\mu V/m$ ))	(dB)
<b>Peak data</b>								
5 855.07	H	46.00	34.11	-29.48	-	50.63	110.80	60.17
11 600.25 <sup>1)</sup>	H	54.10	39.00	-45.75	-	47.35	74.00	26.65
17 237.93	V	56.20	38.68	-43.86	-	51.02	68.20	17.18
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

**802.11n HT40 UNII-3**

**Lowest Channel (5 755 MHz)**



**Highest Channel (5 795 MHz)**





### 802.11ac VHT20 UNII-3

#### Lowest Channel (5 745 MHz)

Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu V$ ))	(dB)	(dB)	(dB)	(dB( $\mu V/m$ ))	(dB( $\mu V/m$ ))	(dB)
<b>Peak data</b>								
5 723.20	V	49.80	33.45	-29.11	-	54.14	118.10	63.96
11 400.15 <sup>1)</sup>	V	53.70	39.30	-45.99	-	47.01	74.00	26.99
17 247.52	V	55.30	38.70	-43.86	-	50.14	68.20	18.06
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

#### Middle Channel (5 785 MHz)

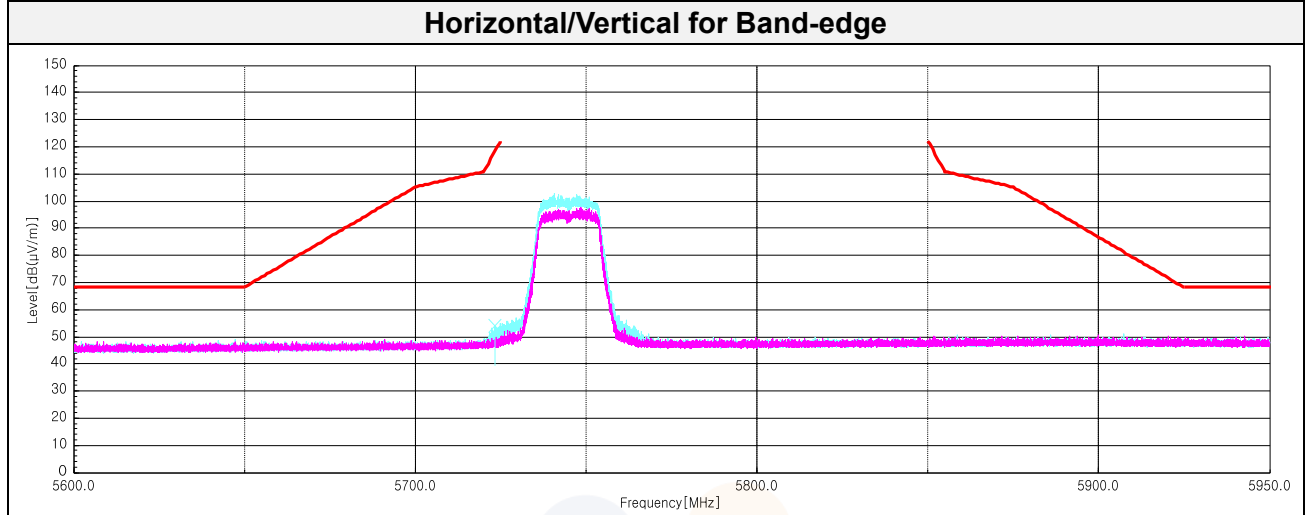
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu V$ ))	(dB)	(dB)	(dB)	(dB( $\mu V/m$ ))	(dB( $\mu V/m$ ))	(dB)
<b>Peak data</b>								
11 578.78 <sup>1)</sup>	V	54.70	39.04	-45.81	-	47.93	74.00	26.07
17 244.83	V	55.40	38.69	-43.86	-	50.23	68.20	17.97
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

#### Highest Channel (5 825 MHz)

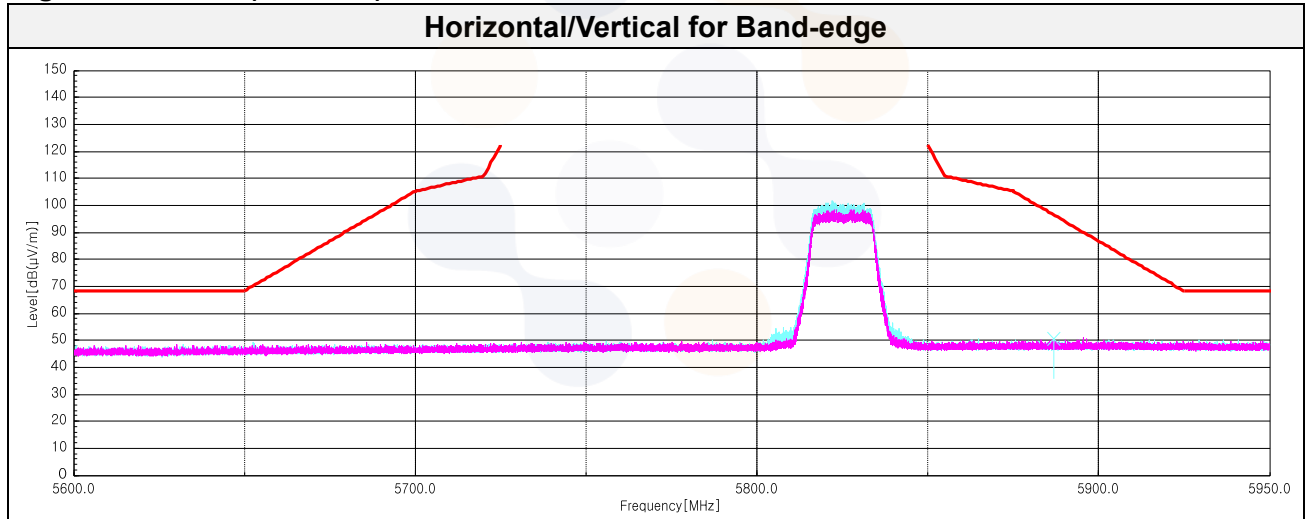
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu V$ ))	(dB)	(dB)	(dB)	(dB( $\mu V/m$ ))	(dB( $\mu V/m$ ))	(dB)
<b>Peak data</b>								
5 886.98	V	45.70	34.17	-29.60	-	50.27	96.30	46.03
11 847.12 <sup>1)</sup>	V	52.70	38.90	-45.05	-	46.55	74.00	27.45
17 253.27	V	55.70	38.81	-43.86	-	50.65	68.20	17.55
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

**802.11ac VHT20 UNII-3**

**Lowest Channel (5 745 MHz)**



**Highest Channel (5 825 MHz)**



### 802.11ac VHT40 UNII-3

#### Lowest Channel (5 755 MHz)

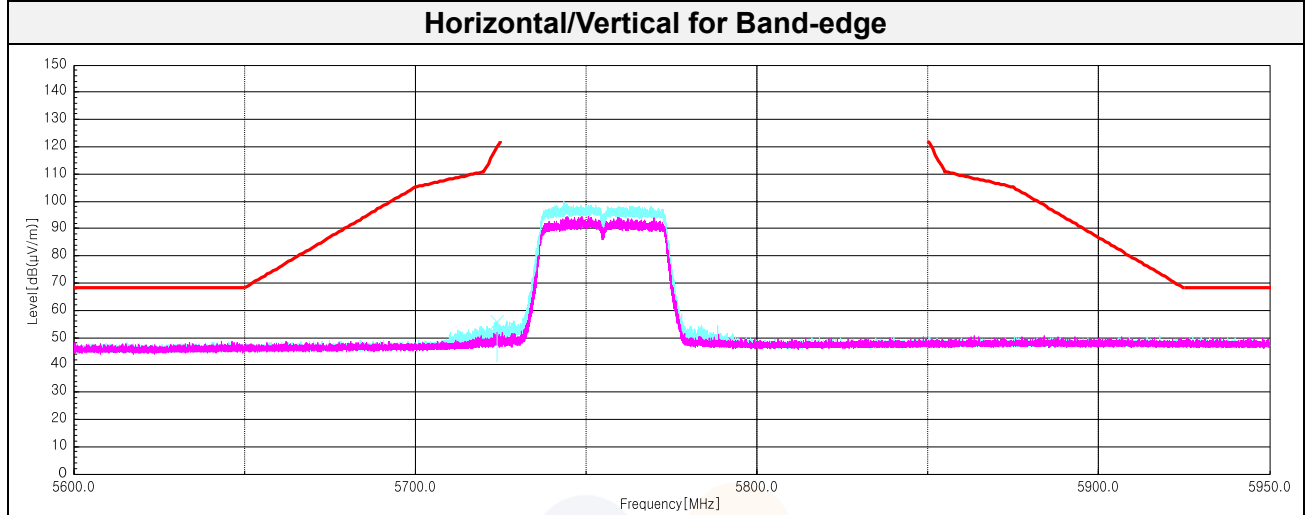
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu$ V))	(dB)	(dB)	(dB)	(dB( $\mu$ V/m))	(dB( $\mu$ V/m))	(dB)
<b>Peak data</b>								
5 723.94	V	51.40	33.45	-29.11	-	55.74	119.80	64.06
11 530.87 <sup>1)</sup>	V	54.20	39.20	-45.95	-	47.45	74.00	26.55
17 220.68	H	55.50	38.64	-43.87	-	50.27	68.20	17.93
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

#### Highest Channel (5 795 MHz)

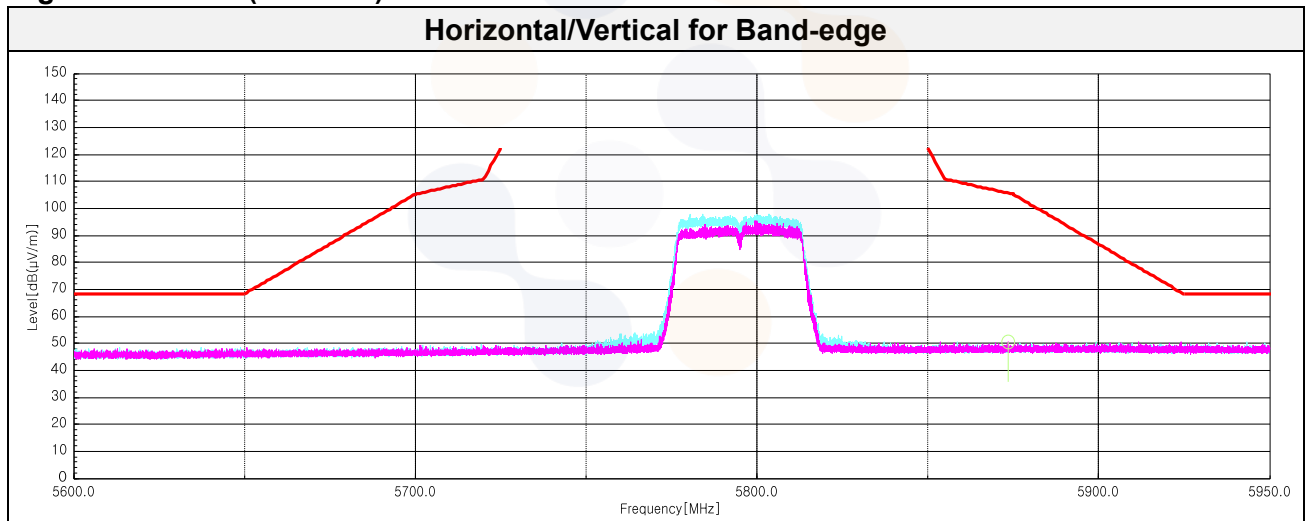
Frequency	Pol.	Reading	Ant. Factor	Amp.+Cable	DCF	Result	Limit	Margin
(MHz)	(V/H)	(dB( $\mu$ V))	(dB)	(dB)	(dB)	(dB( $\mu$ V/m))	(dB( $\mu$ V/m))	(dB)
<b>Peak data</b>								
5 873.53	H	45.70	34.15	-29.55	-	50.30	105.60	55.30
11 530.87 <sup>1)</sup>	H	53.90	39.20	-45.95	-	47.15	74.00	26.85
17 257.87	V	55.40	38.83	-43.86	-	50.37	68.20	17.83
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

**802.11ac VHT40 UNII-3**

**Lowest Channel (5 755 MHz)**



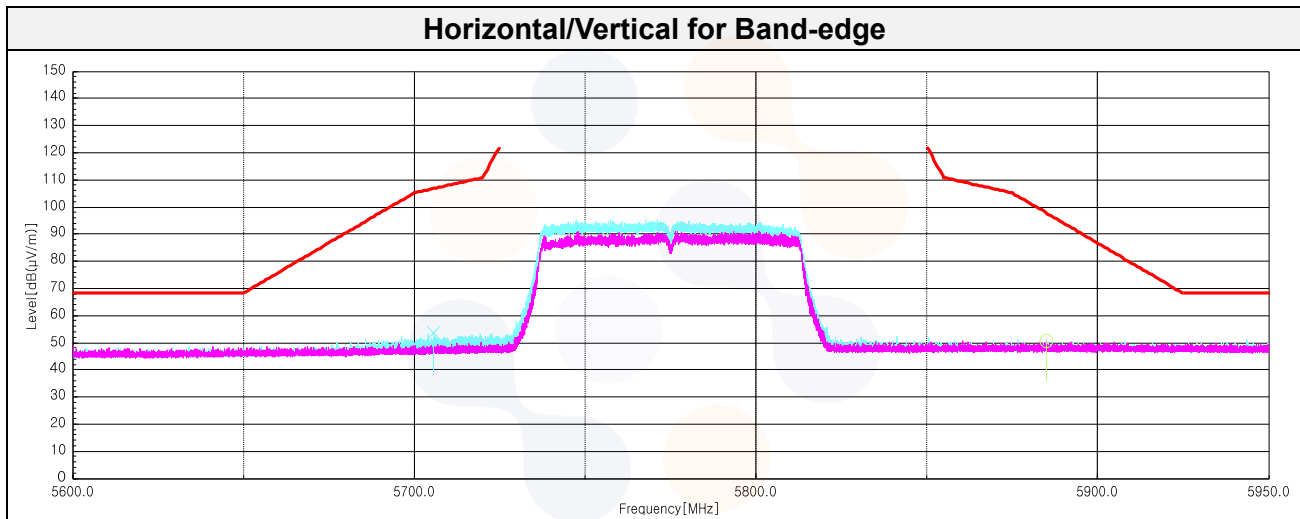
**Highest Channel (5 795 MHz)**



**802.11ac VHT80 UNII-3**

**Middle Channel (5 775 MHz)**

Frequency (MHz)	Pol. (V/H)	Reading (dB(μV))	Ant. Factor (dB)	Amp.+Cable (dB)	DCF (dB)	Result (dB(μV/m))	Limit (dB(μV/m))	Margin (dB)
<b>Peak data</b>								
5 705.61	V	49.00	33.41	-29.07	-	53.34	106.80	53.46
5 885.08	H	45.90	34.17	-29.59	-	50.48	97.70	47.22
11 516.30 <sup>1)</sup>	H	54.90	39.20	-45.99	-	48.11	74.00	25.89
17 303.10	H	56.10	39.01	-43.84	-	51.27	68.20	16.93
<b>Average Data</b>								
No spurious emissions were detected within 20 dB of the limit.								

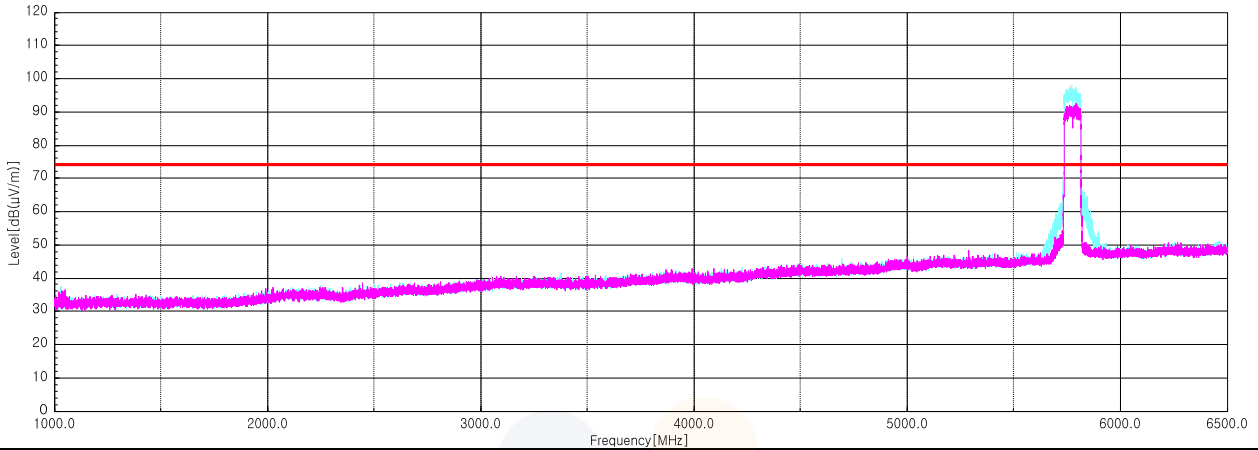


### Plot of Harmonics and Spurious Emissions

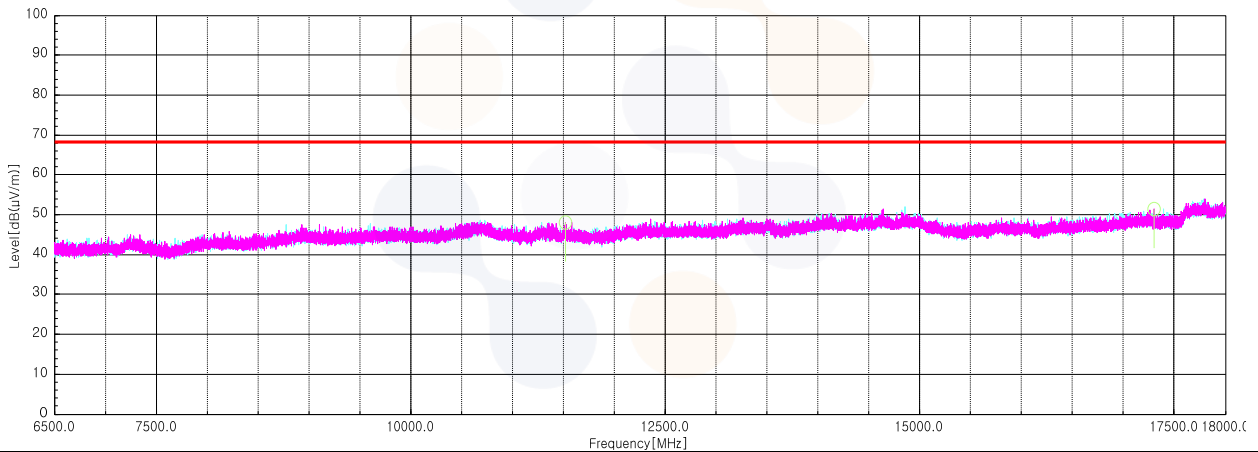
In order to simplify the report, attached plots were only the lowest margin condition

#### 802.11ac VHT80\_UNII-3\_Middle Channel (5 775 MHz)

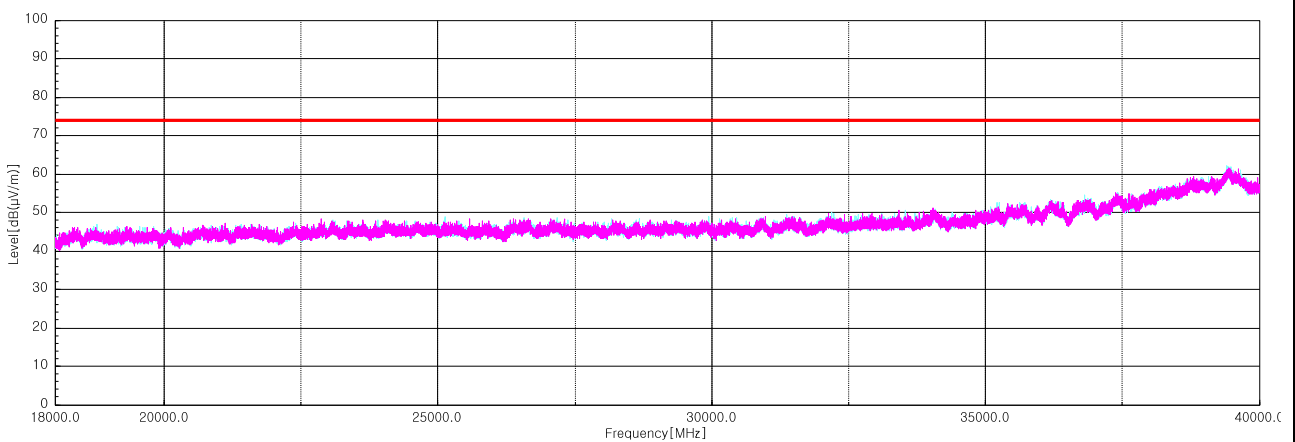
Horizontal/Vertical for 1 GHz ~ 6.5 GHz



Horizontal/Vertical for 6.5 GHz ~ 18 GHz



Horizontal/Vertical for 18 GHz ~ 40 GHz



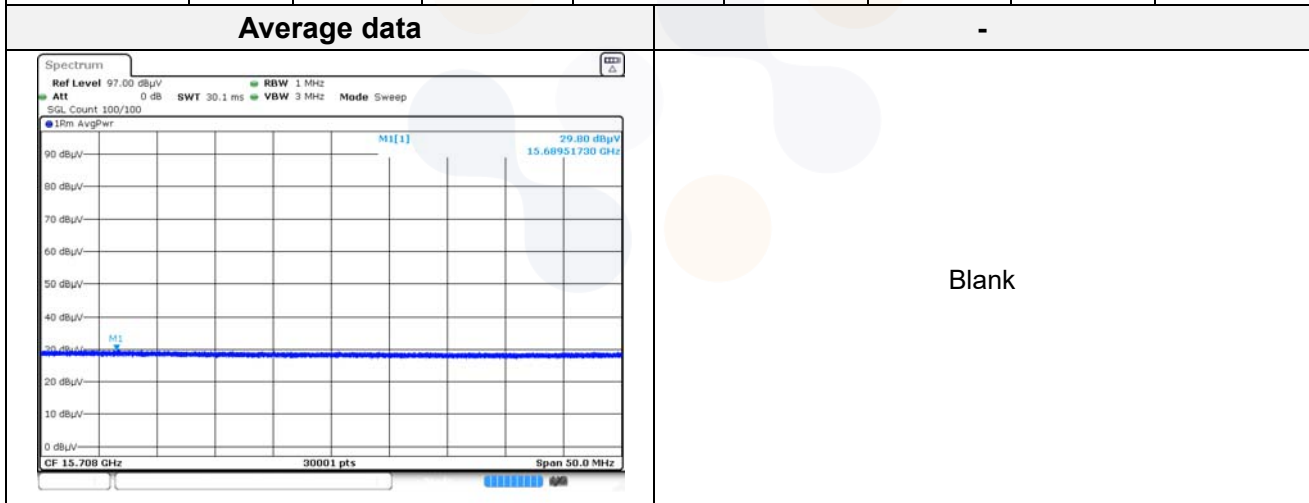
**Spurious Emission for Simultaneous Tx Condition**

Case	WLAN 5 GHz	Bluetooth
Mode	802.11ac VHT160	EDR
Channel	50	78
Frequency	5 250 MHz	2 480 MHz
Data Rate	MCS 0	3DH-3

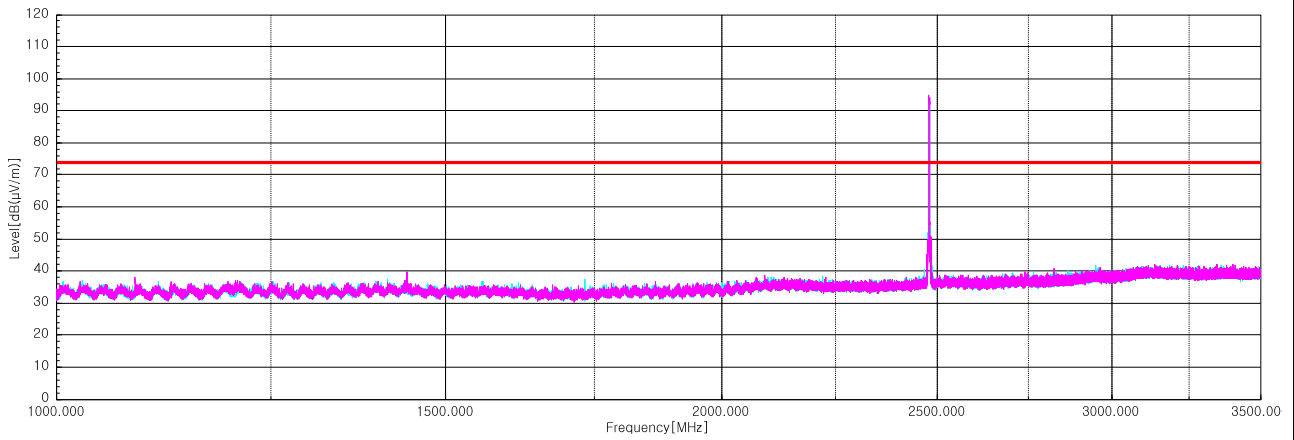
**Notes.**

The lowest margin condition among the channels and modes were selected for test.

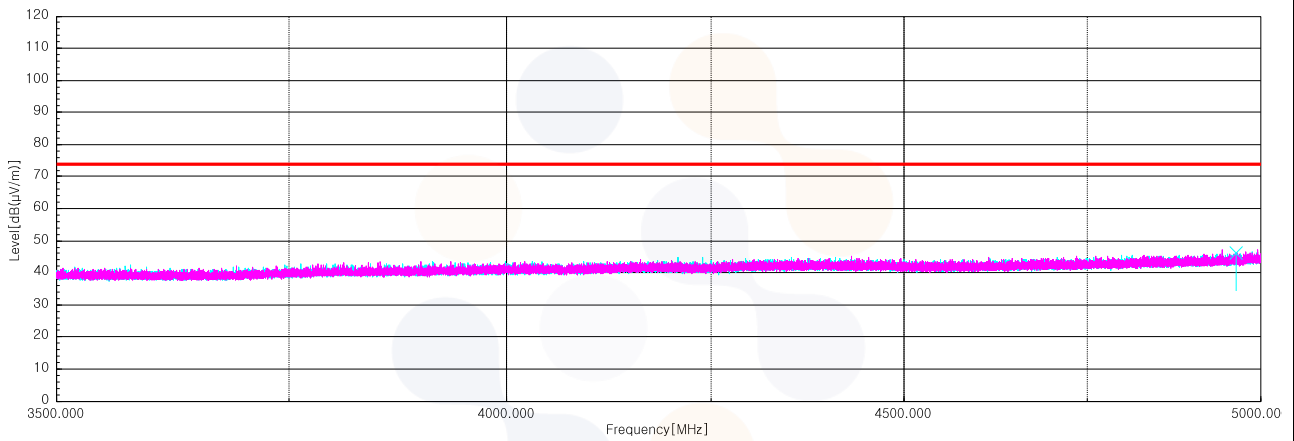
Frequency (MHz)	Pol. (V/H)	Reading (dB(μV))	Ant. Factor (dB)	Amp.+Cable (dB)	DCF (dB)	Result (dB(μV/m))	Limit (dB(μV/m))	Margin (dB)
<b>Peak data</b>								
4 964.00 <sup>1)</sup>	V	43.80	32.96	-30.69	-	46.07	74.00	27.93
7 416.17 <sup>1)</sup>	V	37.10	36.47	-29.09	-	44.48	74.00	29.52
10 487.43	H	38.50	38.80	-28.15	-	49.15	68.20	19.05
15 689.52 <sup>1)</sup>	H	40.60	37.80	-26.43	-	51.97	74.00	22.03
<b>Average Data</b>								
15 689.52 <sup>1)</sup>	H	29.80	37.80	-26.43	1.17	42.34	54.00	11.66



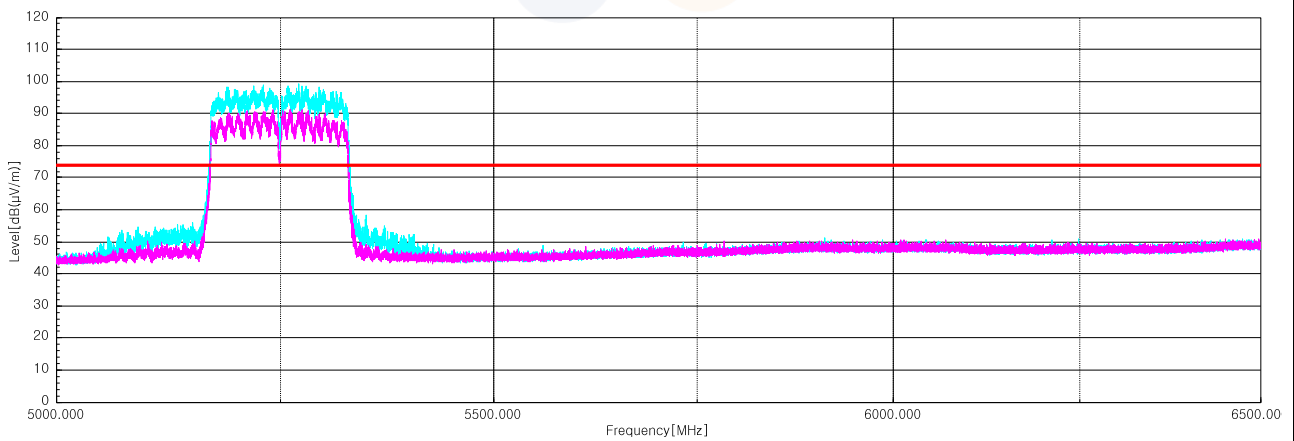
**Horizontal/Vertical for 1 GHz ~ 3.5 GHz**



**Horizontal/Vertical for 3.5 GHz ~ 5 GHz**

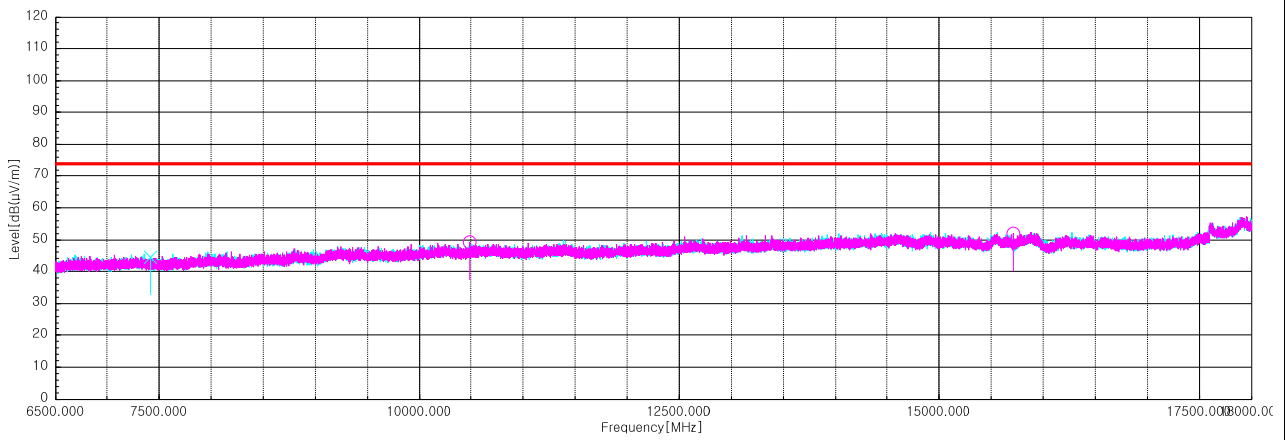


**Horizontal/Vertical for 5 GHz ~ 6.5 GHz**

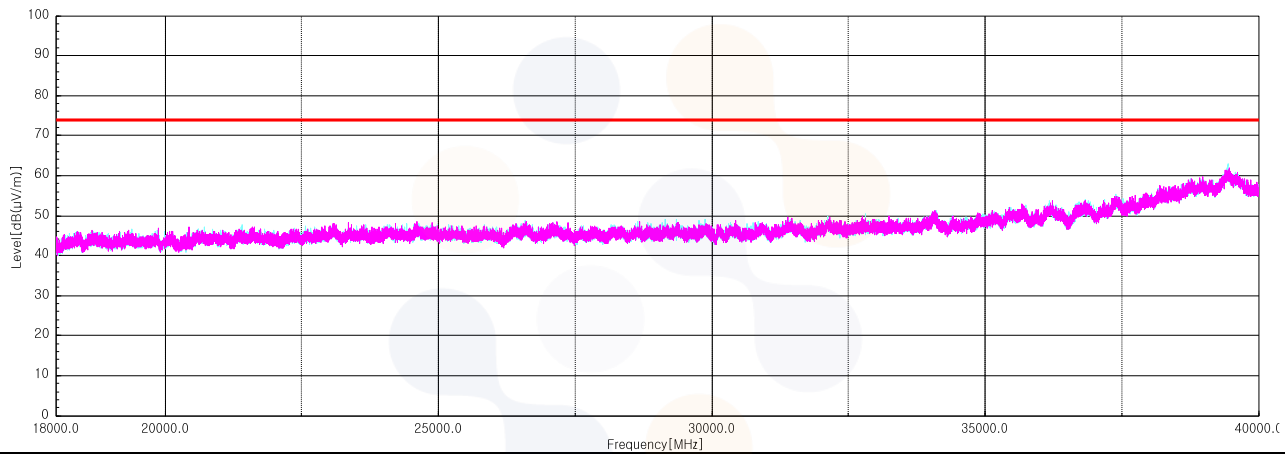




### Horizontal/Vertical for 6.5 GHz ~ 18 GHz

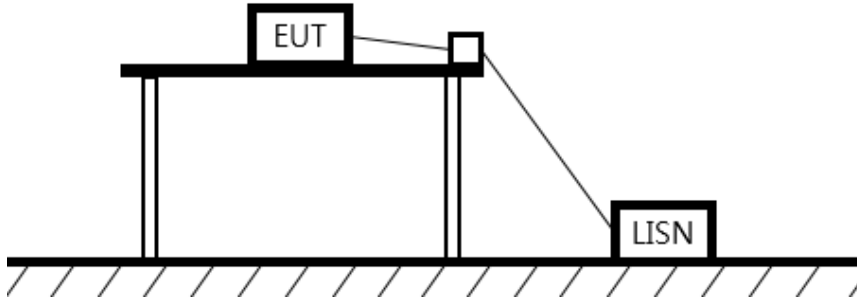


### Horizontal/Vertical for 18 GHz ~ 40 GHz



## 7.7. AC Conducted emission

### Test setup



### Limit

#### §15.407

According to 15.207(a), for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50uH/50 ohm line impedance stabilization network (LISN). Compliance with the provision of this paragraph shall on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower applies at the boundary between the frequencies ranges.

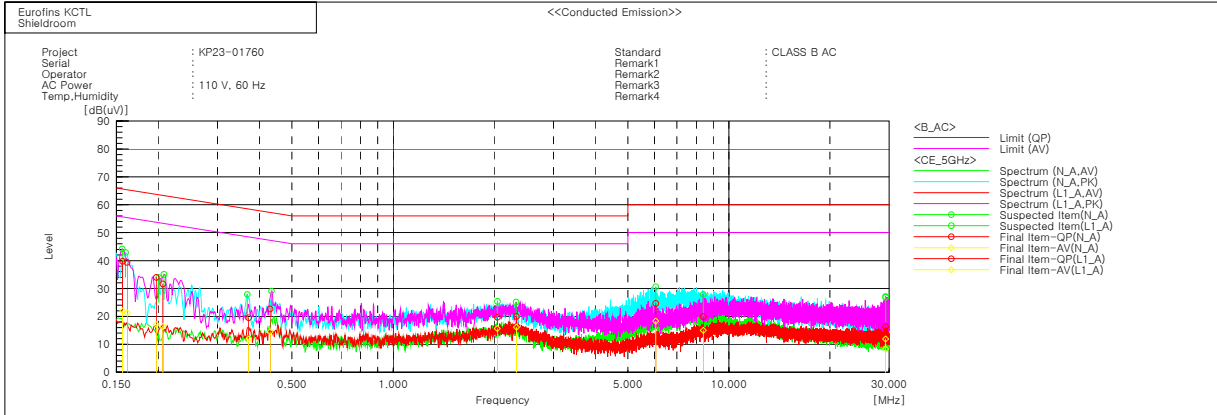
Frequency of Emission (MHz)	Conducted limit (dB $\mu$ V/m)	
	Quasi-peak	Average
0.15 – 0.50	66 - 56*	56 - 46*
0.50 – 5.00	56	46
5.00 – 30.0	60	50

### Measurement procedure

1. The EUT was placed on a wooden table of size, 1 m by 1.5 m, raised 80 cm in which is located 40 cm away from the vertical wall and 1.5m away from the side wall of the shielded room.
2. Each current-carrying conductor of the EUT power cord was individually connected through a 50 $\Omega$ /50 $\mu$ H LISN, which is an input transducer to a spectrum analyzer or an EMI/Field Intensity Meter, to the input power source.
3. Exploratory measurements were made to identify the frequency of the emission that had the highest amplitude relative to the limit by operating the EUT in a range of typical modes of operation, cable position, and with a typical system equipment configuration and arrangement. Based on the exploratory tests of the EUT, the one EUT cable configuration and arrangement and mode of operation that had produced the emission with the highest amplitude relative to the limit was selected for the final measurement.
4. The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment is the system) was then performed over the frequency range of 0.15 MHz to 30 MHz.
5. The measurements were made with the detector set to peak amplitude within a bandwidth of 10 kHz or to quasi-peak and average within a bandwidth of 9 kHz. The EUT was in transmitting mode during the measurements.

## Test results

### Worst case: 802.11a / UNII-3 5 745 MHz



#### Final Result

--- N_A Phase ---										
No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.16134	29.3	11.2	10.1	39.4	21.3	65.4	55.4	26.0	34.1
2	0.19741	23.9	7.0	10.1	34.0	17.1	63.7	53.7	29.7	36.6
3	0.37154	9.7	2.0	9.9	19.6	11.9	58.5	48.5	38.9	36.6
4	2.04212	9.9	5.9	9.8	19.7	15.7	56.0	46.0	36.3	30.3
5	6.05153	14.6	8.3	10.0	24.6	18.3	60.0	50.0	35.4	31.7
6	29.27327	2.0	-2.7	11.0	13.0	8.3	60.0	50.0	47.0	41.7

--- L1_A Phase ---										
No.	Frequency [MHz]	Reading QP [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB]	Result QP [dB(uV)]	Result CAV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin CAV [dB]
1	0.15661	29.9	12.1	9.9	39.8	22.0	65.6	55.6	25.8	33.6
2	0.20646	21.6	6.4	10.0	31.6	16.4	63.3	53.3	31.7	36.9
3	0.4302	12.8	4.6	9.9	22.7	14.5	57.2	47.2	34.5	32.7
4	2.32851	10.2	6.4	9.8	20.0	16.2	56.0	46.0	36.0	29.8
5	8.38744	9.8	4.9	10.1	19.9	15.0	60.0	50.0	40.1	35.0
6	29.27241	5.3	0.8	11.1	16.4	11.9	60.0	50.0	43.6	38.1

## 8. Measurement equipment

Equipment Name	Manufacturer	Model No.	Serial No.	Next Cal. Date
Spectrum Analyzer	R&S	FSVA40	101574	24.03.28
Attenuator	HUBER+SUHNER	6610_SK-50-1/199_NE	ATT08	24.04.10
DC Power Supply	AGILENT	E3632A	KR73001026	24.01.19
Vector Signal Generator	R&S	SMBV100A	257566	23.07.04
Signal Generator	R&S	SMB100A	176206	24.01.19
Bluetooth Tester	TESCOM	TC-3000B	3000B640056	24.01.19
Controller	INNCO SYSTEMS	CO3000	1441/54370322/P	-
Antenna Mast	INNCO SYSTEMS	MA4640-XP-ET	-	-
Turn Device	INNCO SYSTEMS	DS1200-S-1t	-	-
Spectrum Analyzer	R&S	FSVA40	101575	23.07.22
PSA Spectrum Analyzer	Agilent	E4440A	MY46186407	24.03.22
Broadband Pre-Amplifier	SCHWARZBECK	BBV9718D	57	24.03.17
Low Noise Amplifier	TESTEK	TK-PA18H	220124-L	23.12.02
Low Noise Amplifier	TESTEK	TK-PA1840H	220133-L	23.12.02
Amplifier	SONOMA INSTRUMENT	310N	421821	23.12.14
Horn Antenna	SCHWARZBECK	BBHA9120D	2763	23.12.06
Horn Antenna	SCHWARZBECK	BBHA9170	1267	23.12.05
Bi-log Antenna	Teseq GmbH	CBL 6112D	63756	24.11.17
Loop Antenna	R&S	HFH2-Z2	100355	24.08.10
Band Reject Filter	Wainwright Instruments GmbH	WTRCJV8-5100-5850-20-100-50SSK	62	23.10.14
High Pass Filter	Wainwright Instruments GmbH	WHKX8-5655-6500-18000-40SS	SN8	23.12.14
TWO-LINE V - Network	R&S	ENV216	101358	23.09.29
EMI Test Receiver	R&S	ESC13	100001	23.08.18

**End of test report**