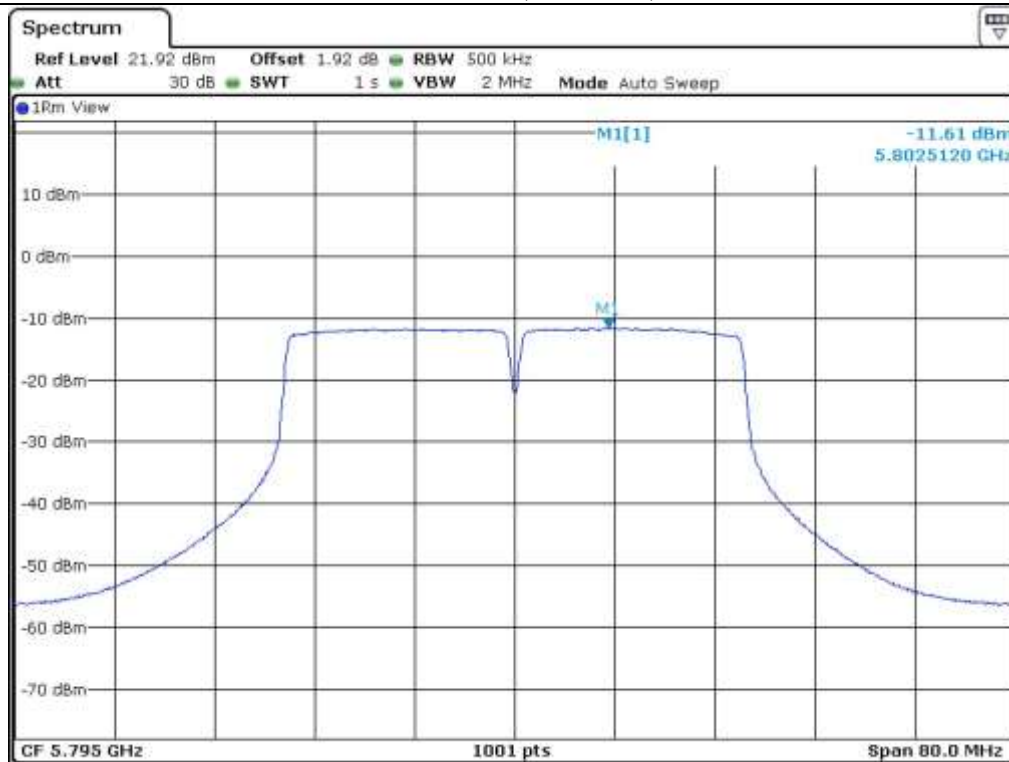




Low Channel (5 755 MHz)



High Channel (5 795 MHz)

9.6.2 Test data for Antenna 1

- . Test Date : May 02, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	-9.57	16.47	26.04
	High	5 230	-9.05	16.47	25.52
5 725 ~ 5 850	Low	5 755	-11.41	29.59	41.00
	High	5 795	-11.86	29.59	41.45

Remark: See next page for measurement data.

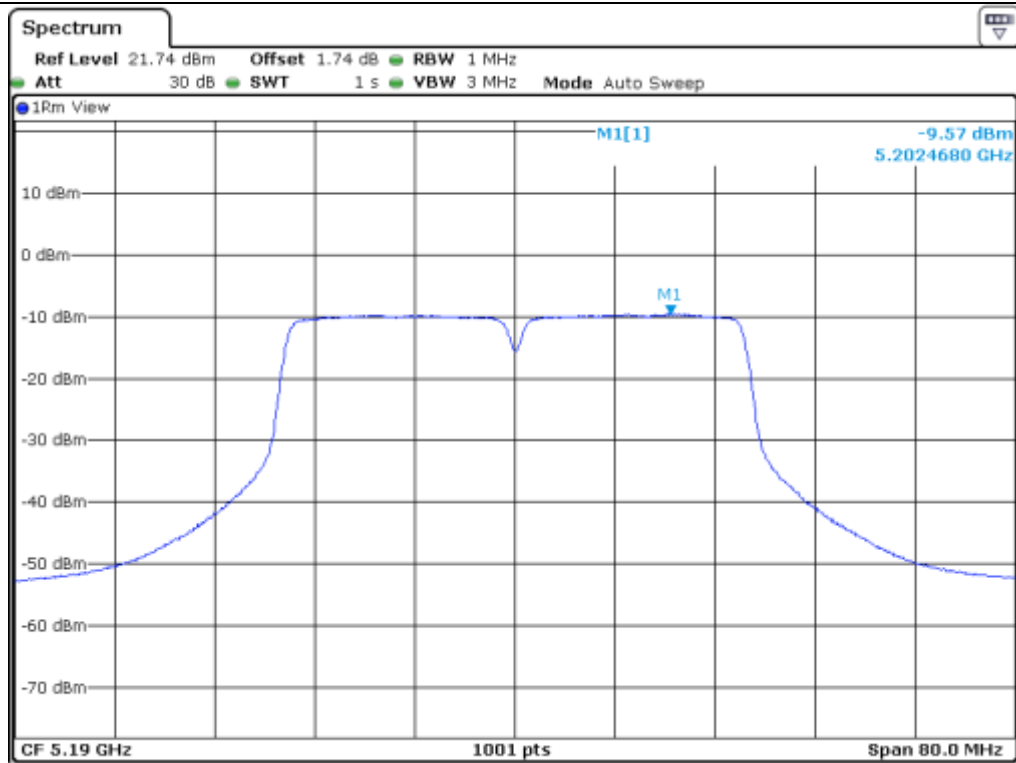
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 190	6.533	-9.57	10.00	13.04	-3.04
	High	5 230		-9.05	10.00	12.52	-2.52
5 725 ~ 5 825	Low	5 755	6.415	-11.41	29.59	41.00	-
	High	5 795		-11.86	29.59	41.45	-

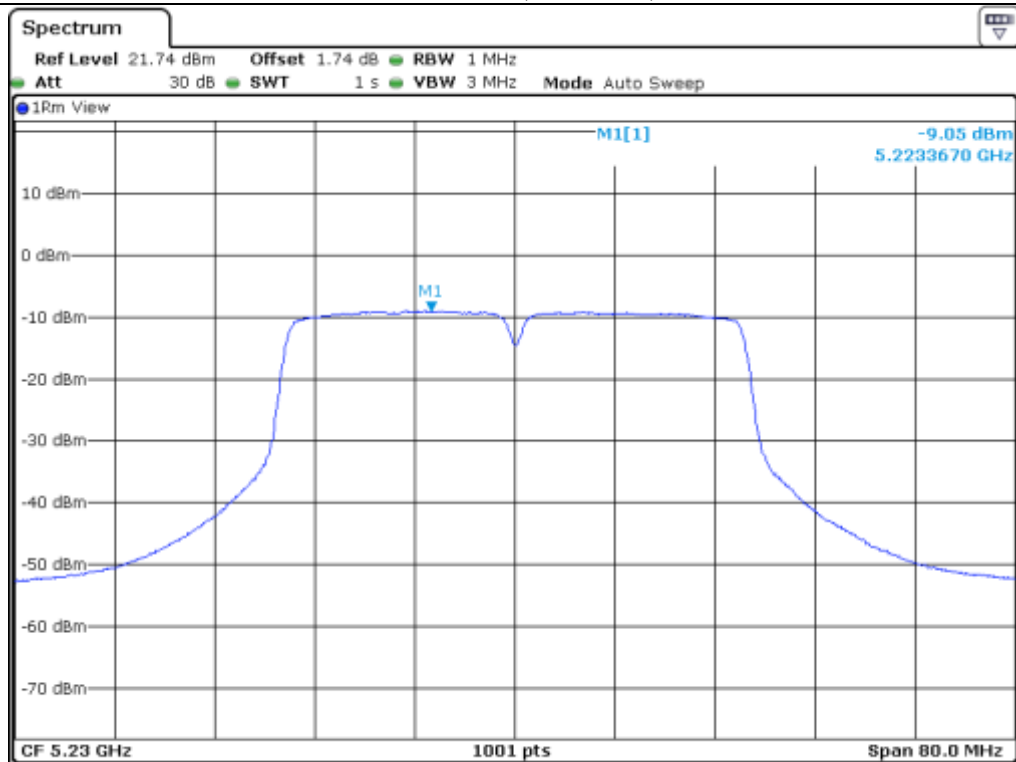
Remark: See next page for measurement data.



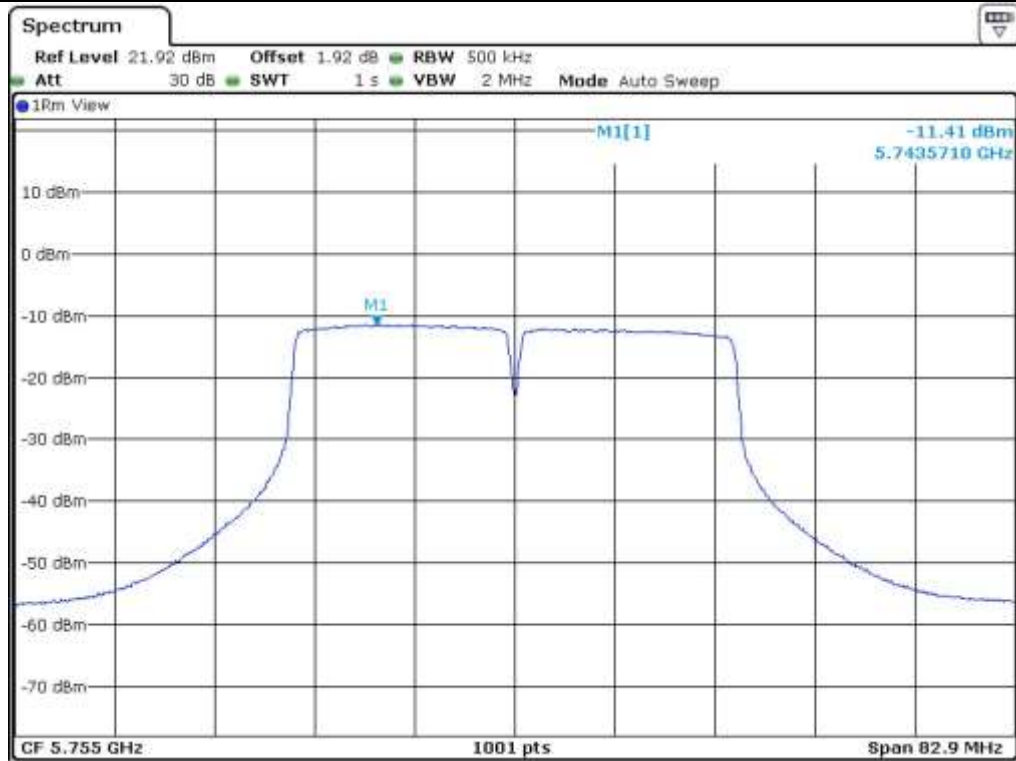
Tested by: Jun-Hui, Lee / Senior Engineer



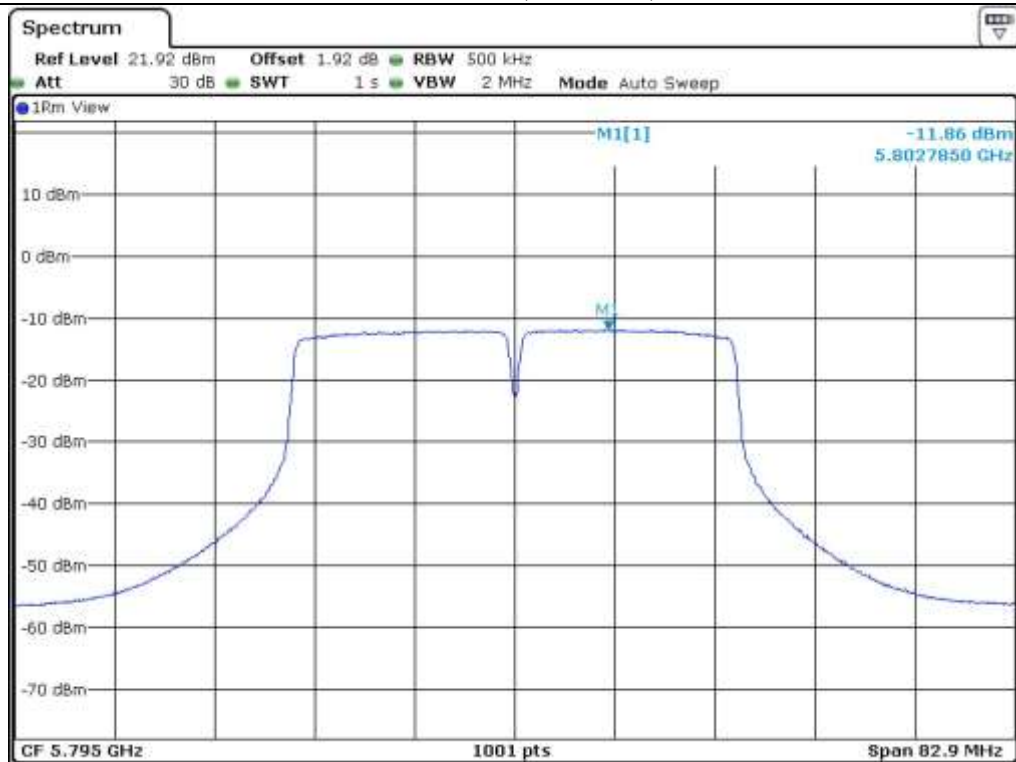
Low Channel (5 190 MHz)



High Channel (5 230 MHz)



Low Channel (5.755 MHz)



High Channel (5.795 MHz)

9.6.3 Test data for Antenna 2

-. Test Date : May 02, 2016
 -. Operating condition : Highest Output Power Transmitting Mode
 -. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	-9.56	16.47	26.03
	High	5 230	-9.18	16.47	25.65
5 725 ~ 5 850	Low	5 755	-11.23	29.59	40.82
	High	5 795	-12.02	29.59	41.61

Remark: See next page for measurement data.

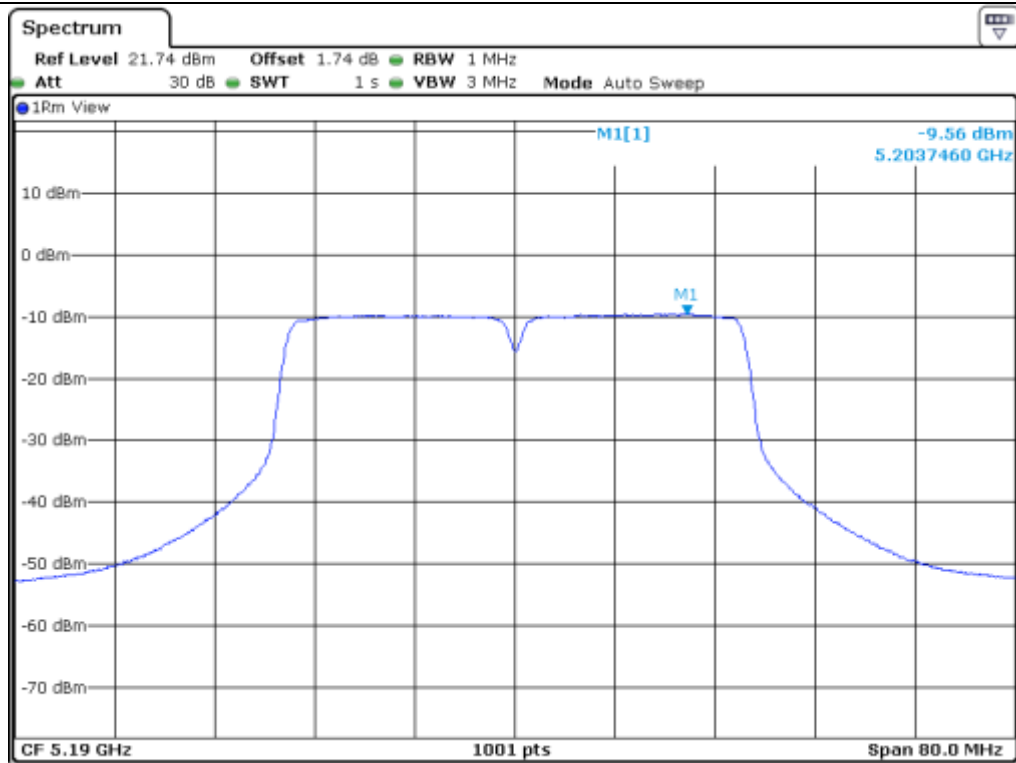
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 190	6.533	-9.56	10.00	13.03	-3.03
	High	5 230		-9.18	10.00	12.65	-2.65
5 725 ~ 5 825	Low	5 755	6.415	-11.23	29.59	40.82	-
	High	5 795		-12.02	29.59	41.61	-

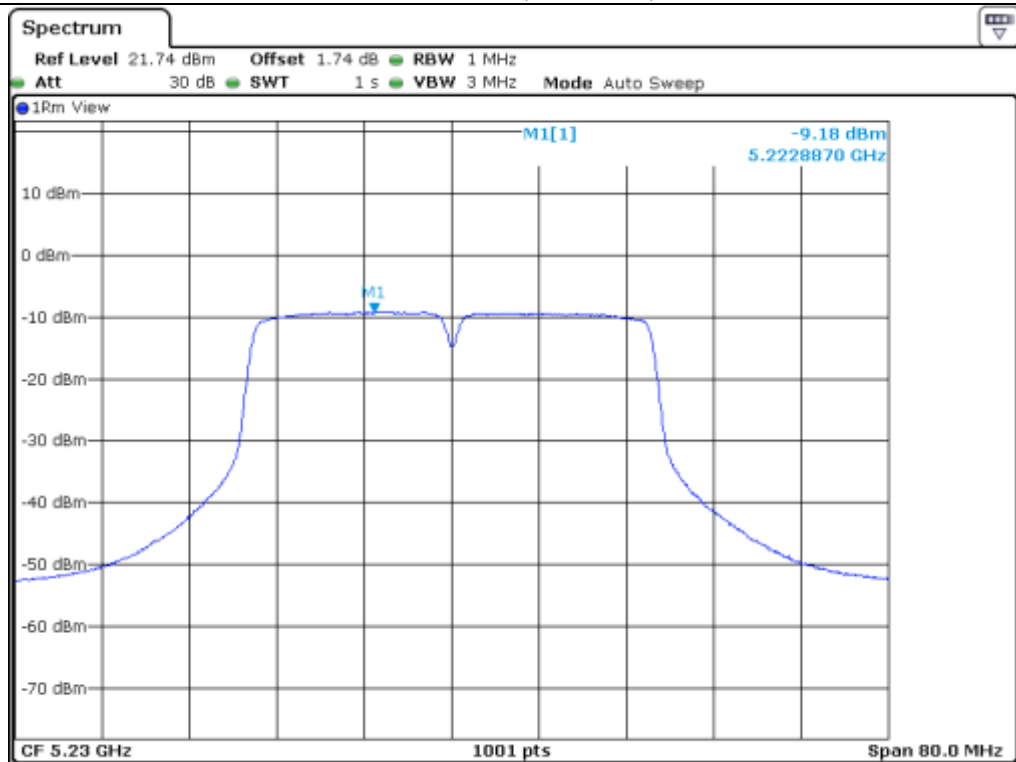
Remark: See next page for measurement data.



Tested by: Jun-Hui, Lee / Senior Engineer



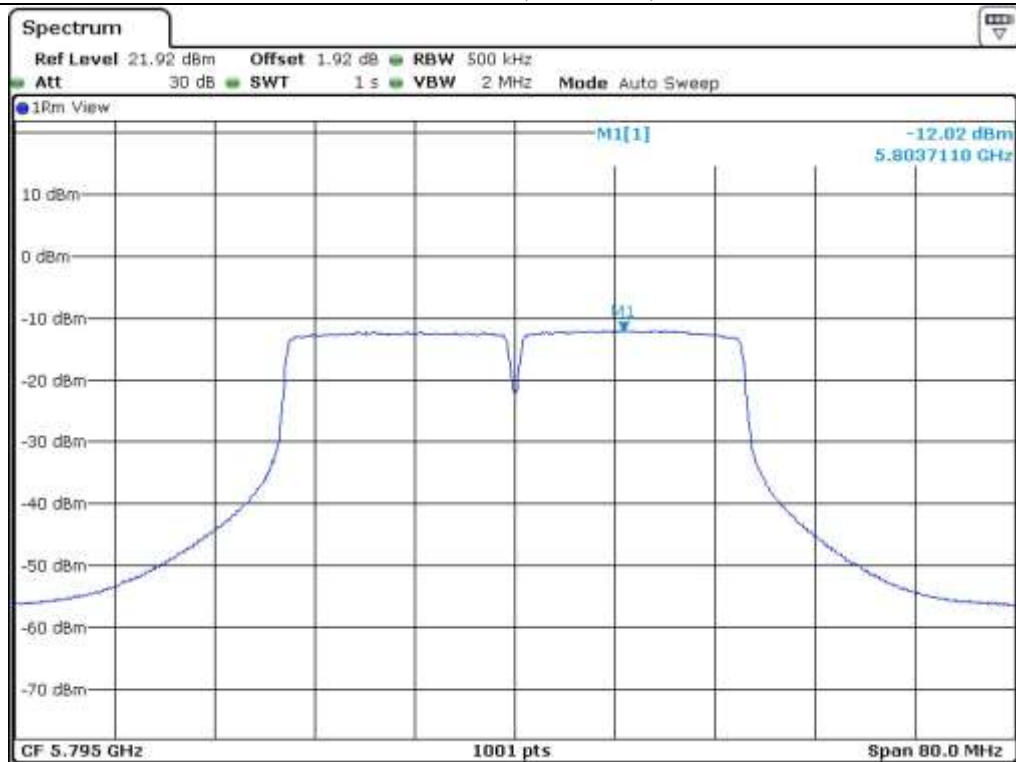
Low Channel (5 190 MHz)



High Channel (5 230 MHz)



Low Channel (5 755 MHz)



High Channel (5 795 MHz)

9.6.4 Test data for Multiple transmit

- Test Date : May 02, 2016
- Operating condition : Highest Output Power Transmitting Mode
- Test Result : Pass

- FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	-4.67	11.70	16.36
	High	5 230	-4.37	11.70	16.07
5 725 ~ 5 850	Low	5 755	-6.46	24.81	31.28
	High	5 795	-7.06	24.81	31.87

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density = $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$

- IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 190	11.304	-4.67	10.00	3.36	6.64
	High	5 230		-4.37	10.00	3.07	6.93
5 725 ~ 5 825	Low	5 755	11.186	-6.46	24.81	31.28	-
	High	5 795		-7.06	24.81	31.87	-

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density = $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$


Tested by: Jun-Hui, Lee / Senior Engineer

9.7 Test data for 802.11ac20 RLAN Mode

9.7.1 Test data for Antenna 0

-. Test Date : May 02, 2016
 -. Operating condition : Highest Output Power Transmitting Mode
 -. Test Result : Pass

-. FCC Test data

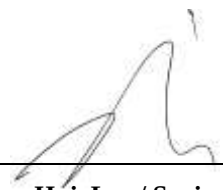
FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	-6.59	16.47	23.06
	Middle	5 200	-6.51	16.47	22.98
	High	5 240	-6.79	16.47	23.26
5 725 ~ 5 850	Low	5 745	-6.32	29.59	35.91
	Middle	5 785	1.54	29.59	28.05
	High	5 825	-6.76	29.59	36.35

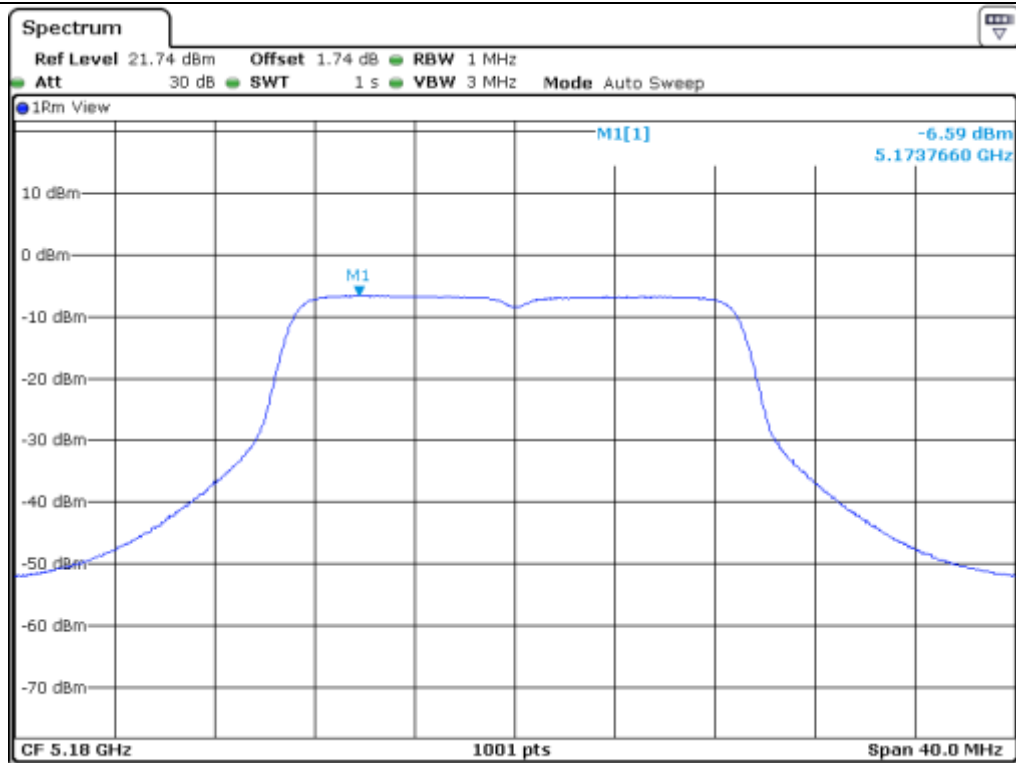
Remark: See next page for measurement data.

-. IC Test data

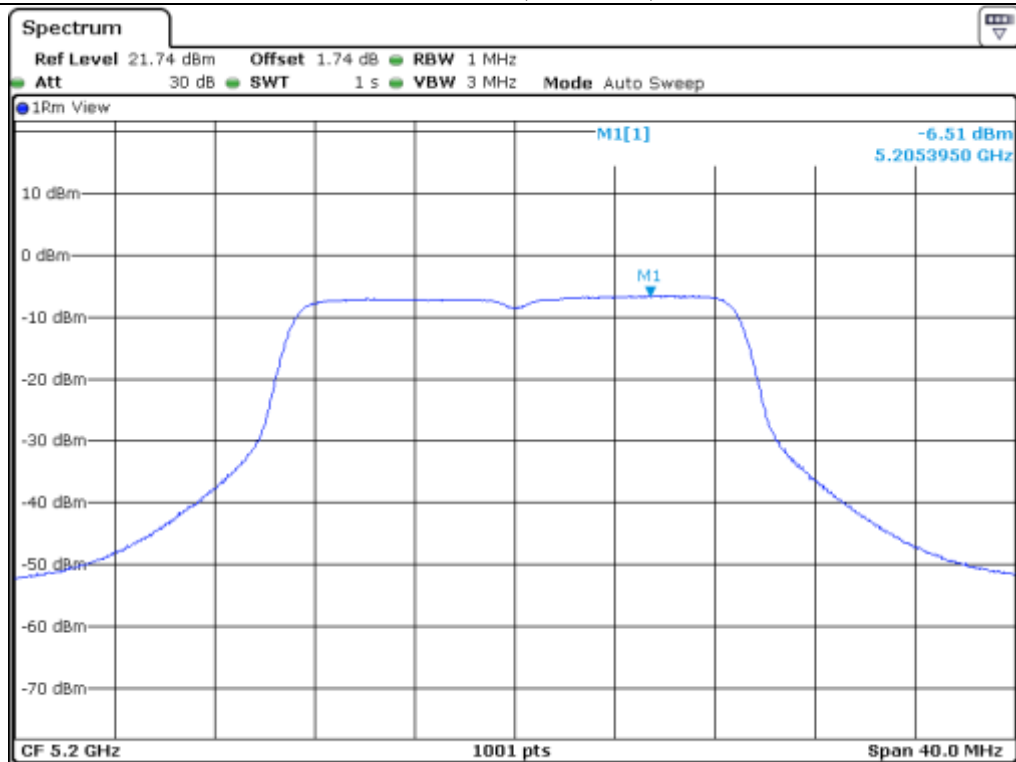
FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 180	6.533	-6.59	10.00	10.06	-0.06
	Middle	5 200		-6.51	10.00	9.98	0.02
	High	5 240		-6.79	10.00	10.26	-0.26
5 725 ~ 5 825	Low	5 745	6.415	-6.32	29.59	35.91	-
	Middle	5 785		1.54	29.59	28.05	-
	High	5 825		-6.76	29.59	36.35	-

Remark: See next page for measurement data.

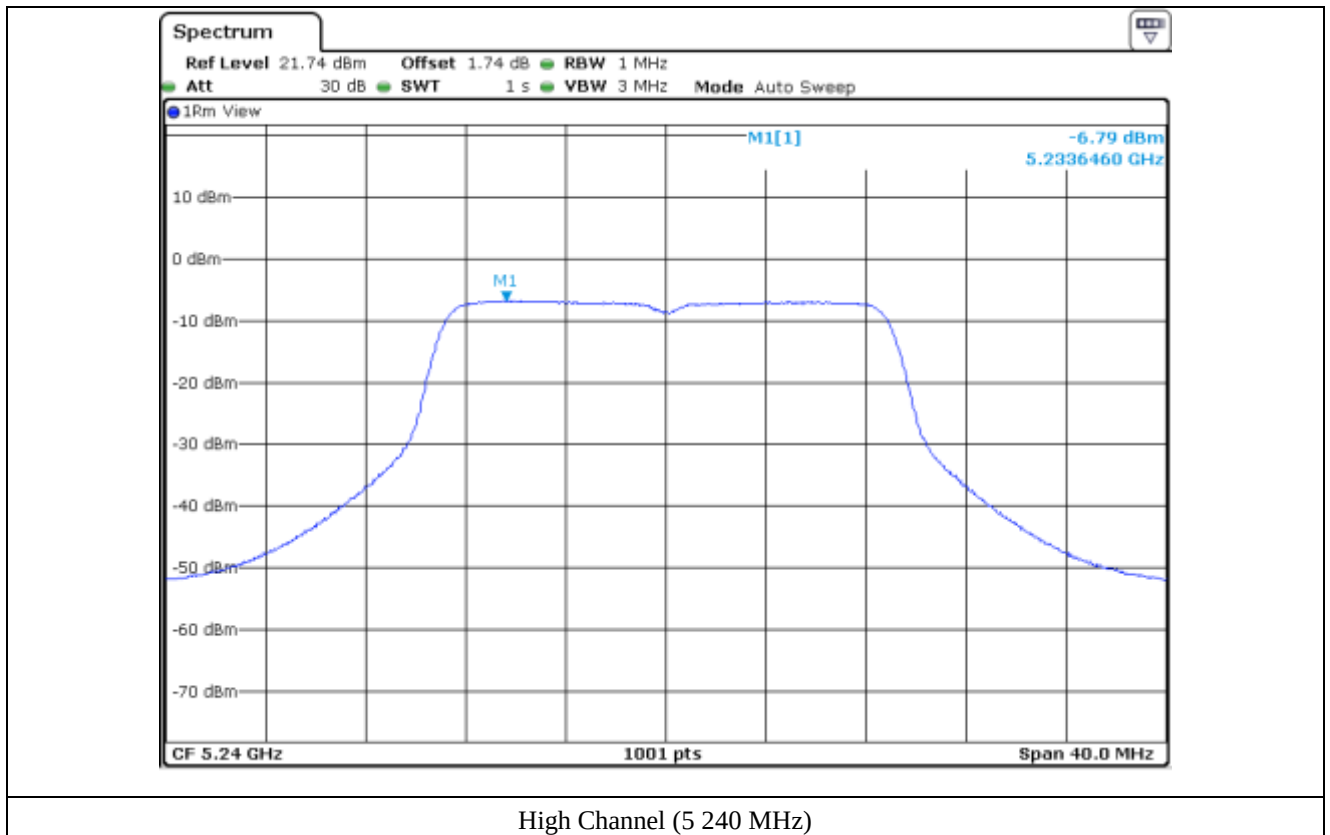

 Tested by: Jun-Hui, Lee / Senior Engineer



Low Channel (5 180 MHz)



Middle Channel (5 200 MHz)

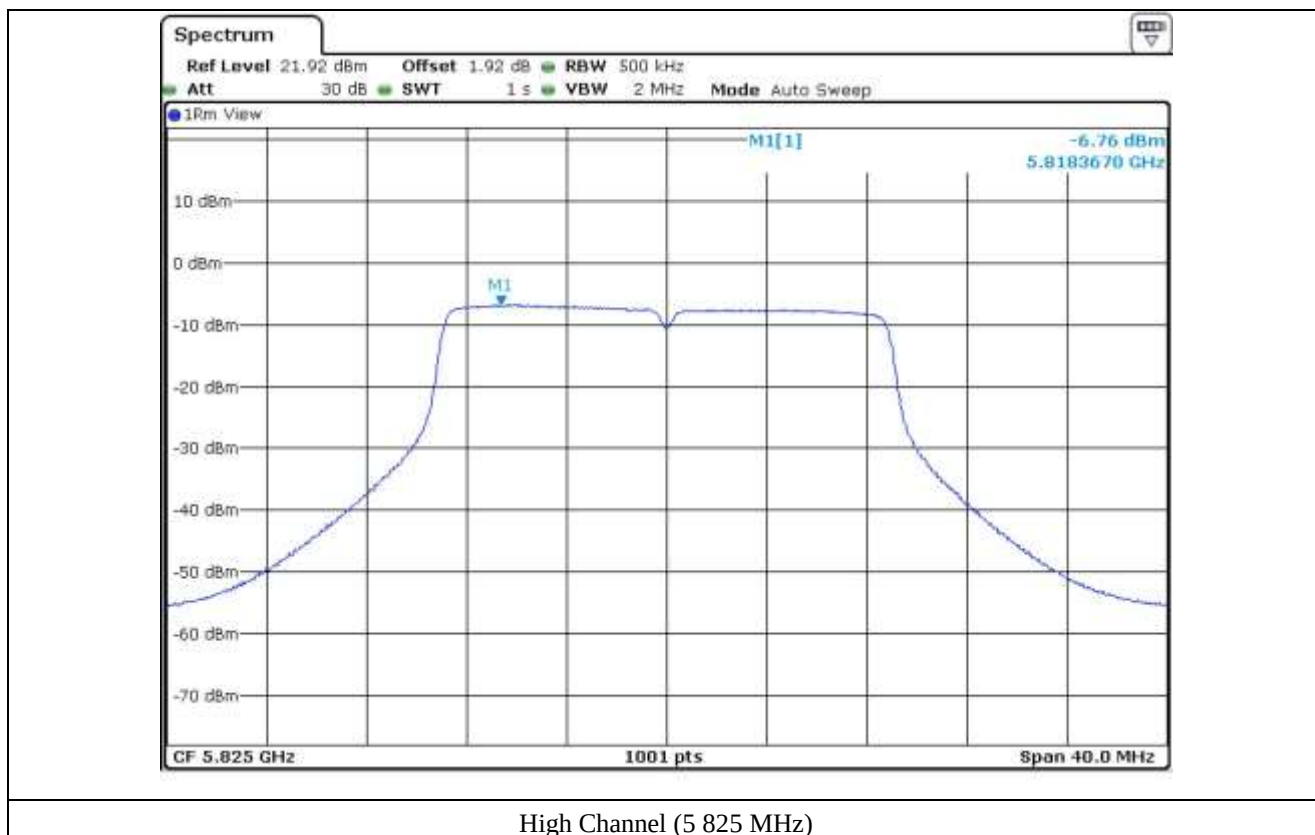




Low Channel (5.745 MHz)



Middle Channel (5.785 MHz)



9.7.2 Test data for Antenna 1

- Test Date : May 02, 2016
- Operating condition : Highest Output Power Transmitting Mode
- Test Result : Pass

- FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	-6.94	16.47	23.41
	Middle	5 200	-6.73	16.47	23.20
	High	5 240	-6.60	16.47	23.07
5 725 ~ 5 850	Low	5 745	-6.58	29.59	36.17
	Middle	5 785	1.78	29.59	27.81
	High	5 825	-8.03	29.59	37.62

Remark: See next page for measurement data.

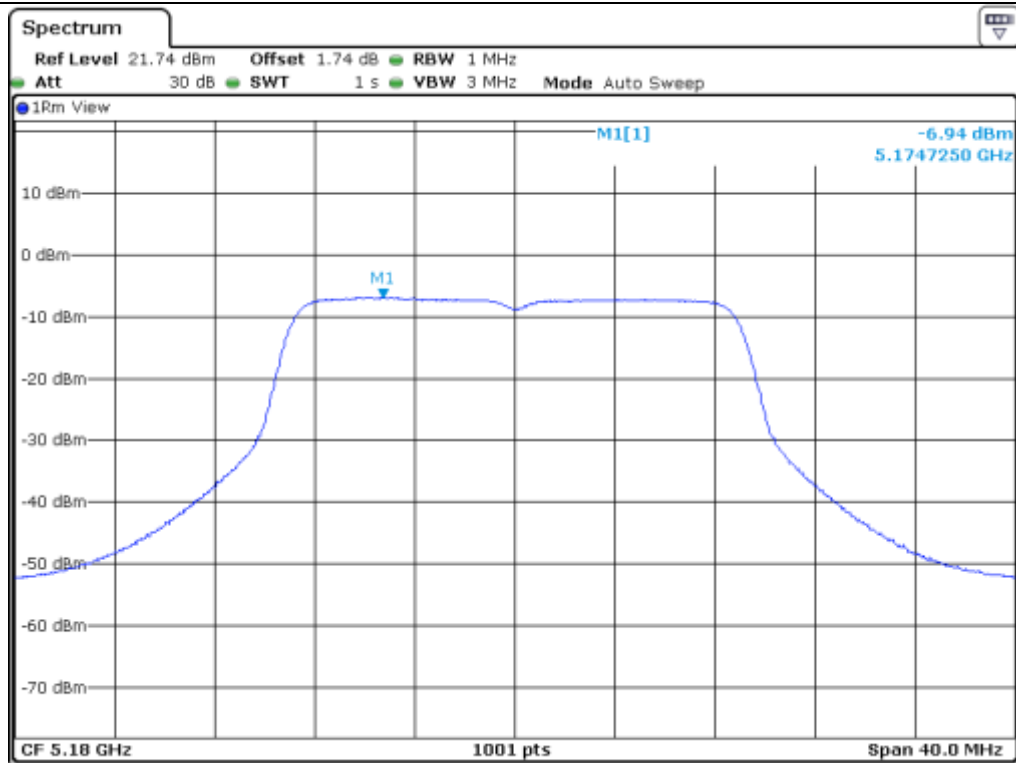
- IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 180	6.533	-6.94	10.00	10.41	-0.41
	Middle	5 200		-6.73	10.00	10.20	-0.20
	High	5 240		-6.60	10.00	10.07	-0.07
5 725 ~ 5 825	Low	5 745	6.415	-6.58	29.59	36.17	-
	Middle	5 785		1.78	29.59	27.81	-
	High	5 825		-8.03	29.59	37.62	-

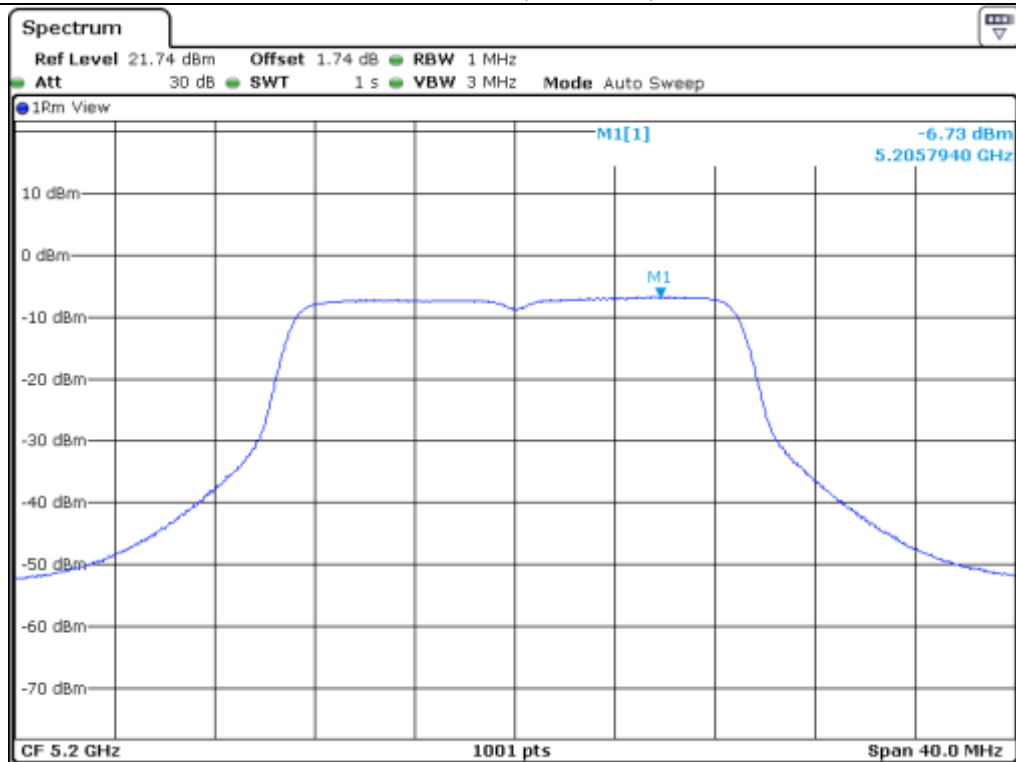
Remark: See next page for measurement data.



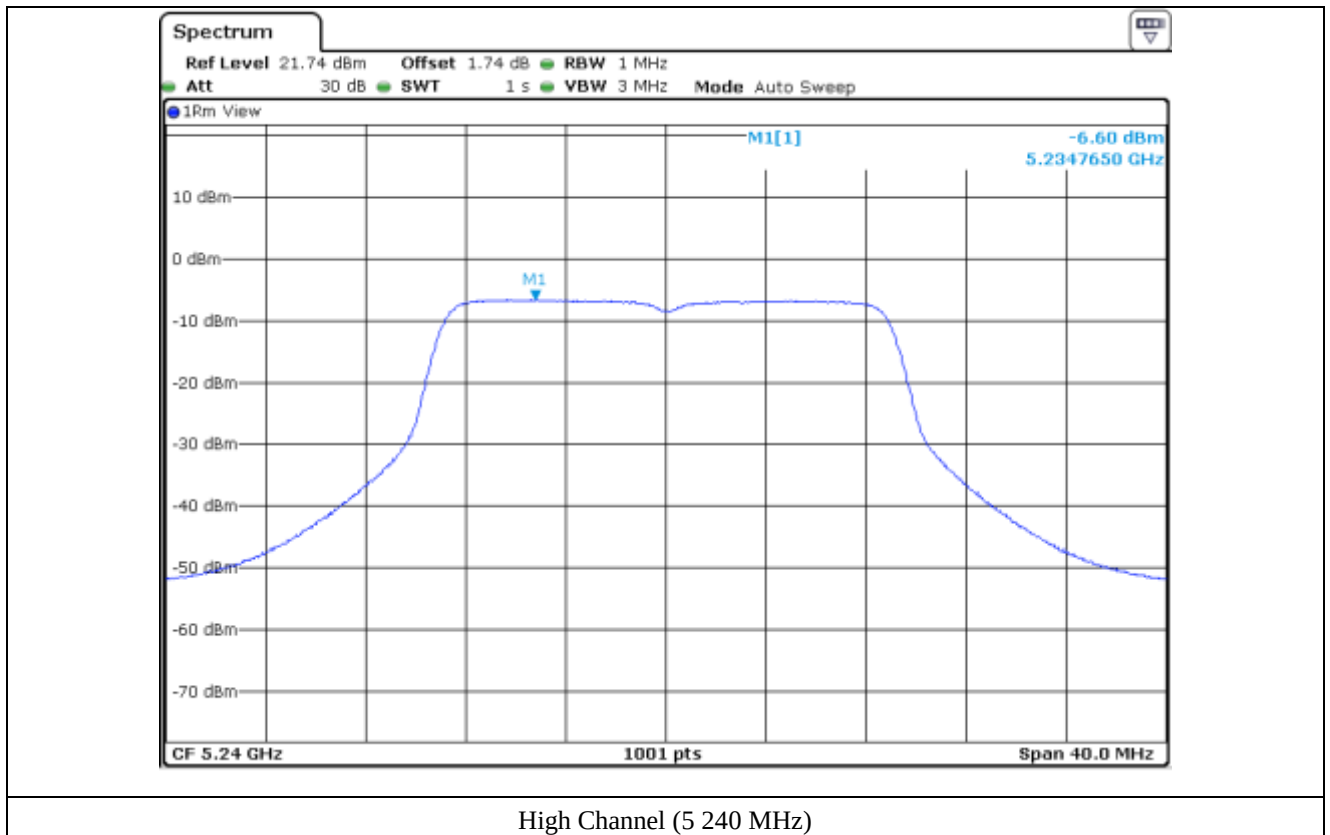
Tested by: Jun-Hui, Lee / Senior Engineer



Low Channel (5 180 MHz)

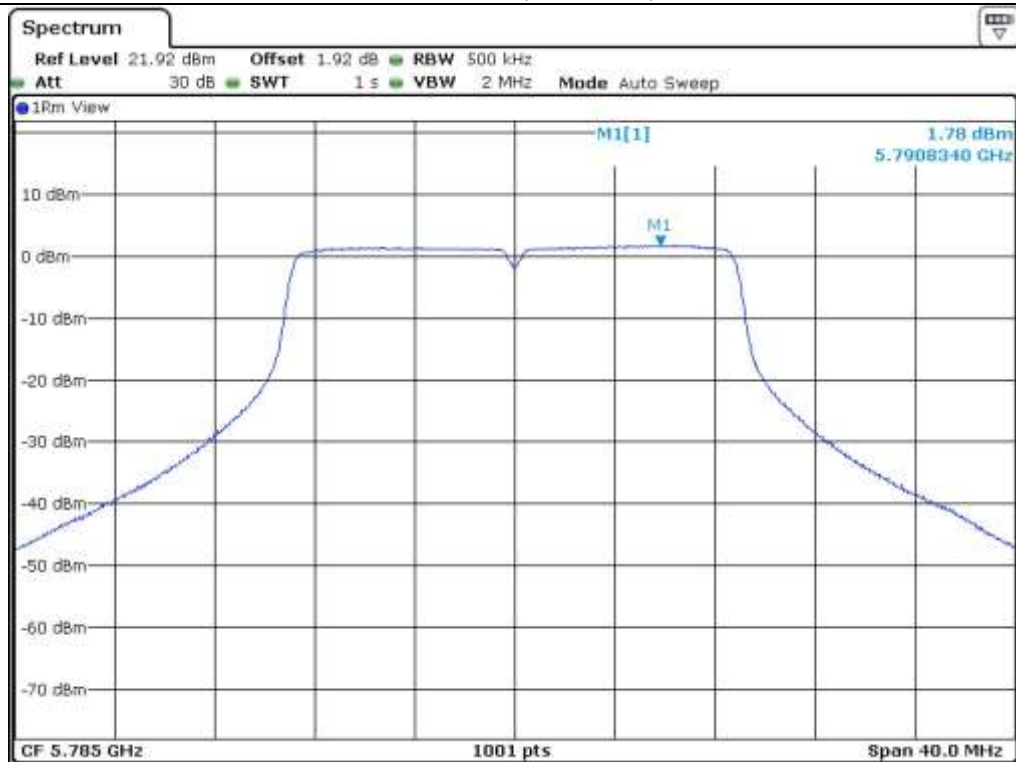


Middle Channel (5 200 MHz)





Low Channel (5.745 MHz)



Middle Channel (5.785 MHz)



High Channel (5 825 MHz)

9.7.3 Test data for Antenna 2

- Test Date : May 02, 2016
- Operating condition : Highest Output Power Transmitting Mode
- Test Result : Pass

- FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	-6.74	16.47	23.21
	Middle	5 200	-6.58	16.47	23.05
	High	5 240	-6.78	16.47	23.25
5 725 ~ 5 850	Low	5 745	-6.60	29.59	36.19
	Middle	5 785	1.23	29.59	28.36
	High	5 825	-7.33	29.59	36.92

Remark: See next page for measurement data.

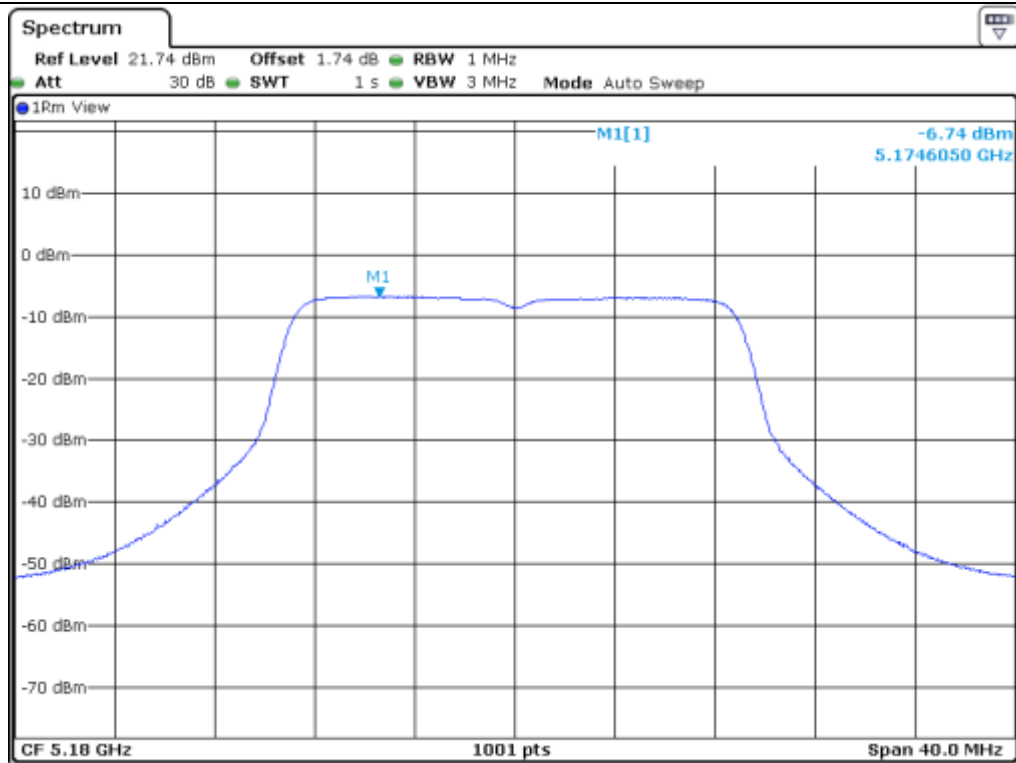
- IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 180	6.533	-6.74	10.00	10.21	-0.21
	Middle	5 200		-6.58	10.00	10.05	-0.05
	High	5 240		-6.78	10.00	10.25	-0.25
5 725 ~ 5 825	Low	5 745	6.415	-6.60	29.59	36.19	-
	Middle	5 785		1.23	29.59	28.36	-
	High	5 825		-7.33	29.59	36.92	-

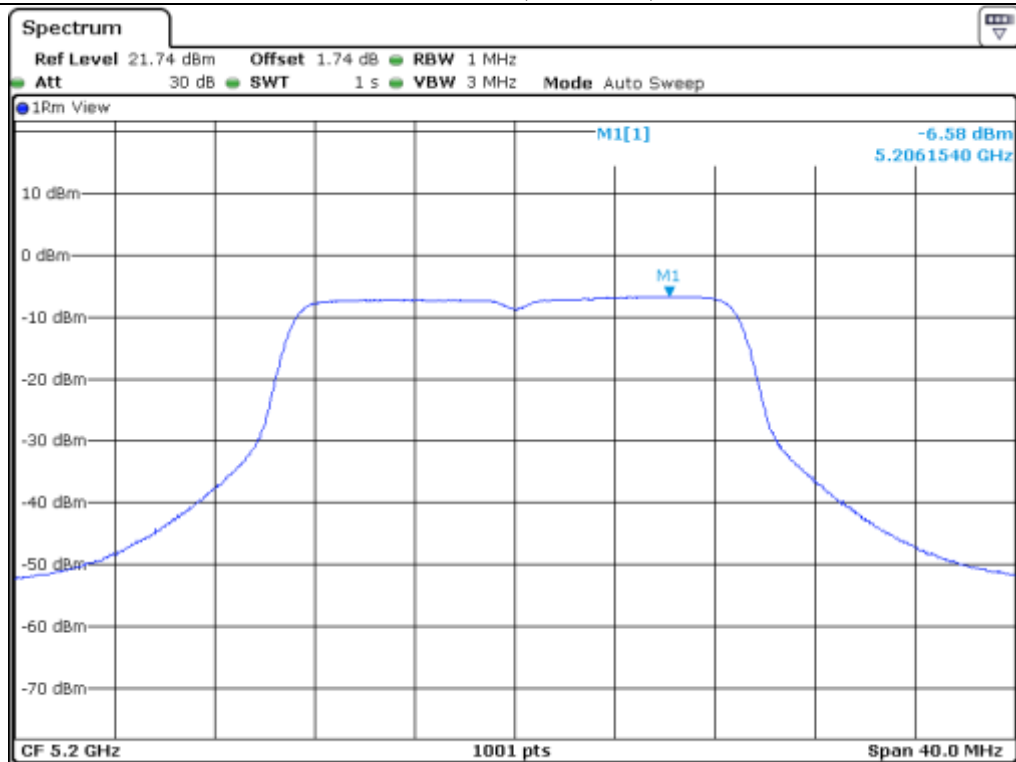
Remark: See next page for measurement data.



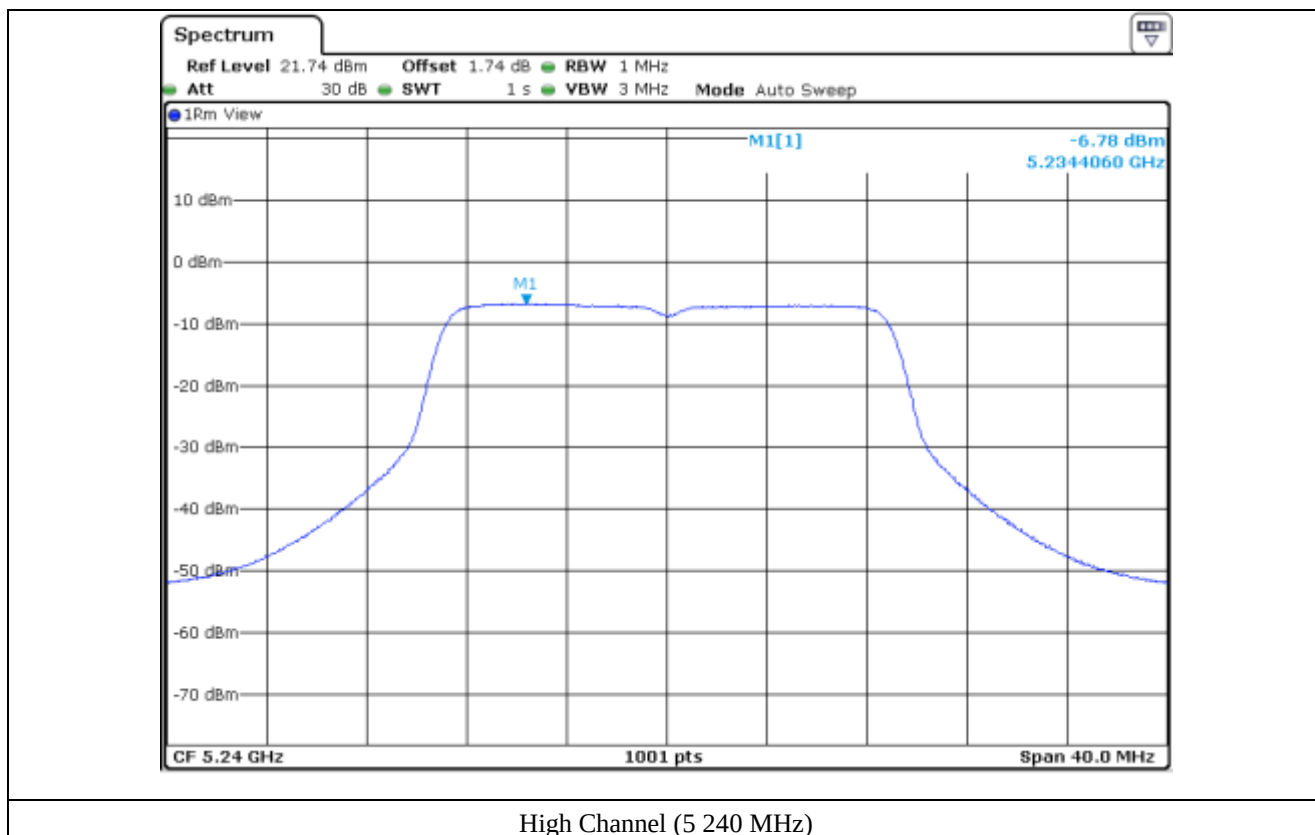
Tested by: Jun-Hui, Lee / Senior Engineer



Low Channel (5 180 MHz)



Middle Channel (5 200 MHz)





Low Channel (5.745 MHz)



Middle Channel (5.785 MHz)



9.7.4 Test data for Multiple Transmit

- Test Date : May 02, 2016
- Operating condition : Highest Output Power Transmitting Mode
- Test Result : Pass

- FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 180	-1.98	11.70	13.68
	Middle	5 200	-1.83	11.70	13.53
	High	5 240	-1.95	11.70	13.65
5 725 ~ 5 850	Low	5 745	-1.73	24.81	26.54
	Middle	5 785	6.29	24.81	18.52
	High	5 825	-2.57	24.81	27.39

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density = $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$

- IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 180	11.304	-1.98	10.00	0.68	9.32
	Middle	5 200		-1.83	10.00	0.53	9.47
	High	5 240		-1.95	10.00	0.65	9.35
5 725 ~ 5 825	Low	5 745	11.186	-1.73	24.81	26.54	-
	Middle	5 785		6.29	24.81	18.52	-
	High	5 825		-2.57	24.81	27.39	-

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density = $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$



Tested by: Jun-Hui, Lee / Senior Engineer

9.8 Test data for 802.11ac40 RLAN Mode

9.8.1 Test data for Antenna 0

- . Test Date : May 02, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	-9.19	16.47	25.66
	High	5 230	-9.27	16.47	25.74
5 725 ~ 5 850	Low	5 755	-11.04	29.59	40.63
	High	5 795	-11.56	29.59	41.15

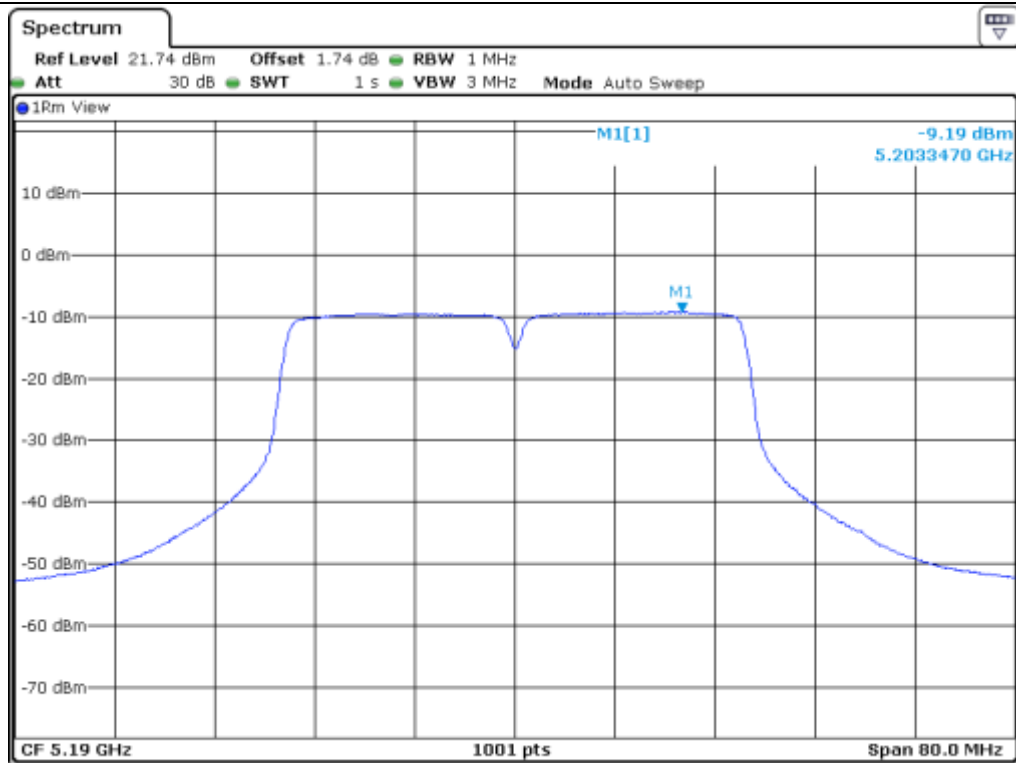
Remark: See next page for measurement data.

-. IC Test data

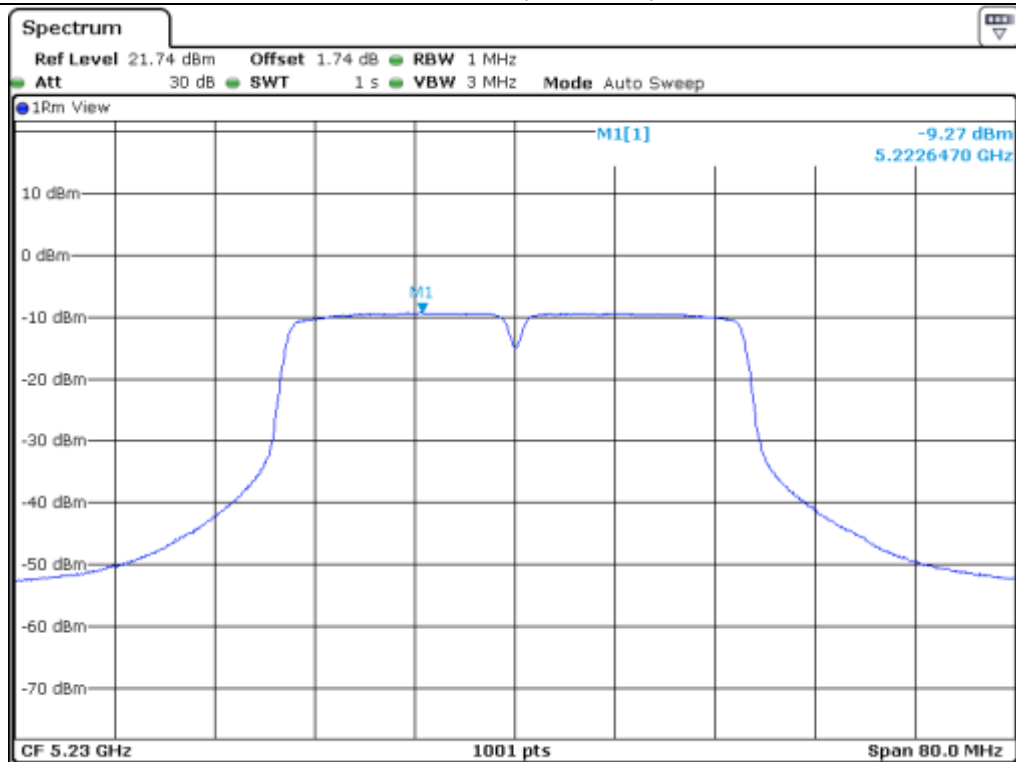
FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 190	6.533	-9.19	10.00	12.66	-2.66
	High	5 230		-9.27	10.00	12.74	-2.74
5 725 ~ 5 825	Low	5 755	6.415	-11.04	29.59	40.63	-
	High	5 795		-11.56	29.59	41.15	-

Remark: See next page for measurement data.

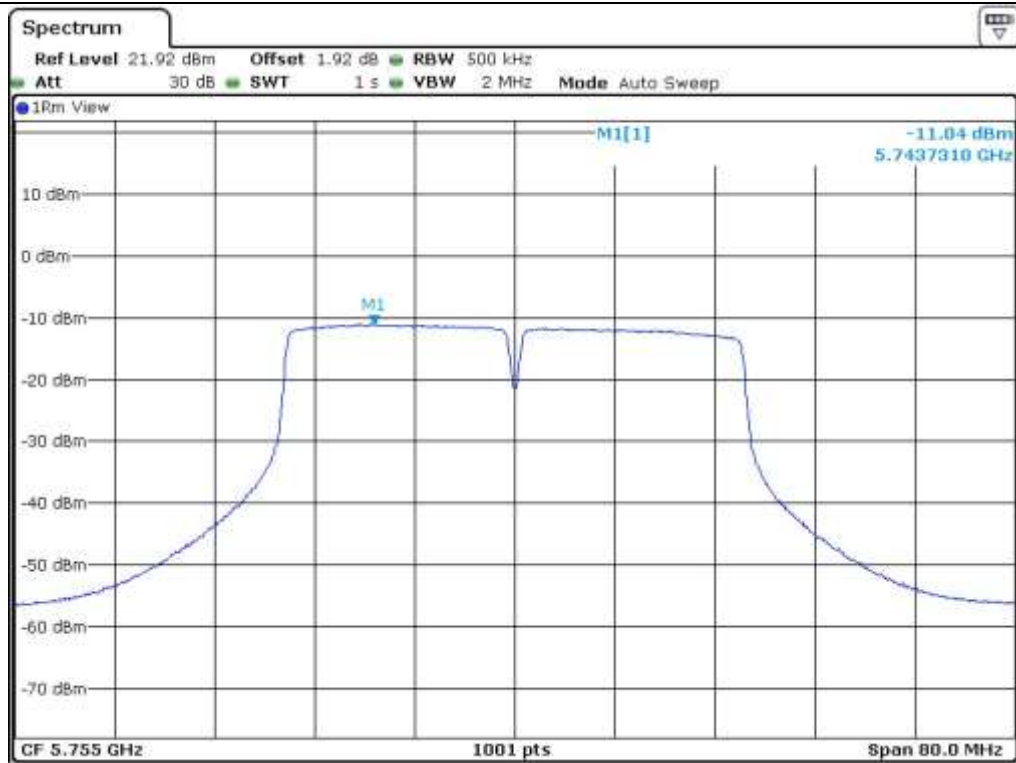

Tested by: Jun-Hui, Lee / Senior Engineer



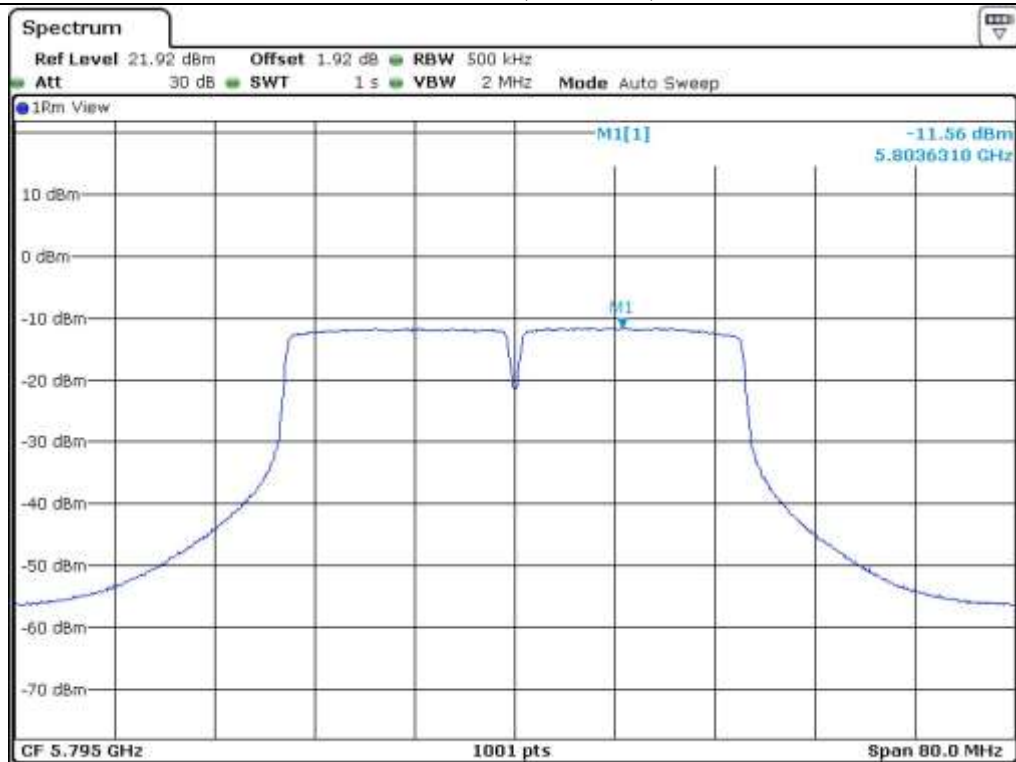
Low Channel (5 190 MHz)



High Channel (5 230 MHz)



Low Channel (5 755 MHz)



High Channel (5 795 MHz)

9.8.2 Test data for Antenna 1

- Test Date : May 02, 2016
- Operating condition : Highest Output Power Transmitting Mode
- Test Result : Pass

- FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	-9.59	16.47	26.06
	High	5 230	-9.02	16.47	25.49
5 725 ~ 5 850	Low	5 755	-11.37	29.59	40.96
	High	5 795	-11.84	29.59	41.43

Remark: See next page for measurement data.

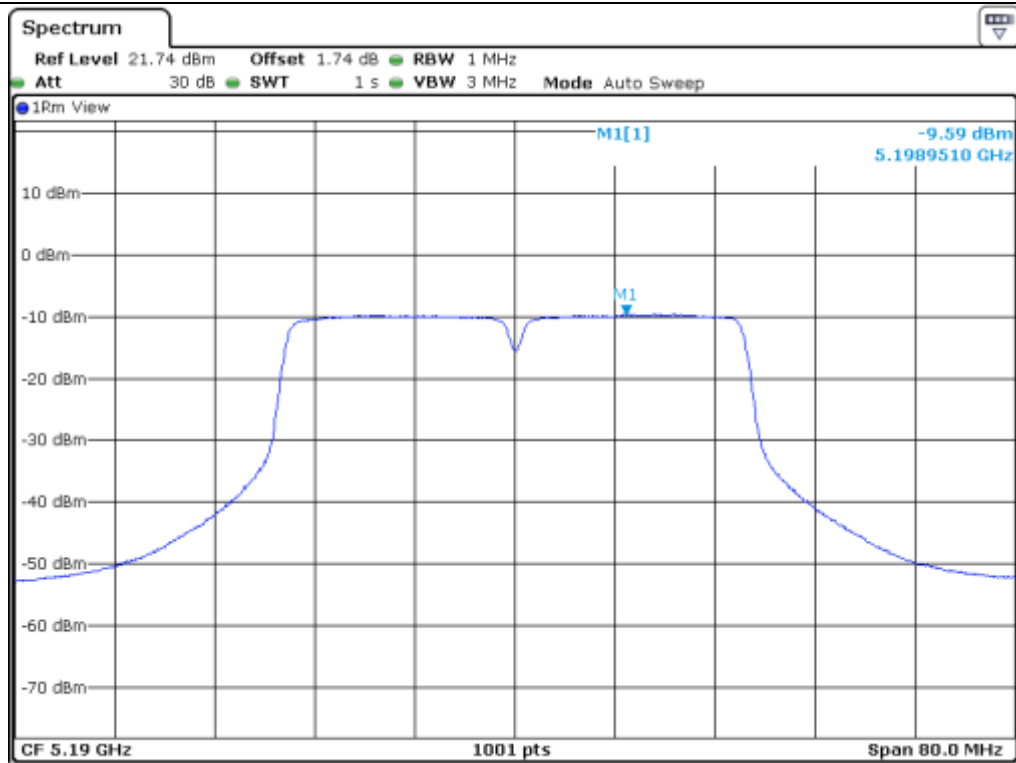
- IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 190	6.533	-9.59	10.00	13.06	-3.06
	High	5 230		-9.02	10.00	12.49	-2.49
5 725 ~ 5 825	Low	5 755	6.415	-11.37	29.59	40.96	-
	High	5 795		-11.84	29.59	41.43	-

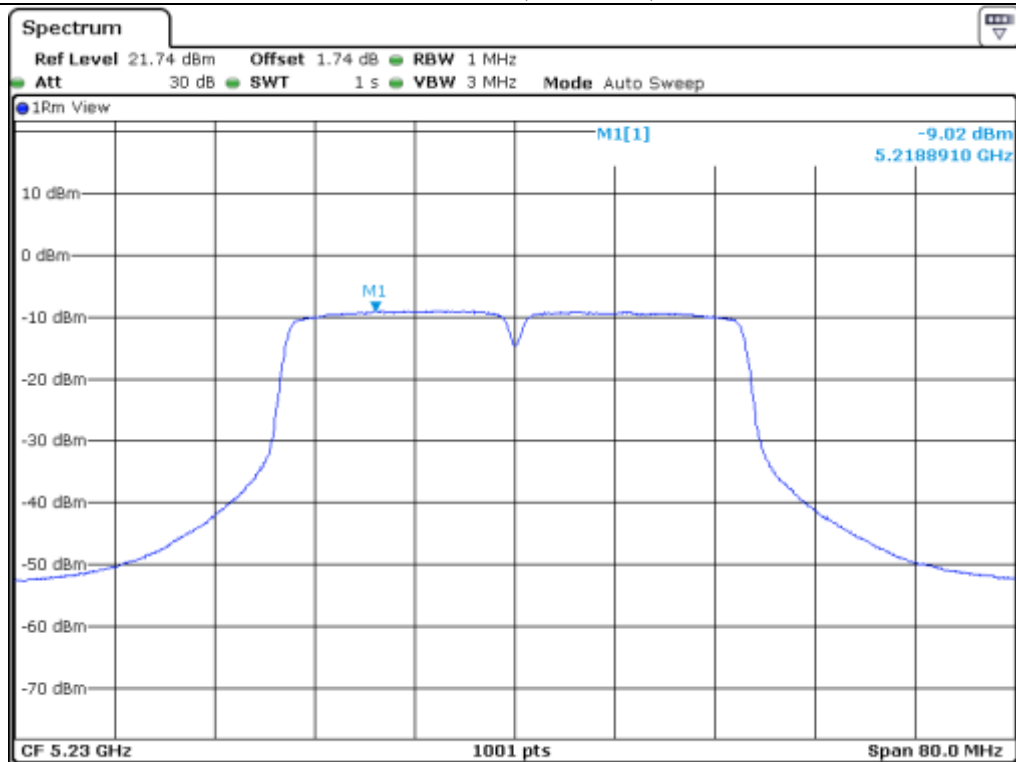
Remark: See next page for measurement data.



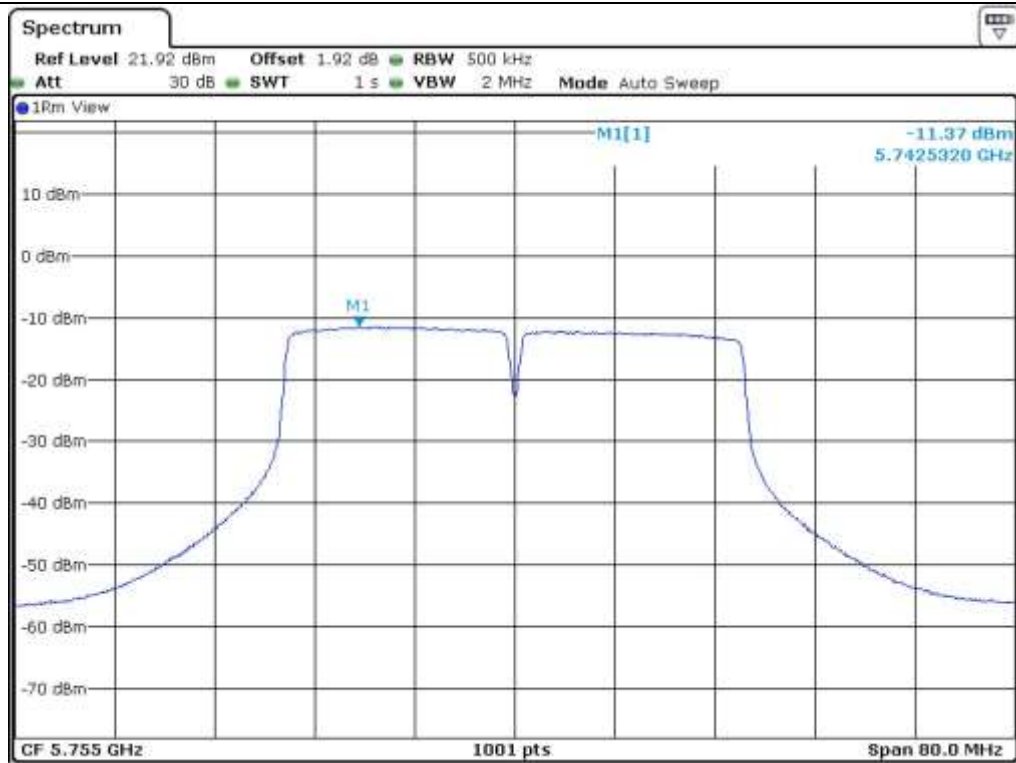
Tested by: Jun-Hui, Lee / Senior Engineer



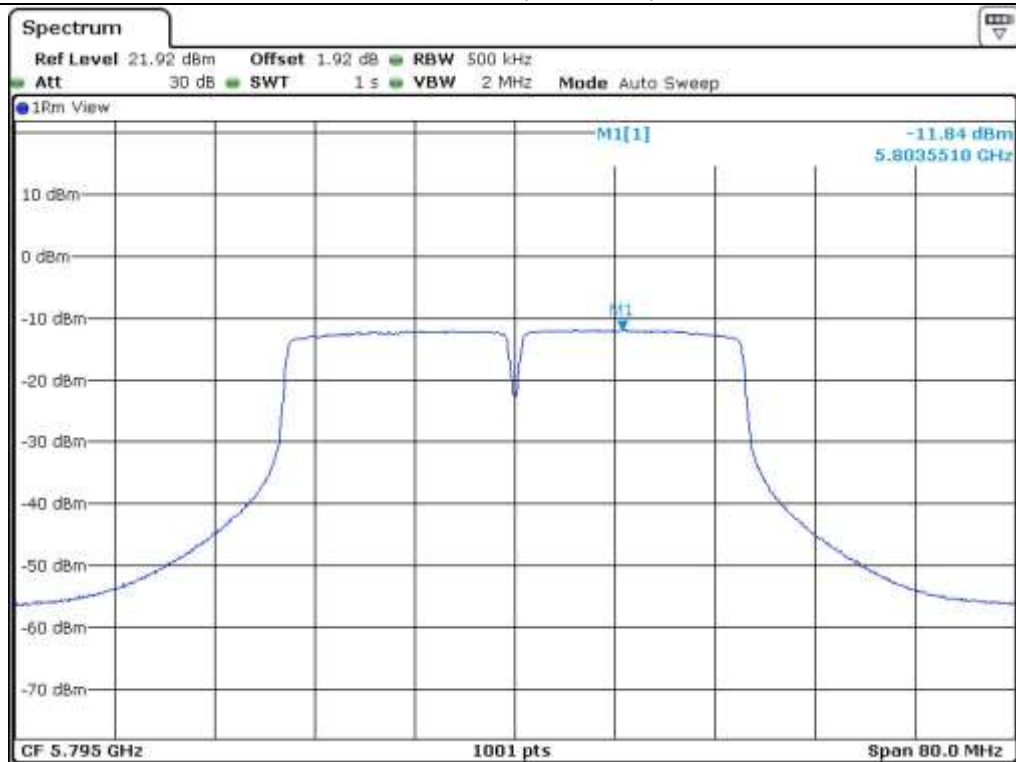
Low Channel (5 190 MHz)



High Channel (5 230 MHz)



Low Channel (5.755 MHz)



High Channel (5.795 MHz)

9.8.3 Test data for Antenna 2

-. Test Date : May 02, 2016
 -. Operating condition : Highest Output Power Transmitting Mode
 -. Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	-9.47	16.47	25.94
	High	5 230	-9.14	16.47	25.61
5 725 ~ 5 850	Low	5 755	-11.22	29.59	40.81
	High	5 795	-12.08	29.59	41.67

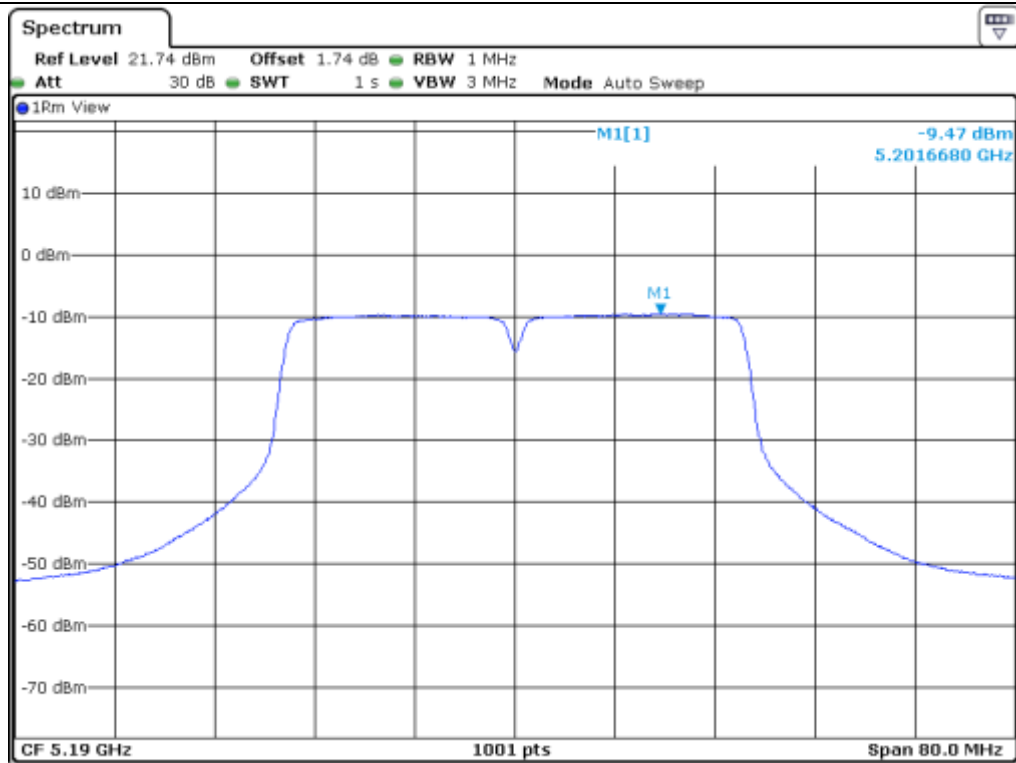
Remark: See next page for measurement data.

-. IC Test data

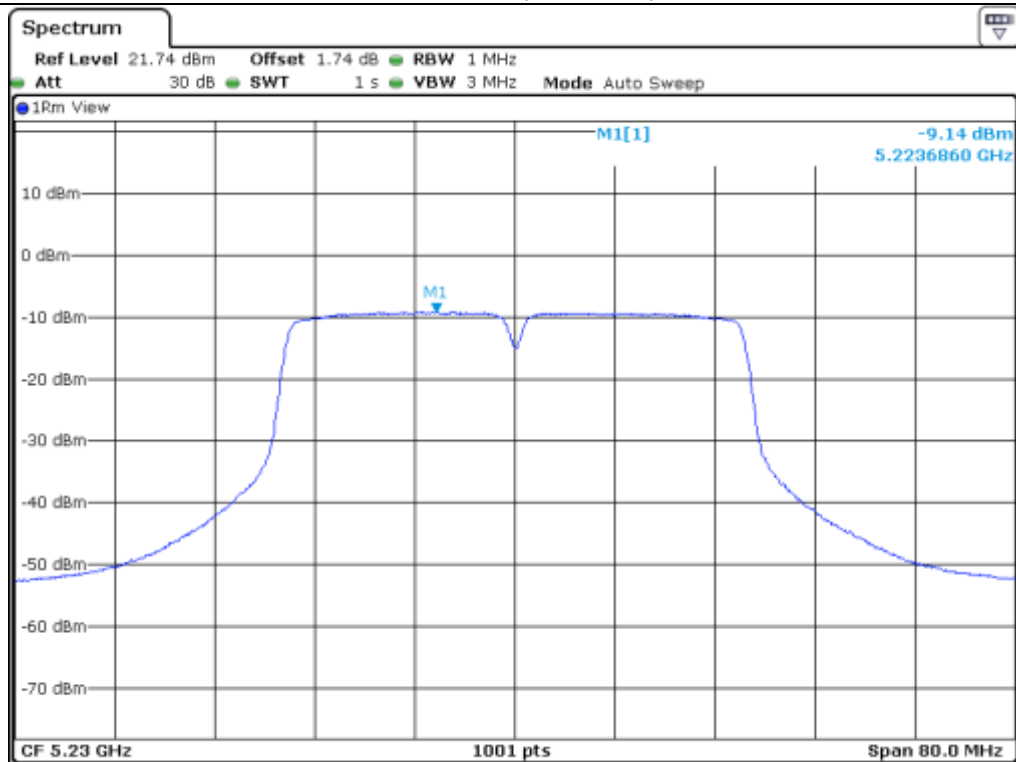
FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 190	6.533	-9.47	10.00	12.94	-2.94
	High	5 230		-9.14	10.00	12.61	-2.61
5 725 ~ 5 825	Low	5 755	6.415	-11.22	29.59	40.81	-
	High	5 795		-12.08	29.59	41.67	-

Remark: See next page for measurement data.


 Tested by: Jun-Hui, Lee / Senior Engineer



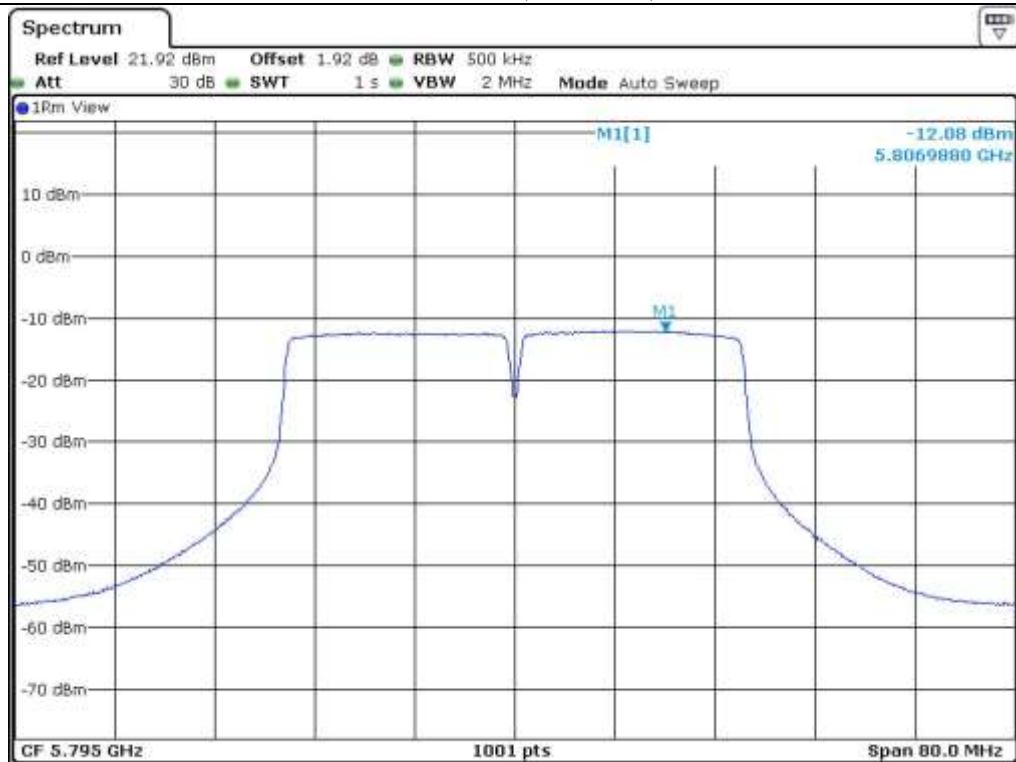
Low Channel (5 190 MHz)



High Channel (5 230 MHz)



Low Channel (5.755 MHz)



High Channel (5.795 MHz)

9.8.4 Test data for Multiple transmit

- . Test Date : May 02, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 190	-4.64	11.70	16.34
	High	5 230	-4.37	11.70	16.07
5 725 ~ 5 850	Low	5 755	-6.44	24.81	31.25
	High	5 795	-7.05	24.81	31.86

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density = $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$

-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 190	11.304	-4.64	10.00	3.34	6.66
	High	5 230		-4.37	10.00	3.07	6.93
5 725 ~ 5 825	Low	5 755	11.186	-6.44	24.81	31.25	-
	High	5 795		-7.05	24.81	31.86	-

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density = $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$

Tested by: Jun-Hui, Lee / Senior Engineer

9.9 Test data for 802.11ac80 RLAN Mode

9.9.1 Test data for Antenna 0

- . Test Date : May 02, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210	-7.90	16.47	24.37
5 725 ~ 5 850	Low	5 775	-10.39	29.59	39.98

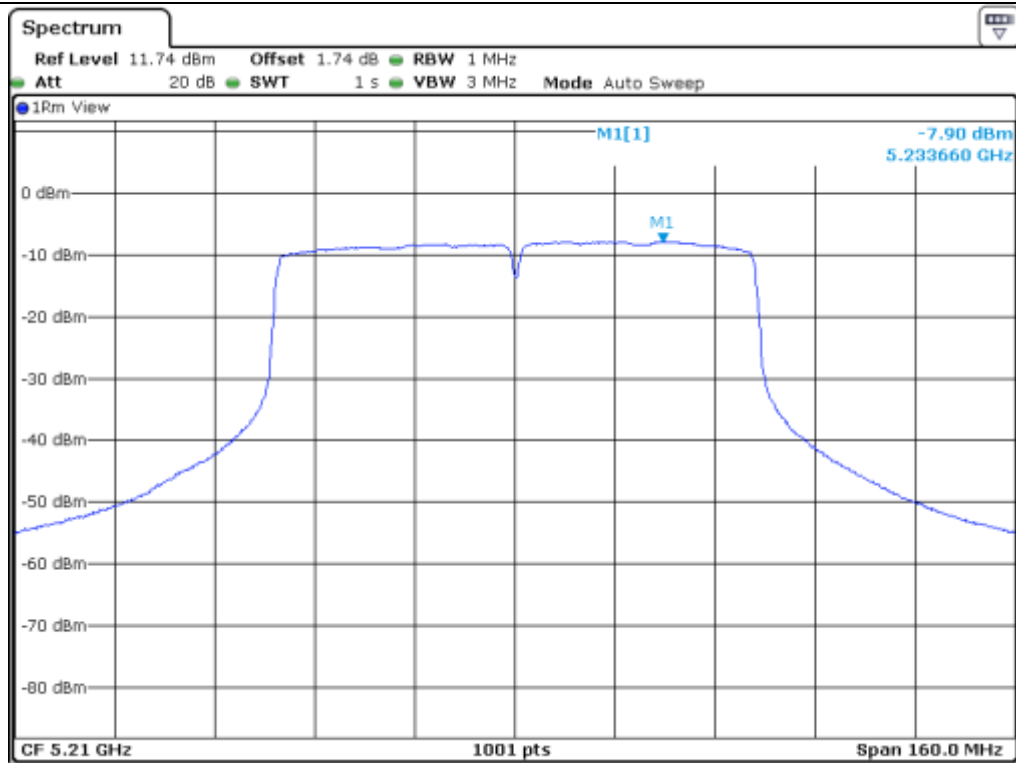
Remark: See next page for measurement data.

-. IC Test data

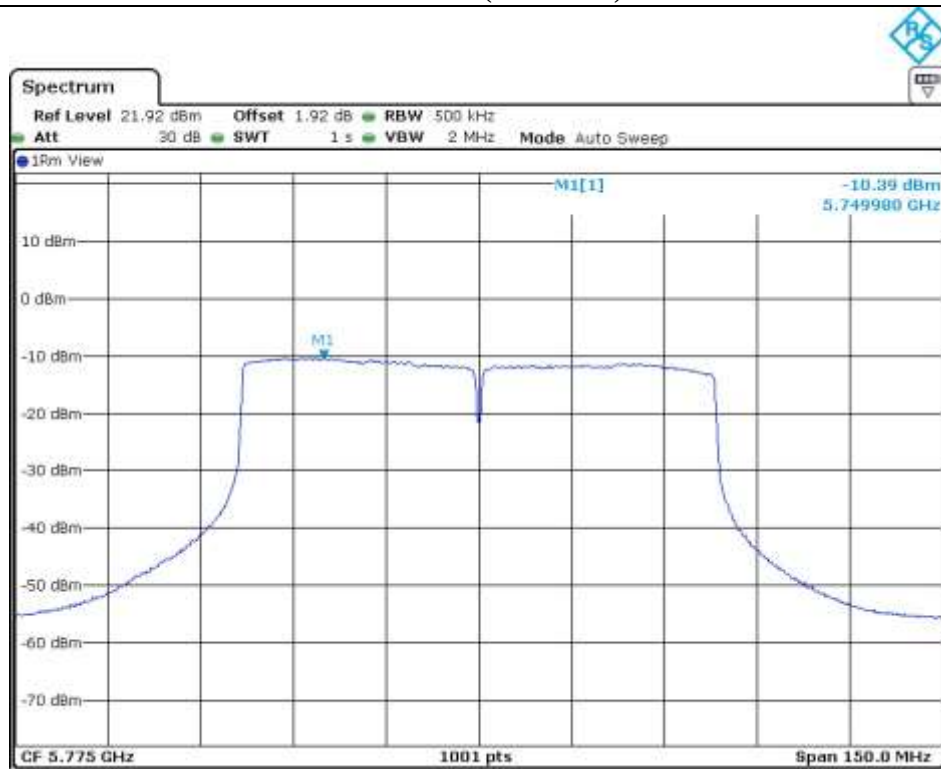
FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 210	6.533	-7.90	10.00	11.37	-1.37
5 725 ~ 5 825	Low	5 775	6.415	-10.39	29.59	39.98	-

Remark: See next page for measurement data.


 Tested by: Jun-Hui, Lee / Senior Engineer



Low Channel (5 210 MHz)



Low Channel (5 775 MHz)

9.9.2 Test data for Antenna 1

- Test Date : May 02, 2016
- Operating condition : Highest Output Power Transmitting Mode
- Test Result : Pass

- FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210	-8.49	16.47	24.96
5 725 ~ 5 850	Low	5 775	-10.82	29.59	40.41

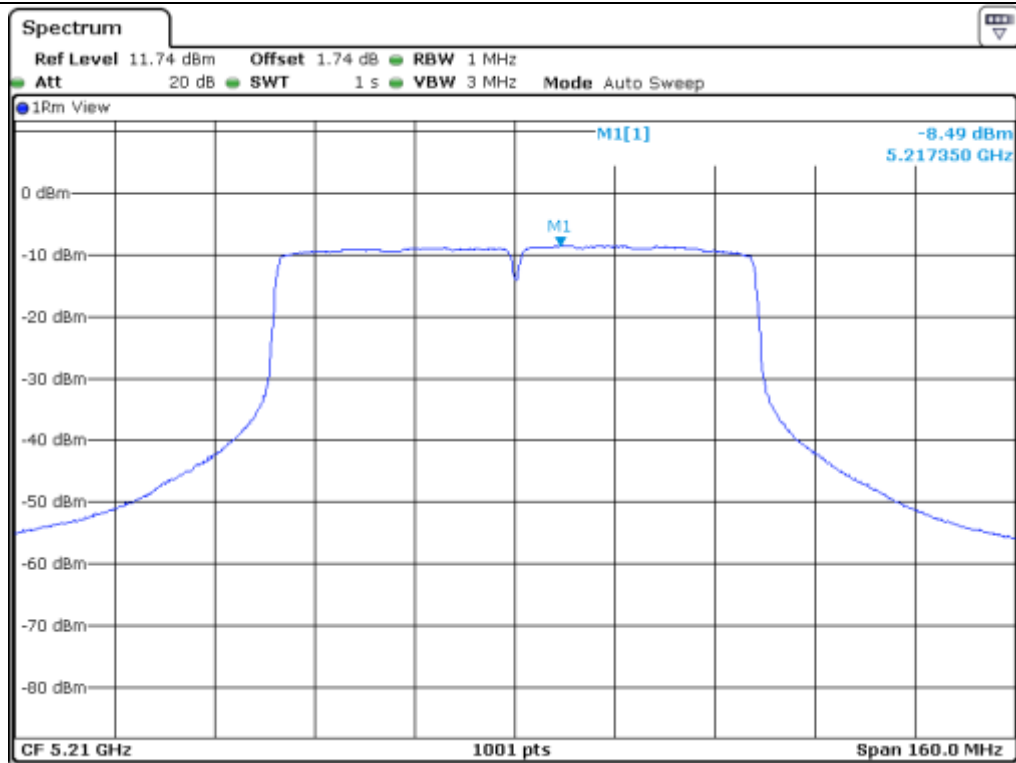
Remark: See next page for measurement data.

- IC Test data

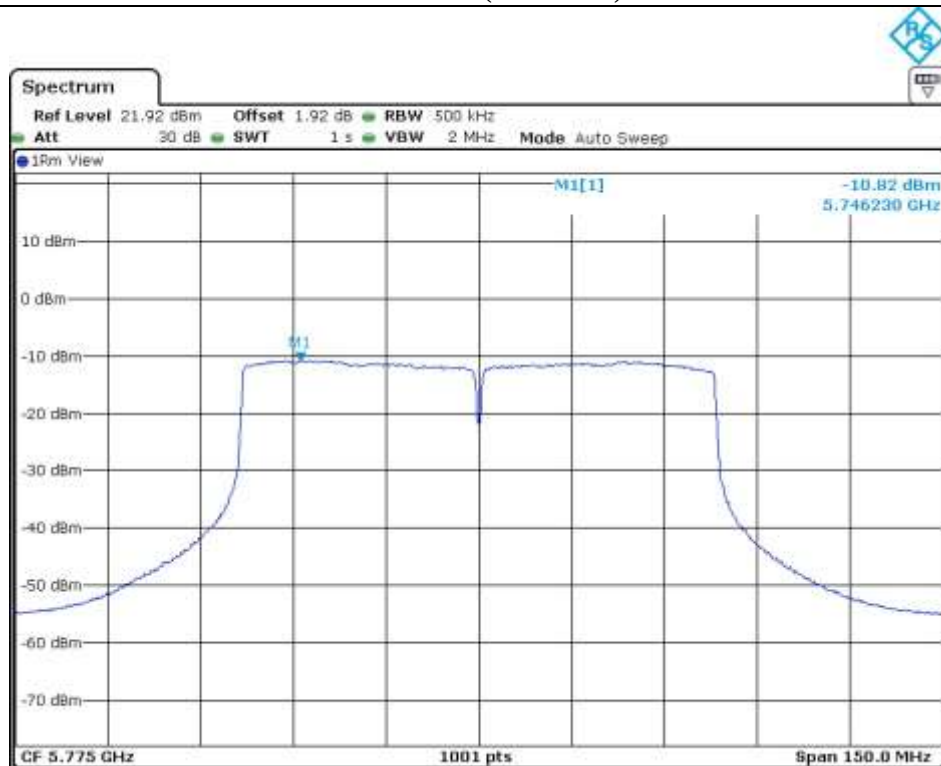
FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 210	6.533	-8.49	10.00	11.96	-1.96
5 725 ~ 5 825	Low	5 775	6.415	-10.82	29.59	40.41	-

Remark: See next page for measurement data.


 Tested by: Jun-Hui, Lee / Senior Engineer



Low Channel (5 210 MHz)



Low Channel (5 775 MHz)

9.9.3 Test data for Antenna 2

- . Test Date : May 02, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210	-8.43	16.47	24.90
5 725 ~ 5 850	Low	5 775	-10.09	29.59	39.68

Remark: See next page for measurement data.

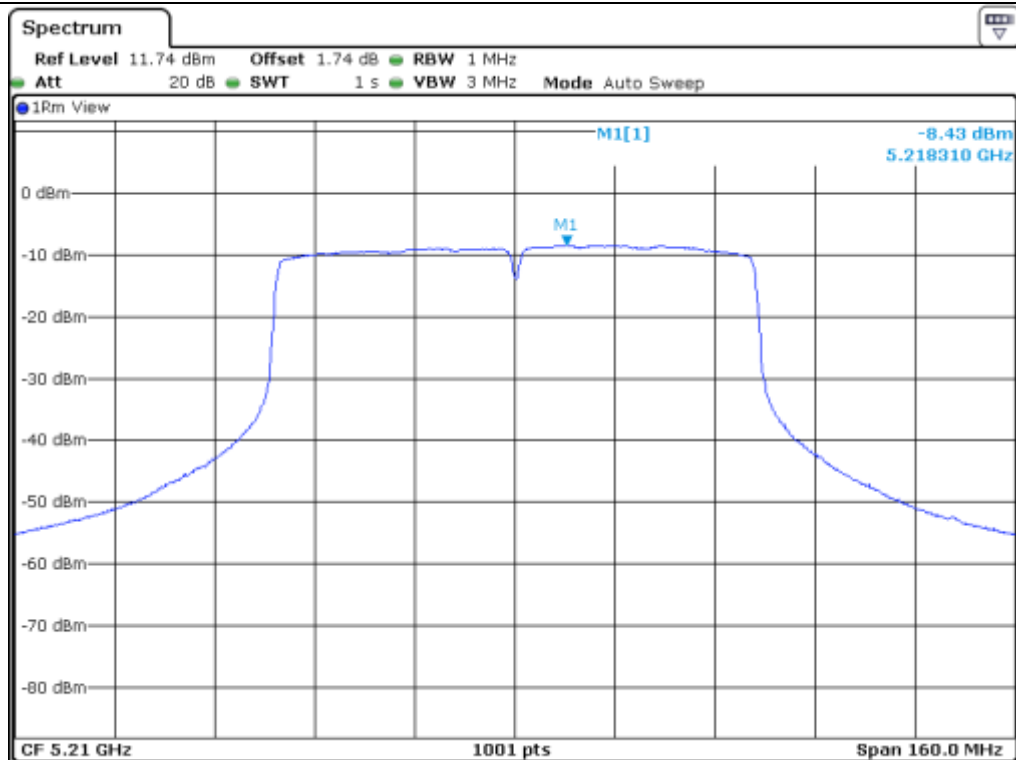
-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 210	6.533	-8.43	10.00	11.90	-1.90
5 725 ~ 5 825	Low	5 775	6.415	-10.09	29.59	39.68	-

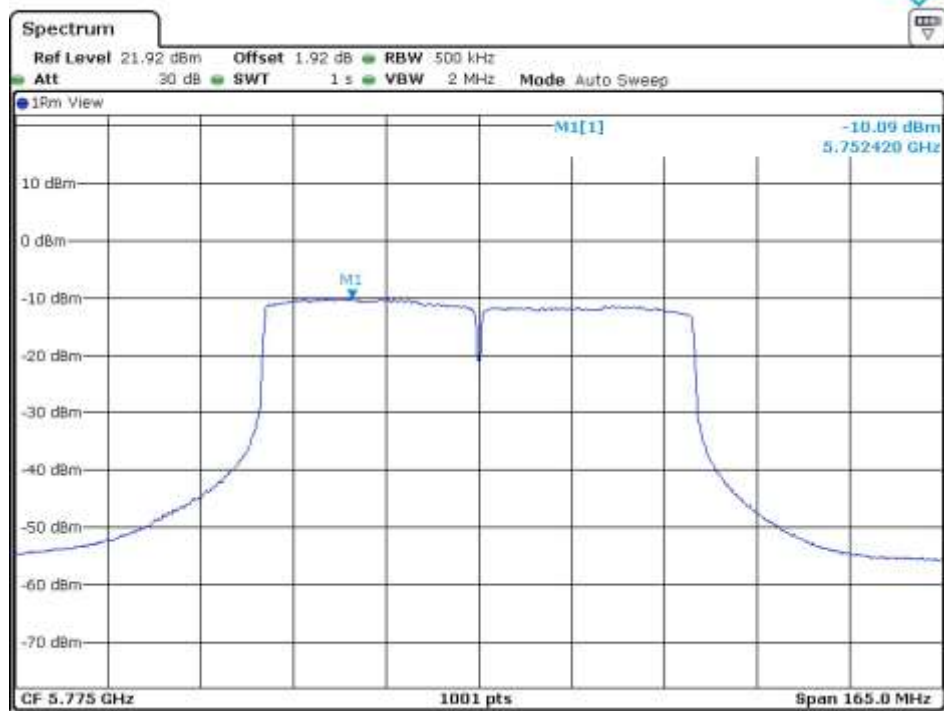
Remark: See next page for measurement data.



Tested by: Jun-Hui, Lee / Senior Engineer



Low Channel (5 210 MHz)



Low Channel (5 775 MHz)

9.9.4 Test data for Multiple transmit

- . Test Date : May 02, 2016
- . Operating condition : Highest Output Power Transmitting Mode
- . Test Result : Pass

-. FCC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)
5 150 ~ 5 250	Low	5 210	-3.49	11.70	15.19
5 725 ~ 5 850	Low	5 775	-5.65	24.81	30.47

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density = $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$

-. IC Test data

FREQUENCY RANGE (MHz)	CHANNEL	FREQUENCY (MHz)	Antenna Gain	MEASURED VLAUE (dBm)	LIMIT (dBm)	MARGIN (dB)	EIRP (dBm)
5 150 ~ 5 250	Low	5 210	11.304	-3.49	10.00	2.19	7.81
5 725 ~ 5 825	Low	5 775	11.186	-5.65	24.81	30.47	-

Remark 1 : Margin = Limit – Measured value

Remark 2 : Calculated Power Density = $10\log(10^{(\text{Antenna1 Power Density}/10)} + 10^{(\text{Antenna2 Power Density}/10)})$


Tested by: Jun-Hui, Lee / Senior Engineer

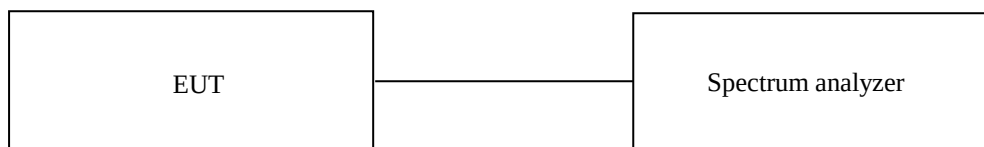
10. FREQUENCY STABILITY WITH TEMPERATURE VARIATION

10.1 Operating environment

Temperature : 22 °C
Relative humidity : 57 % R.H.

10.2 Test set-up

Turn EUT off and set chamber temperature to -30 °C and then allow sufficient time (approximately 20 min to 30 min after chamber reach the assigned temperature) for EUT to stabilize. Turn on the EUT and measure the EUT operating frequency and then turn off the EUT after the measurement. The temperature in the chamber was raised 10 °C step from 0 °C to +65 °C. Repeat above method for frequency measurements every 10 °C step and then record all measured frequencies on each temperature step.



10.3 Test equipment used

	Model Number	Manufacturer	Description	Serial Number	Last Cal.(Interval)
■ -	FSV40	Rohde & Schwarz	Signal Analyzer	101009	Jul. 22, 2015 (1Y)
■ -	PSL-2KP	ESPEC	Environmental Test Chamber	14009407	Feb. 04, 2016 (1Y)
■ -	DH-60	Dae Kwang Elec.	Slidacs	None	Nov. 06, 2015 (1Y)

All test equipment used is calibrated on a regular basis.

10.4 Test Data for 5 150 MHz ~ 5 250 MHz Band

-. Test Date : April 30, 2016

-. Result : Pass

Temperature (°C)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (kHz)
5	5 180 000 000	5 179 985 413	-14.587
10		5 179 984 508	-15.492
20		5 179 983 841	-16.159
30		5 179 983 237	-16.763
40		5 179 982 725	-17.275
5	5 190 000 000	5 189 985 433	-14.567
10		5 189 984 152	-15.848
20		5 189 983 468	-16.532
30		5 189 982 802	-17.198
40		5 189 982 381	-17.619
5	5 210 000 000	5 209 984 161	-15.839
10		5 209 983 249	-16.751
20		5 209 982 674	-17.326
30		5 209 982 138	-17.862
40		5 209 981 784	-18.216

Temperature (°C)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (kHz)
5	5 220 000 000	5 219 983 618	-16.382
10		5 219 982 737	-17.263
20		5 219 982 089	-17.911
30		5 219 981 538	-18.462
40		5 219 981 036	-18.964
5	5 230 000 000	5 229 983 962	-16.038
10		5 229 983 046	-16.954
20		5 229 982 346	-17.654
30		5 229 981 980	-18.020
40		5 229 981 412	-18.588
5	5 240 000 000	5 239 983 634	-16.366
10		5 239 982 813	-17.187
20		5 239 982 294	-17.706
30		5 239 981 746	-18.254
40		5 239 981 185	-18.815



Tested by: Jun-Hui, Lee / Senior Engineer

10.5 Test Data for 5 725 MHz ~ 5 850 MHz Band

-. Test Date : April 30, 2016

-. Result : Pass

Temperature (°C)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (kHz)
5	5 745 000 000	5 744 981 227	-18.773
10		5 744 980 189	-19.811
20		5 744 979 565	-20.435
30		5 744 979 145	-20.855
40		5 744 978 657	-21.343
5	5 755 000 000	5 754 980 936	-19.064
10		5 754 979 909	-20.091
20		5 754 979 305	-20.695
30		5 754 978 811	-21.189
40		5 754 978 356	-21.644
5	5 775 000 000	5 774 980 483	-19.517
10		5 774 979 479	-20.521
20		5 774 978 838	-21.162
30		5 774 978 358	-21.642
40		5 774 977 901	-22.099

Temperature (°C)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (kHz)
5	5 785 000 000	5 784 979 943	-20.057
10		5 784 978 915	-21.085
20		5 784 978 311	-21.689
30		5 784 977 892	-22.108
40		5 784 977 409	-22.591
5	5 795 000 000	5 794 979 890	-20.110
10		5 794 978 857	-21.143
20		5 794 978 208	-21.792
30		5 794 977 804	-22.196
40		5 794 977 356	-22.644
5	5 825 000 000	5 824 980 107	-19.893
10		5 824 979 067	-20.933
20		5 824 978 443	-21.557
30		5 824 977 948	-22.052
40		5 824 977 448	-22.552



Tested by: Jun-Hui, Lee / Senior Engineer

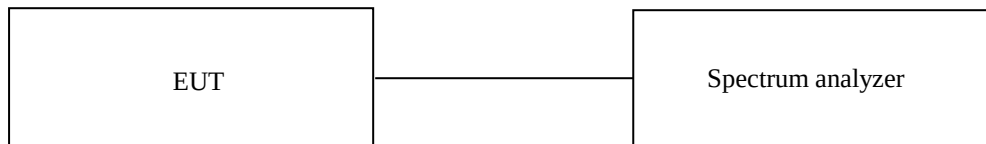
11. FREQUENCY STABILITY WITH VOLTAGE VARIATION

11.1 Operating environment

Temperature : 22 °C
Relative humidity : 57 % R.H.

11.2 Test set-up

A Slidacs was connected to the input of the EUT. The voltage of EUT set to 115 % of the nominal value and then was reduced to 85 % of nominal voltage. The output frequency was recorded at each step.



11.3 Test equipment used

	Model Number	Manufacturer	Description	Serial Number	Last Cal.(Interval)
■ -	FSV40	Rohde & Schwarz	Signal Analyzer	101009	Jul. 22, 2015 (1Y)
■ -	DH-60	Dae Kwang Elec.	Slidacs	None	Nov. 06, 2015 (1Y)

All test equipment used is calibrated on a regular basis.

11.4 Test Data for 5 150 MHz ~ 5 250 MHz Band

-. Test Date : April 30, 2016

-. Result : Pass

Voltage (Vac)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (kHz)
138	5 180 000 000	5 179 983 773	-16.227
120		5 179 983 841	-16.159
102		5 179 983 965	-16.035
138	5 190 000 000	5 189 983 364	-16.636
120		5 189 983 468	-16.532
102		5 189 983 514	-16.486
138	5 210 000 000	5 209 982 639	-17.361
120		5 209 982 674	-17.326
102		5 209 982 799	-17.201
138	5 220 000 000	5 219 981 959	-18.041
120		5 219 982 089	-17.911
102		5 219 982 174	-17.826
138	5 230 000 000	5 229 982 214	-17.786
120		5 229 982 346	-17.654
102		5 229 982 370	-17.63
138	5 240 000 000	5 239 982 231	-17.769
120		5 239 982 294	-17.706
102		5 239 982 401	-17.599

Tested by: Jun-Hui, Lee / Senior Engineer

11.5 Test Data for 5 725 MHz ~ 5 850 MHz Band

-. Test Date : April 30, 2016

-. Result : Pass

Voltage (Vac)	Carrier Freq. (Hz)	Measured Freq. (Hz)	Frequency Error (kHz)
138	5 745 000 000	5 744 979 492	-20.508
120		5 744 979 565	-20.435
102		5 744 979 585	-20.415
138	5 755 000 000	5 754 979 259	-20.741
120		5 754 979 305	-20.695
102		5 754 979 411	-20.589
138	5 775 000 000	5 774 978 759	-21.241
120		5 774 978 838	-21.162
102		5 774 978 971	-21.029
138	5 785 000 000	5 784 978 290	-21.71
120		5 784 978 311	-21.689
102		5 784 978 428	-21.572
138	5 795 000 000	5 794 978 113	-21.887
120		5 794 978 208	-21.792
102		5 794 978 257	-21.743
138	5 825 000 000	5 824 978 412	-21.588
120		5 824 978 443	-21.557
102		5 824 978 480	-21.52

Tested by: Jun-Hui, Lee / Senior Engineer

12. RADIATED SPURIOUS EMISSIONS

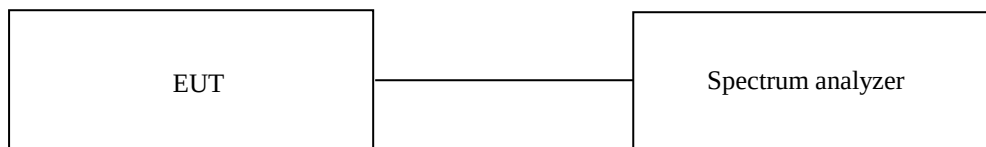
12.1 Operating environment

Temperature : (23 ~ 24) °C
Relative humidity : (46 ~ 47) % R.H.

12.2 Test set-up for conducted measurement

The radiated emissions measurements were performed on the 3 m, open-field test site. The EUT was placed on a non-conductive turntable above the ground plane.

The frequency spectrum from 30 MHz to 40 GHz was scanned and maximum emission levels at each frequency recorded. The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna.



12.3 Test equipment used

	Model Number	Manufacturer	Description	Serial Number	Last Cal.(Interval)
■ -	FSV40	Rohde & Schwarz	Signal Analyzer	101009	Jul. 22, 2015 (1Y)
■ -	ESCI	Rohde & Schwarz	Test Receiver	101012	Nov. 02, 2015 (1Y)
■ -	310N	Sonoma Instrument	Pre-Amplifier	312544	Apr. 05, 2016 (1Y)
■ -	SCU-18	Rohde & Schwarz	Pre-Amplifier	10041	Nov. 23, 2015 (1Y)
■ -	SCU40A	Rohde & Schwarz	Pre-Amplifier	100436	Jun. 10, 2015 (1Y)
■ -	DT3000	Innco System	Turn Table	930611	N/A
■ -	MA4000-EP	Innco System	Antenna Master	3320611	N/A
■ -	VULB9163	Schwarzbeck	TRILOG Broadband Antenna	9163-421	Jul. 10, 2014 (2Y)
■ -	BBHA9120D	Schwarzbeck	Horn Antenna	BBHA9120D295	Aug. 31, 2015 (2Y)
■ -	BBHA9170	Schwarzbeck	Horn Antenna	BBHA9170178	Aug. 31, 2015 (2Y)

All test equipment used is calibrated on a regular basis.

12.4 Test data for Frequency 5 150 band

12.4.1 Test data for 802.11a RLAN Mode

12.4.1.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H.

Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

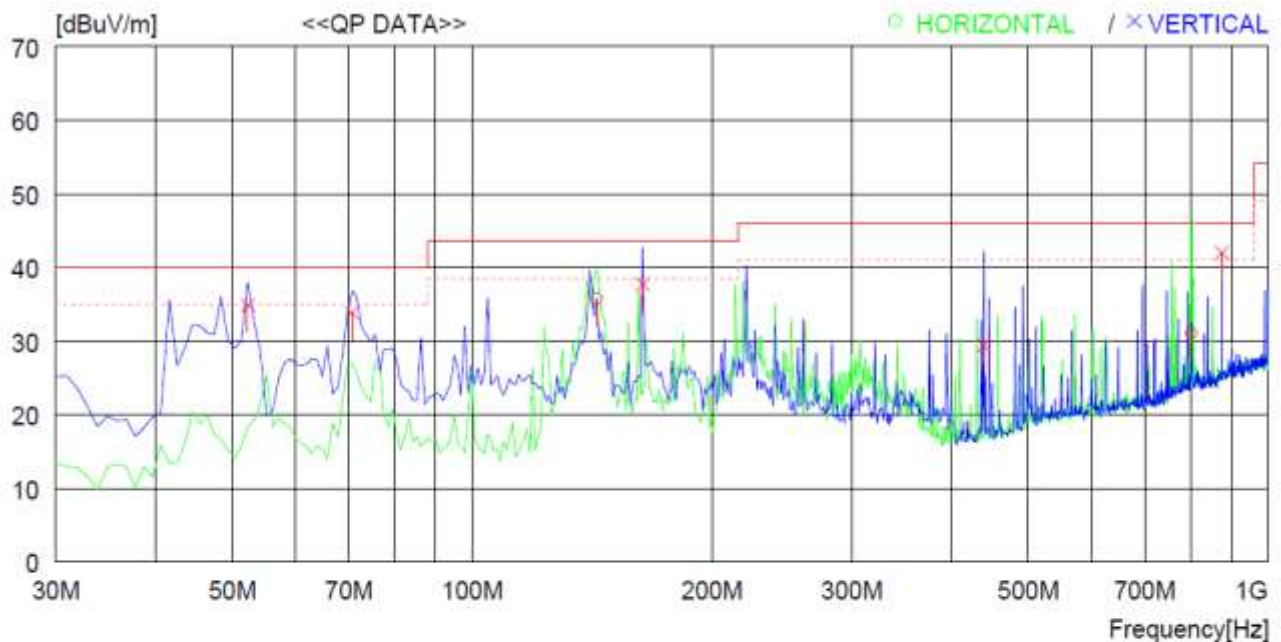
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	143.490	57.3	8.2	3.2	33.0	35.7	43.5	7.8	100	0
2	802.112	35.4	20.9	8.0	33.3	31.0	46.0	15.0	200	248
----- Vertical -----										
3	52.310	52.3	13.6	2.0	33.0	34.9	40.0	5.1	100	58
4	70.740	55.0	9.6	2.3	33.1	33.8	40.0	6.2	200	110
5	163.860	58.4	8.8	3.4	32.9	37.7	43.5	5.8	200	0
6	439.341	40.1	16.4	5.7	32.8	29.4	46.0	16.6	100	19
7	875.830	44.9	21.9	8.3	33.1	42.0	46.0	4.0	100	359

12.4.1.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

12.4.1.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
10 360.00	41.70	Peak	H	38.60	16.30	42.50	54.10	73.98	19.88
	32.24	Average	H				44.64	53.98	9.34
	43.47	Peak	V				55.87	73.98	18.11
	32.51	Average	V				44.91	53.98	9.07
Middle Channel									
10 400.00	42.14	Peak	H	38.60	16.30	42.50	54.54	73.98	19.44
	32.30	Average	H				44.70	53.98	9.28
	42.59	Peak	V				54.99	73.98	18.99
	32.98	Average	V				45.38	53.98	8.60
High Channel									
10 480.00	41.85	Peak	H	38.60	16.30	42.50	54.25	73.98	19.73
	32.31	Average	H				44.71	53.98	9.27
	43.58	Peak	V				55.98	73.98	18.00
	32.77	Average	V				45.17	53.98	8.81

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

12.4.2 Test data for 802.11n_HT20 RLAN Mode

12.4.2.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H. Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

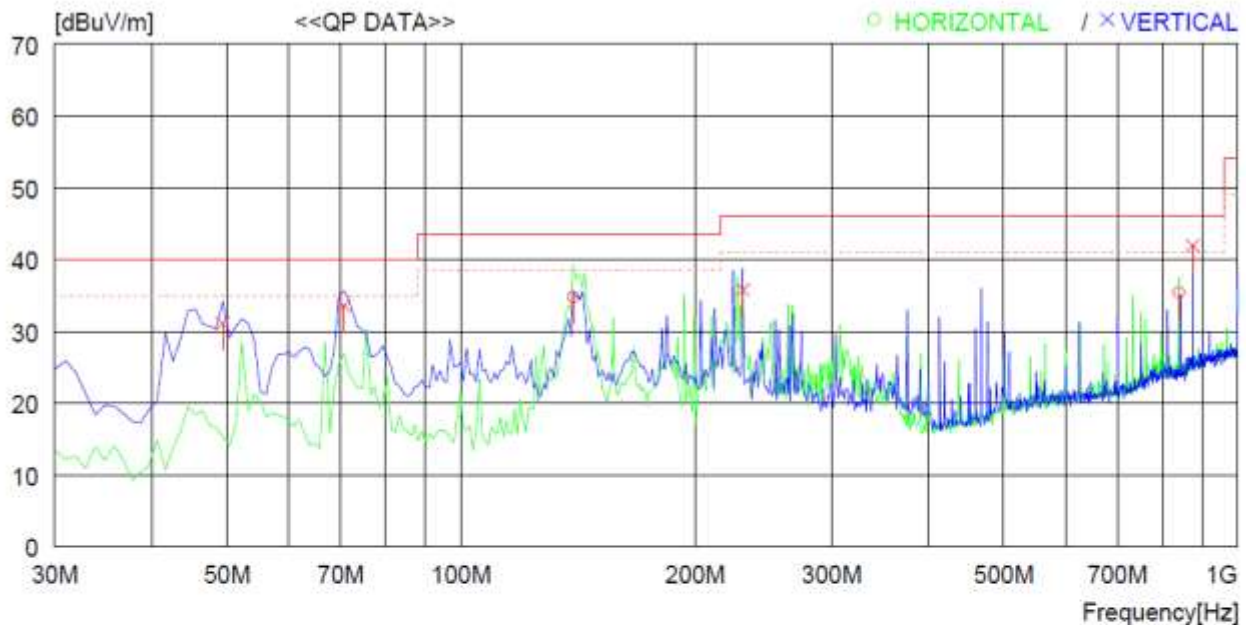
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	139.610	56.5	8.1	3.2	33.1	34.7	43.5	8.8	200	0
2	839.941	39.2	21.4	8.2	33.4	35.4	46.0	10.6	300	359
----- Vertical -----										
3	49.400	48.4	13.7	2.0	33.0	31.1	40.0	8.9	200	359
4	70.740	54.8	9.6	2.3	33.1	33.6	40.0	6.4	200	359
5	230.790	52.8	11.8	4.0	32.8	35.8	46.0	10.2	100	0
6	875.830	44.8	21.9	8.3	33.1	41.9	46.0	4.1	100	134

12.4.2.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

12.4.2.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
10 360.00	42.94	Peak	H	38.60	16.30	42.50	55.34	73.98	18.64
	32.84	Average	H				45.24	53.98	8.74
	55.36	Peak	V				67.76	73.98	6.22
	38.85	Average	V				51.25	53.98	2.73
Middle Channel									
10 400.00	43.68	Peak	H	38.60	16.30	42.50	56.08	73.98	17.90
	32.91	Average	H				45.31	53.98	8.67
	56.67	Peak	V				69.07	73.98	4.91
	39.54	Average	V				51.94	53.98	2.04
High Channel									
10 480.00	43.10	Peak	H	38.60	16.30	42.50	55.50	73.98	18.48
	33.11	Average	H				45.51	53.98	8.47
	54.23	Peak	V				66.63	73.98	7.35
	39.44	Average	V				51.84	53.98	2.14

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

12.4.3 Test data for 802.11n_HT40 RLAN Mode

12.4.3.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H.

Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

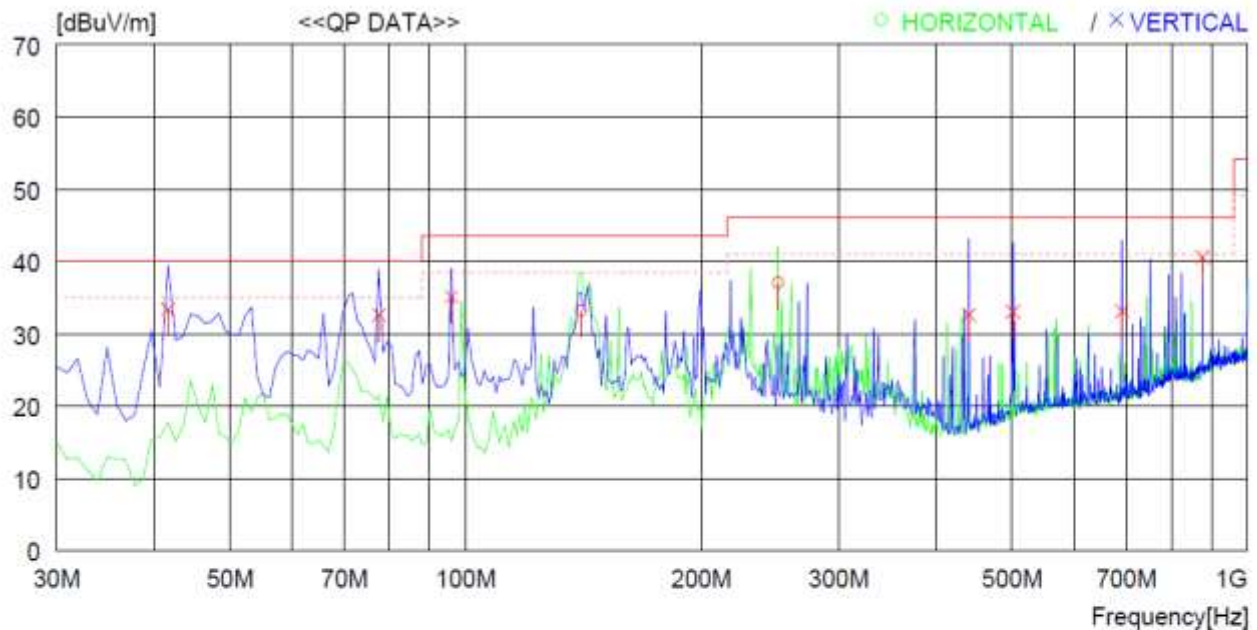
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA TABLE	
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	140.580	55.0	8.1	3.2	33.1	33.2	43.5	10.3	200	0
2	251.160	53.3	12.4	4.1	32.8	37.0	46.0	9.0	100	359
----- Vertical -----										
3	41.640	50.9	13.5	1.9	32.9	33.4	40.0	6.6	100	156
4	77.530	55.4	8.0	2.4	33.2	32.6	40.0	7.4	100	180
5	95.960	54.6	11.2	2.6	33.3	35.1	43.5	8.4	100	0
6	440.311	43.2	16.5	5.7	32.8	32.6	46.0	13.4	100	0
7	501.421	41.6	17.3	7.0	32.9	33.0	46.0	13.0	100	0
8	690.565	39.9	19.6	7.2	33.6	33.1	46.0	12.9	100	0
9	875.830	43.5	21.9	8.3	33.1	40.6	46.0	5.4	100	150

12.4.3.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

12.4.3.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
10 380.00	43.12	Peak	H	38.60	16.30	42.50	55.52	73.98	18.46
	32.76	Average	H				45.16	53.98	8.82
	54.00	Peak	V				66.40	73.98	7.58
	39.38	Average	V				51.78	53.98	2.20
Middle Channel									
10 460.00	43.22	Peak	H	38.60	16.30	42.50	55.62	73.98	18.36
	33.16	Average	H				45.56	53.98	8.42
	52.38	Peak	V				64.78	73.98	9.20
	38.49	Average	V				50.89	53.98	3.09

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dB μ V/m) - Emission Level (dB μ V/m)

Tested by: Jun-Hui, Lee / Senior Engineer

12.4.4 Test data for 802.11ac20 RLAN Mode

12.4.4.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H. Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

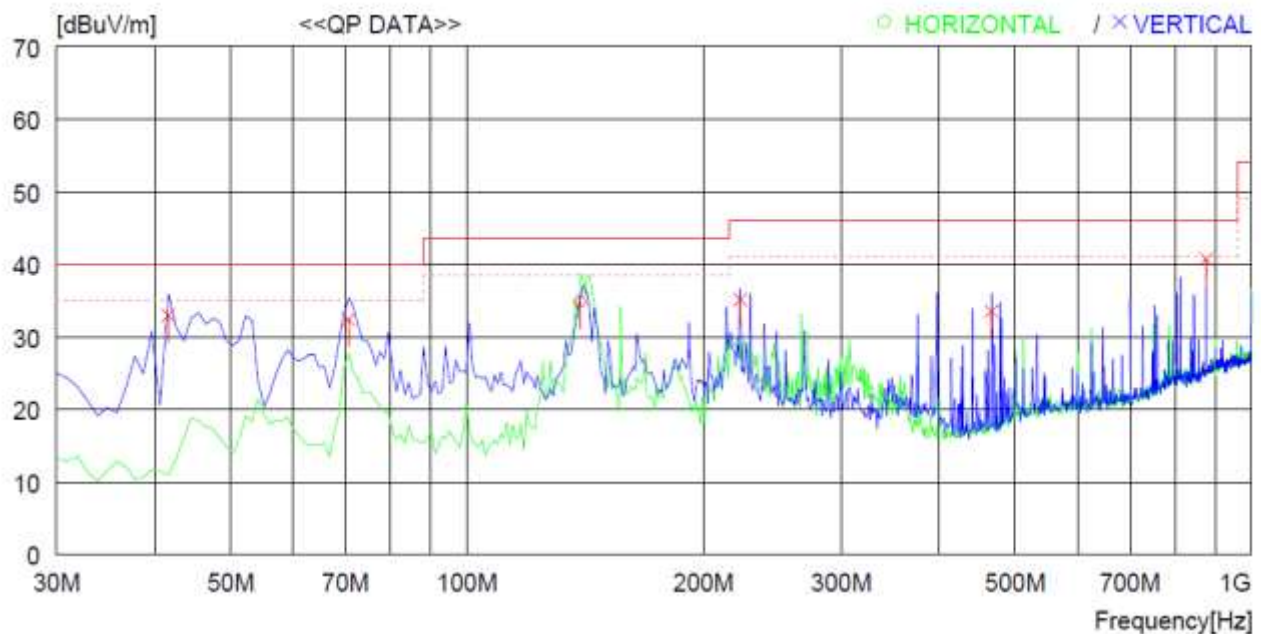
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	139.610	56.6	8.1	3.2	33.1	34.8	43.5	8.7	200	0
----- Vertical -----										
2	41.640	50.4	13.5	1.9	32.9	32.9	40.0	7.1	200	71
3	70.740	53.6	9.6	2.3	33.1	32.4	40.0	7.6	200	107
4	223.030	52.4	11.5	4.0	32.8	35.1	46.0	10.9	100	0
5	466.501	43.7	16.8	5.8	32.8	33.5	46.0	12.5	100	345
6	875.830	43.6	21.9	8.3	33.1	40.7	46.0	5.3	100	0

12.4.4.2 Test data for Below 30 MHz

- . Test Date : April 26, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m
- . Operating mode : Transmitting mode

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

12.4.4.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
10 360.00	42.88	Peak	H	38.60	16.30	42.50	55.28	73.98	18.70
	32.75	Average	H				45.15	53.98	8.83
	53.43	Peak	V				65.83	73.98	8.15
	38.89	Average	V				51.29	53.98	2.69
Middle Channel									
10 400.00	43.21	Peak	H	38.60	16.30	42.50	55.61	73.98	18.37
	33.03	Average	H				45.43	53.98	8.55
	55.29	Peak	V				67.69	73.98	6.29
	39.34	Average	V				51.74	53.98	2.24
High Channel									
10 480.00	42.79	Peak	H	38.60	16.30	42.50	55.19	73.98	18.79
	32.83	Average	H				45.23	53.98	8.75
	53.11	Peak	V				65.51	73.98	8.47
	39.30	Average	V				51.70	53.98	2.28

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

12.4.5 Test data for 802.11ac40 RLAN Mode

12.4.5.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H.

Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

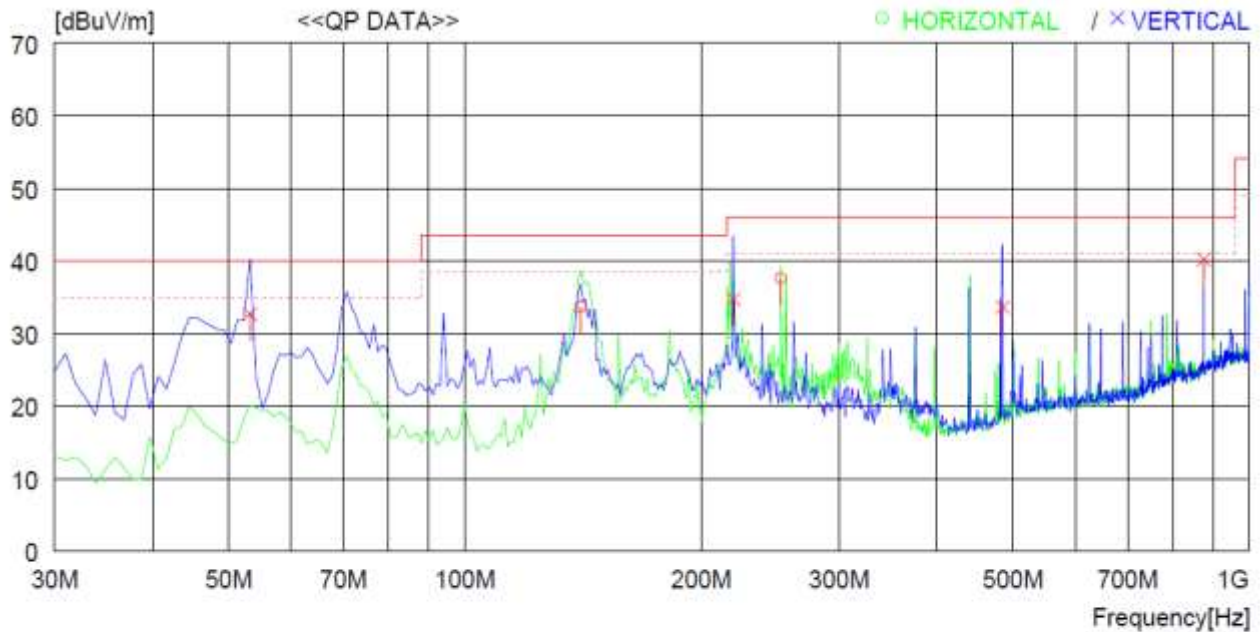
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA TABLE	
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	140.580	55.5	8.1	3.2	33.1	33.7	43.5	9.8	200	0
2	253.100	53.8	12.5	4.1	32.8	37.6	46.0	8.4	200	0
----- Vertical -----										
3	53.280	50.1	13.6	2.0	33.0	32.7	40.0	7.3	100	350
4	220.120	52.1	11.4	4.0	32.8	34.7	46.0	11.3	100	0
5	484.931	43.2	17.1	6.1	32.8	33.6	46.0	12.4	100	0
6	875.830	43.1	21.9	8.3	33.1	40.2	46.0	5.8	100	156

12.4.5.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

12.4.5.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
10 380.00	43.28	Peak	H	38.60	16.30	42.50	55.68	73.98	18.30
	33.01	Average	H				45.41	53.98	8.57
	53.26	Peak	V				65.66	73.98	8.32
	38.67	Average	V				51.07	53.98	2.91
	Middle Channel								
10 460.00	42.85	Peak	H	38.60	16.30	42.50	55.25	73.98	18.73
	32.77	Average	H				45.17	53.98	8.81
	52.10	Peak	V				64.50	73.98	9.48
	37.85	Average	V				50.25	53.98	3.73

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

12.4.6 Test data for 802.11ac80 RLAN Mode

12.4.6.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H. Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

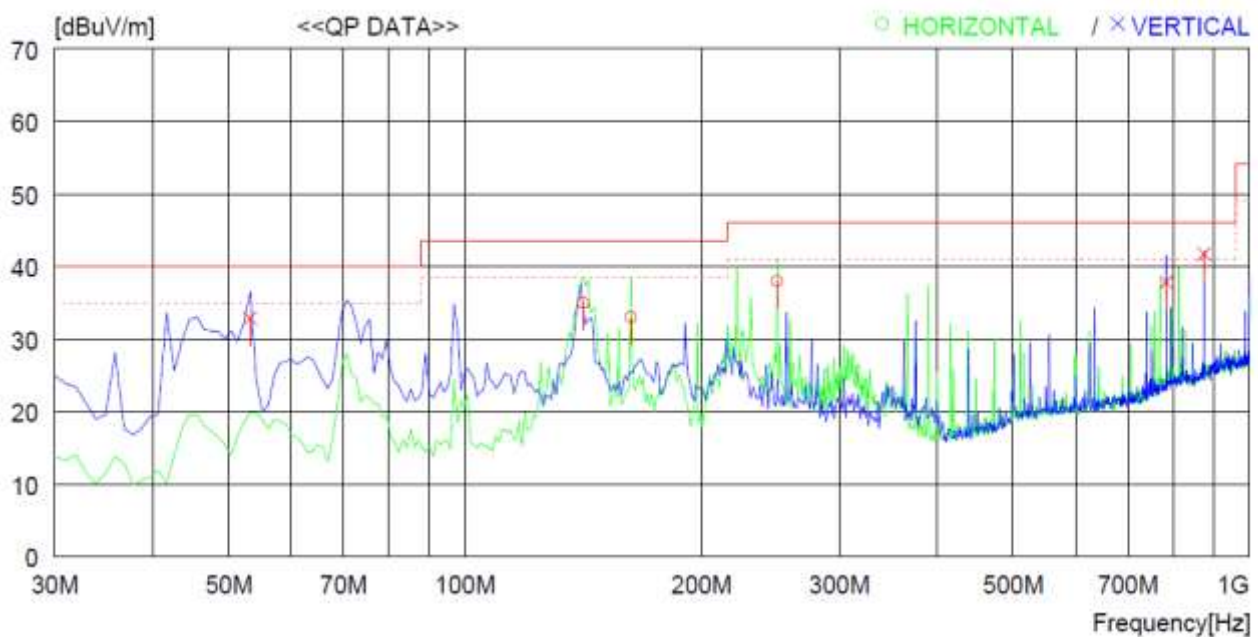
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	141.550	56.7	8.1	3.2	33.1	34.9	43.5	8.6	200	162
2	162.890	53.7	8.8	3.4	32.9	33.0	43.5	10.5	100	211
3	250.190	54.2	12.4	4.1	32.8	37.9	46.0	8.1	100	10
----- Vertical -----										
4	53.280	50.2	13.6	2.0	33.0	32.8	40.0	7.2	100	0
5	782.712	42.7	20.6	7.9	33.4	37.8	46.0	8.2	100	0
6	875.830	44.6	21.9	8.3	33.1	41.7	46.0	4.3	100	124

12.4.6.2 Test data for Below 30 MHz

- . Test Date : April 26, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m
- . Operating mode : Transmitting mode

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

12.4.6.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
10 420.00	43.18	Peak	H	38.60	16.30	42.50	55.58	73.98	18.40
	33.45	Average	H				45.85	53.98	8.13
	52.76	Peak	V				65.16	73.98	8.82
	38.29	Average	V				50.69	53.98	3.29

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

12.5 Test data for Frequency 5 725 MHz Band

12.5.1 Test data for 802.11a RLAN Mode

12.5.1.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H.

Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

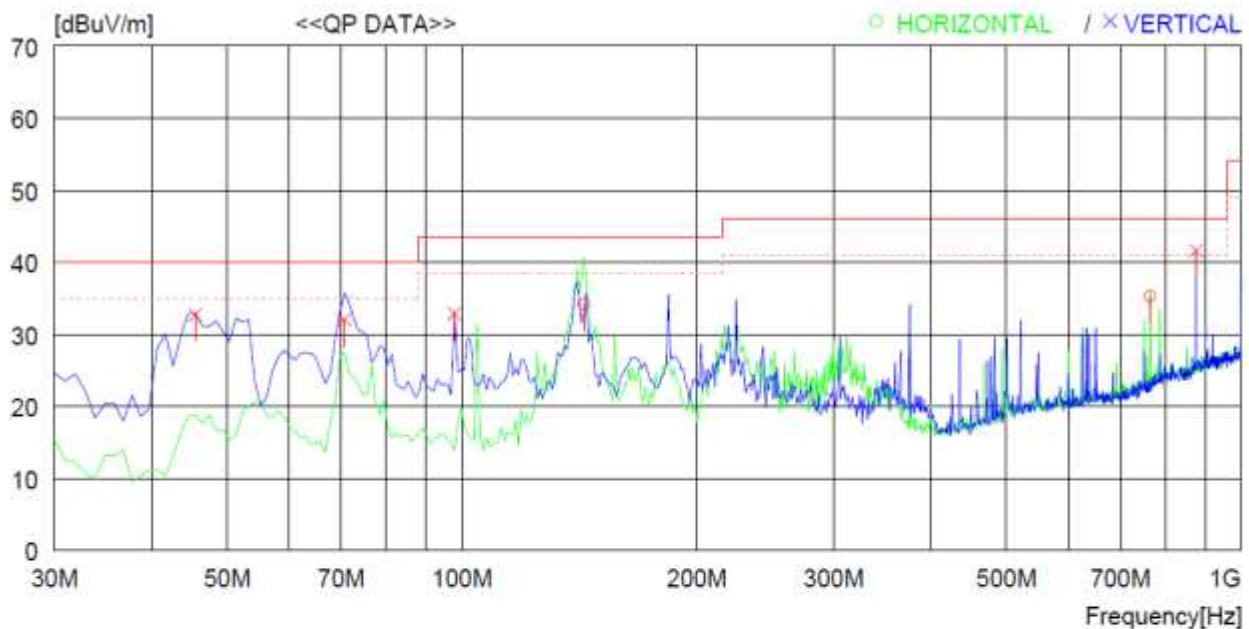
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	QP	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	143.490	55.7	8.2	3.2	33.0	34.1	43.5	9.4	200	172
2	764.283	40.8	20.4	7.7	33.6	35.3	46.0	10.7	400	356
----- Vertical -----										
3	45.520	49.7	13.9	2.0	32.9	32.7	40.0	7.3	100	86
4	70.740	53.2	9.6	2.3	33.1	32.0	40.0	8.0	200	132
5	97.900	51.8	11.6	2.7	33.3	32.8	43.5	10.7	200	359
6	875.830	44.5	21.9	8.3	33.1	41.6	46.0	4.4	100	0

12.5.1.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

12.5.1.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
11 490.00	45.62	Peak	H	39.50	17.50	42.70	59.92	73.98	14.06
	33.78	Average	H				48.08	53.98	5.90
	52.44	Peak	V				66.74	73.98	7.24
	38.83	Average	V				53.13	53.98	0.85
Middle Channel									
11 570.00	45.31	Peak	H	39.50	17.50	42.70	59.61	73.98	14.37
	33.79	Average	H				48.09	53.98	5.89
	52.04	Peak	V				66.34	73.98	7.64
	38.28	Average	V				52.58	53.98	1.40
High Channel									
11 650.00	45.59	Peak	H	39.50	17.50	42.70	59.89	73.98	14.09
	33.79	Average	H				48.09	53.98	5.89
	52.73	Peak	V				67.03	73.98	6.95
	38.34	Average	V				52.64	53.98	1.34

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

12.5.2 Test data for 802.11n_HT20 RLAN Mode

12.5.2.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H.

Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

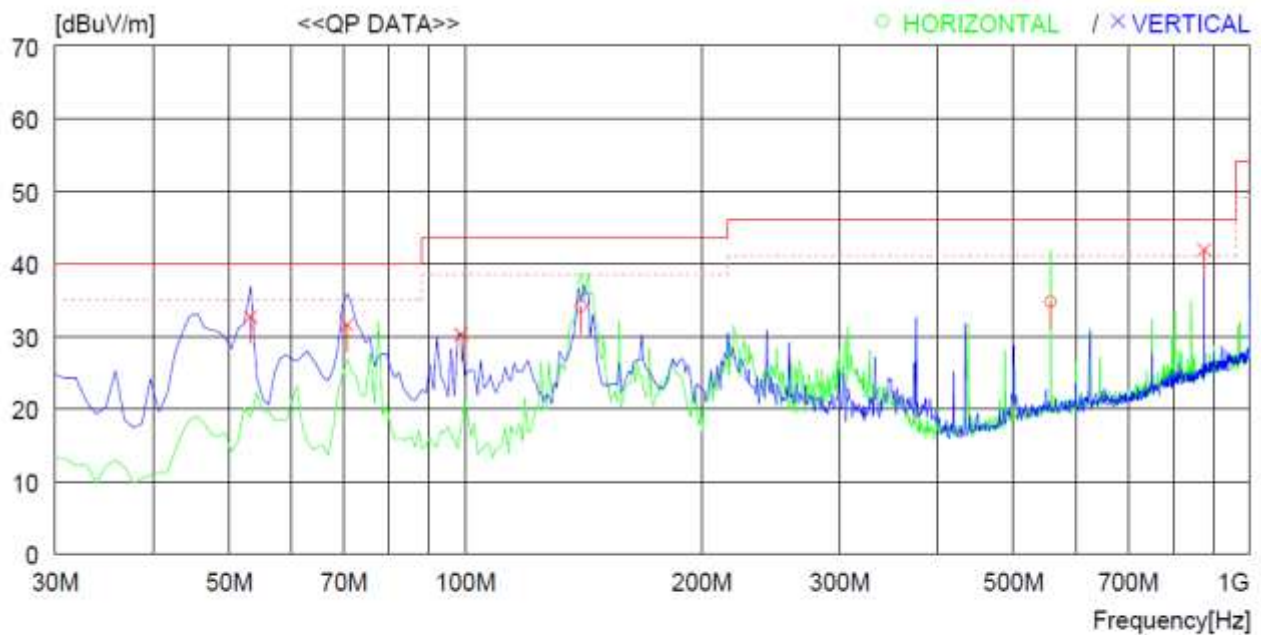
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	140.580	55.9	8.1	3.2	33.1	34.1	43.5	9.4	200	184
2	557.679	42.6	18.4	6.8	33.1	34.7	46.0	11.3	200	352
----- Vertical -----										
3	53.280	50.1	13.6	2.0	33.0	32.7	40.0	7.3	100	324
4	70.740	52.8	9.6	2.3	33.1	31.6	40.0	8.4	200	119
5	98.870	49.1	11.7	2.7	33.3	30.2	43.5	13.3	100	359
6	875.830	44.8	21.9	8.3	33.1	41.9	46.0	4.1	100	0

12.5.2.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

12.5.2.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
11 490.00	43.53	Peak	H	39.50	17.50	42.70	57.83	73.98	16.15
	32.52	Average	H				46.82	53.98	7.16
	52.75	Peak	V				67.05	73.98	6.93
	38.02	Average	V				52.32	53.98	1.66
Middle Channel									
11 570.00	43.30	Peak	H	39.50	17.50	42.70	57.60	73.98	16.38
	32.84	Average	H				47.14	53.98	6.84
	53.65	Peak	V				67.95	73.98	6.03
	38.08	Average	V				52.38	53.98	1.60
High Channel									
11 650.00	43.78	Peak	H	39.50	17.50	42.70	58.08	73.98	15.90
	32.53	Average	H				46.83	53.98	7.15
	53.02	Peak	V				67.32	73.98	6.66
	37.97	Average	V				52.27	53.98	1.71

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

12.5.3 Test data for 802.11n_HT40 RLAN Mode

12.5.3.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H. Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

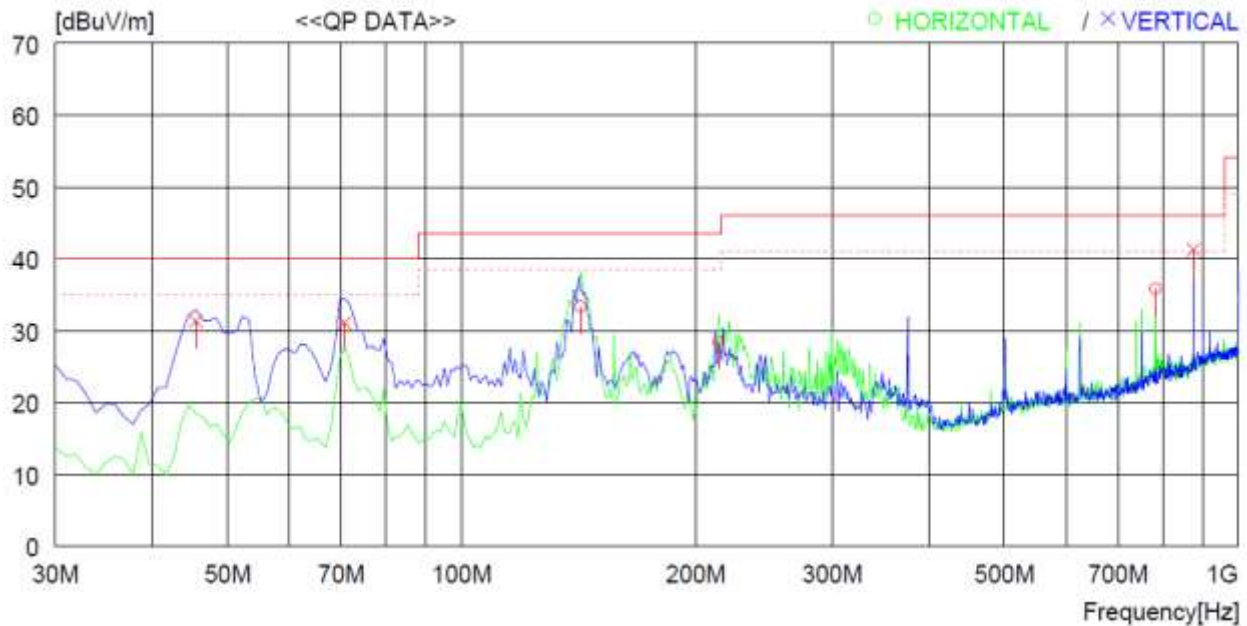
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	142.520	54.9	8.2	3.2	33.0	33.3	43.5	10.2	200	2
2	214.300	46.1	11.2	3.9	32.8	28.4	43.5	15.1	200	6
3	781.742	40.7	20.6	7.9	33.4	35.8	46.0	10.2	300	359
----- Vertical -----										
4	45.520	48.3	13.9	2.0	32.9	31.3	40.0	8.7	100	19
5	70.740	52.3	9.6	2.3	33.1	31.1	40.0	8.9	200	0
6	875.830	44.1	21.9	8.3	33.1	41.2	46.0	4.8	100	125

12.5.3.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

12.5.3.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
11 510.00	43.99	Peak	H	39.50	17.50	42.70	58.29	73.98	15.69
	32.77	Average	H				47.07	53.98	6.91
	50.62	Peak	V				64.92	73.98	9.06
	37.03	Average	V				51.33	53.98	2.65
Middle Channel									
11 590.00	43.86	Peak	H	39.50	17.50	42.70	58.16	73.98	15.82
	32.63	Average	H				46.93	53.98	7.05
	48.63	Peak	V				62.93	73.98	11.05
	35.41	Average	V				49.71	53.98	4.27

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

12.5.4 Test data for 802.11ac20 RLAN Mode

12.5.4.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H. Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

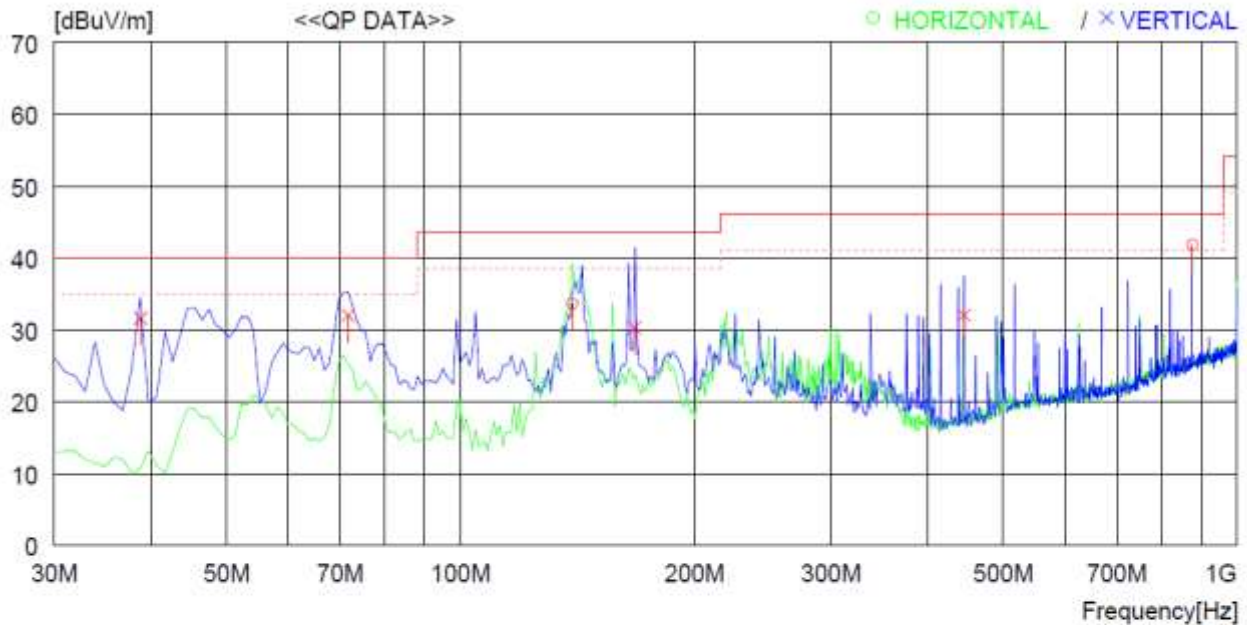
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA TABLE	
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	139.610	55.4	8.1	3.2	33.1	33.6	43.5	9.9	200	199
2	875.830	44.7	21.9	8.3	33.1	41.8	46.0	4.2	100	191
----- Vertical -----										
3	38.730	49.7	13.0	1.8	32.9	31.6	40.0	8.4	100	268
4	71.710	53.4	9.4	2.3	33.1	32.0	40.0	8.0	200	359
5	167.740	50.8	9.0	3.4	32.9	30.3	43.5	13.2	200	359
6	445.161	42.6	16.5	5.7	32.8	32.0	46.0	14.0	200	20

12.5.4.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

12.5.4.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
11 490.00	43.31	Peak	H	39.50	17.50	42.70	57.61	73.98	16.37
	33.20	Average	H				47.50	53.98	6.48
	52.82	Peak	V				67.12	73.98	6.86
	38.01	Average	V				52.31	53.98	1.67
Middle Channel									
11 570.00	43.28	Peak	H	39.50	17.50	42.70	57.58	73.98	16.40
	32.59	Average	H				46.89	53.98	7.09
	52.94	Peak	V				67.24	73.98	6.74
	37.96	Average	V				52.26	53.98	1.72
High Channel									
11 650.00	43.55	Peak	H	39.50	17.50	42.70	57.85	73.98	16.13
	32.60	Average	H				46.90	53.98	7.08
	53.91	Peak	V				68.21	73.98	5.77
	38.00	Average	V				52.30	53.98	1.68

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

12.5.5 Test data for 802.11ac40 RLAN Mode

12.5.5.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H.

Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

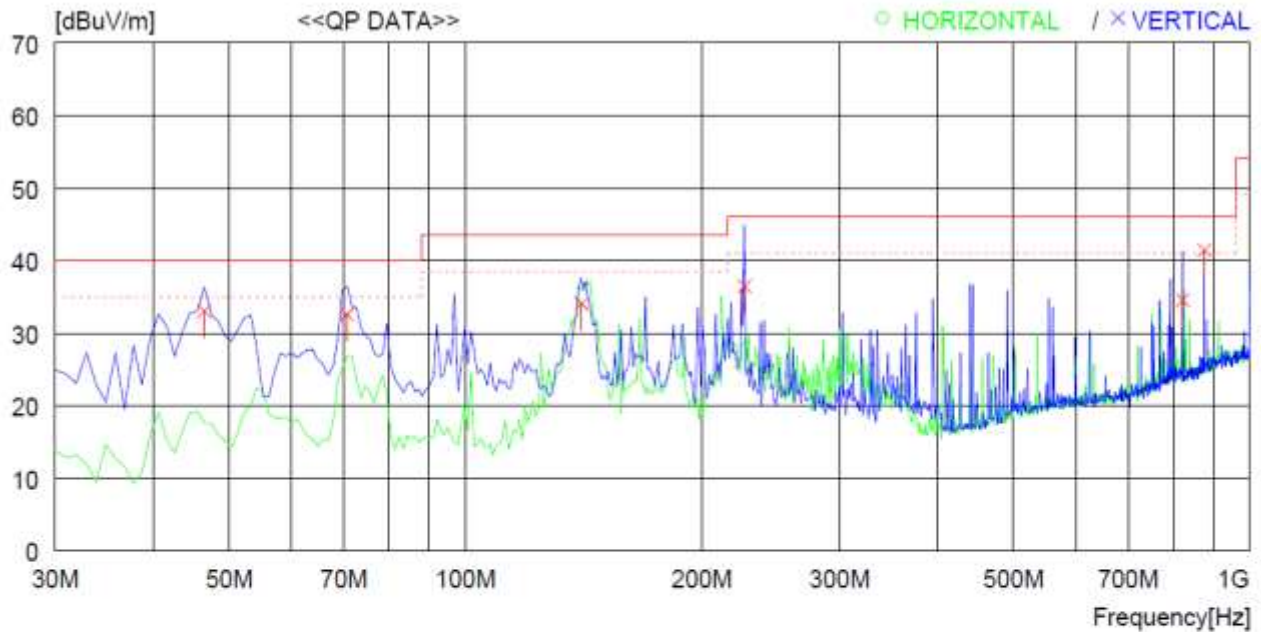
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	Q P [dBuV]	FACTOR [dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Vertical -----										
1	46.490	50.0	13.9	2.0	32.9	33.0	40.0	7.0	100	359
2	70.740	53.8	9.6	2.3	33.1	32.6	40.0	7.4	200	0
3	140.580	55.9	8.1	3.2	33.1	34.1	43.5	9.4	100	359
4	226.910	53.7	11.6	4.0	32.8	36.5	46.0	9.5	100	359
5	821.511	38.7	21.1	8.1	33.4	34.5	46.0	11.5	300	6
6	875.830	44.3	21.9	8.3	33.1	41.4	46.0	4.6	100	131

12.5.5.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

12.5.5.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
11 510.00	43.64	Peak	H	39.50	17.50	42.70	57.94	73.98	16.04
	32.58	Average	H				46.88	53.98	7.10
	50.16	Peak	V				64.46	73.98	9.52
	36.21	Average	V				50.51	53.98	3.47
Middle Channel									
11 590.00	44.50	Peak	H	39.50	17.50	42.70	58.80	73.98	15.18
	32.61	Average	H				46.91	53.98	7.07
	48.57	Peak	V				62.87	73.98	11.11
	35.87	Average	V				50.17	53.98	3.81

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

12.5.6 Test data for 802.11ac80 RLAN Mode

12.5.6.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : (46 ~ 47) % R.H.

Temperature: (23 ~ 24) °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

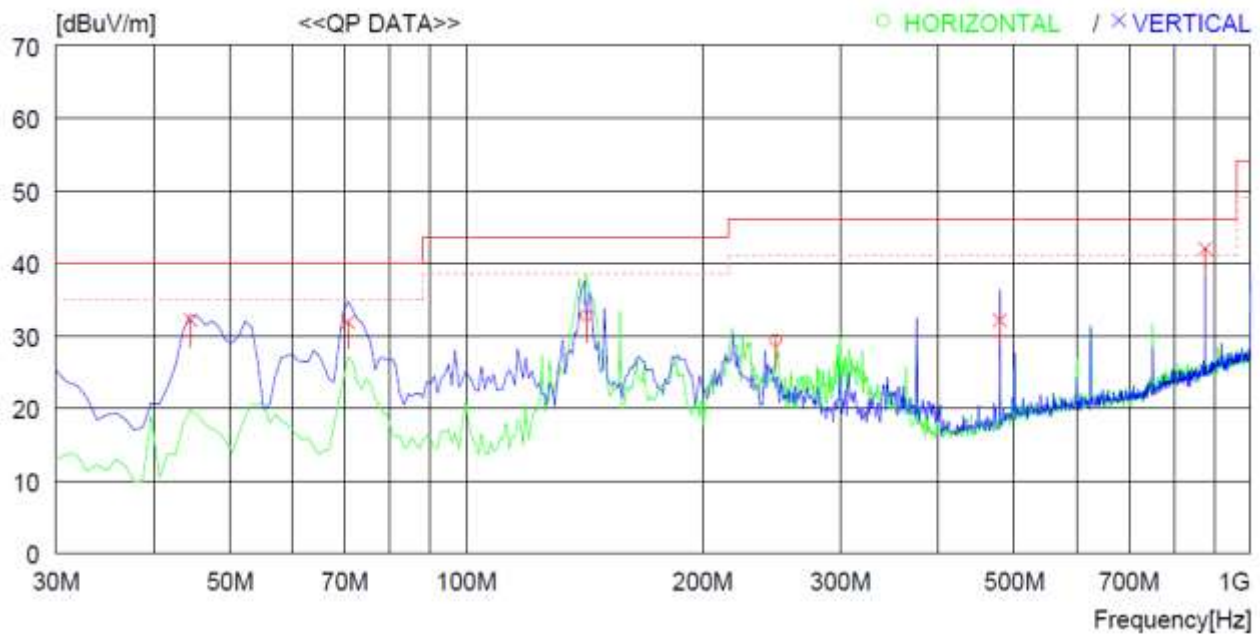
Result : PASSED

EUT : Interface Box

Date: April 26, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	142.520	54.3	8.2	3.2	33.0	32.7	43.5	10.8	200	359
2	248.250	45.6	12.4	4.1	32.8	29.3	46.0	16.7	100	206
----- Vertical -----										
3	44.550	49.2	13.9	1.9	32.9	32.1	40.0	7.9	100	358
4	70.740	53.1	9.6	2.3	33.1	31.9	40.0	8.1	100	125
5	479.111	42.0	17.0	5.9	32.8	32.1	46.0	13.9	100	2
6	875.830	44.9	21.9	8.3	33.1	42.0	46.0	4.0	100	130

12.5.6.2 Test data for Below 30 MHz

- Test Date : April 26, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

12.5.6.3 Test data for above 1 GHz

- Test Date : April 26, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m
- Operating mode : Transmitting mode

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
11 550.00	43.94	Peak	H	39.50	17.50	42.70	58.24	73.98	15.74
	33.66	Average	H				47.96	53.98	6.02
	45.86	Peak	V				60.16	73.98	13.82
	34.51	Average	V				48.81	53.98	5.17

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

13. SPURIOUS EMISSION - RECEIVER

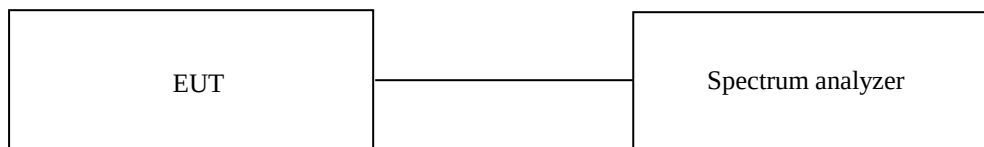
13.1 Operating environment

Temperature : 24 °C

Relative humidity : 45 % R.H.

13.2 Test set-up for conducted measurement

The antenna output of the EUT was connected to the spectrum analyzer. The resolution and video bandwidth is set to 100 kHz, and peak detection was used.



13.3 Test set-up for radiated measurement

The radiated emissions measurements were performed on the 3 m, open-field test site. The EUT was placed on a non-conductive turntable above the ground plane.

The frequency spectrum from 30 MHz to 40 GHz was scanned and maximum emission levels at each frequency recorded. The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna.

13.4 Test equipment used

	Model Number	Manufacturer	Description	Serial Number	Last Cal.(Interval)
■ -	FSV40	Rohde & Schwarz	Signal Analyzer	101009	Jul. 22, 2015 (1Y)
■ -	ESCI	Rohde & Schwarz	Test Receiver	101012	Nov. 02, 2015 (1Y)
■ -	310N	Sonoma Instrument	Pre-Amplifier	312544	Apr. 05, 2016 (1Y)
■ -	SCU-18	Rohde & Schwarz	Pre-Amplifier	10041	Nov. 23, 2015 (1Y)
■ -	DT3000	Innco System	Turn Table	930611	N/A
■ -	MA4000-EP	Innco System	Antenna Master	3320611	N/A
■ -	VULB9163	Schwarzbeck	TRILOG Broadband Antenna	9163-421	Jul. 10, 2014 (2Y)
■ -	BBHA9120D	Schwarzbeck	Horn Antenna	BBHA9120D295	Aug. 31, 2015 (2Y)
■ -	BBHA9170	Schwarzbeck	Horn Antenna	BBHA9170178	Aug. 31, 2015 (2Y)

All test equipment used is calibrated on a regular basis.

13.5 Test data for 5 150 MHz ~ 5 250 MHz Band

13.5.1 Test data for 802.11a RLAN Mode

13.5.1.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

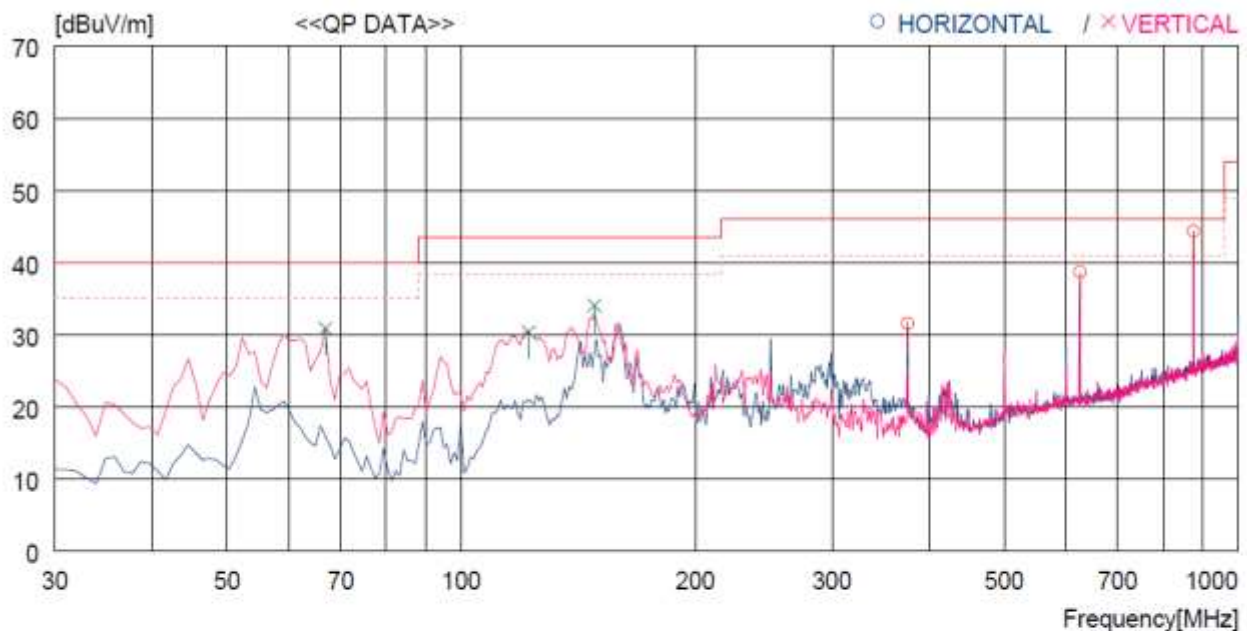
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1 Ant2 with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	QP	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	375.320	43.6	15.3	5.7	33.0	31.6	46.0	14.4	100	172
2	625.577	45.2	19.3	7.5	33.3	38.7	46.0	7.3	100	0
3	875.830	45.9	21.9	9.1	32.5	44.4	46.0	1.6	100	0
----- Vertical -----										
4	66.860	51.1	10.7	2.2	33.1	30.9	40.0	9.1	100	359
5	122.150	50.4	9.8	3.4	33.2	30.4	43.5	13.1	100	359
6	148.340	55.3	8.3	3.5	33.0	34.1	43.5	9.4	100	359

13.5.1.2 Test data for Below 30 MHz

- Test Date : June 03, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dBμV/m)	Limits (dBμV/m)	Margin (dB)
Any emissions were not observed from the EUT.									

13.5.1.3 Test data for above 1 GHz

- Test Date : June 03, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dBμV/m)	Limits (dBμV/m)	Margin (dB)
Any emissions were not observed from the EUT.									


 Tested by: Jun-Hui, Lee / Senior Engineer

13.5.2 Test data for 802.11n_HT20 RLAN Mode

13.5.2.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H. Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

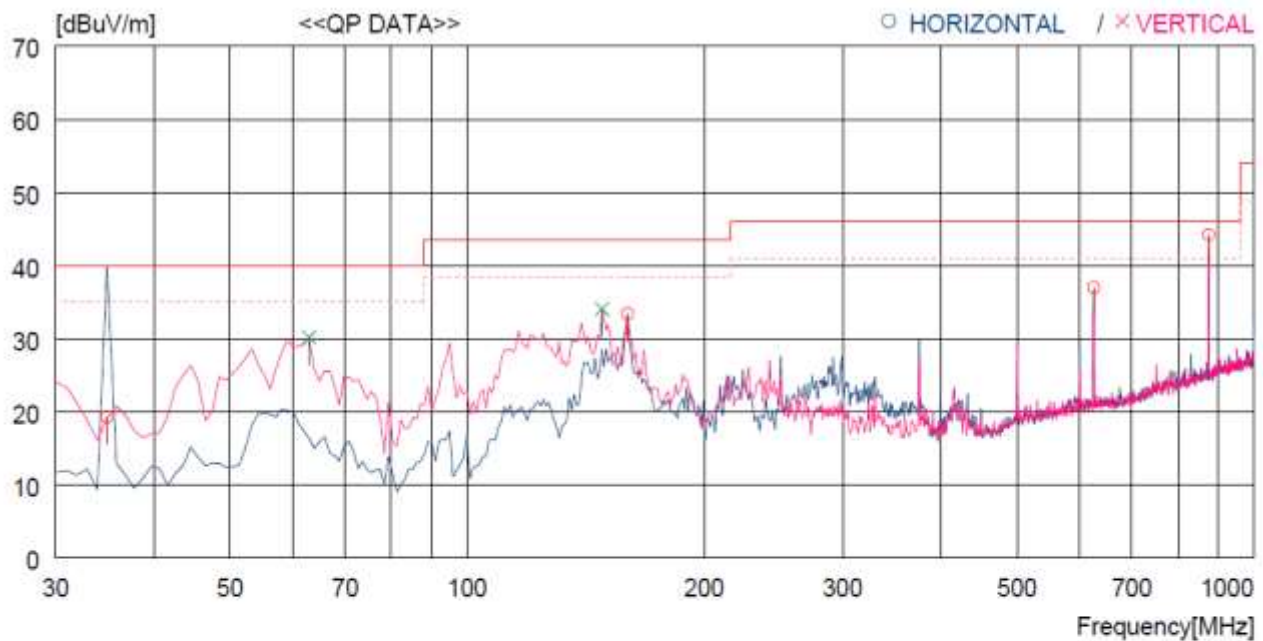
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	QP	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
		[dBuV]	[dB]							
----- Horizontal -----										
1	34.850	37.6	12.7	1.8	32.8	19.3	40.0	20.7	100	0
2	159.980	54.7	8.3	3.4	33.0	33.4	43.5	10.1	200	85
3	625.577	44.7	19.0	6.7	33.4	37.0	46.0	9.0	100	224
4	875.830	47.5	21.5	8.3	33.1	44.2	46.0	1.8	100	208
----- Vertical -----										
5	62.980	48.9	12.2	2.2	33.1	30.2	40.0	9.8	100	359
6	148.340	56.2	7.7	3.2	33.0	34.1	43.5	9.4	100	358

13.5.2.1 Test data for Below 30 MHz

- Test Date : June 03, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

13.5.2.3 Test data for above 1 GHz

- Test Date : June 03, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									



Tested by: Jun-Hui, Lee / Senior Engineer

13.5.3 Test data for 802.11n_HT40 RLAN Mode

13.5.3.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

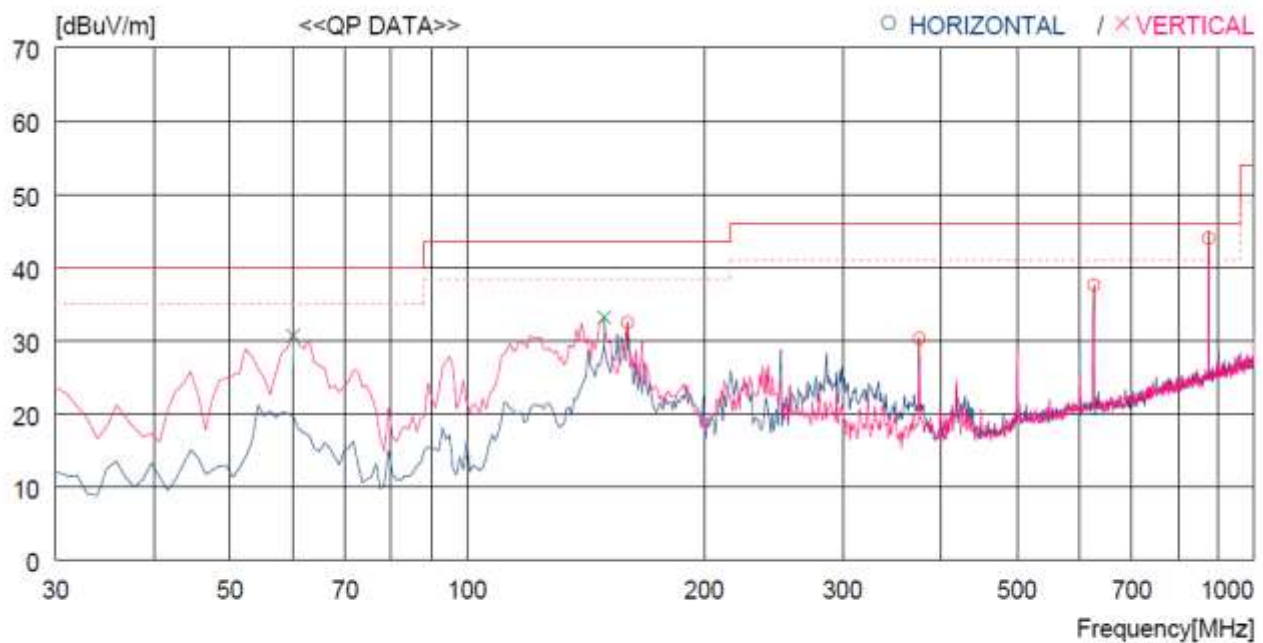
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	QP	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
		[dBuV]	[dB]							
----- Horizontal -----										
1	159.980	53.8	8.3	3.4	33.0	32.5	43.5	11.0	200	359
2	375.320	43.1	14.7	5.2	32.7	30.3	46.0	15.7	100	0
3	625.577	45.3	19.0	6.7	33.4	37.6	46.0	8.4	100	0
4	875.830	47.3	21.5	8.3	33.1	44.0	46.0	2.0	100	201
----- Vertical -----										
5	60.070	48.1	13.5	2.1	33.0	30.7	40.0	9.3	100	251
6	149.310	55.3	7.7	3.2	33.0	33.2	43.5	10.3	100	359

13.5.3.2 Test data for 30 MHz ~ 1 000 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dBμV/m)	Limits (dBμV/m)	Margin (dB)
Any emissions were not observed from the EUT.									

13.5.3.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss	Amp Gain	Emission Level(dBμV/m)	Limits (dBμV/m)	Margin (dB)
Any emissions were not observed from the EUT.								


 Tested by: Jun-Hui, Lee / Senior Engineer

13.5.4 Test data for 802.11ac_HT20 RLAN Mode

13.5.4.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

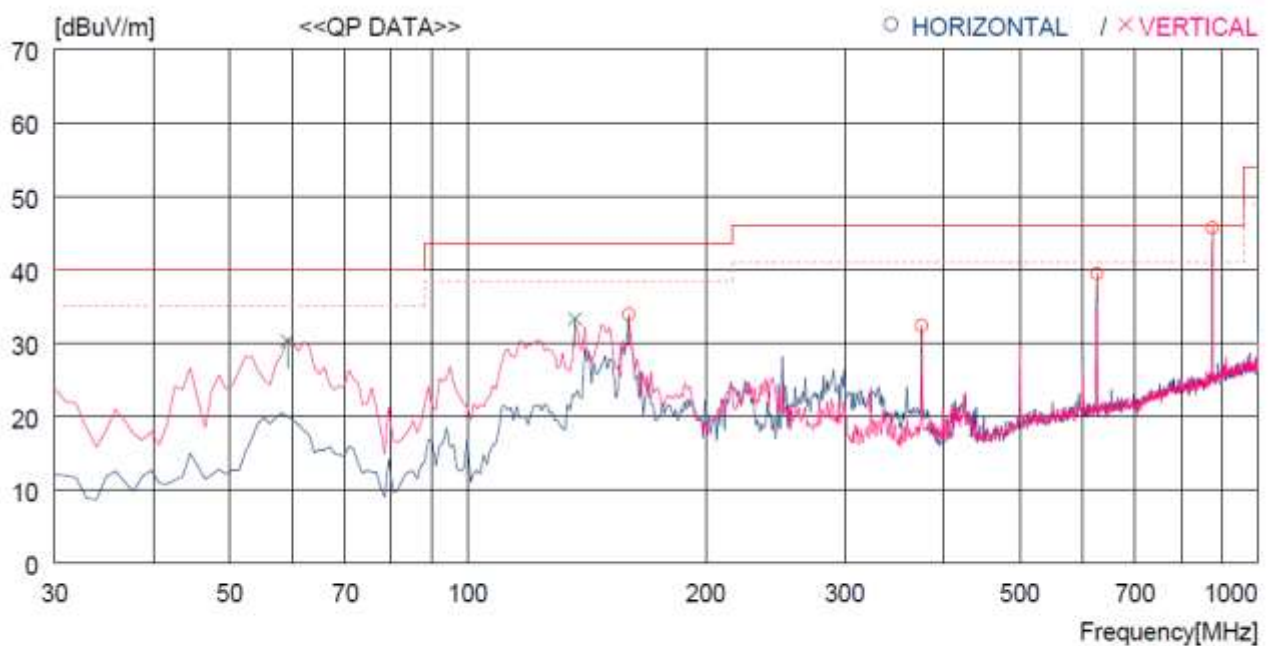
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA TABLE	
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	159.980	54.7	8.6	3.6	33.0	33.9	43.5	9.6	200	359
2	375.320	44.4	15.3	5.7	33.0	32.4	46.0	13.6	100	0
3	625.577	46.0	19.3	7.5	33.3	39.5	46.0	6.5	100	0
4	875.830	47.2	21.9	9.1	32.5	45.7	46.0	0.3	100	181
----- Vertical -----										
5	59.100	47.9	13.3	2.2	33.1	30.3	40.0	9.7	100	228
6	136.700	54.5	8.4	3.4	33.0	33.3	43.5	10.2	100	349

13.5.4.2 Test data for Below 30 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

13.5.4.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									


Tested by: Jun-Hui, Lee / Senior Engineer

13.5.5 Test data for 802.11ac_HT40 RLAN Mode

13.5.5.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

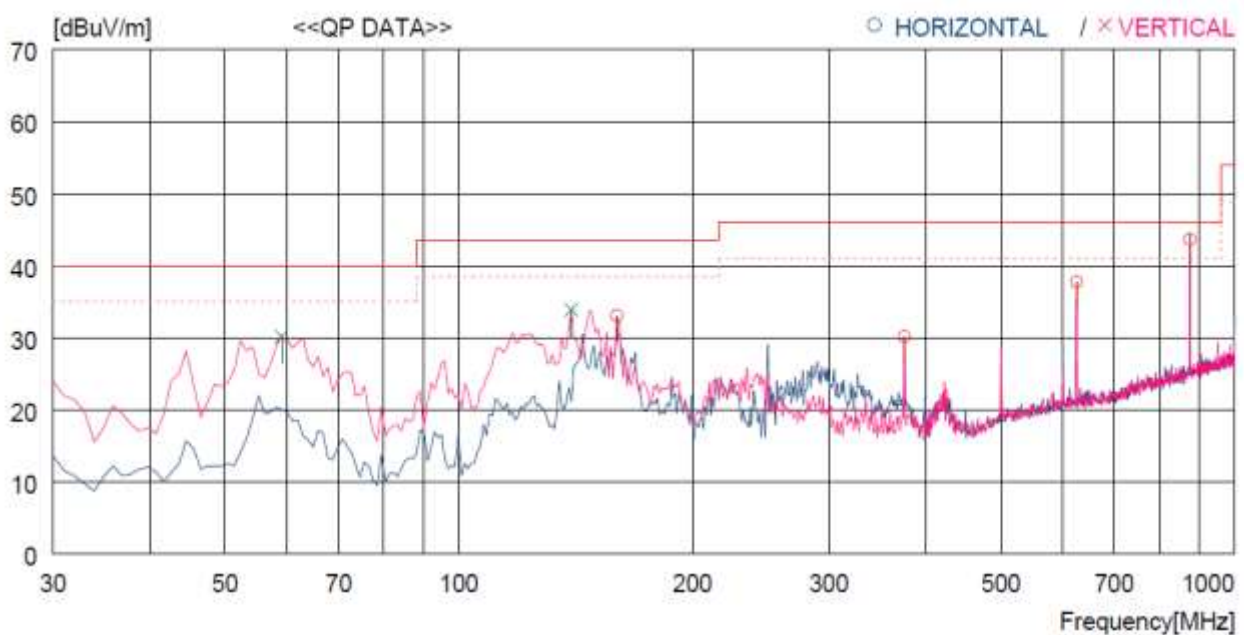
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	QP	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	159.980	54.4	8.3	3.4	33.0	33.1	43.5	10.4	200	359
2	375.320	43.0	14.7	5.2	32.7	30.2	46.0	15.8	100	163
3	625.577	45.5	19.0	6.7	33.4	37.8	46.0	8.2	100	220
4	875.830	47.0	21.5	8.3	33.1	43.7	46.0	2.3	100	205
----- Vertical -----										
5	59.100	47.5	13.6	2.1	33.0	30.2	40.0	9.8	100	359
6	139.610	55.9	7.9	3.2	33.1	33.9	43.5	9.6	100	359

13.5.5.2 Test data for Below 30 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

13.5.5.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

Tested by: Jun-Hui, Lee / Senior Engineer

13.5.6 Test data for 802.11ac_HT80 RLAN Mode

13.5.6.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

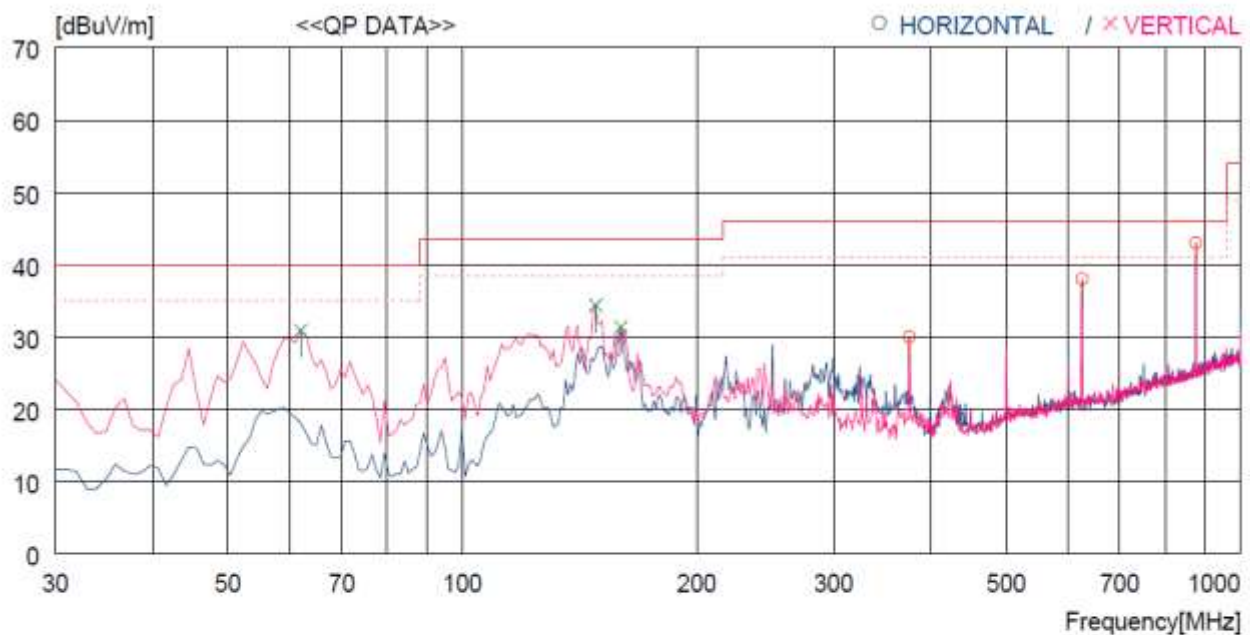
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	QF	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	375.320	42.8	14.7	5.2	32.7	30.0	46.0	16.0	100	162
2	625.577	45.7	19.0	6.7	33.4	38.0	46.0	8.0	100	170
3	875.830	46.3	21.5	8.3	33.1	43.0	46.0	3.0	100	0
----- Vertical -----										
4	62.010	49.1	12.7	2.2	33.1	30.9	40.0	9.1	100	202
5	148.340	56.5	7.7	3.2	33.0	34.4	43.5	9.1	100	359
6	159.980	52.7	8.3	3.4	33.0	31.4	43.5	12.1	200	150

13.5.6.2 Test data for 30 MHz ~ 1 000 MHz

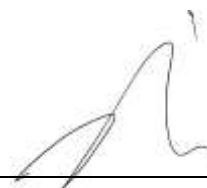
- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

13.5.6.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss	Amp Gain	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.								



Tested by: Jun-Hui, Lee / Senior Engineer

13.6 Test data for 5 725 MHz ~ 5 850 MHz Band

13.6.1 Test data for 802.11a RLAN Mode

13.6.1.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

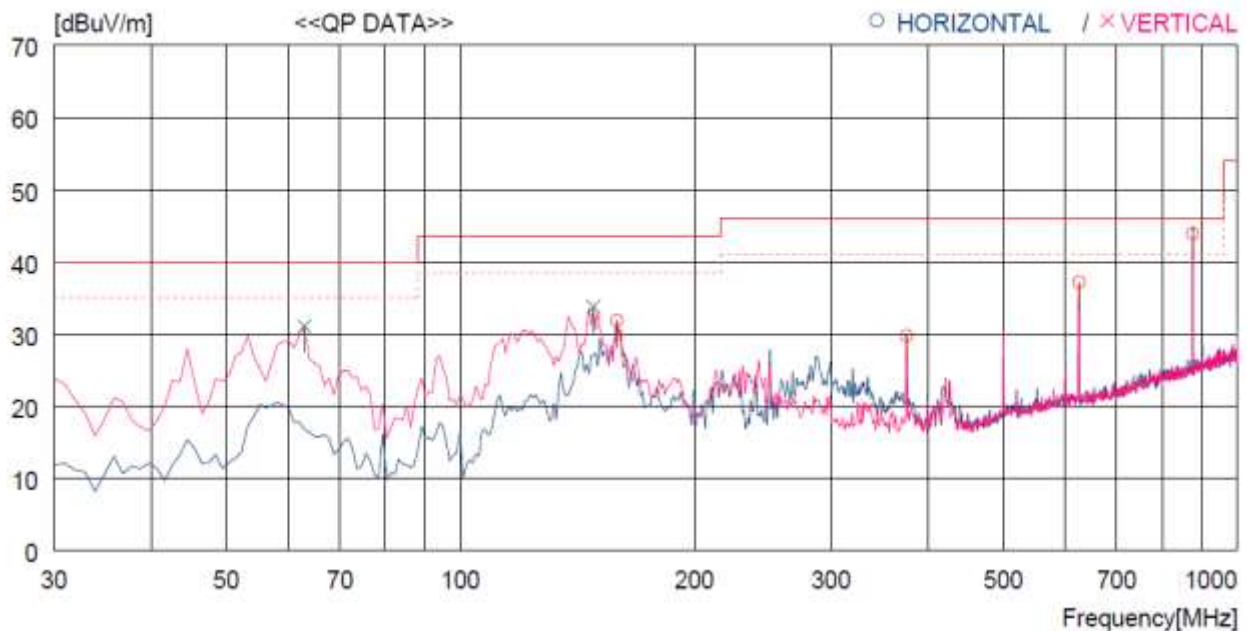
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1 Ant2 with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	QP	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
		[dBuV]	[dB]							
----- Horizontal -----										
1	159.010	53.3	8.2	3.4	33.0	31.9	43.5	11.6	200	98
2	375.320	42.6	14.7	5.2	32.7	29.8	46.0	16.2	100	158
3	625.577	44.9	19.0	6.7	33.4	37.2	46.0	8.8	100	227
4	875.830	47.2	21.5	8.3	33.1	43.9	46.0	2.1	100	0
----- Vertical -----										
5	62.980	49.8	12.2	2.2	33.1	31.1	40.0	8.9	100	168
6	148.340	55.9	7.7	3.2	33.0	33.8	43.5	9.7	100	334

13.6.1.2 Test data for Below 30 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dBμV/m)	Limits (dBμV/m)	Margin (dB)
Any emissions were not observed from the EUT.									

13.6.1.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dBμV/m)	Limits (dBμV/m)	Margin (dB)
Any emissions were not observed from the EUT.									



Tested by: Jun-Hui, Lee / Senior Engineer

13.6.2 Test data for 802.11n_HT20 RLAN Mode

13.6.2.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H. Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

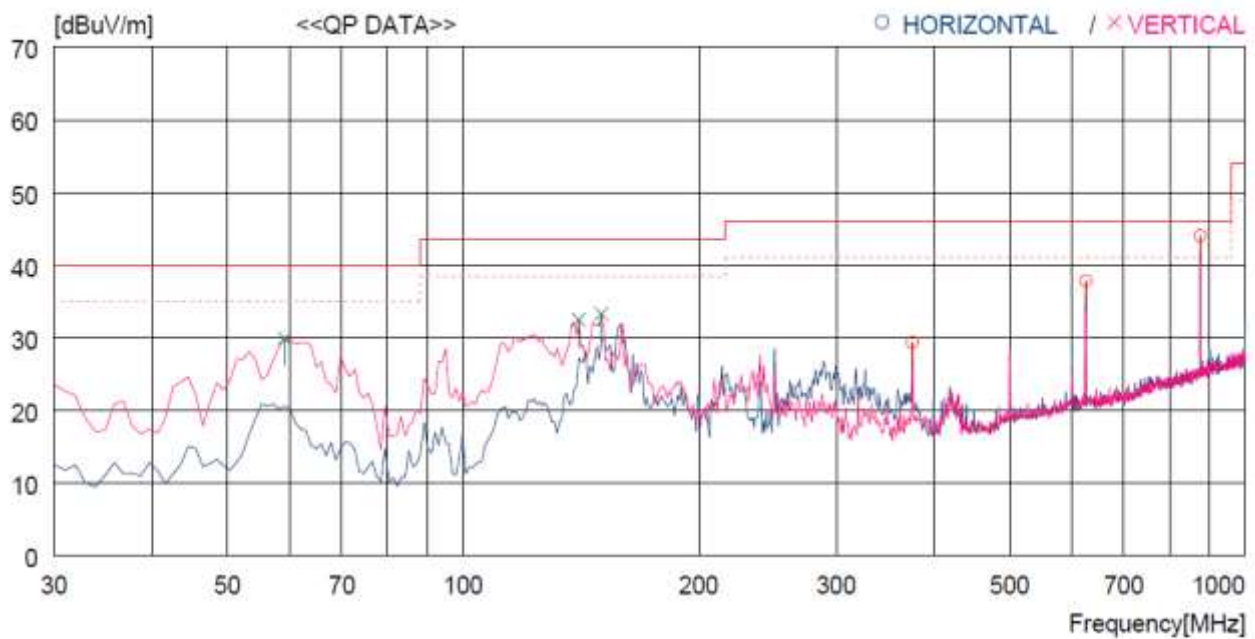
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	375.320	42.2	14.7	5.2	32.7	29.4	46.0	16.6	100	0
2	625.577	45.6	19.0	6.7	33.4	37.9	46.0	8.1	100	0
3	875.830	47.3	21.5	8.3	33.1	44.0	46.0	2.0	100	0
----- Vertical -----										
4	59.100	47.2	13.6	2.1	33.0	29.9	40.0	10.1	100	250
5	140.580	54.5	7.9	3.2	33.1	32.5	43.5	11.0	100	152
6	150.280	55.3	7.7	3.3	33.0	33.3	43.5	10.2	100	350

13.6.2.1 Test data for Below 30 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dBμV/m)	Limits (dBμV/m)	Margin (dB)
Any emissions were not observed from the EUT.									

13.6.2.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dBμV/m)	Limits (dBμV/m)	Margin (dB)
Any emissions were not observed from the EUT.									



Tested by: Jun-Hui, Lee / Senior Engineer

13.6.3 Test data for 802.11n_HT40 RLAN Mode

13.6.3.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

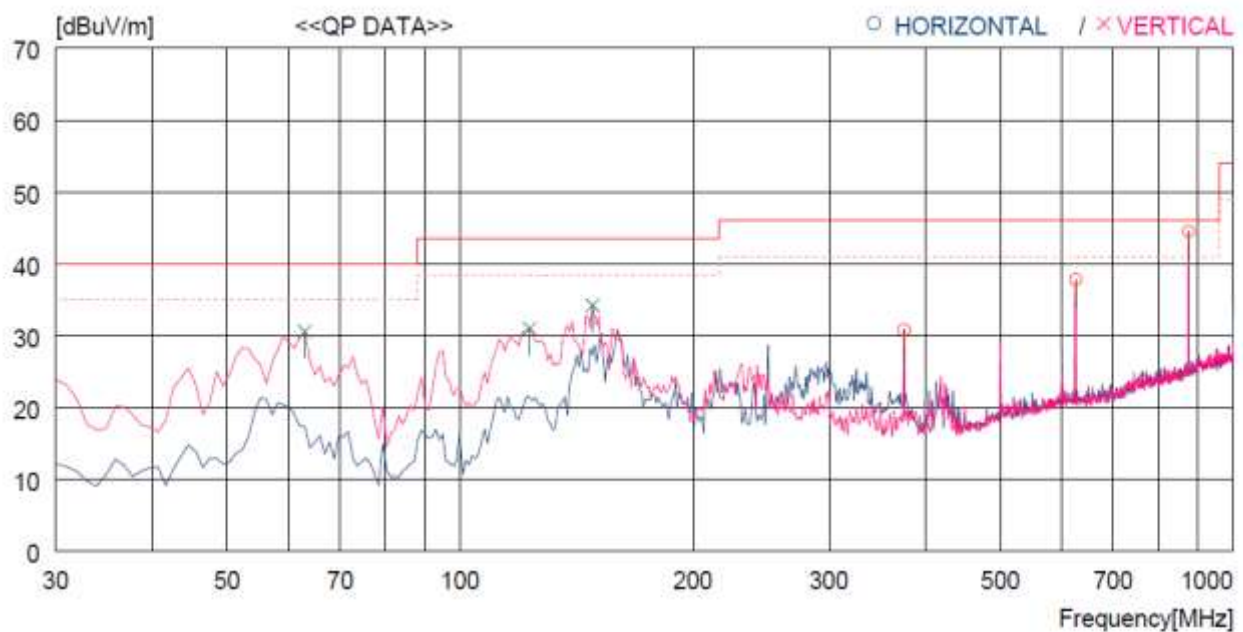
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	375.320	43.6	14.7	5.2	32.7	30.8	46.0	15.2	100	175
2	625.577	45.5	19.0	6.7	33.4	37.8	46.0	8.2	100	226
3	875.830	47.8	21.5	8.3	33.1	44.5	46.0	1.5	100	199
----- Vertical -----										
4	62.980	49.3	12.2	2.2	33.1	30.6	40.0	9.4	100	359
5	123.120	51.2	9.6	3.4	33.2	31.0	43.5	12.5	100	359
6	148.340	56.3	7.7	3.2	33.0	34.2	43.5	9.3	100	359

13.6.3.2 Test data for 30 MHz ~ 1 000 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dBμV/m)	Limits (dBμV/m)	Margin (dB)
Any emissions were not observed from the EUT.									

13.6.3.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss	Amp Gain	Emission Level(dBμV/m)	Limits (dBμV/m)	Margin (dB)
Any emissions were not observed from the EUT.								


 Tested by: Jun-Hui, Lee / Senior Engineer

13.6.4 Test data for 802.11ac_HT20 RLAN Mode

13.6.4.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

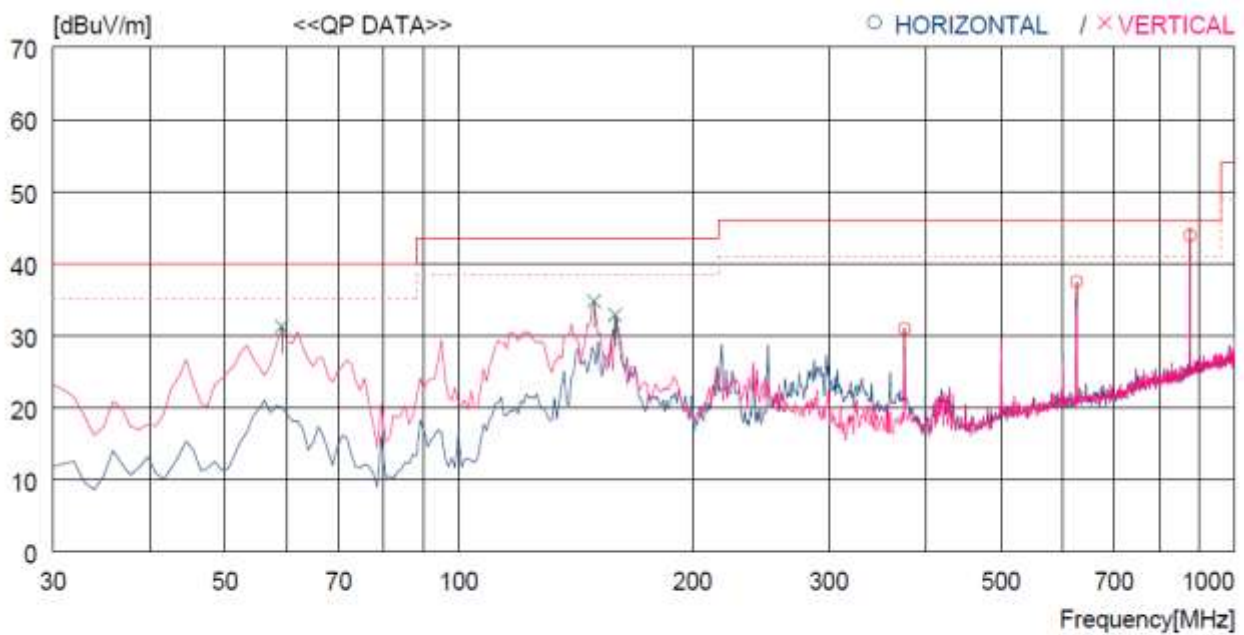
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	375.320	43.8	14.7	5.2	32.7	31.0	46.0	15.0	100	180
2	625.577	45.2	19.0	6.7	33.4	37.5	46.0	8.5	100	0
3	875.830	47.2	21.5	8.3	33.1	43.9	46.0	2.1	100	0
----- Vertical -----										
4	59.100	48.6	13.6	2.1	33.0	31.3	40.0	8.7	100	257
5	149.310	56.9	7.7	3.2	33.0	34.8	43.5	8.7	100	310
6	159.010	54.3	8.2	3.4	33.0	32.9	43.5	10.6	200	139

13.6.4.2 Test data for Below 30 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

13.6.4.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									



Tested by: Jun-Hui, Lee / Senior Engineer

13.6.5 Test data for 802.11ac_HT40 RLAN Mode

13.6.5.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

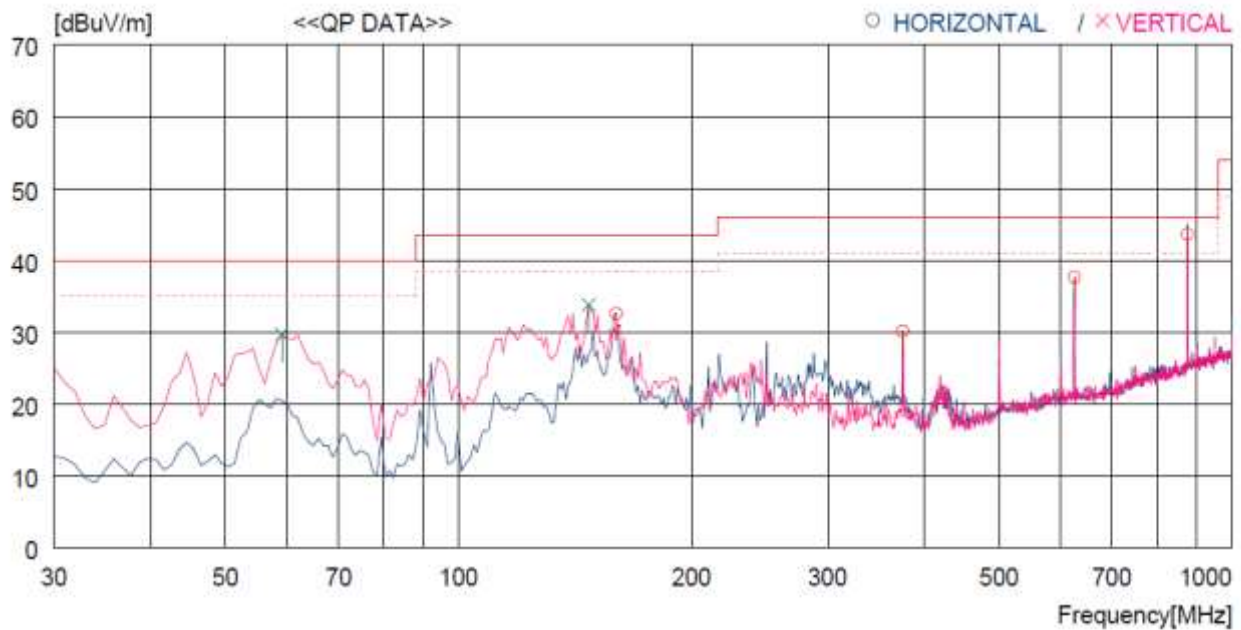
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	[dBuV]	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	159.980	53.9	8.3	3.4	33.0	32.6	43.5	10.9	200	72
2	375.320	43.0	14.7	5.2	32.7	30.2	46.0	15.8	100	0
3	625.577	45.4	19.0	6.7	33.4	37.7	46.0	8.3	100	0
4	875.830	47.0	21.5	8.3	33.1	43.7	46.0	2.3	100	0
----- Vertical -----										
5	59.100	47.0	13.6	2.1	33.0	29.7	40.0	10.3	100	359
6	147.370	55.9	7.7	3.2	33.0	33.8	43.5	9.7	100	6

13.6.5.2 Test data for Below 30 MHz

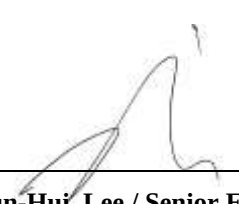
- Test Date : June 03, 2016
- Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- Frequency range : 9 kHz ~ 30 MHz
- Measurement distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									

13.6.5.3 Test data for above 1 GHz

- Test Date : June 03, 2016
- Resolution bandwidth : 1 MHz for Peak and Average Mode
- Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- Frequency range : 1 GHz ~ 40 GHz
- Measurement distance : 3 m

Frequency (MHz)	Reading (dB μ V)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dB μ V/m)	Limits (dB μ V/m)	Margin (dB)
Any emissions were not observed from the EUT.									



Tested by: Jun-Hui, Lee / Senior Engineer

13.6.6 Test data for 802.11ac_HT80 RLAN Mode

13.6.6.1 Test data for 30 MHz ~ 1 000 MHz

Humidity Level : 45 % R.H.

Temperature: 24 °C

Limits apply to : FCC CFR 47, PART 15, SUBPART C, SECTION 15.247

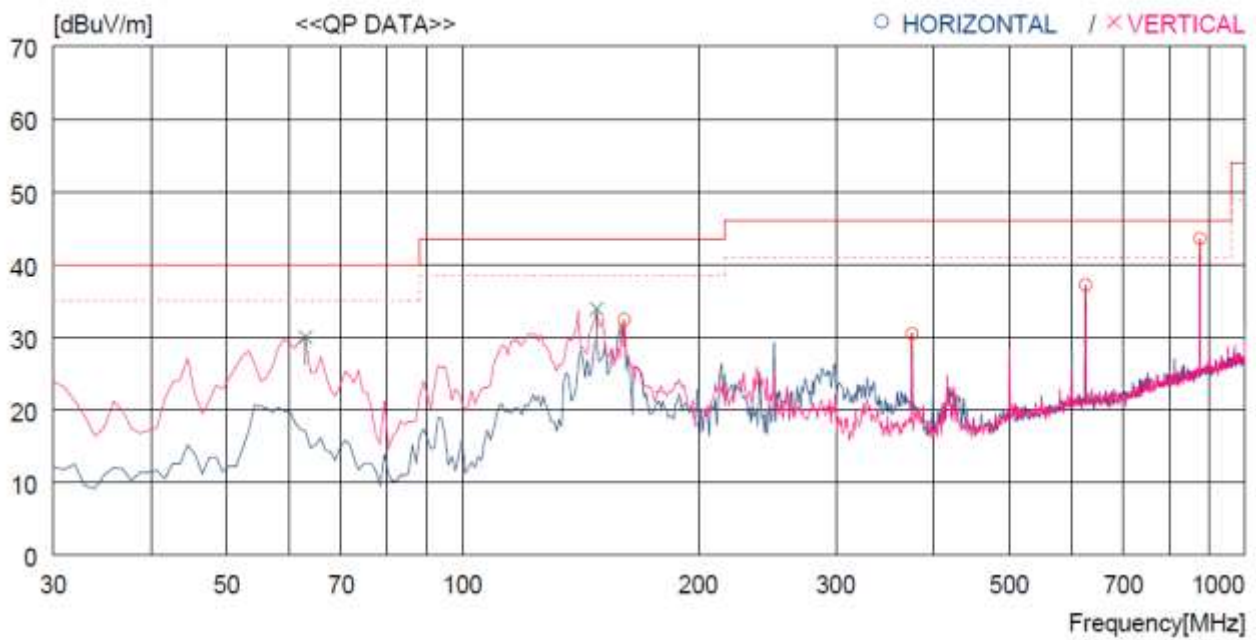
Result : PASSED

EUT : Interface Box

Date: June 03, 2016

Detector : CISPR Quasi-Peak (6 dB Bandwidth: 120 kHz)

-.Ant0, Ant1, Ant2 and Multiple transmit with Low, Middle and High Channels were tested, but the worst data were recorded.



No.	FREQ	READING	ANT	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
	[MHz]	QF	FACTOR	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	160.950	53.6	8.3	3.4	32.9	32.4	43.5	11.1	200	73
2	375.320	43.3	14.7	5.2	32.7	30.5	46.0	15.5	100	0
3	625.577	44.9	19.0	6.7	33.4	37.2	46.0	8.8	100	219
4	875.830	46.9	21.5	8.3	33.1	43.6	46.0	2.4	100	0
----- Vertical -----										
5	62.980	48.7	12.2	2.2	33.1	30.0	40.0	10.0	100	161
6	148.340	56.0	7.7	3.2	33.0	33.9	43.5	9.6	100	359

13.6.6.2 Test data for 30 MHz ~ 1 000 MHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 200 Hz (from 9 kHz to 0.15 MHz), 9 kHz (from 0.15 MHz to 30 MHz)
- . Frequency range : 9 kHz ~ 30 MHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Height (m)	Angle (°)	Ant. Factor (dB/m)	Cable Loss	Emission Level(dBμV/m)	Limits (dBμV/m)	Margin (dB)
Any emissions were not observed from the EUT.									

13.6.6.3 Test data for above 1 GHz

- . Test Date : June 03, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Frequency range : 1 GHz ~ 40 GHz
- . Measurement distance : 3 m

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss	Amp Gain	Emission Level(dBμV/m)	Limits (dBμV/m)	Margin (dB)
Any emissions were not observed from the EUT.								



Tested by: Jun-Hui, Lee / Senior Engineer

14. RADIATED RESTRICTED BAND EDGE MEASUREMENTS

14.1 Operating environment

Temperature : 23 °C
Relative humidity : 43 % R.H.

14.2 Test set-up for conducted measurement

The radiated emissions measurements were performed on the 3 m, open-field test site. The EUT was placed on a non-conductive turntable above the ground plane.

The system was rotated 360°, and the antenna was varied in the height between 1.0 m and 4.0 m in order to determine the maximum emission levels. This procedure was performed for horizontal and vertical polarization of the receiving antenna.



14.3 Test equipment used

	Model Number	Manufacturer	Description	Serial Number	Last Cal.(Interval)
■ -	FSV40	Rohde & Schwarz	Signal Analyzer	101009	Jul. 22, 2015 (1Y)
■ -	ESCI	Rohde & Schwarz	Test Receiver	101012	Nov. 02, 2015 (1Y)
■ -	310N	Sonoma Instrument	Pre-Amplifier	312544	Apr. 05, 2016 (1Y)
■ -	SCU-18	Rohde & Schwarz	Pre-Amplifier	10041	Nov. 23, 2015 (1Y)
■ -	DT3000	Innco System	Turn Table	930611	N/A
■ -	MA4000-EP	Innco System	Antenna Master	3320611	N/A
■ -	VULB9163	Schwarzbeck	TRILOG Broadband Antenna	9163-421	Jul. 10, 2014 (2Y)
■ -	BBHA9120D	Schwarzbeck	Horn Antenna	BBHA9120D295	Aug. 31, 2015 (2Y)
■ -	BBHA9170	Schwarzbeck	Horn Antenna	BBHA9170178	Aug. 31, 2015 (2Y)

All test equipment used is calibrated on a regular basis.

14.4 Test data for Frequency 5 150 band

14.4.1 Test data for 802.11a RLAN Mode

14.4.1.1 Test data for Antenna 0 (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
5 150.00	57.28	Peak	H	31.00	11.50	42.20	57.58	74.00	16.42
	46.78	Average	H				47.08	54.00	6.92
	59.19	Peak	V				59.49	74.00	14.51
	46.80	Average	V				47.10	54.00	6.90
High Channel									
5 350.00	43.82	Peak	H	31.30	11.70	42.20	44.62	74.00	29.38
	32.80	Average	H				33.60	54.00	20.40
	45.11	Peak	V				45.91	74.00	28.09
	33.24	Average	V				34.04	54.00	19.96

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

14.4.2 Test data for 802.11n_HT20 RLAN Mode

14.4.2.1 Test data for Multiple transmit (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 150.00	56.65	Peak	H	31.00	11.50	42.20	56.95	74.00	17.05
	46.80	Average	H				47.10	54.00	6.90
	61.75	Peak	V				62.05	74.00	11.95
	48.65	Average	V				48.95	54.00	5.05
High Channel									
5 350.00	43.84	Peak	H	31.30	11.70	42.20	44.64	74.00	29.36
	32.91	Average	H				33.71	54.00	20.29
	45.20	Peak	V				46.00	74.00	28.00
	33.29	Average	V				34.09	54.00	19.91

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

14.4.3 Test data for 802.11n_HT40 RLAN Mode

14.4.3.1 Test data for Multiple transmit (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 150.00	57.18	Peak	H	31.00	11.50	42.20	57.48	74.00	16.52
	46.82	Average	H				47.12	54.00	6.88
	70.80	Peak	V				71.10	74.00	2.90
	53.16	Average	V				53.46	54.00	0.54
High Channel									
5 350.00	44.15	Peak	H	31.30	11.70	42.20	44.95	74.00	29.05
	32.94	Average	H				33.74	54.00	20.26
	45.28	Peak	V				46.08	74.00	27.92
	33.22	Average	V				34.02	54.00	19.98

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

14.4.4 Test data for 802.11ac20 RLAN Mode

14.4.4.1 Test data for Multiple transmit (Worst case)

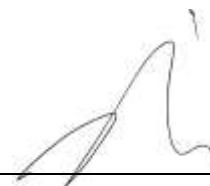
- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5150.00	56.55	Peak	H	31.00	11.50	42.20	56.85	74.00	17.15
	46.79	Average	H				47.09	54.00	6.91
	62.04	Peak	V				62.34	74.00	11.66
	48.45	Average	V				48.75	54.00	5.25
High Channel									
5 350.00	43.61	Peak	H	31.30	11.70	42.20	44.41	74.00	29.59
	32.76	Average	H				33.56	54.00	20.44
	45.02	Peak	V				45.82	74.00	28.18
	33.24	Average	V				34.04	54.00	19.96

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

14.4.5 Test data for 802.11ac40 RLAN Mode

14.4.5.1 Test data for Multiple transmit (Worst case)

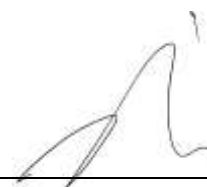
- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 150.00	57.10	Peak	H	31.00	11.50	42.20	57.40	74.00	16.60
	46.80	Average	H				47.10	54.00	6.90
	68.67	Peak	V				68.97	74.00	5.03
	53.53	Average	V				53.83	54.00	0.17
High Channel									
5 350.00	44.42	Peak	H	31.30	11.70	42.20	45.22	74.00	28.78
	32.57	Average	H				33.37	54.00	20.63
	45.14	Peak	V				45.94	74.00	28.06
	33.19	Average	V				33.99	54.00	20.01

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

14.4.6 Test data for 802.11ac80 RLAN Mode

14.4.6.1 Test data for Antenna 0

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
5 150.00	47.49	Peak	H	31.00	11.50	42.20	47.79	74.00	26.21
	33.65	Average	H				33.95	54.00	20.05
	70.19	Peak	V				70.49	74.00	3.51
	50.67	Average	V				50.97	54.00	3.03
High Channel									
5 350.00	44.29	Peak	H	31.30	11.70	42.20	45.09	74.00	28.91
	32.64	Average	H				33.44	54.00	20.56
	47.50	Peak	V				48.30	74.00	25.70
	34.09	Average	V				34.89	54.00	19.11

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



 Tested by: Jun-Hui, Lee / Senior Engineer

14.5 Test data for Frequency 5 725 MHz Band

14.5.1 Test data for 802.11a RLAN Mode

14.5.1.1 Test data for Antenna 0 (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
5 725.00	56.86	Peak	H	31.90	12.10	42.20	58.66	74.00	15.34
	46.77	Average	H				48.57	54.00	5.43
	70.86	Peak	V				72.66	74.00	1.34
	51.91	Average	V				53.71	54.00	0.29
High Channel									
5 850.00	55.87	Peak	H	32.10	12.20	42.20	57.97	74.00	16.03
	46.73	Average	H				48.83	54.00	5.17
	68.27	Peak	V				70.37	74.00	3.63
	50.48	Average	V				52.58	54.00	1.42

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)

Tested by: Jun-Hui, Lee / Senior Engineer

14.5.2 Test data for 802.11n_HT20 RLAN Mode

14.5.2.1 Test data for Multiple transmit (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
5 725.00	56.73	Peak	H	31.90	12.10	42.20	58.53	74.00	15.47
	46.78	Average	H				48.58	54.00	5.42
	70.79	Peak	V				72.59	74.00	1.41
	50.84	Average	V				52.64	54.00	1.36
High Channel									
5 850.00	56.81	Peak	H	32.10	12.20	42.20	58.91	74.00	15.09
	46.80	Average	H				48.90	54.00	5.10
	68.17	Peak	V				70.27	74.00	3.73
	51.35	Average	V				53.45	54.00	0.55

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

14.5.3 Test data for 802.11n_HT40 RLAN Mode

14.5.3.1 Test data for Multiple transmit (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
5 725.00	56.44	Peak	H	31.90	12.10	42.20	58.24	74.00	15.76
	48.80	Average	H				50.60	54.00	3.40
	70.26	Peak	V				72.06	74.00	1.94
	51.95	Average	V				53.75	54.00	0.25
High Channel									
5 850.00	56.00	Peak	H	32.10	12.20	42.20	58.10	74.00	15.90
	46.77	Average	H				48.87	54.00	5.13
	56.49	Peak	V				58.59	74.00	15.41
	48.79	Average	V				50.89	54.00	3.11

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

14.5.4 Test data for 802.11ac20 RLAN Mode

14.5.4.1 Test data for Multiple transmit (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
5 725.00	56.39	Peak	H	31.90	12.10	42.20	58.19	74.00	15.81
	46.82	Average	H				48.62	54.00	5.38
	68.05	Peak	V				69.85	74.00	4.15
	50.86	Average	V				52.66	54.00	1.34
High Channel									
5 850.00	56.80	Peak	H	32.10	12.20	42.20	58.90	74.00	15.10
	46.81	Average	H				48.91	54.00	5.09
	61.53	Peak	V				63.63	74.00	10.37
	48.89	Average	V				50.99	54.00	3.01

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

14.5.5 Test data for 802.11ac40 RLAN Mode

14.5.5.1 Test data for Multiple transmit (Worst case)

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
5 725.00	56.56	Peak	H	31.90	12.10	42.20	58.36	74.00	15.64
	46.83	Average	H				48.63	54.00	5.37
	68.59	Peak	V				70.39	74.00	3.61
	51.85	Average	V				53.65	54.00	0.35
High Channel									
5 850.00	56.51	Peak	H	32.10	12.20	42.20	58.61	74.00	15.39
	46.81	Average	H				48.91	54.00	5.09
	56.70	Peak	V				58.80	74.00	15.20
	46.82	Average	V				48.92	54.00	5.08

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

14.5.6 Test data for 802.11ac80 RLAN Mode

14.5.6.1 Test data for Antenna 0

- . Test Date : April 20, 2016
- . Resolution bandwidth : 1 MHz for Peak and Average Mode for the emissions fall in restricted band,
100 kHz for Peak Mode for the emissions outside restricted band
- . Video bandwidth : 1 MHz for Peak Mode, 10 Hz for Average Mode
- . Measurement distance : 3 m
- . Result : Pass

Frequency (MHz)	Reading (dBμV)	Detector Mode	Ant. Pol. (H/V)	Ant. Factor	Cable Loss	Amp Gain	Total (dBμV/m)	Limits (dBμV/m)	Margin (dB)
Low Channel									
5 725.00	54.89	Peak	H	31.90	12.10	42.20	56.69	74.00	17.31
	36.54	Average	H				38.34	54.00	15.66
	70.26	Peak	V				72.06	74.00	1.94
	49.48	Average	V				51.28	54.00	2.72
High Channel									
5 850.00	44.45	Peak	H	32.10	12.20	42.20	46.55	74.00	27.45
	32.71	Average	H				34.81	54.00	19.19
	63.78	Peak	V				65.88	74.00	8.12
	44.61	Average	V				46.71	54.00	7.29

Tabulated test data for Restricted Band

Remark - "H": Horizontal, "V": Vertical

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m)



Tested by: Jun-Hui, Lee / Senior Engineer

15. CONDUCTED EMISSION TEST

15.1 Operating environment

Temperature : (21 ~ 23) °C
Relative humidity : (44 ~ 47) % R.H.

15.2 Test set-up

The EUT was placed on a wooden table, 0.8 m height above the floor. Power was fed to the EUT through a 50 Ω / 50 μ H + 5 Ω Artificial Mains Network (AMN). The ground plane was electrically bonded to the reference ground system and all power lines were filtered from ambient.

15.3 Test equipment used

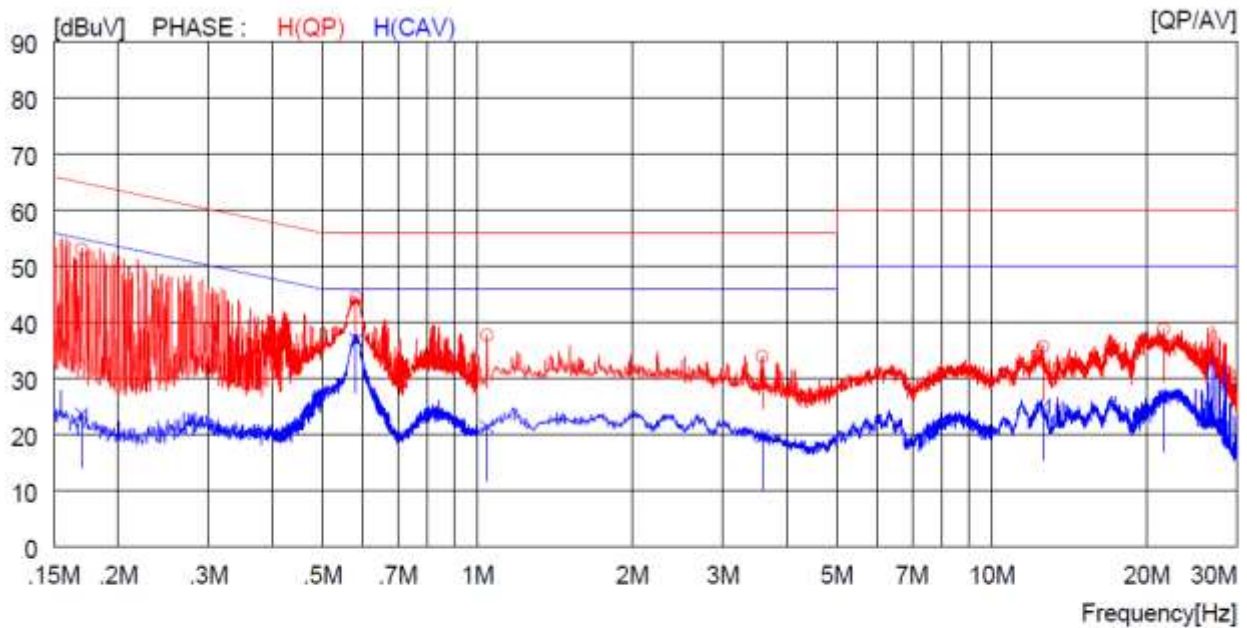
	Model Number	Manufacturer	Description	Serial Number	Last Cal. (Interval)
■ -	ESPI	Rohde & Schwarz	Test Receiver	101012	Nov. 02, 2015 (1Y)
□ -	ESHS10	Rohde & Schwarz	Test Receiver	834467/007	Apr. 05, 2016 (1Y)
□ -	NSLK8128	Schwarzbeck	AMN	8128-216	Apr. 06, 2016 (1Y)
■ -	NSLK8126	Schwarzbeck	AMN	8126-404	Apr. 05, 2016 (1Y)
□ -	3825/2	EMCO	AMN	9109-1869	Apr. 06, 2016 (1Y)
■ -	3825/2	EMCO	AMN	9109-1867	Apr. 06, 2016 (1Y)

All test equipment used is calibrated on a regular basis.

15.4 Test data for Frequency 5 150 band

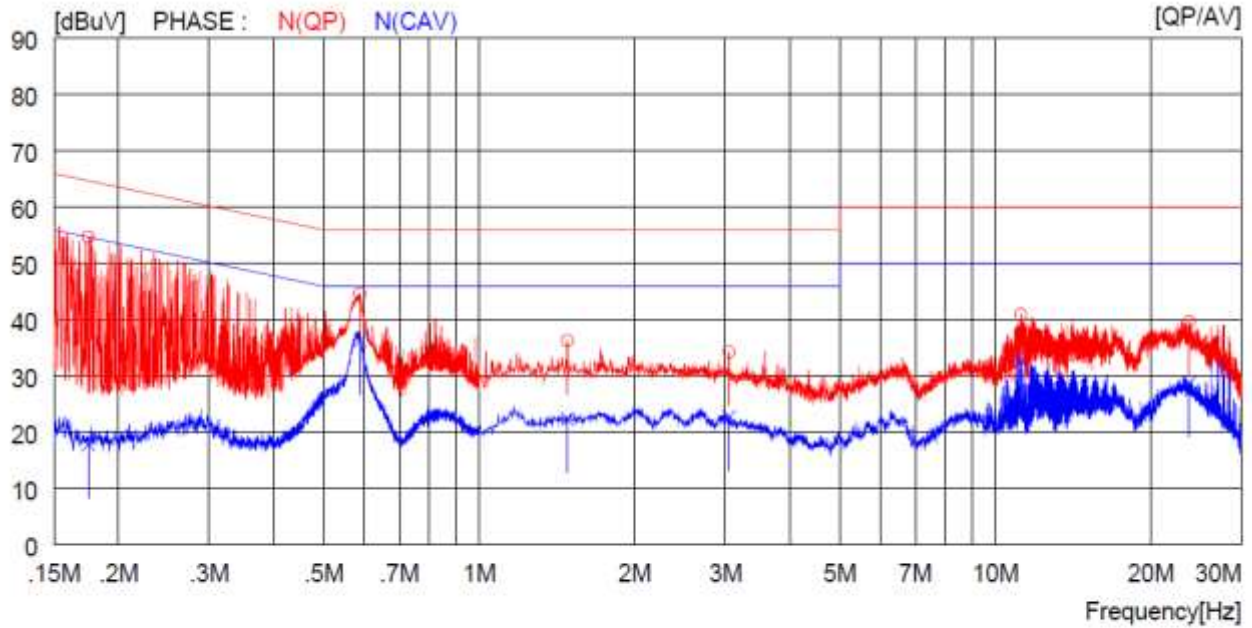
15.4.1 Test data for 802.11a RLAN Mode

- . Test Date : April 28, 2016
- . Resolution bandwidth : 9 kHz
- . Frequency range : 0.15 MHz ~ 30 MHz
- . Tested Line : HOT LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.17000	43.0	----	10.1	53.1	----	65.0	----	11.9	----	H (QP)
2	0.58100	34.5	----	10.1	44.6	----	56.0	----	11.4	----	H (QP)
3	1.04400	27.7	----	10.1	37.8	----	56.0	----	18.2	----	H (QP)
4	3.58000	23.9	----	10.1	34.0	----	56.0	----	22.0	----	H (QP)
5	12.58000	25.3	----	10.4	35.7	----	60.0	----	24.3	----	H (QP)
6	21.60000	28.4	----	10.5	38.9	----	60.0	----	21.1	----	H (QP)
7	0.17000	----	13.6	10.1	----	23.7	----	55.0	----	31.3	H (CAV)
8	0.58100	----	26.9	10.1	----	37.0	----	46.0	----	9.0	H (CAV)
9	1.04400	----	11.3	10.1	----	21.4	----	46.0	----	24.6	H (CAV)
10	3.58000	----	9.6	10.1	----	19.7	----	46.0	----	26.3	H (CAV)
11	12.58000	----	14.6	10.4	----	25.0	----	50.0	----	25.0	H (CAV)
12	21.60000	----	16.1	10.5	----	26.6	----	50.0	----	23.4	H (CAV)

-. Tested Line : NEUTRAL LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.17500	44.6	----	10.1	54.7	----	64.7	----	10.0	----	N (QP)
2	0.58800	34.5	----	10.1	44.6	----	56.0	----	11.4	----	N (QP)
3	1.48400	26.2	----	10.1	36.3	----	56.0	----	19.7	----	N (QP)
4	3.05200	24.2	----	10.1	34.3	----	56.0	----	21.7	----	N (QP)
5	11.22000	30.6	----	10.4	41.0	----	60.0	----	19.0	----	N (QP)
6	23.77000	29.1	----	10.6	39.7	----	60.0	----	20.3	----	N (QP)
7	0.17500	----	7.7	10.1	----	17.8	----	54.7	----	36.9	N (CAV)
8	0.58800	----	26.2	10.1	----	36.3	----	46.0	----	9.7	N (CAV)
9	1.48400	----	12.3	10.1	----	22.4	----	46.0	----	23.6	N (CAV)
10	3.05200	----	12.7	10.1	----	22.8	----	46.0	----	23.2	N (CAV)
11	11.22000	----	22.2	10.4	----	32.6	----	50.0	----	17.4	N (CAV)
12	23.77000	----	18.2	10.6	----	28.8	----	50.0	----	21.2	N (CAV)

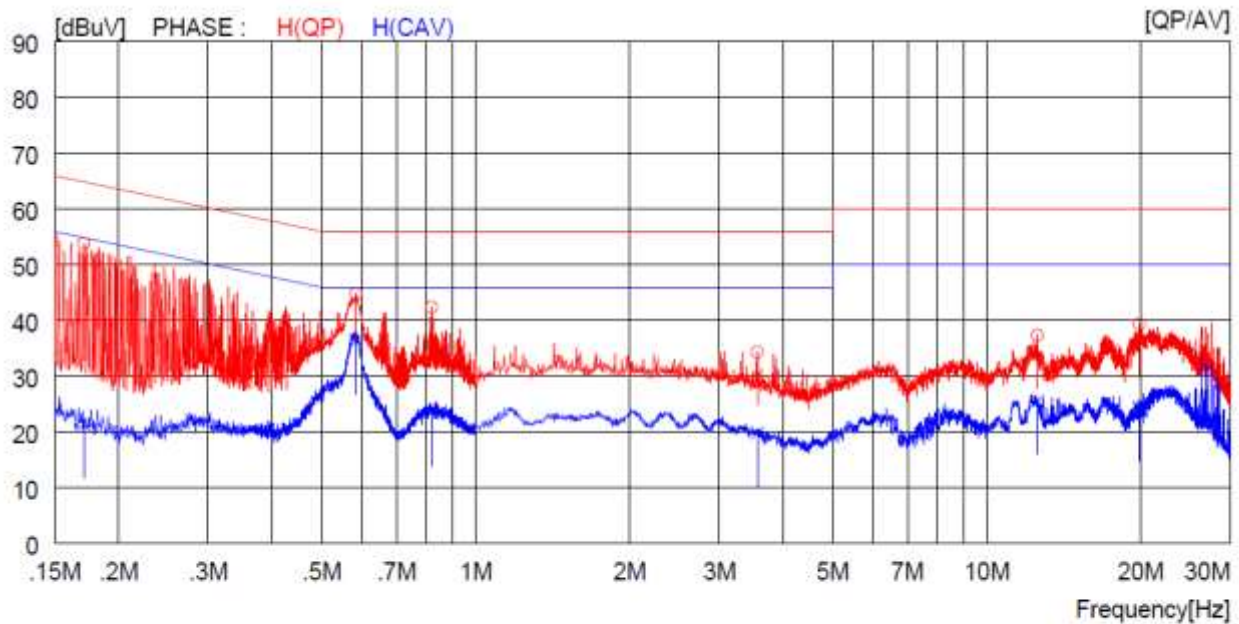
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

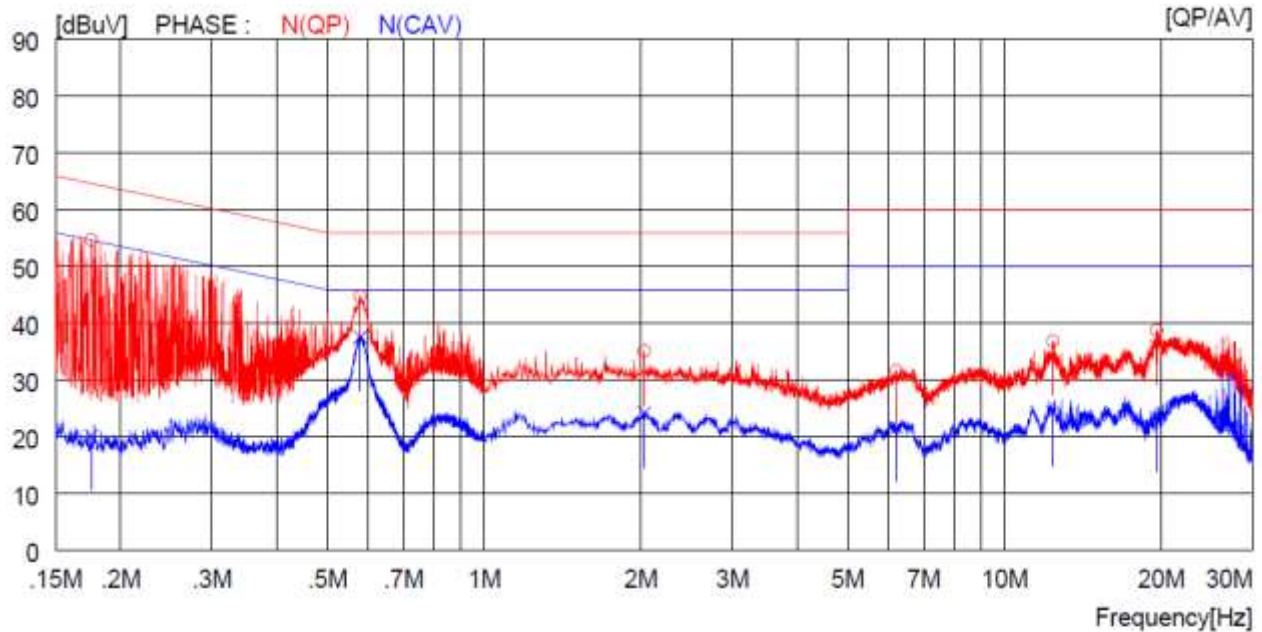
15.4.2 Test data for 802.11n_HT20 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.17100	43.7	----	10.1	53.8	----	64.9	----	11.1	----	H (QP)
2	0.58300	34.7	----	10.1	44.8	----	56.0	----	11.2	----	H (QP)
3	0.82000	32.3	----	10.1	42.4	----	56.0	----	13.6	----	H (QP)
4	3.55600	24.3	----	10.1	34.4	----	56.0	----	21.6	----	H (QP)
5	12.57000	27.0	----	10.4	37.4	----	60.0	----	22.6	----	H (QP)
6	19.92000	28.9	----	10.5	39.4	----	60.0	----	20.6	----	H (QP)
7	0.17100	----	11.3	10.1	----	21.4	----	54.9	----	33.5	H (CAV)
8	0.58300	----	26.3	10.1	----	36.4	----	46.0	----	9.6	H (CAV)
9	0.82000	----	13.5	10.1	----	23.6	----	46.0	----	22.4	H (CAV)
10	3.55600	----	9.7	10.1	----	19.8	----	46.0	----	26.2	H (CAV)
11	12.57000	----	15.2	10.4	----	25.6	----	50.0	----	24.4	H (CAV)
12	19.92000	----	13.9	10.5	----	24.4	----	50.0	----	25.6	H (CAV)

-. Tested Line : NEUTRAL LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.17600	44.6	----	10.1	54.7	----	64.7	----	10.0	----	N (QP)
2	0.57800	34.7	----	10.1	44.8	----	56.0	----	11.2	----	N (QP)
3	2.03200	25.0	----	10.1	35.1	----	56.0	----	20.9	----	N (QP)
4	6.19500	21.5	----	10.2	31.7	----	60.0	----	28.3	----	N (QP)
5	12.39000	26.5	----	10.4	36.9	----	60.0	----	23.1	----	N (QP)
6	19.64000	28.3	----	10.5	38.8	----	60.0	----	21.2	----	N (QP)
7	0.17600	----	10.1	10.1	----	20.2	----	54.7	----	34.5	N (CAV)
8	0.57800	----	27.5	10.1	----	37.6	----	46.0	----	8.4	N (CAV)
9	2.03200	----	14.1	10.1	----	24.2	----	46.0	----	21.8	N (CAV)
10	6.19500	----	11.5	10.2	----	21.7	----	50.0	----	28.3	N (CAV)
11	12.39000	----	14.0	10.4	----	24.4	----	50.0	----	25.6	N (CAV)
12	19.64000	----	12.9	10.5	----	23.4	----	50.0	----	26.6	N (CAV)

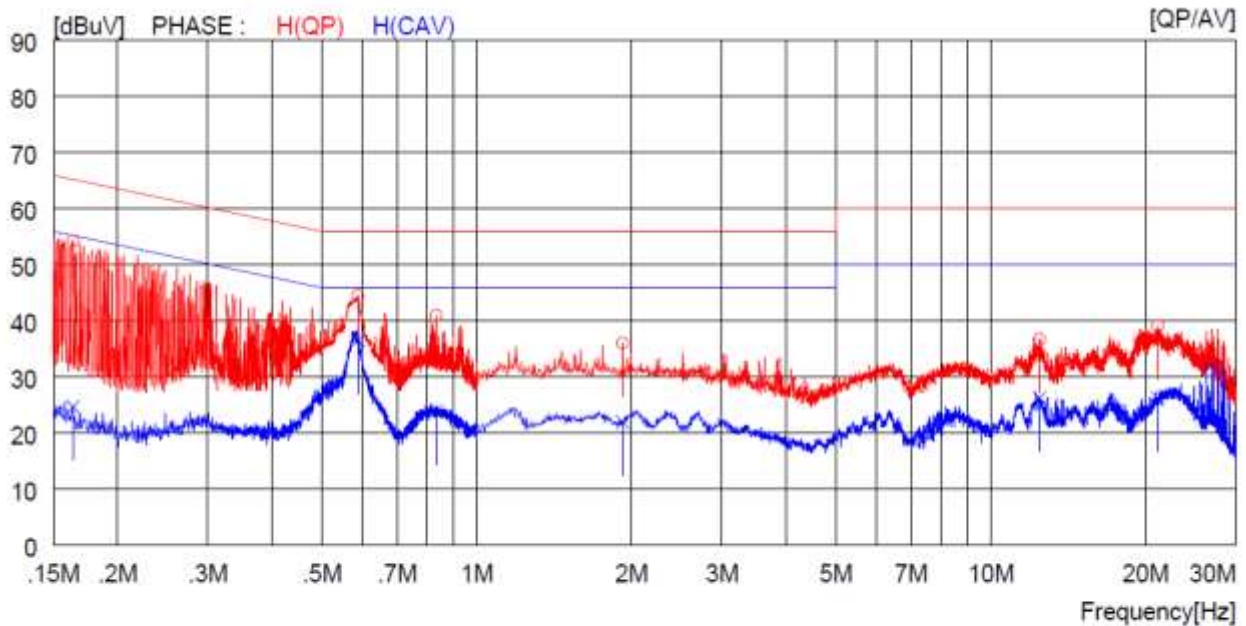
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

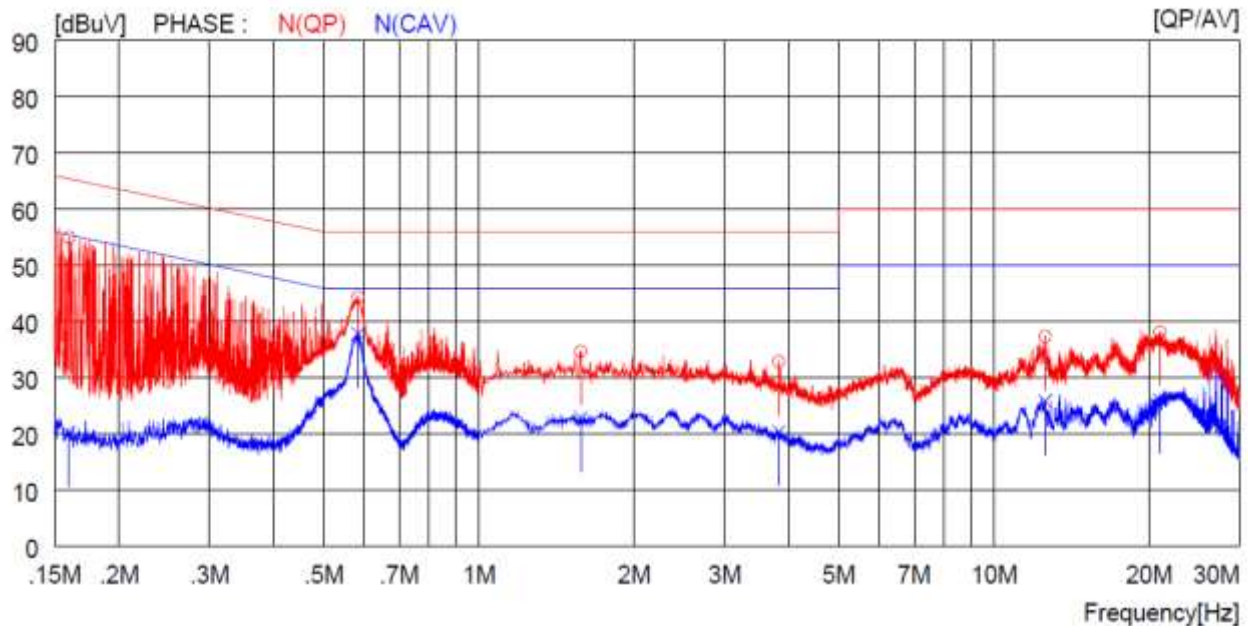
15.4.3 Test data for 802.11n_HT40 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.16400	44.2	----	10.1	54.3	----	65.3	----	11.0	----	H (QP)
2	0.58700	34.4	----	10.1	44.5	----	56.0	----	11.5	----	H (QP)
3	0.83400	30.9	----	10.1	41.0	----	56.0	----	15.0	----	H (QP)
4	1.92400	26.0	----	10.1	36.1	----	56.0	----	19.9	----	H (QP)
5	12.44000	26.3	----	10.4	36.7	----	60.0	----	23.3	----	H (QP)
6	21.14000	28.6	----	10.5	39.1	----	60.0	----	20.9	----	H (QP)
7	0.16400	----	14.6	10.1	----	24.7	----	55.3	----	30.6	H (CAV)
8	0.58700	----	26.5	10.1	----	36.6	----	46.0	----	9.4	H (CAV)
9	0.83400	----	13.8	10.1	----	23.9	----	46.0	----	22.1	H (CAV)
10	1.92400	----	11.9	10.1	----	22.0	----	46.0	----	24.0	H (CAV)
11	12.44000	----	15.9	10.4	----	26.3	----	50.0	----	23.7	H (CAV)
12	21.14000	----	15.8	10.5	----	26.3	----	50.0	----	23.7	H (CAV)

-. Tested Line : NEUTRAL LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.16000	44.9	----	10.1	55.0	----	65.5	----	10.5	----	N(QP)
2	0.58300	34.3	----	10.1	44.4	----	56.0	----	11.6	----	N(QP)
3	1.57600	24.6	----	10.1	34.7	----	56.0	----	21.3	----	N(QP)
4	3.82400	22.8	----	10.1	32.9	----	56.0	----	23.1	----	N(QP)
5	12.58000	27.0	----	10.4	37.4	----	60.0	----	22.6	----	N(QP)
6	21.01000	27.7	----	10.5	38.2	----	60.0	----	21.8	----	N(QP)
7	0.16000	----	10.1	10.1	----	20.2	----	55.5	----	35.3	N(CAV)
8	0.58300	----	27.8	10.1	----	37.9	----	46.0	----	8.1	N(CAV)
9	1.57600	----	12.8	10.1	----	22.9	----	46.0	----	23.1	N(CAV)
10	3.82400	----	10.3	10.1	----	20.4	----	46.0	----	25.6	N(CAV)
11	12.58000	----	15.5	10.4	----	25.9	----	50.0	----	24.1	N(CAV)
12	21.01000	----	15.5	10.5	----	26.0	----	50.0	----	24.0	N(CAV)

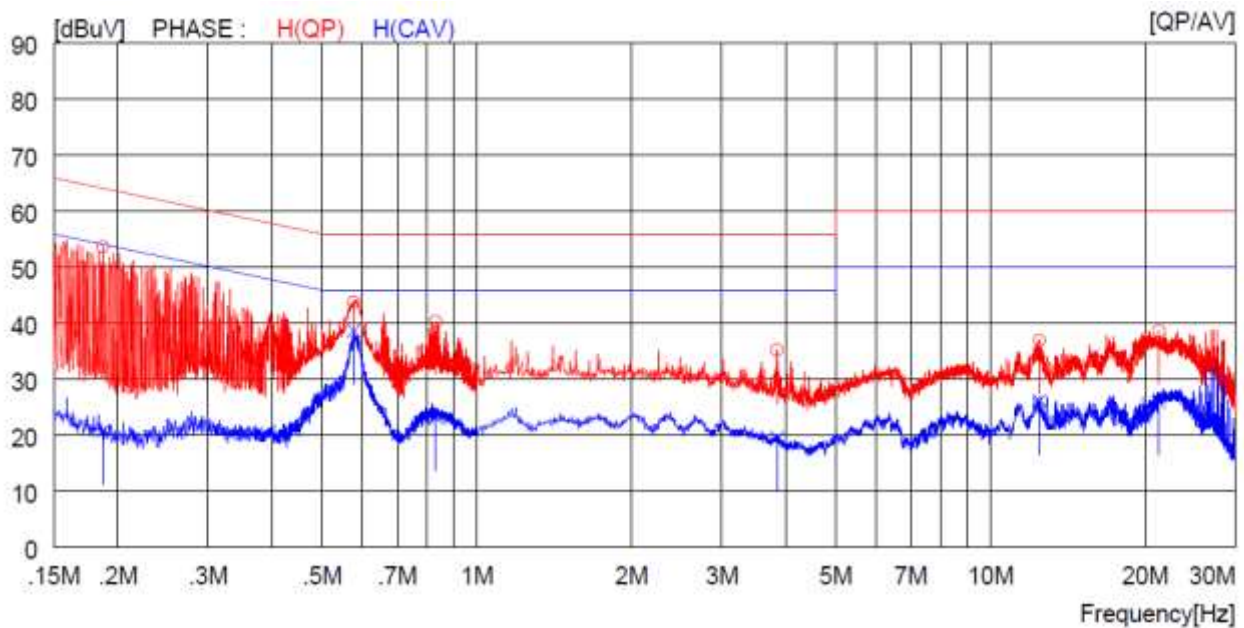
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

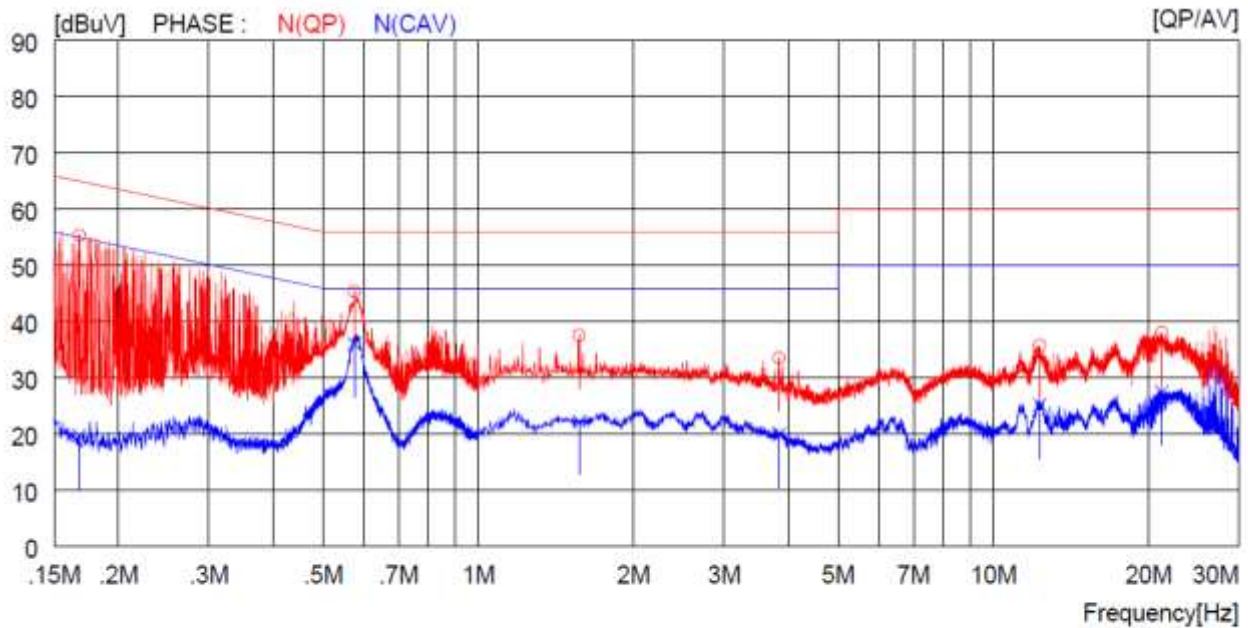
15.4.4 Test data for 802.11ac20 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.18700	43.6	----	10.1	53.7	----	64.2	----	10.5	----	H (QP)
2	0.57600	33.7	----	10.1	43.8	----	56.0	----	12.2	----	H (QP)
3	0.83200	30.3	----	10.1	40.4	----	56.0	----	15.6	----	H (QP)
4	3.84400	25.2	----	10.1	35.3	----	56.0	----	20.7	----	H (QP)
5	12.47000	26.6	----	10.4	37.0	----	60.0	----	23.0	----	H (QP)
6	21.30000	28.2	----	10.5	38.7	----	60.0	----	21.3	----	H (QP)
7	0.18700	----	10.8	10.1	----	20.9	----	54.2	----	33.3	H (CAV)
8	0.57600	----	28.6	10.1	----	38.7	----	46.0	----	7.3	H (CAV)
9	0.83200	----	13.1	10.1	----	23.2	----	46.0	----	22.8	H (CAV)
10	3.84400	----	9.5	10.1	----	19.6	----	46.0	----	26.4	H (CAV)
11	12.47000	----	15.8	10.4	----	26.2	----	50.0	----	23.8	H (CAV)
12	21.30000	----	15.5	10.5	----	26.0	----	50.0	----	24.0	H (CAV)

-. Tested Line : NEUTRAL LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.16800	45.3	----	10.1	55.4	----	65.1	----	9.7	----	N (QP)
2	0.57500	35.3	----	10.1	45.4	----	56.0	----	10.6	----	N (QP)
3	1.57200	27.5	----	10.1	37.6	----	56.0	----	18.4	----	N (QP)
4	3.84000	23.5	----	10.1	33.6	----	56.0	----	22.4	----	N (QP)
5	12.30000	25.4	----	10.4	35.8	----	60.0	----	24.2	----	N (QP)
6	21.23000	27.6	----	10.5	38.1	----	60.0	----	21.9	----	N (QP)
7	0.16800	----	9.7	10.1	----	19.8	----	55.1	----	35.3	N (CAV)
8	0.57500	----	26.0	10.1	----	36.1	----	46.0	----	9.9	N (CAV)
9	1.57200	----	12.2	10.1	----	22.3	----	46.0	----	23.7	N (CAV)
10	3.84000	----	9.9	10.1	----	20.0	----	46.0	----	26.0	N (CAV)
11	12.30000	----	14.8	10.4	----	25.2	----	50.0	----	24.8	N (CAV)
12	21.23000	----	17.1	10.5	----	27.6	----	50.0	----	22.4	N (CAV)

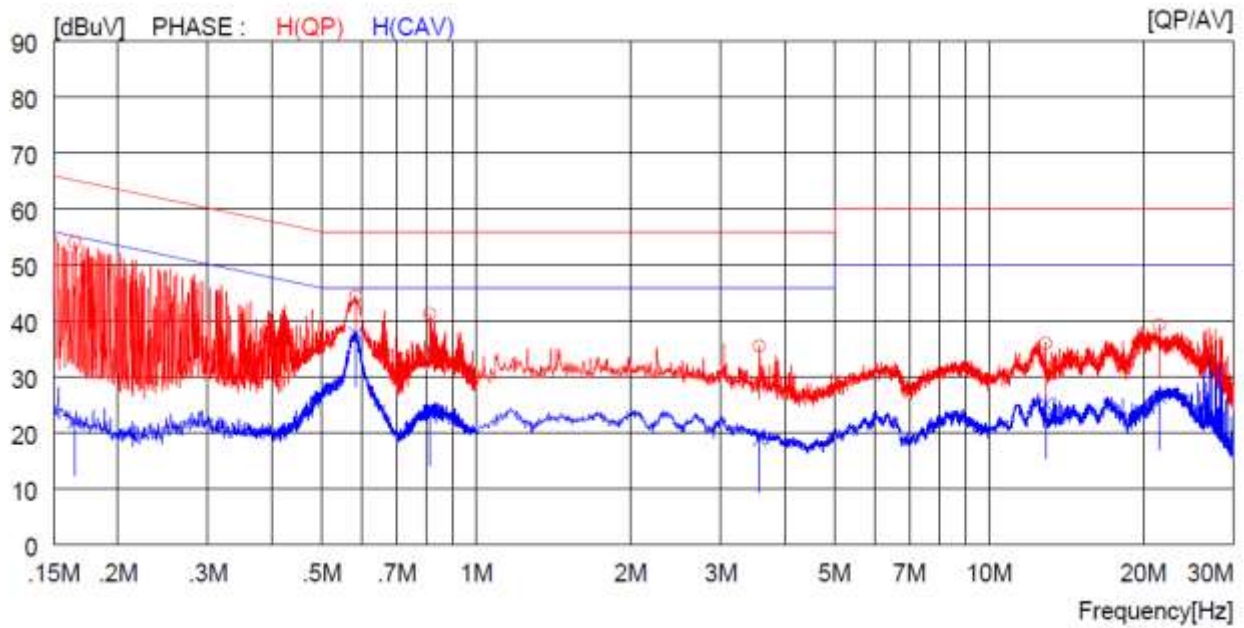
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

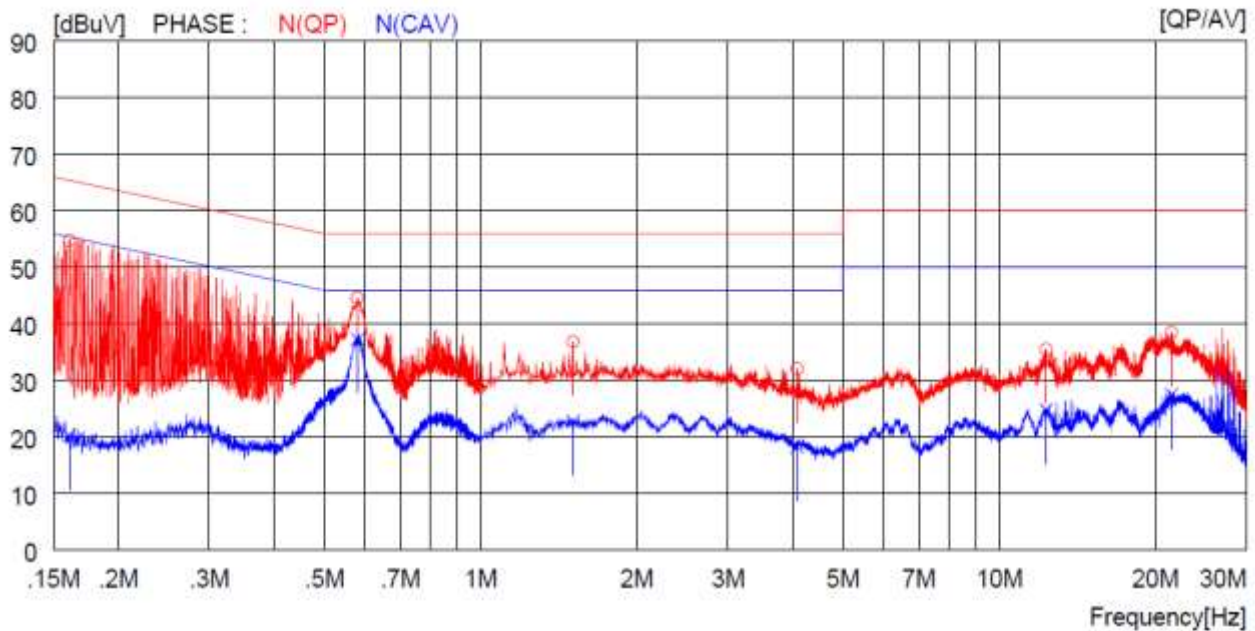
15.4.5 Test data for 802.11ac40 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.16500	44.0	----	10.1	54.1	----	65.2	----	11.1	----	H (QP)
2	0.58300	34.4	----	10.1	44.5	----	56.0	----	11.5	----	H (QP)
3	0.81200	31.2	----	10.1	41.3	----	56.0	----	14.7	----	H (QP)
4	3.57200	25.5	----	10.1	35.6	----	56.0	----	20.4	----	H (QP)
5	12.91000	25.7	----	10.4	36.1	----	60.0	----	23.9	----	H (QP)
6	21.52000	28.9	----	10.5	39.4	----	60.0	----	20.6	----	H (QP)
7	0.16500	----	11.9	10.1	----	22.0	----	55.2	----	33.2	H (CAV)
8	0.58300	----	27.7	10.1	----	37.8	----	46.0	----	8.2	H (CAV)
9	0.81200	----	13.6	10.1	----	23.7	----	46.0	----	22.3	H (CAV)
10	3.57200	----	8.9	10.1	----	19.0	----	46.0	----	27.0	H (CAV)
11	12.91000	----	14.7	10.4	----	25.1	----	50.0	----	24.9	H (CAV)
12	21.52000	----	16.0	10.5	----	26.5	----	50.0	----	23.5	H (CAV)

-. Tested Line : NEUTRAL LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.16100	44.7	----	10.1	54.8	----	65.4	----	10.6	----	N (QP)
2	0.57900	34.5	----	10.1	44.6	----	56.0	----	11.4	----	N (QP)
3	1.50800	26.8	----	10.1	36.9	----	56.0	----	19.1	----	N (QP)
4	4.08400	22.0	----	10.1	32.1	----	56.0	----	23.9	----	N (QP)
5	12.33000	25.1	----	10.4	35.5	----	60.0	----	24.5	----	N (QP)
6	21.50000	28.0	----	10.5	38.5	----	60.0	----	21.5	----	N (QP)
7	0.16100	----	10.2	10.1	----	20.3	----	55.4	----	35.1	N (CAV)
8	0.57900	----	27.2	10.1	----	37.3	----	46.0	----	8.7	N (CAV)
9	1.50800	----	12.7	10.1	----	22.8	----	46.0	----	23.2	N (CAV)
10	4.08400	----	8.2	10.1	----	18.3	----	46.0	----	27.7	N (CAV)
11	12.33000	----	14.4	10.4	----	24.8	----	50.0	----	25.2	N (CAV)
12	21.50000	----	17.0	10.5	----	27.5	----	50.0	----	22.5	N (CAV)

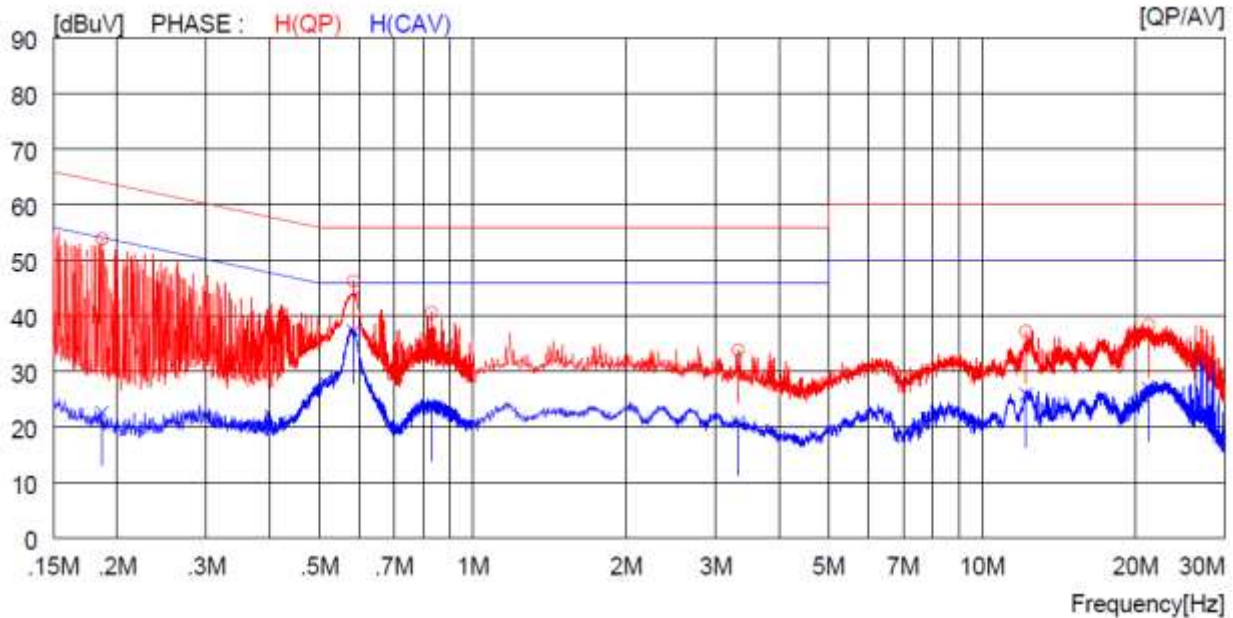
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

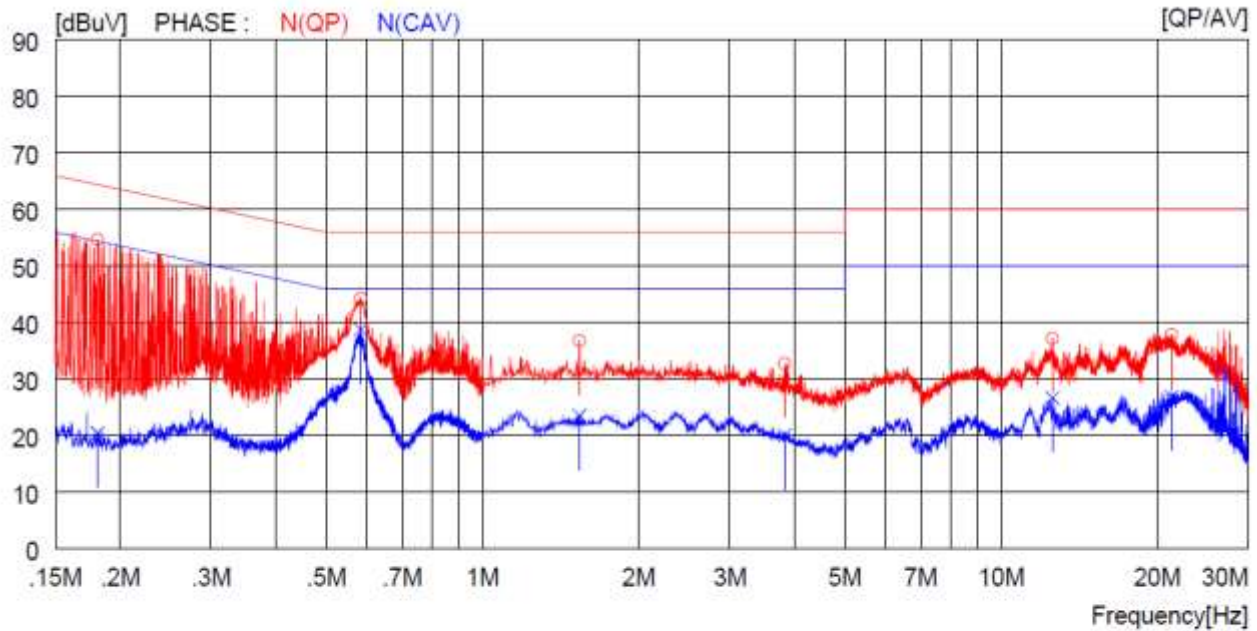
15.4.6 Test data for 802.11ac80 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.18700	43.8	----	10.1	53.9	----	64.2	----	10.3	----	H (QP)
2	0.58300	36.2	----	10.1	46.3	----	56.0	----	9.7	----	H (QP)
3	0.82900	30.6	----	10.1	40.7	----	56.0	----	15.3	----	H (QP)
4	3.32400	23.8	----	10.1	33.9	----	56.0	----	22.1	----	H (QP)
5	12.19000	26.9	----	10.4	37.3	----	60.0	----	22.7	----	H (QP)
6	21.27000	27.9	----	10.5	38.4	----	60.0	----	21.6	----	H (QP)
7	0.18700	----	12.6	10.1	----	22.7	----	54.2	----	31.5	H (CAV)
8	0.58300	----	27.2	10.1	----	37.3	----	46.0	----	8.7	H (CAV)
9	0.82900	----	13.3	10.1	----	23.4	----	46.0	----	22.6	H (CAV)
10	3.32400	----	10.8	10.1	----	20.9	----	46.0	----	25.1	H (CAV)
11	12.19000	----	15.5	10.4	----	25.9	----	50.0	----	24.1	H (CAV)
12	21.27000	----	16.4	10.5	----	26.9	----	50.0	----	23.1	H (CAV)

-. Tested Line : NEUTRAL LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.18100	44.6	----	10.1	54.7	----	64.4	----	9.7	----	N(QP)
2	0.58300	34.2	----	10.1	44.3	----	56.0	----	11.7	----	N(QP)
3	1.54000	26.7	----	10.1	36.8	----	56.0	----	19.2	----	N(QP)
4	3.82800	22.7	----	10.1	32.8	----	56.0	----	23.2	----	N(QP)
5	12.58000	26.8	----	10.4	37.2	----	60.0	----	22.8	----	N(QP)
6	21.32000	27.4	----	10.5	37.9	----	60.0	----	22.1	----	N(QP)
7	0.18100	----	10.4	10.1	----	20.5	----	54.4	----	33.9	N(CAV)
8	0.58300	----	28.7	10.1	----	38.8	----	46.0	----	7.2	N(CAV)
9	1.54000	----	13.5	10.1	----	23.6	----	46.0	----	22.4	N(CAV)
10	3.82800	----	10.0	10.1	----	20.1	----	46.0	----	25.9	N(CAV)
11	12.58000	----	16.3	10.4	----	26.7	----	50.0	----	23.3	N(CAV)
12	21.32000	----	16.4	10.5	----	26.9	----	50.0	----	23.1	N(CAV)

Remark: Margin (dB) = Limit – Level (Result)

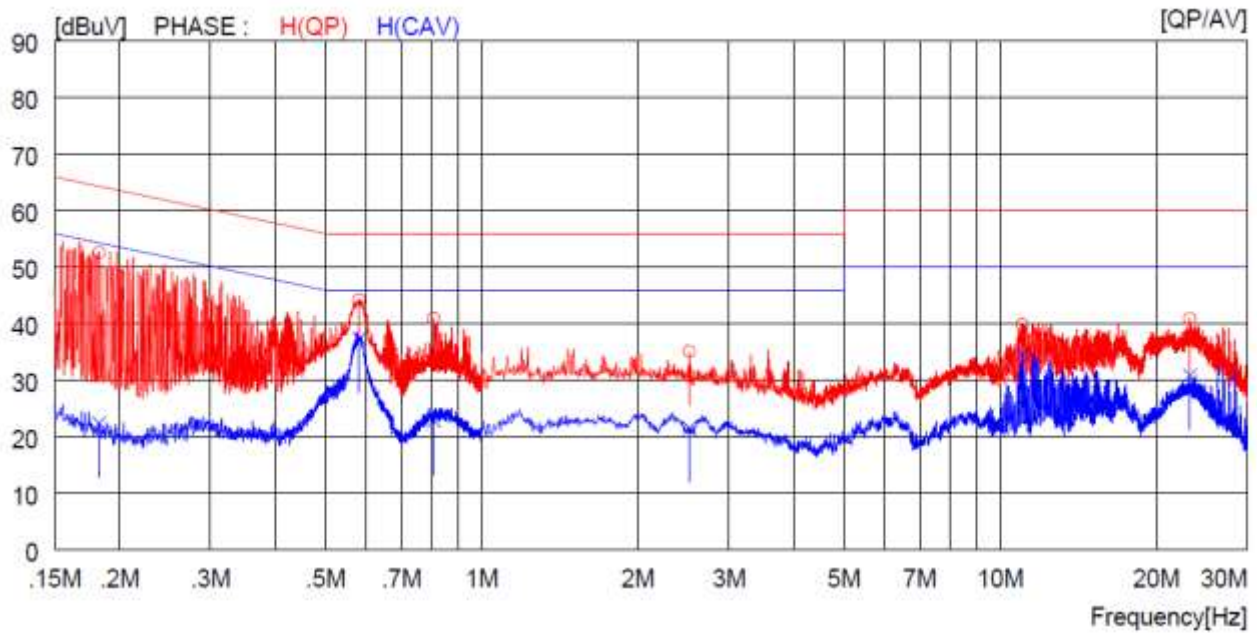
The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

15.5 Test data for Frequency 5 725 MHz Band

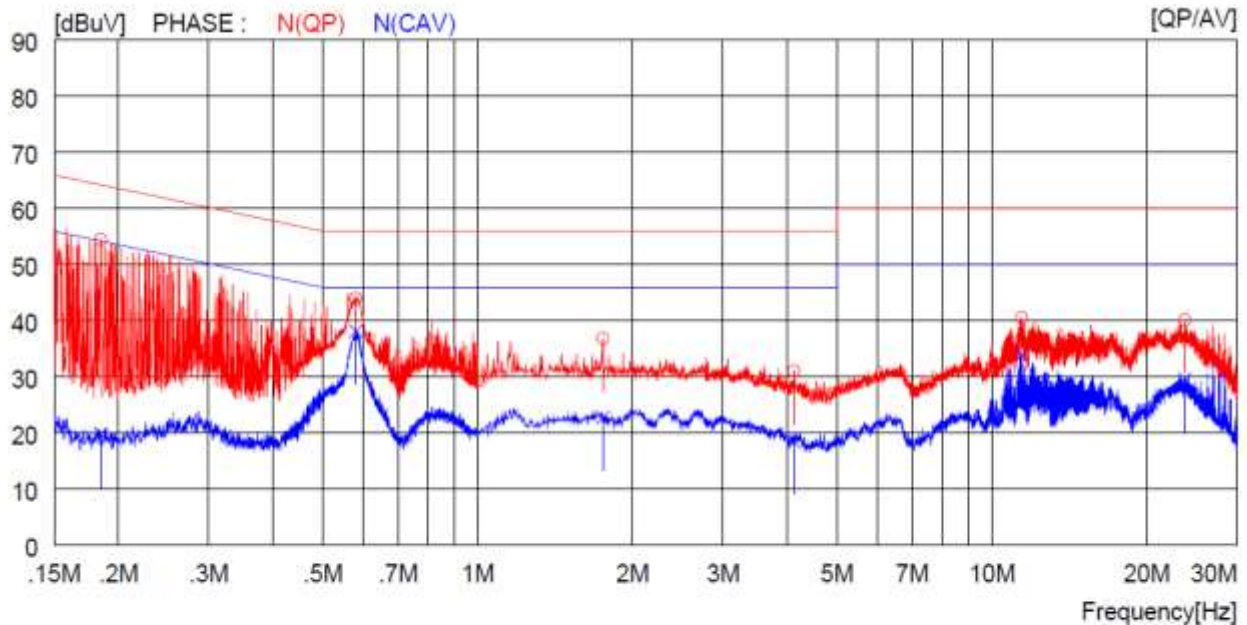
15.5.1 Test data for 802.11a RLAN Mode

- . Test Date : April 28, 2016
- . Resolution bandwidth : 9 kHz
- . Frequency range : 0.15 MHz ~ 30 MHz
- . Tested Line : HOT LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.18300	42.5	----	10.1	52.6	----	64.3	----	11.7	----	H (QP)
2	0.58100	34.2	----	10.1	44.3	----	56.0	----	11.7	----	H (QP)
3	0.80900	30.9	----	10.1	41.0	----	56.0	----	15.0	----	H (QP)
4	2.51600	25.1	----	10.1	35.2	----	56.0	----	20.8	----	H (QP)
5	11.04000	29.5	----	10.4	39.9	----	60.0	----	20.1	----	H (QP)
6	23.22000	30.3	----	10.6	40.9	----	60.0	----	19.1	----	H (QP)
7	0.18300	----	12.4	10.1	----	22.5	----	54.3	----	31.8	H (CAV)
8	0.58100	----	27.3	10.1	----	37.4	----	46.0	----	8.6	H (CAV)
9	0.80900	----	12.8	10.1	----	22.9	----	46.0	----	23.1	H (CAV)
10	2.51600	----	11.5	10.1	----	21.6	----	46.0	----	24.4	H (CAV)
11	11.04000	----	24.3	10.4	----	34.7	----	50.0	----	15.3	H (CAV)
12	23.22000	----	20.3	10.6	----	30.9	----	50.0	----	19.1	H (CAV)

-. Tested Line : NEUTRAL LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBUV]	AV [dBUV]		QP [dBUV]	AV [dBUV]	QP [dBUV]	AV [dBUV]	QP [dBUV]	AV [dBUV]	
1	0.18500	44.4	----	10.1	54.5	----	64.3	----	9.8	----	N (QP)
2	0.58000	33.9	----	10.1	44.0	----	56.0	----	12.0	----	N (QP)
3	1.75200	26.8	----	10.1	36.9	----	56.0	----	19.1	----	N (QP)
4	4.12400	21.0	----	10.1	31.1	----	56.0	----	24.9	----	N (QP)
5	11.42000	30.2	----	10.4	40.6	----	60.0	----	19.4	----	N (QP)
6	23.74000	29.6	----	10.6	40.2	----	60.0	----	19.8	----	N (QP)
7	0.18500	----	9.8	10.1	----	19.9	----	54.3	----	34.4	N (CAV)
8	0.58000	----	28.1	10.1	----	38.2	----	46.0	----	7.8	N (CAV)
9	1.75200	----	12.7	10.1	----	22.8	----	46.0	----	23.2	N (CAV)
10	4.12400	----	8.5	10.1	----	18.6	----	46.0	----	27.4	N (CAV)
11	11.42000	----	23.5	10.4	----	33.9	----	50.0	----	16.1	N (CAV)
12	23.74000	----	19.1	10.6	----	29.7	----	50.0	----	20.3	N (CAV)

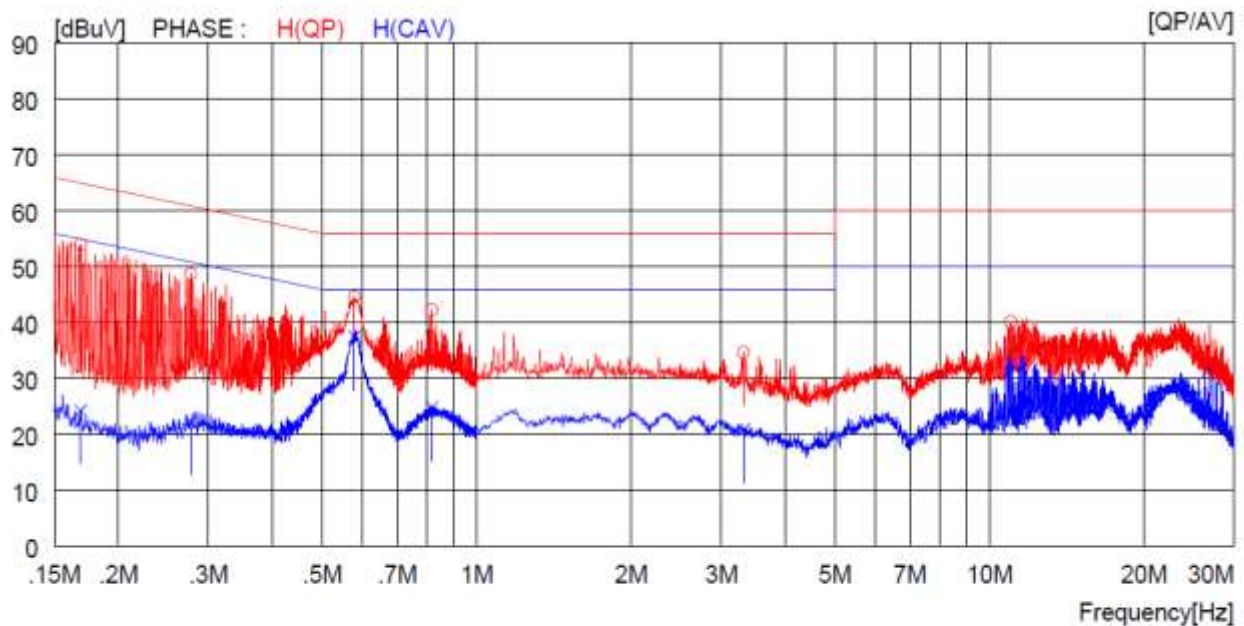
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

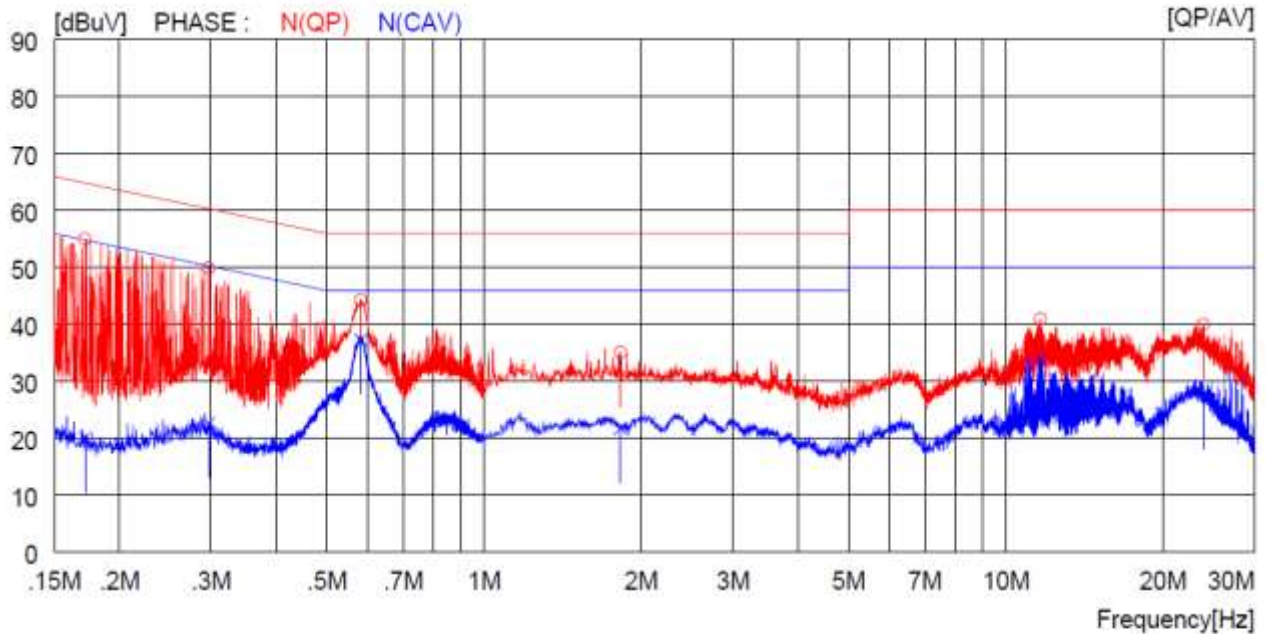
15.5.2 Test data for 802.11n_HT20 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.16900	43.9	----	10.1	54.0	----	65.0	----	11.0	----	H (QP)
2	0.27700	38.7	----	10.1	48.8	----	60.9	----	12.1	----	H (QP)
3	0.57800	34.6	----	10.1	44.7	----	56.0	----	11.3	----	H (QP)
4	0.81800	32.2	----	10.1	42.3	----	56.0	----	13.7	----	H (QP)
5	3.31600	24.6	----	10.1	34.7	----	56.0	----	21.3	----	H (QP)
6	11.01000	29.8	----	10.4	40.2	----	60.0	----	19.8	----	H (QP)
7	0.16900	----	14.2	10.1	----	24.3	----	55.0	----	30.7	H (CAV)
8	0.27700	----	12.3	10.1	----	22.4	----	50.9	----	28.5	H (CAV)
9	0.57800	----	27.4	10.1	----	37.5	----	46.0	----	8.5	H (CAV)
10	0.81800	----	14.8	10.1	----	24.9	----	46.0	----	21.1	H (CAV)
11	3.31600	----	10.8	10.1	----	20.9	----	46.0	----	25.1	H (CAV)
12	11.01000	----	22.5	10.4	----	32.9	----	50.0	----	17.1	H (CAV)

-. Tested Line : NEUTRAL LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.17200	44.9	----	10.1	55.0	----	64.9	----	9.9	----	N(QP)
2	0.29700	39.8	----	10.1	49.9	----	60.3	----	10.4	----	N(QP)
3	0.58100	34.2	----	10.1	44.3	----	56.0	----	11.7	----	N(QP)
4	1.82800	25.0	----	10.1	35.1	----	56.0	----	20.9	----	N(QP)
5	11.64000	30.6	----	10.4	41.0	----	60.0	----	19.0	----	N(QP)
6	23.93000	29.4	----	10.6	40.0	----	60.0	----	20.0	----	N(QP)
7	0.17200	----	10.0	10.1	----	20.1	----	54.9	----	34.8	N(CAV)
8	0.29700	----	12.6	10.1	----	22.7	----	50.3	----	27.6	N(CAV)
9	0.58100	----	27.2	10.1	----	37.3	----	46.0	----	8.7	N(CAV)
10	1.82800	----	11.7	10.1	----	21.8	----	46.0	----	24.2	N(CAV)
11	11.64000	----	23.5	10.4	----	33.9	----	50.0	----	16.1	N(CAV)
12	23.93000	----	17.0	10.6	----	27.6	----	50.0	----	22.4	N(CAV)

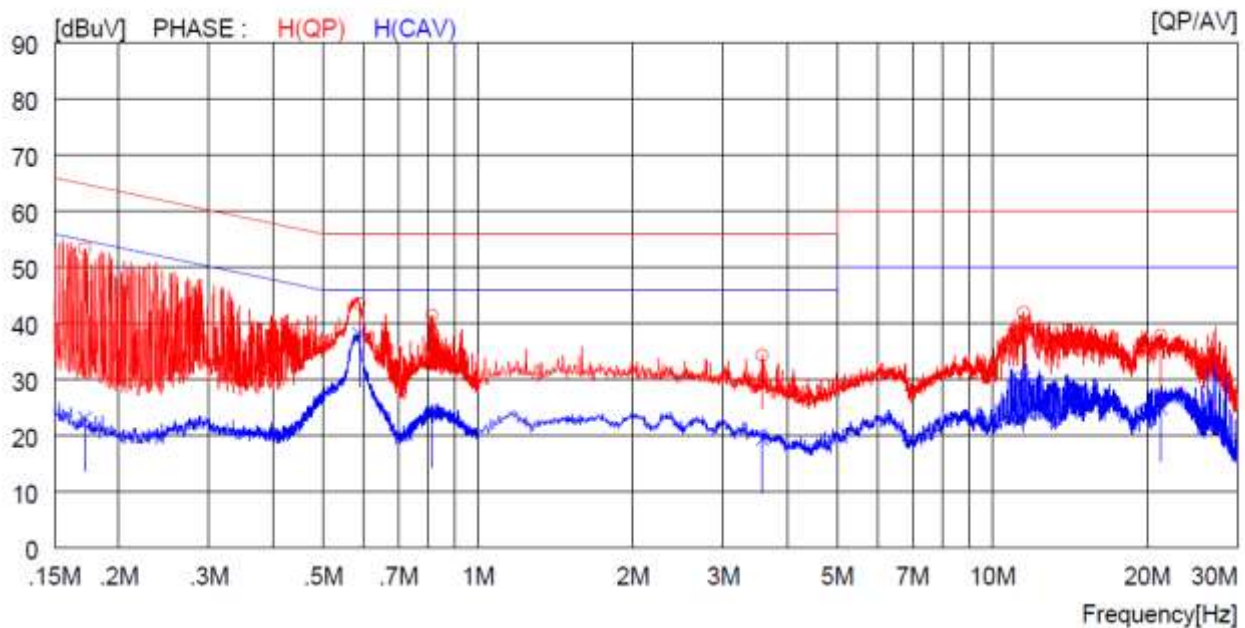
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

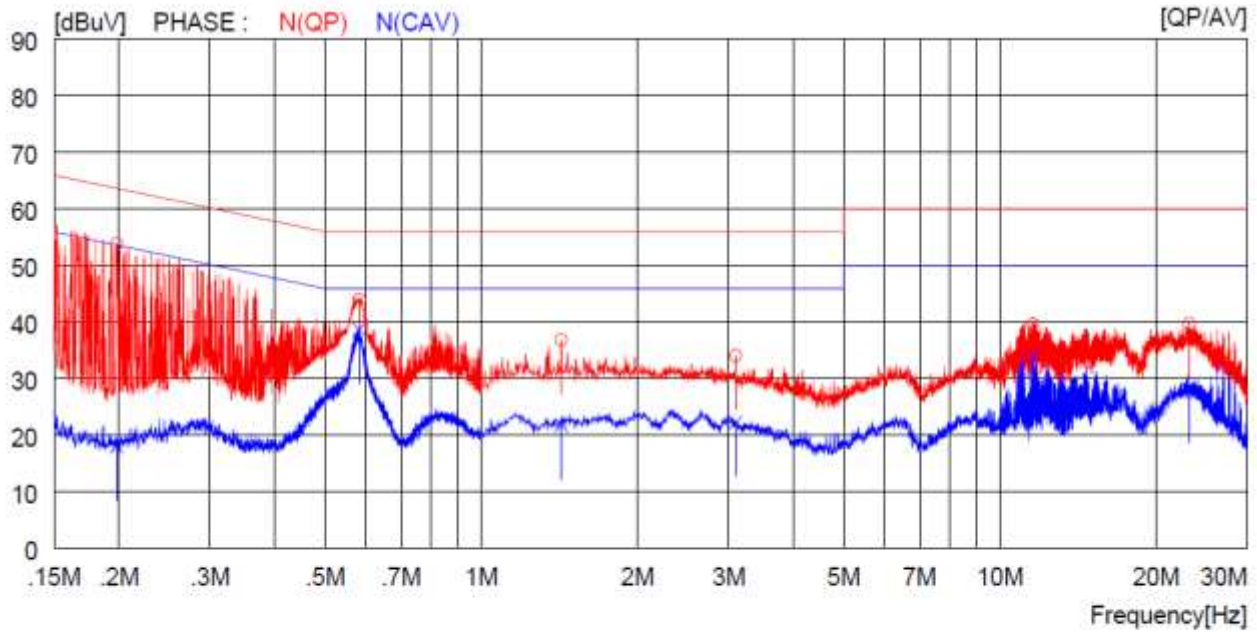
15.5.3 Test data for 802.11n_HT40 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.17200	43.3	----	10.1	53.4	----	64.9	----	11.5	----	H (QP)
2	0.58700	33.5	----	10.1	43.6	----	56.0	----	12.4	----	H (QP)
3	0.81300	31.4	----	10.1	41.5	----	56.0	----	14.5	----	H (QP)
4	3.57200	24.3	----	10.1	34.4	----	56.0	----	21.6	----	H (QP)
5	11.51000	31.6	----	10.4	42.0	----	60.0	----	18.0	----	H (QP)
6	21.28000	27.4	----	10.5	37.9	----	60.0	----	22.1	----	H (QP)
7	0.17200	----	13.1	10.1	----	23.2	----	54.9	----	31.7	H (CAV)
8	0.58700	----	28.1	10.1	----	38.2	----	46.0	----	7.8	H (CAV)
9	0.81300	----	13.9	10.1	----	24.0	----	46.0	----	22.0	H (CAV)
10	3.57200	----	9.3	10.1	----	19.4	----	46.0	----	26.6	H (CAV)
11	11.51000	----	19.9	10.4	----	30.3	----	50.0	----	19.7	H (CAV)
12	21.28000	----	14.5	10.5	----	25.0	----	50.0	----	25.0	H (CAV)

-. Tested Line : NEUTRAL LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.19800	43.8	----	10.1	53.9	----	63.7	----	9.8	----	N (QP)
2	0.58200	33.9	----	10.1	44.0	----	56.0	----	12.0	----	N (QP)
3	1.42800	26.8	----	10.1	36.9	----	56.0	----	19.1	----	N (QP)
4	3.09200	24.0	----	10.1	34.1	----	56.0	----	21.9	----	N (QP)
5	11.59000	29.3	----	10.4	39.7	----	60.0	----	20.3	----	N (QP)
6	23.16000	29.2	----	10.6	39.8	----	60.0	----	20.2	----	N (QP)
7	0.19800	----	7.9	10.1	----	18.0	----	53.7	----	35.7	N (CAV)
8	0.58200	----	28.6	10.1	----	38.7	----	46.0	----	7.3	N (CAV)
9	1.42800	----	11.7	10.1	----	21.8	----	46.0	----	24.2	N (CAV)
10	3.09200	----	12.2	10.1	----	22.3	----	46.0	----	23.7	N (CAV)
11	11.59000	----	23.6	10.4	----	34.0	----	50.0	----	16.0	N (CAV)
12	23.16000	----	17.6	10.6	----	28.2	----	50.0	----	21.8	N (CAV)

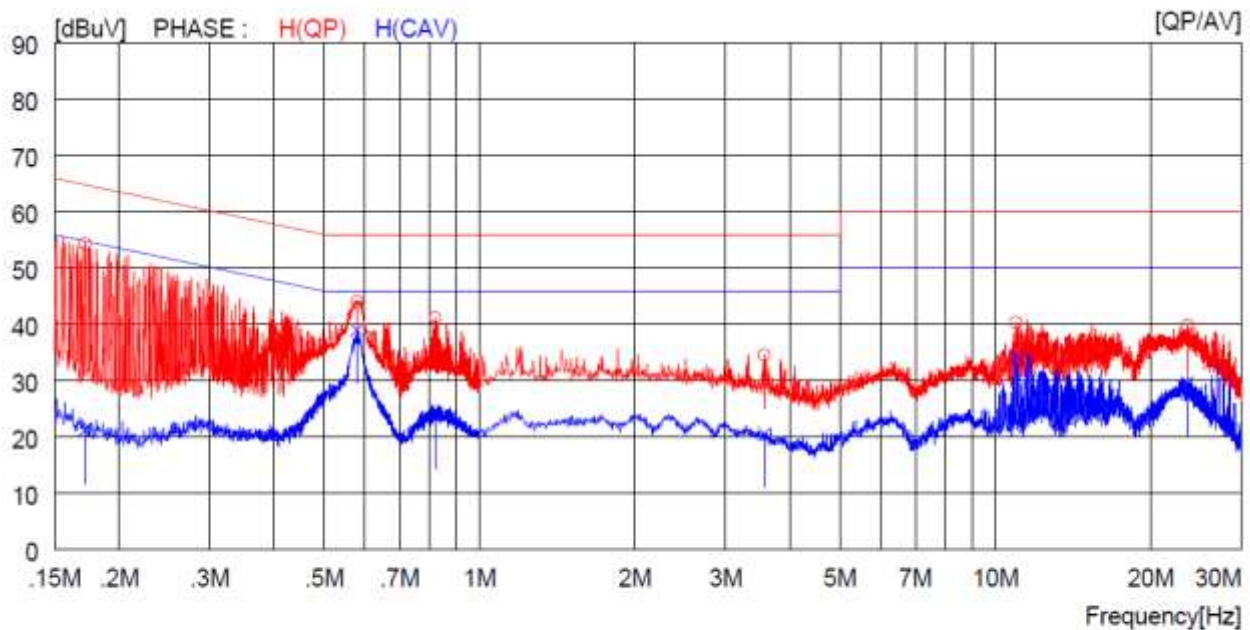
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

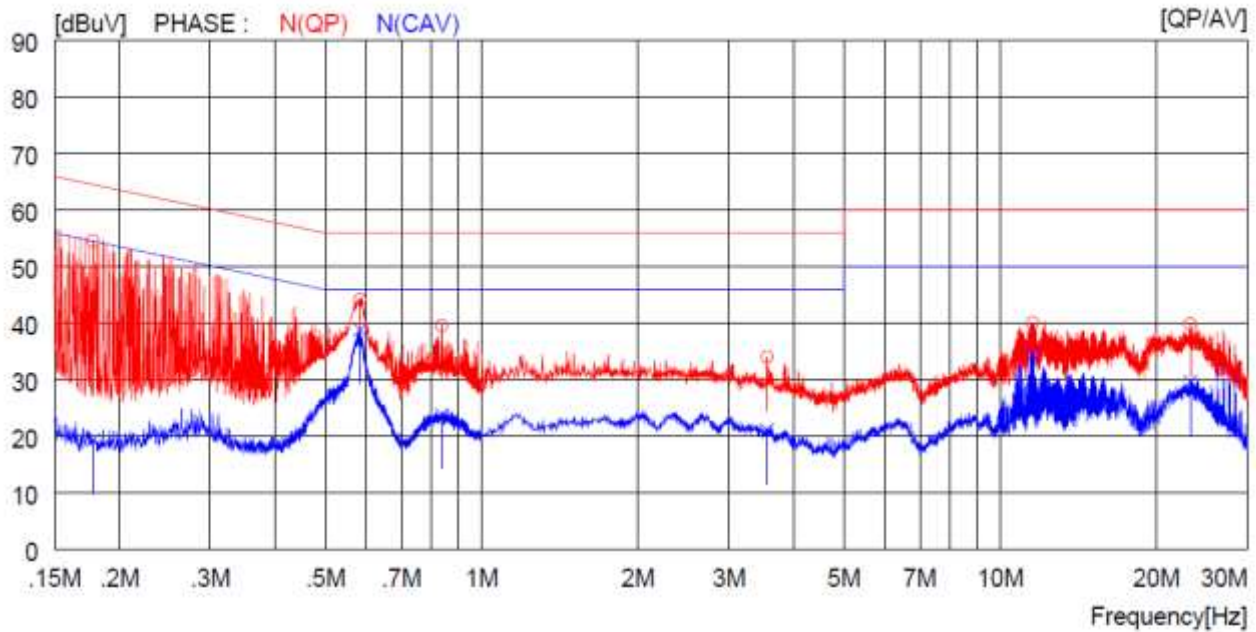
15.5.4 Test data for 802.11ac20 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.17200	44.3	----	10.1	54.4	----	64.9	----	10.5	----	H (QP)
2	0.57900	34.0	----	10.1	44.1	----	56.0	----	11.9	----	H (QP)
3	0.82100	31.1	----	10.1	41.2	----	56.0	----	14.8	----	H (QP)
4	3.56400	24.5	----	10.1	34.6	----	56.0	----	21.4	----	H (QP)
5	10.97000	30.0	----	10.4	40.4	----	60.0	----	19.6	----	H (QP)
6	23.59000	29.3	----	10.6	39.9	----	60.0	----	20.1	----	H (QP)
7	0.17200	----	11.2	10.1	----	21.3	----	54.9	----	33.6	H (CAV)
8	0.57900	----	28.9	10.1	----	39.0	----	46.0	----	7.0	H (CAV)
9	0.82100	----	13.9	10.1	----	24.0	----	46.0	----	22.0	H (CAV)
10	3.56400	----	10.5	10.1	----	20.6	----	46.0	----	25.4	H (CAV)
11	10.97000	----	24.1	10.4	----	34.5	----	50.0	----	15.5	H (CAV)
12	23.59000	----	19.1	10.6	----	29.7	----	50.0	----	20.3	H (CAV)

-. Tested Line : NEUTRAL LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.17800	44.5	----	10.1	54.6	----	64.6	----	10.0	----	N(QP)
2	0.58300	34.1	----	10.1	44.2	----	56.0	----	11.8	----	N(QP)
3	0.83800	29.5	----	10.1	39.6	----	56.0	----	16.4	----	N(QP)
4	3.55200	24.0	----	10.1	34.1	----	56.0	----	21.9	----	N(QP)
5	11.55000	29.8	----	10.4	40.2	----	60.0	----	19.8	----	N(QP)
6	23.28000	29.3	----	10.6	39.9	----	60.0	----	20.1	----	N(QP)
7	0.17800	----	9.3	10.1	----	19.4	----	54.6	----	35.2	N(CAV)
8	0.58300	----	28.8	10.1	----	38.9	----	46.0	----	7.1	N(CAV)
9	0.83800	----	13.8	10.1	----	23.9	----	46.0	----	22.1	N(CAV)
10	3.55200	----	11.1	10.1	----	21.2	----	46.0	----	24.8	N(CAV)
11	11.55000	----	24.2	10.4	----	34.6	----	50.0	----	15.4	N(CAV)
12	23.28000	----	19.1	10.6	----	29.7	----	50.0	----	20.3	N(CAV)

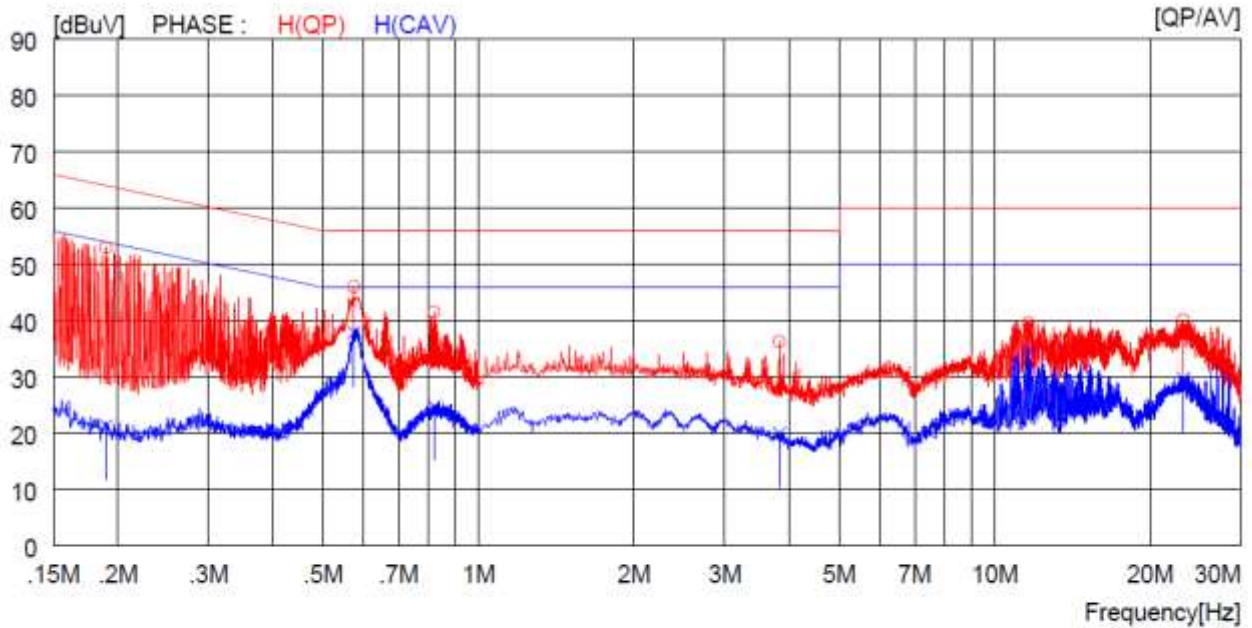
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

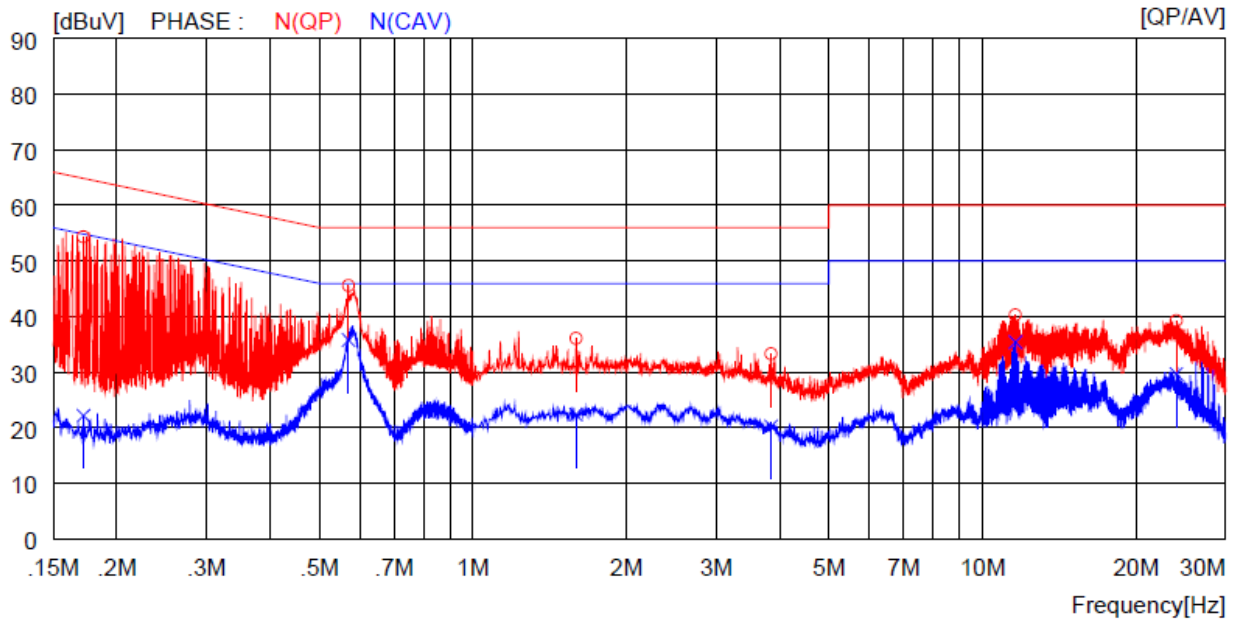
15.5.5 Test data for 802.11ac40 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.19000	42.9	----	10.1	53.0	----	64.0	----	11.0	----	H (QP)
2	0.57400	36.0	----	10.1	46.1	----	56.0	----	9.9	----	H (QP)
3	0.82100	31.5	----	10.1	41.6	----	56.0	----	14.4	----	H (QP)
4	3.82800	26.2	----	10.1	36.3	----	56.0	----	19.7	----	H (QP)
5	11.63000	29.2	----	10.4	39.6	----	60.0	----	20.4	----	H (QP)
6	23.19000	29.6	----	10.6	40.2	----	60.0	----	19.8	----	H (QP)
7	0.19000	----	11.2	10.1	----	21.3	----	54.0	----	32.7	H (CAV)
8	0.57400	----	27.8	10.1	----	37.9	----	46.0	----	8.1	H (CAV)
9	0.82100	----	14.7	10.1	----	24.8	----	46.0	----	21.2	H (CAV)
10	3.82800	----	9.9	10.1	----	20.0	----	46.0	----	26.0	H (CAV)
11	11.63000	----	24.3	10.4	----	34.7	----	50.0	----	15.3	H (CAV)
12	23.19000	----	19.2	10.6	----	29.8	----	50.0	----	20.2	H (CAV)

-. Tested Line : NEUTRAL LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.17200	44.2	----	10.1	54.3	----	64.9	----	10.6	----	N(QP)
2	0.57000	35.5	----	10.1	45.6	----	56.0	----	10.4	----	N(QP)
3	1.59200	26.0	----	10.1	36.1	----	56.0	----	19.9	----	N(QP)
4	3.84400	23.2	----	10.1	33.3	----	56.0	----	22.7	----	N(QP)
5	11.59000	29.9	----	10.4	40.3	----	60.0	----	19.7	----	N(QP)
6	24.00000	28.7	----	10.6	39.3	----	60.0	----	20.7	----	N(QP)
7	0.17200	----	12.1	10.1	----	22.2	----	54.9	----	32.7	N(CAV)
8	0.57000	----	25.7	10.1	----	35.8	----	46.0	----	10.2	N(CAV)
9	1.59200	----	12.3	10.1	----	22.4	----	46.0	----	23.6	N(CAV)
10	3.84400	----	10.2	10.1	----	20.3	----	46.0	----	25.7	N(CAV)
11	11.59000	----	25.0	10.4	----	35.4	----	50.0	----	14.6	N(CAV)
12	24.00000	----	19.1	10.6	----	29.7	----	50.0	----	20.3	N(CAV)

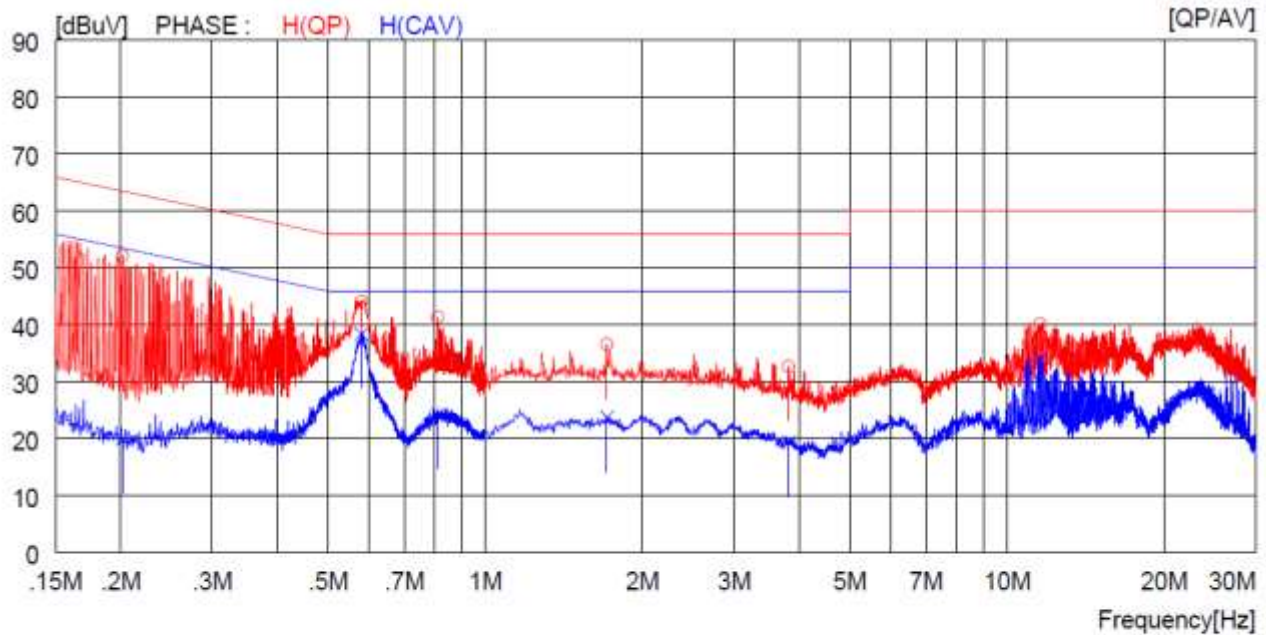
Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.

Tested by: Jun-Hui, Lee / Senior Engineer

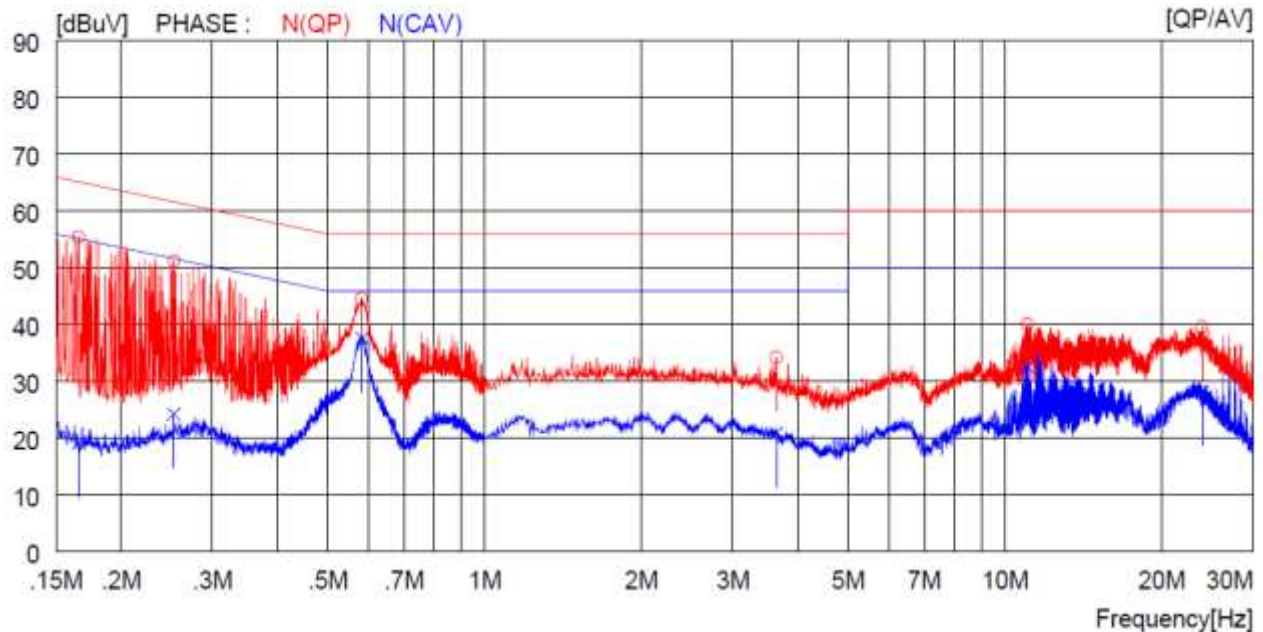
15.5.6 Test data for 802.11ac80 RLAN Mode

- Test Date : April 28, 2016
- Resolution bandwidth : 9 kHz
- Frequency range : 0.15 MHz ~ 30 MHz
- Tested Line : HOT LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.20200	42.1	----	10.1	52.2	----	63.5	----	11.3	----	H (QP)
2	0.57900	34.0	----	10.1	44.1	----	56.0	----	11.9	----	H (QP)
3	0.81200	31.3	----	10.1	41.4	----	56.0	----	14.6	----	H (QP)
4	1.71200	26.5	----	10.1	36.6	----	56.0	----	19.4	----	H (QP)
5	3.81600	22.6	----	10.1	32.7	----	56.0	----	23.3	----	H (QP)
6	11.57000	29.8	----	10.4	40.2	----	60.0	----	19.8	----	H (QP)
7	0.20200	----	9.9	10.1	----	20.0	----	53.5	----	33.5	H (CAV)
8	0.57900	----	28.3	10.1	----	38.4	----	46.0	----	7.6	H (CAV)
9	0.81200	----	14.2	10.1	----	24.3	----	46.0	----	21.7	H (CAV)
10	1.71200	----	13.7	10.1	----	23.8	----	46.0	----	22.2	H (CAV)
11	3.81600	----	9.3	10.1	----	19.4	----	46.0	----	26.6	H (CAV)
12	11.57000	----	23.6	10.4	----	34.0	----	50.0	----	16.0	H (CAV)

-. Tested Line : NEUTRAL LINE



NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.16600	45.4	----	10.1	55.5	----	65.2	----	9.7	----	N(QP)
2	0.25300	41.1	----	10.1	51.2	----	61.7	----	10.5	----	N(QP)
3	0.58100	34.5	----	10.1	44.6	----	56.0	----	11.4	----	N(QP)
4	3.63600	24.2	----	10.1	34.3	----	56.0	----	21.7	----	N(QP)
5	11.05000	29.7	----	10.4	40.1	----	60.0	----	19.9	----	N(QP)
6	23.90000	29.1	----	10.6	39.7	----	60.0	----	20.3	----	N(QP)
7	0.16600	----	9.1	10.1	----	19.2	----	55.2	----	36.0	N(CAV)
8	0.25300	----	14.2	10.1	----	24.3	----	51.7	----	27.4	N(CAV)
9	0.58100	----	27.5	10.1	----	37.6	----	46.0	----	8.4	N(CAV)
10	3.63600	----	10.8	10.1	----	20.9	----	46.0	----	25.1	N(CAV)
11	11.05000	----	22.2	10.4	----	32.6	----	50.0	----	17.4	N(CAV)
12	23.90000	----	17.6	10.6	----	28.2	----	50.0	----	21.8	N(CAV)

Remark: Margin (dB) = Limit – Level (Result)

The emission level in above table is included the transducer factor that means insertion loss (LISN), cable loss and attenuator.


 Tested by: Jun-Hui, Lee / Senior Engineer