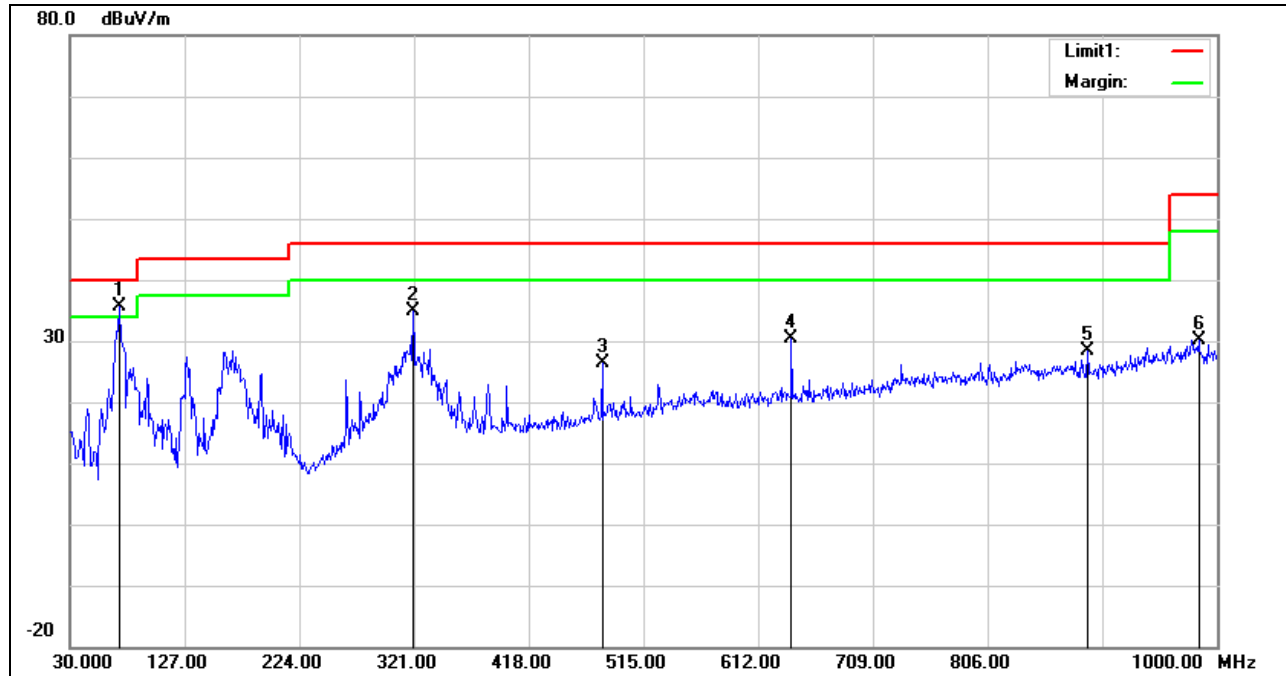




802.11 n40 mode CH03

HARMONICS AND SPURIOUS EMISSIONS (HORIZONTAL)

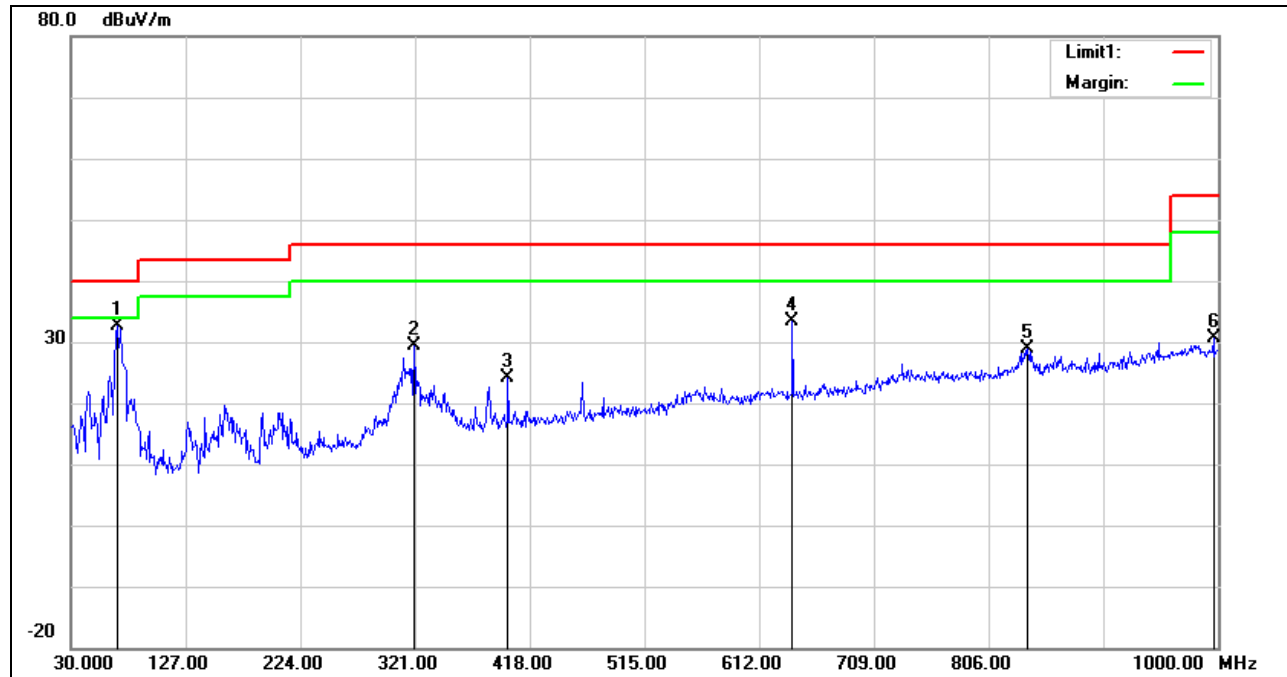


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	71.7100	60.10	-24.56	35.54	40.00	-4.46	QP
2	320.0300	48.93	-14.00	34.93	46.00	-11.07	QP
3	480.0800	34.95	-8.65	26.30	46.00	-19.70	QP
4	640.1300	35.29	-4.84	30.45	46.00	-15.55	QP
5	890.3900	28.97	-0.68	28.29	46.00	-17.71	QP
6	984.4800	27.71	2.40	30.11	54.00	-23.89	QP

Note: Measurement = Reading Level + Correct Factor.



HARMONICS AND SPURIOUS EMISSIONS (VERTICAL)



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	68.8000	57.79	-25.09	32.70	40.00	-7.30	QP
2	320.0300	43.45	-14.00	29.45	46.00	-16.55	QP
3	399.5700	35.31	-11.16	24.15	46.00	-21.85	QP
4	640.1300	38.28	-4.84	33.44	46.00	-12.56	QP
5	838.9800	29.18	-0.39	28.79	46.00	-17.21	QP
6	996.1200	28.47	2.04	30.51	54.00	-23.49	QP

Note: Measurement = Reading Level + Correct Factor.

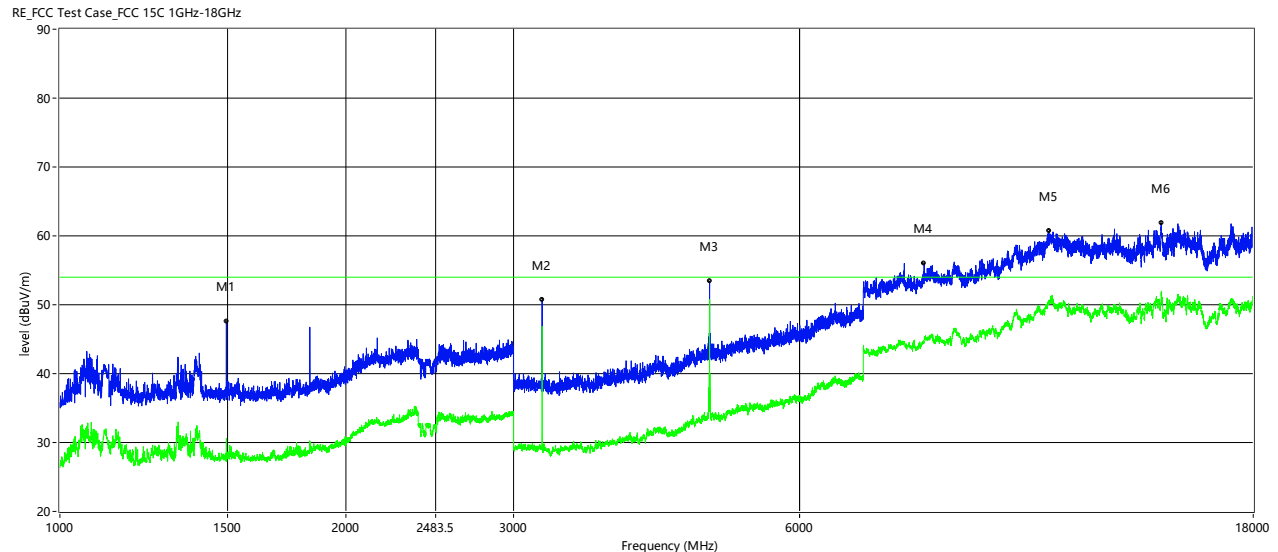


9.3. SPURIOUS EMISSIONS (1GHz-18GHz)

Test Model: WLPSTPR-10

802.11 b mode

HARMONICS AND SPURIOUS EMISSIONS (01 CHANNEL, HORIZONTAL)



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1496.500	47.50	30.58	-0.56	74.0	54.0	-23.42	Horizontal	Pass
3216.000	50.68	46.92	-12.14	74.0	54.0	-7.08	Horizontal	Pass
4824.000	53.38	50.75	-6.84	74.0	54.0	-3.25	Horizontal	Pass
8111.000	56.01	44.82	4.17	74.0	54.0	-9.18	Horizontal	Pass
10973.750	60.66	50.17	10.02	74.0	54.0	-3.83	Horizontal	Pass
14400.250	61.86	50.60	11.42	74.0	54.0	-3.40	Horizontal	Pass

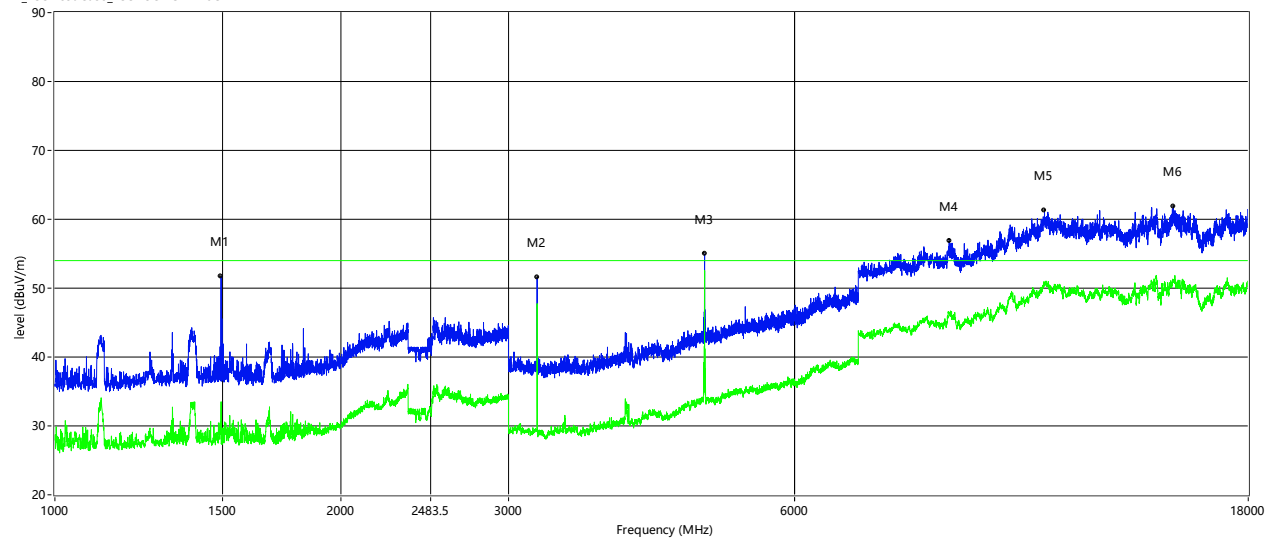
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (01 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1495.500	51.71	33.51	-0.56	74.0	54.0	-20.49	Vertical	Pass
3215.000	51.53	47.69	-12.14	74.0	54.0	-6.31	Vertical	Pass
4824.000	54.96	50.56	-6.84	74.0	54.0	-3.44	Vertical	Pass
8724.250	56.89	46.22	5.08	74.0	54.0	-7.78	Vertical	Pass
10987.500	61.25	50.39	10.12	74.0	54.0	-3.61	Vertical	Pass
15013.500	61.89	50.08	10.39	74.0	54.0	-3.92	Vertical	Pass

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1114.500	44.03	34.42	-1.46	74.0	54.0	-19.58	Horizontal	Pass
3249.000	49.87	47.72	-12.18	74.0	54.0	-6.28	Horizontal	Pass
4874.000	55.36	50.84	-6.54	74.0	54.0	-3.16	Horizontal	Pass
8688.500	57.15	45.68	5.03	74.0	54.0	-8.32	Horizontal	Pass
11399.999	60.96	50.48	9.74	74.0	54.0	-3.52	Horizontal	Pass
15090.500	62.08	50.72	10.31	74.0	54.0	-3.28	Horizontal	Pass

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1123.500	43.33	31.04	-1.44	74.0	54.0	-22.96	Vertical	Pass
3249.000	48.54	45.94	-12.18	74.0	54.0	-8.06	Vertical	Pass
4874.000	55.09	50.64	-6.54	74.0	54.0	-3.36	Vertical	Pass
8856.250	56.44	45.81	4.50	74.0	54.0	-8.19	Vertical	Pass
10968.250	61.55	50.55	9.98	74.0	54.0	-3.45	Vertical	Pass
14400.250	61.86	50.74	11.42	74.0	54.0	-3.26	Vertical	Pass

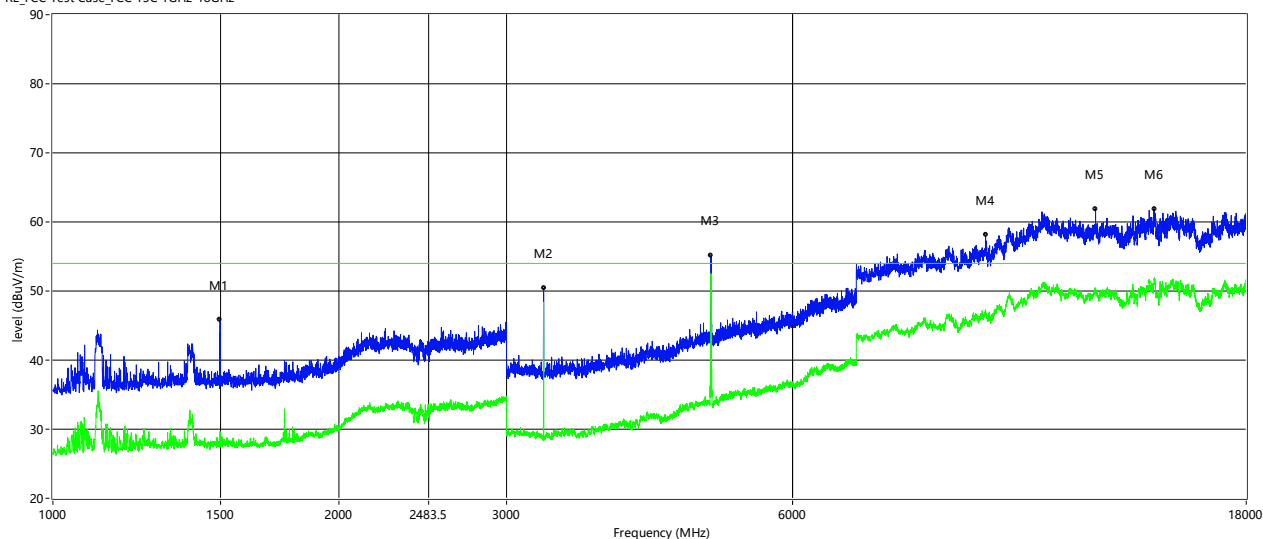
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (11 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1499.000	45.85	29.66	-0.56	74.0	54.0	-24.34	Horizontal	Pass
3282.000	50.42	48.39	-12.22	74.0	54.0	-5.61	Horizontal	Pass
4924.000	55.10	50.51	-6.39	74.0	54.0	-3.49	Horizontal	Pass
9574.000	58.08	47.16	5.60	74.0	54.0	-6.84	Horizontal	Pass
12494.500	61.89	50.16	8.87	74.0	54.0	-3.84	Horizontal	Pass
14397.500	61.90	50.66	11.41	74.0	54.0	-3.34	Horizontal	Pass

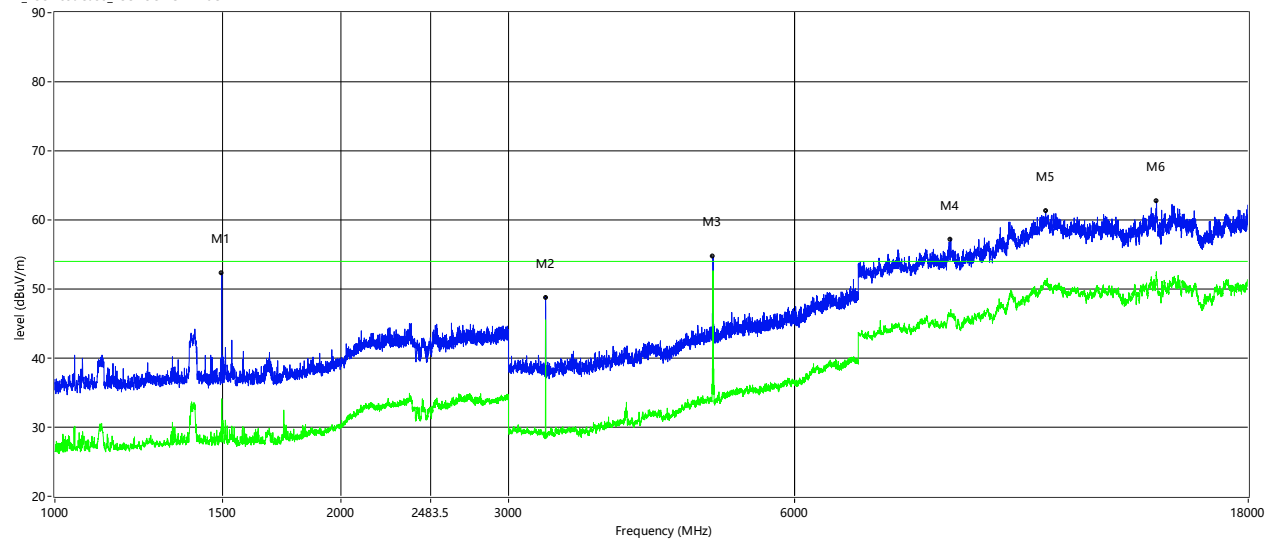
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (11 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1498.000	52.35	34.12	-0.56	74.0	54.0	-19.88	Vertical	Pass
3282.000	48.77	45.53	-12.22	74.0	54.0	-8.47	Vertical	Pass
4924.000	54.67	50.66	-6.39	74.0	54.0	-3.34	Vertical	Pass
8757.250	57.21	47.06	4.98	74.0	54.0	-6.94	Vertical	Pass
11020.500	61.26	50.04	10.11	74.0	54.0	-3.96	Vertical	Pass
14414.000	62.78	50.83	11.26	74.0	54.0	-3.17	Vertical	Pass

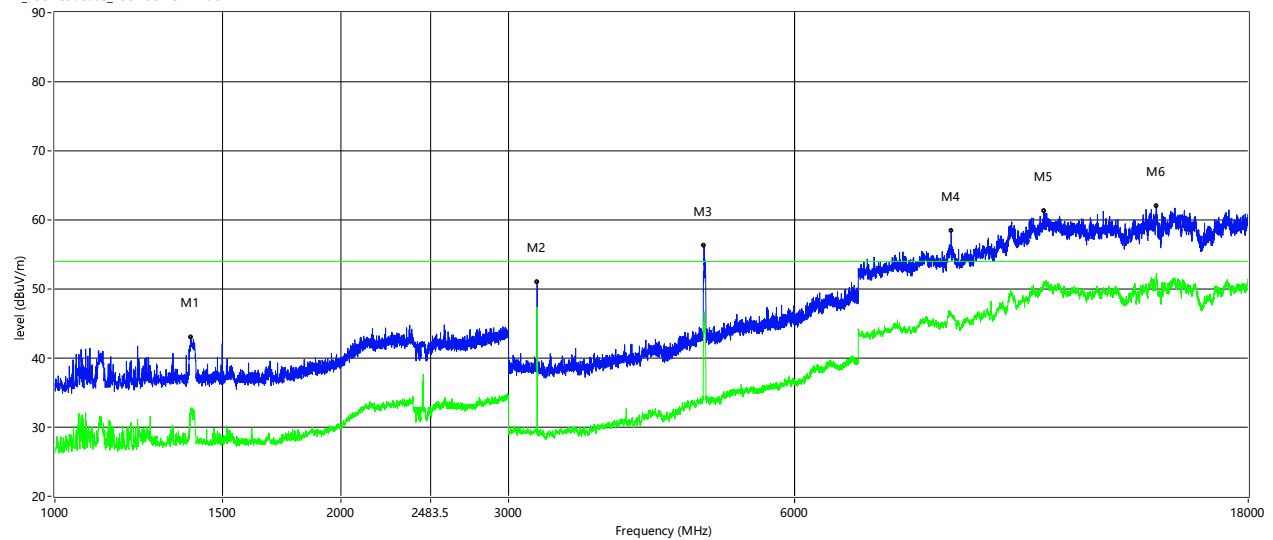
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



802.11 g mode
HARMONICS AND SPURIOUS EMISSIONS (01 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1390.000	43.02	31.86	-0.69	74.0	54.0	-22.14	Horizontal	Pass
3215.000	51.05	47.14	-12.14	74.0	54.0	-6.86	Horizontal	Pass
4818.000	56.30	45.78	-6.87	74.0	54.0	-8.22	Horizontal	Pass
8765.500	58.37	46.42	4.96	74.0	54.0	-7.58	Horizontal	Pass
10976.500	61.22	50.76	10.04	74.0	54.0	-3.24	Horizontal	Pass
14403.000	62.04	50.97	11.39	74.0	54.0	-3.03	Horizontal	Pass

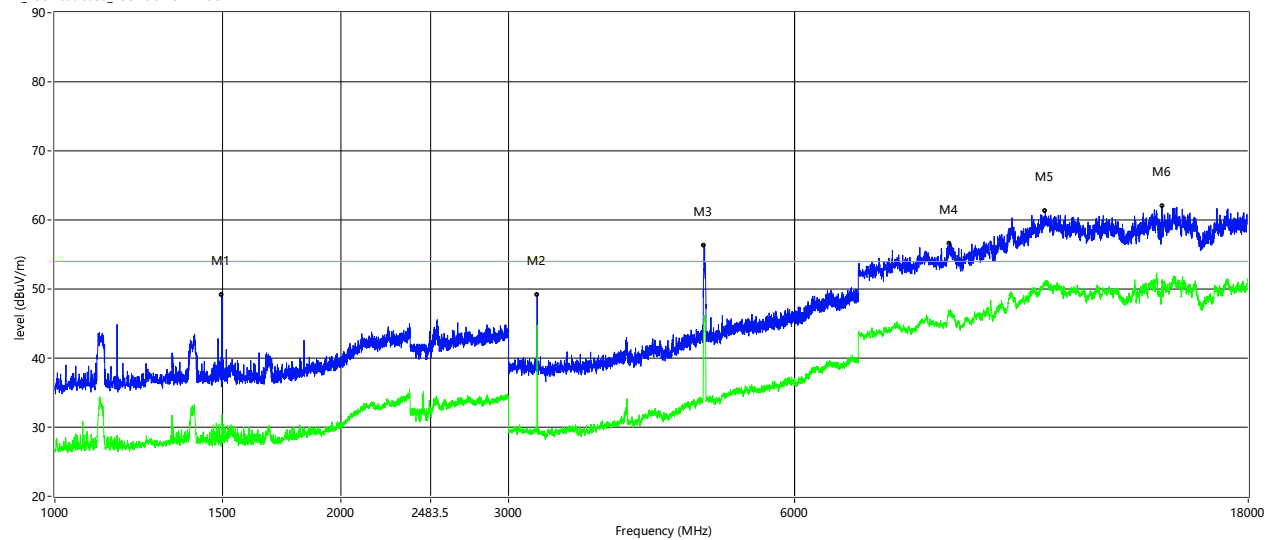
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (01 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1498.500	49.14	31.91	-0.56	74.0	54.0	-22.09	Vertical	Pass
3216.000	49.15	44.80	-12.14	74.0	54.0	-9.20	Vertical	Pass
4819.000	56.34	45.95	-6.87	74.0	54.0	-8.05	Vertical	Pass
8738.000	56.64	46.48	5.04	74.0	54.0	-7.52	Vertical	Pass
11009.500	61.31	50.89	10.17	74.0	54.0	-3.11	Vertical	Pass
14606.500	61.96	50.94	11.14	74.0	54.0	-3.06	Vertical	Pass

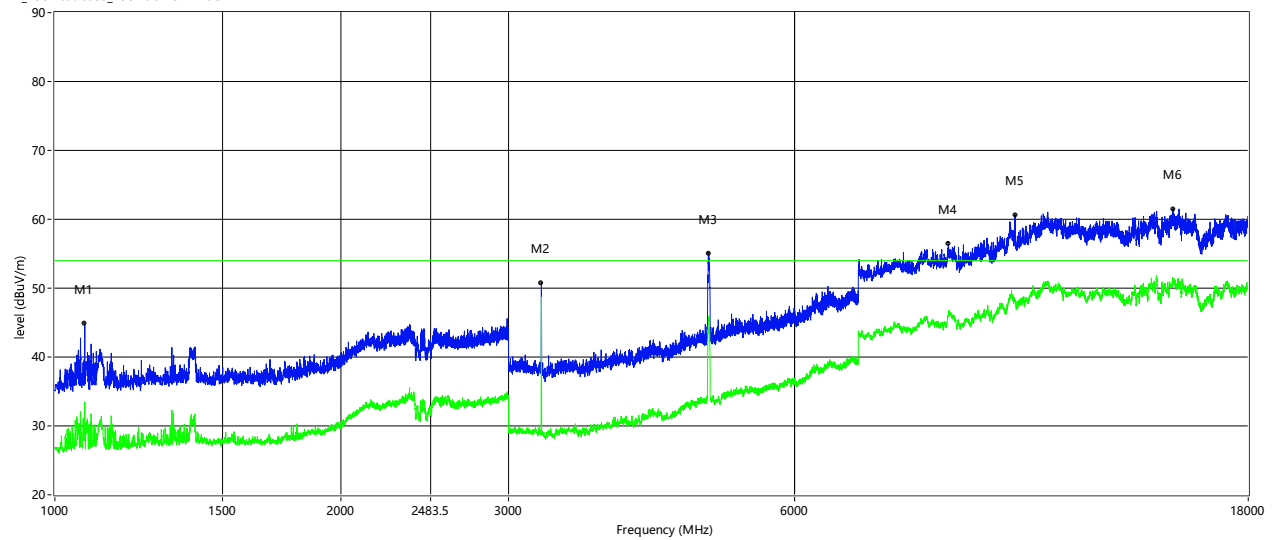
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1075.000	44.79	33.48	-1.66	74.0	54.0	-20.52	Horizontal	Pass
3249.000	50.76	48.70	-12.18	74.0	54.0	-5.30	Horizontal	Pass
4868.000	55.07	44.89	-6.58	74.0	54.0	-9.11	Horizontal	Pass
8707.750	56.37	45.89	5.14	74.0	54.0	-8.11	Horizontal	Pass
10231.250	60.63	48.03	6.86	74.0	54.0	-5.97	Horizontal	Pass
15005.250	61.50	50.05	10.40	74.0	54.0	-3.95	Horizontal	Pass

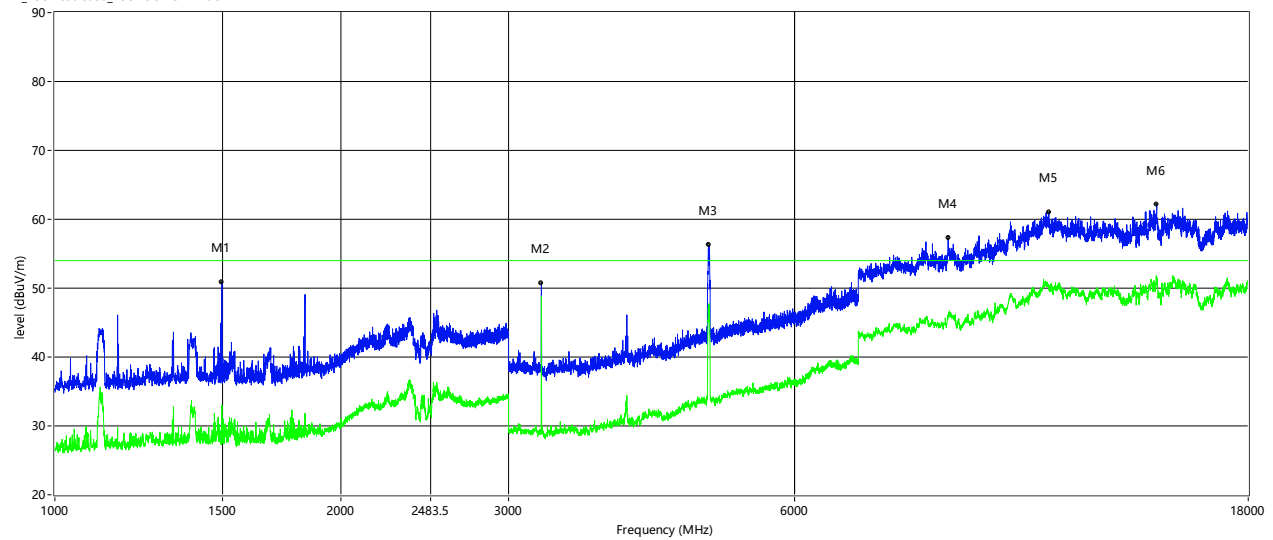
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1498.500	50.89	33.04	-0.56	74.0	54.0	-20.96	Vertical	Pass
3249.000	50.74	48.84	-12.18	74.0	54.0	-5.16	Vertical	Pass
4876.000	56.25	47.76	-6.53	74.0	54.0	-6.24	Vertical	Pass
8702.250	57.26	45.86	5.15	74.0	54.0	-8.14	Vertical	Pass
11105.750	61.01	50.48	9.68	74.0	54.0	-3.52	Vertical	Pass
14419.500	62.14	50.39	11.19	74.0	54.0	-3.61	Vertical	Pass

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (11 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1498.500	46.64	30.01	-0.56	74.0	54.0	-23.99	Horizontal	Pass
3282.000	50.65	48.13	-12.22	74.0	54.0	-5.87	Horizontal	Pass
4925.000	55.09	47.18	-6.39	74.0	54.0	-6.82	Horizontal	Pass
8751.750	57.47	46.85	5.00	74.0	54.0	-7.15	Horizontal	Pass
11078.250	61.30	50.52	9.80	74.0	54.0	-3.48	Horizontal	Pass
15258.250	62.26	50.83	10.42	74.0	54.0	-3.17	Horizontal	Pass

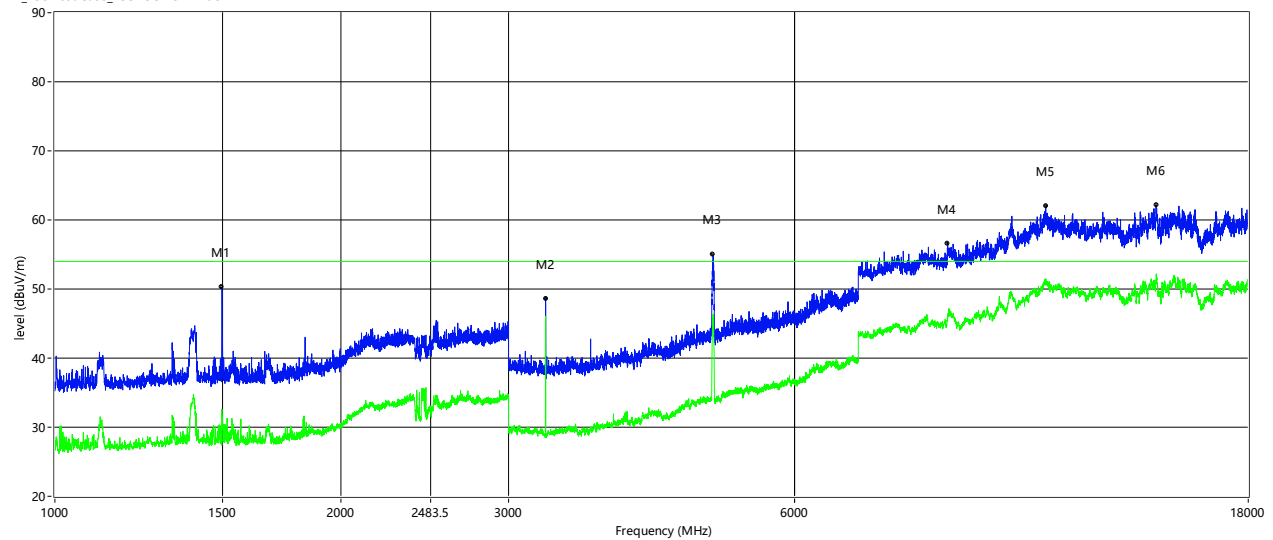
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (11 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1498.500	50.27	32.62	-0.56	74.0	54.0	-21.38	Vertical	Pass
3282.000	48.61	46.08	-12.22	74.0	54.0	-7.92	Vertical	Pass
4925.000	54.99	46.36	-6.39	74.0	54.0	-7.64	Vertical	Pass
8694.000	56.63	46.23	5.09	74.0	54.0	-7.77	Vertical	Pass
11023.250	62.05	50.03	10.09	74.0	54.0	-3.97	Vertical	Pass
14400.250	62.10	50.90	11.42	74.0	54.0	-3.10	Vertical	Pass

Remark:

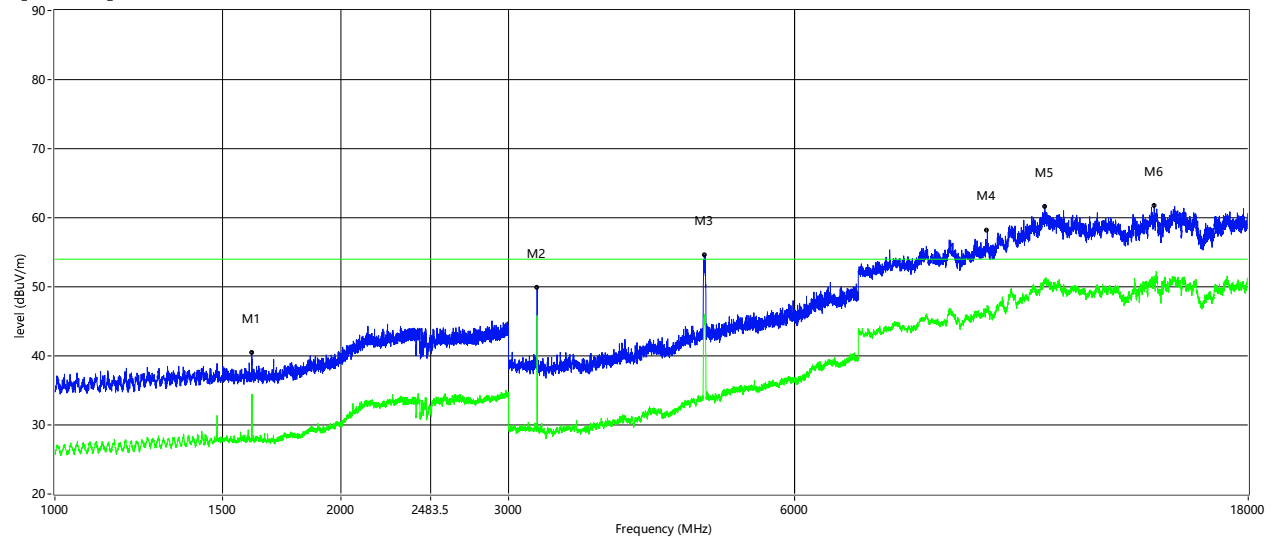
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



802.11 n20 mode

HARMONICS AND SPURIOUS EMISSIONS (01 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1611.000	40.46	31.80	-0.49	74.0	54.0	-22.20	Horizontal	Pass
3215.000	49.89	45.75	-12.14	74.0	54.0	-8.25	Horizontal	Pass
4828.000	54.63	45.14	-6.81	74.0	54.0	-8.86	Horizontal	Pass
9568.500	58.15	46.70	5.56	74.0	54.0	-7.30	Horizontal	Pass
10995.750	61.62	50.79	10.19	74.0	54.0	-3.21	Horizontal	Pass
14334.250	61.74	50.36	11.03	74.0	54.0	-3.64	Horizontal	Pass

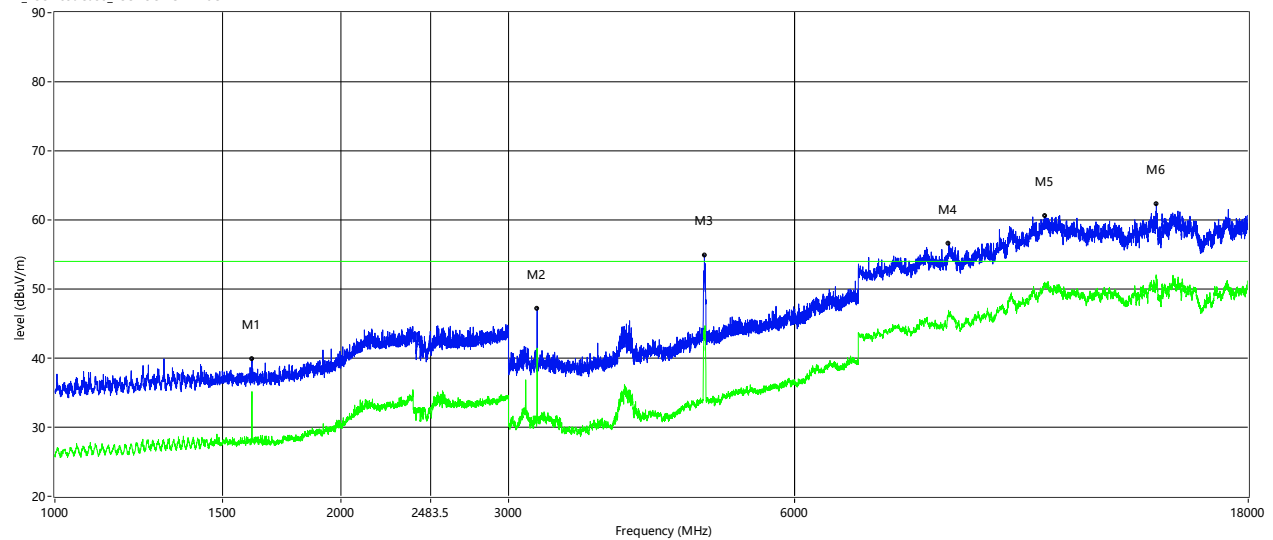
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (01 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1611.500	39.88	35.16	-0.49	74.0	54.0	-18.84	Vertical	Pass
3216.000	47.16	41.42	-12.14	74.0	54.0	-12.58	Vertical	Pass
4822.000	54.93	43.84	-6.85	74.0	54.0	-10.16	Vertical	Pass
8716.000	56.57	46.08	5.11	74.0	54.0	-7.92	Vertical	Pass
10995.750	60.58	50.80	10.19	74.0	54.0	-3.20	Vertical	Pass
14408.500	62.35	50.80	11.32	74.0	54.0	-3.20	Vertical	Pass

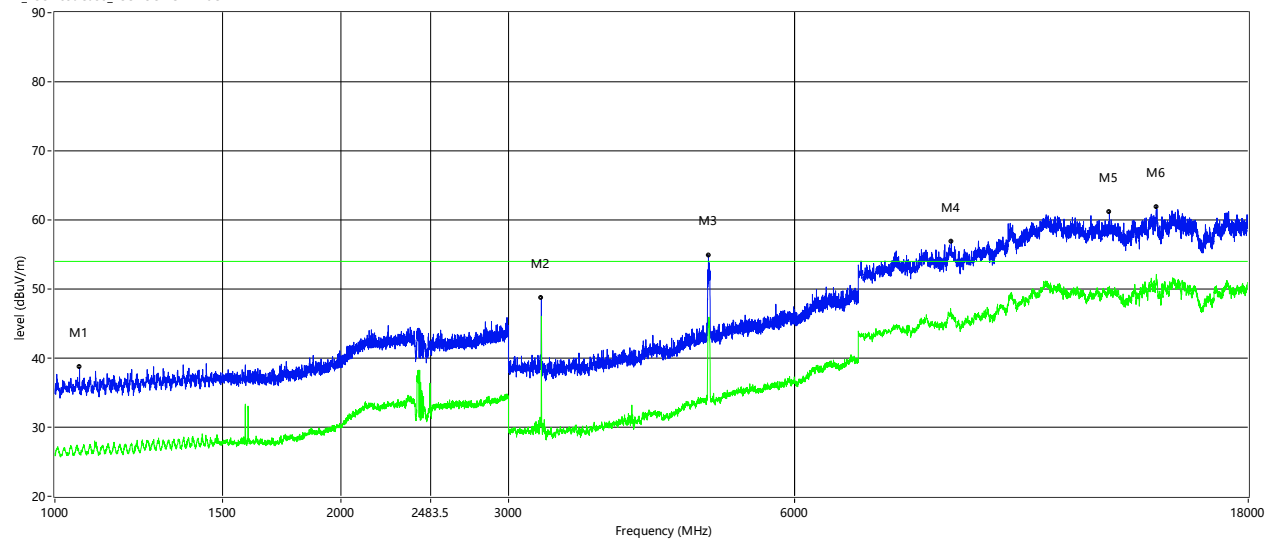
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1061.500	38.66	26.17	-1.75	74.0	54.0	-27.83	Horizontal	Pass
3249.000	48.64	46.04	-12.18	74.0	54.0	-7.96	Horizontal	Pass
4870.000	54.92	45.01	-6.57	74.0	54.0	-8.99	Horizontal	Pass
8768.250	56.92	46.14	4.95	74.0	54.0	-7.86	Horizontal	Pass
12860.250	61.20	50.42	9.89	74.0	54.0	-3.58	Horizontal	Pass
14411.250	61.92	50.42	11.29	74.0	54.0	-3.58	Horizontal	Pass

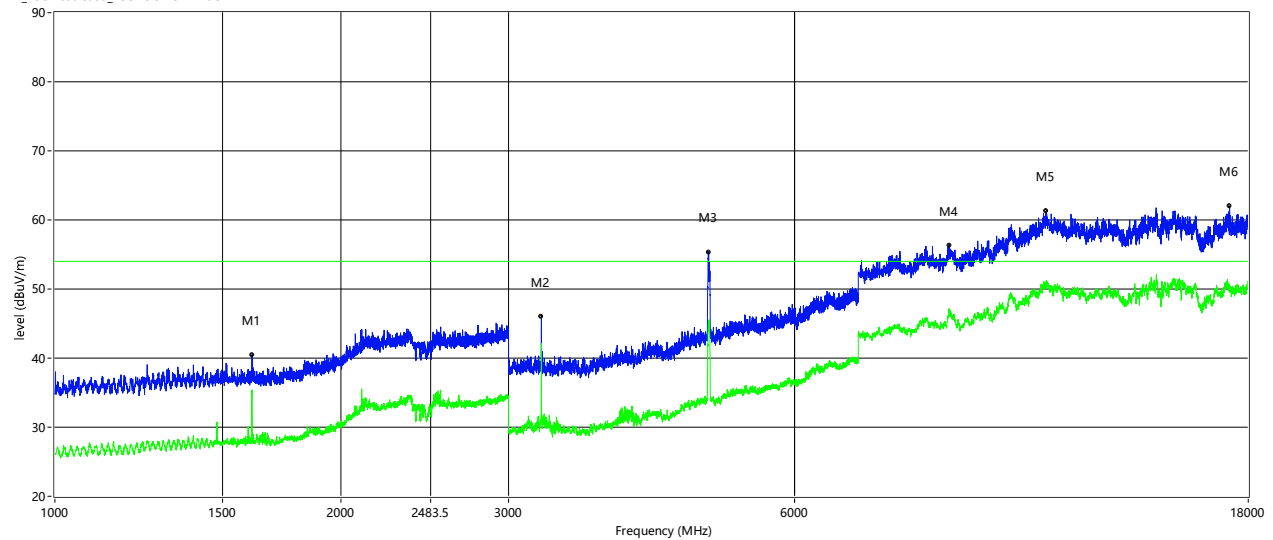
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1612.000	40.47	32.68	-0.49	74.0	54.0	-21.32	Vertical	Pass
3249.000	46.04	42.09	-12.18	74.0	54.0	-11.91	Vertical	Pass
4872.000	55.34	45.39	-6.56	74.0	54.0	-8.61	Vertical	Pass
8718.750	56.31	47.16	5.10	74.0	54.0	-6.84	Vertical	Pass
11023.250	61.26	50.48	10.09	74.0	54.0	-3.52	Vertical	Pass
17205.250	61.96	50.04	9.93	74.0	54.0	-3.96	Vertical	Pass

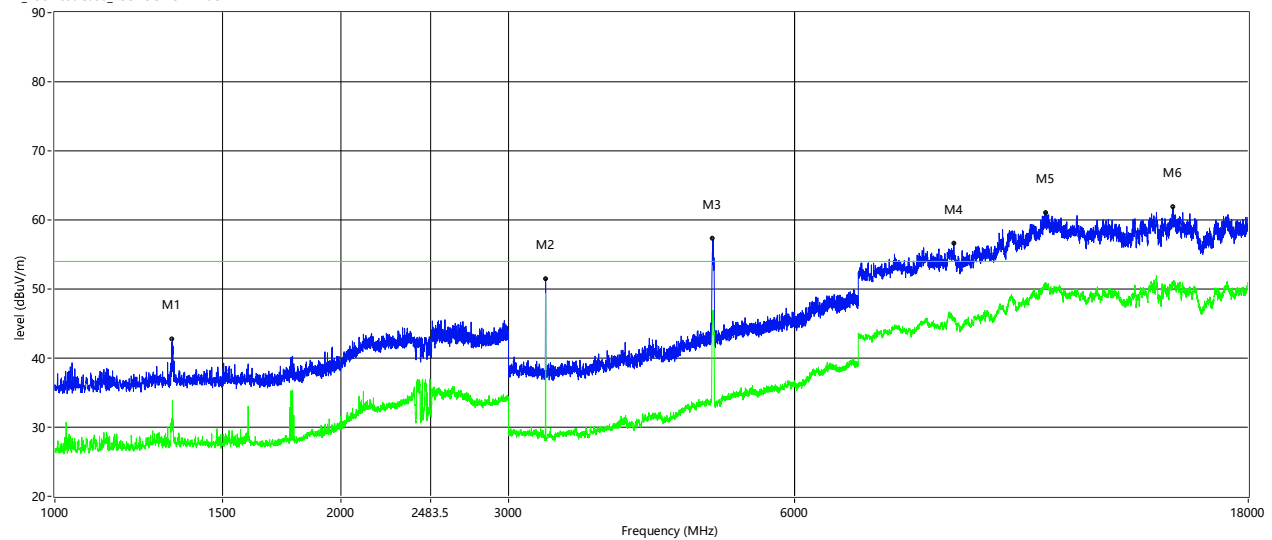
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (11 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1329.500	42.70	33.91	-0.85	74.0	54.0	-20.09	Horizontal	Pass
3282.000	51.49	49.37	-12.22	74.0	54.0	-4.63	Horizontal	Pass
4922.000	57.26	46.90	-6.39	74.0	54.0	-7.10	Horizontal	Pass
8823.250	56.62	45.50	4.71	74.0	54.0	-8.50	Horizontal	Pass
11020.500	61.06	50.93	10.11	74.0	54.0	-3.07	Horizontal	Pass
15019.000	61.79	50.76	10.38	74.0	54.0	-3.24	Horizontal	Pass

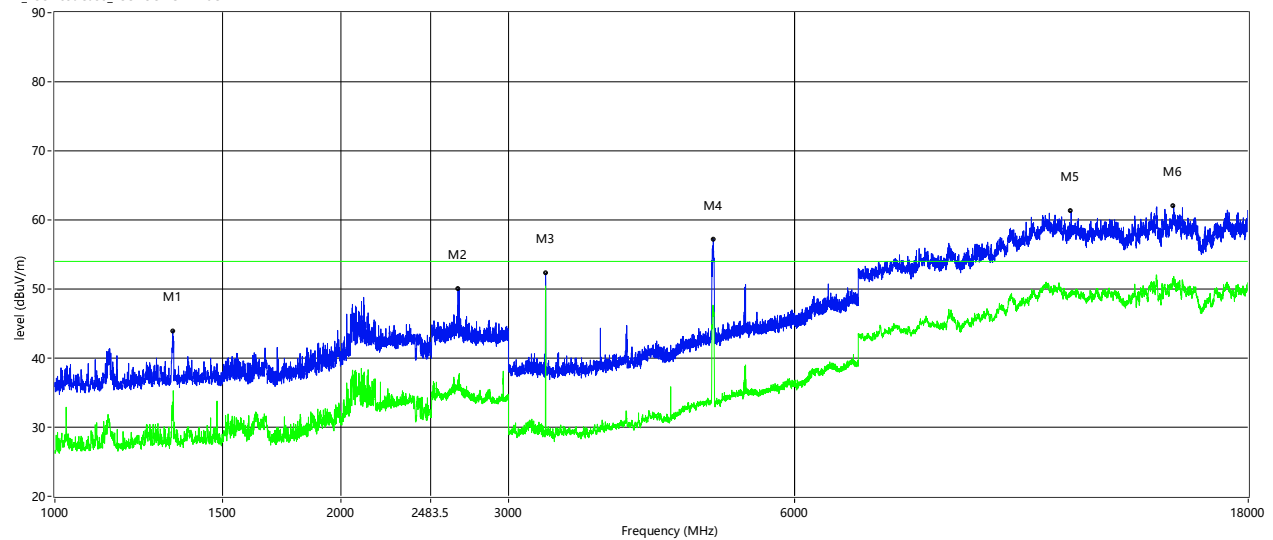
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (11 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1330.500	43.91	32.72	-0.85	74.0	54.0	-21.28	Vertical	Pass
2655.500	50.01	36.90	4.51	74.0	54.0	-17.10	Vertical	Pass
3282.000	52.29	50.45	-12.22	74.0	54.0	-3.55	Vertical	Pass
4927.000	57.21	47.09	-6.39	74.0	54.0	-6.91	Vertical	Pass
11721.750	61.28	49.20	9.32	74.0	54.0	-4.80	Vertical	Pass
15027.250	62.04	50.92	10.37	74.0	54.0	-3.08	Vertical	Pass

Remark:

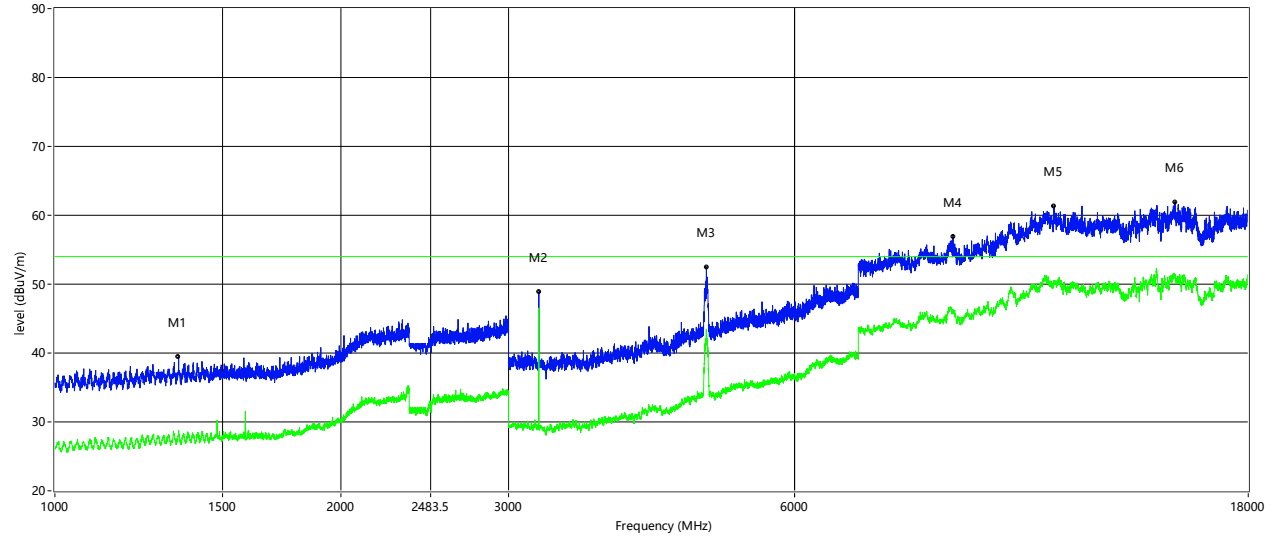
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



802.11 n40 mode

HARMONICS AND SPURIOUS EMISSIONS (03 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1349.500	39.46	28.74	-0.79	74.0	54.0	-25.26	Horizontal	Pass
3229.000	48.89	46.54	-12.15	74.0	54.0	-7.46	Horizontal	Pass
4845.000	52.48	41.82	-6.71	74.0	54.0	-12.18	Horizontal	Pass
8804.000	56.92	46.17	4.83	74.0	54.0	-7.83	Horizontal	Pass
11248.750	61.32	50.44	9.57	74.0	54.0	-3.56	Horizontal	Pass
15074.000	61.89	53.07	10.33	74.0	54.0	-3.93	Horizontal	Pass

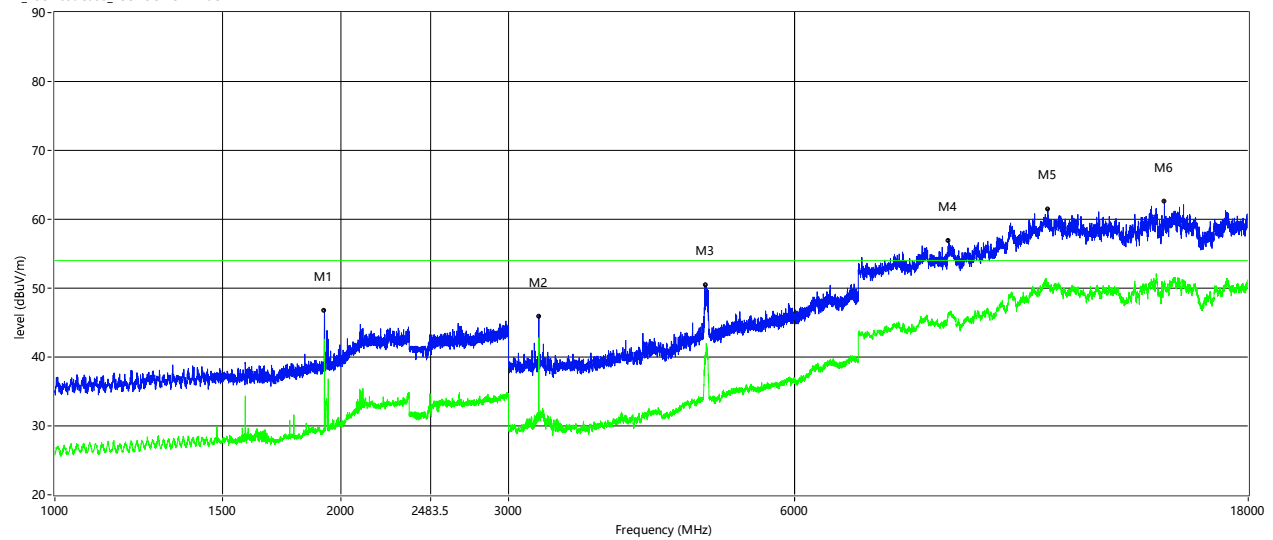
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (03 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1921.500	46.77	42.57	0.93	74.0	54.0	-11.43	Vertical	Pass
3229.000	45.87	42.79	-12.15	74.0	54.0	-11.21	Vertical	Pass
4844.000	50.37	42.00	-6.72	74.0	54.0	-12.00	Vertical	Pass
8710.500	56.91	46.44	5.13	74.0	54.0	-7.56	Vertical	Pass
11078.250	61.42	50.59	9.80	74.0	54.0	-3.41	Vertical	Pass
14691.750	62.55	50.91	11.26	74.0	54.0	-3.09	Vertical	Pass

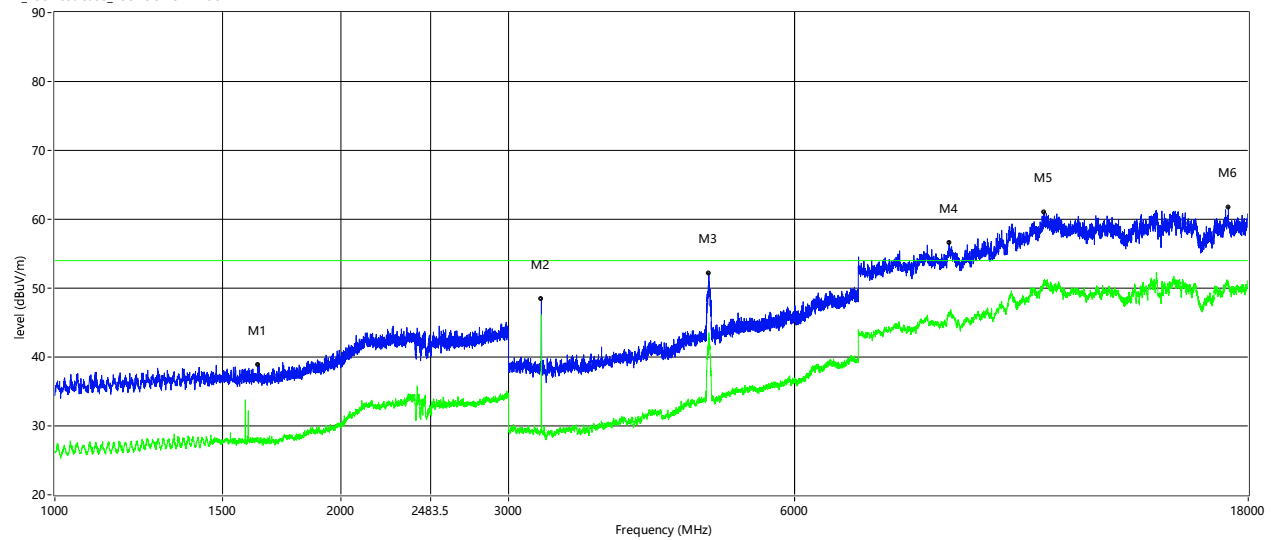
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1635.500	38.91	27.69	-0.49	74.0	54.0	-26.31	Horizontal	Pass
3249.000	48.43	46.12	-12.18	74.0	54.0	-7.88	Horizontal	Pass
4874.000	52.21	43.52	-6.54	74.0	54.0	-10.48	Horizontal	Pass
8721.500	56.63	46.38	5.09	74.0	54.0	-7.62	Horizontal	Pass
10973.750	60.94	50.64	10.02	74.0	54.0	-3.36	Horizontal	Pass
17155.750	61.76	50.61	10.16	74.0	54.0	-3.39	Horizontal	Pass

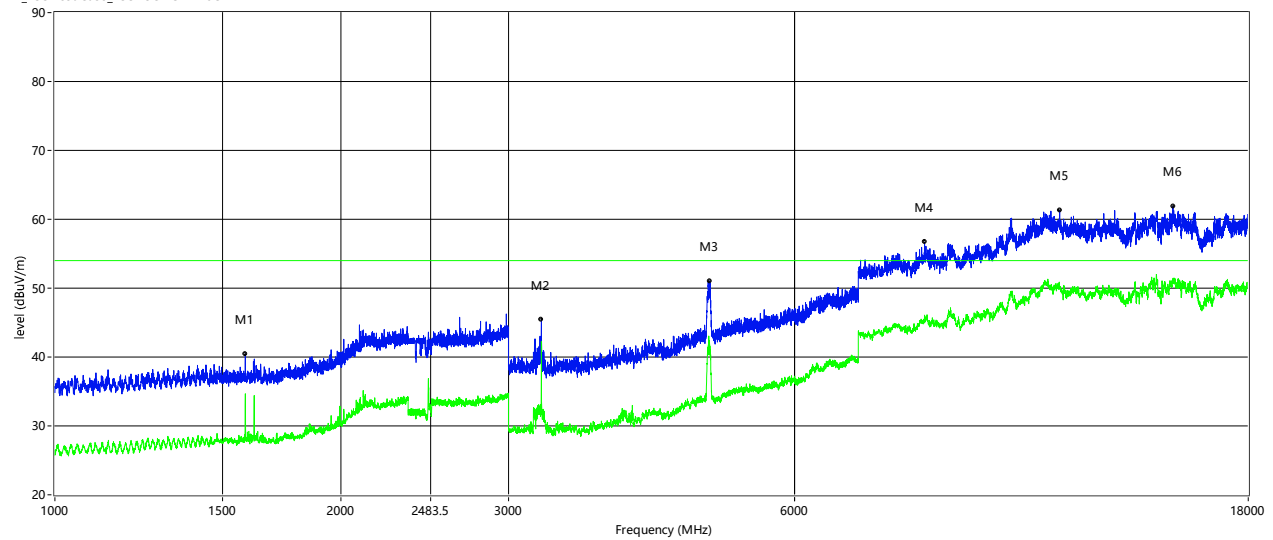
Remark:

- Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
- Margin = Limit - Emission Level
- Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
- Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1586.000	40.44	34.67	-0.53	74.0	54.0	-19.33	Vertical	Pass
3249.000	45.41	42.26	-12.18	74.0	54.0	-11.74	Vertical	Pass
4885.000	51.04	41.06	-6.48	74.0	54.0	-12.94	Vertical	Pass
8218.250	56.69	46.09	4.21	74.0	54.0	-7.91	Vertical	Pass
11399.999	61.31	49.95	9.74	74.0	54.0	-4.05	Vertical	Pass
14997.000	61.86	50.20	10.38	74.0	54.0	-3.80	Vertical	Pass

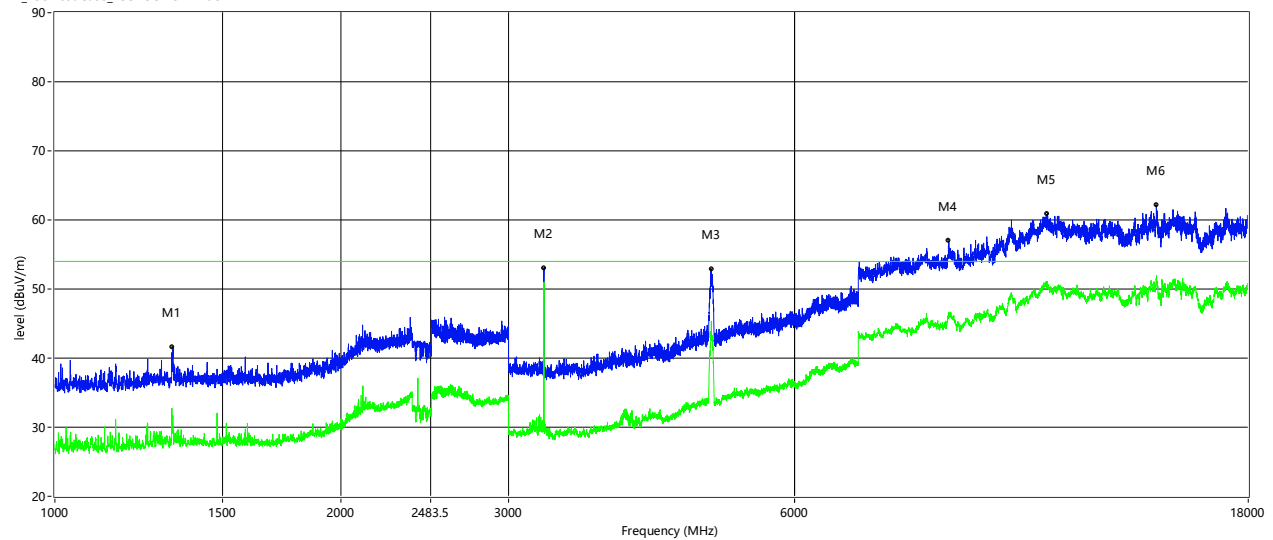
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (09 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1330.000	41.60	31.27	-0.85	74.0	54.0	-22.73	Horizontal	Pass
3269.000	53.04	50.00	-12.20	74.0	54.0	-4.00	Horizontal	Pass
4904.000	52.88	45.34	-6.39	74.0	54.0	-8.66	Horizontal	Pass
8716.000	56.95	46.34	5.11	74.0	54.0	-7.66	Horizontal	Pass
11061.750	60.82	50.58	9.89	74.0	54.0	-3.42	Horizontal	Pass
14408.500	62.14	50.43	11.32	74.0	54.0	-3.57	Horizontal	Pass

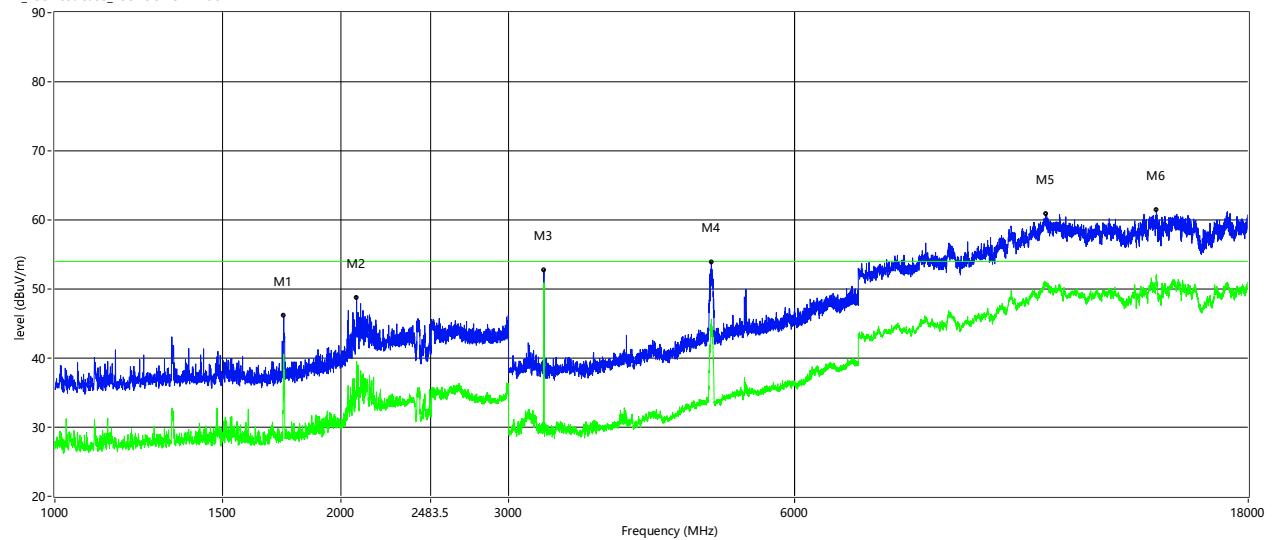
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (09 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1741.000	46.11	39.47	-0.04	74.0	54.0	-14.53	Vertical	Pass
2076.500	48.75	39.54	3.34	74.0	54.0	-14.46	Vertical	Pass
3269.000	52.73	50.93	-12.20	74.0	54.0	-3.07	Vertical	Pass
4904.000	53.86	45.67	-6.39	74.0	54.0	-8.33	Vertical	Pass
11017.750	60.81	50.00	10.12	74.0	54.0	-4.00	Vertical	Pass
14408.500	61.45	50.13	11.32	74.0	54.0	-3.87	Vertical	Pass

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.

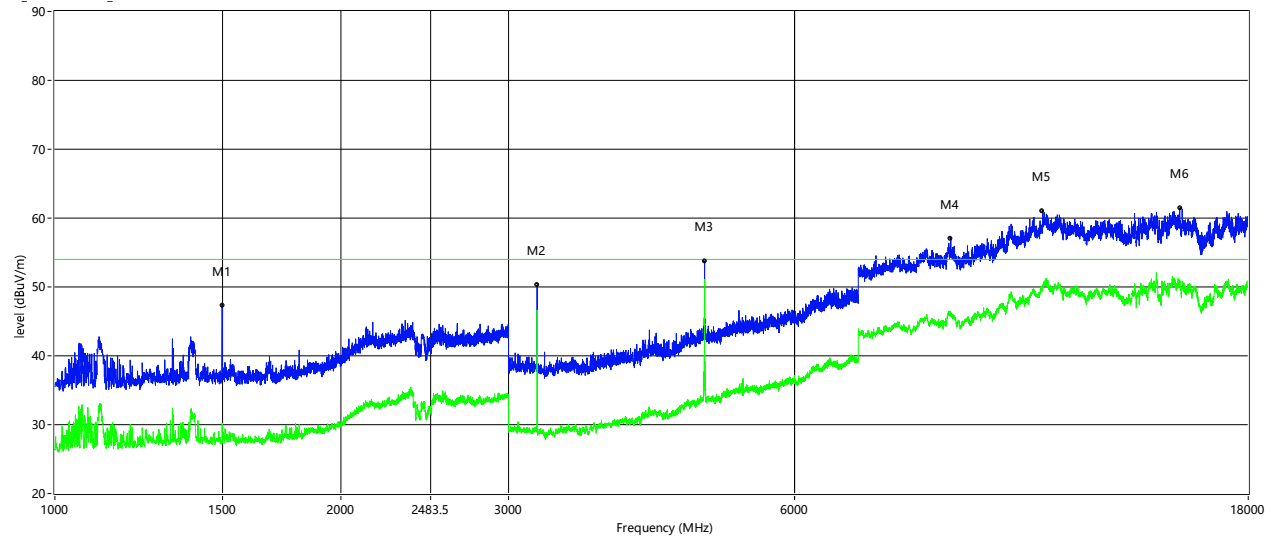


Test Model: WLPSTG-10

802.11 b mode

HARMONICS AND SPURIOUS EMISSIONS (01 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1499.500	47.22	30.20	-0.56	74.0	54.0	-23.80	Horizontal	Pass
3216.000	50.28	46.65	-12.14	74.0	54.0	-7.35	Horizontal	Pass
4824.000	53.75	50.09	-6.84	74.0	54.0	-3.91	Horizontal	Pass
8757.250	57.05	46.24	4.98	74.0	54.0	-7.76	Horizontal	Pass
10938.000	61.01	50.04	9.74	74.0	54.0	-3.96	Horizontal	Pass
15247.250	61.43	50.02	10.53	74.0	54.0	-3.98	Horizontal	Pass

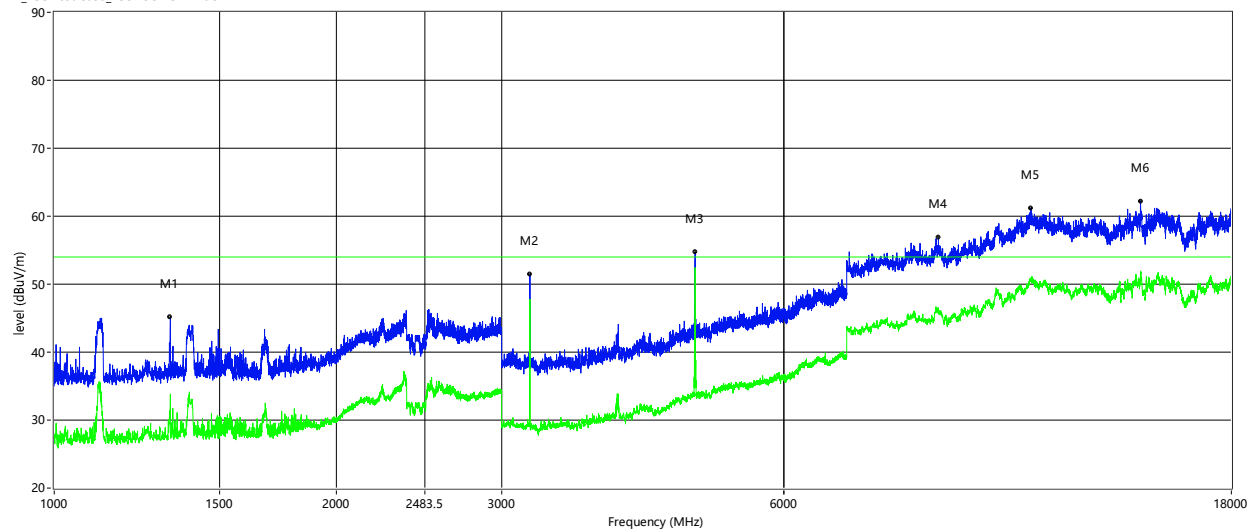
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (01 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1330.000	45.08	33.84	-0.85	74.0	54.0	-20.16	Vertical	Pass
3216.000	51.45	47.78	-12.14	74.0	54.0	-6.22	Vertical	Pass
4824.000	54.74	50.42	-6.84	74.0	54.0	-3.58	Vertical	Pass
8768.250	56.81	46.21	4.95	74.0	54.0	-7.79	Vertical	Pass
11004.000	61.19	50.90	10.20	74.0	54.0	-3.10	Vertical	Pass
14400.250	62.15	50.60	11.42	74.0	54.0	-3.40	Vertical	Pass

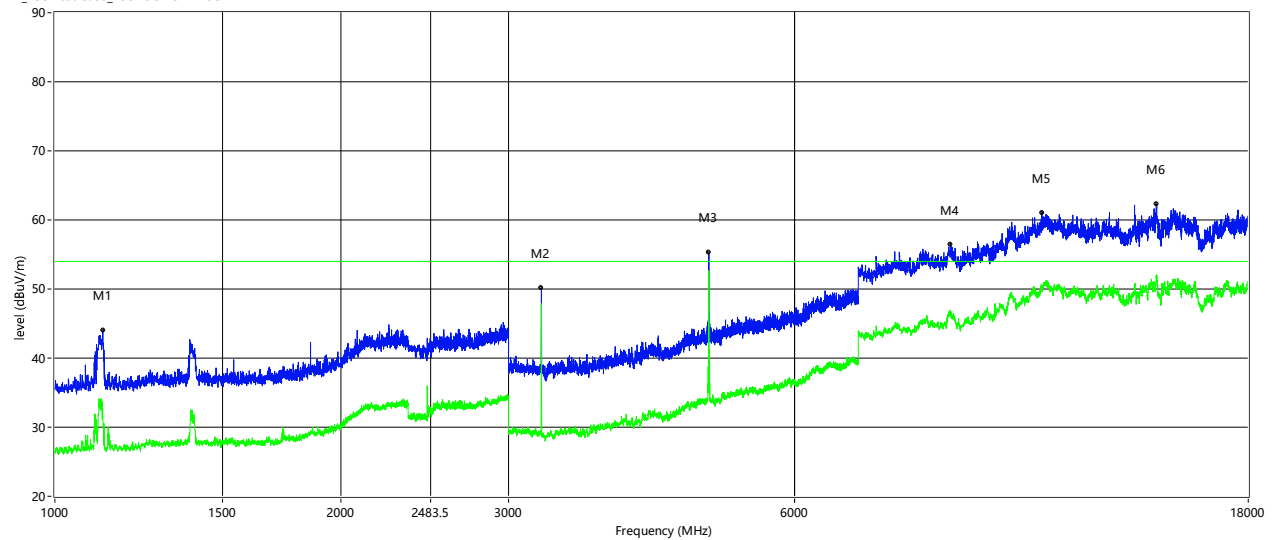
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1123.000	43.93	31.86	-1.44	74.0	54.0	-22.14	Horizontal	Pass
3249.000	50.20	47.87	-12.18	74.0	54.0	-6.13	Horizontal	Pass
4874.000	55.22	50.64	-6.54	74.0	54.0	-3.36	Horizontal	Pass
8751.750	56.42	45.93	5.00	74.0	54.0	-8.07	Horizontal	Pass
10918.750	61.05	49.74	9.59	74.0	54.0	-4.26	Horizontal	Pass
14419.500	62.24	50.03	11.19	74.0	54.0	-3.97	Horizontal	Pass

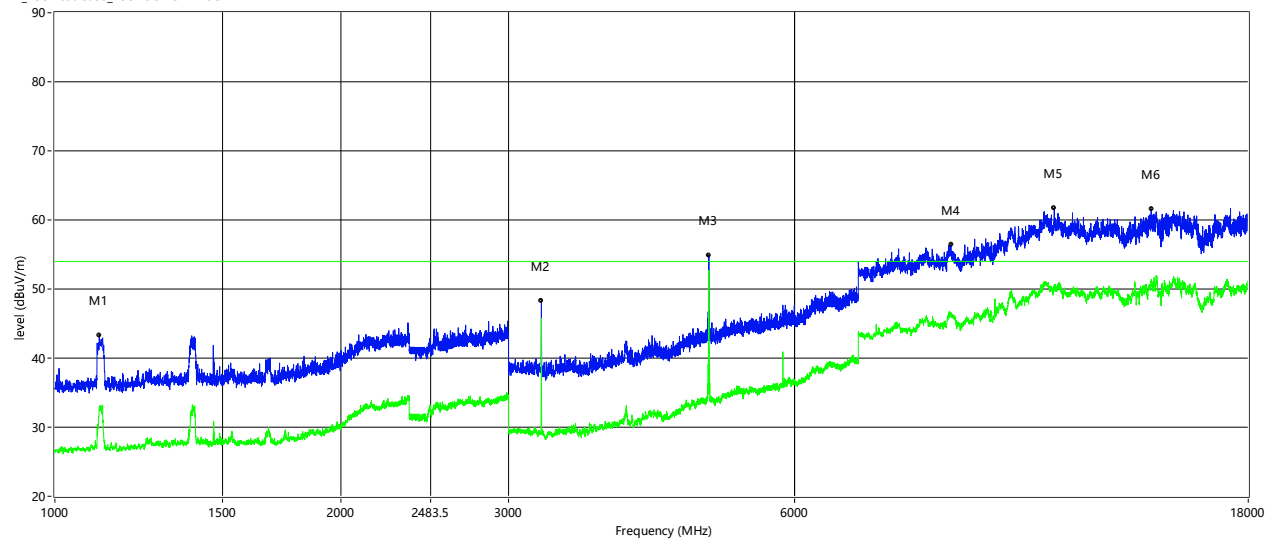
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1113.500	43.27	32.98	-1.46	74.0	54.0	-21.02	Vertical	Pass
3249.000	48.31	45.73	-12.18	74.0	54.0	-8.27	Vertical	Pass
4874.000	54.90	50.70	-6.54	74.0	54.0	-3.30	Vertical	Pass
8760.001	56.37	46.63	4.97	74.0	54.0	-7.37	Vertical	Pass
11251.500	61.66	50.66	9.56	74.0	54.0	-3.34	Vertical	Pass
14229.750	61.61	50.09	11.37	74.0	54.0	-3.91	Vertical	Pass

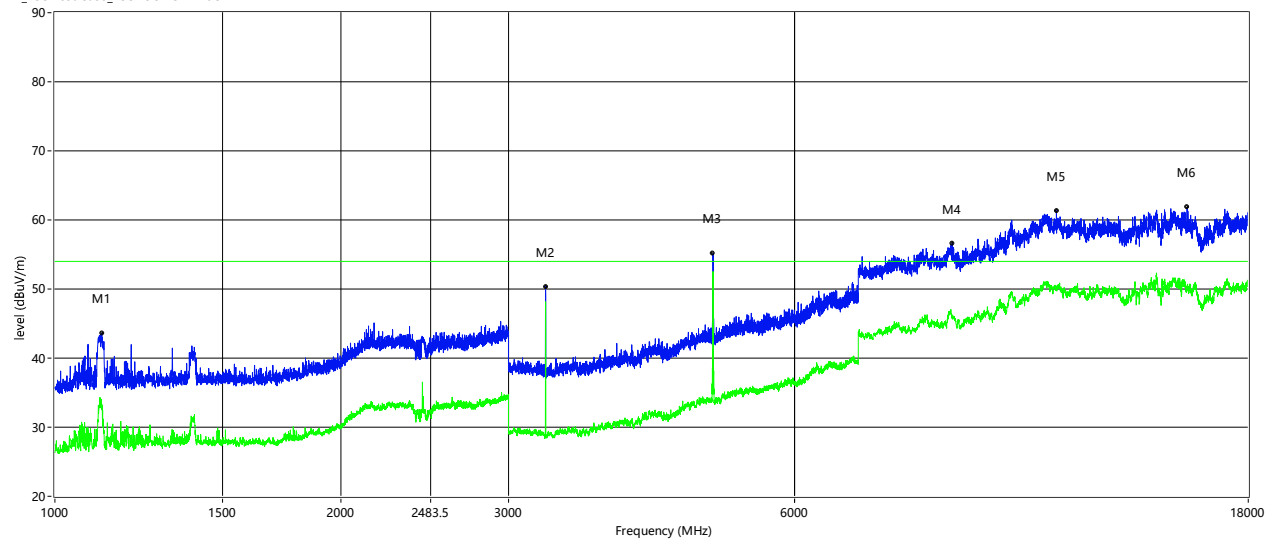
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (11 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1120.500	43.59	33.34	-1.44	74.0	54.0	-20.66	Horizontal	Pass
3282.000	50.36	48.16	-12.22	74.0	54.0	-5.84	Horizontal	Pass
4924.000	55.14	50.55	-6.39	74.0	54.0	-3.45	Horizontal	Pass
8787.500	56.61	46.05	4.89	74.0	54.0	-7.95	Horizontal	Pass
11312.000	61.35	49.95	9.56	74.0	54.0	-4.05	Horizontal	Pass
15522.250	61.80	50.03	10.69	74.0	54.0	-3.97	Horizontal	Pass

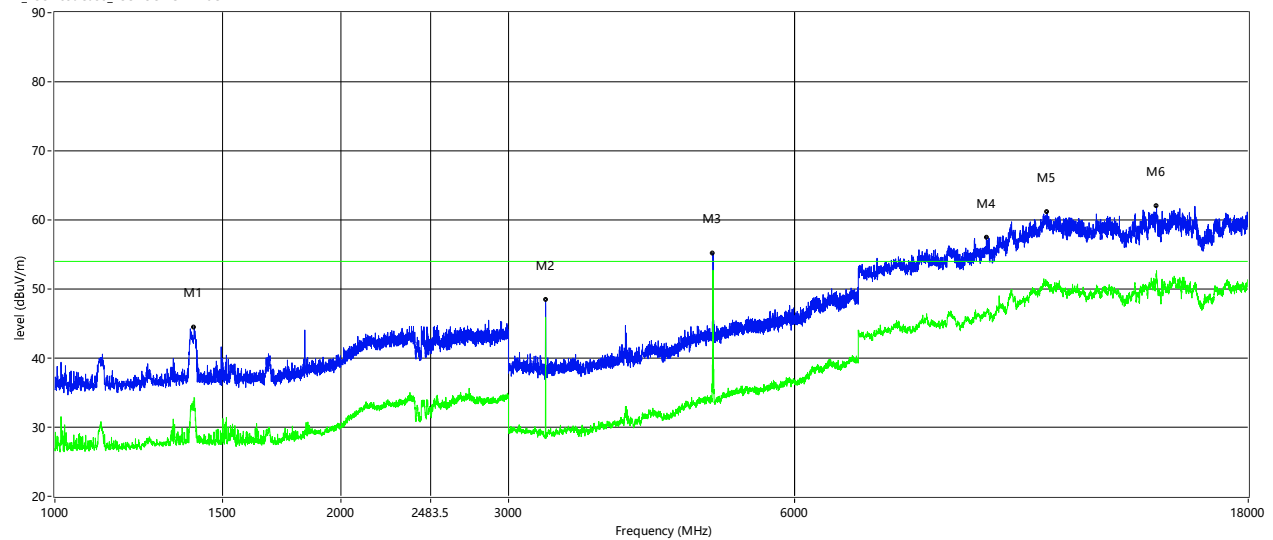
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (11 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1401.500	44.44	33.58	-0.66	74.0	54.0	-20.42	Vertical	Pass
3282.000	48.38	45.88	-12.22	74.0	54.0	-8.12	Vertical	Pass
4924.000	55.20	50.73	-6.39	74.0	54.0	-3.27	Vertical	Pass
9546.500	57.45	46.74	5.41	74.0	54.0	-7.26	Vertical	Pass
11056.250	61.15	50.94	9.92	74.0	54.0	-3.06	Vertical	Pass
14414.000	62.01	50.66	11.26	74.0	54.0	-3.34	Vertical	Pass

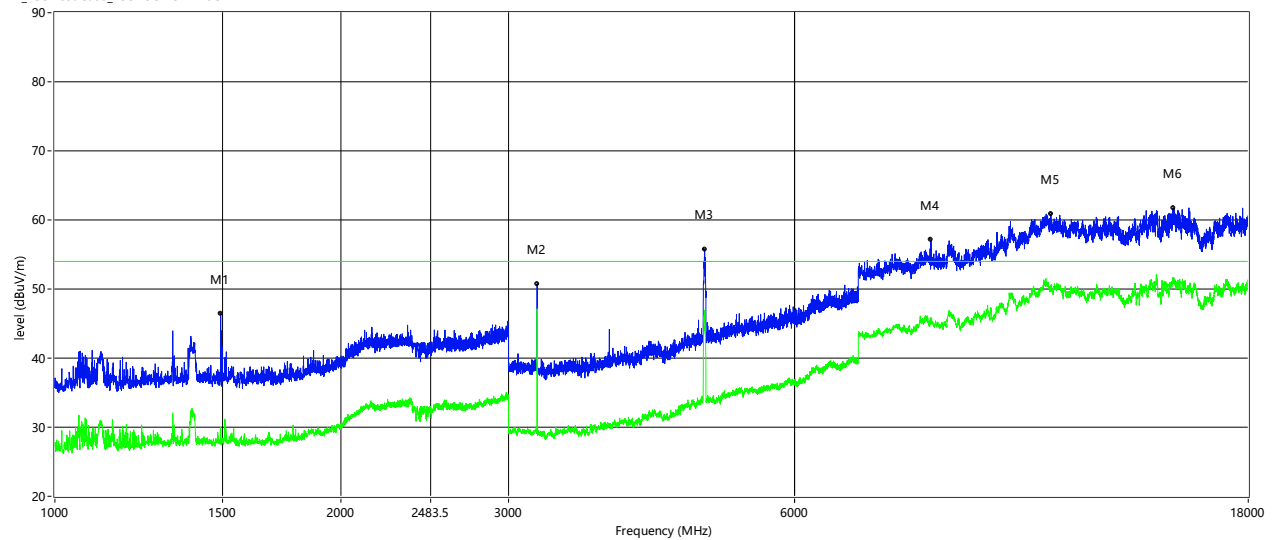
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



802.11 g mode
HARMONICS AND SPURIOUS EMISSIONS (01 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1494.000	46.48	29.96	-0.56	74.0	54.0	-24.04	Horizontal	Pass
3215.000	50.72	47.03	-12.14	74.0	54.0	-6.97	Horizontal	Pass
4825.000	55.74	46.89	-6.83	74.0	54.0	-7.11	Horizontal	Pass
8347.500	57.15	45.91	4.25	74.0	54.0	-8.09	Horizontal	Pass
11160.750	60.90	50.57	9.63	74.0	54.0	-3.43	Horizontal	Pass
15021.750	61.70	50.21	10.38	74.0	54.0	-3.79	Horizontal	Pass

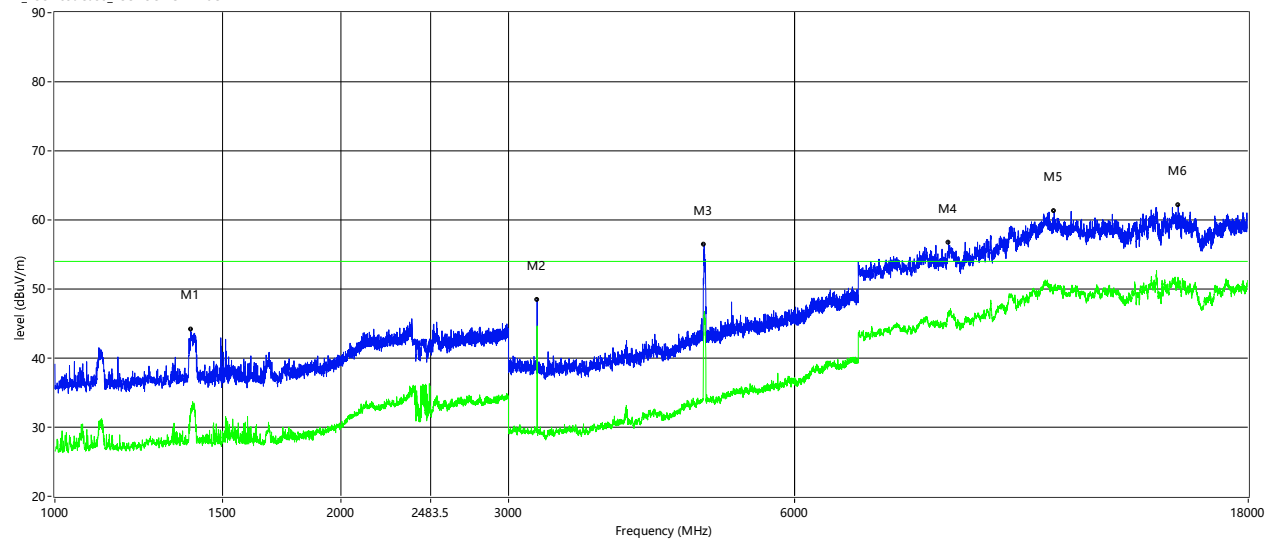
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (01 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1389.000	44.07	31.69	-0.69	74.0	54.0	-22.31	Vertical	Pass
3215.000	48.47	44.33	-12.14	74.0	54.0	-9.67	Vertical	Pass
4819.000	56.45	46.15	-6.87	74.0	54.0	-7.85	Vertical	Pass
8710.500	56.71	46.71	5.13	74.0	54.0	-7.29	Vertical	Pass
11248.750	61.21	50.44	9.57	74.0	54.0	-3.56	Vertical	Pass
15192.250	62.19	50.20	10.98	74.0	54.0	-3.80	Vertical	Pass

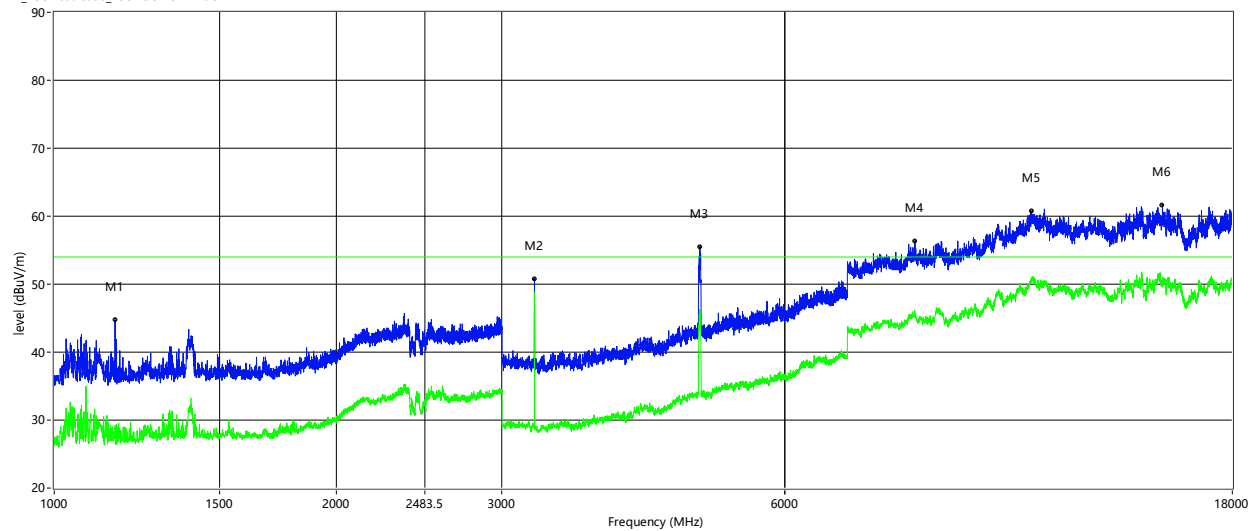
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1161.000	44.66	28.22	-1.34	74.0	54.0	-25.78	Horizontal	Pass
3249.000	50.78	48.81	-12.18	74.0	54.0	-5.19	Horizontal	Pass
4875.000	55.50	46.30	-6.54	74.0	54.0	-7.70	Horizontal	Pass
8262.250	56.26	45.53	4.22	74.0	54.0	-8.47	Horizontal	Pass
10998.500	60.69	50.27	10.21	74.0	54.0	-3.73	Horizontal	Pass
15164.750	61.54	50.60	10.78	74.0	54.0	-3.40	Horizontal	Pass

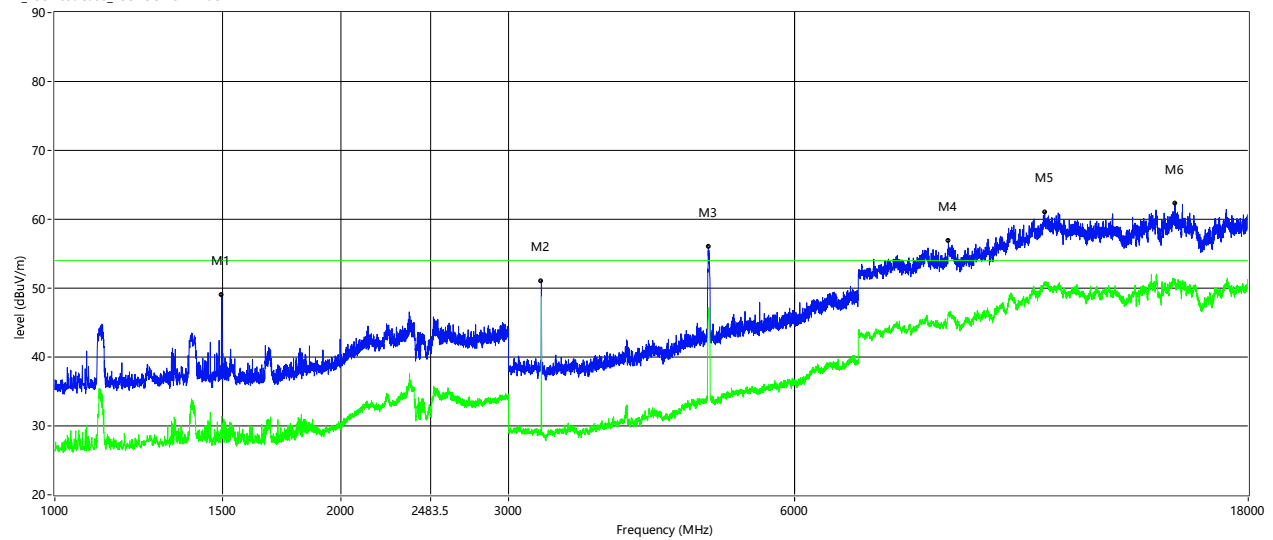
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1498.000	49.00	31.45	-0.56	74.0	54.0	-22.55	Vertical	Pass
3249.000	51.01	48.74	-12.18	74.0	54.0	-5.26	Vertical	Pass
4869.000	55.96	47.09	-6.57	74.0	54.0	-6.91	Vertical	Pass
8707.750	56.87	46.47	5.14	74.0	54.0	-7.53	Vertical	Pass
10993.000	60.94	50.68	10.17	74.0	54.0	-3.32	Vertical	Pass
15074.000	62.31	50.08	10.33	74.0	54.0	-3.92	Vertical	Pass

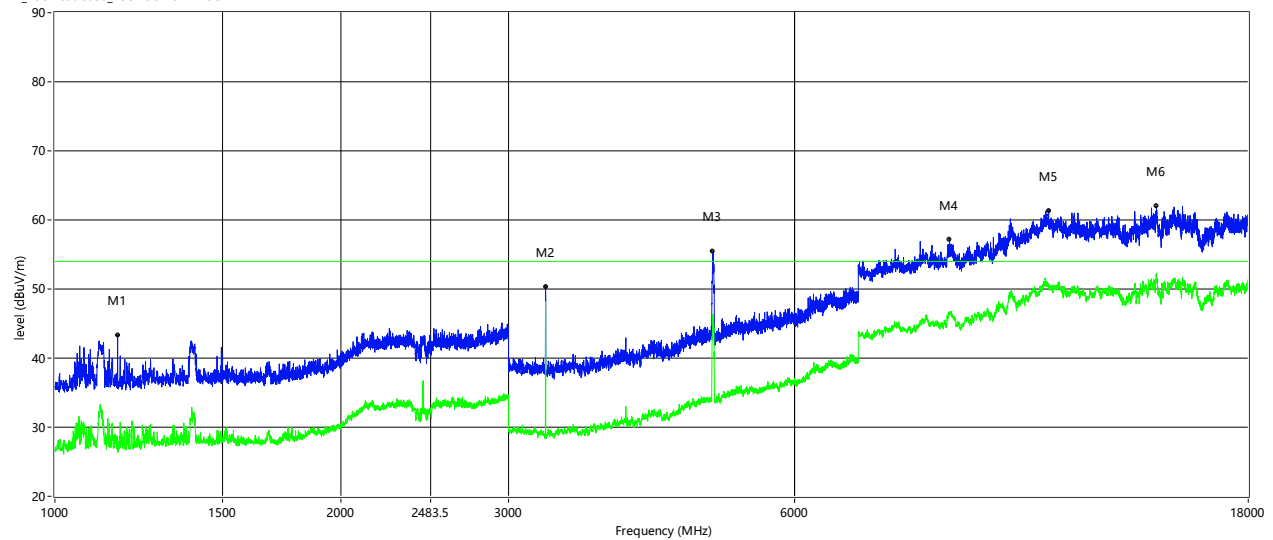
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (11 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1164.000	43.34	28.06	-1.33	74.0	54.0	-25.94	Horizontal	Pass
3282.000	50.35	48.15	-12.22	74.0	54.0	-5.85	Horizontal	Pass
4925.000	55.45	46.39	-6.39	74.0	54.0	-7.61	Horizontal	Pass
8729.750	57.12	46.37	5.07	74.0	54.0	-7.63	Horizontal	Pass
11100.250	61.35	50.44	9.68	74.0	54.0	-3.56	Horizontal	Pass
14411.250	61.93	50.92	11.29	74.0	54.0	-3.08	Horizontal	Pass

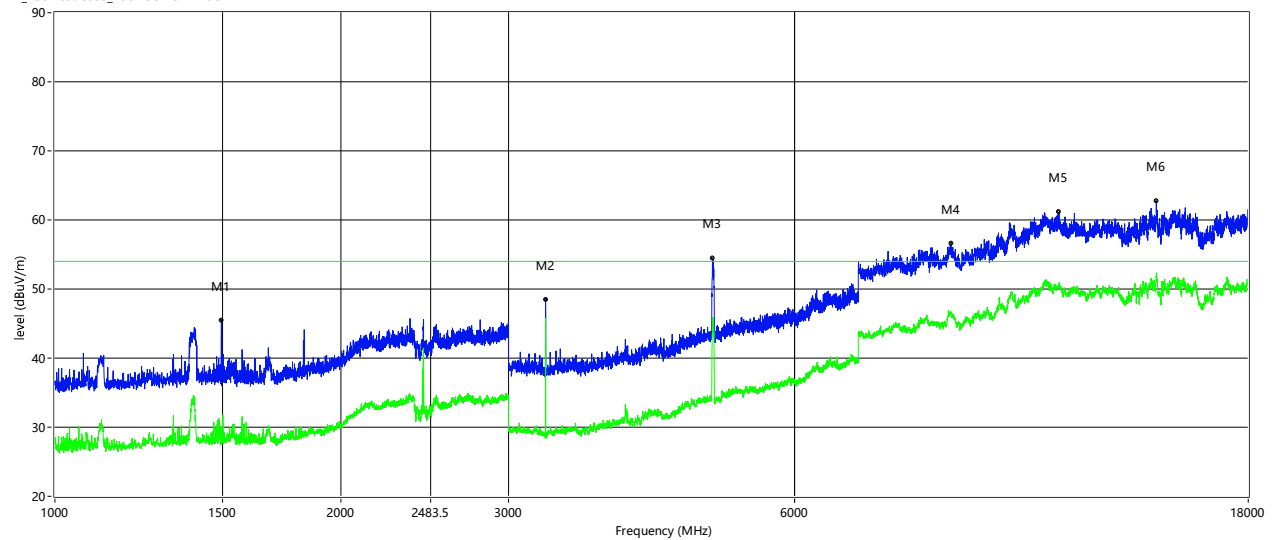
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (11 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1496.500	45.45	30.15	-0.56	74.0	54.0	-23.85	Vertical	Pass
3282.000	48.49	45.75	-12.22	74.0	54.0	-8.25	Vertical	Pass
4919.000	54.36	45.10	-6.39	74.0	54.0	-8.90	Vertical	Pass
8760.001	56.50	46.66	4.97	74.0	54.0	-7.34	Vertical	Pass
11380.750	61.10	50.53	9.70	74.0	54.0	-3.47	Vertical	Pass
14405.750	62.74	50.17	11.36	74.0	54.0	-3.83	Vertical	Pass

Remark:

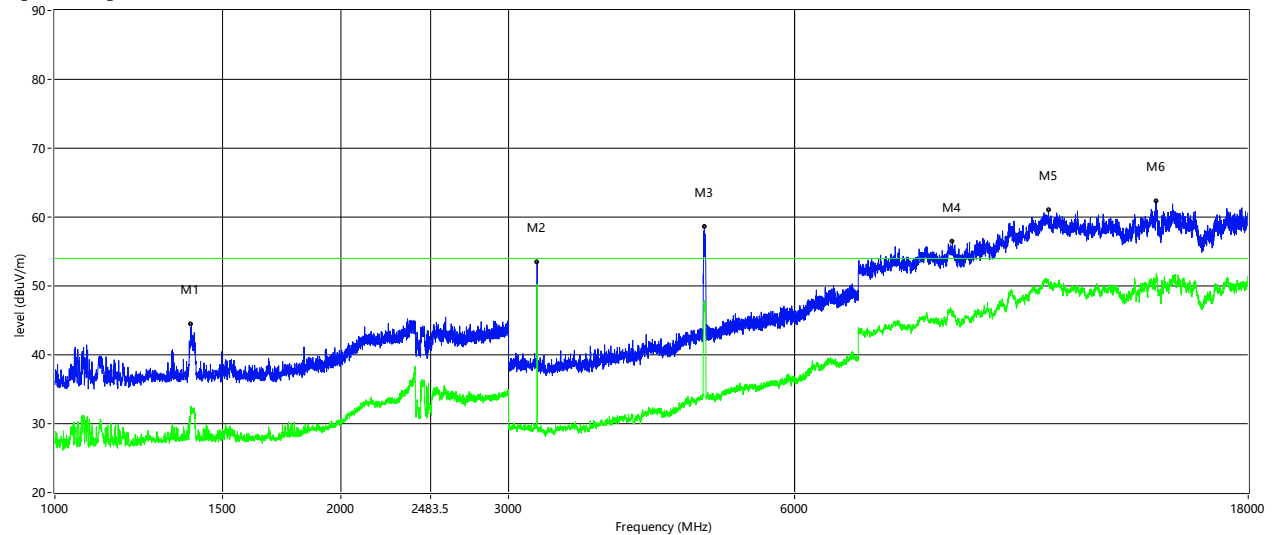
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



802.11 n20 mode

HARMONICS AND SPURIOUS EMISSIONS (01 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1392.000	44.47	32.50	-0.68	74.0	54.0	-21.50	Horizontal	Pass
3215.000	53.45	50.01	-12.14	74.0	54.0	-3.99	Horizontal	Pass
4822.000	58.56	47.81	-6.85	74.0	54.0	-6.19	Horizontal	Pass
8793.000	56.38	46.18	4.87	74.0	54.0	-7.82	Horizontal	Pass
11097.500	60.95	50.28	9.69	74.0	54.0	-3.72	Horizontal	Pass
14408.500	62.34	50.83	11.32	74.0	54.0	-3.17	Horizontal	Pass

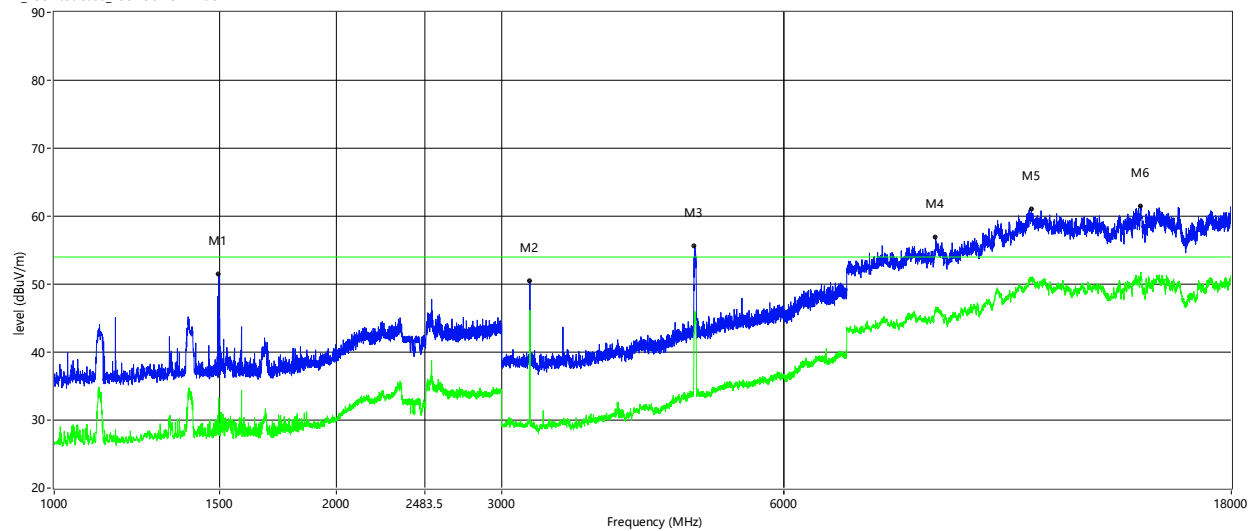
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (01 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1498.000	51.47	33.26	-0.56	74.0	54.0	-20.74	Vertical	Pass
3215.000	50.50	46.03	-12.14	74.0	54.0	-7.97	Vertical	Pass
4818.000	55.64	45.24	-6.87	74.0	54.0	-8.76	Vertical	Pass
8710.500	56.86	46.66	5.13	74.0	54.0	-7.34	Vertical	Pass
11017.750	60.95	50.82	10.12	74.0	54.0	-3.18	Vertical	Pass
14405.750	61.48	50.72	11.36	74.0	54.0	-3.28	Vertical	Pass

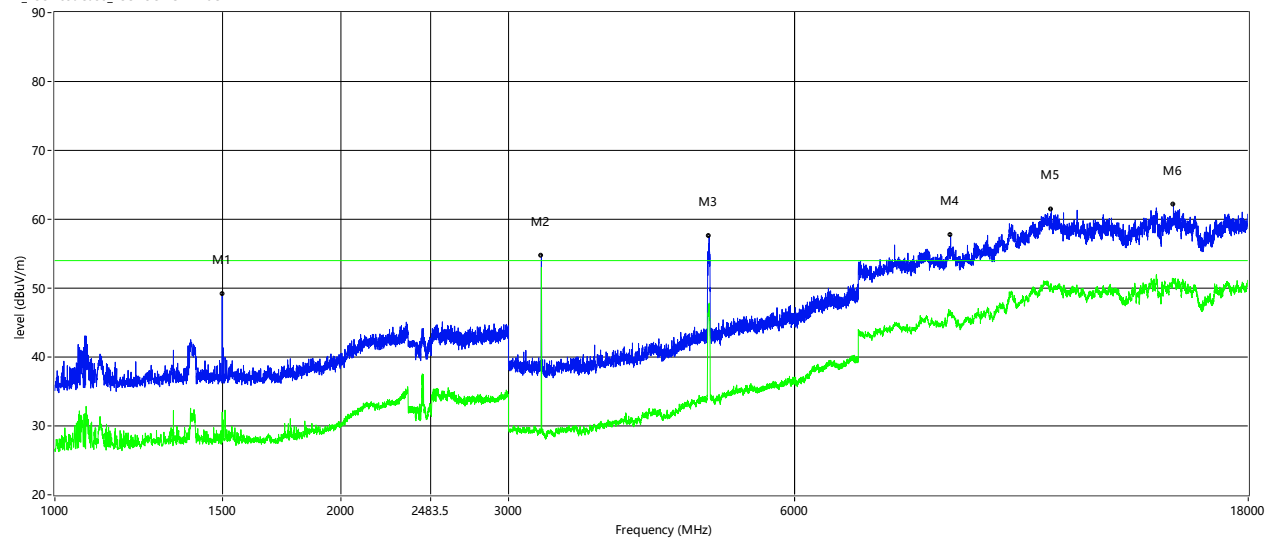
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1499.500	49.11	32.00	-0.56	74.0	54.0	-22.00	Horizontal	Pass
3249.000	54.65	50.98	-12.18	74.0	54.0	-3.02	Horizontal	Pass
4878.000	57.60	47.85	-6.52	74.0	54.0	-6.15	Horizontal	Pass
8754.500	57.71	46.63	4.99	74.0	54.0	-7.37	Horizontal	Pass
11174.500	61.48	50.15	9.62	74.0	54.0	-3.85	Horizontal	Pass
15019.000	62.16	50.93	10.38	74.0	54.0	-3.07	Horizontal	Pass

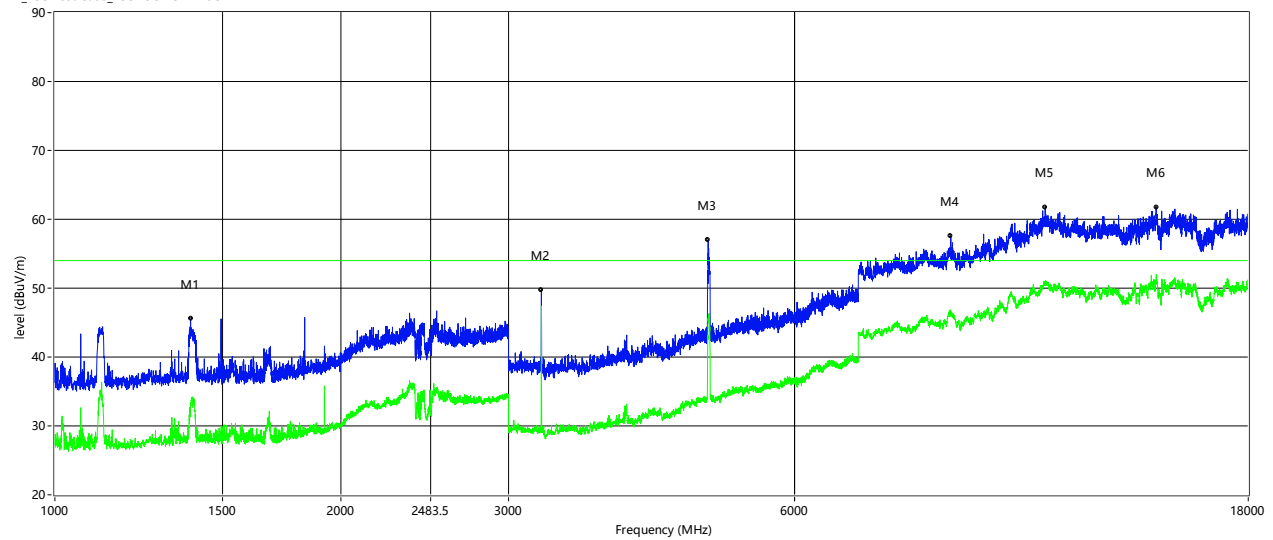
Remark:

- Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
- Margin = Limit - Emission Level
- Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
- Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1389.000	45.51	33.43	-0.69	74.0	54.0	-20.57	Vertical	Pass
3249.000	49.68	47.39	-12.18	74.0	54.0	-6.61	Vertical	Pass
4866.000	57.02	45.70	-6.59	74.0	54.0	-8.30	Vertical	Pass
8757.250	57.58	46.73	4.98	74.0	54.0	-7.27	Vertical	Pass
11006.750	61.66	50.89	10.18	74.0	54.0	-3.11	Vertical	Pass
14400.250	61.70	50.34	11.42	74.0	54.0	-3.66	Vertical	Pass

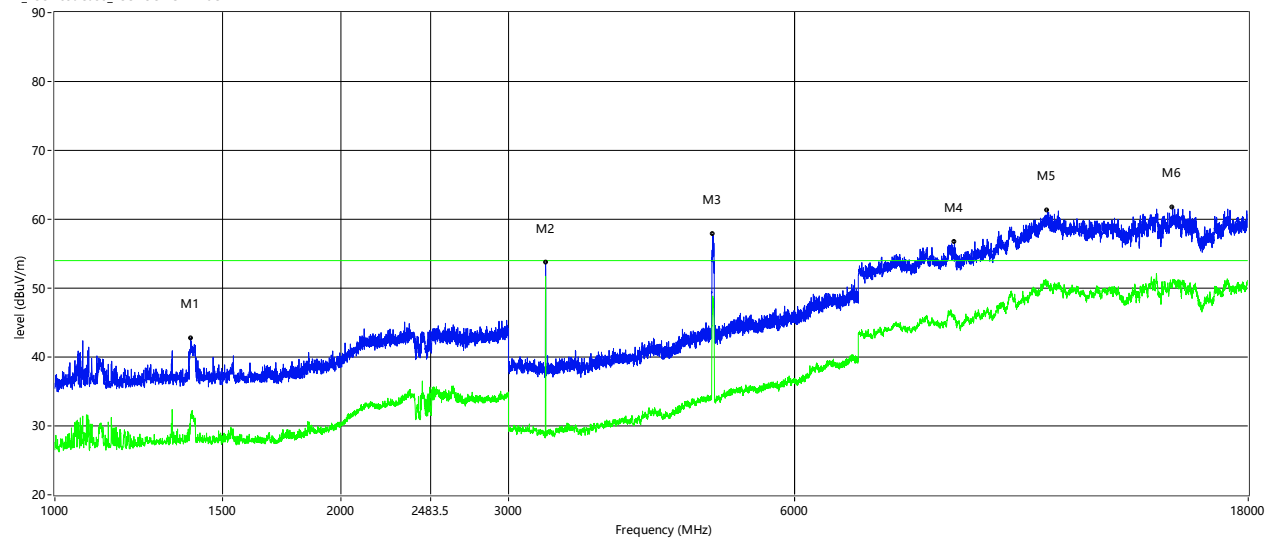
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (11 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1389.500	42.73	31.06	-0.69	74.0	54.0	-22.94	Horizontal	Pass
3282.000	53.66	50.71	-12.22	74.0	54.0	-3.29	Horizontal	Pass
4921.000	57.80	48.85	-6.39	74.0	54.0	-5.15	Horizontal	Pass
8837.000	56.70	45.70	4.62	74.0	54.0	-8.30	Horizontal	Pass
11067.250	61.25	50.51	9.86	74.0	54.0	-3.49	Horizontal	Pass
14988.750	61.76	50.01	10.34	74.0	54.0	-3.99	Horizontal	Pass

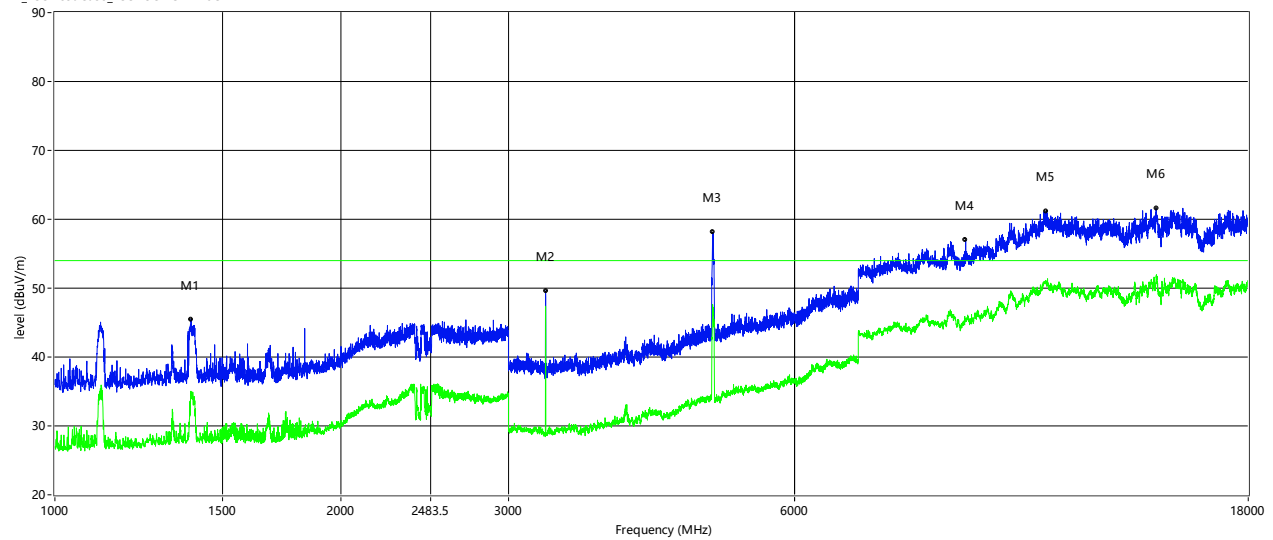
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (11 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1390.500	45.47	33.94	-0.69	74.0	54.0	-20.06	Vertical	Pass
3282.000	49.60	47.37	-12.22	74.0	54.0	-6.63	Vertical	Pass
4922.000	58.11	46.66	-6.39	74.0	54.0	-7.34	Vertical	Pass
9079.000	56.99	45.55	4.70	74.0	54.0	-8.45	Vertical	Pass
11017.750	61.09	50.13	10.12	74.0	54.0	-3.87	Vertical	Pass
14400.250	61.54	50.48	11.42	74.0	54.0	-3.52	Vertical	Pass

Remark:

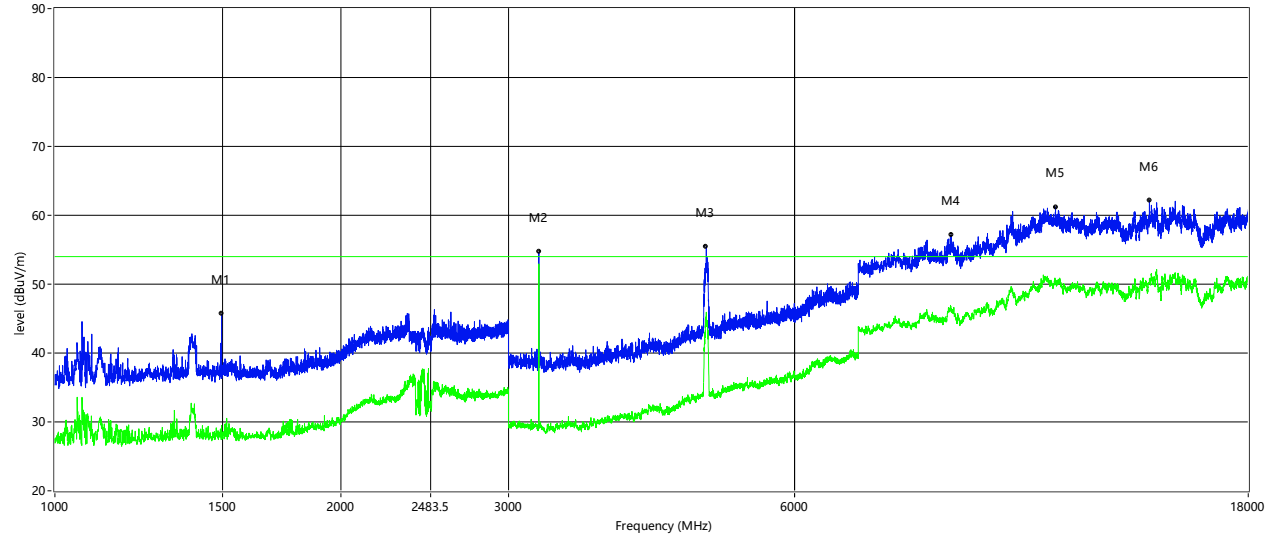
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



802.11 n40 mode

HARMONICS AND SPURIOUS EMISSIONS (03 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1497.500	45.67	29.48	-0.56	74.0	54.0	-24.52	Horizontal	Pass
3229.000	54.65	50.94	-12.15	74.0	54.0	-3.06	Horizontal	Pass
4844.000	55.47	45.93	-6.72	74.0	54.0	-8.07	Horizontal	Pass
8768.250	57.13	46.43	4.95	74.0	54.0	-7.57	Horizontal	Pass
11287.250	61.21	50.56	9.54	74.0	54.0	-3.44	Horizontal	Pass
14169.250	62.13	50.80	11.09	74.0	54.0	-3.20	Horizontal	Pass

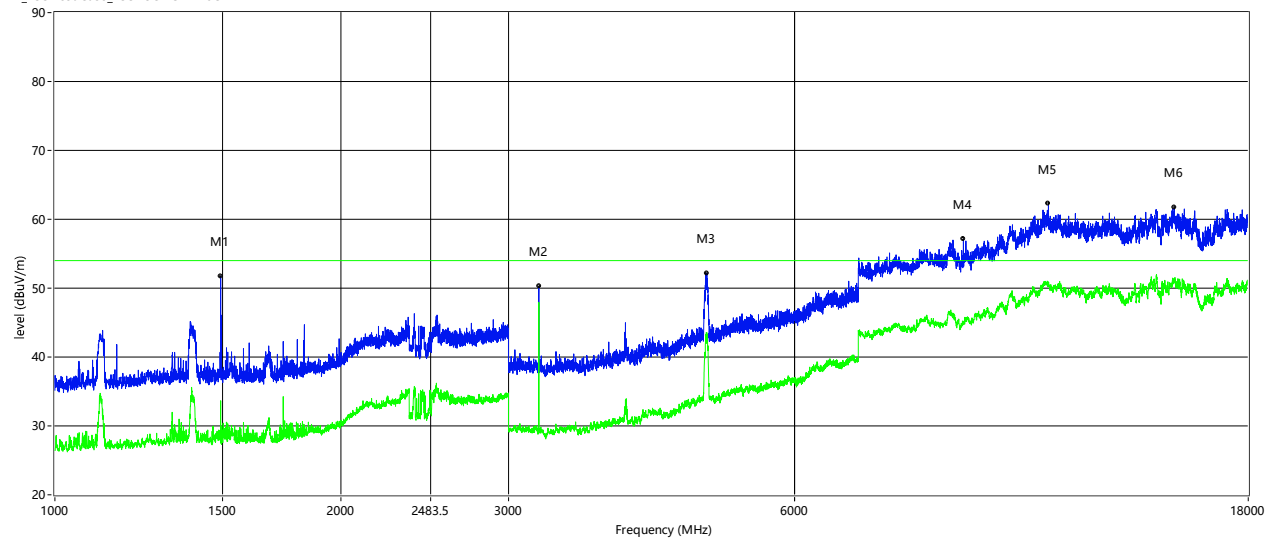
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (03 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1494.000	51.77	33.65	-0.56	74.0	54.0	-20.35	Vertical	Pass
3229.000	50.25	47.92	-12.15	74.0	54.0	-6.08	Vertical	Pass
4851.000	52.19	43.56	-6.68	74.0	54.0	-10.44	Vertical	Pass
9029.500	57.11	45.06	4.42	74.0	54.0	-8.94	Vertical	Pass
11094.750	62.21	50.90	9.71	74.0	54.0	-3.10	Vertical	Pass
15043.750	61.68	50.00	10.36	74.0	54.0	-4.00	Vertical	Pass

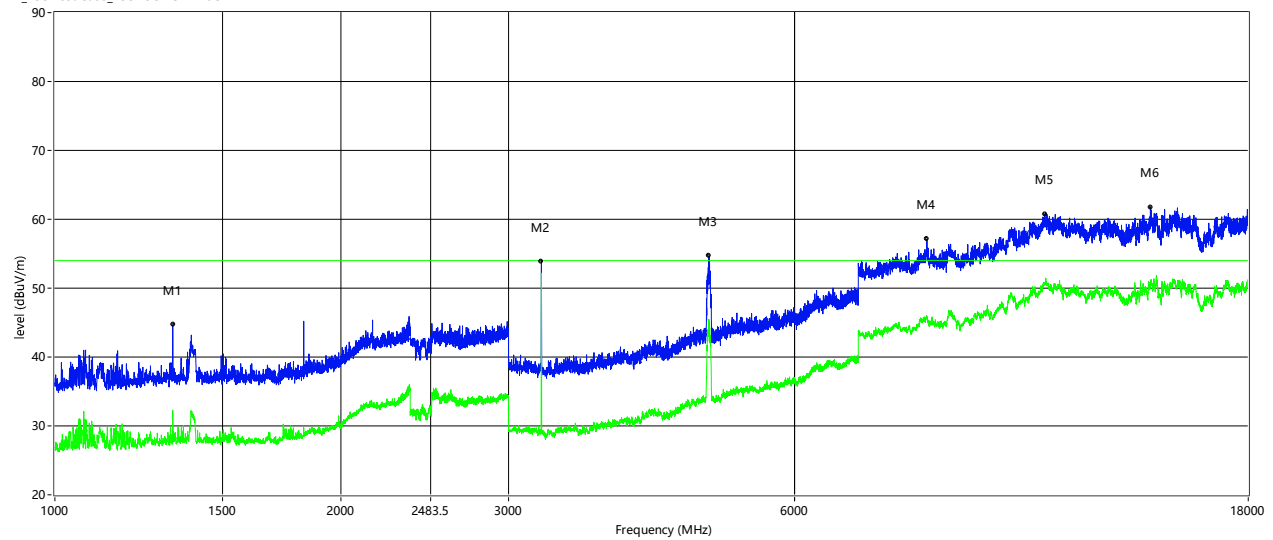
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1330.500	44.66	32.30	-0.85	74.0	54.0	-21.70	Horizontal	Pass
3249.000	53.87	50.18	-12.18	74.0	54.0	-3.82	Horizontal	Pass
4874.000	54.68	45.49	-6.54	74.0	54.0	-8.51	Horizontal	Pass
8265.000	57.09	45.63	4.23	74.0	54.0	-8.37	Horizontal	Pass
10993.000	60.72	50.45	10.17	74.0	54.0	-3.55	Horizontal	Pass
14202.250	61.73	50.20	11.58	74.0	54.0	-3.80	Horizontal	Pass

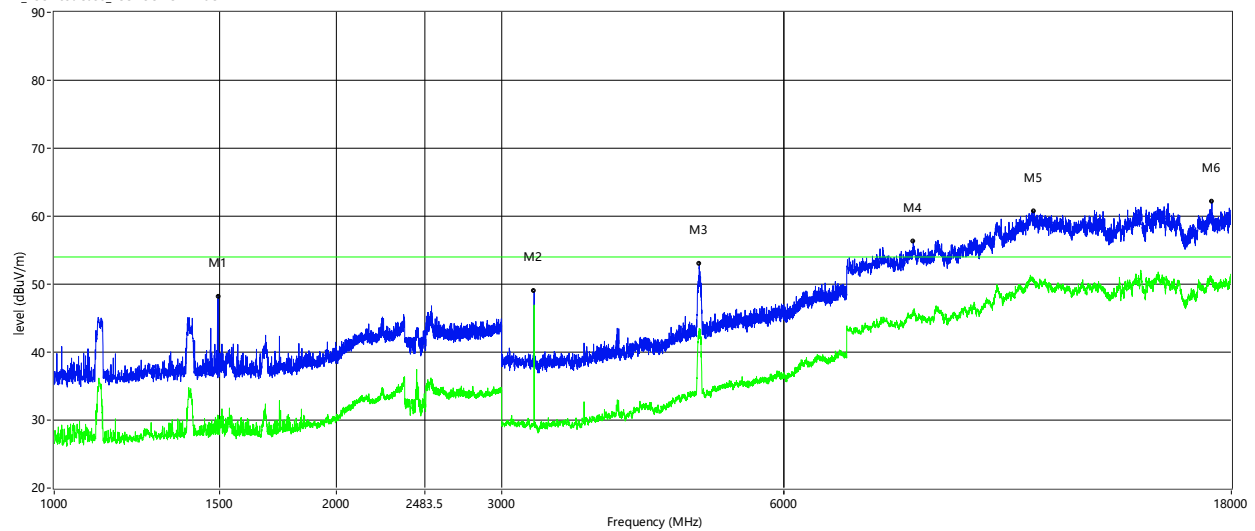
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (06 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1496.000	48.21	30.66	-0.56	74.0	54.0	-23.34	Vertical	Pass
3249.000	49.01	46.94	-12.18	74.0	54.0	-7.06	Vertical	Pass
4873.000	52.97	43.37	-6.55	74.0	54.0	-10.63	Vertical	Pass
8243.000	56.26	45.65	4.22	74.0	54.0	-8.35	Vertical	Pass
11089.250	60.69	50.77	9.74	74.0	54.0	-3.23	Vertical	Pass
17158.500	62.14	50.62	10.15	74.0	54.0	-3.38	Vertical	Pass

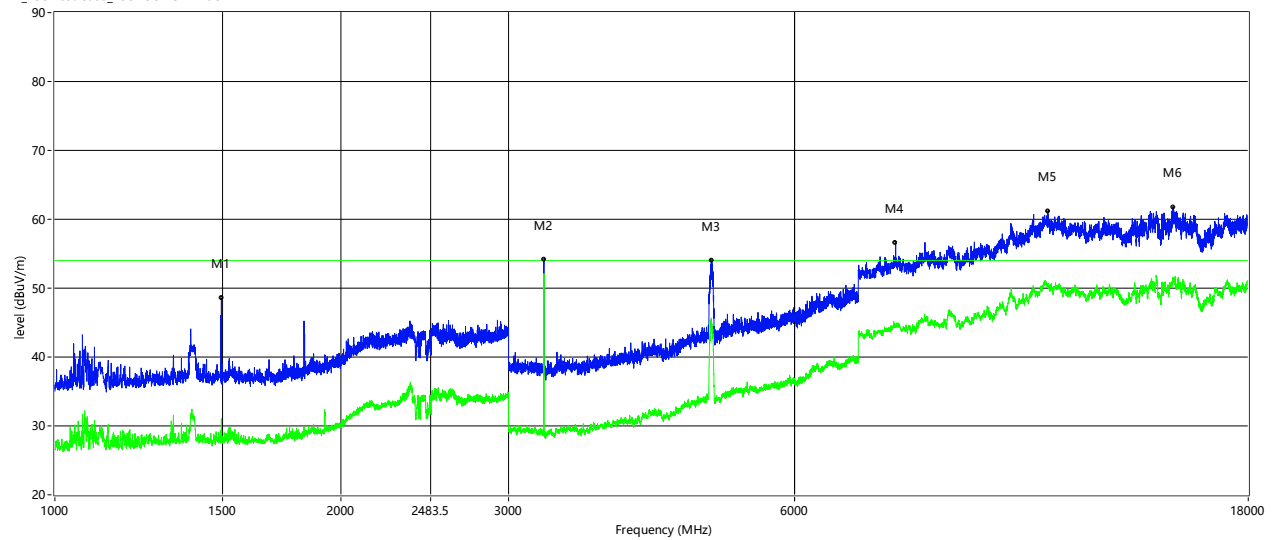
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (09 CHANNEL, HORIZONTAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1496.500	48.52	31.06	-0.56	74.0	54.0	-22.94	Horizontal	Pass
3269.000	54.11	50.13	-12.20	74.0	54.0	-3.87	Horizontal	Pass
4904.000	53.97	45.33	-6.39	74.0	54.0	-8.67	Horizontal	Pass
7662.750	56.51	44.72	3.79	74.0	54.0	-9.28	Horizontal	Pass
11078.250	61.11	50.38	9.80	74.0	54.0	-3.62	Horizontal	Pass
15002.500	61.66	50.24	10.40	74.0	54.0	-3.76	Horizontal	Pass

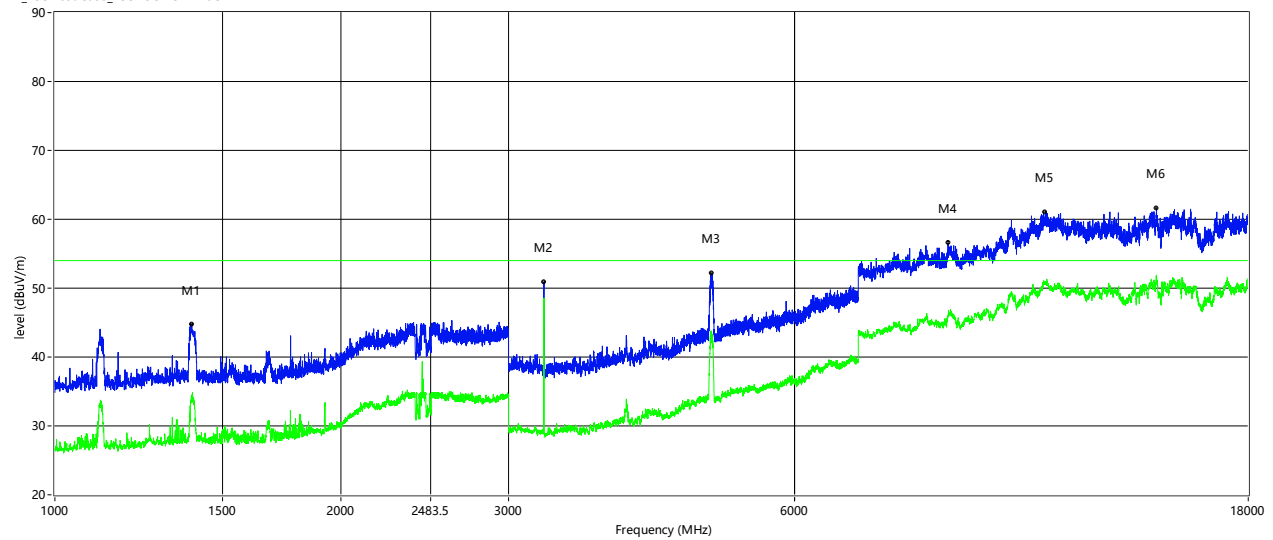
Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
2. Margin = Limit - Emission Level
3. Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
4. Above 18GHz emissions are mainly from the environment noise, not show in report.



HARMONICS AND SPURIOUS EMISSIONS (09 CHANNEL, VERTICAL)

RE_FCC Test Case_FCC 15C 1GHz-18GHz



Frequency (MHz)	Peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	ANT	Verdict
1393.000	44.78	34.53	-0.68	74.0	54.0	-19.47	Vertical	Pass
3269.000	50.89	48.58	-12.20	74.0	54.0	-5.42	Vertical	Pass
4912.000	52.15	42.82	-6.39	74.0	54.0	-11.18	Vertical	Pass
8699.500	56.55	46.01	5.15	74.0	54.0	-7.99	Vertical	Pass
11012.250	61.01	50.67	10.15	74.0	54.0	-3.33	Vertical	Pass
14414.000	61.50	50.67	11.26	74.0	54.0	-3.33	Vertical	Pass

Remark:

- Factor = Antenna Factor + Cable Loss – Pre-amplifier + BRF Factor.
- Margin = Limit - Emission Level
- Tests were performed in three frequency range 1GHz~3GHz, 3GHz~13GHz, 13GHz~18GHz.
- Above 18GHz emissions are mainly from the environment noise, not show in report.



9.4. SPURIOUS EMISSIONS BELOW 30M

Freq.	Reading	Limit	Margin	State	Test Result
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F	
--	--	--	--	--	PASS
--	--	--	--	--	PASS

Note:

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

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

Limit line = specific limits (dBuV) + distance extrapolation factor.

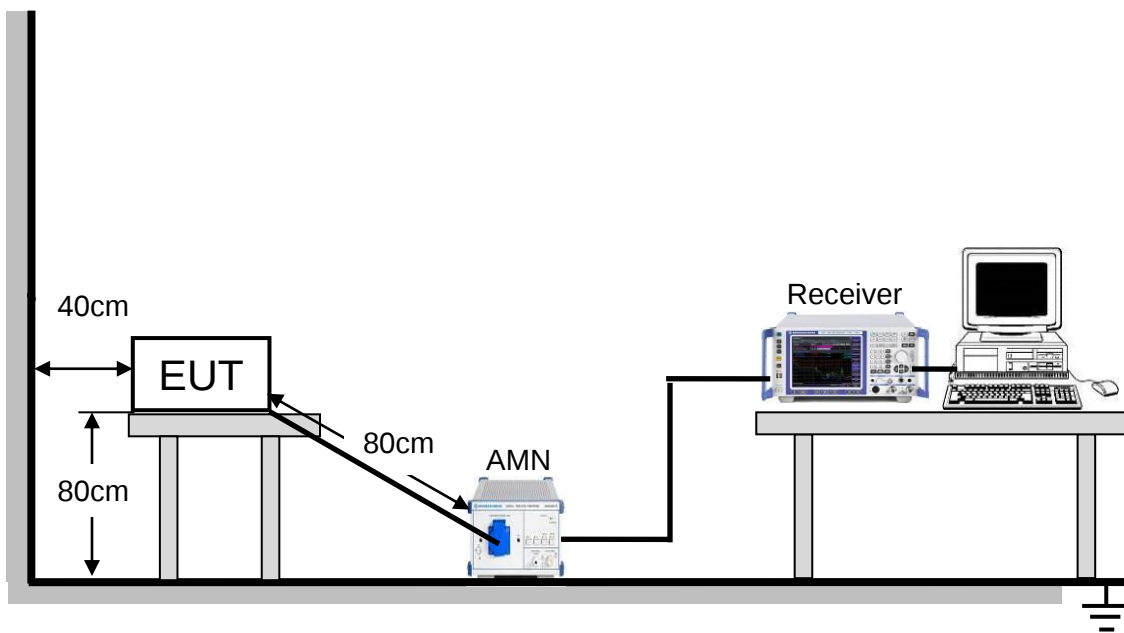
10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

Please refer to FCC §15.207 (a) and RSS-Gen Clause 8.8

FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

TEST SETUP AND PROCEDURE



The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 7 and 13 of ANSI C63.10-2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST ENVIRONMENT

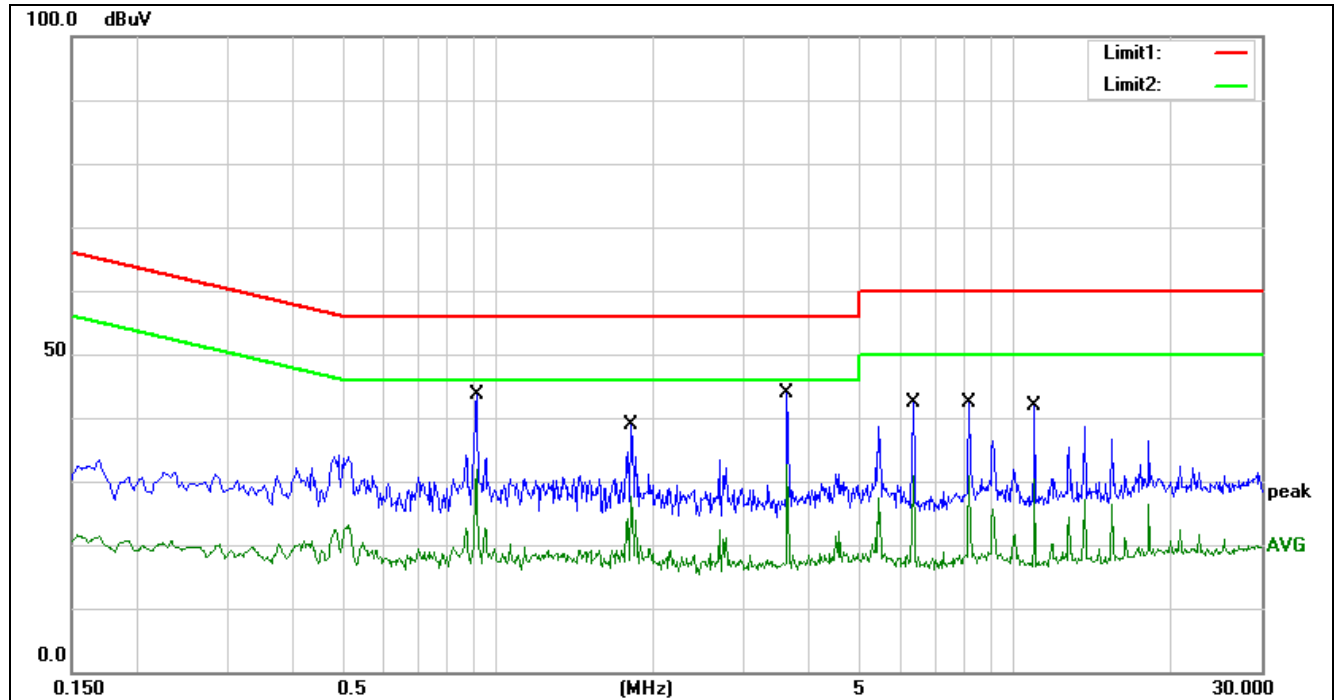
Temperature	25°C	Relative Humidity	60%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V/60Hz



TEST RESULTS

Test Model: WLPSTPR-10

NEUTRAL N RESULTS

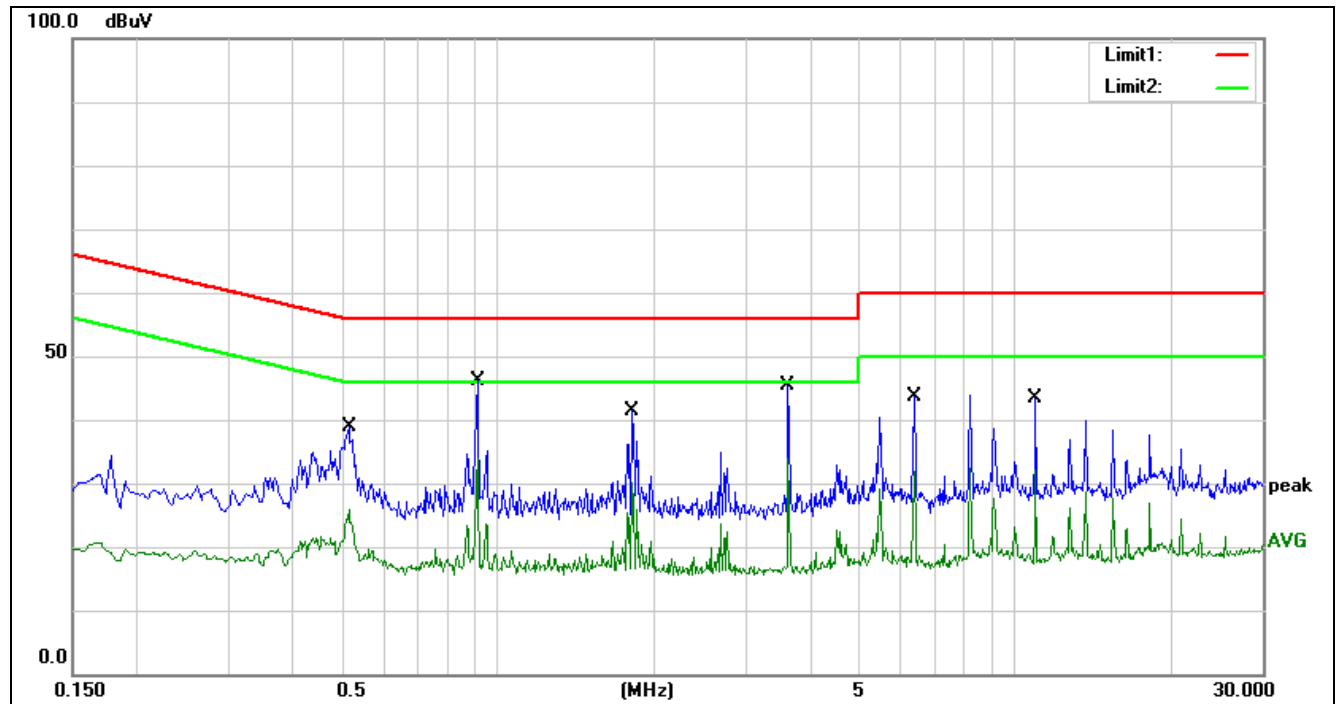


No.	Frequency (MHz)	Reading (dBuV)	Correct dB	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.9100	23.39	20.32	43.71	56.00	-12.29	QP
2	0.9100	11.66	20.32	31.98	46.00	-14.02	AVG
3	1.8180	18.64	20.30	38.94	56.00	-17.06	QP
4	1.8180	7.32	20.30	27.62	46.00	-18.38	AVG
5	3.6380	23.54	20.38	43.92	56.00	-12.08	QP
6	3.6380	12.22	20.38	32.60	46.00	-13.40	AVG
7	6.3620	21.73	20.54	42.27	60.00	-17.73	QP
8	6.3620	10.23	20.54	30.77	50.00	-19.23	AVG
9	8.1820	21.44	20.82	42.26	60.00	-17.74	QP
10	8.1820	9.94	20.82	30.76	50.00	-19.24	AVG
11	10.9100	20.63	21.30	41.93	60.00	-18.07	QP
12	10.9100	9.12	21.30	30.42	50.00	-19.58	AVG

- Note: 1. Result = Reading +Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.



LINE L RESULTS

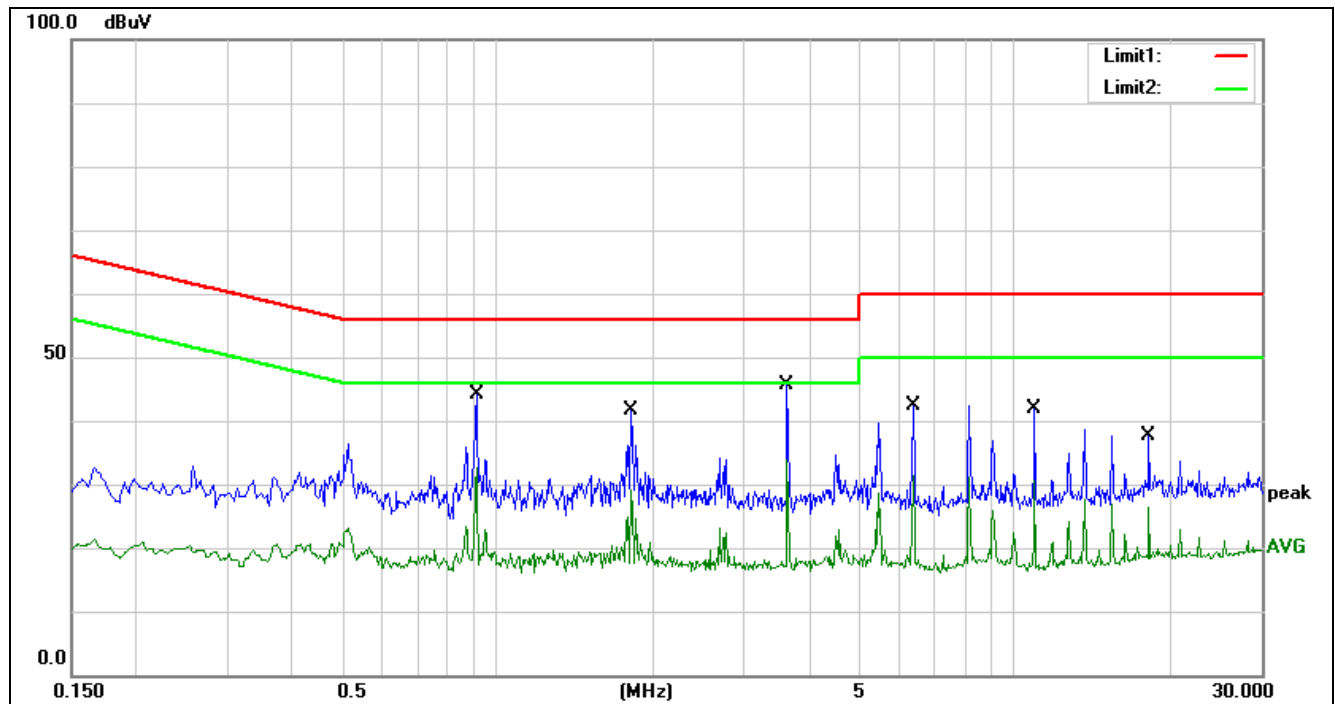


No.	Frequency (MHz)	Reading (dBuV)	Correct dB	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.5140	18.43	20.53	38.96	56.00	-17.04	QP
2	0.5140	5.24	20.53	25.77	46.00	-20.23	AVG
3	0.9100	25.75	20.32	46.07	56.00	-9.93	QP
4	0.9100	13.43	20.32	33.75	46.00	-12.25	AVG
5	1.8180	21.13	20.30	41.43	56.00	-14.57	QP
6	1.8180	9.70	20.30	30.00	46.00	-16.00	AVG
7	3.6380	25.02	20.38	45.40	56.00	-10.60	QP
8	3.6380	13.45	20.38	33.83	46.00	-12.17	AVG
9	6.3620	23.07	20.54	43.61	60.00	-16.39	QP
10	6.3620	11.43	20.54	31.97	50.00	-18.03	AVG
11	10.9100	22.19	21.30	43.49	60.00	-16.51	QP
12	10.9100	10.82	21.30	32.12	50.00	-17.88	AVG

- Note: 1. Result = Reading +Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.



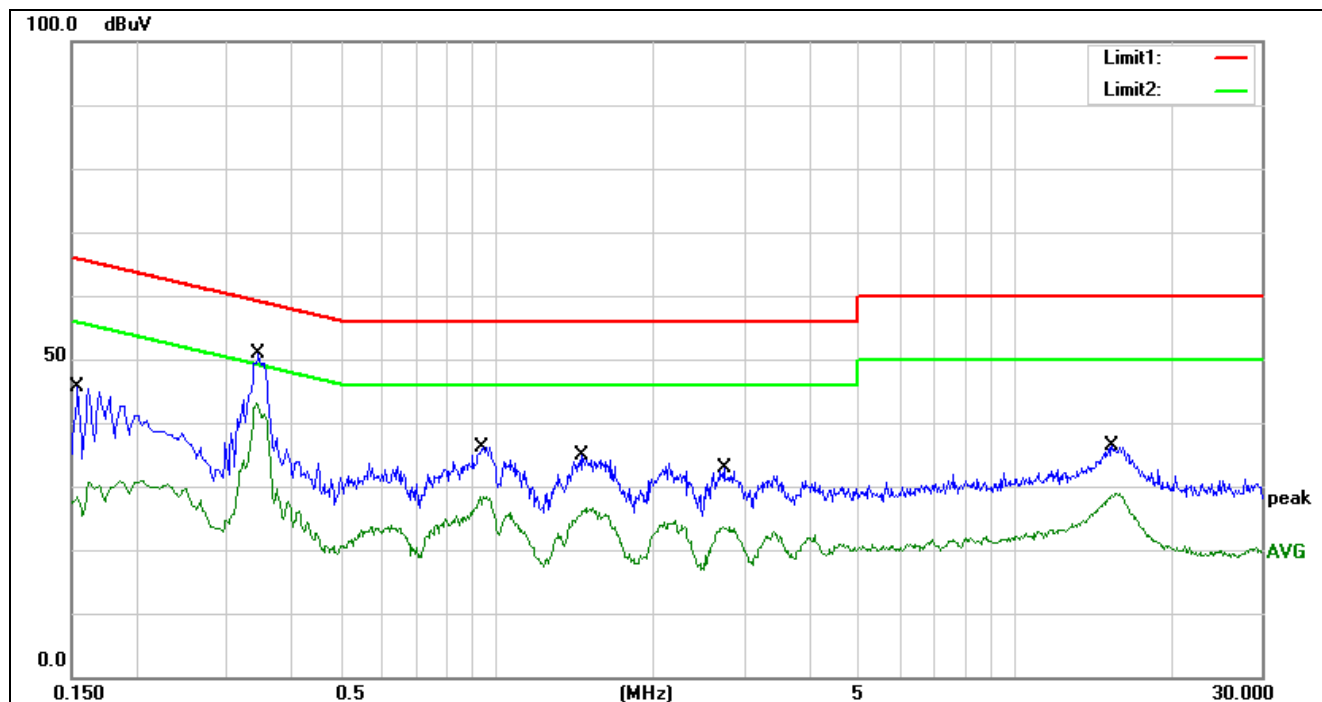
Test Model: WLPSTG-10
NEUTRAL N RESULTS



Note: 1. Result = Reading +Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.



LINE L RESULTS



No.	Frequency (MHz)	Reading (dBuV)	Correct dB	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1540	25.32	20.33	45.65	65.78	-20.13	QP
2	0.1540	10.42	20.33	30.75	55.78	-25.03	AVG
3	0.3420	30.23	20.66	50.89	59.15	-8.26	QP
4	0.3420	22.36	20.66	43.02	49.15	-6.13	AVG
5	0.9420	15.94	20.31	36.25	56.00	-19.75	QP
6	0.9420	8.18	20.31	28.49	46.00	-17.51	AVG
7	1.4620	14.57	20.30	34.87	56.00	-21.13	QP
8	1.4620	6.32	20.30	26.62	46.00	-19.38	AVG
9	2.7500	12.65	20.34	32.99	56.00	-23.01	QP
10	2.7500	3.29	20.34	23.63	46.00	-22.37	AVG
11	15.3940	14.48	21.82	36.30	60.00	-23.70	QP
12	15.3940	7.13	21.82	28.95	50.00	-21.05	AVG

- Note: 1. Result = Reading +Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.



11. ANTENNA REQUIREMENTS

APPLICABLE REQUIREMENTS

Please refer to FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC §15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

ANTENNA CONNECTOR

EUT has a PCB Antenna without antenna connector.

ANTENNA GAIN

The antenna gain of EUT is less than 6 dBi.



Test photos

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

END OF REPORT