

802.11g LOW CHANNEL, CARRIER LEVEL



802.11g LOW CHANNEL, BAND EDGE



802.11g HIGH CHANNEL, CARRIER LEVEL



802.11g HIGH CHANNEL, BAND EDGE



802.11n-20 MHz LOW CHANNEL, CARRIER LEVEL



802.11n-20 MHz LOW CHANNEL, BAND EDGE



802.11n-20 MHz HIGH CHANNEL, CARRIER LEVEL



802.11n-20 MHz HIGH CHANNEL, BAND EDGE



802.11n-40 MHz LOW CHANNEL, CARRIER LEVEL



802.11n-40 MHz LOW CHANNEL, BAND EDGE



802.11n-40 MHz HIGH CHANNEL, CARRIER LEVEL



802.11n-40 MHz HIGH CHANNEL, BAND EDGE



802.11ax-20 MHz(SU) LOW CHANNEL, CARRIER LEVEL



802.11ax-20 MHz(SU) LOW CHANNEL, BAND EDGE



802.11ax-20 MHz(SU) HIGH CHANNEL, CARRIER LEVEL



802.11ax-20 MHz(SU) HIGH CHANNEL, BAND EDGE



802.11ax-40 MHz(SU) LOW CHANNEL, CARRIER LEVEL



802.11ax-40 MHz(SU) LOW CHANNEL, BAND EDGE



802.11ax-40 MHz(SU) HIGH CHANNEL, CARRIER LEVEL



802.11ax-40 MHz(SU) HIGH CHANNEL, BAND EDGE



A.5 Conducted Emission

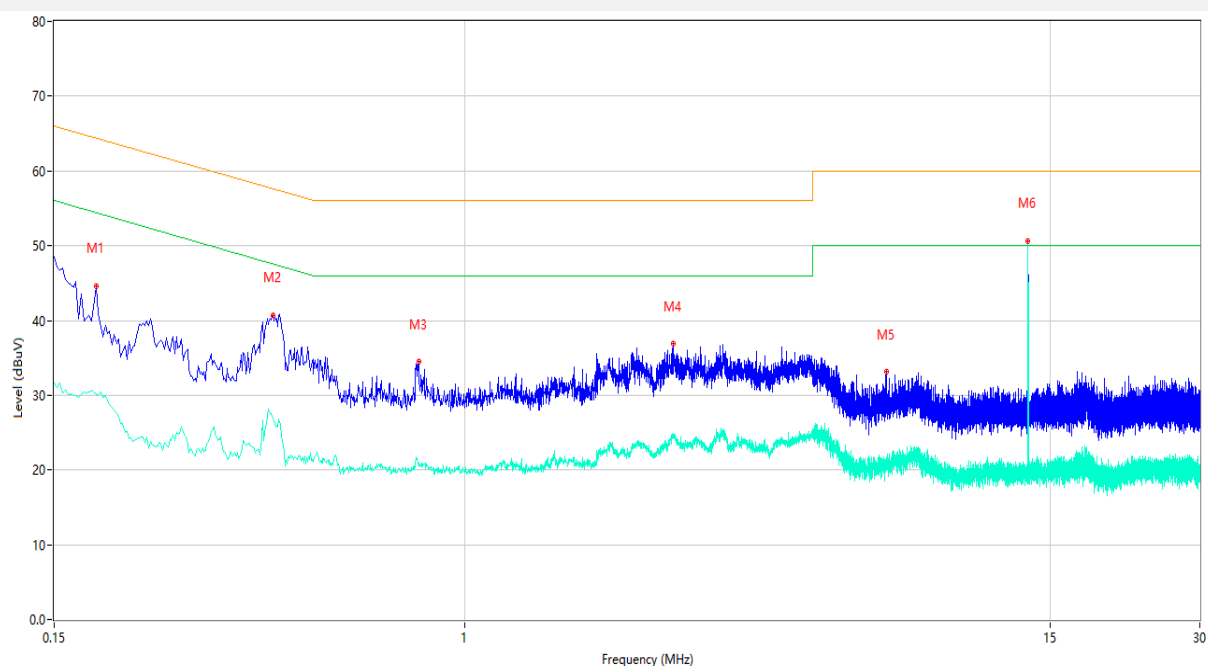
Note 1: The EUT is working in the Normal link mode. All modes have been tested and normal link mode is worst.

Note 2: Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 60 Hz and 240 VAC, 50 Hz) for which the device is capable of operation. So, The configuration 120 VAC, 60 Hz and 240 VAC, 50 Hz were tested respectively, but only the worst configuration (120 VAC, 60 Hz) shown here.

Note 3: Results (dBuV) = Original reading level of Spectrum Analyzer (dBuV) + Factor (dB)

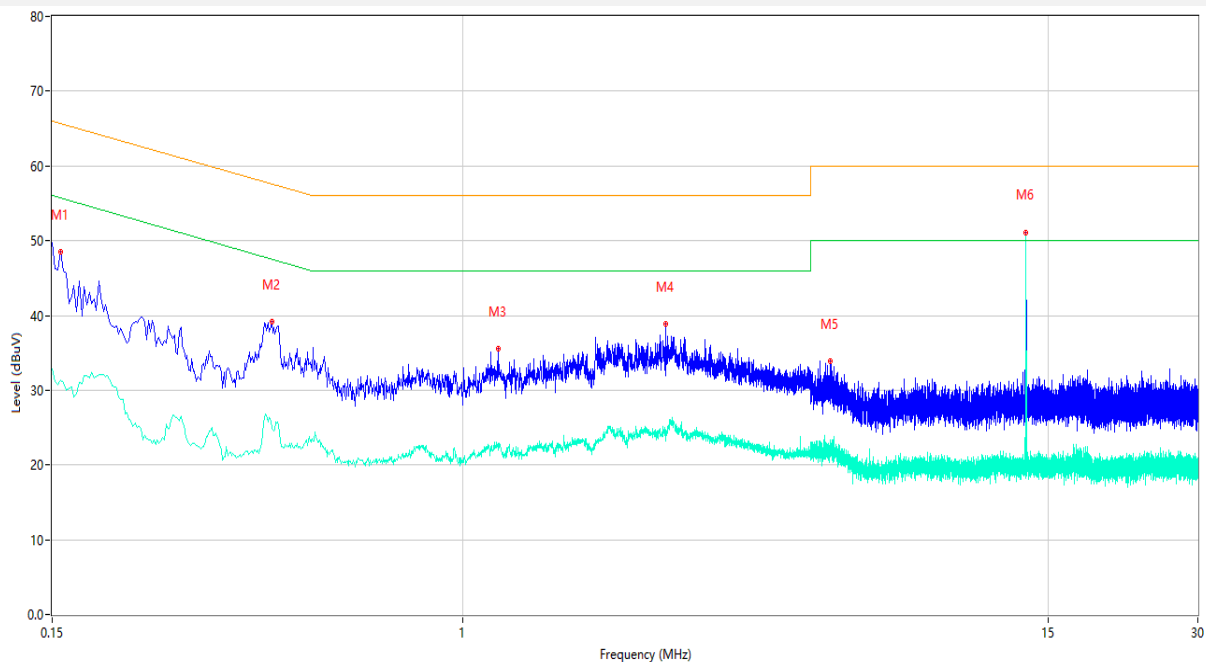
Test Data and Plots

PHASE L



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin(dB)	Detector	Line	Verdict
1	0.182	44.60	9.75	64.39	19.79	Peak	L	Pass
1**	0.182	30.15	9.75	54.39	24.24	AV	L	Pass
2	0.412	40.74	9.74	57.61	16.87	Peak	L	Pass
2**	0.412	26.84	9.74	47.61	20.77	AV	L	Pass
3	0.810	34.53	9.71	56.00	21.47	Peak	L	Pass
3**	0.810	20.97	9.71	46.00	25.03	AV	L	Pass
4	2.624	36.94	9.67	56.00	19.06	Peak	L	Pass
4**	2.624	24.70	9.67	46.00	21.30	AV	L	Pass
5	7.030	33.10	9.58	60.00	26.90	Peak	L	Pass
5**	7.030	21.59	9.58	50.00	28.41	AV	L	Pass
6	13.560	50.69	9.32	60.00	9.31	Peak	L	N/A
6**	13.560	49.99	9.32	50.00	0.01	AV	L	N/A

PHASE N



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Margin(dB)	Detector	Line	Verdict
1	0.156	48.53	9.70	65.67	17.14	Peak	N	Pass
1**	0.156	31.33	9.70	55.67	24.34	AV	N	Pass
2	0.414	39.18	9.78	57.57	18.39	Peak	N	Pass
2**	0.414	25.08	9.78	47.57	22.49	AV	N	Pass
3	1.178	35.53	9.87	56.00	20.47	Peak	N	Pass
3**	1.178	22.95	9.87	46.00	23.05	AV	N	Pass
4	2.558	38.85	9.85	56.00	17.15	Peak	N	Pass
4**	2.558	24.21	9.85	46.00	21.79	AV	N	Pass
5	5.492	33.96	9.81	60.00	26.04	Peak	N	Pass
5**	5.492	21.61	9.81	50.00	28.39	AV	N	Pass
6	13.560	51.14	9.58	60.00	8.86	Peak	N	N/A
6**	13.560	50.69	9.58	50.00	-0.69	AV	N	N/A

A.6 Radiated Emission

Note 1: The symbol of "--" in the table which means not application.

Note 2: For the test data above 1 GHz, According the ANSI C63.10-2013, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

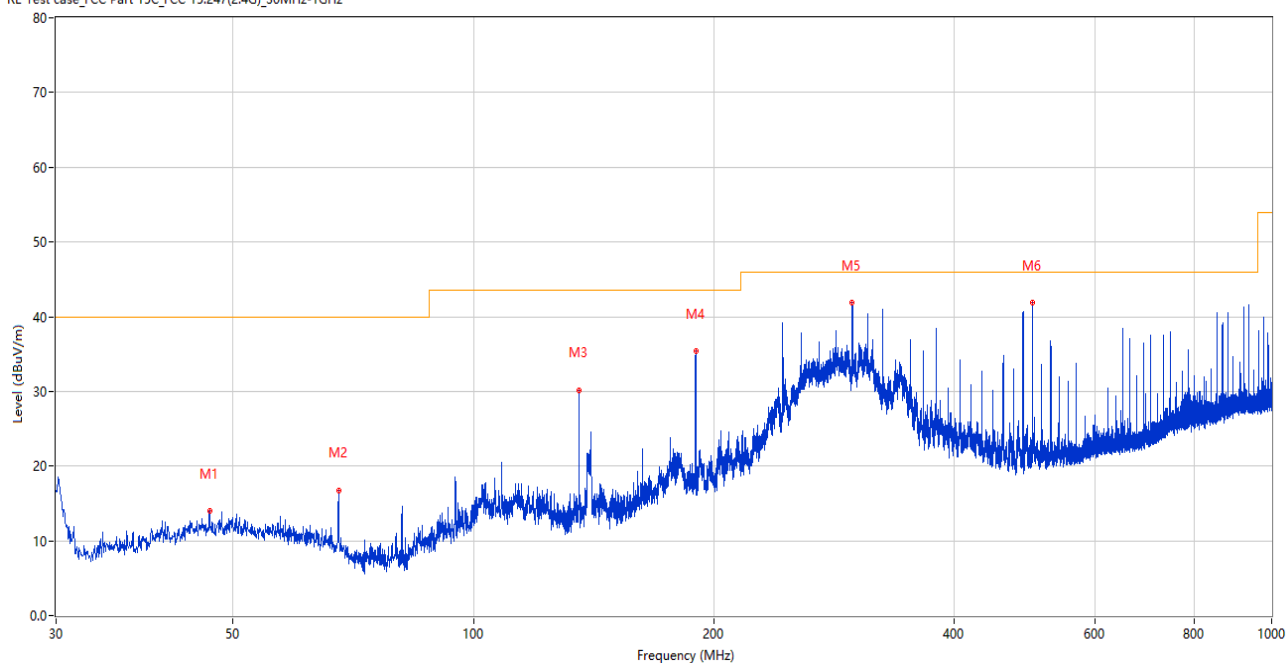
Note 3: The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

Note 4: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and normal link mode is worst.

Test Data and Plots

30 MHz to 1 GHz, ANT H

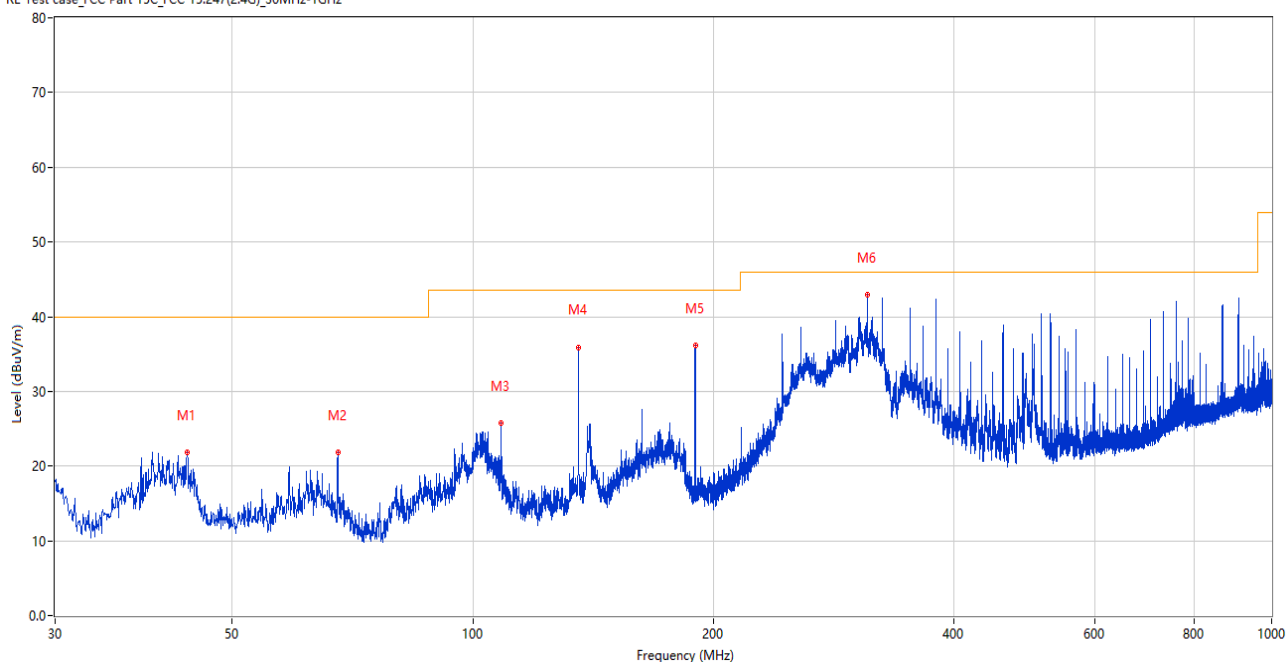
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	46.733	14.04	-24.54	40.0	25.96	Peak	0.00	200	Horizontal	Pass
2	67.830	16.80	-28.26	40.0	23.20	Peak	173.00	200	Horizontal	Pass
3	135.633	30.19	-29.33	43.5	13.31	Peak	253.00	200	Horizontal	Pass
4	189.856	35.35	-26.43	43.5	8.15	Peak	246.00	200	Horizontal	Pass
5	298.350	41.89	-23.23	46.0	4.11	Peak	89.00	100	Horizontal	Pass
6	501.759	41.82	-17.98	46.0	4.18	Peak	119.00	200	Horizontal	Pass

30 MHz to 1 GHz, ANT V

RE Test case_FCC Part 15C_FCC 15.247(2.4G)_30MHz-1GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	43.919	21.85	-24.92	40.0	18.15	Peak	29.00	100	Vertical	Pass
2	67.879	21.81	-28.27	40.0	18.19	Peak	297.00	100	Vertical	Pass
3	108.473	25.80	-26.52	43.5	17.70	Peak	236.00	100	Vertical	Pass
4	135.633	35.92	-29.33	43.5	7.58	Peak	212.00	100	Vertical	Pass
5	189.856	36.12	-26.43	43.5	7.38	Peak	0.00	100	Vertical	Pass
6	311.930	41.28	-23.11	46.0	4.72	Peak	145.00	100	Vertical	Pass

Note 1: The marked spikes near 2400 MHz with circle should be ignored because they are Fundamental signal.

Note 2: The spurious above 18G is noise only, do not show on the report.

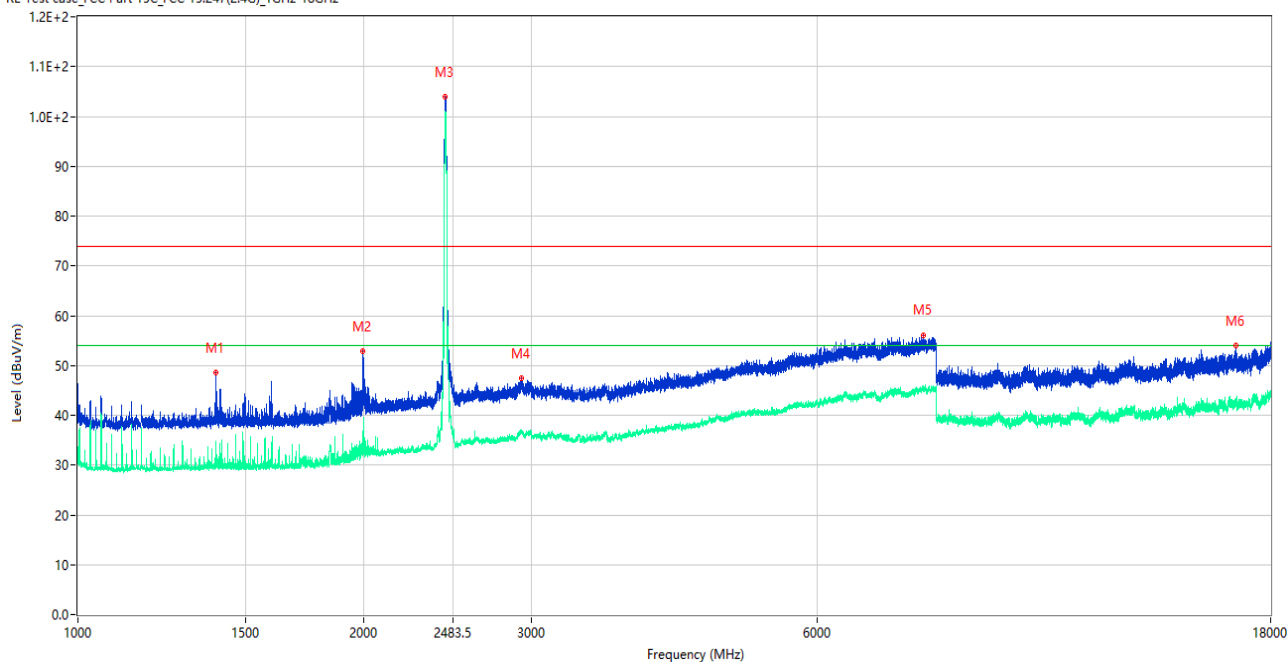
Note 3: All antenna were pre tested, but only the worst case has been reported in this report.

Note 4: All the configurations were pre tested, only the worst configuration has been reported in this report.

Main Antenna:

1 GHz to 18 GHz, ANT H 802.11b Low Channel

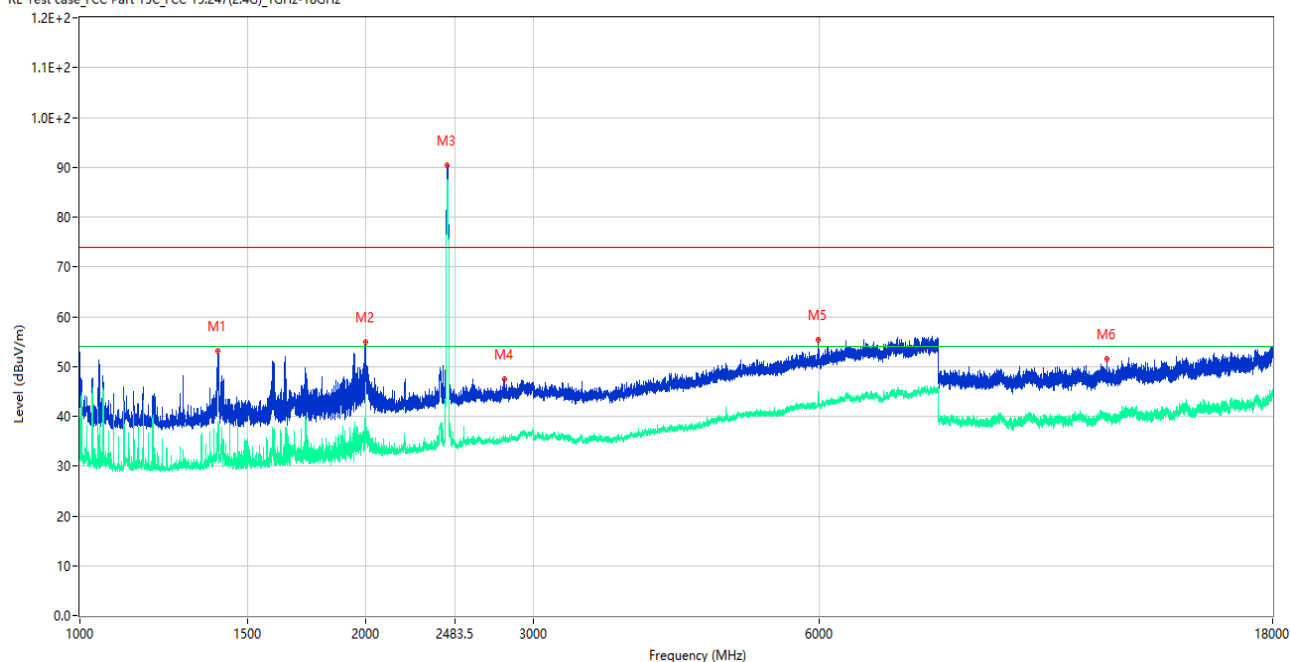
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1397.500	48.52	-15.06	74.0	25.48	Peak	225.00	150	Horizontal	Pass
1**	1397.500	32.48	-15.06	54.0	21.52	AV	225.00	150	Horizontal	Pass
2	1995.750	52.92	-13.31	74.0	21.08	Peak	296.00	150	Horizontal	Pass
2**	1995.750	32.24	-13.31	54.0	21.76	AV	296.00	150	Horizontal	Pass
3	2435.750	103.95	-11.28	74.0	-29.95	Peak	139.00	150	Horizontal	N/A
3**	2435.750	100.91	-11.28	54.0	-46.91	AV	139.00	150	Horizontal	N/A
4	2929.500	47.54	-6.73	74.0	26.46	Peak	356.00	150	Horizontal	Pass
4**	2929.500	36.42	-6.73	54.0	17.58	AV	356.00	150	Horizontal	Pass
5	7750.500	56.10	3.63	74.0	17.90	Peak	319.00	150	Horizontal	Pass
5**	7750.500	45.45	3.63	54.0	8.55	AV	319.00	150	Horizontal	Pass
6	16544.500	54.00	1.88	74.0	20.00	Peak	353.00	150	Horizontal	Pass
6**	16544.500	42.90	1.88	54.0	11.10	AV	353.00	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11b Low Channel

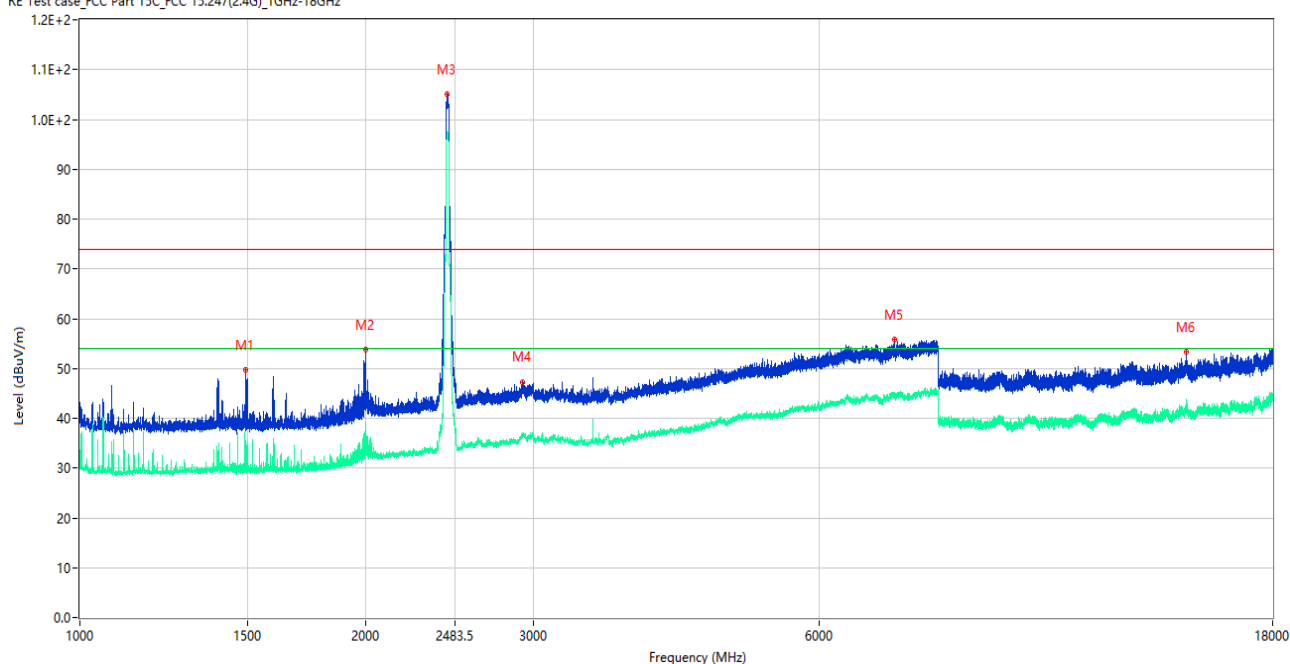
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1396.500	53.05	-15.07	74.0	20.95	Peak	323.00	150	Vertical	Pass
1**	1396.500	34.95	-15.07	54.0	19.05	AV	323.00	150	Vertical	Pass
2	1996.750	54.86	-13.26	74.0	19.14	Peak	156.00	150	Vertical	Pass
2**	1996.750	39.43	-13.26	54.0	14.57	AV	156.00	150	Vertical	Pass
3	2435.750	90.43	-11.28	74.0	-16.43	Peak	277.00	150	Vertical	N/A
3**	2435.750	87.35	-11.28	54.0	-33.35	AV	277.00	150	Vertical	N/A
4	2795.750	47.44	-8.68	74.0	26.56	Peak	338.00	150	Vertical	Pass
4**	2795.750	35.34	-8.68	54.0	18.66	AV	338.00	150	Vertical	Pass
5	5990.000	55.43	1.49	74.0	18.57	Peak	219.00	150	Vertical	Pass
5**	5990.000	43.14	1.49	54.0	10.86	AV	219.00	150	Vertical	Pass
6	12054.000	51.53	-1.09	74.0	22.47	Peak	261.00	150	Vertical	Pass
6**	12054.000	39.88	-1.09	54.0	14.12	AV	261.00	150	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11g Low Channel

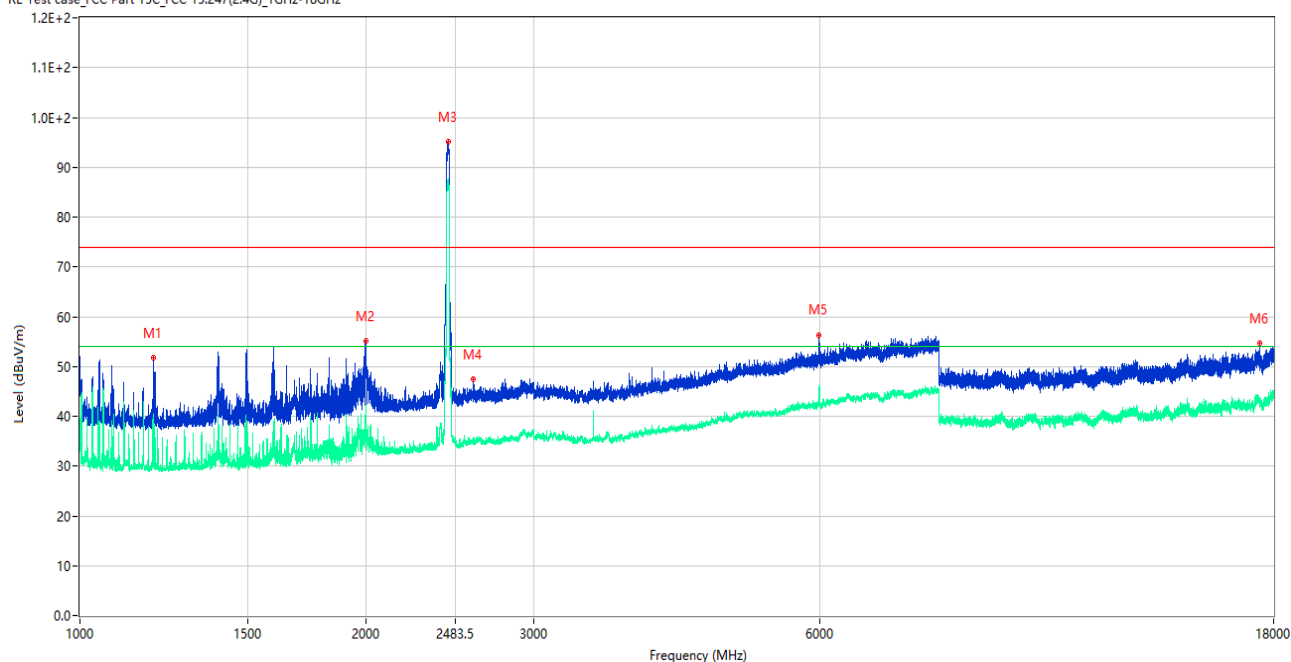
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1495.750	49.66	-15.18	74.0	24.34	Peak	329.00	150	Horizontal	Pass
1**	1495.750	30.29	-15.18	54.0	23.71	AV	329.00	150	Horizontal	Pass
2	1999.250	53.78	-13.13	74.0	20.22	Peak	324.00	150	Horizontal	Pass
2**	1999.250	36.48	-13.13	54.0	17.52	AV	324.00	150	Horizontal	Pass
3	2435.750	105.15	-11.28	74.0	-31.15	Peak	154.00	150	Horizontal	N/A
3**	2435.750	97.60	-11.28	54.0	-43.60	AV	154.00	150	Horizontal	N/A
4	2925.250	47.34	-6.94	74.0	26.66	Peak	360.00	150	Horizontal	Pass
4**	2925.250	36.47	-6.94	54.0	17.53	AV	360.00	150	Horizontal	Pass
5	7200.000	55.79	2.57	74.0	18.21	Peak	318.00	150	Horizontal	Pass
5**	7200.000	44.73	2.57	54.0	9.27	AV	318.00	150	Horizontal	Pass
6	14596.000	53.29	1.24	74.0	20.71	Peak	1.00	150	Horizontal	Pass
6**	14596.000	43.11	1.24	54.0	10.89	AV	1.00	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11g Low Channel

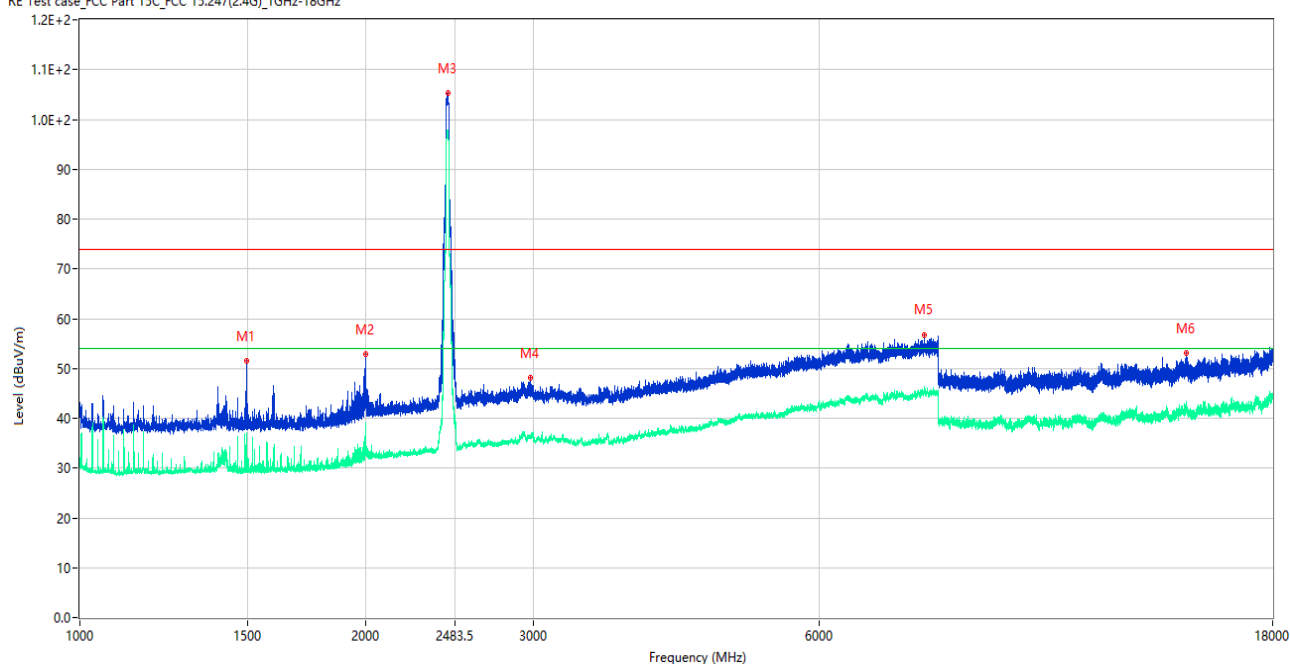
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1196.000	51.73	-14.81	74.0	22.27	Peak	325.00	150	Vertical	Pass
1**	1196.000	35.23	-14.81	54.0	18.77	AV	325.00	150	Vertical	Pass
2	1996.500	55.14	-13.27	74.0	18.86	Peak	160.00	150	Vertical	Pass
2**	1996.500	38.46	-13.27	54.0	15.54	AV	160.00	150	Vertical	Pass
3	2438.750	95.20	-11.32	74.0	-21.20	Peak	280.00	150	Vertical	N/A
3**	2438.750	87.40	-11.32	54.0	-33.40	AV	280.00	150	Vertical	N/A
4	2591.750	47.37	-9.89	74.0	26.63	Peak	228.00	150	Vertical	Pass
4**	2591.750	34.58	-9.89	54.0	19.42	AV	228.00	150	Vertical	Pass
5	5990.500	56.38	1.47	74.0	17.62	Peak	248.00	150	Vertical	Pass
5**	5990.500	45.53	1.47	54.0	8.47	AV	248.00	150	Vertical	Pass
6	17408.000	54.60	3.83	74.0	19.40	Peak	217.00	150	Vertical	Pass
6**	17408.000	43.03	3.83	54.0	10.97	AV	217.00	150	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11n20 Low Channel

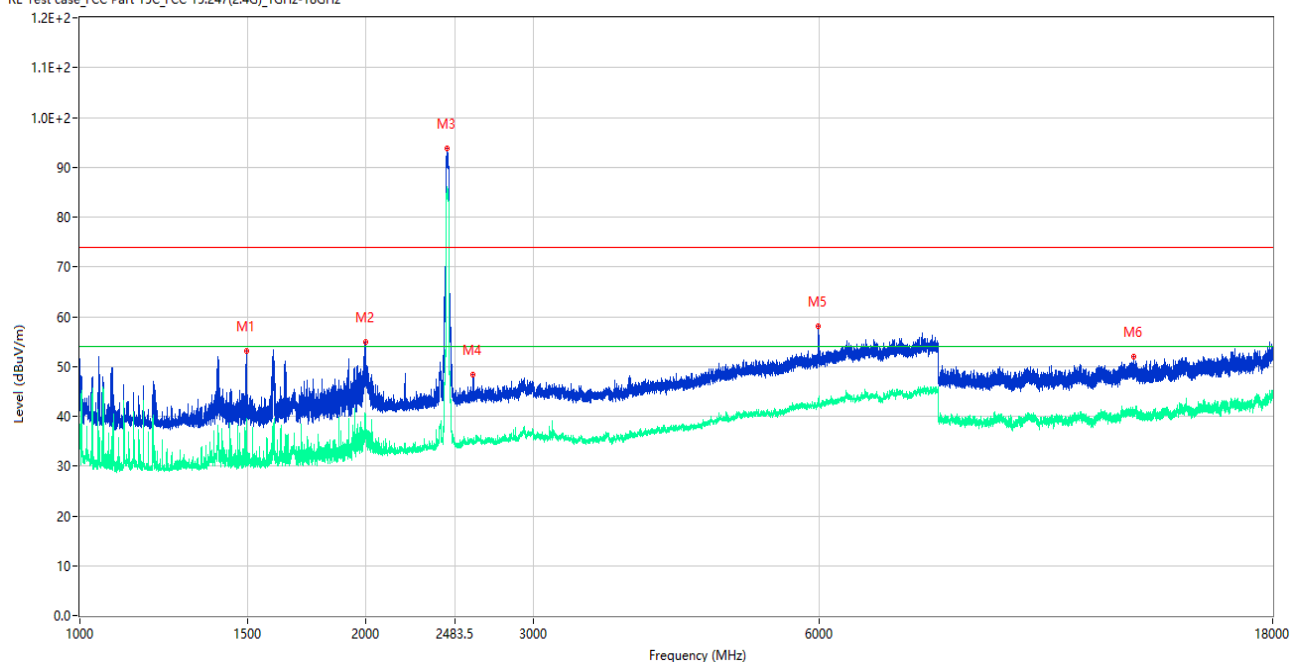
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1497.250	51.55	-15.16	74.0	22.45	Peak	227.00	150	Horizontal	Pass
1**	1497.250	29.45	-15.16	54.0	24.55	AV	227.00	150	Horizontal	Pass
2	1998.750	52.95	-13.16	74.0	21.05	Peak	325.00	150	Horizontal	Pass
2**	1998.750	35.52	-13.16	54.0	18.48	AV	325.00	150	Horizontal	Pass
3	2438.250	105.20	-11.32	74.0	-31.20	Peak	128.00	150	Horizontal	N/A
3**	2438.250	97.75	-11.32	54.0	-43.75	AV	128.00	150	Horizontal	N/A
4	2978.500	48.04	-7.72	74.0	25.96	Peak	0.00	150	Horizontal	Pass
4**	2978.500	36.05	-7.72	54.0	17.95	AV	0.00	150	Horizontal	Pass
5	7736.000	56.82	3.25	74.0	17.18	Peak	348.00	150	Horizontal	Pass
5**	7736.000	45.33	3.25	54.0	8.67	AV	348.00	150	Horizontal	Pass
6	14595.000	53.02	1.12	74.0	20.98	Peak	39.00	150	Horizontal	Pass
6**	14595.000	43.09	1.12	54.0	10.91	AV	39.00	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11n20 Low Channel

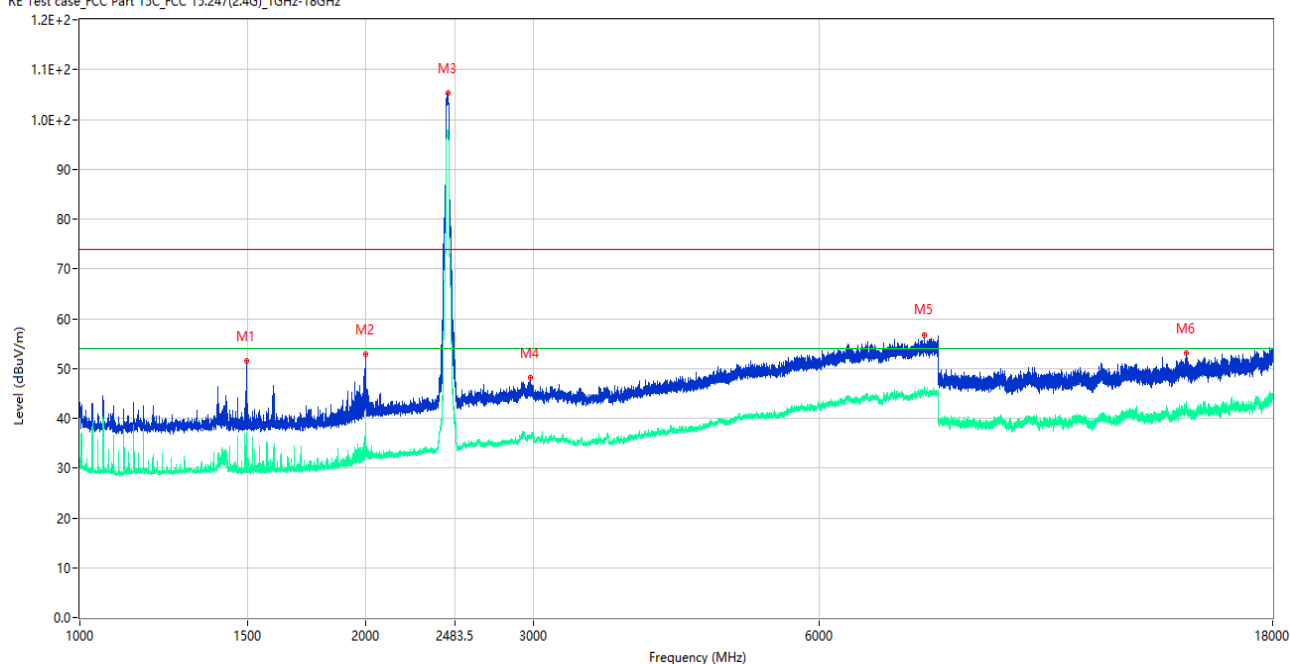
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1497.500	53.03	-15.16	74.0	20.97	Peak	332.00	150	Vertical	Pass
1**	1497.500	30.36	-15.16	54.0	23.64	AV	332.00	150	Vertical	Pass
2	1998.750	54.93	-13.16	74.0	19.07	Peak	271.00	150	Vertical	Pass
2**	1998.750	39.45	-13.16	54.0	14.55	AV	271.00	150	Vertical	Pass
3	2435.000	93.69	-11.24	74.0	-19.69	Peak	322.00	150	Vertical	N/A
3**	2435.000	85.87	-11.24	54.0	-31.87	AV	322.00	150	Vertical	N/A
4	2592.250	48.41	-9.93	74.0	25.59	Peak	234.00	150	Vertical	Pass
4**	2592.250	35.14	-9.93	54.0	18.86	AV	234.00	150	Vertical	Pass
5	5990.500	58.07	1.47	74.0	15.93	Peak	222.00	150	Vertical	Pass
5**	5990.500	43.09	1.47	54.0	10.91	AV	222.00	150	Vertical	Pass
6	12869.000	51.94	-0.12	74.0	22.06	Peak	349.00	150	Vertical	Pass
6**	12869.000	41.36	-0.12	54.0	12.64	AV	349.00	150	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11n40 Low Channel

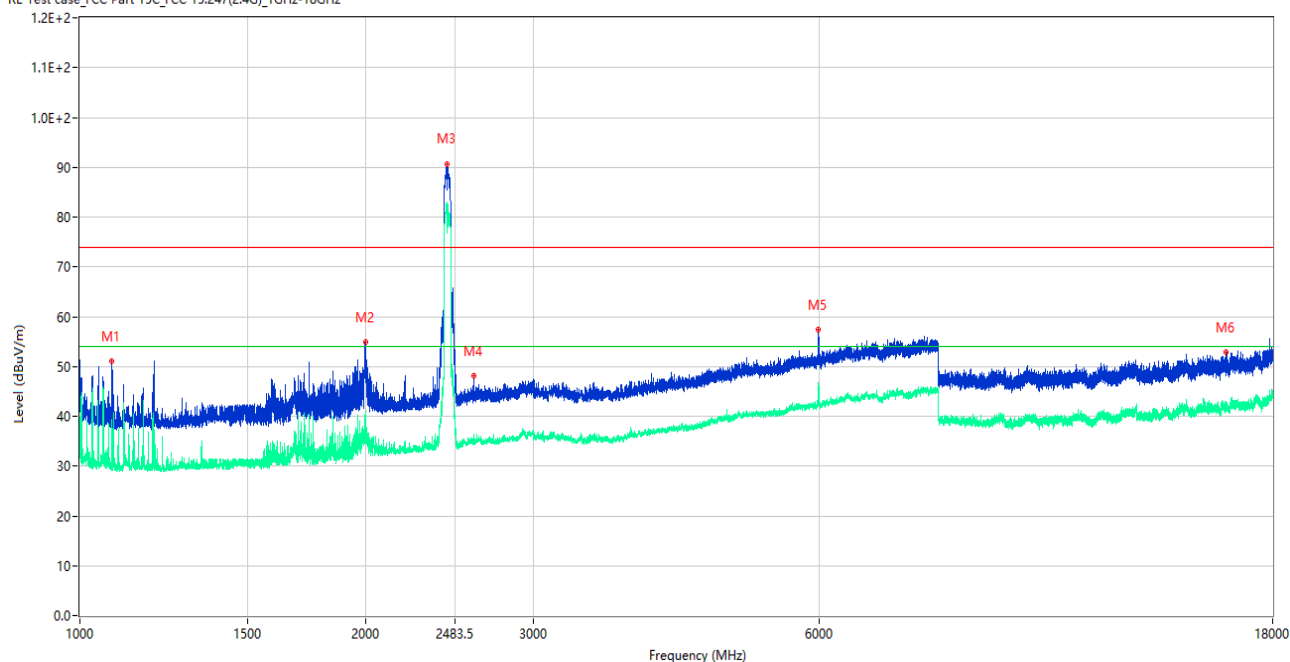
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1497.250	51.55	-15.16	74.0	22.45	Peak	227.00	150	Horizontal	Pass
1**	1497.250	29.45	-15.16	54.0	24.55	AV	227.00	150	Horizontal	Pass
2	1998.750	52.95	-13.16	74.0	21.05	Peak	325.00	150	Horizontal	Pass
2**	1998.750	35.52	-13.16	54.0	18.48	AV	325.00	150	Horizontal	Pass
3	2438.250	105.20	-11.32	74.0	-31.20	Peak	128.00	150	Horizontal	N/A
3**	2438.250	97.75	-11.32	54.0	-43.75	AV	128.00	150	Horizontal	N/A
4	2978.500	48.04	-7.72	74.0	25.96	Peak	0.00	150	Horizontal	Pass
4**	2978.500	36.05	-7.72	54.0	17.95	AV	0.00	150	Horizontal	Pass
5	7736.000	56.82	3.25	74.0	17.18	Peak	348.00	150	Horizontal	Pass
5**	7736.000	45.33	3.25	54.0	8.67	AV	348.00	150	Horizontal	Pass
6	14595.000	53.02	1.12	74.0	20.98	Peak	39.00	150	Horizontal	Pass
6**	14595.000	43.09	1.12	54.0	10.91	AV	39.00	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11n40 Low Channel

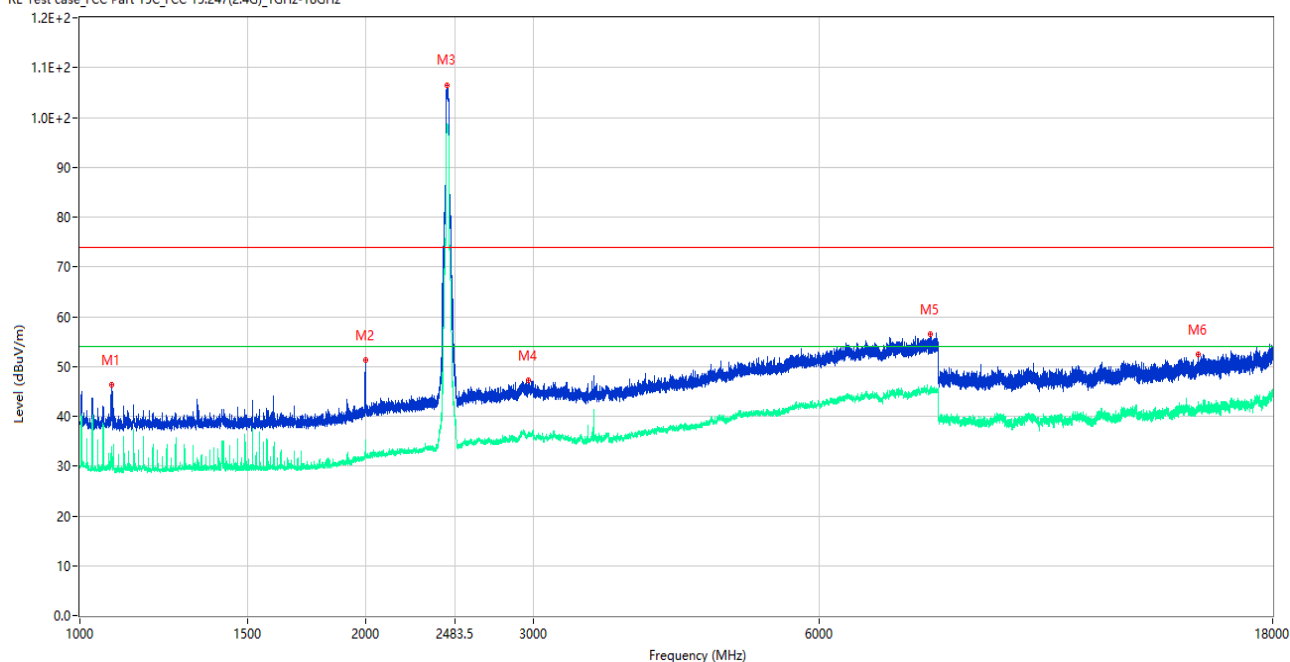
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1079.250	51.03	-14.61	74.0	22.97	Peak	231.00	150	Vertical	Pass
1**	1079.250	29.13	-14.61	54.0	24.87	AV	231.00	150	Vertical	Pass
2	1997.750	54.94	-13.21	74.0	19.06	Peak	161.00	150	Vertical	Pass
2**	1997.750	39.31	-13.21	54.0	14.69	AV	161.00	150	Vertical	Pass
3	2435.500	90.72	-11.26	74.0	-16.72	Peak	320.00	150	Vertical	N/A
3**	2435.500	83.05	-11.26	54.0	-29.05	AV	320.00	150	Vertical	N/A
4	2599.250	48.16	-10.22	74.0	25.84	Peak	221.00	150	Vertical	Pass
4**	2599.250	34.59	-10.22	54.0	19.41	AV	221.00	150	Vertical	Pass
5	5990.500	57.39	1.47	74.0	16.61	Peak	205.00	150	Vertical	Pass
5**	5990.500	46.67	1.47	54.0	7.33	AV	205.00	150	Vertical	Pass
6	16063.500	52.77	1.92	74.0	21.23	Peak	0.00	150	Vertical	Pass
6**	16063.500	42.40	1.92	54.0	11.60	AV	0.00	150	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11ax20(SU) Low Channel

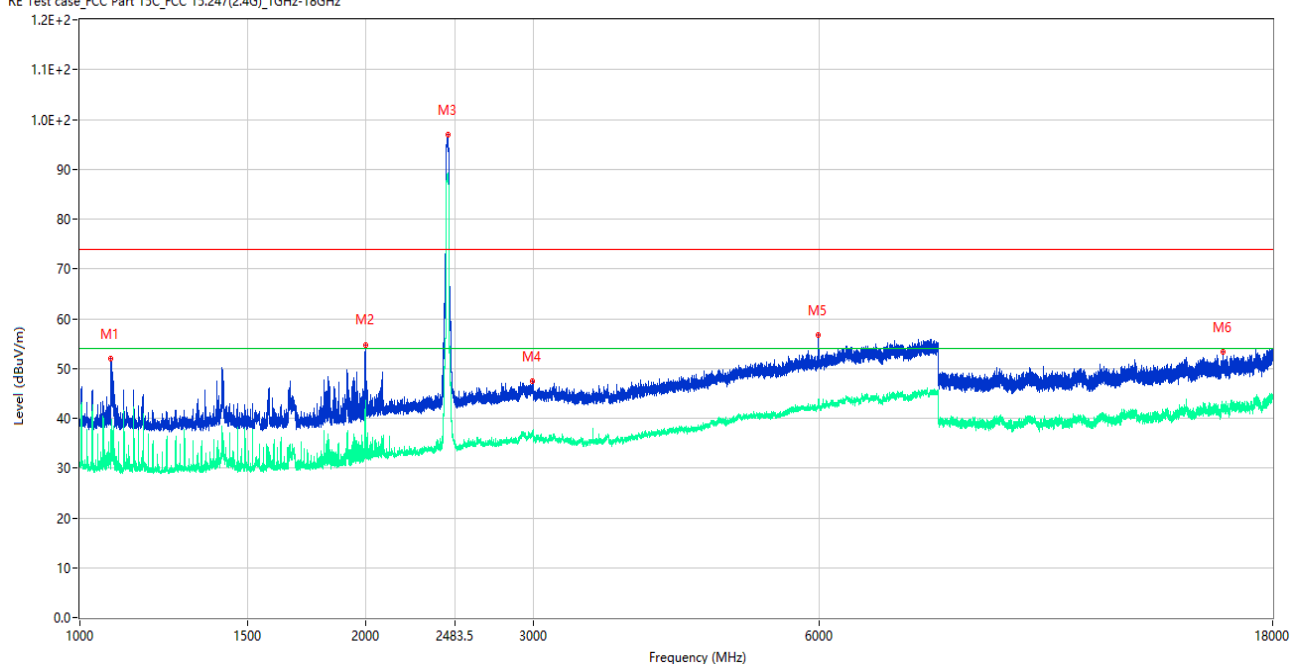
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1080.000	46.31	-14.63	74.0	27.69	Peak	16.00	150	Horizontal	Pass
1**	1080.000	32.24	-14.63	54.0	21.76	AV	16.00	150	Horizontal	Pass
2	1996.750	51.24	-13.26	74.0	22.76	Peak	311.00	150	Horizontal	Pass
2**	1996.750	34.04	-13.26	54.0	19.96	AV	311.00	150	Horizontal	Pass
3	2435.250	106.55	-11.25	74.0	-32.55	Peak	130.00	150	Horizontal	N/A
3**	2435.250	98.31	-11.25	54.0	-44.31	AV	130.00	150	Horizontal	N/A
4	2968.000	47.28	-7.14	74.0	26.72	Peak	16.00	150	Horizontal	Pass
4**	2968.000	36.65	-7.14	54.0	17.35	AV	16.00	150	Horizontal	Pass
5	7860.500	56.49	3.85	74.0	17.51	Peak	217.00	150	Horizontal	Pass
5**	7860.500	45.52	3.85	54.0	8.48	AV	217.00	150	Horizontal	Pass
6	15040.500	52.46	1.22	74.0	21.54	Peak	360.00	150	Horizontal	Pass
6**	15040.500	41.79	1.22	54.0	12.21	AV	360.00	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V802.11ax20(SU) Low Channel

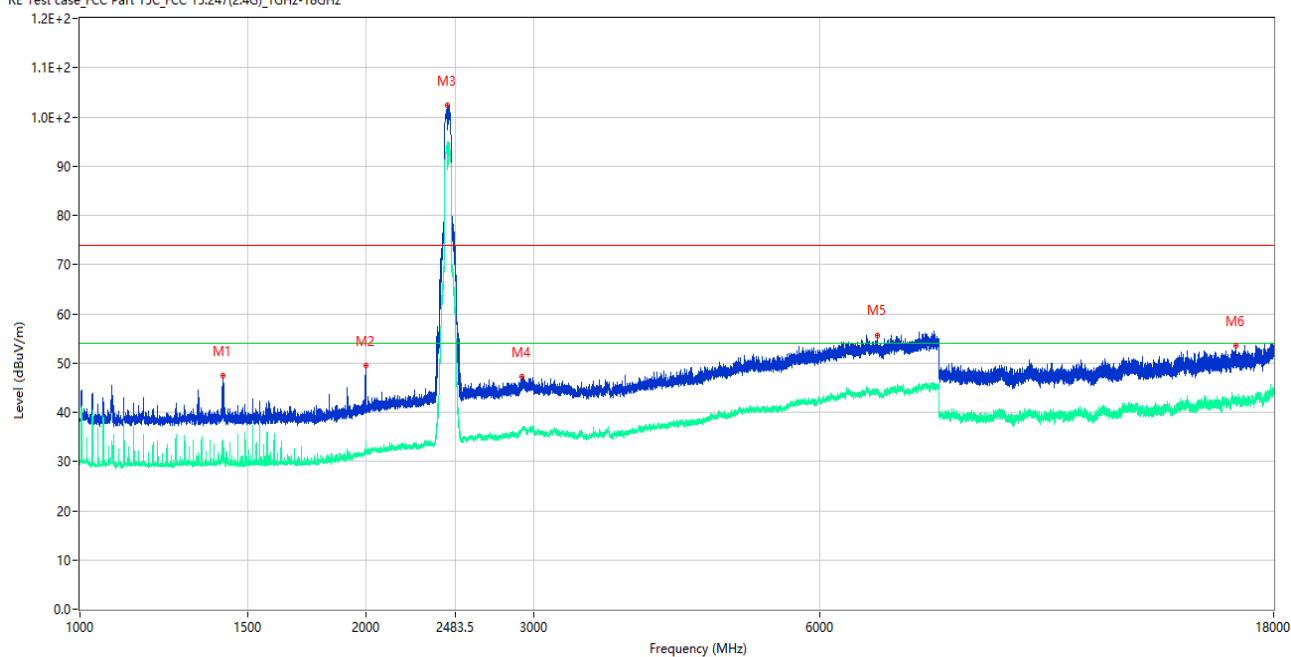
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1078.250	51.98	-14.58	74.0	22.02	Peak	226.00	150	Vertical	Pass
1**	1078.250	34.35	-14.58	54.0	19.65	AV	226.00	150	Vertical	Pass
2	1997.000	54.79	-13.25	74.0	19.21	Peak	47.00	150	Vertical	Pass
2**	1997.000	42.18	-13.25	54.0	11.82	AV	47.00	150	Vertical	Pass
3	2439.500	96.93	-11.34	74.0	-22.93	Peak	332.00	150	Vertical	N/A
3**	2439.500	87.02	-11.34	54.0	-33.02	AV	332.00	150	Vertical	N/A
4	2992.250	47.37	-7.77	74.0	26.63	Peak	85.00	150	Vertical	Pass
4**	2992.250	36.79	-7.77	54.0	17.21	AV	85.00	150	Vertical	Pass
5	5990.000	56.76	1.49	74.0	17.24	Peak	359.00	150	Vertical	Pass
5**	5990.000	42.89	1.49	54.0	11.11	AV	359.00	150	Vertical	Pass
6	15979.000	53.23	0.85	74.0	20.77	Peak	1.00	150	Vertical	Pass
6**	15979.000	41.39	0.85	54.0	12.61	AV	1.00	150	Vertical	Pass

1 GHz to 18 GHz, ANT H 802.11ax40(SU) Low Channel

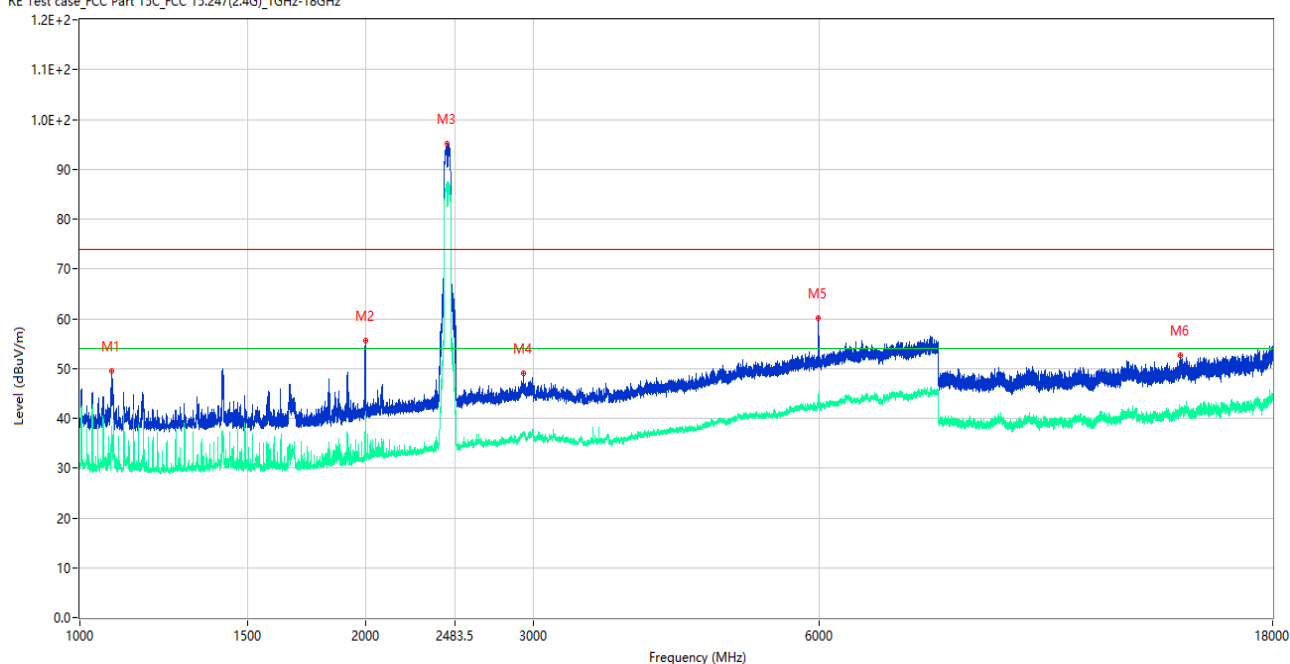
RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1412.750	47.50	-15.00	74.0	26.50	Peak	231.00	150	Horizontal	Pass
1**	1412.750	33.50	-15.00	54.0	20.50	AV	231.00	150	Horizontal	Pass
2	1997.250	49.40	-13.23	74.0	24.60	Peak	144.00	150	Horizontal	Pass
2**	1997.250	33.93	-13.23	54.0	20.07	AV	144.00	150	Horizontal	Pass
3	2433.000	102.35	-11.21	74.0	-28.35	Peak	58.00	150	Horizontal	N/A
3**	2433.000	94.72	-11.21	54.0	-40.72	AV	58.00	150	Horizontal	N/A
4	2917.000	47.22	-7.69	74.0	26.78	Peak	360.00	150	Horizontal	Pass
4**	2917.000	36.24	-7.69	54.0	17.76	AV	360.00	150	Horizontal	Pass
5	6891.500	55.69	2.25	74.0	18.31	Peak	251.00	150	Horizontal	Pass
5**	6891.500	44.44	2.25	54.0	9.56	AV	251.00	150	Horizontal	Pass
6	16427.500	53.64	1.58	74.0	20.36	Peak	204.00	150	Horizontal	Pass
6**	16427.500	42.03	1.58	54.0	11.97	AV	204.00	150	Horizontal	Pass

1 GHz to 18 GHz, ANT V 802.11ax40(SU) Low Channel

RE Test case_FCC Part 15C_FCC 15.247(2.4G)_1GHz-18GHz



	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1079.750	49.54	-14.63	74.0	24.46	Peak	271.00	150	Vertical	Pass
1**	1079.750	37.66	-14.63	54.0	16.34	AV	271.00	150	Vertical	Pass
2	1996.500	55.54	-13.27	74.0	18.46	Peak	21.00	150	Vertical	Pass
2**	1996.500	36.99	-13.27	54.0	17.01	AV	21.00	150	Vertical	Pass
3	2432.250	95.20	-11.18	74.0	-21.20	Peak	1.00	150	Vertical	N/A
3**	2432.250	87.17	-11.18	54.0	-33.17	AV	1.00	150	Vertical	N/A
4	2926.250	49.08	-6.87	74.0	24.92	Peak	136.00	150	Vertical	Pass
4**	2926.250	36.61	-6.87	54.0	17.39	AV	136.00	150	Vertical	Pass
5	5990.500	60.07	1.47	74.0	13.93	Peak	211.00	150	Vertical	Pass
5**	5990.500	44.36	1.47	54.0	9.64	AV	211.00	150	Vertical	Pass
6	14410.000	52.73	0.65	74.0	21.27	Peak	290.00	150	Vertical	Pass
6**	14410.000	41.81	0.65	54.0	12.19	AV	290.00	150	Vertical	Pass

A.7 Band Edge (Restricted-band band-edge)

Note 1: The lowest and highest channels are tested to verify the band edge emissions. Please refer to the following the plots for emissions values.

Note 2: The test data all are tested in the vertical and horizontal antenna which the trace is max hold. So these plots have shown the worst case.

Note 3: According the ANSI C63.10-2013, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note 4: All the configurations were pre tested, only the worst configuration has been reported in this report.

Note 5: All antenna were pre tested, but only the worst case has been reported in this report.

Test Data and Plots

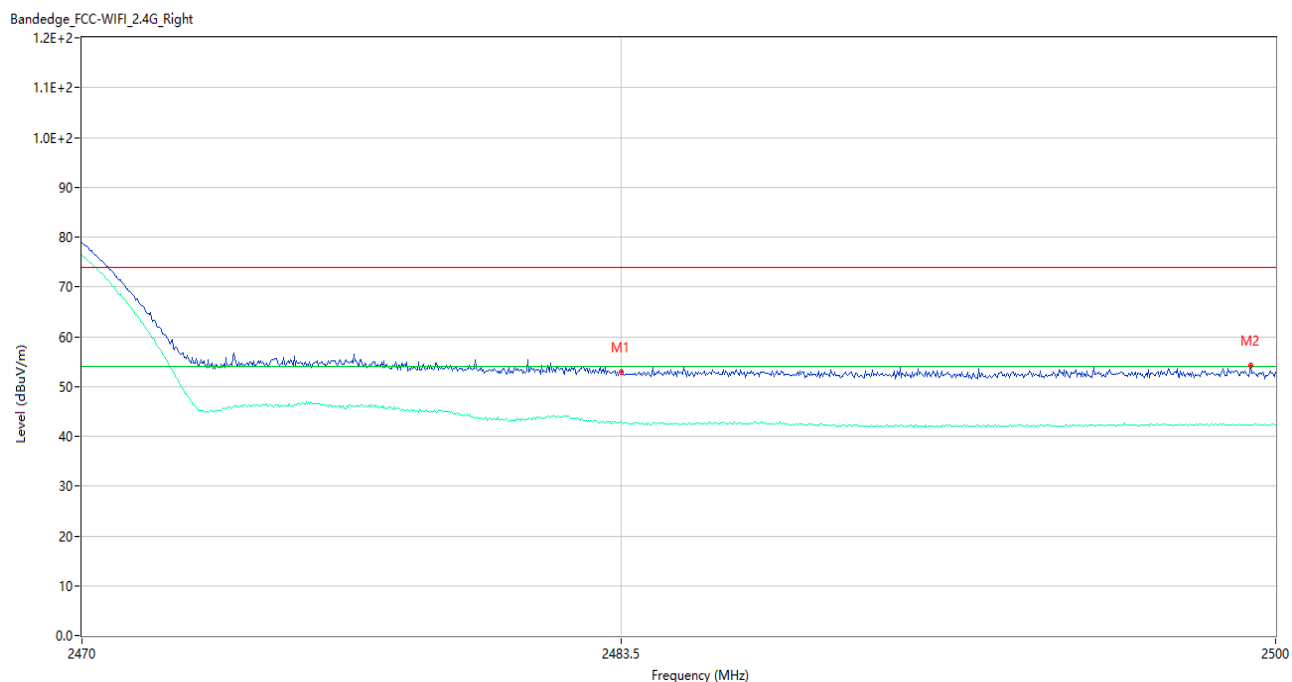
Main Antenna:

802.11b LOW CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2390.000	52.18	-3.73	74.0	21.82	Peak	12.06	150	Horizontal	Pass
1**	2390.000	41.78	-3.73	54.0	12.22	AV	12.06	150	Horizontal	Pass
2	2369.400	53.92	-2.89	74.0	20.08	Peak	237.00	150	Horizontal	Pass
2**	2369.400	42.21	-2.89	54.0	11.79	AV	237.00	150	Horizontal	Pass

802.11b HIGH CHANNEL



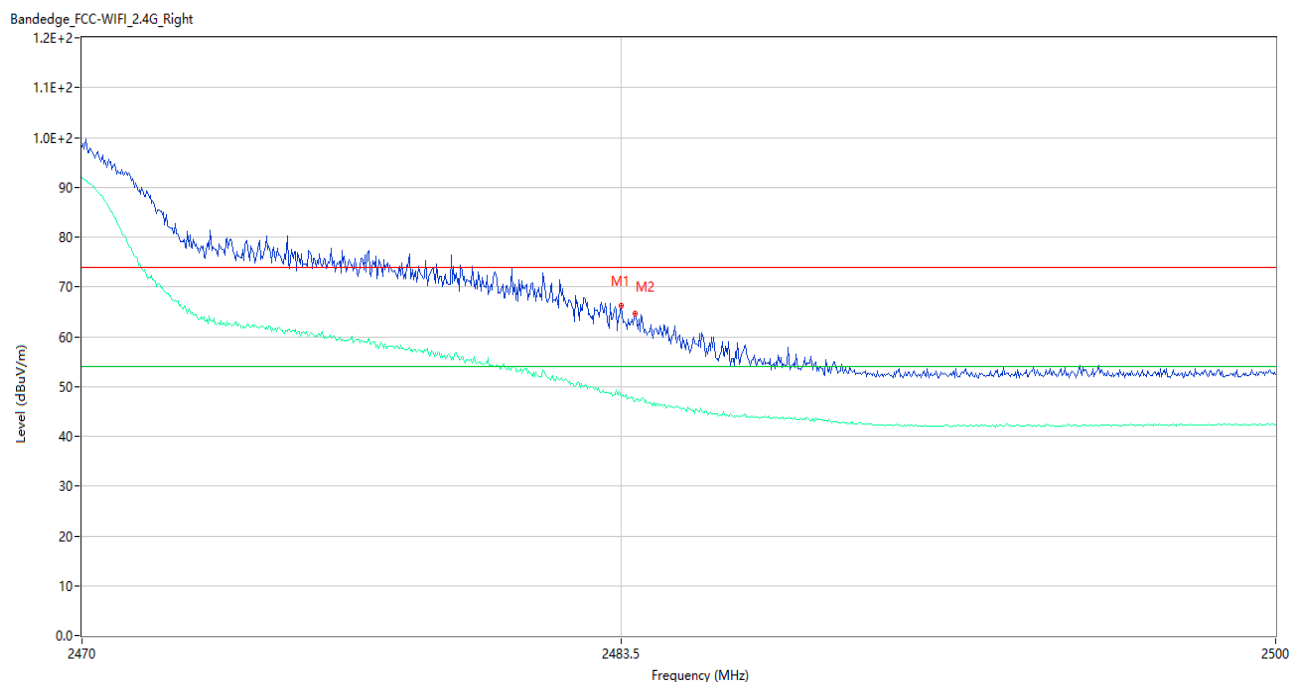
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	52.81	-2.60	74.0	21.19	Peak	22.00	150	Horizontal	Pass
1**	2483.500	42.90	-2.60	54.0	11.10	AV	22.00	150	Horizontal	Pass
2	2499.370	54.17	-2.88	74.0	19.83	Peak	309.00	150	Horizontal	Pass
2**	2499.370	42.24	-2.88	54.0	11.76	AV	309.00	150	Horizontal	Pass

802.11g LOW CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2390.000	58.16	-3.73	74.0	15.84	Peak	76.09	150	Horizontal	Pass
1**	2390.000	44.18	-3.73	54.0	9.82	AV	76.09	150	Horizontal	Pass
2	2389.800	59.48	-3.72	74.0	14.52	Peak	76.00	150	Horizontal	Pass
2**	2389.800	44.23	-3.72	54.0	9.77	AV	76.00	150	Horizontal	Pass

802.11g HIGH CHANNEL



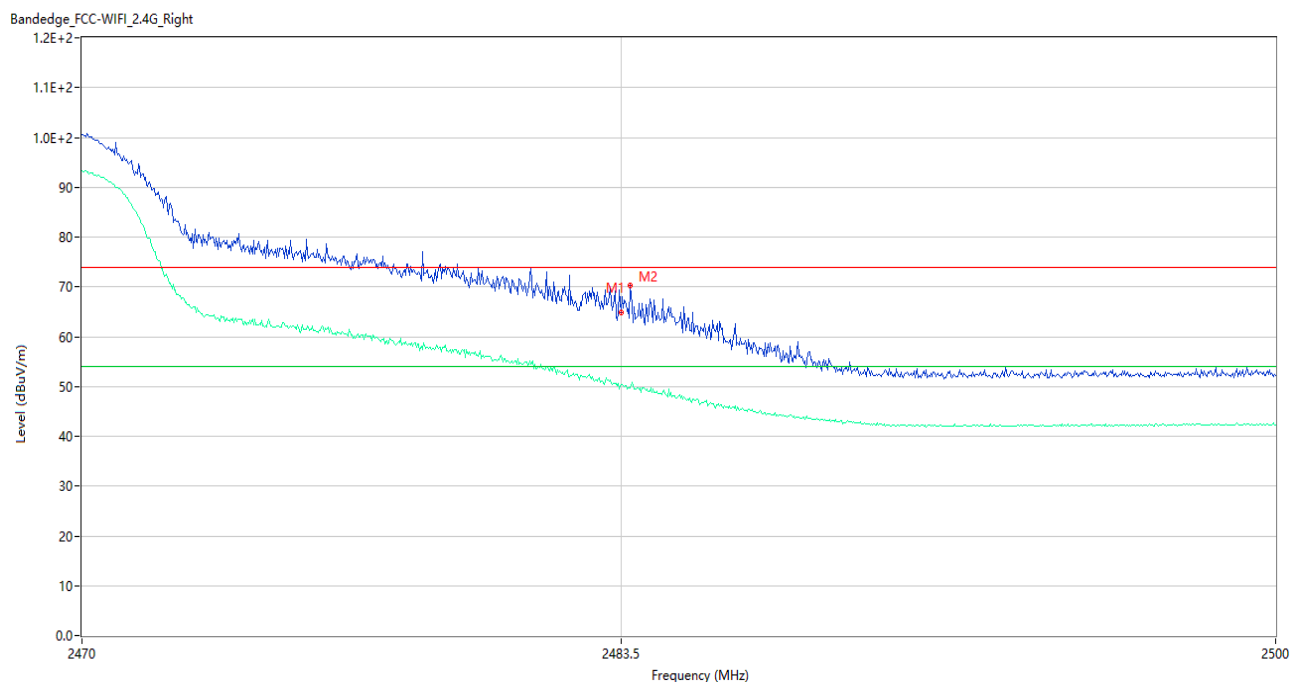
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	66.19	-2.60	74.0	7.81	Peak	133.00	150	Horizontal	Pass
1**	2483.500	48.01	-2.60	54.0	5.99	AV	133.00	150	Horizontal	Pass
2	2483.860	64.60	-2.61	74.0	9.40	Peak	135.00	150	Horizontal	Pass
2**	2483.860	47.03	-2.61	54.0	6.97	AV	135.00	150	Horizontal	Pass

802.11n20 LOW CHANNEL



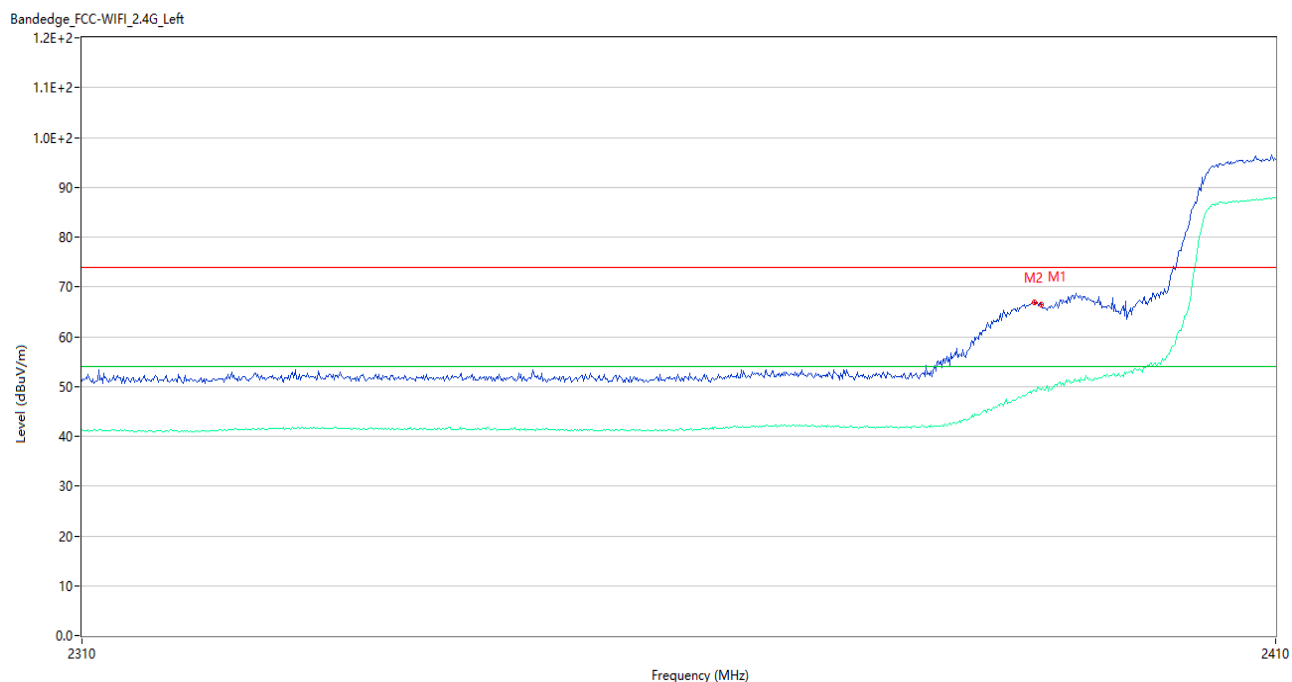
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2390.000	62.45	-3.73	74.0	11.55	Peak	68.12	150	Horizontal	Pass
1**	2390.000	46.64	-3.73	54.0	7.36	AV	68.12	150	Horizontal	Pass
2	2389.800	64.92	-3.72	74.0	9.08	Peak	217.00	150	Horizontal	Pass
2**	2389.800	46.19	-3.72	54.0	7.81	AV	217.00	150	Horizontal	Pass

802.11n20 HIGH CHANNEL



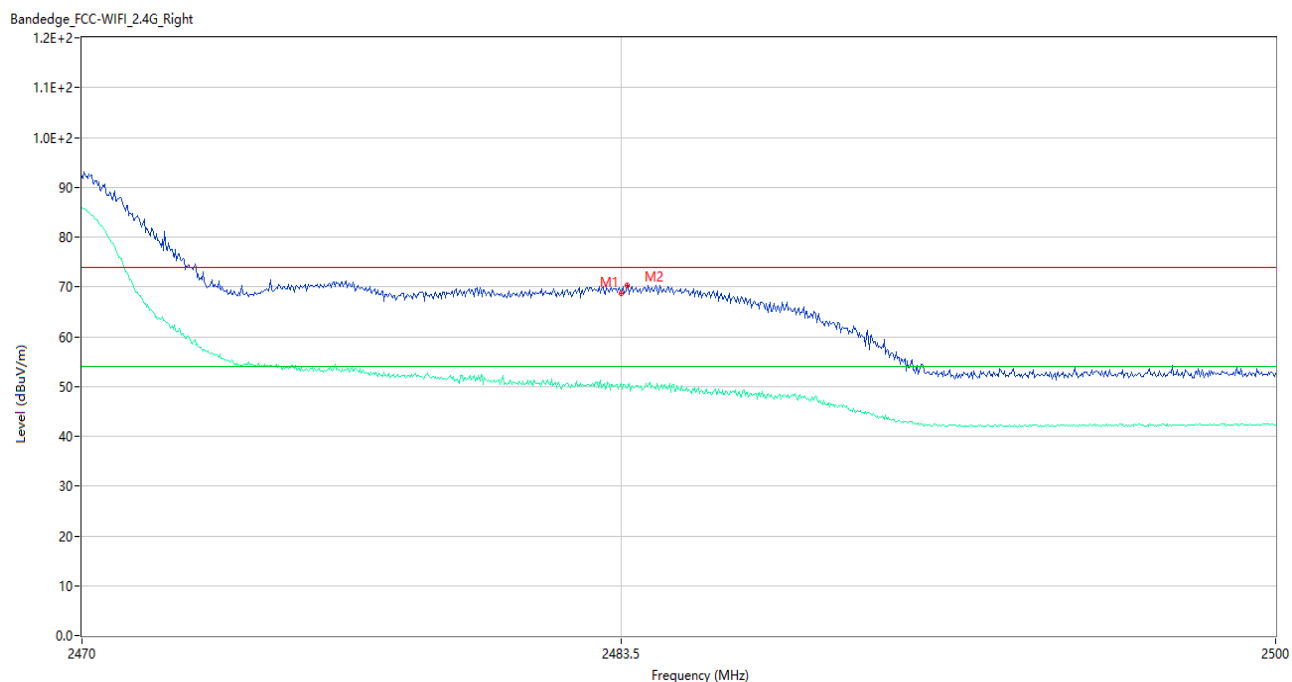
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	64.91	-2.60	74.0	9.09	Peak	152.00	150	Horizontal	Pass
1**	2483.500	50.38	-2.60	54.0	3.62	AV	152.00	150	Horizontal	Pass
2	2483.740	70.20	-2.60	74.0	3.80	Peak	76.00	150	Horizontal	Pass
2**	2483.740	49.70	-2.60	54.0	4.30	AV	76.00	150	Horizontal	Pass

802.11n40 LOW CHANNEL



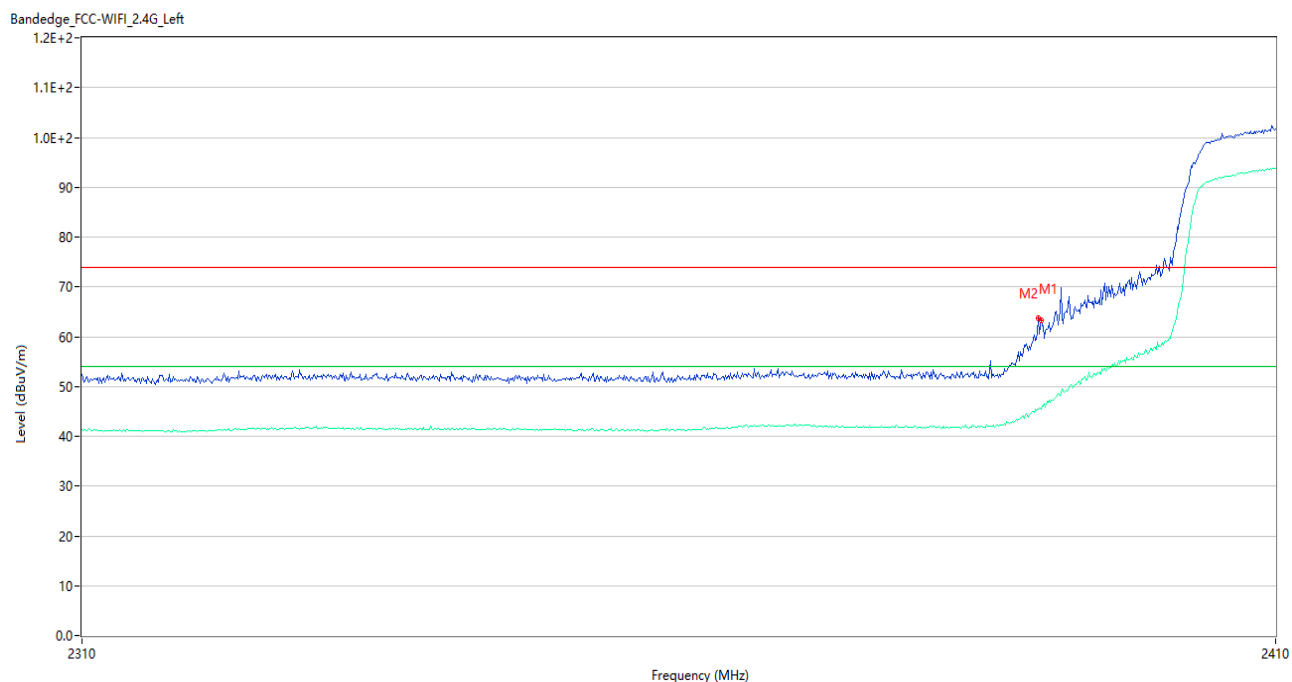
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2390.000	63.71	-3.73	74.0	10.29	Peak	314.87	150	Horizontal	Pass
1**	2390.000	47.82	-3.73	54.0	6.18	AV	314.87	150	Horizontal	Pass
2	2389.400	66.90	-3.70	74.0	7.10	Peak	69.00	150	Horizontal	Pass
2**	2389.400	49.30	-3.70	54.0	4.70	AV	69.00	150	Horizontal	Pass

802.11n40 HIGH CHANNEL



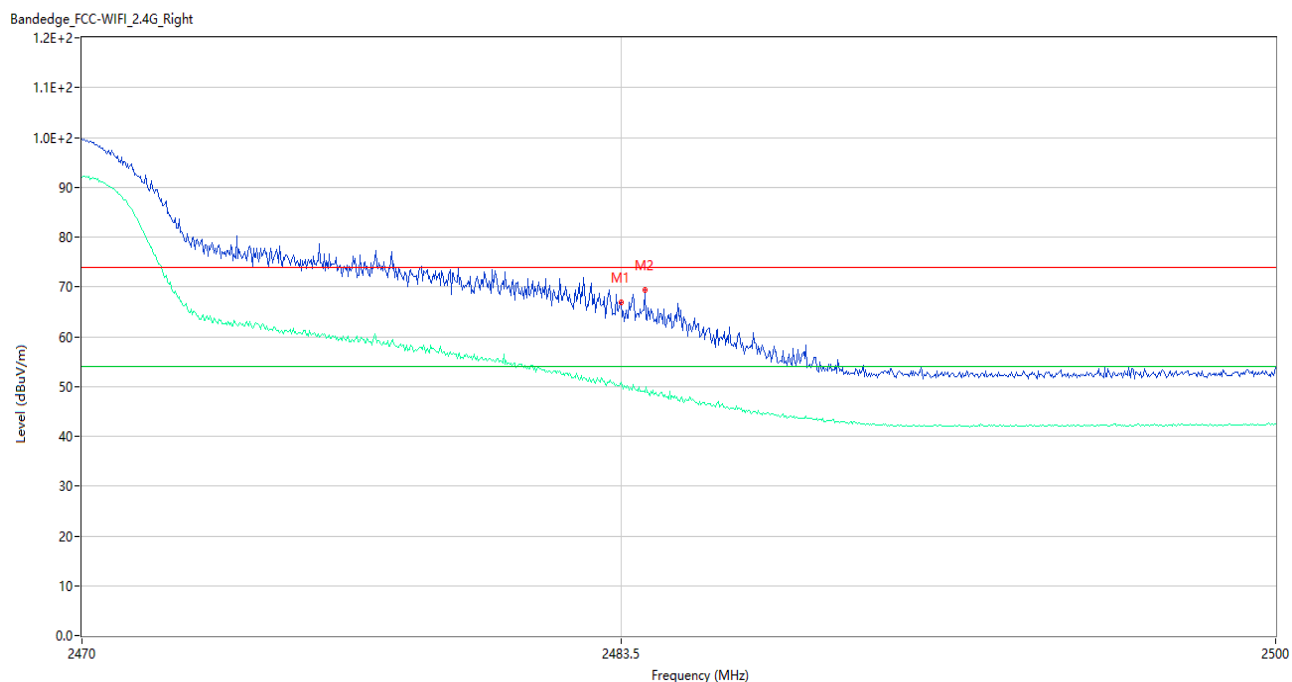
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	68.72	-2.60	74.0	5.28	Peak	160.00	150	Horizontal	Pass
1**	2483.500	50.59	-2.60	54.0	3.41	AV	160.00	150	Horizontal	Pass
2	2483.650	70.34	-2.60	74.0	3.66	Peak	163.00	150	Horizontal	Pass
2**	2483.650	49.62	-2.60	54.0	4.38	AV	163.00	150	Horizontal	Pass

802.11ax20(SU) LOW CHANNEL



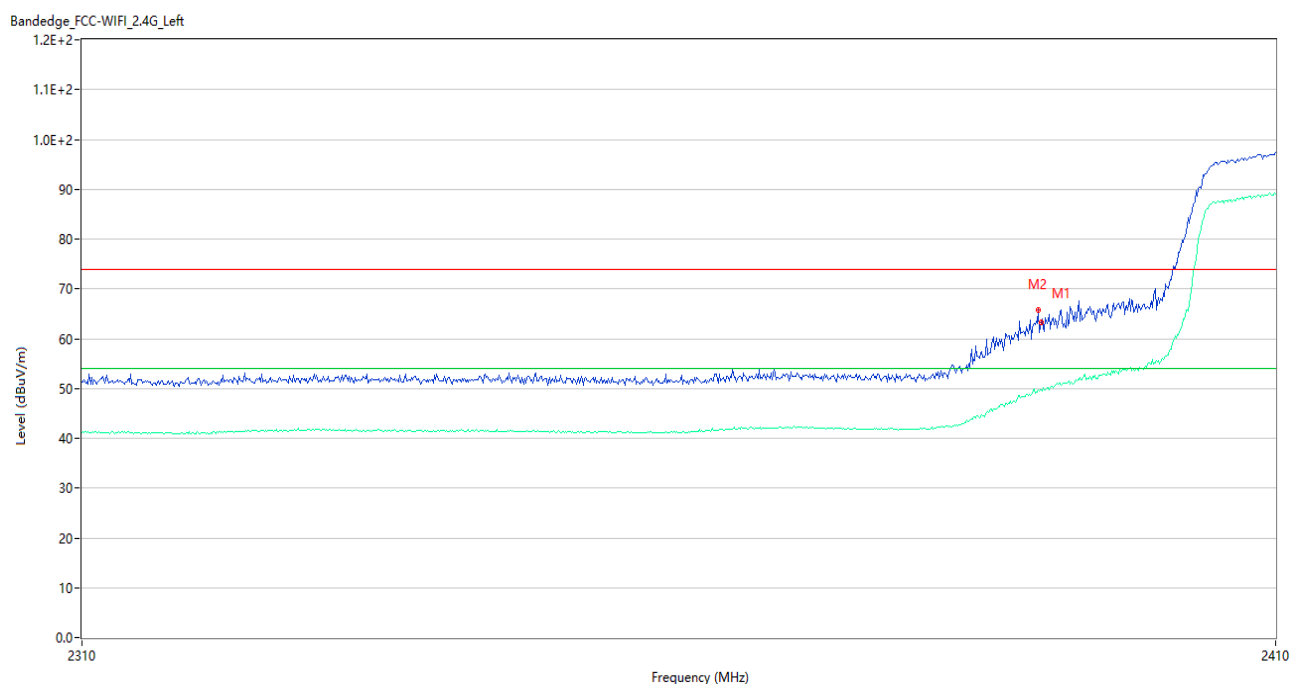
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2390.000	63.35	-3.73	74.0	10.65	Peak	142.97	150	Horizontal	Pass
1**	2390.000	45.45	-3.73	54.0	8.55	AV	142.97	150	Horizontal	Pass
2	2389.800	63.74	-3.72	74.0	10.26	Peak	146.00	150	Horizontal	Pass
2**	2389.800	45.37	-3.72	54.0	8.63	AV	146.00	150	Horizontal	Pass

802.11 ax20(SU) HIGH CHANNEL



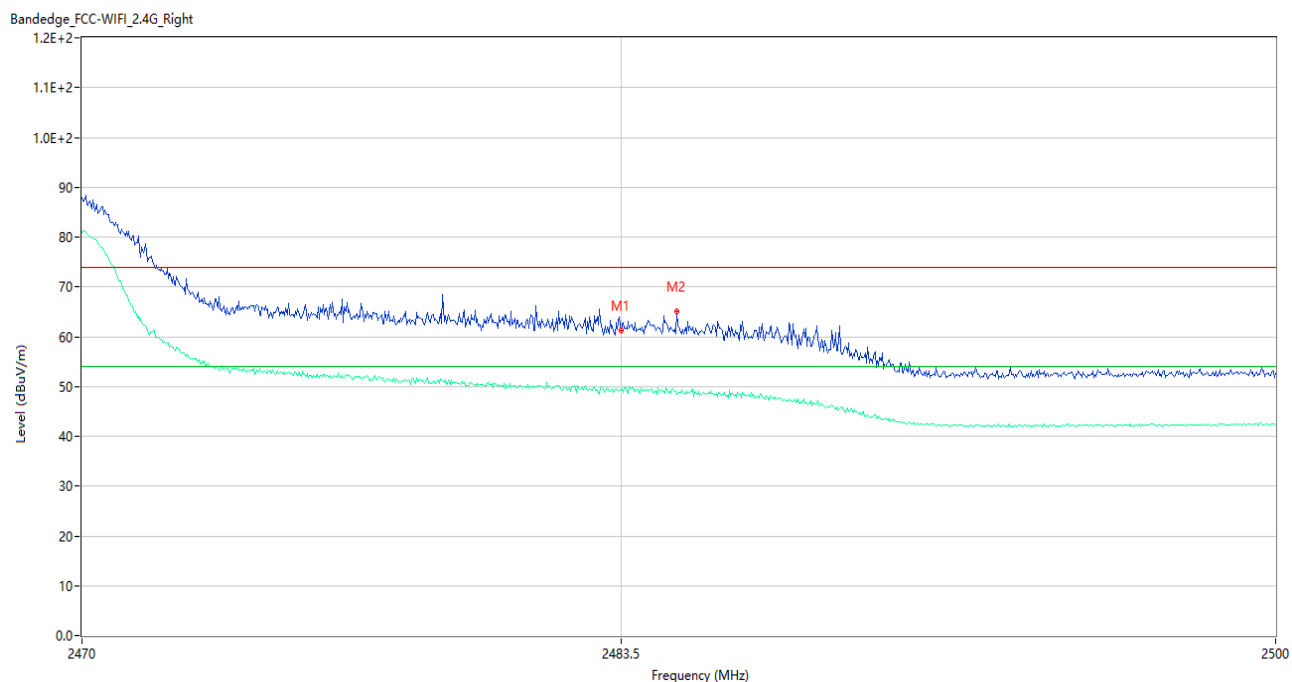
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	66.98	-2.60	74.0	7.02	Peak	151.00	150	Horizontal	Pass
1**	2483.500	50.83	-2.60	54.0	3.17	AV	151.00	150	Horizontal	Pass
2	2484.100	69.28	-2.61	74.0	4.72	Peak	161.00	150	Horizontal	Pass
2**	2484.100	48.87	-2.61	54.0	5.13	AV	161.00	150	Horizontal	Pass

802.11ax40(SU) LOW CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2390.000	63.29	-3.73	74.0	10.71	Peak	64.09	150	Horizontal	Pass
1**	2390.000	49.74	-3.73	54.0	4.26	AV	64.09	150	Horizontal	Pass
2	2389.800	65.76	-3.72	74.0	8.24	Peak	56.00	150	Horizontal	Pass
2**	2389.800	49.68	-3.72	54.0	4.32	AV	56.00	150	Horizontal	Pass

802.11 ax40(SU) HIGH CHANNEL



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	61.20	-2.60	74.0	12.80	Peak	326.00	150	Vertical	Pass
1**	2483.500	49.50	-2.60	54.0	4.50	AV	326.00	150	Vertical	Pass
2	2484.910	65.11	-2.62	74.0	8.89	Peak	326.00	150	Vertical	Pass
2**	2484.910	48.44	-2.62	54.0	5.56	AV	326.00	150	Vertical	Pass

A.8 Power Spectral Density (PSD)

Note: All the configurations were pre tested, only the worst configuration has been reported in this report.

Test Data

802.11b Mode:

Main Antenna:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-9.37	8
Middle	-9.64	8
High	-9.82	8

802.11g Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-12.51	8
Middle	-12.20	8
High	-13.16	8

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-11.84	8
Middle	-11.88	8
High	-10.79	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-14.33	8
Middle	-13.06	8
High	-13.83	8

802.11ax-20 MHz(SU) Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-13.26	8
Middle	-12.86	8
High	-11.74	8

802.11ax-40 MHz(SU) Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-14.64	8
Middle	-14.78	8
High	-15.42	8

Aux. Antenna:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-11.91	8
Middle	-11.03	8
High	-11.39	8

802.11g Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-13.11	8
Middle	-12.94	8
High	-12.58	8

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-12.33	8
Middle	-11.68	8
High	-12.00	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-14.85	8
Middle	-13.55	8
High	-14.73	8

802.11ax-20 MHz(SU) Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-13.23	8
Middle	-13.39	8
High	-13.05	8

802.11ax-40 MHz(SU) Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-15.19	8
Middle	-15.17	8
High	-16.11	8

MIMO:

802.11n-20 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-9.07	8
Middle	-8.77	8
High	-8.34	8

802.11n-40 MHz Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-11.57	8
Middle	-10.29	8
High	-11.25	8

802.11ax-20 MHz(SU) Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-10.23	8
Middle	-10.11	8
High	-9.34	8

802.11ax-40 MHz(SU) Mode:

Channel	Spectral power density (dBm/3kHz)	Limit (dBm/3kHz)
Low	-11.90	8
Middle	-11.96	8
High	-12.74	8

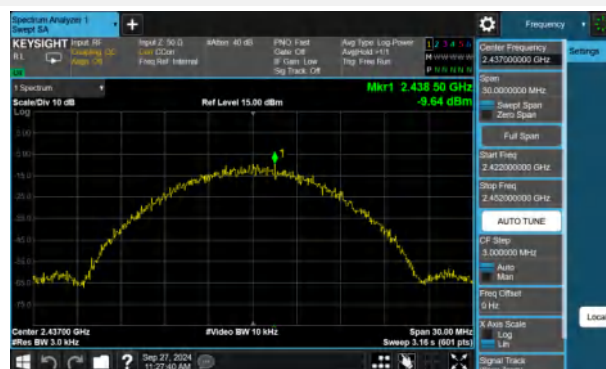
Test Plots

Main Antenna:

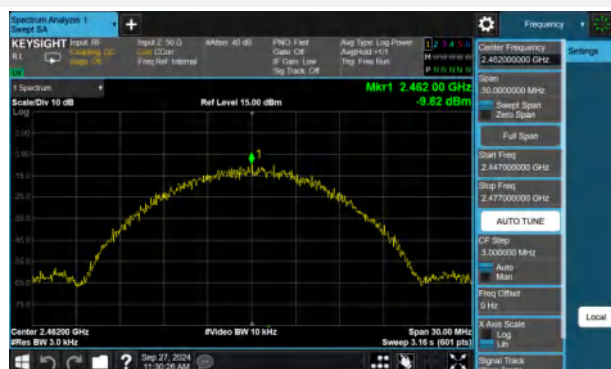
802.11b LOW CHANNEL



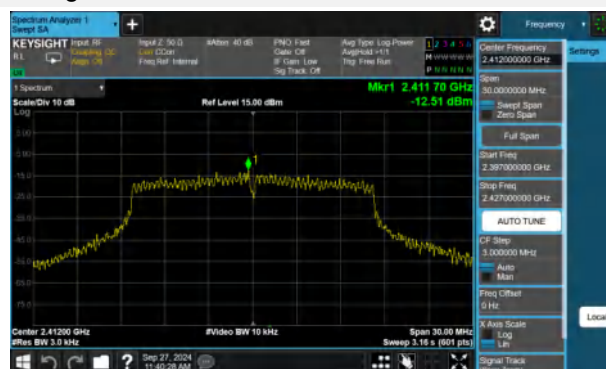
802.11b MIDDLE CHANNEL



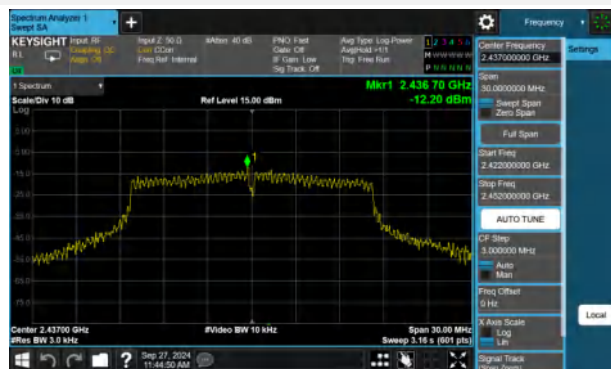
802.11b HIGH CHANNEL



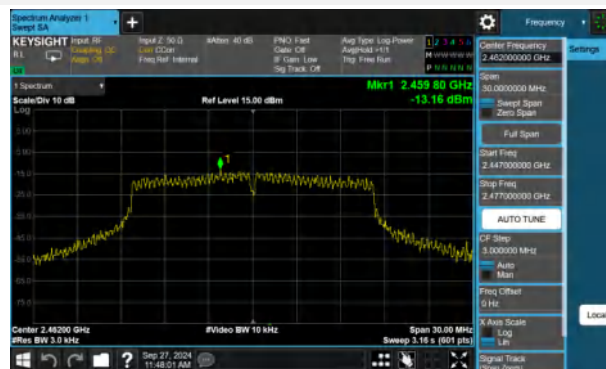
802.11g LOW CHANNEL



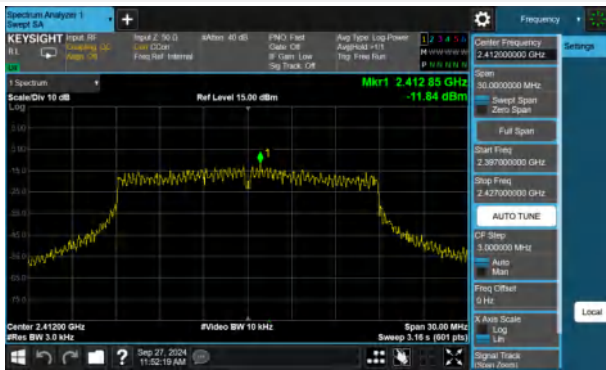
802.11g MIDDLE CHANNEL



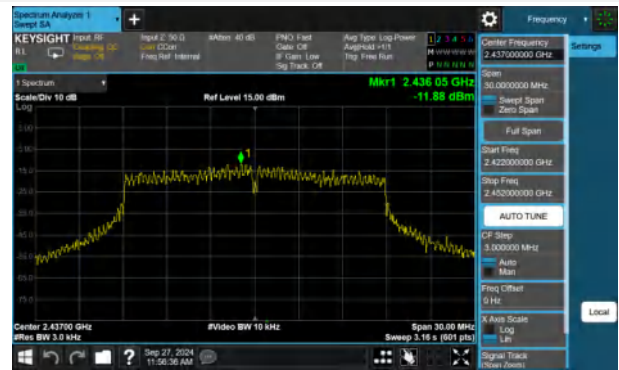
802.11g HIGH CHANNEL



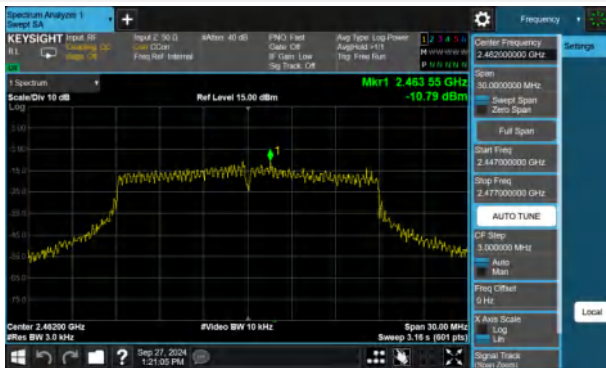
802.11n-20 MHz LOW CHANNEL



802.11 n-20 MHz MIDDLE CHANNEL



802.11n-20 MHz HIGH CHANNEL



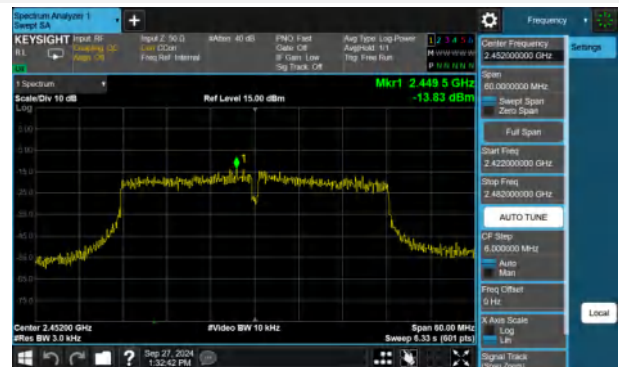
802.11n-40 MHz LOW CHANNEL



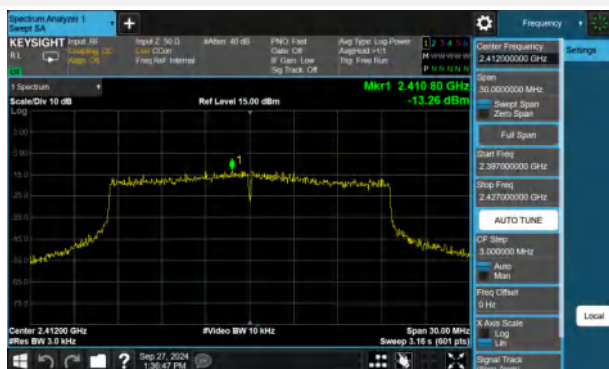
802.11n-40 MHz MIDDLE CHANNEL



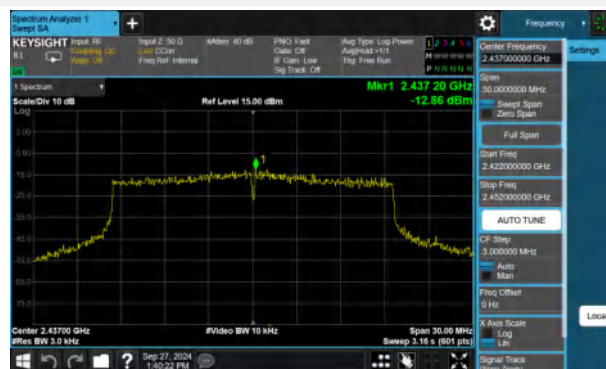
802.11n-40 MHz HIGH CHANNEL



802.11ax-20 MHz(SU) LOW CHANNEL



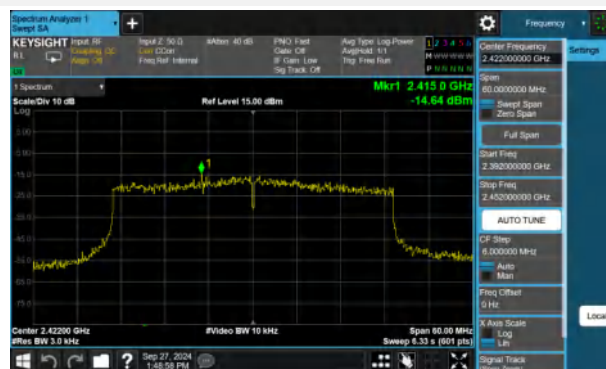
802.11ax-20 MHz(SU) MIDDLE CHANNEL



802.11ax-20 MHz(SU) HIGH CHANNEL



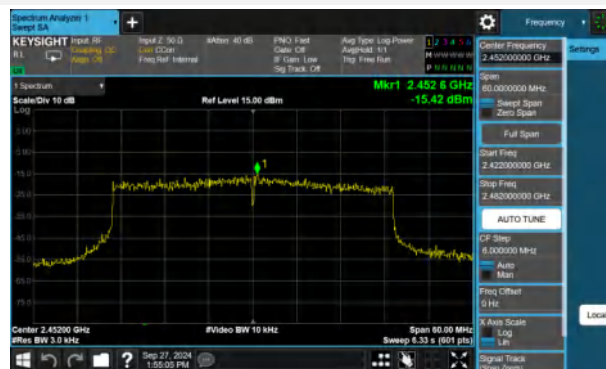
802.11ax-40 MHz(SU) LOW CHANNEL



802.11ax-40 MHz(SU) MIDDLE CHANNEL



802.11ax-40 MHz(SU) HIGH CHANNEL



Aux. Antenna:

802.11b LOW CHANNEL



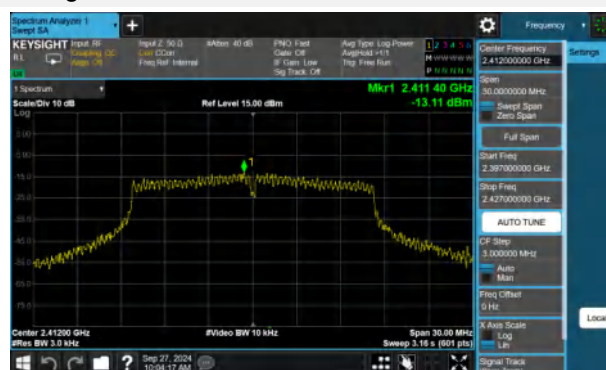
802.11b MIDDLE CHANNEL



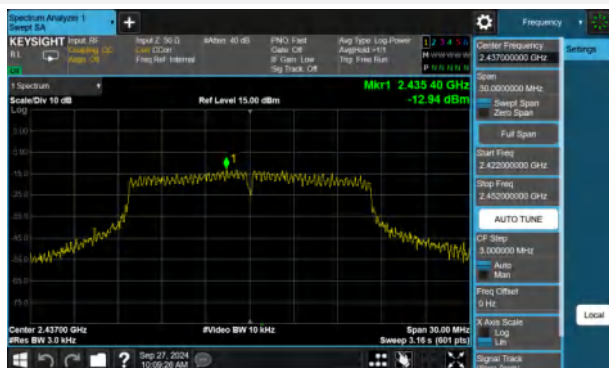
802.11b HIGH CHANNEL



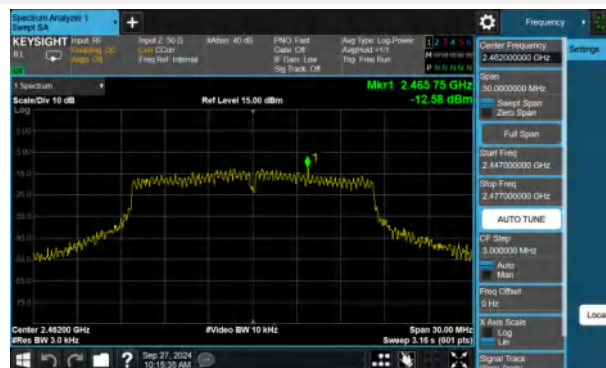
802.11g LOW CHANNEL



802.11g MIDDLE CHANNEL



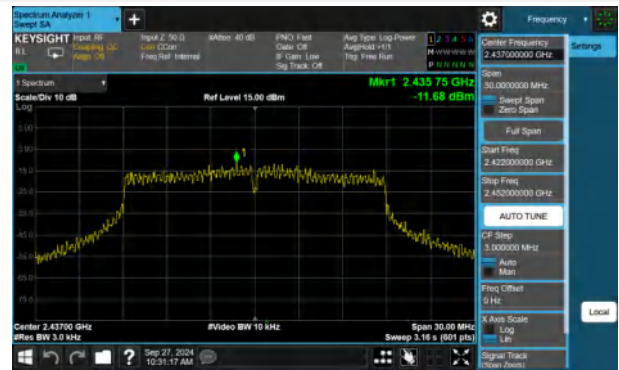
802.11g HIGH CHANNEL



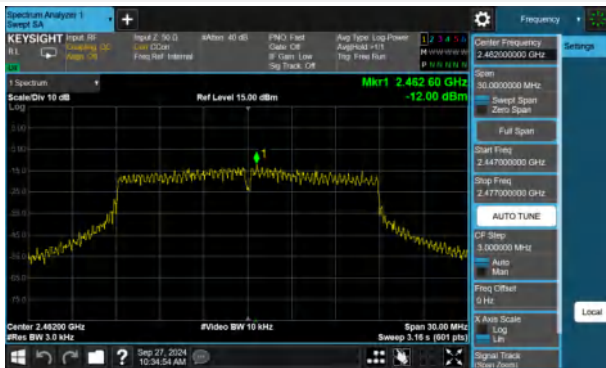
802.11n-20 MHz LOW CHANNEL



802.11 n-20 MHz MIDDLE CHANNEL



802.11n-20 MHz HIGH CHANNEL



802.11n-40 MHz LOW CHANNEL



802.11n-40 MHz MIDDLE CHANNEL



802.11n-40 MHz HIGH CHANNEL



802.11ax-20 MHz(SU) LOW CHANNEL



802.11ax-20 MHz(SU) MIDDLE CHANNEL



802.11ax-20 MHz(SU) HIGH CHANNEL



802.11ax-40 MHz(SU) LOW CHANNEL



802.11ax-40 MHz(SU) MIDDLE CHANNEL



802.11ax-40 MHz(SU) HIGH CHANNEL



ANNEX B TEST SETUP PHOTOS

Please refer the document “BL-SH2480550-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer the document “BL-SH2480550-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer the document “BL-SH2480550-AI.PDF”.

Statement

1. The Testing Center guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
2. For the report with Accreditation Symbol, the items marked with "☆" are not within the accredited scope.
3. This report is invalid if it is altered, without the signature of the testing and approval personnel, or without the test report stamp.
4. The test data and results are only valid for the tested samples provided by the customer.
5. This report shall not be partially reproduced without the written permission of the Testing Center.
6. Any objection shall be raised to the Testing Center within 30 days after receiving the report.

--END OF REPORT--