

TEST REPORT

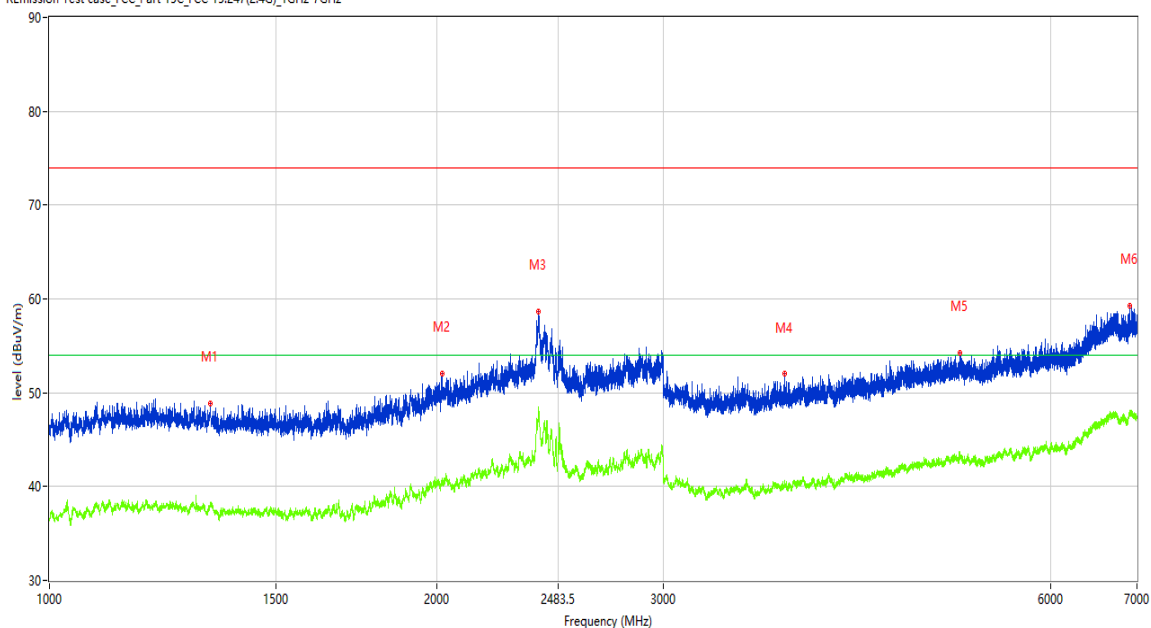
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 60 of 123

Figure 39: Spurious Emission, 1GHz – 10th Harmonic, 802.11b, 2437MHz
1GHz-7GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1333.458	48.82	-4.37	74.0	-25.18	Peak	351.40	100	Horizontal	Pass
1**	1333.458	38.36	-4.37	54.0	-15.64	AV	351.40	100	Horizontal	Pass
2	2019.373	52.08	-1.92	74.0	-21.92	Peak	199.80	100	Horizontal	Pass
2**	2019.373	40.48	-1.92	54.0	-13.52	AV	199.80	100	Horizontal	Pass
3	2399.575	58.63	5.39	74.0	-15.37	Peak	218.80	100	Horizontal	Pass
3**	2399.575	47.94	5.39	54.0	-6.06	AV	218.80	100	Horizontal	Pass
4	3723.910	52.00	-0.74	74.0	-22.00	Peak	46.40	100	Horizontal	Pass
4**	3723.910	39.97	-0.74	54.0	-14.03	AV	46.40	100	Horizontal	Pass
5	5101.237	54.27	1.76	74.0	-19.73	Peak	189.00	100	Horizontal	Pass
5**	5101.237	43.70	1.76	54.0	-10.30	AV	189.00	100	Horizontal	Pass
6	6909.511	59.24	5.75	74.0	-14.76	Peak	0.20	100	Horizontal	Pass
6**	6909.511	47.58	5.75	54.0	-6.42	AV	0.20	100	Horizontal	Pass

TEST REPORT

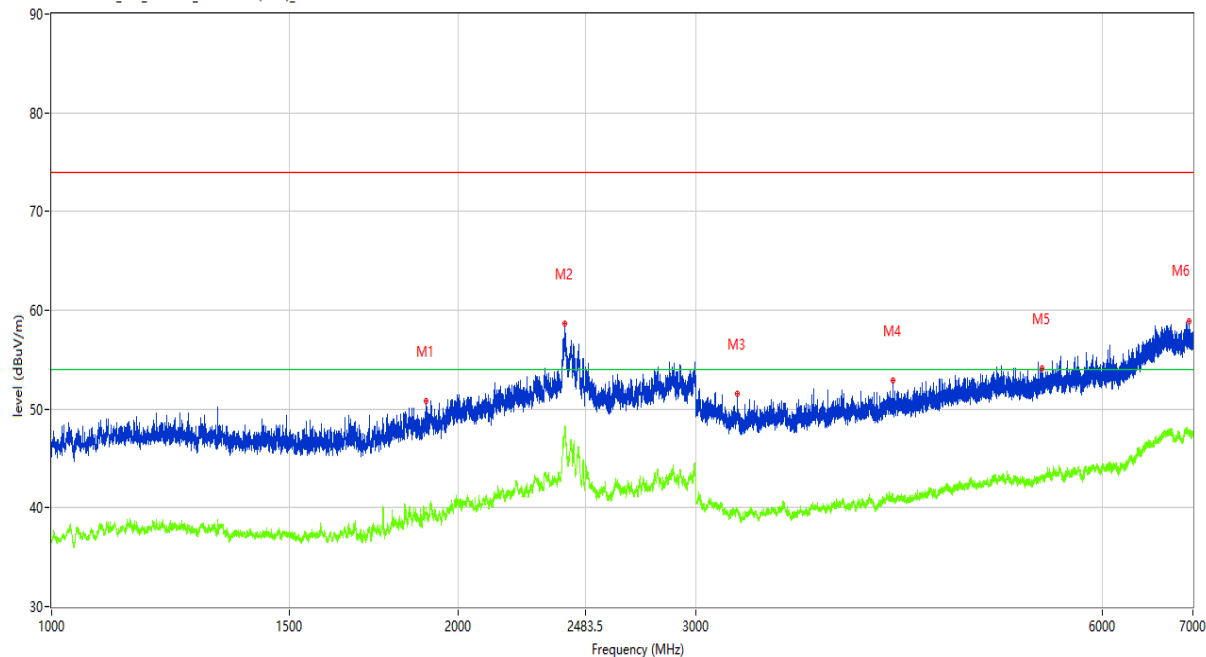
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 61 of 123

1GHz-7GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1894.888	50.83	-3.46	74.0	-23.17	Peak	40.60	100	Vertical	Pass
1**	1894.888	39.88	-3.46	54.0	-14.12	AV	40.60	100	Vertical	Pass
2	2399.575	58.65	5.39	74.0	-15.35	Peak	358.80	100	Vertical	Pass
2**	2399.575	48.16	5.39	54.0	-5.84	AV	358.80	100	Vertical	Pass
3	3221.472	51.50	-1.66	74.0	-22.50	Peak	162.50	100	Vertical	Pass
3**	3221.472	39.66	-1.66	54.0	-14.34	AV	162.50	100	Vertical	Pass
4	4200.350	52.95	-0.04	74.0	-21.05	Peak	153.60	100	Vertical	Pass
4**	4200.350	40.76	-0.04	54.0	-13.24	AV	153.60	100	Vertical	Pass
5	5415.698	54.11	1.51	74.0	-19.89	Peak	209.80	100	Vertical	Pass
5**	5415.698	43.17	1.51	54.0	-10.83	AV	209.80	100	Vertical	Pass
6	6951.506	58.95	5.68	74.0	-15.05	Peak	107.50	100	Vertical	Pass
6**	6951.506	47.74	5.68	54.0	-6.26	AV	107.50	100	Vertical	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 62 of 123

7GHz-18GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBUV/m)	Factor (dB)	Limit (dBUV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7874.281	35.61	4.84	74.0	-38.39	Peak	186.40	100	Horizontal	Pass
1**	7874.281	24.95	4.84	54.0	-29.05	AV	186.40	100	Horizontal	Pass
2	10150.712	41.08	9.93	74.0	-32.92	Peak	190.90	100	Horizontal	Pass
2**	10150.712	30.68	9.93	54.0	-23.32	AV	190.90	100	Horizontal	Pass
3	12141.215	42.87	10.94	74.0	-31.13	Peak	317.80	100	Horizontal	Pass
3**	12141.215	32.51	10.94	54.0	-21.49	AV	317.80	100	Horizontal	Pass
4	14522.119	50.28	17.02	74.0	-23.72	Peak	140.70	100	Horizontal	Pass
4**	14522.119	40.13	17.02	54.0	-13.87	AV	140.70	100	Horizontal	Pass
5	16501.625	54.45	20.75	74.0	-19.55	Peak	17.20	100	Horizontal	Pass
5**	16501.625	43.93	20.75	54.0	-10.07	AV	17.20	100	Horizontal	Pass
6	17807.548	55.49	20.81	74.0	-18.51	Peak	76.70	100	Horizontal	Pass
6**	17807.548	45.44	20.81	54.0	-8.56	AV	76.70	100	Horizontal	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 63 of 123

7GHz-18GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7753.312	35.94	4.85	74.0	-38.06	Peak	124.70	100	Vertical	Pass
1**	7753.312	25.33	4.85	54.0	-28.67	AV	124.70	100	Vertical	Pass
2	9290.177	40.56	9.01	74.0	-33.44	Peak	338.00	100	Vertical	Pass
2**	9290.177	29.88	9.01	54.0	-24.12	AV	338.00	100	Vertical	Pass
3	11165.209	43.45	10.79	74.0	-30.55	Peak	188.70	100	Vertical	Pass
3**	11165.209	32.92	10.79	54.0	-21.08	AV	188.70	100	Vertical	Pass
4	14832.792	50.62	18.04	74.0	-23.38	Peak	0.80	100	Vertical	Pass
4**	14832.792	39.81	18.04	54.0	-14.19	AV	0.80	100	Vertical	Pass
5	16507.123	53.70	20.53	74.0	-20.30	Peak	202.50	100	Vertical	Pass
5**	16507.123	44.05	20.53	54.0	-9.95	AV	202.50	100	Vertical	Pass
6	17807.548	55.59	20.81	74.0	-18.41	Peak	62.60	100	Vertical	Pass
6**	17807.548	45.32	20.81	54.0	-8.68	AV	62.60	100	Vertical	Pass

TEST REPORT

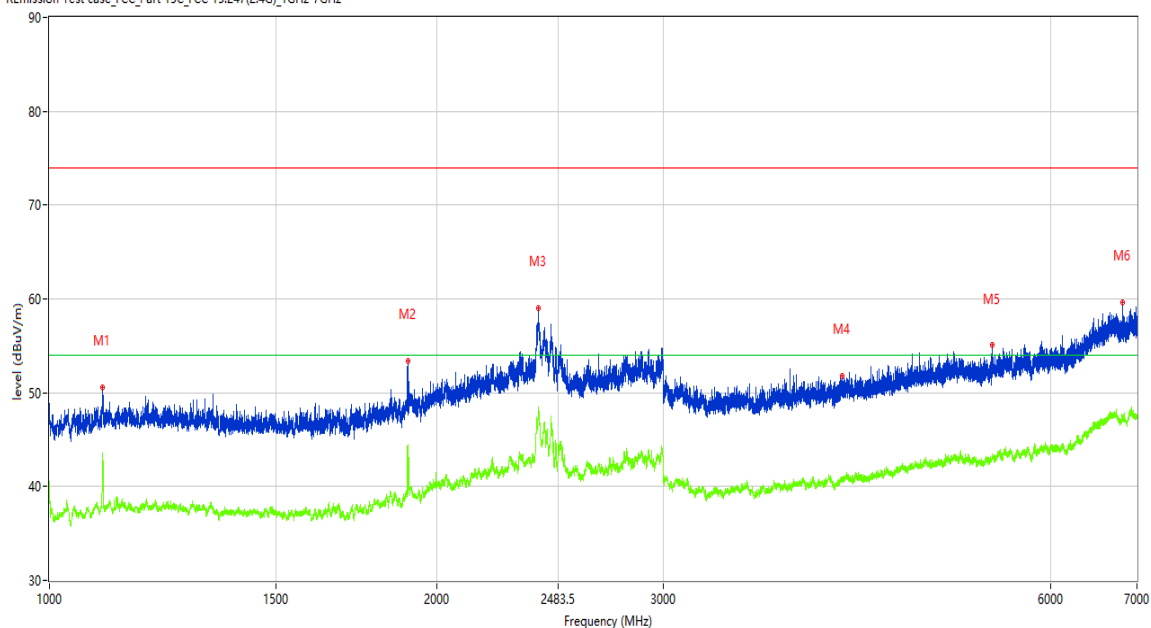
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 64 of 123

Figure 40: Spurious Emission, 1GHz – 10th Harmonic, 802.11b, 2462MHz
1GHz-7GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1099.988	50.55	-3.84	74.0	-23.45	Peak	360.00	100	Horizontal	Pass
1**	1099.988	43.56	-3.84	54.0	-10.44	AV	360.00	100	Horizontal	Pass
2	1900.387	53.43	-3.94	74.0	-20.57	Peak	360.00	100	Horizontal	Pass
2**	1900.387	44.40	-3.94	54.0	-9.60	AV	360.00	100	Horizontal	Pass
3	2398.825	58.99	5.42	74.0	-15.01	Peak	21.00	100	Horizontal	Pass
3**	2398.825	48.14	5.42	54.0	-5.86	AV	21.00	100	Horizontal	Pass
4	4133.858	51.80	-0.04	74.0	-22.20	Peak	0.90	100	Horizontal	Pass
4**	4133.858	40.70	-0.04	54.0	-13.30	AV	0.90	100	Horizontal	Pass
5	5402.700	55.06	1.47	74.0	-18.94	Peak	79.90	100	Horizontal	Pass
5**	5402.700	43.24	1.47	54.0	-10.76	AV	79.90	100	Horizontal	Pass
6	6820.522	59.63	5.46	74.0	-14.37	Peak	256.50	100	Horizontal	Pass
6**	6820.522	47.22	5.46	54.0	-6.78	AV	256.50	100	Horizontal	Pass

TEST REPORT

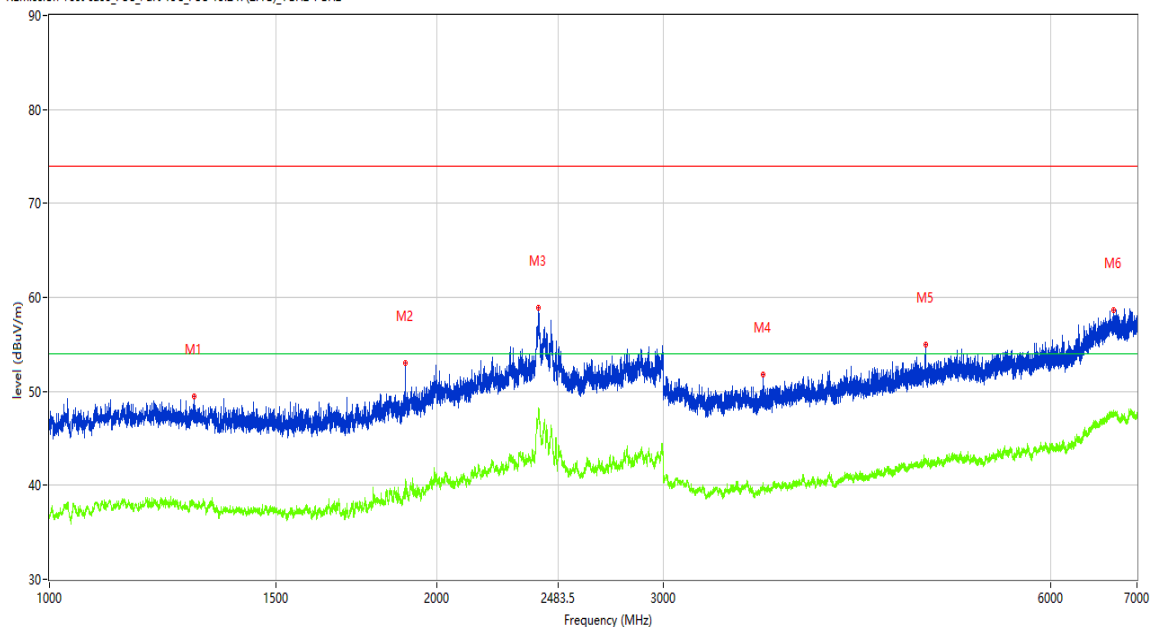
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 65 of 123

1GHz-7GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1296.213	49.46	-4.59	74.0	-24.54	Peak	76.20	100	Vertical	Pass
1**	1296.213	37.83	-4.59	54.0	-16.17	AV	76.20	100	Vertical	Pass
2	1890.889	53.06	-3.57	74.0	-20.94	Peak	27.80	100	Vertical	Pass
2**	1890.889	40.62	-3.57	54.0	-13.38	AV	27.80	100	Vertical	Pass
3	2400.075	58.91	5.37	74.0	-15.09	Peak	327.20	100	Vertical	Pass
3**	2400.075	48.11	5.37	54.0	-5.89	AV	327.20	100	Vertical	Pass
4	3584.427	51.79	-0.99	74.0	-22.21	Peak	42.20	100	Vertical	Pass
4**	3584.427	40.00	-0.99	54.0	-14.00	AV	42.20	100	Vertical	Pass
5	4796.775	55.03	1.06	74.0	-18.97	Peak	0.30	100	Vertical	Pass
5**	4796.775	42.74	1.06	54.0	-11.26	AV	0.30	100	Vertical	Pass
6	6709.036	58.71	5.92	74.0	-15.29	Peak	172.10	100	Vertical	Pass
6**	6709.036	48.06	5.92	54.0	-5.94	AV	172.10	100	Vertical	Pass

TEST REPORT

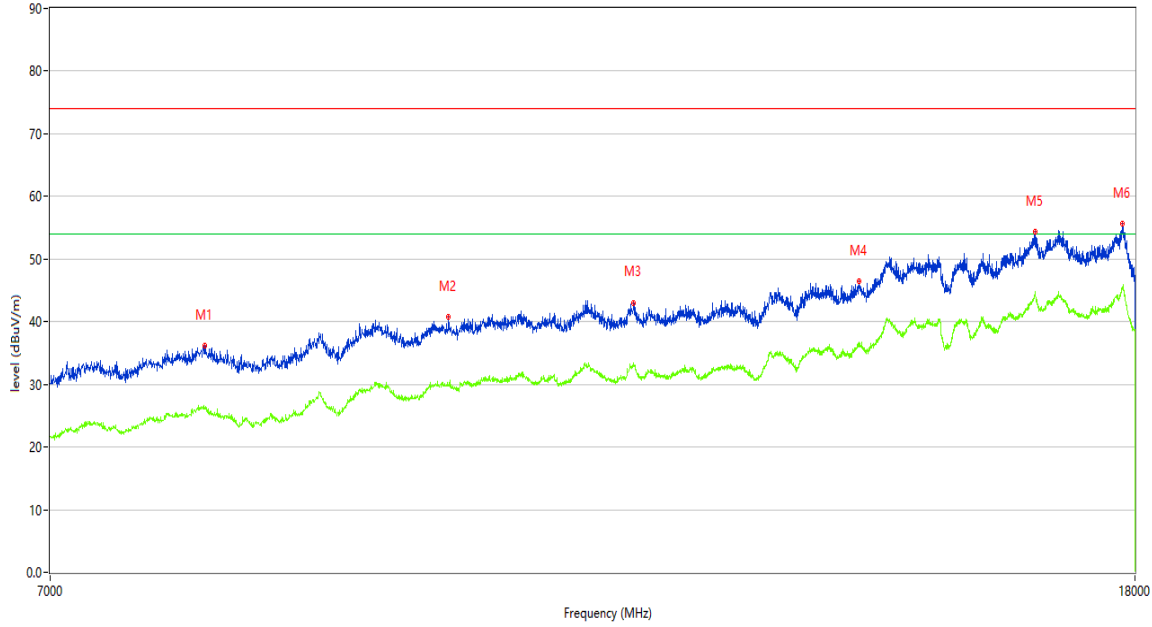
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 66 of 123

7GHz-18GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	8006.248	36.14	5.67	74.0	-37.86	Peak	143.70	100	Horizontal	Pass
1**	8006.248	26.11	5.67	54.0	-27.89	AV	143.70	100	Horizontal	Pass
2	9900.525	40.76	9.93	74.0	-33.24	Peak	176.80	100	Horizontal	Pass
2**	9900.525	29.85	9.93	54.0	-24.15	AV	176.80	100	Horizontal	Pass
3	11635.341	43.06	11.02	74.0	-30.94	Peak	116.50	100	Horizontal	Pass
3**	11635.341	32.87	11.02	54.0	-21.13	AV	116.50	100	Horizontal	Pass
4	14153.712	46.38	14.67	74.0	-27.62	Peak	306.30	100	Horizontal	Pass
4**	14153.712	36.27	14.67	54.0	-17.73	AV	306.30	100	Horizontal	Pass
5	16498.875	54.35	20.80	74.0	-19.65	Peak	121.00	100	Horizontal	Pass
5**	16498.875	44.11	20.80	54.0	-9.89	AV	121.00	100	Horizontal	Pass
6	17807.548	55.68	20.81	74.0	-18.32	Peak	196.20	100	Horizontal	Pass
6**	17807.548	45.31	20.81	54.0	-8.69	AV	196.20	100	Horizontal	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 67 of 123

7GHz-18GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7970.507	36.38	5.10	74.0	-37.62	Peak	357.60	100	Vertical	Pass
1**	7970.507	26.14	5.10	54.0	-27.86	AV	357.60	100	Vertical	Pass
2	10040.740	41.18	9.75	74.0	-32.82	Peak	255.70	100	Vertical	Pass
2**	10040.740	30.34	9.75	54.0	-23.66	AV	255.70	100	Vertical	Pass
3	12185.204	42.82	10.88	74.0	-31.18	Peak	42.10	100	Vertical	Pass
3**	12185.204	32.38	10.88	54.0	-21.62	AV	42.10	100	Vertical	Pass
4	14527.618	50.82	17.00	74.0	-23.18	Peak	87.50	100	Vertical	Pass
4**	14527.618	40.46	17.00	54.0	-13.54	AV	87.50	100	Vertical	Pass
5	16504.374	54.78	20.64	74.0	-19.22	Peak	27.60	100	Vertical	Pass
5**	16504.374	43.98	20.64	54.0	-10.02	AV	27.60	100	Vertical	Pass
6	17818.545	55.78	20.40	74.0	-18.22	Peak	132.50	100	Vertical	Pass
6**	17818.545	45.11	20.40	54.0	-8.89	AV	132.50	100	Vertical	Pass

TEST REPORT

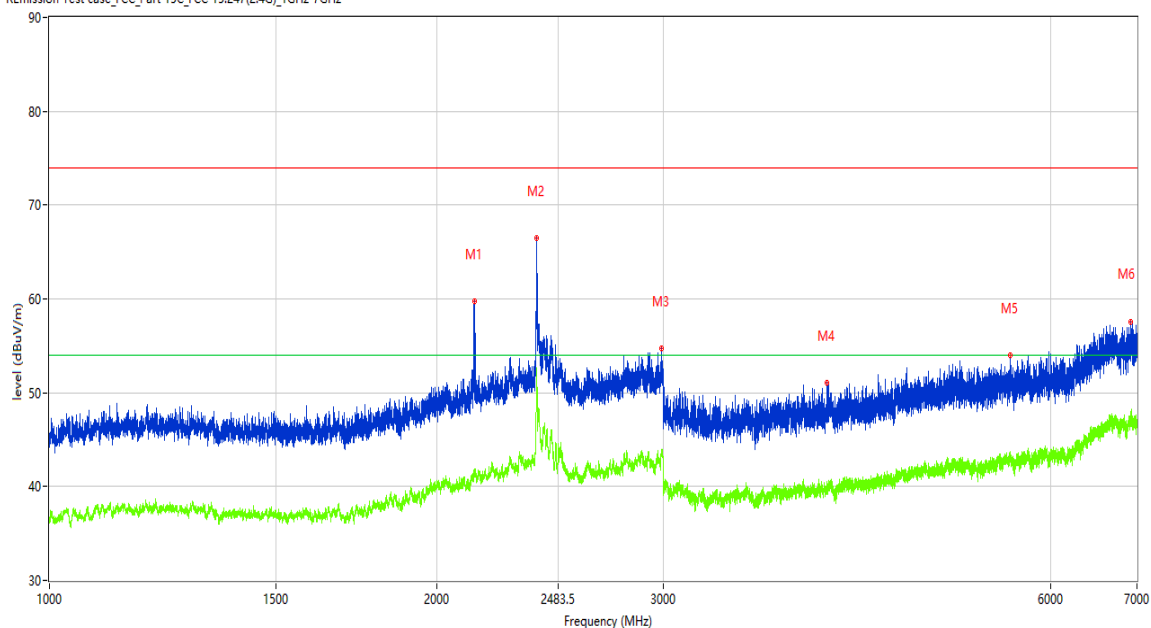
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 68 of 123

Figure 41: Spurious Emission, 1GHz – 10th Harmonic, 802.11g, 2412MHz
1GHz-7GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBUV/m)	Factor (dB)	Limit (dBUV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2138.108	59.77	-1.07	74.0	-14.23	Peak	355.80	100	Horizontal	Pass
1**	2138.108	41.82	-1.07	54.0	-12.18	AV	355.80	100	Horizontal	Pass
2	2391.826	66.51	5.16	74.0	-7.49	Peak	358.80	100	Horizontal	Pass
2**	2391.826	51.94	5.16	54.0	-2.06	AV	358.80	100	Horizontal	Pass
3	2990.501	54.75	3.11	74.0	-19.25	Peak	358.80	100	Horizontal	Pass
3**	2990.501	43.56	3.11	54.0	-10.44	AV	358.80	100	Horizontal	Pass
4	4018.873	51.10	-0.12	74.0	-22.90	Peak	0.00	100	Horizontal	Pass
4**	4018.873	39.75	-0.12	54.0	-14.25	AV	0.00	100	Horizontal	Pass
5	5581.677	53.98	2.01	74.0	-20.02	Peak	0.00	100	Horizontal	Pass
5**	5581.677	43.31	2.01	54.0	-10.69	AV	0.00	100	Horizontal	Pass
6	6924.009	57.57	5.72	74.0	-16.43	Peak	0.00	100	Horizontal	Pass
6**	6924.009	47.00	5.72	54.0	-7.00	AV	0.00	100	Horizontal	Pass

TEST REPORT

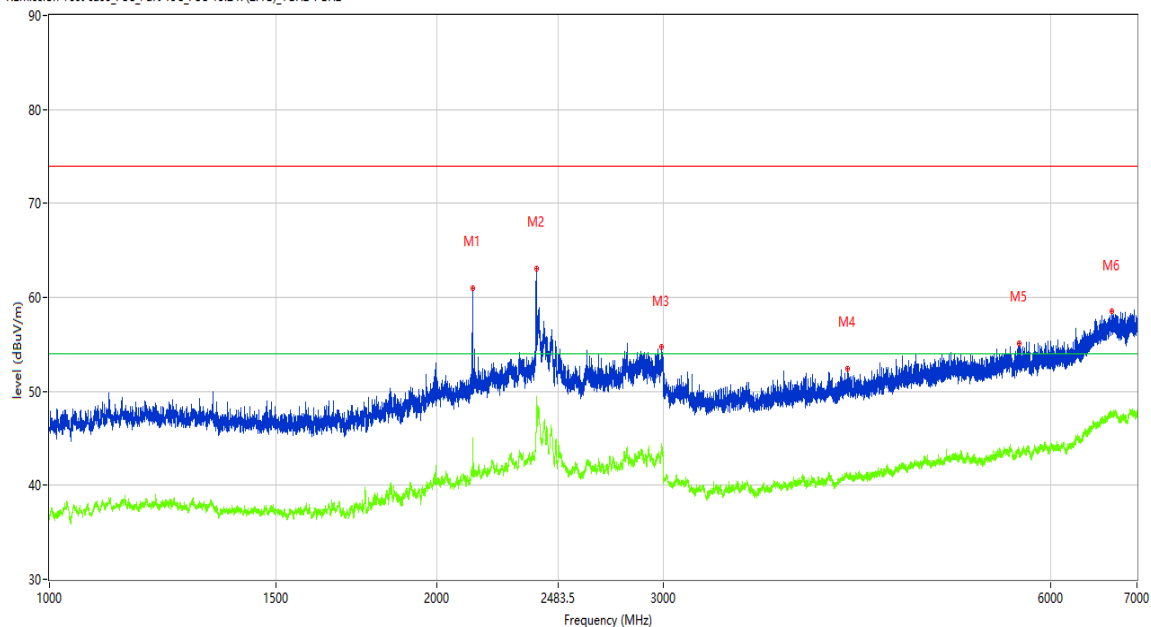
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 69 of 123

1GHz-7GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2132.358	60.96	-1.23	74.0	-13.04	Peak	303.40	100	Vertical	Pass
1**	2132.358	45.05	-1.23	54.0	-8.95	AV	303.40	100	Vertical	Pass
2	2391.576	63.10	5.00	74.0	-10.90	Peak	36.20	100	Vertical	Pass
2**	2391.576	49.50	5.00	54.0	-4.50	AV	36.20	100	Vertical	Pass
3	2992.001	54.69	3.19	74.0	-19.31	Peak	163.40	100	Vertical	Pass
3**	2992.001	44.15	3.19	54.0	-9.85	AV	163.40	100	Vertical	Pass
4	4167.854	52.41	-0.04	74.0	-21.59	Peak	244.00	100	Vertical	Pass
4**	4167.854	41.01	-0.04	54.0	-12.99	AV	244.00	100	Vertical	Pass
5	5674.666	55.10	2.13	74.0	-18.90	Peak	0.20	100	Vertical	Pass
5**	5674.666	43.21	2.13	54.0	-10.79	AV	0.20	100	Vertical	Pass
6	6696.538	58.47	5.93	74.0	-15.53	Peak	239.20	100	Vertical	Pass
6**	6696.538	47.54	5.93	54.0	-6.46	AV	239.20	100	Vertical	Pass

TEST REPORT

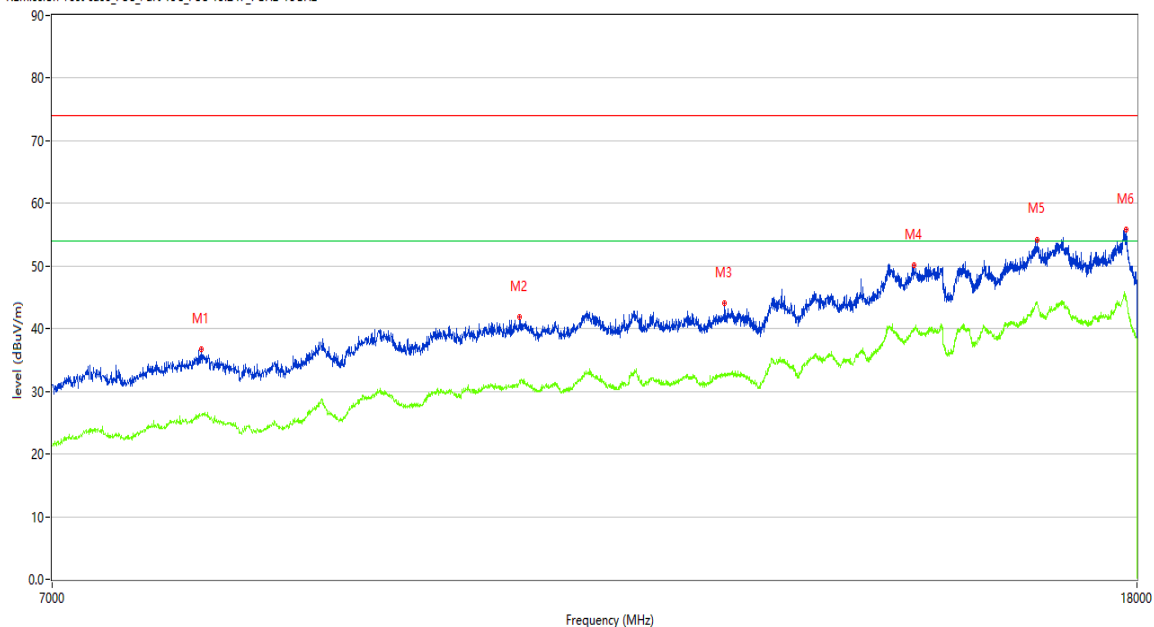
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 70 of 123

7GHz-18GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7973.257	36.74	5.16	74.0	-37.26	Peak	142.20	100	Horizontal	Pass
1**	7973.257	26.32	5.16	54.0	-27.68	AV	142.20	100	Horizontal	Pass
2	10516.371	41.88	9.93	74.0	-32.12	Peak	273.20	100	Horizontal	Pass
2**	10516.371	31.74	9.93	54.0	-22.26	AV	273.20	100	Horizontal	Pass
3	12572.857	44.01	10.94	74.0	-29.99	Peak	309.70	100	Horizontal	Pass
3**	12572.857	32.72	10.94	54.0	-21.28	AV	309.70	100	Horizontal	Pass
4	14827.293	50.18	17.98	74.0	-23.82	Peak	29.10	100	Horizontal	Pass
4**	14827.293	39.95	17.98	54.0	-14.05	AV	29.10	100	Horizontal	Pass
5	16504.374	54.10	20.64	74.0	-19.90	Peak	305.20	100	Horizontal	Pass
5**	16504.374	44.30	20.64	54.0	-9.70	AV	305.20	100	Horizontal	Pass
6	17837.791	55.88	19.67	74.0	-18.12	Peak	15.30	100	Horizontal	Pass
6**	17837.791	44.43	19.67	54.0	-9.57	AV	15.30	100	Horizontal	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 71 of 123

7GHz-18GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7984.254	36.73	5.40	74.0	-37.27	Peak	214.40	100	Vertical	Pass
1**	7984.254	26.47	5.40	54.0	-27.53	AV	214.40	100	Vertical	Pass
2	9790.552	40.53	9.64	74.0	-33.47	Peak	284.00	100	Vertical	Pass
2**	9790.552	29.73	9.64	54.0	-24.27	AV	284.00	100	Vertical	Pass
3	11627.093	43.84	11.16	74.0	-30.16	Peak	257.20	100	Vertical	Pass
3**	11627.093	33.13	11.16	54.0	-20.87	AV	257.20	100	Vertical	Pass
4	14813.547	50.63	17.81	74.0	-23.37	Peak	86.00	100	Vertical	Pass
4**	14813.547	40.00	17.81	54.0	-14.00	AV	86.00	100	Vertical	Pass
5	16837.041	54.96	20.35	74.0	-19.04	Peak	201.00	100	Vertical	Pass
5**	16837.041	44.53	20.35	54.0	-9.47	AV	201.00	100	Vertical	Pass
6	17802.049	55.66	21.02	74.0	-18.34	Peak	58.90	100	Vertical	Pass
6**	17802.049	45.96	21.02	54.0	-8.04	AV	58.90	100	Vertical	Pass

TEST REPORT

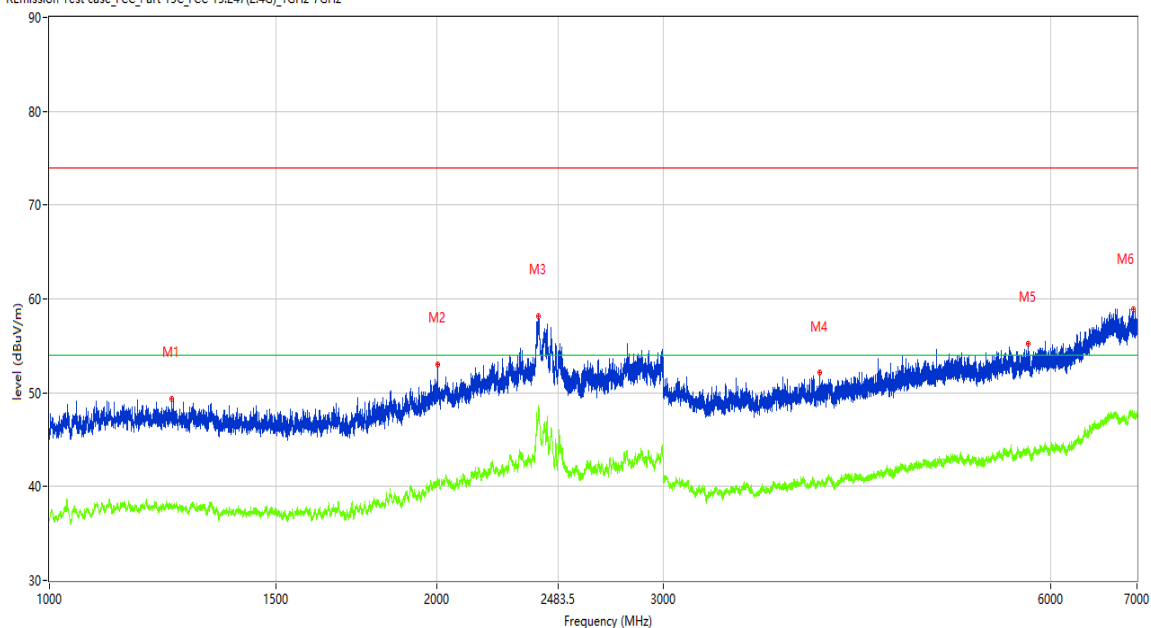
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 72 of 123

Figure 42: Spurious Emission, 1GHz – 10th Harmonic, 802.11g, 2437MHz
1GHz-7GHz, Horizontal

R:Emission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1244.469	49.37	-4.39	74.0	-24.63	Peak	214.80	100	Horizontal	Pass
1**	1244.469	37.62	-4.39	54.0	-16.38	AV	214.80	100	Horizontal	Pass
2	2001.875	53.07	-2.22	74.0	-20.93	Peak	158.60	100	Horizontal	Pass
2**	2001.875	40.63	-2.22	54.0	-13.37	AV	158.60	100	Horizontal	Pass
3	2399.325	58.15	5.40	74.0	-15.85	Peak	238.60	100	Horizontal	Pass
3**	2399.325	47.81	5.40	54.0	-6.19	AV	238.60	100	Horizontal	Pass
4	3965.879	52.11	-0.21	74.0	-21.89	Peak	334.00	100	Horizontal	Pass
4**	3965.879	40.30	-0.21	54.0	-13.70	AV	334.00	100	Horizontal	Pass
5	5764.154	55.22	2.16	74.0	-18.78	Peak	220.20	100	Horizontal	Pass
5**	5764.154	44.05	2.16	54.0	-9.95	AV	220.20	100	Horizontal	Pass
6	6952.006	58.93	5.68	74.0	-15.07	Peak	301.70	100	Horizontal	Pass
6**	6952.006	47.34	5.68	54.0	-6.66	AV	301.70	100	Horizontal	Pass

TEST REPORT

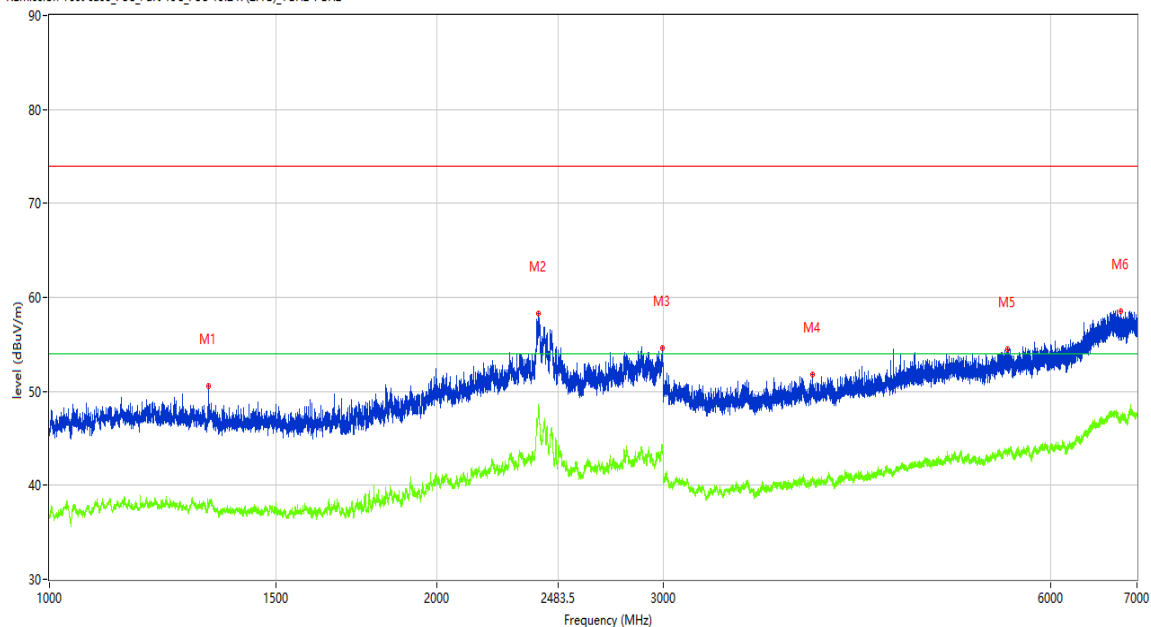
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 73 of 123

1GHz-7GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1329.959	50.59	-4.75	74.0	-23.41	Peak	96.80	100	Vertical	Pass
1**	1329.959	38.17	-4.75	54.0	-15.83	AV	96.80	100	Vertical	Pass
2	2398.825	58.31	5.42	74.0	-15.69	Peak	110.50	100	Vertical	Pass
2**	2398.825	48.08	5.42	54.0	-5.92	AV	110.50	100	Vertical	Pass
3	2996.250	54.55	2.45	74.0	-19.45	Peak	358.50	100	Vertical	Pass
3**	2996.250	43.29	2.45	54.0	-10.71	AV	358.50	100	Vertical	Pass
4	3918.885	51.80	-0.30	74.0	-22.20	Peak	271.90	100	Vertical	Pass
4**	3918.885	40.45	-0.30	54.0	-13.55	AV	271.90	100	Vertical	Pass
5	5556.180	54.46	1.93	74.0	-19.54	Peak	233.60	100	Vertical	Pass
5**	5556.180	43.57	1.93	54.0	-10.43	AV	233.60	100	Vertical	Pass
6	6797.025	58.53	5.40	74.0	-15.47	Peak	171.40	100	Vertical	Pass
6**	6797.025	46.73	5.40	54.0	-7.27	AV	171.40	100	Vertical	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 74 of 123

7GHz-18GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7813.797	36.20	4.76	74.0	-37.80	Peak	32.30	100	Horizontal	Pass
1**	7813.797	24.92	4.76	54.0	-29.08	AV	32.30	100	Horizontal	Pass
2	10197.451	40.59	10.48	74.0	-33.41	Peak	36.80	100	Horizontal	Pass
2**	10197.451	30.71	10.48	54.0	-23.29	AV	36.80	100	Horizontal	Pass
3	11621.595	42.76	11.24	74.0	-31.24	Peak	97.10	100	Horizontal	Pass
3**	11621.595	32.91	11.24	54.0	-21.09	AV	97.10	100	Horizontal	Pass
4	14497.376	50.65	17.02	74.0	-23.35	Peak	207.60	100	Horizontal	Pass
4**	14497.376	40.42	17.02	54.0	-13.58	AV	207.60	100	Horizontal	Pass
5	16872.782	54.84	20.26	74.0	-19.16	Peak	58.00	100	Horizontal	Pass
5**	16872.782	43.88	20.26	54.0	-10.12	AV	58.00	100	Horizontal	Pass
6	17791.052	55.01	21.14	74.0	-18.99	Peak	358.60	100	Horizontal	Pass
6**	17791.052	44.98	21.14	54.0	-9.02	AV	358.60	100	Horizontal	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 75 of 123

7GHz-18GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7802.799	35.78	4.78	74.0	-38.22	Peak	293.50	100	Vertical	Pass
1**	7802.799	25.33	4.78	54.0	-28.67	AV	293.50	100	Vertical	Pass
2	9768.558	40.54	9.68	74.0	-33.46	Peak	2.40	100	Vertical	Pass
2**	9768.558	29.95	9.68	54.0	-24.05	AV	2.40	100	Vertical	Pass
3	11602.349	43.17	11.55	74.0	-30.83	Peak	198.90	100	Vertical	Pass
3**	11602.349	32.58	11.55	54.0	-21.42	AV	198.90	100	Vertical	Pass
4	13614.846	46.55	14.43	74.0	-27.45	Peak	289.00	100	Vertical	Pass
4**	13614.846	35.54	14.43	54.0	-18.46	AV	289.00	100	Vertical	Pass
5	16509.873	53.96	20.42	74.0	-20.04	Peak	230.60	100	Vertical	Pass
5**	16509.873	43.88	20.42	54.0	-10.12	AV	230.60	100	Vertical	Pass
6	17810.297	54.87	20.71	74.0	-19.13	Peak	180.60	100	Vertical	Pass
6**	17810.297	45.72	20.71	54.0	-8.28	AV	180.60	100	Vertical	Pass

TEST REPORT

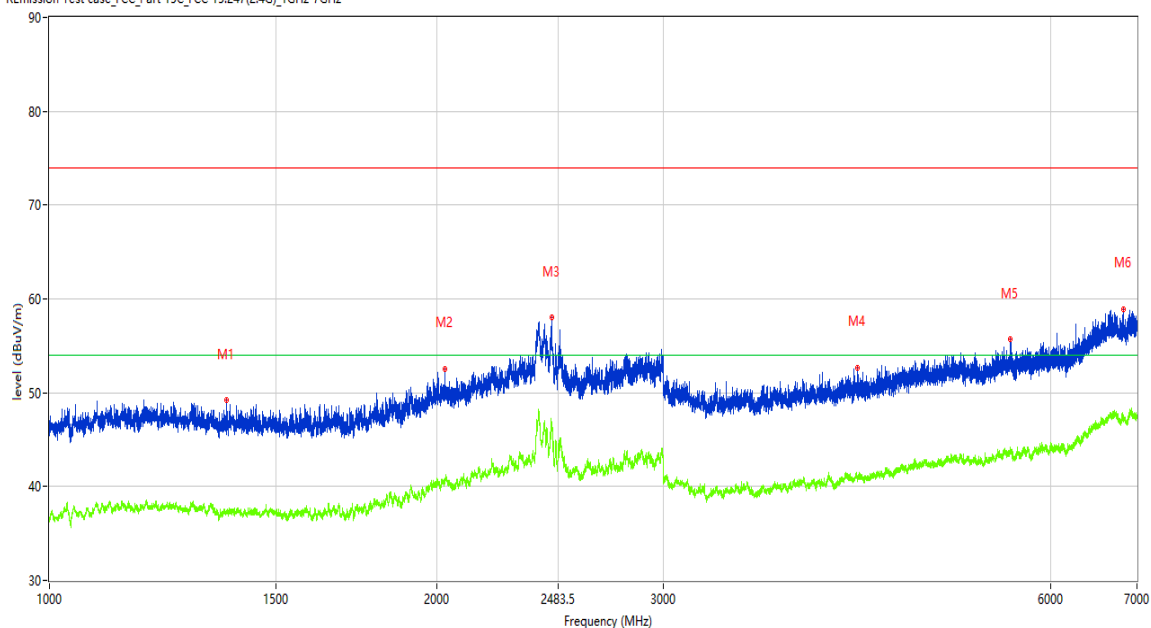
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 76 of 123

Figure 43: Spurious Emission, 1GHz – 10th Harmonic, 802.11g, 2462MHz
1GHz-7GHz, Horizontal

R:Emission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBUV/m)	Factor (dB)	Limit (dBUV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1372.703	49.16	-5.03	74.0	-24.84	Peak	64.10	100	Horizontal	Pass
1**	1372.703	37.12	-5.03	54.0	-16.88	AV	64.10	100	Horizontal	Pass
2	2029.621	52.55	-1.92	74.0	-21.45	Peak	82.70	100	Horizontal	Pass
2**	2029.621	40.42	-1.92	54.0	-13.58	AV	82.70	100	Horizontal	Pass
3	2455.318	57.99	3.21	74.0	-16.01	Peak	294.80	100	Horizontal	Pass
3**	2455.318	46.88	3.21	54.0	-7.12	AV	294.80	100	Horizontal	Pass
4	4243.345	52.62	-0.04	74.0	-21.38	Peak	177.40	100	Horizontal	Pass
4**	4243.345	41.18	-0.04	54.0	-12.82	AV	177.40	100	Horizontal	Pass
5	5580.177	55.67	2.00	74.0	-18.33	Peak	69.50	100	Horizontal	Pass
5**	5580.177	43.65	2.00	54.0	-10.35	AV	69.50	100	Horizontal	Pass
6	6828.021	58.90	5.49	74.0	-15.10	Peak	10.00	100	Horizontal	Pass
6**	6828.021	47.22	5.49	54.0	-6.78	AV	10.00	100	Horizontal	Pass

TEST REPORT

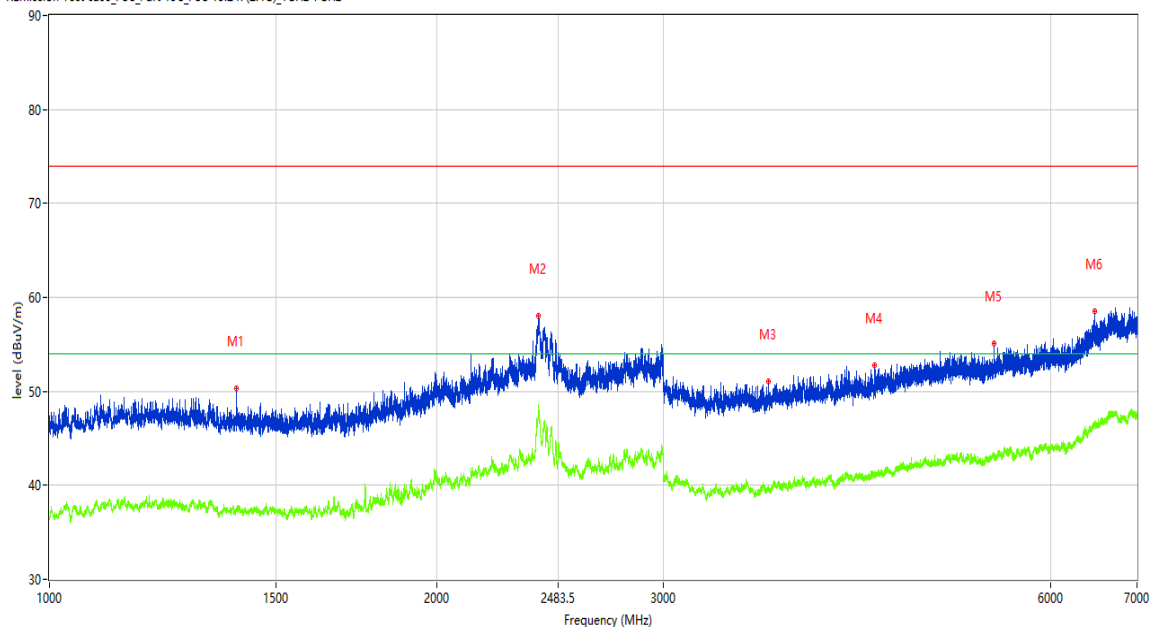
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 77 of 123

1GHz-7GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1397.950	50.37	-4.95	74.0	-23.63	Peak	10.90	100	Vertical	Pass
1**	1397.950	37.50	-4.95	54.0	-16.50	AV	10.90	100	Vertical	Pass
2	2398.325	58.08	5.44	74.0	-15.92	Peak	91.30	100	Vertical	Pass
2**	2398.325	47.84	5.44	54.0	-6.16	AV	91.30	100	Vertical	Pass
3	3619.923	51.11	-0.90	74.0	-22.89	Peak	240.00	100	Vertical	Pass
3**	3619.923	39.77	-0.90	54.0	-14.23	AV	240.00	100	Vertical	Pass
4	4379.328	52.82	0.28	74.0	-21.18	Peak	318.80	100	Vertical	Pass
4**	4379.328	41.26	0.28	54.0	-12.74	AV	318.80	100	Vertical	Pass
5	5423.197	55.14	1.53	74.0	-18.86	Peak	125.00	100	Vertical	Pass
5**	5423.197	43.10	1.53	54.0	-10.90	AV	125.00	100	Vertical	Pass
6	6493.563	58.55	4.79	74.0	-15.45	Peak	1.50	100	Vertical	Pass
6**	6493.563	46.38	4.79	54.0	-7.62	AV	1.50	100	Vertical	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 78 of 123

7GHz-18GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7827.543	35.97	4.73	74.0	-38.03	Peak	154.90	100	Horizontal	Pass
1**	7827.543	24.84	4.73	54.0	-29.16	AV	154.90	100	Horizontal	Pass
2	10169.958	41.63	10.16	74.0	-32.37	Peak	109.10	100	Horizontal	Pass
2**	10169.958	30.24	10.16	54.0	-23.76	AV	109.10	100	Horizontal	Pass
3	12583.854	44.15	11.02	74.0	-29.85	Peak	250.90	100	Horizontal	Pass
3**	12583.854	32.98	11.02	54.0	-21.02	AV	250.90	100	Horizontal	Pass
4	14508.373	50.48	17.07	74.0	-23.52	Peak	27.20	100	Horizontal	Pass
4**	14508.373	40.66	17.07	54.0	-13.34	AV	27.20	100	Horizontal	Pass
5	16504.374	53.86	20.64	74.0	-20.14	Peak	360.00	100	Horizontal	Pass
5**	16504.374	43.86	20.64	54.0	-10.14	AV	360.00	100	Horizontal	Pass
6	17818.545	55.81	20.40	74.0	-18.19	Peak	173.10	100	Horizontal	Pass
6**	17818.545	45.32	20.40	54.0	-8.68	AV	173.10	100	Horizontal	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 79 of 123

7GHz-18GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7783.554	35.85	4.81	74.0	-38.15	Peak	22.40	100	Vertical	Pass
1**	7783.554	25.11	4.81	54.0	-28.89	AV	22.40	100	Vertical	Pass
2	9884.029	39.71	9.78	74.0	-34.29	Peak	150.40	100	Vertical	Pass
2**	9884.029	29.94	9.78	54.0	-24.06	AV	150.40	100	Vertical	Pass
3	12597.601	42.85	11.10	74.0	-31.15	Peak	218.60	100	Vertical	Pass
3**	12597.601	32.73	11.10	54.0	-21.27	AV	218.60	100	Vertical	Pass
4	14500.125	50.33	17.10	74.0	-23.67	Peak	30.90	100	Vertical	Pass
4**	14500.125	40.22	17.10	54.0	-13.78	AV	30.90	100	Vertical	Pass
5	16762.809	54.24	19.51	74.0	-19.76	Peak	58.50	100	Vertical	Pass
5**	16762.809	42.86	19.51	54.0	-11.14	AV	58.50	100	Vertical	Pass
6	17802.049	55.46	21.02	74.0	-18.54	Peak	8.20	100	Vertical	Pass
6**	17802.049	45.39	21.02	54.0	-8.61	AV	8.20	100	Vertical	Pass

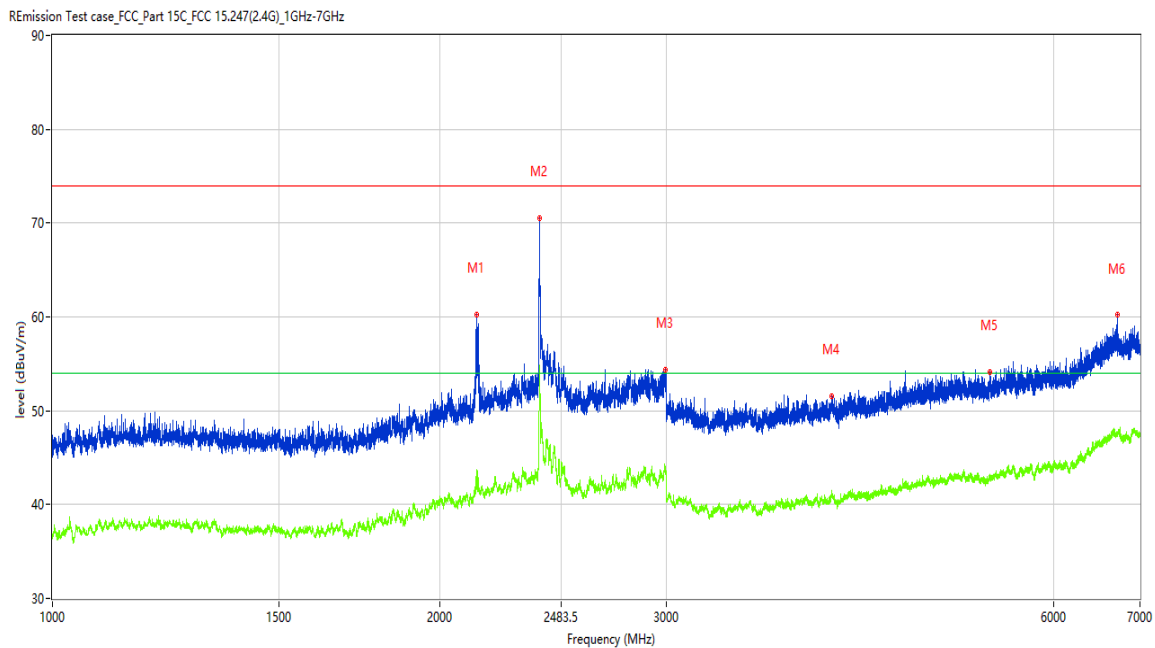
TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 80 of 123

Figure 44: Spurious Emission, 1GHz – 10th Harmonic, 802.11n(HT20), 2412MHz
1GHz-7GHz, Horizontal



No.	Frequency (MHz)	Results (dBUV/m)	Factor (dB)	Limit (dBUV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2136.858	60.28	-1.12	74.0	-13.72	Peak	338.30	100	Horizontal	Pass
1**	2136.858	43.71	-1.12	54.0	-10.29	AV	338.30	100	Horizontal	Pass
2	2391.576	70.50	5.00	74.0	-3.50	Peak	121.40	100	Horizontal	Pass
2**	2391.576	53.81	5.00	54.0	-0.19	AV	121.40	100	Horizontal	Pass
3	2992.501	54.42	3.11	74.0	-19.58	Peak	131.10	100	Horizontal	Pass
3**	2992.501	44.04	3.11	54.0	-9.96	AV	131.10	100	Horizontal	Pass
4	4032.871	51.61	-0.11	74.0	-22.39	Peak	152.70	100	Horizontal	Pass
4**	4032.871	41.24	-0.11	54.0	-12.76	AV	152.70	100	Horizontal	Pass
5	5353.706	54.12	1.46	74.0	-19.88	Peak	180.60	100	Horizontal	Pass
5**	5353.706	43.02	1.46	54.0	-10.98	AV	180.60	100	Horizontal	Pass
6	6720.035	60.20	5.85	74.0	-13.80	Peak	299.70	100	Horizontal	Pass
6**	6720.035	47.58	5.85	54.0	-6.42	AV	299.70	100	Horizontal	Pass

TEST REPORT

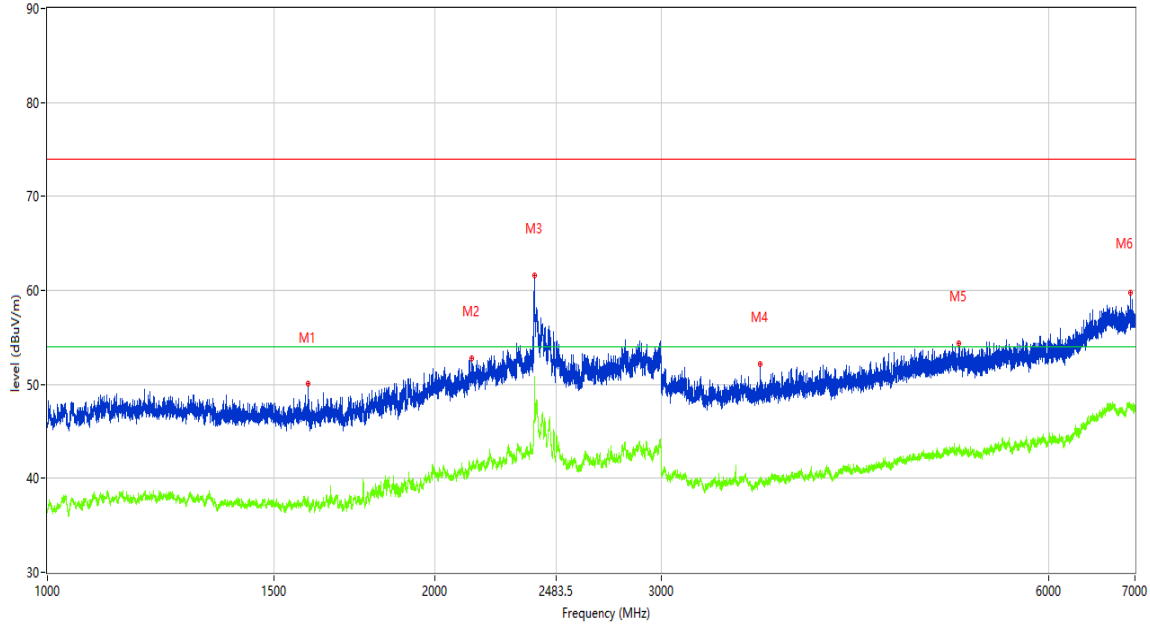
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 81 of 123

1GHz-7GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1595.426	50.04	-5.53	74.0	-23.96	Peak	64.10	100	Vertical	Pass
1**	1595.426	38.08	-5.53	54.0	-15.92	AV	64.10	100	Vertical	Pass
2	2137.108	52.77	-1.12	74.0	-21.23	Peak	0.60	100	Vertical	Pass
2**	2137.108	41.22	-1.12	54.0	-12.78	AV	0.60	100	Vertical	Pass
3	2391.576	61.65	5.00	74.0	-12.35	Peak	44.70	100	Vertical	Pass
3**	2391.576	48.44	5.00	54.0	-5.56	AV	44.70	100	Vertical	Pass
4	3580.927	52.21	-1.00	74.0	-21.79	Peak	128.70	100	Vertical	Pass
4**	3580.927	39.67	-1.00	54.0	-14.33	AV	128.70	100	Vertical	Pass
5	5104.237	54.36	1.76	74.0	-19.64	Peak	18.50	100	Vertical	Pass
5**	5104.237	43.15	1.76	54.0	-10.85	AV	18.50	100	Vertical	Pass
6	6942.007	59.71	5.70	74.0	-14.29	Peak	279.70	100	Vertical	Pass
6**	6942.007	47.62	5.70	54.0	-6.38	AV	279.70	100	Vertical	Pass

TEST REPORT

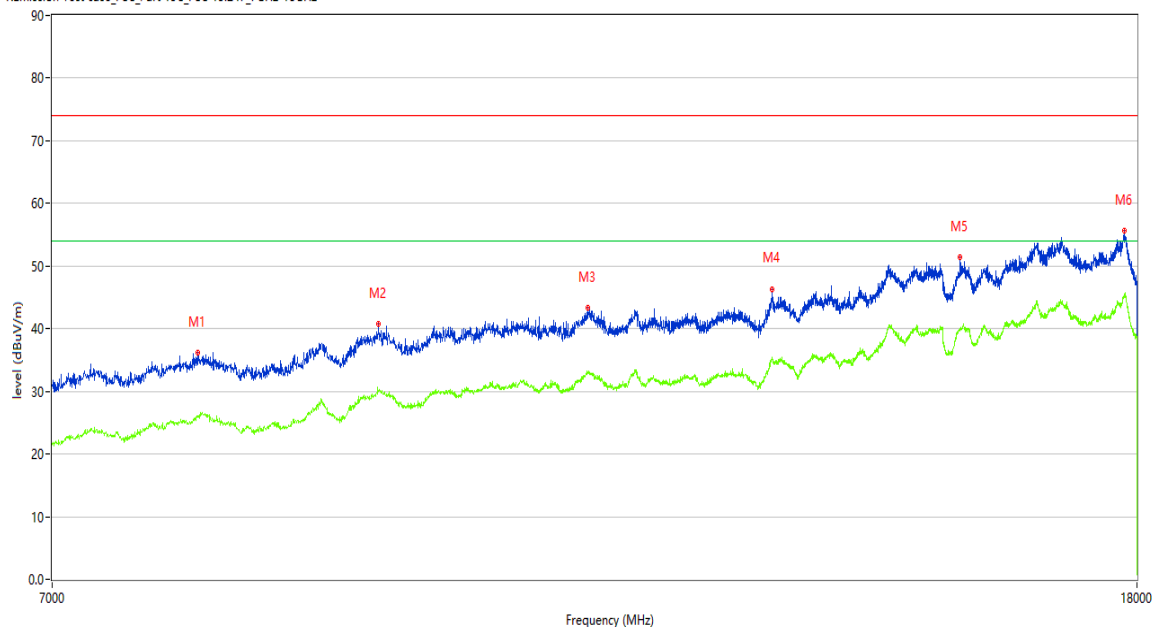
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 82 of 123

7GHz-18GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBUV/m)	Factor (dB)	Limit (dBUV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7948.513	36.11	4.68	74.0	-37.89	Peak	208.40	100	Horizontal	Pass
1**	7948.513	25.97	4.68	54.0	-28.03	AV	208.40	100	Horizontal	Pass
2	9301.175	40.73	9.13	74.0	-33.27	Peak	359.30	100	Horizontal	Pass
2**	9301.175	30.00	9.13	54.0	-24.00	AV	359.30	100	Horizontal	Pass
3	11159.710	43.35	10.81	74.0	-30.65	Peak	289.90	100	Horizontal	Pass
3**	11159.710	33.00	10.81	54.0	-21.00	AV	289.90	100	Horizontal	Pass
4	13097.976	46.35	12.62	74.0	-27.65	Peak	345.00	100	Horizontal	Pass
4**	13097.976	35.23	12.62	54.0	-18.77	AV	345.00	100	Horizontal	Pass
5	15426.643	51.34	15.55	74.0	-22.66	Peak	13.10	100	Horizontal	Pass
5**	15426.643	39.87	15.55	54.0	-14.13	AV	13.10	100	Horizontal	Pass
6	17802.049	55.59	21.02	74.0	-18.41	Peak	195.80	100	Horizontal	Pass
6**	17802.049	45.11	21.02	54.0	-8.89	AV	195.80	100	Horizontal	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 83 of 123

7GHz-18GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7995.251	36.64	5.63	74.0	-37.36	Peak	38.00	100	Vertical	Pass
1**	7995.251	26.60	5.63	54.0	-27.40	AV	38.00	100	Vertical	Pass
2	10059.985	41.54	9.78	74.0	-32.46	Peak	111.00	100	Vertical	Pass
2**	10059.985	30.23	9.78	54.0	-23.77	AV	111.00	100	Vertical	Pass
3	12495.876	42.82	10.65	74.0	-31.18	Peak	56.20	100	Vertical	Pass
3**	12495.876	32.30	10.65	54.0	-21.70	AV	56.20	100	Vertical	Pass
4	14508.373	49.96	17.07	74.0	-24.04	Peak	251.30	100	Vertical	Pass
4**	14508.373	40.57	17.07	54.0	-13.43	AV	251.30	100	Vertical	Pass
5	16892.027	53.95	20.06	74.0	-20.05	Peak	260.20	100	Vertical	Pass
5**	16892.027	43.77	20.06	54.0	-10.23	AV	260.20	100	Vertical	Pass
6	17829.543	55.28	19.98	74.0	-18.72	Peak	342.40	100	Vertical	Pass
6**	17829.543	44.82	19.98	54.0	-9.18	AV	342.40	100	Vertical	Pass

TEST REPORT

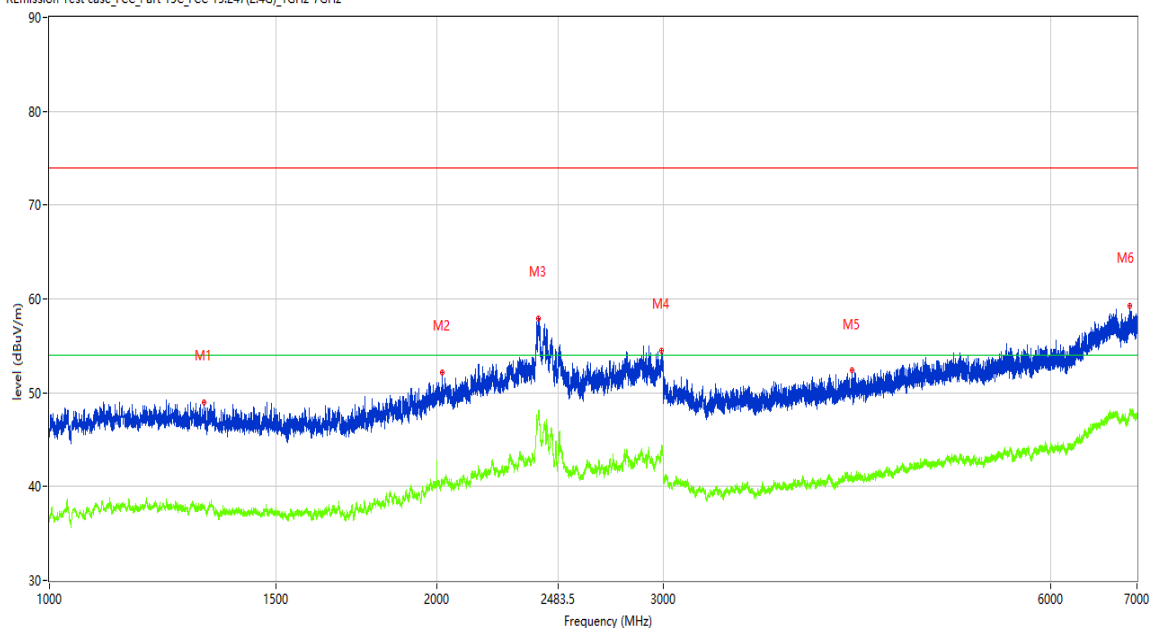
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 84 of 123

Figure 45: Spurious Emission, 1GHz – 10th Harmonic, 802.11n(HT20), 2437MHz
1GHz-7GHz, Horizontal

R:Emission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBUV/m)	Factor (dB)	Limit (dBUV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1317.960	48.96	-4.48	74.0	-25.04	Peak	309.60	100	Horizontal	Pass
1**	1317.960	37.87	-4.48	54.0	-16.13	AV	309.60	100	Horizontal	Pass
2	2018.373	52.14	-1.83	74.0	-21.86	Peak	209.80	100	Horizontal	Pass
2**	2018.373	40.67	-1.83	54.0	-13.33	AV	209.80	100	Horizontal	Pass
3	2396.825	57.92	5.50	74.0	-16.08	Peak	0.00	100	Horizontal	Pass
3**	2396.825	47.10	5.50	54.0	-6.90	AV	0.00	100	Horizontal	Pass
4	2990.751	54.48	3.12	74.0	-19.52	Peak	64.00	100	Horizontal	Pass
4**	2990.751	44.30	3.12	54.0	-9.70	AV	64.00	100	Horizontal	Pass
5	4206.849	52.37	-0.04	74.0	-21.63	Peak	0.00	100	Horizontal	Pass
5**	4206.849	40.77	-0.04	54.0	-13.23	AV	0.00	100	Horizontal	Pass
6	6905.512	59.33	5.75	74.0	-14.67	Peak	202.30	100	Horizontal	Pass
6**	6905.512	47.58	5.75	54.0	-6.42	AV	202.30	100	Horizontal	Pass

TEST REPORT

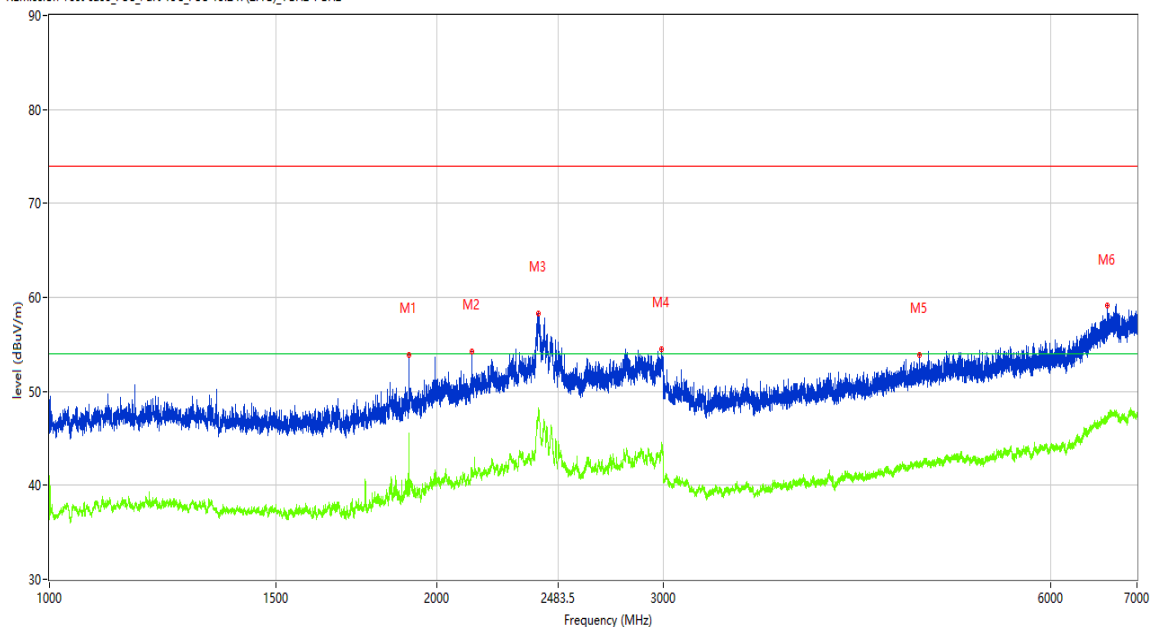
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 85 of 123

1GHz-7GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1902.887	53.90	-4.02	74.0	-20.10	Peak	0.00	100	Vertical	Pass
1**	1902.887	44.26	-4.02	54.0	-9.74	AV	0.00	100	Vertical	Pass
2	2128.859	54.25	-1.03	74.0	-19.75	Peak	326.80	100	Vertical	Pass
2**	2128.859	41.87	-1.03	54.0	-12.13	AV	326.80	100	Vertical	Pass
3	2397.825	58.32	5.46	74.0	-15.68	Peak	357.10	100	Vertical	Pass
3**	2397.825	47.78	5.46	54.0	-6.22	AV	357.10	100	Vertical	Pass
4	2991.501	54.53	3.17	74.0	-19.47	Peak	185.00	100	Vertical	Pass
4**	2991.501	44.06	3.17	54.0	-9.94	AV	185.00	100	Vertical	Pass
5	4744.782	53.88	1.00	74.0	-20.12	Peak	255.10	100	Vertical	Pass
5**	4744.782	42.30	1.00	54.0	-11.70	AV	255.10	100	Vertical	Pass
6	6638.045	59.09	5.26	74.0	-14.91	Peak	214.10	100	Vertical	Pass
6**	6638.045	47.16	5.26	54.0	-6.84	AV	214.10	100	Vertical	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 86 of 123

7GHz-18GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7937.516	36.45	4.75	74.0	-37.55	Peak	158.90	100	Horizontal	Pass
1**	7937.516	25.86	4.75	54.0	-28.14	AV	158.90	100	Horizontal	Pass
2	10235.941	42.16	10.64	74.0	-31.84	Peak	344.90	100	Horizontal	Pass
2**	10235.941	30.83	10.64	54.0	-23.17	AV	344.90	100	Horizontal	Pass
3	12198.950	42.95	10.82	74.0	-31.05	Peak	85.60	100	Horizontal	Pass
3**	12198.950	32.14	10.82	54.0	-21.86	AV	85.60	100	Horizontal	Pass
4	14505.624	50.41	17.08	74.0	-23.59	Peak	290.20	100	Horizontal	Pass
4**	14505.624	40.38	17.08	54.0	-13.62	AV	290.20	100	Horizontal	Pass
5	16705.074	54.16	19.95	74.0	-19.84	Peak	154.40	100	Horizontal	Pass
5**	16705.074	43.52	19.95	54.0	-10.48	AV	154.40	100	Horizontal	Pass
6	17802.049	56.15	21.02	74.0	-17.85	Peak	176.70	100	Horizontal	Pass
6**	17802.049	45.27	21.02	54.0	-8.73	AV	176.70	100	Horizontal	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 87 of 123

7GHz-18GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7992.502	36.49	5.57	74.0	-37.51	Peak	39.10	100	Vertical	Pass
1**	7992.502	26.50	5.57	54.0	-27.50	AV	39.10	100	Vertical	Pass
2	9342.414	41.26	9.71	74.0	-32.74	Peak	3.80	100	Vertical	Pass
2**	9342.414	29.84	9.71	54.0	-24.16	AV	3.80	100	Vertical	Pass
3	11170.707	43.80	10.78	74.0	-30.20	Peak	348.70	100	Vertical	Pass
3**	11170.707	32.69	10.78	54.0	-21.31	AV	348.70	100	Vertical	Pass
4	13573.607	46.76	14.38	74.0	-27.24	Peak	48.40	100	Vertical	Pass
4**	13573.607	35.45	14.38	54.0	-18.55	AV	48.40	100	Vertical	Pass
5	16518.120	53.53	20.08	74.0	-20.47	Peak	325.50	100	Vertical	Pass
5**	16518.120	43.66	20.08	54.0	-10.34	AV	325.50	100	Vertical	Pass
6	17802.049	55.38	21.02	74.0	-18.62	Peak	339.40	100	Vertical	Pass
6**	17802.049	45.15	21.02	54.0	-8.85	AV	339.40	100	Vertical	Pass

TEST REPORT

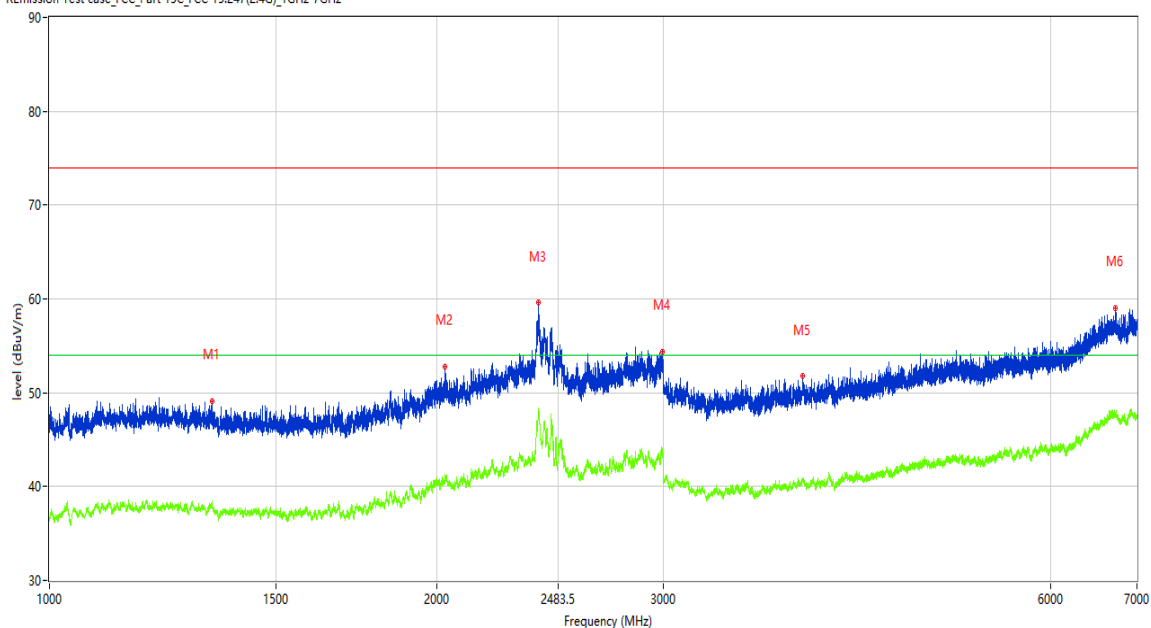
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 88 of 123

Figure 46: Spurious Emission, 1GHz – 10th Harmonic, 802.11n(HT20), 2462MHz
1GHz-7GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1336.958	49.10	-4.40	74.0	-24.90	Peak	359.20	100	Horizontal	Pass
1**	1336.958	38.00	-4.40	54.0	-16.00	AV	359.20	100	Horizontal	Pass
2	2030.121	52.83	-1.85	74.0	-21.17	Peak	151.00	100	Horizontal	Pass
2**	2030.121	40.76	-1.85	54.0	-13.24	AV	151.00	100	Horizontal	Pass
3	2398.075	59.58	5.45	74.0	-14.42	Peak	21.10	100	Horizontal	Pass
3**	2398.075	47.68	5.45	54.0	-6.32	AV	21.10	100	Horizontal	Pass
4	2993.751	54.40	2.89	74.0	-19.60	Peak	222.00	100	Horizontal	Pass
4**	2993.751	43.80	2.89	54.0	-10.20	AV	222.00	100	Horizontal	Pass
5	3847.894	51.76	-0.55	74.0	-22.24	Peak	360.00	100	Horizontal	Pass
5**	3847.894	40.61	-0.55	54.0	-13.39	AV	360.00	100	Horizontal	Pass
6	6733.033	58.98	5.78	74.0	-15.02	Peak	0.10	100	Horizontal	Pass
6**	6733.033	47.46	5.78	54.0	-6.54	AV	0.10	100	Horizontal	Pass

TEST REPORT

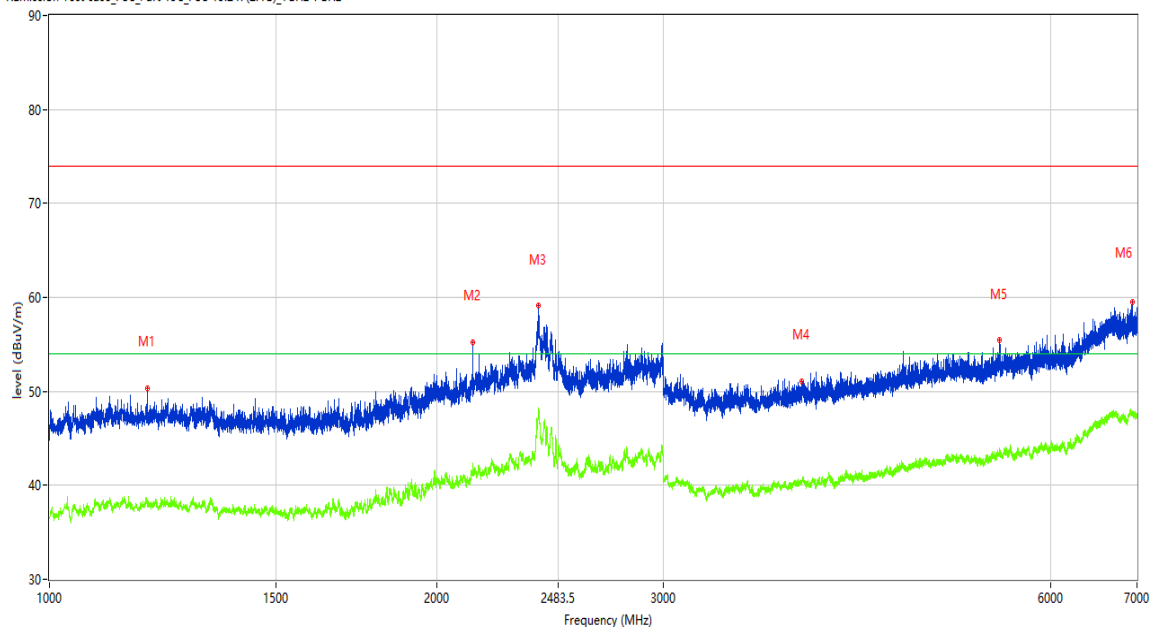
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 89 of 123

1GHz-7GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1190.726	50.34	-4.02	74.0	-23.66	Peak	105.30	100	Vertical	Pass
1**	1190.726	38.08	-4.02	54.0	-15.92	AV	105.30	100	Vertical	Pass
2	2132.108	55.21	-1.21	74.0	-18.79	Peak	294.00	100	Vertical	Pass
2**	2132.108	42.36	-1.21	54.0	-11.64	AV	294.00	100	Vertical	Pass
3	2399.575	59.09	5.39	74.0	-14.91	Peak	124.20	100	Vertical	Pass
3**	2399.575	48.02	5.39	54.0	-5.98	AV	124.20	100	Vertical	Pass
4	3839.395	51.06	-0.58	74.0	-22.94	Peak	347.40	100	Vertical	Pass
4**	3839.395	40.40	-0.58	54.0	-13.60	AV	347.40	100	Vertical	Pass
5	5469.691	55.43	1.67	74.0	-18.57	Peak	80.40	100	Vertical	Pass
5**	5469.691	43.13	1.67	54.0	-10.87	AV	80.40	100	Vertical	Pass
6	6946.507	59.48	5.69	74.0	-14.52	Peak	227.40	100	Vertical	Pass
6**	6946.507	47.34	5.69	54.0	-6.66	AV	227.40	100	Vertical	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 90 of 123

7GHz-18GHz, Horizontal

No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	8011.747	36.38	5.61	74.0	-37.62	Peak	102.20	100	Horizontal	Pass
1**	8011.747	26.29	5.61	54.0	-27.71	AV	102.20	100	Horizontal	Pass
2	10249.688	40.82	10.68	74.0	-33.18	Peak	360.00	100	Horizontal	Pass
2**	10249.688	31.04	10.68	54.0	-22.96	AV	360.00	100	Horizontal	Pass
3	12198.950	43.26	10.82	74.0	-30.74	Peak	243.20	100	Horizontal	Pass
3**	12198.950	32.36	10.82	54.0	-21.64	AV	243.20	100	Horizontal	Pass
4	14508.373	50.16	17.07	74.0	-23.84	Peak	279.30	100	Horizontal	Pass
4**	14508.373	40.73	17.07	54.0	-13.27	AV	279.30	100	Horizontal	Pass
5	16479.630	54.11	20.40	74.0	-19.89	Peak	247.70	100	Horizontal	Pass
5**	16479.630	43.25	20.40	54.0	-10.75	AV	247.70	100	Horizontal	Pass
6	17799.300	54.97	21.10	74.0	-19.03	Peak	25.20	100	Horizontal	Pass
6**	17799.300	45.14	21.10	54.0	-8.86	AV	25.20	100	Horizontal	Pass

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 91 of 123

7GHz-18GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7915.521	36.32	4.90	74.0	-37.68	Peak	0.00	100	Vertical	Pass
1**	7915.521	25.53	4.90	54.0	-28.47	AV	0.00	100	Vertical	Pass
2	9763.059	41.02	9.69	74.0	-32.98	Peak	113.20	100	Vertical	Pass
2**	9763.059	29.80	9.69	54.0	-24.20	AV	113.20	100	Vertical	Pass
3	12154.961	42.60	10.99	74.0	-31.40	Peak	13.90	100	Vertical	Pass
3**	12154.961	32.45	10.99	54.0	-21.55	AV	13.90	100	Vertical	Pass
4	14508.373	51.28	17.07	74.0	-22.72	Peak	210.40	100	Vertical	Pass
4**	14508.373	40.56	17.07	54.0	-13.44	AV	210.40	100	Vertical	Pass
5	16520.870	54.35	19.97	74.0	-19.65	Peak	304.50	100	Vertical	Pass
5**	16520.870	43.25	19.97	54.0	-10.75	AV	304.50	100	Vertical	Pass
6	17813.047	54.96	20.61	74.0	-19.04	Peak	205.90	100	Vertical	Pass
6**	17813.047	45.26	20.61	54.0	-8.74	AV	205.90	100	Vertical	Pass

TEST REPORT

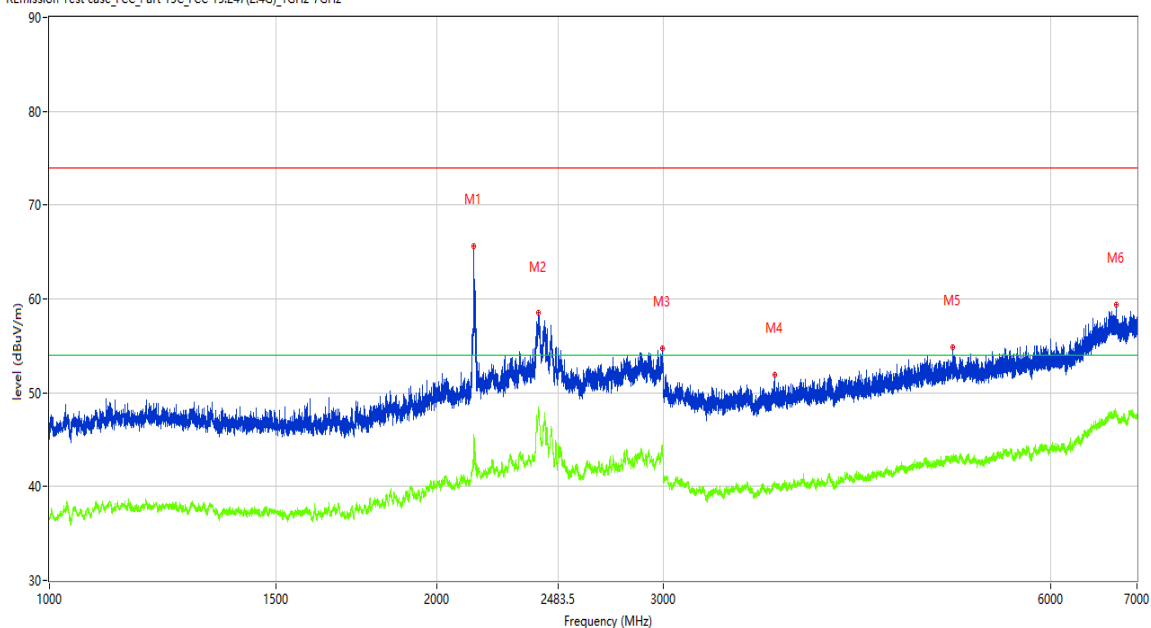
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 92 of 123

Figure 47: Spurious Emission, 1GHz – 10th Harmonic, 802.11n(HT40), 2422MHz
1GHz-7GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBUV/m)	Factor (dB)	Limit (dBUV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2137.858	65.61	-1.09	74.0	-8.39	Peak	347.30	100	Horizontal	Pass
1**	2137.858	45.52	-1.09	54.0	-8.48	AV	347.30	100	Horizontal	Pass
2	2399.825	58.49	5.38	74.0	-15.51	Peak	131.80	100	Horizontal	Pass
2**	2399.825	47.99	5.38	54.0	-6.01	AV	131.80	100	Horizontal	Pass
3	2992.251	54.70	3.16	74.0	-19.30	Peak	313.80	100	Horizontal	Pass
3**	2992.251	44.46	3.16	54.0	-9.54	AV	313.80	100	Horizontal	Pass
4	3661.917	51.91	-0.82	74.0	-22.09	Peak	261.10	100	Horizontal	Pass
4**	3661.917	39.96	-0.82	54.0	-14.04	AV	261.10	100	Horizontal	Pass
5	5032.246	54.83	1.69	74.0	-19.17	Peak	209.10	100	Horizontal	Pass
5**	5032.246	43.02	1.69	54.0	-10.98	AV	209.10	100	Horizontal	Pass
6	6749.031	59.39	5.68	74.0	-14.61	Peak	0.00	100	Horizontal	Pass
6**	6749.031	47.51	5.68	54.0	-6.49	AV	0.00	100	Horizontal	Pass

TEST REPORT

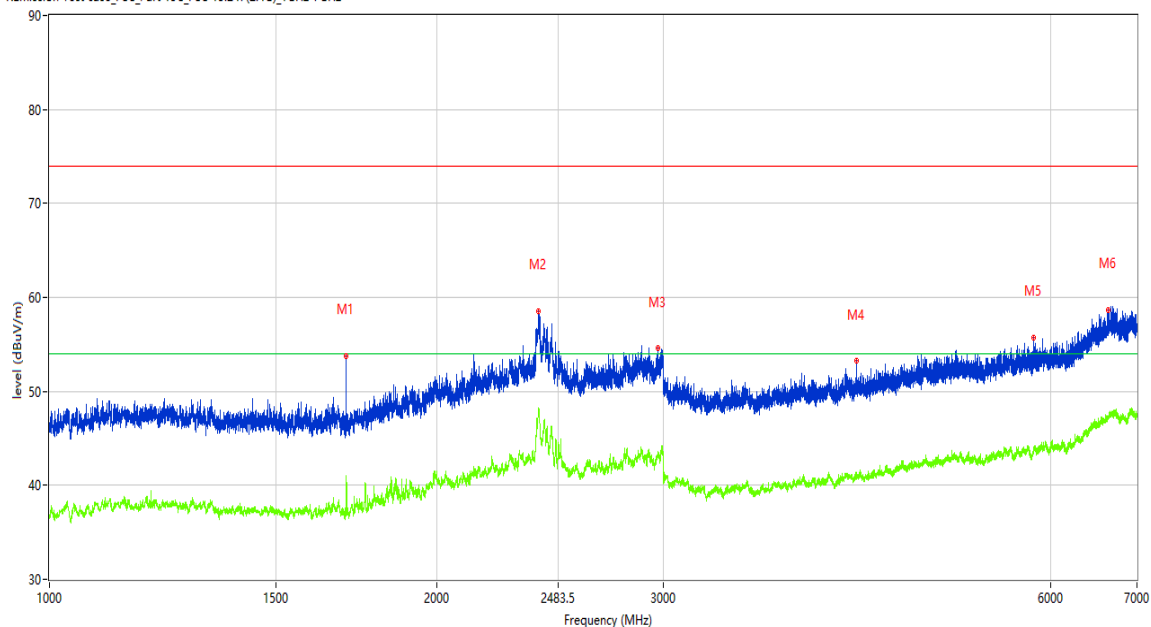
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 93 of 123

1GHz-7GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1699.163	53.73	-5.71	74.0	-20.27	Peak	357.50	100	Vertical	Pass
1**	1699.163	41.03	-5.71	54.0	-12.97	AV	357.50	100	Vertical	Pass
2	2400.075	58.51	5.37	74.0	-15.49	Peak	228.90	100	Vertical	Pass
2**	2400.075	48.27	5.37	54.0	-5.73	AV	228.90	100	Vertical	Pass
3	2971.004	54.57	2.70	74.0	-19.43	Peak	3.60	100	Vertical	Pass
3**	2971.004	43.30	2.70	54.0	-10.70	AV	3.60	100	Vertical	Pass
4	4237.845	53.21	-0.04	74.0	-20.79	Peak	87.70	100	Vertical	Pass
4**	4237.845	40.88	-0.04	54.0	-13.12	AV	87.70	100	Vertical	Pass
5	5818.148	55.77	2.16	74.0	-18.23	Peak	321.00	100	Vertical	Pass
5**	5818.148	43.72	2.16	54.0	-10.28	AV	321.00	100	Vertical	Pass
6	6645.544	58.62	5.35	74.0	-15.38	Peak	0.00	100	Vertical	Pass
6**	6645.544	47.20	5.35	54.0	-6.80	AV	0.00	100	Vertical	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 94 of 123

7GHz-18GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBUV/m)	Factor (dB)	Limit (dBUV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7998.000	36.99	5.69	74.0	-37.01	Peak	94.60	100	Horizontal	Pass
1**	7998.000	27.16	5.69	54.0	-26.84	AV	94.60	100	Horizontal	Pass
2	9752.062	40.94	9.71	74.0	-33.06	Peak	67.50	100	Horizontal	Pass
2**	9752.062	29.76	9.71	54.0	-24.24	AV	67.50	100	Horizontal	Pass
3	11613.347	42.77	11.38	74.0	-31.23	Peak	157.90	100	Horizontal	Pass
3**	11613.347	32.68	11.38	54.0	-21.32	AV	157.90	100	Horizontal	Pass
4	13801.800	46.98	13.42	74.0	-27.02	Peak	358.60	100	Horizontal	Pass
4**	13801.800	36.07	13.42	54.0	-17.93	AV	358.60	100	Horizontal	Pass
5	16498.875	54.22	20.80	74.0	-19.78	Peak	268.80	100	Horizontal	Pass
5**	16498.875	44.07	20.80	54.0	-9.93	AV	268.80	100	Horizontal	Pass
6	17818.545	55.13	20.40	74.0	-18.87	Peak	131.10	100	Horizontal	Pass
6**	17818.545	45.39	20.40	54.0	-8.61	AV	131.10	100	Horizontal	Pass

TEST REPORT

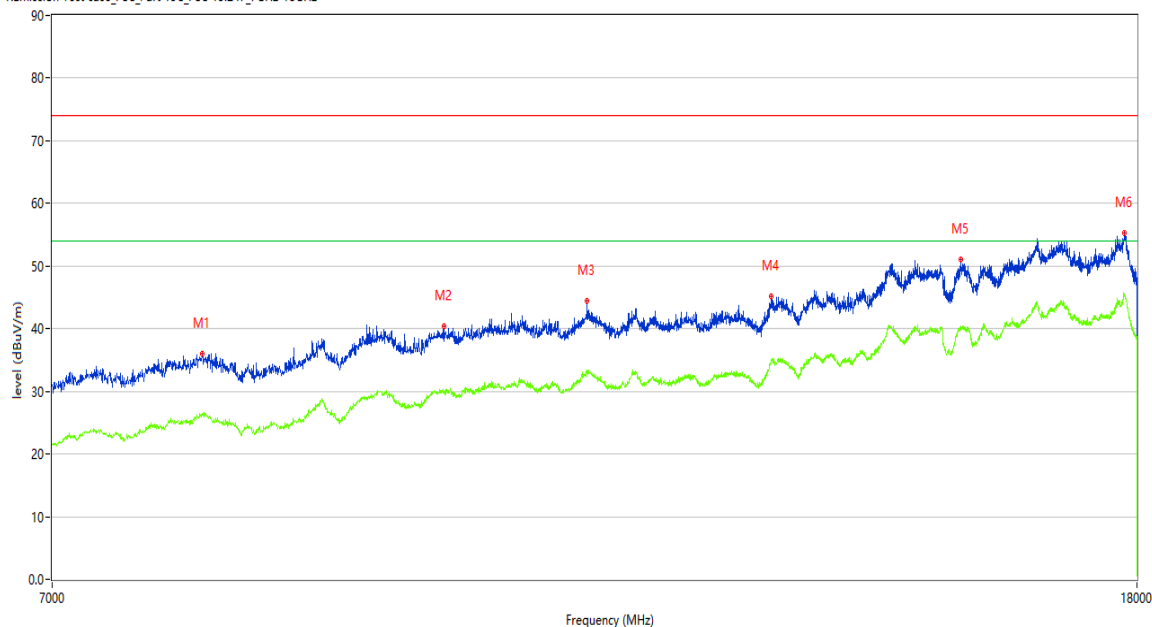
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 95 of 123

7GHz-18GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7978.755	36.04	5.28	74.0	-37.96	Peak	0.00	100	Vertical	Pass
1**	7978.755	26.23	5.28	54.0	-27.77	AV	0.00	100	Vertical	Pass
2	9848.288	40.44	9.46	74.0	-33.56	Peak	57.70	100	Vertical	Pass
2**	9848.288	29.75	9.46	54.0	-24.25	AV	57.70	100	Vertical	Pass
3	11154.211	44.36	10.82	74.0	-29.64	Peak	39.90	100	Vertical	Pass
3**	11154.211	33.37	10.82	54.0	-20.63	AV	39.90	100	Vertical	Pass
4	13092.477	45.14	12.49	74.0	-28.86	Peak	188.30	100	Vertical	Pass
4**	13092.477	34.60	12.49	54.0	-19.40	AV	188.30	100	Vertical	Pass
5	15437.641	50.98	15.43	74.0	-23.02	Peak	156.60	100	Vertical	Pass
5**	15437.641	39.94	15.43	54.0	-14.06	AV	156.60	100	Vertical	Pass
6	17804.799	55.31	20.92	74.0	-18.69	Peak	312.00	100	Vertical	Pass
6**	17804.799	45.45	20.92	54.0	-8.55	AV	312.00	100	Vertical	Pass

TEST REPORT

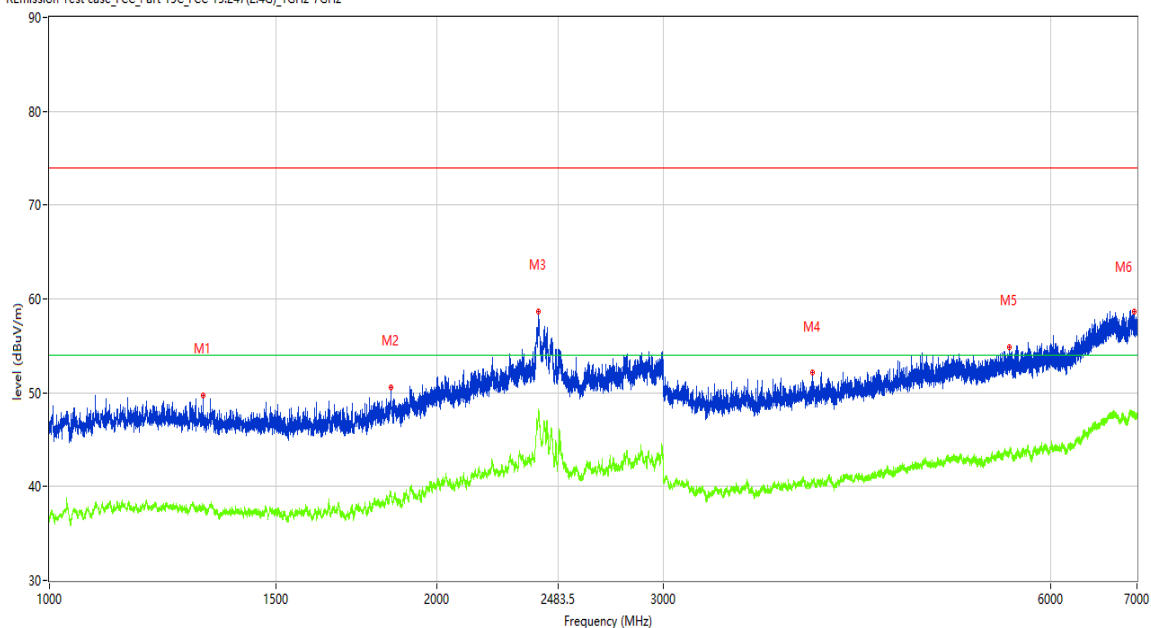
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 96 of 123

Figure 48: Spurious Emission, 1GHz – 10th Harmonic, 802.11n(HT40), 2437MHz
1GHz-7GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBUV/m)	Factor (dB)	Limit (dBUV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1316.710	49.77	-4.56	74.0	-24.23	Peak	115.50	100	Horizontal	Pass
1**	1316.710	37.97	-4.56	54.0	-16.03	AV	115.50	100	Horizontal	Pass
2	1841.645	50.58	-3.48	74.0	-23.42	Peak	351.40	100	Horizontal	Pass
2**	1841.645	38.90	-3.48	54.0	-15.10	AV	351.40	100	Horizontal	Pass
3	2397.325	58.63	5.48	74.0	-15.37	Peak	280.30	100	Horizontal	Pass
3**	2397.325	47.43	5.48	54.0	-6.57	AV	280.30	100	Horizontal	Pass
4	3916.885	52.12	-0.31	74.0	-21.88	Peak	79.90	100	Horizontal	Pass
4**	3916.885	40.54	-0.31	54.0	-13.46	AV	79.90	100	Horizontal	Pass
5	5566.679	54.89	1.96	74.0	-19.11	Peak	61.30	100	Horizontal	Pass
5**	5566.679	43.22	1.96	54.0	-10.78	AV	61.30	100	Horizontal	Pass
6	6963.005	58.62	5.67	74.0	-15.38	Peak	52.00	100	Horizontal	Pass
6**	6963.005	47.44	5.67	54.0	-6.56	AV	52.00	100	Horizontal	Pass

TEST REPORT

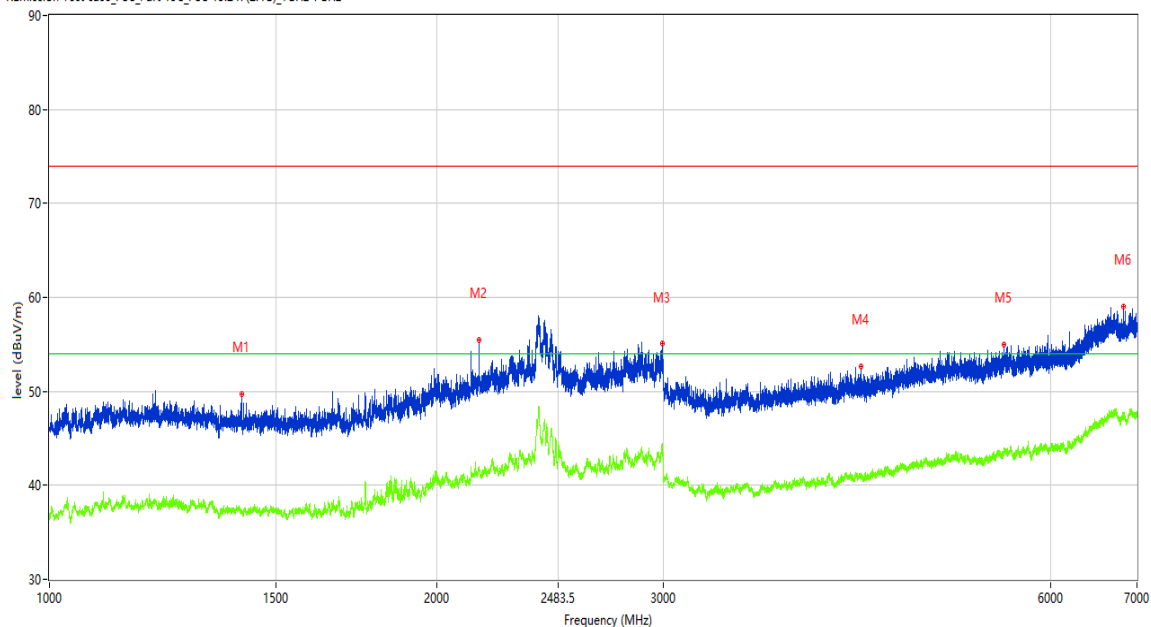
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 97 of 123

1GHz-7GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1409.699	49.73	-5.14	74.0	-24.27	Peak	360.00	100	Vertical	Pass
1**	1409.699	37.06	-5.14	54.0	-16.94	AV	360.00	100	Vertical	Pass
2	2157.355	55.45	-0.64	74.0	-18.55	Peak	304.50	100	Vertical	Pass
2**	2157.355	41.68	-0.64	54.0	-12.32	AV	304.50	100	Vertical	Pass
3	2993.001	55.05	3.02	74.0	-18.95	Peak	34.30	100	Vertical	Pass
3**	2993.001	44.27	3.02	54.0	-9.73	AV	34.30	100	Vertical	Pass
4	4275.341	52.71	-0.04	74.0	-21.29	Peak	164.20	100	Vertical	Pass
4**	4275.341	40.89	-0.04	54.0	-13.11	AV	164.20	100	Vertical	Pass
5	5519.685	54.97	1.82	74.0	-19.03	Peak	90.80	100	Vertical	Pass
5**	5519.685	43.41	1.82	54.0	-10.59	AV	90.80	100	Vertical	Pass
6	6829.521	59.06	5.49	74.0	-14.94	Peak	204.80	100	Vertical	Pass
6**	6829.521	47.30	5.49	54.0	-6.70	AV	204.80	100	Vertical	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 98 of 123

7GHz-18GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7943.014	36.29	4.72	74.0	-37.71	Peak	128.70	100	Horizontal	Pass
1**	7943.014	26.52	4.72	54.0	-27.48	AV	128.70	100	Horizontal	Pass
2	9749.313	40.06	9.70	74.0	-33.94	Peak	128.70	100	Horizontal	Pass
2**	9749.313	29.62	9.70	54.0	-24.38	AV	128.70	100	Horizontal	Pass
3	12143.964	42.62	10.96	74.0	-31.38	Peak	256.00	100	Horizontal	Pass
3**	12143.964	32.16	10.96	54.0	-21.84	AV	256.00	100	Horizontal	Pass
4	14500.125	50.29	17.10	74.0	-23.71	Peak	314.10	100	Horizontal	Pass
4**	14500.125	40.49	17.10	54.0	-13.51	AV	314.10	100	Horizontal	Pass
5	16498.875	54.26	20.80	74.0	-19.74	Peak	78.10	100	Horizontal	Pass
5**	16498.875	44.02	20.80	54.0	-9.98	AV	78.10	100	Horizontal	Pass
6	17799.300	55.15	21.10	74.0	-18.85	Peak	314.10	100	Horizontal	Pass
6**	17799.300	45.21	21.10	54.0	-8.79	AV	314.10	100	Horizontal	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 99 of 123

7GHz-18GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7970.507	36.29	5.10	74.0	-37.71	Peak	256.50	100	Vertical	Pass
1**	7970.507	25.92	5.10	54.0	-28.08	AV	256.50	100	Vertical	Pass
2	10186.453	41.19	10.35	74.0	-32.81	Peak	256.50	100	Vertical	Pass
2**	10186.453	30.52	10.35	54.0	-23.48	AV	256.50	100	Vertical	Pass
3	12253.937	42.88	11.04	74.0	-31.12	Peak	15.30	100	Vertical	Pass
3**	12253.937	32.17	11.04	54.0	-21.83	AV	15.30	100	Vertical	Pass
4	14483.629	50.56	16.63	74.0	-23.44	Peak	260.90	100	Vertical	Pass
4**	14483.629	40.16	16.63	54.0	-13.84	AV	260.90	100	Vertical	Pass
5	16482.379	54.19	20.46	74.0	-19.81	Peak	134.00	100	Vertical	Pass
5**	16482.379	44.19	20.46	54.0	-9.81	AV	134.00	100	Vertical	Pass
6	17796.551	55.75	21.12	74.0	-18.25	Peak	265.80	100	Vertical	Pass
6**	17796.551	45.49	21.12	54.0	-8.51	AV	265.80	100	Vertical	Pass

TEST REPORT

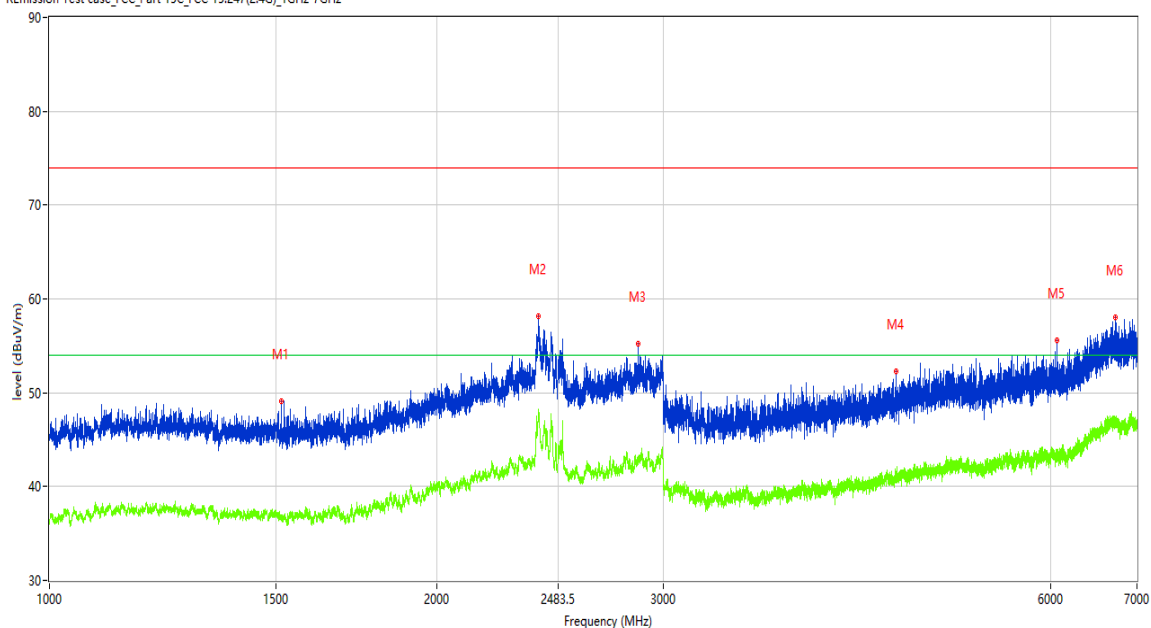
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 100 of 123

Figure 49: Spurious Emission, 1GHz – 10th Harmonic, 802.11n(HT40), 2452MHz
1GHz-7GHz, Horizontal

R:Emission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBUV/m)	Factor (dB)	Limit (dBUV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1513.436	49.11	-5.45	74.0	-24.89	Peak	322.00	100	Horizontal	Pass
1**	1513.436	37.00	-5.45	54.0	-17.00	AV	322.00	100	Horizontal	Pass
2	2400.325	58.13	5.36	74.0	-15.87	Peak	317.50	100	Horizontal	Pass
2**	2400.325	47.97	5.36	54.0	-6.03	AV	317.50	100	Horizontal	Pass
3	2867.767	55.22	2.63	74.0	-18.78	Peak	336.50	100	Horizontal	Pass
3**	2867.767	43.17	2.63	54.0	-10.83	AV	336.50	100	Horizontal	Pass
4	4549.306	52.24	0.81	74.0	-21.76	Peak	0.00	100	Horizontal	Pass
4**	4549.306	41.40	0.81	54.0	-12.60	AV	0.00	100	Horizontal	Pass
5	6062.617	55.61	2.65	74.0	-18.39	Peak	0.00	100	Horizontal	Pass
5**	6062.617	43.57	2.65	54.0	-10.43	AV	0.00	100	Horizontal	Pass
6	6735.533	58.02	5.76	74.0	-15.98	Peak	0.00	100	Horizontal	Pass
6**	6735.533	47.10	5.76	54.0	-6.90	AV	0.00	100	Horizontal	Pass

TEST REPORT

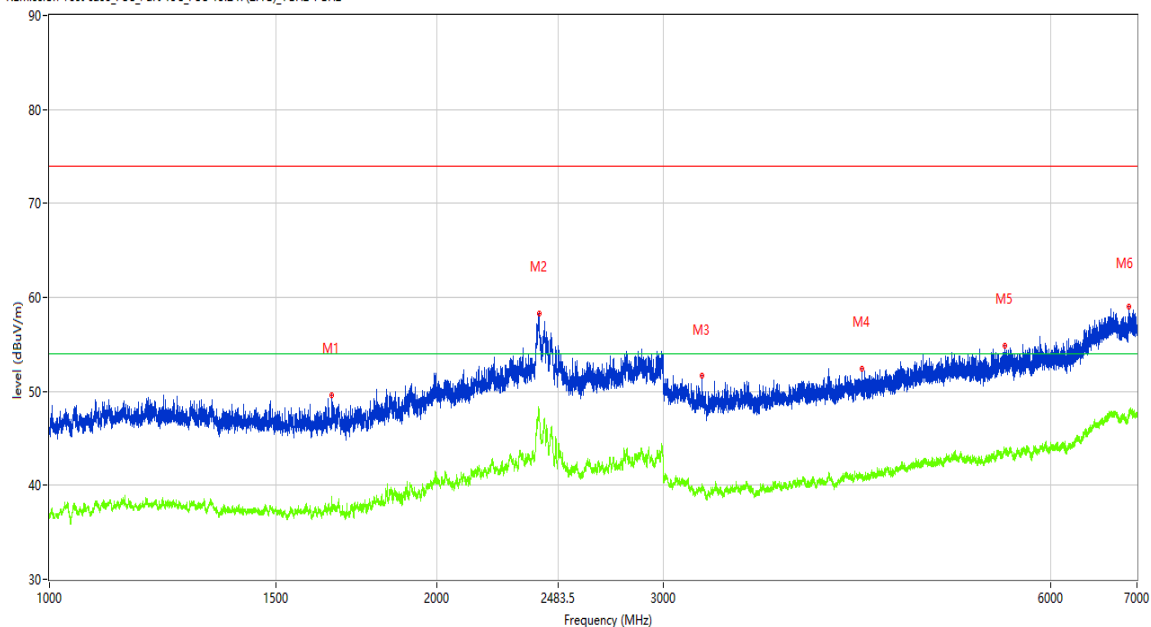
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 101 of 123

1GHz-7GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_1GHz-7GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	1658.168	49.59	-5.20	74.0	-24.41	Peak	64.80	100	Vertical	Pass
1**	1658.168	38.67	-5.20	54.0	-15.33	AV	64.80	100	Vertical	Pass
2	2401.825	58.27	5.30	74.0	-15.73	Peak	69.30	100	Vertical	Pass
2**	2401.825	47.68	5.30	54.0	-6.32	AV	69.30	100	Vertical	Pass
3	3214.973	51.65	-1.65	74.0	-22.35	Peak	290.10	100	Vertical	Pass
3**	3214.973	40.22	-1.65	54.0	-13.78	AV	290.10	100	Vertical	Pass
4	4277.340	52.37	-0.04	74.0	-21.63	Peak	349.30	100	Vertical	Pass
4**	4277.340	40.76	-0.04	54.0	-13.24	AV	349.30	100	Vertical	Pass
5	5522.685	54.89	1.83	74.0	-19.11	Peak	149.10	100	Vertical	Pass
5**	5522.685	43.77	1.83	54.0	-10.23	AV	149.10	100	Vertical	Pass
6	6896.513	58.97	5.75	74.0	-15.03	Peak	52.00	100	Vertical	Pass
6**	6896.513	47.48	5.75	54.0	-6.52	AV	52.00	100	Vertical	Pass

TEST REPORT

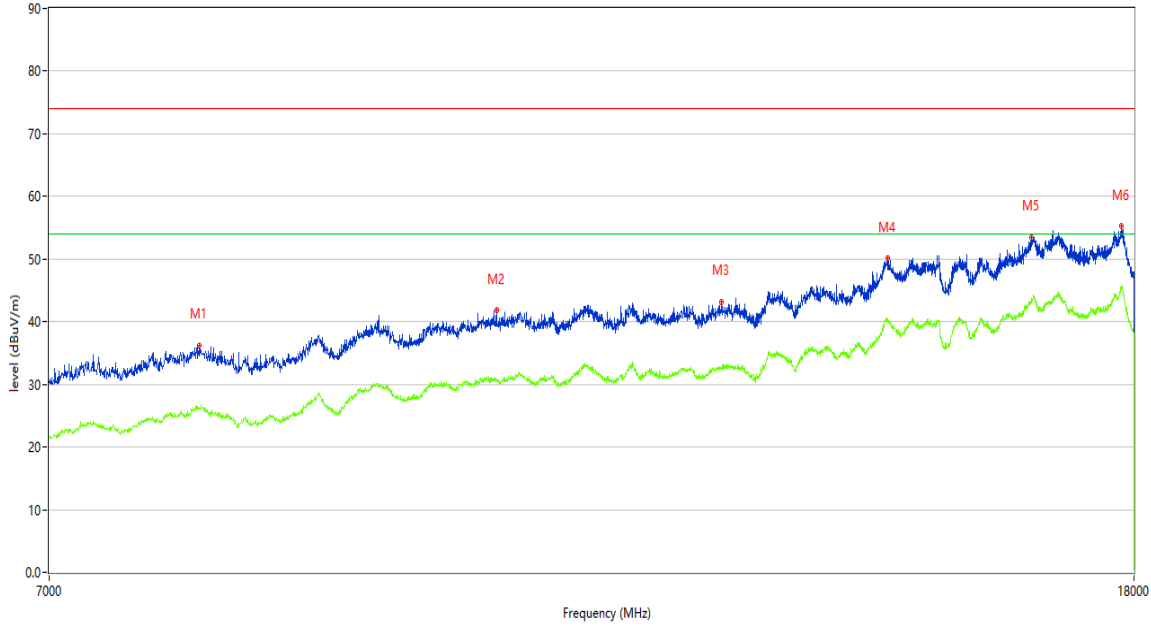
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 102 of 123

7GHz-18GHz, Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7978.755	36.24	5.28	74.0	-37.76	Peak	217.70	100	Horizontal	Pass
1**	7978.755	26.15	5.28	54.0	-27.85	AV	217.70	100	Horizontal	Pass
2	10332.167	41.88	10.72	74.0	-32.12	Peak	80.80	100	Horizontal	Pass
2**	10332.167	30.43	10.72	54.0	-23.57	AV	80.80	100	Horizontal	Pass
3	12572.857	43.25	10.94	74.0	-30.75	Peak	249.30	100	Horizontal	Pass
3**	12572.857	32.63	10.94	54.0	-21.37	AV	249.30	100	Horizontal	Pass
4	14522.119	50.13	17.02	74.0	-23.87	Peak	356.90	100	Horizontal	Pass
4**	14522.119	40.34	17.02	54.0	-13.66	AV	356.90	100	Horizontal	Pass
5	16457.636	53.53	19.96	74.0	-20.47	Peak	360.00	100	Horizontal	Pass
5**	16457.636	43.37	19.96	54.0	-10.63	AV	360.00	100	Horizontal	Pass
6	17807.548	55.24	20.81	74.0	-18.76	Peak	167.50	100	Horizontal	Pass
6**	17807.548	45.50	20.81	54.0	-8.50	AV	167.50	100	Horizontal	Pass

TEST REPORT

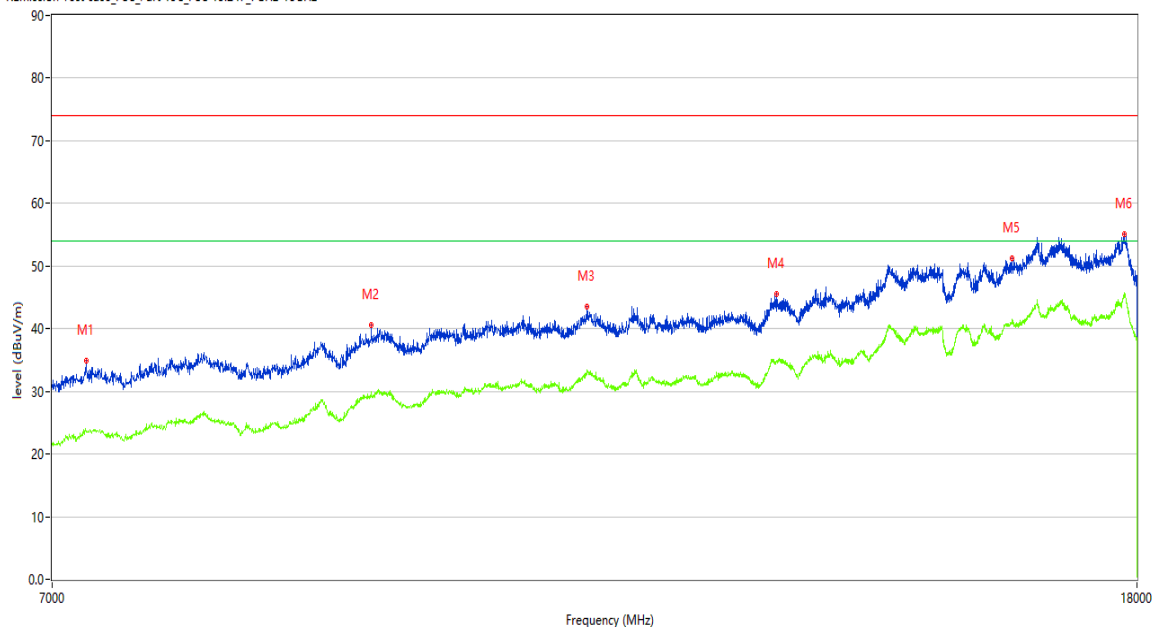
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 103 of 123

7GHz-18GHz, Vertical

REmission Test case_FCC_Part 15C_FCC 15.247_7GHz-18GHz



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7164.959	31.82	2.57	74.0	-42.18	Peak	291.00	100	Vertical	Pass
1**	7164.959	22.74	2.57	54.0	-31.26	AV	291.00	100	Vertical	Pass
2	9240.690	40.59	8.58	74.0	-33.41	Peak	131.70	100	Vertical	Pass
2**	9240.690	29.19	8.58	54.0	-24.81	AV	131.70	100	Vertical	Pass
3	11154.211	43.45	10.82	74.0	-30.55	Peak	58.10	100	Vertical	Pass
3**	11154.211	32.78	10.82	54.0	-21.22	AV	58.10	100	Vertical	Pass
4	13147.463	45.58	12.14	74.0	-28.42	Peak	318.20	100	Vertical	Pass
4**	13147.463	34.67	12.14	54.0	-19.33	AV	318.20	100	Vertical	Pass
5	16141.465	51.29	17.53	74.0	-22.71	Peak	204.70	100	Vertical	Pass
5**	16141.465	41.50	17.53	54.0	-12.50	AV	204.70	100	Vertical	Pass
6	17802.049	55.10	21.02	74.0	-18.90	Peak	332.30	100	Vertical	Pass
6**	17802.049	45.49	21.02	54.0	-8.51	AV	332.30	100	Vertical	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 104 of 123

4.1.7 Band Edge (Restricted-band band-edge)

RESULT:

PASS

Test standard	: FCC Part 15.247(d), 15.205, 15.209 RSS-247 5.5
Requirement	: ANSI C63.10-2013, KDB 558074
Kind of test site	: 3m Semi-Anechoic Chamber

Test setup

Test Channel	: Low/Middle/High
Operation Mode	: A.1
Ambient temperature	: 25°C
Relative humidity	: 52%

For details refer to following test plot.

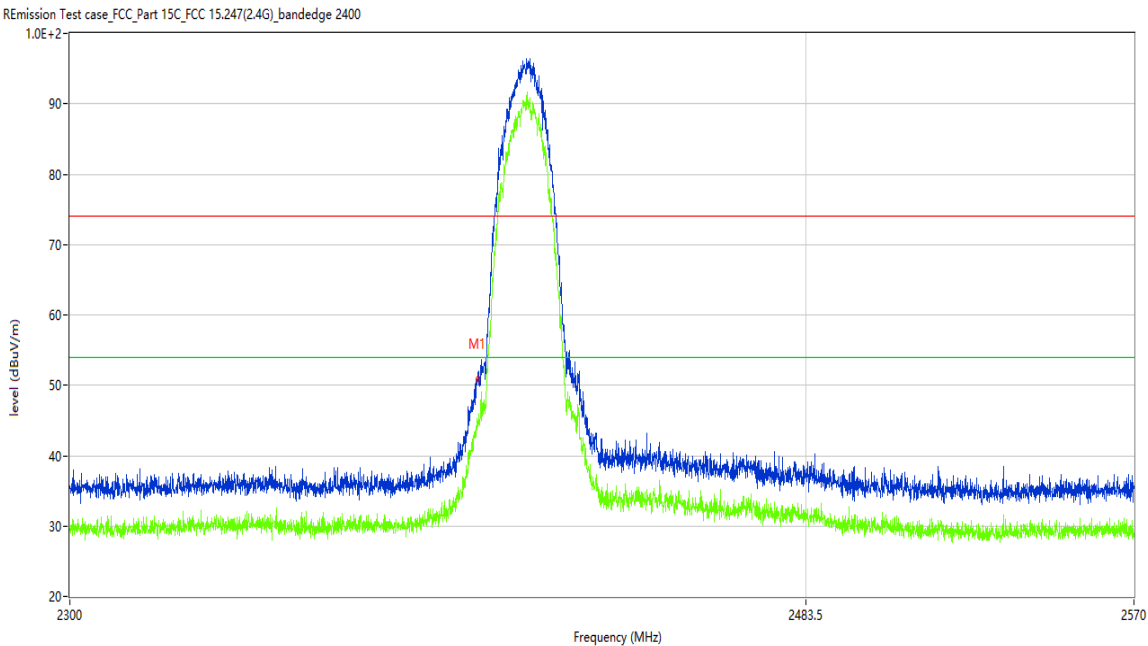
TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 105 of 123

Figure 50: Band Edge (Restricted-band band-edge), 802.11b, 2412MHz
Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2400.000	50.93	-4.18	74.0	-23.07	Peak	1.67	100	H	Pass
1**	2400.000	44.78	-4.18	54.0	-9.22	AV	1.67	100	H	Pass

TEST REPORT

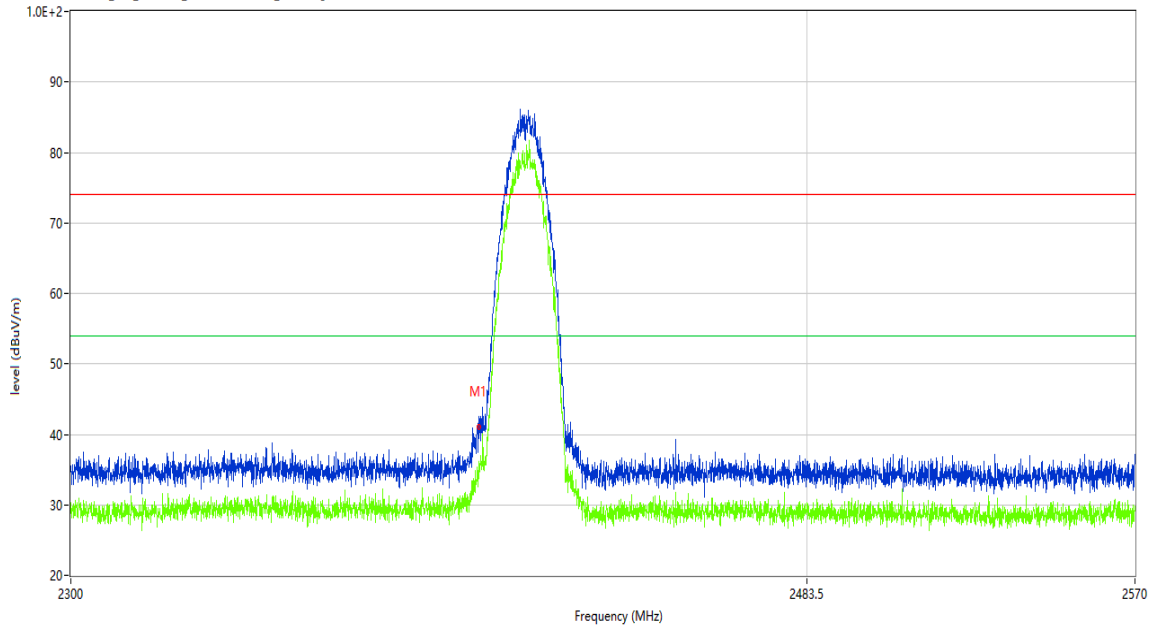
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 106 of 123

Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_bandedge 2400



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2400.000	41.27	-4.18	74.0	-32.73	Peak	1.62	100	V	Pass
1**	2400.000	35.95	-4.18	54.0	-18.05	AV	1.62	100	V	Pass

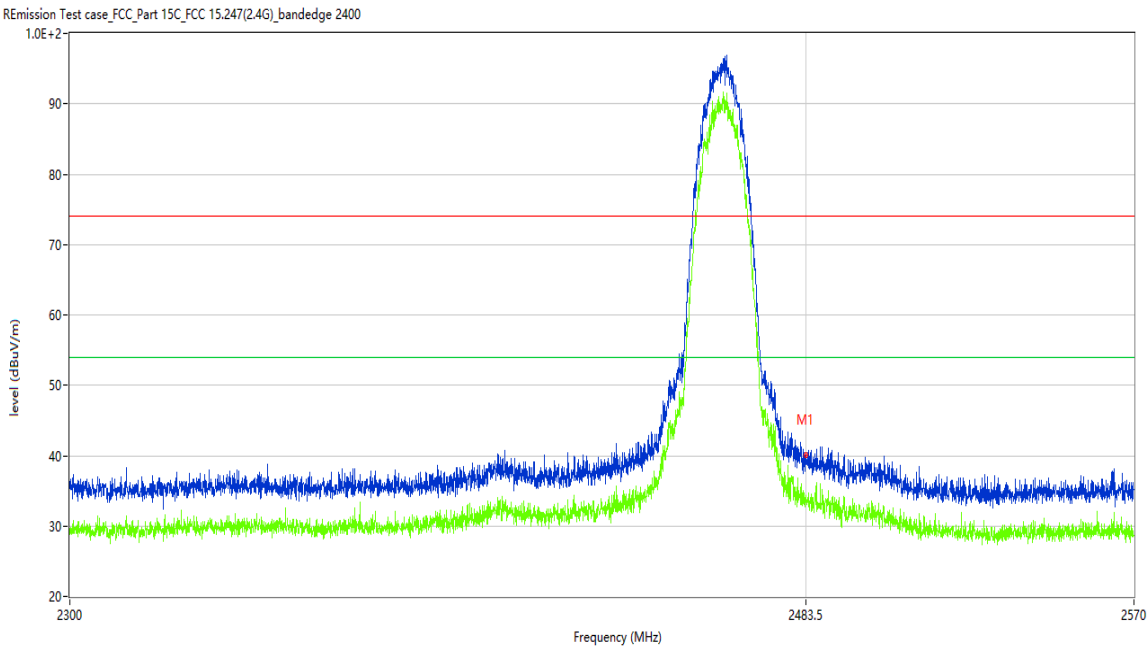
TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 107 of 123

Figure 51: Band Edge (Restricted-band band-edge), 802.11b, 2462MHz
Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	39.94	-3.87	74.0	-34.06	Peak	320.10	100	H	Pass
1**	2483.500	34.39	-3.87	54.0	-19.61	AV	320.10	100	H	Pass

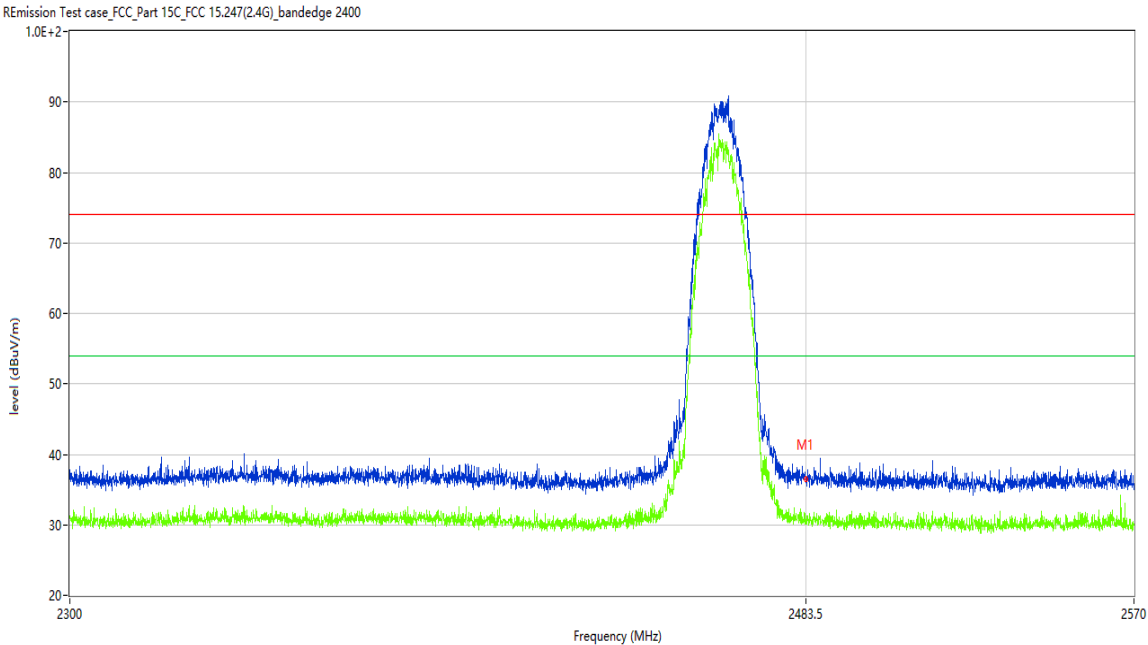
TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 108 of 123

Vertical



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	36.43	-3.87	74.0	-37.57	Peak	103.81	100	V	Pass
1**	2483.500	30.23	-3.87	54.0	-23.77	AV	103.81	100	V	Pass

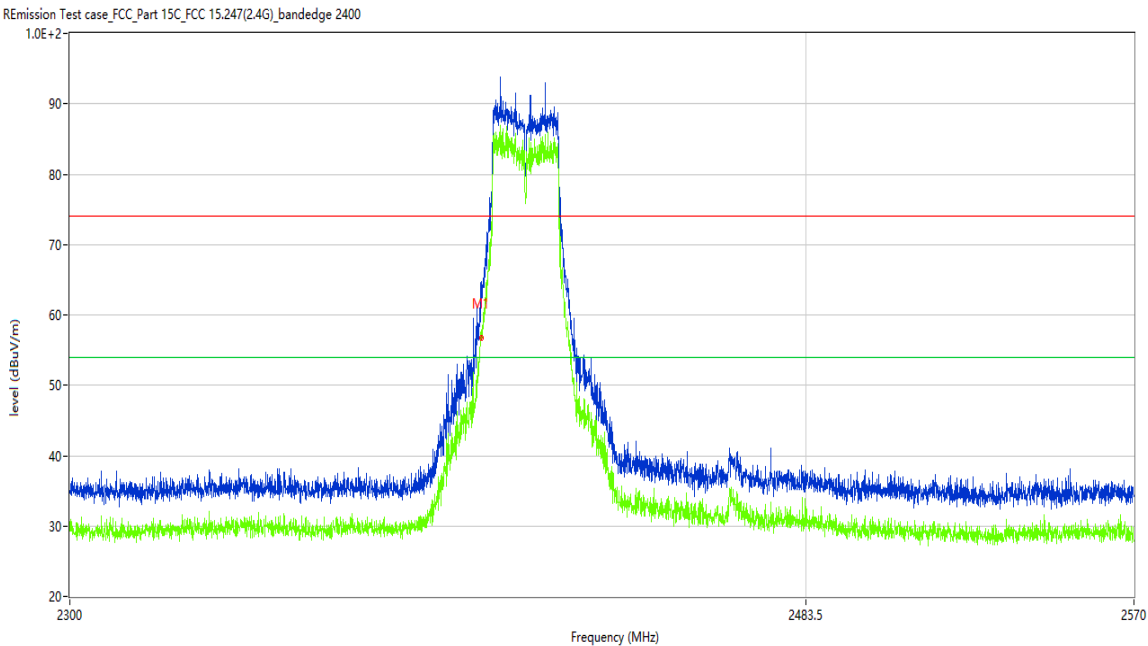
TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 109 of 123

Figure 52: Band Edge (Restricted-band band-edge), 802.11g, 2412MHz
Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2400.000	56.68	-4.18	74.0	-17.32	Peak	339.60	100	H	Pass
1**	2400.000	51.07	-4.18	54.0	-2.93	AV	339.60	100	H	Pass

TEST REPORT

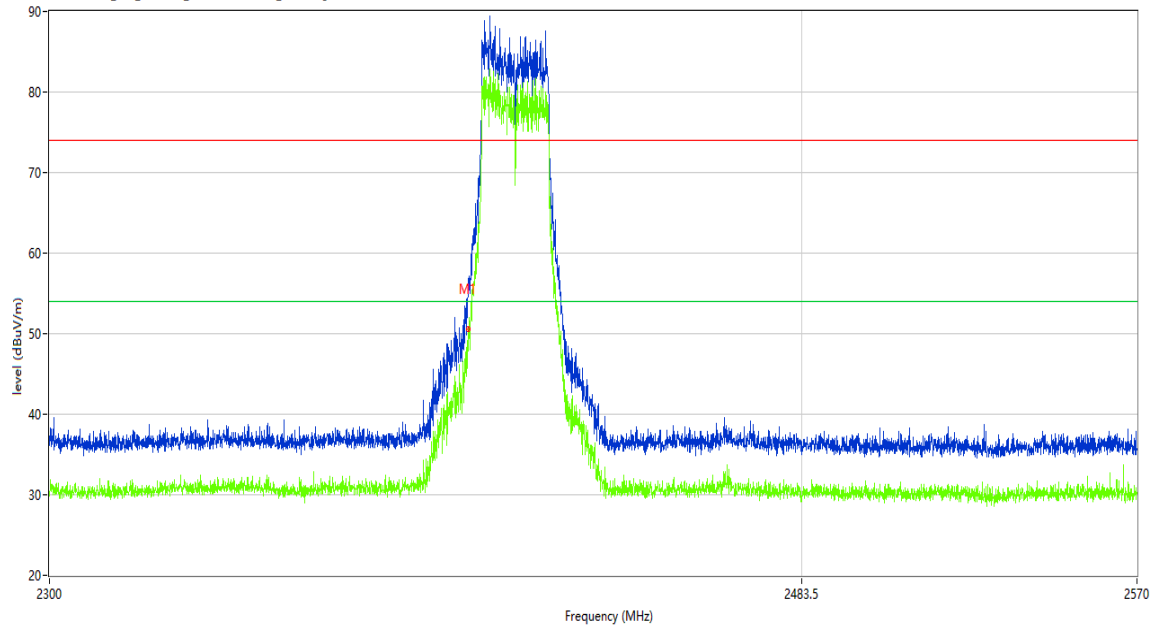
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 110 of 123

Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_bandedge 2400



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2400.000	51.11	-4.18	74.0	-22.89	Peak	32.79	100	V	Pass
1**	2400.000	45.49	-4.18	54.0	-8.51	AV	32.79	100	V	Pass

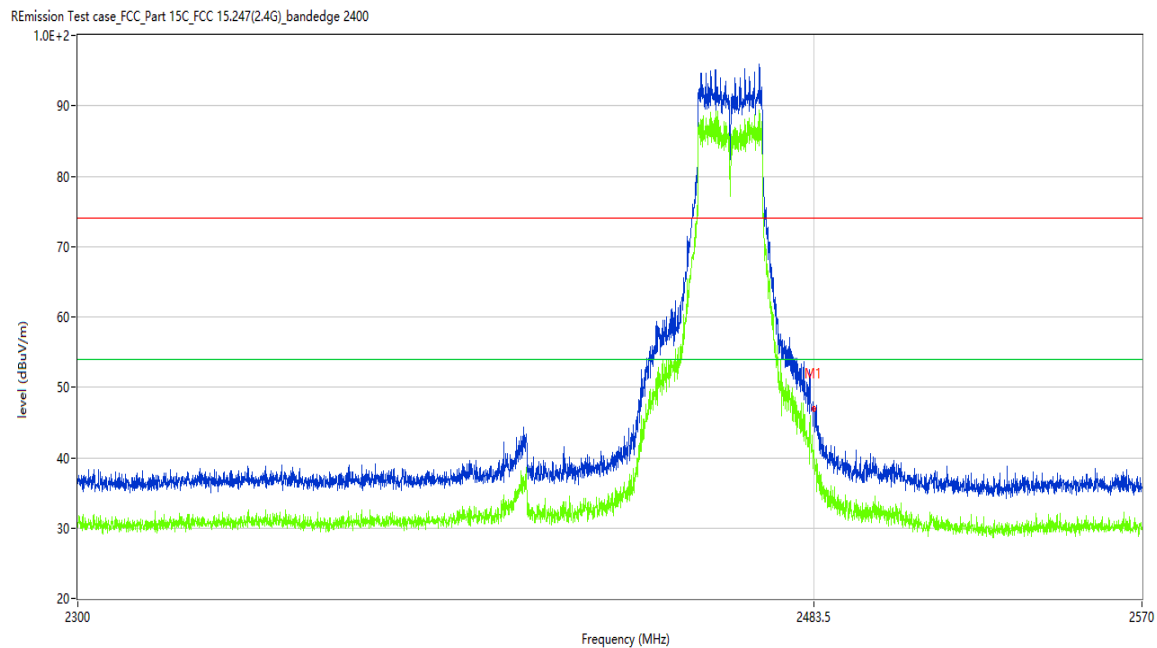
TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 111 of 123

Figure 53: Band Edge (Restricted-band band-edge), 802.11g, 2462MHz
Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	46.92	-3.87	74.0	-27.08	Peak	47.07	100	H	Pass
1**	2483.500	40.50	-3.87	54.0	-13.50	AV	47.07	100	H	Pass

TEST REPORT

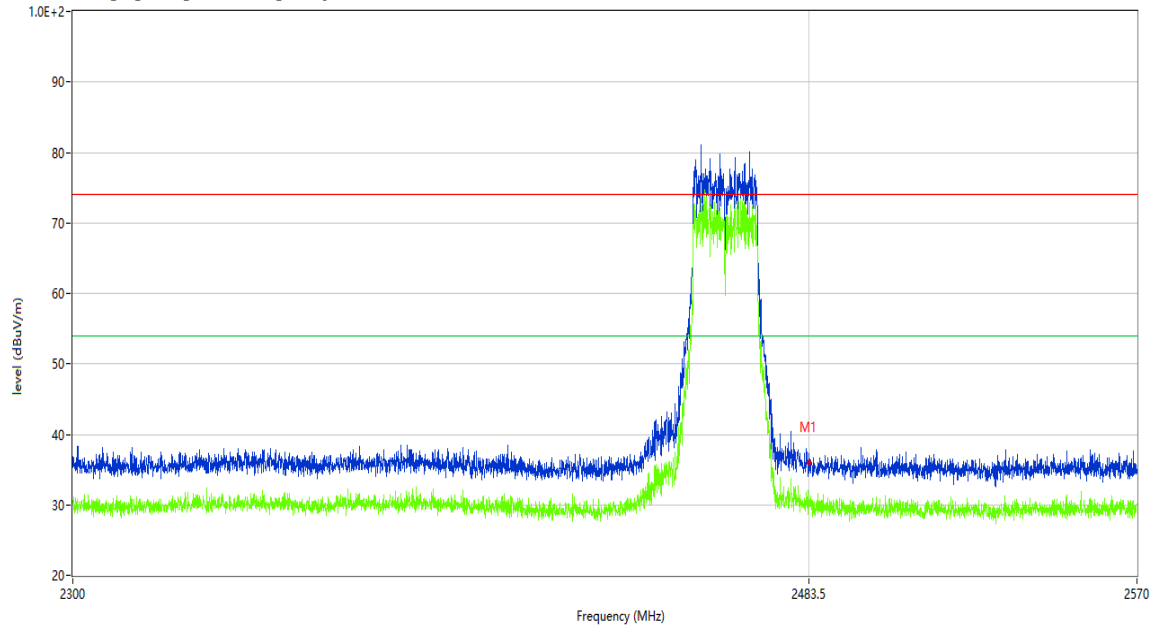
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 112 of 123

Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_bandedge 2400



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	36.20	-3.87	74.0	-37.80	Peak	346.90	100	V	Pass
1**	2483.500	30.58	-3.87	54.0	-23.42	AV	346.90	100	V	Pass

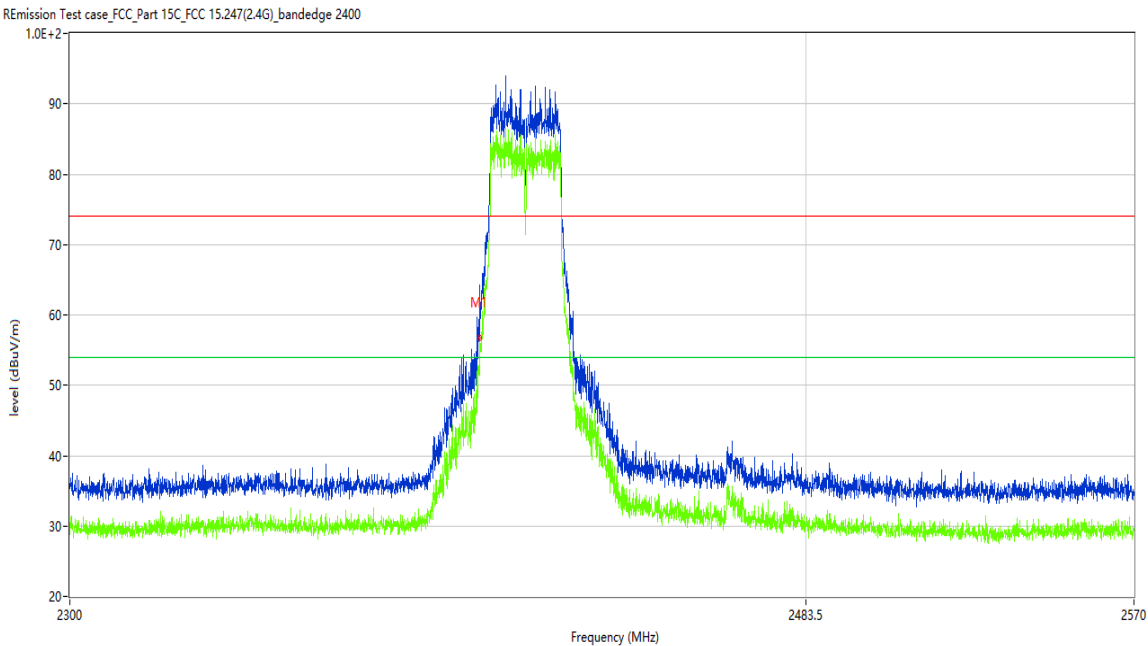
TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 113 of 123

Figure 54: Band Edge (Restricted-band band-edge), 802.11n(HT20), 2412MHz
Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2400.000	56.96	-4.18	74.0	-17.04	Peak	331.50	100	H	Pass
1**	2400.000	50.54	-4.18	54.0	-3.46	AV	331.50	100	H	Pass

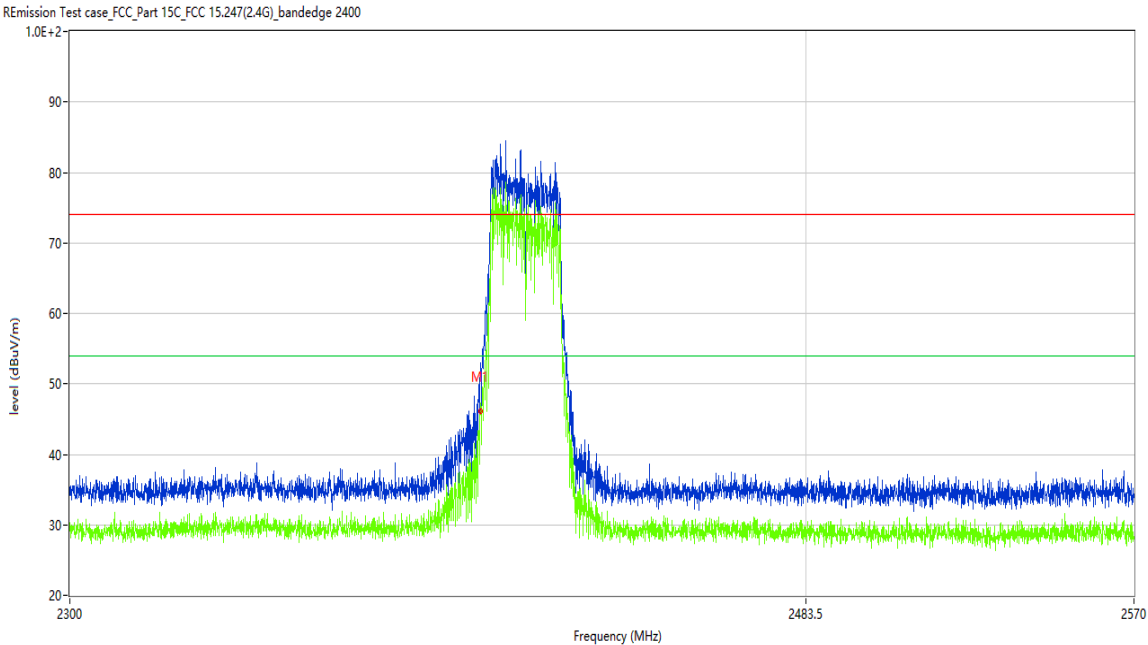
TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 114 of 123

Vertical



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2400.000	46.22	-4.18	74.0	-27.78	Peak	360.00	100	V	Pass
1**	2400.000	40.08	-4.18	54.0	-13.92	AV	360.00	100	V	Pass

TEST REPORT

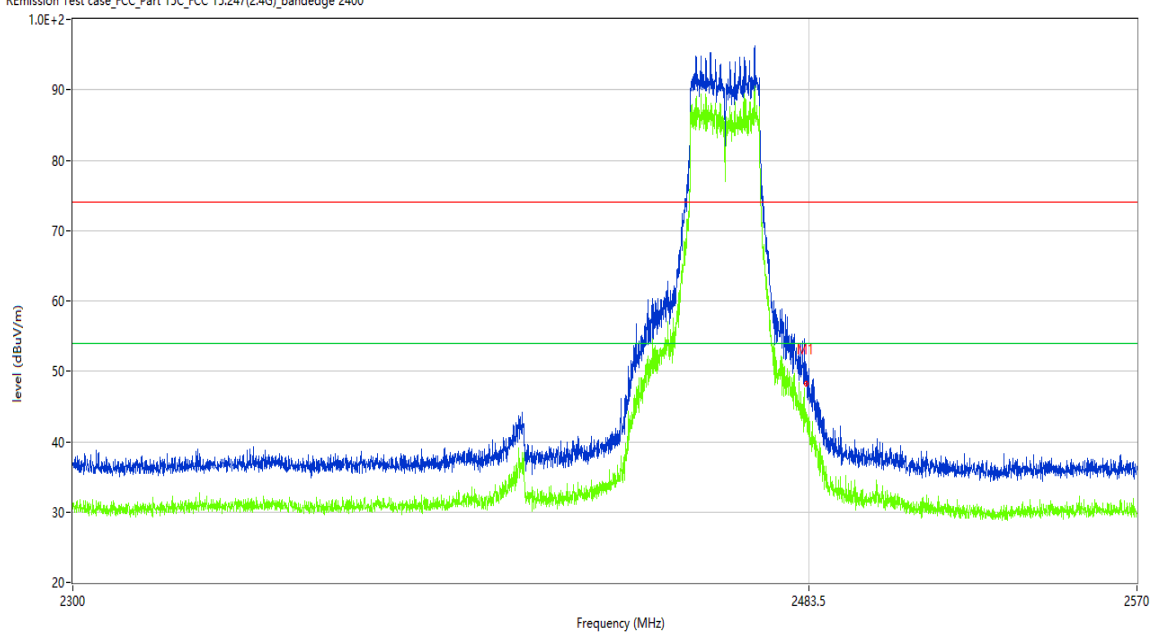
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 115 of 123

Figure 55: Band Edge (Restricted-band band-edge), 802.11n(HT20), 2462MHz
Horizontal

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_bandedge 2400



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	48.21	-3.87	74.0	-25.79	Peak	112.56	100	H	Pass
1**	2483.500	42.33	-3.87	54.0	-11.67	AV	112.56	100	H	Pass

TEST REPORT

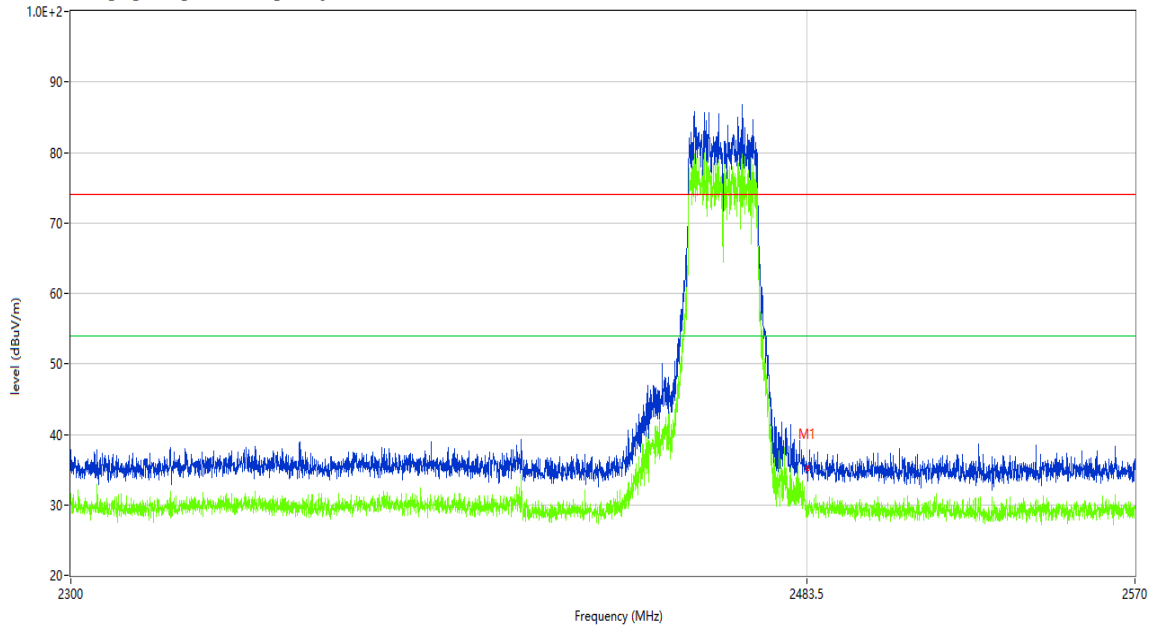
Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 116 of 123

Vertical

REmission Test case_FCC_Part 15C_FCC 15.247(2.4G)_bandedge 2400



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	34.96	-3.87	74.0	-39.04	Peak	21.22	100	V	Pass
1**	2483.500	29.24	-3.87	54.0	-24.76	AV	21.22	100	V	Pass

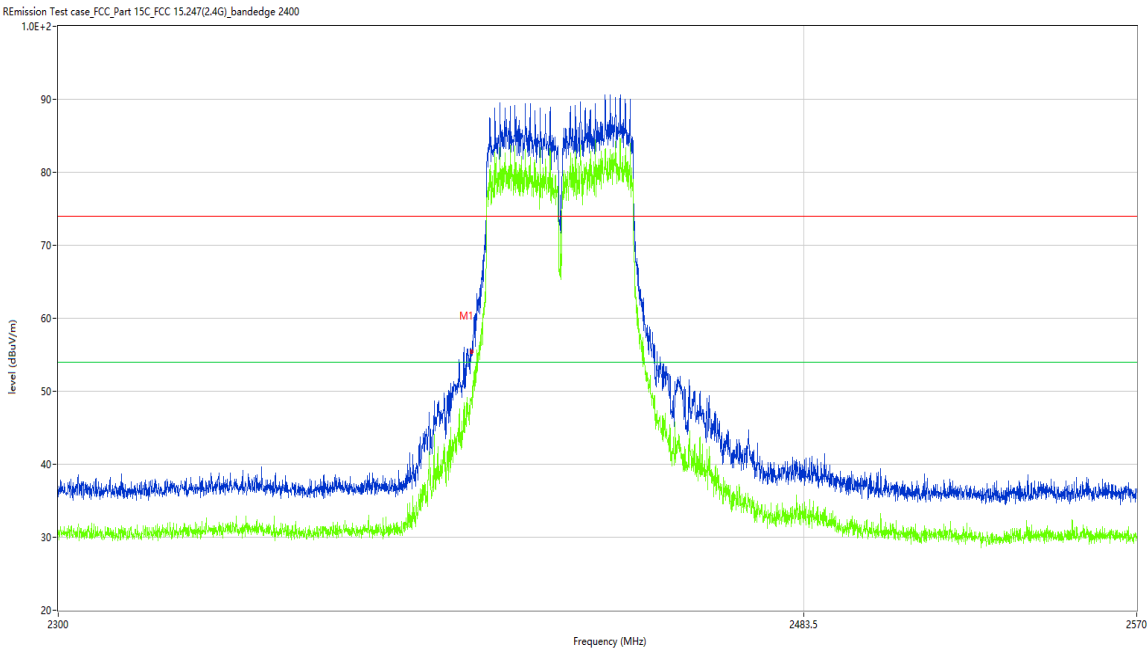
TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 117 of 123

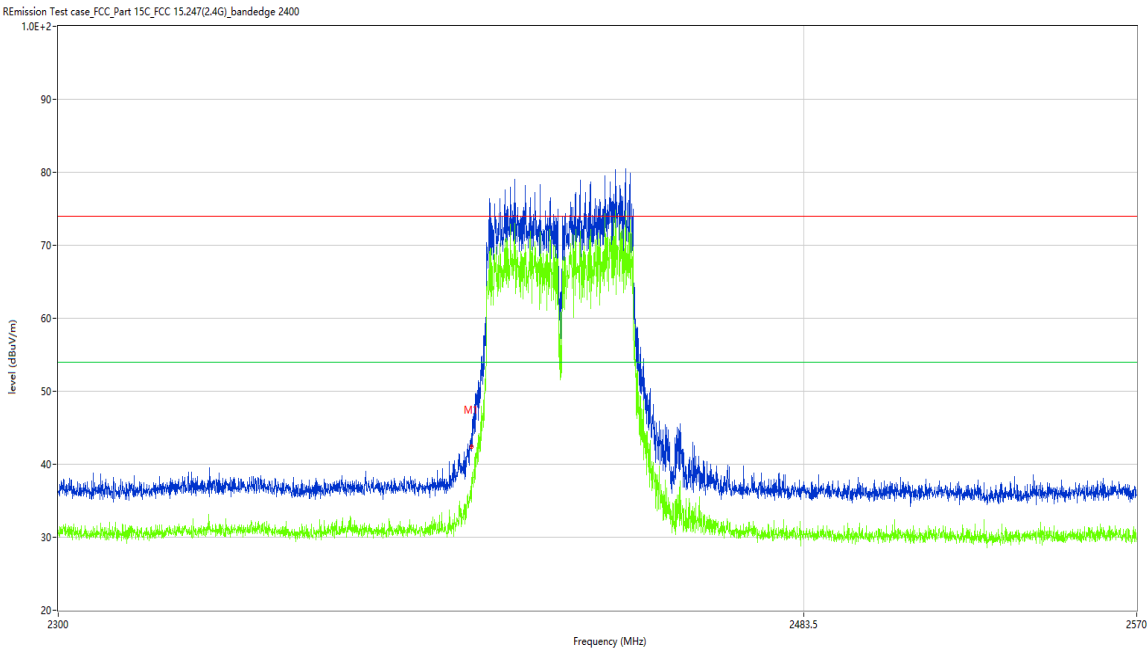
Figure 56: Band Edge (Restricted-band band-edge), 802.11n(HT40), 2422MHz
Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2400.000	55.37	-4.18	74.0	-18.63	Peak	359.79	100	H	Pass
1**	2400.000	48.68	-4.18	54.0	-5.32	AV	359.79	100	H	Pass

TEST REPORT

Vertical



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2400.000	42.31	-4.18	74.0	-31.69	Peak	309.78	100	V	Pass
1**	2400.000	37.09	-4.18	54.0	-16.91	AV	309.78	100	V	Pass

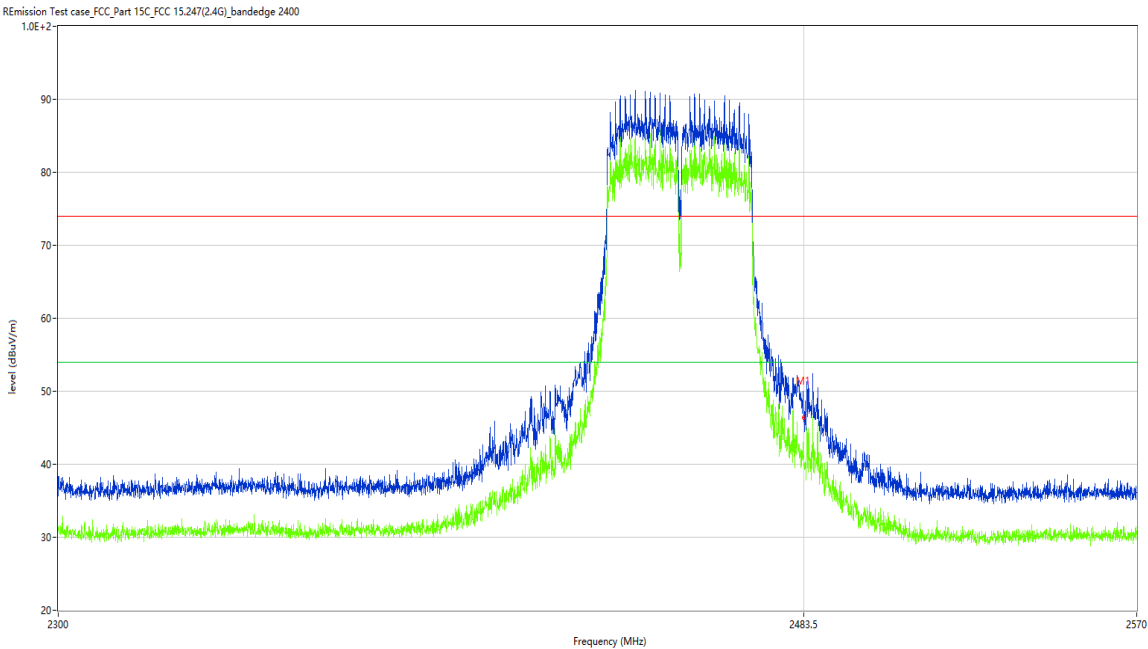
TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 119 of 123

Figure 57: Band Edge (Restricted-band band-edge), 802.11n(HT40), 2452MHz
Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	46.51	-3.87	74.0	-27.49	Peak	256.17	100	H	Pass
1**	2483.500	40.28	-3.87	54.0	-13.72	AV	256.17	100	H	Pass

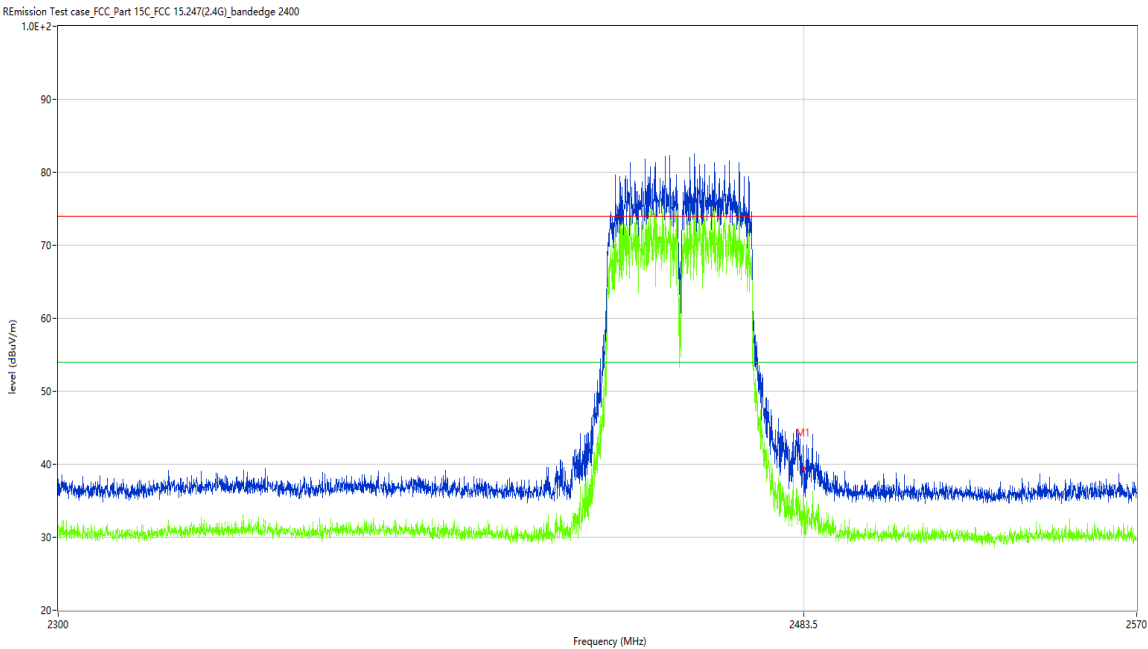
TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 120 of 123

Vertical



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	2483.500	39.37	-3.87	74.0	-34.63	Peak	37.23	100	V	Pass
1**	2483.500	33.64	-3.87	54.0	-20.36	AV	37.23	100	V	Pass

TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 121 of 123

4.1.8

4.2 Mains Emissions

4.2.1 Conducted Emission on AC Mains

RESULT:

PASS

Test standard : FCC Part 15.207(a)
RSS-Gen 8.8
Requirement : ANSI C63.10-2013
Kind of test site : Shielded room

Test setup

Input Voltage : AC 120V, 60Hz; AC 240V, 50Hz
Operation Mode : A
Earthing : Not Connected
Ambient temperature : 25°C
Relative humidity : 52%

For details refer to following test plot.

TEST REPORT

Report No.: SHE19020010-03DE

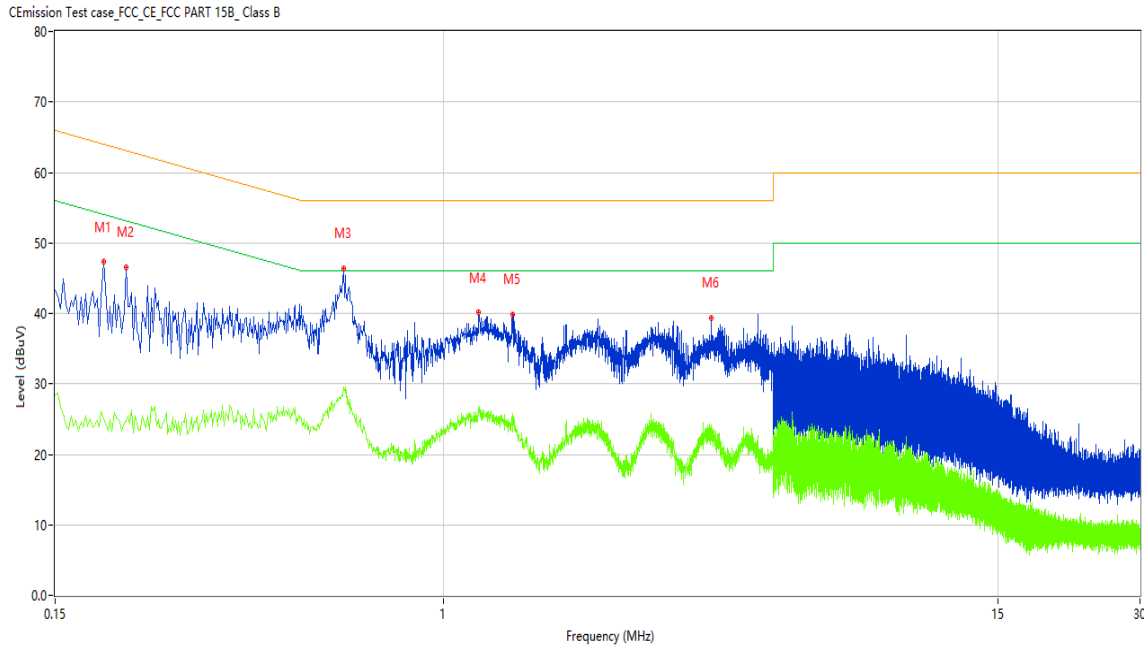
Date: 2020-5-15

Page 122 of 123

Note:

The all configurations were tested respectively, but only the worst configuration shown here.

Figure 58: Conducted Emission on AC Mains, L Phase



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.190	51.53	10.15	64.04	-12.51	Peak	L	Pass
1*	0.190	39.10	10.15	64.04	-24.94	QP	L	Pass
1**	0.190	25.00	10.15	54.04	-29.04	AV	L	Pass
2	0.212	47.86	10.14	63.13	-15.27	Peak	L	Pass
2*	0.212	38.04	10.14	63.13	-25.09	QP	L	Pass
2**	0.212	24.66	10.14	53.13	-28.47	AV	L	Pass
3	0.614	48.06	10.15	56.00	-7.94	Peak	L	Pass
3*	0.614	40.32	10.15	56.00	-15.68	QP	L	Pass
3**	0.614	29.62	10.15	46.00	-16.38	AV	L	Pass
4	1.188	41.87	10.16	56.00	-14.13	Peak	L	Pass
4*	1.188	35.38	10.16	56.00	-20.62	QP	L	Pass
4**	1.188	26.67	10.16	46.00	-19.33	AV	L	Pass
5	1.404	39.71	10.16	56.00	-16.29	Peak	L	Pass
5*	1.404	33.73	10.16	56.00	-22.27	QP	L	Pass
5**	1.404	25.87	10.16	46.00	-20.13	AV	L	Pass
6	3.704	38.91	10.24	56.00	-17.09	Peak	L	Pass
6*	3.704	32.22	10.24	56.00	-23.78	QP	L	Pass
6**	3.704	23.72	10.24	46.00	-22.28	AV	L	Pass

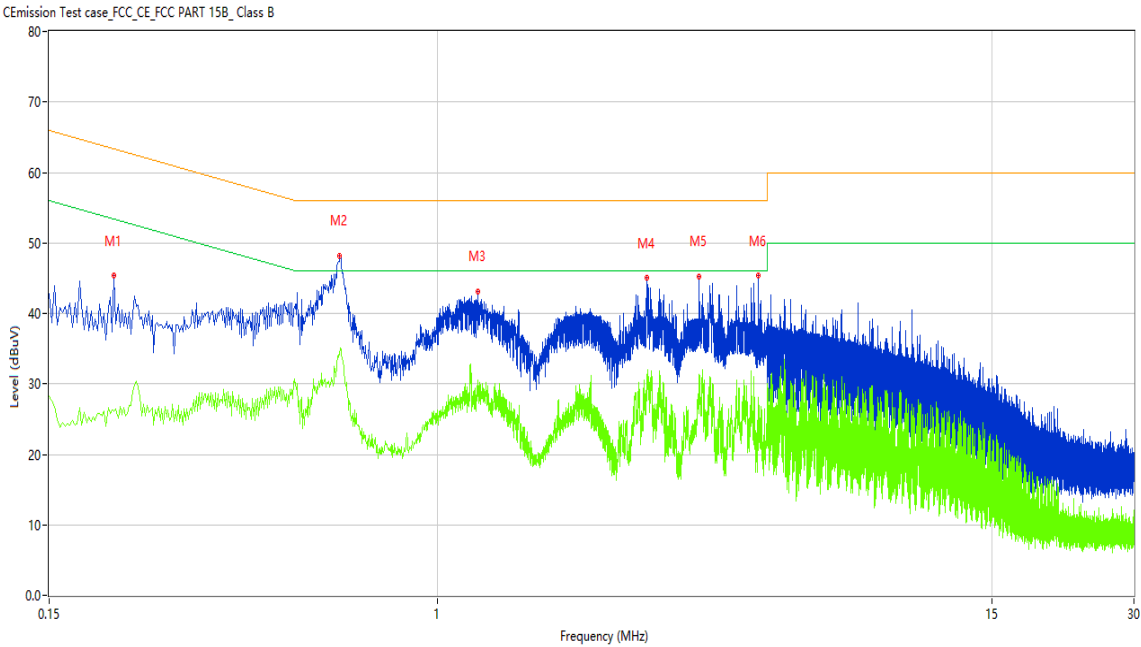
TEST REPORT

Report No.: SHE19020010-03DE

Date: 2020-5-15

Page 123 of 123

Figure 59: Conducted Emission on AC Mains, N Phase



End of the report