

TEST REPORT

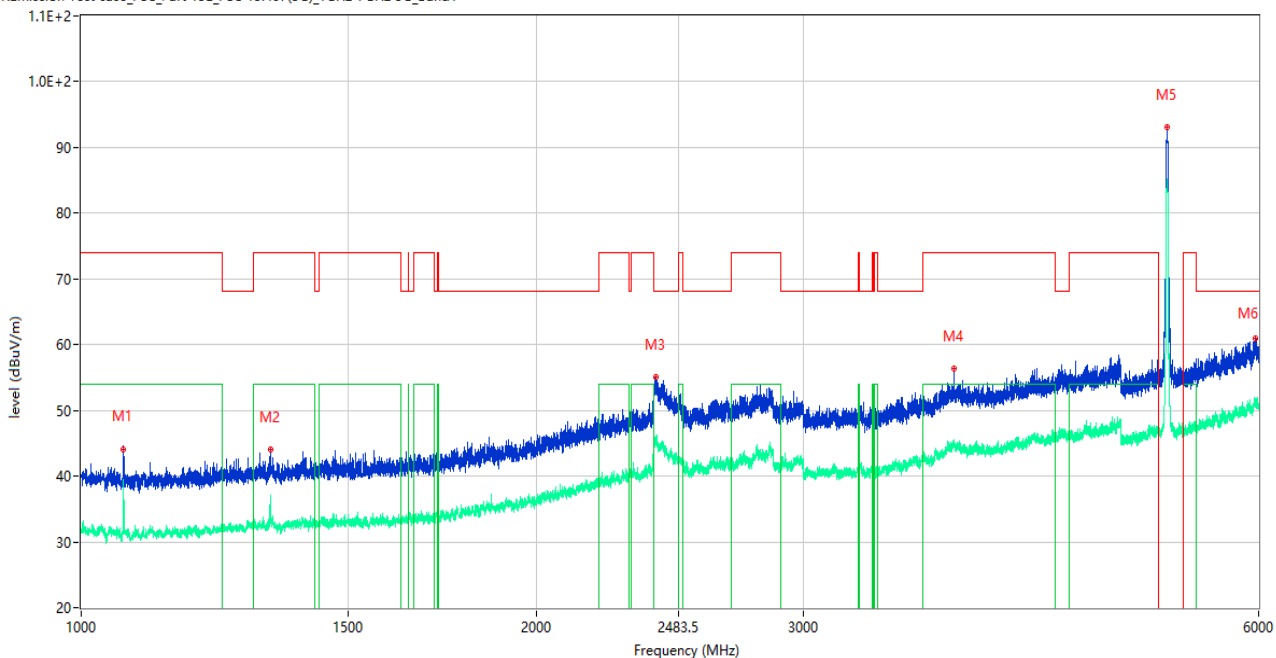
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 89 of 238

1GHz-6GHz, Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1066.492	43.57	--	33.39	-10.64	74.0	--	54.0	-20.61	1.00	100	Vertical	Pass
1333.208	43.98	--	37.14	-9.70	74.0	--	54.0	-16.86	3.00	100	Vertical	Pass
2396.575	55.10	--	44.78	2.21	68.2	--	--	-13.10	11.00	100	Vertical	Pass
3772.403	56.39	--	44.92	1.24	74.0	--	54.0	-9.08	7.00	100	Vertical	Pass
5218.223	93.05	--	84.79	4.20	--	--	--	--	0.00	100	Vertical	Pass
5974.128	60.88	--	51.67	8.22	68.2	--	--	-7.32	4.00	100	Vertical	Pass

TEST REPORT

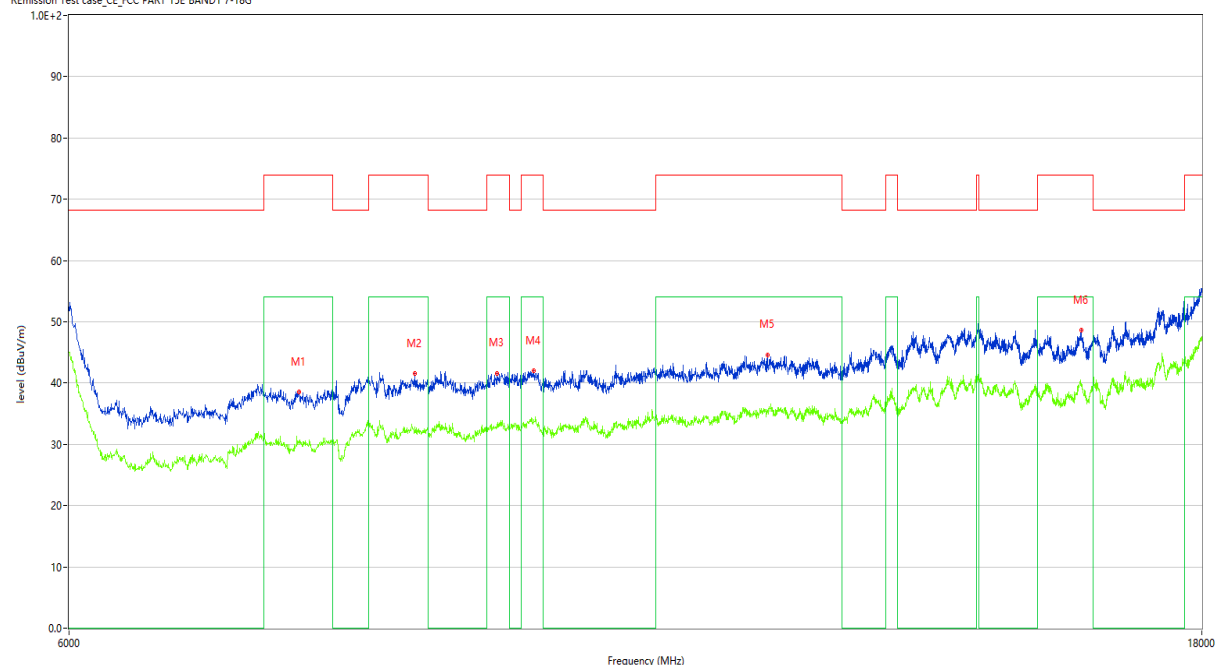
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 90 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7496.626	38.62	-24.43	74.0	-35.38	Peak	300.70	100	Horizontal	Pass
1**	7496.626	30.54	-24.43	54.0	-23.46	AV	300.70	100	Horizontal	Pass
2	8393.402	41.58	-22.01	74.0	-32.42	Peak	181.00	100	Horizontal	Pass
2**	8393.402	32.76	-22.01	54.0	-21.24	AV	181.00	100	Horizontal	Pass
3	9089.228	41.52	-23.05	74.0	-32.48	Peak	264.60	100	Horizontal	Pass
3**	9089.228	32.96	-23.05	54.0	-21.04	AV	264.60	100	Horizontal	Pass
4	9416.146	41.97	-21.88	74.0	-32.03	Peak	279.60	100	Horizontal	Pass
4**	9416.146	33.99	-21.88	54.0	-20.01	AV	279.60	100	Horizontal	Pass
5	11812.547	44.64	-18.57	74.0	-29.36	Peak	91.10	100	Horizontal	Pass
5**	11812.547	35.48	-18.57	54.0	-18.52	AV	91.10	100	Horizontal	Pass
6	16011.497	48.66	-15.57	74.0	-25.34	Peak	157.60	100	Horizontal	Pass
6**	16011.497	39.94	-15.57	54.0	-14.06	AV	157.60	100	Horizontal	Pass

TEST REPORT

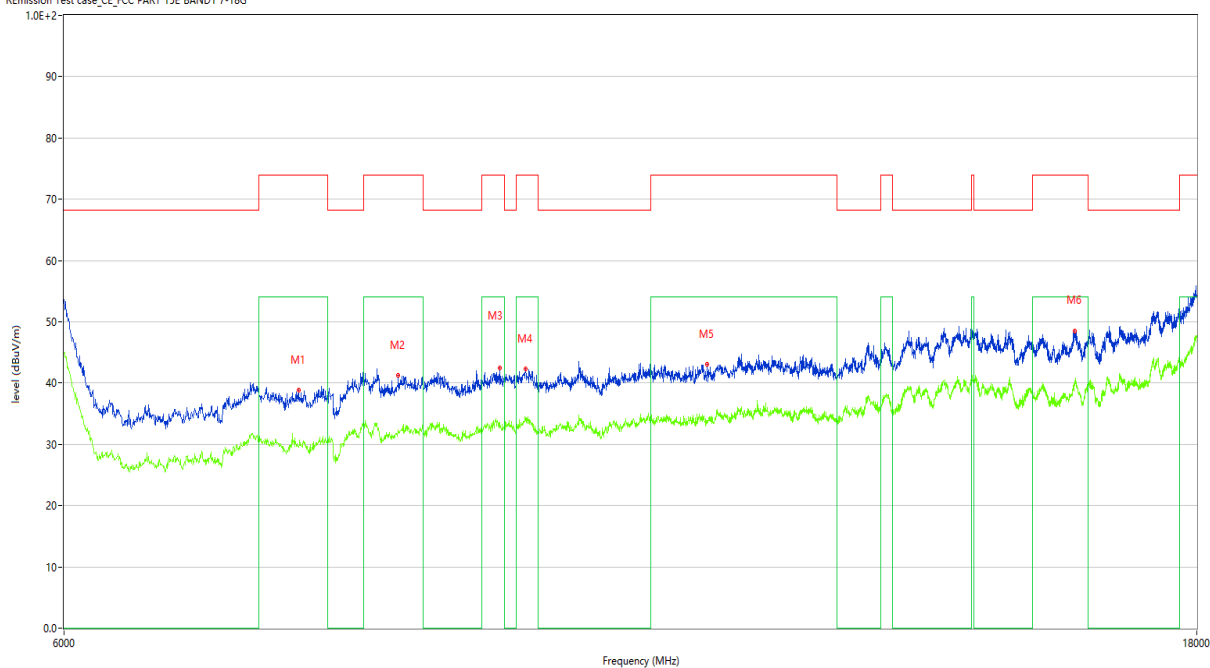
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 91 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7532.617	38.89	-24.78	74.0	-35.11	Peak	240.70	100	Vertical	Pass
1**	7532.617	29.47	-24.78	54.0	-24.53	AV	240.70	100	Vertical	Pass
2	8297.426	41.19	-22.54	74.0	-32.81	Peak	184.60	100	Vertical	Pass
2**	8297.426	32.32	-22.54	54.0	-21.68	AV	184.60	100	Vertical	Pass
3	9158.210	42.48	-22.97	74.0	-31.52	Peak	282.20	100	Vertical	Pass
3**	9158.210	33.59	-22.97	54.0	-20.41	AV	282.20	100	Vertical	Pass
4	9389.153	42.29	-21.89	74.0	-31.71	Peak	6.40	100	Vertical	Pass
4**	9389.153	33.95	-21.89	54.0	-20.05	AV	6.40	100	Vertical	Pass
5	11197.701	43.07	-20.17	74.0	-30.93	Peak	178.90	100	Vertical	Pass
5**	11197.701	33.48	-20.17	54.0	-20.52	AV	178.90	100	Vertical	Pass
6	15987.503	48.44	-15.69	74.0	-25.56	Peak	273.30	100	Vertical	Pass
6**	15987.503	39.74	-15.69	54.0	-14.26	AV	273.30	100	Vertical	Pass

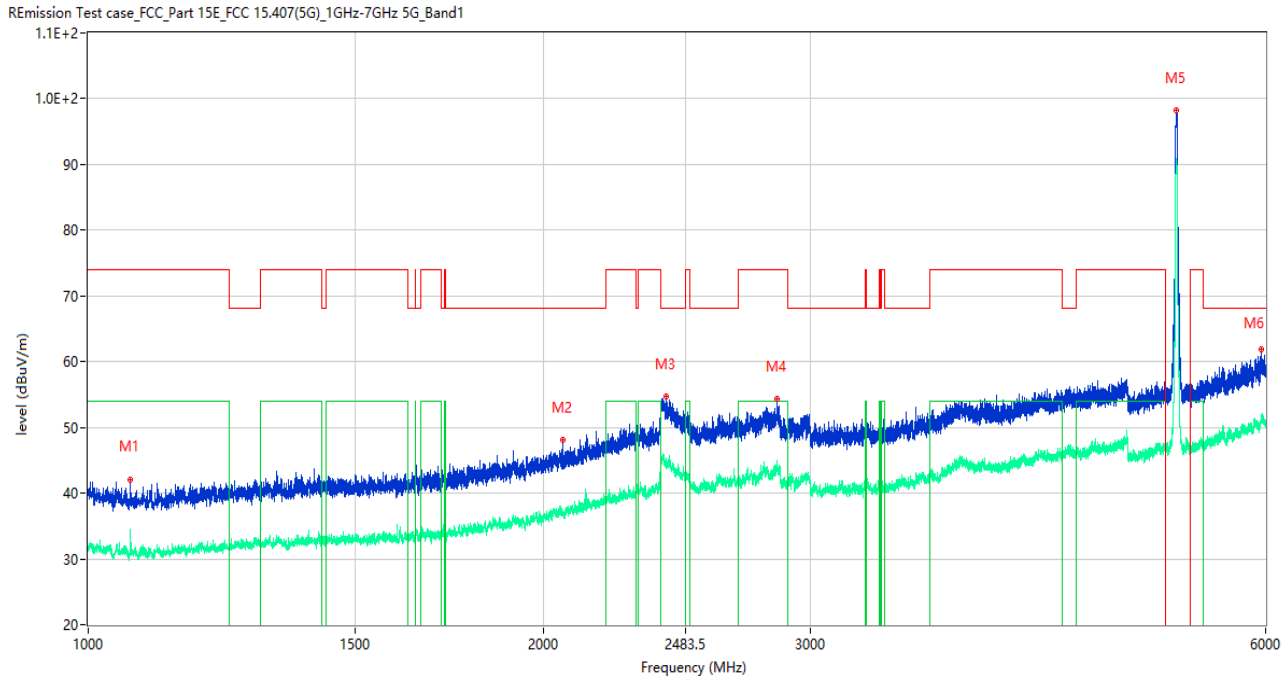
TEST REPORT

Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 92 of 238

Figure 105: Spurious Emission, 1GHz – 10th Harmonic, 802.11n(HT20), 5240MHz
 1GHz-6GHz, Horizontal



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1066.242	42.13	--	34.44	-10.68	74.0	--	54.0	-19.56	9.00	100	Horizontal	Pass
2058.368	48.05	--	37.20	-6.05	68.2	--	--	-20.15	4.00	100	Horizontal	Pass
2411.574	54.70	--	43.87	1.67	68.2	--	--	-13.50	0.00	100	Horizontal	Pass
2851.269	54.31	--	44.34	-0.09	74.0	--	54.0	-9.66	6.00	100	Horizontal	Pass
5238.095	98.17	--	90.47	4.08	--	--	--	--	14.00	100	Horizontal	Pass
5958.380	61.91	--	51.20	7.99	68.2	--	--	-6.29	5.00	100	Horizontal	Pass

TEST REPORT

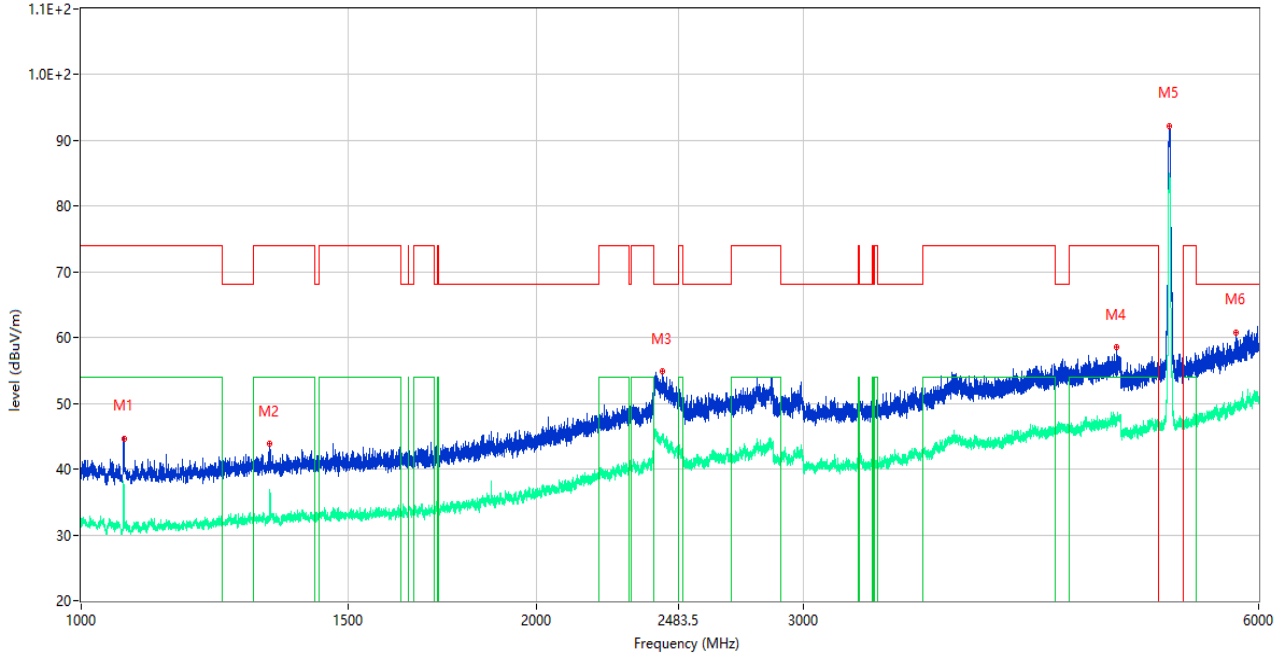
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 93 of 238

1GHz-6GHz, Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1066.992	44.64	--	37.67	-10.54	74.0	--	54.0	-16.33	3.00	100	Vertical	Pass
1332.708	43.81	--	36.95	-9.75	74.0	--	54.0	-17.05	11.00	100	Vertical	Pass
2421.072	54.90	--	45.01	1.33	68.2	--	--	-13.30	4.00	100	Vertical	Pass
4837.270	58.55	--	47.40	3.62	74.0	--	54.0	-6.60	4.00	100	Vertical	Pass
5238.845	92.26	--	85.01	4.08	--	--	--	--	2.00	100	Vertical	Pass
5794.151	60.84	--	49.70	7.01	68.2	--	--	-7.36	2.00	100	Vertical	Pass

TEST REPORT

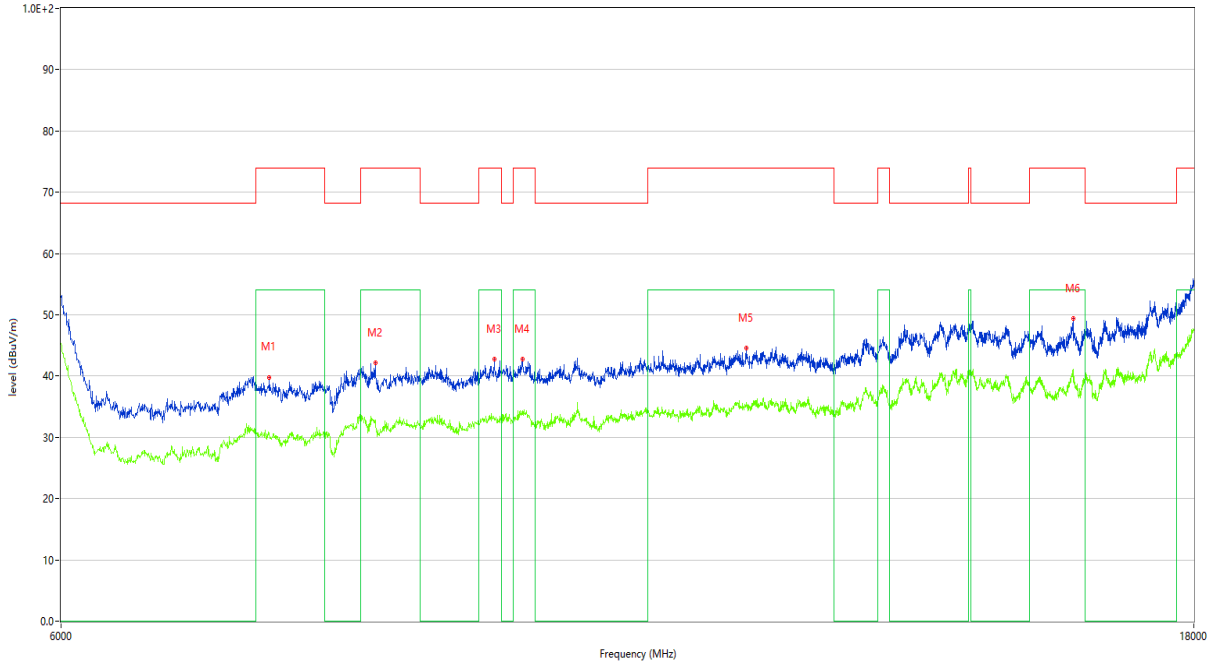
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 94 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7343.664	39.81	-24.97	74.0	-34.19	Peak	232.30	100	Horizontal	Pass
1**	7343.664	30.78	-24.97	54.0	-23.22	AV	232.30	100	Horizontal	Pass
2	8138.465	42.19	-22.49	74.0	-31.81	Peak	0.00	100	Horizontal	Pass
2**	8138.465	32.81	-22.49	54.0	-21.19	AV	0.00	100	Horizontal	Pass
3	9134.216	42.71	-23.01	74.0	-31.29	Peak	62.30	100	Horizontal	Pass
3**	9134.216	32.86	-23.01	54.0	-21.14	AV	62.30	100	Horizontal	Pass
4	9386.153	42.76	-21.96	74.0	-31.24	Peak	339.00	100	Horizontal	Pass
4**	9386.153	34.38	-21.96	54.0	-19.62	AV	339.00	100	Horizontal	Pass
5	11659.585	44.56	-18.65	74.0	-29.44	Peak	215.00	100	Horizontal	Pass
5**	11659.585	35.64	-18.65	54.0	-18.36	AV	215.00	100	Horizontal	Pass
6	16011.497	49.36	-15.57	74.0	-24.64	Peak	133.70	100	Horizontal	Pass
6**	16011.497	41.04	-15.57	54.0	-12.96	AV	133.70	100	Horizontal	Pass

TEST REPORT

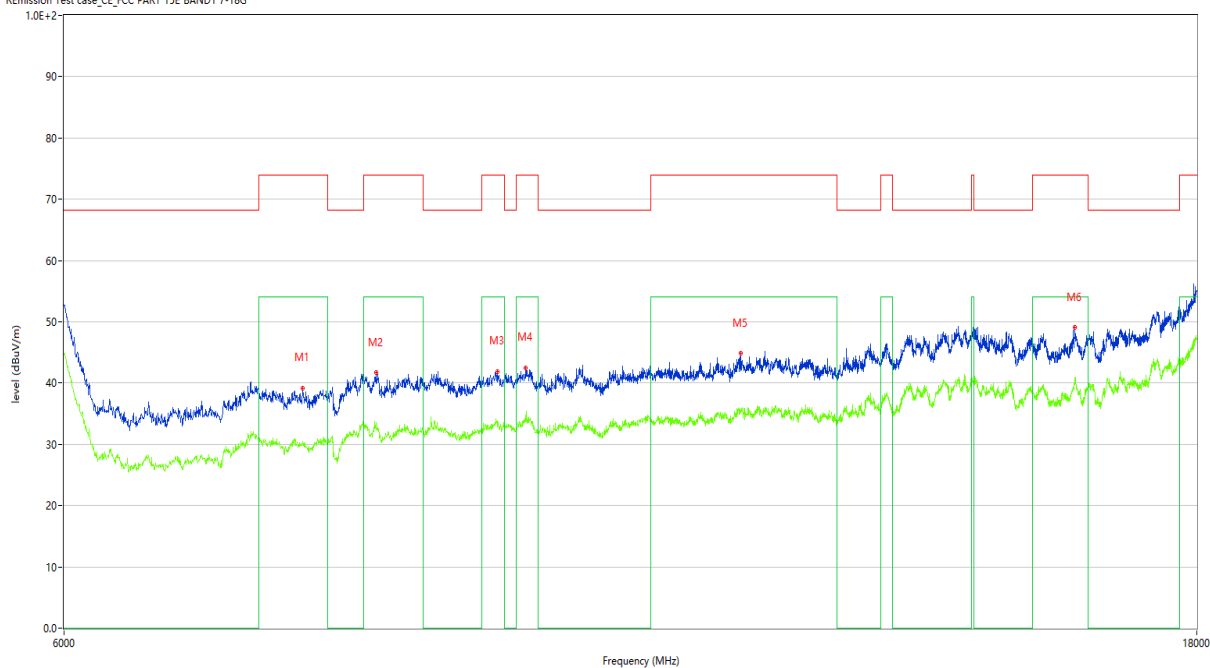
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 95 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7559.610	39.23	-25.08	74.0	-34.77	Peak	125.00	100	Vertical	Pass
1**	7559.610	29.99	-25.08	54.0	-24.01	AV	125.00	100	Vertical	Pass
2	8120.470	41.66	-22.41	74.0	-32.34	Peak	128.20	100	Vertical	Pass
2**	8120.470	33.54	-22.41	54.0	-20.46	AV	128.20	100	Vertical	Pass
3	9134.216	41.91	-23.01	74.0	-32.09	Peak	252.30	100	Vertical	Pass
3**	9134.216	33.84	-23.01	54.0	-20.16	AV	252.30	100	Vertical	Pass
4	9389.153	42.53	-21.89	74.0	-31.47	Peak	6.10	100	Vertical	Pass
4**	9389.153	34.13	-21.89	54.0	-19.87	AV	6.10	100	Vertical	Pass
5	11569.608	44.89	-18.38	74.0	-29.11	Peak	98.00	100	Vertical	Pass
5**	11569.608	35.26	-18.38	54.0	-18.74	AV	98.00	100	Vertical	Pass
6	15996.501	49.05	-15.39	74.0	-24.95	Peak	258.20	100	Vertical	Pass
6**	15996.501	40.37	-15.39	54.0	-13.63	AV	258.20	100	Vertical	Pass

TEST REPORT

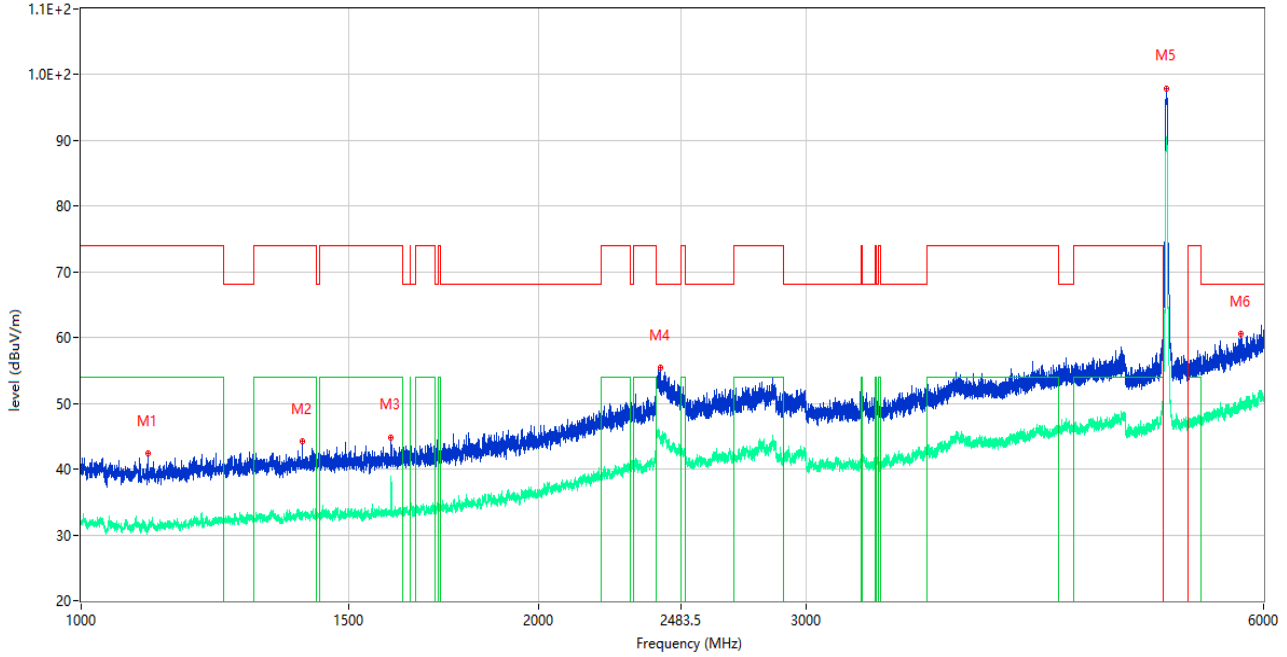
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 96 of 238

Figure 106: Spurious Emission, 1GHz – 10th Harmonic, 802.11ac(VHT20), 5180MHz
1GHz-6GHz, Horizontal

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1105.987	42.33	--	31.43	-10.64	74.0	--	54.0	-22.57	11.00	100	Horizontal	Pass
1398.700	44.26	--	33.00	-9.90	74.0	--	54.0	-21.00	15.00	100	Horizontal	Pass
1599.675	44.86	--	38.92	-10.38	74.0	--	54.0	-15.08	3.00	100	Horizontal	Pass
2405.824	55.39	--	44.50	1.88	68.2	--	--	-12.81	15.00	100	Horizontal	Pass
5178.853	97.95	--	90.38	4.28	--	--	--	--	11.00	100	Horizontal	Pass
5794.526	60.54	--	50.86	7.00	68.2	--	--	-7.66	7.00	100	Horizontal	Pass

TEST REPORT

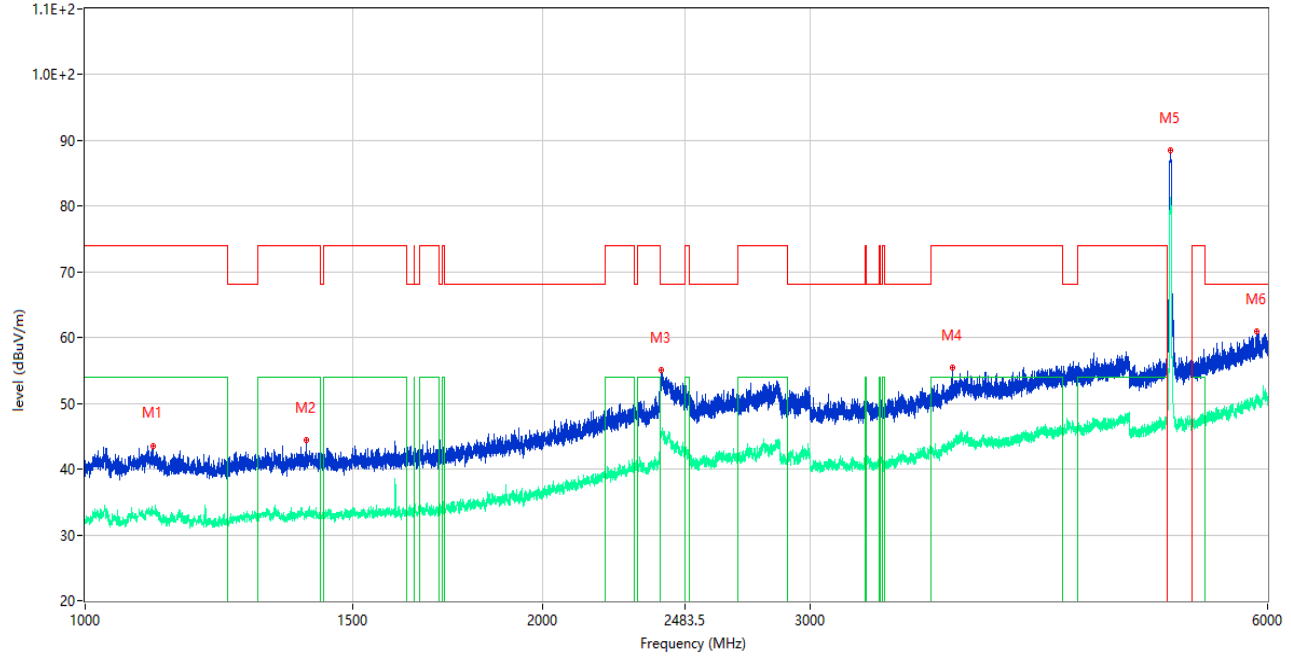
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 97 of 238

1GHz-6GHz, Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1108.236	43.58	--	33.50	-10.37	74.0	--	54.0	-20.50	11.00	100	Vertical	Pass
1397.700	44.38	--	33.66	-9.97	74.0	--	54.0	-20.34	15.00	100	Vertical	Pass
2395.576	55.11	--	45.35	2.25	68.2	--	--	-13.09	15.00	100	Vertical	Pass
3720.660	55.42	--	43.67	0.15	74.0	--	54.0	-10.33	7.00	100	Vertical	Pass
5178.103	88.42	--	80.81	4.27	--	--	--	--	1.00	100	Vertical	Pass
5904.387	60.95	--	51.06	7.76	68.2	--	--	-7.25	8.00	100	Vertical	Pass

TEST REPORT

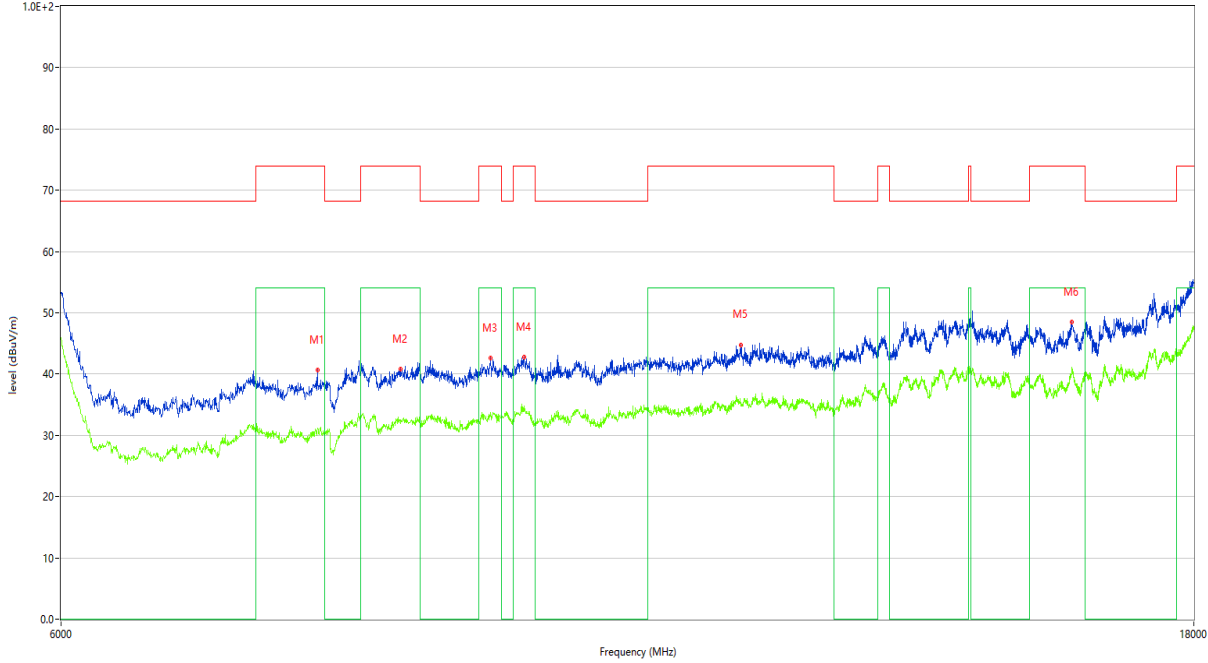
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 98 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7694.576	40.64	-24.63	74.0	-33.36	Peak	89.40	100	Horizontal	Pass
1**	7694.576	31.21	-24.63	54.0	-22.79	AV	89.40	100	Horizontal	Pass
2	8342.414	40.78	-22.29	74.0	-33.22	Peak	267.90	100	Horizontal	Pass
2**	8342.414	31.95	-22.29	54.0	-22.05	AV	267.90	100	Horizontal	Pass
3	9098.225	42.64	-23.06	74.0	-31.36	Peak	113.10	100	Horizontal	Pass
3**	9098.225	33.62	-23.06	54.0	-20.38	AV	113.10	100	Horizontal	Pass
4	9401.150	42.80	-21.66	74.0	-31.20	Peak	3.50	100	Horizontal	Pass
4**	9401.150	34.85	-21.66	54.0	-19.15	AV	3.50	100	Horizontal	Pass
5	11602.599	44.79	-18.65	74.0	-29.21	Peak	35.50	100	Horizontal	Pass
5**	11602.599	35.34	-18.65	54.0	-18.66	AV	35.50	100	Horizontal	Pass
6	15990.502	48.42	-15.59	74.0	-25.58	Peak	172.80	100	Horizontal	Pass
6**	15990.502	39.99	-15.59	54.0	-14.01	AV	172.80	100	Horizontal	Pass

TEST REPORT

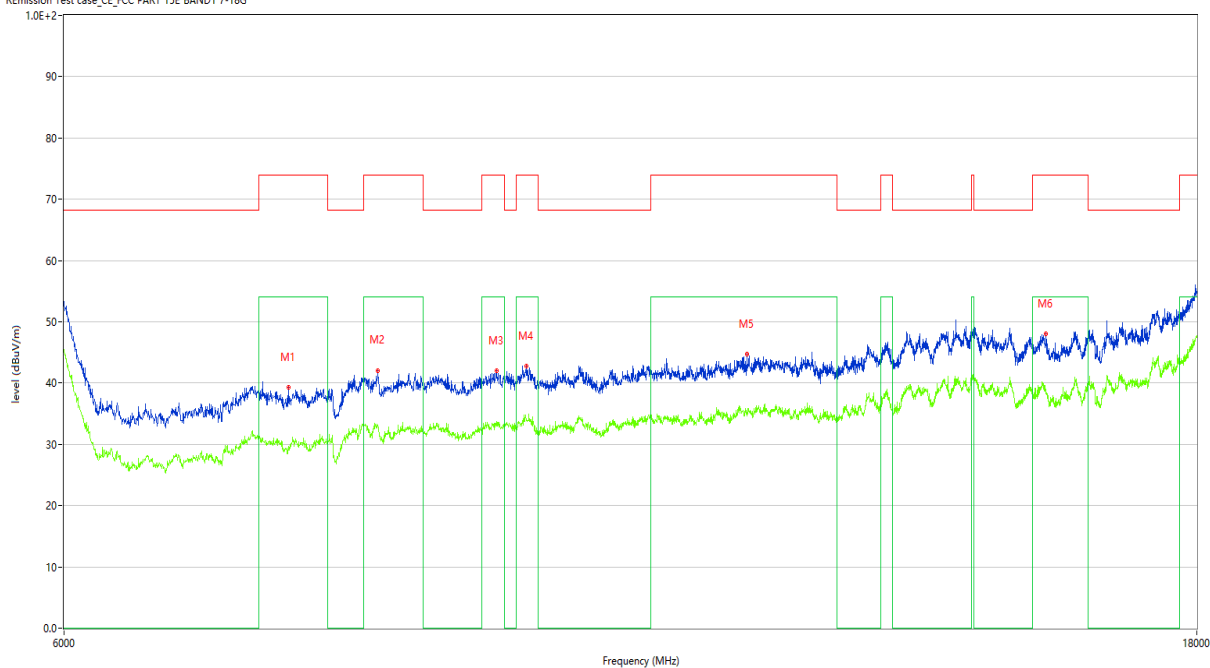
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 99 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7457.636	39.24	-24.72	74.0	-34.76	Peak	309.90	100	Vertical	Pass
1**	7457.636	29.66	-24.72	54.0	-24.34	AV	309.90	100	Vertical	Pass
2	8135.466	42.09	-22.48	74.0	-31.91	Peak	300.70	100	Vertical	Pass
2**	8135.466	33.15	-22.48	54.0	-20.85	AV	300.70	100	Vertical	Pass
3	9125.219	41.98	-23.02	74.0	-32.02	Peak	160.30	100	Vertical	Pass
3**	9125.219	33.57	-23.02	54.0	-20.43	AV	160.30	100	Vertical	Pass
4	9392.152	42.79	-21.82	74.0	-31.21	Peak	175.20	100	Vertical	Pass
4**	9392.152	34.25	-21.82	54.0	-19.75	AV	175.20	100	Vertical	Pass
5	11635.591	44.69	-18.65	74.0	-29.31	Peak	309.90	100	Vertical	Pass
5**	11635.591	34.71	-18.65	54.0	-19.29	AV	309.90	100	Vertical	Pass
6	15552.612	48.02	-17.93	74.0	-25.98	Peak	124.30	100	Vertical	Pass
6**	15552.612	38.78	-17.93	54.0	-15.22	AV	124.30	100	Vertical	Pass

TEST REPORT

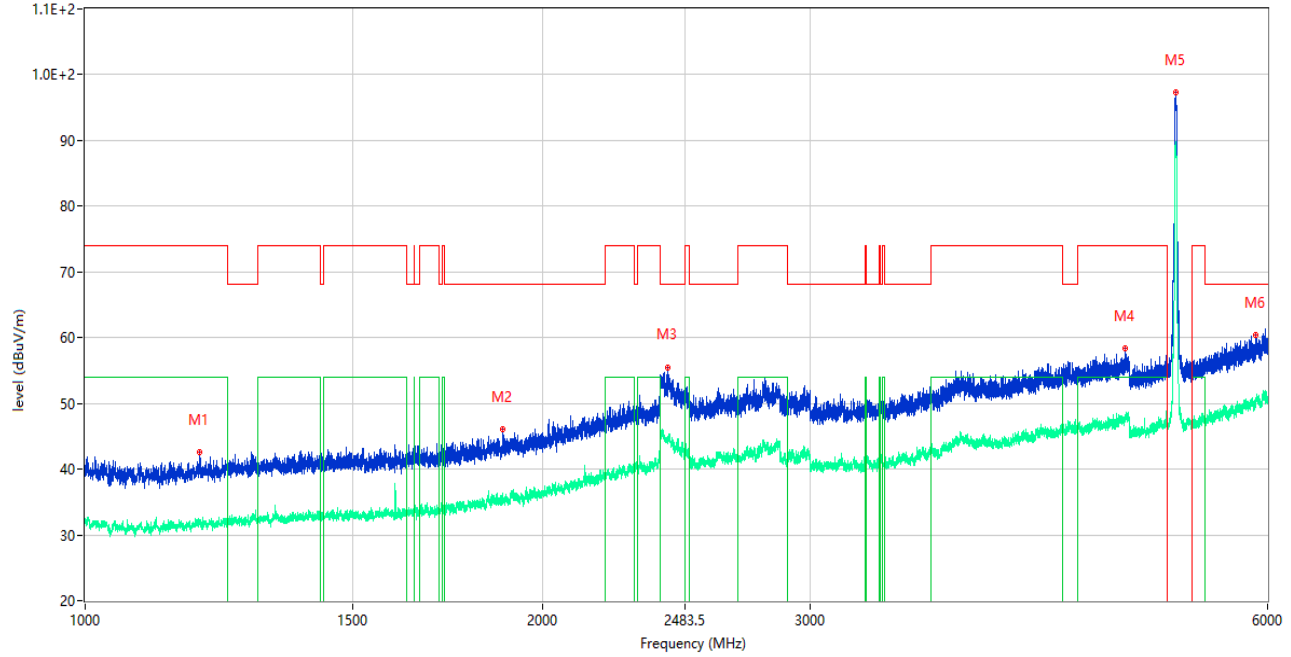
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 100 of 238

Figure 107: Spurious Emission, 1GHz – 10th Harmonic, 802.11ac(VHT20), 5220MHz
1GHz-6GHz, Horizontal

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1188.726	42.53	--	32.17	-9.96	74.0	--	54.0	-21.83	9.00	100	Horizontal	Pass
1881.640	46.07	--	36.41	-7.89	68.2	--	--	-22.13	11.00	100	Horizontal	Pass
2418.073	55.53	--	44.82	1.44	68.2	--	--	-12.67	6.00	100	Horizontal	Pass
4839.145	58.30	--	47.92	3.80	74.0	--	54.0	-6.08	7.00	100	Horizontal	Pass
5218.223	97.27	--	89.55	4.20	--	--	--	--	9.00	100	Horizontal	Pass
5892.388	60.34	--	50.73	6.70	68.2	--	--	-7.86	5.00	100	Horizontal	Pass

TEST REPORT

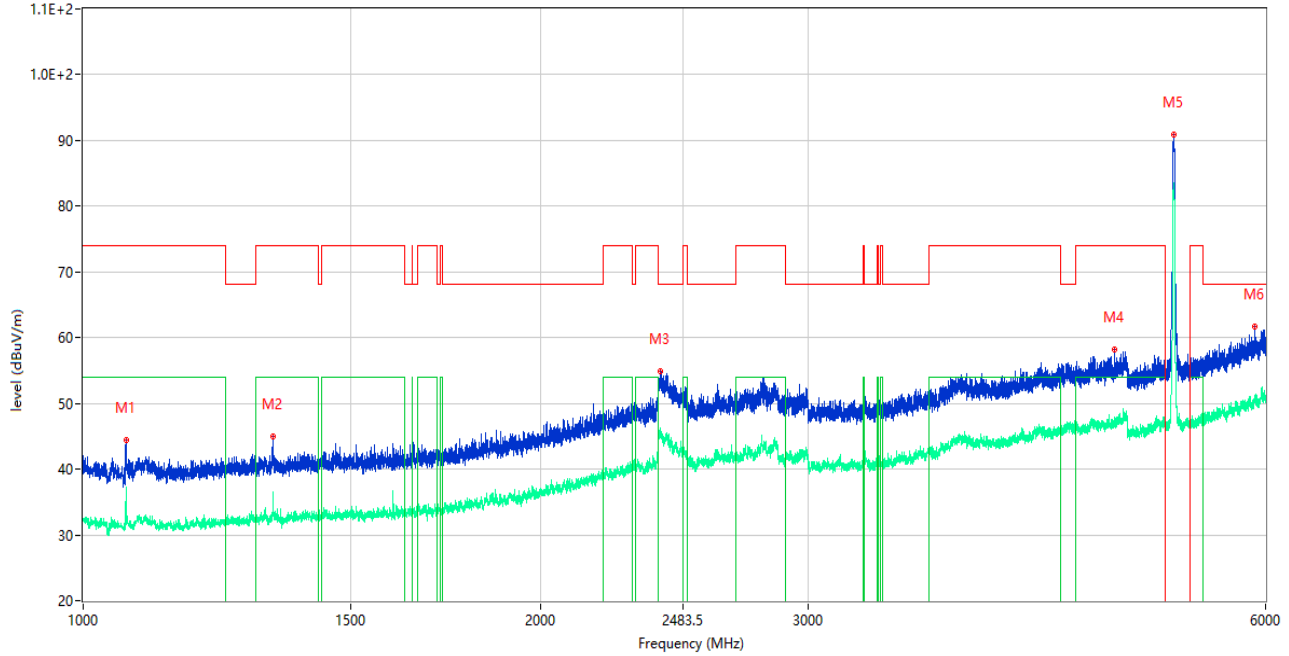
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 101 of 238

1GHz-6GHz, Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1066.742	44.34	--	33.07	-10.59	74.0	--	54.0	-20.93	1.00	100	Vertical	Pass
1332.958	44.92	--	36.36	-9.72	74.0	--	54.0	-17.64	9.00	100	Vertical	Pass
2399.325	54.82	--	45.67	2.11	68.2	--	--	-13.38	8.00	100	Vertical	Pass
4775.403	58.23	--	47.93	2.99	74.0	--	54.0	-6.07	11.00	100	Vertical	Pass
5218.598	90.90	--	83.23	4.20	--	--	--	--	5.00	100	Vertical	Pass
5901.387	61.64	--	50.79	7.52	68.2	--	--	-6.56	15.00	100	Vertical	Pass

TEST REPORT

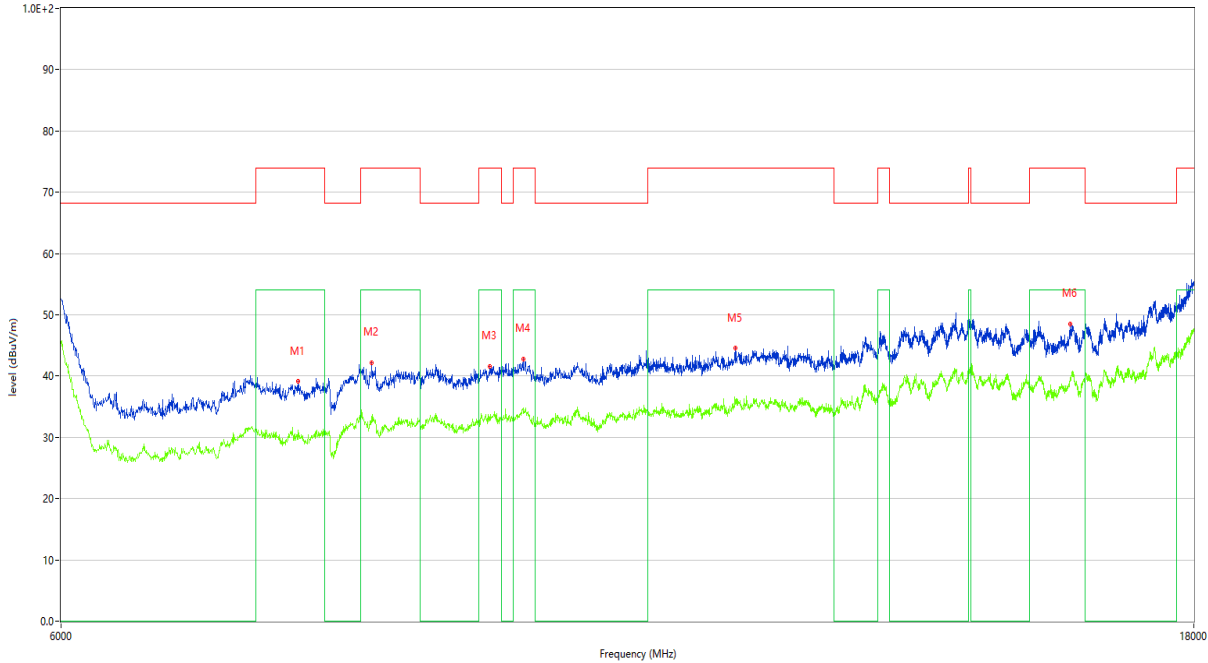
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 102 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7553.612	39.08	-25.02	74.0	-34.92	Peak	13.30	100	Horizontal	Pass
1**	7553.612	31.15	-25.02	54.0	-22.85	AV	13.30	100	Horizontal	Pass
2	8111.472	42.22	-22.37	74.0	-31.78	Peak	276.30	100	Horizontal	Pass
2**	8111.472	33.35	-22.37	54.0	-20.65	AV	276.30	100	Horizontal	Pass
3	9095.226	41.56	-23.05	74.0	-32.44	Peak	10.40	100	Horizontal	Pass
3**	9095.226	33.30	-23.05	54.0	-20.70	AV	10.40	100	Horizontal	Pass
4	9392.152	42.82	-21.82	74.0	-31.18	Peak	138.40	100	Horizontal	Pass
4**	9392.152	34.84	-21.82	54.0	-19.16	AV	138.40	100	Horizontal	Pass
5	11542.614	44.60	-18.14	74.0	-29.40	Peak	75.90	100	Horizontal	Pass
5**	11542.614	35.92	-18.14	54.0	-18.08	AV	75.90	100	Horizontal	Pass
6	15963.509	48.54	-16.49	74.0	-25.46	Peak	356.20	100	Horizontal	Pass
6**	15963.509	39.55	-16.49	54.0	-14.45	AV	356.20	100	Horizontal	Pass

TEST REPORT

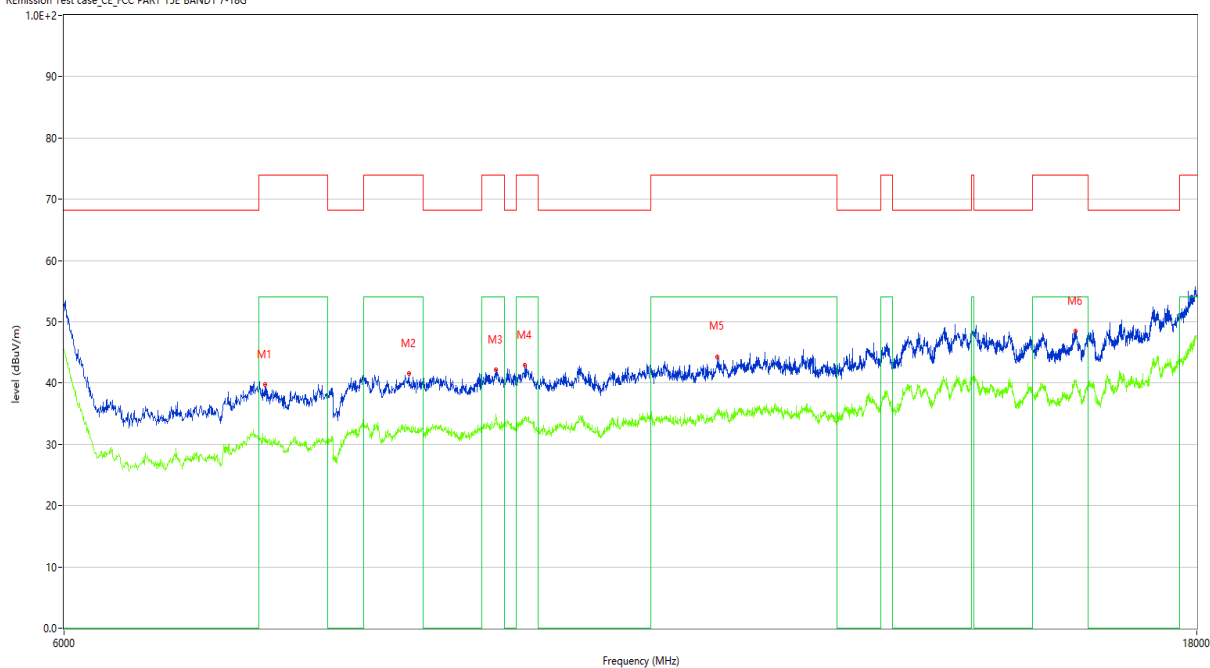
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 103 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7289.678	39.70	-24.72	74.0	-34.30	Peak	90.10	100	Vertical	Pass
1**	7289.678	31.36	-24.72	54.0	-22.64	AV	90.10	100	Vertical	Pass
2	8381.405	41.53	-22.07	74.0	-32.47	Peak	359.60	100	Vertical	Pass
2**	8381.405	32.52	-22.07	54.0	-21.48	AV	359.60	100	Vertical	Pass
3	9119.220	42.14	-23.03	74.0	-31.86	Peak	229.90	100	Vertical	Pass
3**	9119.220	34.91	-23.03	54.0	-19.09	AV	229.90	100	Vertical	Pass
4	9380.155	42.96	-22.10	74.0	-31.04	Peak	253.60	100	Vertical	Pass
4**	9380.155	33.91	-22.10	54.0	-20.09	AV	253.60	100	Vertical	Pass
5	11308.673	44.34	-18.99	74.0	-29.66	Peak	215.10	100	Vertical	Pass
5**	11308.673	35.54	-18.99	54.0	-18.46	AV	215.10	100	Vertical	Pass
6	16008.498	48.48	-15.49	74.0	-25.52	Peak	283.70	100	Vertical	Pass
6**	16008.498	40.27	-15.49	54.0	-13.73	AV	283.70	100	Vertical	Pass

TEST REPORT

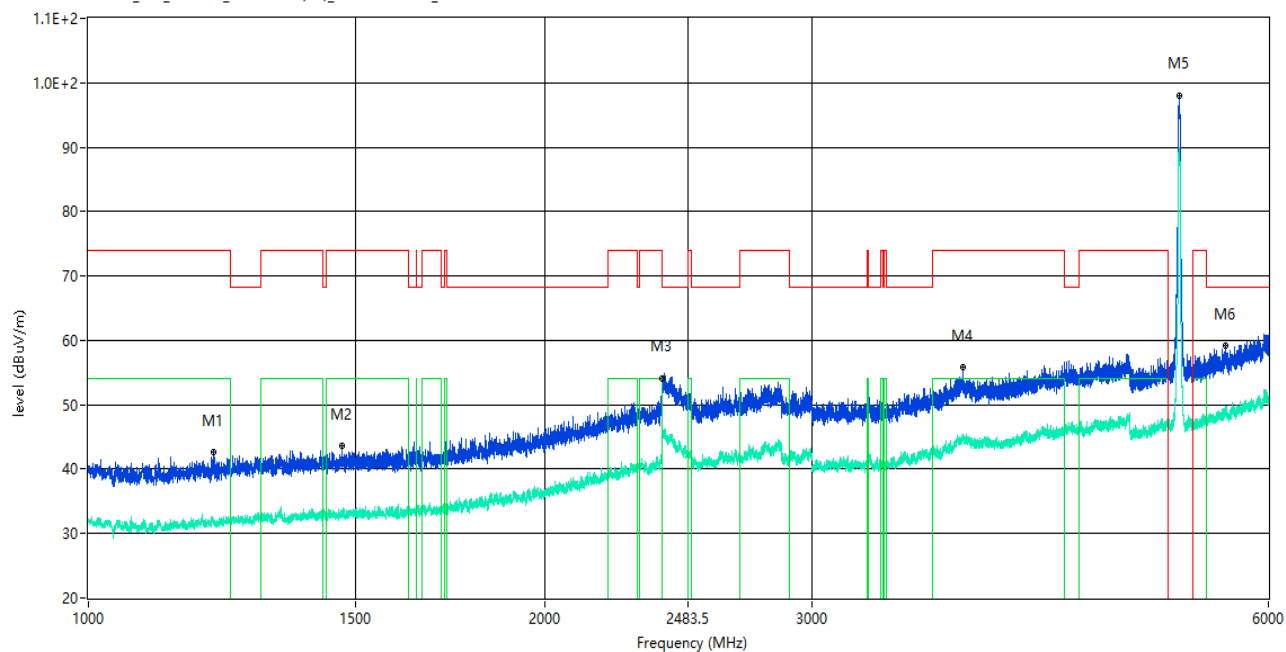
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 104 of 238

Figure 108: Spurious Emission, 1GHz – 10th Harmonic, 802.11ac(VHT20), 5240MHz
1GHz-6GHz, Horizontal

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1209.474	42.56	--	31.85	-10.14	74.0	--	54.0	-22.15	12.00	100	H	Pass
1469.441	43.55	--	32.69	-9.91	74.0	--	54.0	-21.31	9.00	100	H	Pass
2398.325	54.95	--	45.38	2.15	68.2	--	--	-13.25	12.00	100	H	Pass
3772.778	55.77	--	45.04	1.23	74.0	--	54.0	-8.96	5.00	100	H	Pass
5239.970	98.02	--	88.75	4.10	--	--	--	--	0.00	100	H	Pass
5624.672	59.11	--	48.93	6.39	68.2	--	--	-9.09	13.00	100	H	Pass

TEST REPORT

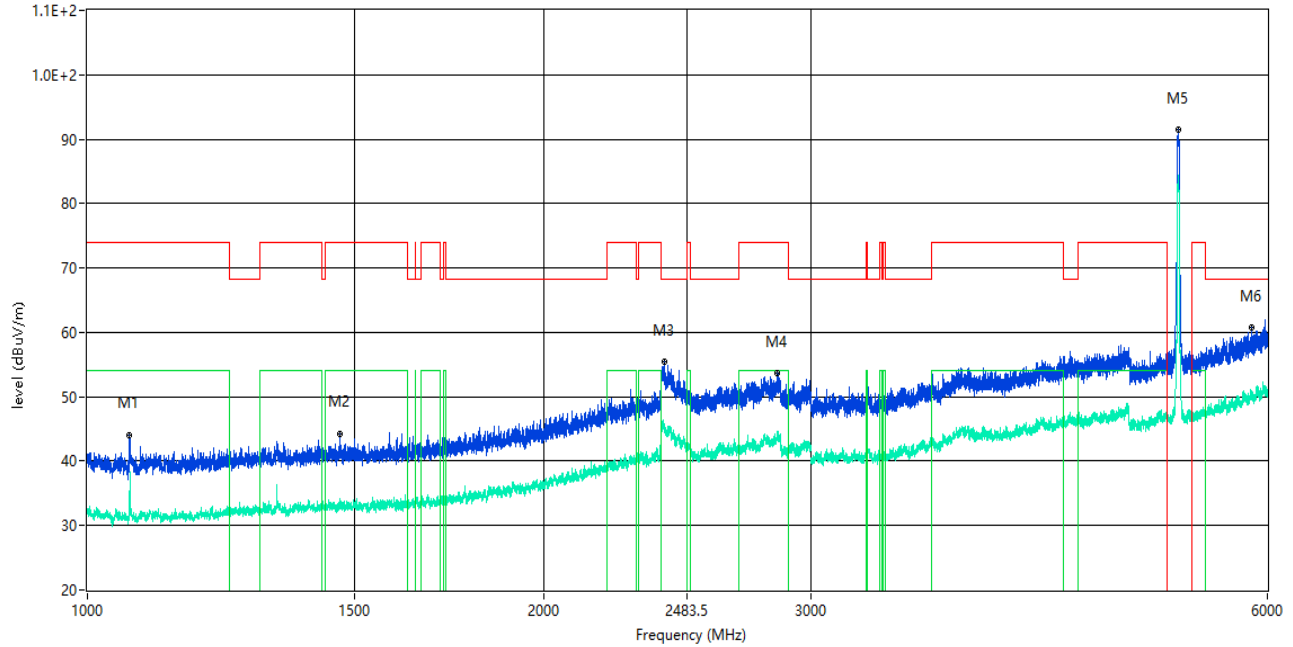
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 105 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1066.242	44.10	--	32.93	-10.68	74.0	--	54.0	-21.07	15.00	100	V	Pass
1466.442	44.31	--	33.07	-10.03	74.0	--	54.0	-20.93	0.00	100	V	Pass
2399.825	55.41	--	45.57	2.09	68.2	--	--	-12.79	8.00	100	V	Pass
2850.519	53.60	--	43.77	-0.21	74.0	--	54.0	-10.23	10.00	100	V	Pass
5238.095	91.42	--	83.76	4.08	--	--	--	--	8.00	100	V	Pass
5854.518	60.73	--	50.12	6.95	68.2	--	--	-7.47	15.00	100	V	Pass

TEST REPORT

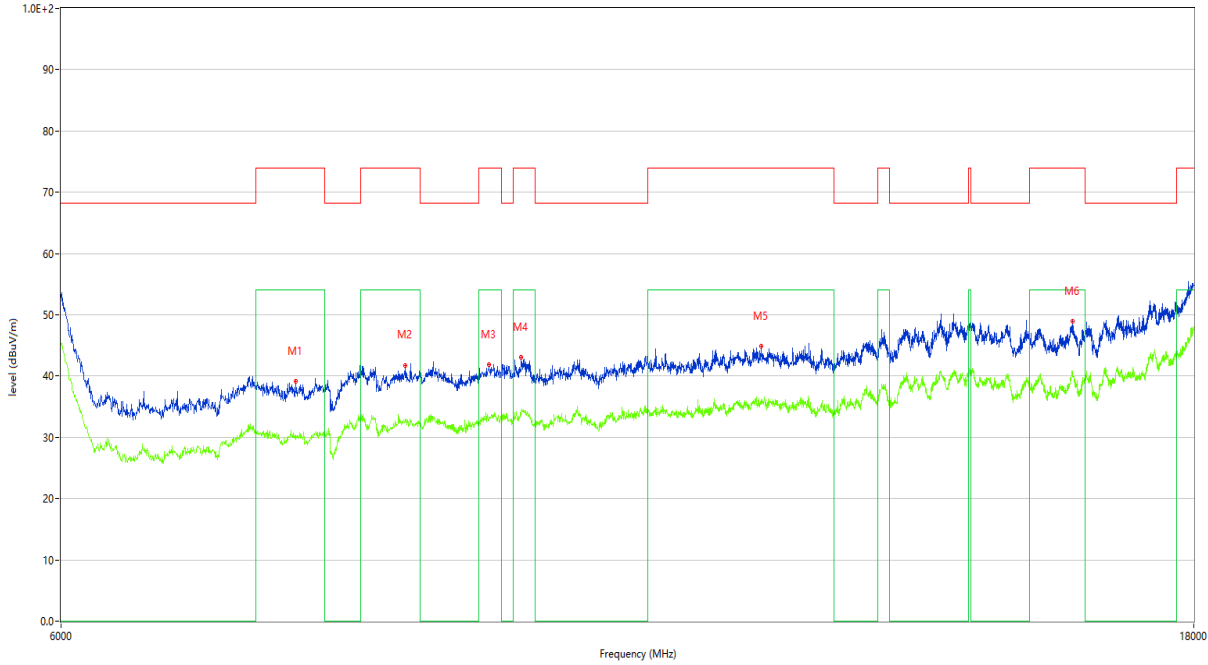
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 106 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7535.616	39.13	-24.81	74.0	-34.87	Peak	116.30	100	Horizontal	Pass
1**	7535.616	29.65	-24.81	54.0	-24.35	AV	116.30	100	Horizontal	Pass
2	8378.405	41.73	-22.09	74.0	-32.27	Peak	336.20	100	Horizontal	Pass
2**	8378.405	32.94	-22.09	54.0	-21.06	AV	336.20	100	Horizontal	Pass
3	9086.228	41.83	-23.04	74.0	-32.17	Peak	66.20	100	Horizontal	Pass
3**	9086.228	33.31	-23.04	54.0	-20.69	AV	66.20	100	Horizontal	Pass
4	9374.156	43.06	-22.24	74.0	-30.94	Peak	36.00	100	Horizontal	Pass
4**	9374.156	34.37	-22.24	54.0	-19.63	AV	36.00	100	Horizontal	Pass
5	11833.542	44.86	-18.64	74.0	-29.14	Peak	95.50	100	Horizontal	Pass
5**	11833.542	35.94	-18.64	54.0	-18.06	AV	95.50	100	Horizontal	Pass
6	15999.500	48.93	-15.29	74.0	-25.07	Peak	110.40	100	Horizontal	Pass
6**	15999.500	40.78	-15.29	54.0	-13.22	AV	110.40	100	Horizontal	Pass

TEST REPORT

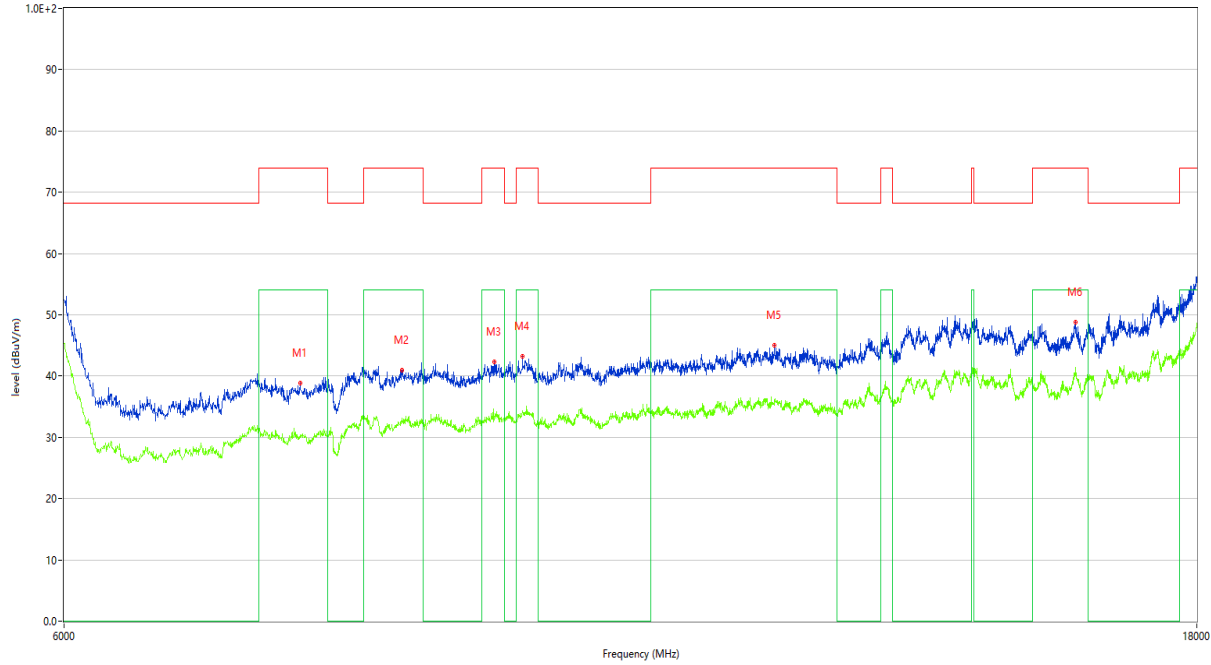
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 107 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7544.614	38.88	-24.91	74.0	-35.12	Peak	270.30	100	Vertical	Pass
1**	7544.614	30.43	-24.91	54.0	-23.57	AV	270.30	100	Vertical	Pass
2	8327.418	40.94	-22.38	74.0	-33.06	Peak	0.00	100	Vertical	Pass
2**	8327.418	32.46	-22.38	54.0	-21.54	AV	0.00	100	Vertical	Pass
3	9110.222	42.38	-23.04	74.0	-31.62	Peak	255.30	100	Vertical	Pass
3**	9110.222	33.11	-23.04	54.0	-20.89	AV	255.30	100	Vertical	Pass
4	9359.160	43.15	-22.59	74.0	-30.85	Peak	309.10	100	Vertical	Pass
4**	9359.160	33.97	-22.59	54.0	-20.03	AV	309.10	100	Vertical	Pass
5	11950.512	44.99	-18.79	74.0	-29.01	Peak	237.20	100	Vertical	Pass
5**	11950.512	36.18	-18.79	54.0	-17.82	AV	237.20	100	Vertical	Pass
6	16008.498	48.76	-15.49	74.0	-25.24	Peak	97.90	100	Vertical	Pass
6**	16008.498	41.37	-15.49	54.0	-12.63	AV	97.90	100	Vertical	Pass

TEST REPORT

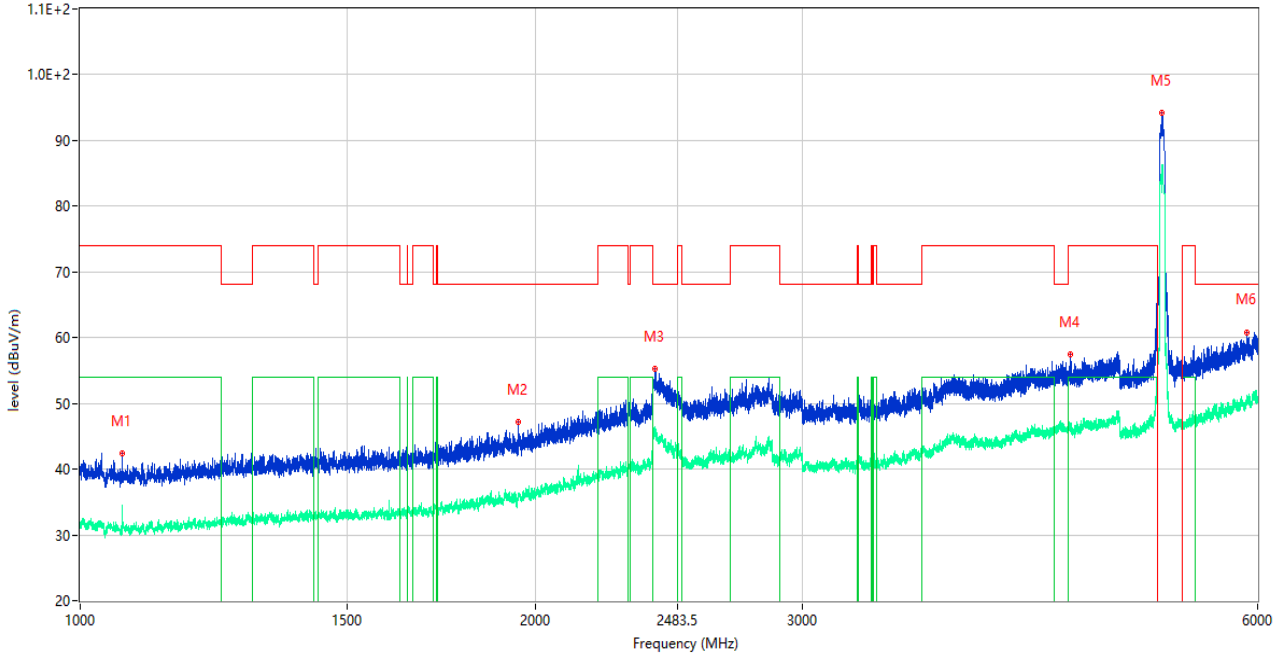
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 108 of 238

Figure 109: Spurious Emission, 1GHz – 10th Harmonic, 802.11n(HT40), 5190MHz
1GHz-6GHz, Horizontal

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1066.242	42.40	--	34.56	-10.68	74.0	--	54.0	-19.44	6.00	100	Horizontal	Pass
1947.382	47.13	--	36.33	-7.11	68.2	--	--	-21.07	15.00	100	Horizontal	Pass
2398.825	55.18	--	46.51	2.13	68.2	--	--	-13.02	9.00	100	Horizontal	Pass
4511.061	57.51	--	46.23	2.04	74.0	--	54.0	-7.77	12.00	100	Horizontal	Pass
5187.102	94.15	--	86.11	4.13	--	--	--	--	8.00	100	Horizontal	Pass
5907.012	60.85	--	50.72	7.47	68.2	--	--	-7.35	8.00	100	Horizontal	Pass

TEST REPORT

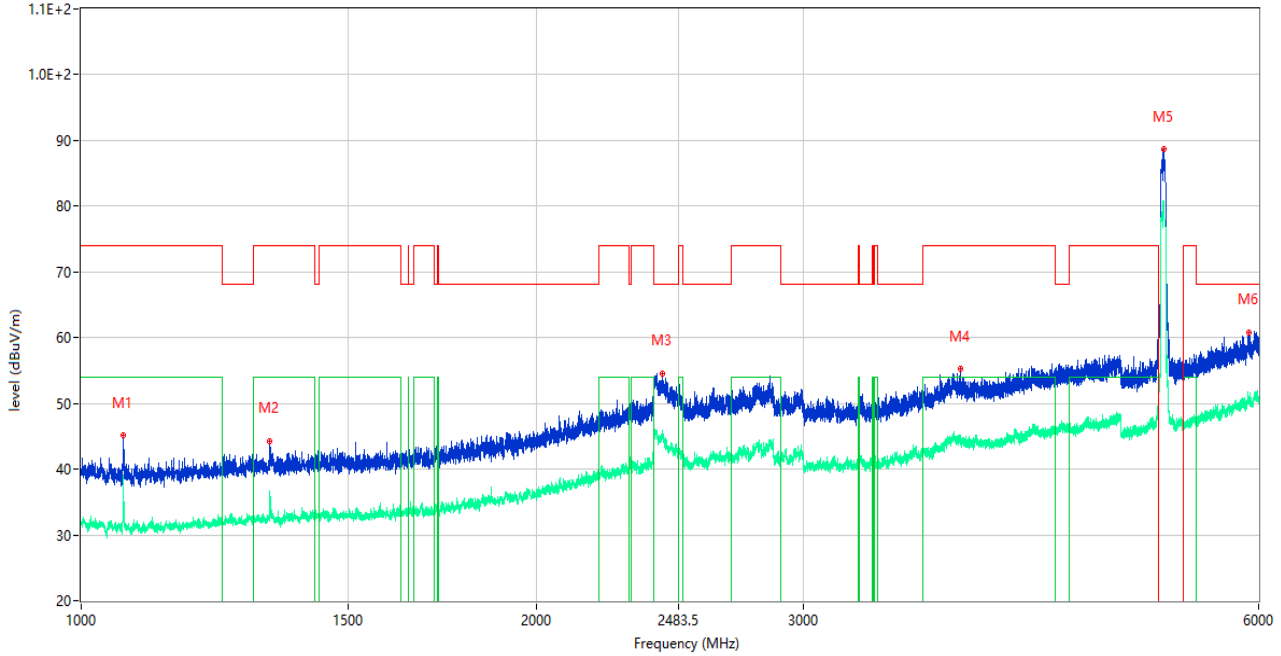
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 109 of 238

1GHz-6GHz, Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1066.492	45.10	--	39.08	-10.64	74.0	--	54.0	-14.92	5.00	100	Vertical	Pass
1332.708	44.30	--	35.33	-9.75	74.0	--	54.0	-18.67	6.00	100	Vertical	Pass
2421.072	54.59	--	44.60	1.33	68.2	--	--	-13.61	15.00	100	Vertical	Pass
3808.774	55.18	--	44.25	1.00	74.0	--	54.0	-9.75	3.00	100	Vertical	Pass
5191.976	88.64	--	80.69	4.19	--	--	--	--	14.00	100	Vertical	Pass
5911.886	60.84	--	50.78	7.29	68.2	--	--	-7.36	7.00	100	Vertical	Pass

TEST REPORT

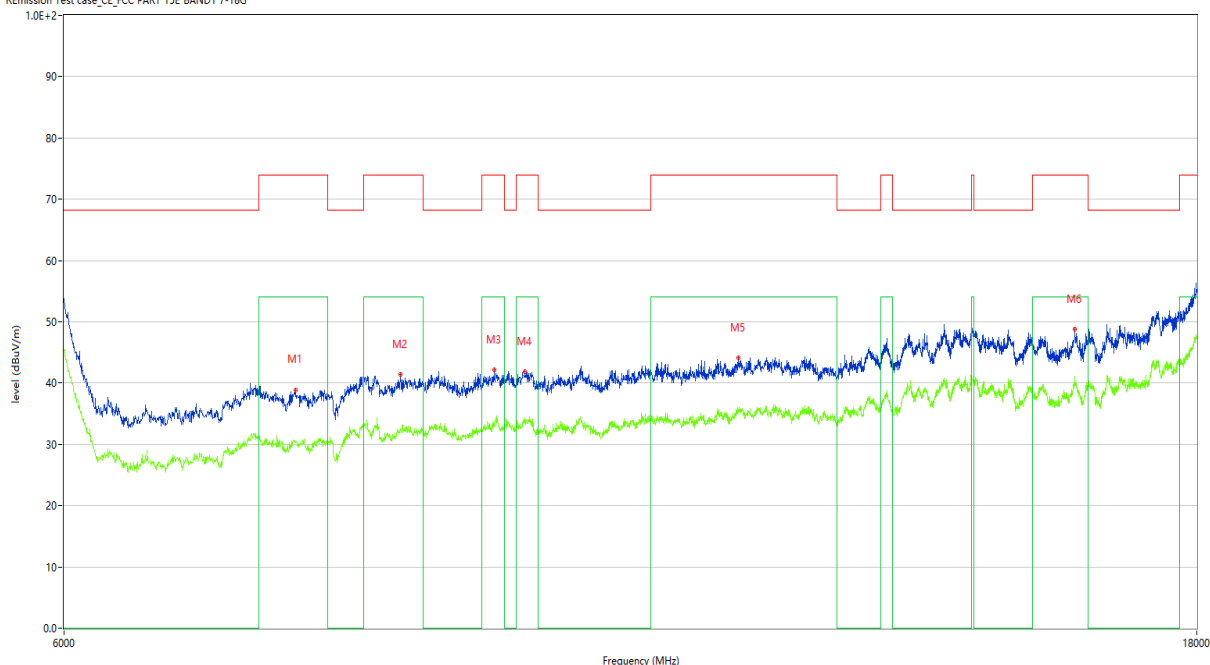
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 110 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7508.623	38.79	-24.51	74.0	-35.21	Peak	169.70	100	Horizontal	Pass
1**	7508.623	30.25	-24.51	54.0	-23.75	AV	169.70	100	Horizontal	Pass
2	8315.421	41.43	-22.44	74.0	-32.57	Peak	77.80	100	Horizontal	Pass
2**	8315.421	32.50	-22.44	54.0	-21.50	AV	77.80	100	Horizontal	Pass
3	9104.224	42.16	-23.05	74.0	-31.84	Peak	338.40	100	Horizontal	Pass
3**	9104.224	33.86	-23.05	54.0	-20.14	AV	338.40	100	Horizontal	Pass
4	9380.155	41.93	-22.10	74.0	-32.07	Peak	124.70	100	Horizontal	Pass
4**	9380.155	33.96	-22.10	54.0	-20.04	AV	124.70	100	Horizontal	Pass
5	11542.614	44.14	-18.14	74.0	-29.86	Peak	107.20	100	Horizontal	Pass
5**	11542.614	35.43	-18.14	54.0	-18.57	AV	107.20	100	Horizontal	Pass
6	15990.502	48.81	-15.59	74.0	-25.19	Peak	255.90	100	Horizontal	Pass
6**	15990.502	41.17	-15.59	54.0	-12.83	AV	255.90	100	Horizontal	Pass

TEST REPORT

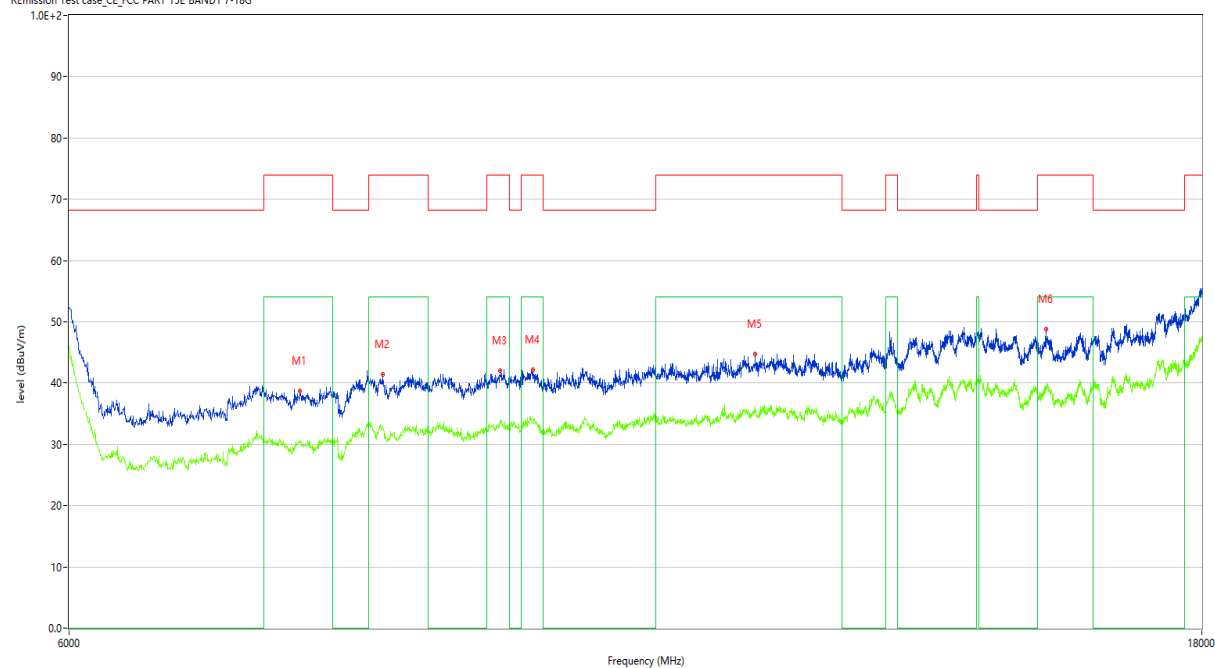
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 111 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7505.624	38.69	-24.47	74.0	-35.31	Peak	116.20	100	Vertical	Pass
1**	7505.624	30.24	-24.47	54.0	-23.76	AV	116.20	100	Vertical	Pass
2	8132.467	41.38	-22.47	74.0	-32.62	Peak	202.40	100	Vertical	Pass
2**	8132.467	32.90	-22.47	54.0	-21.10	AV	202.40	100	Vertical	Pass
3	9113.222	42.06	-23.04	74.0	-31.94	Peak	356.70	100	Vertical	Pass
3**	9113.222	34.05	-23.04	54.0	-19.95	AV	356.70	100	Vertical	Pass
4	9407.148	42.14	-21.75	74.0	-31.86	Peak	258.50	100	Vertical	Pass
4**	9407.148	34.31	-21.75	54.0	-19.69	AV	258.50	100	Vertical	Pass
5	11674.581	44.76	-18.65	74.0	-29.24	Peak	300.50	100	Vertical	Pass
5**	11674.581	36.30	-18.65	54.0	-17.70	AV	300.50	100	Vertical	Pass
6	15474.631	48.82	-17.34	74.0	-25.18	Peak	315.10	100	Vertical	Pass
6**	15474.631	39.25	-17.34	54.0	-14.75	AV	315.10	100	Vertical	Pass

TEST REPORT

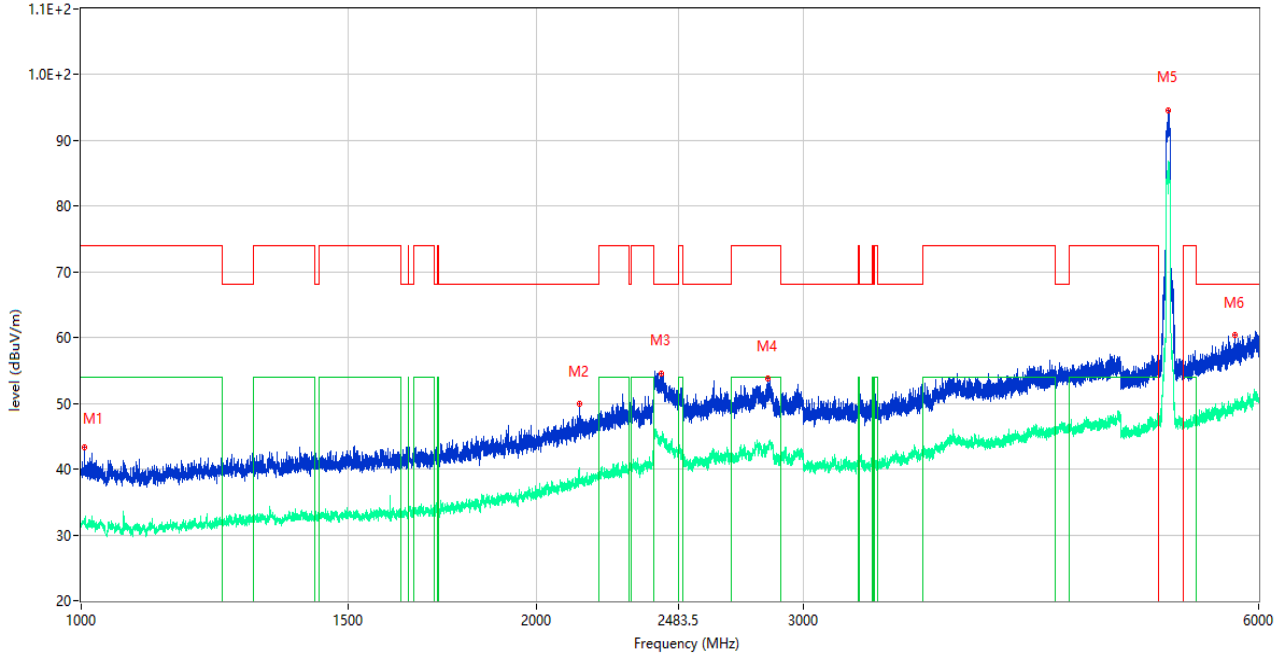
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 112 of 238

Figure 110: Spurious Emission, 1GHz – 10th Harmonic, 802.11n(HT40), 5230MHz
1GHz-6GHz, Horizontal

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1000.000	40.05	--	31.24	-9.76	74.0	--	54.0	-22.76	11.00	100	Horizontal	Pass
2133.358	49.86	--	40.18	-5.04	68.2	--	--	-18.34	10.00	100	Horizontal	Pass
2418.573	54.61	--	44.77	1.42	68.2	--	--	-13.59	11.00	100	Horizontal	Pass
2844.019	53.75	--	43.36	-0.93	74.0	--	54.0	-10.64	4.00	100	Horizontal	Pass
5232.096	94.62	--	86.53	3.94	--	--	--	--	14.00	100	Horizontal	Pass
5791.151	60.32	--	50.55	6.96	68.2	--	--	-7.88	8.00	100	Horizontal	Pass

TEST REPORT

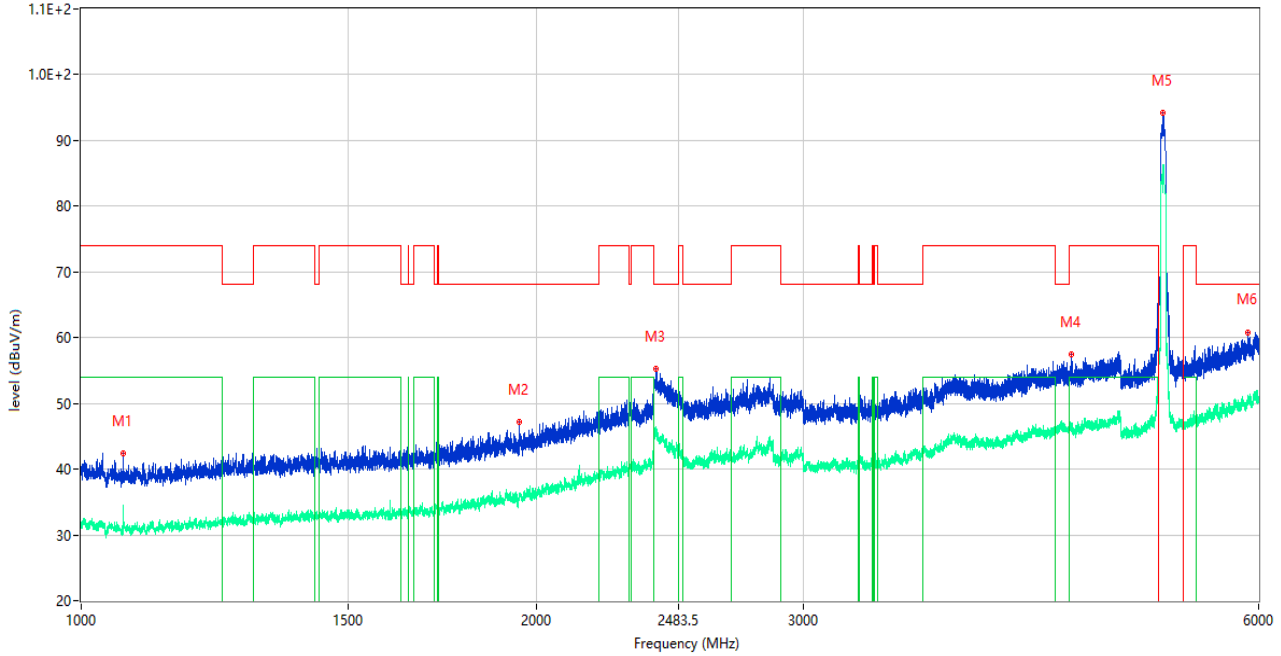
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 113 of 238

1GHz-6GHz, Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1066.492	43.67	--	34.17	-10.64	74.0	--	54.0	-19.83	11.00	100	Vertical	Pass
1333.208	44.46	--	36.80	-9.70	74.0	--	54.0	-17.20	3.00	100	Vertical	Pass
2397.575	56.93	--	47.11	2.18	68.2	--	--	-11.27	9.00	100	Vertical	Pass
4837.270	57.83	--	48.33	3.62	74.0	--	54.0	-5.67	0.00	100	Vertical	Pass
5230.971	87.72	--	79.60	3.89	--	--	--	--	14.00	100	Vertical	Pass
5854.143	60.37	--	50.34	6.97	68.2	--	--	-7.83	14.00	100	Vertical	Pass

TEST REPORT

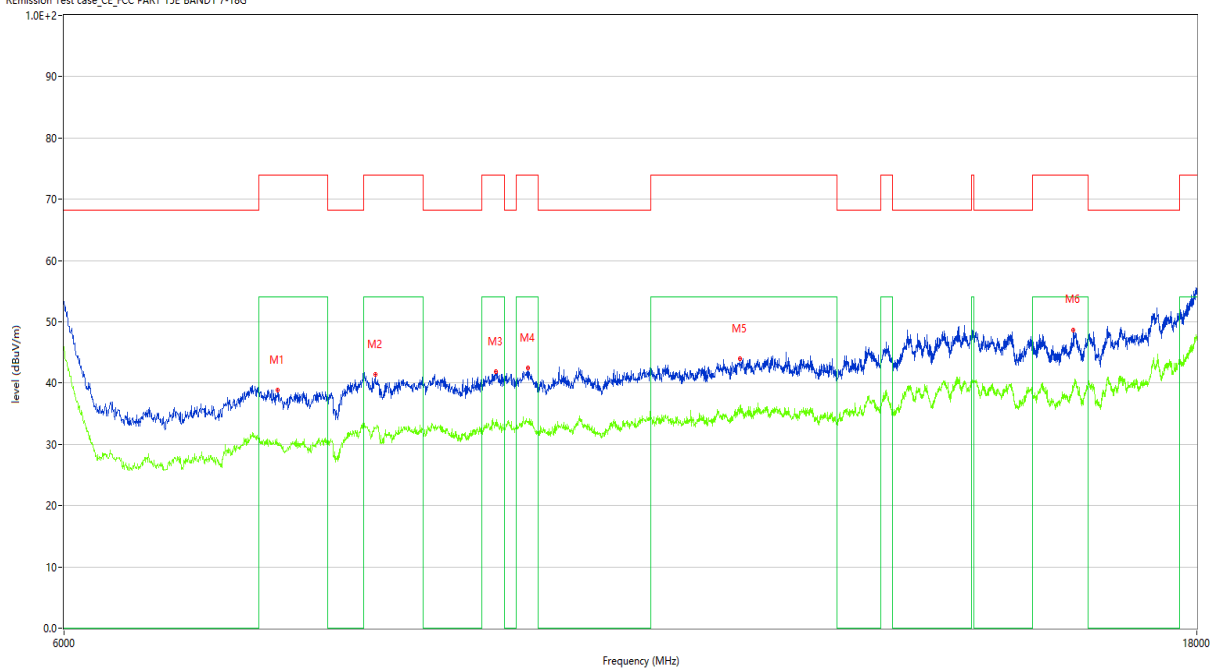
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 114 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7382.654	38.81	-25.09	74.0	-35.19	Peak	127.00	100	Horizontal	Pass
1**	7382.654	29.92	-25.09	54.0	-24.08	AV	127.00	100	Horizontal	Pass
2	8114.471	41.39	-22.38	74.0	-32.61	Peak	109.20	100	Horizontal	Pass
2**	8114.471	32.65	-22.38	54.0	-21.35	AV	109.20	100	Horizontal	Pass
3	9122.219	41.81	-23.03	74.0	-32.19	Peak	343.90	100	Horizontal	Pass
3**	9122.219	33.65	-23.03	54.0	-20.35	AV	343.90	100	Horizontal	Pass
4	9407.148	42.41	-21.75	74.0	-31.59	Peak	240.10	100	Horizontal	Pass
4**	9407.148	33.57	-21.75	54.0	-20.43	AV	240.10	100	Horizontal	Pass
5	11554.611	44.00	-18.25	74.0	-30.00	Peak	112.10	100	Horizontal	Pass
5**	11554.611	35.10	-18.25	54.0	-18.90	AV	112.10	100	Horizontal	Pass
6	15969.508	48.70	-16.29	74.0	-25.30	Peak	79.30	100	Horizontal	Pass
6**	15969.508	38.69	-16.29	54.0	-15.31	AV	79.30	100	Horizontal	Pass

TEST REPORT

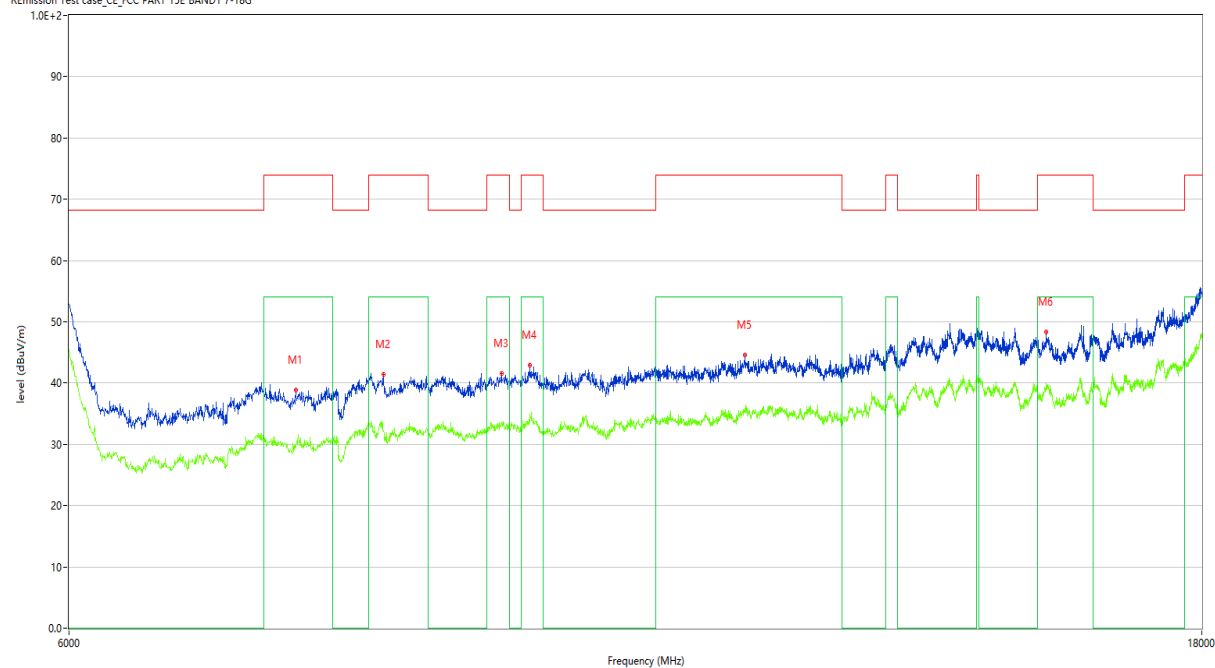
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 115 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7475.631	38.89	-24.59	74.0	-35.11	Peak	339.70	100	Vertical	Pass
1**	7475.631	29.57	-24.59	54.0	-24.43	AV	339.70	100	Vertical	Pass
2	8138.465	41.44	-22.49	74.0	-32.56	Peak	147.00	100	Vertical	Pass
2**	8138.465	32.14	-22.49	54.0	-21.86	AV	147.00	100	Vertical	Pass
3	9125.219	41.63	-23.02	74.0	-32.37	Peak	69.40	100	Vertical	Pass
3**	9125.219	33.27	-23.02	54.0	-20.73	AV	69.40	100	Vertical	Pass
4	9380.155	42.91	-22.10	74.0	-31.09	Peak	31.80	100	Vertical	Pass
4**	9380.155	34.87	-22.10	54.0	-19.13	AV	31.80	100	Vertical	Pass
5	11560.610	44.52	-18.30	74.0	-29.48	Peak	69.40	100	Vertical	Pass
5**	11560.610	35.34	-18.30	54.0	-18.66	AV	69.40	100	Vertical	Pass
6	15480.630	48.33	-17.21	74.0	-25.67	Peak	43.40	100	Vertical	Pass
6**	15480.630	39.91	-17.21	54.0	-14.09	AV	43.40	100	Vertical	Pass

TEST REPORT

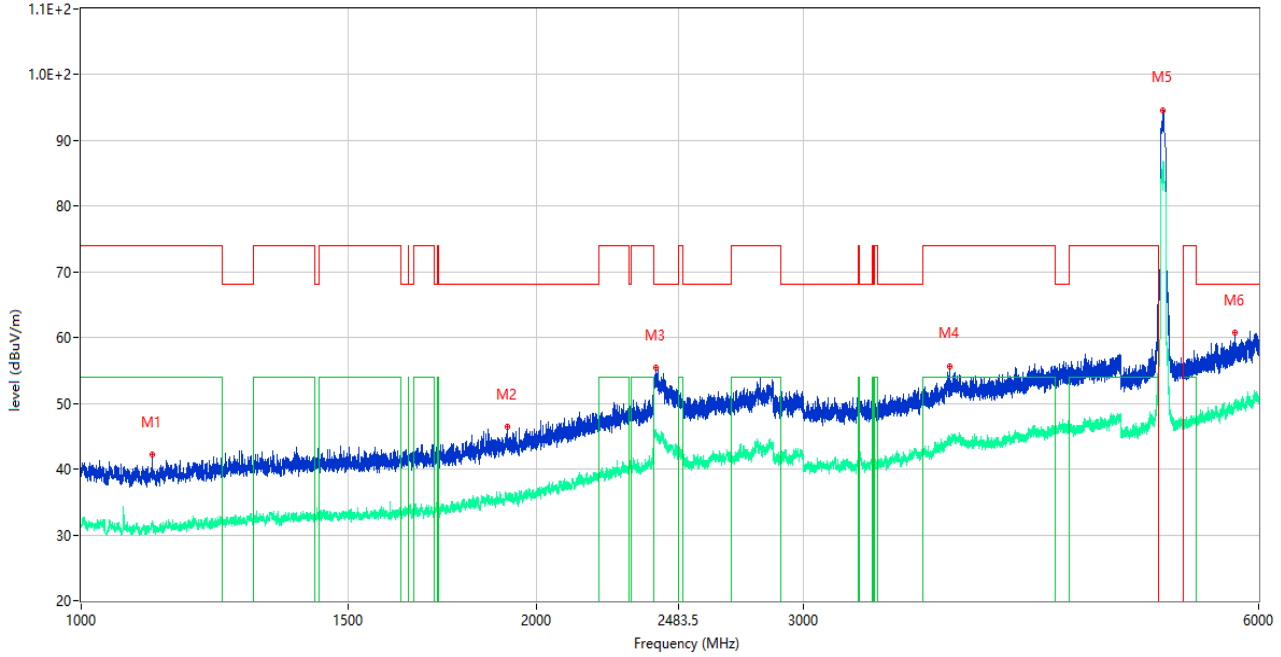
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 116 of 238

Figure 111: Spurious Emission, 1GHz – 10th Harmonic, 802.11ac(VHT40), 5190MHz
1GHz-6GHz, Horizontal

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1113.986	42.23	--	31.42	-10.01	74.0	--	54.0	-22.58	14.00	100	Horizontal	Pass
1911.886	46.40	--	36.04	-7.14	68.2	--	--	-21.80	0.00	100	Horizontal	Pass
2399.575	55.37	--	45.60	2.10	68.2	--	--	-12.83	9.00	100	Horizontal	Pass
3747.657	55.72	--	43.98	0.50	74.0	--	54.0	-10.02	13.00	100	Horizontal	Pass
5188.226	94.53	--	86.85	4.11	--	--	--	--	10.00	100	Horizontal	Pass
5788.151	60.84	--	50.00	6.86	68.2	--	--	-7.36	10.00	100	Horizontal	Pass

TEST REPORT

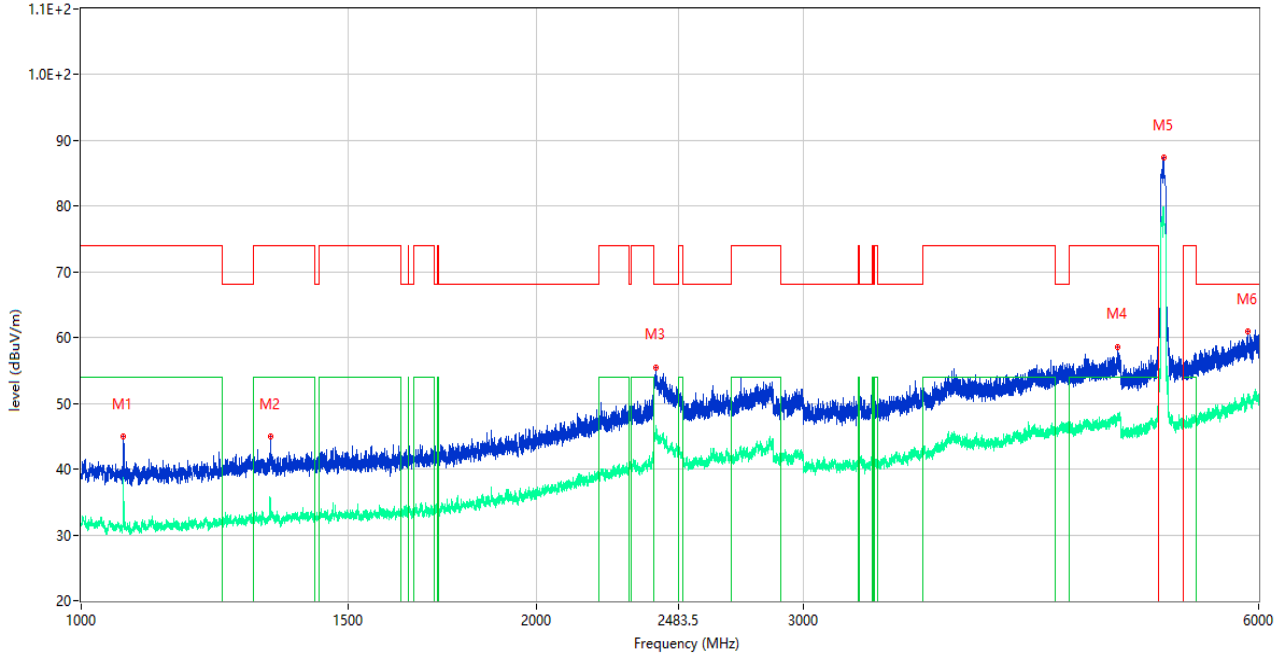
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 117 of 238

1GHz-6GHz, Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1066.742	45.00	--	37.93	-10.59	74.0	--	54.0	-16.07	4.00	100	Vertical	Pass
1333.708	44.92	--	35.55	-9.64	74.0	--	54.0	-18.45	1.00	100	Vertical	Pass
2398.075	55.43	--	45.58	2.16	68.2	--	--	-12.77	11.00	100	Vertical	Pass
4844.394	58.64	--	47.34	3.73	74.0	--	54.0	-6.66	2.00	100	Vertical	Pass
5191.601	87.38	--	79.73	4.17	--	--	--	--	5.00	100	Vertical	Pass
5904.012	60.93	--	51.01	7.78	68.2	--	--	-7.27	7.00	100	Vertical	Pass

TEST REPORT

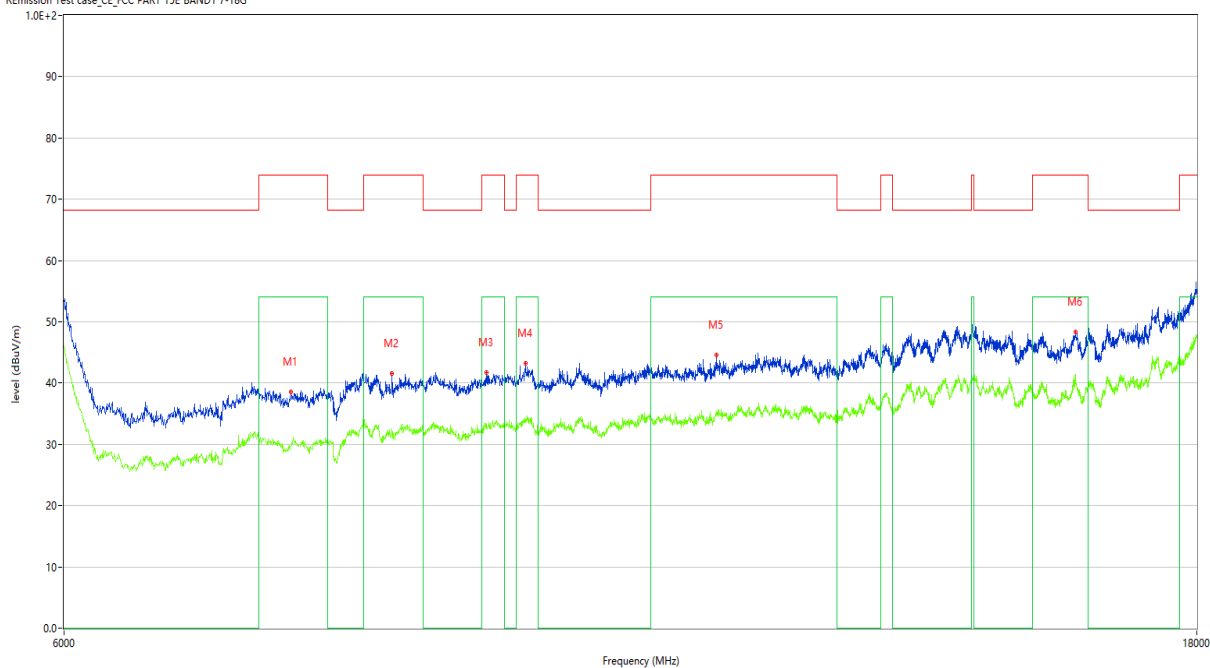
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 118 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7475.631	38.55	-24.59	74.0	-35.45	Peak	288.50	100	Horizontal	Pass
1**	7475.631	29.67	-24.59	54.0	-24.33	AV	288.50	100	Horizontal	Pass
2	8246.438	41.57	-22.67	74.0	-32.43	Peak	21.20	100	Horizontal	Pass
2**	8246.438	32.56	-22.67	54.0	-21.44	AV	21.20	100	Horizontal	Pass
3	9038.240	41.75	-22.99	74.0	-32.25	Peak	21.20	100	Horizontal	Pass
3**	9038.240	33.29	-22.99	54.0	-20.71	AV	21.20	100	Horizontal	Pass
4	9386.153	43.18	-21.96	74.0	-30.82	Peak	359.90	100	Horizontal	Pass
4**	9386.153	33.98	-21.96	54.0	-20.02	AV	359.90	100	Horizontal	Pass
5	11296.676	44.60	-19.06	74.0	-29.40	Peak	163.90	100	Horizontal	Pass
5**	11296.676	35.38	-19.06	54.0	-18.62	AV	163.90	100	Horizontal	Pass
6	16002.499	48.35	-15.33	74.0	-25.65	Peak	176.00	100	Horizontal	Pass
6**	16002.499	41.42	-15.33	54.0	-12.58	AV	176.00	100	Horizontal	Pass

TEST REPORT

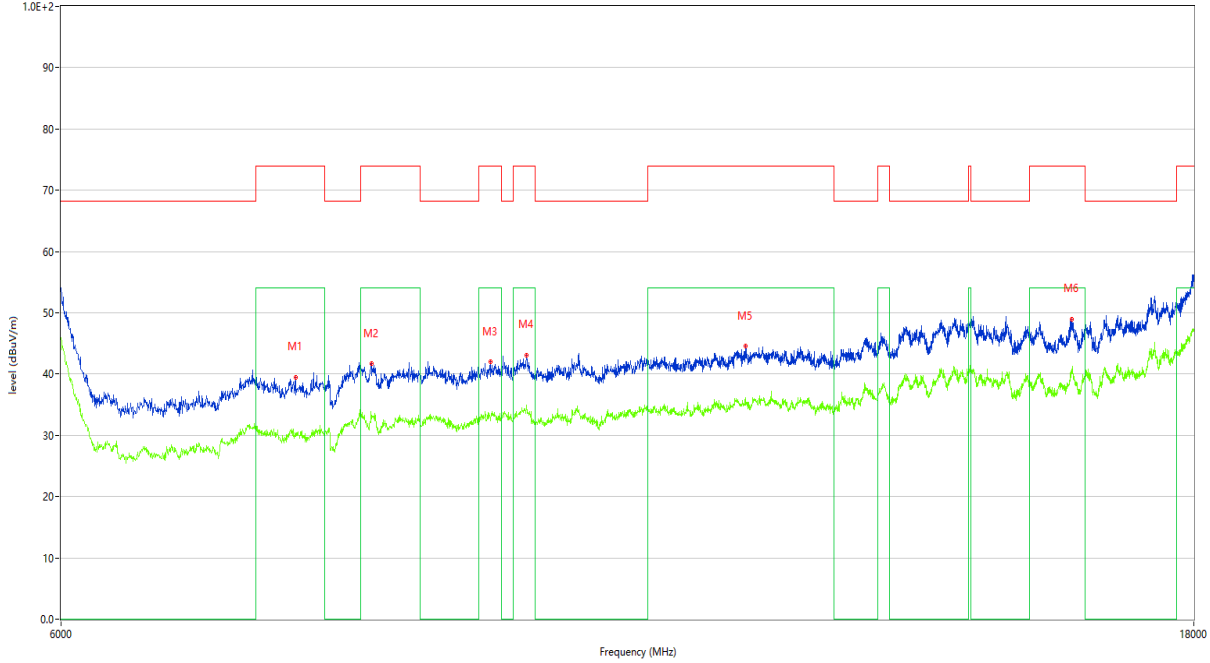
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 119 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7532.617	39.43	-24.78	74.0	-34.57	Peak	256.00	100	Vertical	Pass
1**	7532.617	30.25	-24.78	54.0	-23.75	AV	256.00	100	Vertical	Pass
2	8108.473	41.71	-22.35	74.0	-32.29	Peak	0.00	100	Vertical	Pass
2**	8108.473	32.81	-22.35	54.0	-21.19	AV	0.00	100	Vertical	Pass
3	9098.225	42.02	-23.06	74.0	-31.98	Peak	264.90	100	Vertical	Pass
3**	9098.225	32.95	-23.06	54.0	-21.05	AV	264.90	100	Vertical	Pass
4	9425.144	43.14	-22.01	74.0	-30.86	Peak	190.50	100	Vertical	Pass
4**	9425.144	35.01	-22.01	54.0	-18.99	AV	190.50	100	Vertical	Pass
5	11650.587	44.62	-18.65	74.0	-29.38	Peak	223.60	100	Vertical	Pass
5**	11650.587	36.09	-18.65	54.0	-17.91	AV	223.60	100	Vertical	Pass
6	15996.501	49.00	-15.39	74.0	-25.00	Peak	334.00	100	Vertical	Pass
6**	15996.501	40.39	-15.39	54.0	-13.61	AV	334.00	100	Vertical	Pass

TEST REPORT

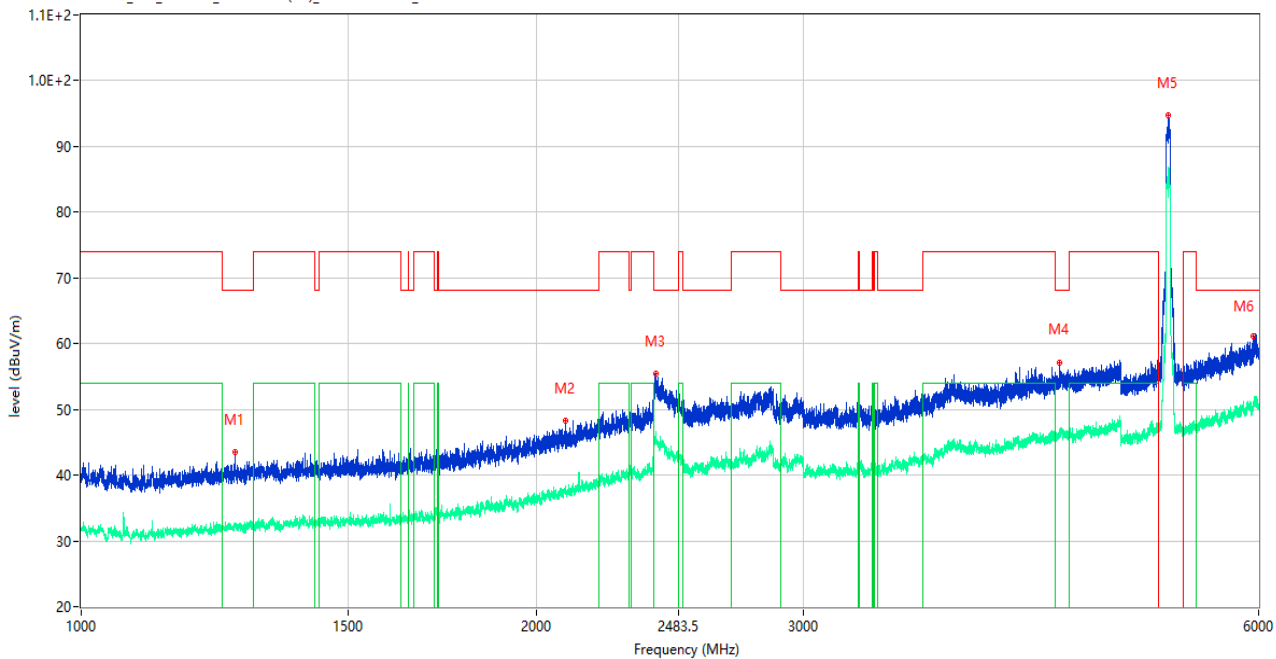
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 120 of 238

Figure 112: Spurious Emission, 1GHz – 10th Harmonic, 802.11ac(VHT40), 5230MHz
1GHz-6GHz, Horizontal

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1263.217	43.44	--	32.51	-10.02	68.2	--	--	-24.76	11.00	100	Horizontal	Pass
2089.864	48.30	--	37.71	-5.57	68.2	--	--	-19.90	8.00	100	Horizontal	Pass
2397.075	55.50	--	45.39	2.19	68.2	--	--	-12.70	13.00	100	Horizontal	Pass
4434.946	57.19	--	46.67	1.98	68.2	--	--	-11.01	9.00	100	Horizontal	Pass
5232.096	94.80	--	86.68	3.94	--	--	--	--	11.00	100	Horizontal	Pass
5949.006	61.13	--	50.91	6.93	68.2	--	--	-7.07	12.00	100	Horizontal	Pass

TEST REPORT

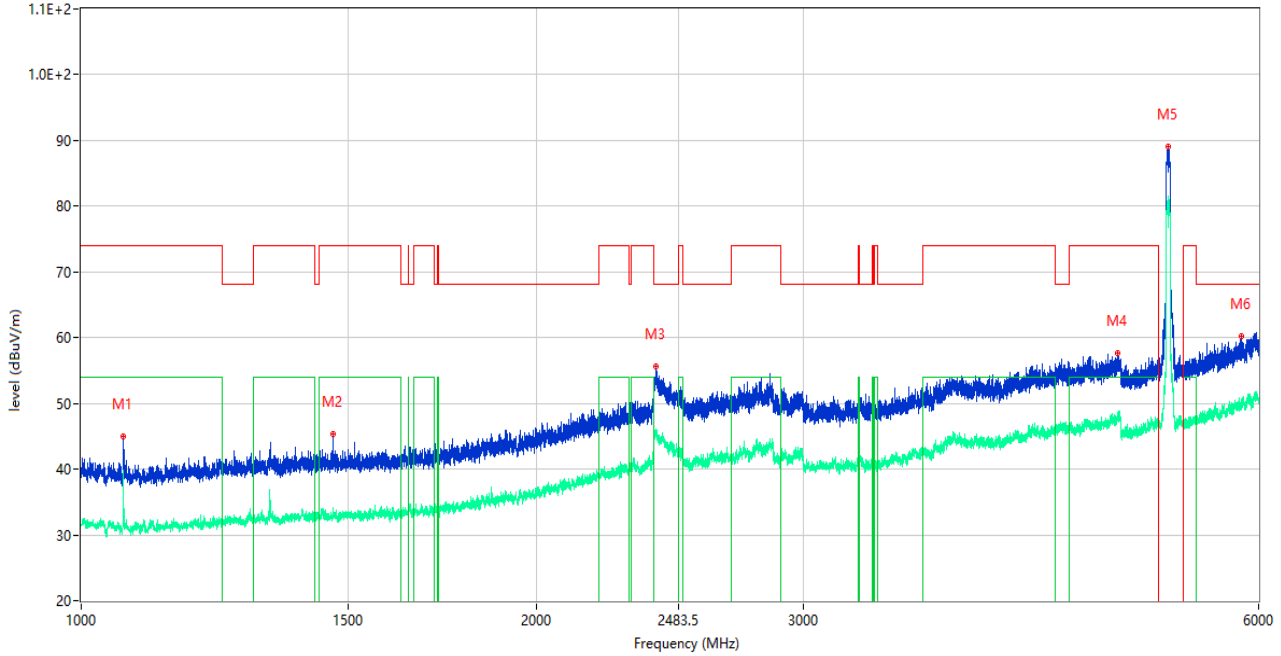
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 121 of 238

1GHz-6GHz, Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1066.492	44.92	--	39.77	-10.64	74.0	--	54.0	-14.23	1.00	100	Vertical	Pass
1467.442	45.30	--	34.17	-10.00	74.0	--	54.0	-19.83	2.00	100	Vertical	Pass
2396.825	55.70	--	45.21	2.20	68.2	--	--	-12.50	12.00	100	Vertical	Pass
4838.770	57.57	--	47.68	3.76	74.0	--	54.0	-6.32	4.00	100	Vertical	Pass
5227.972	89.07	--	81.45	3.96	--	--	--	--	10.00	100	Vertical	Pass
5849.269	60.14	--	50.73	7.27	68.2	--	--	-8.06	15.00	100	Vertical	Pass

TEST REPORT

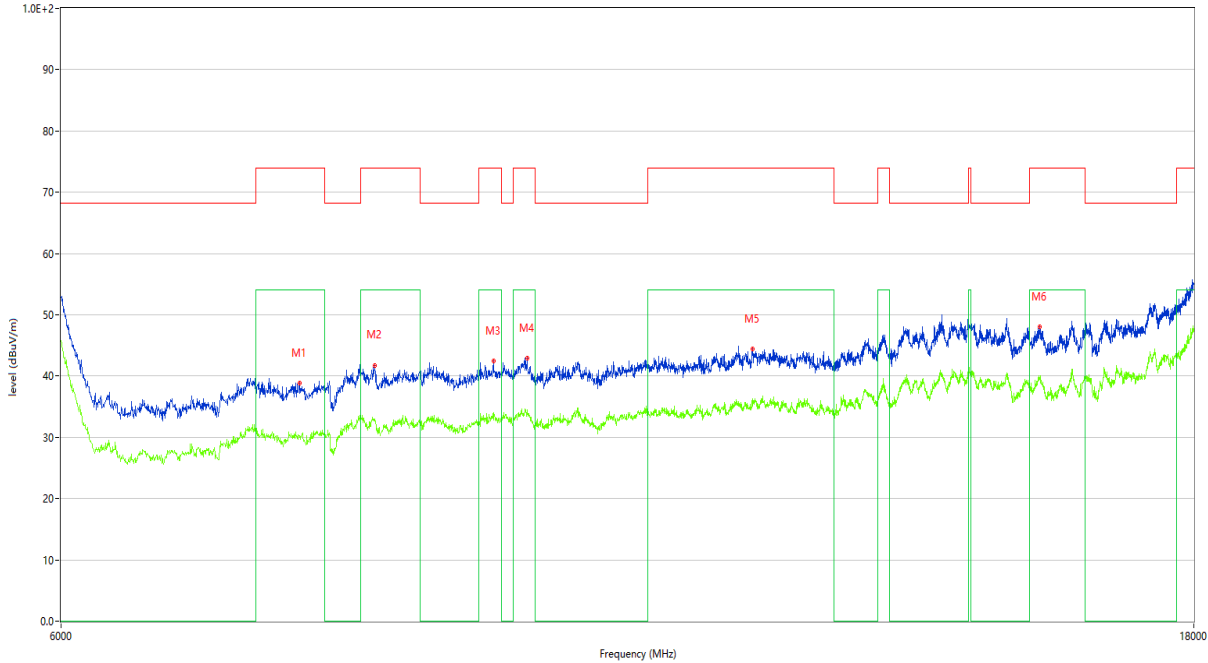
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 122 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7559.610	38.81	-25.08	74.0	-35.19	Peak	327.80	100	Horizontal	Pass
1**	7559.610	30.31	-25.08	54.0	-23.69	AV	327.80	100	Horizontal	Pass
2	8132.467	41.76	-22.47	74.0	-32.24	Peak	47.70	100	Horizontal	Pass
2**	8132.467	32.72	-22.47	54.0	-21.28	AV	47.70	100	Horizontal	Pass
3	9125.219	42.48	-23.02	74.0	-31.52	Peak	264.80	100	Horizontal	Pass
3**	9125.219	34.10	-23.02	54.0	-19.90	AV	264.80	100	Horizontal	Pass
4	9428.143	42.96	-22.05	74.0	-31.04	Peak	342.80	100	Horizontal	Pass
4**	9428.143	33.69	-22.05	54.0	-20.31	AV	342.80	100	Horizontal	Pass
5	11731.567	44.47	-18.61	74.0	-29.53	Peak	237.60	100	Horizontal	Pass
5**	11731.567	35.09	-18.61	54.0	-18.91	AV	237.60	100	Horizontal	Pass
6	15504.624	48.03	-16.89	74.0	-25.97	Peak	6.10	100	Horizontal	Pass
6**	15504.624	39.67	-16.89	54.0	-14.33	AV	6.10	100	Horizontal	Pass

TEST REPORT

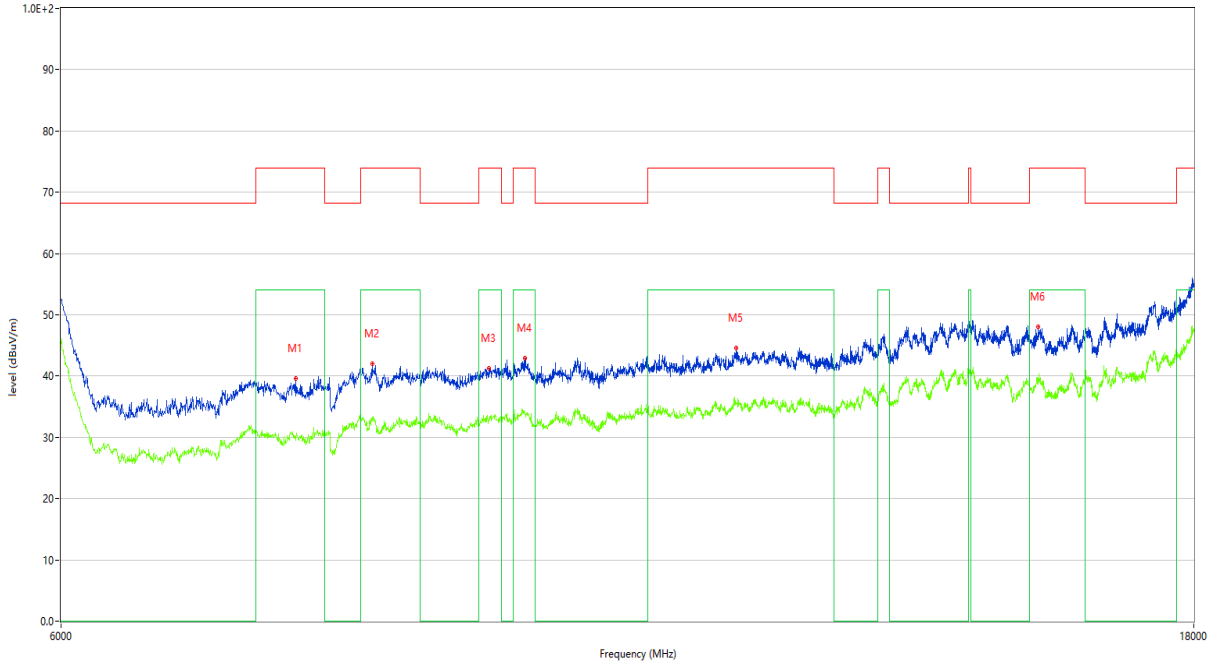
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 123 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7535.616	39.55	-24.81	74.0	-34.45	Peak	273.20	100	Vertical	Pass
1**	7535.616	29.54	-24.81	54.0	-24.46	AV	273.20	100	Vertical	Pass
2	8114.471	42.01	-22.38	74.0	-31.99	Peak	358.00	100	Vertical	Pass
2**	8114.471	33.31	-22.38	54.0	-20.69	AV	358.00	100	Vertical	Pass
3	9083.229	41.34	-23.04	74.0	-32.66	Peak	57.20	100	Vertical	Pass
3**	9083.229	33.17	-23.04	54.0	-20.83	AV	57.20	100	Vertical	Pass
4	9407.148	42.90	-21.75	74.0	-31.10	Peak	21.90	100	Vertical	Pass
4**	9407.148	33.94	-21.75	54.0	-20.06	AV	21.90	100	Vertical	Pass
5	11551.612	44.53	-18.22	74.0	-29.47	Peak	208.00	100	Vertical	Pass
5**	11551.612	35.69	-18.22	54.0	-18.31	AV	208.00	100	Vertical	Pass
6	15477.631	48.03	-17.28	74.0	-25.97	Peak	258.40	100	Vertical	Pass
6**	15477.631	39.56	-17.28	54.0	-14.44	AV	258.40	100	Vertical	Pass

TEST REPORT

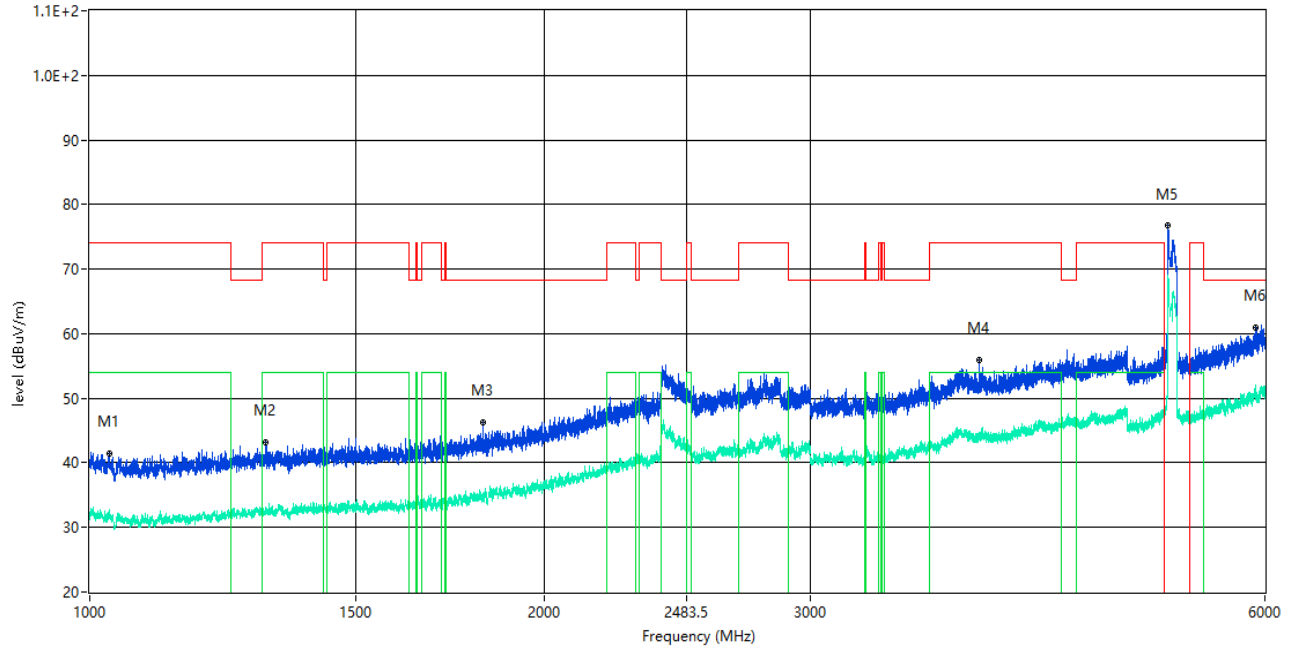
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 124 of 238

Figure 113: Spurious Emission, 1GHz – 10th Harmonic, 802.11ac(VHT80), 5210MHz
 1GHz-6GHz, Horizontal

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1030.746	41.46	--	31.52	-9.47	74.0	--	54.0	-22.48	9.00	100	H	Pass
1307.212	43.12	--	32.16	-10.02	74.0	--	54.0	-21.84	10.00	100	H	Pass
1821.397	46.22	--	35.18	-8.58	68.2	--	--	-21.98	6.00	100	H	Pass
3880.015	55.83	--	44.22	0.35	74.0	--	54.0	-9.78	5.00	100	H	Pass
5174.353	76.76	--	68.42	4.23	--	--	--	--	1.00	100	H	Pass
5920.885	60.96	--	51.30	7.64	68.2	--	--	-7.24	2.00	100	H	Pass

TEST REPORT

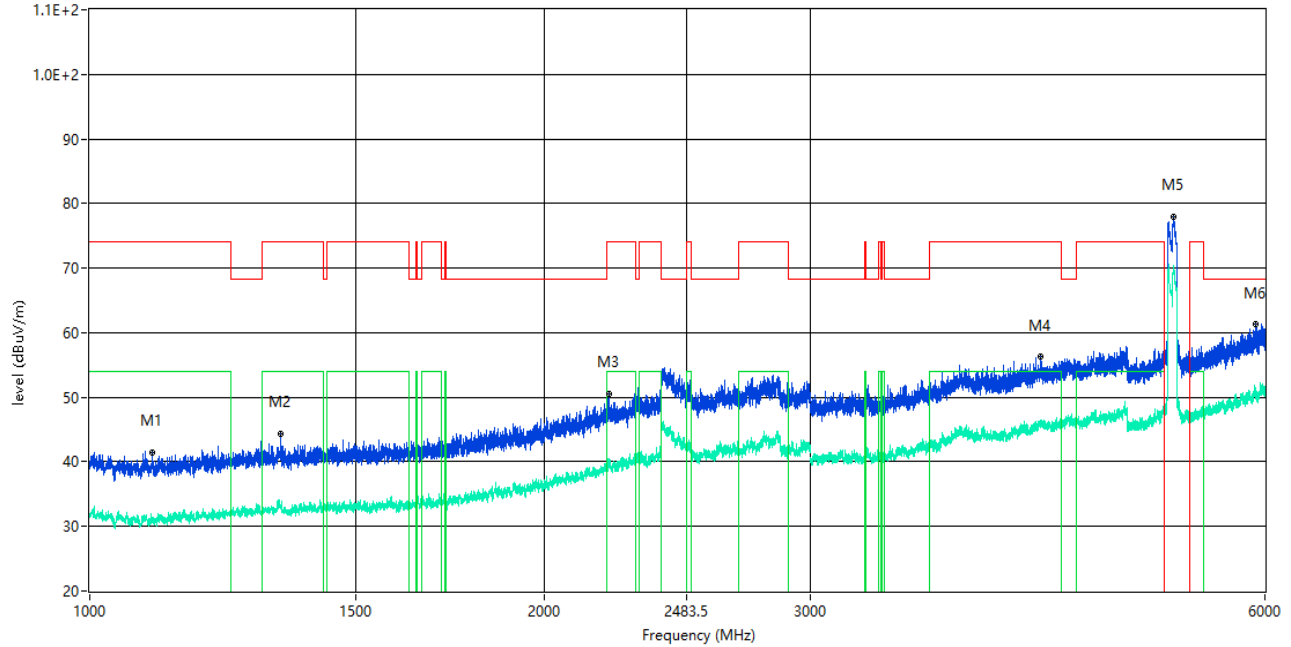
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 125 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band1



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1100.487	41.41	--	31.31	-10.29	74.0	--	54.0	-22.69	0.00	100	V	Pass
1337.458	44.40	--	33.04	-9.68	74.0	--	54.0	-20.96	13.00	100	V	Pass
2207.349	50.56	--	40.36	-3.34	74.0	--	54.0	-13.64	1.00	100	V	Pass
4263.217	56.23	--	45.74	1.13	74.0	--	54.0	-8.26	5.00	100	V	Pass
5220.472	78.02	--	69.91	4.21	--	--	--	--	9.00	100	V	Pass
5920.885	61.25	--	50.52	7.64	68.2	--	--	-6.95	15.00	100	V	Pass

TEST REPORT

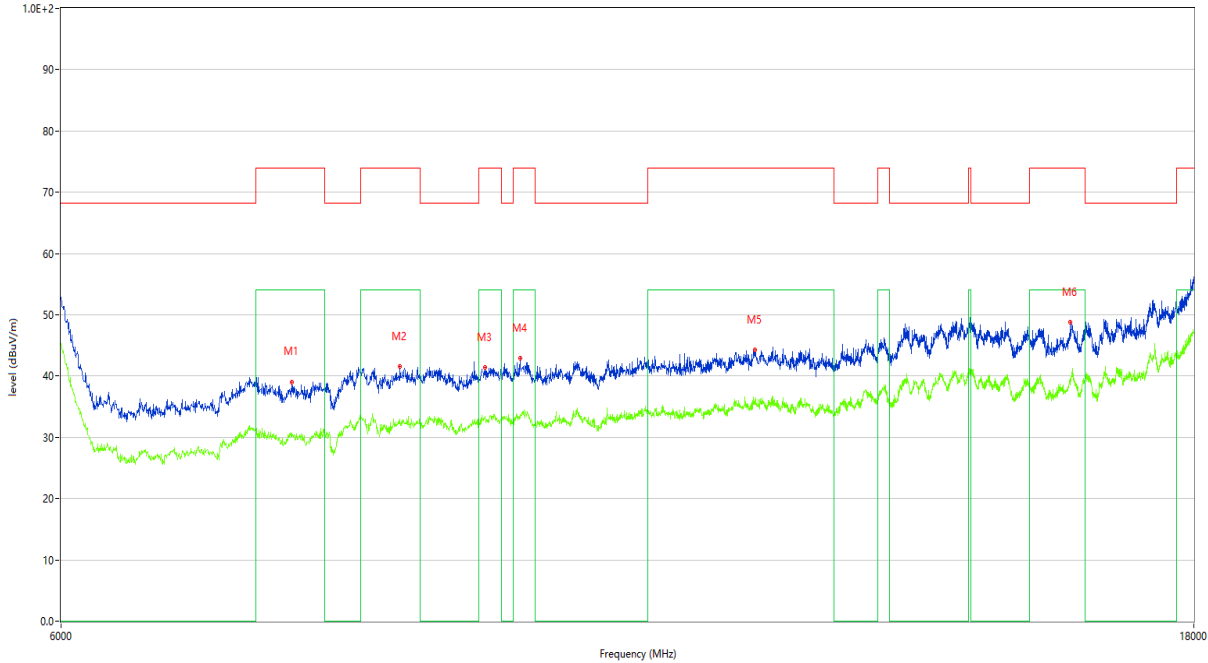
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 126 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7502.624	38.99	-24.44	74.0	-35.01	Peak	3.00	100	Horizontal	Pass
1**	7502.624	30.66	-24.44	54.0	-23.34	AV	3.00	100	Horizontal	Pass
2	8336.416	41.60	-22.33	74.0	-32.40	Peak	100.30	100	Horizontal	Pass
2**	8336.416	32.56	-22.33	54.0	-21.44	AV	100.30	100	Horizontal	Pass
3	9053.237	41.43	-23.00	74.0	-32.57	Peak	243.40	100	Horizontal	Pass
3**	9053.237	33.50	-23.00	54.0	-20.50	AV	243.40	100	Horizontal	Pass
4	9365.159	42.89	-22.45	74.0	-31.11	Peak	353.60	100	Horizontal	Pass
4**	9365.159	33.10	-22.45	54.0	-20.90	AV	353.60	100	Horizontal	Pass
5	11761.560	44.23	-18.57	74.0	-29.77	Peak	202.10	100	Horizontal	Pass
5**	11761.560	36.16	-18.57	54.0	-17.84	AV	202.10	100	Horizontal	Pass
6	15963.509	48.76	-16.49	74.0	-25.24	Peak	17.30	100	Horizontal	Pass
6**	15963.509	39.21	-16.49	54.0	-14.79	AV	17.30	100	Horizontal	Pass

TEST REPORT

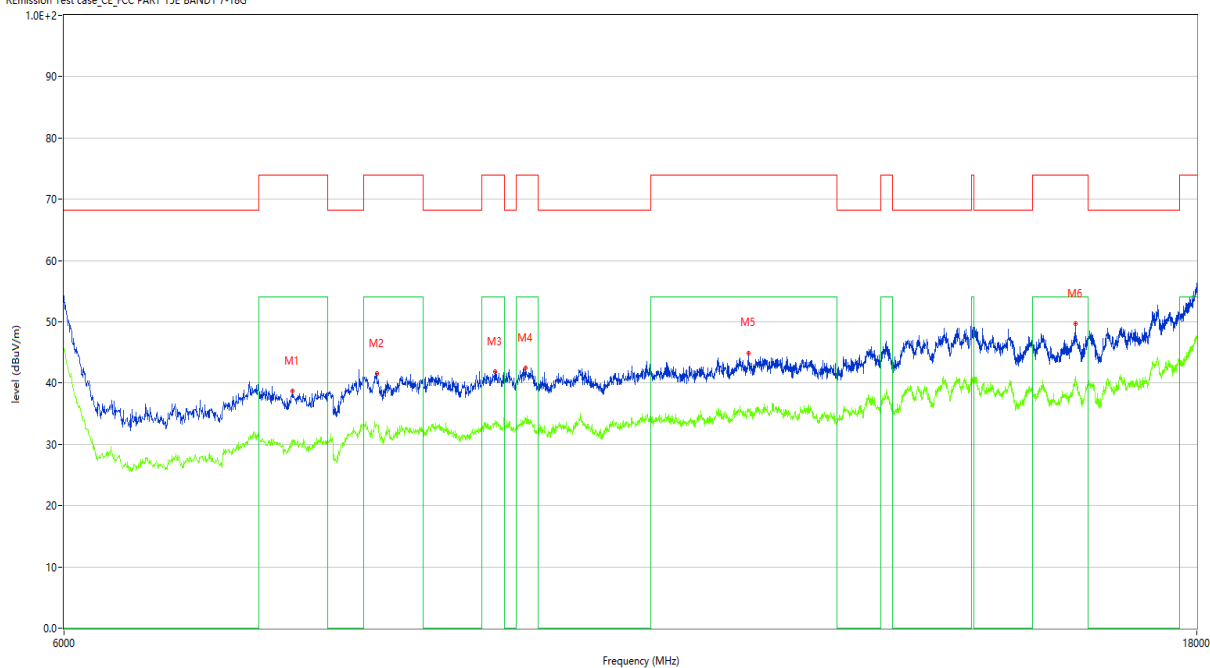
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 127 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND1 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7490.627	38.77	-24.48	74.0	-35.23	Peak	153.10	100	Vertical	Pass
1**	7490.627	30.47	-24.48	54.0	-23.53	AV	153.10	100	Vertical	Pass
2	8126.468	41.51	-22.44	74.0	-32.49	Peak	0.40	100	Vertical	Pass
2**	8126.468	33.12	-22.44	54.0	-20.88	AV	0.40	100	Vertical	Pass
3	9113.222	41.81	-23.04	74.0	-32.19	Peak	0.40	100	Vertical	Pass
3**	9113.222	33.35	-23.04	54.0	-20.65	AV	0.40	100	Vertical	Pass
4	9386.153	42.44	-21.96	74.0	-31.56	Peak	112.60	100	Vertical	Pass
4**	9386.153	34.39	-21.96	54.0	-19.61	AV	112.60	100	Vertical	Pass
5	11656.586	44.94	-18.65	74.0	-29.06	Peak	189.40	100	Vertical	Pass
5**	11656.586	35.32	-18.65	54.0	-18.68	AV	189.40	100	Vertical	Pass
6	16005.499	49.74	-15.41	74.0	-24.26	Peak	48.10	100	Vertical	Pass
6**	16005.499	41.11	-15.41	54.0	-12.89	AV	48.10	100	Vertical	Pass

TEST REPORT

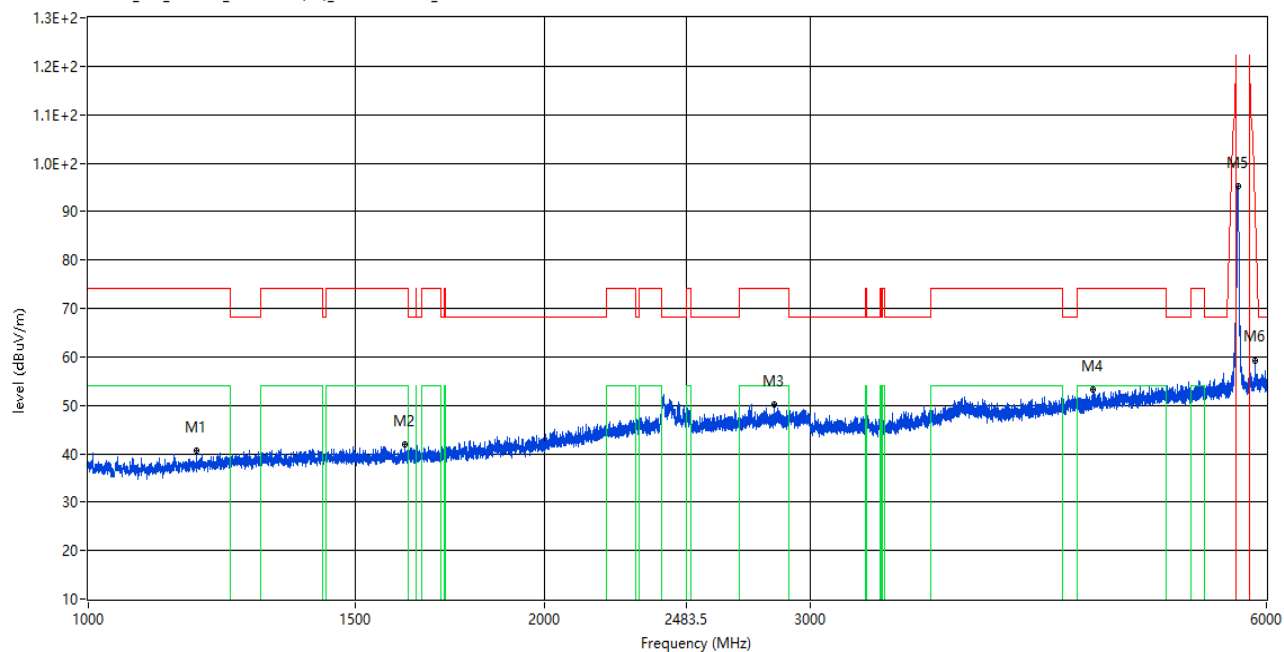
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 128 of 238

Figure 114: Spurious Emission, 1GHz – 10th Harmonic, 802.11a, 5745MHz
1GHz-6GHz, Horizontal

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1178.228	40.59	--	--	-10.30	74.0	--	54.0	-13.41	15.00	100	H	Pass
1618.923	41.81	--	--	-9.72	74.0	--	54.0	-12.19	14.00	100	H	Pass
2838.020	50.16	--	--	-0.76	74.0	--	54.0	-3.84	15.00	100	H	Pass
4609.299	53.17	--	--	3.24	74.0	--	54.0	-0.83	6.00	100	H	Pass
5743.907	95.34	--	--	6.32	--	--	--	--	3.00	100	H	Pass
5902.512	59.06	--	--	7.63	84.8	--	--	-25.74	5.00	100	H	Pass

TEST REPORT

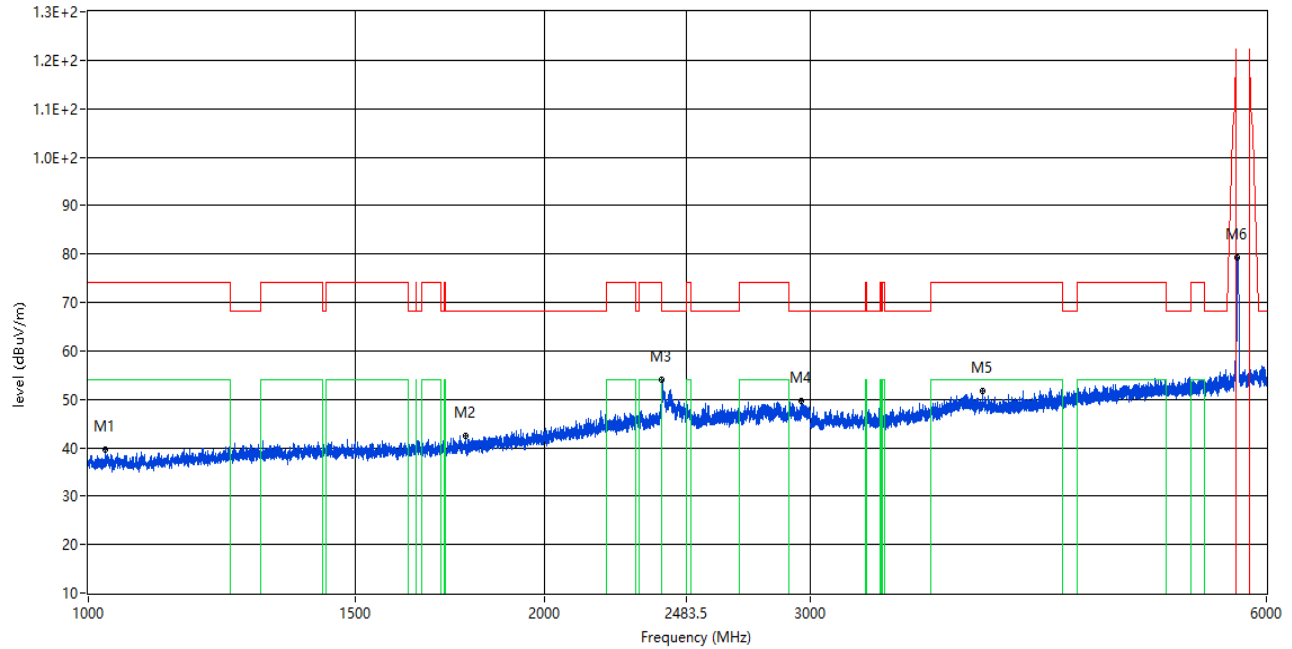
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 129 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1026.747	39.61	--	--	-9.63	74.0	--	54.0	-14.39	11.00	100	V	Pass
1773.903	42.33	--	--	-8.43	68.2	--	--	-25.87	14.00	100	V	Pass
0.000	0.00	--	--	0.00	--	--	--	--	0.00	0	V	Pass
2959.005	49.65	--	--	-0.52	68.2	--	--	-18.55	15.00	100	V	Pass
3895.763	51.73	--	--	0.75	74.0	--	54.0	-2.27	4.00	100	V	Pass
5743.532	79.19	--	--	6.31	--	--	--	--	14.00	100	V	Pass

TEST REPORT

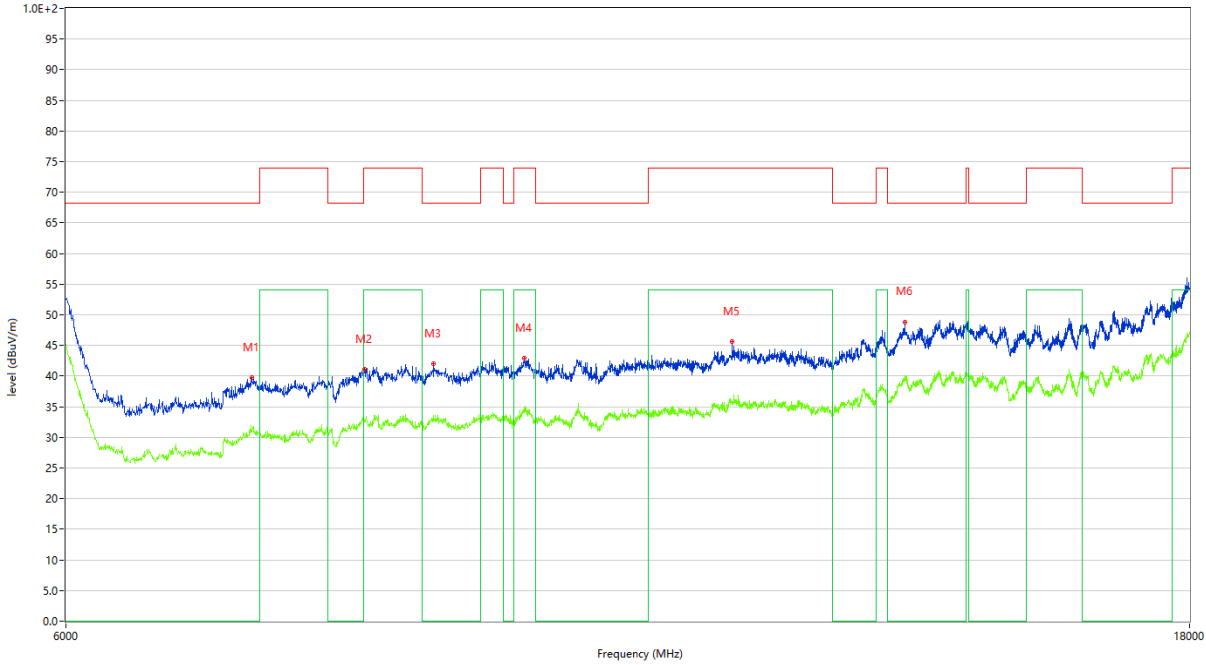
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 130 of 238

6GHz-18GHz, Horizontal

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_6GHz-18GHz_B4



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7193.702	39.78	-23.85	68.2	-28.42	Peak	166.50	83	H	Pass
1**	7193.702	31.13	-23.85	--	31.13	AV	166.50	83	H	N/A
2	8033.492	41.11	-23.00	74.0	-32.89	Peak	323.70	83	H	Pass
2**	8033.492	32.61	-23.00	54.0	-21.39	AV	323.70	83	H	Pass
3	8597.351	42.05	-21.59	68.2	-26.15	Peak	331.50	83	H	Pass
3**	8597.351	33.56	-21.59	--	33.56	AV	331.50	83	H	N/A
4	9395.151	42.94	-21.75	74.0	-31.06	Peak	78.40	83	H	Pass
4**	9395.151	34.46	-21.75	54.0	-19.54	AV	78.40	83	H	Pass
5	11509.623	45.60	-17.85	74.0	-28.40	Peak	302.20	83	H	Pass
5**	11509.623	35.71	-17.85	54.0	-18.29	AV	302.20	83	H	Pass
6	13630.092	48.86	-14.40	68.2	-19.34	Peak	26.60	83	H	Pass
6**	13630.092	39.15	-14.40	--	39.15	AV	26.60	83	H	N/A

TEST REPORT

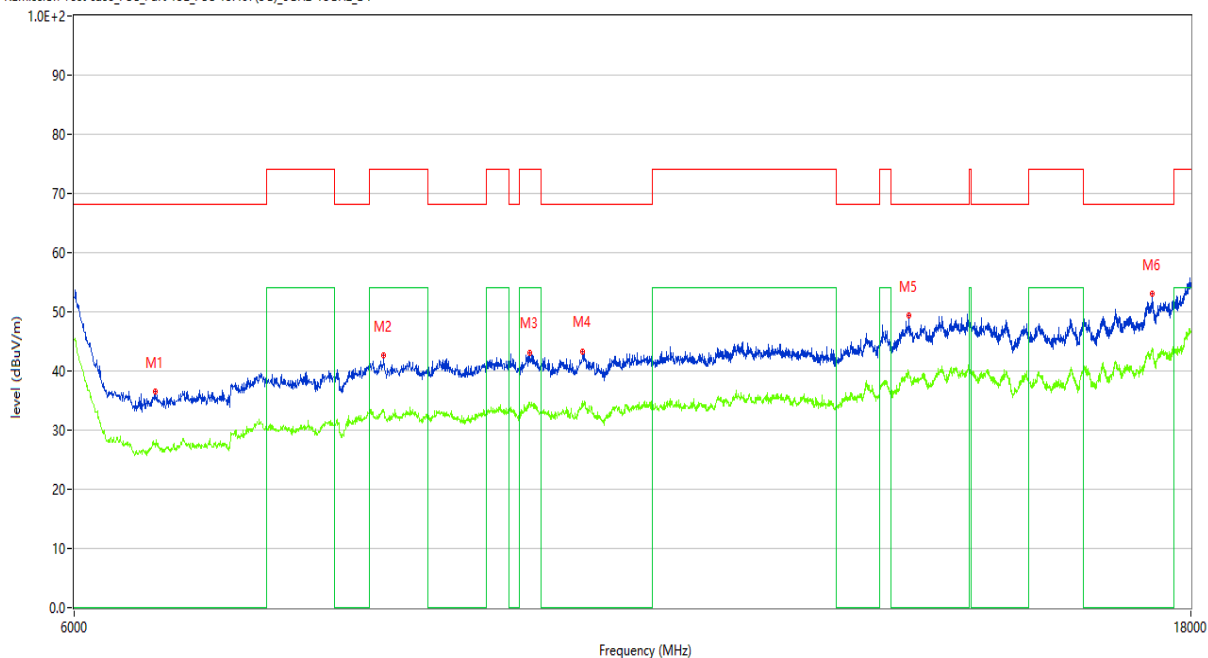
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 131 of 238

6GHz-18GHz, Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_6GHz-18GHz_B4



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	6497.876	36.63	-26.26	68.2	-31.57	Peak	283.60	100	Vertical	Pass
1**	6497.876	27.12	-26.26	--	27.12	AV	283.60	100	Vertical	N/A
2	8135.466	42.58	-22.48	74.0	-31.42	Peak	204.80	100	Vertical	Pass
2**	8135.466	33.47	-22.48	54.0	-20.53	AV	204.80	100	Vertical	Pass
3	9389.153	43.11	-21.89	74.0	-30.89	Peak	316.00	100	Vertical	Pass
3**	9389.153	34.50	-21.89	54.0	-19.50	AV	316.00	100	Vertical	Pass
4	9893.027	43.32	-20.96	68.2	-24.88	Peak	169.50	100	Vertical	Pass
4**	9893.027	34.83	-20.96	--	34.83	AV	169.50	100	Vertical	N/A
5	13636.091	49.33	-14.56	68.2	-18.87	Peak	310.00	100	Vertical	Pass
5**	13636.091	39.72	-14.56	--	39.72	AV	310.00	100	Vertical	N/A
6	17334.166	52.98	-10.79	68.2	-15.22	Peak	242.80	100	Vertical	Pass
6**	17334.166	43.26	-10.79	--	43.26	AV	242.80	100	Vertical	N/A

TEST REPORT

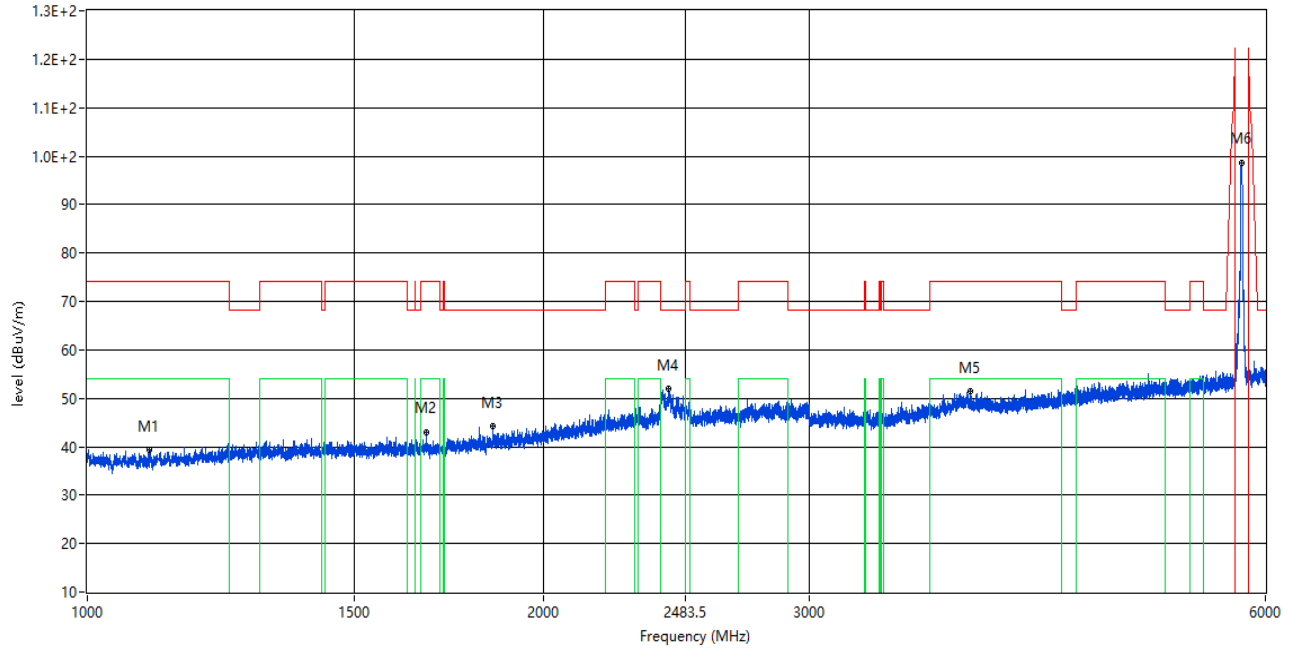
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 132 of 238

Figure 115: Spurious Emission, 1GHz – 10th Harmonic, 802.11a, 5785MHz
1GHz-6GHz, Horizontal

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1098.988	39.31	--	--	-10.02	74.0	--	54.0	-14.69	1.00	100	H	Pass
1675.416	43.04	--	--	-9.25	74.0	--	54.0	-10.96	10.00	100	H	Pass
1852.893	44.14	--	--	-7.72	68.2	--	--	-24.06	13.00	100	H	Pass
2419.323	51.86	--	--	1.39	68.2	--	--	-16.34	11.00	100	H	Pass
3827.522	51.47	--	--	0.58	74.0	--	54.0	-2.53	15.00	100	H	Pass
5785.902	98.63	--	--	6.73	--	--	--	--	7.00	100	H	Pass

TEST REPORT

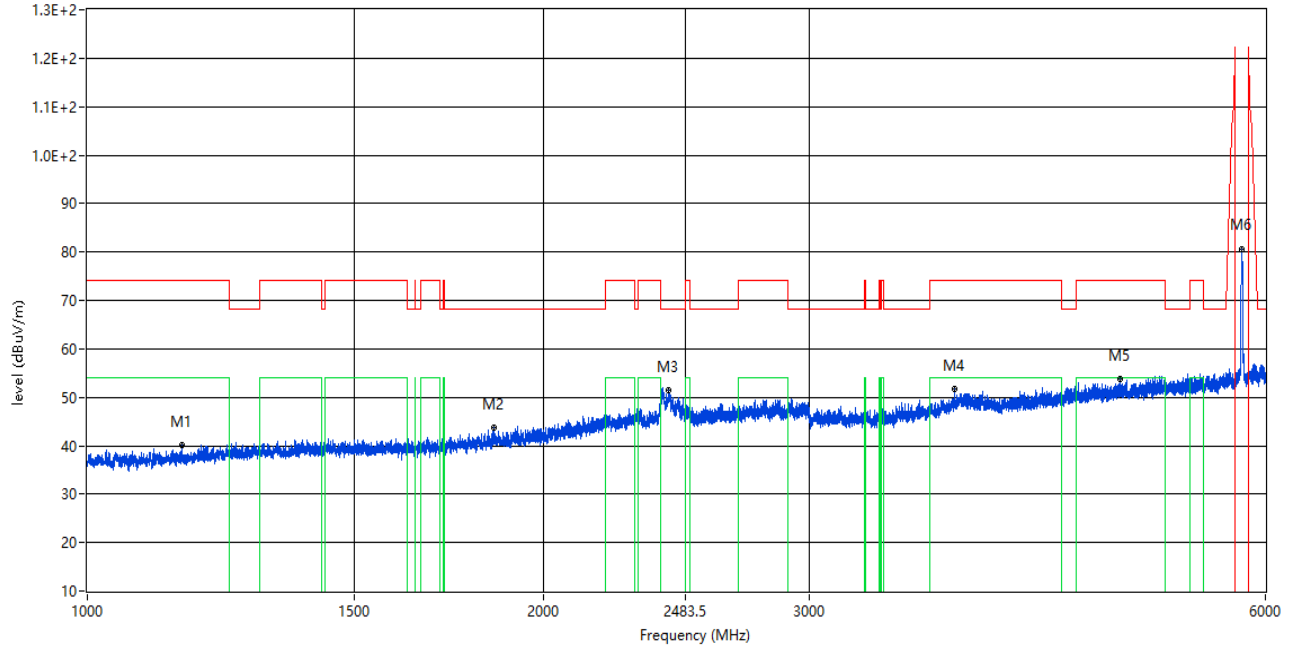
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 133 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1154.731	40.02	--	--	-10.29	74.0	--	54.0	-13.98	10.00	100	V	Pass
1856.143	43.69	--	--	-7.68	68.2	--	--	-24.51	5.00	100	V	Pass
2419.823	51.40	--	--	1.38	68.2	--	--	-16.80	1.00	100	V	Pass
3742.407	51.70	--	--	0.77	74.0	--	54.0	-2.30	8.00	100	V	Pass
4812.523	53.73	--	--	3.46	74.0	--	54.0	-0.27	11.00	100	V	Pass
5792.276	80.65	--	--	6.98	--	--	--	--	4.00	100	V	Pass

TEST REPORT

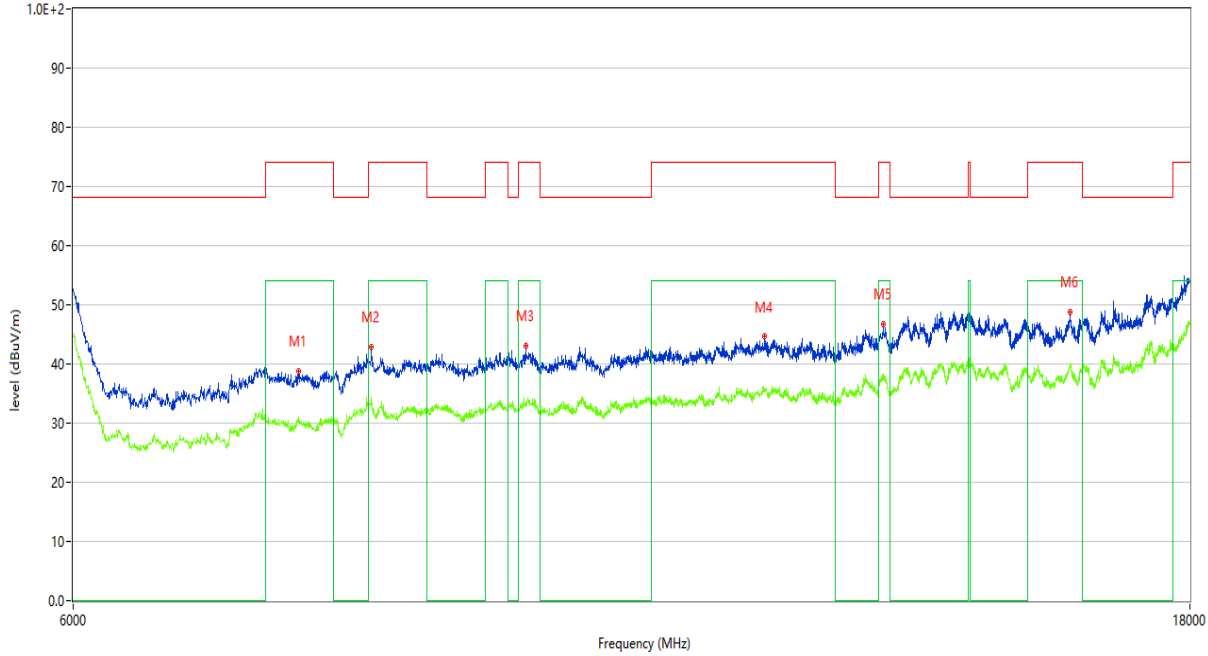
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 134 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7487.628	38.80	-24.50	74.0	-35.20	Peak	241.50	100	Horizontal	Pass
1**	7487.628	30.97	-24.50	54.0	-23.03	AV	241.50	100	Horizontal	Pass
2	8045.489	42.79	-22.88	74.0	-31.21	Peak	14.60	100	Horizontal	Pass
2**	8045.489	34.22	-22.88	54.0	-19.78	AV	14.60	100	Horizontal	Pass
3	9365.159	42.99	-22.45	74.0	-31.01	Peak	90.50	100	Horizontal	Pass
3**	9365.159	33.48	-22.45	54.0	-20.52	AV	90.50	100	Horizontal	Pass
4	11848.538	44.69	-18.69	74.0	-29.31	Peak	238.80	100	Horizontal	Pass
4**	11848.538	35.52	-18.69	54.0	-18.48	AV	238.80	100	Horizontal	Pass
5	13312.172	46.74	-16.32	74.0	-27.26	Peak	235.90	100	Horizontal	Pass
5**	13312.172	38.04	-16.32	54.0	-15.96	AV	235.90	100	Horizontal	Pass
6	15993.502	48.80	-15.49	74.0	-25.20	Peak	137.70	100	Horizontal	Pass
6**	15993.502	39.63	-15.49	54.0	-14.37	AV	137.70	100	Horizontal	Pass

TEST REPORT

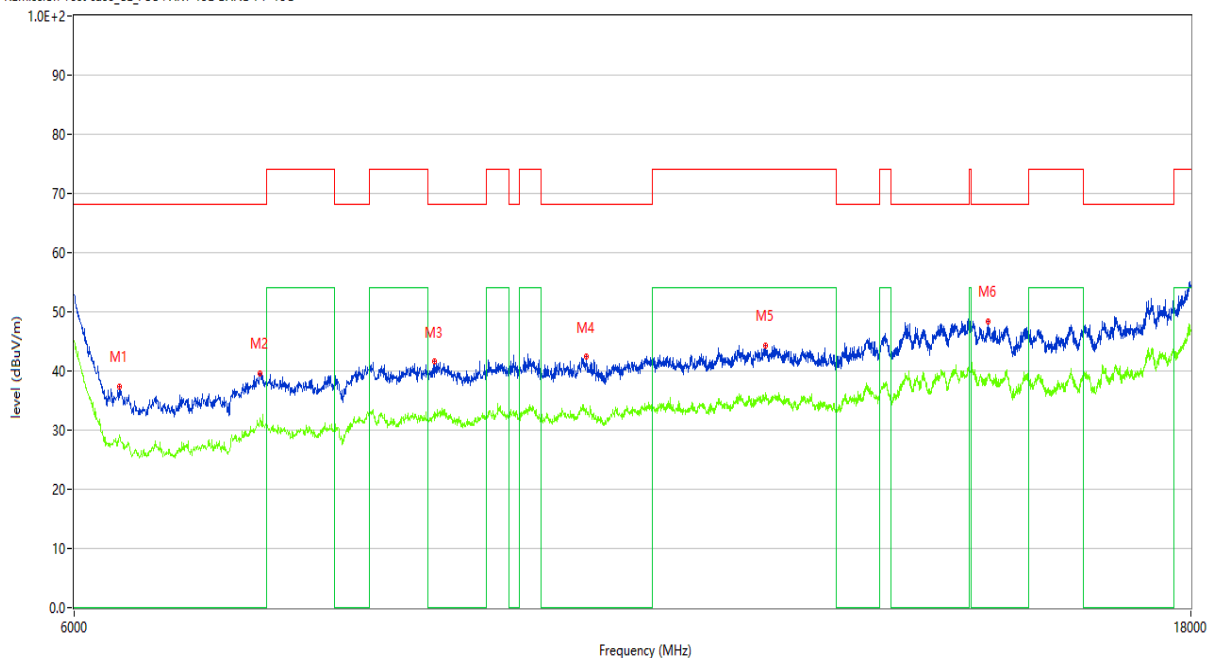
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 135 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	6272.932	37.26	-27.08	68.2	-30.94	Peak	0.40	100	Vertical	Pass
1**	6272.932	28.80	-27.08	--	28.80	AV	0.40	100	Vertical	N/A
2	7202.699	39.65	-23.76	68.2	-28.55	Peak	297.70	100	Vertical	Pass
2**	7202.699	31.47	-23.76	--	31.47	AV	297.70	100	Vertical	N/A
3	8549.363	41.62	-21.98	68.2	-26.58	Peak	132.40	100	Vertical	Pass
3**	8549.363	33.11	-21.98	--	33.11	AV	132.40	100	Vertical	N/A
4	9926.018	42.41	-21.04	68.2	-25.79	Peak	261.80	100	Vertical	Pass
4**	9926.018	33.62	-21.04	--	33.62	AV	261.80	100	Vertical	N/A
5	11848.538	44.31	-18.69	74.0	-29.69	Peak	244.50	100	Vertical	Pass
5**	11848.538	36.24	-18.69	54.0	-17.76	AV	244.50	100	Vertical	Pass
6	14739.815	48.47	-13.77	68.2	-19.73	Peak	232.70	100	Vertical	Pass
6**	14739.815	39.43	-13.77	--	39.43	AV	232.70	100	Vertical	N/A

TEST REPORT

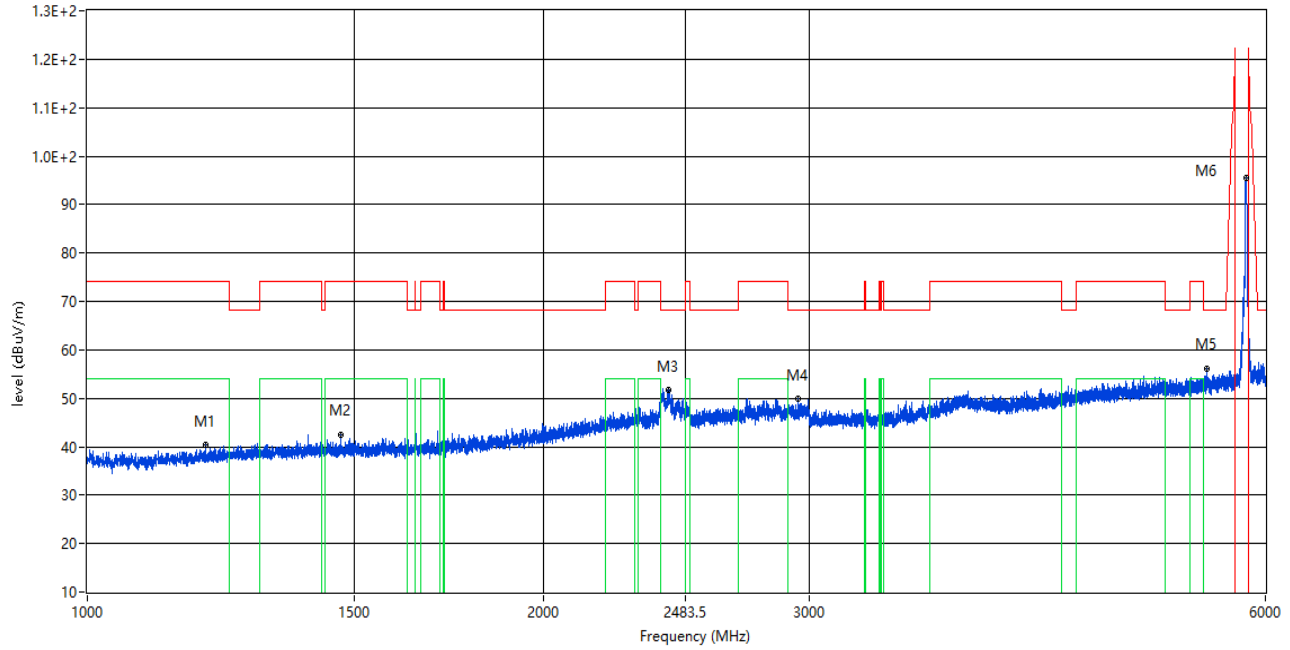
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 136 of 238

Figure 116: Spurious Emission, 1GHz – 10th Harmonic, 802.11a, 5825MHz
1GHz-6GHz, Horizontal

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1196.975	40.33	--	--	-10.50	74.0	--	54.0	-13.67	6.00	100	H	Pass
1469.691	42.55	--	--	-9.90	74.0	--	54.0	-11.45	3.00	100	H	Pass
2422.072	51.63	--	--	1.30	68.2	--	--	-16.57	6.00	100	H	Pass
2946.007	49.89	--	--	-1.11	68.2	--	--	-18.31	9.00	100	H	Pass
5488.564	56.14	--	--	5.43	68.2	--	--	-12.06	15.00	100	H	Pass
5823.772	95.47	--	--	6.85	--	--	--	--	7.00	100	H	Pass

TEST REPORT

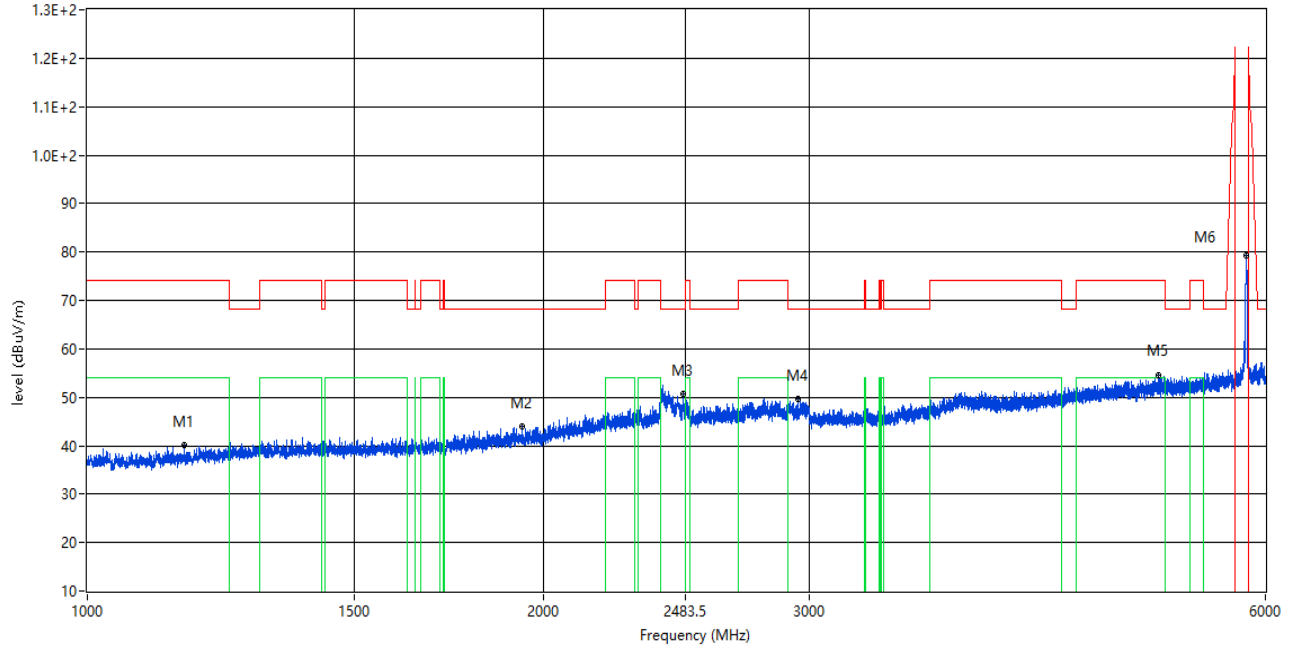
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 137 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1158.230	40.03	--	--	-10.58	74.0	--	54.0	-13.97	8.00	100	V	Pass
1935.883	43.94	--	--	-7.40	68.2	--	--	-24.26	11.00	100	V	Pass
2474.066	50.56	--	--	-0.54	68.2	--	--	-17.64	14.00	100	V	Pass
2945.007	49.63	--	--	-1.18	68.2	--	--	-18.57	13.00	100	V	Pass
5102.737	54.65	--	--	4.88	74.0	--	54.0	0.65	8.00	100	V	N/A
5832.021	79.18	--	--	6.77	--	--	--	--	12.00	100	V	Pass

TEST REPORT

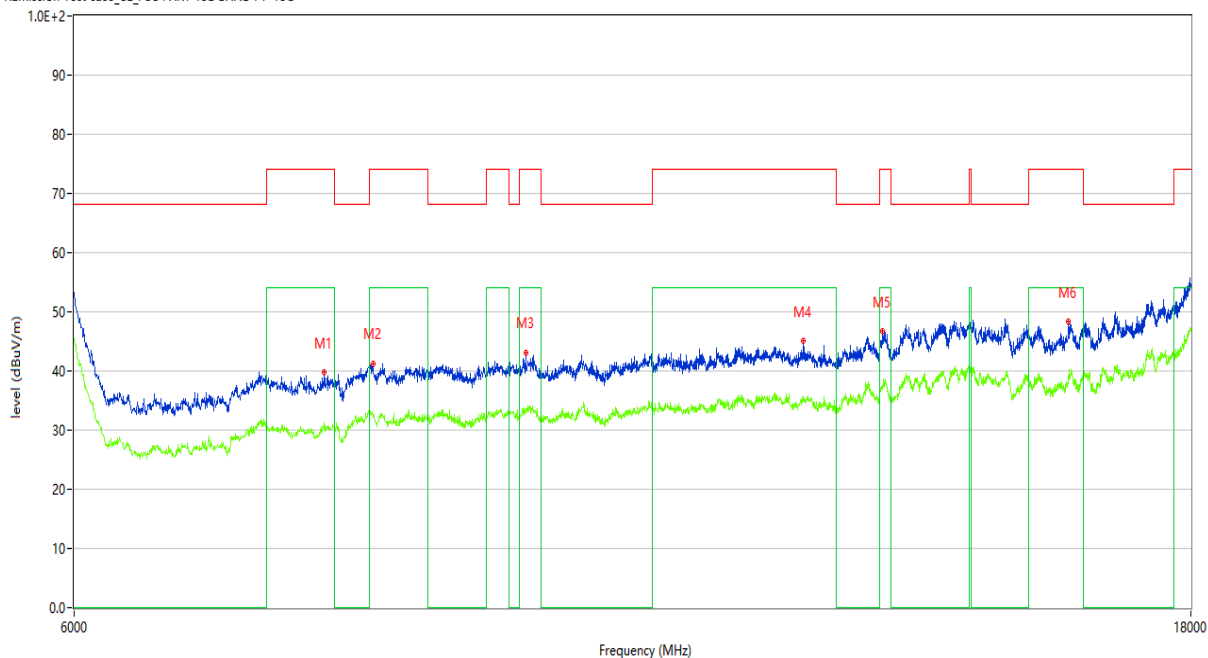
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 138 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7673.582	39.86	-24.83	74.0	-34.14	Peak	248.50	100	Horizontal	Pass
1**	7673.582	31.17	-24.83	54.0	-22.83	AV	248.50	100	Horizontal	Pass
2	8051.487	41.17	-22.81	74.0	-32.83	Peak	94.30	100	Horizontal	Pass
2**	8051.487	32.24	-22.81	54.0	-21.76	AV	94.30	100	Horizontal	Pass
3	9359.160	43.07	-22.59	74.0	-30.93	Peak	245.50	100	Horizontal	Pass
3**	9359.160	33.75	-22.59	54.0	-20.25	AV	245.50	100	Horizontal	Pass
4	12298.425	45.06	-19.06	74.0	-28.94	Peak	145.00	100	Horizontal	Pass
4**	12298.425	35.67	-19.06	54.0	-18.33	AV	145.00	100	Horizontal	Pass
5	13288.178	46.80	-16.52	74.0	-27.20	Peak	359.30	100	Horizontal	Pass
5**	13288.178	36.91	-16.52	54.0	-17.09	AV	359.30	100	Horizontal	Pass
6	15960.510	48.30	-16.59	74.0	-25.70	Peak	23.70	100	Horizontal	Pass
6**	15960.510	38.98	-16.59	54.0	-15.02	AV	23.70	100	Horizontal	Pass

TEST REPORT

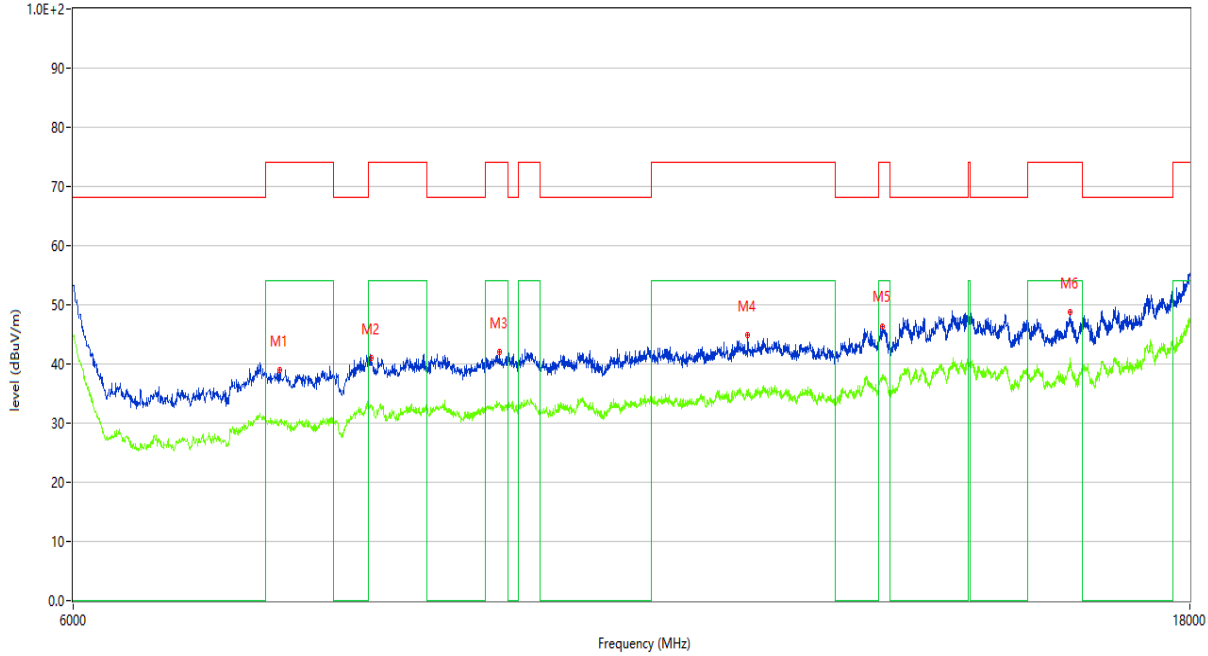
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 139 of 238

6GHz-18GHz, Vertical

R Emission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7349.663	38.94	-24.98	74.0	-35.06	Peak	282.80	100	Vertical	Pass
1**	7349.663	29.78	-24.98	54.0	-24.22	AV	282.80	100	Vertical	Pass
2	8042.489	40.93	-22.91	74.0	-33.07	Peak	294.70	100	Vertical	Pass
2**	8042.489	32.90	-22.91	54.0	-21.10	AV	294.70	100	Vertical	Pass
3	9128.218	41.97	-23.02	74.0	-32.03	Peak	232.20	100	Vertical	Pass
3**	9128.218	33.40	-23.02	54.0	-20.60	AV	232.20	100	Vertical	Pass
4	11653.587	44.88	-18.65	74.0	-29.12	Peak	205.80	100	Vertical	Pass
4**	11653.587	35.24	-18.65	54.0	-18.76	AV	205.80	100	Vertical	Pass
5	13297.176	46.28	-16.30	74.0	-27.72	Peak	141.70	100	Vertical	Pass
5**	13297.176	37.62	-16.30	54.0	-16.38	AV	141.70	100	Vertical	Pass
6	16005.499	48.74	-15.41	74.0	-25.26	Peak	37.50	100	Vertical	Pass
6**	16005.499	40.99	-15.41	54.0	-13.01	AV	37.50	100	Vertical	Pass

TEST REPORT

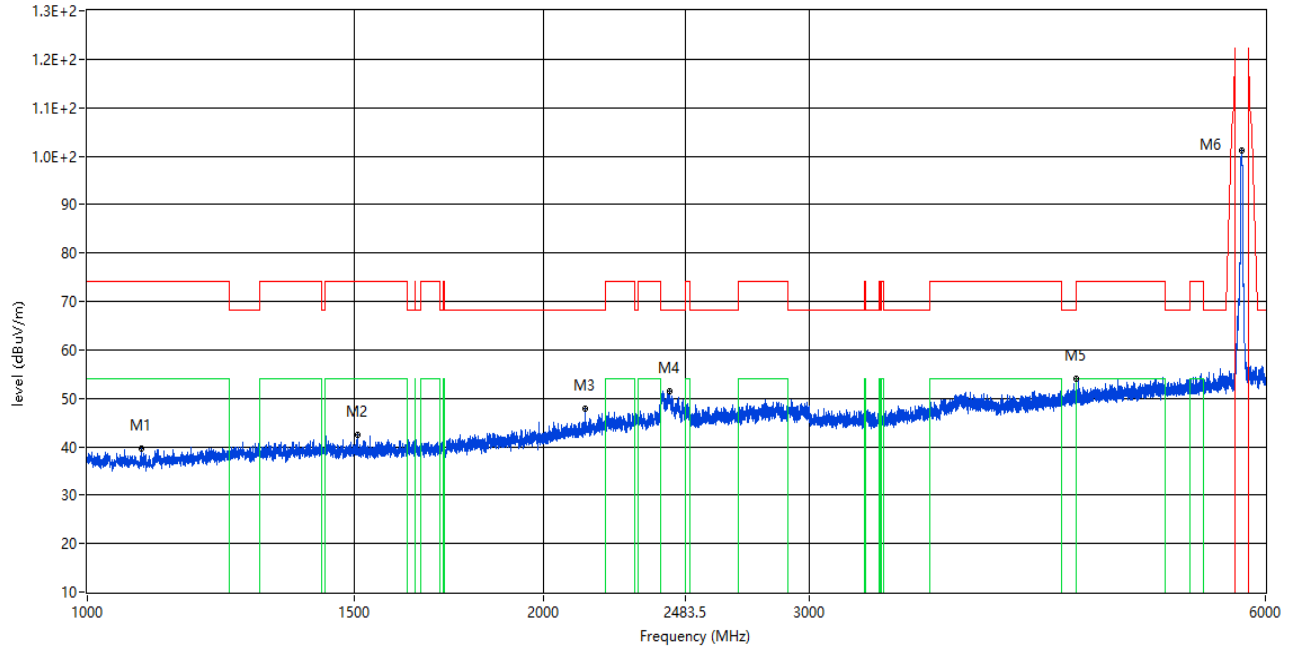
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 140 of 238

Figure 117: Spurious Emission, 1GHz – 10th Harmonic, 802.11n(HT20), 5745MHz
1GHz-6GHz, Horizontal

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1086.489	39.61	--	--	-10.09	74.0	--	54.0	-14.39	0.00	100	H	Pass
1508.686	42.33	--	--	-10.05	74.0	--	54.0	-11.67	2.00	100	H	Pass
2132.108	47.81	--	--	-5.02	68.2	--	--	-20.39	6.00	100	H	Pass
2423.322	51.46	--	--	1.25	68.2	--	--	-16.74	6.00	100	H	Pass
4512.561	53.52	--	--	2.03	74.0	--	54.0	-0.48	3.00	100	H	Pass
5786.277	101.17	--	--	6.75	--	--	--	--	3.00	100	H	Pass

TEST REPORT

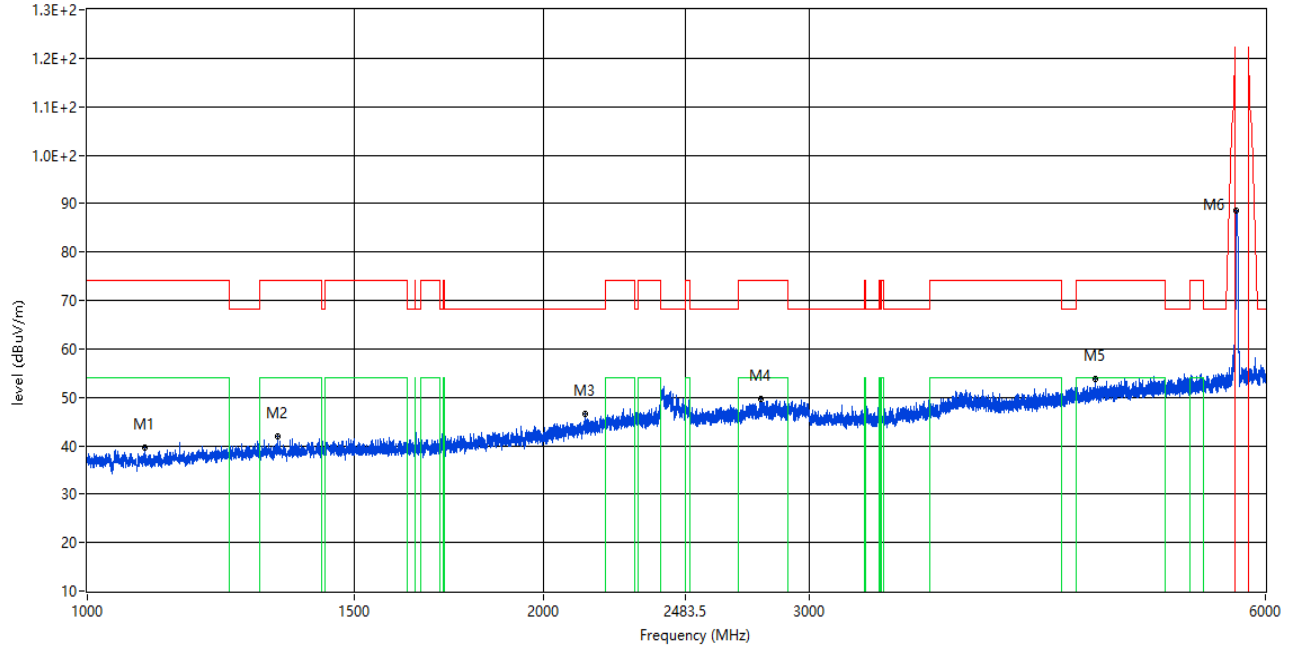
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 141 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1091.989	39.52	--	--	-10.56	74.0	--	54.0	-14.48	0.00	100	V	Pass
1336.458	41.83	--	--	-9.67	74.0	--	54.0	-12.17	0.00	100	V	Pass
2133.358	46.53	--	--	-5.04	68.2	--	--	-21.67	13.00	100	V	Pass
2783.527	49.62	--	--	-1.05	74.0	--	54.0	-4.38	12.00	100	V	Pass
4634.421	53.74	--	--	3.02	74.0	--	54.0	-0.26	12.00	100	V	Pass
5743.532	88.48	--	--	6.31	--	--	--	--	6.00	100	V	Pass

TEST REPORT

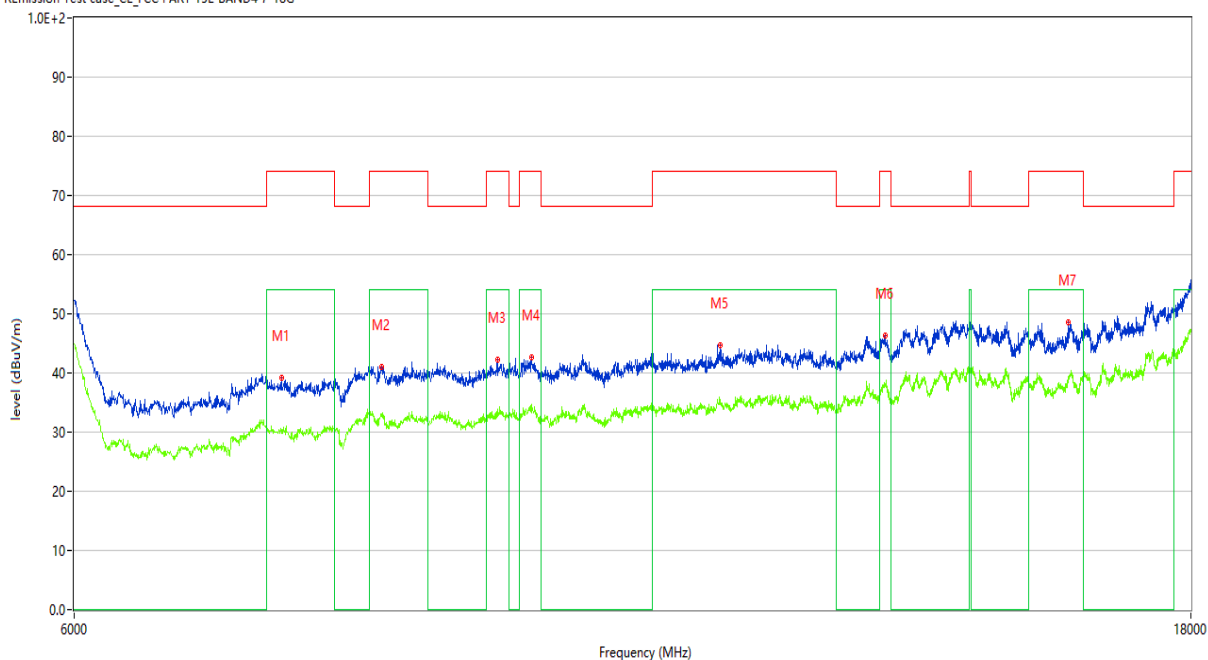
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 142 of 238

6GHz-18GHz, Horizontal

R Emission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7358.660	39.21	-25.01	74.0	-34.79	Peak	342.00	100	Horizontal	Pass
1**	7358.660	29.87	-25.01	54.0	-24.13	AV	342.00	100	Horizontal	Pass
2	8117.471	41.08	-22.39	74.0	-32.92	Peak	315.60	100	Horizontal	Pass
2**	8117.471	33.15	-22.39	54.0	-20.85	AV	315.60	100	Horizontal	Pass
3	9098.225	42.18	-23.06	74.0	-31.82	Peak	273.80	100	Horizontal	Pass
3**	9098.225	33.82	-23.06	54.0	-20.18	AV	273.80	100	Horizontal	Pass
4	9407.148	42.57	-21.75	74.0	-31.43	Peak	312.30	100	Horizontal	Pass
4**	9407.148	33.80	-21.75	54.0	-20.20	AV	312.30	100	Horizontal	Pass
5	11326.668	44.74	-18.94	74.0	-29.26	Peak	183.60	100	Horizontal	Pass
5**	11326.668	35.19	-18.94	54.0	-18.81	AV	183.60	100	Horizontal	Pass
6	13321.170	46.39	-16.40	74.0	-27.61	Peak	192.50	100	Horizontal	Pass
6**	13321.170	37.90	-16.40	54.0	-16.10	AV	192.50	100	Horizontal	Pass
7	15960.510	48.64	-16.59	74.0	-25.36	Peak	276.80	100	Horizontal	Pass
7**	15960.510	39.11	-16.59	54.0	-14.89	AV	276.80	100	Horizontal	Pass

TEST REPORT

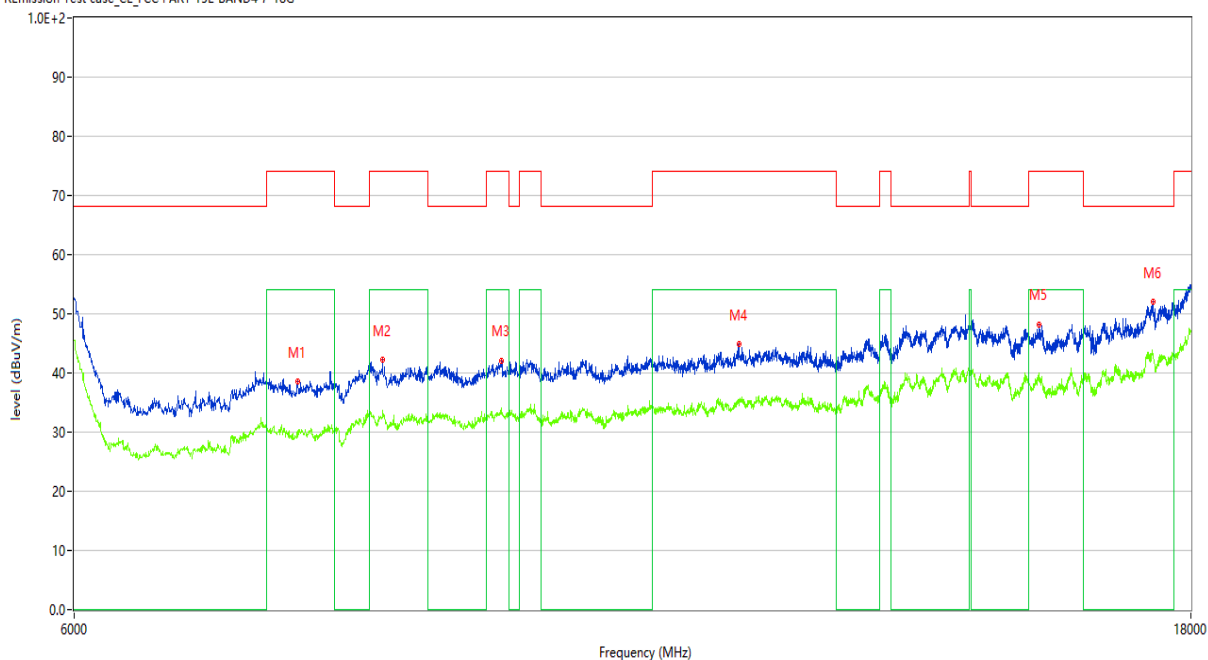
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 143 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBUV/m)	Factor (dB)	Limit (dBUV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7478.630	38.48	-24.57	74.0	-35.52	Peak	20.90	100	Vertical	Pass
1**	7478.630	29.05	-24.57	54.0	-24.95	AV	20.90	100	Vertical	Pass
2	8126.468	42.18	-22.44	74.0	-31.82	Peak	0.40	100	Vertical	Pass
2**	8126.468	31.92	-22.44	54.0	-22.08	AV	0.40	100	Vertical	Pass
3	9137.216	42.04	-23.00	74.0	-31.96	Peak	109.70	100	Vertical	Pass
3**	9137.216	33.09	-23.00	54.0	-20.91	AV	109.70	100	Vertical	Pass
4	11536.616	44.81	-18.09	74.0	-29.19	Peak	70.90	100	Vertical	Pass
4**	11536.616	35.41	-18.09	54.0	-18.59	AV	70.90	100	Vertical	Pass
5	15498.625	48.24	-16.82	74.0	-25.76	Peak	18.00	100	Vertical	Pass
5**	15498.625	39.33	-16.82	54.0	-14.67	AV	18.00	100	Vertical	Pass
6	17337.166	52.12	-10.85	68.2	-16.08	Peak	276.10	100	Vertical	Pass
6**	17337.166	43.10	-10.85	--	43.10	AV	276.10	100	Vertical	N/A

TEST REPORT

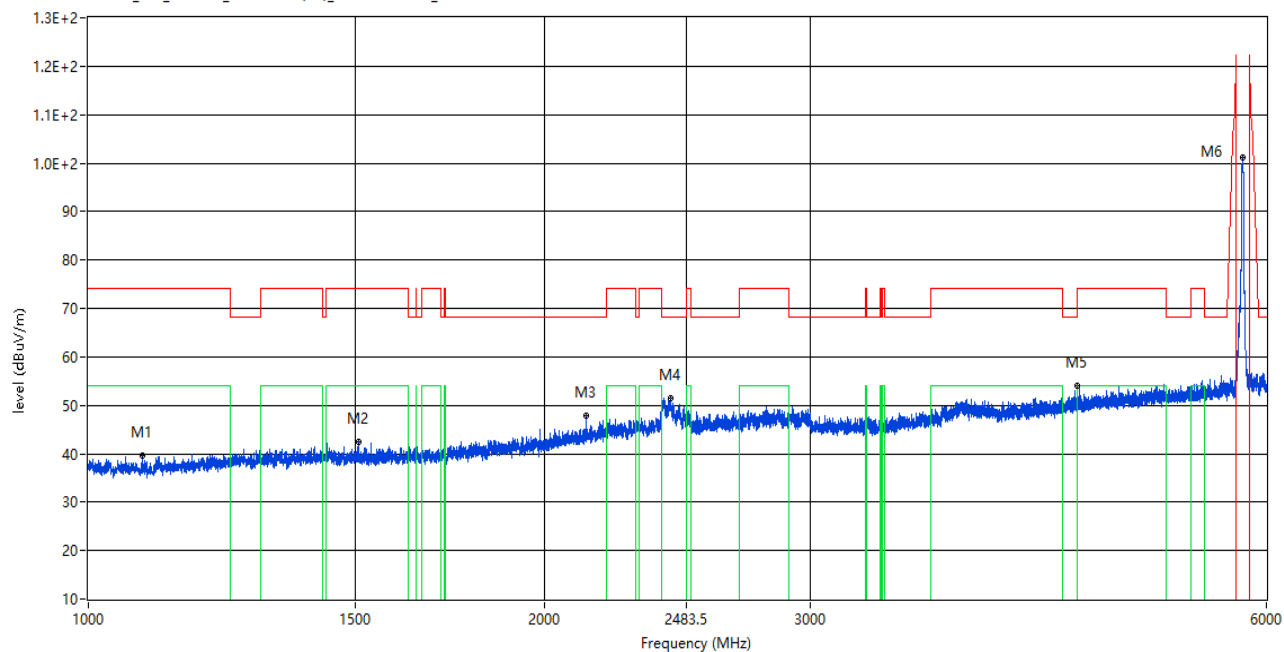
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 144 of 238

Figure 118: Spurious Emission, 1GHz – 10th Harmonic, 802.11n(HT20), 5785MHz
1GHz-6GHz, Horizontal

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1086.489	39.61	--	--	-10.09	74.0	--	54.0	-14.39	0.00	100	H	Pass
1508.686	42.33	--	--	-10.05	74.0	--	54.0	-11.67	2.00	100	H	Pass
2132.108	47.81	--	--	-5.02	68.2	--	--	-20.39	6.00	100	H	Pass
2423.322	51.46	--	--	1.25	68.2	--	--	-16.74	6.00	100	H	Pass
4512.561	53.52	--	--	2.03	74.0	--	54.0	-0.48	3.00	100	H	Pass
5786.277	101.17	--	--	6.75	--	--	--	--	3.00	100	H	Pass

TEST REPORT

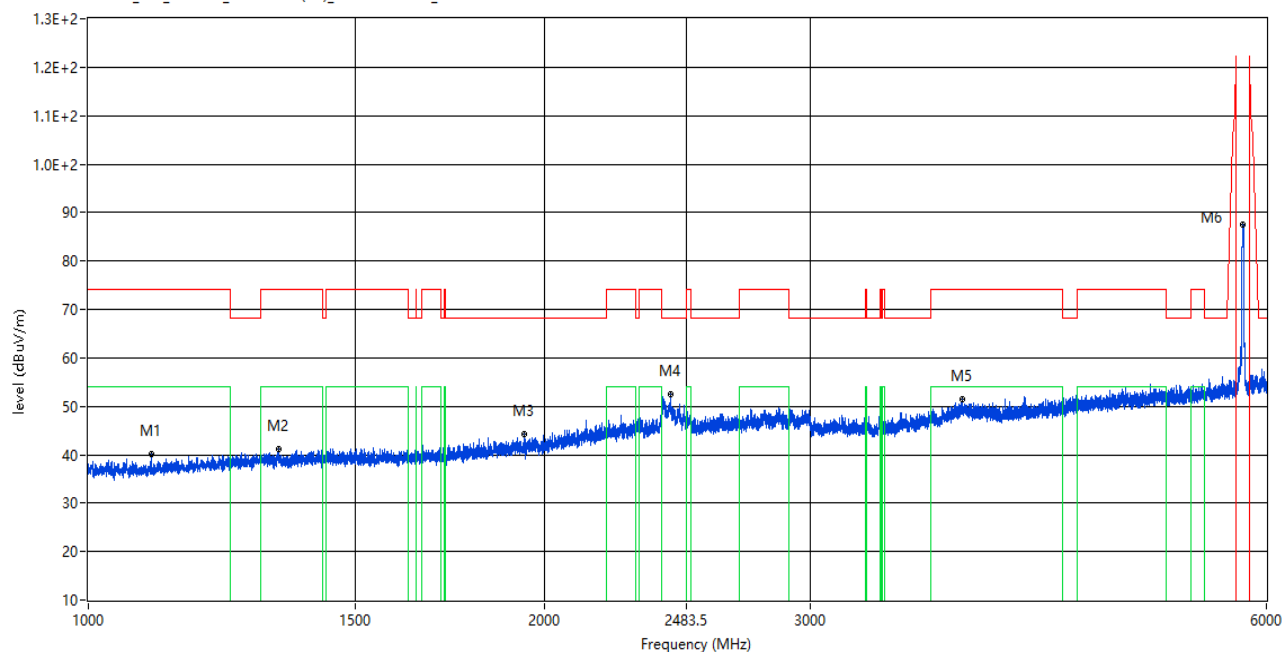
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 145 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1101.237	40.06	--	--	-10.42	74.0	--	54.0	-13.94	10.00	100	V	Pass
1336.458	41.18	--	--	-9.67	74.0	--	54.0	-12.82	13.00	100	V	Pass
1939.383	44.17	--	--	-7.47	68.2	--	--	-24.03	13.00	100	V	Pass
2422.572	52.43	--	--	1.28	68.2	--	--	-15.77	13.00	100	V	Pass
3776.153	51.47	--	--	1.13	74.0	--	54.0	-2.53	5.00	100	V	Pass
5792.651	87.56	--	--	6.98	--	--	--	--	14.00	100	V	Pass

TEST REPORT

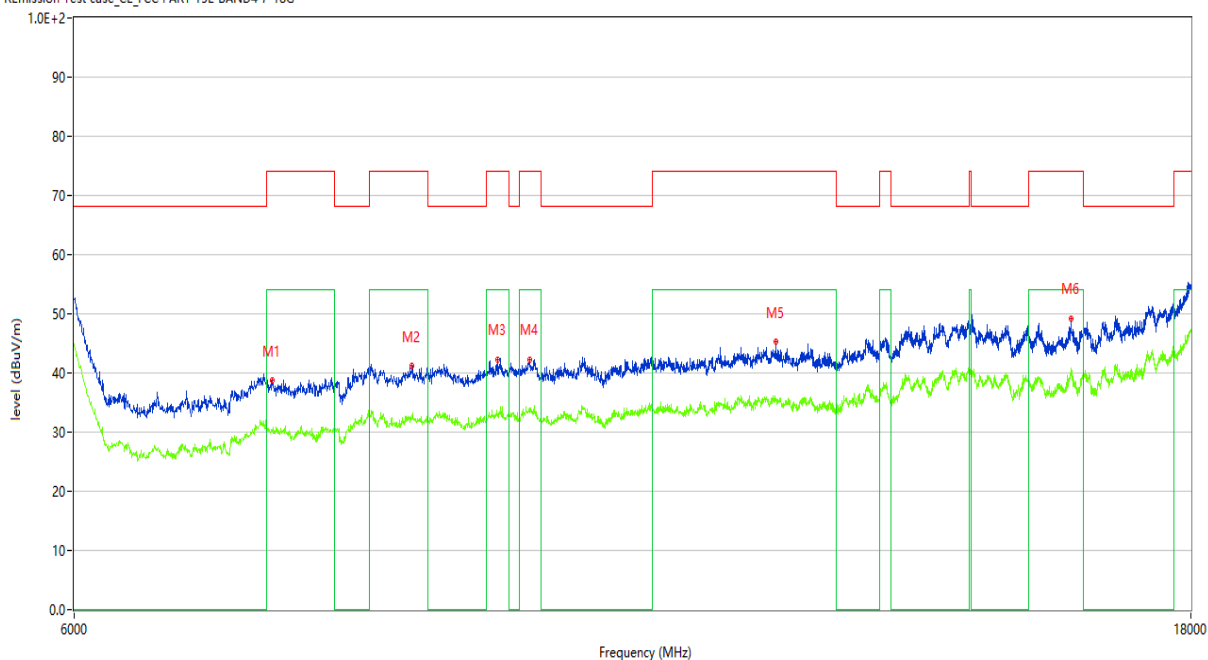
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 146 of 238

6GHz-18GHz, Horizontal

R Emission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7292.677	38.70	-24.75	74.0	-35.30	Peak	191.50	100	Horizontal	Pass
1**	7292.677	30.30	-24.75	54.0	-23.70	AV	191.50	100	Horizontal	Pass
2	8363.409	41.17	-22.17	74.0	-32.83	Peak	359.10	100	Horizontal	Pass
2**	8363.409	32.19	-22.17	54.0	-21.81	AV	359.10	100	Horizontal	Pass
3	9098.225	42.33	-23.06	74.0	-31.67	Peak	129.50	100	Horizontal	Pass
3**	9098.225	32.67	-23.06	54.0	-21.33	AV	129.50	100	Horizontal	Pass
4	9395.151	42.18	-21.75	74.0	-31.82	Peak	12.10	100	Horizontal	Pass
4**	9395.151	33.73	-21.75	54.0	-20.27	AV	12.10	100	Horizontal	Pass
5	11968.508	45.30	-18.76	74.0	-28.70	Peak	158.90	100	Horizontal	Pass
5**	11968.508	35.25	-18.76	54.0	-18.75	AV	158.90	100	Horizontal	Pass
6	16002.499	49.19	-15.33	74.0	-24.81	Peak	32.40	100	Horizontal	Pass
6**	16002.499	40.80	-15.33	54.0	-13.20	AV	32.40	100	Horizontal	Pass

TEST REPORT

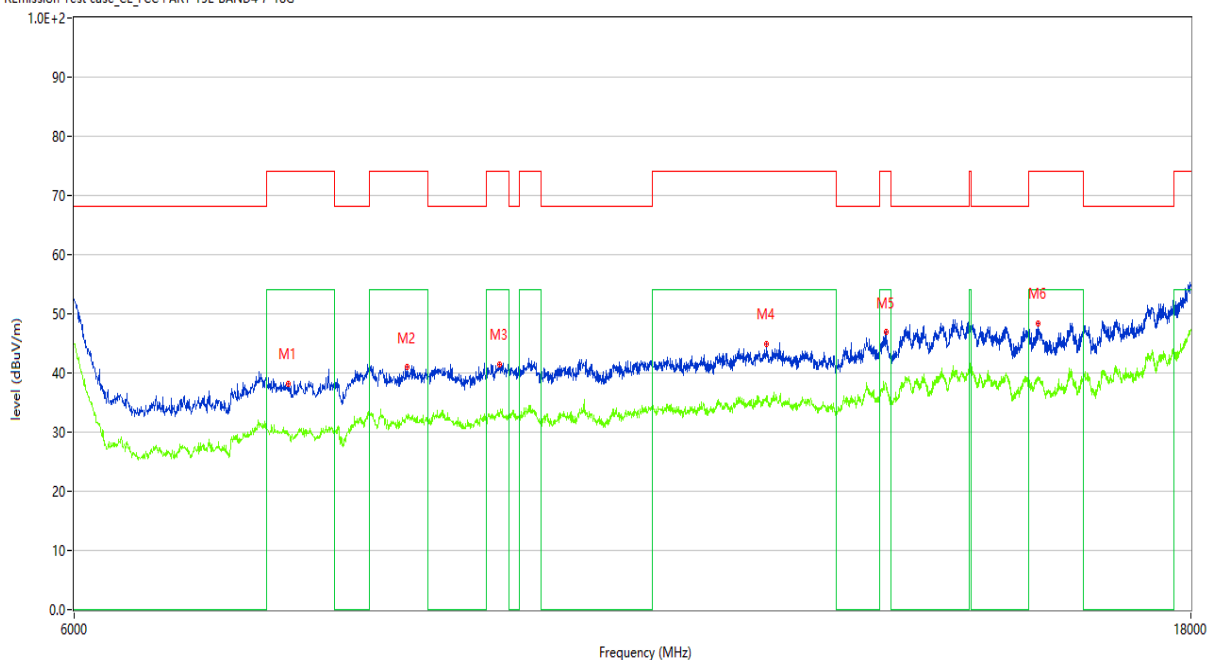
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 147 of 238

6GHz-18GHz, Vertical

R Emission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7403.649	38.14	-25.11	74.0	-35.86	Peak	338.80	100	Vertical	Pass
1**	7403.649	28.60	-25.11	54.0	-25.40	AV	338.80	100	Vertical	Pass
2	8324.419	41.01	-22.39	74.0	-32.99	Peak	186.60	100	Vertical	Pass
2**	8324.419	32.31	-22.39	54.0	-21.69	AV	186.60	100	Vertical	Pass
3	9119.220	41.35	-23.03	74.0	-32.65	Peak	356.30	100	Vertical	Pass
3**	9119.220	32.58	-23.03	54.0	-21.42	AV	356.30	100	Vertical	Pass
4	11860.535	44.99	-18.74	74.0	-29.01	Peak	318.50	100	Vertical	Pass
4**	11860.535	35.44	-18.74	54.0	-18.56	AV	318.50	100	Vertical	Pass
5	13342.164	46.84	-16.56	74.0	-27.16	Peak	224.90	100	Vertical	Pass
5**	13342.164	38.16	-16.56	54.0	-15.84	AV	224.90	100	Vertical	Pass
6	15483.629	48.27	-17.15	74.0	-25.73	Peak	174.70	100	Vertical	Pass
6**	15483.629	38.85	-17.15	54.0	-15.15	AV	174.70	100	Vertical	Pass

TEST REPORT

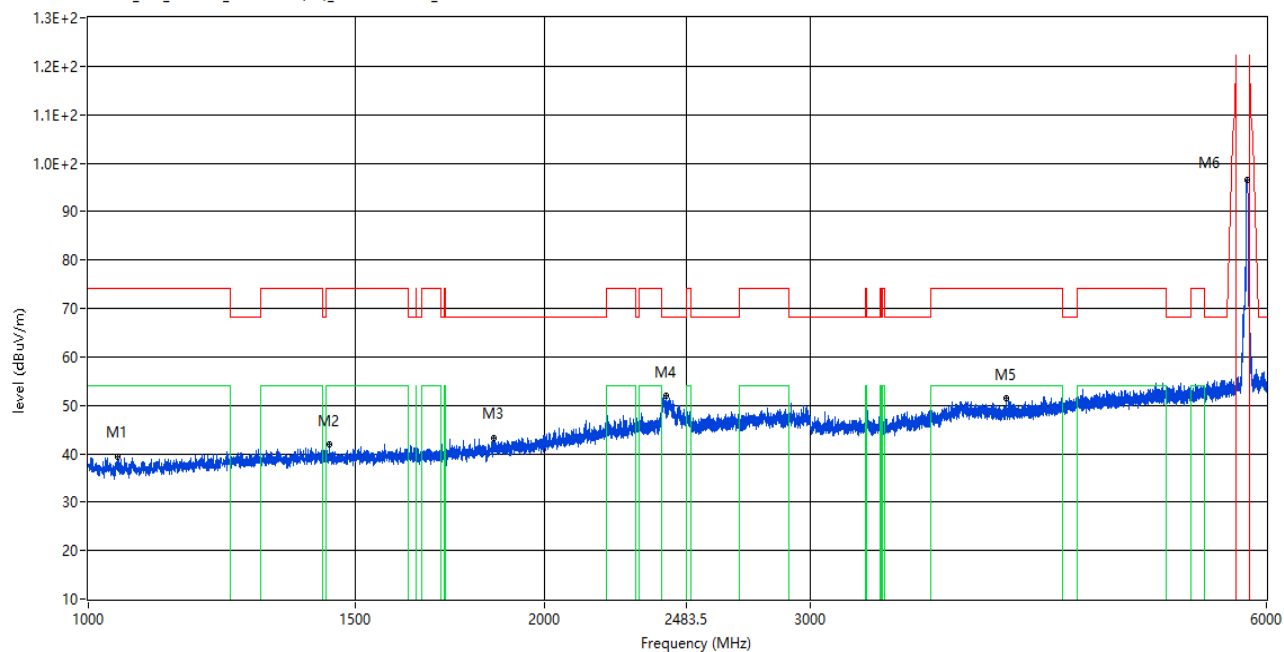
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 148 of 238

Figure 119: Spurious Emission, 1GHz – 10th Harmonic, 802.11n(HT20), 5825MHz
1GHz-6GHz, Horizontal

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1045.244	39.41	--	--	-9.71	74.0	--	54.0	-14.59	15.00	100	H	Pass
1443.195	41.93	--	--	-9.79	74.0	--	54.0	-12.07	2.00	100	H	Pass
1853.893	43.30	--	--	-7.68	68.2	--	--	-24.90	3.00	100	H	Pass
2408.574	51.95	--	--	1.78	68.2	--	--	-16.25	15.00	100	H	Pass
4037.870	51.38	--	--	0.31	74.0	--	54.0	-2.62	7.00	100	H	Pass
5823.397	96.65	--	--	6.88	--	--	--	--	12.00	100	H	Pass

TEST REPORT

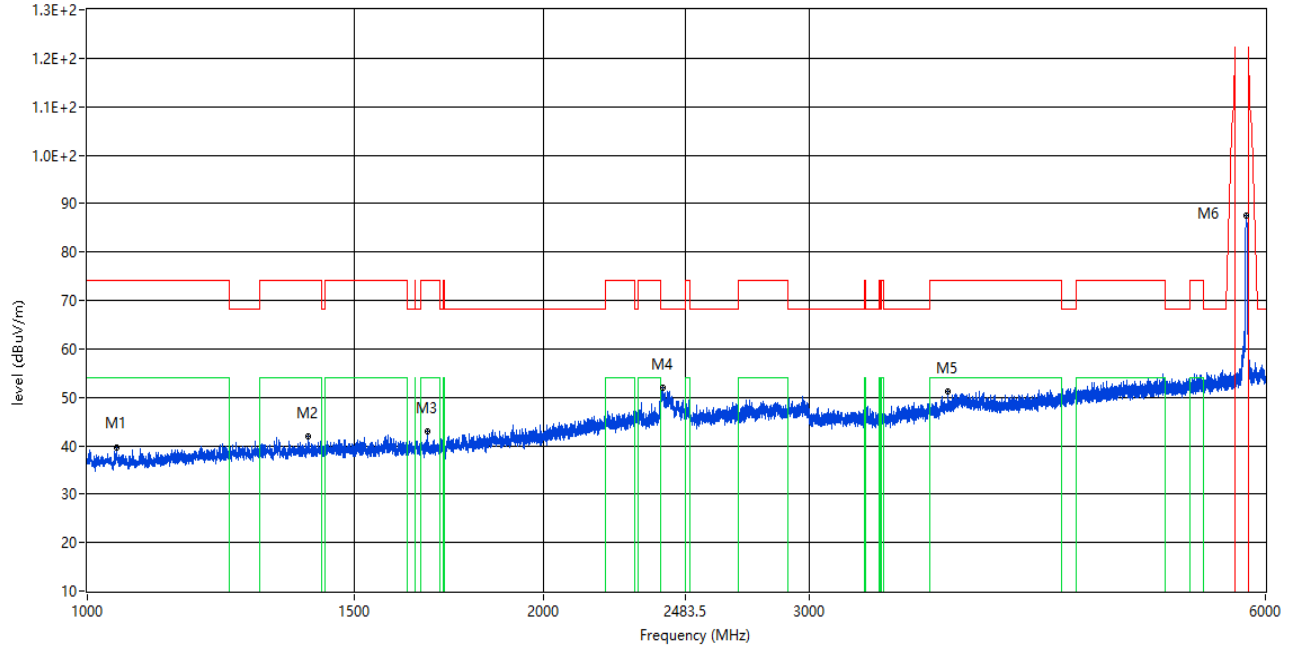
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 149 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1044.744	39.64	--	--	-9.64	74.0	--	54.0	-14.36	8.00	100	V	Pass
1398.700	41.83	--	--	-9.90	74.0	--	54.0	-12.17	7.00	100	V	Pass
1678.665	42.92	--	--	-8.99	74.0	--	54.0	-11.08	14.00	100	V	Pass
2397.825	51.89	--	--	2.17	68.2	--	--	-16.31	8.00	100	V	Pass
3701.537	51.15	--	--	0.23	74.0	--	54.0	-2.85	5.00	100	V	Pass
5825.647	87.43	--	--	6.81	--	--	--	--	15.00	100	V	Pass

TEST REPORT

Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 150 of 238

6GHz-18GHz, Horizontal

R Emission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7562.609	38.64	-25.12	74.0	-35.36	Peak	253.90	100	Horizontal	Pass
1**	7562.609	30.51	-25.12	54.0	-23.49	AV	253.90	100	Horizontal	Pass
2	8336.416	41.56	-22.33	74.0	-32.44	Peak	144.20	100	Horizontal	Pass
2**	8336.416	32.30	-22.33	54.0	-21.70	AV	144.20	100	Horizontal	Pass
3	9122.219	43.20	-23.03	74.0	-30.80	Peak	59.00	100	Horizontal	Pass
3**	9122.219	33.31	-23.03	54.0	-20.69	AV	59.00	100	Horizontal	Pass
4	11830.542	44.83	-18.63	74.0	-29.17	Peak	153.10	100	Horizontal	Pass
4**	11830.542	35.79	-18.63	54.0	-18.21	AV	153.10	100	Horizontal	Pass
5	13312.172	45.91	-16.32	74.0	-28.09	Peak	357.10	100	Horizontal	Pass
5**	13312.172	38.91	-16.32	54.0	-15.09	AV	357.10	100	Horizontal	Pass
6	15990.502	48.11	-15.59	74.0	-25.89	Peak	289.70	100	Horizontal	Pass
6**	15990.502	40.03	-15.59	54.0	-13.97	AV	289.70	100	Horizontal	Pass

TEST REPORT

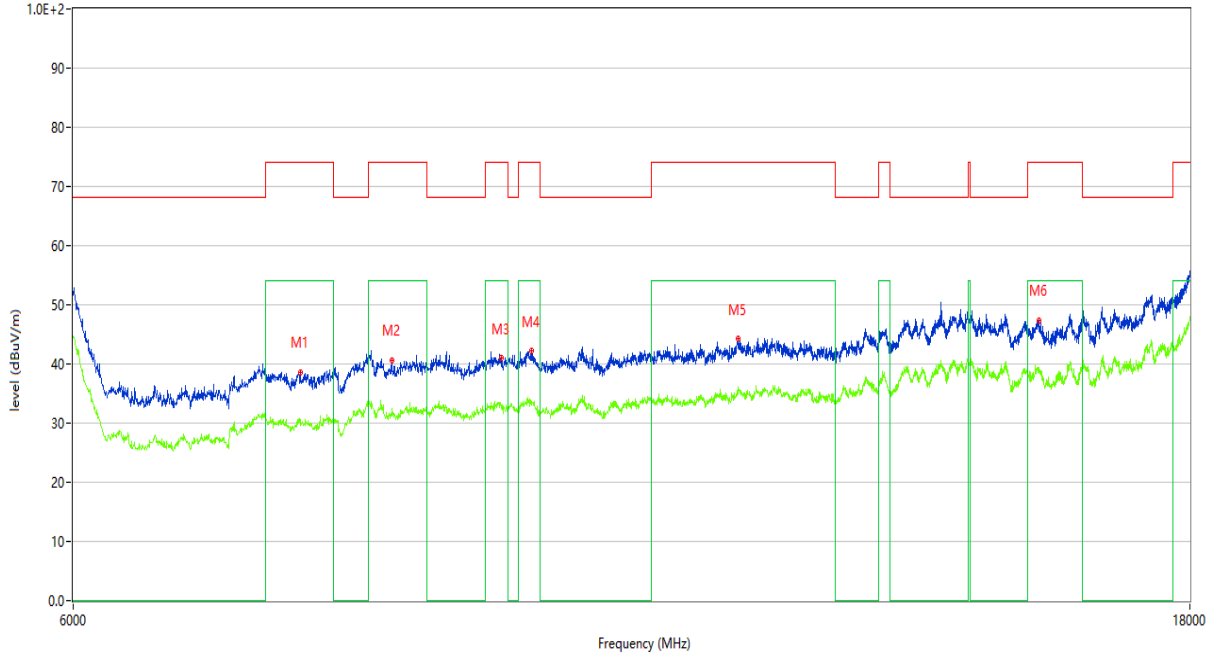
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 151 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7502.624	38.62	-24.44	74.0	-35.38	Peak	324.20	100	Vertical	Pass
1**	7502.624	30.66	-24.44	54.0	-23.34	AV	324.20	100	Vertical	Pass
2	8210.447	40.57	-22.76	74.0	-33.43	Peak	262.20	100	Vertical	Pass
2**	8210.447	32.49	-22.76	54.0	-21.51	AV	262.20	100	Vertical	Pass
3	9143.214	40.94	-23.00	74.0	-33.06	Peak	217.70	100	Vertical	Pass
3**	9143.214	32.99	-23.00	54.0	-21.01	AV	217.70	100	Vertical	Pass
4	9419.145	42.16	-21.92	74.0	-31.84	Peak	167.80	100	Vertical	Pass
4**	9419.145	33.07	-21.92	54.0	-20.93	AV	167.80	100	Vertical	Pass
5	11545.614	44.28	-18.17	74.0	-29.72	Peak	185.30	100	Vertical	Pass
5**	11545.614	35.28	-18.17	54.0	-18.72	AV	185.30	100	Vertical	Pass
6	15513.622	47.31	-17.09	74.0	-26.69	Peak	203.10	100	Vertical	Pass
6**	15513.622	38.36	-17.09	54.0	-15.64	AV	203.10	100	Vertical	Pass

TEST REPORT

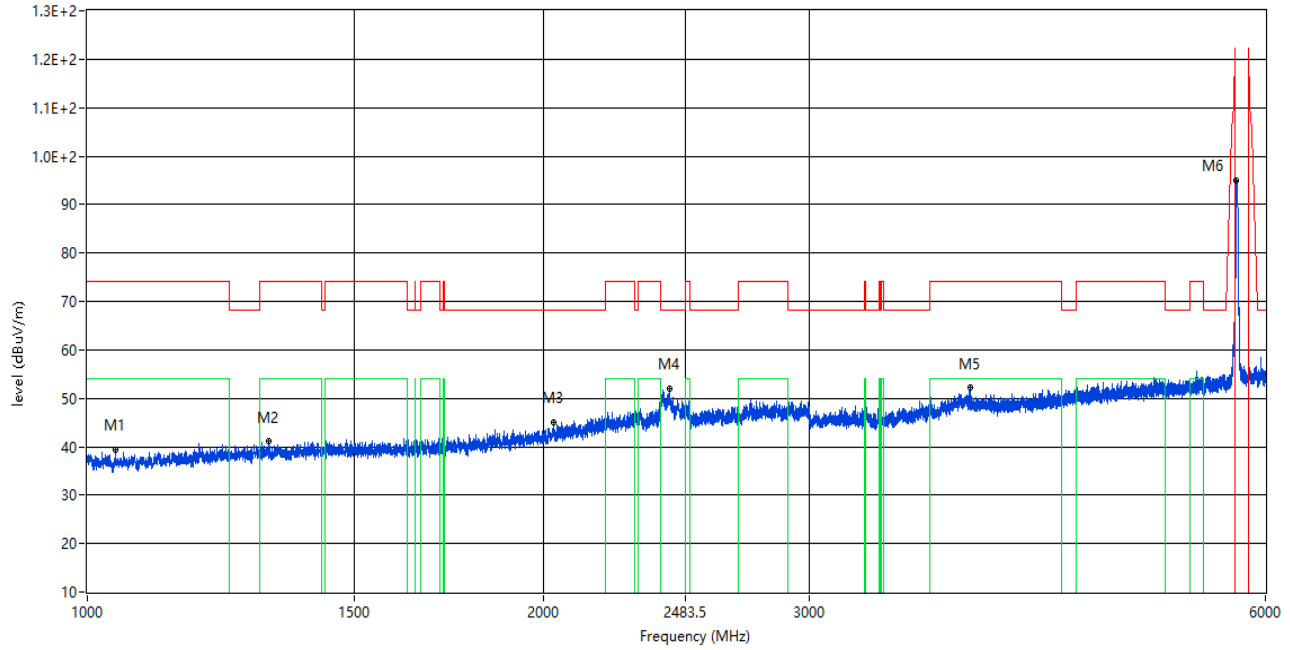
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 152 of 238

Figure 120: Spurious Emission, 1GHz – 10th Harmonic, 802.11ac(VHT20), 5745MHz
 1GHz-6GHz, Horizontal

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1044.244	39.43	--	--	-9.57	74.0	--	54.0	-14.57	0.00	100	H	Pass
1318.210	41.07	--	--	-9.83	74.0	--	54.0	-12.93	11.00	100	H	Pass
2032.621	45.10	--	--	-5.70	68.2	--	--	-23.10	7.00	100	H	Pass
2425.072	52.03	--	--	1.19	68.2	--	--	-16.17	6.00	100	H	Pass
3827.897	52.17	--	--	0.58	74.0	--	54.0	-1.83	0.00	100	H	Pass
5743.157	95.11	--	--	6.30	--	--	--	--	12.00	100	H	Pass

TEST REPORT

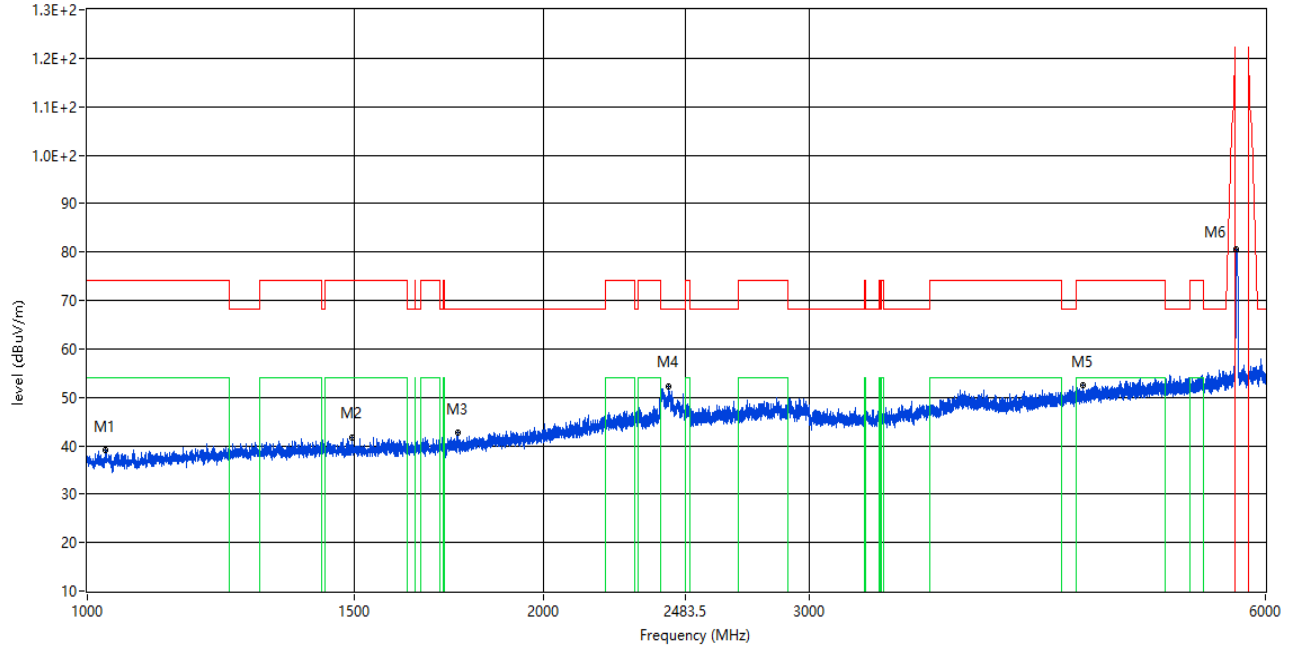
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 153 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1027.497	39.10	--	--	-9.56	74.0	--	54.0	-14.90	13.00	100	V	Pass
1495.688	41.71	--	--	-10.02	74.0	--	54.0	-12.29	14.00	100	V	Pass
1757.655	42.58	--	--	-8.63	68.2	--	--	-25.62	3.00	100	V	Pass
2420.572	52.27	--	--	1.35	68.2	--	--	-15.93	4.00	100	V	Pass
4542.932	52.47	--	--	1.78	74.0	--	54.0	-1.53	7.00	100	V	Pass
5742.032	80.68	--	--	6.27	--	--	--	--	11.00	100	V	Pass

TEST REPORT

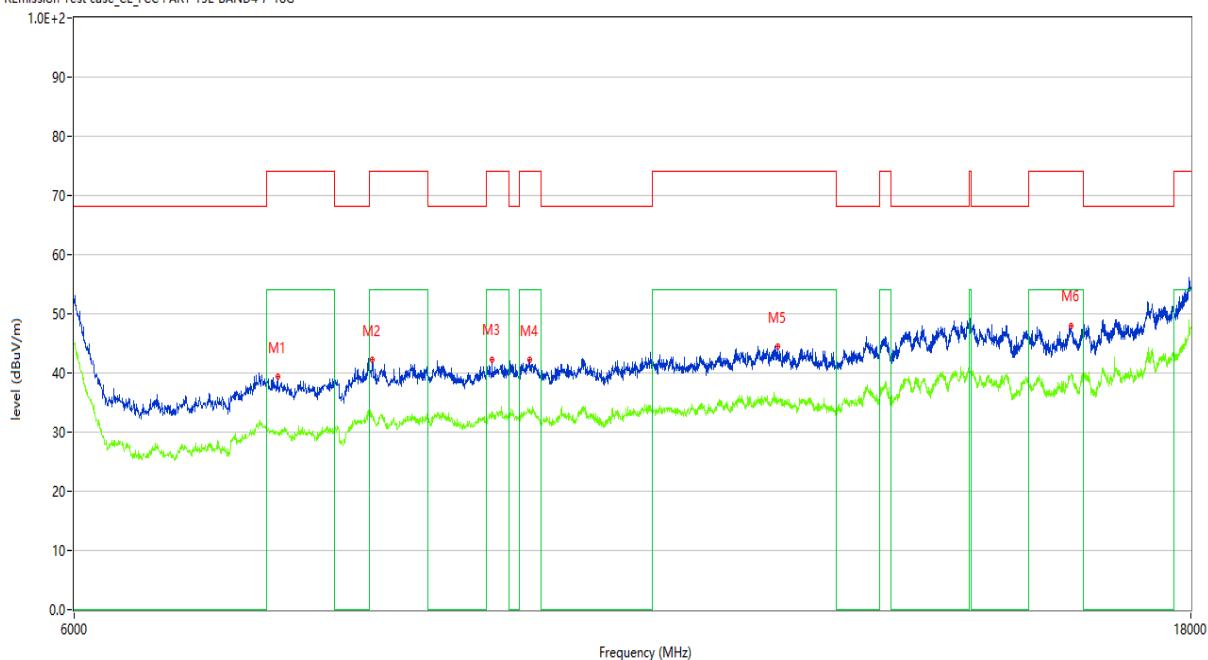
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 154 of 238

6GHz-18GHz, Horizontal

R Emission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7328.668	39.31	-24.92	74.0	-34.69	Peak	29.70	100	Horizontal	Pass
1**	7328.668	29.72	-24.92	54.0	-24.28	AV	29.70	100	Horizontal	Pass
2	8045.489	42.14	-22.88	74.0	-31.86	Peak	180.00	100	Horizontal	Pass
2**	8045.489	33.05	-22.88	54.0	-20.95	AV	180.00	100	Horizontal	Pass
3	9050.237	42.26	-23.00	74.0	-31.74	Peak	339.50	100	Horizontal	Pass
3**	9050.237	33.46	-23.00	54.0	-20.54	AV	339.50	100	Horizontal	Pass
4	9389.153	42.15	-21.89	74.0	-31.85	Peak	0.10	100	Horizontal	Pass
4**	9389.153	33.95	-21.89	54.0	-20.05	AV	0.10	100	Horizontal	Pass
5	11986.503	44.43	-18.72	74.0	-29.57	Peak	351.10	100	Horizontal	Pass
5**	11986.503	35.29	-18.72	54.0	-18.71	AV	351.10	100	Horizontal	Pass
6	16002.499	47.93	-15.33	74.0	-26.07	Peak	356.50	100	Horizontal	Pass
6**	16002.499	39.78	-15.33	54.0	-14.22	AV	356.50	100	Horizontal	Pass

TEST REPORT

Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 155 of 238

6GHz-18GHz, Vertical

R Emission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7514.621	38.57	-24.58	74.0	-35.43	Peak	130.40	100	Vertical	Pass
1**	7514.621	29.55	-24.58	54.0	-24.45	AV	130.40	100	Vertical	Pass
2	8294.426	41.80	-22.54	74.0	-32.20	Peak	88.90	100	Vertical	Pass
2**	8294.426	33.21	-22.54	54.0	-20.79	AV	88.90	100	Vertical	Pass
3	9374.156	42.96	-22.24	74.0	-31.04	Peak	136.30	100	Vertical	Pass
3**	9374.156	33.16	-22.24	54.0	-20.84	AV	136.30	100	Vertical	Pass
4	12082.479	44.29	-19.02	74.0	-29.71	Peak	209.70	100	Vertical	Pass
4**	12082.479	35.20	-19.02	54.0	-18.80	AV	209.70	100	Vertical	Pass
5	13324.169	46.12	-16.42	74.0	-27.88	Peak	289.00	100	Vertical	Pass
5**	13324.169	37.84	-16.42	54.0	-16.16	AV	289.00	100	Vertical	Pass
6	15498.625	48.04	-16.82	74.0	-25.96	Peak	312.90	100	Vertical	Pass
6**	15498.625	39.24	-16.82	54.0	-14.76	AV	312.90	100	Vertical	Pass

TEST REPORT

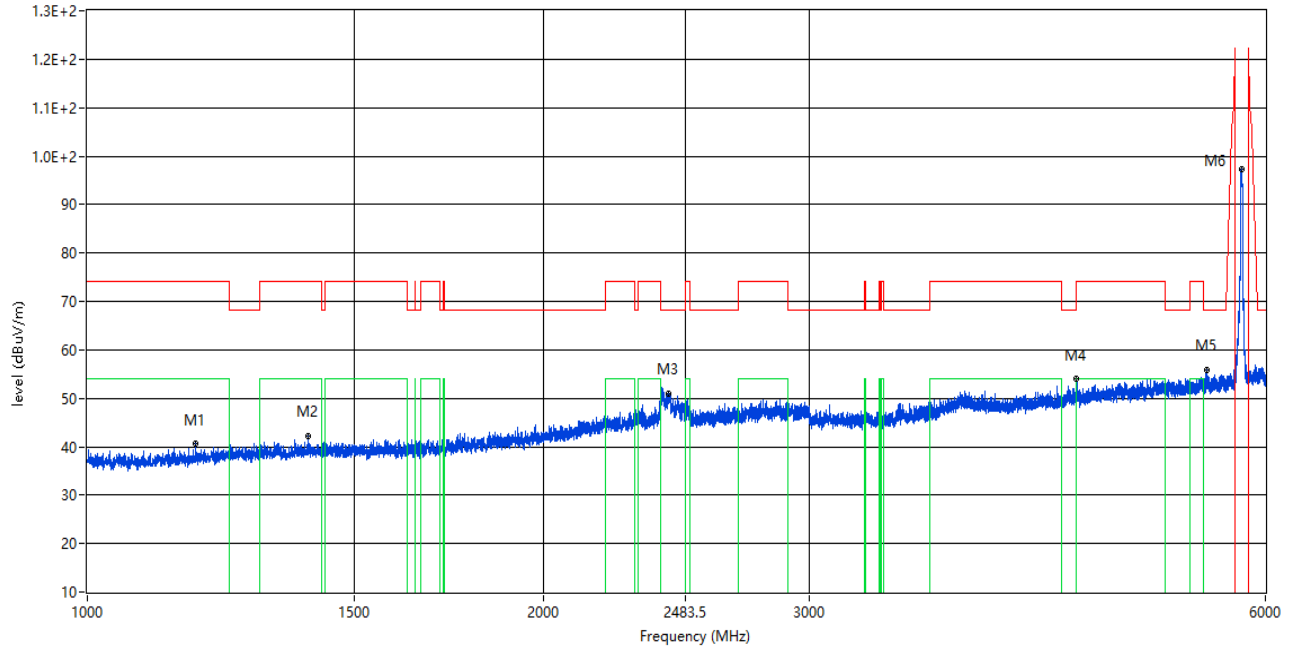
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 156 of 238

Figure 121: Spurious Emission, 1GHz – 10th Harmonic, 802.11ac(VHT20), 5785MHz
 1GHz-6GHz, Horizontal

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1178.478	40.64	--	--	-10.28	74.0	--	54.0	-13.36	6.00	100	H	Pass
1398.450	42.22	--	--	-9.92	74.0	--	54.0	-11.78	6.00	100	H	Pass
2418.573	51.01	--	--	1.42	68.2	--	--	-17.19	9.00	100	H	Pass
4506.937	53.20	--	--	2.17	74.0	--	54.0	-0.80	9.00	100	H	Pass
5489.314	55.94	--	--	5.45	68.2	--	--	-12.26	5.00	100	H	Pass
5783.277	97.37	--	--	6.62	--	--	--	--	7.00	100	H	Pass

TEST REPORT

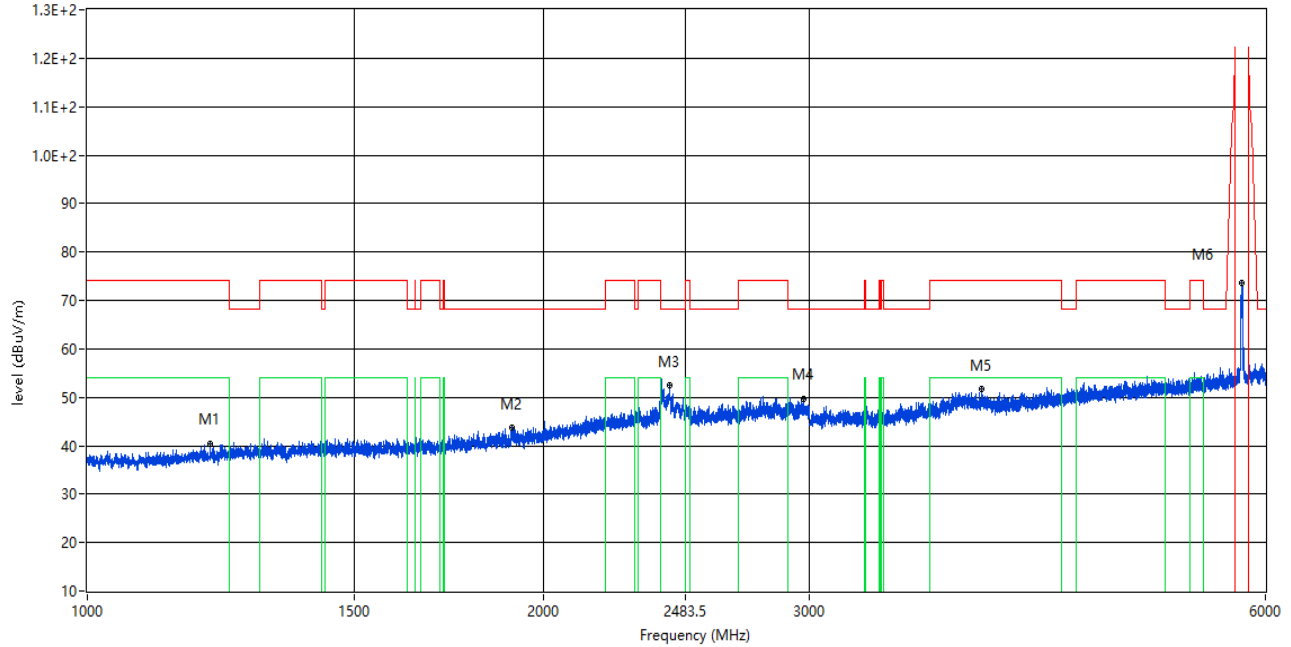
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 157 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1205.224	40.48	--	--	-10.44	74.0	--	54.0	-13.52	10.00	100	V	Pass
1907.887	43.71	--	--	-6.86	68.2	--	--	-24.49	3.00	100	V	Pass
2425.322	52.43	--	--	1.18	68.2	--	--	-15.77	4.00	100	V	Pass
2974.753	49.72	--	--	-0.31	68.2	--	--	-18.48	12.00	100	V	Pass
3896.513	51.74	--	--	0.82	74.0	--	54.0	-2.26	6.00	100	V	Pass
5792.651	73.54	--	--	6.98	--	--	--	--	4.00	100	V	Pass

TEST REPORT

Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 158 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7505.624	38.44	-24.47	74.0	-35.56	Peak	74.60	100	Horizontal	Pass
1**	7505.624	30.43	-24.47	54.0	-23.57	AV	74.60	100	Horizontal	Pass
2	8120.470	41.09	-22.41	74.0	-32.91	Peak	29.80	100	Horizontal	Pass
2**	8120.470	32.63	-22.41	54.0	-21.37	AV	29.80	100	Horizontal	Pass
3	9383.154	41.97	-22.03	74.0	-32.03	Peak	198.90	100	Horizontal	Pass
3**	9383.154	33.81	-22.03	54.0	-20.19	AV	198.90	100	Horizontal	Pass
4	11545.614	45.12	-18.17	74.0	-28.88	Peak	234.20	100	Horizontal	Pass
4**	11545.614	35.98	-18.17	54.0	-18.02	AV	234.20	100	Horizontal	Pass
5	15996.501	47.96	-15.39	74.0	-26.04	Peak	198.90	100	Horizontal	Pass
5**	15996.501	39.49	-15.39	54.0	-14.51	AV	198.90	100	Horizontal	Pass
6	17340.165	52.37	-10.91	68.2	-15.83	Peak	360.00	100	Horizontal	Pass
6**	17340.165	43.37	-10.91	--	43.37	AV	360.00	100	Horizontal	N/A

TEST REPORT

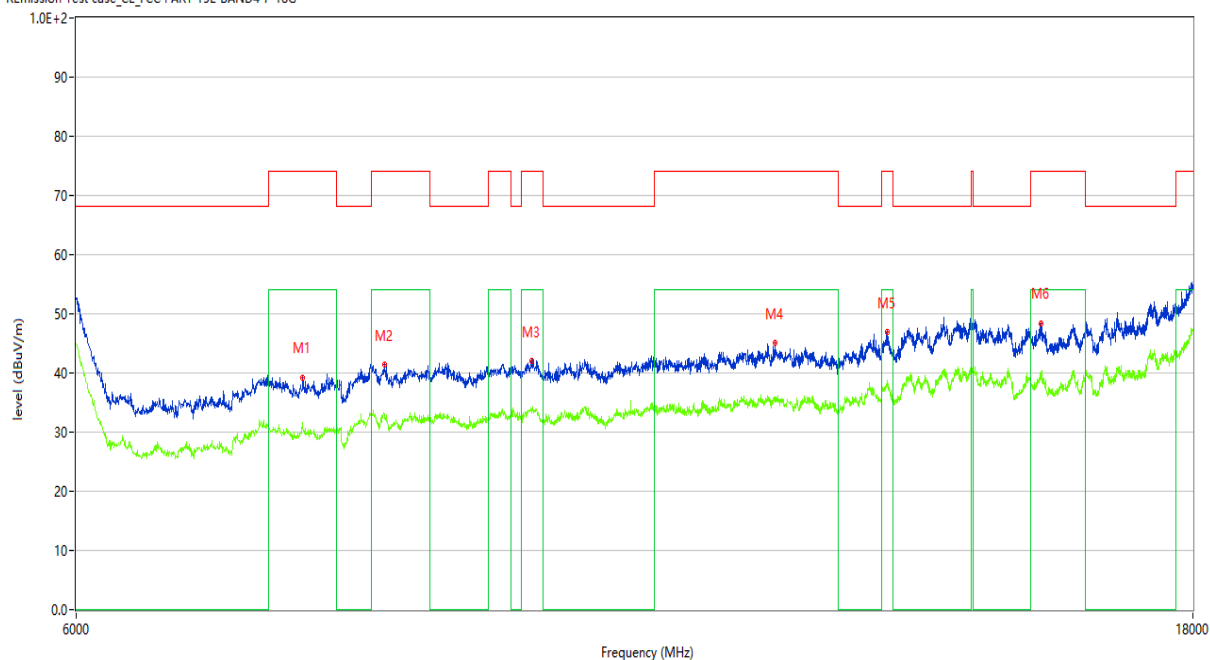
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 159 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7496.626	39.13	-24.43	74.0	-34.87	Peak	76.50	100	Horizontal	Pass
1**	7496.626	30.36	-24.43	54.0	-23.64	AV	76.50	100	Horizontal	Pass
2	8126.468	41.34	-22.44	74.0	-32.66	Peak	47.40	100	Horizontal	Pass
2**	8126.468	33.15	-22.44	54.0	-20.85	AV	47.40	100	Horizontal	Pass
3	9389.153	42.04	-21.89	74.0	-31.96	Peak	120.30	100	Horizontal	Pass
3**	9389.153	33.59	-21.89	54.0	-20.41	AV	120.30	100	Horizontal	Pass
4	11932.517	45.07	-18.82	74.0	-28.93	Peak	123.20	100	Horizontal	Pass
4**	11932.517	35.23	-18.82	54.0	-18.77	AV	123.20	100	Horizontal	Pass
5	13327.168	46.93	-16.44	74.0	-27.07	Peak	114.30	100	Horizontal	Pass
5**	13327.168	37.73	-16.44	54.0	-16.27	AV	114.30	100	Horizontal	Pass
6	15504.624	48.37	-16.89	74.0	-25.63	Peak	129.20	100	Horizontal	Pass
6**	15504.624	39.56	-16.89	54.0	-14.44	AV	129.20	100	Horizontal	Pass

TEST REPORT

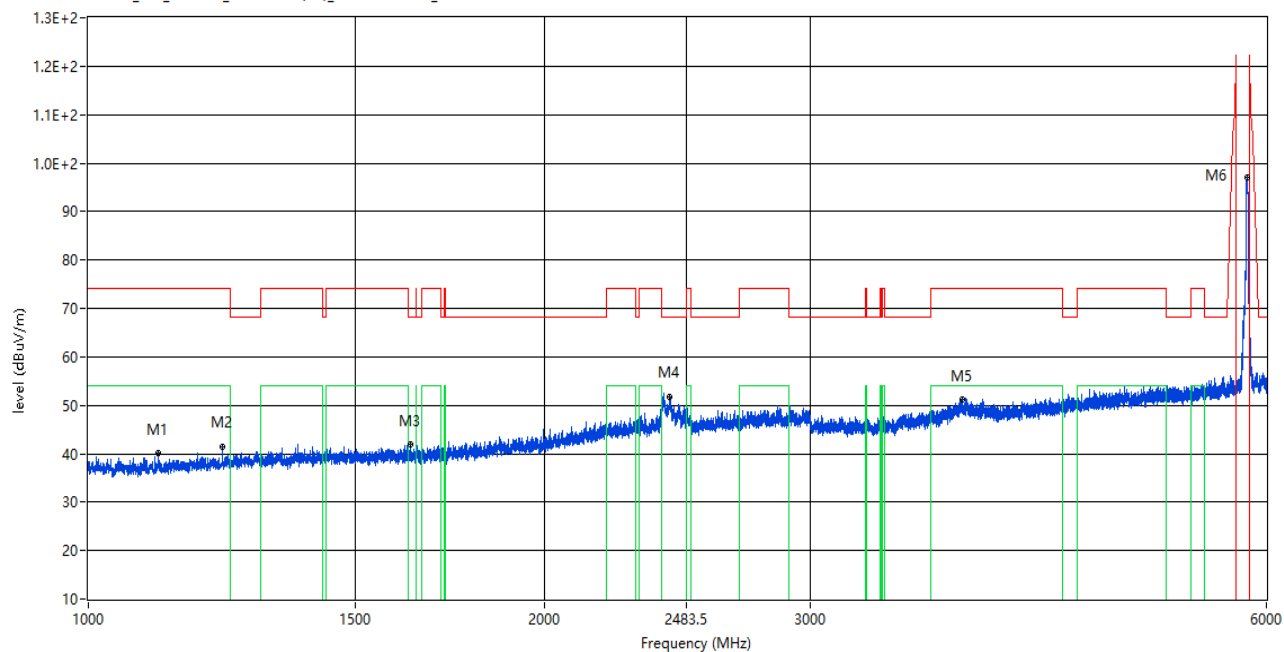
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 160 of 238

Figure 122: Spurious Emission, 1GHz – 10th Harmonic, 802.11ac(VHT20), 5825MHz
1GHz-6GHz, Horizontal

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1112.986	40.13	--	--	-10.05	74.0	--	54.0	-13.87	12.00	100	H	Pass
1225.972	41.48	--	--	-10.36	74.0	--	54.0	-12.52	0.00	100	H	Pass
1632.921	41.82	--	--	-9.80	68.2	--	--	-26.38	1.00	100	H	Pass
2421.822	51.81	--	--	1.31	68.2	--	--	-16.39	11.00	100	H	Pass
3775.028	51.13	--	--	1.16	74.0	--	54.0	-2.87	10.00	100	H	Pass
5823.397	97.09	--	--	6.88	--	--	--	--	15.00	100	H	Pass

TEST REPORT

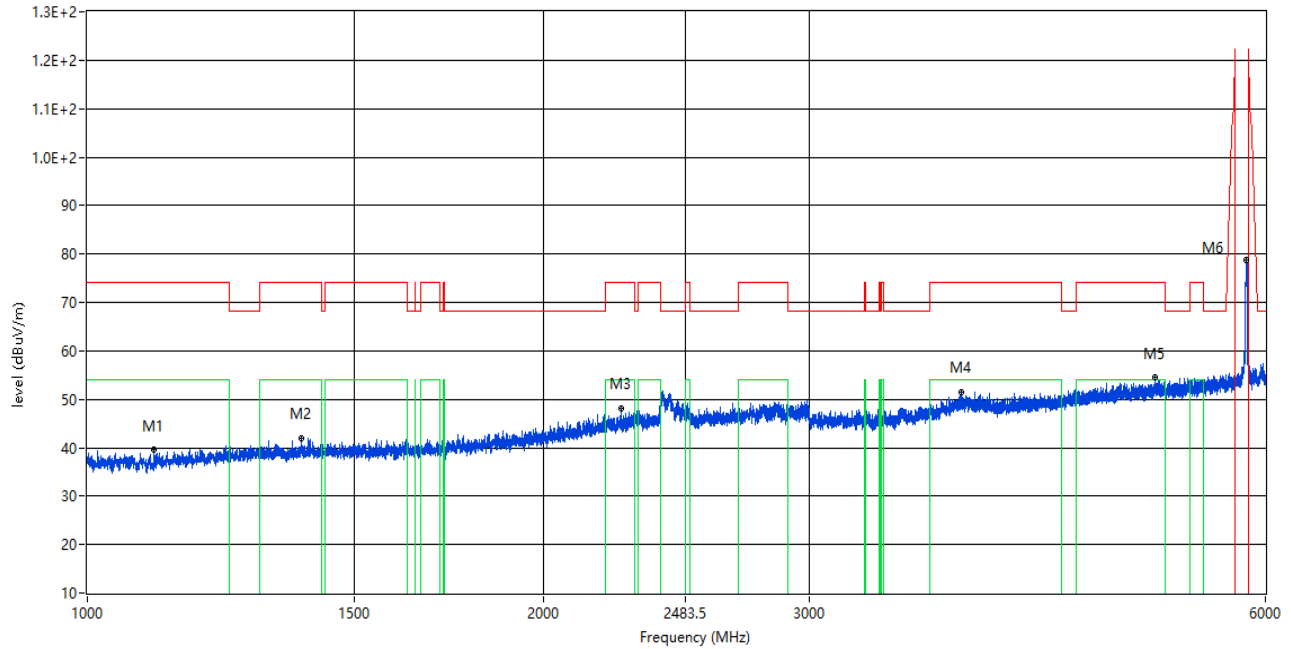
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 161 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1106.737	39.56	--	--	-10.55	74.0	--	54.0	-14.44	0.00	100	V	Pass
1383.702	42.03	--	--	-10.10	74.0	--	54.0	-11.97	9.00	100	V	Pass
2251.094	48.18	--	--	-3.42	74.0	--	54.0	-5.82	14.00	100	V	Pass
3775.778	51.50	--	--	1.14	74.0	--	54.0	-2.50	1.00	100	V	Pass
5074.241	54.56	--	--	4.96	74.0	--	54.0	0.56	4.00	100	V	N/A
5832.396	78.74	--	--	6.77	--	--	--	--	8.00	100	V	Pass

TEST REPORT

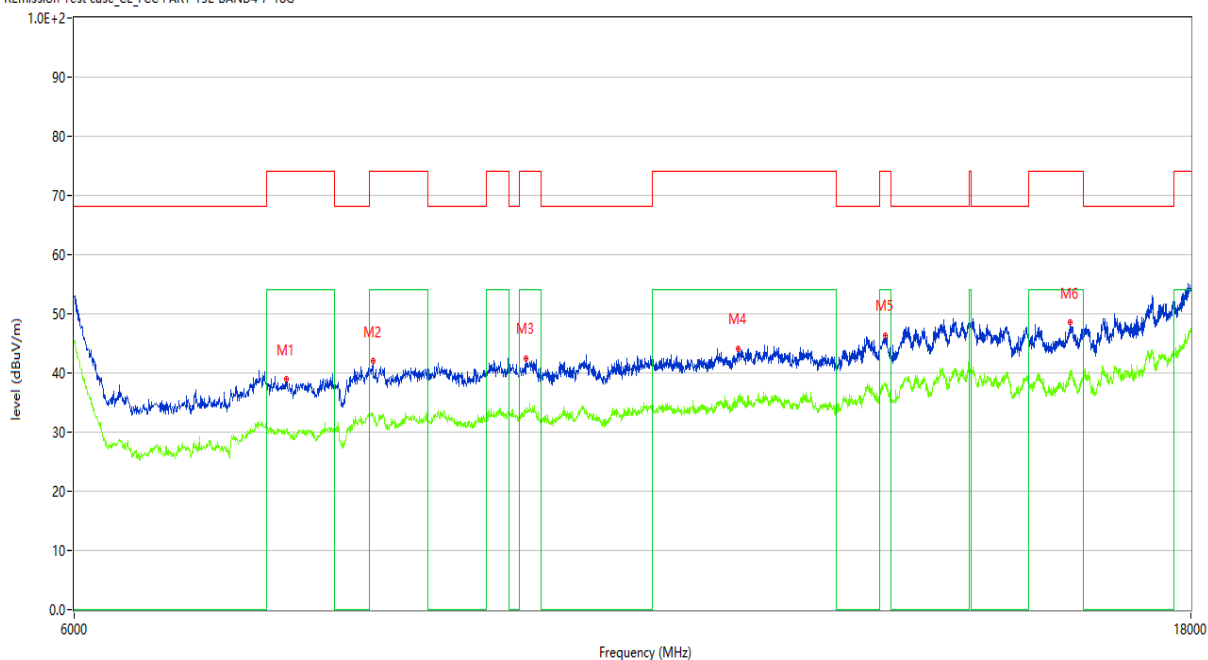
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 162 of 238

6GHz-18GHz, Horizontal

R Emission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7394.651	38.92	-25.12	74.0	-35.08	Peak	318.50	100	Horizontal	Pass
1**	7394.651	30.29	-25.12	54.0	-23.71	AV	318.50	100	Horizontal	Pass
2	8048.488	41.98	-22.85	74.0	-32.02	Peak	37.80	100	Horizontal	Pass
2**	8048.488	33.04	-22.85	54.0	-20.96	AV	37.80	100	Horizontal	Pass
3	9362.159	42.49	-22.52	74.0	-31.51	Peak	304.00	100	Horizontal	Pass
3**	9362.159	34.02	-22.52	54.0	-19.98	AV	304.00	100	Horizontal	Pass
4	11530.617	44.12	-18.03	74.0	-29.88	Peak	55.40	100	Horizontal	Pass
4**	11530.617	35.11	-18.03	54.0	-18.89	AV	55.40	100	Horizontal	Pass
5	13324.169	46.40	-16.42	74.0	-27.60	Peak	148.10	100	Horizontal	Pass
5**	13324.169	37.71	-16.42	54.0	-16.29	AV	148.10	100	Horizontal	Pass
6	15987.503	48.54	-15.69	74.0	-25.46	Peak	292.30	100	Horizontal	Pass
6**	15987.503	39.57	-15.69	54.0	-14.43	AV	292.30	100	Horizontal	Pass

TEST REPORT

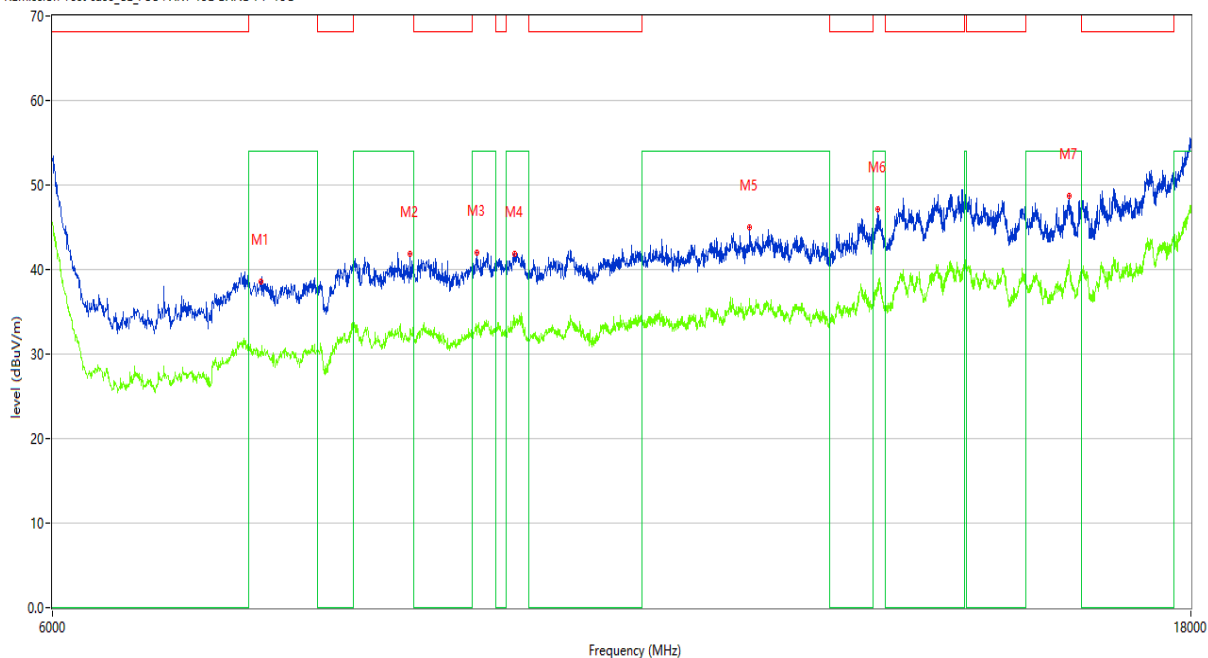
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 163 of 238

6GHz-18GHz, Vertical

R Emission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7334.666	38.52	-24.94	74.0	-35.48	Peak	345.20	100	Vertical	Pass
1**	7334.666	30.10	-24.94	54.0	-23.90	AV	345.20	100	Vertical	Pass
2	8471.382	41.83	-22.26	74.0	-32.17	Peak	358.00	100	Vertical	Pass
2**	8471.382	32.94	-22.26	54.0	-21.06	AV	358.00	100	Vertical	Pass
3	9041.240	41.93	-22.99	74.0	-32.07	Peak	333.40	100	Vertical	Pass
3**	9041.240	33.08	-22.99	54.0	-20.92	AV	333.40	100	Vertical	Pass
4	9368.158	41.79	-22.38	74.0	-32.21	Peak	277.30	100	Vertical	Pass
4**	9368.158	34.12	-22.38	54.0	-19.88	AV	277.30	100	Vertical	Pass
5	11758.560	45.02	-18.57	74.0	-28.98	Peak	0.00	100	Vertical	Pass
5**	11758.560	36.52	-18.57	54.0	-17.48	AV	0.00	100	Vertical	Pass
6	13306.173	47.21	-16.28	74.0	-26.79	Peak	87.70	100	Vertical	Pass
6**	13306.173	38.37	-16.28	54.0	-15.63	AV	87.70	100	Vertical	Pass
7	16005.499	48.68	-15.41	74.0	-25.32	Peak	195.00	100	Vertical	Pass
7**	16005.499	41.10	-15.41	54.0	-12.90	AV	195.00	100	Vertical	Pass

TEST REPORT

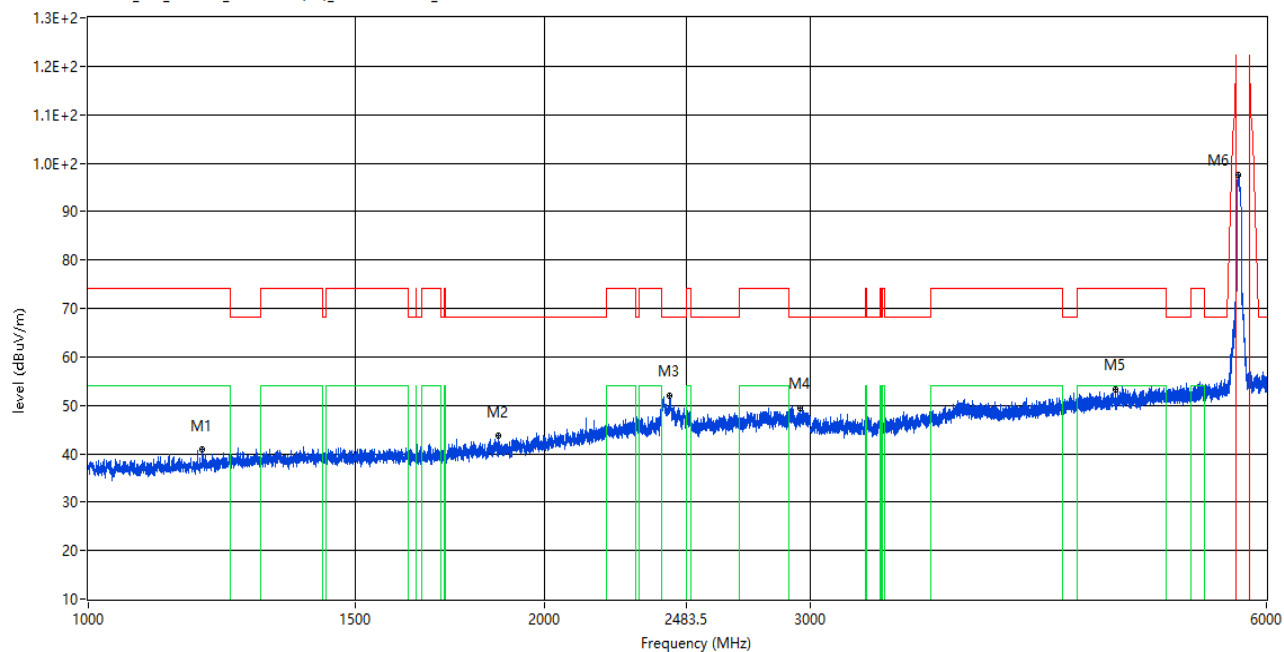
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 164 of 238

Figure 123: Spurious Emission, 1GHz – 10th Harmonic, 802.11n(HT40), 5755MHz
1GHz-6GHz, Horizontal

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1188.726	40.81	--	--	-9.96	74.0	--	54.0	-13.19	6.00	100	H	Pass
1865.892	43.64	--	--	-8.01	68.2	--	--	-24.56	8.00	100	H	Pass
2421.822	52.03	--	--	1.31	68.2	--	--	-16.17	14.00	100	H	Pass
2954.756	49.43	--	--	-0.93	68.2	--	--	-18.77	1.00	100	H	Pass
4768.279	53.30	--	--	2.85	74.0	--	54.0	-0.70	13.00	100	H	Pass
5752.906	97.66	--	--	6.20	--	--	--	--	11.00	100	H	Pass

TEST REPORT

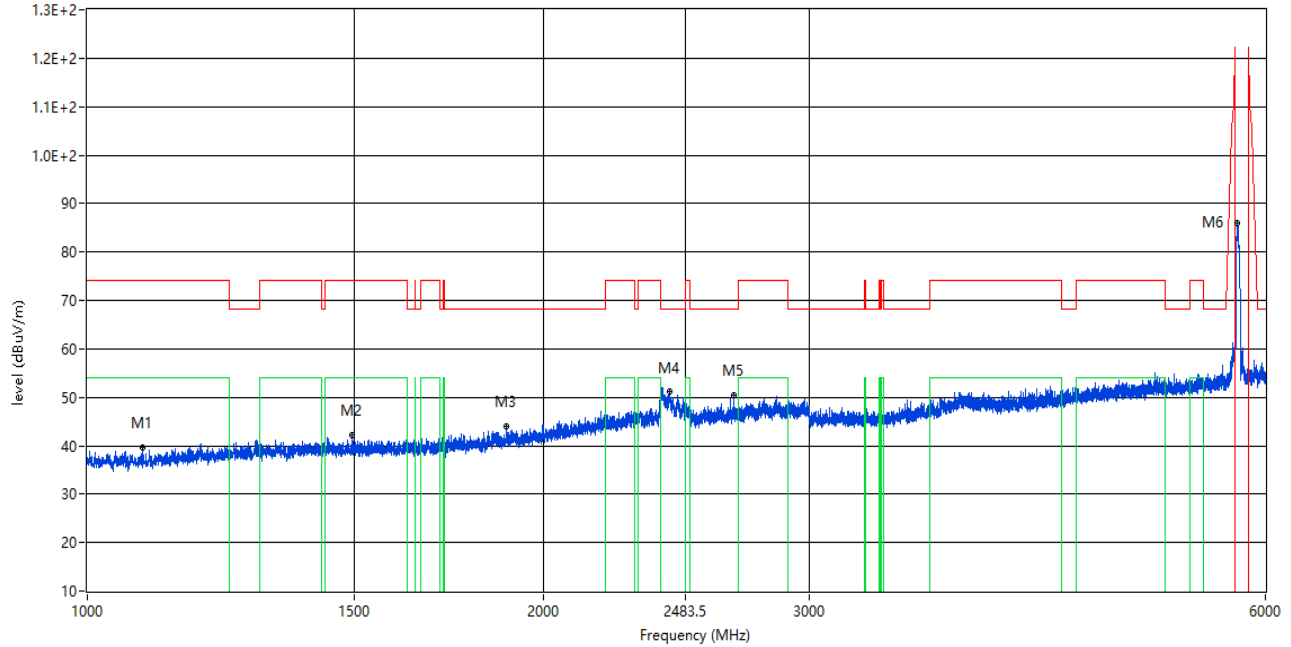
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 165 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1088.489	39.65	--	--	-10.01	74.0	--	54.0	-14.35	15.00	100	V	Pass
1496.688	42.24	--	--	-9.98	74.0	--	54.0	-11.76	11.00	100	V	Pass
1890.889	44.04	--	--	-7.59	68.2	--	--	-24.16	15.00	100	V	Pass
2423.322	51.20	--	--	1.25	68.2	--	--	-17.00	6.00	100	V	Pass
2671.541	50.54	--	--	-1.25	68.2	--	--	-17.66	0.00	100	V	Pass
5752.906	85.86	--	--	6.20	--	--	--	--	15.00	100	V	Pass

TEST REPORT

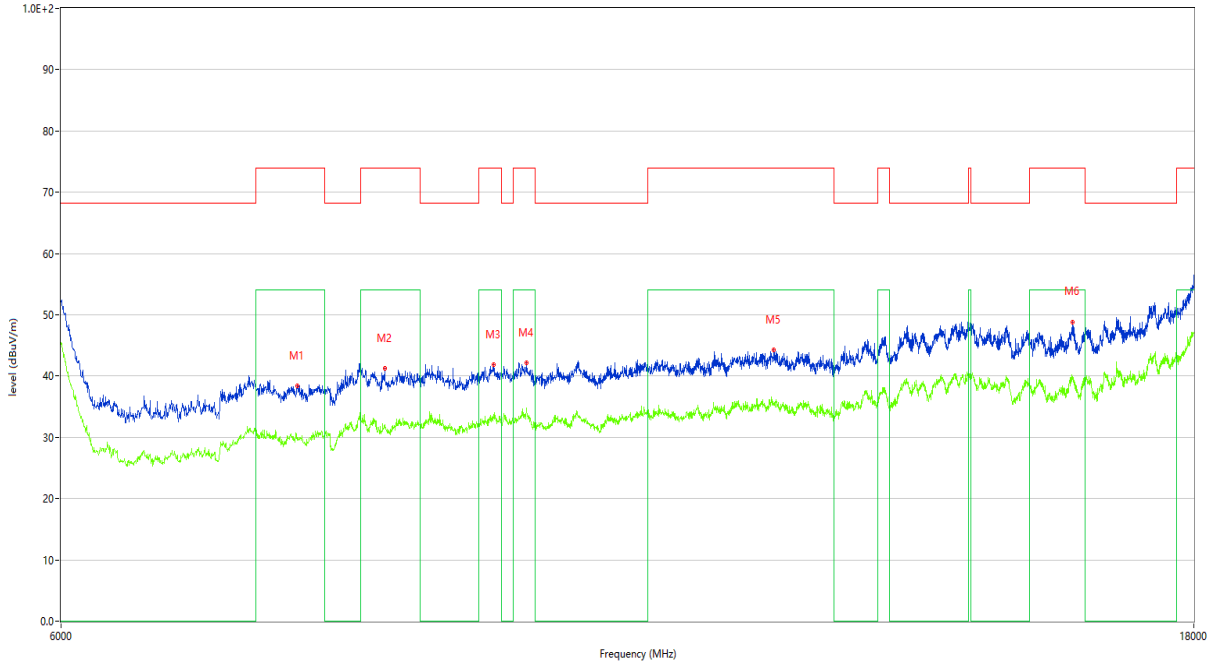
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 166 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7547.613	38.39	-24.95	74.0	-35.61	Peak	333.30	100	Horizontal	Pass
1**	7547.613	29.48	-24.95	54.0	-24.52	AV	333.30	100	Horizontal	Pass
2	8213.447	41.20	-22.76	74.0	-32.80	Peak	70.20	100	Horizontal	Pass
2**	8213.447	32.06	-22.76	54.0	-21.94	AV	70.20	100	Horizontal	Pass
3	9125.219	41.91	-23.02	74.0	-32.09	Peak	265.40	100	Horizontal	Pass
3**	9125.219	33.57	-23.02	54.0	-20.43	AV	265.40	100	Horizontal	Pass
4	9422.144	42.21	-21.97	74.0	-31.79	Peak	268.60	100	Horizontal	Pass
4**	9422.144	34.72	-21.97	54.0	-19.28	AV	268.60	100	Horizontal	Pass
5	11977.506	44.22	-18.74	74.0	-29.78	Peak	218.40	100	Horizontal	Pass
5**	11977.506	35.27	-18.74	54.0	-18.73	AV	218.40	100	Horizontal	Pass
6	16002.499	48.85	-15.33	74.0	-25.15	Peak	85.30	100	Horizontal	Pass
6**	16002.499	39.96	-15.33	54.0	-14.04	AV	85.30	100	Horizontal	Pass

TEST REPORT

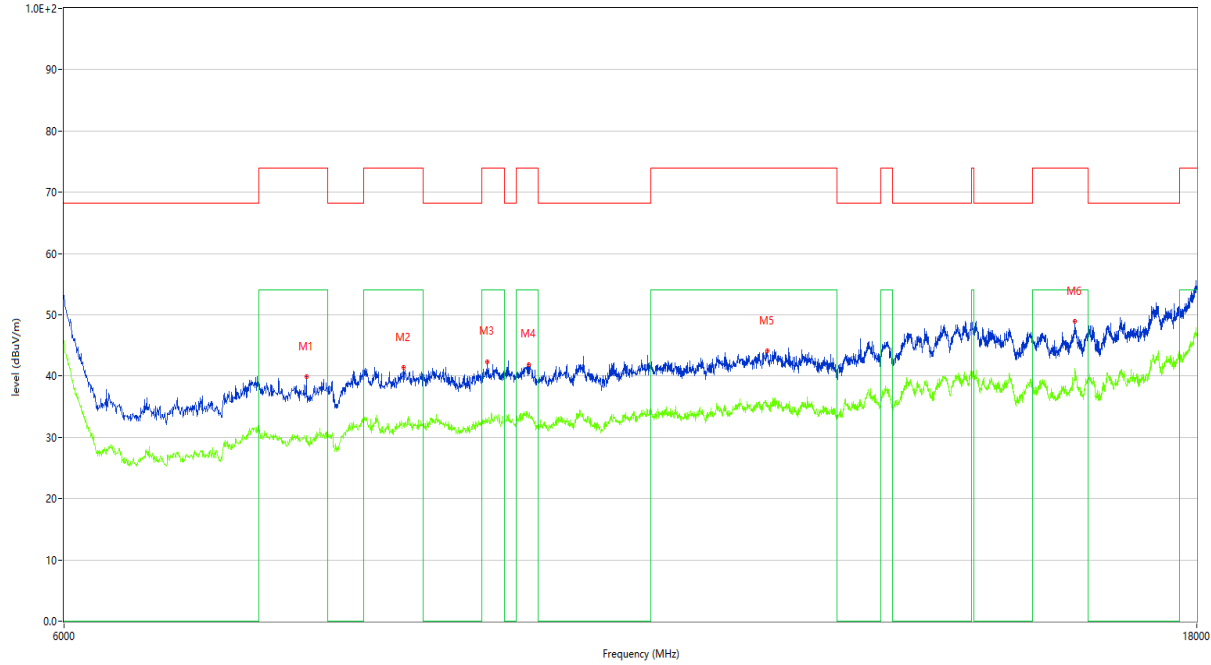
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 167 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7589.603	39.84	-25.42	74.0	-34.16	Peak	68.40	100	Vertical	Pass
1**	7589.603	30.33	-25.42	54.0	-23.67	AV	68.40	100	Vertical	Pass
2	8339.415	41.45	-22.31	74.0	-32.55	Peak	112.90	100	Vertical	Pass
2**	8339.415	32.18	-22.31	54.0	-21.82	AV	112.90	100	Vertical	Pass
3	9047.238	42.36	-23.00	74.0	-31.64	Peak	12.10	100	Vertical	Pass
3**	9047.238	32.99	-23.00	54.0	-21.01	AV	12.10	100	Vertical	Pass
4	9416.146	41.85	-21.88	74.0	-32.15	Peak	178.80	100	Vertical	Pass
4**	9416.146	33.32	-21.88	54.0	-20.68	AV	178.80	100	Vertical	Pass
5	11866.533	44.08	-18.76	74.0	-29.92	Peak	259.10	100	Vertical	Pass
5**	11866.533	35.26	-18.76	54.0	-18.74	AV	259.10	100	Vertical	Pass
6	15996.501	48.91	-15.39	74.0	-25.09	Peak	97.80	100	Vertical	Pass
6**	15996.501	40.07	-15.39	54.0	-13.93	AV	97.80	100	Vertical	Pass

TEST REPORT

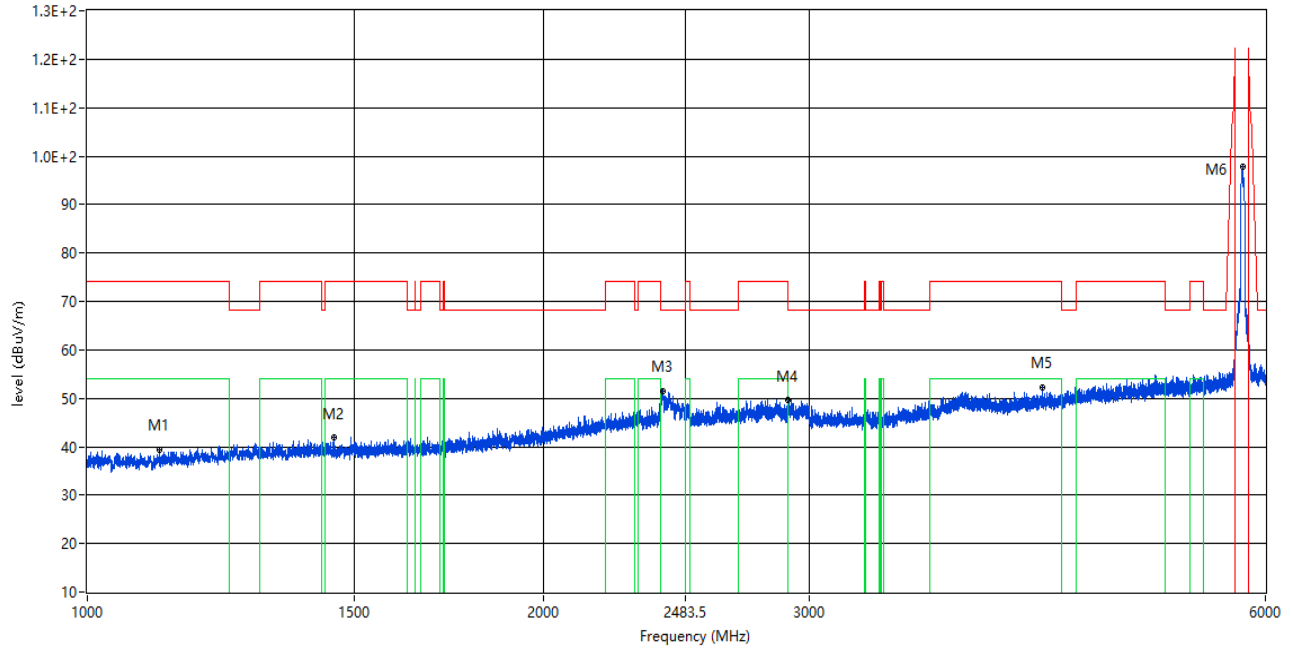
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 168 of 238

Figure 124: Spurious Emission, 1GHz – 10th Harmonic, 802.11n(HT40), 5795MHz
1GHz-6GHz, Horizontal

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1116.735	39.41	--	--	-10.51	74.0	--	54.0	-14.59	11.00	100	H	Pass
1455.693	41.82	--	--	-10.14	74.0	--	54.0	-12.18	7.00	100	H	Pass
2400.575	51.54	--	--	2.06	68.2	--	--	-16.66	11.00	100	H	Pass
2903.262	49.60	--	--	-0.91	68.2	--	--	-18.60	13.00	100	H	Pass
4272.591	52.15	--	--	1.06	74.0	--	54.0	-1.85	7.00	100	H	Pass
5796.775	97.72	--	--	6.89	--	--	--	--	5.00	100	H	Pass

TEST REPORT

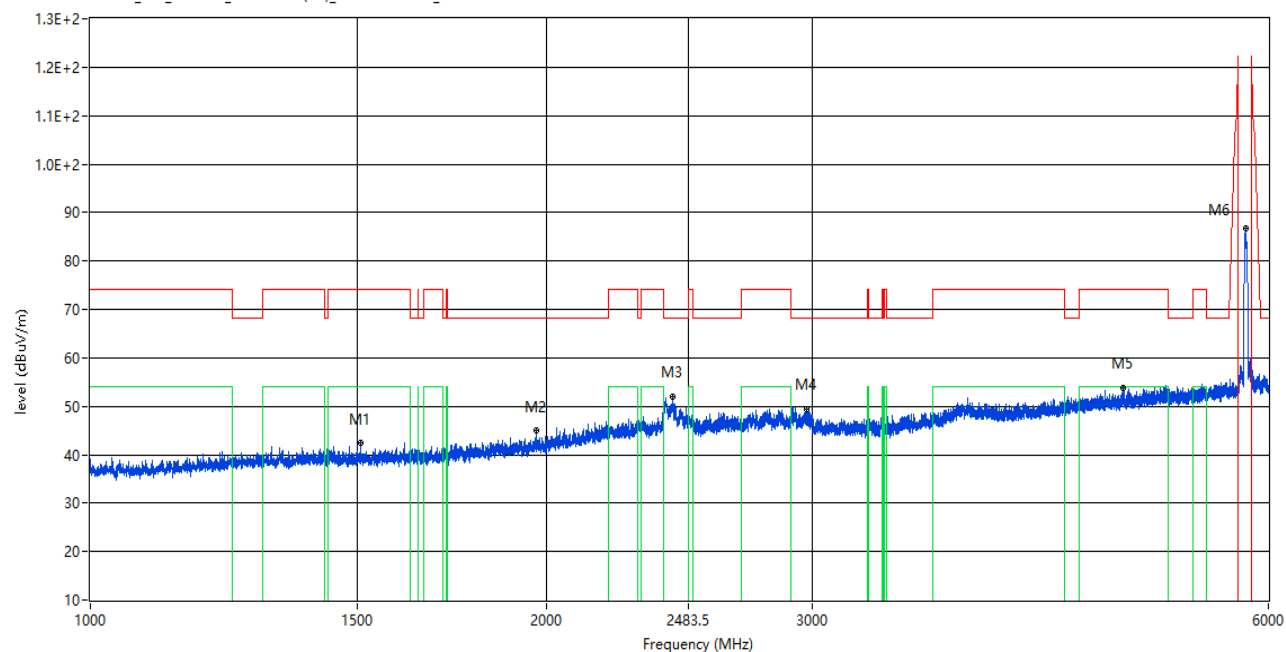
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 169 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1507.937	42.40	--	--	-10.04	74.0	--	54.0	-11.60	14.00	100	V	Pass
1971.129	44.90	--	--	-6.97	68.2	--	--	-23.30	15.00	100	V	Pass
2423.572	52.00	--	--	1.24	68.2	--	--	-16.20	10.00	100	V	Pass
2975.003	49.44	--	--	-0.31	68.2	--	--	-18.76	6.00	100	V	Pass
4808.774	53.87	--	--	3.37	74.0	--	54.0	-0.13	9.00	100	V	Pass
5796.400	86.77	--	--	6.91	--	--	--	--	13.00	100	V	Pass

TEST REPORT

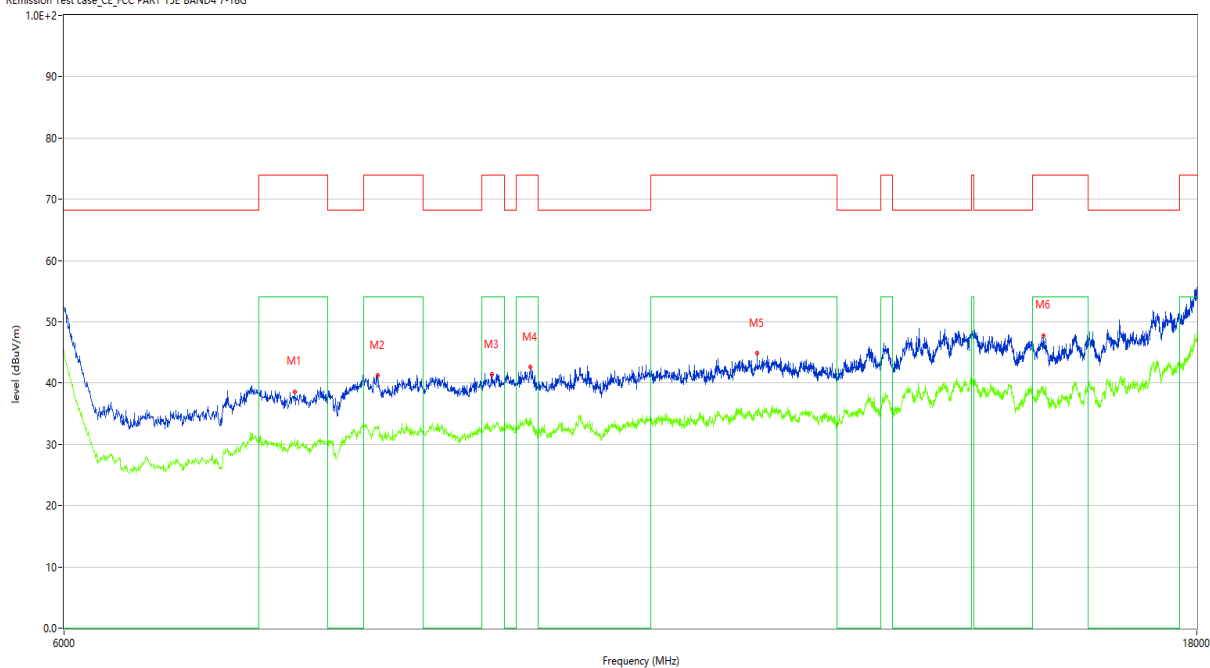
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 170 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7505.624	38.63	-24.47	74.0	-35.37	Peak	360.00	100	Horizontal	Pass
1**	7505.624	30.31	-24.47	54.0	-23.69	AV	360.00	100	Horizontal	Pass
2	8132.467	41.22	-22.47	74.0	-32.78	Peak	42.00	100	Horizontal	Pass
2**	8132.467	32.97	-22.47	54.0	-21.03	AV	42.00	100	Horizontal	Pass
3	9086.228	41.36	-23.04	74.0	-32.64	Peak	175.40	100	Horizontal	Pass
3**	9086.228	33.03	-23.04	54.0	-20.97	AV	175.40	100	Horizontal	Pass
4	9428.143	42.57	-22.05	74.0	-31.43	Peak	136.90	100	Horizontal	Pass
4**	9428.143	34.32	-22.05	54.0	-19.68	AV	136.90	100	Horizontal	Pass
5	11752.562	44.90	-18.58	74.0	-29.10	Peak	211.20	100	Horizontal	Pass
5**	11752.562	35.61	-18.58	54.0	-18.39	AV	211.20	100	Horizontal	Pass
6	15516.621	47.82	-17.15	74.0	-26.18	Peak	344.60	100	Horizontal	Pass
6**	15516.621	38.56	-17.15	54.0	-15.44	AV	344.60	100	Horizontal	Pass

TEST REPORT

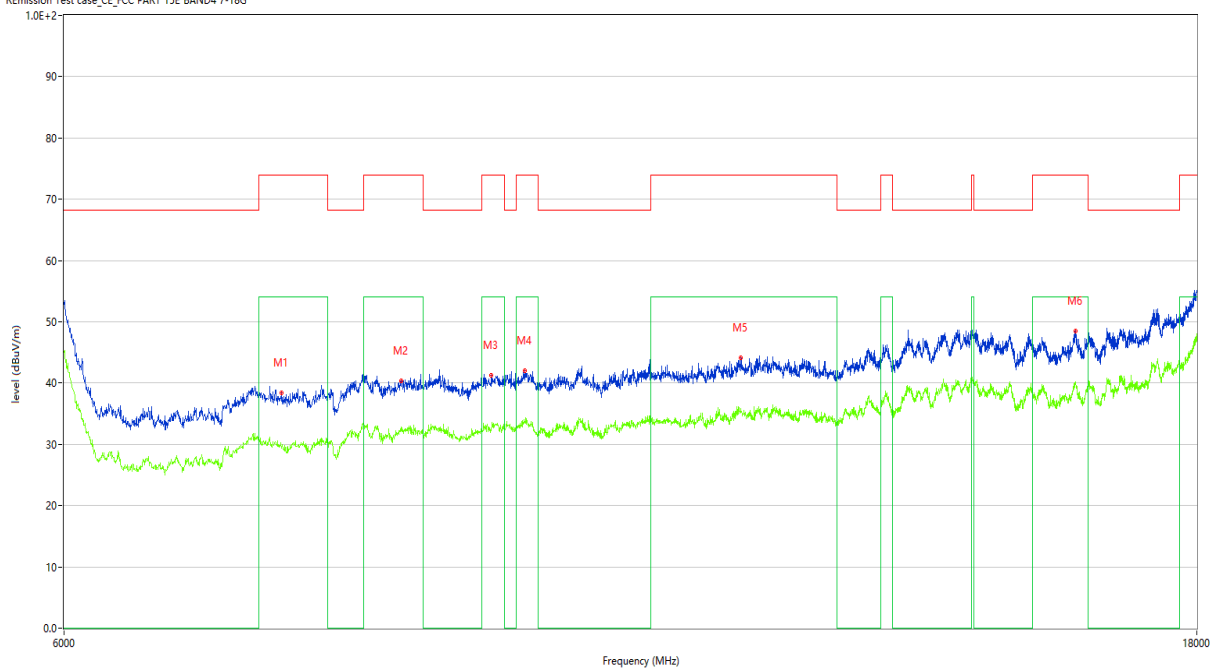
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 171 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7409.648	38.46	-25.07	74.0	-35.54	Peak	356.20	100	Vertical	Pass
1**	7409.648	29.58	-25.07	54.0	-24.42	AV	356.20	100	Vertical	Pass
2	8321.420	40.30	-22.41	74.0	-33.70	Peak	11.60	100	Vertical	Pass
2**	8321.420	32.89	-22.41	54.0	-21.11	AV	11.60	100	Vertical	Pass
3	9080.230	41.29	-23.04	74.0	-32.71	Peak	162.30	100	Vertical	Pass
3**	9080.230	32.46	-23.04	54.0	-21.54	AV	162.30	100	Vertical	Pass
4	9383.154	42.05	-22.03	74.0	-31.95	Peak	0.00	100	Vertical	Pass
4**	9383.154	33.69	-22.03	54.0	-20.31	AV	0.00	100	Vertical	Pass
5	11566.608	44.05	-18.35	74.0	-29.95	Peak	281.50	100	Vertical	Pass
5**	11566.608	35.26	-18.35	54.0	-18.74	AV	281.50	100	Vertical	Pass
6	16002.499	48.50	-15.33	74.0	-25.50	Peak	344.20	100	Vertical	Pass
6**	16002.499	40.09	-15.33	54.0	-13.91	AV	344.20	100	Vertical	Pass

TEST REPORT

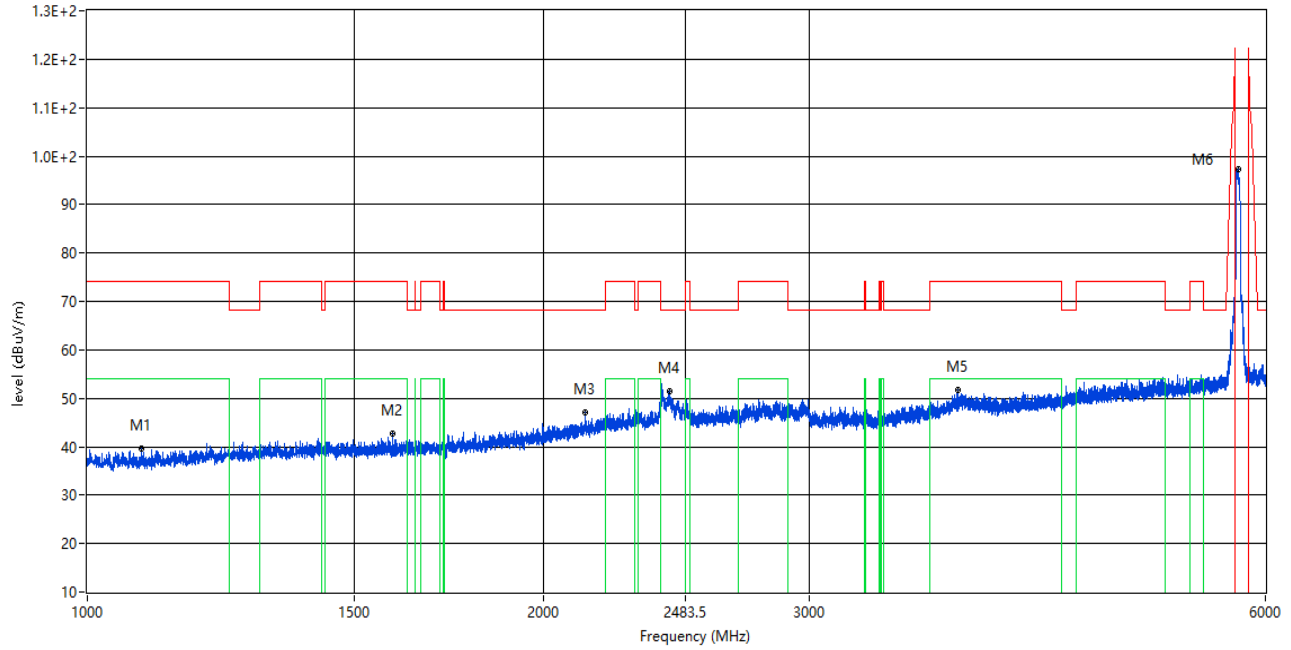
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 172 of 238

Figure 125: Spurious Emission, 1GHz – 10th Harmonic, 802.11ac(VHT40), 5755MHz
1GHz-6GHz, Horizontal

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1085.989	39.49	--	--	-10.10	74.0	--	54.0	-14.51	8.00	100	H	Pass
1591.176	42.61	--	--	-9.90	74.0	--	54.0	-11.39	7.00	100	H	Pass
2132.858	46.96	--	--	-5.06	68.2	--	--	-21.24	9.00	100	H	Pass
2422.822	51.54	--	--	1.27	68.2	--	--	-16.66	10.00	100	H	Pass
3761.530	51.70	--	--	0.54	74.0	--	54.0	-2.30	1.00	100	H	Pass
5760.780	97.22	--	--	6.22	--	--	--	--	3.00	100	H	Pass

TEST REPORT

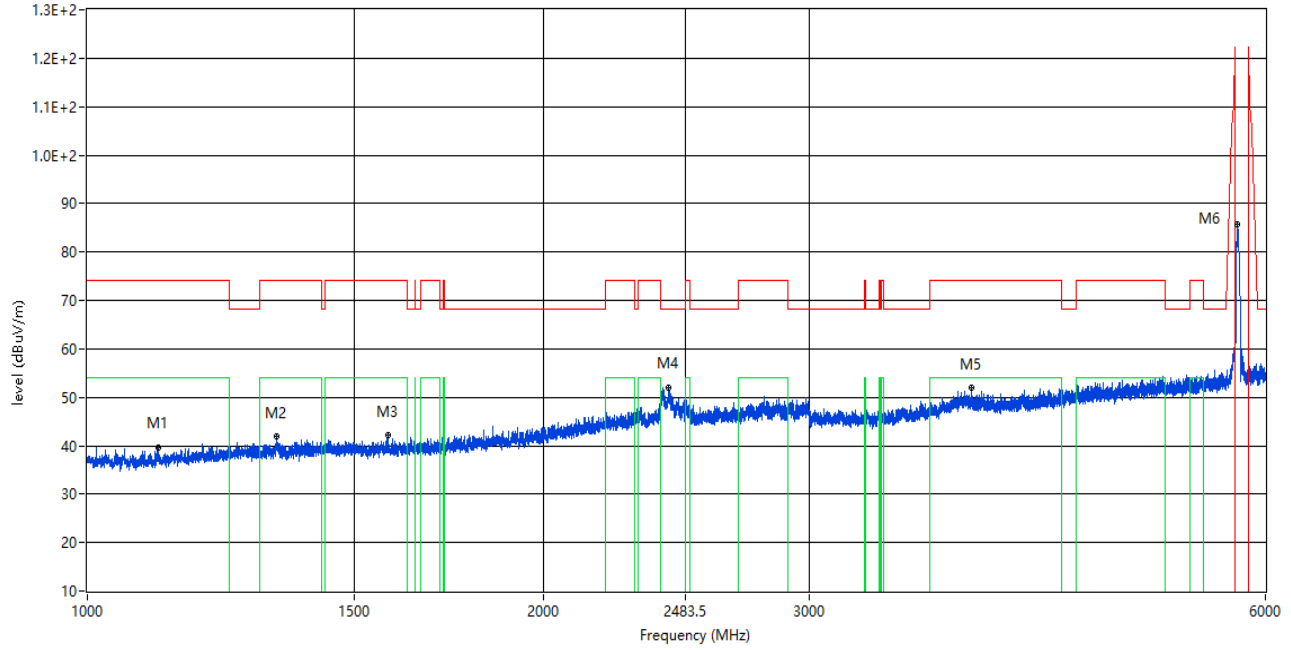
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 173 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1113.486	39.70	--	--	-10.02	74.0	--	54.0	-14.30	4.00	100	V	Pass
1333.208	41.93	--	--	-9.70	74.0	--	54.0	-12.07	1.00	100	V	Pass
1579.428	42.14	--	--	-9.75	74.0	--	54.0	-11.86	14.00	100	V	Pass
2420.322	52.05	--	--	1.36	68.2	--	--	-16.15	6.00	100	V	Pass
3836.145	51.97	--	--	0.63	74.0	--	54.0	-2.03	13.00	100	V	Pass
5752.906	85.67	--	--	6.20	--	--	--	--	8.00	100	V	Pass

TEST REPORT

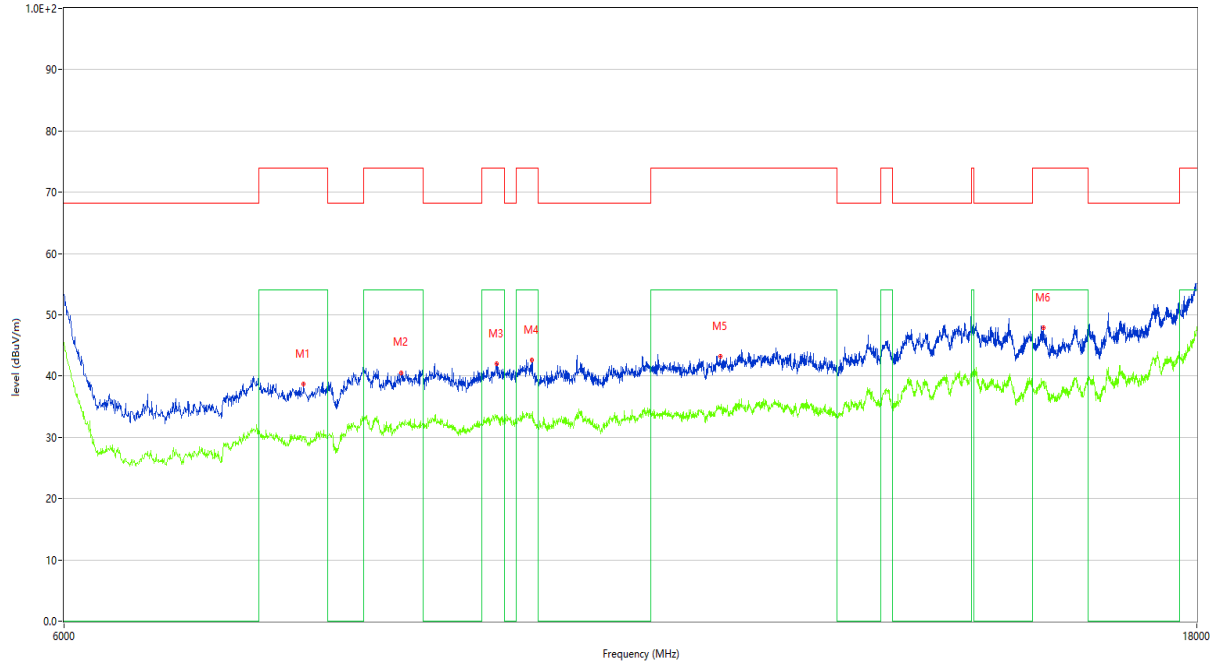
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 174 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7568.608	38.68	-25.19	74.0	-35.32	Peak	125.30	100	Horizontal	Pass
1**	7568.608	30.04	-25.19	54.0	-23.96	AV	125.30	100	Horizontal	Pass
2	8321.420	40.58	-22.41	74.0	-33.42	Peak	125.30	100	Horizontal	Pass
2**	8321.420	32.45	-22.41	54.0	-21.55	AV	125.30	100	Horizontal	Pass
3	9131.217	42.03	-23.01	74.0	-31.97	Peak	143.10	100	Horizontal	Pass
3**	9131.217	32.82	-23.01	54.0	-21.18	AV	143.10	100	Horizontal	Pass
4	9443.139	42.58	-22.27	74.0	-31.42	Peak	116.20	100	Horizontal	Pass
4**	9443.139	33.47	-22.27	54.0	-20.53	AV	116.20	100	Horizontal	Pass
5	11335.666	43.20	-18.91	74.0	-30.80	Peak	273.60	100	Horizontal	Pass
5**	11335.666	34.88	-18.91	54.0	-19.12	AV	273.60	100	Horizontal	Pass
6	15507.623	47.83	-16.96	74.0	-26.17	Peak	327.20	100	Horizontal	Pass
6**	15507.623	39.11	-16.96	54.0	-14.89	AV	327.20	100	Horizontal	Pass

TEST REPORT

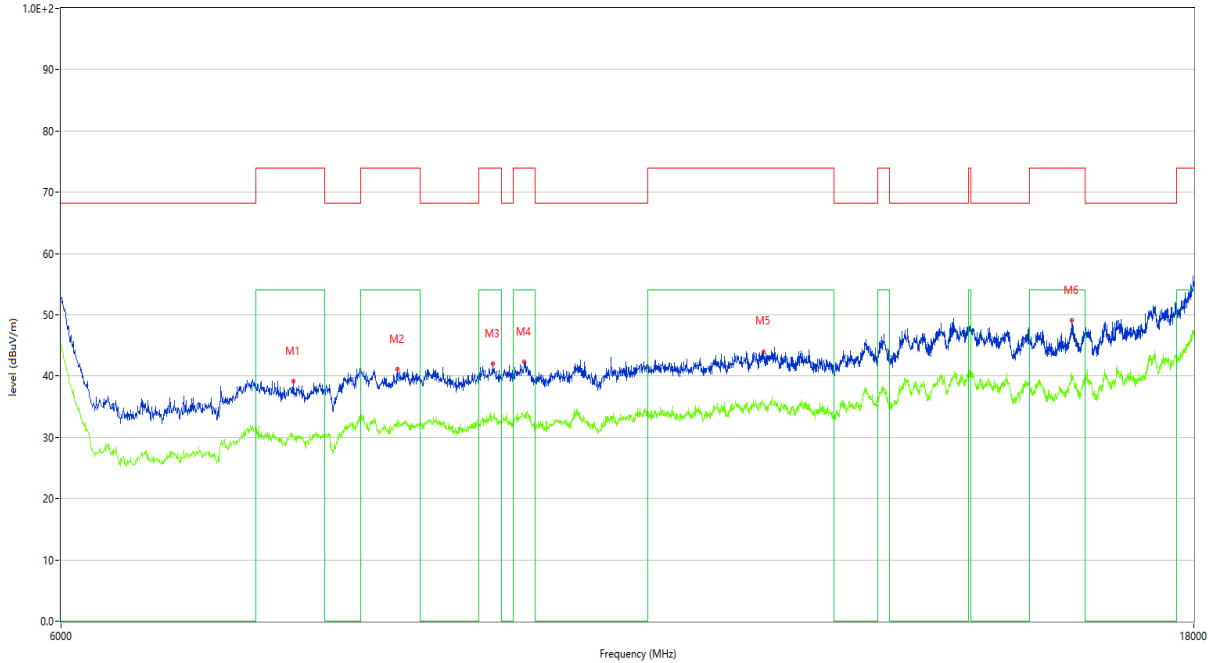
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 175 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7517.621	39.14	-24.61	74.0	-34.86	Peak	226.50	100	Vertical	Pass
1**	7517.621	30.13	-24.61	54.0	-23.87	AV	226.50	100	Vertical	Pass
2	8312.422	41.06	-22.46	74.0	-32.94	Peak	127.70	100	Vertical	Pass
2**	8312.422	32.71	-22.46	54.0	-21.29	AV	127.70	100	Vertical	Pass
3	9119.220	42.00	-23.03	74.0	-32.00	Peak	29.90	100	Vertical	Pass
3**	9119.220	33.08	-23.03	54.0	-20.92	AV	29.90	100	Vertical	Pass
4	9404.149	42.32	-21.70	74.0	-31.68	Peak	298.70	100	Vertical	Pass
4**	9404.149	33.61	-21.70	54.0	-20.39	AV	298.70	100	Vertical	Pass
5	11860.535	44.02	-18.74	74.0	-29.98	Peak	3.50	100	Vertical	Pass
5**	11860.535	35.24	-18.74	54.0	-18.76	AV	3.50	100	Vertical	Pass
6	15993.502	49.07	-15.49	74.0	-24.93	Peak	319.70	100	Vertical	Pass
6**	15993.502	40.56	-15.49	54.0	-13.44	AV	319.70	100	Vertical	Pass

TEST REPORT

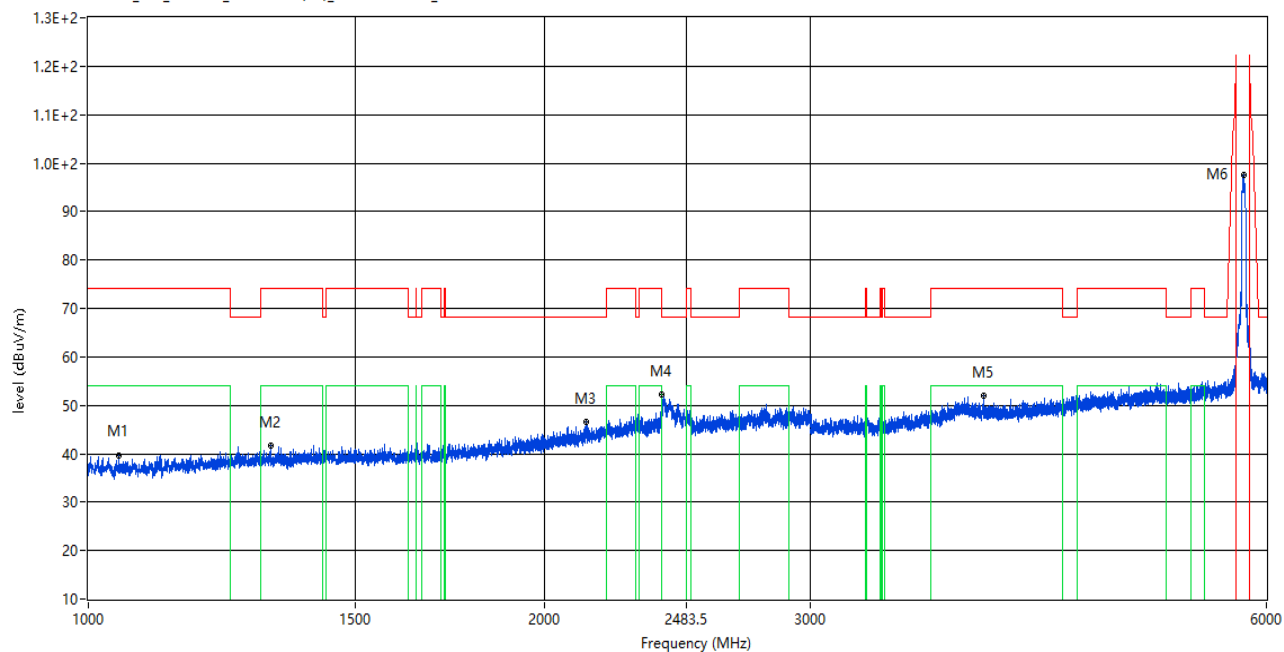
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 176 of 238

Figure 126: Spurious Emission, 1GHz – 10th Harmonic, 802.11ac(VHT40), 5795MHz
1GHz-6GHz, Horizontal

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1046.744	39.65	--	--	-9.91	74.0	--	54.0	-14.35	13.00	100	H	Pass
1318.710	41.60	--	--	-9.80	74.0	--	54.0	-12.40	3.00	100	H	Pass
2133.858	46.51	--	--	-5.02	68.2	--	--	-21.69	11.00	100	H	Pass
2392.576	52.15	--	--	2.34	68.2	--	--	-16.05	7.00	100	H	Pass
3902.512	51.94	--	--	0.85	74.0	--	54.0	-2.06	4.00	100	H	Pass
5796.400	97.56	--	--	6.91	--	--	--	--	15.00	100	H	Pass

TEST REPORT

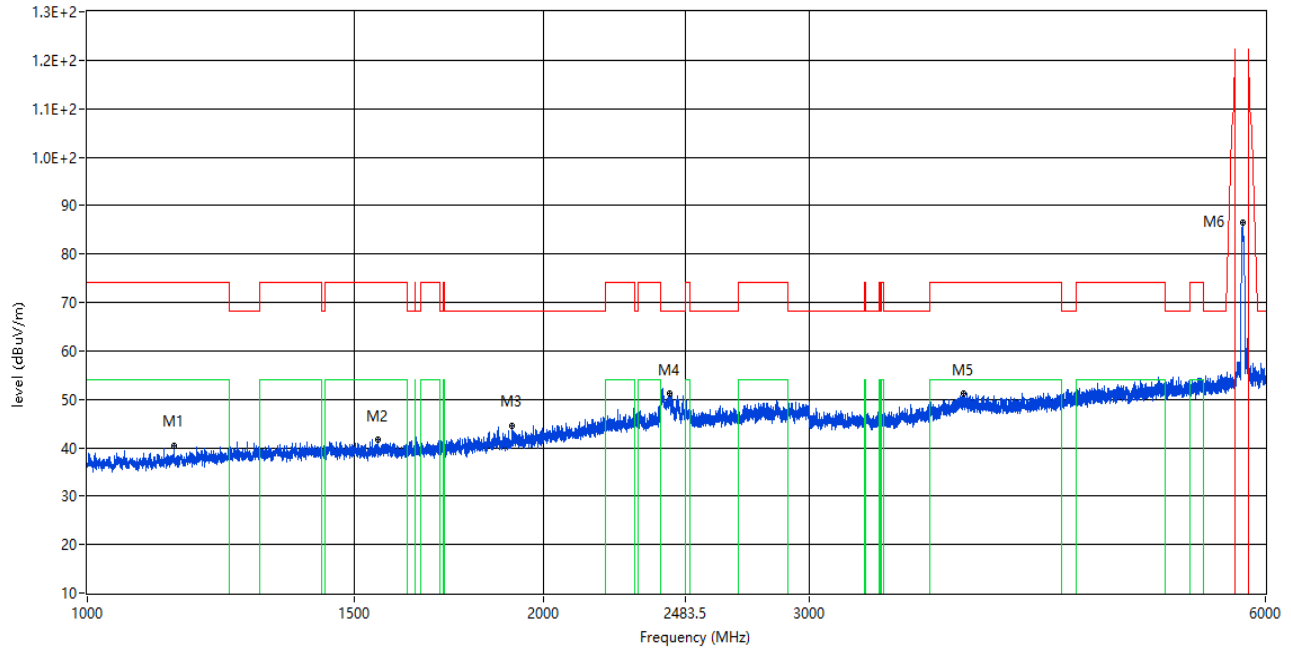
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 177 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1140.732	40.46	--	--	-10.27	74.0	--	54.0	-13.54	12.00	100	V	Pass
1554.431	41.55	--	--	-9.91	74.0	--	54.0	-12.45	0.00	100	V	Pass
1907.887	44.54	--	--	-6.86	68.2	--	--	-23.66	14.00	100	V	Pass
2425.072	51.21	--	--	1.19	68.2	--	--	-16.99	0.00	100	V	Pass
3790.401	51.26	--	--	0.73	74.0	--	54.0	-2.74	14.00	100	V	Pass
5796.775	86.60	--	--	6.89	--	--	--	--	8.00	100	V	Pass

TEST REPORT

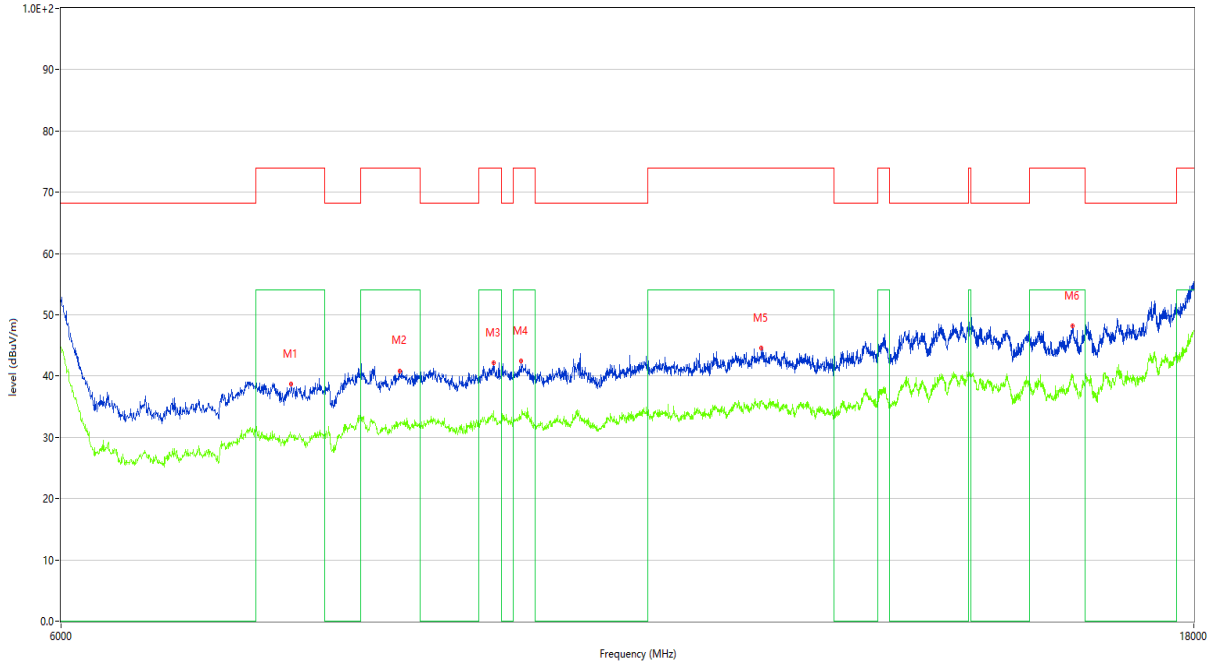
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 178 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7499.625	38.74	-24.41	74.0	-35.26	Peak	145.90	100	Horizontal	Pass
1**	7499.625	30.12	-24.41	54.0	-23.88	AV	145.90	100	Horizontal	Pass
2	8333.417	40.84	-22.34	74.0	-33.16	Peak	223.30	100	Horizontal	Pass
2**	8333.417	32.40	-22.34	54.0	-21.60	AV	223.30	100	Horizontal	Pass
3	9125.219	42.16	-23.02	74.0	-31.84	Peak	0.40	100	Horizontal	Pass
3**	9125.219	34.32	-23.02	54.0	-19.68	AV	0.40	100	Horizontal	Pass
4	9374.156	42.42	-22.24	74.0	-31.58	Peak	252.90	100	Horizontal	Pass
4**	9374.156	33.03	-22.24	54.0	-20.97	AV	252.90	100	Horizontal	Pass
5	11830.542	44.54	-18.63	74.0	-29.46	Peak	241.10	100	Horizontal	Pass
5**	11830.542	35.80	-18.63	54.0	-18.20	AV	241.10	100	Horizontal	Pass
6	16002.499	48.19	-15.33	74.0	-25.81	Peak	24.40	100	Horizontal	Pass
6**	16002.499	40.28	-15.33	54.0	-13.72	AV	24.40	100	Horizontal	Pass

TEST REPORT

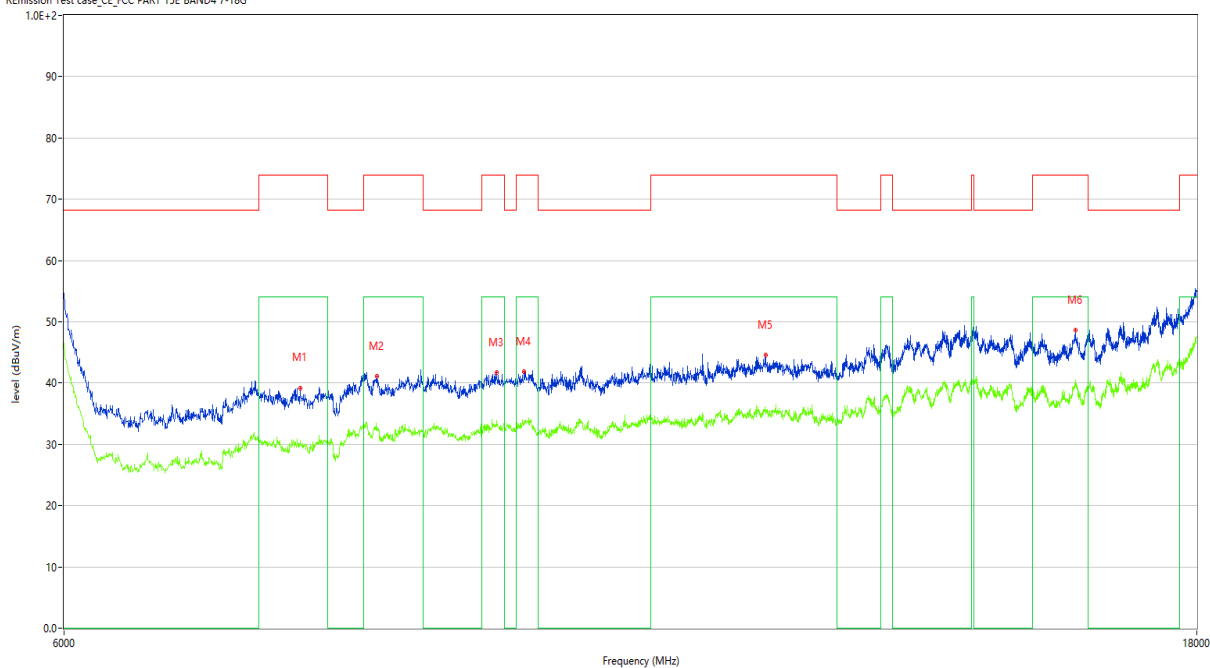
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 179 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7544.614	39.23	-24.91	74.0	-34.77	Peak	288.80	100	Vertical	Pass
1**	7544.614	30.53	-24.91	54.0	-23.47	AV	288.80	100	Vertical	Pass
2	8129.468	41.12	-22.45	74.0	-32.88	Peak	217.70	100	Vertical	Pass
2**	8129.468	32.86	-22.45	54.0	-21.14	AV	217.70	100	Vertical	Pass
3	9128.218	41.76	-23.02	74.0	-32.24	Peak	172.90	100	Vertical	Pass
3**	9128.218	33.05	-23.02	54.0	-20.95	AV	172.90	100	Vertical	Pass
4	9374.156	41.89	-22.24	74.0	-32.11	Peak	26.90	100	Vertical	Pass
4**	9374.156	33.74	-22.24	54.0	-20.26	AV	26.90	100	Vertical	Pass
5	11845.539	44.59	-18.68	74.0	-29.41	Peak	44.90	100	Vertical	Pass
5**	11845.539	34.89	-18.68	54.0	-19.11	AV	44.90	100	Vertical	Pass
6	15999.500	48.62	-15.29	74.0	-25.38	Peak	175.90	100	Vertical	Pass
6**	15999.500	39.52	-15.29	54.0	-14.48	AV	175.90	100	Vertical	Pass

TEST REPORT

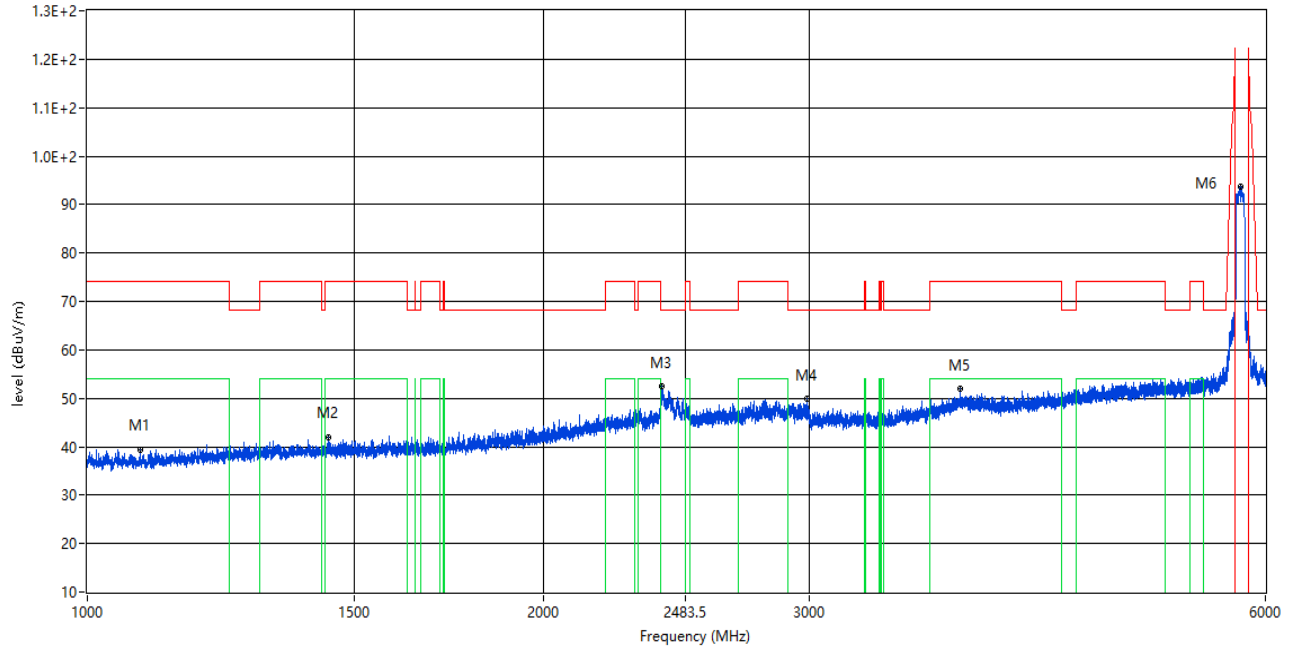
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 180 of 238

Figure 127: Spurious Emission, 1GHz – 10th Harmonic, 802.11ac(VHT80), 5775MHz
 1GHz-6GHz, Horizontal

REmission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1083.990	39.45	--	--	-10.18	74.0	--	54.0	-14.55	1.00	100	H	Pass
1443.445	41.98	--	--	-9.77	74.0	--	54.0	-12.02	14.00	100	H	Pass
2395.326	52.41	--	--	2.26	68.2	--	--	-15.79	2.00	100	H	Pass
2985.502	49.81	--	--	-0.44	68.2	--	--	-18.39	8.00	100	H	Pass
3774.653	51.96	--	--	1.18	74.0	--	54.0	-2.04	15.00	100	H	Pass
5777.653	93.63	--	--	6.50	--	--	--	--	14.00	100	H	Pass

TEST REPORT

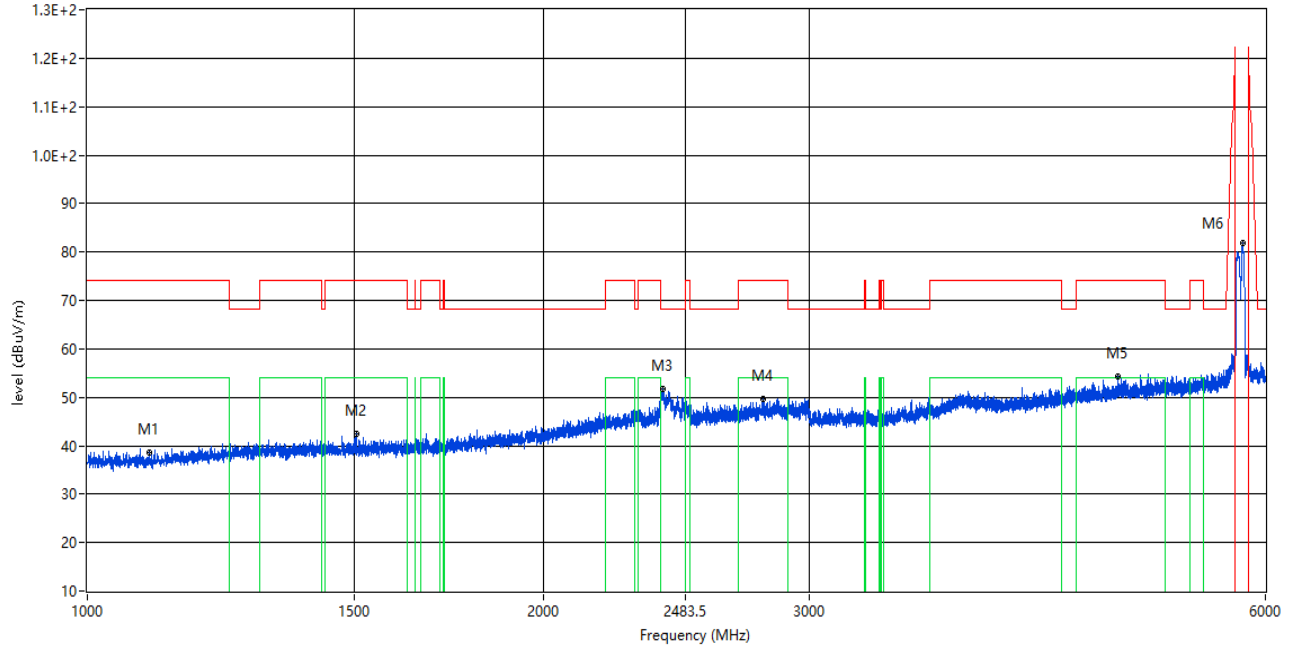
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 181 of 238

1GHz-6GHz, Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G)_1GHz-7GHz 5G_Band4



Frequency (MHz)	Peak Level (dBuV/m)	Q-peak Level (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	PK Limit (dBuV/m)	QP Limit (dBuV/m)	AV Limit (dBuV/m)	Over Limit (dB)	Table (o)	Height (cm)	ANT	Verdict
1098.238	38.48	--	--	-10.14	74.0	--	54.0	-15.52	1.00	100	V	Pass
1506.937	42.43	--	--	-10.04	74.0	--	54.0	-11.57	1.00	100	V	Pass
2400.075	51.69	--	--	2.08	68.2	--	--	-16.51	10.00	100	V	Pass
2794.776	49.57	--	--	-0.07	74.0	--	54.0	-4.43	10.00	100	V	Pass
4794.526	54.17	--	--	3.37	74.0	--	54.0	0.17	2.00	100	V	N/A
5797.900	81.77	--	--	6.84	--	--	--	--	7.00	100	V	Pass

TEST REPORT

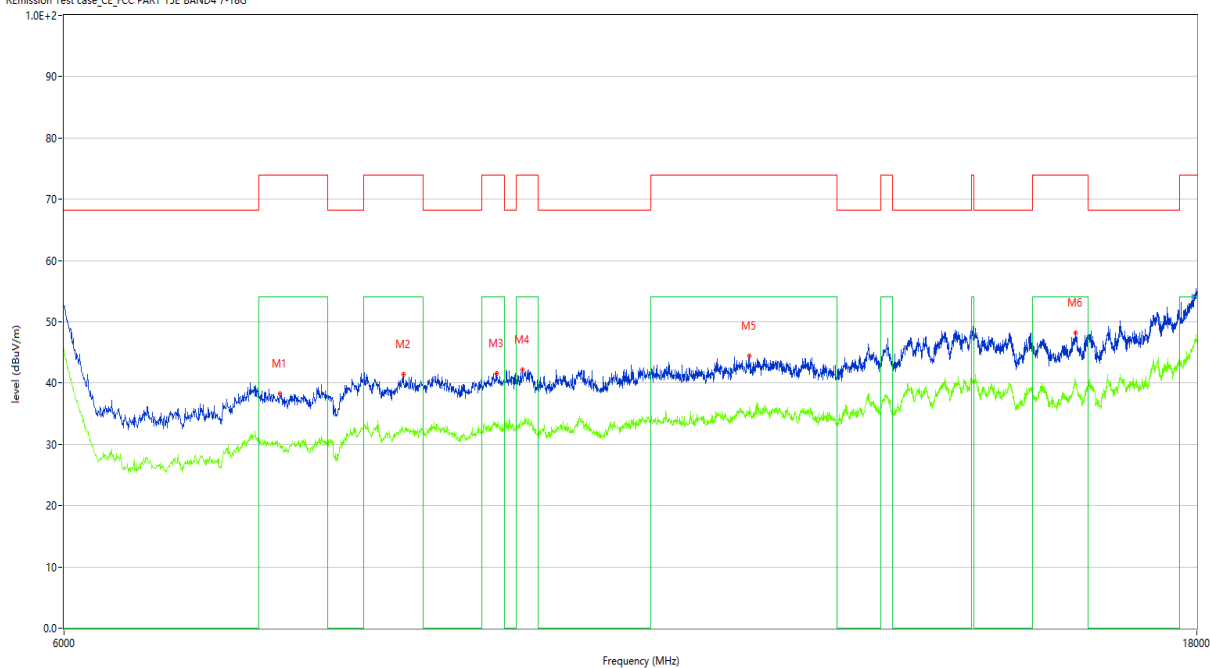
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 182 of 238

6GHz-18GHz, Horizontal

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7397.651	38.27	-25.13	74.0	-35.73	Peak	152.90	100	Horizontal	Pass
1**	7397.651	29.53	-25.13	54.0	-24.47	AV	152.90	100	Horizontal	Pass
2	8339.415	41.48	-22.31	74.0	-32.52	Peak	58.30	100	Horizontal	Pass
2**	8339.415	32.26	-22.31	54.0	-21.74	AV	58.30	100	Horizontal	Pass
3	9125.219	41.60	-23.02	74.0	-32.40	Peak	69.90	100	Horizontal	Pass
3**	9125.219	33.32	-23.02	54.0	-20.68	AV	69.90	100	Horizontal	Pass
4	9362.159	42.17	-22.52	74.0	-31.83	Peak	164.60	100	Horizontal	Pass
4**	9362.159	33.39	-22.52	54.0	-20.61	AV	164.60	100	Horizontal	Pass
5	11659.585	44.41	-18.65	74.0	-29.59	Peak	259.20	100	Horizontal	Pass
5**	11659.585	35.01	-18.65	54.0	-18.99	AV	259.20	100	Horizontal	Pass
6	16002.499	48.23	-15.33	74.0	-25.77	Peak	135.20	100	Horizontal	Pass
6**	16002.499	40.28	-15.33	54.0	-13.72	AV	135.20	100	Horizontal	Pass

TEST REPORT

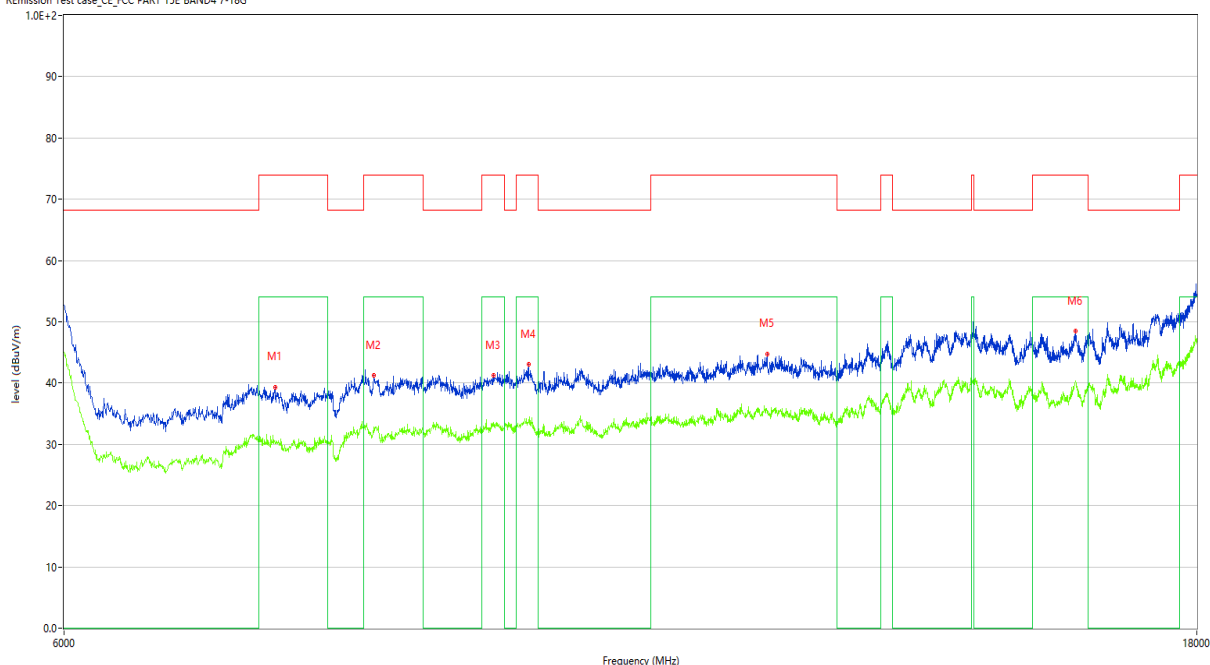
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 183 of 238

6GHz-18GHz, Vertical

REmission Test case_CE_FCC PART 15E BAND4 7-18G



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	7361.660	39.38	-25.02	74.0	-34.62	Peak	152.30	100	Vertical	Pass
1**	7361.660	30.33	-25.02	54.0	-23.67	AV	152.30	100	Vertical	Pass
2	8105.474	41.31	-22.34	74.0	-32.69	Peak	286.30	100	Vertical	Pass
2**	8105.474	31.89	-22.34	54.0	-22.11	AV	286.30	100	Vertical	Pass
3	9101.225	41.21	-23.06	74.0	-32.79	Peak	318.60	100	Vertical	Pass
3**	9101.225	33.57	-23.06	54.0	-20.43	AV	318.60	100	Vertical	Pass
4	9413.147	43.03	-21.83	74.0	-30.97	Peak	53.60	100	Vertical	Pass
4**	9413.147	33.75	-21.83	54.0	-20.25	AV	53.60	100	Vertical	Pass
5	11866.533	44.80	-18.76	74.0	-29.20	Peak	191.40	100	Vertical	Pass
5**	11866.533	35.22	-18.76	54.0	-18.78	AV	191.40	100	Vertical	Pass
6	15999.500	48.53	-15.29	74.0	-25.47	Peak	297.80	100	Vertical	Pass
6**	15999.500	40.18	-15.29	54.0	-13.82	AV	297.80	100	Vertical	Pass

TEST REPORT

Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 184 of 238

4.1.8 Band Edge (Restricted-band band-edge)

RESULT:

PASS

Test standard	:	FCC Part 15.407(b) RSS-247 6.2
Requirement	:	ANSI C63.10-2013, KDB 789033
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

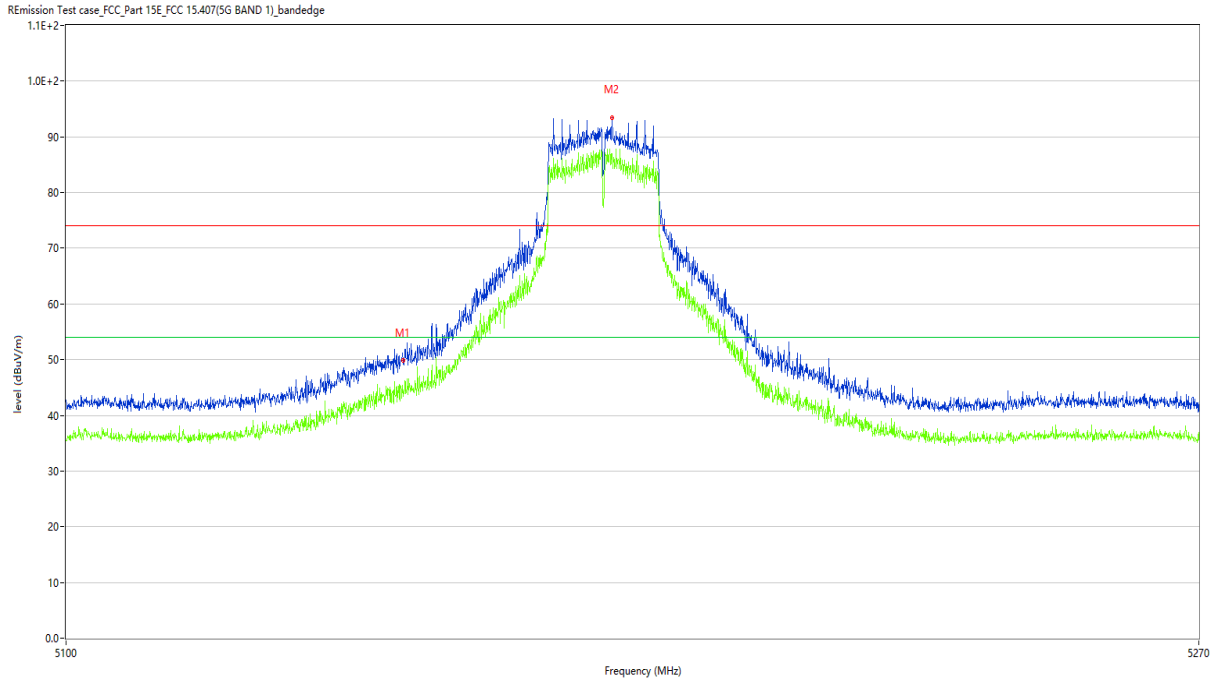
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 185 of 238

Figure 128: Band Edge (Restricted-band band-edge), 802.11a, 5180MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	50.04	4.64	74.0	-23.96	Peak	180.86	100	H	Pass
1**	5150.000	44.16	4.64	54.0	-9.84	AV	180.86	100	H	Pass
2	5181.250	93.40	4.27	74.0	19.40	Peak	173.70	100	Horizontal	N/A
2**	5181.250	86.99	4.27	54.0	32.99	AV	173.70	100	Horizontal	N/A

TEST REPORT

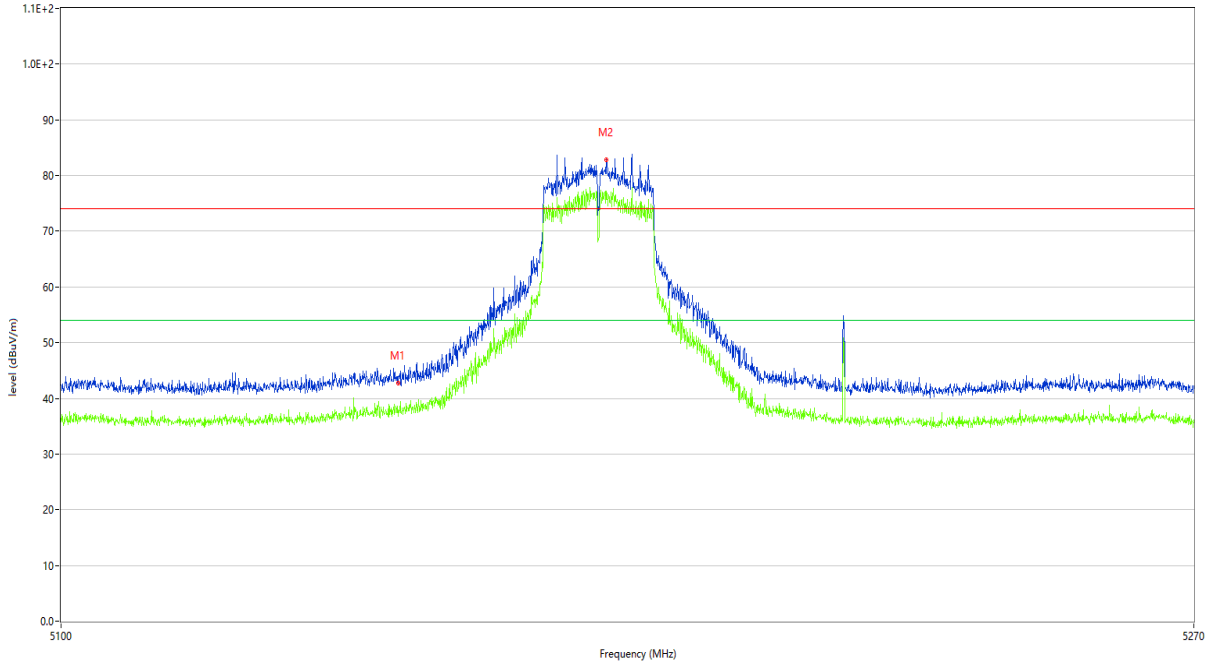
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 186 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G BAND 1)_bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	42.76	4.64	74.0	-31.24	Peak	115.30	100	V	Pass
1**	5150.000	36.92	4.64	54.0	-17.08	AV	115.30	100	V	Pass
2	5181.182	82.76	4.27	74.0	8.76	Peak	240.10	100	Vertical	N/A
2**	5181.182	77.28	4.27	54.0	23.28	AV	240.10	100	Vertical	N/A

TEST REPORT

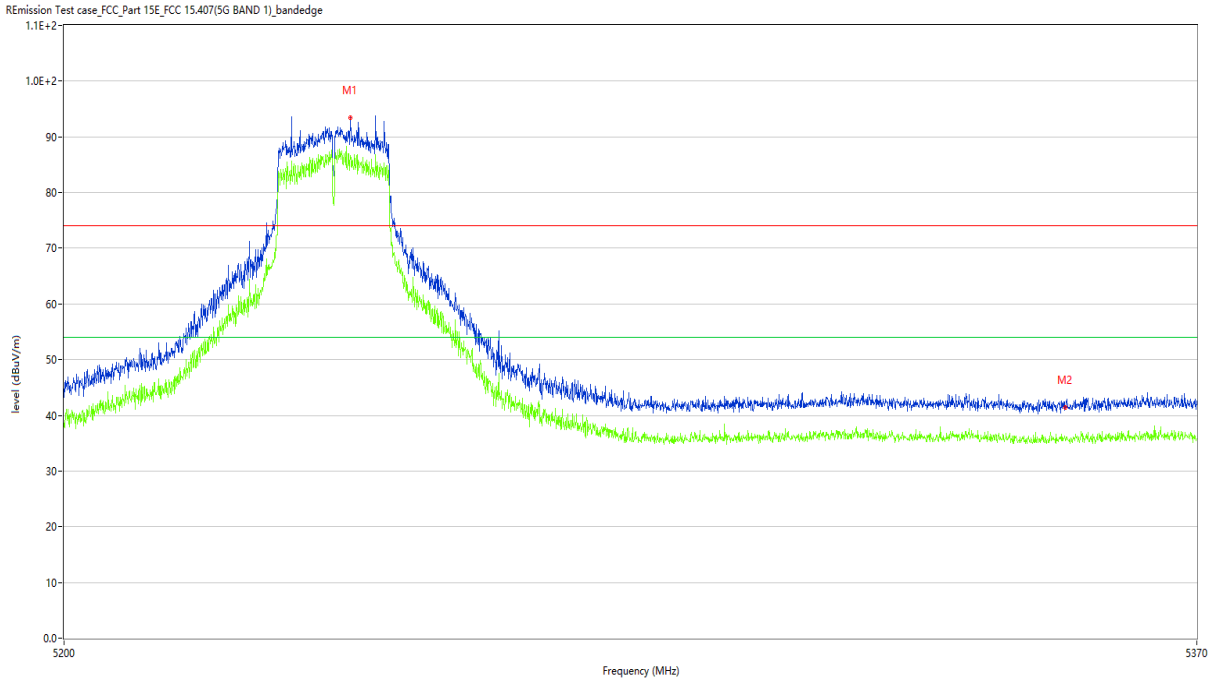
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 187 of 238

Figure 129: Band Edge (Restricted-band band-edge), 802.11a, 5240MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5242.457	93.37	4.30	74.0	19.37	Peak	188.90	100	Horizontal	N/A
1**	5242.457	86.59	4.30	54.0	32.59	AV	188.90	100	Horizontal	N/A
2	5350.000	41.25	4.43	74.0	-32.75	Peak	131.34	100	H	Pass
2**	5350.000	35.63	4.43	54.0	-18.37	AV	131.34	100	H	Pass

TEST REPORT

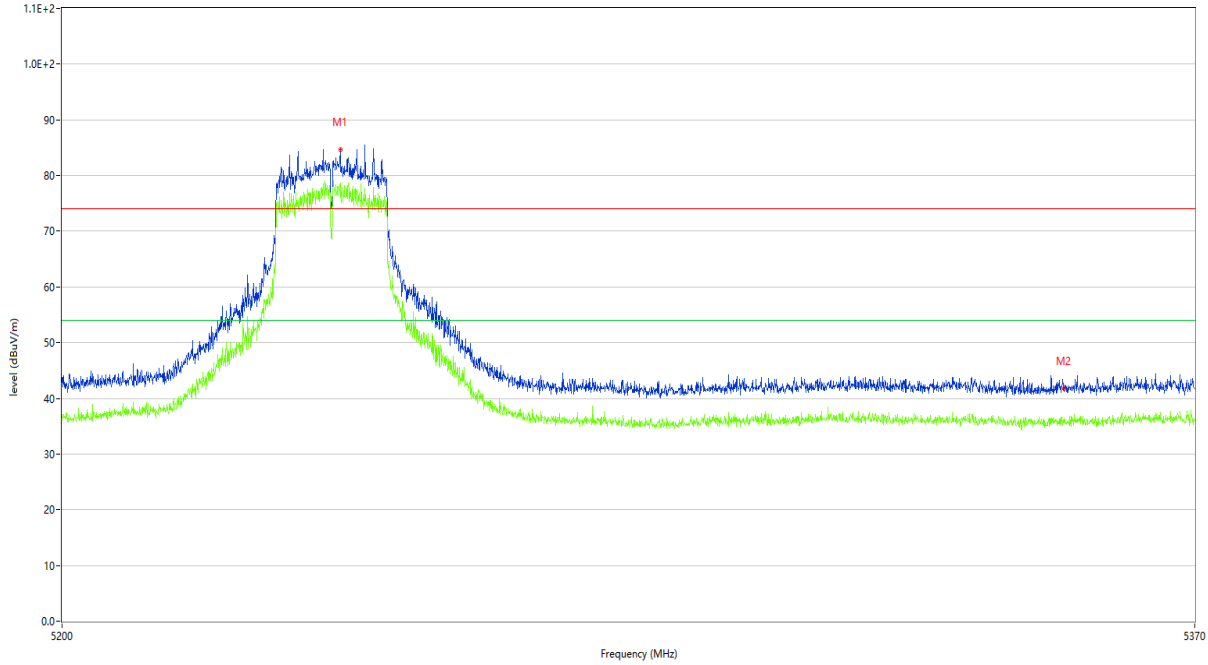
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 188 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G BAND 1)_bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5241.242	84.70	4.20	74.0	10.70	Peak	7.10	100	Vertical	N/A
1**	5241.242	78.67	4.20	54.0	24.67	AV	7.10	100	Vertical	N/A
2	5350.000	41.88	4.43	74.0	-32.12	Peak	139.08	100	V	Pass
2**	5350.000	35.74	4.43	54.0	-18.26	AV	139.08	100	V	Pass

TEST REPORT

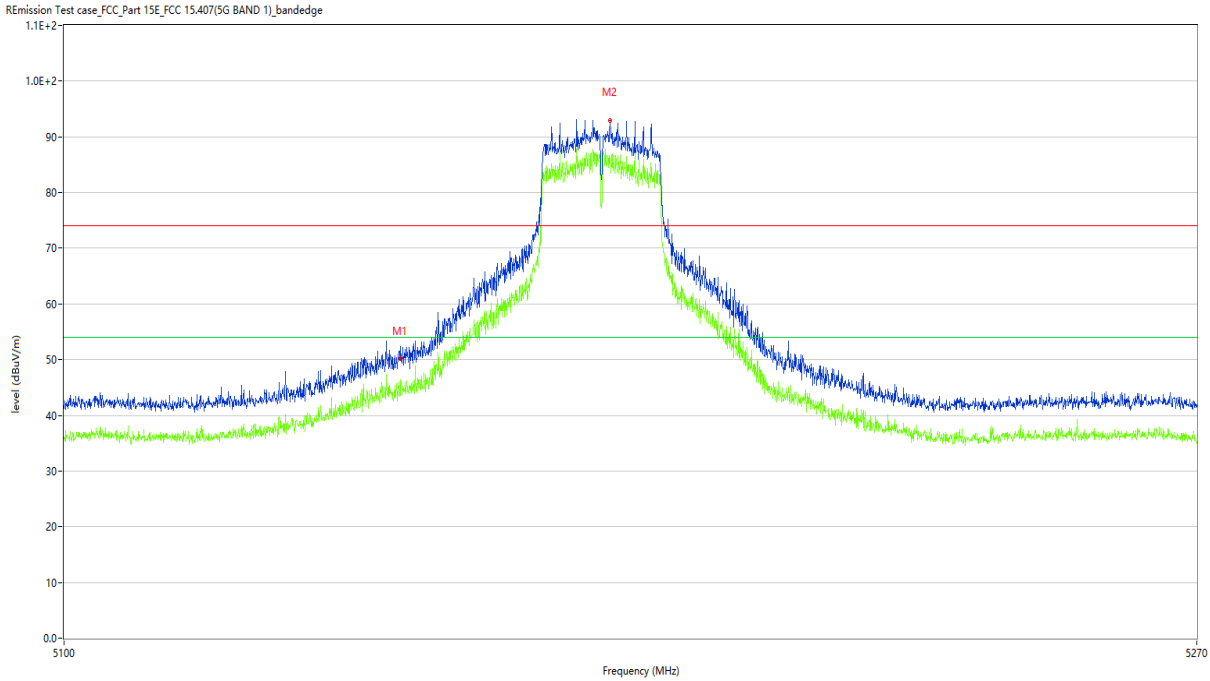
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 189 of 238

Figure 130: Band Edge (Restricted-band band-edge), 802.11n(HT20), 5180MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	50.15	4.64	74.0	-23.85	Peak	190.66	100	Horizontal	Pass
1**	5150.000	45.12	4.64	54.0	-8.88	AV	190.66	100	Horizontal	Pass
2	5181.250	93.01	4.27	74.0	19.01	Peak	175.10	100	Horizontal	N/A
2**	5181.250	85.84	4.27	54.0	31.84	AV	175.10	100	Horizontal	N/A

TEST REPORT

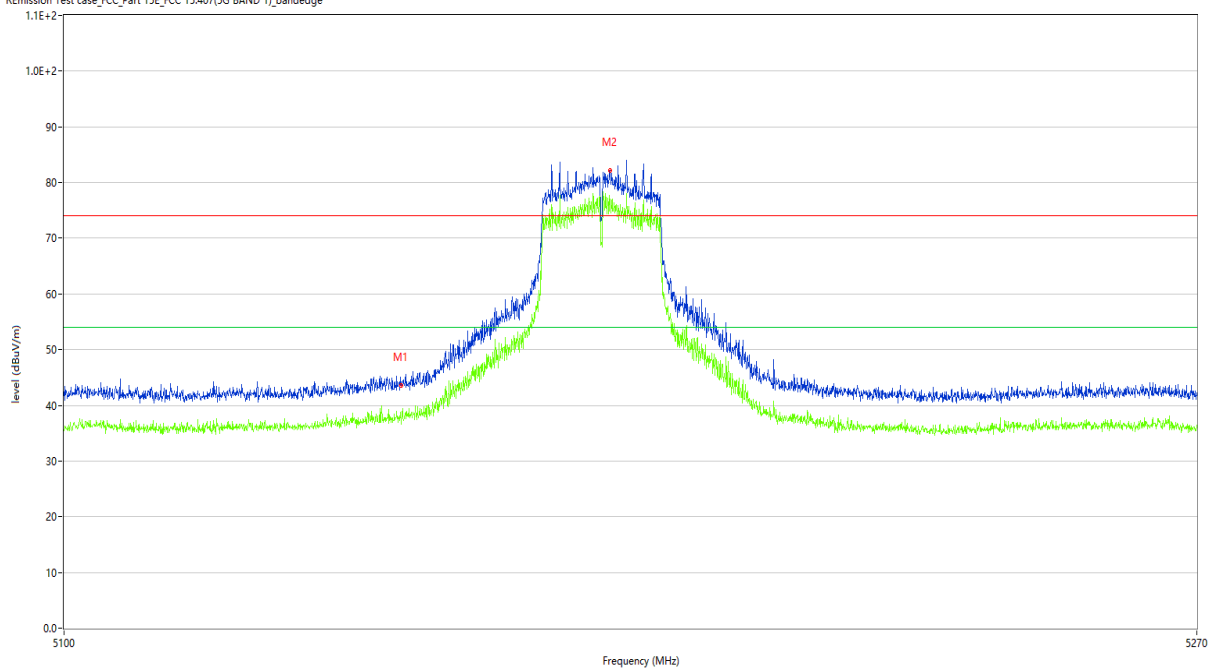
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 190 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G BAND 1)_bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	43.65	4.64	74.0	-30.35	Peak	210.62	100	V	Pass
1**	5150.000	36.82	4.64	54.0	-17.18	AV	210.62	100	V	Pass
2	5181.250	82.11	4.27	74.0	8.11	Peak	158.10	100	Vertical	N/A
2**	5181.250	76.72	4.27	54.0	22.72	AV	158.10	100	Vertical	N/A

TEST REPORT

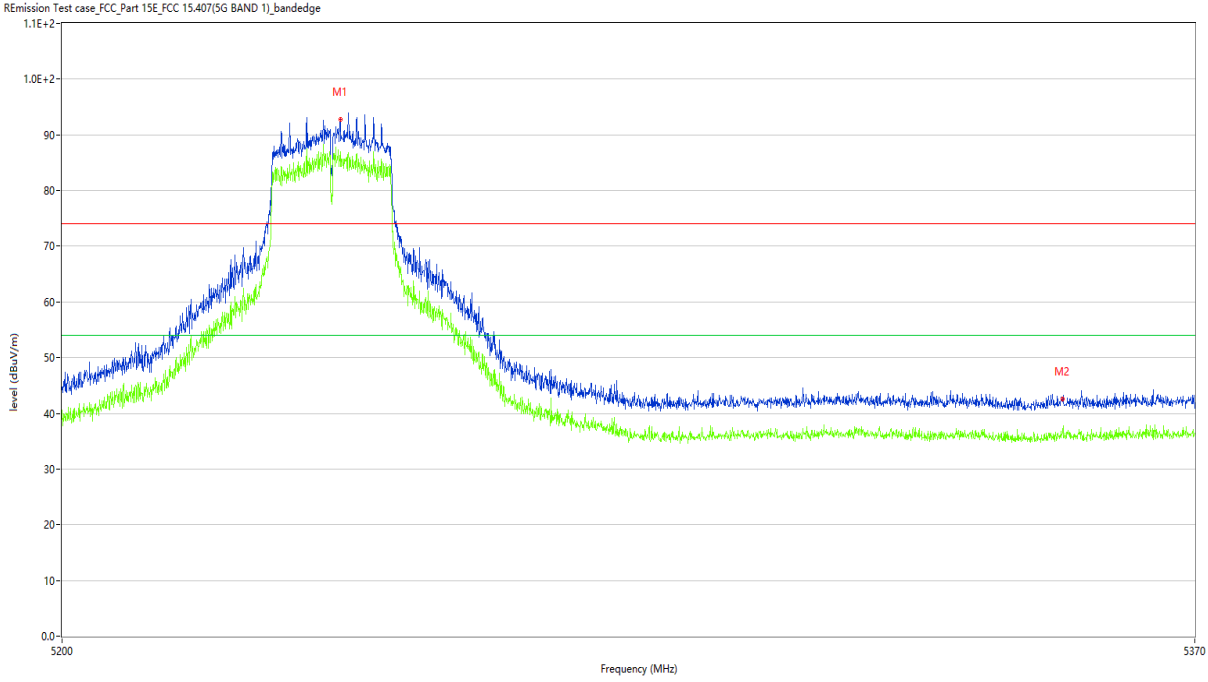
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 191 of 238

Figure 131: Band Edge (Restricted-band band-edge), 802.11n(HT20), 5240MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5241.242	92.69	4.20	74.0	18.69	Peak	175.40	100	Horizontal	N/A
1**	5241.242	86.94	4.20	54.0	32.94	AV	175.40	100	Horizontal	N/A
2	5350.000	42.44	4.43	74.0	-31.56	Peak	153.33	100	H	Pass
2**	5350.000	36.43	4.43	54.0	-17.57	AV	153.33	100	H	Pass

TEST REPORT

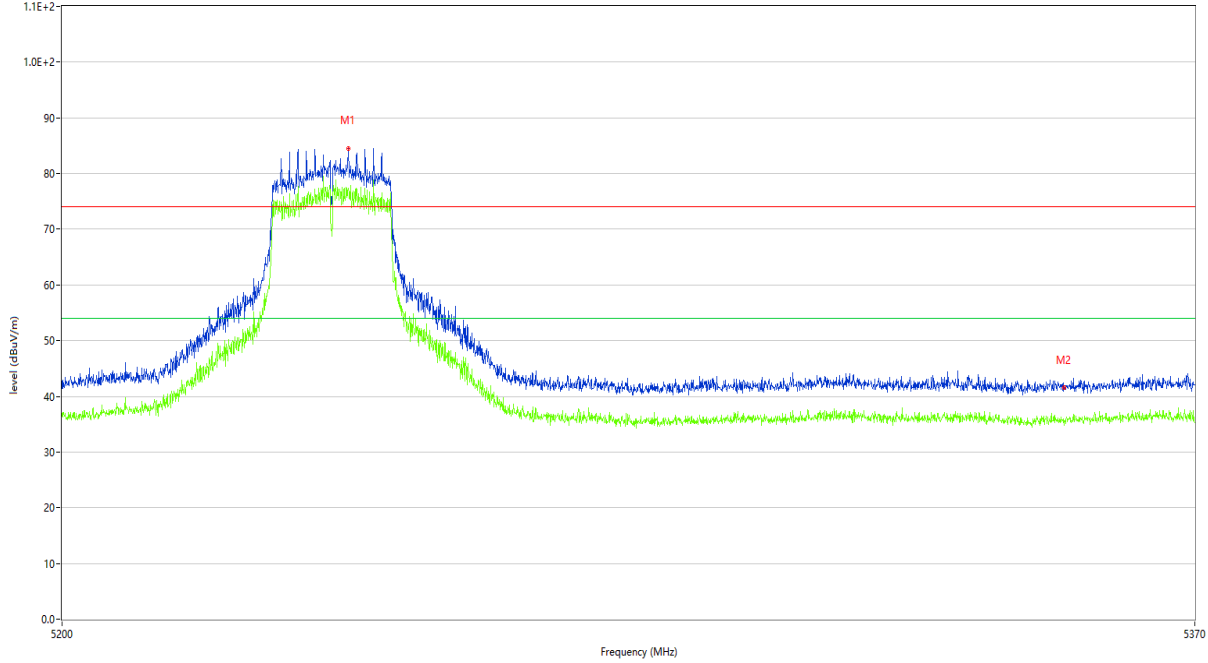
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 192 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G BAND 1)_bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5242.457	84.43	4.30	74.0	10.43	Peak	157.80	100	Vertical	N/A
1**	5242.457	77.42	4.30	54.0	23.42	AV	157.80	100	Vertical	N/A
2	5350.000	41.50	4.43	74.0	-32.50	Peak	170.25	100	V	Pass
2**	5350.000	35.86	4.43	54.0	-18.14	AV	170.25	100	V	Pass

TEST REPORT

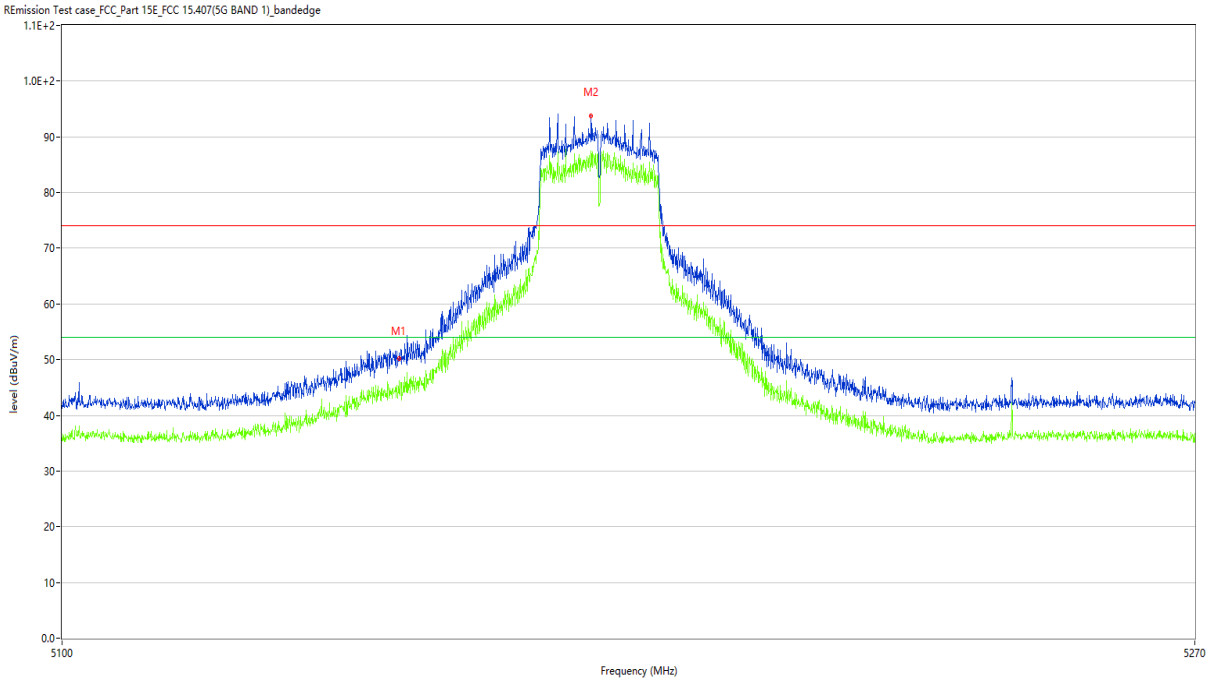
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 193 of 238

Figure 132: Band Edge (Restricted-band band-edge), 802.11ac(VHT20), 5180MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	50.13	4.64	74.0	-23.87	Peak	186.79	100	H	Pass
1**	5150.000	46.10	4.64	54.0	-7.90	AV	186.79	100	H	Pass
2	5178.685	93.80	4.28	74.0	19.80	Peak	192.80	100	Horizontal	N/A
2**	5178.685	87.52	4.28	54.0	33.52	AV	192.80	100	Horizontal	N/A

TEST REPORT

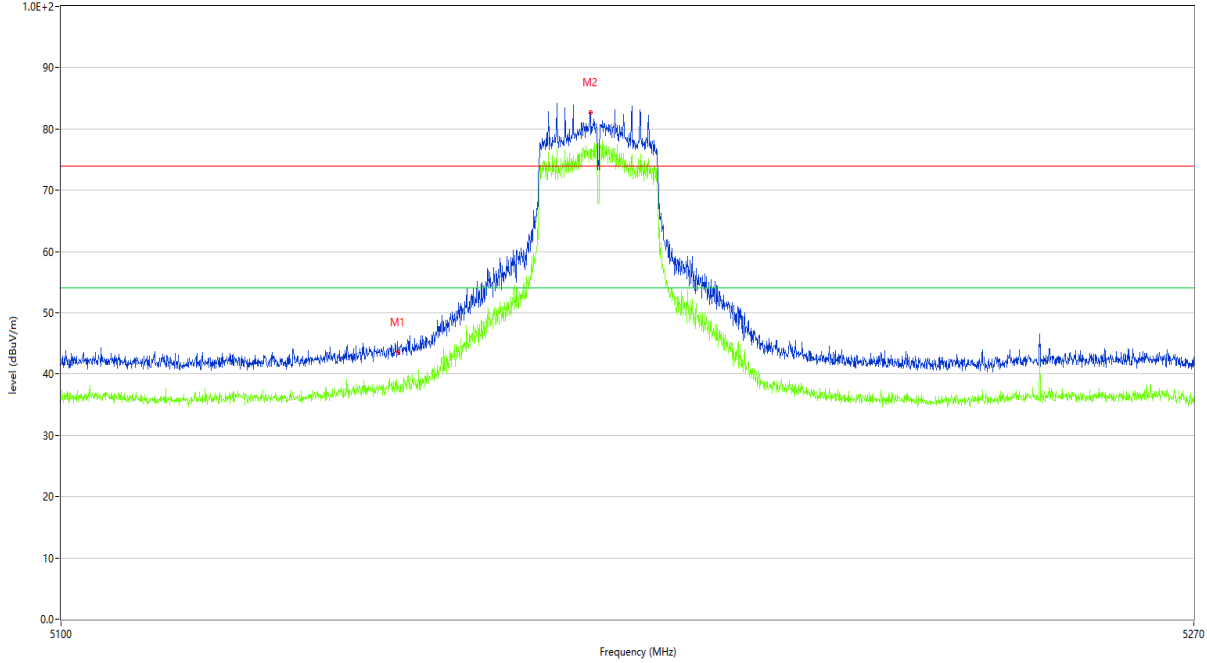
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 194 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G BAND 1)_bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	43.63	4.64	74.0	-30.37	Peak	1.93	100	V	Pass
1**	5150.000	38.15	4.64	54.0	-15.85	AV	1.93	100	V	Pass
2	5178.753	82.74	4.28	74.0	8.74	Peak	2.20	100	Vertical	N/A
2**	5178.753	76.71	4.28	54.0	22.71	AV	2.20	100	Vertical	N/A

TEST REPORT

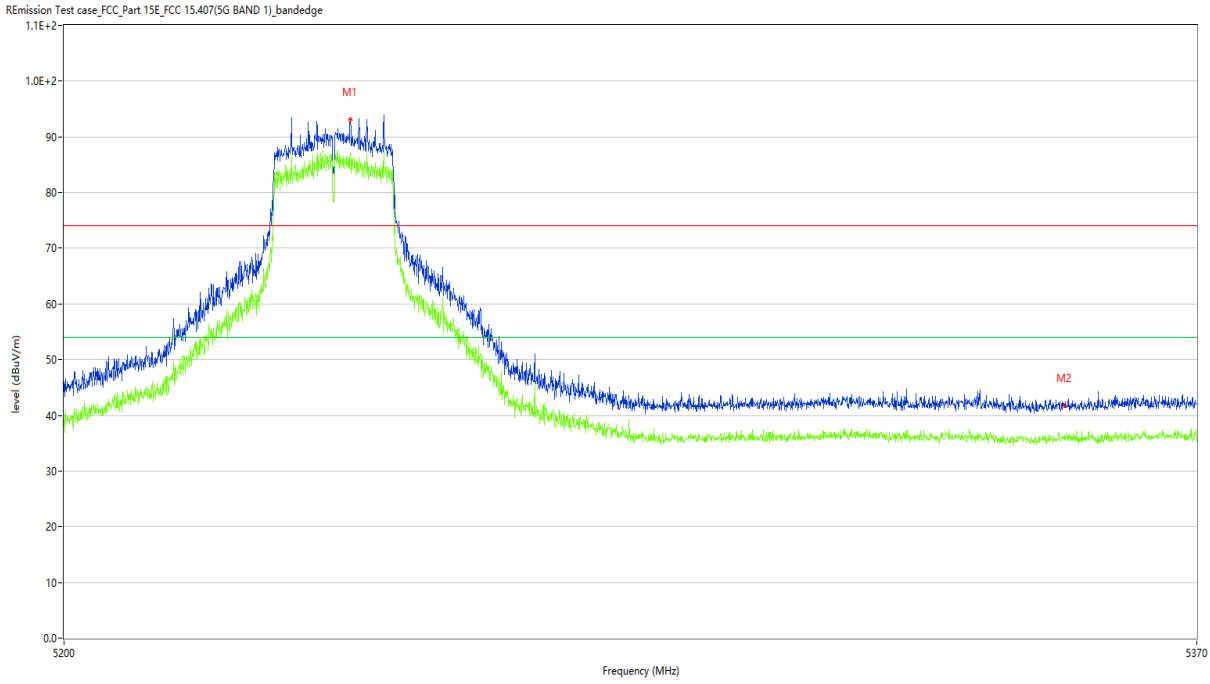
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 195 of 238

Figure 133: Band Edge (Restricted-band band-edge), 802.11ac(VHT20), 5240MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5242.457	93.07	4.30	74.0	19.07	Peak	196.90	100	Horizontal	N/A
1**	5242.457	87.21	4.30	54.0	33.21	AV	196.90	100	Horizontal	N/A
2	5350.000	41.86	4.43	74.0	-32.14	Peak	250.57	100	H	Pass
2**	5350.000	35.83	4.43	54.0	-18.17	AV	250.57	100	H	Pass

TEST REPORT

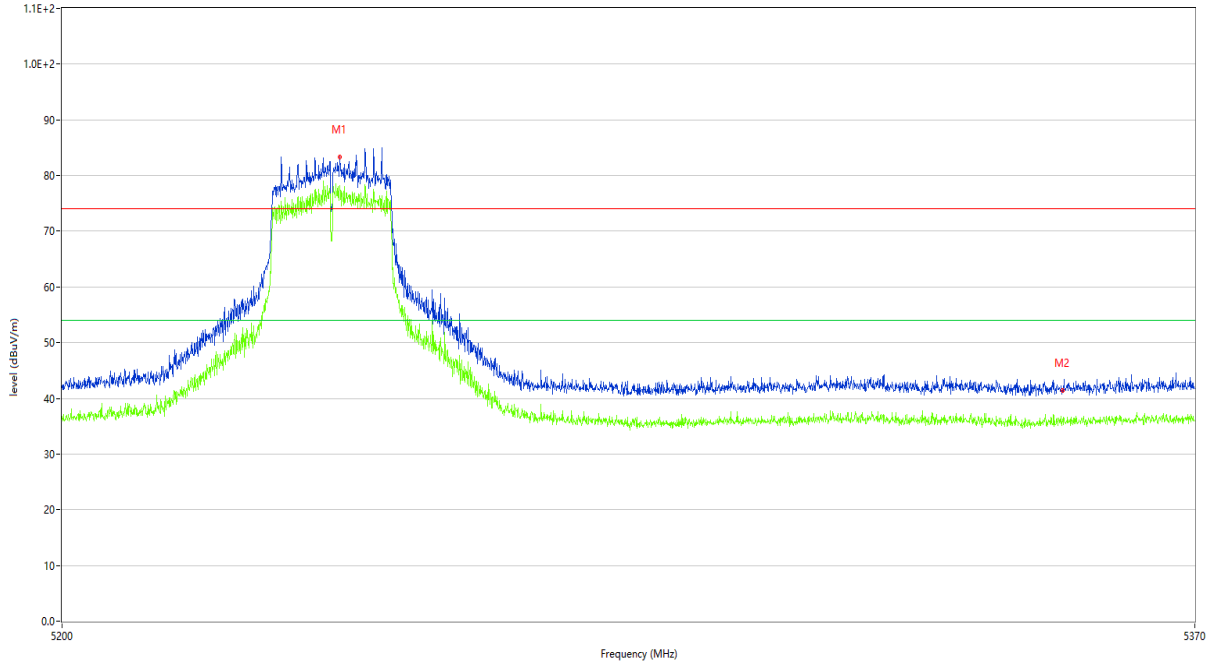
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 196 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G BAND 1)_bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5241.175	83.33	4.20	74.0	9.33	Peak	167.30	100	Vertical	N/A
1**	5241.175	78.25	4.20	54.0	24.25	AV	167.30	100	Vertical	N/A
2	5350.000	41.55	4.43	74.0	-32.45	Peak	196.20	100	V	Pass
2**	5350.000	35.80	4.43	54.0	-18.20	AV	196.20	100	V	Pass

TEST REPORT

Report No.: SHE19080042-02IE

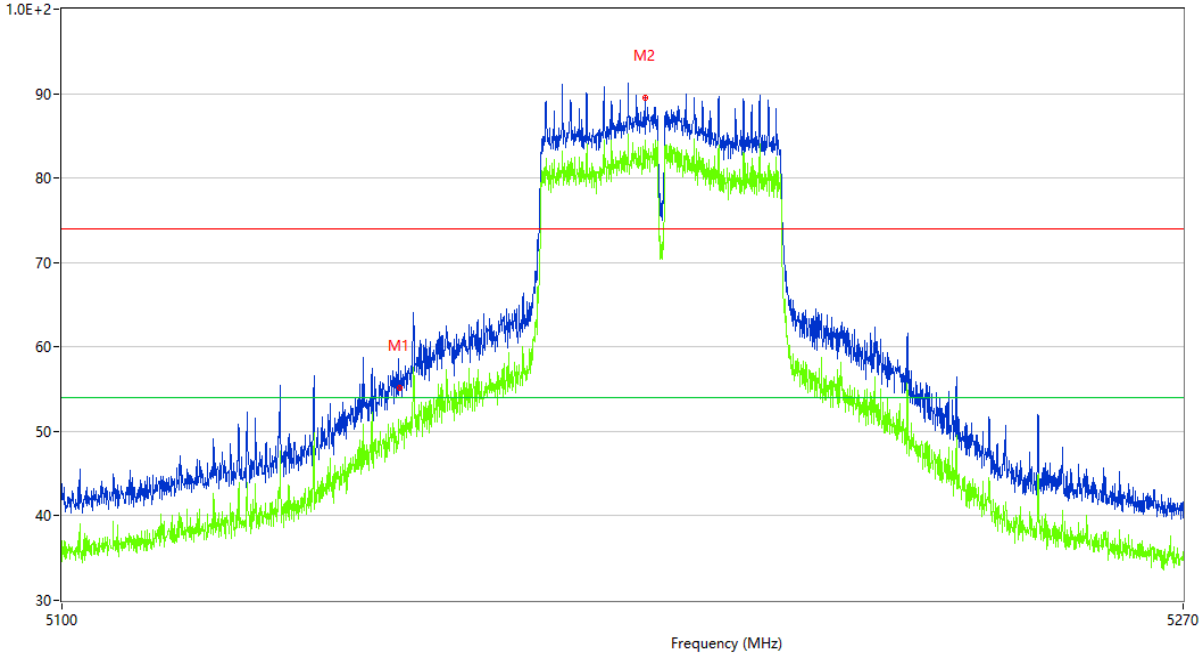
Date: 2019-11-01

Page 197 of 238

Figure 134: Band Edge (Restricted-band band-edge), 802.11n(HT40), 5190MHz

Horizontal

REmission Test case_FCC_Part 15E_FCC 15.407(5G BAND 1)_bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	55.12	1.71	74.0	-18.88	Peak	193.88	100	H	Pass
1**	5150.000	48.69	1.71	54.0	-5.31	AV	193.88	100	H	Pass
2	5187.688	89.52	1.67	74.0	15.52	Peak	66.70	100	Horizontal	N/A
2**	5187.688	84.41	1.67	54.0	30.41	AV	66.70	100	Horizontal	N/A

TEST REPORT

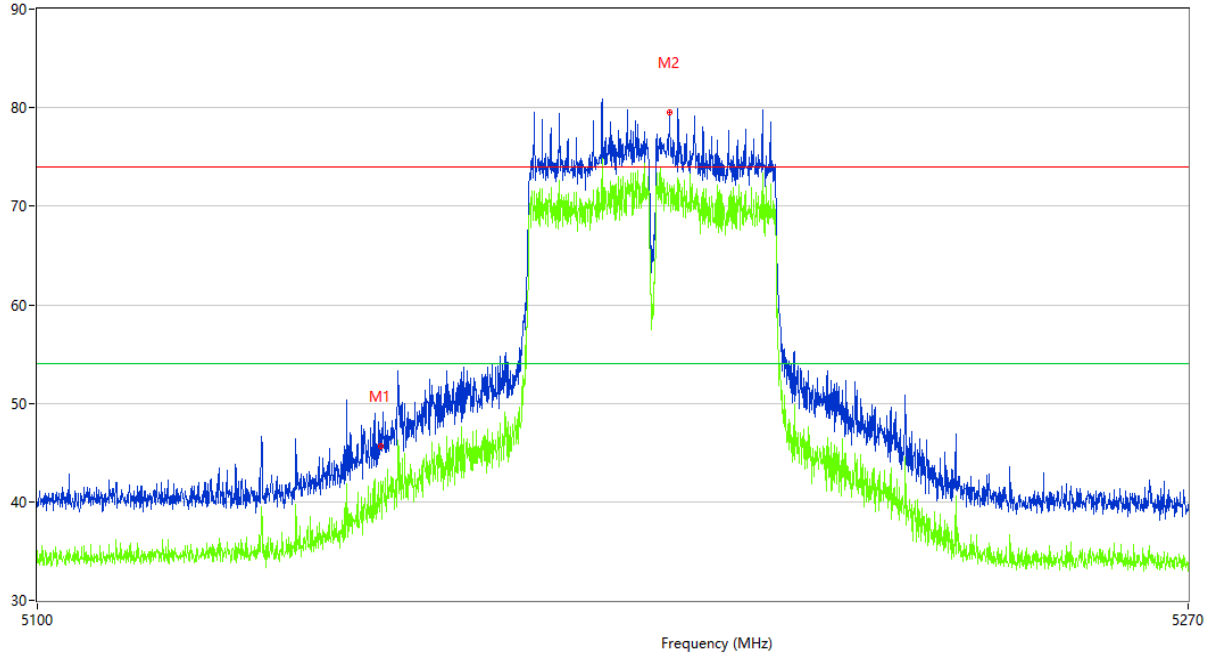
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 198 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G BAND 1)_bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	45.83	1.71	74.0	-28.17	Peak	303.33	100	V	Pass
1**	5150.000	39.21	1.71	54.0	-14.79	AV	303.33	100	V	Pass
2	5192.657	79.56	1.67	74.0	5.56	Peak	237.80	100	Vertical	N/A
2**	5192.657	71.65	1.67	54.0	17.65	AV	237.80	100	Vertical	N/A

TEST REPORT

Report No.: SHE19080042-02IE

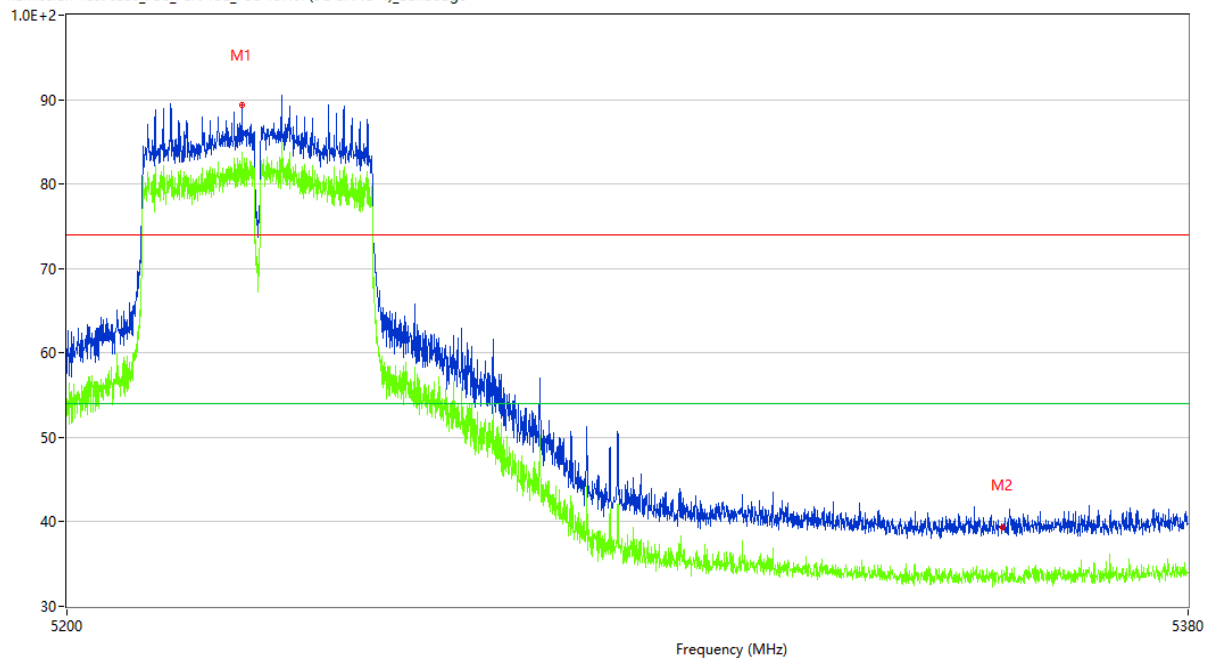
Date: 2019-11-01

Page 199 of 238

Figure 135: Band Edge (Restricted-band band-edge), 802.11n(HT40), 5230MHz

Horizontal

REmission Test case_FCC_Part 15E_FCC 15.407(5G BAND 1)_bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5227.718	89.37	1.60	74.0	15.37	Peak	204.70	100	Horizontal	N/A
1**	5227.718	83.26	1.60	54.0	29.26	AV	204.70	100	Horizontal	N/A
2	5350.000	39.39	1.46	74.0	-34.61	Peak	113.27	100	H	Pass
2**	5350.000	34.00	1.46	54.0	-20.00	AV	113.27	100	H	Pass

TEST REPORT

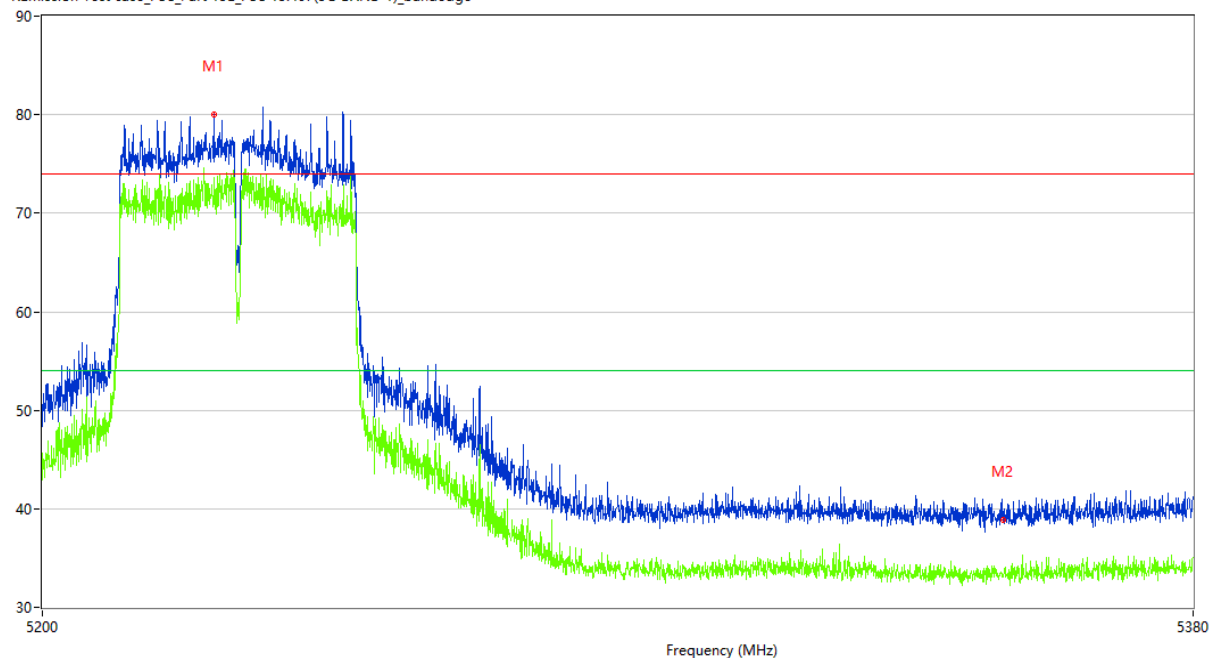
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 200 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G BAND 1)_bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5226.388	80.08	1.61	74.0	6.08	Peak	48.80	100	Vertical	N/A
1**	5226.388	72.55	1.61	54.0	18.55	AV	48.80	100	Vertical	N/A
2	5350.000	38.96	1.46	74.0	-35.04	Peak	143.70	100	V	Pass
2**	5350.000	33.68	1.46	54.0	-20.32	AV	143.70	100	V	Pass

TEST REPORT

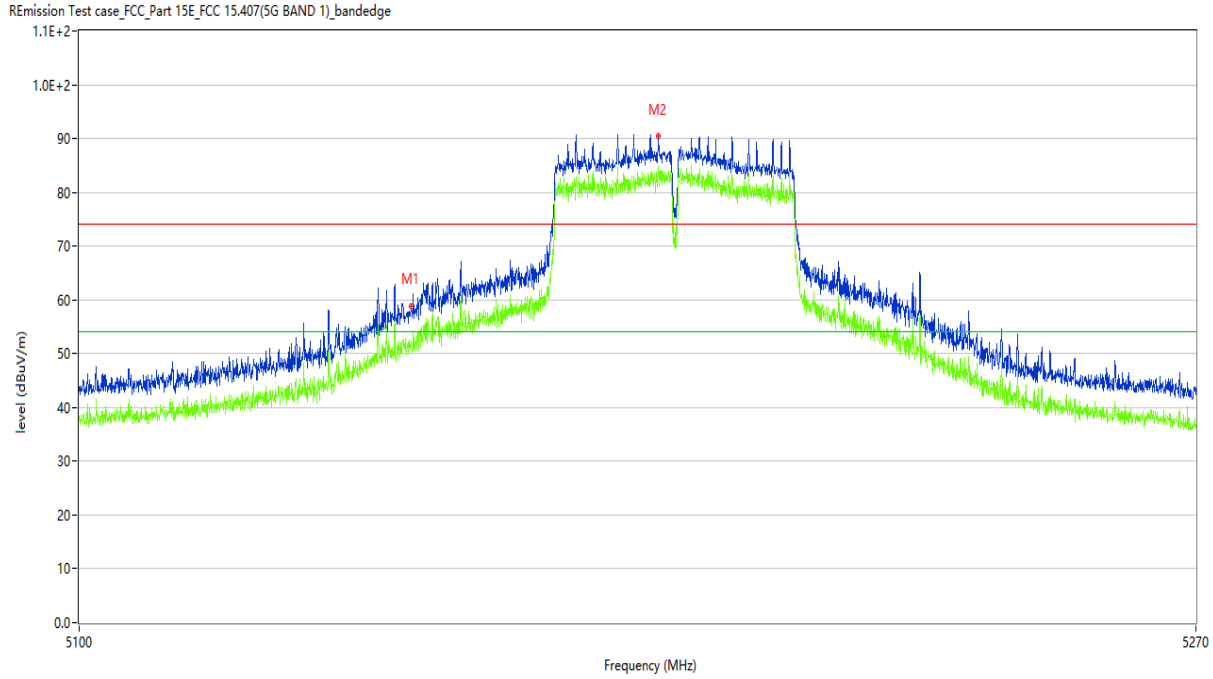
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 201 of 238

Figure 136: Band Edge (Restricted-band band-edge), 802.11ac(VHT40), 5190MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	58.87	4.64	74.0	-15.13	Peak	184.52	100	H	Pass
1**	5150.000	52.18	4.64	54.0	-1.82	AV	184.52	100	H	Pass
2	5187.526	90.42	4.12	74.0	16.42	Peak	189.50	100	Horizontal	N/A
2**	5187.526	84.79	4.12	54.0	30.79	AV	189.50	100	Horizontal	N/A

TEST REPORT

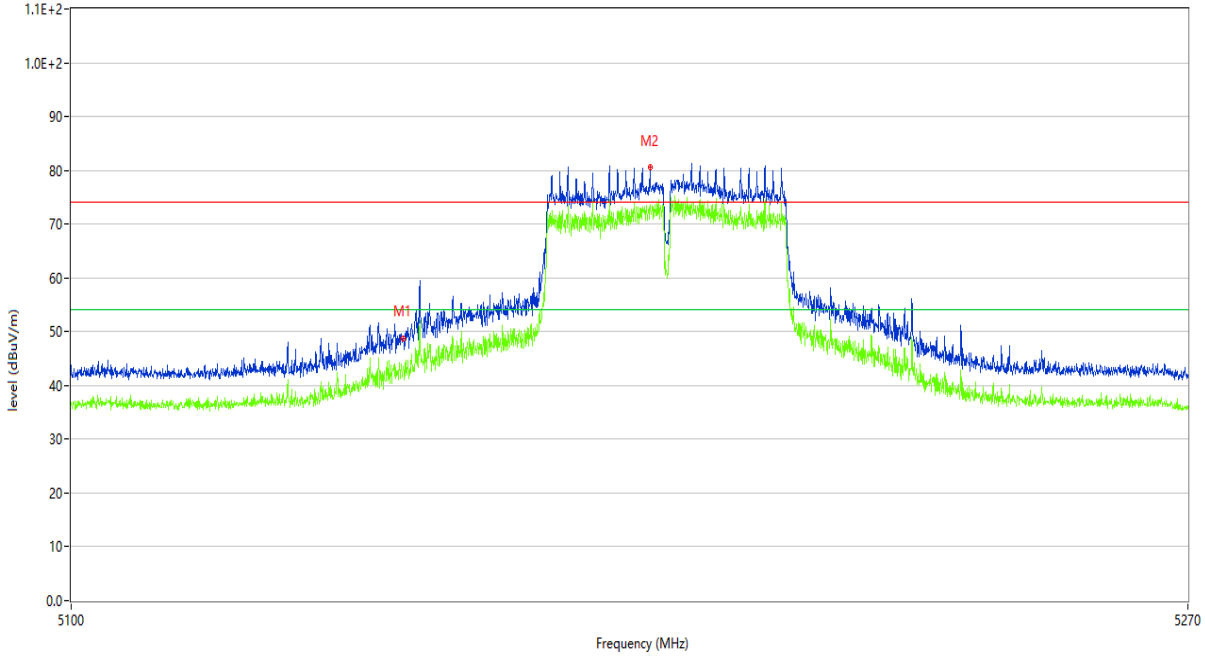
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 202 of 238

Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G BAND 1)_bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	48.82	4.64	74.0	-25.18	Peak	21.34	100	V	Pass
1**	5150.000	43.45	4.64	54.0	-10.55	AV	21.34	100	V	Pass
2	5187.458	80.59	4.13	74.0	6.59	Peak	6.40	100	Vertical	N/A
2**	5187.458	73.62	4.13	54.0	19.62	AV	6.40	100	Vertical	N/A

TEST REPORT

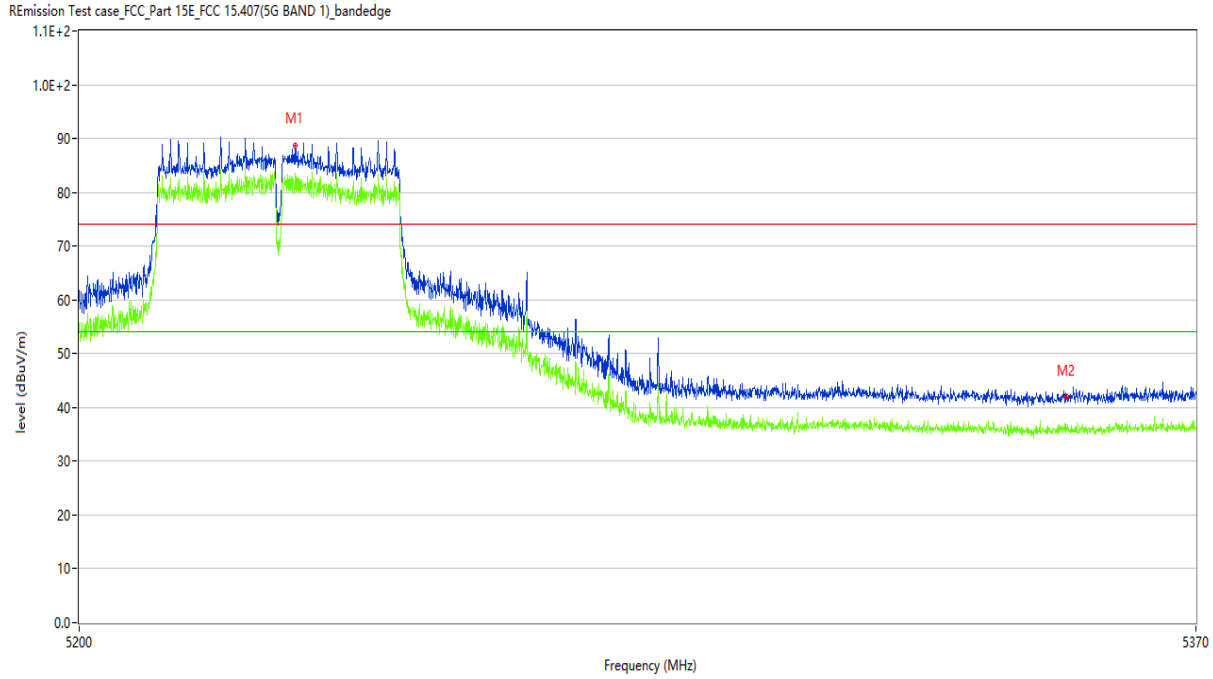
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 203 of 238

Figure 137: Band Edge (Restricted-band band-edge), 802.11ac(VHT40), 5230MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5232.469	88.76	3.96	74.0	14.76	Peak	192.10	100	Horizontal	N/A
1**	5232.469	83.46	3.96	54.0	29.46	AV	192.10	100	Horizontal	N/A
2	5350.000	42.19	4.43	74.0	-31.81	Peak	108.07	100	H	Pass
2**	5350.000	36.52	4.43	54.0	-17.48	AV	108.07	100	H	Pass

TEST REPORT

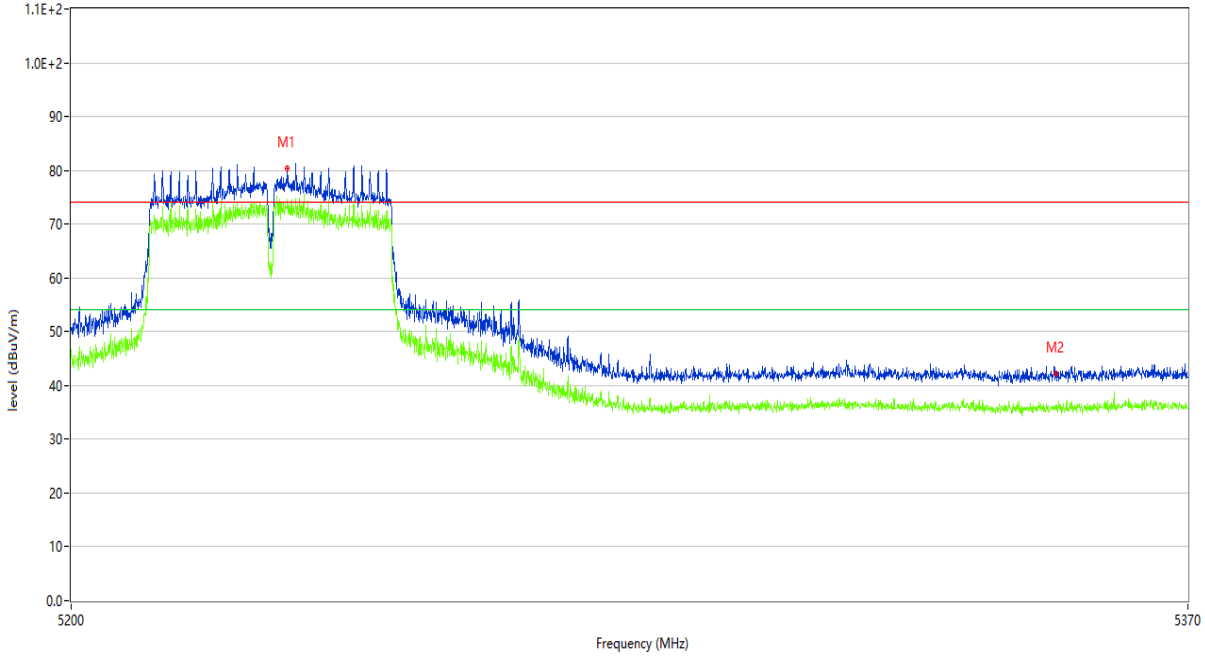
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 204 of 238

Vertical

R Emission Test case_FCC_Part 15E_FCC 15.407(5G BAND 1)_bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5232.469	80.33	3.96	74.0	6.33	Peak	0.50	100	V	N/A
1**	5232.469	74.45	3.96	54.0	20.45	AV	0.50	100	V	N/A
2	5350.000	42.13	4.43	74.0	-31.87	Peak	279.47	100	V	Pass
2**	5350.000	36.26	4.43	54.0	-17.74	AV	279.47	100	V	Pass

TEST REPORT

Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 205 of 238

Figure 138: Band Edge (Restricted-band band-edge), 802.11ac(VHT80), 5210MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	58.00	4.64	74.0	-16.00	Peak	177.20	100	H	Pass
1**	5150.000	52.69	4.64	54.0	-1.31	AV	177.20	100	H	Pass
2	5207.423	86.66	4.57	74.0	12.66	Peak	180.90	100	Horizontal	N/A
2**	5207.423	80.71	4.57	54.0	26.71	AV	180.90	100	Horizontal	N/A

TEST REPORT

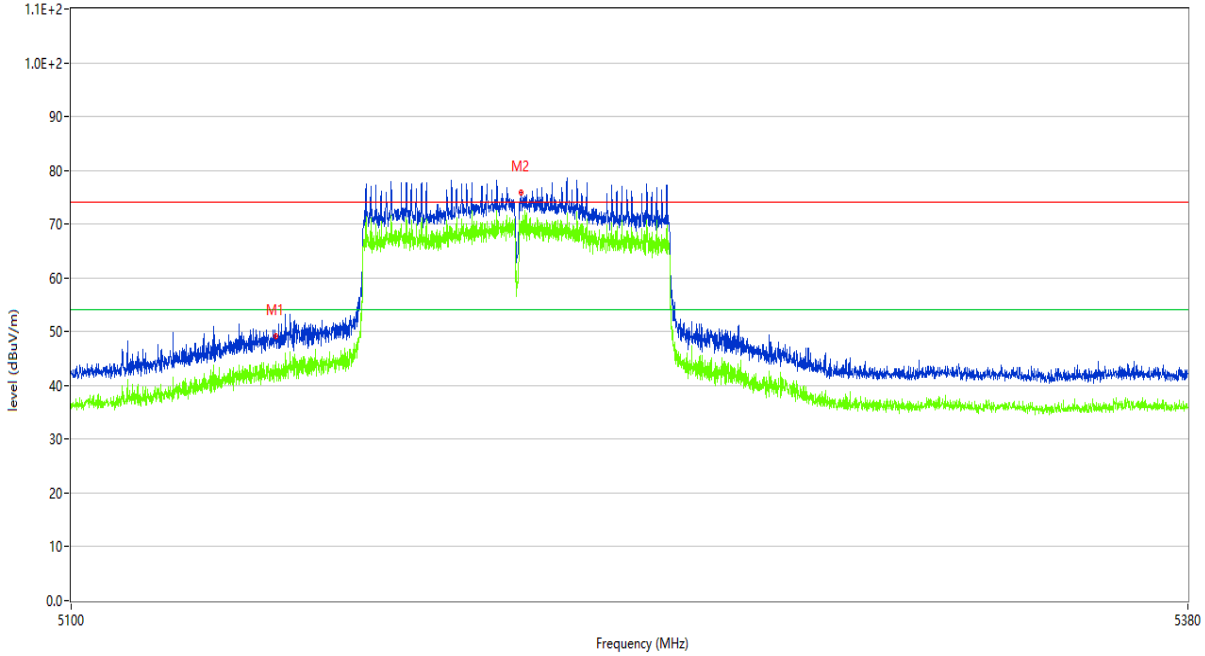
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 206 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G BAND 1)_bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5150.000	49.61	4.64	74.0	-24.39	Peak	57.89	100	V	Pass
1**	5150.000	43.58	4.64	54.0	-10.42	AV	57.89	100	V	Pass
2	5210.992	75.85	4.55	74.0	1.85	Peak	158.30	100	Vertical	N/A
2**	5210.992	70.57	4.55	54.0	16.57	AV	158.30	100	Vertical	N/A

TEST REPORT

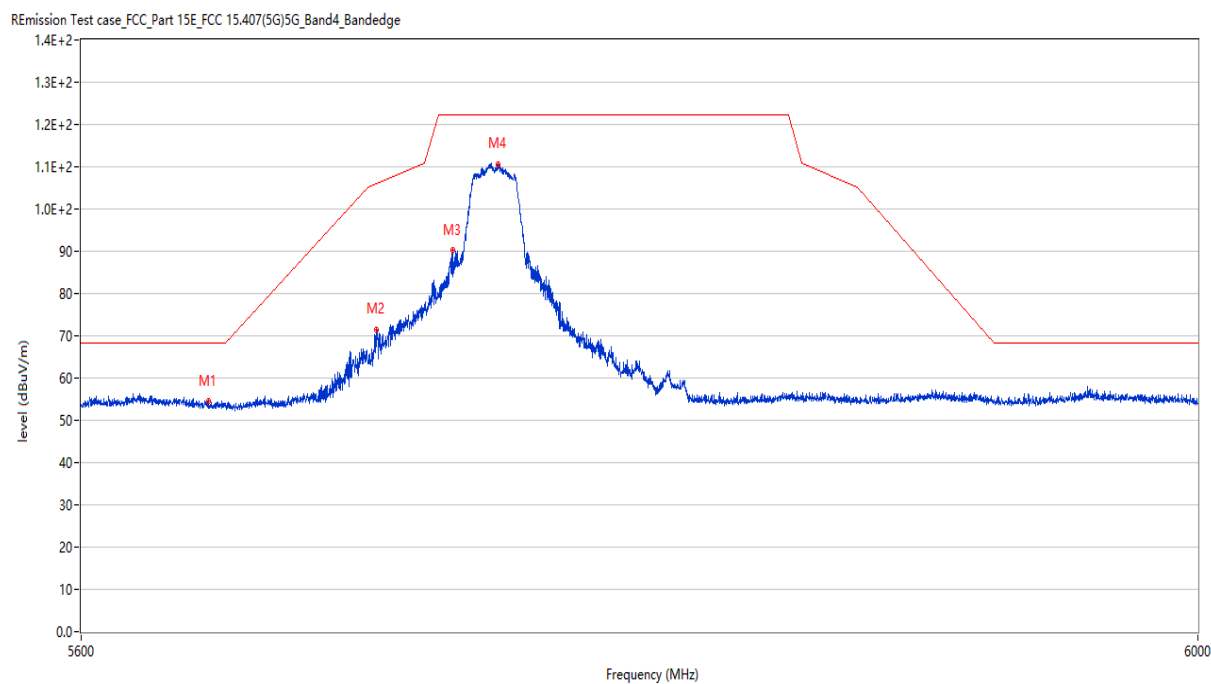
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 207 of 238

Figure 139: Band Edge (Restricted-band band-edge), 802.11a, 5745MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5644.189	54.57	5.67	68.2	-13.63	Peak	318.20	100	Horizontal	Pass
2	5702.974	71.48	5.51	106.0	-34.52	Peak	198.40	100	Horizontal	Pass
3	5730.167	90.15	6.42	122.2	-32.05	Peak	201.90	100	Horizontal	Pass
4	5746.063	110.54	6.31	122.2	-11.66	Peak	201.90	100	Horizontal	Pass

TEST REPORT

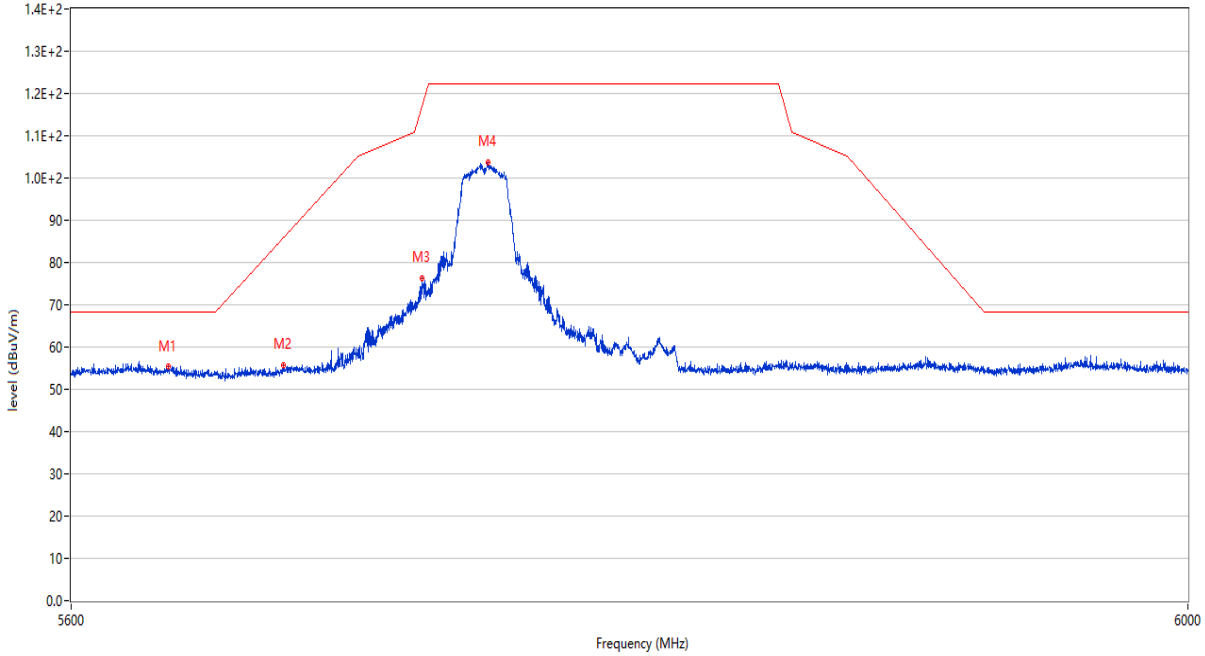
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 208 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5633.792	55.33	6.43	68.2	-12.87	Peak	356.00	100	Vertical	Pass
2	5673.882	55.64	6.40	85.9	-30.26	Peak	311.90	100	Vertical	Pass
3	5722.869	76.37	5.84	117.3	-40.93	Peak	91.70	100	Vertical	Pass
4	5746.263	103.63	6.31	122.2	-18.57	Peak	91.70	100	Vertical	Pass

TEST REPORT

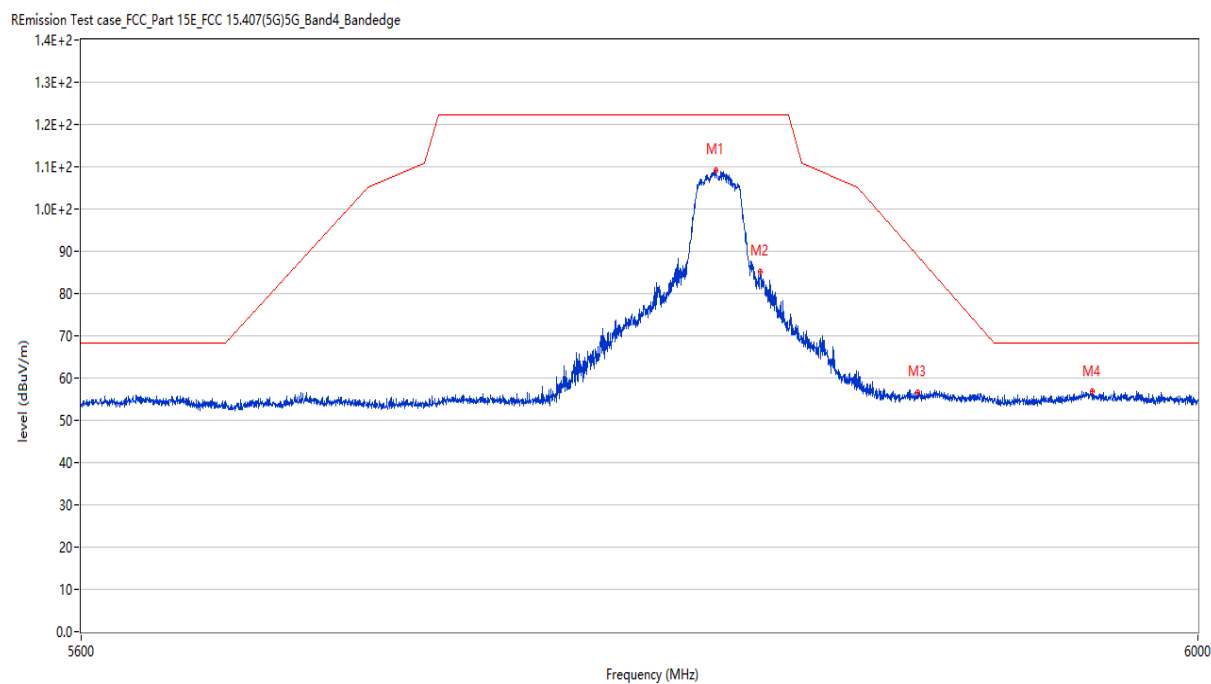
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 209 of 238

Figure 140: Band Edge (Restricted-band band-edge), 802.11a, 5825MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5824.144	109.03	6.83	122.2	-13.17	Peak	204.70	100	Vertical	Pass
2	5839.840	85.21	6.72	122.2	-36.99	Peak	201.50	100	Vertical	Pass
3	5897.226	56.60	7.09	88.7	-32.10	Peak	83.70	100	Vertical	Pass
4	5961.110	56.78	7.92	68.2	-11.42	Peak	157.10	100	Vertical	Pass

TEST REPORT

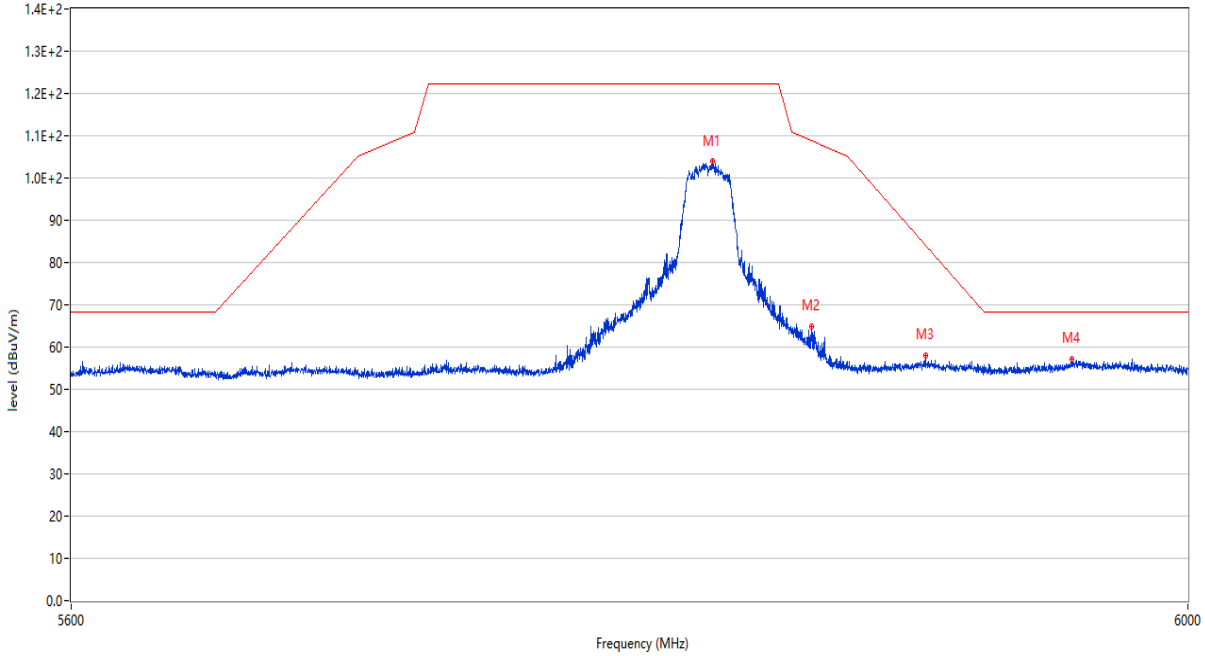
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 210 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5826.343	103.88	6.80	122.2	-18.32	Peak	97.50	100	Vertical	Pass
2	5862.134	64.98	7.07	108.8	-43.82	Peak	97.50	100	Vertical	Pass
3	5903.424	58.12	7.72	84.1	-25.98	Peak	46.40	100	Vertical	Pass
4	5957.111	57.19	7.77	68.2	-11.01	Peak	34.00	100	Vertical	Pass

TEST REPORT

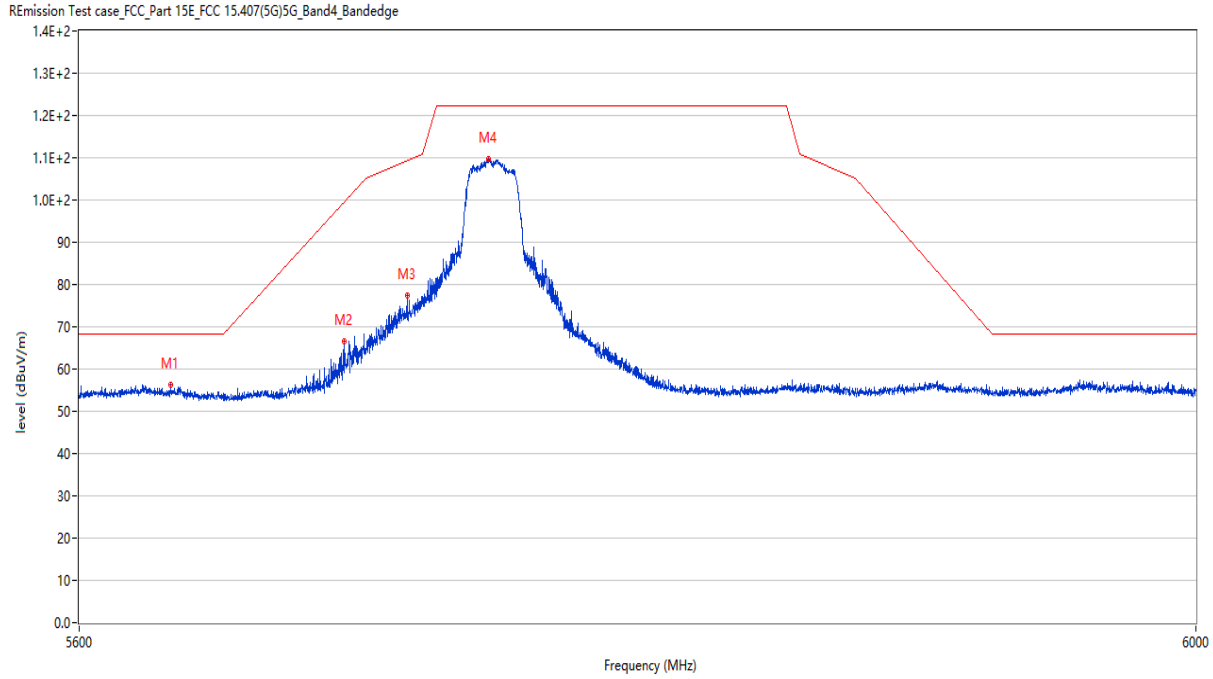
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 211 of 238

Figure 141: Band Edge (Restricted-band band-edge), 802.11n(HT20), 5745MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5631.592	56.37	6.19	68.2	-11.83	Peak	206.80	100	Horizontal	Pass
2	5692.377	66.53	6.22	99.6	-33.07	Peak	213.20	100	Horizontal	Pass
3	5714.771	77.53	5.80	109.3	-31.77	Peak	200.30	100	Horizontal	Pass
4	5743.364	109.77	6.31	122.2	-12.43	Peak	203.60	100	Horizontal	Pass

TEST REPORT

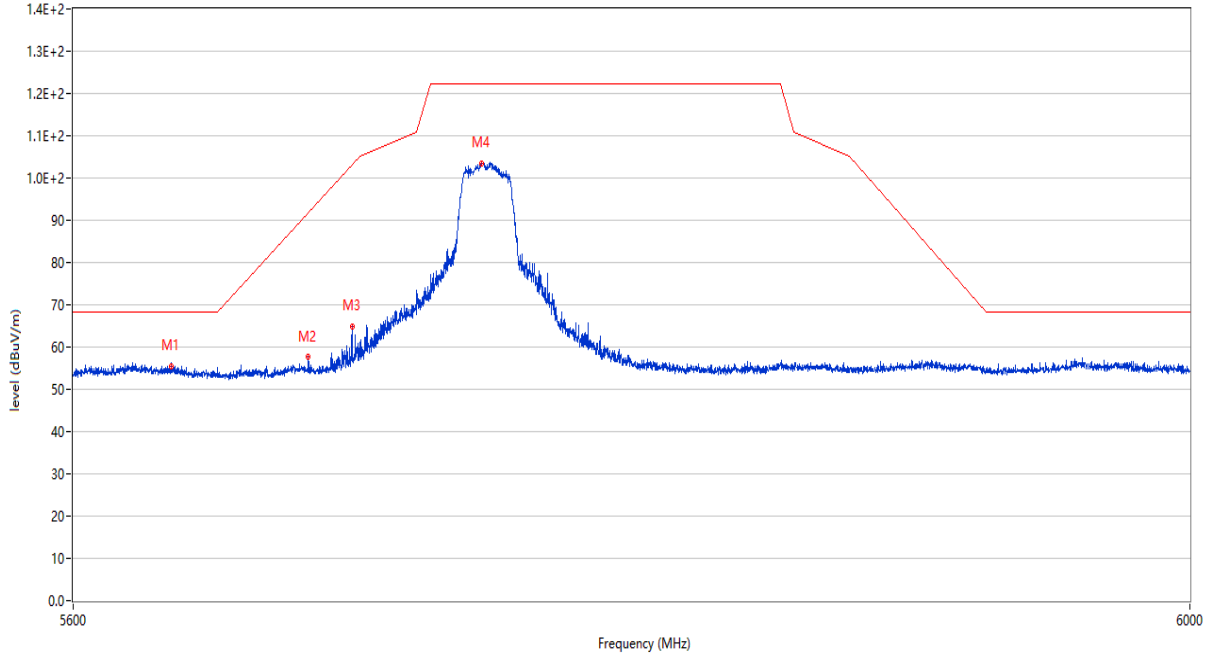
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 212 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5633.892	55.54	6.44	68.2	-12.66	Peak	142.80	100	Vertical	Pass
2	5681.980	57.82	6.26	91.9	-34.08	Peak	13.80	100	Vertical	Pass
3	5697.276	64.87	5.88	103.2	-38.33	Peak	16.80	100	Vertical	Pass
4	5743.164	103.33	6.30	122.2	-18.87	Peak	101.80	100	Vertical	Pass

TEST REPORT

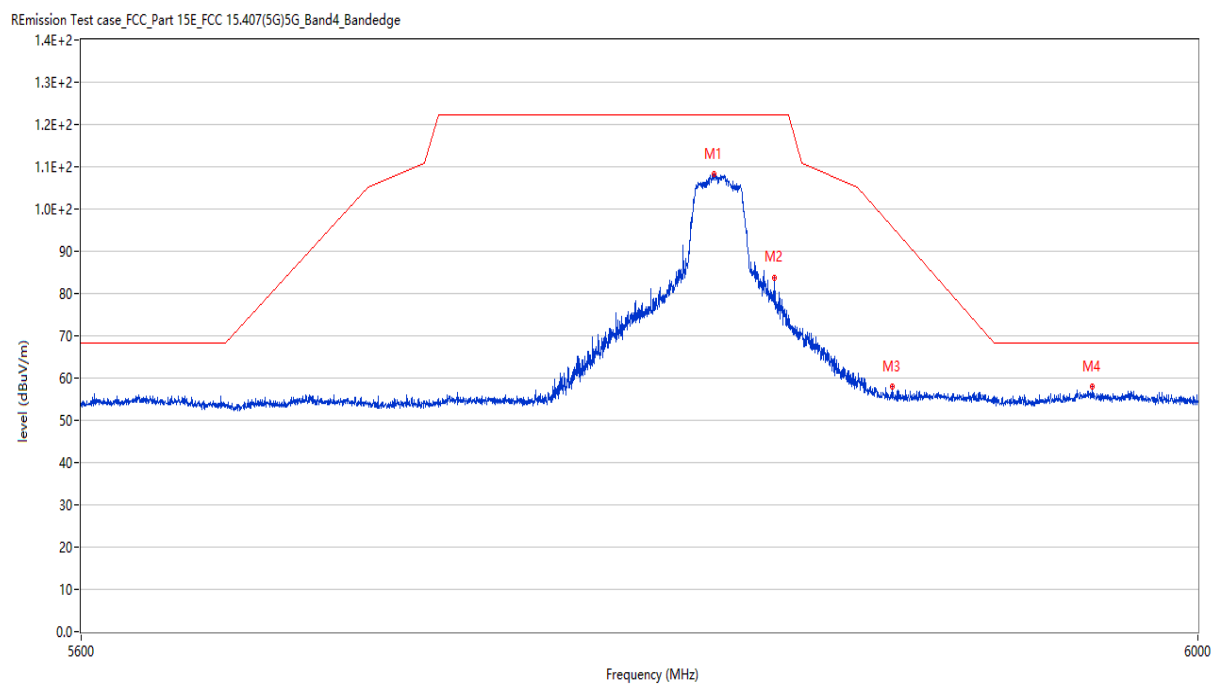
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 213 of 238

Figure 142: Band Edge (Restricted-band band-edge), 802.11n(HT20), 5825MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5823.144	108.16	6.89	122.2	-14.04	Peak	205.50	100	H	Pass
2	5845.039	83.81	6.70	122.2	-38.39	Peak	202.30	100	H	Pass
3	5887.928	58.08	6.55	95.6	-37.52	Peak	192.90	100	H	Pass
4	5961.110	57.96	7.92	68.2	-10.24	Peak	2.30	100	H	Pass

TEST REPORT

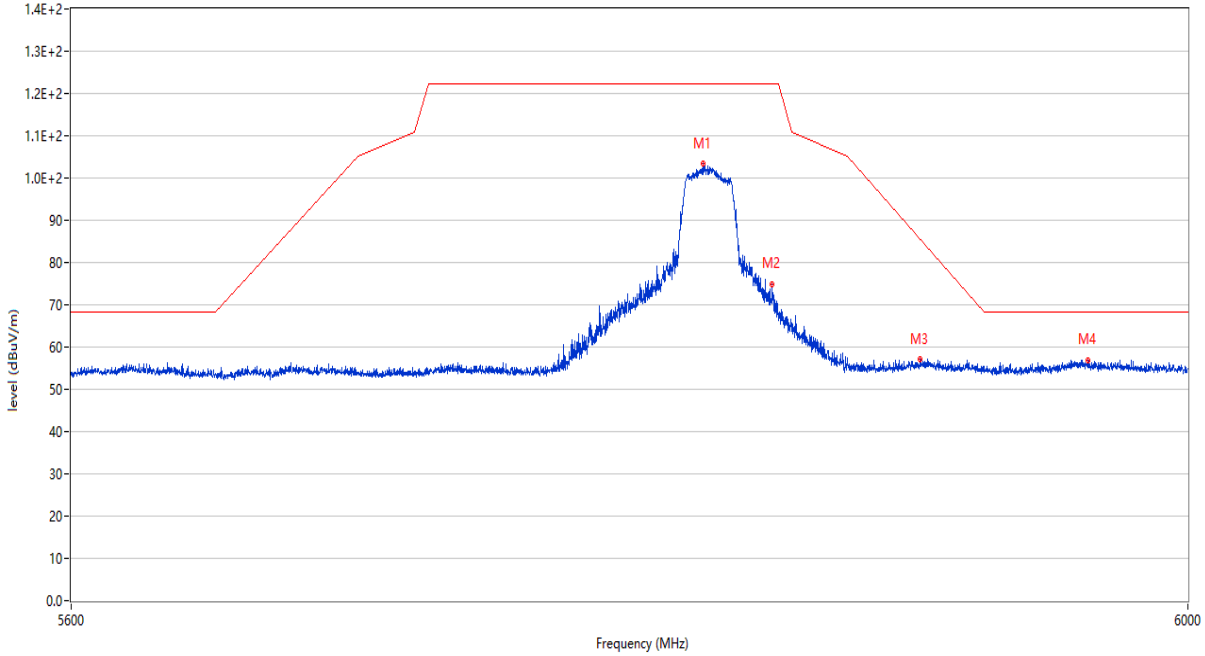
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 214 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5822.944	103.34	6.91	122.2	-18.86	Peak	98.20	100	Vertical	Pass
2	5847.938	74.96	7.11	122.2	-47.24	Peak	98.20	100	Vertical	Pass
3	5901.525	57.05	7.54	85.5	-28.45	Peak	120.20	100	Vertical	Pass
4	5963.109	56.87	7.75	68.2	-11.33	Peak	69.50	100	Vertical	Pass

TEST REPORT

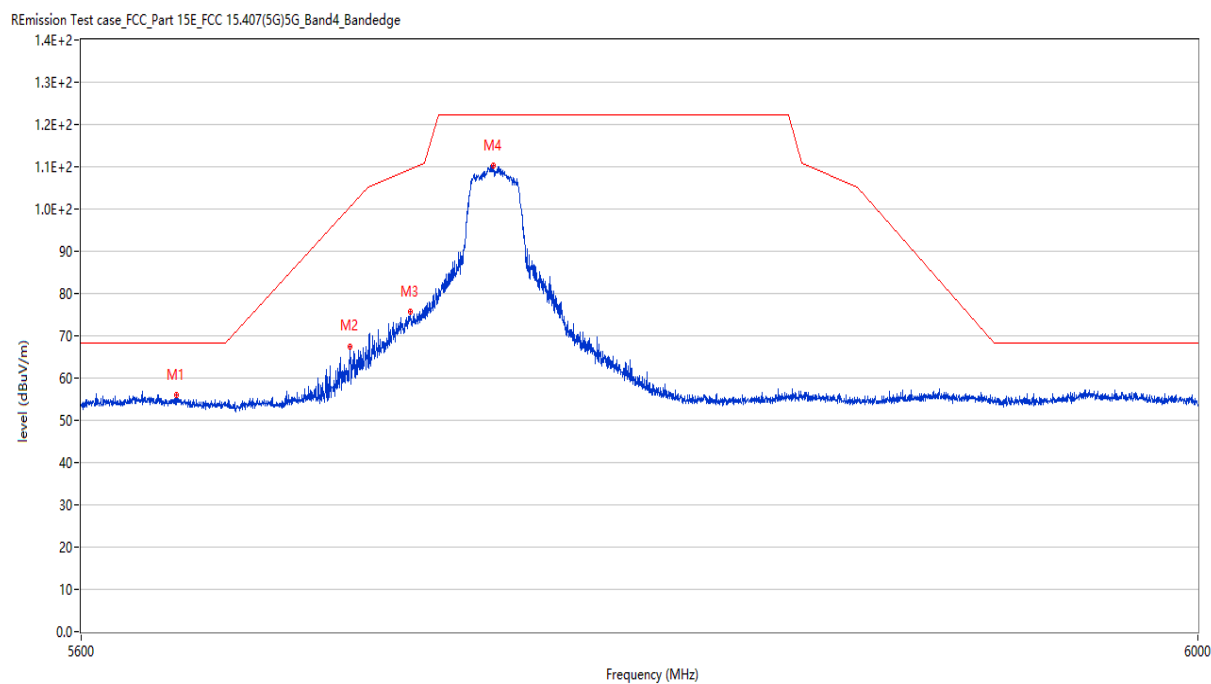
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 215 of 238

Figure 143: Band Edge (Restricted-band band-edge), 802.11ac(VHT20), 5745MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5632.992	55.87	6.34	68.2	-12.33	Peak	64.70	100	H	Pass
2	5693.877	67.48	6.14	100.7	-33.22	Peak	192.50	100	H	Pass
3	5714.971	75.62	5.79	109.4	-33.78	Peak	204.90	100	H	Pass
4	5744.564	110.21	6.33	122.2	-11.99	Peak	195.70	100	H	Pass

TEST REPORT

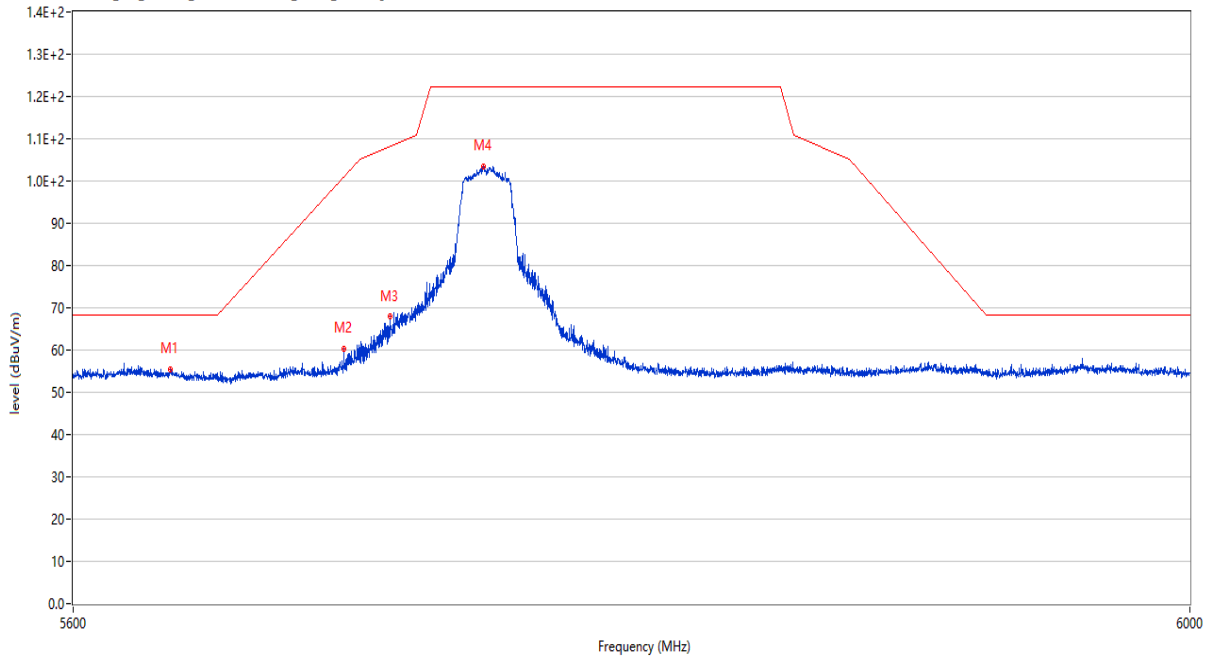
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 216 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5633.692	55.31	6.42	68.2	-12.89	Peak	206.60	100	Vertical	Pass
2	5694.376	60.42	6.11	101.1	-40.68	Peak	98.20	100	Vertical	Pass
3	5710.672	67.89	5.70	108.2	-40.31	Peak	10.00	100	Vertical	Pass
4	5743.764	103.30	6.32	122.2	-18.90	Peak	91.80	100	Vertical	Pass

TEST REPORT

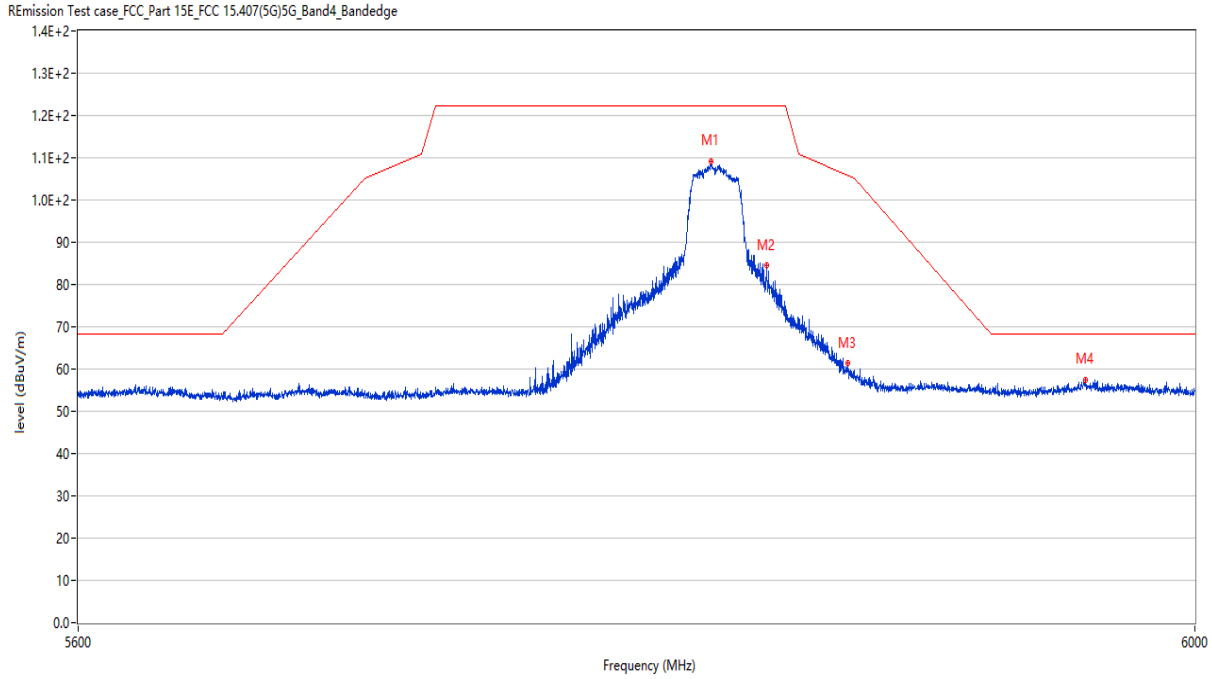
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 217 of 238

Figure 144: Band Edge (Restricted-band band-edge), 802.11ac(VHT20), 5825MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5823.144	109.01	6.89	122.2	-13.19	Peak	203.00	100	Horizontal	Pass
2	5843.239	84.44	6.61	122.2	-37.76	Peak	203.00	100	Horizontal	Pass
3	5872.832	61.33	6.56	105.8	-44.47	Peak	206.30	100	Horizontal	Pass
4	5959.710	57.53	8.05	68.2	-10.67	Peak	130.50	100	Horizontal	Pass

TEST REPORT

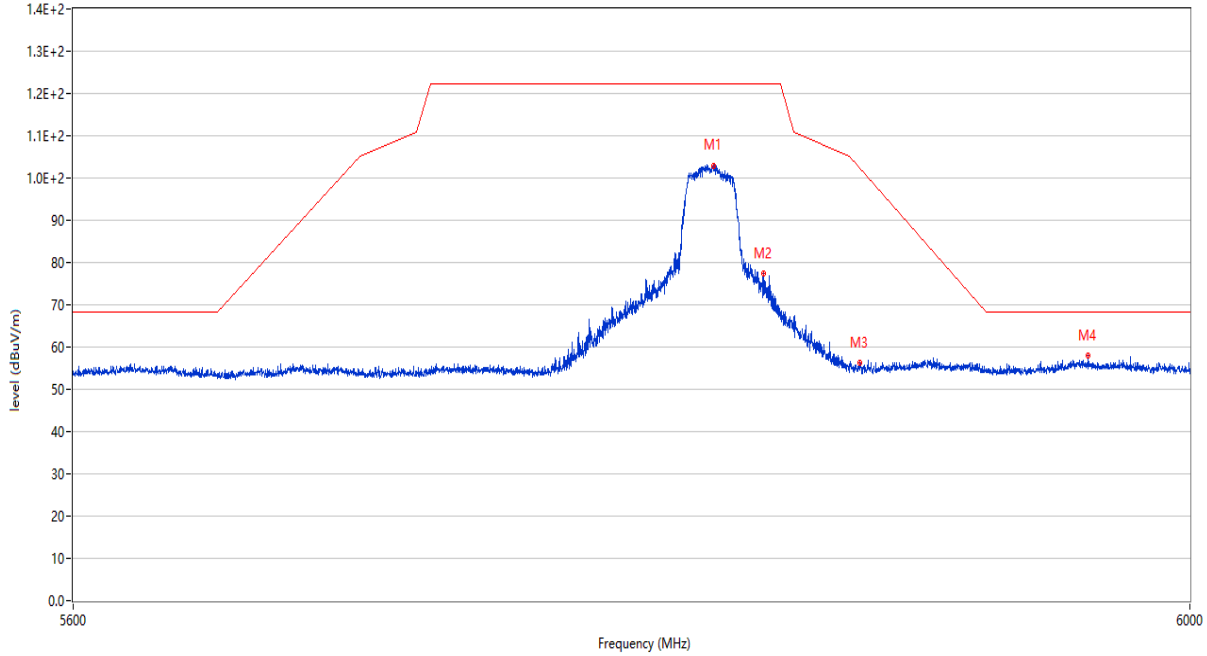
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 218 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5826.143	98.63	6.80	122.2	-23.57	Peak	359.50	100	Vertical	Pass
2	5844.039	77.43	6.58	122.2	-44.77	Peak	98.60	100	Vertical	Pass
3	5878.830	56.16	6.41	102.4	-46.24	Peak	159.10	100	Vertical	Pass
4	5962.509	57.97	7.80	68.2	-10.23	Peak	215.70	100	Vertical	Pass

TEST REPORT

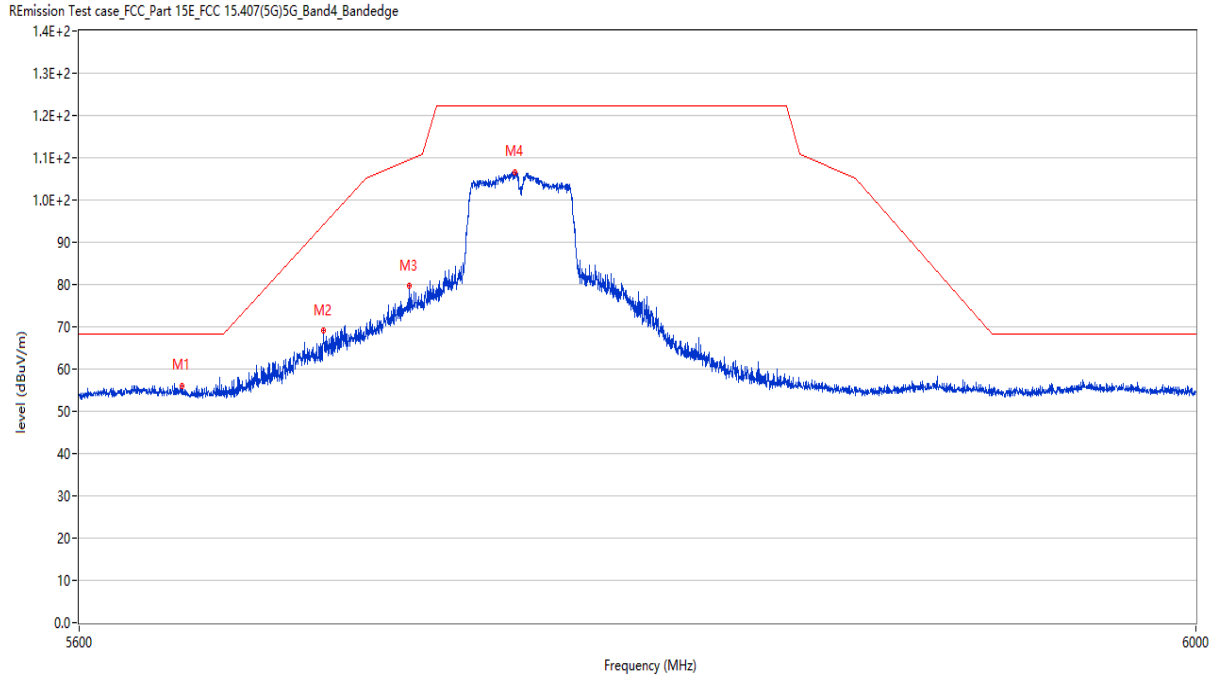
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 219 of 238

Figure 145: Band Edge (Restricted-band band-edge), 802.11n(HT40), 5755MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5635.791	55.95	6.27	68.2	-12.25	Peak	212.90	100	Horizontal	Pass
2	5685.079	69.17	6.00	94.2	-25.03	Peak	193.40	100	Horizontal	Pass
3	5715.271	79.77	5.77	109.5	-29.73	Peak	209.50	100	Horizontal	Pass
4	5752.762	106.46	6.21	122.2	-15.74	Peak	209.50	100	Horizontal	Pass

TEST REPORT

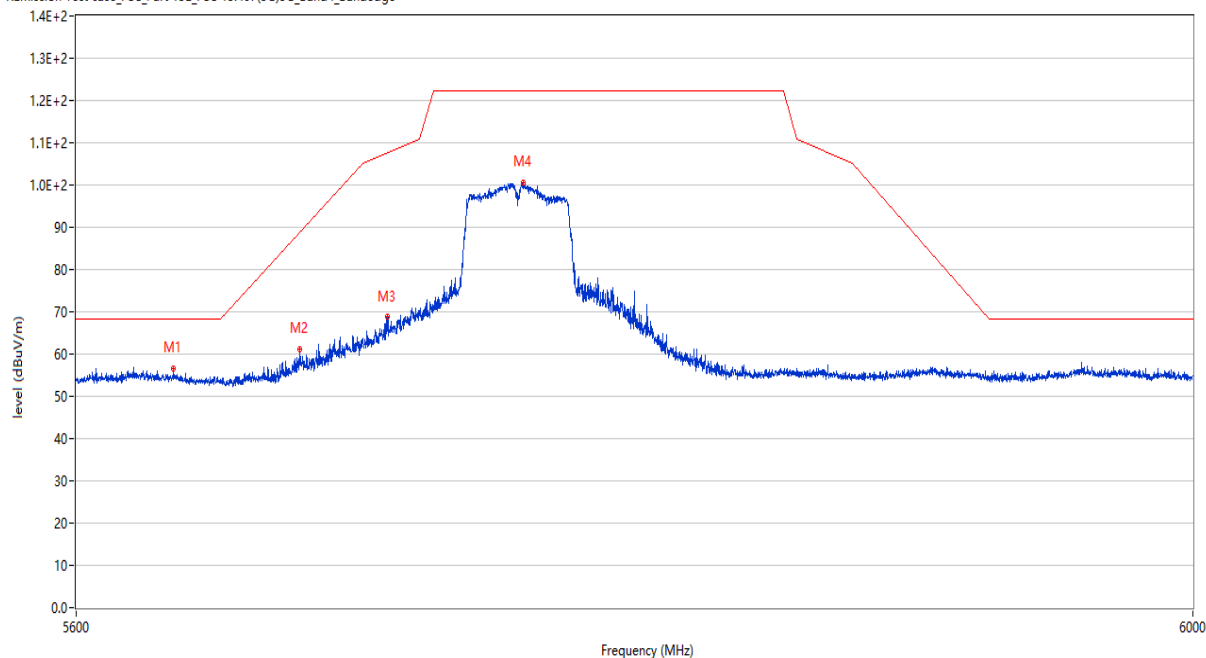
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 220 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5633.792	56.70	6.43	68.2	-11.50	Peak	149.50	100	Vertical	Pass
2	5677.881	61.00	6.58	88.9	-27.90	Peak	16.60	100	Vertical	Pass
3	5708.573	68.94	5.62	107.6	-38.66	Peak	108.00	100	Vertical	Pass
4	5756.861	100.68	6.24	122.2	-21.52	Peak	104.80	100	Vertical	Pass

TEST REPORT

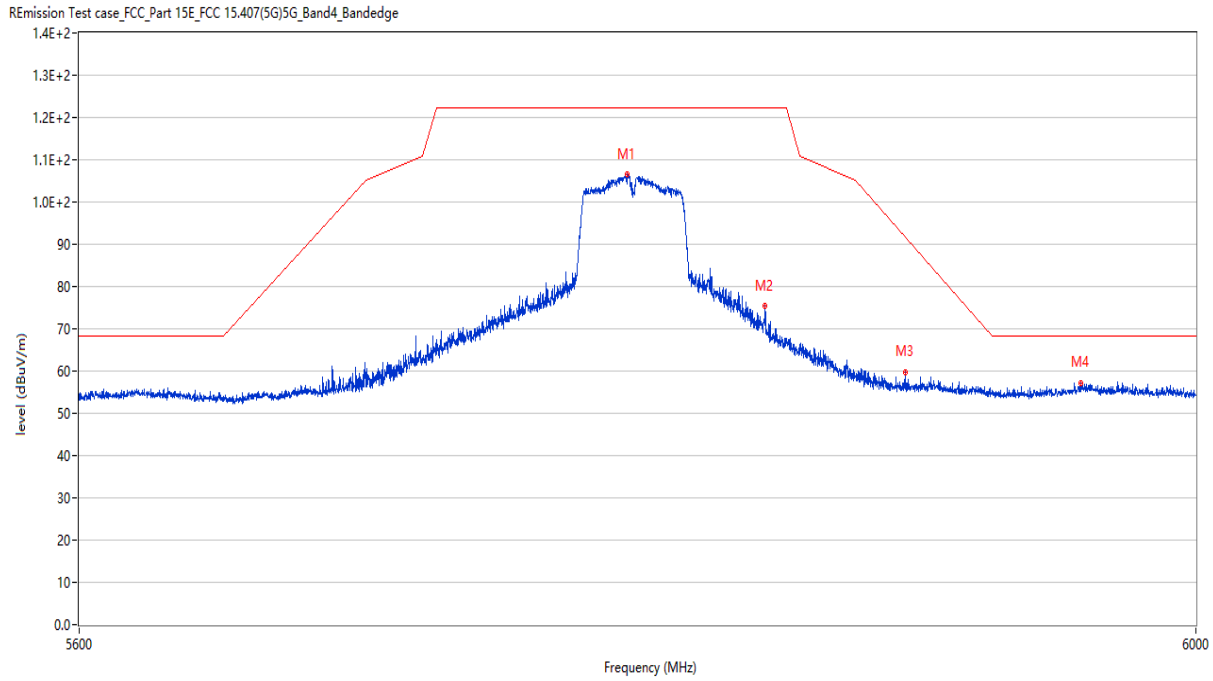
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 221 of 238

Figure 146: Band Edge (Restricted-band band-edge), 802.11n(HT40), 5795MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5792.952	106.44	6.99	122.2	-15.76	Peak	207.80	100	Horizontal	Pass
2	5842.439	75.30	6.64	122.2	-46.90	Peak	207.80	100	Horizontal	Pass
3	5893.427	59.73	6.74	91.5	-31.77	Peak	204.60	100	Horizontal	Pass
4	5957.611	57.24	7.86	68.2	-10.96	Peak	46.00	100	Horizontal	Pass

TEST REPORT

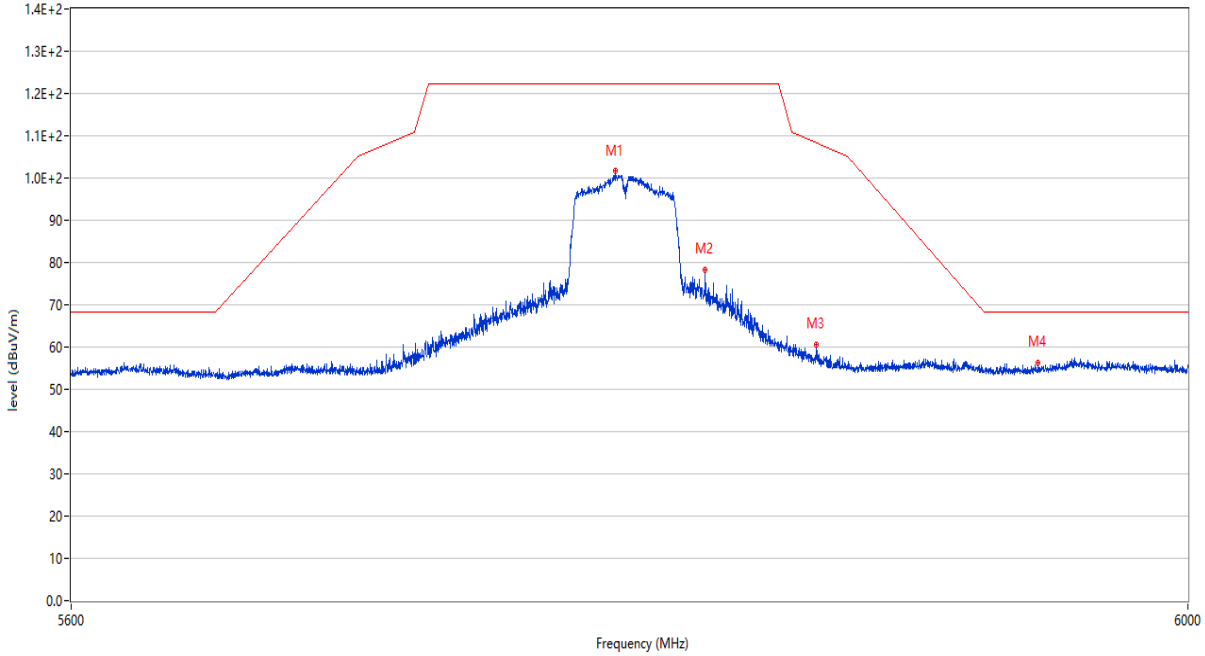
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 222 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5791.352	101.58	6.96	122.2	-20.62	Peak	97.10	100	Vertical	Pass
2	5823.744	78.20	6.85	122.2	-44.00	Peak	103.60	100	Vertical	Pass
3	5863.834	60.70	7.22	108.3	-47.60	Peak	103.60	100	Vertical	Pass
4	5944.814	56.40	6.87	68.2	-11.80	Peak	141.10	100	Vertical	Pass

TEST REPORT

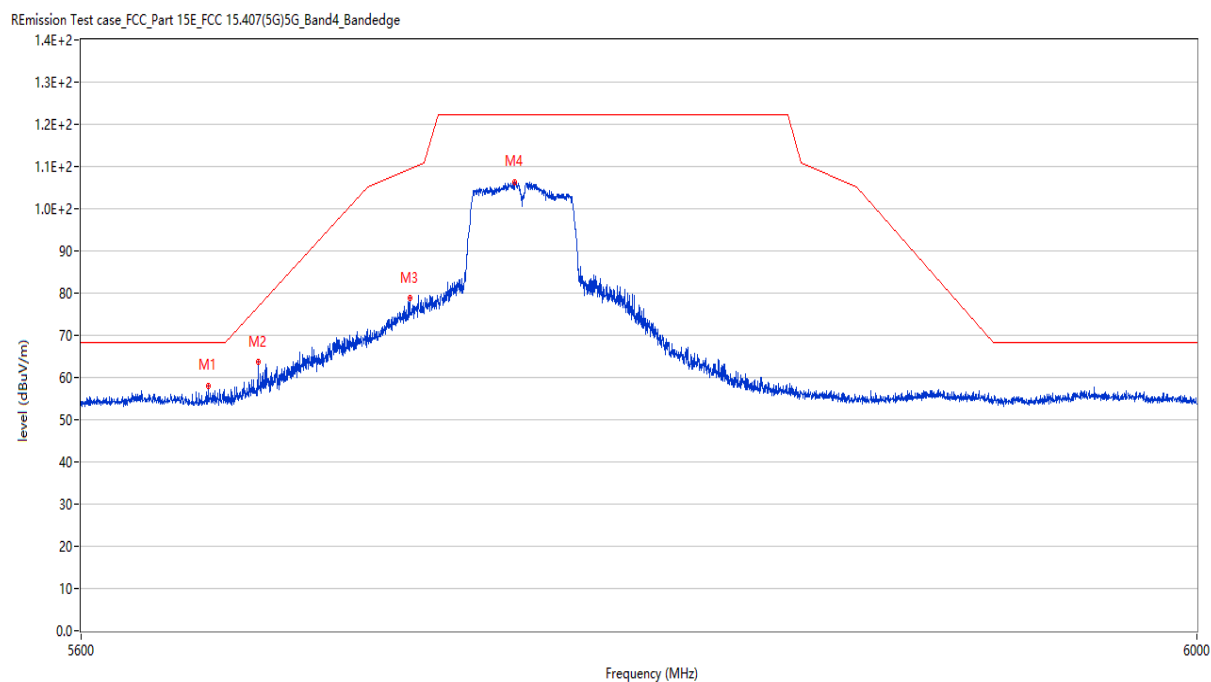
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 223 of 238

Figure 147: Band Edge (Restricted-band band-edge), 802.11ac(VHT40), 5755MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5644.289	58.01	5.67	68.2	-10.19	Peak	210.40	100	Horizontal	Pass
2	5661.685	63.68	6.20	76.9	-13.22	Peak	198.00	100	Horizontal	Pass
3	5714.971	78.87	5.79	109.4	-30.53	Peak	201.20	100	Horizontal	Pass
4	5752.062	106.29	6.22	122.2	-15.91	Peak	195.10	100	Horizontal	Pass

TEST REPORT

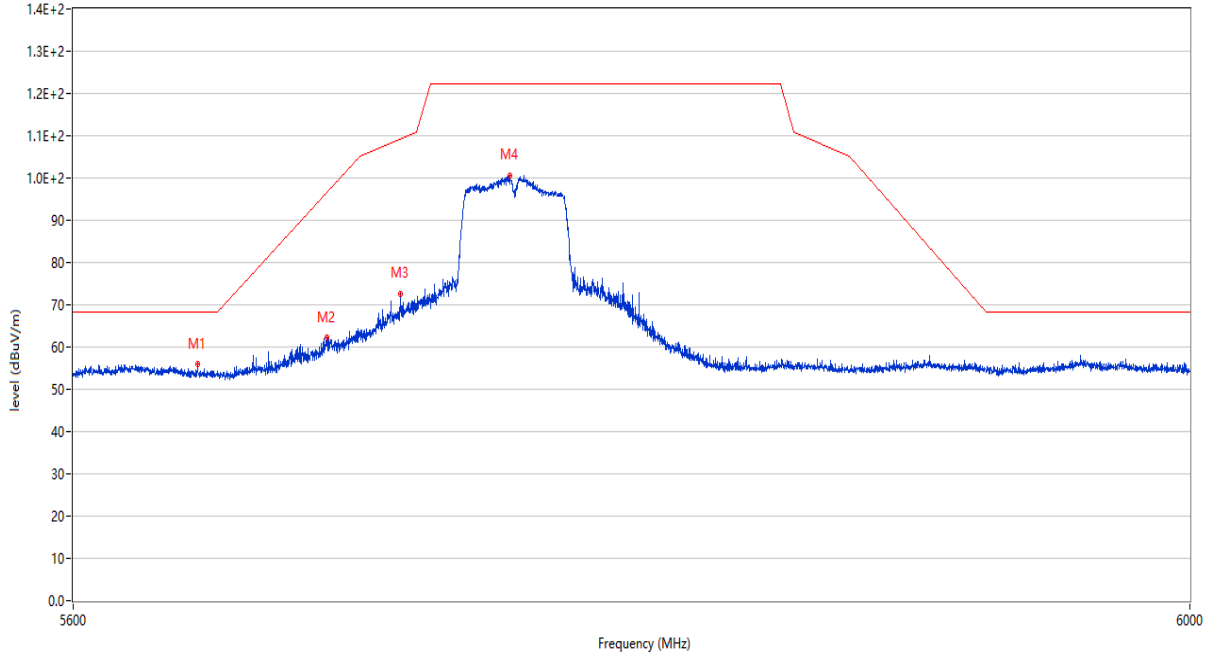
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 224 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5643.289	55.93	5.68	68.2	-12.27	Peak	17.20	100	Vertical	Pass
2	5688.378	62.28	6.30	96.6	-34.32	Peak	20.50	100	Vertical	Pass
3	5714.271	72.46	5.82	109.2	-36.74	Peak	20.50	100	Vertical	Pass
4	5753.162	100.51	6.20	122.2	-21.69	Peak	100.00	100	Vertical	Pass

TEST REPORT

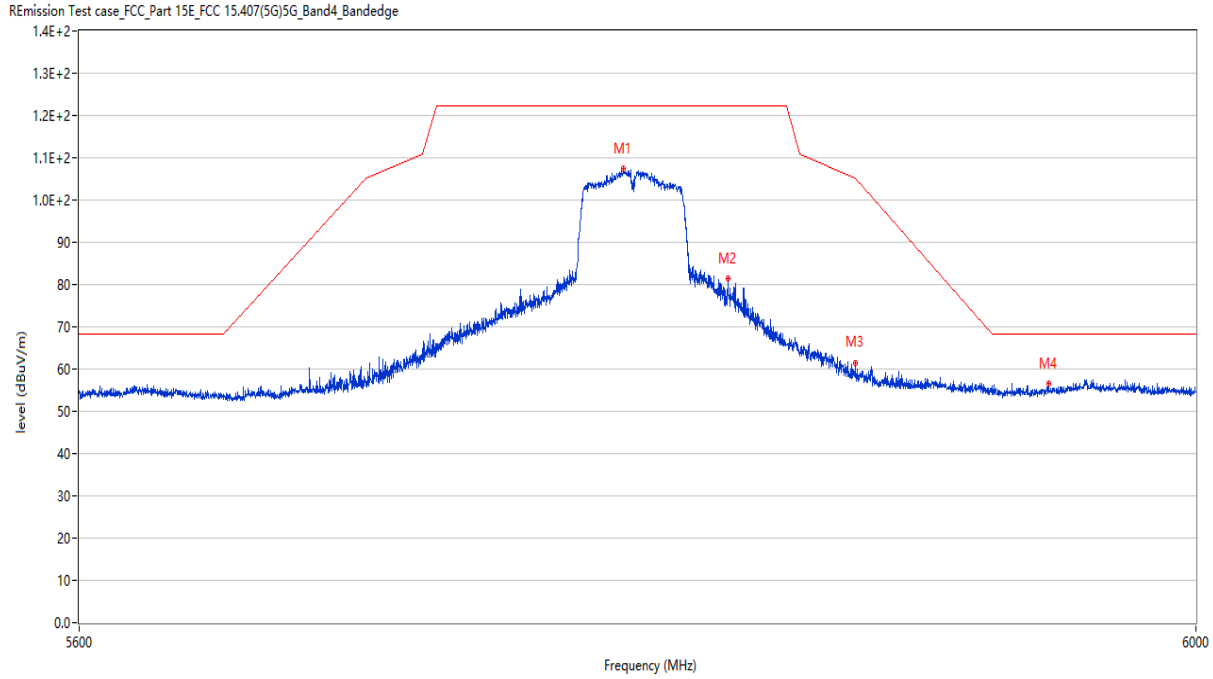
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 225 of 238

Figure 148: Band Edge (Restricted-band band-edge), 802.11ac(VHT40), 5795MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5791.452	107.42	6.96	122.2	-14.78	Peak	202.80	100	Horizontal	Pass
2	5829.043	81.35	6.78	122.2	-40.85	Peak	206.00	100	Horizontal	Pass
3	5875.131	61.47	6.48	105.1	-43.63	Peak	174.10	100	Horizontal	Pass
4	5945.714	56.68	6.88	68.2	-11.52	Peak	0.00	100	Horizontal	Pass

TEST REPORT

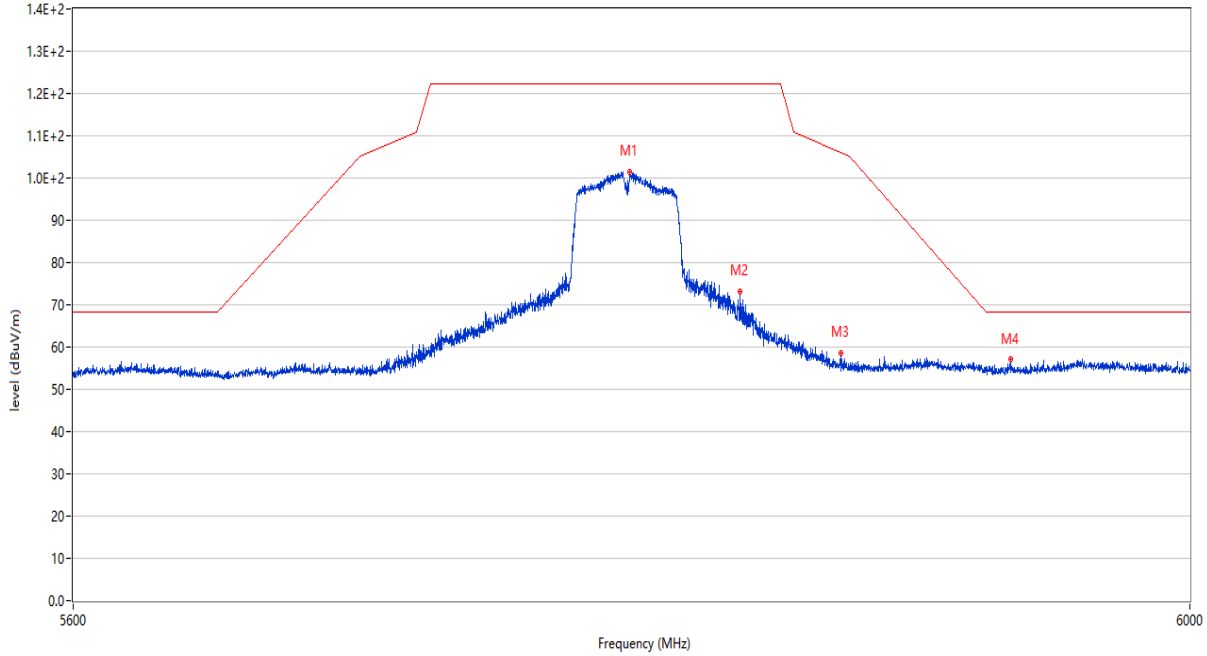
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 226 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5795.851	101.48	6.94	122.2	-20.72	Peak	98.60	100	Vertical	Pass
2	5835.541	73.20	6.77	122.2	-49.00	Peak	98.60	100	Vertical	Pass
3	5871.932	58.62	6.60	106.1	-47.48	Peak	98.60	100	Vertical	Pass
4	5933.817	57.02	7.14	68.2	-11.18	Peak	177.70	100	Vertical	Pass

TEST REPORT

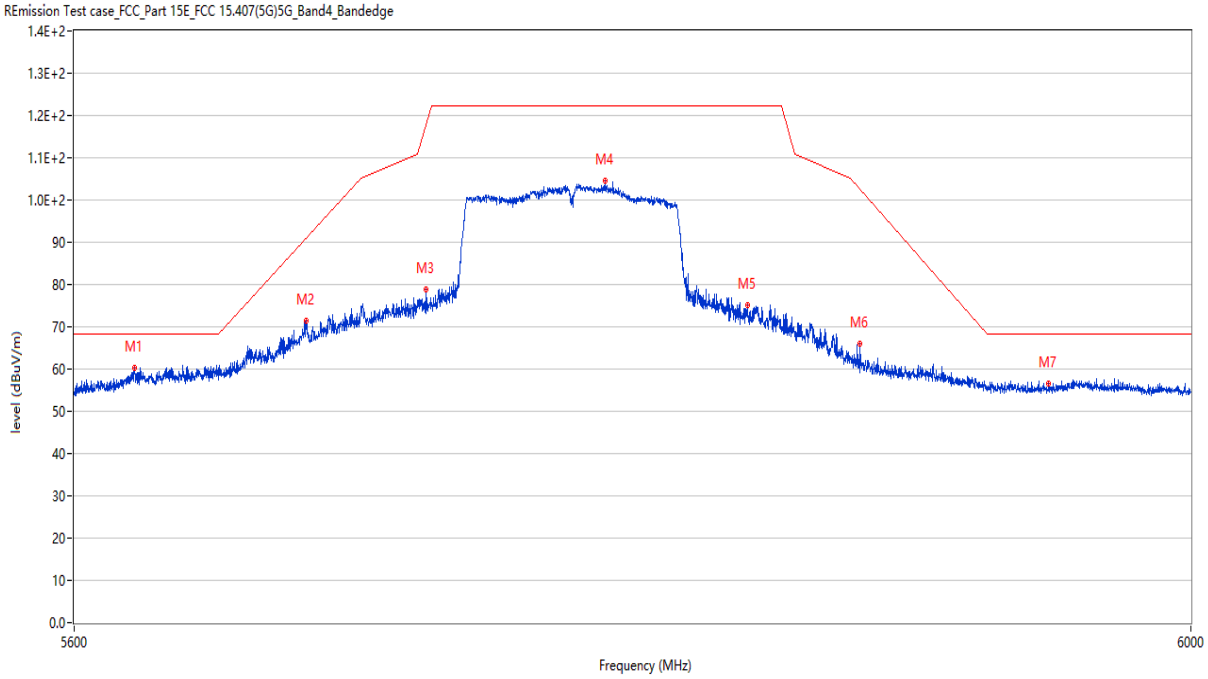
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 227 of 238

Figure 149: Band Edge (Restricted-band band-edge), 802.11ac(VHT80), 5775MHz

Horizontal



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5620.895	60.37	6.68	68.2	-7.83	Peak	204.80	100	Horizontal	Pass
2	5680.980	71.45	6.40	91.2	-19.75	Peak	204.80	100	Horizontal	Pass
3	5723.069	78.98	5.86	117.8	-38.82	Peak	204.80	100	Horizontal	Pass
4	5786.653	104.63	6.77	122.2	-17.57	Peak	201.60	100	Horizontal	Pass
5	5837.741	75.22	6.75	122.2	-46.98	Peak	204.80	100	Horizontal	Pass
6	5878.630	65.95	6.41	102.5	-36.55	Peak	191.90	100	Horizontal	Pass
7	5947.513	56.52	6.90	68.2	-11.68	Peak	195.10	100	Horizontal	Pass

TEST REPORT

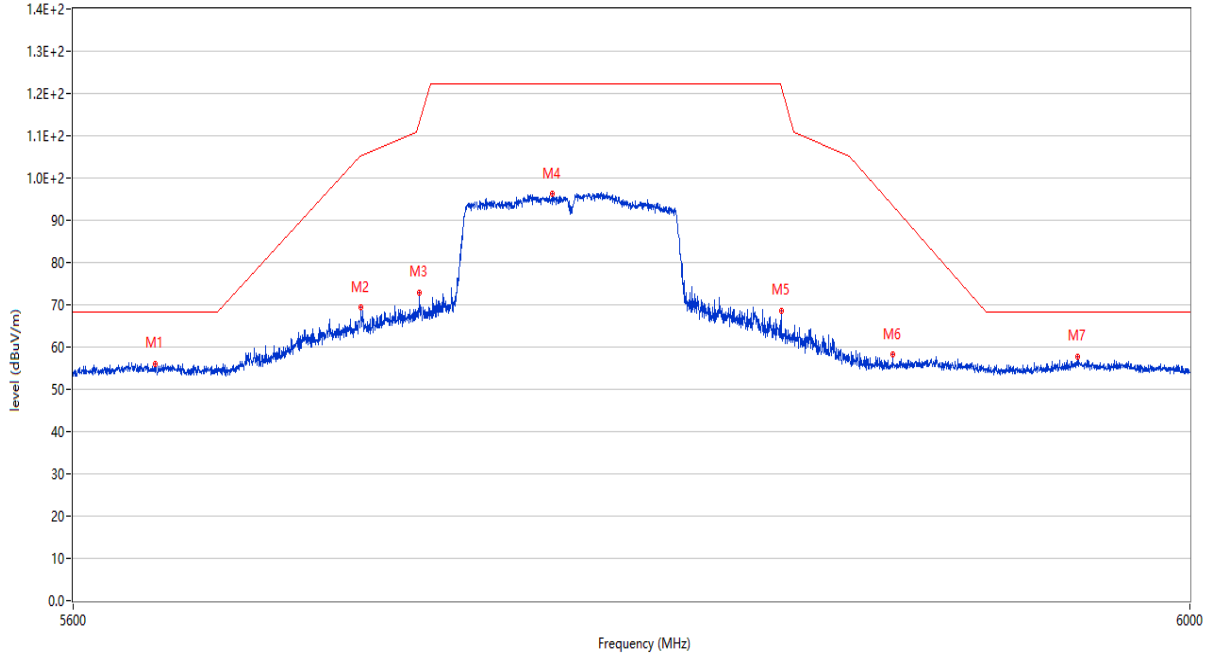
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 228 of 238

Vertical

REmission Test case_FCC_Part 15E_FCC 15.407(5G)5G_Band4_Bandedge



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	5628.593	56.07	6.02	68.2	-12.13	Peak	310.30	100	Vertical	Pass
2	5700.375	69.36	5.65	105.3	-35.94	Peak	36.80	100	Vertical	Pass
3	5721.170	72.88	5.70	113.5	-40.62	Peak	128.50	100	Vertical	Pass
4	5768.258	96.16	6.23	122.2	-26.04	Peak	118.60	100	Vertical	Pass
5	5850.537	68.43	7.19	121.0	-52.57	Peak	122.10	100	Vertical	Pass
6	5890.927	58.29	6.64	93.4	-35.11	Peak	115.60	100	Vertical	Pass
7	5958.710	57.72	8.05	68.2	-10.48	Peak	266.10	100	Vertical	Pass

TEST REPORT

Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 229 of 238

4.1.9 Frequency Stability

RESULT:

PASS

Test standard : FCC Part 15.407(g)
 Kind of test site : Shielded room

Test setup

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

Table 6: Frequency Stability

Band I (5150 – 5250 MHz):

Voltage vs. Frequency Stability (5180MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Temp (°C)	Voltage (V)			
20	4.35 V	5179.956	8.49	±20
	3.80 V	5179.978	4.25	
	3.00 V	5179.973	5.21	

Temperature vs. Frequency Stability (5180MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Voltage (V)	Temp (°C)			
3.8 V	-30	--	--	±20
	-20	--	--	
	-10	5179.964	6.95	
	0	5179.970	5.79	
	10	5179.972	5.41	
	20	5179.978	4.25	
	30	5179.963	7.14	
	40	5179.974	5.02	
	50	5179.959	7.92	

Note:

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

TEST REPORT

Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 230 of 238

Band IV (5725 – 5850 MHz):

Voltage vs. Frequency Stability (5745MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Temp (°C)	Voltage (V)			
20	4.35 V	5744.957	7.48	±20
	3.80 V	5744.975	4.35	
	3.00 V	5744.966	5.92	

Temperature vs. Frequency Stability (5745MHz)

Test Conditions		Frequency (MHz)	Max. Deviation (ppm)	Limit (ppm)
Voltage (V)	Temp (°C)			
3.8 V	-30	--	--	±20
	-20	--	--	
	-10	5744.964	6.27	
	0	5744.955	7.83	
	10	5744.984	2.79	
	20	5744.975	4.35	
	30	5744.945	9.57	
	40	5744.973	4.70	
	50	5744.965	6.09	

Note:

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

TEST REPORT

Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 231 of 238

4.2 Mains Emissions

4.2.1 Conducted Emission on AC Mains

RESULT:

PASS

Test standard	:	FCC Part 15.207 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	:	Normal Link
Earthing	:	Not Connected
Ambient temperature	:	25°C
Relative humidity	:	52%

For details refer to following test plot.

TEST REPORT

Report No.: SHE19080042-02IE

Date: 2019-11-01

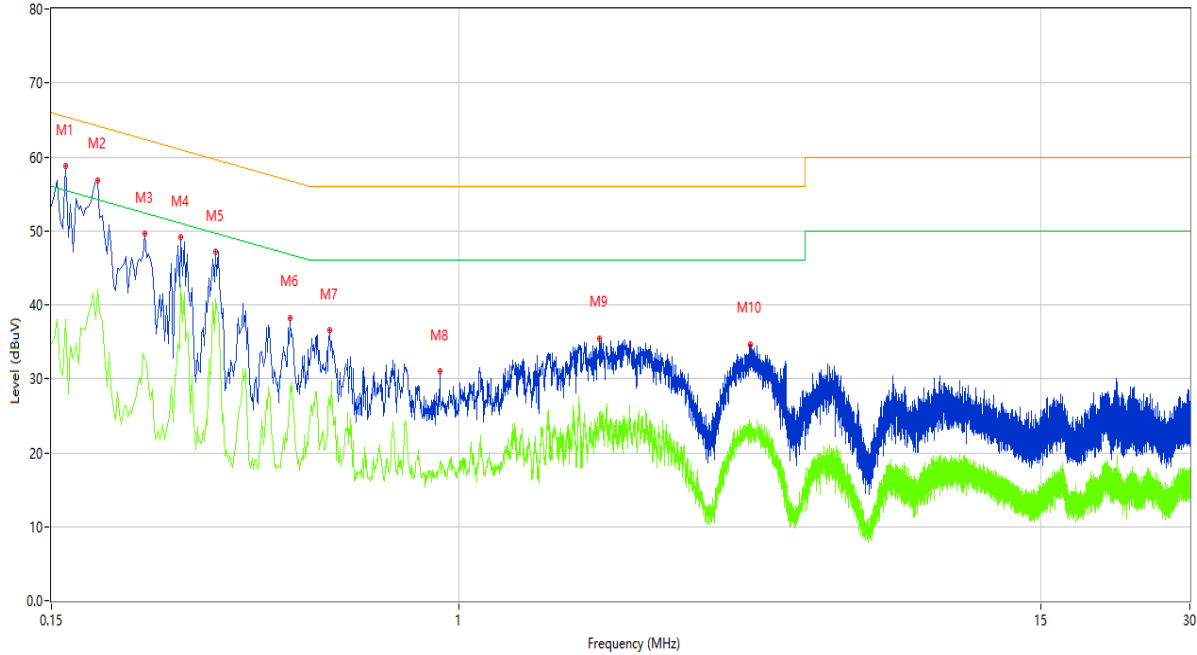
Page 232 of 238

Note:

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

Figure 150: Conducted Emission on AC Mains, L Phase

CEmission Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency(MHz)	Results (dBUV)	Factor(dB)	Limit (dBUV)	Over Limit (dB)	Detector	Line	Verdict
1	0.154	57.63	10.15	65.78	-8.15	Peak	L	Pass
1*	0.154	51.32	10.15	65.78	-14.46	QP	L	Pass
1**	0.154	38.02	10.15	55.78	-17.76	AV	L	Pass
2	0.186	56.53	10.15	64.21	-7.68	Peak	L	Pass
2*	0.186	52.90	10.15	64.21	-11.31	QP	L	Pass
2**	0.186	42.18	10.15	54.21	-12.03	AV	L	Pass
3	0.232	50.21	10.14	62.38	-12.17	Peak	L	Pass
3*	0.232	45.73	10.14	62.38	-16.65	QP	L	Pass
3**	0.232	32.85	10.14	52.38	-19.53	AV	L	Pass
4	0.274	49.50	10.14	61.00	-11.50	Peak	L	Pass
4*	0.274	46.23	10.14	61.00	-14.77	QP	L	Pass
4**	0.274	42.83	10.14	51.00	-8.17	AV	L	Pass
5	0.322	48.00	10.14	59.66	-11.66	Peak	L	Pass
5*	0.322	44.84	10.14	59.66	-14.82	QP	L	Pass
5**	0.322	40.84	10.14	49.66	-8.82	AV	L	Pass
6	0.456	38.20	10.15	56.77	-18.57	Peak	L	Pass
6**	0.456	29.02	10.15	46.77	-17.75	AV	L	Pass
7	0.548	36.50	10.15	56.00	-19.50	Peak	L	Pass
7**	0.548	27.07	10.15	46.00	-18.93	AV	L	Pass

TEST REPORT

Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 233 of 238

8	0.914	30.99	10.15	56.00	-25.01	Peak	L	Pass
8**	0.914	18.74	10.15	46.00	-27.26	AV	L	Pass
9	1.920	35.50	10.17	56.00	-20.50	Peak	L	Pass
9**	1.920	23.32	10.17	46.00	-22.68	AV	L	Pass
10	3.884	34.66	10.24	56.00	-21.34	Peak	L	Pass
10**	3.884	23.90	10.24	46.00	-22.10	AV	L	Pass

TEST REPORT

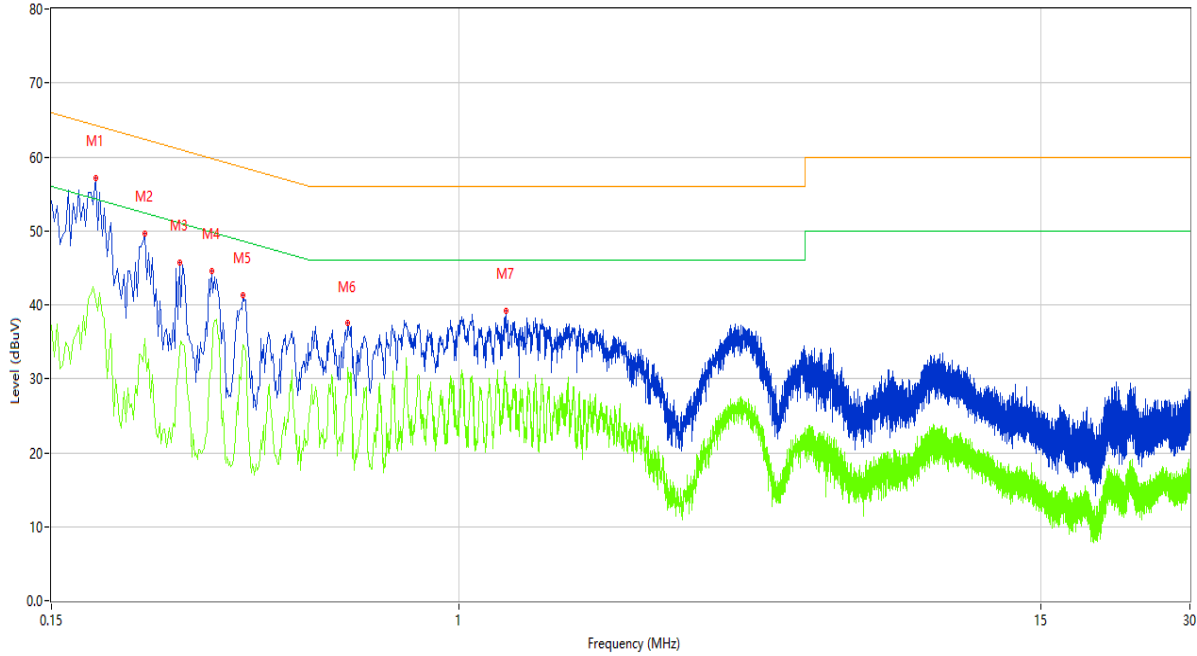
Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 234 of 238

Figure 151: Conducted Emission on AC Mains, N Phase

C:Emission Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency(MHz)	Results (dBuV)	Factor(dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.184	57.41	10.15	64.30	-6.89	Peak	N	Pass
1*	0.184	54.17	10.15	64.30	-10.13	QP	N	Pass
1**	0.184	40.61	10.15	54.30	-13.69	AV	N	Pass
2	0.232	50.38	10.14	62.38	-12.00	Peak	N	Pass
2*	0.232	45.99	10.14	62.38	-16.39	QP	N	Pass
2**	0.232	35.42	10.14	52.38	-16.96	AV	N	Pass
3	0.272	46.80	10.14	61.06	-14.26	Peak	N	Pass
3*	0.272	42.54	10.14	61.06	-18.52	QP	N	Pass
3**	0.272	33.79	10.14	51.06	-17.27	AV	N	Pass
4	0.316	45.84	10.14	59.81	-13.97	Peak	N	Pass
4*	0.316	41.60	10.14	59.81	-18.21	QP	N	Pass
4**	0.316	31.45	10.14	49.81	-18.36	AV	N	Pass
5	0.366	42.77	10.14	58.59	-15.82	Peak	N	Pass
5*	0.366	38.94	10.14	58.59	-19.65	QP	N	Pass
5**	0.366	34.56	10.14	48.59	-14.03	AV	N	Pass
6	0.596	37.49	10.15	56.00	-18.51	Peak	N	Pass
6**	0.596	31.55	10.15	46.00	-14.45	AV	N	Pass
7	1.244	39.20	10.16	56.00	-16.80	Peak	N	Pass
7**	1.244	28.23	10.16	46.00	-17.77	AV	N	Pass

TEST REPORT

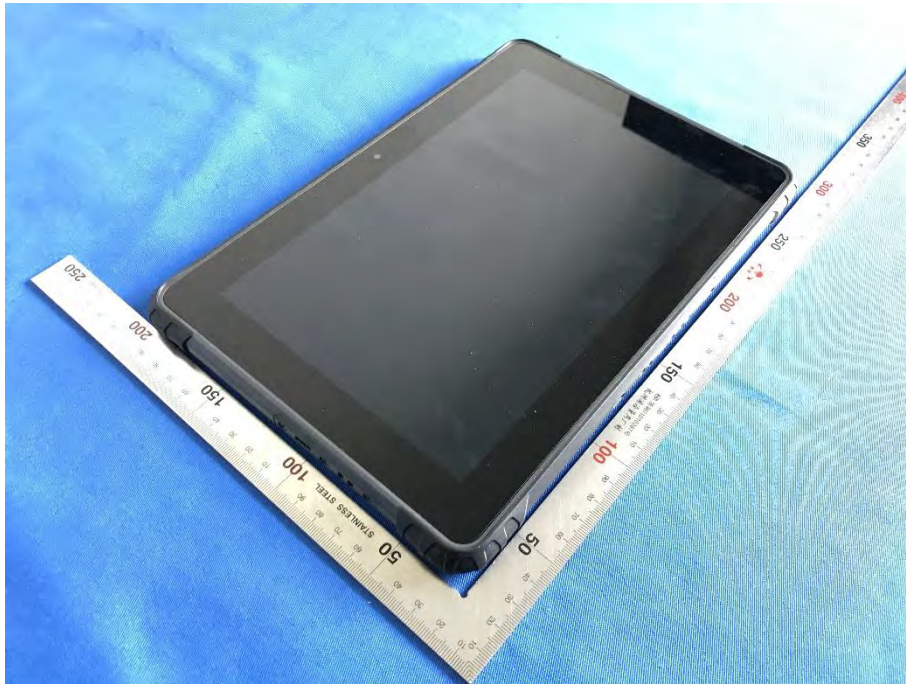
Report No.: SHE19080042-02IE

Date: 2019-11-01

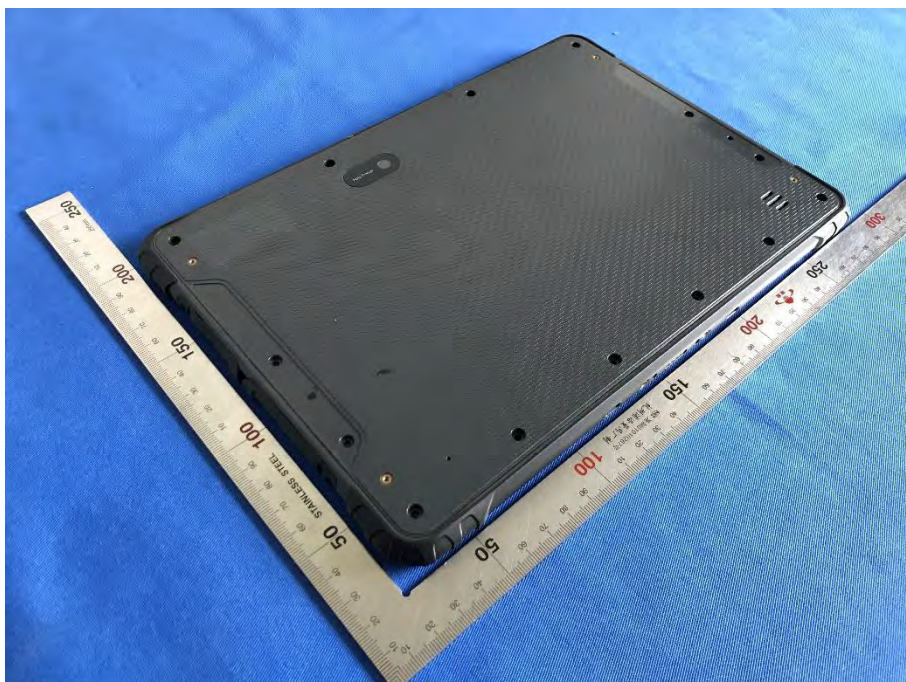
Page 235 of 238

5 Appendixes

5.1 Photographs of the Sample



Front of the sample



Rear of the sample

TEST REPORT

Report No.: SHE19080042-02IE

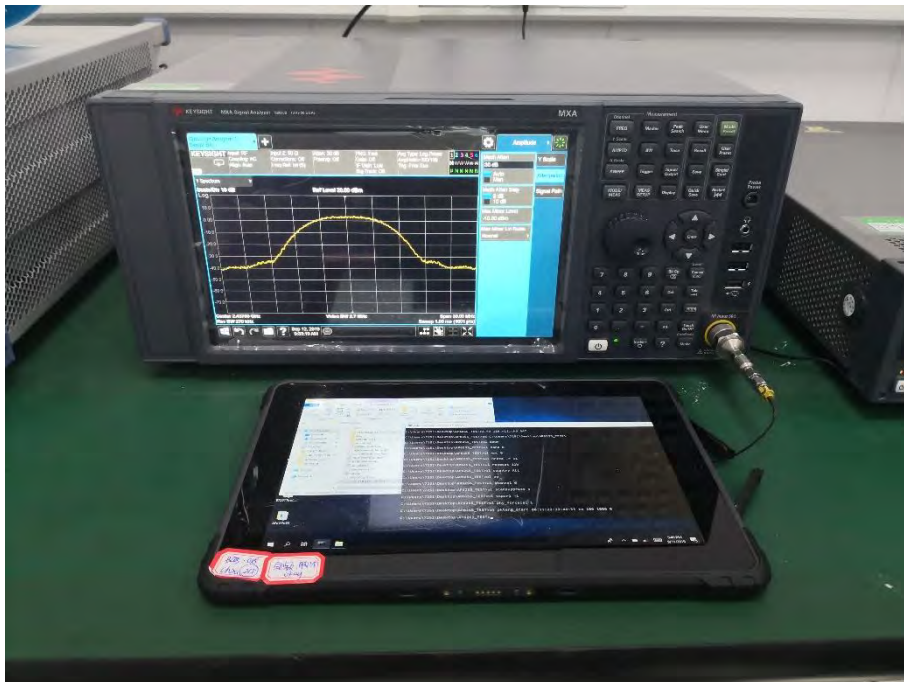
Date: 2019-11-01

Page 236 of 238

5.2 Set-up for Conducted Emissions



5.3 Set-up for Conducted RF test at Antenna Port



TEST REPORT

Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 237 of 238



5.4 Set-up for Spurious Emissions below 1GHz



Below 1 GHz

TEST REPORT

Report No.: SHE19080042-02IE

Date: 2019-11-01

Page 238 of 238

5.5 Set-up for Spurious Emissions above 1GHz



Above 1GHz

End of the report