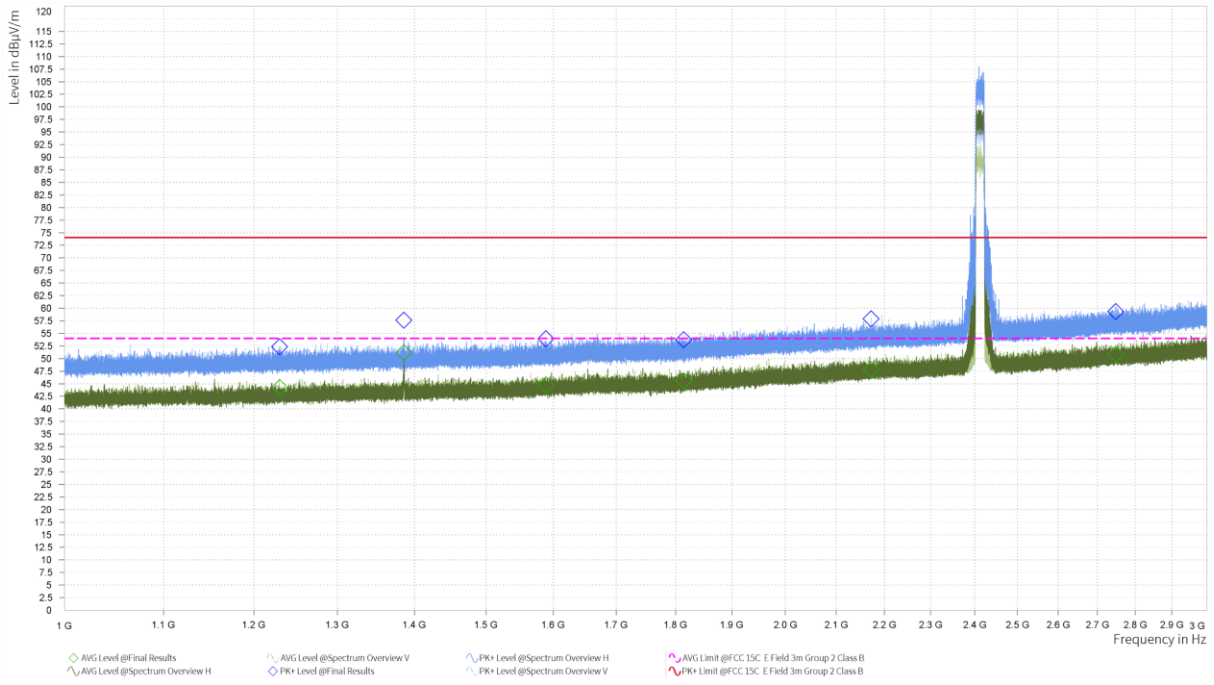
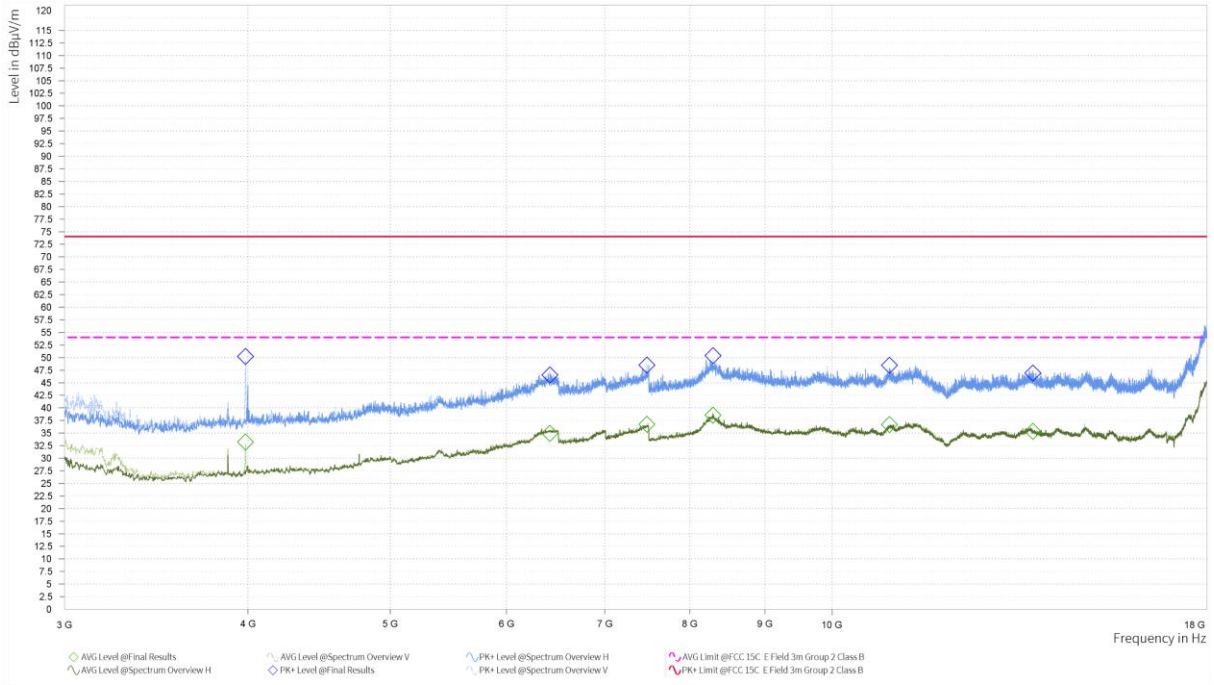
802.11ax HE20 CH 1



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

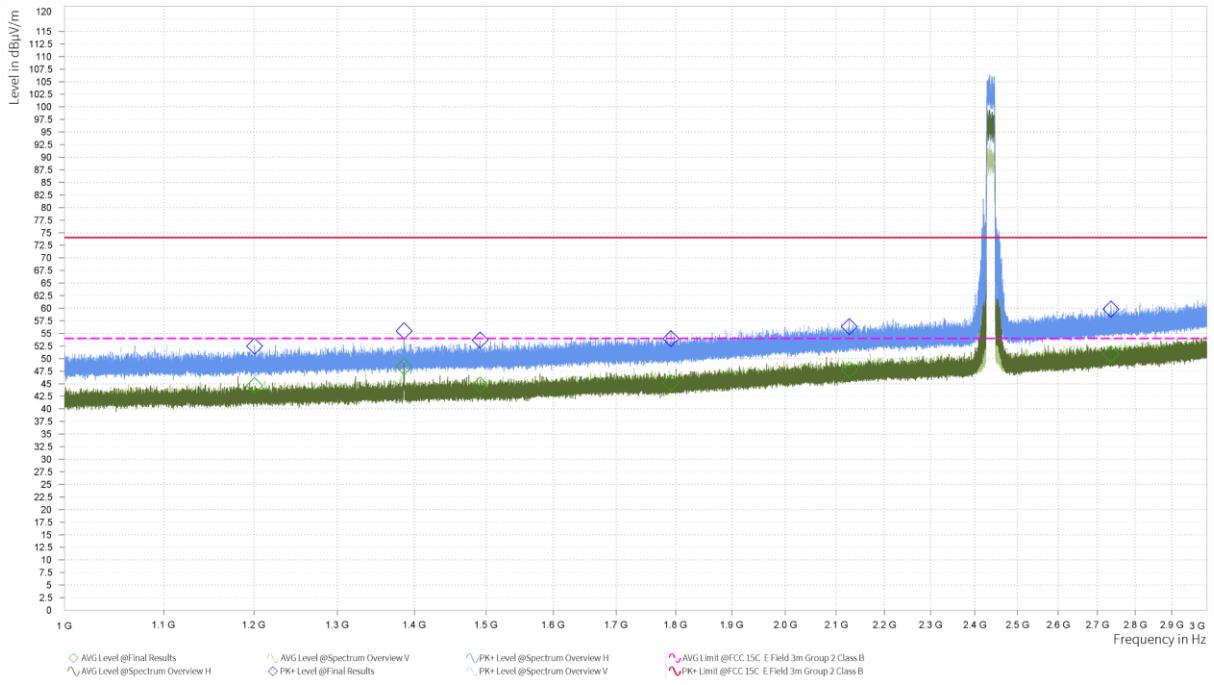


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBµV/m)	MaxPeak Limit (dBµV/m)	MaxPeak Margin (dB)	Average (dBµV/m)	Average Limit (dBµV/m)	Average Margin (dB)	Corr. (dB/m)	Pol	Azimuth (deg)	Height (m)	Meas. Time (ms)
1,229.760	52.34	74.00	21.66	44.24	54.00	9.76	-3.66	V	0.2	1.00	1.000
1,385.800	57.61	74.00	16.39	51.14	54.00	2.86	-3.35	H	226.4	1.00	1.000
1,588.840	53.90	74.00	20.10	44.77	54.00	9.23	-3.09	V	299.5	1.00	1.000
1,813.800	53.69	74.00	20.31	45.54	54.00	8.46	-2.54	V	0.2	1.00	1.000
2,171.940	57.84	74.00	16.16	47.79	54.00	6.21	-0.29	V	25.2	1.00	1.000
2,747.960	59.32	74.00	14.68	50.81	54.00	3.19	2.00	H	135.7	2.00	1.000

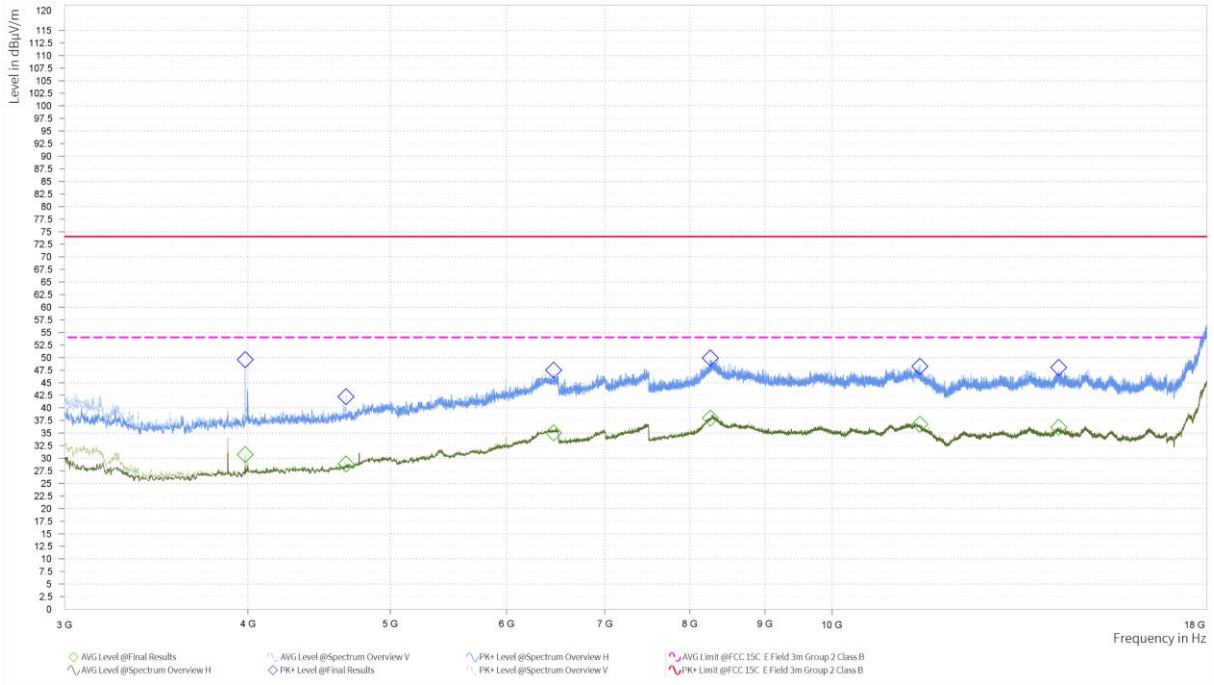
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit –MAX Peak/ Average

802.11ax HE20 CH6



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

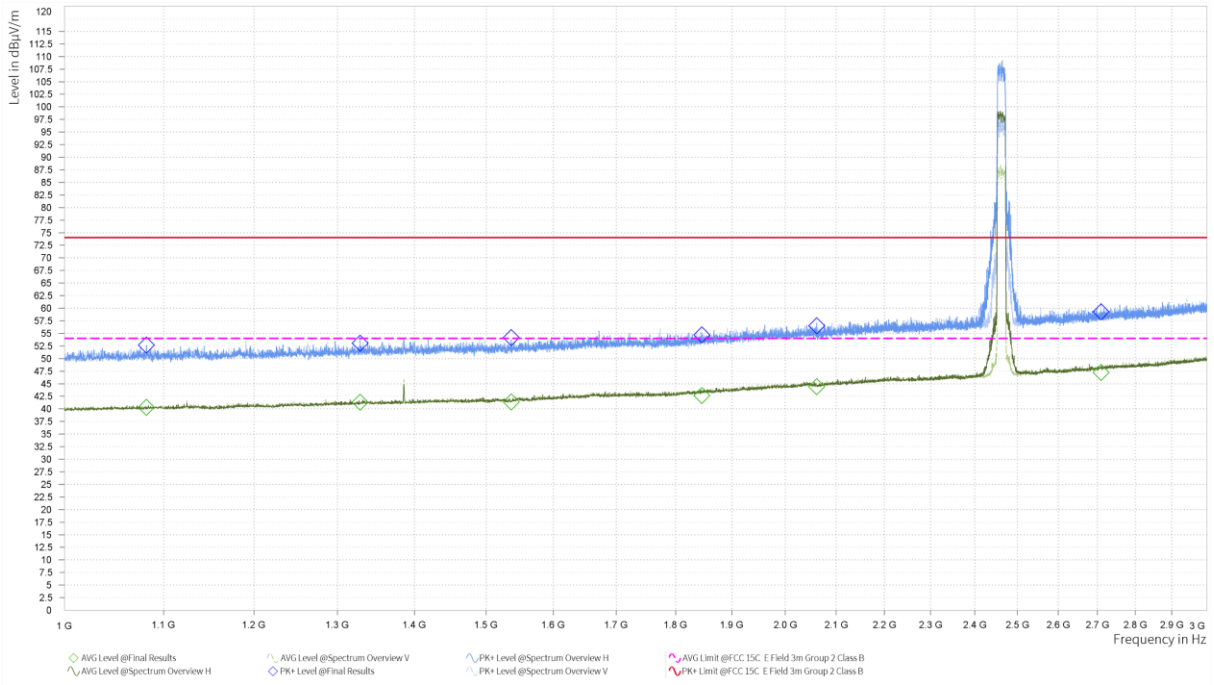


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBµV/m)	MaxPeak Limit (dBµV/m)	MaxPeak Margin (dB)	Average (dBµV/m)	Average Limit (dBµV/m)	Average Margin (dB)	Corr. (dB/m)	Pol	Azimuth (deg)	Height (m)	Meas. Time (ms)
1,200.460	52.42	74.00	21.58	44.59	54.00	9.41	-3.67	H	232.5	2.00	1.000
1,386.180	55.48	74.00	18.52	48.32	54.00	5.68	-3.35	V	182.7	1.00	1.000
1,491.160	53.68	74.00	20.32	44.70	54.00	9.30	-3.17	H	198.8	2.00	1.000
1,791.740	53.91	74.00	20.09	45.14	54.00	8.86	-2.75	H	64.3	2.00	1.000
2,126.560	56.31	74.00	17.69	47.75	54.00	6.25	-0.48	H	64.3	2.00	1.000
2,735.700	59.77	74.00	14.23	50.89	54.00	3.11	1.93	H	360	1.00	1.000

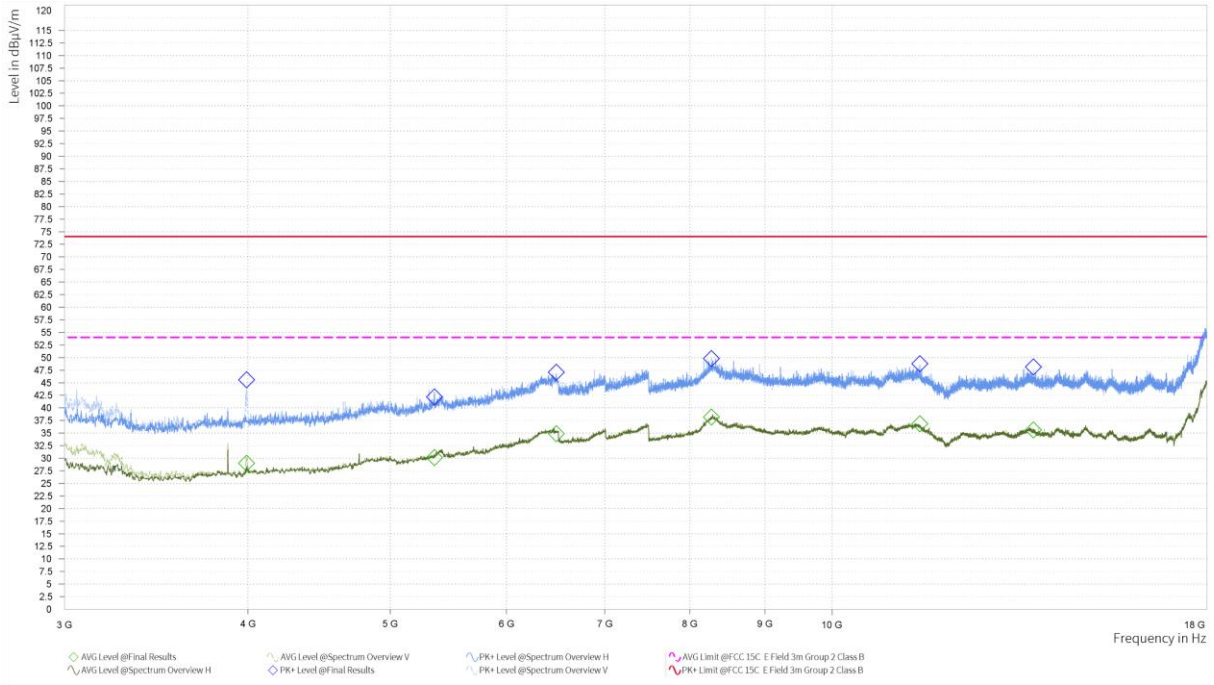
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit –MAX Peak/ Average

802.11ax HE20 CH11



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

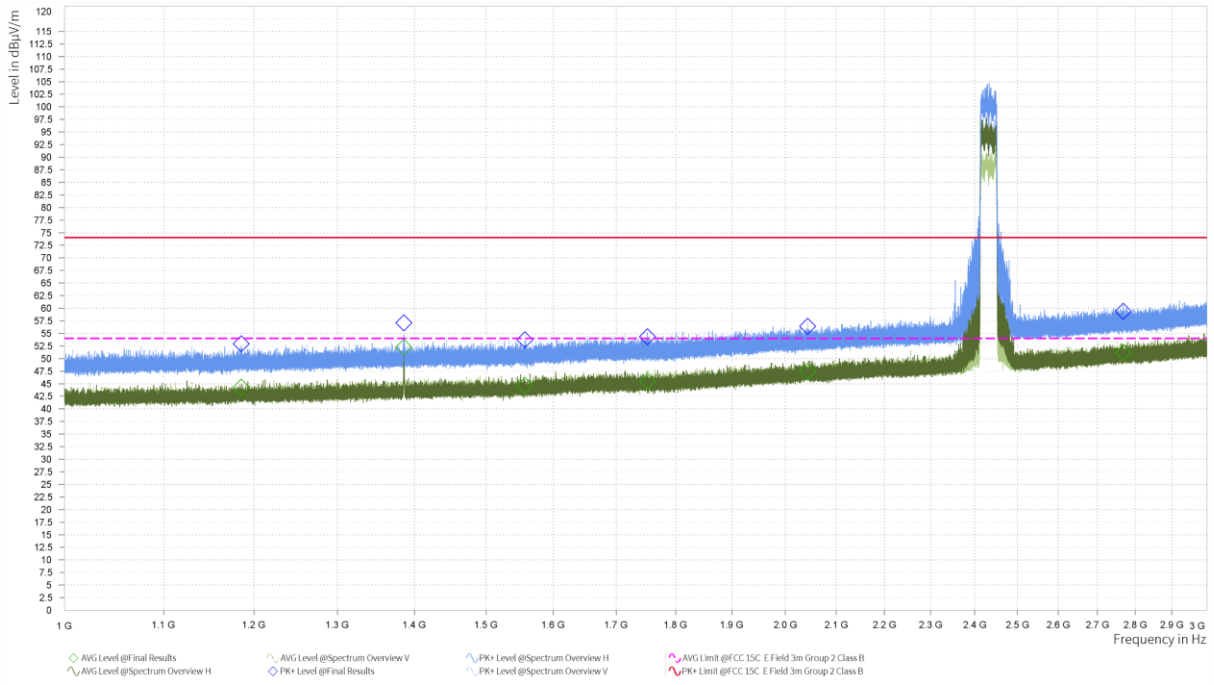


Radiates Emission from 3GHz to 18GHz

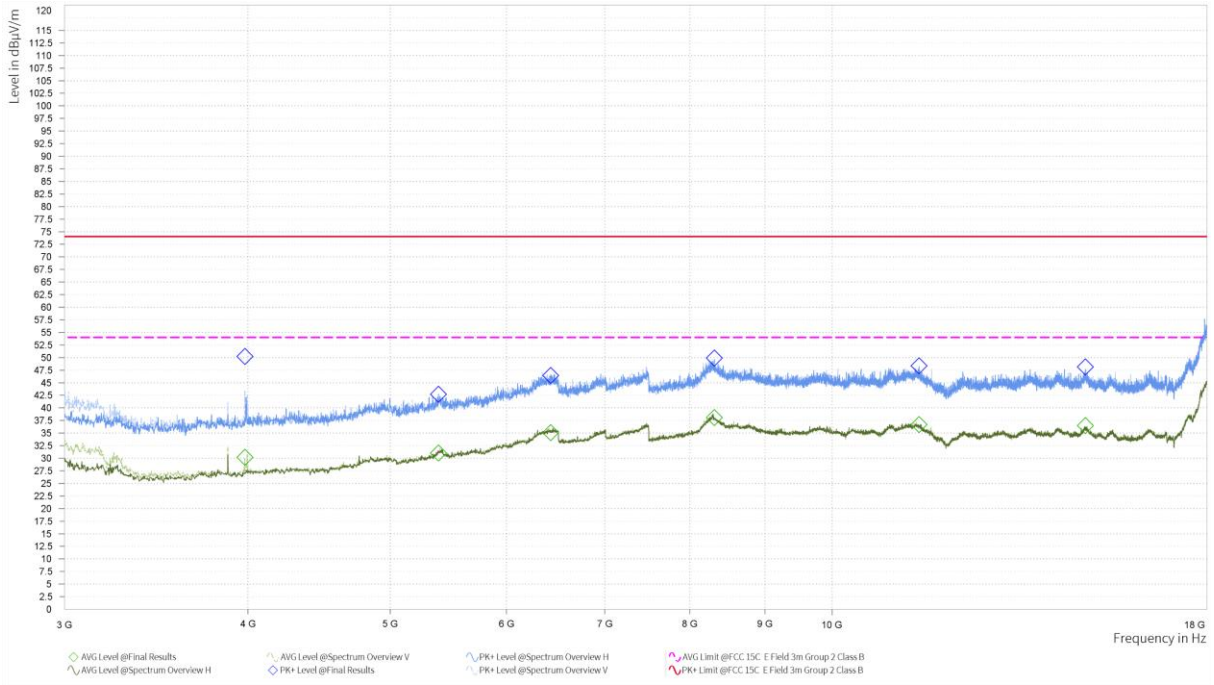
Frequency (MHz)	MaxPeak (dBµV/m)	MaxPeak Limit (dBµV/m)	MaxPeak Margin (dB)	Average (dBµV/m)	Average Limit (dBµV/m)	Average Margin (dB)	Corr. (dB/m)	Pol	Azimuth (deg)	Height (m)	Meas. Time (ms)
1,082.000	52.64	74.00	21.36	40.29	54.00	13.71	-4.39	H	2.8	2.00	1.000
1,328.750	53.01	74.00	20.99	41.29	54.00	12.71	-3.41	H	35	2.00	1.000
1,536.500	54.15	74.00	19.85	41.35	54.00	12.65	-3.29	H	55.9	2.00	1.000
1,845.500	54.68	74.00	19.32	42.62	54.00	11.38	-2.26	H	132.2	2.00	1.000
2,061.250	56.50	74.00	17.50	44.38	54.00	9.62	-0.78	H	21.3	2.00	1.000
2,709.500	59.27	74.00	14.73	47.23	54.00	6.77	1.76	V	241.8	1.00	1.000

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH3



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

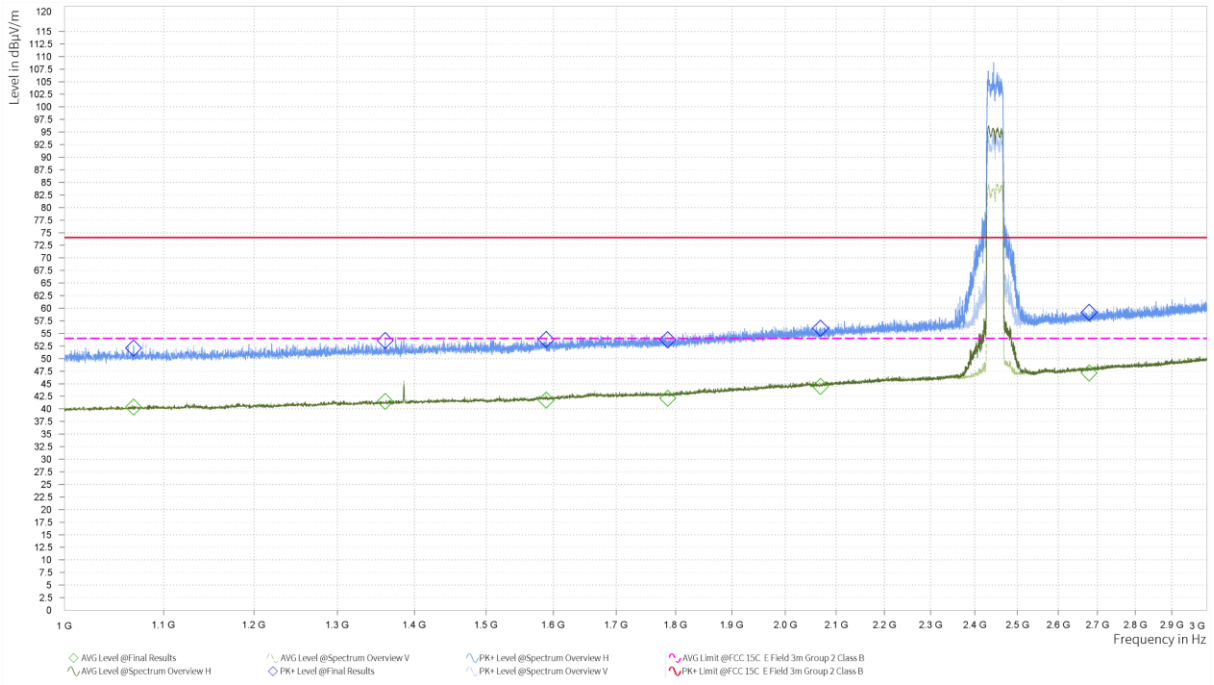


Radiates Emission from 3GHz to 18GHz

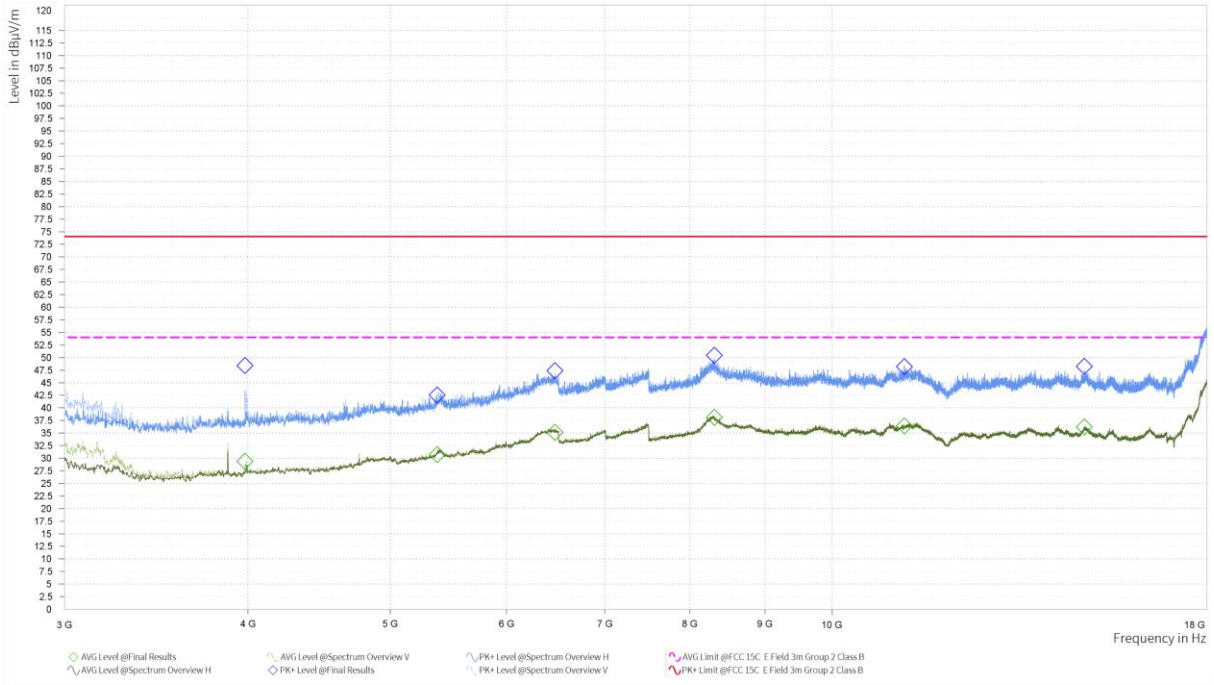
Frequency (MHz)	MaxPeak (dBµV/m)	MaxPeak Limit (dBµV/m)	MaxPeak Margin (dB)	Average (dBµV/m)	Average Limit (dBµV/m)	Average Margin (dB)	Corr. (dB/m)	Pol	Azimuth (deg)	Height (m)	Meas. Time (ms)
1,185.260	52.91	74.00	21.09	44.26	54.00	9.74	-3.58	H	0	2.00	1.000
1,385.880	57.08	74.00	16.92	52.20	54.00	1.80	-3.35	H	229.7	1.00	1.000
1,556.780	53.72	74.00	20.28	44.61	54.00	9.39	-3.22	H	3.2	2.00	1.000
1,751.820	54.27	74.00	19.73	45.48	54.00	8.52	-2.80	H	229.7	1.00	1.000
2,043.240	56.37	74.00	17.63	47.50	54.00	6.50	-0.58	V	360	2.00	1.000
2,767.980	59.36	74.00	14.64	51.15	54.00	2.85	2.06	H	225.1	2.00	1.000

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH6



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

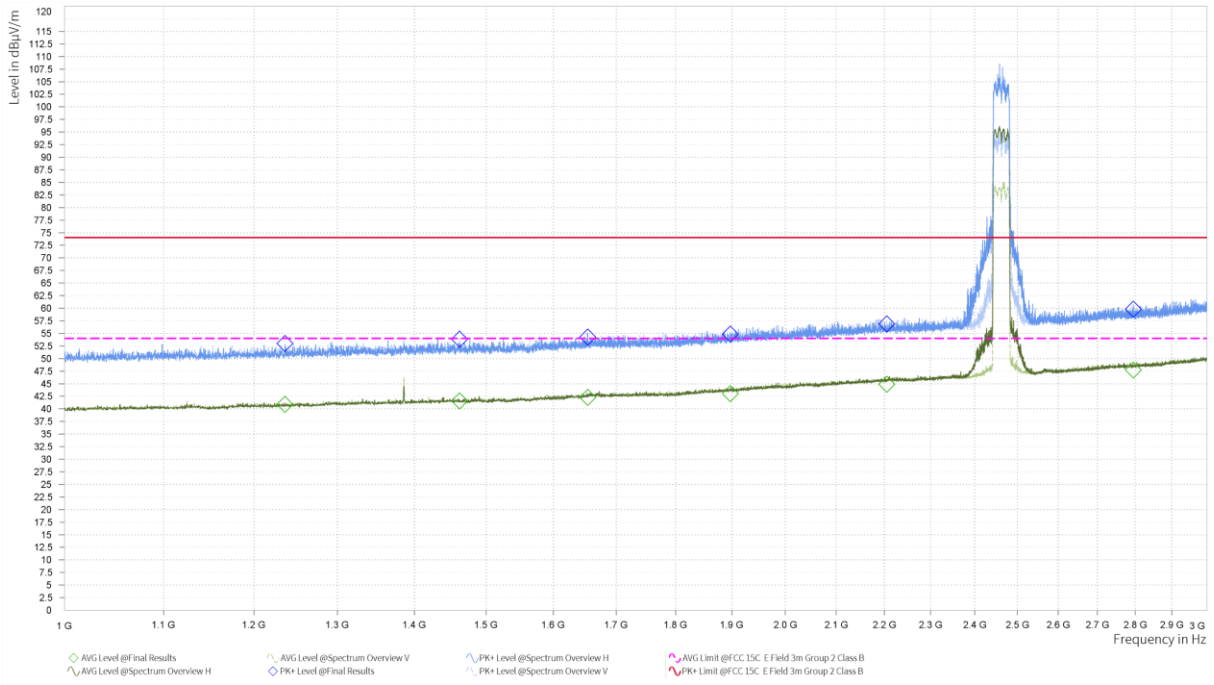


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBµV/m)	MaxPeak Limit (dBµV/m)	MaxPeak Margin (dB)	Average (dBµV/m)	Average Limit (dBµV/m)	Average Margin (dB)	Corr. (dB/m)	Pol	Azimuth (deg)	Height (m)	Meas. Time (ms)
1,068.750	52.07	74.00	21.93	40.33	54.00	13.67	-4.50	H	319.5	2.00	1.000
1,361.250	53.57	74.00	20.43	41.45	54.00	12.55	-3.43	H	338.5	1.00	1.000
1,589.000	53.76	74.00	20.24	41.75	54.00	12.25	-3.09	H	20.1	2.00	1.000
1,786.250	53.72	74.00	20.28	42.12	54.00	11.88	-2.74	V	110.8	1.00	1.000
2,068.750	55.99	74.00	18.01	44.46	54.00	9.54	-0.78	H	33.9	2.00	1.000
2,678.500	59.15	74.00	14.85	47.12	54.00	6.88	1.55	V	70.8	1.00	1.000

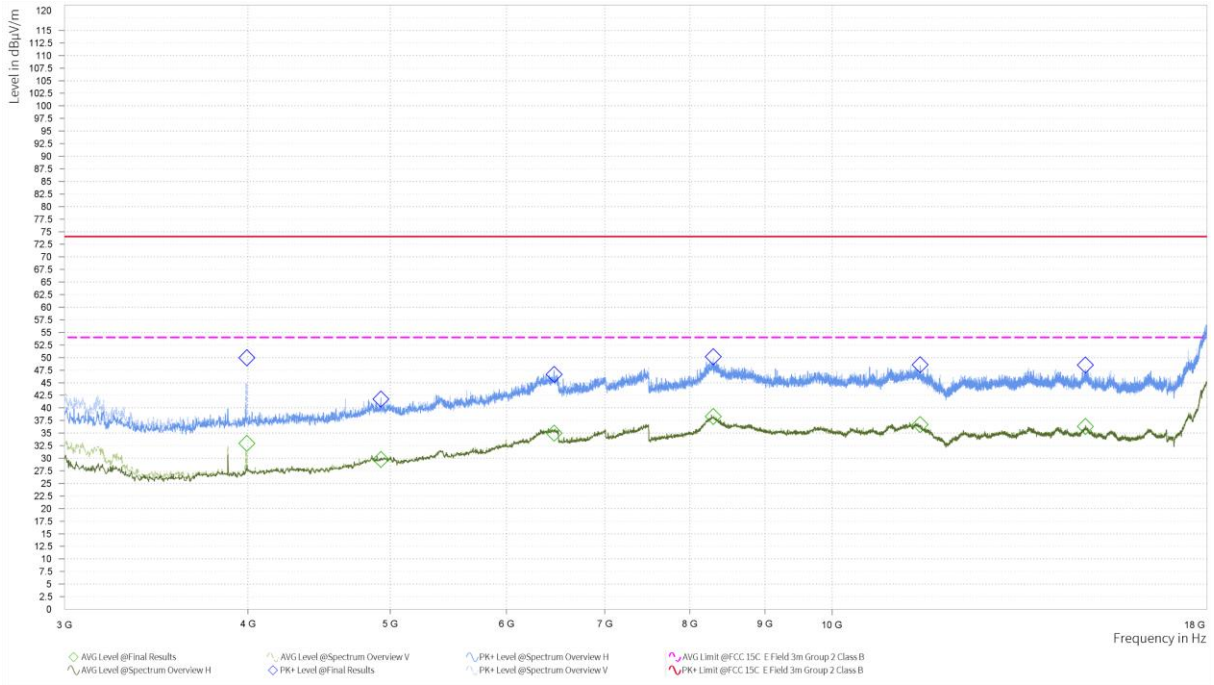
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit –MAX Peak/ Average

802.11ax HE40 CH9



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



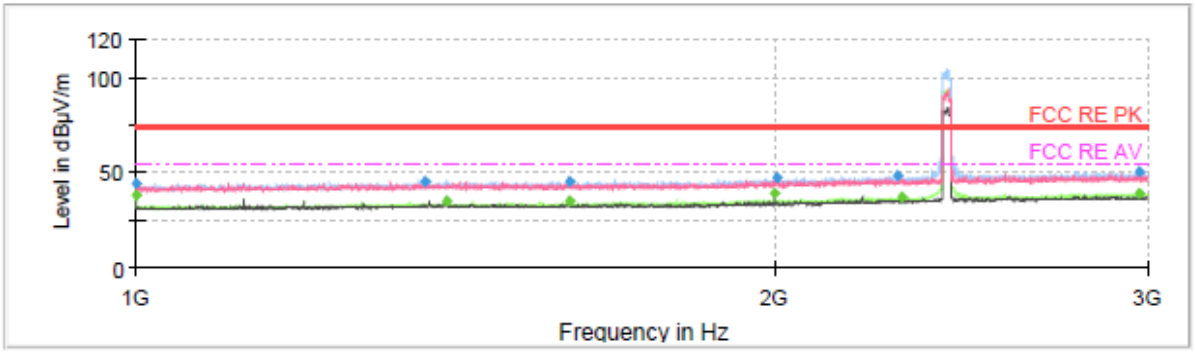
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBµV/m)	MaxPeak Limit (dBµV/m)	MaxPeak Margin (dB)	Average (dBµV/m)	Average Limit (dBµV/m)	Average Margin (dB)	Corr. (dB/m)	Pol	Azimuth (deg)	Height (m)	Meas. Time (ms)
1,236.250	52.94	74.00	21.06	40.88	54.00	13.12	-3.61	H	62.6	2.00	1.000
1,462.250	53.79	74.00	20.21	41.56	54.00	12.44	-3.26	V	339.5	1.00	1.000
1,653.750	54.26	74.00	19.74	42.23	54.00	11.77	-2.86	H	34.3	2.00	1.000
1,897.250	54.83	74.00	19.17	43.00	54.00	11.00	-1.86	H	288.9	2.00	1.000
2,205.000	56.84	74.00	17.16	44.87	54.00	9.13	-0.09	V	0	1.00	1.000
2,795.250	59.76	74.00	14.24	47.70	54.00	6.30	2.15	H	90.9	2.00	1.000

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit –MAX Peak/ Average

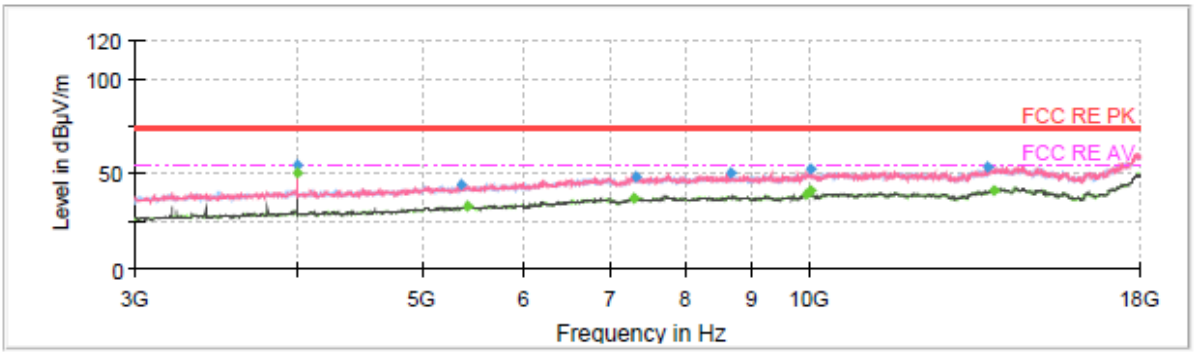
TB Mode

802.11ax HE20 CH1



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

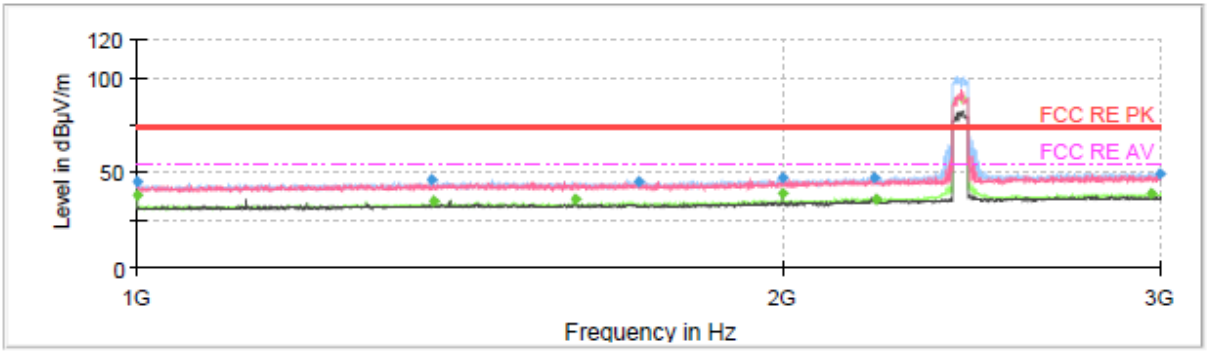


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Correct Factor (dB)
1000.00	---	38.25	54.00	15.75	500.00	100.0	H	316.00	-5
1000.25	44.58	---	74.00	29.42	500.00	200.0	H	329.00	-5
1369.00	44.99	---	74.00	29.01	500.00	100.0	H	112.00	-3
1400.00	---	35.10	54.00	18.90	500.00	200.0	H	44.00	-3
1600.00	45.47	---	74.00	28.53	500.00	200.0	H	99.00	-2
1600.00	---	35.37	54.00	18.63	500.00	100.0	V	68.00	-2
2000.00	---	38.53	54.00	15.47	500.00	100.0	V	234.00	0
2004.00	47.49	---	74.00	26.51	500.00	100.0	H	3.00	0
2286.25	48.18	---	74.00	25.82	500.00	100.0	H	329.00	1
2295.50	---	36.60	54.00	17.40	500.00	200.0	H	3.00	1
2970.75	49.86	---	74.00	24.14	500.00	200.0	H	12.00	3
2972.00	---	38.64	54.00	15.36	500.00	100.0	H	4.00	3
3999.38	---	50.18	54.00	3.82	500.00	200.0	V	349.00	-4

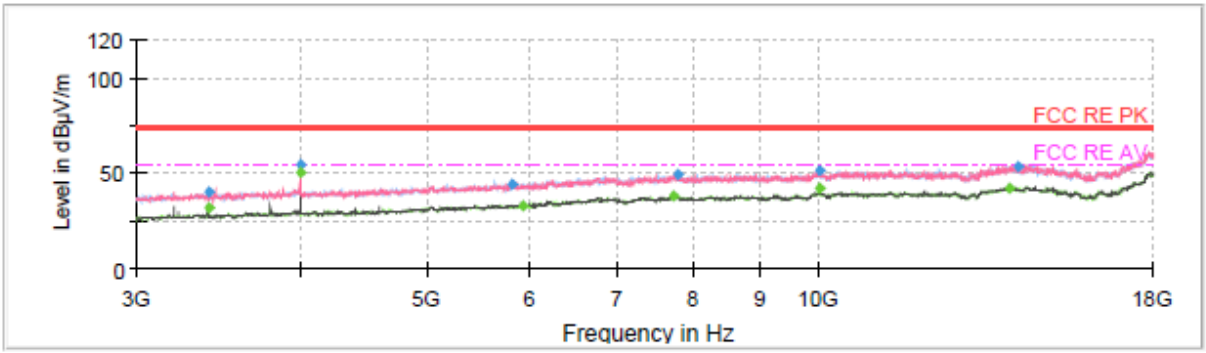
Remark: 1. Correct Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit – MaxPeak / Average

802.11ax HE40 CH3



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



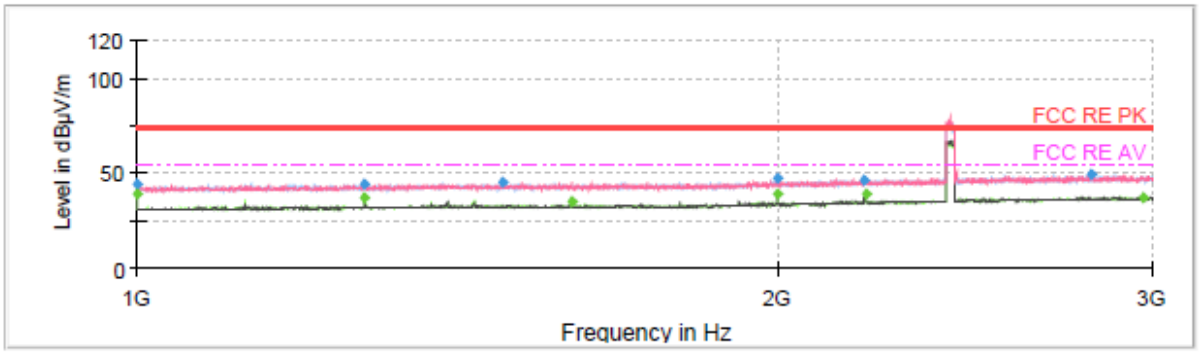
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Correct Factor (dB)
1000.00	---	38.12	54.00	15.88	500.00	200.0	H	216.00	-5
1000.00	44.80	---	74.00	29.20	500.00	100.0	H	216.00	-5
1372.50	45.71	---	74.00	28.29	500.00	100.0	H	192.00	-3
1374.75	---	35.01	54.00	18.99	500.00	100.0	V	90.00	-3
1599.75	---	35.47	54.00	18.53	500.00	200.0	H	287.00	-2
1712.75	45.01	---	74.00	28.99	500.00	100.0	H	74.00	-2
1999.75	46.96	---	74.00	27.04	500.00	100.0	H	2.00	0
2000.00	---	38.69	54.00	15.31	500.00	100.0	V	232.00	0
2205.50	46.95	---	74.00	27.05	500.00	200.0	H	0.00	1
2212.25	---	35.60	54.00	18.40	500.00	100.0	H	52.00	1
2973.25	---	38.70	54.00	15.30	500.00	200.0	H	8.00	3
2999.75	49.71	---	74.00	24.29	500.00	200.0	H	4.00	3
3999.38	---	49.94	54.00	4.06	500.00	200.0	V	351.00	-4

Remark: 1. Correct Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit – MaxPeak / Average

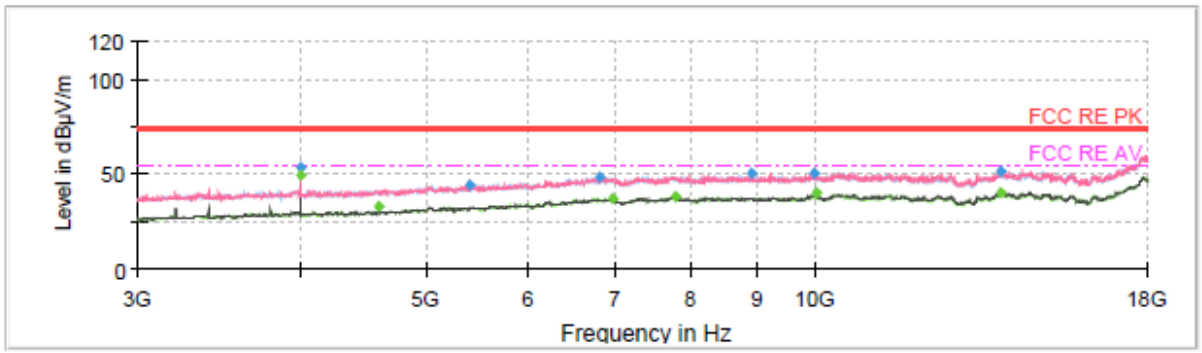
ERSU Mode

802.11ax HE20 CH1



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

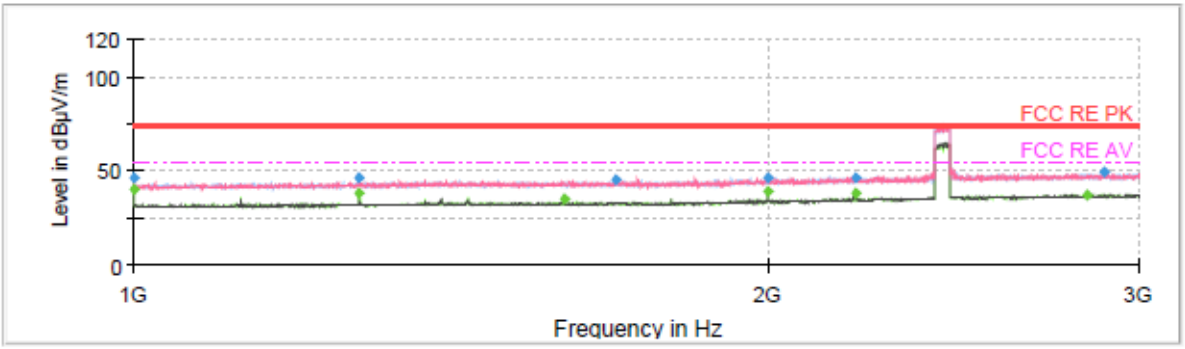


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Correct Factor (dB)
1000.00	---	38.93	54.00	15.07	500.00	200.0	H	46.00	-5
1000.00	44.53	---	74.00	29.47	500.00	100.0	H	38.00	-5
1279.50	44.61	---	74.00	29.39	500.00	100.0	H	60.00	-4
1279.75	---	37.36	54.00	16.64	500.00	100.0	H	60.00	-4
1487.00	45.11	---	74.00	28.89	500.00	100.0	V	199.00	-3
1600.00	---	34.91	54.00	19.09	500.00	100.0	V	2.00	-2
2000.00	47.36	---	74.00	26.64	500.00	200.0	V	345.00	0
2000.00	---	39.12	54.00	14.88	500.00	200.0	V	345.00	0
2198.25	46.47	---	74.00	27.53	500.00	200.0	H	5.00	1
2200.00	---	38.61	54.00	15.39	500.00	100.0	V	31.00	1
2811.75	48.81	---	74.00	25.19	500.00	200.0	V	71.00	3
2973.00	---	37.28	54.00	16.72	500.00	100.0	H	271.00	3
3999.38	---	48.87	54.00	5.13	500.00	200.0	V	78.00	-4

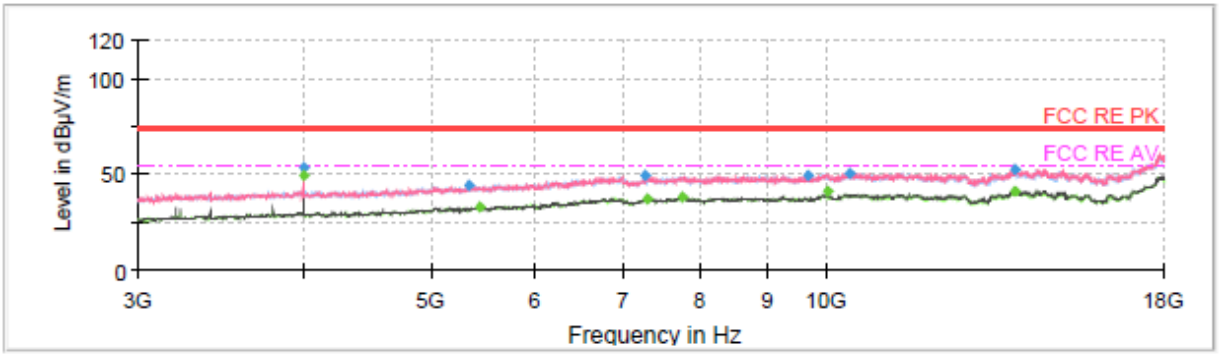
Remark: 1. Correct Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit – MaxPeak / Average

802.11ax HE40 CH3



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



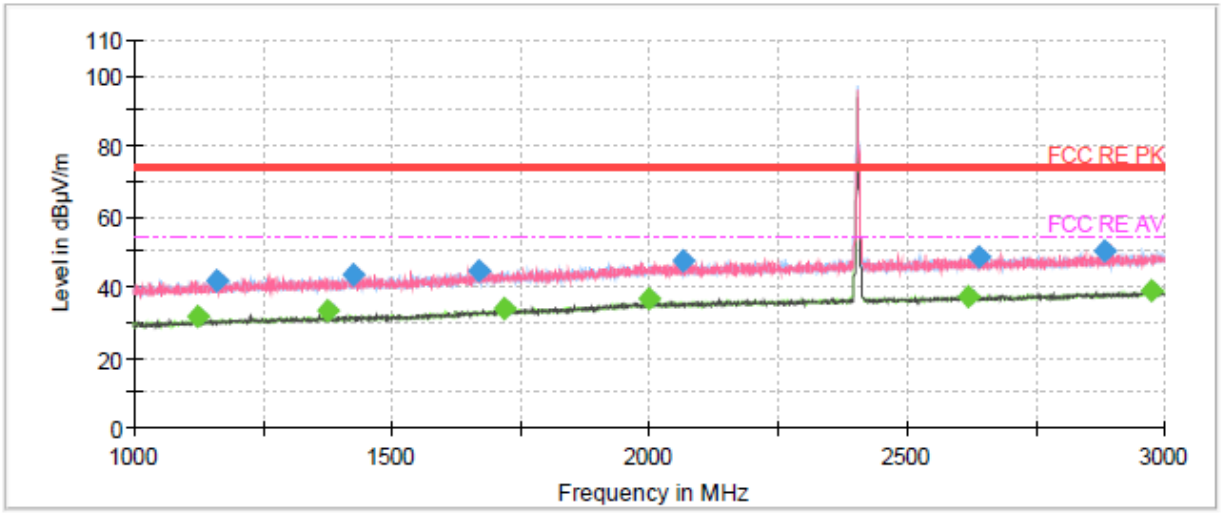
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Correct Factor (dB)
1000.00	---	39.50	54.00	14.50	500.00	100.0	H	55.00	-5
1000.00	46.09	---	74.00	27.91	500.00	100.0	H	55.00	-5
1279.75	---	38.20	54.00	15.80	500.00	200.0	H	50.00	-4
1280.00	45.68	---	74.00	28.32	500.00	100.0	H	38.00	-4
1600.00	---	35.33	54.00	18.67	500.00	200.0	V	314.00	-2
1693.75	45.56	---	74.00	28.44	500.00	200.0	H	26.00	-2
2000.00	46.60	---	74.00	27.40	500.00	200.0	V	336.00	0
2000.00	---	39.33	54.00	14.67	500.00	200.0	V	336.00	0
2200.00	46.66	---	74.00	27.34	500.00	200.0	H	278.00	1
2200.00	---	37.93	54.00	16.07	500.00	200.0	V	170.00	1
2834.00	---	37.37	54.00	16.63	500.00	200.0	V	102.00	3
2887.75	48.82	---	74.00	25.18	500.00	200.0	V	146.00	3
3999.38	---	48.80	54.00	5.20	500.00	200.0	V	71.00	-4

Remark: 1. Correct Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit – MaxPeak / Average

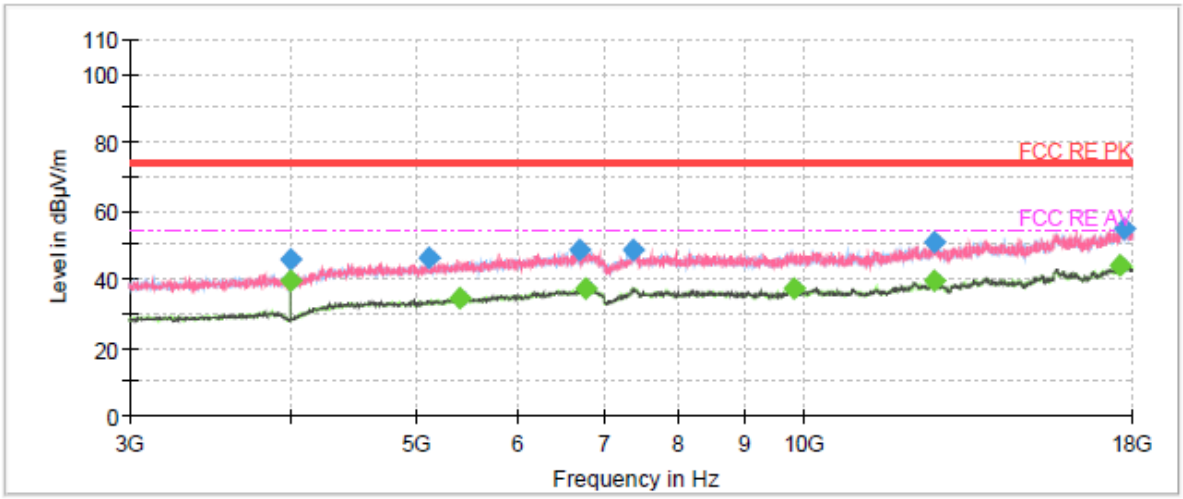
Thread

Thread CH11



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

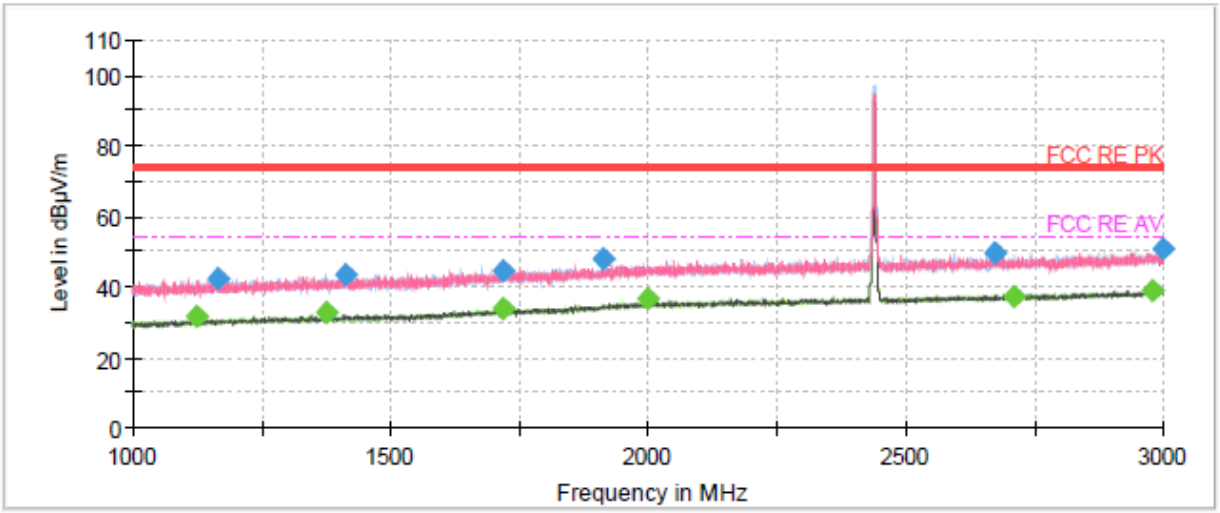


Radiates Emission from 3GHz to 18GHz

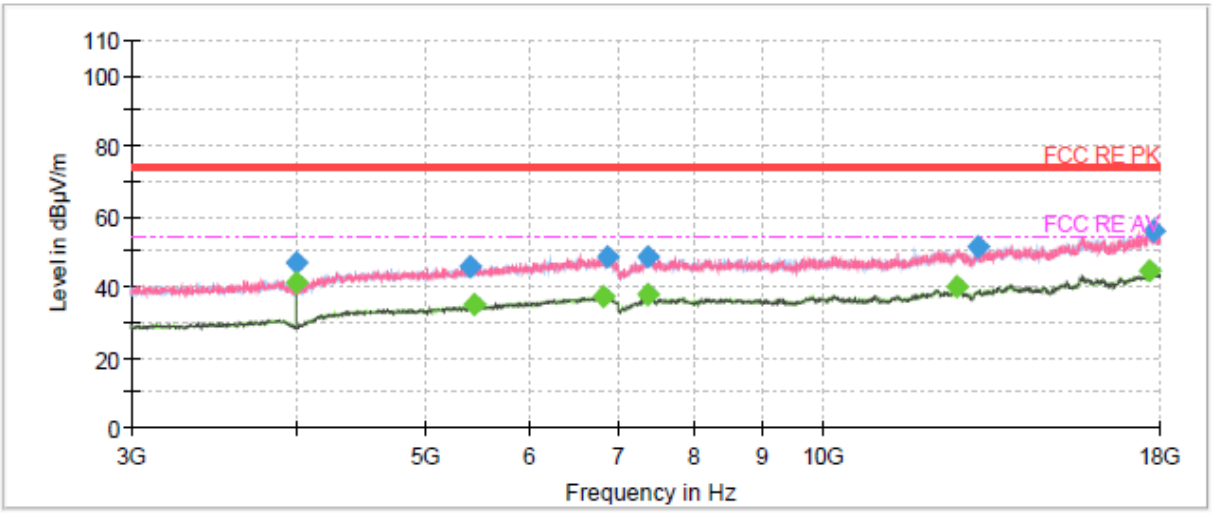
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1125.000000	---	31.63	54.00	22.37	500.0	200.0	V	45.0	-6.6
1161.250000	41.87	---	74.00	32.13	500.0	200.0	V	32.0	-6.3
1375.000000	---	33.08	54.00	20.92	500.0	200.0	H	0.0	-4.6
1425.500000	43.25	---	74.00	30.75	500.0	200.0	V	45.0	-4.2
1667.500000	44.74	---	74.00	29.26	500.0	200.0	H	14.0	-2.3
1720.250000	---	33.72	54.00	20.28	500.0	200.0	H	0.0	-2.0
1999.750000	---	36.39	54.00	17.61	500.0	200.0	V	10.0	0.2
2066.500000	47.21	---	74.00	26.79	500.0	200.0	V	45.0	0.3
2620.500000	---	37.38	54.00	16.62	500.0	200.0	H	1.0	1.9
2641.500000	48.36	---	74.00	25.64	500.0	200.0	V	24.0	2.0
2882.500000	50.22	---	74.00	23.78	500.0	200.0	V	45.0	3.1
2973.750000	---	39.01	54.00	14.99	500.0	200.0	V	45.0	3.4
17626.875000	---	44.14	54.00	9.86	500.0	200.0	V	45.0	10.1

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit –MAX Peak/ Average

Thread CH18



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

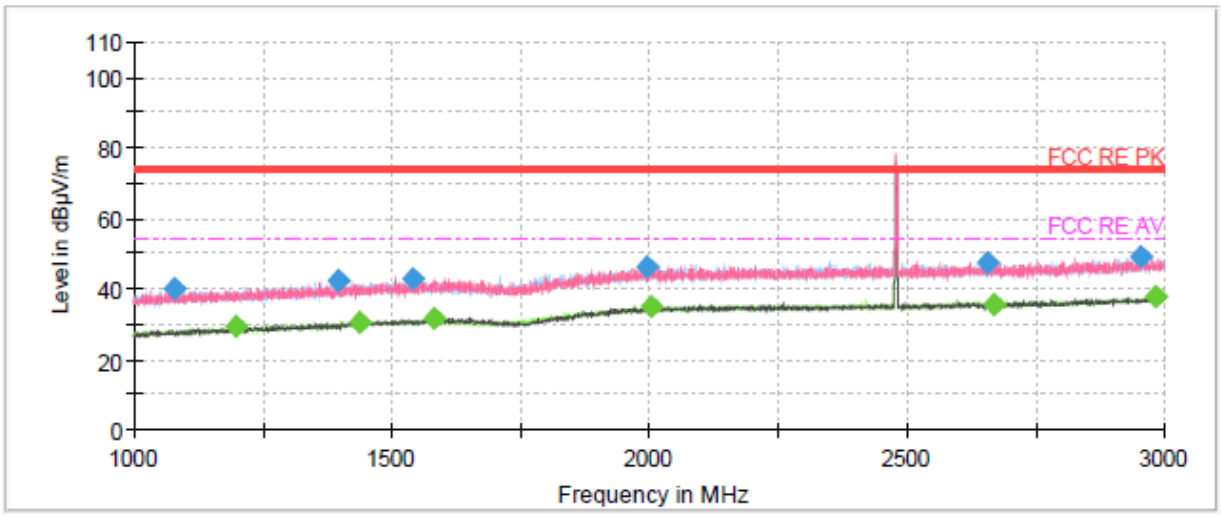


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1125.000000	---	31.45	54.00	22.55	500.0	200.0	V	39.0	-6.6
1166.000000	42.29	---	74.00	31.71	500.0	200.0	V	44.0	-6.3
1374.750000	---	32.49	54.00	21.51	500.0	200.0	V	18.0	-4.6
1413.250000	43.36	---	74.00	30.64	500.0	200.0	V	44.0	-4.3
1717.750000	44.79	---	74.00	29.21	500.0	200.0	H	1.0	-2.0
1717.750000	---	33.70	54.00	20.30	500.0	200.0	H	1.0	-2.0
1914.500000	47.96	---	74.00	26.04	500.0	200.0	H	20.0	-0.5
2000.000000	---	36.78	54.00	17.23	500.0	200.0	V	3.0	0.2
2673.250000	49.42	---	74.00	24.58	500.0	200.0	V	11.0	2.1
2712.000000	---	37.51	54.00	16.49	500.0	200.0	H	45.0	2.3
2979.500000	---	38.85	54.00	15.15	500.0	200.0	H	27.0	3.4
3000.000000	50.83	---	74.00	23.17	500.0	200.0	V	18.0	3.5
17649.375000	---	44.50	54.00	9.50	500.0	200.0	V	287.0	10.1

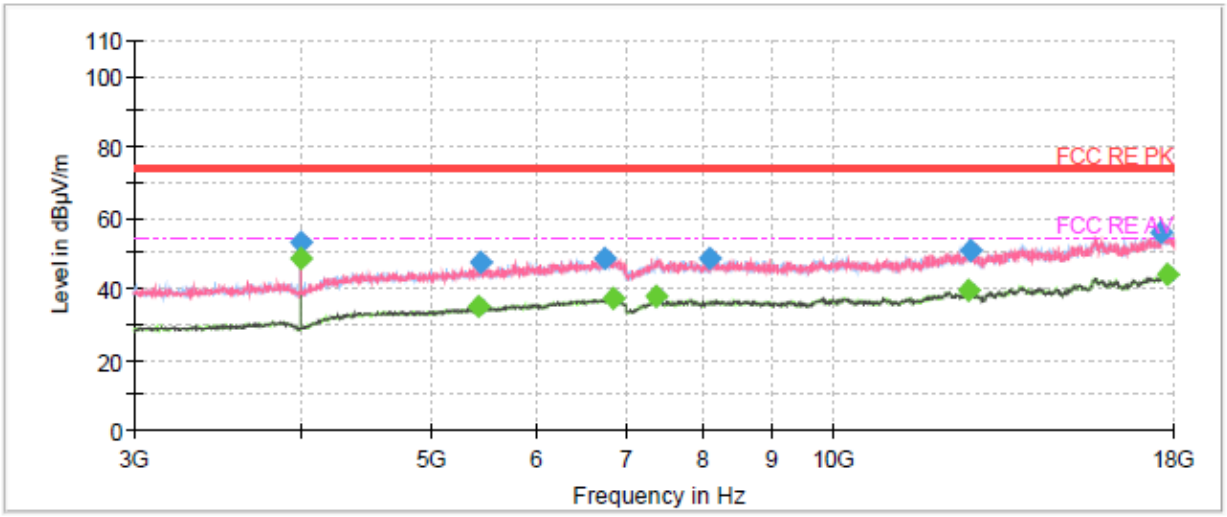
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit –MAX Peak/ Average

Thread CH26



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

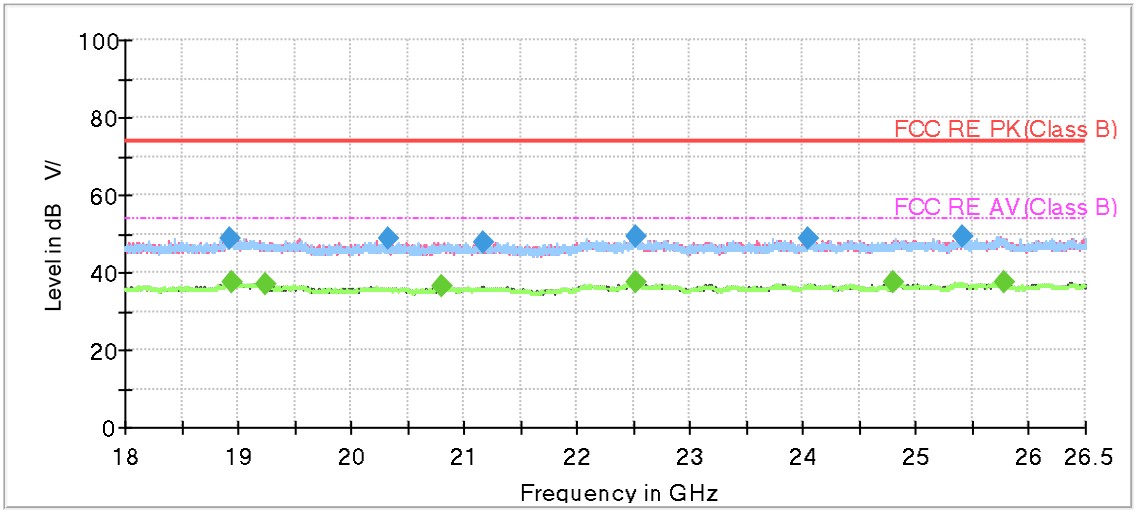


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1079.250000	40.30	---	74.00	33.70	500.0	200.0	V	0.0	-7.1
1197.750000	---	29.12	54.00	24.88	500.0	200.0	V	34.0	-6.0
1394.750000	42.06	---	74.00	31.94	500.0	200.0	V	1.0	-4.5
1439.750000	---	30.67	54.00	23.33	500.0	200.0	V	34.0	-4.1
1541.750000	42.65	---	74.00	31.35	500.0	200.0	H	25.0	-3.3
1583.750000	---	31.53	54.00	22.47	500.0	200.0	V	13.0	-3.0
1994.500000	46.34	---	74.00	27.66	500.0	200.0	V	0.0	0.2
2003.500000	---	35.11	54.00	18.89	500.0	200.0	V	6.0	0.2
2657.500000	47.30	---	74.00	26.70	500.0	200.0	V	6.0	2.1
2669.250000	---	35.48	54.00	18.52	500.0	200.0	H	18.0	2.1
2954.750000	48.91	---	74.00	25.09	500.0	200.0	V	0.0	3.3
2985.500000	---	37.59	54.00	16.41	500.0	200.0	V	1.0	3.5
3999.375000	---	48.69	54.00	5.31	500.0	200.0	V	150.0	-6.4

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit –MAX Peak/ Average

During the test, the Radiates Emission from 18GHz to 26.5GHz was performed in all modes with all channels. The test data of the worst-case condition was recorded in this report.



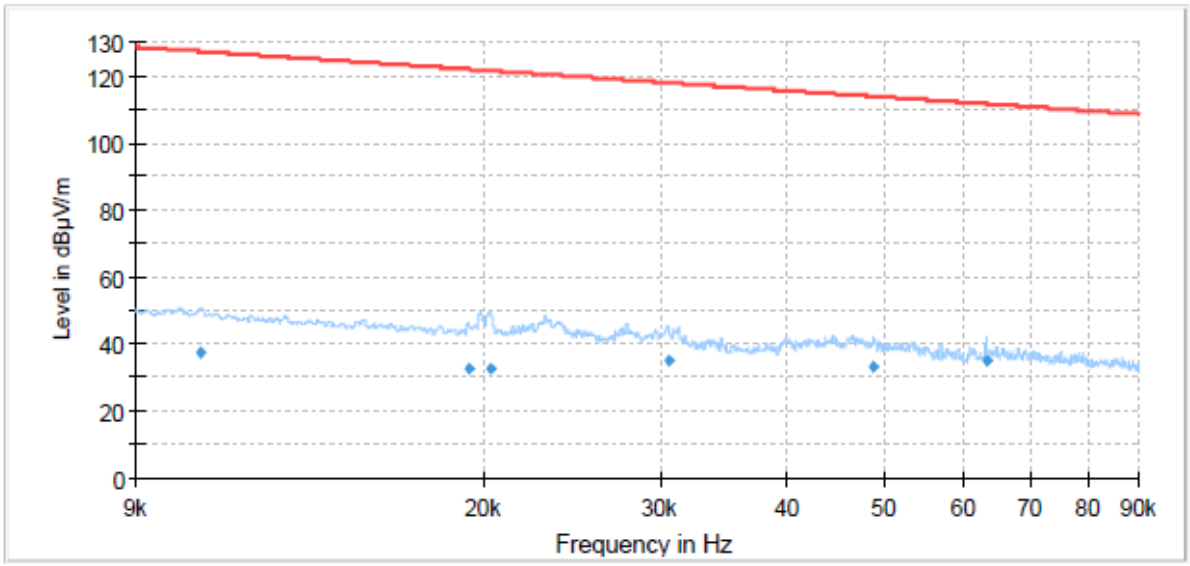
Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
18922.250000	48.62	---	74.00	25.38	500.0	200.0	H	0.0	-3.7
18949.875000	---	37.42	54.00	16.58	500.0	200.0	V	171.0	-3.7
19236.750000	---	36.69	54.00	17.31	500.0	200.0	V	93.0	-4.1
20326.875000	48.57	---	74.00	25.43	500.0	100.0	H	118.0	-3.8
20811.375000	---	36.50	54.00	17.50	500.0	100.0	H	17.0	-3.9
21167.312500	47.88	---	74.00	26.12	500.0	200.0	V	13.0	-3.7
22522.000000	49.16	---	74.00	24.84	500.0	200.0	H	168.0	-2.5
22525.187500	---	37.47	54.00	16.53	500.0	200.0	H	223.0	-2.5
24052.000000	48.58	---	74.00	25.42	500.0	200.0	V	212.0	-2.0
24798.937500	---	37.21	54.00	16.79	500.0	200.0	V	236.0	-1.7
25416.250000	49.28	---	74.00	24.72	500.0	200.0	V	221.0	-1.2
25778.562500	---	37.60	54.00	16.40	500.0	200.0	V	9.0	-1.0

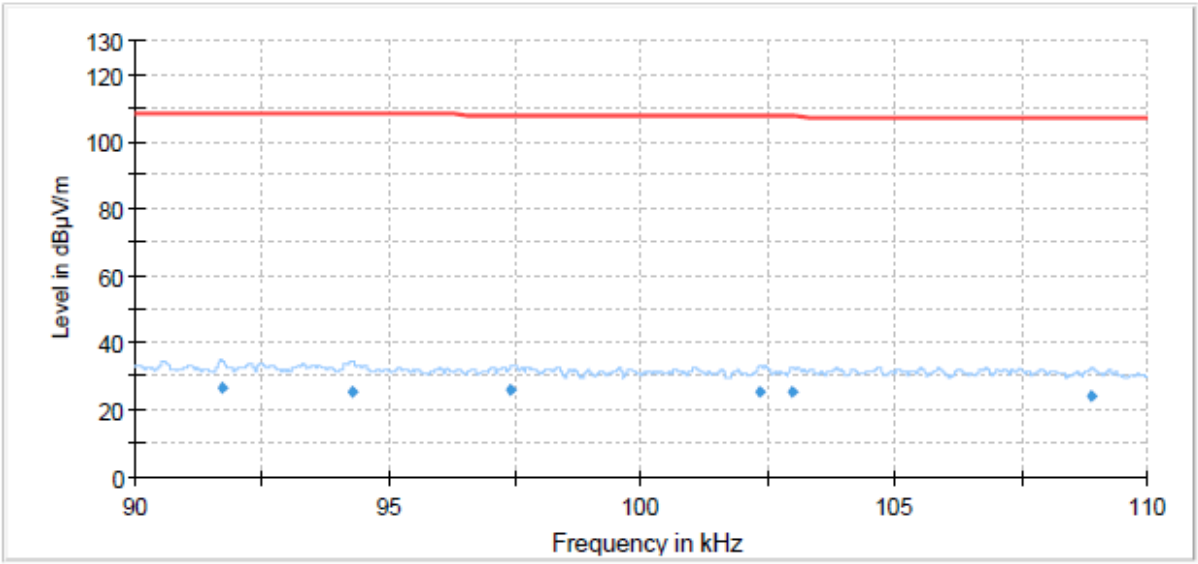
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit –MAX Peak/ Average

Bluetooth LE

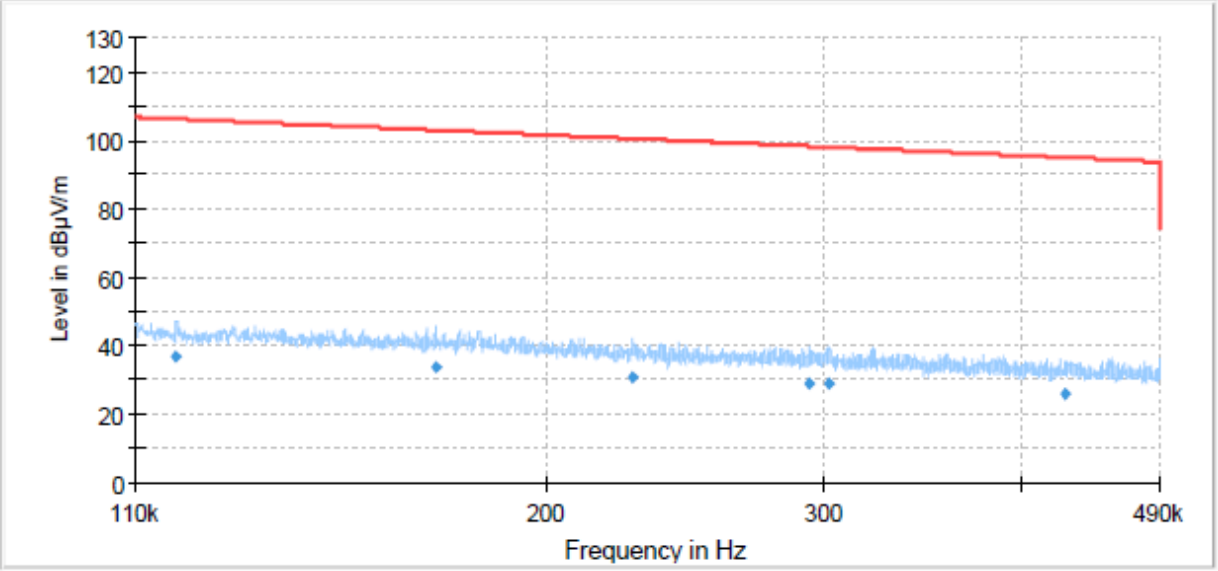
During the test, the Radiates Emission from 9kHz to 1GHz was performed in all modes with all channels, Bluetooth LE-Channel 39 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



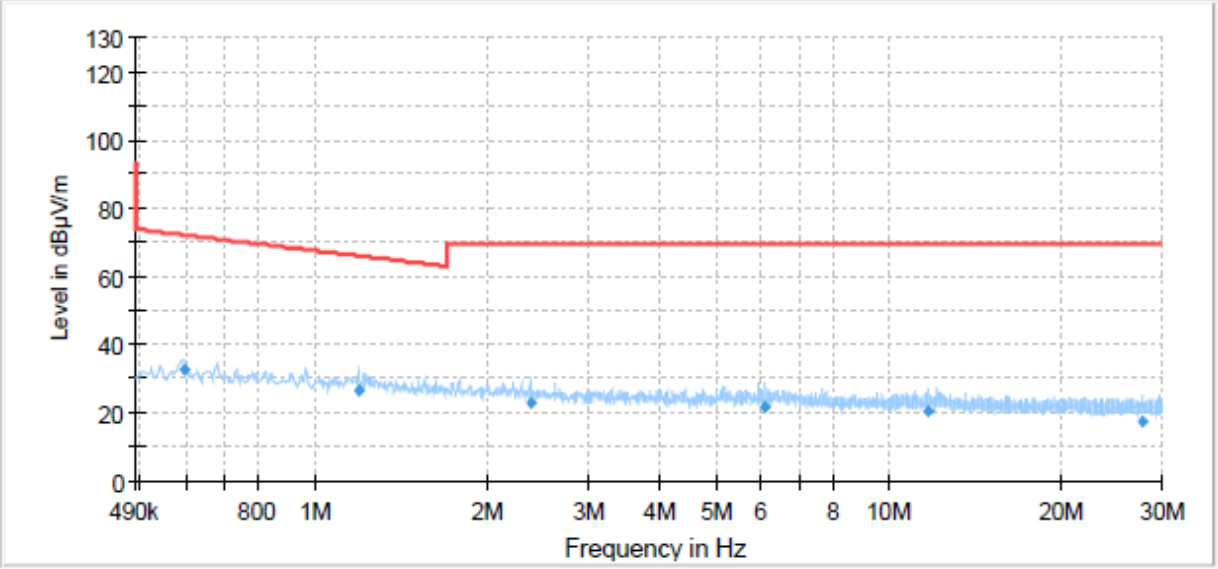
Radiates Emission from 9kHz to 90kHz



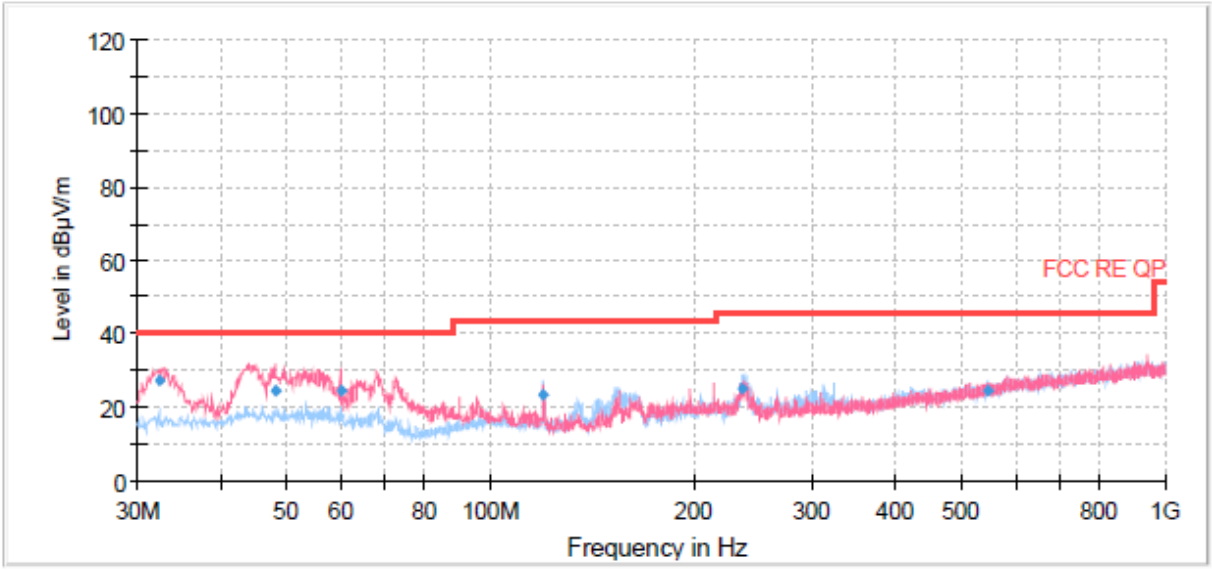
Radiates Emission from 90kHz to 110kHz



Radiates Emission from 110kHz to 490kHz



Radiates Emission from 490kHz to 30MHz

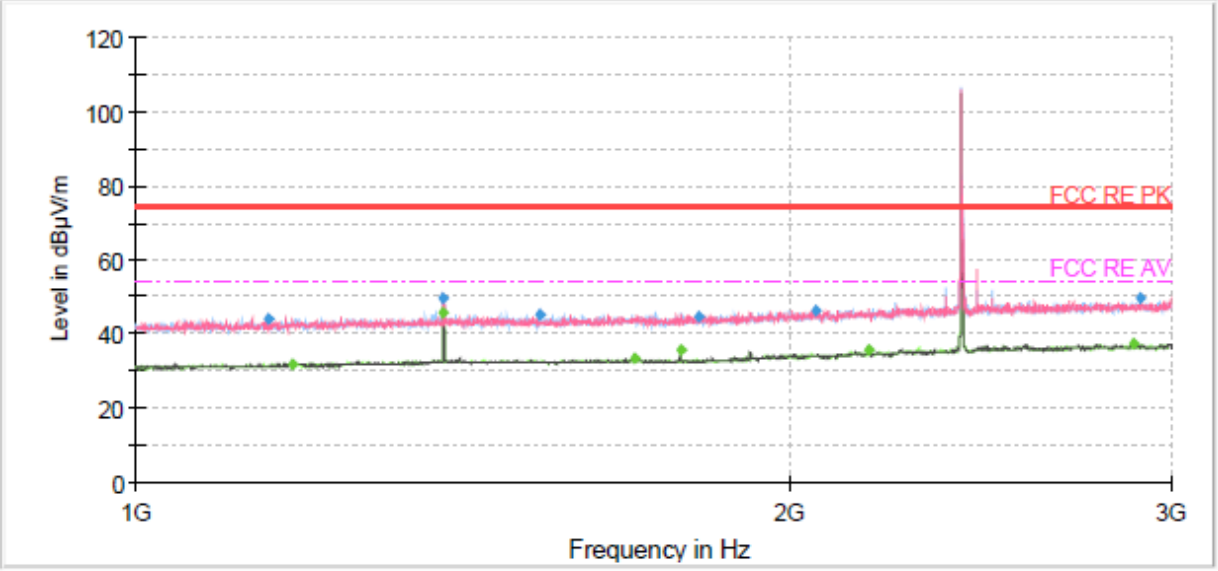


Radiates Emission from 30MHz to 1GHz

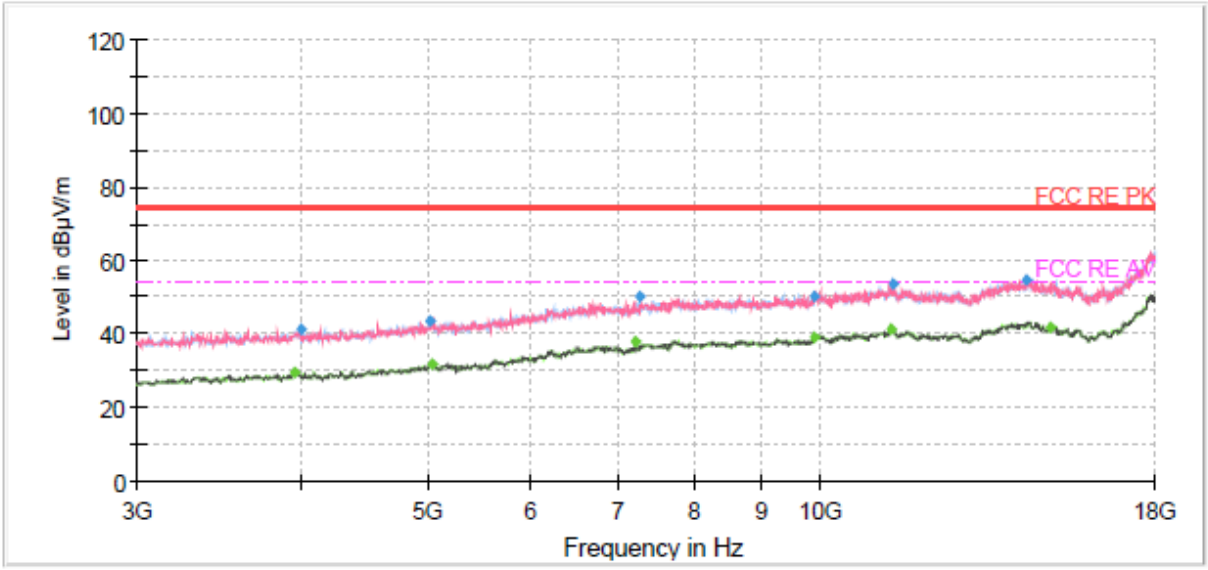
Frequency (MHz)	Quasi-Peak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
32.30	27.21	40.00	12.79	100.0	V	67.00	17
47.95	24.50	40.00	15.50	100.0	V	279.00	20
59.95	24.51	40.00	15.49	100.0	V	290.00	19
119.97	23.54	43.50	19.96	222.0	H	246.00	17
236.25	24.96	46.00	21.04	175.0	H	65.00	20
547.13	24.44	46.00	21.56	206.0	H	176.00	26

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit – Quasi-Peak

Bluetooth LE-Channel 0



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



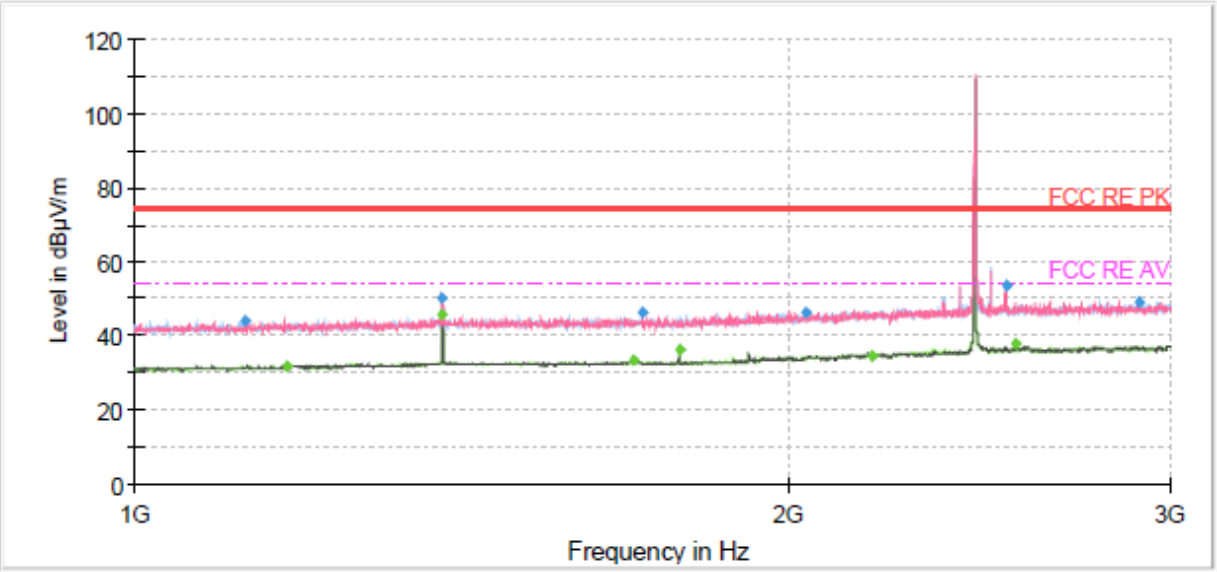
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1152.00	44.21	---	74.00	29.79	500.00	200.0	H	11.00	-5
1181.50	---	32.09	54.00	21.91	500.00	200.0	V	134.00	-4
1385.50	49.49	---	74.00	24.51	500.00	200.0	V	141.00	-3
1386.00	---	45.78	54.00	8.22	500.00	200.0	V	156.00	-3
1533.50	45.32	---	74.00	28.68	500.00	200.0	H	129.00	-2
1698.00	---	33.35	54.00	20.65	500.00	200.0	V	126.00	-2
1782.00	---	35.70	54.00	18.30	500.00	200.0	V	248.00	-2
1817.00	44.82	---	74.00	29.18	500.00	200.0	V	218.00	0
2056.00	46.49	---	74.00	27.51	500.00	200.0	V	298.00	1
2178.00	---	35.72	54.00	18.28	500.00	200.0	V	355.00	2
2884.00	---	37.29	54.00	16.71	500.00	200.0	H	114.00	2
2903.00	49.73	---	74.00	24.27	500.00	200.0	H	247.00	3

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

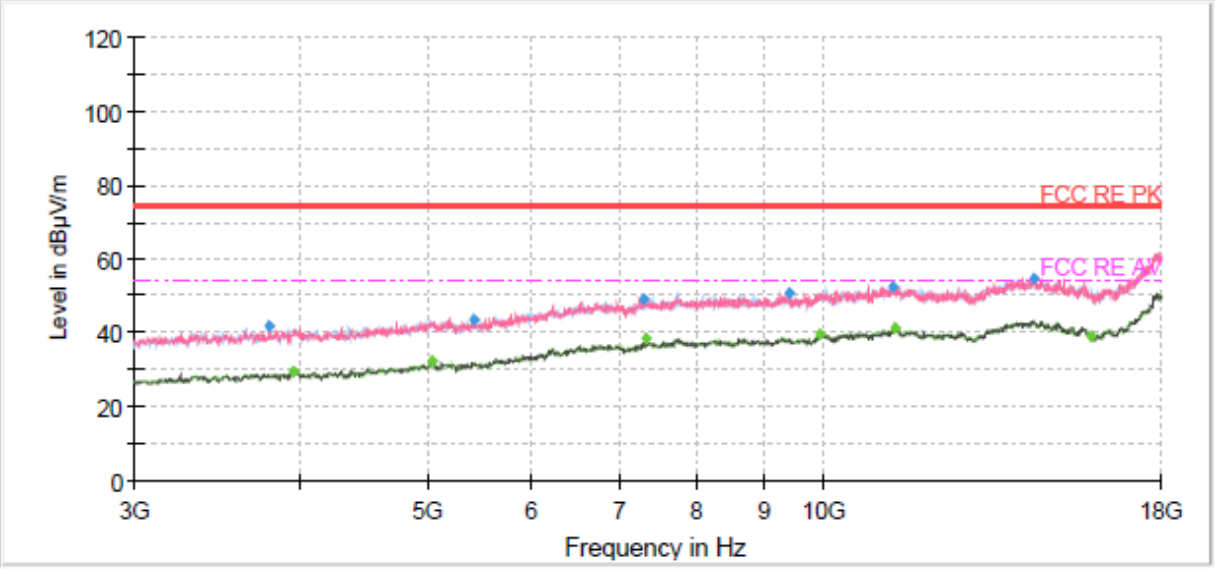
2. Margin = Limit –MAX Peak/ Average

Bluetooth LE-Channel 19



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



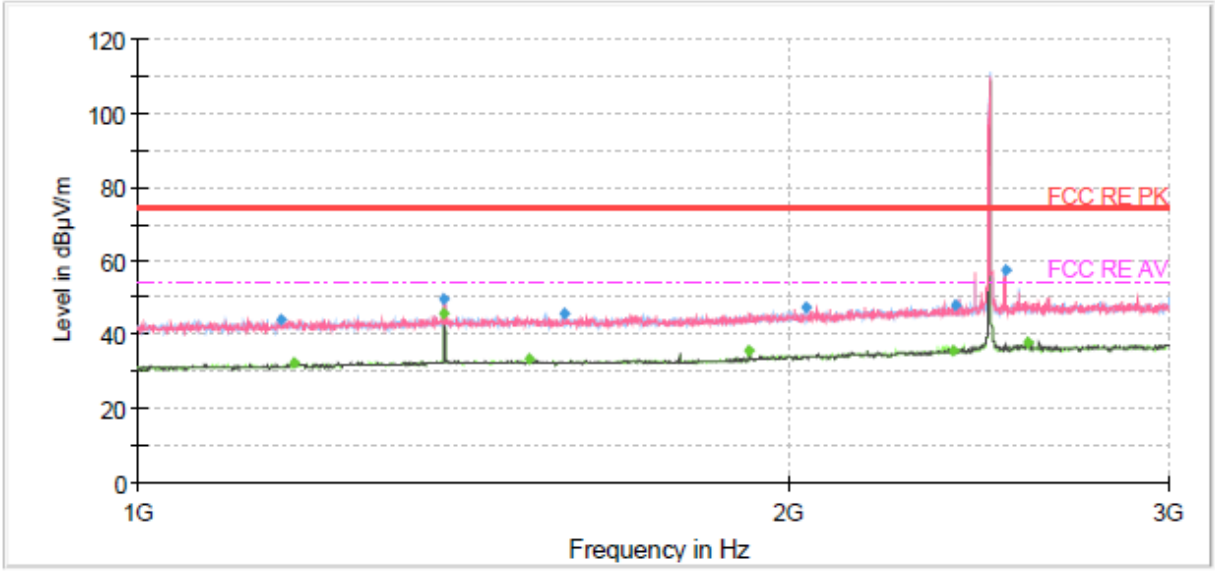
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1123.50	43.86	---	74.00	30.14	500.00	200.0	H	13.00	-5
1176.50	---	32.07	54.00	21.93	500.00	200.0	V	313.00	-4
1386.00	---	46.00	54.00	8.00	500.00	200.0	V	144.00	-3
1386.00	50.00	---	74.00	24.00	500.00	200.0	V	144.00	-3
1698.50	---	33.23	54.00	20.77	500.00	200.0	V	341.00	-2
1712.50	46.34	---	74.00	27.66	500.00	200.0	V	214.00	-2
1782.00	---	36.03	54.00	17.97	500.00	200.0	V	66.00	-2
2036.50	46.29	---	74.00	27.71	500.00	200.0	V	356.00	0
2185.50	---	34.46	54.00	19.54	500.00	200.0	H	58.00	1
2520.50	53.70	---	74.00	20.30	500.00	200.0	H	116.00	2
2547.50	---	37.70	54.00	16.30	500.00	200.0	V	358.00	2
2905.00	49.12	---	74.00	24.88	500.00	200.0	V	336.00	3

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

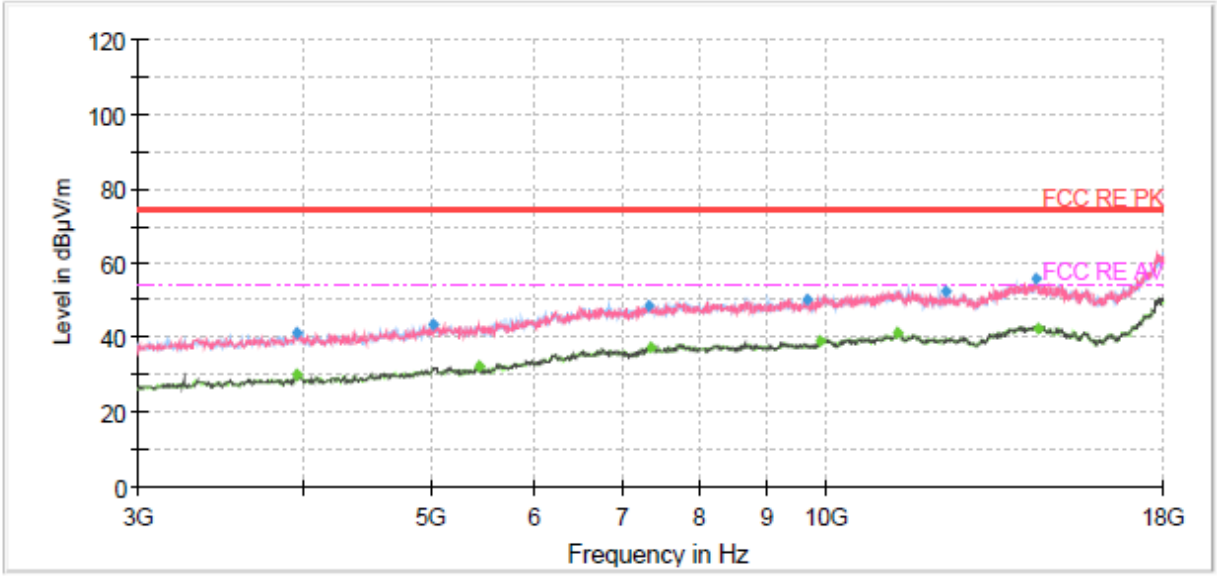
2. Margin = Limit –MAX Peak/ Average

Bluetooth LE-Channel 39



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



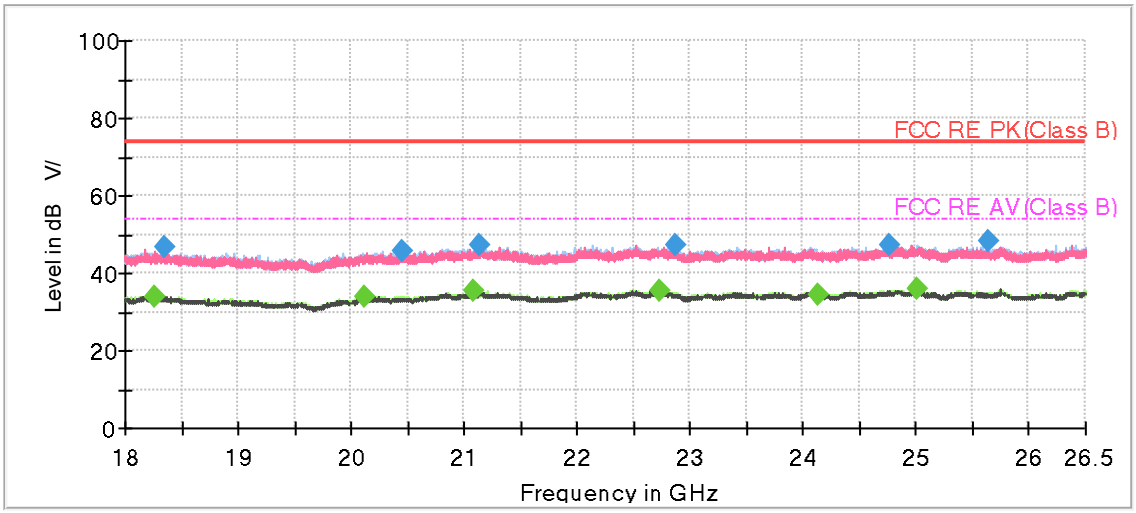
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1165.00	44.25	---	74.00	29.75	500.00	200.0	V	188.00	-5
1180.50	---	32.13	54.00	21.87	500.00	200.0	V	173.00	-4
1385.50	49.73	---	74.00	24.27	500.00	200.0	H	234.00	-3
1386.00	---	45.57	54.00	8.43	500.00	200.0	H	234.00	-3
1518.00	---	33.26	54.00	20.75	500.00	200.0	V	0.00	-3
1576.00	45.65	---	74.00	28.35	500.00	200.0	V	95.00	-2
1920.00	---	35.57	54.00	18.43	500.00	200.0	V	134.00	-1
2038.50	47.55	---	74.00	26.45	500.00	200.0	H	111.00	0
2387.00	---	35.58	54.00	18.42	500.00	200.0	H	111.00	2
2388.50	48.15	---	74.00	25.85	500.00	200.0	V	348.00	2
2520.00	57.48	---	74.00	16.52	500.00	200.0	H	111.00	2
2585.00	---	38.18	54.00	15.82	500.00	200.0	V	352.00	2

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

During the test, the Radiates Emission from 18GHz to 26.5GHz was performed in all modes with all channels. The test data of the worst-case condition was recorded in this report.



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
18260.312500	---	34.07	54.00	19.93	500.0	100.0	H	236.0	-6.1
18349.562500	46.45	---	74.00	27.55	500.0	200.0	V	20.0	-6.0
20128.187500	---	34.04	54.00	19.96	500.0	100.0	H	66.0	-5.8
20454.375000	45.76	---	74.00	28.24	500.0	100.0	H	349.0	-5.2
21084.437500	---	35.26	54.00	18.74	500.0	100.0	H	19.0	-4.2
21137.562500	47.12	---	74.00	26.88	500.0	200.0	V	107.0	-4.2
22730.250000	---	35.56	54.00	18.44	500.0	200.0	H	345.0	-3.5
22870.500000	47.28	---	74.00	26.72	500.0	200.0	H	289.0	-3.6
24133.812500	---	34.36	54.00	19.64	500.0	200.0	H	340.0	-3.2
24760.687500	46.94	---	74.00	27.06	500.0	200.0	H	298.0	-2.4
25001.875000	---	35.88	54.00	18.12	500.0	200.0	V	28.0	-2.3
25640.437500	48.08	---	74.00	25.92	500.0	100.0	H	155.0	-2.3

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit –MAX Peak/ Average

5.7. Conducted Emission

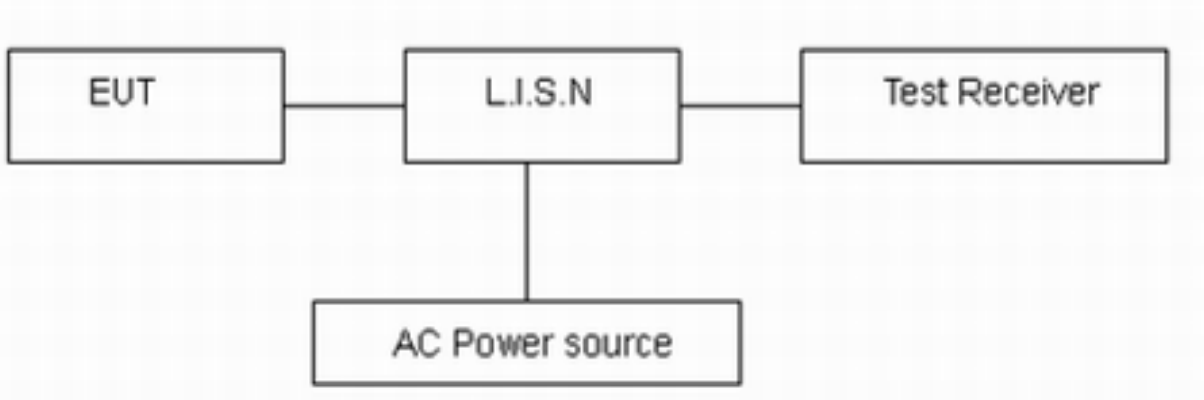
Ambient Condition

Temperature	Relative humidity
15°C ~ 35°C	20% ~ 80%

Methods of Measurement

The EUT is placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10. Connect the AC power line of the EUT to the L.I.S.N. Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9 kHz, VBW is set to 30kHz.
The measurement result should include both L line and N line.
The test is in transmitting mode.

Test Setup



Note: AC Power source is used to change the voltage 120V/60Hz.

Limits

Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*
0.5 - 5	56	46
5 - 30	60	50
*: Decreases with the logarithm of the frequency.		

Measurement Uncertainty

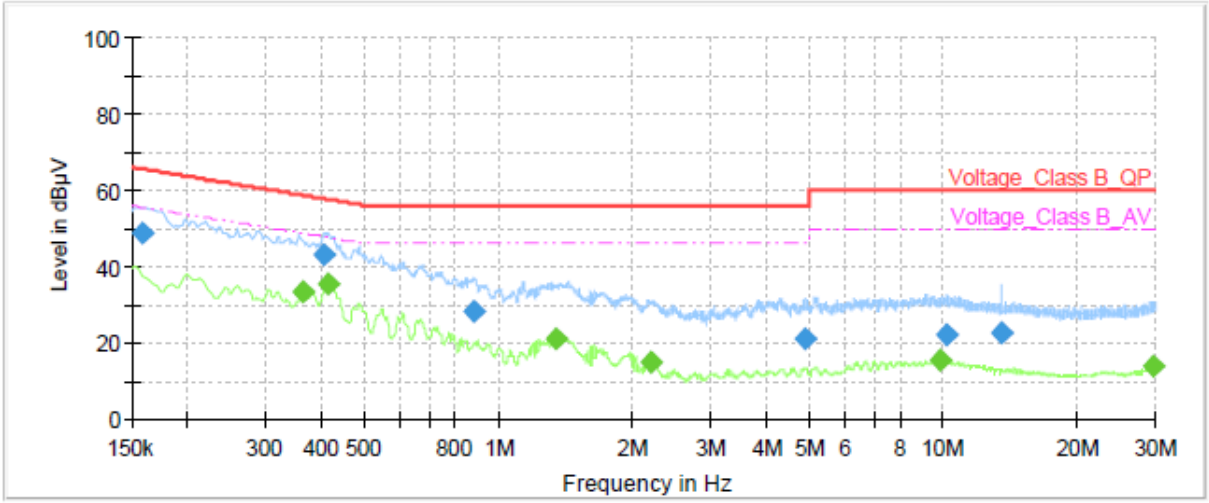
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96, U= 2.69 dB.

Test Results:

Following plots, Blue trace uses the peak detection and Green trace uses the average detection.

Wi-Fi 2.4GHz/ Thread

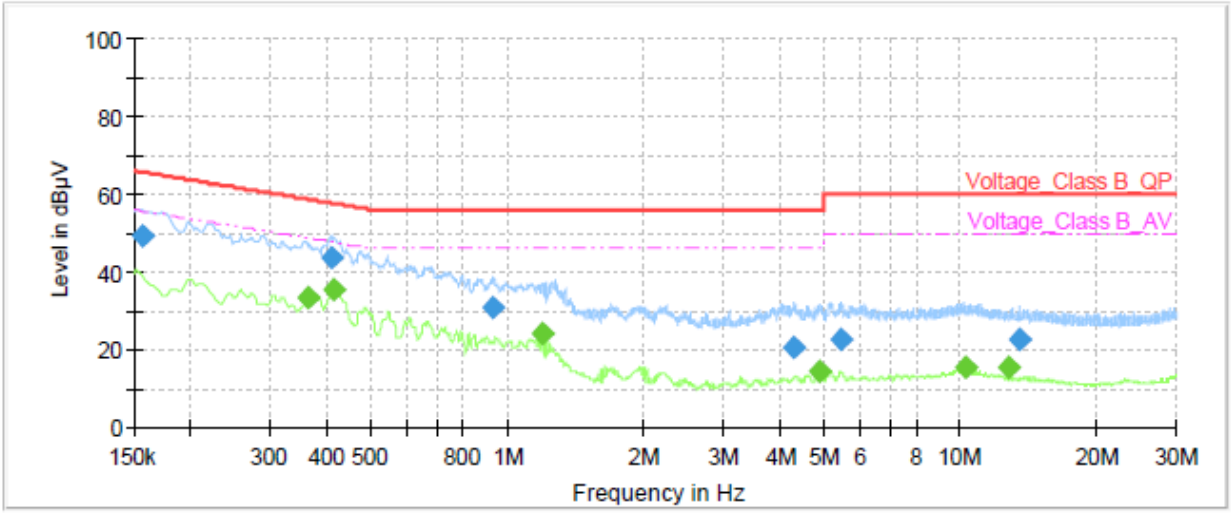
During the test, the Conducted Emission was performed in all modes with all channels. The test data of the worst-case condition was recorded in this report.



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.16	48.50	---	65.52	17.02	1000.0	9.000	L1	ON	21.0
0.36	---	33.09	48.69	15.60	1000.0	9.000	L1	ON	21.0
0.41	43.09	---	57.72	14.63	1000.0	9.000	L1	ON	21.0
0.41	---	35.42	47.58	12.17	1000.0	9.000	L1	ON	21.0
0.88	27.95	---	56.00	28.05	1000.0	9.000	L1	ON	20.3
1.35	---	21.13	46.00	24.87	1000.0	9.000	L1	ON	20.0
2.19	---	14.98	46.00	31.02	1000.0	9.000	L1	ON	19.7
4.90	20.80	---	56.00	35.20	1000.0	9.000	L1	ON	19.5
9.80	---	15.61	50.00	34.39	1000.0	9.000	L1	ON	19.6
10.19	22.19	---	60.00	37.81	1000.0	9.000	L1	ON	19.6
13.56	22.78	---	60.00	37.22	1000.0	9.000	L1	ON	19.6
29.75	---	13.62	50.00	36.38	1000.0	9.000	L1	ON	19.7

Remark: Correct factor=cable loss + LISN factor

L line Conducted Emission from 150 kHz to 30 MHz



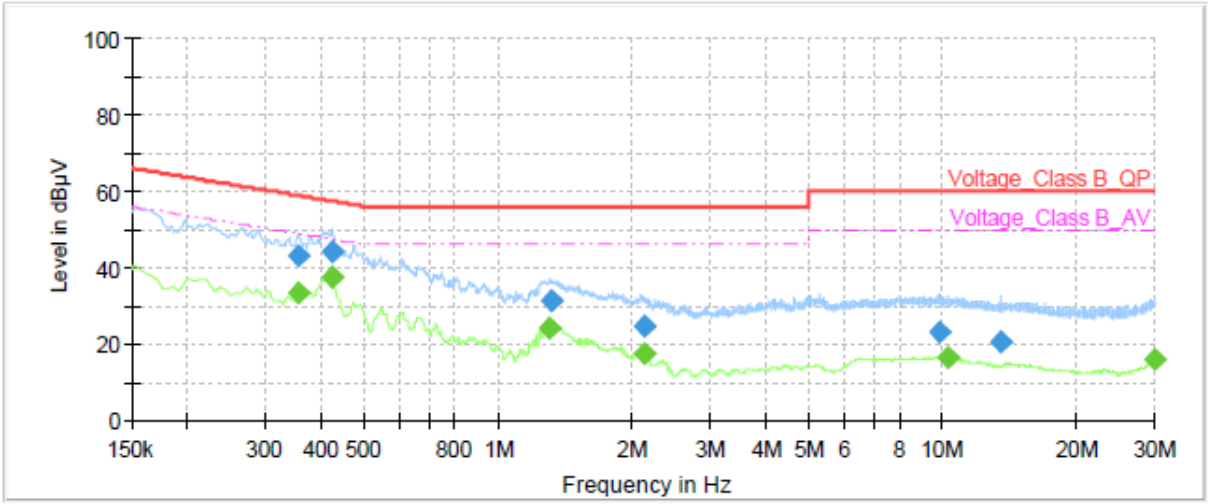
Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.16	49.09	---	65.63	16.54	1000.0	9.000	N	ON	21.0
0.36	---	33.29	48.69	15.40	1000.0	9.000	N	ON	21.0
0.41	43.47	---	57.67	14.20	1000.0	9.000	N	ON	21.0
0.42	---	35.55	47.54	11.99	1000.0	9.000	N	ON	21.0
0.93	30.77	---	56.00	25.23	1000.0	9.000	N	ON	20.3
1.19	---	24.08	46.00	21.92	1000.0	9.000	N	ON	20.1
4.28	20.53	---	56.00	35.47	1000.0	9.000	N	ON	19.5
4.90	---	14.10	46.00	31.90	1000.0	9.000	N	ON	19.5
5.44	22.79	---	60.00	37.21	1000.0	9.000	N	ON	19.5
10.26	---	15.24	50.00	34.76	1000.0	9.000	N	ON	19.6
12.80	---	15.39	50.00	34.61	1000.0	9.000	N	ON	19.6
13.56	22.78	---	60.00	37.22	1000.0	9.000	N	ON	19.6

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 kHz to 30 MHz

Bluetooth LE

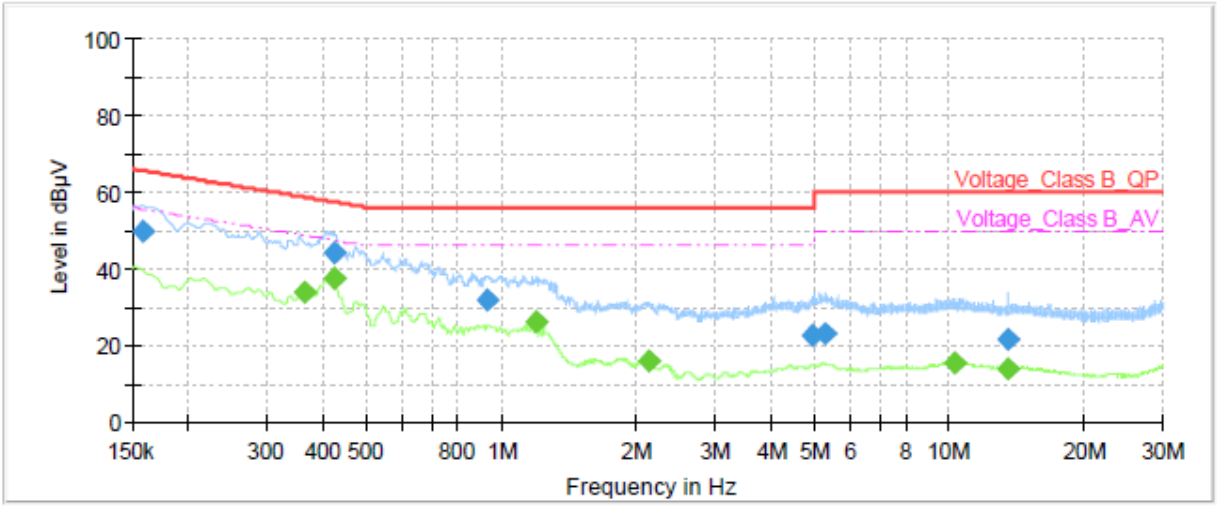
During the test, the Conducted Emission was performed in all modes with all channels. The test data of the worst-case condition was recorded in this report.



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.36	---	33.59	48.80	15.21	1000.0	9.000	L1	ON	21.0
0.36	43.28	---	58.80	15.52	1000.0	9.000	L1	ON	21.0
0.42	---	37.42	47.40	9.98	1000.0	9.000	L1	ON	20.9
0.42	43.88	---	57.40	13.52	1000.0	9.000	L1	ON	20.9
1.30	---	24.30	46.00	21.70	1000.0	9.000	L1	ON	20.0
1.32	31.20	---	56.00	24.80	1000.0	9.000	L1	ON	20.0
2.12	---	17.27	46.00	28.73	1000.0	9.000	L1	ON	19.7
2.14	24.53	---	56.00	31.47	1000.0	9.000	L1	ON	19.7
9.83	23.02	---	60.00	36.98	1000.0	9.000	L1	ON	19.6
10.24	---	16.45	50.00	33.55	1000.0	9.000	L1	ON	19.6
13.56	20.70	---	60.00	39.30	1000.0	9.000	L1	ON	19.6
29.97	---	15.70	50.00	34.30	1000.0	9.000	L1	ON	19.7

Remark: Correct factor=cable loss + LISN factor

L line Conducted Emission from 150 kHz to 30 MHz



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.16	49.52	---	65.52	16.00	1000.0	9.000	N	ON	21.0
0.36	---	33.76	48.69	14.93	1000.0	9.000	N	ON	21.0
0.42	---	37.40	47.40	10.00	1000.0	9.000	N	ON	20.9
0.42	43.96	---	57.40	13.44	1000.0	9.000	N	ON	20.9
0.93	31.85	---	56.00	24.15	1000.0	9.000	N	ON	20.3
1.20	---	26.28	46.00	19.72	1000.0	9.000	N	ON	20.1
2.12	---	15.92	46.00	30.08	1000.0	9.000	N	ON	19.7
4.97	22.56	---	56.00	33.44	1000.0	9.000	N	ON	19.5
5.30	23.18	---	60.00	36.82	1000.0	9.000	N	ON	19.5
10.30	---	15.54	50.00	34.46	1000.0	9.000	N	ON	19.6
13.56	---	13.97	50.00	36.03	1000.0	9.000	N	ON	19.6
13.56	21.51	---	60.00	38.49	1000.0	9.000	N	ON	19.6

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 kHz to 30 MHz

6. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Power Sensor	R&S	NRP18S	101954	2024-05-07	2025-05-06
Spectrum Analyzer	KEYSIGHT	N9020A	MY51330870	2024-05-07	2025-05-06
Unwanted Emissions					
EMI Test Receiver	R&S	ESR	102389	2024-05-07	2025-05-06
Signal Analyzer	R&S	FSV40	101298	2024-05-07	2025-05-06
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2023-04-16	2026-04-15
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	01111	2022-10-25	2025-10-24
Horn Antenna	SCHWARZBECK	BBHA 9120D	430	2024-07-18	2027-07-17
Amplifier	R&S	SCU18	10034	2024-05-08	2025-05-07
Horn Antenna	ETS-Lindgren	3160-09	00102643	2021-10-10	2024-10-09
				2024-09-24	2027-09-23
Amplifier	MicroWave	KLNA-18040050	220826001	2024-05-08	2025-05-07
Software	R&S	EMC32	9.26.01	/	/
Software	R&S	EMC32	10.35.10	/	/
Conducted Emissions					
Artificial main network	R&S	ENV216	102191	2022-12-10	2024-12-09
				2024-12-02	2026-12-01
EMI Test Receiver	R&S	ESR	101667	2024-05-07	2025-05-06
Software	R&S	EMC32	10.35.10	/	/

ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.

ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.

****** END OF REPORT ******