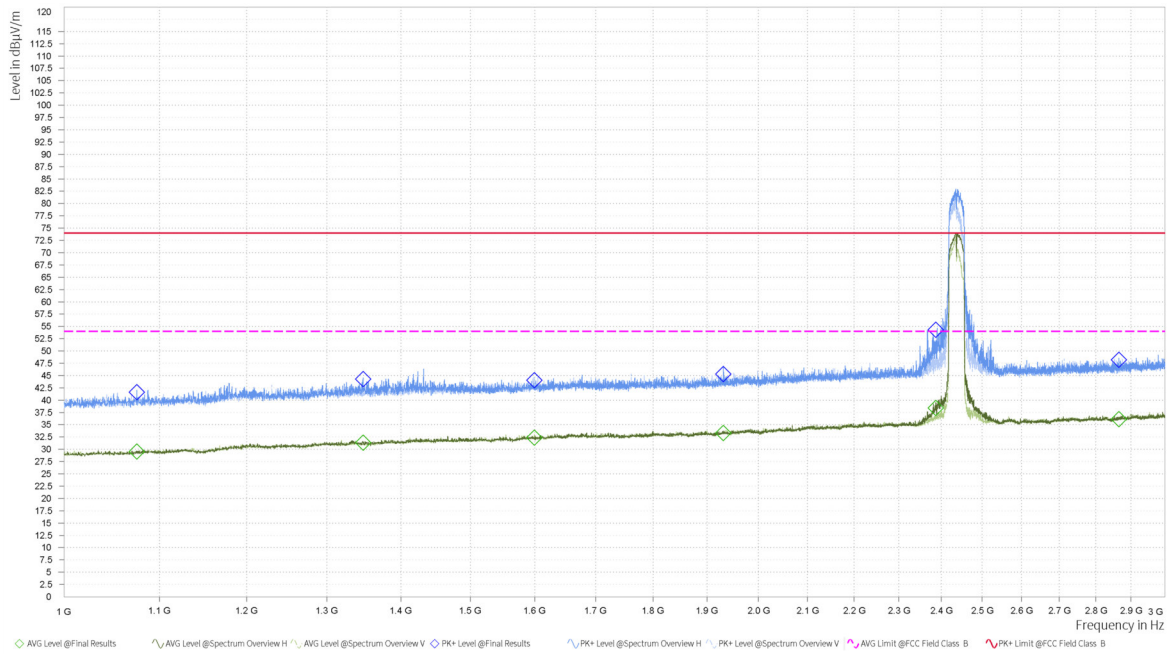


Frequency (MHz)	MaxPeak (dBμV/m)	MaxPeak Limit (dBμV/m)	MaxPeak Margin (dB)	Average (dBμV/m)	Average Limit (dBμV/m)	Average Margin (dB)	Corr. (dB/m)	Pol	Azimuth (deg)	Height (m)	Meas. Time (s)
1,167.500	44.06	74.00	29.94	30.12	54.00	23.88	-5.34	H	264.4	1.00	1.000
1,401.000	46.20	74.00	27.80	31.63	54.00	22.37	-3.15	H	33.2	2.00	1.000
1,731.750	44.50	74.00	29.50	32.67	54.00	21.33	-1.01	V	256.2	1.00	1.000
2,065.000	45.52	74.00	28.48	33.96	54.00	20.04	0.83	H	1.8	2.00	1.000
2,386.250	55.19	74.00	18.81	36.39	54.00	17.61	2.37	H	145.2	2.00	1.000
2,819.750	47.51	74.00	26.49	36.19	54.00	17.81	3.70	V	151.9	1.00	1.000

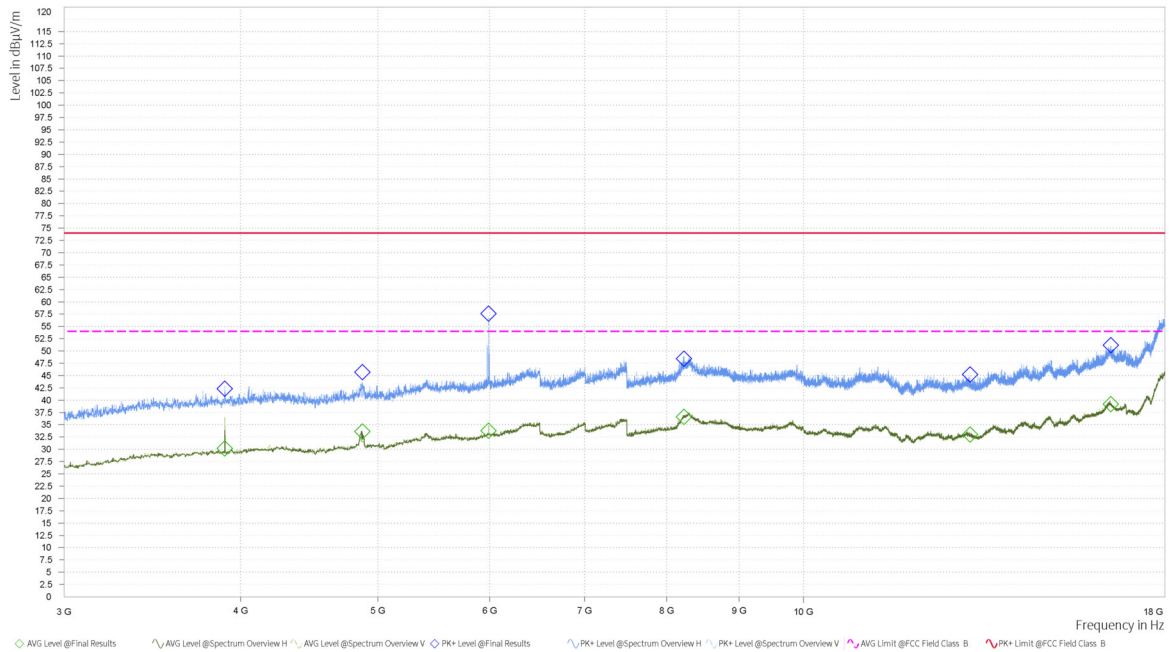
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH6



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



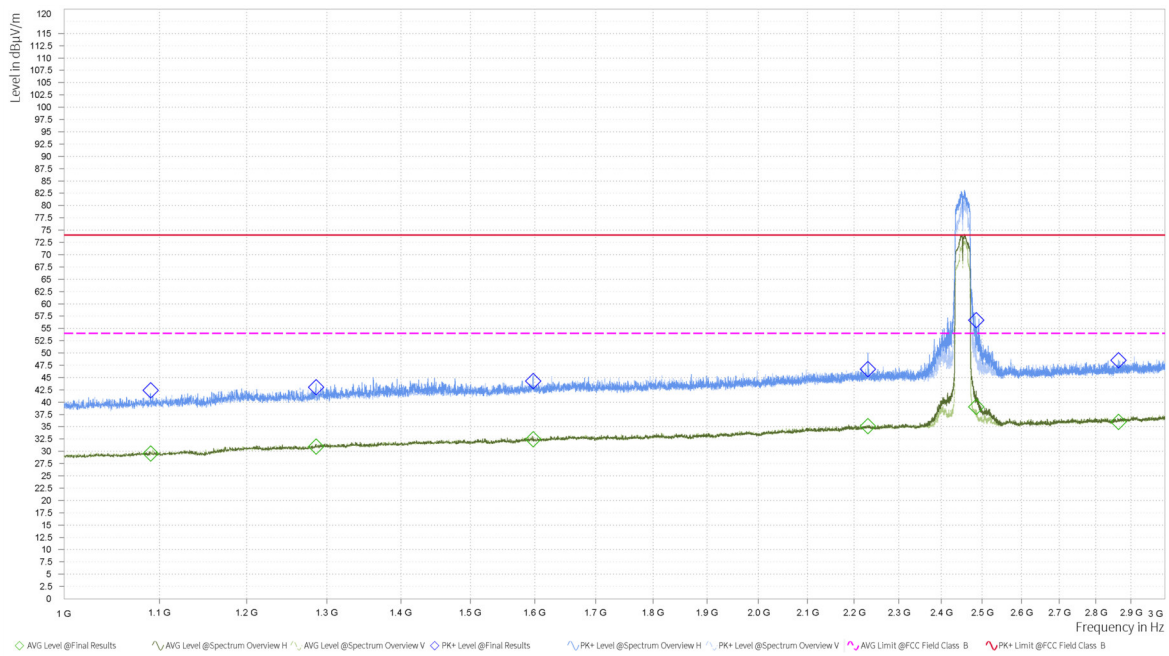
Radiates Emission from 3GHz to 18GHz

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 (s)
1,075.500	41.63	74.00	32.37	29.57	54.00	24.43	-6.26	H	62	2.00	1.000
1,347.750	44.28	74.00	29.72	31.38	54.00	22.62	-3.59	H	34.3	2.00	1.000
1,599.000	44.05	74.00	29.95	32.41	54.00	21.59	-1.77	V	193.7	1.00	1.000
1,931.250	45.30	74.00	28.70	33.28	54.00	20.72	0.16	H	124.3	2.00	1.000
2,387.250	54.32	74.00	19.68	38.39	54.00	15.61	2.38	H	124.3	2.00	1.000
2,865.500	48.22	74.00	25.78	36.10	54.00	17.90	3.72	H	313.6	1.00	1.000

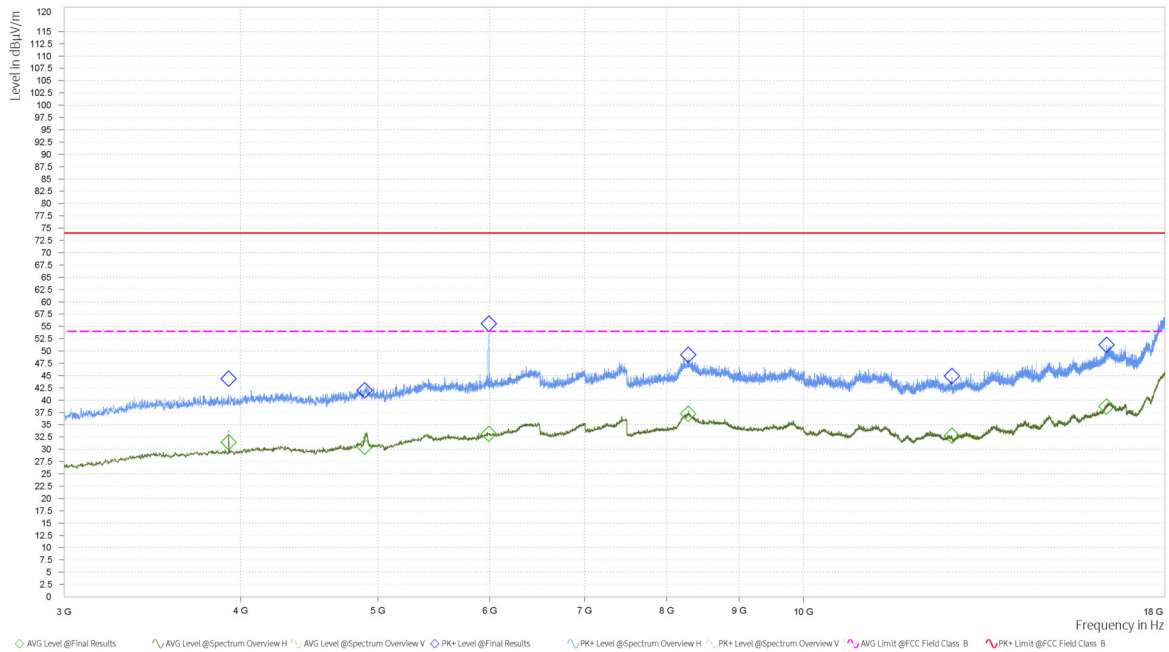
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH9



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



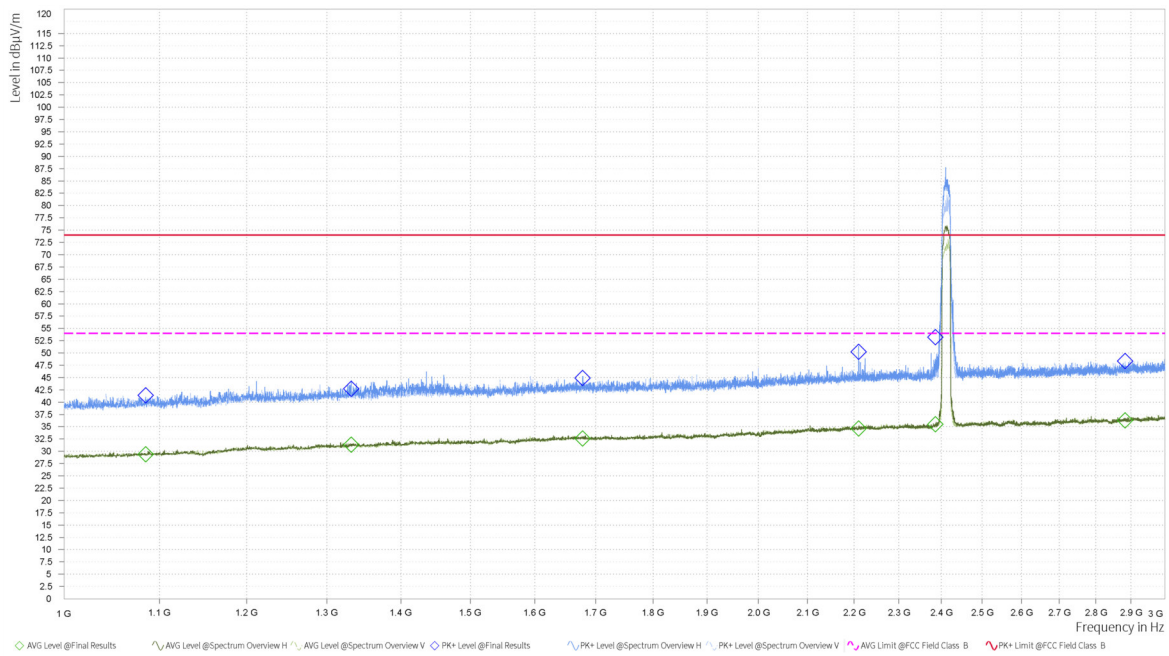
Radiates Emission from 3GHz to 18GHz

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 (s)
1,090.250	42.41	74.00	31.59	29.54	54.00	24.46	-6.08	H	0	2.00	1.000
1,286.000	43.07	74.00	30.93	30.98	54.00	23.02	-4.01	H	33.4	2.00	1.000
1,597.000	44.31	74.00	29.69	32.47	54.00	21.53	-1.78	H	207.7	2.00	1.000
2,231.000	46.69	74.00	27.31	35.14	54.00	18.86	1.87	H	249.6	2.00	1.000
2,485.500	56.64	74.00	17.36	39.01	54.00	14.99	2.81	H	235.6	2.00	1.000
2,865.000	48.49	74.00	25.51	35.96	54.00	18.04	3.72	H	2	2.00	1.000

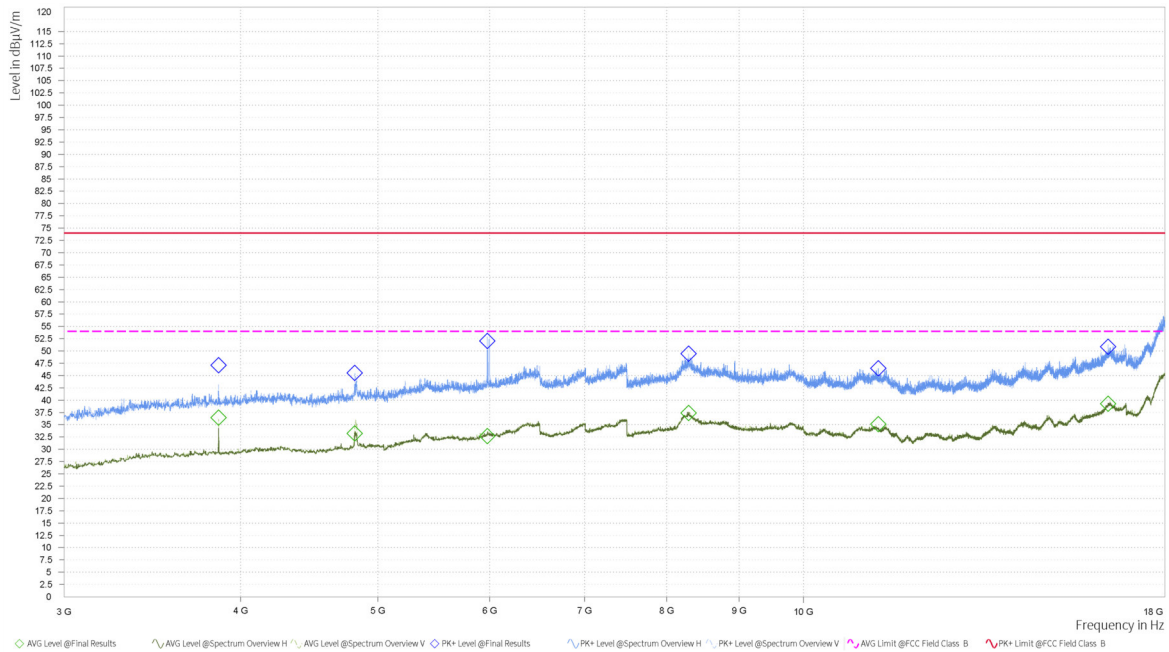
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11ax (HE20) CH 1



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



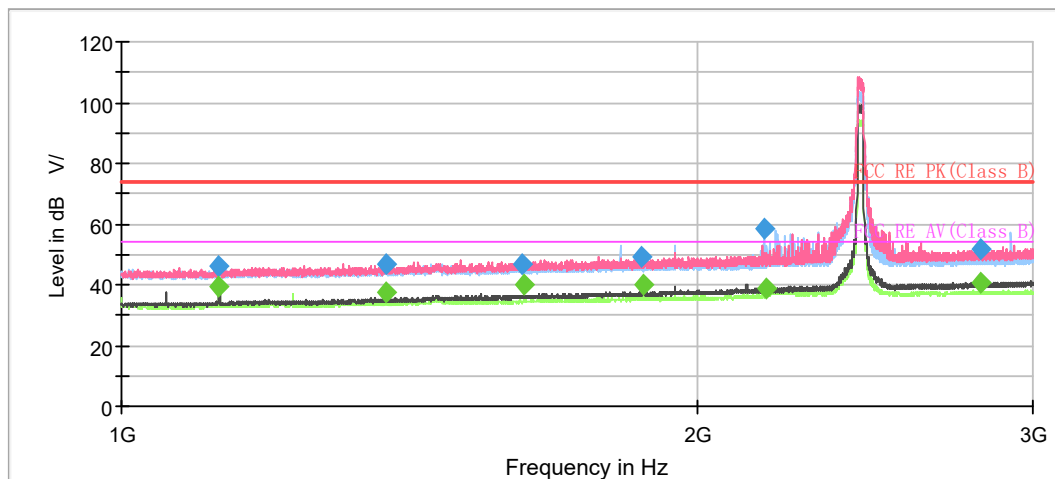
Radiates Emission from 3GHz to 18GHz

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 (s)
1,085.000	41.42	74.00	32.58	29.39	54.00	24.61	-6.14	H	18.9	2.00	1.000
1,332.000	42.71	74.00	31.29	31.31	54.00	22.69	-3.58	H	102.1	2.00	1.000
1,678.250	44.94	74.00	29.06	32.58	54.00	21.42	-1.19	H	297.9	2.00	1.000
2,210.500	50.23	74.00	23.77	34.68	54.00	19.32	1.83	H	60.6	2.00	1.000
2,385.750	53.22	74.00	20.78	35.52	54.00	18.48	2.36	H	60.6	2.00	1.000
2,883.000	48.33	74.00	25.67	36.31	54.00	17.69	3.92	V	339.8	1.00	1.000

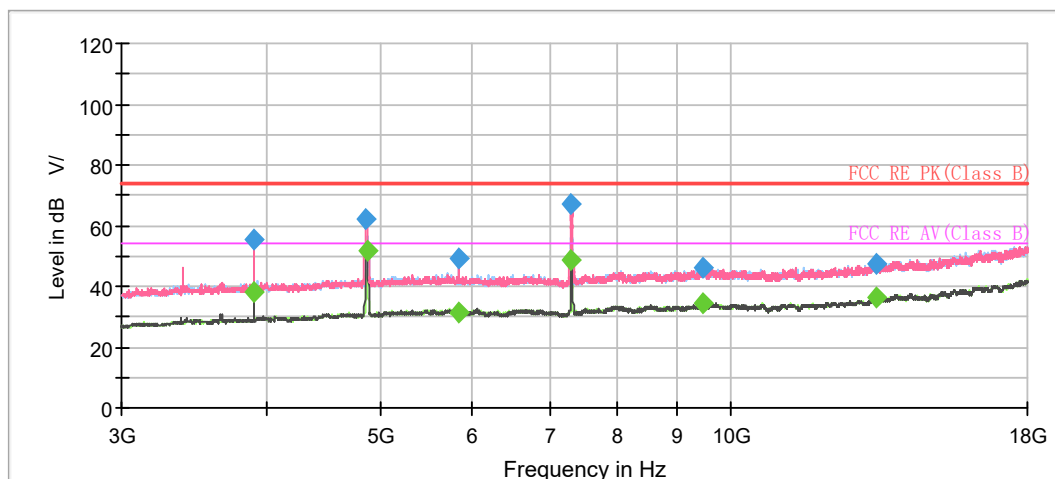
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11ax (HE20) CH 6



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



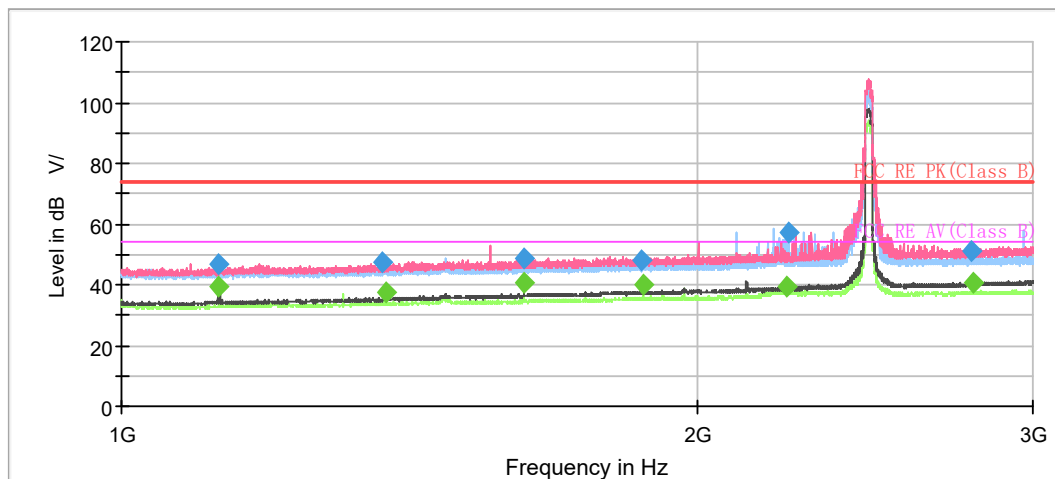
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1124.750000	46.17	---	74.00	27.83	500.0	200.0	H	269.0	2.4
1125.000000	---	39.66	54.00	14.34	500.0	200.0	H	276.0	2.4
1375.000000	---	37.40	54.00	16.60	500.0	200.0	V	305.0	3.8
1375.500000	46.51	---	74.00	27.49	500.0	200.0	H	146.0	3.8
1620.250000	46.51	---	74.00	27.49	500.0	200.0	V	312.0	5.0
1625.000000	---	39.88	54.00	14.12	500.0	200.0	V	0.0	5.0
1872.000000	48.92	---	74.00	25.08	500.0	200.0	V	0.0	6.1
1875.000000	---	40.30	54.00	13.70	500.0	100.0	V	292.0	6.1
2168.750000	58.68	---	74.00	15.32	500.0	100.0	H	350.0	7.1
2174.750000	---	38.60	54.00	15.40	500.0	200.0	V	312.0	7.2
2815.750000	51.44	---	74.00	22.56	500.0	200.0	V	0.0	9.0
2816.500000	---	40.36	54.00	13.64	500.0	200.0	V	342.0	9.0
4875.000000	---	51.41	54.00	2.59	500.0	100.0	V	255.0	-5.3
7305.000000	---	48.82	54.00	5.18	500.0	200.0	V	51.0	-3.1

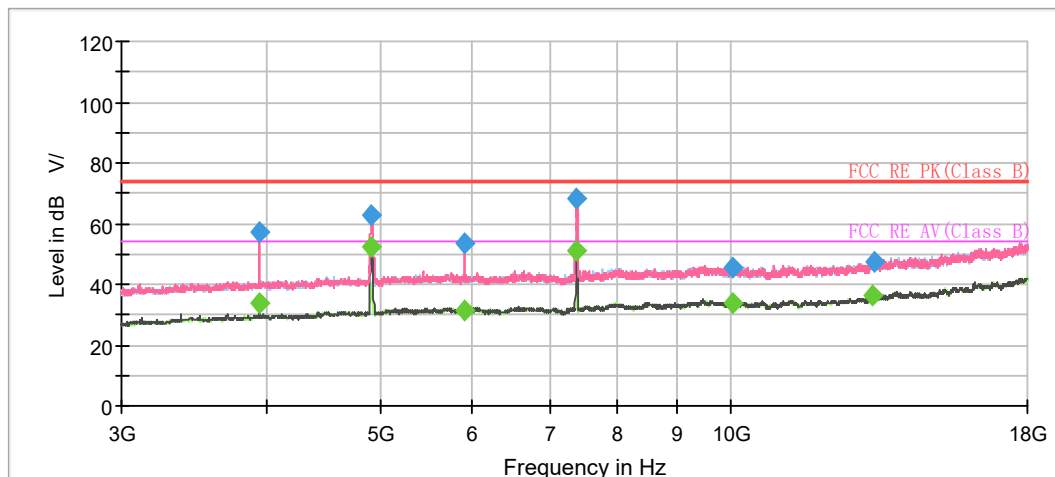
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11ax (HE20) CH11



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



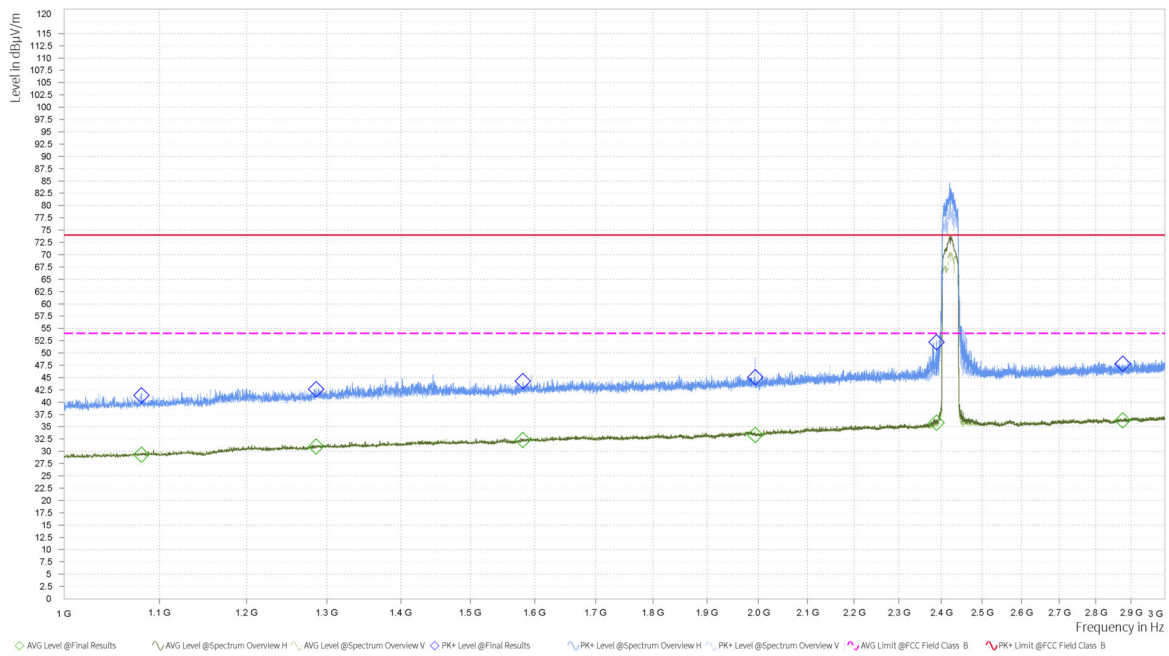
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1124.750000	---	39.30	54.00	14.70	500.0	100.0	H	273.0	2.4
1125.000000	46.78	---	74.00	27.22	500.0	100.0	H	280.0	2.4
1370.750000	47.27	---	74.00	26.73	500.0	200.0	V	316.0	3.8
1375.000000	---	37.53	54.00	16.47	500.0	200.0	V	351.0	3.8
1625.000000	---	40.39	54.00	13.61	500.0	200.0	V	310.0	5.0
1625.500000	48.81	---	74.00	25.19	500.0	200.0	V	296.0	5.0
1872.250000	48.27	---	74.00	25.73	500.0	200.0	V	20.0	6.1
1875.000000	---	40.00	54.00	14.00	500.0	100.0	V	317.0	6.1
2228.500000	---	39.60	54.00	14.40	500.0	200.0	V	316.0	7.3
2232.750000	57.53	---	74.00	16.47	500.0	200.0	H	181.0	7.4
2788.750000	51.30	---	74.00	22.70	500.0	200.0	V	303.0	8.9
2789.750000	---	40.82	54.00	13.18	500.0	200.0	V	221.0	8.9
4920.000000	---	52.21	54.00	1.79	500.0	100.0	V	287.0	-4.9
7380.000000	68.57	---	74.00	5.43	500.0	200.0	V	193.0	-2.8
7387.500000	---	50.89	54.00	3.11	500.0	200.0	V	89.0	-2.8

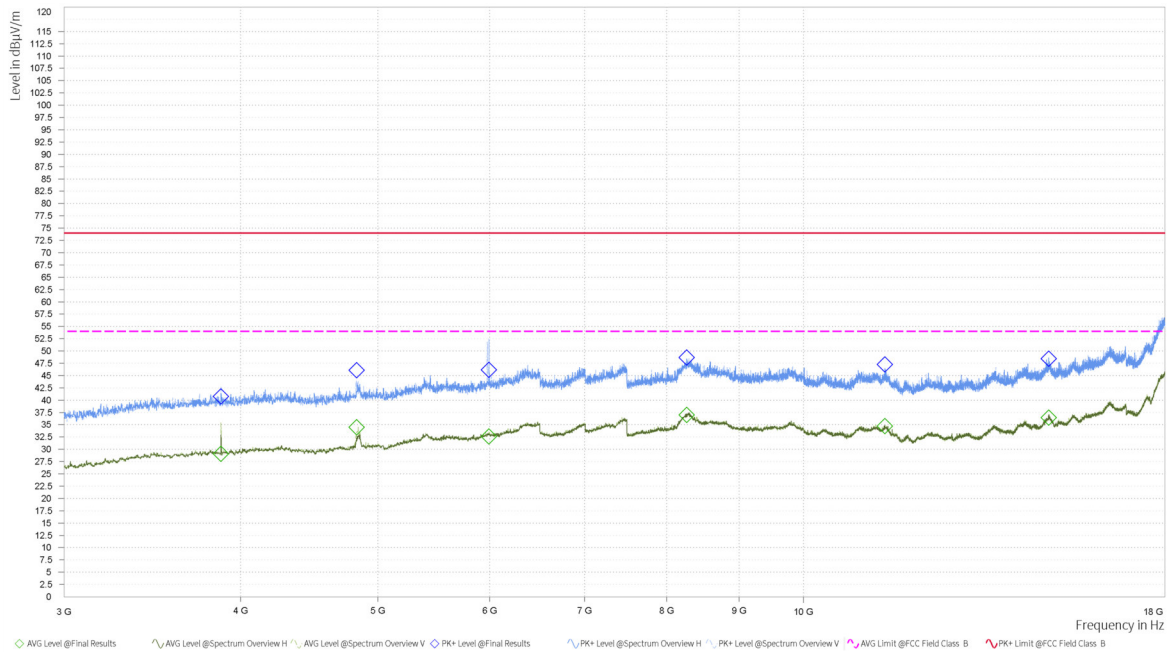
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11ax (HE40) CH3



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



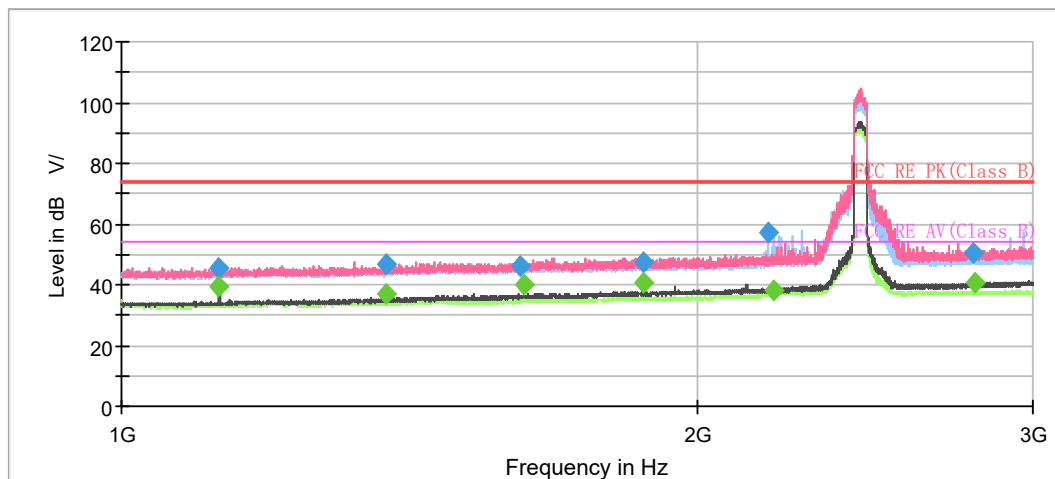
Radiates Emission from 3GHz to 18GHz

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 (s)
1,080.250	41.40	74.00	32.60	29.30	54.00	24.70	-6.20	H	75.7	2.00	1.000
1,286.000	42.63	74.00	31.37	30.96	54.00	23.04	-4.01	H	172.9	2.00	1.000
1,581.000	44.29	74.00	29.71	32.28	54.00	21.72	-1.82	H	14	2.00	1.000
1,993.250	45.06	74.00	28.94	33.32	54.00	20.68	0.53	V	346.9	1.00	1.000
2,388.750	52.18	74.00	21.82	35.80	54.00	18.20	2.41	H	313.1	1.00	1.000
2,876.500	47.80	74.00	26.20	36.30	54.00	17.70	3.85	V	69.7	1.00	1.000

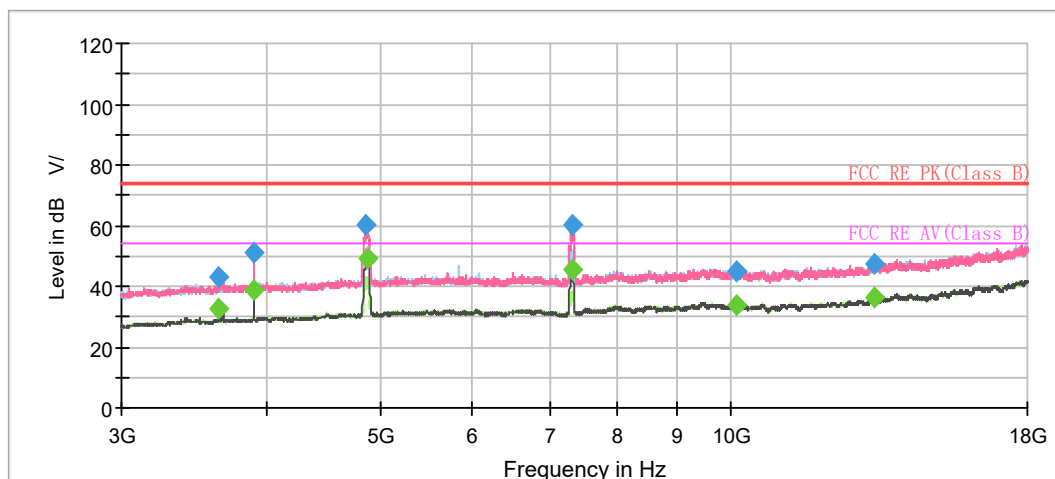
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11ax (HE40) CH6



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



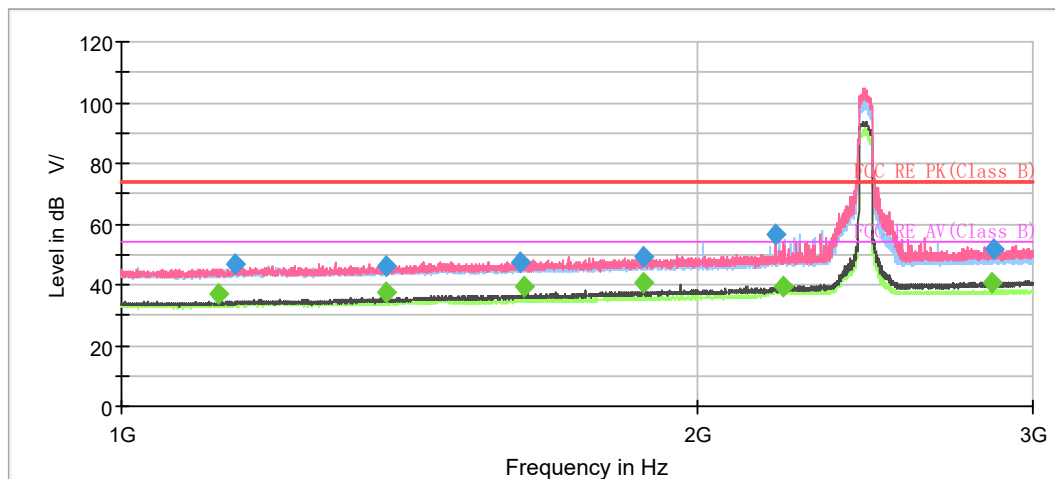
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1124.500000	45.62	---	74.00	28.38	500.0	200.0	H	270.0	2.4
1124.750000	---	39.45	54.00	14.55	500.0	100.0	H	276.0	2.4
1374.500000	47.03	---	74.00	26.97	500.0	200.0	V	343.0	3.8
1375.000000	---	37.19	54.00	16.81	500.0	200.0	V	321.0	3.8
1615.750000	46.43	---	74.00	27.57	500.0	200.0	V	343.0	5.0
1625.000000	---	39.74	54.00	14.26	500.0	100.0	H	230.0	5.0
1875.000000	---	40.40	54.00	13.60	500.0	100.0	V	306.0	6.1
1875.750000	47.65	---	74.00	26.35	500.0	200.0	V	357.0	6.1
2180.250000	56.93	---	74.00	17.07	500.0	200.0	H	291.0	7.2
2194.750000	---	38.45	54.00	15.55	500.0	200.0	V	350.0	7.2
2789.500000	50.60	---	74.00	23.40	500.0	200.0	V	357.0	8.9
2801.000000	---	40.52	54.00	13.48	500.0	200.0	V	0.0	9.0
4882.500000	---	49.15	54.00	4.85	500.0	100.0	V	259.0	-5.2

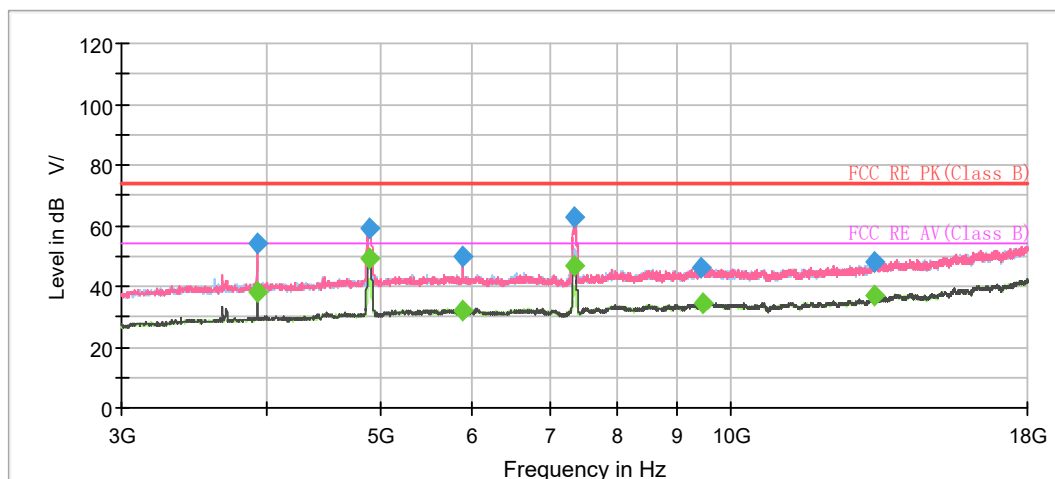
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11ax (HE40) CH9



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



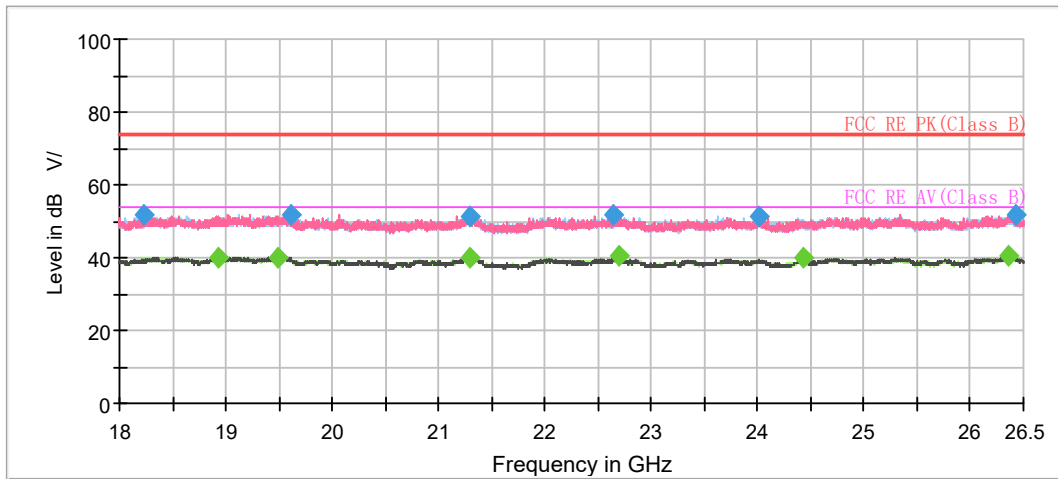
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1125.000000	---	36.72	54.00	17.28	500.0	200.0	V	340.0	2.4
1147.500000	46.60	---	74.00	27.40	500.0	200.0	V	0.0	2.5
1374.250000	46.25	---	74.00	27.75	500.0	200.0	V	348.0	3.8
1375.000000	---	37.30	54.00	16.70	500.0	200.0	V	0.0	3.8
1616.000000	47.59	---	74.00	26.41	500.0	200.0	V	0.0	5.0
1625.000000	---	39.66	54.00	14.34	500.0	100.0	H	91.0	5.0
1875.000000	49.41	---	74.00	24.59	500.0	200.0	V	310.0	6.1
1875.000000	---	40.48	54.00	13.52	500.0	100.0	V	0.0	6.1
2202.000000	56.78	---	74.00	17.22	500.0	100.0	V	260.0	7.2
2219.500000	---	39.11	54.00	14.89	500.0	200.0	V	333.0	7.3
2854.250000	---	40.36	54.00	13.64	500.0	200.0	V	348.0	9.1
2860.500000	51.71	---	74.00	22.29	500.0	200.0	V	340.0	9.1
4903.125000	---	48.94	54.00	5.06	500.0	200.0	V	1.0	-5.0

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, 802.11ax (HE20) CH11 are selected as the worst condition. 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)
18221.000000	51.77	---	74.00	22.23	500.0	100.0	V	70.0	-3.2
18936.062500	---	40.16	54.00	13.84	500.0	200.0	H	167.0	-3.1
19491.750000	---	40.15	54.00	13.85	500.0	200.0	V	256.0	-2.7
19609.687500	51.99	---	74.00	22.01	500.0	200.0	H	154.0	-3.0
21287.375000	51.35	---	74.00	22.65	500.0	100.0	V	31.0	-1.9
21300.125000	---	40.17	54.00	13.83	500.0	200.0	V	281.0	-1.8
22652.687500	51.71	---	74.00	22.29	500.0	100.0	V	0.0	-1.7
22696.250000	---	40.40	54.00	13.60	500.0	200.0	H	5.0	-1.7
24009.500000	51.15	---	74.00	22.85	500.0	200.0	H	273.0	-1.2
24431.312500	---	39.77	54.00	14.23	500.0	200.0	H	123.0	-1.1
26368.250000	---	40.45	54.00	13.55	500.0	200.0	V	324.0	0.4
26429.875000	51.70	---	74.00	22.30	500.0	200.0	H	179.0	0.3

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

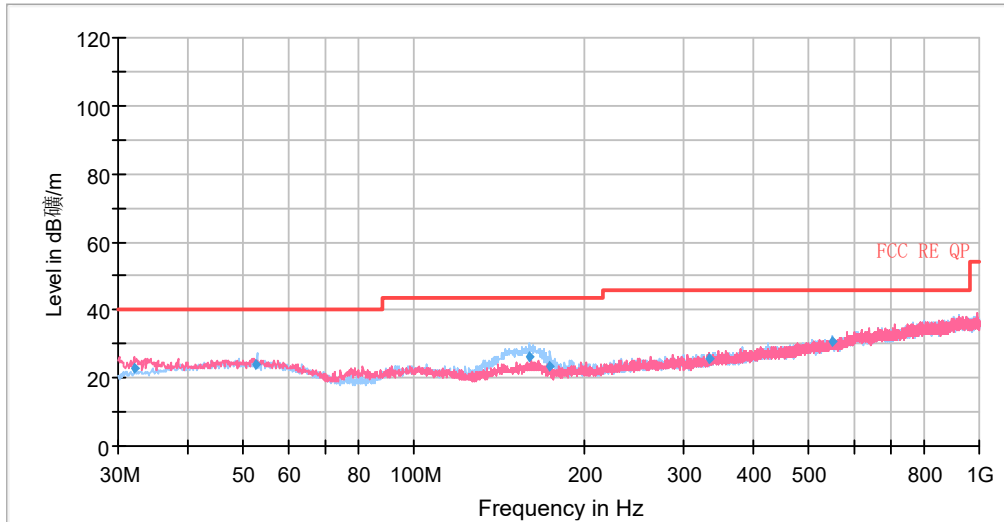
2. Margin = Limit –MAX Peak/ Average

Bluetooth LE

During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes with all channels, Bluetooth LE-Channel 19 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

A symbol ($\text{dB}_{\text{RE}}/\text{m}$) in the test plot below means ($\text{dB}\mu\text{V}/\text{m}$)

A symbol ($\text{dB}_{\text{V}}/\text{m}$) in the test plot below means ($\text{dB}\mu\text{V}/\text{m}$)



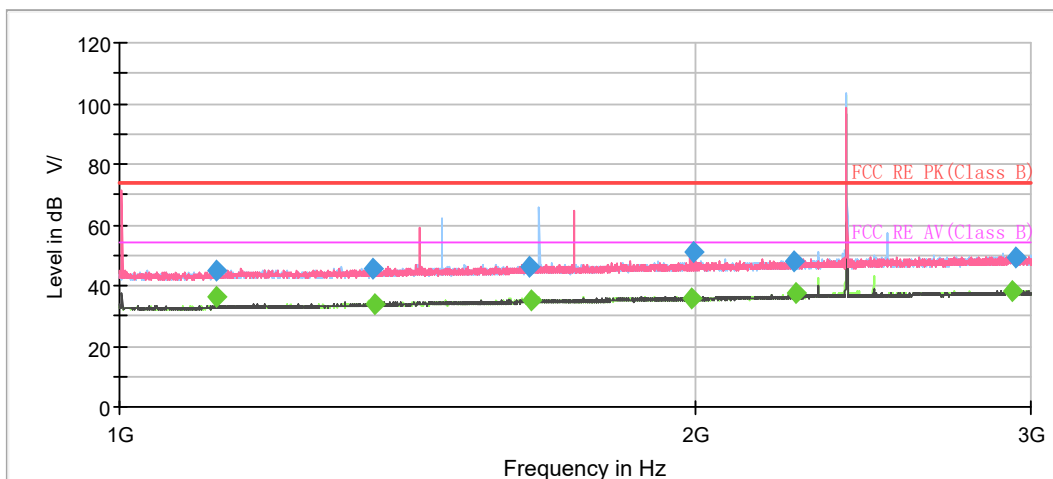
Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak ($\text{dB}\mu\text{V}/\text{m}$)	Limit ($\text{dB}\mu\text{V}/\text{m}$)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
32.07	22.61	40.00	17.39	100.0	V	102.00	17
52.40	24.24	40.00	15.76	222.0	H	53.00	20
159.99	26.07	43.50	17.43	212.0	H	6.00	16
173.85	23.46	43.50	20.04	194.0	H	0.00	17
334.17	25.60	46.00	20.40	194.0	H	222.00	22
548.34	30.54	46.00	15.46	220.0	H	232.00	26

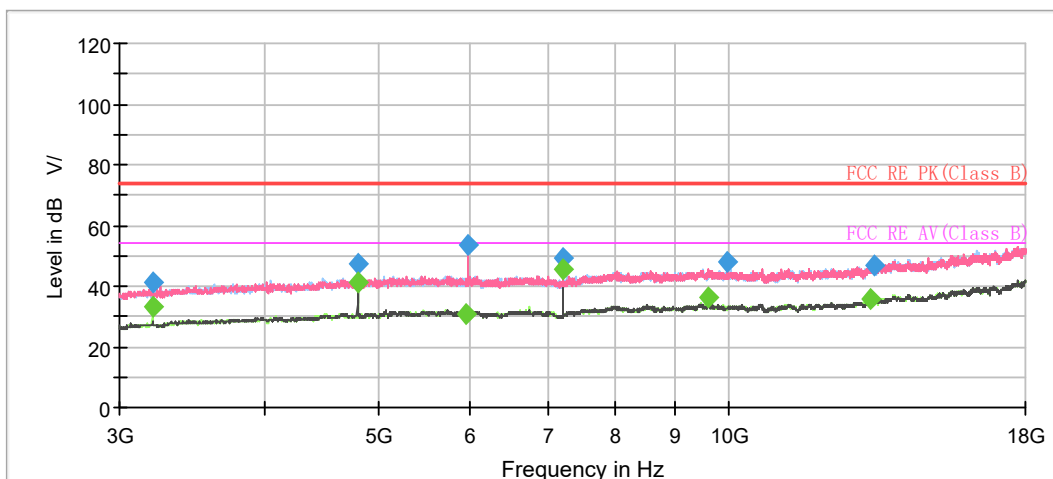
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit – Quasi-Peak

Bluetooth LE-Channel 0



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



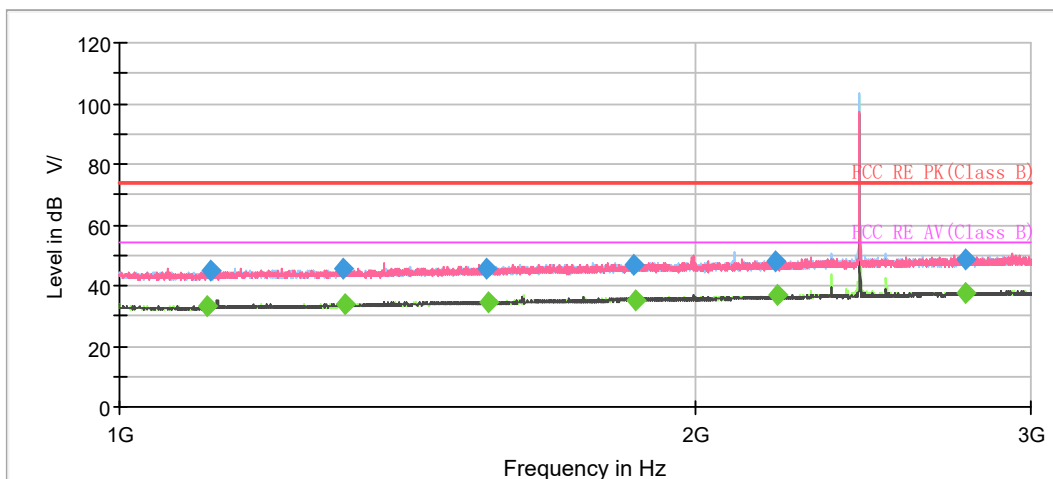
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1125.000000	45.18	---	74.00	28.82	500.0	200.0	H	273.0	2.4
1125.000000	---	36.19	54.00	17.81	500.0	100.0	V	208.0	2.4
1358.000000	45.43	---	74.00	28.57	500.0	200.0	H	309.0	3.7
1359.000000	---	33.85	54.00	20.15	500.0	100.0	V	174.0	3.7
1639.500000	46.16	---	74.00	27.84	500.0	200.0	H	267.0	5.1
1641.250000	---	34.98	54.00	19.02	500.0	100.0	H	203.0	5.1
1994.750000	---	35.89	54.00	18.11	500.0	200.0	H	239.0	6.5
1999.500000	51.38	---	74.00	22.62	500.0	200.0	V	165.0	6.5
2257.250000	48.19	---	74.00	25.81	500.0	200.0	V	108.0	7.4
2262.000000	---	37.72	54.00	16.28	500.0	200.0	H	119.0	7.4
2930.250000	---	38.20	54.00	15.80	500.0	200.0	H	292.0	9.3
2944.250000	49.38	---	74.00	24.62	500.0	200.0	H	273.0	9.3

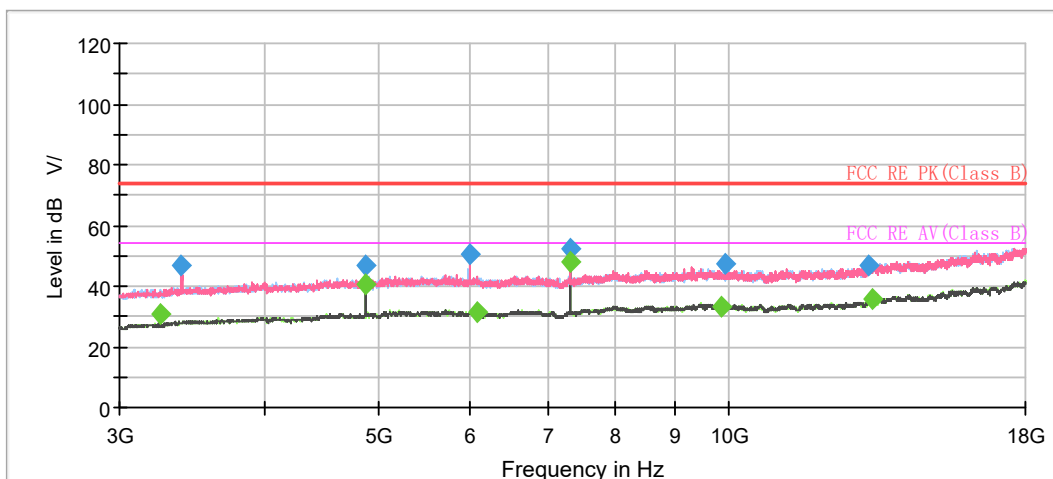
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

Bluetooth LE-Channel 19



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



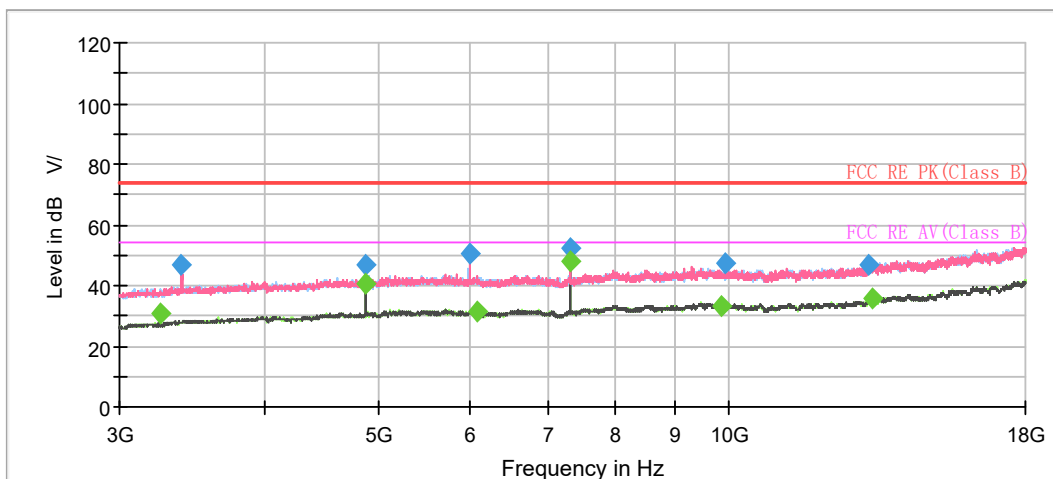
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1112.500000	---	33.07	54.00	20.93	500.0	200.0	H	136.0	2.3
1115.750000	44.70	---	74.00	29.30	500.0	200.0	H	224.0	2.3
1310.500000	45.31	---	74.00	28.69	500.0	200.0	V	40.0	3.4
1312.000000	---	34.09	54.00	19.91	500.0	200.0	H	96.0	3.4
1555.250000	45.79	---	74.00	28.21	500.0	100.0	V	231.0	4.7
1559.000000	---	34.45	54.00	19.55	500.0	200.0	V	0.0	4.7
1860.750000	47.06	---	74.00	26.94	500.0	100.0	H	96.0	6.0
1863.250000	---	35.29	54.00	18.71	500.0	100.0	H	237.0	6.0
2207.500000	47.85	---	74.00	26.15	500.0	100.0	V	344.0	7.2
2211.000000	---	36.75	54.00	17.25	500.0	200.0	H	297.0	7.3
2770.500000	---	37.50	54.00	16.50	500.0	200.0	H	67.0	8.9
2774.250000	48.65	---	74.00	25.35	500.0	100.0	V	321.0	8.9
7320.000000	---	48.30	54.00	5.70	500.0	200.0	V	129.0	-3.0

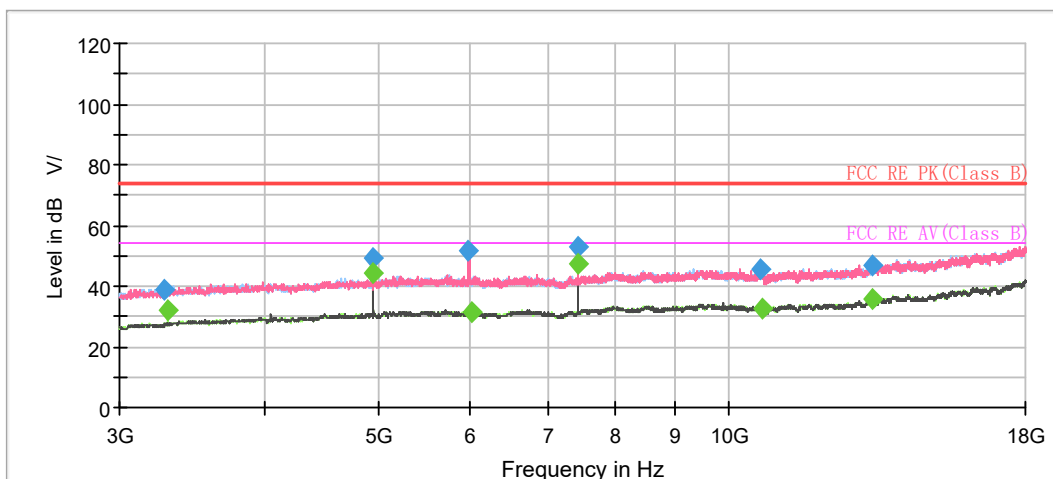
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

Bluetooth LE-Channel 39



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



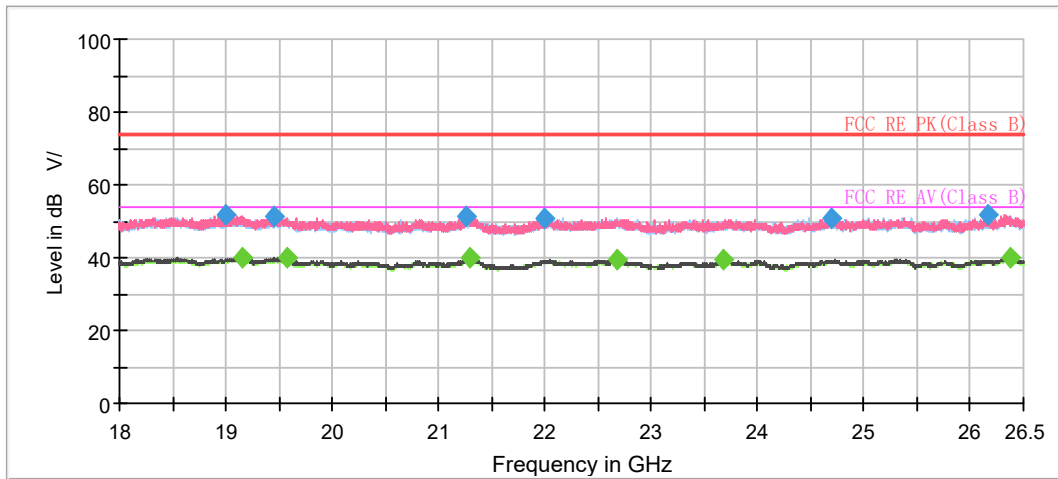
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1125.000000	---	36.33	54.00	17.67	500.0	100.0	V	217.0	2.4
1126.250000	44.26	---	74.00	29.74	500.0	100.0	V	301.0	2.4
1349.750000	46.27	---	74.00	27.73	500.0	200.0	V	201.0	3.7
1350.000000	---	39.03	54.00	14.97	500.0	200.0	V	201.0	3.7
1653.250000	---	36.83	54.00	17.17	500.0	100.0	H	197.0	5.1
1650.000000	45.66	---	74.00	28.34	500.0	200.0	H	257.0	5.6
1995.750000	52.44	---	74.00	21.56	500.0	200.0	V	195.0	6.5
1999.750000	---	36.46	54.00	17.54	500.0	100.0	V	317.0	6.5
2336.000000	49.23	---	74.00	24.77	500.0	200.0	V	77.0	7.7
2340.500000	---	37.86	54.00	16.14	500.0	200.0	H	257.0	7.7
2919.000000	---	37.78	54.00	16.22	500.0	200.0	V	31.0	9.3
2928.000000	49.88	---	74.00	24.12	500.0	200.0	H	118.0	9.3

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, Bluetooth LE-Channel 19 are selected as the worst condition. 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)
19007.250000	51.67	---	74.00	22.33	500.0	100.0	V	87.0	-3.0
19158.125000	---	39.96	54.00	14.04	500.0	100.0	V	329.0	-3.0
19448.187500	51.28	---	74.00	22.72	500.0	200.0	V	355.0	-2.8
19569.312500	---	40.03	54.00	13.97	500.0	200.0	V	307.0	-2.9
21259.750000	51.23	---	74.00	22.77	500.0	100.0	H	0.0	-2.1
21296.937500	---	39.94	54.00	14.06	500.0	200.0	V	289.0	-1.9
22002.437500	50.92	---	74.00	23.08	500.0	100.0	H	130.0	-1.7
22675.000000	---	39.43	54.00	14.57	500.0	100.0	V	31.0	-1.7
23674.812500	---	39.32	54.00	14.68	500.0	100.0	V	167.0	-1.2
24699.062500	50.78	---	74.00	23.22	500.0	100.0	H	0.0	-0.6
26162.125000	51.65	---	74.00	22.35	500.0	100.0	H	173.0	0.3
26376.750000	---	40.18	54.00	13.82	500.0	200.0	V	144.0	0.3

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%

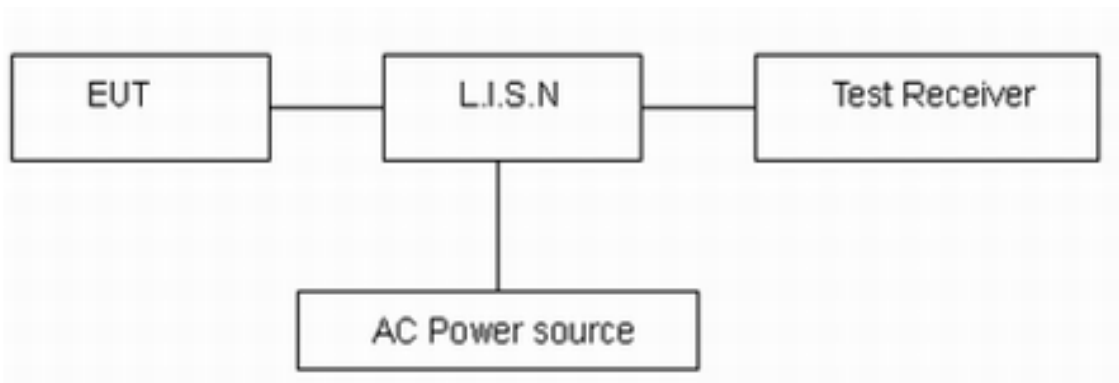
Methods of Measurement

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

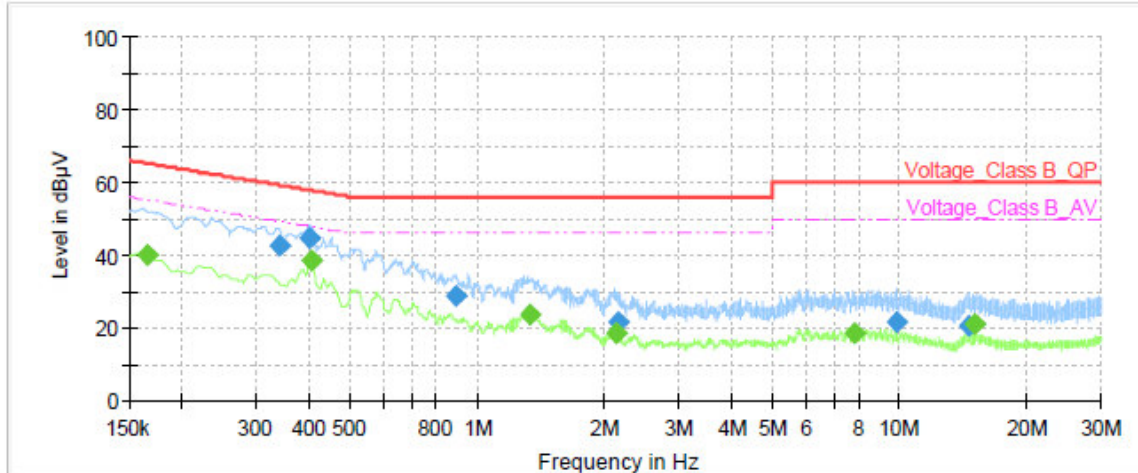
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 2.69$ dB.

Test Results:

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

Wi-Fi 2.4G

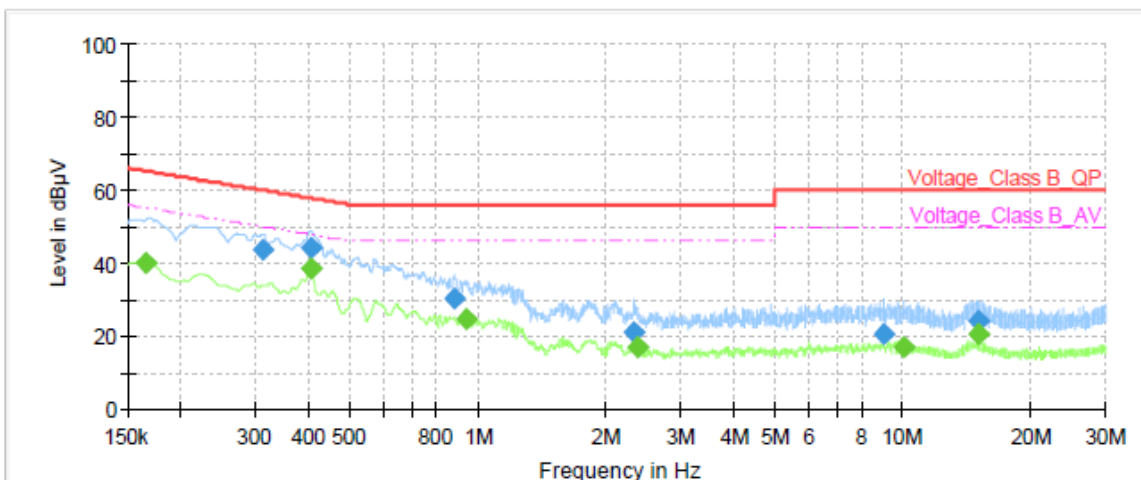
During the test, the Conducted Emission was performed in all modes with all channels, 802.11ax (HE20) CH11 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.17	---	40.08	55.17	15.09	1000.0	9.000	L1	ON	21.0
0.34	42.53	---	59.23	16.70	1000.0	9.000	L1	ON	21.0
0.40	44.44	---	57.81	13.37	1000.0	9.000	L1	ON	21.0
0.40	---	38.49	47.77	9.28	1000.0	9.000	L1	ON	21.0
0.89	28.58	---	56.00	27.42	1000.0	9.000	L1	ON	20.3
1.34	---	23.59	46.00	22.41	1000.0	9.000	L1	ON	20.0
2.12	---	18.40	46.00	27.60	1000.0	9.000	L1	ON	19.7
2.16	21.36	---	56.00	34.64	1000.0	9.000	L1	ON	19.7
7.80	---	18.61	50.00	31.39	1000.0	9.000	L1	ON	19.5
9.87	21.31	---	60.00	38.69	1000.0	9.000	L1	ON	19.6
14.57	20.36	---	60.00	39.64	1000.0	9.000	L1	ON	19.6
15.00	---	20.83	50.00	29.17	1000.0	9.000	L1	ON	19.6

Remark: Correct factor=cable loss + LISN factor

L line Conducted Emission from 150 kHz to 30 MHz



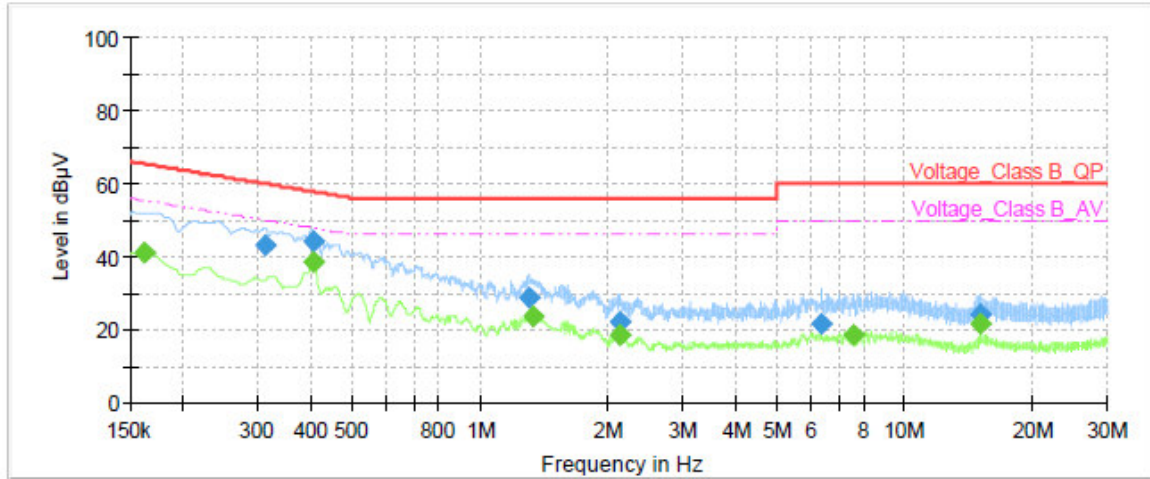
Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.17	---	40.16	55.17	15.01	1000.0	9.000	N	ON	21.0
0.31	43.39	---	59.92	16.53	1000.0	9.000	N	ON	21.0
0.40	---	38.66	47.77	9.11	1000.0	9.000	N	ON	21.0
0.41	44.01	---	57.72	13.71	1000.0	9.000	N	ON	21.0
0.88	30.29	---	56.00	25.71	1000.0	9.000	N	ON	20.3
0.94	---	24.52	46.00	21.48	1000.0	9.000	N	ON	20.3
2.34	20.84	---	56.00	35.16	1000.0	9.000	N	ON	19.6
2.37	---	16.84	46.00	29.16	1000.0	9.000	N	ON	19.6
8.99	20.41	---	60.00	39.59	1000.0	9.000	N	ON	19.5
10.04	---	16.89	50.00	33.11	1000.0	9.000	N	ON	19.6
15.00	---	20.71	50.00	29.29	1000.0	9.000	N	ON	19.6
15.00	24.14	---	60.00	35.86	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

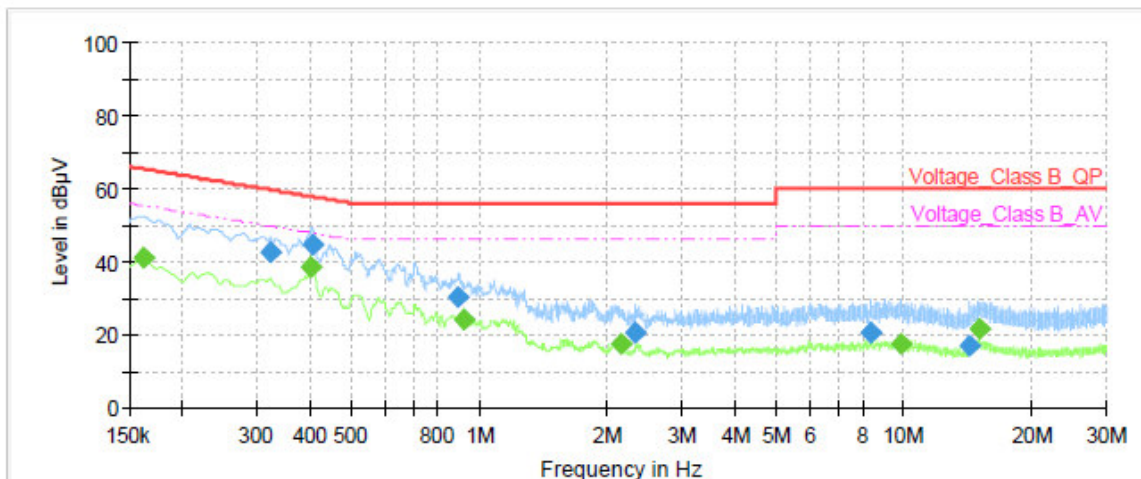
During the test, the Conducted Emission was performed in all modes with all channels, Bluetooth LE-Channel 19 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.16	---	40.84	55.40	14.56	1000.0	9.000	L1	ON	21.0
0.31	43.31	---	59.92	16.61	1000.0	9.000	L1	ON	21.0
0.40	44.35	---	57.77	13.42	1000.0	9.000	L1	ON	21.0
0.41	---	38.35	47.72	9.37	1000.0	9.000	L1	ON	21.0
1.30	28.57	---	56.00	27.43	1000.0	9.000	L1	ON	20.0
1.33	---	23.51	46.00	22.49	1000.0	9.000	L1	ON	20.0
2.12	---	18.45	46.00	27.55	1000.0	9.000	L1	ON	19.7
2.13	21.89	---	56.00	34.11	1000.0	9.000	L1	ON	19.7
6.34	21.33	---	60.00	38.67	1000.0	9.000	L1	ON	19.5
7.55	---	18.65	50.00	31.35	1000.0	9.000	L1	ON	19.5
15.00	---	21.64	50.00	28.36	1000.0	9.000	L1	ON	19.6
15.00	24.34	---	60.00	35.66	1000.0	9.000	L1	ON	19.6

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	---	40.97	55.40	14.43	1000.0	9.000	N	ON	21.0
0.32	42.78	---	59.62	16.84	1000.0	9.000	N	ON	21.0
0.40	---	38.26	47.81	9.55	1000.0	9.000	N	ON	21.0
0.40	44.38	---	57.77	13.39	1000.0	9.000	N	ON	21.0
0.89	30.18	---	56.00	25.82	1000.0	9.000	N	ON	20.3
0.92	---	24.30	46.00	21.70	1000.0	9.000	N	ON	20.3
2.15	---	17.32	46.00	28.68	1000.0	9.000	N	ON	19.7
2.33	20.68	---	56.00	35.32	1000.0	9.000	N	ON	19.6
8.37	20.30	---	60.00	39.70	1000.0	9.000	N	ON	19.5
9.85	---	17.57	50.00	32.43	1000.0	9.000	N	ON	19.6
14.29	17.00	---	60.00	43.00	1000.0	9.000	N	ON	19.6
15.00	---	21.49	50.00	28.51	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 of Equipment	Manufacturer	Type/Model	Serial Number	Calibration Date	Expiration Time
Power sensor	R&S	NRP18S	101954	2023-05-12	2024-05-11
				2024-05-07	2025-05-06
Spectrum Analyzer	KEYSIGHT	N9020A	MY51330870	2023-05-12	2024-05-11
				2024-05-07	2025-05-06
Radiated Emission					
EMI Test Receiver	R&S	ESCI3	100948	2023-05-12	2024-05-11
				2024-05-07	2025-05-06
Signal Analyzer	R&S	FSV40	101186	2023-05-12	2024-05-11
				2024-05-07	2025-05-06
Signal Analyzer	R&S	FSV40	101298	2023-05-12	2024-05-11
				2024-05-07	2025-05-06
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	01111	2022-10-25	2025-10-24
Horn Antenna	SCHWARZBECK	BBHA 9120D	430	2021-07-26	2024-07-25
Horn Antenna	ETS-Lindgren	3160-09	00102643	2021-10-10	2024-10-09
Amplifier	MicroWave	KLNA-18040050	220826001	2023-05-12	2024-05-11
				2024-05-08	2025-05-07
Software	R&S	EMC32	9.26.01	/	/
Conducted Emission					
Artificial main network	R&S	ENV216	102191	2022-12-10	2024-12-09
EMI Test Receiver	R&S	ESR	101667	2023-05-12	2024-05-11
				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 *****