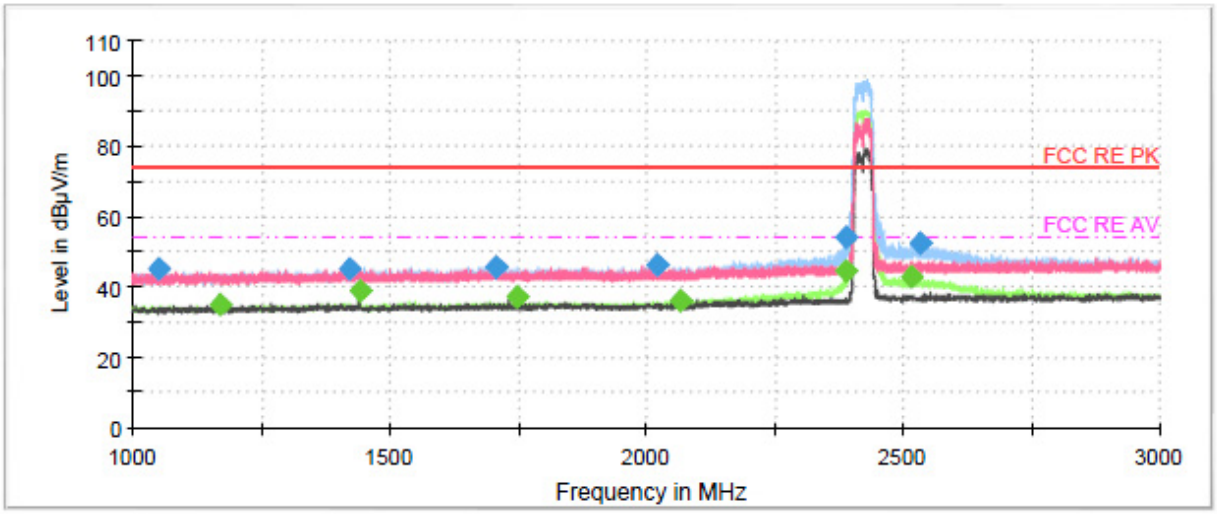
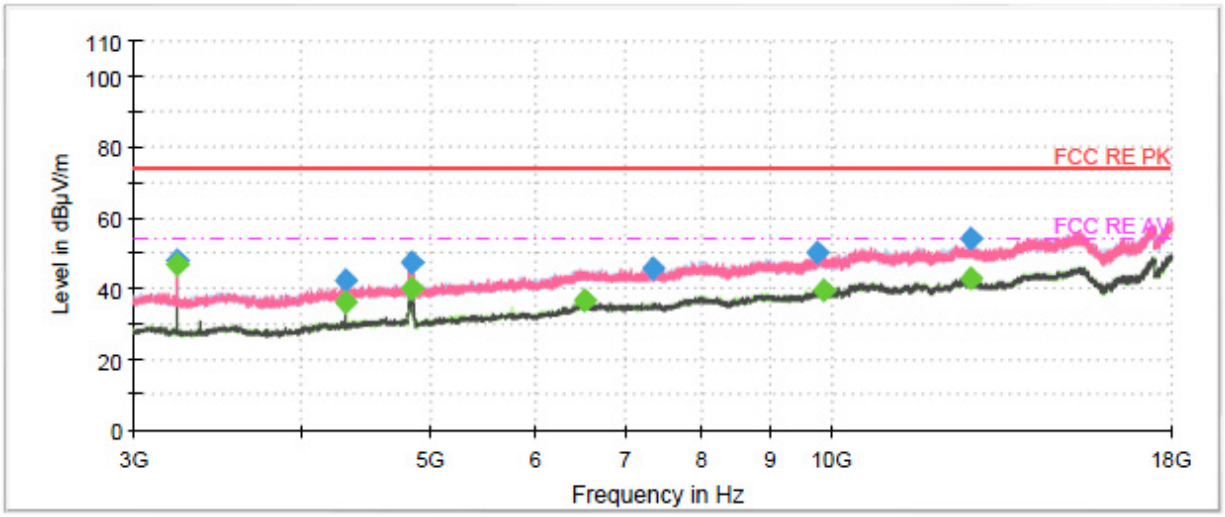
802.11n (HT40) CH3



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

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1050.800000	44.87	---	74.00	29.13	100.0	H	77.0	-11.0
1167.733333	---	35.23	54.00	18.77	100.0	H	195.0	-10.4
1420.200000	45.38	---	74.00	28.62	100.0	V	324.0	-9.3
1440.600000	---	38.76	54.00	15.24	100.0	V	299.0	-9.3
1706.600000	45.89	---	74.00	28.11	200.0	V	2.0	-8.6
1746.266667	---	37.50	54.00	16.50	100.0	V	344.0	-8.6
2019.333333	46.23	---	74.00	27.77	200.0	H	358.0	-8.2
2067.200000	---	36.06	54.00	17.94	100.0	V	208.0	-7.9
2388.066667	54.21	---	74.00	19.79	100.0	H	208.0	-6.5
2388.133333	---	44.40	54.00	9.60	100.0	H	223.0	-6.5
2515.666667	---	42.74	54.00	11.26	100.0	H	1.0	-6.3
2533.933333	52.40	---	74.00	21.60	200.0	H	357.0	-6.3

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

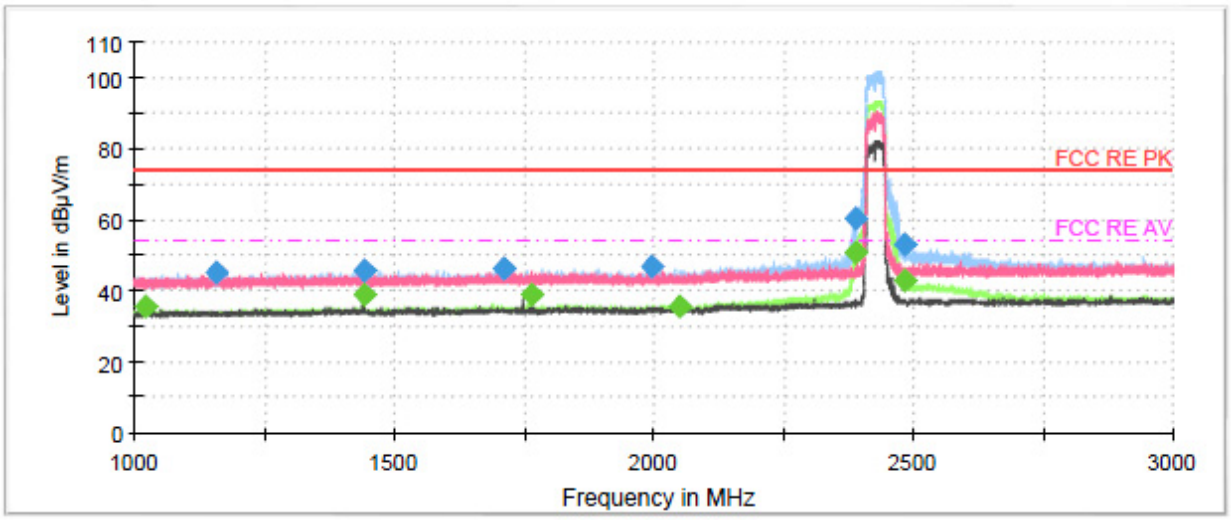


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
3229.000000	---	46.58	54.00	7.42	100.0	V	157.0	-15.1
3229.500000	48.14	---	74.00	25.86	100.0	V	157.0	-15.1
4322.000000	42.56	---	74.00	31.44	100.0	H	305.0	-12.3
4322.000000	---	35.97	54.00	18.03	100.0	H	305.0	-12.3
4841.500000	47.53	---	74.00	26.47	200.0	V	303.0	-10.7
4842.500000	---	40.07	54.00	13.93	200.0	V	204.0	-10.7
6525.000000	---	36.72	54.00	17.28	200.0	H	124.0	-3.7
7342.000000	45.87	---	74.00	28.13	200.0	H	166.0	-4.3
9773.000000	50.13	---	74.00	23.87	200.0	V	348.0	-2.2
9886.500000	---	39.68	54.00	14.32	200.0	V	233.0	-1.7
12715.500000	---	42.90	54.00	11.10	200.0	H	40.0	2.3
12743.000000	53.94	---	74.00	20.06	200.0	H	328.0	2.2

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

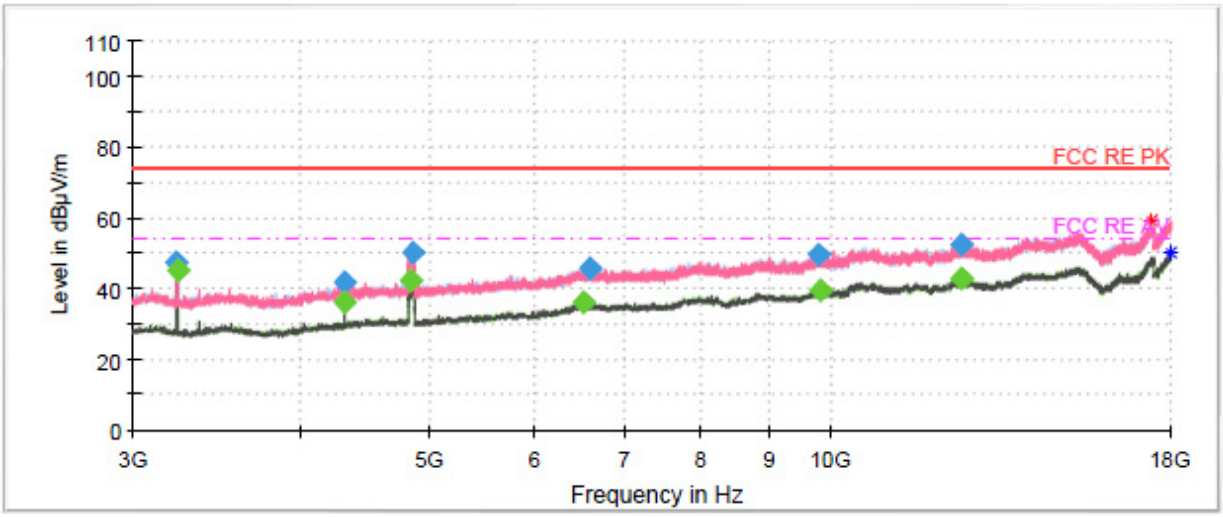
802.11n (HT40) CH4



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

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1020.466667	---	35.76	54.00	18.24	100.0	H	52.0	-11.0
1156.400000	45.06	---	74.00	28.94	200.0	H	160.0	-10.4
1440.333333	45.72	---	74.00	28.28	100.0	V	292.0	-9.3
1440.533333	---	38.89	54.00	15.11	100.0	V	305.0	-9.3
1709.733333	46.11	---	74.00	27.89	200.0	H	265.0	-8.6
1763.466667	---	39.19	54.00	14.81	100.0	V	253.0	-8.6
1996.933333	46.64	---	74.00	27.36	200.0	H	252.0	-8.2
2049.333333	---	35.48	54.00	18.52	100.0	H	154.0	-8.0
2388.133333	60.59	---	74.00	13.41	100.0	H	222.0	-6.5
2389.333333	---	50.69	54.00	3.31	100.0	H	209.0	-6.5
2484.400000	---	42.74	54.00	11.26	100.0	H	0.0	-6.3
2485.533333	53.24	---	74.00	20.76	200.0	H	347.0	-6.3

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

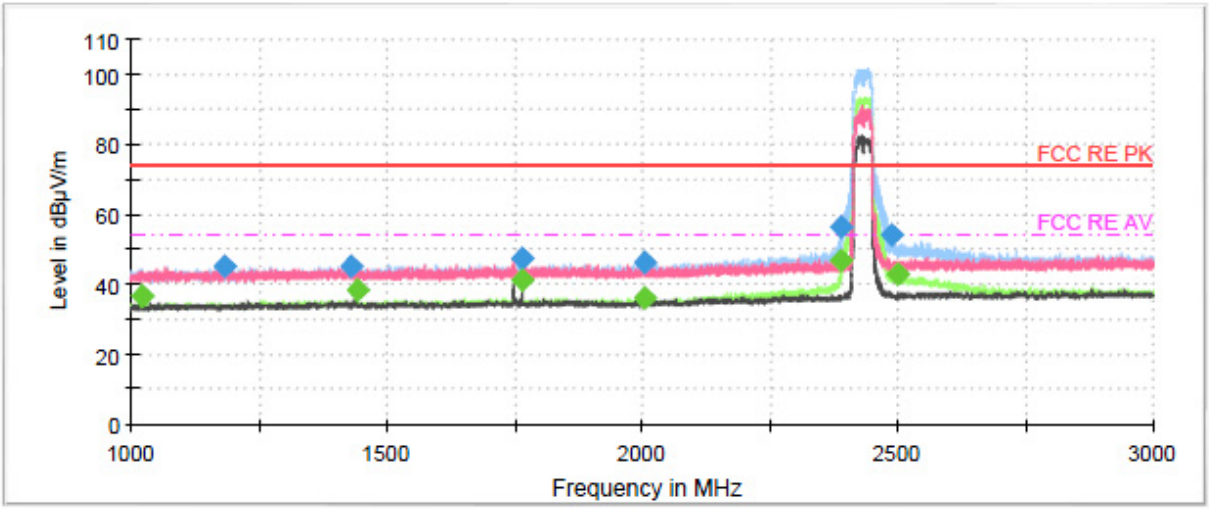


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
3235.500000	47.37	---	74.00	26.63	100.0	V	332.0	-15.1
3236.000000	---	45.33	54.00	8.67	100.0	V	332.0	-15.1
4322.000000	---	35.94	54.00	18.06	200.0	H	0.0	-12.3
4322.500000	41.94	---	74.00	32.06	200.0	H	2.0	-12.3
4847.500000	---	42.06	54.00	11.94	200.0	V	290.0	-10.7
4854.000000	50.30	---	74.00	23.70	200.0	V	208.0	-10.7
6529.500000	---	36.14	54.00	17.86	100.0	V	2.0	-3.7
6611.500000	45.65	---	74.00	28.35	200.0	V	193.0	-3.6
9796.500000	49.90	---	74.00	24.10	100.0	V	0.0	-2.0
9824.000000	---	39.77	54.00	14.23	200.0	V	356.0	-1.8
12522.500000	---	42.72	54.00	11.28	100.0	V	12.0	2.0
12560.500000	52.59	---	74.00	21.41	200.0	H	39.0	2.1

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

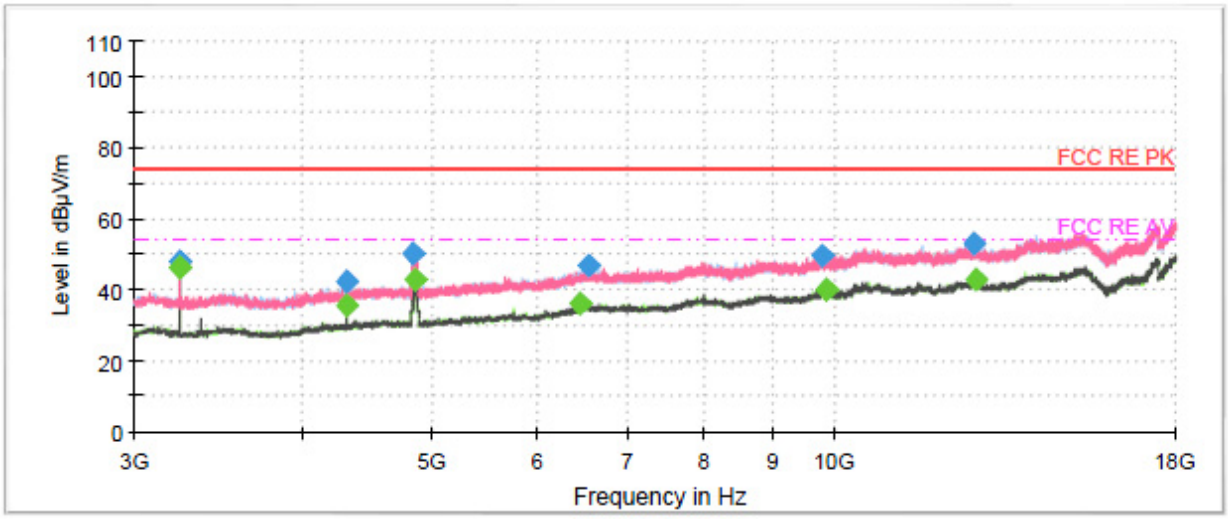
802.11n (HT40) CH5



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

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1020.466667	---	36.54	54.00	17.46	100.0	H	48.0	-11.0
1180.866667	45.12	---	74.00	28.88	200.0	H	303.0	-10.4
1427.800000	45.13	---	74.00	28.87	200.0	H	150.0	-9.3
1440.733333	---	38.59	54.00	15.41	100.0	V	292.0	-9.3
1763.266667	---	41.25	54.00	12.75	100.0	V	266.0	-8.6
1763.466667	47.64	---	74.00	26.36	100.0	V	266.0	-8.6
2004.533333	---	36.17	54.00	17.83	200.0	H	0.0	-8.2
2005.200000	46.39	---	74.00	27.61	200.0	V	0.0	-8.2
2387.733333	56.50	---	74.00	17.50	100.0	H	216.0	-6.5
2389.200000	---	46.56	54.00	7.44	100.0	H	216.0	-6.5
2486.600000	53.97	---	74.00	20.03	200.0	H	356.0	-6.3
2498.866667	---	42.87	54.00	11.13	200.0	H	239.0	-6.3

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

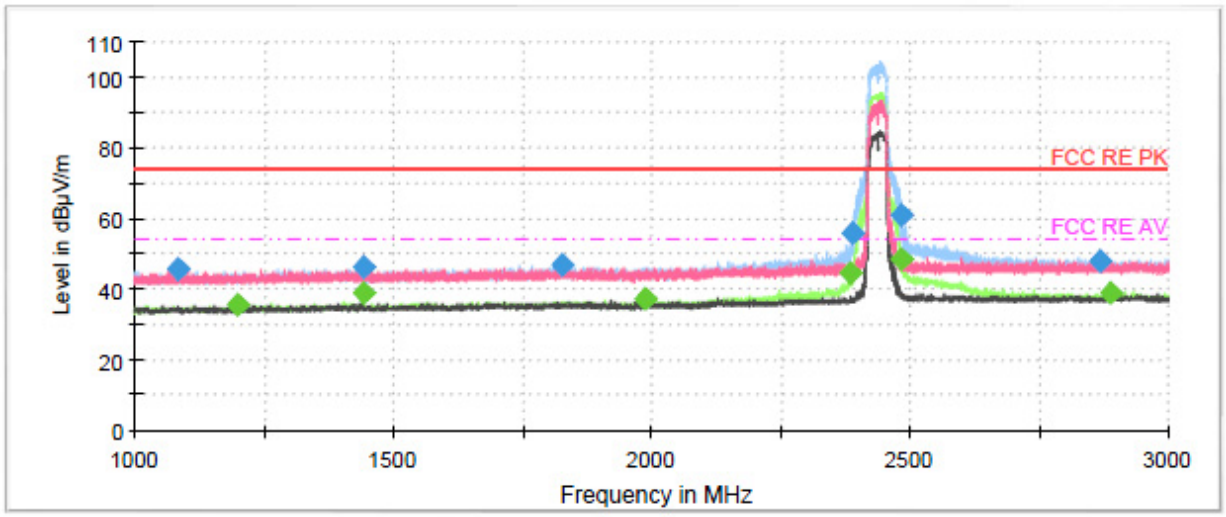


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
3242.500000	47.98	---	74.00	26.02	100.0	V	155.0	-15.2
3242.500000	---	46.35	54.00	7.65	100.0	V	155.0	-15.2
4322.000000	42.12	---	74.00	31.88	100.0	H	288.0	-12.3
4322.000000	---	35.62	54.00	18.38	100.0	V	59.0	-12.3
4851.000000	50.37	---	74.00	23.63	200.0	V	302.0	-10.7
4857.500000	---	42.70	54.00	11.30	200.0	V	288.0	-10.7
6453.500000	---	36.32	54.00	17.68	200.0	H	4.0	-4.1
6563.000000	46.60	---	74.00	27.40	200.0	H	72.0	-3.6
9805.500000	49.71	---	74.00	24.29	200.0	V	260.0	-1.9
9871.500000	---	39.97	54.00	14.03	200.0	V	43.0	-1.8
12718.000000	53.28	---	74.00	20.72	200.0	H	44.0	2.3
12756.500000	---	42.64	54.00	11.36	100.0	V	59.0	2.2

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

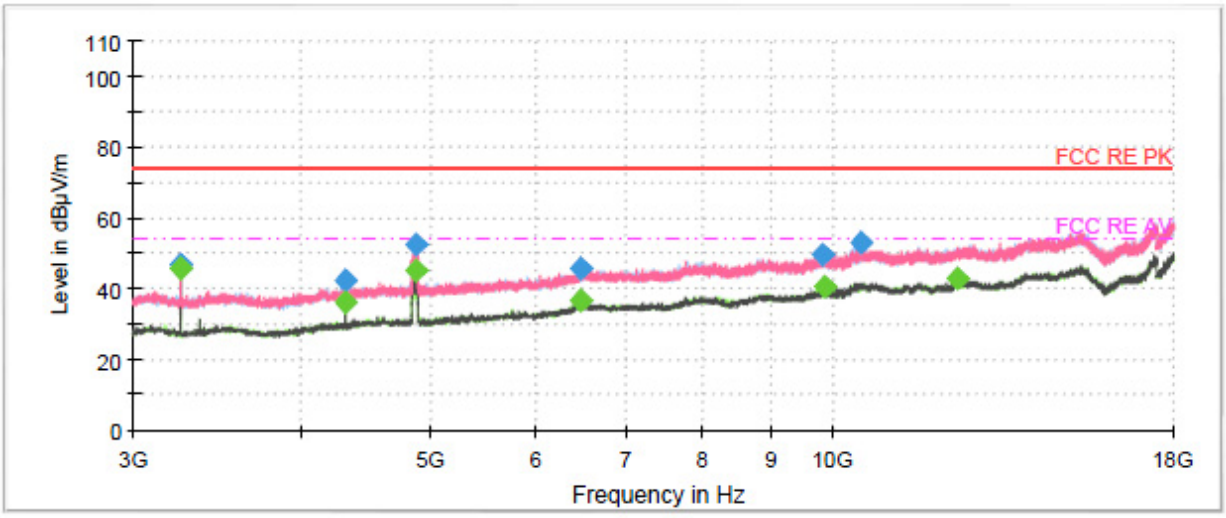
802.11n (HT40) CH6



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

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1083.866667	45.91	---	74.00	28.09	100.0	V	171.0	-10.7
1200.000000	---	35.67	54.00	18.33	200.0	V	179.0	-10.3
1440.666667	---	38.92	54.00	15.08	100.0	V	42.0	-9.3
1440.866667	46.46	---	74.00	27.54	100.0	V	21.0	-9.3
1826.466667	46.80	---	74.00	27.20	100.0	V	224.0	-8.5
1987.866667	---	37.14	54.00	16.86	100.0	H	292.0	-8.2
2385.733333	---	44.30	54.00	9.70	100.0	H	339.0	-6.5
2389.466667	55.96	---	74.00	18.04	200.0	H	351.0	-6.5
2484.733333	61.01	---	74.00	12.99	100.0	H	355.0	-6.3
2484.866667	---	48.35	54.00	5.65	100.0	H	359.0	-6.3
2866.133333	48.18	---	74.00	25.82	200.0	V	82.0	-6.0
2889.600000	---	38.75	54.00	15.25	200.0	H	222.0	-6.0

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

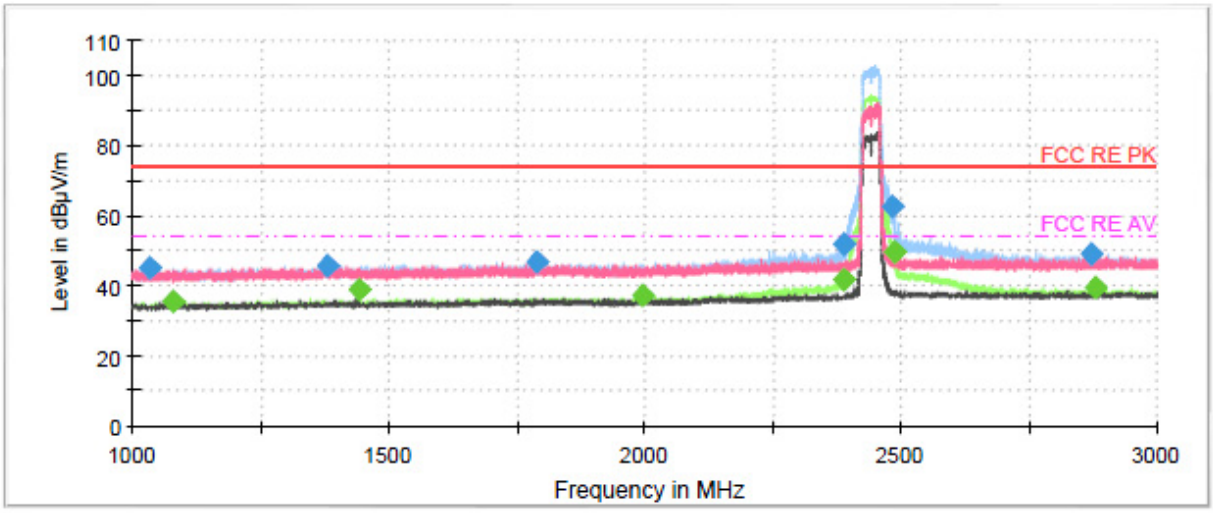


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
3249.000000	47.08	---	74.00	26.92	100.0	V	332.0	-15.2
3249.000000	---	45.55	54.00	8.45	100.0	V	332.0	-15.2
4321.500000	42.12	---	74.00	31.88	200.0	H	0.0	-12.3
4321.500000	---	36.13	54.00	17.87	200.0	H	0.0	-12.3
4874.000000	52.53	---	74.00	21.47	200.0	V	296.0	-10.7
4874.000000	---	45.09	54.00	8.91	200.0	V	296.0	-10.7
6476.500000	---	36.59	54.00	17.41	200.0	H	2.0	-3.9
6488.500000	45.71	---	74.00	28.29	100.0	V	0.0	-3.8
9822.000000	49.64	---	74.00	24.36	100.0	H	0.0	-1.8
9857.000000	---	40.36	54.00	13.64	100.0	H	74.0	-1.8
10526.000000	52.94	---	74.00	21.06	200.0	V	0.0	-0.7
12396.500000	---	42.76	54.00	11.24	200.0	H	330.0	1.5

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

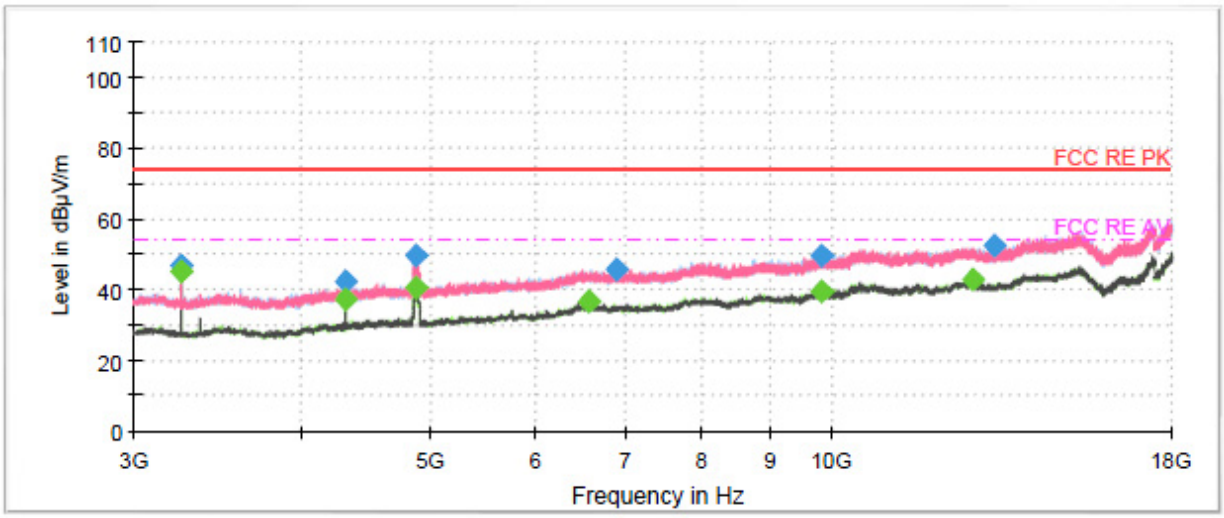
802.11n (HT40) CH7



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

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1031.666667	45.37	---	74.00	28.63	100.0	H	225.0	-11.0
1079.933333	---	35.71	54.00	18.29	200.0	H	4.0	-10.7
1379.733333	45.84	---	74.00	28.16	100.0	H	187.0	-9.6
1440.733333	---	38.69	54.00	15.31	100.0	V	41.0	-9.3
1789.933333	46.84	---	74.00	27.16	100.0	H	355.0	-8.5
1996.466667	---	37.20	54.00	16.80	200.0	H	218.0	-8.2
2387.666667	---	41.76	54.00	12.24	100.0	H	338.0	-6.5
2389.266667	52.01	---	74.00	21.99	200.0	H	2.0	-6.5
2484.266667	62.33	---	74.00	11.67	100.0	H	359.0	-6.3
2486.400000	---	49.41	54.00	4.59	100.0	H	0.0	-6.3
2871.400000	48.96	---	74.00	25.04	100.0	V	156.0	-6.0
2881.133333	---	39.31	54.00	14.69	100.0	V	209.0	-6.0

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

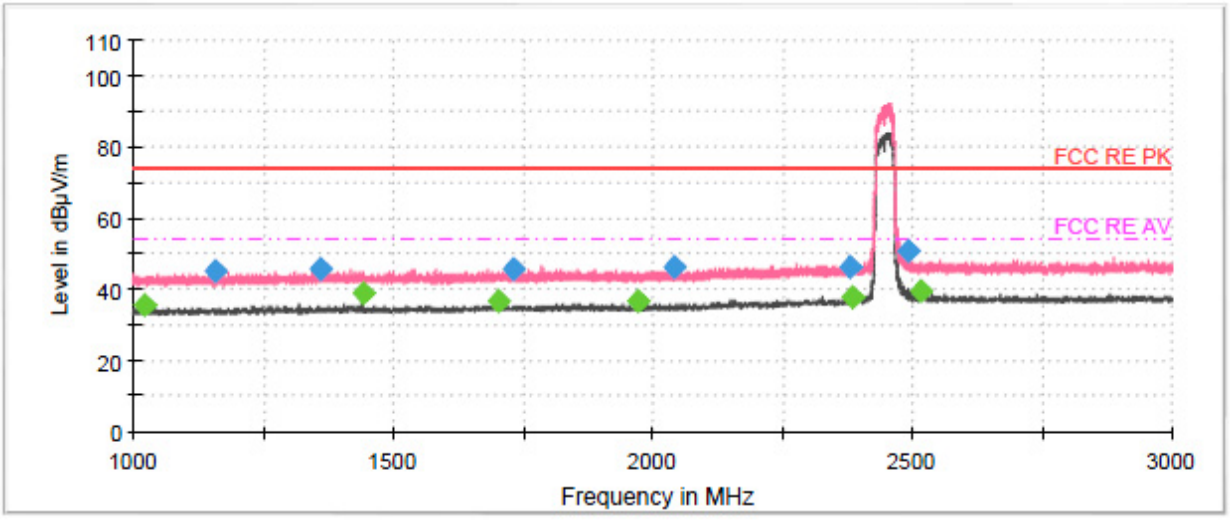


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
3255.500000	---	45.14	54.00	8.86	100.0	V	331.0	-15.2
3256.000000	46.82	---	74.00	27.18	100.0	V	331.0	-15.2
4322.000000	42.06	---	74.00	31.94	100.0	H	312.0	-12.3
4322.000000	---	37.35	54.00	16.65	100.0	H	312.0	-12.3
4883.500000	---	40.88	54.00	13.12	100.0	H	244.0	-10.7
4884.000000	49.92	---	74.00	24.08	100.0	V	300.0	-10.7
6568.000000	---	36.66	54.00	17.34	100.0	V	33.0	-3.6
6892.500000	45.84	---	74.00	28.16	100.0	H	326.0	-3.8
9822.000000	49.53	---	74.00	24.47	200.0	H	46.0	-1.8
9843.000000	---	39.70	54.00	14.30	100.0	V	46.0	-1.8
12765.500000	---	42.65	54.00	11.35	100.0	V	61.0	2.2
13247.000000	52.21	---	74.00	21.79	100.0	H	326.0	1.9

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

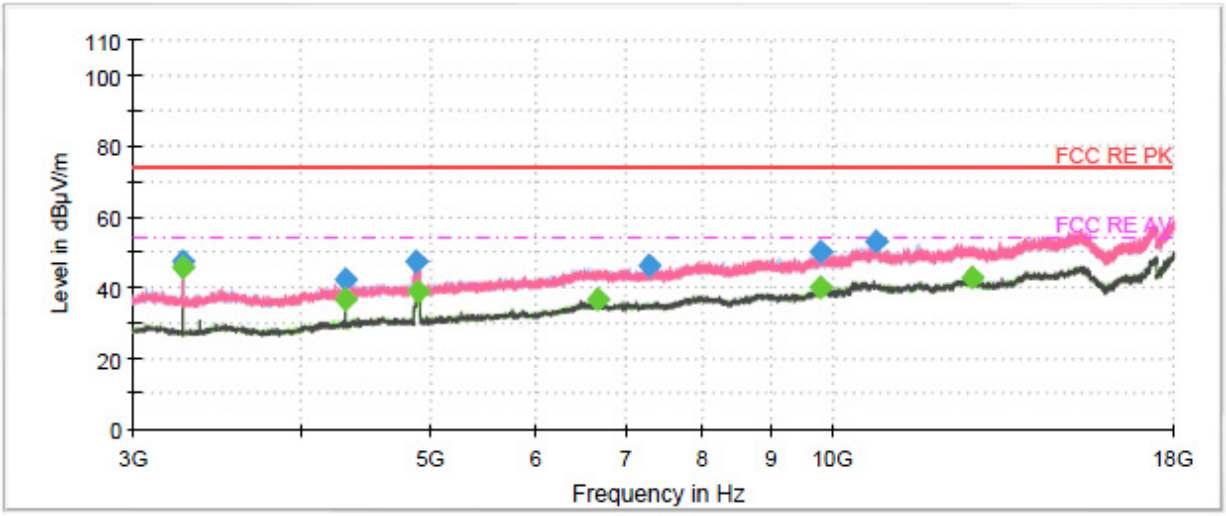
802.11n (HT40) CH8



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

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1020.400000	---	35.54	54.00	18.46	200.0	V	43.0	-11.0
1158.400000	45.13	---	74.00	28.87	100.0	V	337.0	-10.4
1357.600000	45.70	---	74.00	28.30	200.0	V	94.0	-9.6
1440.733333	---	38.70	54.00	15.30	100.0	V	315.0	-9.3
1704.000000	---	36.39	54.00	17.61	100.0	V	93.0	-8.6
1730.000000	45.62	---	74.00	28.38	200.0	V	107.0	-8.6
1973.066667	---	36.82	54.00	17.18	100.0	V	25.0	-8.3
2039.533333	46.05	---	74.00	27.95	100.0	V	265.0	-8.0
2381.466667	46.41	---	74.00	27.59	200.0	V	69.0	-6.5
2382.266667	---	37.68	54.00	16.32	100.0	V	197.0	-6.5
2492.400000	50.62	---	74.00	23.38	100.0	V	197.0	-6.3
2517.800000	---	39.54	54.00	14.46	100.0	V	197.0	-6.3

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

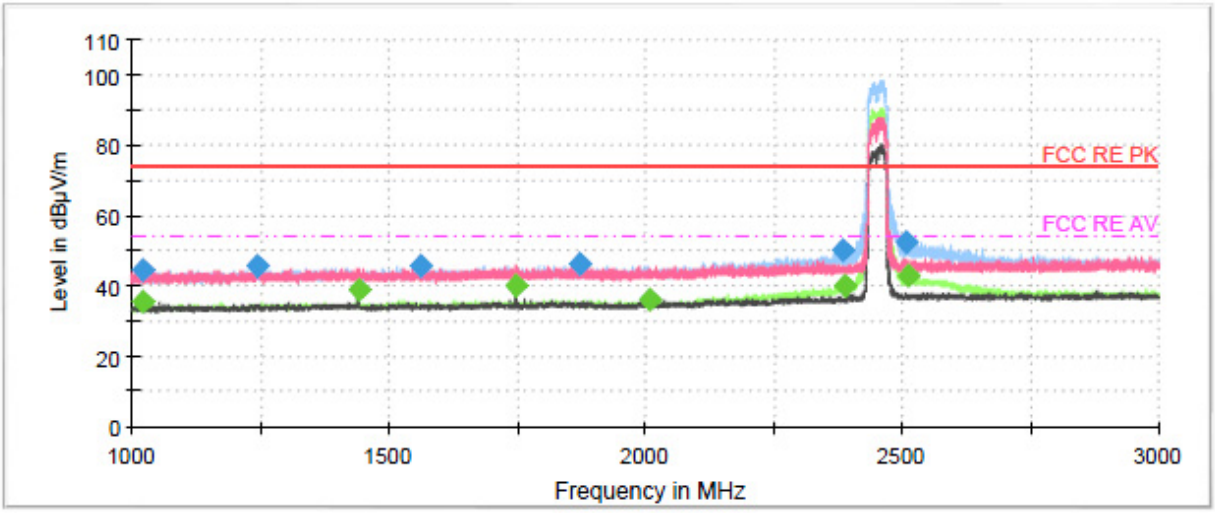


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
3262.500000	47.44	---	74.00	26.56	200.0	H	158.0	-15.1
3262.500000	---	45.88	54.00	8.12	100.0	V	160.0	-15.1
4322.000000	42.22	---	74.00	31.78	100.0	H	312.0	-12.3
4322.000000	---	36.79	54.00	17.21	100.0	H	312.0	-12.3
4885.000000	47.38	---	74.00	26.62	100.0	H	241.0	-10.7
4902.000000	---	38.92	54.00	15.08	200.0	V	291.0	-10.7
6668.000000	---	36.90	54.00	17.10	100.0	H	130.0	-3.5
7290.500000	46.49	---	74.00	27.51	200.0	H	214.0	-4.4
9789.500000	---	39.84	54.00	14.16	200.0	H	144.0	-2.1
9804.500000	50.08	---	74.00	23.92	200.0	V	264.0	-1.9
10801.000000	52.95	---	74.00	21.05	100.0	V	0.0	-0.5
12712.000000	---	42.98	54.00	11.02	100.0	H	358.0	2.3

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

802.11n (HT40) CH9

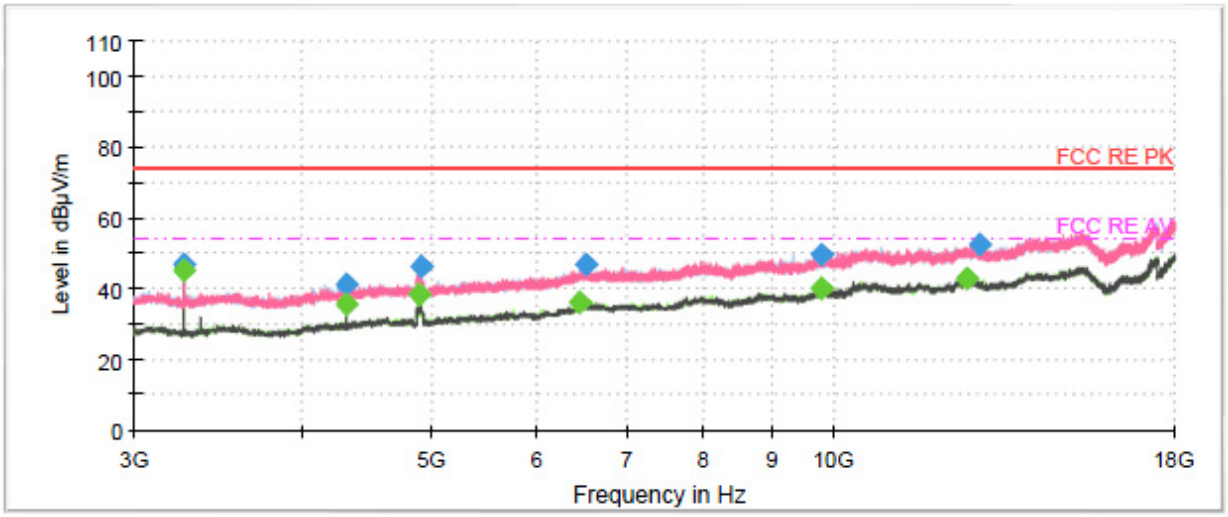


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1020.666667	---	35.61	54.00	18.39	100.0	H	39.0	-11.0
1021.066667	44.83	---	74.00	29.17	200.0	H	286.0	-11.0
1245.000000	45.45	---	74.00	28.55	200.0	H	274.0	-10.0
1440.800000	---	38.80	54.00	15.20	200.0	V	32.0	-9.3
1562.600000	45.88	---	74.00	28.12	200.0	H	311.0	-8.9
1746.600000	---	40.10	54.00	13.90	100.0	V	39.0	-8.6
1871.466667	46.32	---	74.00	27.68	200.0	H	354.0	-8.4
2010.200000	---	36.06	54.00	17.94	200.0	H	356.0	-8.2
2384.466667	50.13	---	74.00	23.87	100.0	H	227.0	-6.5
2387.066667	---	40.22	54.00	13.78	200.0	H	217.0	-6.5
2506.533333	52.54	---	74.00	21.46	200.0	H	0.0	-6.3
2512.666667	---	42.97	54.00	11.03	200.0	H	233.0	-6.3

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

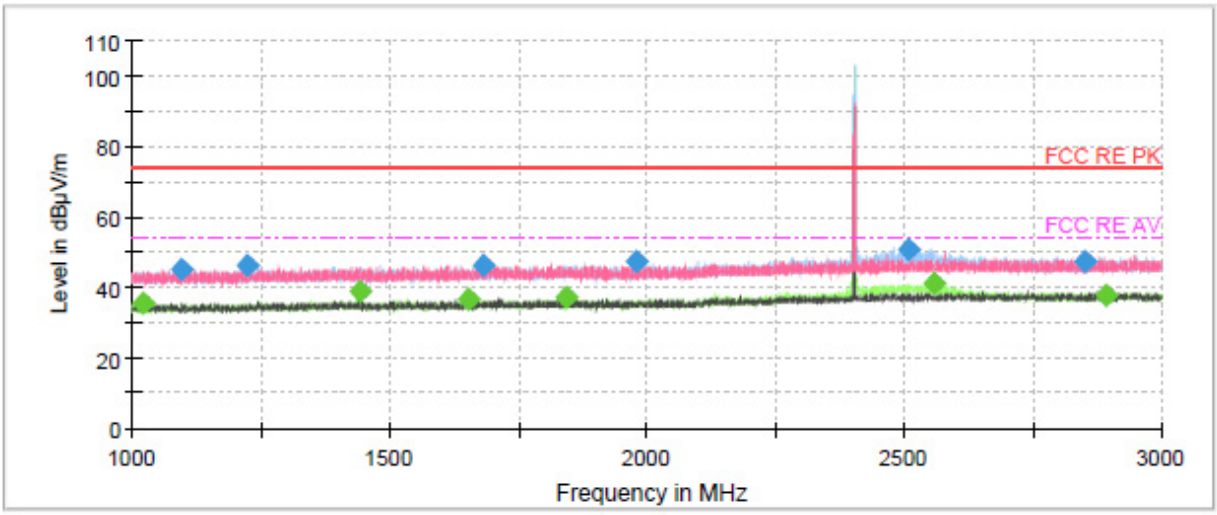


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
3269.000000	46.54	---	74.00	27.46	100.0	V	155.0	-15.1
3269.000000	---	45.29	54.00	8.71	100.0	V	155.0	-15.1
4321.000000	40.97	---	74.00	33.03	200.0	H	0.0	-12.3
4322.000000	---	35.35	54.00	18.65	100.0	H	318.0	-12.3
4905.000000	---	38.53	54.00	15.47	100.0	V	286.0	-10.7
4908.500000	46.52	---	74.00	27.48	100.0	V	286.0	-10.6
6462.500000	---	36.23	54.00	17.77	200.0	H	31.0	-4.0
6525.500000	46.83	---	74.00	27.17	100.0	H	12.0	-3.7
9795.500000	---	39.83	54.00	14.17	200.0	H	46.0	-2.0
9807.000000	49.43	---	74.00	24.57	100.0	V	155.0	-1.9
12597.500000	---	43.00	54.00	11.00	100.0	H	263.0	2.2
12878.000000	52.24	---	74.00	21.76	200.0	V	244.0	2.0

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

Bluetooth LE-Channel 0

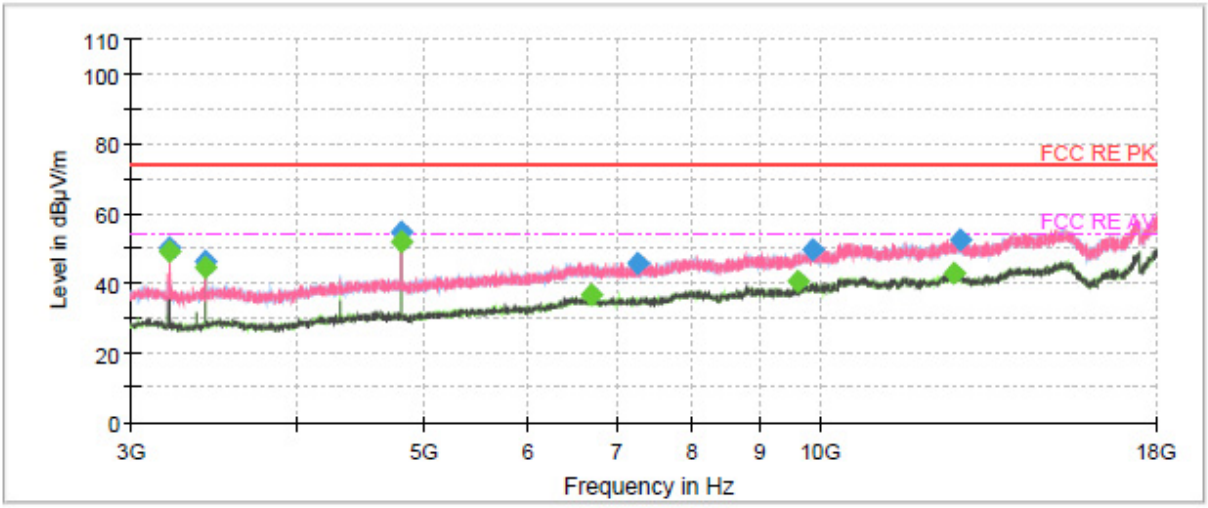


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1020.400000	---	35.74	54.00	18.26	100.0	H	314.0	-11.0
1096.066667	45.24	---	74.00	28.76	200.0	V	341.0	-10.7
1223.200000	46.24	---	74.00	27.76	200.0	V	147.0	-10.2
1440.666667	---	38.70	54.00	15.30	100.0	V	209.0	-9.3
1654.733333	---	36.72	54.00	17.28	100.0	V	170.0	-8.8
1682.466667	46.33	---	74.00	27.67	100.0	V	1.0	-8.7
1842.000000	---	36.95	54.00	17.05	100.0	H	133.0	-8.5
1979.600000	47.50	---	74.00	26.50	200.0	H	71.0	-8.3
2509.600000	50.64	---	74.00	23.36	200.0	H	358.0	-6.3
2557.200000	---	40.94	54.00	13.06	100.0	H	350.0	-6.2
2852.733333	47.26	---	74.00	26.74	200.0	H	15.0	-6.0
2891.666667	---	37.61	54.00	16.39	100.0	H	94.0	-6.0

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

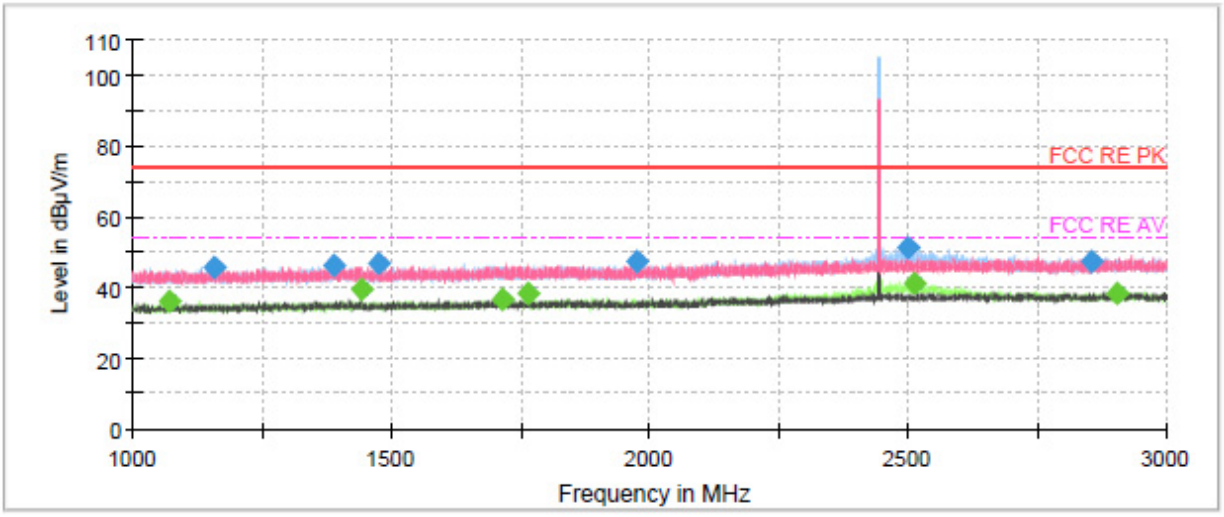


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
3205.000000	50.45	---	74.00	23.55	100.0	V	157.0	-15.2
3205.000000	---	48.90	54.00	5.10	100.0	V	157.0	-15.2
3409.000000	46.47	---	74.00	27.53	100.0	V	114.0	-14.8
3409.000000	---	44.44	54.00	9.56	100.0	V	114.0	-14.8
4807.500000	---	51.79	54.00	2.21	200.0	H	214.0	-10.6
4807.500000	54.67	---	74.00	19.33	200.0	V	291.0	-10.6
6696.000000	---	36.88	54.00	17.12	100.0	H	352.0	-3.5
7281.000000	45.86	---	74.00	28.14	100.0	H	338.0	-4.5
9616.000000	---	40.37	54.00	13.63	100.0	V	286.0	-2.3
9878.500000	49.76	---	74.00	24.24	100.0	V	31.0	-1.8
12622.000000	---	42.72	54.00	11.28	100.0	H	257.0	2.2
12765.000000	52.41	---	74.00	21.59	200.0	H	158.0	2.2

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

Bluetooth LE-Channel 19

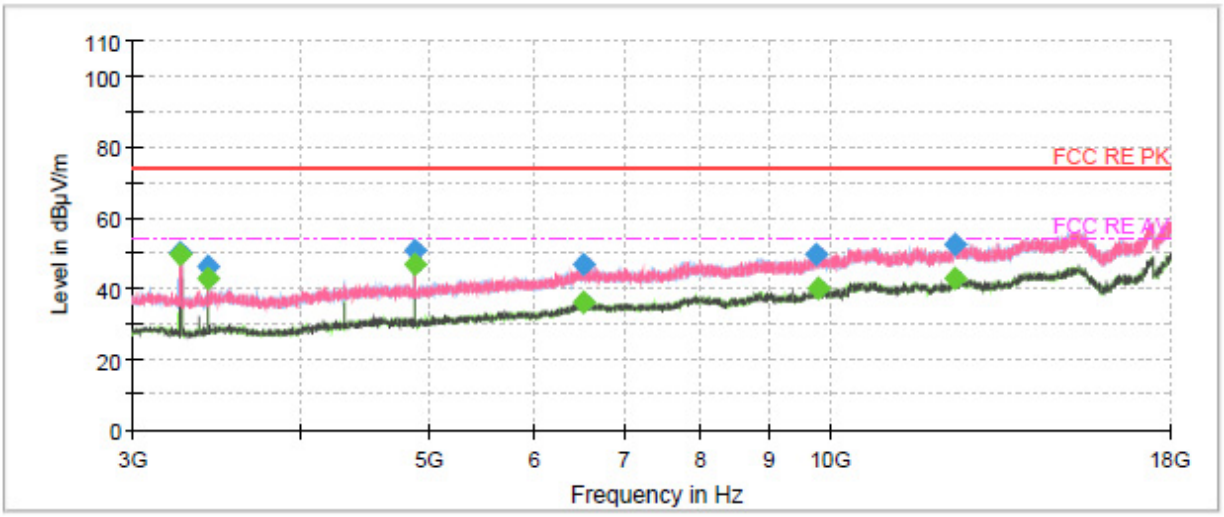


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1068.733333	---	36.16	54.00	17.84	200.0	V	4.0	-10.8
1157.800000	45.93	---	74.00	28.07	100.0	V	160.0	-10.4
1389.133333	46.01	---	74.00	27.99	100.0	H	30.0	-9.6
1440.600000	---	39.25	54.00	14.75	100.0	V	54.0	-9.3
1476.733333	46.90	---	74.00	27.10	200.0	V	38.0	-9.3
1714.866667	---	36.62	54.00	17.38	200.0	V	18.0	-8.6
1763.266667	---	38.41	54.00	15.59	100.0	V	24.0	-8.6
1974.133333	47.16	---	74.00	26.84	200.0	H	240.0	-8.3
2499.600000	51.42	---	74.00	22.58	200.0	H	122.0	-6.3
2512.466667	---	41.17	54.00	12.83	100.0	H	335.0	-6.3
2855.733333	47.63	---	74.00	26.37	100.0	H	0.0	-6.0
2904.933333	---	38.41	54.00	15.59	200.0	H	253.0	-6.1

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

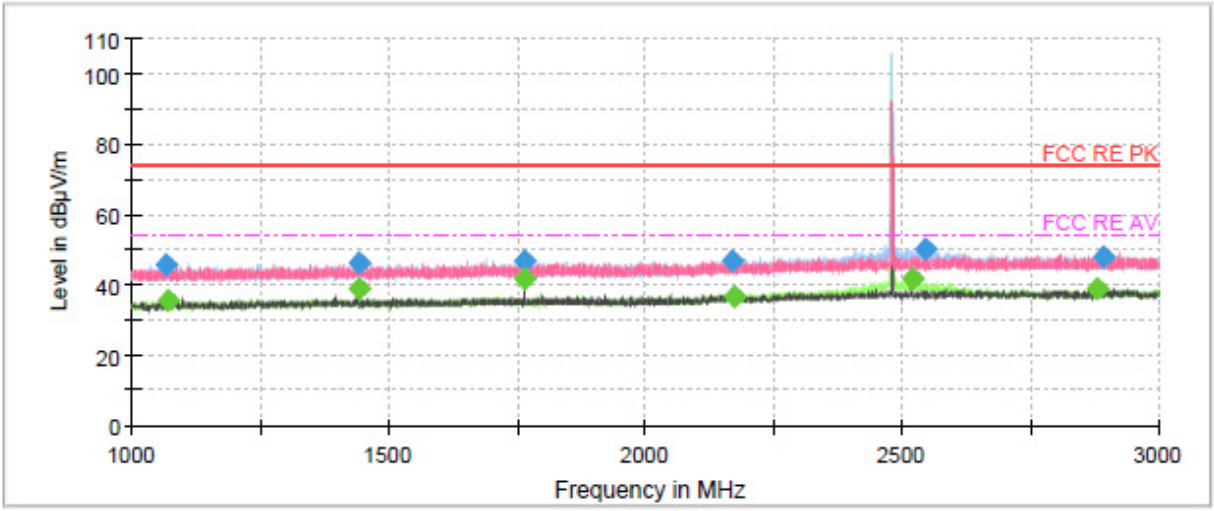


Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
3258.500000	50.08	---	74.00	23.92	100.0	V	333.0	-15.2
3258.500000	---	49.43	54.00	4.57	100.0	V	333.0	-15.2
3409.500000	46.02	---	74.00	27.98	200.0	H	7.0	-14.8
3409.500000	---	42.59	54.00	11.41	200.0	V	359.0	-14.8
4887.500000	50.51	---	74.00	23.49	100.0	V	198.0	-10.7
4888.000000	---	47.00	54.00	7.00	100.0	V	198.0	-10.7
6527.000000	---	36.09	54.00	17.91	100.0	V	5.0	-3.7
6531.500000	46.82	---	74.00	27.18	200.0	H	316.0	-3.7
9776.500000	49.51	---	74.00	24.49	100.0	V	5.0	-2.1
9797.000000	---	40.07	54.00	13.93	100.0	H	351.0	-2.0
12386.000000	---	42.62	54.00	11.38	200.0	H	4.0	1.5
12409.500000	52.52	---	74.00	21.48	100.0	V	302.0	1.6

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

Bluetooth LE-Channel 39

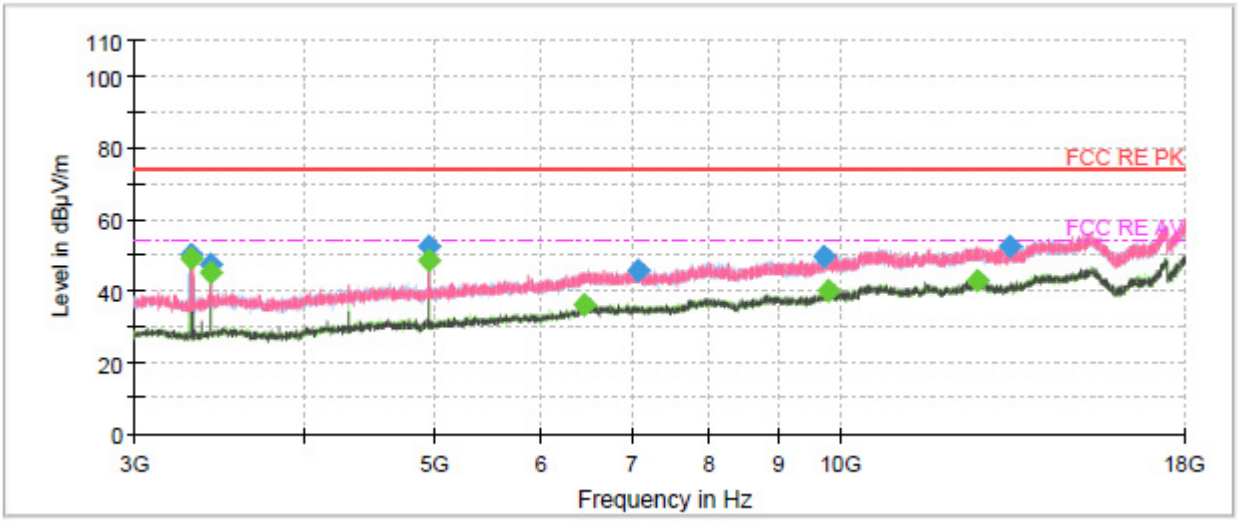


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1065.466667	45.68	---	74.00	28.32	100.0	H	112.0	-10.9
1069.800000	---	35.50	54.00	18.50	200.0	H	71.0	-10.8
1440.666667	46.27	---	74.00	27.73	100.0	V	41.0	-9.3
1440.666667	---	38.98	54.00	15.02	100.0	V	41.0	-9.3
1763.200000	46.66	---	74.00	27.34	100.0	V	357.0	-8.6
1763.400000	---	41.74	54.00	12.26	100.0	V	357.0	-8.6
2167.466667	46.88	---	74.00	27.12	100.0	V	242.0	-7.5
2171.666667	---	36.67	54.00	17.33	100.0	V	0.0	-7.4
2519.866667	---	42.00	54.00	12.00	200.0	H	354.0	-6.3
2543.533333	50.26	---	74.00	23.74	100.0	H	10.0	-6.2
2881.400000	---	39.15	54.00	14.85	200.0	V	249.0	-6.0
2892.066667	47.96	---	74.00	26.04	200.0	V	79.0	-6.0

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



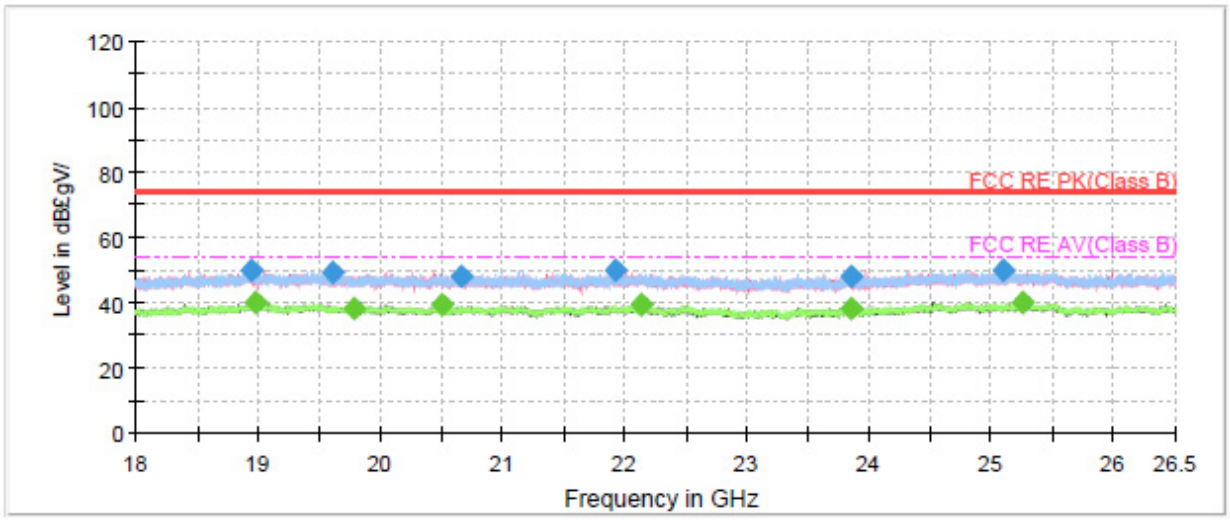
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
3306.500000	49.98	---	74.00	24.02	100.0	V	156.0	-15.1
3306.500000	---	48.81	54.00	5.19	100.0	V	156.0	-15.1
3409.000000	47.25	---	74.00	26.75	100.0	V	170.0	-14.8
3409.500000	---	45.18	54.00	8.82	200.0	V	117.0	-14.8
4959.500000	---	48.25	54.00	5.75	200.0	V	286.0	-10.5
4959.500000	52.39	---	74.00	21.61	200.0	V	286.0	-10.5
6462.000000	---	36.20	54.00	17.80	200.0	H	6.0	-4.0
7076.500000	45.85	---	74.00	28.15	100.0	H	45.0	-4.0
9738.000000	49.38	---	74.00	24.62	200.0	V	132.0	-2.4
9804.000000	---	39.77	54.00	14.23	100.0	H	188.0	-1.9
12653.500000	---	42.79	54.00	11.21	100.0	H	1.0	2.2
13349.500000	52.27	---	74.00	21.73	200.0	H	0.0	1.8

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

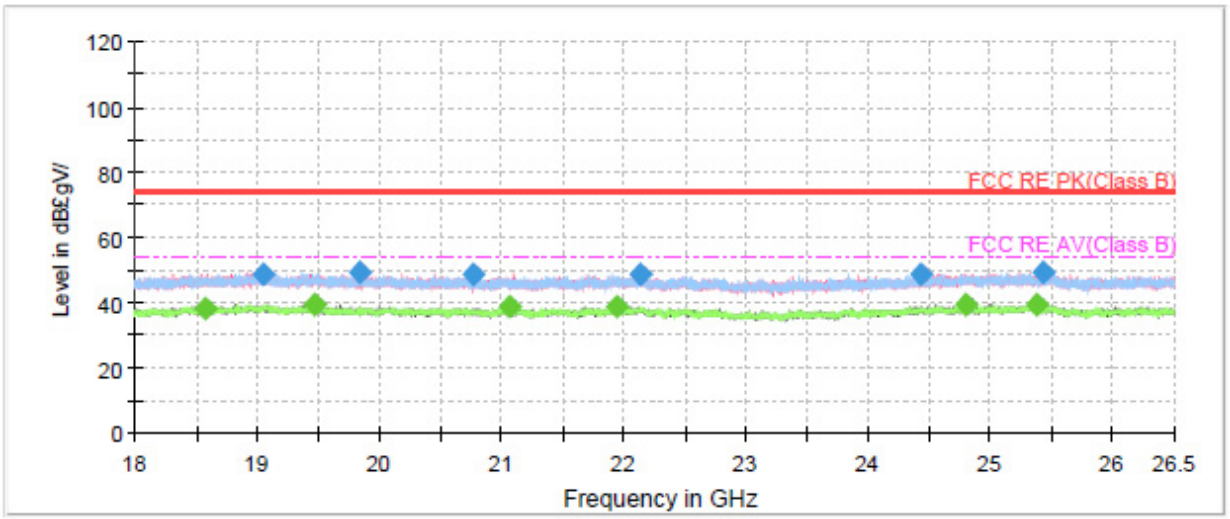
During the test, the Radiates Emission from 18GHz to 26.5GHz was performed in all modes with all channels, 802.11b, Channel 11 and Bluetooth LE-Channel 0 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Wi-Fi 2.4G



Radiates Emission from 18GHz to 26.5GHz

Bluetooth LE



Radiates Emission from 18GHz to 26.5GHz

5.7. Radiates Emission from 18GHz to 26.5GHz Conducted Emission

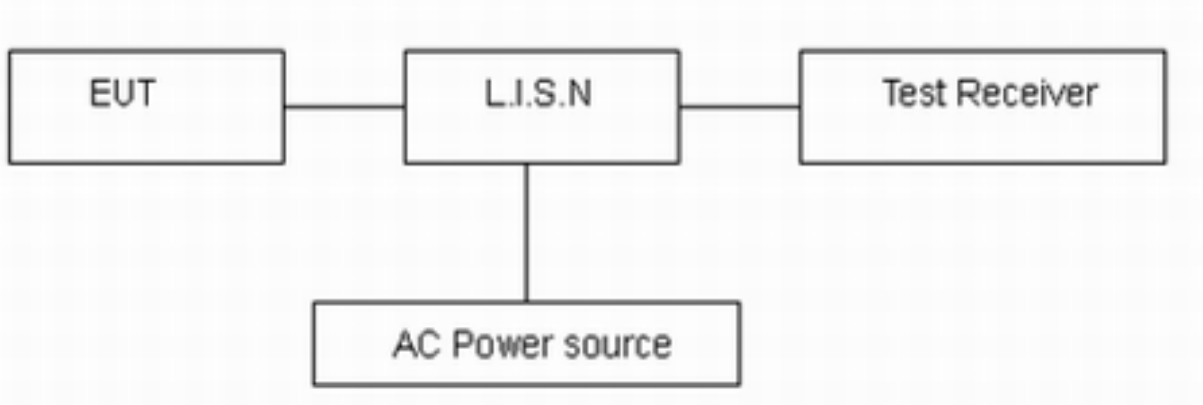
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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 110V/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

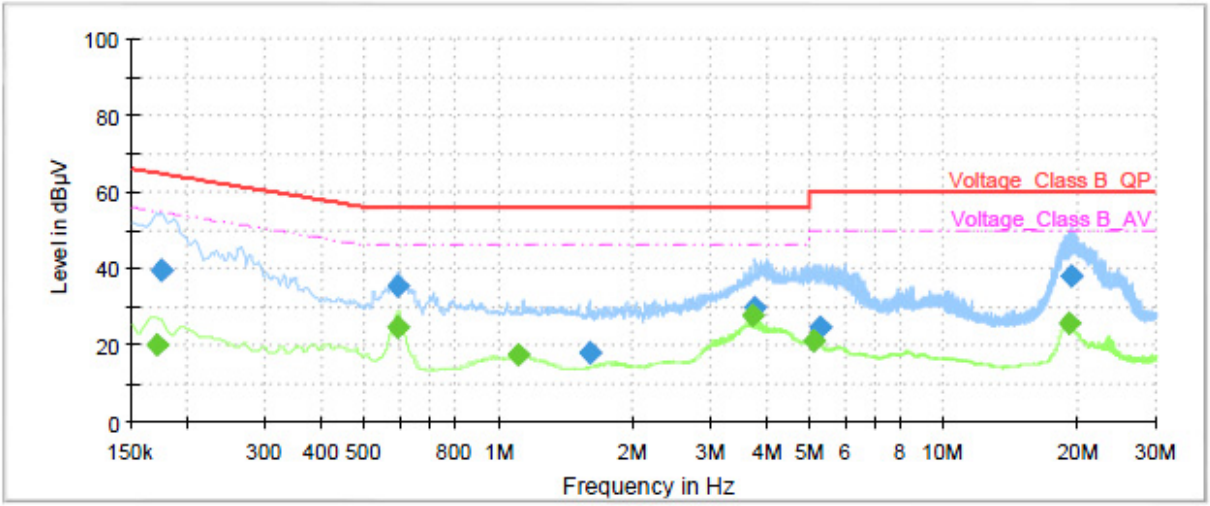
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96, U= 2.69 dB.

Test Results:

ESP32-PICO-MINI-02

Following plots, Blue trace uses the peak detection and Green trace uses the average detection. During the test, the Conducted Emission was performed in all modes (WIFI 2.4G /Bluetooth LE) with all channels, 802.11b, Channel 6 and Bluetooth LE-Channel 0 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

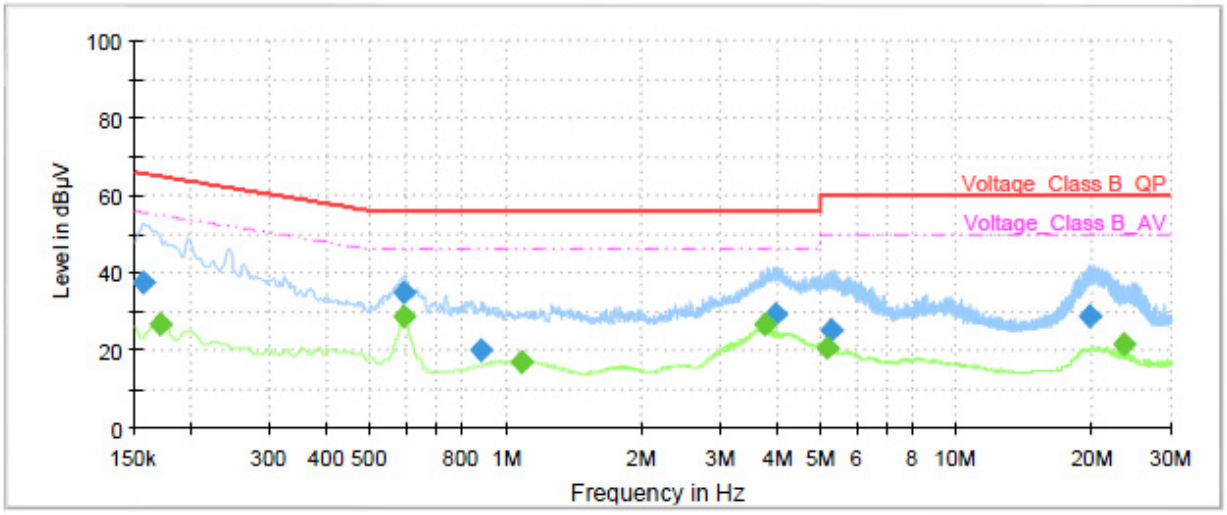
Wi-Fi 2.4G



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.17	---	19.93	54.95	35.02	70.0	9.000	L1	ON	21
0.17	39.28	---	64.73	25.45	70.0	9.000	L1	ON	21
0.60	---	24.48	46.00	21.52	70.0	9.000	L1	ON	20
0.60	35.16	---	56.00	20.84	70.0	9.000	L1	ON	20
1.11	---	17.36	46.00	28.64	70.0	9.000	L1	ON	20
1.60	17.70	---	56.00	38.30	70.0	9.000	L1	ON	20
3.73	---	27.49	46.00	18.51	70.0	9.000	L1	ON	19
3.75	29.62	---	56.00	26.38	70.0	9.000	L1	ON	19
5.13	---	20.84	50.00	29.16	70.0	9.000	L1	ON	19
5.26	24.82	---	60.00	35.18	70.0	9.000	L1	ON	19
19.07	---	25.79	50.00	24.21	70.0	9.000	L1	ON	20
19.48	37.92	---	60.00	22.08	70.0	9.000	L1	ON	20

Remark: Correct factor=cable loss + LISN factor

L line Conducted Emission from 150 KHz to 30 MHz

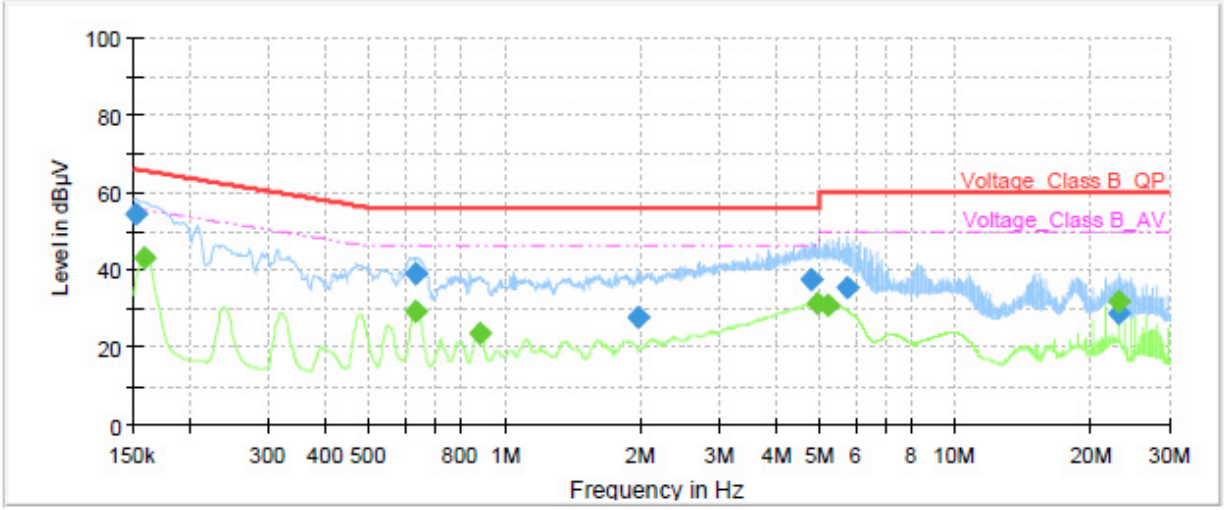


Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.16	37.36	---	65.63	28.27	70.0	9.000	N	ON	21
0.17	---	26.58	54.95	28.37	70.0	9.000	N	ON	21
0.60	---	28.52	46.00	17.48	70.0	9.000	N	ON	20
0.60	35.13	---	56.00	20.87	70.0	9.000	N	ON	20
0.88	20.16	---	56.00	35.84	70.0	9.000	N	ON	20
1.08	---	16.85	46.00	29.15	70.0	9.000	N	ON	20
3.76	---	26.70	46.00	19.30	70.0	9.000	N	ON	19
3.99	29.01	---	56.00	26.99	70.0	9.000	N	ON	19
5.16	---	20.66	50.00	29.34	70.0	9.000	N	ON	19
5.28	25.18	---	60.00	34.82	70.0	9.000	N	ON	19
19.72	28.69	---	60.00	31.31	70.0	9.000	N	ON	20
23.71	---	21.71	50.00	28.29	70.0	9.000	N	ON	20

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 KHz to 30 MHz

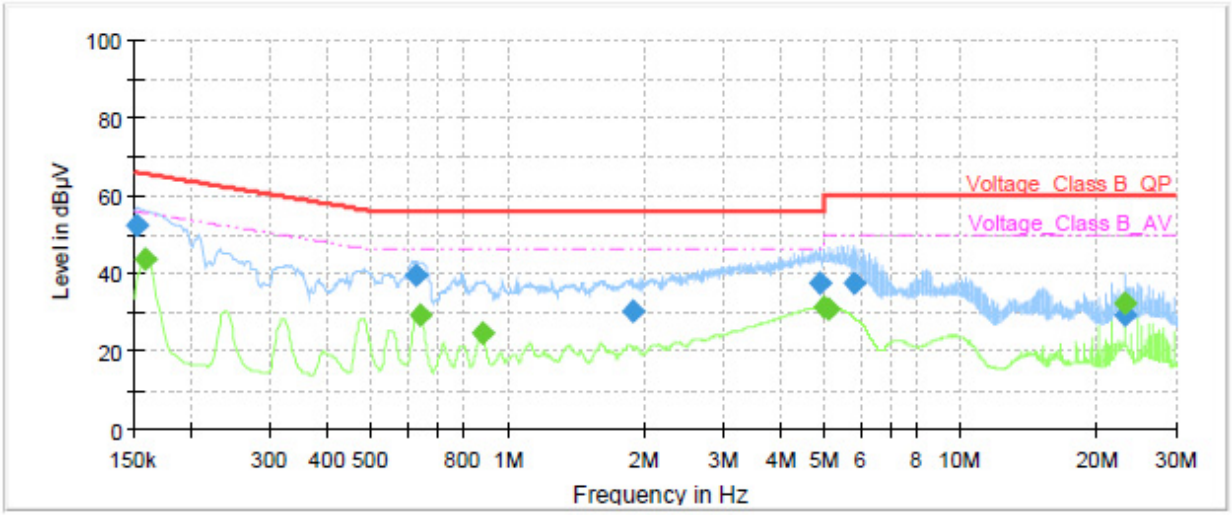
Bluetooth LE



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.15	54.25	---	65.88	11.63	70.0	9.000	L1	ON	21
0.16	---	43.00	55.52	12.52	70.0	9.000	L1	ON	21
0.63	39.06	---	56.00	16.94	70.0	9.000	L1	ON	20
0.64	---	29.32	46.00	16.68	70.0	9.000	L1	ON	20
0.88	---	23.49	46.00	22.51	70.0	9.000	L1	ON	20
1.99	27.90	---	56.00	28.10	70.0	9.000	L1	ON	20
4.81	37.47	---	56.00	18.53	70.0	9.000	L1	ON	19
4.95	---	31.52	46.00	14.48	70.0	9.000	L1	ON	19
5.25	---	30.77	50.00	19.23	70.0	9.000	L1	ON	19
5.75	35.32	---	60.00	24.68	70.0	9.000	L1	ON	19
23.08	28.46	---	60.00	31.54	70.0	9.000	L1	ON	20
23.10	---	31.97	50.00	18.04	70.0	9.000	L1	ON	20

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)
0.15	52.31	---	65.88	13.57	70.0	9.000	N	ON	21
0.16	---	43.55	55.52	11.97	70.0	9.000	N	ON	21
0.62	39.30	---	56.00	16.70	70.0	9.000	N	ON	20
0.64	---	29.46	46.00	16.54	70.0	9.000	N	ON	20
0.88	---	24.50	46.00	21.50	70.0	9.000	N	ON	20
1.88	30.13	---	56.00	25.87	70.0	9.000	N	ON	20
4.91	37.65	---	56.00	18.35	70.0	9.000	N	ON	19
4.99	---	31.28	46.00	14.72	70.0	9.000	N	ON	19
5.14	---	30.72	50.00	19.28	70.0	9.000	N	ON	19
5.86	37.28	---	60.00	22.72	70.0	9.000	N	ON	19
23.08	29.26	---	60.00	30.74	70.0	9.000	N	ON	20
23.10	---	32.10	50.00	17.90	70.0	9.000	N	ON	20

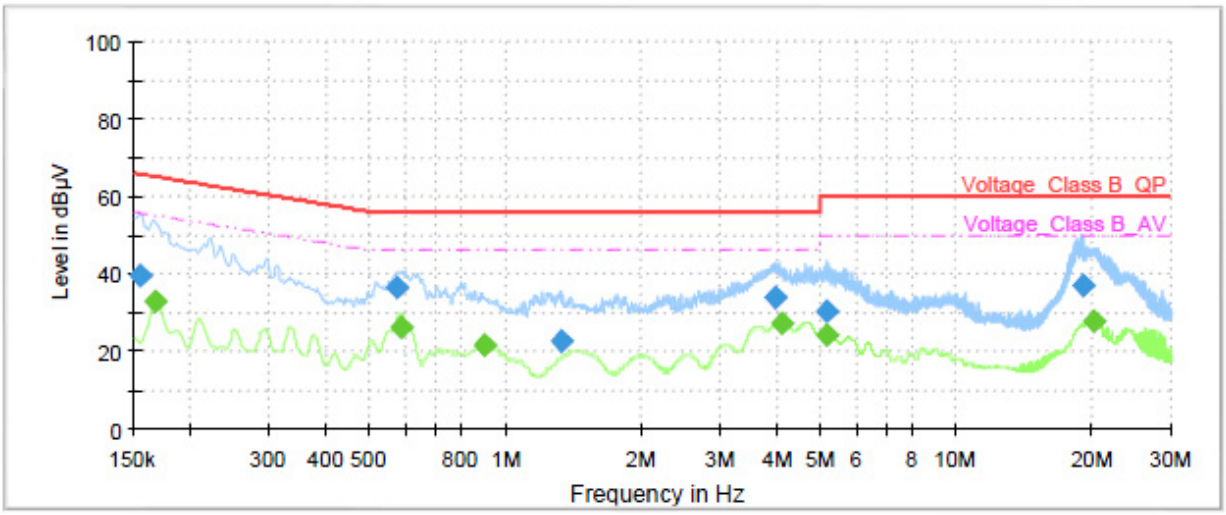
Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 KHz to 30 MHz

ESP32-PICO-MINI-02U

Following plots, Blue trace uses the peak detection and Green trace uses the average detection. During the test, the Conducted Emission was performed in all modes (WIFI 2.4G /Bluetooth LE) with all channels, 802.11b, Channel 11 and Bluetooth LE-Channel 0 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

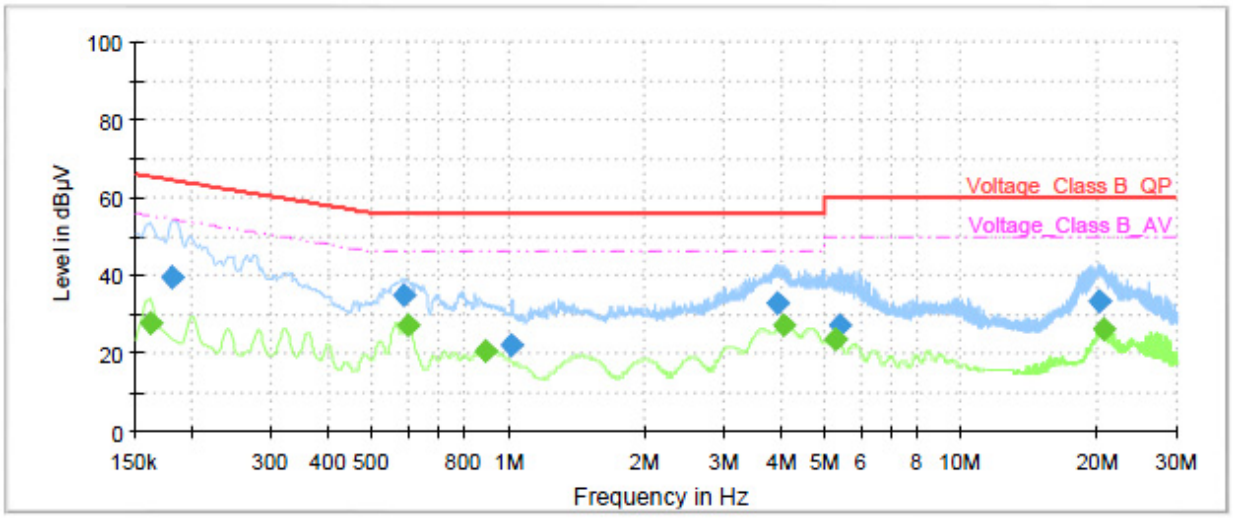
Wi-Fi 2.4G



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.15	39.54	---	65.75	26.21	70.0	9.000	L1	ON	21
0.17	---	32.94	55.06	22.12	70.0	9.000	L1	ON	21
0.58	36.58	---	56.00	19.42	70.0	9.000	L1	ON	20
0.59	---	26.38	46.00	19.62	70.0	9.000	L1	ON	20
0.90	---	21.46	46.00	24.54	70.0	9.000	L1	ON	20
1.33	22.41	---	56.00	33.59	70.0	9.000	L1	ON	20
3.98	33.80	---	56.00	22.20	70.0	9.000	L1	ON	19
4.10	---	27.35	46.00	18.65	70.0	9.000	L1	ON	19
5.17	30.13	---	60.00	29.87	70.0	9.000	L1	ON	19
5.19	---	24.34	50.00	25.66	70.0	9.000	L1	ON	19
19.12	37.08	---	60.00	22.92	70.0	9.000	L1	ON	20
20.24	---	27.85	50.00	22.15	70.0	9.000	L1	ON	20

Remark: Correct factor=cable loss + LISN factor

L line Conducted Emission from 150 KHz to 30 MHz

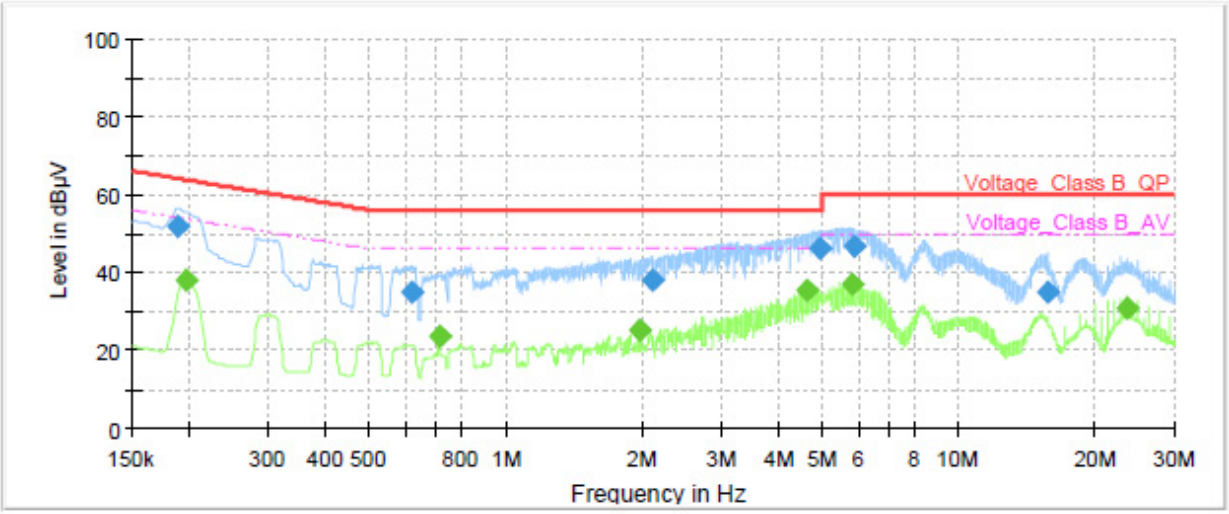


Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.16	---	27.72	55.40	27.68	70.0	9.000	N	ON	21
0.18	39.41	---	64.42	25.01	70.0	9.000	N	ON	21
0.59	35.12	---	56.00	20.88	70.0	9.000	N	ON	20
0.60	---	27.07	46.00	18.93	70.0	9.000	N	ON	20
0.89	---	20.55	46.00	25.45	70.0	9.000	N	ON	20
1.02	22.20	---	56.00	33.80	70.0	9.000	N	ON	20
3.95	32.97	---	56.00	23.03	70.0	9.000	N	ON	19
4.09	---	27.02	46.00	18.98	70.0	9.000	N	ON	19
5.26	---	23.42	50.00	26.58	70.0	9.000	N	ON	19
5.39	27.34	---	60.00	32.66	70.0	9.000	N	ON	19
20.26	33.19	---	60.00	26.81	70.0	9.000	N	ON	20
20.68	---	26.22	50.00	23.78	70.0	9.000	N	ON	20

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 KHz to 30 MHz

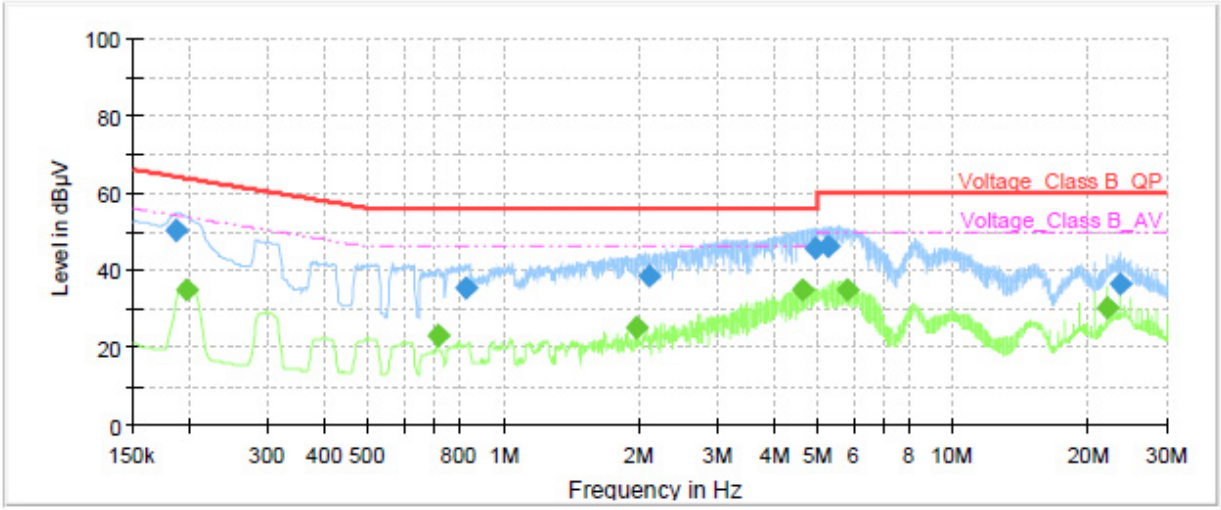
Bluetooth LE



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.19	51.92	---	64.11	12.19	70.0	9.000	L1	ON	21
0.20	---	38.12	53.73	15.61	70.0	9.000	L1	ON	21
0.62	34.91	---	56.00	21.09	70.0	9.000	L1	ON	20
0.71	---	23.36	46.00	22.64	70.0	9.000	L1	ON	20
1.99	---	25.17	46.00	20.83	70.0	9.000	L1	ON	20
2.11	38.08	---	56.00	17.92	70.0	9.000	L1	ON	20
4.63	---	35.15	46.00	10.85	70.0	9.000	L1	ON	19
4.95	45.98	---	56.00	10.02	70.0	9.000	L1	ON	19
5.81	---	36.85	50.00	13.15	70.0	9.000	L1	ON	19
5.90	46.60	---	60.00	13.40	70.0	9.000	L1	ON	19
15.68	34.93	---	60.00	25.07	70.0	9.000	L1	ON	20
23.53	---	30.98	50.00	19.02	70.0	9.000	L1	ON	20

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)
0.19	50.23	---	64.21	13.98	70.0	9.000	N	ON	21
0.20	---	34.80	53.73	18.93	70.0	9.000	N	ON	21
0.71	---	23.08	46.00	22.92	70.0	9.000	N	ON	20
0.82	35.42	---	56.00	20.58	70.0	9.000	N	ON	20
1.98	---	24.97	46.00	21.03	70.0	9.000	N	ON	20
2.10	38.44	---	56.00	17.56	70.0	9.000	N	ON	20
4.62	---	35.04	46.00	10.96	70.0	9.000	N	ON	19
4.94	45.75	---	56.00	10.25	70.0	9.000	N	ON	19
5.26	45.91	---	60.00	14.09	70.0	9.000	N	ON	19
5.80	---	34.81	50.00	15.19	70.0	9.000	N	ON	19
22.10	---	30.05	50.00	19.95	70.0	9.000	N	ON	20
23.52	36.22	---	60.00	23.78	70.0	9.000	N	ON	20

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
Spectrum Analyzer	R&S	FSV30	100815	2020-12-13	2021-12-12
EMI Test Receiver	R&S	ESCI	100948	2021-05-15	2022-05-14
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2020-04-02	2023-04-01
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	391	2019-12-16	2022-12-15
Horn Antenna	R&S	HF907	102723	2020-08-11	2023-08-10
Standard Gain Horn	QPAR	QMS-00225	19928	2020-02-26	2023-02-25
EMI Test Receiver	R&S	ESR	101667	2021-05-16	2022-05-15
LISN	R&S	ENV216	101171	2018-12-15	2021-12-14
Power Meter	R&S	NRP2	104306	2021-05-15	2022-05-14
Power Sensor	R&S	NRP-Z21	104799	2021-05-15	2022-05-14
RF Cable	Agilent	SMA 15cm	0001	2021-06-13	2021-12-12
RF Cable	Agilent	SMA 15cm	0001	2021-12-13	2022-06-12
Software	R&S	EMC32	9.26.0	/	/

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

ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.

ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.