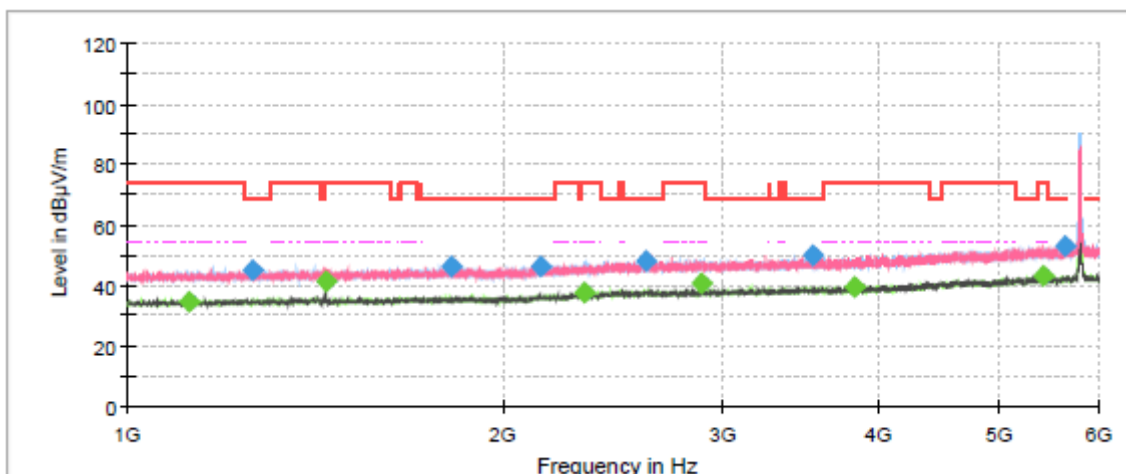


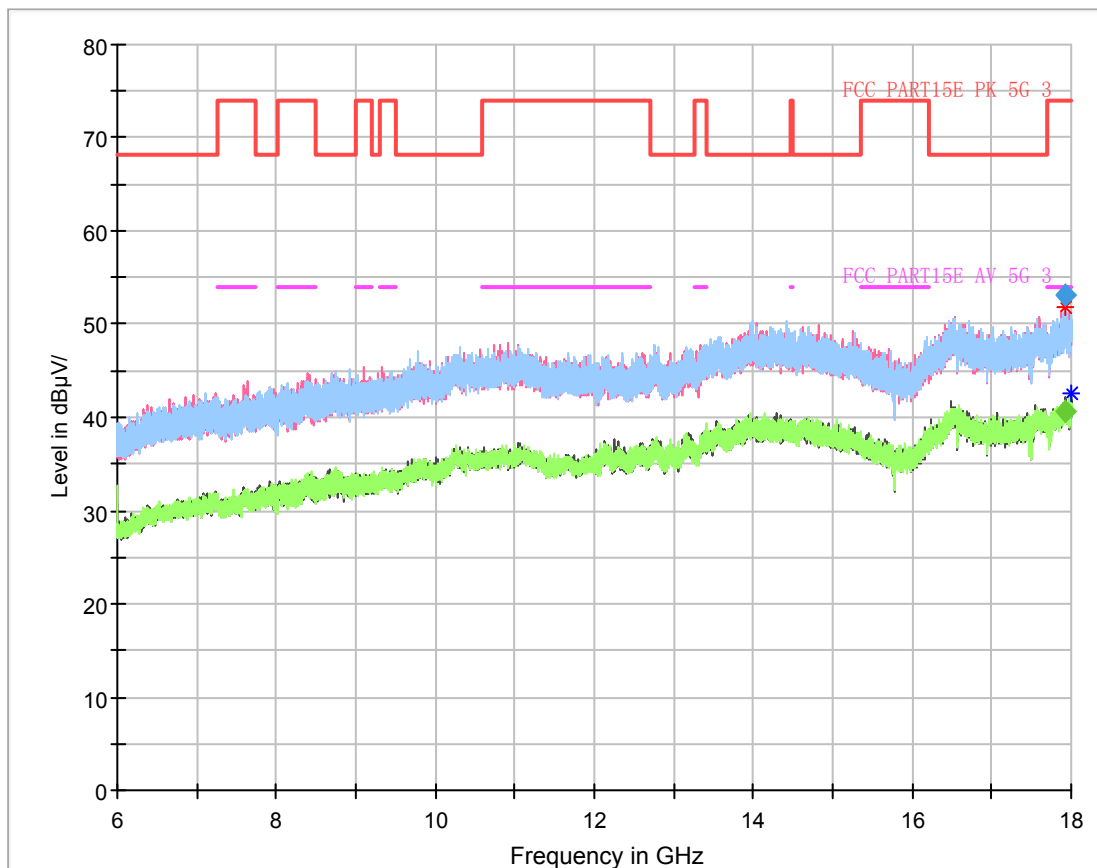


1440.533333	---	41.39	54.00	12.61	500.0	200.0	V	350.0	-9.3
1856.800000	46.43	---	68.20	21.77	500.0	200.0	H	325.0	-8.4
2224.300000	---	37.23	54.00	16.77	500.0	200.0	V	0.0	6.4
2554.466667	48.00	---	68.20	20.20	500.0	200.0	V	102.0	-6.2
2743.233333	---	38.73	54.00	15.27	500.0	100.0	H	130.0	-6.1
2981.933333	48.02	---	68.20	20.18	500.0	200.0	V	222.0	7.1
3494.566667	49.59	---	68.20	18.61	500.0	200.0	H	357.0	-4.6
3920.633333	---	39.90	54.00	14.10	500.0	200.0	V	6.0	-3.6
5360.300000	---	42.79	54.00	11.21	500.0	200.0	V	25.0	1.3
5606.933333	53.23	---	68.20	14.97	500.0	200.0	V	76.0	1.9

802.11n (HT40) CH159



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 6GHz



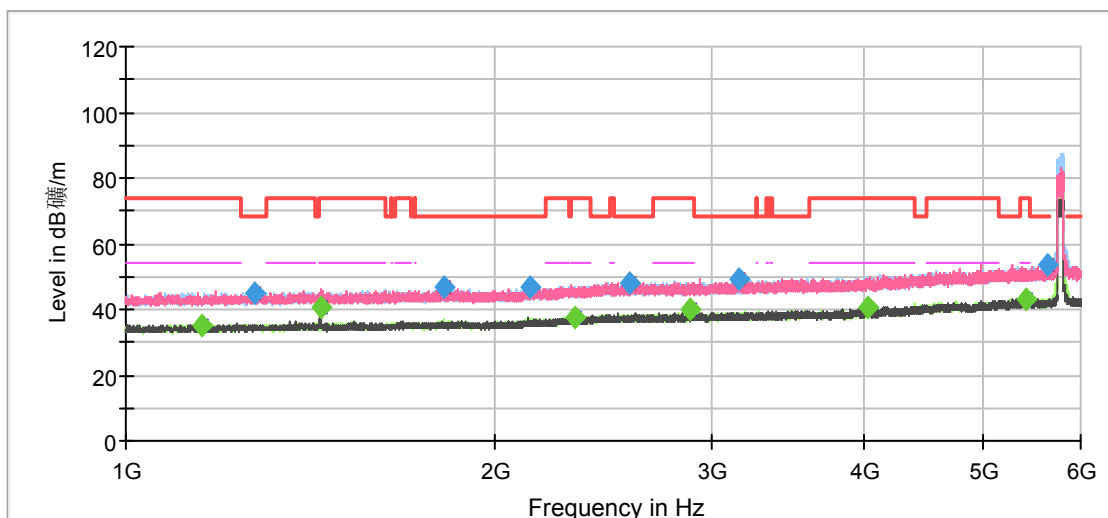
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol.	Azimuth (deg)	Corr. (dB)
1122.266667	---	34.35	54.00	19.65	500.0	100.0	H	53.0	-10.6

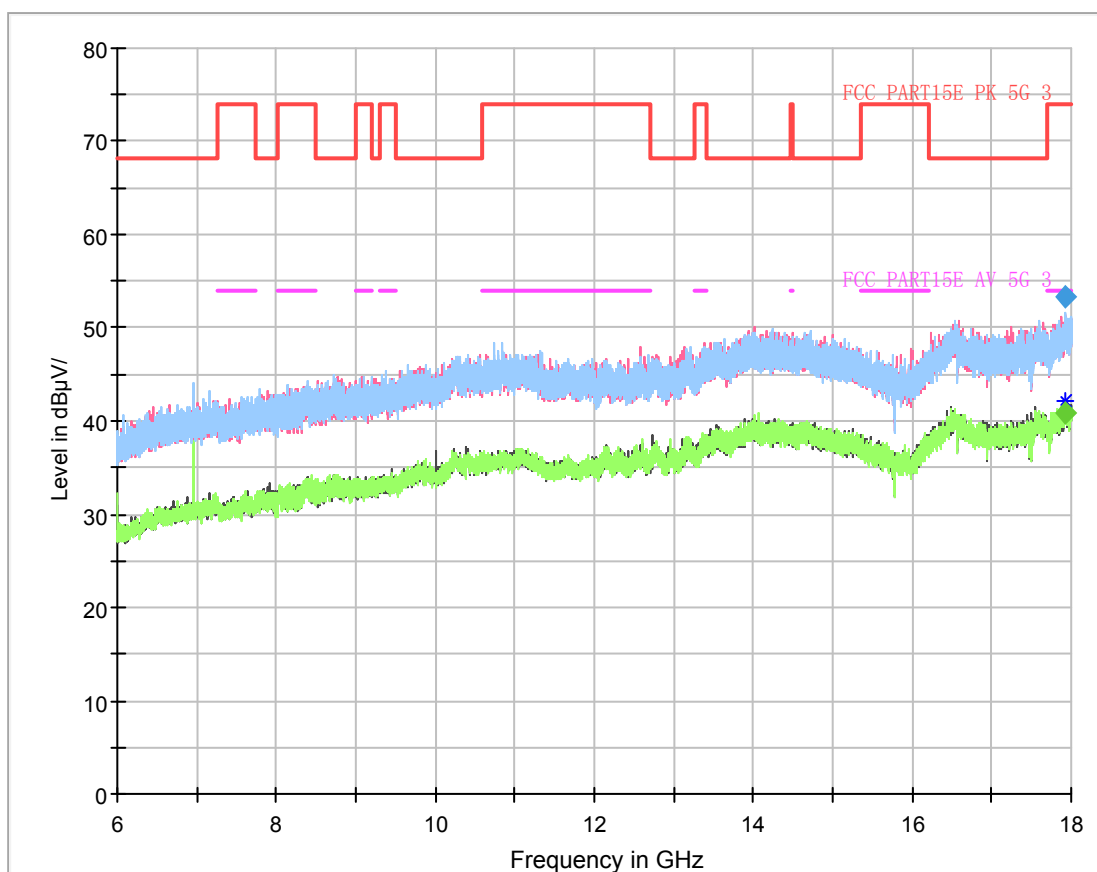


1259.233333	45.01	---	68.20	23.19	500.0	200.0	H	358.0	-10.0
1440.533333	---	41.04	54.00	12.96	500.0	200.0	V	4.0	-9.3
1813.866667	46.10	---	68.20	22.10	500.0	100.0	H	92.0	-8.5
2140.766667	46.42	---	68.20	10.48	500.0	200.0	V	2.0	7.0
2319.033333	---	37.28	54.00	16.72	500.0	100.0	V	190.0	-6.9
2602.066667	48.28	---	68.20	19.92	500.0	100.0	H	79.0	-6.1
2881.366667	---	40.40	54.00	13.60	500.0	100.0	V	358.0	-6.0
3537.500000	49.78	---	68.20	18.42	500.0	100.0	H	6.0	-4.5
3828.466667	---	39.53	54.00	6.82	500.0	100.0	V	164.0	6.4
5416.533333	---	42.87	54.00	11.13	500.0	100.0	V	344.0	1.3
5630.266667	52.89	---	68.20	15.31	500.0	200.0	H	295.0	1.9

802.11ac (HT80) CH155



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 6GHz

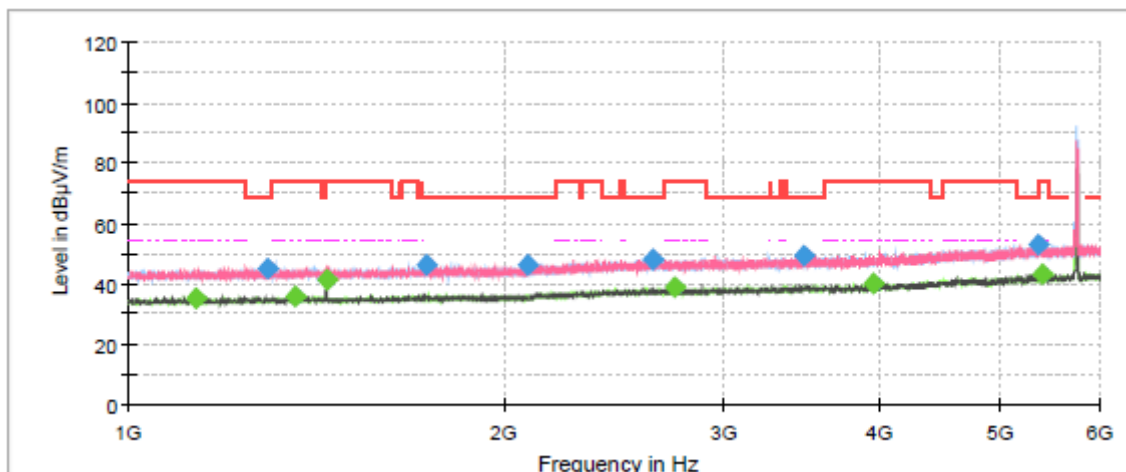


Radiates Emission from 6GHz to 18GHz

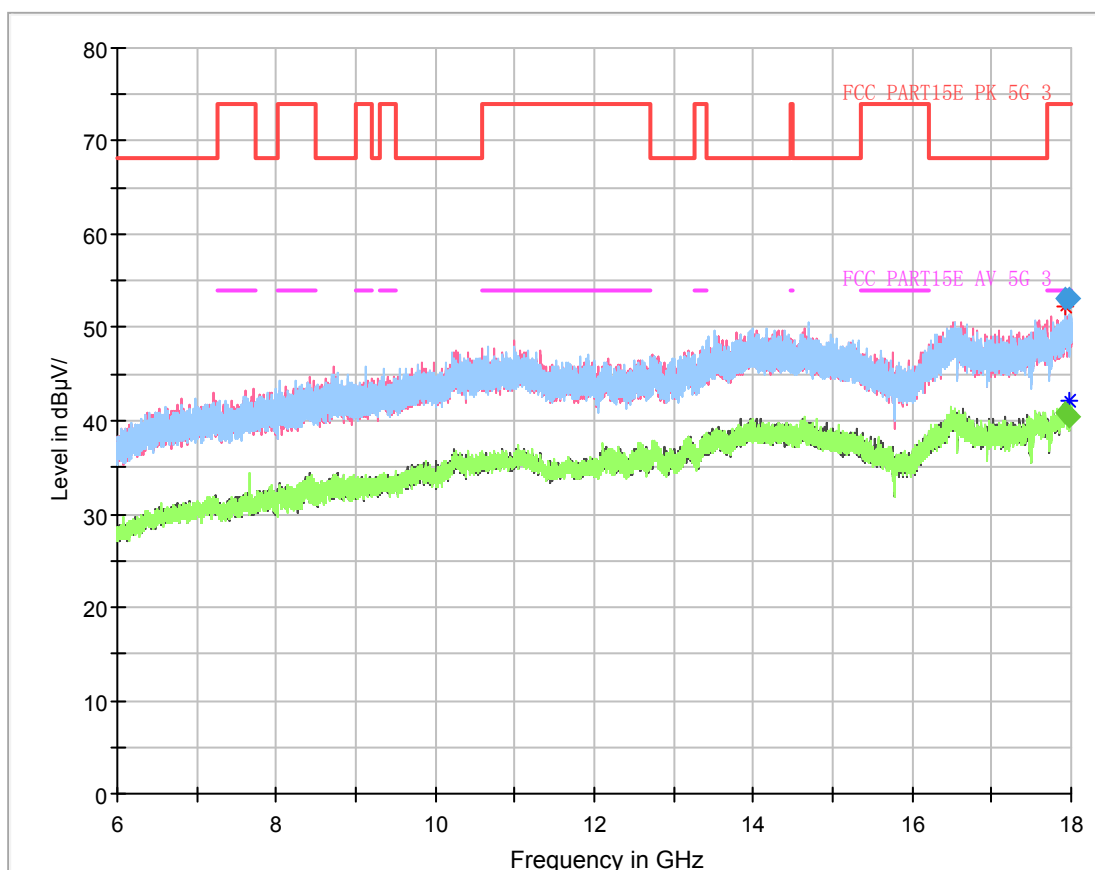


Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol.	Azimuth (deg)	Corr. (dB)
1152.366667	---	34.97	54.00	19.03	500.0	100.0	V	356.0	-10.4
1273.000000	45.19	---	68.20	23.01	500.0	200.0	H	324.0	-9.9
1440.533333	---	40.45	54.00	13.55	500.0	200.0	V	16.0	-9.3
1815.500000	46.69	---	68.20	21.51	500.0	100.0	H	27.0	-8.5
2137.500000	46.77	---	68.20	21.43	500.0	200.0	V	320.0	7.5
2322.766667	---	37.29	54.00	16.71	500.0	200.0	V	0.0	-6.9
2577.800000	48.12	---	68.20	20.08	500.0	200.0	V	37.0	-6.1
2880.900000	---	40.17	54.00	13.83	500.0	100.0	V	0.0	-6.0
3164.400000	49.44	---	68.20	18.76	500.0	200.0	V	0.0	-5.3
4021.200000	---	40.48	54.00	13.52	500.0	100.0	H	0.0	6.4
5418.166667	---	43.30	54.00	10.70	500.0	200.0	V	142.0	1.4
5641.000000	53.60	---	68.20	14.60	500.0	100.0	V	135.0	2.0

802.11ax (HE 20) CH149



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 6GHz



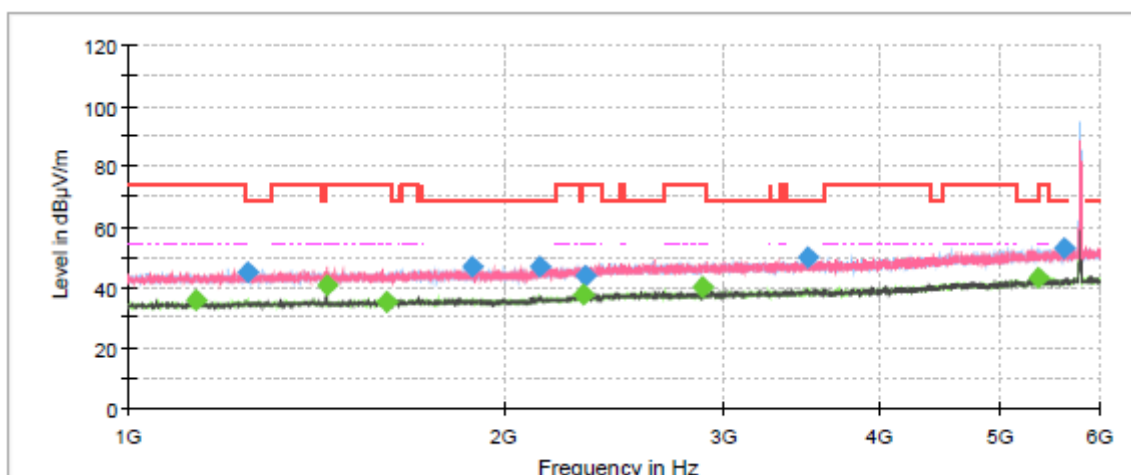
Radiates Emission from 6GHz to 18GHz

Frequency (MHz)	Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol.	Azimuth (deg)	Corr. (dB)
1133.933333	---	34.80	54.00	19.20	500.0	100.0	H	26.0	6.4
1290.266667	45.12	---	68.20	23.08	500.0	200.0	H	357.0	-9.8

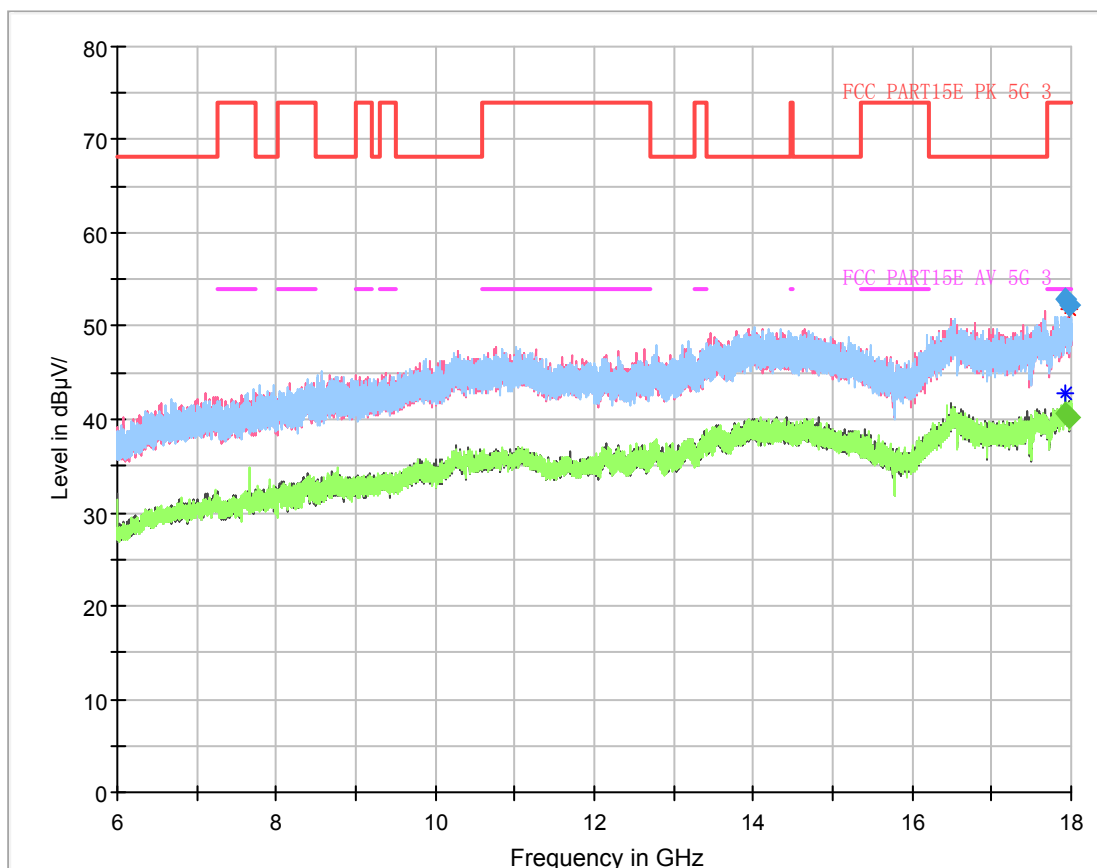


1362.600000	---	35.80	54.00	18.20	500.0	100.0	H	4.0	-9.6
1440.533333	---	41.08	54.00	12.92	500.0	200.0	V	3.0	-9.3
1733.600000	46.07	---	68.20	22.13	500.0	100.0	H	208.0	-8.6
2092.000000	46.42	---	68.20	21.78	500.0	100.0	V	55.0	6.4
2634.266667	48.11	---	68.20	20.09	500.0	200.0	V	181.0	-6.1
2740.200000	---	39.03	54.00	14.97	500.0	200.0	V	348.0	-6.1
3475.666667	49.30	---	68.20	18.90	500.0	100.0	H	291.0	-4.7
3945.366667	---	40.08	54.00	13.92	500.0	100.0	H	263.0	-3.6
5348.866667	52.94	---	68.20	15.26	500.0	100.0	V	333.0	1.3
5390.633333	---	42.95	54.00	11.05	500.0	200.0	V	1.0	1.3

802.11ax (HE 20) CH157



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 6GHz



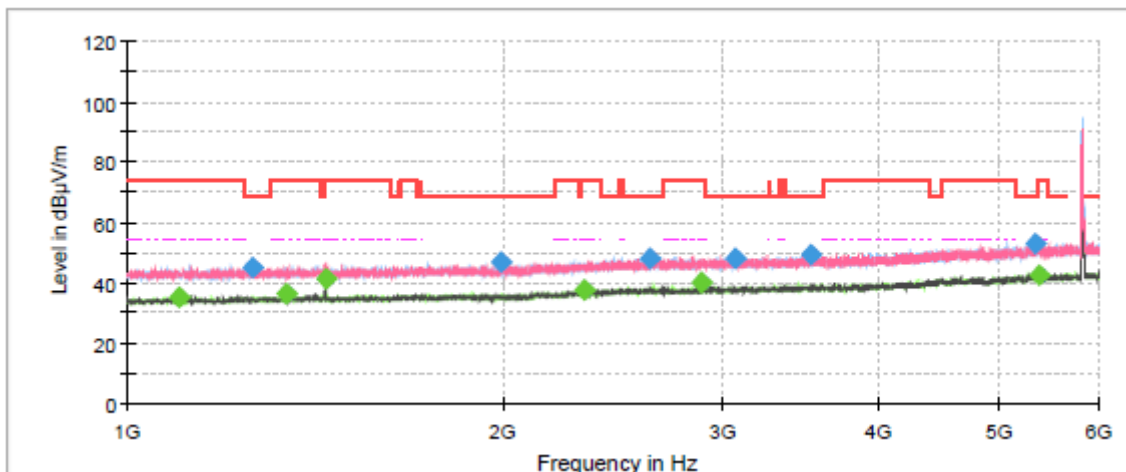
Radiates Emission from 6GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol.	Azimuth (deg)	Corr. (dB)
1134.166667	---	35.46	54.00	18.54	500.0	200.0	V	82.0	-10.5

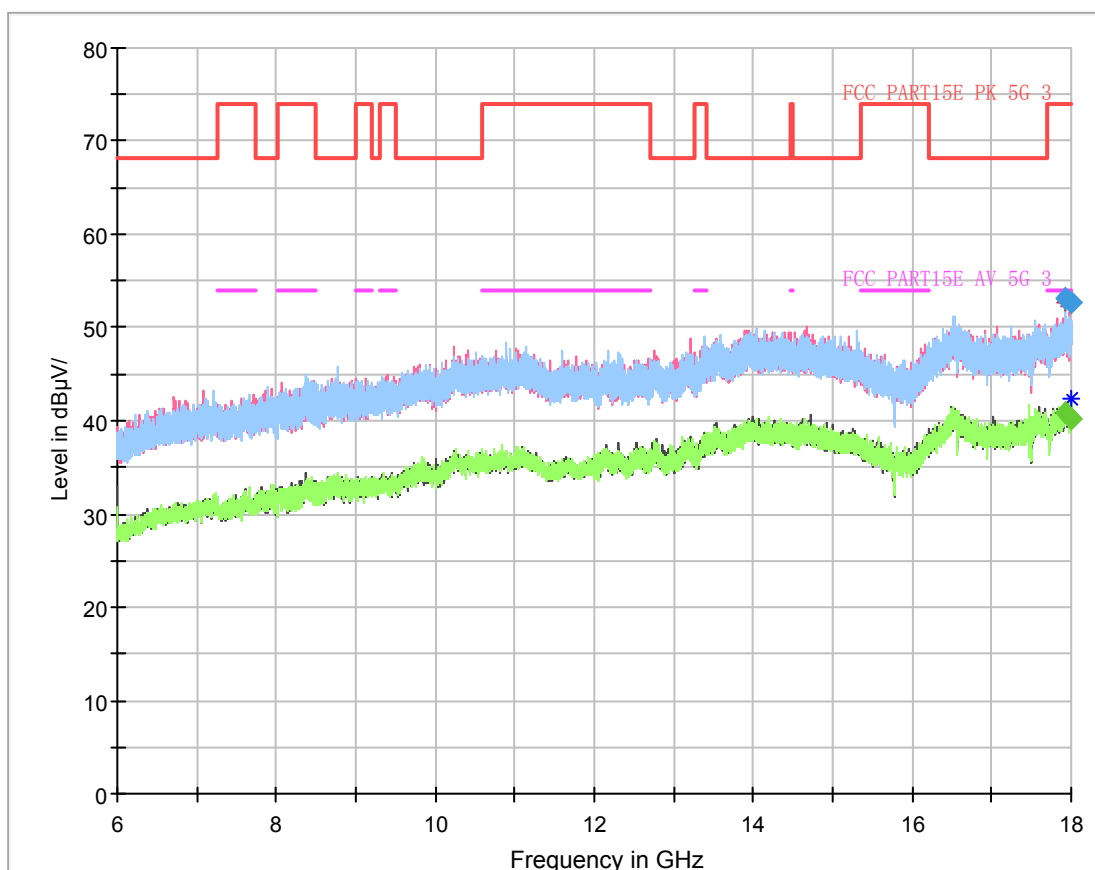


1244.300000	44.89	---	68.20	23.31	500.0	100.0	H	1.0	-10.0
1440.300000	---	40.33	54.00	13.67	500.0	200.0	V	7.0	-9.3
1609.466667	---	35.15	54.00	18.85	500.0	100.0	H	5.0	6.3
1884.333333	46.56	---	68.20	21.64	500.0	200.0	H	349.0	-8.4
2131.900000	46.54	---	68.20	21.66	500.0	200.0	V	244.0	7.5
2313.433333	---	37.69	54.00	16.31	500.0	100.0	V	313.0	-6.9
2319.500000	43.83	---	74.00	30.17	500.0	100.0	V	326.0	-6.9
2881.366667	---	40.09	54.00	13.91	500.0	100.0	V	0.0	-6.0
3495.266667	49.70	---	68.20	18.50	500.0	100.0	V	345.0	-4.6
5357.500000	---	43.10	54.00	10.90	500.0	200.0	V	319.0	1.3
5626.300000	53.05	---	68.20	15.15	500.0	200.0	H	357.0	1.9

802.11ax (HE 20) CH165



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 6GHz



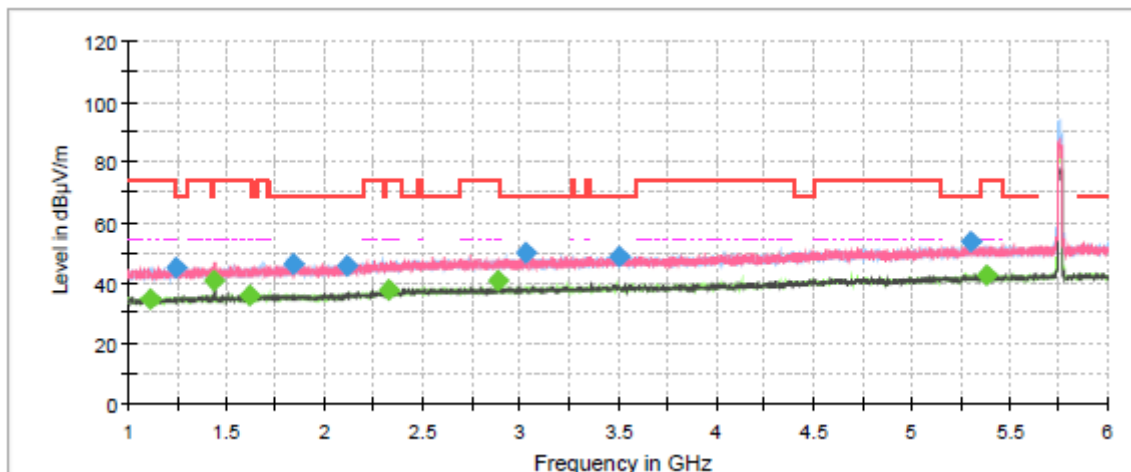
Radiates Emission from 6GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol.	Azimuth (deg)	Corr. (dB)
1098.233333	---	35.16	54.00	18.84	500.0	100.0	V	317.0	6.3
1258.766667	45.12	---	68.20	23.08	500.0	200.0	V	5.0	-10.0

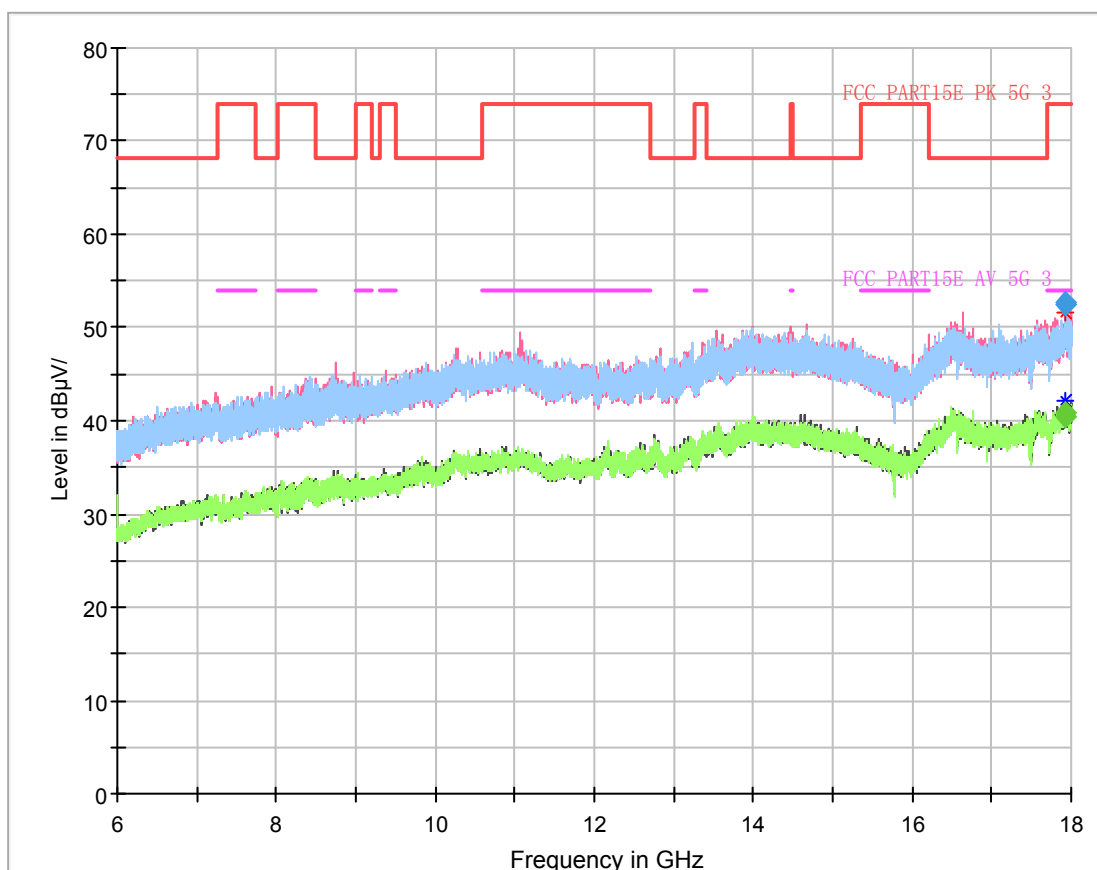


1342.300000	---	36.19	54.00	17.81	500.0	100.0	V	356.0	-9.6
1440.533333	---	41.30	54.00	12.70	500.0	200.0	V	358.0	-9.3
1992.600000	46.47	---	68.20	21.73	500.0	100.0	V	138.0	-8.2
2323.933333	---	37.53	54.00	16.47	500.0	200.0	V	151.0	-6.9
2617.233333	48.03	---	68.20	20.17	500.0	100.0	V	317.0	-6.1
2881.366667	---	40.23	54.00	13.77	500.0	100.0	V	356.0	-6.0
3073.166667	48.27	---	68.20	19.93	500.0	100.0	V	152.0	7.5
3532.833333	49.17	---	68.20	19.03	500.0	100.0	H	0.0	-4.5
5345.133333	53.17	---	68.20	15.03	500.0	200.0	H	96.0	1.3
5374.300000	---	42.57	54.00	11.43	500.0	200.0	V	286.0	1.3

802.11ax (HE 40) CH151



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 6GHz



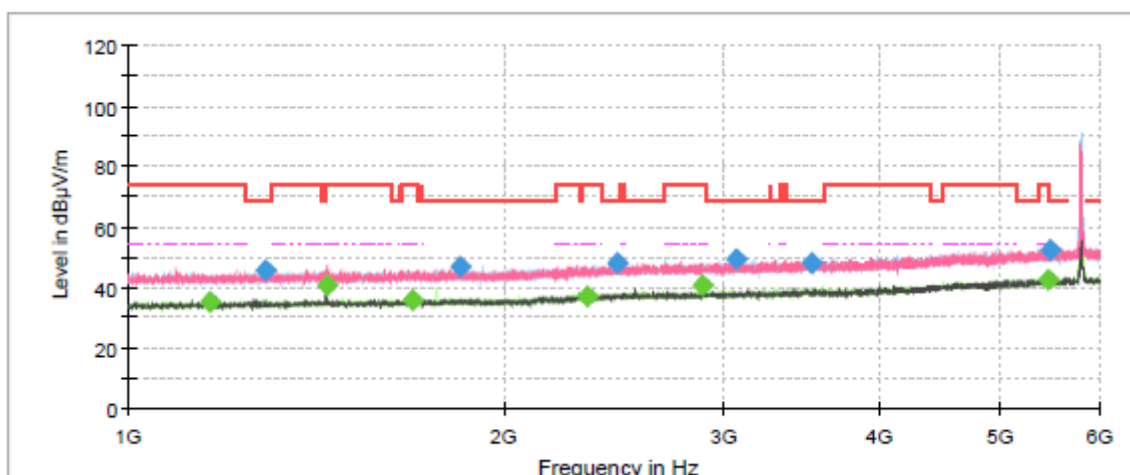
Radiates Emission from 6GHz to 18GHz

Frequency (MHz)	Peak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol.	Azimuth (deg)	Corr. (dB)
1107.566667	---	34.32	54.00	19.68	500.0	100.0	H	2.0	-10.6
1243.366667	45.21	---	68.20	22.99	500.0	200.0	V	358.0	-10.0

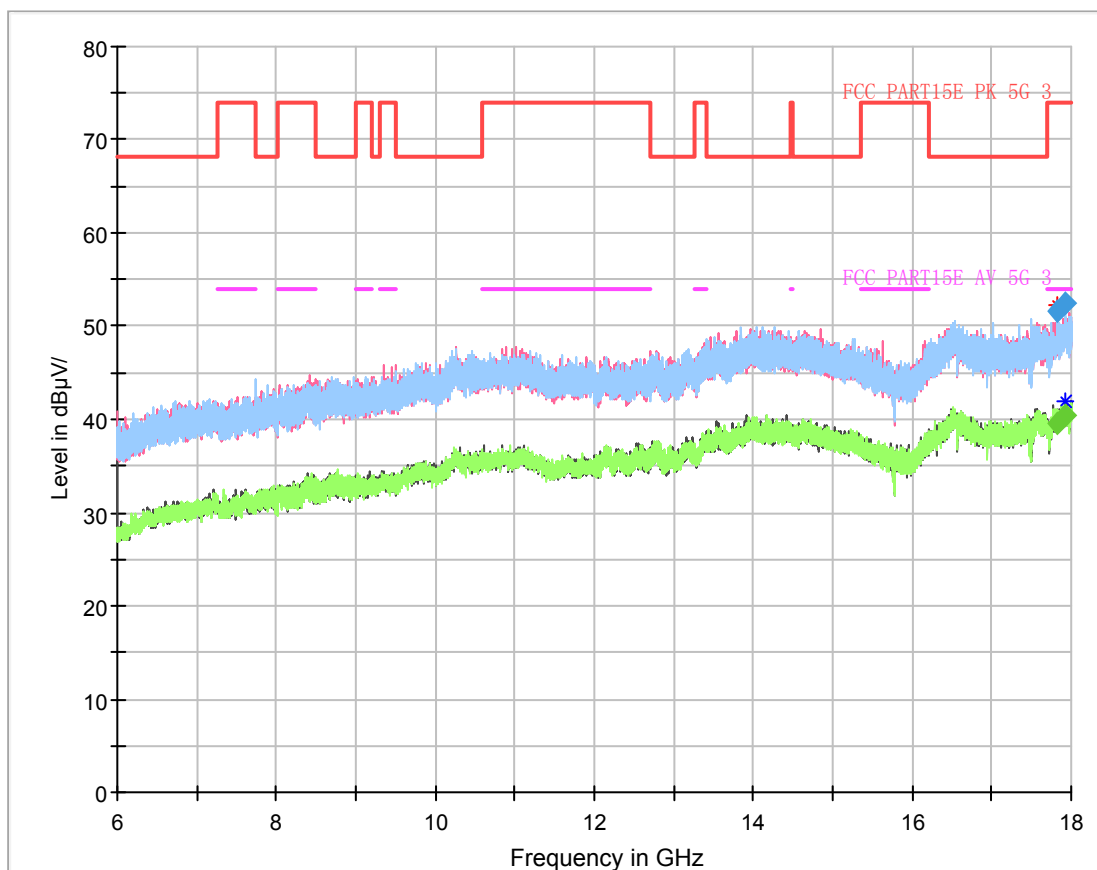


1440.533333	---	40.36	54.00	13.64	500.0	200.0	V	10.0	-9.3
1615.300000	---	35.62	54.00	18.38	500.0	100.0	H	5.0	6.3
1844.900000	46.23	---	68.20	21.97	500.0	100.0	H	8.0	-8.5
2118.133333	45.54	---	68.20	22.66	500.0	100.0	H	207.0	6.4
2330.466667	---	37.42	54.00	16.58	500.0	200.0	V	4.0	-6.9
2881.366667	---	40.46	54.00	13.54	500.0	100.0	V	356.0	-6.0
3027.666667	49.68	---	68.20	18.52	500.0	100.0	H	111.0	-5.7
3500.166667	48.78	---	68.20	19.42	500.0	100.0	H	111.0	-5.7
5304.533333	53.66	---	68.20	14.54	500.0	100.0	V	0.0	1.0
5384.800000	---	42.71	54.00	11.29	500.0	200.0	V	207.0	1.3

802.11ax (HE 40) CH159



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 6GHz



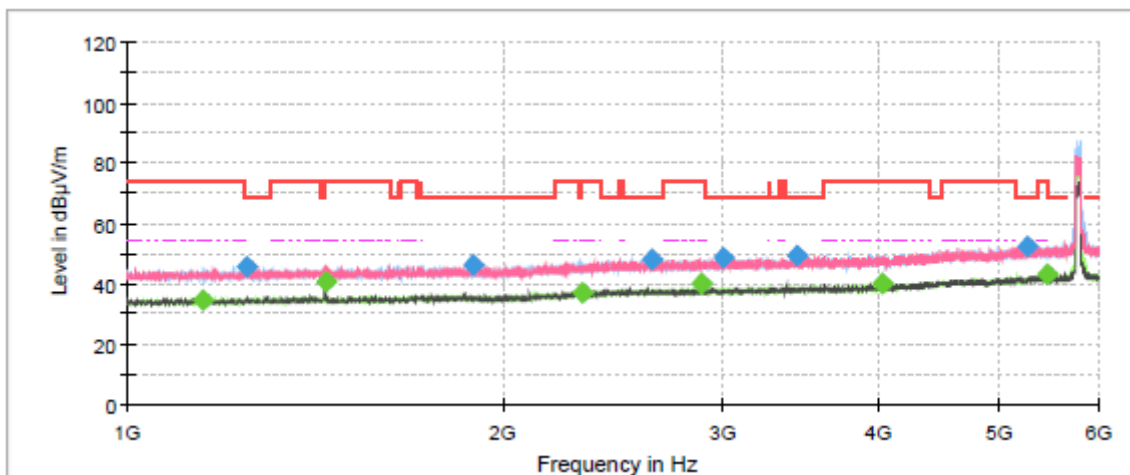
Radiates Emission from 6GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol.	Azimuth (deg)	Corr. (dB)
1163.100000	---	34.82	54.00	19.18	500.0	200.0	H	17.0	-10.4

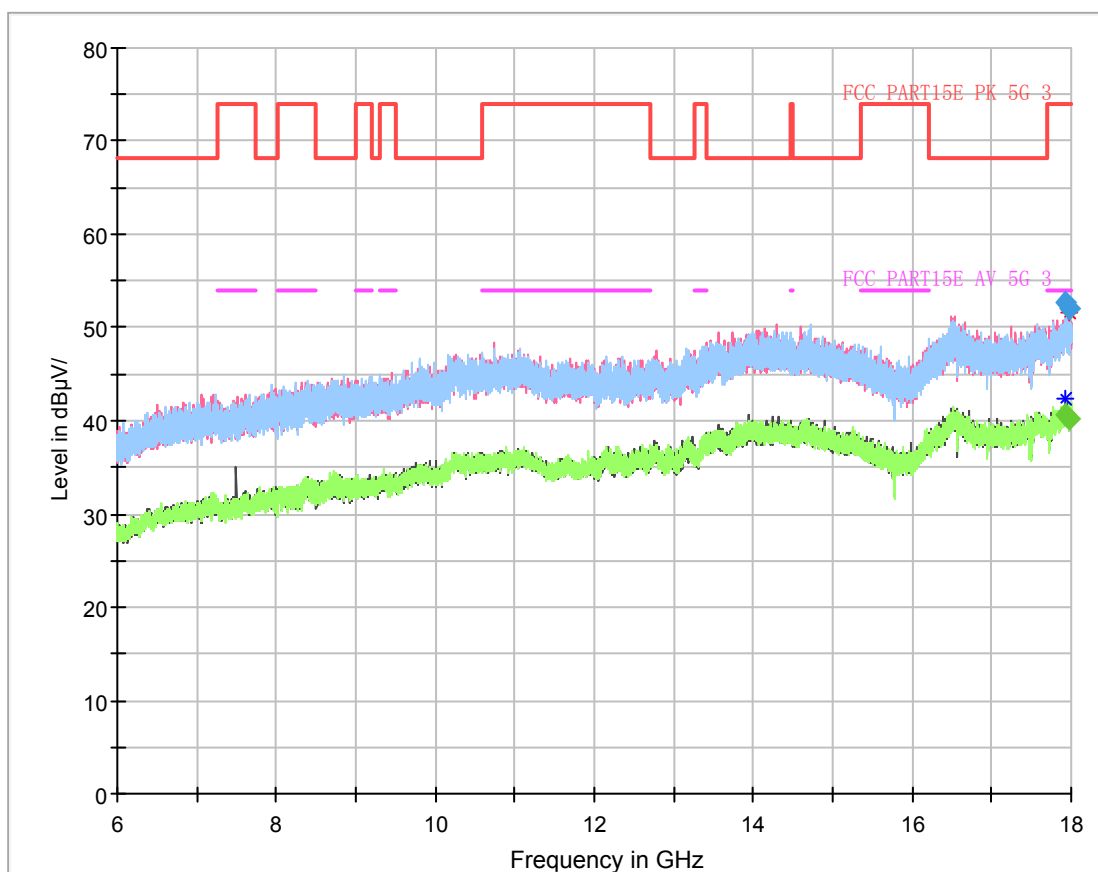


1289.566667	45.39	---	68.20	22.81	500.0	100.0	V	0.0	-9.8
1440.766667	---	40.70	54.00	13.30	500.0	200.0	V	357.0	-9.3
1845.833333	46.90	---	68.20	21.30	500.0	100.0	H	337.0	-8.5
2330.233333	---	37.10	54.00	16.90	500.0	200.0	H	334.0	-6.9
2460.200000	48.20	---	68.20	20.00	500.0	200.0	V	210.0	-6.3
2881.133333	---	40.50	54.00	13.50	500.0	100.0	V	0.0	-6.0
3063.133333	49.47	---	68.20	18.73	500.0	200.0	V	359.0	-5.6
5452.466667	---	42.73	54.00	11.27	500.0	200.0	V	346.0	1.4
5482.566667	52.43	---	68.20	15.77	500.0	100.0	V	140.0	1.5
1686.000000	---	35.51	54.00	18.49	500.0	200.0	H	358.0	6.4
3520.933333	48.06	---	68.20	20.14	500.0	100.0	V	126.0	6.4

802.11ax (HE80) CH155



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 6GHz



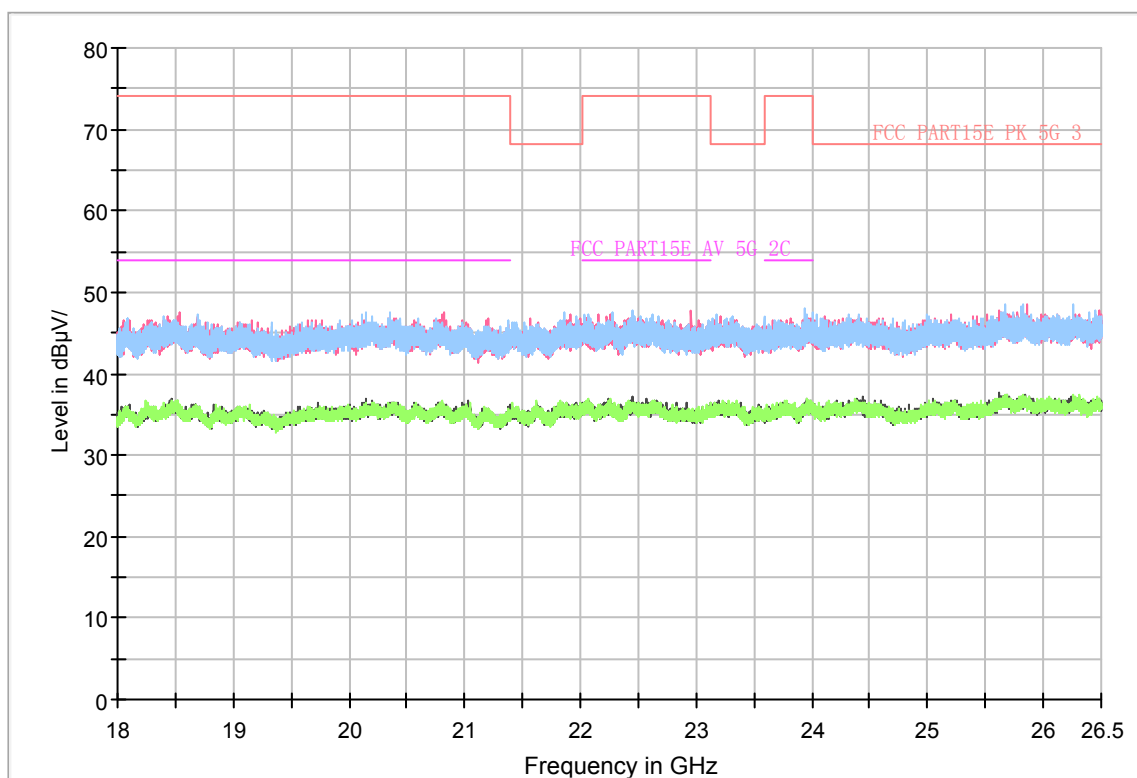
Radiates Emission from 6GHz to 18GHz



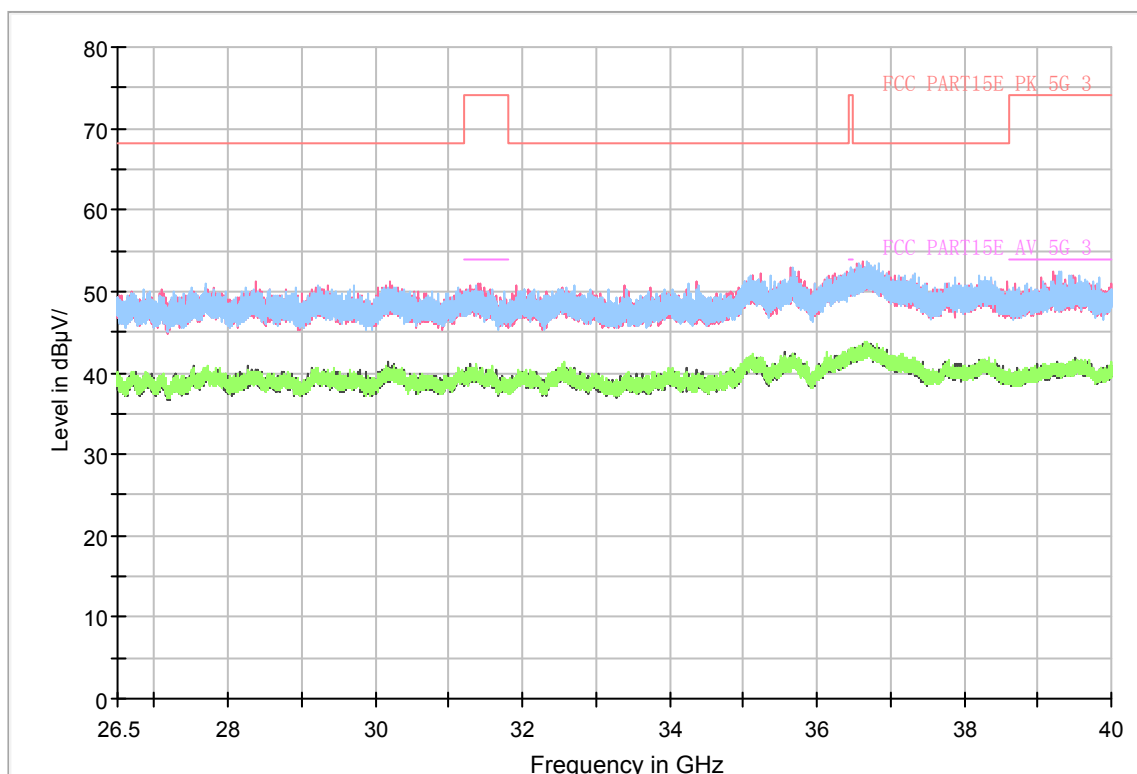
Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol.	Azimuth (deg)	Corr. (dB)
1149.333333	---	34.66	54.00	19.34	500.0	200.0	H	14.0	-10.4
1245.000000	45.61	---	68.20	22.59	500.0	100.0	V	0.0	-10.0
1440.533333	---	40.92	54.00	13.08	500.0	200.0	V	349.0	-9.3
1892.033333	46.01	---	68.20	22.19	500.0	200.0	H	264.0	-8.4
2310.633333	---	36.65	54.00	17.35	500.0	200.0	H	183.0	-6.9
2635.433333	48.07	---	68.20	20.13	500.0	200.0	V	342.0	-6.1
2881.133333	---	40.06	54.00	13.94	500.0	100.0	V	358.0	-6.0
3006.433333	48.50	---	68.20	19.70	500.0	100.0	V	236.0	7.5
3436.700000	49.10	---	68.20	19.10	500.0	100.0	H	322.0	-4.8
4030.533333	---	40.28	54.00	13.72	500.0	100.0	H	349.0	6.4
5256.000000	52.44	---	68.20	15.76	500.0	200.0	H	59.0	0.8
5452.700000	---	42.81	54.00	11.19	500.0	100.0	V	264.0	1.4



During the test, the Radiates Emission from 18GHz to 40GHz was performed in all modes with all channels, 802.11ax (HE 40) CH38 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



Radiates Emission from 26.5GHz to 40GHz

5.6. Conducted Emission

Ambient condition

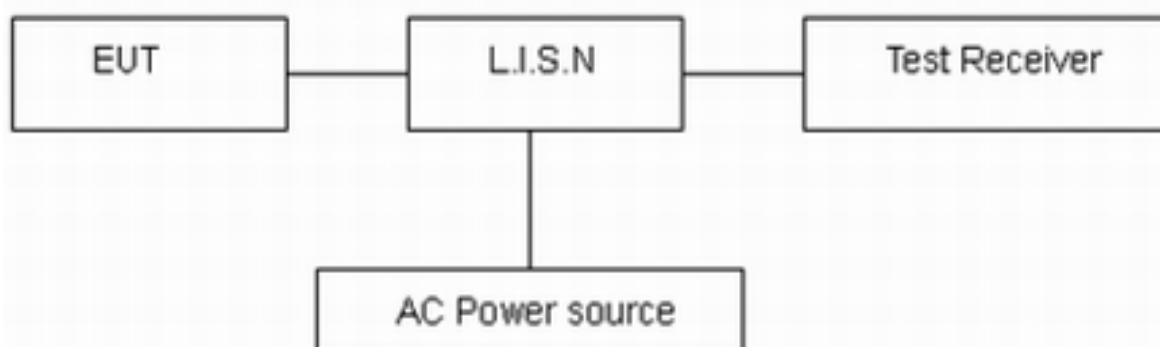
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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 LISN Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9kHz, 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.		

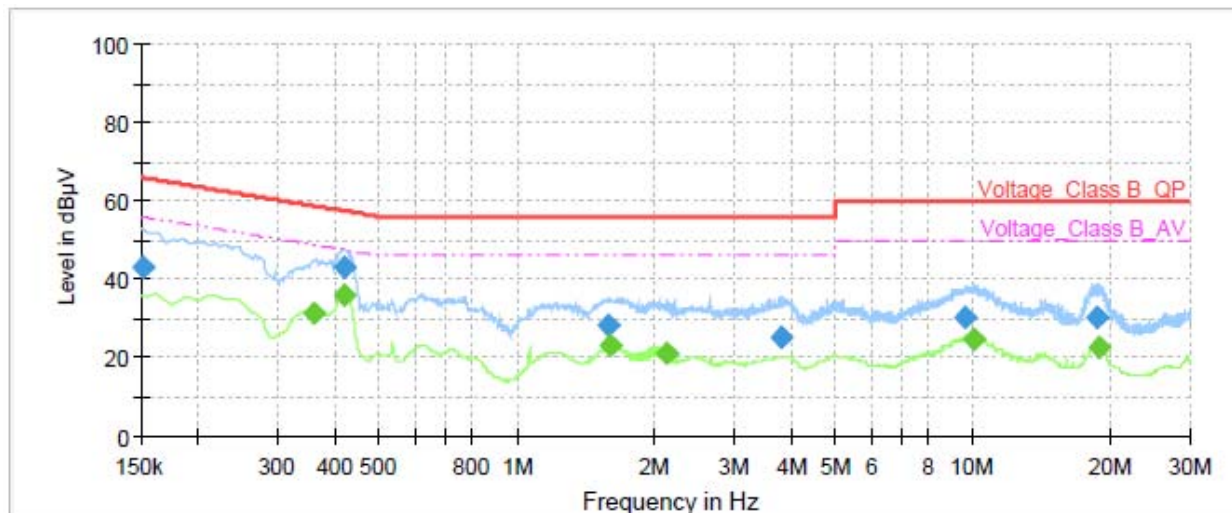
Measurement Uncertainty

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:

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

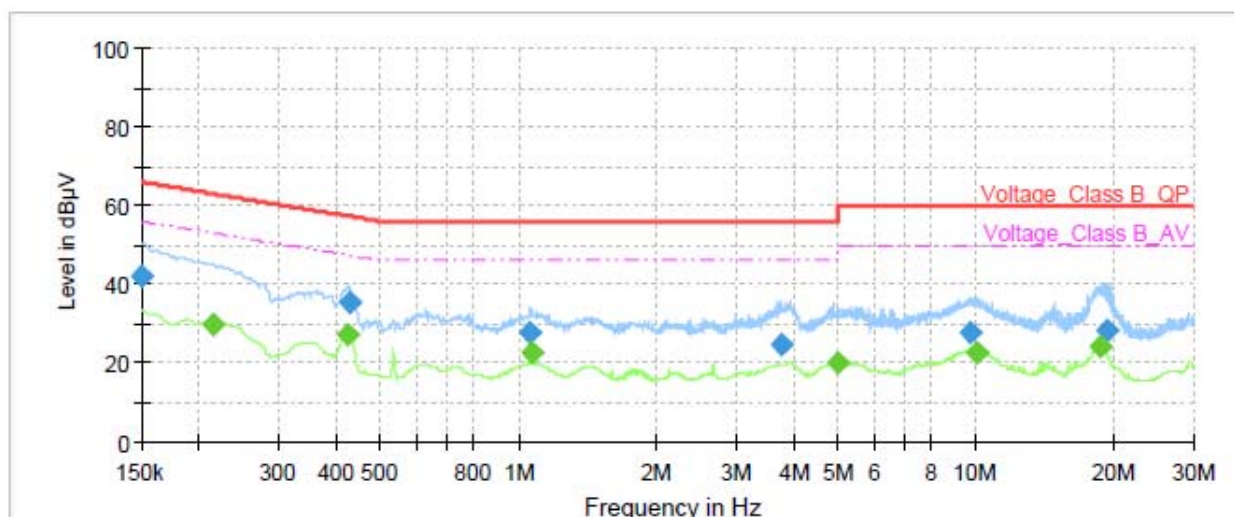
During the test, the Conducted Emission was performed in all modes with all channels, 802.11ax (HE 40) CH38 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.15	42.88	---	65.88	23.00	70.0	9.000	L1	ON	21
0.36	---	31.33	48.75	17.42	70.0	9.000	L1	ON	21
0.42	42.97	---	57.49	14.52	70.0	9.000	L1	ON	20
0.42	---	36.08	47.45	11.37	70.0	9.000	L1	ON	20
1.59	27.99	---	56.00	28.01	70.0	9.000	L1	ON	20
1.60	---	23.04	46.00	22.96	70.0	9.000	L1	ON	20
2.14	---	20.96	46.00	25.04	70.0	9.000	L1	ON	20
3.79	25.10	---	56.00	30.90	70.0	9.000	L1	ON	19
9.60	30.37	---	60.00	29.63	70.0	9.000	L1	ON	20
10.09	---	24.45	50.00	25.55	70.0	9.000	L1	ON	20
18.78	30.04	---	60.00	29.96	70.0	9.000	L1	ON	20
18.88	---	22.43	50.00	27.57	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	41.98	---	66.00	24.02	70.0	9.000	N	ON	21
0.22	---	30.00	53.00	23.00	70.0	9.000	N	ON	21
0.42	---	27.30	47.36	20.06	70.0	9.000	N	ON	20
0.43	35.13	---	57.32	22.19	70.0	9.000	N	ON	20
1.07	27.86	---	56.00	28.14	70.0	9.000	N	ON	20
1.07	---	22.79	46.00	23.21	70.0	9.000	N	ON	20
3.78	24.60	---	56.00	31.40	70.0	9.000	N	ON	19
5.00	---	19.99	46.00	26.01	70.0	9.000	N	ON	19
9.73	27.51	---	60.00	32.49	70.0	9.000	N	ON	20
10.04	---	22.47	50.00	27.53	70.0	9.000	N	ON	20
18.70	---	24.04	50.00	25.96	70.0	9.000	N	ON	20
19.33	28.42	---	60.00	31.58	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	FSV40	15195-01-00	2020-05-18	2021-05-17
EMI Test Receiver	R&S	ESCI	100948	2020-05-18	2021-05-17
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2020-04-02	2023-04-01
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	391	2019-12-16	2021-12-15
Horn Antenna	R&S	HF907	102723	2018-08-11	2021-08-10
Horn Antenna	ETS-Lindgren	3160-09	00102643	2018-06-20	2021-06-19
Standard Gain Horn	STEATITE	QSH-SL-26-40 -K-15	16779	2019-12-24	2022-12-23
Broadband Horn Antenna	SCHWARZBECK	BBHA 9120D	430	2018-07-07	2021-07-06
EMI Test Receiver	R&S	ESR	101667	2020-05-18	2021-05-17
LISN	R&S	ENV216	101171	2018-12-15	2021-12-14
Spectrum Analyzer	KEYSIGHT	N9020A	MY54420163	2020-12-14	2021-12-13
RF Cable	Agilent	SMA 15cm	0001	2020-12-11	2021-06-10
TEMPERATURE CHAMBER	WEISS	VT4002	582261194500 10	2019-12-15	2020-12-14
Power Meter	R&S	NRP2	104306	2020-05-18	2021-05-17
Power Sensor	R&S	NRP-Z21	104799	2020-05-18	2021-05-17
DC Power Supply	GWINSTEK	GPS-3030D	GEP882653	2020-05-18	2021-05-17
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.