802.11n mode

Mode	Channel	Frequency Range	Test Results	Conclusion
802.11n (20MHz)	1	2.412GHz	Fig.129	Pass
		30MHz~26GHz	Fig.130	Pass
	6	2.437GHz	Fig.131	Pass
		30MHz~26GHz	Fig.132	Pass
	11	2.462GHz	Fig.133	Pass
		30MHz~26GHz	Fig.134	Pass
802.11n (40MHz)	3	2.422GHz	Fig.135	Pass
		30MHz~26GHz	Fig.136	Pass
	7	2.442GHz	Fig.137	Pass
		30MHz~26GHz	Fig.138	Pass
	11	2.462GHz	Fig.139	Pass
		30MHz~26GHz	Fig.140	Pass

Conclusion: PASS

Test figure as below:

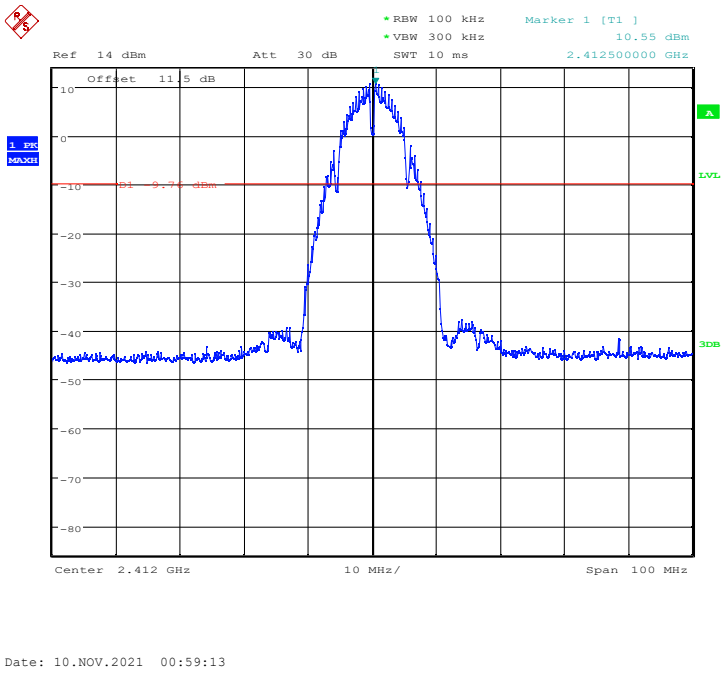


Fig.117 Conducted spurious emission: Ch1,11b,2412MHz

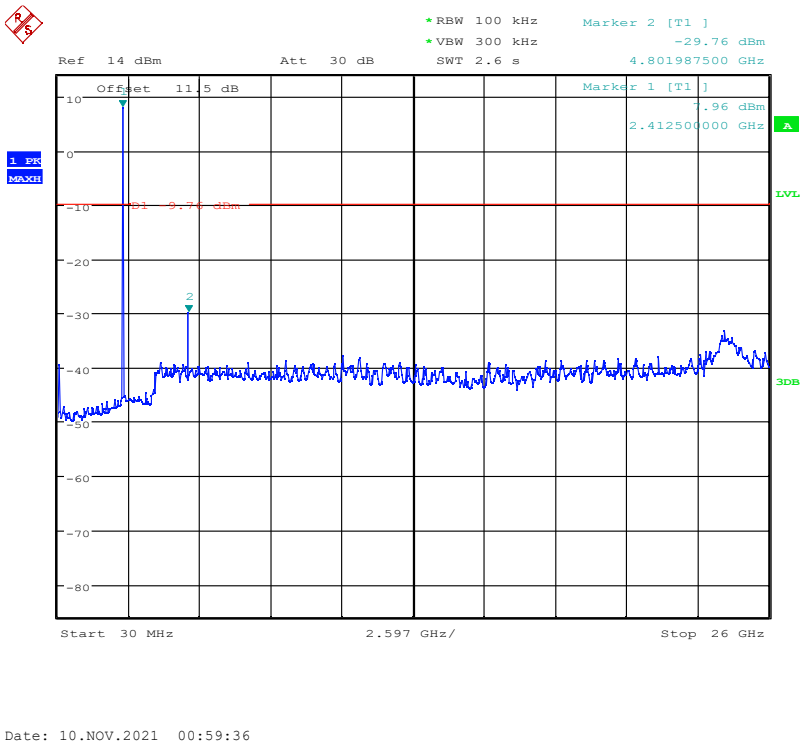


Fig.118 Conducted spurious emission: Ch1,11b,30MHz~26GHz

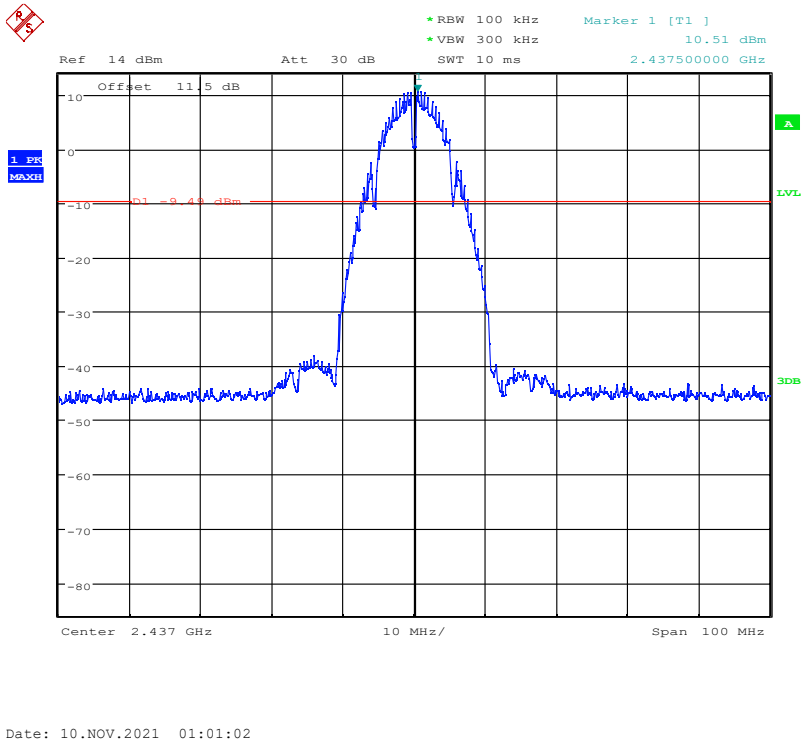


Fig.119 Conducted spurious emission: Ch6,11b,2437MHz

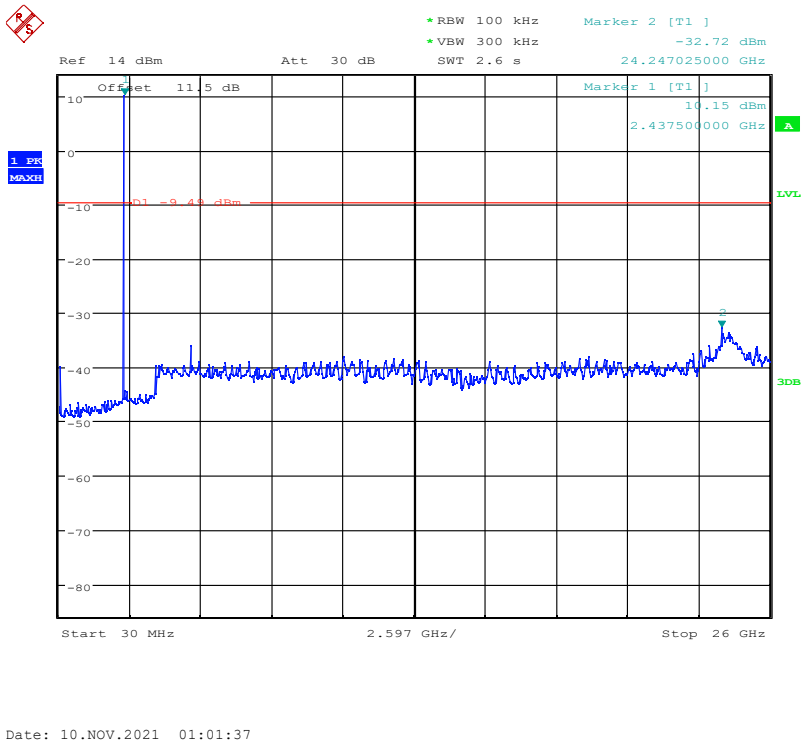


Fig.120 Conducted spurious emission: Ch6,11b,30MHz~26GHz

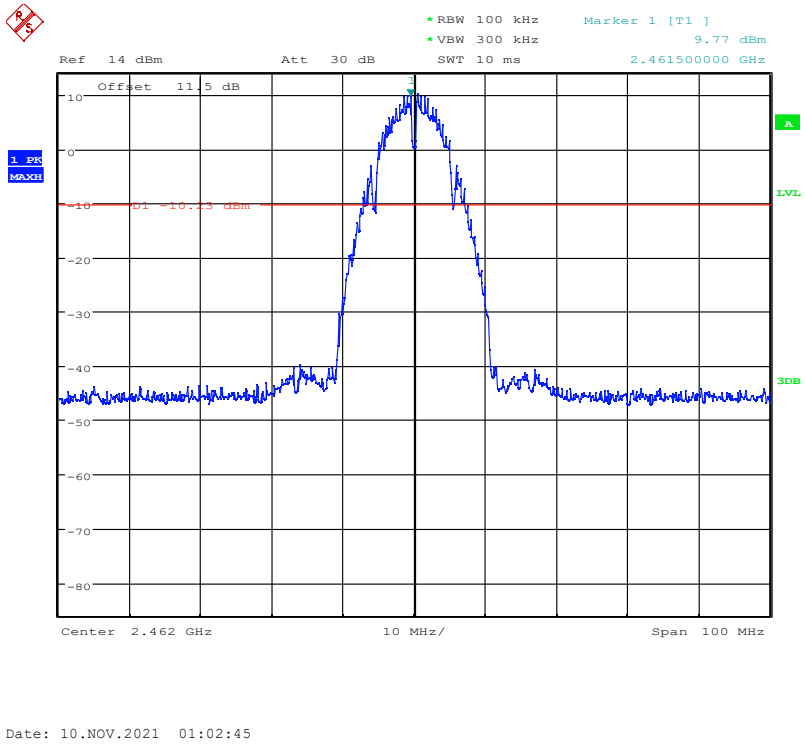


Fig.121 Conducted spurious emission: Ch11,11b,2462MHz

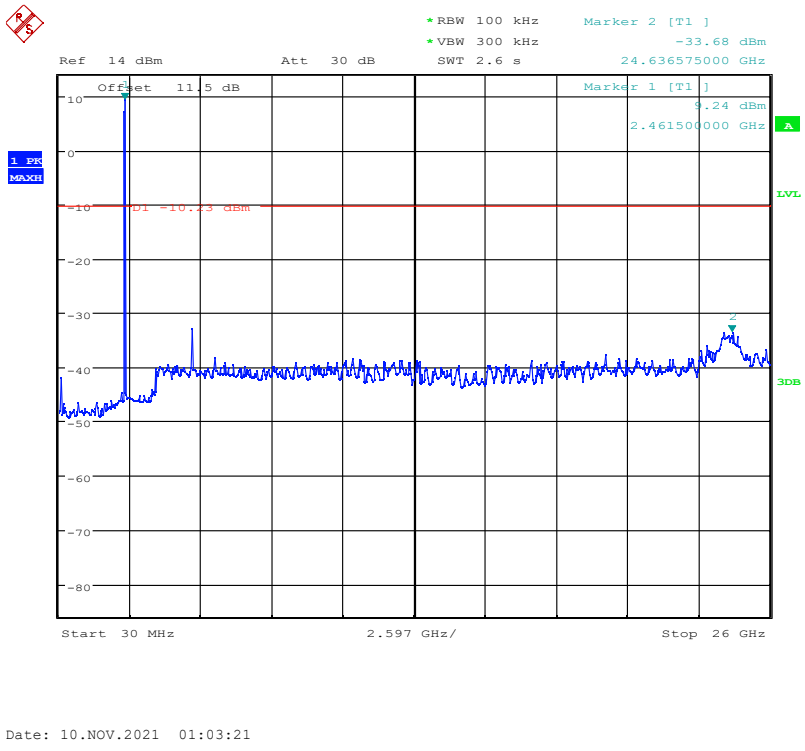


Fig.122 Conducted spurious emission: Ch11,11b,30MHz~26GHz

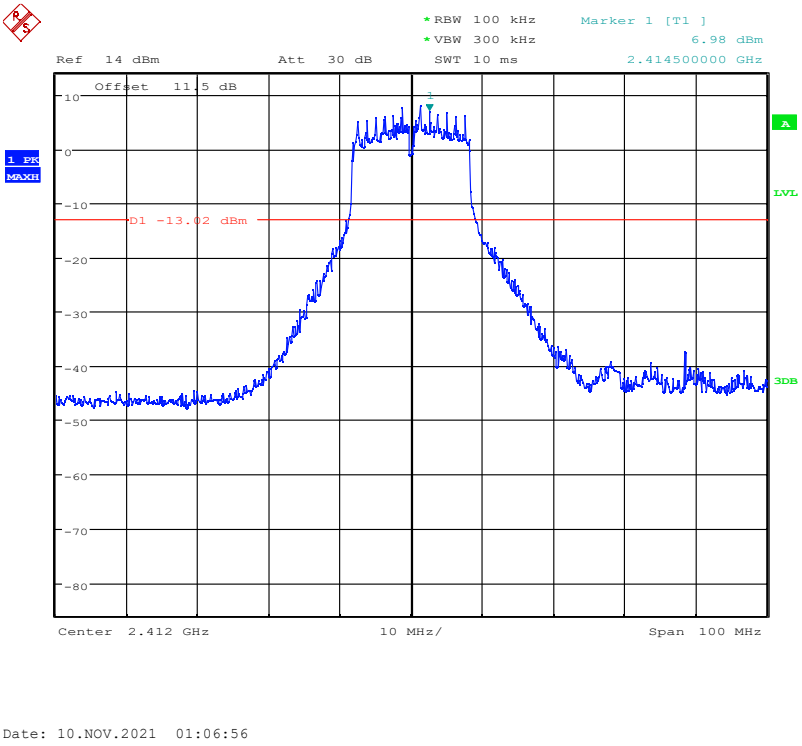


Fig.123 Conducted spurious emission: Ch1,11g,2412MHz

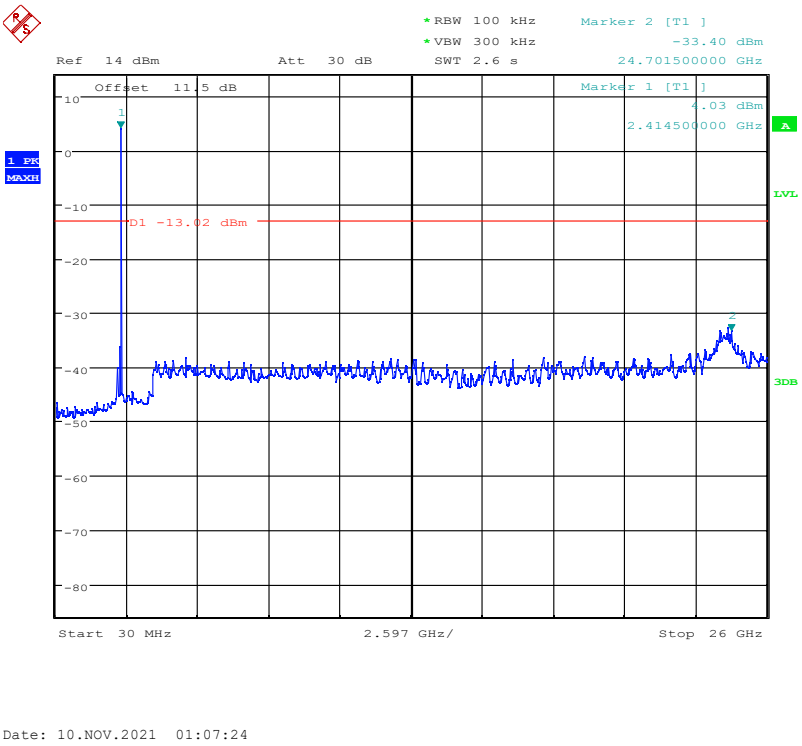


Fig.124 Conducted spurious emission: Ch1,11g,30MHz~26GHz

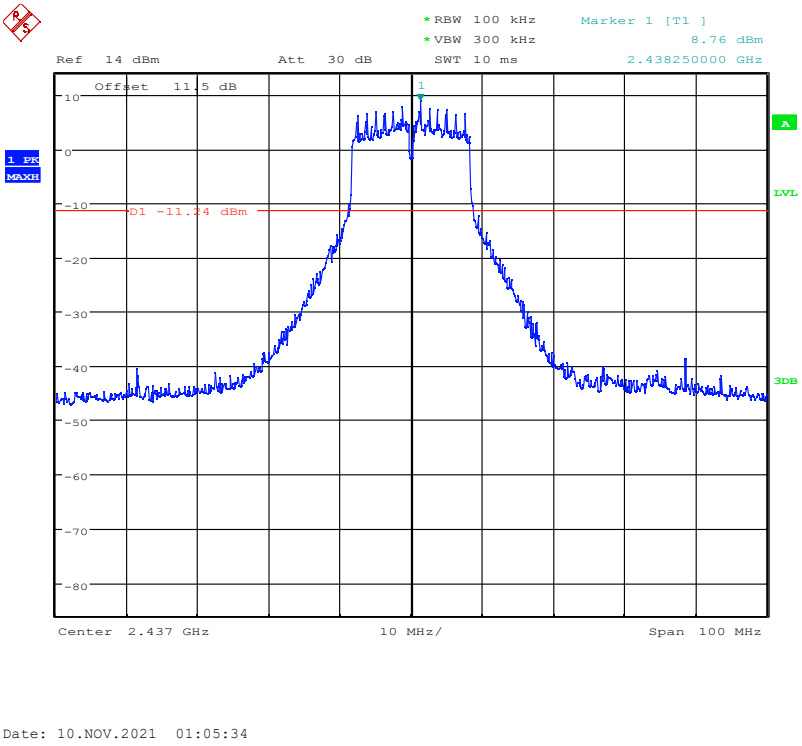


Fig.125 Conducted spurious emission: Ch6,11g,2437MHz

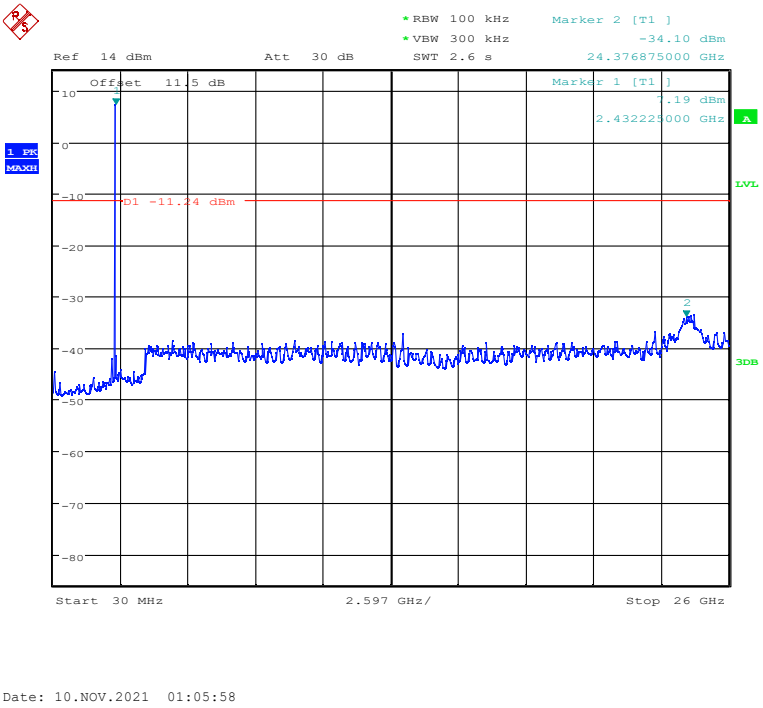


Fig.126 Conducted spurious emission: Ch6,11g,30MHz~26GHz

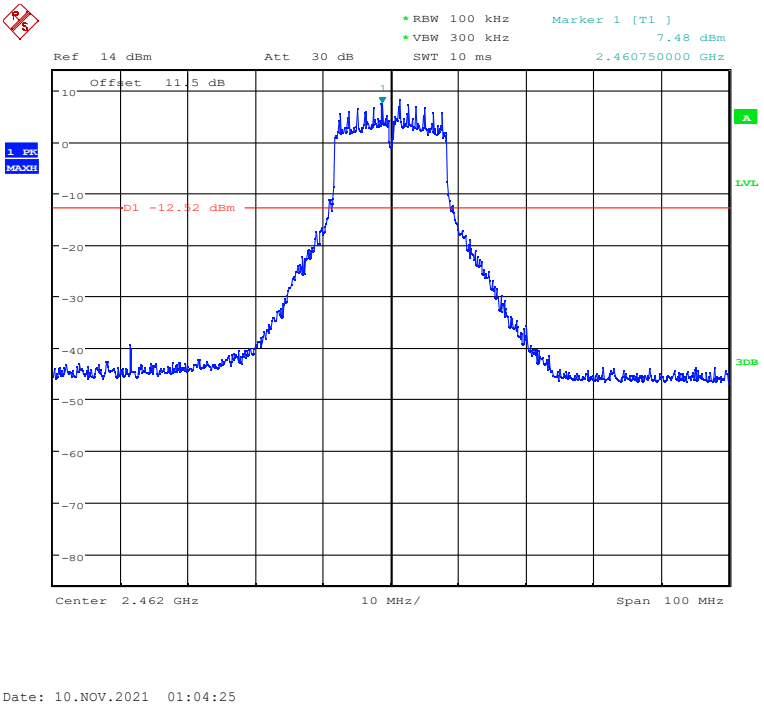


Fig.127 Conducted spurious emission: Ch11,11g,2462MHz

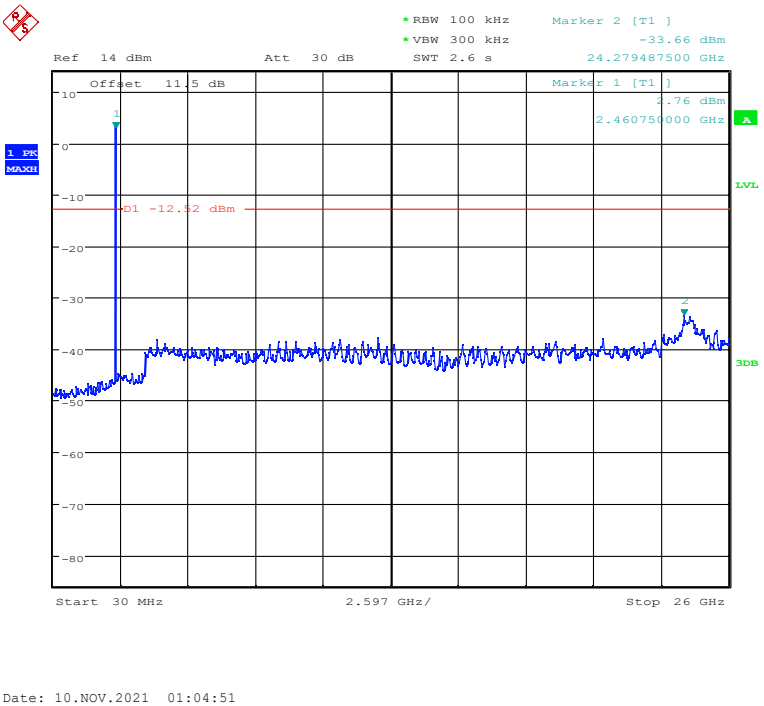


Fig.128 Conducted spurious emission: Ch11,11g,30MHz~26GHz

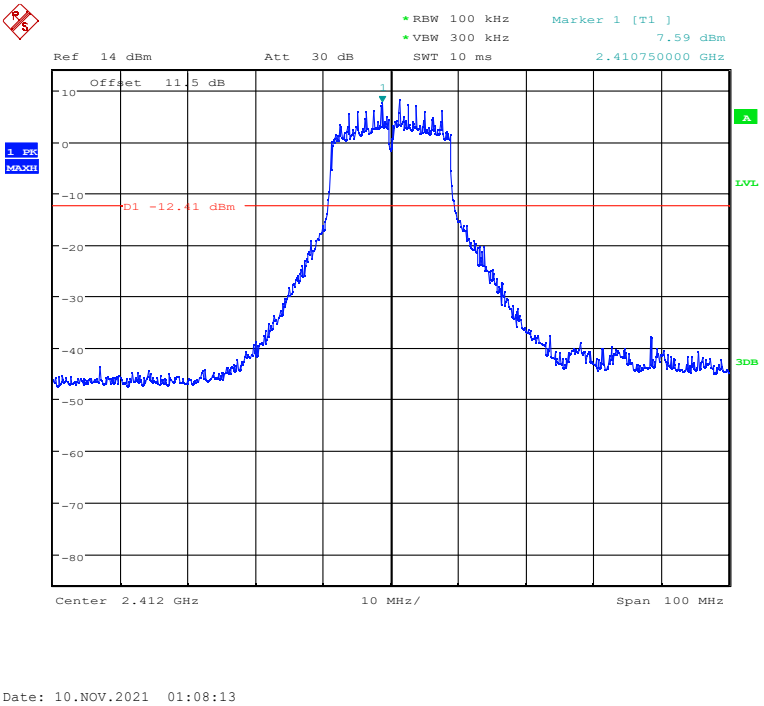


Fig.129 Conducted spurious emission: Ch1,11n,2412MHz

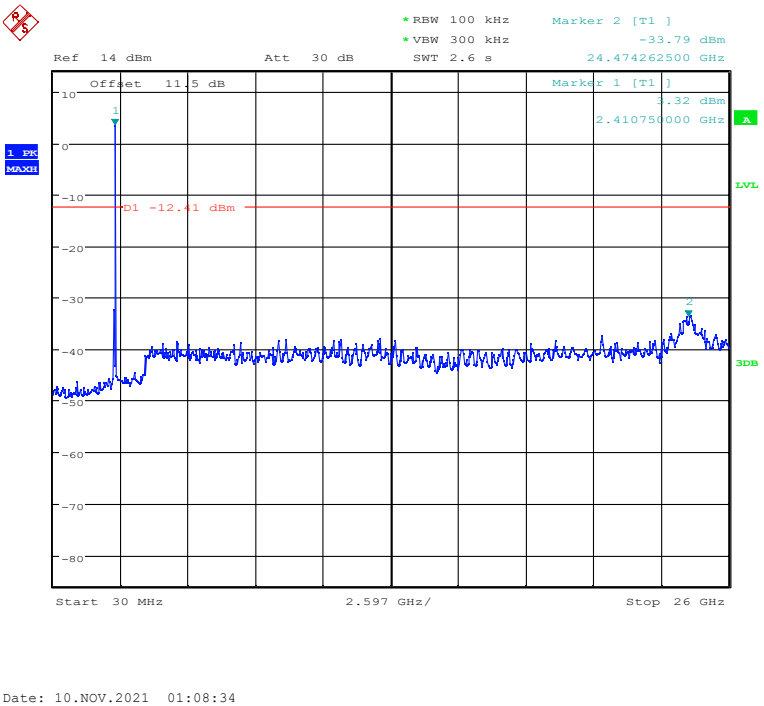


Fig.130 Conducted spurious emission: Ch1,11n,30MHz~26GHz

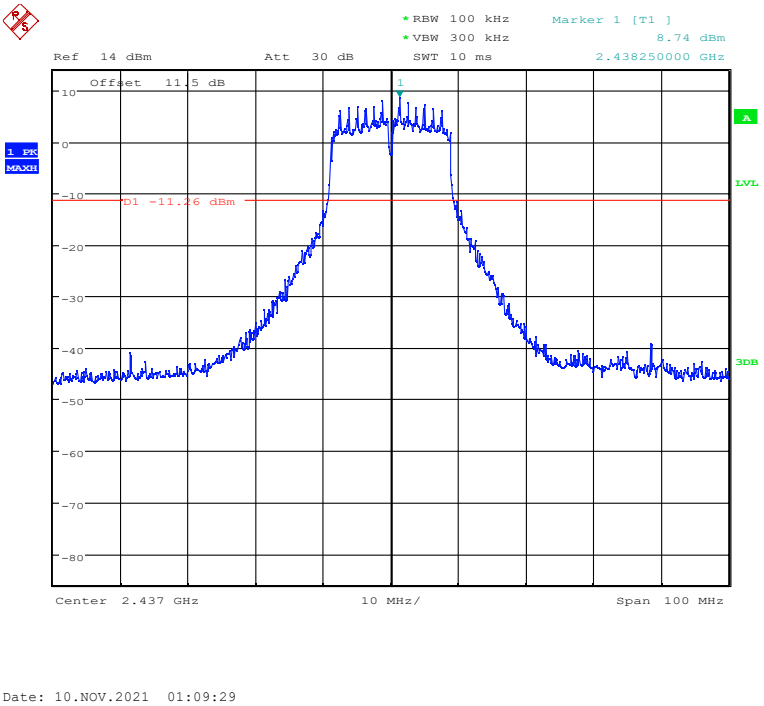


Fig.131 Conducted spurious emission: Ch6,11n,2437MHz

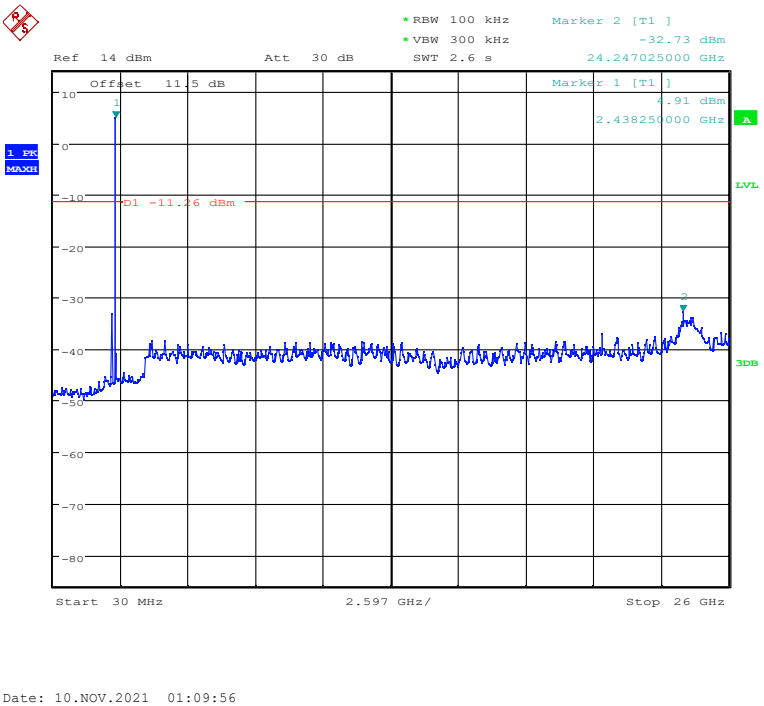


Fig.132 Conducted spurious emission: Ch6,11n,30MHz~26GHz

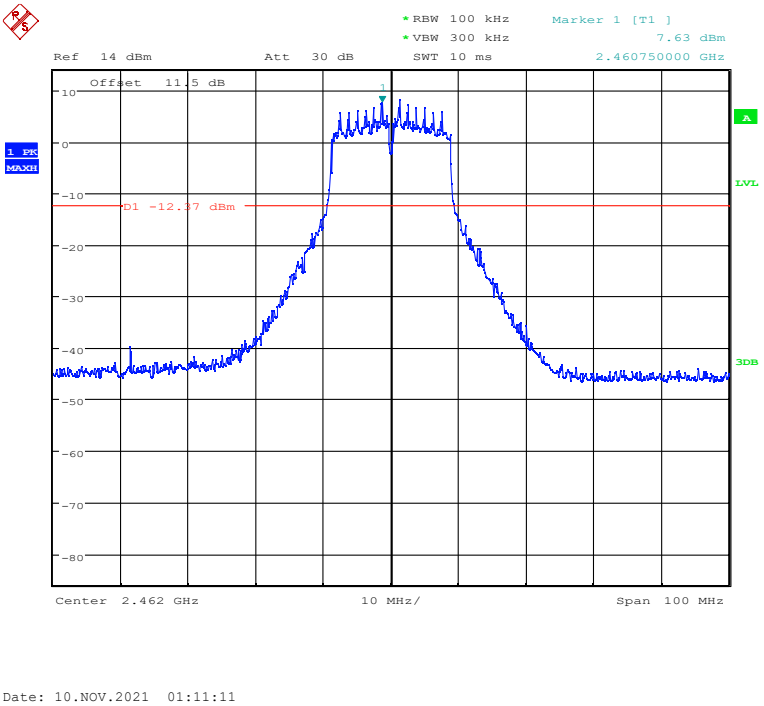


Fig.133 Conducted spurious emission: Ch11,11n,2462MHz

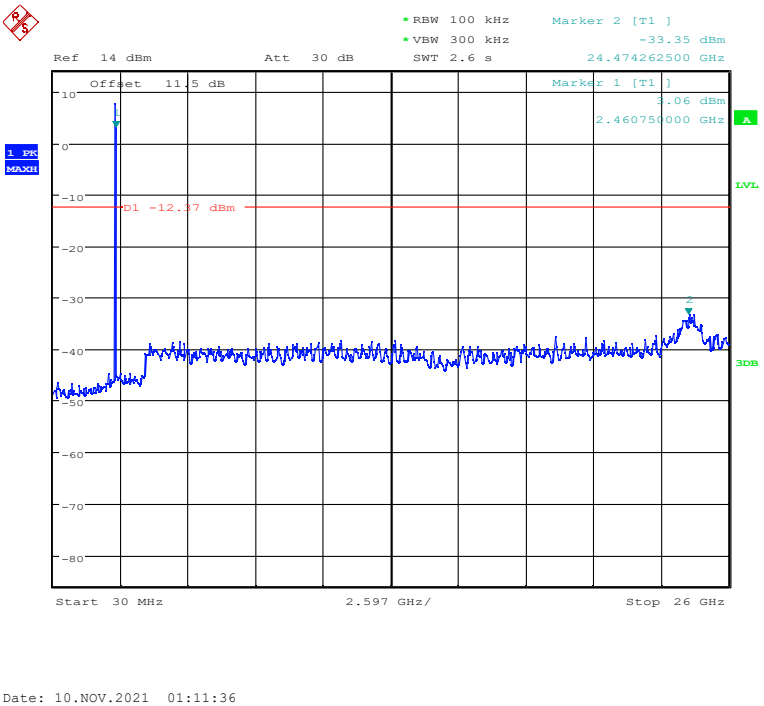


Fig.134 Conducted spurious emission: Ch11,11n,30MHz~26GHz

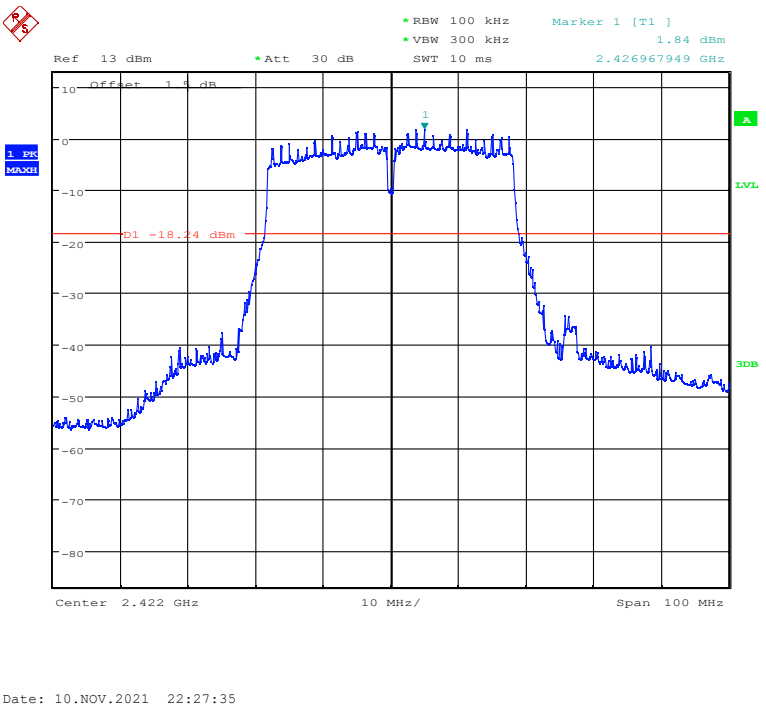


Fig.135 Conducted spurious emission: Ch3,11n(40M),2422MHz

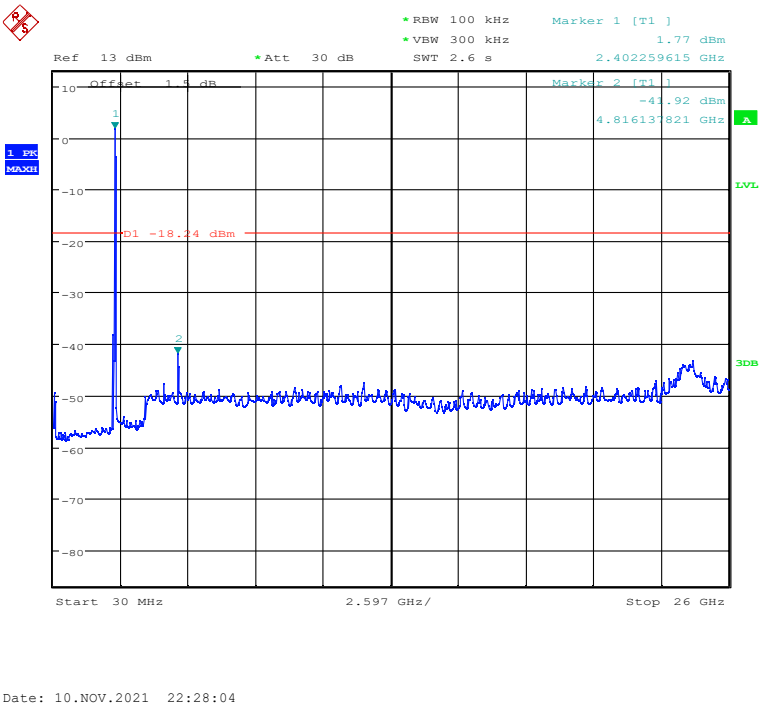


Fig.136 Conducted spurious emission: Ch3,11n(40M),30MHz~26GHz

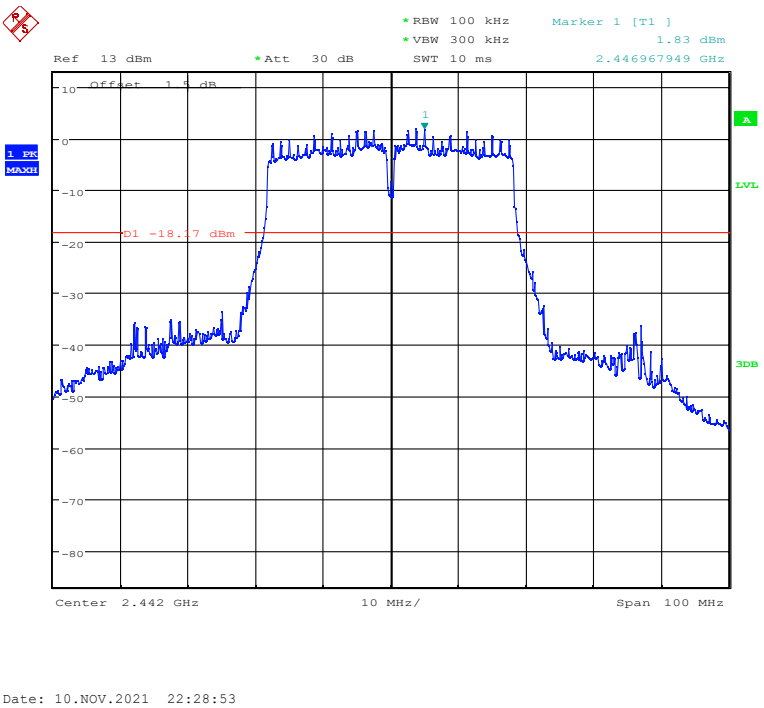


Fig.137 Conducted spurious emission: Ch7,11n(40M),2442MHz

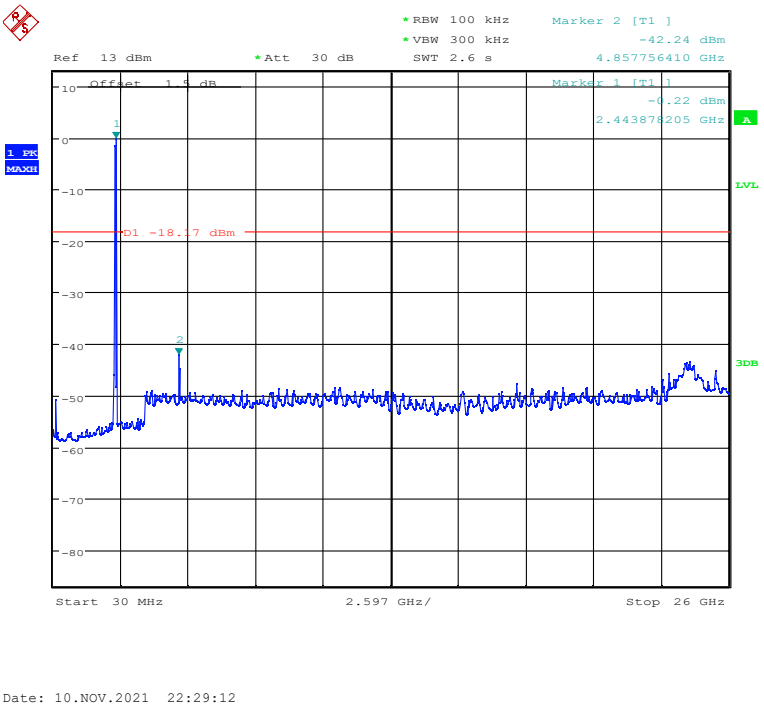


Fig.138 Conducted spurious emission: Ch7,11n(40M),30MHz~26GHz

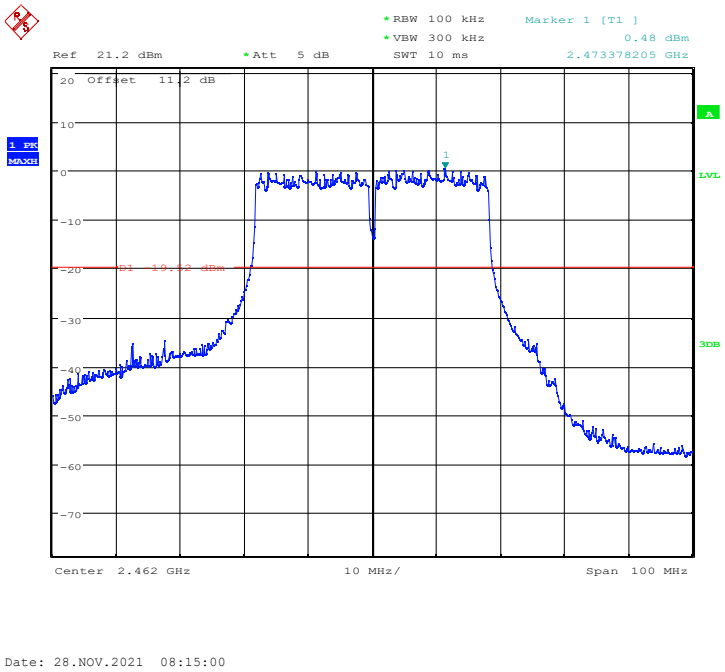


Fig.139 Conducted spurious emission: Ch11,11n(40M),2462MHz

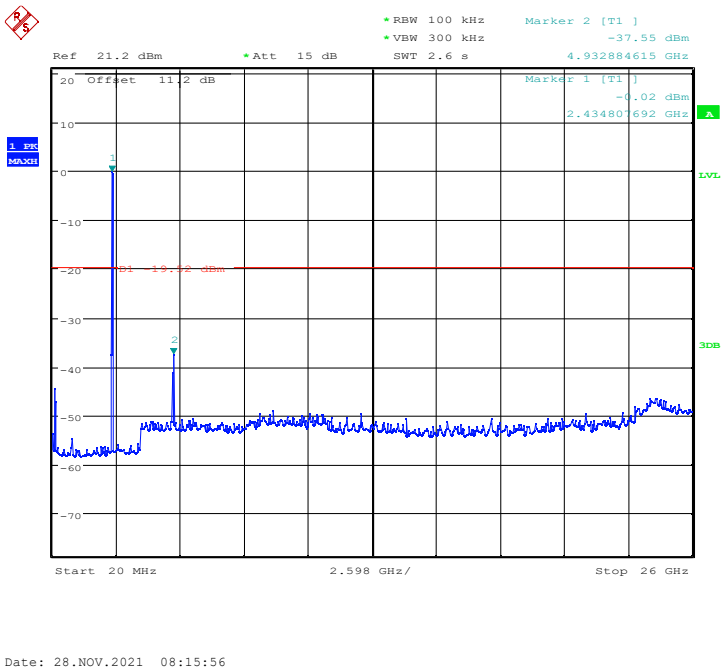


Fig.140 Conducted spurious emission: Ch11,11n(40M),30MHz~26GHz

6.7. Transmitter Spurious Emission-Radiated

Specifications:	FCC 47 CFR Part 15.247, 15.205, 15.209
DUT Serial Number:	865171050693269
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass
Note:There are two kinds of antennas in this test, and the data reflect the worst data with large antenna gain	

Limit

Standard	Limit
FCC 47 CFR Part 15.247, 15.205, 15.209	20dB below peak output power

In addition, radiated emissions which fall in the restricted bands, as defined in 15.205(a), must also comply with the radiated emission limits specified in 15.209(a) (see 15.205(c)).

Measurement Uncertainty:

Frequency Range	Uncertainty
9kHz ≤ f ≤ 30MHz	4.54dB
30MHz ≤ f ≤ 1GHz	4.09dB
1GHz ≤ f ≤6GHz	4.84dB
6GHz ≤ f ≤18GHz	4.52dB
18GHz ≤ f ≤26.5GHz	6.19dB

Limit in restricted band:

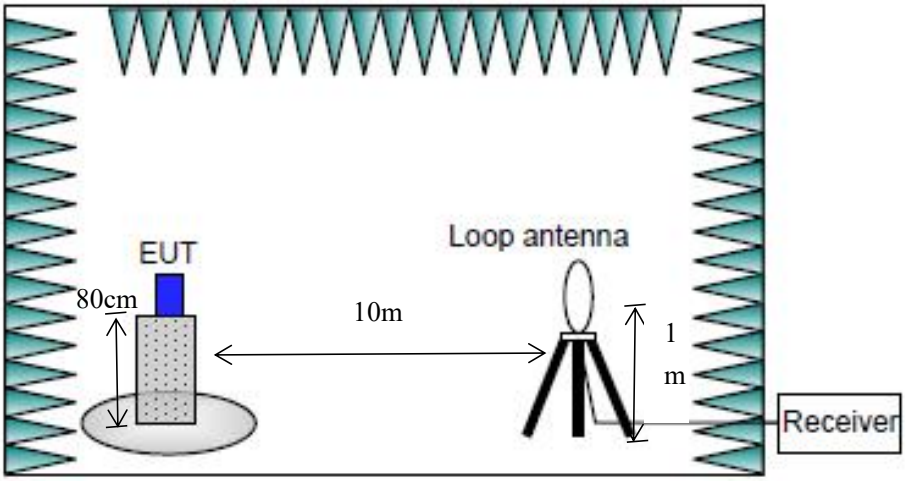
Frequency of emission (MHz)	Field strength (uV/m)	Measurement distance (meters)
0.009-0.49	2400/F(kHz)	300
0.49-1.705	24000/F(kHz)	30
1.705-30	30	30

Frequency of emission (MHz)	Field strength (uV/m)	Field strength (dBuV/m)
30~88	100	40
88~216	150	43.5
216~960	200	46
Above 960	500	54

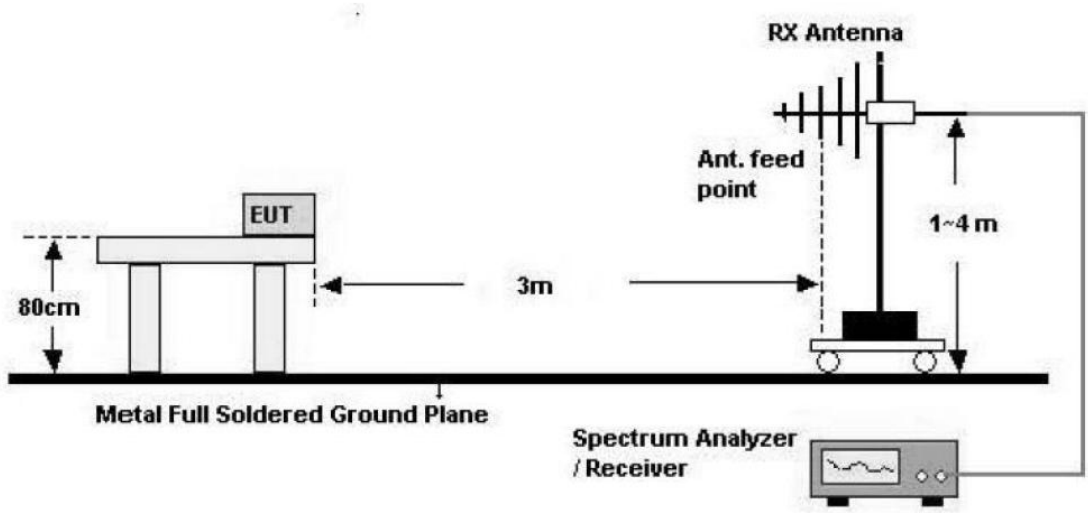
Test Setup

The EUT was placed in an anechoic chamber.. The transmitter output is connected to Spectrum analyzer through a loop antenna (for frequency below 30MHz) or a Bilog antenna (for frequency 30MHz-1GHz) or a horn antenna (for frequency above 1GHz).

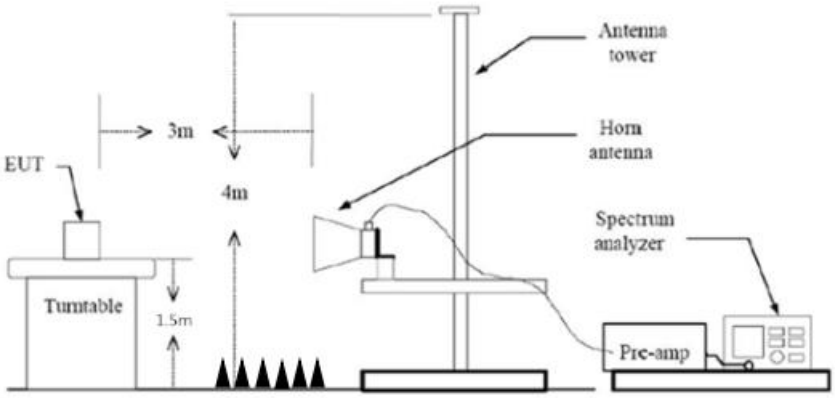
Below 30MHz:



30MHz-1GHz:



Above 1GHz:



Test Procedure

Portable, small, lightweight, or modular devices that may be handheld, worn on the body, or placed on a table during operation shall be positioned on a non-conducting platform, the top of which is 80 cm above the reference ground plane. The preferred area occupied by the EUT arrangement is 1 m by 1.5 m, but it may be larger or smaller to accommodate various sized EUTs. For testing purposes, ceiling- and wall-mounted devices also shall be positioned on a tabletop (see also ANSI C63.10-2013 section 6.3.4 and 6.3.5). In making any tests involving handheld, body-worn, or ceiling-mounted equipment, it is essential to recognize that the measured levels may be dependent on the orientation (attitude) of the three orthogonal axes of the EUT. Thus, exploratory tests as specified in 8.3.1 shall be carried out for various axes orientations to determine the attitude having maximum or near-maximum emission level.

The EUT was placed on a non-conductive table. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to

identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.

Frequency of emission (MHz)	RBW/VBW	Sweep Time (s)
30~1000	100KHz/300KHz	5
1000~4000	1MHz/1MHz	15
4000~18000	1MHz/1MHz	40
18000~26500	1MHz/1MHz	20

Test Result:

A "reference path loss" is established and ARpi is the attenuation of "reference path loss", and including the gain of receive antenna , the gain of the preamplifier, the cable loss.

The measurement results are obtained as described below:

ARpi= Cable loss + Antenna Gain-Preamplifier gain

Result=PMea + ARpi

Channel	Frequency Range	Test Results	Conclusion
All channels	30MH-1GHz	Fig.141	Pass
11b Ch1	1GHz-3GHz	Fig.142	Pass
	3GHz-18GHz	Fig.143	Pass
11b Ch6	1GHz-3GHz	Fig.144	Pass
	3GHz-18GHz	Fig.145	Pass
11b Ch11	1GHz-3GHz	Fig.147	Pass
	3GHz-18GHz	Fig.148	Pass
11g Ch1	1GHz-3GHz	Fig.149	Pass
	3GHz-18GHz	Fig.150	Pass
11g Ch 6	1GHz-3GHz	Fig.151	Pass
	3GHz-18GHz	Fig.152	Pass
11g Ch 11	1GHz-3GHz	Fig.153	Pass

	3GHz-18GHz	Fig.154	Pass
11n Ch1(20M)	1GHz-3GHz	Fig.155	Pass
	3GHz-18GHz	Fig.156	Pass
11n Ch 6(20M)	1GHz-3GHz	Fig.157	Pass
	3GHz-18GHz	Fig.158	Pass
11n Ch 11(20M)	1GHz-3GHz	Fig.159	Pass
	3GHz-18GHz	Fig.160	Pass
11n Ch3(40M)	1GHz-3GHz	Fig.161	Pass
	3GHz-18GHz	Fig.162	Pass
11n Ch 6(40M)	1GHz-3GHz	Fig.163	Pass
	3GHz-18GHz	Fig.164	Pass
11n Ch 9(40M)	1GHz-3GHz	Fig.165	Pass
	3GHz-18GHz	Fig.166	Pass
All channels	18GHz-26GHz	Fig.167	Pass

Note:

1.all the test data shown was peak detected.

2.Transmitter Spurious Emission-Radiated H and V are tested together.,The test is maximum hold. Therefore, the result is only one set of data

Conclusion: PASS

Test graphs as below:

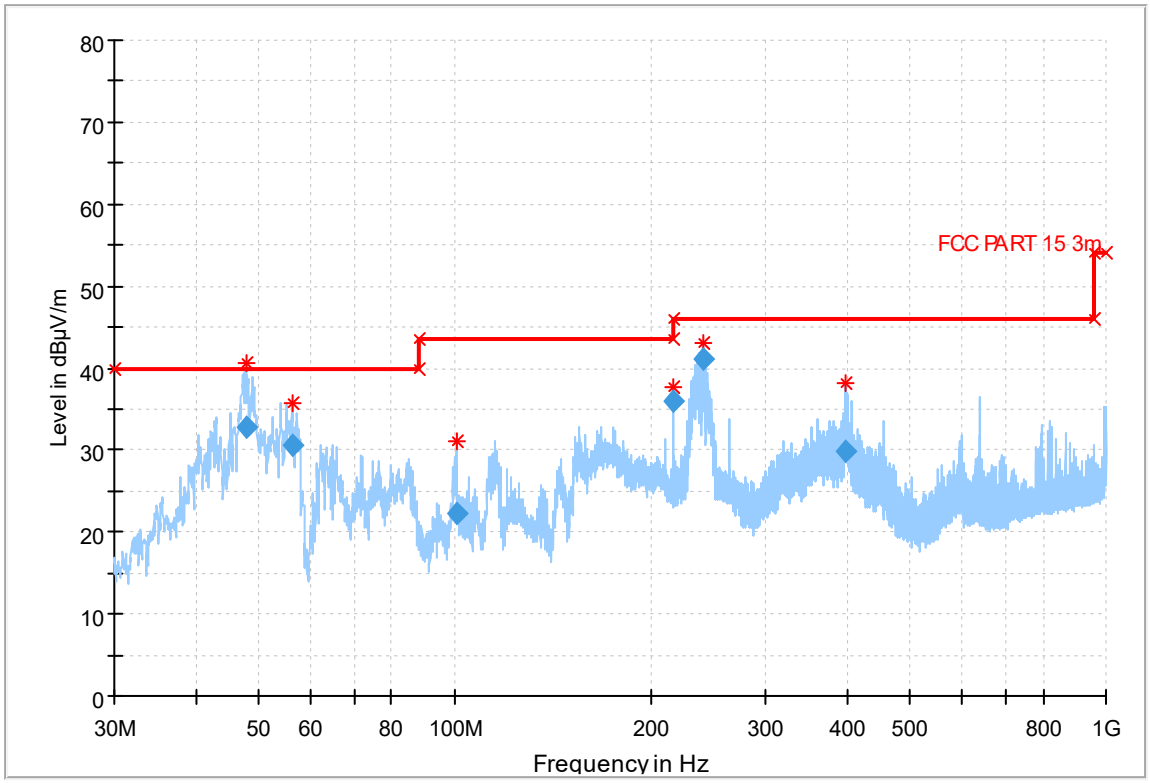


Fig.141

Radiated emission: 11n Ch6, 30MHz-1GHz

Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
47.831000	32.70	40.00	7.30	1000.0	120.000	116.0	V	138.0
56.287000	30.70	40.00	9.30	1000.0	120.000	106.0	V	172.0
100.422000	22.15	43.50	21.35	1000.0	120.000	100.0	V	233.0
215.997500	35.89	43.50	7.61	1000.0	120.000	106.0	V	117.0
239.996500	41.13	46.00	6.87	1000.0	120.000	136.0	H	251.0
398.500500	29.91	46.00	16.09	1000.0	120.000	113.0	V	184.0

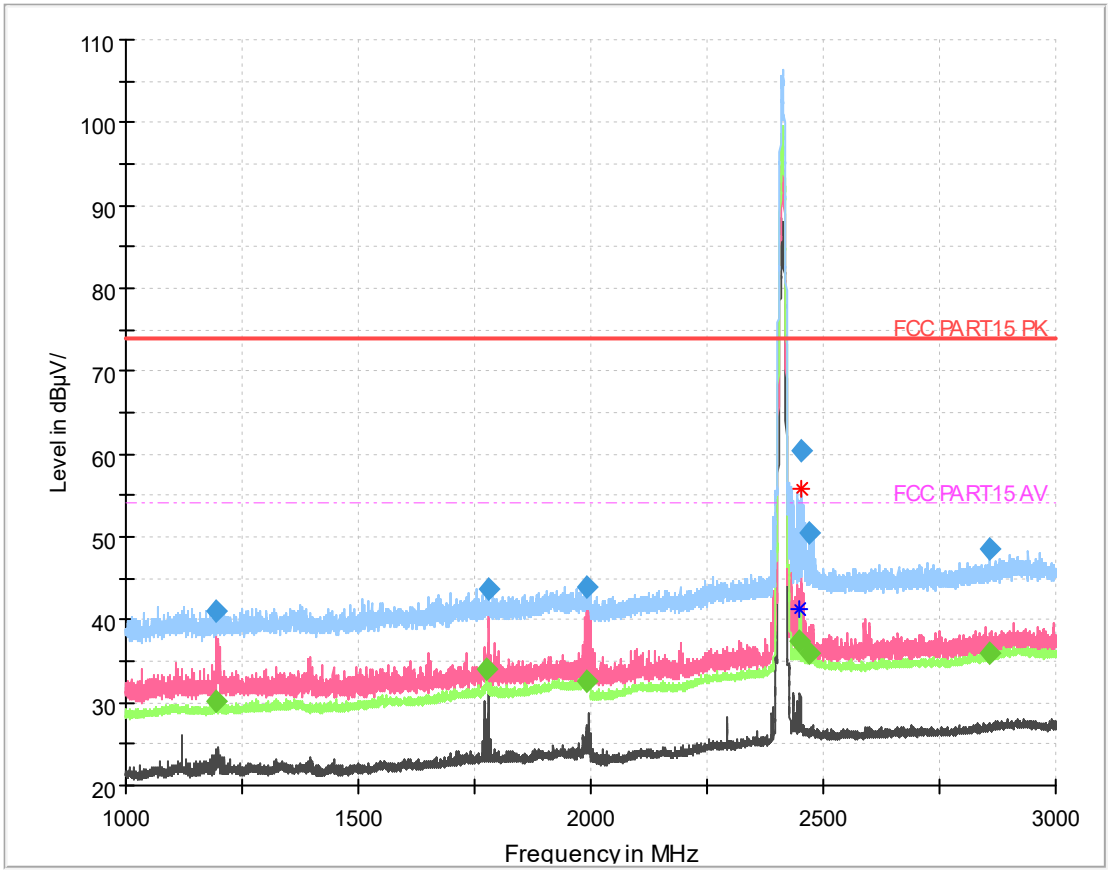


Fig.142 Radiated emission: 11b Ch1, 1GHz-3GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
2450.400000	---	37.44	54.00	16.56	50.0	1000.000	150.0	H	107.0
2450.800000	60.35	---	74.00	13.65	50.0	1000.000	150.0	H	101.0
1194.800000	41.05	---	74.00	32.95	50.0	1000.000	150.0	H	82.0
1194.800000	---	30.09	54.00	13.91	50.0	1000.000	150.0	H	82.0
1780.000000	43.73	---	74.00	30.27	50.0	1000.000	150.0	H	182.0
1776.200000	---	34.15	54.00	19.85	50.0	1000.000	150.0	H	182.0
1991.800000	43.97	---	74.00	30.03	50.0	1000.000	150.0	H	104.0
1991.800000	---	32.69	54.00	21.31	50.0	1000.000	150.0	H	104.0
2857.600000	48.46	---	74.00	25.54	50.0	1000.000	150.0	H	186.0
2857.800000	---	35.98	54.00	18.02	50.0	1000.000	150.0	H	186.0
2471.400000	50.46	---	74.00	23.54	50.0	1000.000	150.0	H	203.0
2471.600000	---	36.01	54.00	17.99	50.0	1000.000	150.0	H	203.0

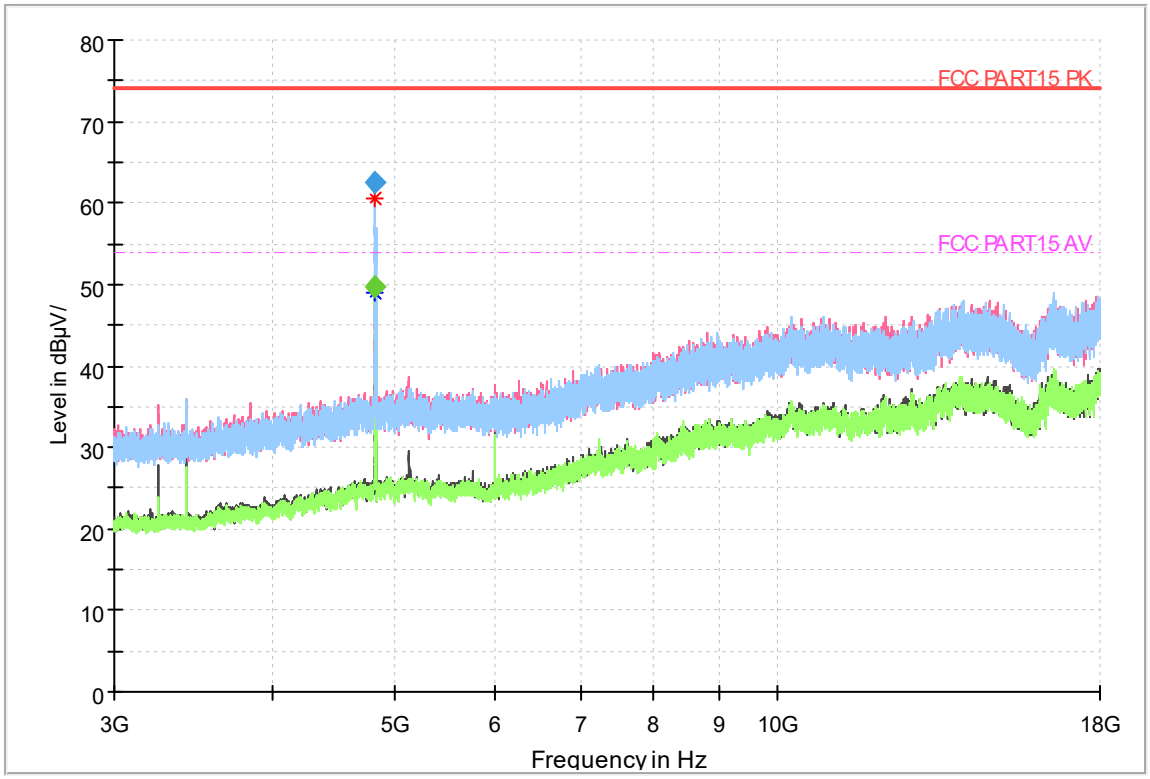


Fig.143 Radiated emission: 11b Ch1, 3GHz-18GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
4824.000000	62.51	---	74.00	11.49	50.0	1000.000	150.0	H	180.0
4825.200000	---	49.67	54.00	4.33	50.0	1000.000	150.0	H	180.0

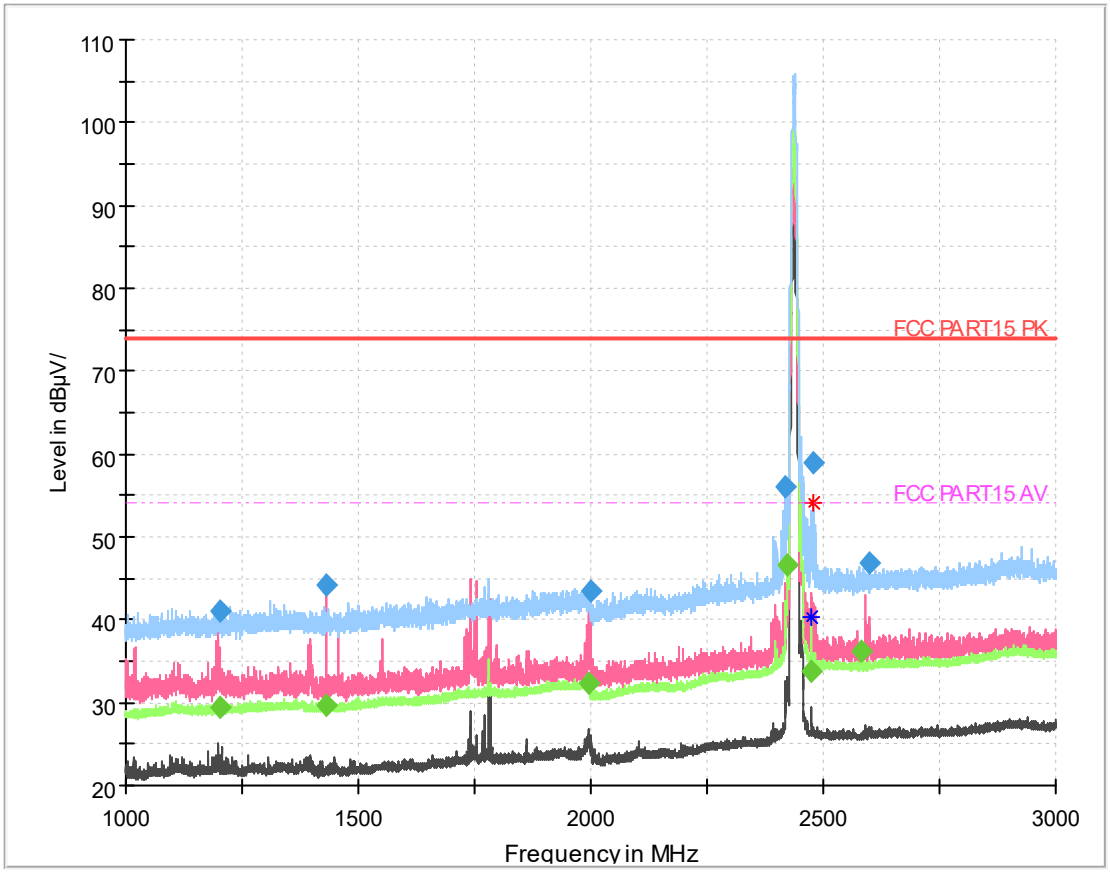


Fig.144 Radiated emission:11b Ch6,1GHz-3GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
2475.400000	---	33.78	54.00	20.22	50.0	1000.000	150.0	H	130.0
2476.400000	59.07	---	74.00	34.93	50.0	1000.000	150.0	H	98.0
2419.400000	55.98	---	74.00	28.02	50.0	1000.000	150.0	H	251.0
2422.800000	---	46.66	54.00	7.34	50.0	1000.000	150.0	H	213.0
1203.200000	41.13	---	74.00	32.87	50.0	1000.000	150.0	H	75.0
1201.800000	---	29.34	54.00	24.66	50.0	1000.000	150.0	H	81.0
1430.600000	44.26	---	74.00	29.74	50.0	1000.000	150.0	H	143.0
1429.400000	---	29.59	54.00	24.41	50.0	1000.000	150.0	H	196.0
1999.600000	43.56	---	74.00	30.44	50.0	1000.000	150.0	H	211.0
1995.000000	---	32.32	54.00	21.68	50.0	1000.000	150.0	H	237.0
2600.000000	46.81	---	74.00	27.19	50.0	1000.000	150.0	H	24.0
2582.800000	---	36.24	54.00	17.76	50.0	1000.000	150.0	H	69.0

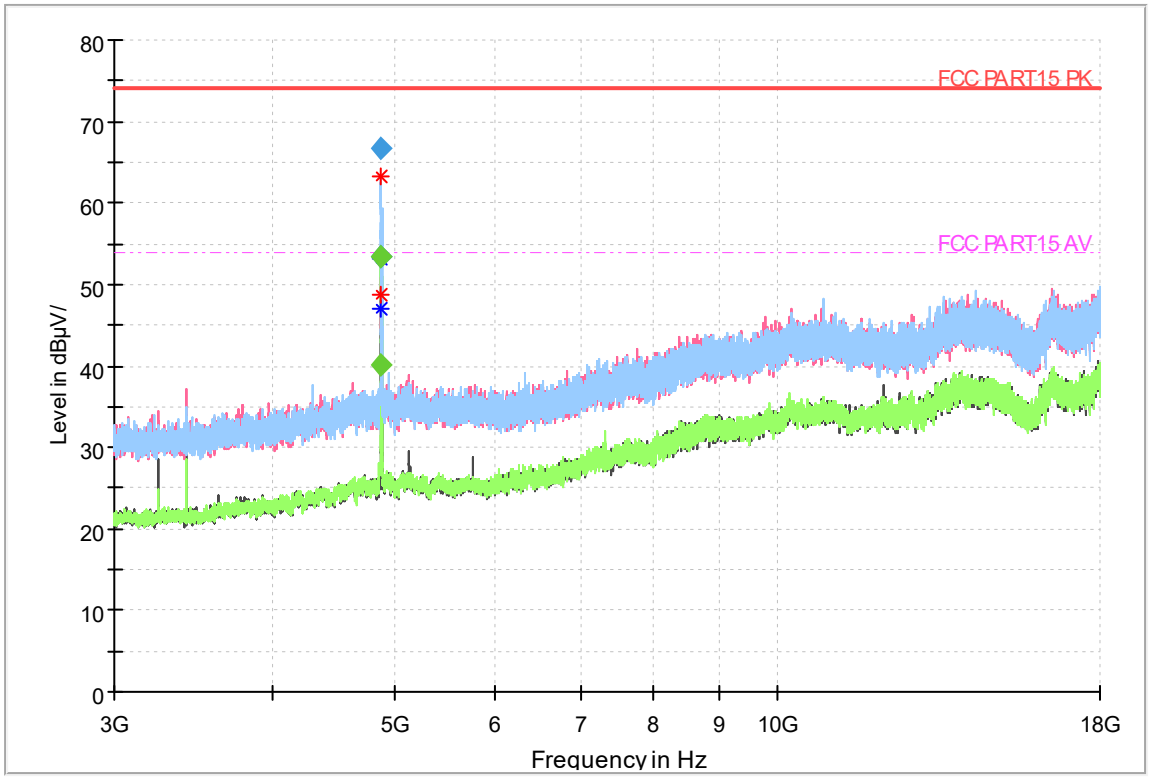


Fig.145 Radiated emission: 11b Ch6, 3GHz-18GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
4873.200000	53.50	---	74.00	20.50	50.0	1000.000	150.0	V	90.0
4873.800000	---	40.12	54.00	13.88	50.0	1000.000	150.0	V	270.0
4874.100000	66.78	---	74.00	7.22	50.0	1000.000	150.0	H	90.0
4875.300000	---	53.00	54.00	1.00	50.0	1000.000	150.0	H	90.0

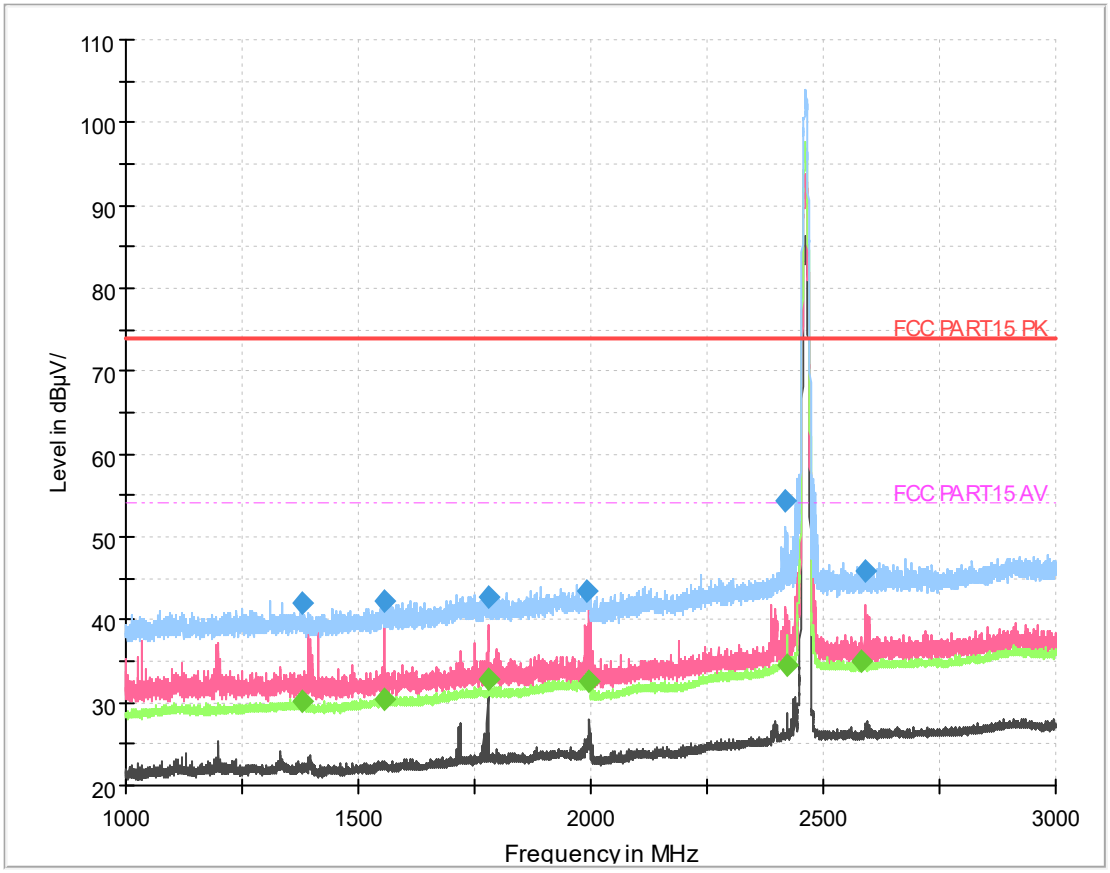


Fig.146 Radiated emission: 11b Ch11, 1GHz-3GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
2418.000000	54.42	---	74.00	19.58	50.0	1000.000	150.0	H	242.0
2423.800000	---	34.41	54.00	19.59	50.0	1000.000	150.0	H	96.0
1556.800000	42.22	---	74.00	31.78	50.0	1000.000	150.0	H	152.0
1555.000000	---	30.43	54.00	23.57	50.0	1000.000	150.0	H	36.0
1782.200000	42.82	---	74.00	31.18	50.0	1000.000	150.0	H	108.0
1778.400000	---	32.89	54.00	21.11	50.0	1000.000	150.0	H	106.0
1990.800000	43.47	---	74.00	32.50	50.0	1000.000	150.0	H	123.0
1997.800000	---	32.50	54.00	21.50	50.0	1000.000	150.0	H	209.0
1380.800000	42.02	---	74.00	31.98	50.0	1000.000	150.0	H	85.0
1379.800000	---	30.11	54.00	23.89	50.0	1000.000	150.0	H	21.0
2589.400000	45.94	---	74.00	28.06	50.0	1000.000	150.0	H	120.0
2581.400000	---	35.09	54.00	18.91	50.0	1000.000	150.0	H	243.0

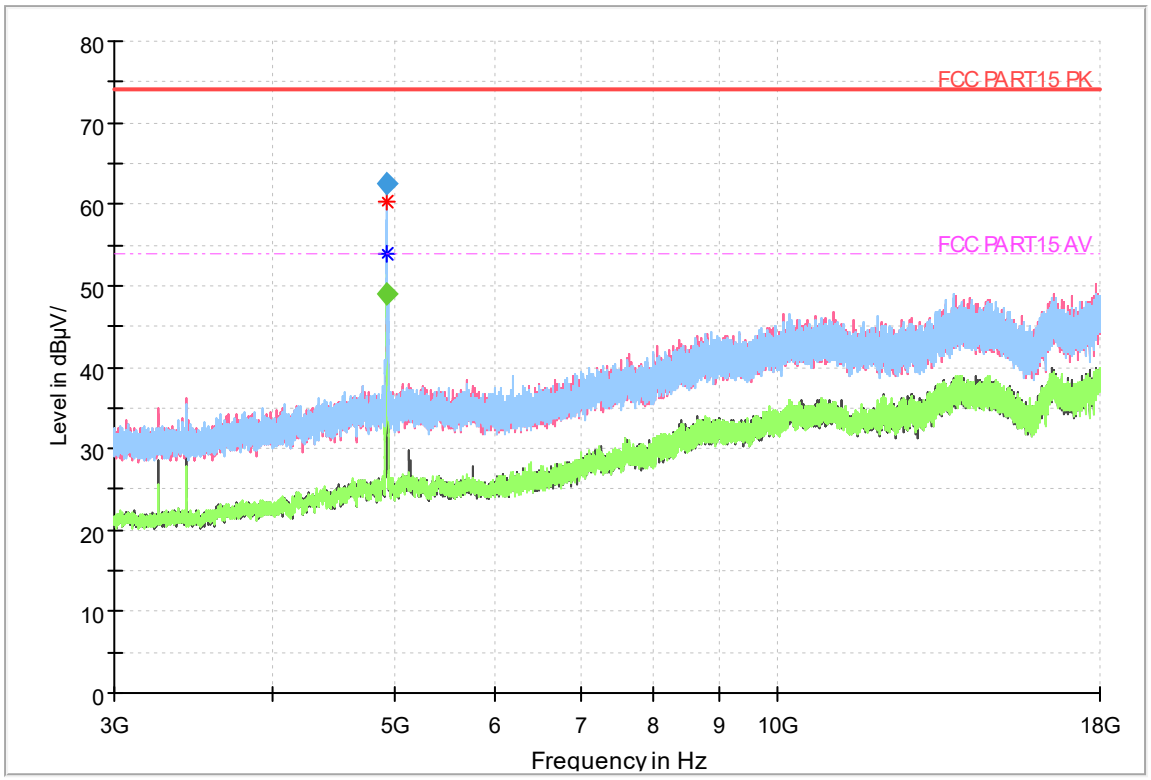


Fig.147 Radiated emission: 11b Ch11, 3GHz-18GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
4924.200000	62.58	---	74.00	11.42	50.0	1000.000	150.0	H	90.0
4924.500000	---	48.93	54.00	5.07	50.0	1000.000	150.0	H	0.0

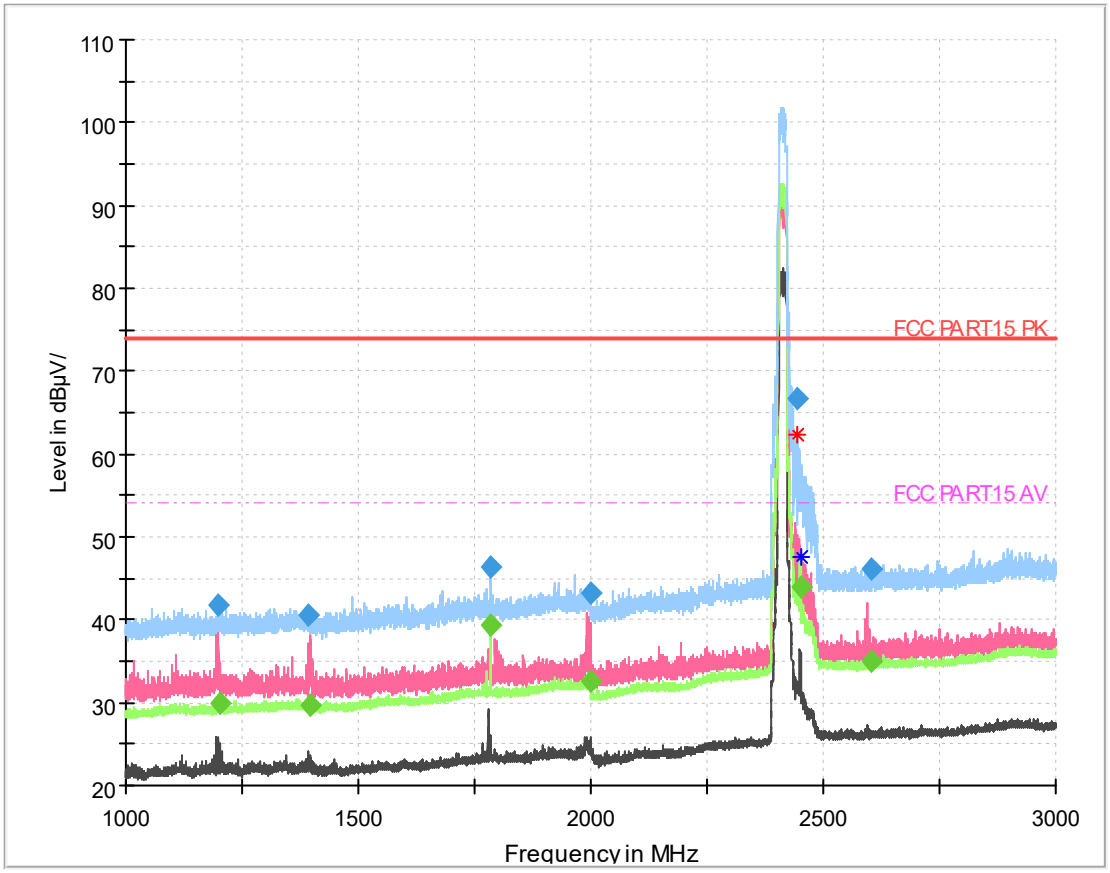


Fig.148 Radiated emission: 11g Ch1, 1GHz-3GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
2443.000000	66.80	---	74.00	7.20	50.0	1000.000	150.0	H	99.0
2450.600000	---	44.07	54.00	9.93	50.0	1000.000	150.0	H	99.0
1197.400000	41.77	---	74.00	32.23	50.0	1000.000	150.0	H	234.0
1203.200000	---	30.02	54.00	23.98	50.0	1000.000	150.0	H	211.0
1394.200000	40.65	---	74.00	33.35	50.0	1000.000	150.0	H	24.0
1398.400000	---	29.76	54.00	24.24	50.0	1000.000	150.0	H	73.0
1783.600000	46.48	---	74.00	27.52	50.0	1000.000	150.0	H	146.0
1783.400000	---	39.34	54.00	14.66	50.0	1000.000	150.0	H	146.0
1999.800000	43.23	---	74.00	30.77	50.0	1000.000	150.0	H	145.0
1999.000000	---	32.48	54.00	11.52	50.0	1000.000	150.0	H	183.0
2602.600000	46.11	---	74.00	27.89	50.0	1000.000	150.0	H	46.0
2601.600000	---	34.98	54.00	18.02	50.0	1000.000	150.0	H	77.0

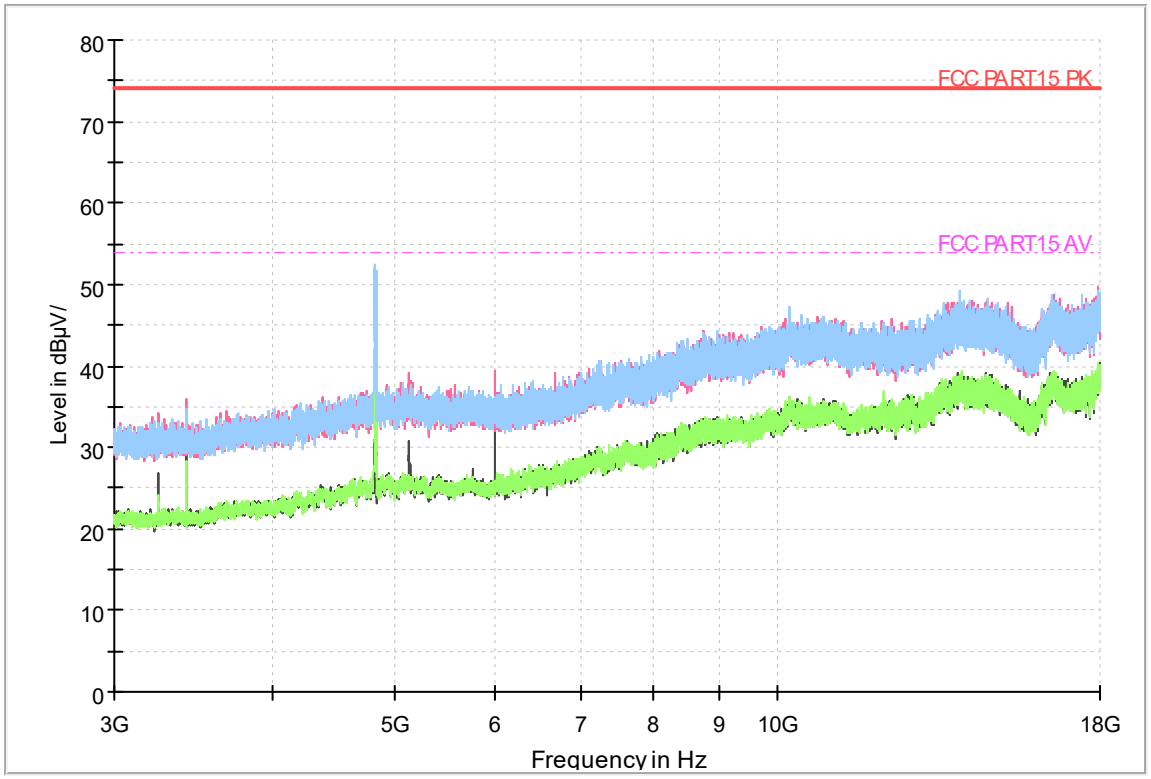


Fig.149 Radiated emission: 11g Ch1, 3GHz-18GHz

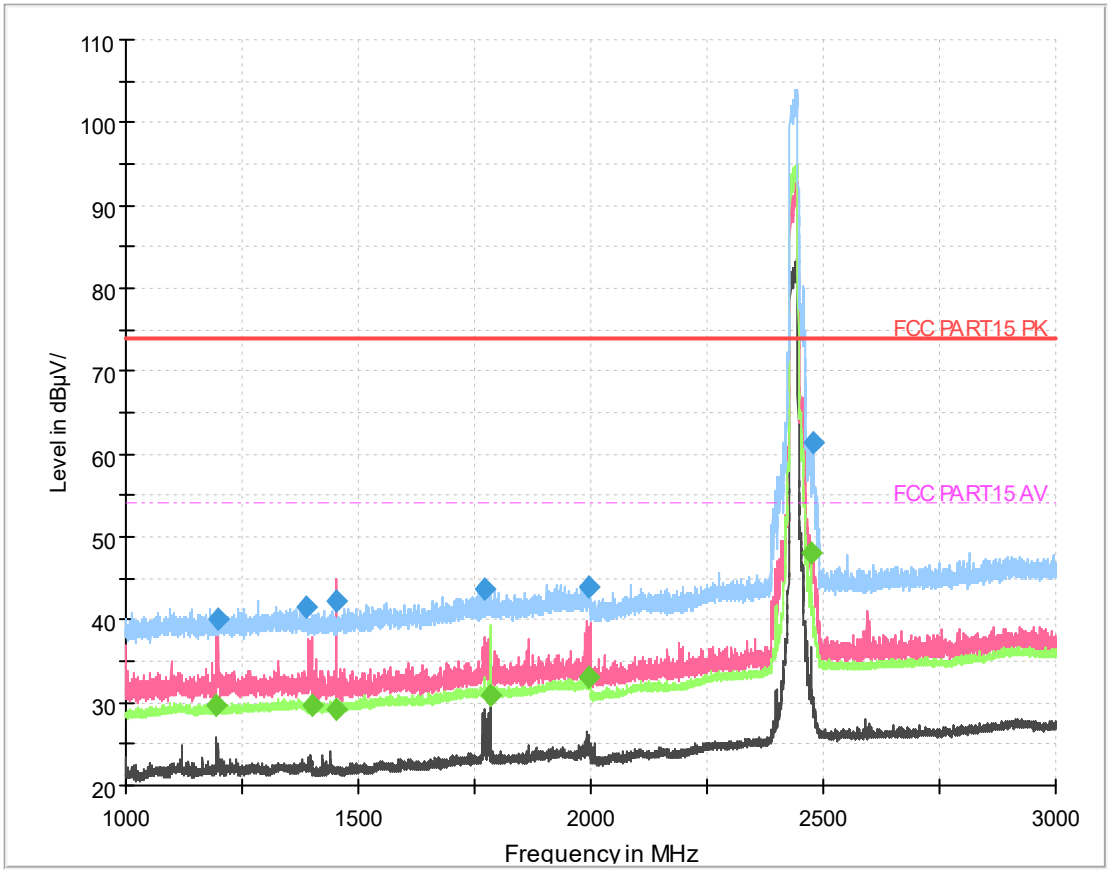


Fig.150 Radiated emission: 11g Ch6, 1GHz-3GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
1450.800000	42.28	---	74.00	31.72	50.0	1000.000	150.0	V	75.0
1784.000000	---	30.98	54.00	23.02	50.0	1000.000	150.0	H	270.0
1196.400000	40.05	---	74.00	33.95	50.0	1000.000	150.0	H	43.0
1195.000000	---	29.61	54.00	24.39	50.0	1000.000	150.0	H	83.0
1450.800000	---	29.23	54.00	24.77	50.0	1000.000	150.0	H	88.0
1387.800000	41.60	---	74.00	32.40	50.0	1000.000	150.0	H	179.0
1401.600000	---	29.79	54.00	24.21	50.0	1000.000	150.0	H	251.0
1772.600000	43.66	---	74.00	30.34	50.0	1000.000	150.0	H	189.0
1995.000000	44.03	---	74.00	29.97	50.0	1000.000	150.0	H	78.0
1995.600000	---	32.97	54.00	21.03	50.0	1000.000	150.0	H	78.0
2476.400000	61.34	---	74.00	12.66	50.0	1000.000	150.0	H	125.0
2475.400000	---	48.00	54.00	6.00	50.0	1000.000	150.0	H	125.0

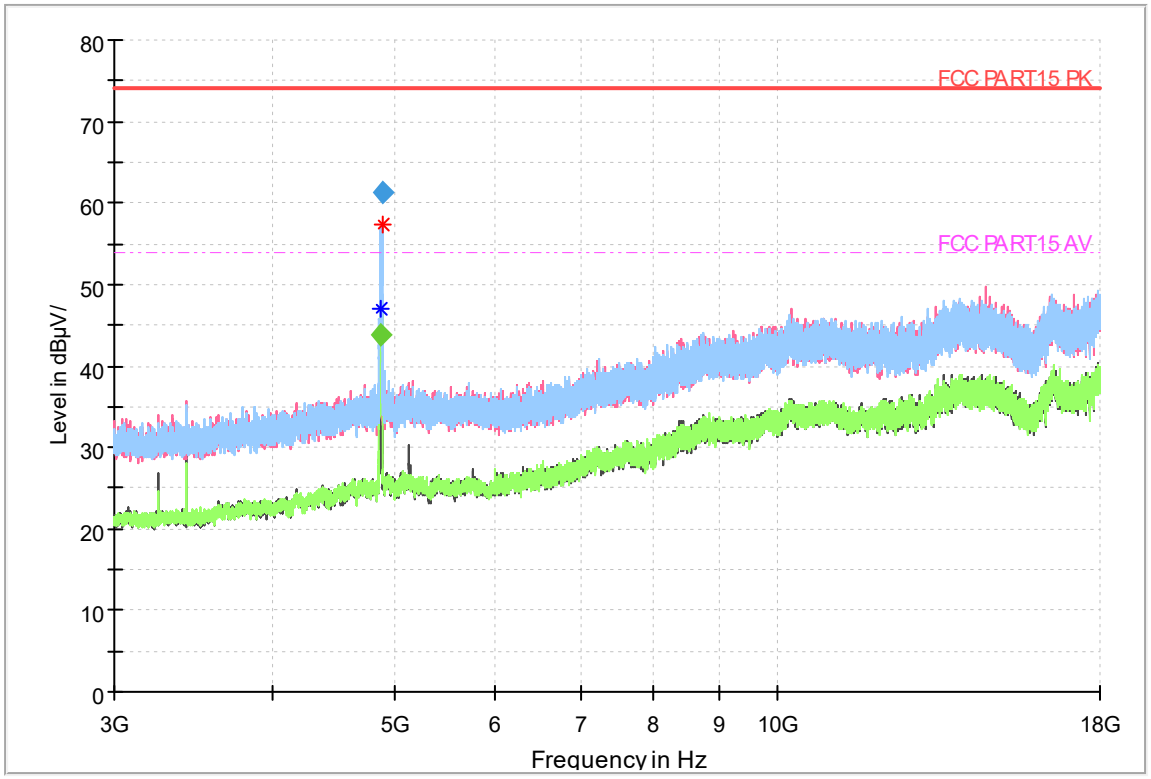


Fig.151 Radiated emission: 11g Ch6, 3GHz-18GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
4876.200000	---	43.79	54.00	10.21	50.0	1000.000	150.0	H	90.0
4879.800000	61.22	---	74.00	12.78	50.0	1000.000	150.0	H	90.0

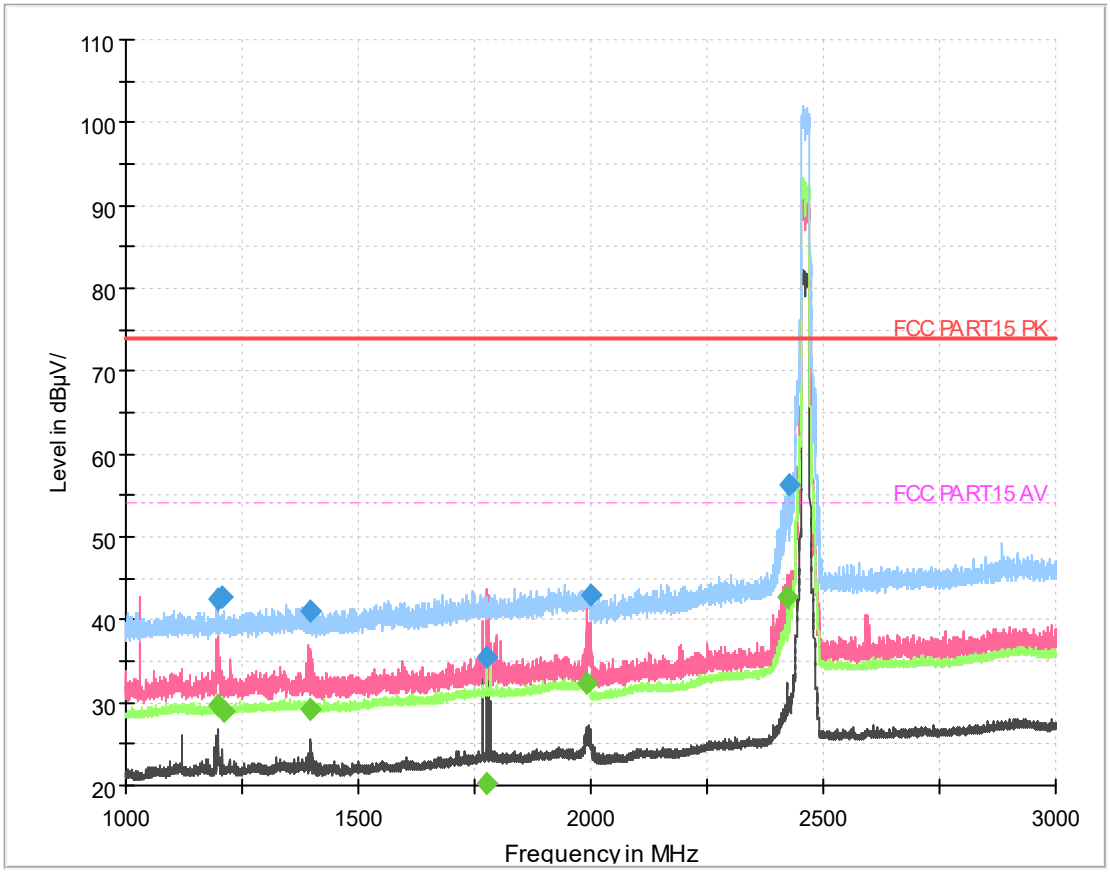


Fig.152 Radiated emission: 11g Ch11, 1GHz-3GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
1775.200000	35.50	---	74.00	38.50	50.0	1000.000	150.0	V	170.0
1775.600000	---	20.20	54.00	33.80	50.0	1000.000	150.0	V	170.0
1209.000000	42.81	---	74.00	31.19	50.0	1000.000	150.0	V	118.0
1209.400000	---	28.94	54.00	25.06	50.0	1000.000	150.0	V	118.0
1198.000000	42.58	---	74.00	31.42	50.0	1000.000	150.0	V	169.0
1197.200000	---	29.74	54.00	24.26	50.0	1000.000	150.0	V	169.0
1395.000000	41.05	---	74.00	32.95	50.0	1000.000	150.0	V	210.0
1397.600000	---	29.31	54.00	24.69	50.0	1000.000	150.0	V	210.0
1999.200000	43.03	---	74.00	30.97	50.0	1000.000	150.0	V	177.0
1991.000000	---	32.30	54.00	21.70	50.0	1000.000	150.0	V	177.0
2426.600000	56.22	---	74.00	17.78	50.0	1000.000	150.0	V	96.0
2423.600000	---	42.65	54.00	11.35	50.0	1000.000	150.0	V	96.0

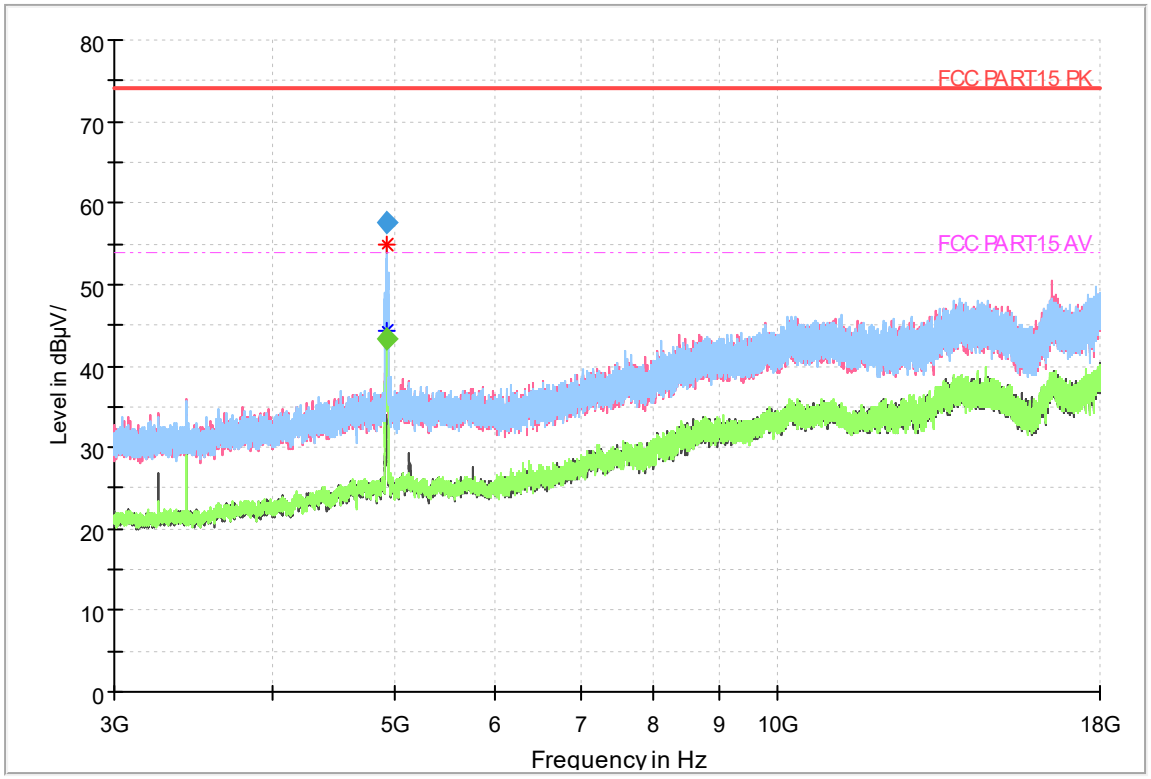


Fig.153 Radiated emission: 11g Ch11, 3GHz-18GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
4925.100000	---	43.33	54.00	10.67	50.0	1000.000	150.0	H	90.0
4925.100000	57.63	---	74.00	16.37	50.0	1000.000	150.0	H	90.0

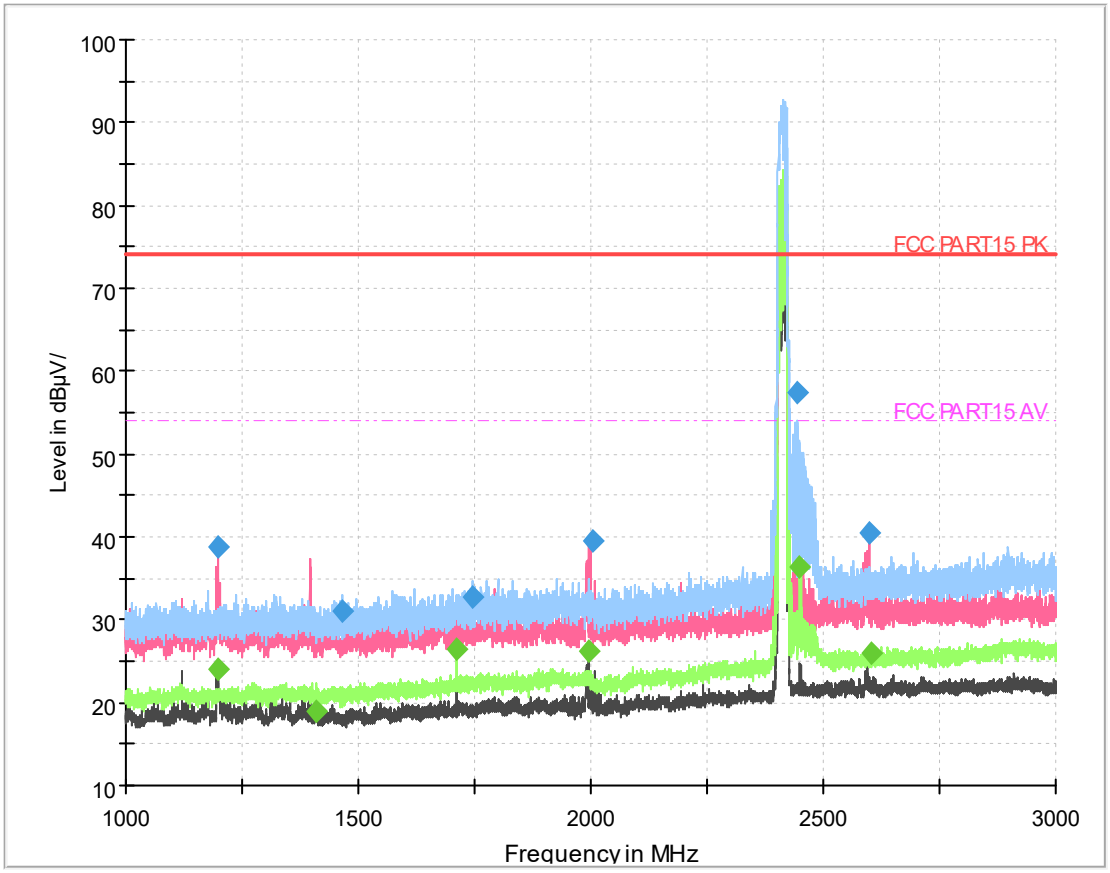


Fig.154 Radiated emission: 11n(20M) Ch1, 1GHz-3GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
1409.000000	---	19.07	54.00	34.93	50.0	1000.000	150.0	H	180.0
1464.000000	31.14	---	74.00	42.86	50.0	1000.000	150.0	H	180.0
1710.800000	---	26.45	54.00	27.55	50.0	1000.000	150.0	H	90.0
1746.600000	32.83	---	74.00	41.17	50.0	1000.000	150.0	H	180.0
2445.600000	57.47	---	74.00	16.53	50.0	1000.000	150.0	H	180.0
2450.400000	---	36.40	54.00	17.60	50.0	1000.000	150.0	H	180.0
1196.400000	38.79	---	74.00	35.21	50.0	1000.000	150.0	H	150.0
1196.400000	---	24.15	54.00	19.85	50.0	1000.000	150.0	H	150.0
2002.200000	39.49	---	74.00	34.51	50.0	1000.000	150.0	H	215.0
1997.200000	---	26.18	54.00	17.82	50.0	1000.000	150.0	H	215.0
2600.600000	40.37	---	74.00	33.63	50.0	1000.000	150.0	H	135.0
2603.000000	---	25.99	54.00	18.01	50.0	1000.000	150.0	H	135.0

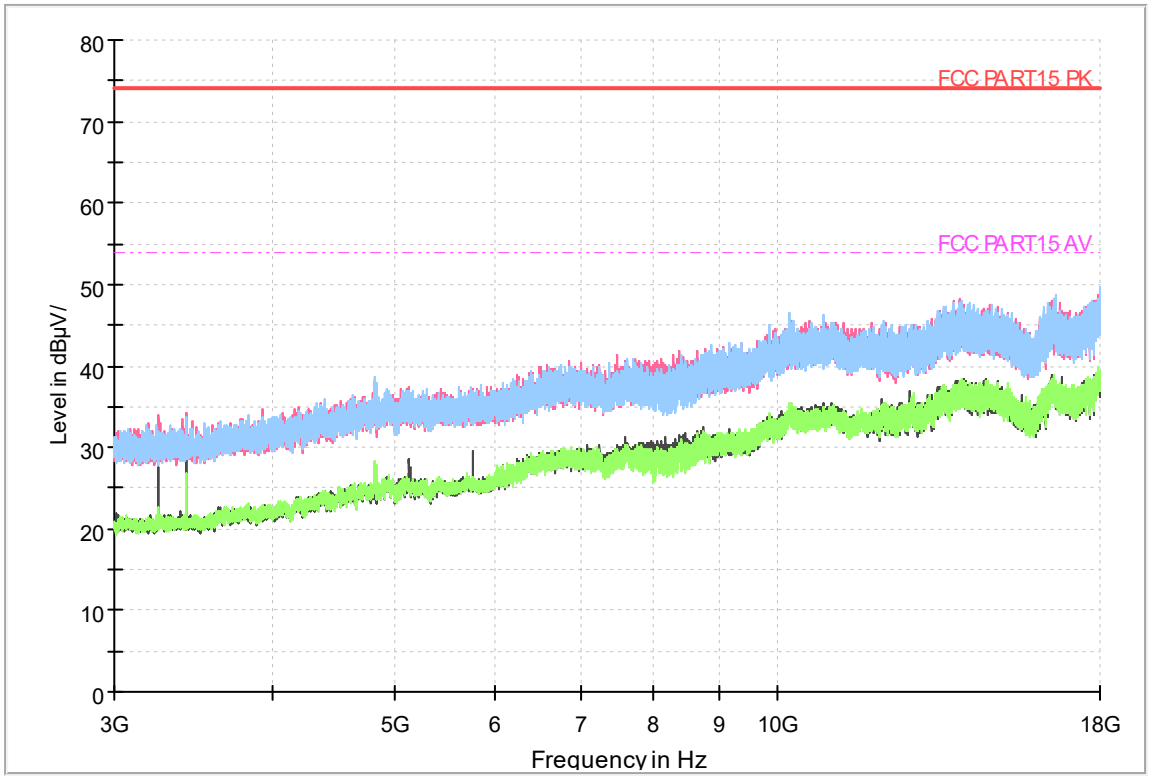


Fig.155 Radiated emission: 11n(20M) Ch1, 3GHz-18GHz

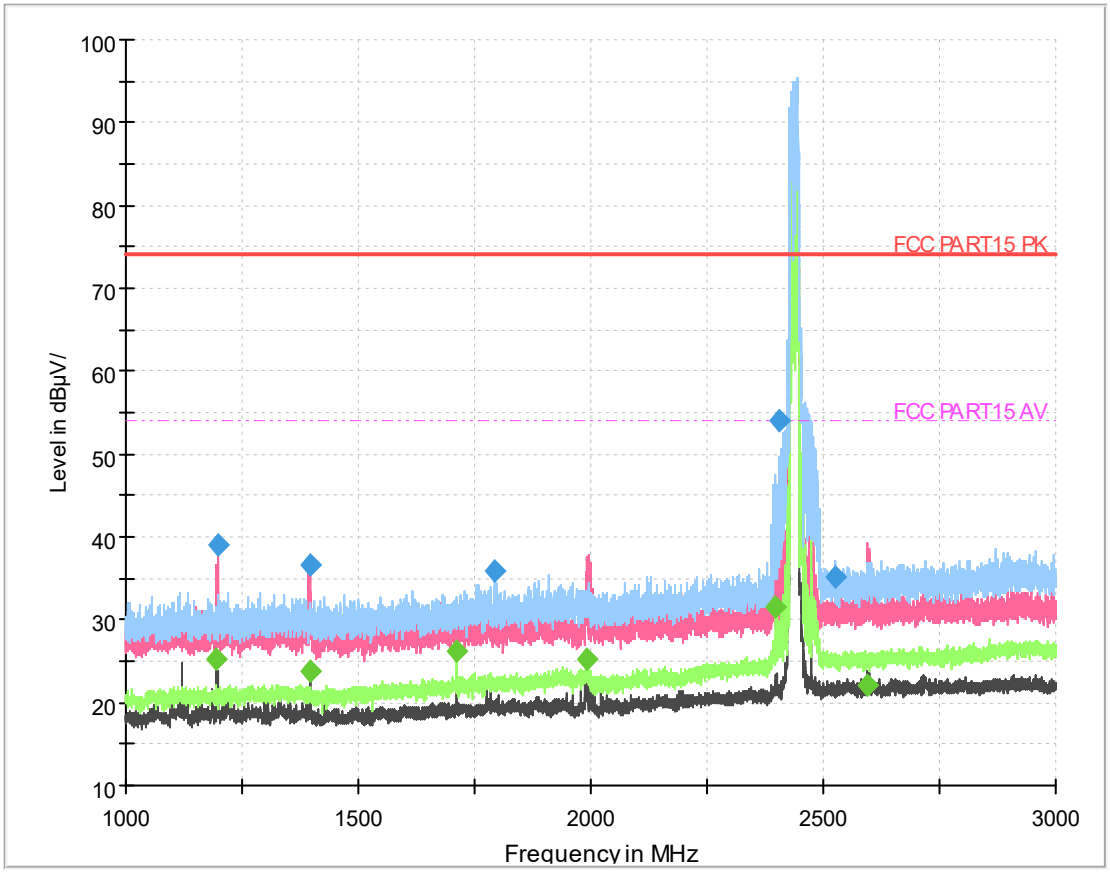


Fig.156 Radiated emission: 11n(20M) Ch6, 1GHz-3GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
1710.800000	---	26.33	54.00	27.67	50.0	1000.000	150.0	H	90.0
1794.200000	35.85	---	74.00	38.15	50.0	1000.000	150.0	H	0.0
2398.400000	---	31.57	54.00	22.43	50.0	1000.000	150.0	H	180.0
2405.000000	54.09	---	74.00	19.91	50.0	1000.000	150.0	H	180.0
2524.800000	35.21	---	74.00	38.79	50.0	1000.000	150.0	H	180.0
2595.600000	---	22.14	54.00	31.86	50.0	1000.000	150.0	H	180.0
1199.800000	38.94	---	74.00	35.06	50.0	1000.000	150.0	H	45.0
1195.200000	---	25.14	54.00	18.86	50.0	1000.000	150.0	H	45.0
1396.000000	36.59	---	74.00	37.41	50.0	1000.000	150.0	H	120.0
1398.200000	---	23.67	54.00	20.33	50.0	1000.000	150.0	H	120.0
1996.400000	37.77	---	74.00	36.23	50.0	1000.000	150.0	H	210.0
1992.000000	---	25.21	54.00	18.79	50.0	1000.000	150.0	H	210.0

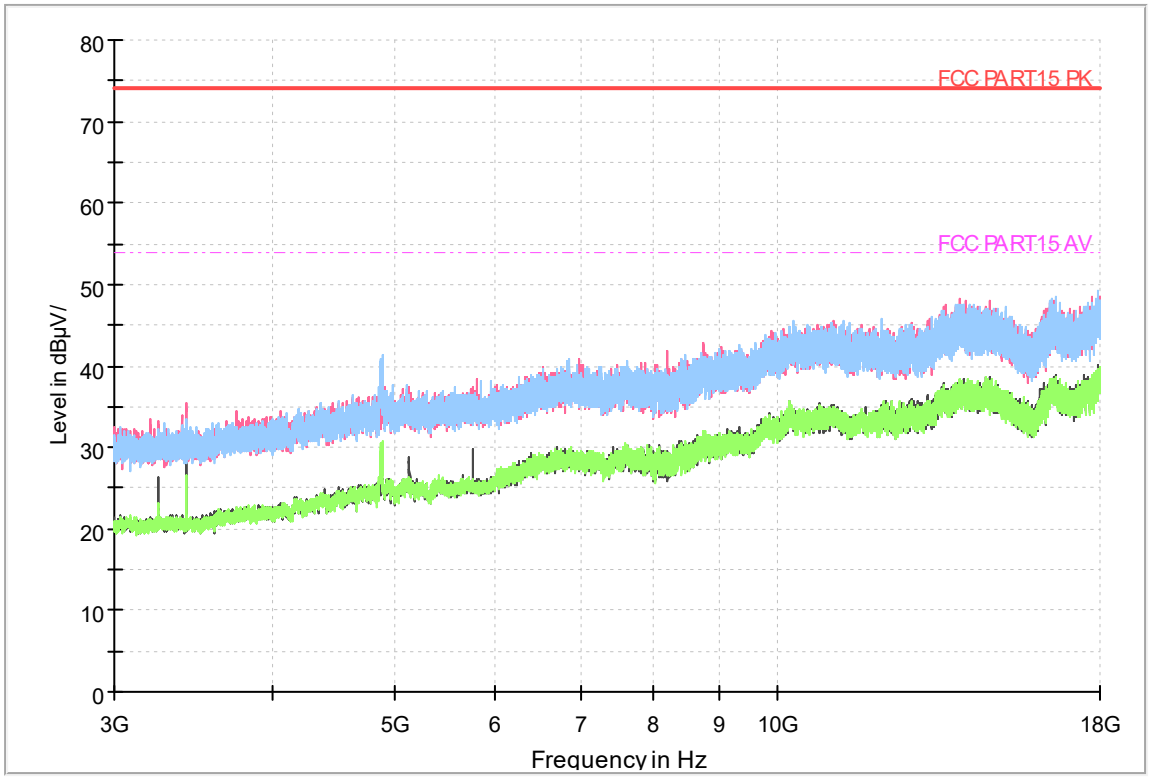


Fig.157 Radiated emission: 11n(20M) Ch6, 3GHz-18GHz

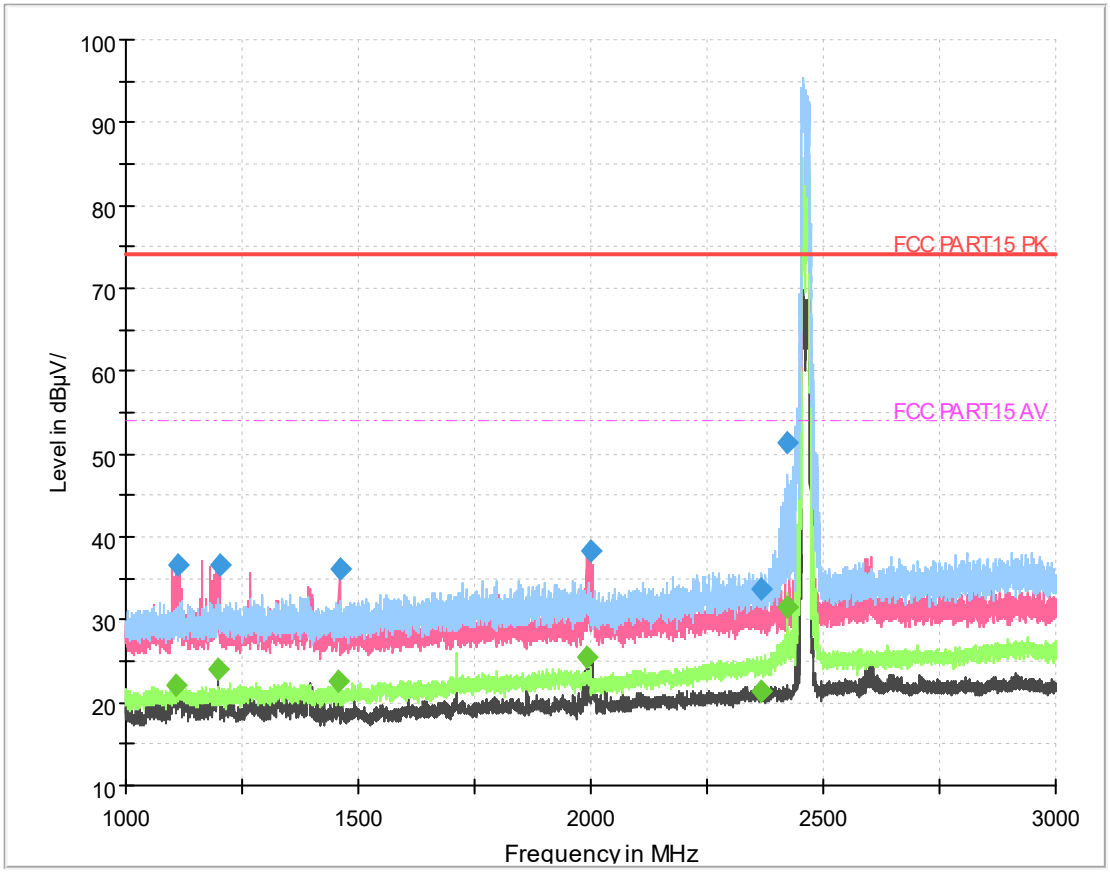


Fig.158 Radiated emission: 11n(20M) Ch11, 1GHz-3GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
2365.200000	---	21.40	54.00	32.60	50.0	1000.000	150.0	H	180.0
2367.600000	33.64	---	74.00	40.36	50.0	1000.000	150.0	H	180.0
2422.600000	51.39	---	74.00	22.61	50.0	1000.000	150.0	H	180.0
2423.600000	---	31.48	54.00	22.52	50.0	1000.000	150.0	H	180.0
1111.600000	36.59	---	74.00	37.41	50.0	1000.000	150.0	H	112.0
1201.200000	36.72	---	74.00	37.28	50.0	1000.000	150.0	H	145.0
1196.400000	---	23.92	54.00	30.08	50.0	1000.000	150.0	H	145.0
1107.200000	---	22.13	54.00	31.87	50.0	1000.000	150.0	H	112.0
1459.200000	36.18	---	74.00	37.82	50.0	1000.000	150.0	H	210.0
1458.800000	---	22.59	54.00	21.41	50.0	1000.000	150.0	H	210.0
2000.200000	38.19	---	74.00	35.81	50.0	1000.000	150.0	H	176.0
1992.800000	---	25.37	54.00	19.63	50.0	1000.000	150.0	H	176.0

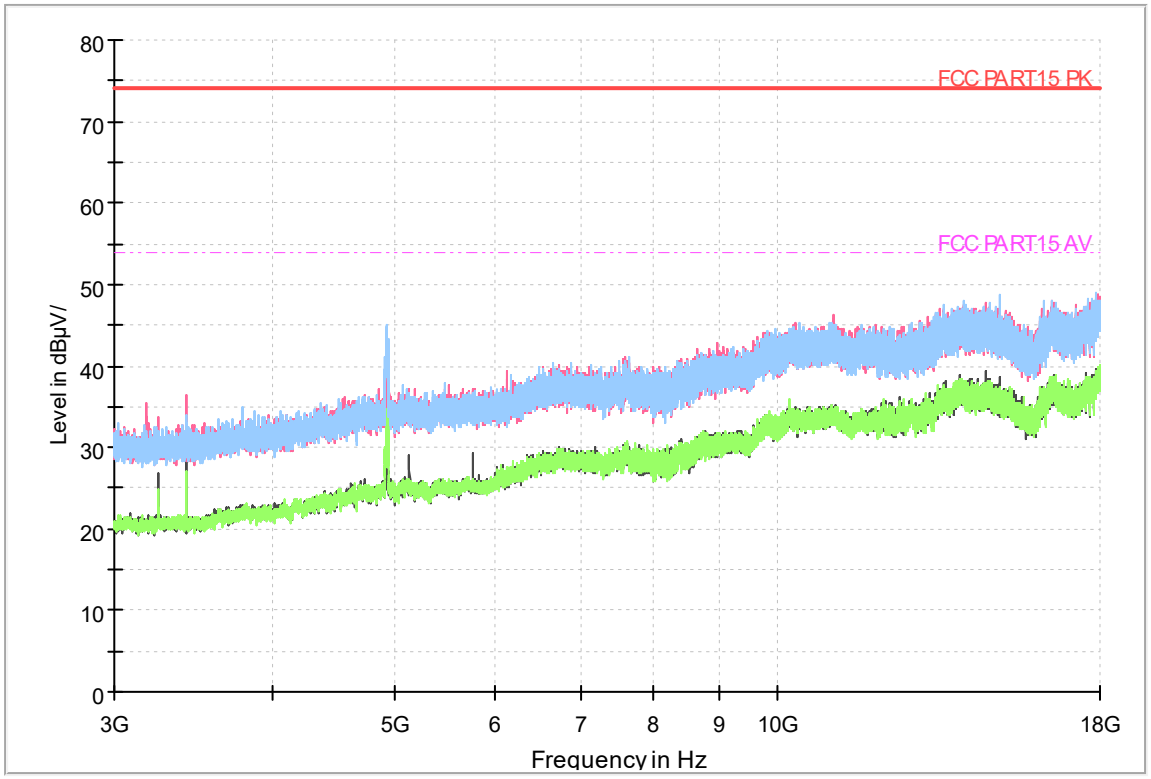


Fig.159 Radiated emission: 11n(20M) Ch11, 3GHz-18GHz

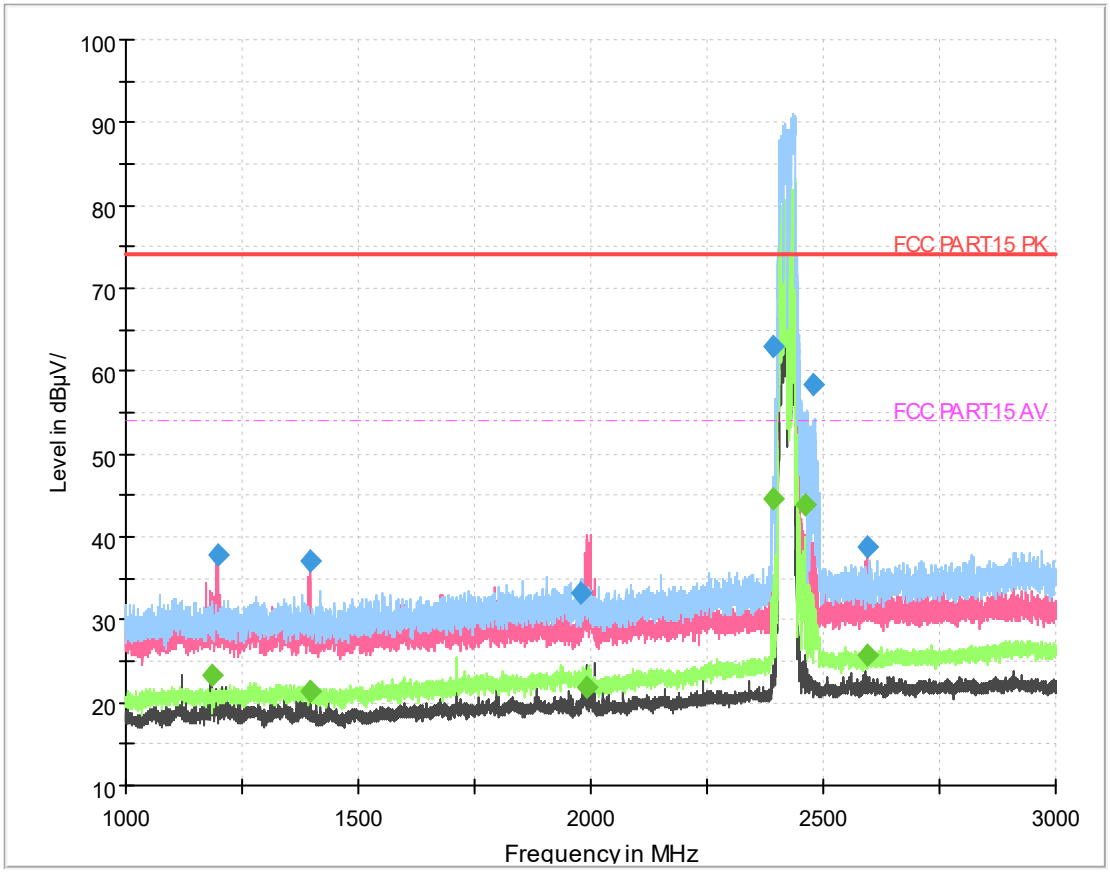


Fig.160 Radiated emission: 11n(40M) Ch3, 1GHz-3GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
1978.600000	33.12	---	74.00	40.88	50.0	1000.000	150.0	H	180.0
1992.800000	---	21.80	54.00	32.20	50.0	1000.000	150.0	V	0.0
2391.000000	62.98	---	74.00	11.02	50.0	1000.000	150.0	H	180.0
2393.600000	---	44.48	54.00	9.52	50.0	1000.000	150.0	H	180.0
2460.200000	---	43.77	54.00	10.23	50.0	1000.000	150.0	H	180.0
2478.400000	58.27	---	74.00	15.73	50.0	1000.000	150.0	H	180.0
1200.000000	37.85	---	74.00	36.15	50.0	1000.000	150.0	H	90.0
1183.400000	---	23.35	54.00	20.65	50.0	1000.000	150.0	H	90.0
1394.800000	37.21	---	74.00	36.79	50.0	1000.000	150.0	H	115.0
1398.400000	---	21.40	54.00	22.60	50.0	1000.000	150.0	H	115.0
2594.800000	38.91	---	74.00	35.09	50.0	1000.000	150.0	H	230.0
2596.400000	---	25.81	54.00	18.19	50.0	1000.000	150.0	H	230.0

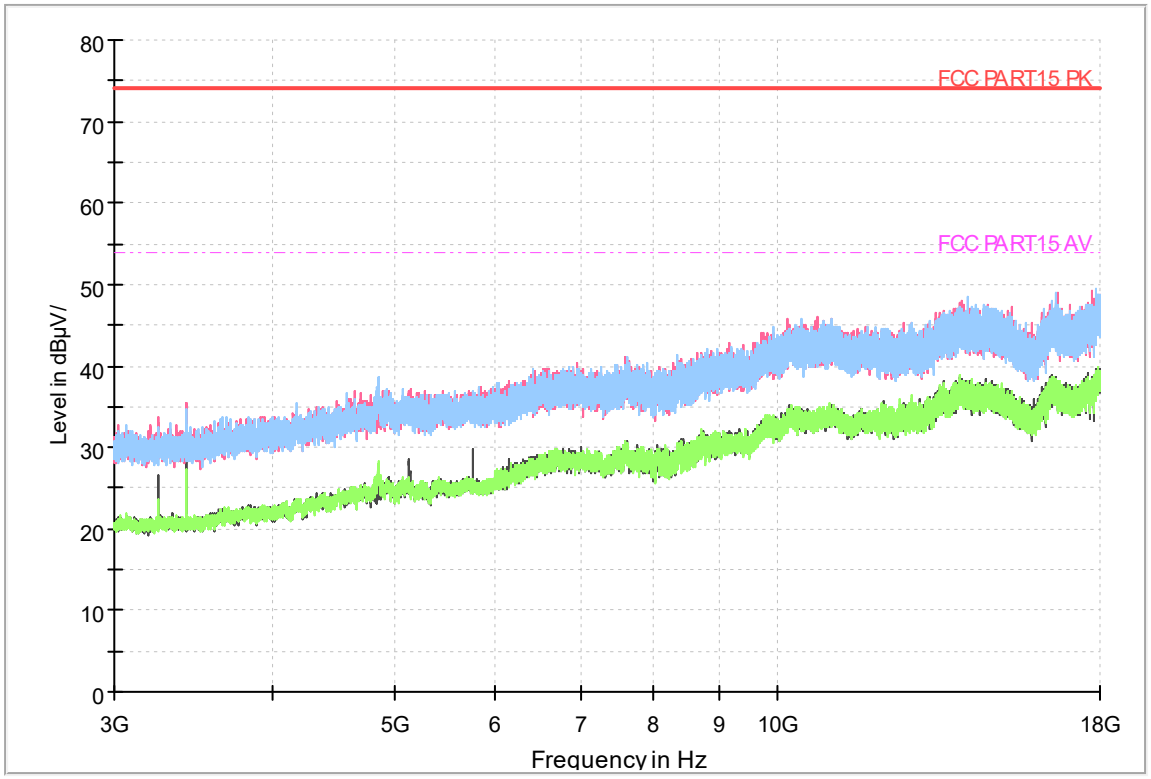


Fig.161 Radiated emission: 11n(40M) Ch3, 3GHz-18GHz

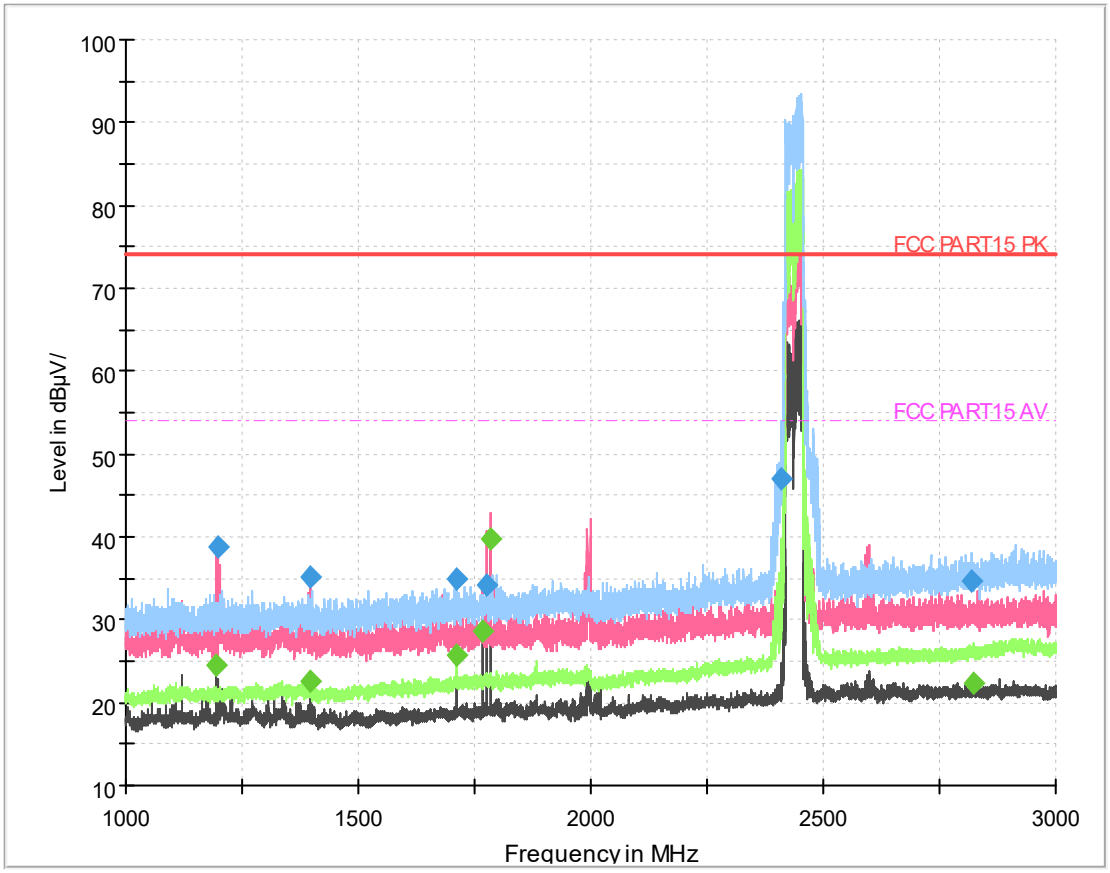


Fig.162 Radiated emission: 11n(40M) Ch6, 1GHz-3GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
1710.600000	---	25.64	54.00	28.36	50.0	1000.000	150.0	H	90.0
1710.800000	34.94	---	74.00	39.06	50.0	1000.000	150.0	H	90.0
2411.600000	47.10	---	74.00	26.90	50.0	1000.000	150.0	V	270.0
2817.800000	34.78	---	74.00	39.22	50.0	1000.000	150.0	H	180.0
2822.600000	---	22.29	54.00	31.71	50.0	1000.000	150.0	H	180.0
1197.600000	38.91	---	74.00	35.09	50.0	1000.000	150.0	H	150.0
1195.200000	---	24.58	54.00	19.42	50.0	1000.000	150.0	H	150.0
1395.000000	35.21	---	74.00	38.79	50.0	1000.000	150.0	H	64.0
1398.400000	---	22.54	54.00	21.46	50.0	1000.000	150.0	H	64.0
1783.600000	---	39.84	54.00	14.16	50.0	1000.000	150.0	H	147.0
1776.400000	34.26	---	74.00	39.74	50.0	1000.000	150.0	H	147.0
1766.200000	---	28.75	54.00	25.25	50.0	1000.000	150.0	H	120.0

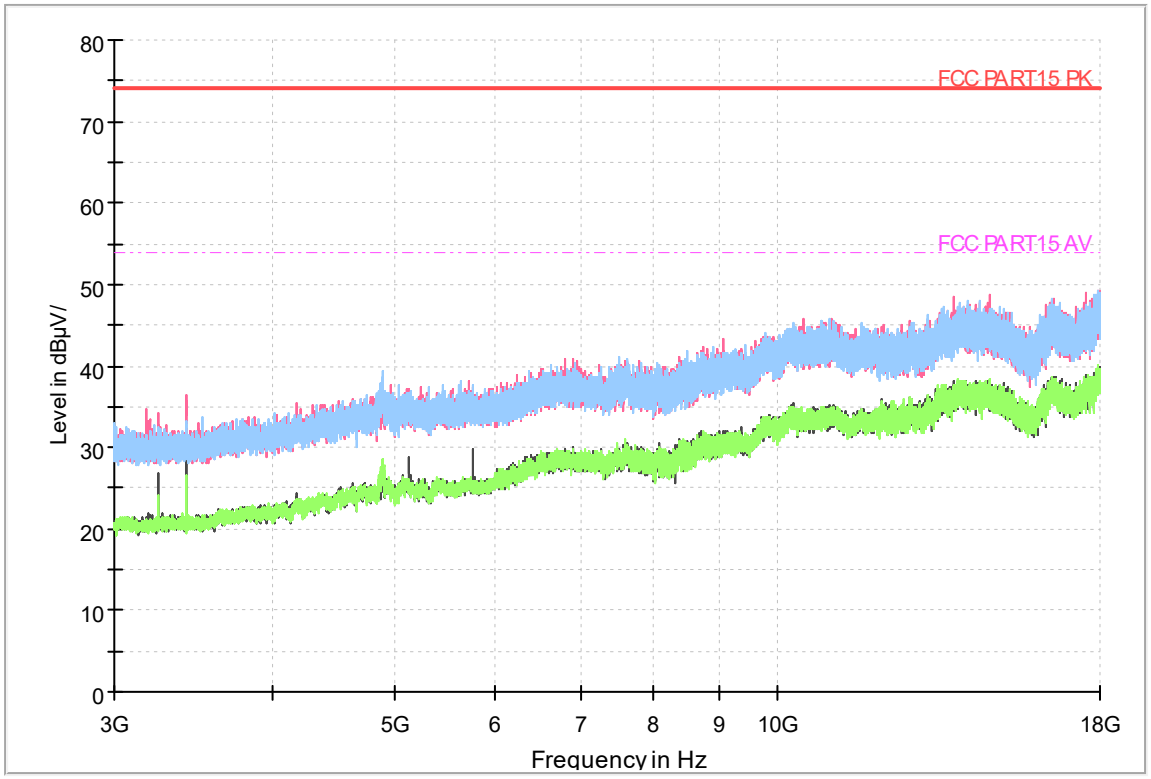


Fig.163 Radiated emission: 11n(40M) Ch6, 3GHz-18GHz

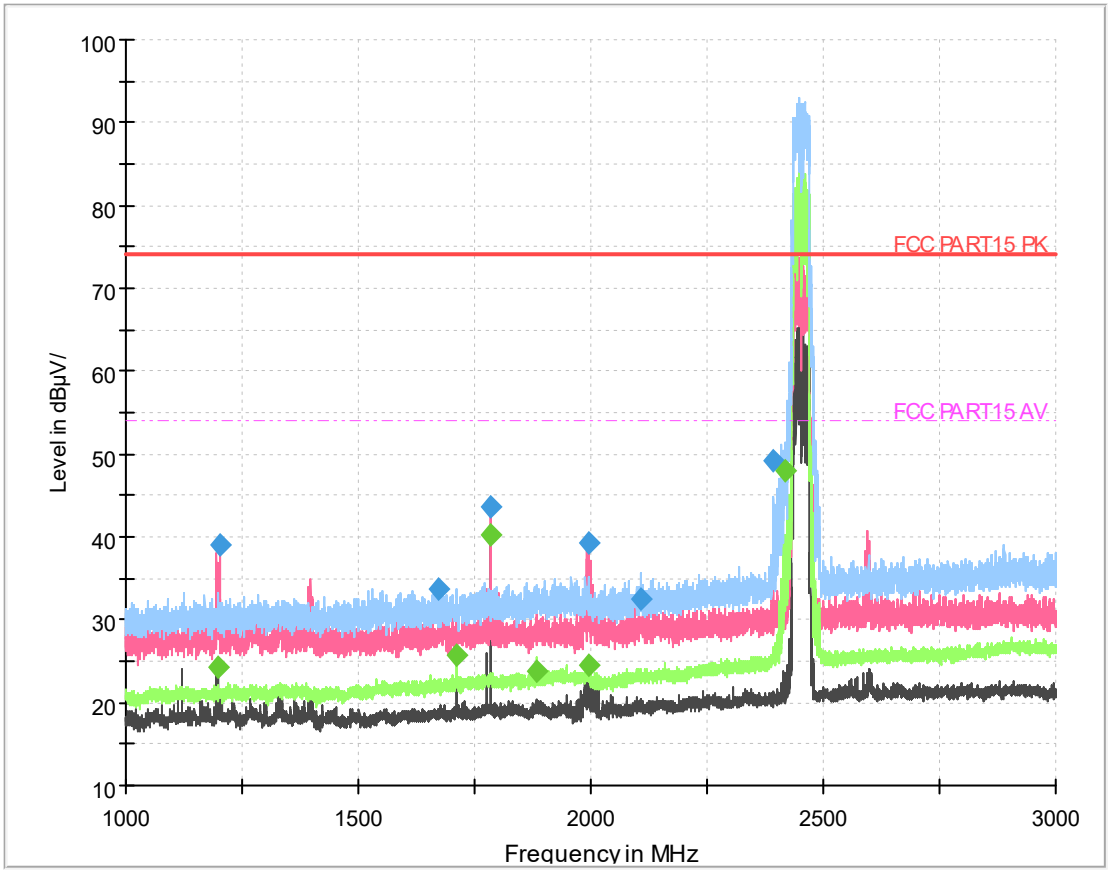


Fig.164 Radiated emission: 11n(40M) Ch9, 1GHz-3GHz

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Averge (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)
1673.800000	33.69	---	74.00	40.31	50.0	1000.000	150.0	H	90.0
1710.600000	---	25.63	54.00	28.37	50.0	1000.000	150.0	H	90.0
1882.000000	---	23.90	54.00	30.10	50.0	1000.000	150.0	H	90.0
2109.000000	32.55	---	74.00	41.45	50.0	1000.000	150.0	H	180.0
2392.800000	49.25	---	74.00	24.75	50.0	1000.000	150.0	H	180.0
2416.800000	---	48.07	54.00	5.93	50.0	1000.000	150.0	H	180.0
1201.200000	38.99	---	74.00	35.01	50.0	1000.000	150.0	H	155.0
1198.200000	---	24.25	54.00	19.75	50.0	1000.000	150.0	H	155.0
1783.800000	43.54	---	74.00	30.46	50.0	1000.000	150.0	H	175.0
1783.600000	---	40.18	54.00	13.82	50.0	1000.000	150.0	H	175.0
1993.800000	39.16	---	74.00	34.84	50.0	1000.000	150.0	H	103.0
1993.600000	---	24.47	54.00	29.53	50.0	1000.000	150.0	H	103.0

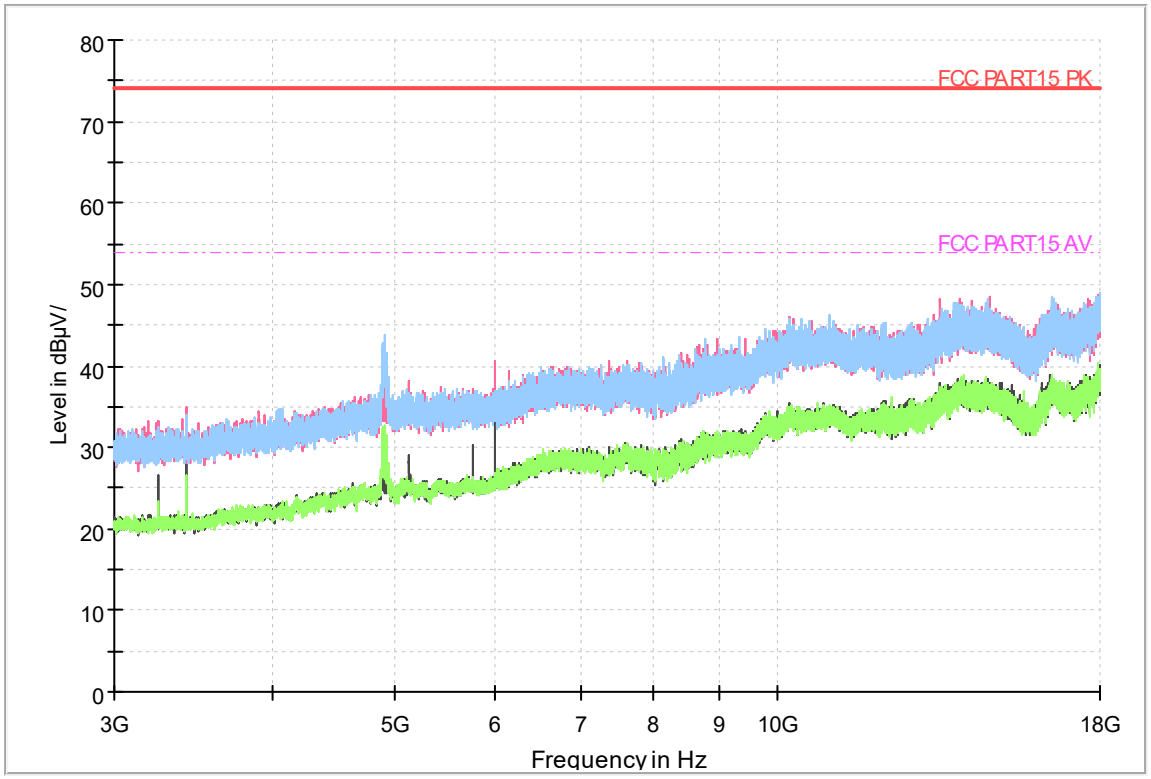


Fig.165 Radiated emission: 11n(40M) Ch9, 3GHz-18GHz

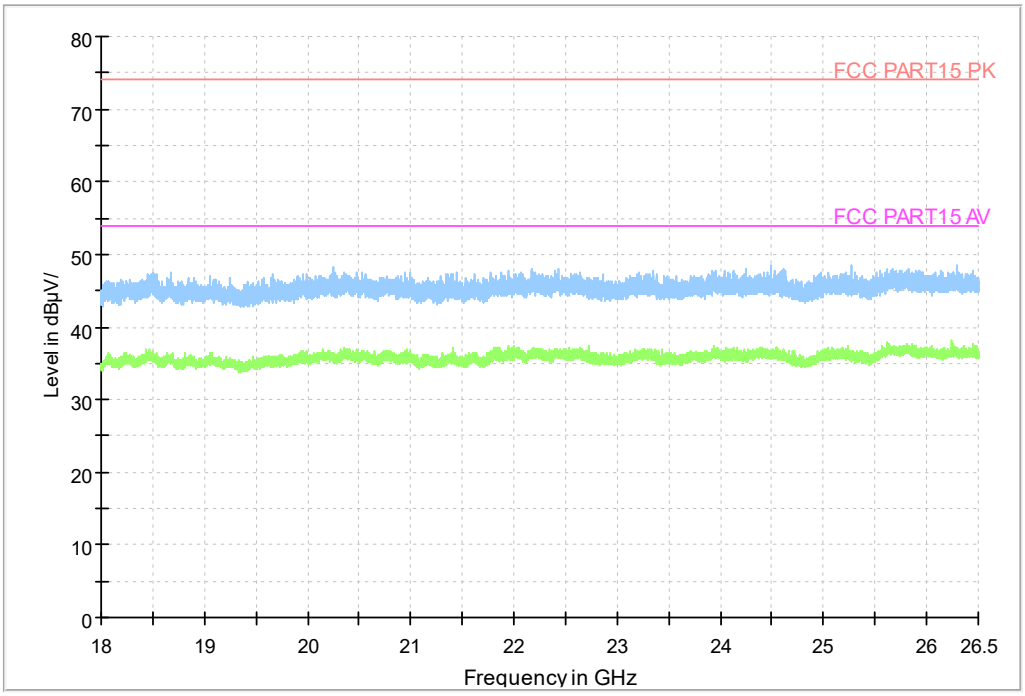


Fig.166 Radiated emission: 18 GHz - 26.5 GHz

Test photo

See the document" Wifi_BT_Test Setup Photos".

6.8. Power line Conducted Emissions

Specifications:	ANSI C63.10 voltage mains test
DUT Serial Number:	865171050693269
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

Limit

The EUT meets the requirement of having a peak to average ratio of less than 13dB.

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolt (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range are listed as follows:

Measurement Uncertainty:

Frequency Range	Uncertainty
150 kHz to 30 MHz	1.83

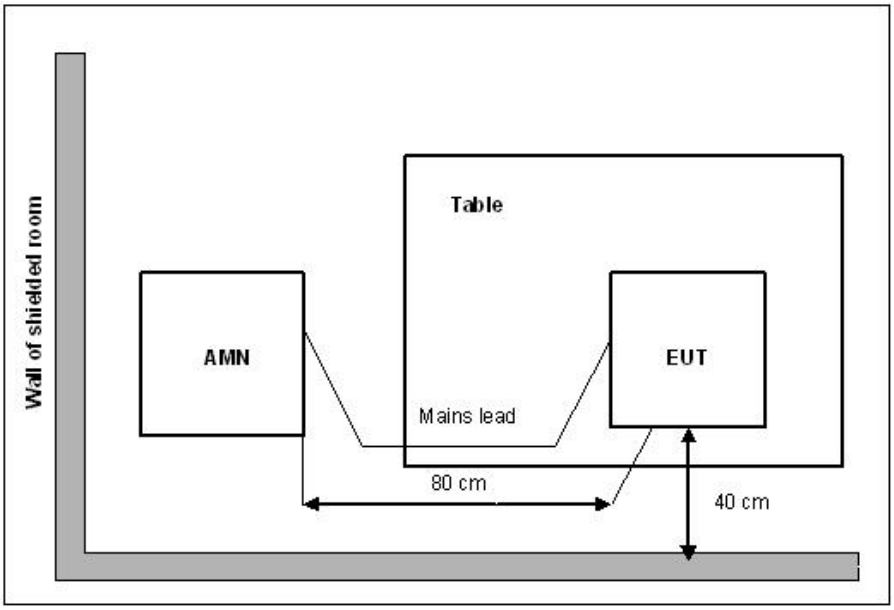
Limits of the conducted disturbance at the AC mains ports:

Frequency range	Limit(Quasi-peak)	Limit(Average)
0.15 MHz to 0.5 MHz	66 dBμV – 56 dBμV	56 dBμV – 46 dBμV
>0.5 MHz to 5MHz	56 dBμV	46 dBμV
>5 MHz to 30 MHz	60 dBμV	50 dBμV
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.		

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Setup

The EUT was placed in a shielding room. The WLAN TESTER was used to set the TX channel and power level. The ac adapter output is connected to Receiver through an AMN (Artificial Mains Network).



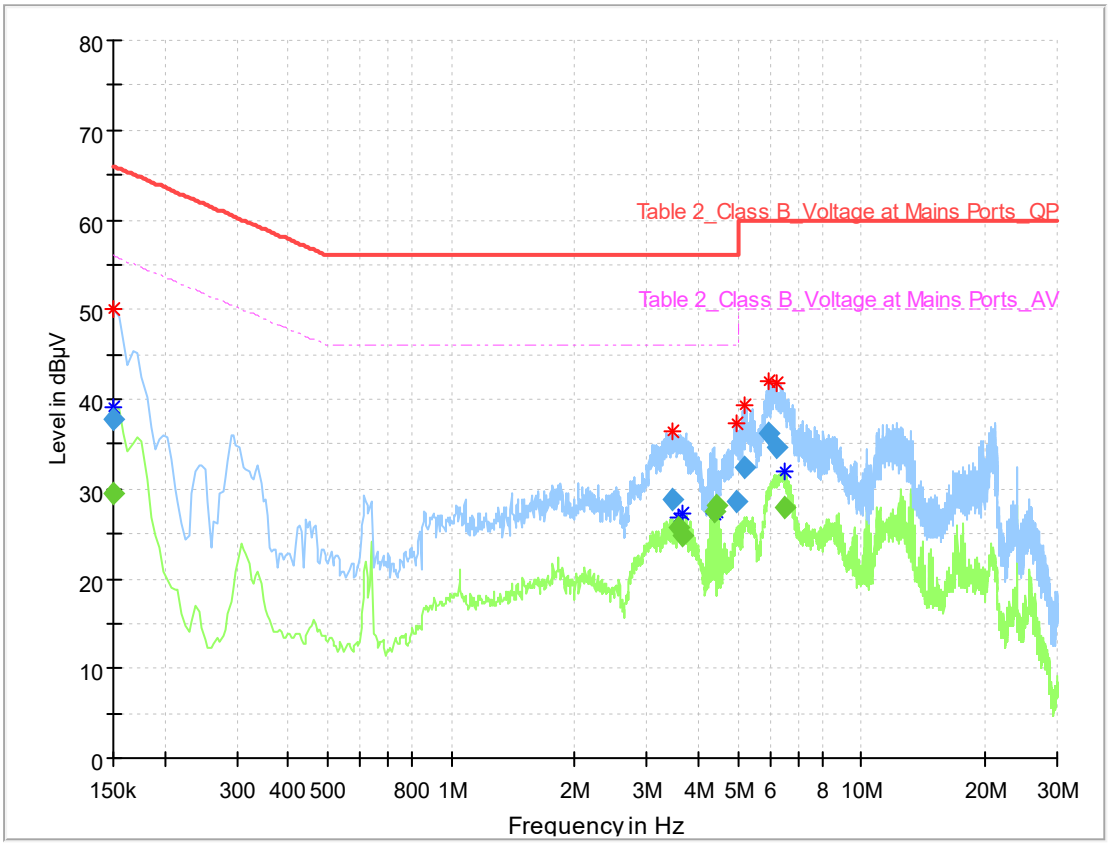
Test Procedure

1. The EUT is placed on a wooden table 80 cm above the reference ground plane.
2. The EUT is connected via LISN to a test power supply.
3. The measurement results are obtained as described below:
4. Detectors – Quasi Peak and Average Detector.

The measurement is made according to ANSI C63.10-2013.

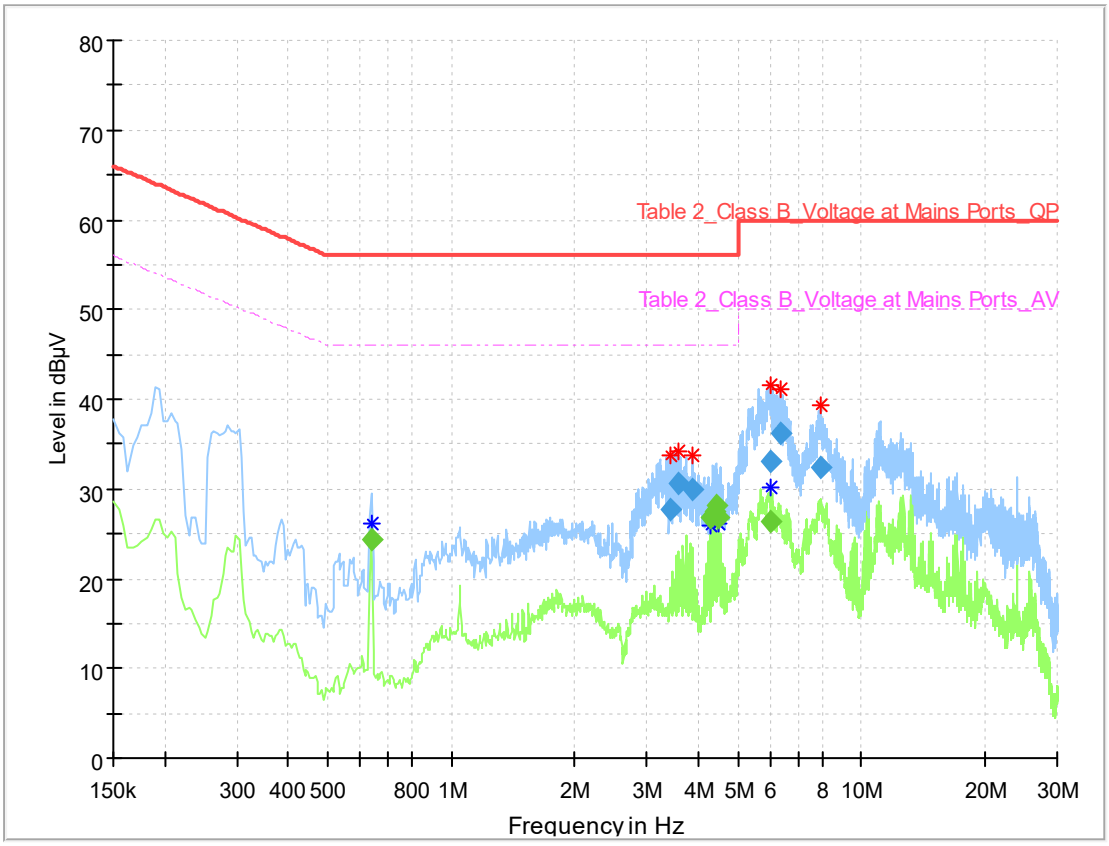
Conclusion: PASS

Test Result:



Final Result 1

Frequency (MHz)	QuasiPeak (dB µ V)	Averge (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time	Bandwidth	Line
0.150000	37.71	---	66.00	28.29	100.0	9.000	+
0.150000	---	29.40	56.00	26.60	100.0	9.000	+
3.459838	28.90	---	56.00	27.10	100.0	9.000	+
3.591529	---	25.78	46.00	20.22	100.0	9.000	+
3.679324	---	24.73	46.00	21.27	100.0	9.000	+
4.359728	---	27.46	46.00	18.54	100.0	9.000	+
4.408015	---	28.10	46.00	17.90	100.0	9.000	+
4.978677	28.55	---	56.00	27.45	100.0	9.000	+
5.189382	32.49	---	60.00	27.51	100.0	9.000	+
5.961971	36.18	---	60.00	23.82	100.0	9.000	+
6.181456	34.65	---	60.00	25.35	100.0	9.000	+
6.501904	---	27.88	50.00	22.12	100.0	9.000	+



Final Result 1

Frequency (MHz)	QuasiPeak (dB µ V)	Averge (dB µ V)	Limit (dB µ V)	Margin (dB)	Meas. Time	Bandwidth	Line
0.637257	---	24.29	46.00	21.71	100.0	9.000	-
3.420331	27.60	---	56.00	28.40	100.0	9.000	-
3.560802	30.68	---	56.00	25.32	100.0	9.000	-
3.863691	29.89	---	56.00	26.11	100.0	9.000	-
4.271934	---	26.92	46.00	19.08	100.0	9.000	-
4.359728	---	27.44	46.00	18.56	100.0	9.000	-
4.408015	---	28.13	46.00	17.87	100.0	9.000	-
4.495809	---	26.73	46.00	19.27	100.0	9.000	-
5.992699	---	26.29	50.00	23.71	100.0	9.000	-
6.005868	33.18	---	60.00	26.82	100.0	9.000	-
6.317537	36.24	---	60.00	23.76	100.0	9.000	-
7.950507	32.35	---	60.00	27.65	100.0	9.000	-

Annex A EUT Photos

See the document”SLM900-External Photos”.
See the document”SLM900-Internal Photos ”.

ANNEX B Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

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