

Appendix

2.4G WiFi Test Data

Conducted Test Data

Conducted Output Power

Test Result

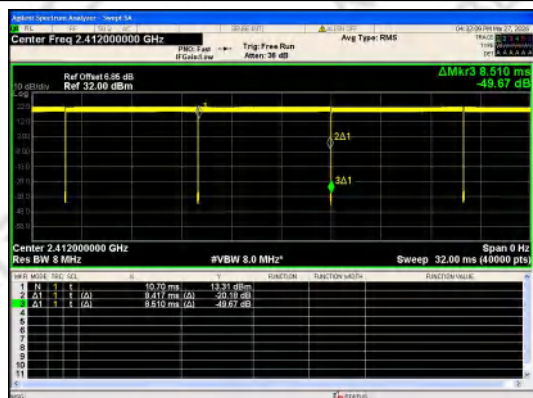
Mode	Channel	Peak Output Power (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	23.58	≤30	PASS
	6	23.82	≤30	PASS
	11	23.49	≤30	PASS
IEEE 802.11g	1	29.20	≤30	PASS
	6	29.30	≤30	PASS
	11	28.84	≤30	PASS
IEEE 802.11n_20	1	28.28	≤30	PASS
	6	27.90	≤30	PASS
	11	27.47	≤30	PASS

Duty Cycle

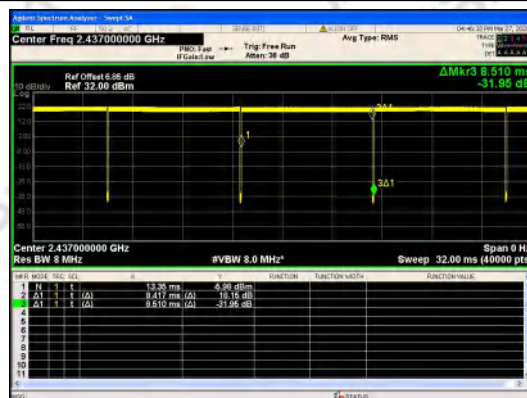
Test Result

Mode	Data rates	Channel	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
IEEE 802.11b	1	1	0	8.417	8.510	98.91	0.9891	0.0476	0.1188
		6		8.417	8.510	98.90	0.9890	0.048	0.1188
		11		8.416	8.509	98.91	0.9891	0.0476	0.1188
IEEE 802.11g	6	1		1.400	1.497	93.52	0.9352	0.291	0.7143
		6		1.400	1.497	93.52	0.9352	0.291	0.7143
		11		1.400	1.497	93.52	0.9352	0.291	0.7143
IEEE 802.11n_20	MCS 0	1		1.312	1.410	93.05	0.9305	0.3128	0.7622
		6		1.312	1.409	93.12	0.9312	0.3096	0.7622
		11		1.312	1.409	93.08	0.9308	0.3114	0.7622

Test Graphs



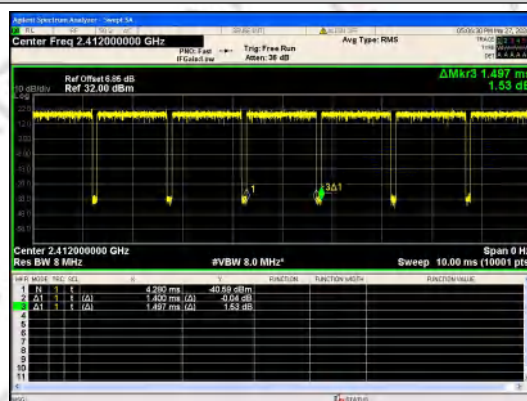
IEEE 802.11b_20MHz_Channel 1



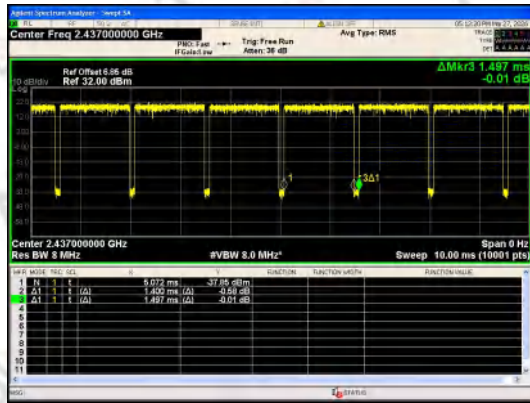
IEEE 802.11b_20MHz_Channel 6



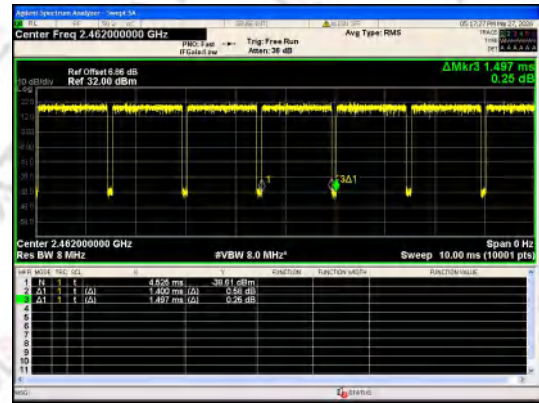
IEEE 802.11b_20MHz_Channel 11



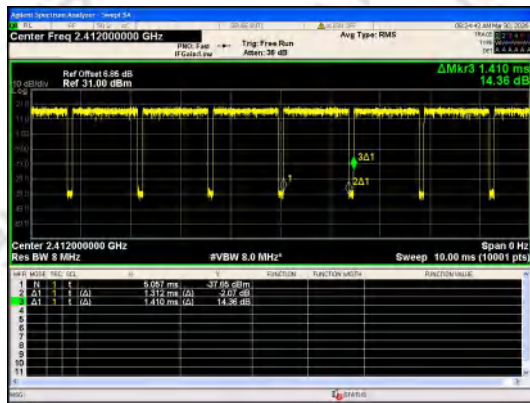
IEEE 802.11g_20MHz_Channel 1



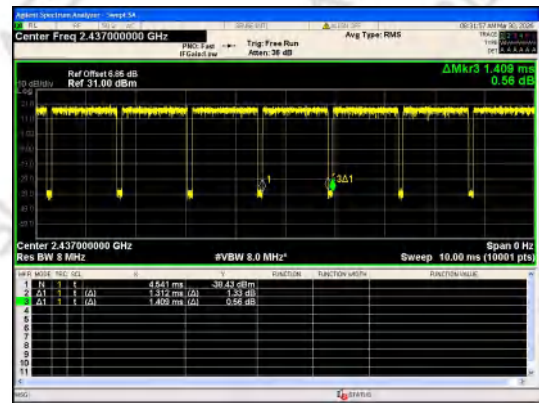
IEEE 802.11g_20MHz_Channel 6



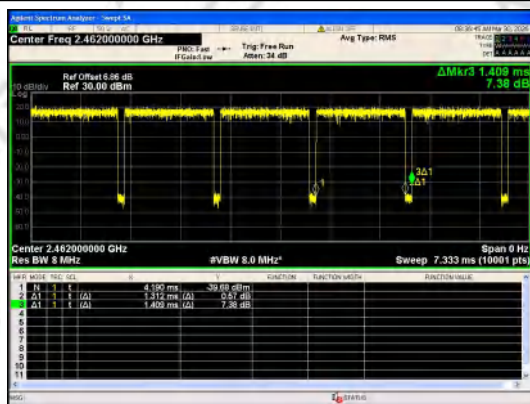
IEEE 802.11g_20MHz_Channel 11



IEEE 802.11n_20MHz_Channel 1



IEEE 802.11n_20MHz_Channel 6



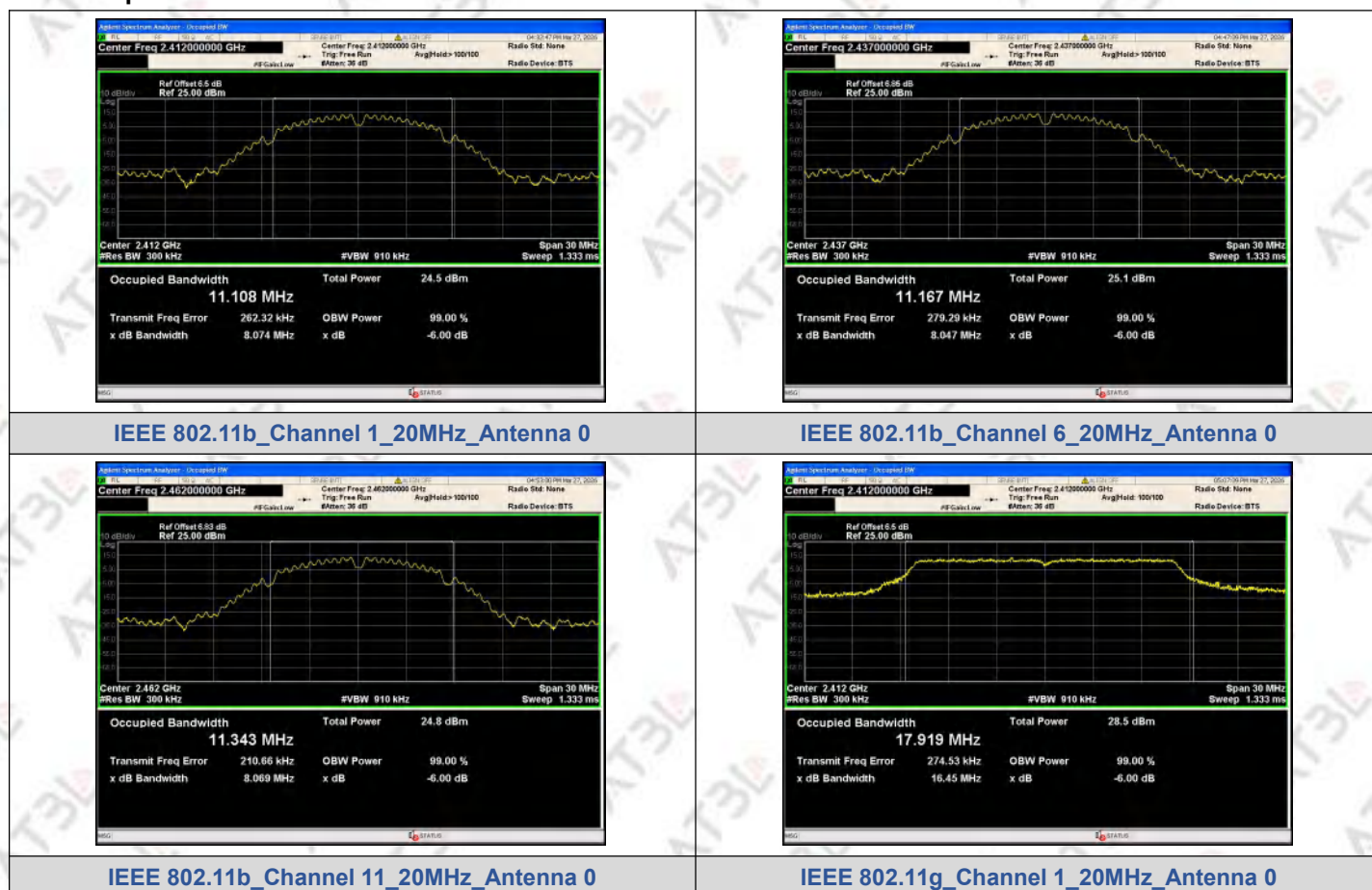
IEEE 802.11n_20MHz_Channel 11

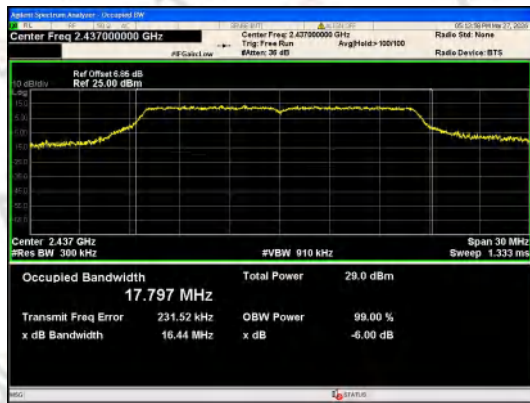
6dB Bandwidth

Test Result

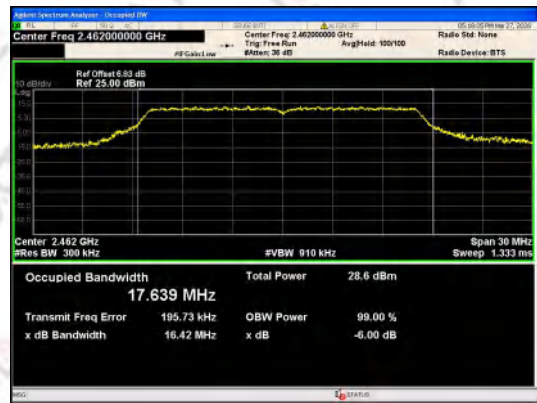
Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	0	2412	8.074	≥0.5	PASS
	6		2437	8.047		PASS
	11		2462	8.069		PASS
IEEE 802.11g	1		2412	16.45		PASS
	6		2437	16.44		PASS
	11		2462	16.42		PASS
IEEE 802.11n_20	1		2412	17.68		PASS
	6		2437	17.72		PASS
	11		2462	17.69		PASS

Test Graphs

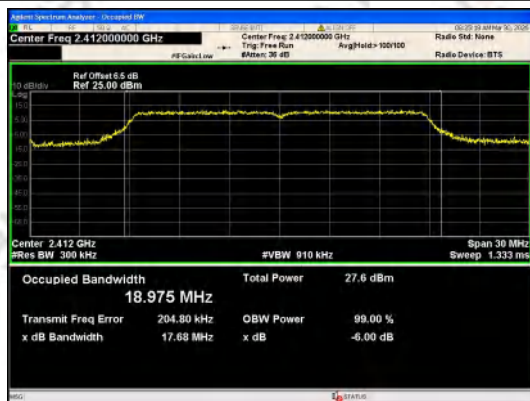




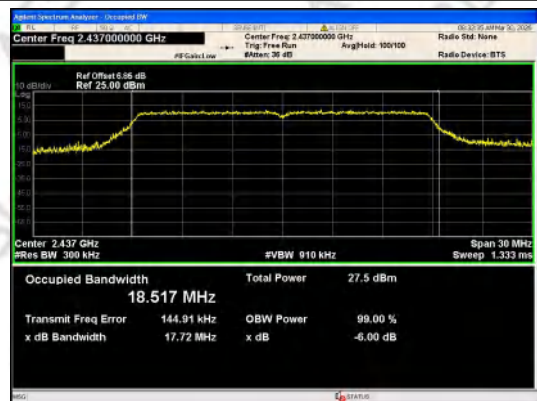
IEEE 802.11g_Channel 6_20MHz_Antenna 0



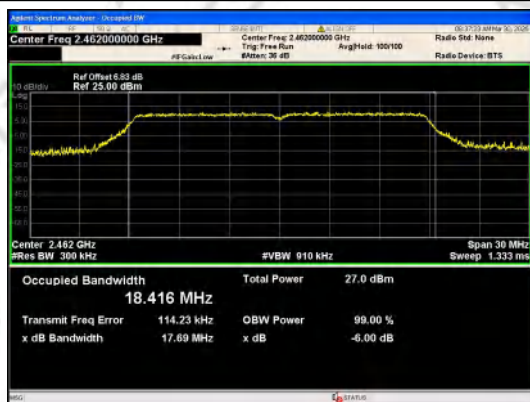
IEEE 802.11g_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 1_20MHz_Antenna 0



IEEE 802.11n_Channel 6_20MHz_Antenna 0



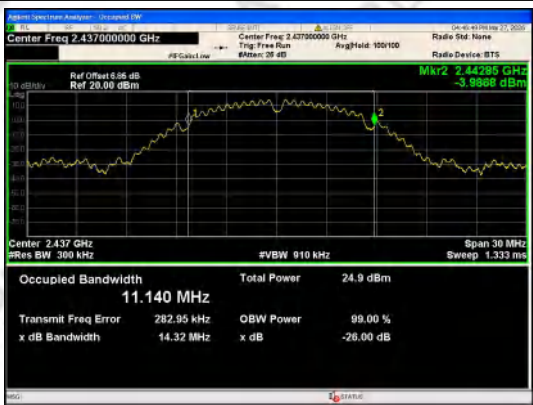
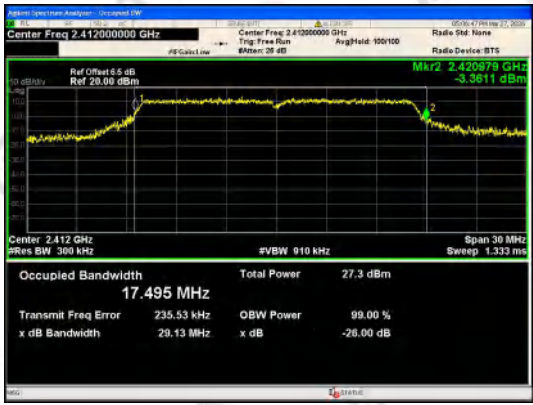
IEEE 802.11n_Channel 11_20MHz_Antenna 0

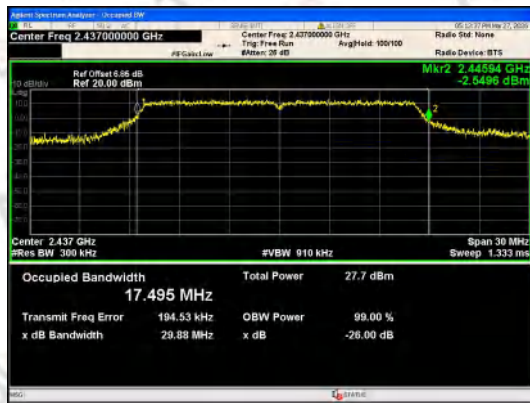
99% Bandwidth

Test Result

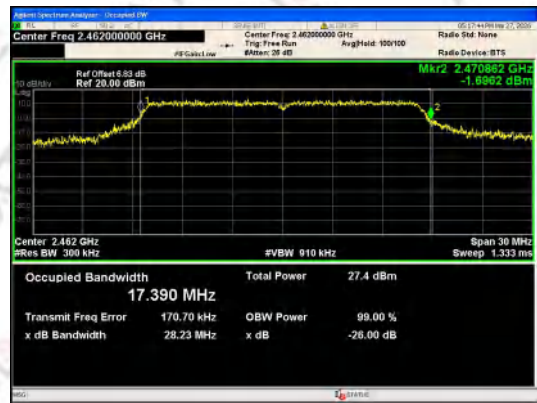
Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11b	1	0	2412	11.056
	6		2437	11.140
	11		2462	11.295
IEEE 802.11g	1		2412	17.495
	6		2437	17.495
	11		2462	17.390
IEEE 802.11n_20	1		2412	18.711
	6		2437	18.294
	11		2462	18.239

Test Graphs

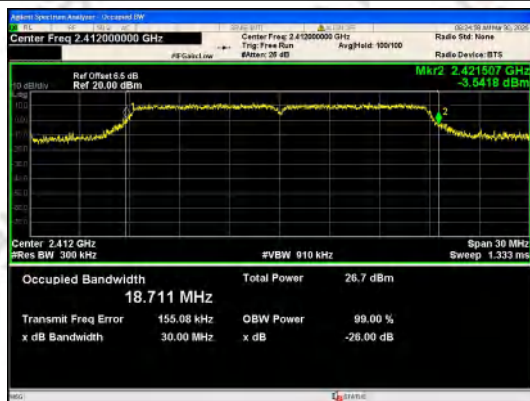
 Center Freq 2.41200000 GHz Ref Offset 6.5 dB Ref 20.00 dBm Mkr2 2.411787 GHz -8.7903 dBm Center 2.412 GHz #Res BW 300 kHz #VBW 910 kHz Span 30 MHz Sweep 1.333 ms Occupied Bandwidth 11.056 MHz Total Power 24.2 dBm Transmit Freq Error 261.03 kHz OBW Power 99.00 % x dB Bandwidth 14.35 MHz x dB -26.00 dB	 Center Freq 2.43700000 GHz Ref Offset 6.5 dB Ref 20.00 dBm Mkr2 2.44286 GHz -3.9888 dBm Center 2.437 GHz #Res BW 300 kHz #VBW 910 kHz Span 30 MHz Sweep 1.333 ms Occupied Bandwidth 11.140 MHz Total Power 24.9 dBm Transmit Freq Error 282.95 kHz OBW Power 99.00 % x dB Bandwidth 14.32 MHz x dB -26.00 dB
IEEE 802.11b_Channel 1_20MHz_Antenna 0	IEEE 802.11b_Channel 6_20MHz_Antenna 0
 Center Freq 2.46200000 GHz Ref Offset 6.5 dB Ref 20.00 dBm Mkr2 2.467868 GHz -3.6086 dBm Center 2.462 GHz #Res BW 300 kHz #VBW 910 kHz Span 30 MHz Sweep 1.333 ms Occupied Bandwidth 11.295 MHz Total Power 24.6 dBm Transmit Freq Error 220.96 kHz OBW Power 99.00 % x dB Bandwidth 14.35 MHz x dB -26.00 dB	 Center Freq 2.41200000 GHz Ref Offset 6.5 dB Ref 20.00 dBm Mkr2 2.420879 GHz -3.3611 dBm Center 2.412 GHz #Res BW 300 kHz #VBW 910 kHz Span 30 MHz Sweep 1.333 ms Occupied Bandwidth 17.495 MHz Total Power 27.3 dBm Transmit Freq Error 235.53 kHz OBW Power 99.00 % x dB Bandwidth 29.13 MHz x dB -26.00 dB
IEEE 802.11b_Channel 11_20MHz_Antenna 0	IEEE 802.11g_Channel 1_20MHz_Antenna 0



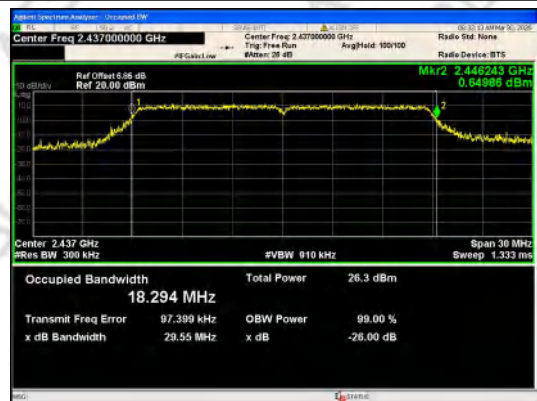
IEEE 802.11g_Channel 6_20MHz_Antenna 0



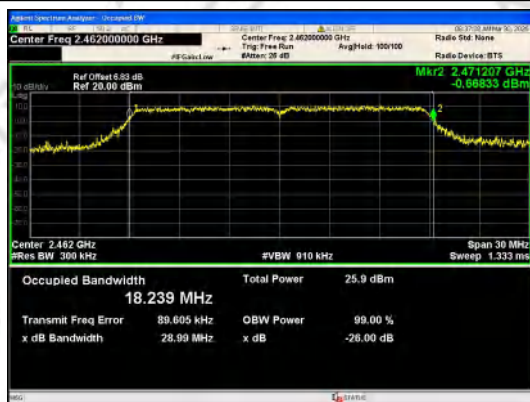
IEEE 802.11g_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 1_20MHz_Antenna 0



IEEE 802.11n_Channel 6_20MHz_Antenna 0



IEEE 802.11n_Channel 11_20MHz_Antenna 0

Power Spectral Density

Test Result

Mode	Channel	PSD (dBm/3kHz) Ant. 0	Limit (dBm/3kHz)	Result
IEEE 802.11b	1	0.900	≤8	PASS
	6	-0.800		PASS
	11	0.550		PASS
IEEE 802.11g	1	-3.970		PASS
	6	-3.350		PASS
	11	-3.310		PASS
IEEE 802.11n_20	1	-3.420		PASS
	6	-4.220		PASS
	11	-3.470		PASS

Test Graphs



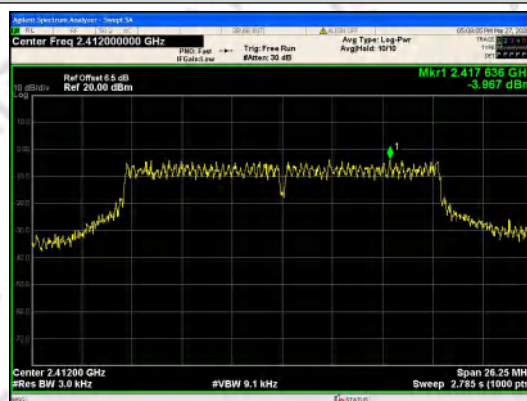
IEEE 802.11b_Channel 1_20MHz_Antenna 0



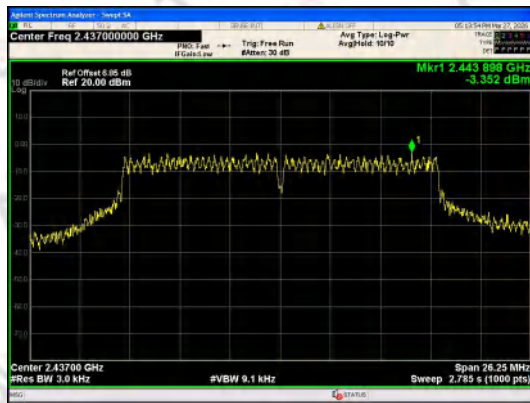
IEEE 802.11b_Channel 6_20MHz_Antenna 0



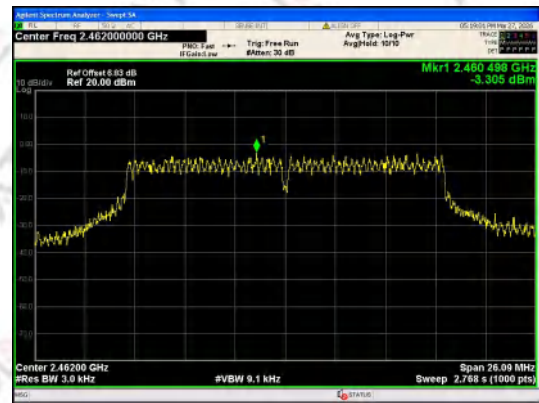
IEEE 802.11b_Channel 11_20MHz_Antenna 0



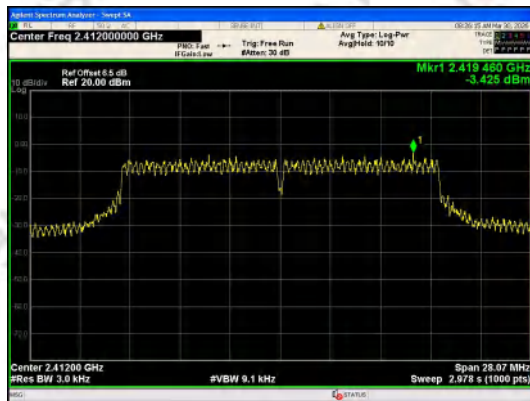
IEEE 802.11g_Channel 1_20MHz_Antenna 0



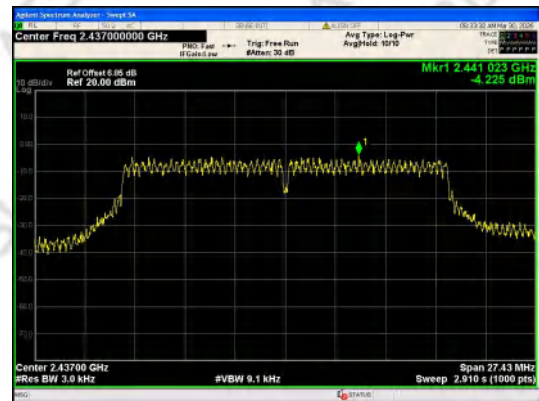
IEEE 802.11g_Channel 6_20MHz_Antenna 0



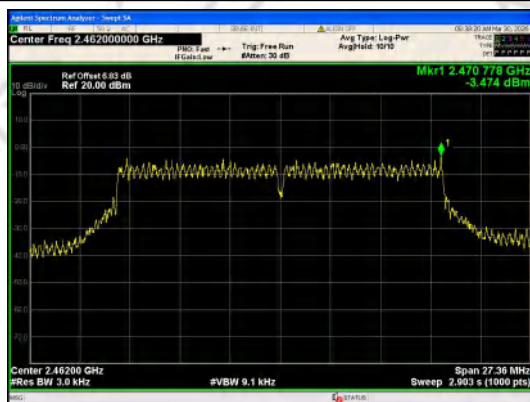
IEEE 802.11g_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 1_20MHz_Antenna 0



IEEE 802.11n_Channel 6_20MHz_Antenna 0



IEEE 802.11n_Channel 11_20MHz_Antenna 0

Conducted Out Of Band Emission

Note: The maximum loss of the test system for testing at 30MHz-26.5GHz is 17.2dB. The offset on the test chart is the offset of the main frequency, and the margin is sufficient to offset the difference between the maximum loss of the system and the offset of the main frequency.

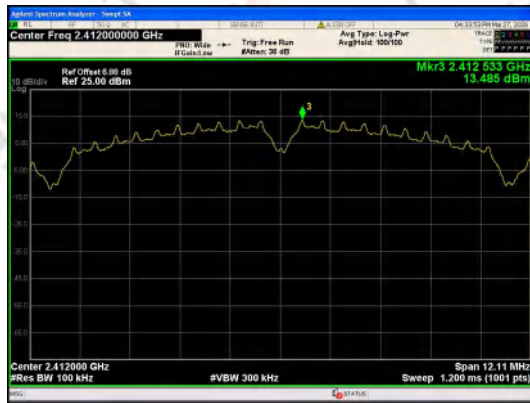
Test Result

Mode	Channel	Ant.	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
IEEE 802.11b	1	0	2400.00	-30.787	-6.52	-24.267	PASS
			4807.39	-50.143	-6.52	-43.623	PASS
			7244.46	-47.589	-6.52	-41.069	PASS
			9634.71	-48.880	-6.52	-42.360	PASS
			24983.8	-37.810	-6.52	-31.290	PASS
	6		4865.44	-49.373	-6.12	-43.253	PASS
			7294.40	-48.881	-6.12	-42.761	PASS
			9752.07	-49.684	-6.12	-43.564	PASS
			24649.8	-38.195	-6.12	-32.075	PASS
	11		2483.50	-49.233	-6.71	-42.523	PASS
			4927.87	-49.314	-6.71	-42.604	PASS
			7369.93	-49.697	-6.71	-42.987	PASS
			9837.59	-49.865	-6.71	-43.155	PASS
			24698.5	-37.812	-6.71	-31.102	PASS
IEEE 802.11g	1		2397.88	-18.467	-9.59	-8.877	PASS
			2400.00	-20.501	-9.59	-10.911	PASS
			4821.10	-50.382	-9.59	-40.792	PASS
			7236.30	-49.125	-9.59	-39.535	PASS
			9637.20	-49.129	-9.59	-39.539	PASS
			24706.6	-37.722	-9.59	-28.132	PASS
	6		4874.18	-48.292	-8.95	-39.342	PASS
			7295.65	-48.784	-8.95	-39.834	PASS
			9755.82	-49.483	-8.95	-40.534	PASS
			24706.6	-36.804	-8.95	-27.854	PASS
	11		2483.50	-27.252	-9.56	-17.692	PASS
			4912.26	-48.412	-9.56	-38.852	PASS
			7396.15	-47.892	-9.56	-38.332	PASS
			9848.83	-50.519	-9.56	-40.959	PASS
24742.8			-37.759	-9.56	-28.199	PASS	
IEEE 802.11n_20	1		2359.10	-35.602	-10.07	-25.532	PASS
			2396.97	-13.848	-10.07	-3.778	PASS
			2400.00	-18.236	-10.07	-8.166	PASS
			4843.00	-50.541	-10.07	-40.471	PASS
			7245.10	-50.116	-10.07	-40.046	PASS

6	9645.90	-50.166	-10.07	-40.096	PASS
	4864.82	-50.536	-10.53	-40.006	PASS
	7298.77	-50.403	-10.53	-39.873	PASS
	9762.06	-51.449	-10.53	-40.919	PASS
	24677.9	-38.549	-10.53	-28.019	PASS
11	2483.50	-28.241	-11.1	-17.141	PASS
	4909.76	-50.176	-11.1	-39.076	PASS
	7384.29	-49.984	-11.1	-38.884	PASS
	9866.31	-50.223	-11.1	-39.123	PASS
	24692.2	-38.541	-11.1	-27.441	PASS

Note: input compensation coefficient (dB)= Cable Loss (dB)

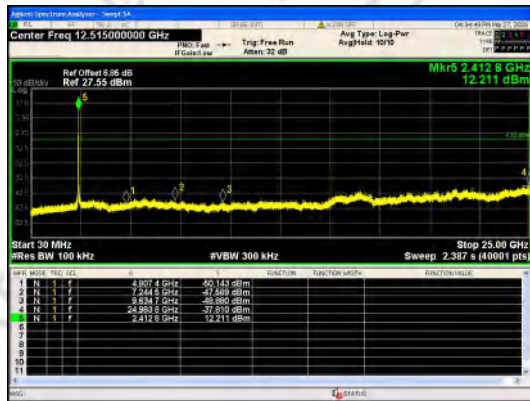
Test Graphs



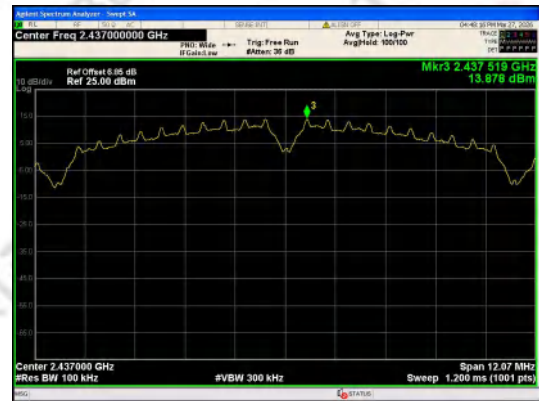
In-Band Reference Level
IEEE 802.11b_Channel 1_20MHz_Antenna 0



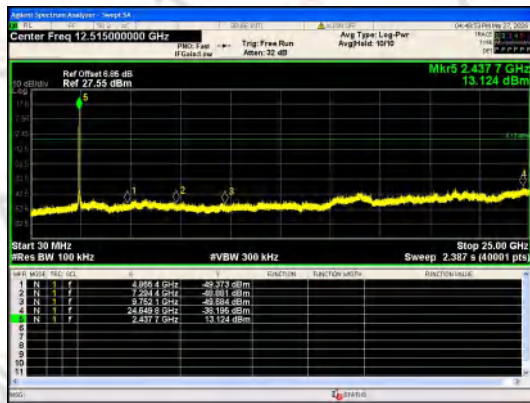
Out Of Band Emission
IEEE 802.11b_Channel 1_20MHz_Antenna 0



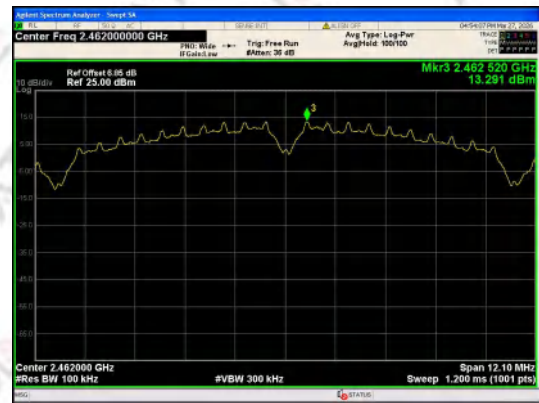
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 1_20MHz_Antenna 0



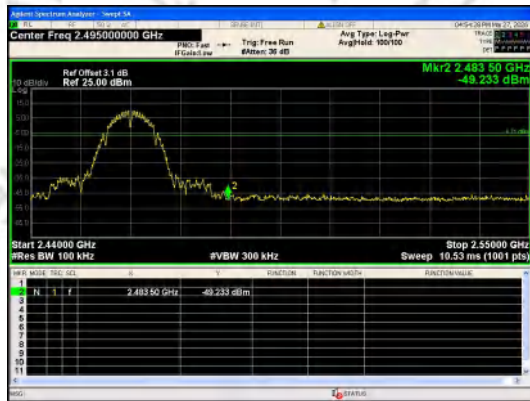
In-Band Reference Level
IEEE 802.11b_Channel 6_20MHz_Antenna 0



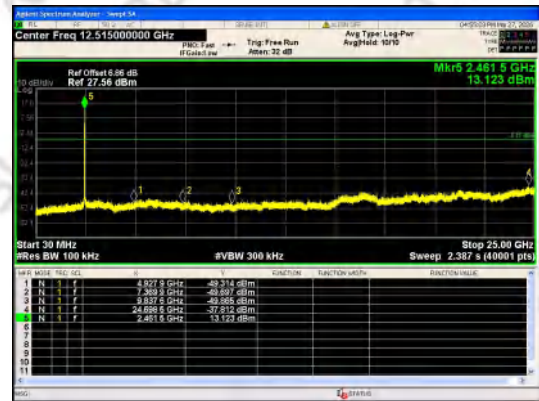
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 6_20MHz_Antenna 0



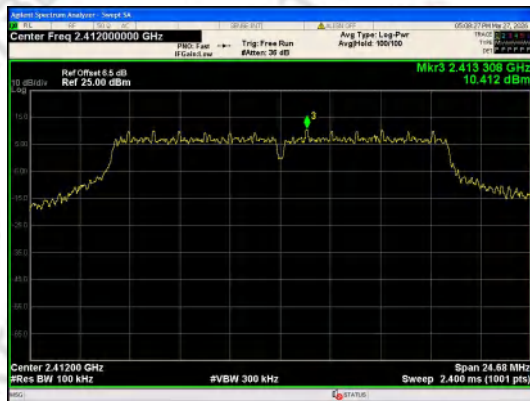
In-Band Reference Level
IEEE 802.11b_Channel 11_20MHz_Antenna 0



Out Of Band Emission
IEEE 802.11b_Channel 11_20MHz_Antenna 0



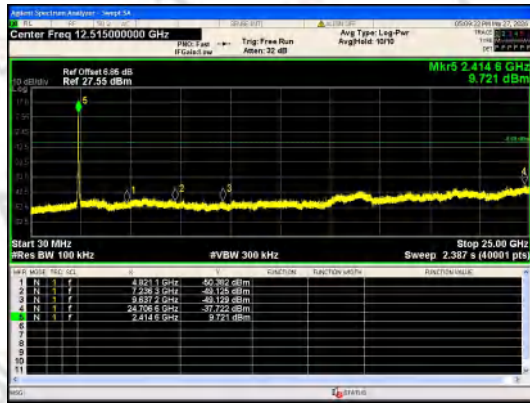
30.0 MHz - 25000.0 MHz
IEEE 802.11b_Channel 11_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11g_Channel 1_20MHz_Antenna 0



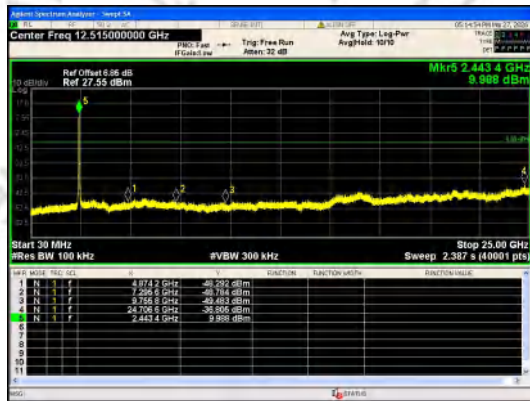
Out Of Band Emission
IEEE 802.11g_Channel 1_20MHz_Antenna 0



30.0 MHz - 25000.0 MHz
IEEE 802.11g_Channel 1_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11g_Channel 6_20MHz_Antenna 0



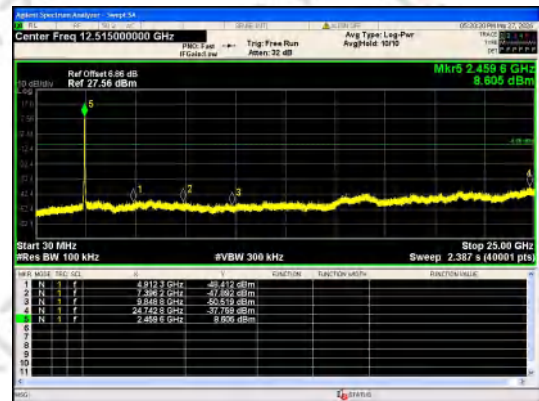
30.0 MHz - 25000.0 MHz
IEEE 802.11g_Channel 6_20MHz_Antenna 0



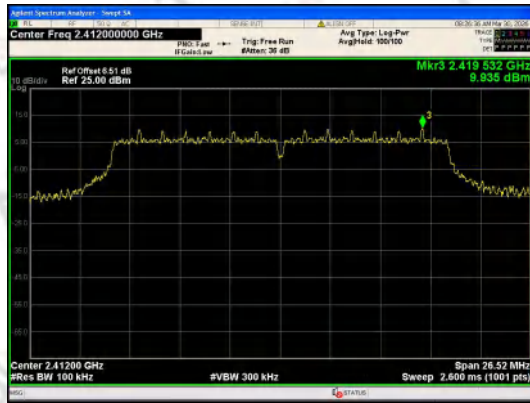
In-Band Reference Level
IEEE 802.11g_Channel 11_20MHz_Antenna 0



Out Of Band Emission
IEEE 802.11g_Channel 11_20MHz_Antenna 0



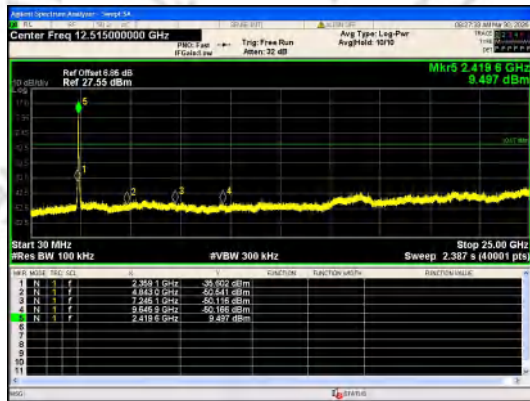
30.0 MHz - 25000.0 MHz
IEEE 802.11g_Channel 11_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11n_Channel 1_20MHz_Antenna 0



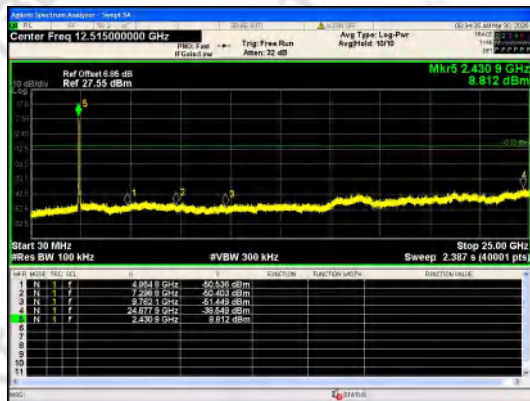
Out Of Band Emission
IEEE 802.11n_Channel 1_20MHz_Antenna 0



30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 1_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11n_Channel 6_20MHz_Antenna 0



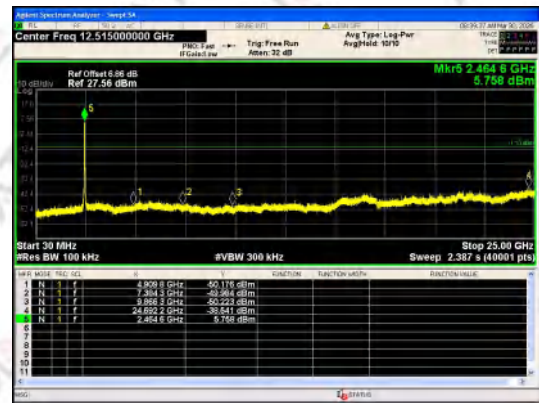
30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 6_20MHz_Antenna 0



In-Band Reference Level
IEEE 802.11n_Channel 11_20MHz_Antenna 0



Out Of Band Emission
IEEE 802.11n_Channel 11_20MHz_Antenna 0



30.0 MHz - 25000.0 MHz
IEEE 802.11n_Channel 11_20MHz_Antenna 0

Radiated Test Data

Radiated Spurious Emission

Radiated Emission (9KHz-30MHz)

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Radiated Emission (30MHz-1GHz)

Note:

1. All modes have been tested, only worst case mode(802.11g) was recorded in the test report.
2. $\text{Margin} = \text{Result} (\text{Result} = \text{Reading} + \text{Factor}) - \text{Limit}$
3. $\text{Factor} = \text{Cable Loss} + \text{Antenna Factor} - \text{Amplifier Gain}$
4. $\text{Reading} = \text{Level} - \text{factor}$

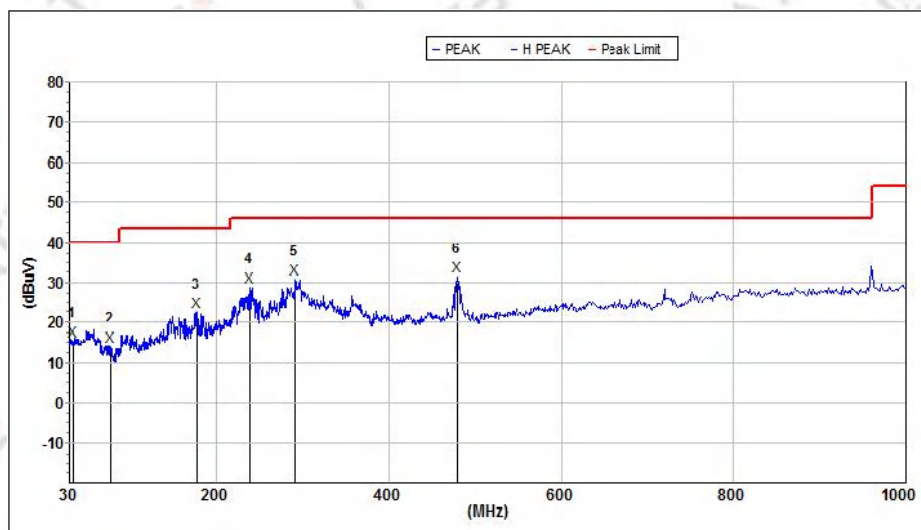
Radiated Emission (Above 1GHz)

Note:

1. All modes have been tested, only worst case mode(802.11g) was recorded in the test report.
2. We used the filter to test and the main frequency was filtered out.
3. Other 18G-25G Emission detected are more than 20dB below the limit.
4. $\text{Margin} = \text{Result} (\text{Result} = \text{Reading} + \text{Factor}) - \text{Limit}$
5. $\text{Factor} = \text{Cable Loss} + \text{Antenna Factor} - \text{Amplifier Gain}$
6. $\text{Reading} = \text{Level} - \text{factor}$

Radiated Emission (30MHz-1GHz)

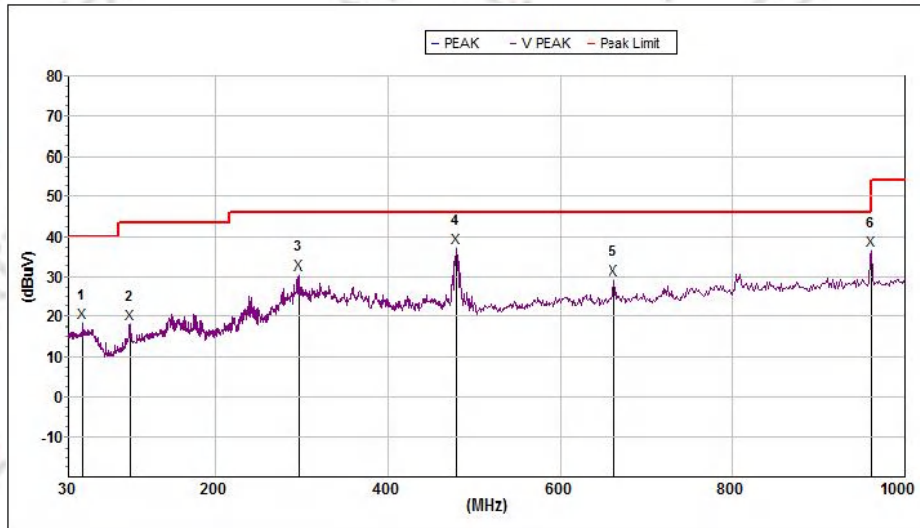
Temperature:	26°C	Relative Humidity:	53%
Test Voltage:	DC 12V	Phase:	Horizontal
Test Mode:	802.11g-2412 MHz	Comment:	30MHz-1GHz



Test Summary Result

Mk.	Freq. (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	34.821	15.5	40.0	24.5	18.7	31.8	1.1	H
2	76.512	14.3	40.0	25.7	15.4	32.4	1.3	H
3	177.198	22.9	43.5	20.6	17.3	31.6	1.6	H
4	239.987	29.0	46.0	17.0	17.2	32.0	1.9	H
5	291.547	30.9	46.0	15.1	18.9	32.3	2.1	H
6	479.686	31.6	46.0	14.4	23.2	31.8	2.8	H

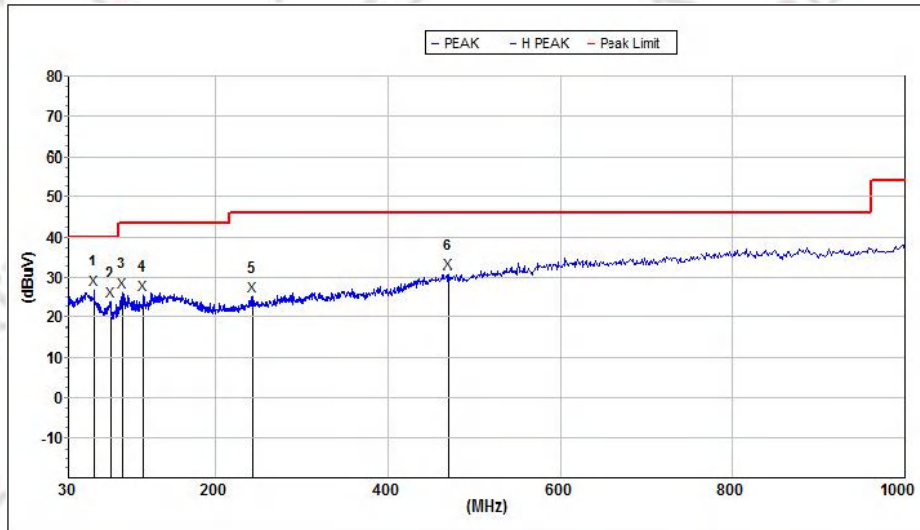
Temperature:	26°C	Relative Humidity:	53%
Test Voltage:	DC 12V	Phase:	Vertical
Test Mode:	802.11g-2412 MHz	Comment:	30MHz-1GHz



Test Summary Result

Mk.	Freq. (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margi n (dB)	Ant.F/G (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	45.936	18.4	40.0	21.6	19.4	31.3	1.2	V
2	101.289	18.3	43.5	25.2	14.9	30.8	1.4	V
3	296.703	30.5	46.0	15.5	19.1	32.3	2.1	V
4	479.686	37.1	46.0	8.9	23.2	31.8	2.8	V
5	662.311	29.2	46.0	16.8	26.4	31.8	3.0	V
6	960.477	36.7	54.0	17.3	29.5	32.4	3.6	V

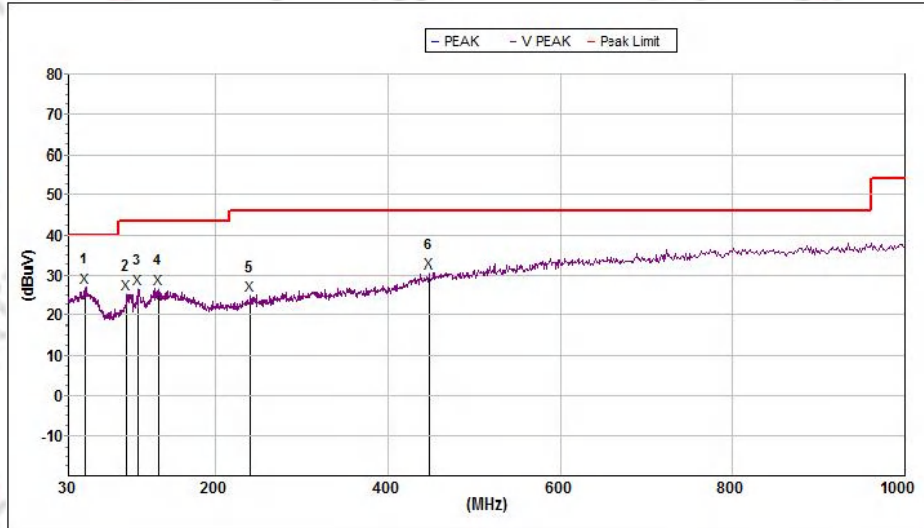
Temperature:	26°C	Relative Humidity:	53%
Test Voltage:	DC 12V	Phase:	Horizontal
Test Mode:	802.11g-2437 MHz	Comment:	30MHz-1GHz



Test Summary Result

Mk.	Freq. (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margi n (dB)	Ant.F/G (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	59.545	27.0	40.0	13.0	18.1	31.2	1.2	H
2	78.002	24.0	40.0	16.0	15.1	32.3	1.3	H
3	91.977	26.3	43.5	17.2	14.8	31.3	1.3	H
4	116.132	25.7	43.5	17.8	16.2	31.0	1.4	H
5	243.377	25.4	46.0	20.6	17.3	32.0	1.9	H
6	471.349	30.9	46.0	15.1	23.1	32.0	2.9	H

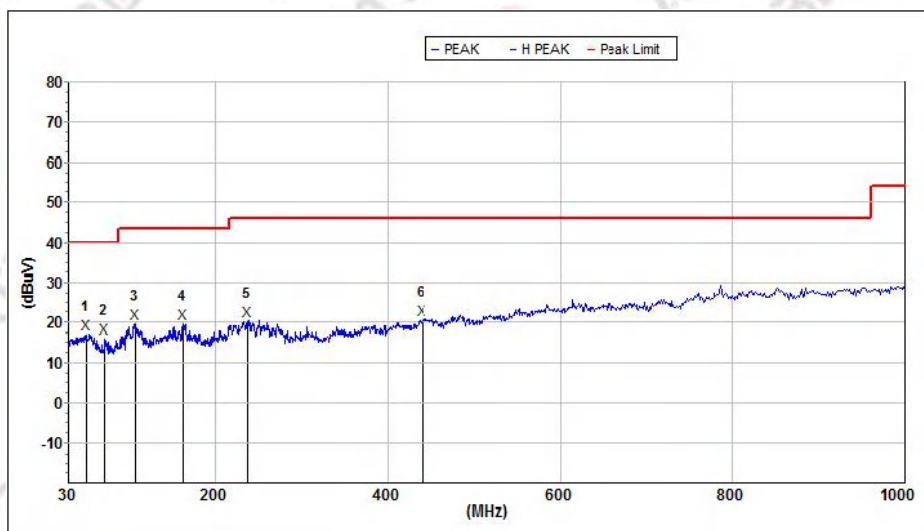
Temperature:	26°C	Relative Humidity:	53%
Test Voltage:	DC 12V	Phase:	Vertical
Test Mode:	802.11g-2437 MHz	Comment:	30MHz-1GHz



Test Summary Result

Mk.	Freq. (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	49.881	27.1	40.0	12.9	19.6	30.9	1.2	V
2	96.436	25.3	43.5	18.2	14.8	31.0	1.3	V
3	109.989	26.7	43.5	16.8	15.7	30.9	1.4	V
4	134.088	26.8	43.5	16.7	17.8	31.1	1.5	V
5	241.253	25.1	46.0	20.9	17.3	32.0	1.9	V
6	447.982	30.6	46.0	15.4	22.8	32.4	3.2	V

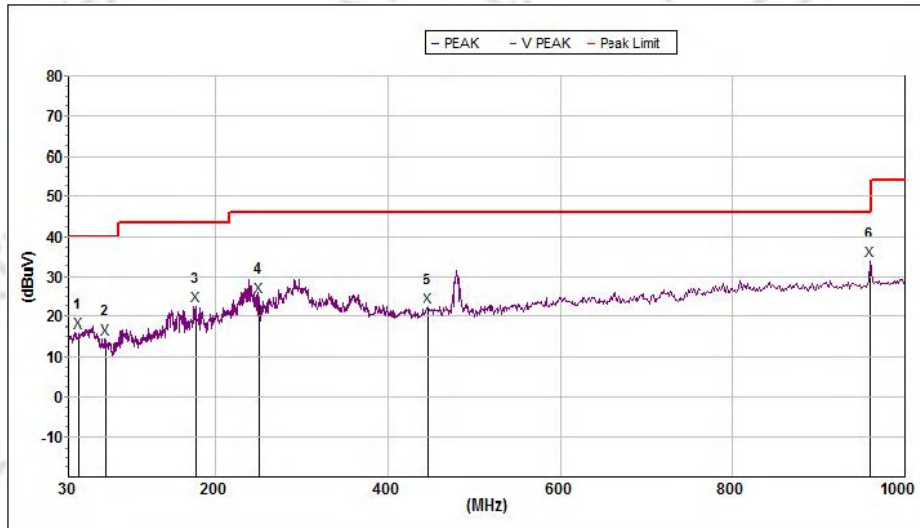
Temperature:	26°C	Relative Humidity:	53%
Test Voltage:	DC 12V	Phase:	Horizontal
Test Mode:	802.11g-2462 MHz	Comment:	30MHz-1GHz



Test Summary Result

Mk.	Freq. (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margi n (dB)	Ant.F/G (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	50.853	17.2	40.0	22.8	19.5	30.9	1.2	H
2	71.706	16.1	40.0	23.9	16.1	32.8	1.2	H
3	106.013	19.9	43.5	23.6	15.3	30.9	1.4	H
4	162.326	19.7	43.5	23.8	18.3	31.4	1.6	H
5	237.893	20.6	46.0	25.4	17.1	32.0	1.9	H
6	440.196	20.9	46.0	25.1	22.6	32.5	3.0	H

Temperature:	26°C	Relative Humidity:	53%
Test Voltage:	DC 12V	Phase:	Vertical
Test Mode:	802.11g-2462 MHz	Comment:	30MHz-1GHz

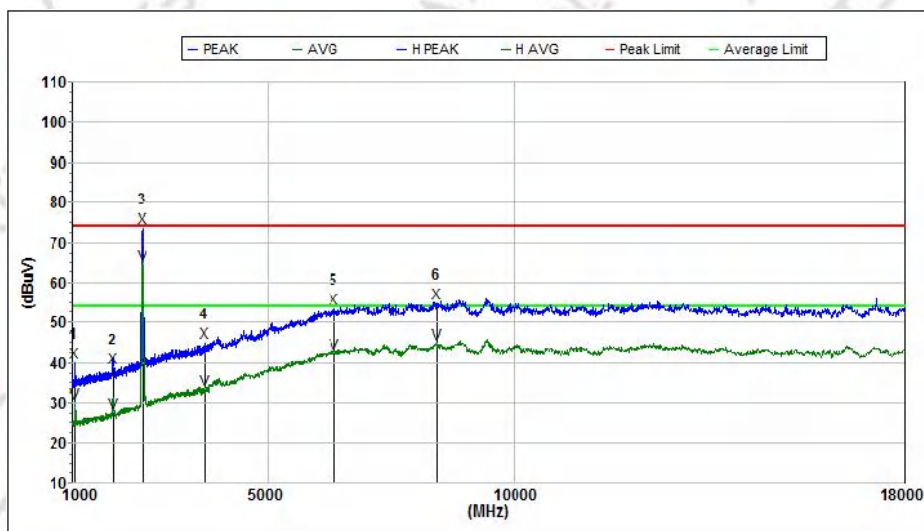


Test Summary Result

Mk.	Freq. (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margi n (dB)	Ant.F/G (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	42.080	16.3	40.0	23.7	19.1	31.6	1.1	V
2	72.084	14.5	40.0	25.5	16.1	32.8	1.2	V
3	177.198	22.8	43.5	20.7	17.3	31.6	1.6	V
4	250.740	25.2	46.0	20.8	17.6	32.1	1.9	V
5	447.197	22.4	46.0	23.6	22.8	32.4	3.1	V
6	958.794	33.9	46.0	12.1	29.5	32.4	3.6	V

Radiated Emission (Above 1GHz)

Temperature:	26°C	Relative Humidity:	53%
Test Voltage:	DC 12V	Phase:	Horizontal
Test Mode:	802.11g-2412 MHz	Comment:	1GHz-18GHz

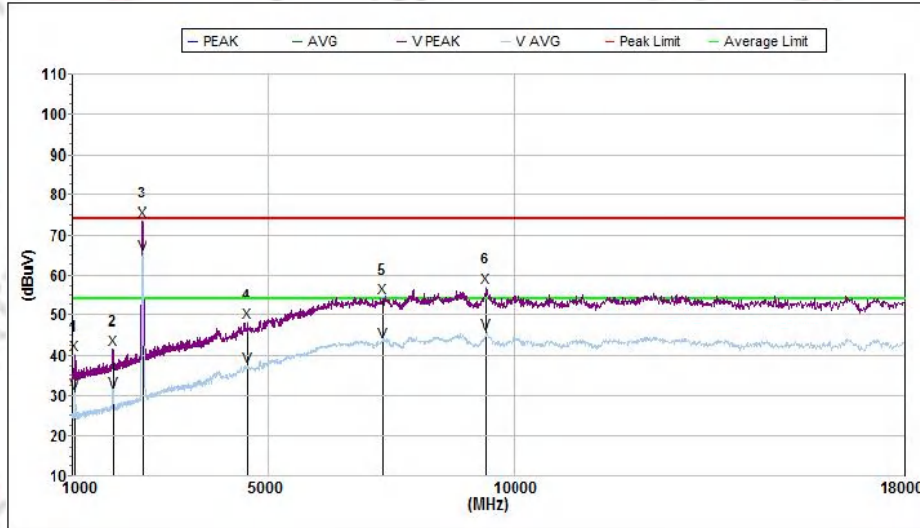


Test Summary Result

Mk.	Freq. (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	1061.500	40.1	74.0	33.9	25.1	53.7	3.8	H
2	1843.000	38.8	74.0	35.2	25.4	53.7	4.9	H
3	2417.500	73.7	74.0	0.3	27.4	54.1	5.7	H
4	3695.500	45.2	74.0	28.8	30.0	53.6	7.4	H
5	6352.000	53.6	74.0	20.4	34.9	51.6	10.3	H
6	8459.000	55.2	74.0	18.8	37.4	52.2	11.5	H
Avg:								
1	1061.500	30.0	54.0	24.0	25.1	53.7	3.8	H
2	1843.000	27.9	54.0	26.1	25.4	53.7	4.9	H
3	2417.500	64.6	54.0	-10.6	27.4	54.1	5.7	H
4	3695.500	33.5	54.0	20.5	30.0	53.6	7.4	H
5	6352.000	42.6	54.0	11.4	34.9	51.6	10.3	H
6	8459.000	44.8	54.0	9.2	37.4	52.2	11.5	H

Note: Point 3 serves as the primary frequency signal

Temperature:	26°C	Relative Humidity:	53%
Test Voltage:	DC 12V	Phase:	Vertical
Test Mode:	802.11g-2412 MHz	Comment:	1GHz-18GHz

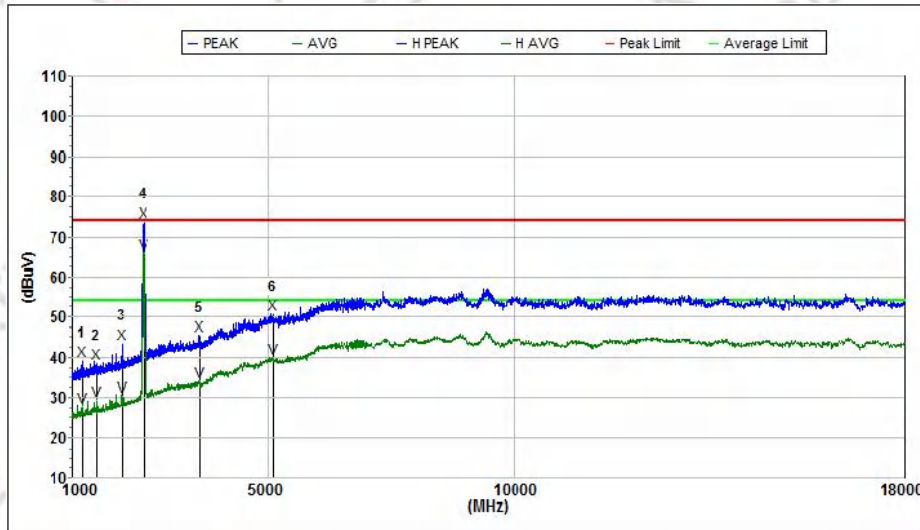


Test Summary Result

Mk.	Freq. (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	1058.500	40.1	74.0	33.9	25.1	53.7	3.8	V
2	1822.000	41.7	74.0	32.3	25.3	53.7	4.9	V
3	2419.000	73.6	74.0	0.4	27.4	54.1	5.7	V
4	4574.000	48.3	74.0	25.7	31.8	52.9	8.1	V
5	7325.000	54.5	74.0	19.5	36.2	51.8	11.0	V
6	9439.000	57.1	74.0	16.9	38.1	52.2	12.8	V
Avg:								
1	1058.500	30.8	54.0	23.2	25.1	53.7	3.8	V
2	1822.000	31.2	54.0	22.8	25.3	53.7	4.9	V
3	2419.000	65.3	54.0	-11.3	27.4	54.1	5.7	V
4	4574.000	37.3	54.0	16.7	31.8	52.9	8.1	V
5	7325.000	43.7	54.0	10.3	36.2	51.8	11.0	V
6	9439.000	45.5	54.0	8.5	38.1	52.2	12.8	V

Note: Point 3 serves as the primary frequency signal

Temperature:	26°C	Relative Humidity:	53%
Test Voltage:	DC 12V	Phase:	Horizontal
Test Mode:	802.11g-2437 MHz	Comment:	1GHz-18GHz

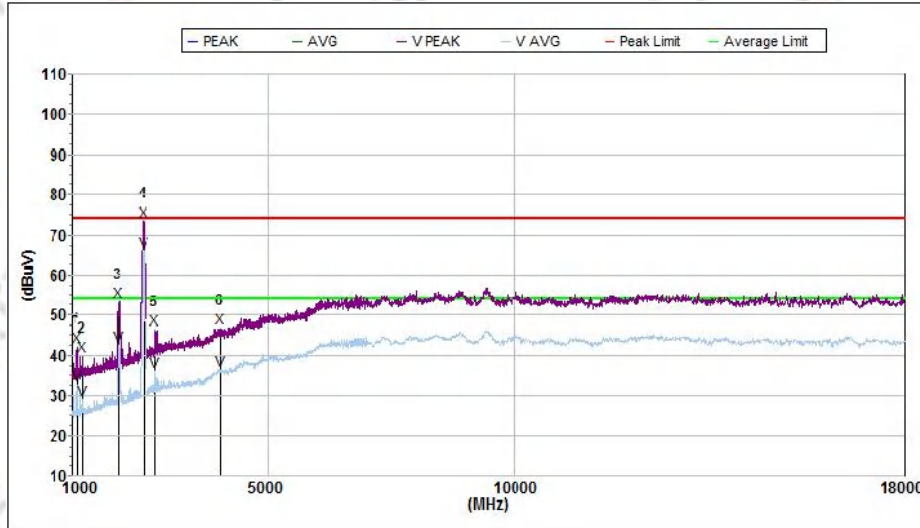


Test Summary Result

Mk.	Freq. (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	1214.000	39.3	74.0	34.7	25.7	53.6	4.0	H
2	1500.000	38.7	74.0	35.3	25.4	53.4	4.4	H
3	2016.000	43.5	74.0	30.5	26.5	53.9	5.1	H
4	2445.000	73.8	74.0	0.2	27.5	54.1	5.7	H
5	3598.000	45.4	74.0	28.6	29.8	53.7	7.2	H
6	5088.000	50.7	74.0	23.3	33.1	52.4	8.8	H
Avg:								
1	1214.000	27.8	54.0	26.2	25.7	53.6	4.0	H
2	1500.000	29.4	54.0	24.6	25.4	53.4	4.4	H
3	2016.000	30.3	54.0	23.7	26.5	53.9	5.1	H
4	2445.000	66.0	54.0	-12.0	27.5	54.1	5.7	H
5	3598.000	34.1	54.0	19.9	29.8	53.7	7.2	H
6	5088.000	40.0	54.0	14.0	33.1	52.4	8.8	H

Note:Point 4 serves as the primary frequency signal

Temperature:	26°C	Relative Humidity:	53%
Test Voltage:	DC 12V	Phase:	Vertical
Test Mode:	802.11g-2437 MHz	Comment:	1GHz-18GHz

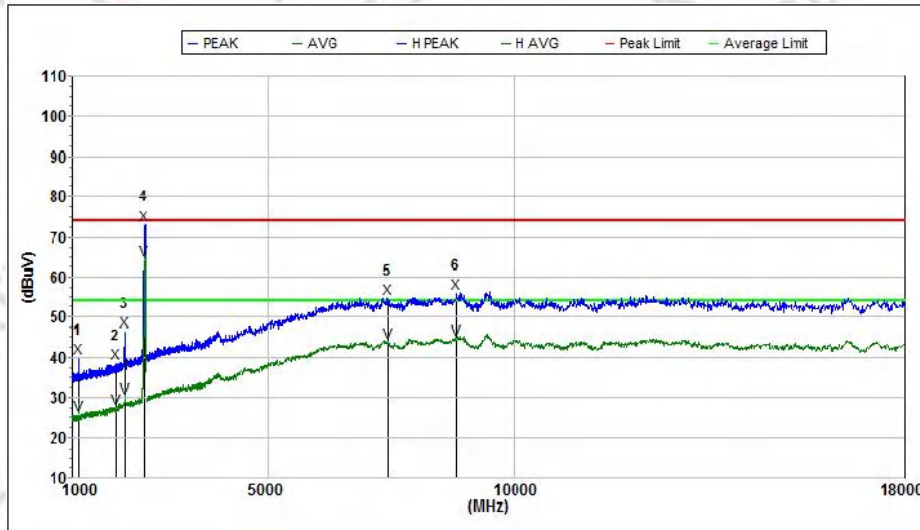


Test Summary Result

Mk.	Freq. (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	1096.000	42.1	74.0	31.9	25.3	53.6	3.8	V
2	1214.000	40.0	74.0	34.0	25.7	53.6	4.0	V
3	1944.000	53.5	74.0	20.5	26.1	53.8	5.0	V
4	2445.000	73.5	74.0	0.5	27.5	54.1	5.7	V
5	2696.000	46.4	74.0	27.6	28.3	54.1	6.0	V
6	4020.000	46.7	74.0	27.3	30.9	53.2	8.0	V
Avg:								
1	1096.000	32.8	54.0	21.2	25.3	53.6	3.8	V
2	1214.000	29.2	54.0	24.8	25.7	53.6	4.0	V
3	1944.000	42.5	54.0	11.5	26.1	53.8	5.0	V
4	2445.000	66.0	54.0	-12.0	27.5	54.1	5.7	V
5	2696.000	35.9	54.0	18.1	28.3	54.1	6.0	V
6	4020.000	36.4	54.0	17.6	30.9	53.2	8.0	V

Note: Point 4 serves as the primary frequency signal

Temperature:	20°C	Relative Humidity:	35%
Test Voltage:	DC 12V	Phase:	Horizontal
Test Mode:	802.11g-2462 MHz	Comment:	1GHz-18GHz

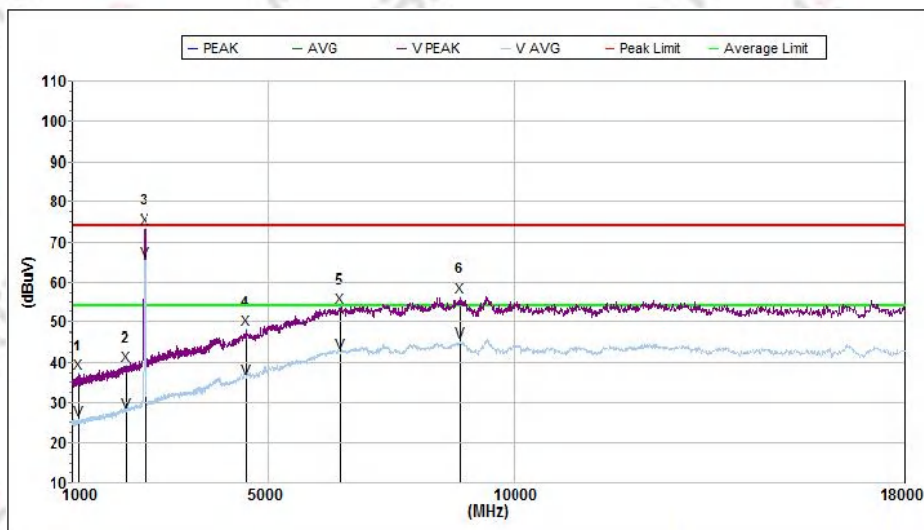


Test Summary Result

Mk.	Freq. (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	1127.500	39.9	74.0	34.1	25.4	53.6	3.9	H
2	1871.500	38.6	74.0	35.4	25.6	53.8	5.0	H
3	2059.000	46.6	74.0	27.4	26.6	53.9	5.2	H
4	2465.500	73.2	74.0	0.8	27.5	54.1	5.7	H
5	7437.000	54.8	74.0	19.2	36.3	51.8	11.0	H
6	8837.000	56.0	74.0	18.0	37.7	52.4	12.0	H
Avg:								
1	1127.500	25.8	54.0	28.2	25.4	53.6	3.9	H
2	1871.500	27.3	54.0	26.7	25.6	53.8	5.0	H
3	2059.000	30.0	54.0	24.0	26.6	53.9	5.2	H
4	2465.500	64.3	54.0	-10.3	27.5	54.1	5.7	H
5	7437.000	43.8	54.0	10.2	36.3	51.8	11.0	H
6	8837.000	44.7	54.0	9.3	37.7	52.4	12.0	H

Note: Point 4 serves as the primary frequency signal

Temperature:	26°C	Relative Humidity:	53%
Test Voltage:	DC 12V	Phase:	Vertical
Test Mode:	802.11g-2462 MHz	Comment:	1GHz-18GHz



Test Summary Result

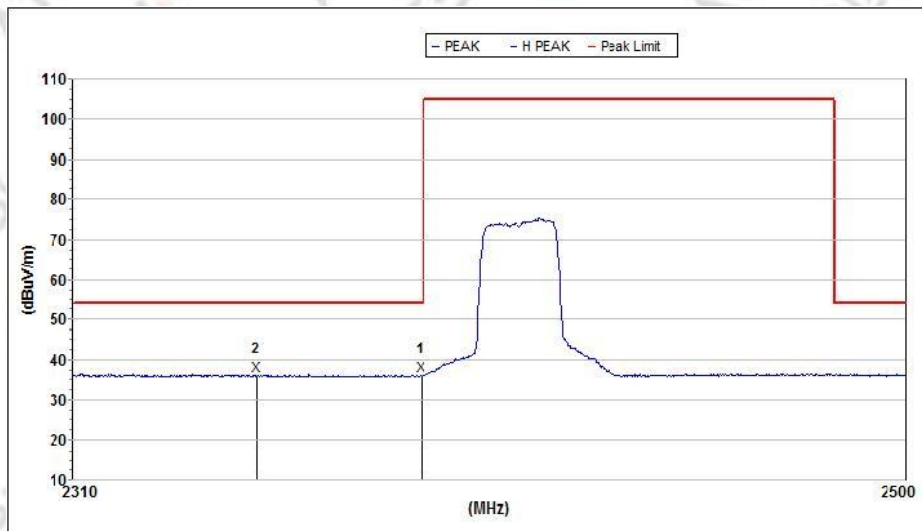
Mk.	Freq. (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margi n (dB)	Ant.F/G (dB)	Amp.G. (dB)	Cbl.L. (dB)	Pol.
Peak:								
1	1136.500	37.2	74.0	36.8	25.4	53.6	3.9	V
2	2084.500	39.2	74.0	34.8	26.7	53.9	5.2	V
3	2470.000	73.6	74.0	0.4	27.5	54.1	5.7	V
4	4553.000	48.3	74.0	25.7	31.8	52.9	8.1	V
5	6485.000	53.8	74.0	20.2	35.3	51.6	10.4	V
6	8907.000	56.4	74.0	17.6	37.8	52.5	12.1	V
Avg:								
1	1136.500	25.7	54.0	28.3	25.4	53.6	3.9	V
2	2084.500	27.8	54.0	26.2	26.7	53.9	5.2	V
3	2470.000	65.2	54.0	-11.2	27.5	54.1	5.7	V
4	4553.000	36.0	54.0	18.0	31.8	52.9	8.1	V
5	6485.000	42.7	54.0	11.3	35.3	51.6	10.4	V
6	8907.000	45.3	54.0	8.7	37.8	52.5	12.1	V

Note:Point 3 serves as the primary frequency signal

Note: During the test, pre-scan 802.11b, 802.11g, 802.11n20 mode, found 802.11g was worse case mode. The report only reflects the test data of worst mode.

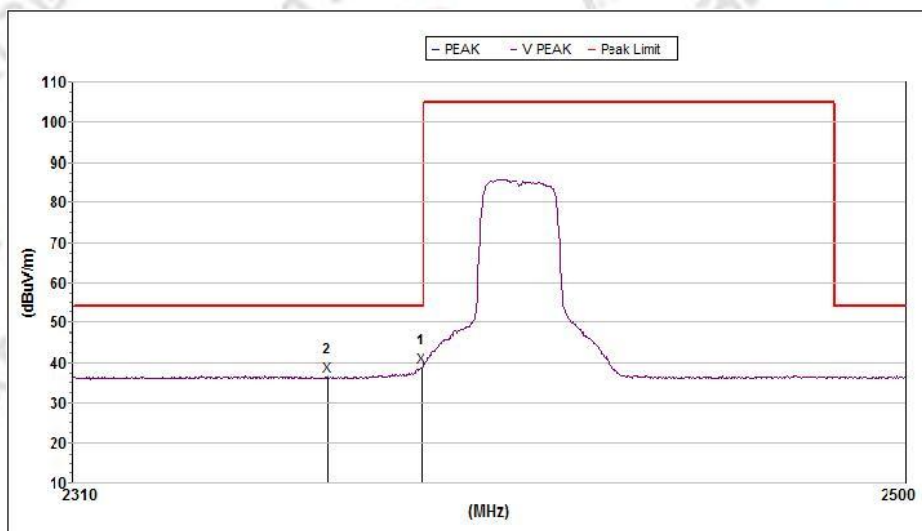
Test Mode: 802.11g

Test Channel: Lowest channel, Test Polarization: Horizontal



Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol
AVG								
1	2389.500	35.9	54.0	18.1	27.4	43.6	5.6	H
2	2352.194	35.9	54.0	18.1	27.3	43.6	5.6	H

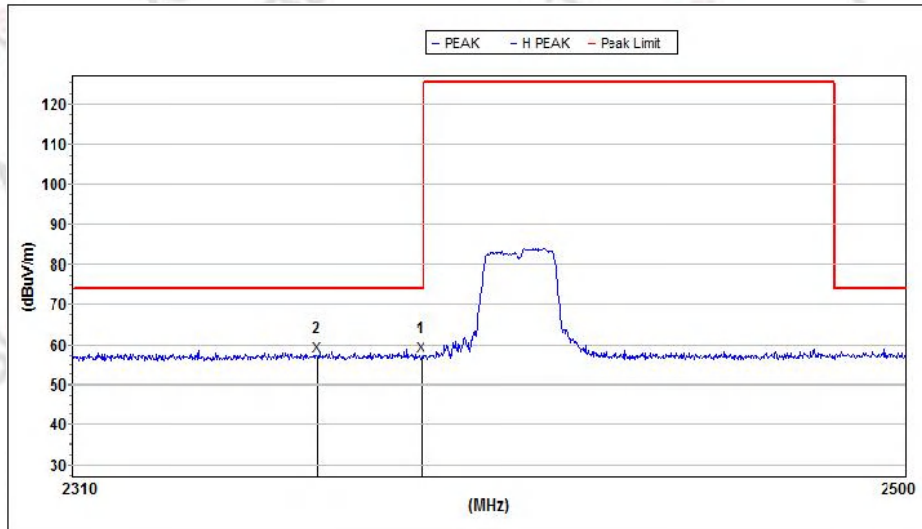
Test Channel: Lowest channel, Test Polarization: Vertical



Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol
AVG								
1	2389.500	39.1	54.0	14.9	27.4	43.6	5.6	V
2	2368.051	36.5	54.0	17.5	27.3	43.6	5.6	V

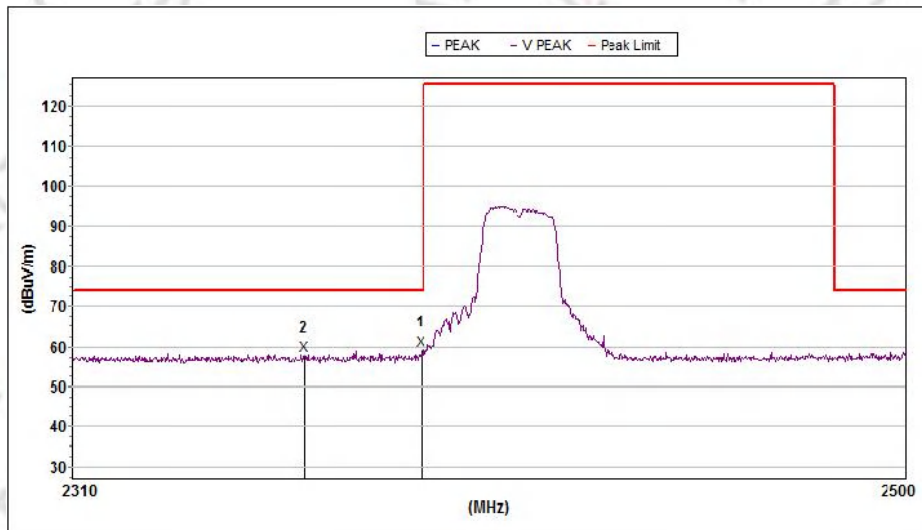
Test Mode: 802.11g

Test Channel: Lowest channel, Test Polarization: Horizontal



Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Po l.
PEAK								
1	2389.600	57.1	74.0	16.9	27.4	43.6	5.6	H
2	2365.806	57.3	74.0	16.7	27.3	43.6	5.6	H

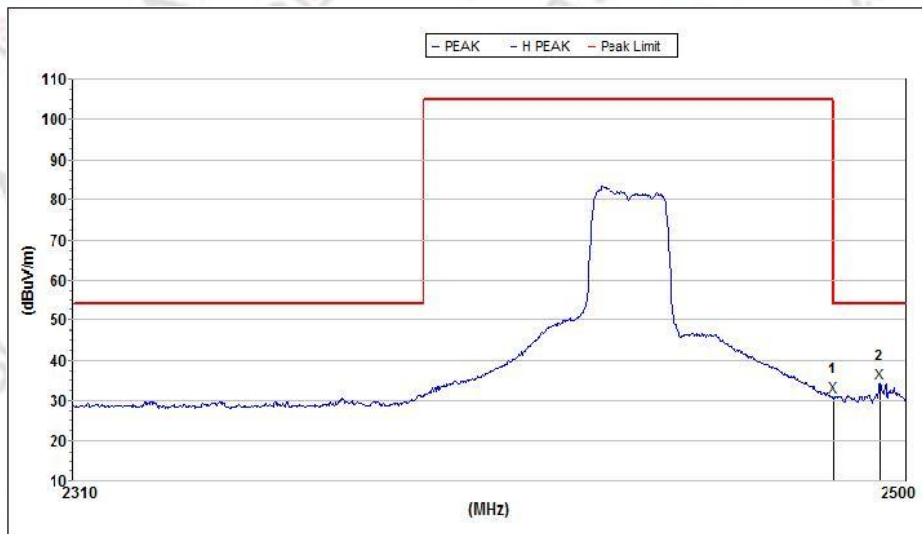
Test Channel: Lowest channel, Test Polarization: Vertical



Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol
PEAK								.
1	2389.600	59.2	74.0	14.8	27.4	43.6	5.6	V
2	2362.815	57.9	74.0	16.1	27.3	43.6	5.6	V

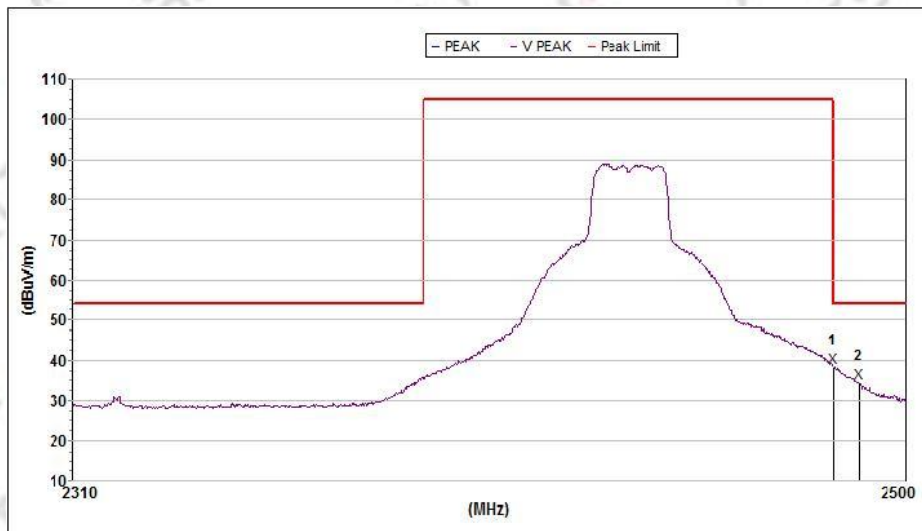
Test Mode: 802.11g

Test Channel: Midest channel, Test Polarization: Horizontal



Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol
AVG								.
1	2483.600	30.9	54.0	23.1	27.6	54.1	5.7	H
2	2493.882	34.5	54.0	19.5	27.6	54.1	5.8	H

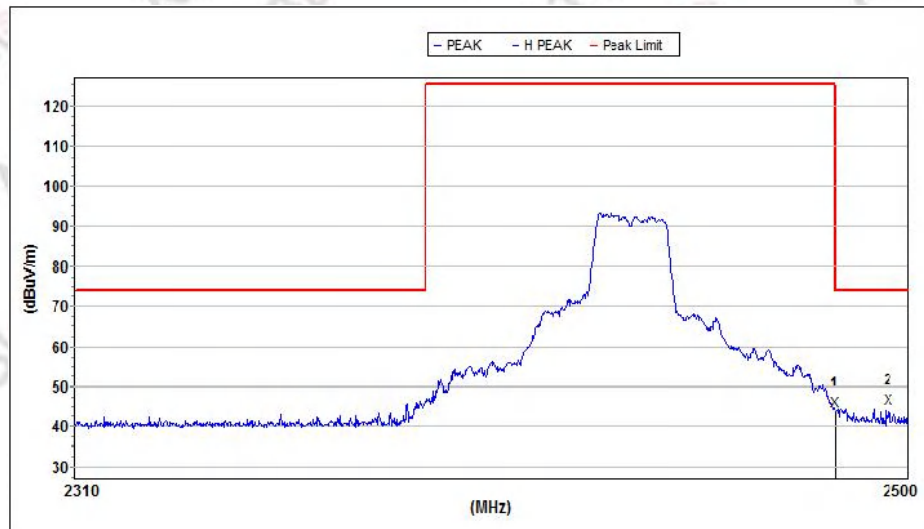
Test Channel: Midest channel, Test Polarization: Vertical



Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol
AVG								.
1	2483.600	38.4	54.0	15.6	27.6	54.1	5.7	V
2	2489.155	34.3	54.0	19.7	27.6	54.1	5.8	V

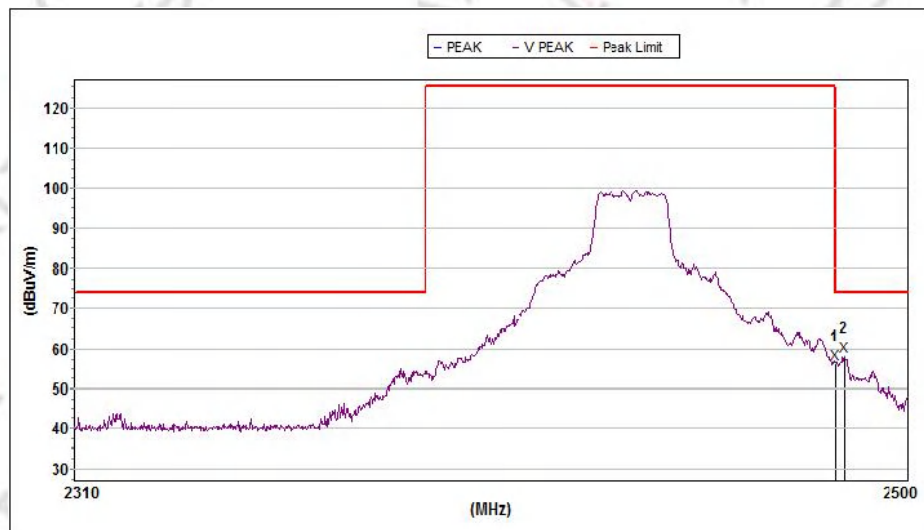
Test Mode: 802.11g

Test Channel: Midest channel, Test Polarization: Horizontal



Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Po l.
PEAK								
1	2483.600	44.1	74.0	29.9	27.6	54.1	5.7	H
2	2495.656	44.6	74.0	29.4	27.6	54.1	5.8	H

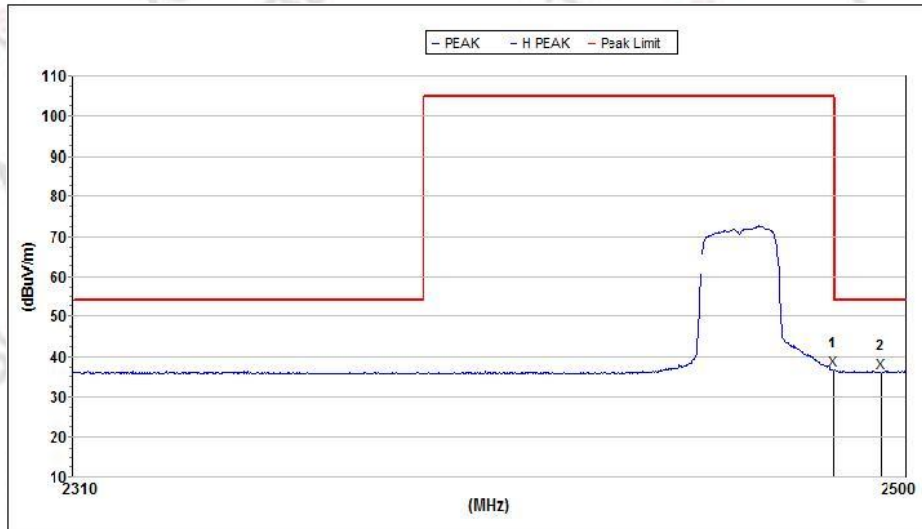
Test Channel: Midest channel, Test Polarization: Vertical



Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol
PEAK								.
1	2483.600	56.4	74.0	17.6	27.6	54.1	5.7	V
2	2485.420	58.1	74.0	15.9	27.6	54.1	5.7	V

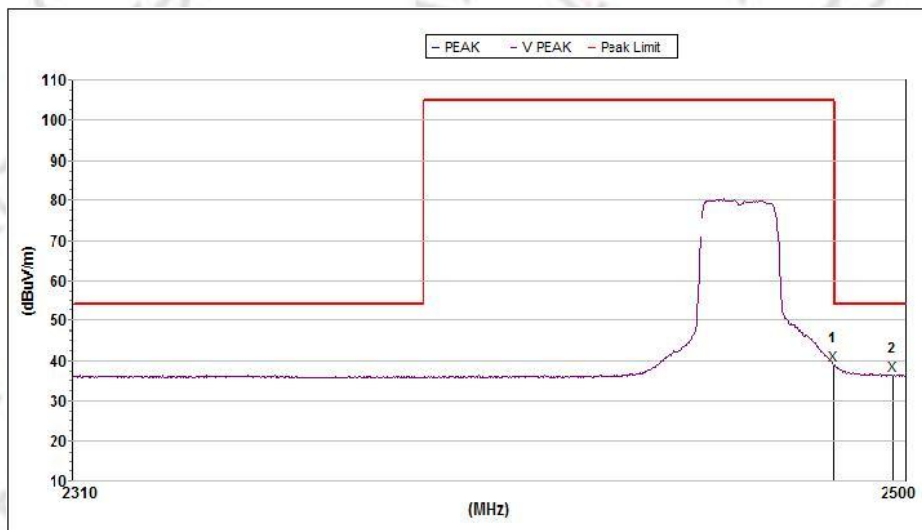
Test Mode: 802.11g

Test Channel: Highest channel, Test Polarization: Horizontal



Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol
AVG								
1	2483.600	36.7	54.0	17.3	27.6	43.5	5.7	H
2	2494.079	36.1	54.0	17.9	27.6	43.5	5.8	H

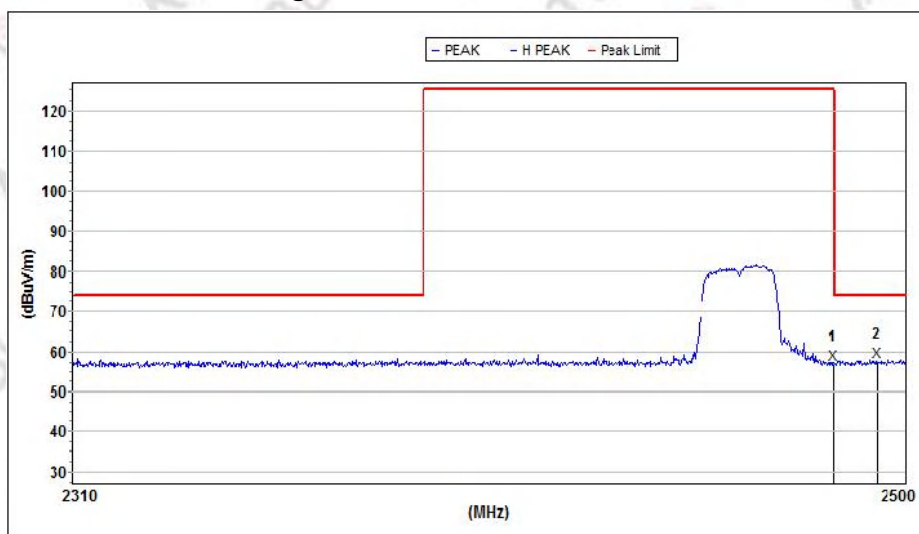
Test Channel: Highest channel, Test Polarization: Vertical



Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol
AVG								
1	2483.600	38.9	54.0	15.1	27.6	43.5	5.7	V
2	2497.235	36.4	54.0	17.6	27.6	43.5	5.8	V

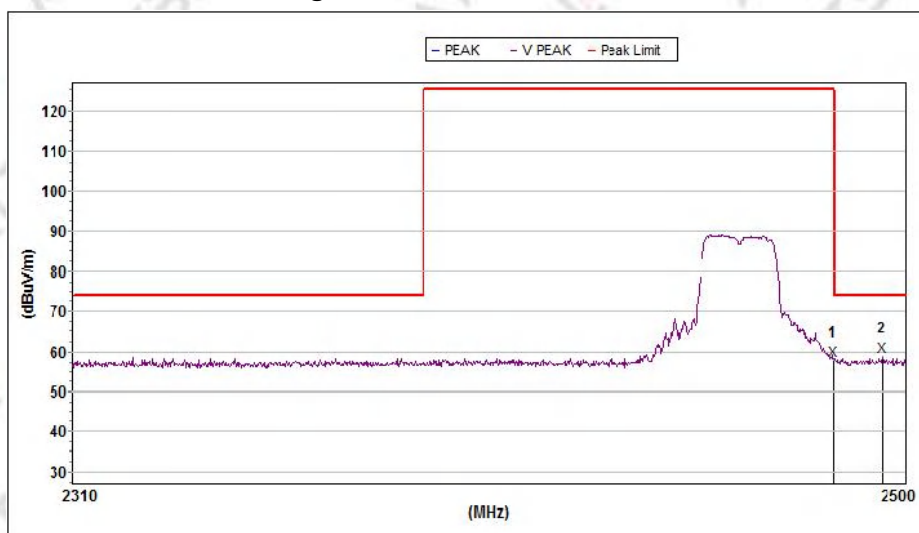
Test Mode: 802.11g

Test Channel: Highest channel, Test Polarization: Horizontal



Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Po l.
PEAK								
1	2483.600	56.8	74.0	17.2	27.6	43.5	5.7	H
2	2493.290	57.6	74.0	16.4	27.6	43.5	5.8	H

Test Channel: Highest channel, Test Polarization: Vertical



Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Ant.F/G. (dB/m)	Amp.G. (dB)	Cbl.L. (dB)	Pol
PEAK								.
1	2483.600	58.0	74.0	16.0	27.6	43.5	5.7	V
2	2494.473	58.8	74.0	15.2	27.6	43.5	5.8	V

.*****END OF THE Appendix*****