

Test Model: 65VS4K20

1GHz-18GHz:

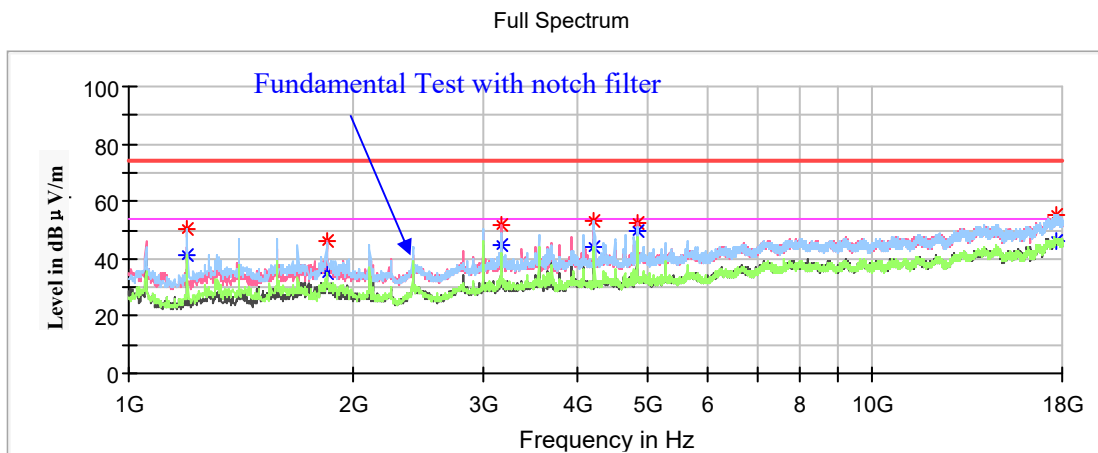
802.11b Mode(Chain 0):

(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

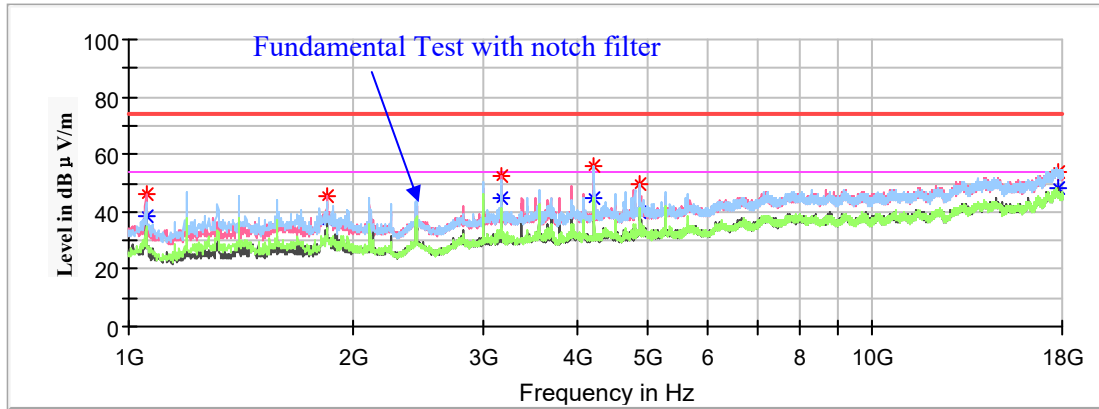
Low Channel: 2412MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1198.900000	---	41.51	200.0	H	0.0	-18.0	54.00	12.49
1198.900000	50.26	---	200.0	H	0.0	-18.0	74.00	23.74
1846.600000	---	35.28	200.0	V	339.0	-15.0	54.00	18.72
1846.600000	46.50	---	200.0	V	339.0	-15.0	74.00	27.50
3165.800000	---	44.46	200.0	V	359.0	-9.7	54.00	9.54
3165.800000	51.99	---	200.0	V	359.0	-9.7	74.00	22.01
4221.500000	---	43.94	200.0	H	319.0	-6.7	54.00	10.06
4221.500000	53.41	---	200.0	H	319.0	-6.7	74.00	20.59
4824.000000	---	49.39	200.0	V	25.0	-5.5	54.00	4.61
4824.000000	52.32	---	200.0	V	25.0	-5.5	74.00	21.68
17719.500000	---	46.37	150.0	H	313.0	8.9	54.00	7.63
17719.500000	55.50	---	150.0	H	313.0	8.9	74.00	18.50

Middle Channel: 2437MHz

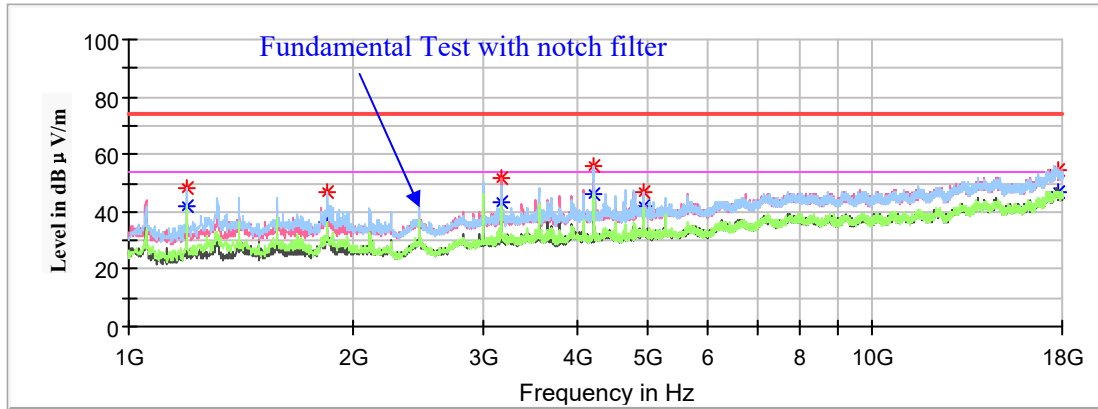
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1054.400000	---	38.70	200.0	V	334.0	-18.8	54.00	15.30
1054.400000	45.97	---	200.0	V	334.0	-18.8	74.00	28.03
1844.900000	---	36.79	150.0	V	352.0	-15.1	54.00	17.21
1844.900000	45.24	---	150.0	V	352.0	-15.1	74.00	28.76
3165.800000	---	44.58	200.0	V	0.0	-9.7	54.00	9.42
3165.800000	52.65	---	200.0	V	0.0	-9.7	74.00	21.35
4224.900000	55.75	---	200.0	H	324.0	-6.6	74.00	18.25
4224.900000	---	44.58	200.0	H	324.0	-6.6	54.00	9.42
4874.000000	49.88	---	200.0	H	41.0	-5.4	74.00	24.12
4874.000000	---	39.81	200.0	H	41.0	-5.4	54.00	14.19
17756.900000	54.16	---	150.0	V	201.0	8.8	74.00	19.84
17756.900000	---	48.10	150.0	V	201.0	8.8	54.00	5.90

High Channel: 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1198.900000	---	41.65	150.0	H	0.0	-18.0	54.00	12.35
1198.900000	48.38	---	150.0	H	0.0	-18.0	74.00	25.62
1844.900000	---	36.68	150.0	H	329.0	-15.1	54.00	17.32
1844.900000	46.52	---	150.0	H	329.0	-15.1	74.00	27.48
3165.800000	---	43.57	200.0	V	346.0	-9.7	54.00	10.43
3165.800000	51.75	---	200.0	V	346.0	-9.7	74.00	22.25
4223.200000	---	45.96	200.0	H	322.0	-6.6	54.00	8.04
4223.200000	56.20	---	200.0	H	322.0	-6.6	74.00	17.80
4924.000000	---	41.77	150.0	V	67.0	-5.3	54.00	12.23
4924.000000	46.69	---	150.0	V	67.0	-5.3	74.00	27.31
17726.300000	---	46.58	200.0	V	156.0	8.8	54.00	7.42
17726.300000	54.53	---	200.0	V	156.0	8.8	74.00	19.47

802.11g Mode (Chain 0):

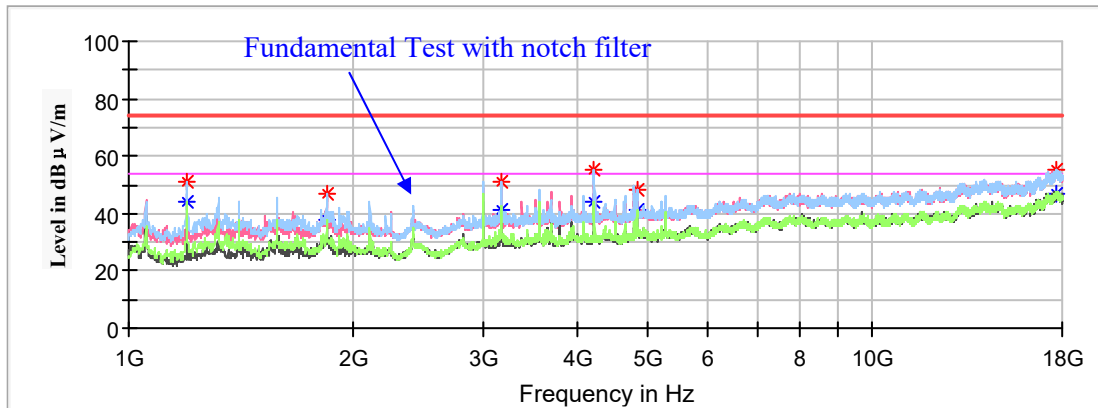
(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
 2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
- Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)
- Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Low Channel: 2412MHz

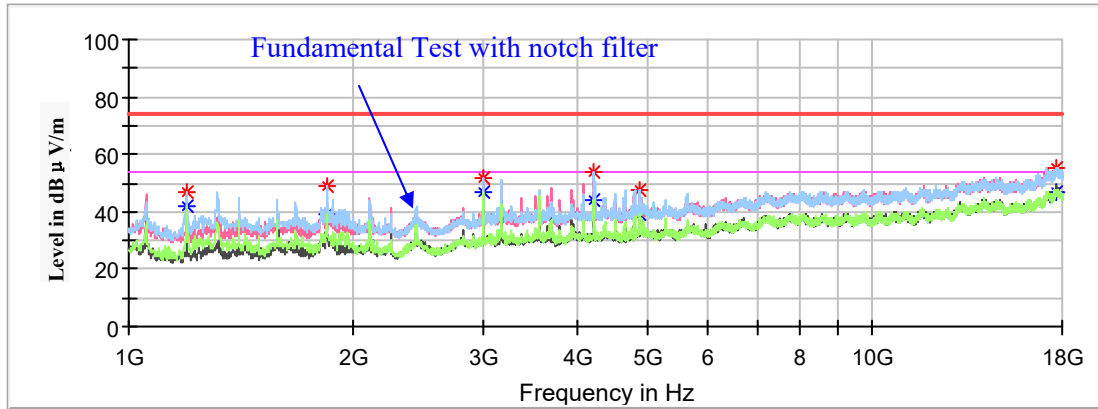
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1198.900000	51.21	---	150.0	H	10.0	-18.0	74.00	22.79
1198.900000	---	44.37	150.0	H	10.0	-18.0	54.00	9.63
1846.600000	46.88	---	150.0	H	38.0	-15.0	74.00	27.12
1846.600000	---	37.68	150.0	H	38.0	-15.0	54.00	16.32
3164.100000	50.77	---	200.0	V	61.0	-9.7	74.00	23.23
3164.100000	---	41.53	200.0	V	61.0	-9.7	54.00	12.47
4221.500000	54.99	---	200.0	H	313.0	-6.7	74.00	19.01
4221.500000	---	44.26	200.0	H	313.0	-6.7	54.00	9.74
4824.000000	48.58	---	200.0	V	308.0	-5.5	74.00	25.42
4824.000000	---	41.55	200.0	V	208.0	-5.5	54.00	12.45
17717.800000	---	46.64	150.0	H	121.0	8.9	54.00	7.36
17717.800000	55.58	---	150.0	H	121.0	8.9	74.00	18.42

Middle Channel: 2437MHz

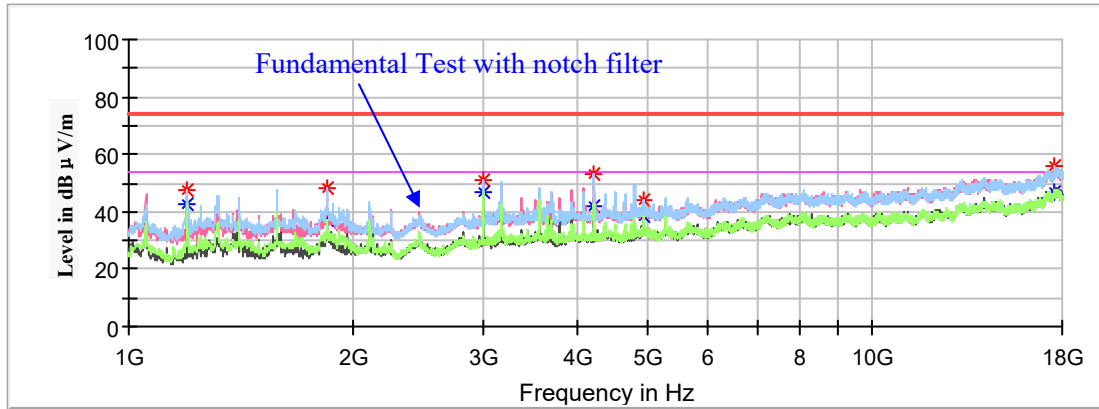
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1198.900000	---	41.78	150.0	H	70.0	-18.0	54.00	12.22
1198.900000	46.88	---	150.0	H	70.0	-18.0	74.00	27.12
1844.900000	---	39.38	150.0	H	336.0	-15.1	54.00	14.62
1844.900000	48.71	---	150.0	H	336.0	-15.1	74.00	25.29
2990.700000	---	46.91	150.0	H	59.0	-10.1	54.00	7.09
2990.700000	51.99	---	150.0	H	59.0	-10.1	74.00	22.01
4226.600000	---	44.20	200.0	H	15.0	-6.6	54.00	9.80
4226.600000	54.02	---	200.0	H	15.0	-6.6	74.00	19.98
4874.000000	---	39.17	200.0	H	308.0	-5.4	54.00	14.83
4874.000000	47.82	---	200.0	H	308.0	-5.4	74.00	26.18
17653.200000	---	46.83	150.0	V	273.0	8.9	54.00	7.17
17653.200000	55.36	---	150.0	V	273.0	8.9	74.00	18.64

High Channel: 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1198.900000	47.60	---	200.0	H	49.0	-18.0	74.00	26.40
1198.900000	---	42.91	200.0	H	49.0	-18.0	54.00	11.09
1846.600000	48.10	---	150.0	H	284.0	-15.0	74.00	25.90
1846.600000	---	36.85	150.0	H	284.0	-15.0	54.00	17.15
2990.700000	51.39	---	150.0	H	63.0	-10.1	74.00	22.61
2990.700000	---	46.79	150.0	H	63.0	-10.1	54.00	7.21
4224.900000	---	42.22	200.0	H	340.0	-6.6	54.00	11.78
4224.900000	53.19	---	200.0	H	340.0	-6.6	74.00	20.81
4924.000000	44.25	---	200.0	H	59.0	-5.3	74.00	29.75
4924.000000	---	38.22	200.0	H	59.0	-5.3	54.00	15.78
17603.900000	---	46.84	150.0	H	233.0	8.9	54.00	7.16
17603.900000	56.24	---	150.0	H	233.0	8.9	74.00	17.76

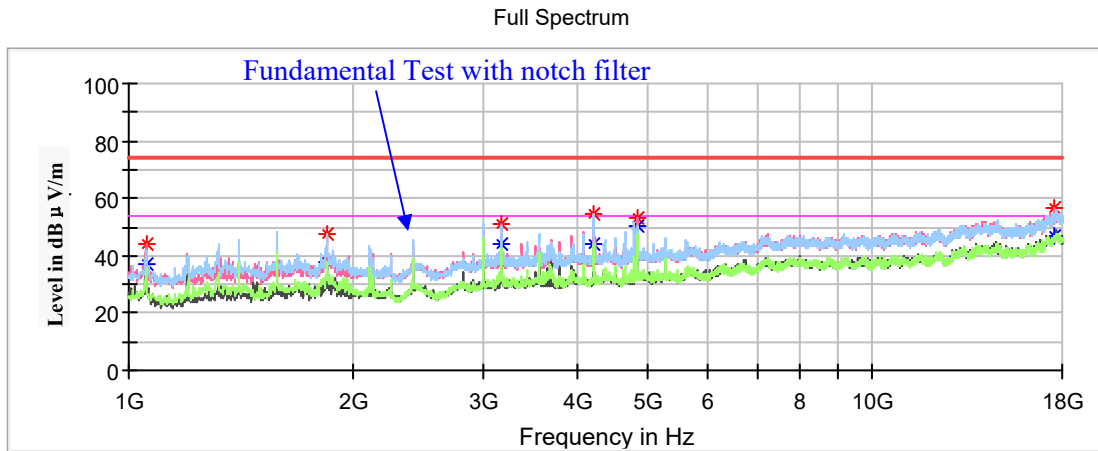
802.11b Mode(Chain 1):

(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

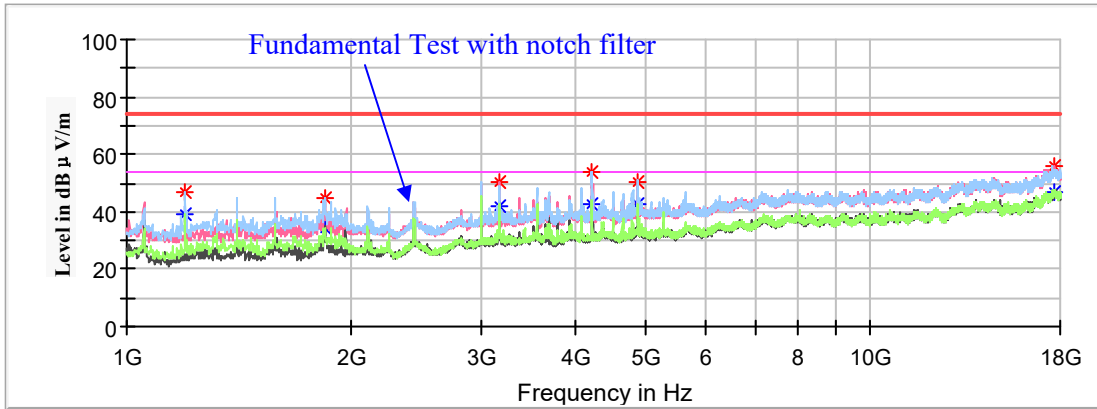
Low Channel: 2412MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1054.400000	---	37.34	200.0	V	319.0	-18.8	54.00	16.66
1054.400000	44.25	---	200.0	V	319.0	-18.8	74.00	29.75
1844.900000	---	37.52	150.0	H	329.0	-15.1	54.00	16.48
1844.900000	47.62	---	150.0	H	329.0	-15.1	74.00	26.38
3165.800000	50.96	---	150.0	V	344.0	-9.7	74.00	23.04
3165.800000	---	43.76	150.0	V	344.0	-9.7	54.00	10.24
4218.100000	54.63	---	200.0	H	39.0	-6.7	74.00	19.37
4218.100000	---	44.16	200.0	H	39.0	-6.7	54.00	9.84
4824.000000	---	50.13	200.0	V	19.0	-5.5	54.00	3.87
4824.000000	53.29	---	200.0	V	19.0	-5.5	74.00	20.71
17595.400000	---	46.88	200.0	V	73.0	8.9	54.00	7.12
17595.400000	56.46	---	200.0	V	73.0	8.9	74.00	17.54

Middle Channel: 2437MHz

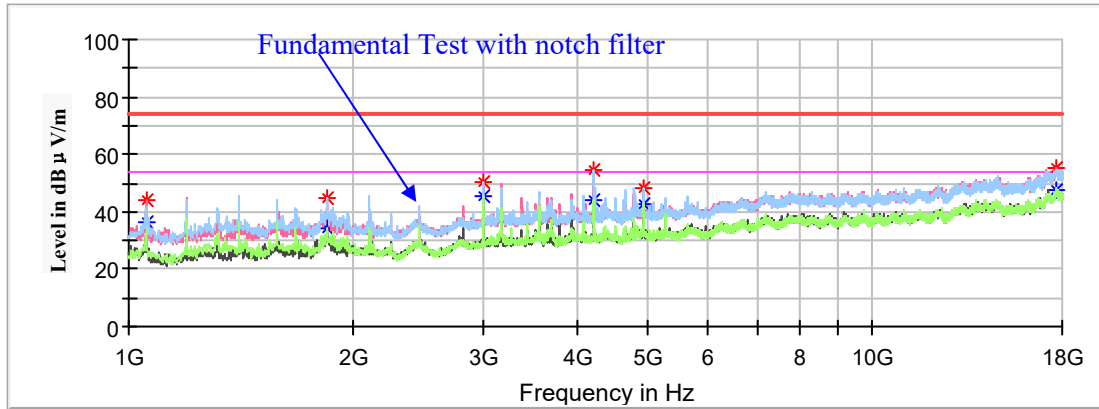
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1198.900000	---	39.43	150.0	H	319.0	-18.0	54.00	14.57
1198.900000	46.58	---	150.0	H	319.0	-18.0	74.00	27.42
1846.600000	---	34.49	150.0	H	329.0	-15.0	54.00	19.51
1846.600000	44.82	---	150.0	H	329.0	-15.0	74.00	29.18
3164.100000	---	42.09	200.0	V	0.0	-9.7	54.00	11.91
3164.100000	50.35	---	200.0	V	0.0	-9.7	74.00	23.65
4218.100000	54.14	---	200.0	H	317.0	-6.7	74.00	19.86
4218.100000	---	42.98	200.0	H	317.0	-6.7	54.00	11.02
4874.000000	---	42.66	200.0	H	311.0	-5.4	54.00	11.34
4874.000000	50.33	---	200.0	H	311.0	-5.4	74.00	23.67
17680.400000	---	46.76	150.0	V	9.0	8.9	54.00	7.24
17680.400000	55.65	---	150.0	V	9.0	8.9	74.00	18.35

High Channel: 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1054.400000	43.98	---	200.0	V	334.0	-18.8	74.00	30.02
1054.400000	---	36.65	200.0	V	334.0	-18.8	54.00	17.35
1844.900000	45.00	---	200.0	H	330.0	-15.1	74.00	29.00
1844.900000	---	34.35	200.0	H	330.0	-15.1	54.00	19.65
2990.700000	50.47	---	150.0	H	64.0	-10.1	74.00	23.53
2990.700000	---	45.43	150.0	H	64.0	-10.1	54.00	8.57
4224.900000	54.86	---	200.0	H	324.0	-6.6	74.00	19.14
4224.900000	---	43.89	200.0	H	324.0	-6.6	54.00	10.11
4924.000000	48.37	---	200.0	H	41.0	-5.3	74.00	25.63
4924.000000	---	42.88	200.0	H	41.0	-5.3	54.00	11.12
17620.900000	---	47.21	200.0	V	257.0	8.9	54.00	6.79
17620.900000	55.18	---	200.0	V	257.0	8.9	74.00	18.82

802.11g Mode (Chain 1):

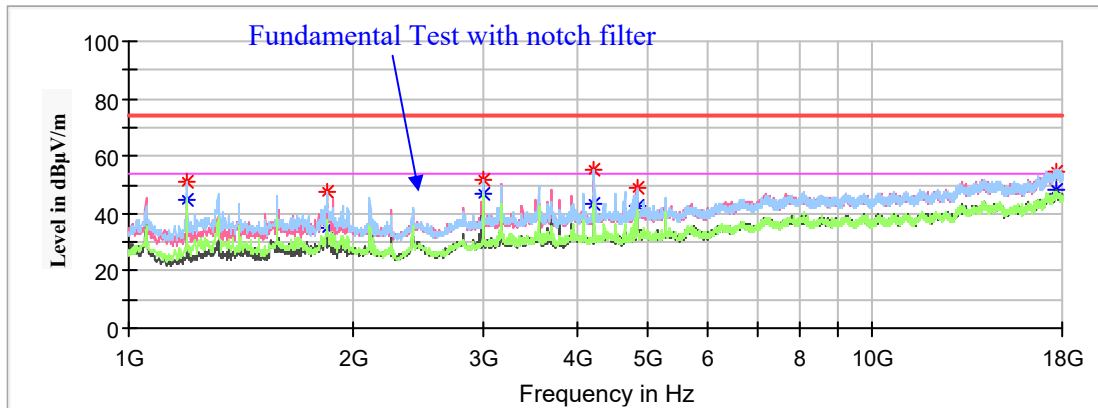
(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV /m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV /m)

Low Channel: 2412MHz

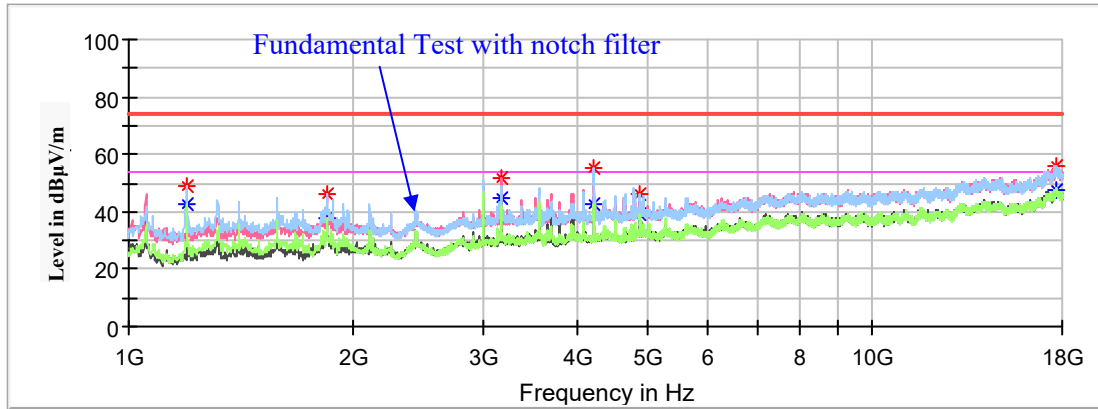
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1198.900000	---	44.68	200.0	H	0.0	-18.0	54.00	9.32
1198.900000	50.97	---	200.0	H	0.0	-18.0	74.00	23.03
1844.900000	---	35.05	150.0	H	264.0	-15.1	54.00	18.95
1844.900000	47.45	---	150.0	H	264.0	-15.1	74.00	26.55
2990.700000	---	47.17	150.0	H	65.0	-10.1	54.00	6.83
2990.700000	51.99	---	150.0	H	65.0	-10.1	74.00	22.01
4224.900000	---	43.43	200.0	H	335.0	-6.7	54.00	10.57
4224.900000	55.50	---	200.0	H	335.0	-6.6	74.00	18.50
4824.000000	49.18	---	150.0	V	25.0	-5.5	74.00	24.82
4824.000000	---	42.46	150.0	V	25.0	-5.5	54.00	11.54
17646.400000	---	48.56	200.0	V	278.0	8.9	54.00	5.44
17646.400000	54.77	---	200.0	V	278.0	8.9	74.00	19.23

Middle Channel: 2437MHz

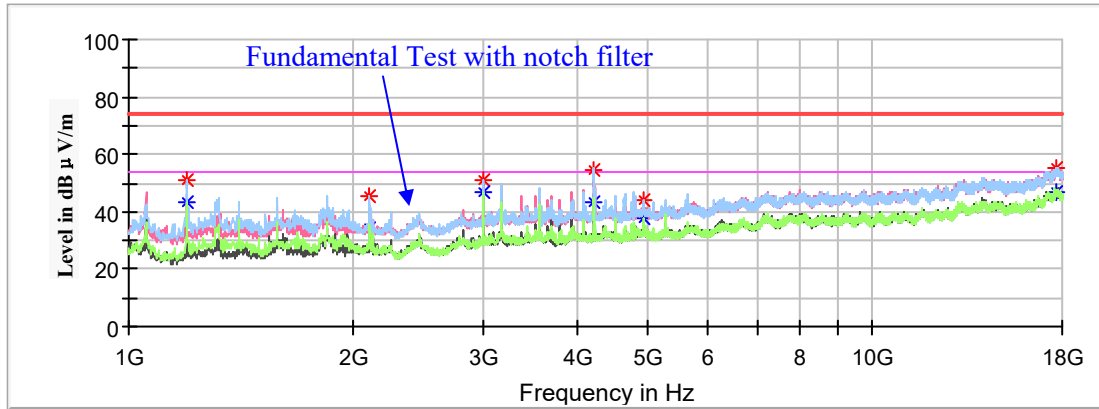
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1198.900000	48.64	---	150.0	H	324.0	-18.0	74.00	25.36
1198.900000	---	42.36	150.0	H	324.0	-18.0	54.00	11.64
1846.600000	45.98	---	150.0	H	36.0	-15.0	74.00	28.02
1846.600000	---	37.69	150.0	H	36.0	-15.0	54.00	16.31
3165.800000	51.68	---	200.0	V	0.0	-9.7	74.00	22.32
3165.800000	---	45.02	200.0	V	0.0	-9.7	54.00	8.98
4226.600000	55.11	---	200.0	H	324.0	-6.6	74.00	18.89
4226.600000	---	42.75	200.0	H	324.0	-6.6	54.00	11.25
4874.000000	46.06	---	200.0	H	313.0	-5.4	74.00	27.94
4874.000000	---	39.42	200.0	H	313.0	-5.4	54.00	14.58
17636.200000	---	47.41	150.0	H	355.0	8.9	54.00	6.59
17636.200000	55.81	---	150.0	H	355.0	8.9	74.00	18.19

High Channel: 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1198.900000	---	43.31	150.0	H	21.0	-18.0	54.00	10.69
1198.900000	50.81	---	150.0	H	21.0	-18.0	74.00	23.19
2108.400000	---	34.40	200.0	H	0.0	-14.0	54.00	19.60
2108.400000	45.51	---	200.0	H	0.0	-14.0	74.00	28.49
2990.700000	---	46.53	150.0	H	59.0	-10.1	54.00	7.47
2990.700000	51.22	---	150.0	H	59.0	-10.1	74.00	22.78
4224.900000	54.80	---	200.0	H	330.0	-6.6	74.00	19.20
4224.900000	---	43.53	200.0	H	330.0	-6.6	54.00	10.47
4924.000000	43.94	---	200.0	H	34.0	-5.3	74.00	30.06
4924.000000	---	37.74	200.0	H	34.0	-5.3	54.00	16.26
17632.800000	---	46.60	150.0	V	319.0	8.9	54.00	7.40
17632.800000	55.38	---	150.0	V	319.0	8.9	74.00	18.62

802.11n-HT20 Mode(Chain 0& Chain 1 transmitting simultaneously):

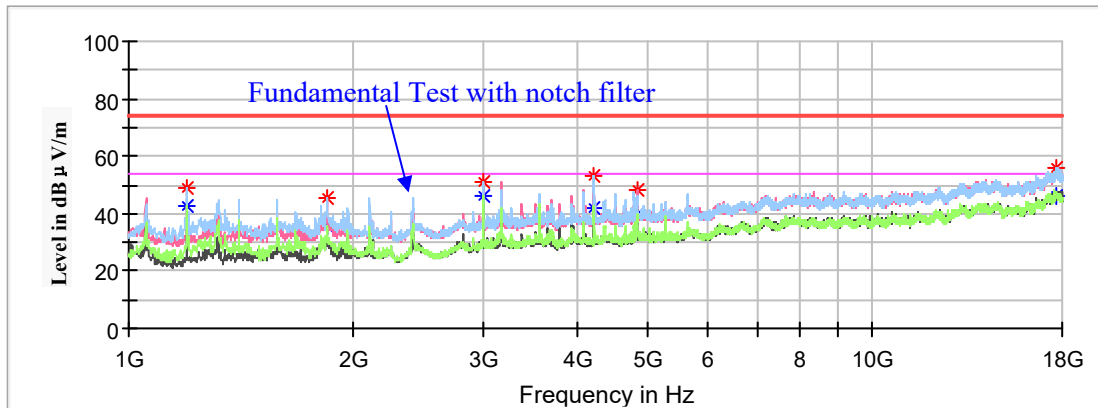
(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

Low Channel : 2412MHz

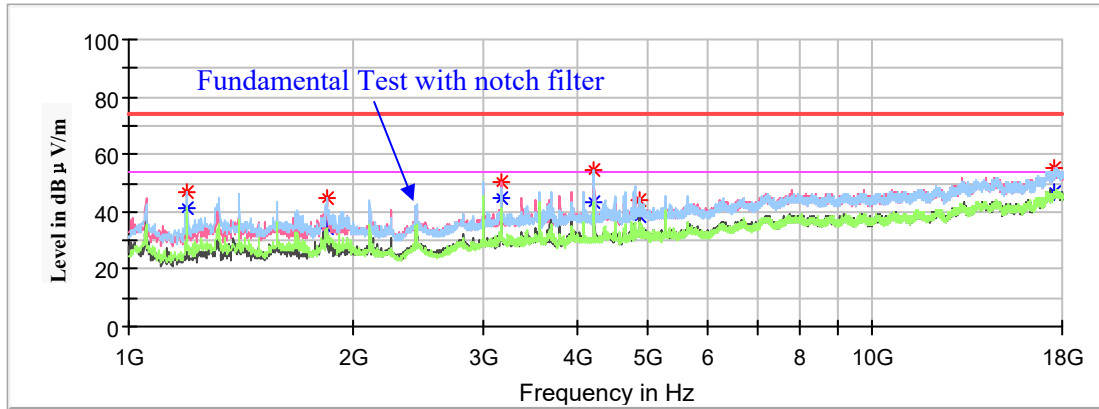
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1198.900000	48.66	---	200.0	H	340.0	-18.0	74.00	25.34
1198.900000	---	42.79	200.0	H	340.0	-18.0	54.00	11.21
1844.900000	45.41	---	200.0	H	329.0	-15.1	74.00	28.59
1844.900000	---	35.48	200.0	H	329.0	-15.1	54.00	18.52
2990.700000	50.91	---	150.0	H	62.0	-10.1	74.00	23.09
2990.700000	---	46.31	150.0	H	62.0	-10.1	54.00	7.69
4223.200000	53.18	---	200.0	H	319.0	-6.6	74.00	20.82
4223.200000	---	41.85	200.0	H	319.0	-6.6	54.00	12.15
4824.000000	48.33	---	150.0	V	0.0	-5.5	74.00	25.67
4824.000000	---	39.81	150.0	V	0.0	-5.5	54.00	14.19
17697.400000	---	46.42	150.0	H	121.0	8.9	54.00	7.58
17697.400000	55.91	---	150.0	H	121.0	8.9	74.00	18.09

Middle Channel: 2437MHz

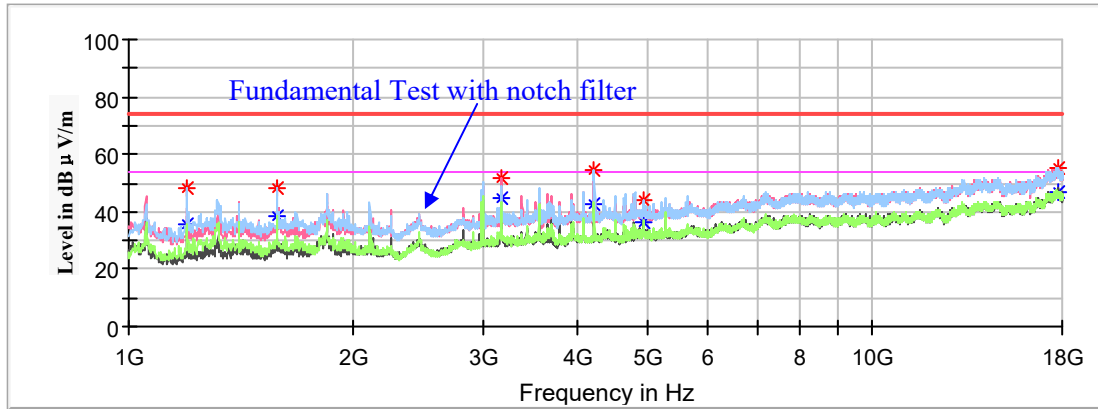
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1198.900000	46.76	---	200.0	H	75.0	-18.0	74.00	27.24
1198.900000	---	41.33	200.0	H	75.0	-18.0	54.00	12.67
1844.900000	44.97	---	150.0	H	337.0	-15.1	74.00	29.03
1844.900000	---	34.52	150.0	V	337.0	-15.1	54.00	19.48
3165.800000	---	44.51	200.0	V	0.0	-9.7	54.00	9.49
3165.800000	50.54	---	200.0	V	0.0	-9.7	74.00	23.46
4223.200000	54.86	---	200.0	H	346.0	-6.6	74.00	19.14
4223.200000	---	43.25	200.0	H	346.0	-6.6	54.00	10.75
4874.000000	44.12	---	200.0	V	0.0	-5.4	74.00	29.88
4874.000000	---	38.43	200.0	V	0.0	-5.4	54.00	15.57
17605.600000	---	46.61	150.0	H	340.0	8.9	54.00	7.39
17605.600000	55.23	---	150.0	H	340.0	8.9	74.00	18.77

High Channel : 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1198.900000	48.23	---	150.0	H	8.0	-18.0	74.00	25.77
1198.900000	---	35.70	150.0	H	8.0	-18.0	54.00	18.30
1581.400000	48.48	---	200.0	H	34.0	-16.1	74.00	25.52
1581.400000	---	38.21	200.0	H	34.0	-16.1	54.00	15.79
3165.800000	51.67	---	150.0	V	0.0	-9.7	74.00	22.33
3165.800000	---	44.50	150.0	V	0.0	-9.7	54.00	9.50
4224.900000	54.20	---	200.0	H	322.0	-6.6	74.00	19.80
4224.900000	---	42.75	200.0	H	322.0	-6.6	54.00	11.25
4924.000000	44.28	---	200.0	H	306.0	-5.3	74.00	29.72
4924.000000	---	36.02	200.0	H	306.0	-5.3	54.00	17.98
17739.900000	---	46.52	150.0	V	128.0	8.8	54.00	7.48
17739.900000	55.58	---	150.0	V	128.0	8.8	74.00	18.42

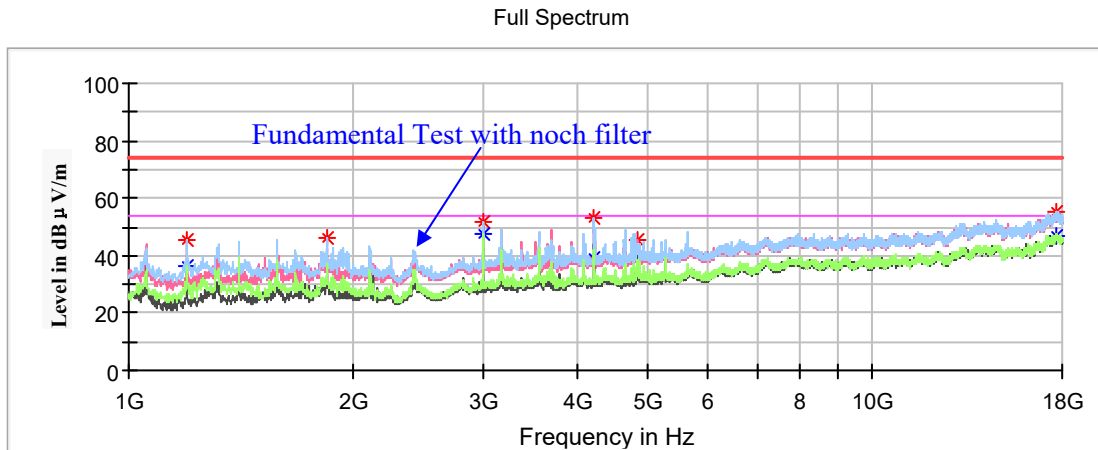
802.11n-HT40 Mode(Chain 0& Chain 1 transmitting simultaneously):

(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

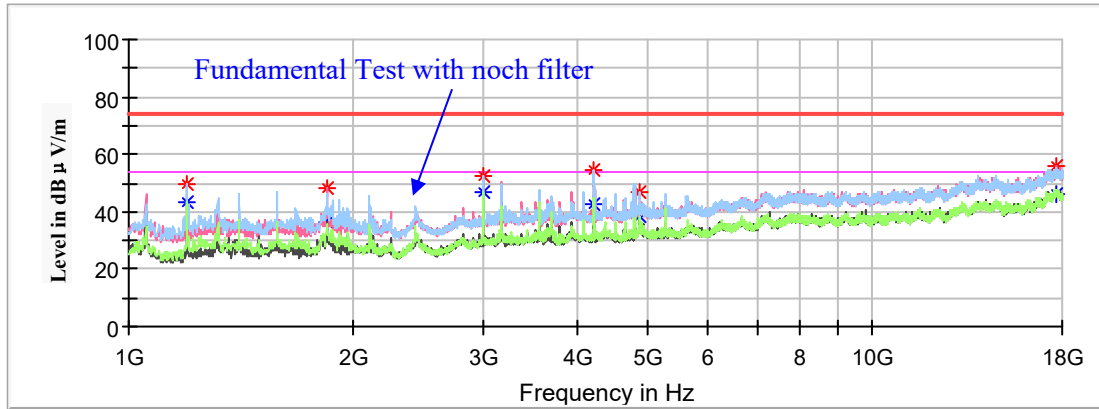
Low Channel : 2422MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1198.900000	45.20	---	150.0	H	61.0	-18.0	74.00	28.80
1198.900000	---	36.71	150.0	H	61.0	-18.0	54.00	17.29
1844.900000	45.80	---	200.0	H	321.0	-15.1	74.00	28.20
1844.900000	---	37.03	200.0	H	321.0	-15.1	54.00	16.97
2990.700000	51.67	---	150.0	H	61.0	-10.1	74.00	22.33
2990.700000	---	47.32	150.0	H	61.0	-10.1	54.00	6.68
4218.100000	53.49	---	200.0	H	341.0	-6.7	74.00	20.51
4218.100000	---	39.36	200.0	H	341.0	-6.7	54.00	14.64
4844.000000	45.44	---	200.0	V	24.0	-5.5	74.00	28.56
4844.000000	---	39.74	200.0	V	24.0	-5.5	54.00	14.26
17654.900000	---	47.16	150.0	H	51.0	8.9	54.00	6.84
17654.900000	55.49	---	150.0	H	51.0	8.9	74.00	18.51

Middle Channel: 2437MHz

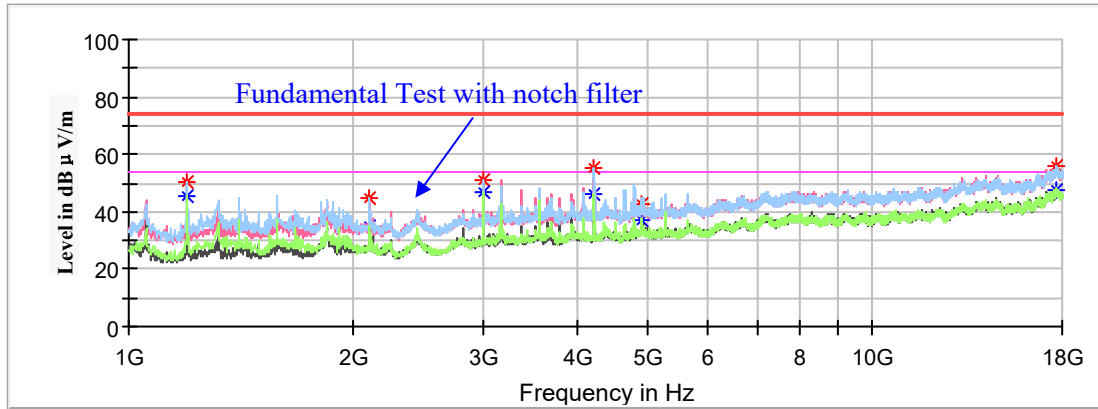
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1198.900000	49.52	---	200.0	H	14.0	-18.0	74.00	24.48
1198.900000	---	43.69	200.0	H	14.0	-18.0	54.00	10.31
1844.900000	48.32	---	150.0	V	347.0	-15.1	74.00	25.68
1844.900000	---	36.25	150.0	V	347.0	-15.1	54.00	17.75
2990.700000	52.11	---	150.0	H	61.0	-10.1	74.00	21.89
2990.700000	---	47.02	150.0	H	61.0	-10.1	54.00	6.98
4223.200000	54.84	---	200.0	H	0.0	-6.6	74.00	19.16
4223.200000	---	42.81	200.0	H	0.0	-6.6	54.00	11.19
4874.000000	---	38.25	200.0	H	311.0	-5.4	54.00	15.75
4874.000000	46.62	---	200.0	H	311.0	-5.4	74.00	27.38
17697.400000	---	46.19	200.0	V	0.0	8.9	54.00	7.81
17697.400000	55.76	---	200.0	V	0.0	8.9	74.00	18.24

High Channel : 2452MHz

Full Spectrum

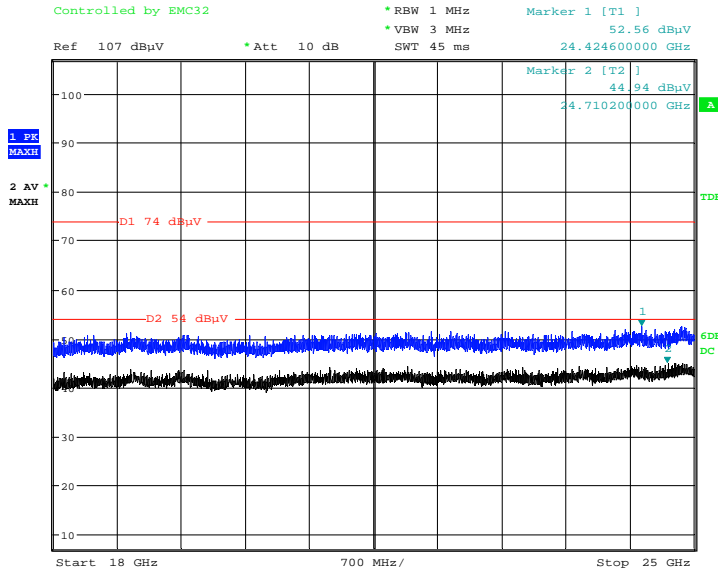


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1198.900000	50.42	---	200.0	H	340.0	-18.0	74.00	23.58
1198.900000	---	45.32	200.0	H	340.0	-18.0	54.00	8.68
2110.100000	44.71	---	150.0	V	36.0	-14.0	74.00	29.29
2110.100000	---	35.09	150.0	V	36.0	-14.0	54.00	18.91
2990.700000	51.07	---	150.0	H	61.0	-10.1	74.00	22.93
2990.700000	---	46.79	150.0	H	61.0	-10.1	54.00	7.21
4224.900000	55.05	---	200.0	H	319.0	-6.6	74.00	18.95
4224.900000	---	46.30	200.0	H	319.0	-6.6	54.00	7.70
4904.000000	---	36.77	200.0	H	329.0	-5.4	54.00	17.23
4904.000000	42.52	---	200.0	H	329.0	-5.4	74.00	31.48
17702.500000	---	47.56	200.0	H	324.0	8.9	54.00	6.44
17702.500000	56.20	---	200.0	H	324.0	8.9	74.00	17.80

18GHz-25GHz(worst case):

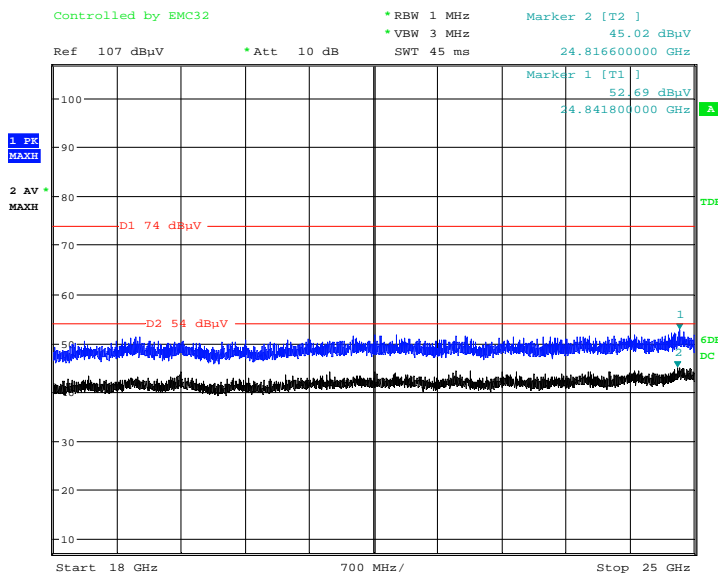
Pre-scan with 802.11b, 802.11g, 802.11n-HT20 and 802.11n-HT40 modes of operation in the X,Y and Z axes of orientation, the worst case **high channel of 802.11 n-HT20 mode in Z-axis of orientation** was recorded

Horizontal



Date: 27.JUL.2020 18:17:40

Vertical



Date: 27.JUL.2020 18:30:35

Restricted Bands Emissions Test:

Note:

- Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

2. The test distance is 1.5m, the limit at 1.5m is below:

Average (dBµV/m) = 54.00 dBµV/m + 20*log10(3/1.5)=60.00 dBµV/m

MaxPeak (dBµV/m) = 74.00 dBµV/m + 20*log10(3/1.5)=80.00 dBµV/m

802.11b Mode (Chain 0): (Pre-scan in the X, Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2389.00	44.56	---	200.0	V	51.0	-2.9	74.00	29.44
2389.00	---	37.57	200.0	V	51.0	-2.9	54.00	16.43
High Channel: 2462MHz								
2483.50	45.78	---	200.0	V	76.0	-2.5	74.00	28.22
2483.50	---	38.01	200.0	V	76.0	-2.5	54.00	15.99

802.11g Mode (Chain 0): (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2389.00	---	38.06	150.0	V	353.0	-2.9	54.00	15.94
2389.00	46.17	---	150.0	V	353.0	-2.9	74.00	27.83
High Channel: 2462MHz								
2483.50	45.66	---	150.0	V	346.0	-2.5	74.00	28.34
2483.50	---	39.35	150.0	V	346.0	-2.5	54.00	14.65

802.11b Mode (Chain 1): (Pre-scan in the X, Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2389.00	---	37.43	150.0	V	193.0	-2.9	54.00	16.57
2389.00	45.11	---	150.0	V	193.0	-2.9	74.00	28.89
High Channel: 2462MHz								
2483.50	---	38.69	150.0	V	313.0	-2.5	54.00	15.31
2483.50	43.58	---	150.0	V	313.0	-2.5	74.00	30.42

802.11g Mode (Chain 1): (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dB μ V/m)	Margin (dB)
	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2390.00	47.71	---	150.0	V	352.0	-2.9	74.00	26.29
2390.00	---	40.51	150.0	V	352.0	-2.9	54.00	13.49
High Channel: 2462MHz								
2483.50	44.83	---	200.0	V	323.0	-2.5	74.00	29.17
2483.50	---	39.60	200.0	V	323.0	-2.5	54.00	14.40

802.11n-HT20 Mode (Chain 0& Chain 1): (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dB μ V/m)	Margin (dB)
	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2390.00	---	42.20	150.0	V	352.0	-2.9	54.00	11.80
2390.00	51.13	---	150.0	V	352.0	-2.9	74.00	22.87
High Channel: 2462MHz								
2483.50	---	38.18	150.0	V	328.0	-2.5	54.00	15.82
2483.50	47.00	---	150.0	V	328.0	-2.5	74.00	27.00

802.11n-HT40 Mode (Chain 0& Chain 1): (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dB μ V/m)	Margin (dB)
	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Height (cm)	Polar (H/V)				
Low Channel: 2422MHz								
2390.00	48.99	---	150.0	H	351.0	-2.9	74.00	25.01
2390.00	---	44.57	150.0	H	351.0	-2.9	54.00	9.43
High Channel: 2452MHz								
2483.50	---	44.85	200.0	H	309.0	-2.5	54.00	9.15
2483.50	52.73	---	200.0	H	309.0	-2.5	74.00	21.27

Test Model: 75SVL20

1GHz-18GHz:

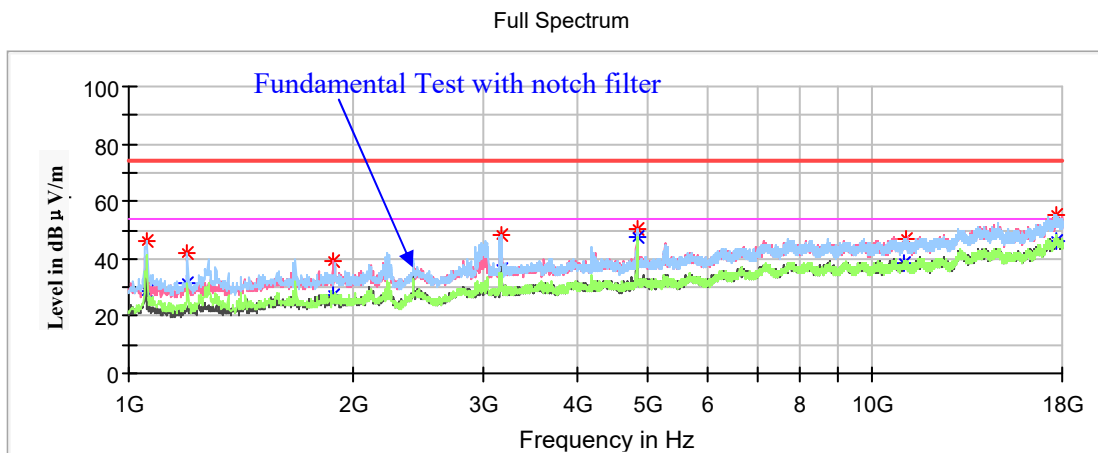
802.11b Mode(Chain 0):

(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

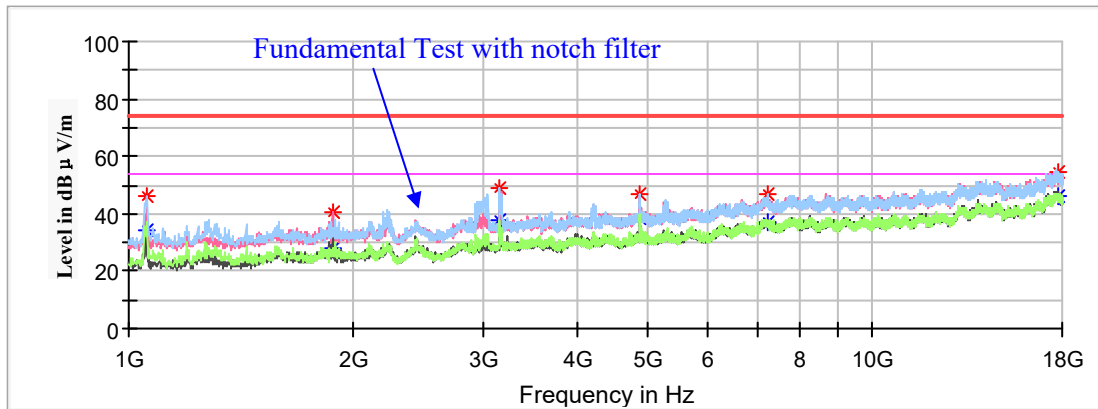
Low Channel: 2412MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1057.800000	46.48	---	150.0	V	240.0	-18.8	74.00	27.52
1057.800000	---	28.96	150.0	V	240.0	-18.8	54.00	25.04
1200.600000	42.00	---	100.0	H	267.0	-18.0	74.00	32.00
1200.600000	---	31.36	100.0	H	267.0	-18.0	54.00	22.64
1878.900000	---	27.41	150.0	V	186.0	-14.9	54.00	26.59
1878.900000	39.06	---	150.0	V	186.0	-14.9	74.00	34.94
3176.000000	---	36.68	100.0	V	201.0	-9.6	54.00	17.32
3176.000000	48.09	---	100.0	V	201.0	-9.6	74.00	25.91
4824.000000	---	47.44	150.0	H	187.0	-5.5	54.00	6.56
4824.000000	50.58	---	150.0	H	187.0	-5.5	74.00	23.42
11048.700000	---	38.62	150.0	V	288.0	2.9	54.00	15.38
11065.700000	46.77	---	100.0	V	288.0	2.9	74.00	27.23

Middle Channel: 2437MHz

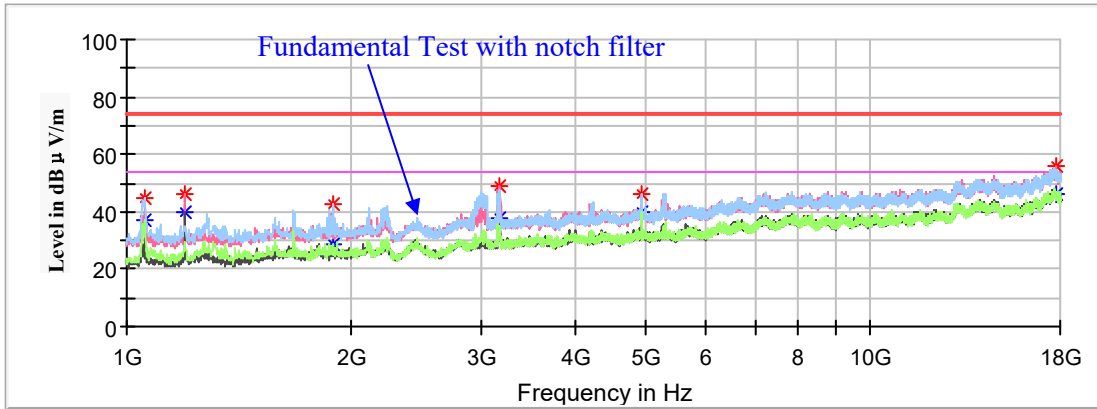
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1059.500000	---	34.58	100.0	H	242.0	-18.7	54.00	19.42
1059.500000	45.94	---	100.0	H	242.0	-18.7	74.00	28.06
1885.700000	---	27.66	150.0	V	176.0	-14.9	54.00	26.34
1885.700000	40.63	---	150.0	V	176.0	-14.9	74.00	33.37
3155.600000	---	37.77	150.0	H	202.0	-9.7	54.00	16.23
3155.600000	48.94	---	150.0	H	202.0	-9.7	74.00	25.06
4874.000000	---	38.63	150.0	H	112.0	-5.4	54.00	15.37
4874.000000	46.98	---	150.0	H	112.0	-5.4	74.00	27.02
7220.300000	---	37.37	150.0	H	162.0	0.4	54.00	16.63
7220.300000	46.57	---	150.0	H	162.0	0.4	74.00	27.43
17755.200000	54.88	---	100.0	H	99.0	8.8	74.00	19.12
17756.900000	---	46.34	100.0	H	99.0	8.8	54.00	7.66

High Channel: 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1057.800000	---	37.31	100.0	H	152.0	-18.8	54.00	16.69
1057.800000	44.95	---	100.0	H	152.0	-18.8	74.00	29.05
1198.900000	45.87	---	150.0	V	122.0	-18.0	74.00	28.13
1198.900000	---	39.63	150.0	V	122.0	-18.0	54.00	14.37
1892.500000	---	28.55	100.0	H	152.0	-14.9	54.00	25.45
1892.500000	42.52	---	100.0	H	152.0	-14.9	74.00	31.48
3164.100000	---	37.58	150.0	V	122.0	-9.7	54.00	16.42
3164.100000	49.30	---	150.0	V	122.0	-9.7	74.00	24.70
4924.000000	45.91	---	150.0	H	204.0	-5.3	74.00	28.09
4924.000000	---	39.61	150.0	H	204.0	-5.3	54.00	14.39
17724.600000	---	46.24	100.0	V	135.0	8.8	54.00	7.76
17724.600000	55.80	---	100.0	V	135.0	8.8	74.00	18.20

802.11g Mode (Chain 0):

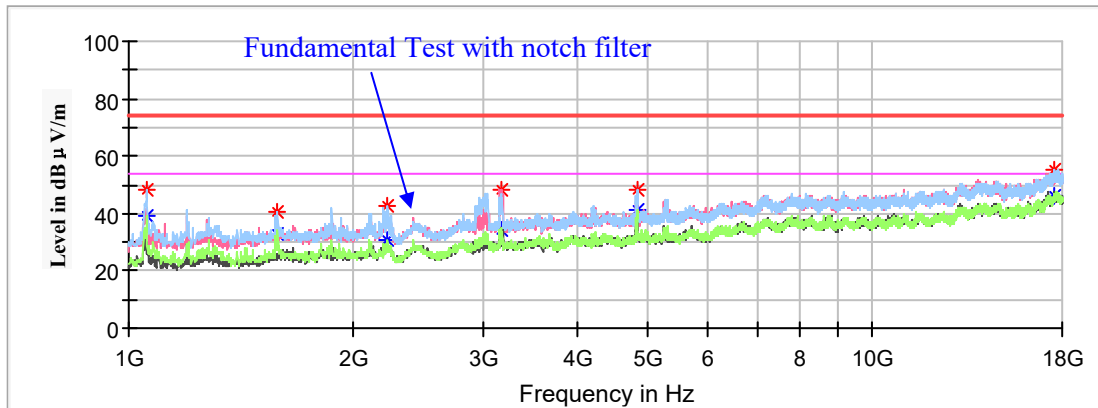
(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

Low Channel: 2412MHz

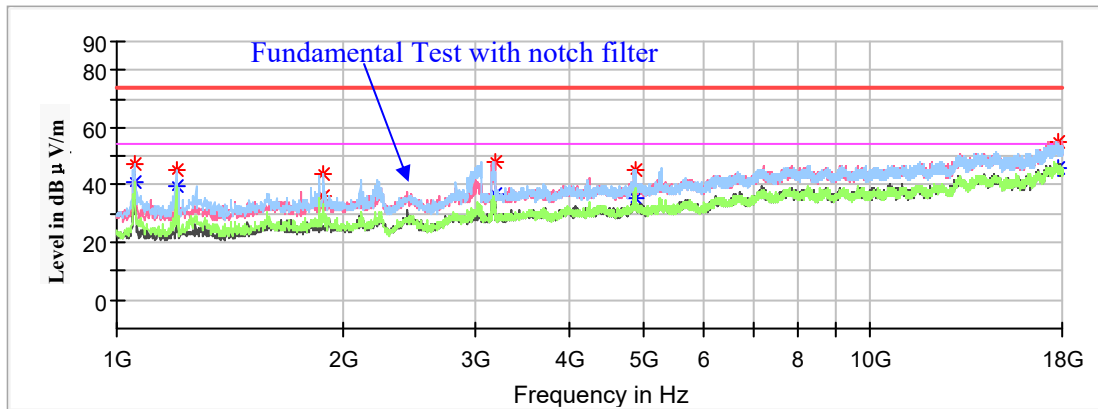
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1057.800000	---	38.96	150.0	H	232.0	-18.8	54.00	15.04
1057.800000	48.56	---	150.0	H	232.0	-18.8	74.00	25.44
1584.800000	---	33.04	100.0	H	179.0	-16.0	54.00	20.96
1584.800000	40.22	---	100.0	H	179.0	-16.0	74.00	33.78
2232.500000	43.00	---	150.0	H	81.0	-13.5	74.00	31.00
2232.500000	---	30.83	150.0	H	81.0	-13.5	54.00	23.17
3165.800000	---	34.44	100.0	V	137.0	-9.7	54.00	19.56
3165.800000	48.17	---	100.0	V	137.0	-9.7	74.00	25.83
4824.000000	---	41.53	100.0	V	94.0	-5.5	54.00	12.47
4824.000000	48.13	---	100.0	V	94.0	-5.5	74.00	25.87
17598.800000	---	45.98	150.0	H	347.0	8.9	54.00	8.02
17598.800000	55.27	---	150.0	H	347.0	8.9	74.00	18.73

Middle Channel: 2437MHz

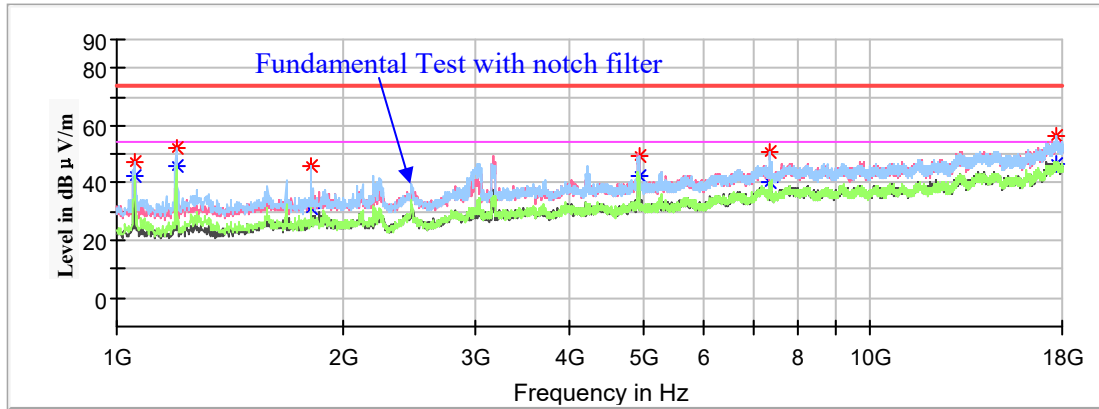
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1056.100000	---	40.93	150.0	H	246.0	-18.8	54.00	13.07
1056.100000	47.13	---	150.0	H	246.0	-18.8	74.00	26.87
1198.900000	---	39.54	100.0	H	156.0	-18.0	54.00	14.46
1198.900000	45.33	---	100.0	H	156.0	-18.0	74.00	28.67
1875.500000	---	36.28	150.0	H	231.0	-14.9	54.00	17.72
1875.500000	43.91	---	150.0	H	231.0	-14.9	74.00	30.09
3172.600000	---	36.52	150.0	V	126.0	-9.7	54.00	17.48
3172.600000	47.78	---	150.0	V	126.0	-9.7	74.00	26.22
4874.000000	45.48	---	100.0	V	196.0	-5.4	74.00	28.52
4874.000000	---	35.47	100.0	V	196.0	-5.4	54.00	18.53
17734.800000	55.31	---	100.0	V	63.0	8.8	74.00	18.69
17734.800000	---	45.99	100.0	V	63.0	8.8	54.00	8.01

High Channel: 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1057.800000	---	42.18	150.0	H	239.0	-18.8	54.00	11.82
1057.800000	47.44	---	150.0	H	239.0	-18.8	74.00	26.56
1198.900000	51.93	---	100.0	H	227.0	-18.0	74.00	22.07
1198.900000	---	46.17	100.0	H	227.0	-18.0	54.00	7.83
1814.300000	46.03	---	100.0	H	200.0	-15.2	74.00	27.97
1814.300000	---	31.42	100.0	H	200.0	-15.2	54.00	22.58
4924.000000	49.69	---	150.0	H	160.0	-5.3	74.00	24.31
4924.000000	---	42.42	150.0	H	160.0	-5.3	54.00	11.58
7378.400000	---	40.56	100.0	H	131.0	0.8	54.00	13.44
7378.400000	50.71	---	100.0	H	131.0	0.8	74.00	23.29
17665.100000	56.30	---	100.0	V	265.0	8.9	74.00	17.70
17665.100000	---	46.45	100.0	V	265.0	8.9	54.00	7.55

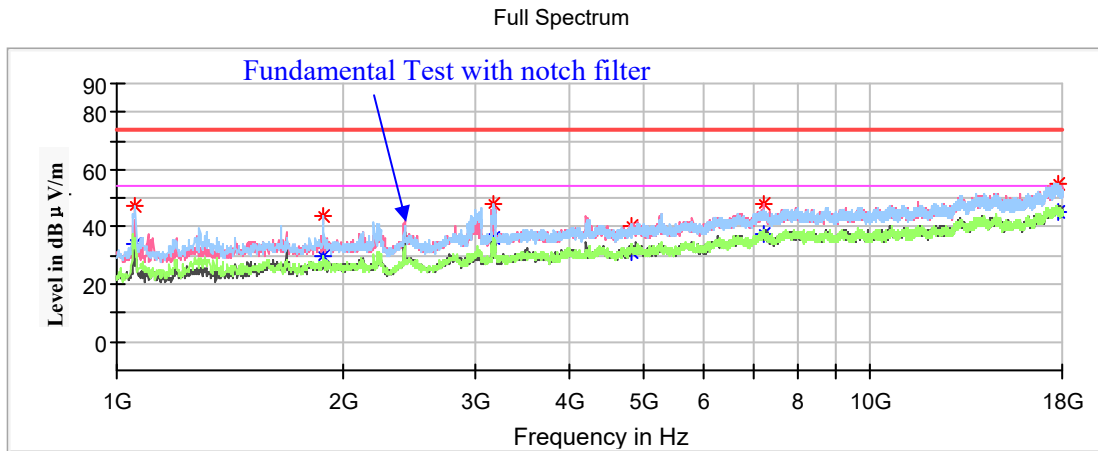
802.11b Mode(Chain 1):

(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

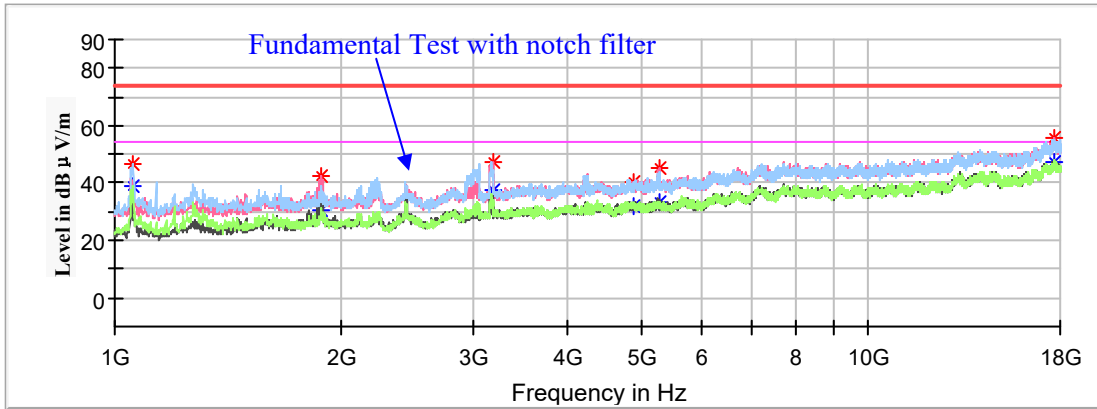
Low Channel: 2412MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1059.500000	---	34.34	100.0	H	255.0	-18.7	54.00	19.66
1059.500000	47.15	---	100.0	H	255.0	-18.7	74.00	26.85
1882.300000	43.92	---	150.0	H	176.0	-14.9	74.00	30.08
1882.300000	---	29.97	150.0	H	176.0	-14.9	54.00	24.03
3169.200000	---	36.11	150.0	H	202.0	-9.7	54.00	17.89
3169.200000	48.30	---	150.0	H	202.0	-9.7	74.00	25.70
4824.000000	---	31.48	100.0	V	184.0	-5.5	54.00	22.52
4824.000000	40.08	---	100.0	V	184.0	-5.5	74.00	33.92
7216.900000	---	37.77	150.0	H	69.0	0.4	54.00	16.23
7216.900000	48.03	---	150.0	H	69.0	0.4	74.00	25.97
17821.500000	---	45.35	100.0	V	184.0	8.8	54.00	8.65
17821.500000	55.04	---	100.0	V	163.0	8.8	74.00	18.96

Middle Channel: 2437MHz

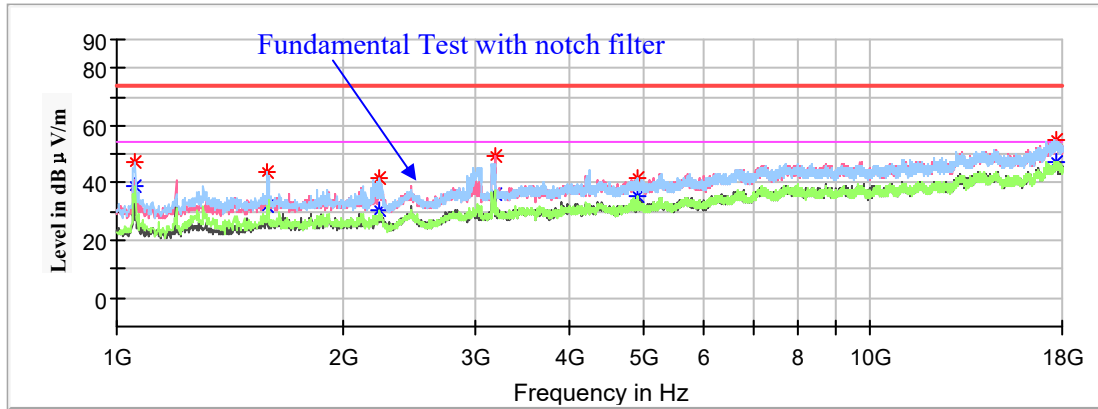
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1056.100000	46.70	---	150.0	H	246.0	-18.8	74.00	27.30
1056.100000	---	38.93	150.0	H	246.0	-18.8	54.00	15.07
1880.600000	---	30.87	150.0	V	99.0	-14.9	54.00	23.13
1880.600000	42.72	---	150.0	V	99.0	-14.9	74.00	31.28
3172.600000	47.65	---	150.0	V	127.0	-9.7	74.00	26.35
3172.600000	---	37.55	150.0	V	127.0	-9.7	54.00	16.45
4874.000000	---	31.82	100.0	H	357.0	-5.4	54.00	22.18
4874.000000	40.02	---	100.0	H	357.0	-5.4	74.00	33.98
5284.000000	45.09	---	100.0	V	178.0	-4.5	74.00	28.91
5284.000000	---	33.63	100.0	V	178.0	-4.5	54.00	20.37
17660.000000	---	47.10	150.0	V	99.0	8.9	54.00	6.90
17660.000000	55.50	---	150.0	V	99.0	8.9	74.00	18.50

High Channel: 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1059.500000	---	39.20	150.0	H	241.0	-18.7	54.00	14.80
1059.500000	47.62	---	150.0	H	241.0	-18.7	74.00	26.38
1583.100000	---	32.13	100.0	H	201.0	-16.0	54.00	21.87
1583.100000	43.60	---	100.0	H	201.0	-16.0	74.00	30.40
2235.900000	---	30.87	100.0	H	91.0	-13.5	54.00	23.13
2235.900000	41.98	---	100.0	H	91.0	-13.5	74.00	32.02
3174.300000	---	36.12	150.0	V	122.0	-9.7	54.00	17.88
3174.300000	49.18	---	150.0	V	122.0	-9.7	74.00	24.82
4924.000000	---	35.31	150.0	H	254.0	-5.3	54.00	18.69
4924.000000	41.86	---	150.0	H	254.0	-5.3	74.00	32.14
17685.500000	---	47.04	100.0	V	277.0	8.9	54.00	6.96
17685.500000	55.13	---	100.0	V	277.0	8.9	74.00	18.87

802.11g Mode (Chain 1):

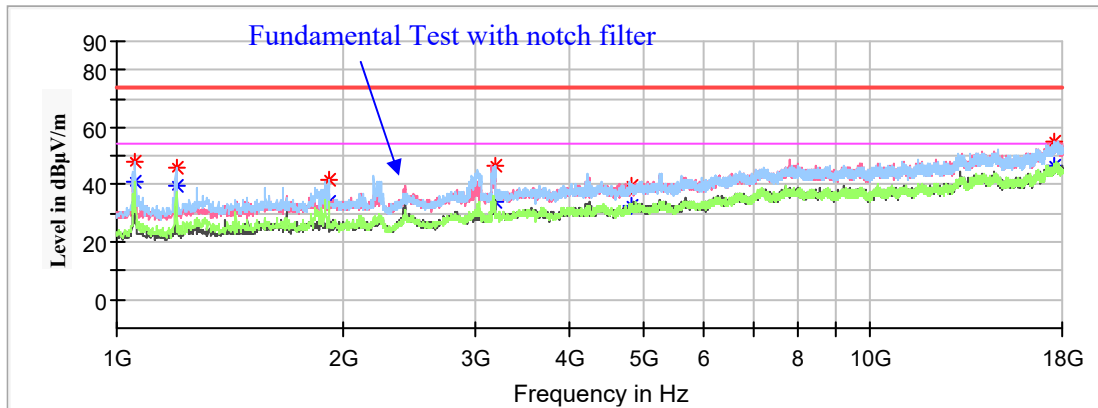
(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV /m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV /m)

Low Channel: 2412MHz

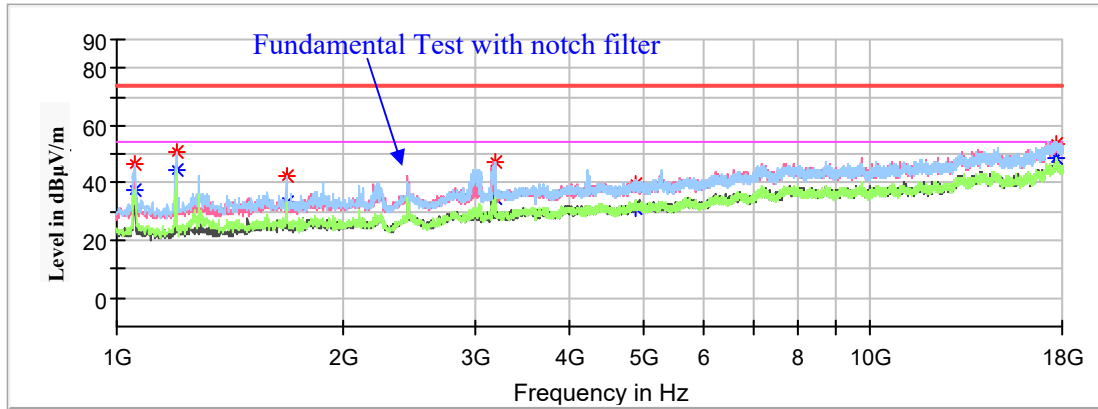
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1057.800000	---	41.25	150.0	H	243.0	-18.8	54.00	12.75
1057.800000	47.96	---	150.0	H	243.0	-18.8	74.00	26.04
1198.900000	---	39.74	100.0	V	216.0	-18.0	54.00	14.26
1198.900000	46.19	---	100.0	V	216.0	-18.0	74.00	27.81
1911.200000	---	34.19	150.0	H	216.0	-14.8	54.00	19.81
1911.200000	42.06	---	150.0	H	216.0	-14.8	74.00	31.94
3176.000000	---	34.16	100.0	H	203.0	-9.6	54.00	19.84
3176.000000	46.71	---	100.0	H	203.0	-9.6	74.00	27.29
4824.000000	---	32.66	150.0	V	177.0	-5.5	54.00	21.34
4824.000000	39.87	---	150.0	V	177.0	-5.5	74.00	34.13
17581.800000	54.98	---	100.0	H	283.0	8.9	74.00	19.02
17583.500000	---	46.68	150.0	H	283.0	8.9	54.00	7.32

Middle Channel: 2437MHz

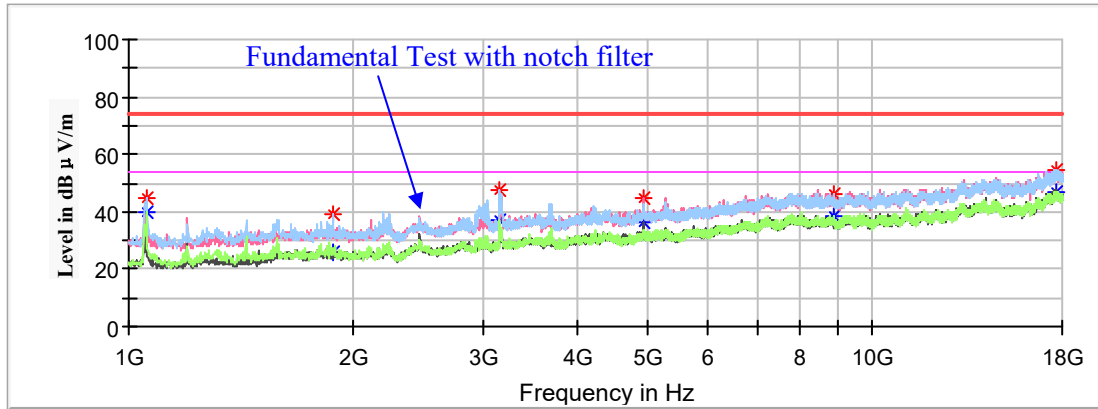
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1059.500000	---	37.55	150.0	H	239.0	-18.7	54.00	16.45
1059.500000	46.40	---	150.0	H	239.0	-18.7	74.00	27.60
1198.900000	50.52	---	150.0	H	239.0	-18.0	74.00	23.48
1198.900000	---	44.62	150.0	H	239.0	-18.0	54.00	9.38
1678.300000	---	33.20	150.0	H	135.0	-15.7	54.00	20.80
1678.300000	42.40	---	150.0	H	135.0	-15.7	74.00	31.60
3174.300000	---	34.46	150.0	H	199.0	-9.7	54.00	19.54
3174.300000	47.47	---	150.0	H	199.0	-9.7	74.00	26.53
4874.000000	---	31.07	100.0	V	212.0	-5.4	54.00	22.93
4874.000000	39.51	---	100.0	V	212.0	-5.4	74.00	34.49
17688.900000	53.68	---	100.0	H	293.0	8.9	74.00	20.32
17688.900000	---	48.44	100.0	H	293.0	8.9	54.00	5.56

High Channel: 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1057.800000	---	39.52	100.0	H	233.0	-18.8	54.00	14.48
1057.800000	44.97	---	100.0	H	233.0	-18.8	74.00	29.03
1880.600000	---	26.15	150.0	H	182.0	-14.9	54.00	27.85
1880.600000	39.33	---	150.0	H	182.0	-14.9	74.00	34.67
3152.200000	---	36.91	100.0	H	195.0	-9.7	54.00	17.09
3152.200000	47.42	---	100.0	H	195.0	-9.7	74.00	26.58
4924.000000	---	36.19	100.0	V	200.0	-5.3	54.00	17.81
4924.000000	44.47	---	100.0	V	200.0	-5.3	74.00	29.53
8852.300000	---	38.20	150.0	H	258.0	1.7	54.00	15.80
8852.300000	46.18	---	150.0	H	258.0	1.7	74.00	27.82
17634.500000	---	46.85	150.0	V	359.0	8.9	54.00	7.15
17634.500000	54.57	---	150.0	V	359.0	8.9	74.00	19.43

802.11n-HT20 Mode(Chain 0& Chain 1 transmitting simultaneously):

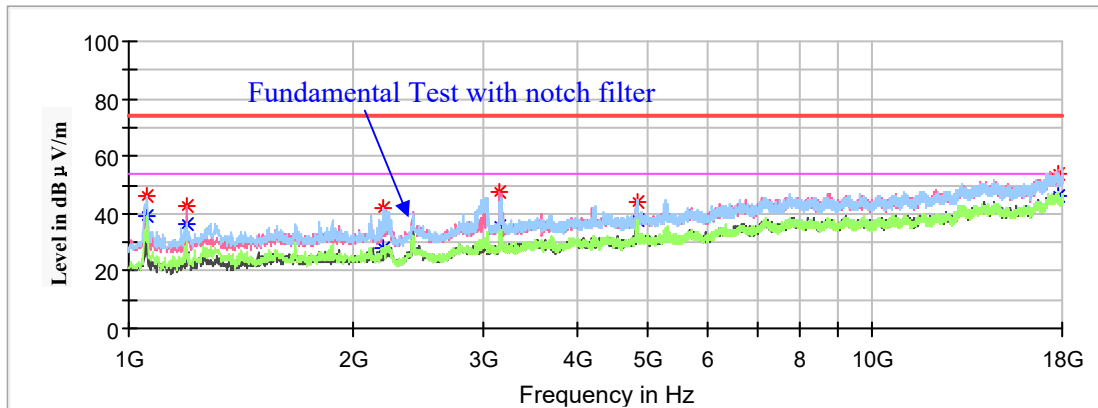
(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

Low Channel : 2412MHz

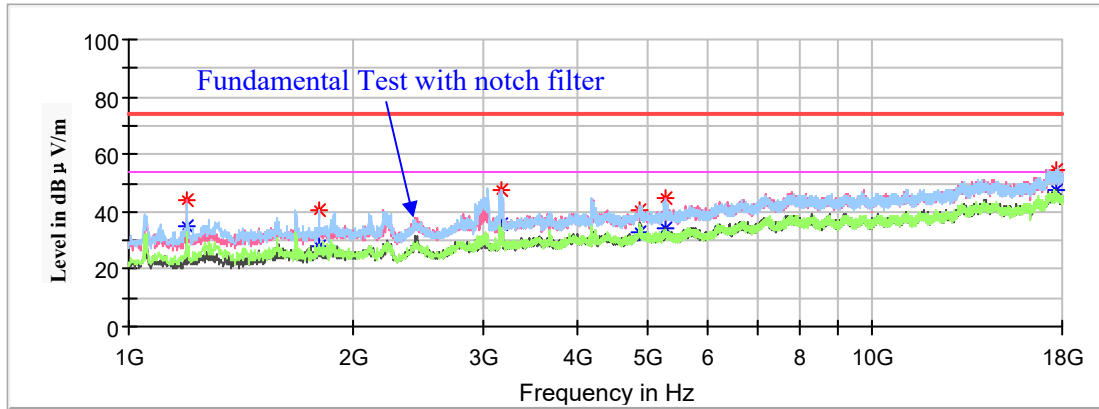
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1059.500000	46.36	---	100.0	H	239.0	-18.7	74.00	27.64
1059.500000	---	38.93	100.0	H	239.0	-18.7	54.00	15.07
1198.900000	42.82	---	150.0	V	244.0	-18.0	74.00	31.18
1198.900000	---	36.28	150.0	V	244.0	-18.0	54.00	17.72
2193.400000	---	28.29	100.0	H	83.0	-13.7	54.00	25.71
2193.400000	41.74	---	100.0	H	83.0	-13.7	74.00	32.26
3155.600000	---	35.73	150.0	V	140.0	-9.7	54.00	18.27
3155.600000	47.71	---	150.0	V	140.0	-9.7	74.00	26.29
4824.000000	---	38.09	150.0	H	211.0	-5.5	54.00	15.91
4824.000000	44.26	---	150.0	H	211.0	-5.5	74.00	29.74
17724.600000	53.91	---	150.0	V	265.0	8.8	74.00	20.09
17728.000000	---	46.14	150.0	V	265.0	8.8	54.00	7.86

Middle Channel: 2437MHz

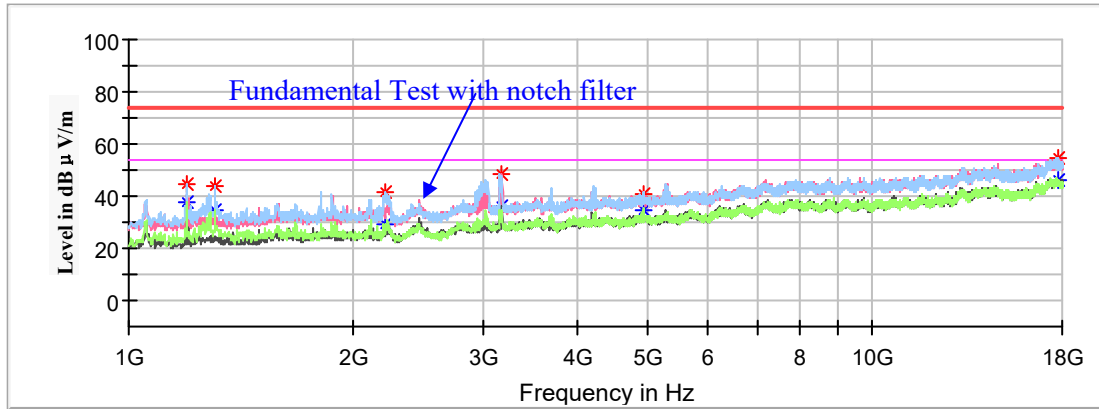
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1198.900000	44.10	---	150.0	V	117.0	-18.0	74.00	29.90
1198.900000	---	34.81	150.0	V	117.0	-18.0	54.00	19.19
1802.400000	40.77	---	150.0	H	215.0	-15.2	74.00	33.23
1802.400000	---	27.88	150.0	H	215.0	-15.2	54.00	26.12
3170.900000	---	35.74	150.0	V	117.0	-9.7	54.00	18.26
3170.900000	47.54	---	150.0	V	117.0	-9.7	74.00	26.46
4874.000000	---	32.63	100.0	H	255.0	-5.4	54.00	21.37
4874.000000	40.75	---	100.0	H	255.0	-5.4	74.00	33.25
5265.300000	---	34.14	100.0	V	170.0	-4.5	54.00	19.86
5265.300000	44.58	---	100.0	V	170.0	-4.5	74.00	29.42
17661.700000	54.50	---	100.0	H	311.0	8.9	74.00	19.50
17661.700000	---	47.36	100.0	H	311.0	8.9	54.00	6.64

High Channel : 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1198.900000	44.43	---	100.0	H	211.0	-18.0	74.00	29.57
1198.900000	---	37.52	100.0	H	211.0	-18.0	54.00	16.48
1306.000000	---	34.51	150.0	H	133.0	-17.4	54.00	19.49
1306.000000	44.09	---	150.0	H	133.0	-17.4	74.00	29.91
2212.100000	---	29.25	150.0	H	264.0	-13.6	54.00	24.75
2212.100000	41.82	---	150.0	H	264.0	-13.6	74.00	32.18
3172.600000	---	36.46	100.0	V	130.0	-9.7	54.00	17.54
3172.600000	48.76	---	100.0	V	130.0	-9.7	74.00	25.24
4924.000000	---	34.73	100.0	H	121.0	-5.3	54.00	19.27
4924.000000	41.04	---	100.0	H	121.0	-5.3	74.00	32.96
17746.700000	---	46.23	150.0	H	57.0	8.8	54.00	7.77
17746.700000	54.45	---	150.0	H	57.0	8.8	74.00	19.55

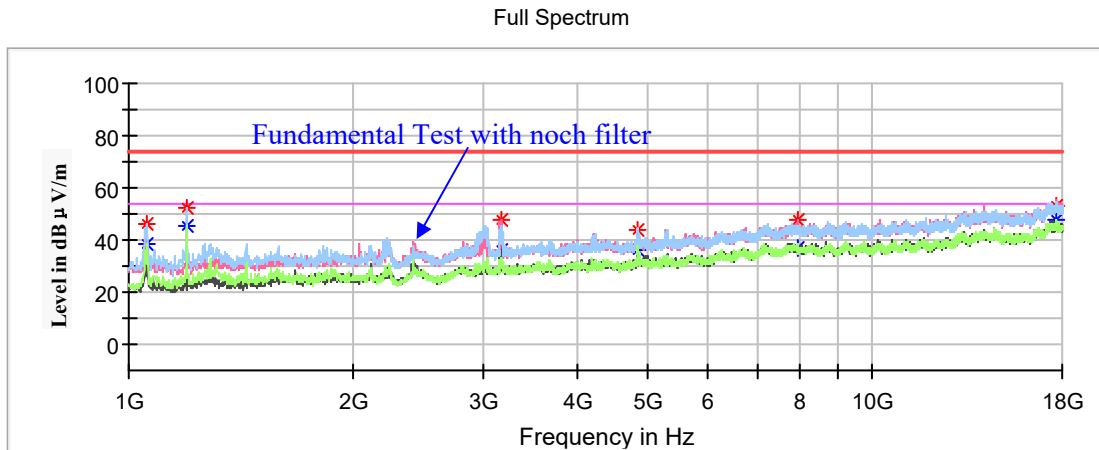
802.11n-HT40 Mode(Chain 0& Chain 1 transmitting simultaneously):

(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

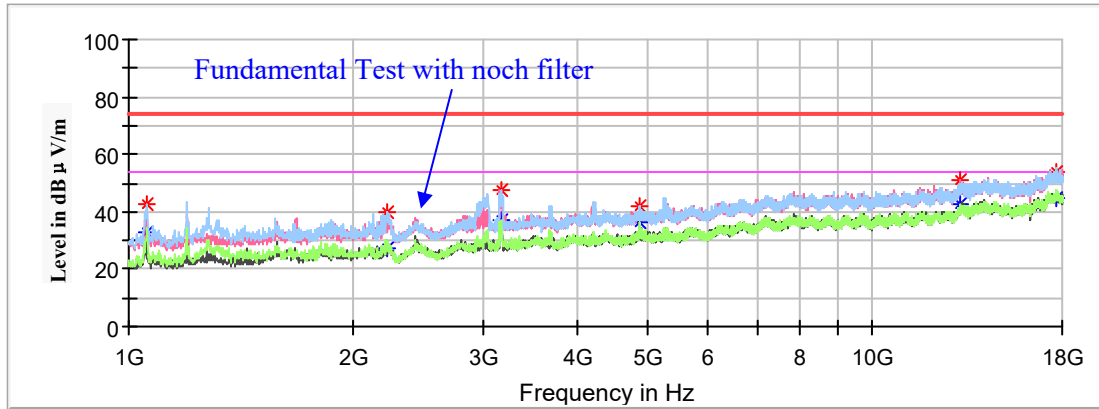
Low Channel : 2422MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1057.800000	---	38.72	100.0	H	244.0	-18.8	54.00	15.28
1057.800000	45.86	---	150.0	H	244.0	-18.8	74.00	28.14
1198.900000	52.32	---	150.0	H	257.0	-18.0	74.00	21.68
1198.900000	---	45.37	150.0	H	257.0	-18.0	54.00	8.63
3176.000000	---	36.36	100.0	V	133.0	-9.6	54.00	17.64
3176.000000	47.98	---	100.0	V	133.0	-9.6	74.00	26.02
4844.000000	43.55	---	150.0	H	206.0	-5.5	74.00	30.45
4844.000000	---	36.51	150.0	H	206.0	-5.5	54.00	17.49
7949.600000	---	37.10	150.0	V	2.0	1.7	54.00	16.90
7949.600000	47.59	---	150.0	V	2.0	1.7	74.00	26.41
17682.100000	53.37	---	100.0	V	358.0	8.9	74.00	20.63
17682.100000	---	47.53	100.0	V	358.0	8.9	54.00	6.47

Middle Channel: 2437MHz

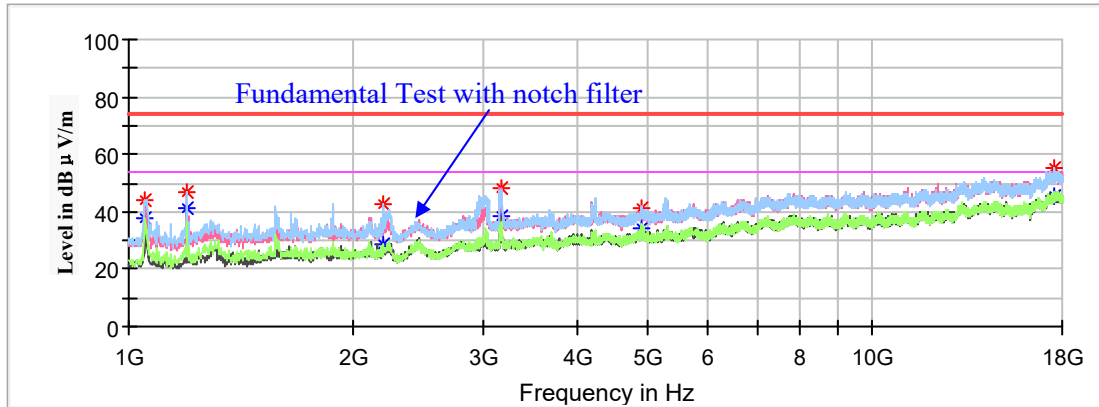
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1059.500000	---	32.98	150.0	H	229.0	-18.7	54.00	21.02
1059.500000	42.62	---	150.0	H	229.0	-18.7	74.00	31.38
2230.800000	---	27.46	100.0	V	310.0	-13.5	54.00	26.54
2230.800000	39.86	---	100.0	V	310.0	-13.5	74.00	34.14
3160.700000	47.66	---	100.0	H	202.0	-9.7	74.00	26.34
3160.700000	---	36.93	100.0	H	202.0	-9.7	54.00	17.07
4874.000000	---	36.19	100.0	H	255.0	-5.4	54.00	17.81
4874.000000	42.20	---	100.0	H	255.0	-5.4	74.00	31.80
13156.700000	51.21	---	150.0	H	359.0	5.4	74.00	22.79
13156.700000	---	42.35	150.0	H	359.0	5.4	54.00	11.65
17704.200000	---	44.97	150.0	V	182.0	8.9	54.00	9.03
17704.200000	53.94	---	150.0	V	182.0	8.9	74.00	20.06

High Channel : 2452MHz

Full Spectrum

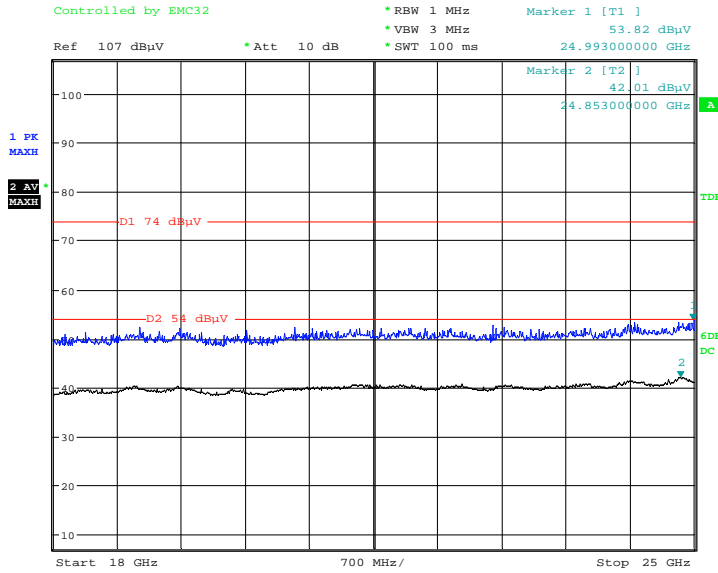


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1052.700000	43.93	---	150.0	H	242.0	-18.8	74.00	30.07
1052.700000	---	37.61	150.0	H	242.0	-18.8	54.00	16.39
1198.900000	---	41.25	150.0	V	117.0	-18.0	54.00	12.75
1198.900000	46.66	---	150.0	V	117.0	-18.0	74.00	27.34
2195.100000	42.67	---	100.0	H	269.0	-13.7	74.00	31.33
2196.800000	---	28.76	100.0	H	269.0	-13.7	54.00	25.24
3176.000000	48.10	---	100.0	V	130.0	-9.6	74.00	25.90
3176.000000	---	38.20	100.0	V	130.0	-9.6	54.00	15.80
4904.000000	---	34.14	150.0	V	163.0	-5.4	54.00	19.86
4904.000000	41.03	---	150.0	V	163.0	-5.4	74.00	32.97
17581.800000	54.96	---	100.0	H	323.0	8.9	74.00	19.04
17583.500000	---	45.22	100.0	H	323.0	8.9	54.00	8.78

18GHz-25GHz(worst case):

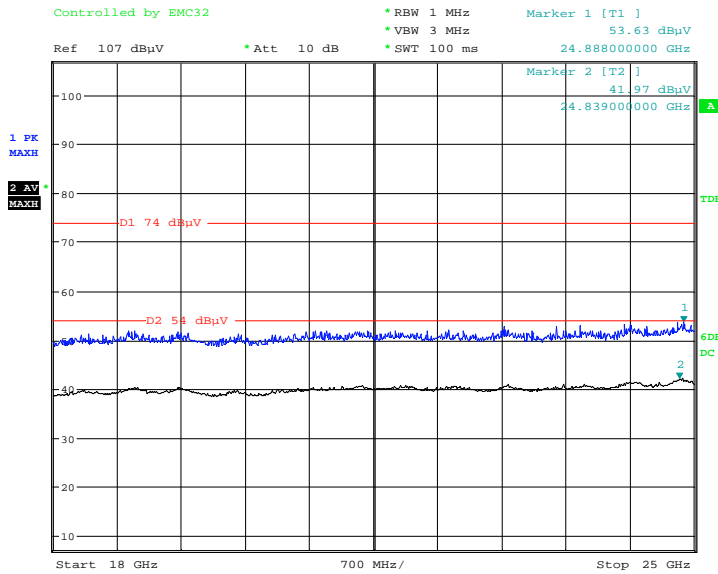
Pre-scan with 802.11b, 802.11g, 802.11n-HT20 and 802.11n-HT40 modes of operation in the X,Y and Z axes of orientation, the worst case **high channel of 802.11 n-HT20 mode in Z-axis of orientation** was recorded

Horizontal



Date: 15.JUL.2020 21:03:38

Vertical



Date: 15.JUL.2020 21:27:38

Restricted Bands Emissions Test:

Note:

- 1. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

2. The test distance is 1.5m, the limit at 1.5m is below:

Average (dBµV/m) = 54.00 dBµV/m + 20*log10(3/1.5)=60.00 dBµV/m

MaxPeak (dBµV/m) = 74.00 dBµV/m + 20*log10(3/1.5)=80.00 dBµV/m

802.11b Mode (Chain 0): (Pre-scan in the X, Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2389.00	---	38.31	150.0	V	154.0	-2.9	54.00	15.69
2389.00	44.07	---	150.0	V	154.0	-2.9	74.00	29.93
High Channel: 2462MHz								
2483.50	43.71	---	100.0	V	184.0	-2.5	74.00	30.29
2483.50	---	37.93	100.0	V	184.0	-2.5	54.00	16.07

802.11g Mode (Chain 0): (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2389.00	44.33	---	150.0	V	132.0	-2.9	74.00	29.67
2389.00	---	37.42	150.0	V	132.0	-2.9	54.00	16.58
High Channel: 2462MHz								
2483.50	44.39	---	100.0	V	182.0	-2.5	74.00	29.61
2483.50	---	37.32	100.0	V	182.0	-2.5	54.00	16.68

802.11b Mode (Chain 1): (Pre-scan in the X, Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2389.00	---	37.28	150.0	V	165.0	-2.9	54.00	16.72
2389.00	45.73	---	150.0	V	165.0	-2.9	74.00	28.27
High Channel: 2462MHz								
2483.50	---	38.51	100.0	V	175.0	-2.5	54.00	15.49
2483.50	46.69	---	100.0	V	175.0	-2.5	74.00	27.31

802.11g Mode (Chain 1): (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2390.00	42.86	---	100.0	V	159.0	-2.9	74.00	31.14
2390.00	---	37.56	100.0	V	159.0	-2.9	54.00	16.44
High Channel: 2462MHz								
2483.50	46.35	---	150.0	V	185.0	-2.5	74.00	27.65
2483.50	---	38.53	150.0	V	185.0	-2.5	54.00	15.47

802.11n-HT20 Mode (Chain 0& Chain 1): (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2390.00	45.58	---	150.0	V	171.0	-2.9	74.00	28.42
2390.00	---	39.57	150.0	V	171.0	-2.9	54.00	14.43
High Channel: 2462MHz								
2483.50	44.99	---	100.0	V	176.0	-2.5	74.00	29.01
2483.50	---	39.22	100.0	V	176.0	-2.5	54.00	14.78

802.11n-HT40 Mode (Chain 0& Chain 1): (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2422MHz								
2390.00	48.78	---	150.0	V	170.0	-2.9	74.00	25.22
2390.00	---	44.31	150.0	V	170.0	-2.9	54.00	9.69
High Channel: 2452MHz								
2483.50	49.82	---	100.0	V	145.0	-2.5	74.00	24.18
2483.50	---	44.34	100.0	V	145.0	-2.5	54.00	9.66

Test Model: 82BS4K20

1GHz-18GHz:

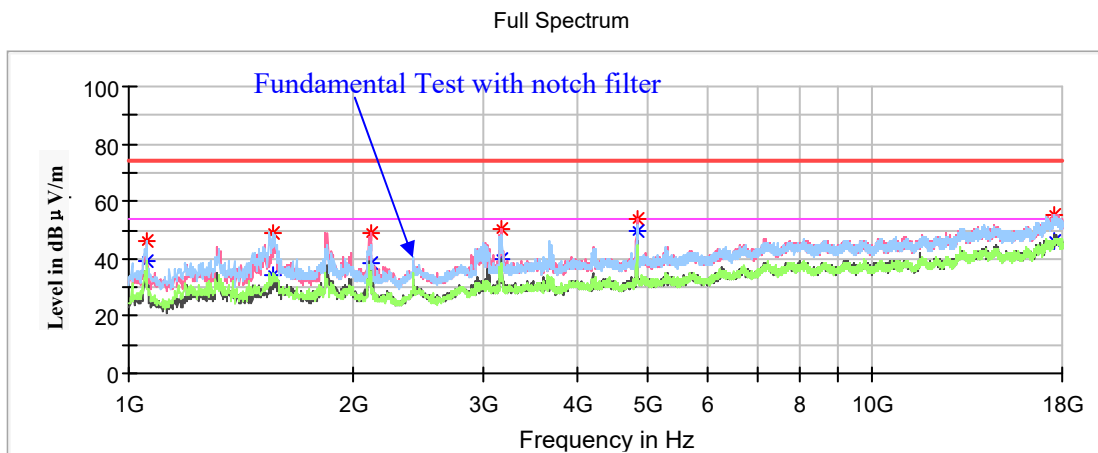
802.11b Mode(Chain 0):

(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

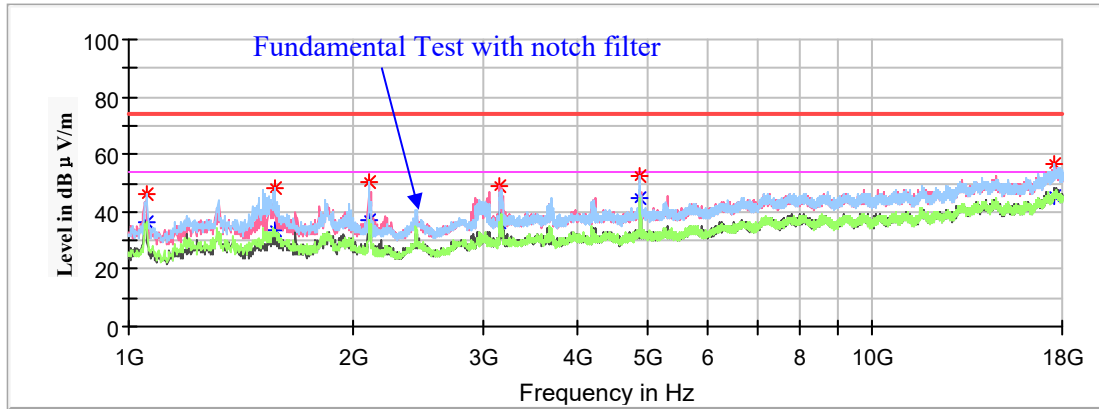
Low Channel: 2412MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1057.800000	45.95	---	200.0	H	134.0	-18.8	74.00	28.05
1057.800000	---	38.84	200.0	H	134.0	-18.8	54.00	15.16
1564.400000	48.65	---	200.0	H	119.0	-16.1	74.00	25.35
1564.400000	---	34.47	200.0	H	119.0	-16.1	54.00	19.53
2111.800000	---	38.58	200.0	V	184.0	-14.0	54.00	15.42
2111.800000	48.73	---	200.0	V	184.0	-14.0	74.00	25.27
3170.900000	50.29	---	100.0	V	174.0	-9.7	74.00	23.71
3170.900000	---	39.88	100.0	V	174.0	-9.7	54.00	14.12
4824.000000	---	49.38	200.0	V	204.0	-5.5	54.00	4.62
4824.000000	53.82	---	200.0	V	204.0	-5.5	74.00	20.18
17569.900000	---	46.13	100.0	V	249.0	8.9	54.00	7.87
17569.900000	55.46	---	100.0	V	249.0	8.9	74.00	18.54

Middle Channel: 2437MHz

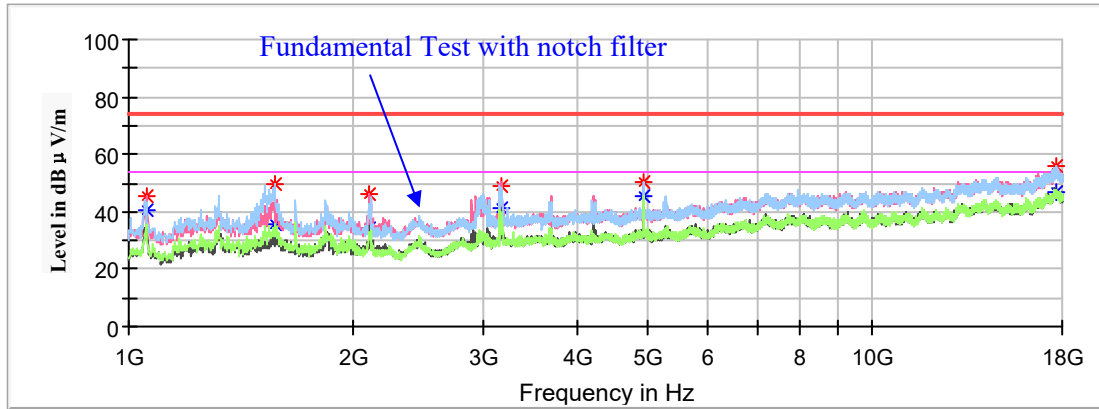
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1057.800000	---	36.39	200.0	H	128.0	-18.8	54.00	17.61
1057.800000	46.33	---	200.0	H	128.0	-18.8	74.00	27.67
1571.200000	---	33.73	200.0	H	113.0	-16.1	54.00	20.27
1571.200000	48.54	---	200.0	H	113.0	-16.1	74.00	25.46
2101.600000	---	37.25	100.0	H	215.0	-14.1	54.00	16.75
2101.600000	50.50	---	100.0	H	215.0	-14.1	74.00	23.50
3157.300000	---	36.54	100.0	V	194.0	-9.7	54.00	17.46
3157.300000	48.63	---	100.0	V	194.0	-9.7	74.00	25.37
4874.000000	---	44.69	200.0	H	159.0	-5.4	54.00	9.31
4874.000000	52.50	---	200.0	H	159.0	-5.4	74.00	21.50
17607.300000	---	45.67	200.0	V	231.0	8.9	54.00	8.33
17607.300000	56.76	---	200.0	V	231.0	8.9	74.00	17.24

High Channel: 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1057.800000	---	40.64	200.0	V	215.0	-18.8	54.00	13.36
1057.800000	45.74	---	200.0	V	215.0	-18.8	74.00	28.26
1572.900000	---	35.39	200.0	H	119.0	-16.1	54.00	18.61
1572.900000	49.91	---	200.0	H	119.0	-16.1	74.00	24.09
2106.700000	---	34.48	200.0	V	183.0	-14.0	54.00	19.52
2106.700000	46.41	---	200.0	V	183.0	-14.0	74.00	27.59
3177.700000	48.80	---	100.0	V	175.0	-9.6	74.00	25.20
3177.700000	---	40.93	100.0	V	175.0	-9.6	54.00	13.07
4924.000000	50.09	---	200.0	H	134.0	-5.3	74.00	23.91
4924.000000	---	45.14	200.0	H	134.0	-5.3	54.00	8.86
17680.400000	---	46.59	200.0	H	134.0	8.9	54.00	7.41
17680.400000	55.70	---	200.0	H	134.0	8.9	74.00	18.30

802.11g Mode (Chain 0):

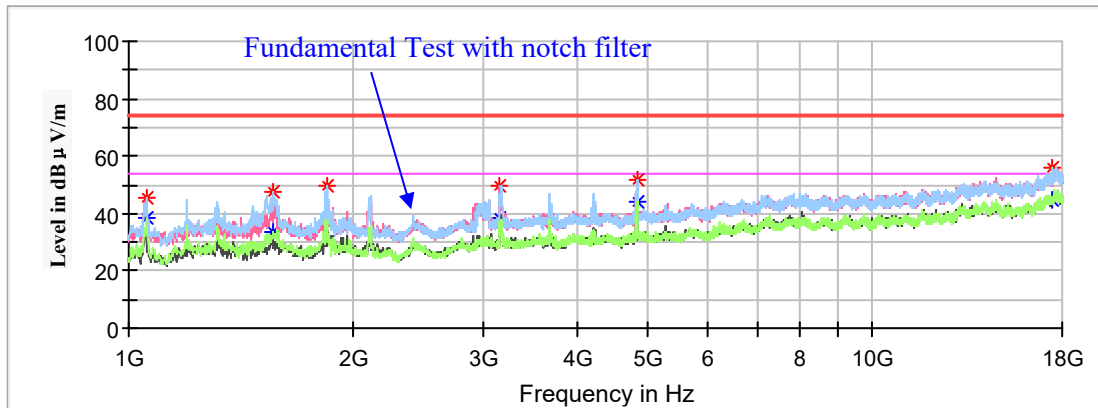
(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
- Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
- Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

Low Channel: 2412MHz

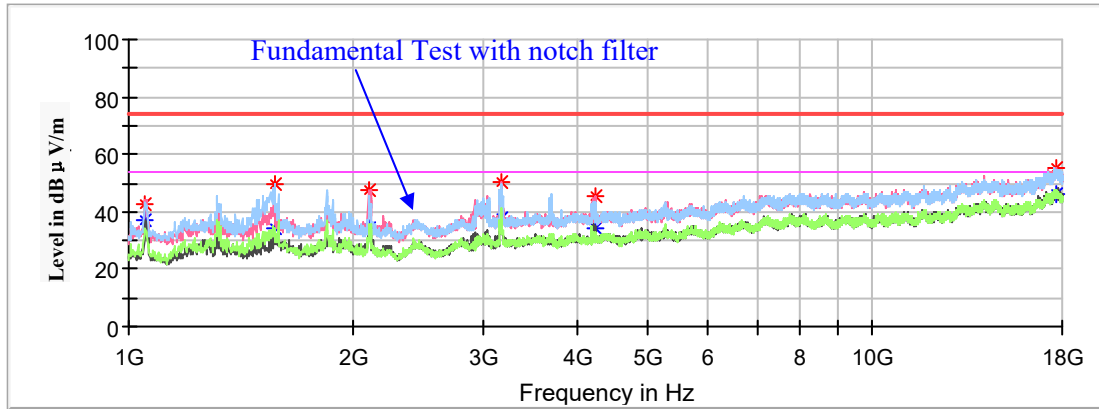
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1057.800000	45.26	---	200.0	H	129.0	-18.8	74.00	28.74
1057.800000	---	38.41	200.0	H	129.0	-18.8	54.00	15.59
1561.000000	---	33.27	200.0	H	97.0	-16.1	54.00	20.73
1561.000000	47.49	---	200.0	H	97.0	-16.1	74.00	26.51
1844.900000	---	36.75	100.0	H	179.0	-15.1	54.00	17.25
1844.900000	49.34	---	100.0	H	179.0	-15.1	74.00	24.66
3153.900000	49.41	---	200.0	V	212.0	-9.7	74.00	24.59
3153.900000	---	38.60	200.0	V	212.0	-9.7	54.00	15.40
4824.000000	51.62	---	200.0	H	190.0	-5.5	74.00	22.38
4824.000000	---	43.75	200.0	H	190.0	-5.5	54.00	10.25
17473.000000	---	44.67	100.0	H	135.0	8.8	54.00	9.33
17473.000000	55.83	---	100.0	H	135.0	8.8	74.00	18.17

Middle Channel: 2437MHz

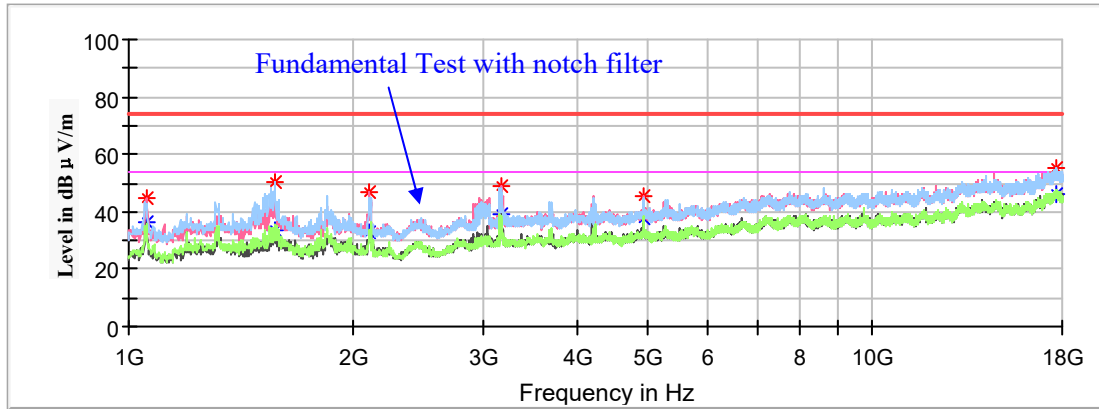
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1052.700000	---	36.86	200.0	V	194.0	-18.8	54.00	17.14
1052.700000	42.99	---	200.0	V	194.0	-18.8	74.00	31.01
1572.900000	---	34.57	200.0	H	231.0	-16.1	54.00	19.43
1572.900000	49.61	---	200.0	H	231.0	-16.1	74.00	24.39
2099.900000	47.54	---	200.0	V	194.0	-14.1	74.00	26.46
2099.900000	---	34.51	200.0	V	194.0	-14.1	54.00	19.49
3174.300000	50.35	---	100.0	V	209.0	-9.7	74.00	23.65
3174.300000	---	37.53	100.0	V	209.0	-9.7	54.00	16.47
4874.000000	---	34.41	100.0	V	171.0	-6.6	54.00	19.59
4874.000000	45.57	---	100.0	V	171.0	-6.6	74.00	28.43
17678.700000	---	46.10	200.0	H	262.0	8.9	54.00	7.90
17678.700000	55.22	---	200.0	H	262.0	8.9	74.00	18.78

High Channel: 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1054.400000	44.42	---	200.0	V	195.0	-18.8	74.00	29.58
1054.400000	---	36.26	200.0	V	195.0	-18.8	54.00	17.74
1574.600000	---	33.55	200.0	H	124.0	-16.1	54.00	20.45
1574.600000	50.12	---	200.0	H	124.0	-16.1	74.00	23.88
2103.300000	46.94	---	200.0	H	195.0	-14.0	74.00	27.06
2103.300000	---	33.06	200.0	H	195.0	-14.0	54.00	20.94
3174.300000	49.27	---	100.0	V	185.0	-9.7	74.00	24.73
3174.300000	---	39.35	100.0	V	185.0	-9.7	54.00	14.65
4924.000000	---	37.95	200.0	V	211.0	-5.3	54.00	16.05
4924.000000	45.61	---	200.0	V	211.0	-5.3	74.00	28.39
17692.300000	---	46.06	100.0	H	256.0	8.9	54.00	7.94
17692.300000	55.01	---	100.0	H	256.0	8.9	74.00	18.99

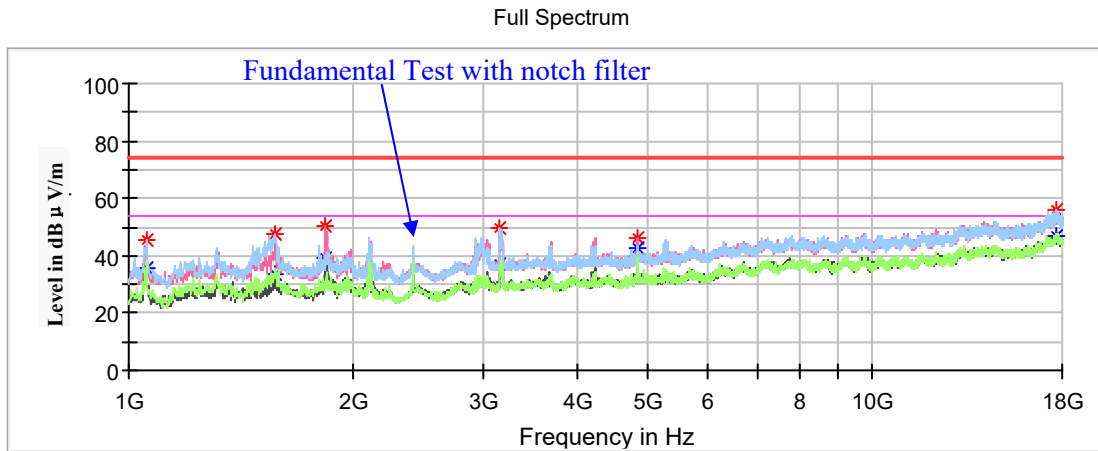
802.11b Mode(Chain 1):

(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

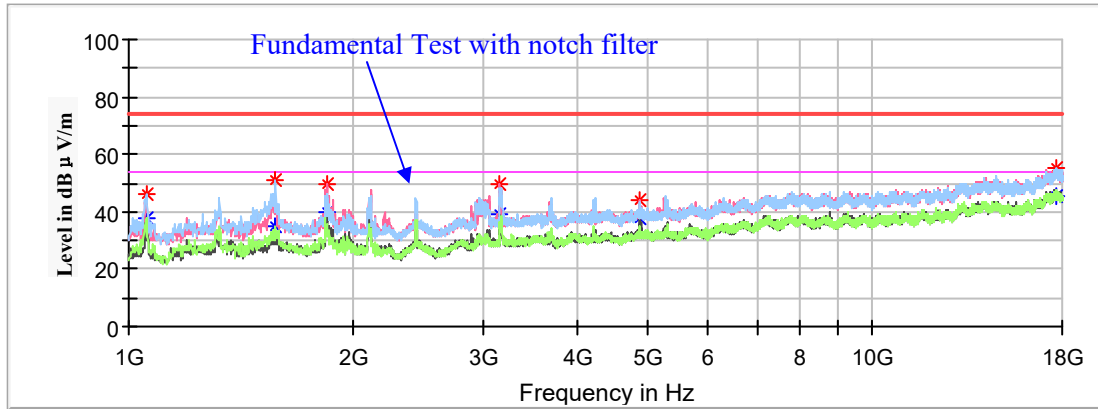
Low Channel: 2412MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1057.800000	45.35	---	200.0	H	136.0	-18.8	74.00	28.65
1057.800000	---	35.74	200.0	H	136.0	-18.8	54.00	18.26
1569.500000	47.80	---	200.0	H	228.0	-16.1	74.00	26.20
1569.500000	---	33.88	200.0	H	228.0	-16.1	54.00	20.12
1838.100000	50.09	---	200.0	V	200.0	-15.1	74.00	23.91
1838.100000	---	38.85	200.0	V	200.0	-15.1	54.00	15.15
3157.300000	---	36.73	100.0	H	175.0	-9.7	54.00	17.27
3157.300000	49.34	---	100.0	H	175.0	-9.7	74.00	24.66
4824.000000	45.97	---	200.0	V	184.0	-5.5	74.00	28.03
4824.000000	---	42.47	200.0	V	184.0	-5.5	54.00	11.53
17668.500000	---	47.13	100.0	H	351.0	8.9	54.00	6.87
17668.500000	55.62	---	100.0	H	351.0	8.9	74.00	18.38

Middle Channel: 2437MHz

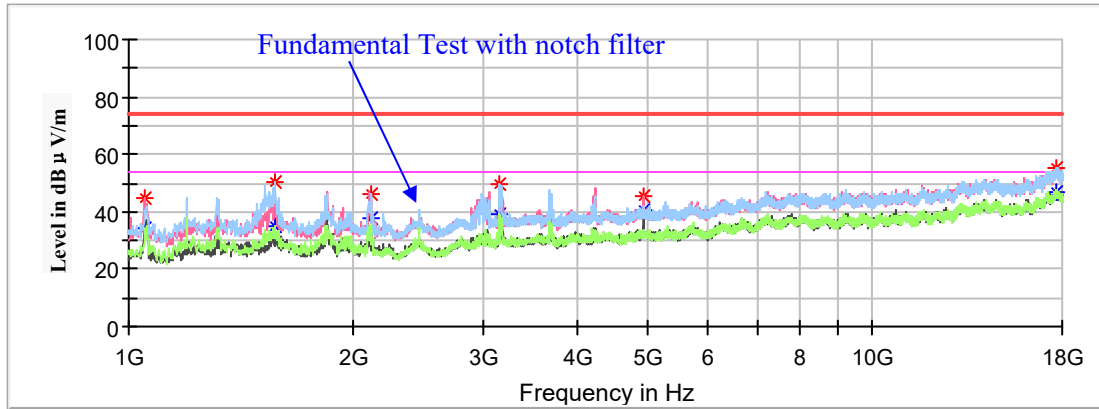
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1054.400000	---	37.64	200.0	H	136.0	-18.8	54.00	16.36
1054.400000	46.42	---	200.0	H	136.0	-18.8	74.00	27.58
1576.300000	---	34.85	200.0	H	227.0	-16.1	54.00	19.15
1576.300000	50.87	---	200.0	H	227.0	-16.1	74.00	23.13
1850.000000	---	39.55	100.0	V	196.0	-15.0	54.00	14.45
1850.000000	49.54	---	100.0	V	196.0	-15.0	74.00	24.46
3153.900000	---	38.88	200.0	V	212.0	-9.7	54.00	15.12
3153.900000	49.55	---	200.0	V	212.0	-9.7	74.00	24.45
4874.000000	---	37.58	100.0	V	165.0	-5.4	54.00	16.42
4874.000000	44.39	---	100.0	V	165.0	-5.4	74.00	29.61
17722.900000	55.04	---	200.0	H	287.0	8.8	74.00	18.96
17722.900000	---	45.59	200.0	H	287.0	8.8	54.00	8.41

High Channel: 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1051.000000	---	34.49	200.0	V	216.0	-18.8	54.00	19.51
1051.000000	44.64	---	200.0	V	216.0	-18.8	74.00	29.36
1572.900000	---	35.14	100.0	H	246.0	-16.1	54.00	18.86
1572.900000	50.69	---	100.0	H	246.0	-16.1	74.00	23.31
2116.900000	46.29	---	200.0	V	196.0	-14.0	74.00	27.71
2116.900000	---	37.56	200.0	V	196.0	-14.0	54.00	16.44
3157.300000	---	38.84	200.0	H	226.0	-9.7	54.00	15.16
3157.300000	49.34	---	200.0	H	226.0	-9.7	74.00	24.66
4924.000000	---	40.45	200.0	V	169.0	-5.3	54.00	13.55
4924.000000	45.19	---	200.0	V	169.0	-5.3	74.00	28.81
17699.100000	---	46.62	100.0	H	246.0	8.9	54.00	7.38
17699.100000	55.06	---	100.0	H	246.0	8.9	74.00	18.94

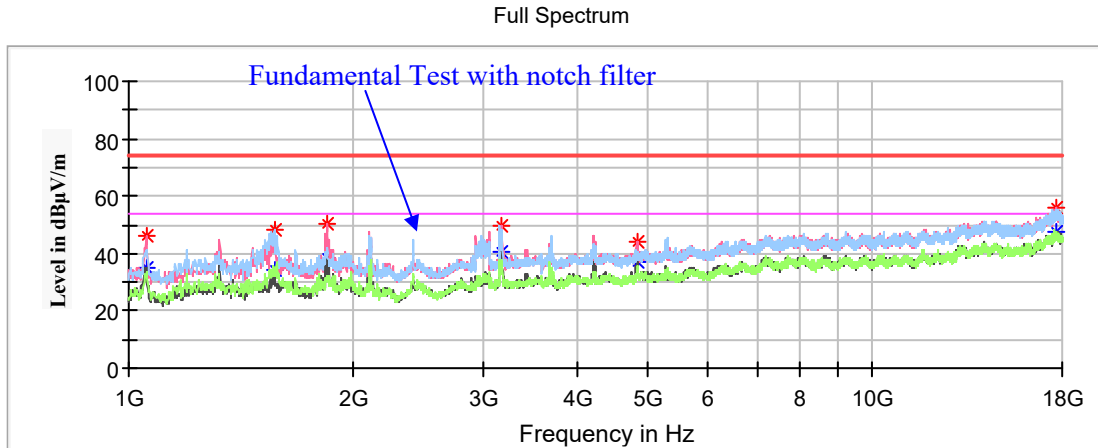
802.11g Mode (Chain 1):

(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBμV /m) = Corrected Factor (dB/m) + Reading (dBμV)
 Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV /m)

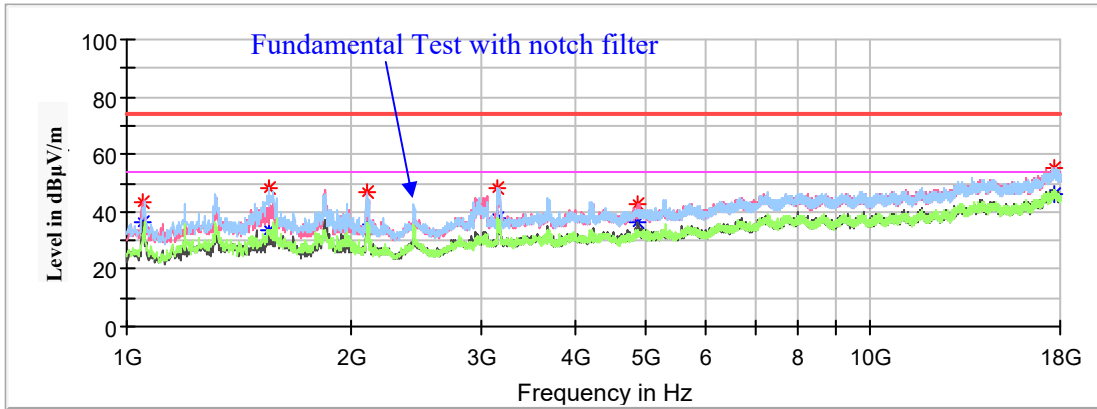
Low Channel: 2412MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1054.400000	---	35.03	200.0	V	201.0	-18.8	54.00	18.97
1054.400000	46.05	---	200.0	V	201.0	-18.8	74.00	27.95
1569.500000	---	34.37	100.0	H	246.0	-16.1	54.00	19.63
1569.500000	48.09	---	100.0	H	246.0	-16.1	74.00	25.91
1850.000000	---	38.64	200.0	V	232.0	-15.0	54.00	15.36
1850.000000	50.01	---	200.0	V	232.0	-15.0	74.00	23.99
3172.600000	49.83	---	100.0	V	174.0	-9.7	74.00	24.17
3172.600000	---	40.86	100.0	V	174.0	-9.7	54.00	13.14
4824.000000	44.17	---	200.0	V	158.0	-5.5	74.00	29.83
4824.000000	---	37.19	200.0	V	158.0	-5.5	54.00	16.81
17661.700000	---	47.62	100.0	V	308.0	8.9	54.00	6.38
17661.700000	55.78	---	100.0	V	308.0	8.9	74.00	18.22

Middle Channel: 2437MHz

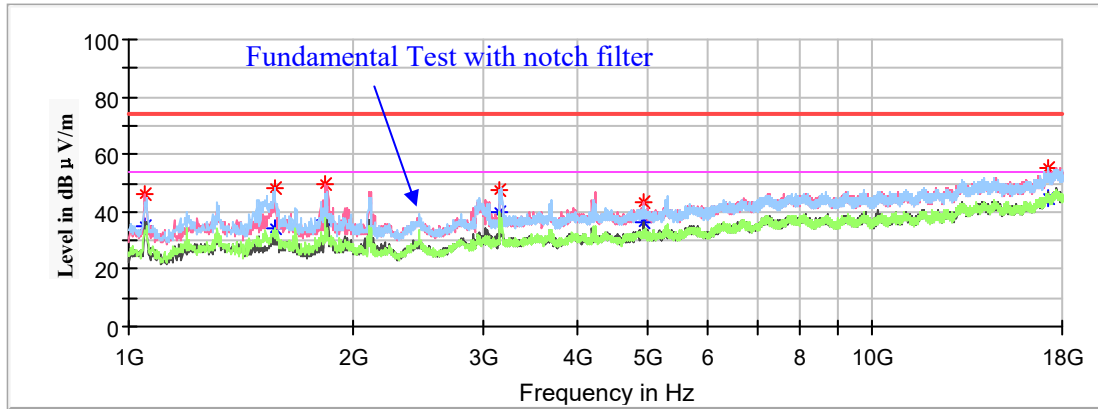
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1051.000000	43.66	---	200.0	V	175.0	-18.8	74.00	30.34
1051.000000	---	36.24	200.0	V	175.0	-18.8	54.00	17.76
1554.200000	48.10	---	200.0	H	106.0	-16.2	74.00	25.90
1554.200000	---	33.72	200.0	H	106.0	-16.2	54.00	20.28
2099.900000	46.58	---	200.0	V	175.0	-14.1	74.00	27.42
2099.900000	---	34.44	200.0	V	175.0	-14.1	54.00	19.56
3150.500000	48.24	---	200.0	H	232.0	-9.7	74.00	25.76
3150.500000	---	37.92	200.0	H	232.0	-9.7	54.00	16.08
4874.000000	---	36.40	200.0	V	144.0	-5.4	54.00	17.60
4874.000000	42.83	---	200.0	V	144.0	-5.4	74.00	31.17
17685.500000	---	46.19	200.0	V	65.0	8.9	54.00	7.81
17685.500000	55.46	---	200.0	V	65.0	8.9	74.00	18.54

High Channel: 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1049.300000	45.87	---	200.0	V	207.0	-18.8	74.00	28.13
1049.300000	---	35.09	200.0	V	207.0	-18.8	54.00	18.91
1572.900000	48.50	---	200.0	H	224.0	-16.1	74.00	25.50
1572.900000	---	34.14	200.0	H	224.0	-16.1	54.00	19.86
1839.800000	49.96	---	100.0	V	212.0	-15.1	74.00	24.04
1839.800000	---	37.08	100.0	V	212.0	-15.1	54.00	16.92
3153.900000	---	39.57	200.0	H	224.0	-9.7	54.00	14.43
3153.900000	47.51	---	200.0	H	224.0	-9.7	74.00	26.49
4924.000000	---	36.15	200.0	V	177.0	-5.3	54.00	17.85
4924.000000	43.58	---	200.0	V	177.0	-5.3	74.00	30.42
17240.100000	55.19	---	100.0	H	191.0	8.0	74.00	18.81
17240.100000	---	44.54	100.0	H	191.0	8.0	54.00	9.46

802.11n-HT20 Mode(Chain 0& Chain 1 transmitting simultaneously):

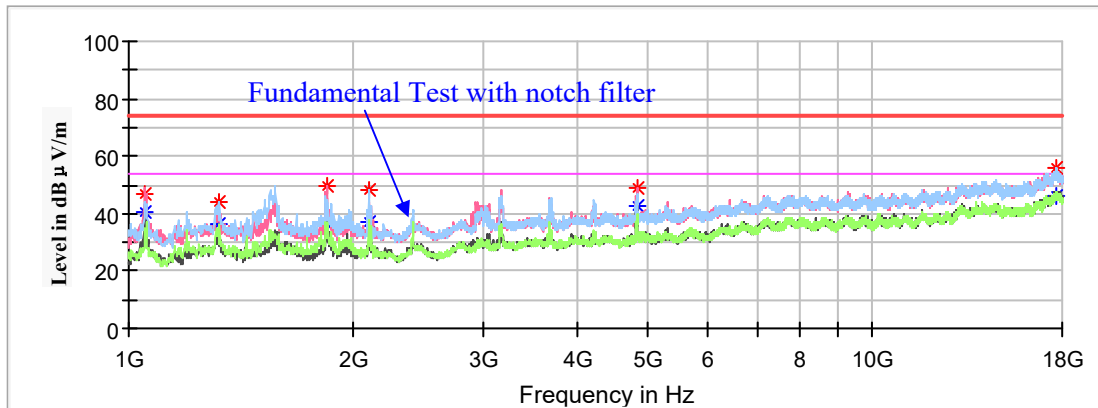
(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

Low Channel : 2412MHz

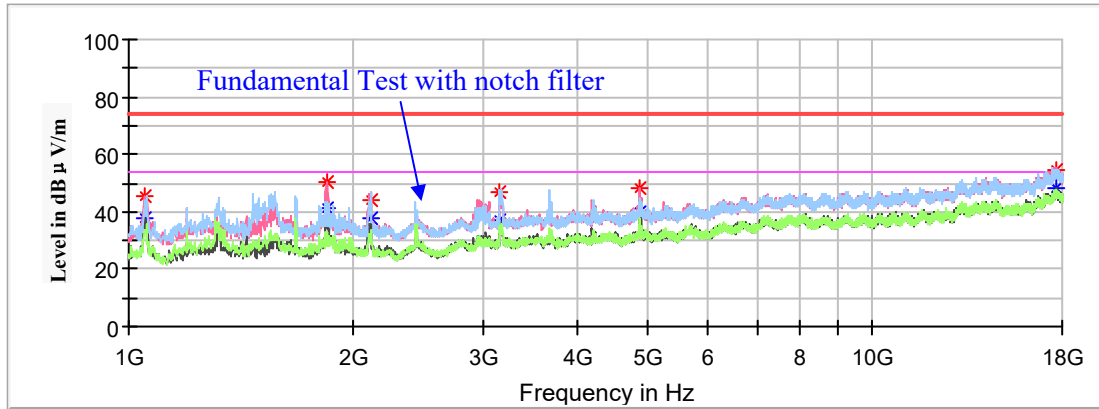
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1052.700000	---	40.90	150.0	V	211.0	-18.8	54.00	13.10
1052.700000	46.92	---	150.0	V	211.0	-18.8	74.00	27.08
1324.700000	---	36.22	150.0	H	251.0	-17.3	54.00	17.78
1324.700000	43.89	---	150.0	H	251.0	-17.3	74.00	30.11
1848.300000	---	36.57	200.0	V	205.0	-15.0	54.00	17.43
1848.300000	49.71	---	200.0	V	205.0	-15.0	74.00	24.29
2103.300000	---	36.99	150.0	H	206.0	-14.0	54.00	17.01
2103.300000	48.20	---	150.0	H	206.0	-14.0	74.00	25.80
4824.000000	---	42.70	150.0	V	196.0	-5.5	54.00	11.30
4824.000000	48.84	---	150.0	V	196.0	-5.5	74.00	25.16
17700.800000	---	45.94	150.0	H	20.0	8.9	54.00	8.06
17700.800000	55.82	---	150.0	H	20.0	8.9	74.00	18.18

Middle Channel: 2437MHz

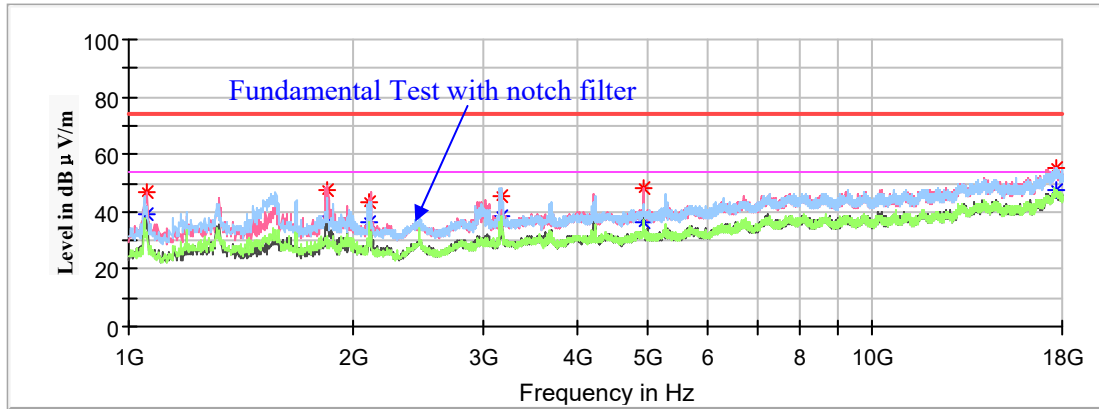
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1049.300000	---	37.98	200.0	V	112.0	-18.8	54.00	16.02
1049.300000	45.78	---	200.0	V	112.0	-18.8	74.00	28.22
1843.200000	---	41.25	200.0	V	189.0	-15.1	54.00	12.75
1843.200000	50.27	---	200.0	V	189.0	-15.1	74.00	23.73
2118.600000	---	37.48	200.0	V	174.0	-14.0	54.00	16.52
2118.600000	44.03	---	200.0	V	174.0	-14.0	74.00	29.97
3155.600000	---	36.74	200.0	V	174.0	-9.7	54.00	17.26
3155.600000	47.11	---	200.0	V	174.0	-9.7	74.00	26.89
4874.000000	---	39.72	150.0	V	196.0	-5.4	54.00	14.28
4874.000000	48.06	---	150.0	V	196.0	-5.4	74.00	25.94
17671.900000	---	48.23	200.0	V	293.0	8.9	54.00	5.77
17671.900000	54.74	---	200.0	V	293.0	8.9	74.00	19.26

High Channel : 2462MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1059.500000	---	38.92	150.0	V	202.0	-18.7	54.00	15.08
1059.500000	46.58	---	150.0	V	202.0	-18.7	74.00	27.42
1853.400000	---	37.26	150.0	V	234.0	-15.0	54.00	16.74
1853.400000	47.53	---	150.0	V	234.0	-15.0	74.00	26.47
2101.600000	---	36.03	200.0	H	209.0	-14.1	54.00	17.97
2101.600000	43.25	---	200.0	H	209.0	-14.1	74.00	30.75
3177.700000	---	38.57	150.0	H	191.0	-9.6	54.00	15.43
3177.700000	45.55	---	150.0	H	191.0	-9.6	74.00	28.45
4924.000000	---	36.27	200.0	V	206.0	-5.3	54.00	17.73
4924.000000	48.19	---	200.0	V	206.0	-5.3	74.00	25.81
17627.700000	---	47.89	200.0	V	49.0	8.9	54.00	6.11
17627.700000	55.30	---	200.0	V	49.0	8.9	74.00	18.70

802.11n-HT40 Mode(Chain 0& Chain 1 transmitting simultaneously):

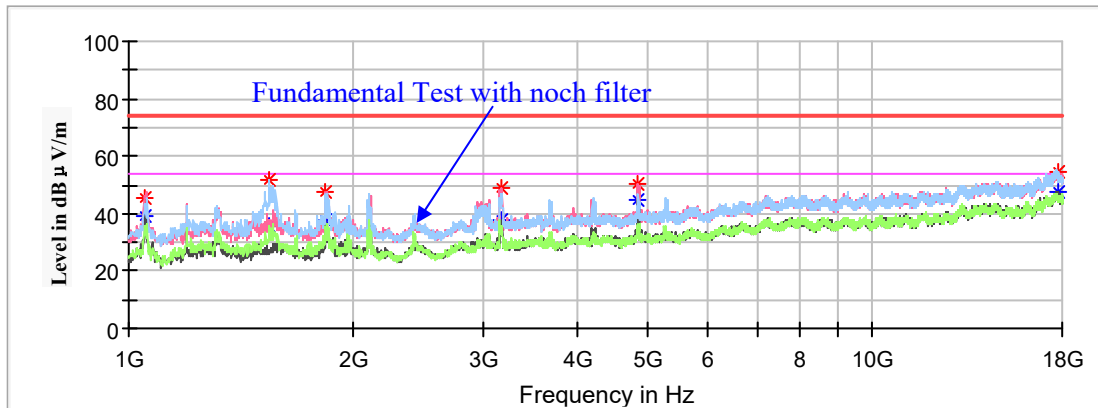
(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded)

Note:

1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

Low Channel : 2422MHz

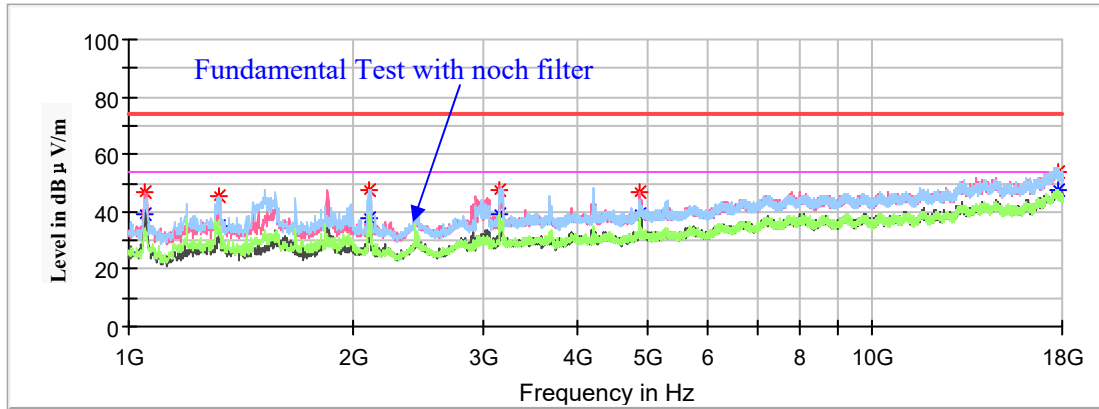
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1052.700000	---	39.43	150.0	V	232.0	-18.8	54.00	14.57
1052.700000	45.39	---	150.0	V	232.0	-18.8	74.00	28.61
1545.700000	---	35.78	200.0	H	123.0	-16.2	54.00	18.22
1545.700000	51.85	---	200.0	H	123.0	-16.2	74.00	22.15
1841.500000	---	37.65	200.0	V	181.0	-15.1	54.00	16.35
1841.500000	47.48	---	200.0	V	181.0	-15.1	74.00	26.52
3179.400000	---	38.00	200.0	V	211.0	-9.6	54.00	16.00
3179.400000	48.96	---	200.0	V	211.0	-9.6	74.00	25.04
4844.000000	---	44.74	150.0	V	216.0	-5.5	54.00	9.26
4844.000000	50.63	---	150.0	V	216.0	-5.5	74.00	23.37
17789.200000	---	47.51	150.0	V	31.0	8.8	54.00	6.49
17789.200000	54.84	---	150.0	V	31.0	8.8	74.00	19.16

Middle Channel: 2437MHz

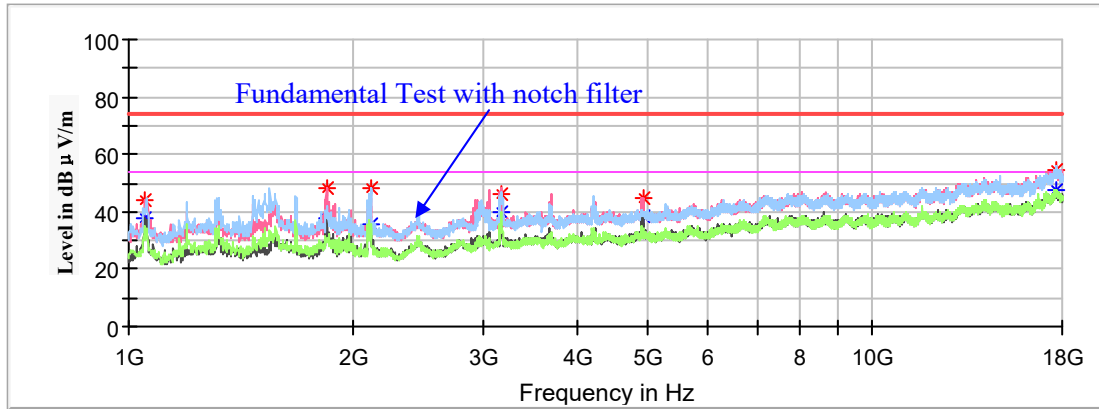
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1052.700000	---	38.98	200.0	V	176.0	-18.8	54.00	15.02
1052.700000	47.17	---	200.0	V	176.0	-18.8	74.00	26.83
1317.900000	---	34.82	200.0	H	242.0	-17.3	54.00	19.18
1317.900000	45.47	---	200.0	H	242.0	-17.3	74.00	28.53
2103.300000	---	37.79	200.0	H	210.0	-14.0	54.00	16.21
2103.300000	47.74	---	200.0	H	210.0	-14.0	74.00	26.26
3153.900000	---	39.35	150.0	H	222.0	-9.7	54.00	14.65
3153.900000	47.88	---	150.0	H	222.0	-9.7	74.00	26.12
4874.000000	---	39.15	150.0	V	216.0	-5.5	54.00	14.85
4874.000000	47.03	---	150.0	V	216.0	-5.5	74.00	26.97
17731.400000	---	47.78	150.0	V	32.0	8.8	54.00	6.22
17731.400000	53.60	---	150.0	V	32.0	8.8	74.00	20.40

High Channel : 2452MHz

Full Spectrum

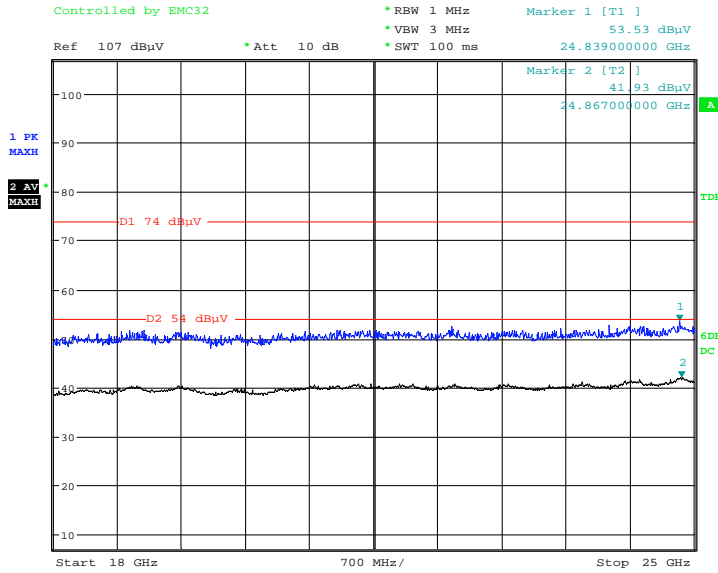


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1051.000000	---	37.64	150.0	V	195.0	-18.8	54.00	16.36
1051.000000	44.32	---	150.0	V	195.0	-18.8	74.00	29.68
1850.000000	---	38.05	150.0	V	232.0	-15.0	54.00	15.95
1850.000000	48.18	---	150.0	V	232.0	-15.0	74.00	25.82
2120.300000	---	35.51	200.0	H	200.0	-14.0	54.00	18.49
2120.300000	48.30	---	200.0	H	200.0	-14.0	74.00	25.70
3177.700000	---	39.74	150.0	H	196.0	-9.6	54.00	14.26
3177.700000	46.35	---	150.0	H	196.0	-9.6	74.00	27.65
4904.000000	---	38.35	200.0	V	206.0	-5.4	54.00	15.65
4904.000000	44.75	---	200.0	V	206.0	-5.4	74.00	29.25
17663.400000	---	47.80	200.0	V	65.0	8.9	54.00	6.20
17663.400000	54.61	---	200.0	V	65.0	8.9	74.00	19.39

18GHz-25GHz(worst case):

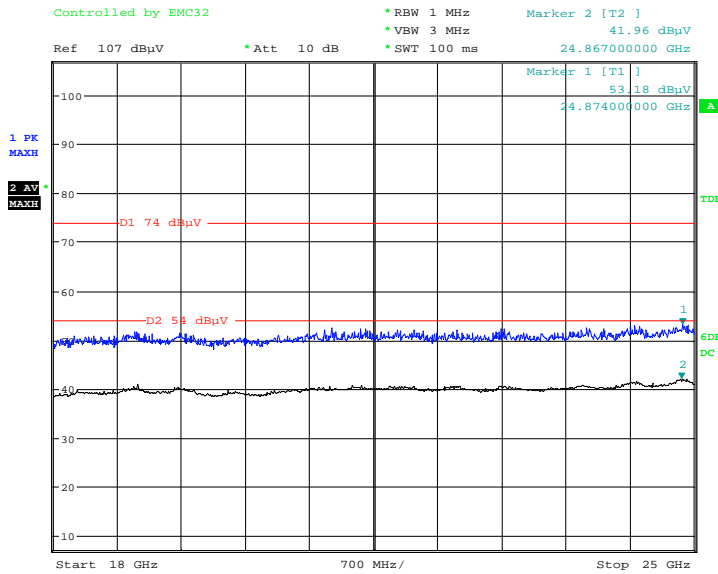
Pre-scan with 802.11b, 802.11g, 802.11n-HT20 and 802.11n-HT40 modes of operation in the X,Y and Z axes of orientation, the worst case **high channel of 802.11 n-HT20 mode in Z-axis of orientation** was recorded

Horizontal



Date: 15.JUL.2020 21:40:50

Vertical



Date: 15.JUL.2020 21:51:59

Restricted Bands Emissions Test:

Note:

- 1. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB)
 Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
 Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

2. The test distance is 1.5m, the limit at 1.5m is below:

Average (dBµV/m) = 54.00 dBµV/m + 20*log10(3/1.5)=60.00 dBµV/m

MaxPeak (dBµV/m) = 74.00 dBµV/m + 20*log10(3/1.5)=80.00 dBµV/m

802.11b Mode (Chain 0): (Pre-scan in the X, Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2389.00	---	34.67	200.0	V	39.0	-2.9	54.00	19.33
2389.00	44.50	---	200.0	V	39.0	-2.9	74.00	29.50
High Channel: 2462MHz								
2483.50	---	36.51	150.0	V	321.0	-2.5	54.00	17.49
2483.50	45.11	---	150.0	V	321.0	-2.5	74.00	28.89

802.11g Mode (Chain 0): (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2389.00	---	35.43	150.0	V	184.0	-2.9	54.00	18.57
2389.00	44.49	---	150.0	V	184.0	-2.9	74.00	29.51
High Channel: 2462MHz								
2483.50	46.57	---	150.0	V	255.0	-2.5	74.00	27.43
2483.50	---	38.62	150.0	V	255.0	-2.5	54.00	15.38

802.11b Mode (Chain 1): (Pre-scan in the X, Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2389.00	44.03	---	200.0	V	139.0	-2.9	74.00	29.97
2389.00	---	34.58	200.0	V	139.0	-2.9	54.00	19.42
High Channel: 2462MHz								
2483.50	42.45	---	200.0	V	60.0	-2.5	74.00	31.55
2483.50	---	37.95	200.0	V	60.0	-2.5	54.00	16.05

802.11g Mode (Chain 1): (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dB μ V/m)	Margin (dB)
	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2390.00	---	38.08	200.0	V	246.0	-2.9	54.00	15.92
2390.00	44.52	---	200.0	V	246.0	-2.9	74.00	29.48
High Channel: 2462MHz								
2483.50	44.63	---	200.0	V	243.0	-2.5	74.00	29.37
2483.50	---	40.29	200.0	V	243.0	-2.5	54.00	13.71

802.11n-HT20 Mode (Chain 0& Chain 1): (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

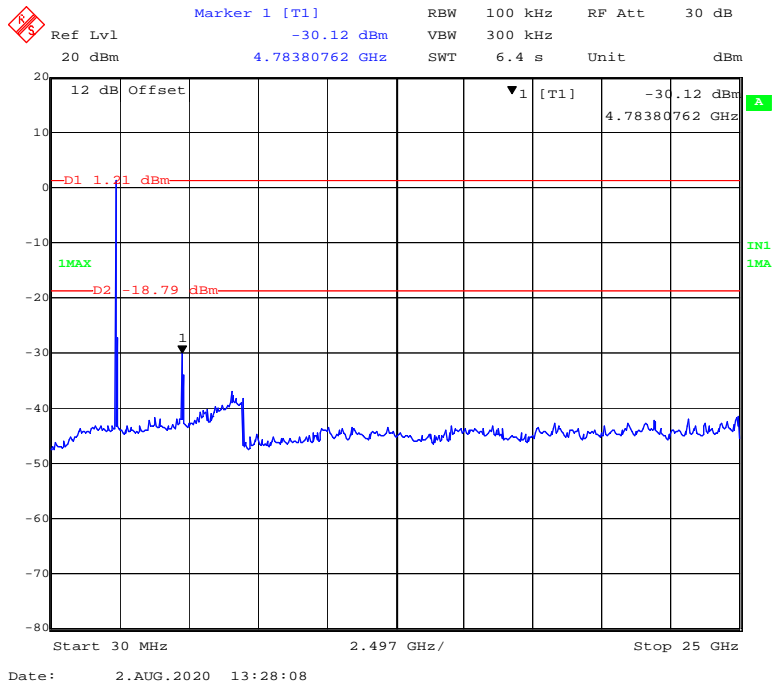
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dB μ V/m)	Margin (dB)
	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2390.00	---	38.65	200.0	V	246.0	-2.9	54.00	15.35
2390.00	45.90	---	200.0	V	246.0	-2.9	74.00	28.10
High Channel: 2462MHz								
2483.50	---	42.62	200.0	V	239.0	-2.5	54.00	11.38
2483.50	51.46	---	200.0	V	239.0	-2.5	74.00	22.54

802.11n-HT40 Mode (Chain 0& Chain 1): (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

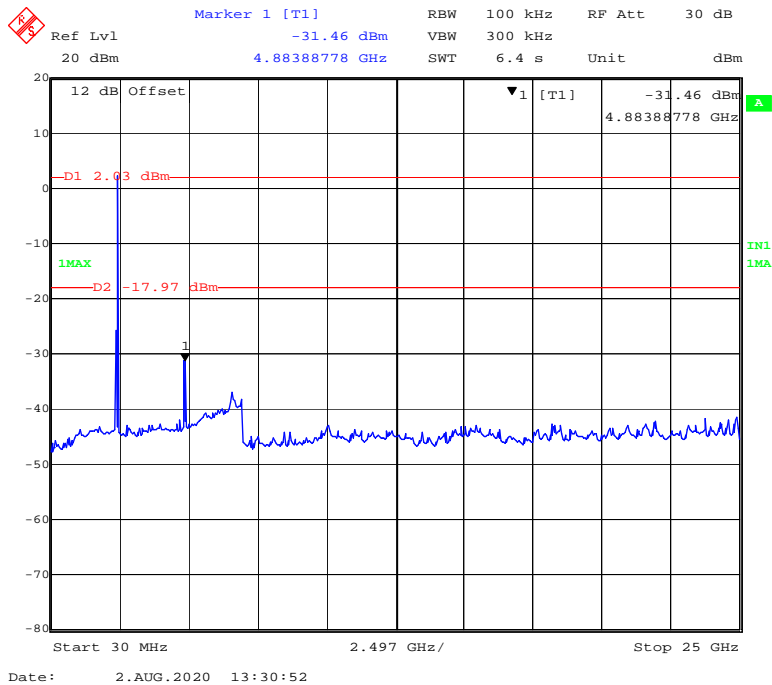
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dB μ V/m)	Margin (dB)
	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Height (cm)	Polar (H/V)				
Low Channel: 2422MHz								
2390.00	52.26	---	200.0	V	246.0	-2.9	74.00	21.74
2390.00	---	42.70	200.0	V	246.0	-2.9	54.00	11.30
High Channel: 2452MHz								
2483.50	---	48.59	200.0	V	241.0	-2.5	54.00	5.41
2483.50	53.03	---	200.0	V	241.0	-2.5	74.00	20.97

Conducted Spurious Emissions at Antenna Port

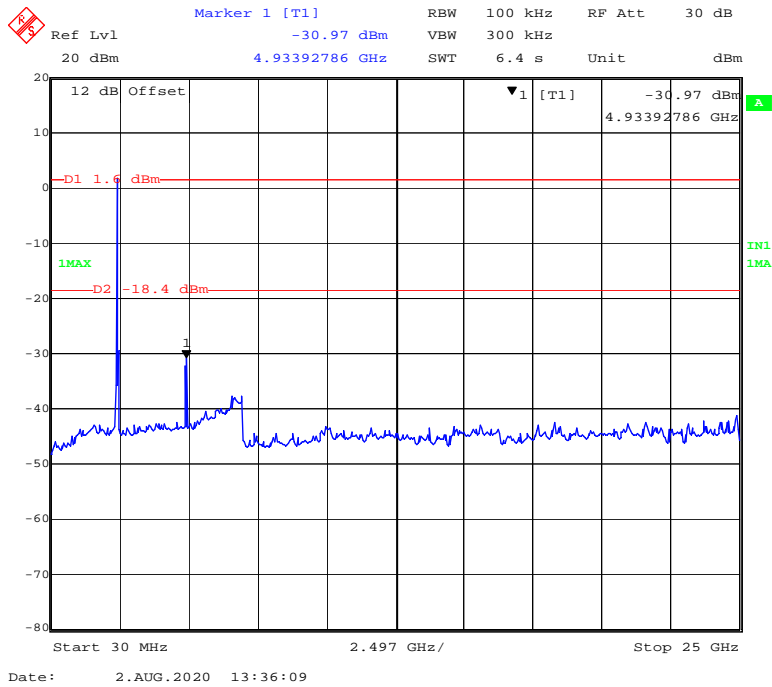
Chain0: 802.11b Mode Low Channel



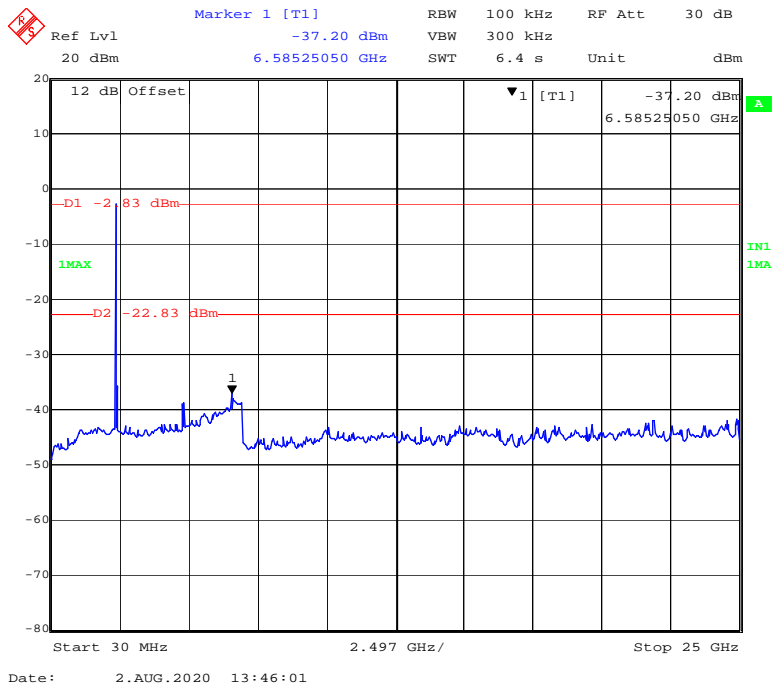
Chain0: 802.11b Mode Middle Channel



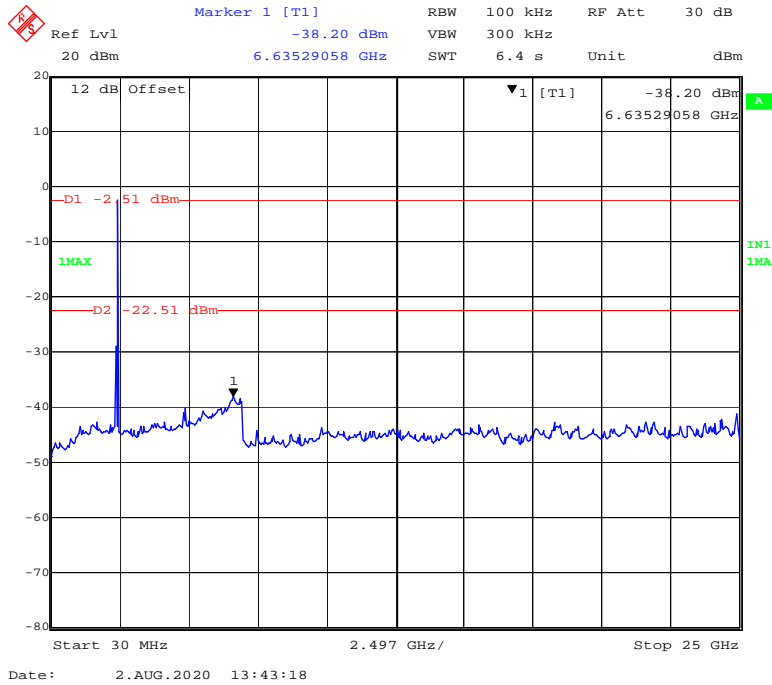
Chain0: 802.11b Mode High Channel



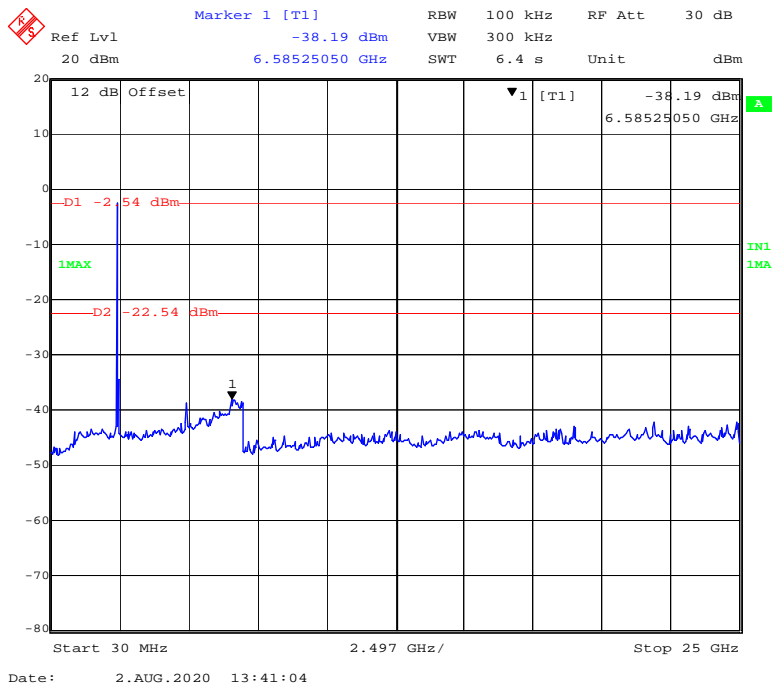
Chain0: 802.11g Mode Low Channel



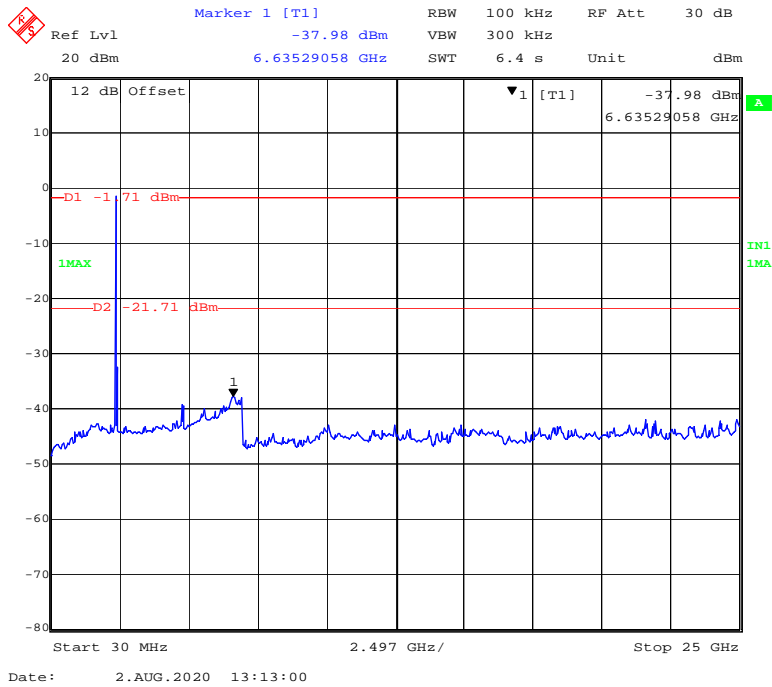
Chain0: 802.11g Mode Middle Channel



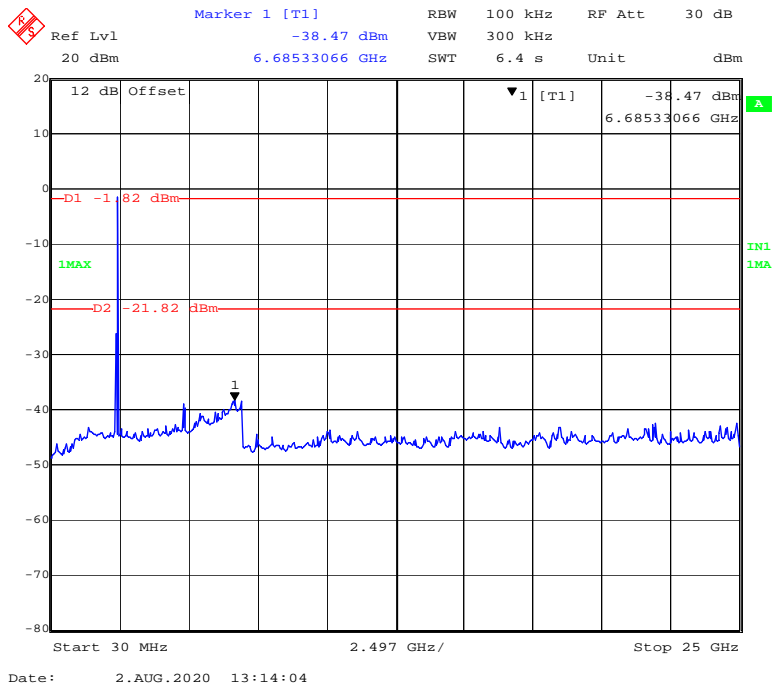
Chain0: 802.11g Mode High Channel



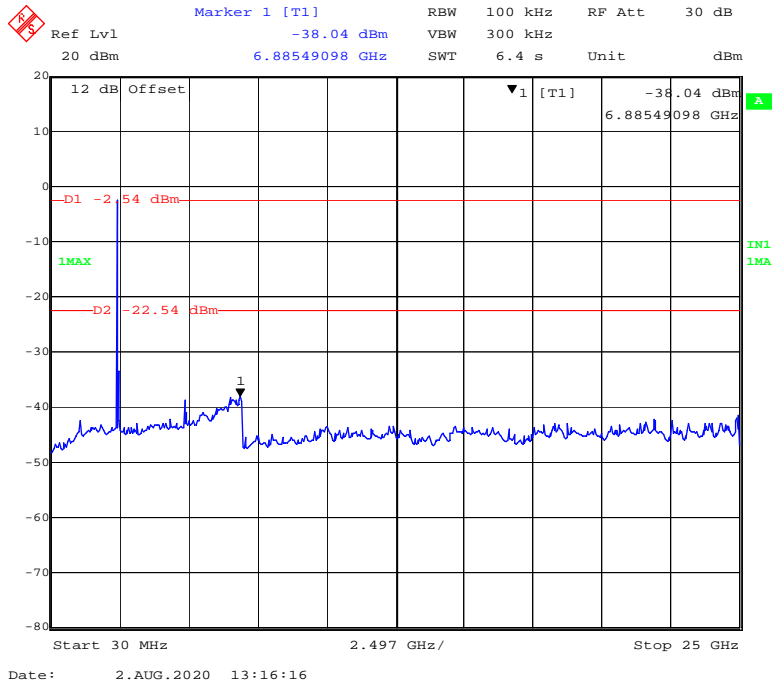
Chain0: 802.11n-HT20 Mode Low Channel



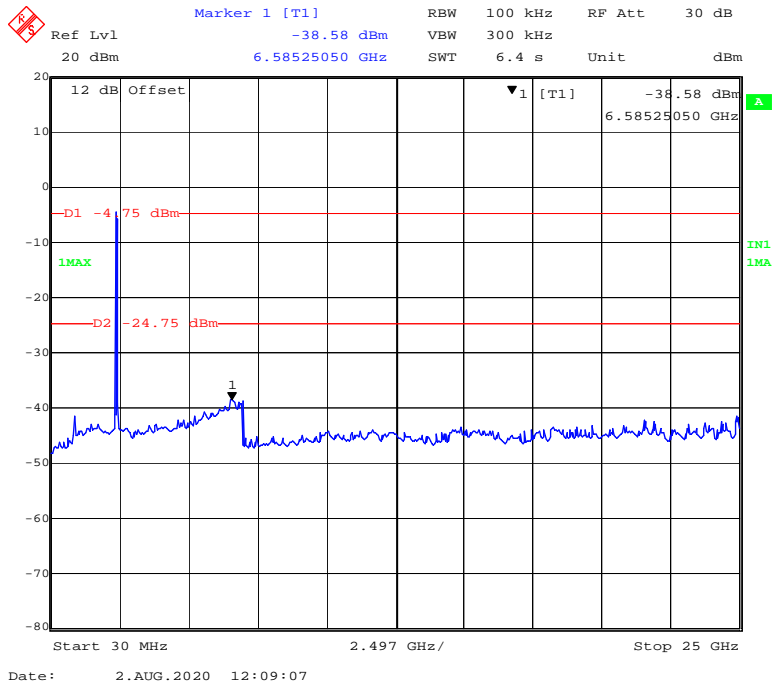
Chain0: 802.11n-HT20 Mode Middle Channel



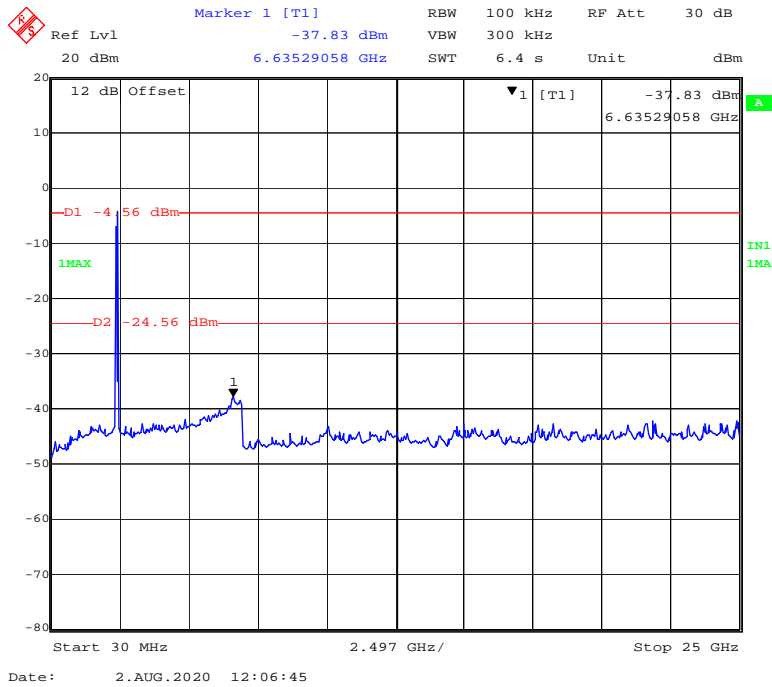
Chain0: 802.11n-HT20 Mode High Channel



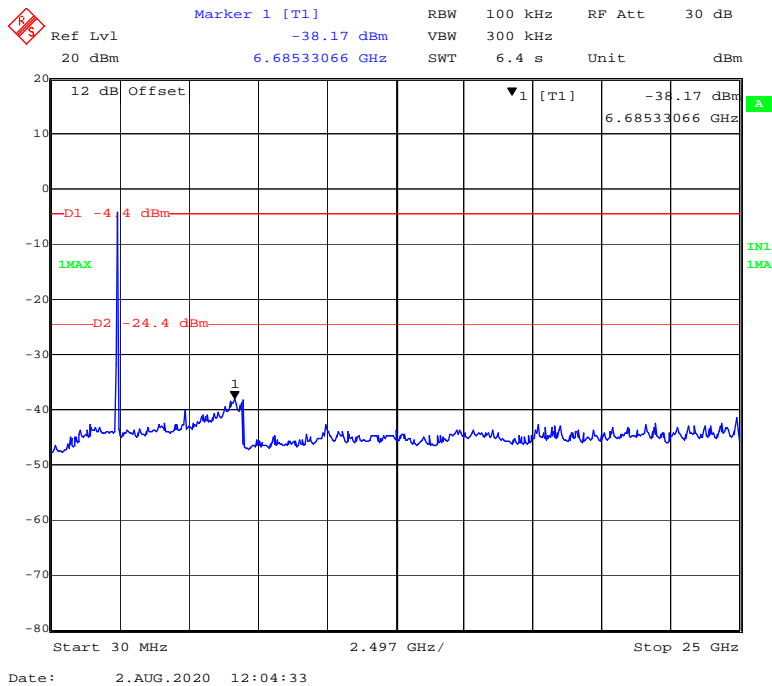
Chain0: 802.11n-HT40 Mode Low Channel



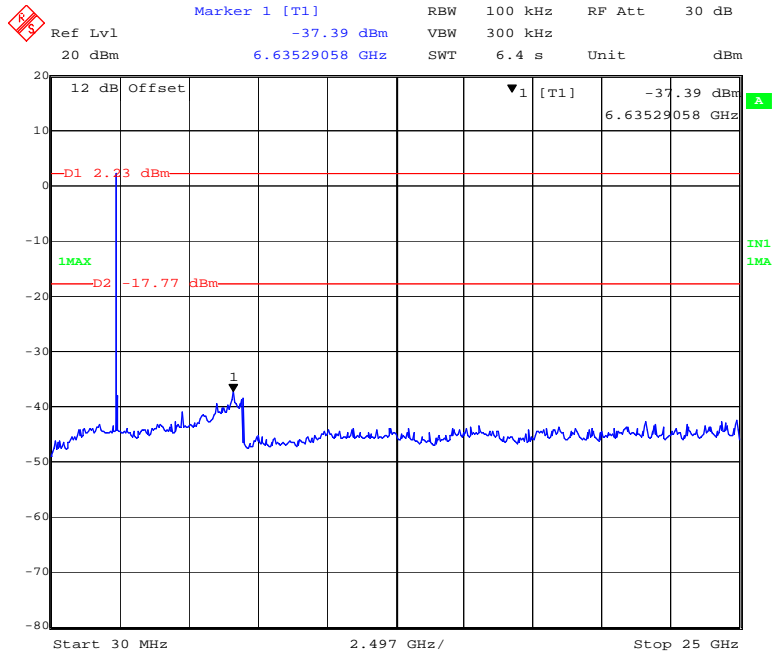
Chain0: 802.11n-HT40 Mode Middle Channel



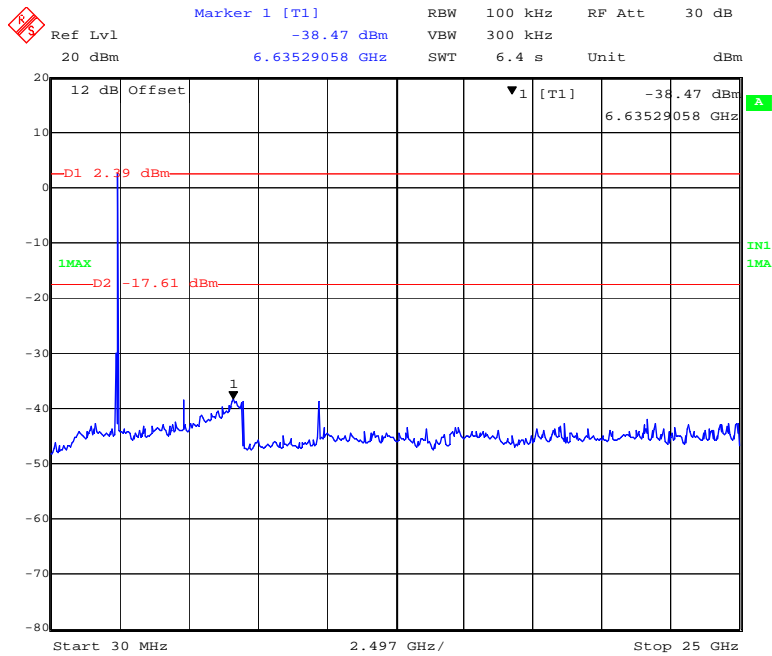
Chain0: 802.11n-HT40 Mode High Channel



Chain1: 802.11b Mode Low Channel

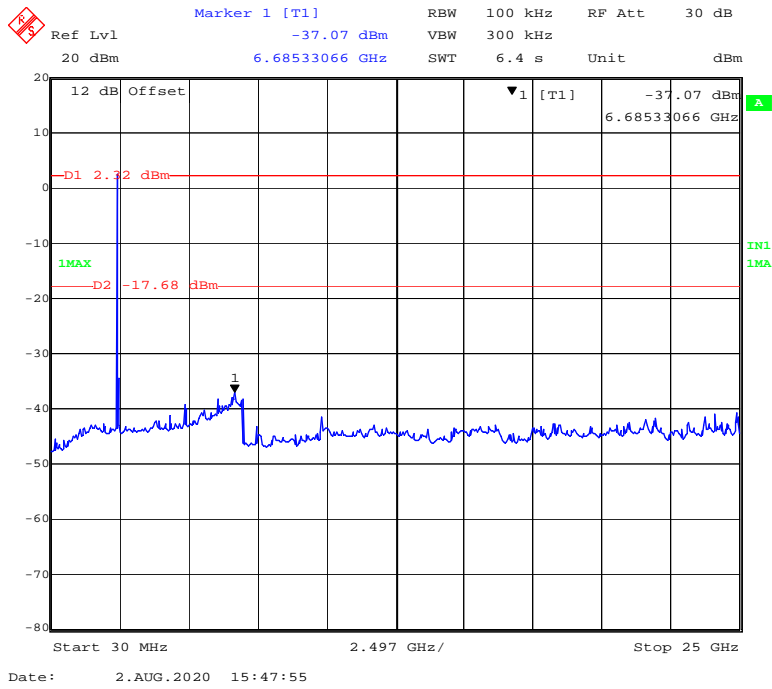


Chain1: 802.11b Mode Middle Channel

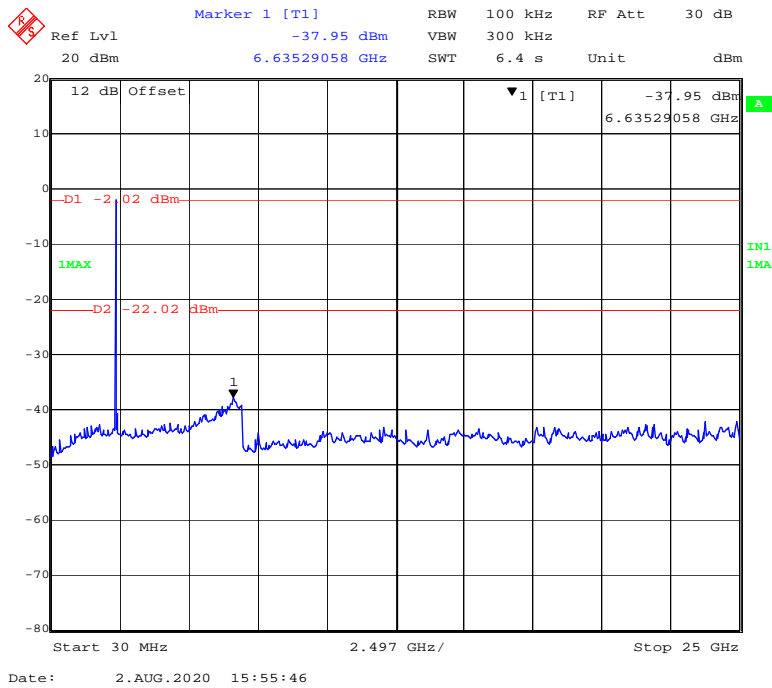


Date: 2.AUG.2020 15:42:49

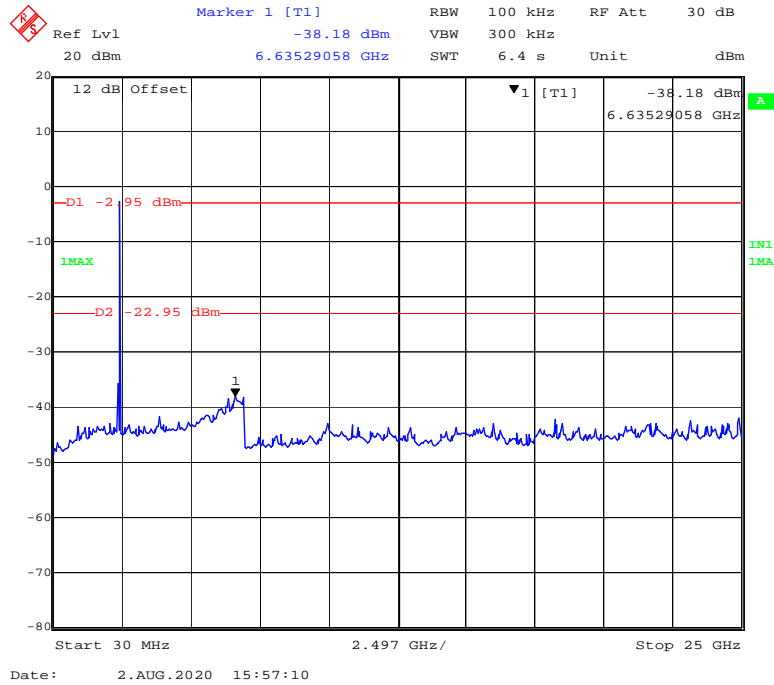
Chain1: 802.11b Mode High Channel



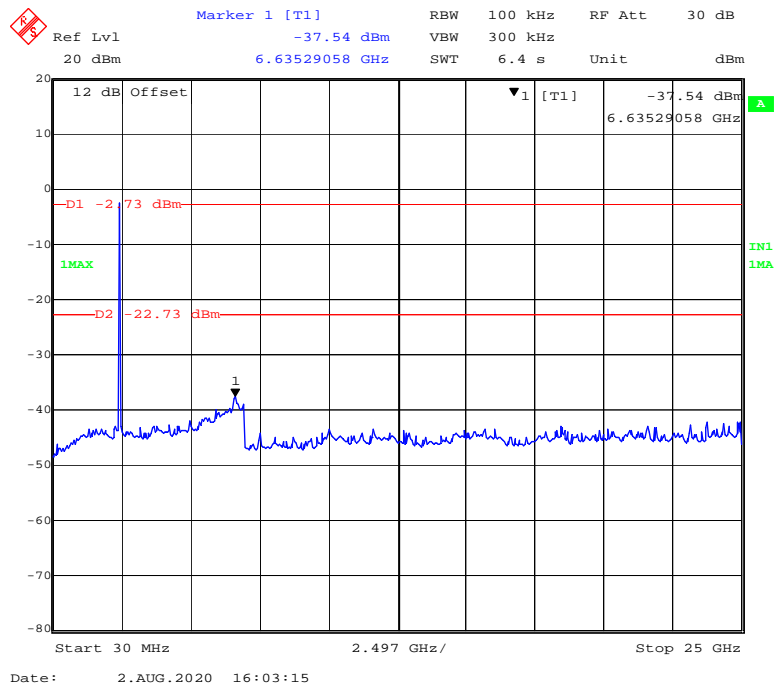
Chain1: 802.11g Mode Low Channel



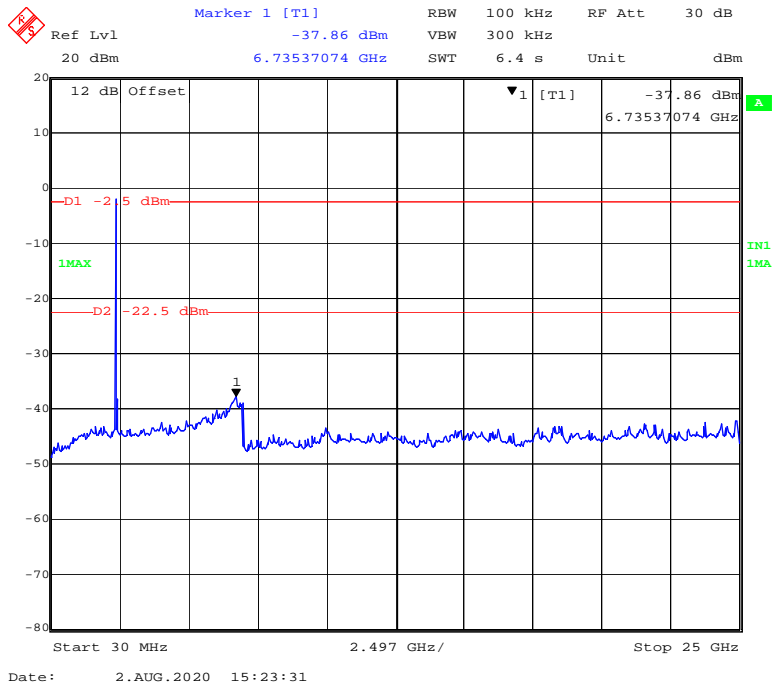
Chain1: 802.11g Mode Middle Channel



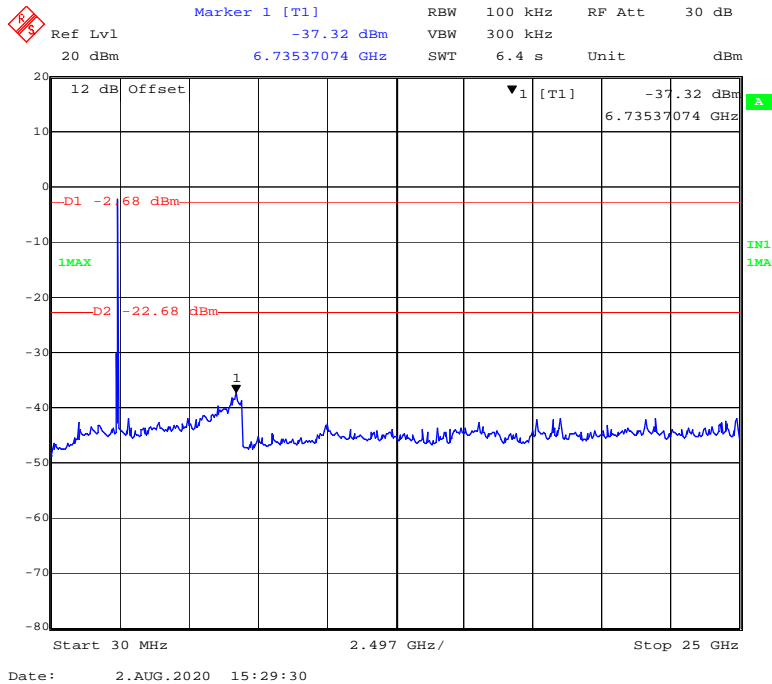
Chain1: 802.11g Mode High Channel



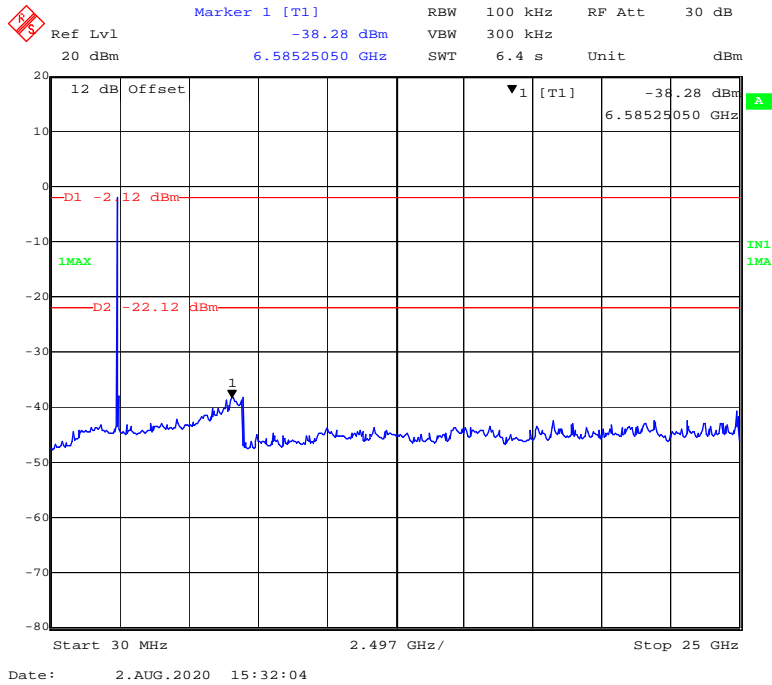
Chain1: 802.11n-HT20 Mode Low Channel



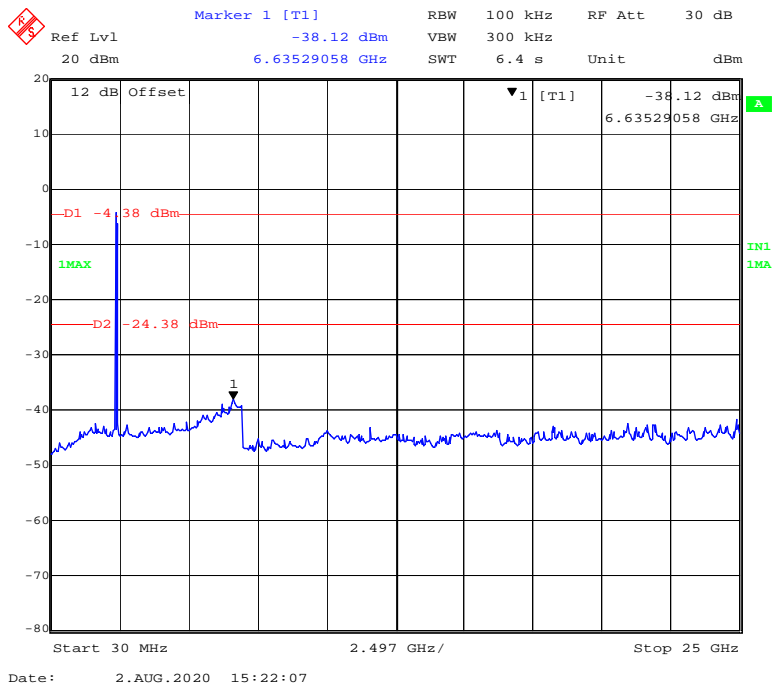
Chain1: 802.11n-HT20 Mode Middle Channel



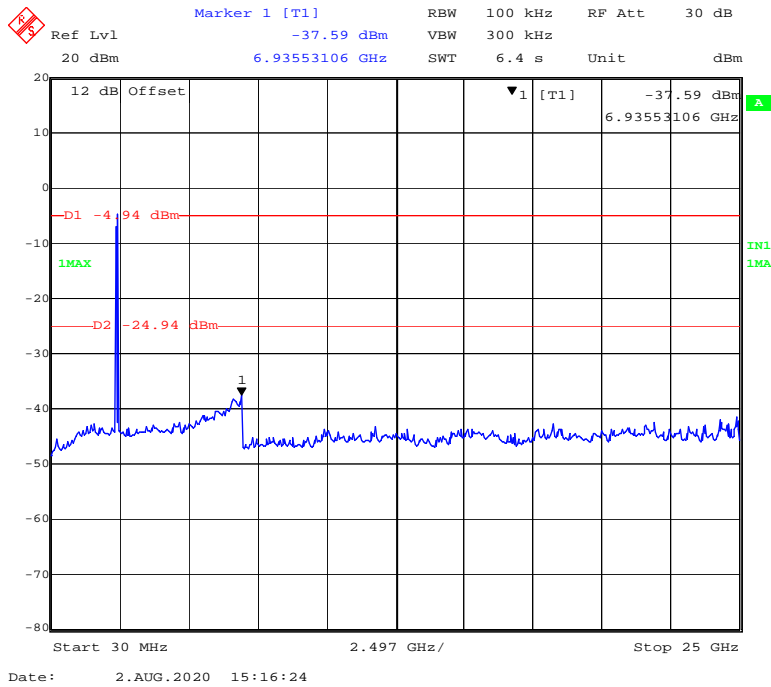
Chain1: 802.11n-HT20 Mode High Channel



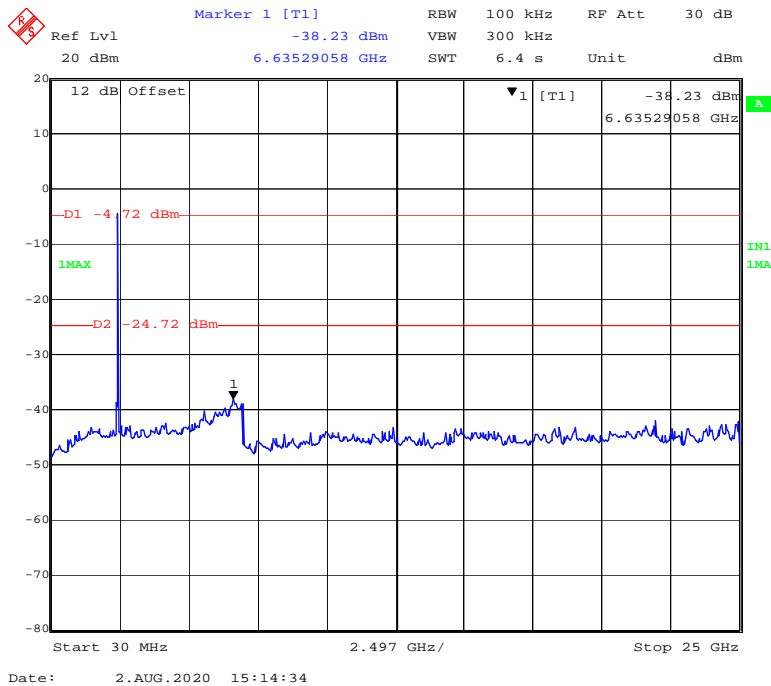
Chain1: 802.11n-HT40 Mode Low Channel



Chain1: 802.11n-HT40 Mode Middle Channel



Chain1: 802.11n-HT40 Mode High Channel



FCC §15.247(a) (2) - 6 dB EMISSION BANDWIDTH

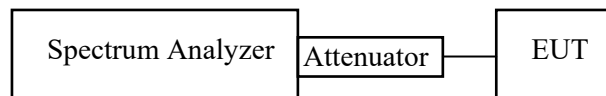
Applicable Standard

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Test Procedure

According to ANSI C63.10-2013 sub-clause 11.8.1

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) $\geq 3 * \text{RBW}$.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



Test Data

Environmental Conditions

Temperature:	26.3 °C
Relative Humidity:	62 %
ATM Pressure:	101.2kPa

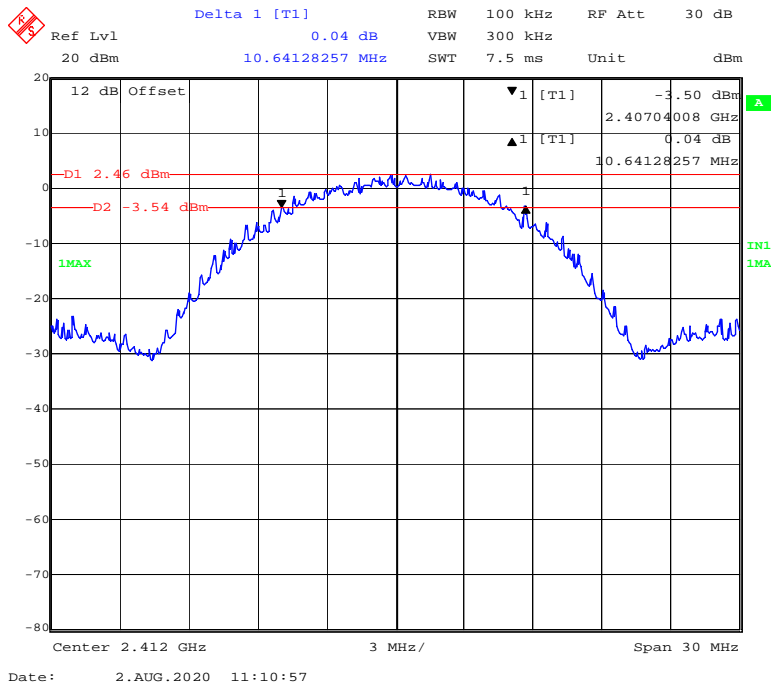
The testing was performed by CK Huang on 2020-08-02.

EUT operation mode: Transmitting

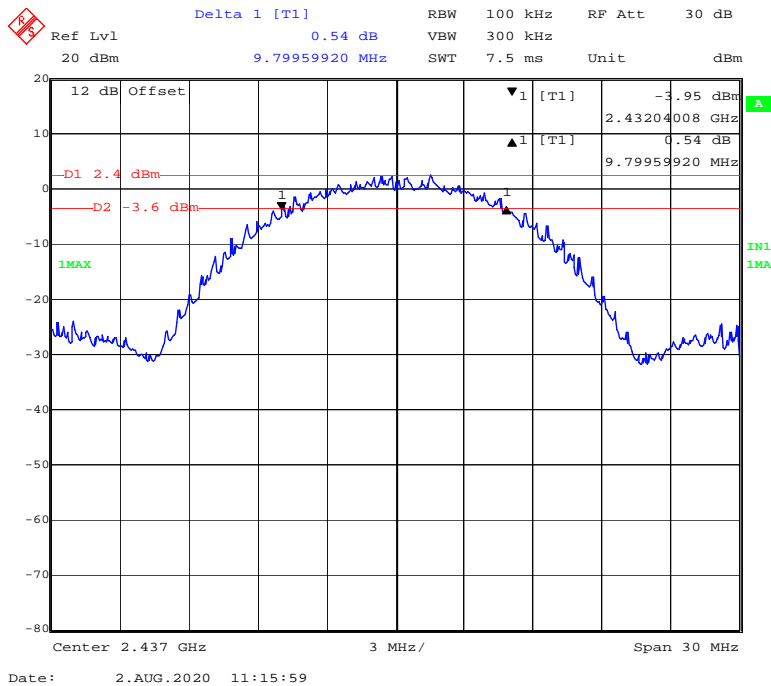
Test Result: Pass

Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)		Limit (MHz)
		Chain 0	Chain 1	
	802.11b Mode			
Low	2412	10.641	9.619	≥ 0.5
Middle	2437	9.800	9.559	≥ 0.5
High	2462	10.401	9.559	≥ 0.5
	802.11g Mode			
Low	2412	15.511	15.571	≥ 0.5
Middle	2437	15.752	16.353	≥ 0.5
High	2462	16.353	15.451	≥ 0.5
	802.11n-HT20 Mode			
Low	2412	16.052	15.932	≥ 0.5
Middle	2437	15.691	16.293	≥ 0.5
High	2462	16.894	16.713	≥ 0.5
	802.11n-HT40 Mode			
Low	2422	35.110	35.230	≥ 0.5
Middle	2437	35.230	35.230	≥ 0.5
High	2452	35.230	35.230	≥ 0.5

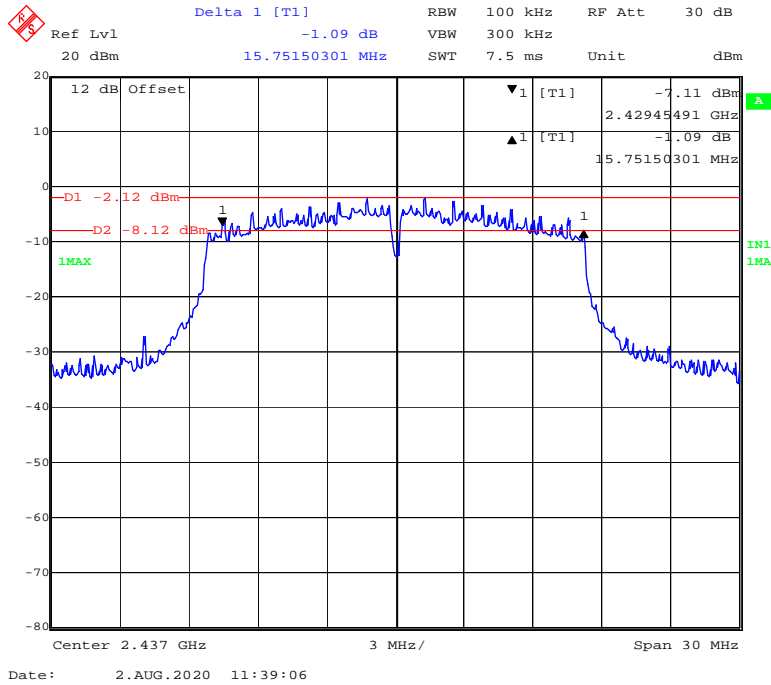
Chain0: 802.11b Mode Low Channel



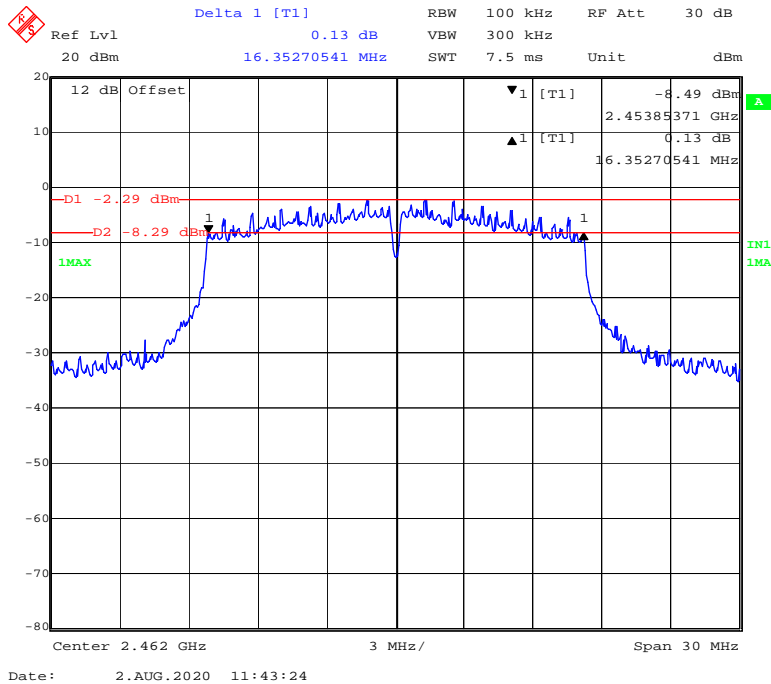
Chain0: 802.11b Mode Middle Channel



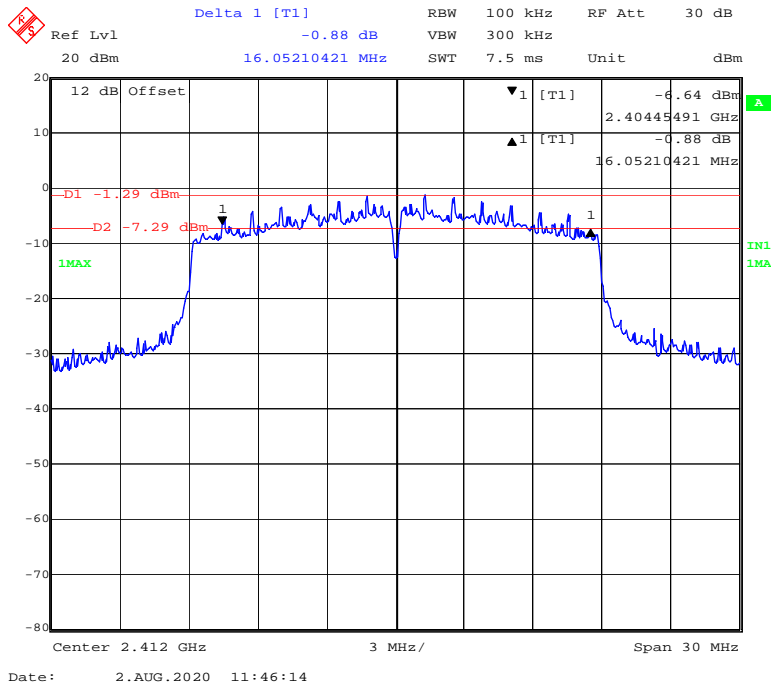
Chain0: 802.11g Mode Middle Channel



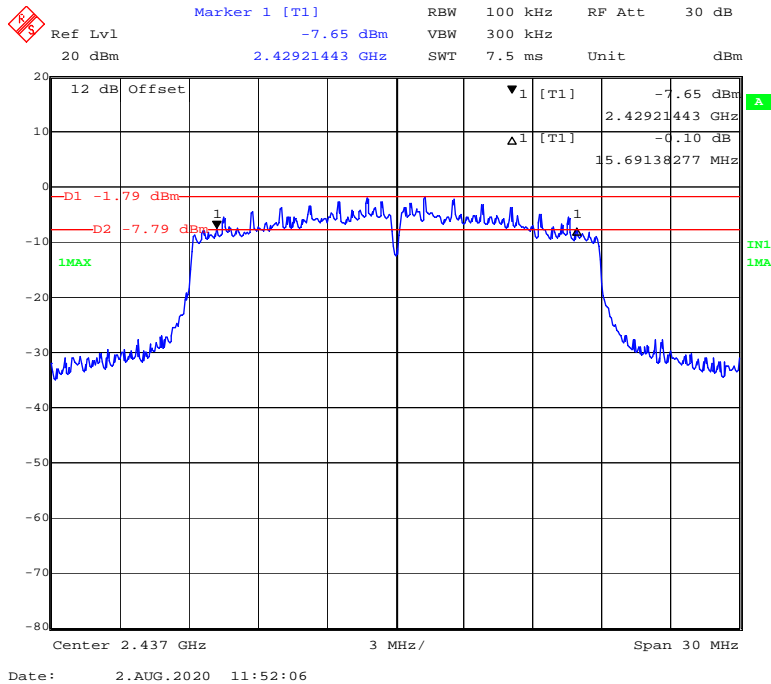
Chain0: 802.11g Mode High Channel



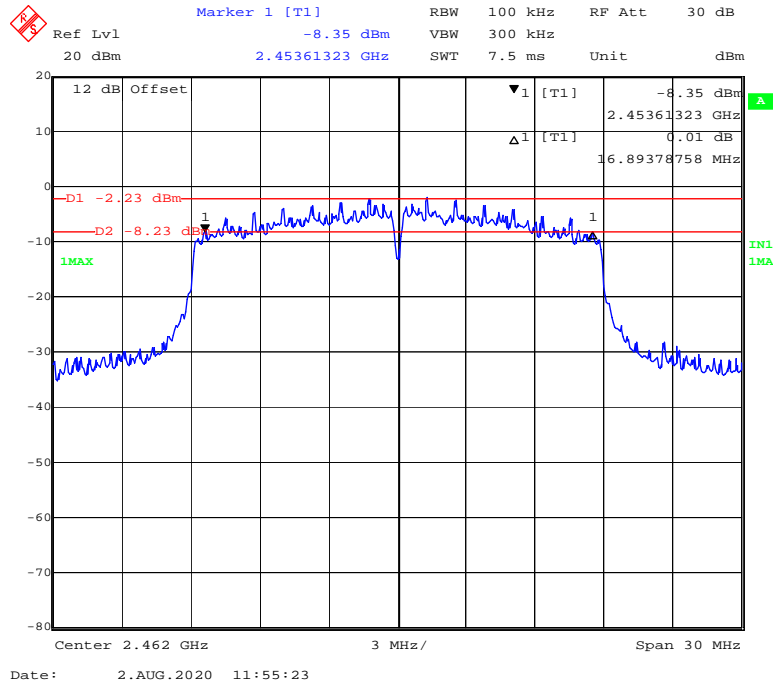
Chain0: 802.11n-HT20 Mode Low Channel



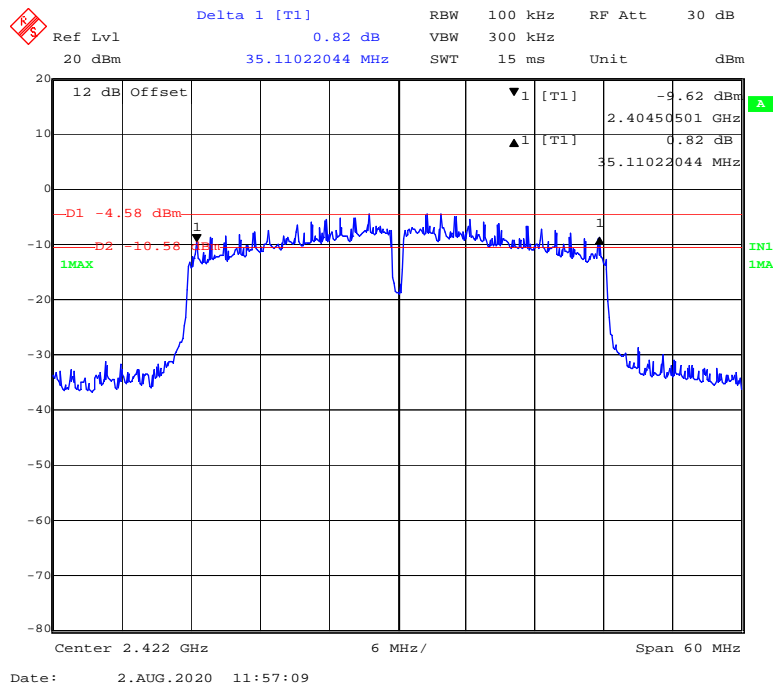
Chain0: 802.11n-HT20 Mode Middle Channel



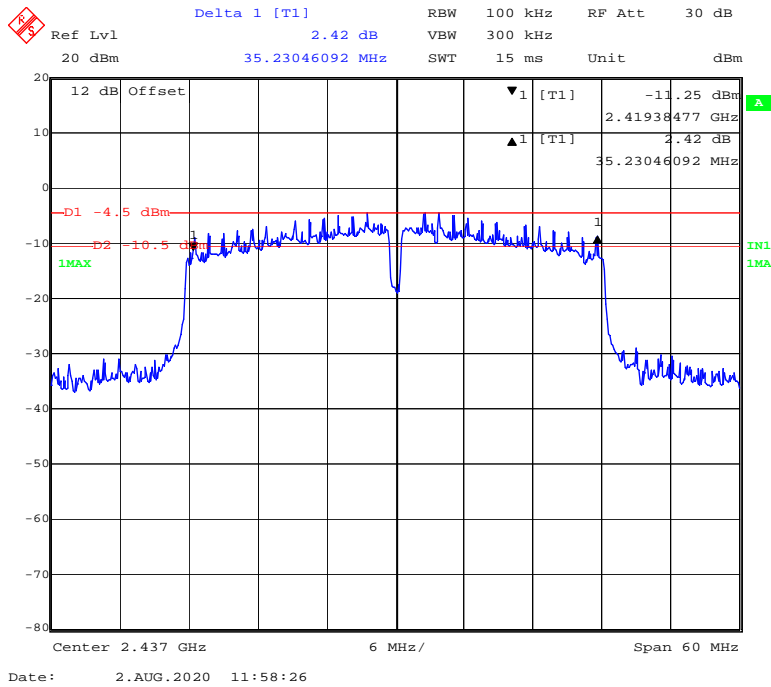
Chain0: 802.11n-HT20 Mode High Channel



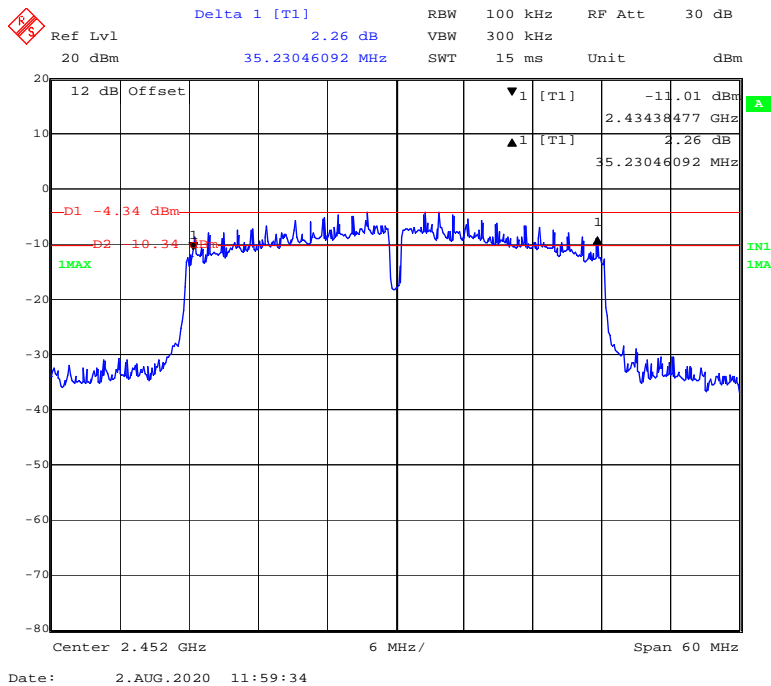
Chain0: 802.11n-HT40 Mode Low Channel



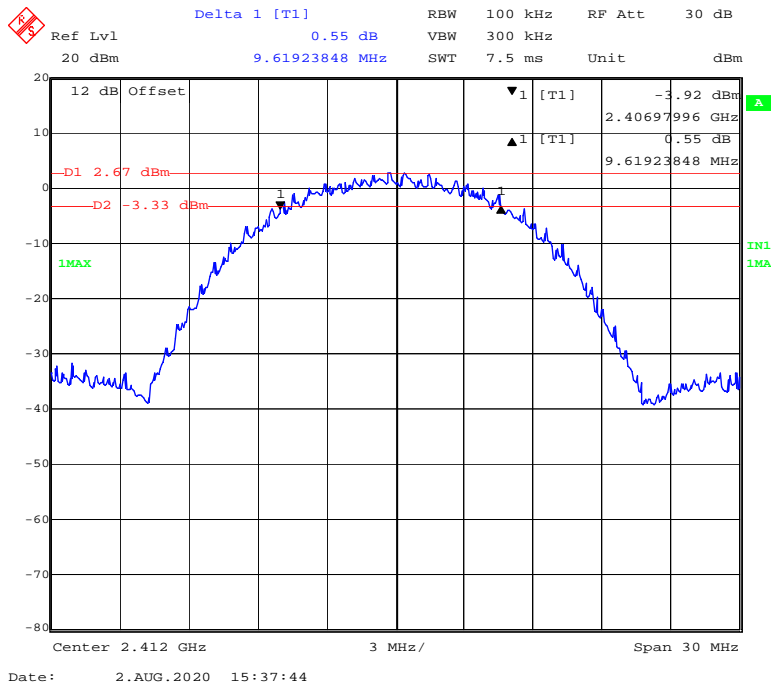
Chain0: 802.11n-HT40 Mode Middle Channel



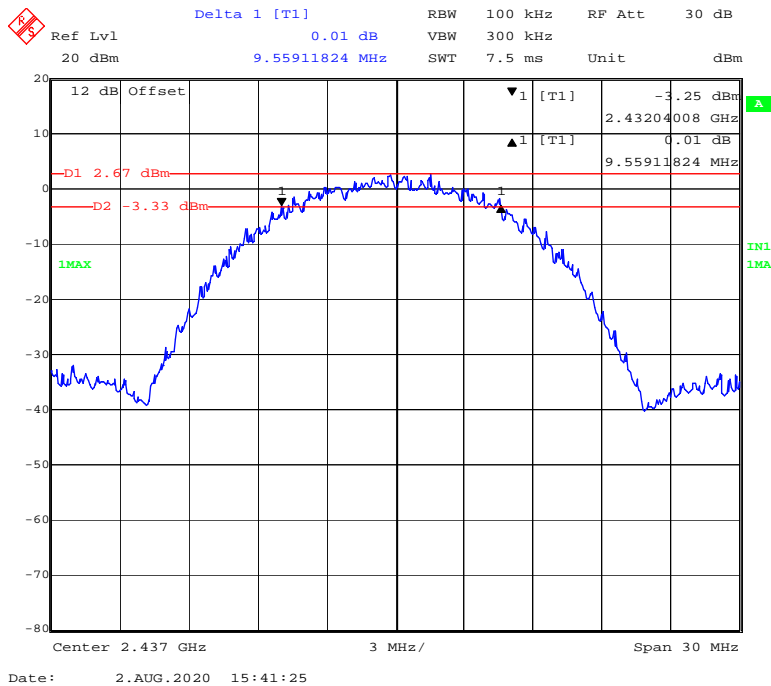
Chain0: 802.11n-HT40 Mode High Channel



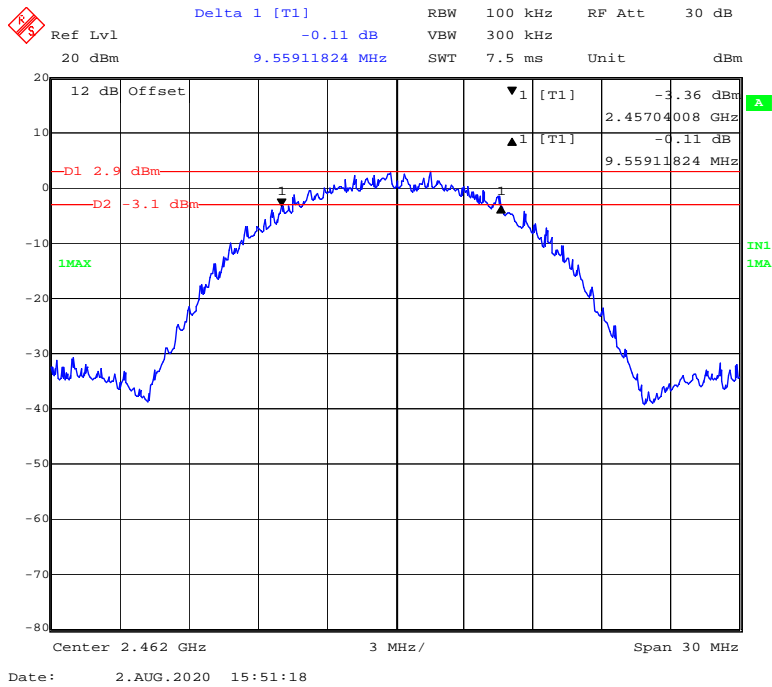
Chain1: 802.11b Mode Low Channel



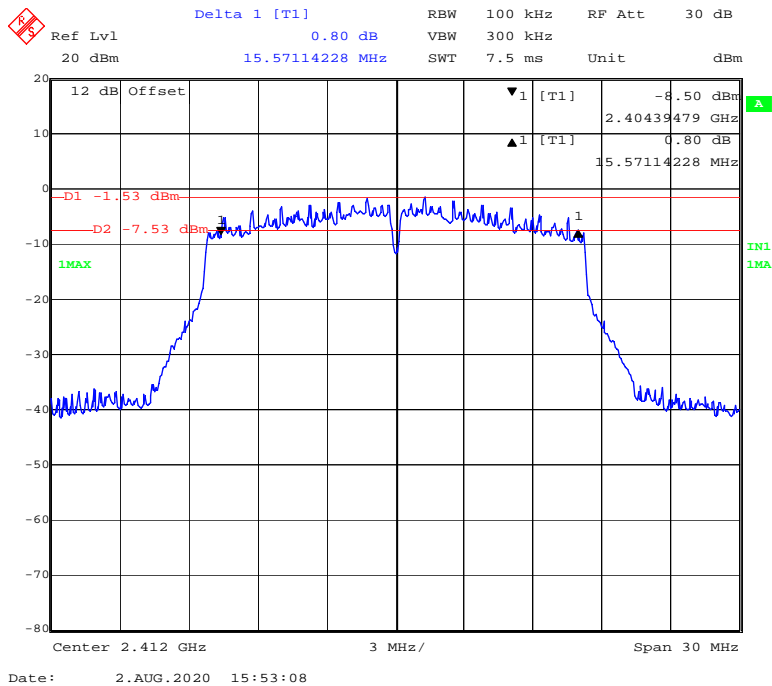
Chain1: 802.11b Mode Middle Channel



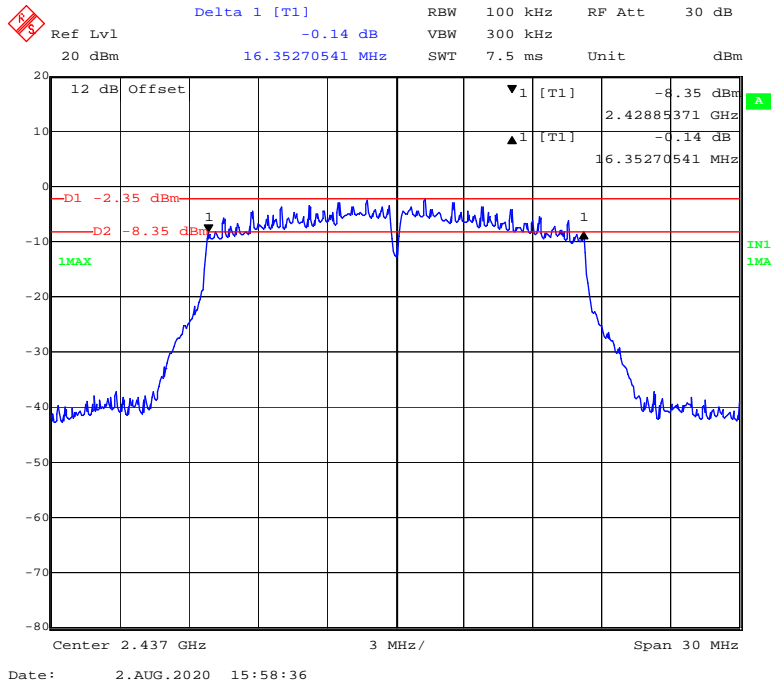
Chain1: 802.11b Mode High Channel



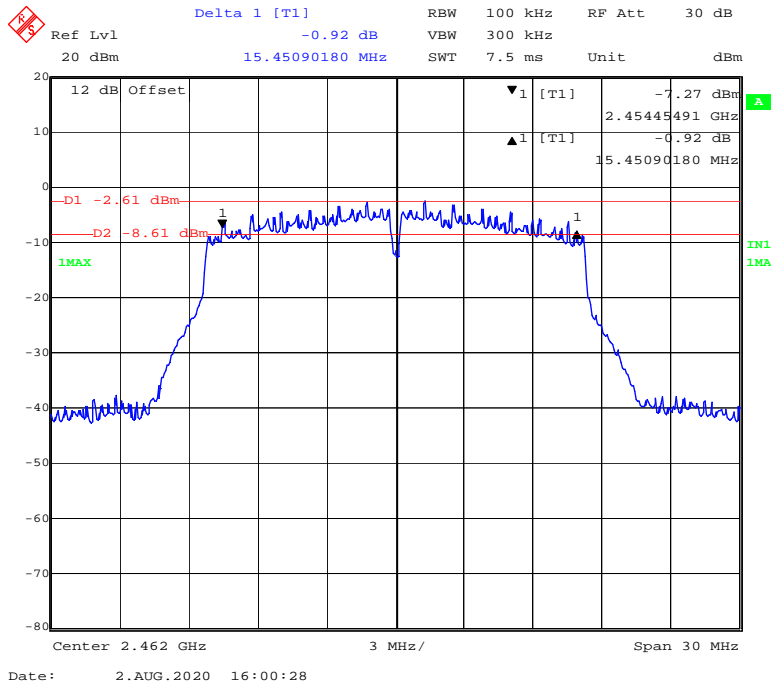
Chain1: 802.11g Mode Low Channel



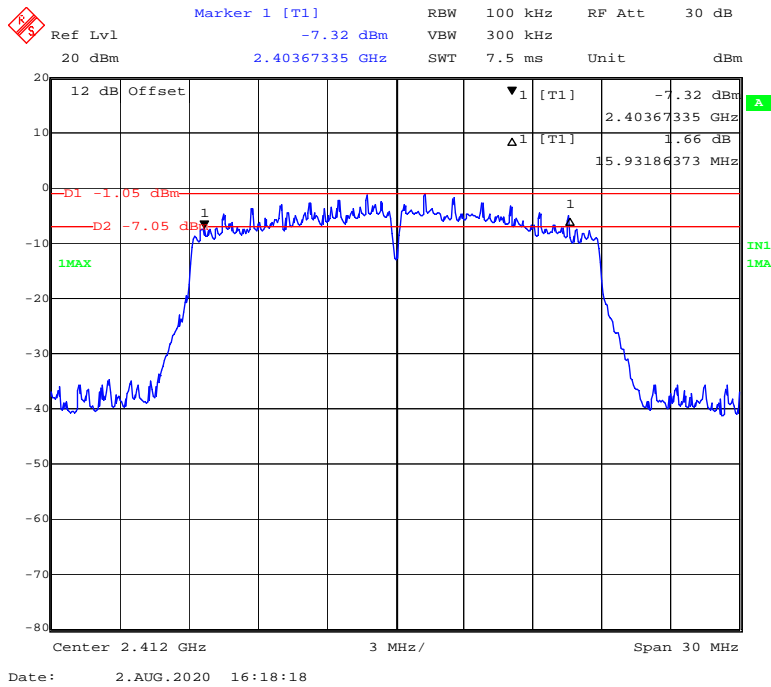
Chain1: 802.11g Mode Middle Channel



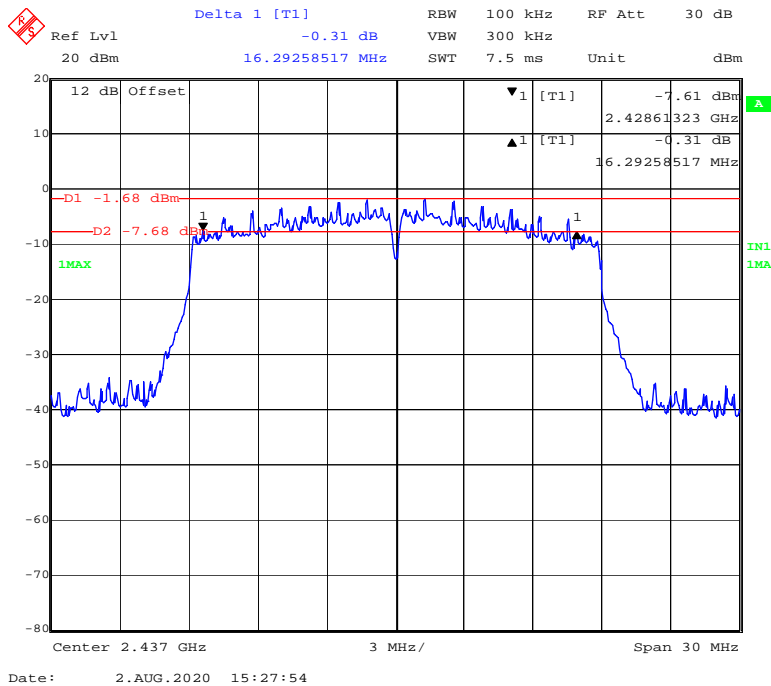
Chain1: 802.11g Mode High Channel



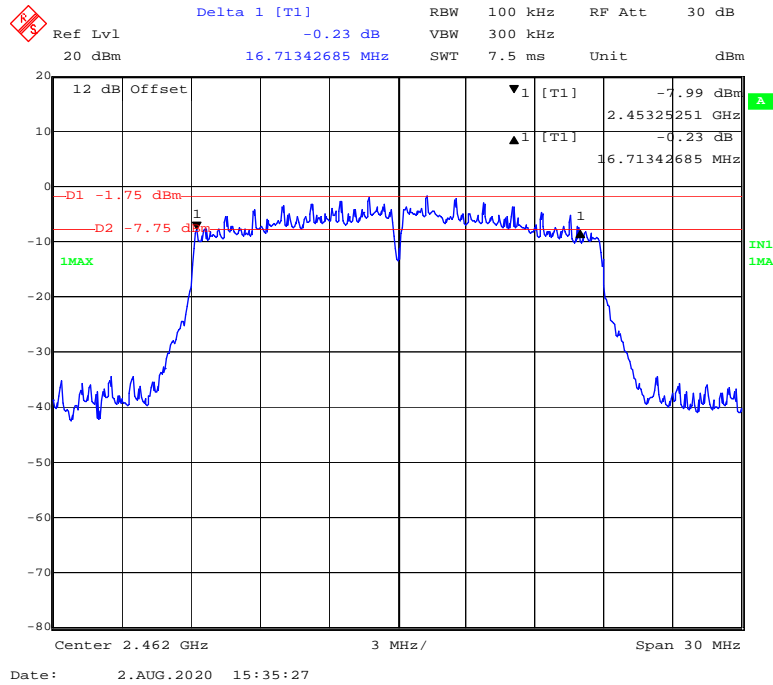
Chain1: 802.11n-HT20 Mode Low Channel



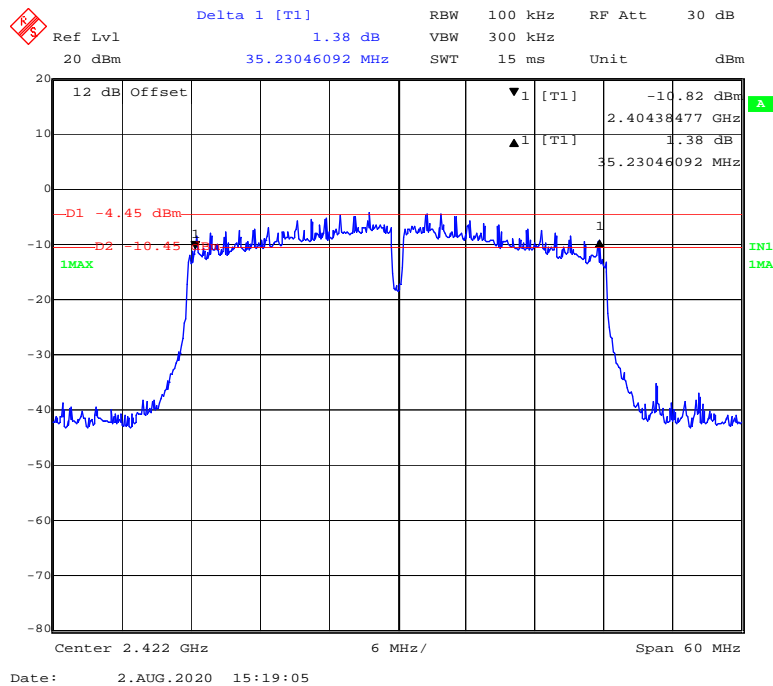
Chain1: 802.11n-HT20 Mode Middle Channel



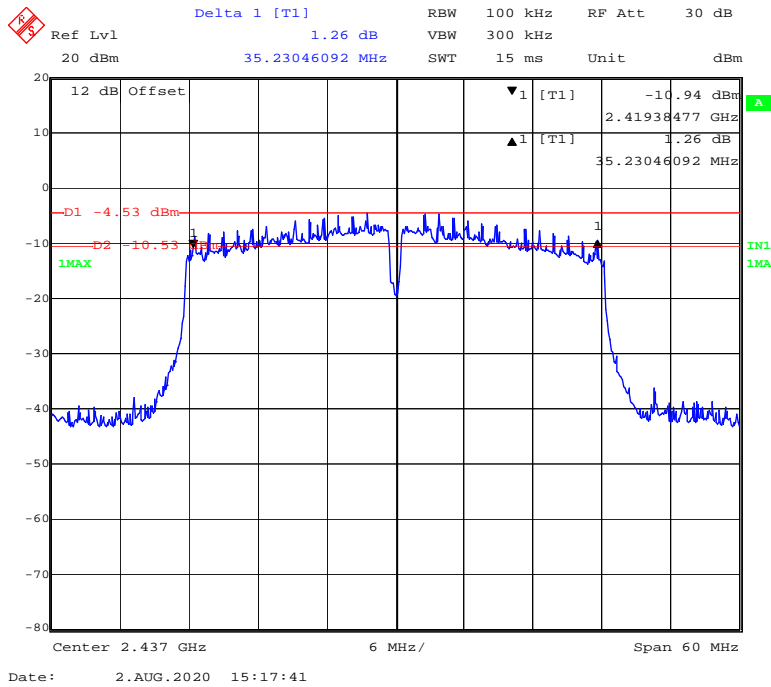
Chain1: 802.11n-HT20 Mode High Channel



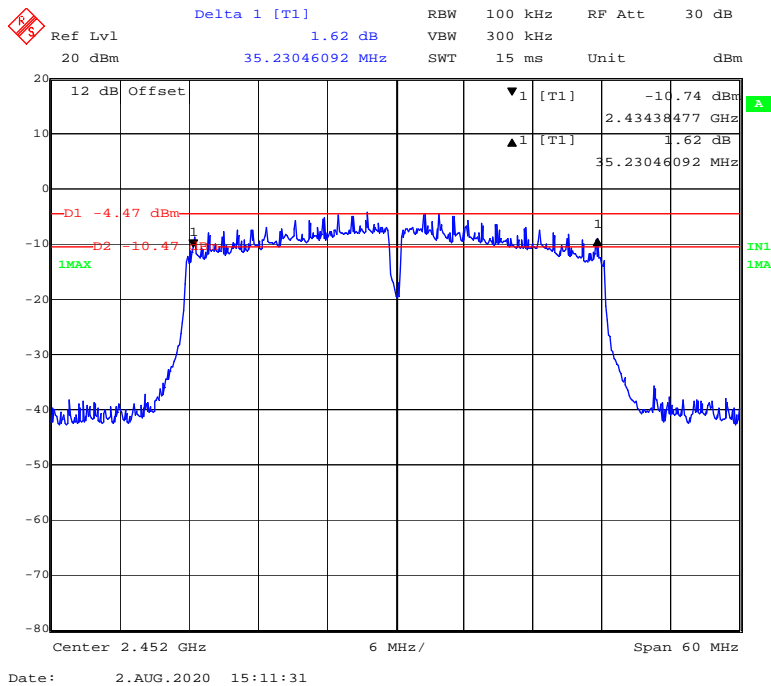
Chain1: 802.11n-HT40 Mode Low Channel



Chain1: 802.11n-HT40 Mode Middle Channel



Chain1: 802.11n-HT40 Mode High Channel



FCC §15.247(b) (3) - MAXIMUM CONDUCTED OUTPUT POWER

Applicable Standard

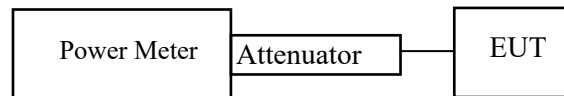
According to FCC §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, Compliant with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

Test Procedure

According to ANSI C63.10-2013 sub-clause 11.9.1.3

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
3. Add a correction factor to the display.



Test Data

Environmental Conditions

Temperature:	26.3 °C
Relative Humidity:	62 %
ATM Pressure:	101.2kPa

The testing was performed by CK Huang on 2020-08-02.

EUT operation mode: Transmitting

Test mode	Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)			Limit (dBm)	Result
			Chain0	Chain1	Total		
802.11b	Low	2412	17.67	17.47	/	30	Pass
	Middle	2437	17.54	17.11	/	30	Pass
	High	2462	17.07	17.22	/	30	Pass
802.11g	Low	2412	16.48	16.98	/	30	Pass
	Middle	2437	17.04	16.72	/	30	Pass
	High	2462	16.73	16.35	/	30	Pass
802.11n-HT20	Low	2412	16.66	17.07	19.88	30	Pass
	Middle	2437	16.72	16.63	19.69	30	Pass
	High	2462	16.33	16.61	19.48	30	Pass
802.11n-HT40	Low	2422	16.27	16.56	19.43	30	Pass
	Middle	2437	16.58	16.34	19.47	30	Pass
	High	2452	16.52	16.47	19.51	30	Pass

Note: The total output power= $10\log(10^{\text{Chain 0}/10} + 10^{\text{Chain 1}/10})$

The maximum antenna gain is 0.0dBi, the device employed Cyclic Delay Diversity (CDD) for 802.11 MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power measurements on IEEE 802.11 devices:

Array Gain = 0 dB (i.e., no array gain) for NANT \leq 4;

So: Directional gain = GANT + Array Gain = 0.0dBi < 6dBi, no RF out power limit was reduced

FCC §15.247(d) – 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE

Applicable Standard

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates Compliant with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. 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)).

Test Procedure

According to ANSI C63.10-2013 sub-clause 6.10.

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

Test Data

Environmental Conditions

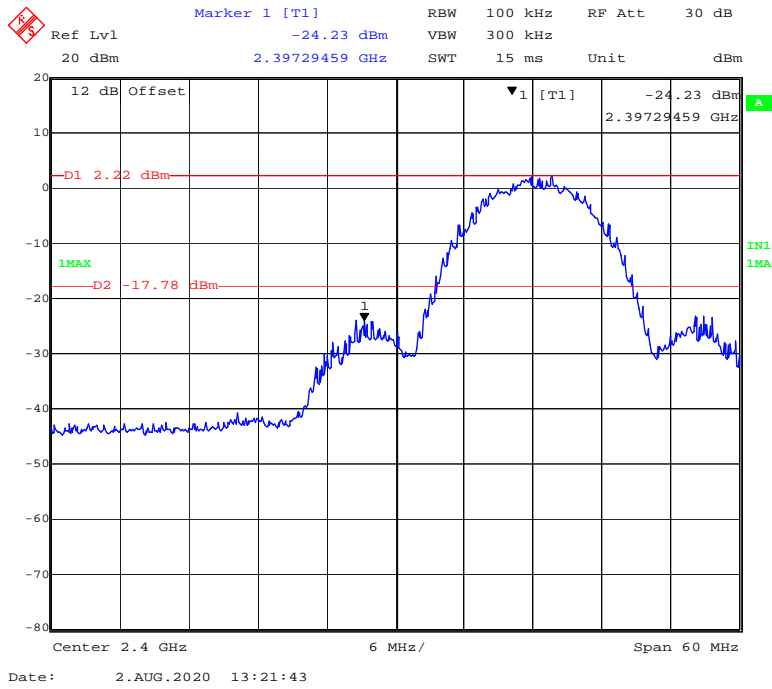
Temperature:	26.3 °C
Relative Humidity:	62 %
ATM Pressure:	101.2kPa

The testing was performed by CK Huang on 2020-08-02.

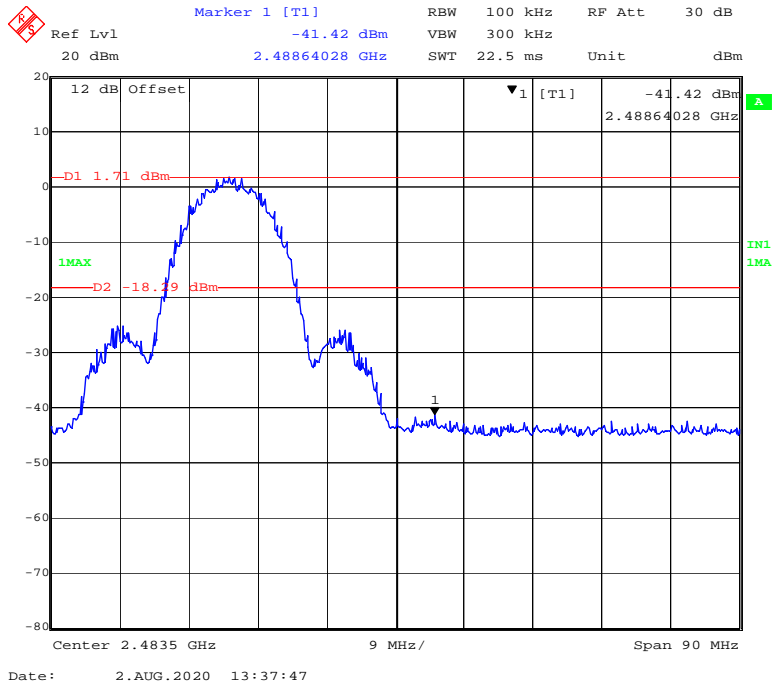
EUT operation mode: Transmitting

Test Result: Compliant

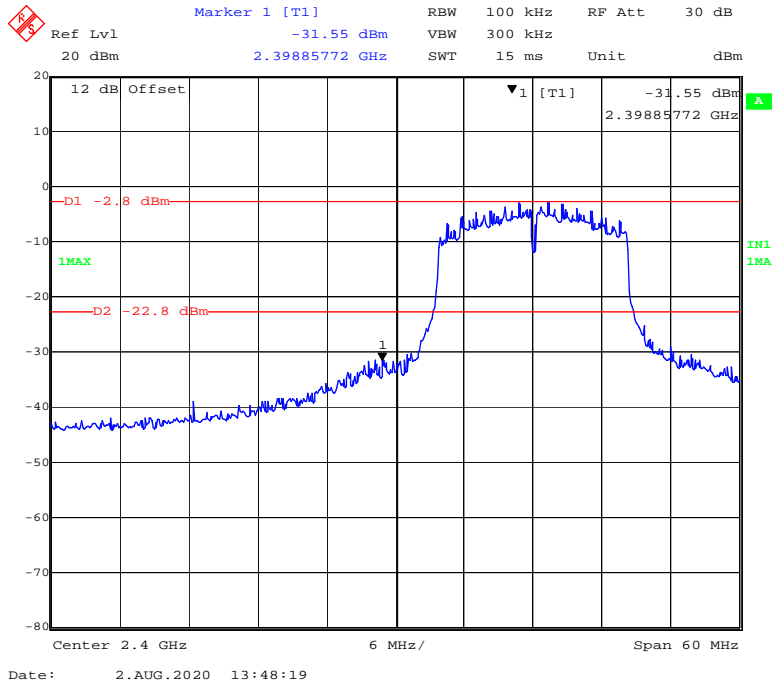
Chain0: 802.11b Mode Left Side



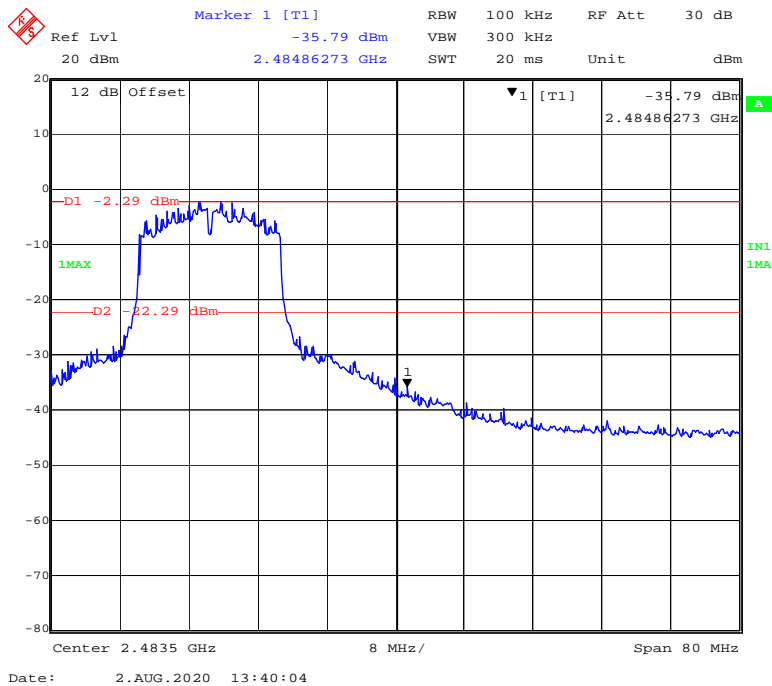
Chain0: 802.11b Mode Right Side



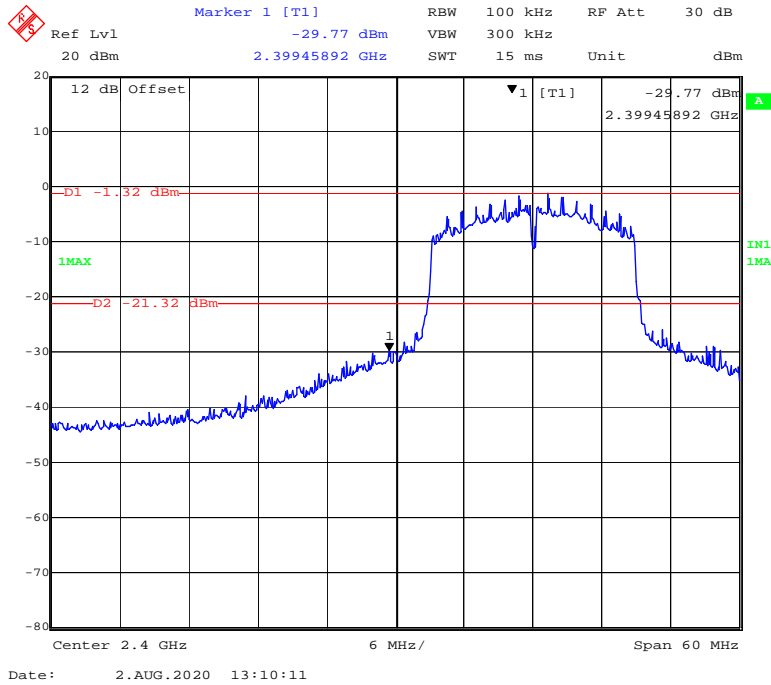
Chain0: 802.11g Mode Left Side



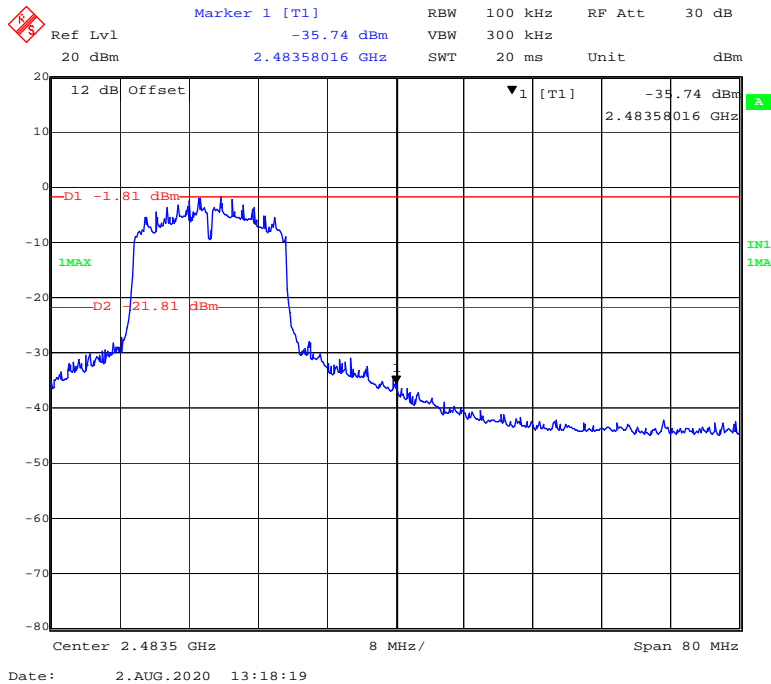
Chain0: 802.11g Mode Right Side



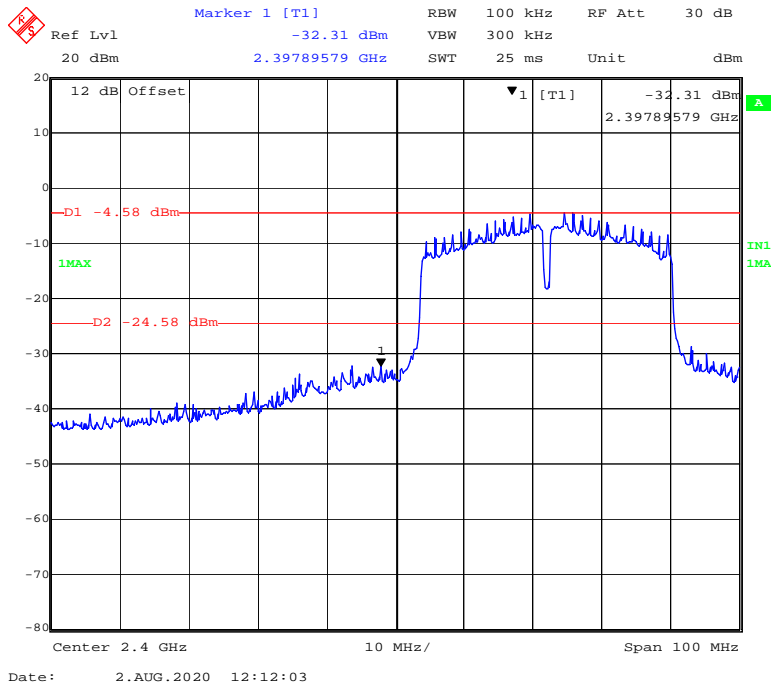
Chain0: 802.11n-HT20 Mode Left Side



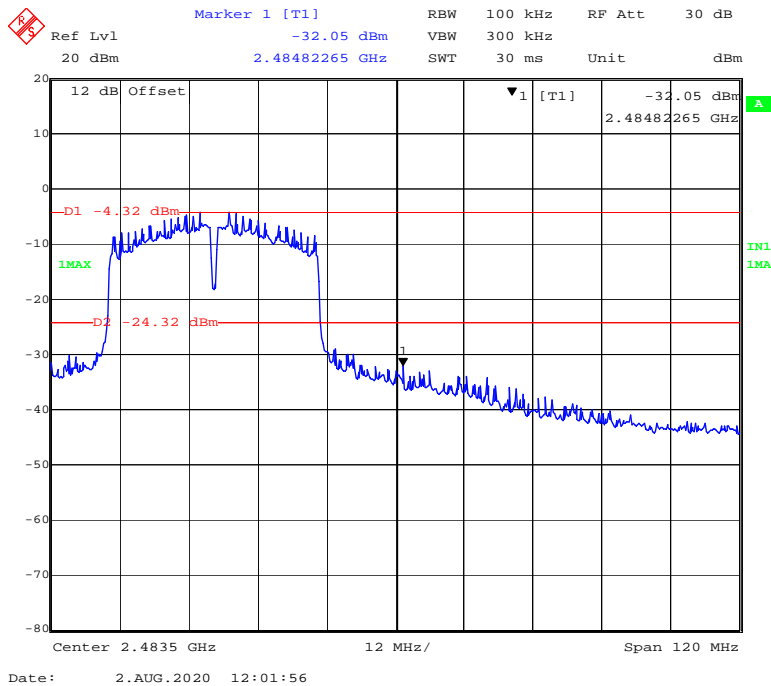
Chain0: 802.11n-HT20 Mode Right Side



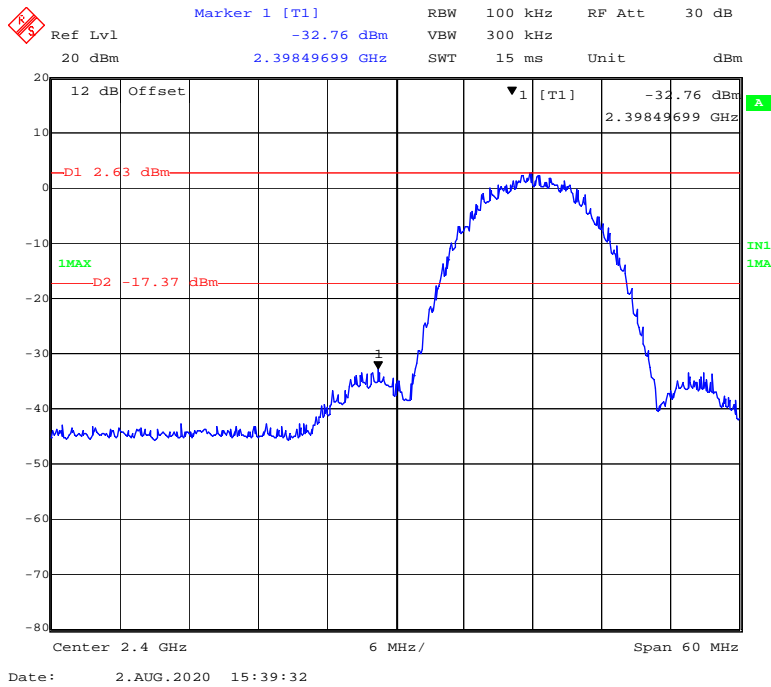
Chain0: 802.11n-HT40 Mode Left Side



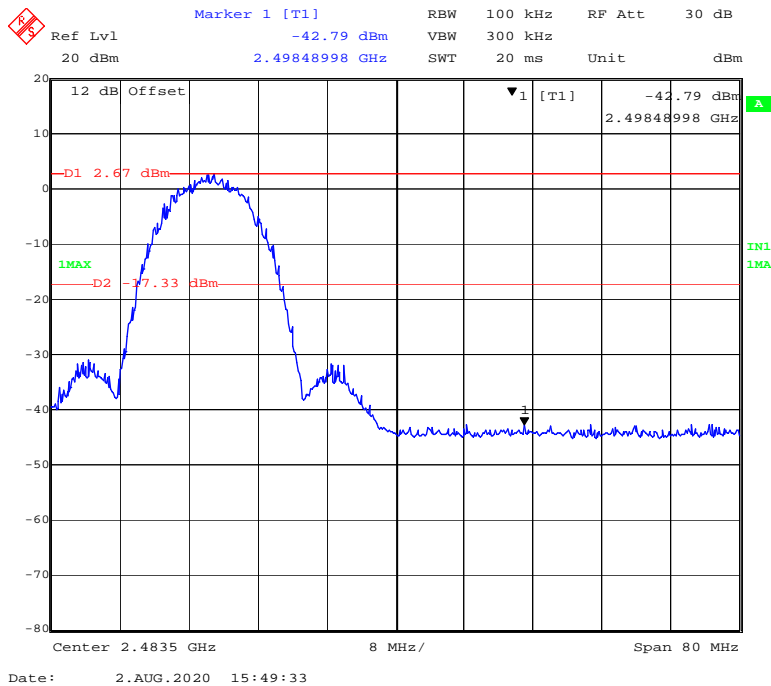
Chain0: 802.11n-HT40 Mode Right Side



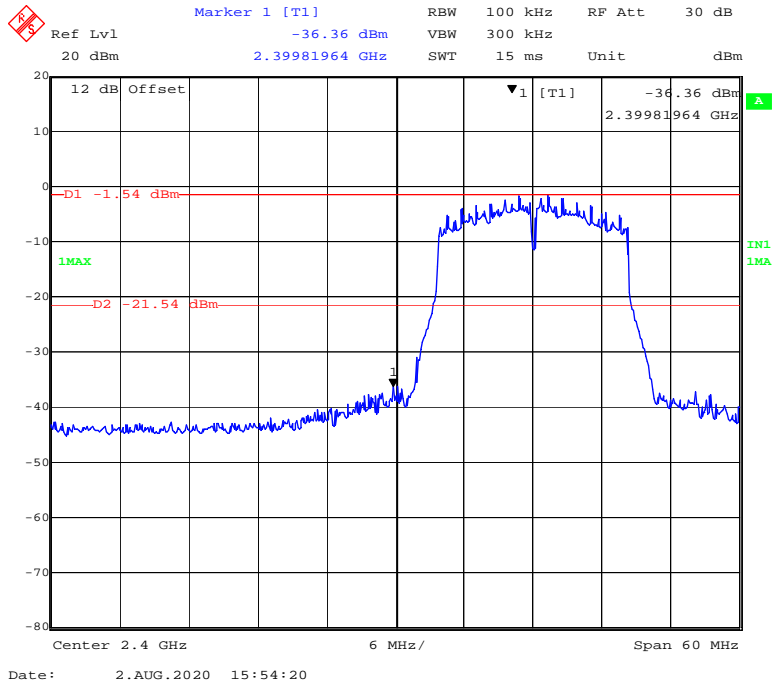
Chain1: 802.11b Mode Left Side



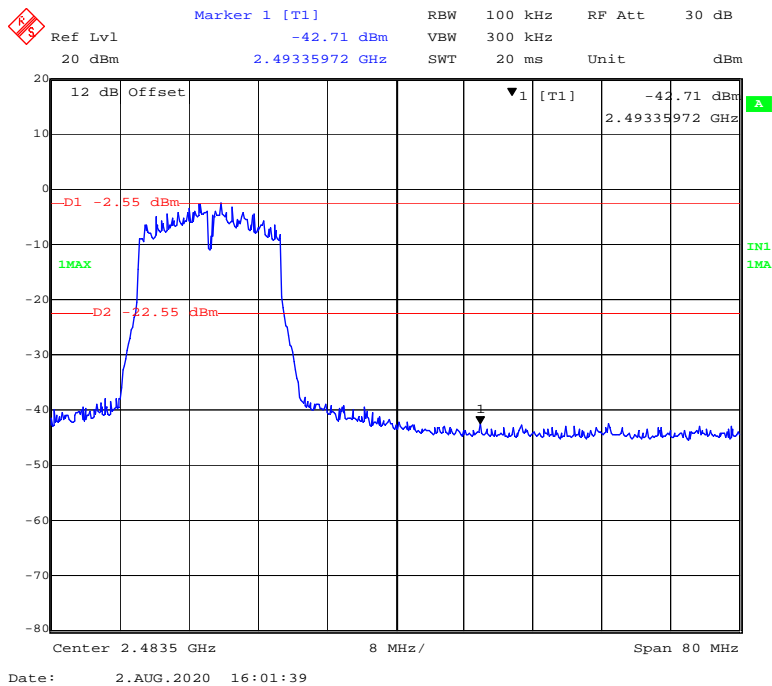
Chain1: 802.11b Mode Right Side



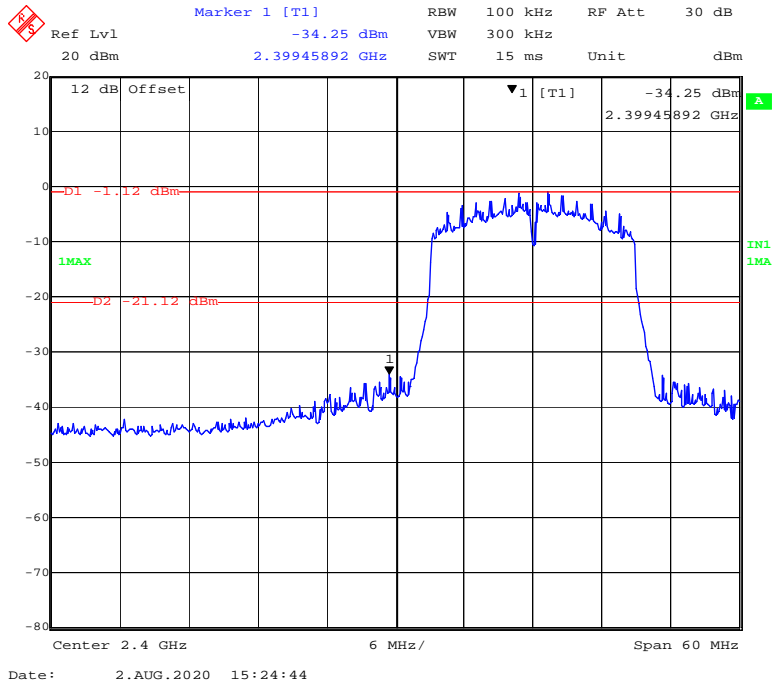
Chain1: 802.11g Mode Left Side



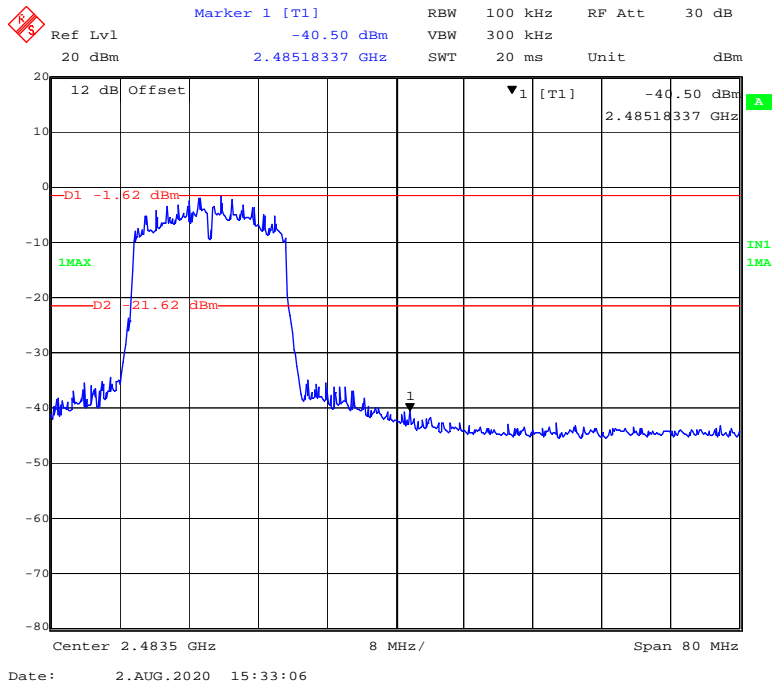
Chain1: 802.11g Mode Right Side



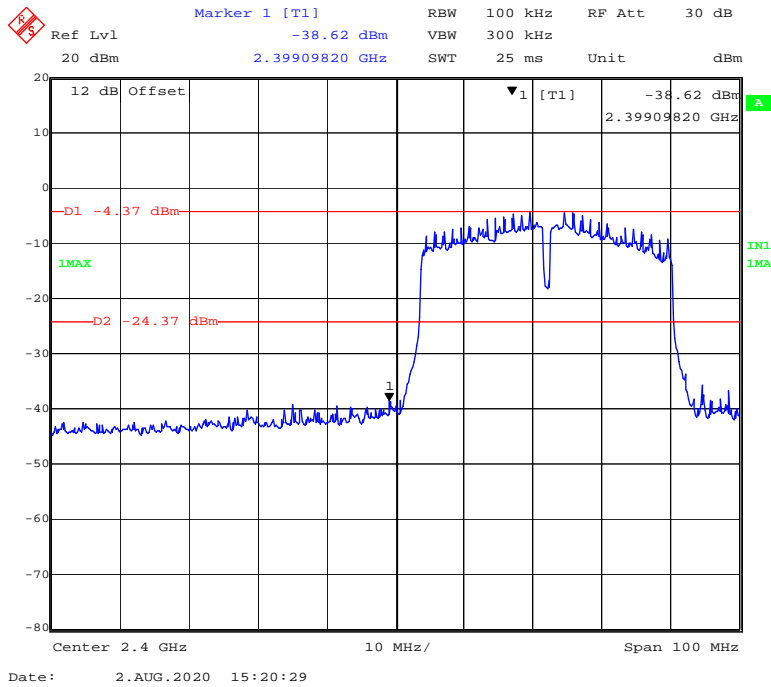
Chain1: 802.11n-HT20 Mode Left Side



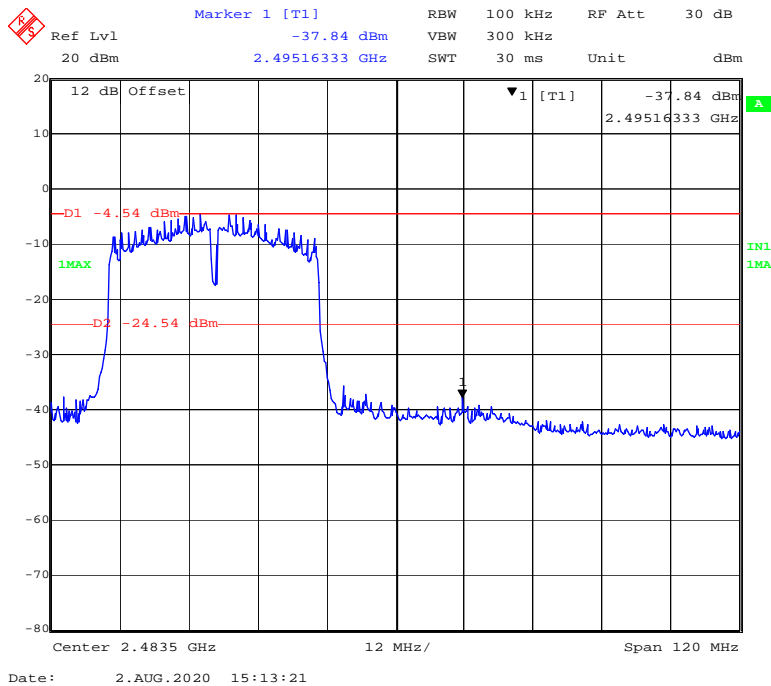
Chain1: 802.11n-HT20 Mode Right Side



Chain1: 802.11n-HT40 Mode Left Side



Chain1: 802.11n-HT40 Mode Right Side



FCC §15.247(e) - POWER SPECTRAL DENSITY

Applicable Standard

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

Test Procedure

According to ANSI C63.10-2013 sub-clause 11.10.2

The following procedure shall be used if maximum peak conducted output power was used to determine Compliant, and it is optional if the maximum conducted (average) output power was used to determine Compliant:

1. Set the RBW to: $3\text{kHz} \leq \text{RBW} \leq 100\text{ kHz}$.
2. Set the VBW $\geq 3 \times \text{RBW}$.
3. Set the span to 1.5 times the DTS bandwidth.
4. Detector = peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the maximum amplitude level within the RBW.
9. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

Test Data

Environmental Conditions

Temperature:	24.5-26.3 °C
Relative Humidity:	50-62 %
ATM Pressure:	101.2-102.3kPa

The testing was performed by CK Huang from 2020-08-02 to 2020-09-14.

EUT operation mode: Transmitting

Test Result: Pass

Channel	Frequency (MHz)	PSD (dBm/3kHz)			Limit (dBm/3kHz)
		Chain0	Chain1	Total	
802.11b mode					
Low	2412	-12.61	-12.00	/	≤8.0
Middle	2437	-13.49	-11.76	/	≤8.0
High	2462	-12.71	-13.07	/	≤8.0
802.11g mode					
Low	2412	-18.71	-17.94	/	≤8.0
Middle	2437	-19.45	-19.02	/	≤8.0
High	2462	-17.87	-18.73	/	≤8.0
802.11n-HT20 mode					
Low	2412	-18.12	-17.51	-14.79	≤8.0
Middle	2437	-18.11	-17.70	-14.89	≤8.0
High	2462	-18.68	-17.09	-14.80	≤8.0
802.11n-HT40 mode					
Low	2422	-18.84	-20.20	-16.46	≤8.0
Middle	2437	-19.77	-21.07	-17.36	≤8.0
High	2452	-20.58	-19.94	-17.24	≤8.0

Note:

The total PSD=10 Log (10[^](Chain 0/10) +10[^](Chain 1/10))

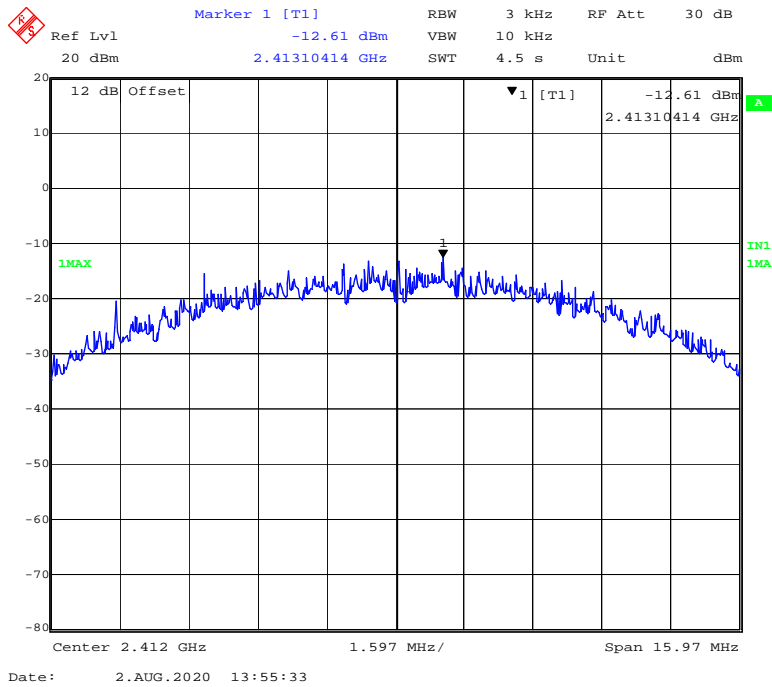
The maximum antenna gain is 0.0 dBi. The device employed Cyclic Delay Diversity (CDD) for 802.11MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:

Array Gain = 10 log (N_{ANT}/N_{SS}) dB.

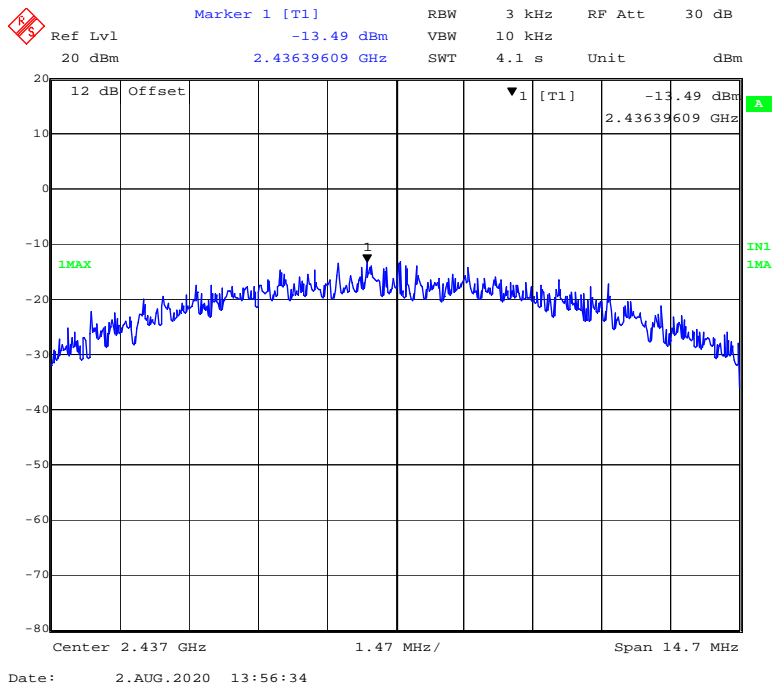
So:

Directional gain = GANT + Array Gain =0.0 +10*log (2/1) = 3.0dBi, no power spectral density limit was reduced

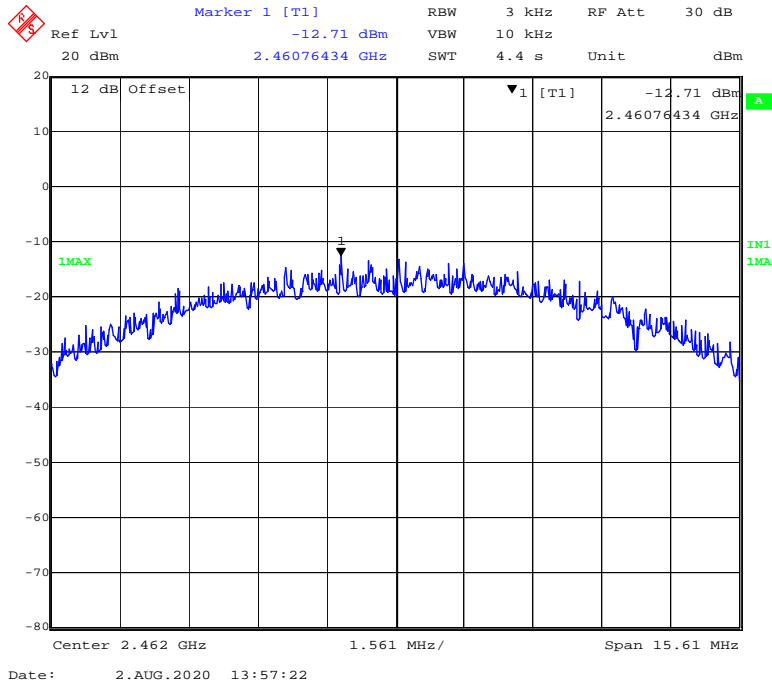
Chain0: 802.11b Mode Low Channel



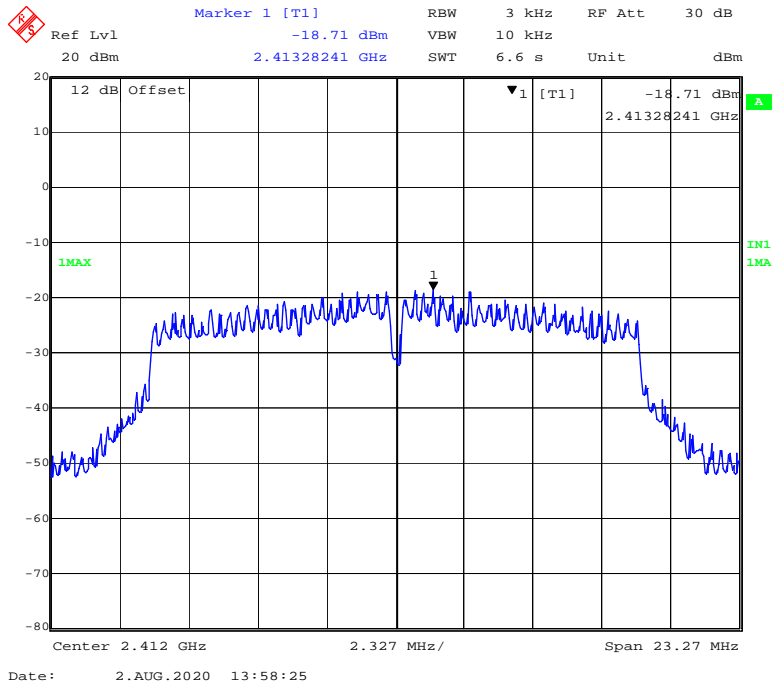
Chain0: 802.11b Mode Middle Channel



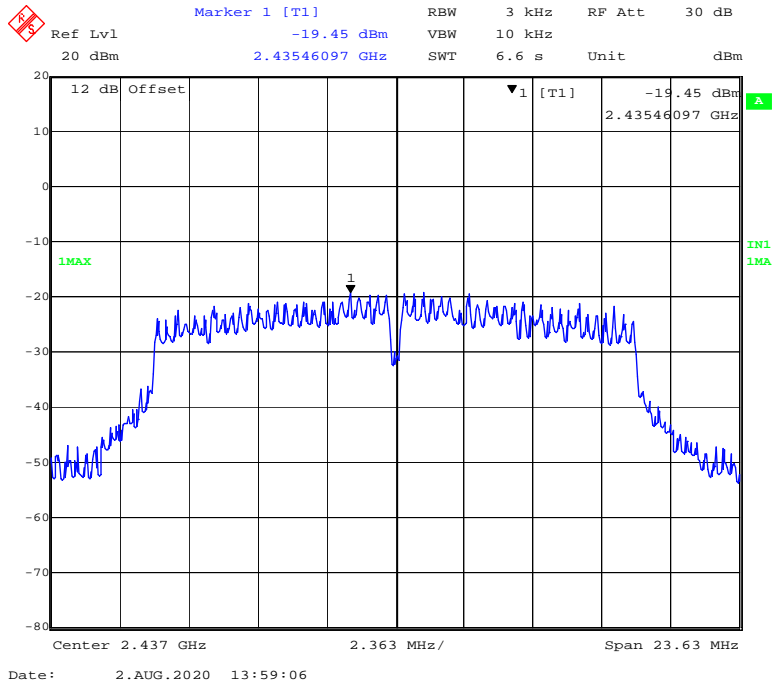
Chain0: 802.11b Mode High Channel



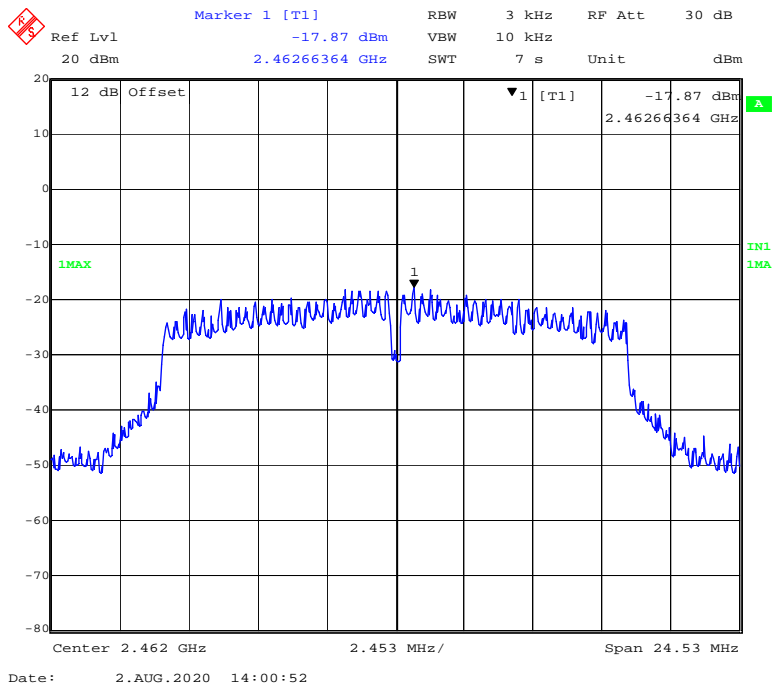
Chain0: 802.11g Mode Low Channel



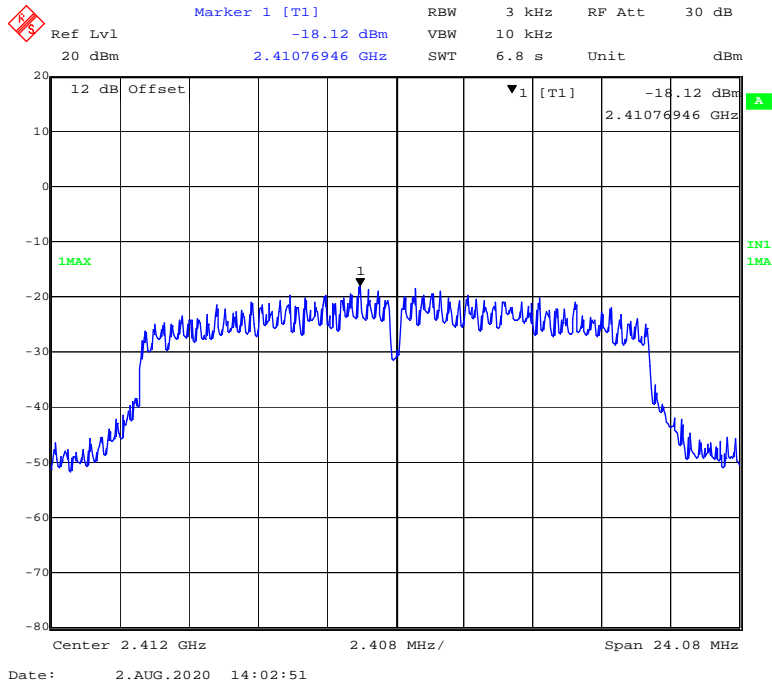
Chain0: 802.11g Mode Middle Channel



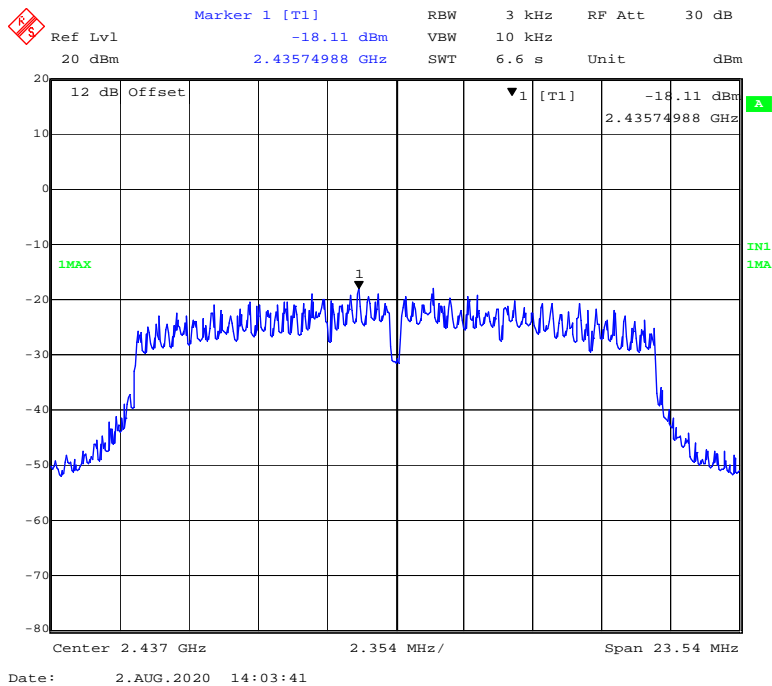
Chain0: 802.11g Mode High Channel



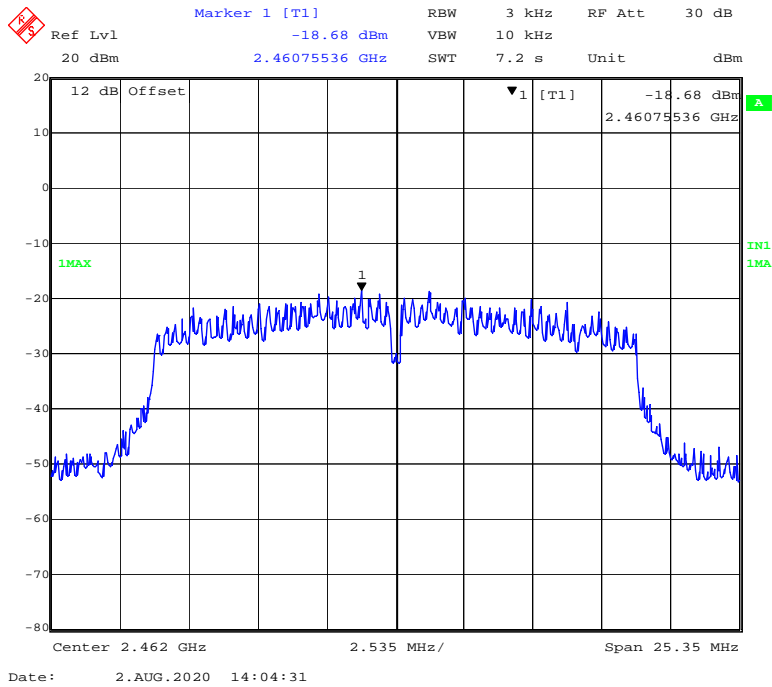
Chain0: 802.11n-HT20 Mode Low Channel



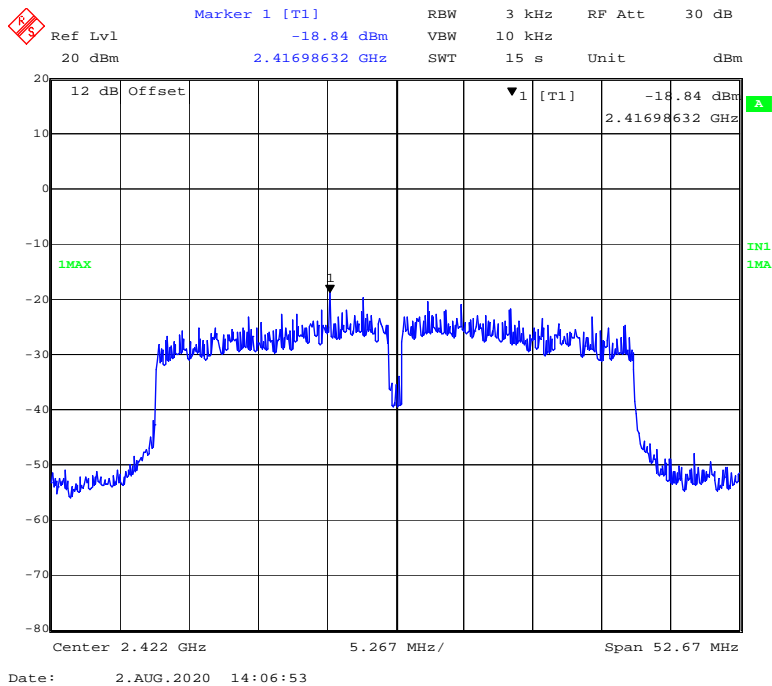
Chain0: 802.11n-HT20 Mode Middle Channel



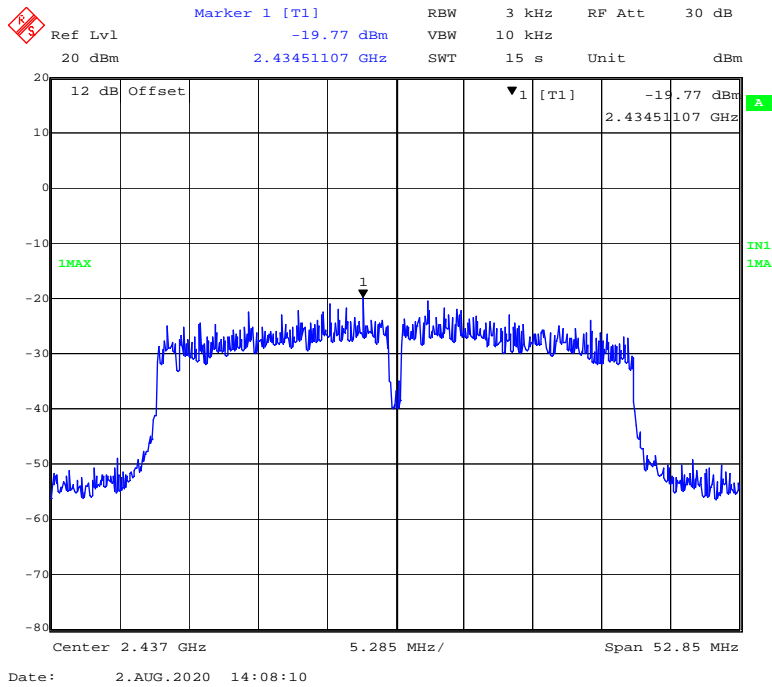
Chain0: 802.11n-HT20 Mode High Channel



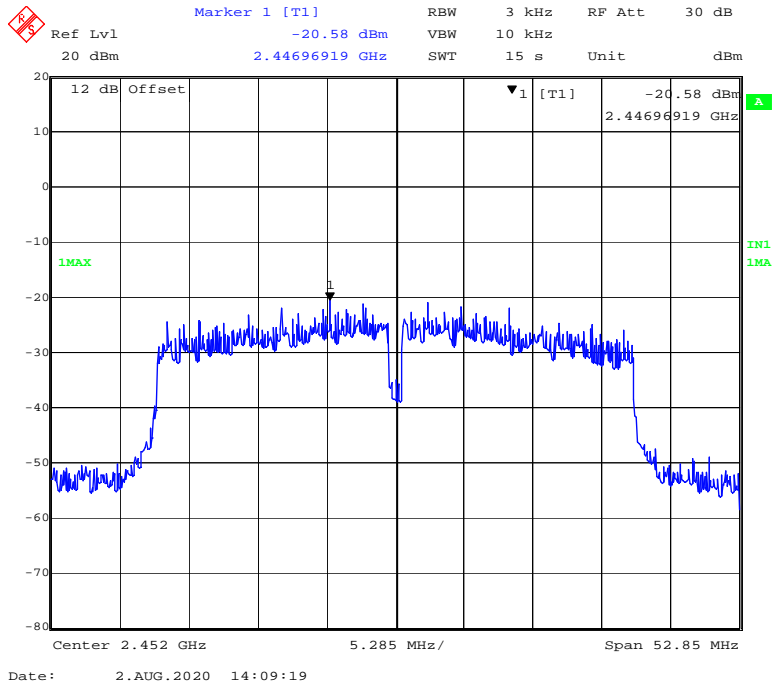
Chain0: 802.11n-HT40 Mode Low Channel



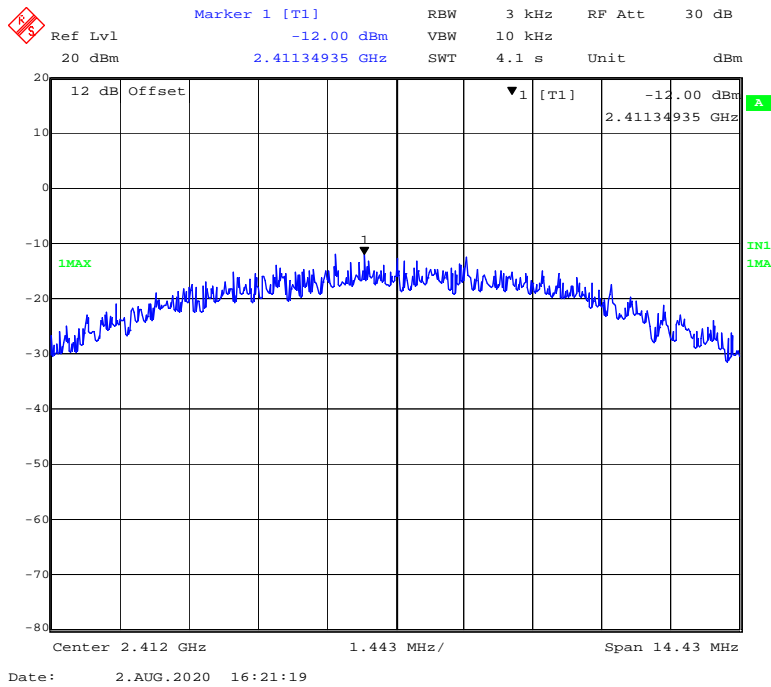
Chain0: 802.11n-HT40 Mode Middle Channel



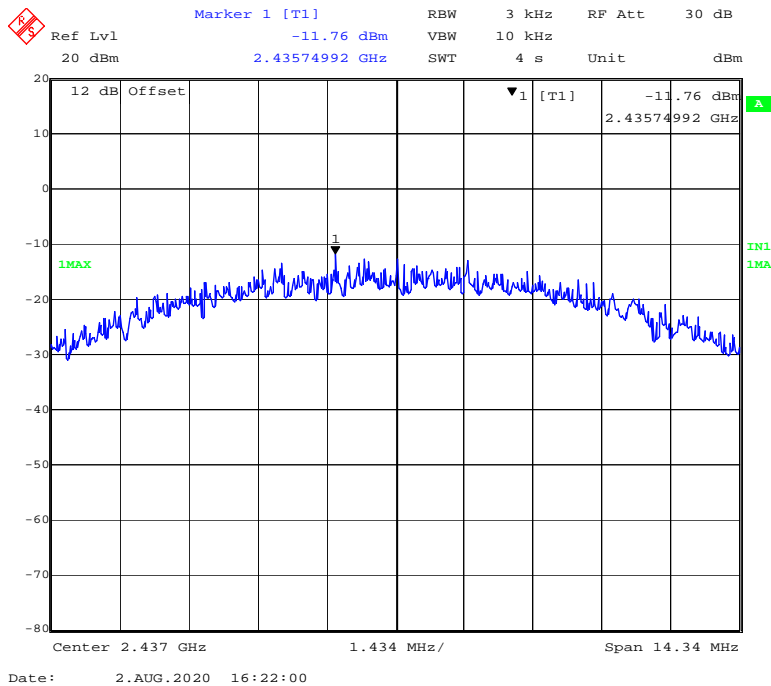
Chain0: 802.11n-HT40 Mode High Channel



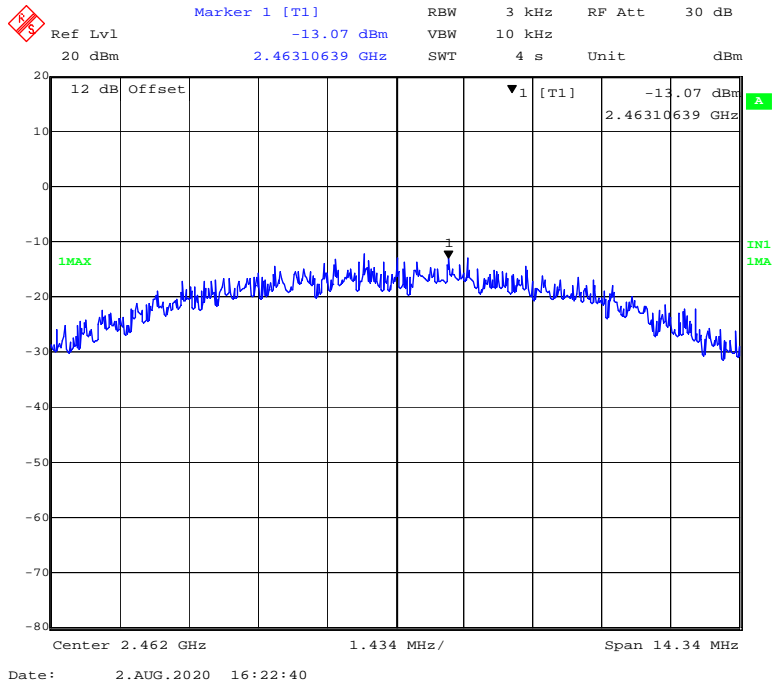
Chain1: 802.11b Mode Low Channel



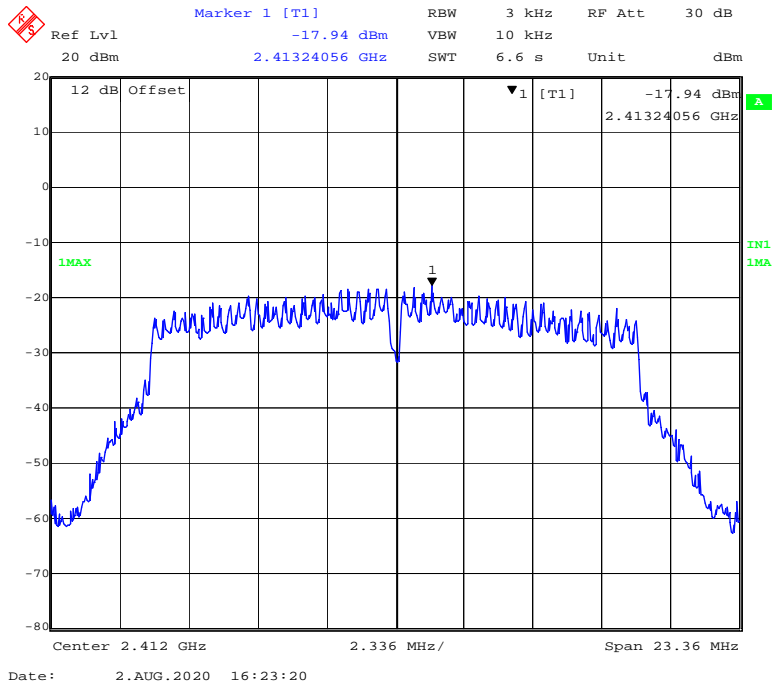
Chain1: 802.11b Mode Middle Channel



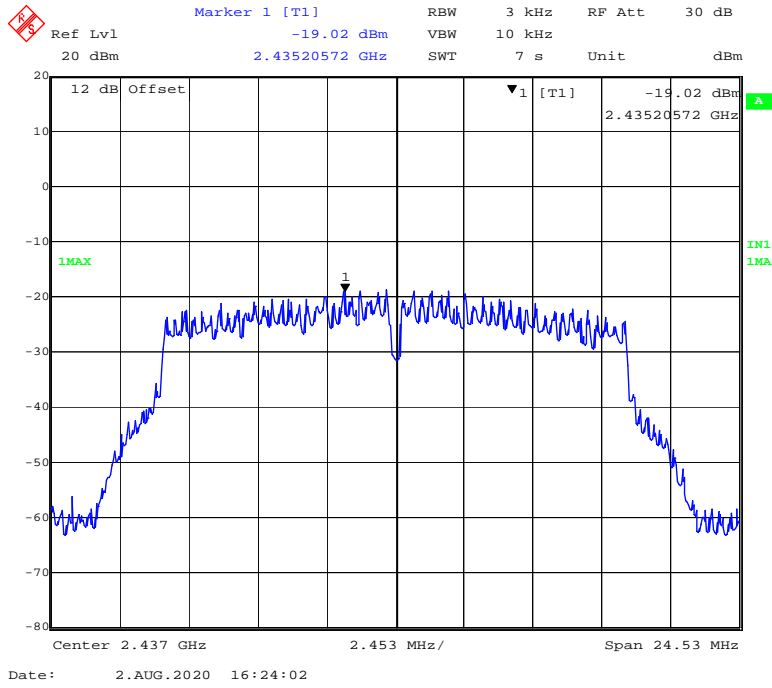
Chain1: 802.11b Mode High Channel



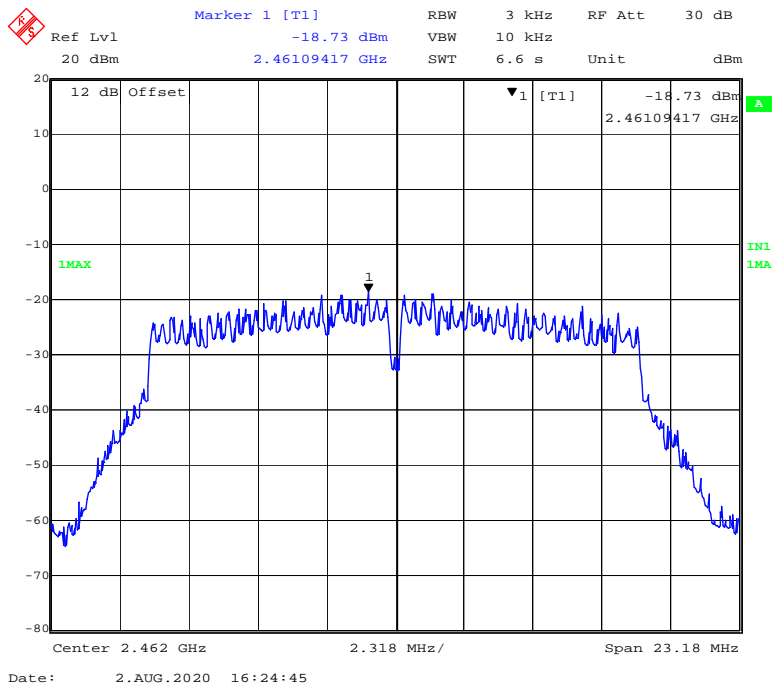
Chain1: 802.11g Mode Low Channel



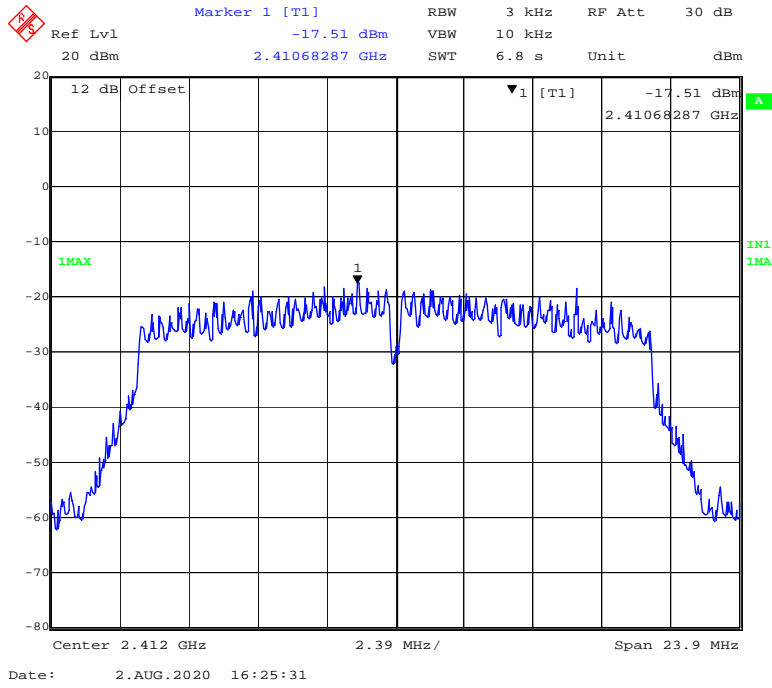
Chain1: 802.11g Mode Middle Channel



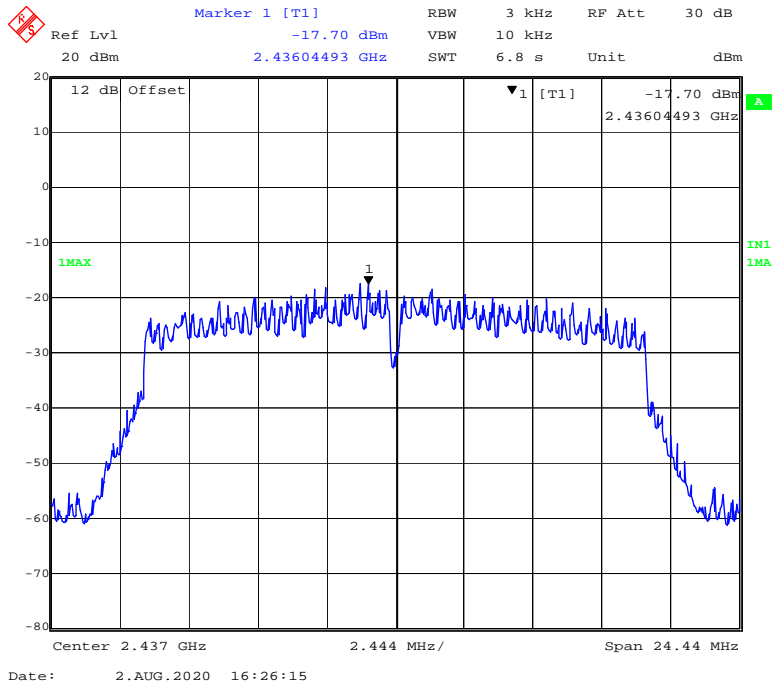
Chain1: 802.11g Mode High Channel



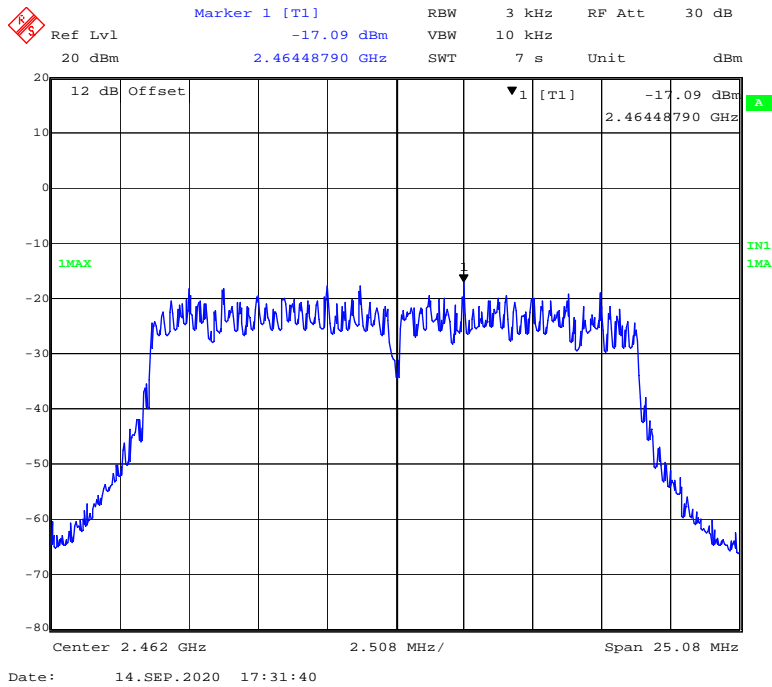
Chain1: 802.11n-HT20 Mode Low Channel



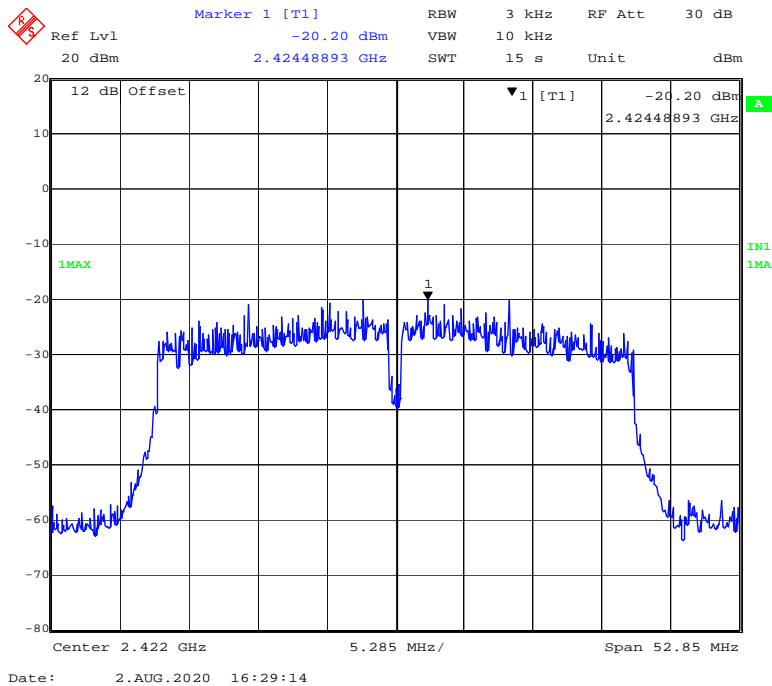
Chain1: 802.11n-HT20 Mode Middle Channel



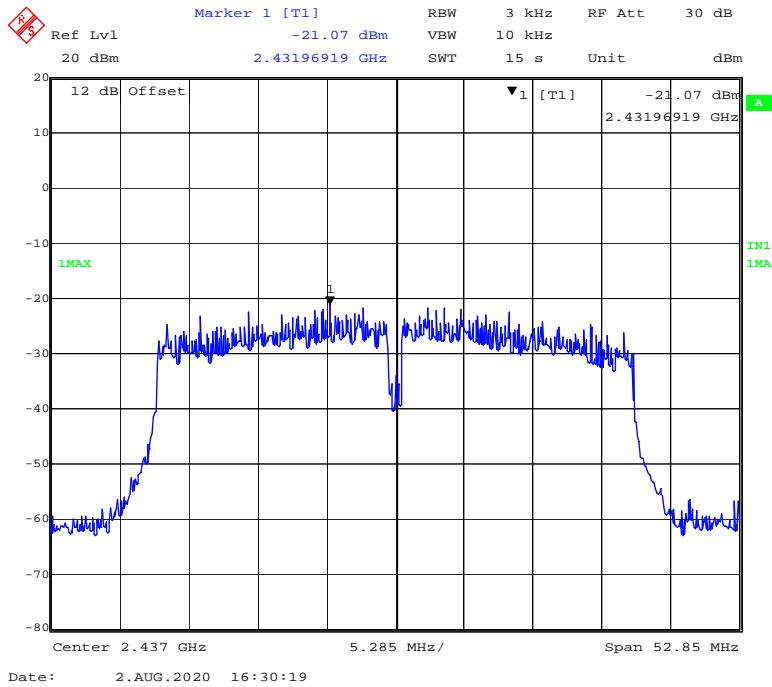
Chain1: 802.11n-HT20 Mode High Channel



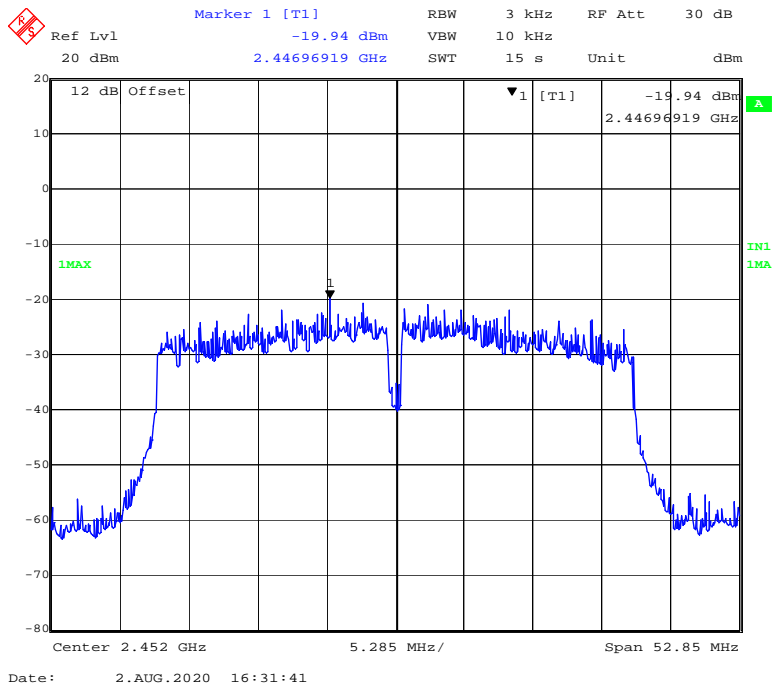
Chain1: 802.11n-HT40 Mode Low Channel



Chain1: 802.11n-HT40 Mode Middle Channel



Chain1: 802.11n-HT40 Mode High Channel



Declarations

- 1: BACL is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with an asterisk '*'. Customer model name, addresses, names, trademarks etc. are not considered data.
- 2: Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
- 3: Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
- 4: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.
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