

802.11ac40 Mode(Chain0+Chain1):

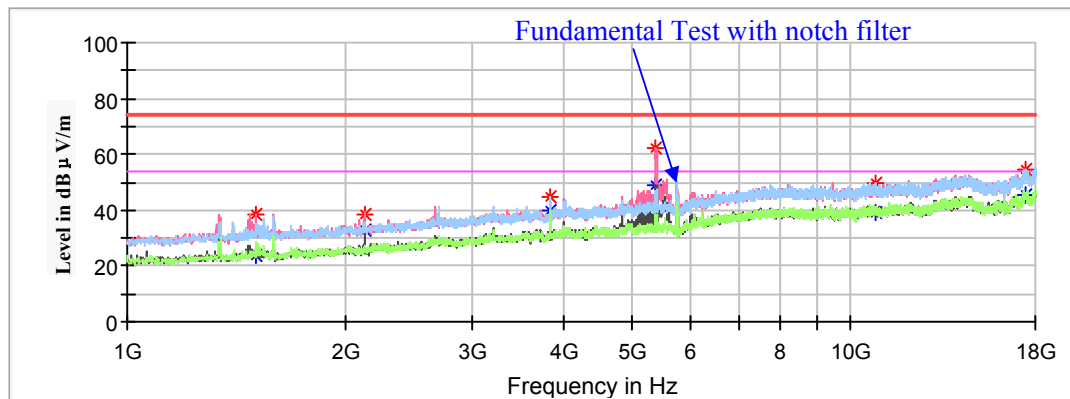
(Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded.)

Note:

1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5755MHz

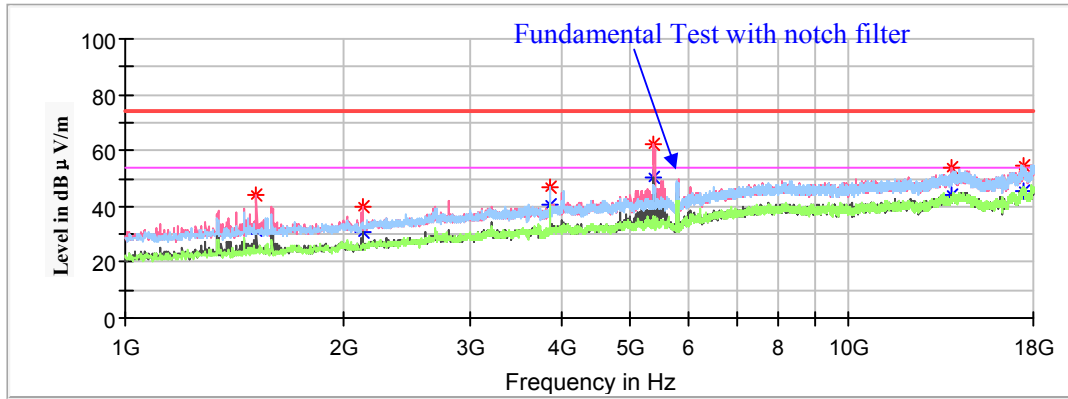
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1508.30	---	23.64	150	V	190	-16.3	54.00	30.36
1508.30	38.76	---	150	V	190	-16.3	74.00	35.24
2130.50	38.75	---	200	V	260	-13.9	68.20	29.45
3835.60	---	39.63	200	H	306	-7.6	54.00	14.37
3835.60	44.96	---	200	H	306	-7.6	74.00	29.04
5362.20	---	48.65	150	V	19	-4.3	54.00	5.35
5362.20	62.23	---	150	V	19	-4.2	74.00	11.77
10829.40	---	39.31	200	H	9	2.7	54.00	14.69
10829.40	49.86	---	200	H	9	2.7	74.00	24.14
17466.20	54.38	---	150	H	82	8.8	68.20	13.82

High Channel: 5795MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct 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)				
1518.50	---	31.12	150	V	130	-16.3	54.00	22.88
1518.50	44.04	---	150	V	130	-16.3	74.00	29.96
2128.80	39.84	---	200	V	264	-13.9	68.20	28.36
3862.80	---	40.50	150	H	328	-7.5	54.00	13.50
3862.80	47.16	---	150	H	328	-7.5	74.00	26.84
5365.60	---	50.19	200	V	29	-4.3	54.00	3.81
5365.60	62.31	---	200	V	29	-4.3	74.00	11.69
13908.10	53.52	---	150	V	305	6.1	68.20	14.68
17437.30	54.51	---	200	V	130	8.7	68.20	13.69

802.11n-HT40 Mode(Chain0+Chain1):

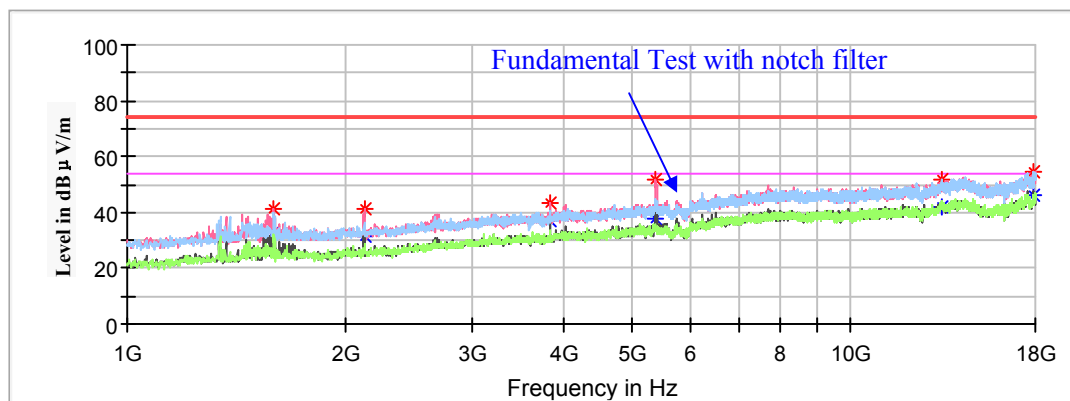
(Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded)

Note:

1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5755MHz

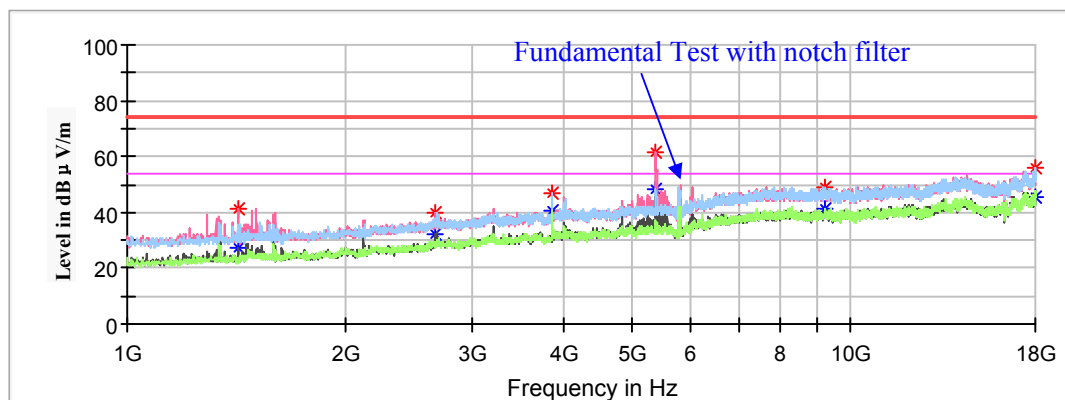
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1591.60	---	32.82	200	V	123	-16.0	54.00	21.18
1591.60	41.44	---	200	V	123	-16.0	74.00	32.56
2128.80	41.21	---	150	V	216	-13.9	68.20	26.99
3835.60	---	36.89	200	V	165	-7.6	54.00	17.11
3835.60	43.24	---	200	V	165	-7.6	74.00	30.76
5367.30	---	37.79	150	V	110	-4.2	54.00	16.21
5367.30	52	---	150	V	110	-4.2	74.00	22.00
13336.90	---	41.98	200	V	207	5.5	54.00	12.02
13336.90	51.62	---	200	V	207	5.5	74.00	22.38
17935.40	---	46.14	200	V	0	8.8	54.00	7.86
17935.40	54.66	---	200	V	0	8.8	74.00	19.34

High Channel: 5795MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct 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)				
1425.00	---	27.42	150	V	232	-16.8	54.00	26.58
1425.00	41.13	---	150	V	232	-16.8	74.00	32.87
2662.60	39.92	---	200	V	291	-11.7	68.20	28.28
3862.80	---	40.63	200	H	323	-7.5	54.00	13.37
3862.80	47.17	---	200	H	323	-7.5	74.00	26.83
5365.60	---	48.29	200	V	20	-4.2	54.00	5.71
5365.60	61.54	---	200	V	20	-4.3	74.00	12.46
9239.90	49.18	---	150	H	19	2	68.20	19.02
17974.50	---	45.29	200	H	333	8.8	54.00	8.71
17974.50	55.94	---	200	H	333	8.8	74.00	18.06

802.11ac80 Mode(Chain0+Chain1):

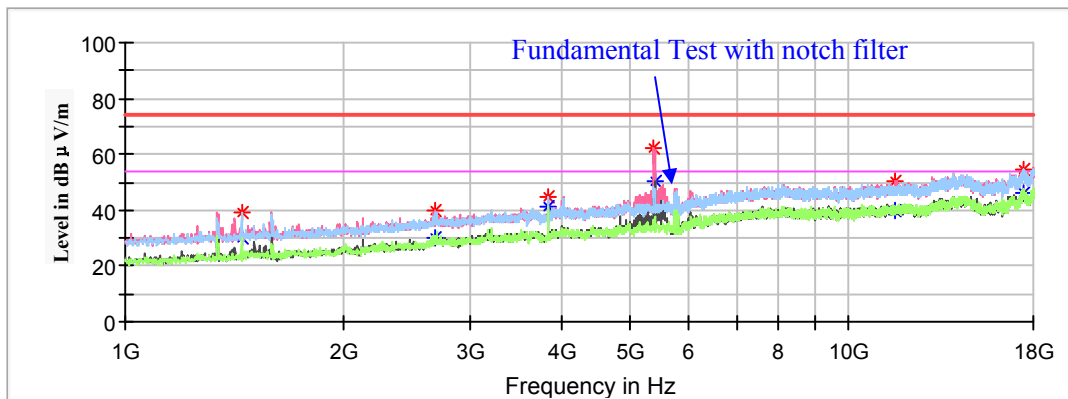
(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)

Note:

1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5775MHz

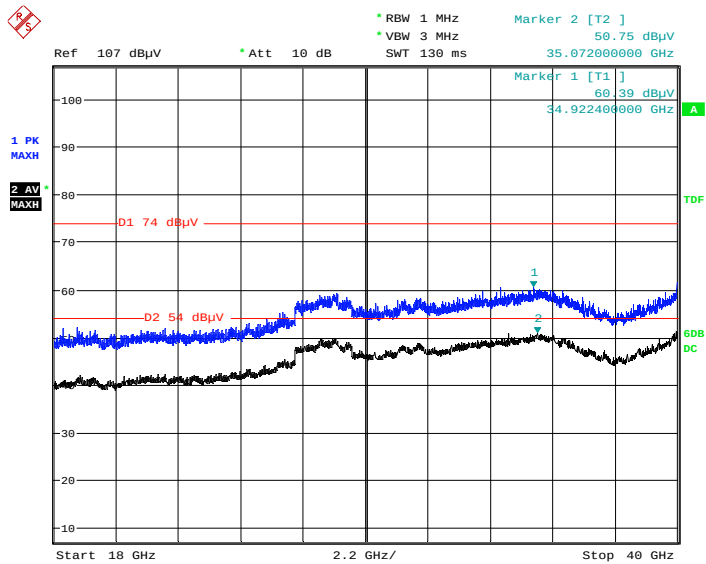
Full Spectrum



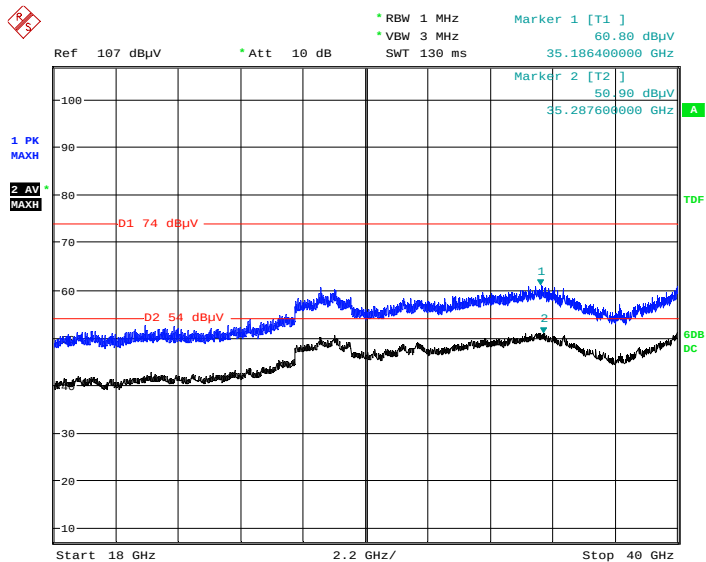
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1447.10	---	29.74	200	H	156	-16.6	54.00	24.26
1447.10	39.48	---	200	H	156	-16.6	74.00	34.52
2681.30	39.53	---	150	V	205	-11.6	68.20	28.67
3849.20	---	41.26	200	H	308	-7.5	54.00	12.74
3849.20	45	---	200	H	308	-7.5	74.00	29.00
5380.90	---	50.03	150	V	19	-4.2	54.00	3.97
5380.90	61.98	---	150	V	19	-4.2	74.00	12.02
11568.90	---	39.97	200	V	14	2.9	54.00	14.03
11568.90	50.01	---	200	V	14	2.9	74.00	23.99
17452.60	54.58	---	150	H	358	8.7	68.20	13.62

18GHz-40GHz (5150-5250MHz Band):

Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X,Y and Z axes of orientation, the worst case 802.11a mode in channel 5240 in Z-axis of orientation was recorded.

Horizontal

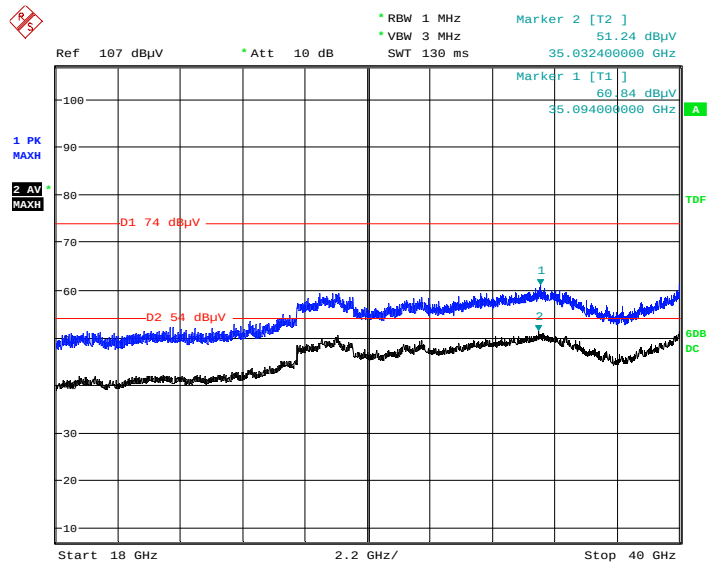
Date: 9.MAY.2020 03:20:53

Vertical

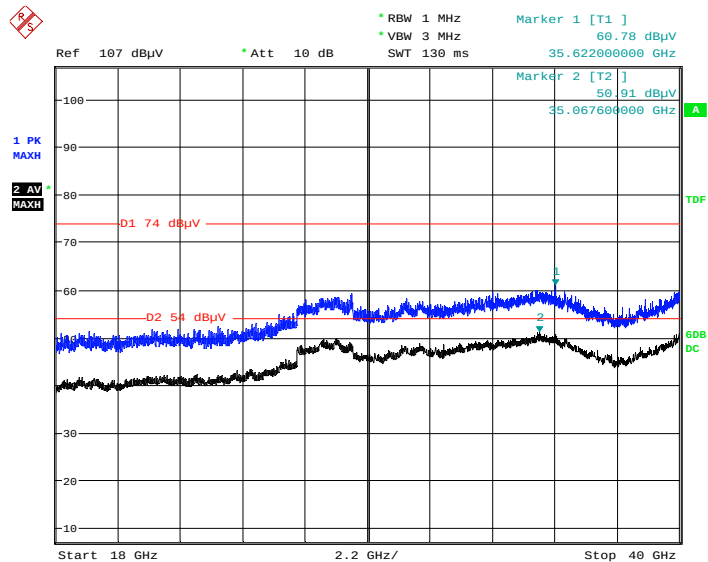
Date: 9.MAY.2020 03:41:15

18GHz-40GHz (5725-5850 Band):

Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X,Y and Z axes of orientation, the worst case 802.11a mode in channel 5825 in Z-axis of orientation was recorded.

Horizontal

Date: 9.MAY.2020 04:00:44

Vertical

Date: 9.MAY.2020 04:15:21

Restricted Bands Emissions Test (5150-5250MHz Band):

- 1: These emissions were tested without amplifier and the test distance is 1.5m.
- 2: The test distance is 1.5m instead of 3m, Extrapolation Factor= $20 \cdot \log(3m / 1.5m) = 6.0\text{dB}$
 The PK limit 80dBuV/m @1.5m instead of 74dBuV/m @3.0m
 The AV limit 60dBuV/m @1.5m instead of 54dBuV/m @3.0m
3. Corrected Factor = Antenna factor (RX) + Cable Loss
 Corrected Amplitude = Corrected Factor + Reading
 Margin = Limit - Corrected. Amplitude

802.11a Mode-Chain0: (Pre-scan in the X, Y and Z axes of orientation, the worst case in 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: 5180MHz								
5150.00	---	56.57	150	V	1	15.2	60.00	3.43
5150.00	64.22	---	150	V	1	15.2	80.00	15.78
High Channel: 5240MHz								
5350.00	66.37	---	150	V	36	15.7	80.00	13.63
5350.00	---	56.76	200	V	20	15.7	60.00	3.24

802.11a Mode-Chain1: (Pre-scan in the X, Y and Z axes of orientation, the worst case in 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: 5180MHz								
5150.00	---	55.87	150	V	116	15.2	60.00	4.13
5150.00	65.37	---	150	V	116	15.2	80.00	14.63
High Channel: 5240MHz								
5350.00	66.14	---	150	H	353	15.7	80.00	13.86
5350.00	---	56.38	200	H	353	15.7	60.00	3.62

802.11ac20 Mode (Chain0+ Chain1): (Pre-scan in the X, Y and Z axes of orientation, the worst case in 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: 5180MHz								
5150.00	---	56.19	150	V	19	15.2	60.00	3.81
5150.00	64.87	---	150	V	21	15.2	80.00	15.13
High Channel: 5240MHz								
5350.00	67.45	---	200	V	28	15.7	80.00	12.55
5350.00	---	56.72	150	H	28	15.7	60.00	3.28

802.11n-HT20 Mode (Chain0+ Chain1): (Pre-scan in the X, Y and Z axes of orientation, the worst case in 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: 5180MHz								
5150.00	---	55.42	150	V	123	15.2	60.00	4.58
5150.00	64.85	---	150	V	123	15.2	80.00	15.15
High Channel: 5240MHz								
5350.00	67.43	---	150	V	28	15.7	80.00	12.57
5350.00	---	56.96	200	V	28	15.7	60.00	3.04

802.11ac40 Mode (Chain0+ Chain1): (Pre-scan in the X, Y and Z axes of orientation, the worst case in 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: 5190MHz								
5150.00	---	54.93	150	V	34	15.2	60.00	5.07
5150.00	66.88	---	150	H	34	15.2	80.00	13.12
High Channel: 5230MHz								
5350.00	68.22	---	150	V	82	15.7	80.00	11.78
5350.00	---	57.23	150	H	82	15.7	60.00	2.77

802.11n-HT40 Mode (Chain0+ Chain1): (Pre-scan in the X, Y and Z axes of orientation, the worst case in 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: 5190MHz								
5150.00	---	57.16	150	H	2	15.2	60.00	2.84
5150.00	64.77	---	150	V	2	15.2	80.00	15.23
High Channel: 5230MHz								
5350.00	63.07	---	150	V	319	15.7	80.00	16.93
5350.00	---	57.15	200	V	319	15.7	60.00	2.85

802.11ac80 Mode (Chain0+ Chain1): (Pre-scan in the X, Y and Z axes of orientation, the worst case in 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: 5210MHz								
5150.00	---	56.03	200	H	359	15.2	60.00	3.97
5150.00	68.71	---	150	V	359	15.2	80.00	11.29
5350.00	66.85	---	200	H	8	16.9	80.00	13.15
5350.00	---	56.32	150	V	8	16.9	60.00	3.68

Band Edge Emissions Test (5725-5850MHz band):

Note:

- 1: These emissions were tested without amplifier and the test distance is 1.5m.
2. The test distance is 1.5m instead of 3m, Extrapolation Factor= $20 \cdot \log(3m / 1.5m) = 6.0\text{dB}$
3. Corrected Factor = Antenna factor (RX) + Cable Loss
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

802.11a Mode-Chain0: (Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	65.13	---	150	V	354	16.4	68.2	74.2	9.07
5700.00	65.58	---	200	V	121	16.5	105.2	111.2	45.62
5720.00	65.37	---	200	H	218	16.5	110.8	116.8	51.43
5725.00	65.84	---	150	V	27	16.5	122.2	128.2	62.36
High Channel: 5825MHz									
5850.00	65.10	---	150	H	134	16.7	122.2	128.2	63.1
5855.00	65.69	---	100	V	22	16.7	110.8	116.8	51.11
5875.00	65.72	---	100	V	89	16.8	105.2	111.2	45.48
5925.00	65.28	---	200	V	114	16.9	68.2	74.2	8.92

802.11a Mode-Chain1: (Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	65.42	---	100	H	167	16.4	68.2	74.2	8.78
5700.00	65.37	---	150	V	344	16.5	105.2	111.2	45.83
5720.00	65.22	---	150	H	39	16.5	110.8	116.8	51.58
5725.00	65.54	---	200	H	235	16.5	122.2	128.2	62.66
High Channel: 5825MHz									
5850.00	65.43	---	100	V	51	16.7	122.2	128.2	62.77
5855.00	65.22	---	150	H	323	16.7	110.8	116.8	51.58
5875.00	65.78	---	200	V	248	16.8	105.2	111.2	45.42
5925.00	65.09	---	150	H	183	16.9	68.2	74.2	9.11

802.11ac20 Mode-Chain0+ Chain1: (Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	64.87	---	200	V	271	16.4	68.2	74.2	9.33
5700.00	65.42	---	200	H	339	16.5	105.2	111.2	45.78
5720.00	65.35	---	150	H	187	16.5	110.8	116.8	51.45
5725.00	65.02	---	200	V	247	16.5	122.2	128.2	63.18
High Channel: 5825MHz									
5850.00	65.55	---	150	V	147	16.7	122.2	128.2	62.65
5855.00	65.83	---	200	H	349	16.7	110.8	116.8	50.97
5875.00	65.59	---	200	V	46	16.8	105.2	111.2	45.61
5925.00	65.37	---	200	V	110	16.9	68.2	74.2	8.83

802.11n-HT20 Mode- Chain0+ Chain1: (Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	63.98	---	150	H	328	16.4	68.2	74.2	10.22
5700.00	65.99	---	100	V	221	16.5	105.2	111.2	45.21
5720.00	65.71	---	200	H	98	16.5	110.8	116.8	51.09
5725.00	65.76	---	150	H	265	16.5	122.2	128.2	62.44
High Channel: 5825MHz									
5850.00	65.02	---	100	V	320	16.7	122.2	128.2	63.18
5855.00	65.89	---	150	V	182	16.7	110.8	116.8	50.91
5875.00	65.50	---	100	H	93	16.8	105.2	111.2	45.7
5925.00	64.86	---	200	H	186	16.9	68.2	74.2	9.34

802.11ac40 Mode- Chain0+ Chain1: (Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	63.79	---	200	V	187	16.4	68.2	74.2	10.41
5700.00	65.38	---	150	H	12	16.5	105.2	111.2	45.82
5720.00	65.08	---	200	H	201	16.5	110.8	116.8	51.72
5725.00	65.04	---	200	H	146	16.5	122.2	128.2	63.16
High Channel: 5825MHz									
5850.00	65.88	---	200	H	31	16.7	122.2	128.2	62.32
5855.00	65.53	---	200	H	251	16.7	110.8	116.8	51.27
5875.00	65.77	---	200	H	57	16.8	105.2	111.2	45.43
5925.00	64.27	---	200	H	18	16.9	68.2	74.2	9.93

802.11n-HT40 Mode- Chain0+ Chain1: (Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	63.88	---	100	V	22	16.4	68.2	74.2	10.32
5700.00	65.82	---	200	V	97	16.5	105.2	111.2	45.38
5720.00	65.74	---	150	V	44	16.5	110.8	116.8	51.06
5725.00	65.07	---	200	H	309	16.5	122.2	128.2	63.13
High Channel: 5825MHz									
5850.00	65.10	---	150	H	98	16.7	122.2	128.2	63.1
5855.00	65.94	---	200	H	177	16.7	110.8	116.8	50.86
5875.00	65.94	---	100	V	41	16.8	105.2	111.2	45.26
5925.00	63.78	---	150	V	166	16.9	68.2	74.2	10.42

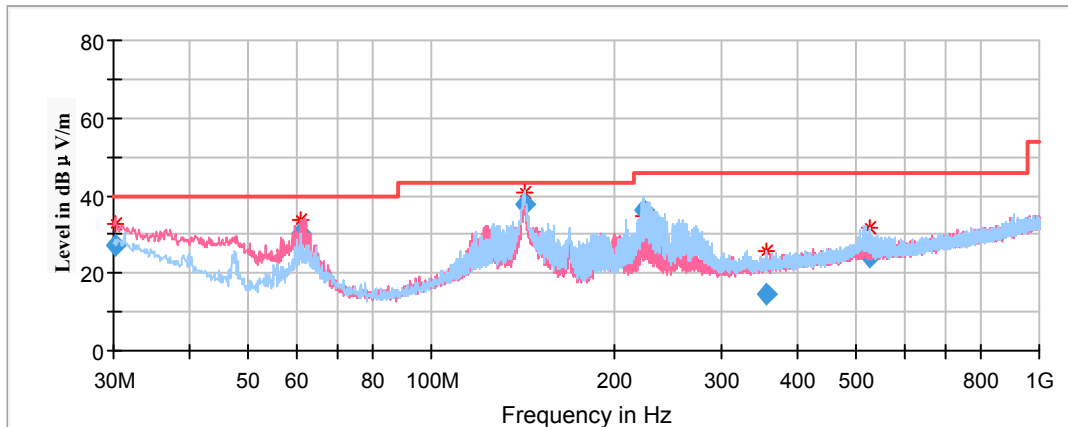
802.11ac80 Mode- Chain0+ Chain1: (Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5775MHz									
5650.00	64.76	---	200	V	4	16.4	68.2	74.2	9.44
5700.00	65.74	---	150	H	1	16.5	105.2	111.2	45.46
5720.00	65.36	---	150	H	6	16.5	110.8	116.8	51.44
5725.00	65.13	---	150	H	88	16.5	122.2	128.2	63.07
5850.00	65.12	---	200	V	247	16.7	122.2	128.2	63.08
5855.00	65.97	---	200	V	181	16.7	110.8	116.8	50.83
5875.00	65.56	---	200	V	300	16.8	105.2	111.2	45.64
5925.00	64.26	---	200	V	15	16.9	68.2	74.2	9.94

Antenna 3 Spurious Emission Test

30MHz-1GHz(5150-5250MHz Band):

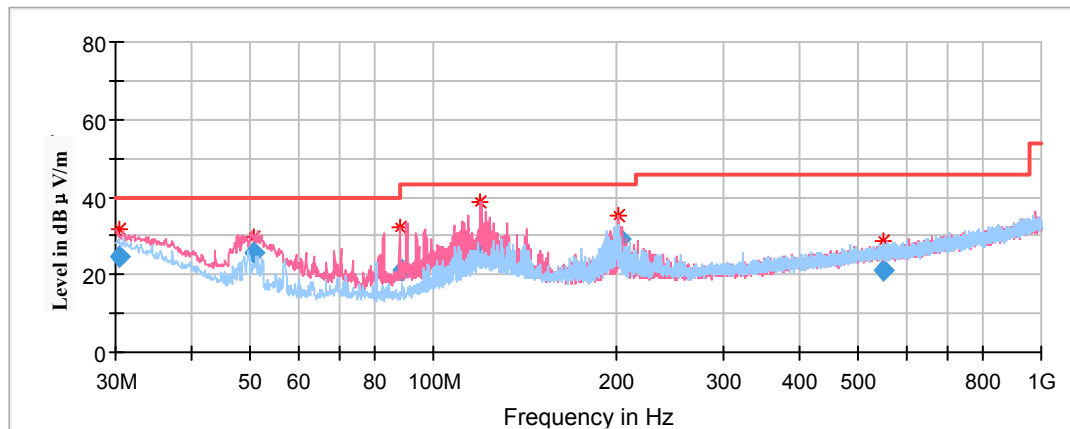
Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X,Y and Z axes of orientation, the worst case 802.11a mode in channel 5240MHz(Chain0) in Z-axis of orientation was recorded.



Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	QuasiPeak (dBμV/m)	Height (cm)	Polar (H/V)				
30.24	27.12	100	V	170	-4.1	40.00	12.88
60.88	30.37	100	V	71	-17.9	40.00	9.63
142.42	37.69	200	H	180	-12	43.50	5.81
223.06	36.24	100	H	81	-12.2	46.00	9.76
356.63	14.55	100	H	70	-9.2	46.00	31.45
526.92	24.19	200	H	299	-5.9	46.00	21.81

30MHz-1GHz(5725-5850MHz Band):

Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X,Y and Z axes of orientation, the worst case 802.11a mode in channel 5825MHz(Chain0) in Z-axis of orientation was recorded



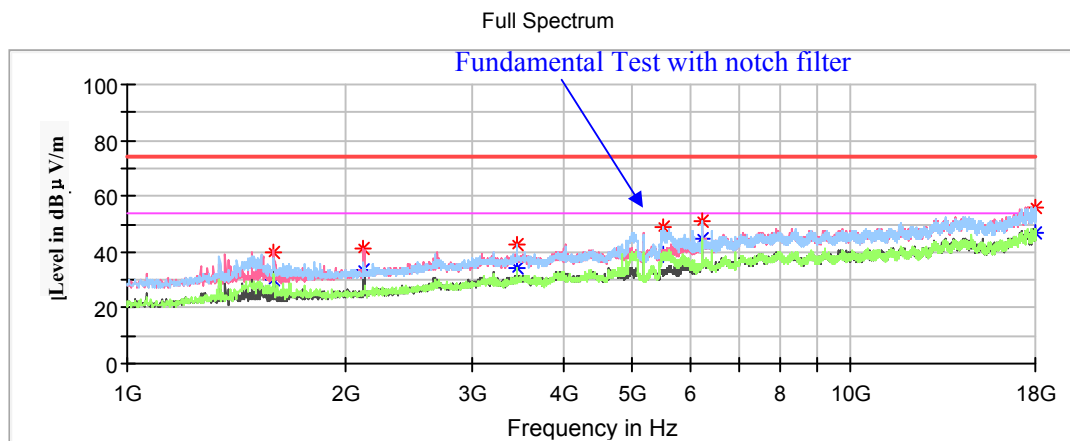
Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	QuasiPeak (dBμV/m)	Height (cm)	Polar (H/V)				
30.45	24.75	100	V	203	-4.2	40.00	15.25
50.69	25.59	100	V	25	-17.5	40.00	14.41
88.57	20.97	100	V	331	-17.5	43.50	22.53
118.77	27.39	100	V	142	-11.4	43.50	16.11
202.53	29.40	100	V	101	-12.3	43.50	14.10
551.93	21.05	100	H	162	-5.6	46.00	24.95

1GHz-18GHz (5150-5250MHz Band):**802.11a Mode(Chain0):**

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

Note:

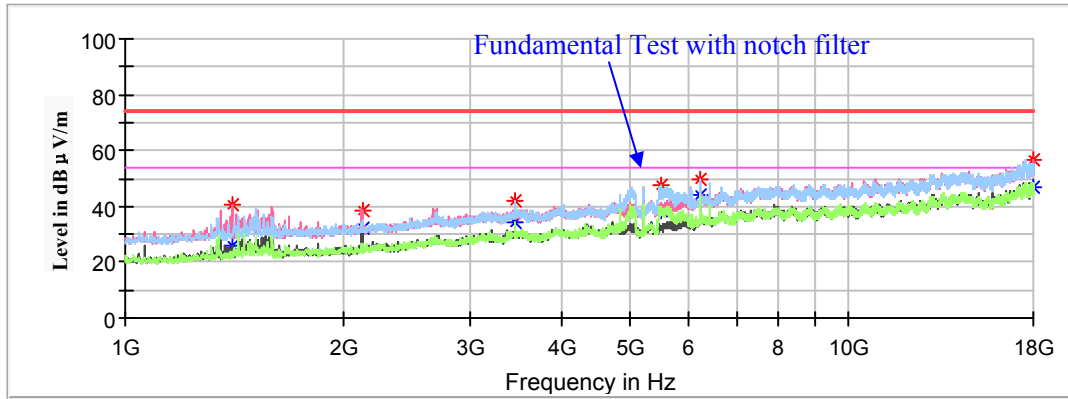
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5180MHz

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1591.60	---	30.12	200	V	235	-16.0	54.00	23.88
1591.60	39.96	---	200	V	235	-16.0	74.00	34.04
2123.70	41.09	---	100	V	258	-14.0	68.20	27.11
3453.10	42.38	---	150	H	191	-8.9	68.20	25.82
5503.30	48.75	---	150	H	0	-3.9	68.20	19.45
6249.60	51.39	---	150	H	1	-2.1	68.20	16.81
17962.60	---	46.87	100	V	145	8.8	54.00	7.13
17962.60	56.13	---	100	V	145	8.8	74.00	17.87

Middle Channel: 5200MHz

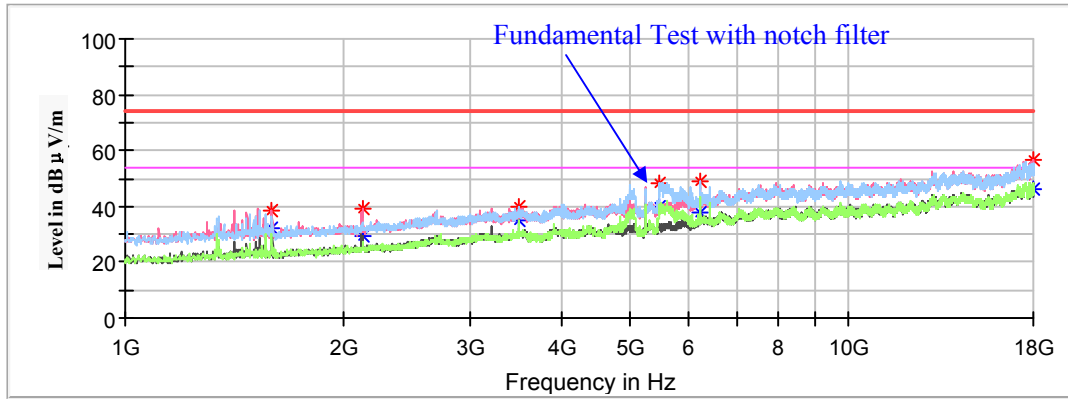
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1406.30	---	25.71	100	V	251	-16.9	54.00	28.29
1406.30	40.6	---	100	V	251	-16.9	74.00	33.40
2130.50	38.43	---	200	V	265	-13.9	68.20	29.77
3465.00	41.79	---	200	H	197	-8.9	68.20	26.41
5489.70	47.74	---	150	H	0	-3.9	68.20	20.46
6249.60	49.68	---	200	H	0	-2.1	68.20	18.52
17955.80	---	46.97	100	V	104	8.8	54.00	7.03
17955.80	56.54	---	100	V	104	8.8	74.00	17.46

High Channel: 5240MHz

Full Spectrum



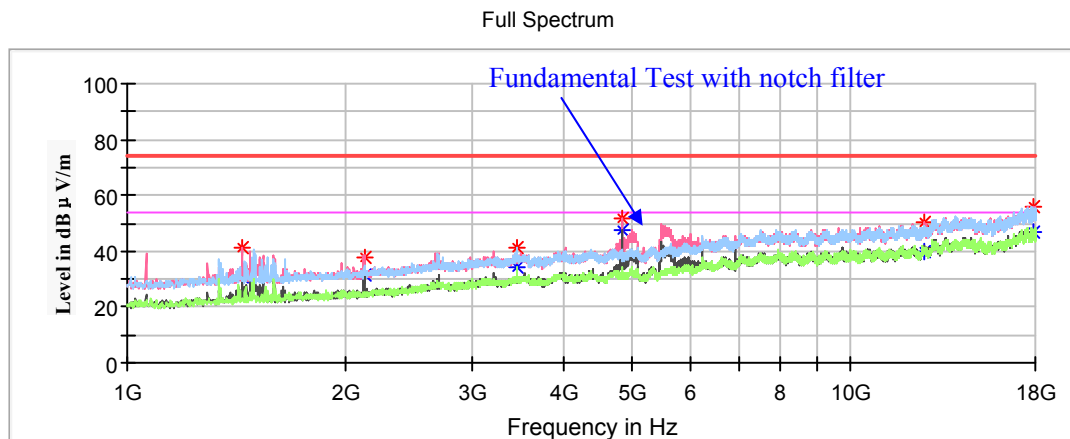
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1591.60	---	31.85	150	V	278	-16.0	54.00	22.15
1591.60	38.36	---	150	V	278	-16.0	74.00	35.64
2127.10	39.14	---	150	V	263	-13.9	68.20	29.06
3492.20	40.01	---	200	H	197	-8.8	68.20	28.19
5481.20	48.6	---	150	H	0	-4.0	68.20	19.60
6247.90	48.97	---	150	H	0	-2.1	68.20	19.23
17969.40	---	46.03	100	V	329	8.8	54.00	7.97
17969.40	56.6	---	100	V	329	8.8	74.00	17.40

802.11a Mode(Chain1):

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

Note:

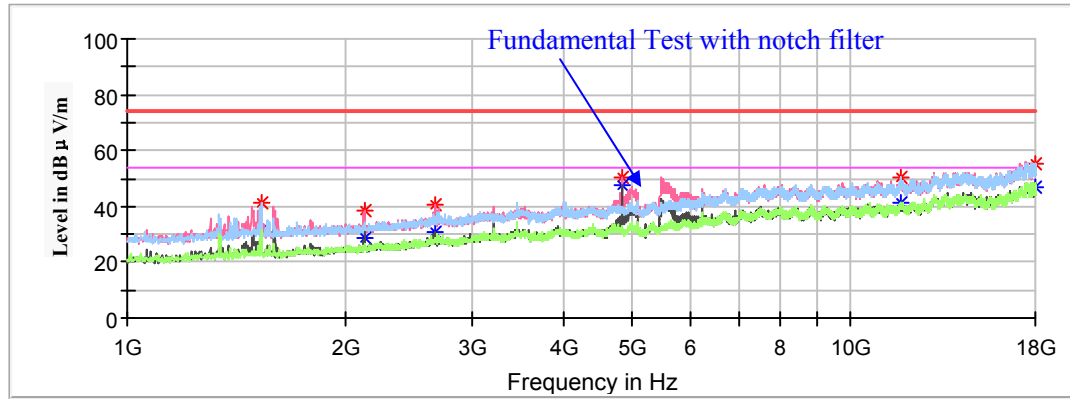
1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5180MHz

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1442.00	---	30.84	150	V	233	-16.7	54.00	23.16
1442.00	41.54	---	150	V	233	-16.7	74.00	32.46
2130.50	38.11	---	200	V	251	-13.9	68.20	30.09
3453.10	41.56	---	100	H	185	-8.9	68.20	26.64
4823.30	---	47.69	150	V	0	-5.5	54.00	6.31
4823.30	51.41	---	150	V	0	-5.5	74.00	22.59
12646.70	---	39.79	150	V	125	3.6	54.00	14.21
12646.70	50.18	---	150	V	125	3.6	74.00	23.82
17938.80	---	47.13	100	V	0	8.8	54.00	6.87
17938.80	55.61	---	100	V	0	8.8	74.00	18.39

Middle Channel: 5200MHz

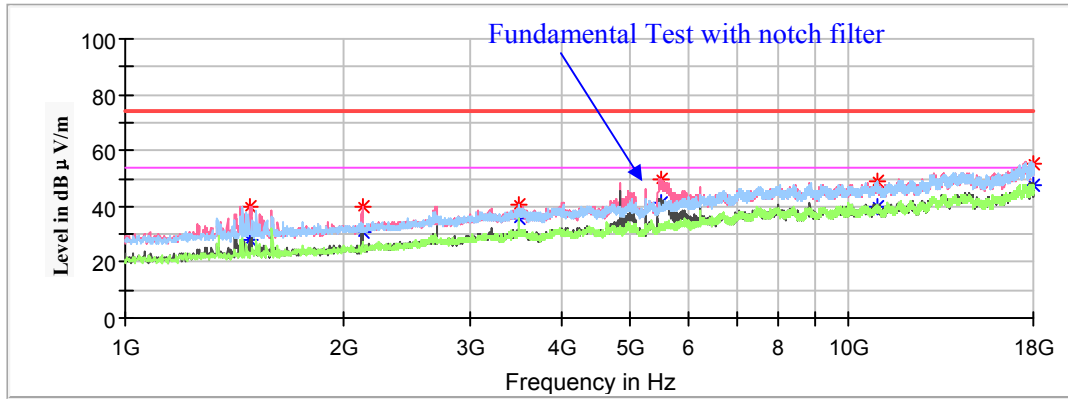
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1533.80	---	31.28	200	H	126	-16.2	54.00	22.72
1533.80	41.06	---	200	H	126	-16.2	74.00	32.94
2125.40	38.62	---	100	V	282	-14	68.20	29.58
2662.60	40.84	---	200	V	266	-11.7	68.20	27.36
4823.30	---	47.25	150	V	0	-5.5	54.00	6.75
4823.30	50.69	---	150	V	0	-5.5	74.00	23.31
11752.50	---	41.22	200	H	349	3.3	54.00	12.78
11752.50	50.29	---	200	H	349	3.3	74.00	23.71
17955.80	---	46.98	200	H	249	8.8	54.00	7.02
17955.80	55.38	---	200	H	249	8.8	74.00	18.62

High Channel: 5240MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1484.50	---	27.72	200	V	237	-16.4	54.00	26.28
1484.50	40.15	---	200	V	237	-16.4	74.00	33.85
2130.50	39.52	---	100	V	246	-13.9	68.20	28.68
3492.20	40.90	---	200	H	191	-8.8	68.20	27.30
5489.70	49.58	---	200	V	15	-3.9	68.20	18.62
10973.90	---	39.77	150	H	116	2.9	54.00	14.23
10973.90	48.81	---	150	H	116	2.9	74.00	25.19
17959.20	---	47.26	200	V	28	8.8	54.00	6.74
17959.20	55.44	---	200	V	28	8.8	74.00	18.56

802.11ac20 Mode(Chain0+Chain1):

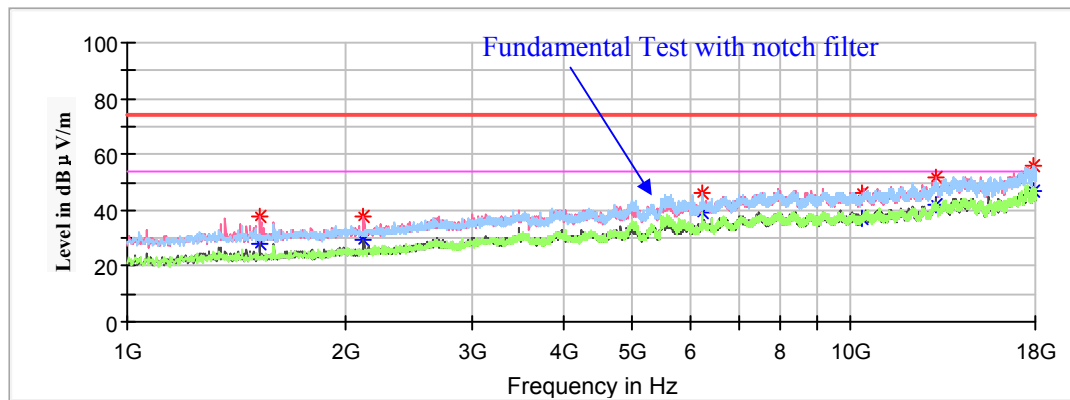
(Pre-scan in the X, Y and Z axes of orientation, the worst case Z-axis of orientation was recorded.)

Note:

1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5180MHz

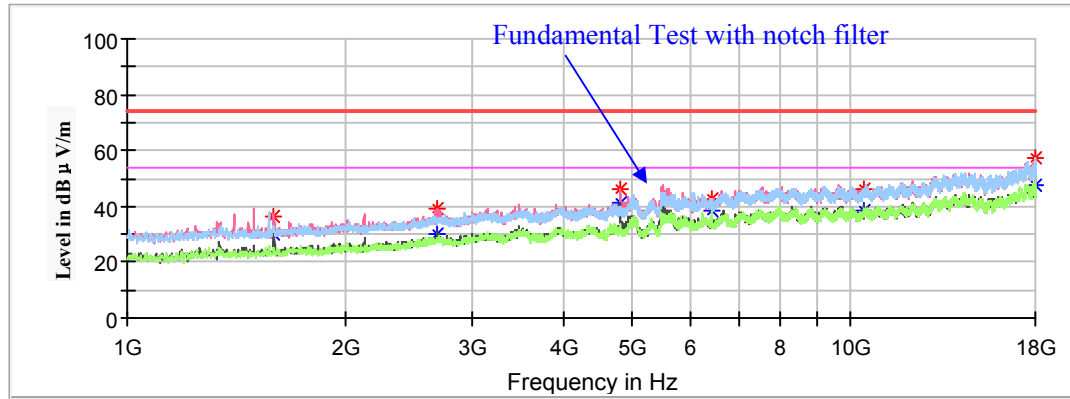
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1525.30	---	28.25	150	V	243	-16.3	54.00	25.75
1525.30	37.57	---	150	V	243	-16.3	74.00	36.43
2123.70	38.1	---	150	V	257	-14.0	68.20	30.10
6249.60	46.09	---	150	H	0	-2.1	68.20	22.11
10358.50	46.16	---	150	V	272	2.2	68.20	22.04
13100.60	51.63	---	150	V	228	5.3	68.20	16.57
17930.30	---	46.74	150	H	112	8.8	54.00	7.26
17930.30	55.84	---	150	H	112	8.8	74.00	18.16

Middle Channel: 5200MHz

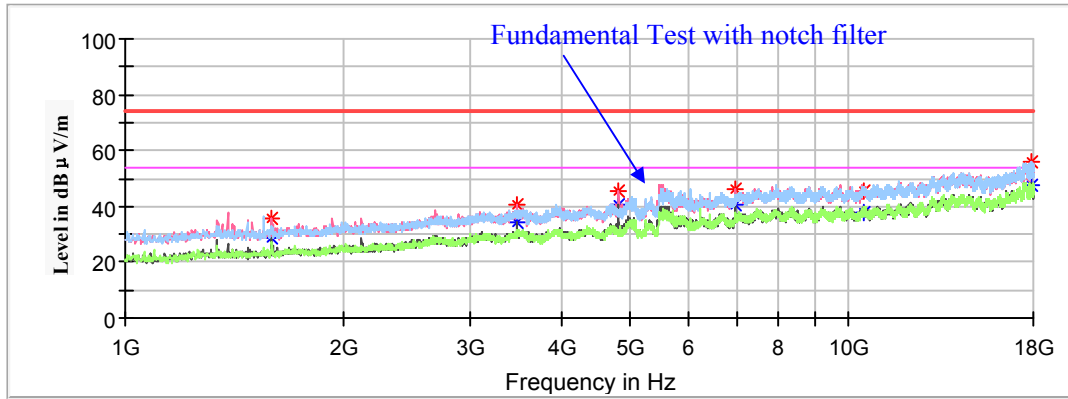
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct 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)				
1596.70	36.18	---	150	V	257	-16.0	74.00	37.82
1596.70	---	30.11	150	V	257	-16.0	54.00	23.89
2688.10	39.03	---	150	V	169	-11.5	68.20	29.17
4814.80	---	41.27	150	V	9	-5.6	54.00	12.73
4814.80	46.22	---	150	V	9	-5.6	74.00	27.78
6419.60	42.9	---	200	H	9	-1.5	68.20	25.30
10399.30	46.31	---	200	V	55	2.2	68.20	21.89
17950.70	---	47.35	150	H	45	8.8	54.00	6.65
17950.70	57.09	---	150	H	45	8.8	74.00	16.91

High Channel: 5240MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1593.30	---	28.63	150	V	243	-16.0	54.00	25.37
1593.30	35.4	---	150	V	243	-16.0	74.00	38.60
3478.60	40.46	---	150	V	94	-8.9	68.20	27.74
4814.80	---	40.84	150	V	0	-5.6	54.00	13.16
4814.80	45.41	---	150	V	0	-5.6	74.00	28.59
6985.70	46.31	---	150	V	9	-0.1	68.20	21.89
10480.90	45.78	---	150	H	127	2.3	68.20	22.42
17938.80	---	47.64	150	V	213	8.8	54.00	6.36
17938.80	55.9	---	150	V	213	8.8	74.00	18.10

802.11n-HT20 Mode(Chain0+Chain1):

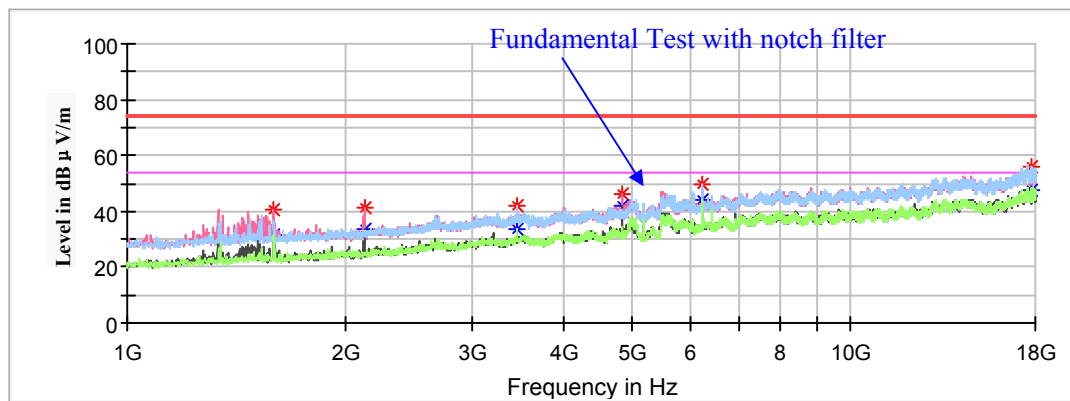
Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded

Note:

1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5180MHz

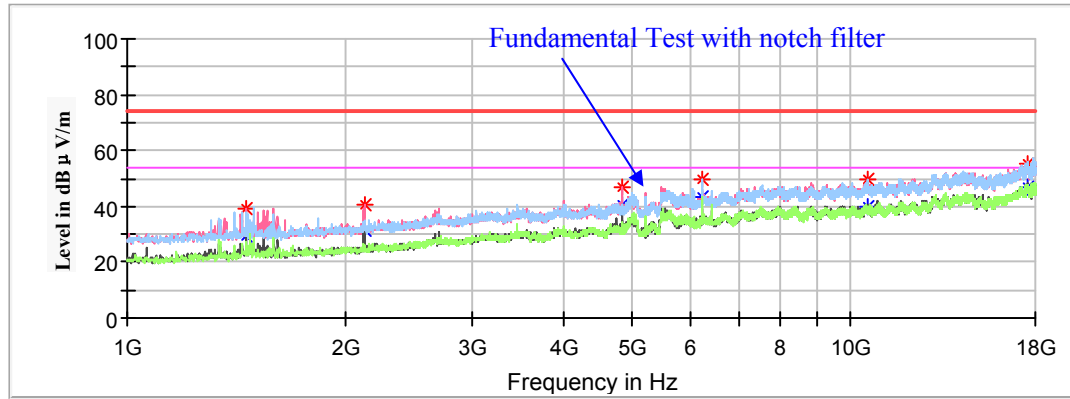
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1593.30	---	31.49	200	V	236	-16.0	54.00	22.51
1593.30	40.54	---	200	V	236	-16.0	74.00	33.46
2127.10	41.13	---	100	V	266	-13.9	68.20	27.07
3453.10	41.84	---	150	H	201	-8.9	68.20	26.36
4823.30	---	41.61	100	V	5	-5.5	54.00	12.39
4823.30	46.25	---	100	V	5	-5.5	74.00	27.75
6249.60	49.88	---	150	H	0	-2.1	68.20	18.32
17819.80	---	47.48	200	H	305	8.8	54.00	6.52
17819.80	55.77	---	200	H	305	8.8	74.00	18.23

Middle Channel: 5200MHz

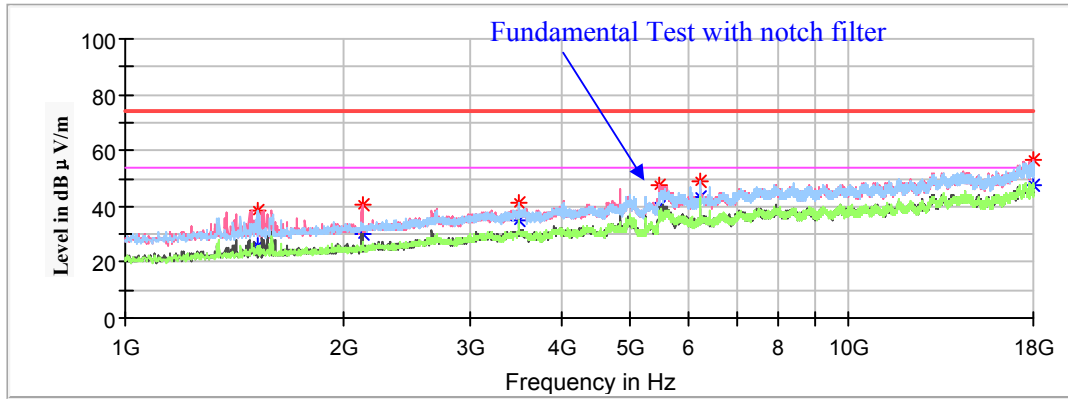
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1462.40	---	29.7	200	V	266	-16.6	54.00	24.30
1462.40	39.48	---	200	V	266	-16.6	74.00	34.52
2128.80	40.6	---	150	V	261	-13.9	68.20	27.60
4821.60	---	40.33	100	V	2	-5.5	54.00	13.67
4821.60	46.71	---	100	V	2	-5.5	74.00	27.29
6249.60	49.92	---	150	H	0	-2.1	68.20	18.28
10526.80	49.99	---	200	H	198	2.3	68.20	18.21
17573.30	55.49	---	150	V	0	8.9	68.20	12.71

High Channel: 5240MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct 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)				
1520.20	---	26.04	200	H	129	-16.3	54.00	27.96
1520.20	38.38	---	200	H	129	-16.3	74.00	35.62
2125.40	40.57	---	100	V	261	-14.0	68.20	27.63
3492.20	41.32	---	100	H	204	-8.8	68.20	26.88
5454.40	---	39.78	150	V	0	-4.0	54.00	14.22
5454.40	47.46	---	150	V	0	-4.0	74.00	26.54
6249.60	48.69	---	150	H	1	-2.1	68.20	19.51
17949.00	---	47.46	200	V	177	8.8	54.00	6.54
17949.00	56.83	---	200	V	177	8.8	74.00	17.17

802.11ac40 Mode(Chain0+Chain1):

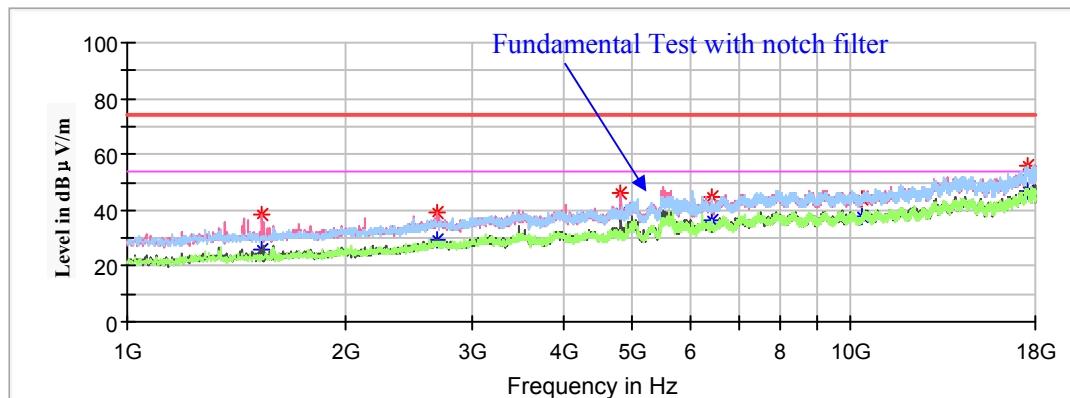
(Pre-scan in the X, Y and Z axes of orientation, the worst case Z-axis of orientation was recorded.)

Note:

1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5190MHz

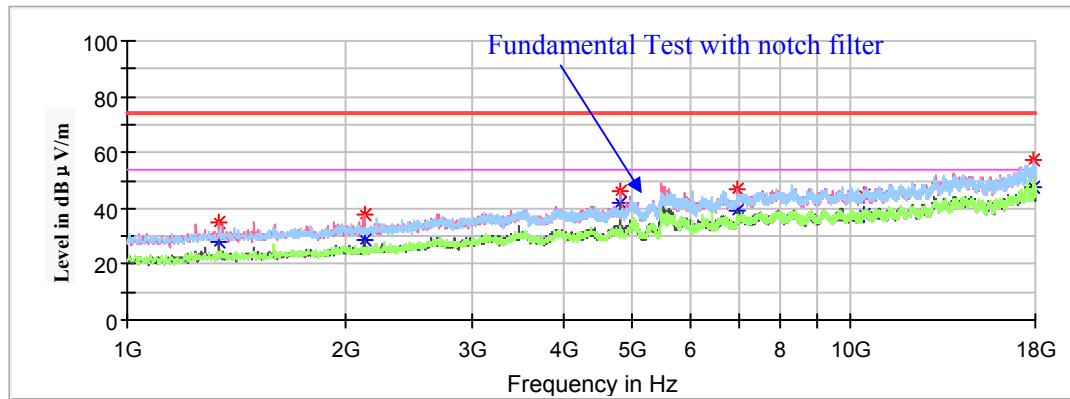
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1532.10	---	26.22	150	V	217	-16.2	54.00	27.78
1532.10	38.78	---	150	V	217	-16.2	74.00	35.22
2686.40	39.11	---	150	V	173	-11.6	68.20	29.09
4814.80	---	39.19	200	V	8	-5.6	54.00	14.81
4814.80	46.05	---	200	V	8	-5.6	74.00	27.95
6421.30	44.65	---	150	H	1	-1.5	68.20	23.55
10380.60	44.34	---	150	V	344	2.2	68.20	23.86
17530.80	55.81	---	200	H	234	8.9	68.20	12.39

High Channel: 5230MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1340.00	---	28.17	150	V	144	-17.2	54.00	25.83
1340.00	34.82	---	150	V	144	-17.2	74.00	39.18
2125.40	38.07	---	200	V	267	-14.0	68.20	30.13
4814.80	---	41.85	150	V	9	-5.6	54.00	12.15
4814.80	46.1	---	150	V	9	-5.6	74.00	27.90
6972.10	46.89	---	200	V	8	-0.1	68.20	21.31
10460.50	44.82	---	200	H	139	2.3	68.20	23.38
17943.90	---	47.45	150	V	346	8.8	54.00	6.55
17943.90	57.38	---	150	V	346	8.8	74.00	16.62

802.11n-HT40 Mode(Chain0+Chain1):

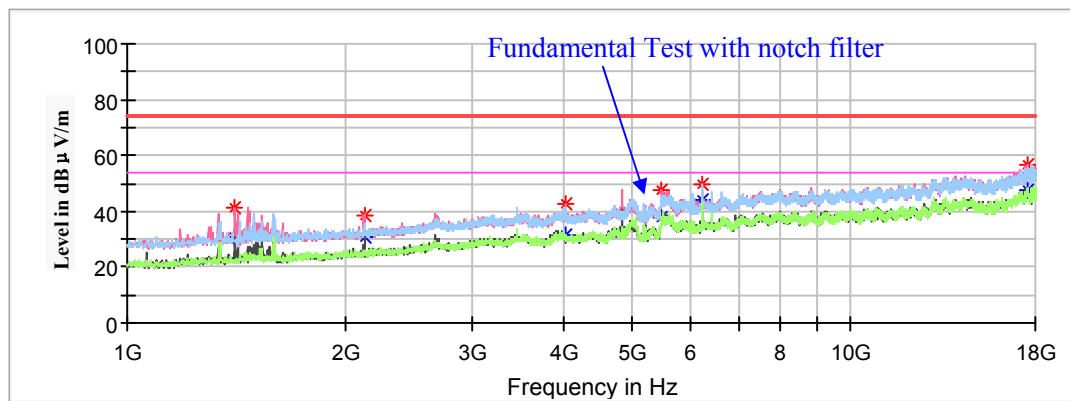
Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded

Note:

1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5190MHz

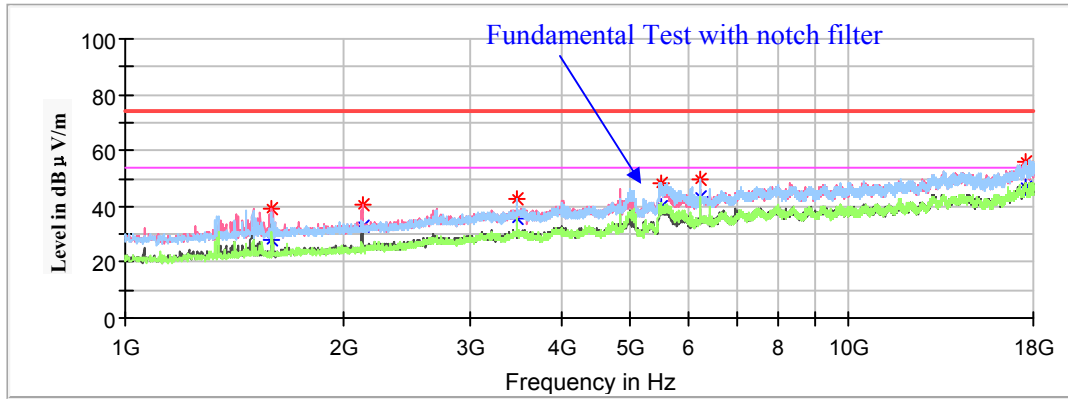
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1409.70	---	30.46	100	V	251	-16.8	54.00	23.54
1409.70	41.35	---	100	V	251	-16.8	74.00	32.65
2130.50	38.6	---	150	V	247	-13.9	68.20	29.60
4037.90	---	31.68	200	V	191	-6.9	54.00	22.32
4037.90	42.41	---	200	V	191	-6.9	74.00	31.59
5476.10	47.55	---	150	V	2	-4.0	68.20	20.65
6249.60	49.66	---	150	H	0	-2.1	68.20	18.54
17530.80	56.93	---	200	V	1	8.9	68.20	11.27

High Channel: 5230MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1591.60	---	28.03	200	V	236	-16.0	54.00	25.97
1591.60	39.24	---	200	V	236	-16.0	74.00	34.76
2130.50	40.83	---	100	V	267	-13.9	68.20	27.37
3485.40	42.70	---	150	H	206	-8.9	68.20	25.50
5401.60	---	40.12	200	H	355	-3.9	54.00	13.88
5401.60	48.55	---	200	H	355	-3.9	74.00	25.45
6249.60	49.77	---	150	H	0	-2.1	68.20	18.43
17575.00	55.97	---	150	V	23	8.9	68.20	12.23

802.11ac80 Mode(Chain0+Chain1):

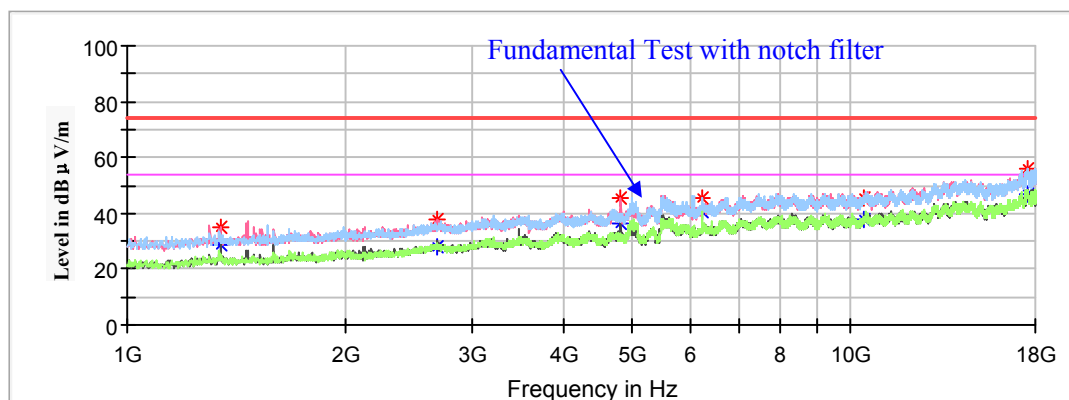
Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded

Note:

1. This test was performed with the 5150-5250MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5210MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1345.10	---	28.64	200	V	143	-17.2	54.00	25.36
1345.10	35.14	---	200	V	143	-17.2	74.00	38.86
2688.10	37.41	---	200	V	172	-11.5	68.20	30.79
4816.50	---	36.70	150	V	5	-5.6	54.00	17.30
4816.50	45.24	---	150	V	9	-5.6	74.00	28.76
6249.60	45.62	---	150	H	0	-2.1	68.20	22.58
10460.50	45.46	---	150	V	79	2.3	68.20	22.74
17535.90	55.86	---	200	V	341	8.9	68.20	12.34

5725-5850MHz Band:**1GHz-18GHz:****802.11a Mode(Chain0):**

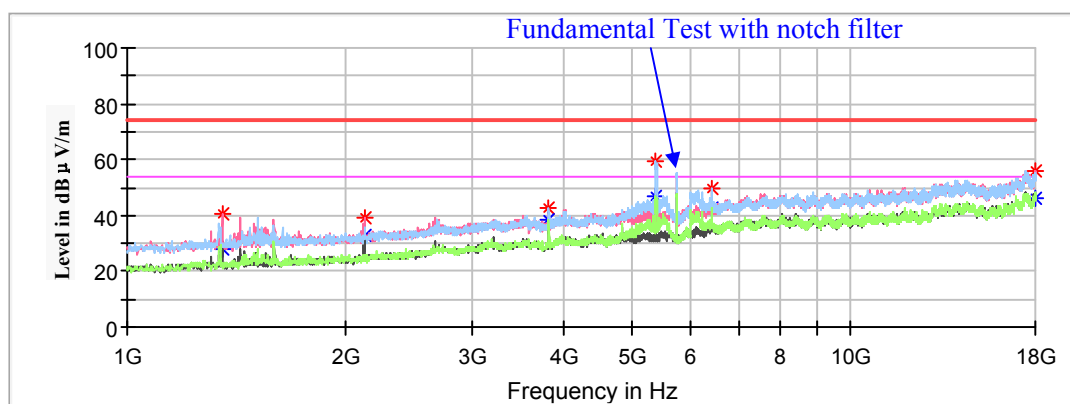
(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)

Note:

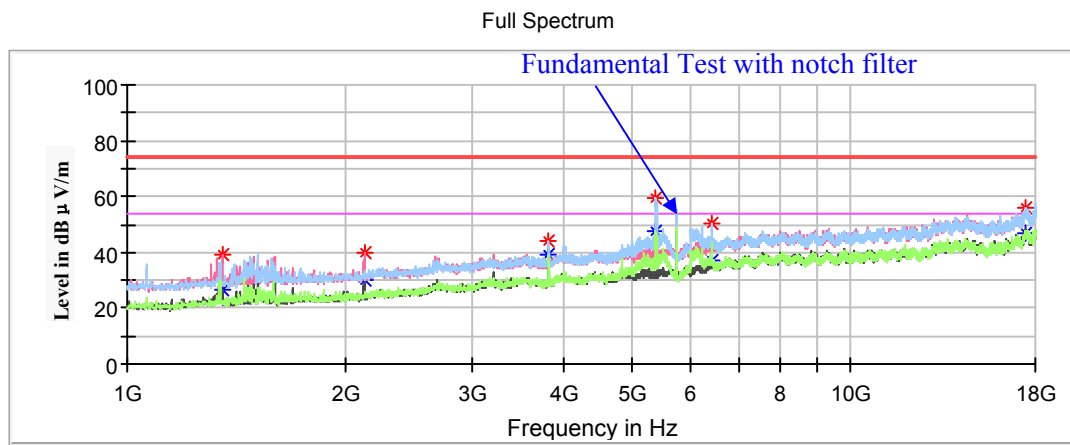
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5745MHz

Full Spectrum



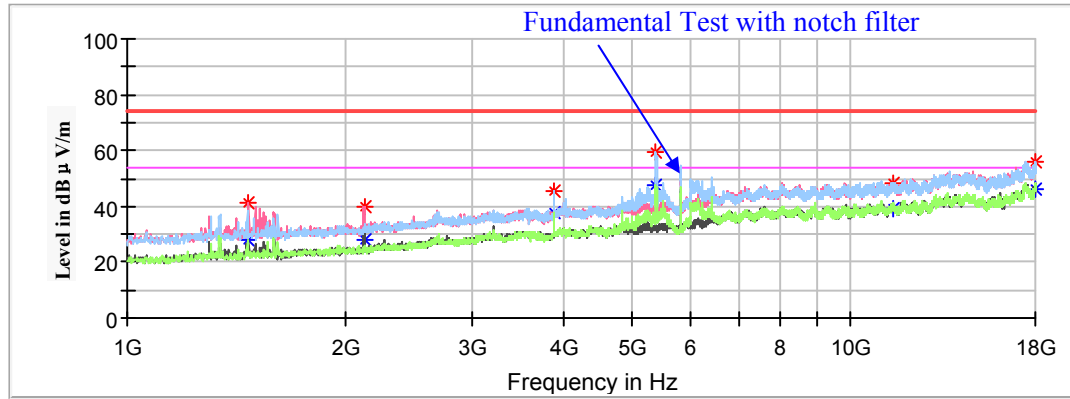
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1351.90	---	28.18	100	V	250	-17.2	54.00	25.82
1351.90	40.53	---	100	V	250	-17.2	74.00	33.47
2130.50	39.03	---	150	V	249	-13.9	68.20	29.17
3828.80	---	38.28	200	H	346	-7.6	54.00	15.72
3828.80	42.81	---	200	H	346	-7.6	74.00	31.19
5363.90	---	47.17	150	H	1	-4.3	54.00	6.83
5363.90	59.69	---	150	H	1	-4.3	74.00	14.31
6431.50	49.99	---	150	H	0	-1.4	68.20	18.21
17960.90	---	46.47	100	V	160	8.8	54.00	7.53
17960.90	55.75	---	100	V	160	8.8	74.00	18.25

Middle Channel: 5785MHz

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1351.90	---	26.37	150	V	234	-17.2	54.00	27.63
1351.90	39.02	---	150	V	234	-17.2	74.00	34.98
2128.80	39.59	---	100	V	266	-13.9	68.20	28.61
3828.80	---	38.84	150	H	358	-7.6	54.00	15.16
3828.80	44.24	---	150	H	358	-7.6	74.00	29.76
5363.90	---	47.3	200	H	356	-4.3	54.00	6.70
5363.90	59.38	---	200	H	356	-4.3	74.00	14.62
6431.50	50.28	---	150	H	0	-1.4	68.20	17.92
17423.70	55.92	---	200	V	88	8.6	68.20	12.28

High Channel: 5825MHz

Full Spectrum



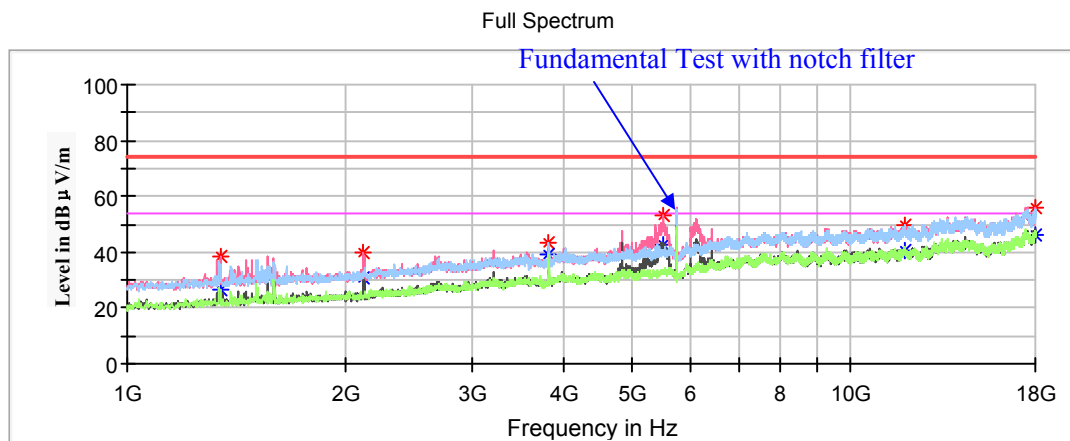
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dB μ V/m)	Margin (dB)
	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Height (cm)	Polar (H/V)				
1472.60	---	27.97	150	V	306	-16.5	54.00	26.03
1472.60	41.21	---	150	V	306	-16.5	74.00	32.79
2128.80	39.78	---	100	V	266	-13.9	68.20	28.42
3883.20	---	37.69	200	H	9	-7.4	54.00	16.31
3883.20	45.4	---	200	H	9	-7.4	74.00	28.60
5365.60	---	47.51	150	H	0	-4.3	54.00	6.49
5365.60	59.47	---	150	H	0	-4.3	74.00	14.53
11449.90	---	39.29	200	V	73	2.8	54.00	14.71
11449.90	48.52	---	200	V	73	2.8	74.00	25.48
17983.00	---	45.83	100	V	133	8.8	54.00	8.17
17983.00	56.18	---	100	V	133	8.8	74.00	17.82

802.11a Mode(Chain1):

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

Note:

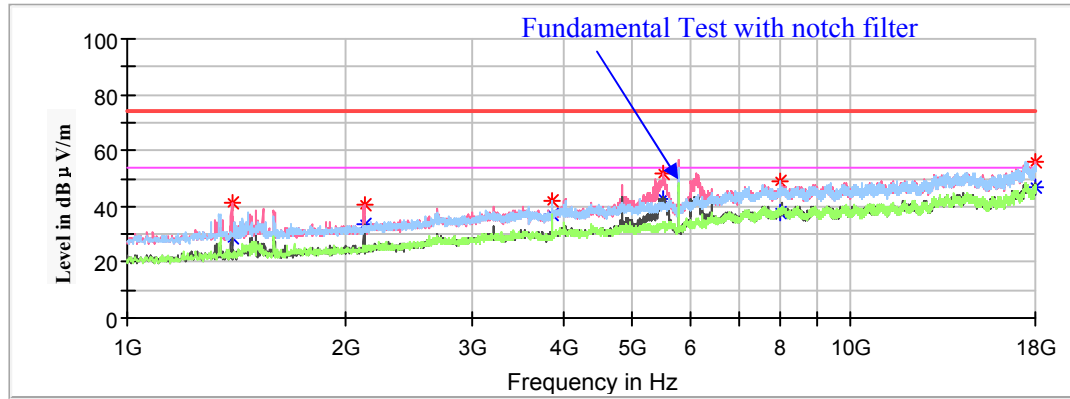
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5745MHz

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1343.40	---	26.64	200	V	281	-17.2	54.00	27.36
1343.40	38.67	---	200	V	281	-17.2	74.00	35.33
2123.70	39.51	---	150	V	261	-14.0	68.20	28.69
3828.80	---	38.9	200	H	176	-7.6	54.00	15.10
3828.80	43.2	---	200	H	176	-7.6	74.00	30.80
5510.10	52.94	---	150	V	0	-3.9	68.20	15.26
11863.00	---	40.5	200	H	279	3.5	54.00	13.50
11863.00	49.68	---	200	H	279	3.5	74.00	24.32
17955.80	---	46.3	100	V	267	8.8	54.00	7.70
17955.80	56.02	---	100	V	267	8.8	74.00	17.98

Middle Channel: 5785MHz

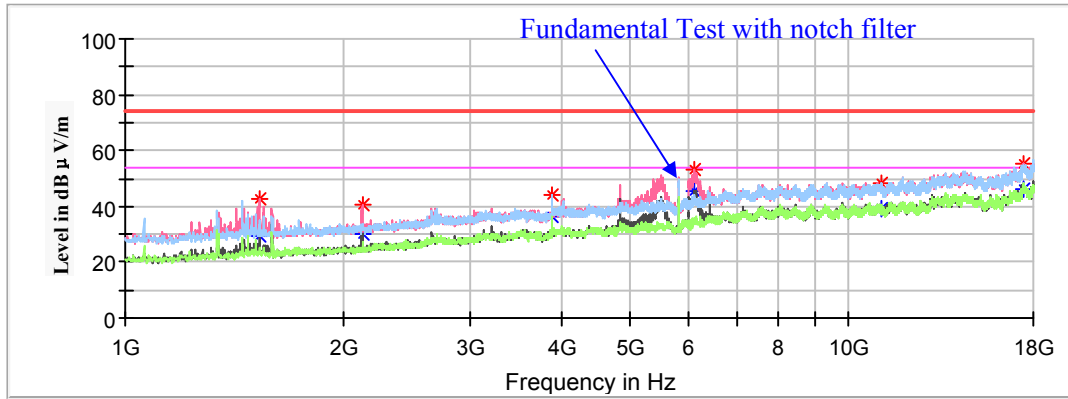
Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct 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)				
1394.40	---	28.35	100	V	237	-16.9	54.00	25.65
1394.40	40.91	---	100	V	237	-16.9	74.00	33.09
2125.40	40.43	---	100	V	267	-14.0	68.20	27.77
3856.00	---	37.35	200	H	189	-7.5	54.00	16.65
3856.00	41.9	---	200	H	189	-7.5	74.00	32.10
5515.20	51.6	---	150	V	0	-3.9	68.20	16.60
8005.70	48.85	---	150	H	131	1.8	68.20	19.35
17972.80	---	46.88	100	V	128	8.8	54.00	7.12
17972.80	55.6	---	100	V	128	8.8	74.00	18.40

High Channel: 5825MHz

Full Spectrum



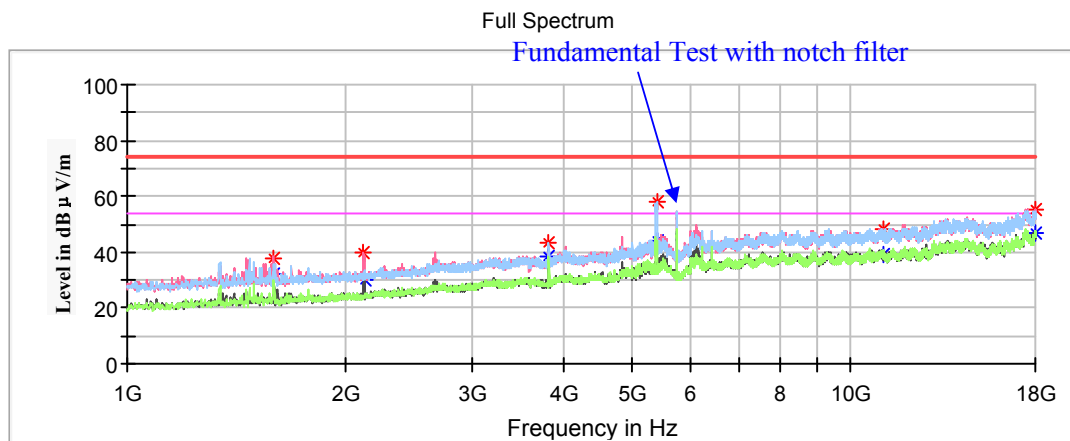
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1532.10	---	29.19	150	V	237	-16.2	54.00	24.81
1532.10	42.59	---	150	V	237	-16.2	74.00	31.41
2125.40	40.47	---	150	V	267	-14	68.20	27.73
3883.20	---	36.59	100	H	189	-7.4	54.00	17.41
3883.20	44.29	---	100	H	189	-7.4	74.00	29.71
6132.30	53.02	---	150	V	5	-2.5	68.20	15.18
11108.20	---	38.81	200	H	16	2.9	54.00	15.19
11108.20	48.42	---	200	H	16	2.9	74.00	25.58
17491.70	55.47	---	150	V	267	8.9	68.20	12.73

802.11ac20 Mode(Chain0+Chain1):

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

Note:

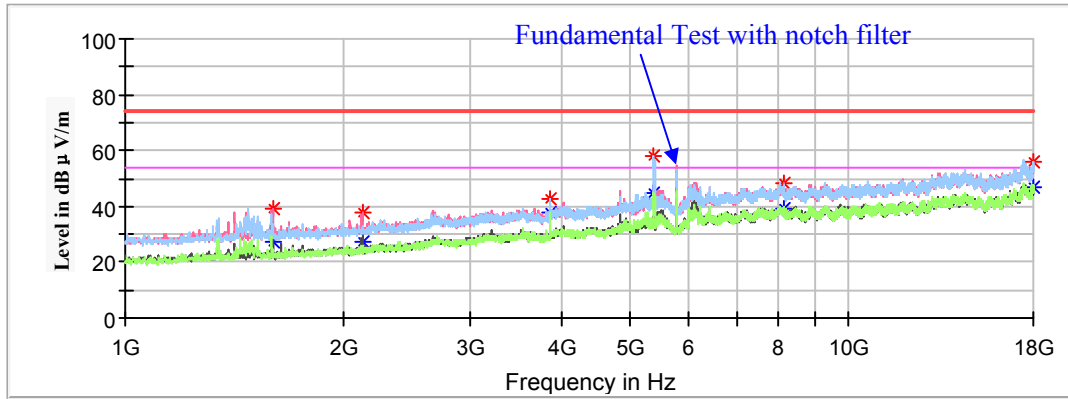
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5745MHz

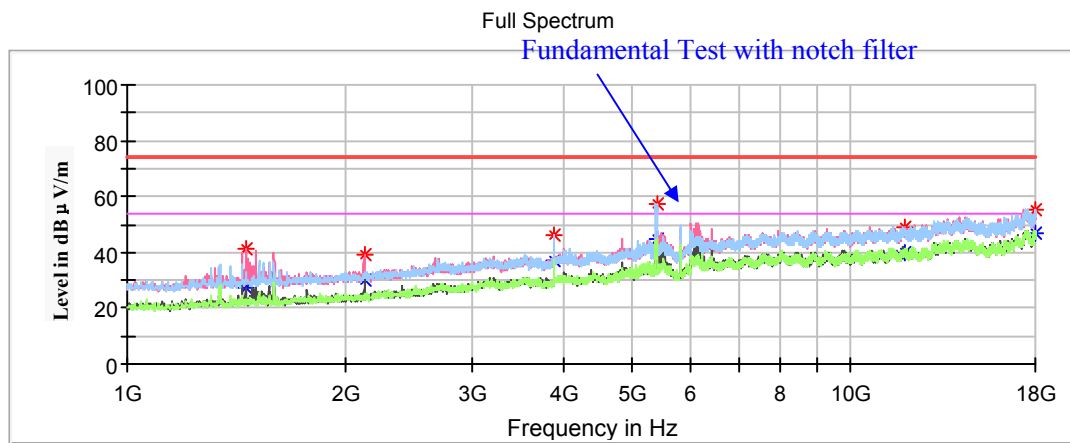
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1595.00	---	31.91	150	V	256	-16.0	54.00	22.09
1595.00	37.7	---	150	V	256	-16.0	74.00	36.30
2123.70	39.54	---	150	V	270	-14.0	68.20	28.66
3828.80	---	38.16	150	H	207	-7.6	54.00	15.84
3828.80	43.25	---	150	H	207	-7.6	74.00	30.75
5387.70	---	44.38	150	H	1	-4.2	54.00	9.62
5387.70	57.91	---	150	H	1	-4.2	74.00	16.09
11123.50	---	38.95	200	V	173	2.9	54.00	15.05
11123.50	48.55	---	200	V	173	2.9	74.00	25.45
17957.50	---	46.58	150	V	139	8.8	54.00	7.42
17957.50	55.49	---	150	V	139	8.8	74.00	18.51

Middle Channel: 5785MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct 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)				
1598.40	---	27.32	200	V	256	-16.0	54.00	26.68
1598.40	38.95	---	200	V	256	-16.0	74.00	35.05
2130.50	37.79	---	150	V	256	-13.9	68.20	30.41
3856.00	---	38.05	200	H	359	-7.5	54.00	15.95
3856.00	42.5	---	200	H	359	-7.5	74.00	31.50
5362.20	---	44.75	150	H	2	-4.3	54.00	9.25
5362.20	58.23	---	150	H	2	-4.3	74.00	15.77
8121.30	---	39.12	200	V	148	1.7	54.00	14.88
8121.30	48.27	---	200	V	148	1.7	74.00	25.73
17979.60	---	47.16	150	V	227	8.8	54.00	6.84
17979.60	55.67	---	150	V	227	8.8	74.00	18.33

High Channel: 5825MHz

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1457.30	---	27.55	150	V	284	-16.6	54.00	26.45
1457.30	41.15	---	150	V	284	-16.6	74.00	32.85
2128.80	38.88	---	200	V	267	-13.9	68.20	29.32
3883.20	---	37.22	200	H	355	-7.4	54.00	16.78
3883.20	45.94	---	200	H	355	-7.4	74.00	28.06
5387.70	---	44.68	150	H	358	-4.2	54.00	9.32
5387.70	57.04	---	150	H	358	-4.2	74.00	16.96
11846.00	---	39.7	200	V	352	3.5	54.00	14.30
11844.30	49.27	---	200	V	352	3.5	74.00	24.73
17971.10	---	46.88	150	V	358	8.8	54.00	7.12
17971.10	55.42	---	150	V	358	8.8	74.00	18.58

802.11n-HT20 Mode(Chain0+Chain1):

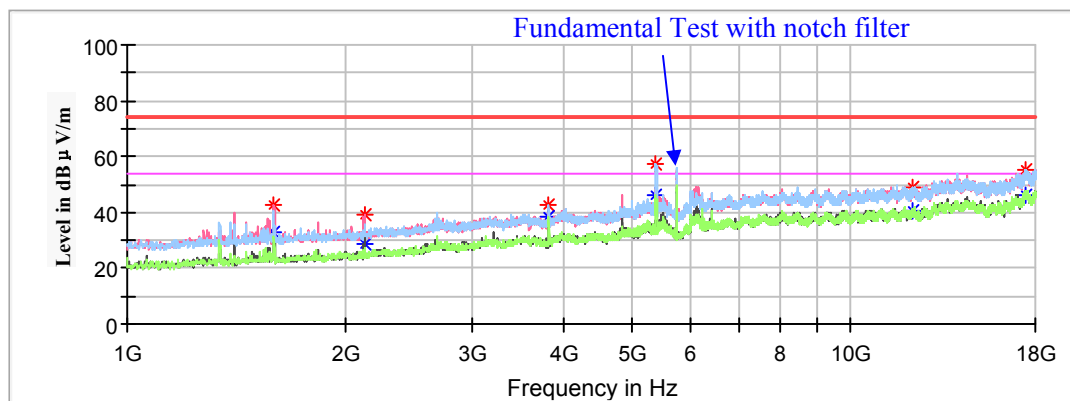
(Pre-scan with X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded)

Note:

1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5745MHz

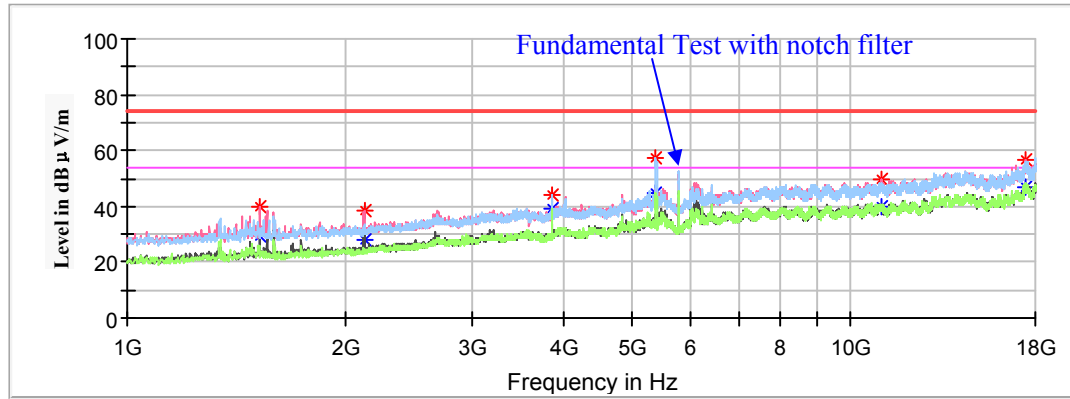
Full Spectrum



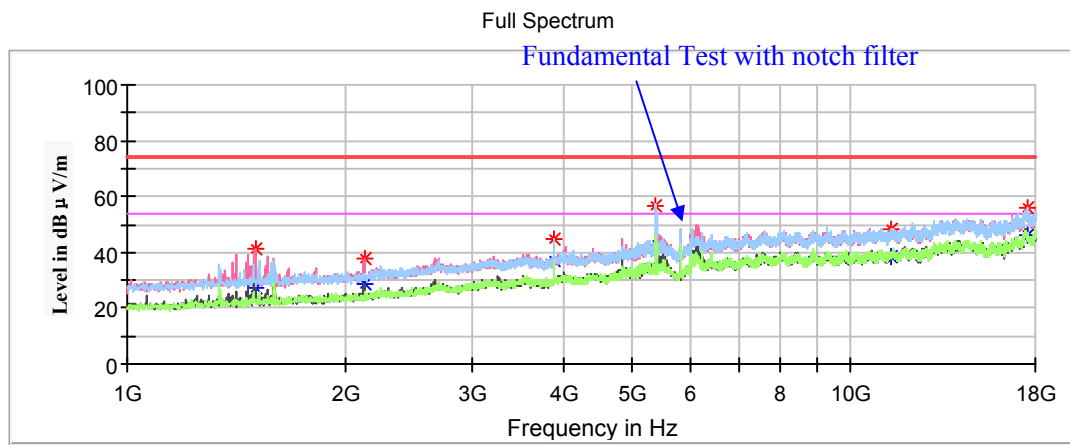
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1596.70	---	33.04	100	V	242	-16.0	54.00	20.96
1596.70	42.77	---	100	V	242	-16.0	74.00	31.23
2130.50	39.03	---	150	V	251	-13.9	68.20	29.17
3828.80	---	38.38	150	H	358	-7.6	54.00	15.62
3828.80	42.7	---	150	H	358	-7.6	74.00	31.30
5367.30	---	45.91	150	H	352	-4.2	54.00	8.09
5367.30	57.27	---	150	H	352	-4.2	74.00	16.73
12140.10	---	40.3	200	V	184	3.6	54.00	13.70
12140.10	48.93	---	200	V	184	3.6	74.00	25.07
17401.60	55.27	---	100	V	355	8.6	68.20	12.93

Middle Channel: 5785MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1525.30	---	29.64	100	V	233	-16.3	54.00	24.36
1525.30	40.11	---	100	V	233	-16.3	74.00	33.89
2125.40	38.18	---	150	V	293	-14	68.20	30.02
3856.00	---	39.04	100	H	0	-7.5	54.00	14.96
3856.00	44.00	---	100	H	0	-7.5	74.00	30.00
5362.20	---	44.45	200	H	0	-4.3	54.00	9.55
5362.20	57.14	---	200	H	0	-4.3	74.00	16.86
10997.70	---	39.76	150	V	305	2.9	54.00	14.24
10997.70	49.55	---	150	V	305	2.9	74.00	24.45
17495.10	56.35	---	200	V	355	8.9	68.20	11.85

High Channel: 5825MHz

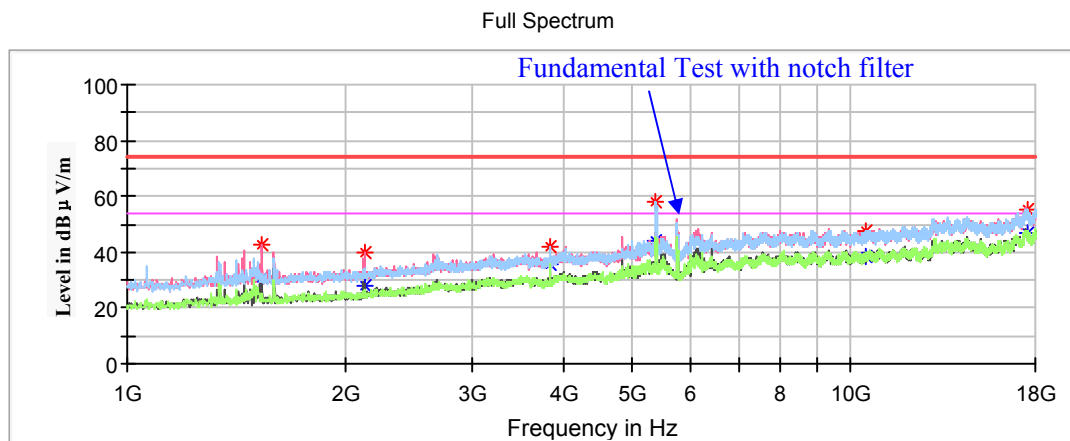
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1501.50	---	27.22	150	V	255	-16.4	54.00	26.78
1501.50	41.33	---	150	V	255	-16.4	74.00	32.67
2128.80	38.09	---	150	V	284	-13.9	68.20	30.11
3883.20	---	36.94	150	H	0	-7.4	54.00	17.06
3883.20	44.98	---	150	H	0	-7.4	74.00	29.02
5386.00	---	42.43	150	H	351	-4.2	54.00	11.57
5386.00	56.42	---	150	H	351	-4.2	74.00	17.58
11342.80	---	38.71	200	V	99	2.8	54.00	15.29
11342.80	48.2	---	200	V	99	2.8	74.00	25.80
17518.90	55.77	---	200	H	358	8.9	68.20	12.43

802.11ac40 Mode(Chain0+Chain1):

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

Note:

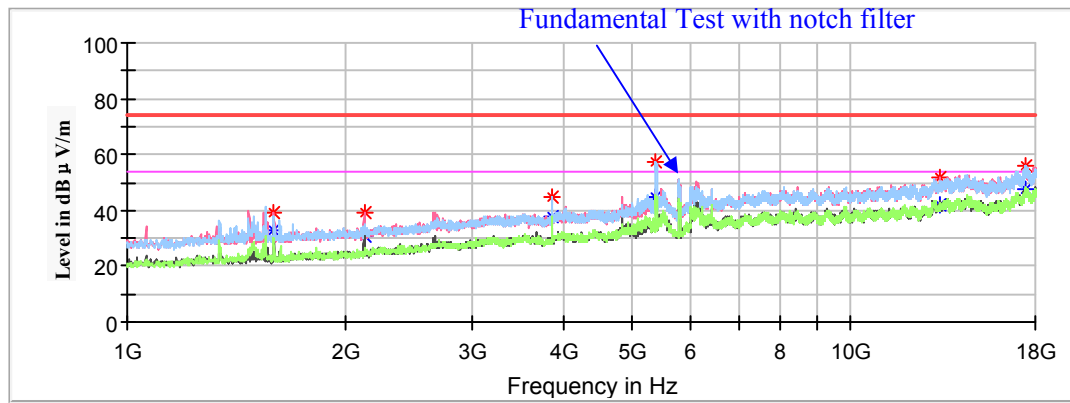
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5755MHz

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1533.80	---	30.95	150	V	233	-16.2	54.00	23.05
1533.80	42.42	---	150	V	233	-16.2	74.00	31.58
2128.80	39.56	---	200	V	188	-13.9	68.20	28.64
3835.60	---	35.85	150	H	0	-7.6	54.00	18.15
3835.60	41.95	---	150	H	0	-7.6	74.00	32.05
5365.60	---	44.37	150	H	1	-4.3	54.00	9.63
5365.60	58.12	---	150	H	1	-4.3	74.00	15.88
10504.70	47.82	---	200	V	114	2.3	68.20	20.38
17573.30	55.23	---	200	H	154	8.9	68.20	12.97

High Channel: 5795MHz

Full Spectrum



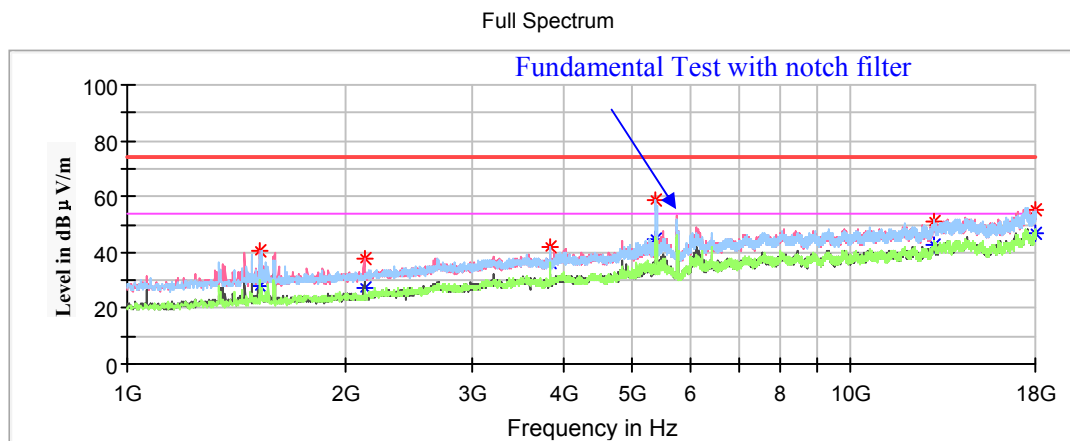
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1593.30	---	33.07	200	V	231	-16.0	54.00	20.93
1593.30	39.45	---	200	V	231	-16.0	74.00	34.55
2130.50	39.16	---	200	V	262	-13.9	68.20	29.04
3862.80	---	38	150	H	202	-7.5	54.00	16.00
3862.80	44.53	---	150	H	202	-7.5	74.00	29.47
5363.90	---	44.72	150	H	0	-4.3	54.00	9.28
5363.90	57.49	---	150	H	0	-4.3	74.00	16.51
13314.80	---	41.93	200	V	333	5.5	54.00	12.07
13314.80	51.4	---	200	V	333	5.5	74.00	22.60
17476.40	56.28	---	150	H	236	8.8	68.20	11.92

802.11n-HT40 Mode(Chain0+Chain1):

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

Note:

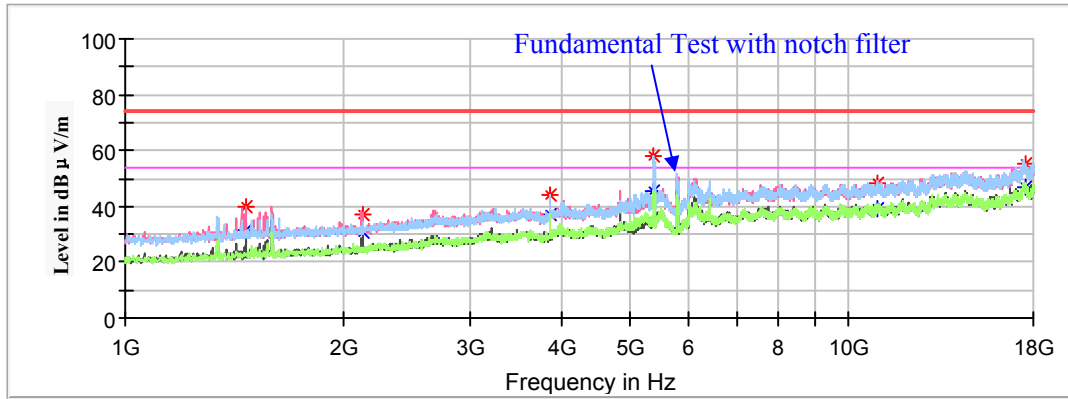
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5755MHz

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1523.60	---	27.63	200	V	221	-16.3	54.00	26.37
1523.60	40.55	---	200	V	221	-16.3	74.00	33.45
2128.80	37.72	---	150	V	285	-13.9	68.20	30.48
3835.60	---	36.29	150	H	1	-7.6	54.00	17.71
3835.60	41.78	---	150	H	1	-7.6	74.00	32.22
5362.20	---	44.43	150	H	1	-4.3	54.00	9.57
5362.20	58.44	---	150	H	1	-4.3	74.00	15.56
13036.00	51.11	---	200	V	143	5.3	68.20	17.09
17983.00	---	46.68	200	V	56	8.8	54.00	7.32
17983.00	55.43	---	200	V	56	8.8	74.00	18.57

High Channel: 5795MHz

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1469.20	---	31.13	200	V	297	-16.5	54.00	22.87
1469.20	39.81	---	200	V	297	-16.5	74.00	34.19
2130.50	37.39	---	150	V	285	-13.9	68.20	30.81
3862.80	---	37.16	200	H	0	-7.5	54.00	16.84
3862.80	44.28	---	200	H	0	-7.5	74.00	29.72
5362.20	---	45.76	150	H	1	-4.3	54.00	8.24
5362.20	58.39	---	150	H	0	-4.3	74.00	15.61
10984.10	---	39.06	200	V	26	2.9	54.00	14.94
10984.10	48.43	---	200	V	26	2.9	74.00	25.57
17575.00	55.14	---	150	V	355	8.9	68.20	13.06

802.11ac80 Mode(Chain0+Chain1):

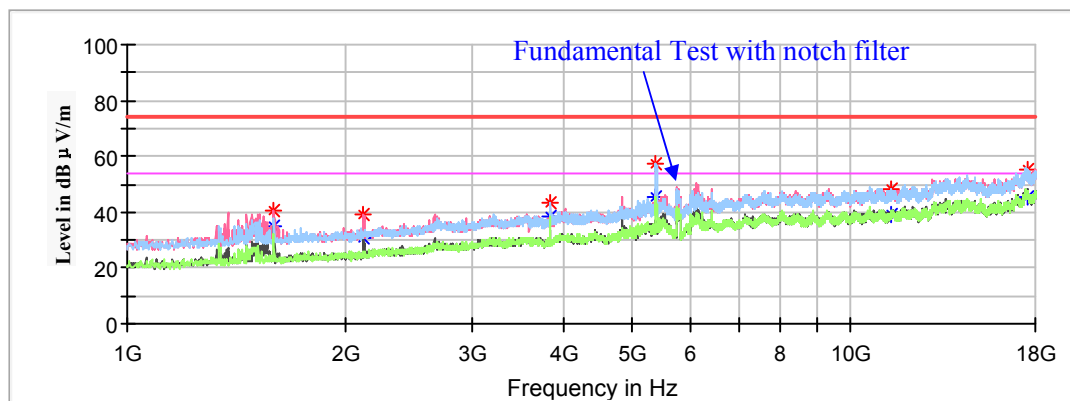
(Pre-scan in the X,Y and Z axes of orientation, the worst case **Z-axis of orientation** was recorded.)

Note:

1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

Low Channel: 5775MHz

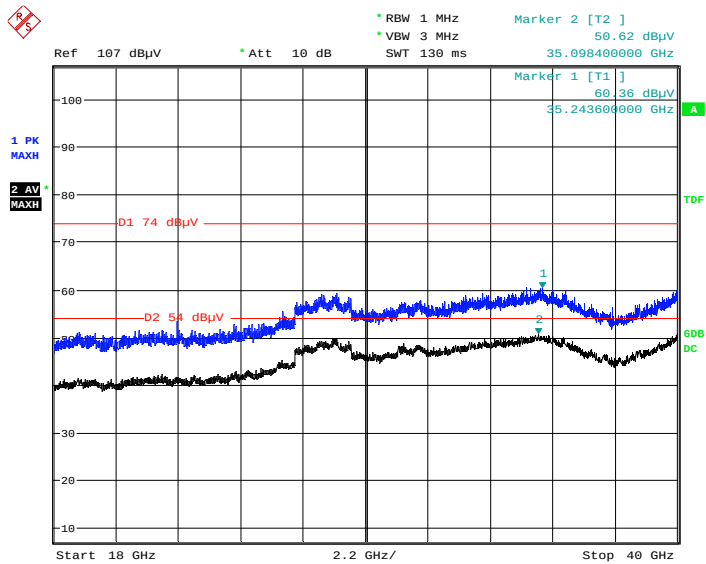
Full Spectrum



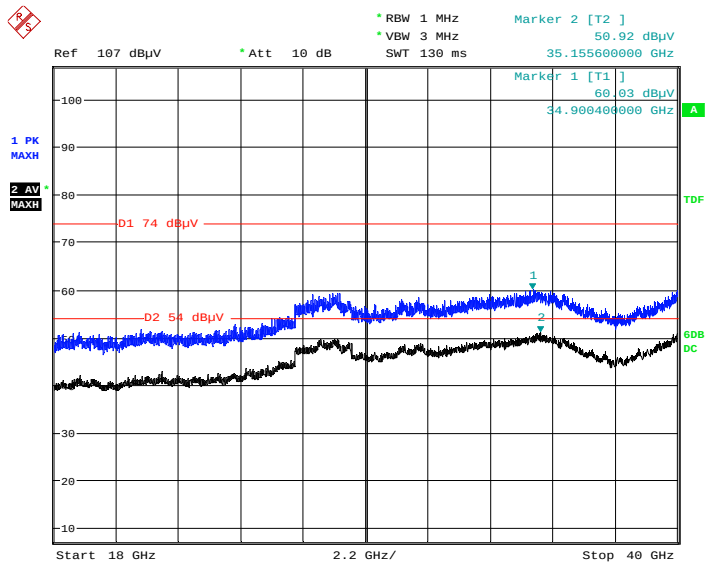
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1593.30	---	35.03	200	V	236	-16.0	54.00	18.97
1593.30	40.68	---	200	V	236	-16.0	74.00	33.32
2123.70	39.11	---	200	V	267	-14.0	68.20	29.09
3849.20	---	38.66	150	H	358	-7.5	54.00	15.34
3849.20	43.31	---	150	H	358	-7.5	74.00	30.69
5362.20	---	45.72	150	H	2	-4.3	54.00	8.28
5362.20	57.65	---	150	H	2	-4.3	74.00	16.35
11387.00	---	39.4	200	V	298	2.8	54.00	14.60
11387.00	48.35	---	200	V	298	2.8	74.00	25.65
17609.00	55.57	---	200	V	313	8.9	68.20	12.63

18GHz-40GHz (5150-5250MHz Band):

Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X,Y and Z axes of orientation, the worst case 802.11a mode in channel 5240 in Z-axis of orientation was recorded.

Horizontal

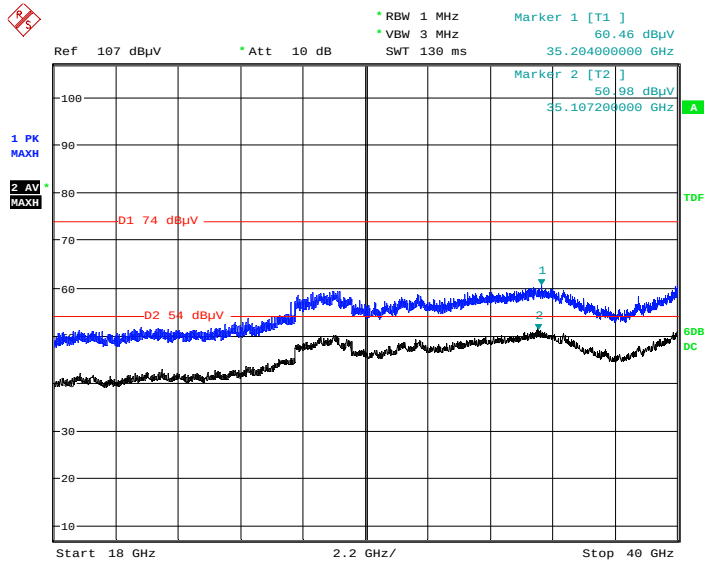
Date: 9.MAY.2020 04:31:05

Vertical

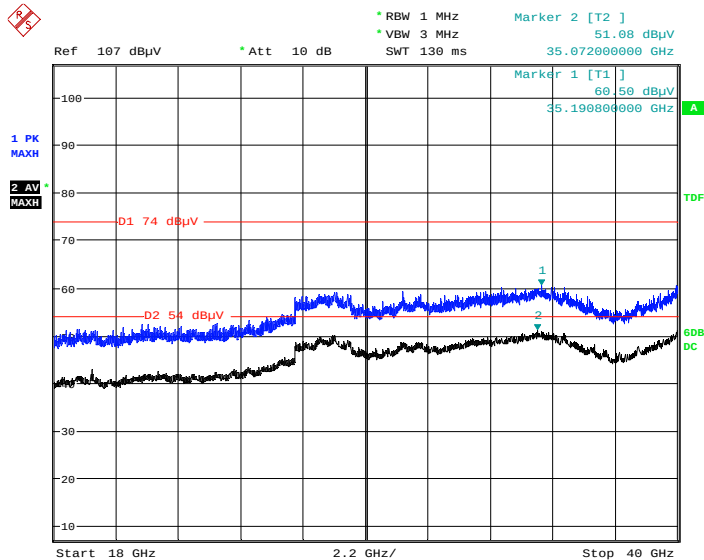
Date: 9.MAY.2020 04:46:36

18GHz-40GHz (5725-5850 Band):

Pre-scan with 802.11a, 802.11ac20, 802.11n-HT20, 802.11ac40, 802.11n-HT40 and 802.11 ac80 modes of operation in the X,Y and Z axes of orientation, the worst case 802.11a mode in channel 5825 in Z-axis of orientation was recorded.

Horizontal

Date: 9.MAY.2020 04:59:16

Vertical

Date: 9.MAY.2020 05:10:20

Restricted Bands Emissions Test (5150-5250MHz Band):

- 1: These emissions were tested without amplifier and the test distance is 1.5m.
 2: The test distance is 1.5m instead of 3m, Extrapolation Factor= $20 \cdot \log(3m / 1.5m) = 6.0\text{dB}$
 The PK limit 80dBuV/m @1.5m instead of 74dBuV/m @3.0m
 The AV limit 60dBuV/m @1.5m instead of 54dBuV/m @3.0m
 3. Corrected Factor = Antenna factor (RX) + Cable Loss
 Corrected Amplitude = Corrected Factor + Reading
 Margin = Limit - Corrected. Amplitude

802.11a Mode-Chain0: (Pre-scan in the X, Y and Z axes of orientation, the worst case in 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: 5180MHz								
5150.00	---	56.95	150	H	158	15.2	60.00	3.05
5150.00	63.71	---	100	V	244	15.2	80.00	16.29
High Channel: 5240MHz								
5350.00	65.21	---	150	V	0	15.7	80.00	14.79
5350.00	---	55.53	100	V	0	15.7	60.00	4.47

802.11a Mode-Chain1: (Pre-scan in the X, Y and Z axes of orientation, the worst case in 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: 5180MHz								
5150.00	---	57.14	150	V	0	15.2	60.00	2.86
5150.00	64.37	---	150	V	0	15.2	80.00	15.63
High Channel: 5240MHz								
5350.00	64.76	---	150	H	35	15.7	80.00	15.24
5350.00	---	55.83	200	H	77	15.7	60.00	4.17

802.11ac20 Mode (Chain0+ Chain1): (Pre-scan in the X, Y and Z axes of orientation, the worst case in 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: 5180MHz								
5150.00	---	55.81	150	V	97	15.2	60.00	4.19
5150.00	64.54	---	100	V	327	15.2	80.00	15.46
High Channel: 5240MHz								
5350.00	64.48	---	100	V	56	15.7	80.00	15.52
5350.00	---	55.86	150	V	56	15.7	60.00	4.14

802.11n-HT20 Mode (Chain0+ Chain1): (Pre-scan in the X, Y and Z axes of orientation, the worst case in 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: 5180MHz								
5150.00	---	55.98	100	V	275	15.2	60.00	4.02
5150.00	64.28	---	100	V	275	15.2	80.00	15.72
High Channel: 5240MHz								
5350.00	64.67	---	150	H	122	15.7	80.00	15.33
5350.00	---	56.49	150	V	122	15.7	60.00	3.51

802.11ac40 Mode (Chain0+ Chain1): (Pre-scan in the X, Y and Z axes of orientation, the worst case in 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: 5190MHz								
5150.00	---	56.42	150	V	114	15.2	60.00	3.58
5150.00	65.19	---	150	V	341	15.2	80.00	14.81
High Channel: 5230MHz								
5350.00	62.64	---	100	V	51	15.7	80.00	17.36
5350.00	---	57.09	150	V	350	15.7	60.00	2.91

802.11n-HT40 Mode (Chain0+ Chain1): (Pre-scan in the X, Y and Z axes of orientation, the worst case in 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: 5190MHz								
5150.00	---	56.53	100	V	97	15.2	60.00	3.47
5150.00	62.65	---	100	V	276	15.2	80.00	17.35
High Channel: 5230MHz								
5350.00	64.42	---	150	V	75	15.7	80.00	15.58
5350.00	---	57.15	200	V	75	15.7	60.00	2.85

802.11ac80 Mode (Chain0+ Chain1): (Pre-scan in the X, Y and Z axes of orientation, the worst case in 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: 5210MHz								
5150.00	---	56.47	150	V	2	15.2	60.00	3.53
5150.00	62.48	---	100	V	2	15.2	80.00	17.52
5350.00	64.44	---	200	V	181	16.9	80.00	15.56
5350.00	---	57.82	100	V	181	16.9	60.00	2.18

Band Edge Emissions Test (5725-5850MHz band):

Note:

- 1: These emissions were tested without amplifier and the test distance is 1.5m.
2. The test distance is 1.5m instead of 3m, Extrapolation Factor= $20 \cdot \log(3m/1.5m)=6.0\text{dB}$
3. Corrected Factor = Antenna factor (RX) + Cable Loss
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude

802.11a Mode-Chain0: (Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	64.82	---	100	V	46	16.4	68.2	74.2	9.38
5700.00	65.23	---	200	V	211	16.5	105.2	111.2	45.97
5720.00	65.21	---	100	V	20	16.5	110.8	116.8	51.59
5725.00	65.76	---	150	V	179	16.5	122.2	128.2	62.44
High Channel: 5825MHz									
5850.00	65.63	---	200	V	183	16.7	122.2	128.2	62.57
5855.00	65.33	---	100	V	106	16.7	110.8	116.8	51.47
5875.00	65.53	---	200	V	346	16.8	105.2	111.2	45.67
5925.00	65.23	---	100	V	324	16.9	68.2	74.2	8.97

802.11a Mode-Chain1: (Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	65.43	---	100	H	196	16.4	68.2	74.2	8.77
5700.00	65.11	---	150	V	38	16.5	105.2	111.2	46.09
5720.00	65.13	---	100	H	19	16.5	110.8	116.8	51.67
5725.00	65.48	---	200	H	257	16.5	122.2	128.2	62.72
High Channel: 5825MHz									
5850.00	65.18	---	200	V	244	16.7	122.2	128.2	63.02
5855.00	65.68	---	150	H	35	16.7	110.8	116.8	51.12
5875.00	65.66	---	200	V	261	16.8	105.2	111.2	45.54
5925.00	64.72	---	150	H	143	16.9	68.2	74.2	9.48

802.11ac20 Mode-Chain0+ Chain1: (Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	65.75	---	200	V	225	16.4	68.2	74.2	8.45
5700.00	65.40	---	200	H	51	16.5	105.2	111.2	45.8
5720.00	65.36	---	150	H	77	16.5	110.8	116.8	51.44
5725.00	65.56	---	100	V	204	16.5	122.2	128.2	62.64
High Channel: 5825MHz									
5850.00	65.38	---	150	V	206	16.7	122.2	128.2	62.82
5855.00	65.55	---	200	H	67	16.7	110.8	116.8	51.25
5875.00	65.56	---	100	V	304	16.8	105.2	111.2	45.64
5925.00	65.19	---	150	V	83	16.9	68.2	74.2	9.01

802.11n-HT20 Mode- Chain0+ Chain1: (Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	65.12	---	150	H	101	16.4	68.2	74.2	9.08
5700.00	65.87	---	150	V	53	16.5	105.2	111.2	45.33
5720.00	65.76	---	200	H	311	16.5	110.8	116.8	51.04
5725.00	65.52	---	150	H	294	16.5	122.2	128.2	62.68
High Channel: 5825MHz									
5850.00	65.67	---	200	V	329	16.7	122.2	128.2	62.53
5855.00	65.39	---	150	V	38	16.7	110.8	116.8	51.41
5875.00	65.72	---	150	H	356	16.8	105.2	111.2	45.48
5925.00	65.18	---	200	H	47	16.9	68.2	74.2	9.02

802.11ac40 Mode- Chain0+ Chain1: (Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	66.25	---	200	V	88	16.4	68.2	74.2	7.95
5700.00	65.62	---	150	H	182	16.5	105.2	111.2	45.58
5720.00	65.37	---	200	H	239	16.5	110.8	116.8	51.43
5725.00	65.00	---	200	H	206	16.5	122.2	128.2	63.2
High Channel: 5825MHz									
5850.00	65.49	---	200	H	80	16.7	122.2	128.2	62.71
5855.00	65.62	---	200	H	100	16.7	110.8	116.8	51.18
5875.00	65.36	---	200	H	309	16.8	105.2	111.2	45.84
5925.00	65.99	---	200	H	6	16.9	68.2	74.2	8.21

802.11n-HT40 Mode- Chain0+ Chain1: (Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)

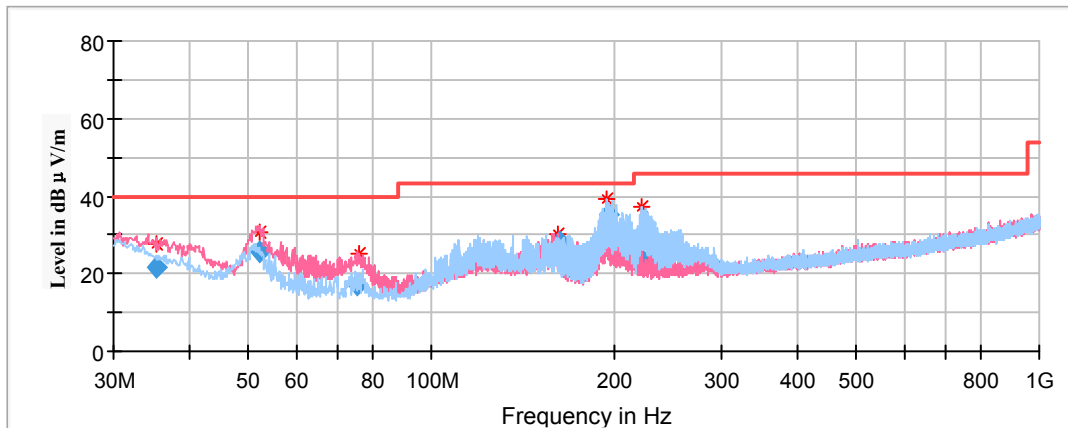
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5745MHz									
5650.00	65.11	---	150	V	347	16.4	68.2	74.2	9.09
5700.00	65.08	---	200	V	166	16.5	105.2	111.2	46.12
5720.00	65.74	---	150	V	142	16.5	110.8	116.8	51.06
5725.00	65.34	---	200	H	92	16.5	122.2	128.2	62.86
High Channel: 5825MHz									
5850.00	65.78	---	150	H	105	16.7	122.2	128.2	62.42
5855.00	65.12	---	200	H	221	16.7	110.8	116.8	51.68
5875.00	65.69	---	150	V	229	16.8	105.2	111.2	45.51
5925.00	63.75	---	150	V	182	16.9	68.2	74.2	10.45

802.11ac80 Mode- Chain0+ Chain1: (Pre-scan in the X, Y and Z axes of orientation, the worst case in Z-axis of orientation was recorded)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit @3m (dBμV/m)	Limit @1.5m (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)					
Low Channel: 5775MHz									
5650.00	64.63	---	200	V	336	16.4	68.2	74.2	9.57
5700.00	65.47	---	150	H	225	16.5	105.2	111.2	45.73
5720.00	65.24	---	150	H	216	16.5	110.8	116.8	51.56
5725.00	65.46	---	150	H	253	16.5	122.2	128.2	62.74
5850.00	65.56	---	200	V	126	16.7	122.2	128.2	62.64
5855.00	65.95	---	200	V	228	16.7	110.8	116.8	50.85
5875.00	65.83	---	200	V	7	16.8	105.2	111.2	45.37
5925.00	65.47	---	200	V	117	16.9	68.2	74.2	8.73

2.4G Wi-Fi Antenna 2& 5G Wi-Fi Antenna 1 Transmit simultaneously 30MHz-1GHz:

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

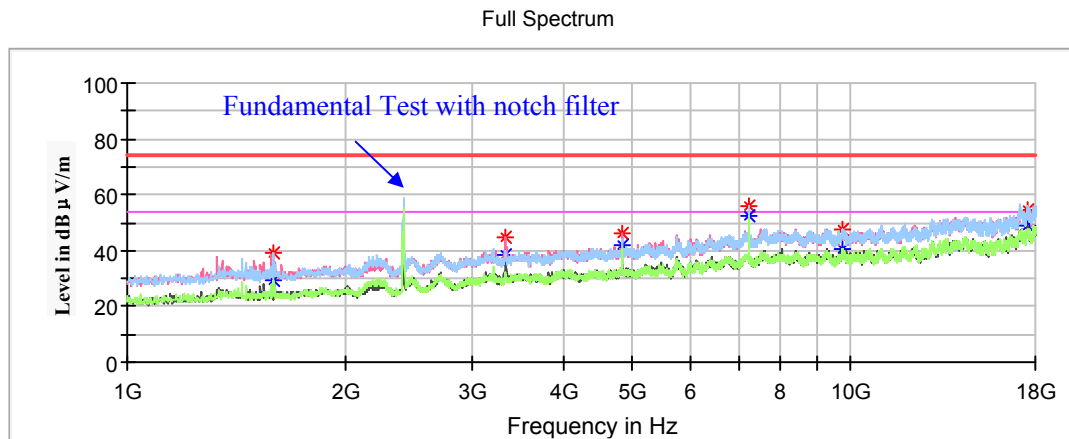


Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	QuasiPeak (dBμV/m)	Height (cm)	Polar (H/V)				
35.24	21.41	100	V	131	-7.5	40.00	18.59
52.19	25.91	200	V	283	-17.6	40.00	14.09
75.70	16.90	100	V	241	-17.6	40.00	23.10
162.11	28.33	200	V	299	-12.8	43.50	15.17
195.71	35.18	100	H	309	-12.6	43.50	8.32
223.27	23.33	200	H	113	-12.2	46.00	22.67

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

Note:

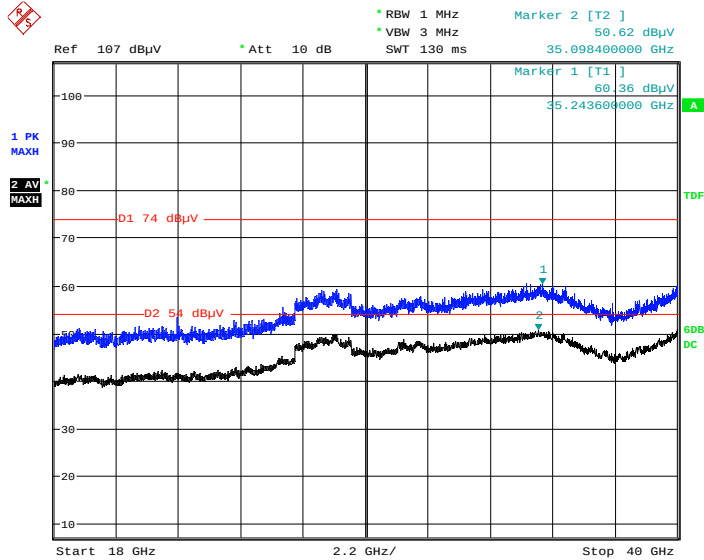
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude



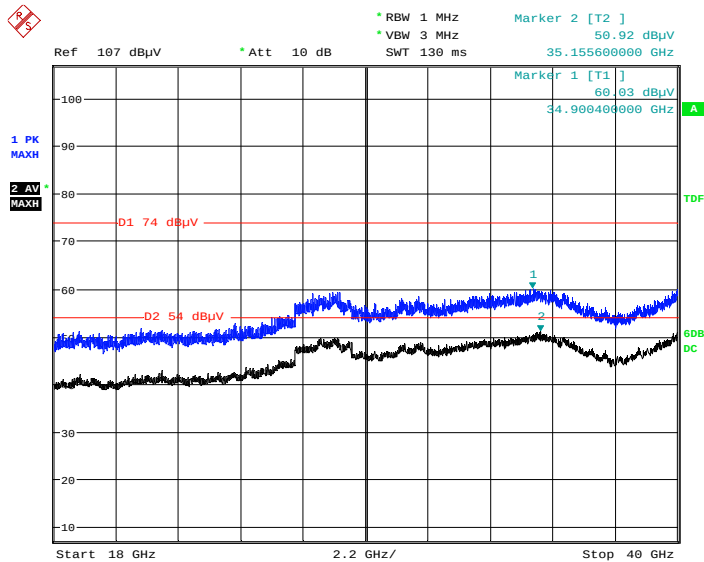
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1593.30	---	29.21	150	H	174	-16.0	54.00	24.79
1593.30	39.29	---	150	H	174	-16.0	74.00	34.71
3334.10	---	38.32	150	V	318	-9.2	54.00	15.68
3334.10	44.87	---	150	V	318	-9.2	74.00	29.13
4823.30	---	42.26	150	V	9	-5.5	54.00	11.74
4823.30	46.26	---	150	V	9	-5.5	74.00	27.74
7235.60	---	52.28	100	H	0	0.5	54.00	1.72
7235.60	55.91	---	100	H	0	0.5	74.00	18.09
9749.90	47.40	---	200	H	280	2	68.20	20.80
17573.30	54.55	---	200	V	130	8.9	68.20	13.65

18GHz-40GHz:

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

Horizontal

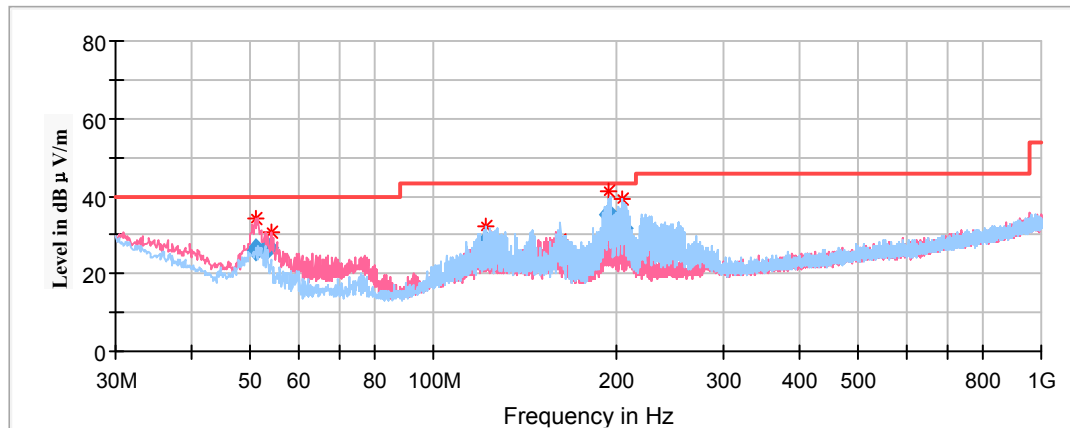
Date: 9.MAY.2020 04:31:05

Vertical

Date: 9.MAY.2020 04:46:36

2.4G Wi-Fi Antenna 2& 5G Wi-Fi Antenna 2 Transmit simultaneously 30MHz-1GHz:

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

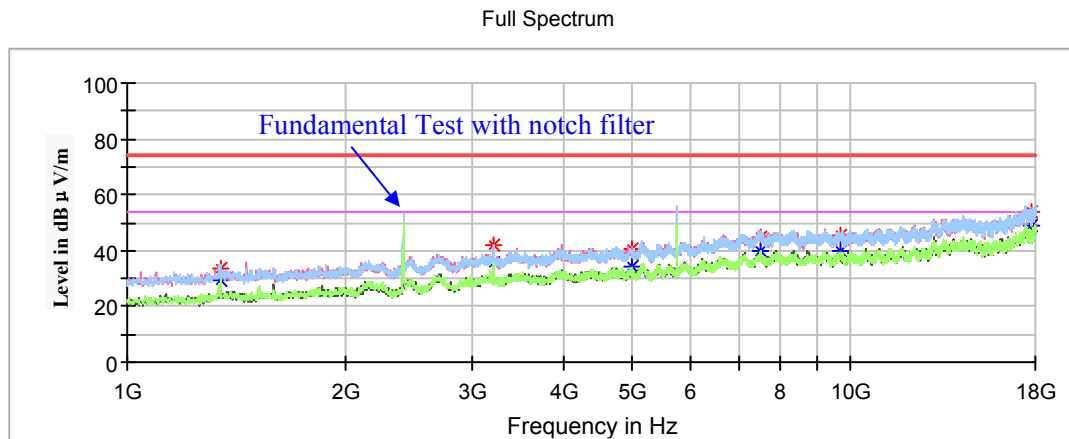


Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	QuasiPeak (dBμV/m)	Height (cm)	Polar (H/V)				
51.20	25.92	100	V	341	-17.6	40.00	14.08
53.45	26.51	100	V	347	-17.7	40.00	13.49
122.38	28.09	200	H	9	-11.3	43.50	15.41
161.34	26.98	200	H	236	-12.8	43.50	16.52
194.92	35.25	200	H	298	-12.6	43.50	8.25
205.09	31.93	200	H	132	-12.3	43.50	11.57

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

Note:

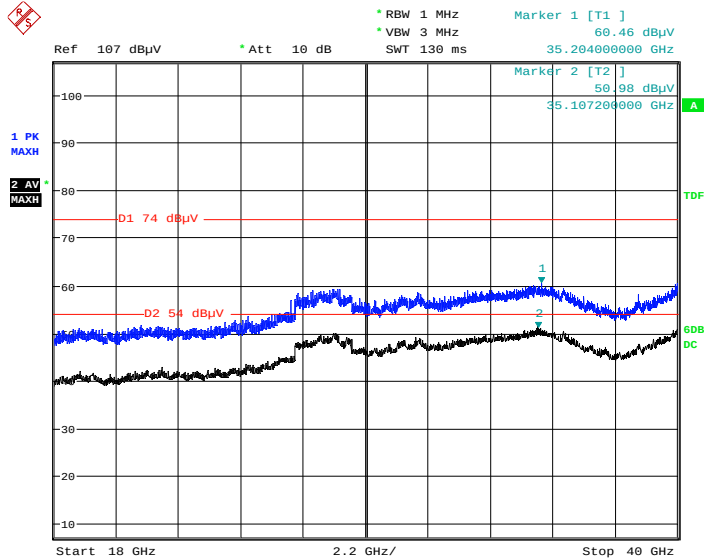
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude



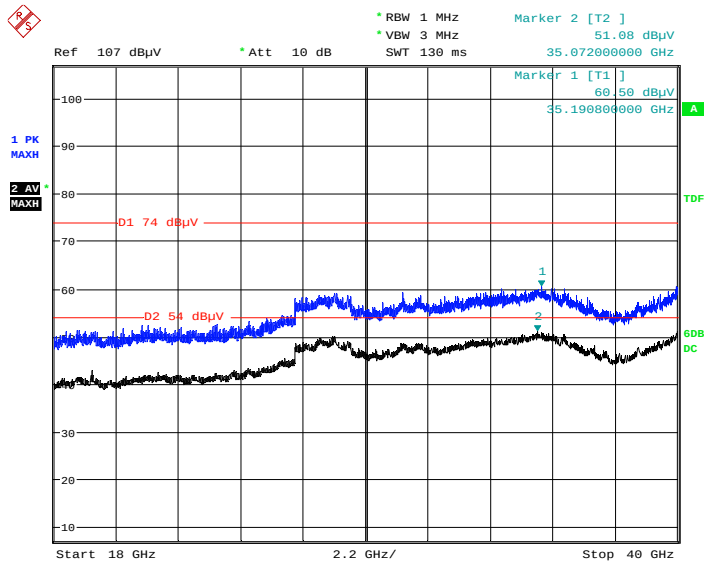
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1345.10	---	29.04	150	H	219	-17.2	54.00	24.96
1345.10	33.29	---	150	H	219	-17.2	74.00	40.71
3215.10	41.90	---	200	H	219	-9.5	68.20	26.30
4988.20	---	34.29	200	V	221	-5.2	54.00	19.71
4988.20	40.58	---	200	V	221	-5.2	74.00	33.42
7490.60	---	39.73	150	H	0	1	54.00	14.27
7490.60	44.54	---	150	H	0	1	74.00	29.46
9656.40	45.33	---	150	V	233	2.1	68.20	22.87
17819.80	---	49.01	200	V	162	8.8	54.00	4.99
17819.80	54.00	---	200	V	162	8.8	74.00	20.00

18GHz-40GHz:

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

Horizontal

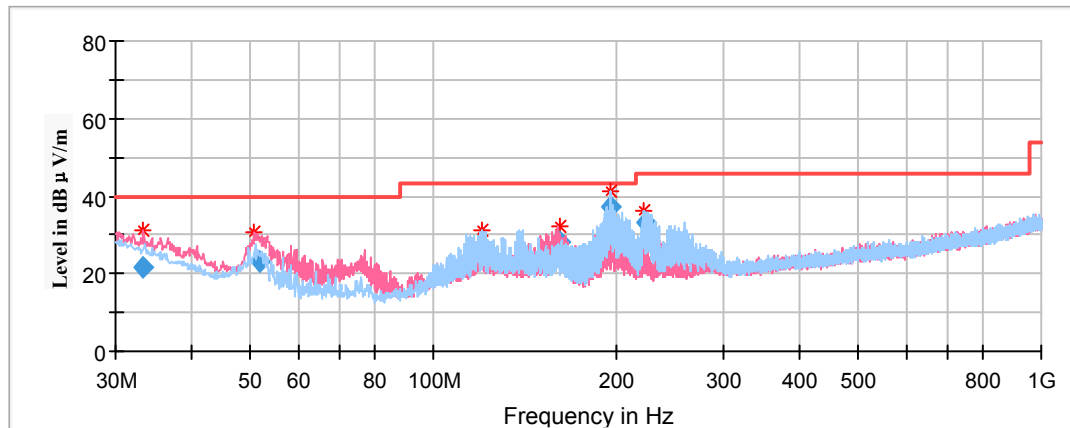
Date: 9.MAY.2020 04:59:16

Vertical

Date: 9.MAY.2020 05:10:20

2.4G Wi-Fi Antenna 2& 5G Wi-Fi Antenna 3 Transmit simultaneously 30MHz-1GHz:

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

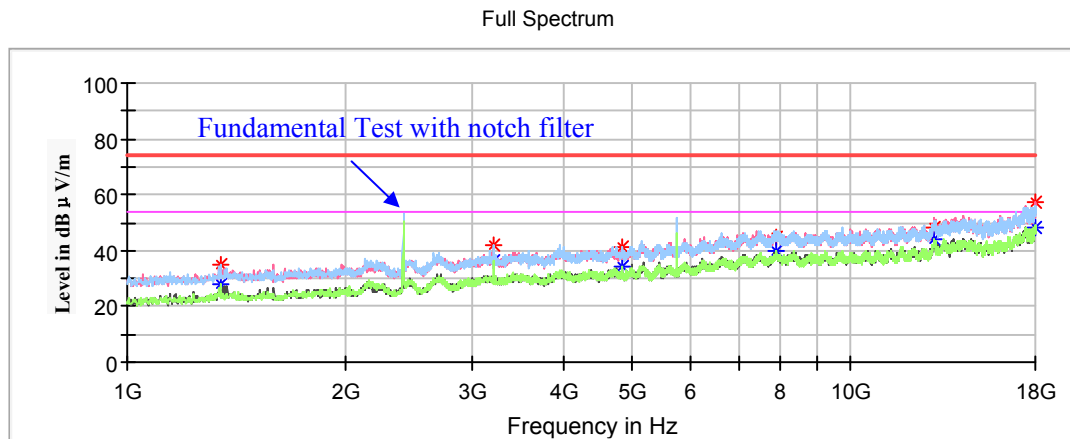


Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	QuasiPeak (dBμV/m)	Height (cm)	Polar (H/V)				
33.29	21.44	100	V	101	-6.2	40.00	18.56
51.93	23.01	200	V	179	-17.6	40.00	16.99
119.93	26.09	200	H	0	-11.2	43.50	17.41
161.51	27.96	100	V	302	-12.8	43.50	15.54
195.69	37.20	100	H	311	-12.6	43.50	6.30
223.03	33.00	200	H	277	-12.2	46.00	13.00

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

Note:

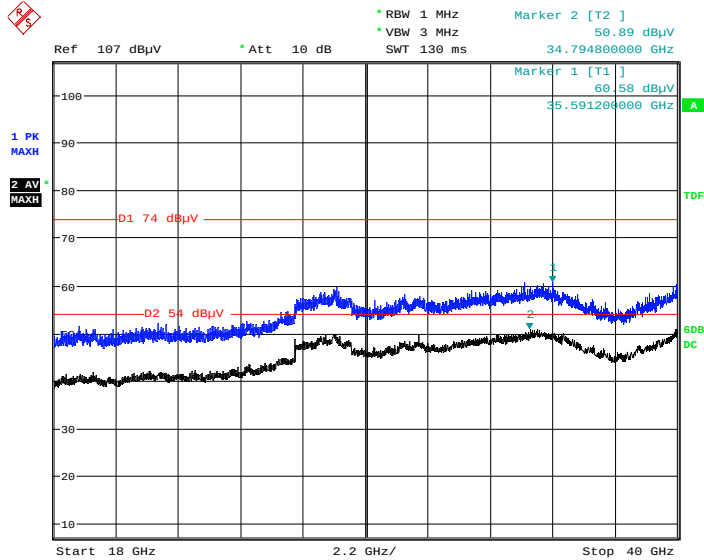
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude



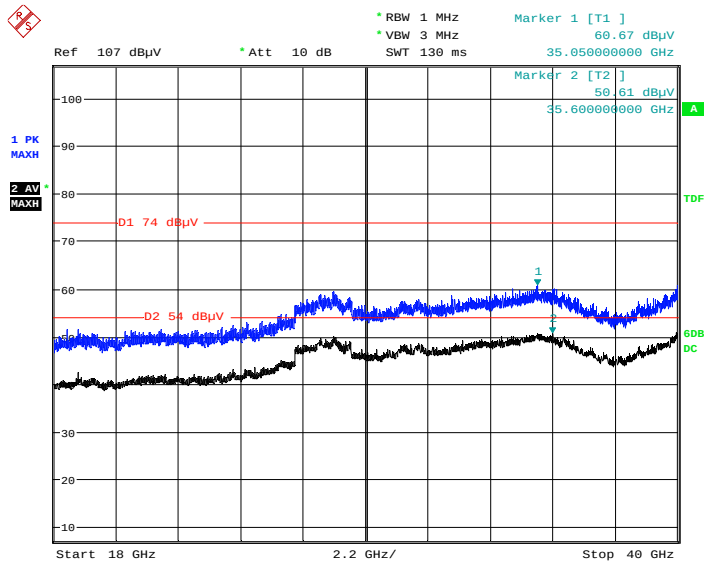
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1345.10	---	27.65	200	H	234	-17.2	54.00	26.35
1345.10	34.74	---	200	H	234	-17.2	74.00	39.26
3215.10	42.18	---	150	H	346	-9.5	68.20	26.02
4823.30	---	34.33	200	H	351	-5.5	54.00	19.67
4823.30	41.46	---	200	H	351	-5.5	74.00	32.54
7890.10	44.98	---	150	H	0	1.6	68.20	23.22
13063.20	48.29	---	200	H	199	5.3	68.20	19.91
17959.20	---	48.02	150	V	95	8.8	54.00	5.98
17959.20	57.21	---	150	V	95	8.8	74.00	16.79

18GHz-40GHz:

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

Horizontal

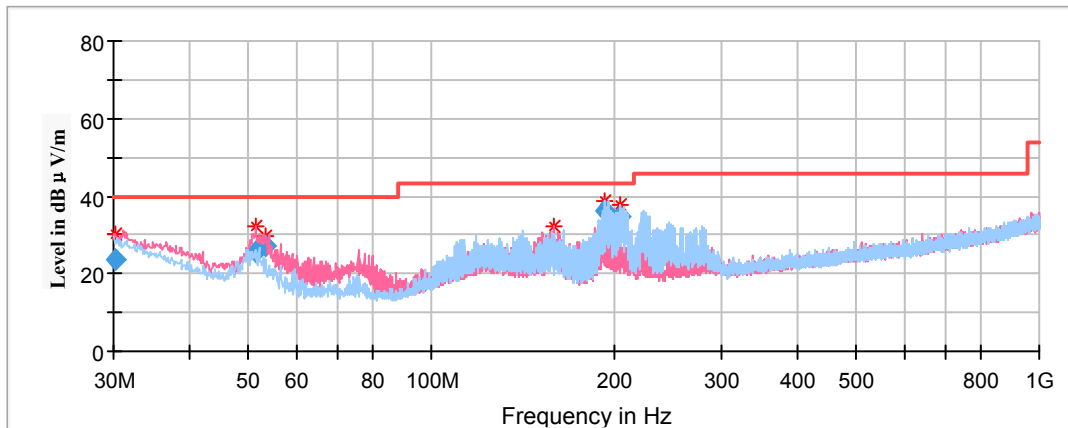
Date: 9.MAY.2020 05:25:55

Vertical

Date: 9.MAY.2020 05:45:27

2.4G Wi-Fi Antenna 1& 5G Wi-Fi Antenna 2 Transmit simultaneously 30MHz-1GHz:

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

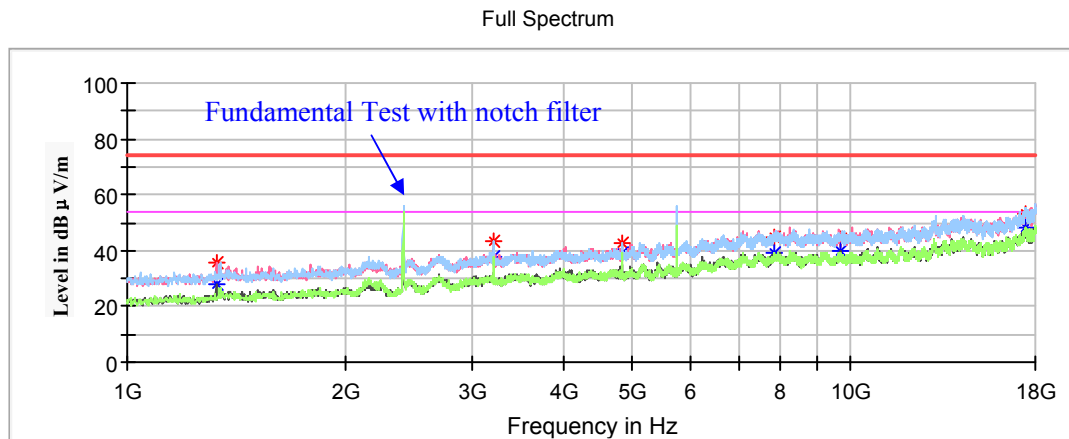


Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	QuasiPeak (dBμV/m)	Height (cm)	Polar (H/V)				
30.27	23.59	100	V	51	-4.1	40.00	16.41
51.36	25.66	100	V	258	-17.6	40.00	14.34
53.51	27.23	100	V	285	-17.6	40.00	12.77
160.19	24.74	100	V	149	-12.7	43.50	18.76
192.57	36.09	100	H	283	-12.8	43.50	7.41
204.28	34.95	200	H	145	-12.3	43.50	8.55

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

Note:

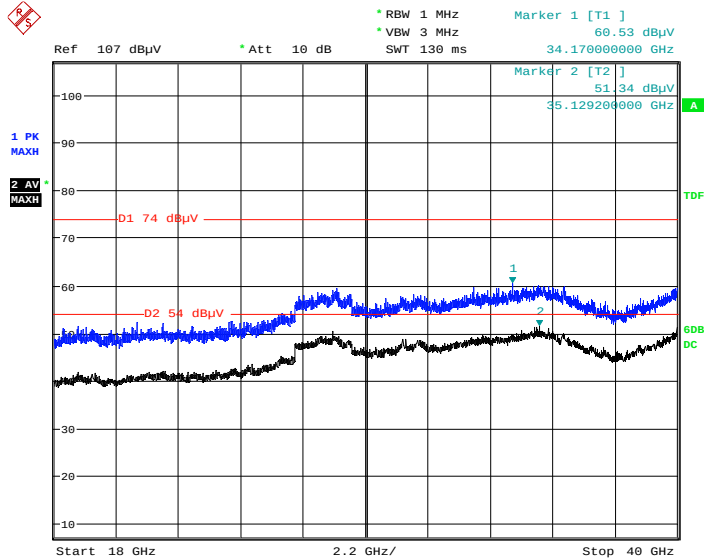
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude



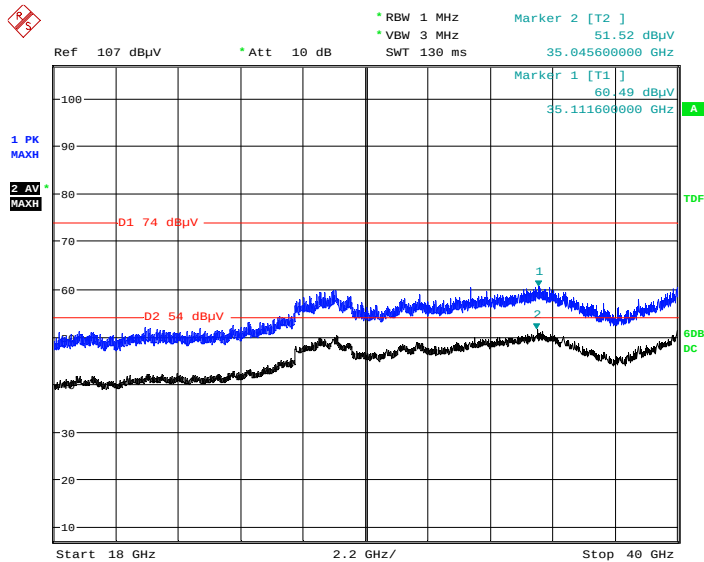
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1326.40	---	27.67	200	V	81	-17.3	54.00	26.33
1326.40	35.53	---	200	V	81	-17.3	74.00	38.47
3215.10	43.64	---	150	H	347	-9.5	68.20	24.56
4823.30	---	39.09	150	H	347	-5.5	54.00	14.91
4823.30	42.56	---	150	H	347	-5.5	74.00	31.44
7842.50	44.61	---	150	V	306	1.6	68.20	23.59
9700.60	44.40	---	150	V	169	2	68.20	23.80
17500.20	53.05	---	200	V	290	8.9	68.20	15.15

18GHz-40GHz:

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

Horizontal

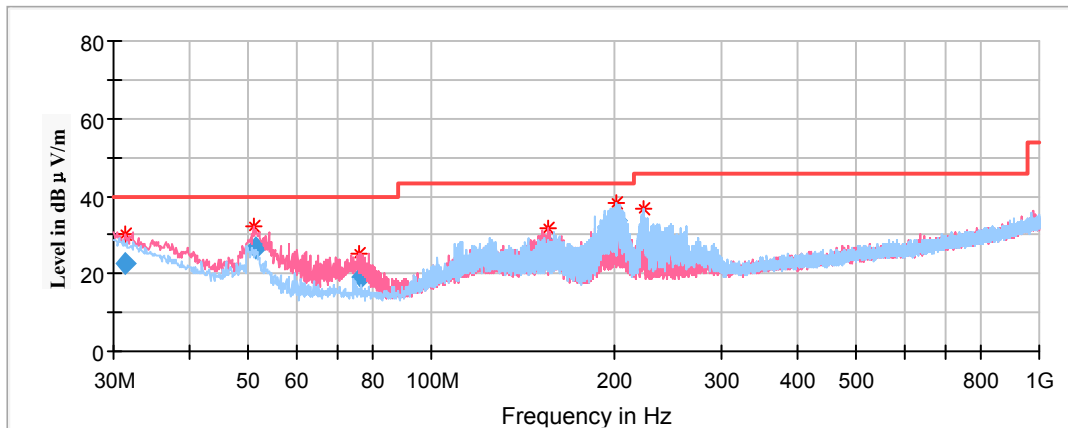
Date: 9.MAY.2020 05:46:18

Vertical

Date: 9.MAY.2020 06:00:05

2.4G Wi-Fi Antenna 1& 5G Wi-Fi Antenna 3 Transmit simultaneously 30MHz-1GHz:

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

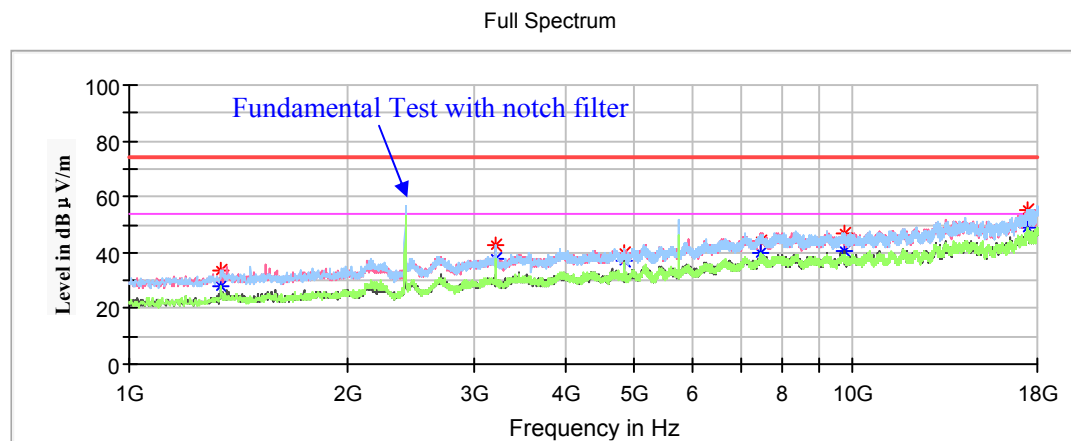


Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	QuasiPeak (dBμV/m)	Height (cm)	Polar (H/V)				
31.35	22.52	100	V	69	-4.8	40.00	17.48
51.33	26.44	100	V	347	-17.6	40.00	13.56
76.48	19.22	100	V	74	-17.6	40.00	20.78
156.64	26.89	100	V	331	-12.6	43.50	16.61
201.97	33.92	200	H	140	-12.3	43.50	9.58
224.11	25.79	200	H	310	-12.2	46.00	20.21

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

Note:

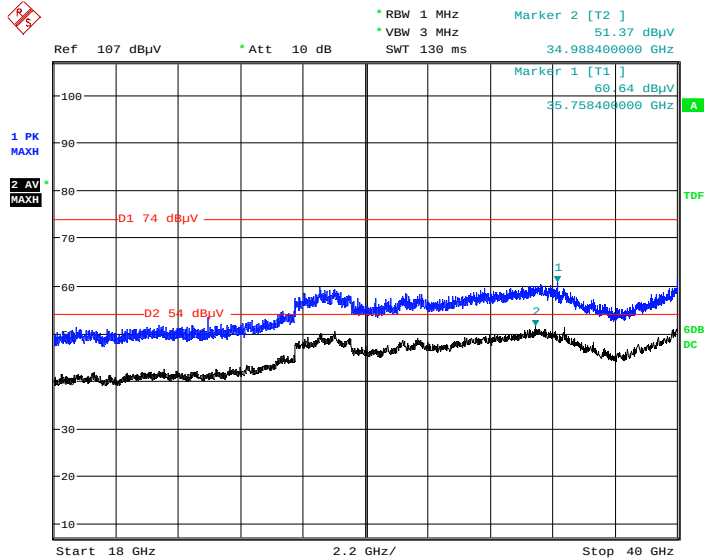
1. This test was performed with the 5725-5850MHz band reject filter.
2. Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Corrected Factor + Reading
Margin = Limit - Corrected. Amplitude



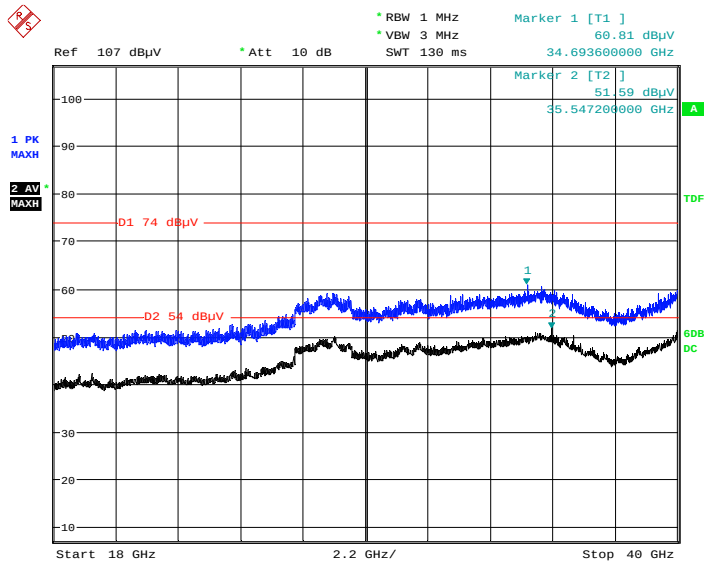
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Correct Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1340.00	---	27.90	150	H	202	-17.2	54.00	26.10
1340.00	33.28	---	150	H	202	-17.2	74.00	40.72
3215.10	42.55	---	200	H	219	-9.5	68.20	25.65
4823.30	---	37.38	150	V	281	-5.5	54.00	16.62
4823.30	39.82	---	150	V	281	-5.5	74.00	34.18
7437.90	---	39.55	200	H	327	0.9	54.00	14.45
7437.90	43.84	---	200	H	327	0.9	74.00	30.16
9724.40	47.07	---	200	V	147	2	68.20	21.13
17484.90	55.29	---	200	H	234	8.8	68.20	12.91

18GHz-40GHz:

(The worst case 2.4G Wi-Fi 802.11 n-HT20 (Chain0&Chain 1) high Channel and 5G Wi-Fi Band 1 802.11n-HT40 low channel (Chain 0&Chain 1) can transmit simultaneously in Z-axis of orientation was recorded)

Horizontal

Date: 9.MAY.2020 06:11:08

Vertical

Date: 9.MAY.2020 06:30:40

FCC §15.407(a) & §15.407(e)–EMISSION BANDWIDTH

Applicable Standard

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Procedure

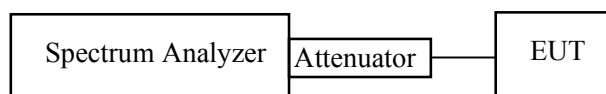
1. Emission Bandwidth (EBW)

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) 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:	23.4~24.5 °C
Relative Humidity:	48~50 %
ATM Pressure:	101.1~101.2 kPa

The testing was performed by Stone Zhang from 2020-03-26 to 2020-04-05.

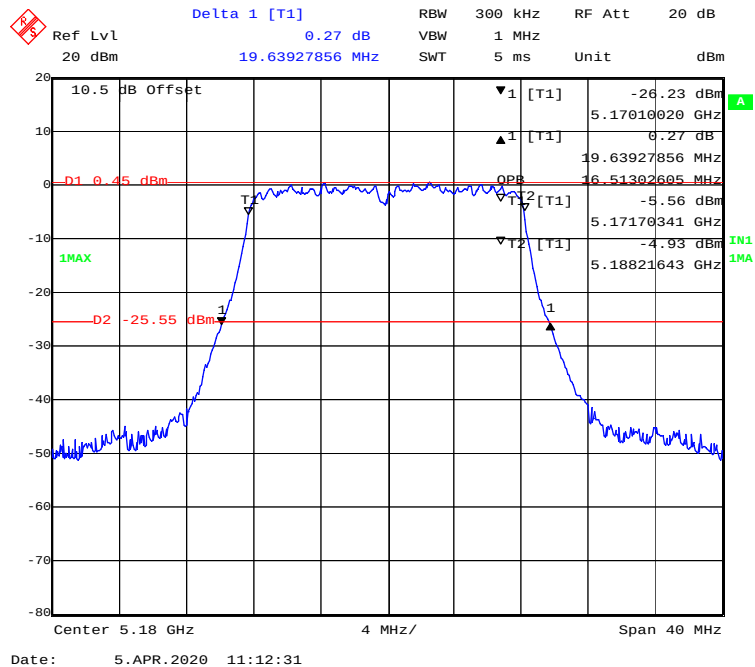
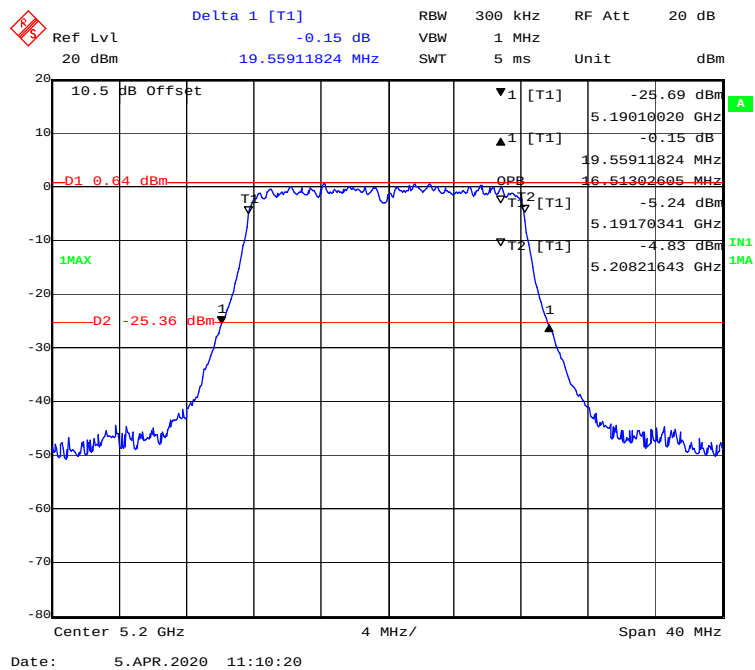
Test Result: Pass.

5150-5250 MHz:

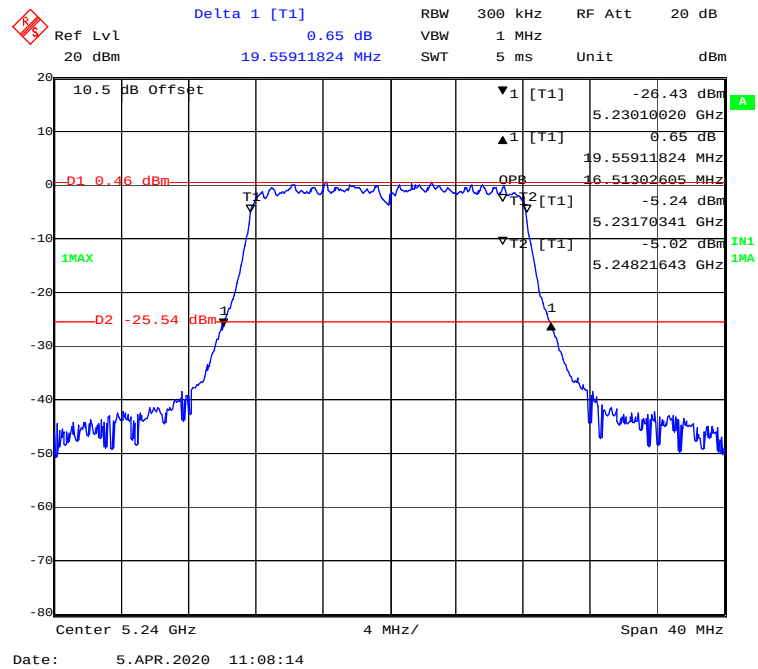
Test mode	Channel	Frequency (MHz)	26dB Bandwidth (MHz)		99% Bandwidth (MHz)	
			Chain0	Chain1	Chain0	Chain1
802.11a	Low	5180	19.639	19.559	16.513	16.513
	Middle	5200	19.559	19.479	16.513	16.513
	High	5240	19.559	19.559	16.513	16.513
802.11ac20	Low	5180	19.559	19.479	16.513	16.513
	Middle	5200	19.559	19.399	16.513	16.513
	High	5240	19.559	19.459	16.513	16.513
802.11n-HT20	Low	5180	19.639	19.559	16.513	16.513
	Middle	5200	19.559	19.479	16.513	16.513
	High	5240	19.559	19.559	16.513	16.513
802.11ac40	Low	5190	39.118	38.958	35.431	35.431
	High	5230	39.238	38.918	35.431	35.271
802.11n-HT40	Low	5190	39.279	38.798	35.431	35.431
	High	5230	39.118	39.118	35.431	35.271
802.11ac80	Low	5210	84.008	83.687	75.671	75.671

5725-5850MHz:

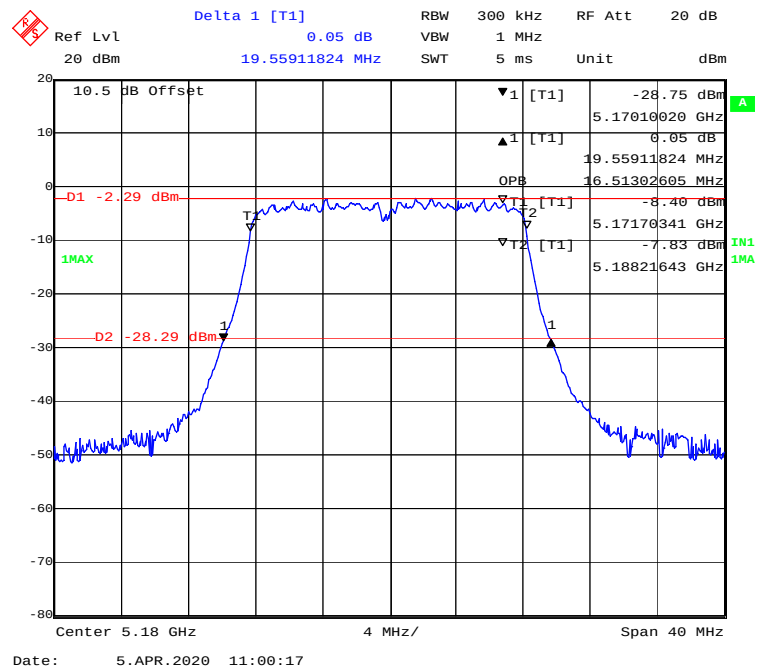
Test mode	Channel	Frequency (MHz)	6dB Bandwidth (MHz)		99% Bandwidth (MHz)		Limit (MHz)
			Chain0	Chain1	Chain0	Chain1	
802.11a	Low	5745	16.433	16.513	16.513	16.593	≥ 0.5
	Middle	5785	16.433	16.433	16.513	16.593	≥ 0.5
	High	5825	16.513	16.433	16.513	16.593	≥ 0.5
802.11ac20	Low	5745	16.513	16.433	16.513	16.593	≥ 0.5
	Middle	5785	16.513	16.433	16.513	16.513	≥ 0.5
	High	5825	16.513	16.433	16.513	16.593	≥ 0.5
802.11n-HT20	Low	5745	16.433	16.433	16.513	16.593	≥ 0.5
	Middle	5785	16.513	16.433	16.513	16.513	≥ 0.5
	High	5825	16.513	16.433	16.513	16.513	≥ 0.5
802.11ac40	Low	5755	36.148	33.988	35.431	35.431	≥ 0.5
	High	5795	34.108	33.988	35.431	35.431	≥ 0.5
802.11n-HT40	Low	5755	34.148	35.110	35.271	35.431	≥ 0.5
	High	5795	34.148	33.026	35.431	35.431	≥ 0.5
802.11ac80	Low	5775	75.992	75.992	75.671	75.992	≥ 0.5

5150-5250 MHz Band:**Chain0:****26 Bandwidth&99% Occupied Bandwidth****802.11a mode, 5180MHz****802.11a mode, 5200MHz**

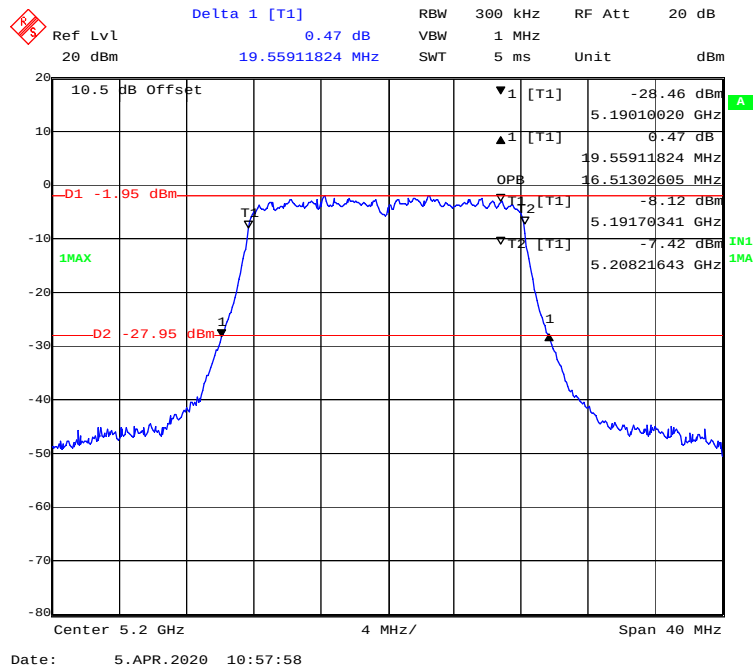
802.11a mode, 5240MHz



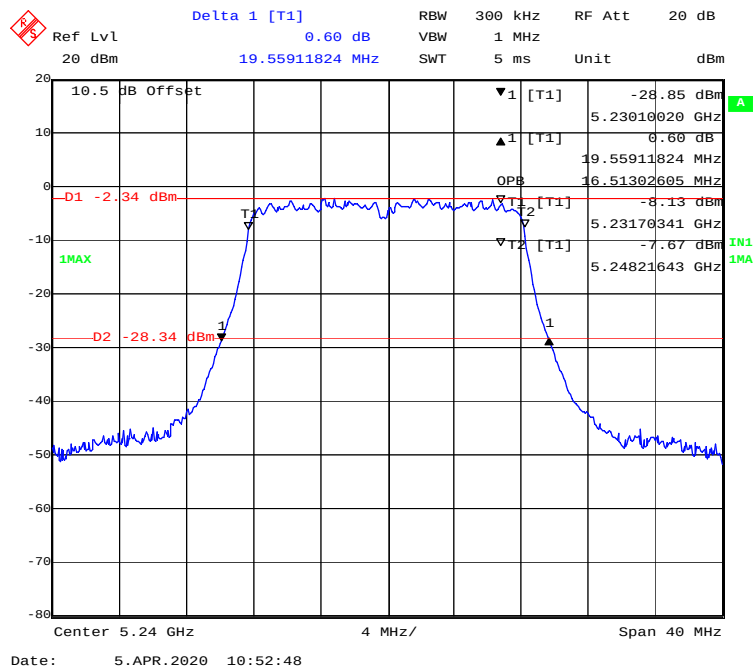
802.11ac20 mode, 5180MHz



802.11 ac20 mode, 5200MHz



802.11 ac20 mode, 5240MHz



Delta 1 [T1]

Ref Lvl 0.36 dB

20 dBm 19.63927856 MHz

RBW 300 kHz

1 MHz

SWT 5 ms

Unit dBm

20 dBm

10.5 dB Offset

-28.94 dBm

5.17010020 GHz

0.36 dB

19.63927856 MHz

16.51302605 MHz

-8.35 dBm

5.17170341 GHz

-7.77 dBm

5.18821643 GHz

D1 -2.44 dBm

1MAX

D2 -28.44 dBm

1

Center 5.18 GHz

4 MHz/

Span 40 MHz

Date: 5.APR.2020 11:02:39

Delta 1 [T1]

Ref Lvl 0.13 dB

20 dBm

19.55911824 MHz

SWT 5 ms

Unit dBm

300 kHz

RF Att 20 dB

RBW 1 MHz

VBW 1 MHz

10.5 dB Offset

-28.84 dBm

5.19010020 GHz

0.13 dB

19.55911824 MHz

16.51302605 MHz

-8.19 dBm

5.19170341 GHz

-73.36 dBm

5.20821643 GHz

D1 -2.14 dBm

1MAX

D2 -28.14 dBm

IN1 1MA

Center 5.2 GHz

4 MHz/

Span 40 MHz

Date: 5.APR.2020 11:04:26

Delta 1 [T1]

Ref Lvl 0.36 dB

20 dBm 19.5591824 MHz

RBW 300 kHz RF Att 20 dB

VBW 1 MHz

SWT 5 ms Unit dBm

10.5 dB Offset

-D1 -2.33 dBm

1MAX

D2 -28.33 dBm

▼1 [T1] -28.81 dBm

▲1 [T1] 0.36 dB

OPB

▼T1 [T1] 5.23010020 GHz

▼T2 [T1] 19.5591824 MHz

▼T2 [T1] 16.51302605 MHz

▼T2 [T1] -8.28 dBm

▼T2 [T1] 5.23170341 GHz

▼T2 [T1] -7.60 dBm

▼T2 [T1] 5.24821643 GHz

1

IN1 1MA

Center 5.24 GHz

4 MHz/

Span 40 MHz

Date: 5.APR.2020 11:06:40

Ref Lvl
20 dBm

Marker 1 [T1]
-28.16 dBm
5.17036072 GHz

RBW 500 kHz
VBW 2 MHz
SWT 5 ms

RF Att 20 dB

Unit dBm

10.5 dB Offset

▼1 [T1] -28.16 dBm
5.17036072 GHz

OPB 35.43086172 MHz

▽T1 [T1] -10.52 dBm
5.17228457 GHz

△T1 [T1] -9.94 dBm
5.20771543 GHz

△T2 [T1] -6.14 dBm
5.911823647 MHz

D1 -2.38 dBm

1MAX

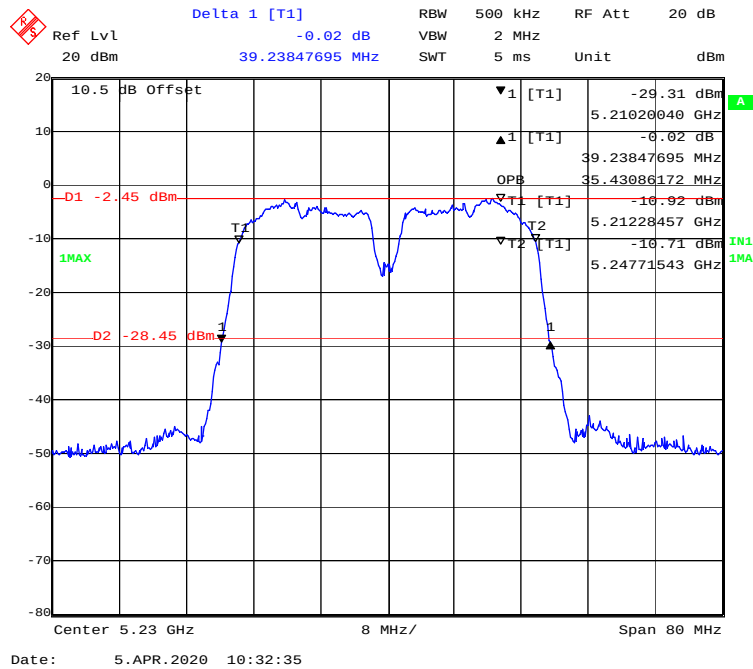
D2 -28.38 dBm

IN1 1MA

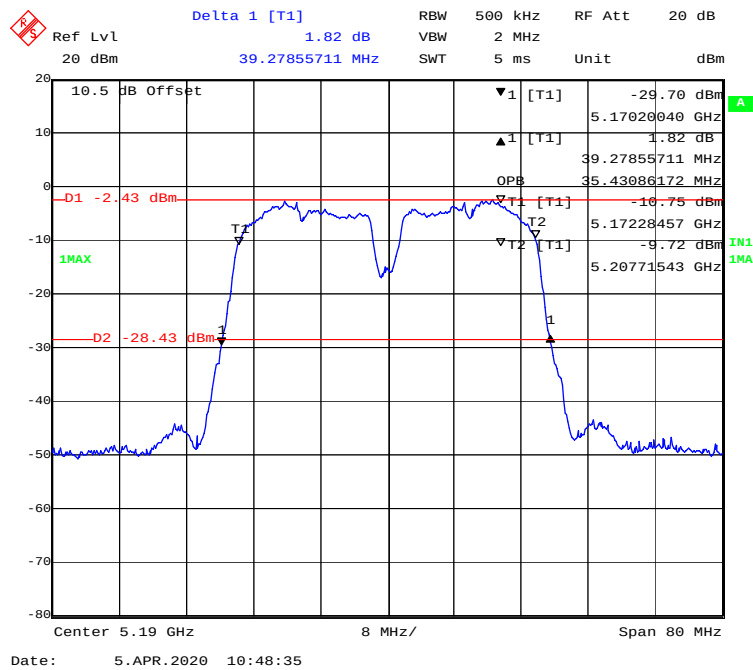
Center 5.19 GHz
8 MHz/
Span 80 MHz

Date: 5.APR.2020 10:36:05

802.11 ac40 mode, 5230MHz



802.11n-HT40 mode, 5190MHz



[illegible]

Delta 1 [T1] 0.48 dB

Ref Lvl 20 dBm

84.00801603 MHz

RBW 1 MHz

VBW 3 MHz

SWT 5 ms

RF Att 20 dB

Unit dBm

10.5 dB Offset

▼1 [T1] -29.92 dBm

▲1 [T1] 0.48 dB

OPB 84.00801603 MHz

▼T1 [T1] 5.16815631 GHz

▼T2 [T1] 5.67134269 MHz

▼T2 [T1] 5.17232465 GHz

▼T2 [T1] 5.24799599 GHz

D1 -3 dBm

D2 -29 dBm

1MAX

1

Center 5.21 GHz

16 MHz/

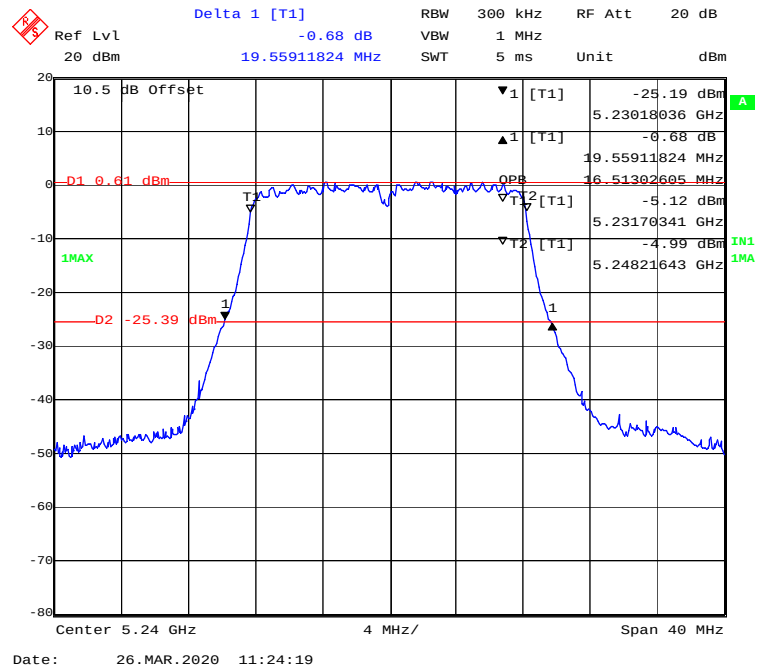
Span 160 MHz

Date: 5.APR.2020 10:30:38

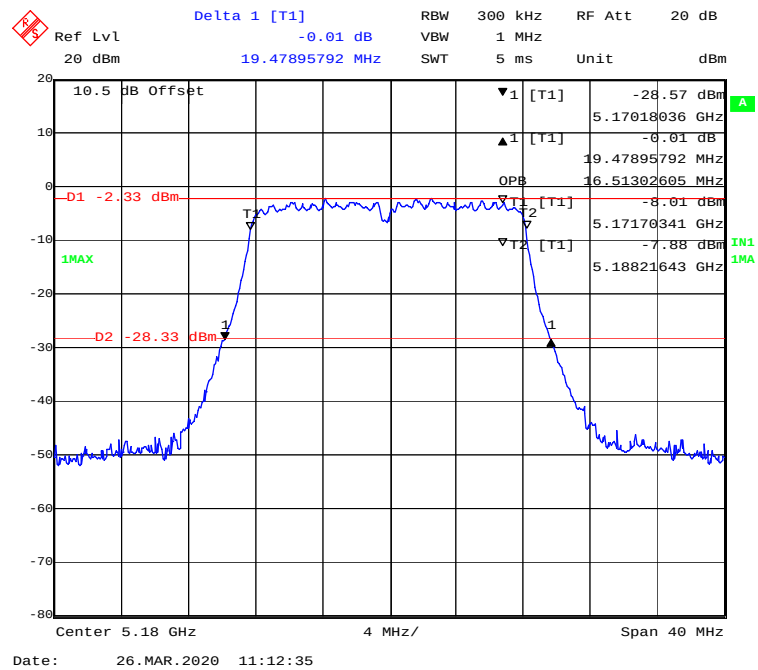
802.11a mode, 5180MHz



802.11a mode, 5240MHz



802.11ac20 mode, 5180MHz



Delta 1 [T1] 0.11 dB

Ref Lvl 20 dBm

19.39879760 MHz

300 kHz RBW

1 MHz VBW

5 ms SWT

Unit dBm

10.5 dB Offset

-1.88 dBm D1

1MAX

-27.88 dBm D2

1

2

-7.90 dBm OPB

-7.90 dBm IN1

1MA

Center 5.2 GHz

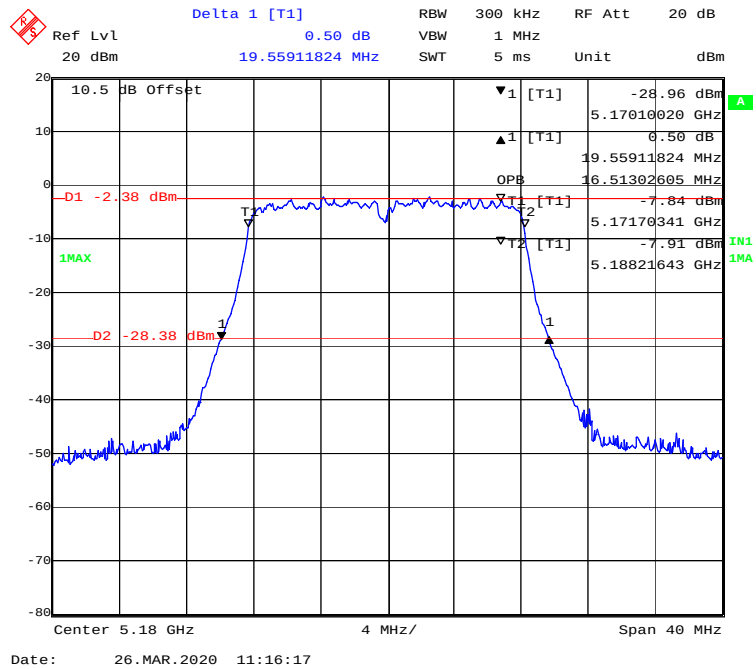
4 MHz/

Span 40 MHz

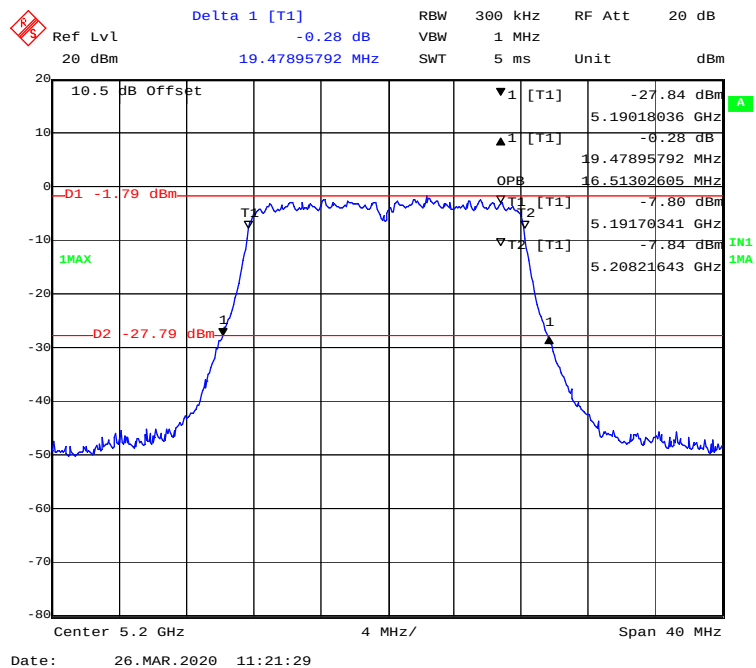
Date: 26.MAR.2020 11:11:05

[illegible]

802.11n-HT20 mode, 5180MHz



802.11n-HT20 mode, 5200MHz



Delta 1 [T1] 0.28 dB
 RBW 300 KHz RF Att 20 dB
 Ref Lvl 20 dBm VBW 1 MHz
 19.55911824 MHz SWT 5 ms Unit dBm

10.5 dB Offset
 -29.03 dBm
 5.23018036 GHz
 0.28 dB
 19.55911824 MHz
 16.51302605 MHz
 -8.43 dBm
 5.23170341 GHz
 -7.86 dBm
 5.24821643 GHz

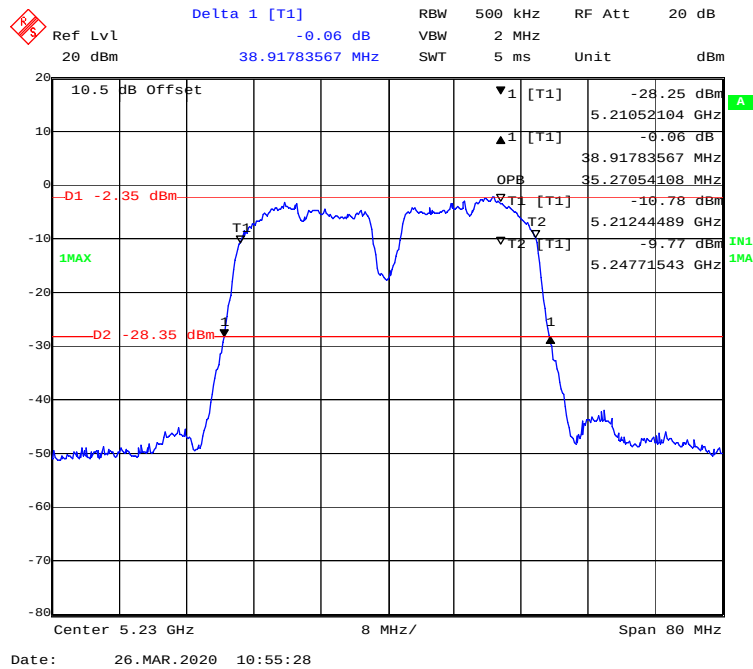
D1 -2.3 dBm
 1MAX
 D2 -28.3 dBm
 1
 1
 1

Center 5.24 GHz 4 MHz/ Span 40 MHz

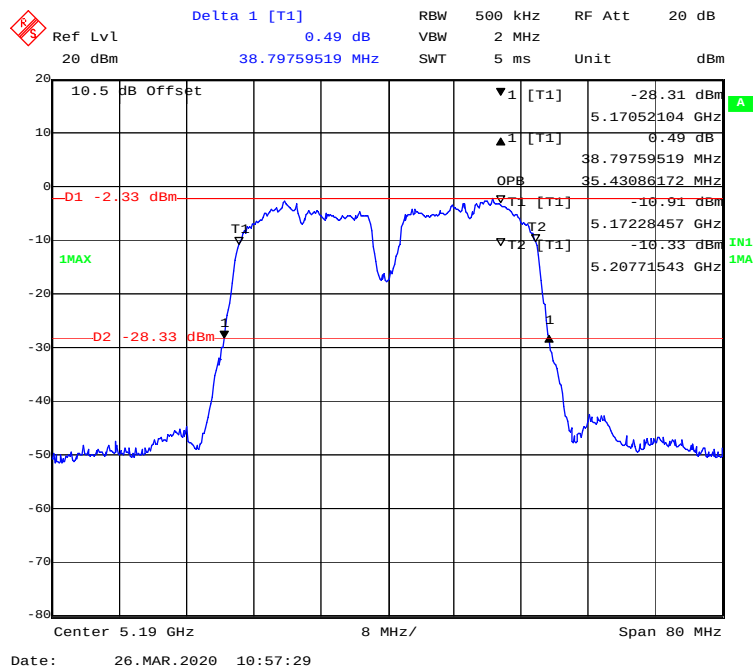
Date: 26.MAR.2020 11:22:44

Delta 1 [T1] 0.30 dB
 Ref Lvl 20 dBm
 38.95791583 MHz
 RBW 500 kHz
 VBW 2 MHz
 RF Att 20 dB
 Unit dBm
 5 ms
 10.5 dB Offset
 -28.56 dBm
 5.17036072 GHz
 0.30 dB
 38.95791583 MHz
 35.43086172 MHz
 -11.17 dBm
 5.17228457 GHz
 -10.37 dBm
 5.20771543 GHz
 -2.32 dBm
 -28.32 dBm
 1MAX
 IN1 1MA
 Center 5.19 GHz
 8 MHz/
 Span 80 MHz
 Date: 26. MAR. 2020 10:56:27

802.11 ac40 mode, 5230MHz



802.11n-HT40 mode, 5190MHz



Delta 1 [T1] -0.68 dB

Ref Lvl 20 dBm

39.11823647 MHz

RBW 500 kHz

VBW 2 MHz

SWT 5 ms

RF Att 20 dB

Unit dBm

10.5 dB Offset

▼1 [T1] -28.56 dBm

5.21036072 GHz

▲1 [T1] -0.68 dB

39.11823647 MHz

OPB 35.27054108 MHz

▼T1 [T1] -10.67 dBm

5.21244489 GHz

▼T2 [T1] -9.79 dBm

5.24771543 GHz

D1 -2.16 dBm

D2 -28.16 dBm

1MAX

IN1 1MAX

Center 5.23 GHz

8 MHz/

Span 80 MHz

Date: 26.MAR.2020 10:58:45

Delta 1 [T1] 0.63 dB

Ref Lvl 20 dBm

83.68737475 MHz

1 MHz RBW 3 MHz VBW 5 ms RF Att 20 dB

Unit dBm

10.5 dB Offset

D1 -28.29 dBm

1MAX

D2 -28.29 dBm

1

1 [T1] -28.89 dBm

1 [T1] 0.63 dB

83.68737475 MHz

OPB 75.67134269 MHz

1 [T1] -7.47 dBm

12 [T1] 5.17232465 GHz

1 [T1] -6.33 dBm

1 [T1] 5.24799599 GHz

1MAX

Center 5.21 GHz 16 MHz/ Span 160 MHz

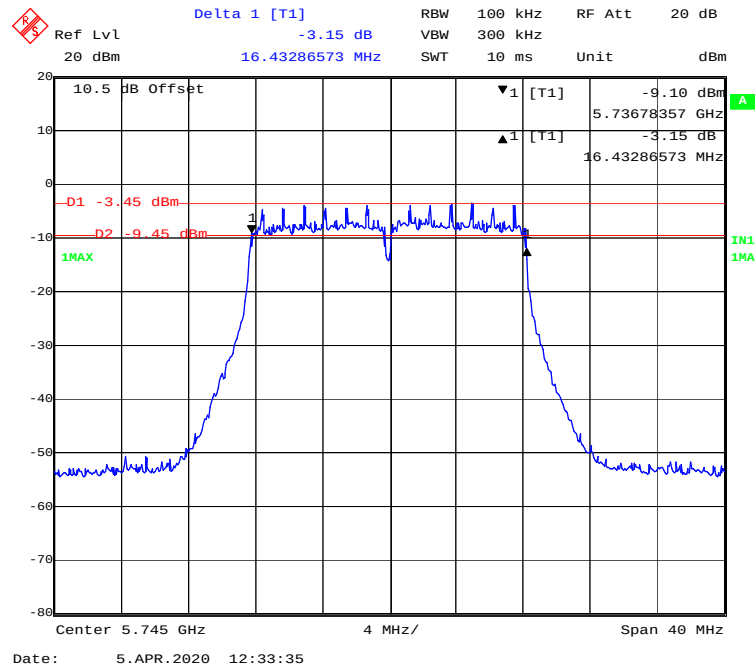
Date: 26. MAR. 2020 10:54:09

5725-5850 MHz Band

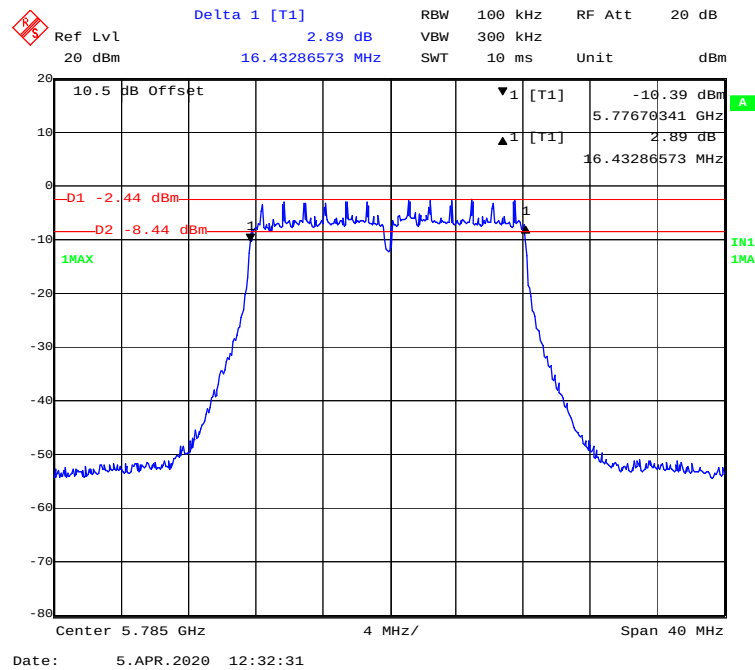
Chain0:

6 Bandwidth

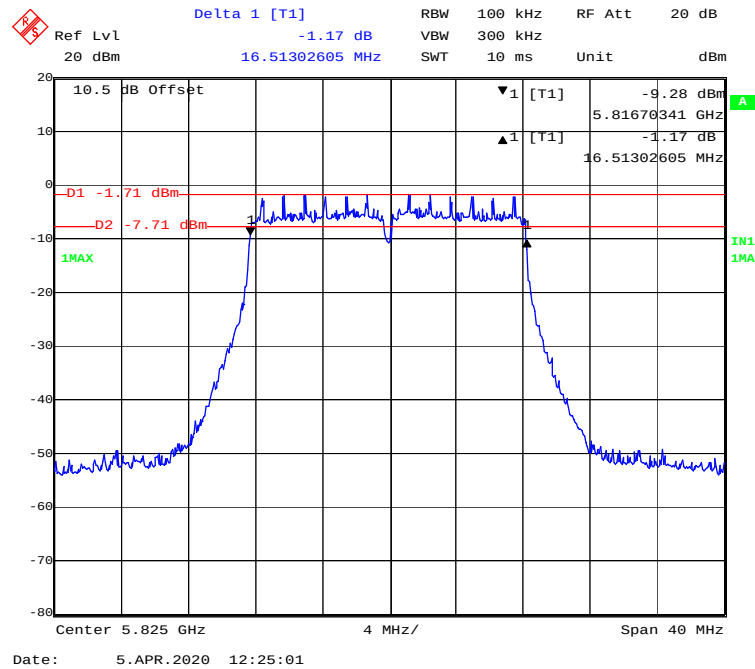
802.11a mode, 5745MHz



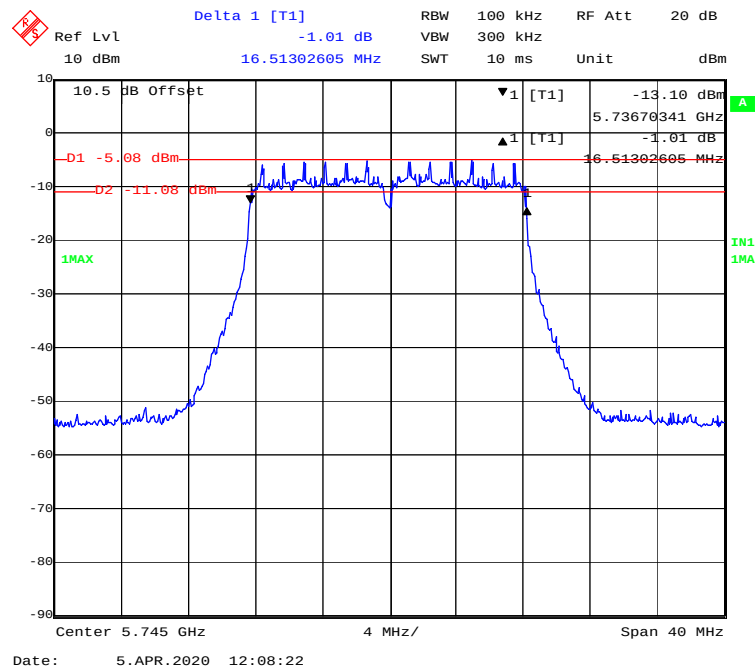
802.11a mode, 5785MHz



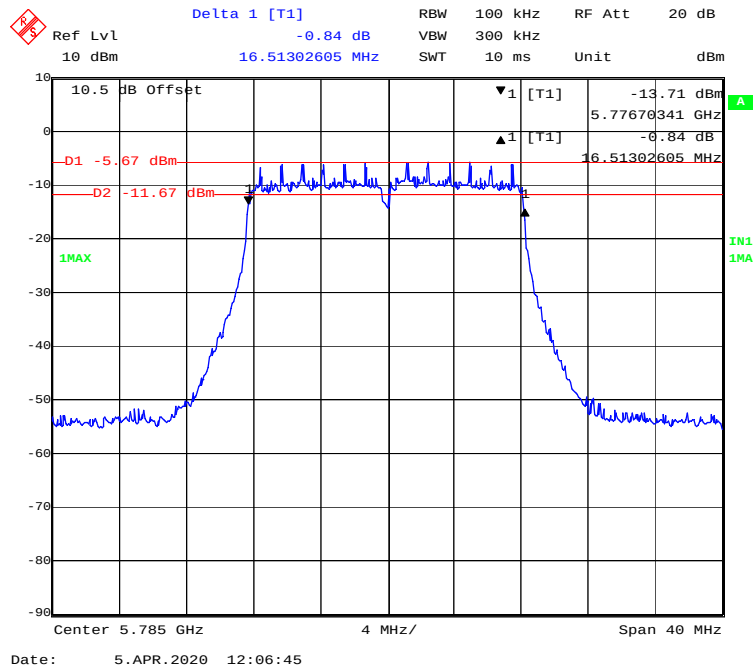
802.11a mode, 5825MHz



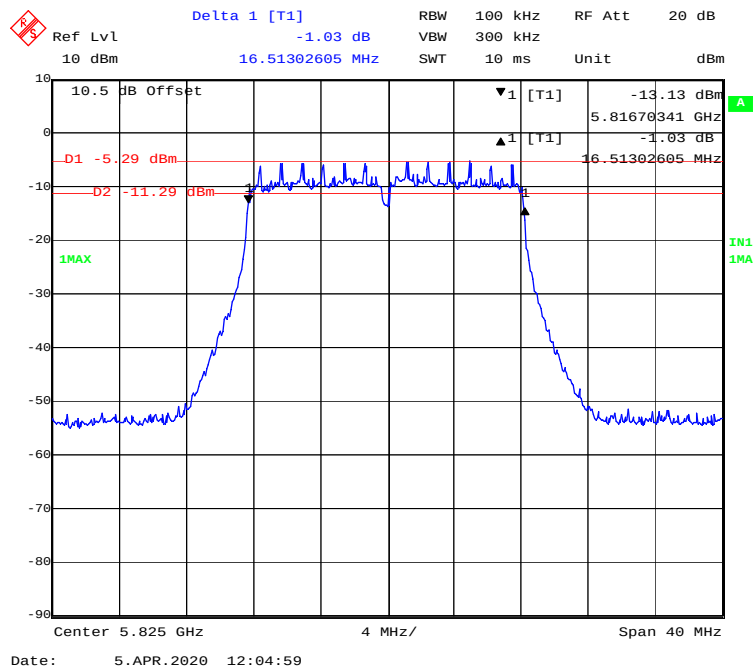
802.11ac20 mode, 5745MHz



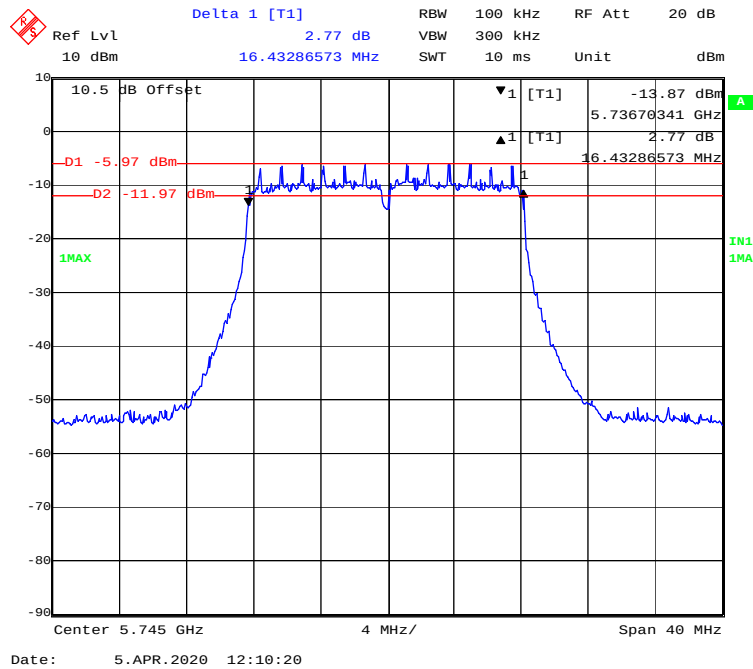
802.11 ac20 mode, 5785MHz



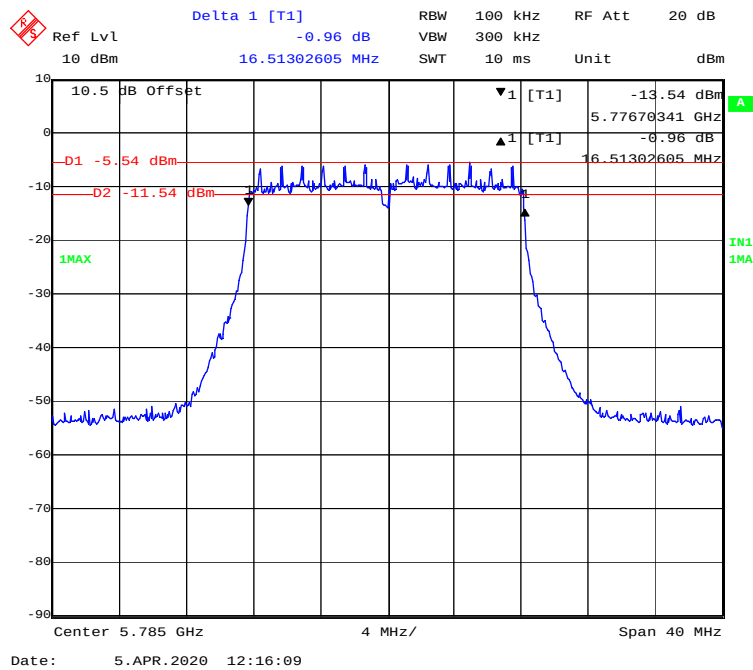
802.11 ac20 mode, 5825MHz



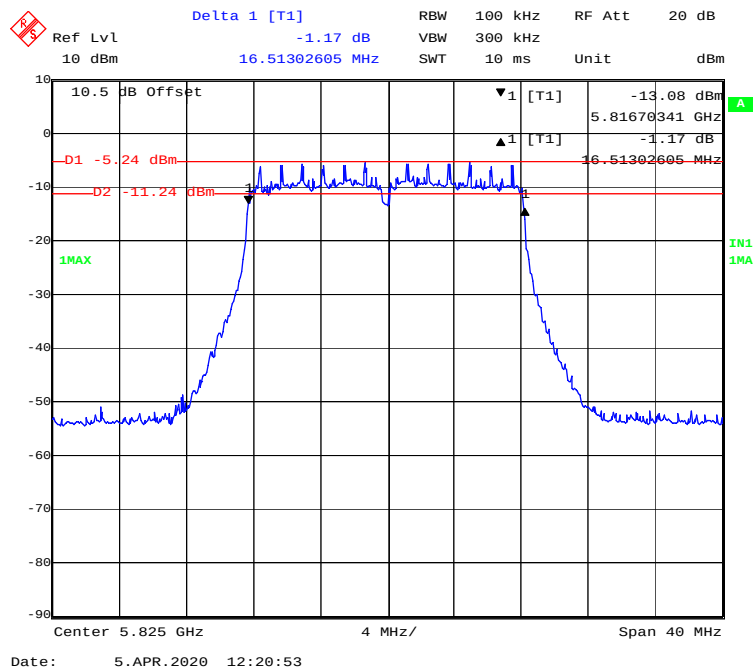
802.11n-HT20 mode, 5745MHz



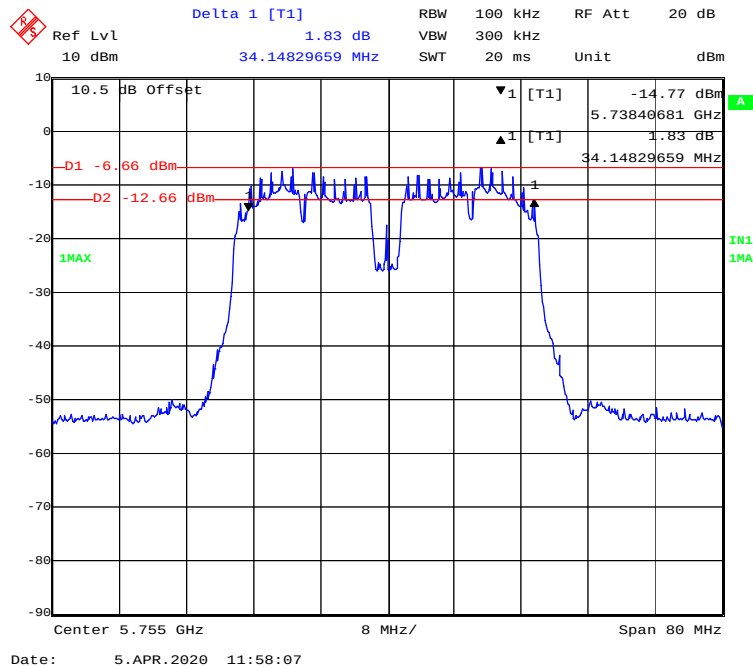
802.11n-HT20 mode, 5785MHz



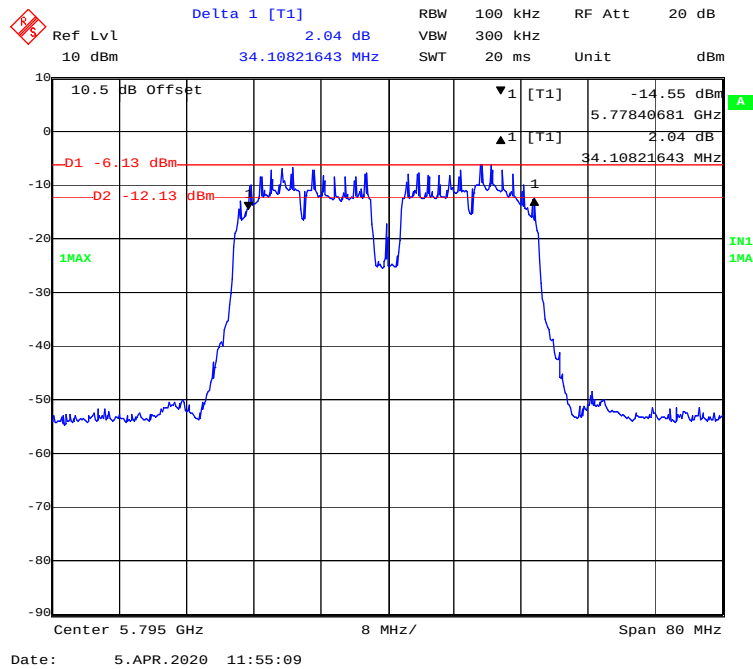
802.11n-HT20 mode, 5825MHz



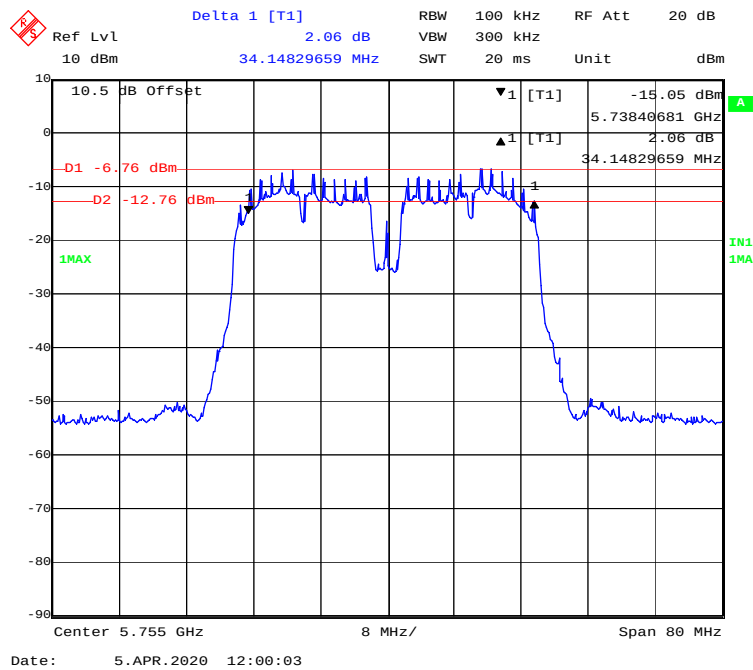
802.11ac40 mode, 5755MHz



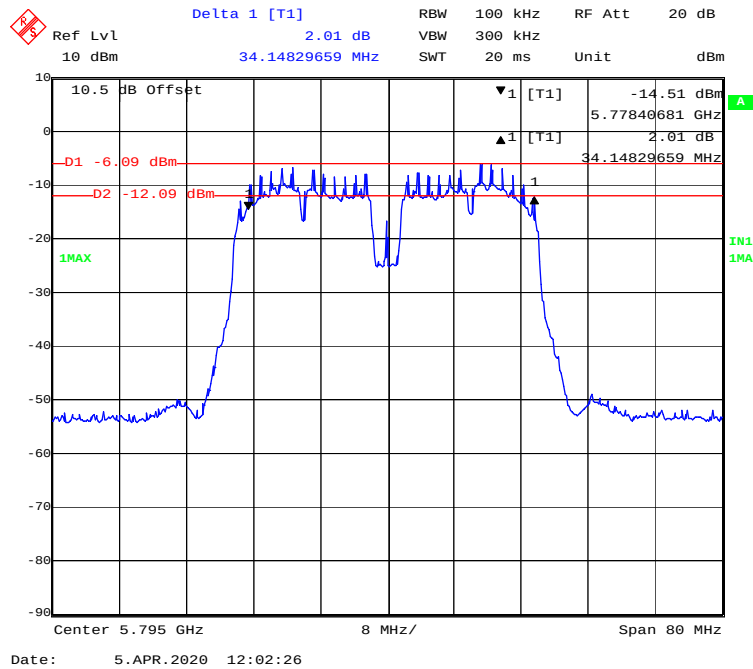
802.11 ac40 mode, 5795MHz



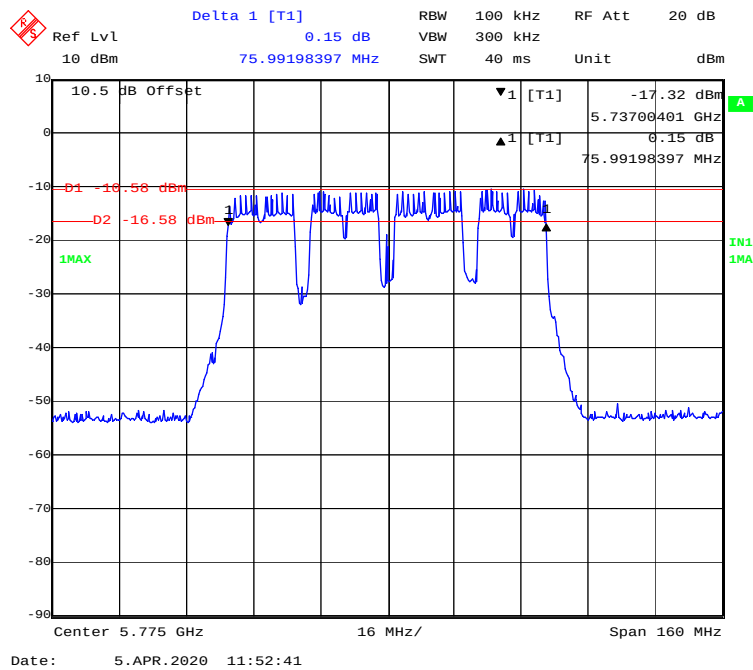
802.11n-HT40 mode, 5755MHz



802.11n-HT40 mode, 5795MHz



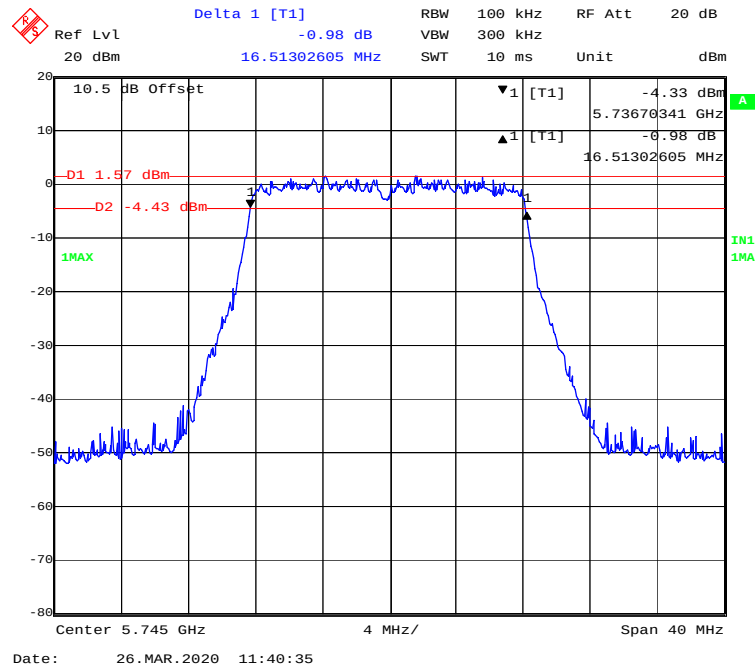
802.11ac80 mode, 5775MHz



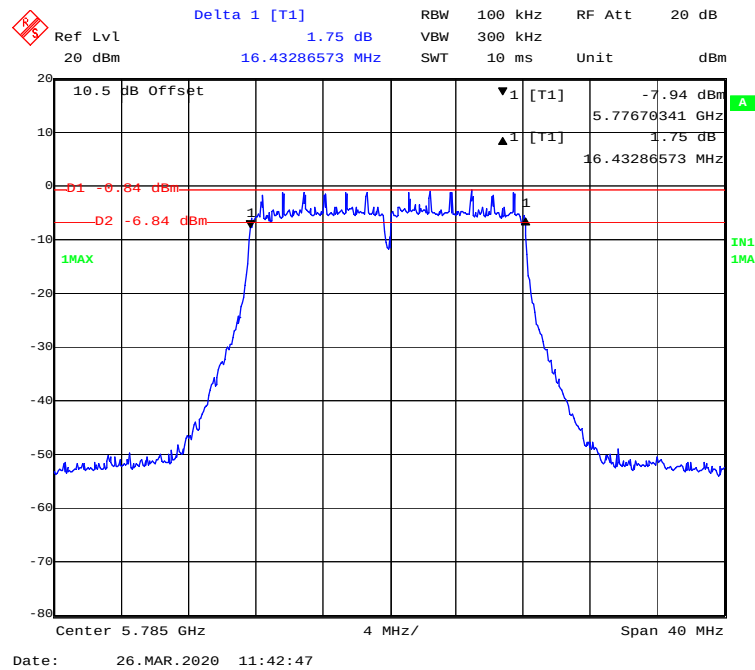
Chain1:

6 Bandwidth

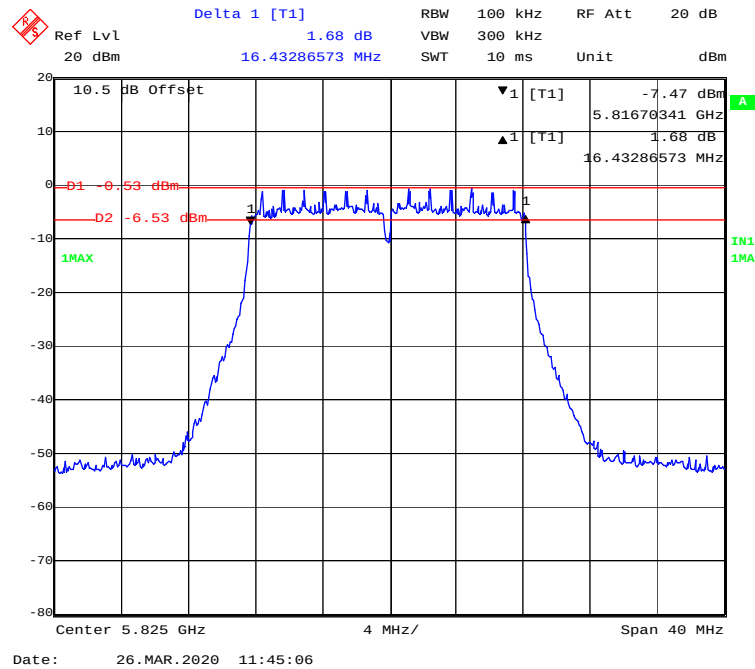
802.11a mode, 5745MHz



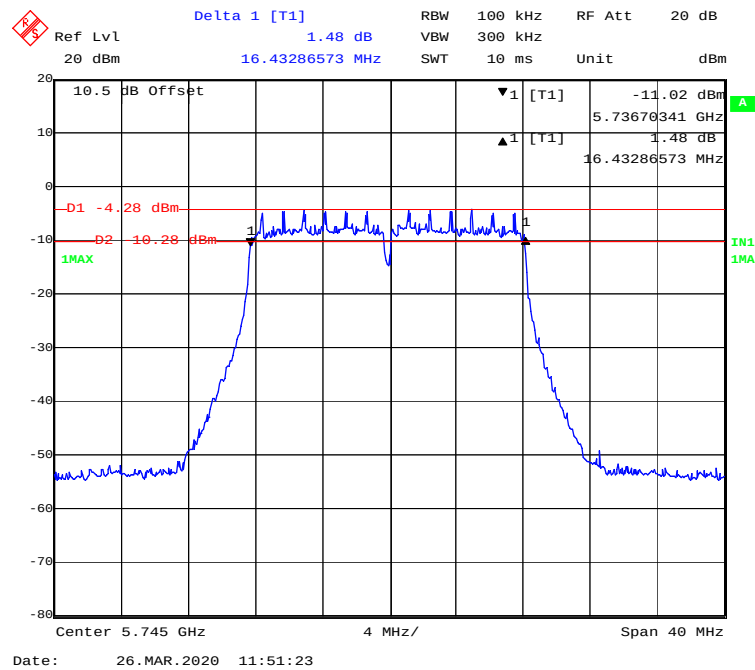
802.11a mode, 5785MHz



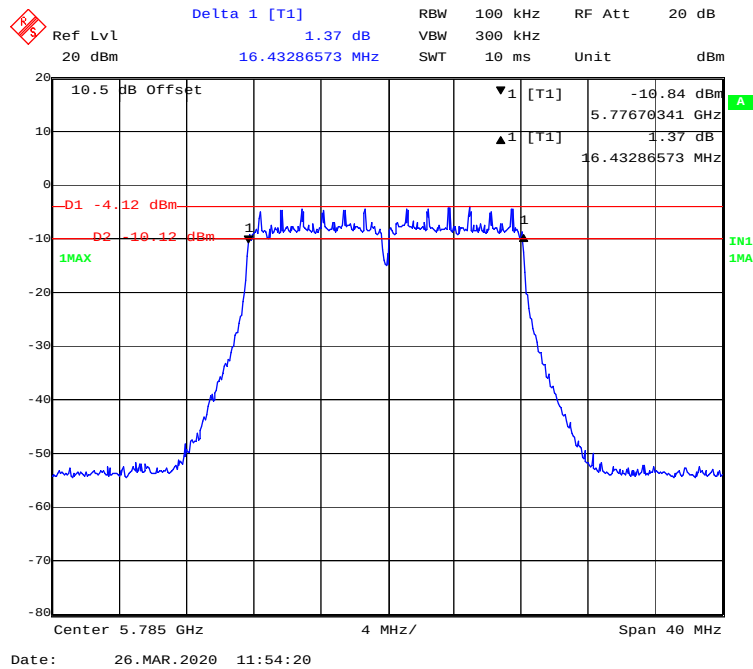
802.11a mode, 5825MHz



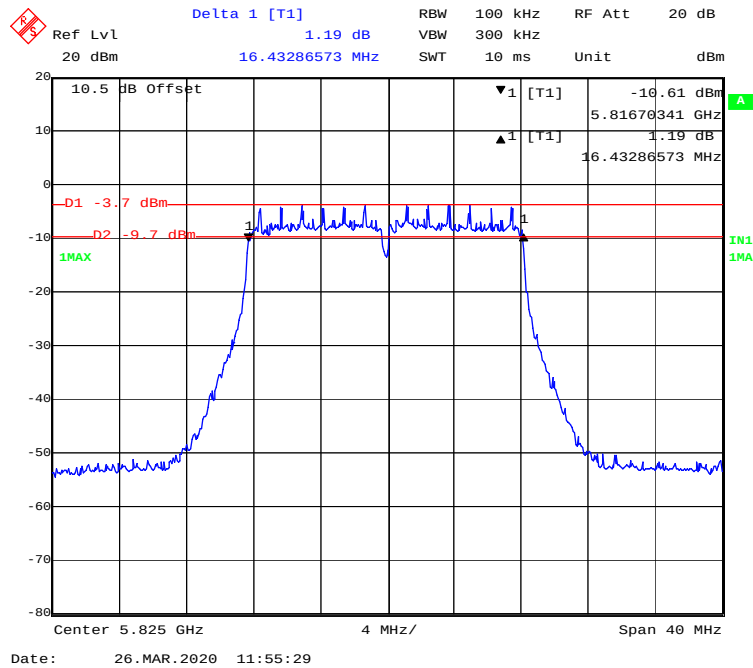
802.11ac20 mode, 5745MHz



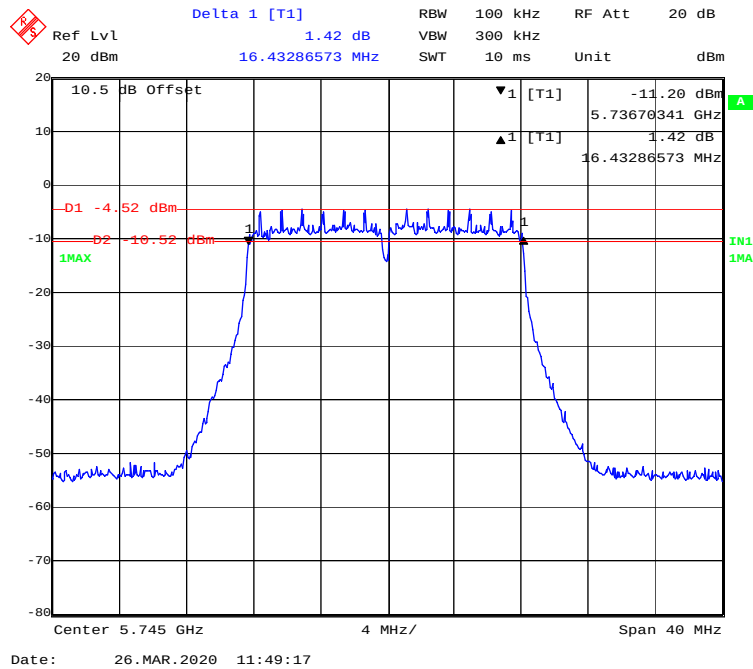
802.11 ac20 mode, 5785MHz



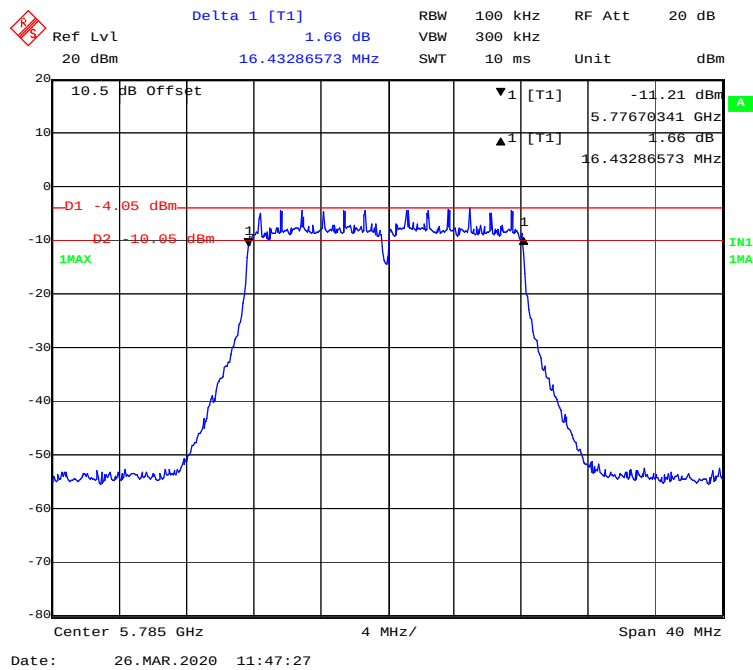
802.11 ac20 mode, 5825MHz



802.11n-HT20 mode, 5745MHz



802.11n-HT20 mode, 5785MHz



Delta 1 [T1] 1.50 dB
 Ref Lvl 20 dBm
 16.43286573 MHz
 RBW 100 kHz
 VBW 300 kHz
 SWT 10 ms
 RF Att 20 dB
 Unit dBm

10.5 dB Offset
 -10.69 dBm
 5.81670341 GHz
 1.50 dB
 16.43286573 MHz
 -D1 -3.79 dBm
 -D2 -9.79 dBm
 1MAX

Center 5.825 GHz
 4 MHz/
 Span 40 MHz

Date: 26.MAR.2020 11:46:18

Delta 1 [T1]

Ref Lvl 1.72 dB

20 dBm 33.98797595 MHz

RBW 100 kHz RF Att 20 dB

SWT 20 ms Unit dBm

10.5 dB Offset

▼1 [T1] -13.61 dBm

▲1 [T1] 5.73840681 GHz

1.72 dB

33.98797595 MHz

D1 -5.8 dBm

D2 -11.8 dBm

1MAX

IN1

1MA

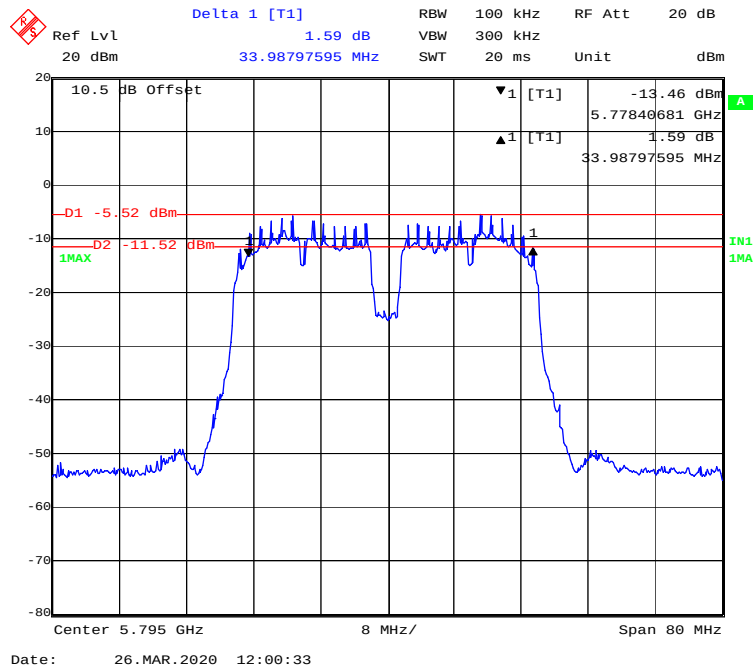
Center 5.755 GHz

8 MHz/

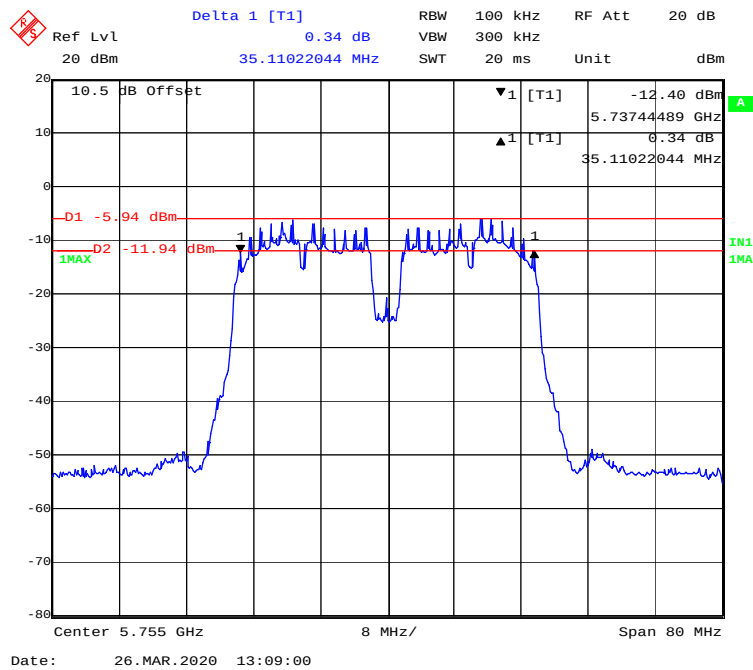
Span 80 MHz

Date: 26.MAR.2020 11:58:57

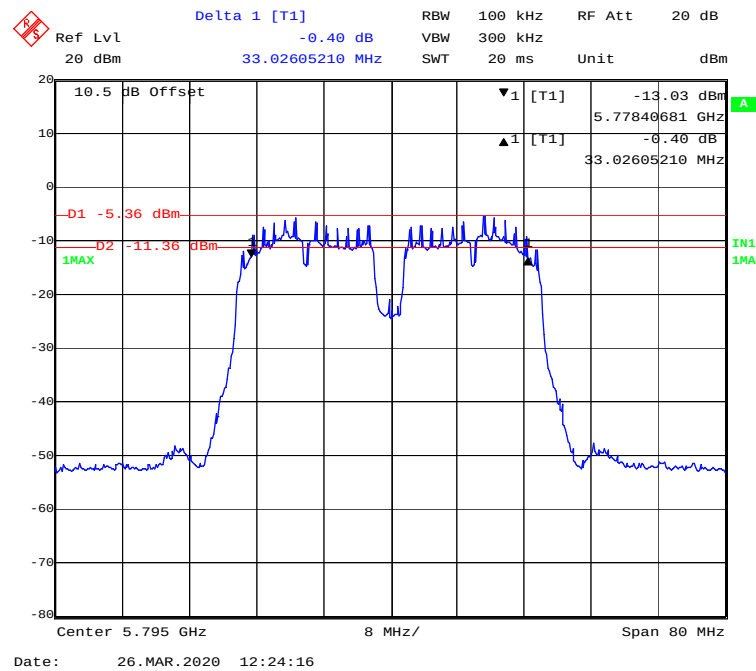
802.11 ac40 mode, 5795MHz



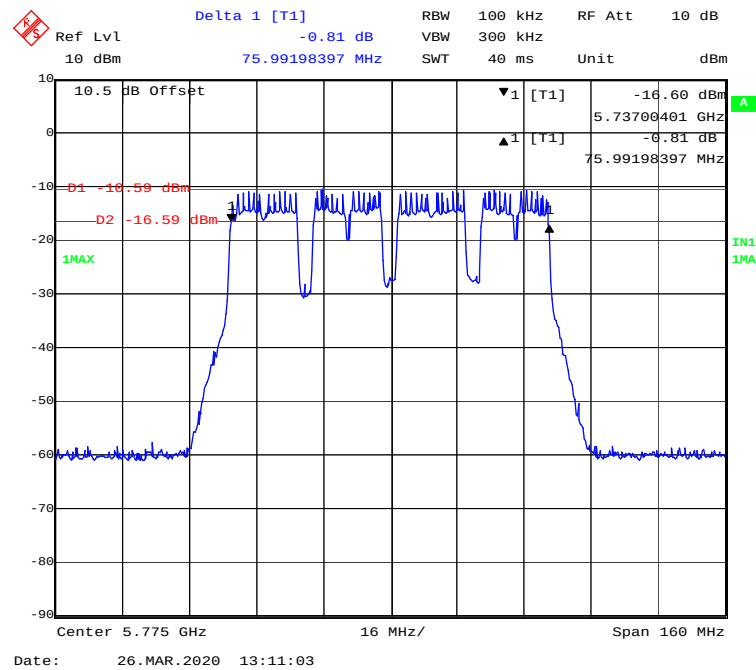
802.11n-HT40 mode, 5755MHz



802.11n-HT40 mode, 5795MHz

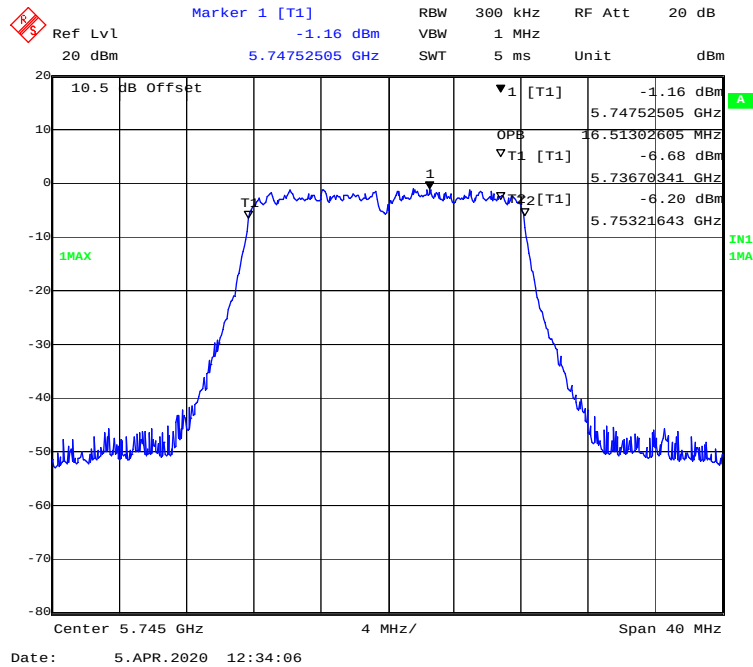


802.11ac80 mode, 5775MHz

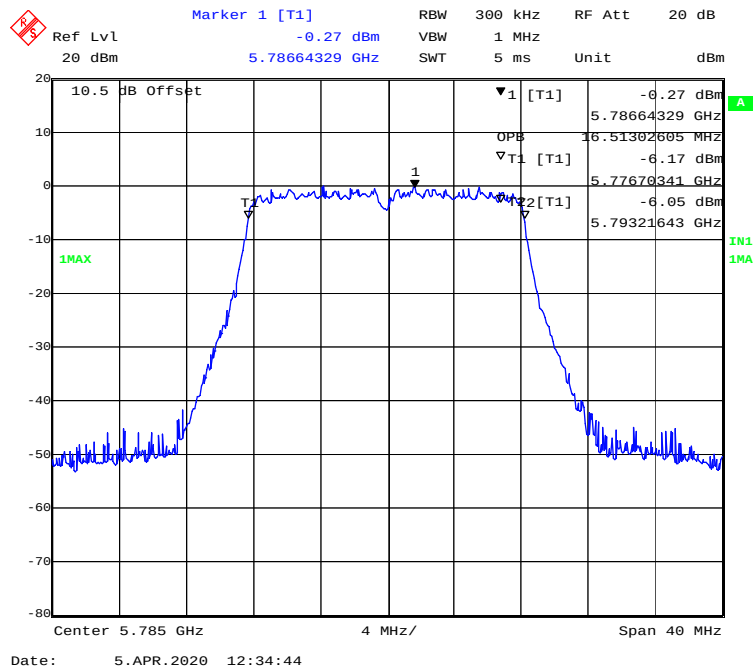


99% Occupied Bandwidth-Chain0

802.11a mode, 5745MHz



802.11a mode, 5785MHz



Ref Lvl 1.37 dBm RBW 300 kHz RF Att 20 dB
 20 dBm 5.82119238 GHz SWT 1 MHz Unit dBm

10.5 dB Offset

▼1 [T1] 1.37 dBm
 5.82119238 GHz
 OPB 16.51302605 MHz
 ▽T1 [T1] -4.20 dBm
 5.81670341 GHz
 ▽T2 [T1] -4.34 dBm
 5.83321643 GHz

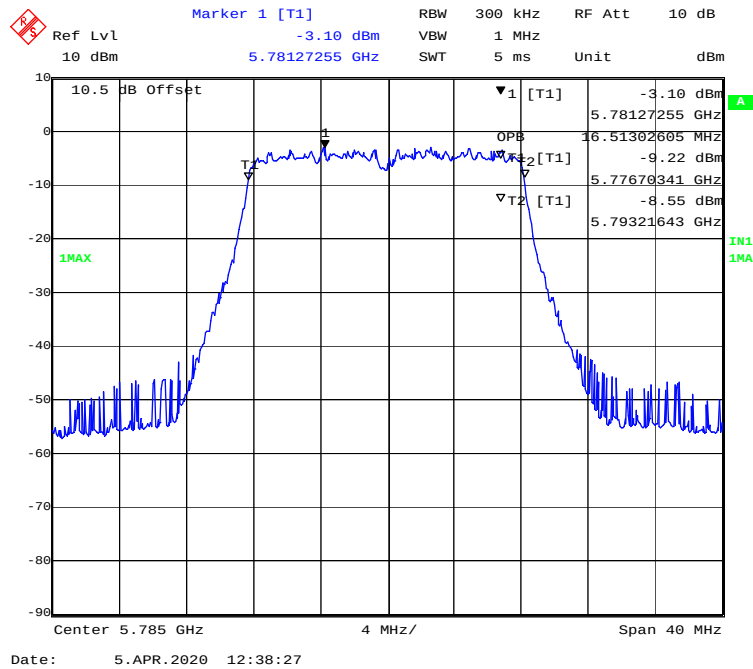
1MAX

Center 5.825 GHz 4 MHz/ Span 40 MHz

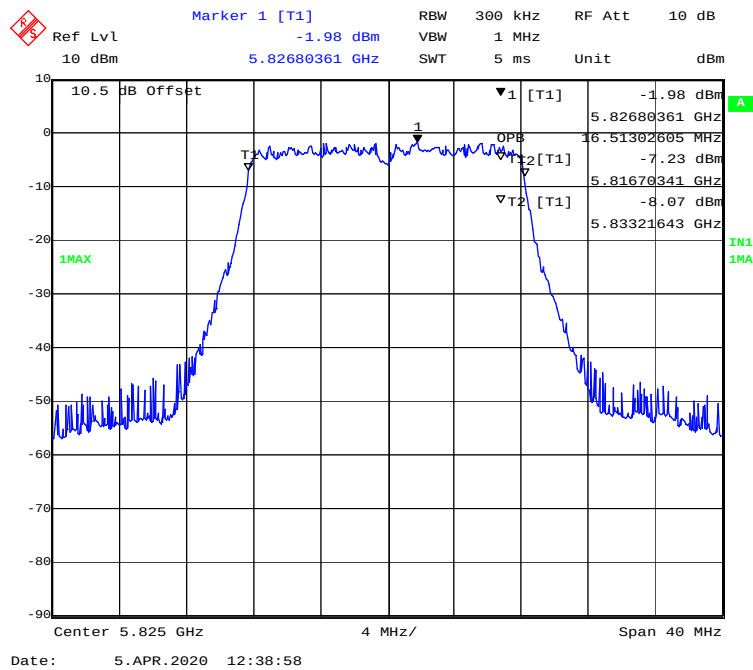
Date: 5.APR.2020 12:35:12

[illegible]

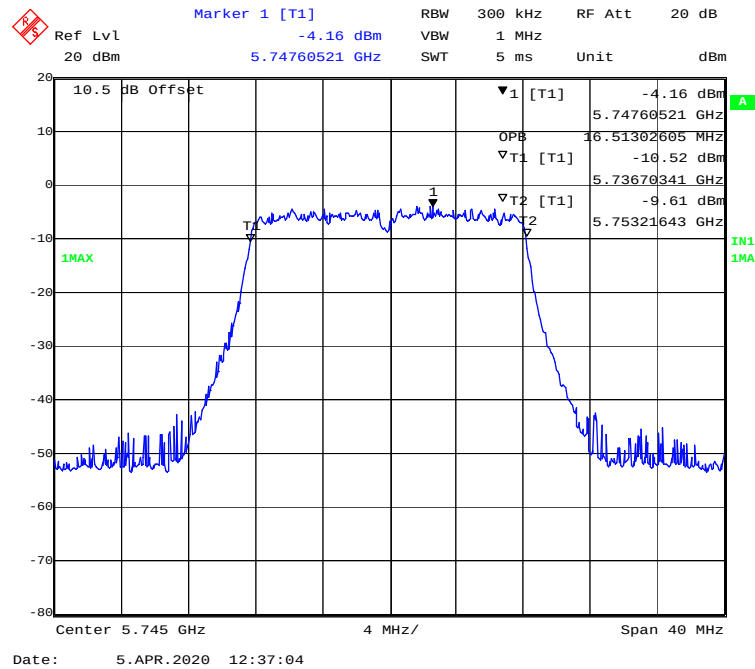
802.11 ac20 mode, 5785MHz



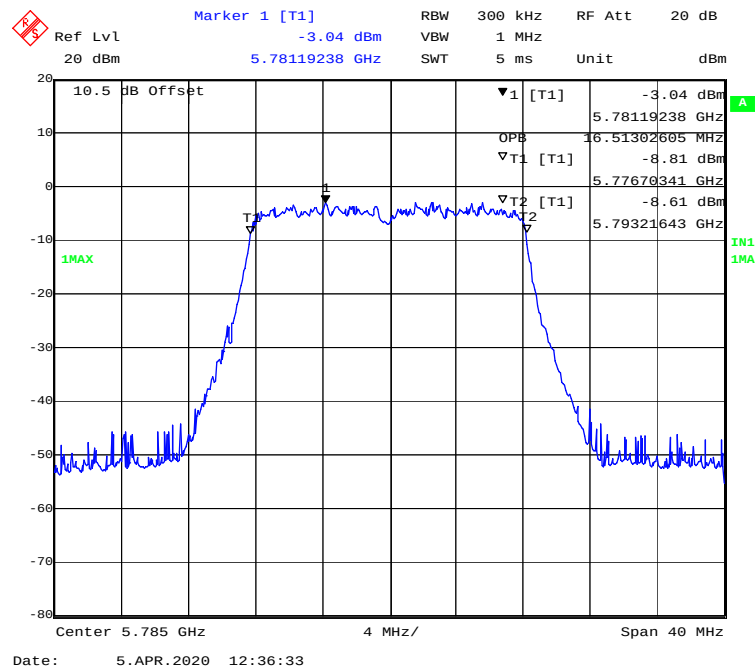
802.11 ac20 mode, 5825MHz



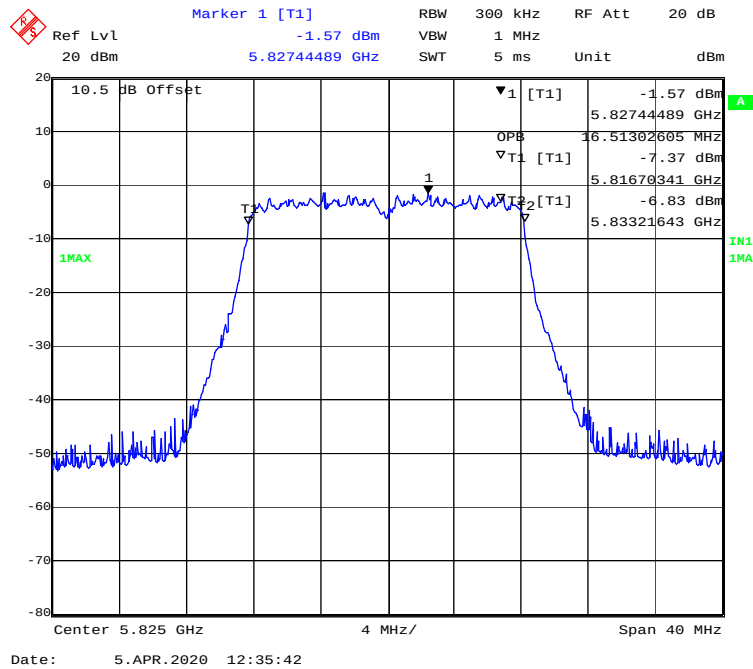
802.11n-HT20 mode, 5745MHz



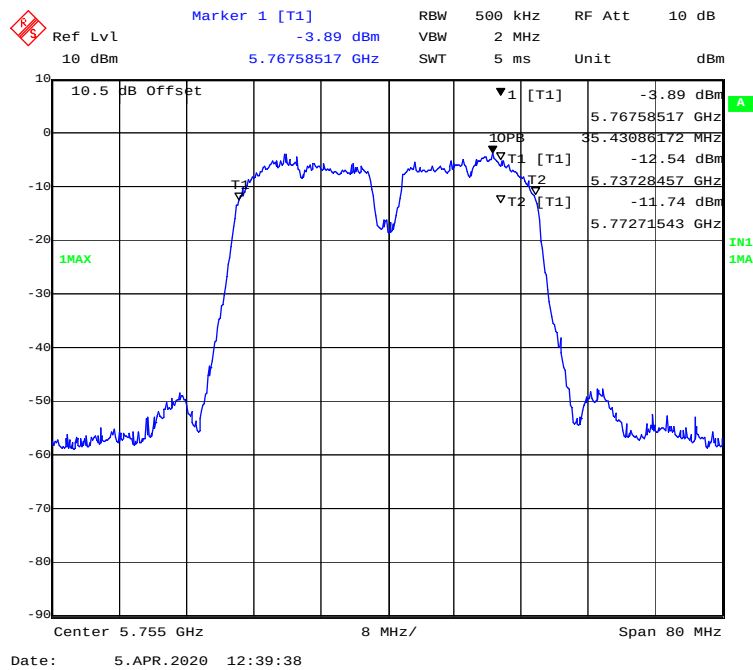
802.11n-HT20 mode, 5785MHz



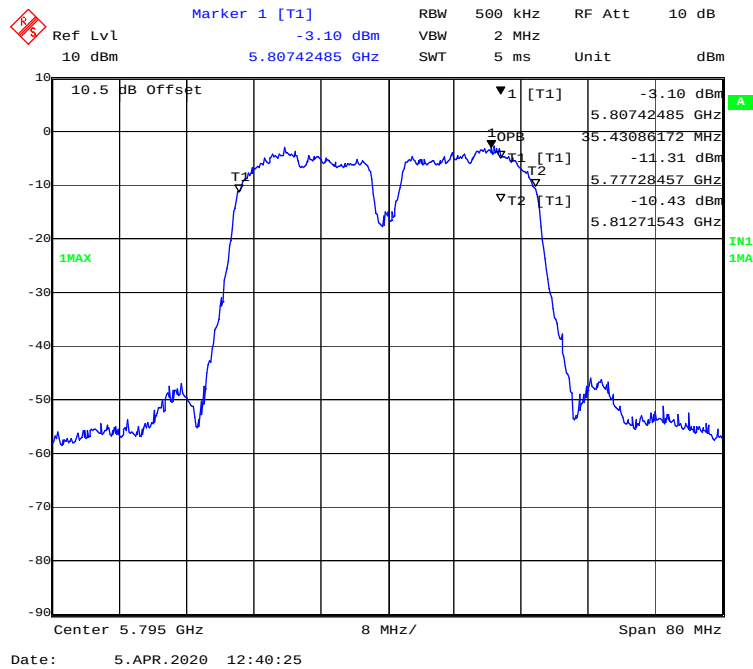
802.11n-HT20 mode, 5825MHz



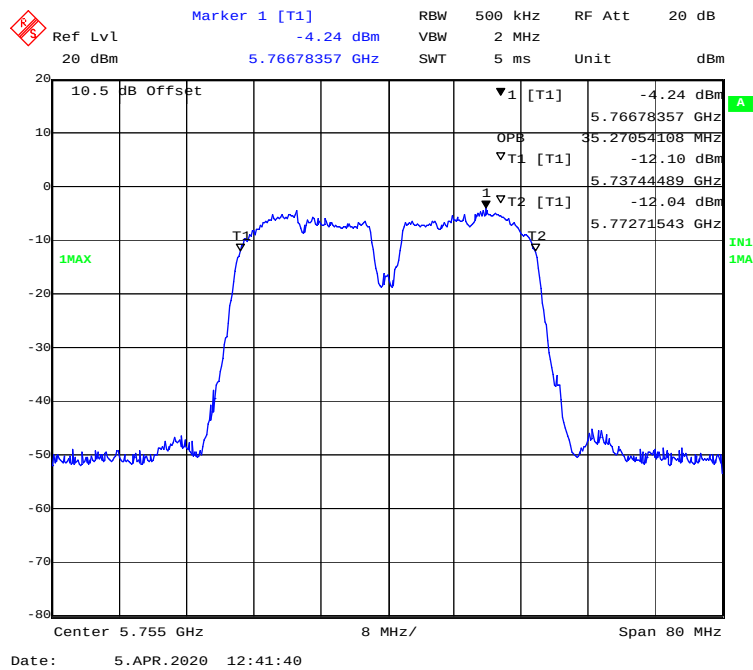
802.11ac40 mode, 5755MHz



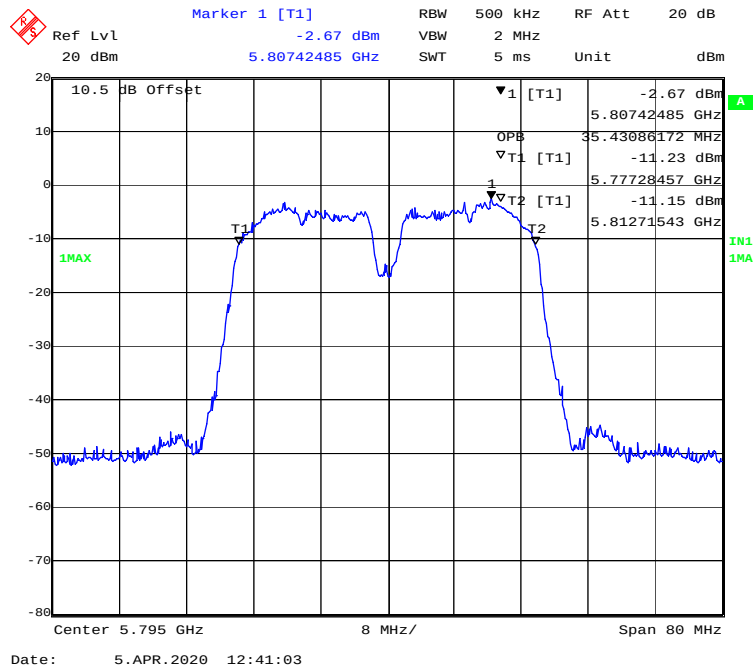
802.11 ac40 mode, 5795MHz



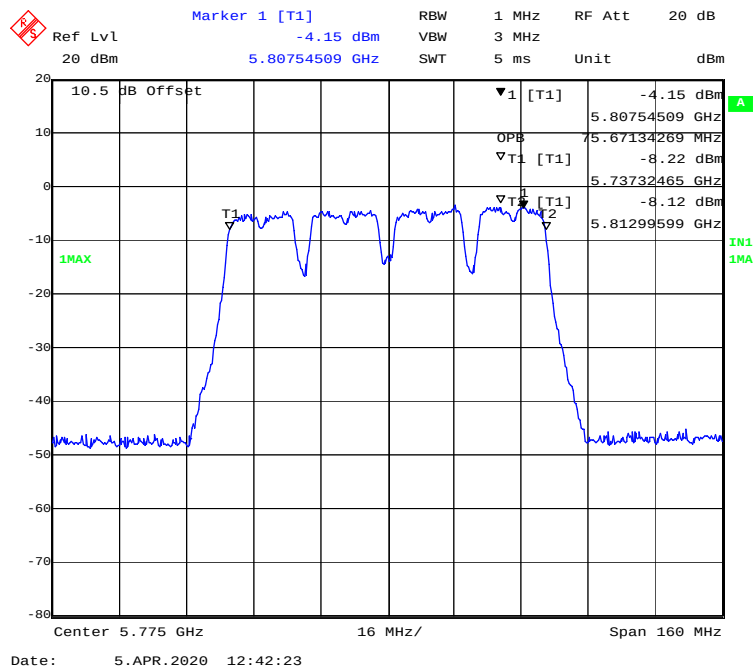
802.11n-HT40 mode, 5755MHz



802.11n-HT40 mode, 5795MHz

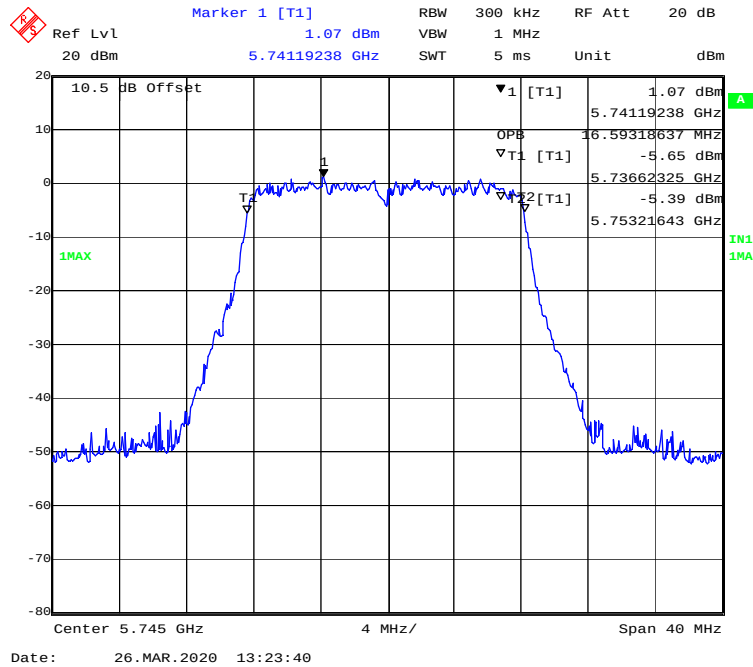


802.11n-ac80 mode, 5775MHz

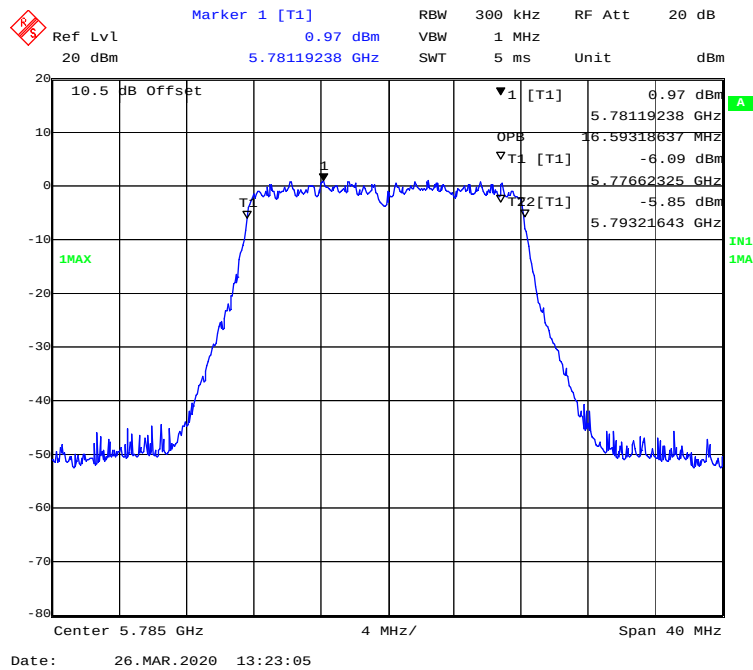


99% Occupied Bandwidth-Chain1

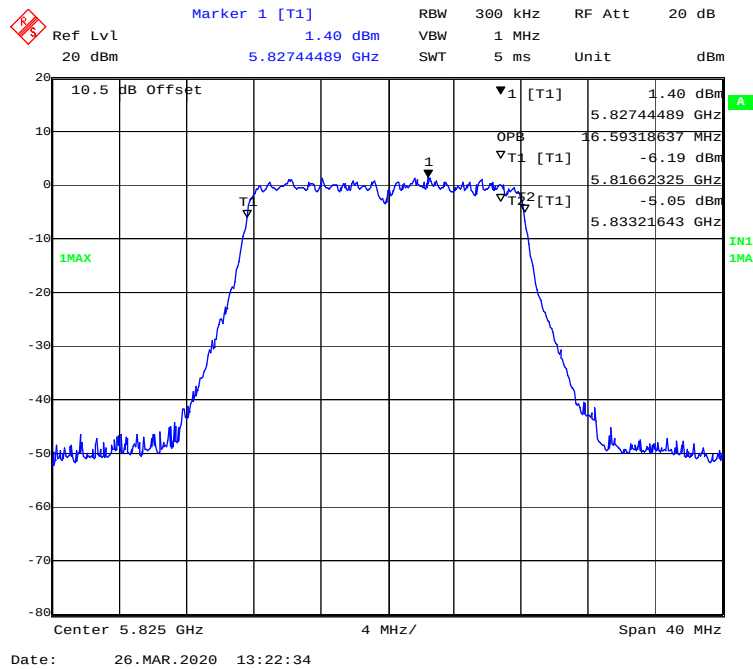
802.11a mode, 5745MHz



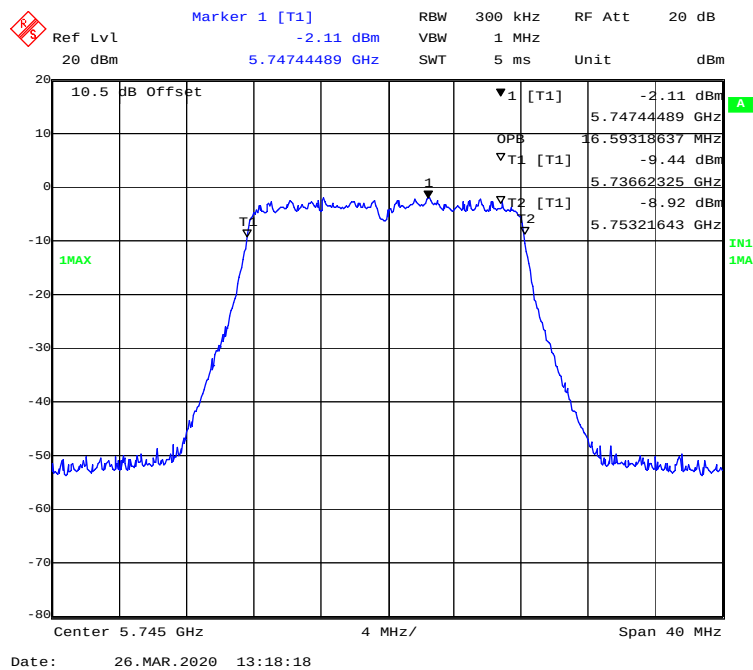
802.11a mode, 5785MHz



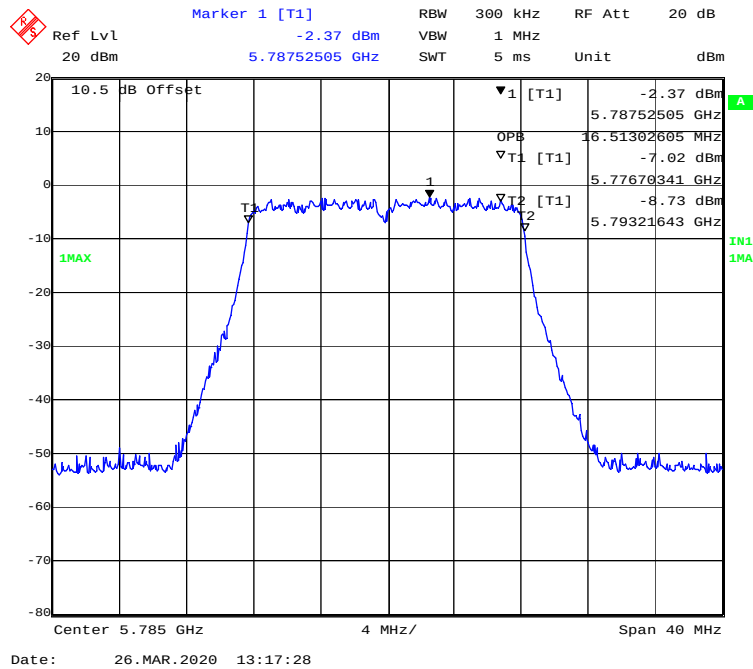
802.11a mode, 5825MHz



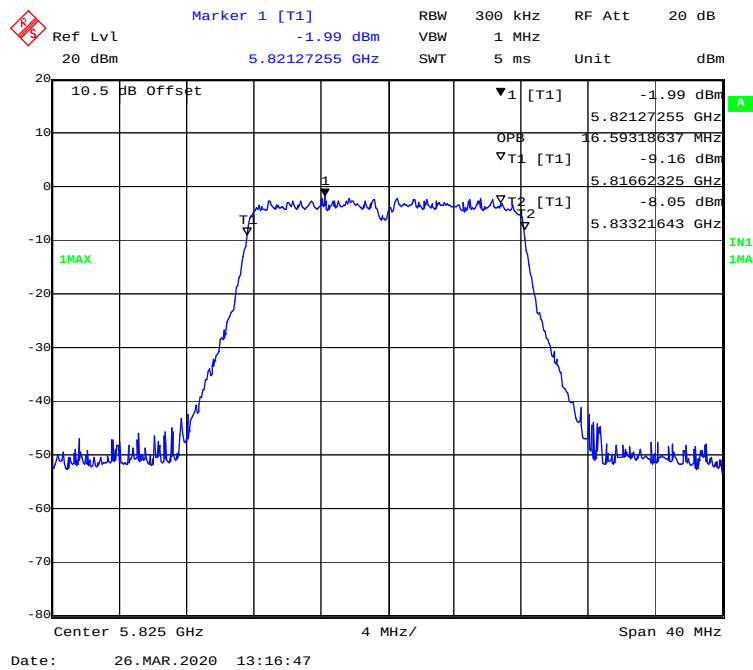
802.11ac20 mode, 5745MHz



802.11 ac20 mode, 5785MHz



802.11 ac20 mode, 5825MHz



Ref Lvl 20 dBm

20 dBm

10.5 dB Offset

Marker 1 [T1]

-2.19 dBm

5.7411222 GHz

RBW 300 kHz

1 MHz

SWT 5 ms

RF Att 20 dB

Unit dBm

▼1 [T1]

-2.19 dBm

5.7411222 GHz

OPB

▼T1 [T1]

-9.38 dBm

5.73662325 GHz

▼T2 [T1]

-8.06 dBm

5.75321643 GHz

1MAX

IN1

1MA

Center 5.745 GHz

4 MHz/

Span 40 MHz

Date: 26.MAR.2020 13:19:58

Ref Lvl 20 dBm
 20 dBm
 10.5 dB Offset

Marker 1 [T1]
 -2.60 dBm
 5.78806601 GHz

RBW 300 kHz
 1 MHz
 5 ms
 300 kHz
 1 MHz
 5 ms

RF Att 20 dB
 Unit dBm

▼1 [T1]
 OPB
 ▽T1 [T1]
 ▽T2 [T1]

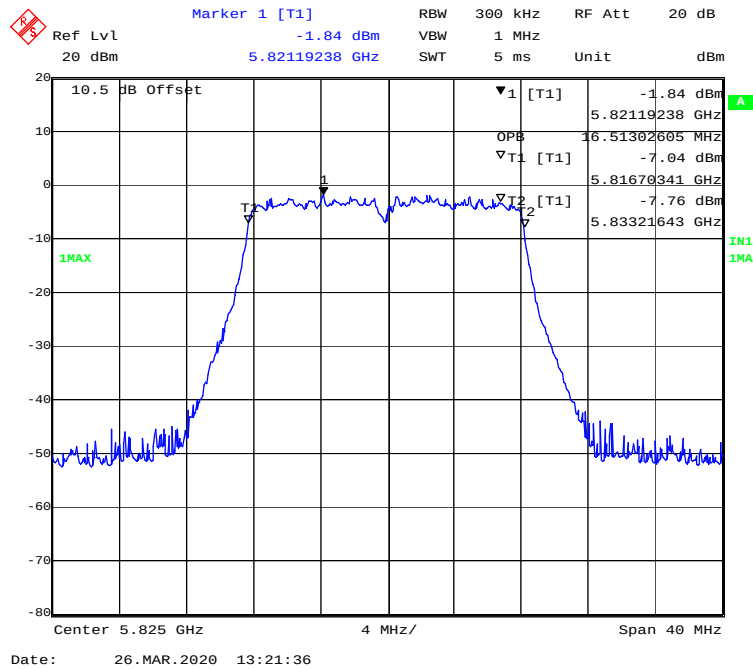
-2.60 dBm
 5.78806601 GHz
 -7.79 dBm
 5.77670341 GHz
 -8.63 dBm
 5.79321643 GHz

1MAX
 1N1
 1MA

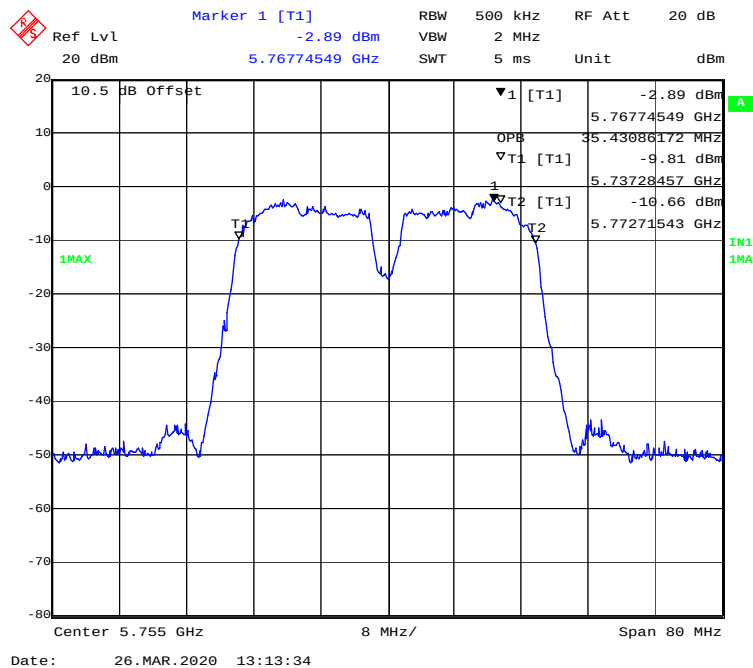
Center 5.785 GHz
 4 MHz/
 Span 40 MHz

Date: 26.MAR.2020 13:20:44

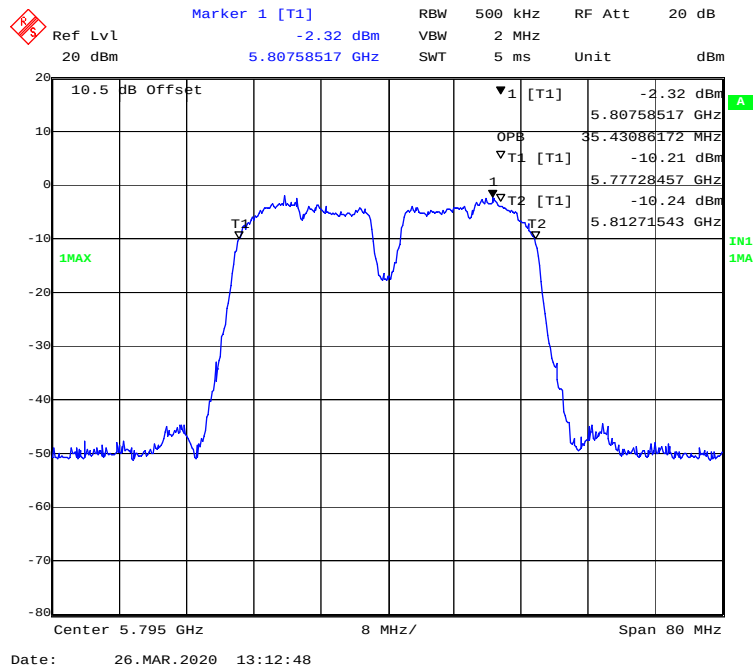
802.11n-HT20 mode, 5825MHz



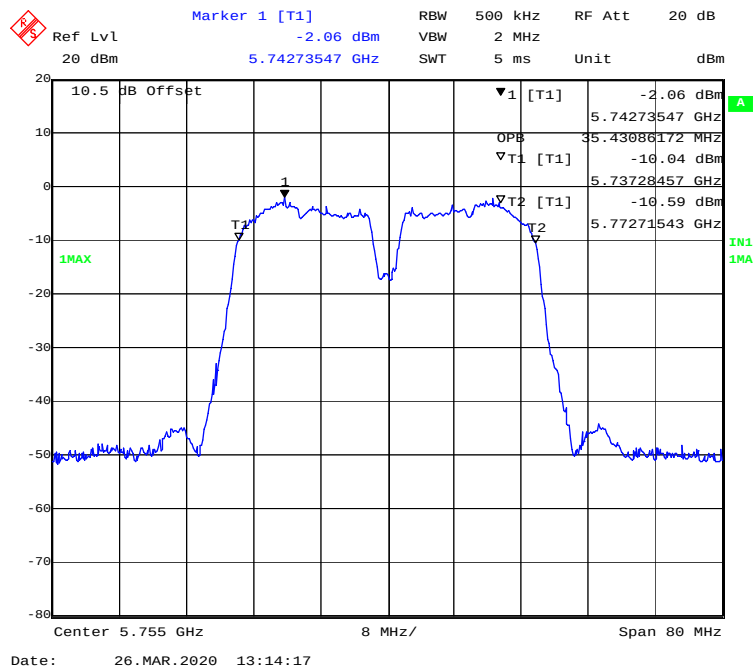
802.11ac40 mode, 5755MHz



802.11 ac40 mode, 5795MHz



802.11n-HT40 mode, 5755MHz



Ref Lvl 20 dBm

Marker 1 [T1]

-1.76 dBm

5.78273547 GHz

RBW 500 kHz

RF Att 20 dB

SWT 2 MHz

Unit dBm

10.5 dB Offset

▼1 [T1]

-1.76 dBm

5.78273547 GHz

OPB 35.43086172 MHz

▽T1 [T1]

-9.99 dBm

5.77728457 GHz

▽T2 [T1]

-10.00 dBm

5.81271543 GHz

1MAX

1

T1

T2

Center 5.795 GHz

8 MHz/

Span 80 MHz

Date: 26.MAR.2020 13:15:28

Ref Lvl -2.86 dBm
 10 dBm
 5.79119238 GHz
 RBW 1 MHz
 VBW 3 MHz
 SWT 5 ms
 RF Att 10 dB
 Unit dBm

Marker	Frequency	Power
▼1 [T1]	5.79119238 GHz	-2.86 dBm
▽1 [T1]	5.99198397 MHz	-7.00 dBm
▽1 [T1]	5.73700401 GHz	-7.39 dBm
▽T2 [T1]	5.81299599 GHz	-7.39 dBm

Center 5.775 GHz
 16 MHz/
 Span 160 MHz

Date: 26.MAR.2020 13:11:43

FCC §15.407(a) (1) (3) – CONDUCTED TRANSMITTER OUTPUT POWER**Applicable Standard**

According to §15.407(a)(1)

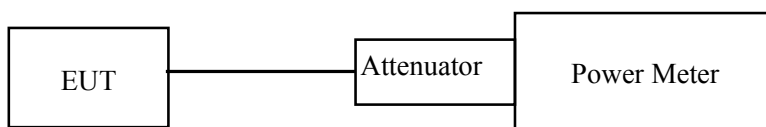
(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

According to §15.407(a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure

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:	24.1~25.2 °C
Relative Humidity:	48~50 %
ATM Pressure:	101.1~101.2 kPa

The testing was performed by Stone Zhang from 2020-03-20 to 2020-04-05.

Test Mode: Transmitting

Test mode	Band	Channel	Frequency (MHz)	Average Conducted Output Power (dBm)			Limit (dBm)	Result
				Chain0	Chain1	Total		
802.11a	5150-5250 MHz	Low	5180	16.53	16.57	/	18	PASS
		Middle	5200	16.61	16.46	/	18	PASS
		High	5240	16.61	16.67	/	18	PASS
	5725-5850 MHz	Low	5745	16.75	16.71	/	18	PASS
		Middle	5785	16.85	16.76	/	18	PASS
		High	5825	16.92	16.90	/	18	PASS
802.11n-HT20	5150-5250 MHz	Low	5180	13.74	13.30	16.54	18	PASS
		Middle	5200	13.91	13.26	16.61	18	PASS
		High	5240	13.79	13.23	16.53	18	PASS
	5725-5850 MHz	Low	5745	12.95	13.51	16.25	18	PASS
		Middle	5785	13.29	13.03	16.17	18	PASS
		High	5825	13.56	13.27	16.43	18	PASS
802.11n-HT40	5150-5250 MHz	Low	5190	13.46	13.81	16.65	18	PASS
		High	5230	13.34	13.88	16.63	18	PASS
	5725-5850 MHz	Low	5755	13.24	13.72	16.50	18	PASS
		High	5795	13.62	13.96	16.80	18	PASS
802.11ac20	5150-5250 MHz	Low	5180	13.81	13.25	16.55	18	PASS
		Middle	5200	13.95	13.13	16.57	18	PASS
		High	5240	13.72	13.41	16.58	18	PASS
	5725-5850 MHz	Low	5745	13.78	13.74	16.77	18	PASS
		Middle	5785	13.27	13.61	16.45	18	PASS
		High	5825	13.63	14.02	16.84	18	PASS
802.11ac40	5150-5250 MHz	Low	5190	13.35	13.90	16.64	18	PASS
		High	5230	13.38	13.73	16.57	18	PASS
	5725-5850 MHz	Low	5755	13.23	13.76	16.51	18	PASS
		High	5795	13.66	13.82	16.75	18	PASS
802.11ac80	5150-5250 MHz	/	5210	13.38	13.83	16.62	18	PASS
	5725-5850 MHz	/	5775	13.56	13.92	16.75	18	PASS

Note 1: The total output power= $10 \cdot \log_{10}(10^{(\text{Chain 1}/10)} + 10^{(\text{Chain 2}/10)})$

Note 2: The maximum antenna gain is 18.0 dBi, 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 ≤ 4;

So: Directional gain = GANT + Array Gain = 18.0dBi > 6dBi

Maximum e.i.r.p. at any elevation angle above 30 degrees (worst case)

For ANT 3 (18dBi) , the Max gain above 30 degrees is 3.2dBi which provided by manufacturer.

Test mode	Band	Channel	Frequency (MHz)	Average Conducted Output Power (dBm)			elevation angle above 30 degrees Max gain (dBi)	elevation angle above 30 degrees Max EIRP (dBm)	Limit	Result
				Chain 1	Chain 2	Total			(dBm)	
802.11a	5150-5250 MHz	Low	5180	16.53	16.57	/	3.2	19.77	21	PASS
		Middle	5200	16.61	16.46	/	3.2	19.81	21	PASS
		High	5240	16.61	16.67	/	3.2	19.87	21	PASS
802.11n-HT20	5150-5250 MHz	Low	5180	13.74	13.30	16.54	3.2	19.74	21	PASS
		Middle	5200	13.91	13.26	16.61	3.2	19.81	21	PASS
		High	5240	13.79	13.23	16.53	3.2	19.73	21	PASS
802.11n-HT40	5150-5250 MHz	Low	5190	13.46	13.81	16.65	3.2	19.85	21	PASS
		High	5230	13.34	13.88	16.63	3.2	19.83	21	PASS
802.11ac20	5150-5250 MHz	Low	5180	13.81	13.25	16.55	3.2	19.75	21	PASS
		Middle	5200	13.95	13.13	16.57	3.2	19.77	21	PASS
		High	5240	13.72	13.41	16.58	3.2	19.78	21	PASS
802.11ac40	5150-5250 MHz	Low	5190	13.35	13.90	16.64	3.2	19.84	21	PASS
		High	5230	13.38	13.73	16.57	3.2	19.77	21	PASS
802.11ac80	5150-5250 MHz	/	5210	13.38	13.83	16.62	3.2	19.82	21	PASS

FCC §15.407(a) (1) (3) - POWER SPECTRAL DENSITY**Applicable Standard**

According to §15.407(a)(1)

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

According to §15.407(a) (3)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure

The measurements are base on FCC KDB 789033 D02 General UNII Test Procecdyres New Rules v02r01: Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices section F: Maximum power spectral density (PPSD)

Test Data**Environmental Conditions**

Temperature:	23.4~24.5 °C
Relative Humidity:	48~50 %
ATM Pressure:	101.1~101.2 kPa

The testing was performed by Stone Zhang from 2020-03-26 to 2020-04-06.

Test Mode: Transmitting

5150MHz-5250MHz:

Mode	Channel	Frequency (MHz)	PSD (dBm/MHz)			Limit (dBm/MHz)	Result
			Chain0	Chain1	Total		
802.11a	Low	5180	-1.04	-0.32	/	2	PASS
	Middle	5200	-0.92	-0.66	/	2	PASS
	High	5240	-1.22	-0.90	/	2	PASS
802.11ac20	Low	5180	-3.85	-3.78	-0.80	2	PASS
	Middle	5200	-4.00	-4.14	-1.06	2	PASS
	High	5240	-4.11	-3.92	-1.00	2	PASS
802.11n20	Low	5180	-3.89	-4.03	-0.95	2	PASS
	Middle	5200	-3.84	-4.03	-0.92	2	PASS
	High	5240	-3.98	-3.88	-0.92	2	PASS
802.11ac40	Low	5190	-5.60	-5.78	-2.68	2	PASS
	High	5230	-5.67	-5.93	-2.79	2	PASS
802.11n40	Low	5190	-6.18	-5.95	-3.05	2	PASS
	High	5230	-5.43	-6.08	-2.73	2	PASS
802.11ac80	/	5210	-9.77	-9.61	-6.68	2	PASS

5725MHz-5850MHz:

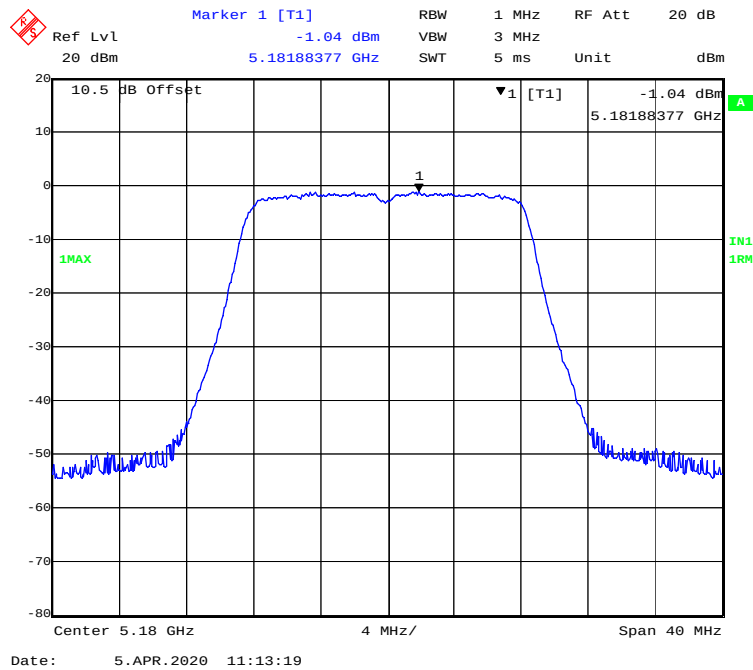
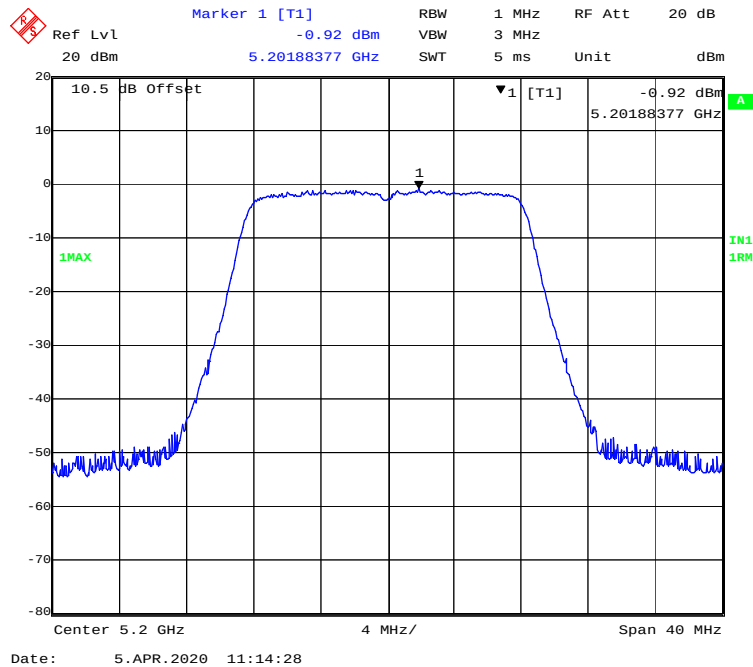
Mode	Channel	Frequency MHz	PSD (dBm/500kHz)			Limit (dBm/500kHz)	Result
			Chain0	Chain1	Total		
802.11a	Low	5745	-4.17	-1.52	/	15	PASS
	Middle	5785	-2.76	-1.99	/	15	PASS
	High	5825	-1.23	-0.74	/	15	PASS
802.11ac20	Low	5745	-6.66	-4.02	-2.13	15	PASS
	Middle	5785	-5.54	-4.60	-2.03	15	PASS
	High	5825	-4.27	-4.27	-1.26	15	PASS
802.11n20	Low	5745	-5.60	-4.51	-2.01	15	PASS
	Middle	5785	-5.93	-4.45	-2.12	15	PASS
	High	5825	-6.29	-4.80	-2.47	15	PASS
802.11ac40	Low	5755	-7.84	-6.30	-3.99	15	PASS
	High	5795	-7.27	-6.54	-3.88	15	PASS
802.11n40	Low	5755	-8.63	-6.25	-4.27	15	PASS
	High	5795	-6.71	-6.77	-3.73	15	PASS
802.11ac80	/	5775	-12.15	-10.82	-8.42	15	PASS

Note1: The total PSD= $10 \cdot \log_{10}(10^{\text{Chain 0/10}} + 10^{\text{Chain 1/10}})$

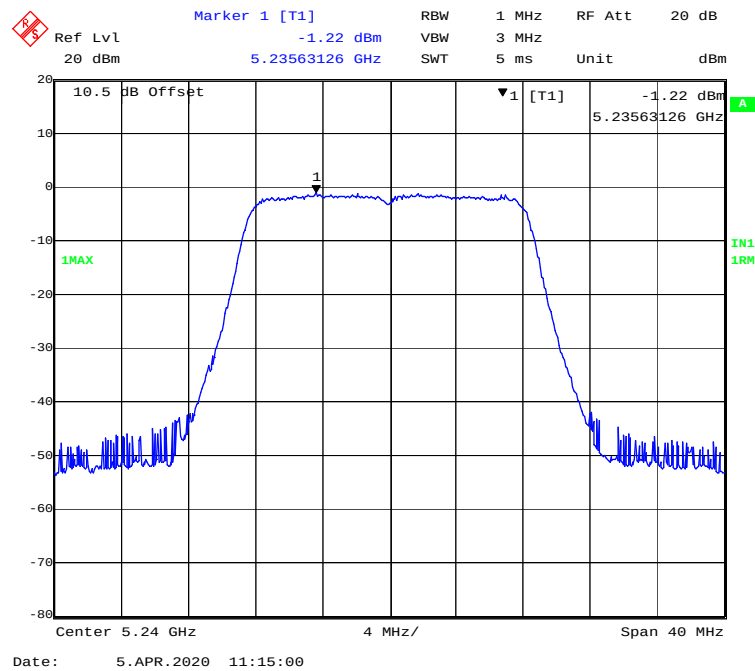
Note2: The maximum antenna gain is 19.0 dBi. The device employed Cyclic Delay Diversity (CDD) for 802.11MIMO transmitting, per KDB 662911 D01 Multiple Transmitter Output v02r01, for power spectral density (PSD) measurements on the devices:

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

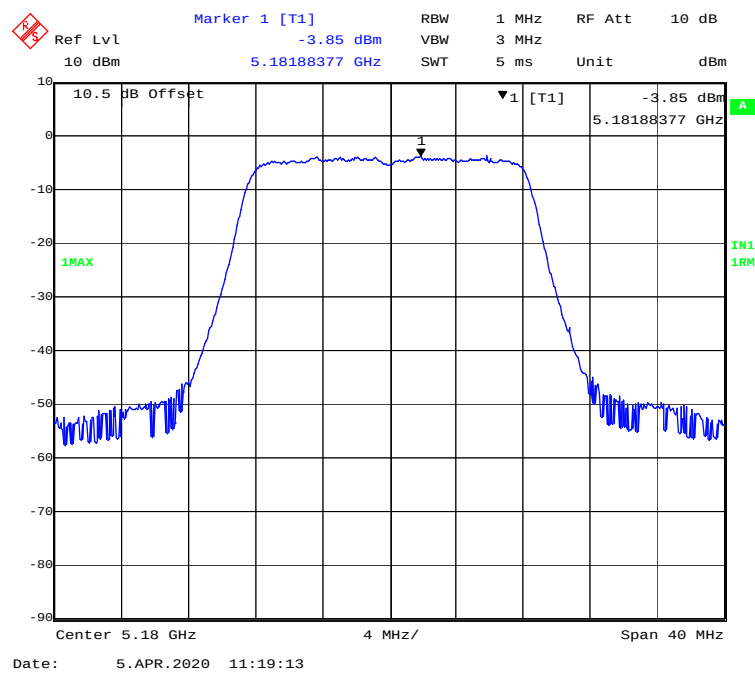
So: Directional gain = GANT + Array Gain = 18.0+10*log(2/1) =21.0 dBi, power spectral density limit reduced 21.0-6.0=15.0dB.

5150MHz-5250MHz Band-Chain0 :**802.11a mode, Power spectral density-5180MHz****802.11a mode, Power spectral density-5200MHz**

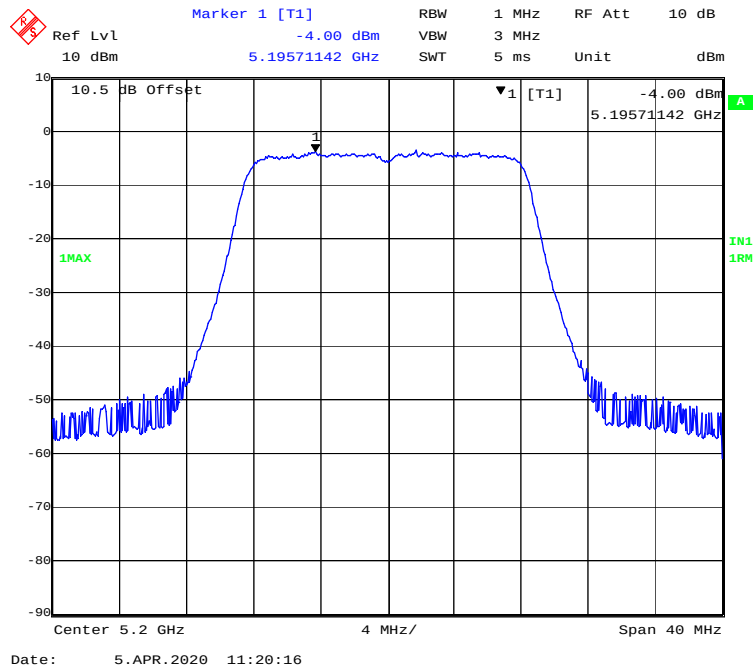
802.11a mode, Power spectral density-5240MHz



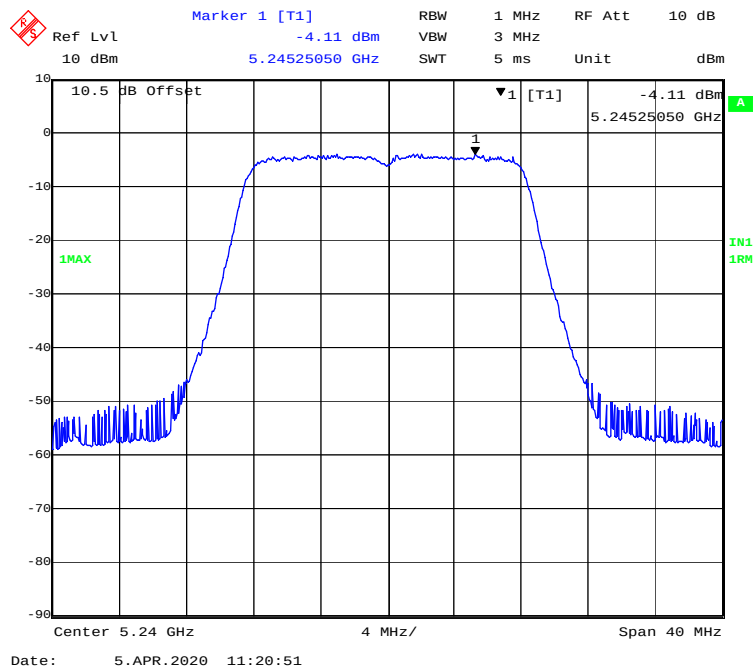
802.11ac20 mode, Power spectral density-5180MHz



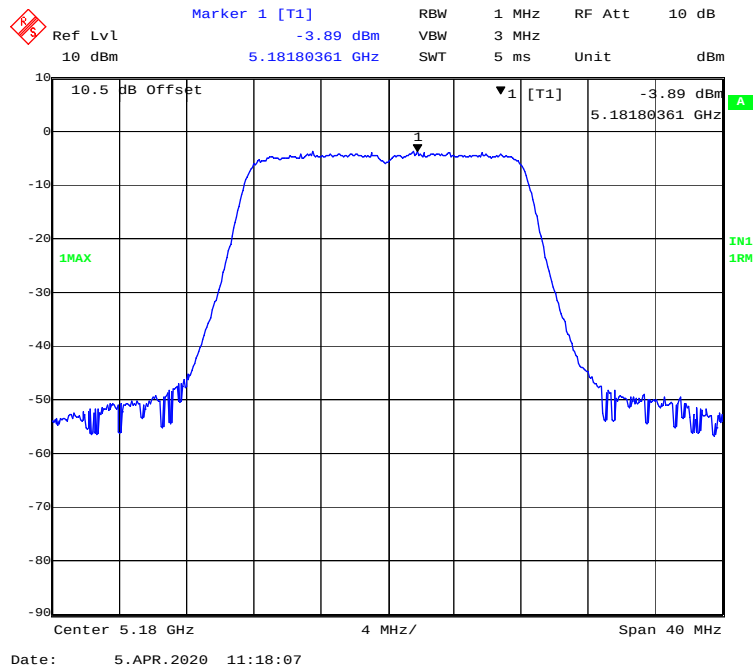
802.11 ac20 mode, Power spectral density-5200MHz



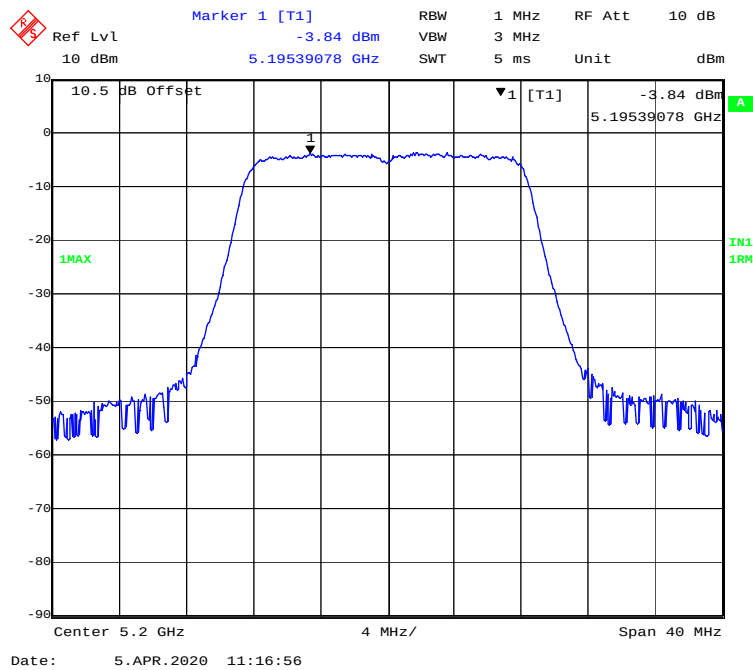
802.11ac20 mode, Power spectral density-5240MHz



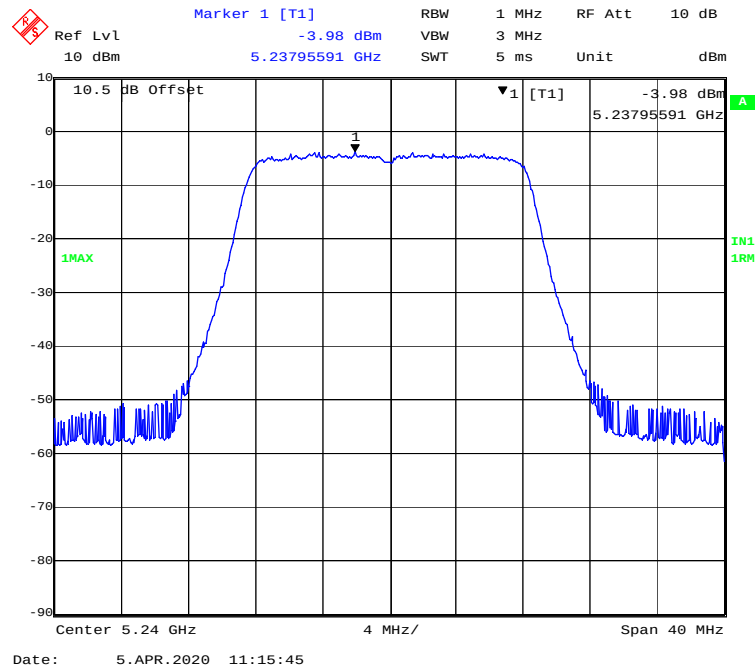
802.11n-HT20 mode, Power spectral density-5180MHz



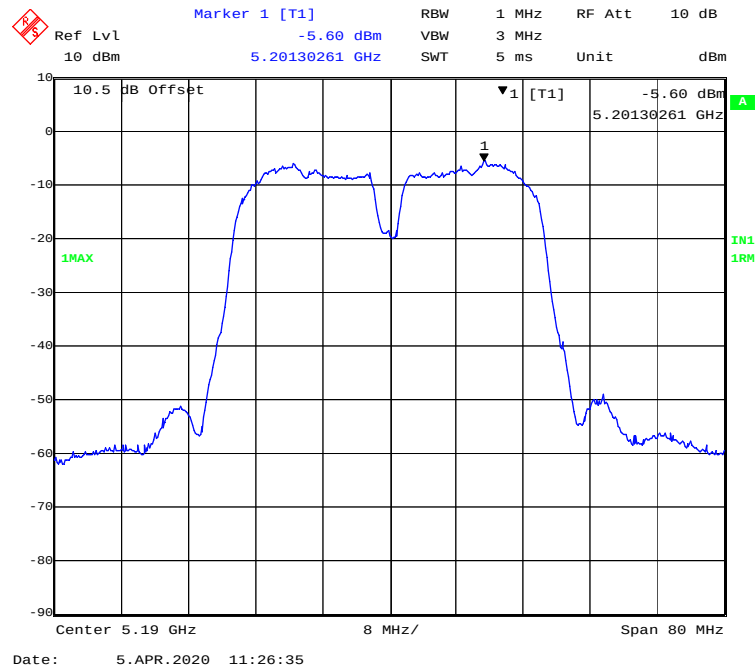
802.11n-HT20 mode, Power spectral density-5200MHz



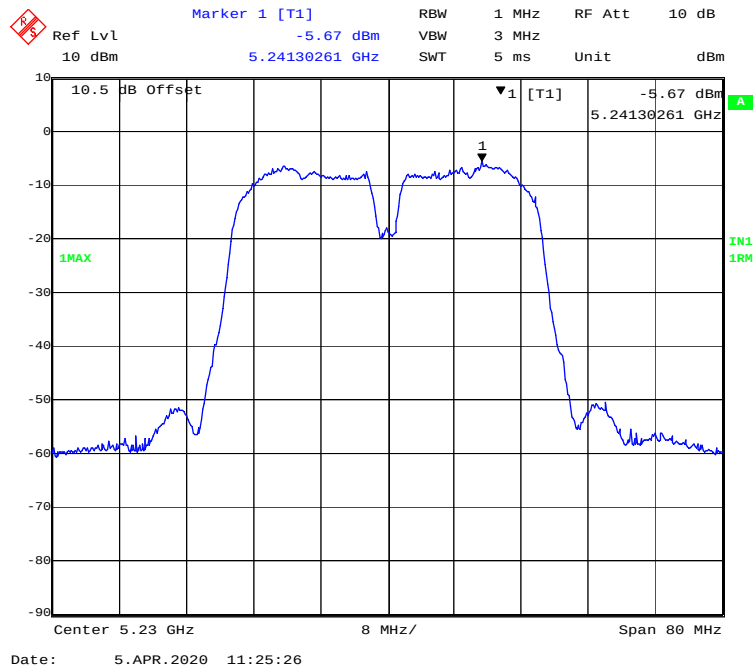
802.11n-HT20 mode, Power spectral density-5240MHz



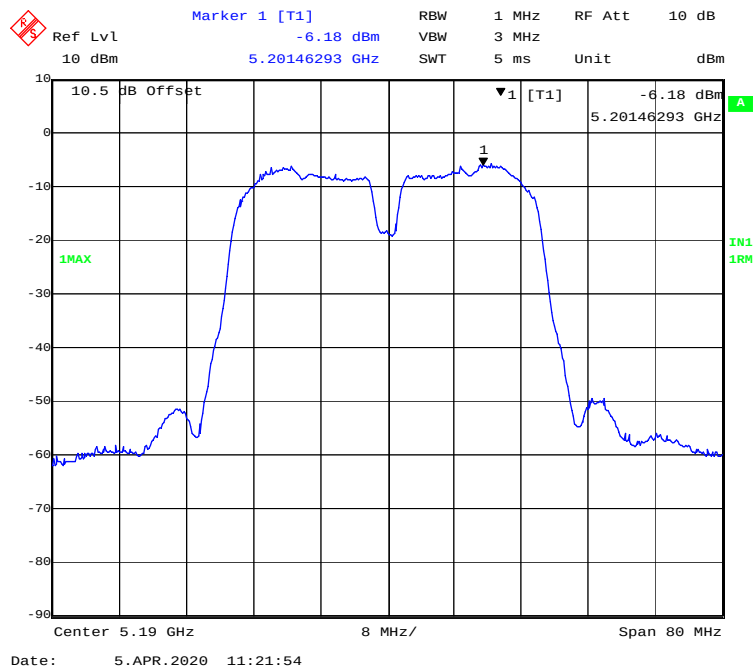
802.11ac40 mode, Power spectral density-5190MHz



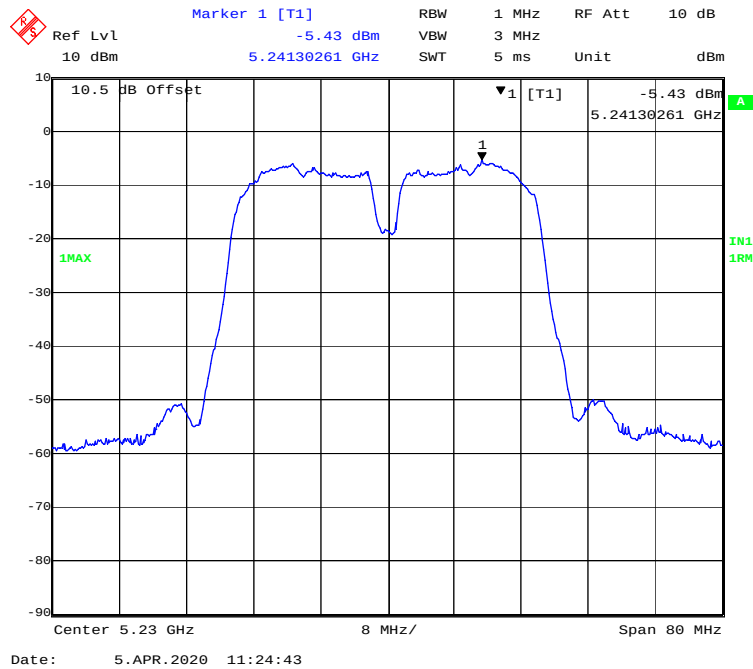
802.11 ac40 mode, Power spectral density-5230MHz



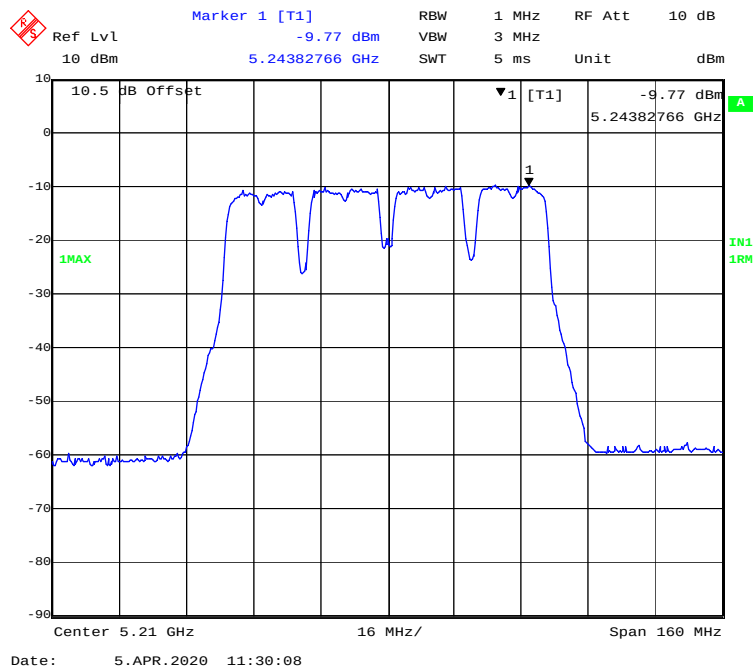
802.11n-HT40 mode, Power spectral density-5190MHz



802.11n-HT40 mode, Power spectral density-5230MHz

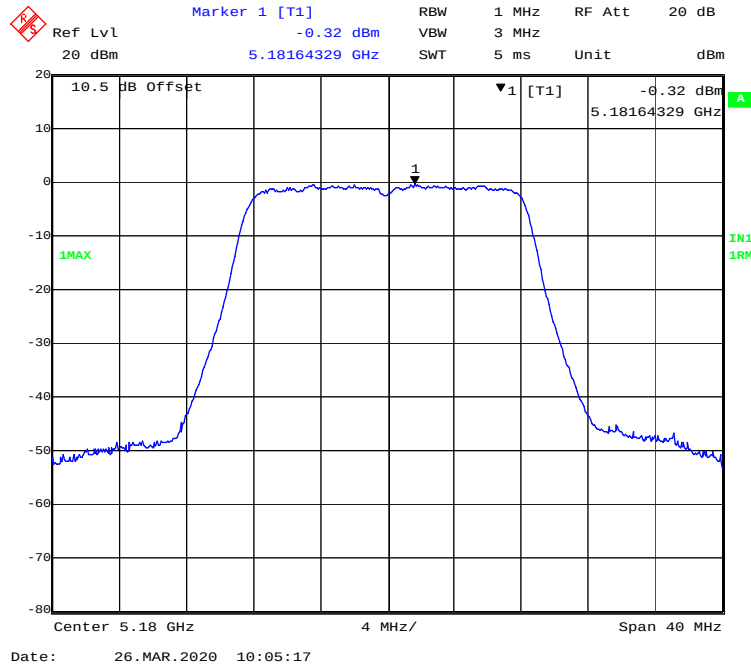


802.11n- ac80 mode, Power spectral density-5210MHz

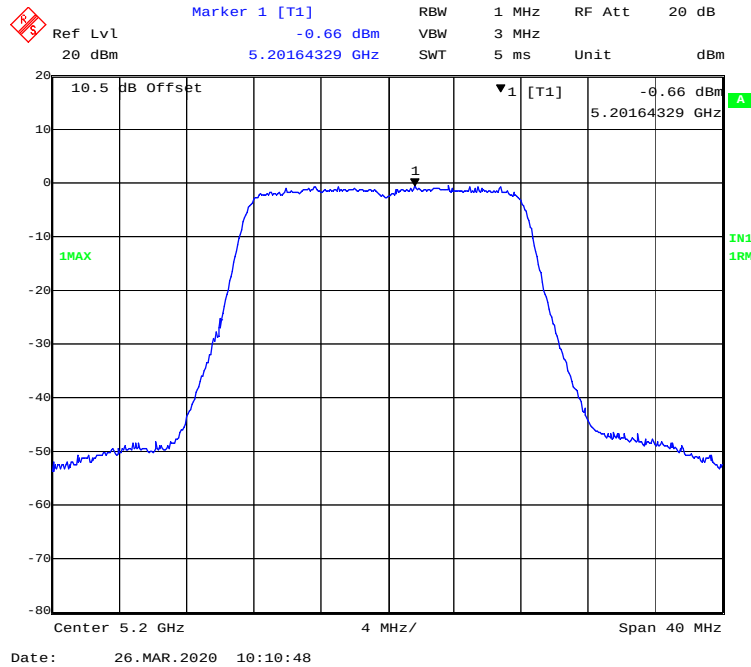


5150MHz-5250MHz Band-Chain1 :

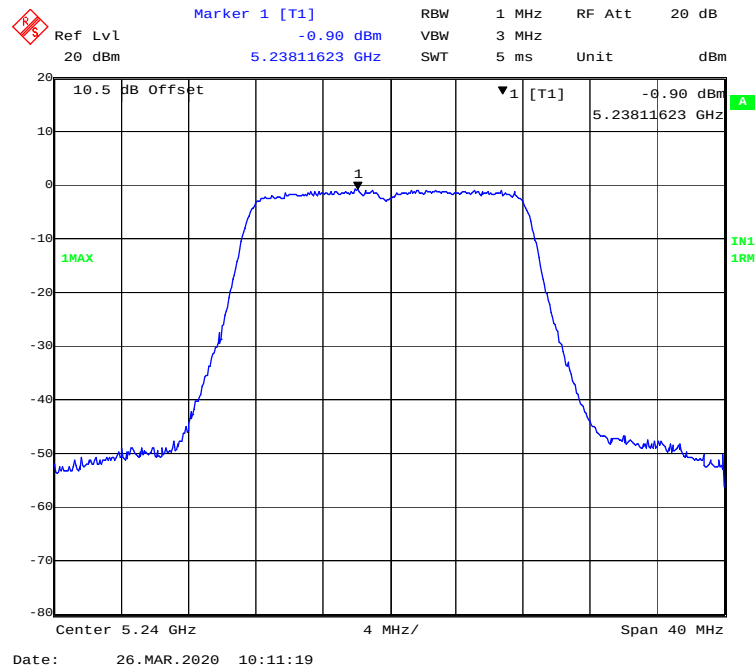
802.11a mode, Power spectral density-5180MHz



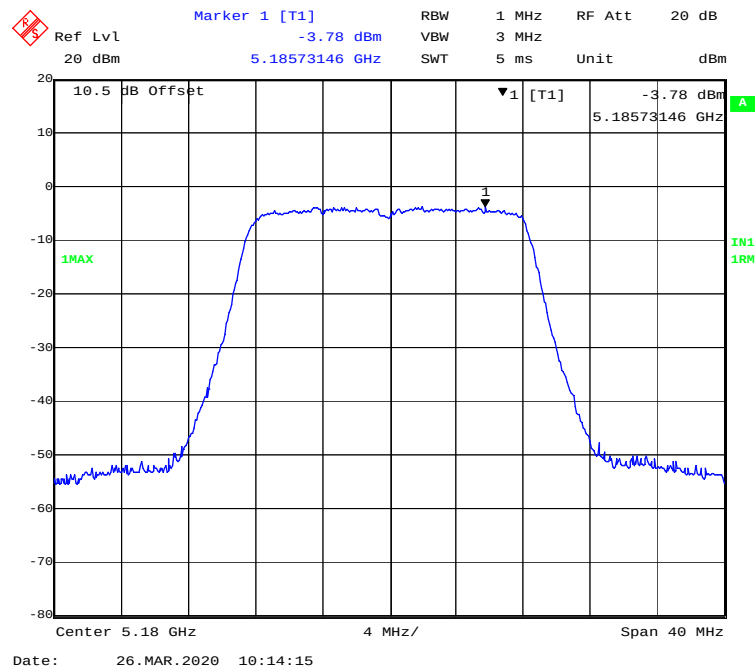
802.11a mode, Power spectral density-5200MHz



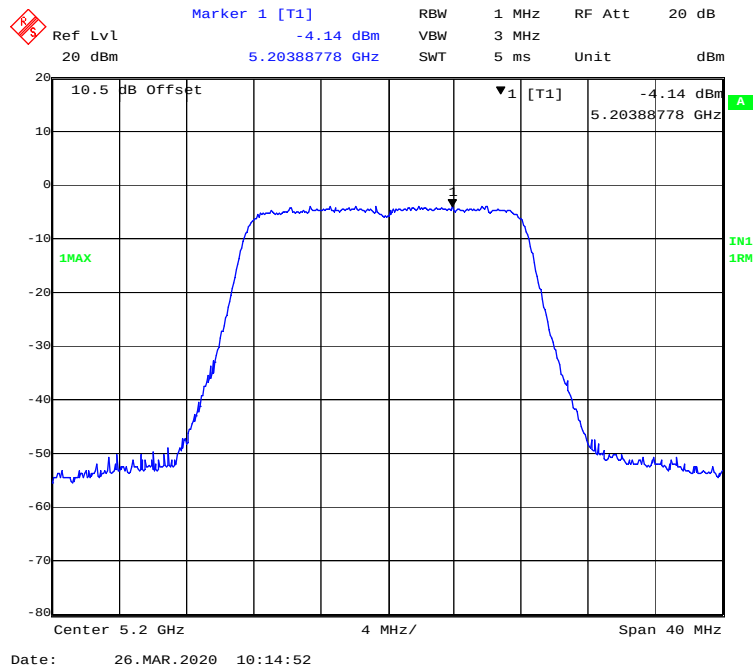
802.11a mode, Power spectral density-5240MHz



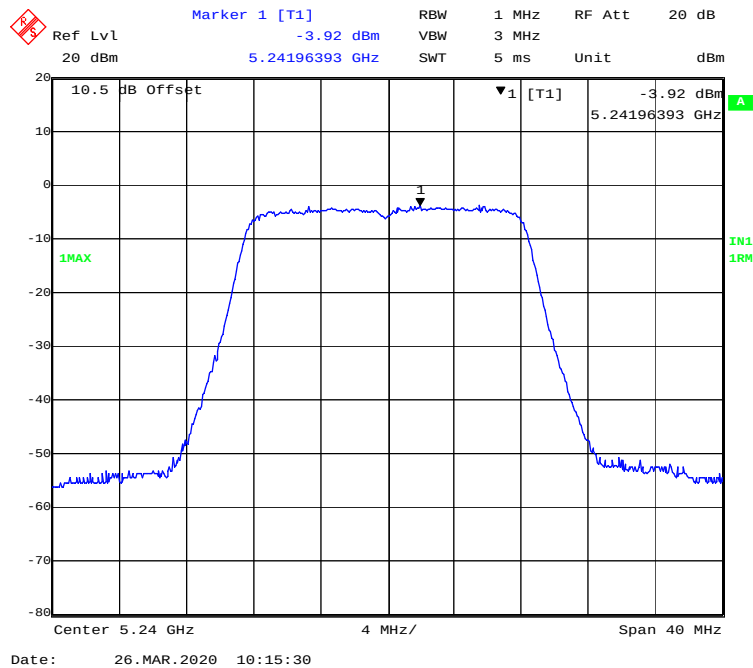
802.11ac20 mode, Power spectral density-5180MHz



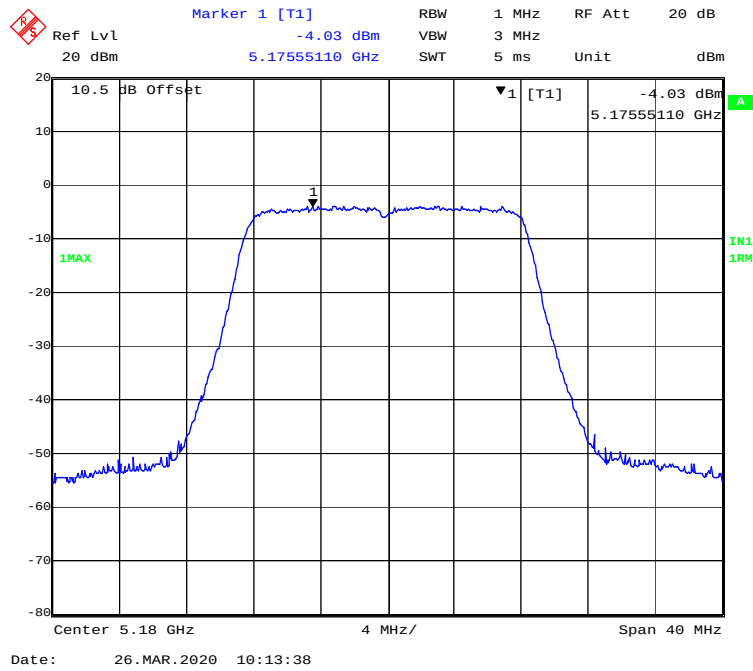
802.11 ac20 mode, Power spectral density-5200MHz



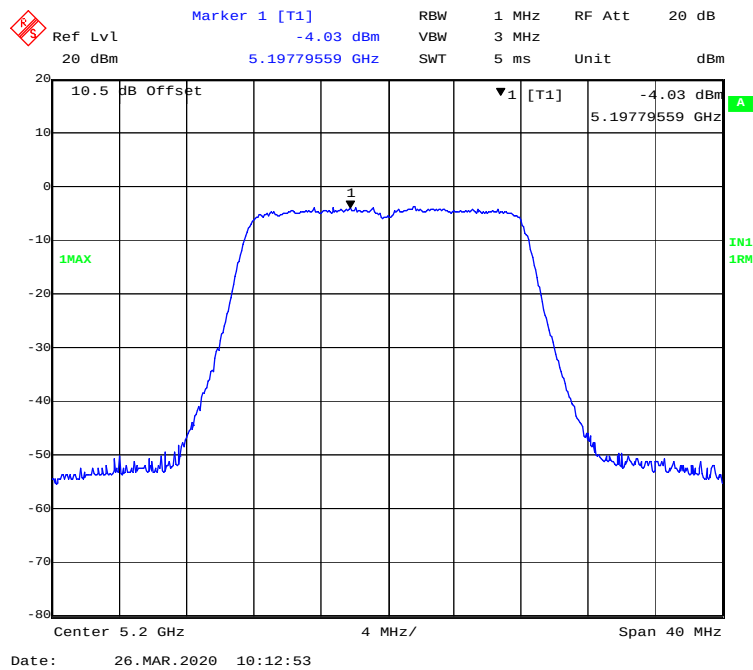
802.11ac20 mode, Power spectral density-5240MHz



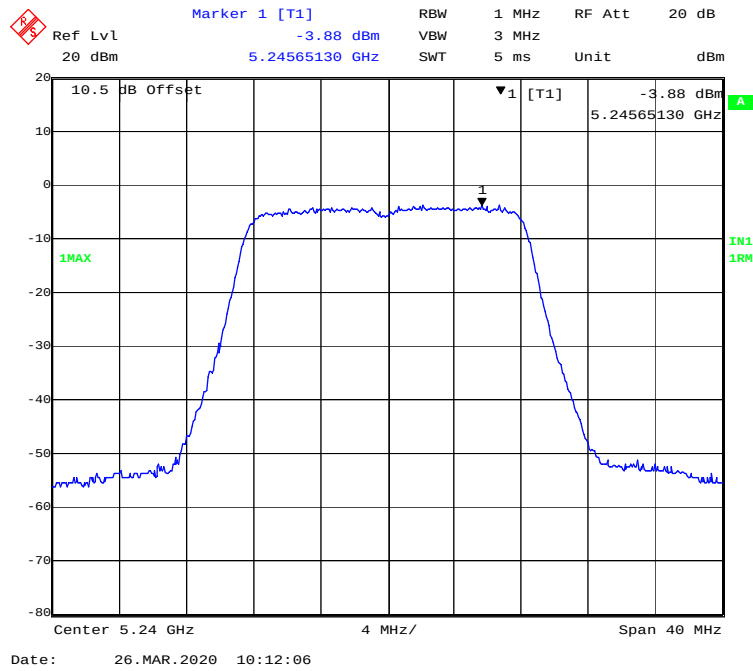
802.11n-HT20 mode, Power spectral density-5180MHz



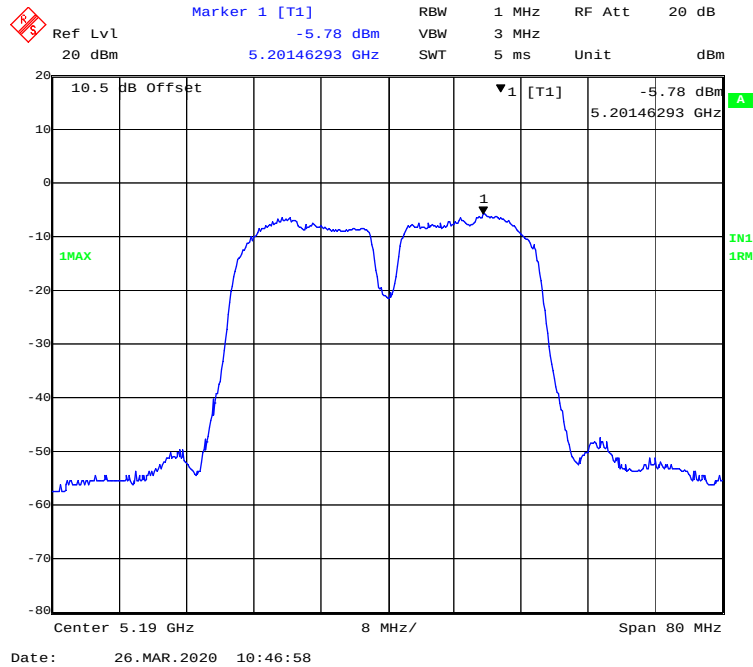
802.11n-HT20 mode, Power spectral density-5200MHz



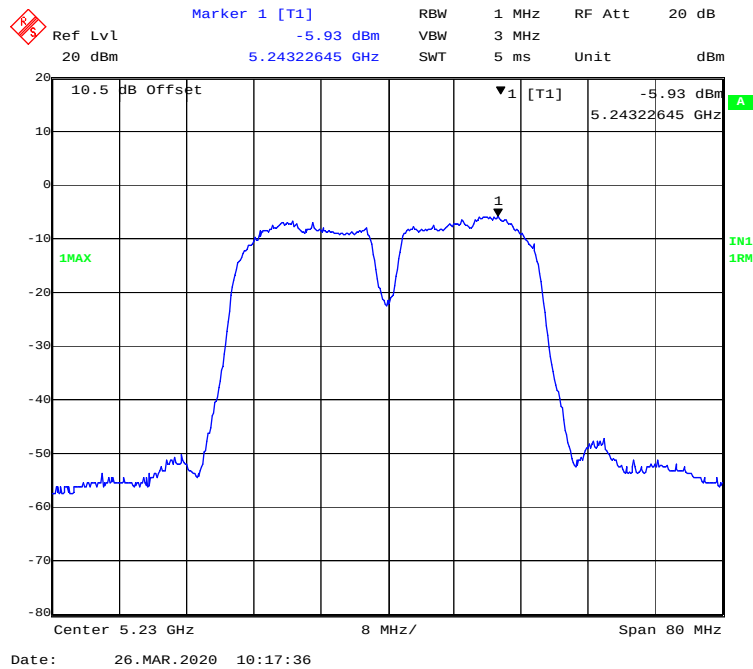
802.11n-HT20 mode, Power spectral density-5240MHz



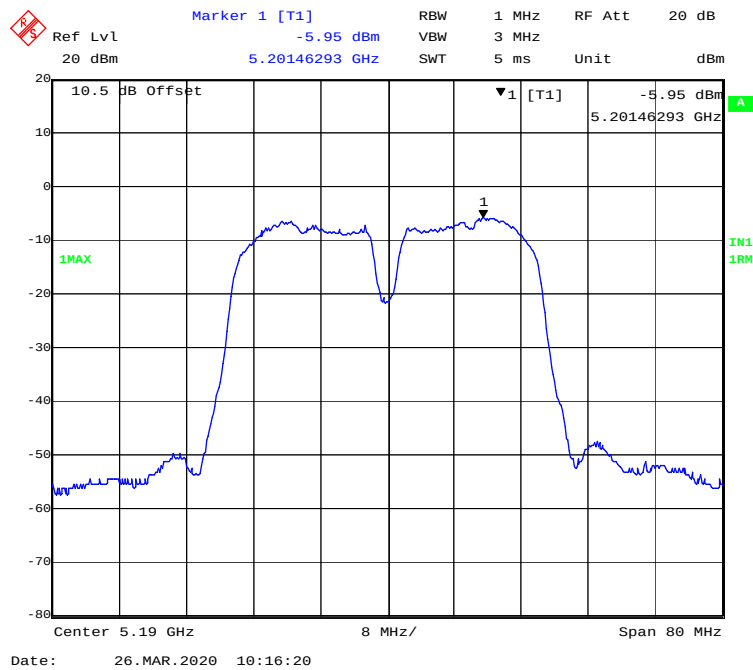
802.11ac40 mode, Power spectral density-5190MHz



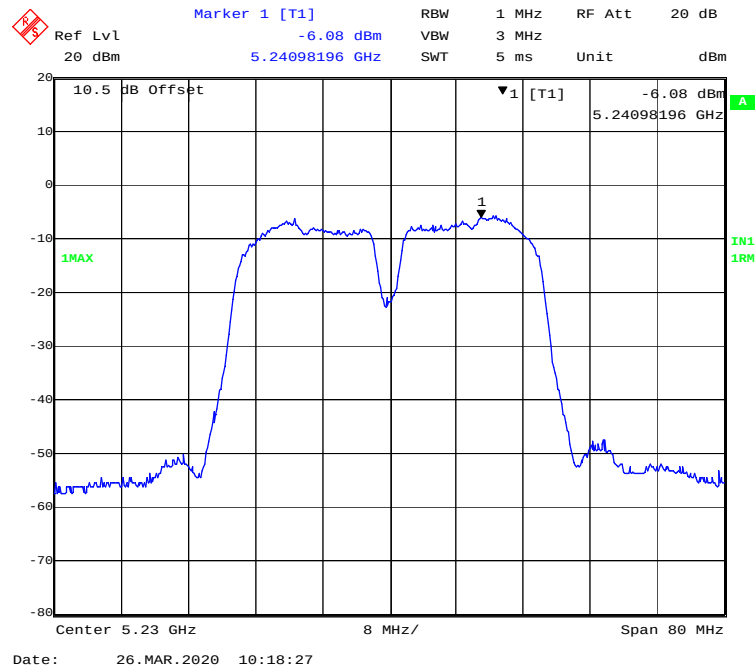
802.11 ac40 mode, Power spectral density-5230MHz



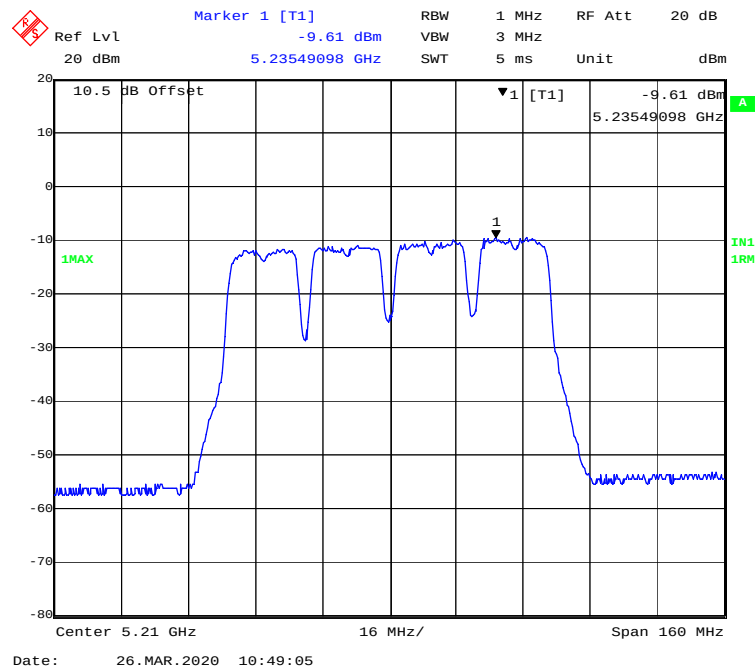
802.11n-HT40 mode, Power spectral density-5190MHz



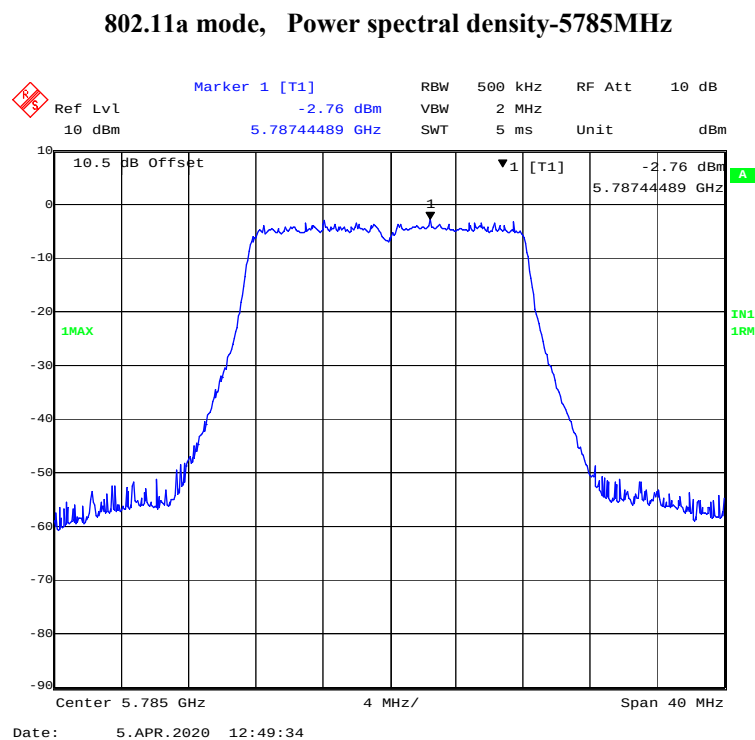
802.11n-HT40 mode, Power spectral density-5230MHz



802.11n- ac80 mode, Power spectral density-5210MHz



802.11a mode, Power spectral density-5745MHz



Ref Lvl 10 dBm RBW 500 kHz RF Att 10 dB
 10 dBm VBW 2 MHz Unit dBm
 5.82992986 GHz SWT 5 ms

Marker 1 [T1] -1.23 dBm
 5.82992986 GHz

10.5 dB Offset

1

1MAX

IN1 1RM

Center 5.825 GHz 4 MHz/ Span 40 MHz

Date: 5.APR.2020 12:50:00

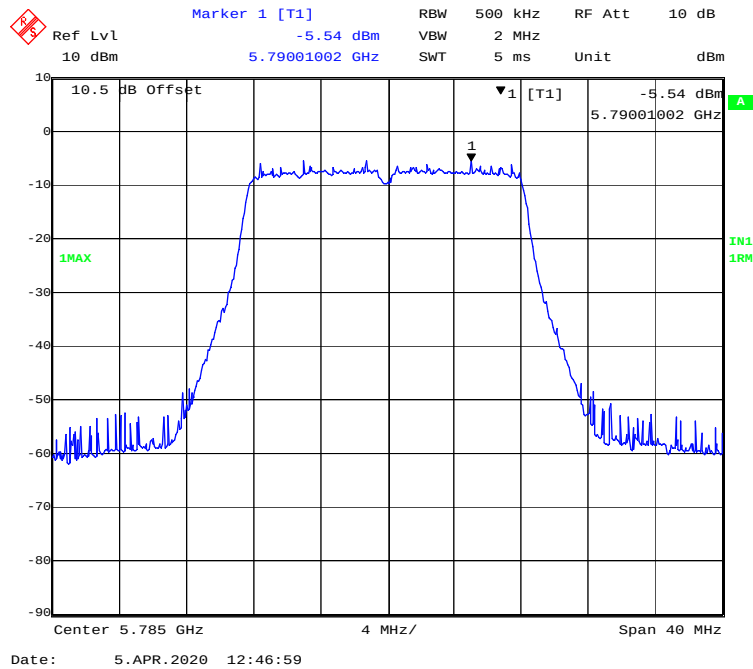
Ref Lvl 10 dBm
 10 dBm
 Marker 1 [T1]
 -6.66 dBm
 5.73990982 GHz
 RBW 500 kHz
 VBW 2 MHz
 SWT 5 ms
 RF Att 10 dB
 Unit dBm

10.5 dB Offset
 ▼1 [T1]
 -6.66 dBm
 5.73990982 GHz
 1MAX
 IN1 1RM

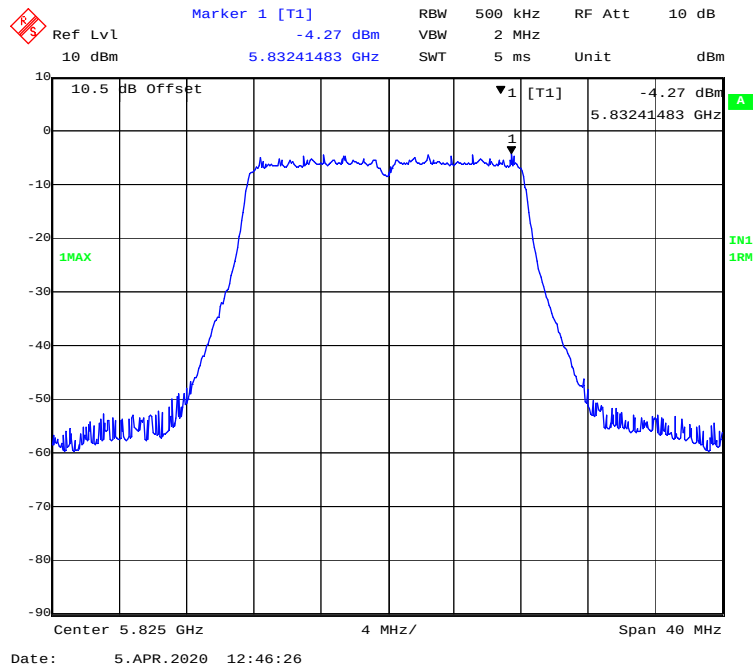
Center 5.745 GHz
 4 MHz/
 Span 40 MHz

Date: 5.APR.2020 12:47:25

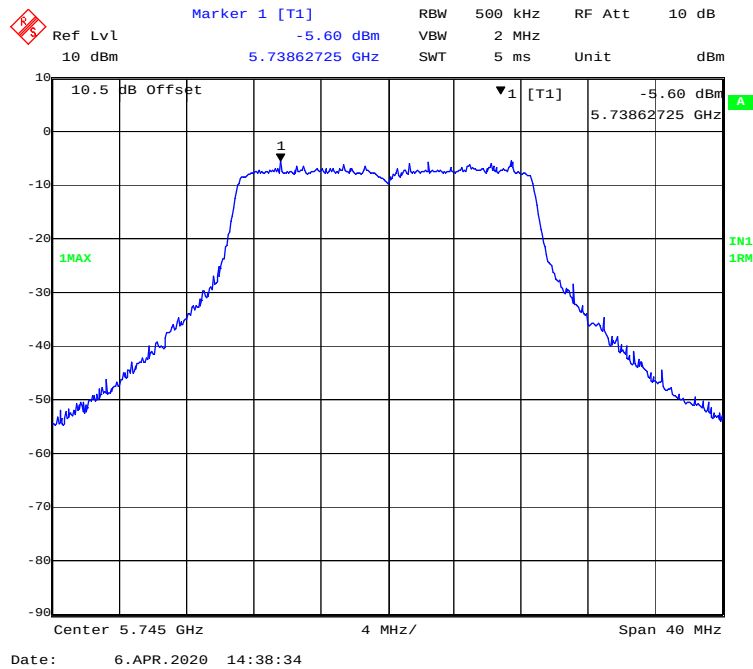
802.11 ac20 mode, Power spectral density-5785MHz



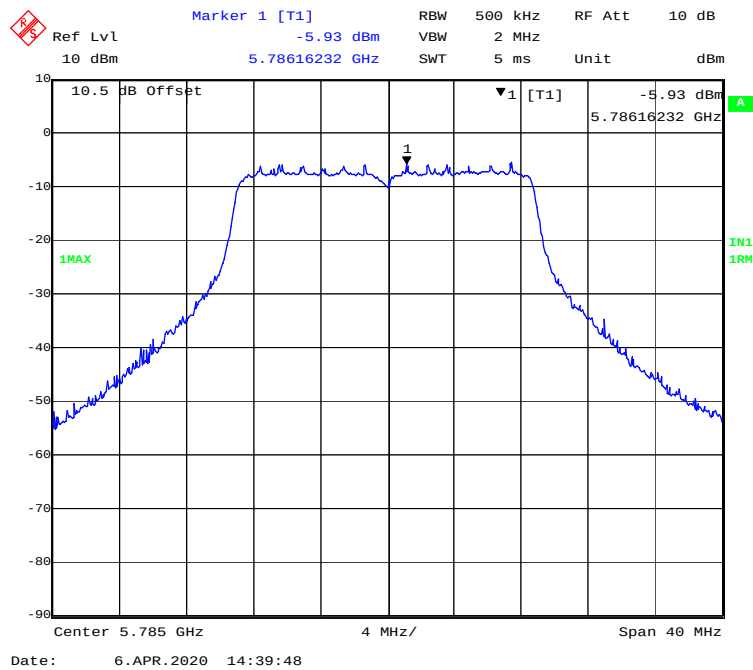
802.11 ac20 mode, Power spectral density-5825MHz



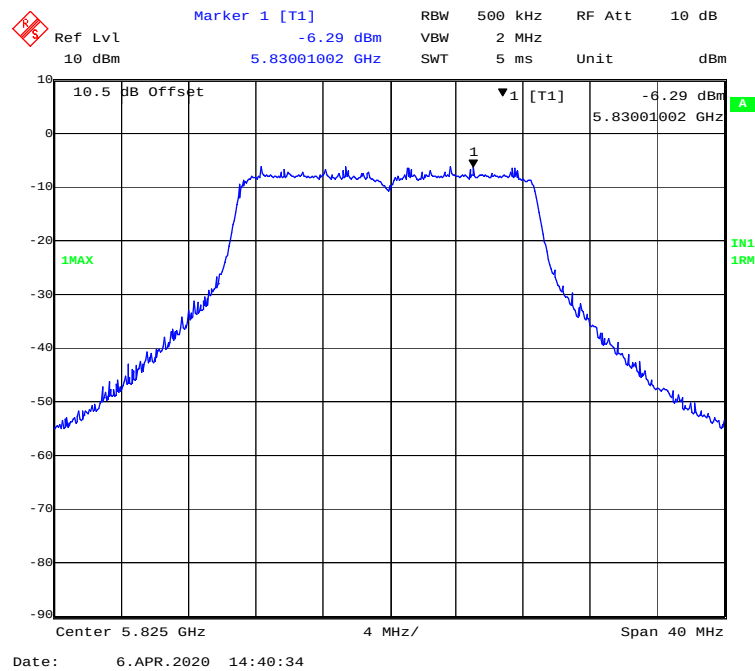
802.11n-HT20 mode, Power spectral density-5745MHz



802.11n-HT20 mode, Power spectral density-5785MHz

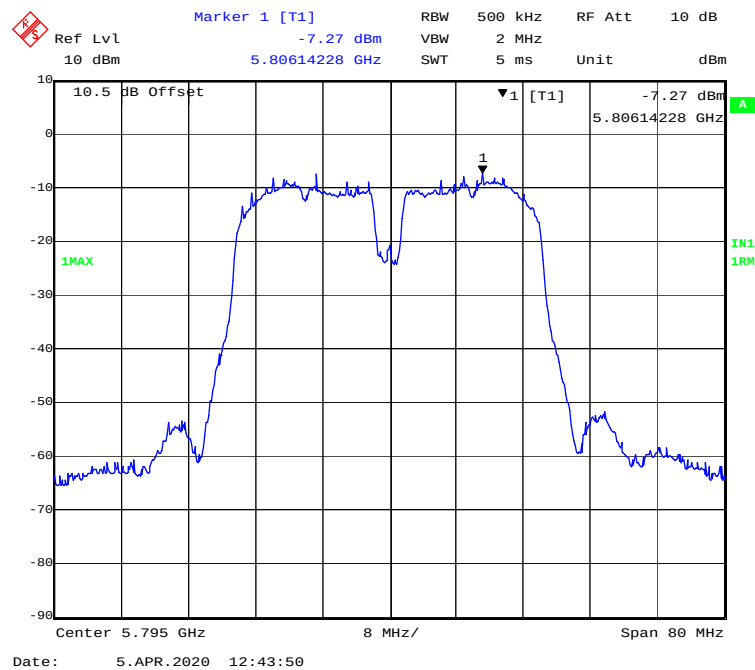


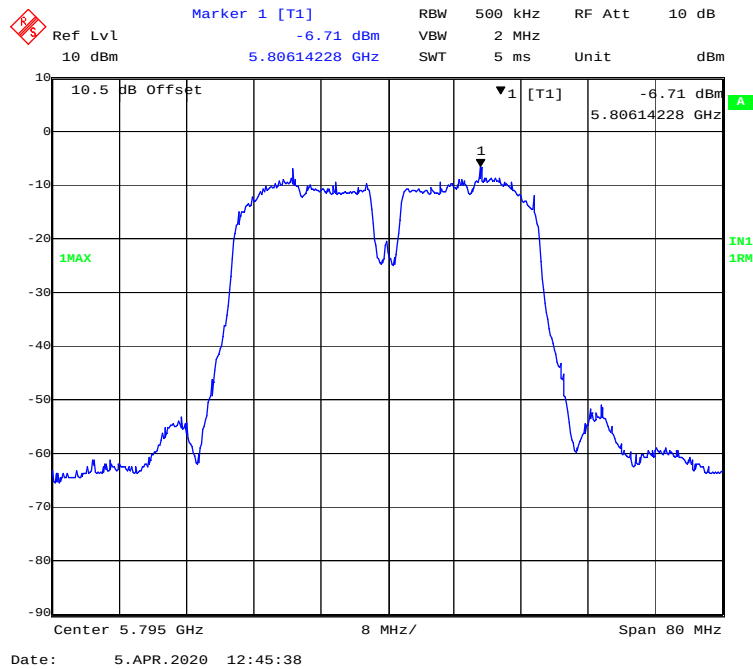
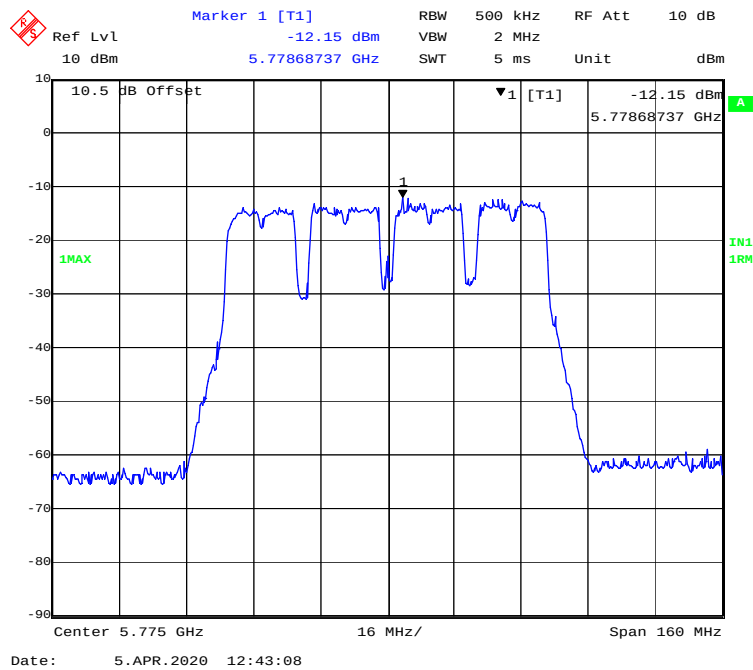
802.11n-HT20 mode, Power spectral density-5825MHz



802.11ac40 mode, Power spectral density-5755MHz

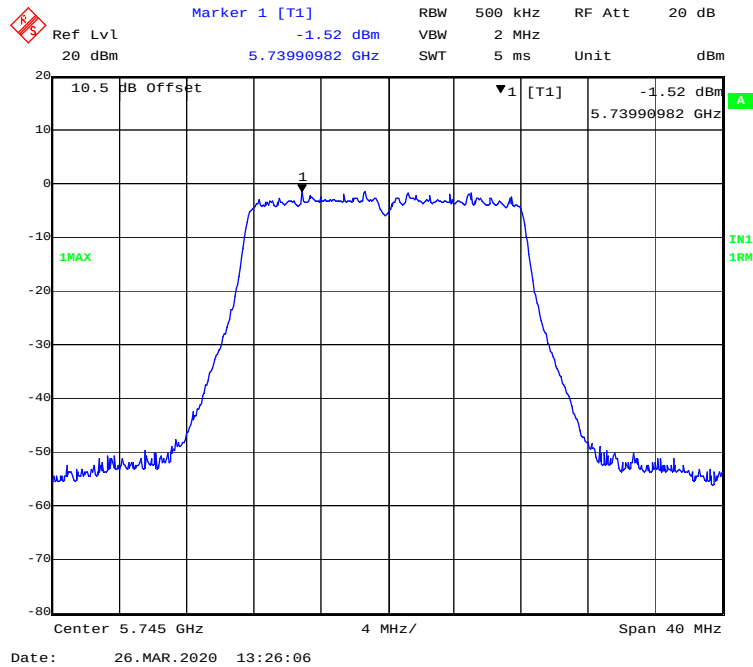


802.11 ac40 mode, Power spectral density-5795MHz**802.11n-HT40 mode, Power spectral density-5755MHz**

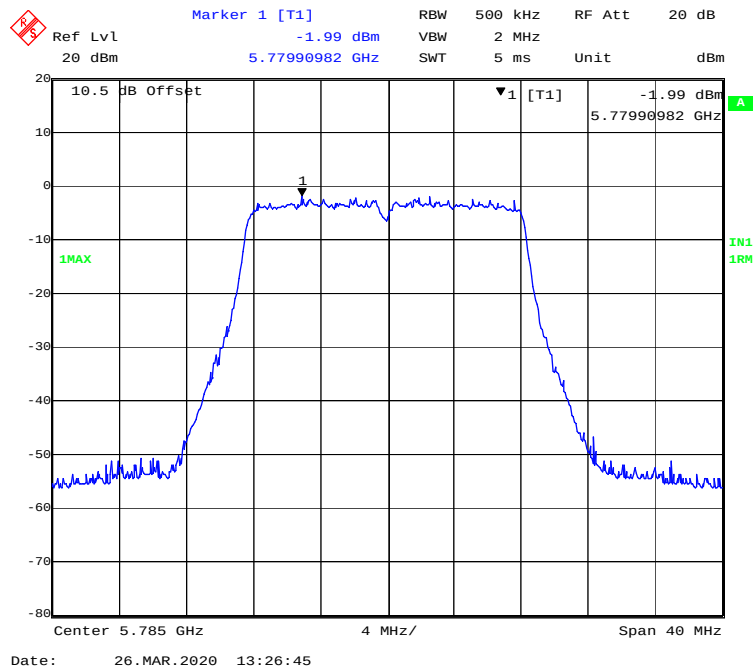
802.11n-HT40 mode, Power spectral density-5795MHz**802.11 ac80 mode, Power spectral density-5775MHz**

5725MHz-5850 MHz Band-Chain1:

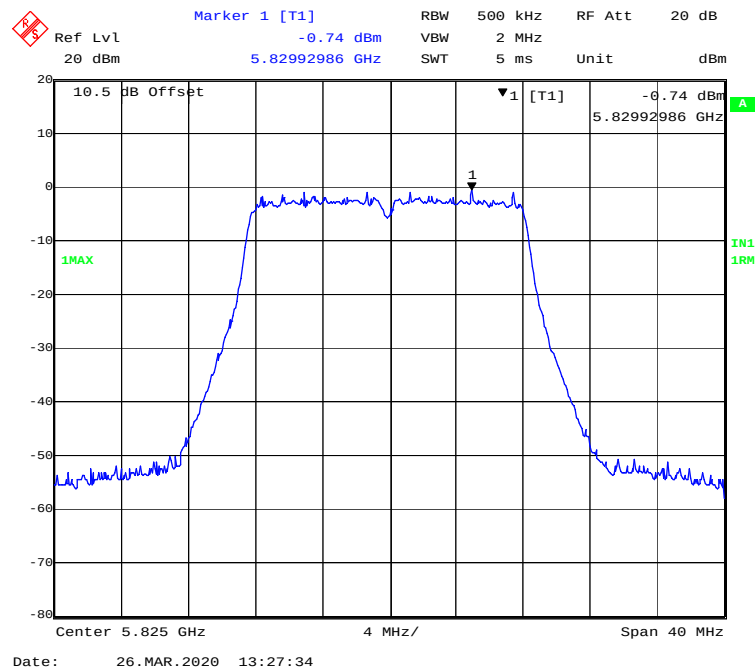
802.11a mode, Power spectral density-5745MHz



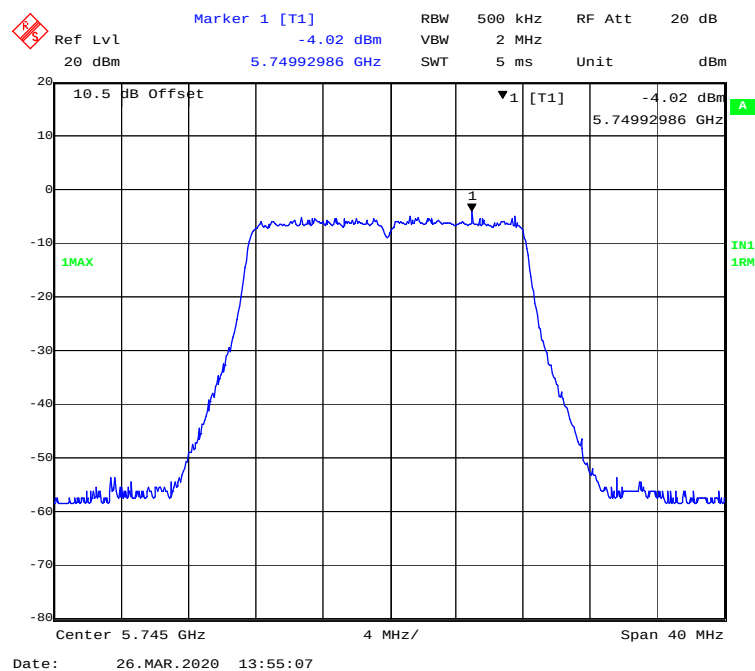
802.11a mode, Power spectral density-5785MHz



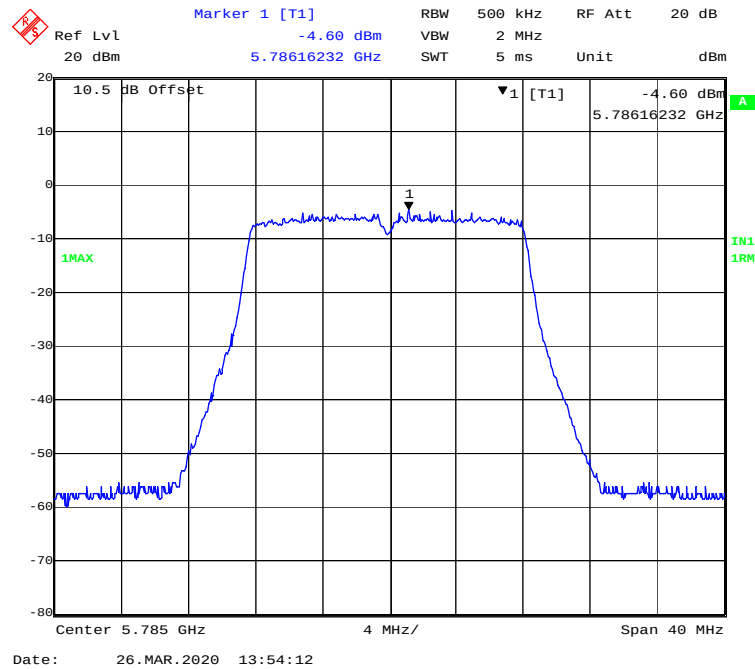
802.11a mode, Power spectral density-5825MHz



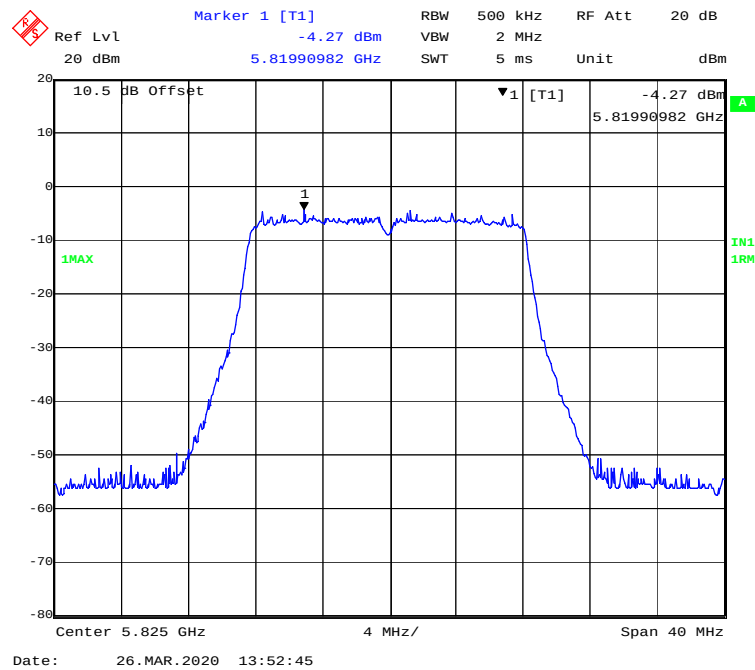
802.11ac20 mode, Power spectral density-5745MHz



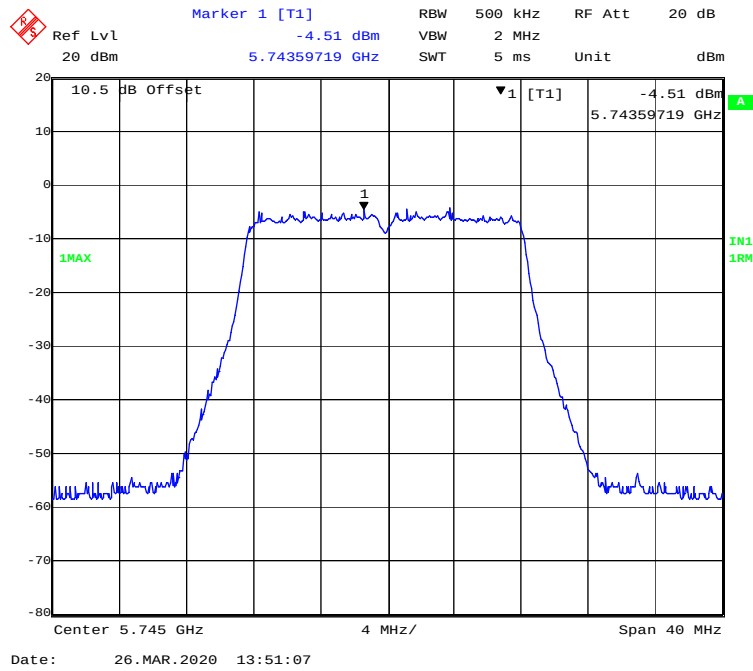
802.11 ac20 mode, Power spectral density-5785MHz



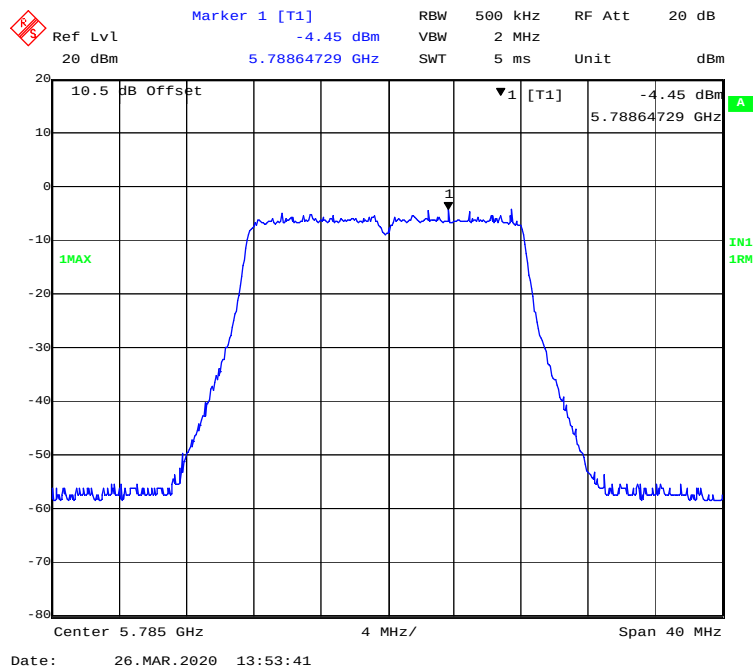
802.11 ac20 mode, Power spectral density-5825MHz



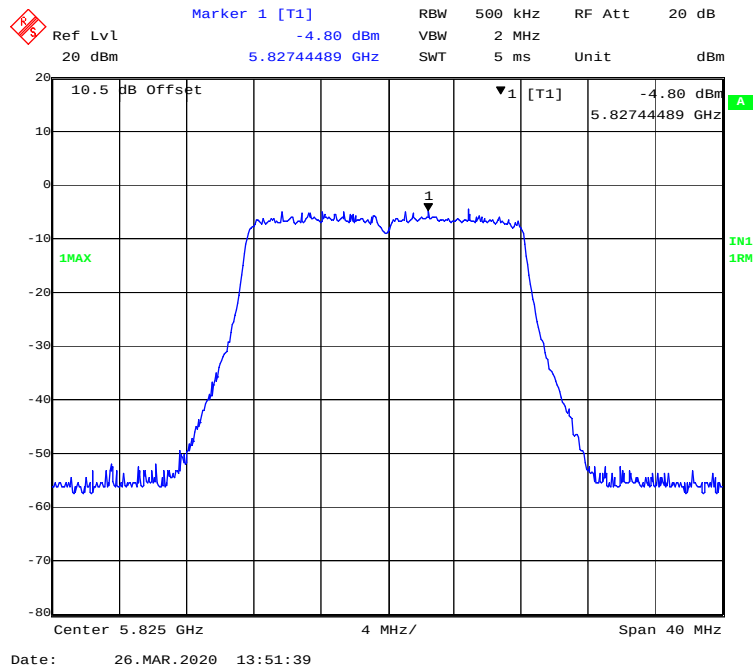
802.11n-HT20 mode, Power spectral density-5745MHz



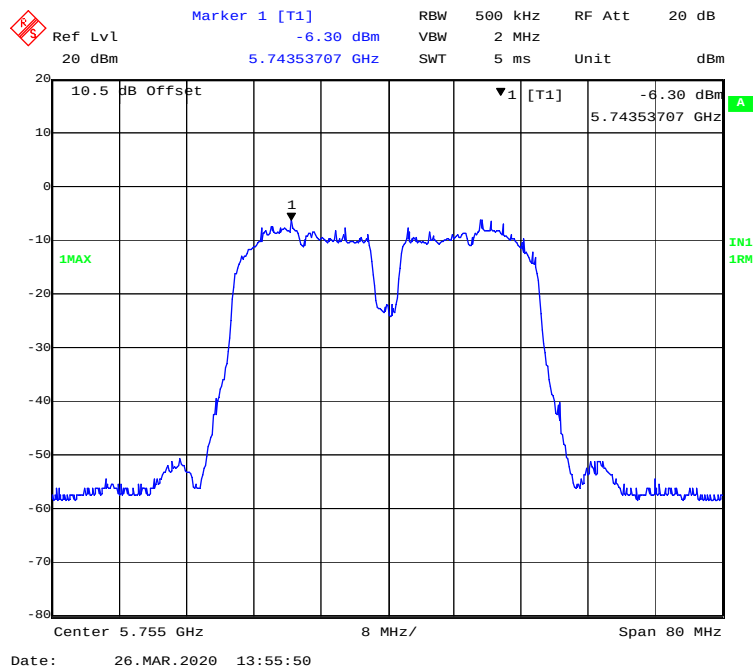
802.11n-HT20 mode, Power spectral density-5785MHz



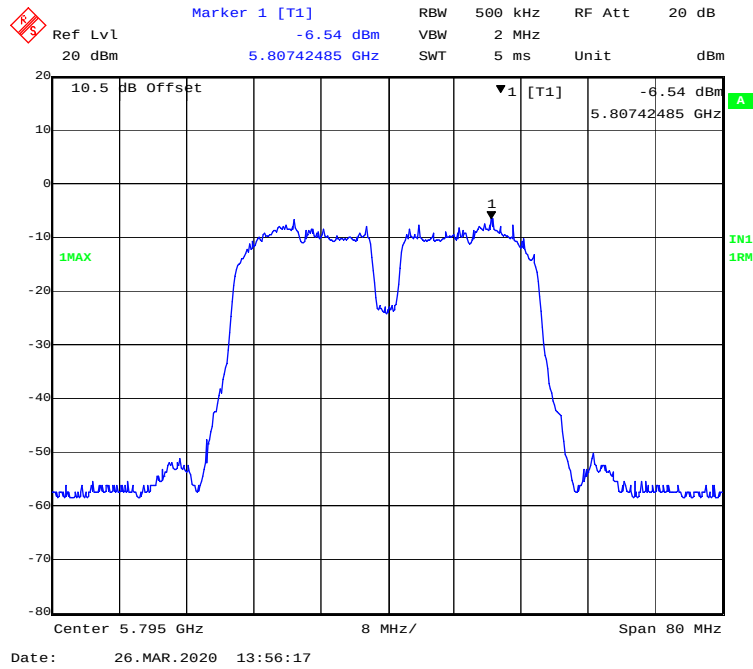
802.11n-HT20 mode, Power spectral density-5825MHz



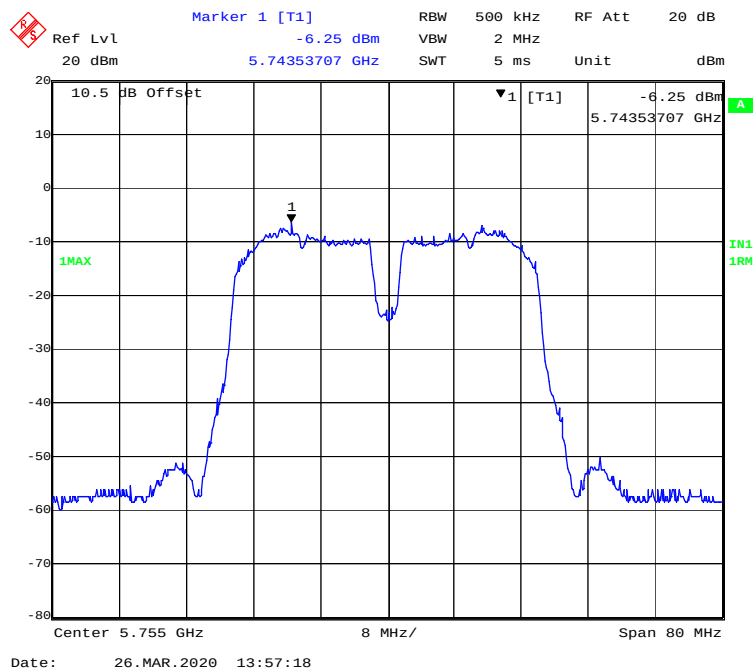
802.11ac40 mode, Power spectral density-5755MHz

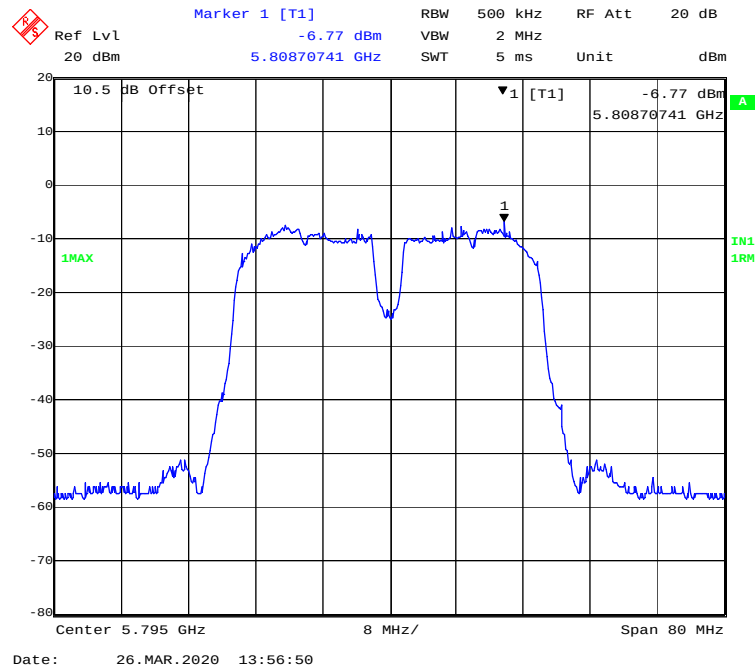
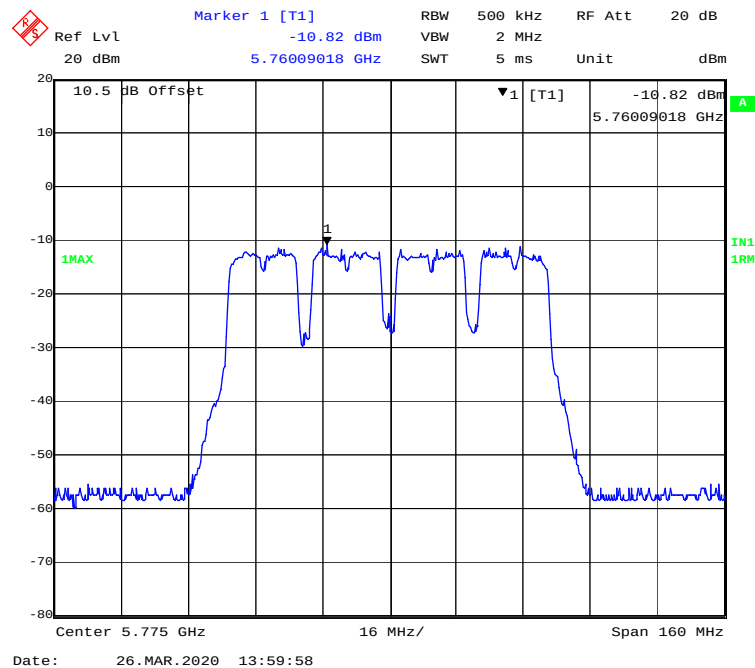


802.11 ac40 mode, Power spectral density-5795MHz



802.11n-HT40 mode, Power spectral density-5755MHz



802.11n-HT40 mode, Power spectral density-5795MHz**802.11 ac80 mode, Power spectral density-5775MHz**

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