802.11ac-HT40

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17931.800	42.79	-25.55	42.30	26.04	54.00	11.21	V
17903.200	42.54	-25.55	42.30	25.79	54.00	11.46	V
13276.050	37.77	-29.75	40.30	27.22	54.00	16.23	H
13287.050	37.57	-29.75	40.30	27.02	54.00	16.43	V
5149.540	52.67	-27.27	32.70	47.24	54.00	1.33	H
5149.860	52.65	-27.27	32.70	47.22	54.00	1.35	H

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17931.800	42.49	-25.55	42.30	25.74	54.00	11.51	H
17925.750	42.47	-25.55	42.30	25.72	54.00	11.53	H
13255.700	37.40	-29.75	40.20	26.95	54.00	16.60	V
13274.400	37.40	-29.75	40.30	26.85	54.00	16.60	V
5350.272	50.66	-27.08	33.50	44.24	54.00	3.34	H
5350.640	50.66	-27.08	33.50	44.24	54.00	3.34	H

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17918.050	42.59	-25.55	42.30	25.84	54.00	11.41	H
17920.250	42.43	-25.55	42.30	25.68	54.00	11.57	H
13278.800	37.82	-29.75	40.30	27.27	54.00	16.18	V
13266.150	37.60	-29.75	40.20	27.15	54.00	16.40	H
5459.560	45.43	-27.06	33.70	38.79	54.00	8.57	H
5459.845	45.27	-27.06	33.70	38.63	54.00	8.73	H

802.11ac-HT80

Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17932.900	42.79	-25.55	42.30	26.04	54.00	11.21	H
17918.600	42.77	-25.55	42.30	26.02	54.00	11.23	V
13296.400	37.65	-29.75	40.30	27.10	54.00	16.35	V
13287.600	37.54	-29.75	40.30	26.99	54.00	16.46	V
5149.620	52.33	-27.27	32.70	46.90	54.00	1.67	H
5149.460	52.15	-27.27	32.70	46.72	54.00	1.85	H

Channel 58

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17904.300	42.59	-25.55	42.30	25.84	54.00	11.41	V
17912.000	42.56	-25.55	42.30	25.81	54.00	11.44	V
13294.200	37.70	-29.75	40.30	27.15	54.00	16.30	H
13261.750	37.51	-29.75	40.20	27.06	54.00	16.49	H
5351.296	52.77	-27.08	33.50	46.35	54.00	1.23	H
5350.096	52.67	-27.08	33.50	46.25	54.00	1.33	H

Channel 106

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17930.150	42.77	-25.55	42.30	26.02	54.00	11.23	V
17910.350	42.69	-25.55	42.30	25.94	54.00	11.31	V
13280.450	37.68	-29.75	40.30	27.13	54.00	16.32	H
13320.050	37.64	-30.08	40.30	27.42	54.00	16.36	H
5458.810	51.07	-27.06	33.70	44.43	54.00	2.93	H
5457.415	50.46	-27.06	33.70	43.82	54.00	3.54	H

PEAK Results:

802.11a

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17865.250	53.52	-25.55	42.30	36.77	74.00	20.48	V
17900.450	52.79	-25.55	42.30	36.04	74.00	21.21	V
13590.650	48.76	-29.88	40.60	38.04	68.20	19.44	V
13804.600	48.74	-29.41	40.90	37.25	68.20	19.46	V
5149.520	68.52	-27.27	32.70	63.09	74.00	5.48	H
5149.660	66.78	-27.27	32.70	61.35	74.00	7.22	H

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17928.500	53.35	-25.55	42.30	36.60	74.00	20.65	V
17855.900	53.14	-25.55	42.30	36.39	74.00	20.86	V
13145.700	49.33	-29.74	40.00	39.07	68.20	18.87	V
14157.700	49.19	-28.86	40.50	37.55	68.20	19.01	V
5350.960	71.21	-27.08	33.50	64.79	74.00	2.79	H
5352.448	69.70	-27.08	33.50	63.28	74.00	4.30	H

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
16498.500	54.34	-27.85	40.50	41.69	68.20	13.86	V
16501.800	53.71	-27.85	40.50	41.06	68.20	14.49	V
14034.500	49.45	-28.98	40.70	37.73	68.20	18.75	V
14097.200	49.15	-28.98	40.50	37.63	68.20	19.05	V
5456.035	60.83	-27.06	33.70	54.19	74.00	13.17	H
5469.685	67.88	-27.06	33.70	61.24	68.20	0.32	H

802.11n-HT20

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17947.200	53.41	-25.55	42.30	36.66	74.00	20.59	V
17908.700	52.84	-25.55	42.30	36.09	74.00	21.16	V
14121.950	48.79	-28.86	40.50	37.15	68.20	19.41	H
14210.500	48.73	-28.86	40.40	37.19	68.20	19.47	V
5146.880	66.89	-27.34	32.70	61.53	74.00	7.11	H
5148.980	65.63	-27.27	32.70	60.20	74.00	8.37	H

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17923.000	53.27	-25.55	42.30	36.52	74.00	20.73	V
17926.850	53.07	-25.55	42.30	36.32	74.00	20.93	V
14109.300	49.00	-28.86	40.50	37.36	68.20	19.20	H
14147.800	48.73	-28.86	40.50	37.09	68.20	19.47	V
5351.808	67.09	-27.08	33.50	60.67	74.00	6.91	H
5351.568	66.43	-27.08	33.50	60.01	74.00	7.57	H

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
16493.550	53.77	-27.85	40.50	41.12	68.20	14.43	V
17920.250	53.04	-25.55	42.30	36.29	74.00	20.96	V
14032.300	49.44	-28.98	40.70	37.72	68.20	18.76	V
13844.750	49.08	-29.41	40.90	37.59	68.20	19.12	V
5458.615	61.26	-27.06	33.70	54.62	74.00	12.74	H
5469.835	66.63	-27.06	33.70	59.99	68.20	1.57	H

802.11n-HT40

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17917.500	53.21	-25.55	42.30	36.46	74.00	20.79	V
17923.000	52.85	-25.55	42.30	36.10	74.00	21.15	H
14064.200	50.08	-28.98	40.50	38.56	68.20	18.12	H
14593.300	48.98	-28.77	39.70	38.05	68.20	19.22	H
5144.180	68.06	-27.34	32.70	62.70	74.00	5.94	H
5149.020	67.93	-27.27	32.70	62.50	74.00	6.07	H

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17928.500	53.55	-25.55	42.30	36.80	74.00	20.45	V
17931.250	53.17	-25.55	42.30	36.42	74.00	20.83	V
14108.750	49.49	-28.98	40.50	37.97	68.20	18.71	H
14044.400	49.05	-28.98	40.70	37.33	68.20	19.15	H
5350.080	68.74	-27.08	33.50	62.32	74.00	5.26	H
5350.512	68.20	-27.08	33.50	61.78	74.00	5.80	H

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17925.200	52.86	-25.55	42.30	36.11	74.00	21.14	H
17899.350	52.81	-25.55	42.30	36.06	74.00	21.19	H
14137.350	48.77	-28.86	40.50	37.13	68.20	19.43	V
14208.850	48.66	-28.86	40.40	37.12	68.20	19.54	H
5459.440	58.06	-27.06	33.70	51.42	74.00	15.94	H
5469.955	66.81	-27.06	33.70	60.17	68.20	1.39	H

802.11ac-HT20

Channel 36

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17950.500	53.48	-25.55	42.30	36.73	74.00	20.52	V
17915.300	53.07	-25.55	42.30	36.32	74.00	20.93	V
14076.850	49.49	-28.98	40.50	37.97	68.20	18.71	H
13329.950	49.41	-30.08	40.30	39.19	74.00	24.59	H
5149.480	66.32	-27.27	32.70	60.89	74.00	7.68	H
5148.880	65.76	-27.27	32.70	60.33	74.00	8.24	H

Channel 64

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17910.900	53.43	-25.55	42.30	36.68	74.00	20.57	V
17934.000	53.17	-25.55	42.30	36.42	74.00	20.83	V
14134.600	49.20	-28.86	40.50	37.56	68.20	19.00	V
14091.700	48.92	-28.98	40.50	37.40	68.20	19.28	V
5353.360	70.95	-27.08	33.50	64.53	74.00	3.05	H
5351.264	68.49	-27.08	33.50	62.07	74.00	5.51	H

Channel 100

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
16501.250	53.93	-27.85	40.50	41.28	68.20	14.27	V
16499.050	53.78	-27.85	40.50	41.13	68.20	14.42	V
13810.650	49.30	-29.41	40.90	37.81	68.20	18.90	V
13894.800	48.89	-29.33	40.90	37.32	68.20	19.31	H
5455.915	63.42	-27.06	33.70	56.78	74.00	10.58	H
5467.375	67.82	-27.06	33.70	61.18	68.20	0.38	H

802.11ac-HT40

Channel 38

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17915.850	53.34	-25.55	42.30	36.59	74.00	20.66	H
17936.200	52.81	-25.55	42.30	36.06	74.00	21.19	V
14048.800	49.25	-28.98	40.70	37.53	68.20	18.95	V
14092.800	49.09	-28.98	40.50	37.57	68.20	19.11	H
5149.400	68.96	-27.27	32.70	63.53	74.00	5.04	H
5149.320	66.42	-27.27	32.70	60.99	74.00	7.58	H

Channel 62

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17963.700	53.28	-25.55	42.30	36.53	74.00	20.72	V
17906.500	52.91	-25.55	42.30	36.16	74.00	21.09	V
14141.750	49.20	-28.86	40.50	37.56	68.20	19.00	V
14126.350	49.18	-28.86	40.50	37.54	68.20	19.02	H
5351.344	67.10	-27.08	33.50	60.68	74.00	6.90	H
5352.064	66.02	-27.08	33.50	59.60	74.00	7.98	H

Channel 102

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17877.350	53.02	-25.55	42.30	36.27	74.00	20.98	V
17886.150	52.56	-25.55	42.30	35.81	74.00	21.44	H
13816.700	49.01	-29.41	40.90	37.52	68.20	19.19	V
13833.200	48.67	-29.41	40.90	37.18	68.20	19.53	H
5458.480	60.51	-27.06	33.70	53.87	74.00	13.49	H
5469.265	66.03	-27.06	33.70	59.39	68.20	2.17	H

802.11ac-HT80

Channel 42

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17936.750	53.73	-25.55	42.30	36.98	74.00	20.27	H
17985.700	53.34	-25.55	42.30	36.59	74.00	20.66	V
13824.400	49.30	-29.41	40.90	37.81	68.20	18.90	V
13790.300	49.29	-29.41	40.90	37.80	68.20	18.91	V
5135.000	66.90	-27.34	32.70	61.54	74.00	7.10	H
5146.860	66.63	-27.34	32.70	61.27	74.00	7.37	H

Channel 58

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17913.650	53.68	-25.55	42.30	36.93	74.00	20.32	V
17884.500	53.37	-25.55	42.30	36.62	74.00	20.63	H
14136.800	49.38	-28.86	40.50	37.74	68.20	18.82	H
14061.450	49.05	-28.98	40.50	37.53	68.20	19.15	V
5352.960	67.71	-27.08	33.50	61.29	74.00	6.29	H
5350.432	67.29	-27.08	33.50	60.87	74.00	6.71	H

Channel 106

Frequency (MHz)	Measurement Result (dBuV/m)	Cable Loss (dB)	Antenna Factor (dB/m)	Receiver Reading (dBuV)	Limit (dBuV/m)	Margin (dB)	Antenna Pol. (H/V)
17921.900	53.33	-25.55	42.30	36.58	74.00	20.67	V
17912.000	53.11	-25.55	42.30	36.36	74.00	20.89	H
13895.350	49.16	-29.33	40.90	37.59	68.20	19.04	H
13270.550	48.86	-29.75	40.30	38.31	74.00	25.14	V
5443.915	66.17	-27.18	33.60	59.75	74.00	7.83	H
5468.245	67.34	-27.06	33.70	60.70	68.20	0.86	H

Conclusion: PASS

Band edge compliance

Mode	Channel	Test Results	Conclusion
802.11a	5180 MHz	Fig.1	P
	5320 MHz	Fig.2	P
	5500 MHz	Fig.3	P
	5700 MHz	Fig.4	P
802.11n HT20	5180 MHz	Fig.5	P
	5320 MHz	Fig.6	P
	5500 MHz	Fig.7	P
	5700 MHz	Fig.8	P
802.11n HT40	5190 MHz	Fig.9	P
	5310 MHz	Fig.10	P
	5510 MHz	Fig.11	P
	5670 MHz	Fig.12	P
802.11ac HT20	5180 MHz	Fig.13	P
	5320 MHz	Fig.14	P
	5500 MHz	Fig.15	P
	5700 MHz	Fig.16	P
802.11ac HT40	5190 MHz	Fig.17	P
	5310 MHz	Fig.18	P
	5510 MHz	Fig.19	P
	5670 MHz	Fig.20	P
802.11ac HT80	5210MHz	Fig.21	P
	5290MHz	Fig.22	P
	5530MHz	Fig.23	P
	5610MHz	Fig.24	P

Conclusion: PASS

Test graphs as below:

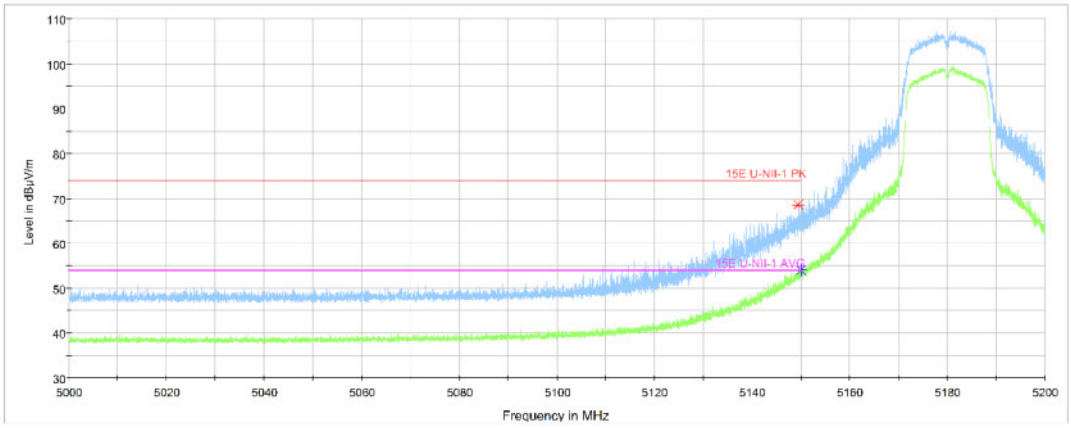


Fig. 1 Band Edges (802.11a Ch36, 5180MHz)

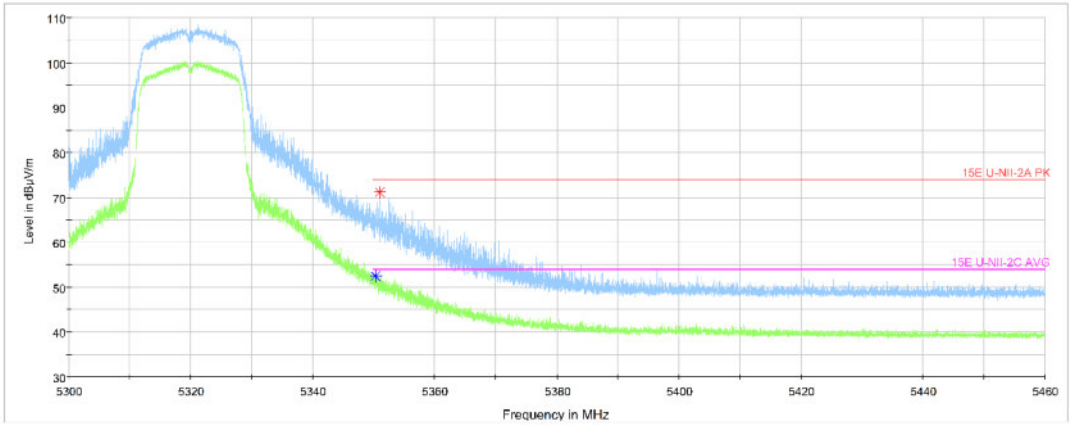


Fig. 2 Band Edges (802.11a Ch64, 5320MHz)

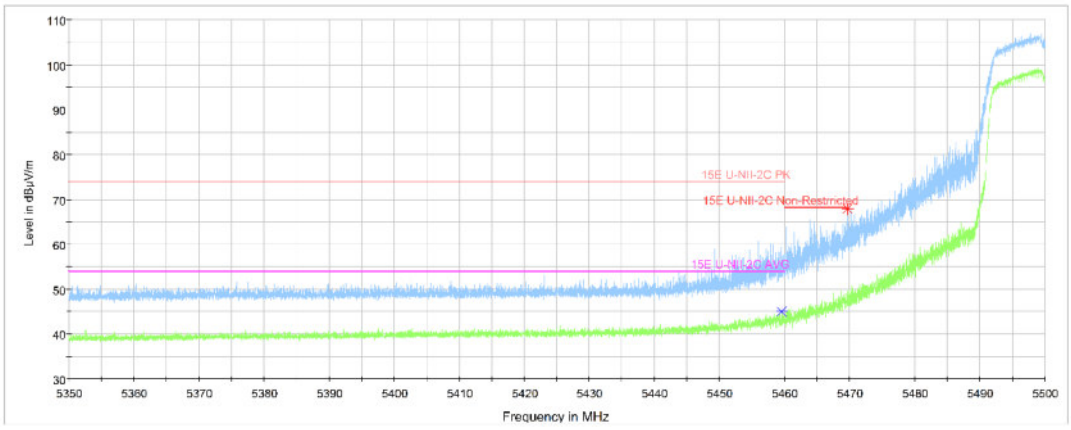


Fig. 3 Band Edges (802.11a Ch100, 5500MHz)

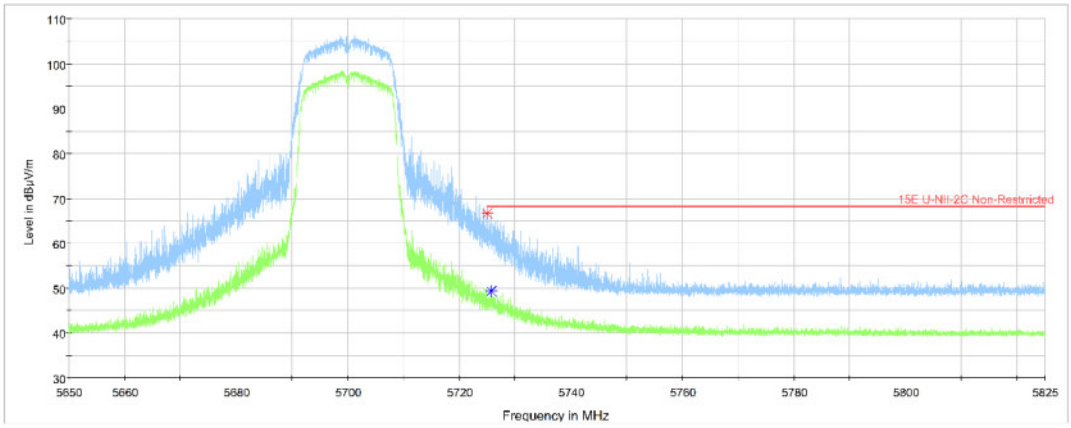


Fig. 4 Band Edges (802.11a Ch140, 5700MHz)

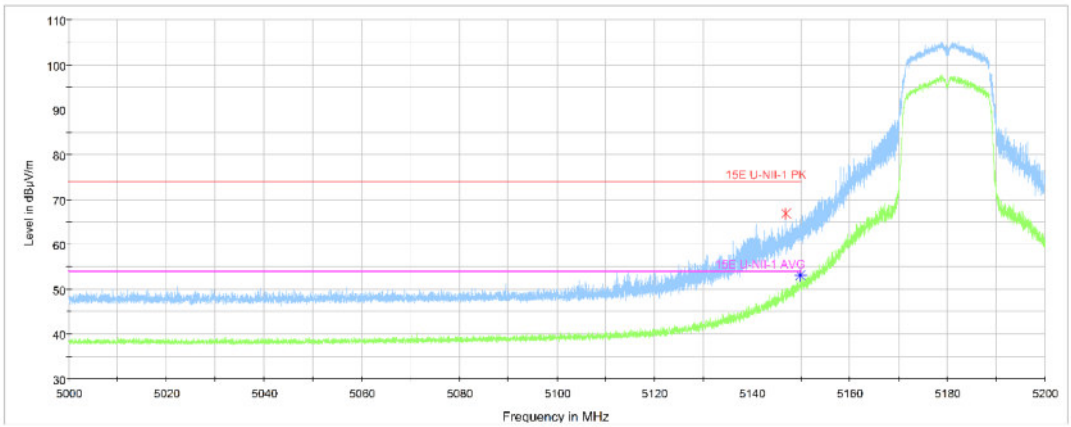


Fig. 5 Band Edges (802.11n-HT20 Ch36, 5180MHz)

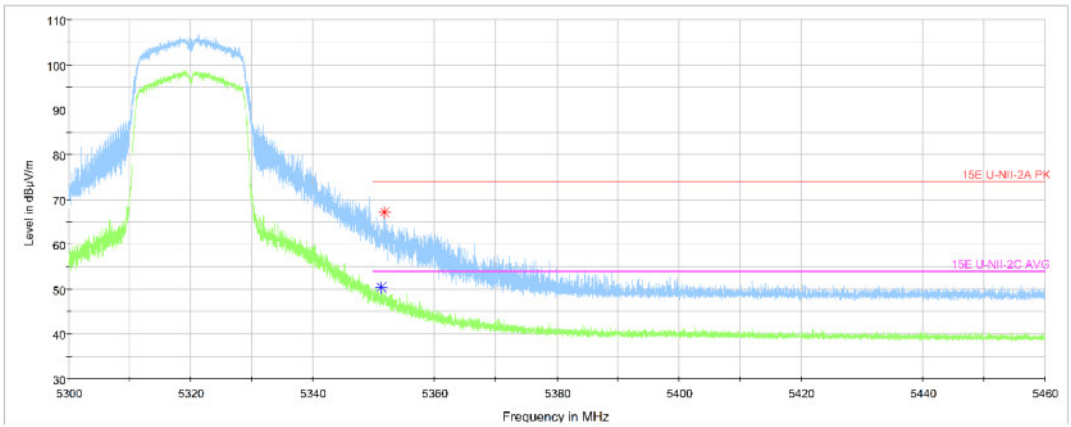


Fig. 6 Band Edges (802.11n-HT20 Ch64, 5320MHz)

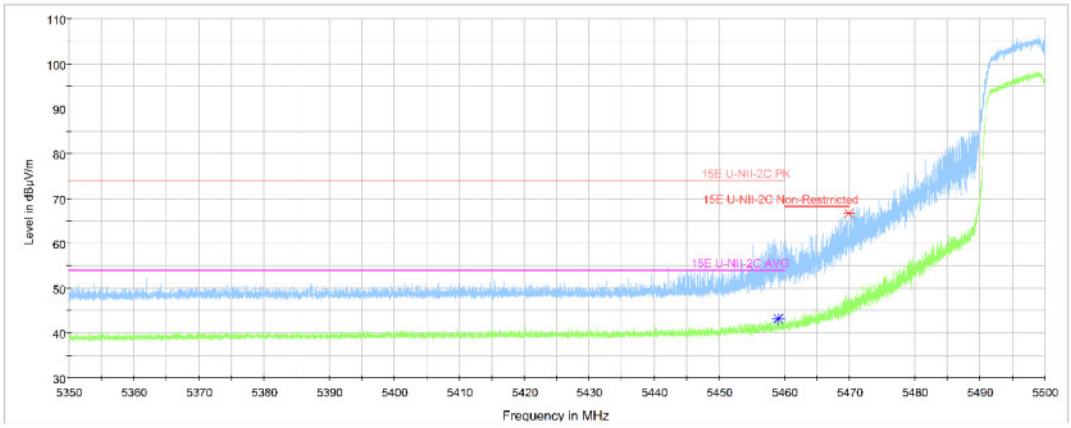


Fig. 7 Band Edges (802.11n-HT20 Ch100, 5500MHz)

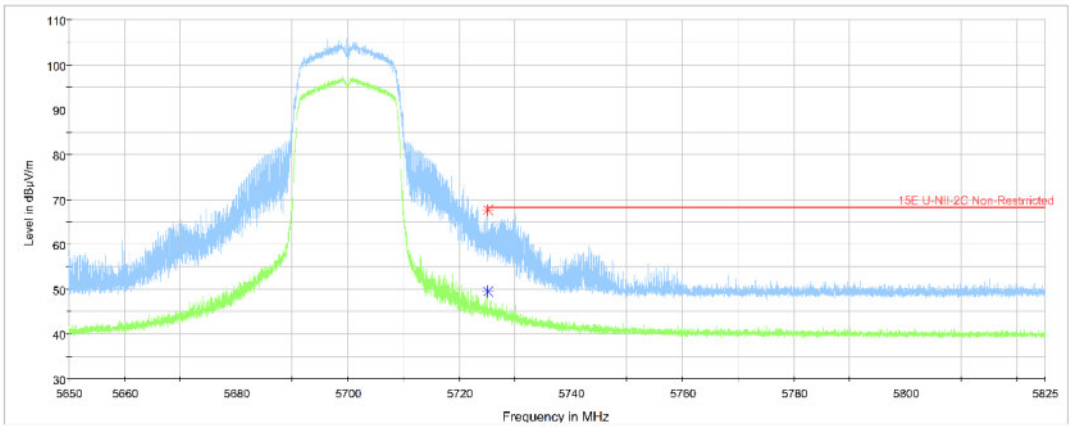


Fig. 8 Band Edges (802.11n-HT20 Ch140, 5700MHz)

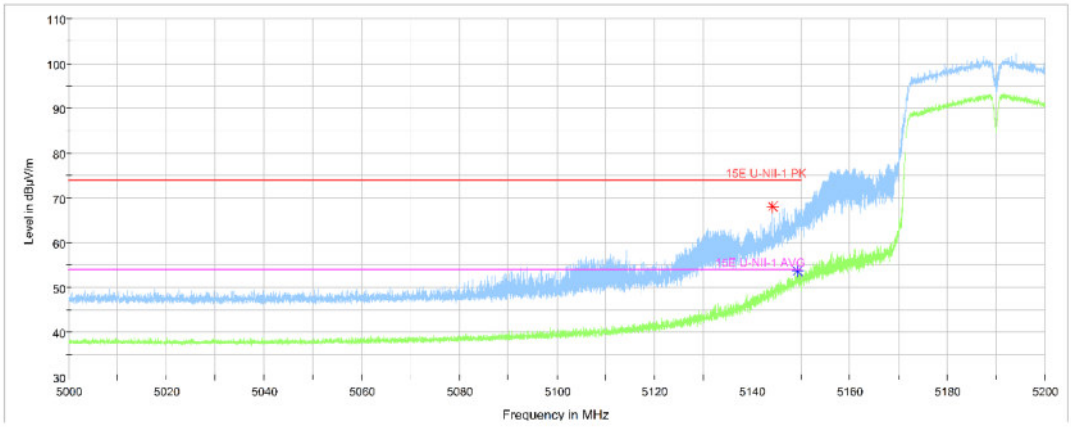


Fig. 9 Band Edges (802.11n-HT40 Ch38, 5190MHz)

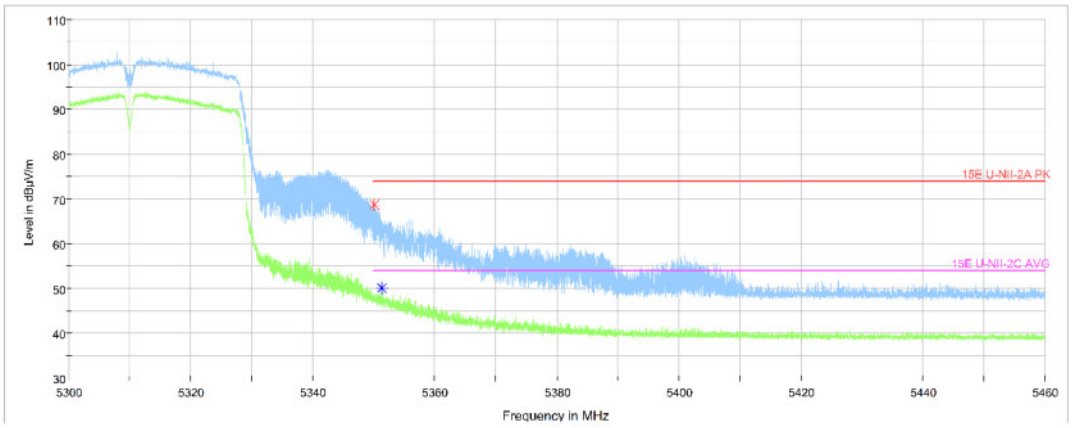


Fig. 10 Band Edges (802.11n-HT40 Ch62, 5310MHz)

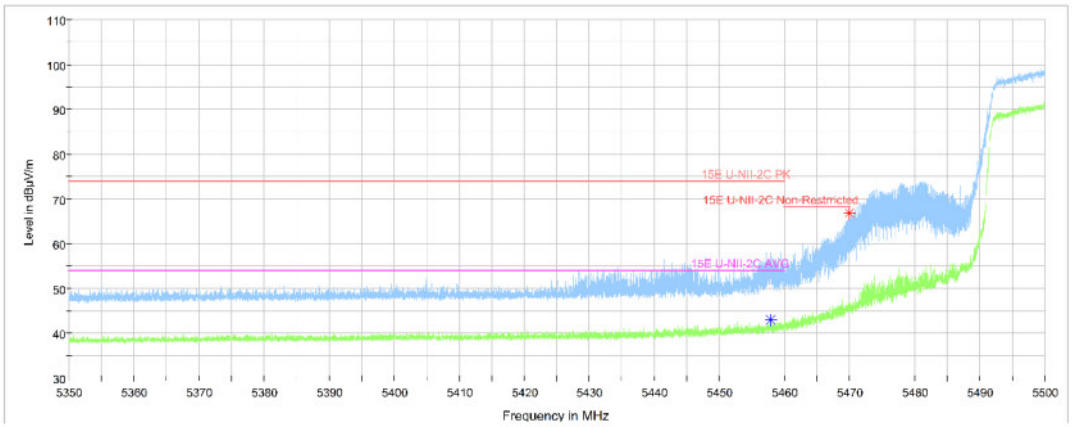


Fig. 11 Band Edges (802.11n-HT40 Ch102, 5510MHz)

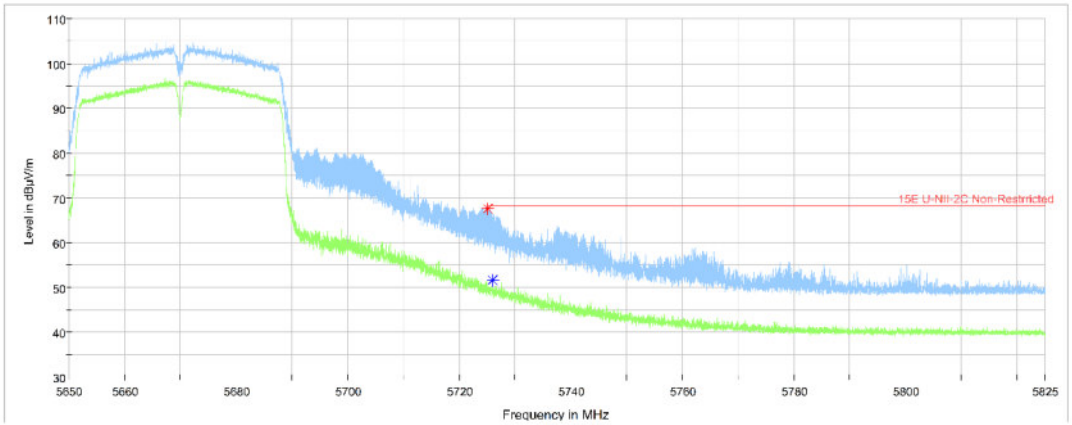


Fig. 12 Band Edges (802.11n-HT40 Ch134, 5670MHz)

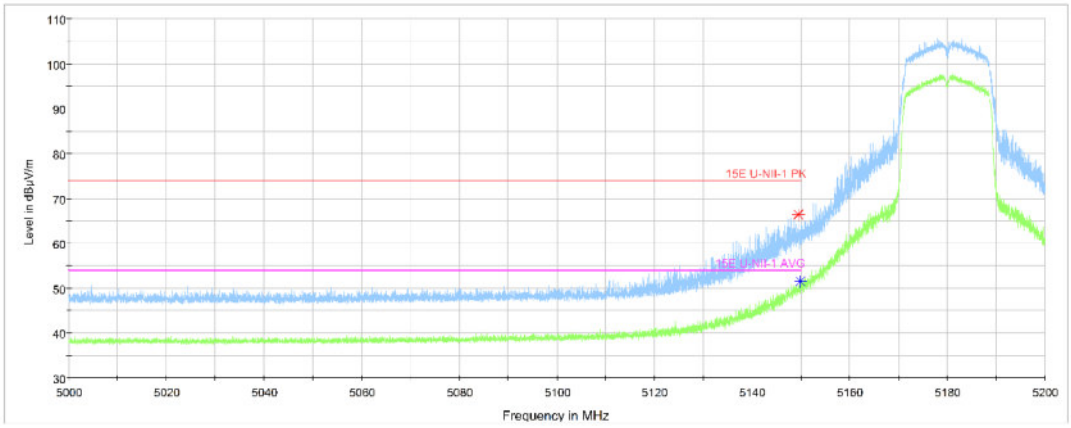


Fig. 13 Band Edges (802.11ac-HT20 Ch36, 5180MHz)

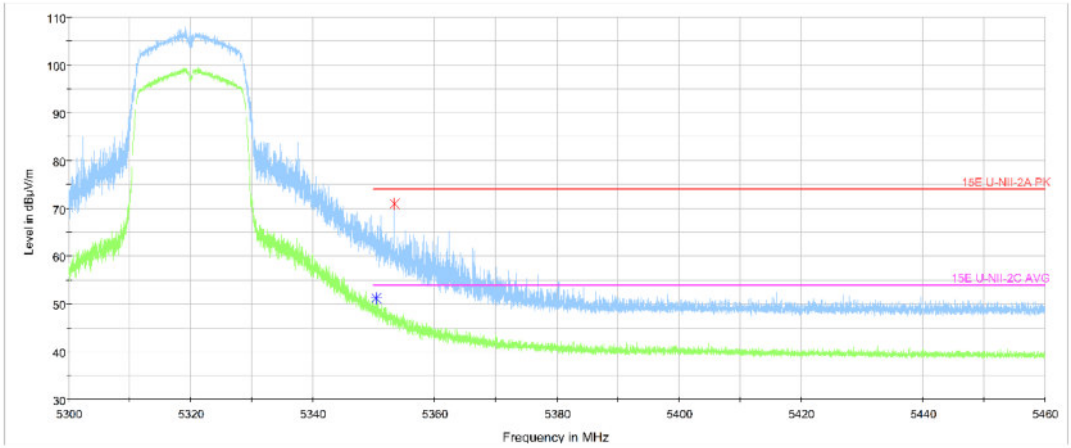


Fig. 14 Band Edges (802.11ac-HT20 Ch64, 5320MHz)

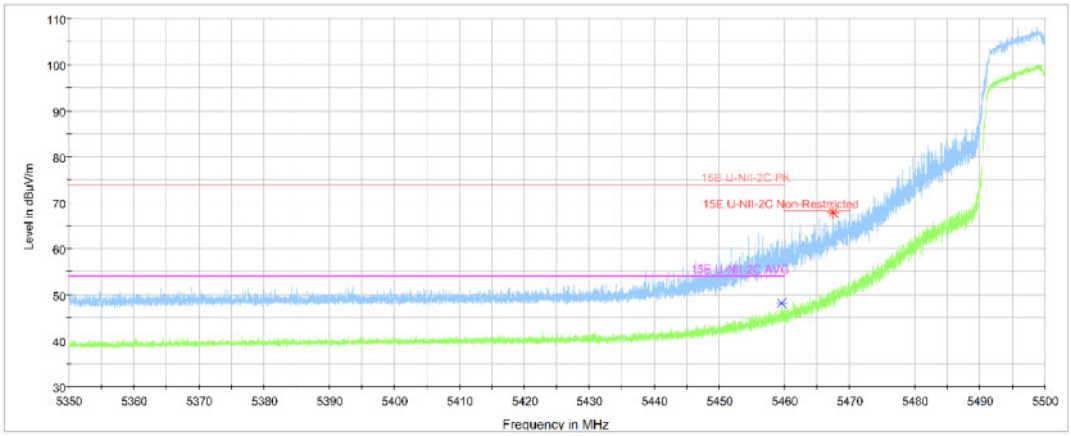


Fig. 15 Band Edges (802.11ac-HT20 Ch100, 5500MHz)

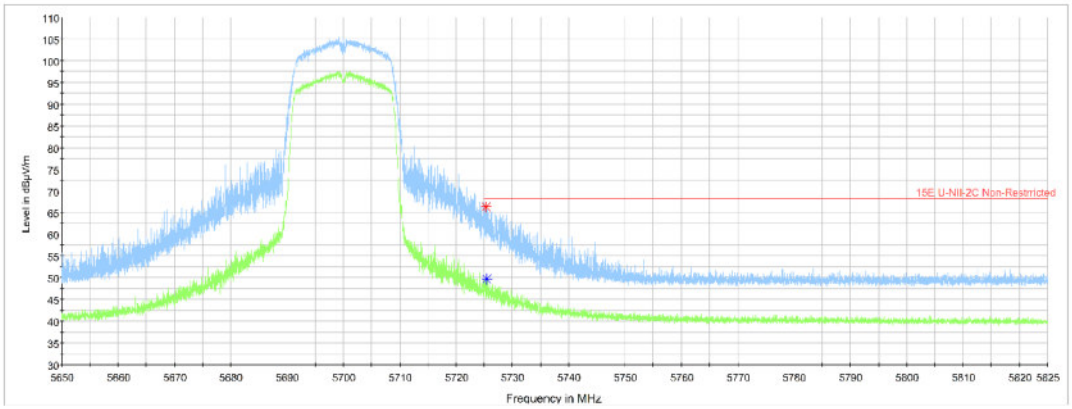


Fig. 16 Band Edges (802.11ac-HT20 Ch140, 5700MHz)

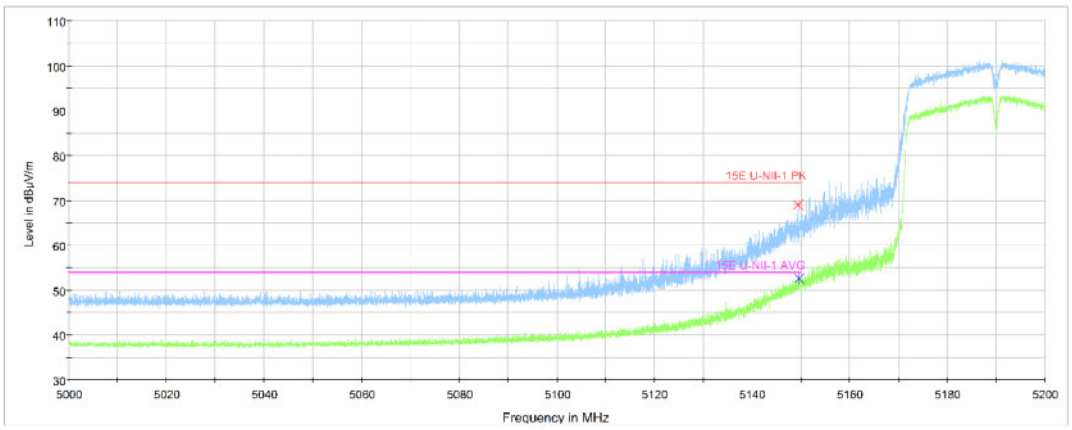


Fig. 17 Band Edges (802.11ac-HT40 Ch38, 5190MHz)

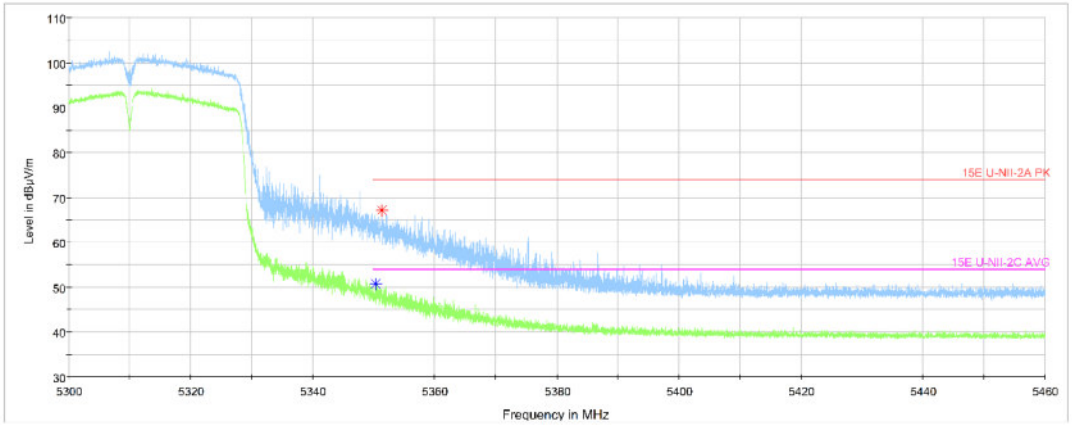


Fig. 18 Band Edges (802.11ac-HT40 Ch62, 5310MHz)

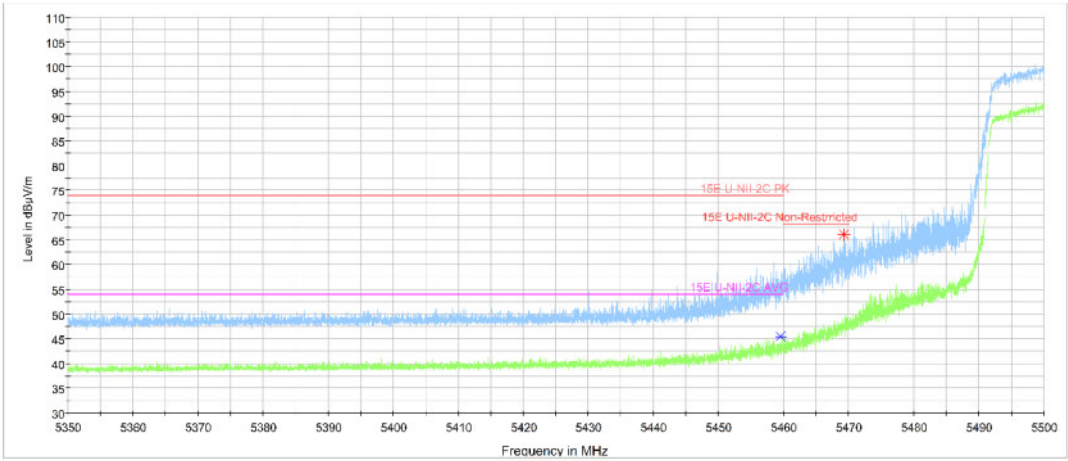


Fig. 19 Band Edges (802.11ac-HT40 Ch102, 5510MHz)

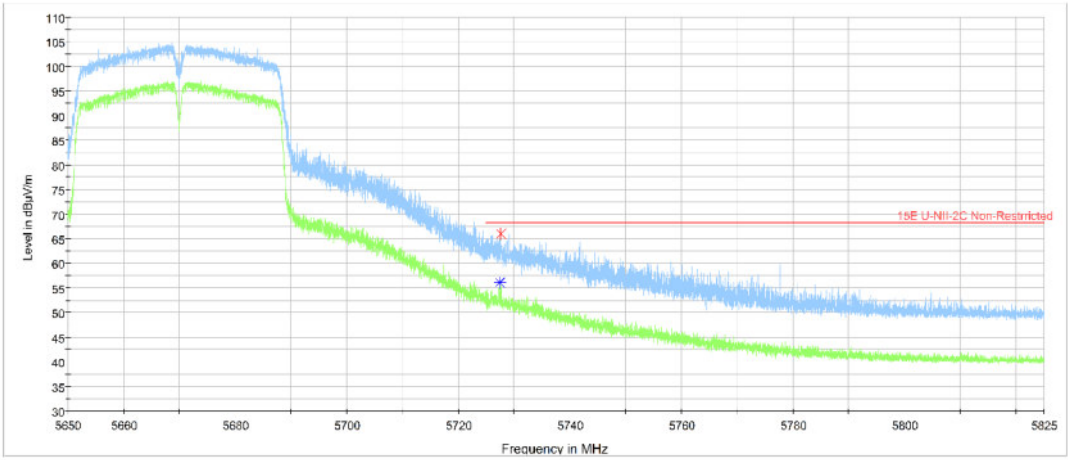


Fig. 20 Band Edges (802.11ac-HT40 Ch134, 5670MHz)

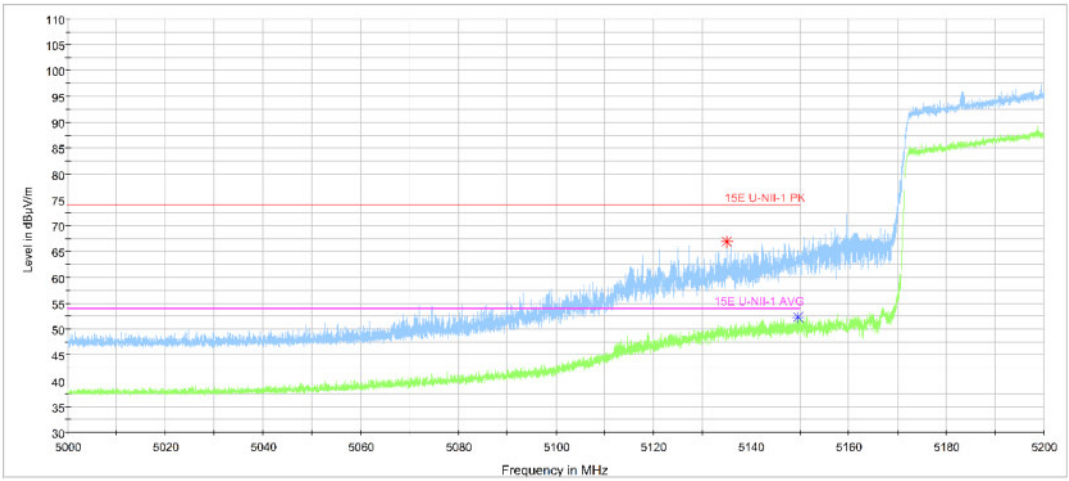


Fig. 21 Band Edges (802.11ac-HT80 Ch42 , 5210MHz)

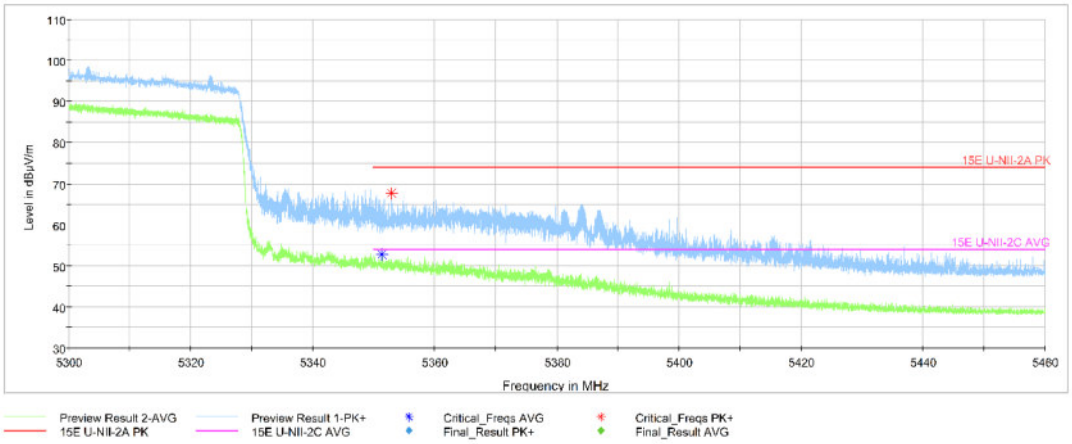


Fig. 22 Band Edges (802.11ac-HT80 Ch58, 5290MHz)

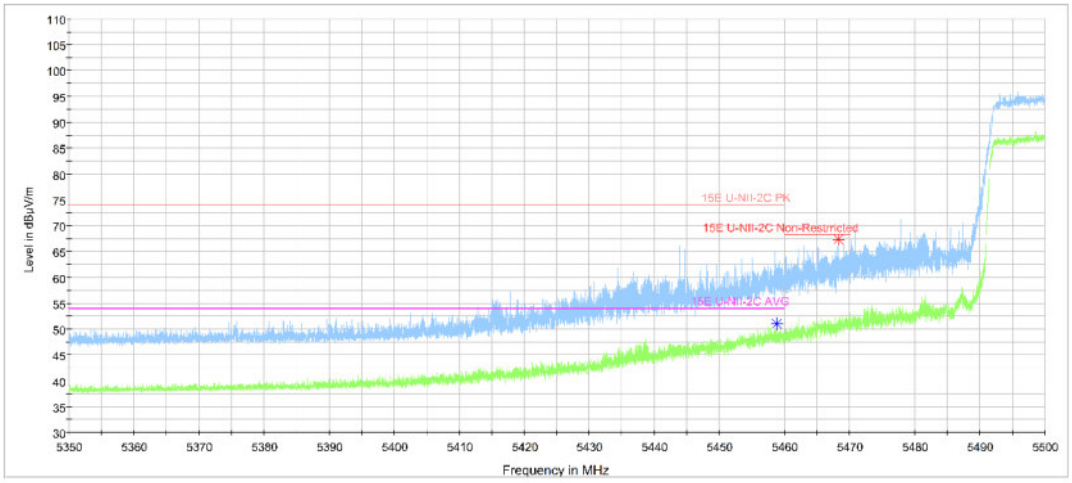


Fig. 23 Band Edges (802.11ac-HT80 Ch106, 5530MHz)

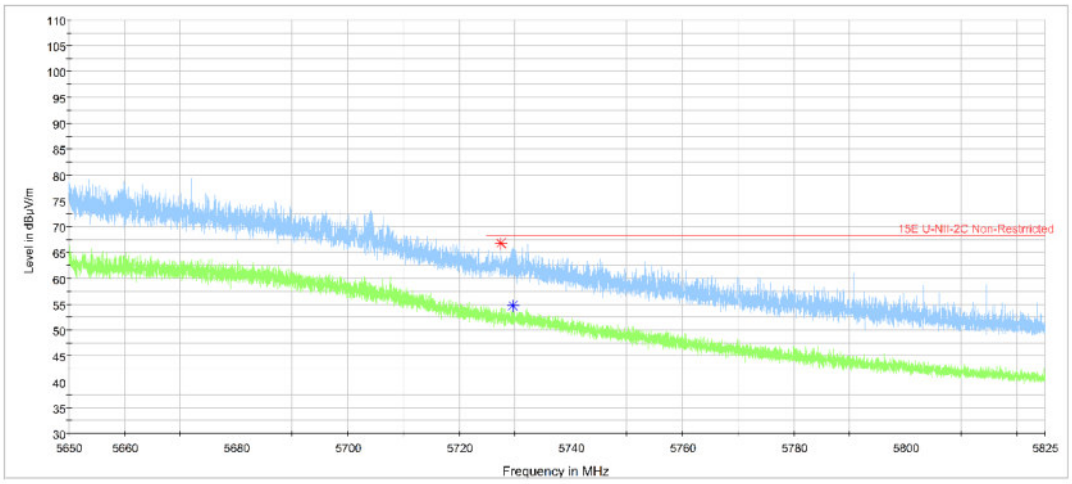


Fig. 24 Band Edges (802.11ac-HT80 Ch122, 5610MHz)

A.6. AC Powerline Conducted Emission (150kHz- 30MHz)

A.6.1 Summary

All AC line conducted spurious emissions are measured with a receiver connected to a grounded LISN while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates and modes were investigated for conducted spurious emissions. Only the conducted emissions of the configuration that produced the worst case emissions are reported in this section

A.6.2 Method of Measurement

See Clause 6.2 of ANSI C63.10 specifically.

See Clause 4 and Clause 5 of ANSI C63.10 generally.

The conducted emissions from the AC port of the EUT are measured in a shielding room. The EUT is connected to a Line Impedance Stabilization Network (LISN). An overview sweep with peak detection was performed. The measurements were performed with a quasi-peak detector and if required, an average detector.

The conducted emission measurements were made with the following detector of the test receiver: Quasi-Peak / Average Detector.

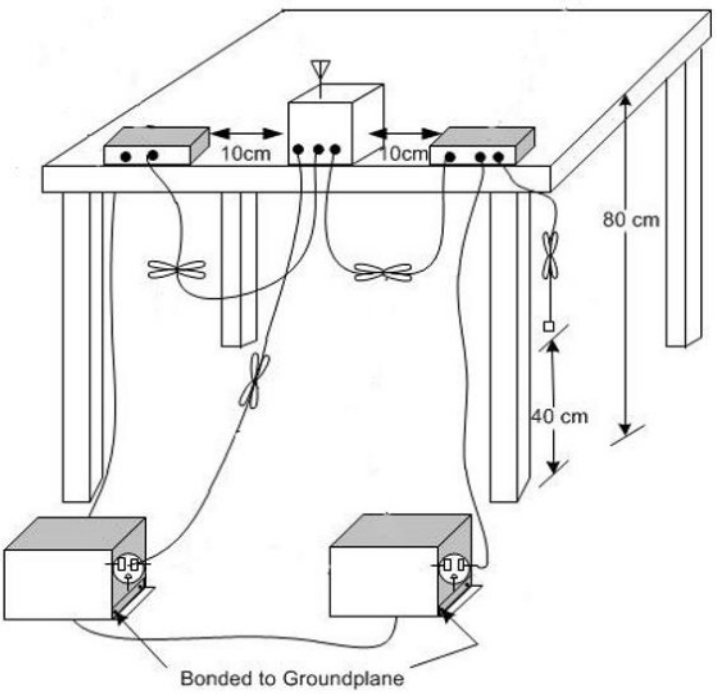
The measurement bandwidth is:

Frequency of Emission (MHz)	RBW/IF bandwidth
0.15-30	9kHz

A.6.3 Test Condition

Voltage（V）	Frequency（Hz）
120	60

A.6.4 Test setup



Measurement Result and limit:

WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	66 to 56	Fig.25	Fig.26	P
0.5 to 5	56			
5 to 30	60			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		11a mode	Idle	
0.15 to 0.5	56 to 46	Fig.25	Fig.26	P
0.5 to 5	46			
5 to 30	50			
NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.				

Conclusion: PASS

Test graphs as below:

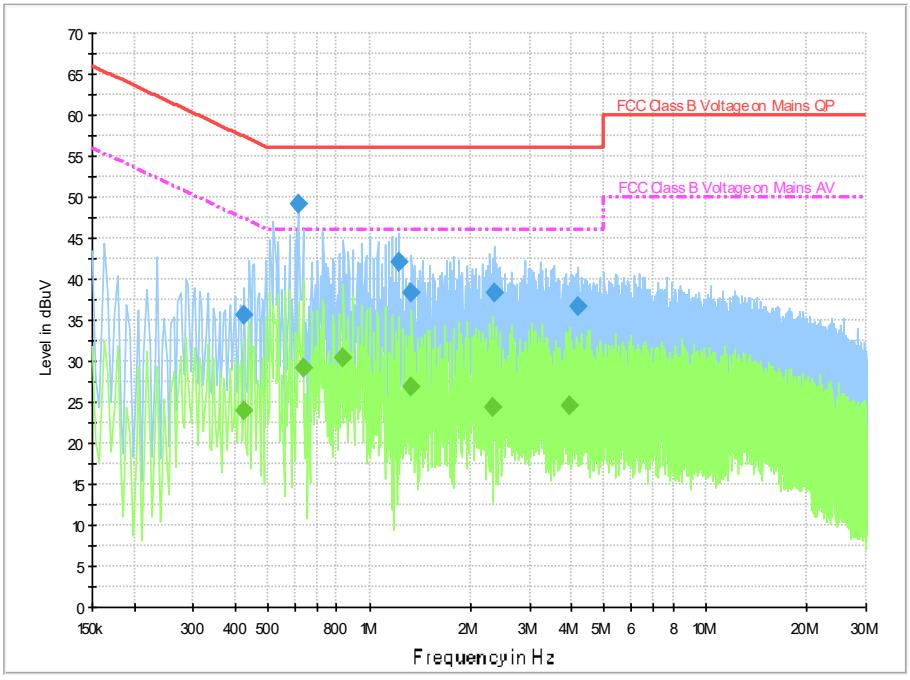


Fig. 25 Conducted Emission(802.11a, Ch36, TX)

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.426000	35.5	2000.0	9.000	On	N	19.9	21.8	57.3	
0.614000	49.2	2000.0	9.000	On	L1	20.0	6.8	56.0	
1.222000	42.1	2000.0	9.000	On	L1	19.9	13.9	56.0	
1.334000	38.3	2000.0	9.000	On	L1	19.9	17.7	56.0	
2.358000	38.4	2000.0	9.000	On	L1	19.8	17.6	56.0	
4.174000	36.6	2000.0	9.000	On	L1	19.8	19.4	56.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.426000	24.0	2000.0	9.000	On	N	19.9	23.4	0.42600	
0.634000	29.2	2000.0	9.000	On	N	19.8	16.8	0.63400	
0.838000	30.5	2000.0	9.000	On	L1	19.9	15.5	0.83800	
1.334000	26.9	2000.0	9.000	On	L1	19.9	19.1	1.33400	
2.334000	24.4	2000.0	9.000	On	L1	19.8	21.6	2.33400	
3.954000	24.6	2000.0	9.000	On	L1	19.8	21.4	3.95400	

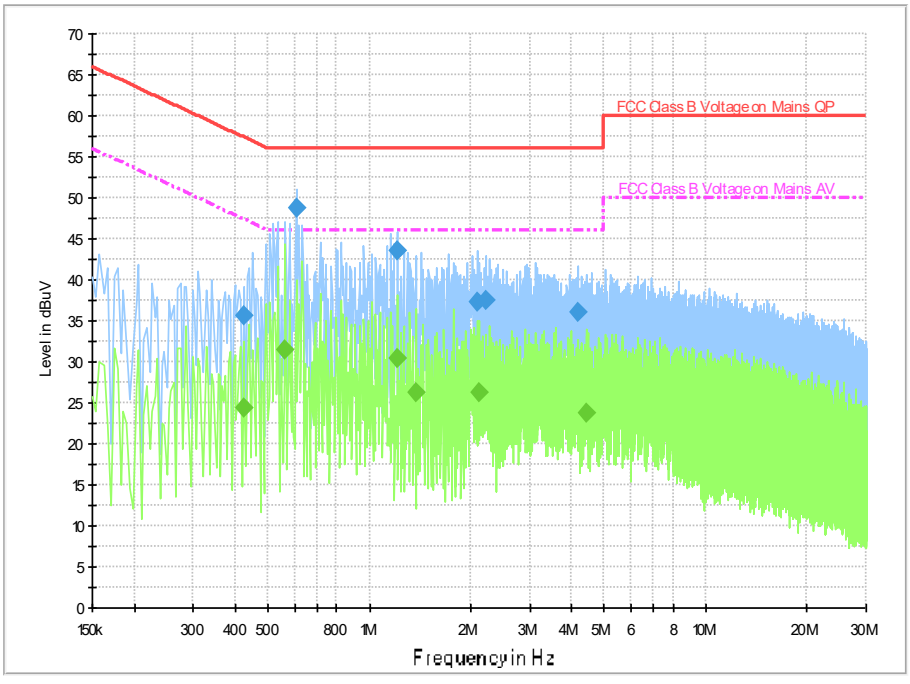


Fig. 26 Conducted Emission(802.11a, IDLE)

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.426000	35.6	2000.0	9.000	On	L1	20.0	21.7	57.3	
0.606000	48.7	2000.0	9.000	On	L1	20.0	7.3	56.0	
1.214000	43.6	2000.0	9.000	On	L1	19.9	12.4	56.0	
2.102000	37.3	2000.0	9.000	On	L1	19.8	18.7	56.0	
2.226000	37.6	2000.0	9.000	On	L1	19.8	18.4	56.0	
4.162000	36.0	2000.0	9.000	On	L1	19.8	20.0	56.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.422000	24.4	2000.0	9.000	On	N	19.9	23.0	0.42200	
0.562000	31.4	2000.0	9.000	On	L1	20.0	14.6	0.56200	
1.214000	30.4	2000.0	9.000	On	L1	19.9	15.6	1.21400	
1.378000	26.3	2000.0	9.000	On	L1	19.9	19.7	1.37800	
2.126000	26.2	2000.0	9.000	On	L1	19.8	19.8	2.12600	
4.406000	23.7	2000.0	9.000	On	L1	19.8	22.3	4.40600	

A.7. 99% Occupied bandwidth

Method of Measurement: See ANSI C63.10-2013-clause 12.4.2.

a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.

b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.

c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.

d) Step a) through step c) might require iteration to adjust within the specified range.

e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.

f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% ofthe total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.

h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

Measurement Uncertainty:

Measurement Uncertainty	60.80Hz

EUT ID: UT12a

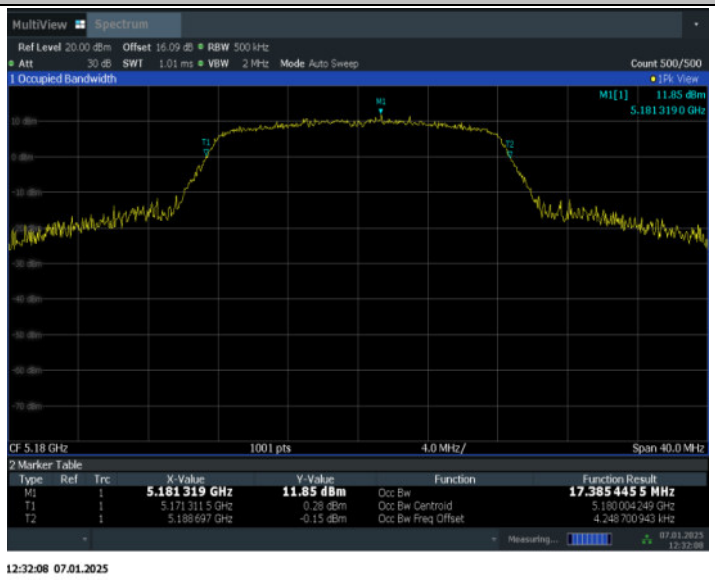
Measurement Result:

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.385	5171.3115	5188.6970	---	---
		5200	17.348	5191.3030	5208.6510	---	---
		5240	17.416	5231.3172	5248.7334	---	---
		5260	17.49	5251.2423	5268.7321	---	---
		5280	17.436	5271.2936	5288.7293	---	---
		5320	17.425	5311.2812	5328.7065	---	---
		5500	17.394	5491.2689	5508.6631	---	---
		5580	17.405	5571.2797	5588.6846	---	---
		5700	17.412	5691.2768	5708.6887	---	---
		5720	17.507	5711.2243	5728.7308	---	---
11N40SISO	Ant1	5190	36.895	5171.5531	5208.4485	---	---

		5230	36.977	5211.5418	5248.5193	---	---
		5270	36.858	5251.5829	5288.4412	---	---
		5310	37.024	5291.4499	5328.4736	---	---
		5510	36.764	5491.6353	5528.3996	---	---
		5550	36.954	5531.5232	5568.4774	---	---
		5670	36.923	5651.5372	5688.4607	---	---
		5710	36.867	5691.5612	5728.4286	---	---
11AC20SISO	Ant1	5180	18.184	5170.9398	5189.1235	---	---
		5200	18.13	5190.9055	5209.0352	---	---
		5240	18.202	5230.9000	5249.1021	---	---
		5260	18.218	5250.8938	5269.1121	---	---
		5280	18.12	5270.9361	5289.0561	---	---
		5320	18.175	5310.9415	5329.1170	---	---
		5500	18.252	5490.8737	5509.1257	---	---
		5580	18.2	5570.8663	5589.0665	---	---
		5700	18.104	5690.9570	5709.0613	---	---
		5720	18.18	5710.8749	5729.0550	---	---
11AC80SISO	Ant1	5210	75.435	5172.2376	5247.6722	---	---
		5290	75.587	5252.2491	5327.8359	---	---
		5530	75.488	5492.1501	5567.6383	---	---
		5610	75.61	5572.1215	5647.7314	---	---
		5690	75.559	5652.1056	5727.6645	---	---

Test graphs as below:

11A_Ant1_5180



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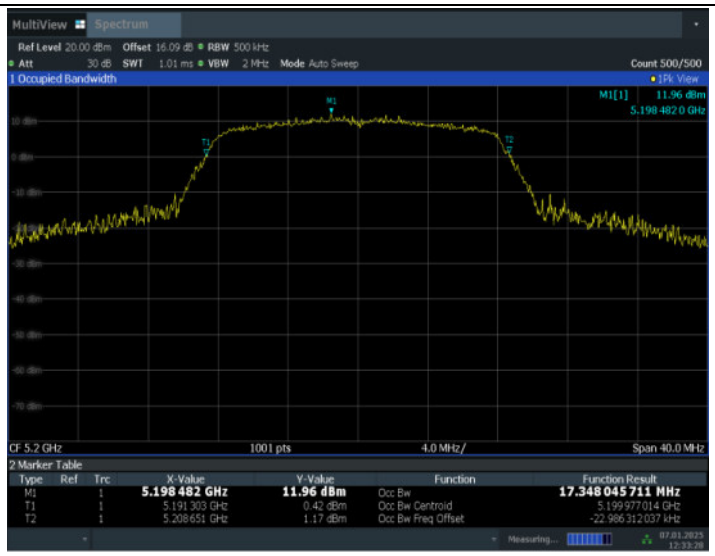
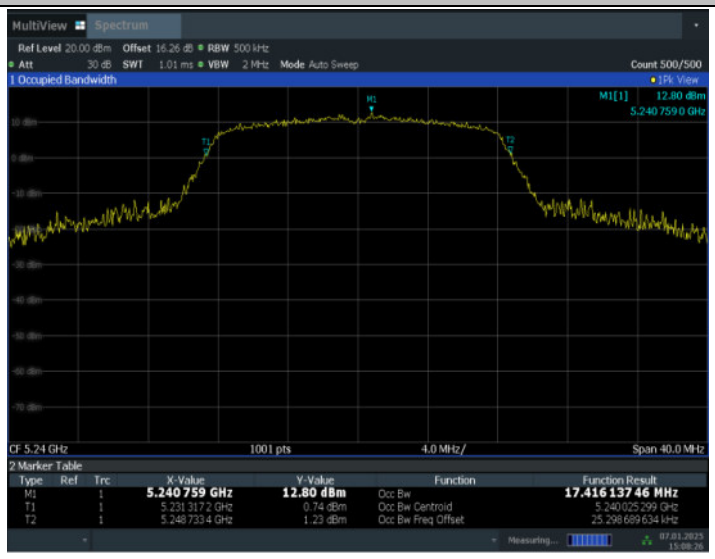
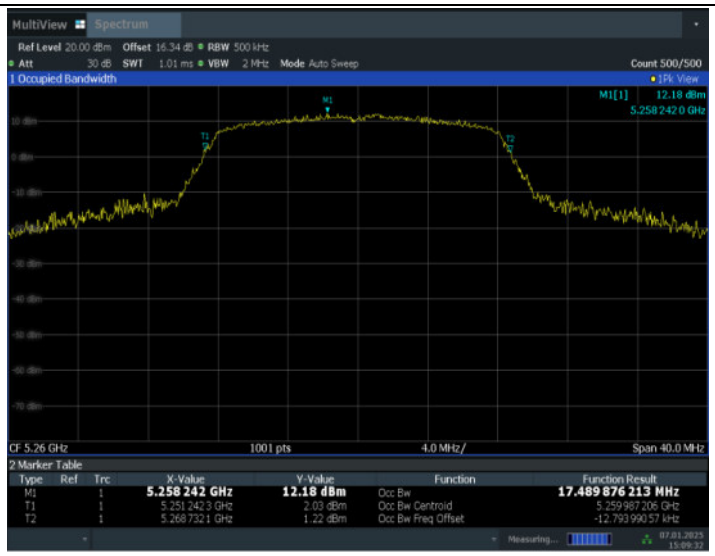


11A_Ant1_5240



11A_Ant1_5260



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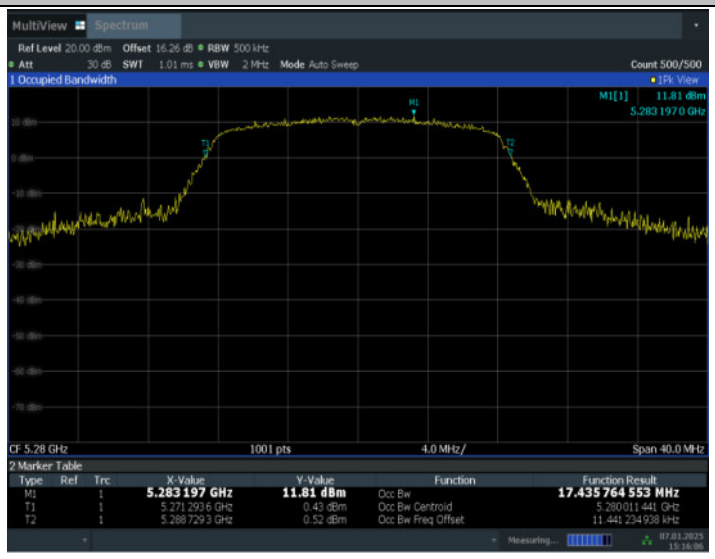

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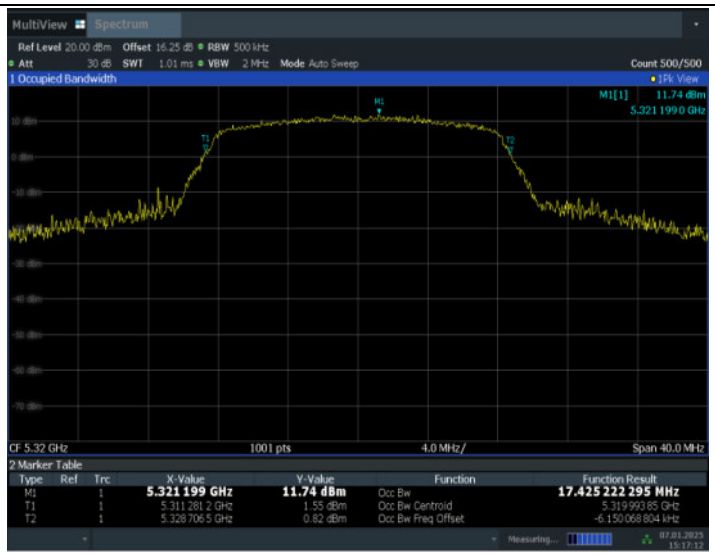

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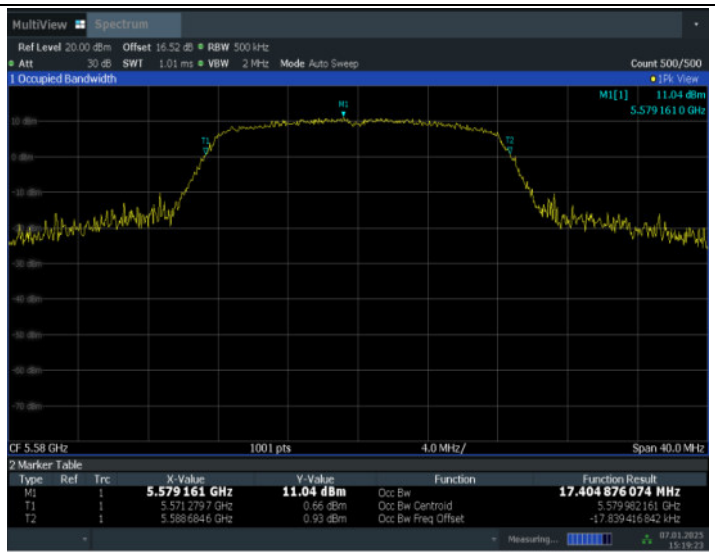
11A_Ant1_5580



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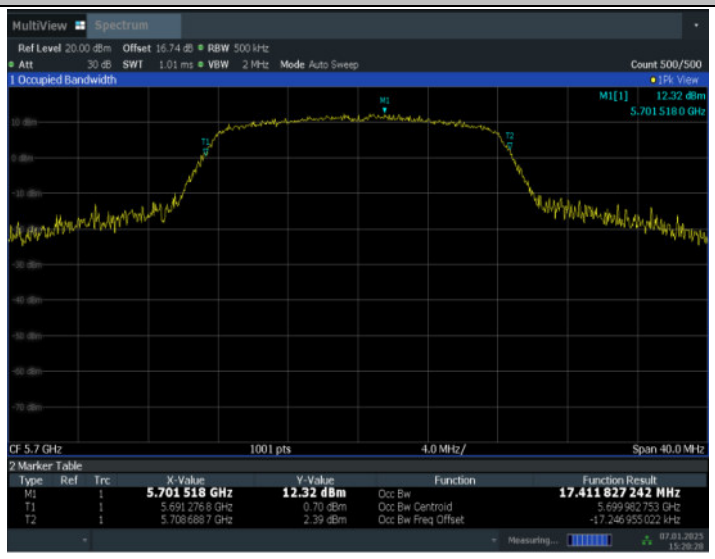

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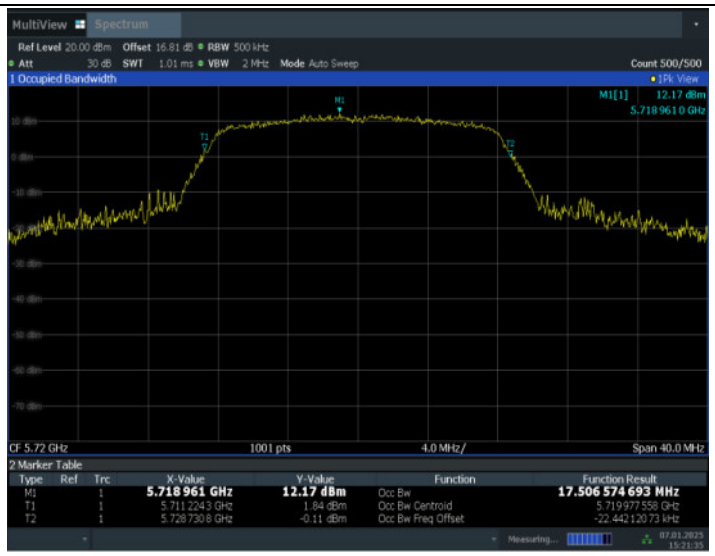

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16:37:39 07.01.2025

11N40SISO_Ant1_5310

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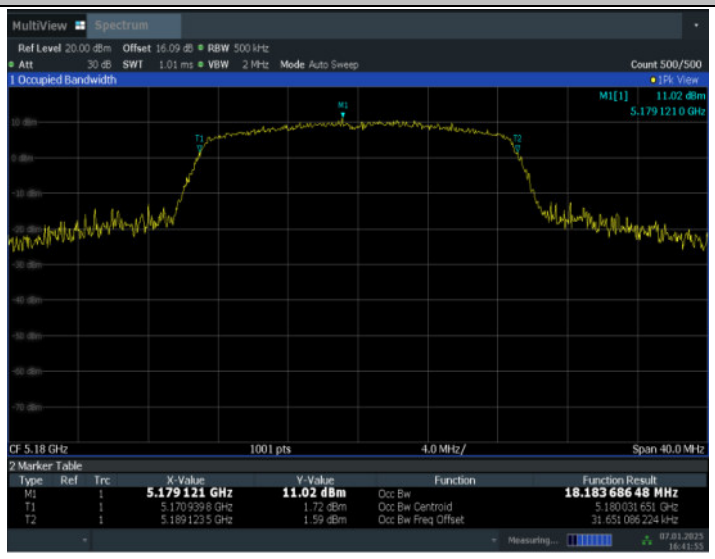
11N40SISO_Ant1_5710

16:41:05 07.01.2025

11AC20SISO_Ant1_5180



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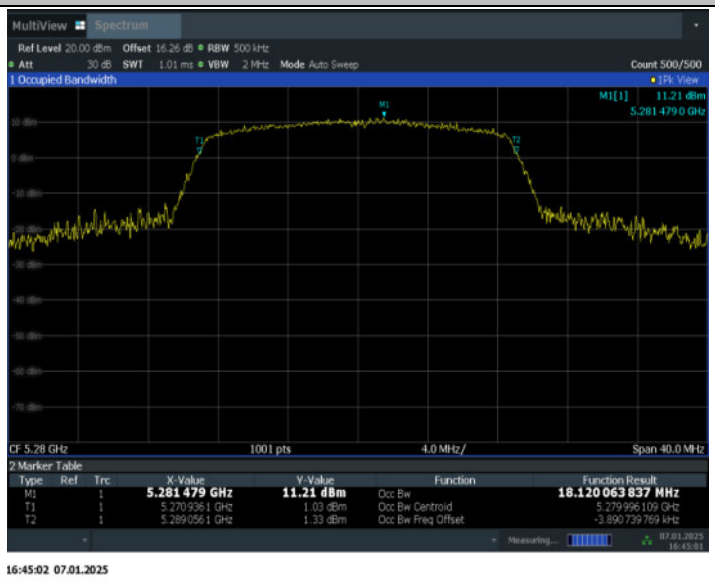
11AC20SISO_Ant1_5240

11AC20SISO_Ant1_5260

11AC20SISO_Ant1_5280



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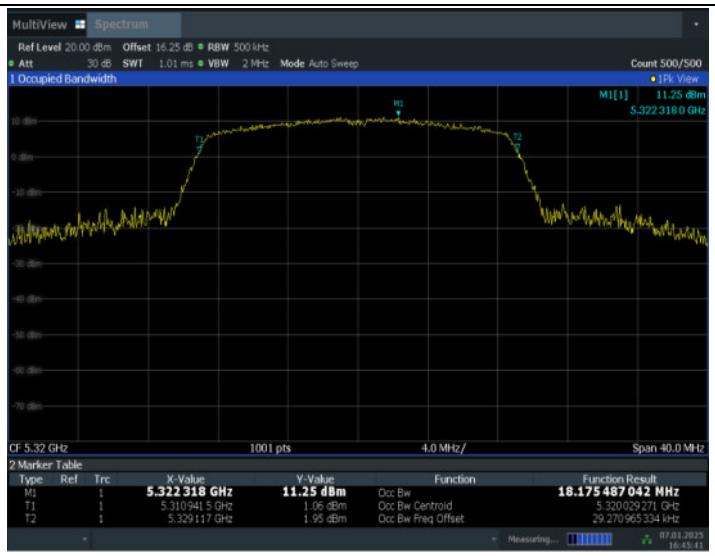

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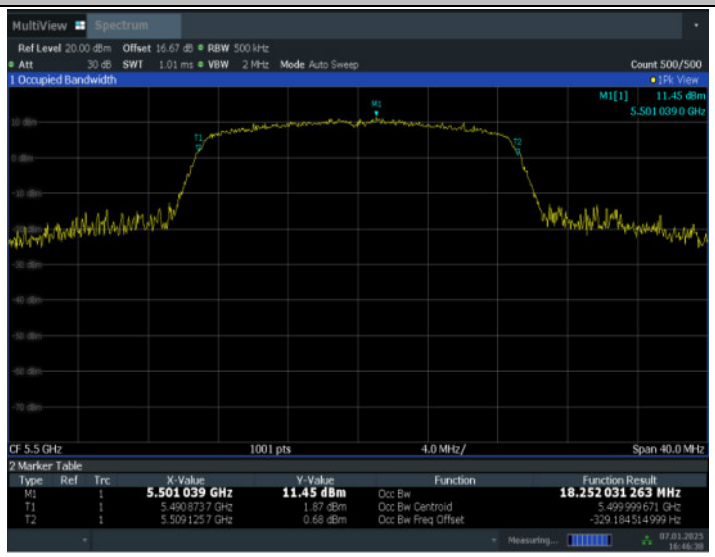
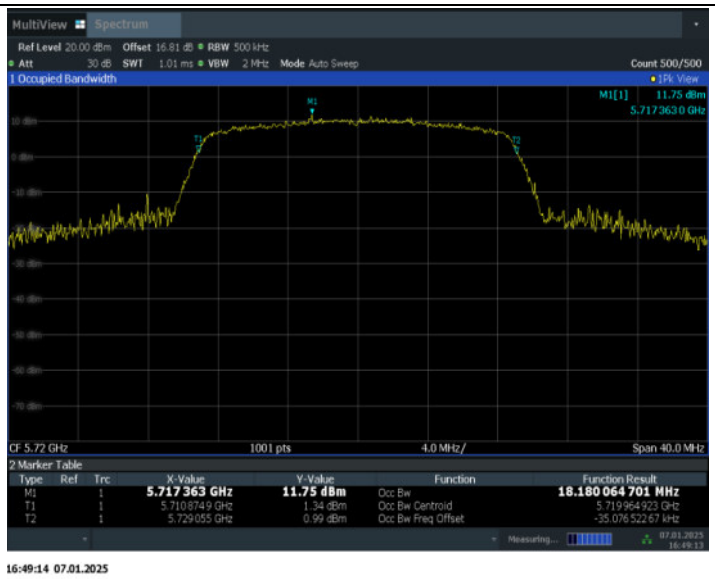


16:46:39 07.01.2025

11AC20SISO_Ant1_5580

11AC20SISO_Ant1_5700

11AC20SISO_Ant1_5720



16:49:14 07.01.2025

11AC80SISO_Ant1_5210

16:50:23 07.01.2025

11AC80SISO_Ant1_5290

11AC80SISO_Ant1_5530

11AC80SISO_Ant1_5610

11AC80SISO_Ant1_5690

A.8. Power control

A Transmission Power Control mechanism is not required for systems with an e.i.r.p. of less than 27dBm (500 mW).

A.9. Antenna Requirement

The antenna of the device is permanently attached. There are no provisions for connection to an external antenna.

The unit complies with the requirement of FCC Part 15.203.

ANNEX B: EUT parameters

Disclaimer: The antenna gain and worse case provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

ANNEX C: Accreditation Certificate

Accredited Laboratory

A2LA has accredited

TELECOMMUNICATION TECHNOLOGY LABS, CAICT

Beijing, People's Republic of China

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 23rd day of July 2024.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 7049.01
Valid to July 31, 2026

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

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