

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)
17599.600	51.74	-29.60	42.25	39.09	68.20	16.46	V
17600.150	51.29	-29.60	42.25	38.64	68.20	16.91	H
13717.150	48.41	-31.18	40.80	38.79	68.20	19.79	H
13698.450	48.00	-30.98	40.70	38.28	68.20	20.20	V
5149.540	52.70	-28.00	32.70	48.00	74.00	21.30	H
5149.820	52.57	-28.00	32.70	47.87	74.00	21.43	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)
17978.550	51.64	-29.59	42.40	38.83	74.00	22.36	V
17879.000	51.23	-29.59	42.40	38.42	74.00	22.77	V
13675.900	48.20	-30.98	40.70	38.48	68.20	20.00	H
14073.550	48.05	-30.20	40.50	37.75	68.20	20.15	V
5350.432	52.78	-27.82	33.50	47.11	74.00	21.22	H
5350.128	52.61	-27.82	33.50	46.94	74.00	21.39	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)
17992.300	51.46	-29.59	42.40	38.65	74.00	22.54	V
17483.000	51.09	-29.07	42.15	38.01	68.20	17.11	V
13692.950	48.00	-30.98	40.70	38.28	68.20	20.20	H
14202.250	47.98	-30.42	40.40	38.00	68.20	20.22	H
5436.310	53.26	-27.94	33.60	47.60	74.00	20.74	V
5468.800	53.11	-27.49	33.70	46.90	68.20	15.09	V

802.11ax-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)
17973.050	51.46	-29.59	42.40	38.65	74.00	22.54	V
17584.200	51.26	-29.60	42.25	38.61	68.20	16.94	H
13725.950	48.12	-31.18	40.80	38.50	68.20	20.08	H
14177.500	48.05	-30.42	40.40	38.07	68.20	20.15	H
5144.580	47.10	-27.79	32.70	42.19	74.00	26.90	H
5115.800	46.66	-27.79	32.70	41.75	74.00	27.34	V

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)
17981.300	51.74	-29.59	42.40	38.93	74.00	22.26	H
17942.250	51.18	-29.59	42.40	38.37	74.00	22.82	H
14577.900	48.18	-29.14	39.70	37.62	68.20	20.02	V
13725.950	47.68	-31.18	40.80	38.06	68.20	20.52	V
5419.408	50.11	-27.94	33.60	44.45	74.00	23.89	V
5406.224	49.08	-27.94	33.60	43.42	74.00	24.92	V

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)
17990.100	50.94	-29.59	42.40	38.13	74.00	23.06	H
17604.550	50.90	-29.60	42.25	38.25	68.20	17.30	H
13702.850	48.09	-30.98	40.70	38.37	68.20	20.11	V
14178.050	48.05	-30.42	40.40	38.07	68.20	20.15	V
5458.915	46.35	-27.49	33.70	40.14	74.00	27.65	V
5464.330	46.43	-27.49	33.70	40.22	68.20	21.77	V

802.11ax-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)
17635.900	51.52	-29.60	42.30	38.82	68.20	16.68	V
17590.800	51.23	-29.60	42.25	38.58	68.20	16.97	H
13673.700	48.82	-30.98	40.70	39.10	68.20	19.38	H
13666.550	47.92	-30.98	40.70	38.20	68.20	20.28	V
5149.940	49.44	-28.00	32.70	44.74	74.00	24.56	V
5142.240	48.95	-27.79	32.70	44.04	74.00	25.05	V

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)
17965.900	51.89	-29.59	42.40	39.08	74.00	22.11	V
17473.100	51.33	-28.70	42.10	37.93	68.20	16.87	H
14194.550	48.34	-30.42	40.40	38.36	68.20	19.86	V
13732.000	47.88	-31.18	40.80	38.26	68.20	20.32	V
5350.000	51.63	-27.82	33.50	45.96	74.00	22.37	V
5350.080	50.86	-27.82	33.50	45.19	74.00	23.14	V

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)
17491.250	51.77	-29.07	42.15	38.69	68.20	16.43	H
17511.050	50.96	-29.07	42.15	37.88	68.20	17.24	V
14202.250	48.62	-30.42	40.40	38.64	68.20	19.58	H
14097.200	48.13	-30.20	40.50	37.83	68.20	20.07	H
5459.515	47.13	-27.49	33.70	40.92	74.00	26.87	V
5469.940	49.65	-27.49	33.70	43.44	68.20	18.55	V

802.11ax-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)
17568.250	51.89	-29.39	42.20	39.09	68.20	16.31	H
17981.850	51.14	-29.59	42.40	38.33	74.00	22.86	V
13685.800	48.44	-30.98	40.70	38.72	68.20	19.76	V
13669.850	48.38	-30.98	40.70	38.66	68.20	19.82	V
5149.500	55.69	-28.00	32.70	50.99	74.00	18.31	H
5149.620	55.64	-28.00	32.70	50.94	74.00	18.36	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)
17602.350	51.62	-29.60	42.25	38.97	68.20	16.58	V
17951.050	51.47	-29.59	42.40	38.66	74.00	22.53	H
13756.750	48.62	-31.18	40.80	39.00	68.20	19.58	V
13580.750	48.02	-31.27	40.60	38.69	68.20	20.18	H
5357.104	51.29	-27.82	33.50	45.62	74.00	22.71	V
5353.792	51.19	-27.82	33.50	45.52	74.00	22.81	V

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)
17949.400	51.51	-29.59	42.40	38.70	74.00	22.49	V
17979.650	51.26	-29.59	42.40	38.45	74.00	22.74	H
13757.850	47.81	-31.18	40.80	38.19	68.20	20.39	H
14200.600	47.81	-30.42	40.40	37.83	68.20	20.39	V
5458.015	52.11	-27.49	33.70	45.90	74.00	21.89	V
5469.940	54.95	-27.49	33.70	48.74	68.20	13.25	V

802.11ax-HT160

Channel 50

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)
17537.450	51.94	-29.39	42.20	39.14	68.20	16.26	V
17990.650	51.63	-29.59	42.40	38.82	74.00	22.37	H
13717.150	48.26	-31.18	40.80	38.64	68.20	19.94	V
14198.950	48.17	-30.42	40.40	38.19	68.20	20.03	H
5149.260	52.88	-28.00	32.70	48.18	74.00	21.12	H
5149.360	52.50	-28.00	32.70	47.80	74.00	21.50	H

Channel 114

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)
17619.950	51.04	-29.60	42.25	38.39	68.20	17.16	H
17989.000	51.02	-29.59	42.40	38.21	74.00	22.98	V
13695.700	48.54	-30.98	40.70	38.82	68.20	19.66	V
13698.450	48.14	-30.98	40.70	38.42	68.20	20.06	V
5452.060	53.36	-27.49	33.70	47.15	74.00	20.64	V
5469.235	52.45	-27.49	33.70	46.24	68.20	15.75	V

Conclusion: PASS

Band edge compliance

Full RU

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
802.11ax HT20	5180 MHz	Fig.25	P
	5320 MHz	Fig.26	P
	5500 MHz	Fig.27	P
	5700 MHz	Fig.28	P
802.11ax HT40	5190 MHz	Fig.29	P
	5310 MHz	Fig.30	P
	5510 MHz	Fig.31	P
	5670 MHz	Fig.32	P
802.11ax HT80	5210 MHz	Fig.33	P
	5290 MHz	Fig.34	P
	5530 MHz	Fig.35	P
	5610 MHz	Fig.36	P
802.11ax HT160	5250 MHz	Fig.37	P
	5570 MHz	Fig.38	P

Partial RU

Mode	Channel	RU	Test Results	Conclusion
802.11ax HT20	5180 MHz	26RU index 0	Fig.39	P
	5320 MHz	26RU index 8	Fig.40	P
	5500 MHz	26RU index 0	Fig.41	P
	5700 MHz	26RU index 8	Fig.42	P
802.11ax HT40	5190 MHz	26RU index 0	Fig.43	P
	5310 MHz	26RU index 17	Fig.44	P
	5510 MHz	26RU index 0	Fig.45	P
	5670 MHz	26RU index 17	Fig.46	P
802.11ax HT80	5210 MHz	26RU index 0	Fig.47	P
	5290 MHz	26RU index 36	Fig.48	P
	5530 MHz	26RU index 0	Fig.49	P
	5610 MHz	26RU index 36	Fig.50	P
802.11ax HT160	5250 MHz	26RU index 0	Fig.51	P
	5570 MHz	26RU index 72	Fig.52	P

Conclusion: PASS

Test graphs as below:

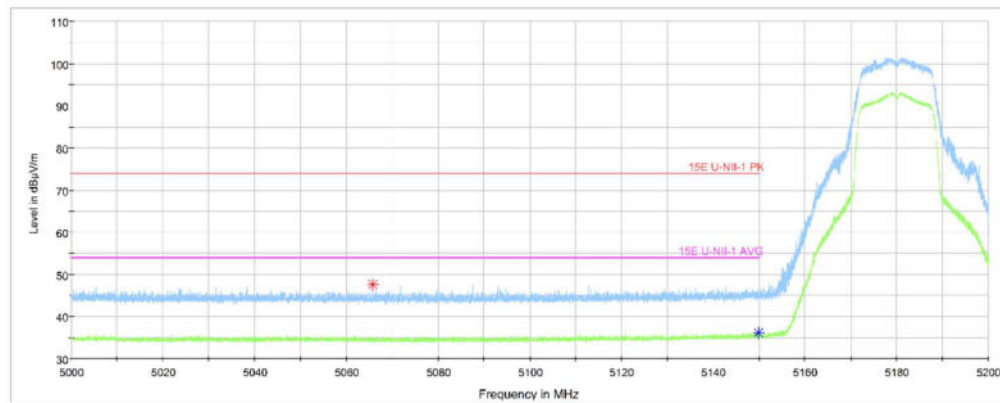


Fig. 1 Band Edges (802.11a,Ch36, 5180MHz)

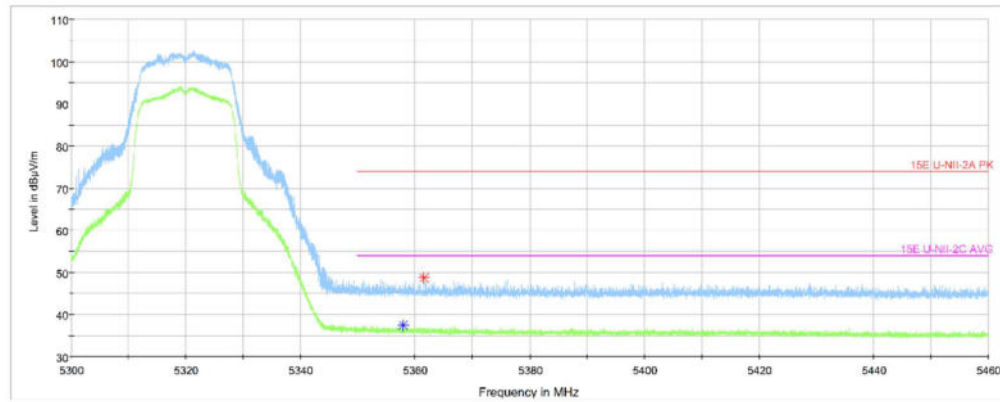


Fig. 2 Band Edges (802.11a, Ch64, 5320MHz)

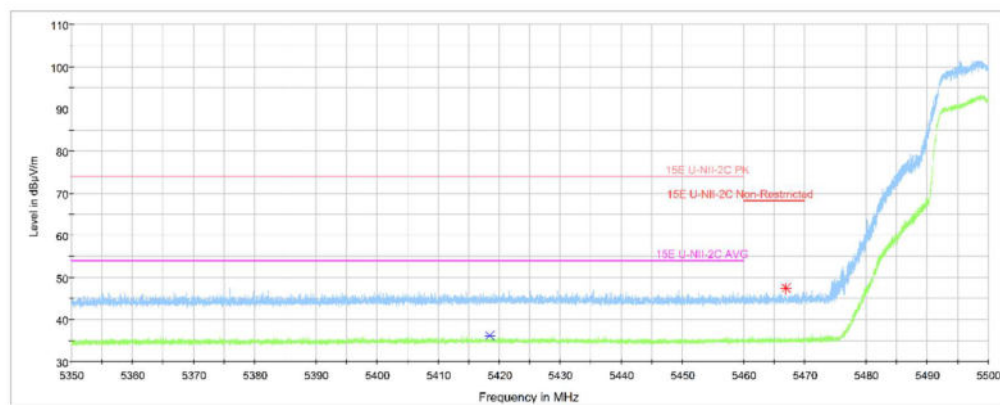


Fig. 3 Band Edges (802.11a, Ch100, 5500MHz)

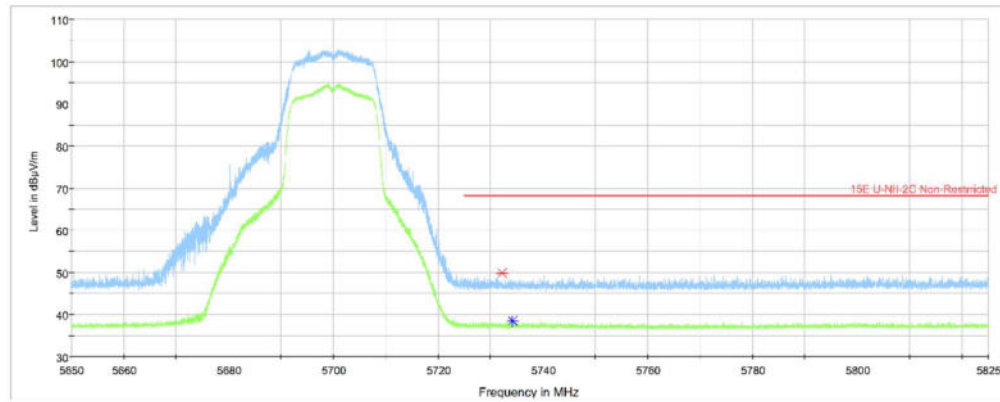


Fig. 4 Band Edges (802.11a, Ch140, 5700MHz)

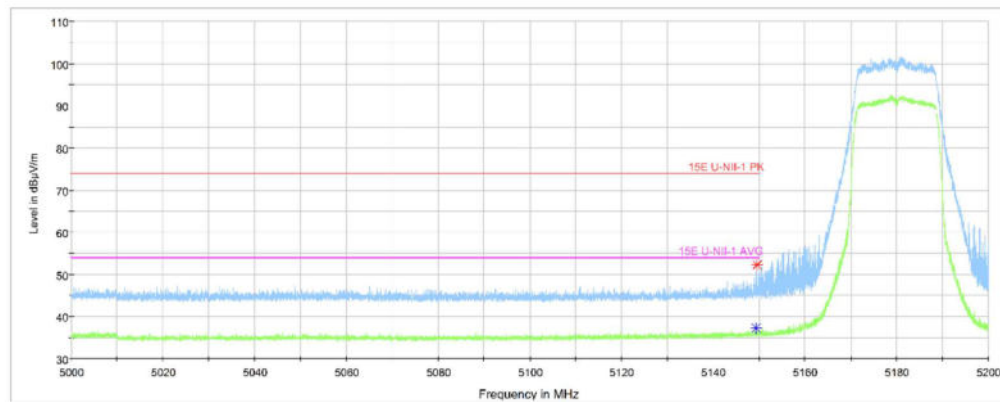


Fig. 5 Band Edges (802.11n-HT20, Ch36, 5180MHz)

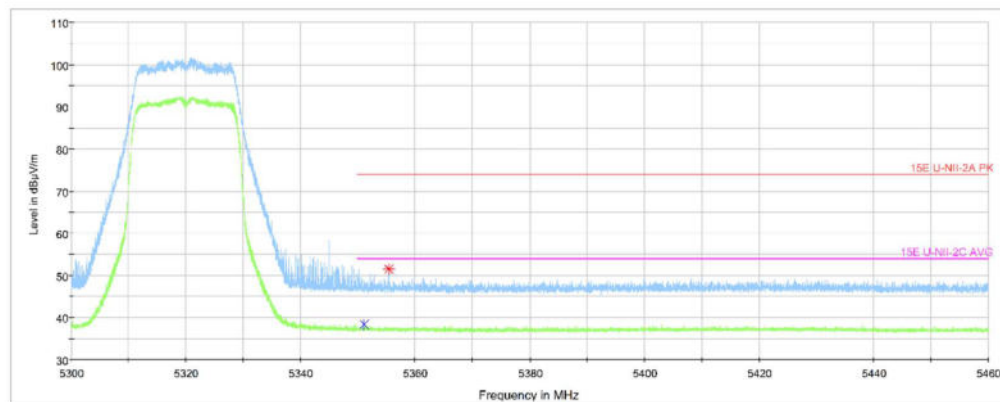


Fig. 6 Band Edges (802.11n-HT20, Ch64, 5320MHz)

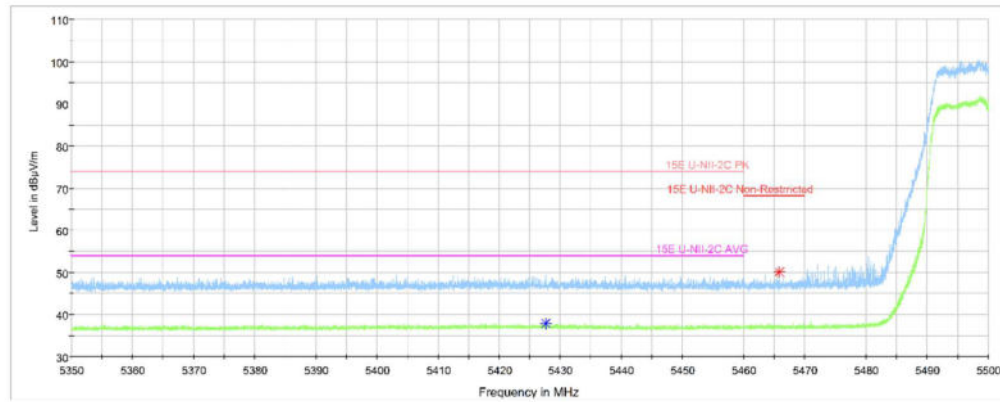


Fig. 7 Band Edges (802.11n-HT20 , Ch100, 5500MHz)

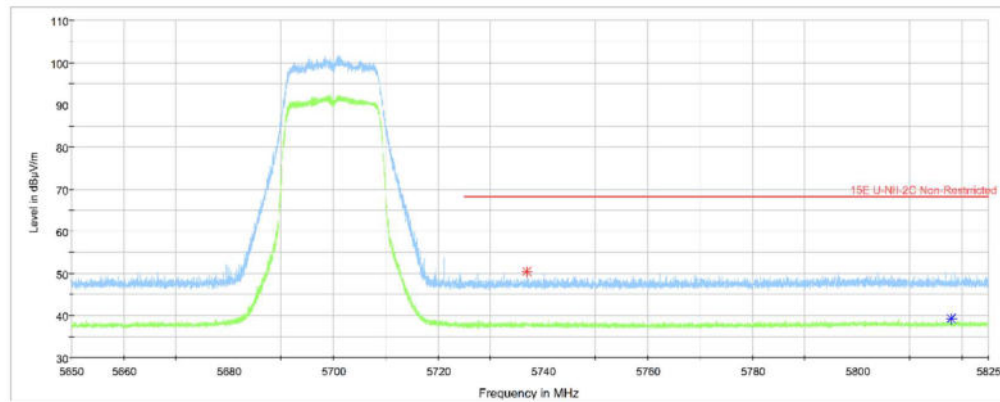


Fig. 8 Band Edges (802.11n-HT20 , Ch140, 5700MHz)

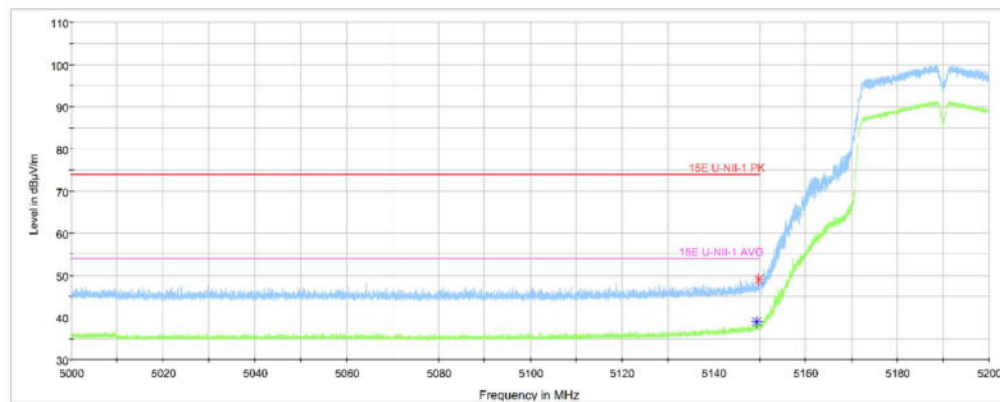


Fig. 9 Band Edges (802.11n-HT40 , Ch38, 5190MHz)

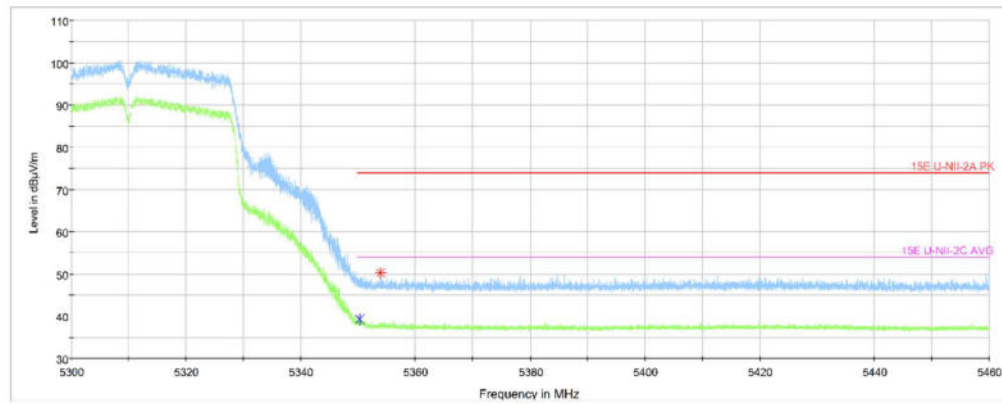


Fig. 10 Band Edges (802.11n-HT40 , Ch62, 5310MHz)

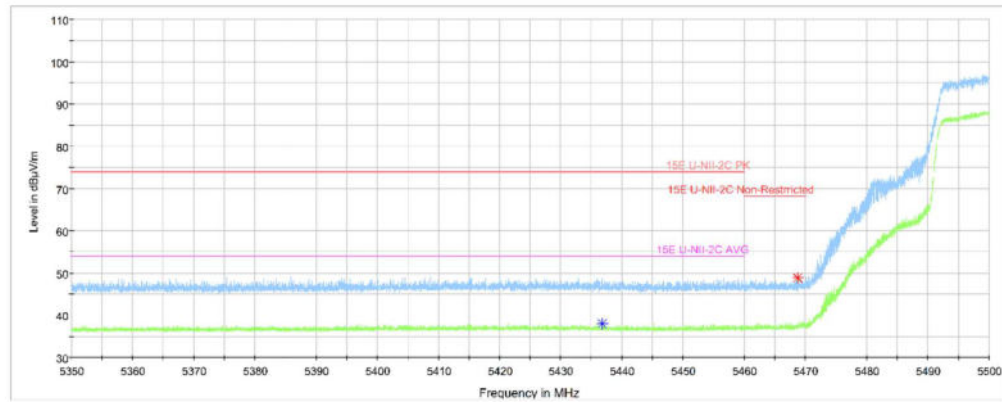


Fig. 11 Band Edges (802.11n-HT40 , Ch102, 5510MHz)

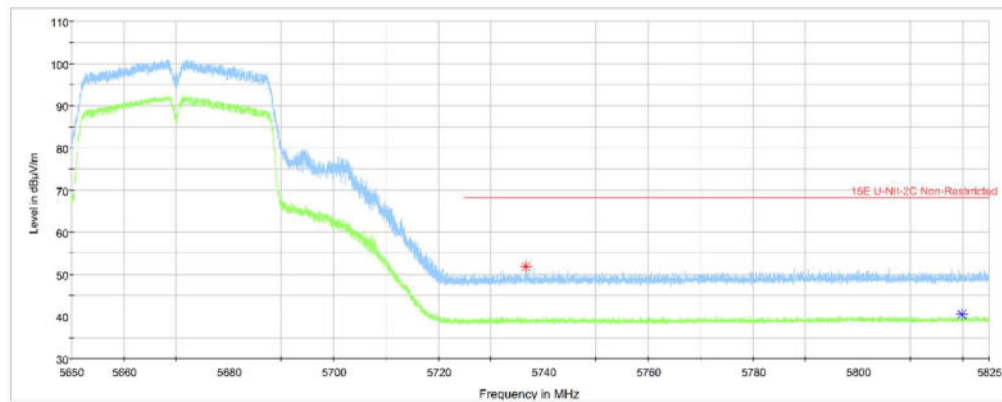


Fig. 12 Band Edges (802.11n-HT40 , Ch134, 5670MHz)

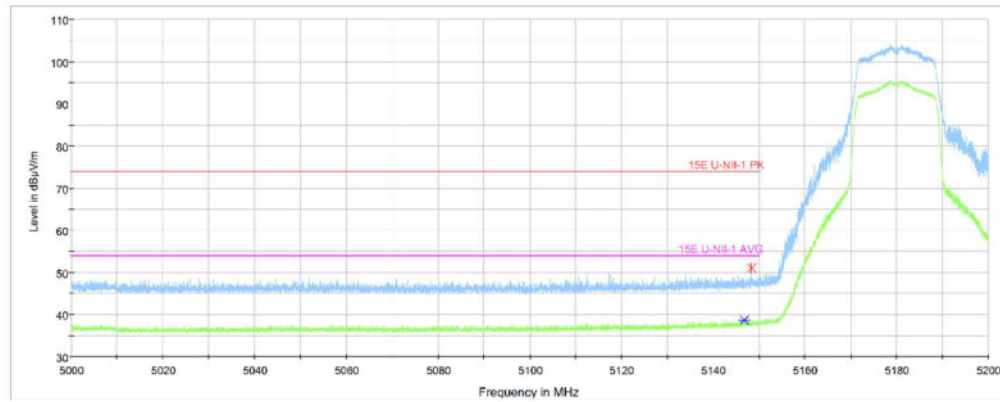


Fig. 13 Band Edges (802.11ac-HT20 , Ch36, 5180MHz)

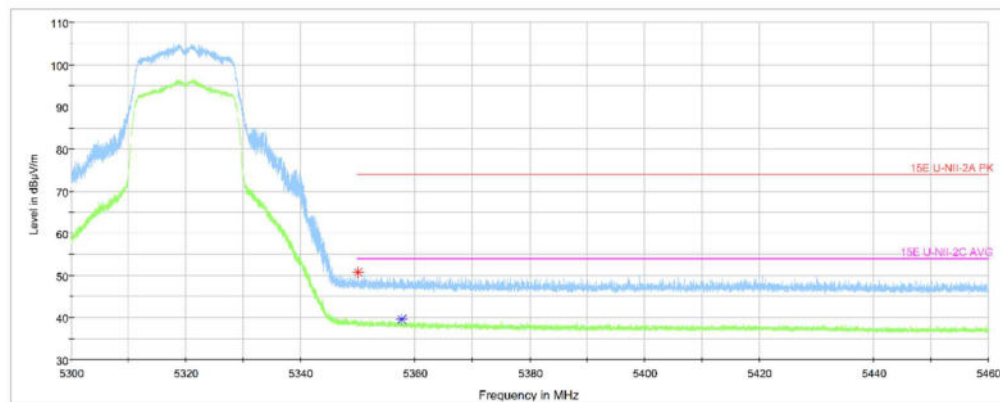


Fig. 14 Band Edges (802.11ac-HT20 , Ch64, 5320MHz)

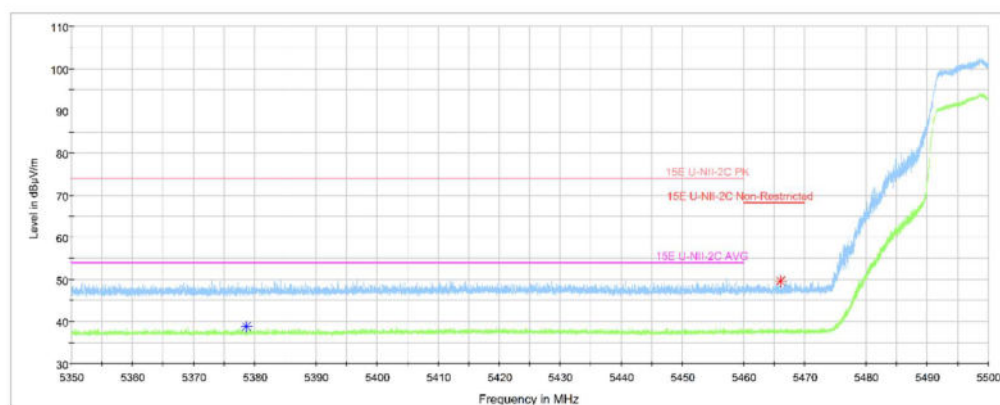


Fig. 15 Band Edges (802.11ac-HT20 , Ch100, 5500MHz)

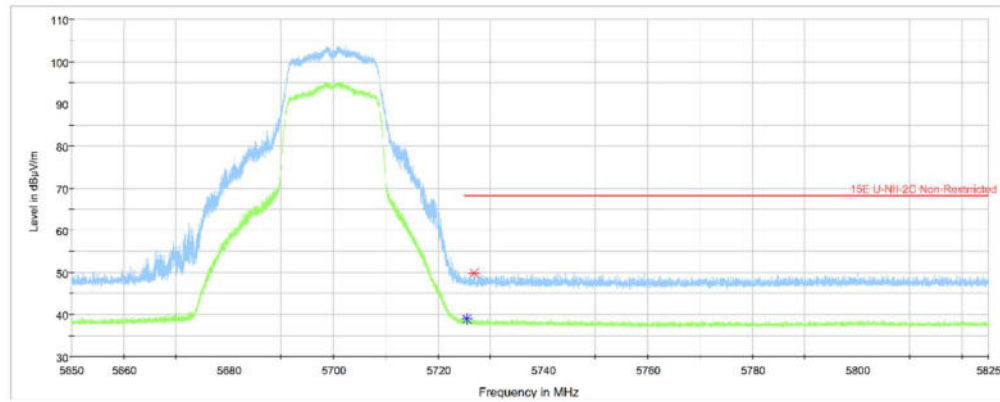


Fig. 16 Band Edges (802.11ac-HT20 , Ch140, 5700MHz)

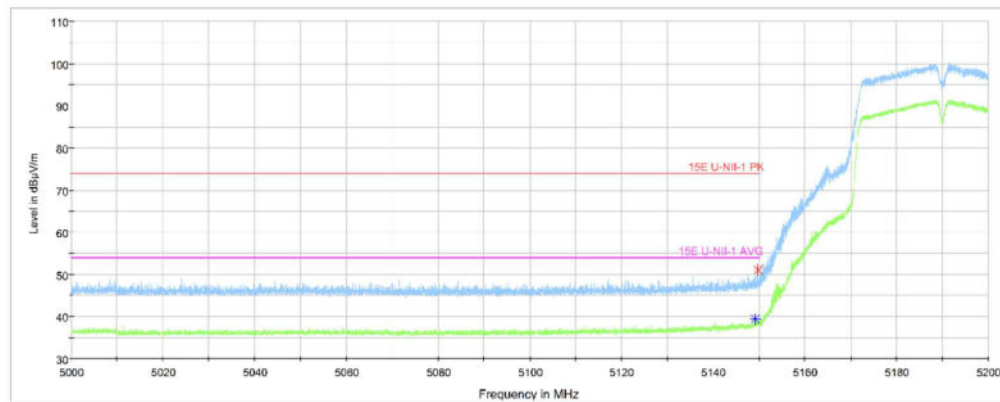


Fig. 17 Band Edges (802.11ac-HT40 , Ch38, 5190MHz)

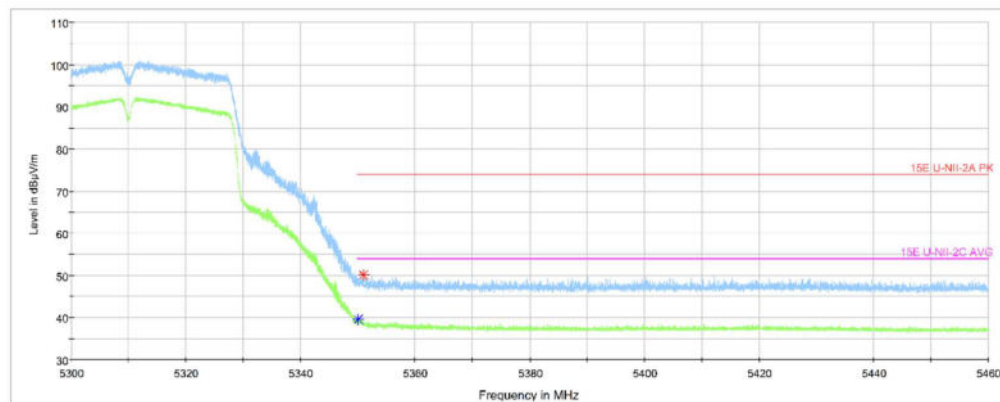


Fig. 18 Band Edges (802.11ac-HT40 , Ch62, 5310MHz)

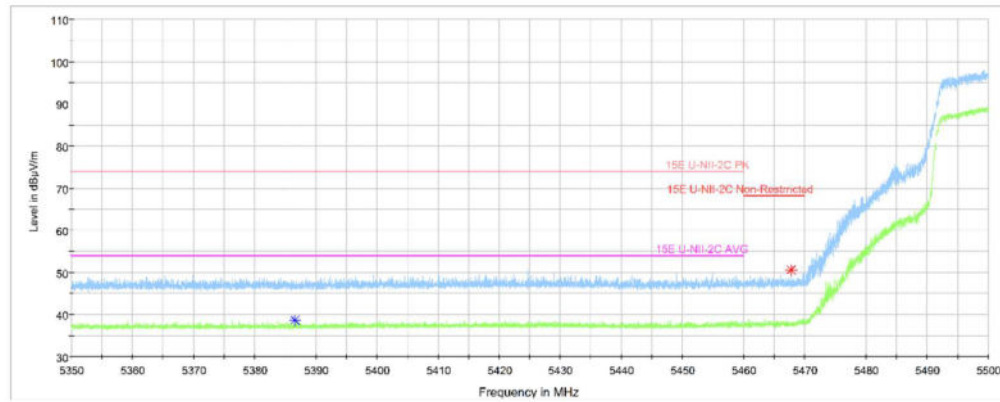


Fig. 19 Band Edges (802.11ac-HT40 , Ch102, 5510MHz)

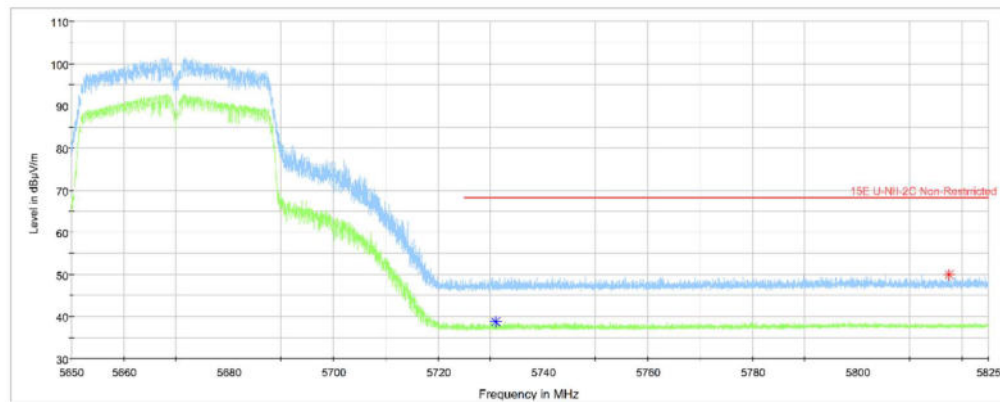


Fig. 20 Band Edges (802.11ac-HT40 , Ch134, 5670MHz)

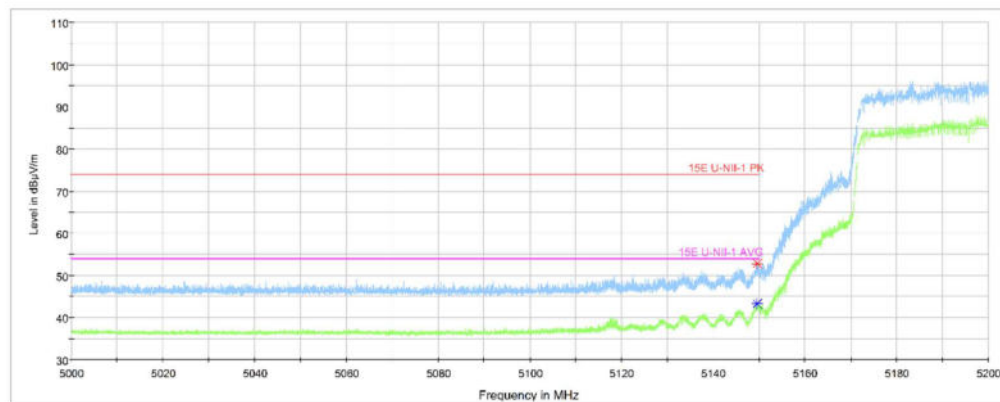


Fig. 21 Band Edges (802.11ac-HT80 , Ch42 , 5210MHz)

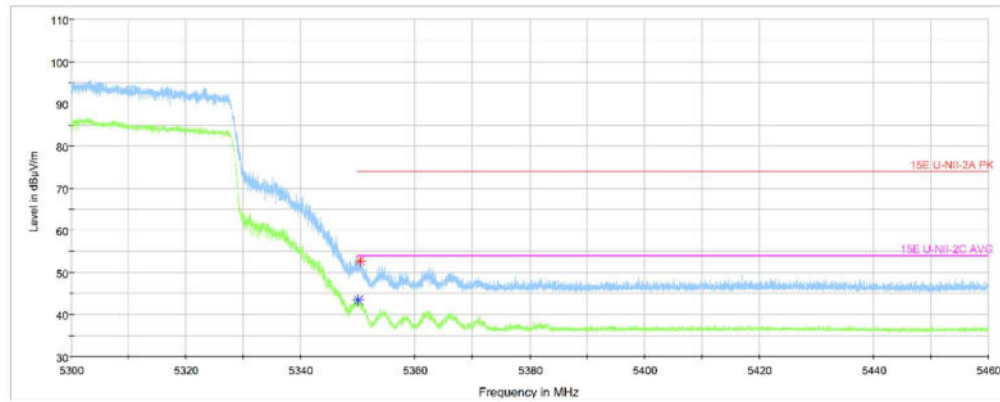


Fig. 22 Band Edges (802.11ac-HT80 , Ch58, 5290MHz)

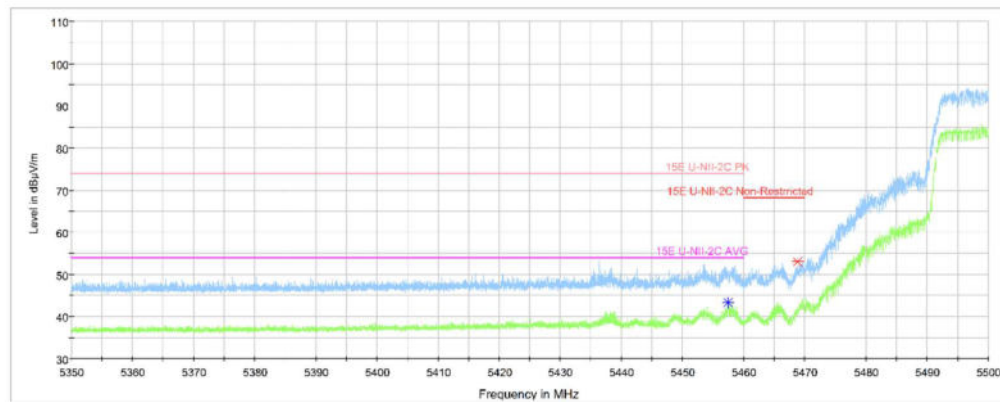


Fig. 23 Band Edges (802.11ac-HT80 , Ch106, 5530MHz)

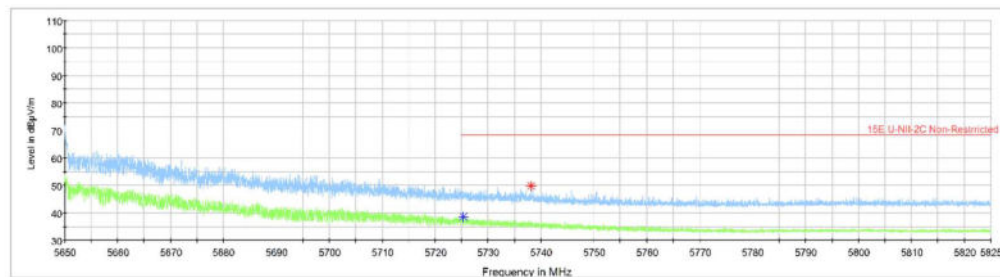


Fig. 24 Band Edges (802.11ac-HT80 , Ch122, 5610MHz)

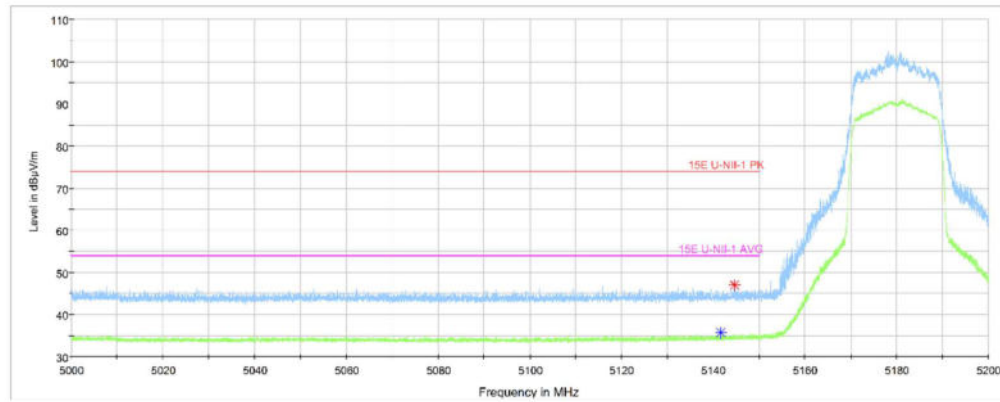


Fig. 25 Band Edges (802.11ax-HT20 , full RU, Ch36, 5180MHz)

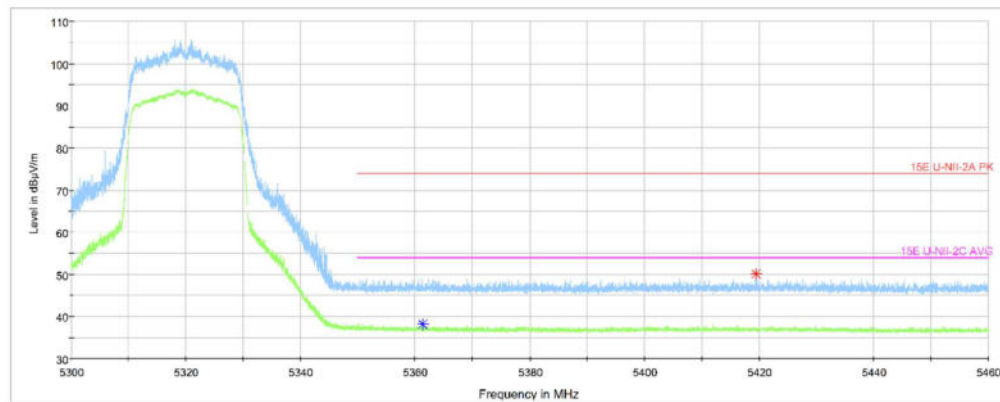


Fig. 26 Band Edges (802.11ax-HT20 , full RU, Ch64, 5320MHz)

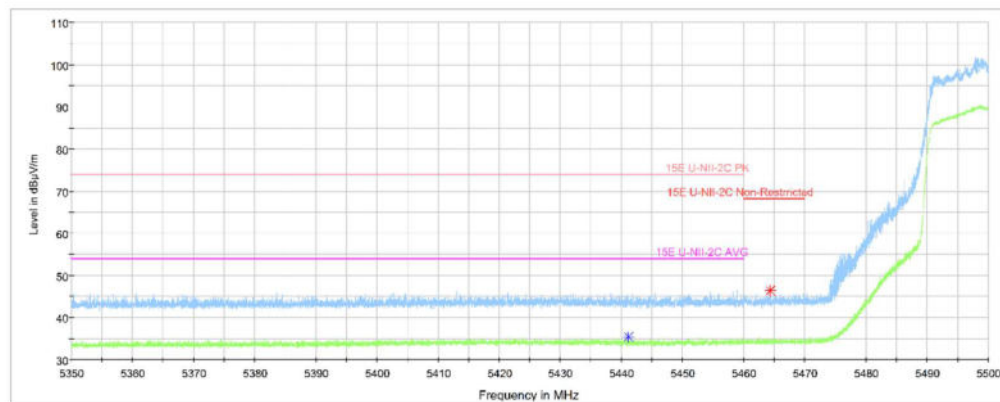


Fig. 27 Band Edges (802.11ax-HT20 , full RU, Ch100, 5500MHz)

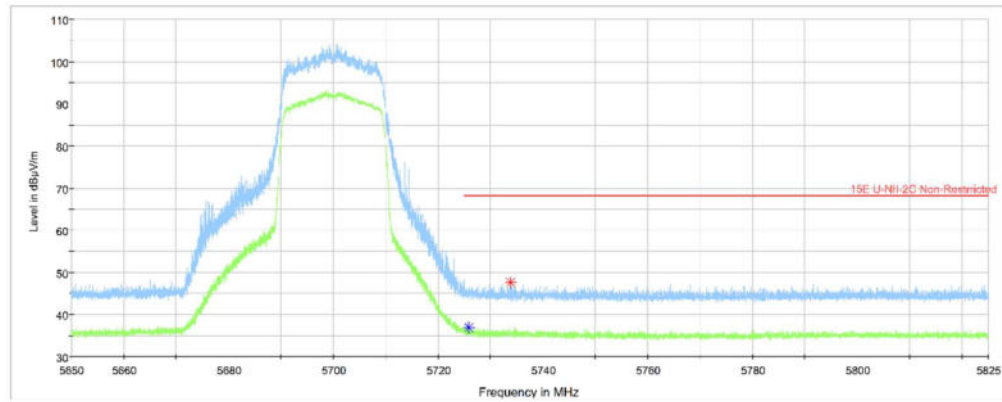


Fig. 28 Band Edges (802.11ax-HT20 , full RU, Ch140, 5700MHz)

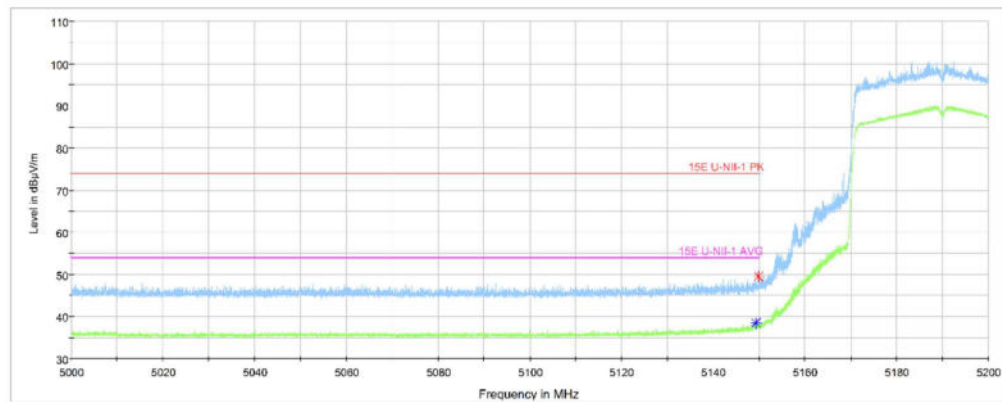


Fig. 29 Band Edges (802.11ax-HT40 , full RU, Ch38, 5190MHz)

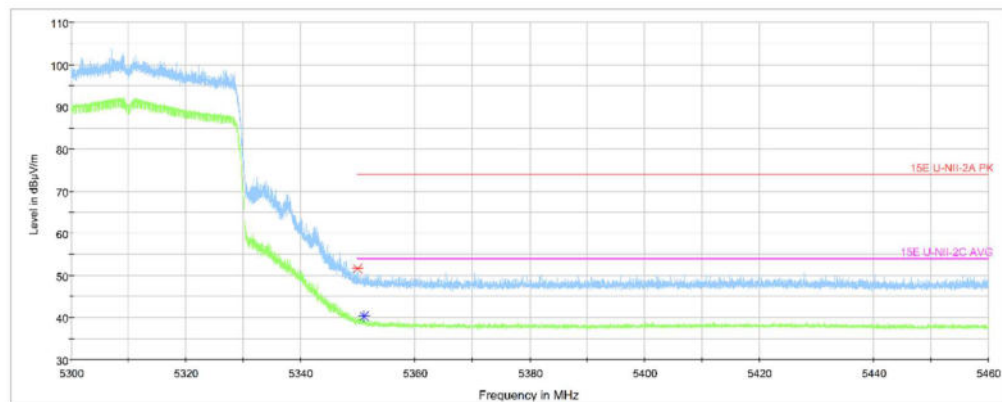


Fig. 30 Band Edges (802.11ax-HT40 , full RU, Ch62, 5310MHz)

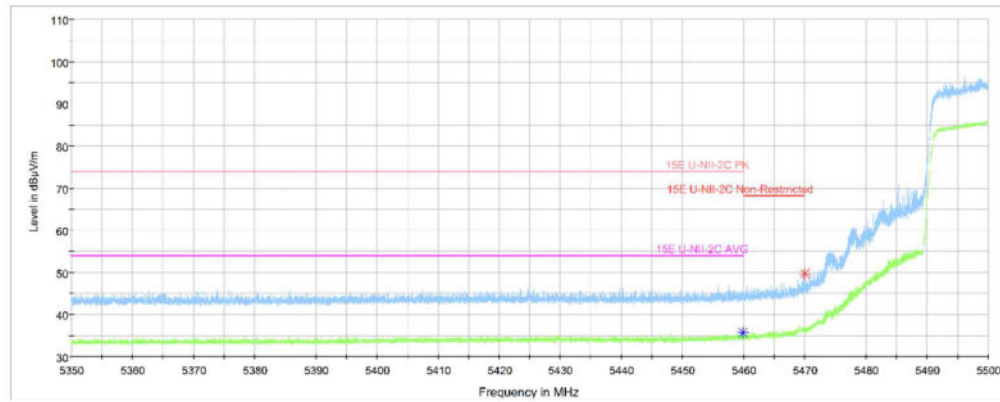


Fig. 31 Band Edges (802.11ax-HT40 , full RU, Ch102, 5510MHz)

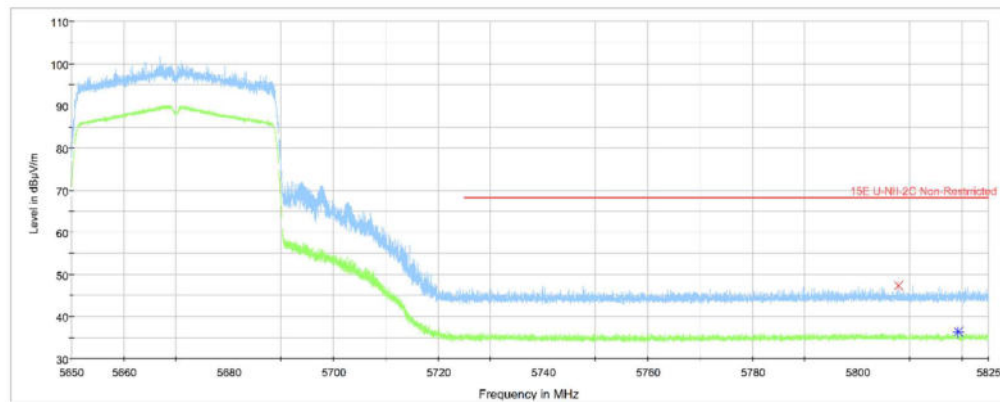


Fig. 32 Band Edges (802.11ax-HT40 , full RU, Ch134, 5670MHz)

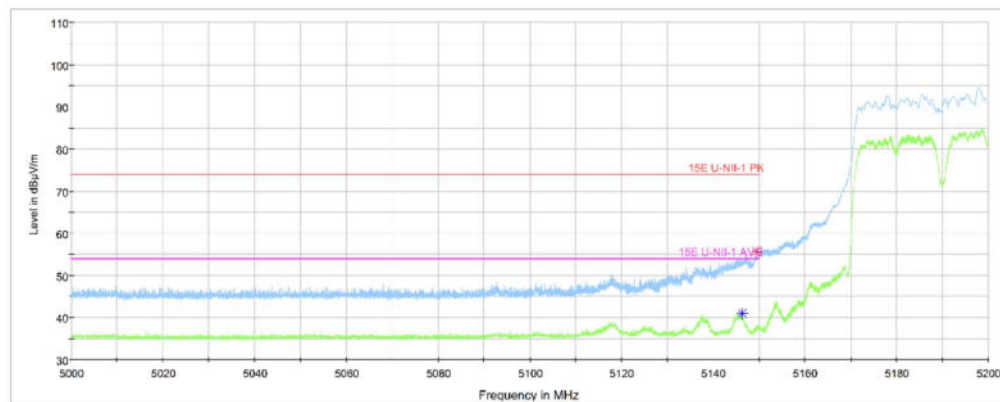


Fig. 33 Band Edges (802.11ax-HT80 , full RU, Ch42 , 5210MHz)

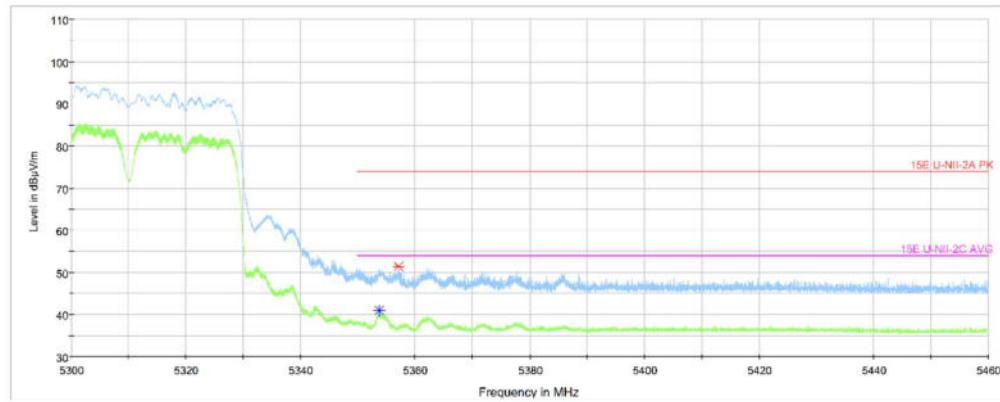


Fig. 34 Band Edges (802.11ax-HT80 , full RU, Ch58, 5290MHz)

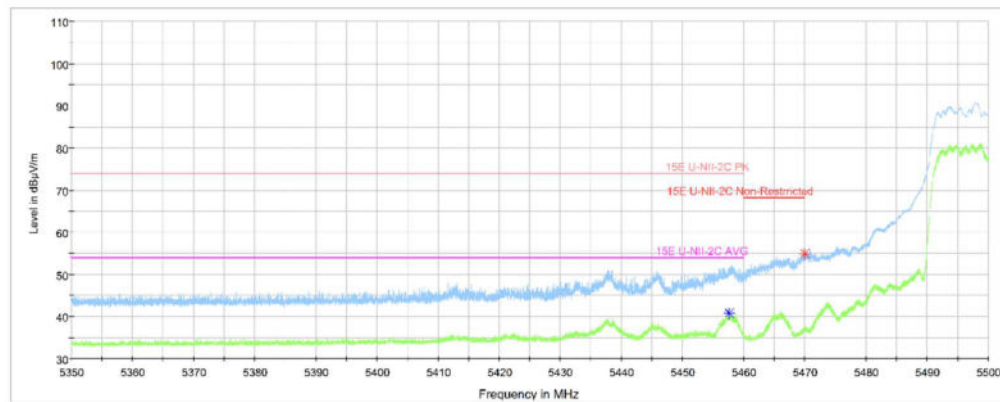


Fig. 35 Band Edges (802.11ax-HT80 , full RU, Ch106, 5530MHz)

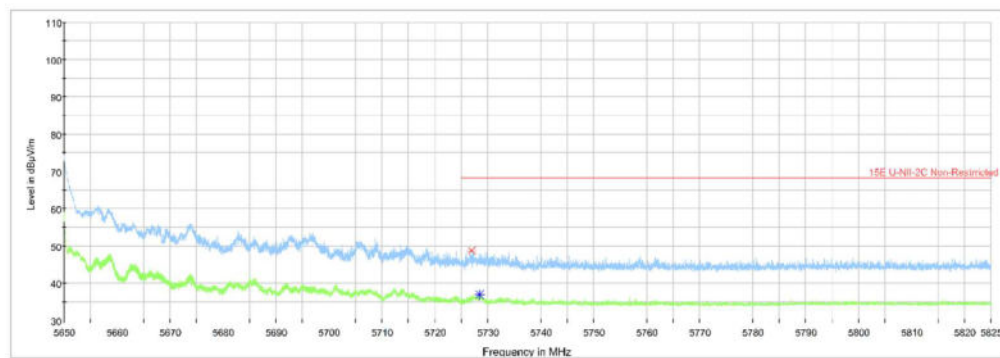


Fig. 36 Band Edges (802.11ax-HT80 , full RU, Ch122, 5610MHz)

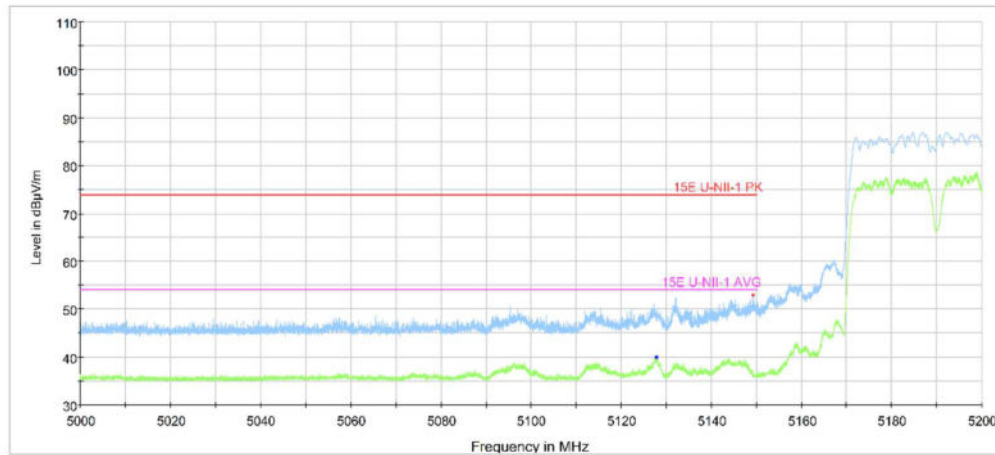


Fig. 37 Band Edges (802.11ax-HT160 , full RU, Ch50, 5250MHz)

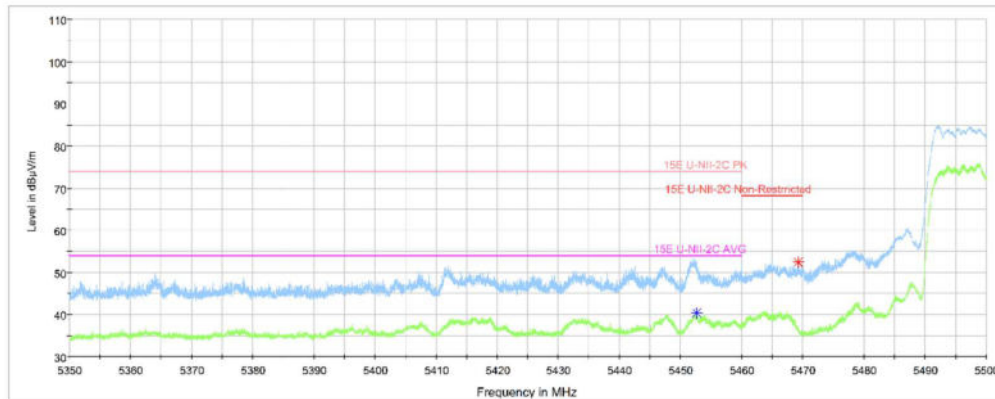


Fig. 38 Band Edges (802.11ax-HT160 , full RU, Ch114, 5570MHz)

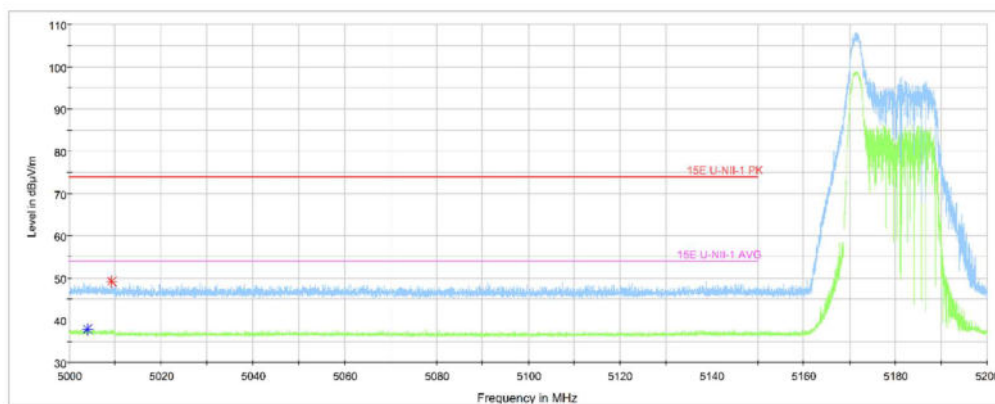


Fig. 39 Band Edges (802.11ax-HT20 , partial RU, Ch36, 5180MHz)

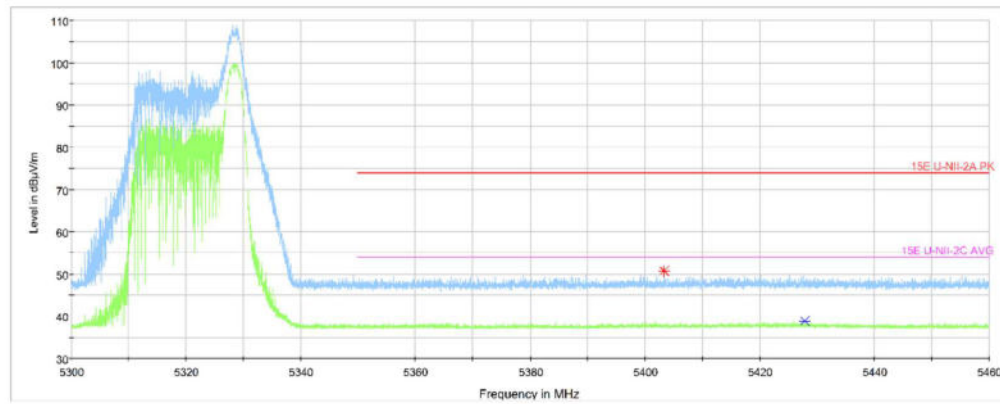


Fig. 40 Band Edges (802.11ax-HT20 , partial RU, Ch64, 5320MHz)

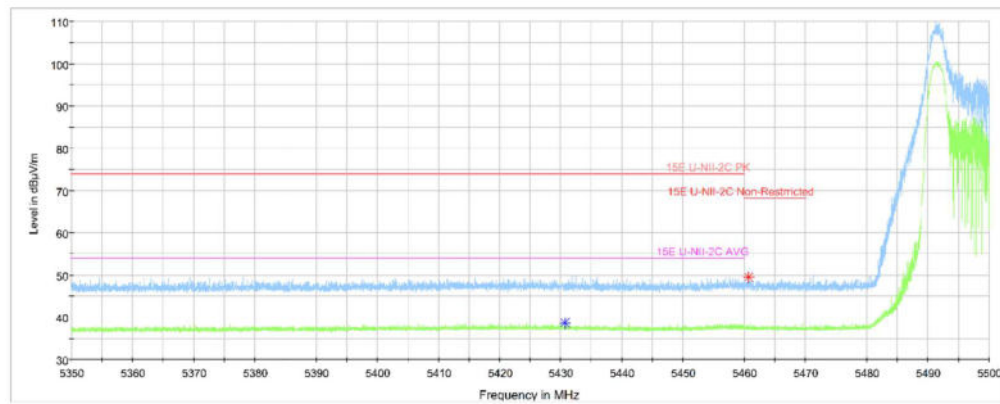


Fig. 41 Band Edges (802.11ax-HT20 , partial RU, Ch100, 5500MHz)

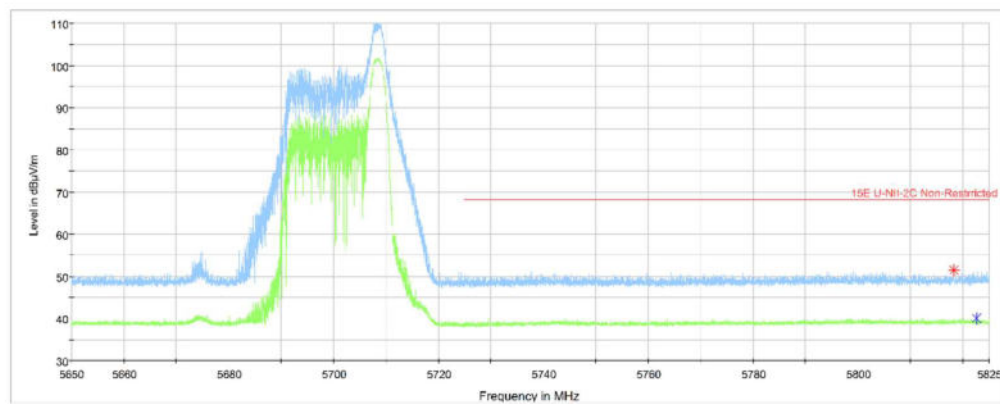


Fig. 42 Band Edges (802.11ax-HT20 , partial RU, Ch140, 5700MHz)

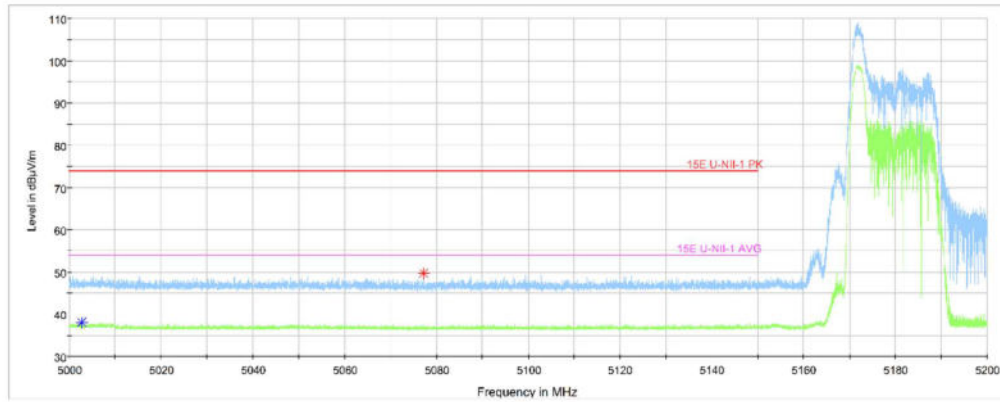


Fig. 43 Band Edges (802.11ax-HT40 , partial RU, Ch38, 5190MHz)

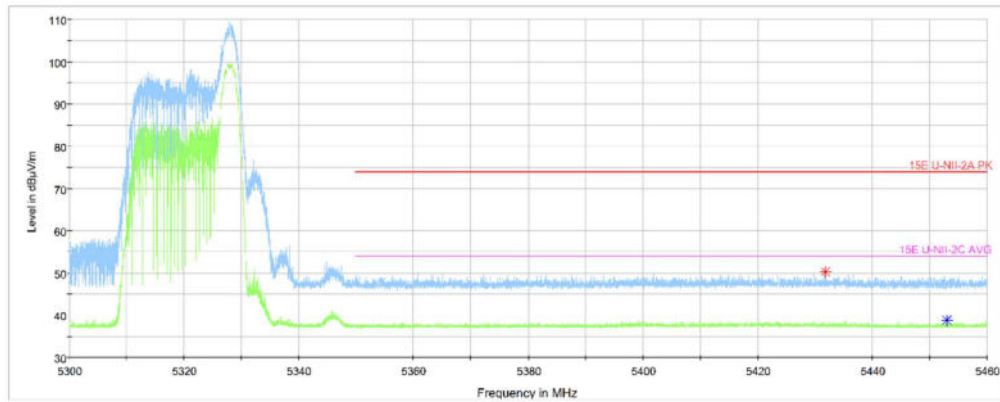


Fig. 44 Band Edges (802.11ax-HT40 , partial RU, Ch62, 5310MHz)

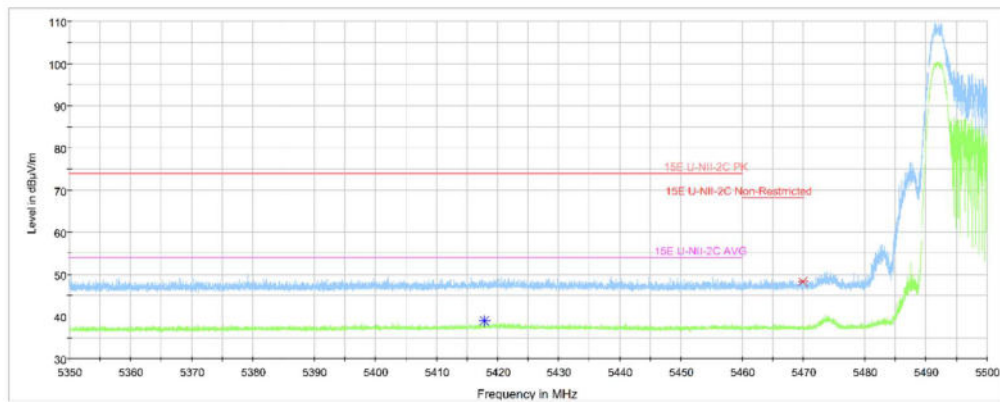


Fig. 45 Band Edges (802.11ax-HT40 , partial RU, Ch102, 5510MHz)

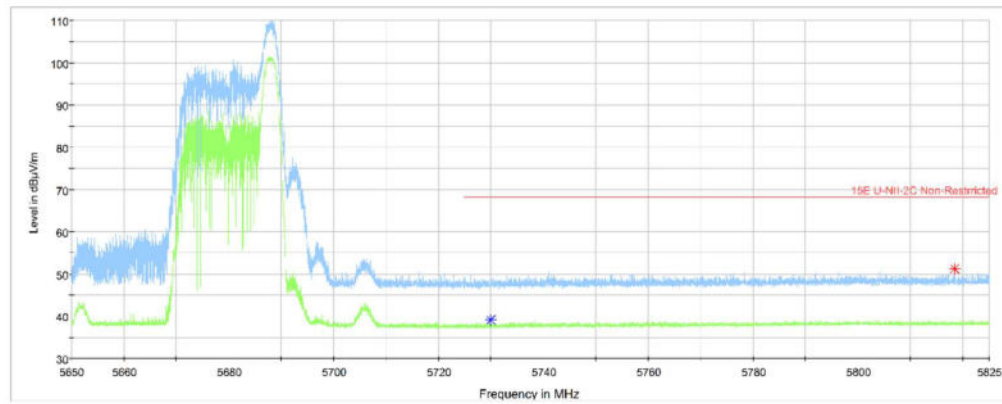


Fig. 46 Band Edges (802.11ax-HT40 , partial RU, Ch134, 5670MHz)

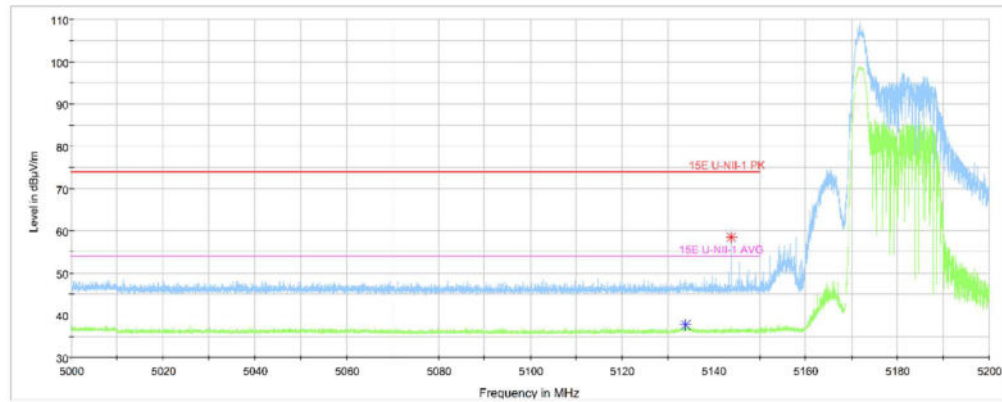


Fig. 47 Band Edges (802.11ax-HT80 , partial RU, Ch42 , 5210MHz)

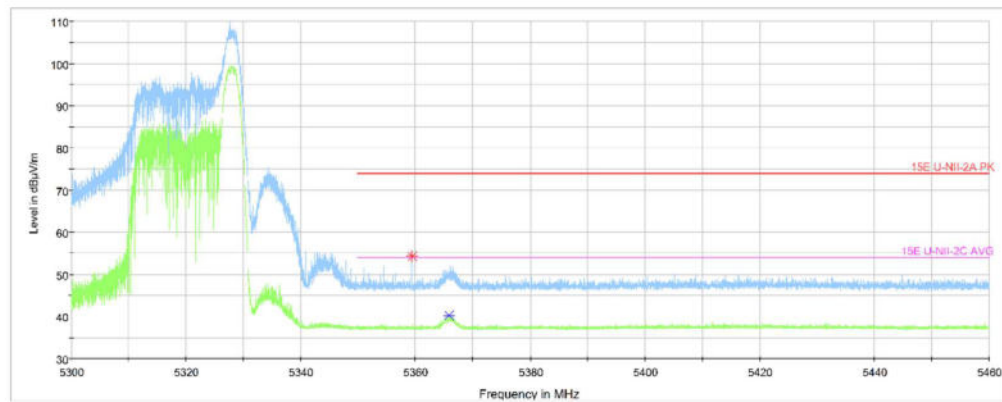


Fig. 48 Band Edges (802.11ax-HT80 , partial RU, Ch58, 5290MHz)

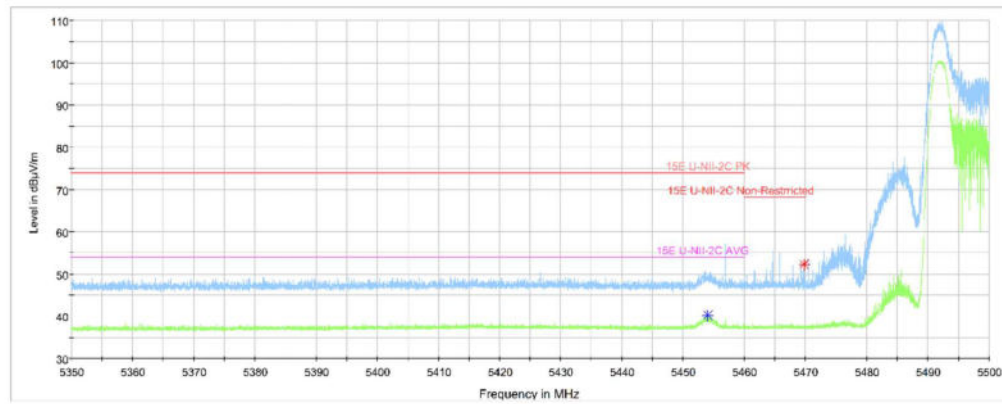


Fig. 49 Band Edges (802.11ax-HT80 , partial RU, Ch106, 5530MHz)

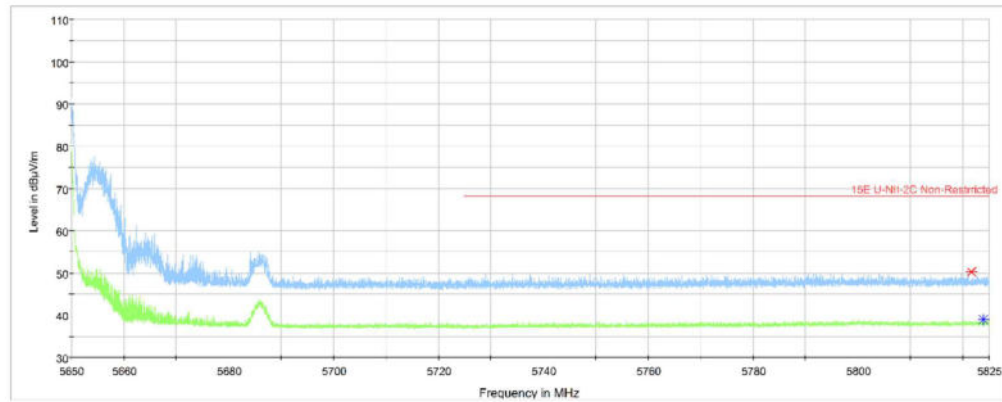


Fig. 50 Band Edges (802.11ax-HT80 , partial RU, Ch122, 5610MHz)

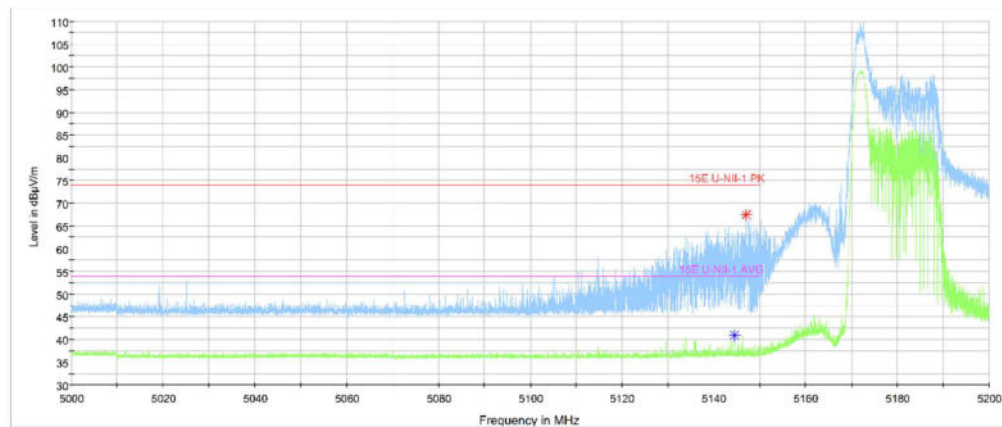


Fig. 51 Band Edges (802.11ax-HT160 , partial RU, Ch50, 5250MHz)

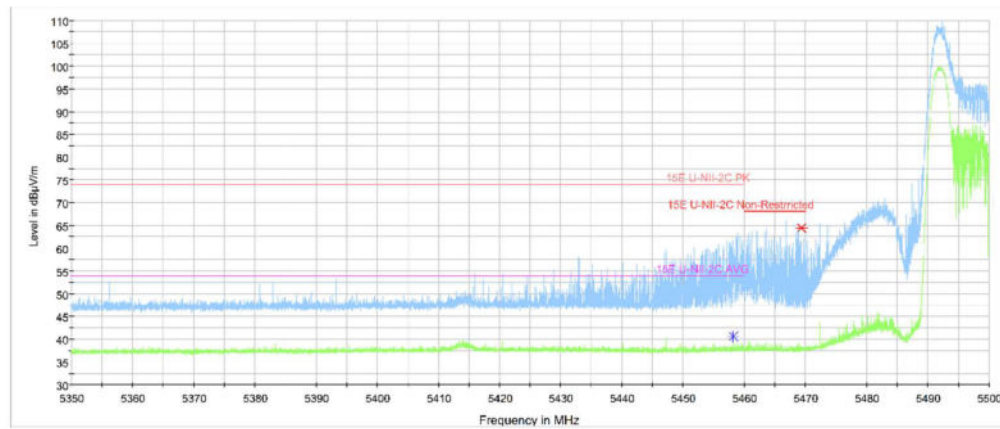


Fig. 52 Band Edges (802.11ax-HT160 , partial RU, Ch114, 5570MHz)

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.

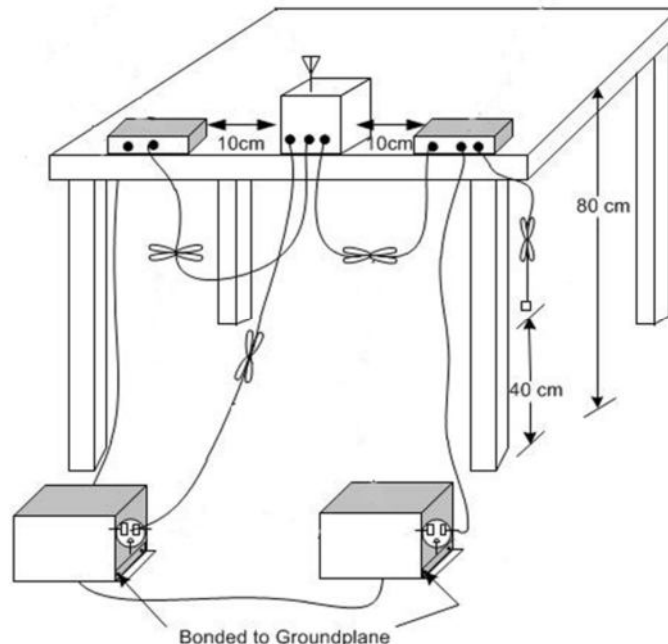
The measurement bandwidth is:

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. 53	Fig. 54	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. 53	Fig. 54	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:

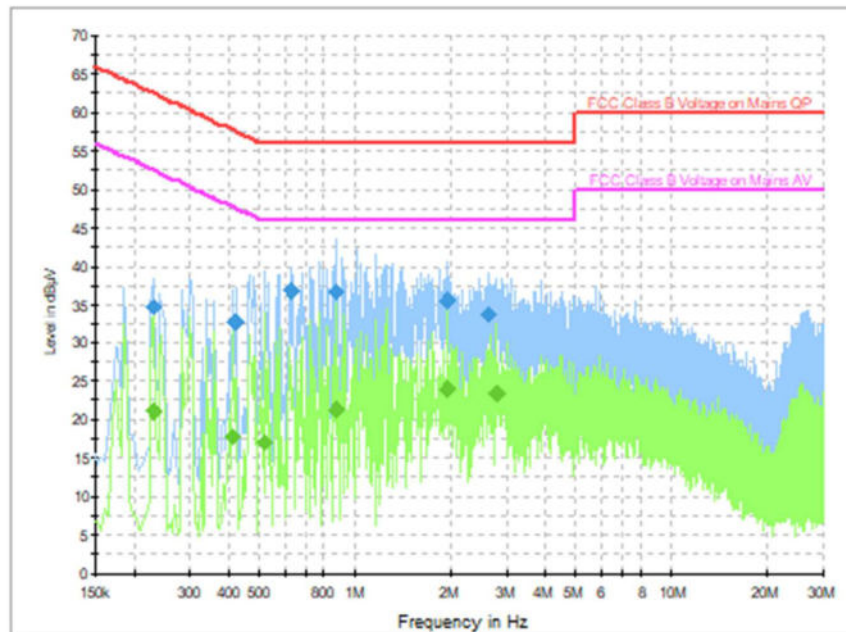


Fig. 53 Conducted Emission(802.11a, Ch36, TX)

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.230000	34.7	2000.0	9.000	On	L1	19.9	27.7	62.4	
0.418000	32.8	2000.0	9.000	On	N	19.9	24.7	57.5	
0.630000	36.8	2000.0	9.000	On	L1	20.0	19.2	56.0	
0.878000	36.6	2000.0	9.000	On	L1	19.9	19.4	56.0	
1.962000	35.6	2000.0	9.000	On	L1	19.8	20.4	56.0	
2.662000	33.7	2000.0	9.000	On	L1	19.8	22.3	56.0	

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.230000	21.2	2000.0	9.000	On	L1	19.9	31.3	52.4	
0.410000	17.8	2000.0	9.000	On	L1	20.0	29.9	47.6	
0.518000	17.2	2000.0	9.000	On	N	19.9	28.8	46.0	
0.878000	21.3	2000.0	9.000	On	L1	19.9	24.7	46.0	
1.962000	24.1	2000.0	9.000	On	L1	19.8	21.9	46.0	
2.822000	23.4	2000.0	9.000	On	L1	19.8	22.6	46.0	

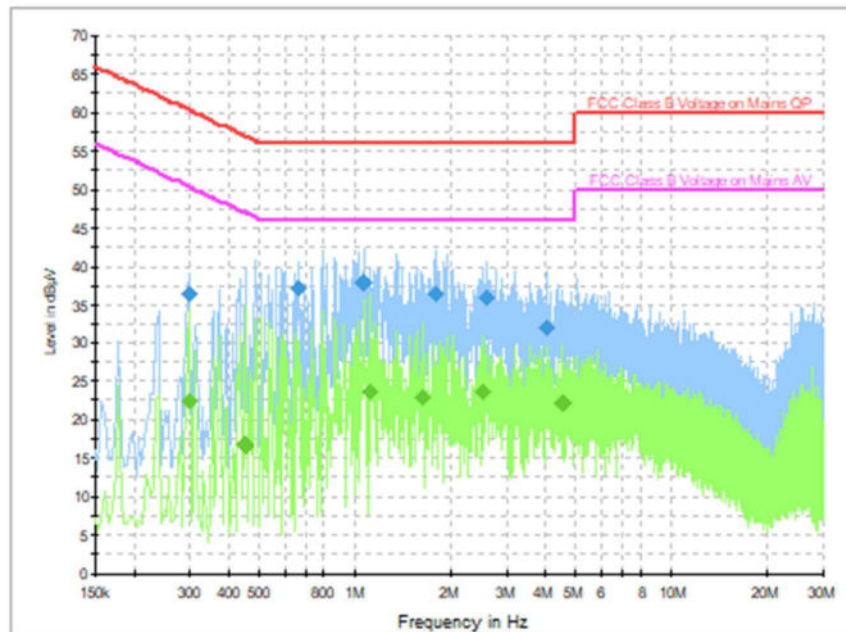


Fig. 54 Conducted Emission(802.11a, IDLE)

Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.298000	36.4	2000.0	9.000	On	N	19.8	23.9	60.3	
0.662000	37.3	2000.0	9.000	On	L1	20.0	18.7	56.0	
1.062000	37.8	2000.0	9.000	On	L1	19.9	18.2	56.0	
1.810000	36.3	2000.0	9.000	On	L1	19.8	19.7	56.0	
2.618000	35.9	2000.0	9.000	On	L1	19.8	20.1	56.0	
4.046000	32.0	2000.0	9.000	On	L1	19.8	24.0	56.0	

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)	Comment
0.298000	22.3	2000.0	9.000	On	N	19.8	28.0	50.3	
0.450000	16.8	2000.0	9.000	On	N	19.9	30.1	46.9	
1.118000	23.5	2000.0	9.000	On	L1	19.9	22.5	46.0	
1.650000	23.1	2000.0	9.000	On	L1	19.8	22.9	46.0	
2.522000	23.6	2000.0	9.000	On	L1	19.8	22.4	46.0	
4.510000	22.3	2000.0	9.000	On	L1	19.8	23.7	46.0	

A.7. 99% Occupied bandwidth

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

- 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.
- 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.
- 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.
- Step a) through step c) might require iteration to adjust within the specified range.
- 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.
- Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- 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% of the 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.
- 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: UT05a

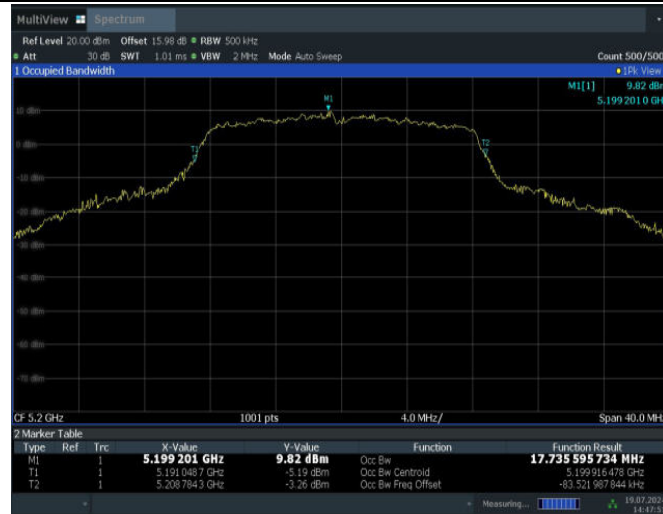
Test graphs as below:

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant2	5180	17.823	5171.1228	5188.9462	---	---
		5200	17.736	5191.0487	5208.7843	---	---
		5240	17.29	5231.3022	5248.5926	---	---
		5260	17.293	5251.2873	5268.5807	---	---
		5280	17.238	5271.3381	5288.5760	---	---
		5320	17.725	5311.0472	5328.7723	---	---
		5500	17.774	5491.1219	5508.8957	---	---
		5580	17.29	5571.2796	5588.5701	---	---
		5700	17.624	5691.0205	5708.6447	---	---
11N40SISO	Ant2	5190	36.306	5171.8585	5208.1649	---	---

		5230	36.354	5211.8353	5248.1897	---	---
		5270	36.37	5251.8721	5288.2421	---	---
		5310	36.329	5291.8586	5328.1875	---	---
		5510	36.279	5491.8723	5528.1509	---	---
		5550	36.43	5531.8470	5568.2768	---	---
		5670	36.402	5651.8076	5688.2101	---	---
11AC80SISO	Ant2	5210	76.648	5171.7616	5248.4097	---	---
		5290	76.717	5251.7538	5328.4712	---	---
		5530	76.725	5491.7153	5568.4406	---	---
		5610	76.722	5571.7250	5648.4468	---	---
		5690	76.69	5651.7200	5728.4099	---	---
11AC160SISO	Ant2	5250	156.492	5171.9802	5328.4725	---	---
		5570	156.307	5491.9495	5648.2567	---	---
11AX20SISO	Ant2	5180	19.053	5170.4684	5189.5216	---	---
		5200	19.001	5190.4815	5209.4826	---	---
		5240	18.874	5230.5552	5249.4288	---	---
		5260	19.079	5250.4298	5269.5085	---	---
		5280	19.056	5270.4601	5289.5164	---	---
		5320	19.019	5310.4863	5329.5057	---	---
		5500	19.051	5490.4738	5509.5247	---	---
		5580	19.051	5570.4658	5589.5172	---	---
		5700	19.05	5690.4737	5709.5241	---	---

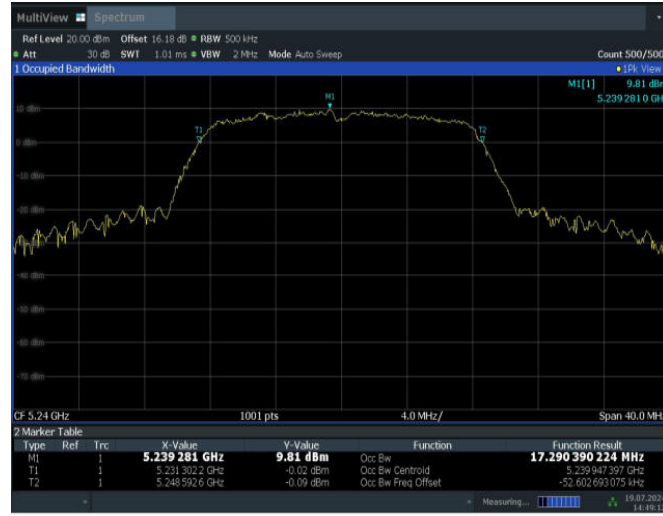
Conclusion: PASS





14:47:52 19.07.2024

11A_Ant2_5240



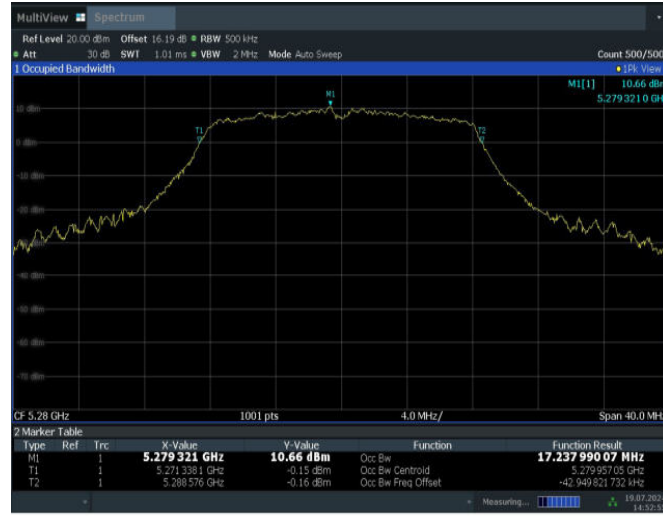
14:49:13 19.07.2024

11A_Ant2_5260



14:50:59 19.07.2024

11A_Ant2_5280



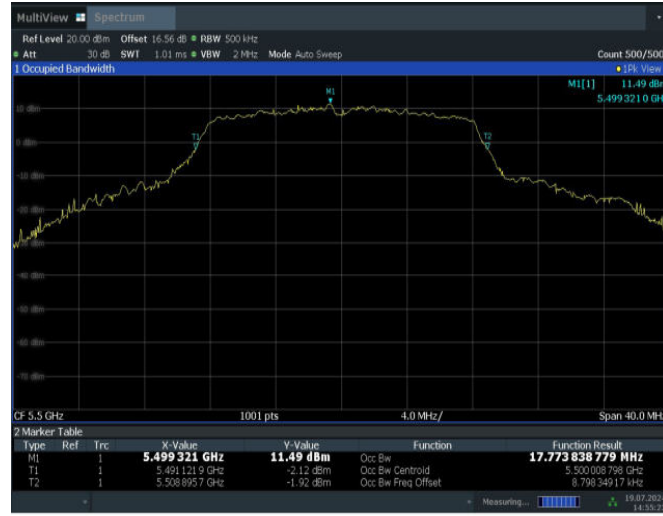
14:52:56 19.07.2024

11A_Ant2_5320



14:54:11 19.07.2024

11A_Ant2_5500

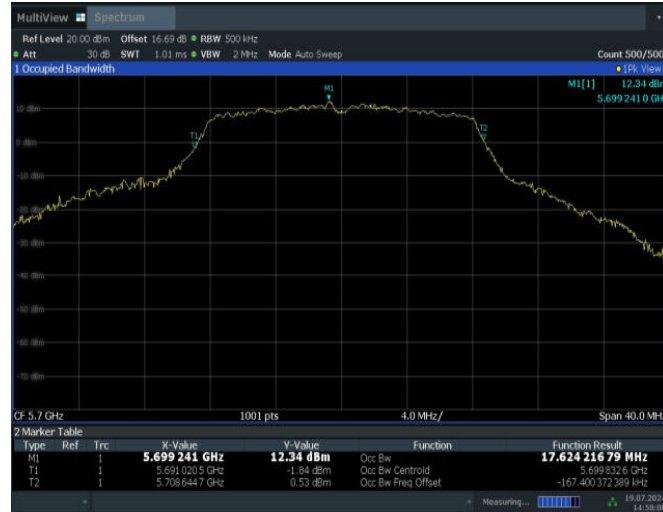


14:55:24 19.07.2024

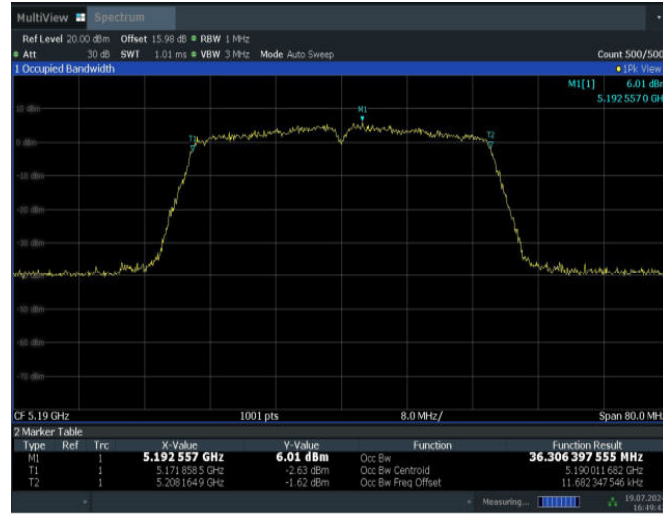
11A_Ant2_5580



11A_Ant2_5700

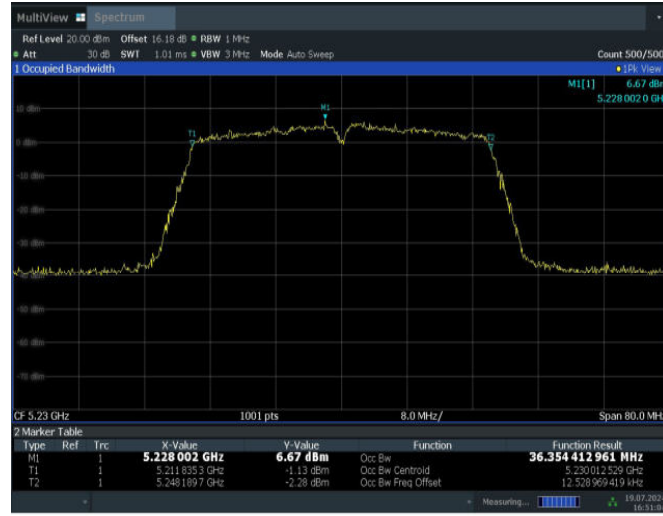


11N40ISO_Ant2_5190



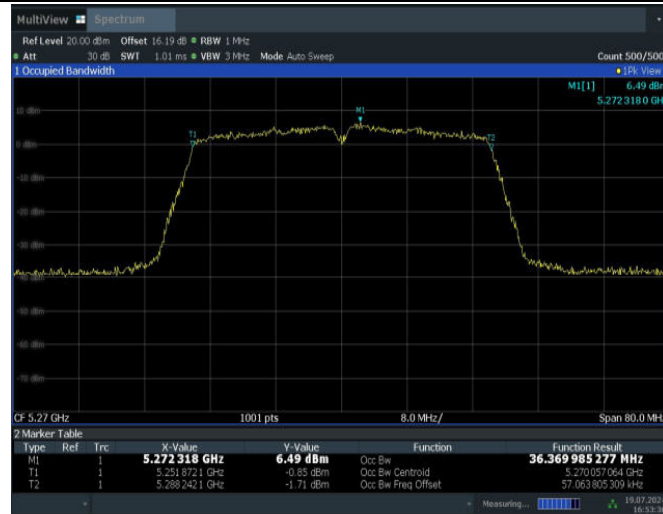
16:49:43 19.07.2024

11N40ISO_Ant2_5230



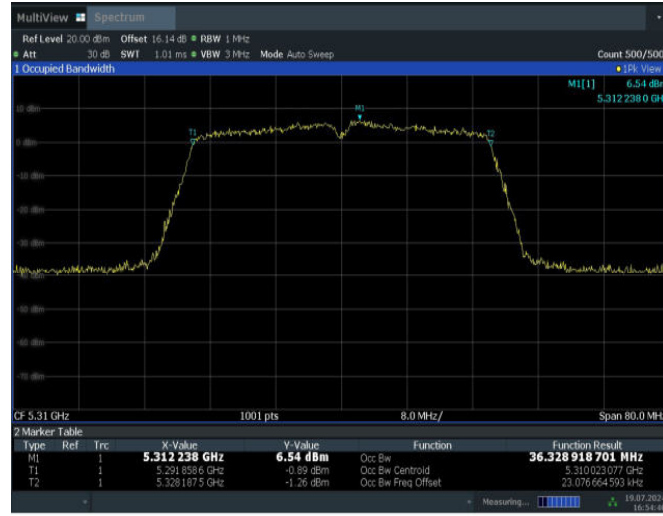
16:51:05 19.07.2024

11N40ISO_Ant2_5270



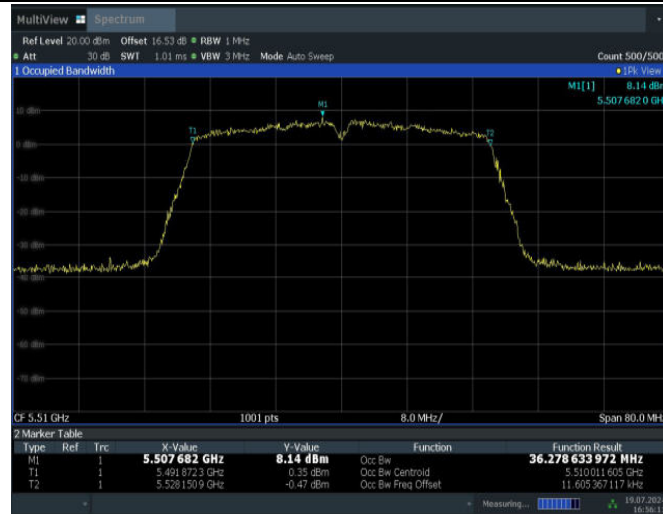
16:53:37 19.07.2024

11N40SISO_Ant2_5310



16:54:41 19.07.2024

11N40SISO_Ant2_5510



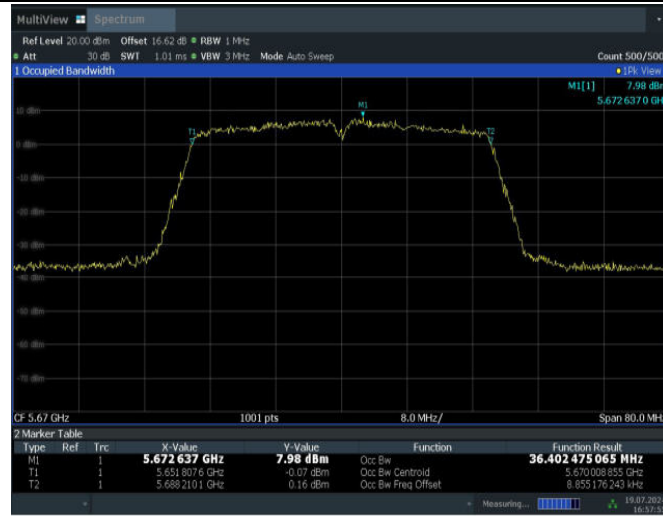
16:56:12 19.07.2024

11N40ISO_Ant2_5550



16:56:44 19.07.2024

11N40ISO_Ant2_5670



16:57:55 19.07.2024

11AC80SISO_Ant2_5210



17:03:04 19.07.2024

11AC80SISO_Ant2_5290



17:06:48 19.07.2024

11AC80SISO_Ant2_5530



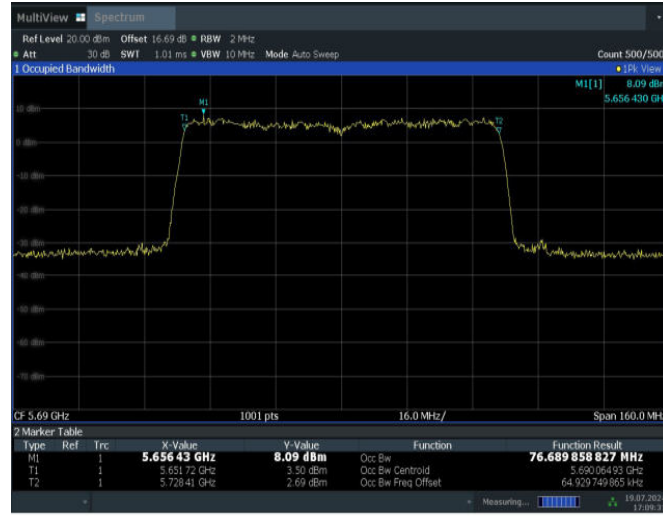
17:07:51 19.07.2024

11AC80SISO_Ant2_5610



17:08:39 19.07.2024

11AC80SISO_Ant2_5690



17:09:31 19.07.2024

11AC160SISO_Ant2_5250



17:10:18 19.07.2024

11AC160SISO_Ant2_5570



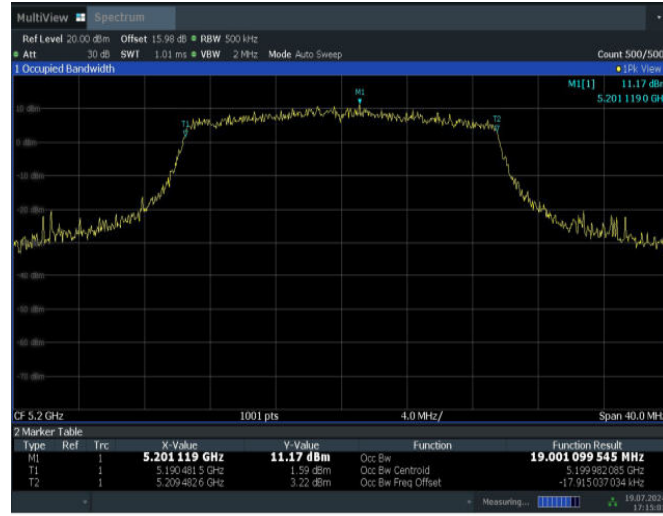
17:11:03 19.07.2024

11AX20SISO_Ant2_5180



17:13:34 19.07.2024

11AX20SISO_Ant2_5200



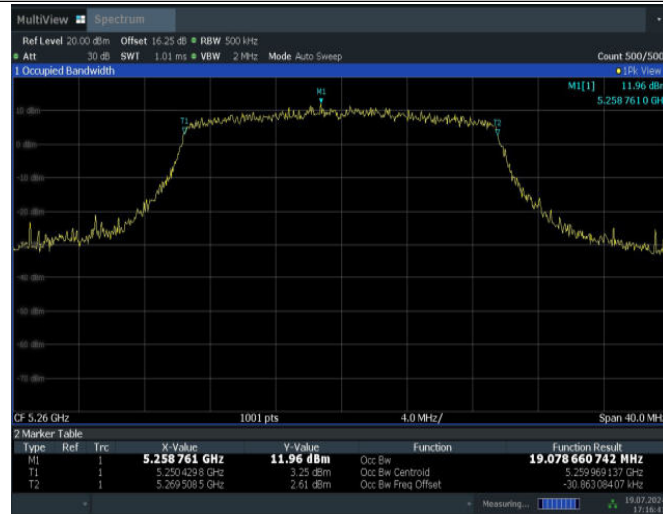
17:15:01 19.07.2024

11AX20SISO_Ant2_5240



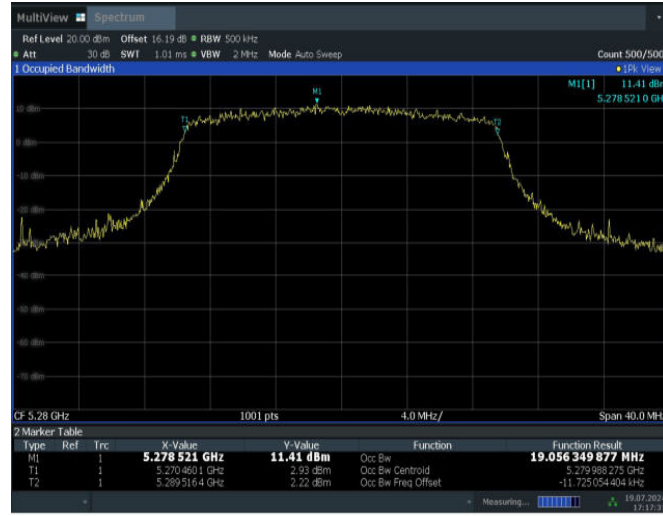
17:16:00 19.07.2024

11AX20SISO_Ant2_5260



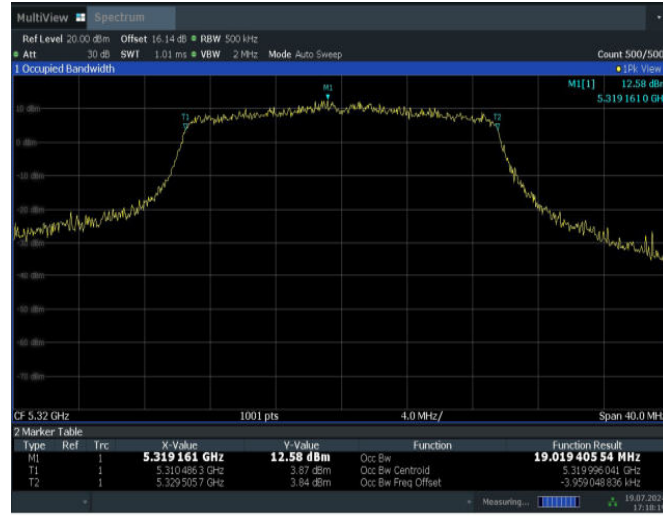
17:16:42 19.07.2024

11AX20SISO_Ant2_5280



17:17:32 19.07.2024

11AX20SISO_Ant2_5320



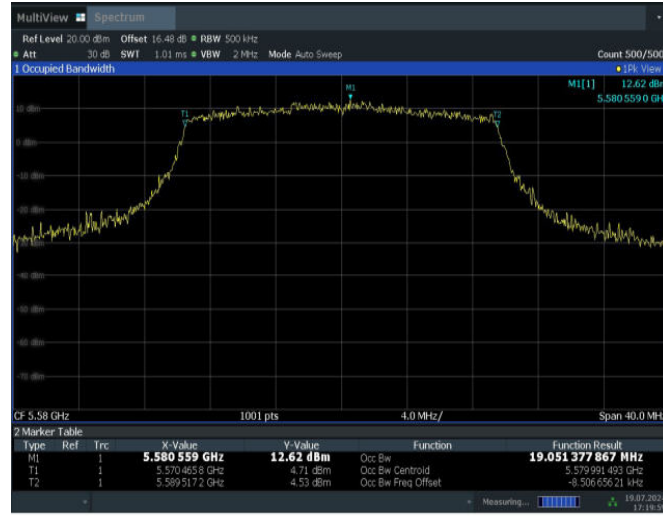
17:18:19 19.07.2024

11AX20SISO_Ant2_5500



17:19:19 19.07.2024

11AX20SISO_Ant2_5580



17:20:00 19.07.2024

11AX20SISO_Ant2_5700



A.8. 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



*** END OF REPORT BODY ***