



Test Configuration			
Frequency Range:		Band:	
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE20 RU52	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	A (Core 0) B (Core 1)	Active Chain Id(s):	0 1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
5955 (RU52.37)	7.23	-	-	-
6175 (RU52.37)	6.79	-	-	-
6415 (RU52.40)	7.41	-	-	-
6435 (RU52.37)	7.52	-	-	-
6475 (RU52.37)	7.71	-	-	-
6515 (RU52.40)	8.23	-	-	-
6535 (RU52.37)	7.83	-	-	-
6695 (RU52.37)	7.95	-	-	-
6855 (RU52.40)	7.60	-	-	-
6875 (RU52.38)	7.36	-	-	-
6875 (RU52.39)	6.90	-	-	-
6895 (RU52.37)	-	9.45	-	-
6995 (RU52.37)	-	9.53	-	-
7095 (RU52.40)	-	9.18	-	-

Table 319 - Unwanted Emissions Within the Band Results



Test Configuration			
Frequency Range:		Band:	
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE20 RU106	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	SISO	Peak Antenna Gain (dBi):	-
Active Port(s):	A (Core 0) B (Core 1)	Active Chain Id(s):	0 1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
5955 (RU106.53)	6.95	-	-	-
6175 (RU106.53)	6.88	-	-	-
6415 (RU106.54)	7.65	-	-	-
6435 (RU106.53)	7.65	-	-	-
6475 (RU106.53)	8.21	-	-	-
6515 (RU106.54)	7.97	-	-	-
6535 (RU106.53)	7.78	-	-	-
6695 (RU106.53)	7.61	-	-	-
6855 (RU106.54)	7.27	-	-	-
6875 (RU106.53)	6.96	-	-	-
6875 (RU106.54)	7.30	-	-	-
6895 (RU106.53)	-	8.94	-	-
6995 (RU106.53)	-	8.87	-	-
7095 (RU106.54)	-	9.02	-	-

Table 320 - Unwanted Emissions Within the Band Results

MIMO CDD

Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE20 SU	2.88	7063.800
802.11ax HE40 SU	0.56	6073.260
802.11ax HE80 SU	1.69	6824.080
802.11ax HE160 SU	1.27	6588.000
802.11ax HE20 RU106	2.93	6826.200
802.11ax HE20 RU52	3.29	6941.300

Table 321 - Unwanted Emissions Within the RLAN Band Summary Results

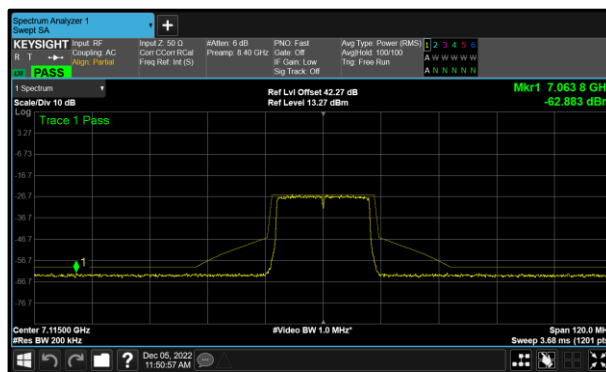


Figure 86 - A(Core 0) 802.11ax HE20 SU 7115 MHz (CH233)

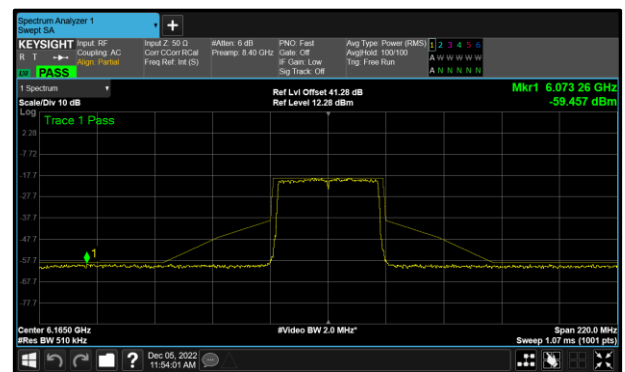


Figure 87 - A(Core 0) 802.11ax HE40 SU 6165 MHz (CH43)

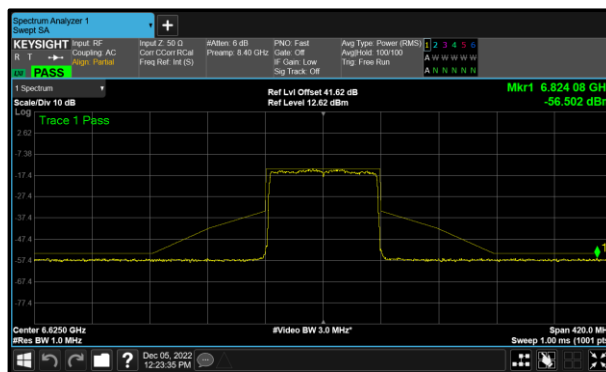


Figure 88 - A(Core 0) 802.11ax HE80 SU 6625 MHz (CH135)

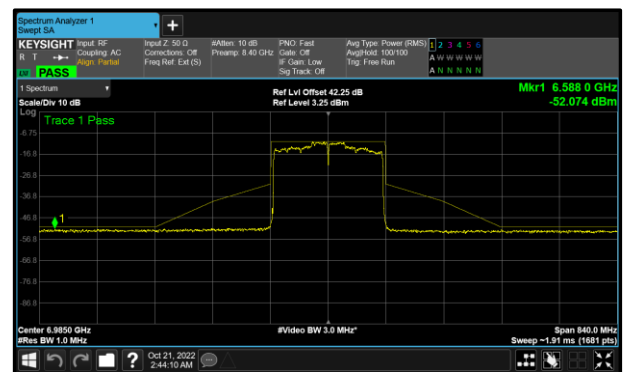


Figure 89 - B(Core 1) 802.11ax HE160 SU 6985 MHz (CH207)

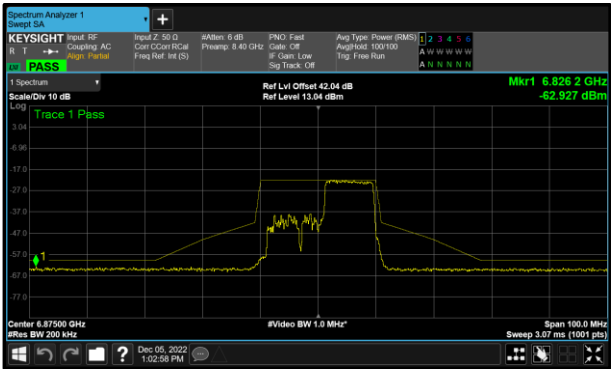


Figure 90 - A(Core 0) 802.11ax HE20 RU106
6875 MHz (CH185)

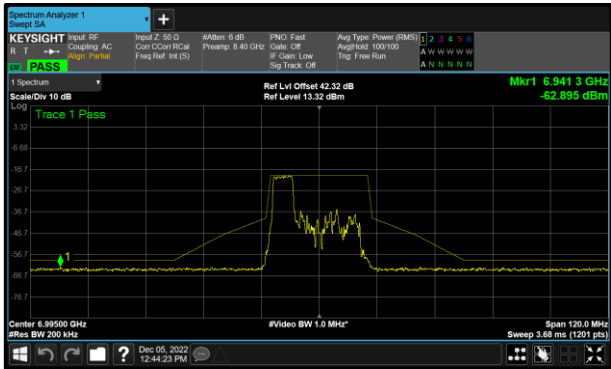


Figure 91 - A(Core 0) 802.11ax HE20 RU52 6995
MHz (CH209)



Test Configuration			
Frequency Range:		Band:	
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE20 SU	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
5955	3.65	4.64	-	-
6175	3.99	4.51	-	-
6415	3.19	3.79	-	-
6435	3.77	3.65	-	-
6475	3.75	4.10	-	-
6515	3.51	4.18	-	-
6535	3.50	3.93	-	-
6695	3.63	3.99	-	-
6855	3.49	3.66	-	-
6875	3.25	3.55	-	-
6895	3.50	4.22	-	-
6995	3.61	4.19	-	-
7115	2.88	3.40	-	-

Table 322 - Unwanted Emissions Within the Band Results



Test Configuration			
Frequency Range:		Band:	
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE40 SU	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
5965	1.03	2.13	-	-
6165	0.56	1.76	-	-
6405	1.88	2.28	-	-
6445	1.03	2.05	-	-
6485	0.83	2.06	-	-
6525	1.17	2.28	-	-
6565	1.36	1.32	-	-
6685	1.95	1.45	-	-
6845	1.83	1.95	-	-
6885	0.73	1.13	-	-
6925	1.82	1.28	-	-
7005	1.62	1.34	-	-
7085	1.27	1.02	-	-

Table 323 - Unwanted Emissions Within the Band Results



Test Configuration			
Frequency Range:		Band:	
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE80 SU	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
5985	5.07	5.97	-	-
6145	3.16	4.09	-	-
6385	3.01	3.17	-	-
6465	2.53	2.79	-	-
6545	2.27	2.16	-	-
6625	2.30	1.69	-	-
6705	2.64	2.53	-	-
6785	5.91	6.13	-	-
6865	1.99	2.36	-	-
6945	3.82	3.58	-	-
7025	3.47	4.12	-	-

Table 324 - Unwanted Emissions Within the Band Results



Test Configuration			
Frequency Range:	5.925-7.125 GHz	Band:	U-NII-5, U-NII-6, U-NII-7, U-NII-8
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE160 SU	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
6025	2.83	3.72	-	-
6185	2.83	3.48	-	-
6345	3.61	4.03	-	-
6505	3.80	4.13	-	-
6665	2.91	4.15	-	-
6825	3.00	3.18	-	-
6985	4.83	1.27	-	-

Table 325 - Unwanted Emissions Within the Band Results



Test Configuration			
Frequency Range:		Band:	
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE20 RU52	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
6275 (RU52.37)	3.62	4.37	-	-
6335 (RU52.37)	3.66	4.26	-	-
6415 (RU52.40)	3.57	3.90	-	-
6435 (RU52.37)	3.62	4.00	-	-
6475 (RU52.37)	3.48	4.12	-	-
6515 (RU52.40)	3.65	4.04	-	-
6895 (RU52.37)	3.52	3.82	-	-
6995 (RU52.37)	3.29	3.63	-	-
7095 (RU52.40)	3.38	3.61	-	-

Table 326 - Unwanted Emissions Within the Band Results



Test Configuration			
Frequency Range:		Band:	
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE20 RU106	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	MIMO CDD	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
5955 (RU106.53)	3.89	4.78	-	-
6175 (RU106.53)	4.12	4.71	-	-
6415 (RU106.54)	3.43	3.98	-	-
6435 (RU106.53)	3.63	4.04	-	-
6475 (RU106.53)	3.74	4.09	-	-
6515 (RU106.54)	3.35	4.11	-	-
6535 (RU106.53)	3.76	4.09	-	-
6695 (RU106.53)	3.41	4.17	-	-
6855 (RU106.54)	3.43	3.41	-	-
6875 (RU106.53)	3.34	3.66	-	-
6875 (RU106.54)	2.93	3.60	-	-
6895 (RU106.53)	3.11	3.80	-	-
6995 (RU106.53)	3.66	4.11	-	-
7095 (RU106.54)	3.54	3.65	-	-

Table 327 - Unwanted Emissions Within the Band Results

MIMO SDM

Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE20 SU	2.88	7070.800
802.11ax HE40 SU	1.55	6273.240
802.11ax HE80 SU	4.07	6741.800
802.11ax HE160 SU	0.49	6600.500
802.11ax HE20 RU106	3.73	5912.700
802.11ax HE20 RU26	4.74	6294.500
802.11ax HE20 RU52	4.14	6811.300

Table 328 - Unwanted Emissions Within the RLAN Band Summary Results

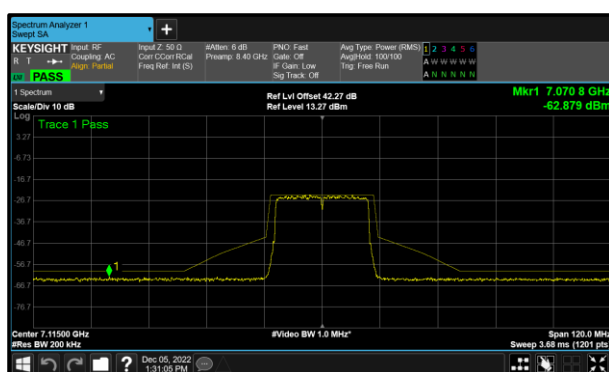


Figure 92 - A(Core 0) 802.11ax HE20 SU 7115 MHz (CH233)

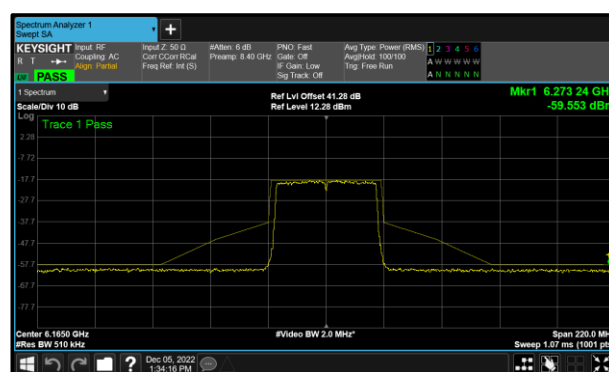


Figure 93 - A(Core 0) 802.11ax HE40 SU 6165 MHz (CH43)

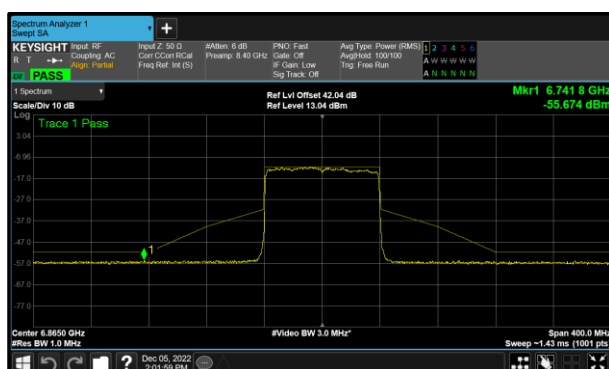
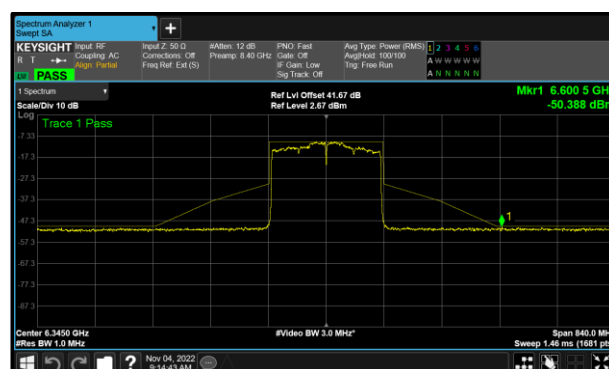


Figure 94 - A(Core 0) 802.11ax HE80 SU 6865 MHz (CH183)



<ImageCaption> - A(Core 0) 802.11ax HE160 SU 6345 MHz (CH79)

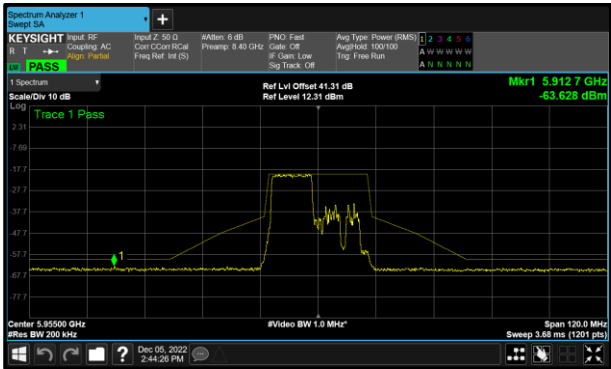


Figure 95 - A(Core 0) 802.11ax HE20 RU106
5955 MHz (CH1)

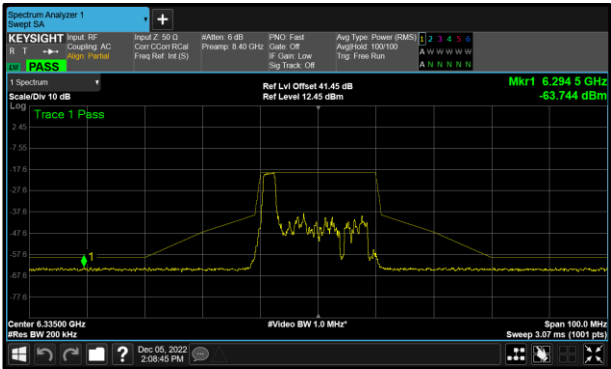


Figure 96 - A(Core 0) 802.11ax HE20 RU26 6335
MHz (CH77)

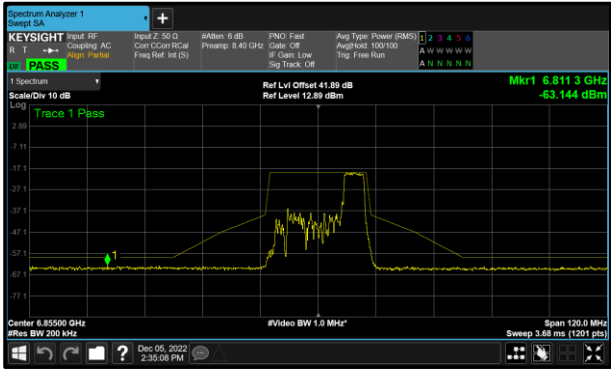


Figure 97 - A(Core 0) 802.11ax HE20 RU52 6855
MHz (CH181)



Test Configuration			
Frequency Range:		Band:	
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE20 SU	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x2	DCCF (dB):	-
Antenna Configuration:	MIMO SDM	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
5955	3.91	5.52	-	-
6175	4.14	5.78	-	-
6415	5.75	6.06	-	-
6435	5.45	5.50	-	-
6475	5.44	5.68	-	-
6515	5.65	6.50	-	-
6535	4.82	5.73	-	-
6695	5.20	5.03	-	-
6855	4.80	5.27	-	-
6875	4.39	4.40	-	-
6895	4.52	4.58	-	-
6995	5.38	5.54	-	-
7115	2.88	3.37	-	-

Table 329 - Unwanted Emissions Within the Band Results



Test Configuration			
Frequency Range:		Band:	
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE40 SU	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x2	DCCF (dB):	-
Antenna Configuration:	MIMO SDM	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
5965	1.99	3.38	-	-
6165	1.55	2.79	-	-
6405	5.27	5.93	-	-
6445	5.29	5.71	-	-
6485	5.27	5.81	-	-
6525	4.99	5.11	-	-
6565	4.76	4.90	-	-
6685	4.64	5.15	-	-
6845	1.89	1.80	-	-
6885	1.69	2.31	-	-
6925	6.02	7.18	-	-
7005	6.31	6.82	-	-
7085	6.52	7.05	-	-

Table 330 - Unwanted Emissions Within the Band Results



Test Configuration			
Frequency Range:		Band:	
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE80 SU	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x2	DCCF (dB):	-
Antenna Configuration:	MIMO SDM	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
5985	4.12	4.62	-	-
6145	4.09	5.11	-	-
6385	5.53	6.01	-	-
6465	5.28	5.56	-	-
6545	4.98	4.75	-	-
6625	4.63	4.42	-	-
6705	4.55	5.03	-	-
6785	4.69	5.44	-	-
6865	4.07	5.07	-	-
6945	5.28	6.31	-	-
7025	5.96	7.03	-	-

Table 331 - Unwanted Emissions Within the Band Results



Test Configuration			
Frequency Range:	5.925-7.125 GHz	Band:	U-NII-5, U-NII-6, U-NII-7, U-NII-8
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE160 SU	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x2	DCCF (dB):	-
Antenna Configuration:	MIMO SDM	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
6025	1.76	2.34	-	-
6185	1.58	2.66	-	-
6345	0.49	1.16	-	-
6505	2.54	0.68	-	-
6665	1.95	2.46	-	-
6825	2.10	2.37	-	-
6985	3.55	3.99	-	-

Table 332 - Unwanted Emissions Within the Band Results



Test Configuration			
Frequency Range:		Band:	
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE20 RU26	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x2	DCCF (dB):	-
Antenna Configuration:	MIMO SDM	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
6275 (RU26.0)	4.86	6.00	-	-
6335 (RU26.0)	4.74	5.77	-	-
6415 (RU26.8)	5.51	5.66	-	-
6435 (RU26.0)	5.30	5.35	-	-
6475 (RU26.0)	5.31	5.83	-	-
6515 (RU26.8)	5.21	5.49	-	-
6895 (RU26.0)	5.24	6.33	-	-
6995 (RU26.0)	6.03	6.61	-	-
7095 (RU26.8)	6.47	5.98	-	-

Table 333 - Unwanted Emissions Within the Band Results



Test Configuration			
Frequency Range:		Band:	
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE20 RU52	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x2	DCCF (dB):	-
Antenna Configuration:	MIMO SDM	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
5955 (RU52.37)	4.45	6.35	-	-
6175 (RU52.37)	4.19	5.25	-	-
6415 (RU52.40)	5.53	5.67	-	-
6435 (RU52.37)	5.19	5.33	-	-
6475 (RU52.37)	5.34	5.40	-	-
6515 (RU52.40)	5.40	5.90	-	-
6535 (RU52.37)	4.92	5.40	-	-
6695 (RU52.37)	4.80	4.89	-	-
6855 (RU52.40)	4.14	4.87	-	-
6875 (RU52.38)	4.46	4.96	-	-
6875 (RU52.39)	4.59	4.79	-	-
6895 (RU52.37)	6.42	6.65	-	-
6995 (RU52.37)	5.99	6.72	-	-
7095 (RU52.40)	6.54	6.58	-	-

Table 334 - Unwanted Emissions Within the Band Results



Test Configuration			
Frequency Range:		Band:	
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE20 RU106	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x2	DCCF (dB):	-
Antenna Configuration:	MIMO SDM	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
5955 (RU106.53)	3.73	5.75	-	-
6175 (RU106.53)	3.98	5.33	-	-
6415 (RU106.54)	5.51	5.97	-	-
6435 (RU106.53)	5.68	5.68	-	-
6475 (RU106.53)	5.52	5.37	-	-
6515 (RU106.54)	5.71	5.68	-	-
6535 (RU106.53)	4.97	5.36	-	-
6695 (RU106.53)	5.05	5.06	-	-
6855 (RU106.54)	4.44	4.53	-	-
6875 (RU106.53)	4.22	4.21	-	-
6875 (RU106.54)	4.34	4.78	-	-
6895 (RU106.53)	6.32	6.94	-	-
6995 (RU106.53)	6.56	6.31	-	-
7095 (RU106.54)	6.41	6.34	-	-

Table 335 - Unwanted Emissions Within the Band Results



TxBF

Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE40 SU	2.89	6998.640
802.11ax HE80 SU	1.15	6665.400

Table 336 - Unwanted Emissions Within the RLAN Band Summary Results

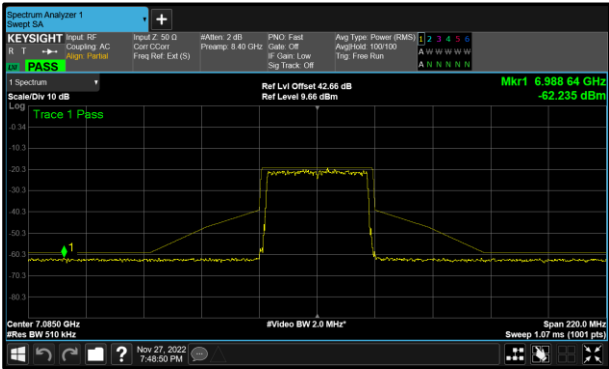


Figure 98 - B(Core 1) 802.11ax HE40 SU 7085 MHz (CH227)

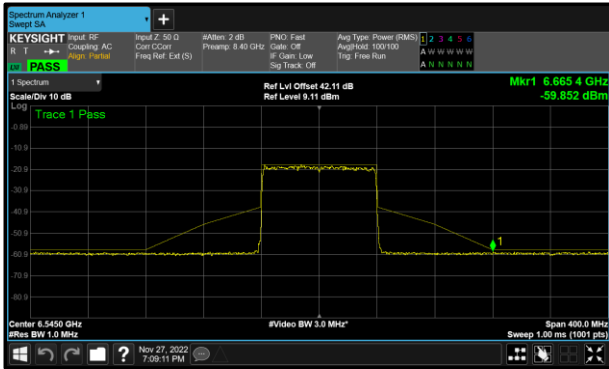


Figure 99 - A(Core 0) 802.11ax HE80 SU 6545 MHz (CH119)



Test Configuration			
Frequency Range:	6.875-7.125 GHz	Band:	U-NII-8
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE40 SU	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	TxBF	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
6925	3.21	4.94	-	-
7005	6.42	5.71	-	-
7085	2.73	6.97	-	-

Table 337 - Unwanted Emissions Within the Band Results



Test Configuration			
Frequency Range:	5.925-7.125 GHz	Band:	U-NII-5, U-NII-6, U-NII-7, U-NII-8
Limit Clause(s):	15.407(b)	Test Method(s):	KDB 987594 clause j

DUT Configuration			
Mode:	802.11ax HE80 SU	Duty Cycle (%):	-
Modulation Coding Scheme:	MCS2x1	DCCF (dB):	-
Antenna Configuration:	TxBF	Peak Antenna Gain (dBi):	-
Active Port(s):	A+B (Core 0 + Core 1)	Active Chain Id(s):	0+1

Test Frequency (MHz)	Unwanted Emissions Within the RLAN Band Margin (dB)			
	A	B	C	D
5985	4.02	1.83	-	-
6145	4.35	2.43	-	-
6385	1.69	5.60	-	-
6465	3.93	4.60	-	-
6545	1.15	5.15	-	-
6625	4.76	1.36	-	-
6705	2.31	5.02	-	-
6785	3.94	4.73	-	-
6865	3.18	2.46	-	-
6945	4.96	3.70	-	-
7025	4.74	6.00	-	-

Table 338 - Unwanted Emissions Within the Band Results



FCC 47 CFR Part 15, Limit Clause 15.407(b)(6)

For transmitters operating within the 5.925–7.125 GHz bands:

Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and onehalf times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

ISED RSS-248, Limit Clause 4.7.2(b)

e.i.r.p. spectral density of unwanted emissions falling into the 5925-7125 MHz band shall be attenuated (in dB) below the reference power spectral density by:

- i. 20 dB at 1 MHz away from the channel edge; and
- ii. a linearly interpolated value between 20 dB and 28 dB at frequencies between 1 MHz outside of channel edge and one (1) channel bandwidth from the operating channel centre, respectively; and
- iii. 28 dB at one (1) channel bandwidth away from the operating channel centre; and
- iv. a linearly interpolated value between 28 dB and 40 dB at frequencies between one (1) channel bandwidth from the channel centre and one- and one-half (1.5) times the channel bandwidth away from the operating channel centre, respectively; and
- v. 40 dB at one- and one-half (1.5) times the channel bandwidth away from the channel centre; and
- vi. a minimum of 40 dB at frequencies that are further away than one and one-half (1.5) times the channel bandwidth from the channel centre;



2.5.7 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 1.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Multimeter	Fluke	79 Series III	611	12	21-Dec-2022
Hygrometer	Rotronic	I-1000	3068	12	21-Sep-2023
Network Analyser	Rohde & Schwarz	ZVA 40	3548	12	24-Feb-2023
Calibration Unit	Rohde & Schwarz	ZV-Z54	4368	12	24-Feb-2023
Frequency Standard	Spectracom	SecureSync 1200-0408-0601	4393	6	01-Feb-2023
AC Programmable Power Supply	iTech	IT7324	5225	-	O/P Mon
AC Programmable Power Supply	iTech	IT7324	5226	-	O/P Mon
Attenuator 5W 30dB DC-18GHz	Aaren	AT40A-4041-D18-30	5502	12	21-Apr-2023
MXA Signal Analyser	Keysight Technologies	N9020B	5528	24	21-Mar-2024
Signal Conditioning Unit	TUV SUD	SPECTRUM SCU001	5546	12	06-Apr-2023
2-Way Power Divider (2-8 GHz)	Aaren	AT30A-TE0208-2-AF	5685	12	20-Dec-2022
2-Way Power Divider (2-8 GHz)	Aaren	AT30A-TE0208-2-AF	5687	12	20-Dec-2022
Signal Conditioning Unit	TUV SUD	SPECTRUM SCU002	5759	12	05-Jul-2023
Directional Coupler 2-8GHz	RF-Lambda	RFDC2G8G10	5765	-	O/P Mon
Directional Coupler 2-8GHz	RF-Lambda	RFDC2G8G10	5766	-	O/P Mon
1500VA AC Power Supply	iTech	IT7324	5907	-	O/P Mon
Signal Analyser	Keysight Technologies	N9020B	5919	24	13-Mar-2024
Signal Conditioning Unit	TUV SUD	SPECTRUM SCU003	5932	12	10-May-2023
Coaxial Fixed Attenuator DC-18GHz 5W 10dB	RF-Lambda	RFS5G18B10SMP	6175	12	17-Jul-2023
Coaxial Fixed Attenuator DC-18GHz 5W 10dB	RF-Lambda	RFS5G18B10SMP	6176	12	17-Jul-2023

Table 339

O/P Mon – Output Monitored using calibrated equipment



2.6 Spurious Radiated Emissions

2.6.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.209 and 15.407 (b)
ISED RSS-248, Clause 4.7
ISED RSS-GEN, Clause, 6.13 and 8.9

2.6.2 Equipment Under Test and Modification State

A2780, S/N: FWC3JLYYHC - Modification State 0

2.6.3 Date of Test

30-September-2022 to 11-October-2022

2.6.4 Test Method

Testing was performed in accordance with KDB 987594 D02 and ANSI C63.10, clause 6.3, 6.5 and 6.6.

Tests were performed in HT20 CDD in 2TX MIMO mode with measurements undertaken from 30 MHz to 40 GHz, on channel 45 (6175 MHz), 105 (6475 MHz), 149 (6695 MHz) and 209 (6995 MHz). Spurious emissions were limited to 1 GHz to 40 GHz on all other test channels.

All testing was performed using the lowest data rate/modulation scheme for the applicable mode.

Plots for average measurements were taken in accordance with ANSI C63.10, clause 12.7.7.2 with max-hold trace to characterize the EUT. Where emissions were detected, final average measurements were taken in accordance with ANSI C63.10, clause 4.1.4.2.2.

The plots shown are the characterization of the EUT. The limits on the plots represent the most stringent case for restricted bands, (54/74 dBuV/m @ 3 m and 64/84 dBuV/m @ 1m) when compared to -27 dBm/MHz RMS EIRP and -7 dBm/MHz Peak EIRP outside restricted bands. The limits shown have been used as a threshold to determine where further measurements are necessary. Where results are within 10dB of the limits shown on the plots, further investigation was carried out and reported in results tables.

The following conversion can be applied to convert from dBuV/m to uV/m:

$10^{(\text{Field Strength in dBuV/m}/20)}$.

EIRP was converted to field strength at 3m using the following formula:

Field Strength (dBuV/m at 3 m) = EIRP (dBm) + 95.2 dB.

2.6.5 Test Setup Diagram

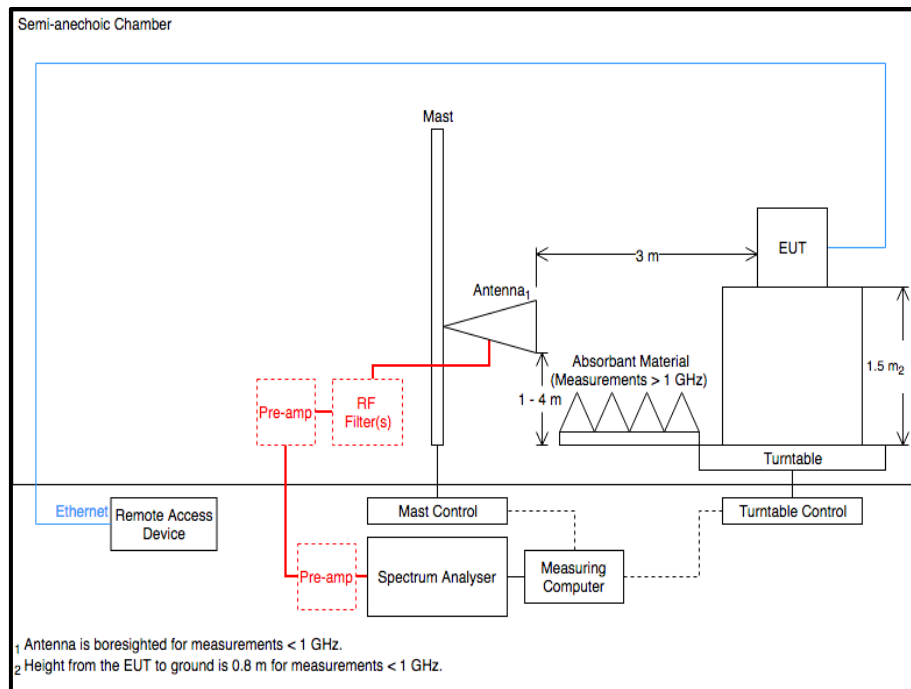


Figure 100 - Radiated Emissions Test Setup Diagram

2.6.6 Environmental Conditions

Ambient Temperature	21.2 - 23.0 °C
Relative Humidity	44.5 - 52.7 %

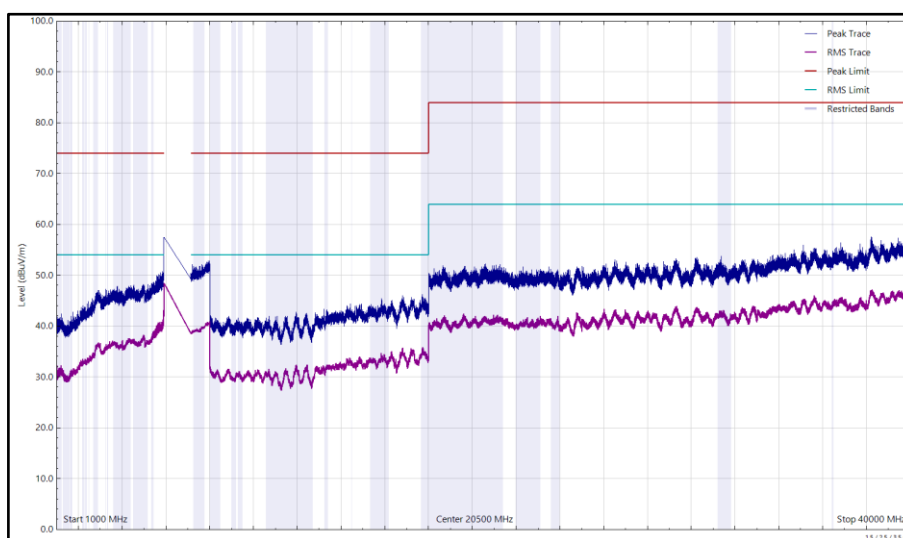
2.6.7 Test Results

6 GHz WLAN

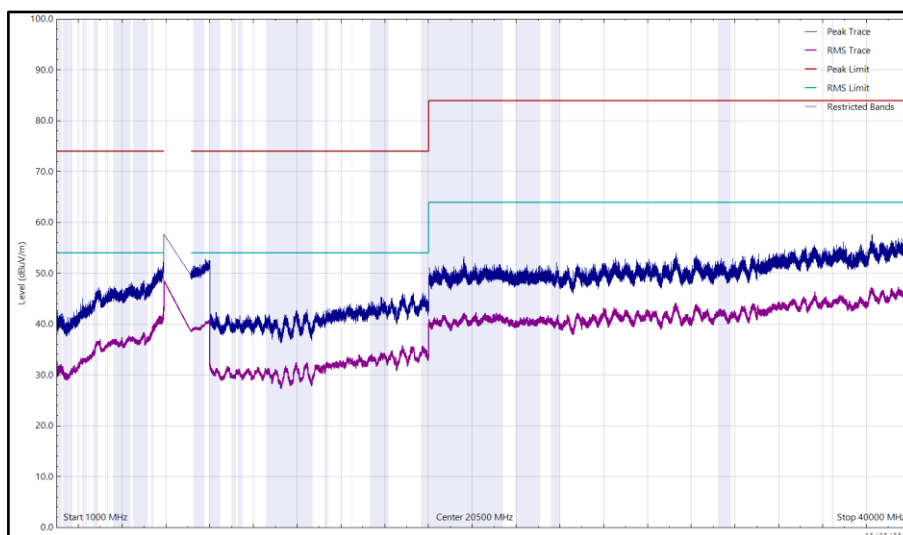
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

**Table 340 - U-NII-5 - 5955 MHz (CH1), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz**

*No emissions found within 10 dB of the limit.



**Figure 101 - U-NII-5 - 5955 MHz (CH1), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz, Horizontal**



**Figure 102 - U-NII-5 - 5955 MHz (CH1), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz, Vertical**

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
279.988	26.50	46.00	-19.50	Q-Peak	102	100	Horizontal
280.007	24.64	46.00	-21.36	Q-Peak	360	192	Vertical

Table 341 - U-NII-5 - 6175 MHz (CH45), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 40 GHz

No other emissions found within 10 dB of the limit.

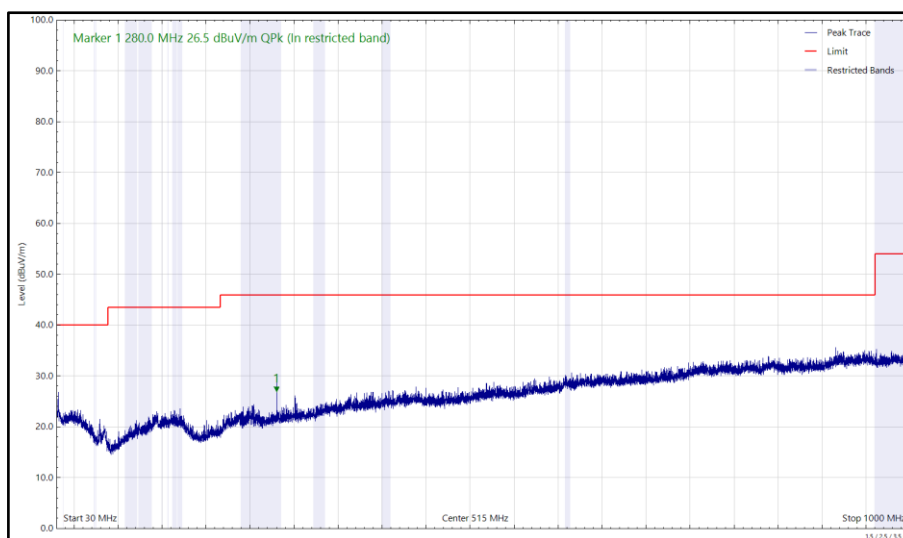


Figure 103 - U-NII-5 - 6175 MHz (CH45), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

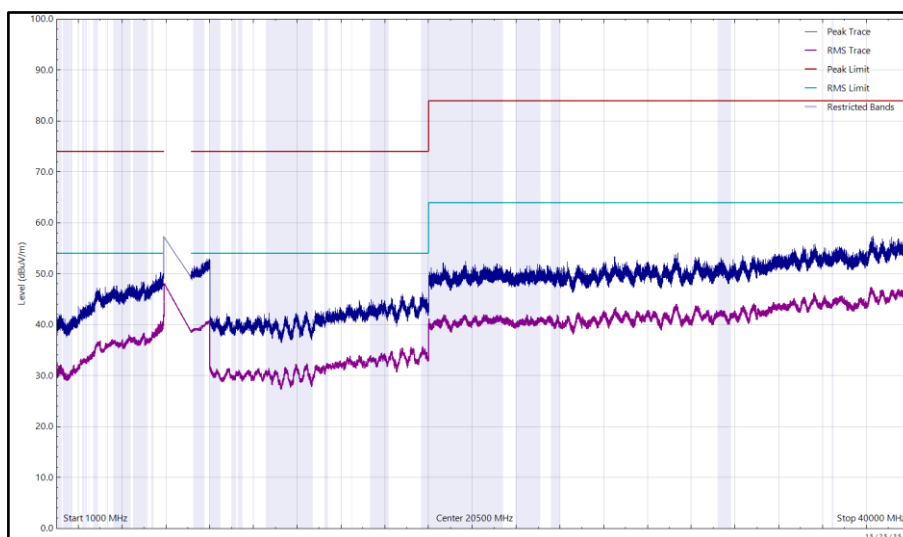


Figure 104 - U-NII-5 - 6175 MHz (CH45), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

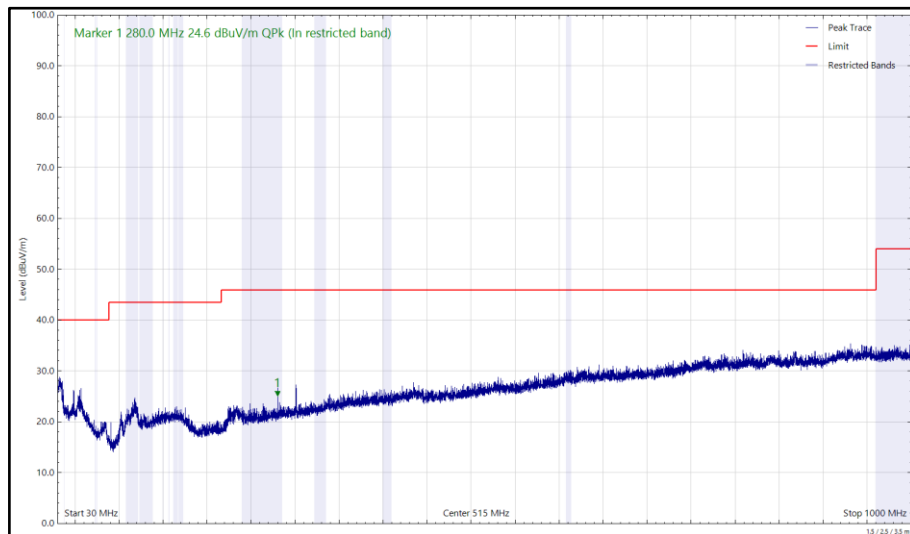


Figure 105 - U-NII-5 - 6175 MHz (CH45), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

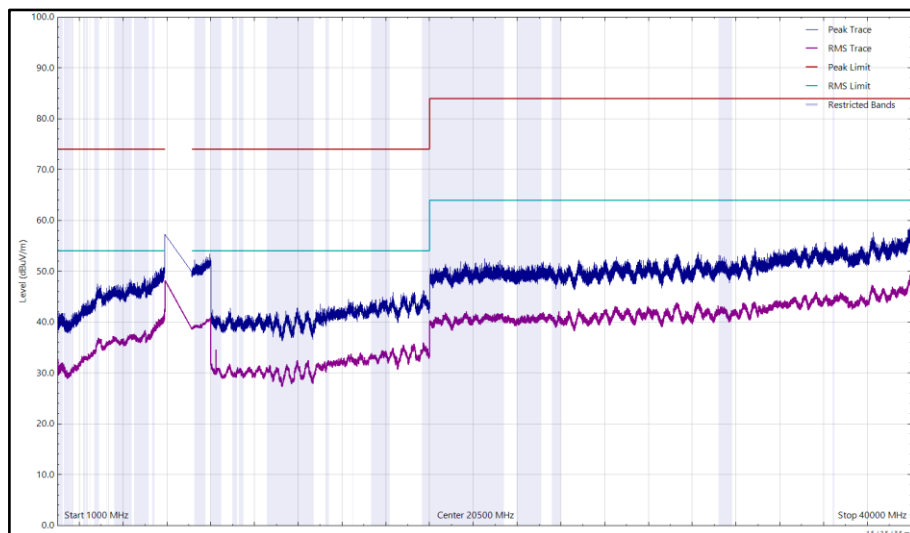


Figure 106 - U-NII-5 - 6175 MHz (CH45), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical



Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

Table 342 - U-NII-5 - 6415 MHz (CH93), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz

*No emissions found within 10 dB of the limit.

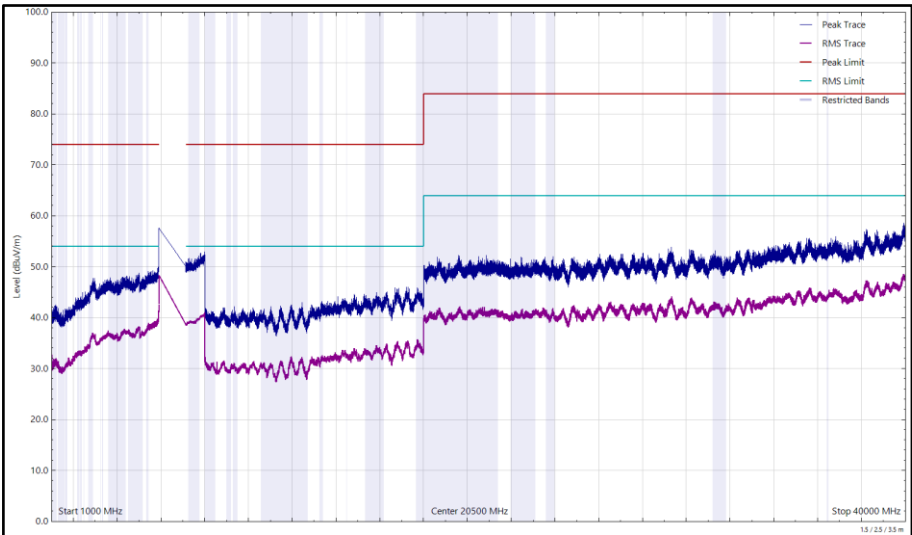


Figure 107 - U-NII-5 - 6415 MHz (CH93), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

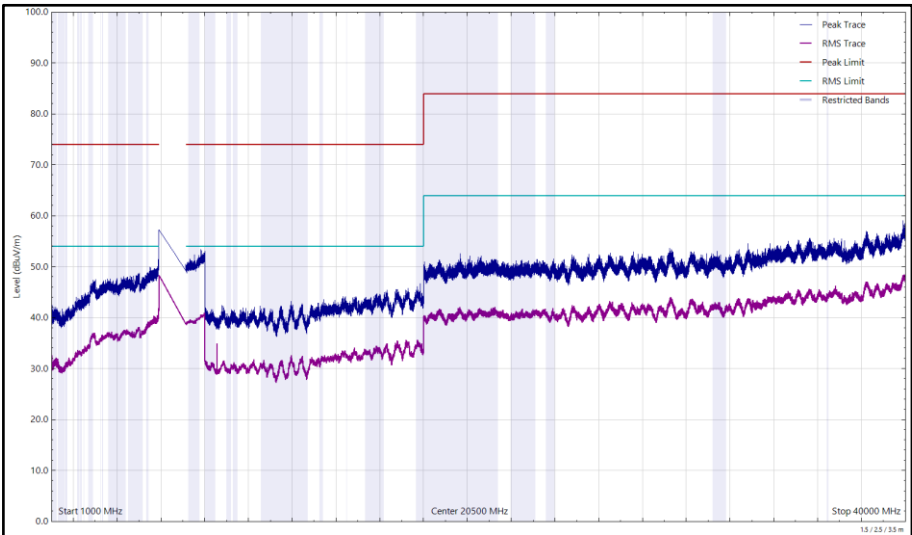
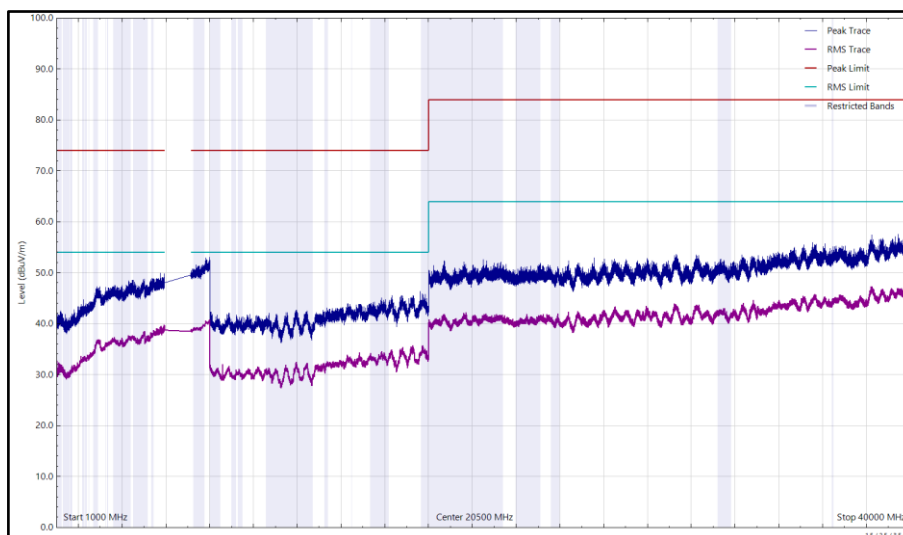


Figure 108 - U-NII-5 - 6415 MHz (CH93), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

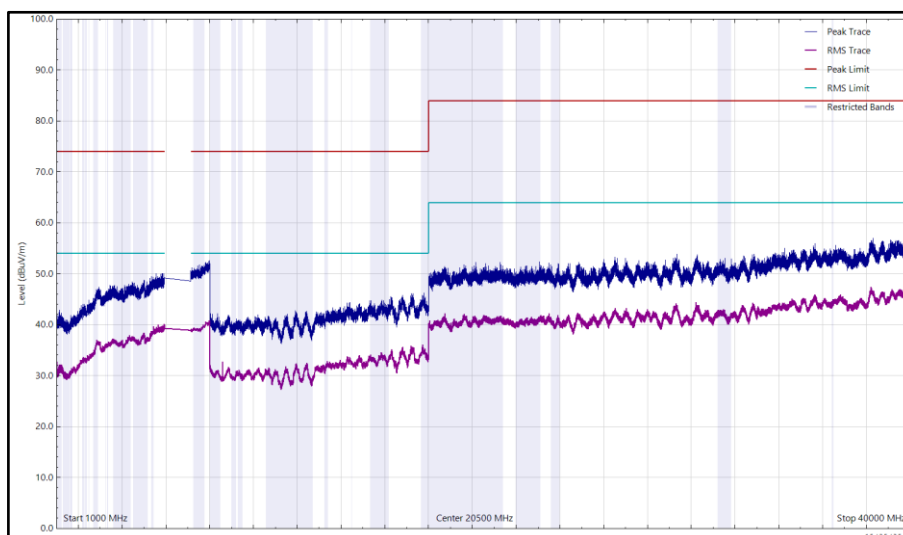
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

**Table 343 - U-NII-6 - 6435 MHz (CH97), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz**

*No emissions found within 10 dB of the limit.



**Figure 109 - U-NII-6 - 6435 MHz (CH97), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz, Horizontal**



**Figure 110 - U-NII-6 - 6435 MHz (CH97), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz, Vertical**

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
280.002	24.90	46.00	-21.10	Q-Peak	350	198	Vertical
280.012	26.81	46.00	-19.19	Q-Peak	92	106	Horizontal

Table 344 - U-NII-6 - 6475 MHz (CH105), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 40 GHz

No other emissions found within 10 dB of the limit.

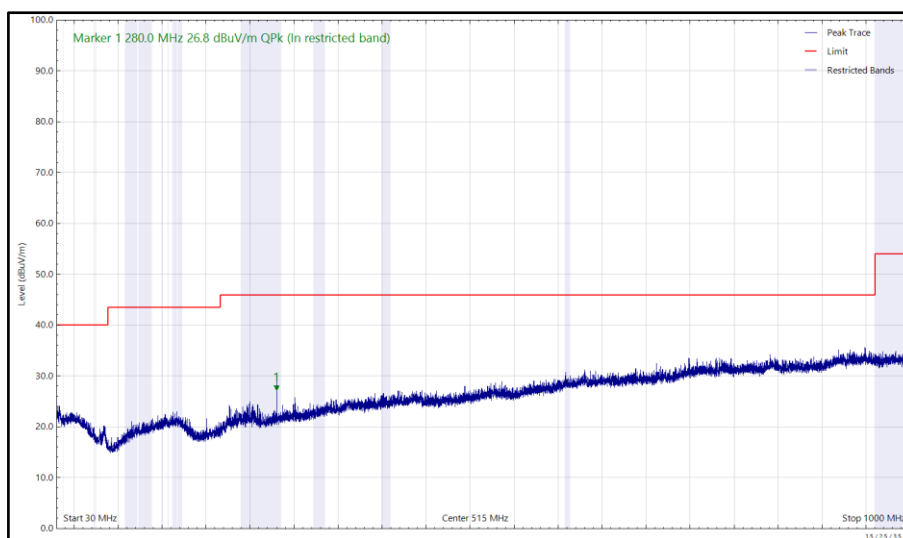


Figure 111 - U-NII-6 - 6475 MHz (CH105), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

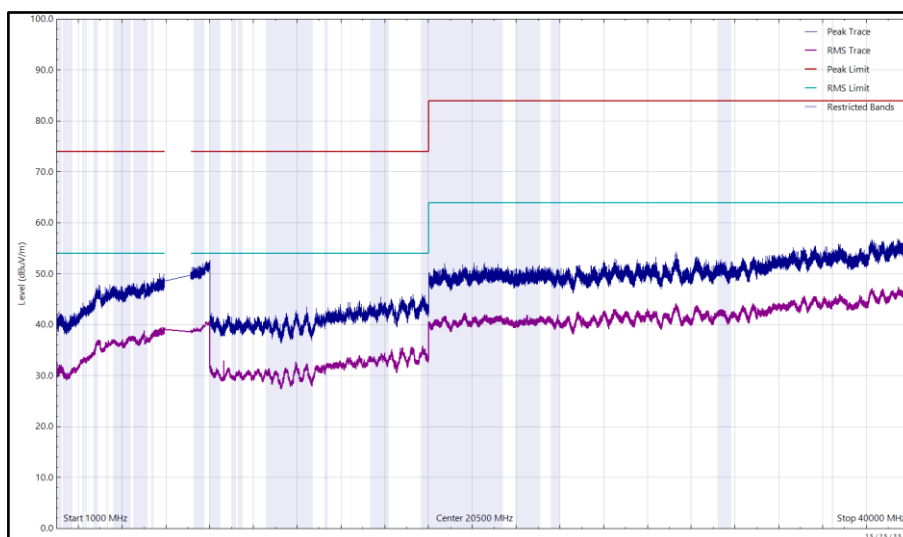


Figure 112 - U-NII-6 - 6475 MHz (CH105), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

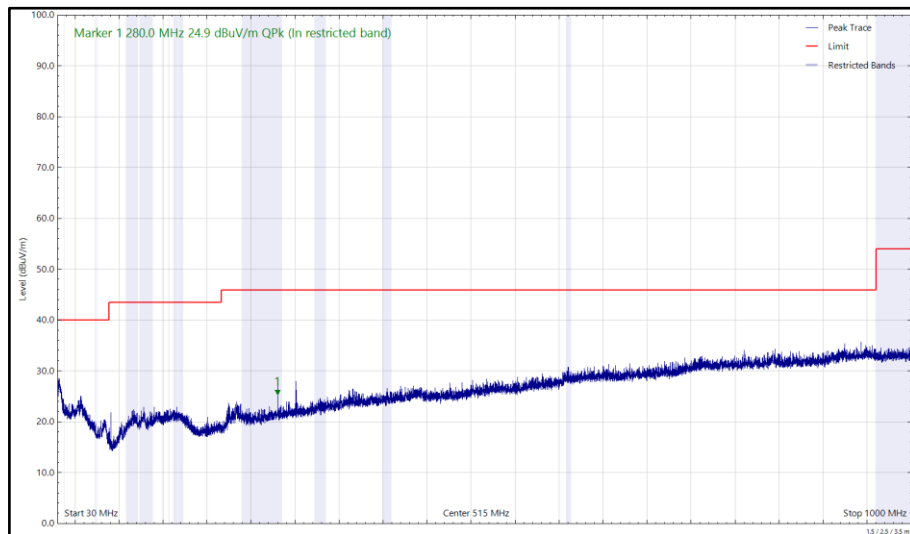


Figure 113 - U-NII-6 - 6475 MHz (CH105), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

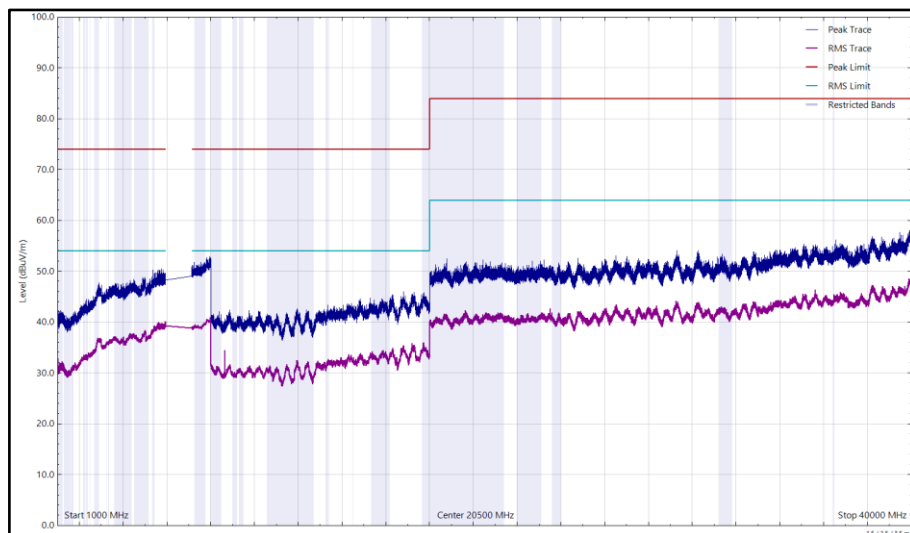
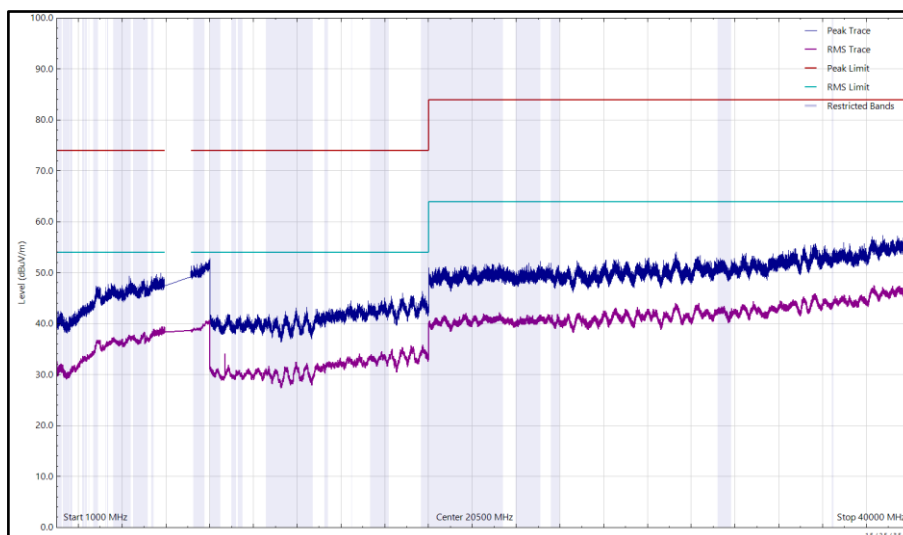


Figure 114 - U-NII-6 - 6475 MHz (CH105), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

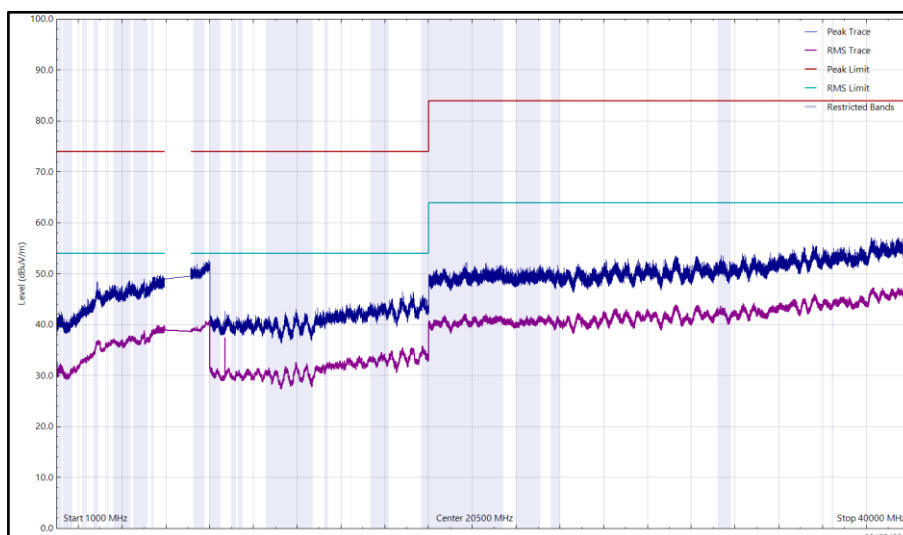
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

**Table 345 - U-NII-6 - 6515 MHz (CH113), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz**

*No emissions found within 10 dB of the limit.



**Figure 115 - U-NII-6 - 6515 MHz (CH113), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz, Horizontal**



**Figure 116 - U-NII-6 - 6515 MHz (CH113), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz, Vertical**

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

Table 346 - U-NII-7 - 6535 MHz (CH117), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz

*No emissions found within 10 dB of the limit.

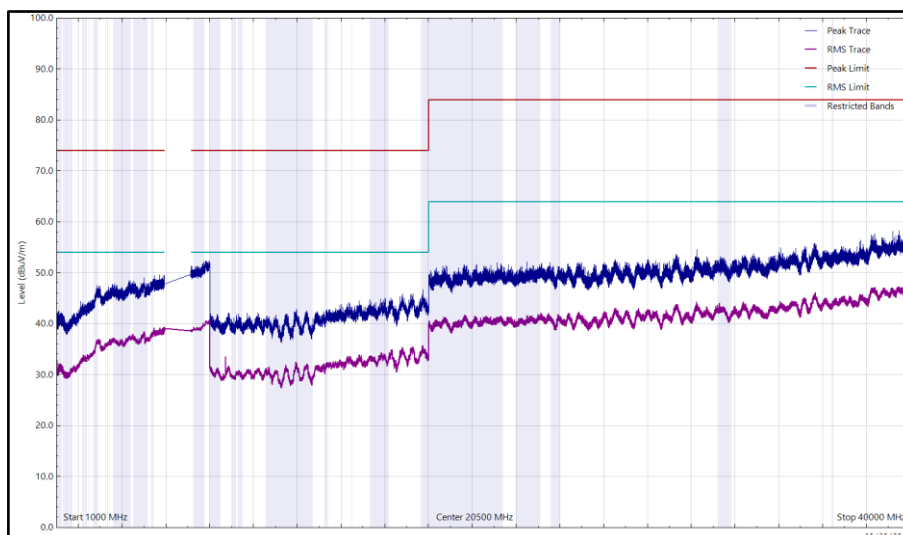


Figure 117 - U-NII-7 - 6535 MHz (CH117), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

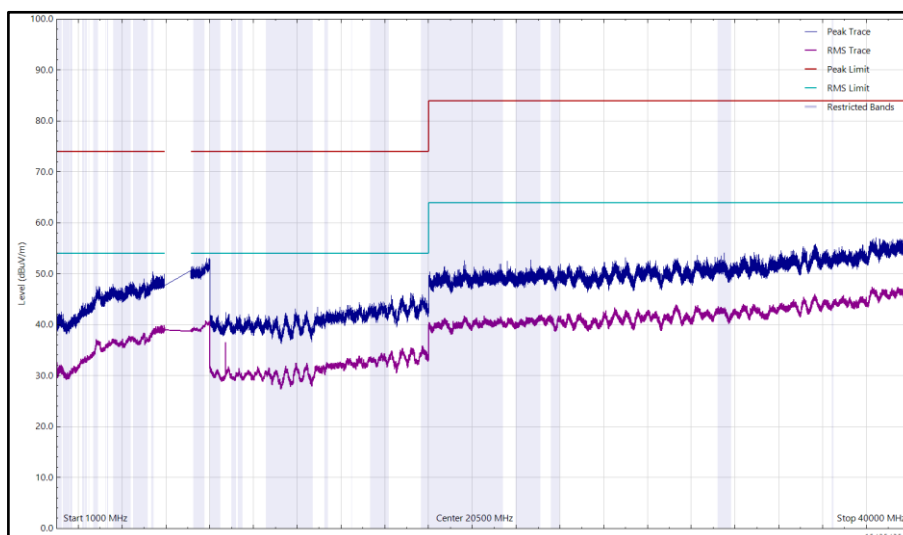


Figure 118 - U-NII-7 - 6535 MHz (CH117), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
279.989	24.40	46.00	-21.60	Q-Peak	0	187	Vertical
280.002	26.67	46.00	-19.33	Q-Peak	86	110	Horizontal

Table 347 - U-NII-7 - 6695 MHz (CH149), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 40 GHz

No other emissions found within 10 dB of the limit.

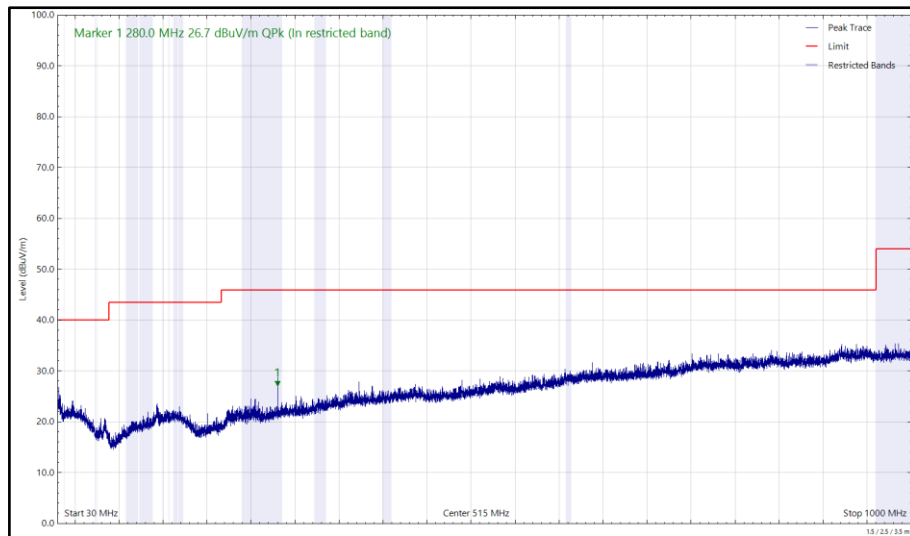


Figure 119 - U-NII-7 - 6695 MHz (CH149), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

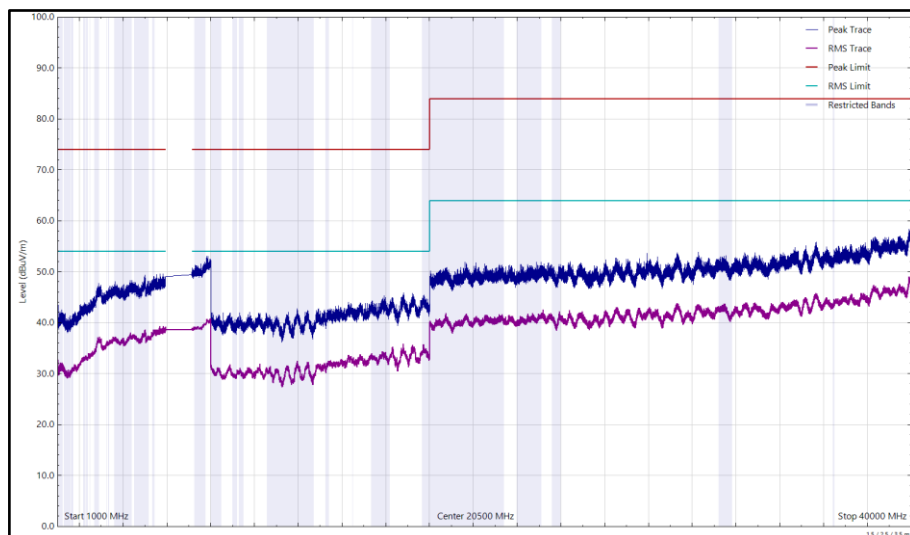


Figure 120 - U-NII-7 - 6695 MHz (CH149), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

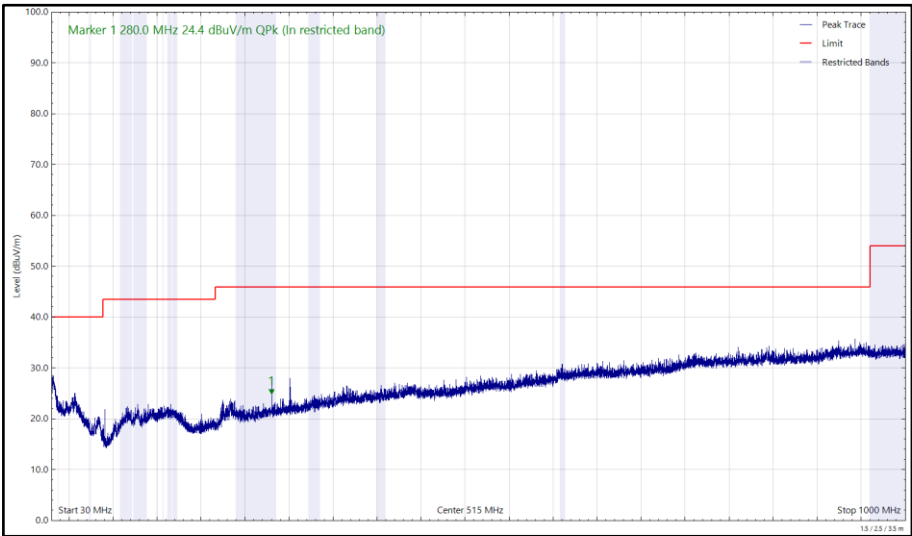


Figure 121 - U-NII-7 - 6695 MHz (CH149), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

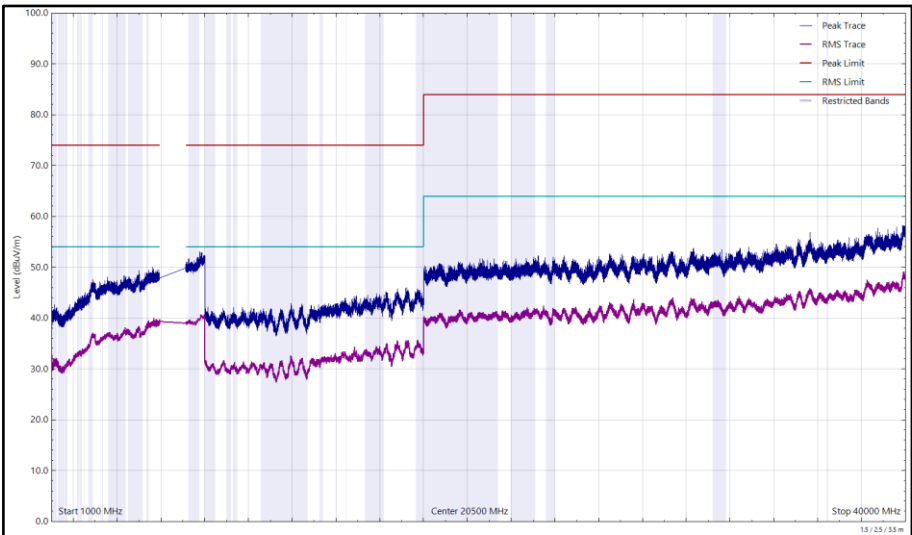
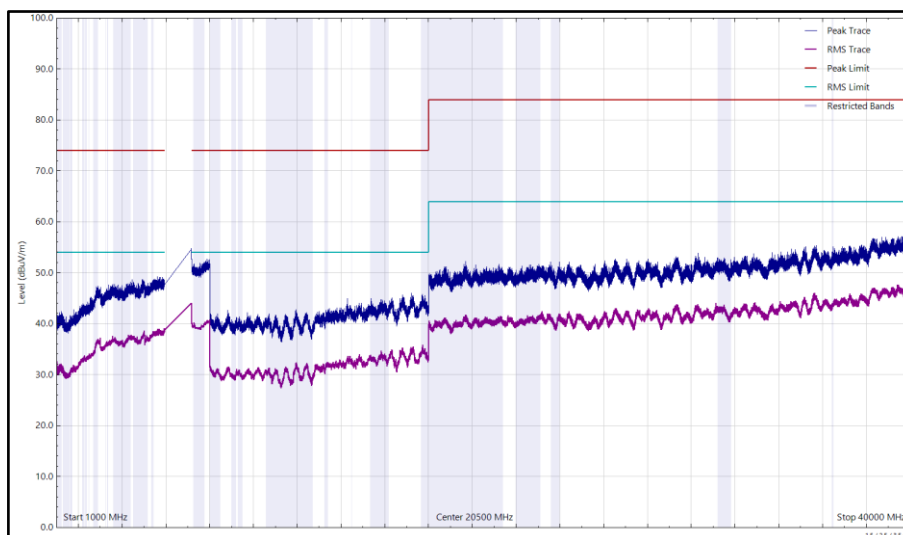


Figure 122 - U-NII-7 - 6695 MHz (CH149), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

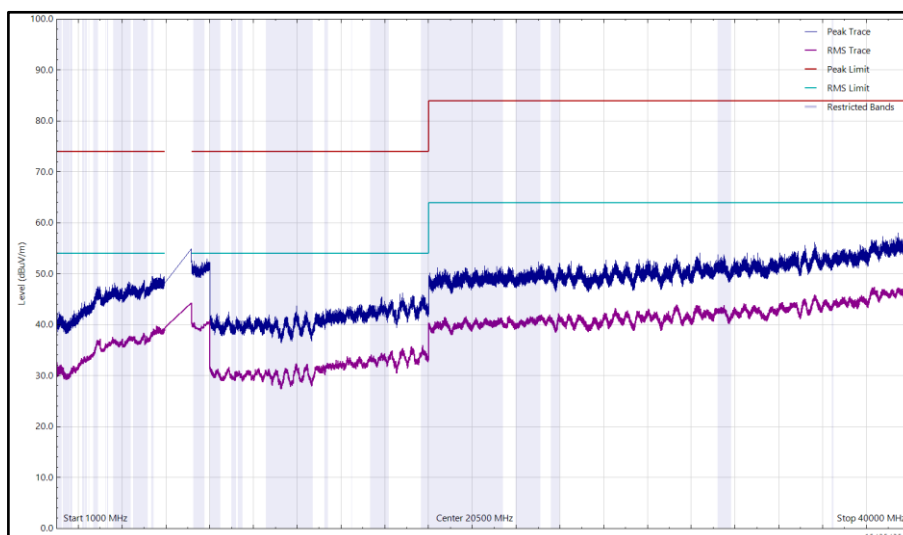
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

**Table 348 - U-NII-7 - 6855 MHz (CH181), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz**

*No emissions found within 10 dB of the limit.



**Figure 123 - U-NII-7 - 6855 MHz (CH181), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz, Horizontal**

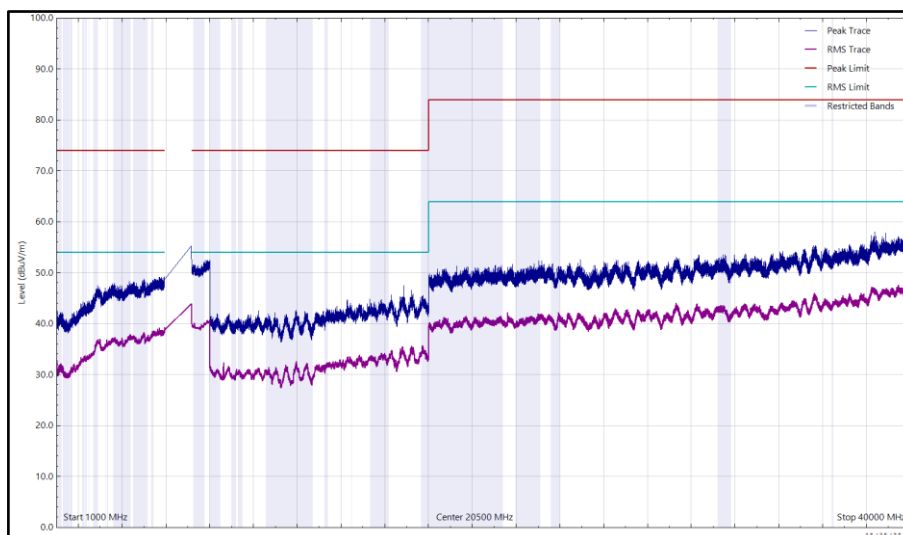


**Figure 124 - U-NII-7 - 6855 MHz (CH181), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz, Vertical**

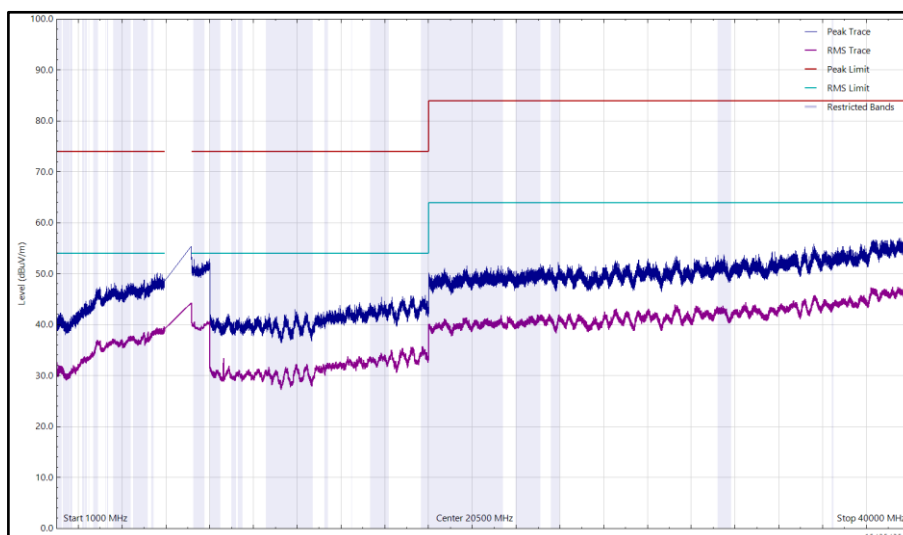
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
*							

**Table 349 - U-NII-8 - 6895 MHz (CH189), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz**

*No emissions found within 10 dB of the limit.



**Figure 125 - U-NII-8 - 6895 MHz (CH189), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz, Horizontal**

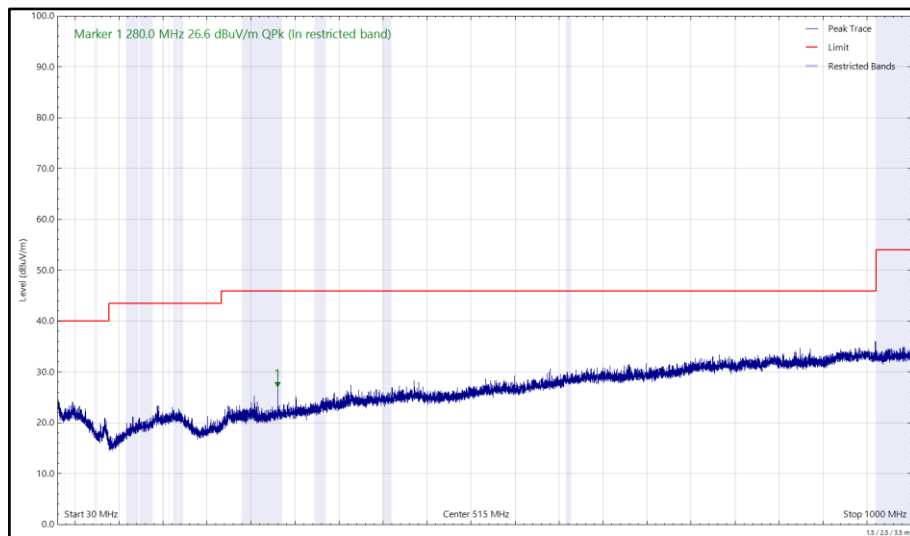


**Figure 126 - U-NII-8 - 6895 MHz (CH189), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz, Vertical**

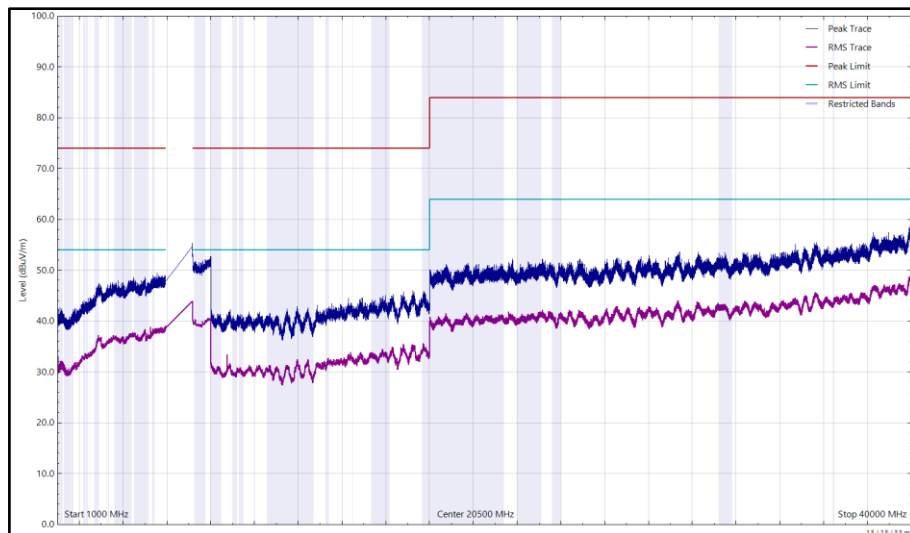
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
280.003	25.19	46.00	-20.81	Q-Peak	355	177	Vertical
280.012	26.59	46.00	-19.41	Q-Peak	94	116	Horizontal
5247.522	52.97	74.00	-21.03	Peak	358	346	Vertical

**Table 350 - U-NII-8 - 6995 MHz (CH209), HE20, SU, CDD, Core 0 + Core 1,
30 MHz to 40 GHz**

No other emissions found within 10 dB of the limit.



**Figure 127 - U-NII-8 - 6995 MHz (CH209), HE20, SU, CDD, Core 0 + Core 1,
30 MHz to 1 GHz, Horizontal (Peak)**



**Figure 128 - U-NII-8 - 6995 MHz (CH209), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz, Horizontal**

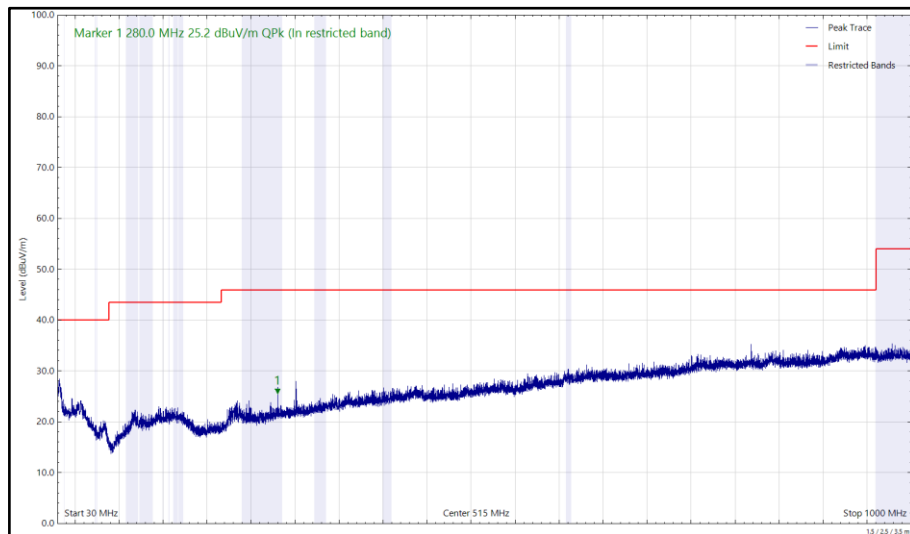


Figure 129 - U-NII-8 - 6995 MHz (CH209), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

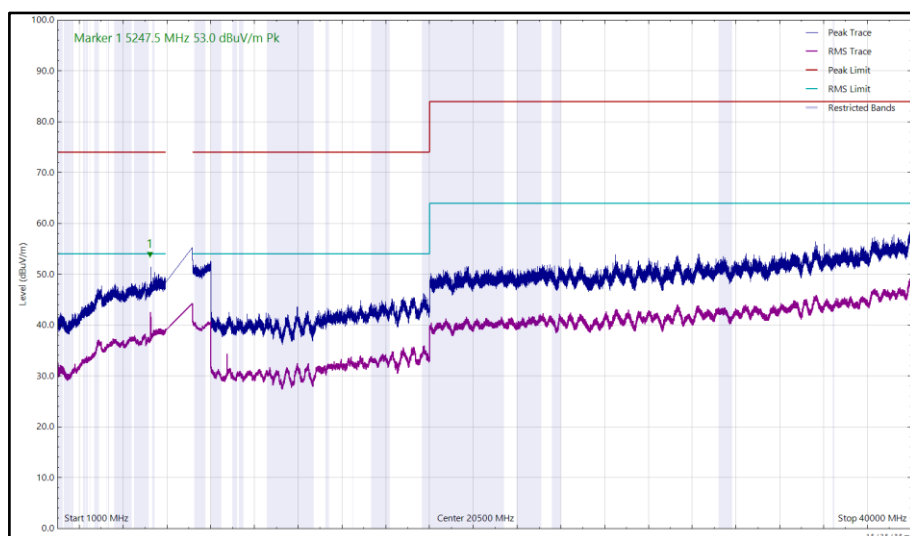
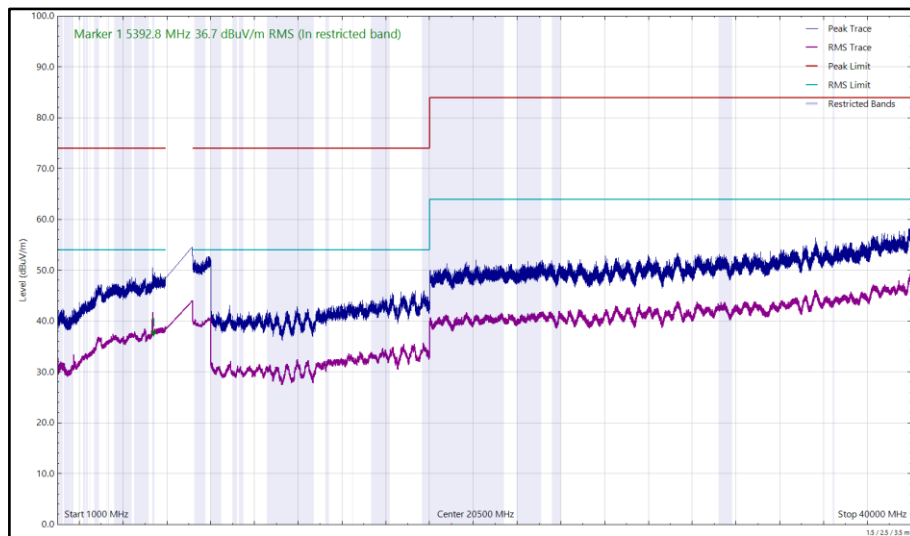


Figure 130 - U-NII-8 - 6995 MHz (CH209), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

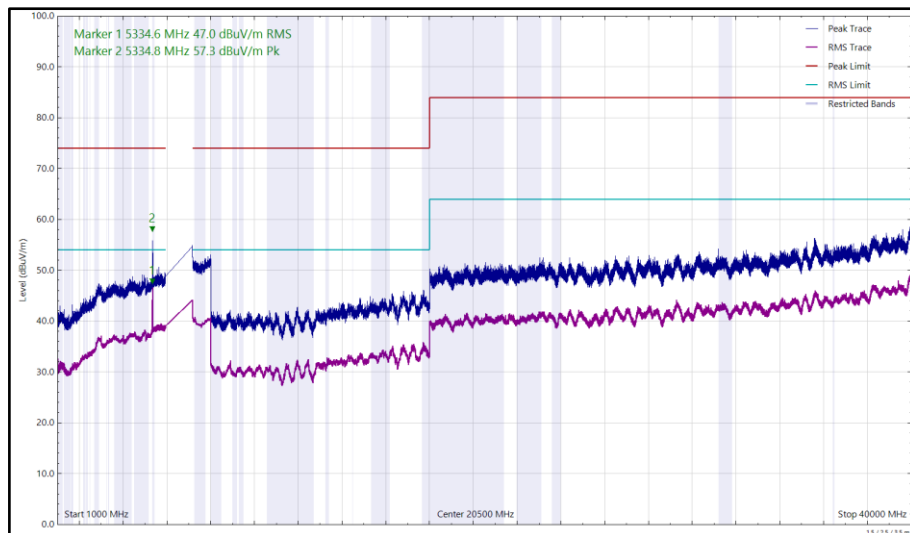
Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
5334.647	47.02	68.20	-21.18	RMS	4	256	Vertical
5334.785	57.29	74.00	-16.71	Peak	4	256	Vertical
5392.773	36.69	54.00	-17.31	RMS	205	108	Horizontal

**Table 351 - U-NII-8 - 7115 MHz (CH233), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz**

No other emissions found within 10 dB of the limit.



**Figure 131 - U-NII-8 - 7115 MHz (CH233), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz, Horizontal**



**Figure 132 - U-NII-8 - 7115 MHz (CH233), HE20, SU, CDD, Core 0 + Core 1,
1 GHz to 40 GHz, Vertical**



FCC 47 CFR Part 15, Limit Clause 15.407(b)(5) and 15.209

Emissions not falling within the restricted bands listed in 15.205:

For transmitters operating within the 5.925–7.125 GHz band: Any emissions outside of the 5.925–7.125 GHz band must not exceed an e.i.r.p. of -27 dBm/MHz.

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in 15.209.

Emissions within the restricted bands listed in FCC 47 CFR Part 15.205:

Frequency (MHz)	Field Strength ($\mu\text{V/m}$) at 3m	Field Strength Limit ($\text{dB}\mu\text{V/m}$) at 3m
30 to 88	100	40.00
88 to 216	150	43.52
216 to 960	200	46.02
Above 960	500	53.98

Table 352 - Radiated Emissions Limit Table (FCC)

ISED RSS-248, Limit Clause 4.7.2(a) and ISED RSS-GEN, Limit Clause 8.9

Emissions not falling within the restricted bands listed in ISED RSS-GEN, Clause 8.10:

Any emissions outside of the 5925-7125 MHz band shall not exceed -27 dBm/MHz e.i.r.p.

Any emissions below 1000 MHz shall meet the general field strength limits specified in RSS-Gen

Emissions falling within the restricted bands listed in ISED RSS-GEN, Clause 8.10:

Frequency (MHz)	Field Strength ($\mu\text{V/m}$) at 3m	Field Strength Limit ($\text{dB}\mu\text{V/m}$) at 3m
30 to 88	100	40.00
88 to 216	150	43.52
216 to 960	200	46.02
Above 960	500	53.98

Table 353 - Radiated Emissions Limit Table (ISED)



2.6.8 Test Location and Test Equipment Used

This test was carried out in RF Chamber 16.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
Emissions Software	TUV SUD	EmX V3.1.6	5125	-	Software
Cable (18GHz)	Junkosha	MWX221-04000NMSNMS/B	5262	12	04-Aug-2023
Cable (18 GHz)	Junkosha	MWX221-04000NMSNMS/B	5263	12	24-Jan-2023
Test Receiver	Rohde & Schwarz	ESW44	5914	12	21-Feb-2023
Cable (K Type 2m)	Junkosha	MWX241-02000KMSKMS/B	5935	12	14-May-2023
DRG Horn Antenna (7.5-18GHz)	Schwarzbeck	HWRD750	5940	12	29-May-2023
TRILOG Super Broadband Test Antenna	Schwarzbeck	VULB 9168	5944	24	03-Feb-2024
1500W (300V 12A) AC Power Supply	iTech	IT7324	5957	-	O/P Mon
3m Semi-Anechoic Chamber	Schaffner	RF Chamber 16	5972	36	24-May-2025
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5973	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5974	-	TU
Turntable	Maturo Gmbh	TT1.5SI	5975	-	TU
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	6018	12	06-Jun-2023
Cable (SMA to SMA 3m)	Junkosha	MWX221-03000AMSAMS/A	6021	12	06-Jun-2023
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6142	12	26-Jun-2023
Digital Multimeter	Fluke	115	6146	12	16-Jun-2023
Humidity & Temperature meter	R.S Components	1364	6148	12	17-Jun-2023
Double Ridge Active Horn Antenna (18-40 GHz)	Com-Power	AHA-840	6188	24	02-Jun-2024
SAC Switch Unit	TUV SUD	TUV_SSU_001	6190	12	08-Aug-2023
8GHz Highpass Filter	Wainwright	WHKX 7150 8000 18000 50SS	6196	12	15-Jul-2023
Pre Amp 8 - 18 GHz	Wright Technologies	APS06 0061	6200	12	19-Jul-2023
Attenuator 4dB	Pasternack	PE7074-4	6203	24	16-Jul-2024
Cable (SMA to SMA 20cm)	TUV SUD	MH-FH 8-18	6220	12	10-Aug-2023

Table 354

TU - Traceability Unscheduled



2.7 Contention Based Protocol

2.7.1 Specification Reference

FCC 47 CFR Part 15E, Clause 15.407 (d)(6)
ISED RSS-248, Clause 4.8

2.7.2 Equipment Under Test and Modification State

A2780, S/N: CY9HXKDF2L - Modification State 0

2.7.3 Date of Test

13-October-2022

2.7.4 Test Method

This test was performed in accordance with KDB 987594 D02, clause I.

The AWGN signal level was initially set at a level much less than the required threshold level ($\ll -62$ dBm) it was verified at this point that transmissions from the device under test (DUT) were present. The signal level was gradually increased until it was observed that the DUT continuously ceased transmissions with the AWGN signal present, i.e., no partial transmissions other than short control signalling transmissions.

The AWGN Signal level recorded is the level in to the DUT's receiver, corrected for all cable losses. The minimum antenna gain value was then used to correct the level as described in KDB 987594 D04.

Timing plots showing verification that transmissions from the DUT responded to the interferer have been included in the test results below.

2.7.5 Test Setup Diagram

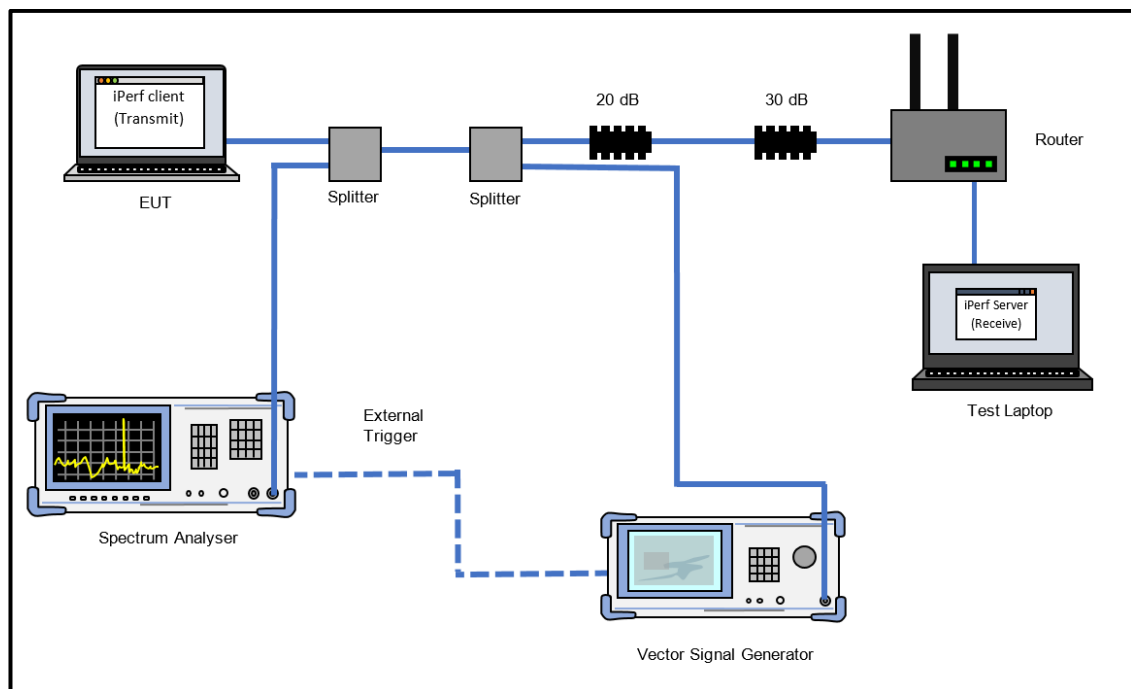


Figure 133 - Test Equipment Setup Diagram

2.7.6 Environmental Conditions

Ambient Temperature	25.1 °C
Relative Humidity	40.0 %



2.7.7 Test Results

6 GHz WLAN

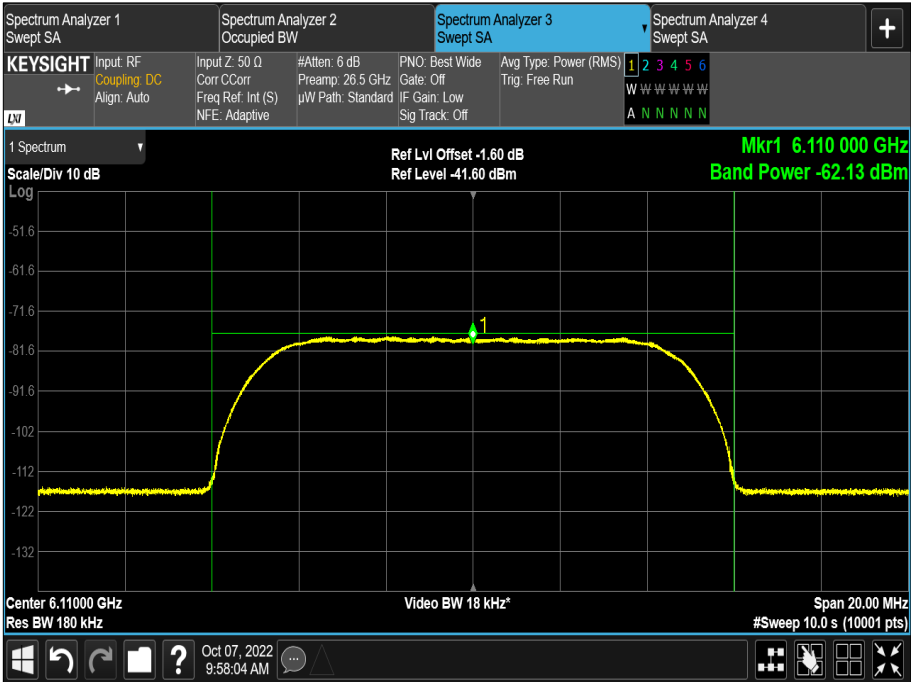


Figure 134 - Example of AWGN Signal



Parameter	Results		
U-NII Band	5	5	5
Channel Number	37	37	37
Bandwidth (MHz)	20	20	20
DUT Centre Frequency (MHz)	6135	6135	6135
AWGN Centre Frequency (MHz)	6135	6135	6135
AWGN Signal Power (dBm)	-66.7	-68.7	-80.0
Minimum Antenna Gain (dBi)	4.11	4.11	4.11
Adjusted Power (dBm)	-70.81	-72.81	-84.11
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 355 - U-NII-5, Minimum Bandwidth

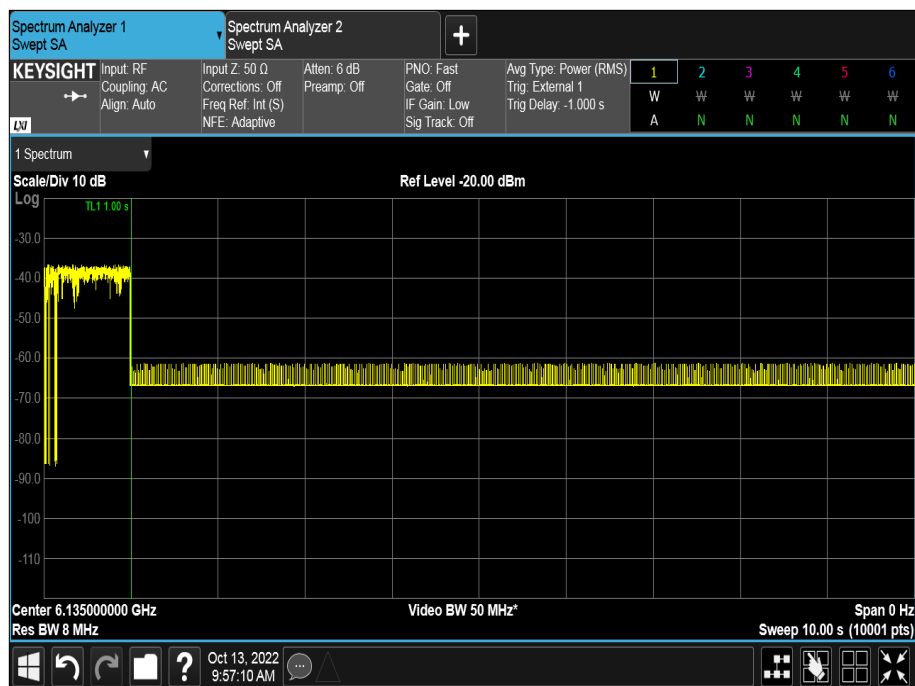


Figure 135 - U-NII-5, Minimum Bandwidth



Parameter	Results		
U-NII Band	5	5	5
Channel Number	47	47	47
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6185	6185	6185
AWGN Centre Frequency (MHz)	6110	6110	6110
AWGN Signal Power (dBm)	-67.9	-69.4	-80.0
Minimum Antenna Gain (dBi)	4.11	4.11	4.11
Adjusted Power (dBm)	-72.01	-73.51	-84.11
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 356 - U-NII-5, Maximum Bandwidth (AWGN Low)

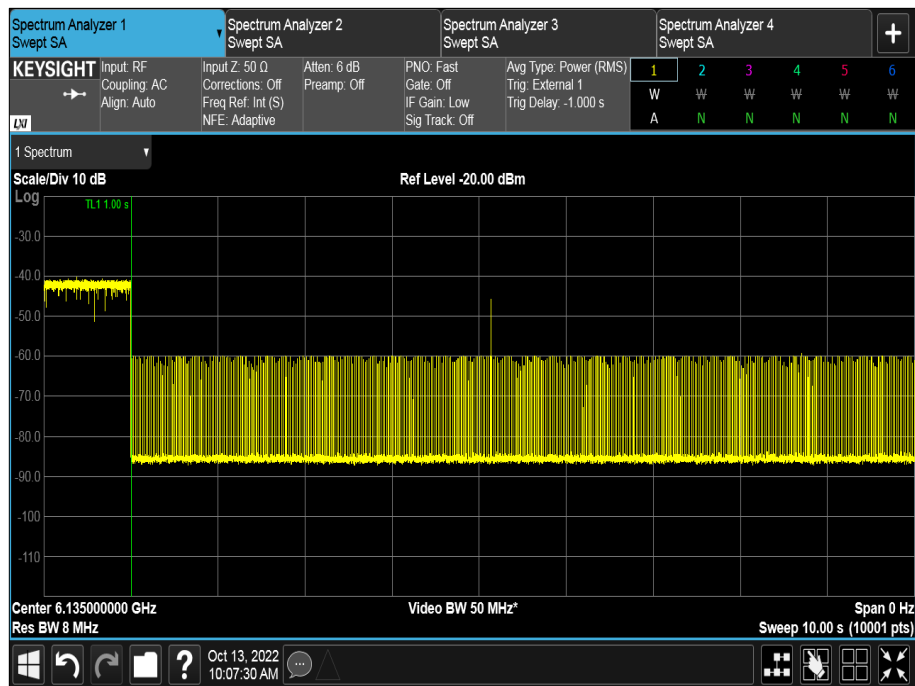


Figure 136 - U-NII-5, Minimum Bandwidth (AWGN Low)



Parameter	Results		
U-NII Band	5	5	5
Channel Number	47	47	47
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6185	6185	6185
AWGN Centre Frequency (MHz)	6185	6185	6185
AWGN Signal Power (dBm)	-72.4	-74.4	-80.0
Minimum Antenna Gain (dBi)	4.11	4.11	4.11
Adjusted Power (dBm)	-76.51	-878.51	-84.11
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 357 - U-NII-5, Maximum Bandwidth (AWGN Mid)

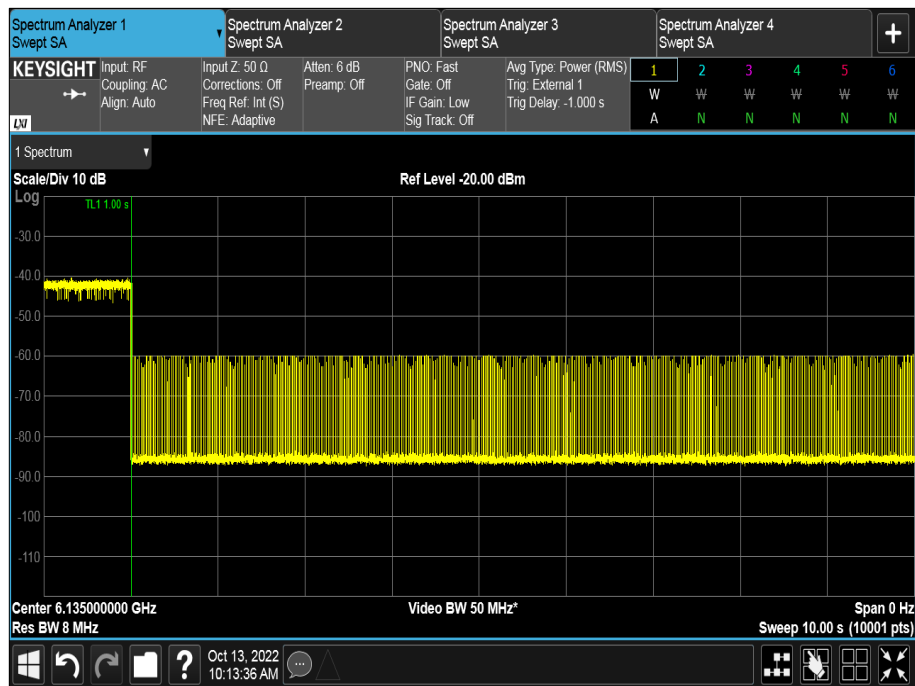


Figure 137 - U-NII-5, Minimum Bandwidth (AWGN Mid)

Parameter	Results		
U-NII Band	5	5	5
Channel Number	47	47	47
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6185	6185	6185
AWGN Centre Frequency (MHz)	6260	6260	6260
AWGN Signal Power (dBm)	-65.7	-67.7	-80.0
Minimum Antenna Gain (dBi)	4.11	4.11	4.11
Adjusted Power (dBm)	-69.81	-71.81	-84.11
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 358 - U-NII-5, Maximum Bandwidth (AWGN High)

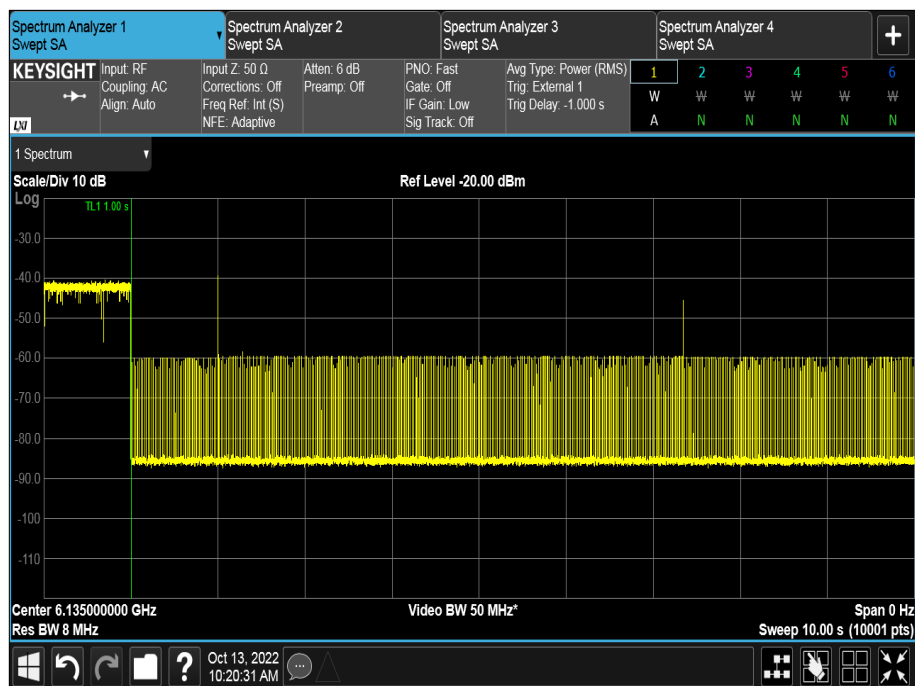


Figure 138 - U-NII-5, Minimum Bandwidth (AWGN High)



Parameter	Results		
U-NII Band	6	6	6
Channel Number	101	101	101
Bandwidth (MHz)	20	20	20
DUT Centre Frequency (MHz)	6455	6455	6455
AWGN Centre Frequency (MHz)	6455	6455	6455
AWGN Signal Power (dBm)	-68.6	70.1	-60.1
Minimum Antenna Gain (dBi)	3.45	3.45	3.45
Adjusted Power (dBm)	-72.05	-73.55	-83.45
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 359 - U-NII-6, Minimum Bandwidth

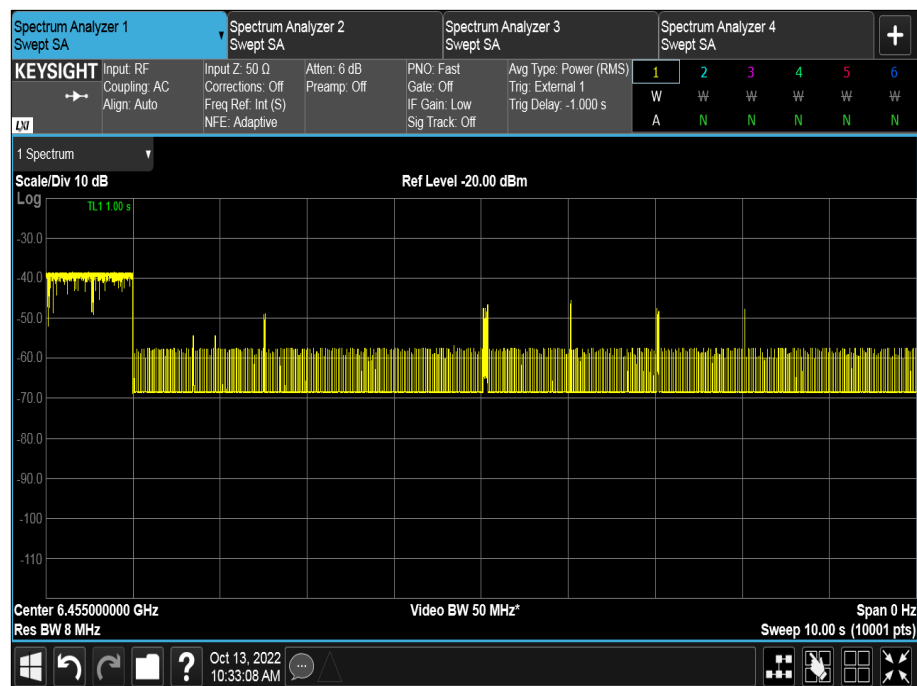


Figure 139 - U-NII-6, Minimum Bandwidth

Parameter	Results		
U-NII Band	6	6	6
Channel Number	111	111	111
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6505	6505	6505
AWGN Centre Frequency (MHz)	6430	6430	6430
AWGN Signal Power (dBm)	-67.7	-69.2	-80.0
Minimum Antenna Gain (dBi)	3.45	3.45	3.45
Adjusted Power (dBm)	-71.15	-73.65	-83.45
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 360 - U-NII-6, Maximum Bandwidth (AWGN Low)

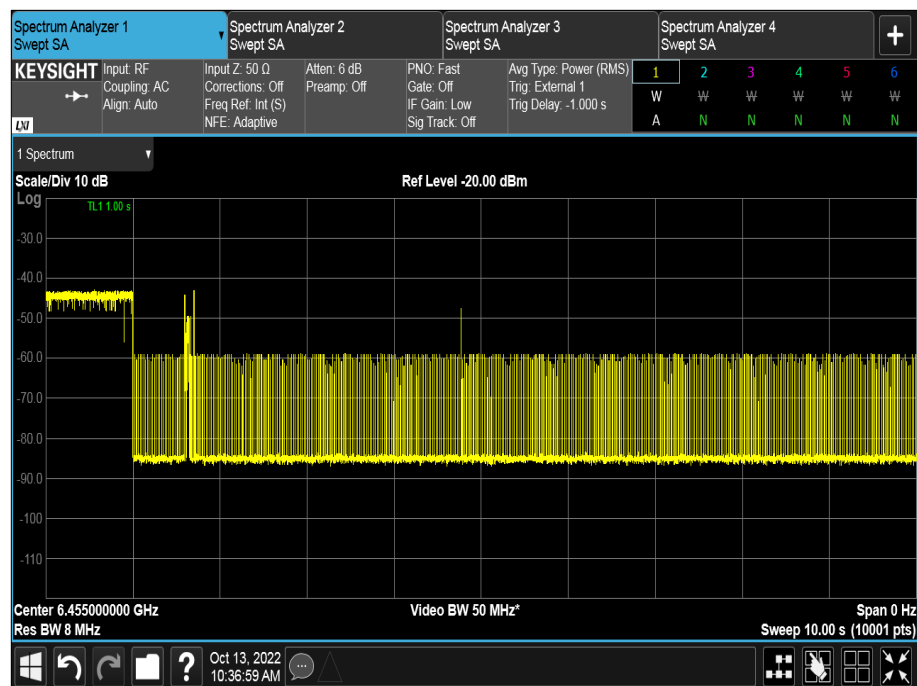


Figure 140 - U-NII-6, Minimum Bandwidth (AWGN Low)

Parameter	Results		
U-NII Band	6	6	6
Channel Number	111	111	111
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6505	6505	6505
AWGN Centre Frequency (MHz)	6505	6505	6505
AWGN Signal Power (dBm)	-69.6	-71.6	-80.0
Minimum Antenna Gain (dBi)	3.45	3.45	3.45
Adjusted Power (dBm)	-73.05	-75.05	-83.45
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 361 - U-NII-6, Maximum Bandwidth (AWGN Mid)

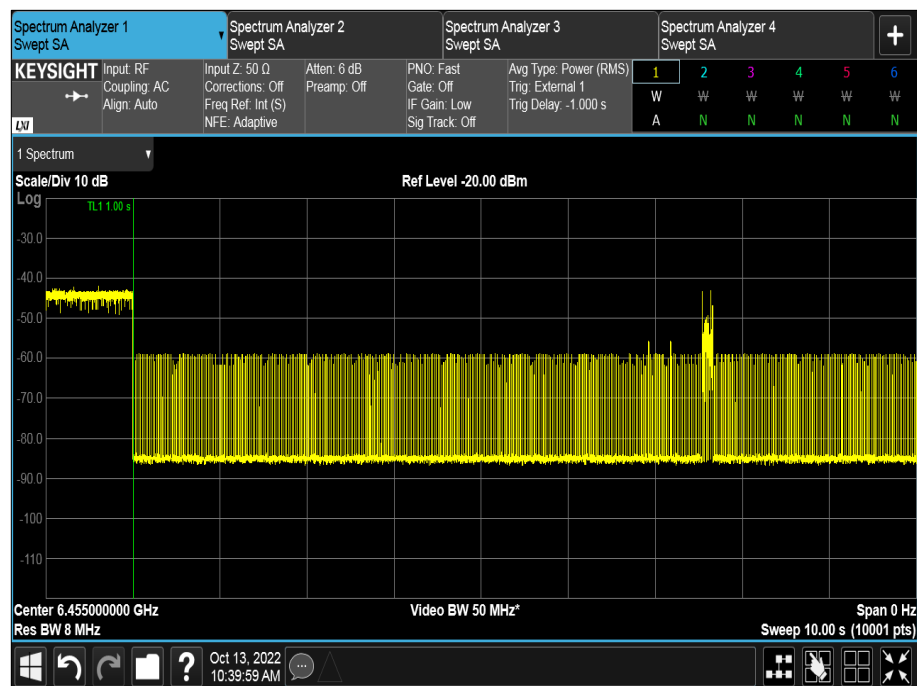


Figure 141 - - U-NII-6, Minimum Bandwidth (AWGN Mid)

Parameter	Results		
U-NII Band	6	6	6
Channel Number	111	111	111
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6505	6505	6505
AWGN Centre Frequency (MHz)	6580	6580	6580
AWGN Signal Power (dBm)	-65.1	-67.1	-80.0
Minimum Antenna Gain (dBi)	3.45	3.45	3.45
Adjusted Power (dBm)	-68.55	-70.55	-83.45
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 362 - U-NII-6, Maximum Bandwidth (AWGN High)

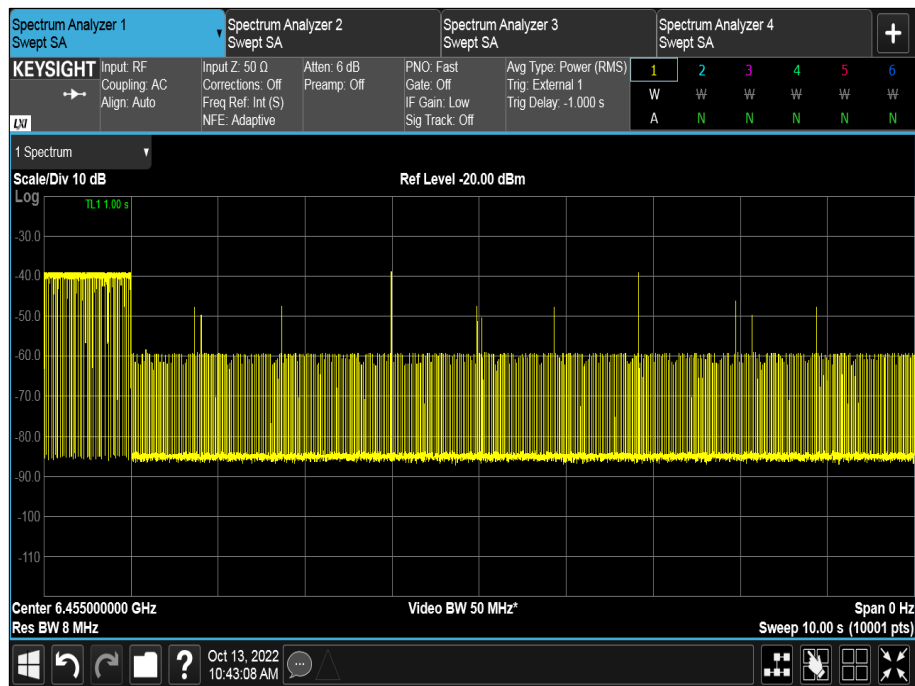


Figure 142 - U-NII-6, Minimum Bandwidth (AWGN High)

Parameter	Results		
U-NII Band	7	7	7
Channel Number	133	133	133
Bandwidth (MHz)	20	20	20
DUT Centre Frequency (MHz)	6615	6615	6615
AWGN Centre Frequency (MHz)	6615	6615	6615
AWGN Signal Power (dBm)	-68.2	-69.7	-80.0
Minimum Antenna Gain (dBi)	4.75	4.75	4.75
Adjusted Power (dBm)	-72.95	-74.45	-84.75
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 363 - U-NII-7, Minimum Bandwidth

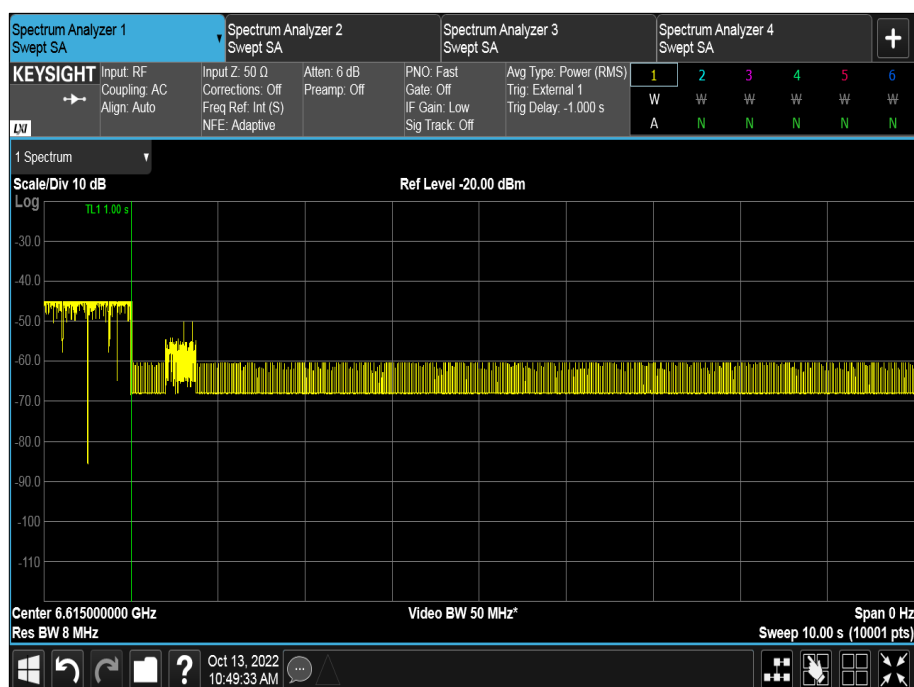


Figure 143 - U-NII-7, Minimum Bandwidth

Parameter	Results		
U-NII Band	7	7	7
Channel Number	143	143	143
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6665	6665	6665
AWGN Centre Frequency (MHz)	6590	6590	6590
AWGN Signal Power (dBm)	-67.6	-69.1	-80.0
Minimum Antenna Gain (dBi)	4.75	4.75	4.75
Adjusted Power (dBm)	-72.35	-73.85	-84.75
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 364 - U-NII-7, Maximum Bandwidth (AWGN Low)

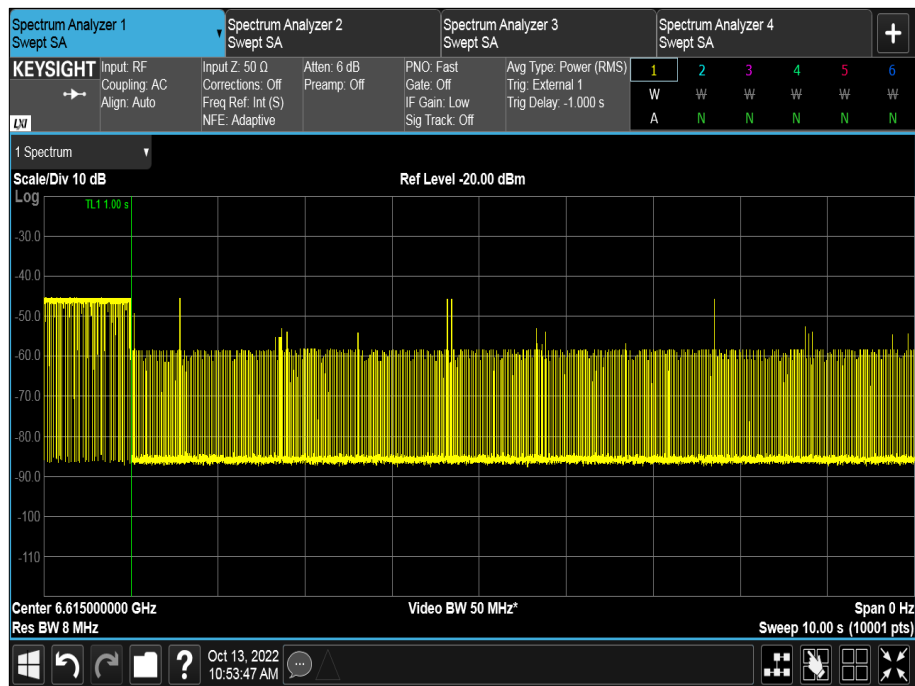


Figure 144 - U-NII-7, Minimum Bandwidth (AWGN Low)



Parameter	Results		
U-NII Band	7	7	7
Channel Number	143	143	143
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6665	6665	6665
AWGN Centre Frequency (MHz)	6665	6665	6665
AWGN Signal Power (dBm)	-71.1	-72.6	-80.0
Minimum Antenna Gain (dBi)	4.75	4.75	4.75
Adjusted Power (dBm)	-75.85	-77.25	-84.75
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 365 - U-NII-7, Maximum Bandwidth (AWGN Mid)

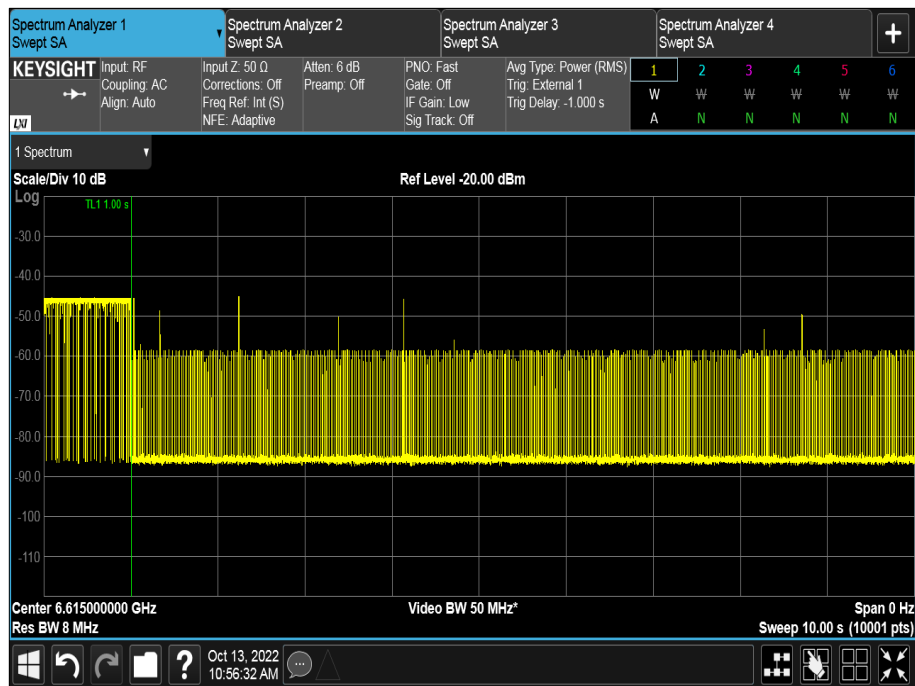


Figure 145 - U-NII-7, Minimum Bandwidth (AWGN Mid)



Parameter	Results		
U-NII Band	7	7	7
Channel Number	143	143	143
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6665	6665	6665
AWGN Centre Frequency (MHz)	6740	6740	6740
AWGN Signal Power (dBm)	-65.6	-67.6	-80.0
Minimum Antenna Gain (dBi)	4.75	4.75	4.75
Adjusted Power (dBm)	-70.35	-72.35	-84.75
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 366 - U-NII-7, Maximum Bandwidth (AWGN High)

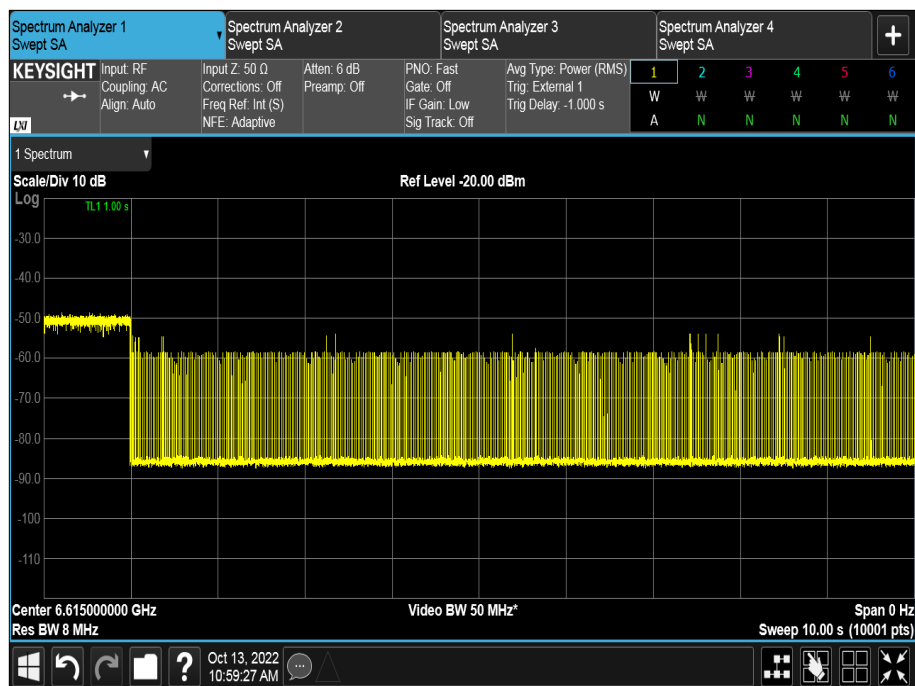


Figure 146 - U-NII-7, Minimum Bandwidth (AWGN High)

Parameter	Results		
U-NII Band	8	8	8
Channel Number	197	197	197
Bandwidth (MHz)	20	20	20
DUT Centre Frequency (MHz)	6935	6935	6935
AWGN Centre Frequency (MHz)	6935	6935	6935
AWGN Signal Power (dBm)	-70.1	-72.1	-80.0
Minimum Antenna Gain (dBi)	3.35	3.35	3.35
Adjusted Power (dBm)	-73.45	-75.45	-83.35
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 367 - U-NII-8, Minimum Bandwidth

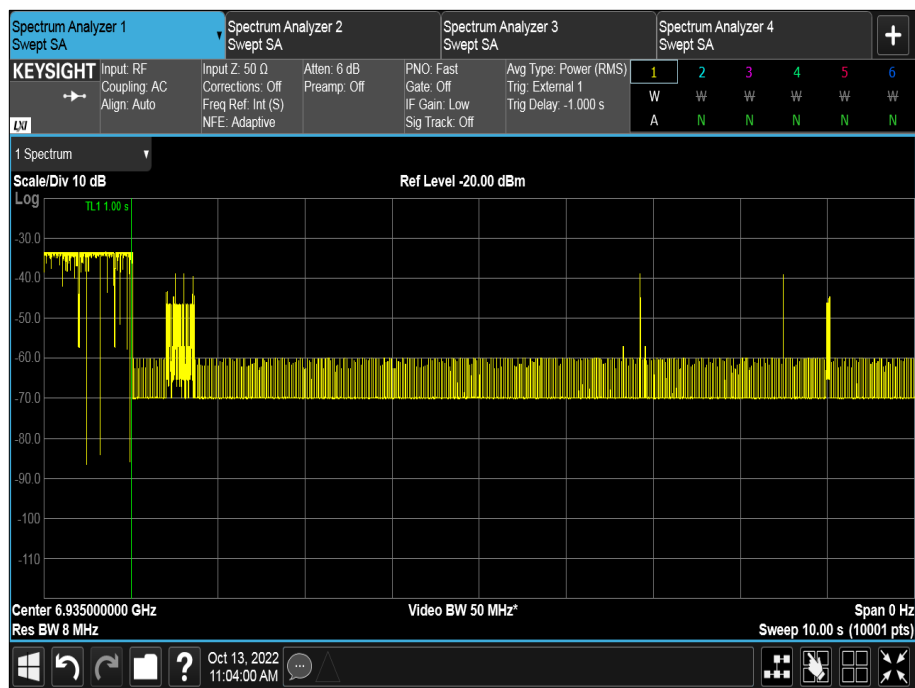


Figure 147 - U-NII-8, Minimum Bandwidth

Parameter	Results		
U-NII Band	8	8	8
Channel Number	207	207	207
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6985	6985	6985
AWGN Centre Frequency (MHz)	6910	6910	6910
AWGN Signal Power (dBm)	-68.2	-70.2	-80.0
Minimum Antenna Gain (dBi)	3.35	3.35	3.35
Adjusted Power (dBm)	-71.55	-73.55	-83.35
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 368 - U-NII-8, Maximum Bandwidth (AWGN Low)

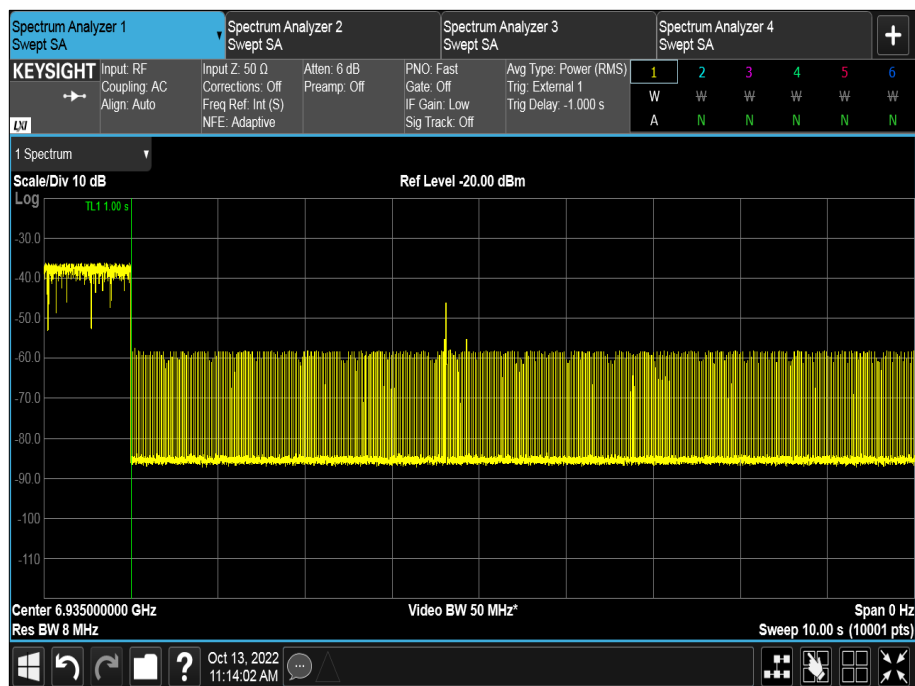


Figure 148 - U-NII-8, Minimum Bandwidth (AWGN Low)

Parameter	Results		
U-NII Band	8	8	8
Channel Number	207	207	207
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6985	6985	6985
AWGN Centre Frequency (MHz)	6985	6985	6985
AWGN Signal Power (dBm)	-71.1	-72.6	-80.0
Minimum Antenna Gain (dBi)	3.35	3.35	3.35
Adjusted Power (dBm)	-74.45	-75.95	-83.35
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 369 - U-NII-8, Maximum Bandwidth (AWGN Mid)

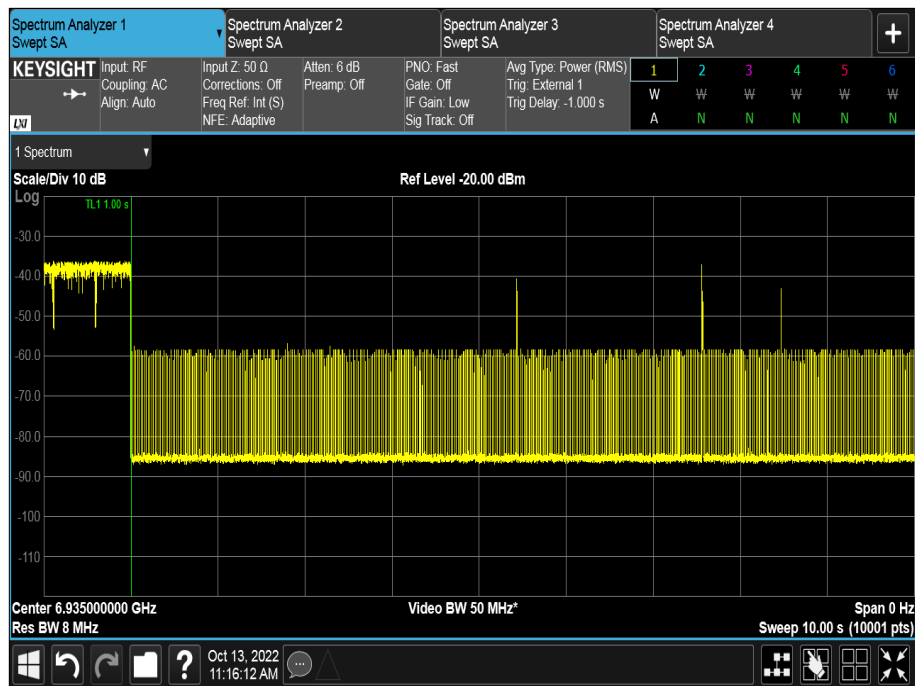


Figure 149 - U-NII-8, Minimum Bandwidth (AWGN Mid)

Parameter	Results		
U-NII Band	8	8	8
Channel Number	207	207	207
Bandwidth (MHz)	160	160	160
DUT Centre Frequency (MHz)	6985	6985	6985
AWGN Centre Frequency (MHz)	7060	7060	7060
AWGN Signal Power (dBm)	-65.3	-66.8	-80.0
Minimum Antenna Gain (dBi)	3.35	3.35	3.35
Adjusted Power (dBm)	-68.65	-70.15	-83.35
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 370 - U-NII-8, Maximum Bandwidth (AWGN High)

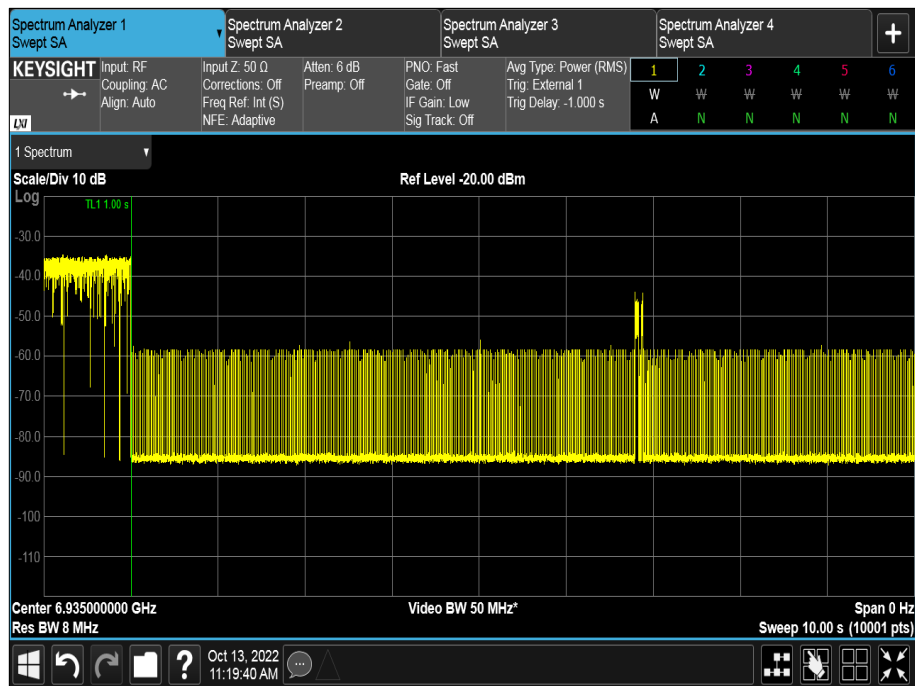


Figure 150 - U-NII-8, Minimum Bandwidth (AWGN High)



FCC 47 CFR Part 15.407 (d)(6)

Indoor access points, subordinate devices and client devices operating in the 5.925–7.125 GHz band must employ a contention-based protocol.

KDB 987594, Limit Clause I

Indoor access points, subordinate devices and client devices operating in the 5.925-7.125 GHz band (herein referred to as unlicensed devices) are required to use technologies that include a contention-based protocol to avoid co-channel interference with incumbent devices sharing the band. To ensure incumbent co-channel operations are detected in a technology-agnostic manner, unlicensed devices are required to detect co-channel radio frequency energy (energy detect) and avoid simultaneous transmission.

Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel (in which incumbent signal is transmitted) and stay off the incumbent channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm). The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain.

To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.

ISED RSS-248, Limit Clause 4.8.2

The RLAN devices shall utilize a contention-based protocol to detect the presence of any emissions on the channel that the RLAN device intends to occupy. The RLAN device must detect within its entire occupied bandwidth a radio frequency power of –62 dBm or lower. The minimum detection threshold power is the received power averaged over a 1microsecond reference to a 0 dBi antenna.

If an emission is detected, the RLAN device shall vacate the occupied channel and shall not transmit on this channel until the detected radio frequency power is equal to or greater than the -62 dBm threshold.



2.7.8 Test Location and Test Equipment Used

This test was carried out in RF Laboratory 1.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
10dB/1W SMA Attenuator dc - 18GHz	Sealectro	60-674-1010-89	395	-	O/P Mon
Multimeter	Iso-tech	IDM101	2421	12	28-Oct-2022
Hygrometer	Rotronic	I-1000	2891	12	04-Nov-2022
EXA	Keysight Technologies	N9010B	4968	24	19-Jan-2024
AC Programmable Power Supply	iTech	IT7324	5227	-	O/P Mon
3.5 mm 1m Cable	Junkosha	MWX221-01000DMS	5418	12	25-Jun-2023
3.5 mm 2m Cable	Junkosha	MWX221-02000DMS	5423	12	25-Jun-2023
3.5 mm 2m Cable	Junkosha	MWX221-02000DMS	5427	12	29-Mar-2023
Attenuator 5W 30dB DC-18GHz	Aaren	AT40A-4041-D18-30	5502	12	21-Apr-2023
Attenuator 2W 10dB DC-10GHz	Telegartner	J01156A0031	5578	-	O/P Mon
2-Way Power Divider (2 to 8 GHz)	Aaren	AT30A-TE0208-2-AF	5684	12	20-Dec-2022
2-Way Power Divider (2-8 GHz)	Aaren	AT30A-TE0208-2-AF	5685	12	20-Dec-2022
Vector Signal Generator	Rohde & Schwarz	SMM100A	5915	36	18-Feb-2025
WiFi 6E Tri-Band Gaming Router	Asus	GT-AXE110000	5926	-	TU
Cable (SMA to SMA 4m)	Junkosha	MWX221-04000AMSAMS/A	6001	12	06-Jun-2023
Coaxial Fixed Attenuator DC-18GHz 5W 10dB	RF-Lambda	RFS5G18B10SMP	6181	12	17-Jul-2023

Table 371

TU - Traceability Unscheduled

O/P Mon – Output Monitored using calibrated equipment



3 Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

Test Name	Measurement Uncertainty
Emission Bandwidth	± 1.0436 MHz
Maximum Conducted Output Power	± 1.38 dB
Maximum Conducted Power Spectral Density	± 1.49 dB
Authorised Band Edges	± 6.3 dB
Unwanted Emissions within the 5925-7125 MHz band	± 3.45 dB
Spurious Radiated Emissions	30 MHz to 1 GHz ± 5.2 dB 1 GHz to 40 GHz ± 6.3 dB
Contention Based Protocol	Time: 0.30% Interferer BW: 267.98 kHz Interferer Level: 0.80 dB

Table 372

Measurement Uncertainty Decision Rule – Accuracy Method

Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115:2021, Clause 4.4.3 (Procedure 2). The measurement results are directly compared with the test limit to determine conformance with the requirements of the standard.

Risk: The uncertainty of measurement about the measured result is negligible with regard to the final pass/fail decision. The measurement result can be directly compared with the test limit to determine conformance with the requirement (compare IEC Guide 115). The level of risk to falsely accept and falsely reject items is further described in ILAC-G8.