

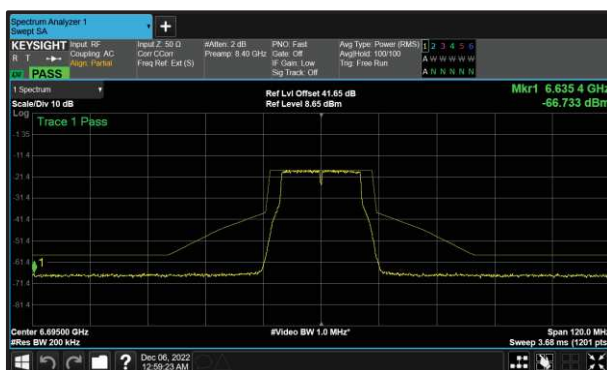


Figure 78 - A (Core 0) 802.11a 6695 MHz (CH149)

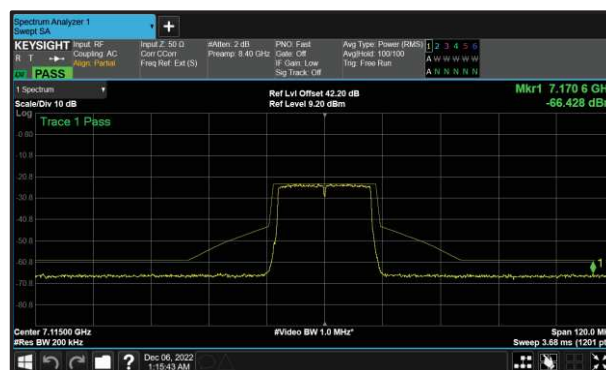


Figure 79 - A (Core 0) 802.11ax HE20 SU 7115 MHz (CH233)

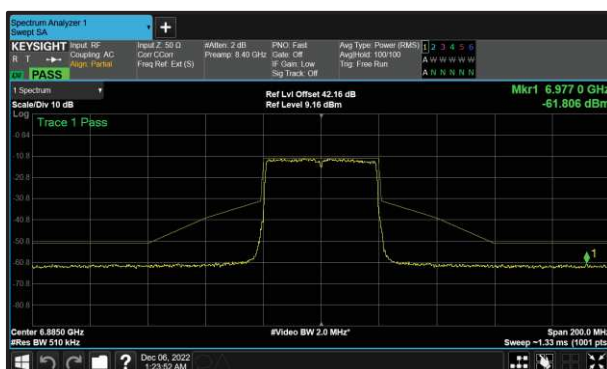


Figure 80 - A (Core 0) 802.11ax HE40 SU 6885 MHz (CH187)

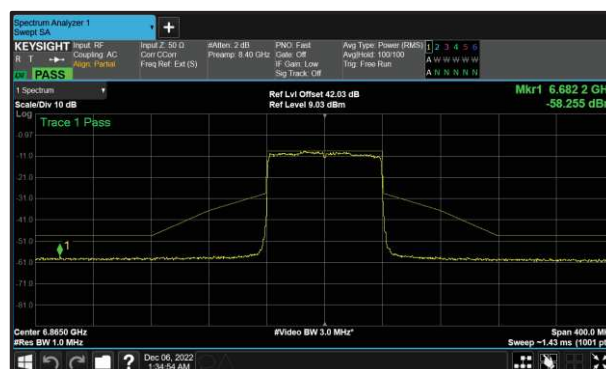


Figure 81 - A (Core 0) 802.11ax HE80 SU 6865 MHz (CH183)

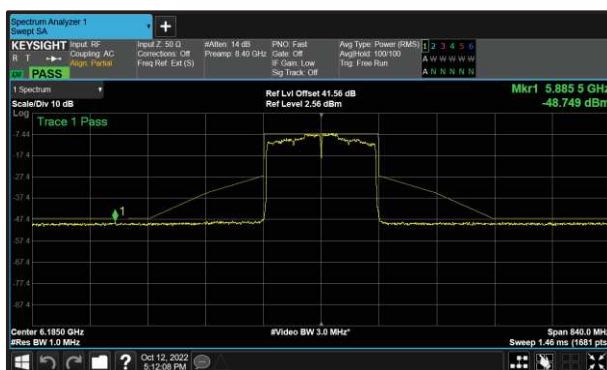


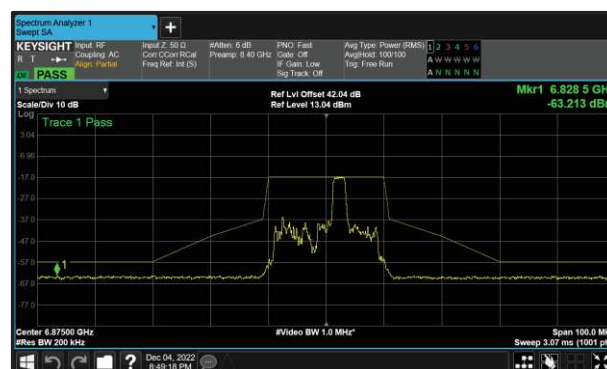
Figure 82 - A (Core 0) 802.11ax HE160 SU 6185 MHz (CH47)

Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE20 RU106	6.97	6831.500
802.11ax HE20 RU26	6.61	6828.500
802.11ax HE20 RU52	6.57	6842.000

Table 316 - Unwanted Emissions Within the RLAN Band Summary Results



**Figure 83 - A (Core 0) 802.11ax HE20 RU106
6875 MHz (CH185)**



**Figure 84 - A (Core 0) 802.11ax HE20 RU26
6875 MHz (CH185)**



**Figure 85 - A (Core 0) 802.11ax HE20 RU52
6875 MHz (CH185)**



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:	802.11a	Duty Cycle (%):	-
Data Rate:	12 Mbps	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	-	11.85	-	-
6175	11.91	-	-	-
6415	11.89	-	-	-
6435	11.41	-	-	-
6475	11.87	-	-	-
6515	11.71	-	-	-
6535	9.28	-	-	-
6695	8.63	-	-	-
6855	9.80	-	-	-
6875	9.43	-	-	-
6895	10.93	-	-	-
6995	11.40	-	-	-
7115	9.21	-	-	-

Table 317 - 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 HE20 SU	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	-	11.52	-	-
6175	12.23	-	-	-
6415	11.95	-	-	-
6435	11.44	-	-	-
6475	11.31	-	-	-
6515	12.06	-	-	-
6535	9.07	-	-	-
6695	8.43	-	-	-
6855	9.70	-	-	-
6875	11.02	-	-	-
6895	11.10	-	-	-
6995	11.32	-	-	-
7115	6.43	-	-	-

Table 318 - 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 HE40 SU	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
5965	-	11.07	-	-
6165	11.50	-	-	-
6405	11.40	-	-	-
6445	10.45	-	-	-
6485	10.92	-	-	-
6525	10.43	-	-	-
6565	10.09	-	-	-
6685	10.53	-	-	-
6845	10.56	-	-	-
6885	9.91	-	-	-
6925	11.09	-	-	-
7005	10.93	-	-	-
7085	10.99	-	-	-

Table 319 - 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:	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
5985	-	10.50	-	-
6145	11.10	-	-	-
6385	10.48	-	-	-
6465	10.22	-	-	-
6545	9.88	-	-	-
6625	9.82	-	-	-
6705	10.15	-	-	-
6785	9.92	-	-	-
6865	9.75	-	-	-
6945	10.30	-	-	-
7025	10.36	-	-	-

Table 320 - 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:	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
6025	-	3.48	-	-
6185	1.85	-	-	-
6345	3.70	-	-	-
6505	2.34	-	-	-
6665	2.76	-	-	-
6825	2.51	-	-	-
6985	3.03	-	-	-

Table 321 - 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 HE20 RU26	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 (RU26.0)	-	8.74	-	-
6175 (RU26.0)	8.34	-	-	-
6415 (RU26.8)	8.24	-	-	-
6435 (RU26.0)	7.59	-	-	-
6475 (RU26.0)	8.01	-	-	-
6515 (RU26.8)	7.58	-	-	-
6535 (RU26.0)	7.52	-	-	-
6695 (RU26.0)	7.35	-	-	-
6855 (RU26.0)	7.12	-	-	-
6875 (RU26.3)	6.76	-	-	-
6875 (RU26.5)	6.61	-	-	-
6895 (RU26.0)	7.62	-	-	-
6995 (RU26.0)	7.40	-	-	-

Table 322 - 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 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)	-	8.87	-	-
6175 (RU52.37)	8.61	-	-	-
6415 (RU52.40)	8.32	-	-	-
6435 (RU52.37)	8.13	-	-	-
6475 (RU52.37)	7.70	-	-	-
6515 (RU52.40)	8.01	-	-	-
6535 (RU52.37)	7.00	-	-	-
6695 (RU52.37)	7.67	-	-	-
6855 (RU52.37)	6.64	-	-	-
6875 (RU52.38)	6.57	-	-	-
6875 (RU52.39)	6.71	-	-	-
6895 (RU52.37)	7.62	-	-	-
6995 (RU52.37)	7.54	-	-	-

Table 323 - 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 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)	-	8.57	-	-
6175 (RU106.53)	8.55	-	-	-
6415 (RU106.54)	8.72	-	-	-
6435 (RU106.53)	8.17	-	-	-
6475 (RU106.53)	7.86	-	-	-
6515 (RU106.54)	8.67	-	-	-
6535 (RU106.53)	7.46	-	-	-
6695 (RU106.53)	7.35	-	-	-
6855 (RU106.53)	7.03	-	-	-
6875 (RU106.53)	6.97	-	-	-
6875 (RU106.54)	7.17	-	-	-
6895 (RU106.53)	7.62	-	-	-
6995 (RU106.53)	7.71	-	-	-

Table 324 - Unwanted Emissions Within the Band Results

MIMO CDD

Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE20 SU	6.61	6838.700
802.11ax HE40 SU	4.32	6631.000
802.11ax HE80 SU	2.73	5860.260
802.11ax HE160 SU	0.33	6631.500

Table 325 - Unwanted Emissions Within the RLAN Band Summary Results



Figure 86 - A (Core 0) 802.11ax HE20 SU
6875 MHz (CH185)

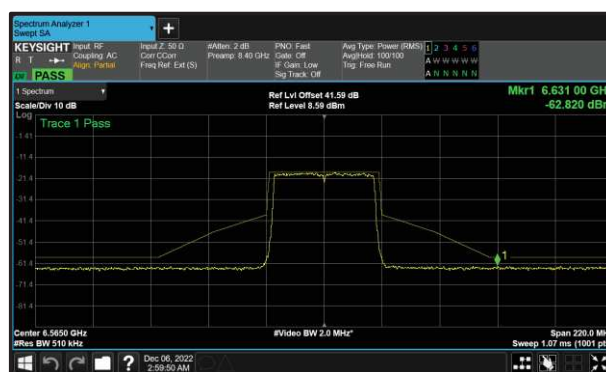


Figure 87 - A (Core 0) 802.11ax HE40 SU
6565 MHz (CH123)



Figure 88 - B (Core 1) 802.11ax HE80 SU
5985 MHz (CH7)

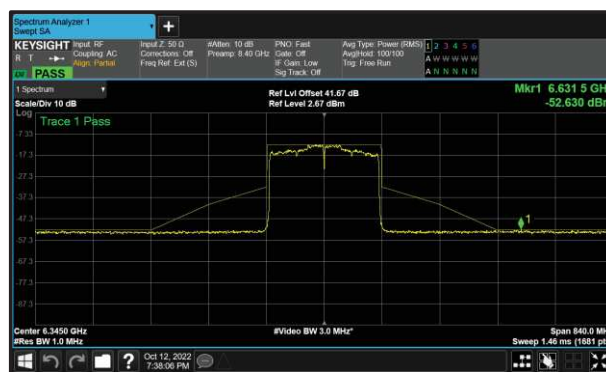


Figure 89 - A (Core 0) 802.11ax HE160 SU
6345 MHz (CH79)



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 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	6.78	7.46	-	-
6175	6.90	7.70	-	-
6415	7.00	7.26	-	-
6435	6.90	6.94	-	-
6475	7.12	7.59	-	-
6515	6.98	7.63	-	-
6535	6.99	7.47	-	-
6695	6.81	7.08	-	-
6855	6.78	6.98	-	-
6875	6.61	6.87	-	-
6895	7.25	6.75	-	-
6995	7.06	6.66	-	-
7115	6.69	6.78	-	-

Table 326 - 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 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	4.72	4.52	-	-
6165	5.33	5.97	-	-
6405	5.65	5.72	-	-
6445	5.42	5.37	-	-
6485	5.38	5.74	-	-
6525	4.59	5.27	-	-
6565	4.32	5.58	-	-
6685	5.32	5.52	-	-
6845	5.07	5.34	-	-
6885	4.60	4.68	-	-
6925	5.46	5.41	-	-
7005	5.43	5.63	-	-
7085	5.71	5.23	-	-

Table 327 - 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:	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	2.91	2.73	-	-
6145	5.98	6.04	-	-
6385	5.99	6.28	-	-
6465	5.53	5.61	-	-
6545	5.59	5.63	-	-
6625	5.85	5.90	-	-
6705	5.75	5.81	-	-
6785	5.29	5.38	-	-
6865	3.59	3.32	-	-
6945	6.40	6.84	-	-
7025	6.47	6.64	-	-

Table 328 - 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	3.45	3.61	-	-
6185	3.81	4.00	-	-
6345	0.33	3.84	-	-
6505	3.56	3.68	-	-
6665	3.27	1.95	-	-
6825	3.29	3.30	-	-
6985	4.64	4.64	-	-

Table 329 - 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 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
6175 (RU52.37)	4.22	4.74	-	-
6415 (RU52.40)	3.41	4.10	-	-
6435 (RU52.37)	3.48	4.35	-	-
6475 (RU52.37)	3.51	4.33	-	-
6515 (RU52.40)	3.55	4.06	-	-
6895 (RU52.37)	2.97	3.63	-	-
6995 (RU52.37)	2.86	3.06	-	-

Table 330 - 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 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)	3.83	4.46	-	-
6175 (RU106.53)	3.98	4.69	-	-
6415 (RU106.54)	3.60	3.87	-	-
6435 (RU106.53)	3.58	4.17	-	-
6475 (RU106.53)	3.65	4.16	-	-
6515 (RU106.54)	3.64	4.23	-	-
6535 (RU106.53)	3.45	3.98	-	-
6695 (RU106.53)	3.64	3.88	-	-
6855 (RU106.53)	2.73	3.68	-	-
6875 (RU106.53)	3.31	3.62	-	-
6875 (RU106.54)	3.30	3.68	-	-
6895 (RU106.53)	3.10	3.47	-	-
6995 (RU106.53)	3.32	3.32	-	-

Table 331 - Unwanted Emissions Within the Band Results

MIMO SDM

Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE20 SU	3.09	7151.200
802.11ax HE40 SU	1.40	6672.580
802.11ax HE80 SU	4.08	5796.000
802.11ax HE160 SU	0.92	6625.500

Table 332 - Unwanted Emissions Within the RLAN Band Summary Results



Figure 90 - A (Core 0) 802.11ax HE20 SU
7115 MHz (CH233)



Figure 92 - A (Core 0) 802.11ax HE40 SU
6565 MHz (CH123)



Figure 91 - A (Core 0) 802.11ax HE80 SU
5985 MHz (CH7)

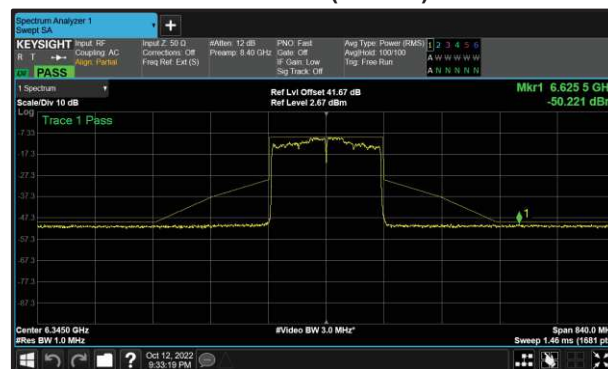


Figure 93 - A (Core 0) 802.11ax HE160 SU
6345 MHz (CH79)



Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE20 RU106	3.87	6832.300
802.11ax HE20 RU26	4.82	6925.100
802.11ax HE20 RU52	3.72	6826.100

Table 333 - Unwanted Emissions Within the RLAN Band Summary Results



Figure 94 - B (Core 1) 802.11ax HE20 RU106
6875 MHz (CH185)



Figure 95 - B (Core 1) 802.11ax HE20 RU26
6895 MHz (CH189)

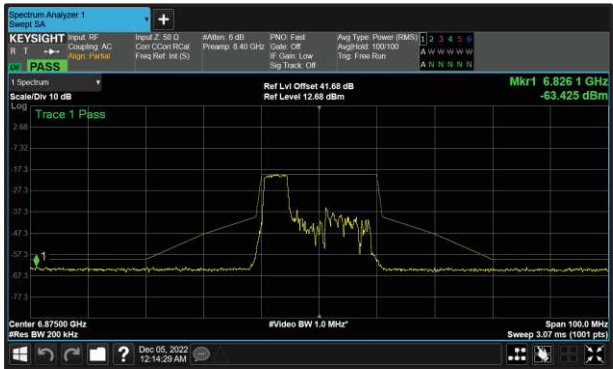


Figure 96 - B (Core 1) 802.11ax HE20 RU52
6875 MHz (CH185)



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 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	5.31	5.52	-	-
6175	5.65	6.26	-	-
6415	6.10	5.88	-	-
6435	5.89	5.18	-	-
6475	5.78	5.60	-	-
6515	6.01	5.50	-	-
6535	5.73	6.01	-	-
6695	5.61	5.30	-	-
6855	5.46	4.61	-	-
6875	4.76	4.25	-	-
6895	6.11	5.38	-	-
6995	5.24	5.55	-	-
7115	3.09	3.55	-	-

Table 334 - 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 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	3.03	2.83	-	-
6165	5.44	5.99	-	-
6405	5.05	6.20	-	-
6445	5.73	6.09	-	-
6485	5.63	5.95	-	-
6525	5.20	5.67	-	-
6565	1.40	2.29	-	-
6685	1.84	2.83	-	-
6845	2.53	1.90	-	-
6885	4.39	4.59	-	-
6925	5.98	5.97	-	-
7005	5.99	6.52	-	-
7085	6.18	6.04	-	-

Table 335 - 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:	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	4.08	4.61	-	-
6145	5.23	5.64	-	-
6385	5.96	6.38	-	-
6465	5.46	5.56	-	-
6545	5.03	4.76	-	-
6625	4.78	4.45	-	-
6705	5.13	5.10	-	-
6785	4.59	4.97	-	-
6865	4.32	5.09	-	-
6945	5.65	5.66	-	-
7025	5.61	6.25	-	-

Table 336 - 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	6.01	2.49	-	-
6185	2.71	3.25	-	-
6345	0.92	1.78	-	-
6505	2.29	2.48	-	-
6665	2.17	2.29	-	-
6825	5.98	2.19	-	-
6985	2.50	2.71	-	-

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 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
6175 (RU26.0)	5.28	6.01	-	-
6415 (RU26.8)	5.42	5.41	-	-
6435 (RU26.0)	4.91	5.21	-	-
6475 (RU26.0)	4.98	5.31	-	-
6515 (RU26.8)	5.14	5.35	-	-
6895 (RU26.0)	5.03	4.82	-	-
6995 (RU26.0)	5.26	5.33	-	-

Table 338 - 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 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)	4.89	5.09	-	-
6175 (RU52.37)	5.27	5.76	-	-
6415 (RU52.40)	5.95	5.52	-	-
6435 (RU52.37)	5.05	5.04	-	-
6475 (RU52.37)	5.32	5.11	-	-
6515 (RU52.40)	5.35	5.41	-	-
6535 (RU52.37)	4.58	4.74	-	-
6695 (RU52.37)	5.04	4.54	-	-
6855 (RU52.37)	4.20	3.95	-	-
6875 (RU52.37)	4.14	3.72	-	-
6875 (RU52.40)	4.06	3.81	-	-
6895 (RU52.37)	5.67	5.45	-	-
6995 (RU52.37)	5.25	5.51	-	-

Table 339 - 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 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)	5.06	5.31	-	-
6175 (RU106.53)	4.93	6.04	-	-
6415 (RU106.54)	5.89	5.58	-	-
6435 (RU106.53)	5.17	5.14	-	-
6475 (RU106.53)	5.34	5.35	-	-
6515 (RU106.54)	5.40	5.31	-	-
6535 (RU106.53)	4.64	5.11	-	-
6695 (RU106.53)	4.73	4.31	-	-
6855 (RU106.53)	4.21	3.94	-	-
6875 (RU106.53)	4.06	3.89	-	-
6875 (RU106.54)	4.72	3.87	-	-
6895 (RU106.53)	5.51	5.46	-	-
6995 (RU106.53)	5.65	5.69	-	-

Table 340 - Unwanted Emissions Within the Band Results



MIMO TxBE

Protocol	Unwanted Emissions Within the RLAN Band	
	Margin (dB)	Frequency (MHz)
802.11ax HE40 SU	4.56	7190.160
802.11ax HE80 SU	4.43	6681.400

Table 341 - Unwanted Emissions Within the RLAN Band Summary Results



Figure 97 - B (Core 1) 802.11ax HE40 SU
7085 MHz (CH227)



Figure 98 - A (Core 0) 802.11ax HE80 SU
6865 MHz (CH183)



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	5.53	5.50	-	-
7005	5.72	4.99	-	-
7085	5.56	4.56	-	-

Table 342 - 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	5.01	5.36	-	-
6145	4.83	6.15	-	-
6385	5.31	5.90	-	-
6465	4.59	5.21	-	-
6545	4.58	5.35	-	-
6625	4.86	5.03	-	-
6705	5.44	5.57	-	-
6785	4.68	5.21	-	-
6865	4.43	5.28	-	-
6945	6.33	6.34	-	-
7025	5.56	5.69	-	-

Table 343 - 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 one-half 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
Hygrometer	Rotronic	I-1000	3220	12	05-Nov-2022
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
Attenuator 5W 30dB DC-18GHz	Aaren	AT40A-4041-D18-30	5502	12	21-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
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 344

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

A2779, S/N: JM67M9K770 - Modification State 0

2.6.3 Date of Test

05-October-2022 to 08-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).

For the purpose of this testing, 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

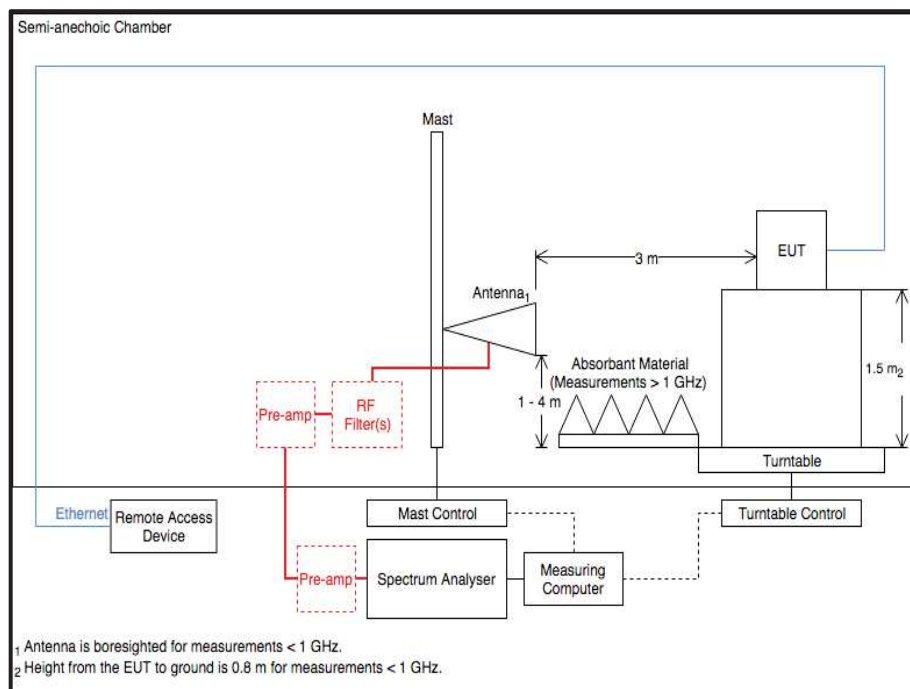


Figure 99 - Radiated Emissions Test Setup Diagram

2.6.6 Environmental Conditions

Ambient Temperature	22.2 - 23.0 °C
Relative Humidity	45.7 - 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
33.178	20.44	40.00	-19.56	Q-Peak	100	395	Vertical
33.411	21.55	40.00	-18.45	Q-Peak	357	392	Horizontal
280.003	27.40	46.00	-18.60	Q-Peak	100	110	Horizontal
300.843	27.99	46.00	-18.01	Q-Peak	350	162	Vertical
300.851	25.25	46.00	-20.75	Q-Peak	102	106	Horizontal

Table 345 - 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.

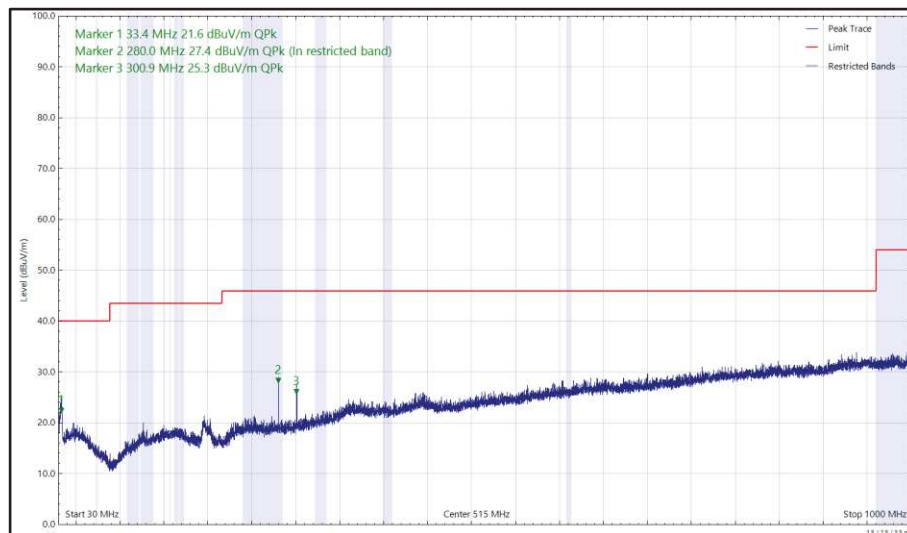


Figure 100 - U-NII-5 - 6175 MHz (CH45), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

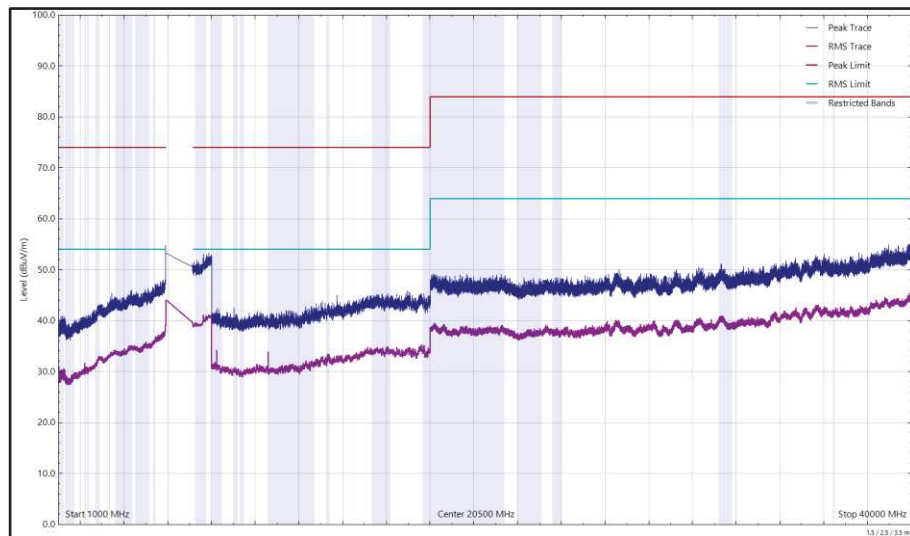


Figure 101 - U-NII-5 - 6175 MHz (CH45), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

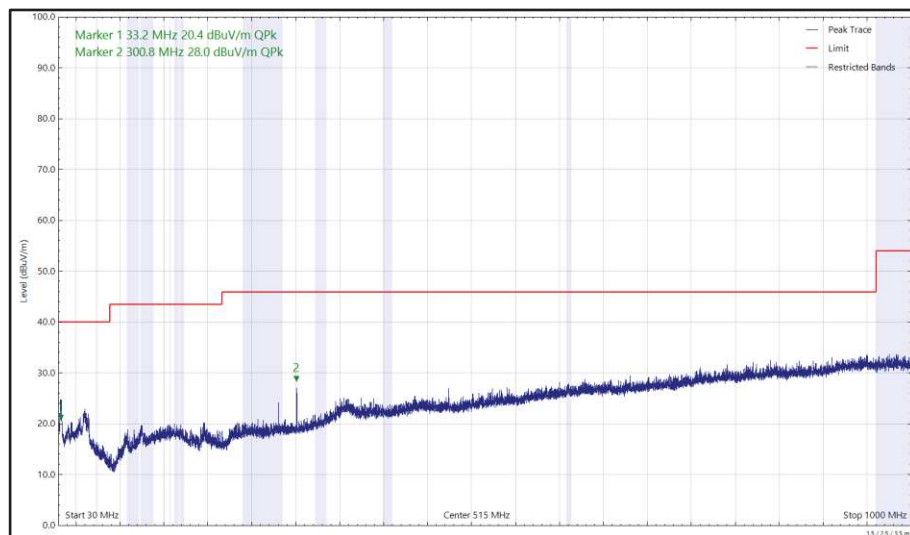


Figure 102 - U-NII-5 - 6175 MHz (CH45), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

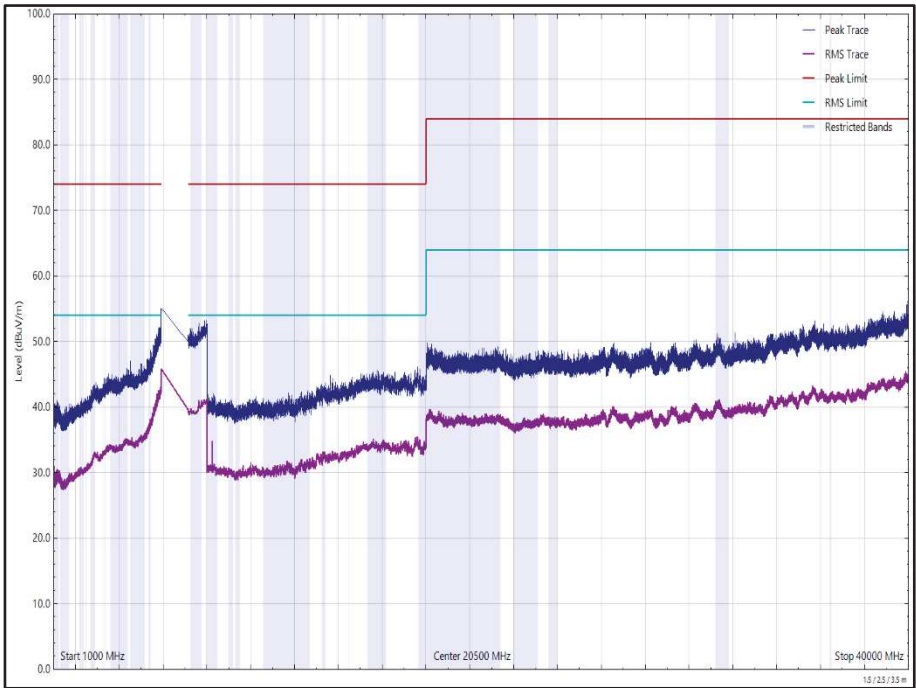


Figure 103 - U-NII-5 - 6175 MHz (CH45), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
32.792	21.85	40.00	-18.15	Q-Peak	5	394	Vertical
279.989	25.07	46.00	-20.93	Q-Peak	291	130	Horizontal
300.875	26.91	46.00	-19.09	Q-Peak	4	179	Vertical

Table 346 - 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.

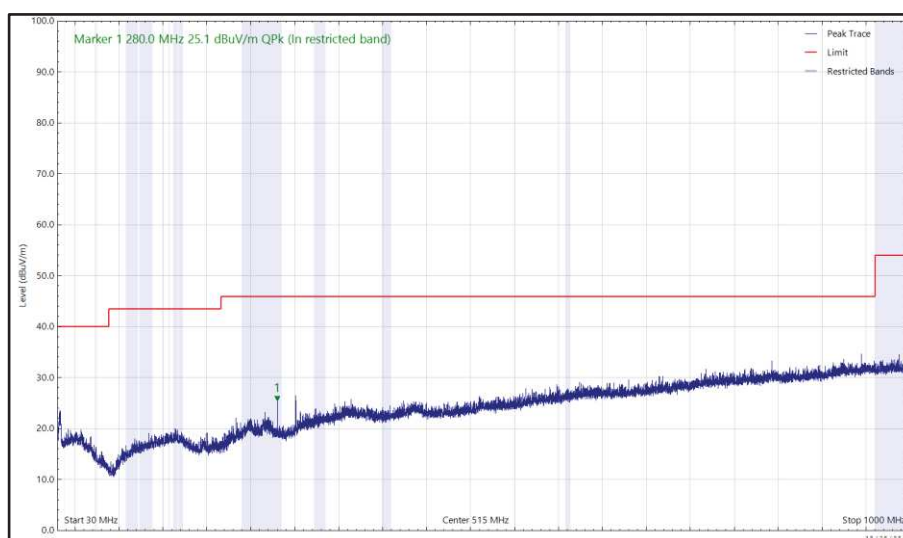


Figure 104 - U-NII-6 - 6475 MHz (CH105), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

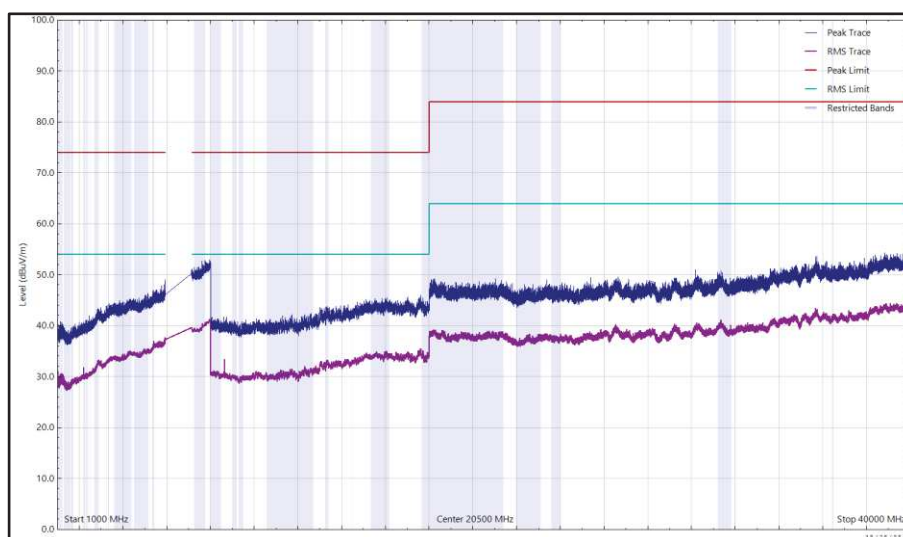


Figure 105 - U-NII-6 - 6475 MHz (CH105), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

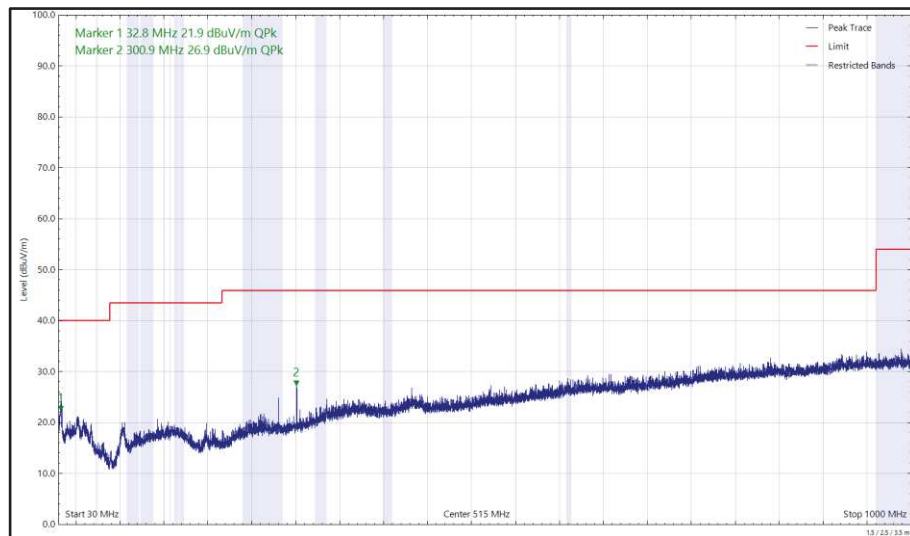


Figure 106 - U-NII-6 - 6475 MHz (CH105), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

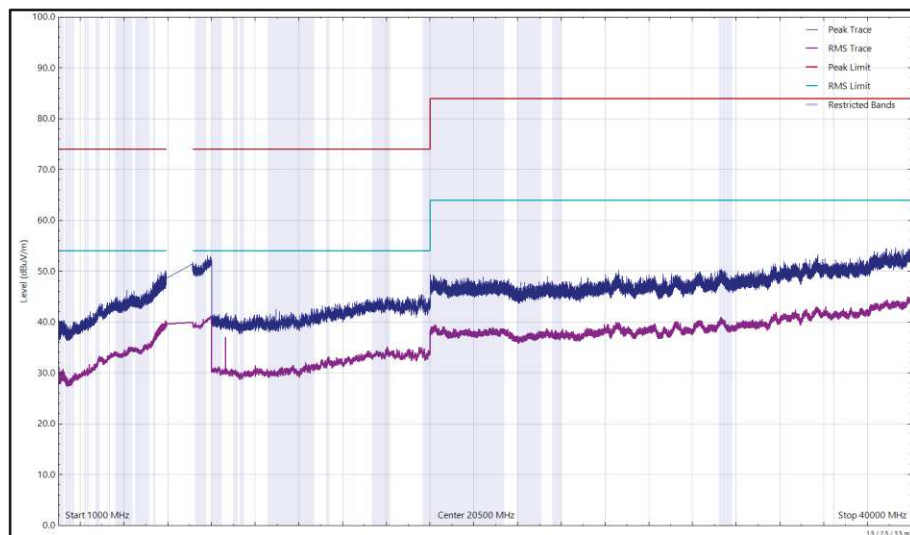


Figure 107 - U-NII-6 - 6475 MHz (CH105), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
32.488	21.92	40.00	-18.08	Q-Peak	0	390	Horizontal
32.766	23.04	40.00	-16.96	Q-Peak	8	385	Vertical
280.002	25.57	46.00	-20.43	Q-Peak	284	120	Horizontal
300.853	26.11	46.00	-19.89	Q-Peak	354	200	Vertical

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.

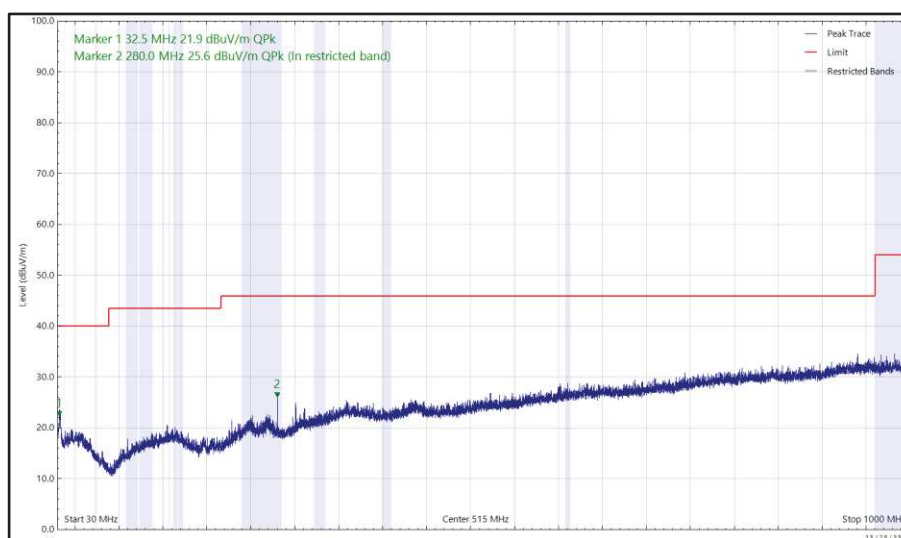


Figure 108 - U-NII-7 - 6695 MHz (CH149), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

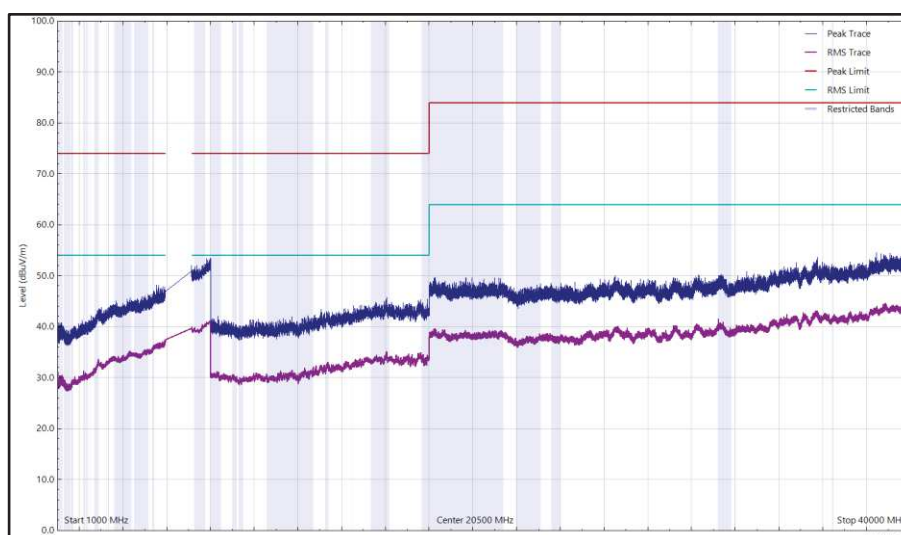


Figure 109 - U-NII-7 - 6695 MHz (CH149), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

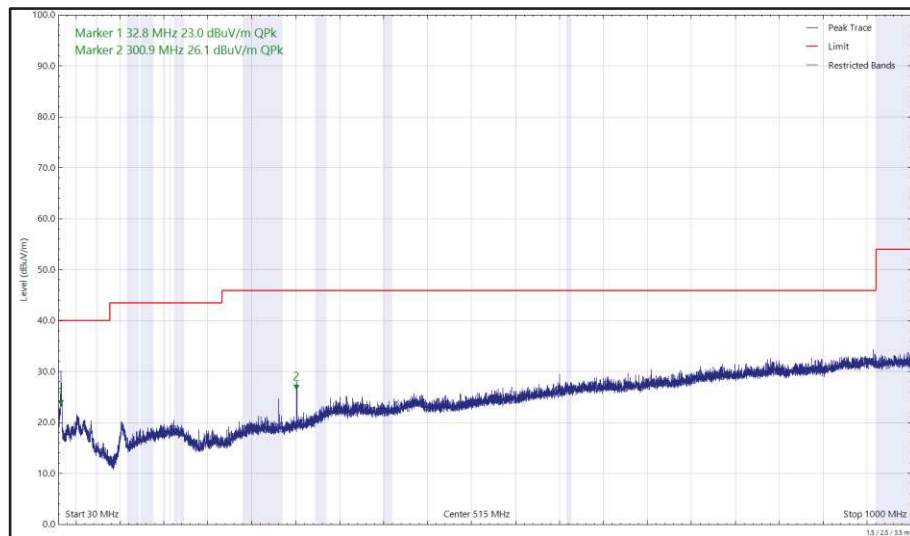


Figure 110 - U-NII-7 - 6695 MHz (CH149), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

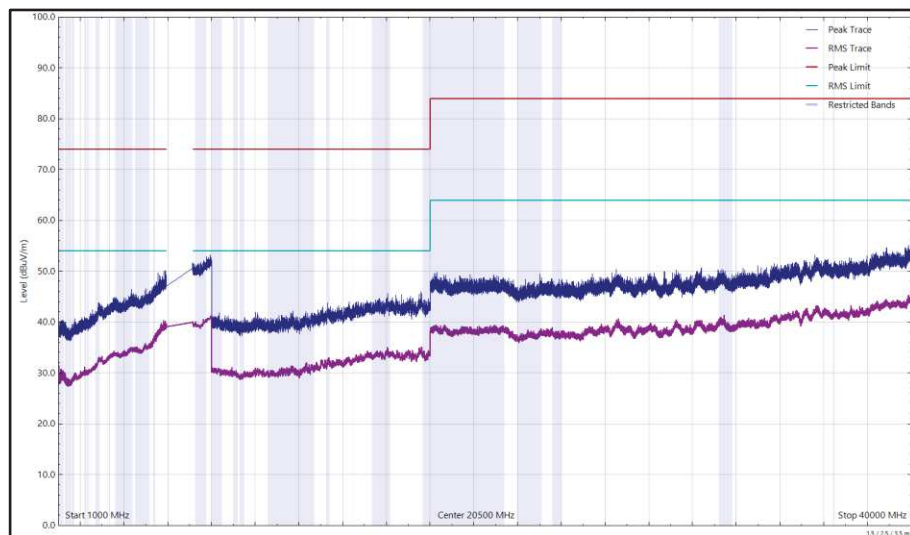


Figure 111 - U-NII-7 - 6695 MHz (CH149), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Angle (°)	Height (cm)	Polarisation
32.352	22.26	40.00	-17.74	Q-Peak	350	397	Horizontal
32.450	23.31	40.00	-16.69	Q-Peak	354	397	Vertical
300.867	26.14	46.00	-19.86	Q-Peak	356	139	Vertical

Table 348 - 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.

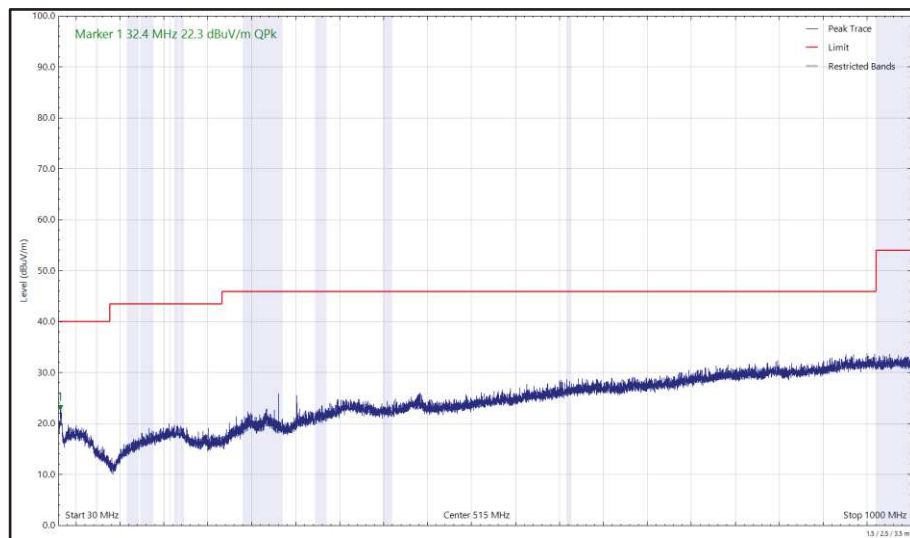


Figure 112 - U-NII-8 - 6995 MHz (CH209), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Horizontal (Peak)

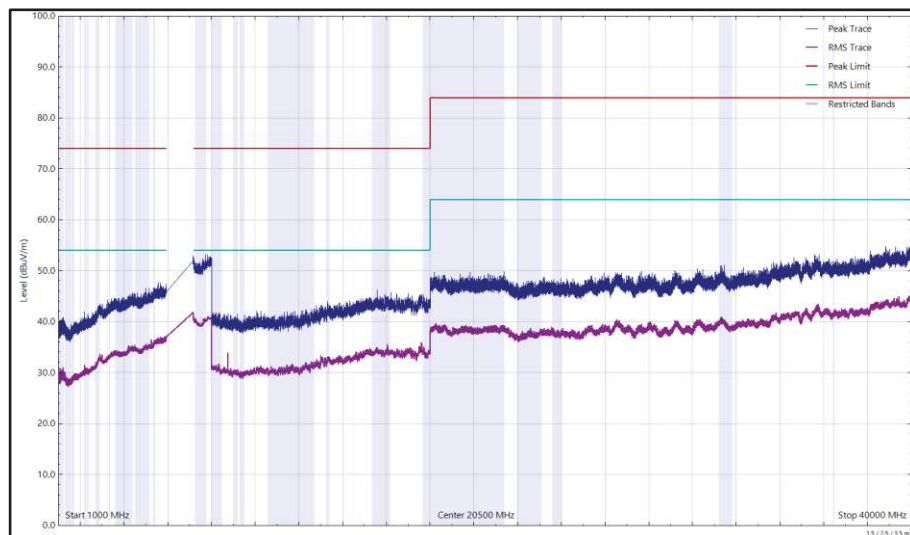


Figure 113 - U-NII-8 - 6995 MHz (CH209), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

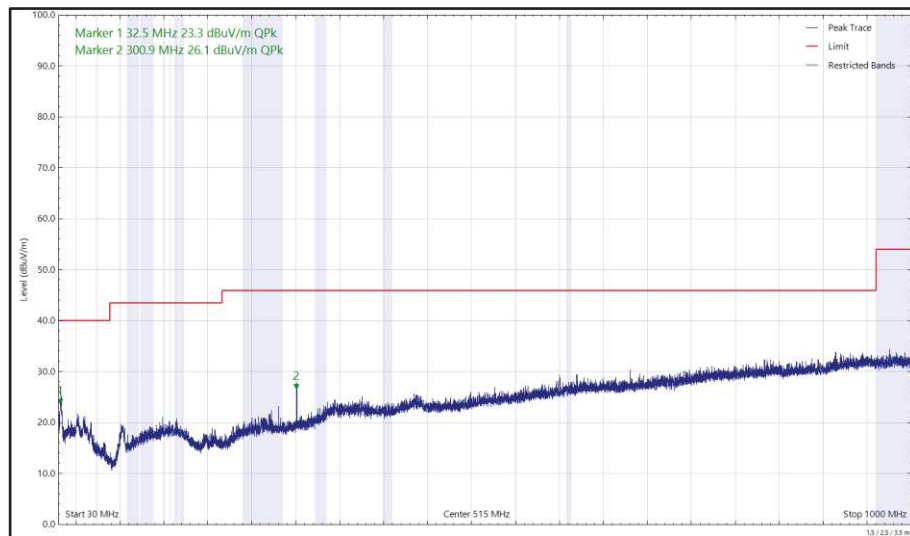


Figure 114 - U-NII-8 - 6995 MHz (CH209), HE20, SU, CDD, Core 0 + Core 1, 30 MHz to 1 GHz, Vertical (Peak)

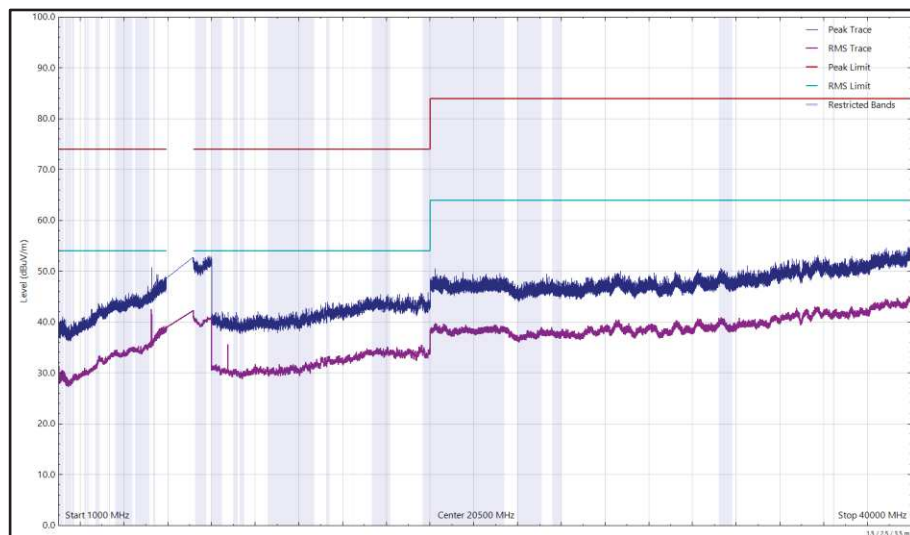


Figure 115 - U-NII-8 - 6995 MHz (CH209), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical



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

Table 349 - 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.

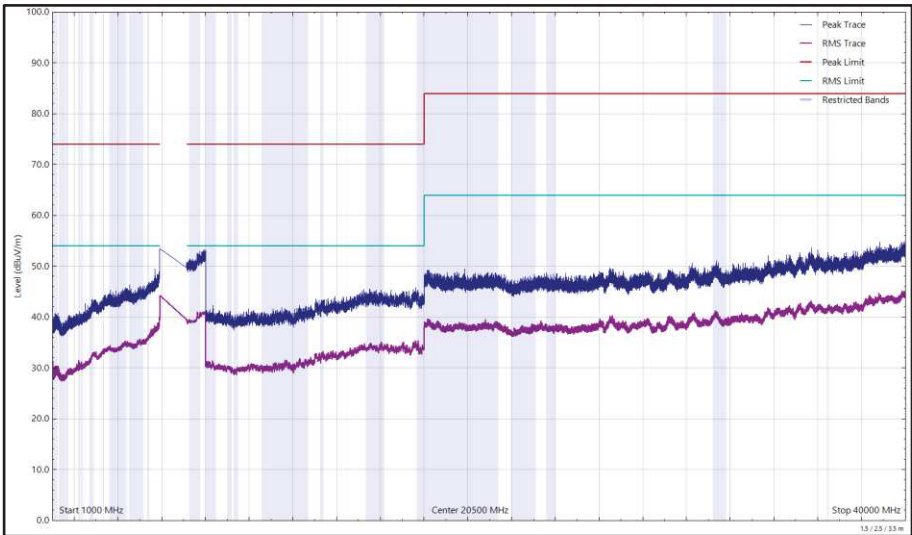


Figure 116 - U-NII-5 - 5955 MHz (CH1), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

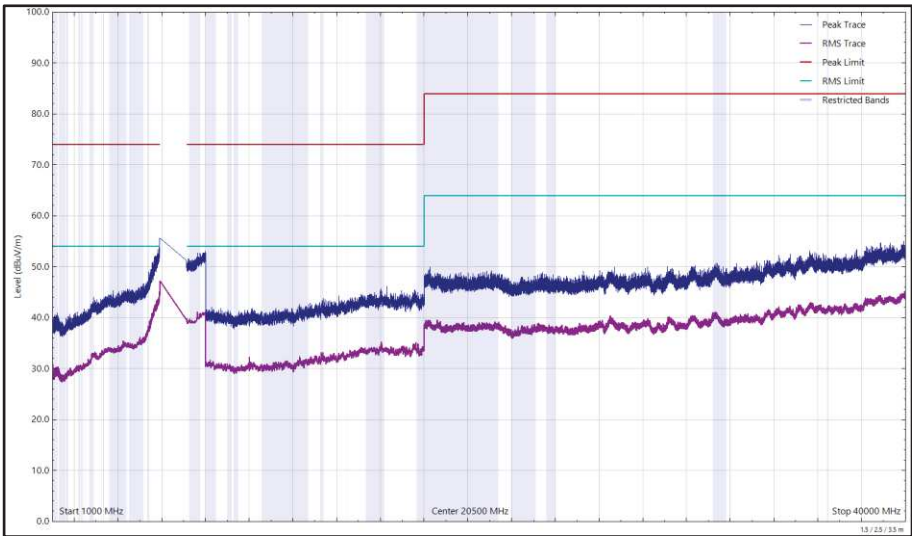


Figure 117 - U-NII-5 - 5955 MHz (CH1), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical



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

Table 350 - 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.

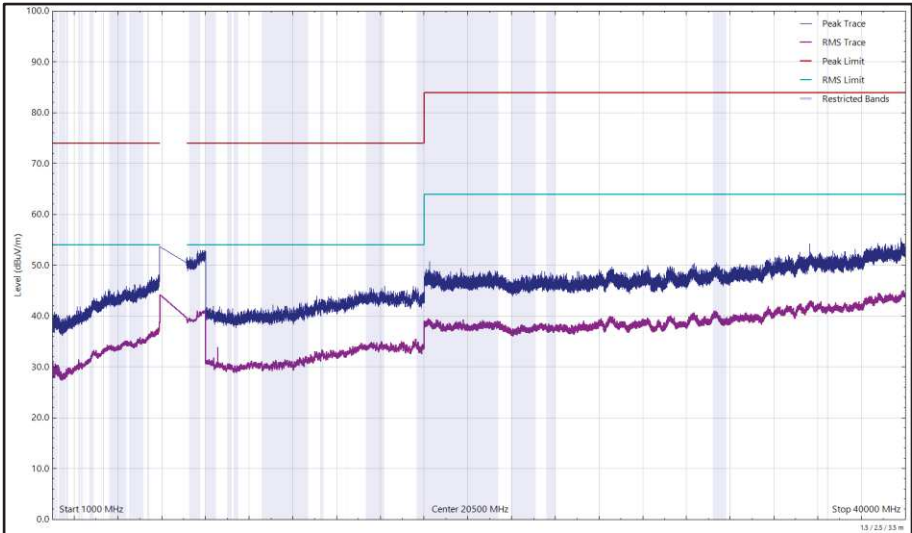


Figure 118 - U-NII-5 - 6415 MHz (CH93), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

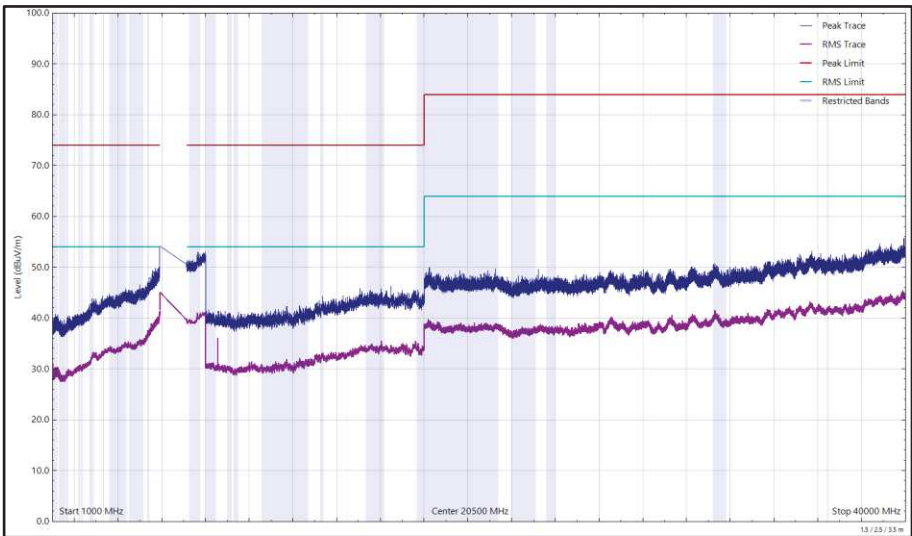


Figure 119 - U-NII-5 - 6415 MHz (CH93), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical



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

Table 351 - 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.

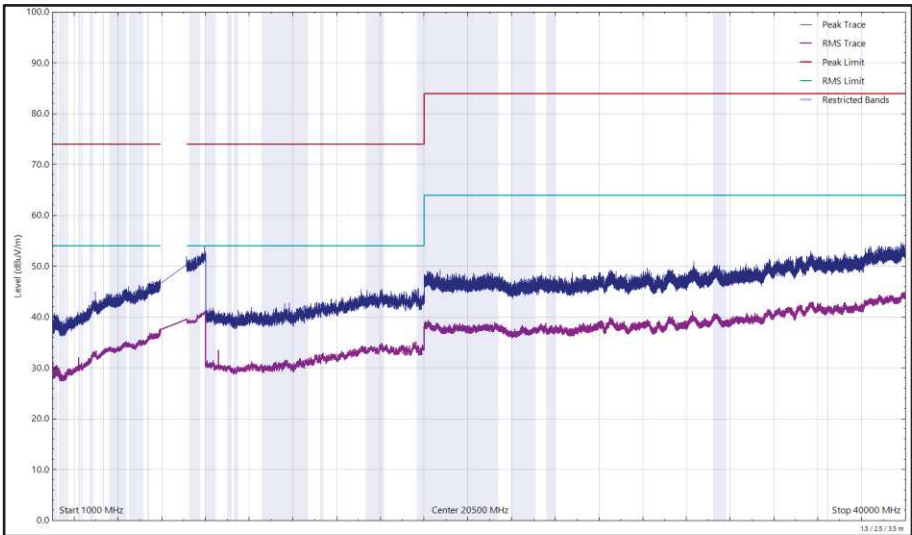


Figure 120 - U-NII-6 - 6435 MHz (CH97), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

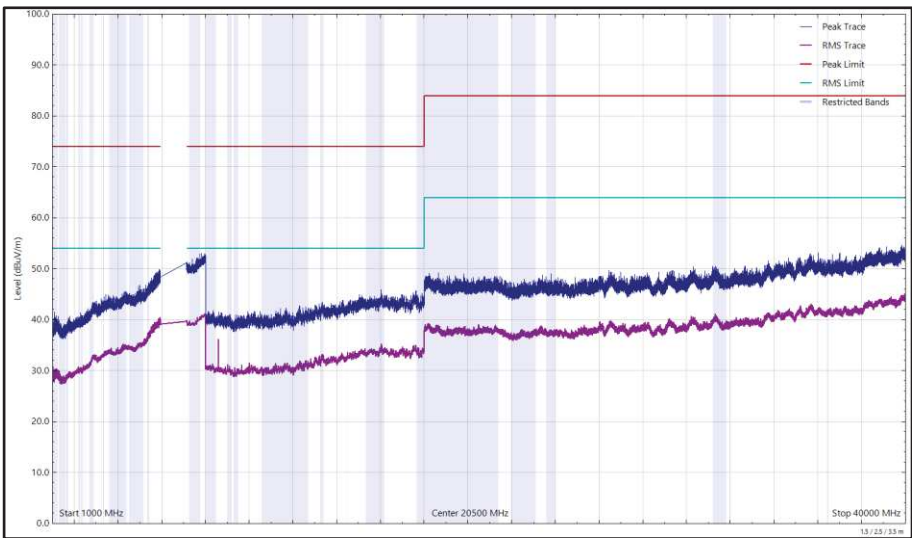


Figure 121 - U-NII-6 - 6435 MHz (CH97), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

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

Table 352 - 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.

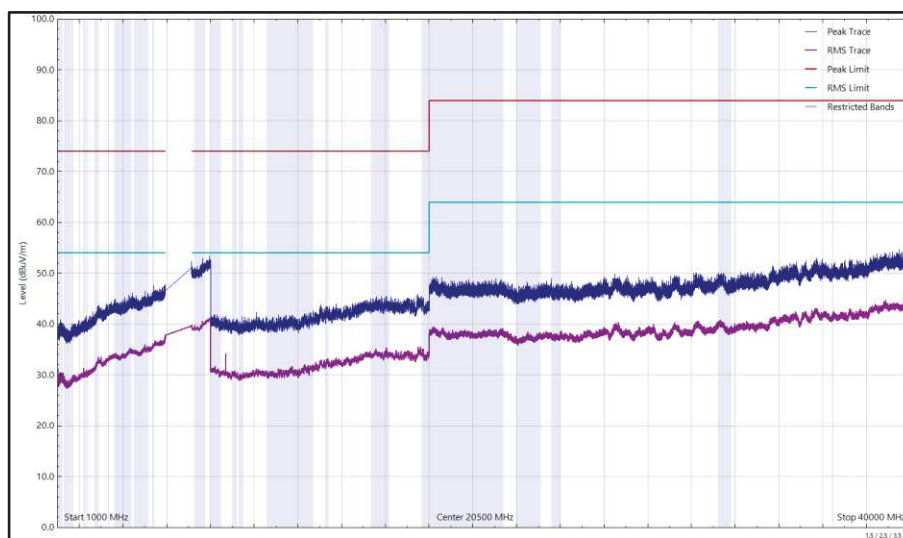


Figure 122 - U-NII-6 - 6515 MHz (CH113), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

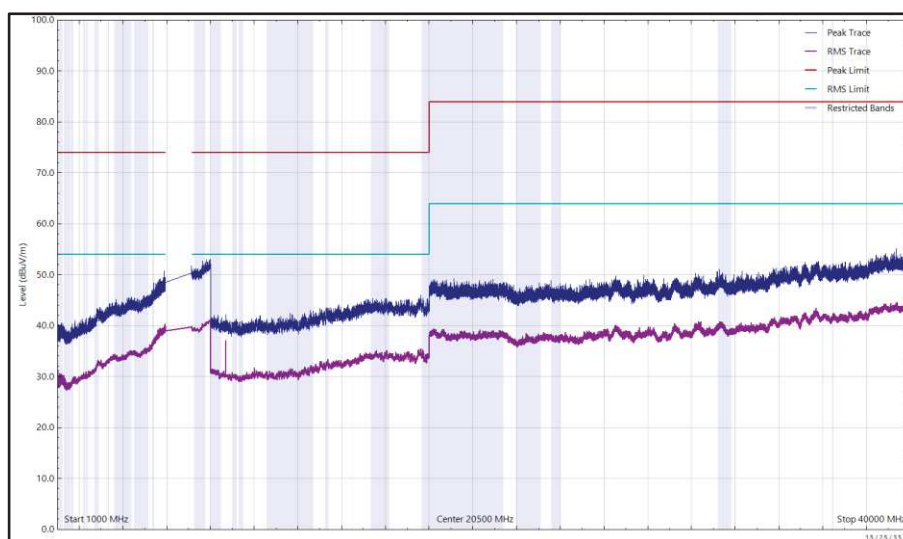


Figure 123 - U-NII-6 - 6515 MHz (CH113), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

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

Table 353 - 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.

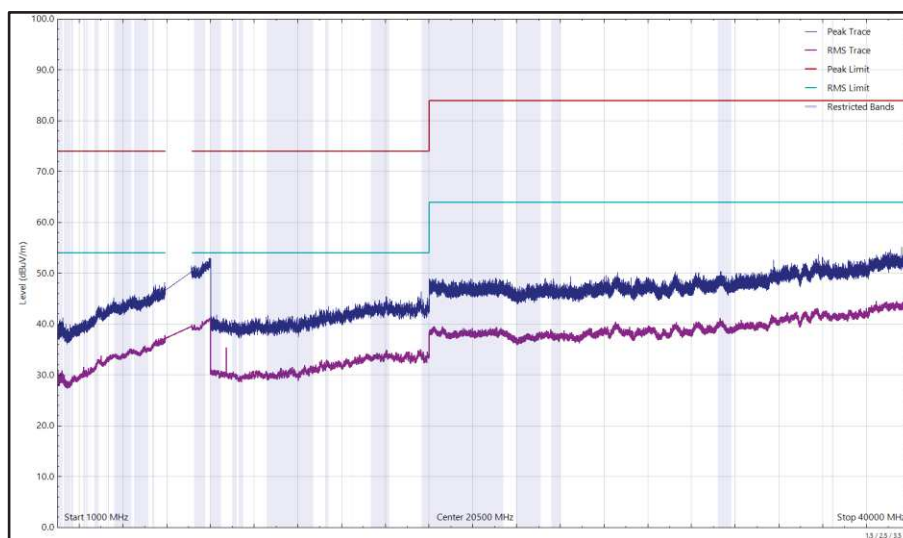


Figure 124 - U-NII-7 - 6535 MHz (CH117), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

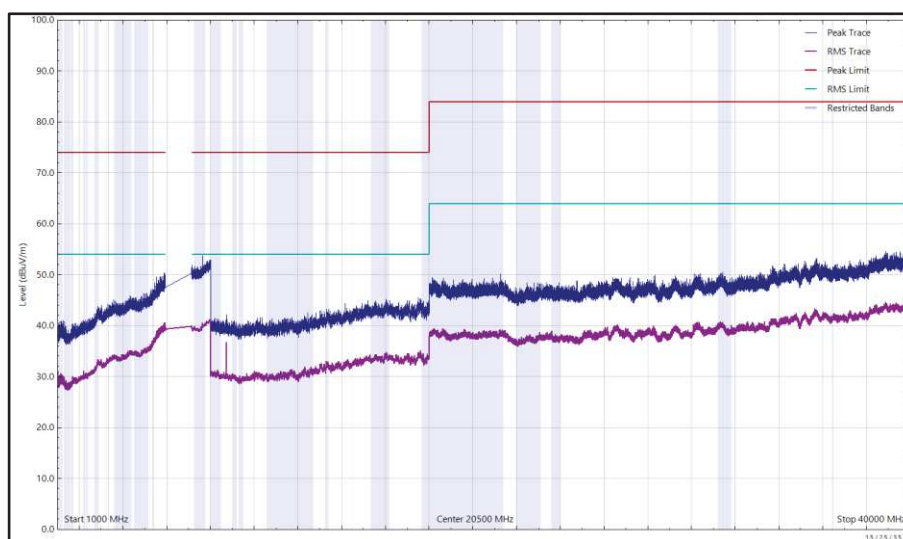


Figure 125 - U-NII-7 - 6535 MHz (CH117), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

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

Table 354 - 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.

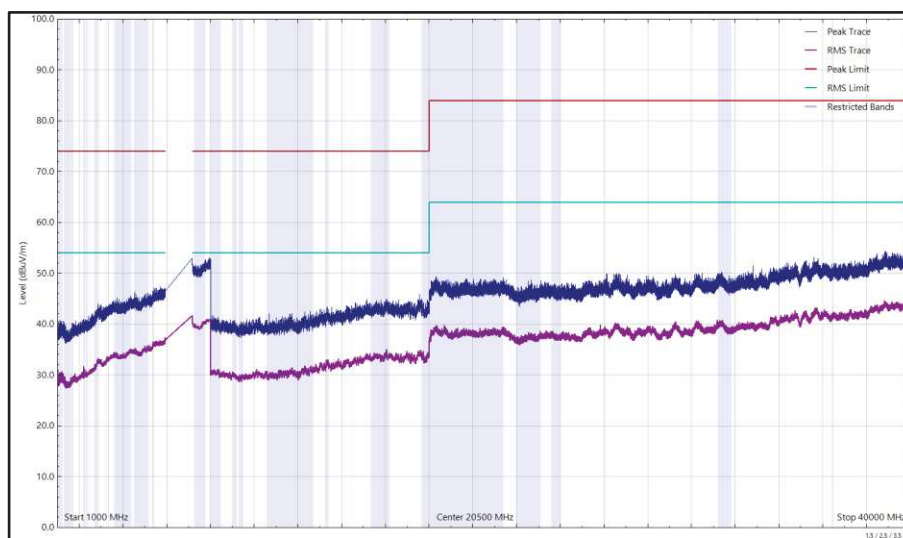


Figure 126 - U-NII-7 - 6855 MHz (CH181), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

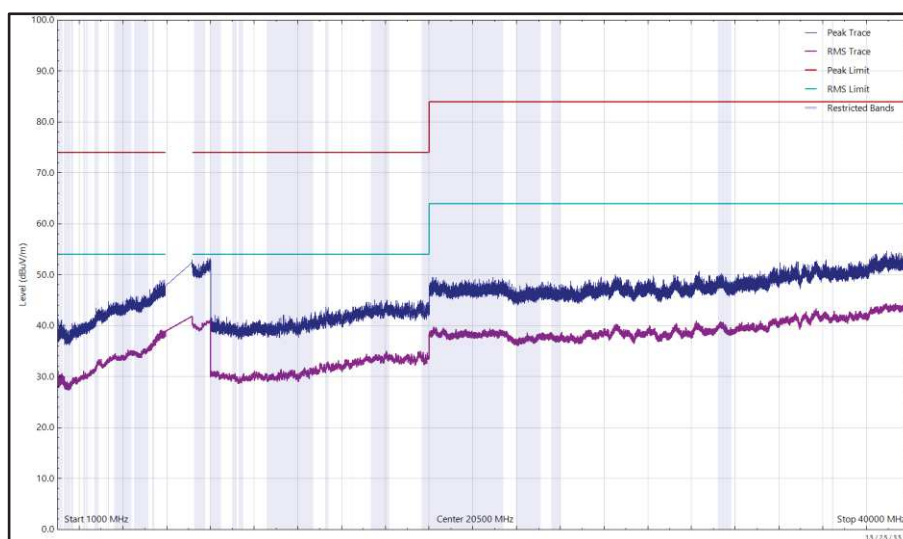


Figure 127 - U-NII-7 - 6855 MHz (CH181), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

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

Table 355 - 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.

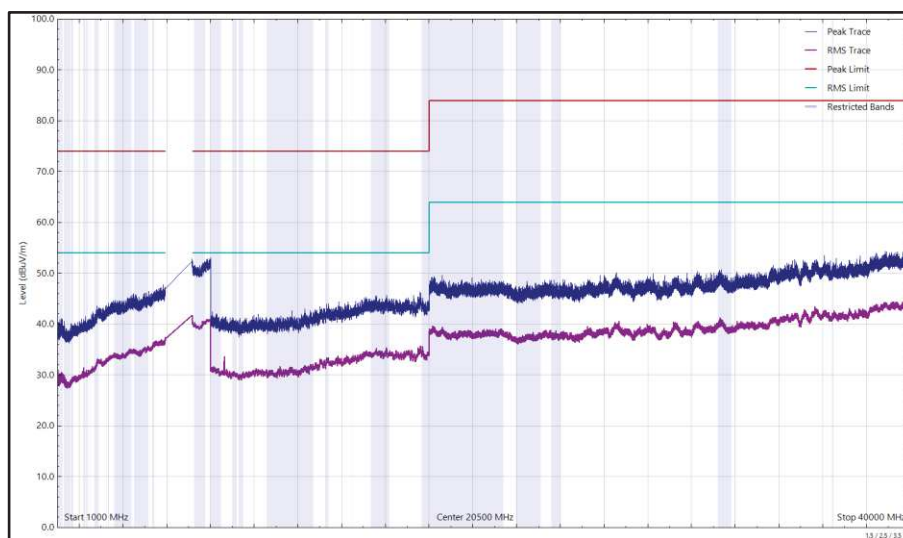


Figure 128 - U-NII-8 - 6895 MHz (CH189), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

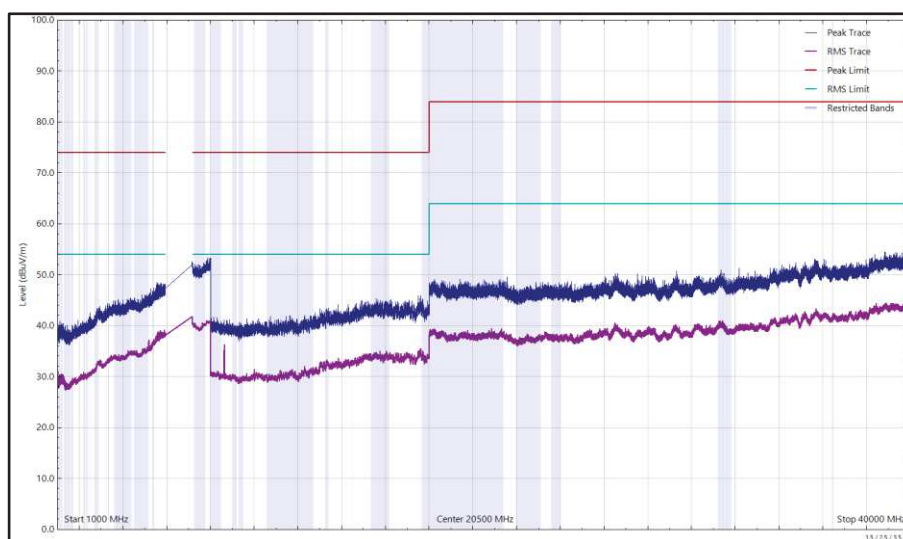


Figure 129 - U-NII-8 - 6895 MHz (CH189), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical

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

Table 356 - U-NII-8 - 7115 MHz (CH233), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz

*No emissions found within 10 dB of the limit.

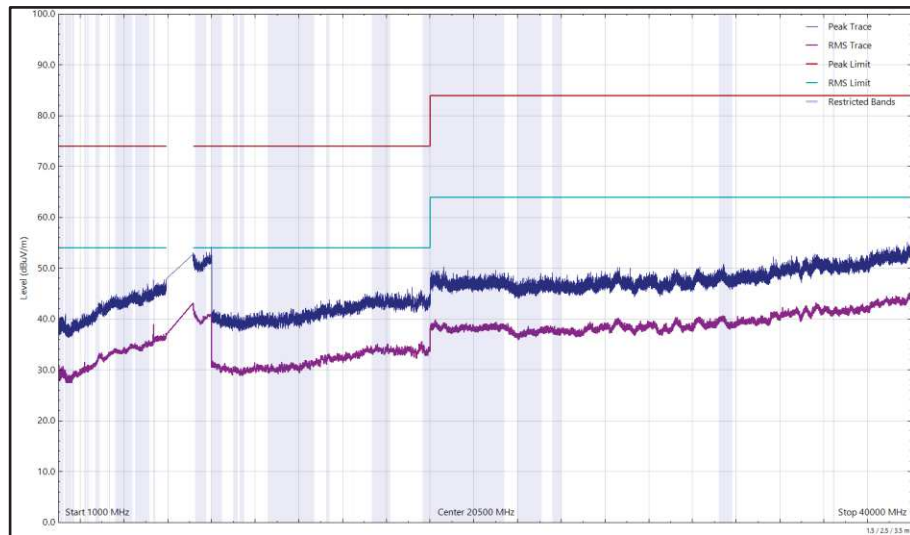


Figure 130 - U-NII-8 - 7115 MHz (CH233), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Horizontal

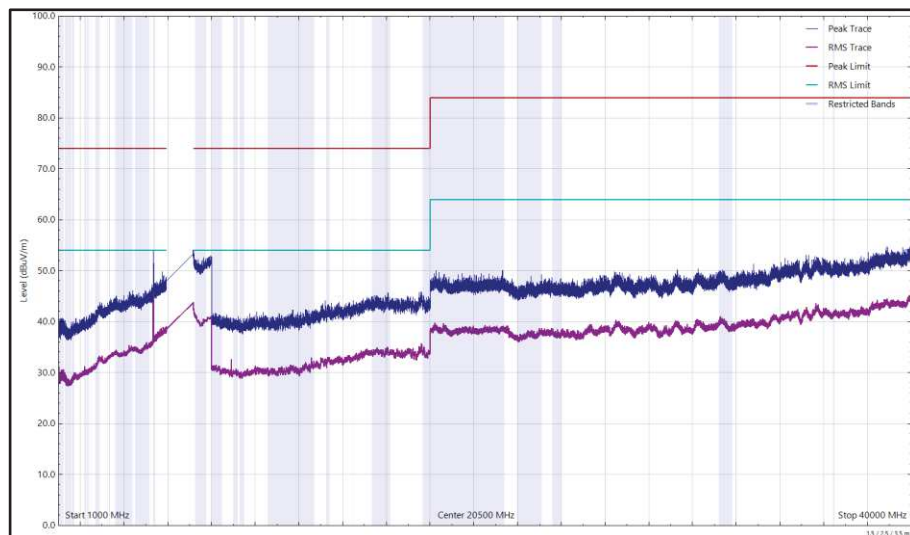


Figure 131 - U-NII-8 - 7115 MHz (CH233), HE20, SU, CDD, Core 0 + Core 1, 1 GHz to 40 GHz, Vertical



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 ($\mu\text{V}/\text{m}$) at 3m	Field Strength Limit ($\text{dB}\mu\text{V}/\text{m}$) 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 357 - 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 ($\mu\text{V}/\text{m}$) at 3m	Field Strength Limit ($\text{dB}\mu\text{V}/\text{m}$) 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 358 - Radiated Emissions Limit Table (ISED)



2.6.8 Test Location and Test Equipment Used

This test was carried out in RF Chamber 15.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
EMI Test Receiver	Rohde & Schwarz	ESW44	5911	12	24-Feb-2023
Cable (K Type 2m)	Junkosha	MWX241-02000KMSKMS/B	5937	12	14-May-2023
DRG Horn Antenna (7.5-18GHz)	Schwarzbeck	HWRD750	5939	12	29-May-2023
DRG Horn Antenna (7.5-18GHz)	Schwarzbeck	HWRD750	5941	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	5956	-	O/P Mon
5m Semi-Anechoic Chamber (Dual-Axis)	Albatross Projects	RF Chamber 15	5963	36	28-Apr-2025
Compact Antenna Mast	Maturo Gmbh	CAM4.0-P	5964	-	TU
Mast & Turntable Controller	Maturo Gmbh	FCU3.0	5966	-	TU
Tilt Antenna Mast	Maturo Gmbh	BAM4.5-P	5967	-	TU
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	5996	12	06-Jun-2023
Cable (N to N 1m)	Junkosha	MWX221-01000NMSNMS/B	5999	12	05-Jun-2023
Cable (N to N 7m)	Junkosha	MWX221-07000NMSNMS/B	6005	12	05-Jun-2023
Cable (N to N 8m)	Junkosha	MWX221-08000NMSNMS/A	6006	12	05-Jun-2023
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/A	6007	12	06-Jun-2023
Cable (SMA to SMA 6.5m)	Junkosha	MWX221-06500AMSAMS/B	6014	12	07-Jun-2023
Cable (SMA to SMA 1m)	Junkosha	MWX221-01000AMSAMS/B	6019	12	07-Jun-2023
Horn Antenna (1-10 GHz)	Schwarzbeck	BBHA9120B	6140	12	21-Jun-2023
Digital Multimeter	Fluke	115	6147	12	16-Jun-2023
Humidity & Temperature meter	R.S Components	1364	6150	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	SSU003	6191	12	15-Jul-2023



Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Expiry Date
8GHz Highpass Filter	Wainwright	WHKX 7150 8000 18000 50SS	6194	12	15-Jul-2023
8GHz Highpass Filter	Wainwright	WHKX 7150 8000 18000 50SS	6195	12	15-Jul-2023
Pre-Amp 8 - 18 GHz	Wright Technologies	APS06 0061	6198	12	19-Jul-2023
Pre-Amp 8 - 18 GHz	Wright Technologies	APS06 0061	6199	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	6214	12	25-Jul-2023
Cable (SMA to SMA 20cm)	TUV SUD	MH-FH 8-18	6215	12	25-Jul-2023

Table 359



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

A2779, S/N: G9H0GW0F4V - Modification State 0

2.7.3 Date of Test

26-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 (< -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

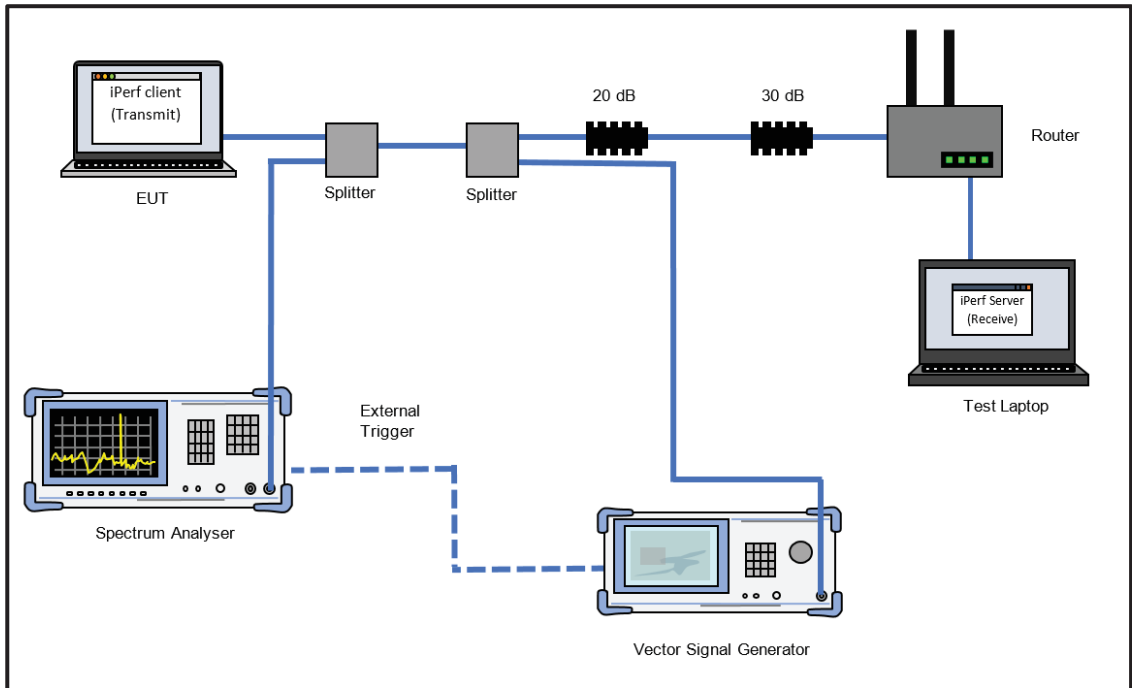


Figure 132 - Test Equipment Setup Diagram

2.7.6 Environmental Conditions

Ambient Temperature	23.3 °C
Relative Humidity	49.6 %



2.7.7 Test Results

6 GHz WLAN

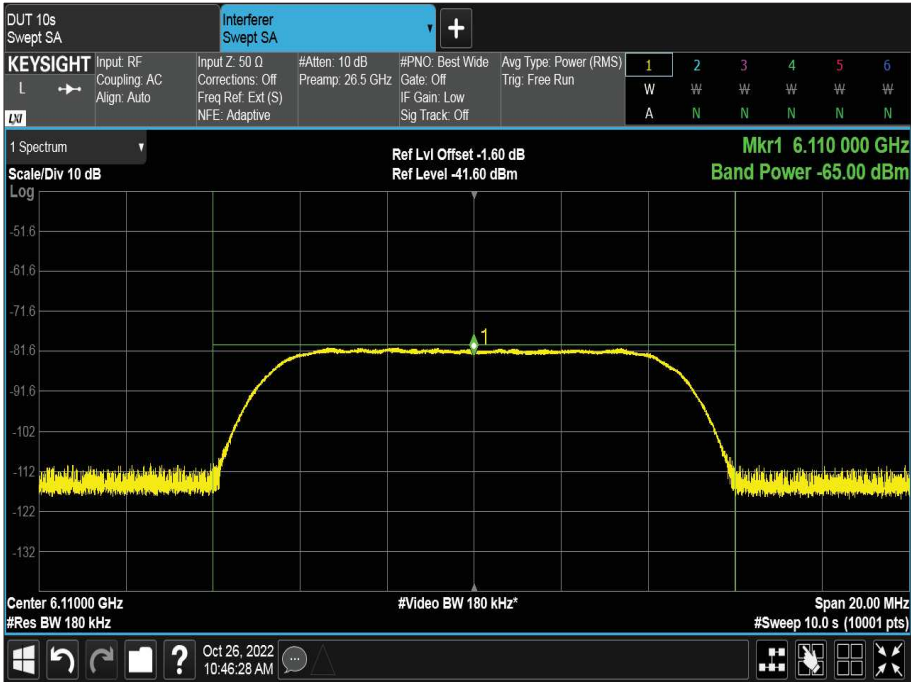


Figure 133 - Example of AWGN Signal



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)	-76.3	-77.3	-77.9
Minimum Antenna Gain (dBi)	4.34	4.34	4.34
Adjusted Power (dBm)	-80.64	-81.64	-82.24
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 360 - U-NII-5, Minimum Bandwidth

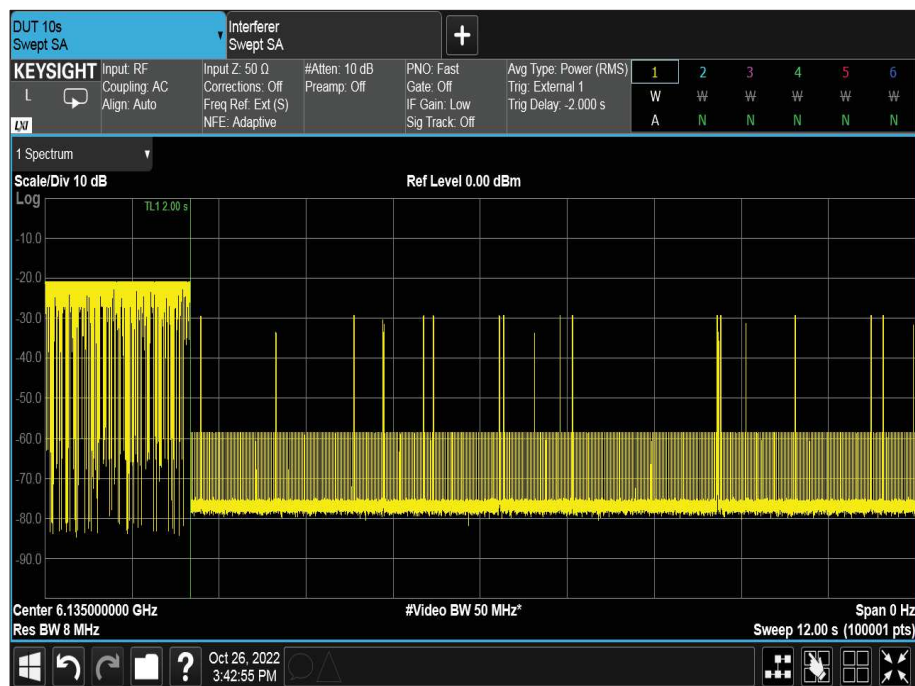


Figure 134 - U-NII-5, Minimum Bandwidth



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)	-76.7	-77.9	-78.5
Minimum Antenna Gain (dBi)	4.34	4.34	4.34
Adjusted Power (dBm)	-81.04	-82.24	-82.84
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 361 - U-NII-5, Maximum Bandwidth (AWGN Low)

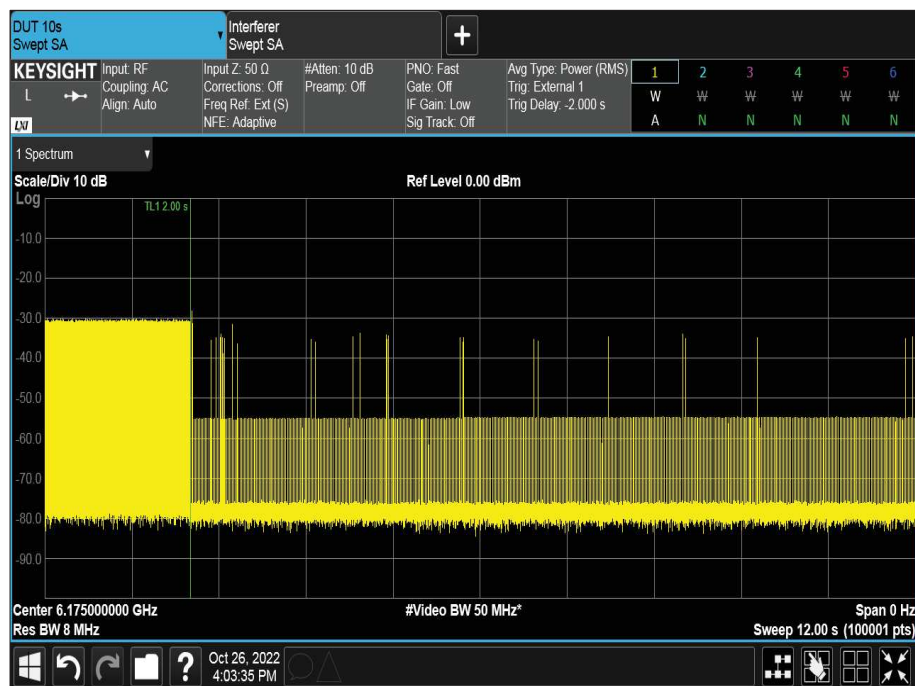


Figure 135 - U-NII-5, Minimum Bandwidth (AWGN Low)



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)	-77.0	-77.6	-78.3
Minimum Antenna Gain (dBi)	4.34	4.34	4.34
Adjusted Power (dBm)	-81.34	-81.94	-82.64
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 362 - U-NII-5, Maximum Bandwidth (AWGN Mid)

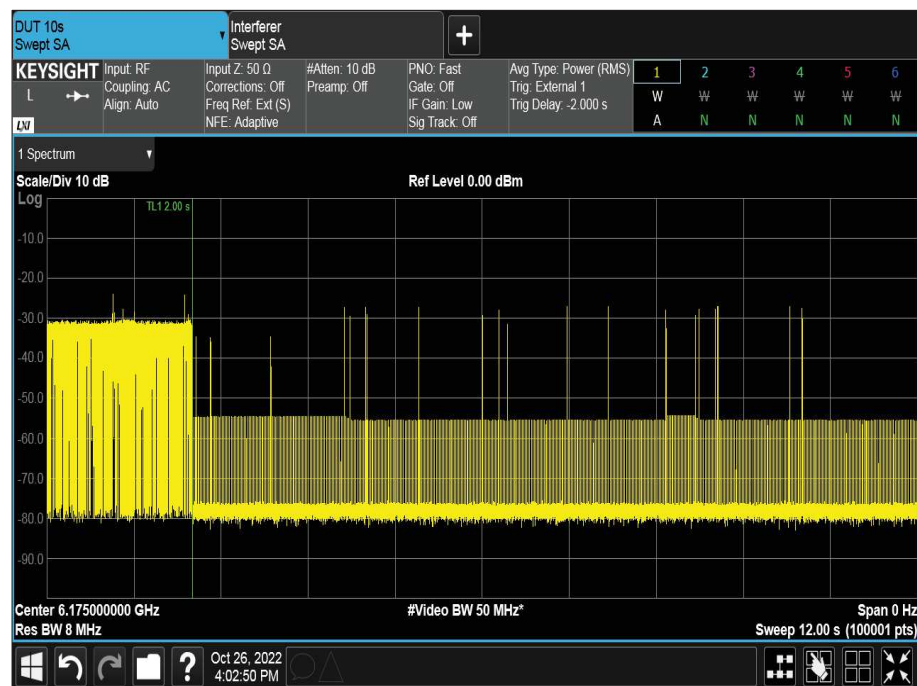


Figure 136 - U-NII-5, Minimum Bandwidth (AWGN Mid)



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)	-72.3	-73.3	-73.9
Minimum Antenna Gain (dBi)	4.34	4.34	4.34
Adjusted Power (dBm)	-76.64	-77.64	-78.24
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 363 - U-NII-5, Maximum Bandwidth (AWGN High)

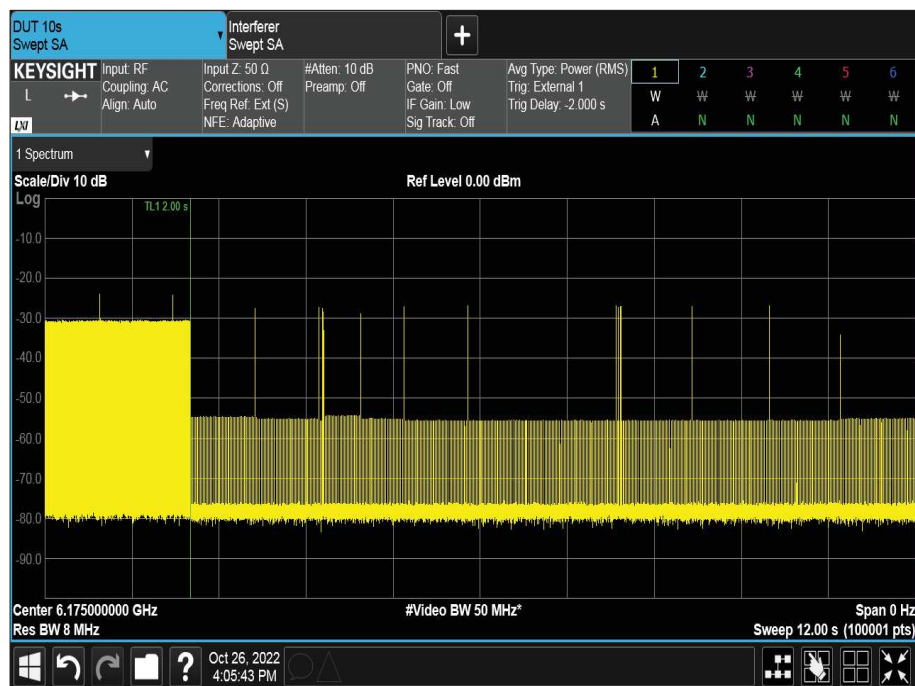


Figure 137 - U-NII-5, Minimum Bandwidth (AWGN High)



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)	-75.1	-77.1	-79.1
Minimum Antenna Gain (dBi)	4.06	4.06	4.06
Adjusted Power (dBm)	-79.16	-81.16	-83.16
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 364 - U-NII-6, Minimum Bandwidth

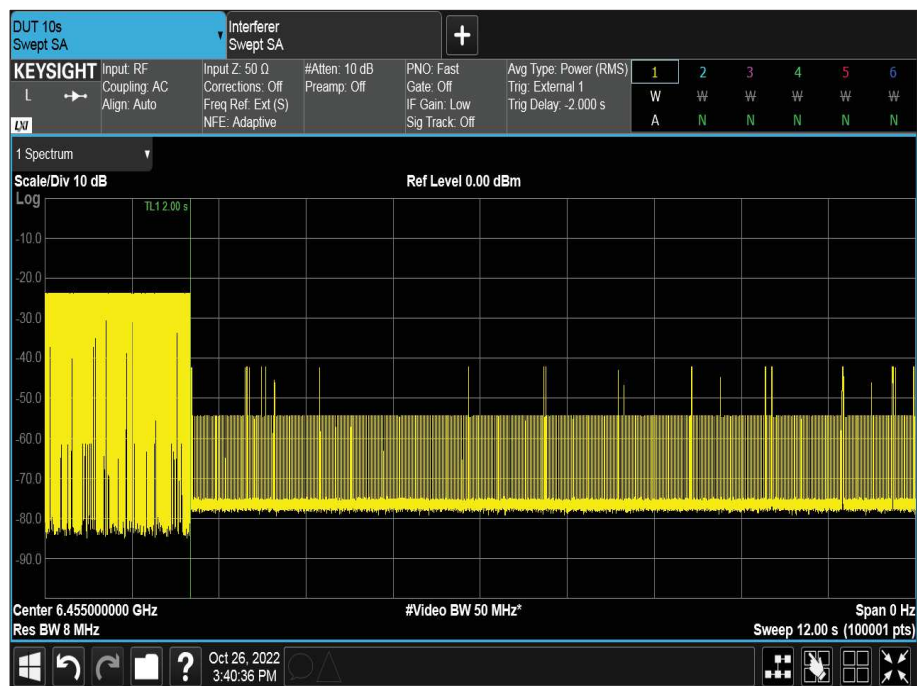


Figure 138 - U-NII-6, Minimum Bandwidth



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)	-75.5	-77.1	-78.3
Minimum Antenna Gain (dBi)	4.06	4.06	4.06
Adjusted Power (dBm)	-79.56	-81.16	-82.36
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 365 - U-NII-6, Maximum Bandwidth (AWGN Low)

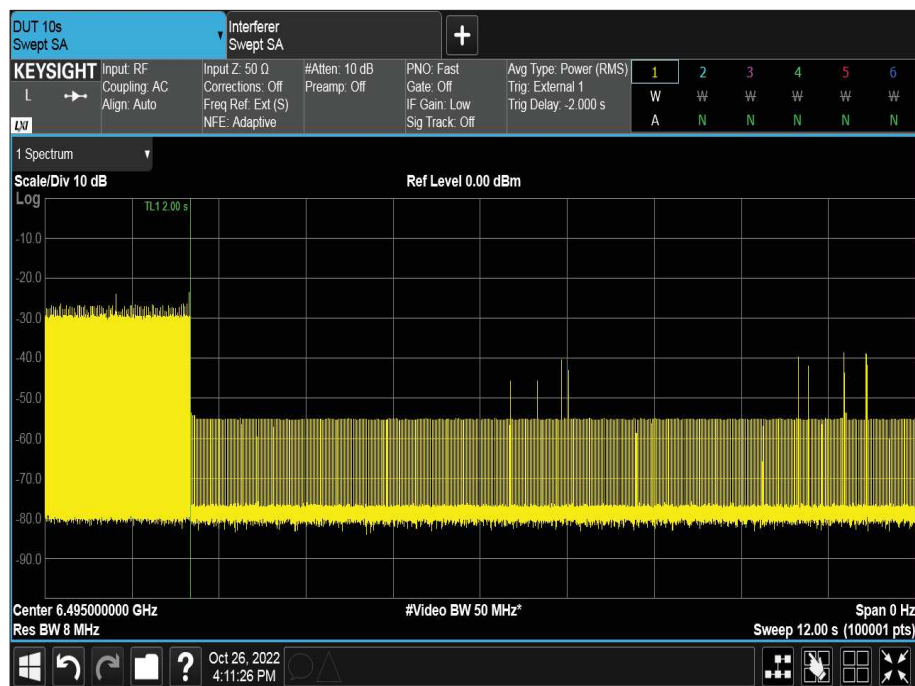


Figure 139 - U-NII-6, Minimum Bandwidth (AWGN Low)



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)	-77.6	-78.5	-79.4
Minimum Antenna Gain (dBi)	4.06	4.06	4.06
Adjusted Power (dBm)	-81.66	-82.56	-83.46
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 366 - U-NII-6, Maximum Bandwidth (AWGN Mid)

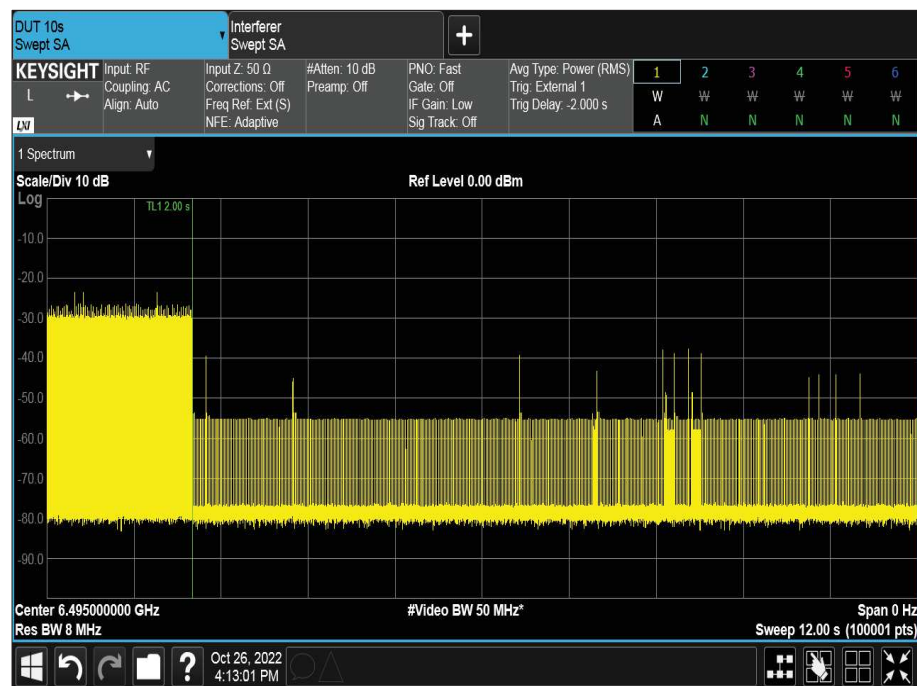


Figure 140 - - U-NII-6, Minimum Bandwidth (AWGN Mid)



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)	-73.9	-75.0	-75.7
Minimum Antenna Gain (dBi)	4.06	4.06	4.06
Adjusted Power (dBm)	-77.96	-79.06	-79.76
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 367 - U-NII-6, Maximum Bandwidth (AWGN High)

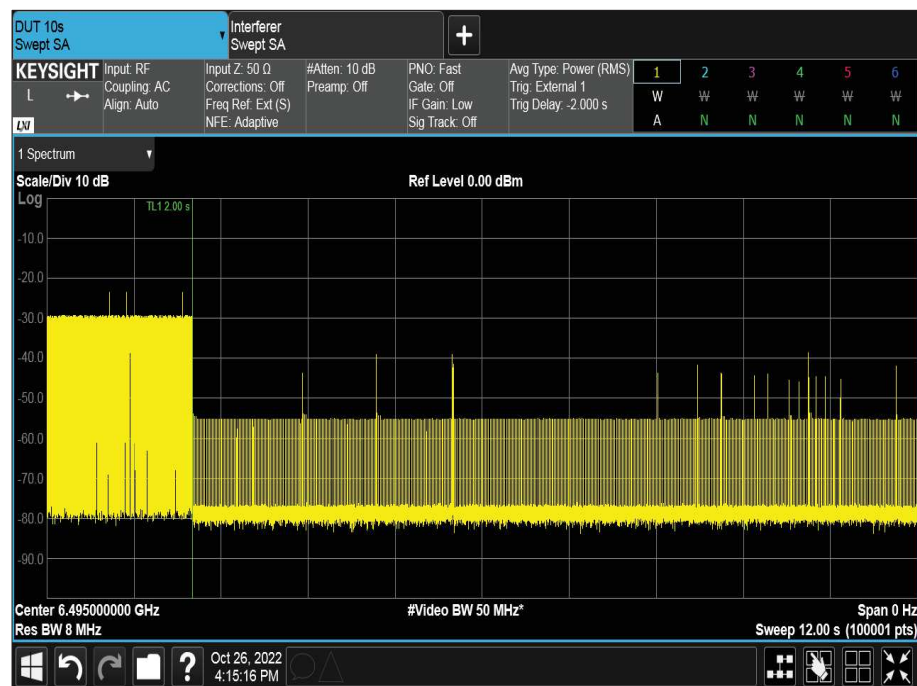


Figure 141 - U-NII-6, Minimum Bandwidth (AWGN High)



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)	-76.6	-77.7	-78.8
Minimum Antenna Gain (dBi)	4.10	4.10	4.10
Adjusted Power (dBm)	-80.70	-81.80	-82.90
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 368 - U-NII-7, Minimum Bandwidth

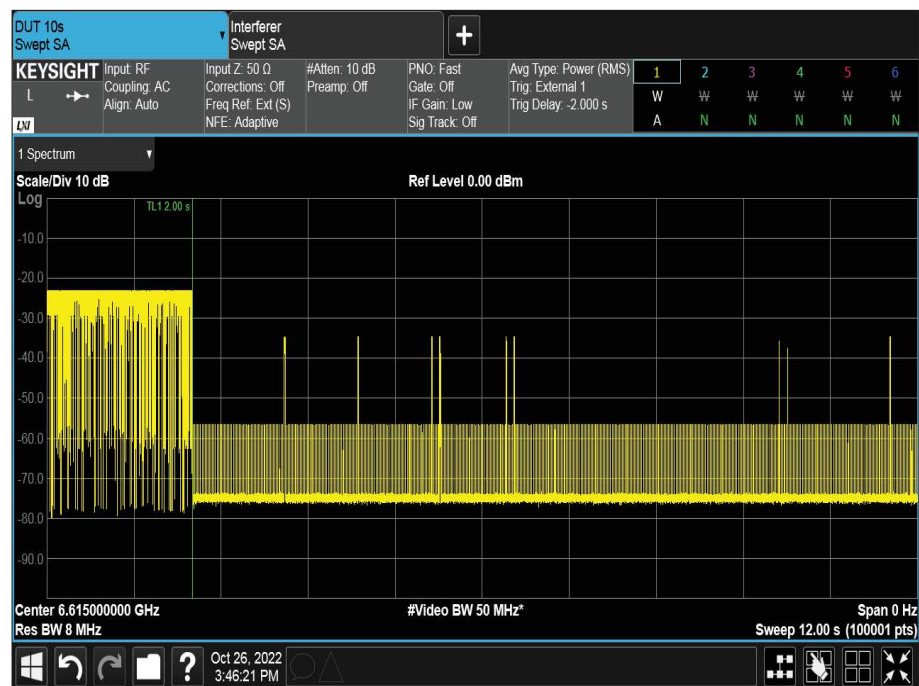


Figure 142 - U-NII-7, Minimum Bandwidth



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)	-76.0	-76.7	-78.0
Minimum Antenna Gain (dBi)	4.10	4.10	4.10
Adjusted Power (dBm)	-80.10	-80.80	-82.1
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 369 - U-NII-7, Maximum Bandwidth (AWGN Low)

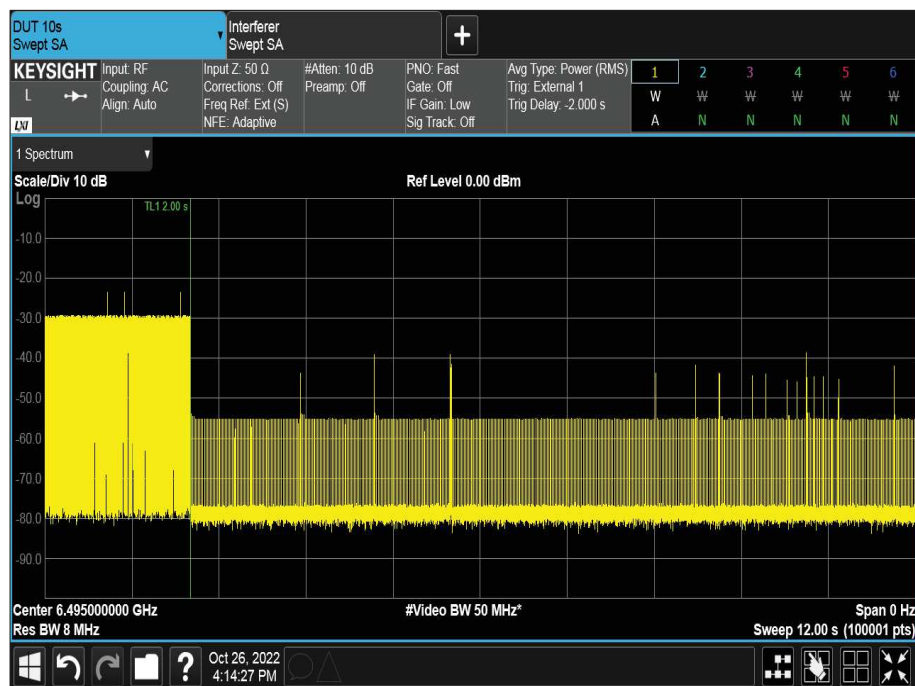


Figure 143 - U-NII-7, Minimum Bandwidth (AWGN Low)



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)	-75.6	-76.9	-78.9
Minimum Antenna Gain (dBi)	4.10	4.10	4.10
Adjusted Power (dBm)	-79.70	-81.00	-83.00
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 370 - U-NII-7, Maximum Bandwidth (AWGN Mid)

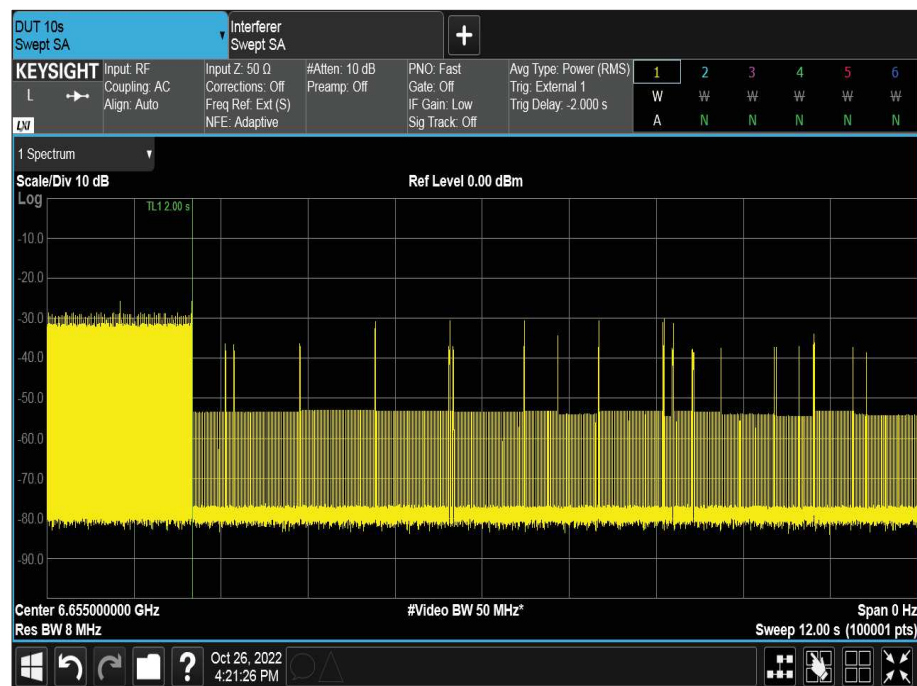


Figure 144 - U-NII-7, Minimum Bandwidth (AWGN Mid)



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)	-69.5	-71.0	-72.6
Minimum Antenna Gain (dBi)	4.10	4.10	4.10
Adjusted Power (dBm)	-73.60	-75.10	-76.70
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 371 - U-NII-7, Maximum Bandwidth (AWGN High)

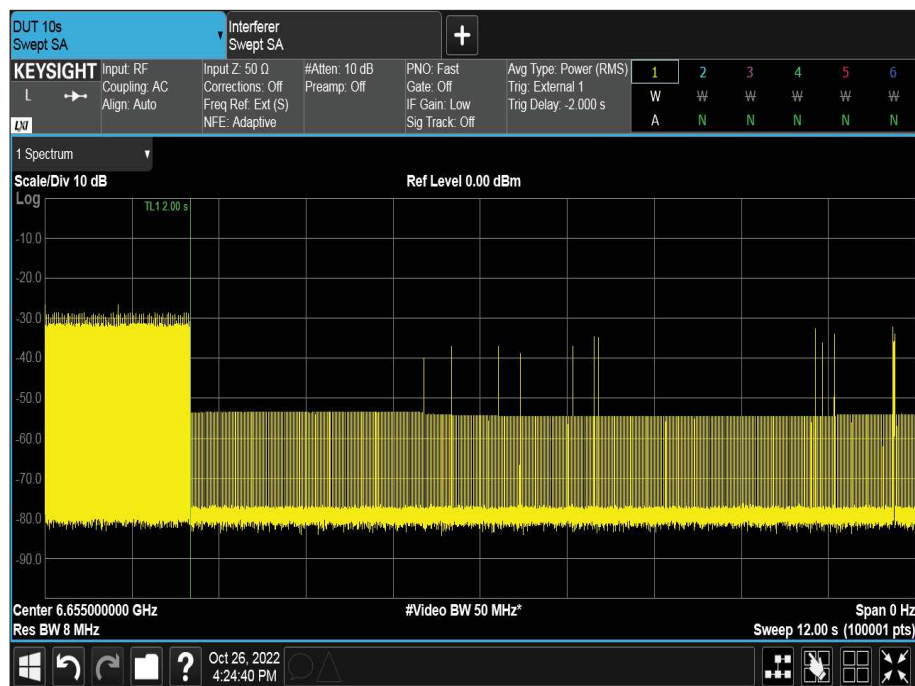


Figure 145 - U-NII-7, Minimum Bandwidth (AWGN High)



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)	-76.4	-77.9	-79.3
Minimum Antenna Gain (dBi)	1.78	1.78	1.78
Adjusted Power (dBm)	-78.18	-79.68	-81.08
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 372 - U-NII-8, Minimum Bandwidth

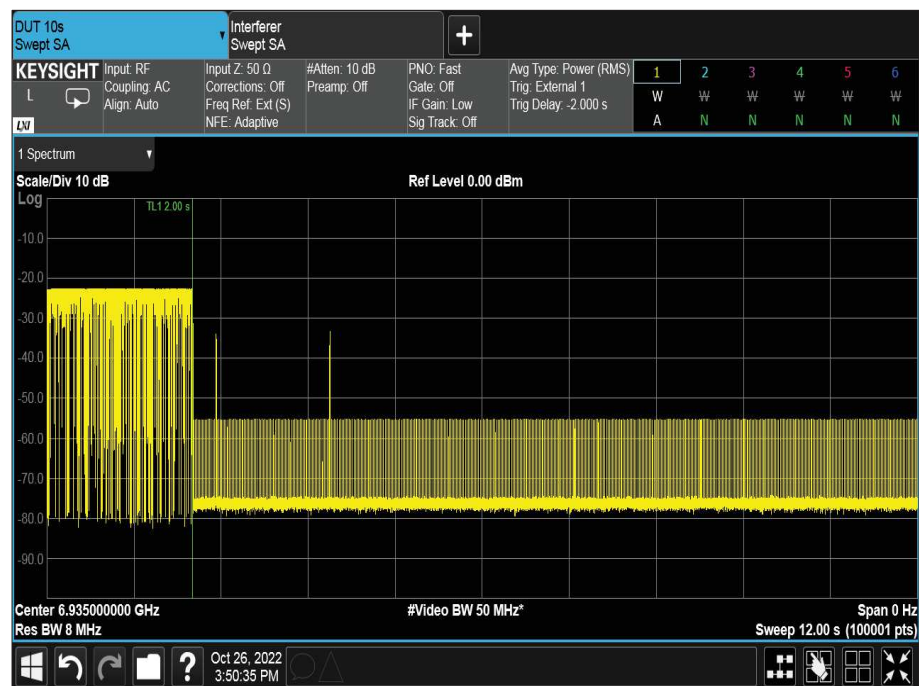


Figure 146 - U-NII-8, Minimum Bandwidth

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)	-76.8	-77.4	-78.2
Minimum Antenna Gain (dBi)	1.78	1.78	1.78
Adjusted Power (dBm)	-78.58	-79.18	-79.98
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 373 - U-NII-8, Maximum Bandwidth (AWGN Low)

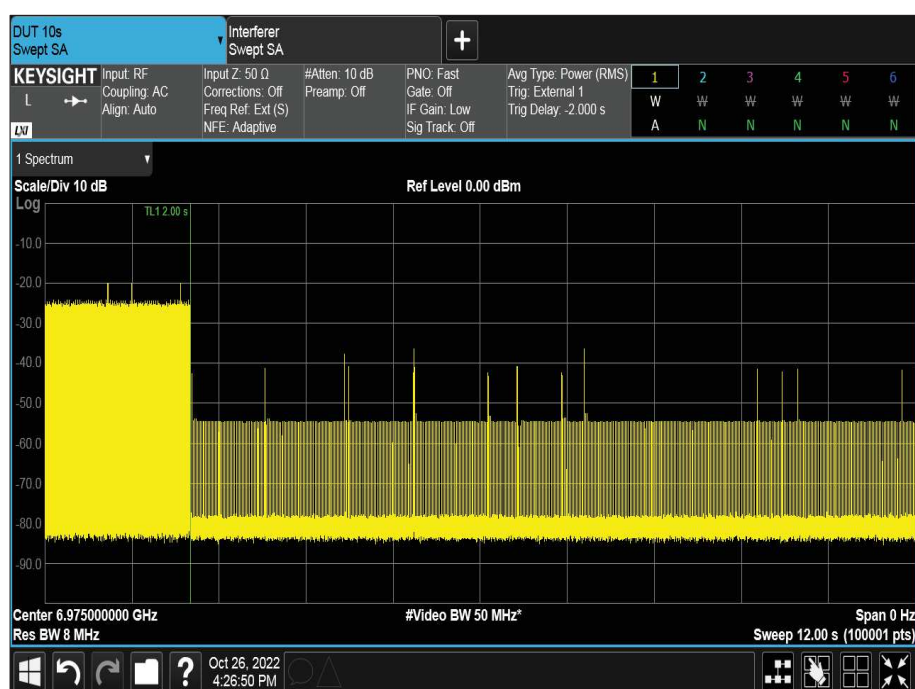


Figure 147 - U-NII-8, Minimum Bandwidth (AWGN Low)



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)	-78.4	-79.5	-81.4
Minimum Antenna Gain (dBi)	1.78	1.78	1.78
Adjusted Power (dBm)	-80.18	-81.28	-83.18
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 374 - U-NII-8, Maximum Bandwidth (AWGN Mid)

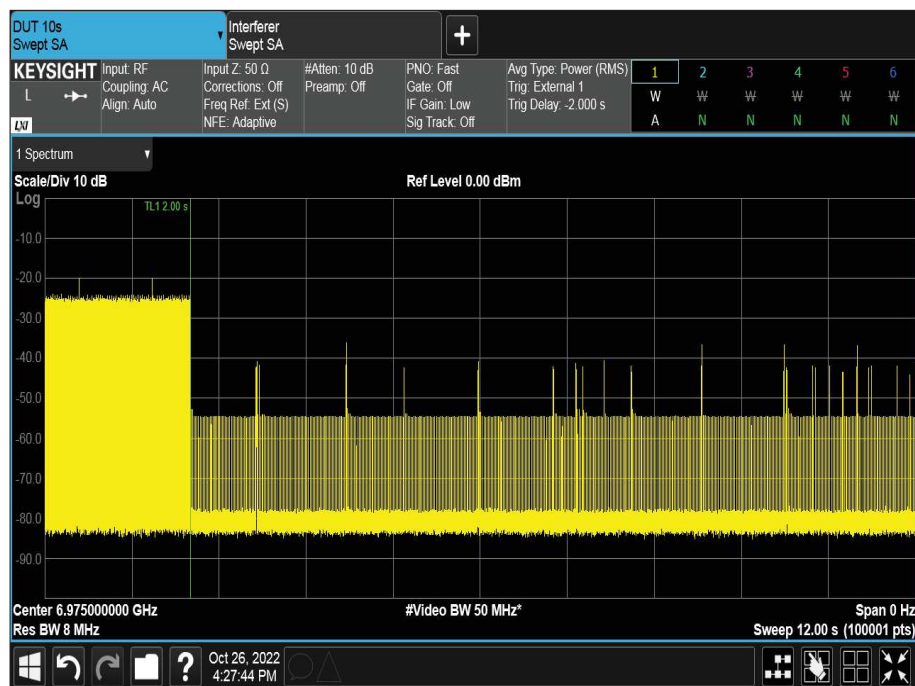


Figure 148 - U-NII-8, Minimum Bandwidth (AWGN Mid)



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)	-74.6	-75.2	-76.8
Minimum Antenna Gain (dBi)	1.78	1.78	1.78
Adjusted Power (dBm)	-76.38	-76.98	-78.58
Detection Limit (dBm)	-62.0	-62.0	-62.0
EUT Tx Status (OFF/Minimal/ON)	ON	Minimal	OFF

Table 375 - U-NII-8, Maximum Bandwidth (AWGN High)

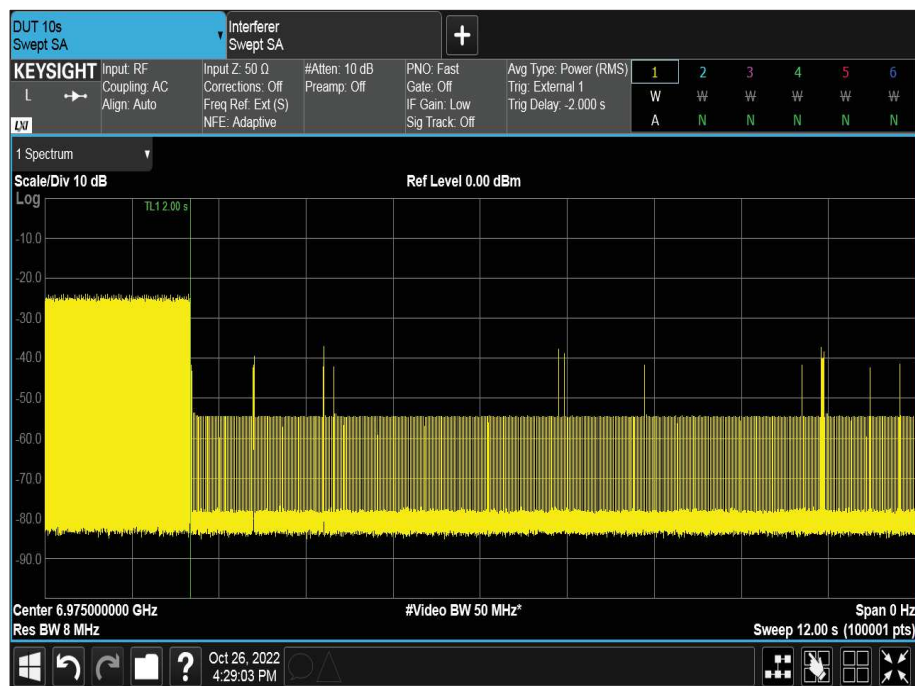


Figure 149 - U-NII-8, Minimum Bandwidth (AWGN High)



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
Hygrometer	Rotronic	I-1000	3220	12	05-Nov-2022
Frequency Standard	Spectracom	SecureSync 1200-0408-0601	4393	6	01-Feb-2023
EXA	Keysight Technologies	N9010B	4969	24	07-Feb-2024
Cable (40 GHz)	Rosenberger	LU1-001-2000	5020	12	27-Jan-2023
Cable 2.92m	Junkosha	MWX241-01000KMS	5412	12	24-Jul-2023
2.92mm 1m cable	Junkosha	MWX211/B	5415	12	24-Jul-2023
3.5 mm 1m Cable	Junkosha	MWX221-01000DMS	5419	12	24-Jul-2023
Attenuator 5W 20dB DC-18GHz	Aaren	AT40A-4041-D18-20	5498	12	16-May-2023
Attenuator 5W 30dB DC-18GHz	Aaren	AT40A-4041-D18-30	5504	12	21-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
Vector Signal Generator	Rohde & Schwarz	SMM100A	5915	36	18-Feb-2025
WiFi 6E Tri-Band Gaming Router	Asus	GT-AXE110000	5926	-	TU

Table 376

TU - Traceability Unscheduled



3 Measurement Uncertainty

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

Test Name	Measurement Uncertainty
Emission Bandwidth	± 279.05 kHz
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 377

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.