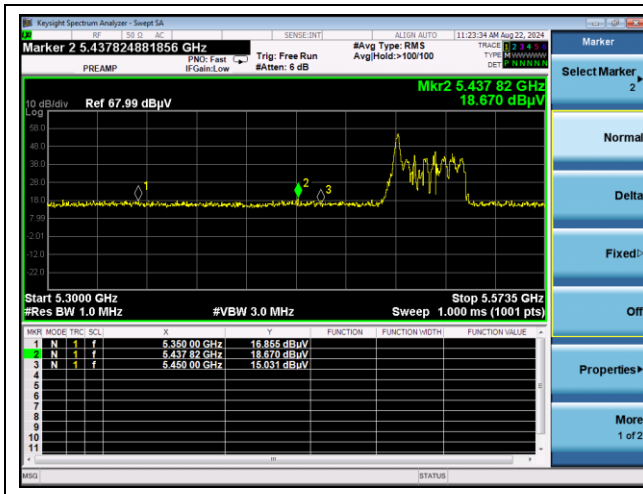
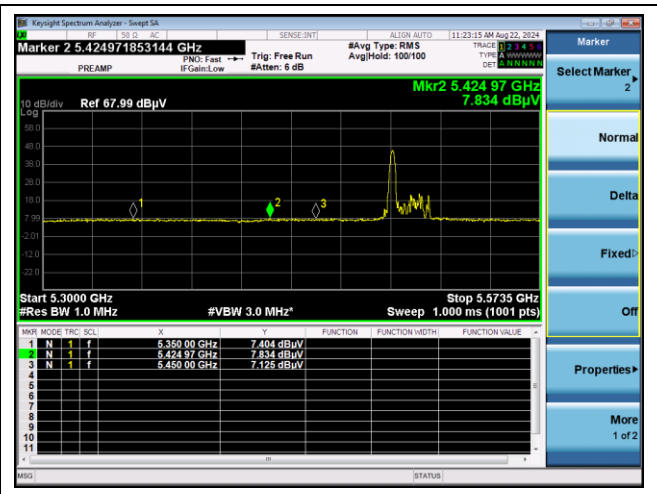


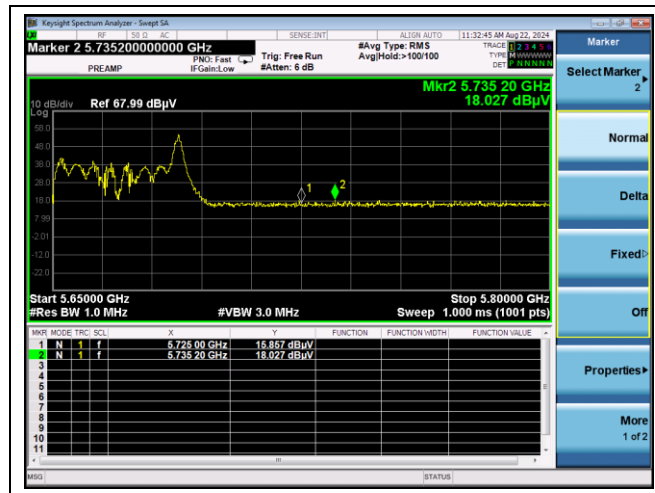
Low channel Band edge (Peak) - Band 2C



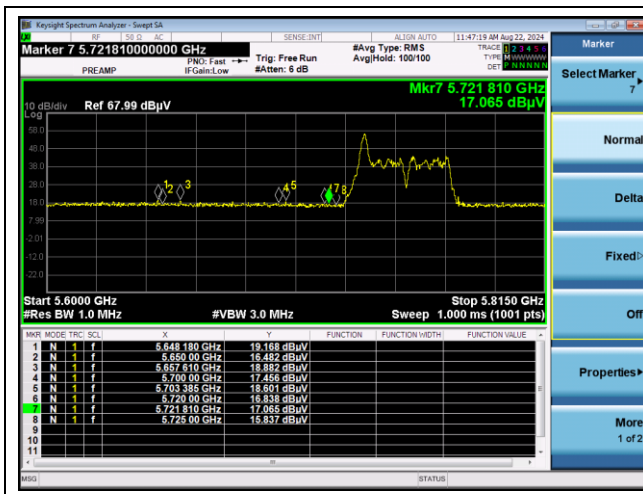
Low channel Band edge (Average) - Band 2C



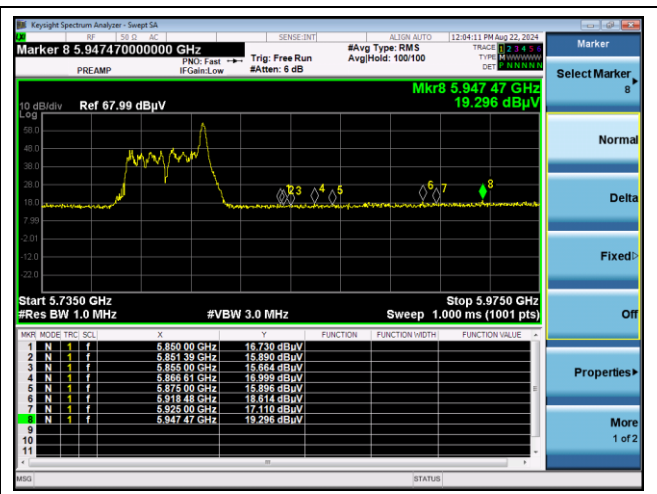
High channel Band edge (Peak) - Band 2C



Low channel Band edge (Peak) - Band 3

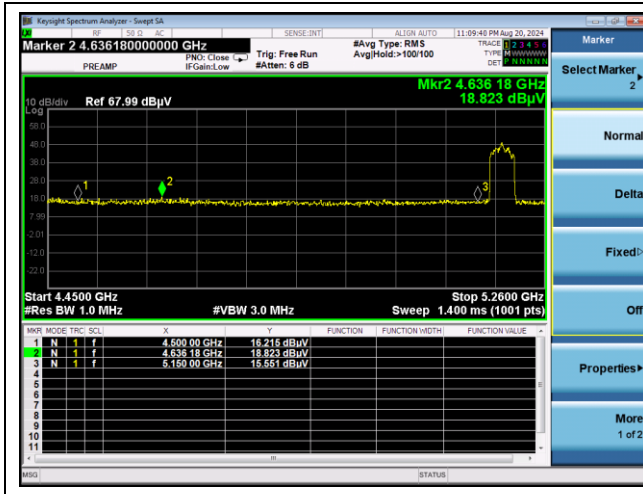


High channel Band edge (Peak) - Band 3

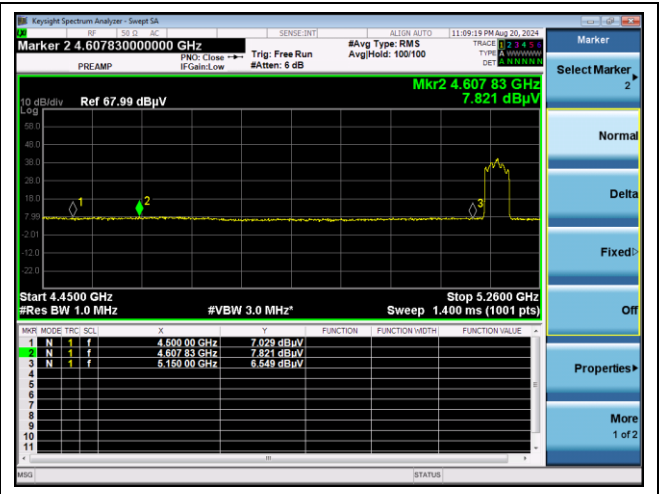


11ax_HE40_SU

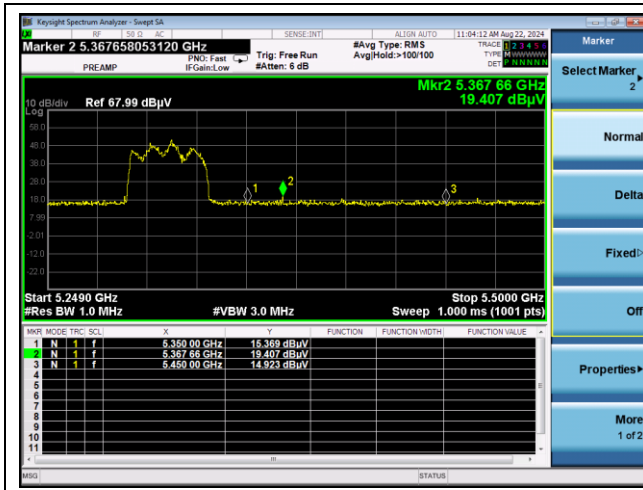
Low channel Band edge (Peak) - Band 1



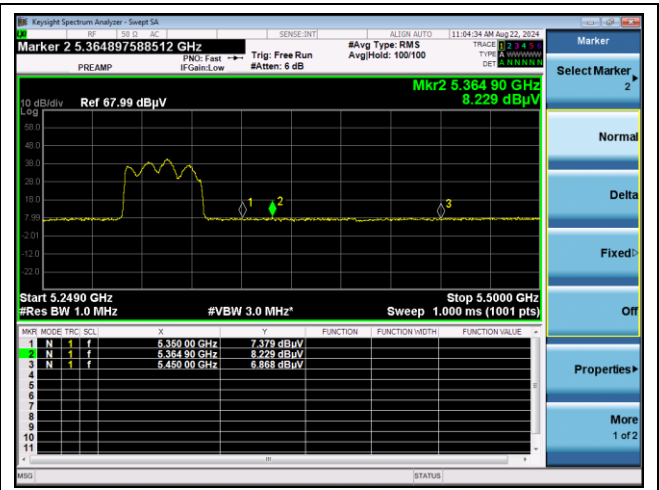
Low channel Band edge (Average) - Band 1



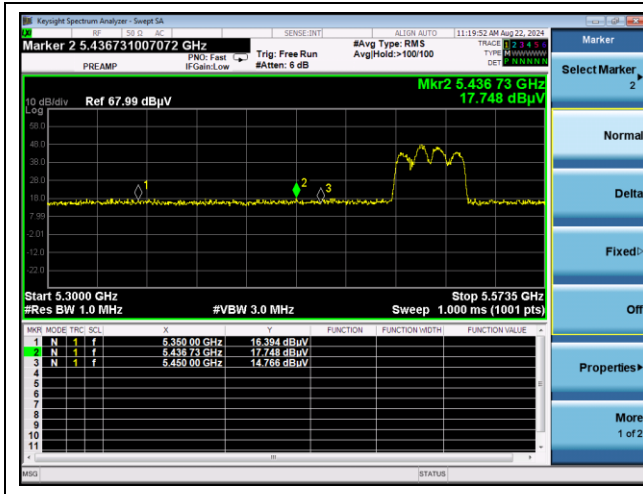
High channel Band edge (Peak) - Band 2A



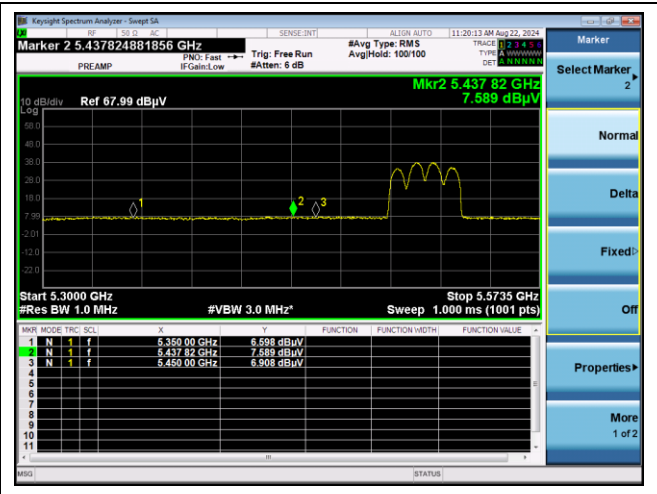
High channel Band edge (Average) - Band 2A



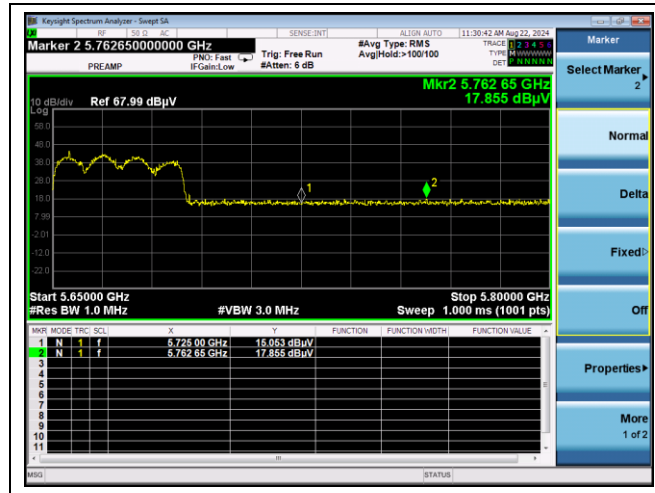
Low channel Band edge (Peak) - Band 2C



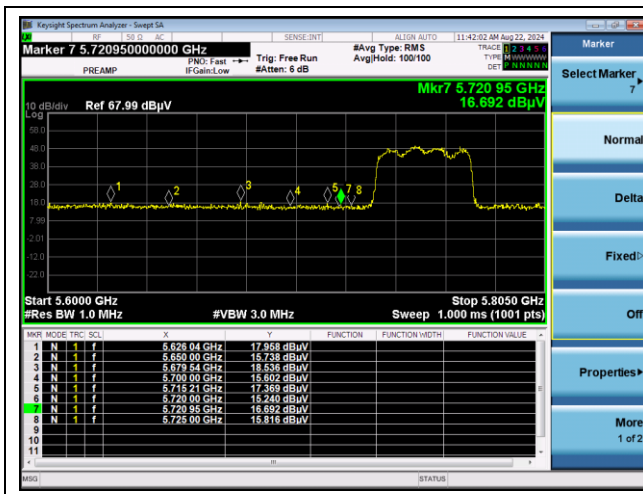
Low channel Band edge (Average) - Band 2C



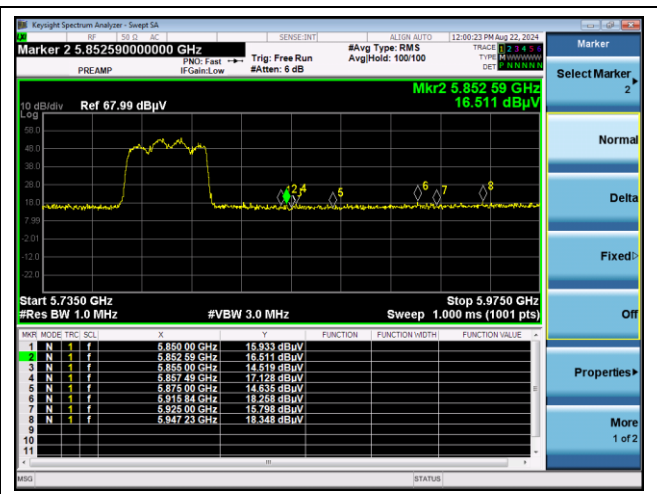
High channel Band edge (Peak) - Band 2C



Low channel Band edge (Peak) - Band 3

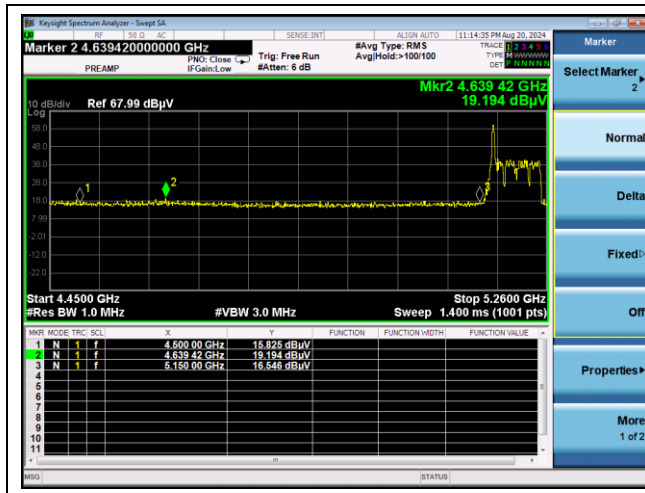


High channel Band edge (Peak) - Band 3

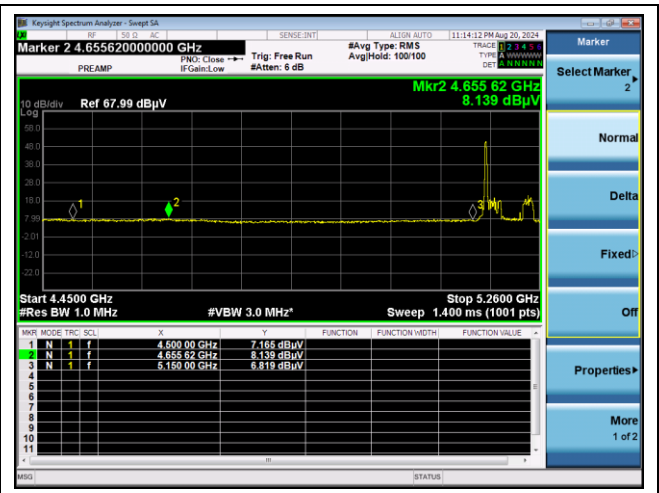


11ax_HE80_26T

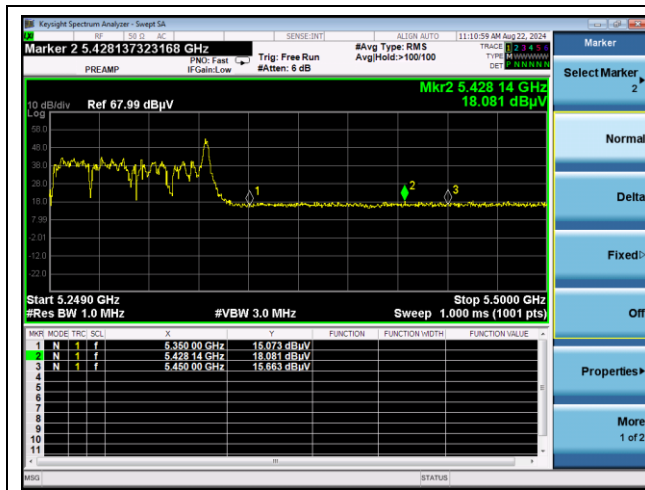
Middle channel Band edge (Peak) - Band 1



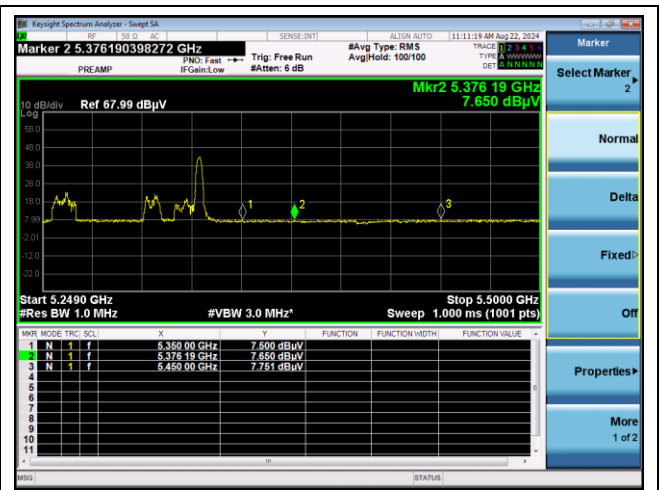
Middle channel Band edge (Average) - Band 1



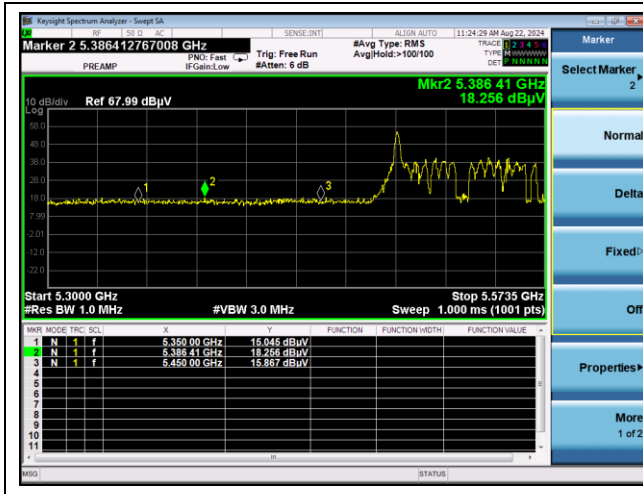
Middle channel Band edge (Peak) - Band 2A



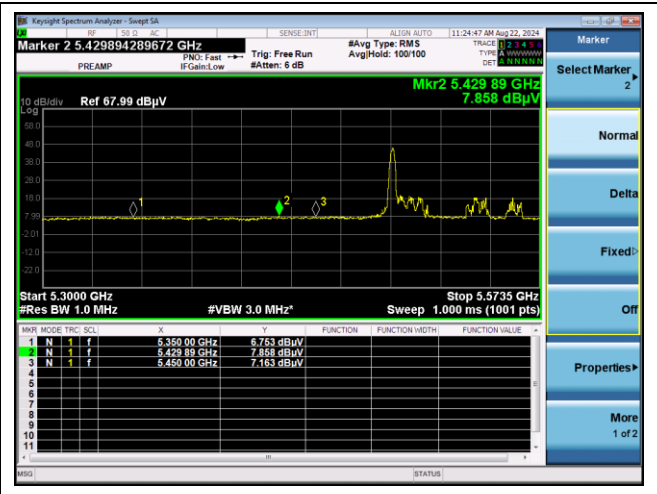
Middle channel Band edge (Average) - Band 2A



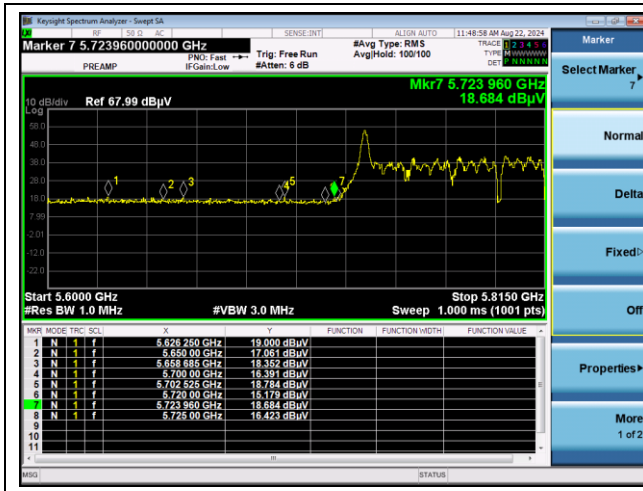
Low channel Band edge (Peak) - Band 2C



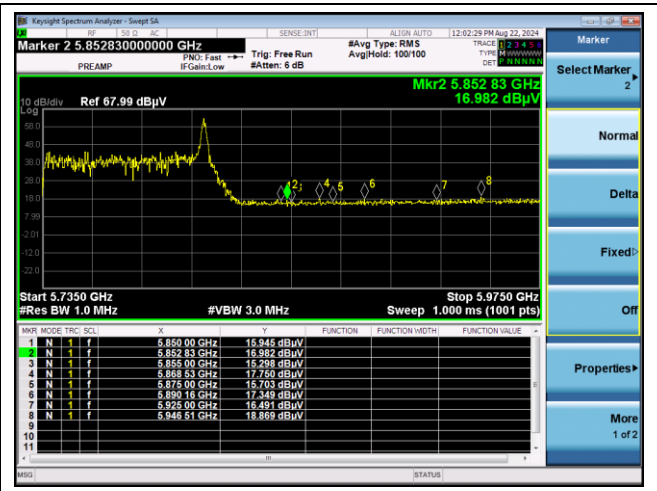
Low channel Band edge (Average) - Band 2C



Middle channel Band edge (Peak) - Band 3

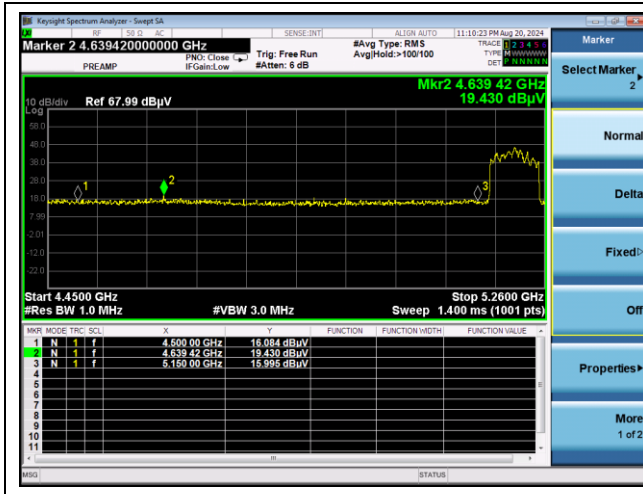


Middle channel Band edge (Peak) - Band 3

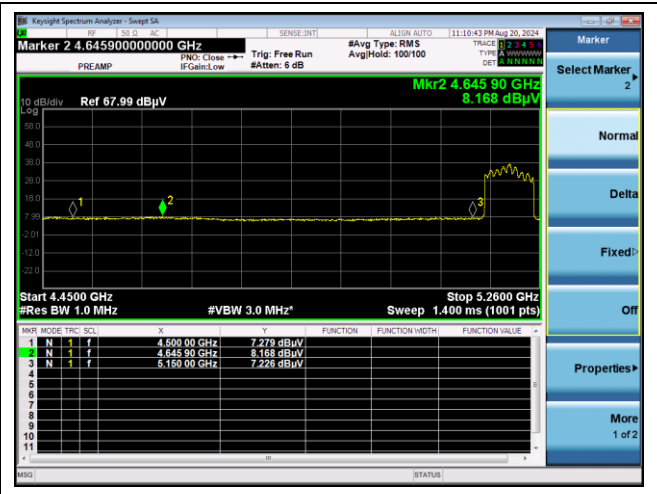


11ax_HE80_SU

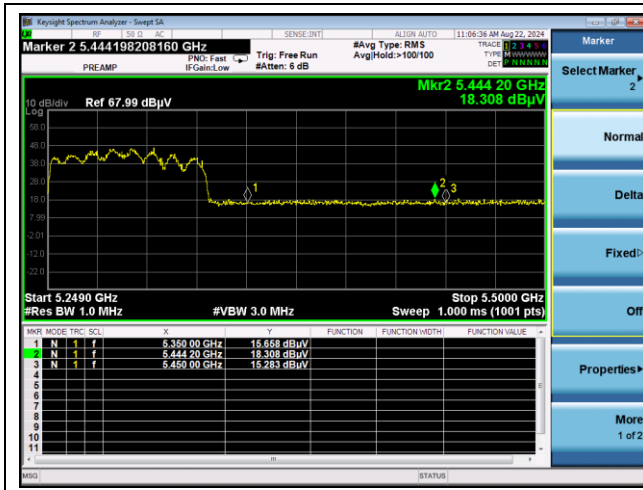
Middle channel Band edge (Peak) - Band 1



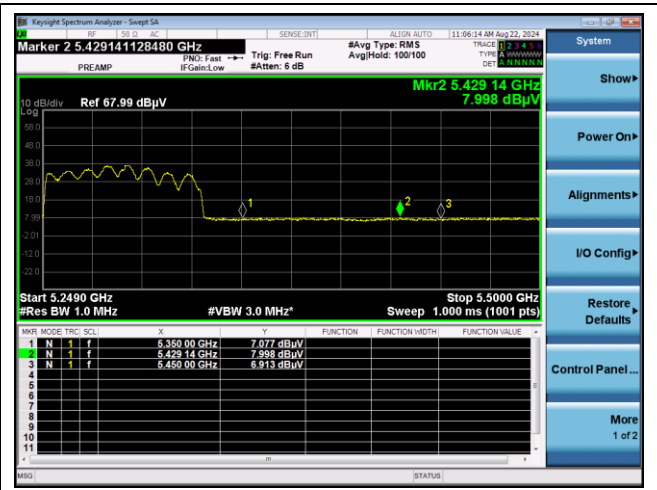
Middle channel Band edge (Average) - Band 1



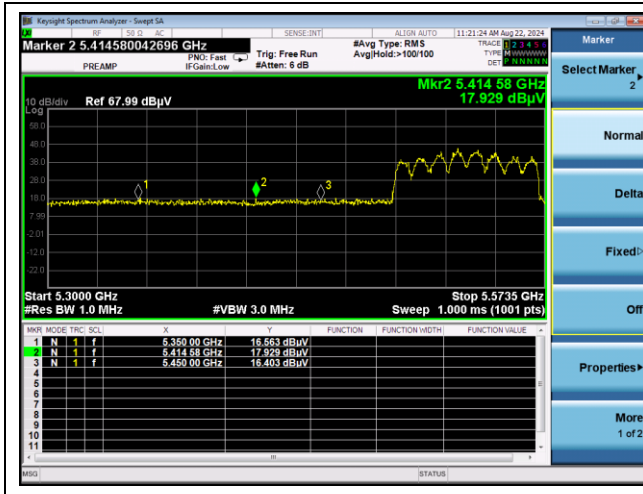
Middle channel Band edge (Peak) - Band 2A



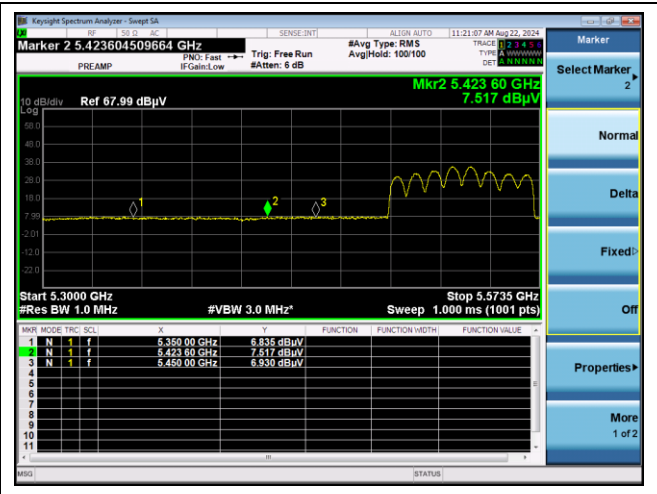
Middle channel Band edge (Average) - Band 2A



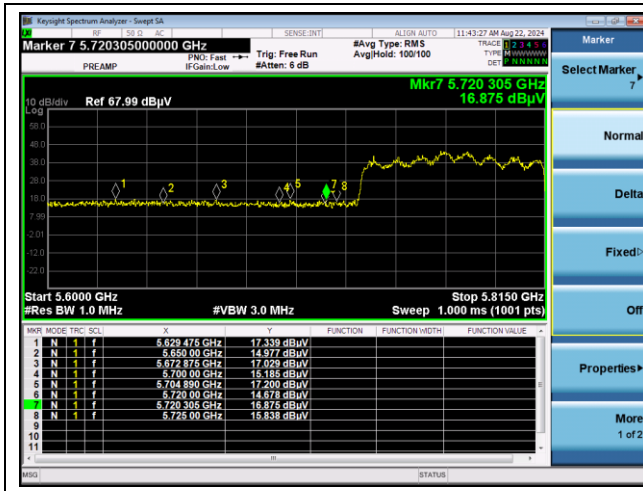
Low channel Band edge (Peak) - Band 2C



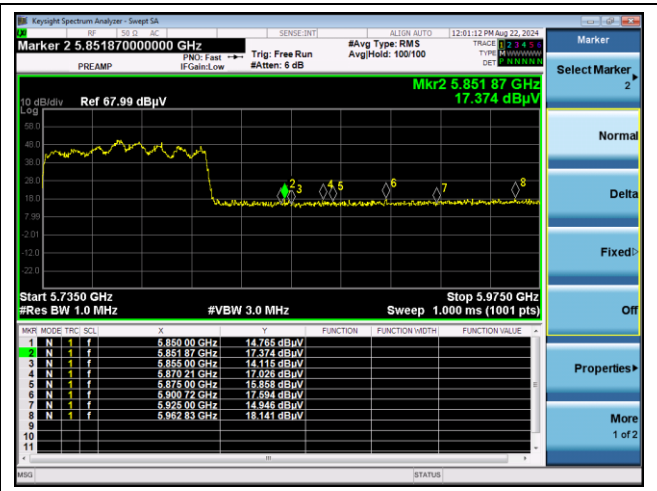
Low channel Band edge (Average) - Band 2C



Middle channel Band edge (Peak) - Band 3

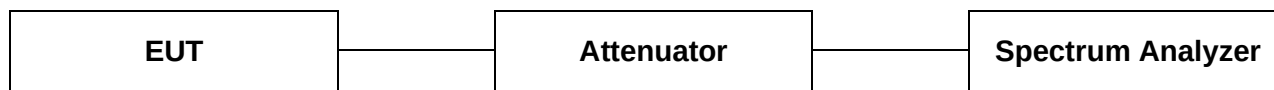


Middle channel Band edge (Peak) - Band 3



3. 26 dB Bandwidth & 99 % Bandwidth

3.1. Test Setup



3.2. Limit

None; for reporting purpose only.

3.3. Test Procedure

3.3.1. 26 dB Bandwidth

1. This measurement settings are specified in section II.C.1 of KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
2. Set RBW = approximately 1 % of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1 %.

Remark;

In case of band crossing channels 138, 142 and 144, the measurement is complied with section III.A of KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

3.3.2. 99 % Bandwidth

3.3.2.1 FCC

1. This measurement settings are specified in section II.D of KDB 789033 D02 General UNII Test

Procedures New Rules v02r01.

2. Set center frequency to the nominal EUT channel center frequency.
3. Set span = 1.5 times to 5.0 times the OBW.
4. Set RBW = 1 % to 5 % of the OBW.
5. Set VBW $\geq 3 \times$ RBW.
6. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
7. Use the 99 % power bandwidth function of the instrument (if available).
8. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99 % occupied bandwidth is the difference between these two frequencies.

In the result,

- DFS requirements are not applicable in the 5 150 MHz ~ 5 250 MHz.

3.3.2.2 IC

- The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.

- The detector of the spectrum analyzer shall be set to "Sample". However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or "Max Hold") may be necessary to determine the occupied / x dB bandwidth if the device is not transmitting continuously.

- The resolution bandwidth (RBW) shall be in the range of 1 % to 5 % of the actual occupied / x dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value. Video averaging is not permitted.

Note: It may be necessary to repeat the measurement a few times until the RBW and VBW are in compliance with the above requirement.

For the 99 % emission bandwidth, the trace data points are recovered and directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached, and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded. The difference between the two recorded frequencies is the occupied bandwidth (or the 99 % emission bandwidth).

3.4. Test Result

Ambient temperature : (23 ± 1) °C
Relative humidity : 47 % R.H.

-SISO

Test mode: 11ax_HE20_26T

Band	Frequency (MHz)	Ch.	26 dB Bandwidth (MHz)			99 % Bandwidth (MHz)		
			Ru Index			Ru Index		
			Low	Middle	High	Low	Middle	High
U-NII 1	5 180	36	20.280	18.641	21.119	18.741	17.463	18.941
	5 220	44	20.839	19.081	20.859	18.821	17.383	18.941
	5 240	48	20.559	18.841	20.480	18.821	17.423	18.981
U-NII 2A	5 260	52	20.619	19.021	20.819	18.861	17.423	18.941
	5 300	60	20.679	19.041	20.599	18.821	17.423	18.981
	5 320	64	20.919	18.941	20.739	18.821	17.423	19.021
U-NII 2C	5 500	100	20.739	18.961	20.779	18.981	17.502	19.101
	5 580	116	20.899	18.921	20.999	18.901	17.542	19.021
	5 700	140	20.679	18.981	20.999	18.861	17.383	18.941
U-NII 3	5 745	149	20.480	19.061	21.059	18.901	17.502	19.101
	5 785	157	20.699	19.241	20.959	18.821	17.502	19.021
	5 825	165	18.981	25.984	32.233	16.823	21.623	29.535

Test mode: 11ax_HE20_SU

Band	Frequency (MHz)	Ch.	26 dB Bandwidth (MHz)			99 % Bandwidth (MHz)		
			Ru Index			Ru Index		
			Low	Middle	High	Low	Middle	High
U-NII 1	5 180	36	-	20.819	-	-	18.861	-
	5 220	44	-	20.799	-	-	18.901	-
	5 240	48	-	20.919	-	-	18.861	-
U-NII 2A	5 260	52	-	20.879	-	-	18.861	-
	5 300	60	-	20.839	-	-	18.861	-
	5 320	64	-	20.979	-	-	18.861	-
U-NII 2C	5 500	100	-	20.939	-	-	18.861	-
	5 580	116	-	20.919	-	-	18.861	-
	5 700	140	-	20.799	-	-	18.861	-
U-NII 3	5 745	149	-	20.559	-	-	18.861	-
	5 785	157	-	20.939	-	-	18.861	-
	5 825	165	-	29.560	-	-	23.616	-

Test mode: 11ax_HE40_26T

Band	Frequency (MHz)	Ch.	26 dB Bandwidth (MHz)			99 % Bandwidth (MHz)		
			Ru Index			Ru Index		
			Low	Middle	High	Low	Middle	High
U-NII 1	5 190	38	40.919	38.362	40.759	38.921	36.843	39.001
	5 230	46	40.759	38.282	40.719	39.161	37.083	38.521
U-NII 2A	5 270	54	40.839	38.322	40.839	39.481	37.243	39.560
	5 310	62	40.679	38.322	41.039	39.401	37.323	39.640
U-NII 2C	5 510	102	40.759	38.242	40.799	38.681	36.843	38.921
	5 550	110	41.039	38.242	40.959	38.681	36.603	40.759
	5 670	134	40.759	38.202	40.719	39.321	36.603	39.321
U-NII 3	5 755	151	41.119	38.122	40.839	38.841	36.843	39.481
	5 795	159	40.959	38.322	40.799	39.081	37.083	39.640

Test mode: 11ax_HE40_SU

Band	Frequency (MHz)	Ch.	26 dB Bandwidth (MHz)			99 % Bandwidth (MHz)		
			Ru Index			Ru Index		
			Low	Middle	High	Low	Middle	High
U-NII 1	5 190	38	-	40.679	-	-	37.642	-
	5 230	46	-	40.599	-	-	37.562	-
U-NII 2A	5 270	54	-	40.999	-	-	37.642	-
	5 310	62	-	40.759	-	-	37.642	-
U-NII 2C	5 510	102	-	40.520	-	-	37.642	-
	5 550	110	-	40.679	-	-	37.642	-
	5 670	134	-	40.839	-	-	37.562	-
U-NII 3	5 755	151	-	40.400	-	-	37.562	-
	5 795	159	-	40.719	-	-	37.642	-

Test mode: 11ax_HE80_26T

Band	Frequency (MHz)	Ch.	26 dB Bandwidth (MHz)			99 % Bandwidth (MHz)		
			Ru Index			Ru Index		
			Low	Middle	High	Low	Middle	High
U-NII 1	5 210	42	82.637	78.881	82.877	79.600	77.522	81.199
U-NII 2A	5 290	58	84.076	79.121	81.918	85.674	91.429	87.912
U-NII 2C	5 530	106	82.318	78.801	82.717	80.879	76.084	80.240
U-NII 3	5 775	155	83.437	78.961	82.238	77.682	75.445	79.760

Test mode: 11ax_HE80_SU

Band	Frequency (MHz)	Ch.	26 dB Bandwidth (MHz)			99 % Bandwidth (MHz)		
			Ru Index			Ru Index		
			Low	Middle	High	Low	Middle	High
U-NII 1	5 210	42	-	81.758	-	-	77.043	-
U-NII 2A	5 290	58	-	82.158	-	-	76.883	-
U-NII 2C	5 530	106	-	81.838	-	-	76.883	-
U-NII 3	5 775	155	-	82.957	-	-	76.723	-

Band-crossing channels

Mode	Frequency (MHz)	Ch.	Tones	26 dB Bandwidth (MHz)
11ax_HE20	5 720	144	SU	15.260
11ax_HE40	5 710	142	SU	35.200
11ax_HE80	5 690	138	SU	75.639

- MIMO(CDD)

Test mode: 11ax_HE20_26T

Band	Frequency (MHz)	Ch.	26 dB Bandwidth (MHz)					
			Ru Index					
			Low		Middle		High	
			Port 1	Port 2	Port 1	Port 2	Port 1	Port 2
U-NII 1	5 180	36	20.599	20.420	19.121	18.402	20.819	20.320
	5 220	44	20.559	20.420	19.181	18.402	20.919	20.380
	5 240	48	20.440	20.240	19.161	18.482	20.599	20.280
U-NII 2A	5 260	52	20.599	20.340	19.081	18.462	20.959	20.520
	5 300	60	20.380	20.480	18.861	18.542	20.879	20.500
	5 320	64	20.939	20.559	19.021	18.542	20.919	20.340
U-NII 2C	5 500	100	20.779	20.559	19.101	18.442	21.039	20.599
	5 580	116	20.819	20.340	18.821	18.681	20.979	20.460
	5 700	140	20.180	20.420	18.661	18.821	20.819	20.300
U-NII 3	5 745	149	20.839	20.559	18.961	18.561	20.759	20.420
	5 785	157	20.480	20.380	18.721	18.362	20.659	20.540
	5 825	165	17.722	20.240	18.961	26.234	20.879	21.876

Band	Frequency (MHz)	Ch.	99 % Bandwidth (MHz)					
			Ru Index					
			Low		Middle		High	
			Port 1	Port 2	Port 1	Port 2	Port 1	Port 2
U-NII 1	5 180	36	18.781	18.821	17.502	17.343	18.941	18.781
	5 220	44	18.821	18.781	17.502	17.303	19.061	18.821
	5 240	48	18.861	18.821	17.502	17.303	18.981	18.741
U-NII 2A	5 260	52	18.861	18.781	17.502	17.303	19.021	18.861
	5 300	60	18.821	18.821	17.463	17.343	19.061	18.781
	5 320	64	18.901	19.021	17.463	17.343	19.021	18.861
U-NII 2C	5 500	100	18.861	18.741	17.463	17.143	19.061	18.701
	5 580	116	18.821	18.661	17.383	17.303	19.061	18.941
	5 700	140	18.821	18.861	17.463	17.383	19.221	18.821
U-NII 3	5 745	149	19.101	18.981	17.423	17.303	19.061	18.741
	5 785	157	19.021	18.781	17.423	17.343	19.021	18.941
	5 825	165	14.466	15.824	15.465	21.818	19.021	25.375

Test mode: 11ax_HE20_SU

Band	Frequency (MHz)	Ch.	26 dB Bandwidth (MHz)					
			Ru Index					
			Low		Middle		High	
			Port 1	Port 2	Port 1	Port 2	Port 1	Port 2
U-NII 1	5 180	36	-	-	20.659	20.719	-	-
	5 220	44	-	-	21.079	20.819	-	-
	5 240	48	-	-	20.839	20.619	-	-
U-NII 2A	5 260	52	-	-	20.639	20.779	-	-
	5 300	60	-	-	20.799	20.579	-	-
	5 320	64	-	-	20.759	20.659	-	-
U-NII 2C	5 500	100	-	-	20.659	21.059	-	-
	5 580	116	-	-	20.919	20.599	-	-
	5 700	140	-	-	20.919	20.679	-	-
U-NII 3	5 745	149	-	-	20.799	20.739	-	-
	5 785	157	-	-	20.739	20.879	-	-
	5 825	165	-	-	27.972	33.417	-	-

Band	Frequency (MHz)	Ch.	99 % Bandwidth (MHz)					
			Ru Index					
			Low		Middle		High	
			Port 1	Port 2	Port 1	Port 2	Port 1	Port 2
U-NII 1	5 180	36	-	-	18.821	18.861	-	-
	5 220	44	-	-	18.821	18.861	-	-
	5 240	48	-	-	18.861	18.861	-	-
U-NII 2A	5 260	52	-	-	18.821	18.861	-	-
	5 300	60	-	-	18.861	18.861	-	-
	5 320	64	-	-	18.861	18.861	-	-
U-NII 2C	5 500	100	-	-	18.901	18.901	-	-
	5 580	116	-	-	18.941	18.781	-	-
	5 700	140	-	-	18.941	18.861	-	-
U-NII 3	5 745	149	-	-	18.901	18.861	-	-
	5 785	157	-	-	18.901	18.901	-	-
	5 825	165	-	-	16.823	26.174	-	-

Test mode: 11ax_HE40_26T

Band	Frequency (MHz)	Ch.	26 dB Bandwidth (MHz)					
			Ru Index					
			Low		Middle		High	
			Port 1	Port 2	Port 1	Port 2	Port 1	Port 2
U-NII 1	5 190	38	40.879	41.159	38.402	38.322	41.239	40.839
	5 230	46	41.159	41.039	38.322	38.162	40.759	40.639
U-NII 2A	5 270	54	40.719	41.359	38.162	38.202	40.719	40.440
	5 310	62	41.079	41.119	38.282	38.242	41.079	41.159
U-NII 2C	5 510	102	40.959	40.999	38.322	38.242	41.359	40.919
	5 550	110	40.719	40.839	38.242	38.322	41.199	40.719
	5 670	134	41.718	41.039	38.242	38.242	41.239	40.320
U-NII 3	5 755	151	40.599	40.679	38.322	38.162	40.999	40.839
	5 795	159	41.119	41.079	38.322	38.282	41.119	40.719

Band	Frequency (MHz)	Ch.	99 % Bandwidth (MHz)					
			Ru Index					
			Low		Middle		High	
			Port 1	Port 2	Port 1	Port 2	Port 1	Port 2
U-NII 1	5 190	38	40.040	39.001	38.521	36.923	42.597	38.761
	5 230	46	39.161	42.118	37.083	36.683	38.442	38.122
U-NII 2A	5 270	54	38.282	38.202	36.923	36.364	39.241	38.442
	5 310	62	39.401	38.921	37.083	36.763	39.401	38.761
U-NII 2C	5 510	102	38.521	38.442	36.523	36.444	38.761	38.442
	5 550	110	39.640	39.241	37.323	37.163	38.761	38.282
	5 670	134	38.841	38.362	36.603	36.444	39.321	39.481
U-NII 3	5 755	151	38.362	39.001	36.523	36.364	39.560	39.241
	5 795	159	38.841	39.241	36.843	37.083	40.040	39.560

Test mode: 11ax_HE40_SU

Band	Frequency (MHz)	Ch.	26 dB Bandwidth (MHz)					
			Ru Index					
			Low		Middle		High	
			Port 1	Port 2	Port 1	Port 2	Port 1	Port 2
U-NII 1	5 190	38	-	-	40.400	40.360	-	-
	5 230	46	-	-	40.639	40.639	-	-
U-NII 2A	5 270	54	-	-	40.799	40.400	-	-
	5 310	62	-	-	40.599	40.480	-	-
U-NII 2C	5 510	102	-	-	40.679	40.520	-	-
	5 550	110	-	-	40.480	40.440	-	-
	5 670	134	-	-	40.639	40.360	-	-
U-NII 3	5 755	151	-	-	40.999	40.200	-	-
	5 795	159	-	-	40.559	41.039	-	-

Band	Frequency (MHz)	Ch.	99 % Bandwidth (MHz)					
			Ru Index					
			Low		Middle		High	
			Port 1	Port 2	Port 1	Port 2	Port 1	Port 2
U-NII 1	5 190	38	-	-	37.562	37.642	-	-
	5 230	46	-	-	37.562	37.562	-	-
U-NII 2A	5 270	54	-	-	37.642	37.562	-	-
	5 310	62	-	-	37.642	37.562	-	-
U-NII 2C	5 510	102	-	-	37.562	37.722	-	-
	5 550	110	-	-	37.642	37.722	-	-
	5 670	134	-	-	37.722	37.562	-	-
U-NII 3	5 755	151	-	-	37.722	37.562	-	-
	5 795	159	-	-	37.562	37.483	-	-

Test mode: 11ax_HE80_26T

Band	Frequency (MHz)	Ch.	26 dB Bandwidth (MHz)					
			Ru Index					
			Low		Middle		High	
			Port 1	Port 2	Port 1	Port 2	Port 1	Port 2
U-NII 1	5 210	42	82.717	84.316	78.961	78.482	81.998	81.359
U-NII 2A	5 290	58	82.637	83.117	79.441	78.322	83.357	82.797
U-NII 2C	5 530	106	83.676	82.478	78.482	78.482	82.238	81.838
U-NII 3	5 775	155	81.439	81.758	78.961	78.162	81.838	81.519

Band	Frequency (MHz)	Ch.	99 % Bandwidth (MHz)					
			Ru Index					
			Low		Middle		High	
			Port 1	Port 2	Port 1	Port 2	Port 1	Port 2
U-NII 1	5 210	42	78.801	79.121	75.764	75.125	78.961	78.482
U-NII 2A	5 290	58	79.281	79.281	75.285	74.965	78.961	78.641
U-NII 2C	5 530	106	78.961	78.641	75.445	74.486	79.281	78.641
U-NII 3	5 775	155	79.121	78.322	75.924	74.965	80.400	79.121

Test mode: 11ax_HE80_SU

Band	Frequency (MHz)	Ch.	26 dB Bandwidth (MHz)					
			Ru Index					
			Low		Middle		High	
			Port 1	Port 2	Port 1	Port 2	Port 1	Port 2
U-NII 1	5 210	42	-	-	82.078	81.838	-	-
U-NII 2A	5 290	58	-	-	82.158	82.478	-	-
U-NII 2C	5 530	106	-	-	81.758	82.637	-	-
U-NII 3	5 775	155	-	-	81.838	81.998	-	-

Band	Frequency (MHz)	Ch.	99 % Bandwidth (MHz)					
			Ru Index					
			Low		Middle		High	
			Port 1	Port 2	Port 1	Port 2	Port 1	Port 2
U-NII 1	5 210	42	-	-	76.883	77.203	-	-
U-NII 2A	5 290	58	-	-	77.043	77.043	-	-
U-NII 2C	5 530	106	-	-	76.883	77.203	-	-
U-NII 3	5 775	155	-	-	76.723	76.563	-	-

Band-crossing channels

Mode	Frequency (MHz)	Ch.	Tones	26 dB Bandwidth (MHz)	
				Port 1	Port 2
11ax_HE20	5 720	144	SU	15.460	15.340
11ax_HE40	5 710	142	SU	35.400	35.160
11ax_HE80	5 690	138	SU	76.199	76.119

- Test plots

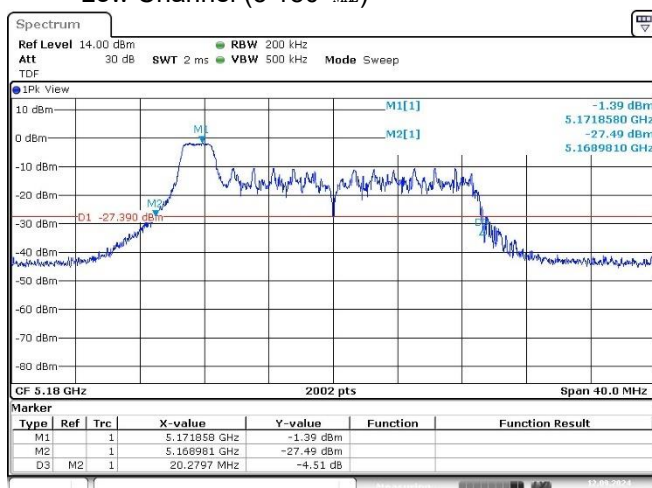
26 dB Bandwidth

SISO

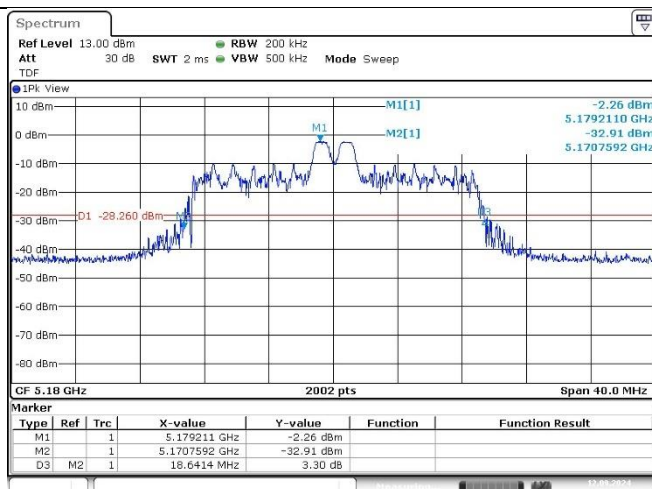
11ax_HE20_26T (Band 1)

0 RU

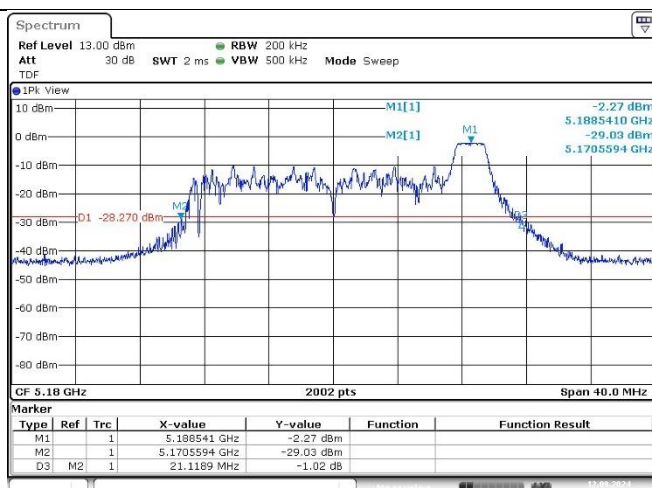
Low Channel (5 180 MHz)



4 RU

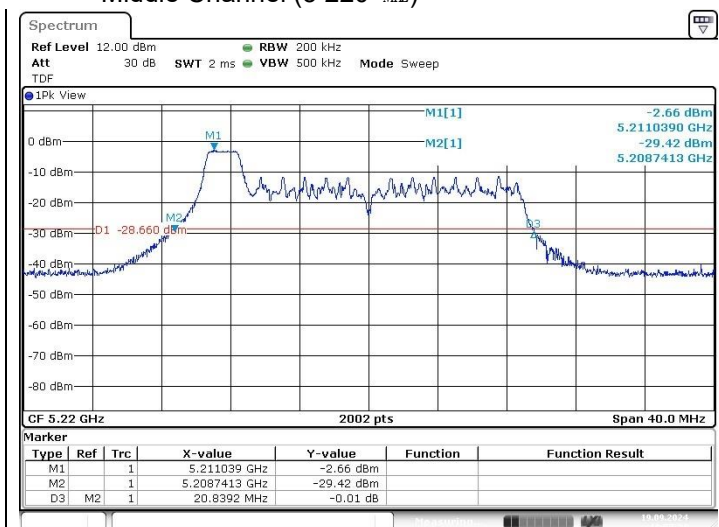


8 RU

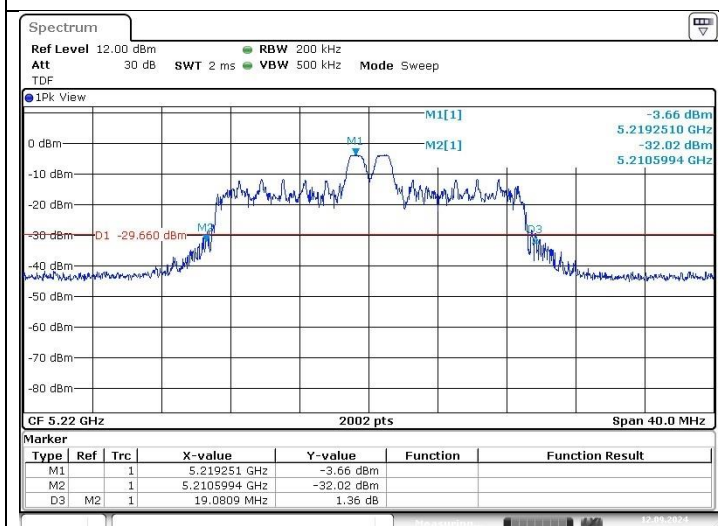


Middle Channel (5 220 MHz)

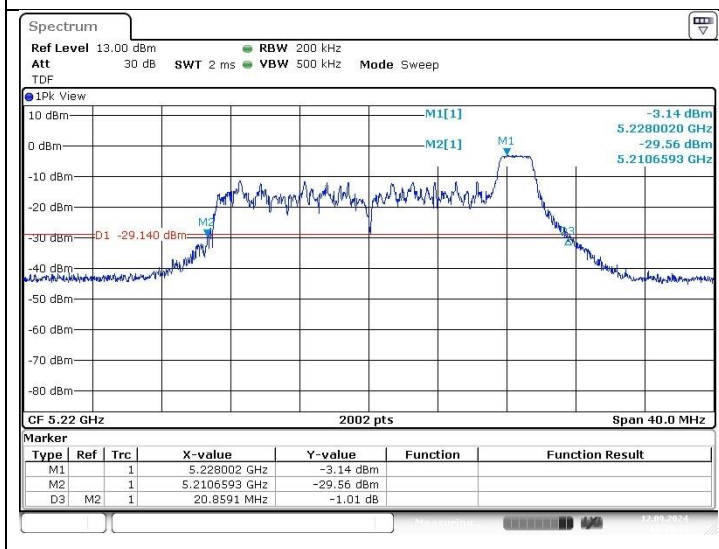
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4 RU

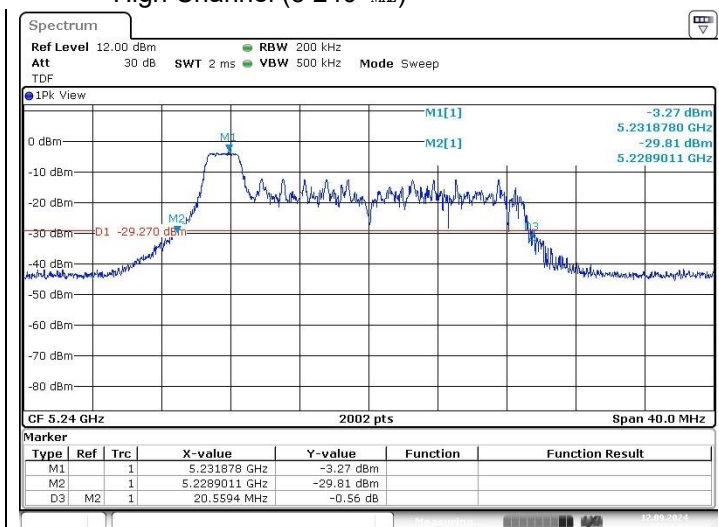


8 RU

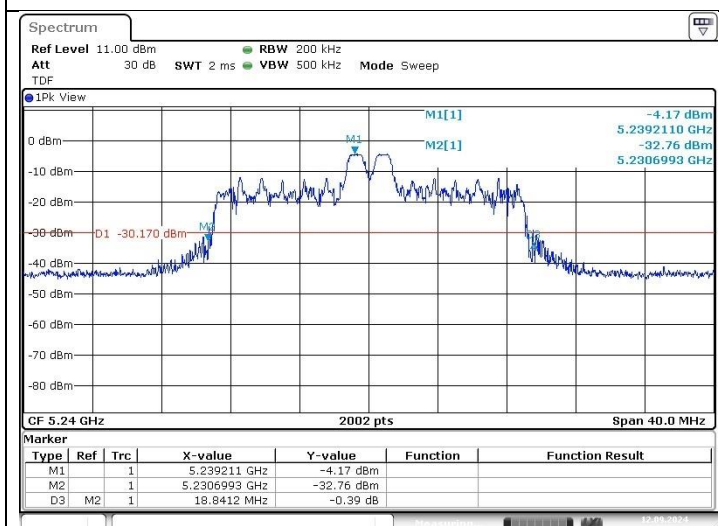


High Channel (5 240 MHz)

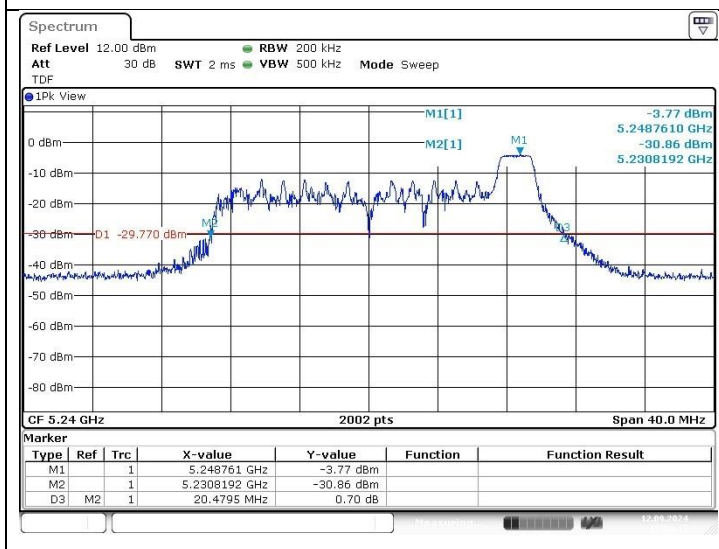
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4 RU



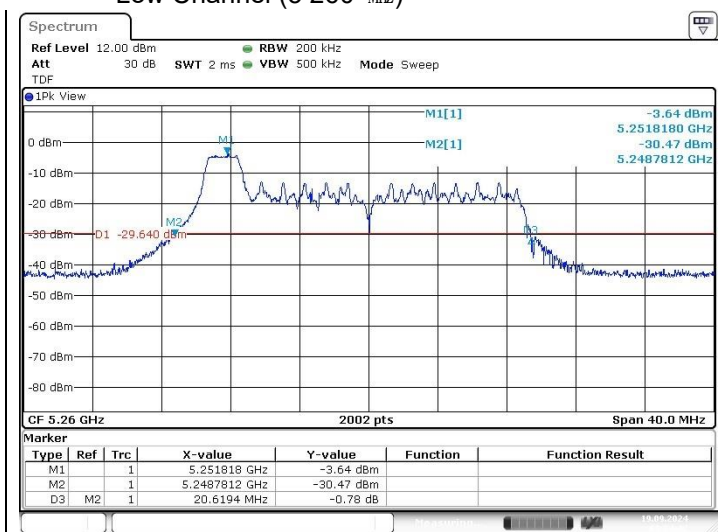
8 RU



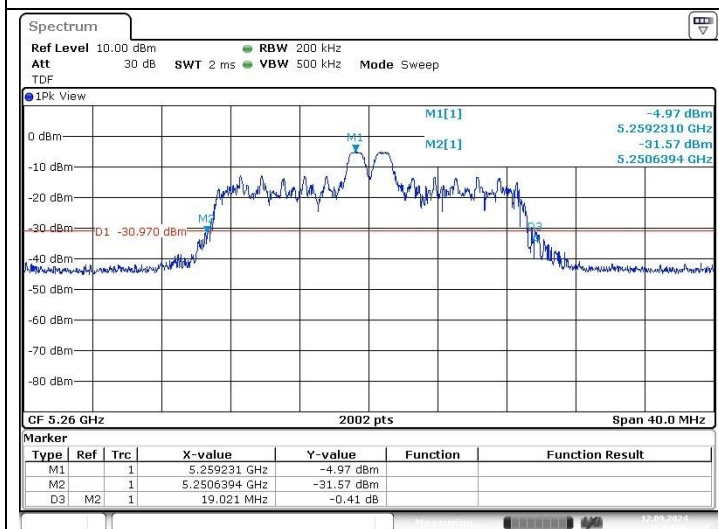
11ax_HE20_26T (Band 2A)

0 RU

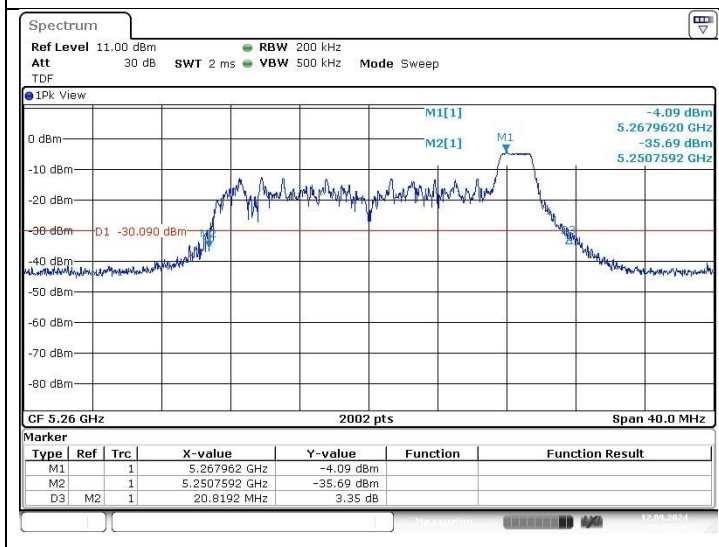
Low Channel (5 260 MHz)



4 RU

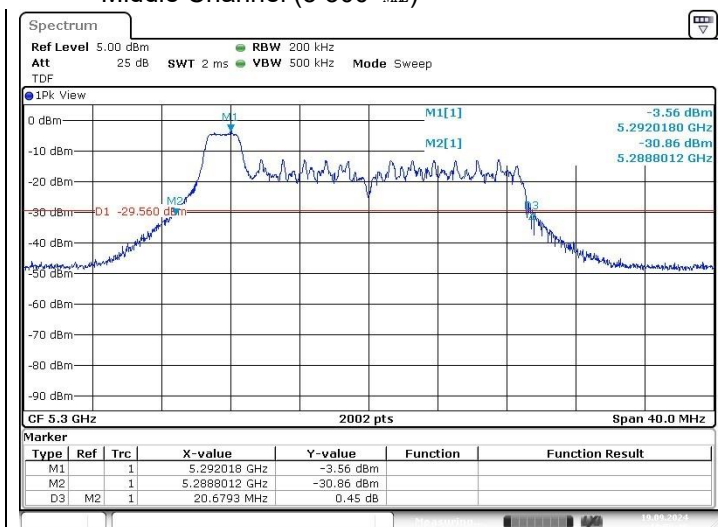


8 RU

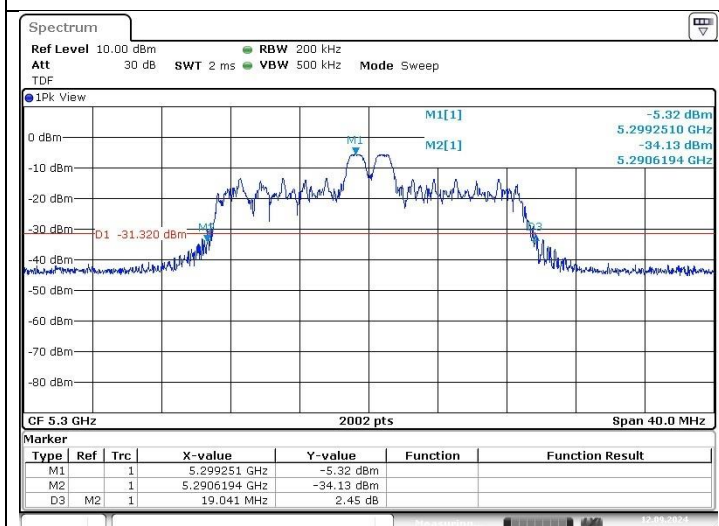


Middle Channel (5 300 MHz)

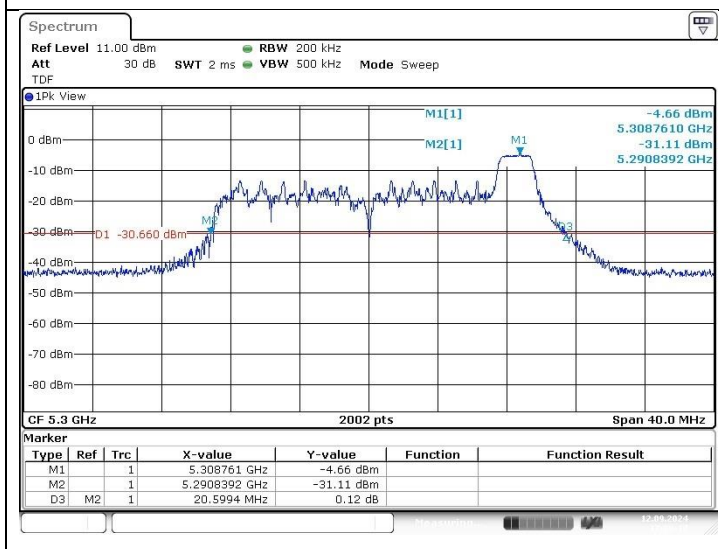
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4 RU

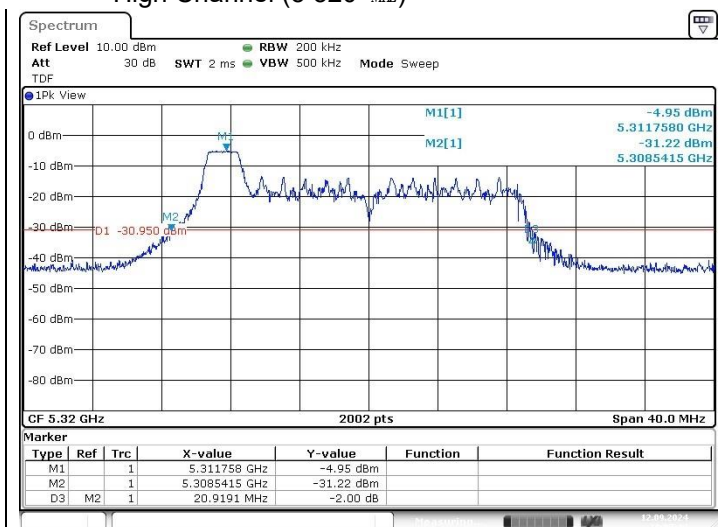


8 RU

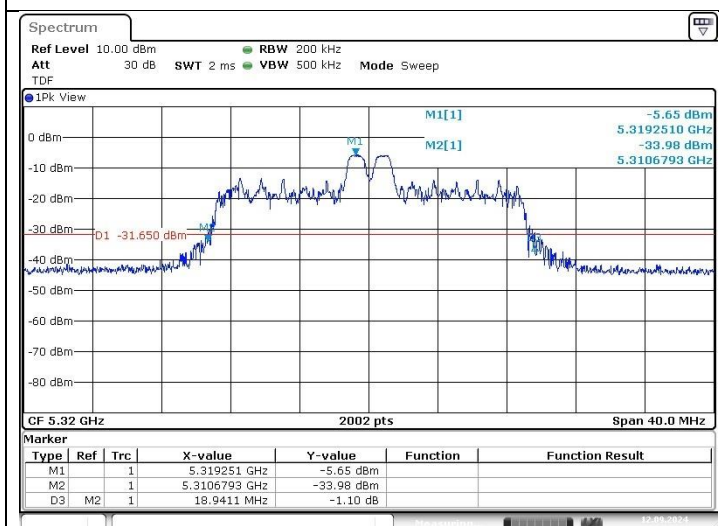


High Channel (5 320 MHz)

0 RU



4 RU



8 RU

