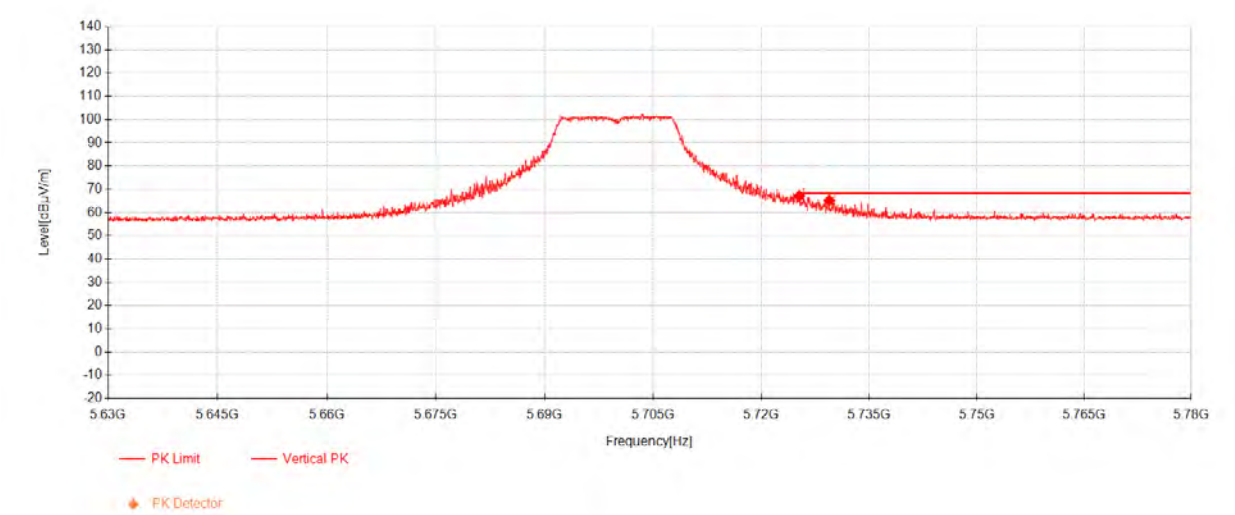


802.11a Channel 140



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5725.2875	46.84	33.87	-13.62	67.09	68.30	1.21	Vertical
2	5729.45	44.92	33.88	-13.61	65.19	68.30	3.11	Vertical

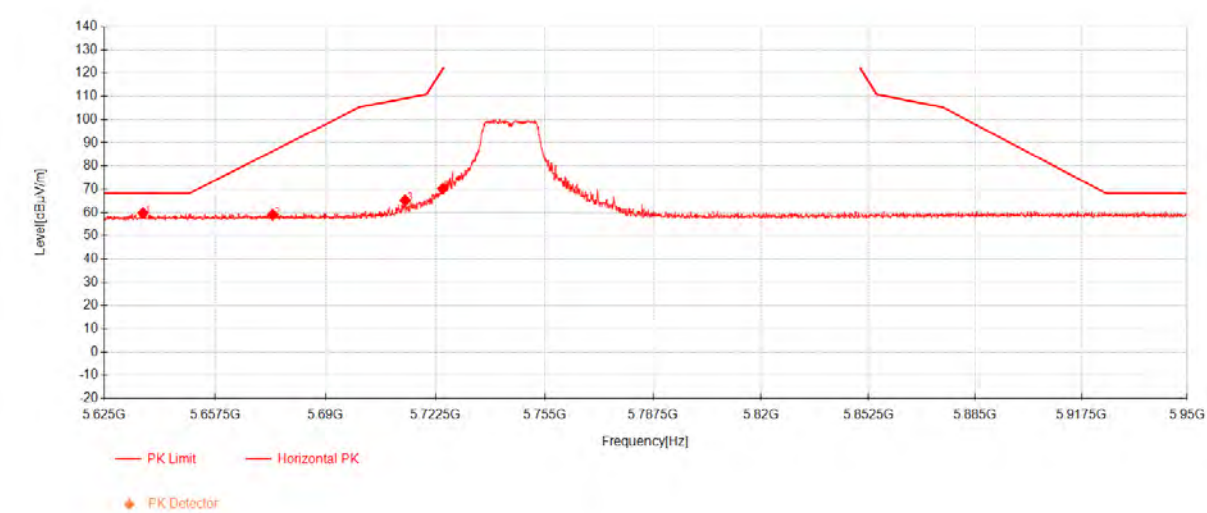
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 152 of 420

802.11a Channel 149



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5636.375	39.85	33.56	-13.68	59.74	68.30	8.56	Horizontal
2	5674.4	38.96	33.69	-13.67	58.98	86.40	27.42	Horizontal
3	5713.5625	45.06	33.83	-13.64	65.24	109.10	43.86	Horizontal
4	5724.6938	49.97	33.86	-13.62	70.22	121.60	51.38	Horizontal

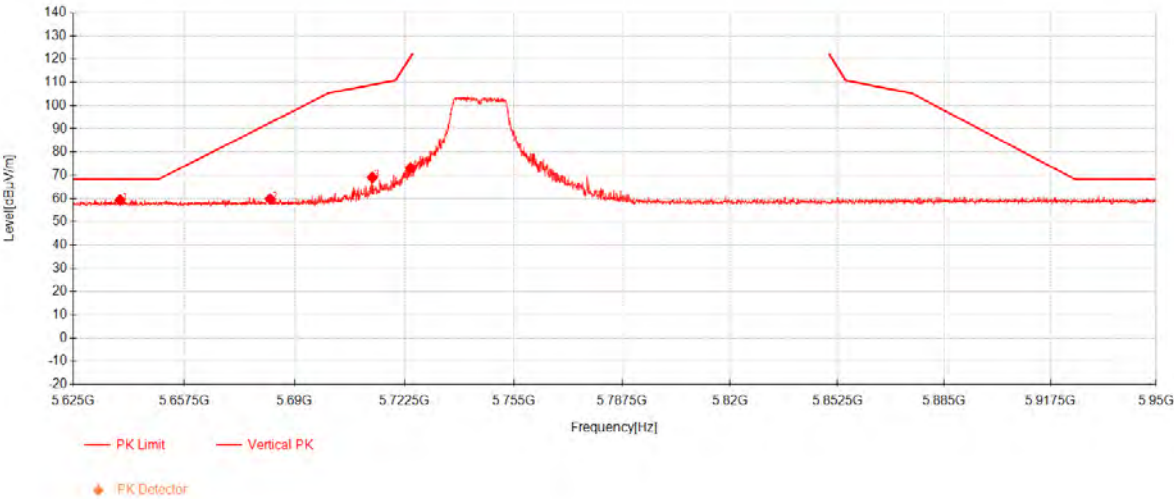
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 153 of 420

802.11a Channel 149



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5638.7312	39.40	33.57	-13.68	59.30	68.30	9.00	Vertical
2	5682.7688	39.67	33.72	-13.67	59.72	92.59	32.87	Vertical
3	5712.9938	48.87	33.82	-13.64	69.05	108.94	39.89	Vertical
4	5724.2875	52.94	33.86	-13.62	73.18	120.68	47.50	Vertical

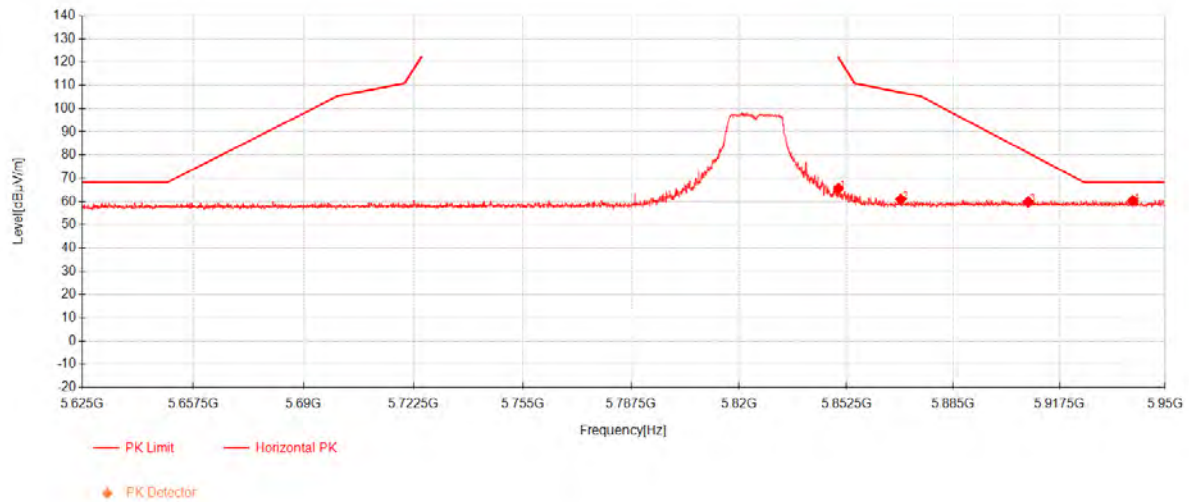
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 154 of 420

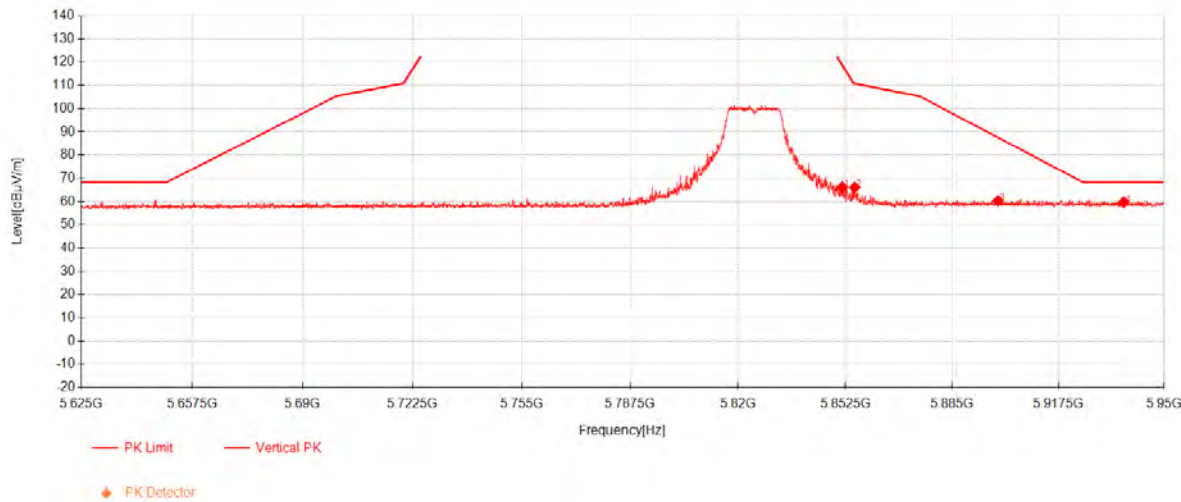
802.11a Channel 165



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5850.0625	44.56	34.29	-13.21	65.64	122.16	56.52	Horizontal
2	5868.9938	39.70	34.35	-13.12	60.94	106.98	46.04	Horizontal
3	5907.9125	38.32	34.49	-12.99	59.82	80.91	21.09	Horizontal
4	5940.0062	38.85	34.60	-13.11	60.33	68.30	7.97	Horizontal

802.11a Channel 165



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5851.525	45.15	34.30	-13.20	66.24	118.82	52.58	Vertical
2	5855.2625	44.94	34.31	-13.18	66.06	110.83	44.77	Vertical
3	5898.975	38.84	34.46	-12.97	60.33	87.52	27.19	Vertical
4	5937.5688	38.21	34.59	-13.10	59.69	68.30	8.61	Vertical

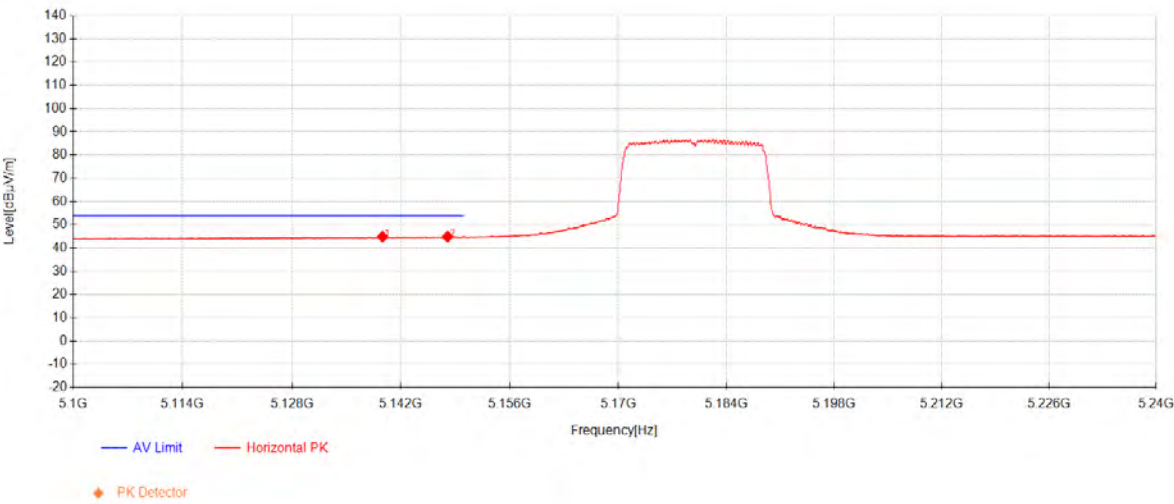
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 156 of 420

802.11n20 Channel 36



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5139.62	26.54	33.17	-14.84	44.88	54.00	9.12	Horizontal
2	5147.985	26.53	33.17	-14.80	44.90	54.00	9.10	Horizontal

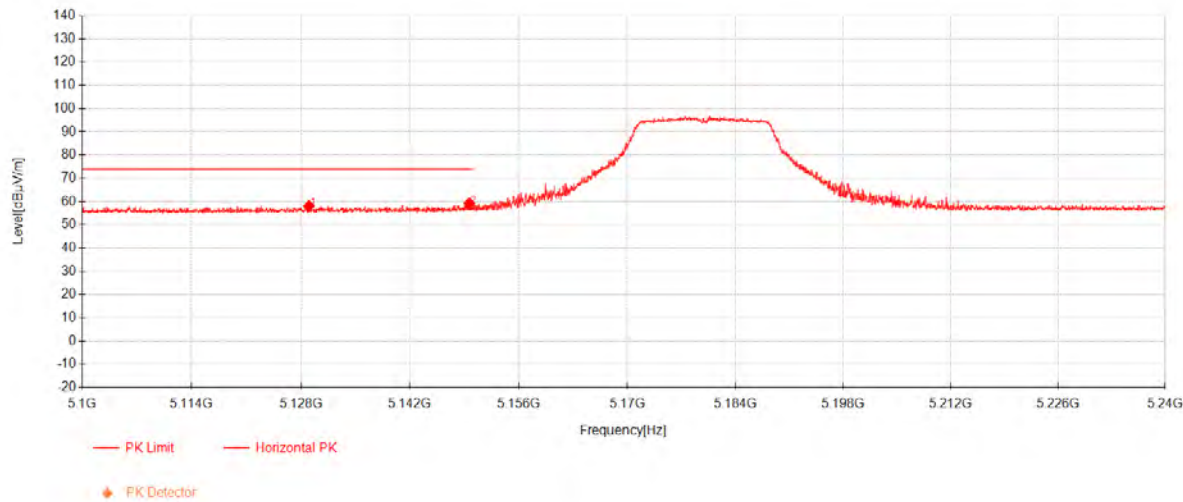
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 157 of 420

802.11n20 Channel 36



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5129.015	39.77	33.17	-14.88	58.06	74.00	15.94	Horizontal
2	5149.63	40.85	33.17	-14.79	59.23	74.00	14.77	Horizontal

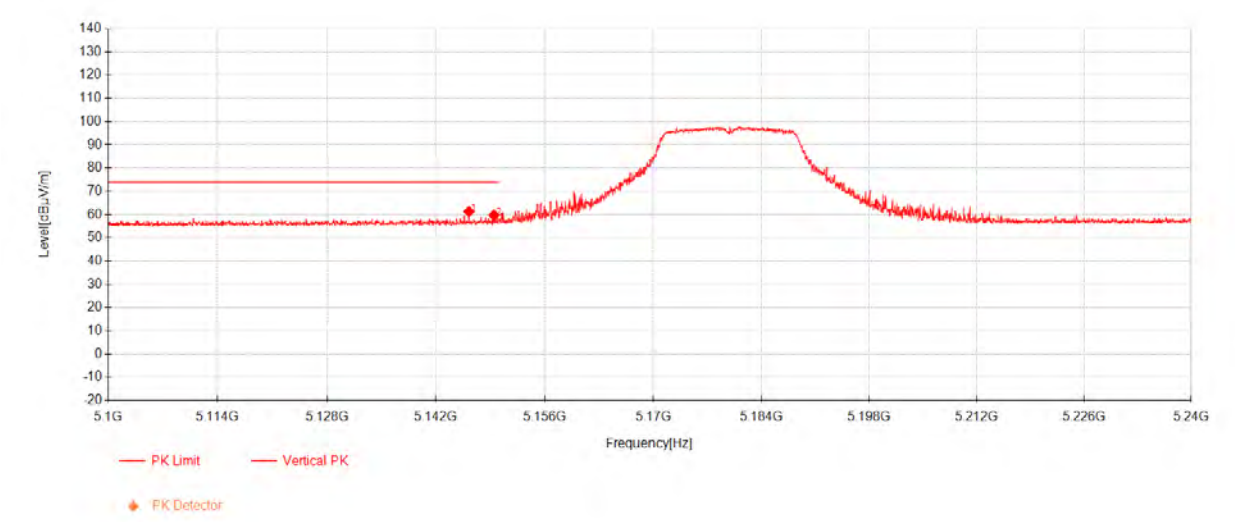
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 158 of 420

802.11n20 Channel 36



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5146.235	42.91	33.17	-14.81	61.27	74.00	12.73	Vertical
2	5149.455	41.27	33.17	-14.79	59.65	74.00	14.35	Vertical

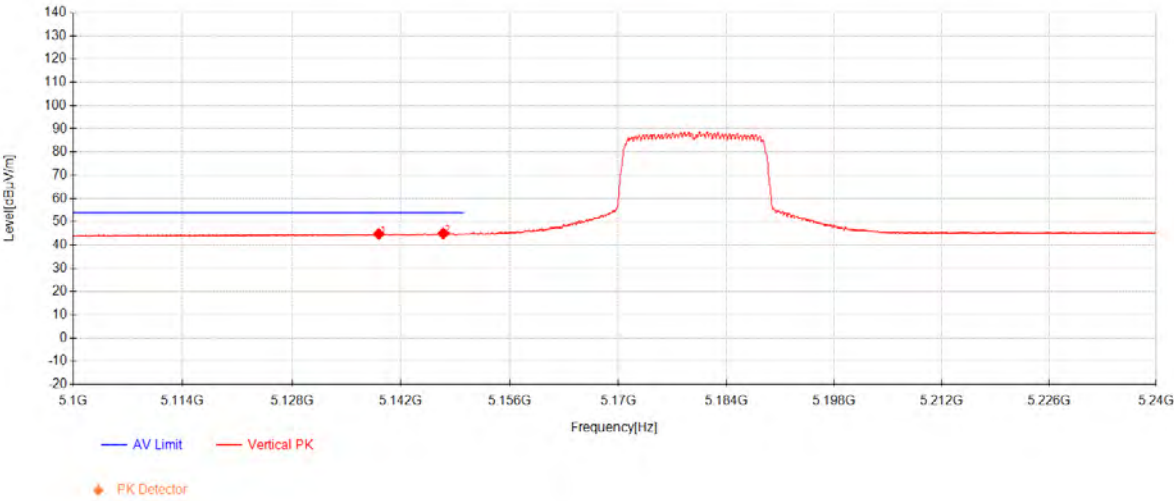
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 159 of 420

802.11n20 Channel 36



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5139.13	26.44	33.17	-14.84	44.77	54.00	9.23	Vertical
2	5147.425	26.63	33.17	-14.80	45.00	54.00	9.00	Vertical

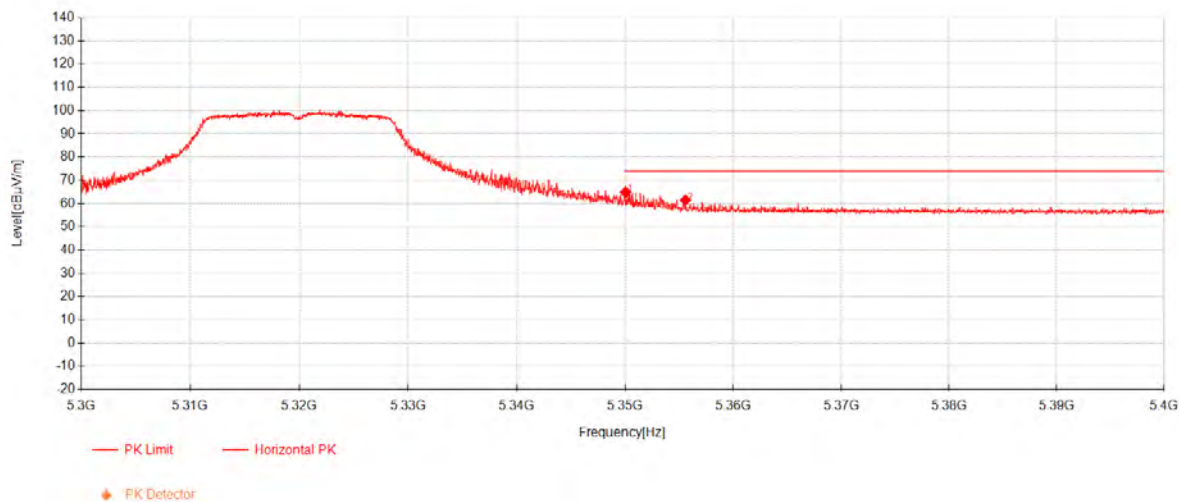
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 160 of 420

802.11n20 Channel 64



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.05	45.86	33.13	-14.10	64.89	74.00	9.11	Horizontal
2	5355.575	42.46	33.13	-14.11	61.48	74.00	12.52	Horizontal

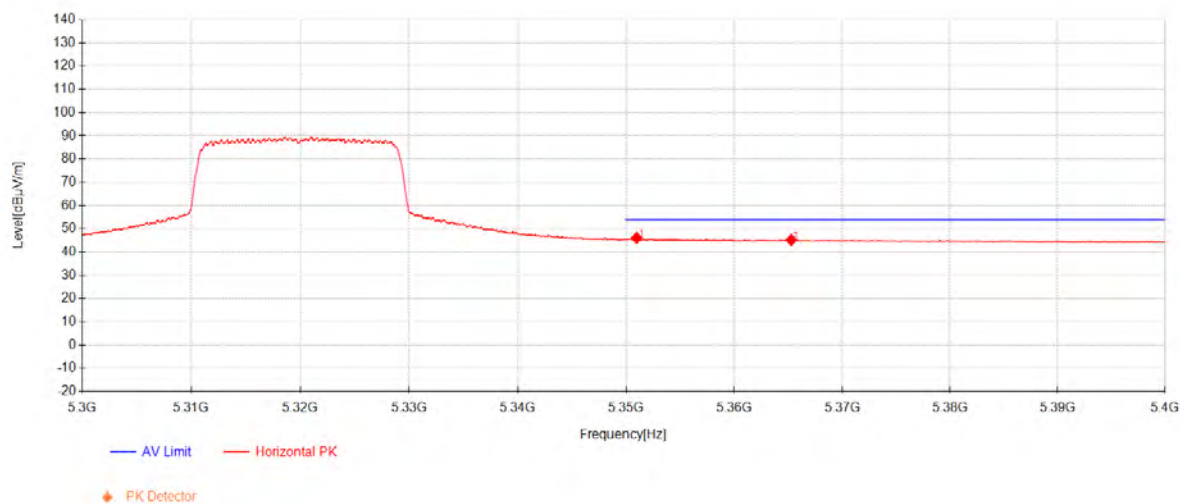
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 161 of 420

802.11n20 Channel 64



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.975	27.07	33.13	-14.10	46.10	54.00	7.90	Horizontal
2	5365.275	26.22	33.13	-14.13	45.22	54.00	8.78	Horizontal

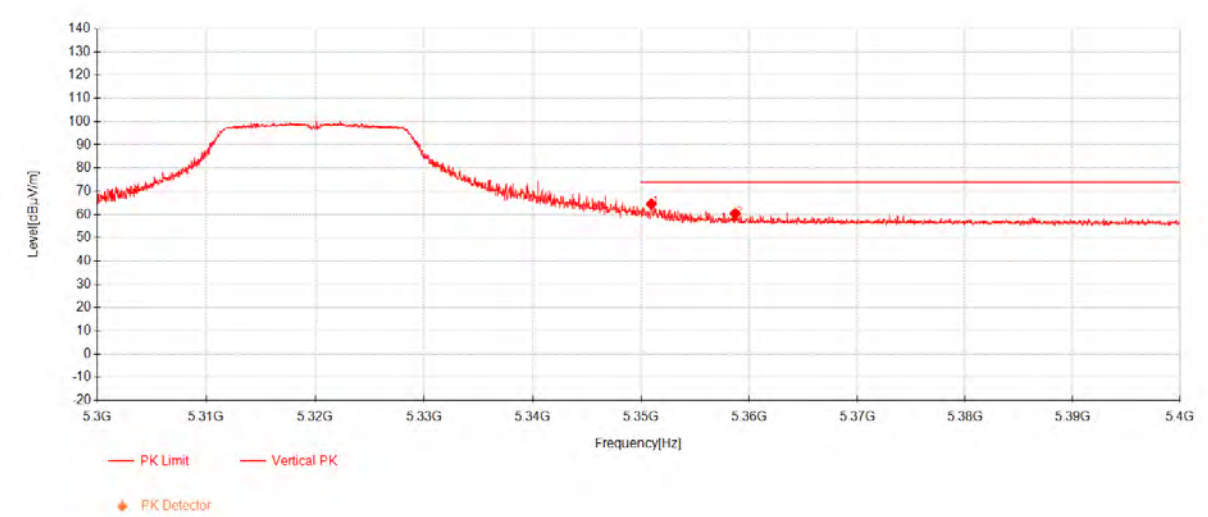
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 162 of 420

802.11n20 Channel 64



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.95	45.54	33.13	-14.10	64.57	74.00	9.43	Vertical
2	5358.7	41.42	33.13	-14.11	60.43	74.00	13.57	Vertical

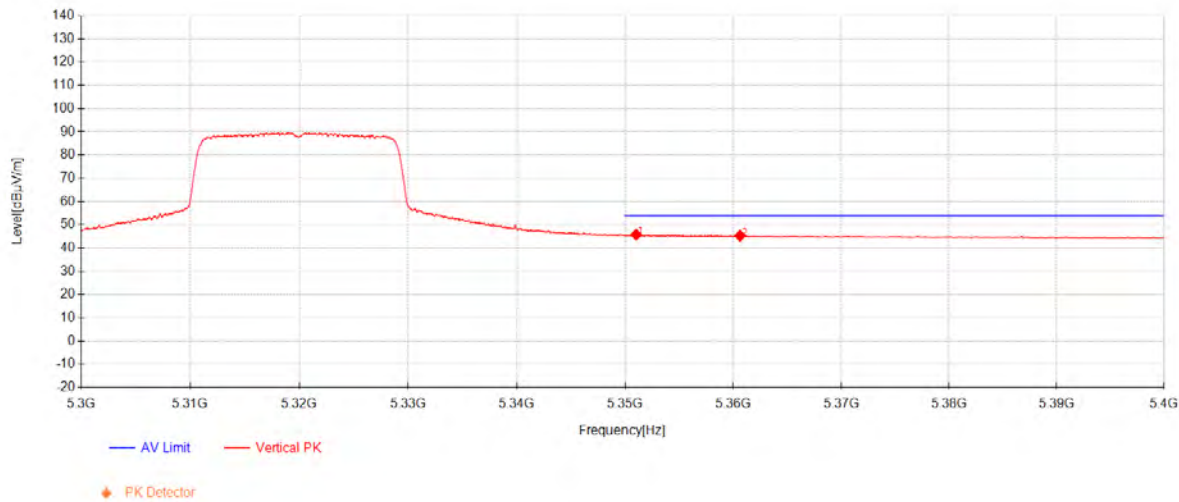
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 163 of 420

802.11n20 Channel 64



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5351.025	26.74	33.13	-14.10	45.77	54.00	8.23	Vertical
2	5360.625	26.30	33.13	-14.12	45.31	54.00	8.69	Vertical

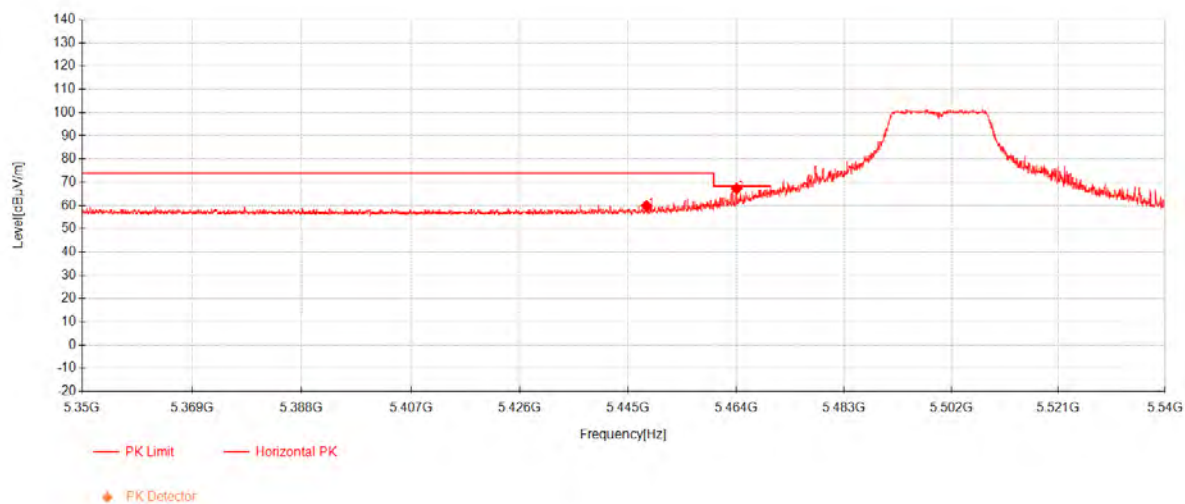
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 164 of 420

802.11n20 Channel 100



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5448.1825	40.78	33.11	-14.04	59.85	74.00	14.15	Horizontal
2	5464.0475	48.16	33.11	-13.98	67.28	68.30	1.02	Horizontal

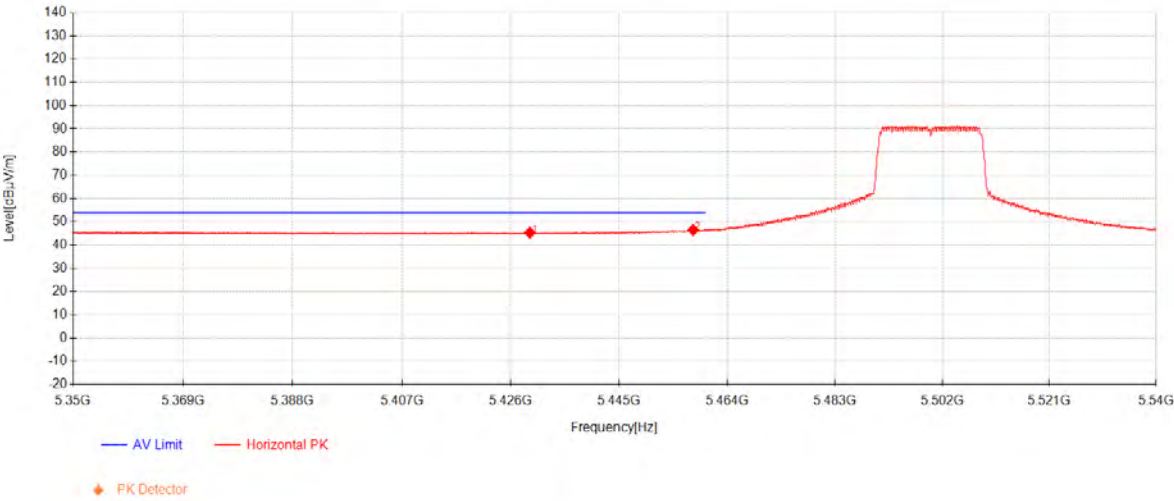
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 165 of 420

802.11n20 Channel 100



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5429.325	26.32	33.11	-14.10	45.33	54.00	8.67	Horizontal
2	5457.9675	27.36	33.11	-14.00	46.47	54.00	7.53	Horizontal

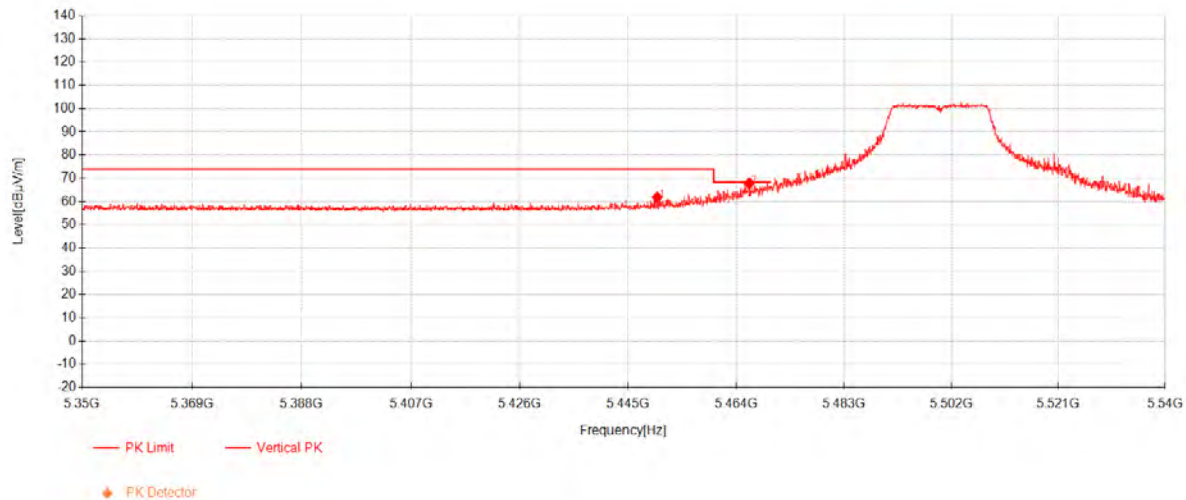
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 166 of 420

802.11n20 Channel 100



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5450.0825	42.77	33.11	-14.03	61.85	74.00	12.15	Vertical
2	5466.28	48.70	33.11	-13.97	67.83	68.30	0.47	Vertical

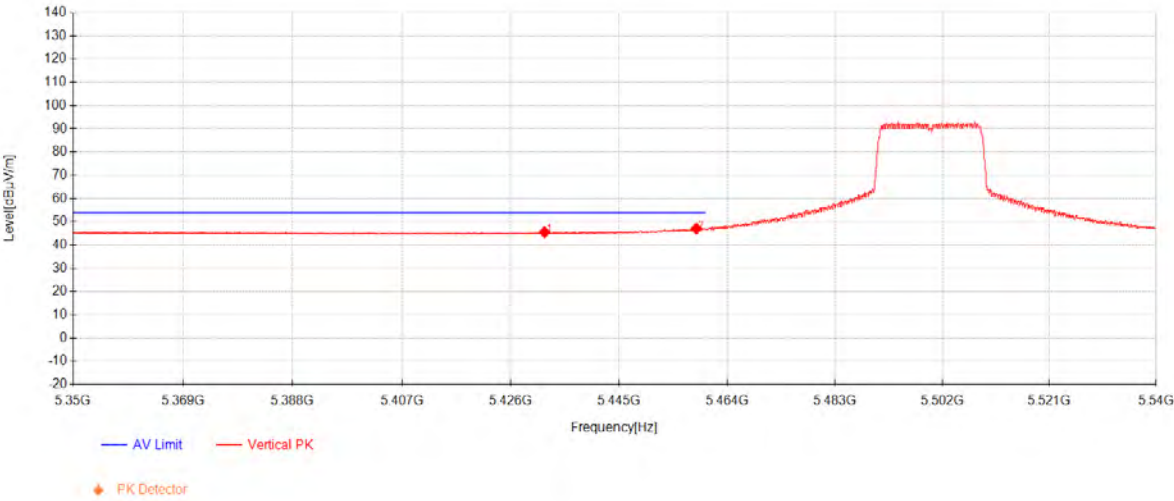
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 167 of 420

802.11n20 Channel 100



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5431.89	26.49	33.11	-14.09	45.51	54.00	8.49	Vertical
2	5458.5375	27.95	33.11	-14.00	47.06	54.00	6.94	Vertical

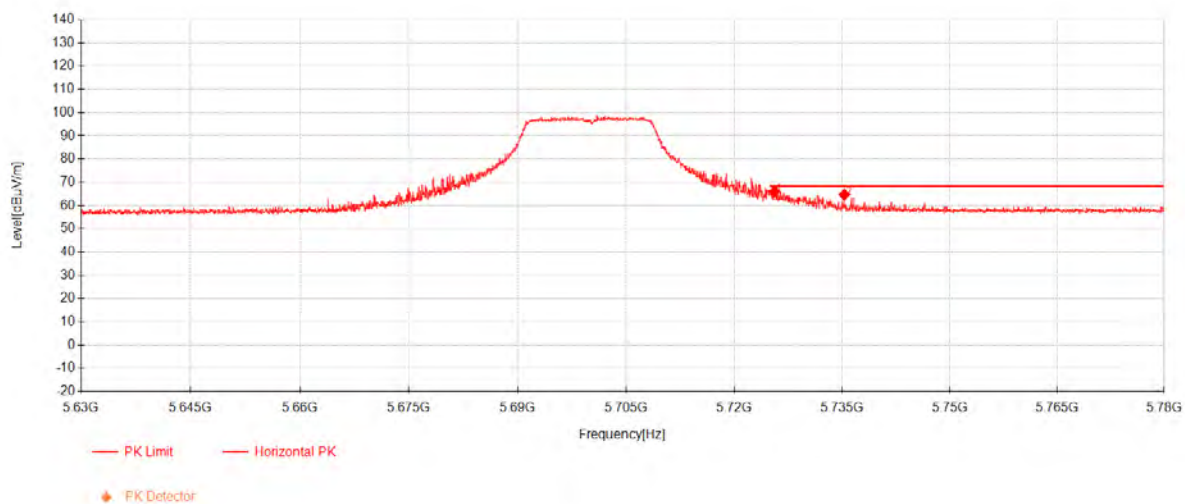
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 168 of 420

802.11n20 Channel 140



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5725.625	45.86	33.87	-13.62	66.11	68.30	2.19	Horizontal
2	5735.3	44.43	33.90	-13.60	64.73	68.30	3.57	Horizontal

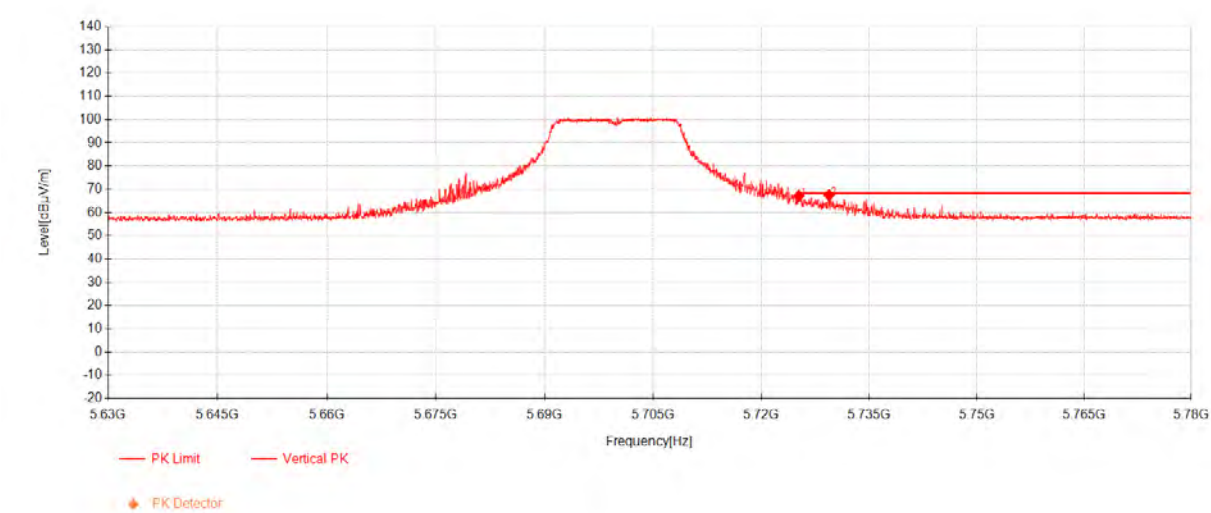
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 169 of 420

802.11n20 Channel 140



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5725.2125	46.89	33.87	-13.62	67.14	68.30	1.16	Vertical
2	5729.4125	47.26	33.88	-13.61	67.53	68.30	0.77	Vertical

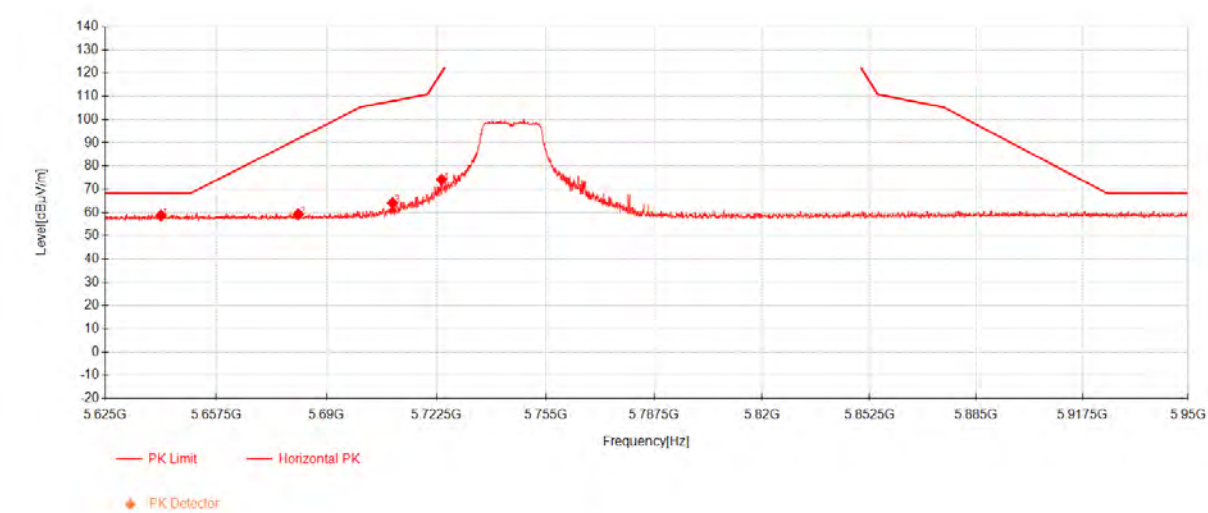
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 170 of 420

802.11n20 Channel 149



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5641.3312	38.80	33.58	-13.68	58.70	68.30	9.60	Horizontal
2	5681.6312	39.16	33.72	-13.67	59.21	91.74	32.53	Horizontal
3	5709.5	44.00	33.81	-13.65	64.16	107.96	43.80	Horizontal
4	5724.0438	53.90	33.86	-13.62	74.14	120.12	45.98	Horizontal

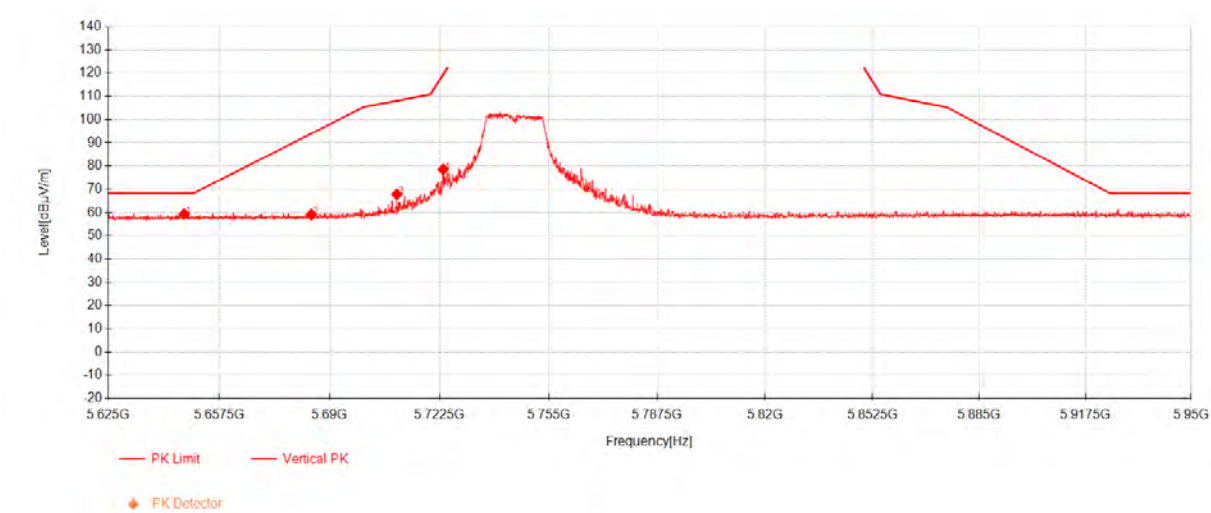
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 171 of 420

802.11n20 Channel 149



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5647.2625	39.34	33.60	-13.68	59.27	68.30	9.03	Vertical
2	5684.6375	39.06	33.73	-13.67	59.12	93.97	34.85	Vertical
3	5709.9062	47.67	33.81	-13.65	67.83	108.08	40.25	Vertical
4	5723.6375	58.31	33.86	-13.62	78.55	119.19	40.64	Vertical

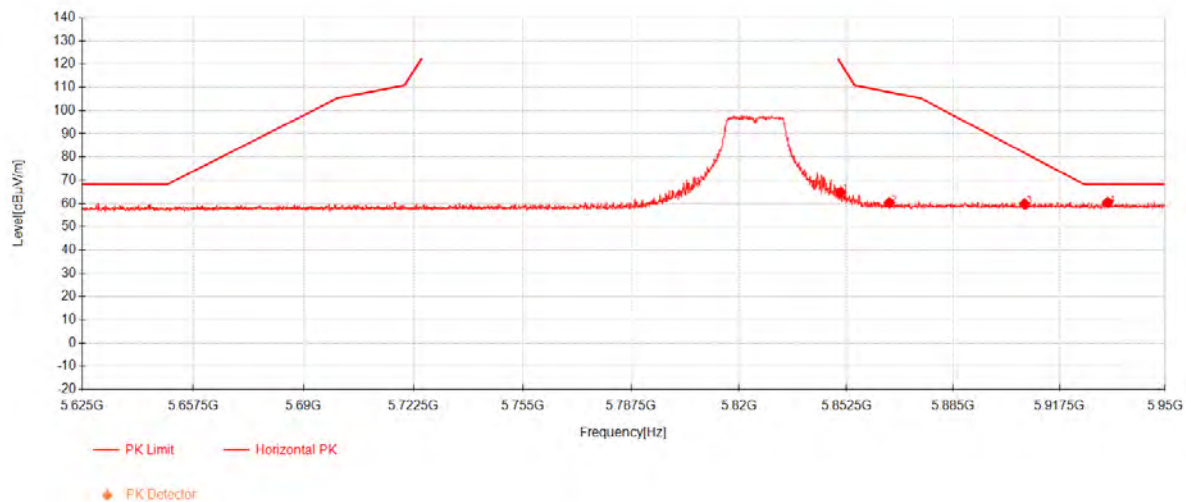
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 172 of 420

802.11n20 Channel 165



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5850.7938	43.77	34.29	-13.21	64.86	120.49	55.63	Horizontal
2	5865.5	39.15	34.34	-13.13	60.36	107.96	47.60	Horizontal
3	5906.775	38.33	34.48	-12.99	59.83	81.75	21.92	Horizontal
4	5932.2875	39.02	34.57	-13.08	60.51	68.30	7.79	Horizontal

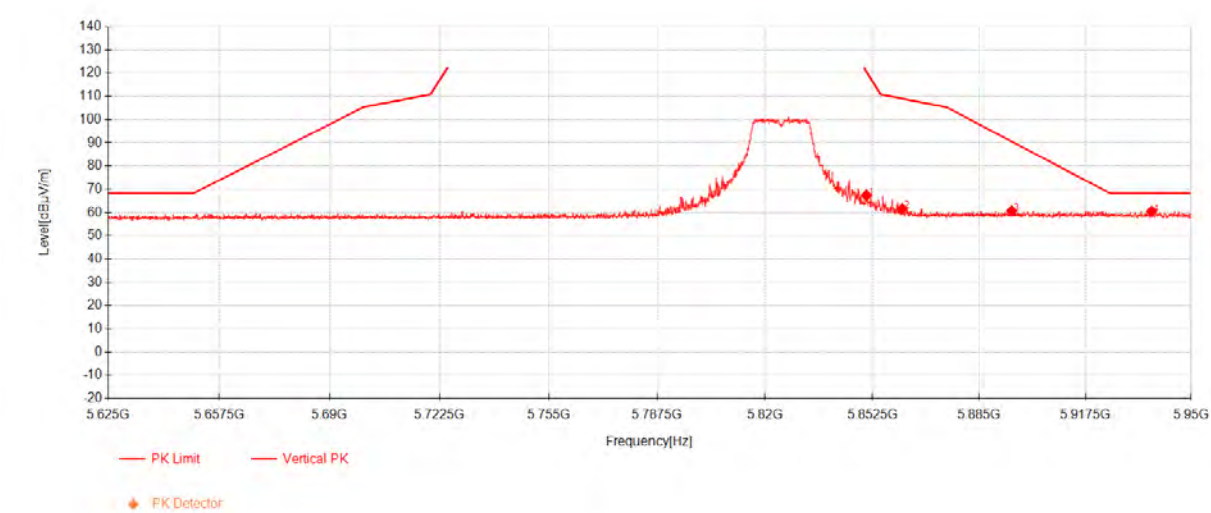
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 173 of 420

802.11n20 Channel 165



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5850.6312	46.29	34.29	-13.21	67.38	120.86	53.48	Vertical
2	5861.5188	40.44	34.33	-13.15	61.62	109.07	47.45	Vertical
3	5894.9125	39.16	34.44	-12.99	60.62	90.53	29.91	Vertical
4	5937.8125	38.98	34.59	-13.10	60.46	68.30	7.84	Vertical

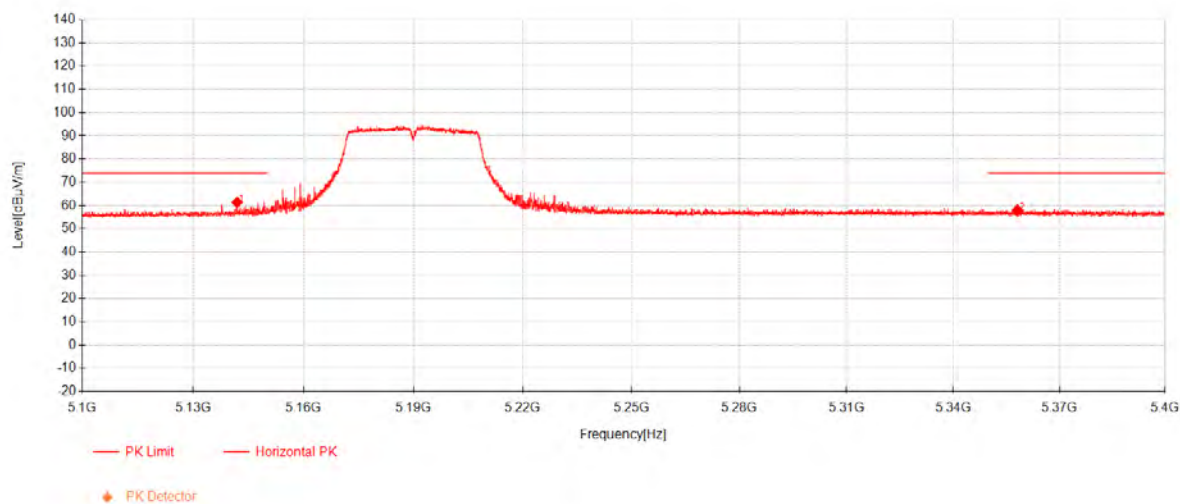
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 174 of 420

802.11n40 Channel 38



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5141.92	43.03	33.17	-14.83	61.38	74.00	12.62	Horizontal
2	5358.07	38.92	33.13	-14.11	57.94	74.00	16.06	Horizontal

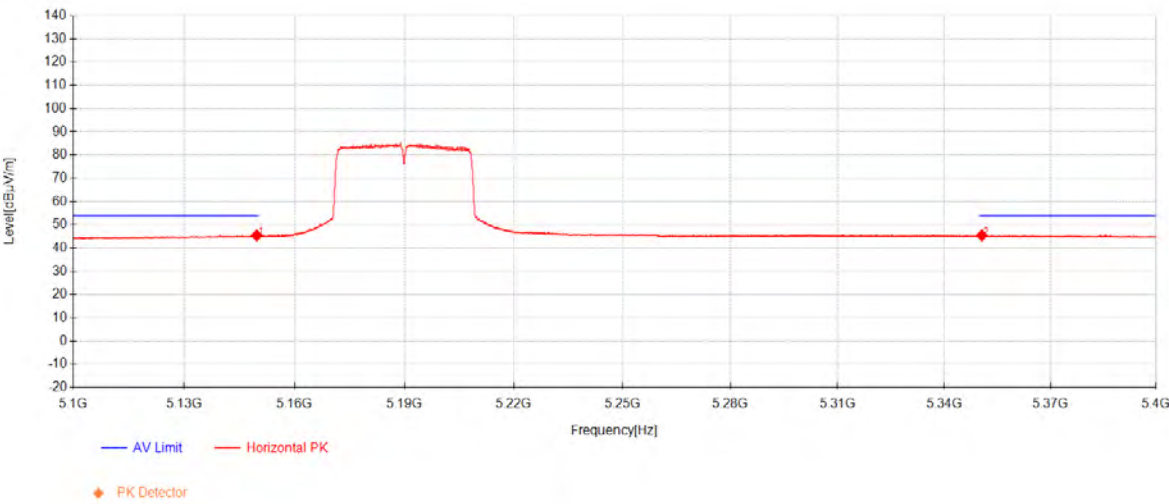
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

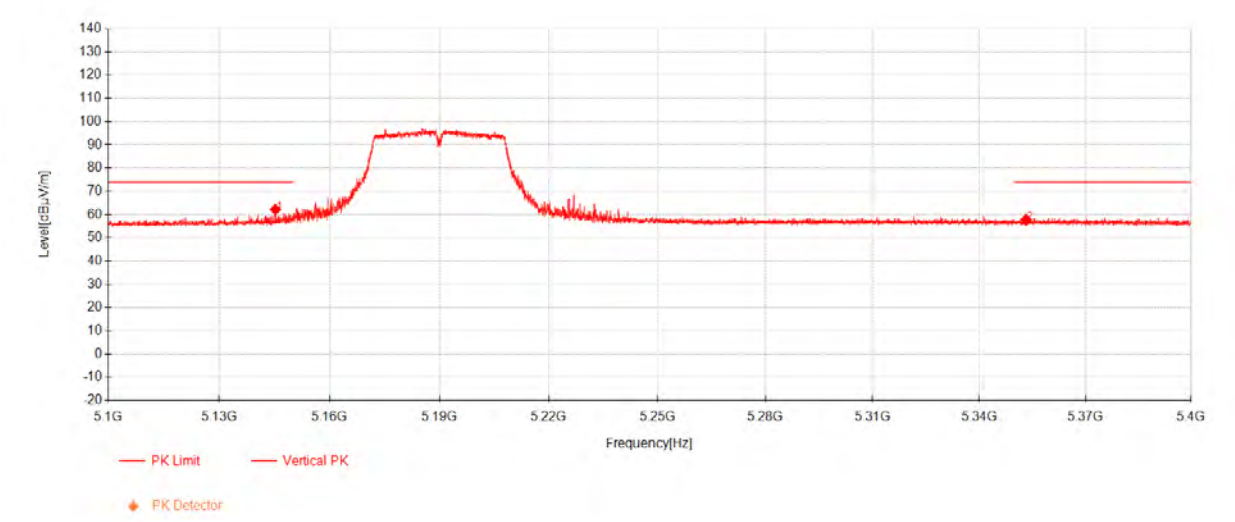
Page: 175 of 420

802.11n40 Channel 38



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.68	27.05	33.17	-14.79	45.43	54.00	8.57	Horizontal
2	5350.58	26.42	33.13	-14.10	45.45	54.00	8.55	Horizontal

802.11n40 Channel 38



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5145.24	43.83	33.17	-14.81	62.19	74.00	11.81	Vertical
2	5353.135	38.68	33.13	-14.10	57.71	74.00	16.29	Vertical

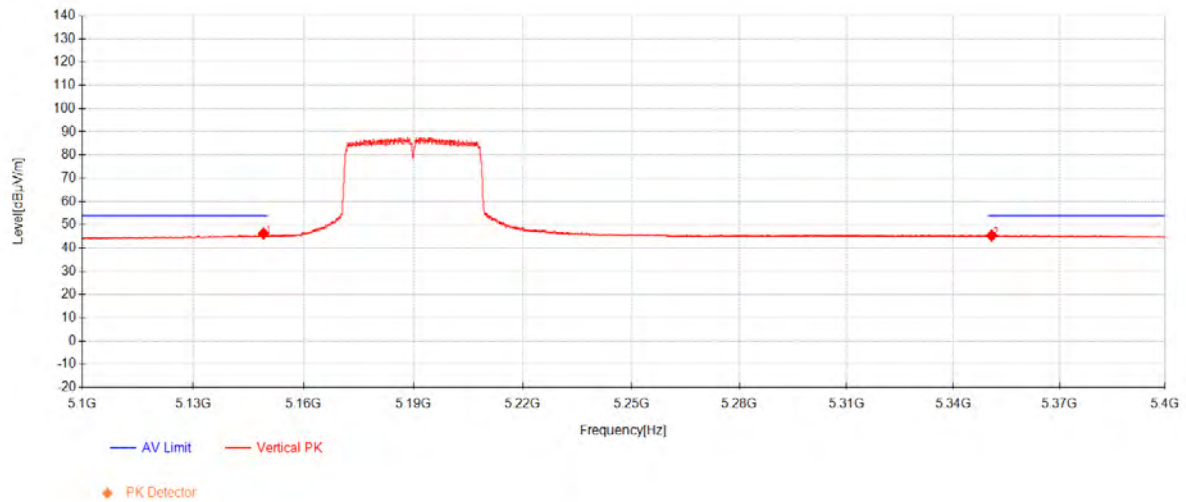
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 177 of 420

802.11n40 Channel 38



Data List

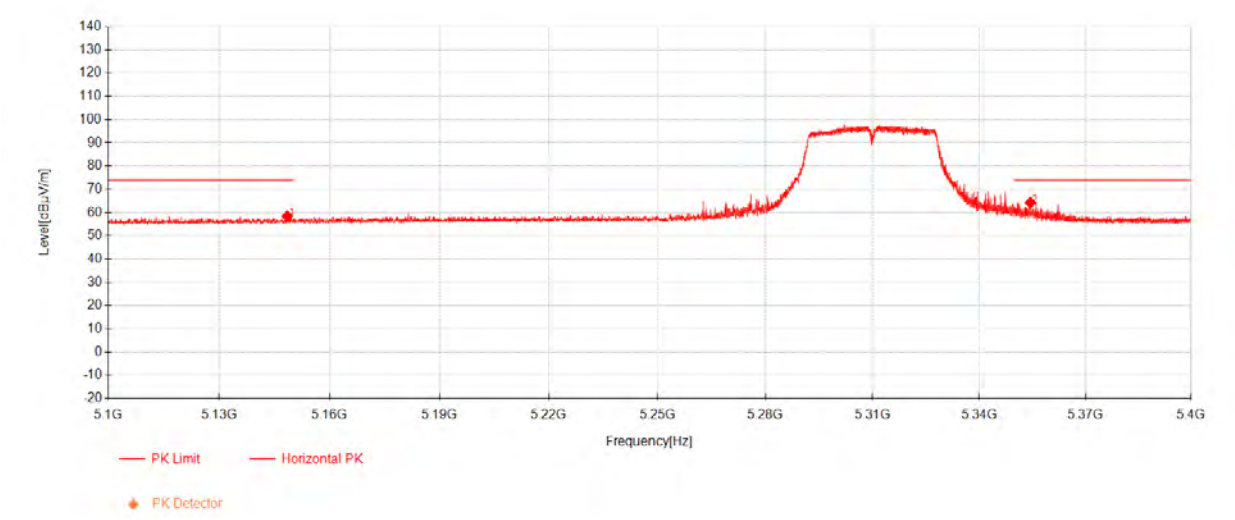
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5149.08	27.86	33.17	-14.79	46.24	54.00	7.76	Vertical
2	5350.79	26.37	33.13	-14.10	45.40	54.00	8.60	Vertical

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204
Page: 178 of 420

802.11n40 Channel 62



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.45	40.01	33.17	-14.80	58.38	74.00	15.62	Horizontal
2	5354.4	45.28	33.13	-14.10	64.30	74.00	9.70	Horizontal

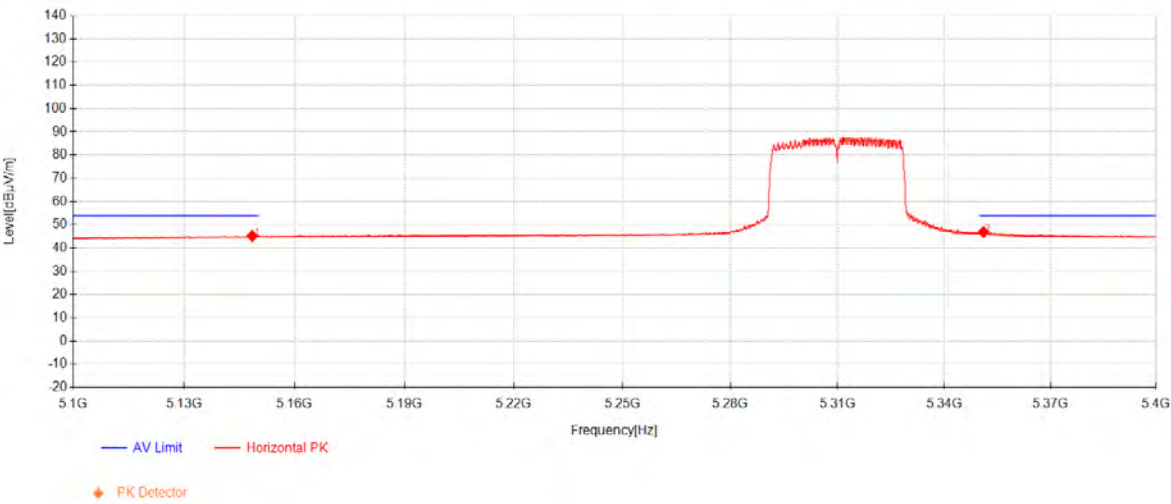
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

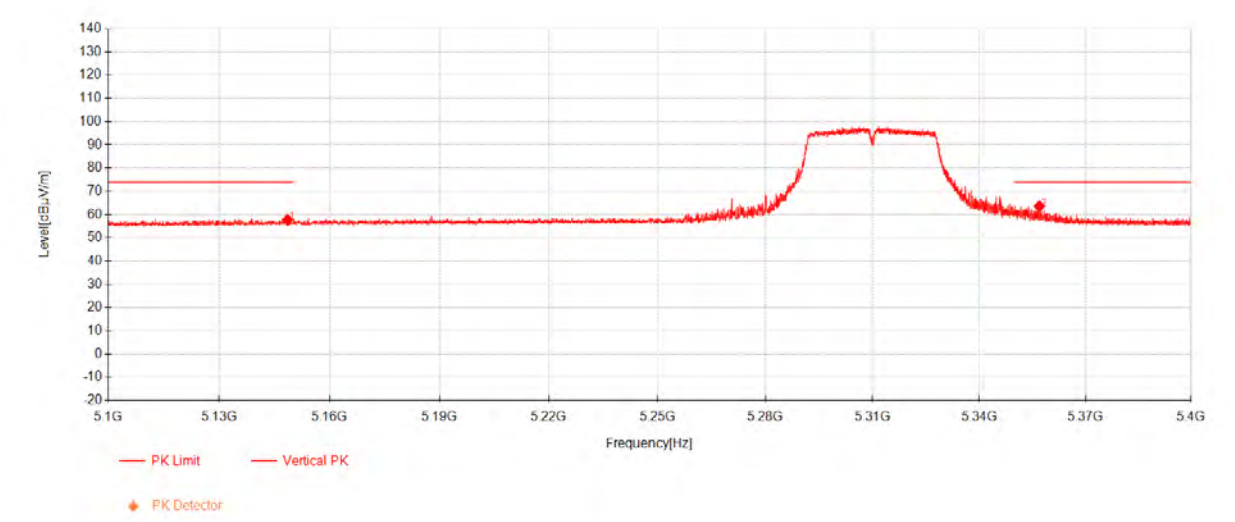
Page: 179 of 420

802.11n40 Channel 62



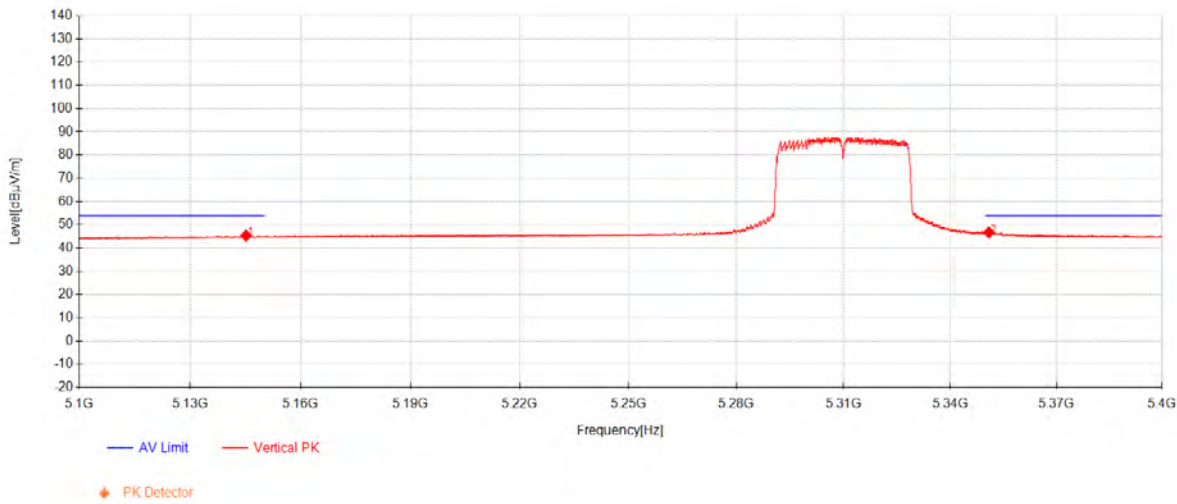
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.45	26.87	33.17	-14.80	45.24	54.00	8.76	Horizontal
2	5351.05	27.82	33.13	-14.10	46.85	54.00	7.15	Horizontal

802.11n40 Channel 62



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.55	39.29	33.17	-14.80	57.66	74.00	16.34	Vertical
2	5356.95	44.60	33.13	-14.11	63.62	74.00	10.38	Vertical

802.11n40 Channel 62



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5145.15	27.03	33.17	-14.81	45.39	54.00	8.61	Vertical
2	5350.875	27.68	33.13	-14.10	46.71	54.00	7.29	Vertical

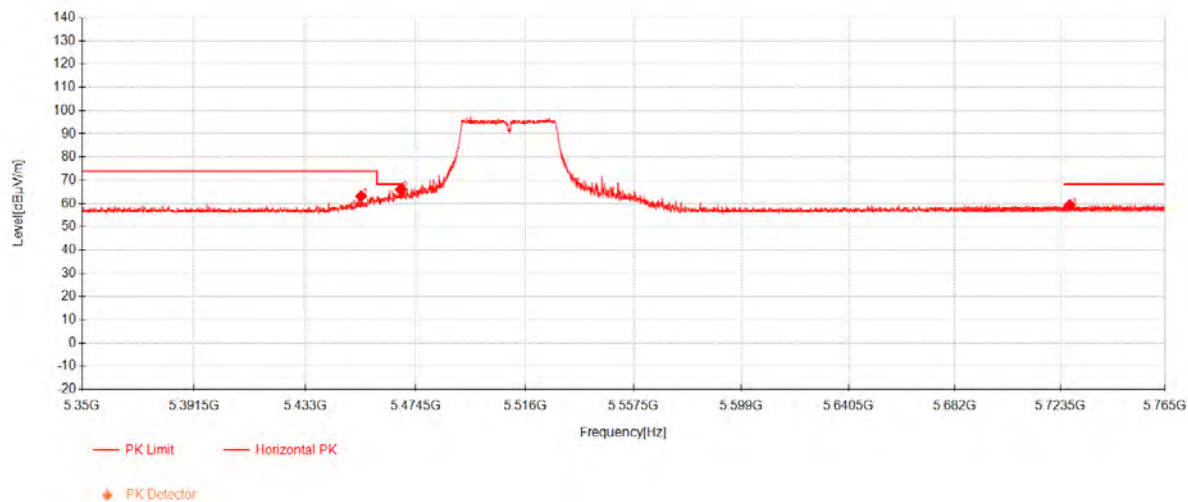
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 182 of 420

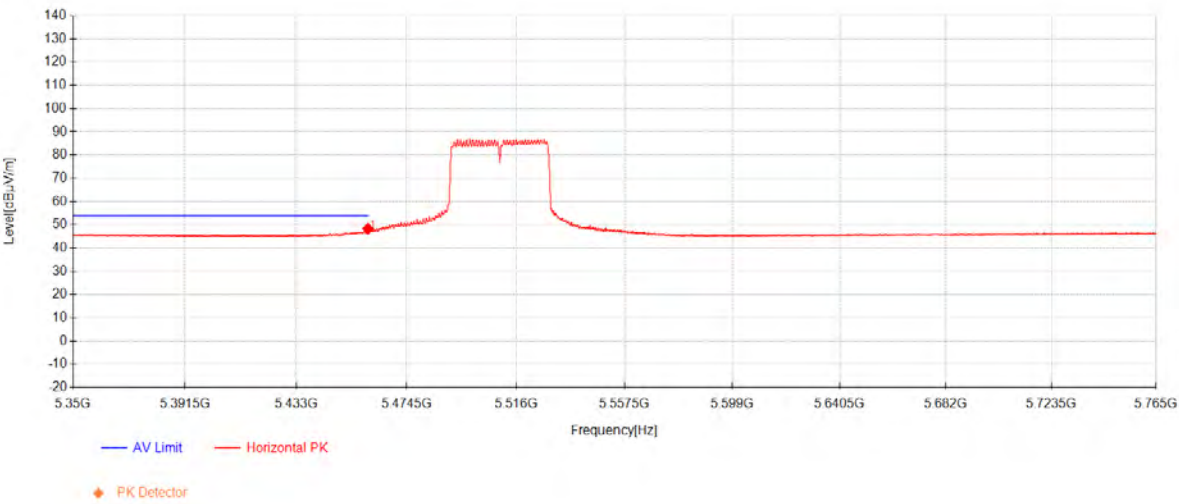
802.11n40 Channel 102



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5454.0175	44.10	33.11	-14.02	63.19	74.00	10.81	Horizontal
2	5468.8413	46.88	33.11	-13.97	66.02	68.30	2.28	Horizontal
3	5727.26	39.10	33.87	-13.61	59.36	68.30	8.94	Horizontal

802.11n40 Channel 102



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5459.9638	29.14	33.11	-14.00	48.25	54.00	5.75	Horizontal

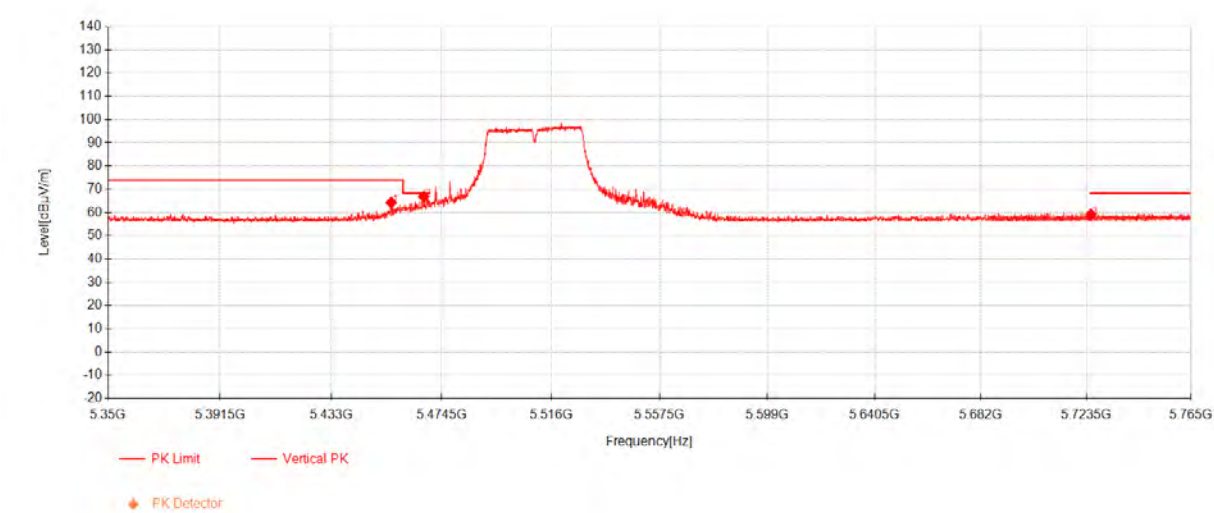
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

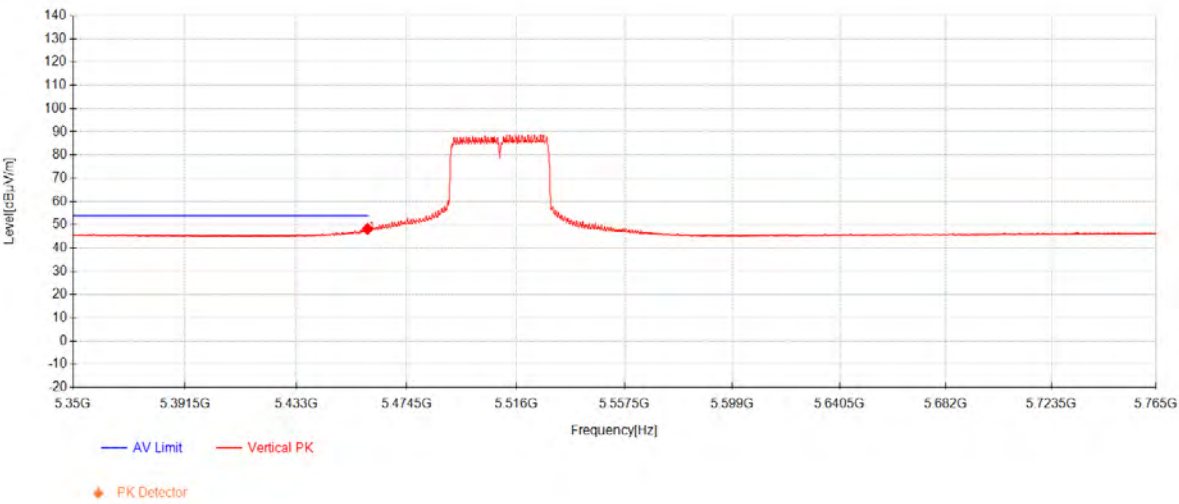
Page: 184 of 420

802.11n40 Channel 102



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5455.525	45.23	33.11	-14.01	64.33	74.00	9.67	Vertical
2	5467.7525	47.73	33.11	-13.97	66.87	68.30	1.43	Vertical
3	5725.36	38.93	33.87	-13.62	59.18	68.30	9.12	Vertical

802.11n40 Channel 102



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5459.7962	29.09	33.11	-14.00	48.20	54.00	5.80	Vertical

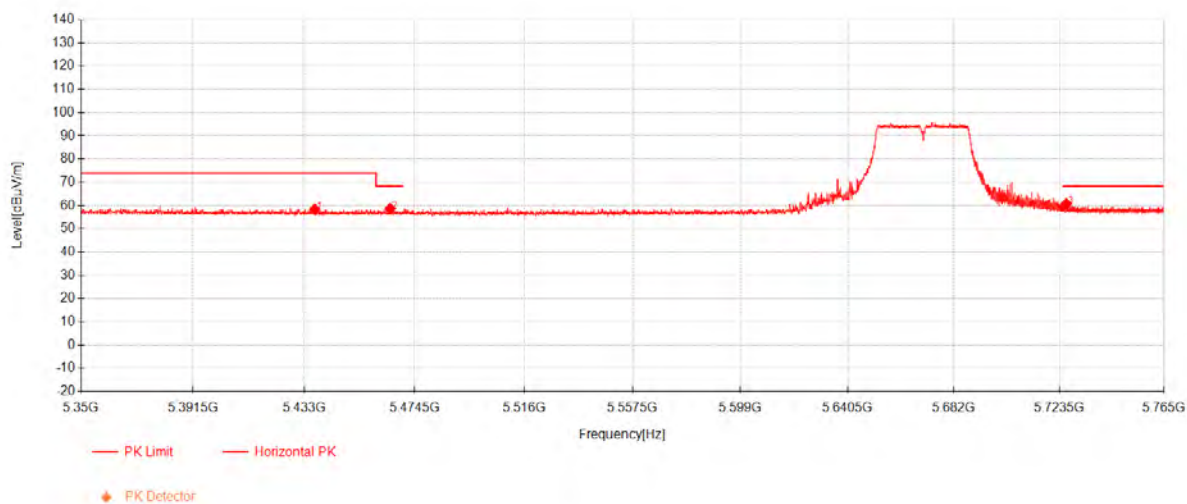
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 186 of 420

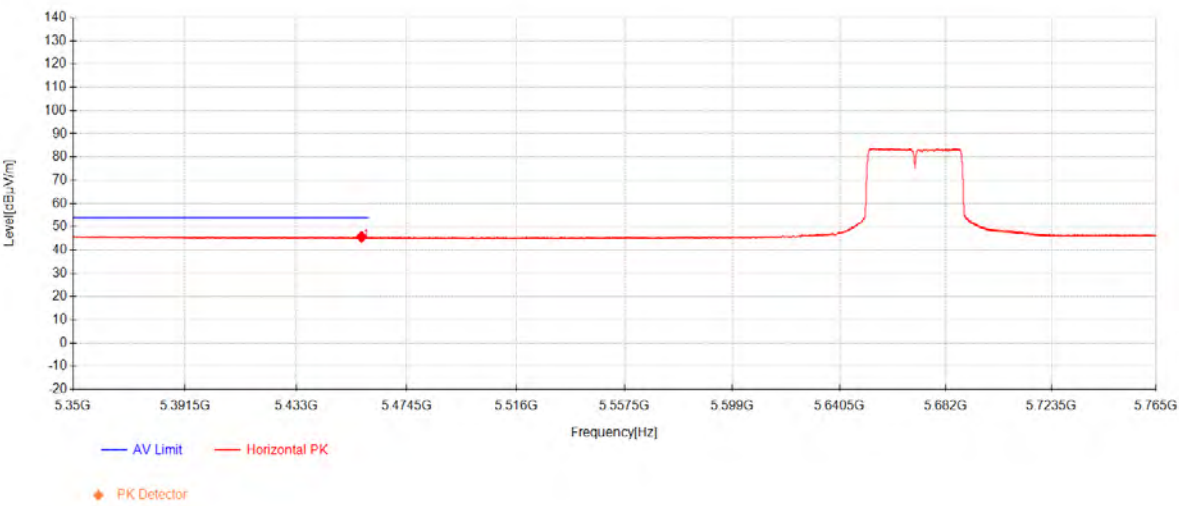
802.11n40 Channel 134



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5436.9325	39.29	33.11	-14.07	58.33	74.00	15.67	Horizontal
2	5465.24	39.47	33.11	-13.98	58.60	68.30	9.70	Horizontal
3	5726.24	40.52	33.87	-13.61	60.77	68.30	7.53	Horizontal

802.11n40 Channel 134



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5457.535	26.55	33.11	-14.00	45.65	54.00	8.35	Horizontal

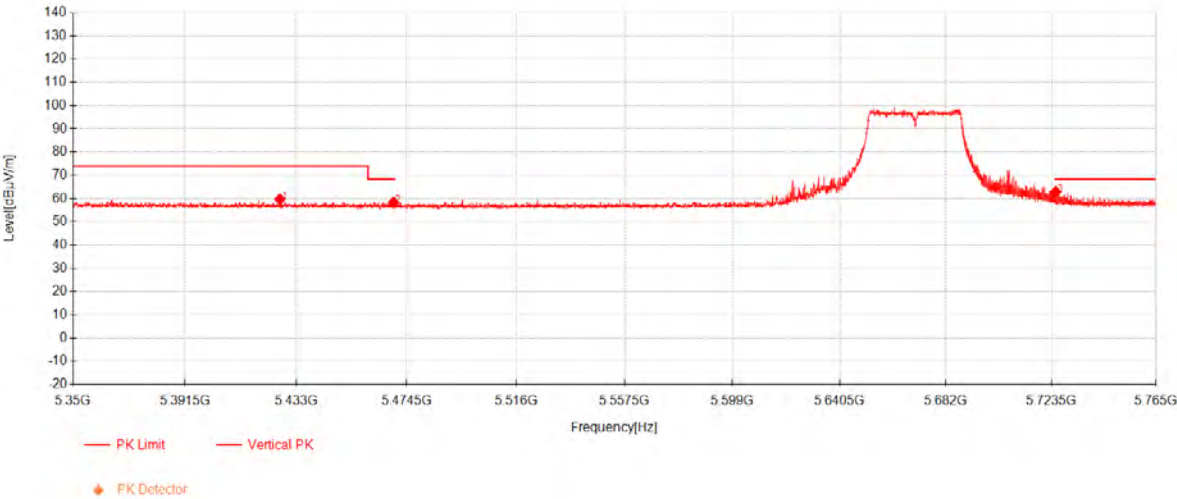
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 188 of 420

802.11n40 Channel 134



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5426.8825	40.61	33.11	-14.11	59.62	74.00	14.38	Vertical
2	5469.595	39.13	33.11	-13.96	58.27	68.30	10.03	Vertical
3	5725.22	42.69	33.87	-13.62	62.94	68.30	5.36	Vertical

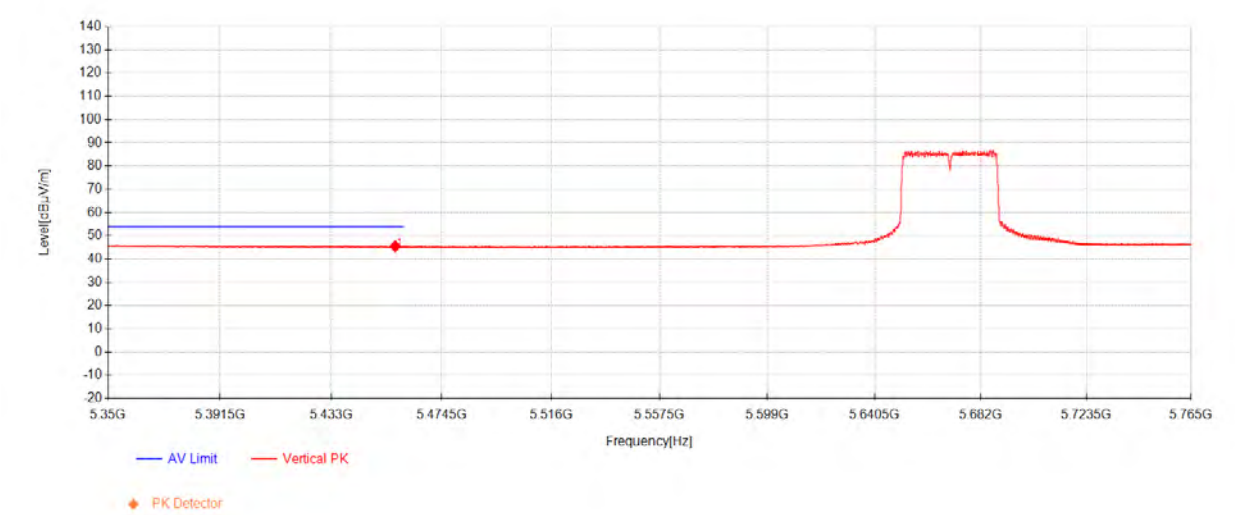
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 189 of 420

802.11n40 Channel 134



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5457.0325	26.41	33.11	-14.01	45.51	54.00	8.49	Vertical

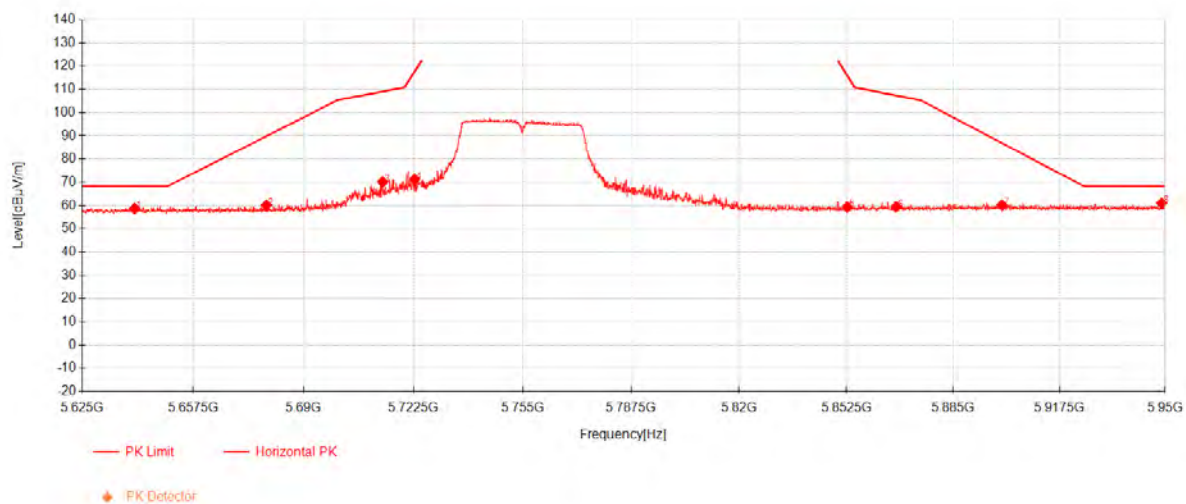
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 190 of 420

802.11n40 Channel 151



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5640.3562	38.78	33.58	-13.68	58.68	68.30	9.62	Horizontal
2	5679.0312	40.04	33.71	-13.67	60.08	89.82	29.74	Horizontal
3	5713.4	49.92	33.83	-13.64	70.10	109.05	38.95	Horizontal
4	5722.825	50.95	33.86	-13.62	71.19	117.34	46.15	Horizontal
5	5852.7438	38.22	34.30	-13.20	59.32	116.04	56.72	Horizontal
6	5867.6125	38.20	34.35	-13.12	59.43	107.37	47.94	Horizontal
7	5899.8688	38.67	34.46	-12.96	60.17	86.86	26.69	Horizontal
8	5948.9438	39.49	34.63	-13.15	60.97	68.30	7.33	Horizontal

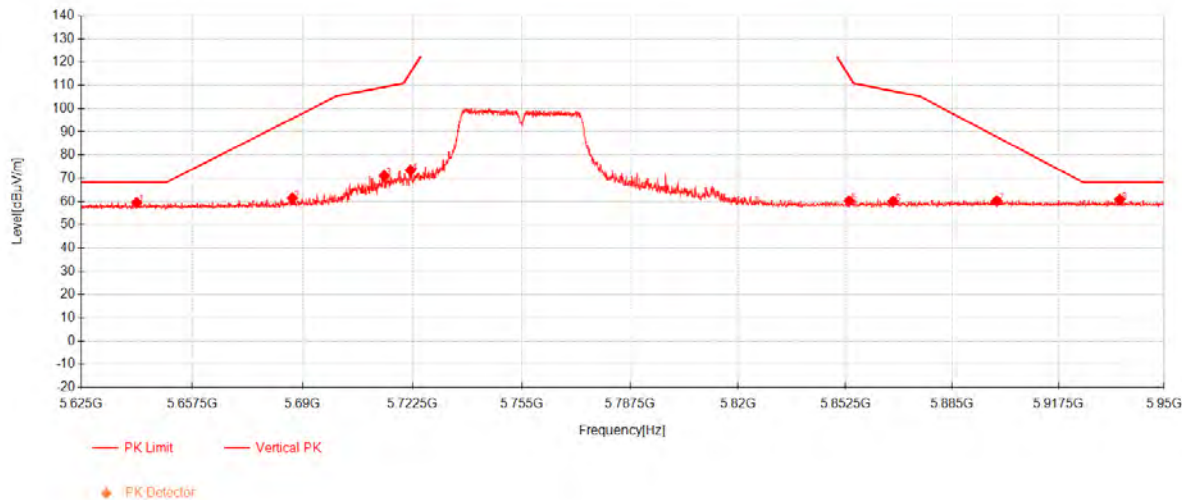
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 191 of 420

802.11n40 Channel 151



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5641.125	39.55	33.58	-13.68	59.45	68.30	8.85	Vertical
2	5686.9938	41.46	33.74	-13.67	61.52	95.71	34.19	Vertical
3	5714.1312	50.87	33.83	-13.64	71.06	109.26	38.20	Vertical
4	5721.9312	53.20	33.85	-13.62	73.43	115.30	41.87	Vertical
5	5853.6375	39.15	34.30	-13.19	60.26	114.01	53.75	Vertical
6	5866.9625	38.86	34.35	-13.13	60.08	107.55	47.47	Vertical
7	5898.5688	38.80	34.46	-12.97	60.29	87.82	27.53	Vertical
8	5936.35	39.38	34.58	-13.10	60.87	68.30	7.43	Vertical

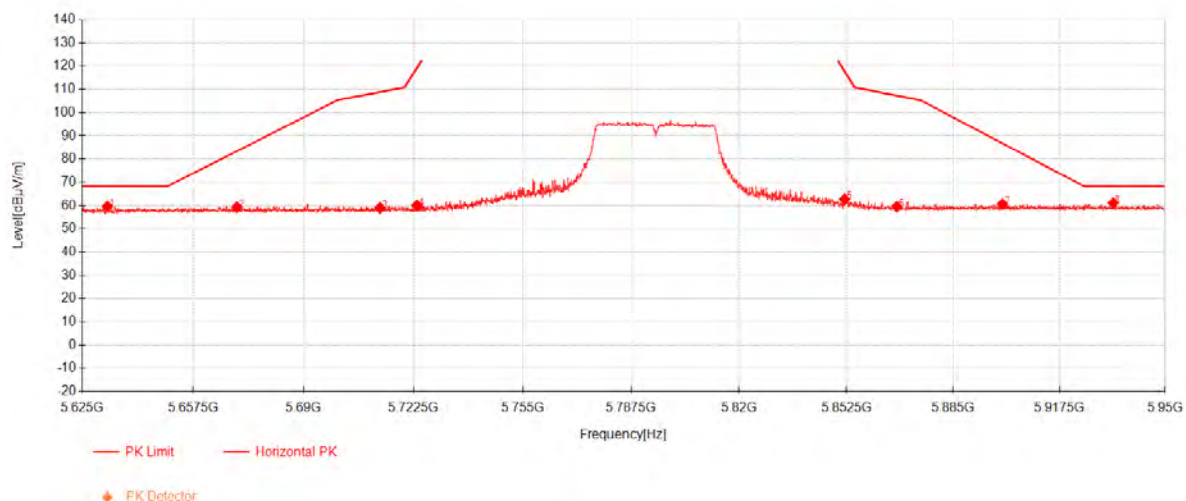
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 192 of 420

802.11n40 Channel 159



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5632.3938	39.66	33.55	-13.68	59.53	68.30	8.77	Horizontal
2	5670.3375	39.26	33.68	-13.67	59.27	83.39	24.12	Horizontal
3	5712.5875	38.78	33.82	-13.64	58.96	108.83	49.87	Horizontal
4	5723.5562	39.78	33.86	-13.62	60.02	119.01	58.99	Horizontal
5	5851.9312	41.66	34.30	-13.20	62.76	117.90	55.14	Horizontal
6	5867.775	38.26	34.35	-13.12	59.49	107.32	47.83	Horizontal
7	5900.0312	39.11	34.46	-12.96	60.61	86.74	26.13	Horizontal
8	5933.9938	39.59	34.58	-13.09	61.08	68.30	7.22	Horizontal

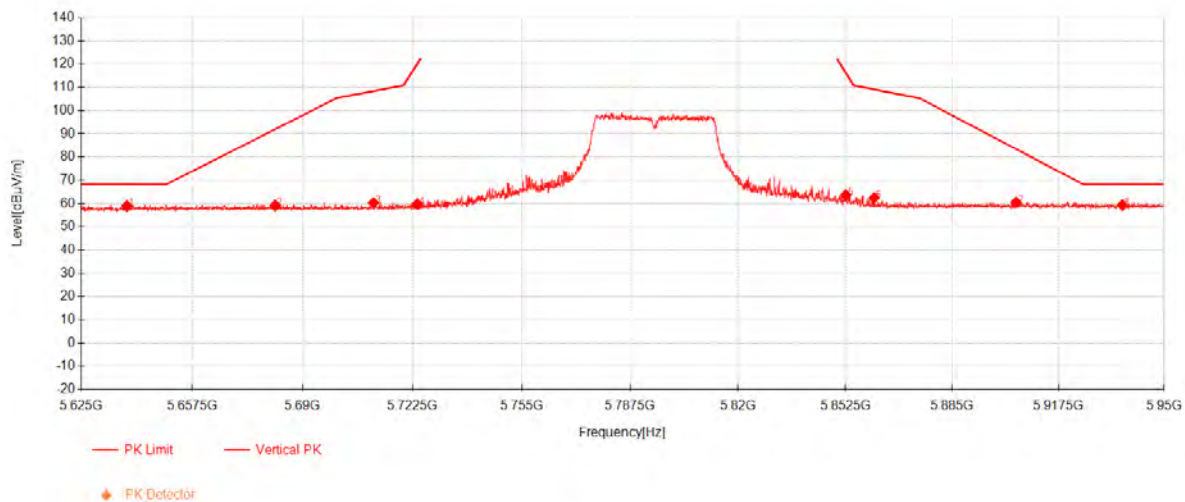
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 193 of 420

802.11n40 Channel 159



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5638.4062	39.04	33.57	-13.68	58.93	68.30	9.37	Vertical
2	5681.9562	39.08	33.72	-13.67	59.13	91.99	32.86	Vertical
3	5710.9625	40.14	33.82	-13.65	60.31	108.37	48.06	Vertical
4	5723.9625	39.55	33.86	-13.62	59.79	119.94	60.15	Vertical
5	5852.5812	42.56	34.30	-13.20	63.66	116.41	52.75	Vertical
6	5861.1938	41.26	34.33	-13.15	62.43	109.16	46.73	Vertical
7	5904.5	39.00	34.48	-12.98	60.50	83.43	22.93	Vertical
8	5937.1625	37.80	34.59	-13.10	59.29	68.30	9.01	Vertical

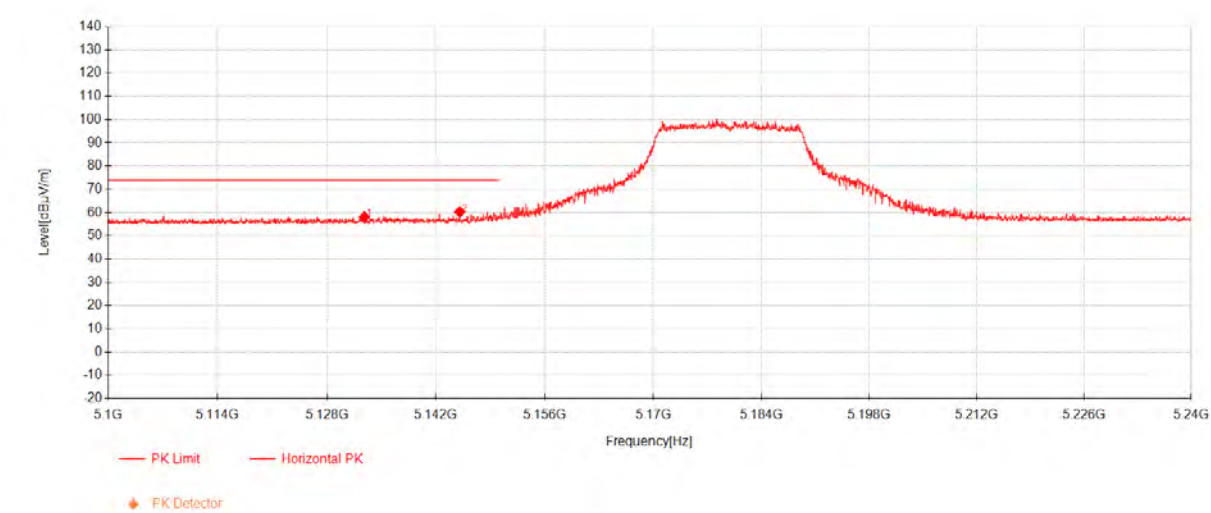
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

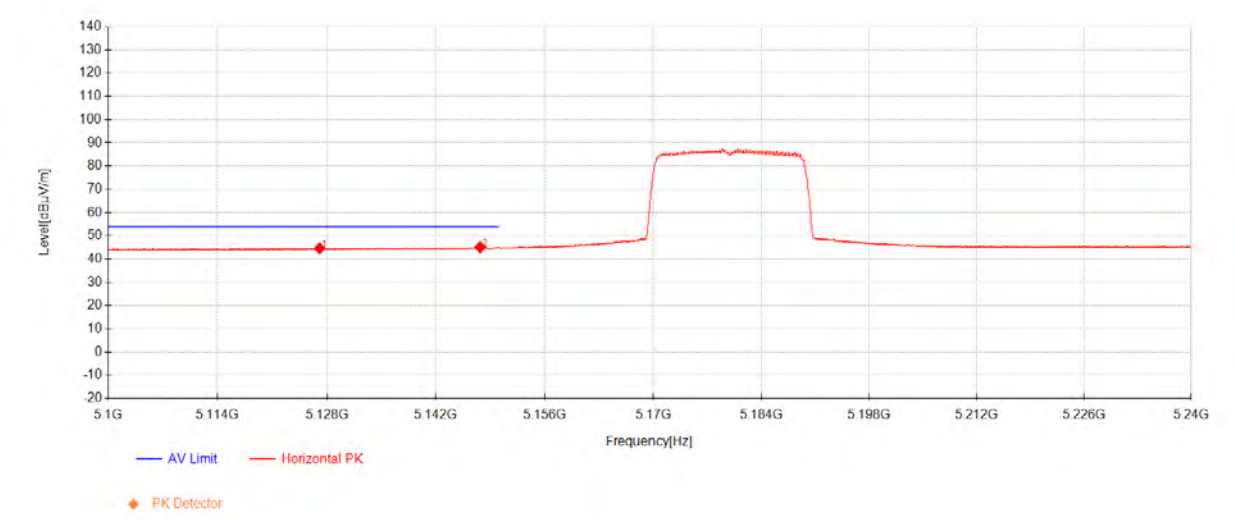
Page: 194 of 420

802.11ax20 Channel 36



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5132.795	39.70	33.17	-14.87	58.01	74.00	15.99	Horizontal
2	5145.045	41.91	33.17	-14.81	60.27	74.00	13.73	Horizontal

802.11ax20 Channel 36



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5127.055	26.37	33.17	-14.89	44.65	54.00	9.35	Horizontal
2	5147.67	26.74	33.17	-14.80	45.11	54.00	8.89	Horizontal

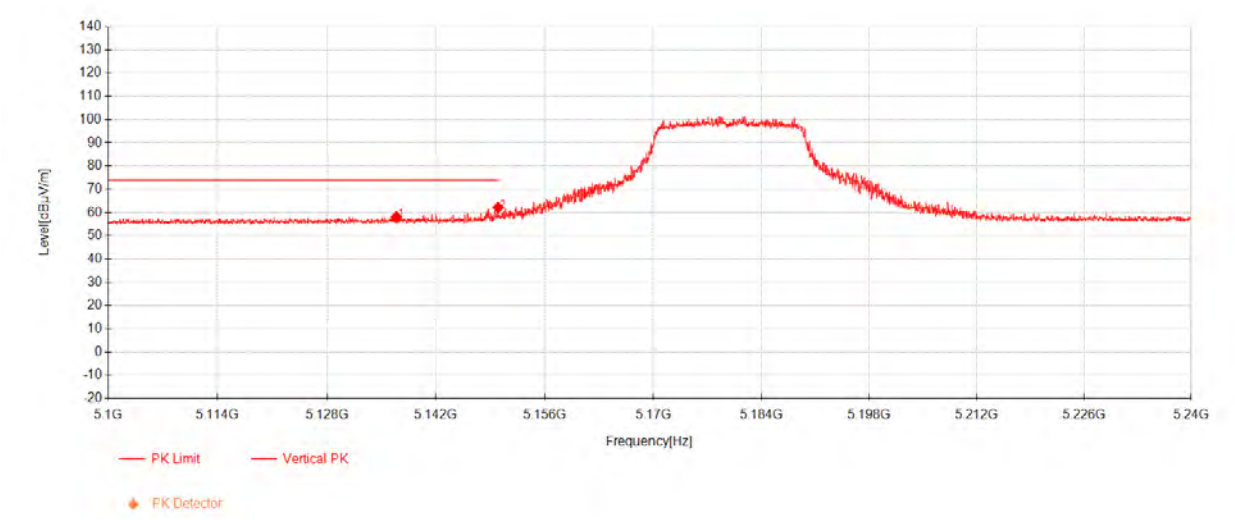
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 196 of 420

802.11ax20 Channel 36



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5136.89	39.70	33.17	-14.85	58.02	74.00	15.98	Vertical
2	5149.98	43.77	33.17	-14.79	62.15	74.00	11.85	Vertical

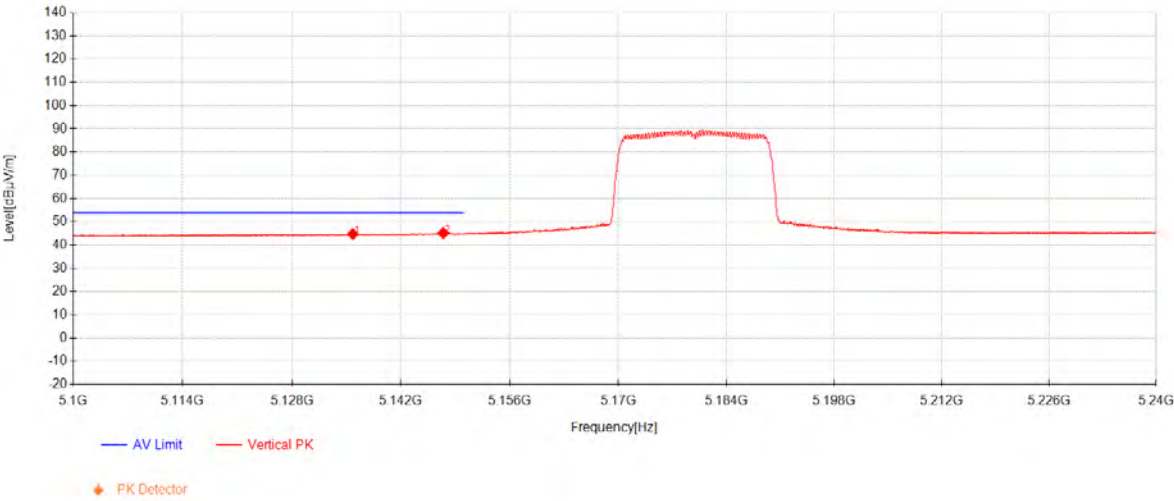
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

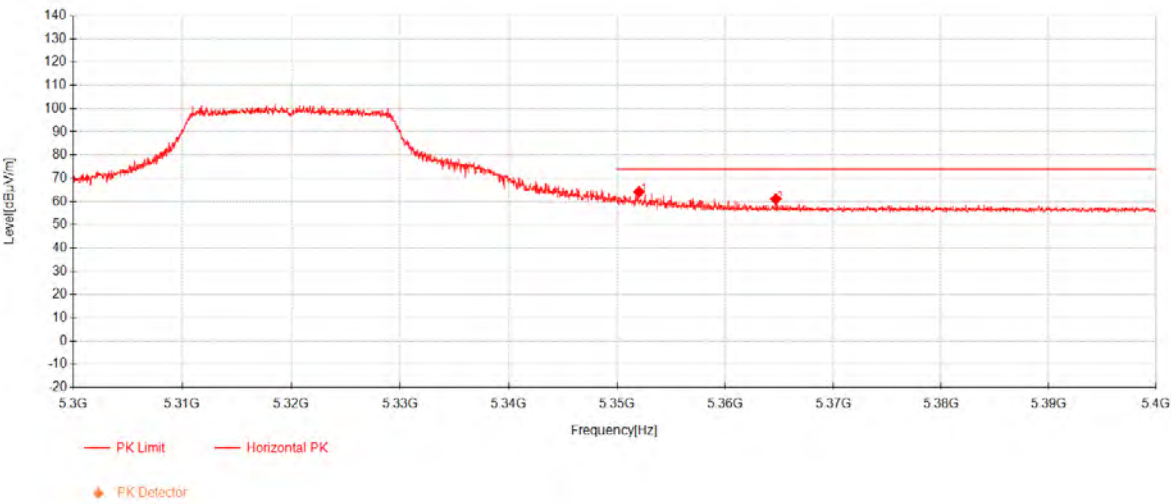
Page: 197 of 420

802.11ax20 Channel 36



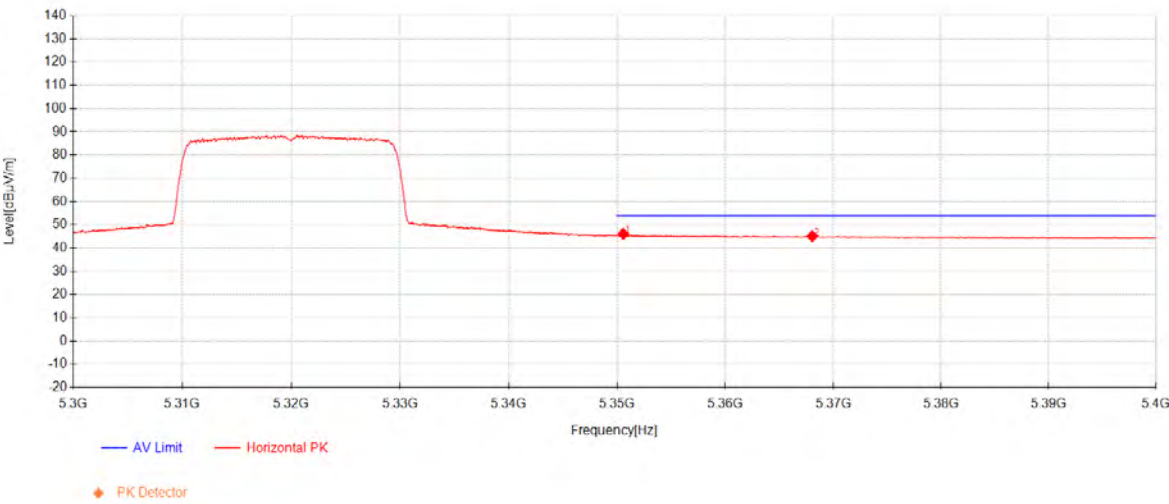
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5135.805	26.44	33.17	-14.85	44.76	54.00	9.24	Vertical
2	5147.425	26.81	33.17	-14.80	45.18	54.00	8.82	Vertical

802.11ax20 Channel 64



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5352.025	45.14	33.13	-14.10	64.17	74.00	9.83	Horizontal
2	5364.675	42.08	33.13	-14.13	61.08	74.00	12.92	Horizontal

802.11ax20 Channel 64



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.575	27.05	33.13	-14.10	46.08	54.00	7.92	Horizontal
2	5368.05	26.08	33.13	-14.13	45.07	54.00	8.93	Horizontal

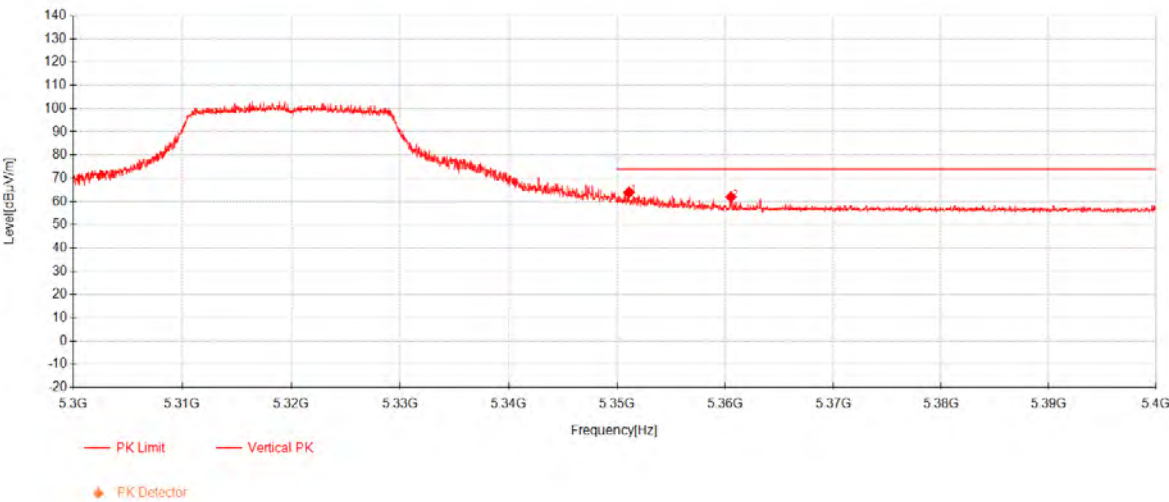
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 200 of 420

802.11ax20 Channel 64



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5351.1	44.92	33.13	-14.10	63.95	74.00	10.05	Vertical
2	5360.525	42.95	33.13	-14.12	61.96	74.00	12.04	Vertical

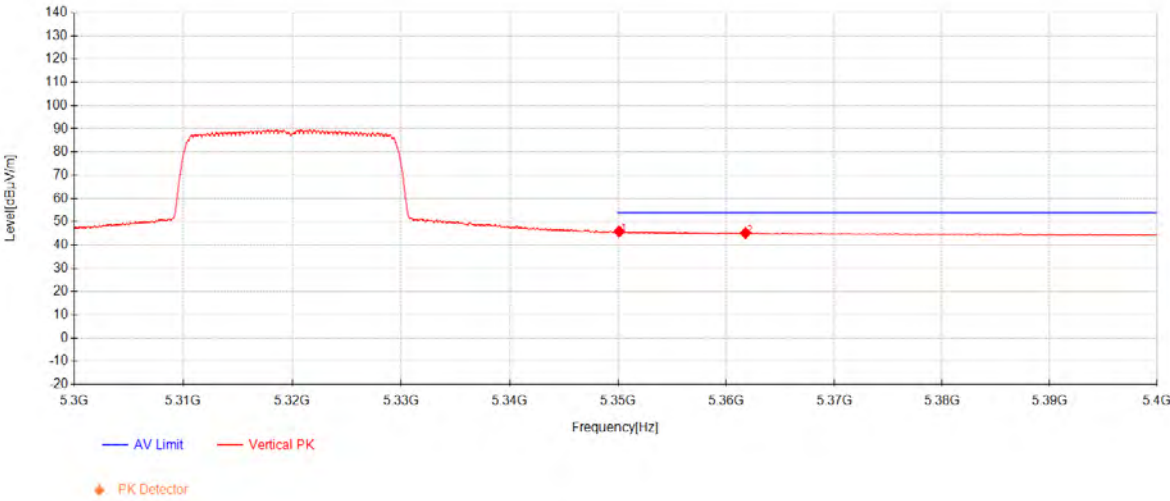
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 201 of 420

802.11ax20 Channel 64



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5350.1	26.82	33.13	-14.10	45.85	54.00	8.15	Vertical
2	5361.775	26.15	33.13	-14.12	45.16	54.00	8.84	Vertical

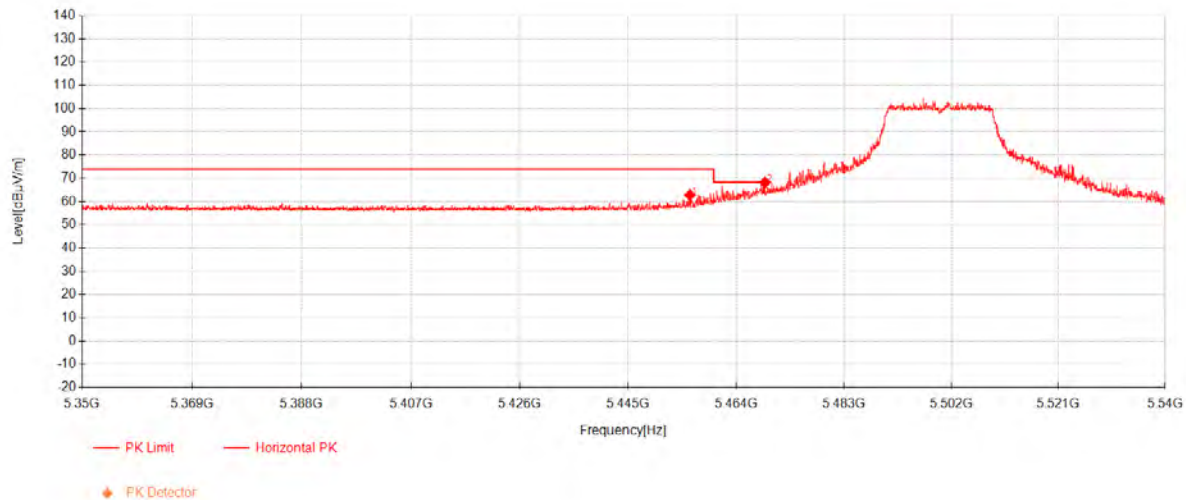
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 202 of 420

802.11ax20 Channel 100



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5455.83	43.68	33.11	-14.01	62.78	74.00	11.22	Horizontal
2	5469.035	49.02	33.11	-13.97	68.16	68.30	0.14	Horizontal

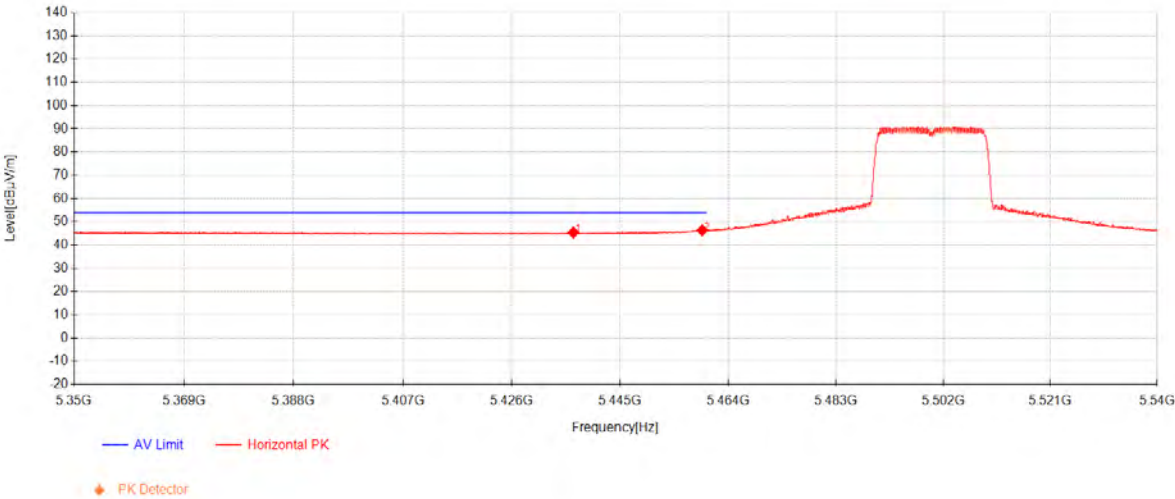
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 203 of 420

802.11ax20 Channel 100



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5436.7825	26.33	33.11	-14.07	45.37	54.00	8.63	Horizontal
2	5459.3925	27.23	33.11	-14.00	46.34	54.00	7.66	Horizontal

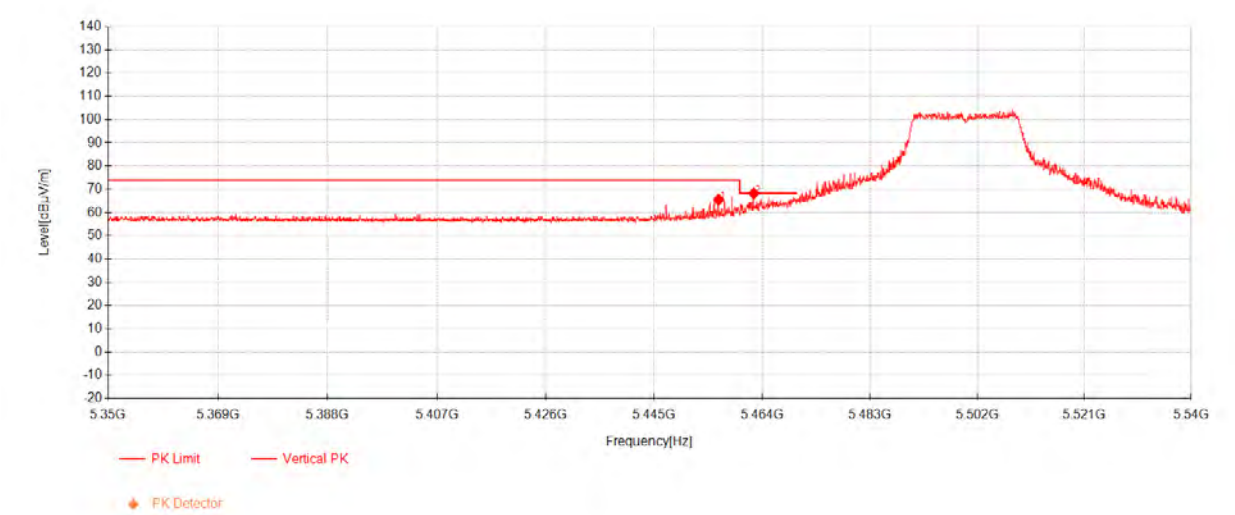
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 204 of 420

802.11ax20 Channel 100



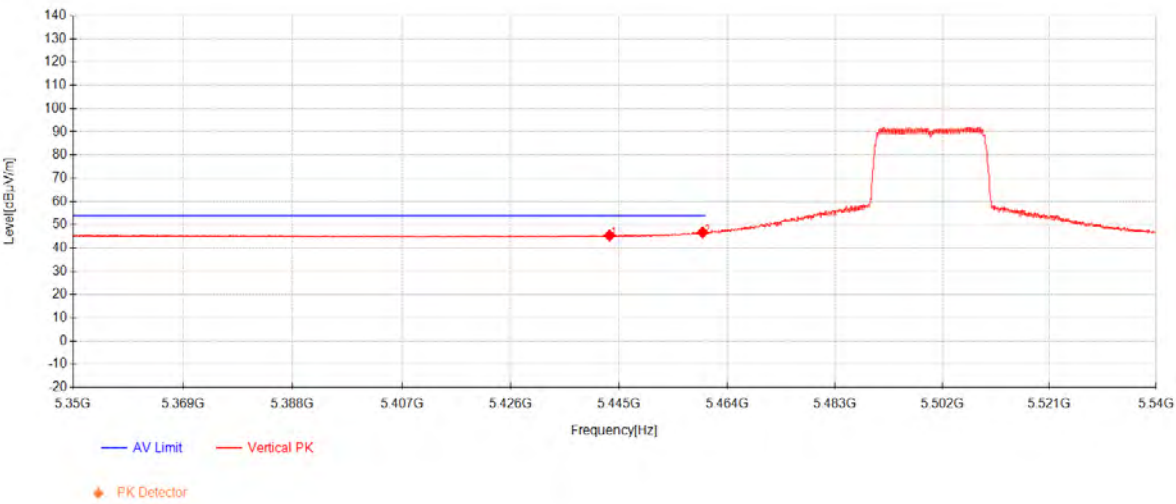
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5456.305	46.48	33.11	-14.01	65.58	74.00	8.42	Vertical
2	5462.48	49.07	33.11	-13.99	68.19	68.30	0.11	Vertical

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204
Page: 205 of 420

802.11ax20 Channel 100



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5443.29	26.34	33.11	-14.05	45.40	54.00	8.60	Vertical
2	5459.63	27.59	33.11	-14.00	46.70	54.00	7.30	Vertical

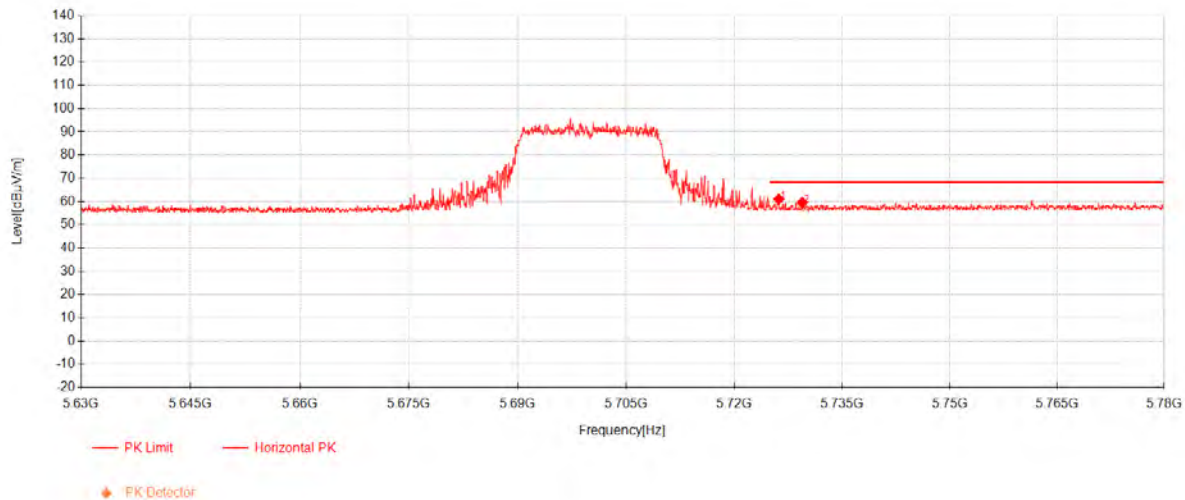
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 206 of 420

802.11ax20 Channel 140



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5726.1875	40.75	33.87	-13.62	61.00	68.30	7.30	Horizontal
2	5729.45	39.25	33.88	-13.61	59.52	68.30	8.78	Horizontal

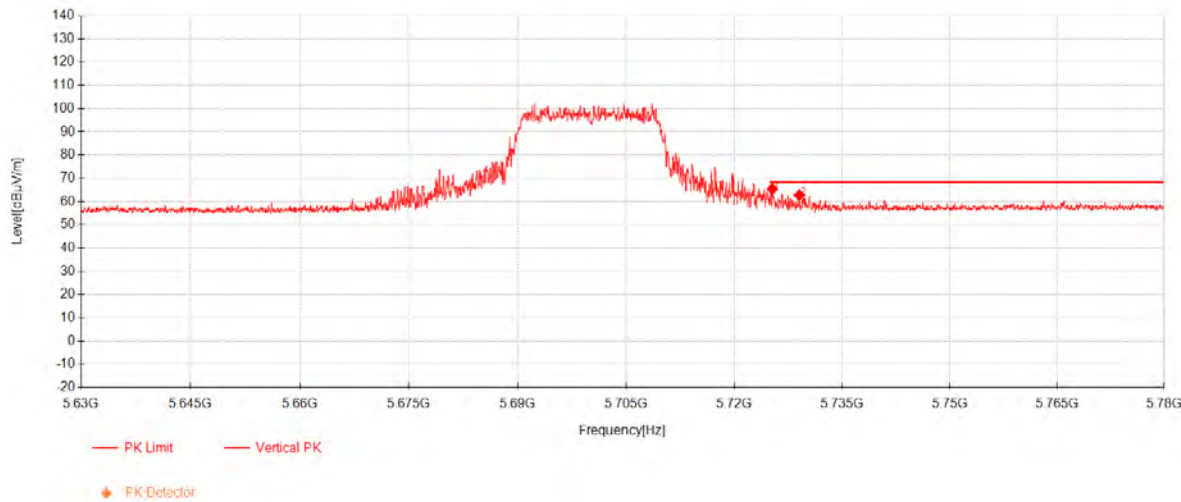
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 207 of 420

802.11ax20 Channel 140



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5725.2875	45.22	33.87	-13.62	65.47	68.30	2.83	Vertical
2	5729.0375	42.46	33.88	-13.61	62.73	68.30	5.57	Vertical

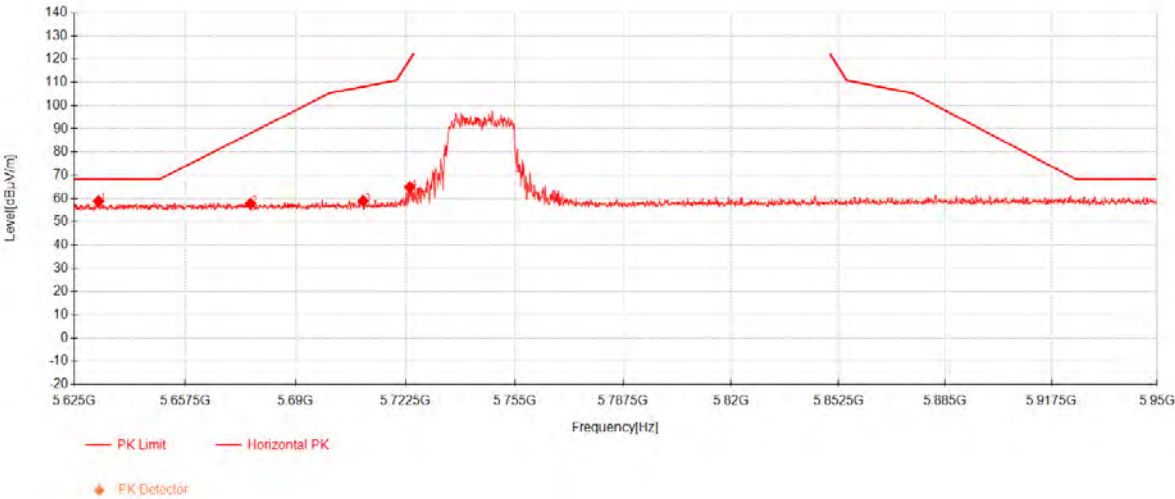
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 208 of 420

802.11ax20 Channel 149



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5632.15	38.96	33.55	-13.68	58.83	68.30	9.47	Horizontal
2	5676.675	37.73	33.70	-13.67	57.76	88.08	30.32	Horizontal
3	5709.9875	38.80	33.81	-13.65	58.96	108.10	49.14	Horizontal
4	5723.8	44.65	33.86	-13.62	64.89	119.56	54.67	Horizontal

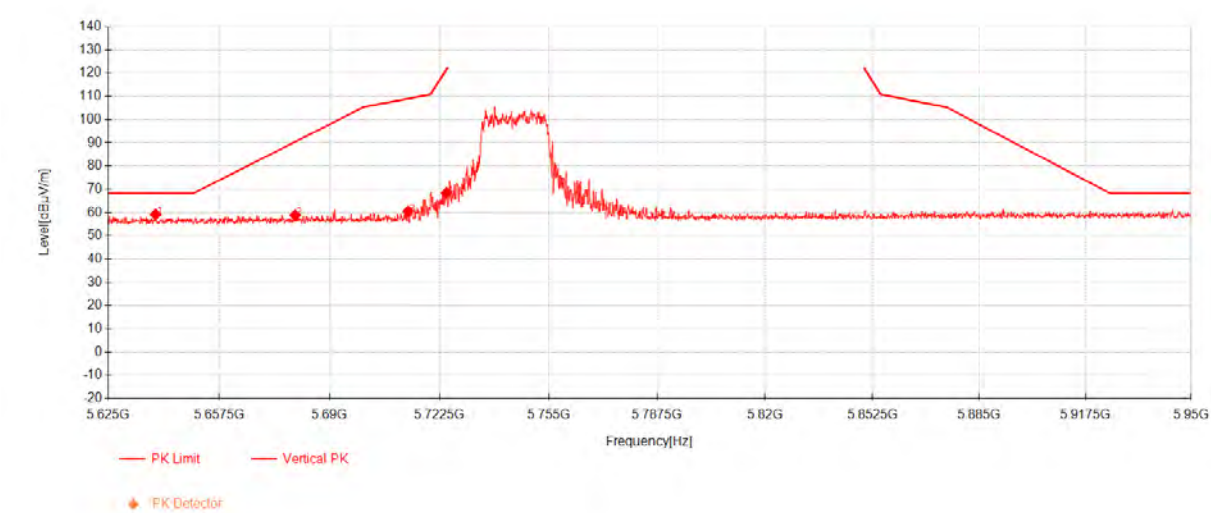
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 209 of 420

802.11ax20 Channel 149



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5638.8938	39.23	33.57	-13.68	59.13	68.30	9.17	Vertical
2	5679.8438	38.74	33.71	-13.67	58.78	90.42	31.64	Vertical
3	5713.2375	40.33	33.83	-13.64	60.51	109.01	48.50	Vertical
4	5724.6125	48.14	33.86	-13.62	68.39	121.42	53.03	Vertical

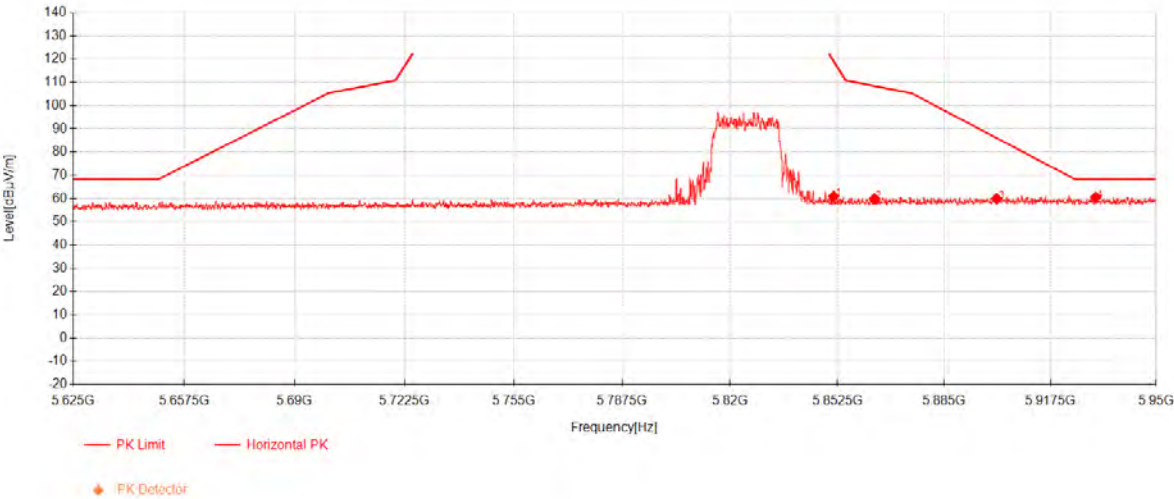
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 210 of 420

802.11ax20 Channel 165



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5851.3625	39.86	34.29	-13.20	60.95	119.19	58.24	Horizontal
2	5863.7125	38.65	34.34	-13.14	59.85	108.46	48.61	Horizontal
3	5901.0062	38.42	34.46	-12.96	59.92	86.02	26.10	Horizontal
4	5931.3938	38.98	34.57	-13.08	60.47	68.30	7.83	Horizontal

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 211 of 420

802.11ax20 Channel 165



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5850.1438	43.70	34.29	-13.21	64.78	121.97	57.19	Vertical
2	5863.4688	38.94	34.34	-13.14	60.13	108.53	48.40	Vertical
3	5898.4875	38.34	34.45	-12.97	59.83	87.88	28.05	Vertical
4	5941.3875	39.07	34.60	-13.12	60.55	68.30	7.75	Vertical

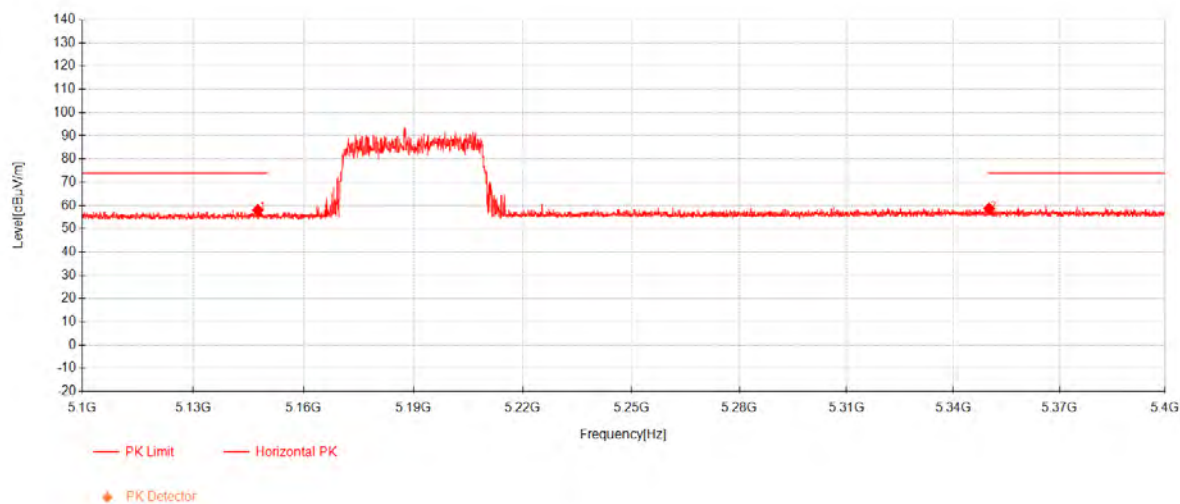
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 212 of 420

802.11ax40 Channel 38

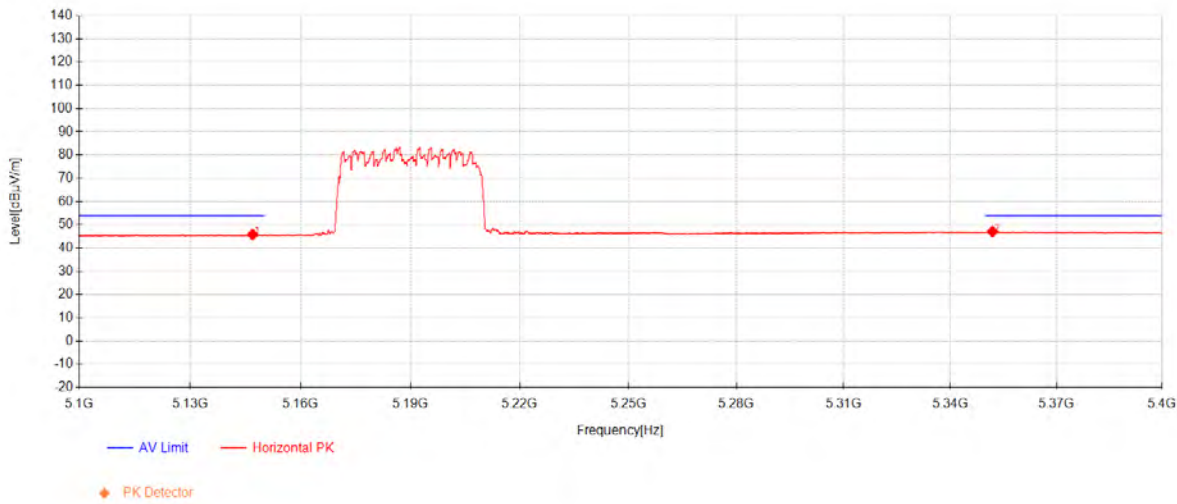


Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.52	39.65	33.17	-14.80	58.02	74.00	15.98	Horizontal
2	5350.055	39.67	33.13	-14.10	58.70	74.00	15.30	Horizontal

Compliance Certification Services (Kunshan) Inc.

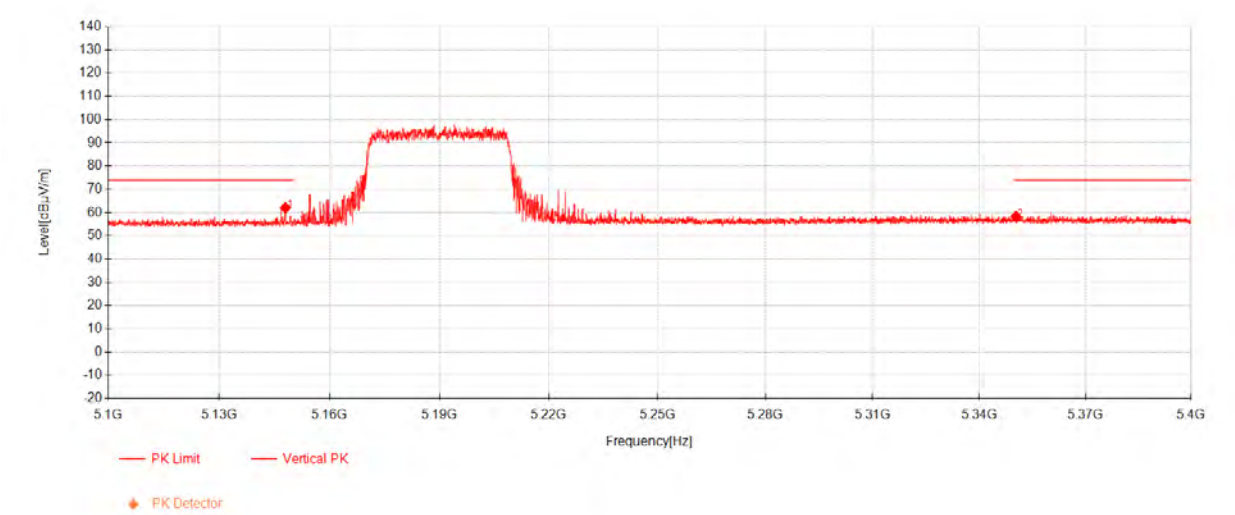
802.11ax40 Channel 38



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5146.92	27.45	33.17	-14.80	45.82	54.00	8.18	Horizontal
2	5351.875	28.01	33.13	-14.10	47.04	54.00	6.96	Horizontal

Compliance Certification Services (Kunshan) Inc.

802.11ax40 Channel 38



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5147.96	43.66	33.17	-14.80	62.03	74.00	11.97	Vertical
2	5350.335	39.23	33.13	-14.10	58.26	74.00	15.74	Vertical

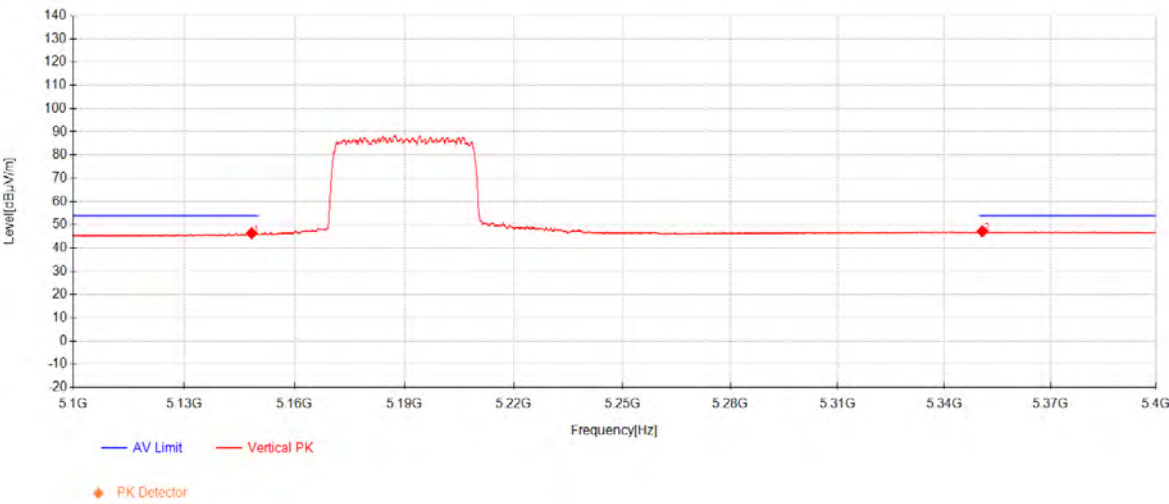
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 215 of 420

802.11ax40 Channel 38



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.28	27.98	33.17	-14.80	46.35	54.00	7.65	Vertical
2	5350.685	28.14	33.13	-14.10	47.17	54.00	6.83	Vertical

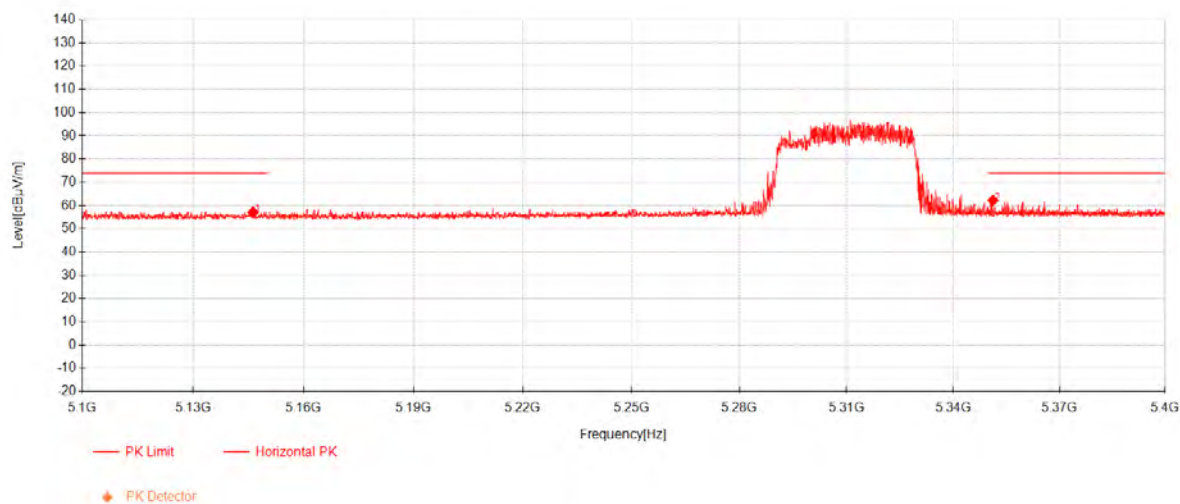
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 216 of 420

802.11ax40 Channel 62



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5146.25	38.73	33.17	-14.81	57.09	74.00	16.91	Horizontal
2	5351.15	43.19	33.13	-14.10	62.22	74.00	11.78	Horizontal

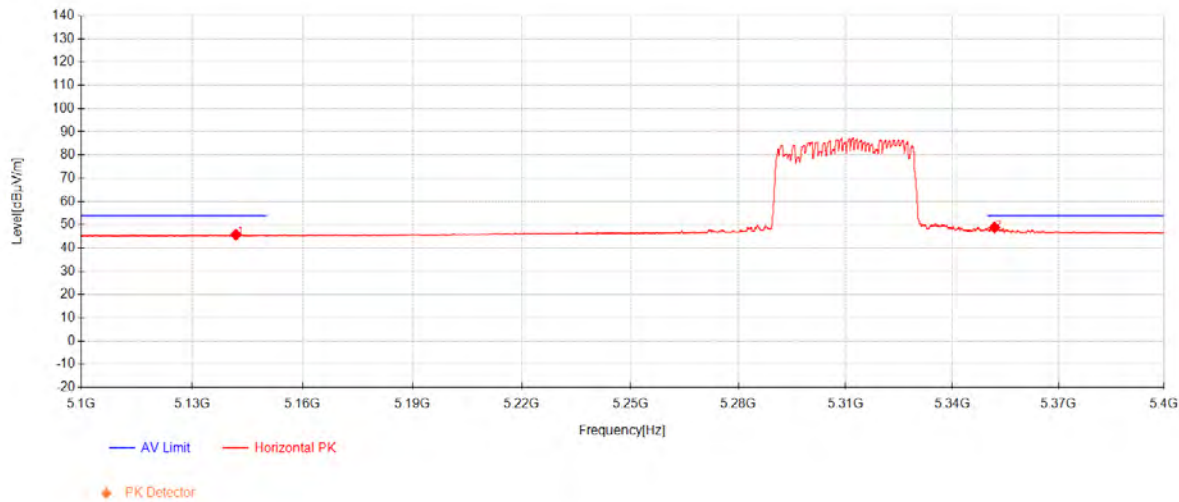
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 217 of 420

802.11ax40 Channel 62



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5141.85	27.40	33.17	-14.83	45.75	54.00	8.25	Horizontal
2	5351.9	29.78	33.13	-14.10	48.81	54.00	5.19	Horizontal

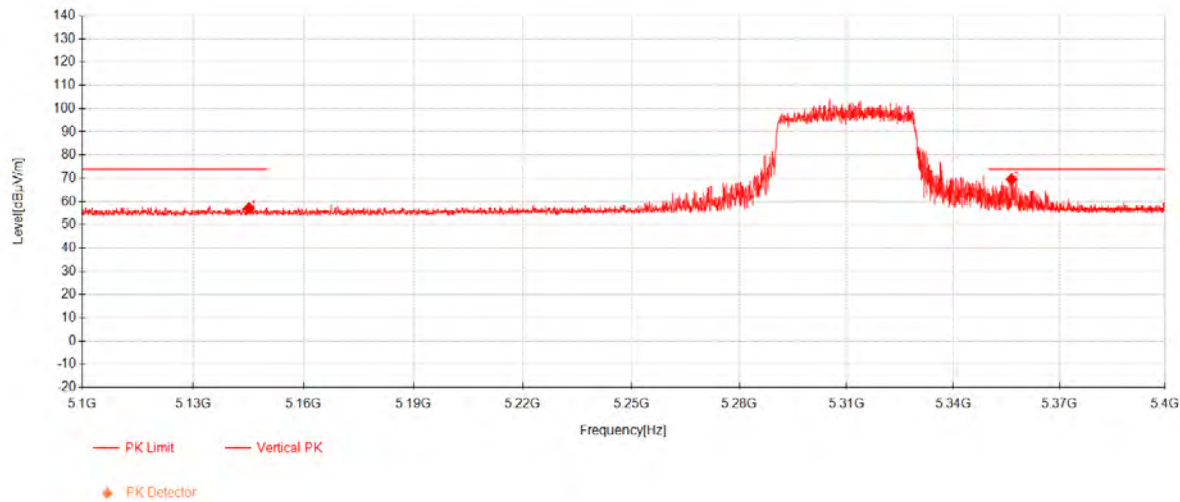
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 218 of 420

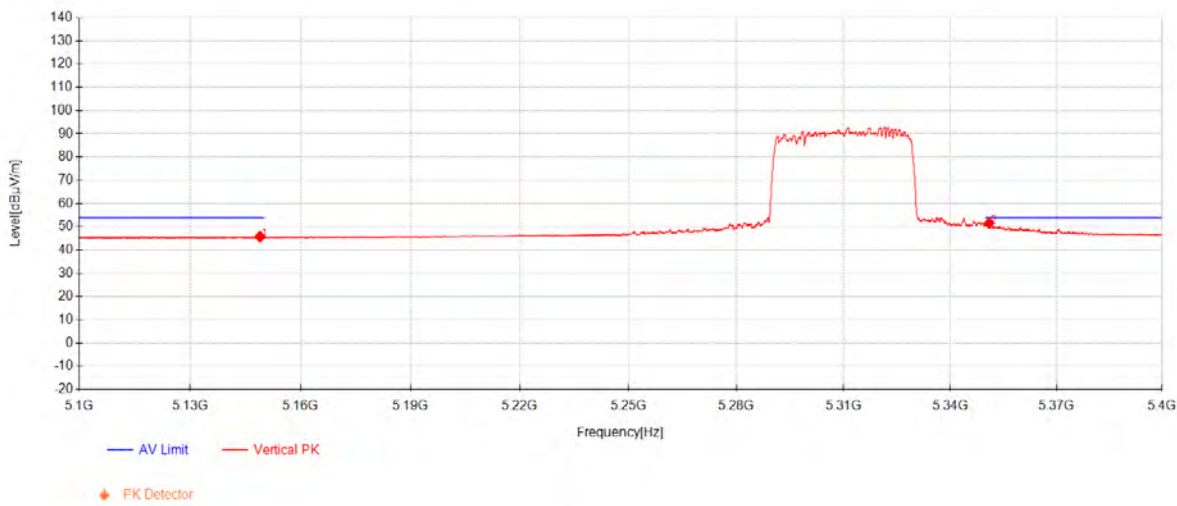
802.11ax40 Channel 62



Data List

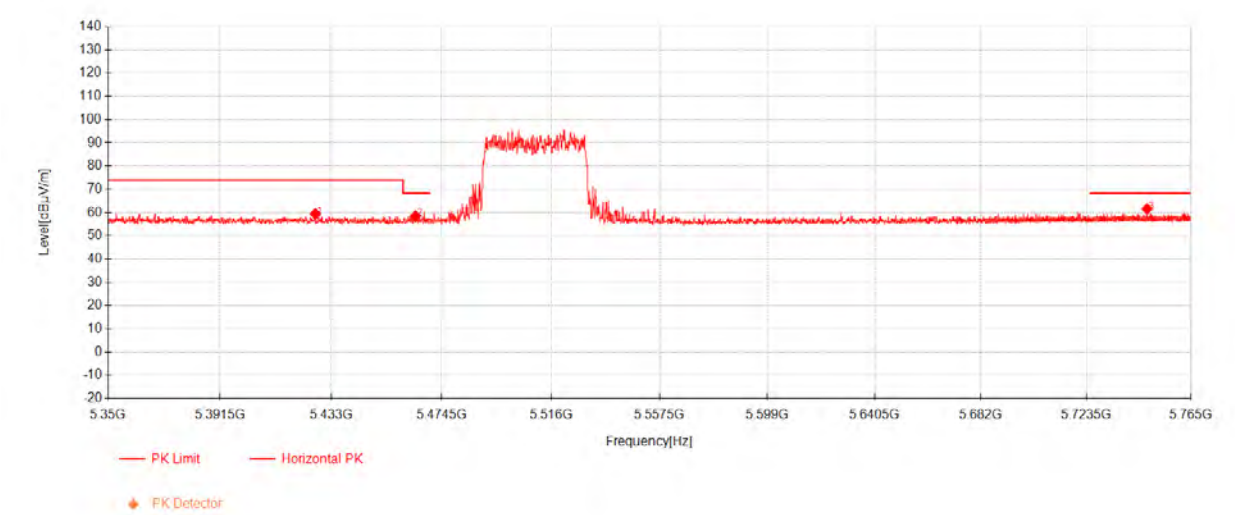
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5145.15	38.80	33.17	-14.81	57.16	74.00	16.84	Vertical
2	5356.425	50.48	33.13	-14.11	69.50	74.00	4.50	Vertical

802.11ax40 Channel 62



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5148.95	27.39	33.17	-14.79	45.77	54.00	8.23	Vertical
2	5350.925	32.47	33.13	-14.10	51.50	54.00	2.50	Vertical

802.11ax40 Channel 102



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5427.05	40.38	33.11	-14.11	59.39	74.00	14.61	Horizontal
2	5464.6538	39.27	33.11	-13.98	58.40	68.30	9.90	Horizontal
3	5747.54	41.22	33.94	-13.57	61.59	68.30	6.71	Horizontal

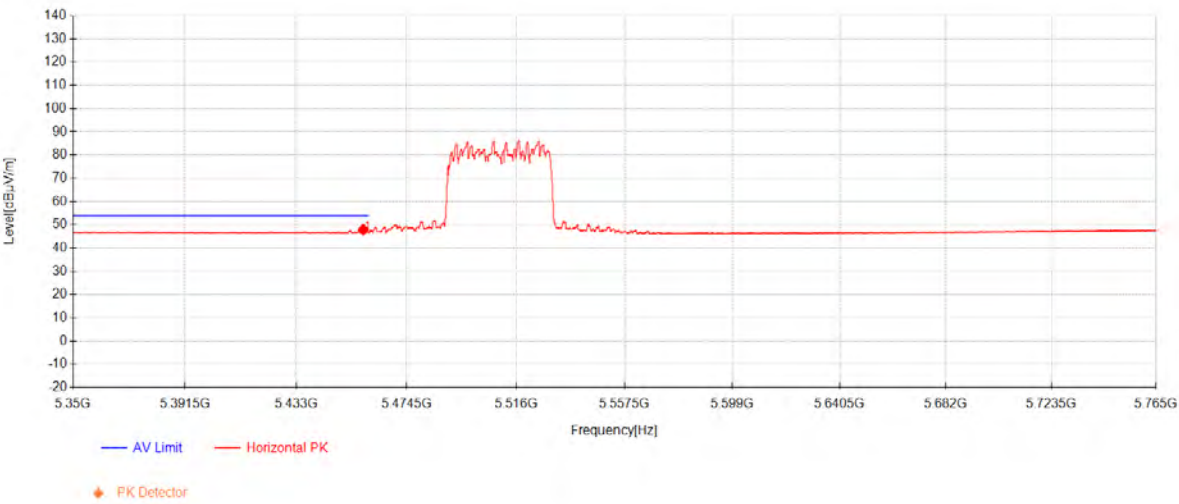
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 221 of 420

802.11ax40 Channel 102



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5458.205	28.80	33.11	-14.00	47.91	54.00	6.09	Horizontal

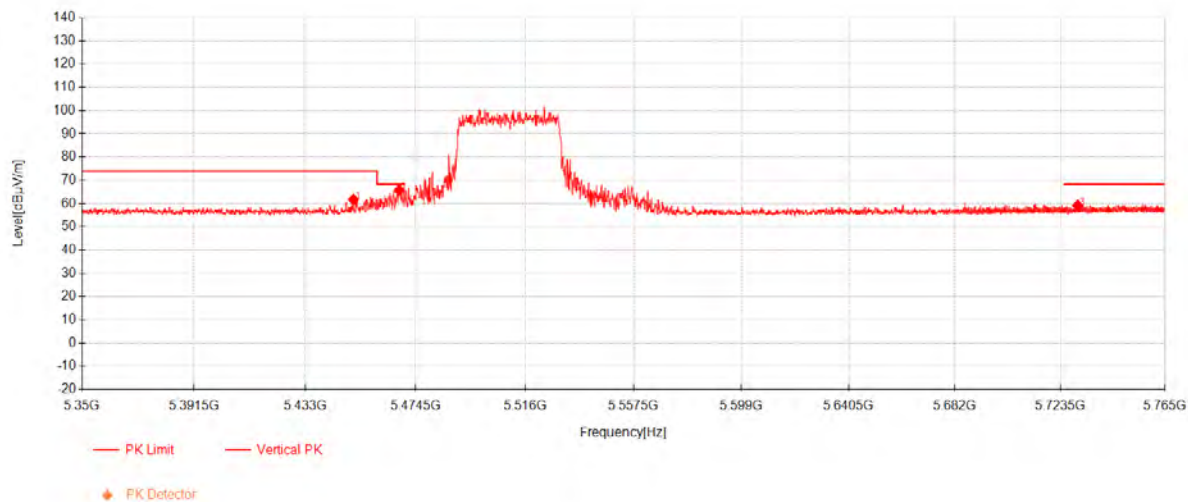
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 222 of 420

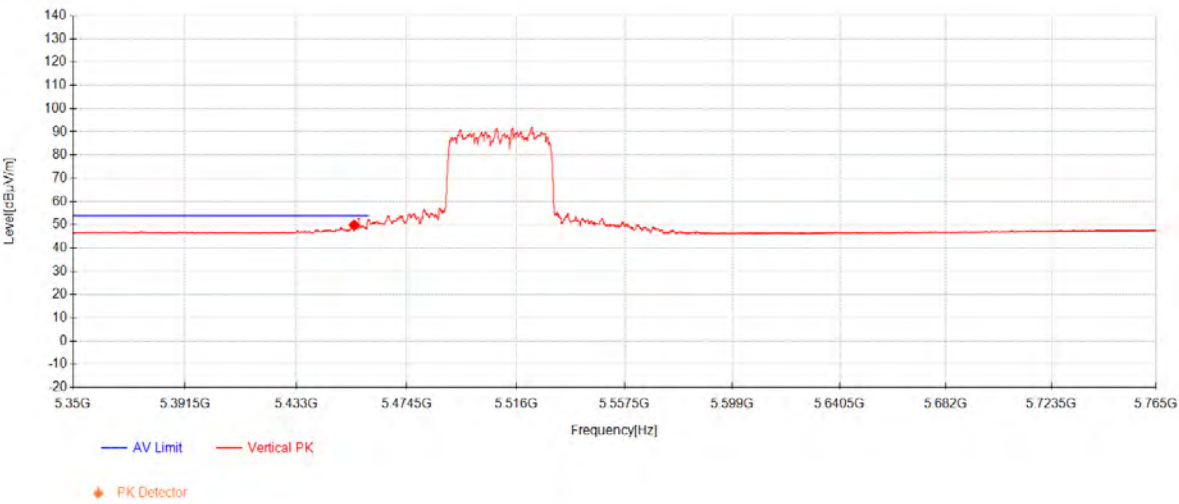
802.11ax40 Channel 102



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5451.0862	42.63	33.11	-14.03	61.71	74.00	12.29	Vertical
2	5468.3388	46.60	33.11	-13.97	65.74	68.30	2.56	Vertical
3	5730.42	38.82	33.88	-13.61	59.10	68.30	9.20	Vertical

802.11ax40 Channel 102



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5454.7712	30.71	33.11	-14.01	49.81	54.00	4.19	Vertical

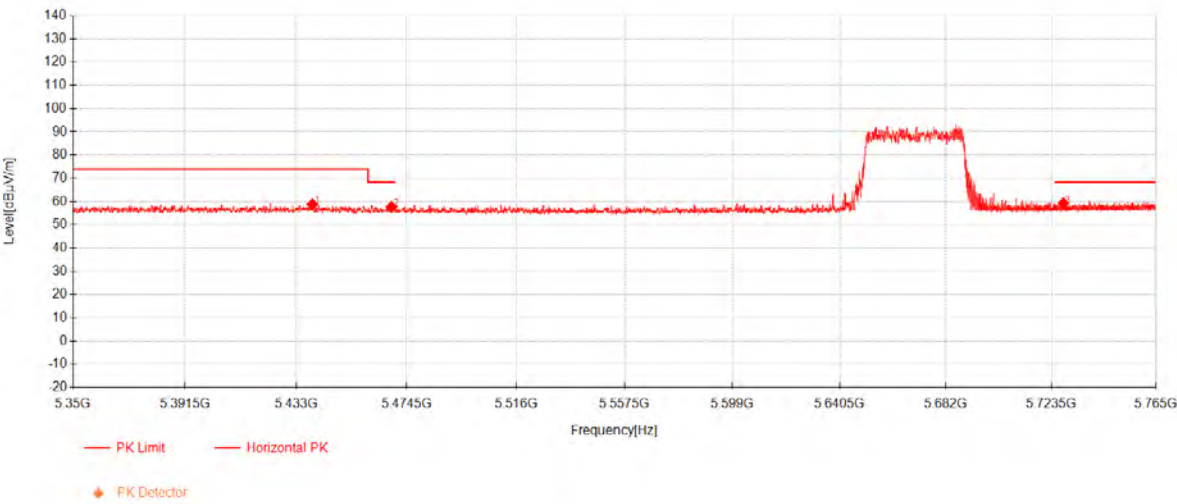
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 224 of 420

802.11ax40 Channel 134



Data List

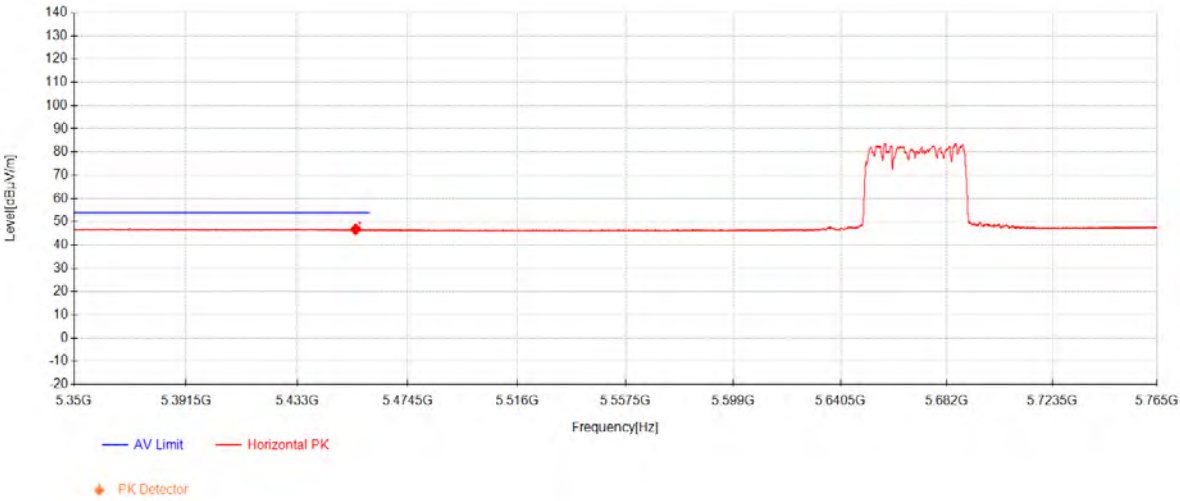
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5439.0262	39.70	33.11	-14.07	58.74	74.00	15.26	Horizontal
2	5468.7575	38.51	33.11	-13.97	57.65	68.30	10.65	Horizontal
3	5728.26	38.91	33.88	-13.61	59.18	68.30	9.12	Horizontal

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204
 Page: 225 of 420

802.11ax40 Channel 134



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5454.9388	27.63	33.11	-14.01	46.73	54.00	7.27	Horizontal

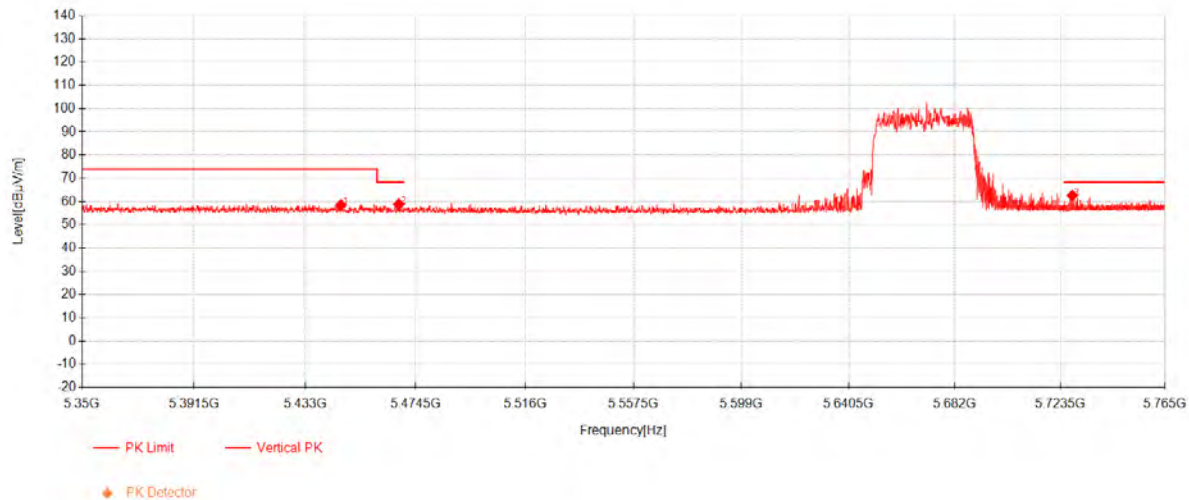
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 226 of 420

802.11ax40 Channel 134



Data List

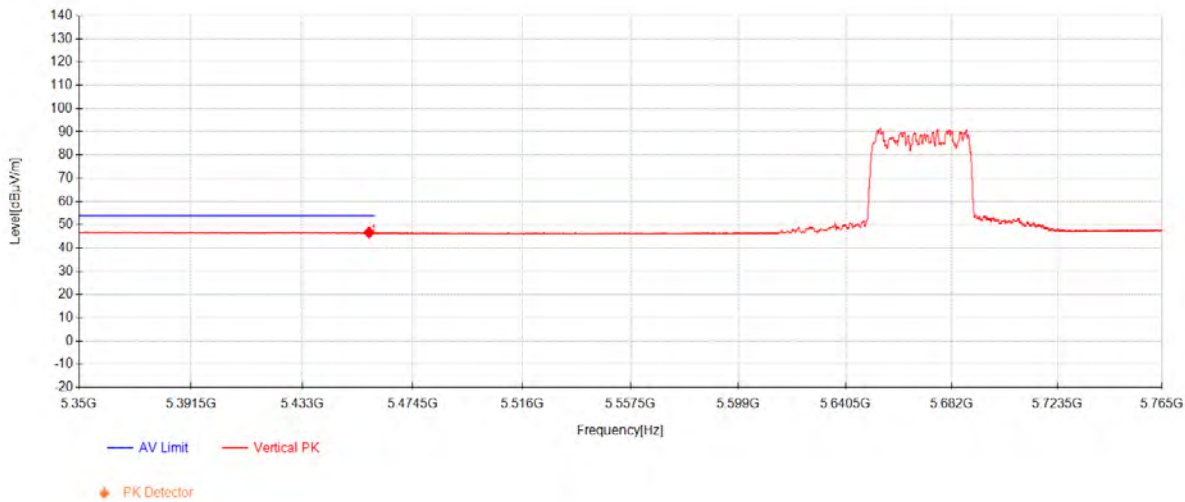
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5446.3962	39.34	33.11	-14.04	58.41	74.00	15.59	Vertical
2	5468.1712	39.63	33.11	-13.97	58.77	68.30	9.53	Vertical
3	5728.24	42.31	33.88	-13.61	62.58	68.30	5.72	Vertical

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023
Report No.: KSCR240900173204

Page: 227 of 420

802.11ax40 Channel 134



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5458.1212	27.57	33.11	-14.00	46.68	54.00	7.32	Vertical

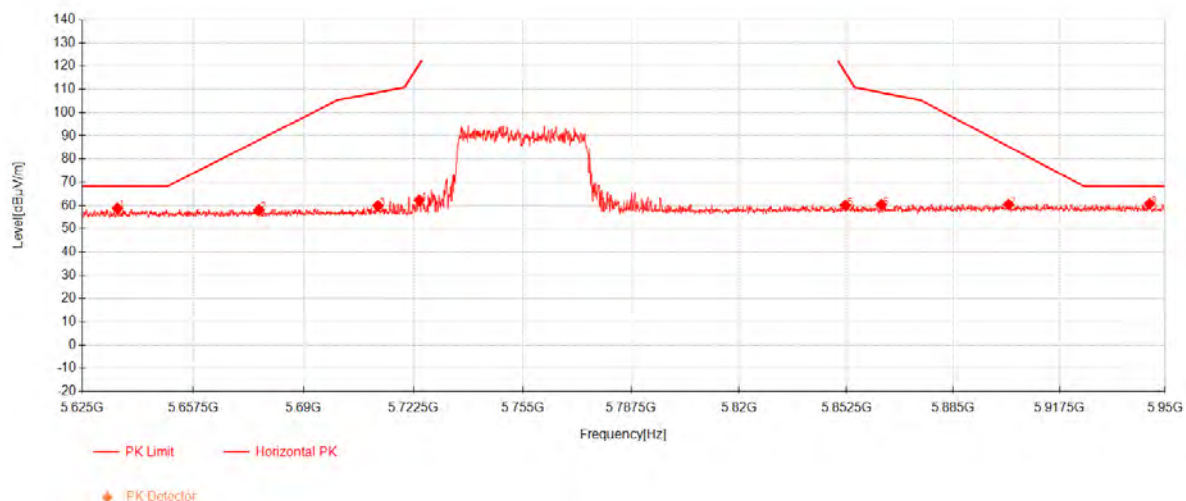
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 228 of 420

802.11ax40 Channel 151



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5635.3188	38.84	33.56	-13.68	58.72	68.30	9.58	Horizontal
2	5676.8375	38.03	33.70	-13.67	58.06	88.20	30.14	Horizontal
3	5712.0188	39.69	33.82	-13.64	59.87	108.67	48.80	Horizontal
4	5724.2062	42.09	33.86	-13.62	62.33	120.49	58.16	Horizontal
5	5852.175	39.02	34.30	-13.20	60.12	117.34	57.22	Horizontal
6	5863.0625	39.19	34.33	-13.14	60.38	108.64	48.26	Horizontal
7	5901.9	38.89	34.47	-12.97	60.39	85.36	24.97	Horizontal
8	5945.2062	39.23	34.61	-13.13	60.71	68.30	7.59	Horizontal

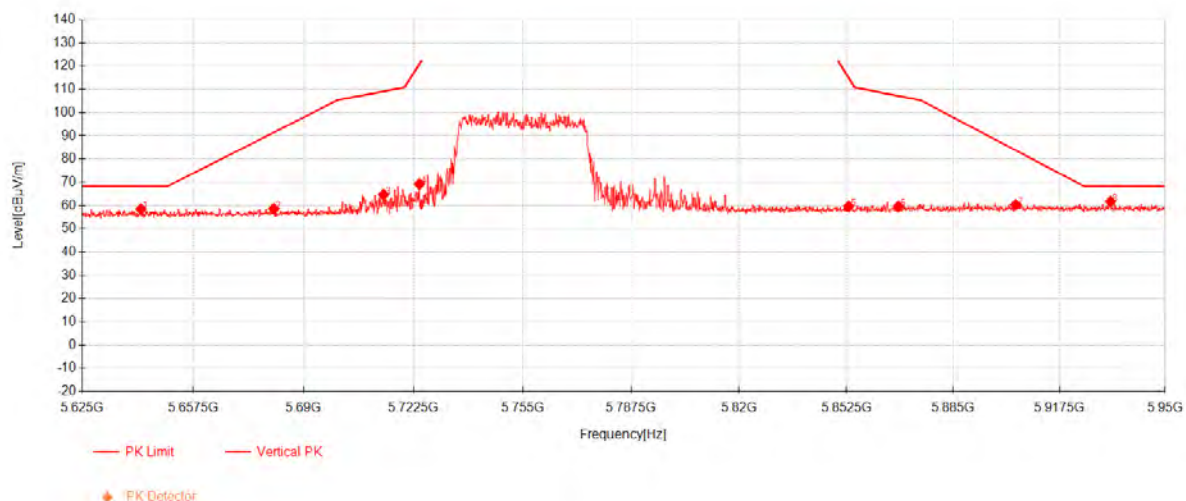
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 229 of 420

802.11ax40 Channel 151



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5642.225	38.50	33.58	-13.68	58.41	68.30	9.89	Vertical
2	5681.225	38.49	33.72	-13.67	58.53	91.44	32.91	Vertical
3	5713.6438	44.55	33.83	-13.64	64.74	109.12	44.38	Vertical
4	5724.2875	48.95	33.86	-13.62	69.19	120.68	51.49	Vertical
5	5853.15	38.50	34.30	-13.19	59.61	115.12	55.51	Vertical
6	5868.2625	38.34	34.35	-13.12	59.57	107.18	47.61	Vertical
7	5904.0938	38.88	34.47	-12.98	60.38	83.73	23.35	Vertical
8	5933.1812	40.25	34.57	-13.09	61.74	68.30	6.56	Vertical

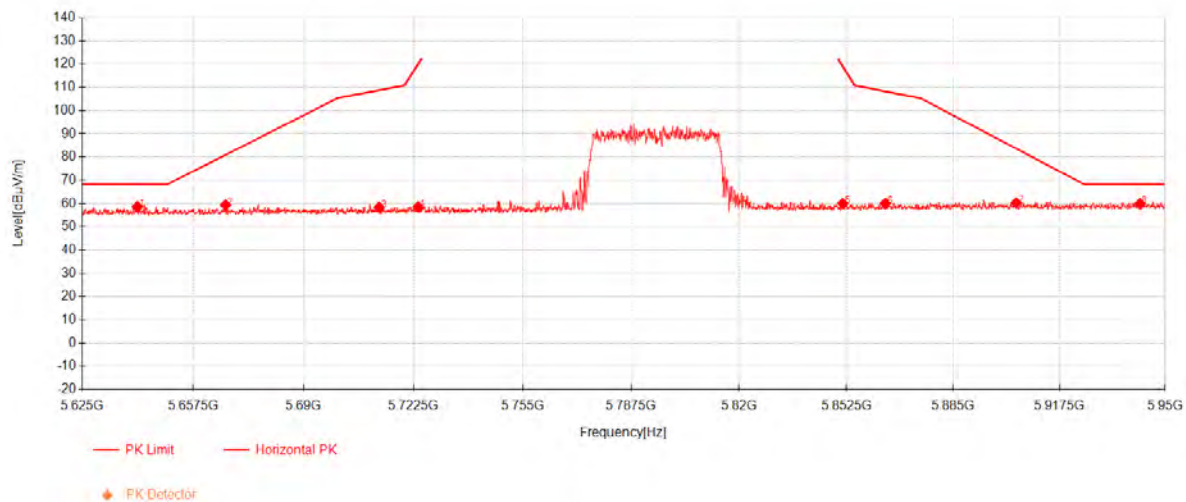
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 230 of 420

802.11ax40 Channel 159



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5641.1688	38.66	33.58	-13.68	58.56	68.30	9.74	Horizontal
2	5667.0062	39.36	33.67	-13.67	59.35	80.92	21.57	Horizontal
3	5712.3438	38.12	33.82	-13.64	58.30	108.76	50.46	Horizontal
4	5723.8812	38.22	33.86	-13.62	58.46	119.75	61.29	Horizontal
5	5851.3625	38.88	34.29	-13.20	59.97	119.19	59.22	Horizontal
6	5864.2812	38.81	34.34	-13.14	60.01	108.30	48.29	Horizontal
7	5904.2562	38.76	34.47	-12.98	60.26	83.61	23.35	Horizontal
8	5942.2812	38.48	34.60	-13.12	59.96	68.30	8.34	Horizontal

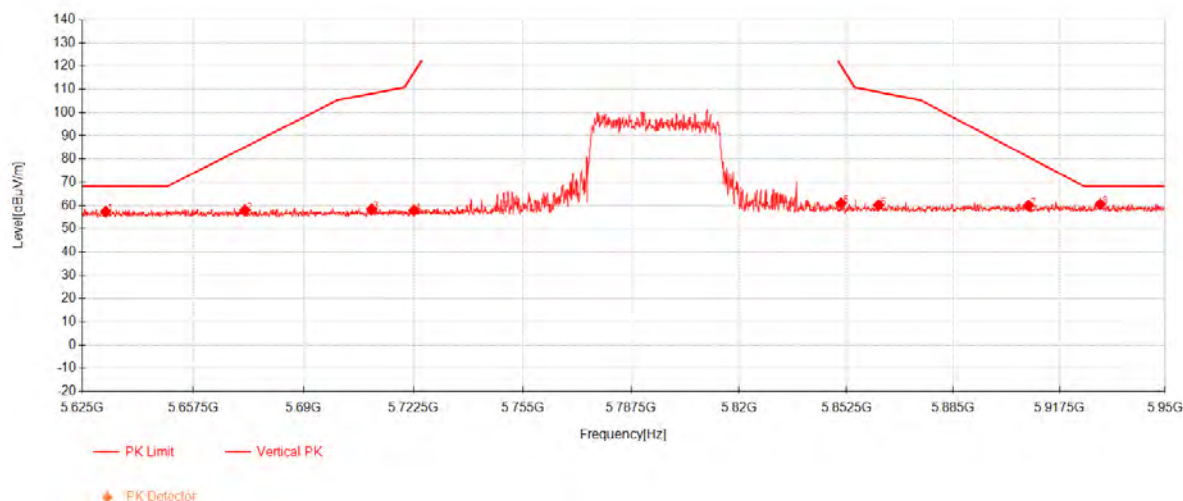
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 231 of 420

802.11ax40 Channel 159



Data List

NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	5631.9062	37.45	33.55	-13.68	57.32	68.30	10.98	Vertical
2	5672.6938	37.91	33.69	-13.67	57.92	85.13	27.21	Vertical
3	5710.15	38.22	33.81	-13.65	58.39	108.14	49.75	Vertical
4	5722.6625	37.66	33.86	-13.62	57.89	116.97	59.08	Vertical
5	5850.875	39.89	34.29	-13.21	60.98	120.30	59.32	Vertical
6	5862.25	38.99	34.33	-13.15	60.17	108.87	48.70	Vertical
7	5907.9938	38.51	34.49	-12.99	60.01	80.85	20.84	Vertical
8	5930.0125	39.04	34.56	-13.07	60.53	68.30	7.77	Vertical

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 232 of 420

7.6 Duty Cycle

Test Requirement KDB 789033 D02 II B 1

Test Method: KDB 789033 II B 1

Measurement Distance: 3m

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C

Humidity: 48.2 % RH

Atmospheric Pressure: 1010 mbar

7.6.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.6.3 Measurement Procedure and Data

Please Refer to Appendix for Details



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 233 of 420

7.7 99% Bandwidth

Test Requirement N/A
Test Method: KDB 789033 II D

7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C Humidity: 48.2 % RH Atmospheric Pressure: 1010 mbar

7.7.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.7.3 Measurement Procedure and Data

Please Refer to Appendix for Details

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 234 of 420

7.8 26dB Emission bandwidth

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: KDB 789033 D02 II C 1

7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C

Humidity: 48.2 % RH

Atmospheric Pressure: 1010 mbar

7.8.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.8.3 Measurement Procedure and Data

Please Refer to Appendix for Details



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 235 of 420

7.9 Minimum 6 dB bandwidth (5.725-5.85 GHz band)

Test Requirement 47 CFR Part 15, Subpart E 15.407 (e)

Test Method: KDB 789033 D02 II C 2

Limit:

Frequency band(MHz)	Limit
5725-5850	≥ 500 kHz

7.9.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C

Humidity: 48.2 % RH

Atmospheric Pressure: 1010 mbar

7.9.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	04	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.9.3 Measurement Procedure and Data

Please Refer to Appendix for Details

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 236 of 420

7.10 Peak Power spectrum density

Test Requirement 47 CFR Part 15, Subpart E 15.407 (a)

Test Method: KDB 789033 D02 II F

Limit:

Frequency band(MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz
Remark:	The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

7.10.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C

Humidity: 48.2 % RH

Atmospheric Pressure: 1010 mbar

7.10.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.
Final test	04	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40, Only the data of worst case is recorded in the report.

7.10.3 Measurement Procedure and Data

Please Refer to Appendix for Details



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 237 of 420

7.11 Frequency Stability

Test Requirement 47 CFR Part 15, Subpart E 15.407 (g)

Test Method: ANSI C63.10 (2013) Section 6.8

7.11.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C

Humidity: 48.2 % RH

Atmospheric Pressure: 1010 mbar

7.11.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	01	TX mode (U-NII-1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Final test	02	TX mode (U-NII-2A) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Final test	03	TX mode (U-NII-2C) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.
Final test	04	TX mode (U-NII-3) _Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; data rate @ MCS0 is the worst case of IEEE 802.11n/ac/ax 20/40/80, Only the data of worst case is recorded in the report.

7.11.3 Measurement Procedure and Data

Please Refer to Appendix for Details

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 238 of 420

7.12 Channel Move Time

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required
Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.			

7.12.1 E.U.T. Operation

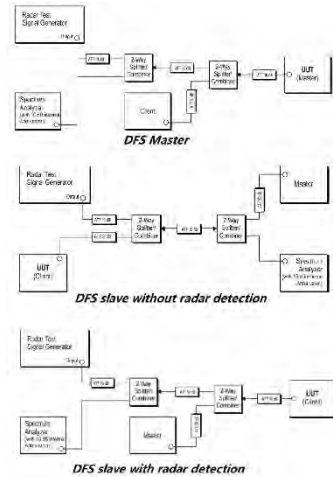
Operating Environment:

Temperature: 22.5 °C Humidity: 48.2 % RH Atmospheric Pressure: 1010 mbar

7.12.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	Normal operating_ Keep the EUT communication with the companion device.

7.12.3 Test Setup Diagram



7.12.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (0.3ms) = S (12000ms) / B (4000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C (ms) = N \times Dwell (0.3ms)$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 240 of 420

7.13 Channel Closing Transmission Time

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required
Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.			

7.13.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C

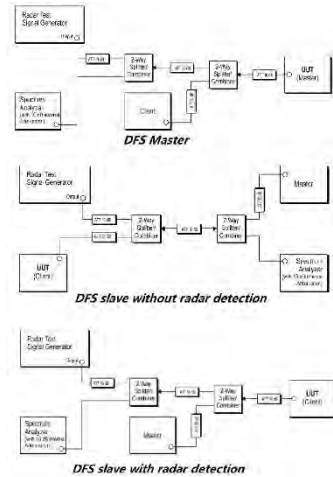
Humidity: 48.2 % RH

Atmospheric Pressure: 1010 mbar

7.13.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	Normal operating_ Keep the EUT communication with the companion device.

7.13.3 Test Setup Diagram



7.13.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (0.3ms) = S (12000ms) / B (4000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C (ms) = N \times Dwell (0.3ms)$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 242 of 420

7.14 Non-occupancy period

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required
Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions. Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.			

7.14.1 E.U.T. Operation

Operating Environment:

Temperature: 22.5 °C

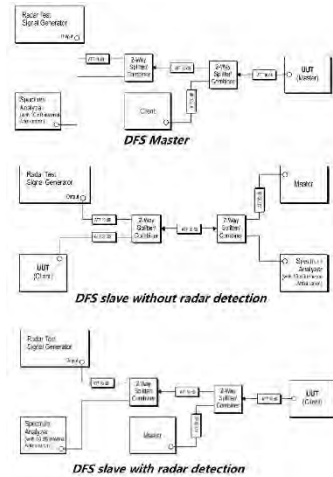
Humidity: 48.2 % RH

Atmospheric Pressure: 1010 mbar

7.14.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	05	Normal operating_Keep the EUT communication with the companion device.

7.14.3 Test Setup Diagram



7.14.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (0.3ms) = S (12000ms) / B (4000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C (ms) = N \times Dwell (0.3ms)$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 244 of 420

8 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2409001732AT

9 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for KSCR2409001732AT

10 Appendix

1. Duty Cycle

1.1 Test Result

1.1.1 Ant1

Ant1									
Mode	TX Type	Frequency (MHz)	RU	RU Pos	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
802.11a	SISO	5180	/	/	1.365	1.485	91.92	0.37	0.03
		5200	/	/	1.366	1.467	93.12	0.31	0.03
		5240	/	/	1.367	1.468	93.12	0.31	0.03
		5260	/	/	1.367	1.401	97.57	0.11	0.03
		5300	/	/	1.366	1.467	93.12	0.31	0.03
		5320	/	/	1.367	1.468	93.12	0.31	0.03
		5500	/	/	1.367	1.468	93.12	0.31	0.03
		5580	/	/	1.366	1.400	97.57	0.11	0.00
		5700	/	/	1.366	1.467	93.12	0.31	0.03
		5745	/	/	1.366	1.400	97.57	0.11	0.00
		5785	/	/	1.366	1.400	97.57	0.11	0.03
		5825	/	/	1.367	1.468	93.12	0.31	0.03
802.11n (HT20)	SISO	5180	/	/	1.278	1.312	97.41	0.11	0.03
		5200	/	/	1.278	1.379	92.68	0.33	0.03
		5240	/	/	1.279	1.379	92.75	0.33	0.03
		5260	/	/	1.278	1.312	97.41	0.11	0.03
		5300	/	/	1.278	1.379	92.68	0.33	0.03
		5320	/	/	1.278	1.379	92.68	0.33	0.03
		5500	/	/	1.278	1.379	92.68	0.33	0.03
		5580	/	/	1.278	1.379	92.68	0.33	0.03
		5700	/	/	1.279	1.379	92.75	0.33	0.03
		5745	/	/	1.279	1.312	97.48	0.11	0.03
		5785	/	/	1.278	1.312	97.41	0.11	0.03
		5825	/	/	1.279	1.312	97.48	0.11	0.03
802.11n (HT40)	SISO	5190	/	/	0.637	0.738	86.31	0.64	0.03
		5230	/	/	0.638	0.738	86.45	0.63	0.03
		5270	/	/	0.638	0.672	94.94	0.23	0.03
		5310	/	/	0.637	0.738	86.31	0.64	0.03
		5510	/	/	0.638	0.739	86.33	0.64	0.03
		5550	/	/	0.638	0.739	86.33	0.64	0.05
		5670	/	/	0.638	0.739	86.33	0.64	0.03
		5755	/	/	0.637	0.774	82.30	0.85	4.05
		5795	/	/	0.638	0.739	86.33	0.64	0.03

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

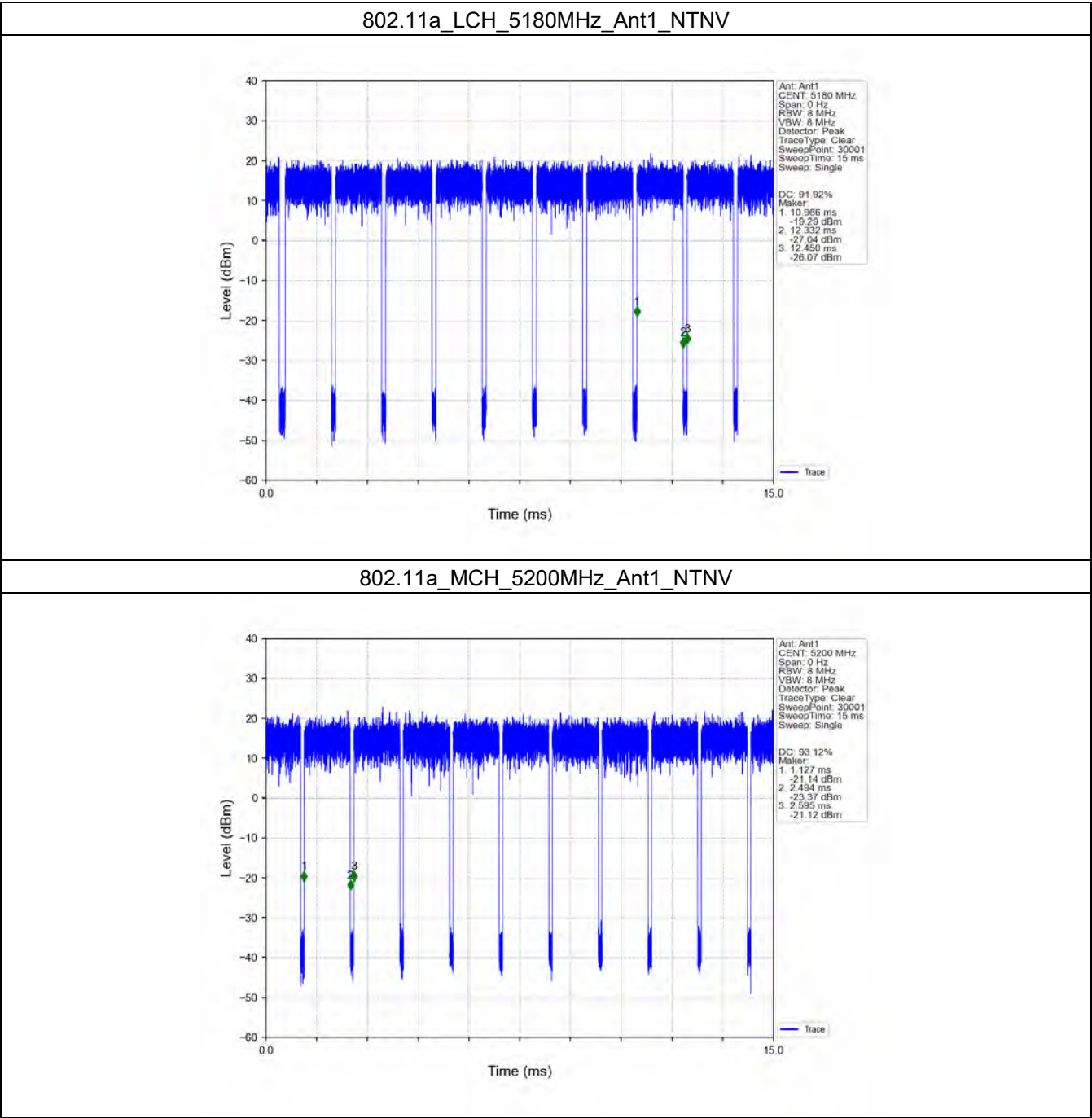
Report No.: KSCR240900173204

Page: 246 of 420

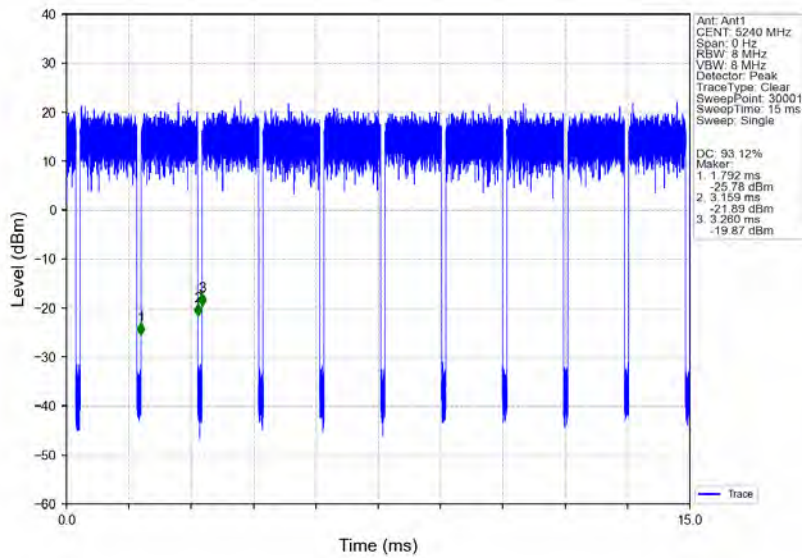
802.11ax (HE20)	SISO	5180	RU242	Left	1.001	1.102	90.83	0.42	0.03
		5200	RU242	Left	1.002	1.160	86.38	0.64	4.51
		5240	RU242	Left	1.001	1.102	90.83	0.42	0.03
		5260	RU242	Left	52.620	53.017	99.25	0.03	0.00
		5300	RU242	Left	1.002	1.102	90.93	0.41	0.03
		5320	RU242	Left	1.001	1.102	90.83	0.42	0.03
		5500	RU242	Left	1.001	1.035	96.71	0.15	0.00
		5580	RU242	Left	1.001	1.120	89.38	0.49	0.03
		5700	RU242	Left	1.002	1.103	90.84	0.42	0.03
		5745	RU242	Left	1.002	1.035	96.81	0.14	0.04
		5785	RU242	Left	1.001	1.035	96.71	0.15	0.04
		5825	RU242	Left	1.002	1.035	96.81	0.14	0.03
802.11ax (HE40)	SISO	5190	RU484	Left	0.533	0.567	94.00	0.27	0.04
		5230	RU484	Left	0.533	0.634	84.07	0.75	0.01
		5270	RU484	Left	0.533	0.633	84.20	0.75	0.03
		5310	RU484	Left	0.533	0.634	84.07	0.75	0.04
		5510	RU484	Left	0.531	0.633	83.89	0.76	0.03
		5550	RU484	Left	0.533	0.634	84.07	0.75	0.03
		5670	RU484	Left	0.533	0.634	84.07	0.75	0.03
		5755	RU484	Left	0.533	0.634	84.07	0.75	0.03
		5795	RU484	Left	0.533	0.566	94.17	0.26	0.04

1.2 Test Graph

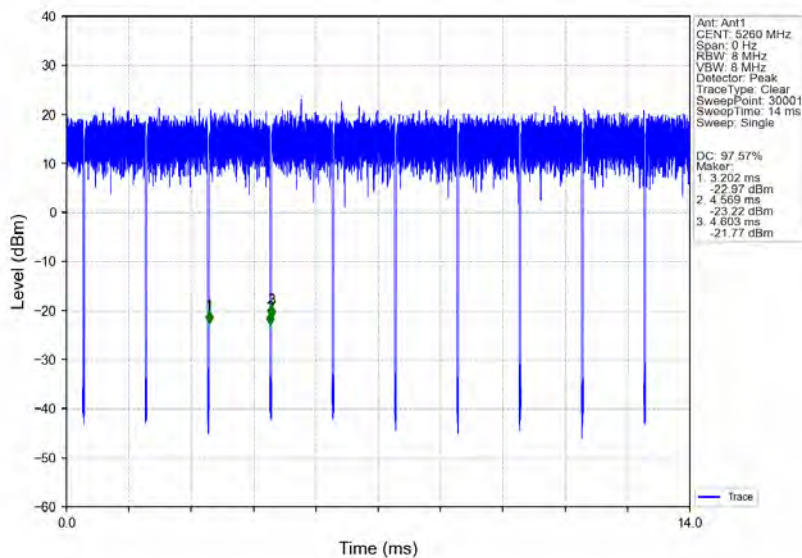
1.2.1 Ant1



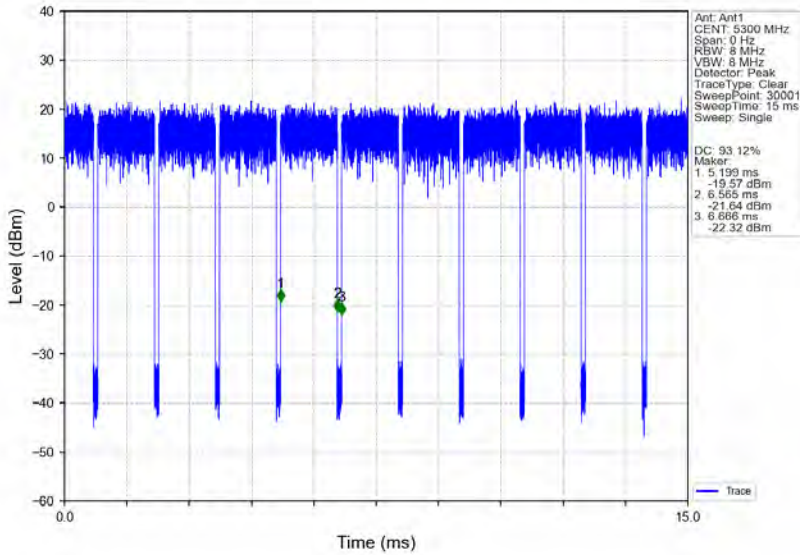
802.11a_HCH_5240MHz_Ant1_NTNV



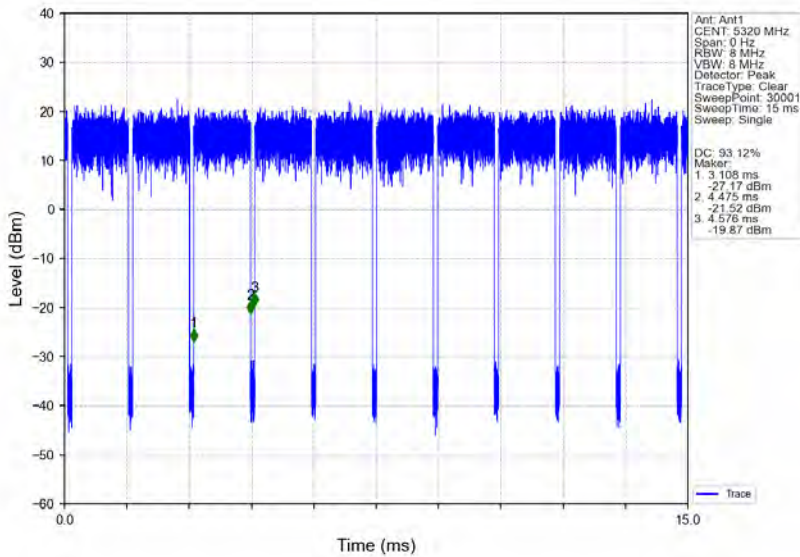
802.11a_LCH_5260MHz_Ant1_NTNV



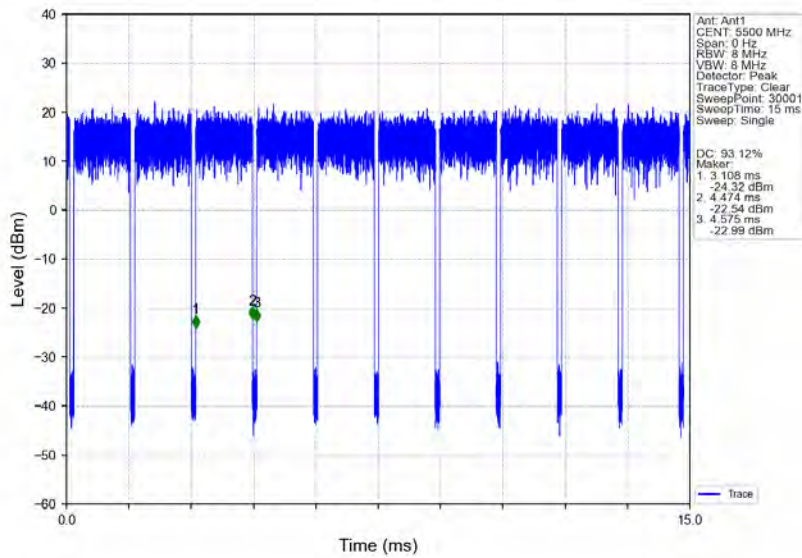
802.11a_MCH_5300MHz_Ant1_NTNV



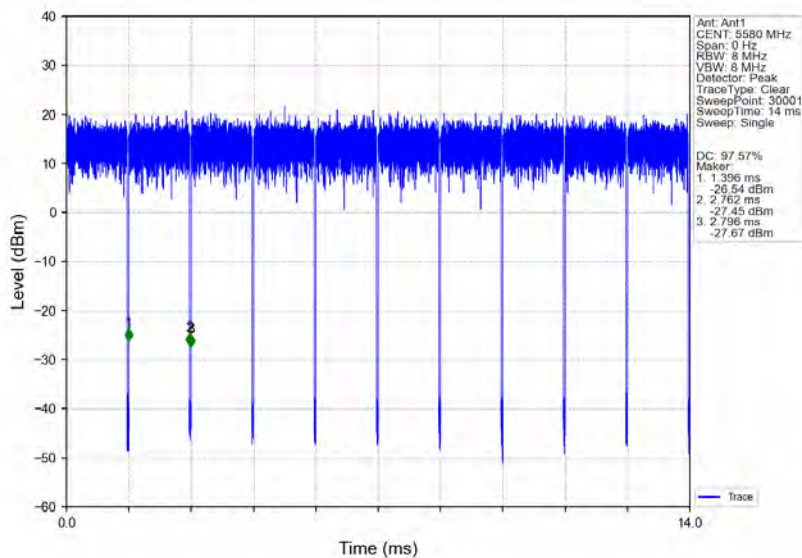
802.11a_HCH_5320MHz_Ant1_NTNV



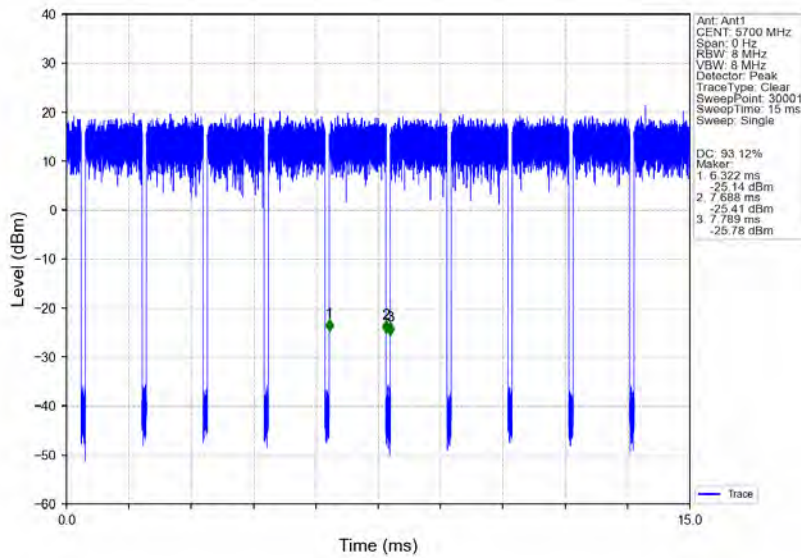
802.11a_LCH_5500MHz_Ant1_NTNV



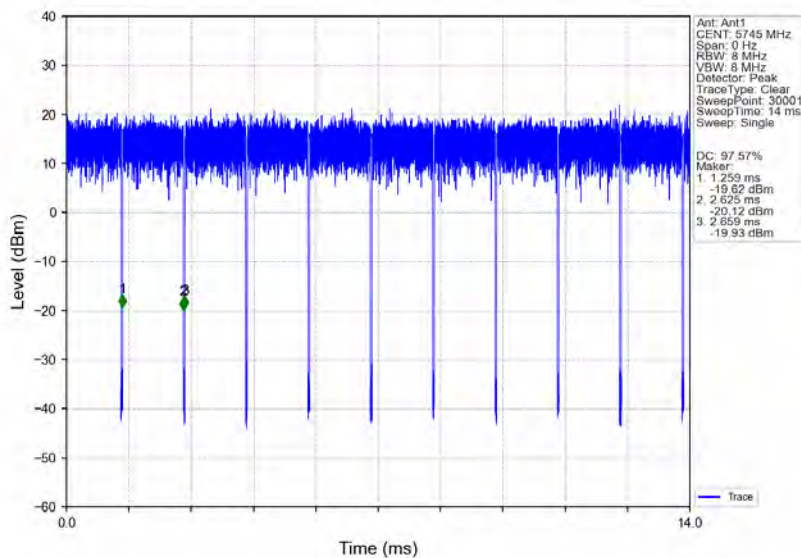
802.11a_MCH_5580MHz_Ant1_NTNV



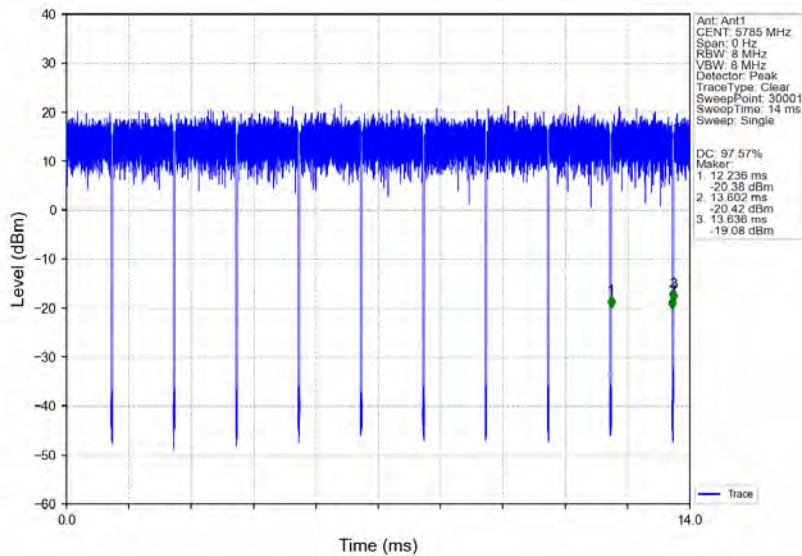
802.11a_HCH_5700MHz_Ant1_NTNV



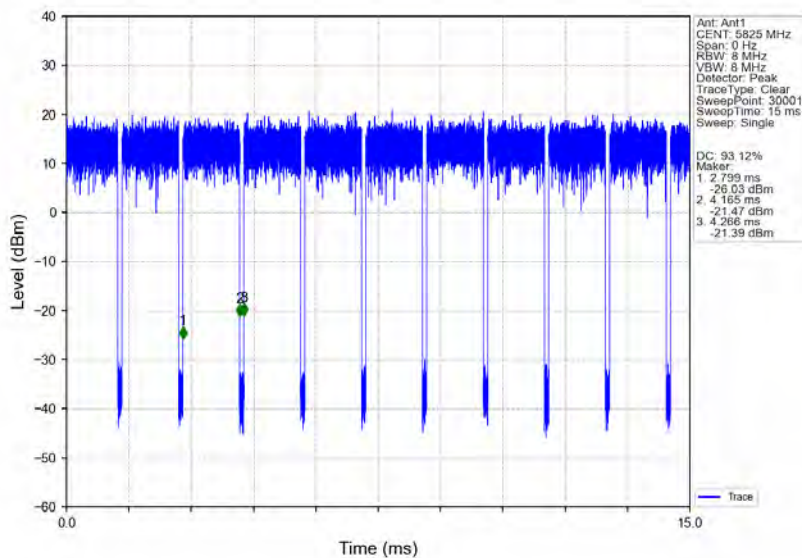
802.11a_LCH_5745MHz_Ant1_NTNV



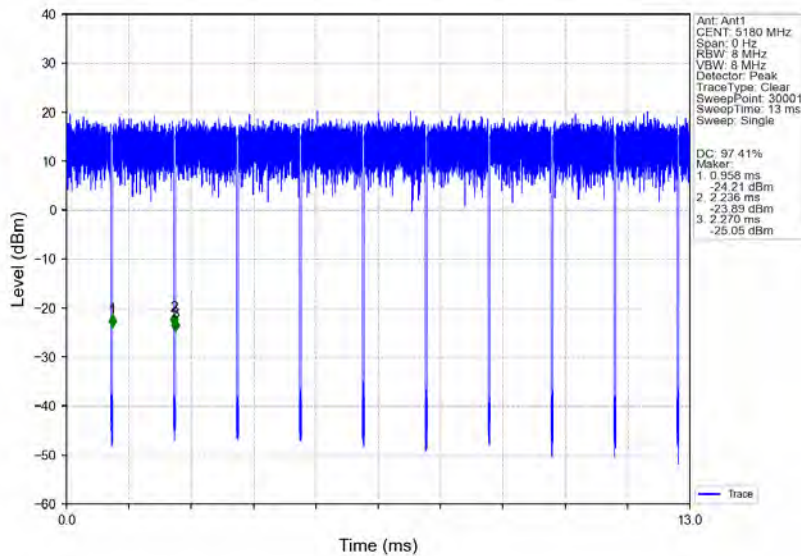
802.11a_MCH_5785MHz_Ant1_NTNV



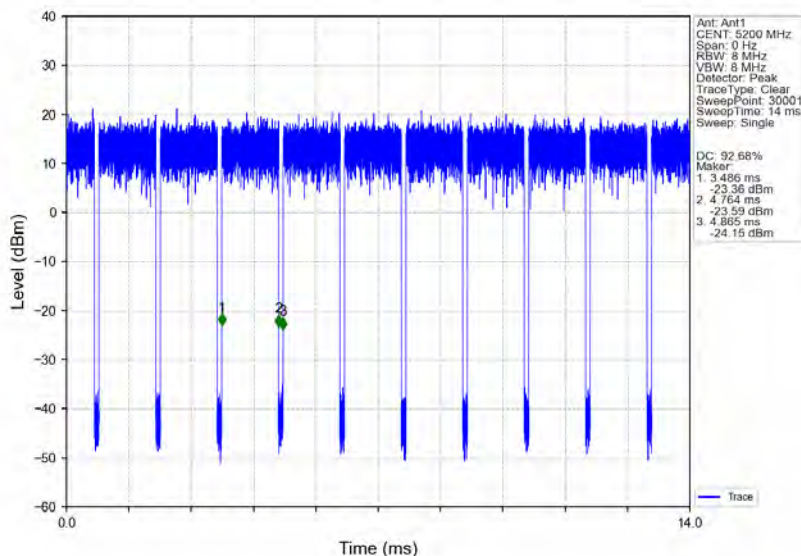
802.11a_HCH_5825MHz_Ant1_NTNV



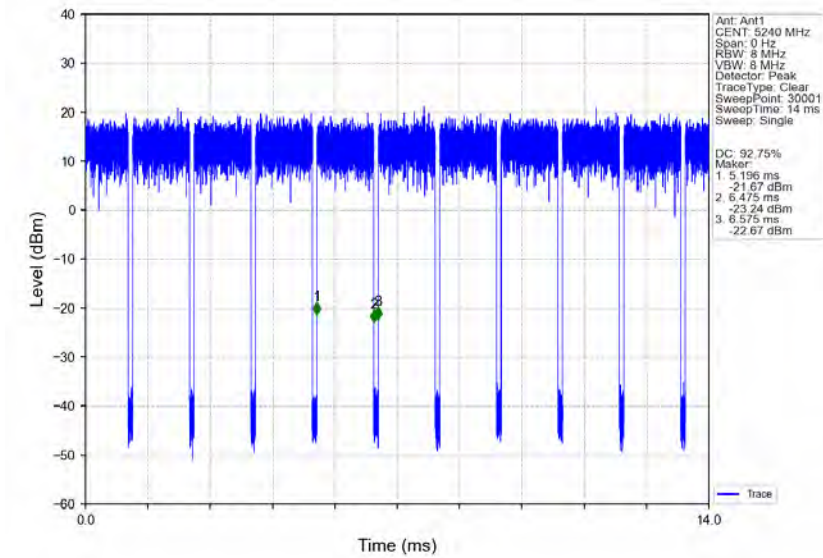
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



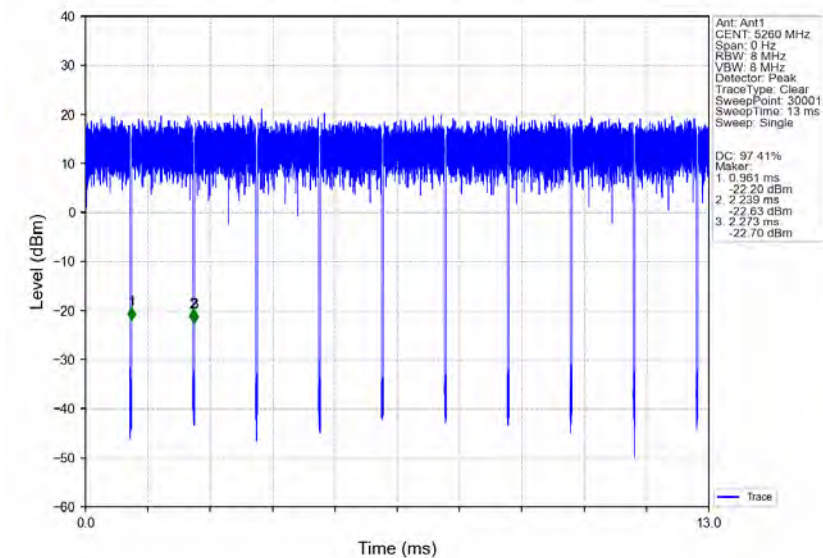
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



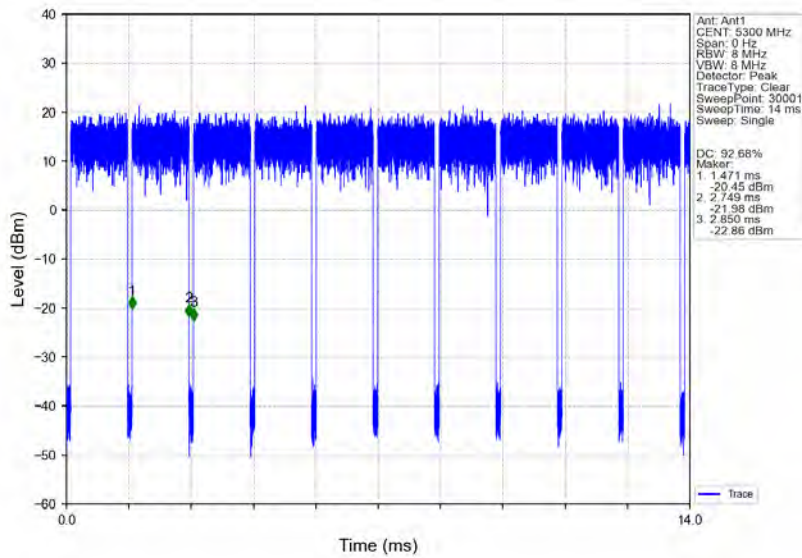
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



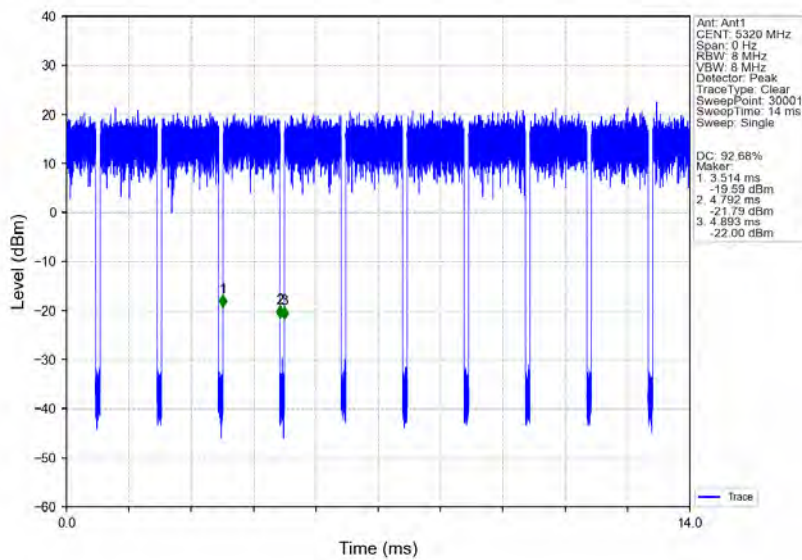
802.11n(HT20)_LCH_5260MHz_Ant1_NTNV



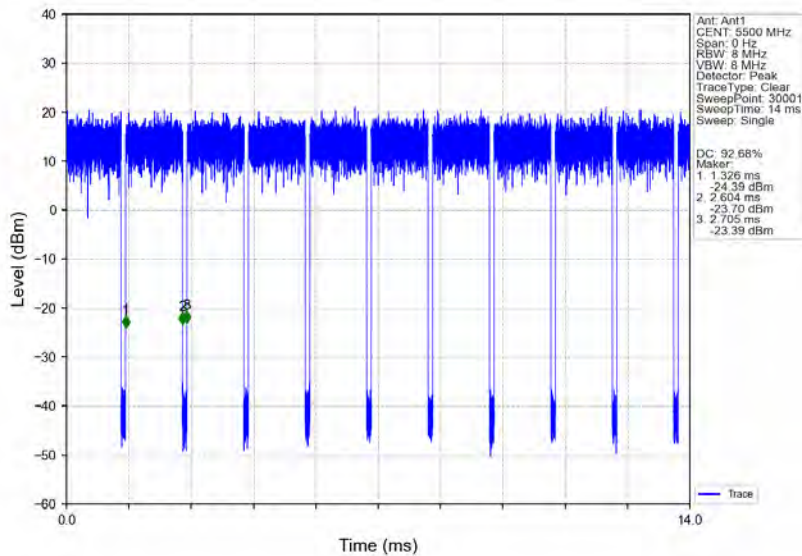
802.11n(HT20)_MCH_5300MHz_Ant1_NTNV



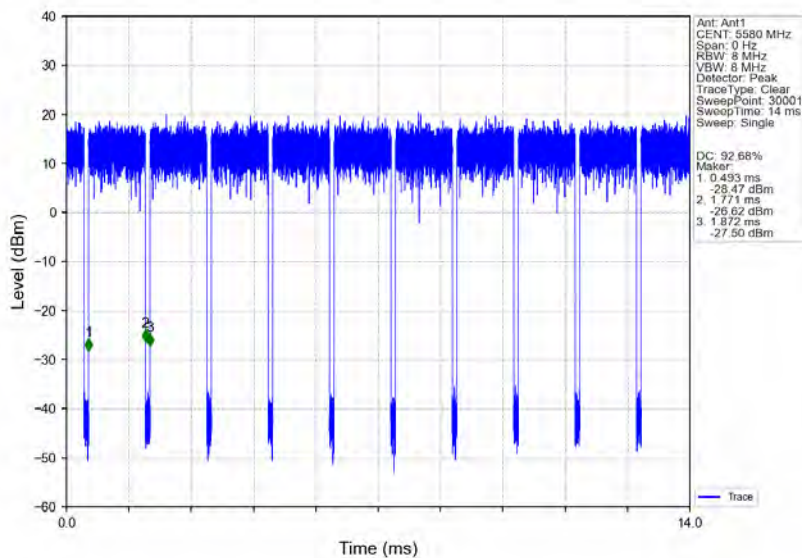
802.11n(HT20)_HCH_5320MHz_Ant1_NTNV



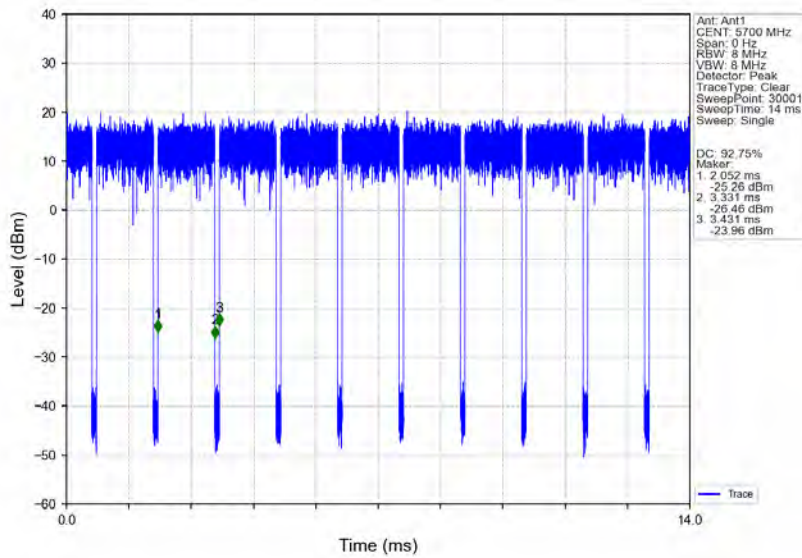
802.11n(HT20)_LCH_5500MHz_Ant1_NTNV



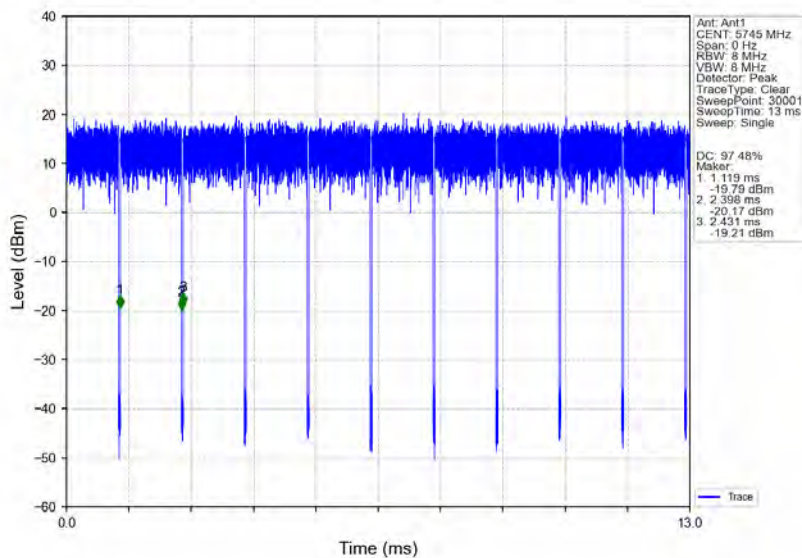
802.11n(HT20)_MCH_5580MHz_Ant1_NTNV



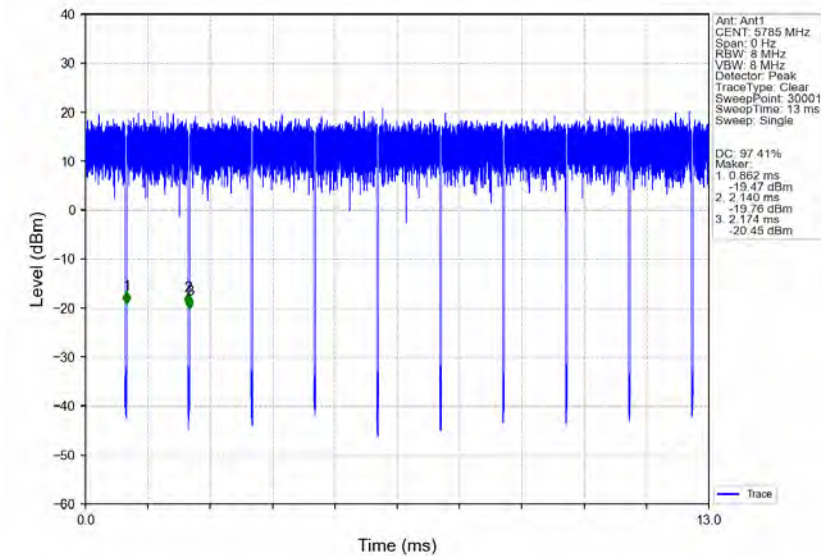
802.11n(HT20)_HCH_5700MHz_Ant1_NTNV



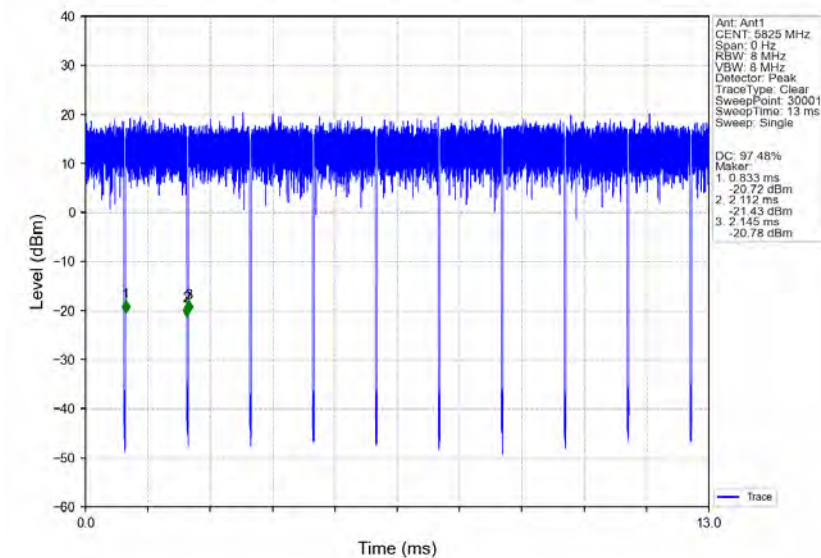
802.11n(HT20)_LCH_5745MHz_Ant1_NTNV



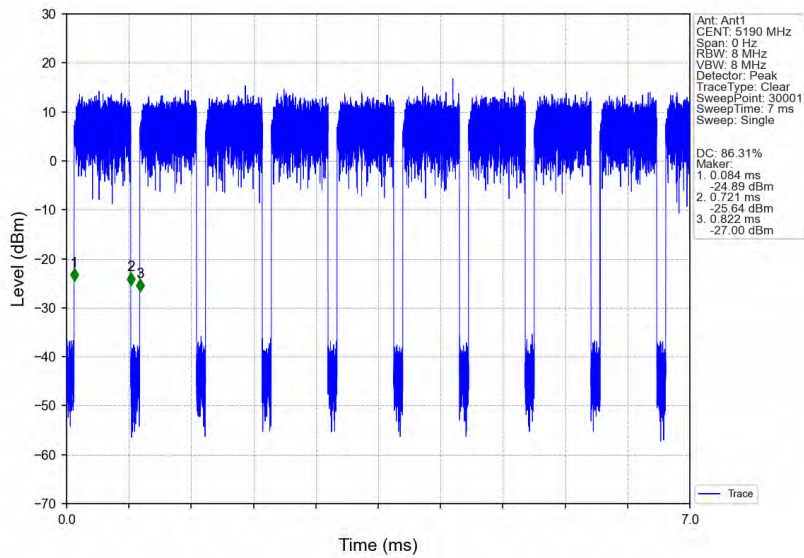
802.11n(HT20)_MCH_5785MHz_Ant1_NTNV



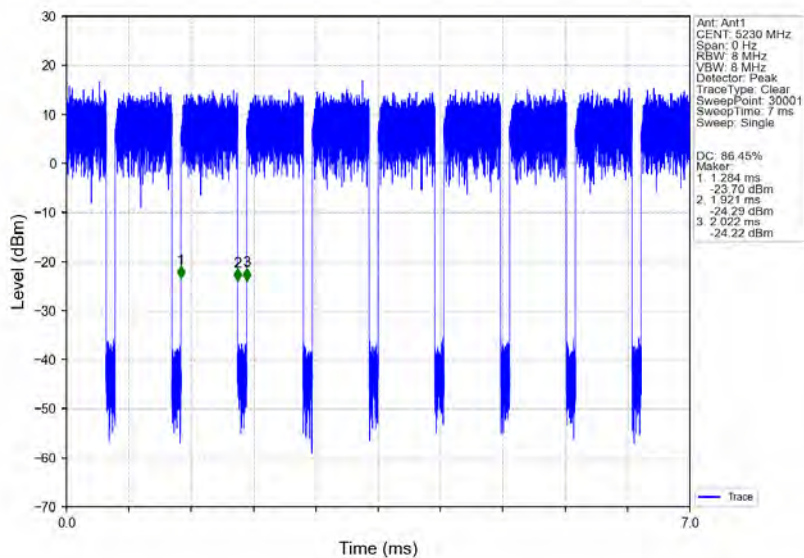
802.11n(HT20)_HCH_5825MHz_Ant1_NTNV



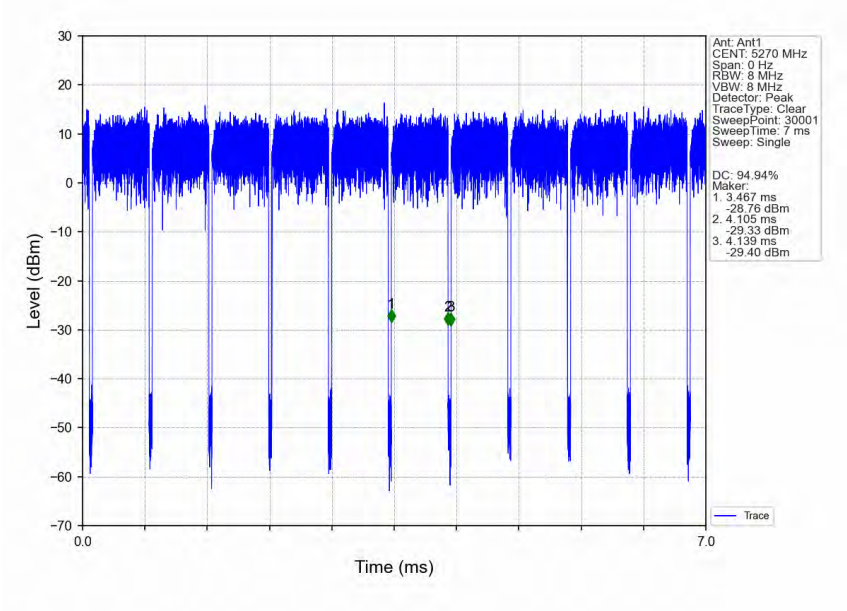
802.11n(HT40)_LCH_5190MHz_Ant1_NTNV



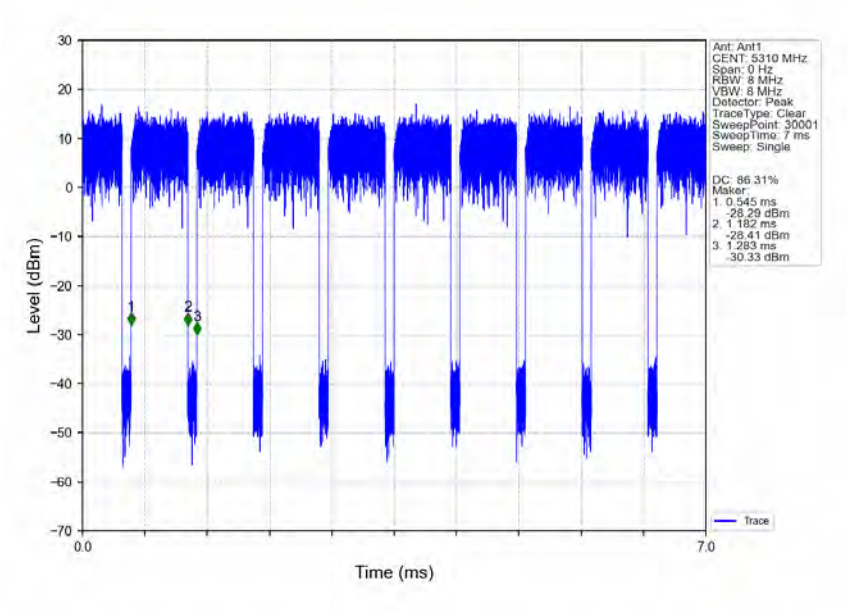
802.11n(HT40)_HCH_5230MHz_Ant1_NTNV



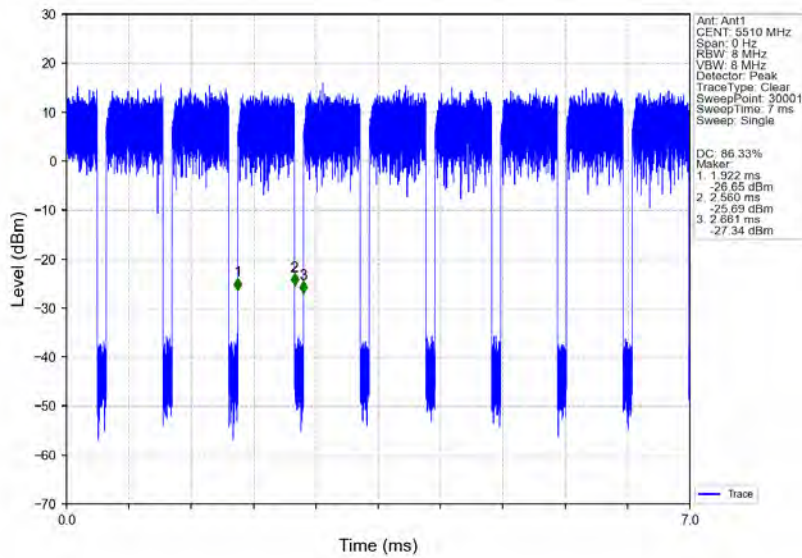
802.11n(HT40)_LCH_5270MHz_Ant1_NTNV



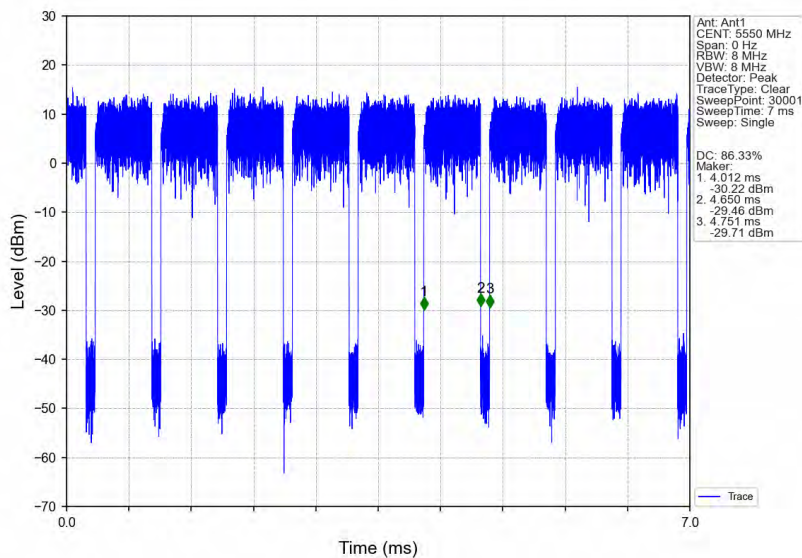
802.11n(HT40)_HCH_5310MHz_Ant1_NTNV



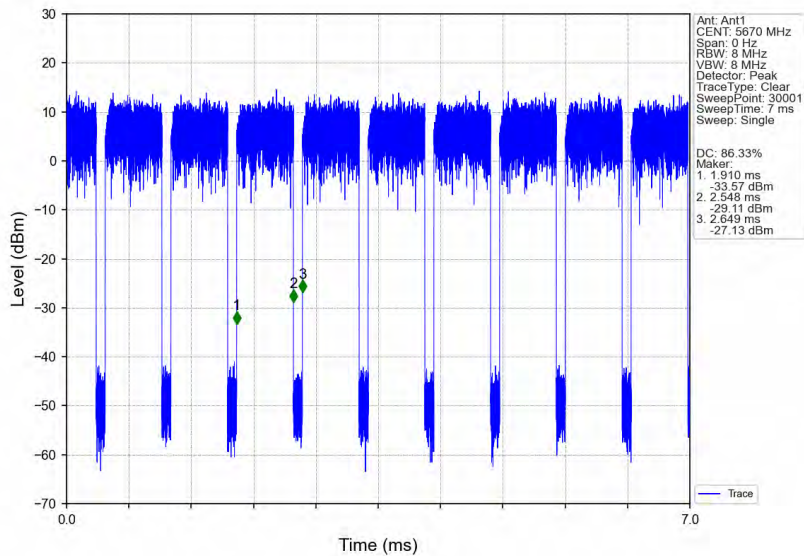
802.11n(HT40)_LCH_5510MHz_Ant1_NTNV



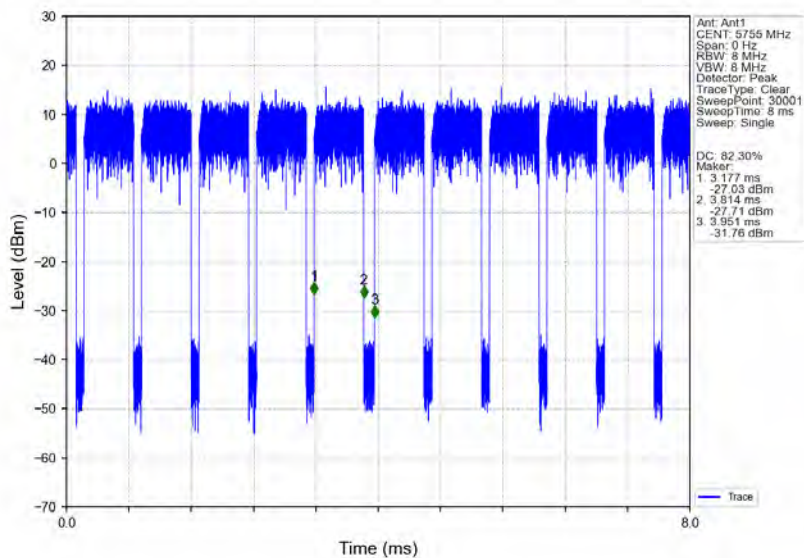
802.11n(HT40)_MCH_5550MHz_Ant1_NTNV



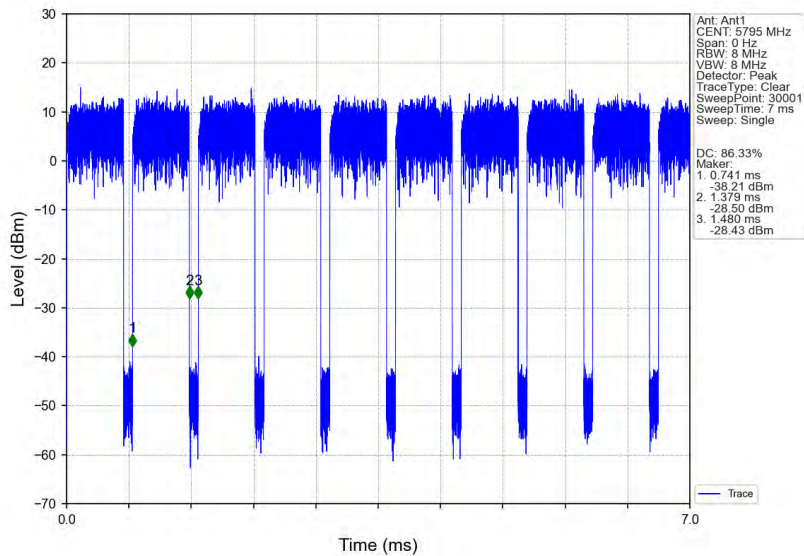
802.11n(HT40)_HCH_5670MHz_Ant1_NTNV



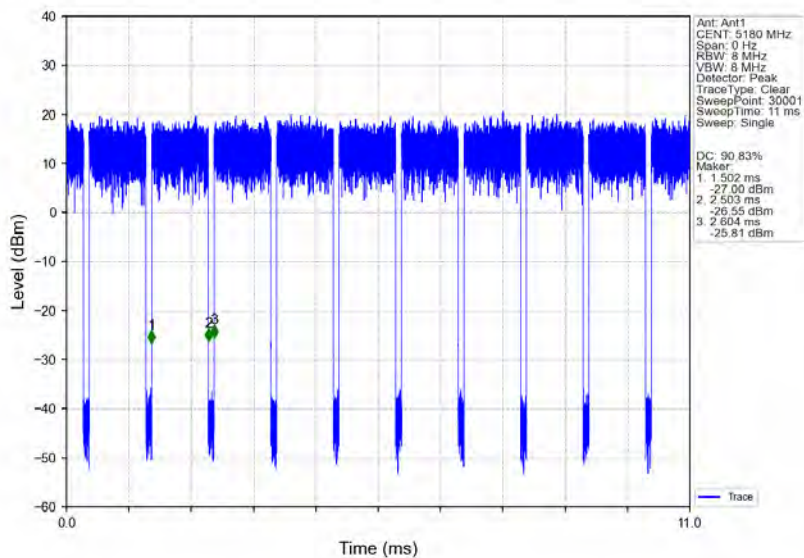
802.11n(HT40)_LCH_5755MHz_Ant1_NTNV



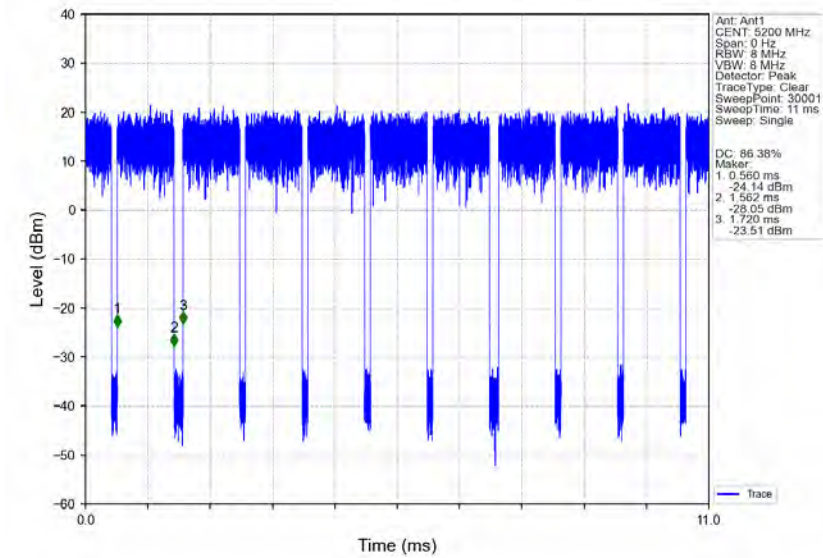
802.11n(HT40)_HCH_5795MHz_Ant1_NTNV



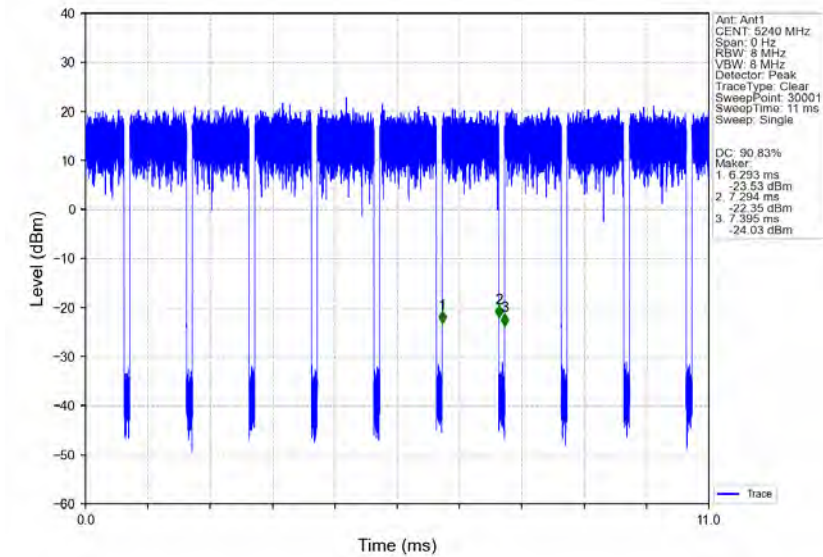
802.11ax(HE20)_LCH_5180MHz_RU242_Left_Ant1_NTNV



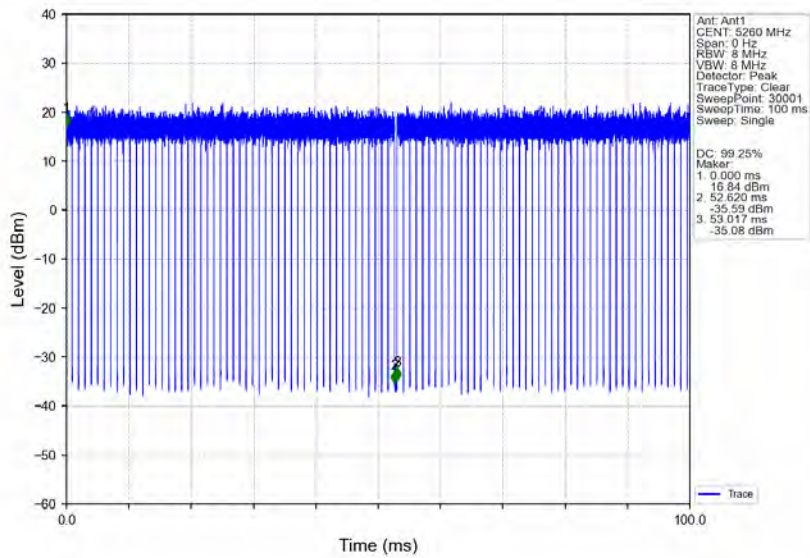
802.11ax(HE20)_MCH_5200MHz_RU242_Left_Ant1_NTNV



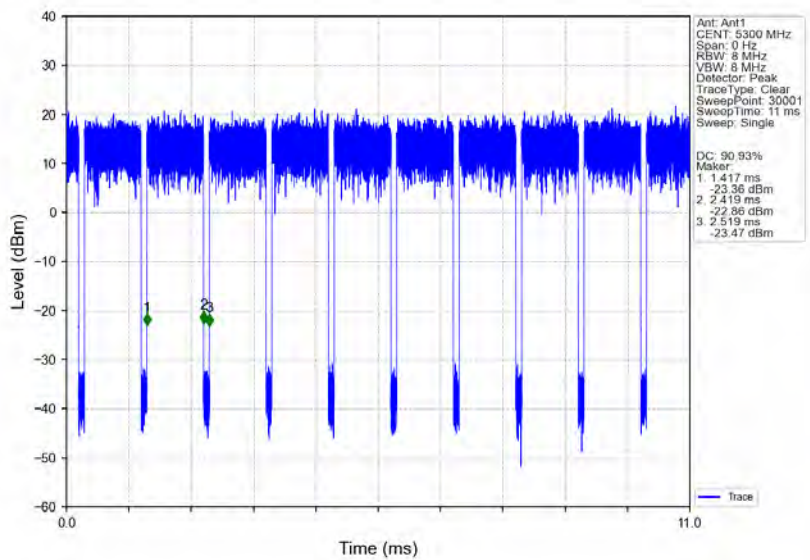
802.11ax(HE20)_HCH_5240MHz_RU242_Left_Ant1_NTNV



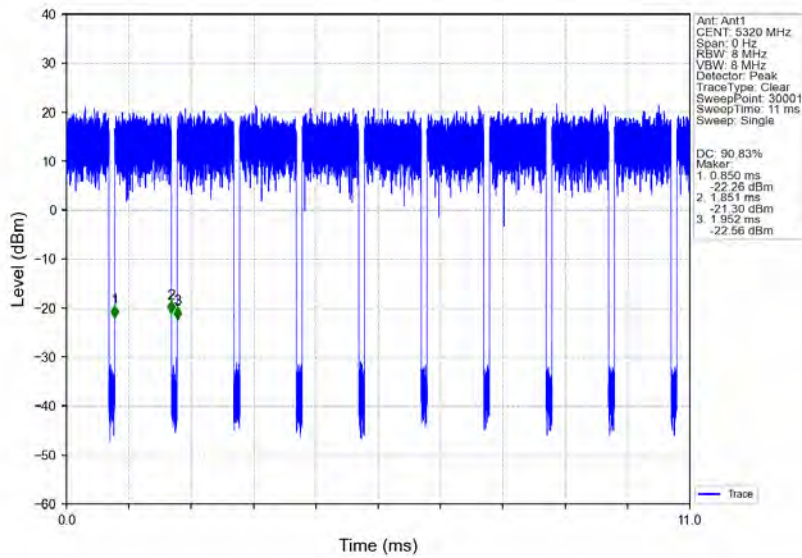
802.11ax(HE20)_LCH_5260MHz_RU242_Left_Ant1_NTNV



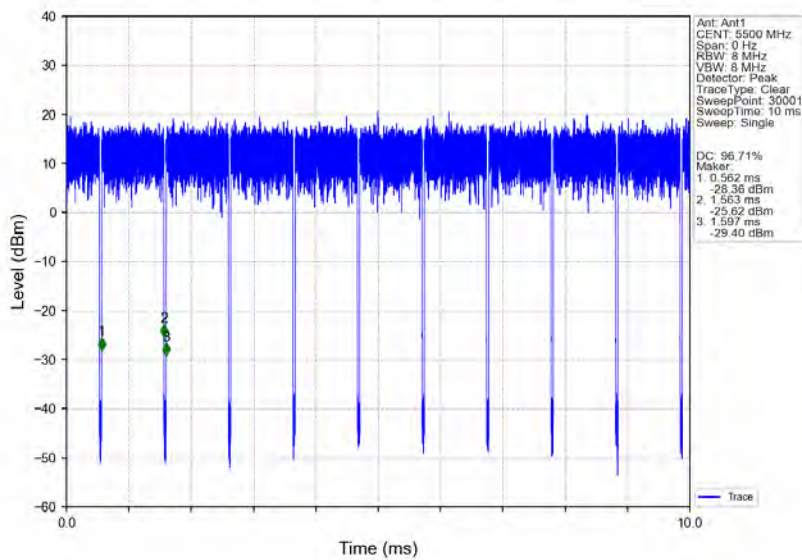
802.11ax(HE20)_MCH_5300MHz_RU242_Left_Ant1_NTNV



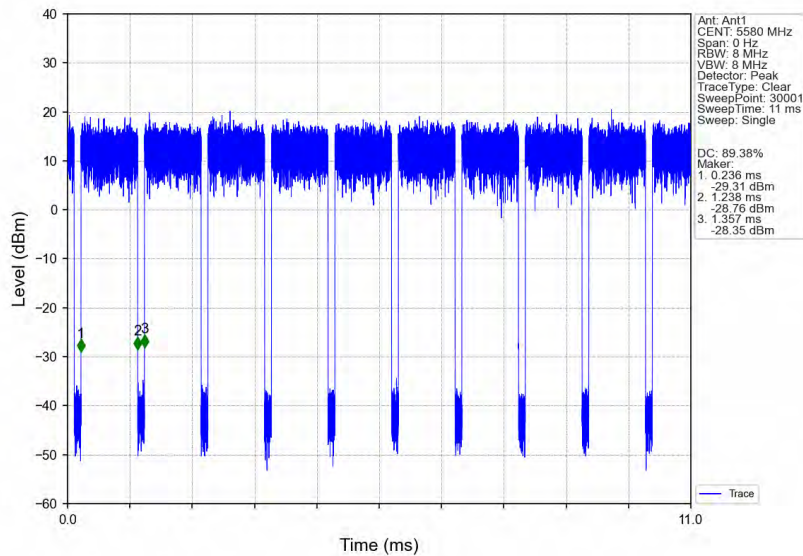
802.11ax(HE20)_HCH_5320MHz_RU242_Left_Ant1_NTNV



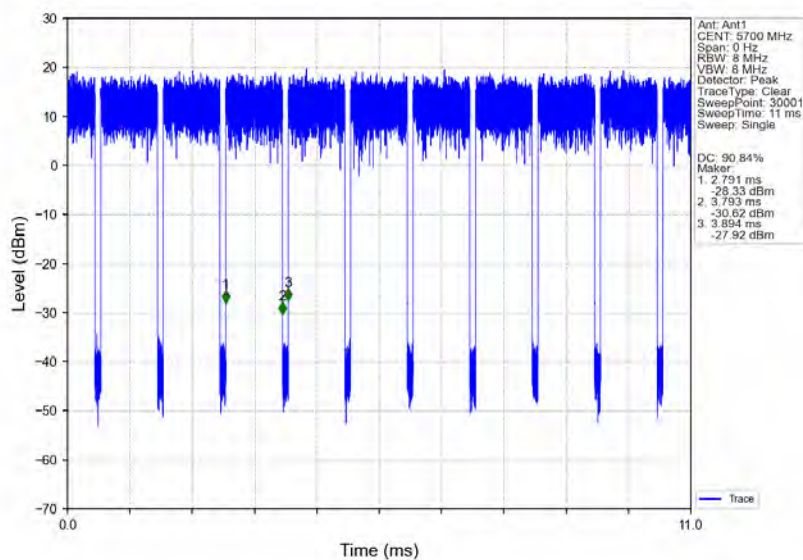
802.11ax(HE20)_LCH_5500MHz_RU242_Left_Ant1_NTNV



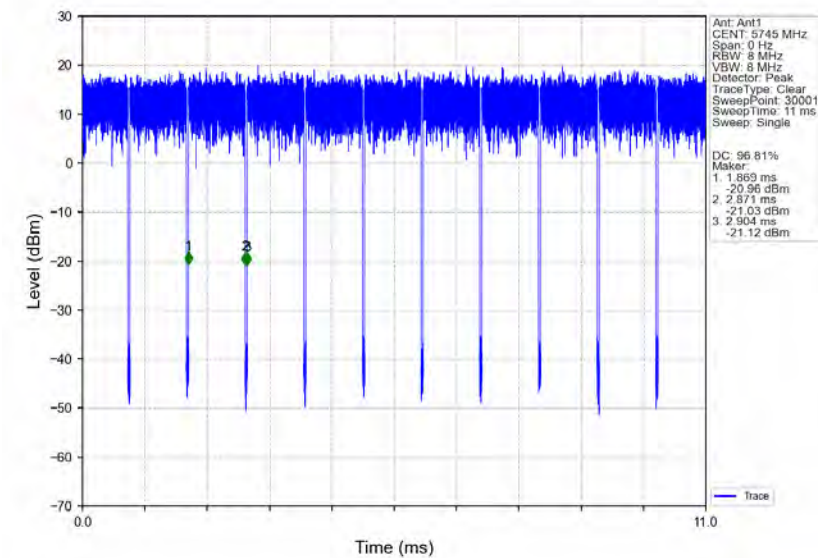
802.11ax(HE20)_MCH_5580MHz_RU242_Left_Ant1_NTNV



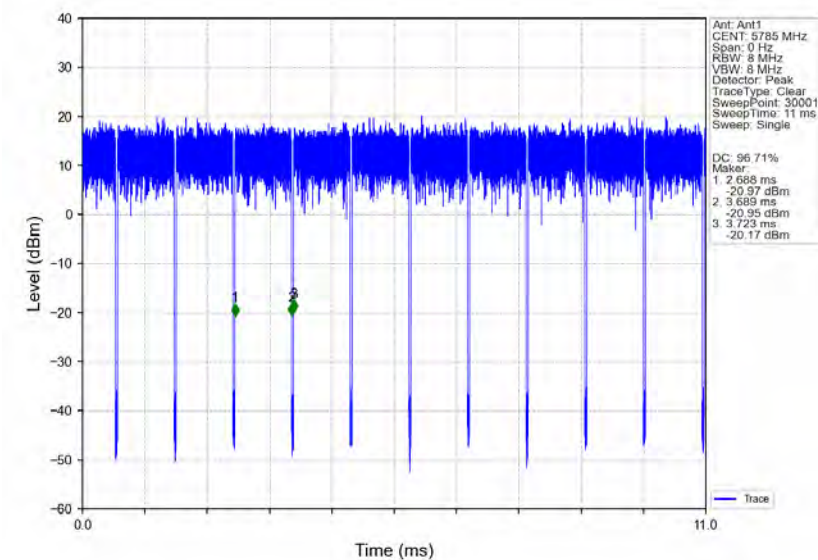
802.11ax(HE20)_HCH_5700MHz_RU242_Left_Ant1_NTNV



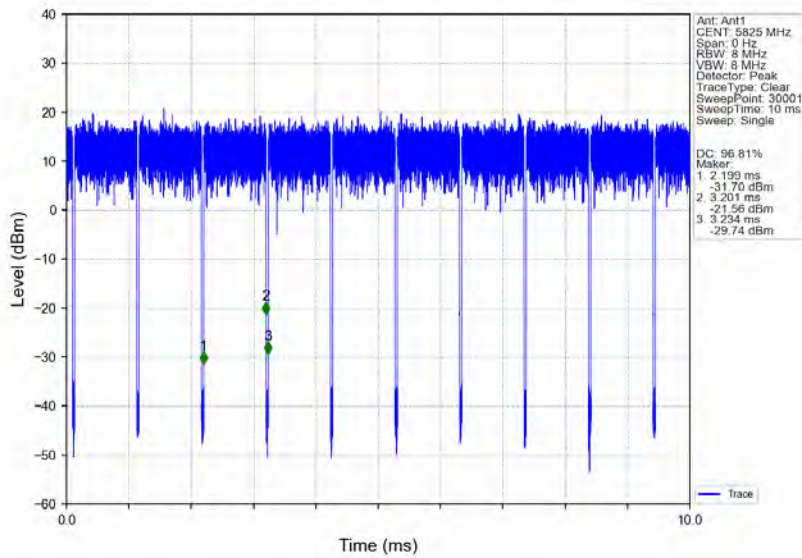
802.11ax(HE20)_LCH_5745MHz_RU242_Left_Ant1_NTNV



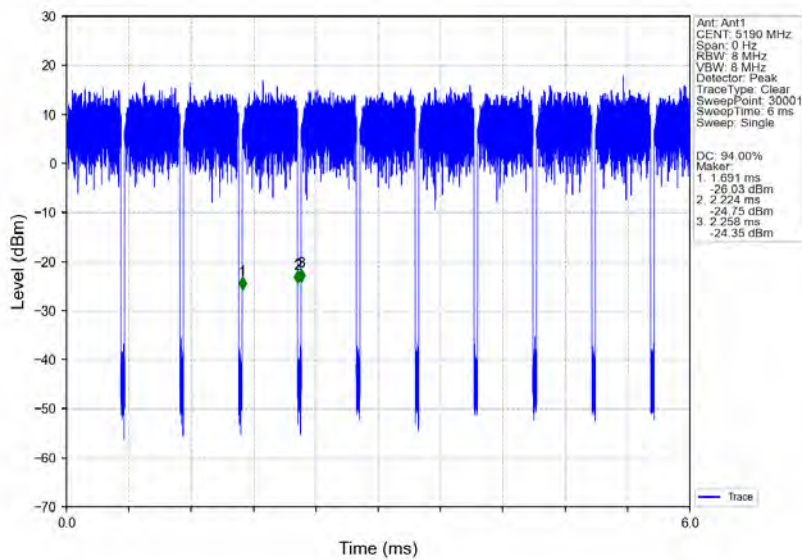
802.11ax(HE20)_MCH_5785MHz_RU242_Left_Ant1_NTNV



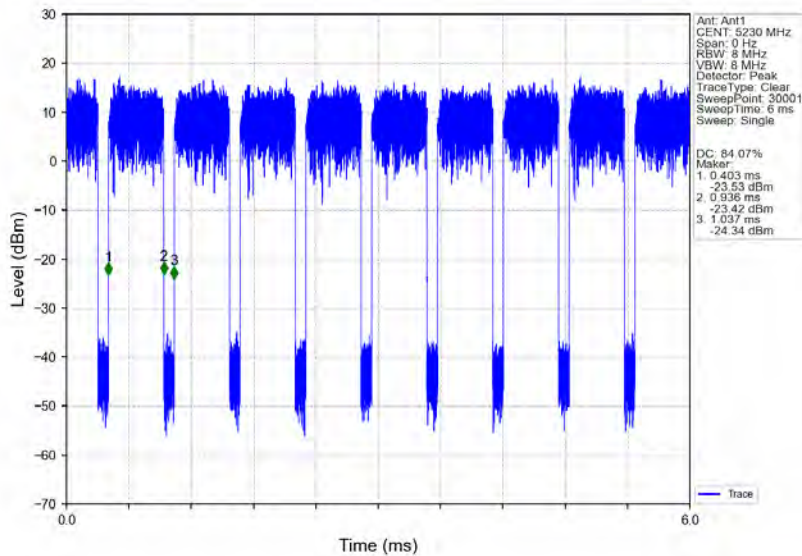
802.11ax(HE20)_HCH_5825MHz_RU242_Left_Ant1_NTNV



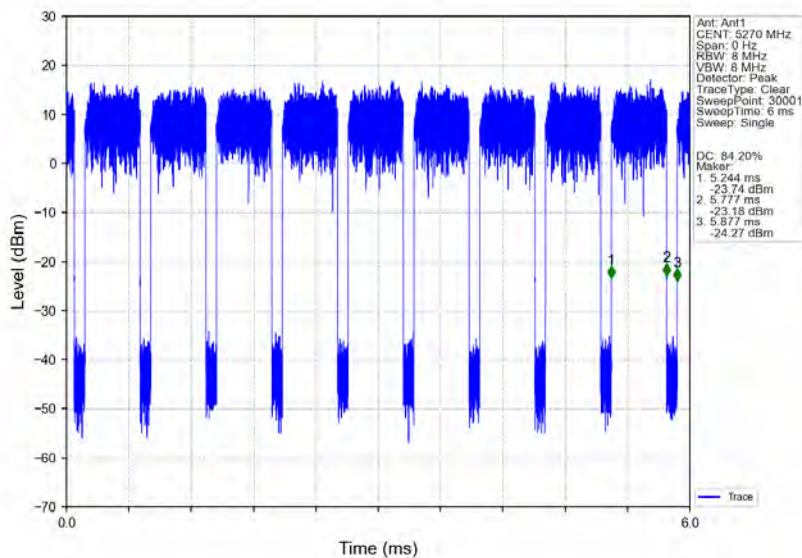
802.11ax(HE40)_LCH_5190MHz_RU484_Left_Ant1_NTNV



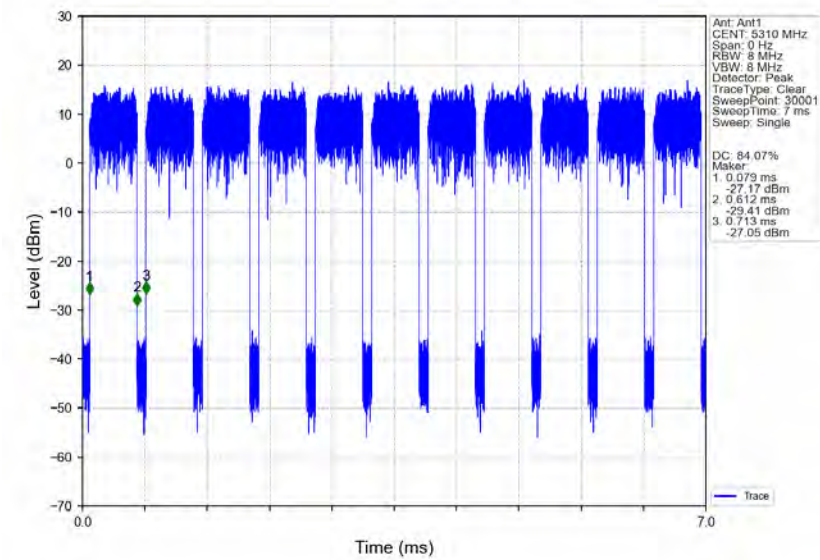
802.11ax(HE40)_HCH_5230MHz_RU484_Left_Ant1_NTNV



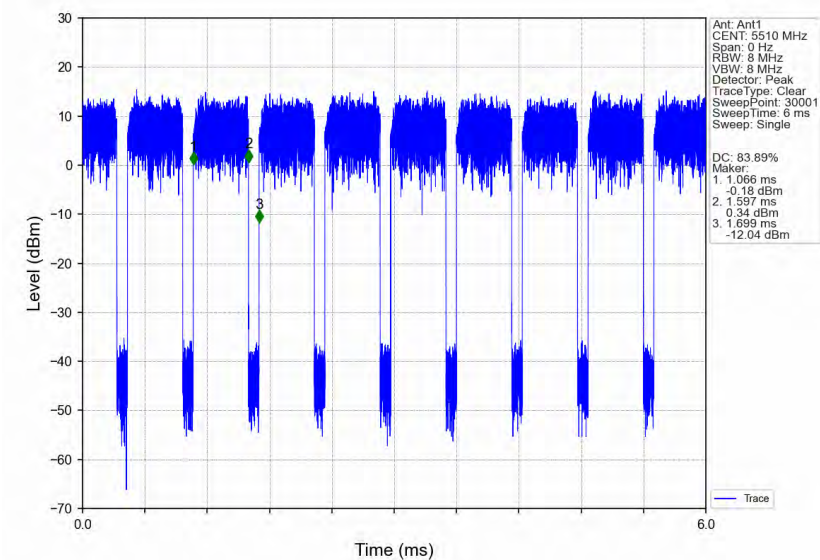
802.11ax(HE40)_LCH_5270MHz_RU484_Left_Ant1_NTNV



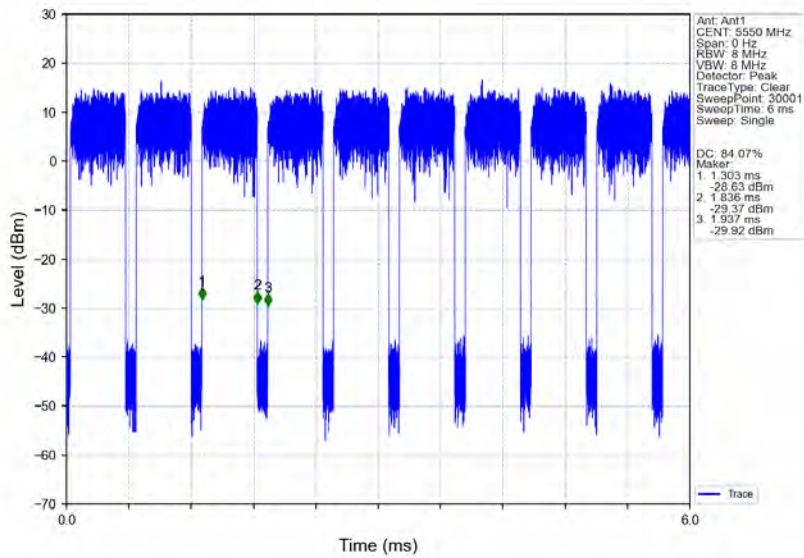
802.11ax(HE40)_HCH_5310MHz_RU484_Left_Ant1_NTNV



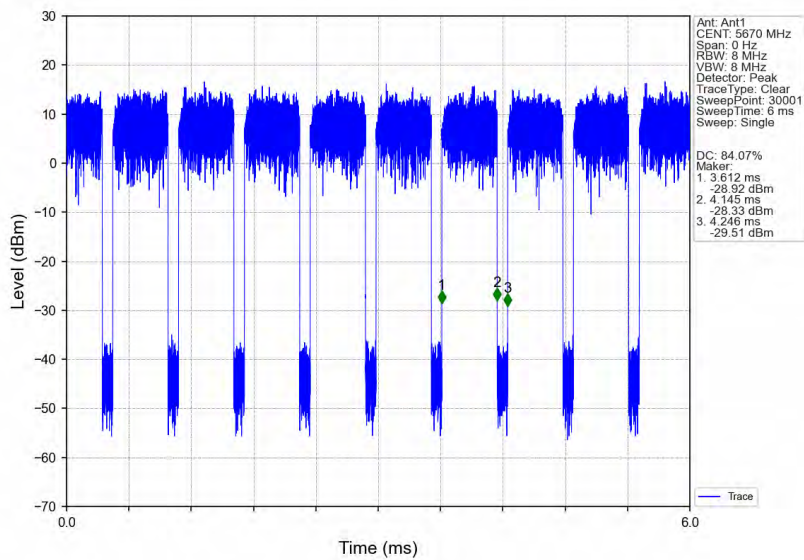
802.11ax(HE40)_LCH_5510MHz_RU484_Left_Ant1_NTNV



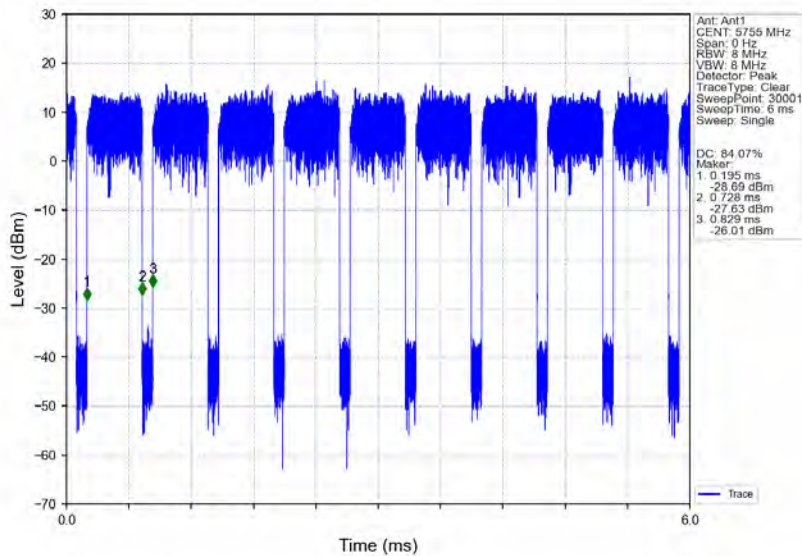
802.11ax(HE40)_MCH_5550MHz_RU484_Left_Ant1_NTNV



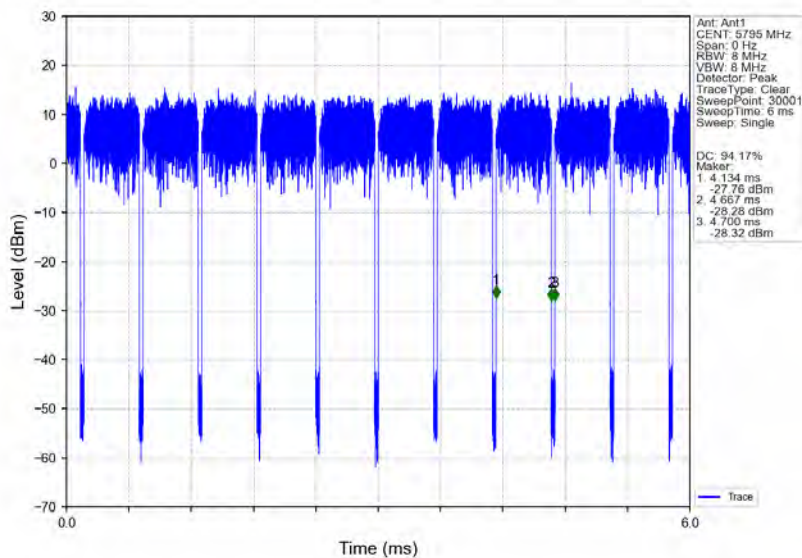
802.11ax(HE40)_HCH_5670MHz_RU484_Left_Ant1_NTNV



802.11ax(HE40)_LCH_5755MHz_RU484_Left_Ant1_NTNV



802.11ax(HE40)_HCH_5795MHz_RU484_Left_Ant1_NTNV



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 274 of 420

2. Bandwidth

2.1 Test Result

2.1.1 OBW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	99% Occupied Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5180	/	/	1	18.777	/	Pass
		5200	/	/	1	18.858	/	Pass
		5240	/	/	1	18.690	/	Pass
		5260	/	/	1	18.799	/	Pass
		5300	/	/	1	18.712	/	Pass
		5320	/	/	1	18.751	/	Pass
		5500	/	/	1	19.273	/	Pass
		5580	/	/	1	19.197	/	Pass
		5700	/	/	1	19.710	/	Pass
		5745	/	/	1	19.331	/	Pass
		5785	/	/	1	19.381	/	Pass
		5825	/	/	1	19.014	/	Pass
802.11n (HT20)	SISO	5180	/	/	1	19.711	/	Pass
		5200	/	/	1	19.712	/	Pass
		5240	/	/	1	19.675	/	Pass
		5260	/	/	1	19.590	/	Pass
		5300	/	/	1	19.665	/	Pass
		5320	/	/	1	19.694	/	Pass
		5500	/	/	1	20.336	/	Pass
		5580	/	/	1	20.111	/	Pass
		5700	/	/	1	20.450	/	Pass
		5745	/	/	1	20.239	/	Pass
		5785	/	/	1	20.141	/	Pass
		5825	/	/	1	20.162	/	Pass
802.11n (HT40)	SISO	5190	/	/	1	37.728	/	Pass
		5230	/	/	1	37.860	/	Pass
		5270	/	/	1	37.929	/	Pass
		5310	/	/	1	37.863	/	Pass
		5510	/	/	1	38.360	/	Pass
		5550	/	/	1	38.249	/	Pass
		5670	/	/	1	38.144	/	Pass
		5755	/	/	1	38.148	/	Pass
		5795	/	/	1	38.181	/	Pass
802.11ax (HE20)	SISO	5180	RU242	Left	1	20.163	/	Pass
		5200	RU242	Left	1	20.057	/	Pass

Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

Report No.: KSCR240900173204

Page: 275 of 420

		5240	RU242	Left	1	20.077	/	Pass
		5260	RU242	Left	1	20.076	/	Pass
		5300	RU242	Left	1	20.133	/	Pass
		5320	RU242	Left	1	20.068	/	Pass
		5500	RU242	Left	1	20.422	/	Pass
		5580	RU242	Left	1	20.431	/	Pass
		5700	RU242	Left	1	20.338	/	Pass
		5745	RU242	Left	1	20.317	/	Pass
		5785	RU242	Left	1	20.339	/	Pass
		5825	RU242	Left	1	20.282	/	Pass
802.11ax (HE40)	SISO	5190	RU484	Left	1	38.770	/	Pass
		5230	RU484	Left	1	38.686	/	Pass
		5270	RU484	Left	1	38.870	/	Pass
		5310	RU484	Left	1	38.745	/	Pass
		5510	RU484	Left	1	39.296	/	Pass
		5550	RU484	Left	1	39.066	/	Pass
		5670	RU484	Left	1	39.352	/	Pass
		5755	RU484	Left	1	39.146	/	Pass
		5795	RU484	Left	1	39.232	/	Pass

2.1.2 6dB BW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	6dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5745	/	/	1	16.436	>=0.5	Pass
		5785	/	/	1	16.445	>=0.5	Pass
		5825	/	/	1	16.421	>=0.5	Pass
802.11n (HT20)	SISO	5745	/	/	1	17.665	>=0.5	Pass
		5785	/	/	1	17.649	>=0.5	Pass
		5825	/	/	1	17.647	>=0.5	Pass
802.11n (HT40)	SISO	5755	/	/	1	36.417	>=0.5	Pass
		5795	/	/	1	36.394	>=0.5	Pass
802.11ax (HE20)	SISO	5745	RU242	Left	1	19.064	>=0.5	Pass
		5785	RU242	Left	1	19.066	>=0.5	Pass
		5825	RU242	Left	1	19.096	>=0.5	Pass
802.11ax (HE40)	SISO	5755	RU484	Left	1	38.156	>=0.5	Pass
		5795	RU484	Left	1	38.124	>=0.5	Pass

2.1.3 26dB BW

Mode	TX Type	Frequency (MHz)	RU	RU Pos	ANT	26dB Bandwidth (MHz)		Verdict
						Result	Limit	
802.11a	SISO	5180	/	/	1	24.121	/	Pass
		5200	/	/	1	25.461	/	Pass
		5240	/	/	1	24.985	/	Pass



Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

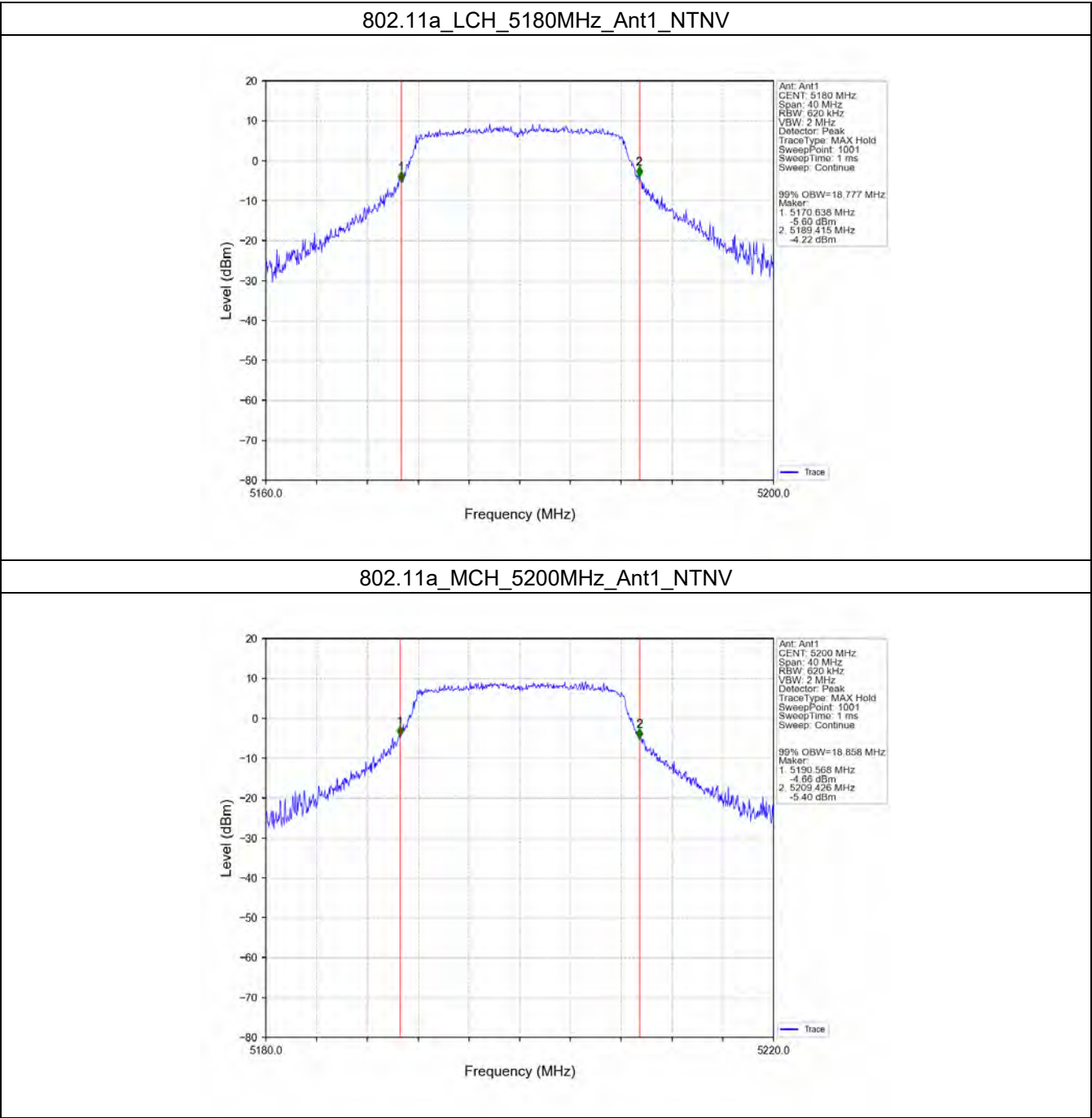
Report No.: KSCR240900173204

Page: 276 of 420

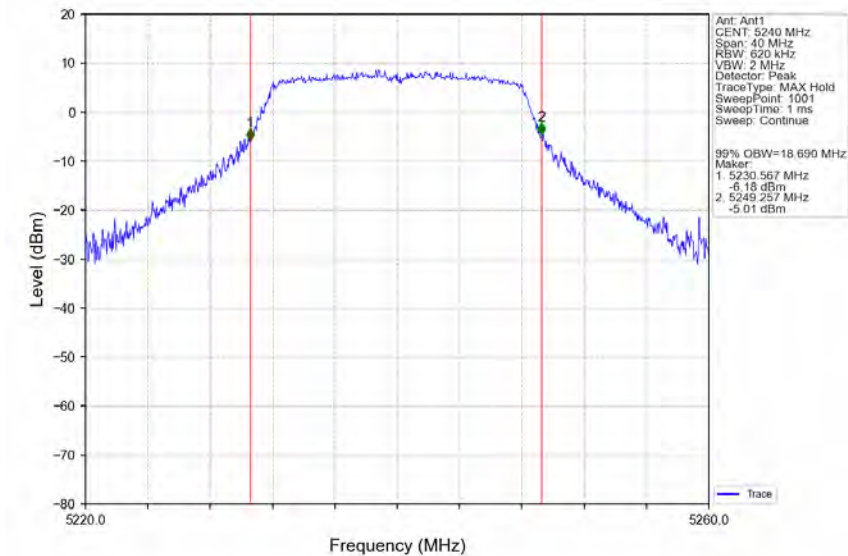
		5260	/	/	1	25.501	/	Pass
		5300	/	/	1	25.051	/	Pass
		5320	/	/	1	24.512	/	Pass
		5500	/	/	1	25.244	/	Pass
		5580	/	/	1	27.261	/	Pass
		5700	/	/	1	27.700	/	Pass
802.11n (HT20)	SISO	5180	/	/	1	25.291	/	Pass
		5200	/	/	1	26.198	/	Pass
		5240	/	/	1	25.753	/	Pass
		5260	/	/	1	25.098	/	Pass
		5300	/	/	1	25.123	/	Pass
		5320	/	/	1	25.122	/	Pass
		5500	/	/	1	25.934	/	Pass
		5580	/	/	1	26.005	/	Pass
802.11n (HT40)	SISO	5700	/	/	1	27.037	/	Pass
		5190	/	/	1	44.995	/	Pass
		5230	/	/	1	46.077	/	Pass
		5270	/	/	1	45.651	/	Pass
		5310	/	/	1	45.527	/	Pass
		5510	/	/	1	47.009	/	Pass
		5550	/	/	1	46.595	/	Pass
		5670	/	/	1	46.844	/	Pass
802.11ax (HE20)	SISO	5180	RU242	Left	1	25.306	/	Pass
		5200	RU242	Left	1	24.978	/	Pass
		5240	RU242	Left	1	24.194	/	Pass
		5260	RU242	Left	1	24.831	/	Pass
		5300	RU242	Left	1	25.505	/	Pass
		5320	RU242	Left	1	25.407	/	Pass
		5500	RU242	Left	1	26.813	/	Pass
		5580	RU242	Left	1	26.008	/	Pass
802.11ax (HE40)	SISO	5700	RU242	Left	1	26.437	/	Pass
		5190	RU484	Left	1	44.958	/	Pass
		5230	RU484	Left	1	45.244	/	Pass
		5270	RU484	Left	1	44.942	/	Pass
		5310	RU484	Left	1	45.376	/	Pass
		5510	RU484	Left	1	45.890	/	Pass
		5550	RU484	Left	1	48.297	/	Pass
		5670	RU484	Left	1	45.601	/	Pass

2.2 Test Graph

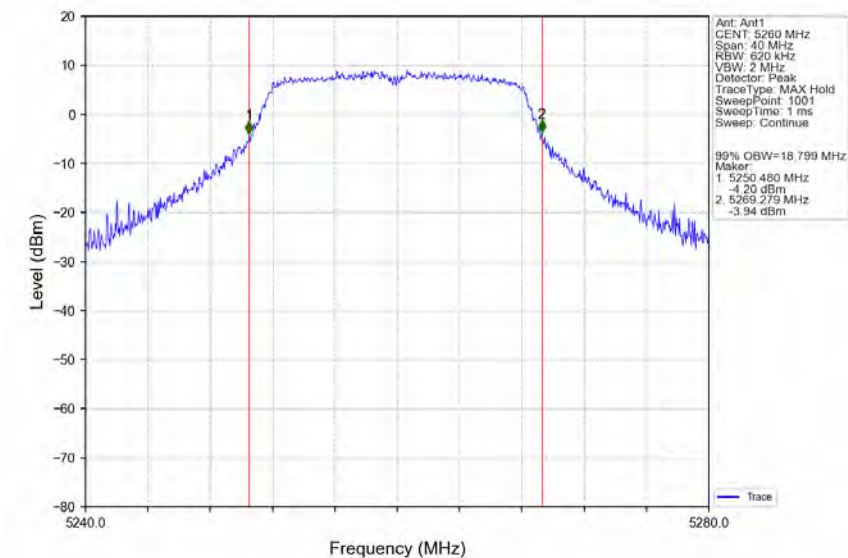
2.2.1 OBW



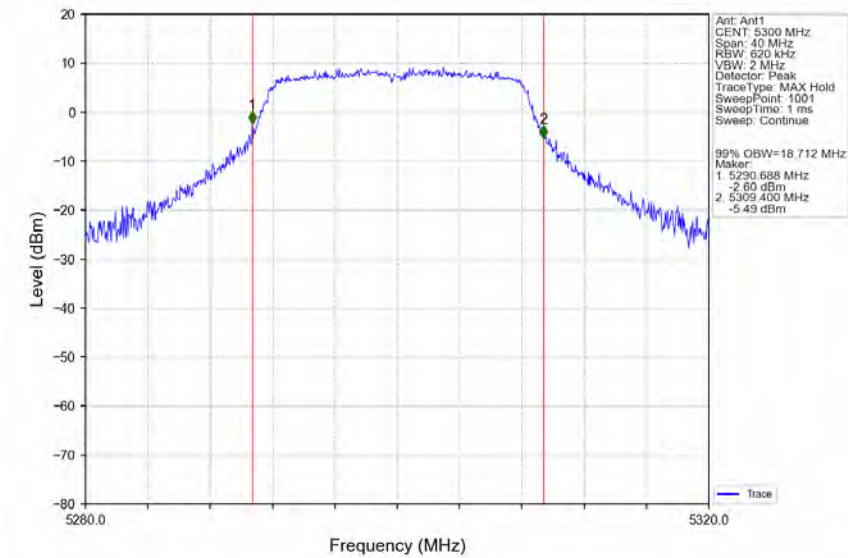
802.11a_HCH_5240MHz_Ant1_NTNV



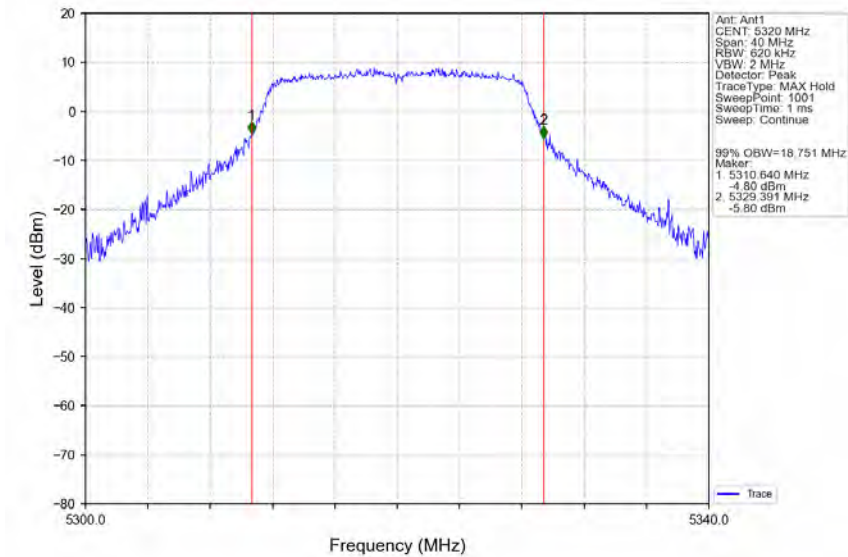
802.11a_LCH_5260MHz_Ant1_NTNV



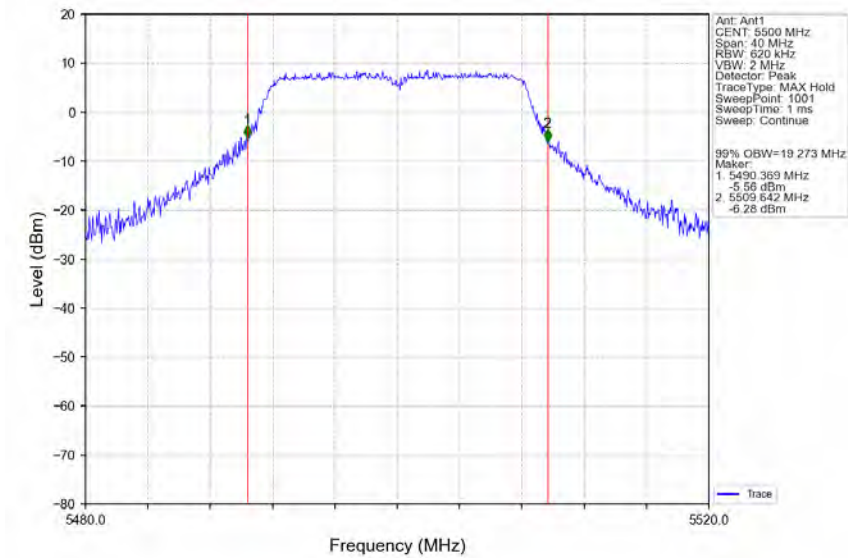
802.11a_MCH_5300MHz_Ant1_NTNV



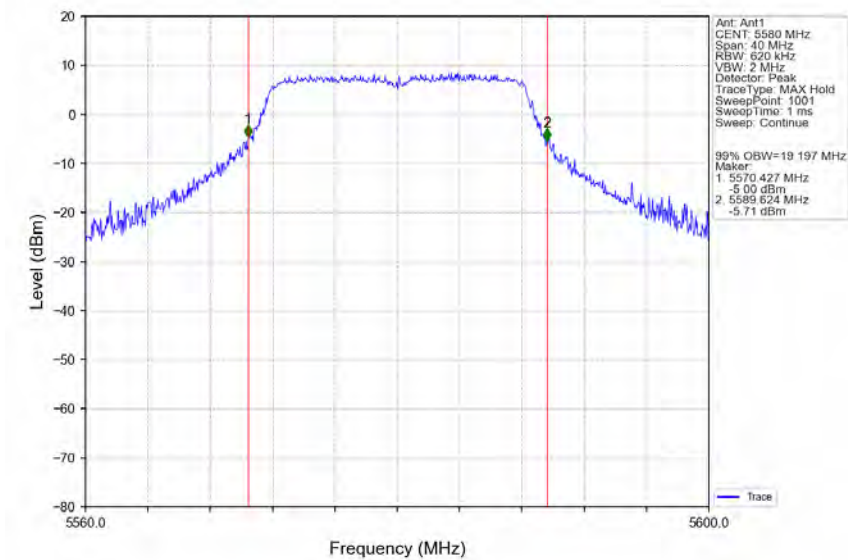
802.11a_HCH_5320MHz_Ant1_NTNV



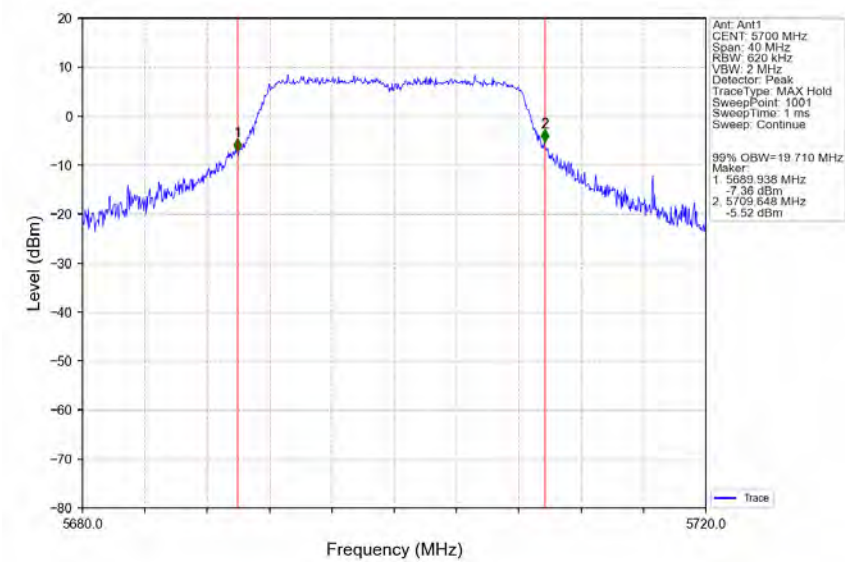
802.11a_LCH_5500MHz_Ant1_NTNV



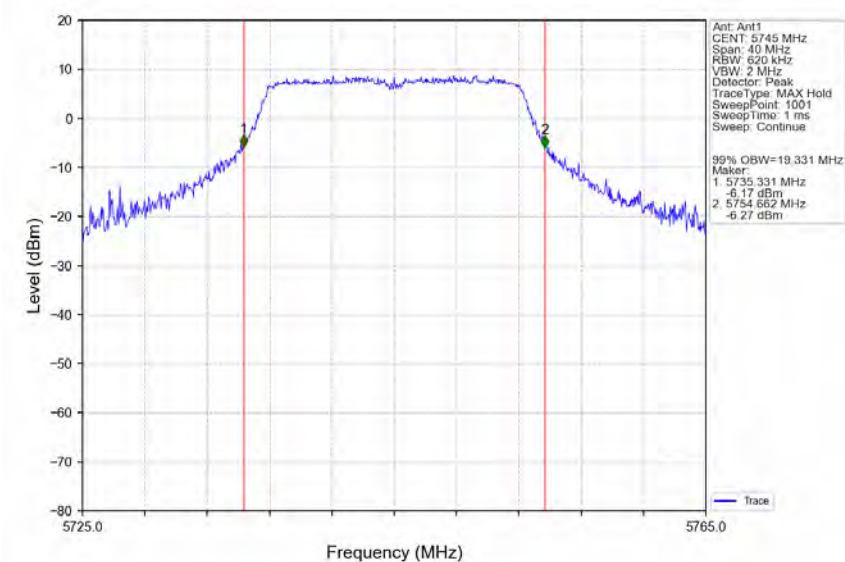
802.11a_MCH_5580MHz_Ant1_NTNV



802.11a_HCH_5700MHz_Ant1_NTNV



802.11a_LCH_5745MHz_Ant1_NTNV



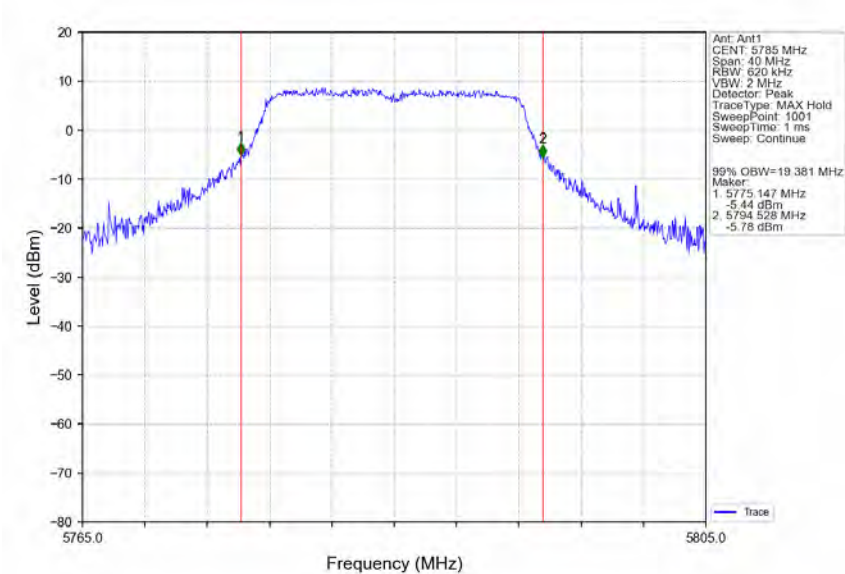
Compliance Certification Services (Kunshan) Inc.

CCSEM-TRF-001 Rev. 02 Sep 01, 2023

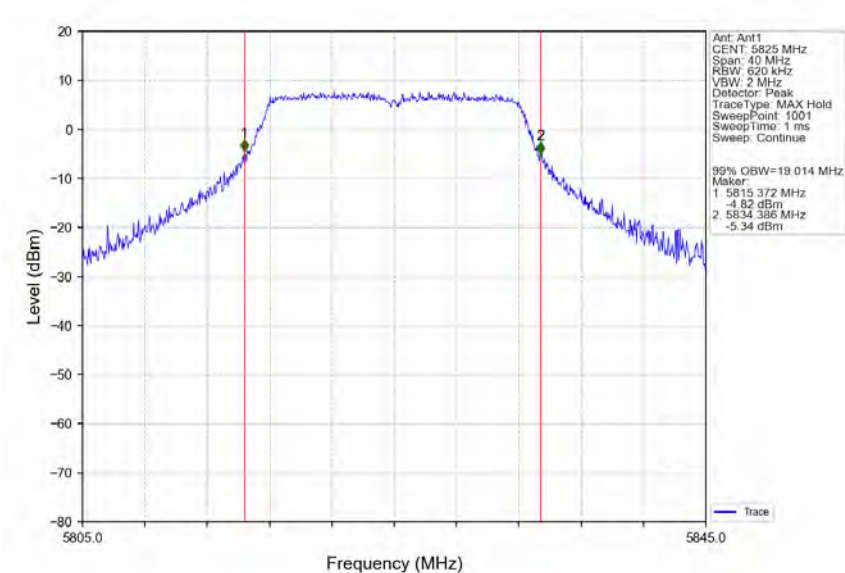
Report No.: KSCR240900173204

Page: 282 of 420

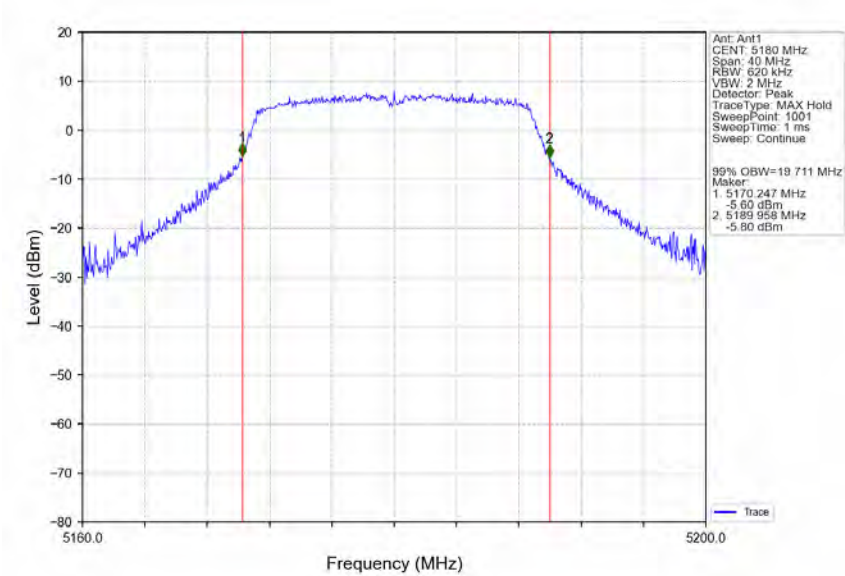
802.11a_MCH_5785MHz_Ant1_NTNV



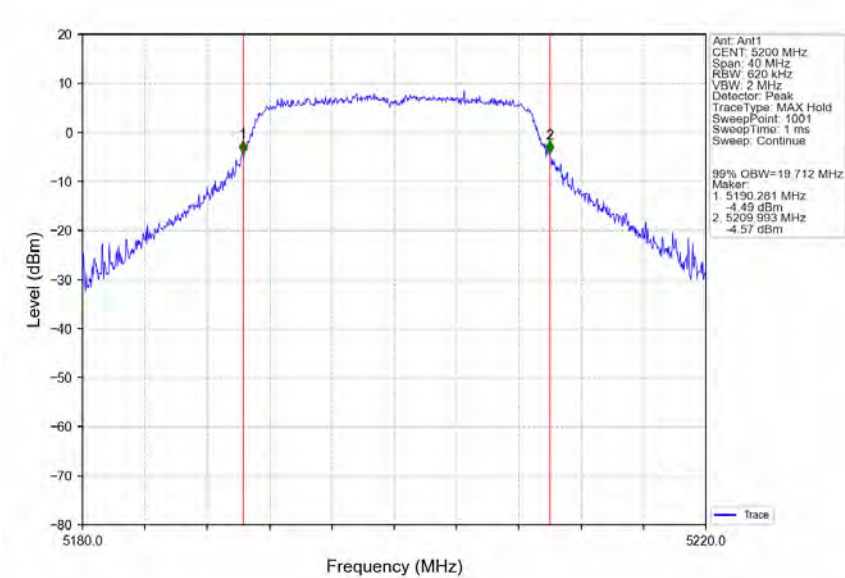
802.11a_HCH_5825MHz_Ant1_NTNV



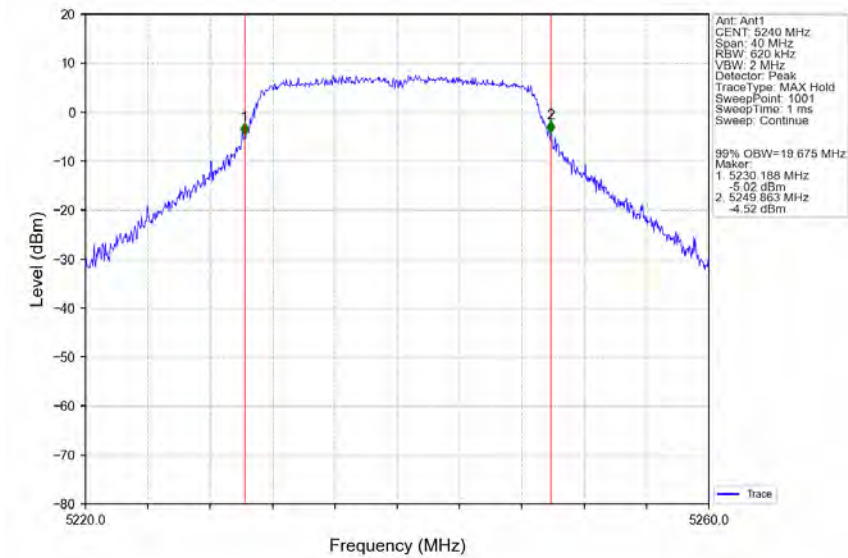
802.11n(HT20)_LCH_5180MHz_Ant1_NTNV



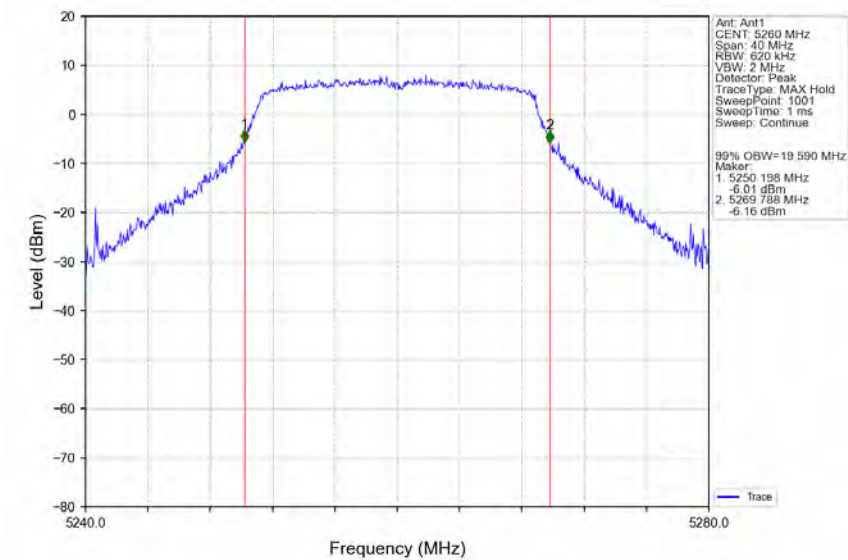
802.11n(HT20)_MCH_5200MHz_Ant1_NTNV



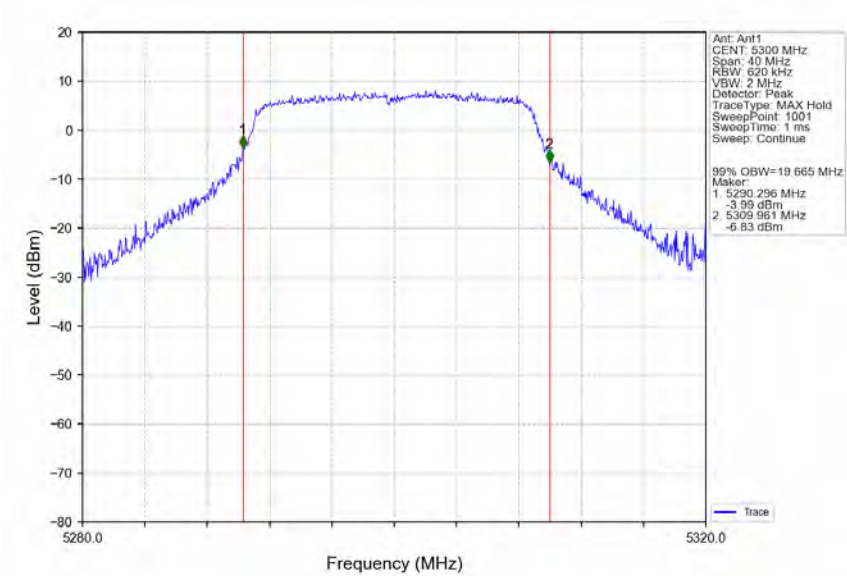
802.11n(HT20)_HCH_5240MHz_Ant1_NTNV



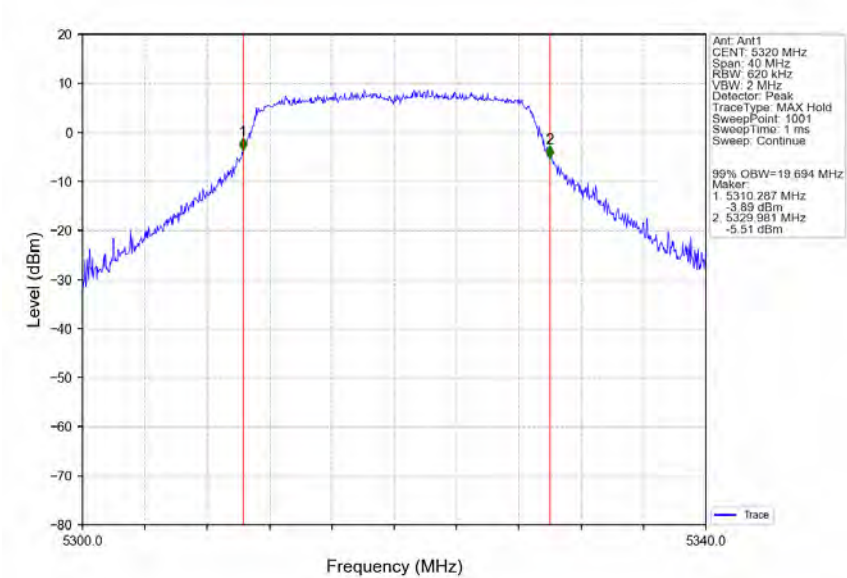
802.11n(HT20)_LCH_5260MHz_Ant1_NTNV



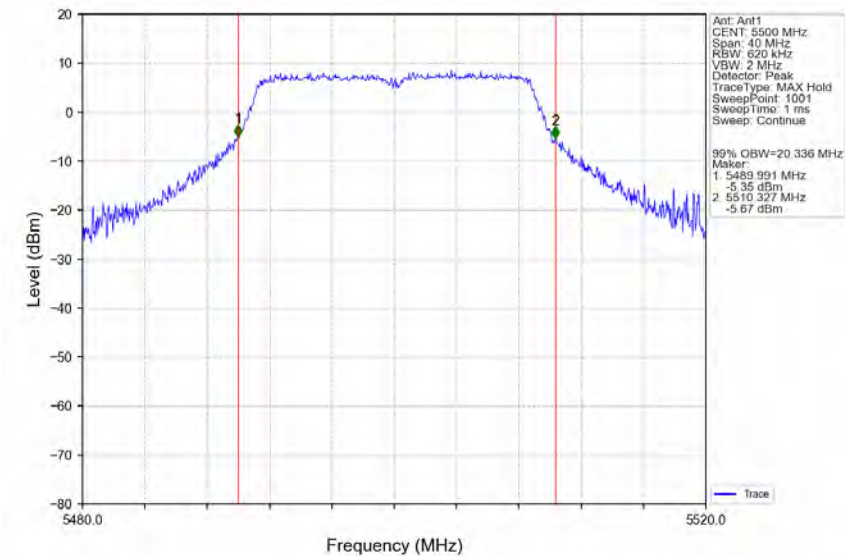
802.11n(HT20)_MCH_5300MHz_Ant1_NTNV



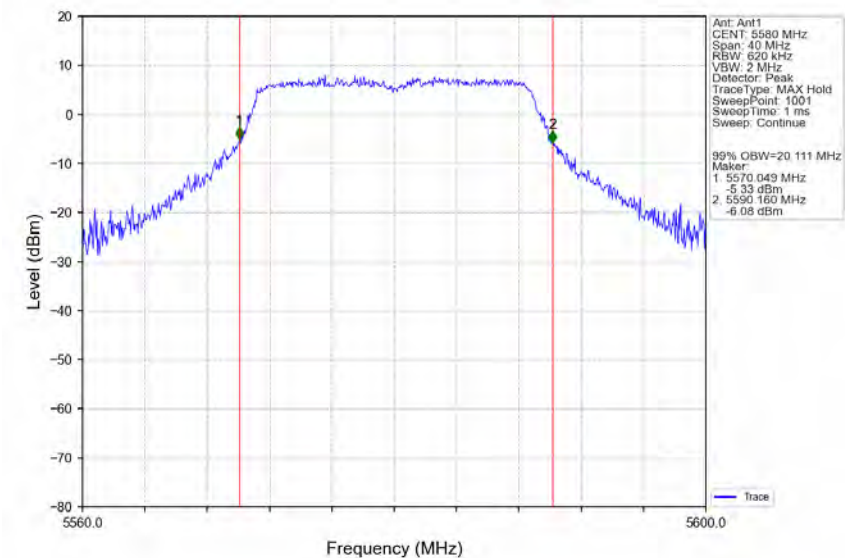
802.11n(HT20)_HCH_5320MHz_Ant1_NTNV



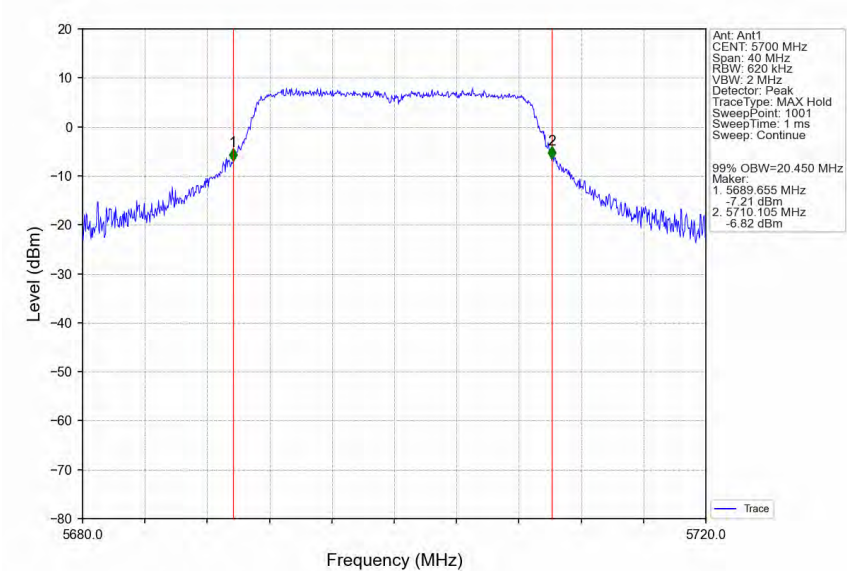
802.11n(HT20)_LCH_5500MHz_Ant1_NTNV



802.11n(HT20)_MCH_5580MHz_Ant1_NTNV



802.11n(HT20)_HCH_5700MHz_Ant1_NTNV



802.11n(HT20)_LCH_5745MHz_Ant1_NTNV

