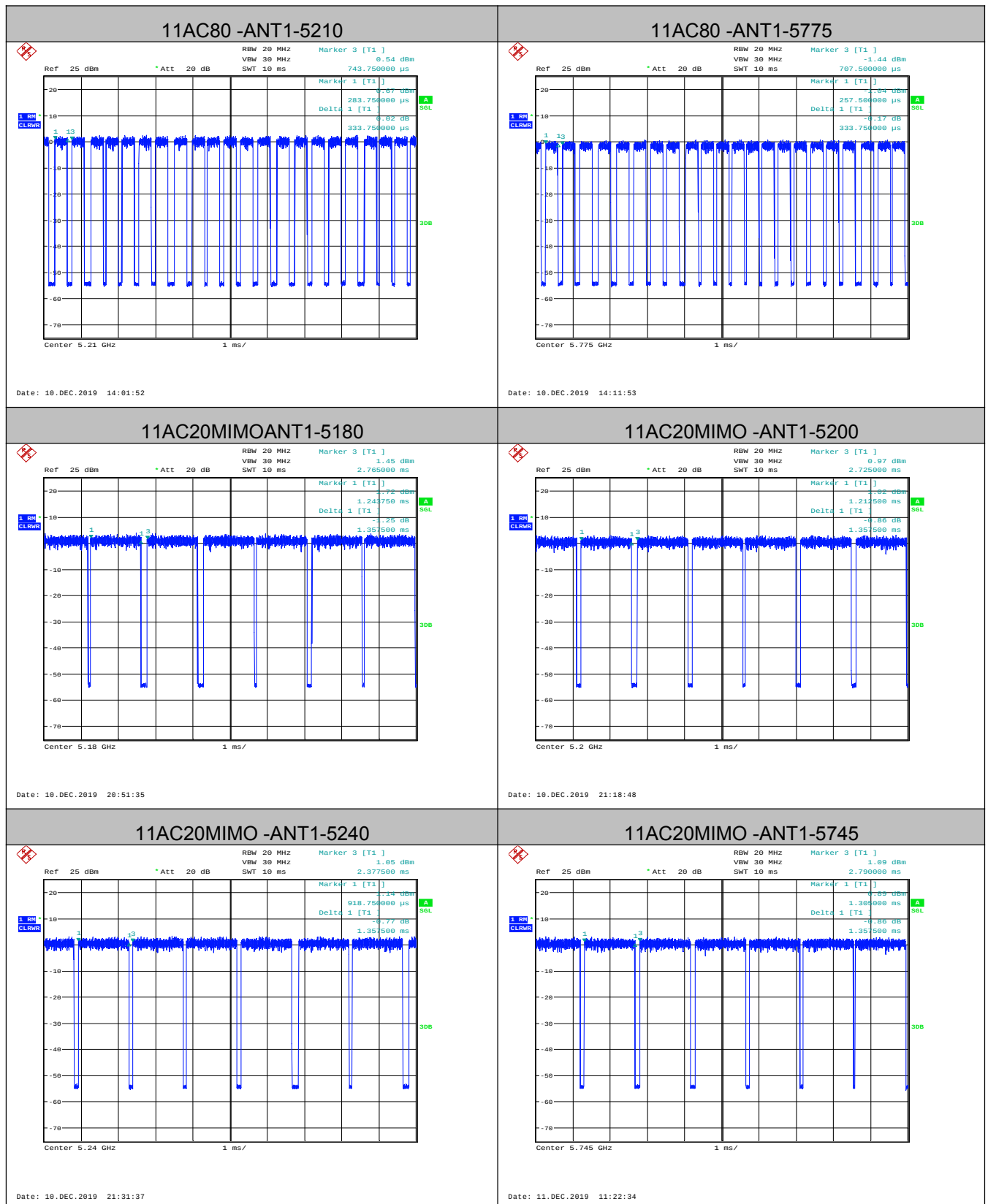
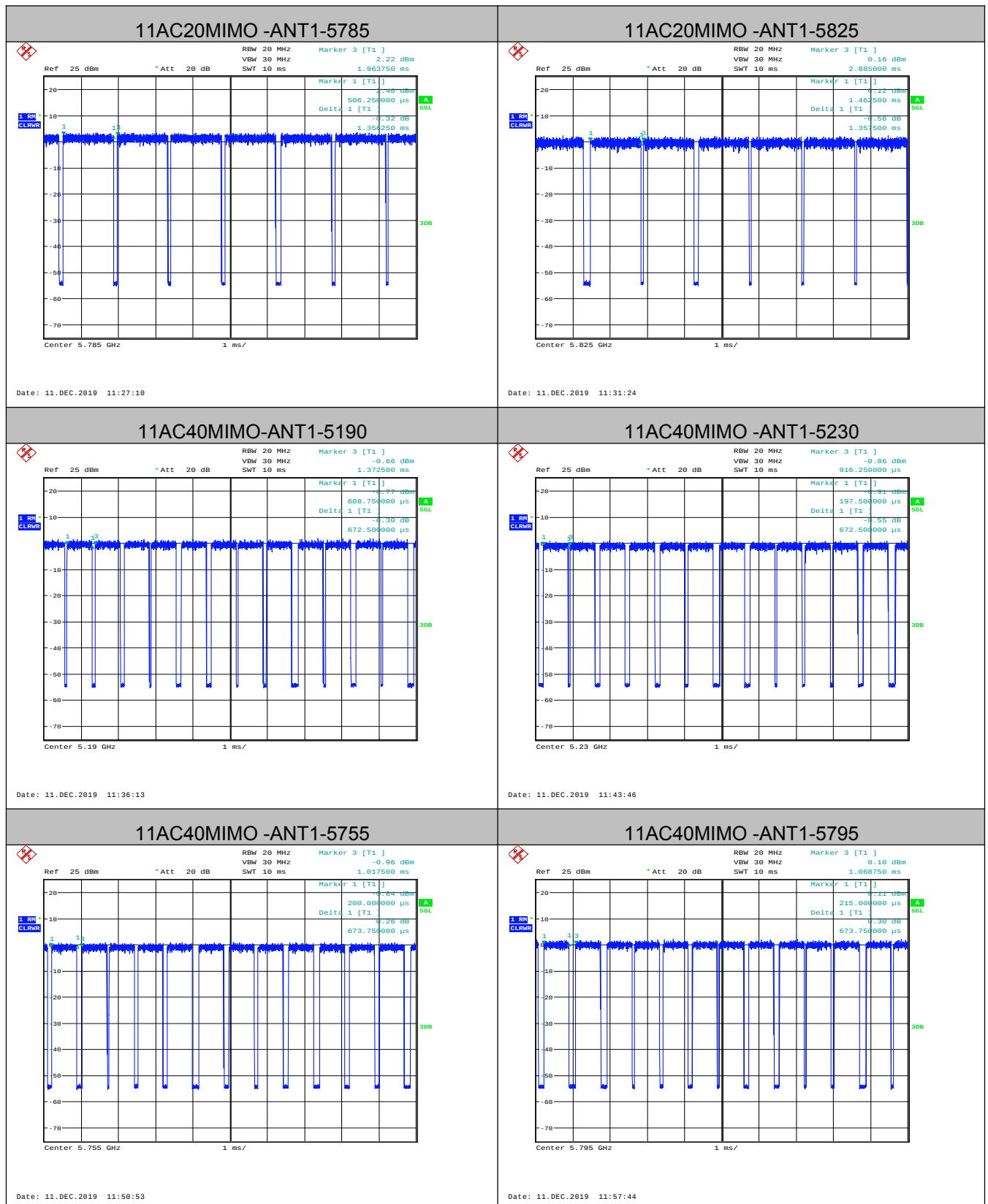
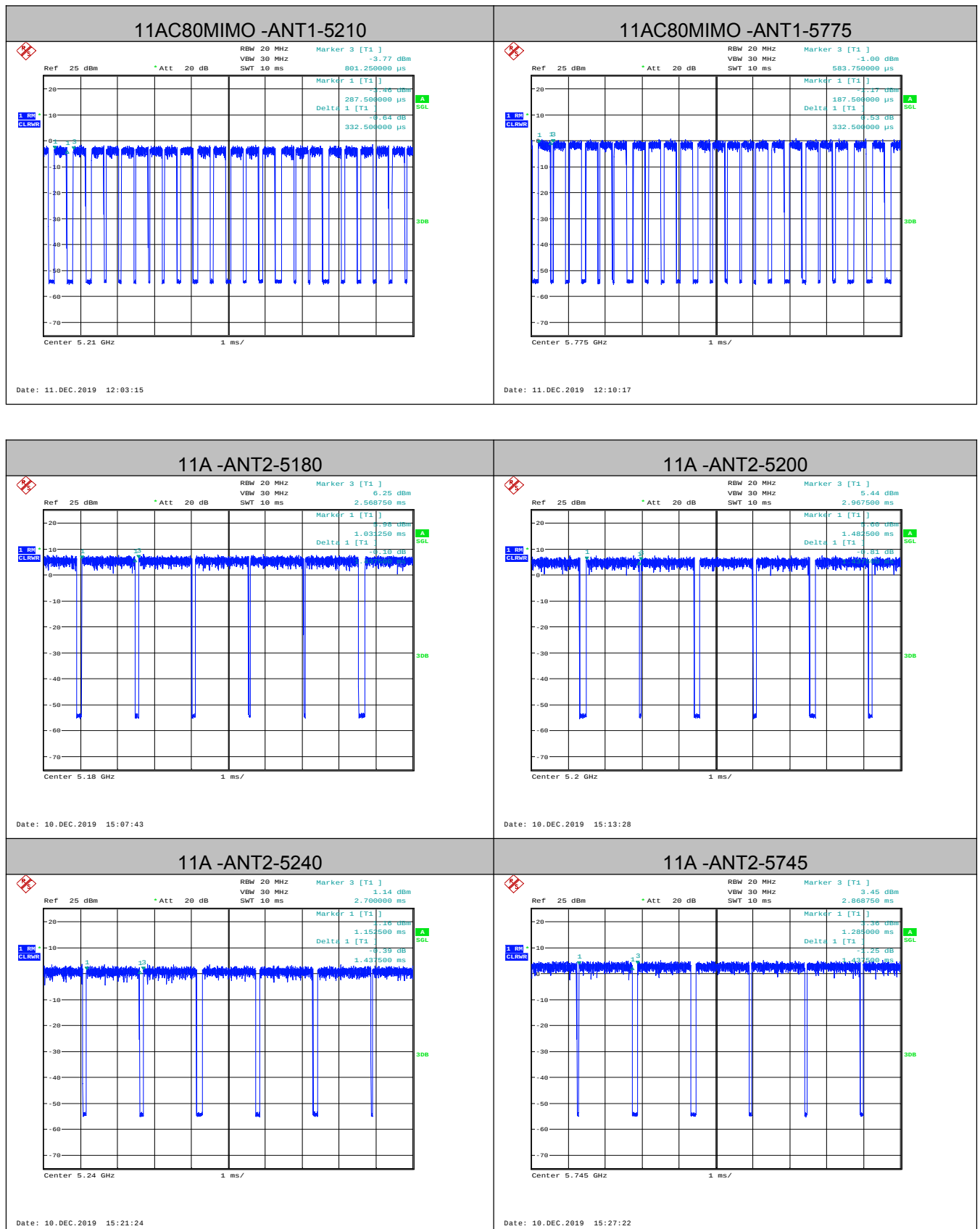
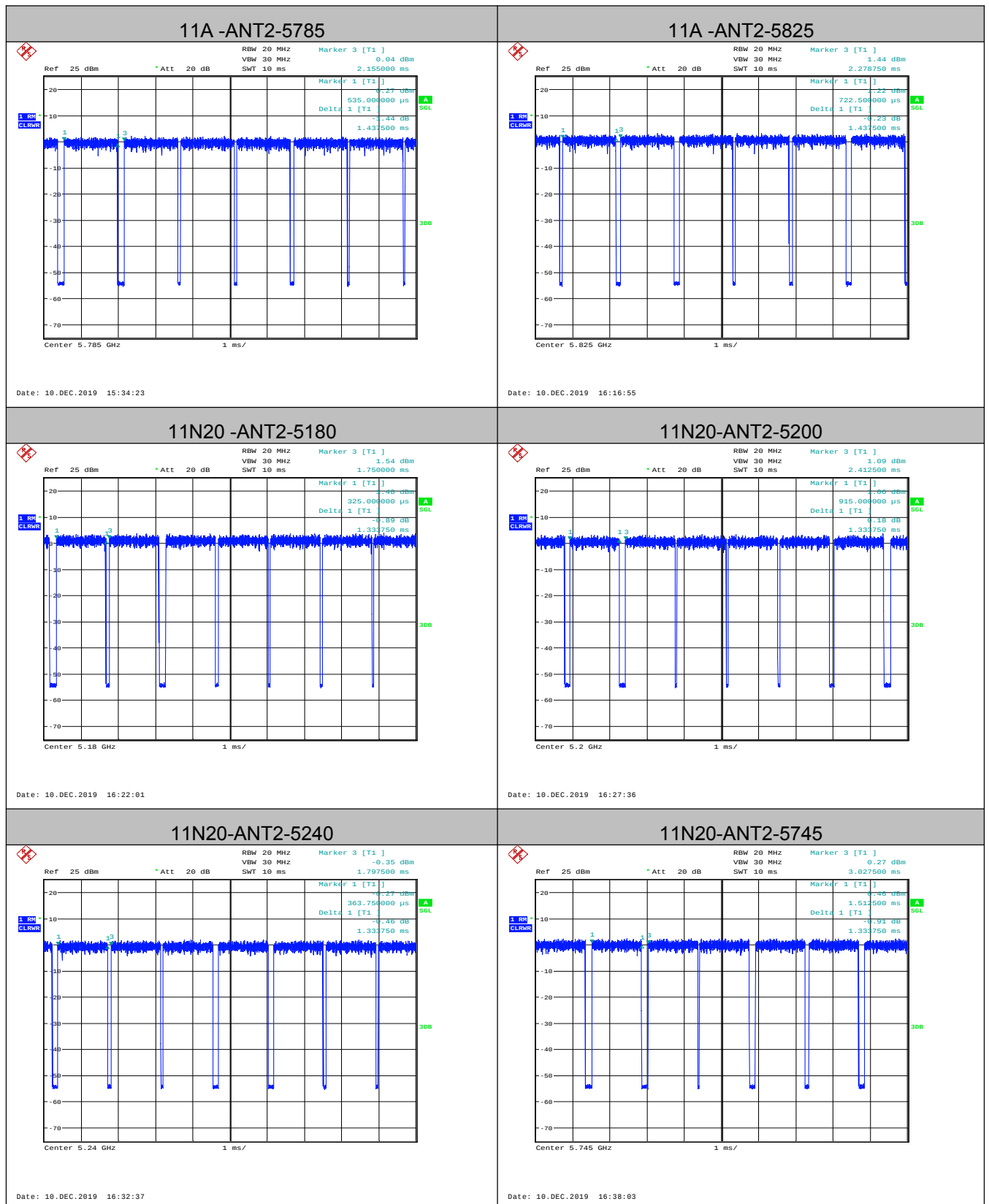
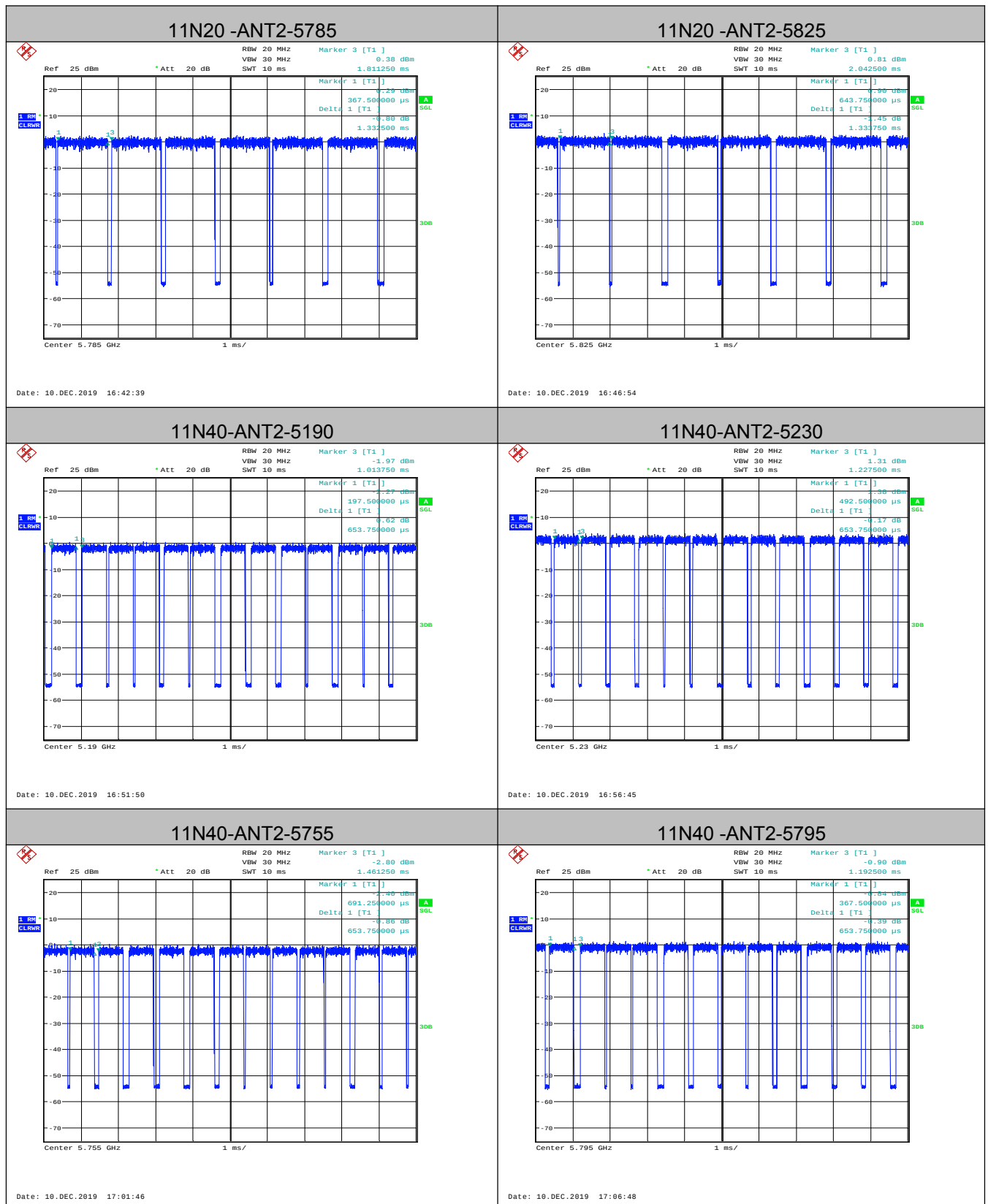


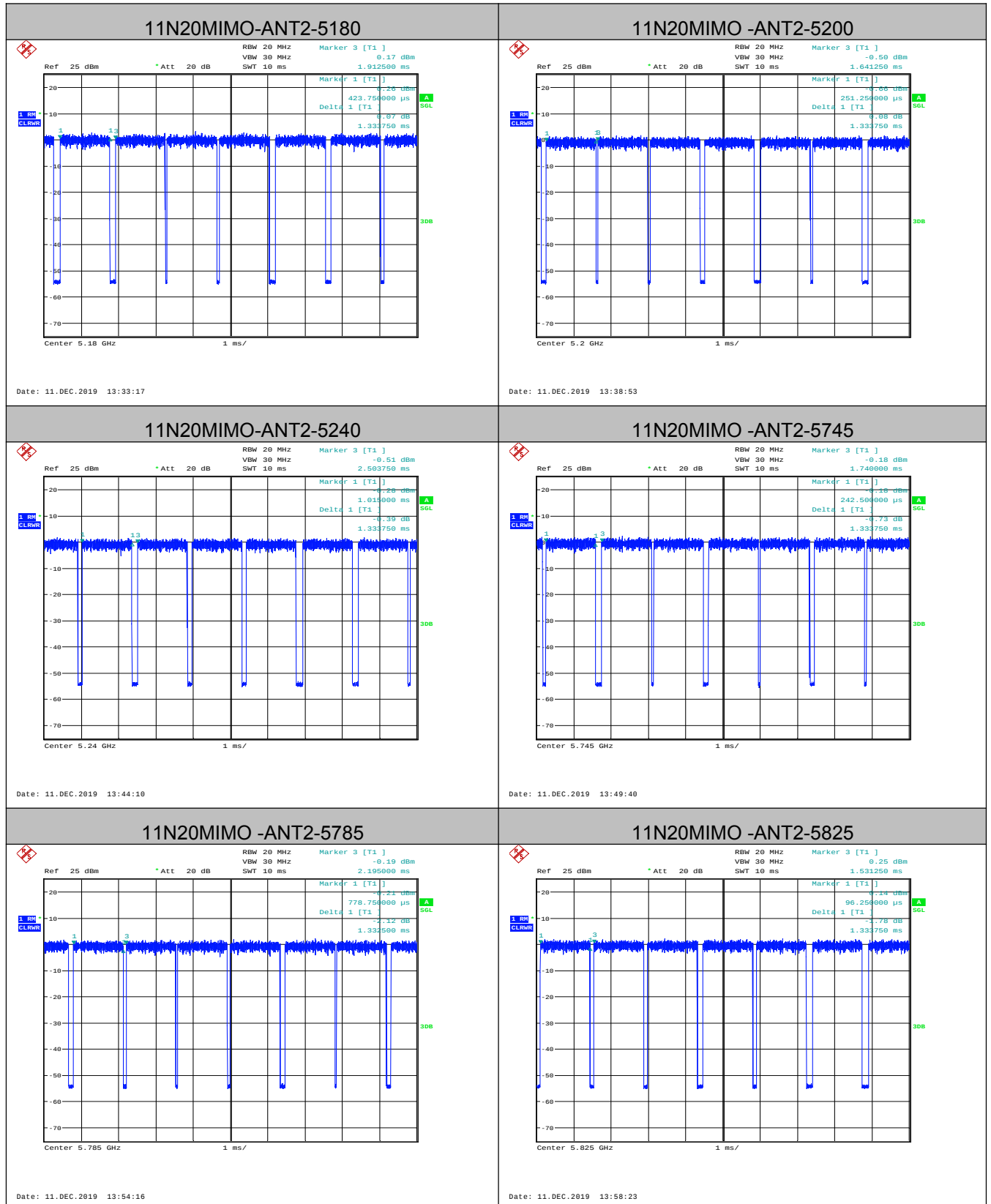


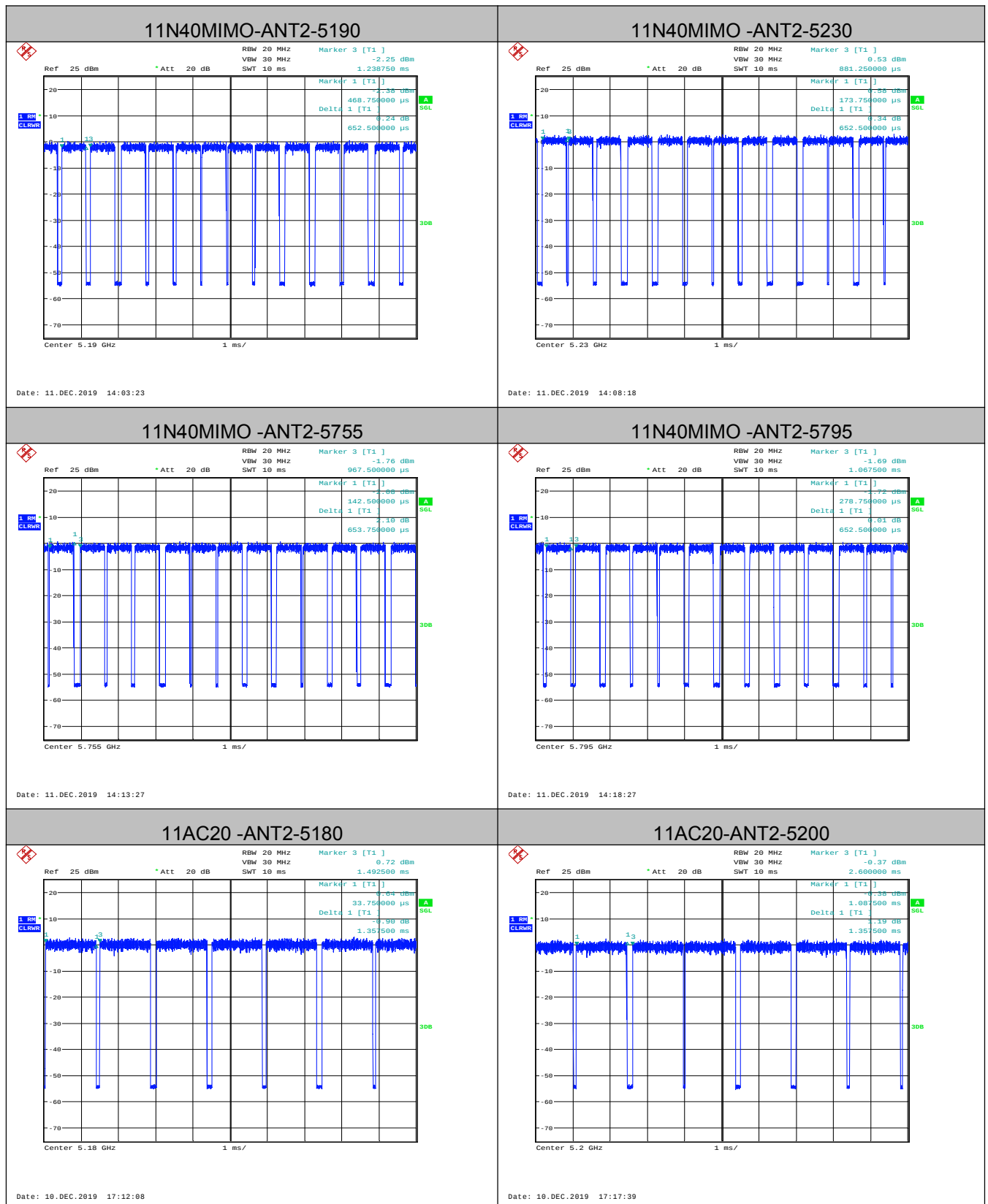


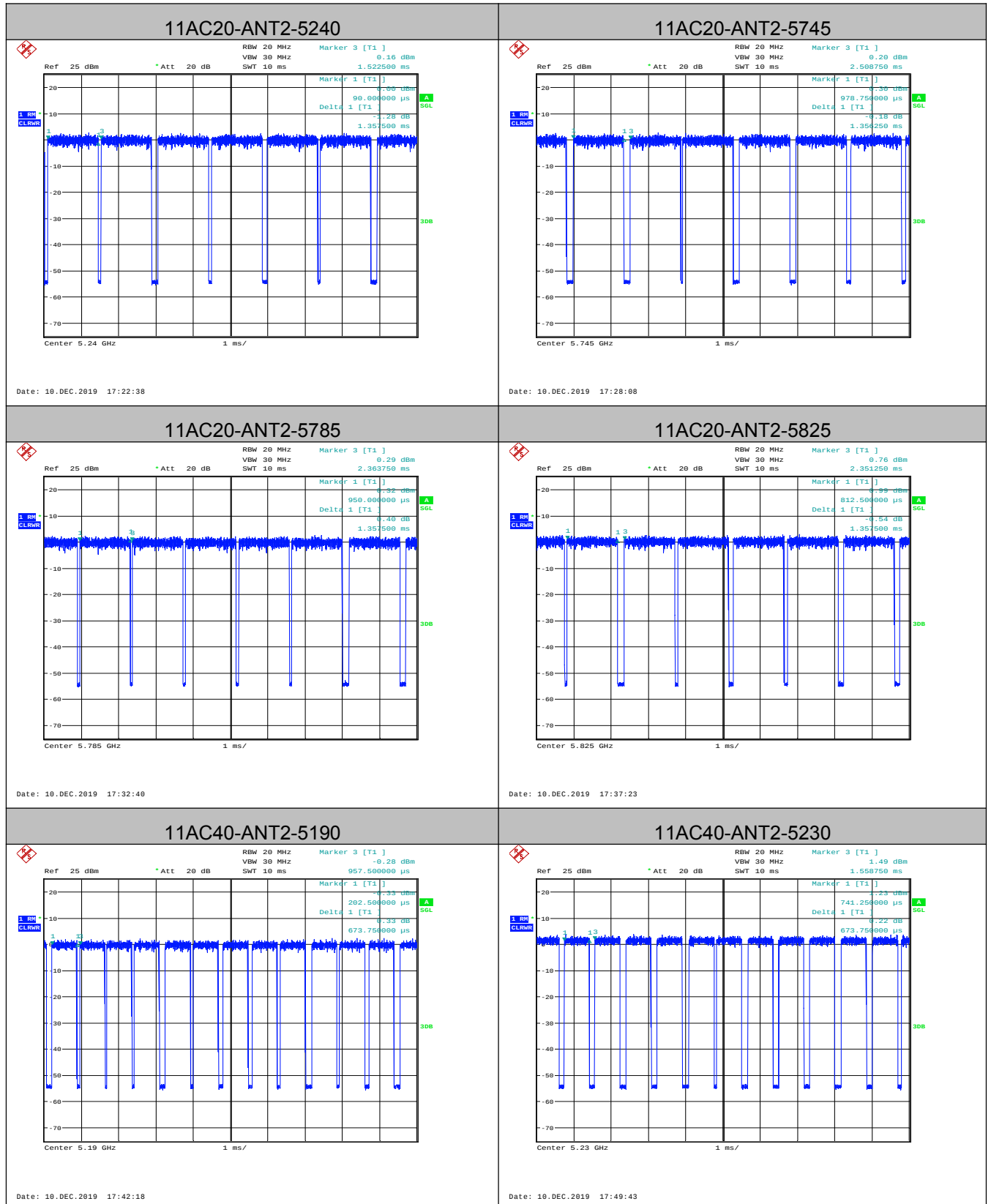


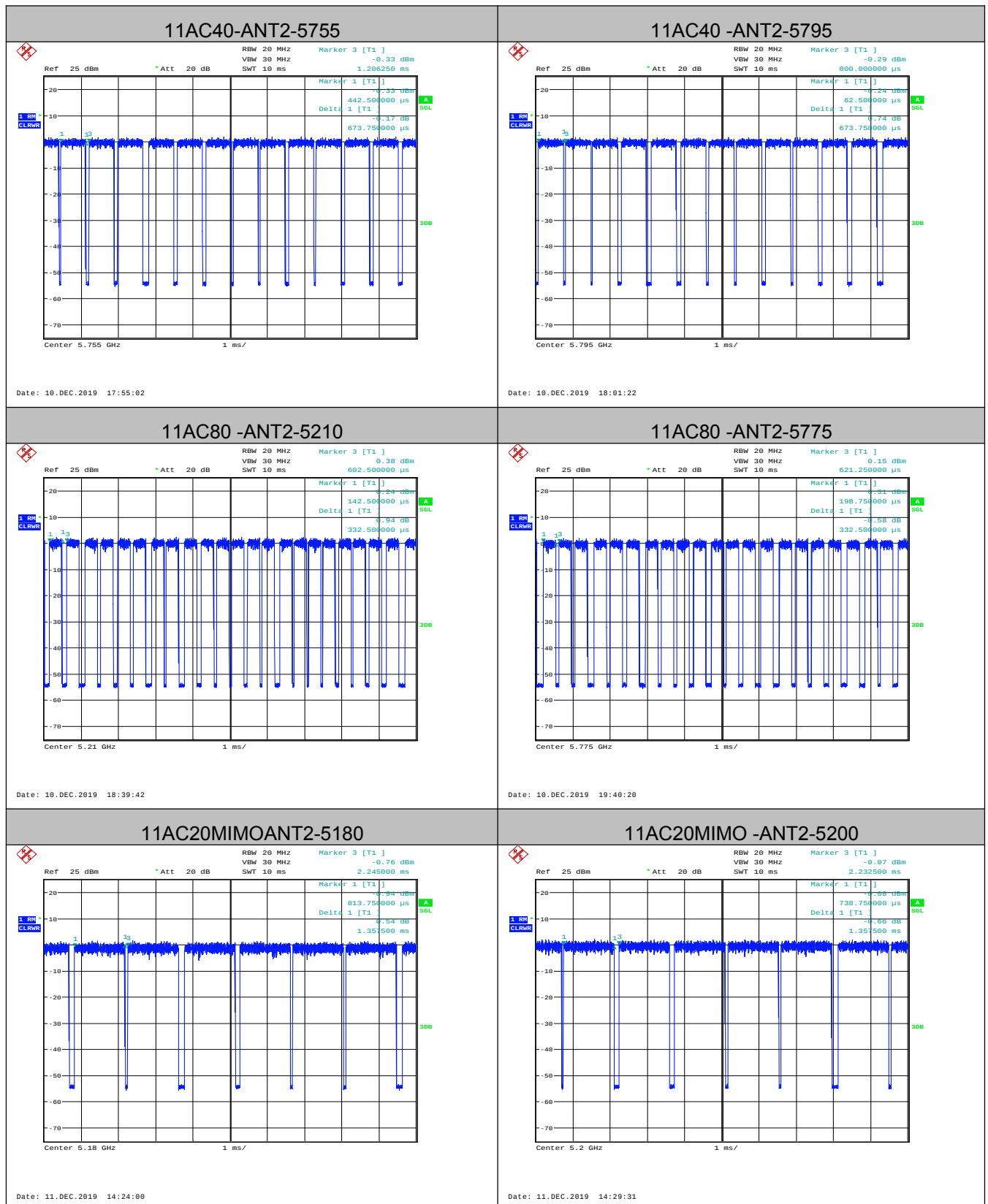


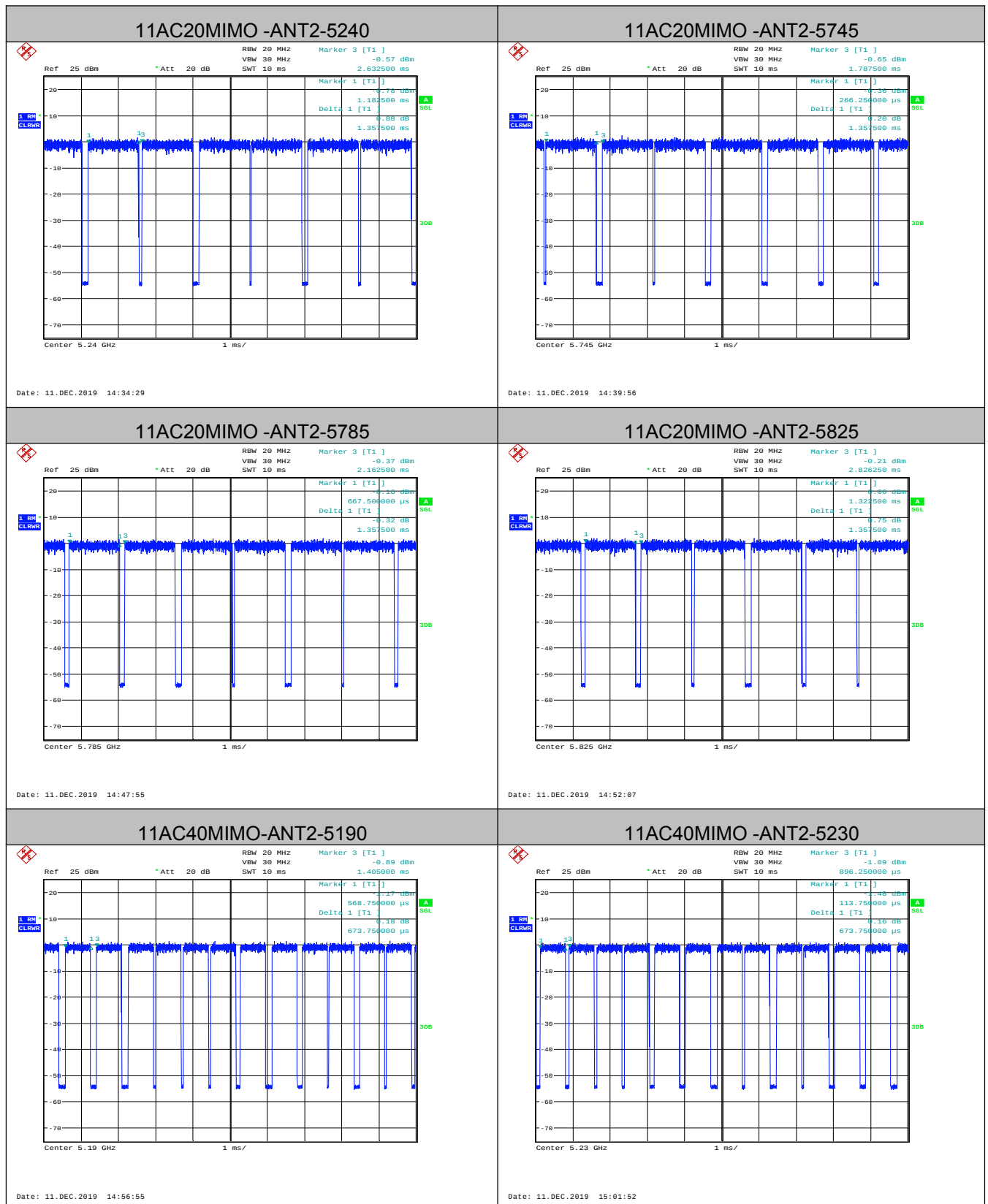


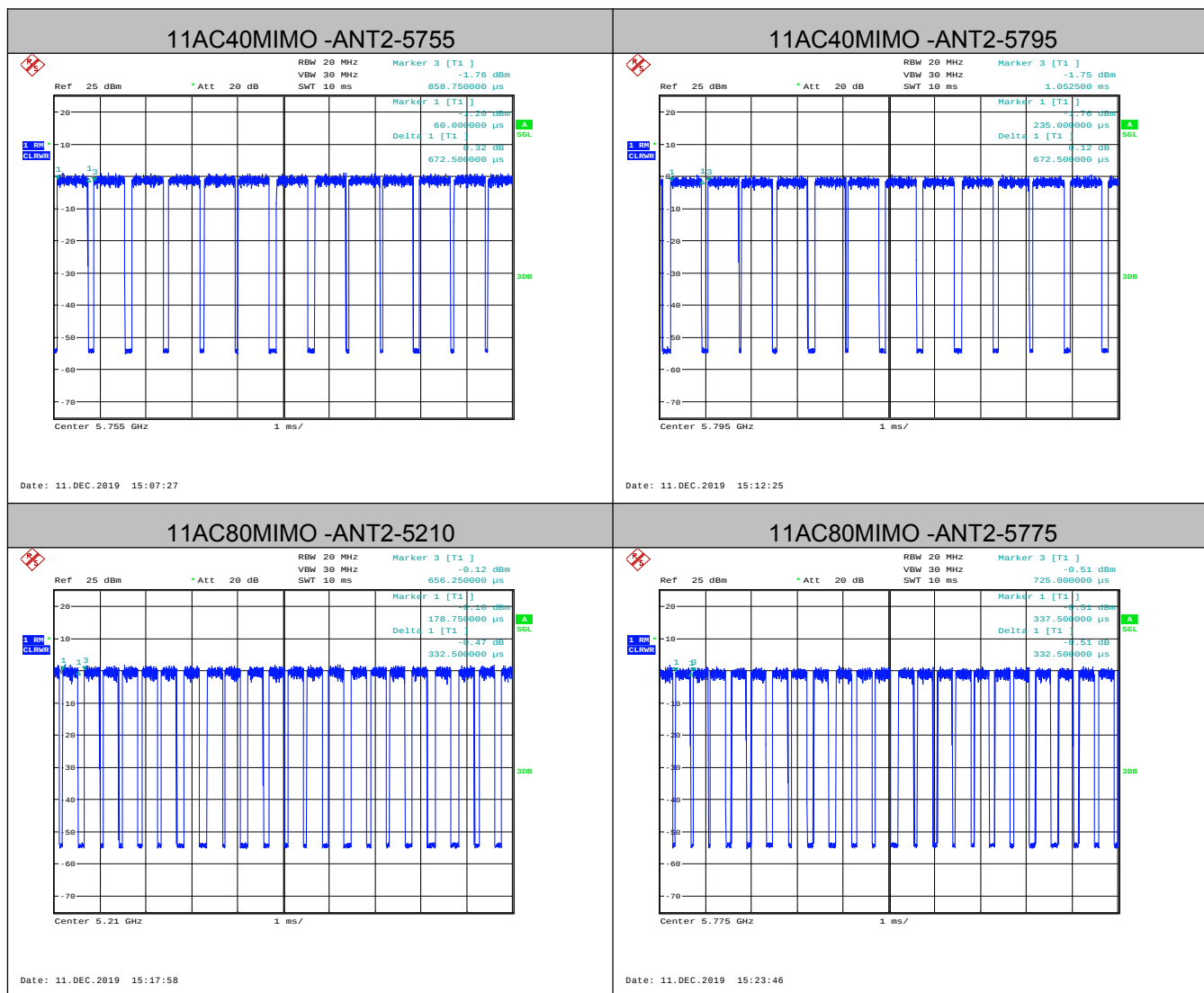












Conducted Average Output Power:

Measurement Data

Test Mode	Antenna	Test Channel	Level [dBm]	Duty Cycle factor (dB)	Power [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	12.66	0.32	12.98	24.00	PASS
11A	Ant2	5180	12.32	0.29	12.61	24.00	PASS
11A	Ant1	5200	11.9	0.32	12.22	24.00	PASS
11A	Ant2	5200	12.34	0.14	12.48	24.00	PASS
11A	Ant1	5240	11.41	0.22	11.63	24.00	PASS
11A	Ant2	5240	11.94	0.32	12.26	24.00	PASS
11A	Ant1	5745	12.35	0.32	12.67	30.00	PASS
11A	Ant2	5745	12.08	0.42	12.5	30.00	PASS
11A	Ant1	5785	12.22	0.22	12.44	30.00	PASS
11A	Ant2	5785	11.46	0.52	11.98	30.00	PASS
11A	Ant1	5825	12.42	0.14	12.56	30.00	PASS
11A	Ant2	5825	12.02	0.34	12.36	30.00	PASS
11N20SISO	Ant1	5180	12.37	0.26	12.63	24.00	PASS
11N20SISO	Ant2	5180	11.97	0.29	12.26	24.00	PASS
11N20SISO	Ant1	5200	12.22	0.32	12.54	24.00	PASS
11N20SISO	Ant2	5200	11.53	0.5	12.03	24.00	PASS
11N20SISO	Ant1	5240	12.24	0.18	12.42	24.00	PASS
11N20SISO	Ant2	5240	11.61	0.31	11.92	24.00	PASS
11N20SISO	Ant1	5745	11.98	0.18	12.16	30.00	PASS
11N20SISO	Ant2	5745	11.62	0.55	12.17	30.00	PASS
11N20SISO	Ant1	5785	12.11	0.34	12.45	30.00	PASS
11N20SISO	Ant2	5785	11.55	0.35	11.9	30.00	PASS
11N20SISO	Ant1	5825	12	0.37	12.37	30.00	PASS
11N20SISO	Ant2	5825	12.01	0.21	12.22	30.00	PASS
11N40SISO	Ant1	5190	11.45	0.88	12.33	24.00	PASS
11N40SISO	Ant2	5190	11.04	0.96	12	24.00	PASS

11N40SISO	Ant1	5230	10.91	0.87	11.78	24.00	PASS
11N40SISO	Ant2	5230	11.33	0.51	11.84	24.00	PASS
11N40SISO	Ant1	5755	11.45	1.06	12.51	30.00	PASS
11N40SISO	Ant2	5755	11.26	0.71	11.97	30.00	PASS
11N40SISO	Ant1	5795	12.23	0.29	12.52	30.00	PASS
11N40SISO	Ant2	5795	11.57	1.01	12.58	30.00	PASS
11AC20SISO	Ant1	5180	12	0.31	12.31	24.00	PASS
11AC20SISO	Ant2	5180	11.99	0.31	12.3	24.00	PASS
11AC20SISO	Ant1	5200	11.63	0.52	12.15	24.00	PASS
11AC20SISO	Ant2	5200	11.84	0.47	12.31	24.00	PASS
11AC20SISO	Ant1	5240	11.35	0.42	11.77	24.00	PASS
11AC20SISO	Ant2	5240	11.88	0.23	12.11	24.00	PASS
11AC20SISO	Ant1	5745	11.59	0.52	12.11	30.00	PASS
11AC20SISO	Ant2	5745	11.74	0.52	12.26	30.00	PASS
11AC20SISO	Ant1	5785	12.01	0.23	12.24	30.00	PASS
11AC20SISO	Ant2	5785	12.04	0.18	12.22	30.00	PASS
11AC20SISO	Ant1	5825	12.27	0.26	12.53	30.00	PASS
11AC20SISO	Ant2	5825	11.72	0.54	12.26	30.00	PASS
11AC40SISO	Ant1	5190	11.51	1.04	12.55	24.00	PASS
11AC40SISO	Ant2	5190	11.71	0.49	12.2	24.00	PASS
11AC40SISO	Ant1	5230	11.82	0.55	12.37	24.00	PASS
11AC40SISO	Ant2	5230	11.56	0.84	12.4	24.00	PASS
11AC40SISO	Ant1	5755	12.01	0.44	12.45	30.00	PASS
11AC40SISO	Ant2	5755	11.37	0.54	11.91	30.00	PASS
11AC40SISO	Ant1	5795	12.37	0.39	12.76	30.00	PASS
11AC40SISO	Ant2	5795	11.49	0.39	11.88	30.00	PASS
11AC80SISO	Ant1	5210	10.59	1.39	11.98	24.00	PASS
11AC80SISO	Ant2	5210	11.41	1.41	12.82	24.00	PASS
11AC80SISO	Ant1	5775	10.95	1.3	12.25	30.00	PASS

11AC80SISO	Ant2	5775	11.34	1.04	12.38	30.00	PASS
11N20MIMO	Ant1	5180	12.06	0.34	12.4	24.00	PASS
11N20MIMO	Ant2	5180	11.98	0.48	12.46	24.00	PASS
11N20MIMO	Ant 1+2	5180	/	/	15.44	22.00	PASS
11N20MIMO	Ant1	5200	11.26	0.45	11.71	24.00	PASS
11N20MIMO	Ant2	5200	12.3	0.18	12.48	24.00	PASS
11N20MIMO	Ant 1+2	5200	/	/	15.12	22.00	PASS
11N20MIMO	Ant1	5240	12.17	0.26	12.43	24.00	PASS
11N20MIMO	Ant2	5240	11.63	0.48	12.11	24.00	PASS
11N20MIMO	Ant 1+2	5240	/	/	15.28	22.00	PASS
11N20MIMO	Ant1	5745	11.86	0.21	12.07	30.00	PASS
11N20MIMO	Ant2	5745	11.51	0.5	12.01	30.00	PASS
11N20MIMO	Ant 1+2	5745	/	/	15.05	28.00	PASS
11N20MIMO	Ant1	5785	11.75	0.21	11.96	30.00	PASS
11N20MIMO	Ant2	5785	12.12	0.26	12.38	30.00	PASS
11N20MIMO	Ant 1+2	5785	/	/	15.19	28.00	PASS
11N20MIMO	Ant1	5825	11.74	0.5	12.24	30.00	PASS
11N20MIMO	Ant2	5825	12.07	0.32	12.39	30.00	PASS
11N20MIMO	Ant 1+2	5825	/	/	15.33	28.00	PASS
11N40MIMO	Ant1	5190	12.13	0.36	12.49	24.00	PASS
11N40MIMO	Ant2	5190	11.51	0.72	12.23	24.00	PASS
11N40MIMO	Ant 1+2	5190	/	/	15.37	22.00	PASS
11N40MIMO	Ant1	5230	11.42	1.06	12.48	24.00	PASS
11N40MIMO	Ant2	5230	11.68	0.35	12.03	24.00	PASS
11N40MIMO	Ant 1+2	5230	/	/	15.27	22.00	PASS
11N40MIMO	Ant1	5755	11.69	0.72	12.41	30.00	PASS
11N40MIMO	Ant2	5755	11.72	1.01	12.73	30.00	PASS
11N40MIMO	Ant 1+2	5755	/	/	15.58	28.00	PASS
11N40MIMO	Ant1	5795	11.71	0.66	12.37	30.00	PASS

11N40MIMO	Ant2	5795	11.56	0.82	12.38	30.00	PASS
11N40MIMO	Ant 1+2	5795	/	/	15.39	28.00	PASS
11AC20MIMO	Ant1	5180	11.99	0.49	12.48	24.00	PASS
11AC20MIMO	Ant2	5180	12.1	0.23	12.33	24.00	PASS
11AC20MIMO	Ant 1+2	5180	/	/	15.42	22.00	PASS
11AC20MIMO	Ant1	5200	11.88	0.47	12.35	24.00	PASS
11AC20MIMO	Ant2	5200	11.57	0.42	11.99	24.00	PASS
11AC20MIMO	Ant 1+2	5200	/	/	15.18	22.00	PASS
11AC20MIMO	Ant1	5240	11.87	0.31	12.18	24.00	PASS
11AC20MIMO	Ant2	5240	11.64	0.29	11.93	24.00	PASS
11AC20MIMO	Ant 1+2	5240	/	/	15.07	22.00	PASS
11AC20MIMO	Ant1	5745	11.87	0.52	12.39	30.00	PASS
11AC20MIMO	Ant2	5745	11.44	0.49	11.93	30.00	PASS
11AC20MIMO	Ant 1+2	5745	/	/	15.11	28.00	PASS
11AC20MIMO	Ant1	5785	12.24	0.31	12.55	30.00	PASS
11AC20MIMO	Ant2	5785	11.66	0.42	12.08	30.00	PASS
11AC20MIMO	Ant 1+2	5785	/	/	15.33	28.00	PASS
11AC20MIMO	Ant1	5825	12.07	0.2	12.27	30.00	PASS
11AC20MIMO	Ant2	5825	11.63	0.44	12.07	30.00	PASS
11AC20MIMO	Ant 1+2	5825	/	/	15.18	28.00	PASS
11AC40MIMO	Ant1	5190	11.64	0.55	12.19	24.00	PASS
11AC40MIMO	Ant2	5190	11.42	0.94	12.36	24.00	PASS
11AC40MIMO	Ant 1+2	5190	/	/	15.29	22.00	PASS
11AC40MIMO	Ant1	5230	12.09	0.29	12.38	24.00	PASS
11AC40MIMO	Ant2	5230	11.6	0.65	12.25	24.00	PASS
11AC40MIMO	Ant 1+2	5230	/	/	15.33	22.00	PASS
11AC40MIMO	Ant1	5755	11.47	0.84	12.31	30.00	PASS
11AC40MIMO	Ant2	5755	11.73	0.75	12.48	30.00	PASS
11AC40MIMO	Ant 1+2	5755	/	/	15.41	28.00	PASS

11AC40MIMO	Ant1	5795	11.5	1.03	12.53	30.00	PASS
11AC40MIMO	Ant2	5795	10.3	0.85	11.15	30.00	PASS
11AC40MIMO	Ant 1+2	5795	/	/	14.9	28.00	PASS
11AC80MIMO	Ant1	5210	11.07	1.89	12.96	24.00	PASS
11AC80MIMO	Ant2	5210	10.66	1.57	12.23	24.00	PASS
11AC80MIMO	Ant 1+2	5210	/	/	15.62	22.00	PASS
11AC80MIMO	Ant1	5775	11.29	0.76	12.05	30.00	PASS
11AC80MIMO	Ant2	5775	11.67	0.66	12.33	30.00	PASS
11AC80MIMO	Ant 1+2	5775	/	/	15.2	28.00	PASS

Appendix C): Power Spectral Density

Measurement Data

For U-NII-1 Band:

Test Mode	Test Channel	Antenna	Meas PSD [dBm/MHz]	Duty Cycle Factor [dB]	PSD [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	5180	Ant1	2.49	0.32	2.81	11.00	PASS
11A	5180	Ant2	2.2	0.29	2.49	11.00	PASS
11A	5200	Ant1	1.74	0.32	2.06	11.00	PASS
11A	5200	Ant2	2.13	0.14	2.27	11.00	PASS
11A	5240	Ant1	1.3	0.22	1.52	11.00	PASS
11A	5240	Ant2	1.68	0.32	2	11.00	PASS
11N20SISO	5180	Ant1	2.12	0.26	2.38	11.00	PASS
11N20SISO	5180	Ant2	1.7	0.29	1.99	11.00	PASS
11N20SISO	5200	Ant1	1.79	0.32	2.11	11.00	PASS
11N20SISO	5200	Ant2	1.15	0.5	1.65	11.00	PASS
11N20SISO	5240	Ant1	1.79	0.18	1.97	11.00	PASS
11N20SISO	5240	Ant2	1.22	0.31	1.53	11.00	PASS
11N40SISO	5190	Ant1	-2.06	0.88	-1.18	11.00	PASS
11N40SISO	5190	Ant2	-2.45	0.96	-1.49	11.00	PASS
11N40SISO	5230	Ant1	-2.99	0.87	-2.12	11.00	PASS
11N40SISO	5230	Ant2	-2.3	0.51	-1.79	11.00	PASS
11AC20SISO	5180	Ant1	1.88	0.31	2.19	11.00	PASS
11AC20SISO	5180	Ant2	1.82	0.31	2.13	11.00	PASS
11AC20SISO	5200	Ant1	1.39	0.52	1.91	11.00	PASS
11AC20SISO	5200	Ant2	1.83	0.47	2.3	11.00	PASS
11AC20SISO	5240	Ant1	0.93	0.42	1.35	11.00	PASS
11AC20SISO	5240	Ant2	1.6	0.23	1.83	11.00	PASS
11AC40SISO	5190	Ant1	-2.08	1.04	-1.04	11.00	PASS
11AC40SISO	5190	Ant2	-1.84	0.49	-1.35	11.00	PASS
11AC40SISO	5230	Ant1	-1.98	0.55	-1.43	11.00	PASS

11AC40SISO	5230	Ant2	-2.14	0.84	-1.3	11.00	PASS
11AC80SISO	5210	Ant1	-5.39	1.39	-4	11.00	PASS
11AC80SISO	5210	Ant2	-4.67	1.41	-3.26	11.00	PASS
11N20MIMO	5180	Ant1	1.91	0.34	2.25	11.00	PASS
11N20MIMO	5180	Ant2	1.53	0.48	2.01	11.00	PASS
11N20MIMO	5180	Ant 1+2	/	/	5.14	8.99	PASS
11N20MIMO	5200	Ant1	0.64	0.45	1.09	11.00	PASS
11N20MIMO	5200	Ant2	1.93	0.18	2.11	11.00	PASS
11N20MIMO	5200	Ant 1+2	/	/	4.64	8.99	PASS
11N20MIMO	5240	Ant1	1.96	0.26	2.22	11.00	PASS
11N20MIMO	5240	Ant2	1.07	0.48	1.55	11.00	PASS
11N20MIMO	5240	Ant 1+2	/	/	4.91	8.99	PASS
11N40MIMO	5190	Ant1	-1.46	0.36	-1.1	11.00	PASS
11N40MIMO	5190	Ant2	-1.91	0.72	-1.19	11.00	PASS
11N40MIMO	5190	Ant 1+2	/	/	1.87	8.99	PASS
11N40MIMO	5230	Ant1	-2.31	1.06	-1.25	11.00	PASS
11N40MIMO	5230	Ant2	-2.06	0.35	-1.71	11.00	PASS
11N40MIMO	5230	Ant 1+2	/	/	1.54	8.99	PASS
11AC20MIMO	5180	Ant1	0.71	0.49	1.2	11.00	PASS
11AC20MIMO	5180	Ant2	1.73	0.23	1.96	11.00	PASS
11AC20MIMO	5180	Ant 1+2	/	/	4.61	8.99	PASS
11AC20MIMO	5200	Ant1	1.39	0.47	1.86	11.00	PASS
11AC20MIMO	5200	Ant2	1.1	0.42	1.52	11.00	PASS
11AC20MIMO	5200	Ant 1+2	/	/	4.7	8.99	PASS
11AC20MIMO	5240	Ant1	1.59	0.31	1.9	11.00	PASS
11AC20MIMO	5240	Ant2	1.39	0.29	1.68	11.00	PASS
11AC20MIMO	5240	Ant 1+2	/	/	4.8	8.99	PASS
11AC40MIMO	5190	Ant1	-2.52	0.55	-1.97	11.00	PASS
11AC40MIMO	5190	Ant2	-2.37	0.94	-1.43	11.00	PASS

11AC40MIMO	5190	Ant 1+2	/	/	1.32	8.99	PASS
11AC40MIMO	5230	Ant1	-1.81	0.29	-1.52	11.00	PASS
11AC40MIMO	5230	Ant2	-2.06	0.65	-1.41	11.00	PASS
11AC40MIMO	5230	Ant 1+2	/	/	1.55	8.99	PASS
11AC80MIMO	5210	Ant1	-4.6	1.89	-2.71	11.00	PASS
11AC80MIMO	5210	Ant2	-5.09	1.57	-3.52	11.00	PASS
11AC80MIMO	5210	Ant 1+2	/	/	-0.09	8.99	PASS

Remark:

PSD = Meas PSD + Duty Cycle Factor

For U-NII-3 Band:

Test Mode	Test Channel	Antenna	Meas PSD [dBm/500kHz]	Duty Cycle Factor [dB]	PSD [dBm/500kHz]	Limit [dBm/500kHz]	Verdict
11A	5745	Ant1	0.29	0.32	0.61	30.00	PASS
11A	5745	Ant2	0.15	0.42	0.57	30.00	PASS
11A	5785	Ant1	0.12	0.22	0.34	30.00	PASS
11A	5785	Ant2	-0.54	0.52	-0.02	30.00	PASS
11A	5825	Ant1	0.21	0.14	0.35	30.00	PASS
11A	5825	Ant2	0.56	0.34	0.9	30.00	PASS
11N20SISO	5745	Ant1	1.14	0.18	1.32	30.00	PASS
11N20SISO	5745	Ant2	0.18	0.55	0.73	30.00	PASS
11N20SISO	5785	Ant1	0.13	0.34	0.47	30.00	PASS
11N20SISO	5785	Ant2	-0.04	0.35	0.31	30.00	PASS
11N20SISO	5825	Ant1	-0.41	0.37	-0.04	30.00	PASS
11N20SISO	5825	Ant2	0	0.21	0.21	30.00	PASS
11N40SISO	5755	Ant1	-3.7	1.06	-2.64	30.00	PASS
11N40SISO	5755	Ant2	-3.45	0.71	-2.74	30.00	PASS
11N40SISO	5795	Ant1	-2.93	0.29	-2.64	30.00	PASS
11N40SISO	5795	Ant2	-3.32	1.01	-2.31	30.00	PASS
11AC20SISO	5745	Ant1	0.57	0.52	1.09	30.00	PASS

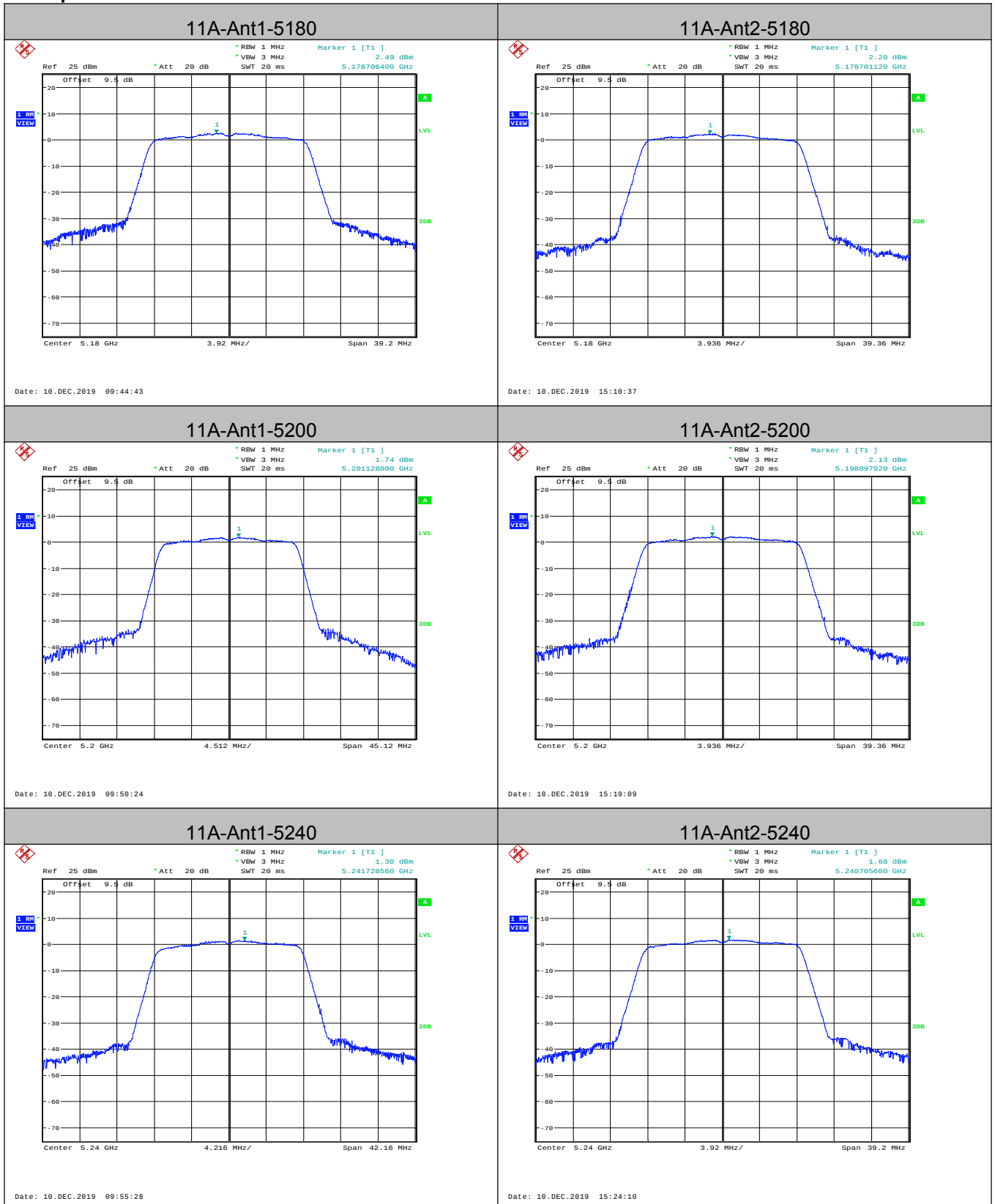
11AC20SISO	5745	Ant2	0.78	0.52	1.3	30.00	PASS
11AC20SISO	5785	Ant1	0.32	0.23	0.55	30.00	PASS
11AC20SISO	5785	Ant2	0.25	0.18	0.43	30.00	PASS
11AC20SISO	5825	Ant1	-0.06	0.26	0.2	30.00	PASS
11AC20SISO	5825	Ant2	0	0.54	0.54	30.00	PASS
11AC40SISO	5755	Ant1	-2.8	0.44	-2.36	30.00	PASS
11AC40SISO	5755	Ant2	-3.29	0.54	-2.75	30.00	PASS
11AC40SISO	5795	Ant1	-2.76	0.39	-2.37	30.00	PASS
11AC40SISO	5795	Ant2	-3.61	0.39	-3.22	30.00	PASS
11AC80SISO	5775	Ant1	-7.69	1.3	-6.39	30.00	PASS
11AC80SISO	5775	Ant2	-6.9	1.04	-5.86	30.00	PASS
11N20MIMO	5745	Ant1	-0.47	0.21	-0.26	30.00	PASS
11N20MIMO	5745	Ant2	-0.39	0.5	0.11	30.00	PASS
11N20MIMO	5745	Ant 1+2	/	/	2.94	27.99	PASS
11N20MIMO	5785	Ant1	-0.36	0.21	-0.15	30.00	PASS
11N20MIMO	5785	Ant2	0.27	0.26	0.53	30.00	PASS
11N20MIMO	5785	Ant 1+2	/	/	3.21	27.99	PASS
11N20MIMO	5825	Ant1	-0.36	0.5	0.14	30.00	PASS
11N20MIMO	5825	Ant2	0.35	0.32	0.67	30.00	PASS
11N20MIMO	5825	Ant 1+2	/	/	3.42	27.99	PASS
11N40MIMO	5755	Ant1	-3.32	0.72	-2.6	30.00	PASS
11N40MIMO	5755	Ant2	-3.08	1.01	-2.07	30.00	PASS
11N40MIMO	5755	Ant 1+2	/	/	0.68	27.99	PASS
11N40MIMO	5795	Ant1	-3.47	0.66	-2.81	30.00	PASS
11N40MIMO	5795	Ant2	-3.54	0.82	-2.72	30.00	PASS
11N40MIMO	5795	Ant 1+2	/	/	0.25	27.99	PASS
11AC20MIMO	5745	Ant1	0.51	0.39	0.9	30.00	PASS
11AC20MIMO	5745	Ant2	-0.18	0.49	0.31	30.00	PASS
11AC20MIMO	5745	Ant 1+2	/	/	3.63	27.99	PASS

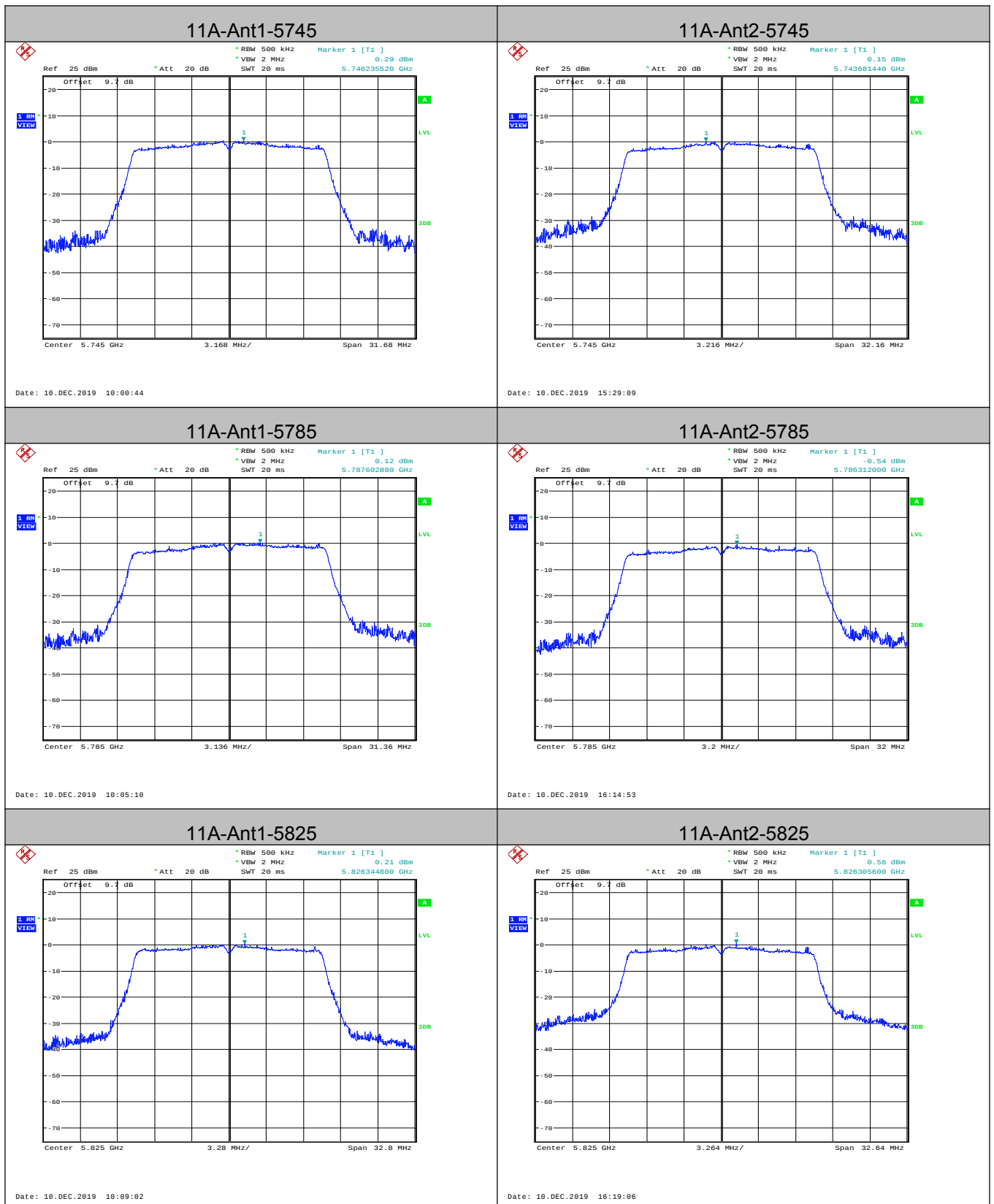
11AC20MIMO	5785	Ant1	0.77	0.31	1.08	30.00	PASS
11AC20MIMO	5785	Ant2	-0.05	0.42	0.37	30.00	PASS
11AC20MIMO	5785	Ant 1+2	/	/	3.75	27.99	PASS
11AC20MIMO	5825	Ant1	0.1	0.2	0.3	30.00	PASS
11AC20MIMO	5825	Ant2	-0.4	0.44	0.04	30.00	PASS
11AC20MIMO	5825	Ant 1+2	/	/	3.18	27.99	PASS
11AC40MIMO	5755	Ant1	-3.13	0.84	-2.29	30.00	PASS
11AC40MIMO	5755	Ant2	-2.88	0.75	-2.13	30.00	PASS
11AC40MIMO	5755	Ant 1+2	/	/	0.8	27.99	PASS
11AC40MIMO	5795	Ant1	-3.24	1.03	-2.21	30.00	PASS
11AC40MIMO	5795	Ant2	-4.88	0.85	-4.03	30.00	PASS
11AC40MIMO	5795	Ant 1+2	/	/	-0.02	27.99	PASS
11AC80MIMO	5775	Ant1	-6.61	0.76	-5.85	30.00	PASS
11AC80MIMO	5775	Ant2	-6.83	0.66	-6.17	30.00	PASS
11AC80MIMO	5775	Ant 1+2	/	/	-3.00	27.99	PASS

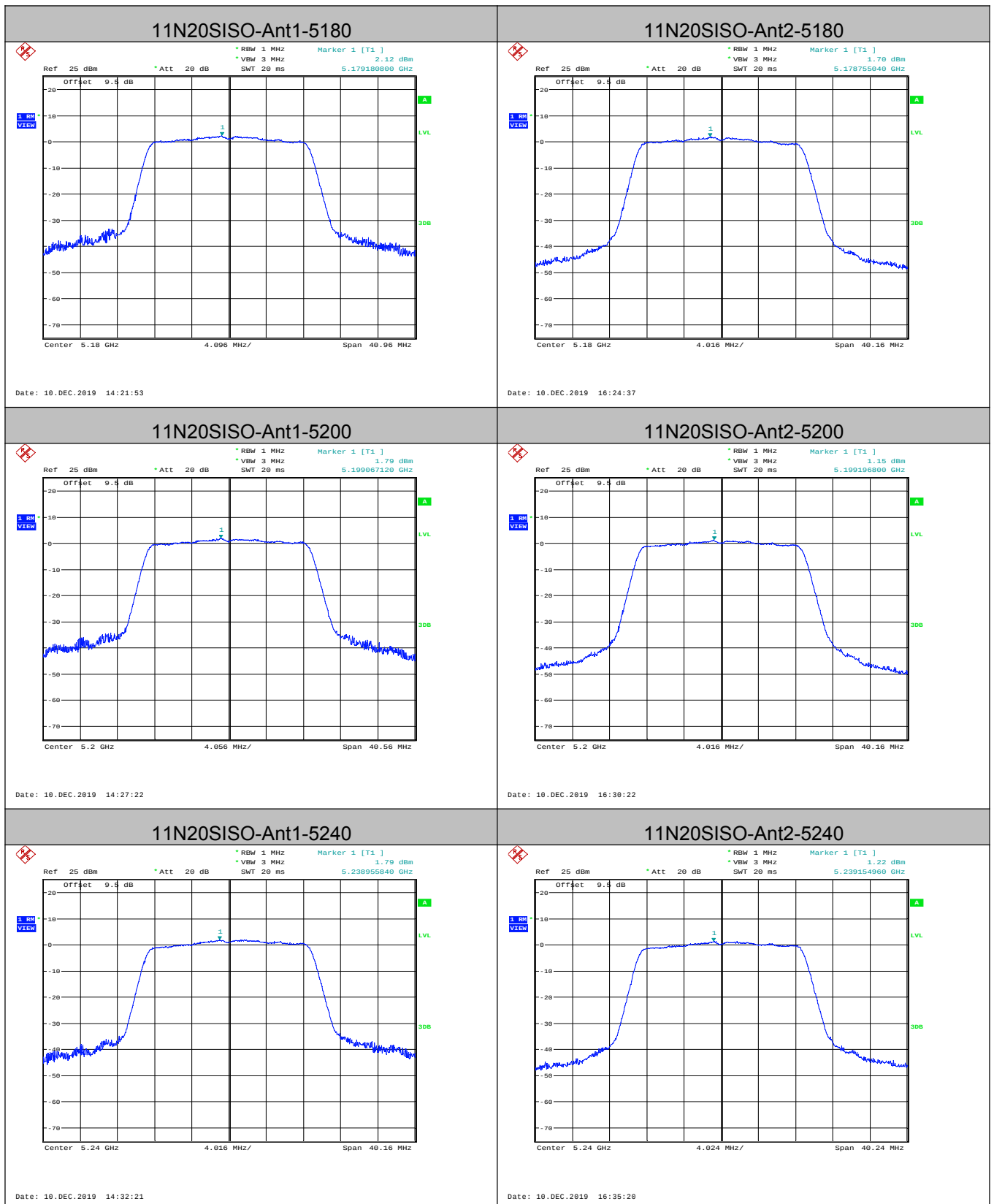
Remark:

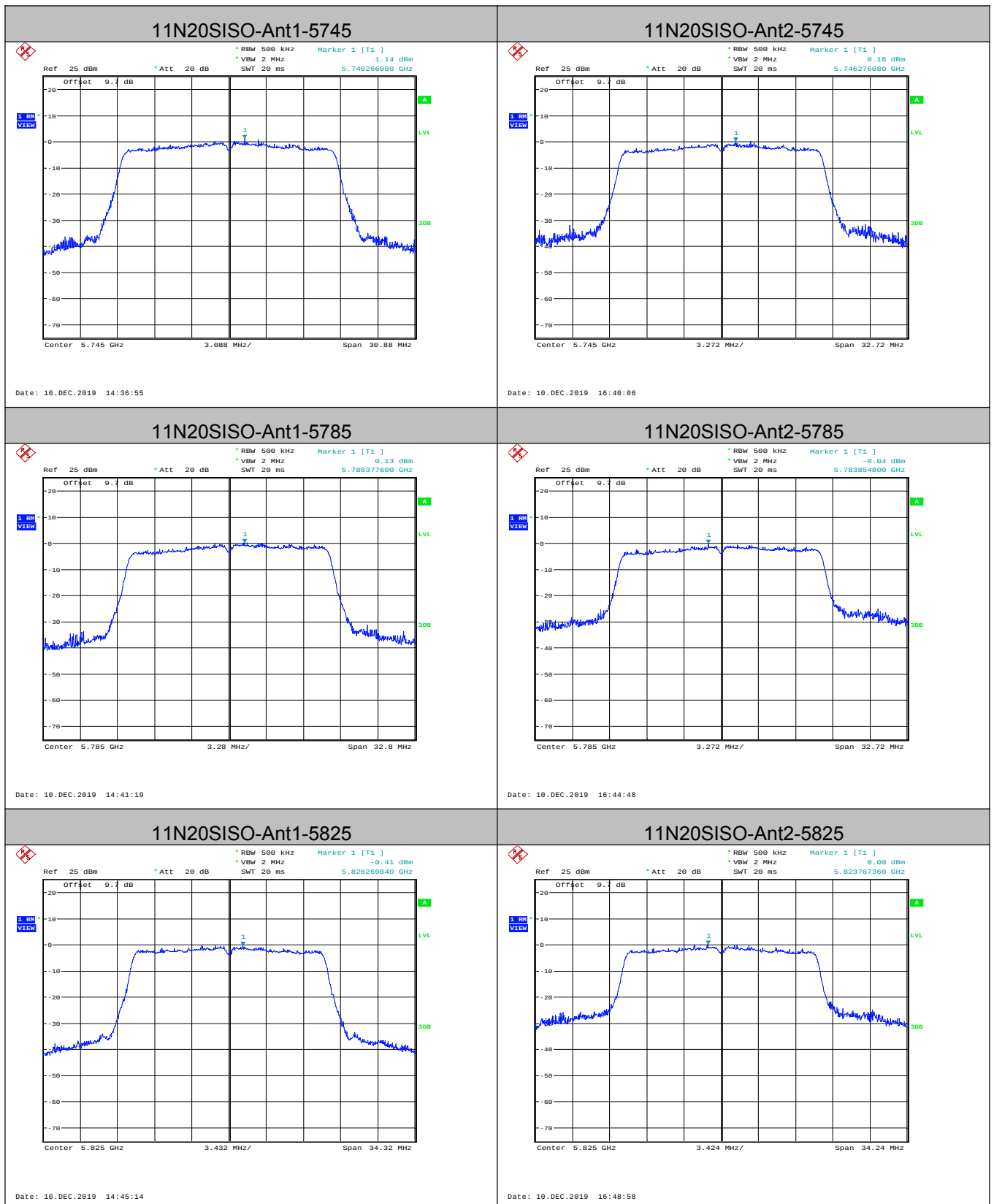
PSD = Meas PSD + Duty Cycle Factor

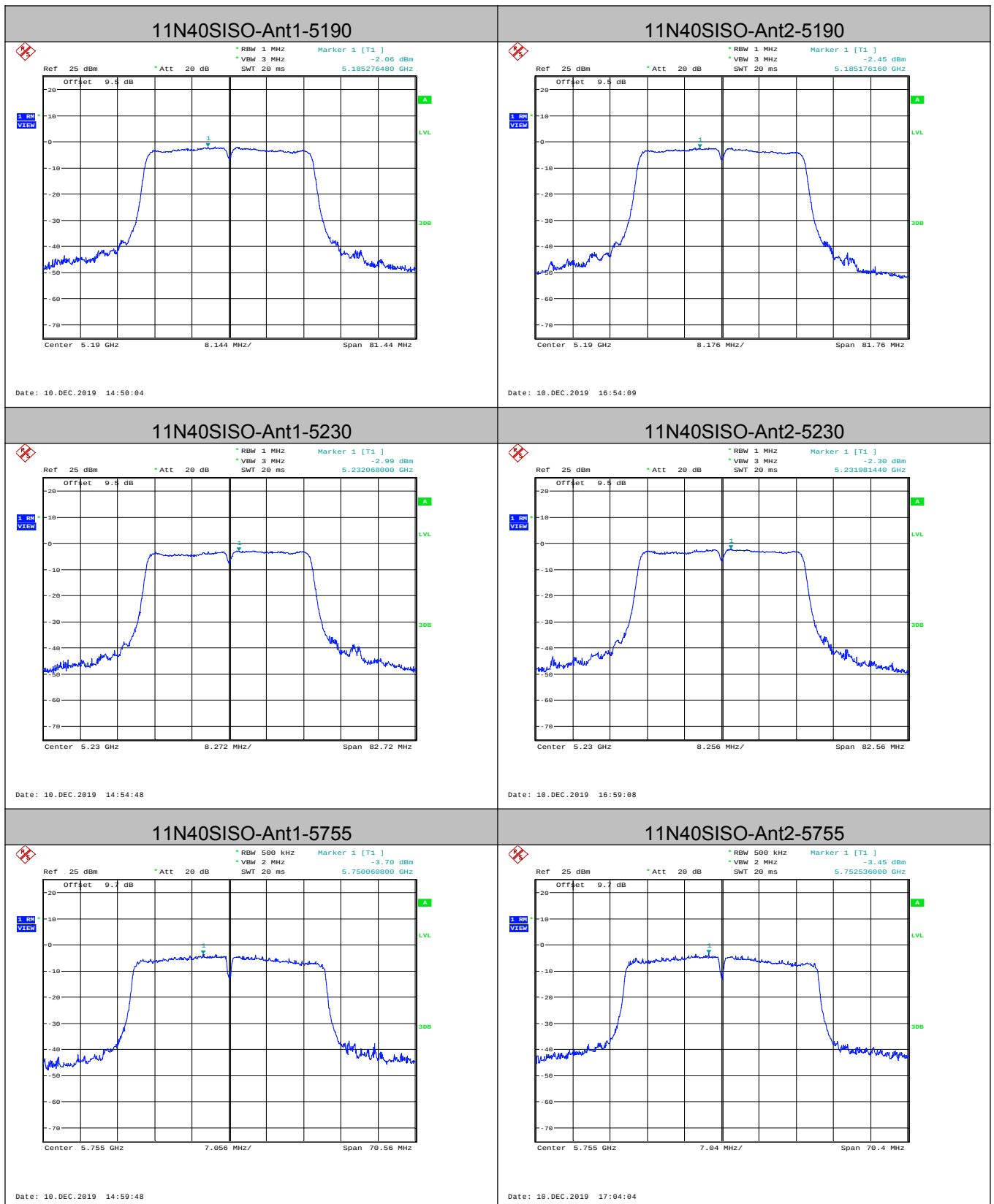
Test plot as follows:

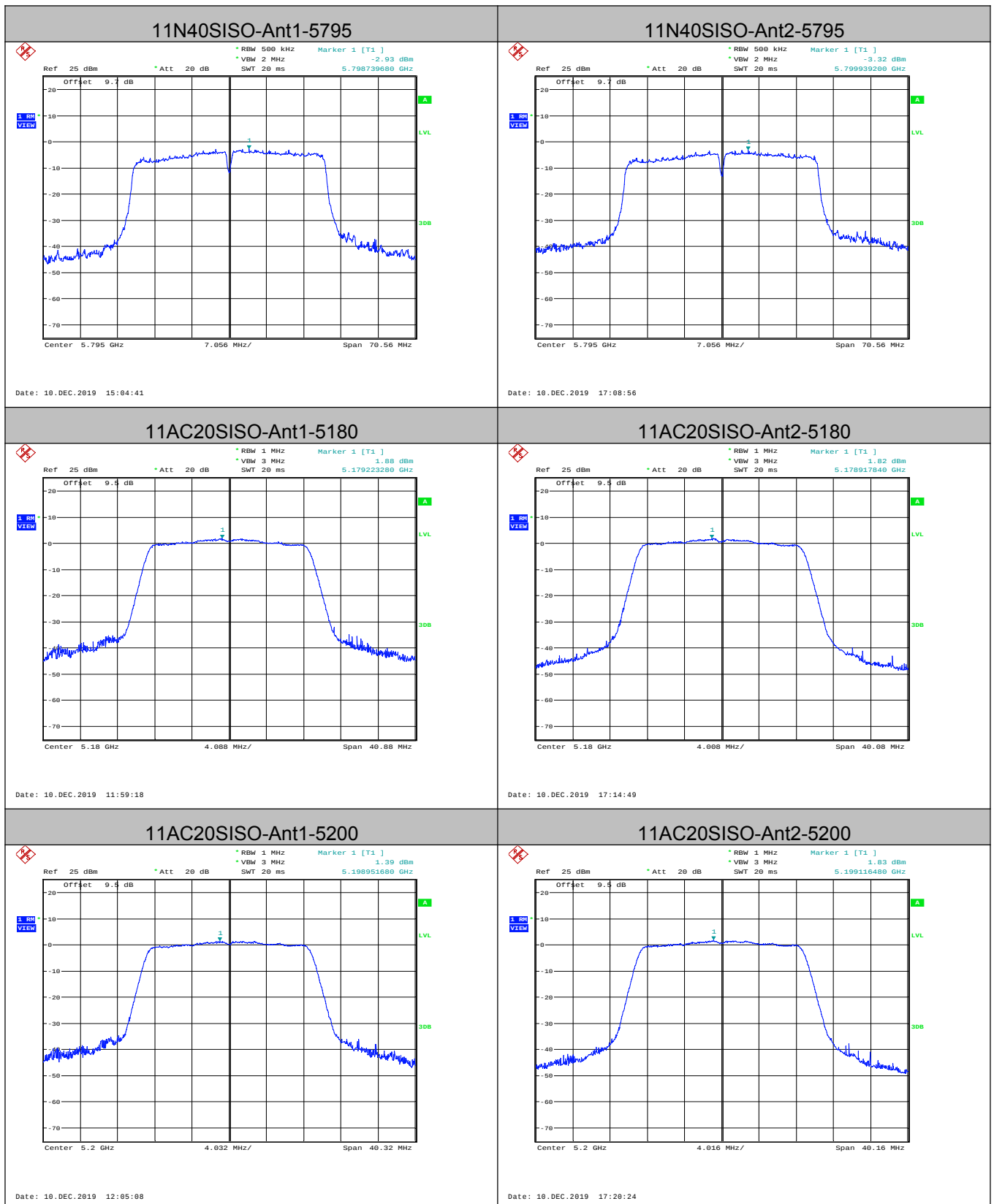


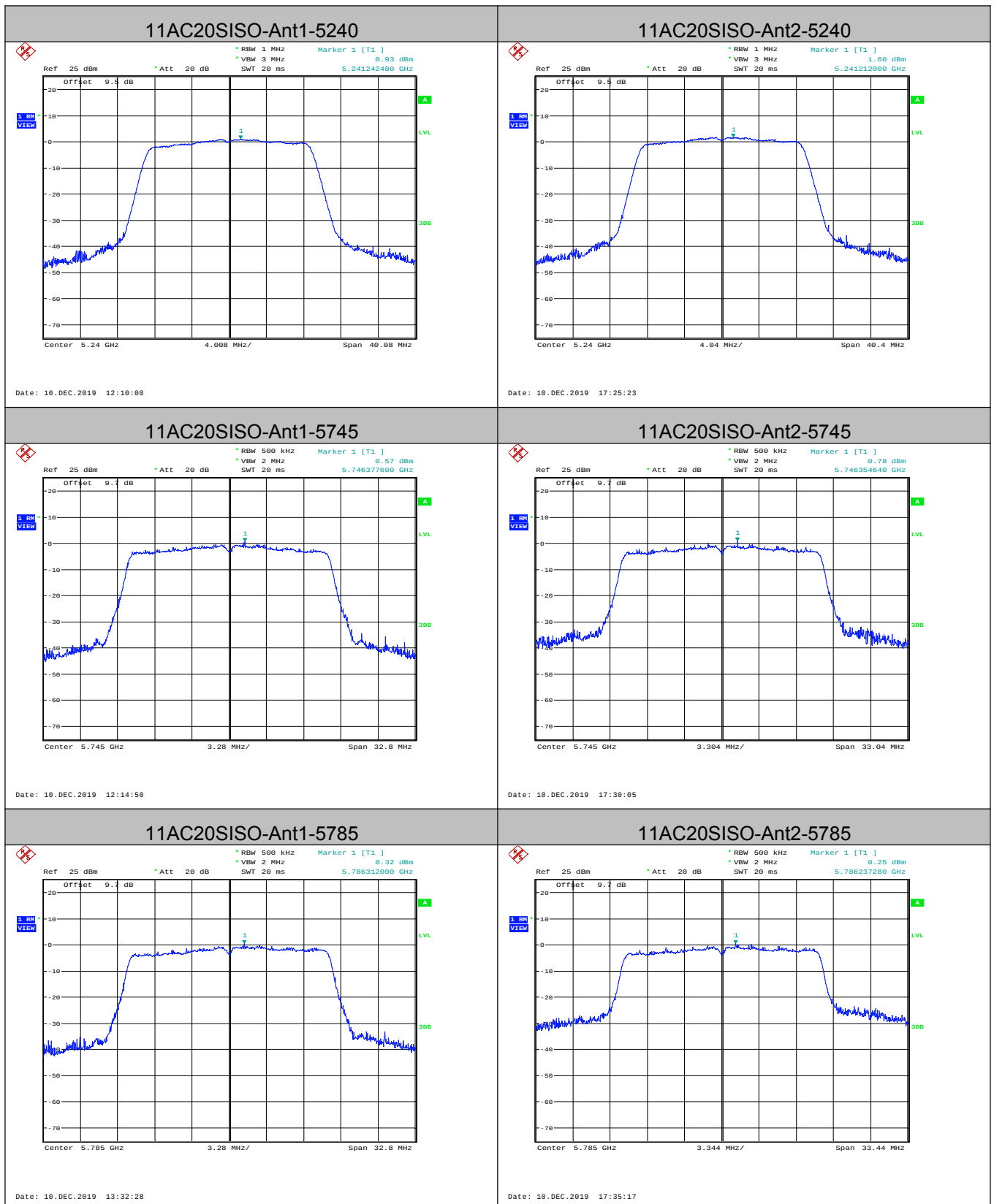


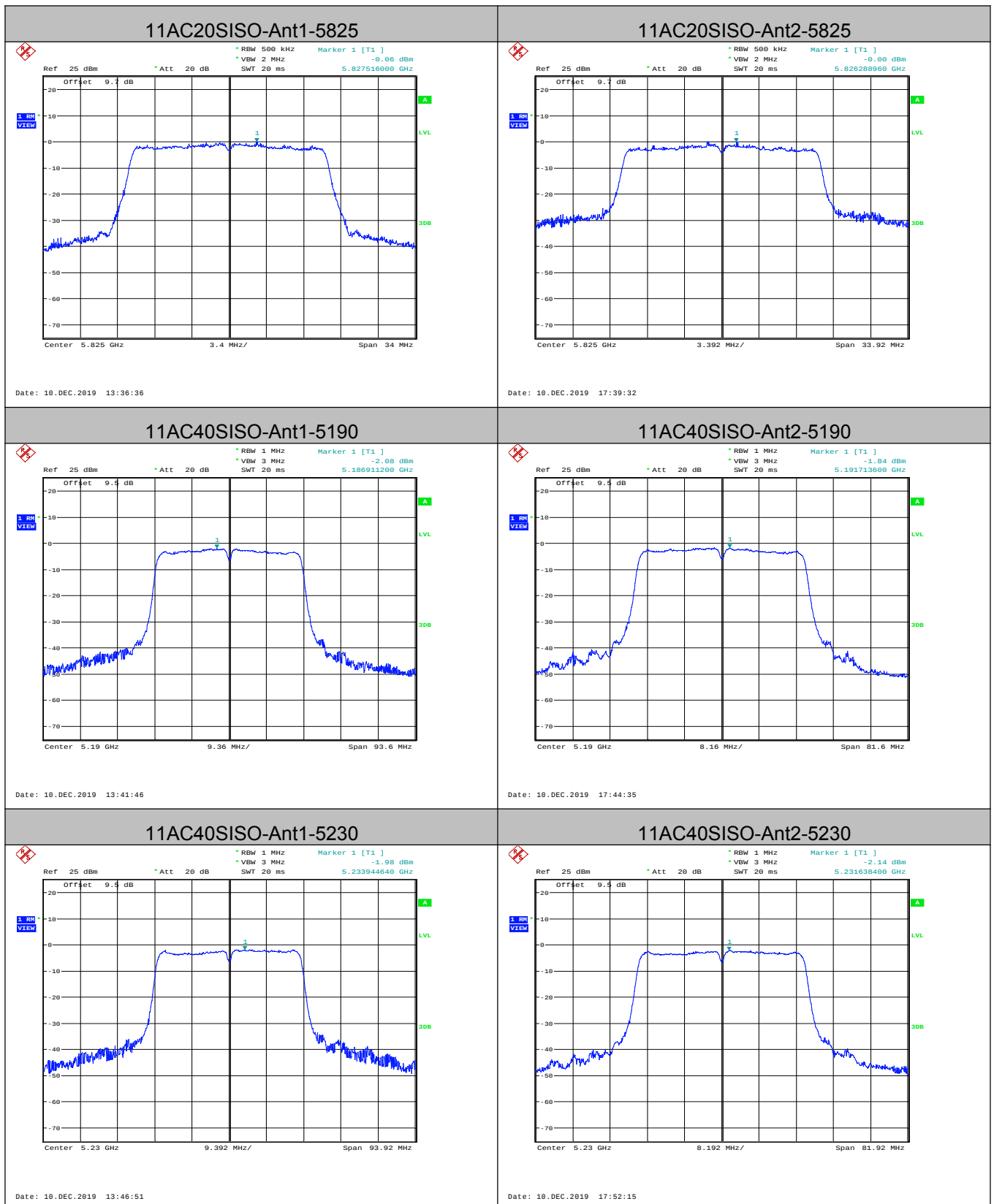


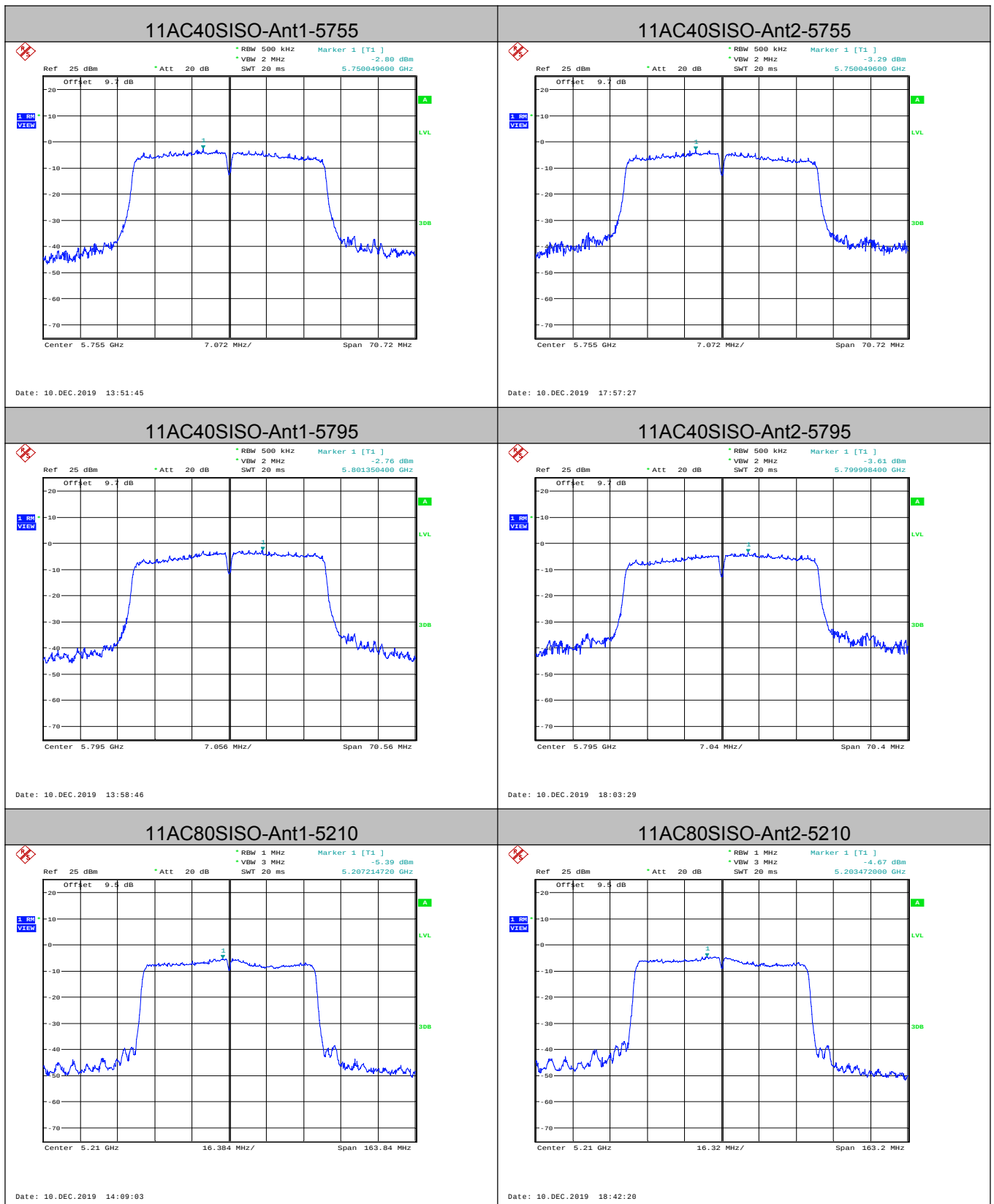


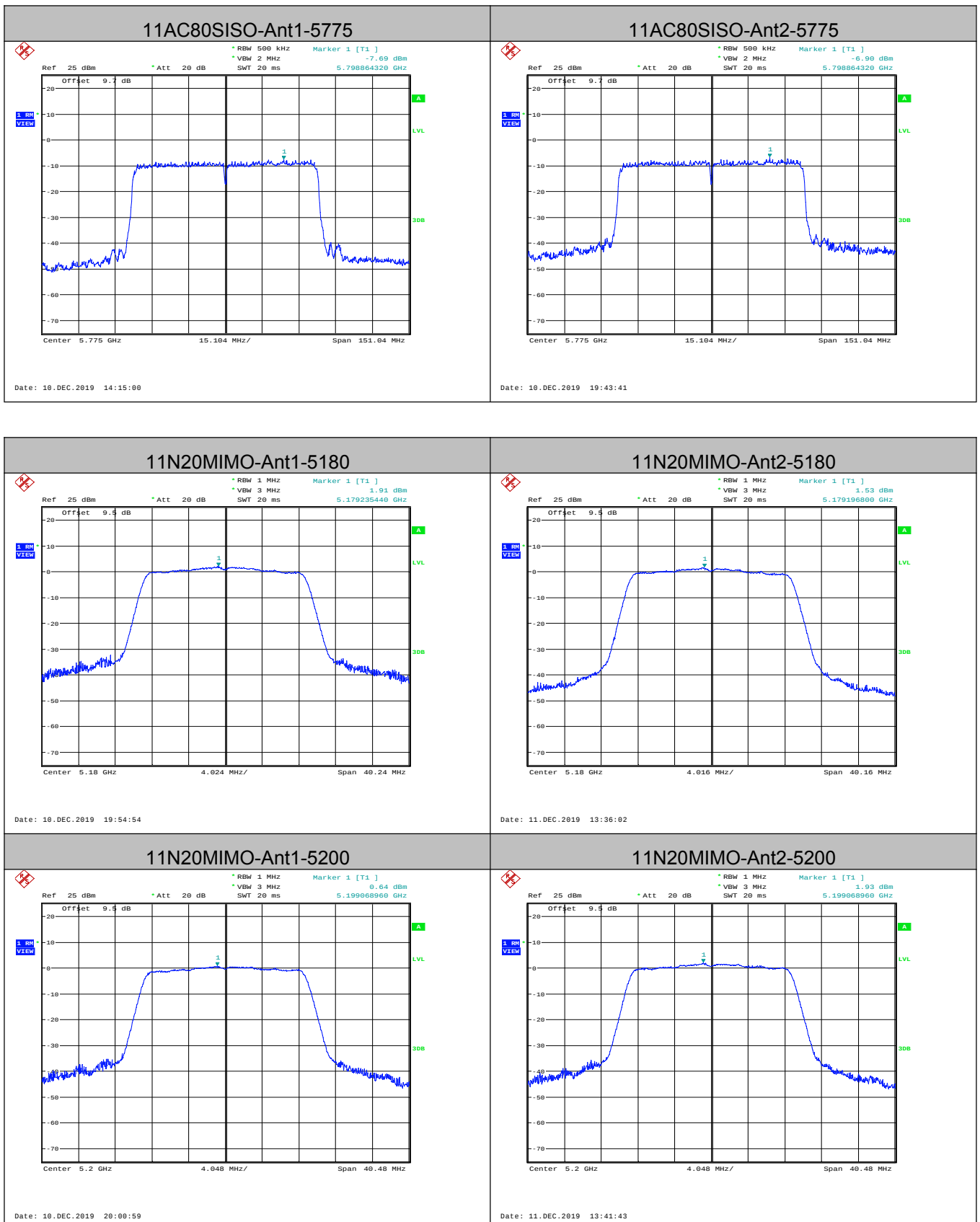


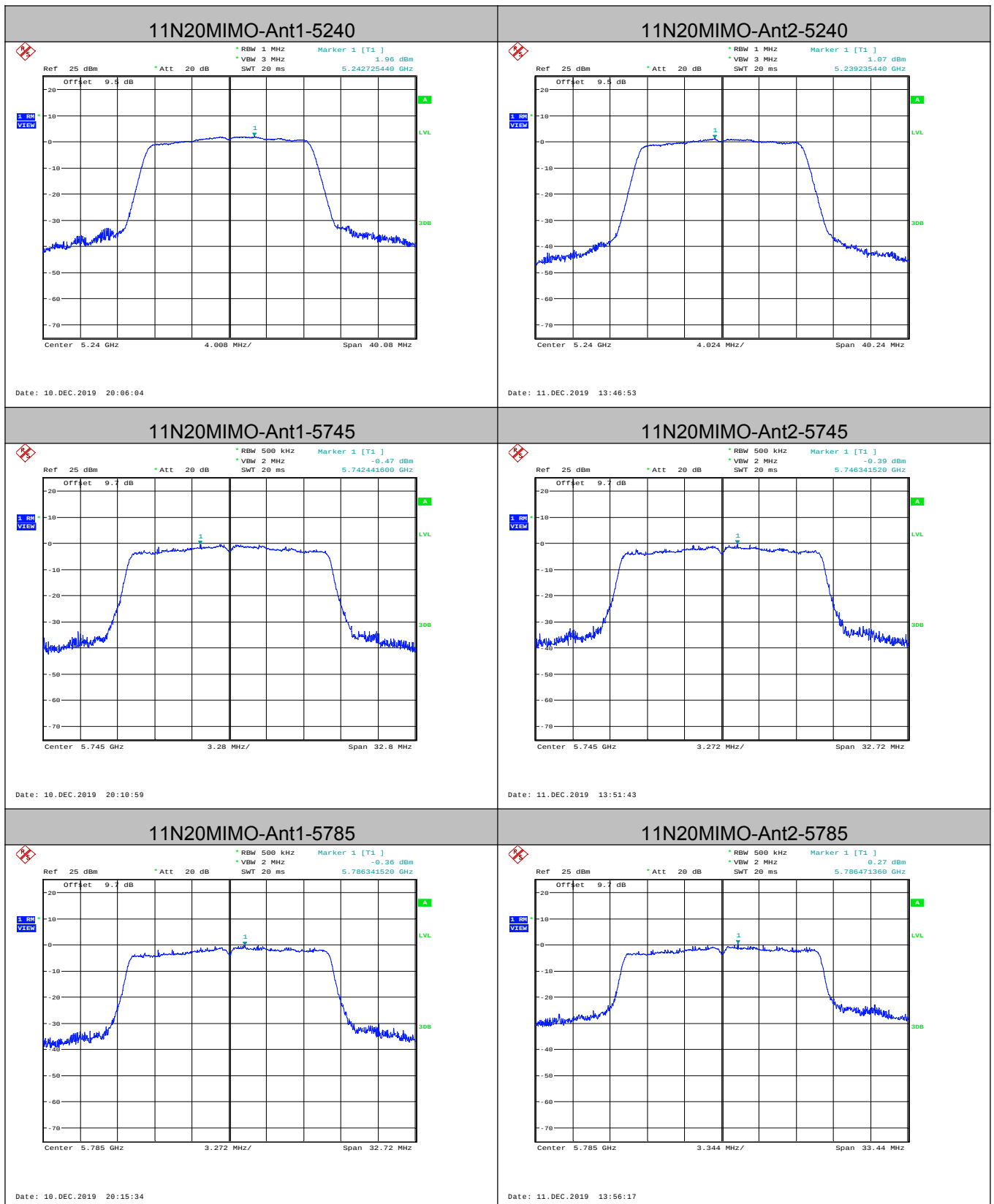


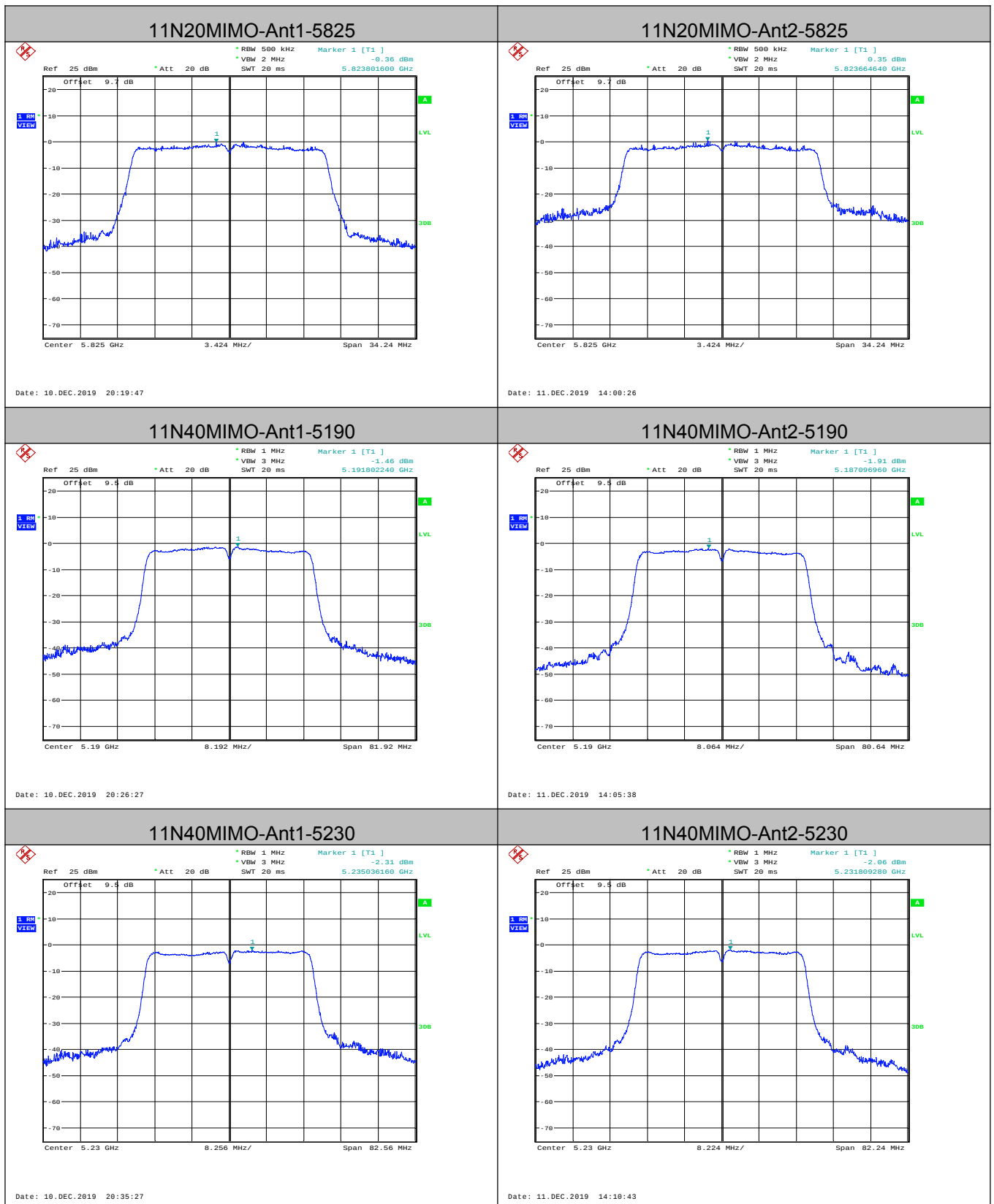


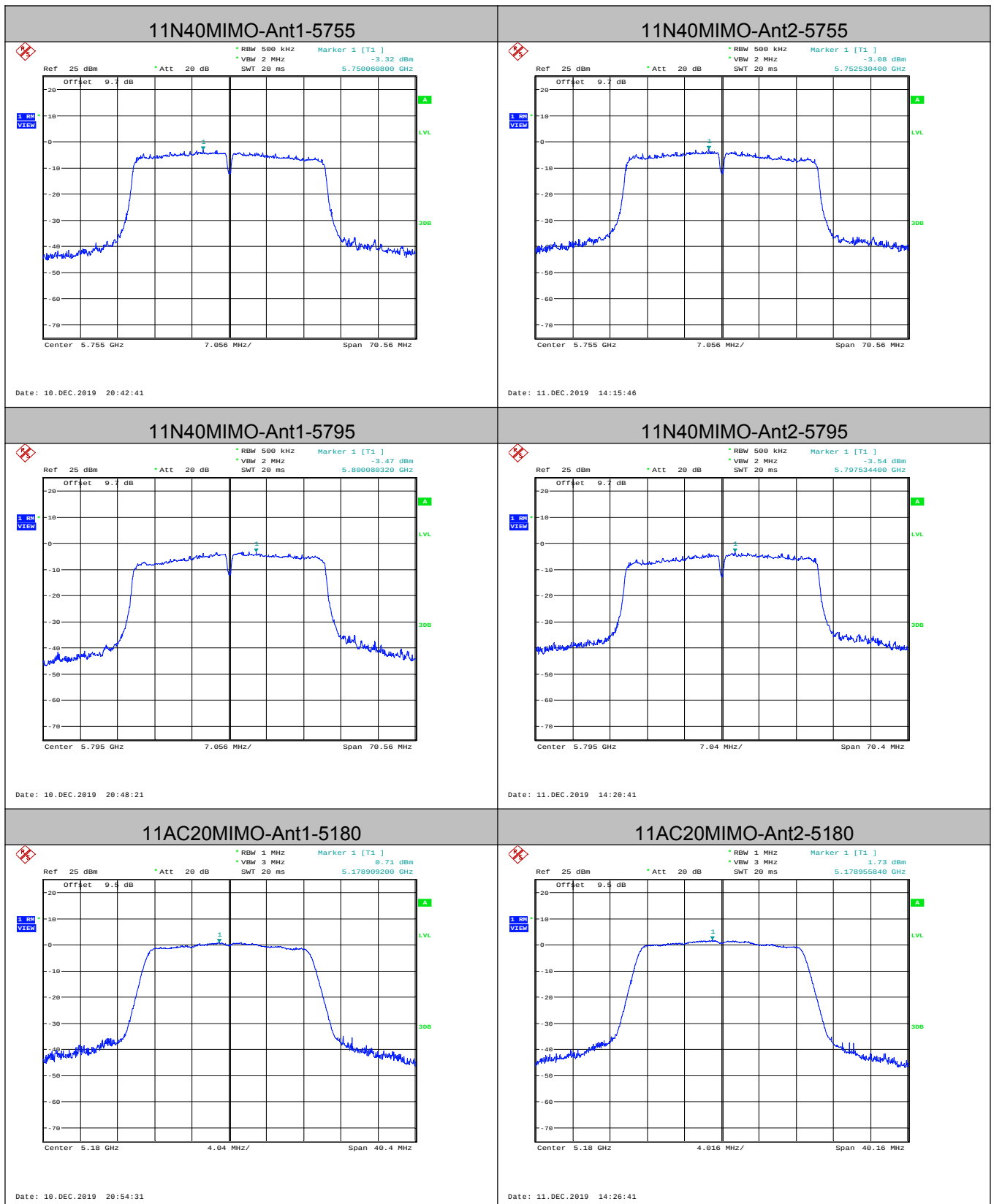


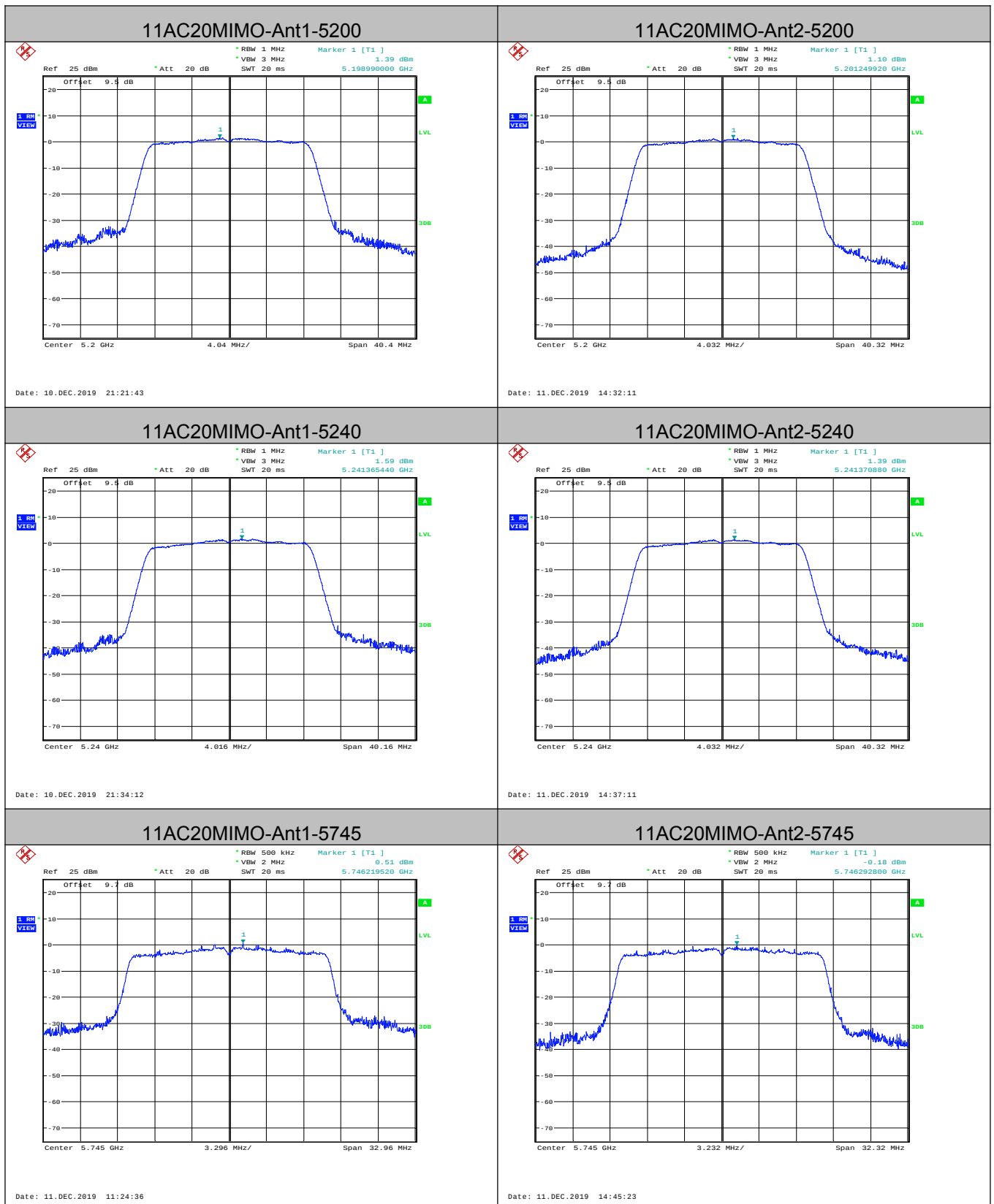


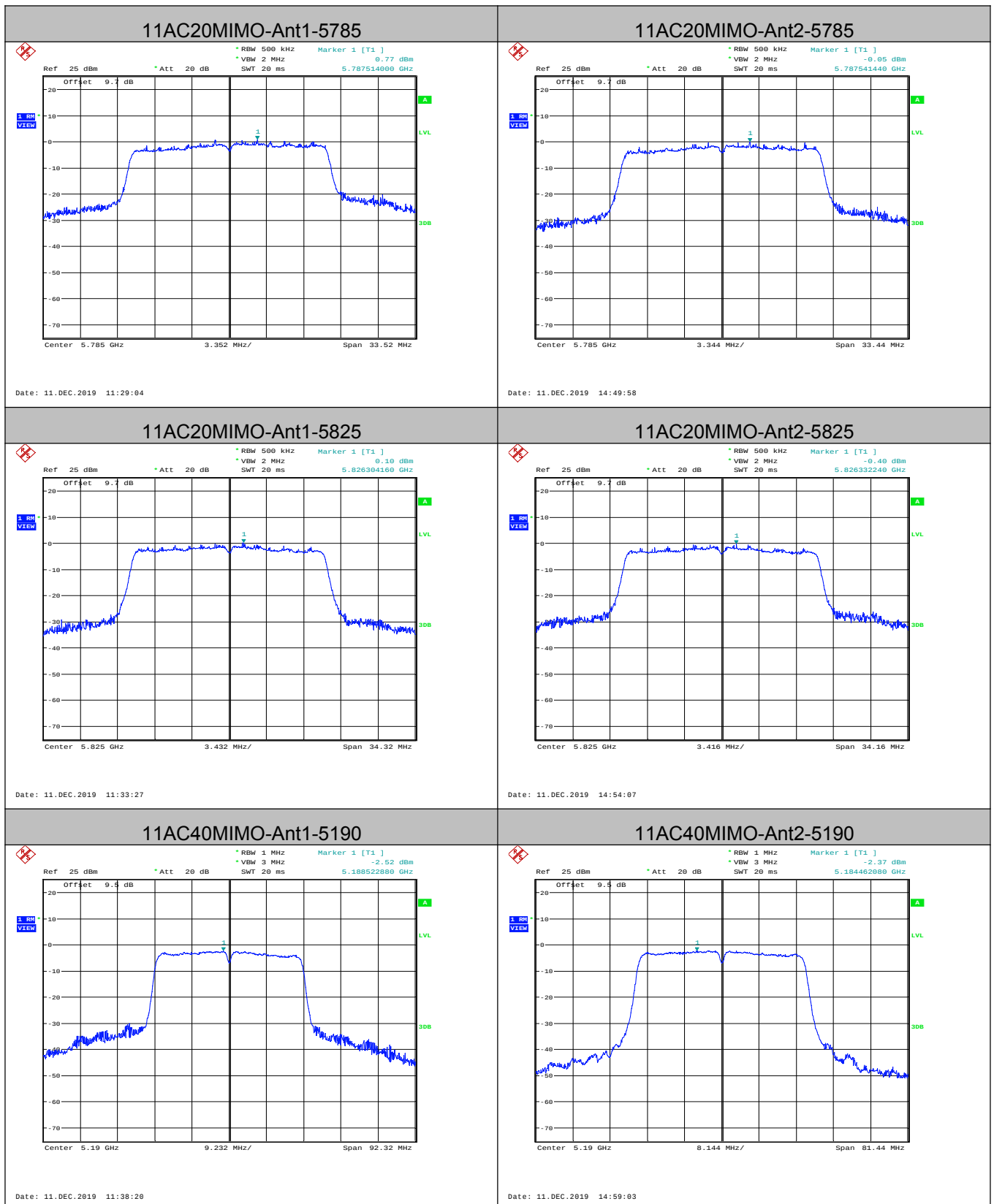


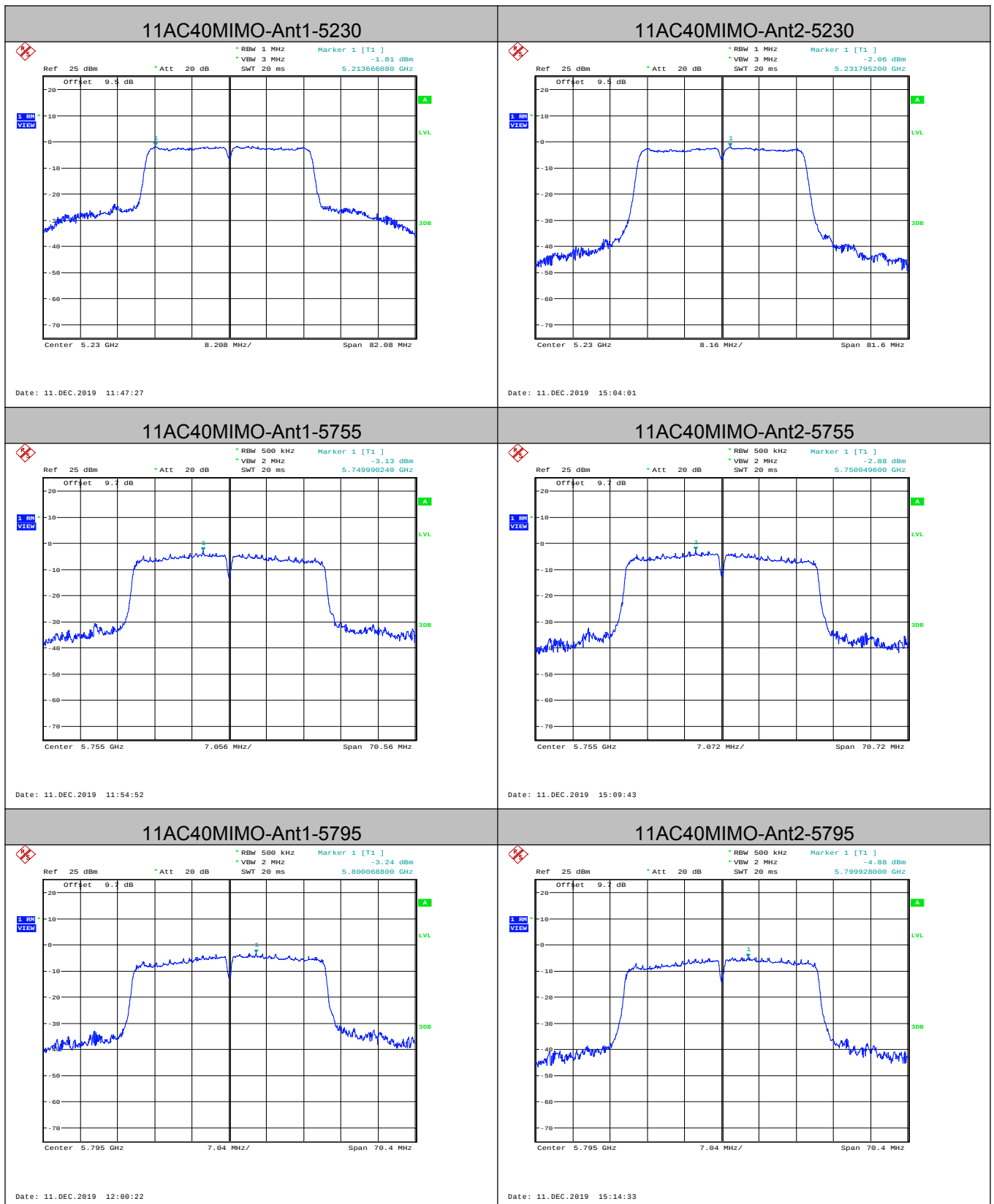


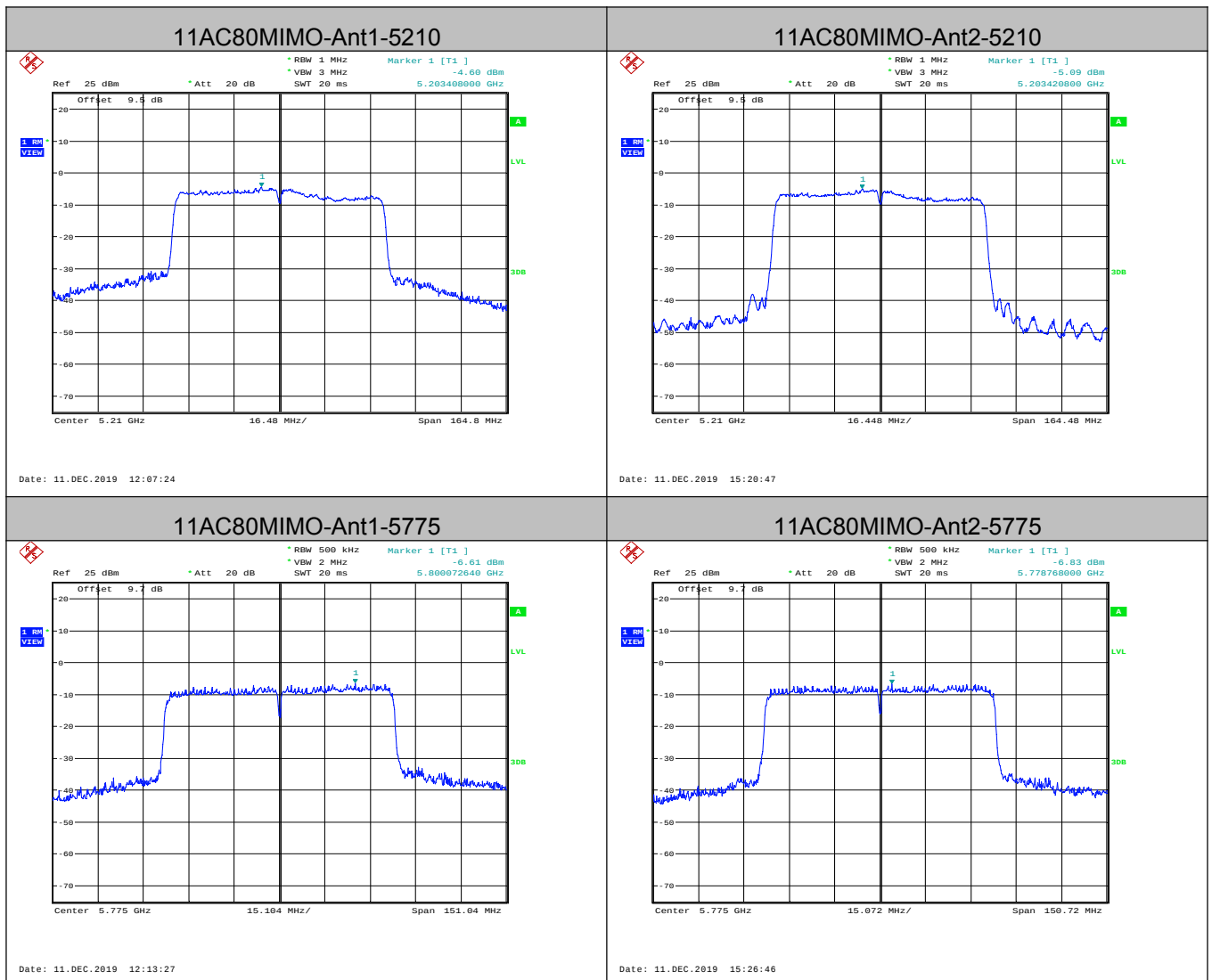












Appendix D): Frequency Stability

Measurement Data

Frequency Stability Versus Temp.			
Operating Frequency: 5210 MHz			
Temp	Voltage	Measured Frequency	Frequency Drift
(°C)		(MHz)	(ppm)
50	VN	5209.96	-7.67754
40		5209.97	-5.75816
30		5209.99	-1.91939
20		5209.99	-1.91939
10		5210.01	1.919386
0		5210.01	1.919386
-10		5209.96	-7.67754
-20		5209.98	-3.83877

Frequency Stability Versus Temp.			
Operating Frequency: 5210 MHz			
Temp.	Voltage	Measured Frequency	Frequency Drift
		(MHz)	(ppm)
TN	VL	5209.97	-5.75816
	VN	5209.98	-3.83877
	VH	5209.98	-3.83877

Note: All the modulation and channels had been tested, but only the worst data recorded in the report.

Appendix E): Antenna Requirement

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.407(a)(1) (2) requirement:

The conducted output power limit specified in paragraph (a) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (a) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power and the peak power spectral density shall be reduced by the by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:



The antenna is Omni Directional Antennas.

The best case gain of the ANT1 is 5.0dBi. The best case gain of the ANT2 is 5.0dBi.

MIMO mode: the antenna gain is 8.01dBi

Note: transmit signals are correlated with each other,

Directional gain = $G_{ANT} + 10 \log(N_{ANT})$ dBi=5.0+10log(2)dBi=8.01dBi

Appendix F): Operation in the absence of information to the transmit

15.407(c) requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signal ling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

Operation in the absence of information to the transmit

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ASK message transmitting from remote device and verify whether it shall resend or discontinue transmission. (manufacturer declare)

Appendix G): AC Power Line Conducted Emission

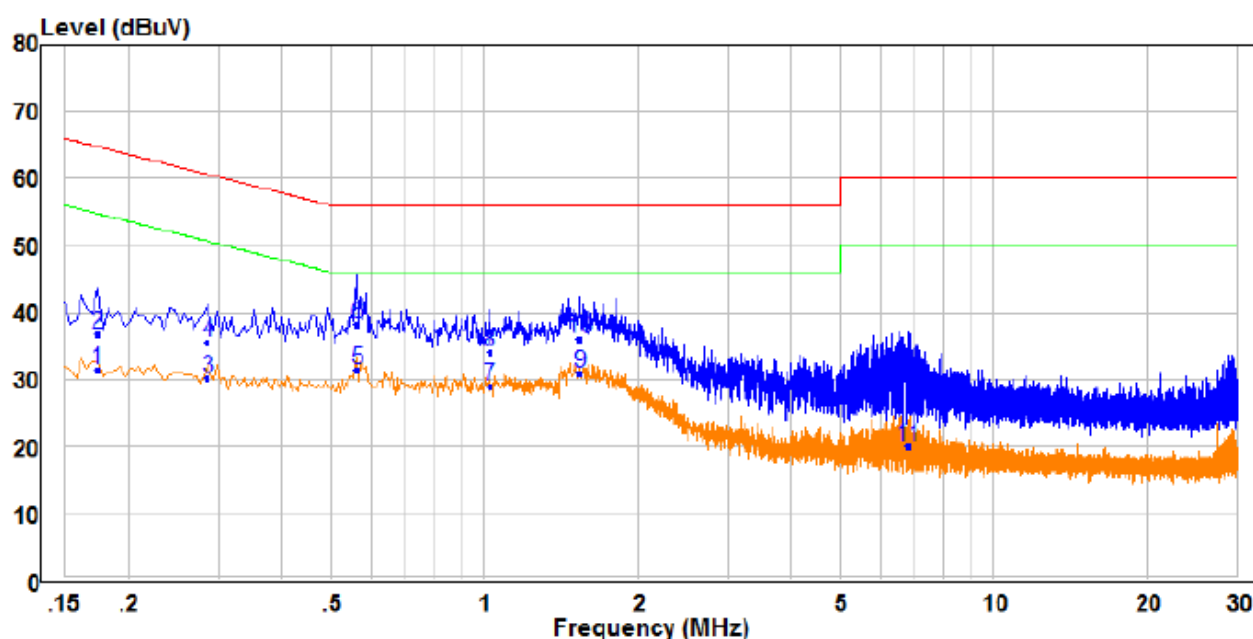
Test Procedure:	Test frequency range :150KHz-30MHz 1)The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50\Omega/50\mu\text{H} + 5\Omega$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3)The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.															
Limit:	<table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dBμV)</th></tr> <tr> <th>Quasi-peak</th><th>Average</th></tr> </thead> <tbody> <tr> <td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr> <tr> <td>0.5-5</td><td>56</td><td>46</td></tr> <tr> <td>5-30</td><td>60</td><td>50</td></tr> </tbody> </table> * The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz. NOTE : The lower limit is applicable at the transition frequency		Frequency range (MHz)	Limit (dB μ V)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dB μ V)															
	Quasi-peak	Average														
0.15-0.5	66 to 56*	56 to 46*														
0.5-5	56	46														
5-30	60	50														

Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

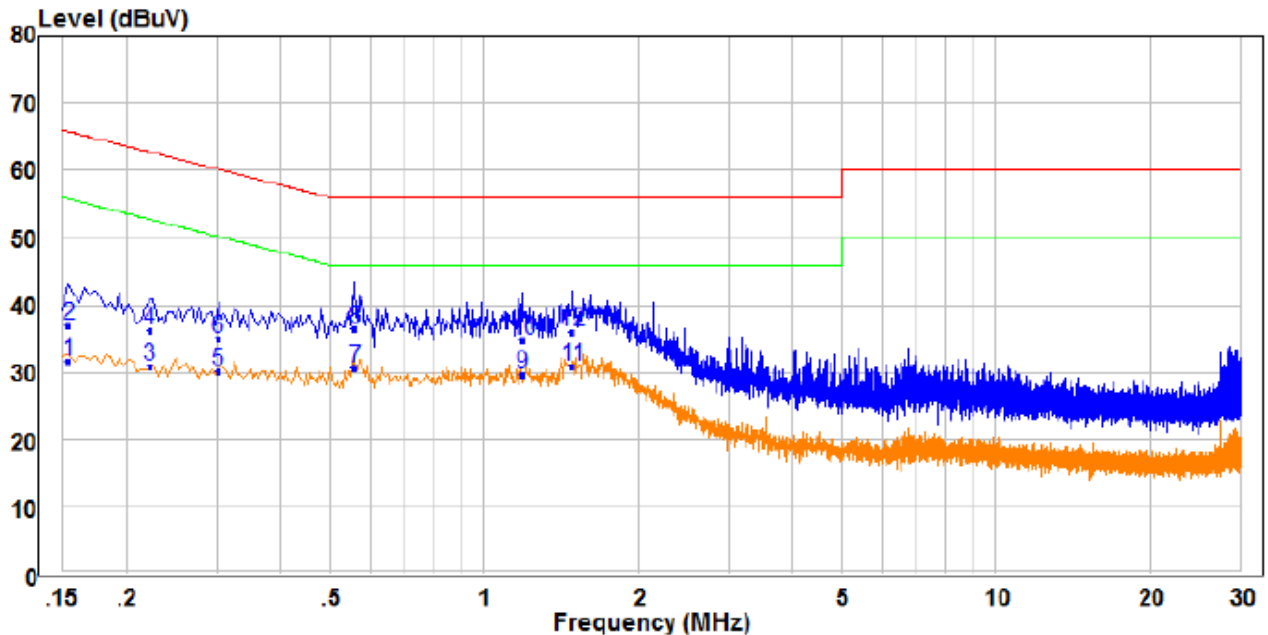
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live line:



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.174	21.79	9.49	31.28	54.77	-23.49	Average	Line
2	0.174	27.30	9.49	36.79	64.77	-27.98	QP	Line
3	0.286	20.79	9.49	30.28	50.64	-20.36	Average	Line
4	0.286	25.97	9.49	35.46	60.64	-25.18	QP	Line
5 PP	0.562	21.81	9.63	31.44	46.00	-14.56	Average	Line
6 QP	0.562	28.45	9.63	38.08	56.00	-17.92	QP	Line
7	1.026	19.33	9.53	28.86	46.00	-17.14	Average	Line
8	1.026	24.57	9.53	34.10	56.00	-21.90	QP	Line
9	1.542	21.47	9.53	31.00	46.00	-15.00	Average	Line
10	1.542	26.49	9.53	36.02	56.00	-19.98	QP	Line
11	6.802	10.22	9.70	19.92	50.00	-30.08	Average	Line
12	6.802	20.15	9.70	29.85	60.00	-30.15	QP	Line

Neutral line:



	Freq	Read		Limit	Over		
	MHz	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	Pol/Phase
1	0.154	22.05	9.48	31.53	55.78	-24.25	Average
2	0.154	27.44	9.48	36.92	65.78	-28.86	QP
3	0.222	21.39	9.48	30.87	52.74	-21.87	Average
4	0.222	26.66	9.48	36.14	62.74	-26.60	QP
5	0.302	20.64	9.48	30.12	50.19	-20.07	Average
6	0.302	25.60	9.48	35.08	60.19	-25.11	QP
7	0.558	20.89	9.66	30.55	46.00	-15.45	Average
8 QP	0.558	26.86	9.66	36.52	56.00	-19.48	QP
9	1.190	19.85	9.72	29.57	46.00	-16.43	Average
10	1.190	25.01	9.72	34.73	56.00	-21.27	QP
11 PP	1.486	21.20	9.71	30.91	46.00	-15.09	Average
12	1.486	26.36	9.71	36.07	56.00	-19.93	QP

Notes:

1. All the modulation and channels had been tested, but only the worst data recorded in the report.
2. The following Quasi-Peak and Average measurements were performed on the EUT.
3. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.
4. AC120V and AC240V have been tested, find the AC120V is the worst case, only the worst case is recorded in the report.

Appendix H) Restricted bands around fundamental frequency (Radiated Emission)

Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10Hz	Average
Test Procedure:	Below 1GHz test procedure as below: - The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. - The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. - The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. - For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading. - The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. - Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel Above 1GHz test procedure as below: - Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre). - Test the EUT in the lowest channel , the Highest channel - The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case. - Repeat above procedures until all frequencies measured was complete.				
Limit:	Frequency	Limit (dB μ V/m @3cm)		Remark	
	30MHz-88MHz	40.0		Quasi-peak Value	
	88MHz-216MHz	43.5		Quasi-peak Value	
	216MHz-960MHz	46.0		Quasi-peak Value	
	960MHz-1GHz	54.0		Quasi-peak Value	
	Above 1GHz	54.0		Average Value	
		74.0		Peak Value	

Test plot as follows:

ANT1:

Worse case mode:		802.11a(6Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	54.34	-3.63	50.71	74	-23.29	peak	H
5150.00	43.14	-3.63	39.51	54	-14.49	AVG	H
5150.00	54.27	-3.63	50.64	74	-23.36	peak	V
5150.00	43.35	-3.63	39.72	54	-14.28	AVG	V

Worse case mode:		802.11a(6Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	53.79	-3.59	50.20	74	-23.80	peak	H
5350.00	43.78	-3.59	40.19	54	-13.81	AVG	H
5350.00	55.34	-3.59	51.75	74	-22.25	peak	V
5350.00	44.16	-3.59	40.57	54	-13.43	AVG	V

Worse case mode:		802.11a(6Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	55.81	-3.46	52.35	68.2	-15.85	peak	H
5741.52	98.40	-3.44	94.96	122.2	-27.24	peak	H
5650	56.16	-3.46	52.70	68.2	-15.50	peak	V
5741.85	96.13	-3.44	92.69	122.2	-29.51	peak	V

Worse case mode:		802.11a(6Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5827.34	98.06	-3.42	94.64	122.2	-27.56	peak	H
5925	56.62	-3.41	53.21	68.2	-14.99	peak	H
5821.38	98.07	-3.42	94.65	122.2	-27.55	peak	V
5925	56.73	-3.41	53.32	68.2	-14.88	peak	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	58.93	-3.63	51.52	74	-22.48	peak	H
5150.00	44.56	-3.63	41.77	54	-12.23	AVG	H
5150.00	59.65	-3.63	52.14	74	-21.86	peak	V
5150.00	46.6	-3.63	39.75	54	-14.25	AVG	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	55.65	-3.59	52.06	74	-21.94	peak	H
5350.00	42.67	-3.59	39.08	54	-14.92	AVG	H
5350.00	54.12	-3.59	50.53	74	-23.47	peak	V
5350.00	44.91	-3.59	41.32	54	-12.68	AVG	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	55.84	-3.46	52.38	68.2	-15.82	peak	H
5743.90	97.32	-3.44	93.88	122.2	-28.32	peak	H
5650	58.24	-3.46	54.78	68.2	-13.42	peak	V
5744.26	97.43	-3.44	93.99	122.2	-28.21	peak	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5822.35	97.43	-3.42	94.01	122.2	-28.19	peak	H
5925	57.21	-3.41	53.80	68.2	-14.40	peak	H
5824.90	96.78	-3.42	93.36	122.2	-28.84	peak	V
5925	57.65	-3.41	54.24	68.2	-13.96	peak	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		38	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150	56.59	-3.63	52.96	74	-21.04	peak	H
5150	43.57	-3.63	39.94	54	-14.06	AVG	H
5150	54.11	-3.63	50.48	74	-23.52	peak	V
5150	44.12	-3.63	40.49	54	-13.51	AVG	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		46	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	54.06	-3.59	50.47	74	-23.53	peak	H
5350.00	44.13	-3.59	40.54	54	-13.46	AVG	H
5350.00	54.39	-3.59	50.80	74	-23.20	peak	V
5350.00	43.74	-3.59	40.15	54	-13.85	AVG	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		151	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	57.39	-3.46	53.93	68.2	-14.27	peak	H
5751.45	96.99	-3.44	93.55	122.2	-28.65	peak	H
5650	57.91	-3.46	54.45	68.2	-13.75	peak	V
5750.59	96.62	-3.44	93.18	122.2	-29.02	peak	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		159	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5787.01	95.75	-3.42	92.33	122.2	-29.87	peak	H
5925	55.89	-3.41	52.48	68.2	-15.72	peak	H
5787.91	96.83	-3.42	93.41	122.2	-28.79	peak	V
5925	56.07	-3.41	52.66	68.2	-15.54	peak	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	54.66	-3.63	51.03	74	-22.97	peak	H
5150.00	43.03	-3.63	39.40	54	-14.60	AVG	H
5150.00	55.92	-3.63	52.29	74	-21.71	peak	V
5150.00	45.47	-3.63	41.84	54	-12.16	AVG	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	54.82	-3.59	51.23	74	-22.77	peak	H
5350.00	45.15	-3.59	41.56	54	-12.44	AVG	H
5350.00	55.32	-3.59	51.73	74	-22.27	peak	V
5350.00	44.46	-3.59	40.87	54	-13.13	AVG	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	56.14	-3.46	52.68	68.2	-15.52	peak	H
5741.39	97.47	-3.44	94.03	122.2	-28.17	peak	H
5650	58.00	-3.46	54.54	68.2	-13.66	peak	V
5736.65	96.95	-3.44	93.51	122.2	-28.69	peak	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5827.63	97.02	-3.42	93.60	122.2	-28.60	peak	H
5925	56.77	-3.41	53.36	68.2	-14.84	peak	H
5823.76	98.09	-3.42	94.67	122.2	-27.53	peak	V
5925	57.53	-3.41	54.12	68.2	-14.08	peak	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		38	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	54.38	-3.63	50.75	74	-23.25	peak	H
5150.00	43.31	-3.63	39.68	54	-14.32	AVG	H
5150.00	56.26	-3.63	52.63	74	-21.37	peak	V
5150.00	44.24	-3.63	40.61	54	-13.39	AVG	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		46	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	56.04	-3.59	52.45	74	-21.55	peak	H
5350.00	43.73	-3.59	40.14	54	-13.86	AVG	H
5350.00	53.81	-3.59	50.22	74	-23.78	peak	V
5350.00	43.83	-3.59	40.24	54	-13.76	AVG	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		151	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	55.78	-3.46	52.32	68.2	-15.88	peak	H
5753.58	96.04	-3.44	92.60	122.2	-29.60	peak	H
5650	56.70	-3.46	53.24	68.2	-14.96	peak	V
5752.33	97.77	-3.44	94.33	122.2	-27.87	peak	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		159	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5794.97	97.73	-3.42	94.31	122.2	-27.89	peak	H
5925	56.05	-3.41	52.64	68.2	-15.56	peak	H
5792.86	97.54	-3.42	94.12	122.2	-28.08	peak	V
5925	55.66	-3.41	52.25	68.2	-15.95	peak	V

Worse case mode:		802.11ac(VHT80)(29.3Mbps)		Test channel:		42	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	53.85	-3.63	50.22	74	-23.78	peak	H
5150.00	42.99	-3.63	39.36	54	-14.64	AVG	H
5150.00	54.93	-3.63	51.30	74	-22.70	peak	V
5150.00	44.63	-3.63	41.00	54	-13.00	AVG	V
5350.00	54.56	-3.59	50.97	74	-23.03	peak	H
5350.00	45.15	-3.59	41.56	54	-12.44	AVG	H
5350.00	56.04	-3.59	52.45	74	-21.55	peak	V
5350.00	45.03	-3.59	41.44	54	-12.56	AVG	V

Worse case mode:		802.11ac(VHT80)(29.3Mbps)		Test channel:		155	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	56.81	-3.46	53.35	68.2	-14.85	peak	H
5773.95	97.32	-3.44	93.88	122.2	-28.32	peak	H
5925	56.59	-3.46	53.13	68.2	-15.07	peak	H
5650	57.10	-3.41	53.69	68.2	-14.51	peak	V
5779.76	96.90	-3.42	93.48	122.2	-28.72	peak	V
5925	57.68	-3.41	54.27	68.2	-13.93	peak	V

ANT2:

Worse case mode:		802.11a(6Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	54.44	-3.63	50.81	74	-23.19	peak	H
5150.00	44.91	-3.63	41.28	54	-12.72	AVG	H
5150.00	54.63	-3.63	51.00	74	-23.00	peak	V
5150.00	45.37	-3.63	41.74	54	-12.26	AVG	V

Worse case mode:		802.11a(6Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	55.65	-3.59	52.06	74	-21.94	peak	H
5350.00	45.01	-3.59	41.42	54	-12.58	AVG	H
5350.00	54.17	-3.59	50.58	74	-23.42	peak	V
5350.00	44.70	-3.59	41.11	54	-12.89	AVG	V

Worse case mode:		802.11a(6Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	56.98	-3.46	53.52	68.2	-14.68	peak	H
5739.68	96.21	-3.44	92.77	122.2	-29.43	peak	H
5650	57.95	-3.46	54.49	68.2	-13.71	peak	V
5737.41	98.32	-3.44	94.88	122.2	-27.32	peak	V

Worse case mode:		802.11a(6Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5820.87	98.55	-3.42	95.13	122.2	-27.07	peak	H
5925	57.25	-3.41	53.84	68.2	-14.36	peak	H
5821.49	97.62	-3.42	94.20	122.2	-28.00	peak	V
5925	56.28	-3.41	52.87	68.2	-15.33	peak	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	58.93	-3.63	52.14	74	-21.86	peak	H
5150.00	44.56	-3.63	41.71	54	-12.29	AVG	H
5150.00	59.65	-3.63	51.61	74	-22.39	peak	V
5150.00	46.6	-3.63	39.30	54	-14.70	AVG	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	56.42	-3.59	52.83	74	-21.17	peak	H
5350.00	43.06	-3.59	39.47	54	-14.53	AVG	H
5350.00	54.25	-3.59	50.66	74	-23.34	peak	V
5350.00	42.83	-3.59	39.24	54	-14.76	AVG	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	56.69	-3.46	53.23	68.2	-14.97	peak	H
5743.10	95.90	-3.44	92.46	122.2	-29.74	peak	H
5650	58.21	-3.46	54.75	68.2	-13.45	peak	V
5741.75	96.81	-3.44	93.37	122.2	-28.83	peak	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5823.89	96.11	-3.42	92.69	122.2	-29.51	peak	H
5925	58.21	-3.41	54.80	68.2	-13.40	peak	H
5820.52	98.58	-3.42	95.16	122.2	-27.04	peak	V
5925	58.05	-3.41	54.64	68.2	-13.56	peak	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		38	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	55.57	-3.63	51.94	74	-22.06	peak	H
5150.00	42.69	-3.63	39.06	54	-14.94	AVG	H
5150.00	54.56	-3.63	50.93	74	-23.07	peak	V
5150.00	44.66	-3.63	41.03	54	-12.97	AVG	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		46	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	55.18	-3.59	51.59	74	-22.41	peak	H
5350.00	42.66	-3.59	39.07	54	-14.93	AVG	H
5350.00	54.21	-3.59	50.62	74	-23.38	peak	V
5350.00	45.41	-3.59	41.82	54	-12.18	AVG	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		151	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	57.42	-3.46	53.96	68.2	-14.24	peak	H
5751.85	96.78	-3.44	93.34	122.2	-28.86	peak	H
5650	57.51	-3.46	54.05	68.2	-14.15	peak	V
5752.62	95.84	-3.44	92.40	122.2	-29.80	peak	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		159	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5787.40	96.03	-3.42	92.61	122.2	-29.59	peak	H
5925	57.15	-3.41	53.74	68.2	-14.46	peak	H
5787.35	95.74	-3.42	92.32	122.2	-29.88	peak	V
5925	55.66	-3.41	52.25	68.2	-15.95	peak	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	55.17	-3.63	51.54	74	-22.46	peak	H
5150.00	45.35	-3.63	41.72	54	-12.28	AVG	H
5150.00	54.11	-3.63	50.48	74	-23.52	peak	V
5150.00	43.20	-3.63	39.57	54	-14.43	AVG	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	55.55	-3.59	51.96	74	-22.04	peak	H
5350.00	45.14	-3.59	41.55	54	-12.45	AVG	H
5350.00	55.39	-3.59	51.80	74	-22.20	peak	V
5350.00	45.08	-3.59	41.49	54	-12.51	AVG	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	56.85	-3.46	53.39	68.2	-14.81	peak	H
5737.49	96.04	-3.44	92.60	122.2	-29.60	peak	H
5650	56.21	-3.46	52.75	68.2	-15.45	peak	V
5743.79	97.99	-3.44	94.55	122.2	-27.65	peak	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5827.60	98.61	-3.42	95.19	122.2	-27.01	peak	H
5925	58.31	-3.41	54.90	68.2	-13.30	peak	H
5824.13	98.54	-3.42	95.12	122.2	-27.08	peak	V
5925	56.23	-3.41	52.82	68.2	-15.38	peak	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		38	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	56.29	-3.63	52.66	74	-21.34	peak	H
5150.00	42.70	-3.63	39.07	54	-14.93	AVG	H
5150.00	53.99	-3.63	50.36	74	-23.64	peak	V
5150.00	42.63	-3.63	39.00	54	-15.00	AVG	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		46	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	54.26	-3.59	50.67	74	-23.33	peak	H
5350.00	45.16	-3.59	41.57	54	-12.43	AVG	H
5350.00	54.29	-3.59	50.70	74	-23.30	peak	V
5350.00	44.13	-3.59	40.54	54	-13.46	AVG	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		151	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	58.50	-3.46	55.04	68.2	-13.16	peak	H
5755.93	97.10	-3.44	93.66	122.2	-28.54	peak	H
5650	56.20	-3.46	52.74	68.2	-15.46	peak	V
5750.56	97.25	-3.44	93.81	122.2	-28.39	peak	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		159	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5795.11	98.16	-3.42	94.74	122.2	-27.46	peak	H
5925	58.45	-3.41	55.04	68.2	-13.16	peak	H
5796.71	96.63	-3.42	93.21	122.2	-28.99	peak	V
5925	57.56	-3.41	54.15	68.2	-14.05	peak	V

Worse case mode:		802.11ac(VHT80)(29.3Mbps)		Test channel:		42	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	54.29	-3.63	50.66	74	-23.34	peak	H
5150.00	43.27	-3.63	39.64	54	-14.36	AVG	H
5150.00	56.36	-3.63	52.73	74	-21.27	peak	V
5150.00	45.17	-3.63	41.54	54	-12.46	AVG	V
5350.00	55.30	-3.59	51.71	74	-22.29	peak	H
5350.00	45.38	-3.59	41.79	54	-12.21	AVG	H
5350.00	56.00	-3.59	52.41	74	-21.59	peak	V
5350.00	44.08	-3.59	40.49	54	-13.51	AVG	V

Worse case mode:		802.11ac(VHT80)(29.3Mbps)		Test channel:		155	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	58.60	-3.46	55.14	68.2	-13.06	peak	H
5774.27	98.50	-3.44	95.06	122.2	-27.14	peak	H
5925	58.38	-3.46	54.92	68.2	-13.28	peak	H
5650	57.79	-3.41	54.38	68.2	-13.82	peak	V
5778.46	97.75	-3.42	94.33	122.2	-27.87	peak	V
5925	58.56	-3.41	55.15	68.2	-13.05	peak	V

ANT1+2:

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	58.93	-3.63	51.43	74	-22.57	peak	H
5150.00	44.56	-3.63	40.87	54	-13.13	AVG	H
5150.00	59.65	-3.63	51.82	74	-22.18	peak	V
5150.00	46.6	-3.63	39.63	54	-14.37	AVG	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	54.52	-3.59	50.93	74	-23.07	peak	H
5350.00	42.75	-3.59	39.16	54	-14.84	AVG	H
5350.00	55.08	-3.59	51.49	74	-22.51	peak	V
5350.00	44.70	-3.59	41.11	54	-12.89	AVG	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	57.41	-3.46	53.95	68.2	-14.25	peak	H
5738.36	96.01	-3.44	92.57	122.2	-29.63	peak	H
5650	56.57	-3.46	53.11	68.2	-15.09	peak	V
5741.78	96.22	-3.44	92.78	122.2	-29.42	peak	V

Worse case mode:		802.11n(HT20)(6.5Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5826.54	98.14	-3.42	94.72	122.2	-27.48	peak	H
5925	58.12	-3.41	54.71	68.2	-13.49	peak	H
5827.43	96.41	-3.42	92.99	122.2	-29.21	peak	V
5925	58.01	-3.41	54.60	68.2	-13.60	peak	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		38	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	56.30	-3.63	52.67	74	-21.33	peak	H
5150.00	45.53	-3.63	41.90	54	-12.10	AVG	H
5150.00	53.89	-3.63	50.26	74	-23.74	peak	V
5150.00	43.88	-3.63	40.25	54	-13.75	AVG	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		46	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	55.60	-3.59	52.01	74	-21.99	peak	H
5350.00	44.74	-3.59	41.15	54	-12.85	AVG	H
5350.00	56.29	-3.59	52.70	74	-21.30	peak	V
5350.00	44.32	-3.59	40.73	54	-13.27	AVG	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		151	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	56.81	-3.46	53.35	68.2	-14.85	peak	H
5756.21	95.80	-3.44	92.36	122.2	-29.84	peak	H
5650	56.59	-3.46	53.13	68.2	-15.07	peak	V
5756.97	97.45	-3.44	94.01	122.2	-28.19	peak	V

Worse case mode:		802.11n(HT40)(13.5Mbps)		Test channel:		159	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5783.76	96.83	-3.42	93.41	122.2	-28.79	peak	H
5925	56.49	-3.41	53.08	68.2	-15.12	peak	H
5780.18	97.67	-3.42	94.25	122.2	-27.95	peak	V
5925	56.24	-3.41	52.83	68.2	-15.37	peak	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		36	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	55.13	-3.63	51.50	74	-22.50	peak	H
5150.00	43.49	-3.63	39.86	54	-14.14	AVG	H
5150.00	55.16	-3.63	51.53	74	-22.47	peak	V
5150.00	45.06	-3.63	41.43	54	-12.57	AVG	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		48	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	55.47	-3.59	51.88	74	-22.12	peak	H
5350.00	44.10	-3.59	40.51	54	-13.49	AVG	H
5350.00	55.94	-3.59	52.35	74	-21.65	peak	V
5350.00	44.33	-3.59	40.74	54	-13.26	AVG	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		149	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	58.23	-3.46	54.77	68.2	-13.43	peak	H
5742.04	96.66	-3.44	93.22	122.2	-28.98	peak	H
5650	56.52	-3.46	53.06	68.2	-15.14	peak	V
5742.57	98.07	-3.44	94.63	122.2	-27.57	peak	V

Worse case mode:		802.11ac(HT20)(6.5Mbps)		Test channel:		165	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5827.72	95.67	-3.42	92.25	122.2	-29.95	peak	H
5925	57.29	-3.41	53.88	68.2	-14.32	peak	H
5826.57	96.73	-3.42	93.31	122.2	-28.89	peak	V
5925	58.43	-3.41	55.02	68.2	-13.18	peak	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		38	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	54.22	-3.63	50.59	74	-23.41	peak	H
5150.00	44.12	-3.63	40.49	54	-13.51	AVG	H
5150.00	55.51	-3.63	51.88	74	-22.12	peak	V
5150.00	43.81	-3.63	40.18	54	-13.82	AVG	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		46	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5350.00	55.07	-3.59	51.48	74	-22.52	peak	H
5350.00	45.38	-3.59	41.79	54	-12.21	AVG	H
5350.00	54.58	-3.59	50.99	74	-23.01	peak	V
5350.00	43.83	-3.59	40.24	54	-13.76	AVG	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		151	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	58.49	-3.46	55.03	68.2	-13.17	peak	H
5752.43	97.87	-3.44	94.43	122.2	-27.77	peak	H
5650	58.62	-3.46	55.16	68.2	-13.04	peak	V
5756.81	98.56	-3.44	95.12	122.2	-27.08	peak	V

Worse case mode:		802.11ac(VHT40)(13.5Mbps)		Test channel:		159	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5791.66	98.42	-3.42	95.00	122.2	-27.20	peak	H
5925	57.20	-3.41	53.79	68.2	-14.41	peak	H
5790.93	98.28	-3.42	94.86	122.2	-27.34	peak	V
5925	56.35	-3.41	52.94	68.2	-15.26	peak	V

Worse case mode:		802.11ac(VHT80)(29.3Mbps)		Test channel:		42	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5150.00	53.91	-3.63	50.28	74	-23.72	peak	H
5150.00	44.60	-3.63	40.97	54	-13.03	AVG	H
5150.00	54.24	-3.63	50.61	74	-23.39	peak	V
5150.00	44.01	-3.63	40.38	54	-13.62	AVG	V
5350.00	54.76	-3.59	51.17	74	-22.83	peak	H
5350.00	43.88	-3.59	40.29	54	-13.71	AVG	H
5350.00	55.58	-3.59	51.99	74	-22.01	peak	V
5350.00	45.15	-3.59	41.56	54	-12.44	AVG	V

Worse case mode:		802.11ac(VHT80)(29.3Mbps)		Test channel:		155	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
5650	58.61	-3.46	55.15	68.2	-13.05	peak	H
5776.62	97.17	-3.44	93.73	122.2	-28.47	peak	H
5925	56.48	-3.46	53.02	68.2	-15.18	peak	H
5650	55.88	-3.41	52.47	68.2	-15.73	peak	V
5777.05	98.51	-3.42	95.09	122.2	-27.11	peak	V
5925	56.69	-3.41	53.28	68.2	-14.92	peak	V

Note:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor

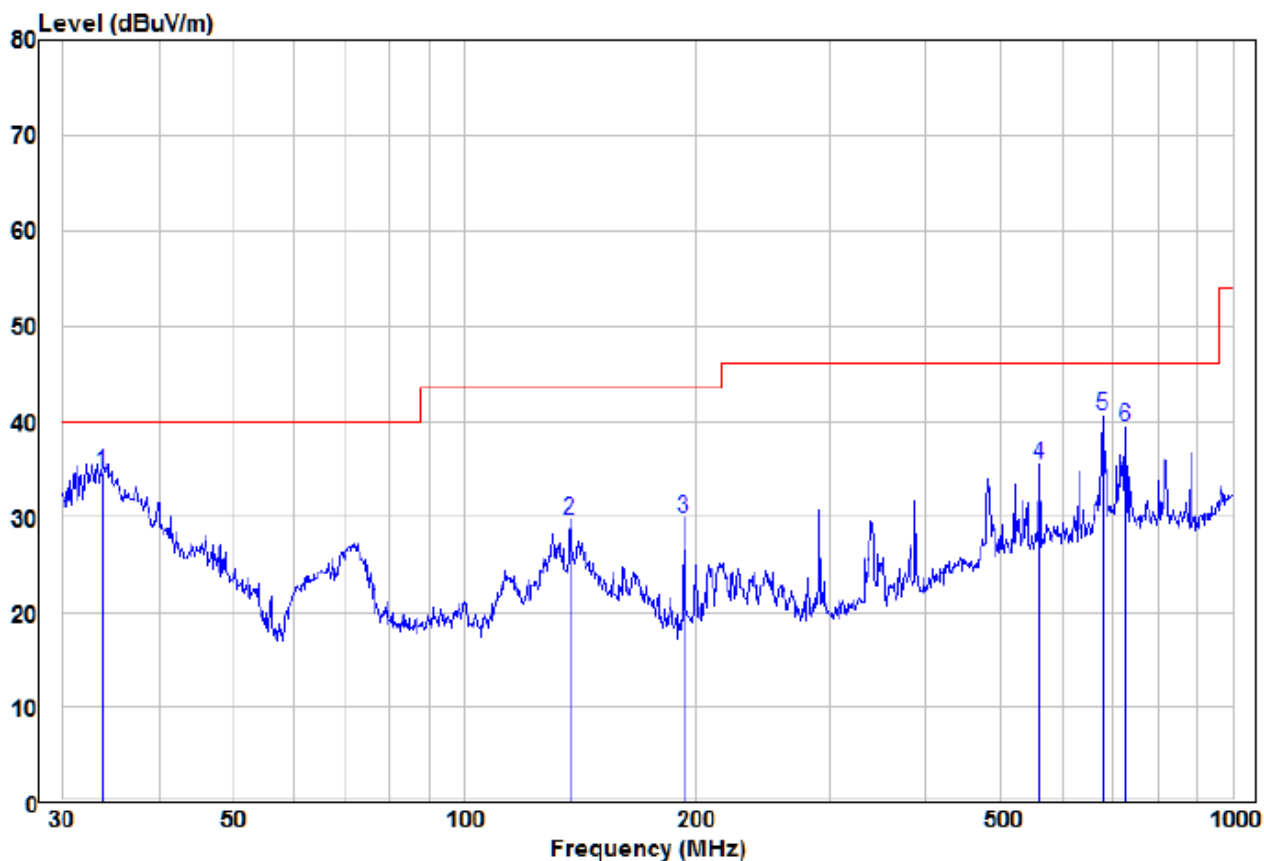
Appendix I): Radiated Spurious Emissions

Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
	0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
	0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
	0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
	0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
		Peak	1MHz	10Hz	Average
Test Procedure:					
Below 1GHz test procedure as below: a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. Above 1GHz test procedure as below: g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre(Above 18GHz the distance is 1 meter and table is 1.5 metre) h. Test the EUT in the lowest channel ,the middle channel ,the Highest channel i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case. j. Repeat above procedures until all frequencies measured was complete.					
Limit:	Frequency	Field strength (microvolt/meter)	Limit (dBµV/cm)	Remark	Measurement distance (cm)
	0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
	0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
	1.705MHz-30MHz	30	-	-	30
	30MHz-88MHz	100	40.0	Quasi-peak	3
	88MHz-216MHz	150	43.5	Quasi-peak	3
	216MHz-960MHz	200	46.0	Quasi-peak	3
	960MHz-1GHz	500	54.0	Quasi-peak	3
	Above 1GHz	500	54.0	Average	3
	Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.				
Test result: PASS					

Test Data:

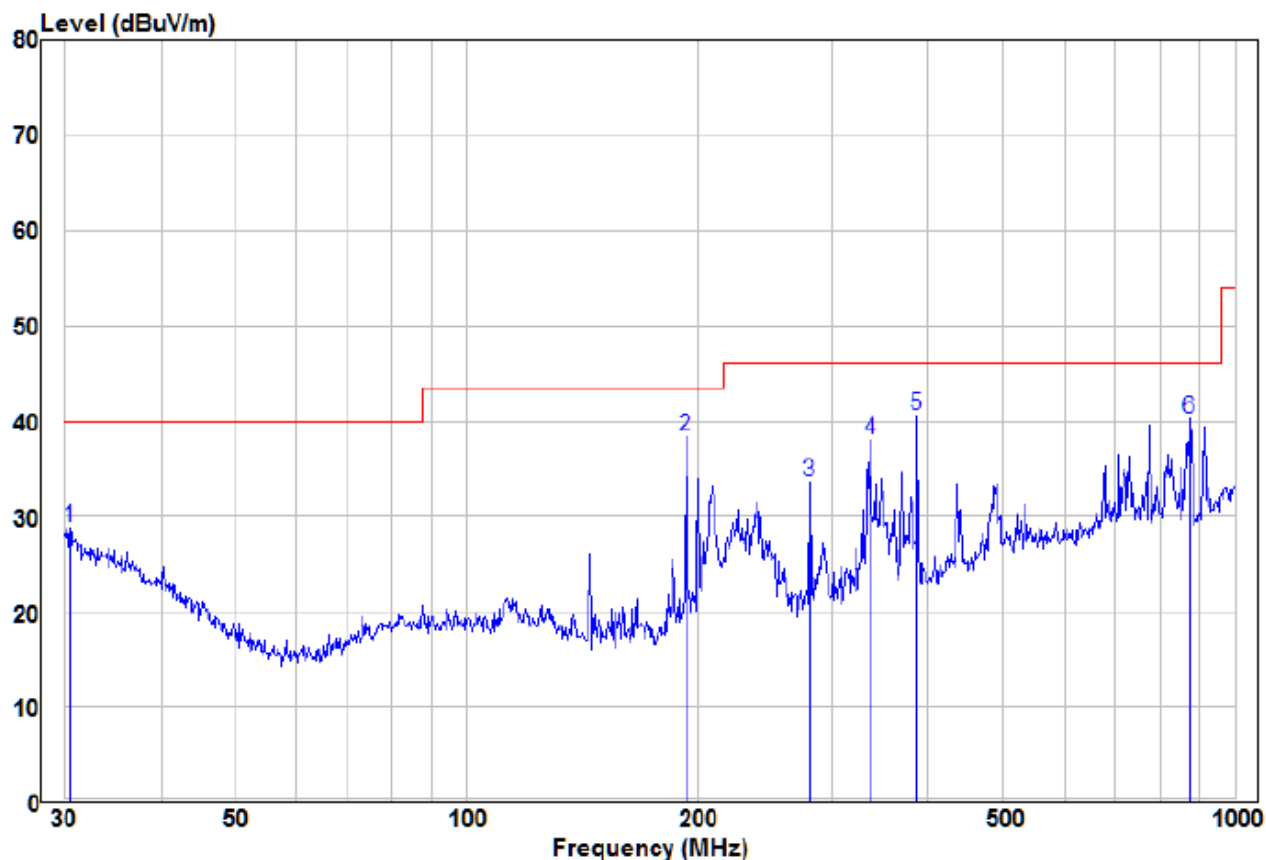
Radiated Emission below 1GHz

30MHz~1GHz		
Test mode:	Transmitting	Vertical



	Read			Limit	Over		
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Pol/Phase
1 pp	33.80	17.65	17.04	34.69	40.00	-5.31	QP
2	137.42	21.00	8.63	29.63	43.50	-13.87	QP
3	193.09	21.72	8.12	29.84	43.50	-13.66	QP
4	560.69	17.60	17.91	35.51	46.00	-10.49	QP
5	677.58	21.00	19.68	40.68	46.00	-5.32	QP
6	726.81	19.12	20.27	39.39	46.00	-6.61	QP

Test mode:	Transmitting	Horizontal
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	Read Freq	Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	30.53	10.54	18.22	28.76	40.00	-11.24	QP	HORIZONTAL
2	193.09	30.18	8.12	38.30	43.50	-5.20	QP	HORIZONTAL
3	280.02	22.48	11.07	33.55	46.00	-12.45	QP	HORIZONTAL
4	336.04	25.44	12.61	38.05	46.00	-7.95	QP	HORIZONTAL
5	386.63	26.69	13.83	40.52	46.00	-5.48	QP	HORIZONTAL
6	875.25	19.82	20.45	40.27	46.00	-5.73	QP	HORIZONTAL

Transmitter Emission above 1GHz

Test mode:		802.11ac(VHT80)_Ant1+2 (29.3Mbps)		Test channel:		42	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
10420.00	49.81	2.23	52.04	74	-21.96	peak	H
10420.00	39.21	2.23	41.44	54	-12.56	AVG	H
15630.00	48.15	3.75	51.90	74	-22.10	peak	H
15630.00	37.95	3.75	41.70	54	-12.30	AVG	H
10420.00	49.16	2.23	51.39	74	-22.61	peak	V
10420.00	38.73	2.23	40.96	54	-13.04	AVG	V
15630.00	47.46	3.75	51.21	74	-22.79	peak	V
15630.00	35.52	3.75	39.27	54	-14.73	AVG	V

Test mode:		802.11ac(VHT80)_Ant1+2 (29.3Mbps)		Test channel:		155	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
11544.00	49.82	2.23	52.05	74	-21.95	peak	H
11544.00	37.25	2.23	39.48	54	-14.52	AVG	H
17325.00	48.61	3.75	52.36	74	-21.64	peak	H
17325.00	38.25	3.75	42.00	54	-12.00	AVG	H
11544.00	50.65	2.23	52.88	74	-21.12	peak	V
11544.00	38.26	2.23	40.49	54	-13.51	AVG	V
17325.00	46.63	3.75	50.38	74	-23.62	peak	V
17325.00	35.70	3.75	39.45	54	-14.55	AVG	V

Remark:

- 1) The 29.3Mbps of rate of 802.11ac(VHT80)_Ant1+2 is the worst case, only the worst data recorded in the report.
- 2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- 3) Scan from 9kHz to 40GHz, The disturbance above 18GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

PHOTOGRAPHS OF TEST SETUP

Test model No.: WL-WN531G3

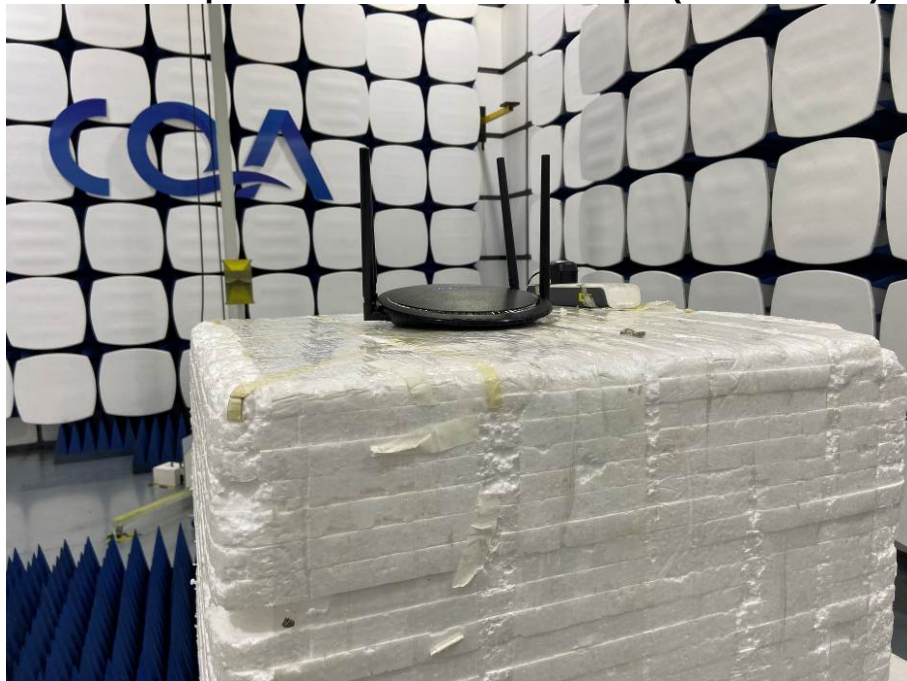
Radiated spurious emission Test Setup-1(Below 30MHz)



Radiated spurious emission Test Setup-2(30MHz-1GHz)



Radiated spurious emission Test Setup-3(Above 1GHz)



Conducted Emissions Test Setup



PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. CQASZ20191101242E-01 for EUT external and internal photos.

*** End of Report ***