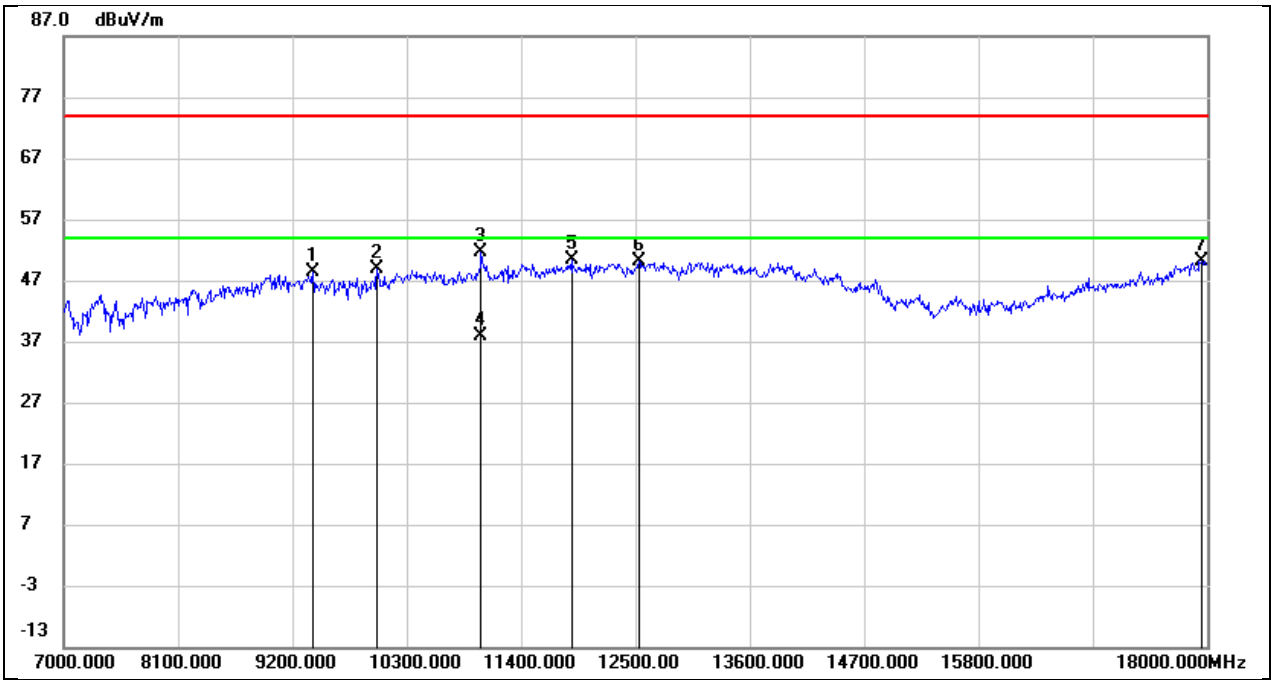
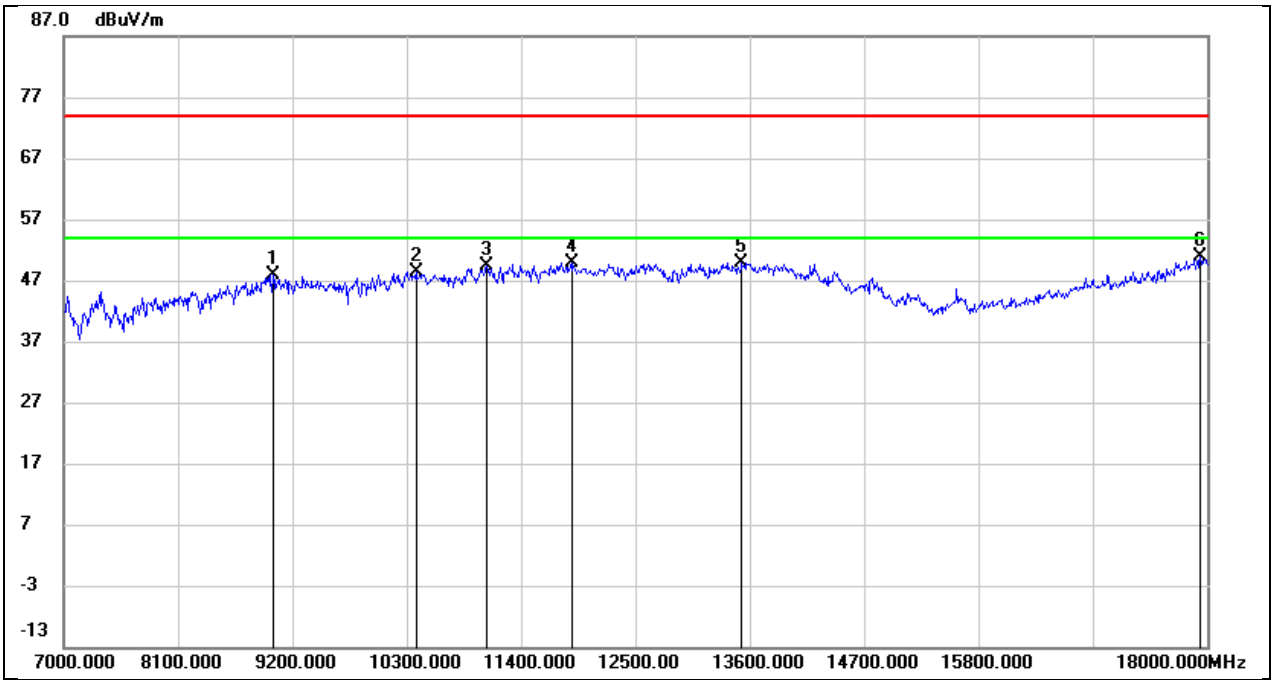
Test Mode:	802.11n HT40	Frequency(MHz):	5510
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9398.000	37.68	10.67	48.35	74.00	-25.65	peak
2	10014.000	36.71	12.19	48.90	74.00	-25.10	peak
3	11015.000	36.59	14.93	51.52	74.00	-22.48	peak
4	11015.000	22.97	14.93	37.90	54.00	-16.10	AVG
5	11884.000	32.38	18.00	50.38	74.00	-23.62	peak
6	12533.000	31.68	18.49	50.17	74.00	-23.83	peak
7	17945.000	23.30	26.74	50.04	74.00	-23.96	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

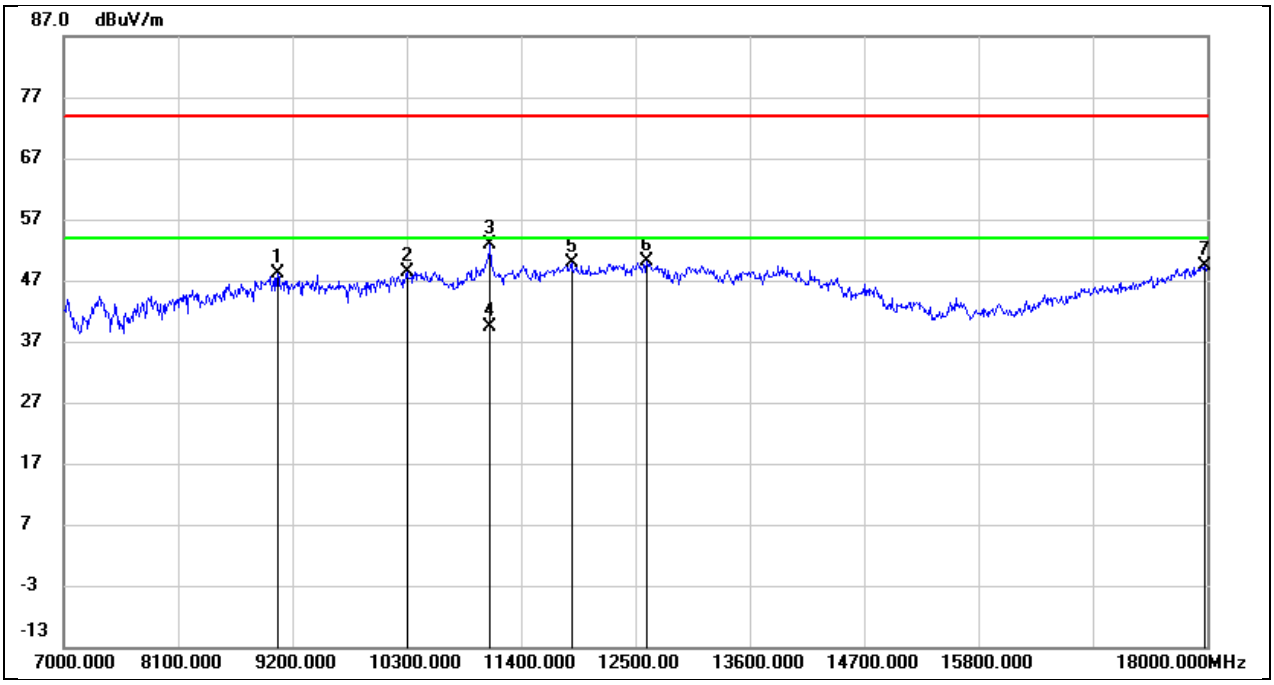
Test Mode:	802.11n HT40	Frequency(MHz):	5550
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9013.000	36.23	11.75	47.98	74.00	-26.02	peak
2	10388.000	35.14	13.18	48.32	74.00	-25.68	peak
3	11070.000	34.28	15.04	49.32	74.00	-24.68	peak
4	11884.000	31.82	18.00	49.82	74.00	-24.18	peak
5	13523.000	28.57	21.41	49.98	74.00	-24.02	peak
6	17934.000	24.13	26.69	50.82	74.00	-23.18	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

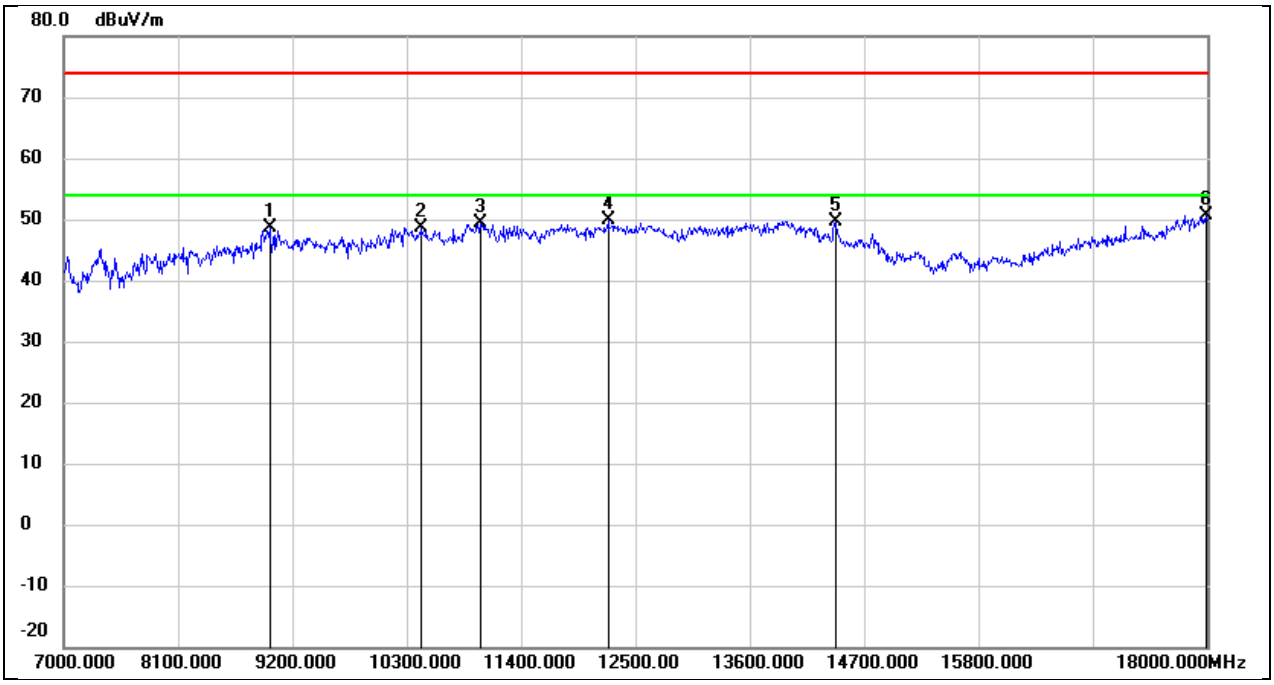
Test Mode:	802.11n HT40	Frequency(MHz):	5550
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9057.000	36.66	11.35	48.01	74.00	-25.99	peak
2	10300.000	35.61	12.78	48.39	74.00	-25.61	peak
3	11103.000	37.66	15.12	52.78	74.00	-21.22	peak
4	11103.000	24.38	15.12	39.50	54.00	-14.50	AVG
5	11884.000	31.83	18.00	49.83	74.00	-24.17	peak
6	12610.000	31.75	18.34	50.09	74.00	-23.91	peak
7	17978.000	22.44	26.88	49.32	74.00	-24.68	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

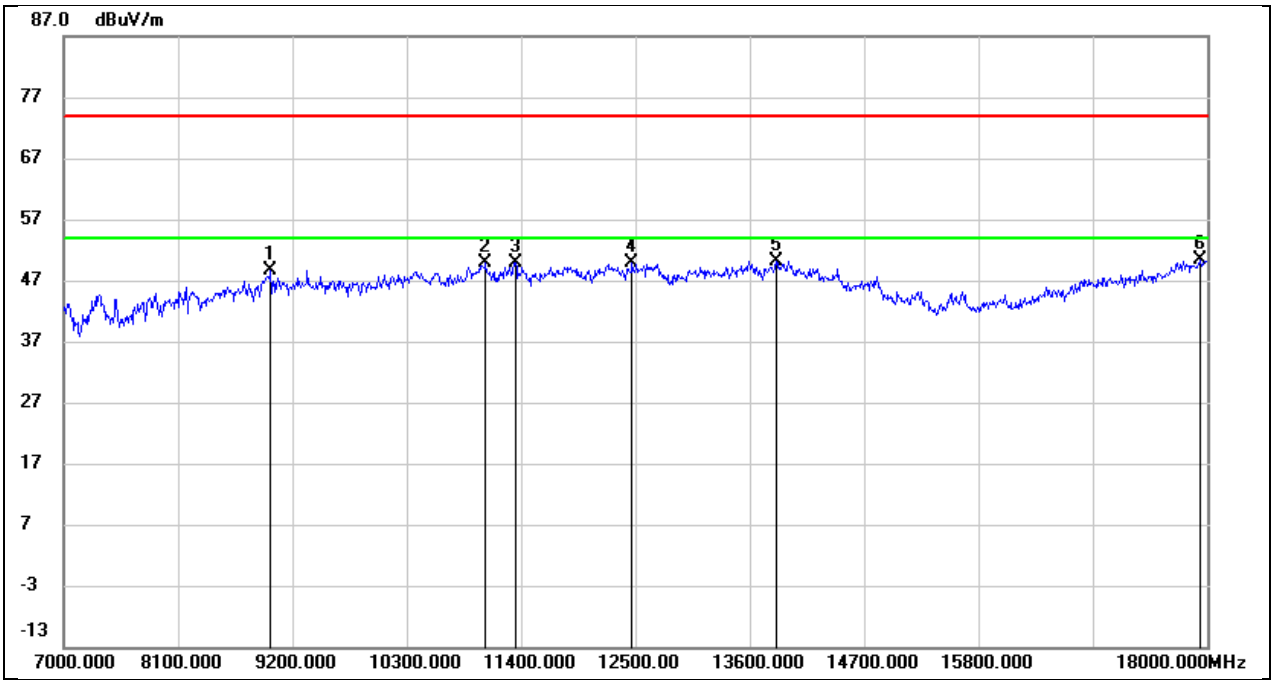
Test Mode:	802.11n HT40	Frequency(MHz):	5670
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8980.000	37.04	11.57	48.61	74.00	-25.39	peak
2	10443.000	35.18	13.35	48.53	74.00	-25.47	peak
3	11004.000	34.42	14.90	49.32	74.00	-24.68	peak
4	12236.000	31.22	18.66	49.88	74.00	-24.12	peak
5	14425.000	29.01	20.67	49.68	74.00	-24.32	peak
6	17989.000	23.79	26.92	50.71	74.00	-23.29	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

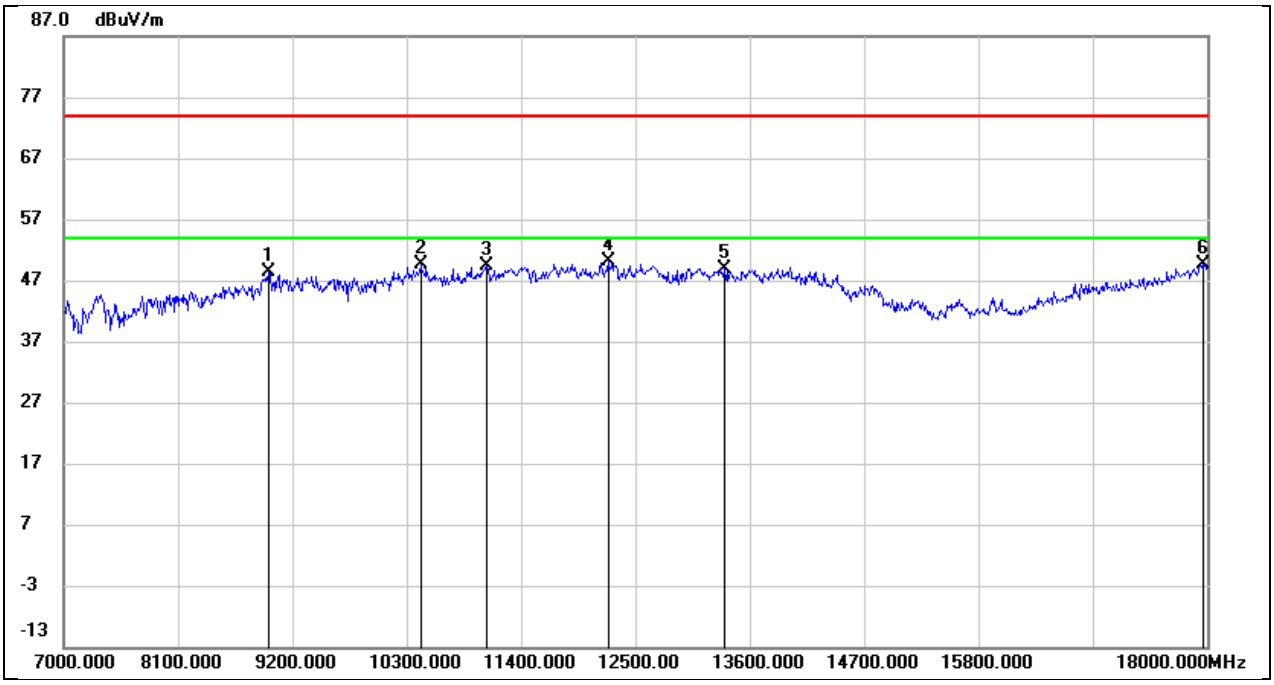
Test Mode:	802.11n HT40	Frequency(MHz):	5670
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8991.000	36.82	11.73	48.55	74.00	-25.45	peak
2	11059.000	34.77	15.02	49.79	74.00	-24.21	peak
3	11345.000	33.69	16.24	49.93	74.00	-24.07	peak
4	12467.000	31.18	18.70	49.88	74.00	-24.12	peak
5	13853.000	27.77	22.46	50.23	74.00	-23.77	peak
6	17934.000	23.71	26.69	50.40	74.00	-23.60	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

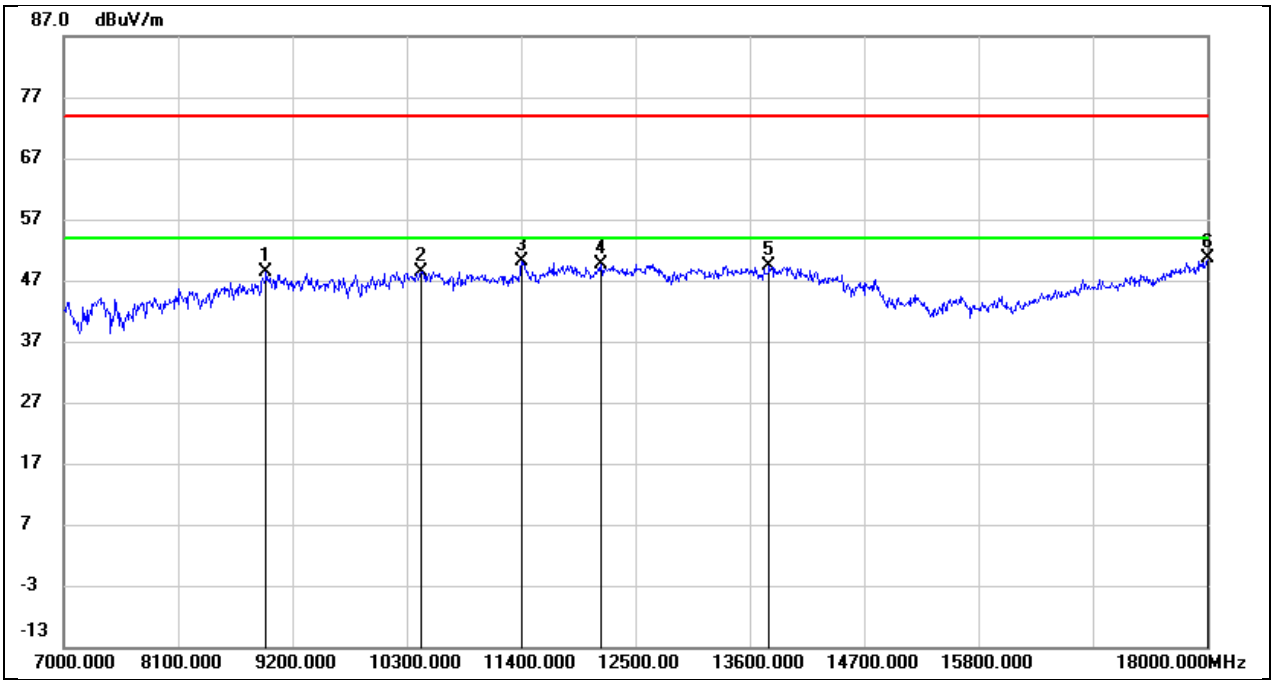
Test Mode:	802.11n HT40	Frequency(MHz):	5710
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8969.000	36.99	11.40	48.39	74.00	-25.61	peak
2	10432.000	36.41	13.31	49.72	74.00	-24.28	peak
3	11070.000	34.30	15.04	49.34	74.00	-24.66	peak
4	12236.000	31.36	18.66	50.02	74.00	-23.98	peak
5	13358.000	28.05	20.89	48.94	74.00	-25.06	peak
6	17956.000	22.97	26.78	49.75	74.00	-24.25	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

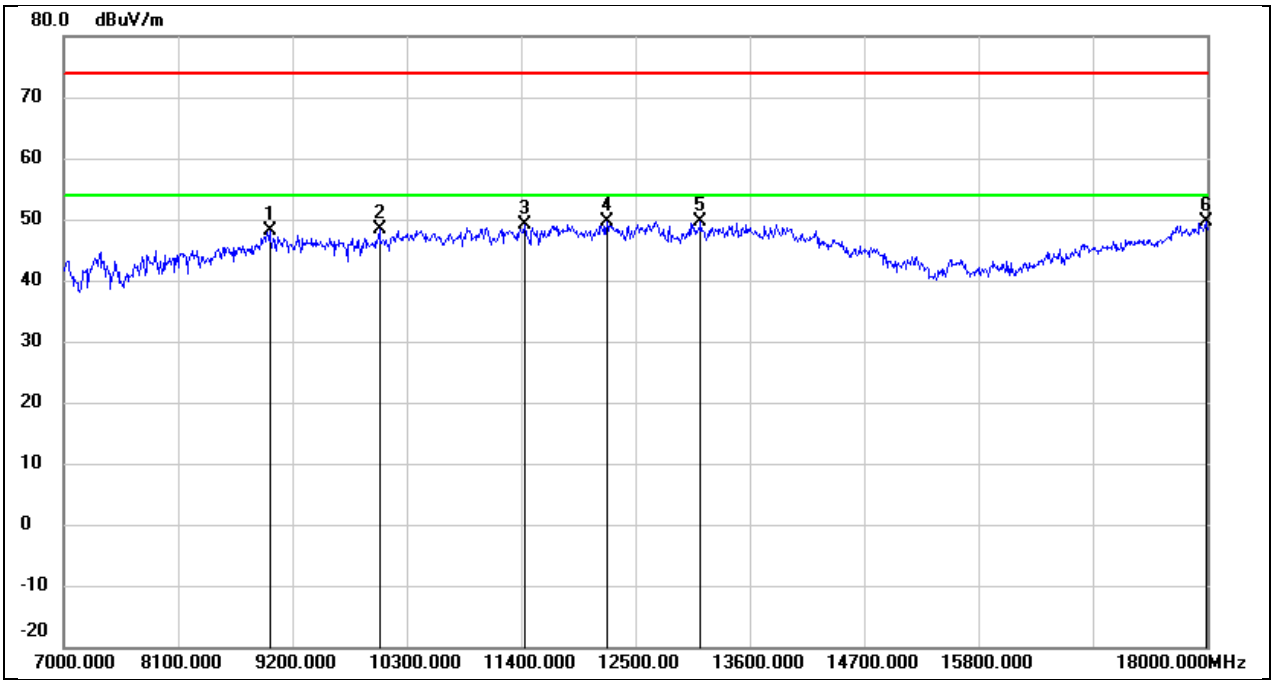
Test Mode:	802.11n HT40	Frequency(MHz):	5710
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8947.000	37.24	11.08	48.32	74.00	-25.68	peak
2	10432.000	35.17	13.31	48.48	74.00	-25.52	peak
3	11400.000	33.49	16.57	50.06	74.00	-23.94	peak
4	12170.000	31.13	18.58	49.71	74.00	-24.29	peak
5	13787.000	27.12	22.36	49.48	74.00	-24.52	peak
6	18000.000	23.56	26.97	50.53	74.00	-23.47	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

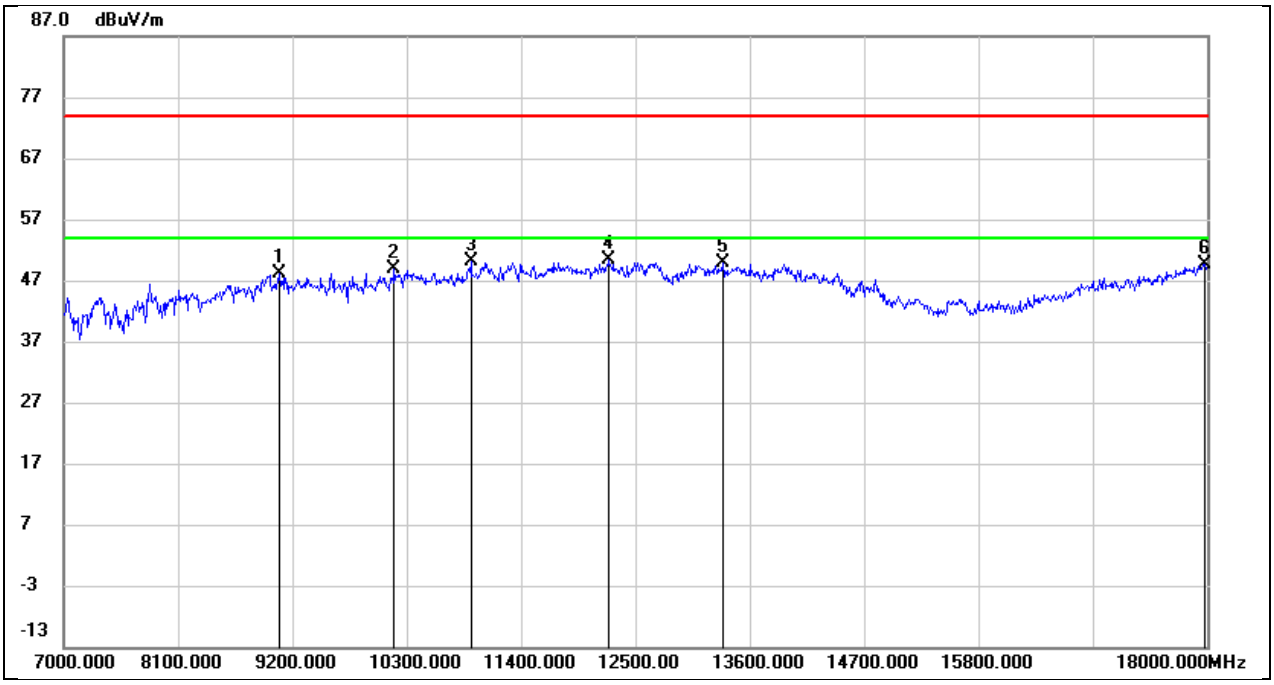
Test Mode:	802.11n HT40	Frequency(MHz):	5755
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8980.000	36.44	11.57	48.01	74.00	-25.99	peak
2	10036.000	36.09	12.20	48.29	74.00	-25.71	peak
3	11433.000	32.54	16.68	49.22	74.00	-24.78	peak
4	12225.000	31.04	18.63	49.67	74.00	-24.33	peak
5	13127.000	29.97	19.68	49.65	74.00	-24.35	peak
6	17989.000	22.81	26.92	49.73	74.00	-24.27	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

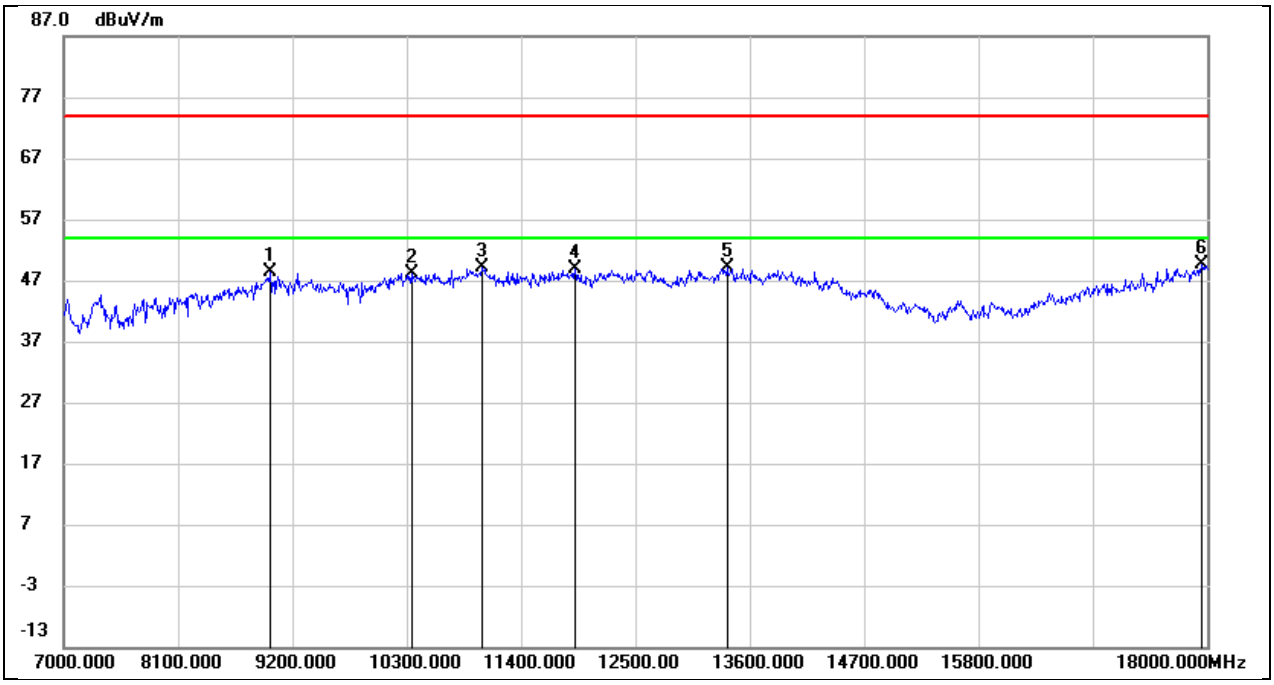
Test Mode:	802.11n HT40	Frequency(MHz):	5755
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9079.000	36.92	11.15	48.07	74.00	-25.93	peak
2	10179.000	36.65	12.32	48.97	74.00	-25.03	peak
3	10916.000	35.62	14.45	50.07	74.00	-23.93	peak
4	12247.000	31.79	18.68	50.47	74.00	-23.53	peak
5	13347.000	29.10	20.82	49.92	74.00	-24.08	peak
6	17978.000	22.83	26.88	49.71	74.00	-24.29	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

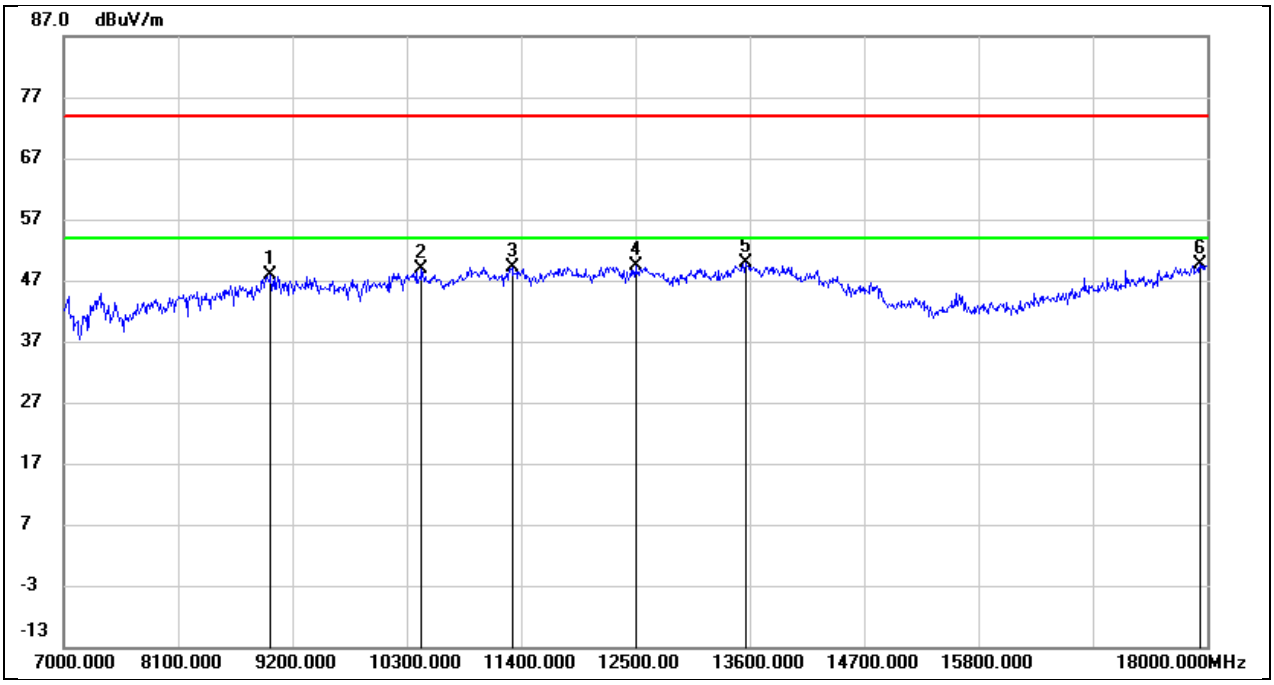
Test Mode:	802.11n HT40	Frequency(MHz):	5795
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8991.000	36.60	11.73	48.33	74.00	-25.67	peak
2	10344.000	35.16	12.98	48.14	74.00	-25.86	peak
3	11026.000	34.18	14.95	49.13	74.00	-24.87	peak
4	11917.000	30.67	18.16	48.83	74.00	-25.17	peak
5	13380.000	28.14	21.01	49.15	74.00	-24.85	peak
6	17945.000	22.86	26.74	49.60	74.00	-24.40	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

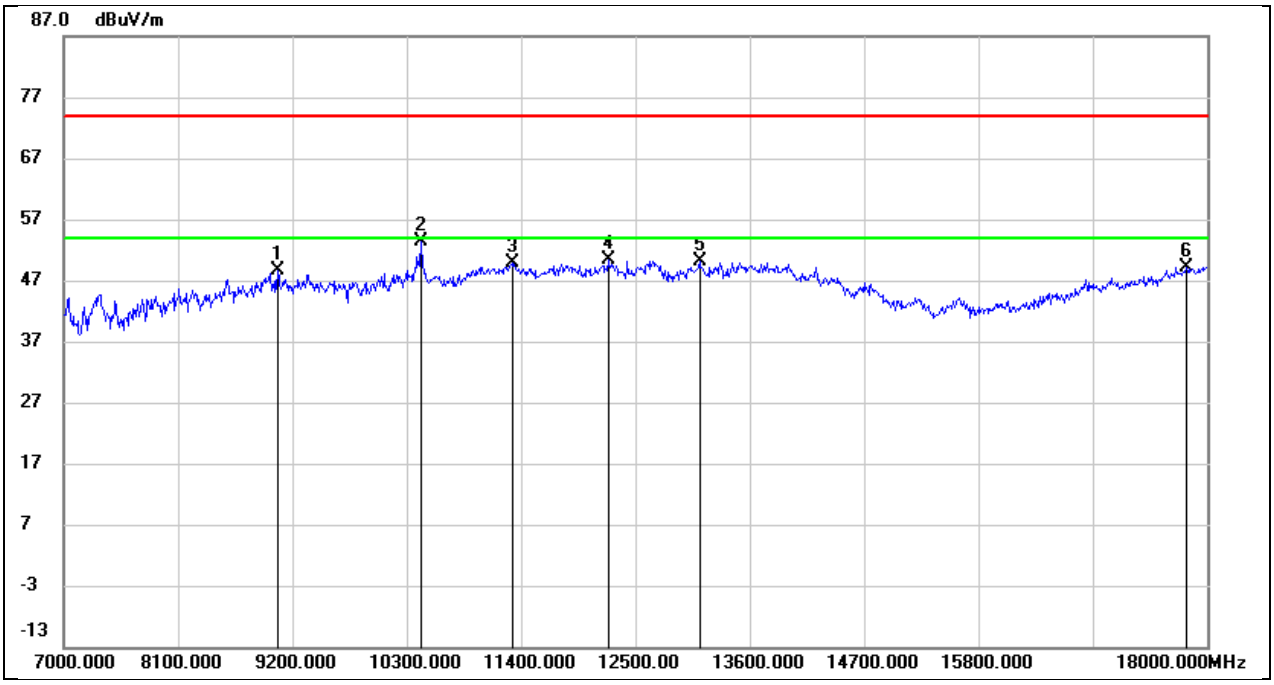
Test Mode:	802.11n HT40	Frequency(MHz):	5795
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8991.000	36.17	11.73	47.90	74.00	-26.10	peak
2	10443.000	35.58	13.35	48.93	74.00	-25.07	peak
3	11312.000	33.11	16.03	49.14	74.00	-24.86	peak
4	12500.000	30.84	18.56	49.40	74.00	-24.60	peak
5	13556.000	28.45	21.41	49.86	74.00	-24.14	peak
6	17934.000	23.02	26.69	49.71	74.00	-24.29	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

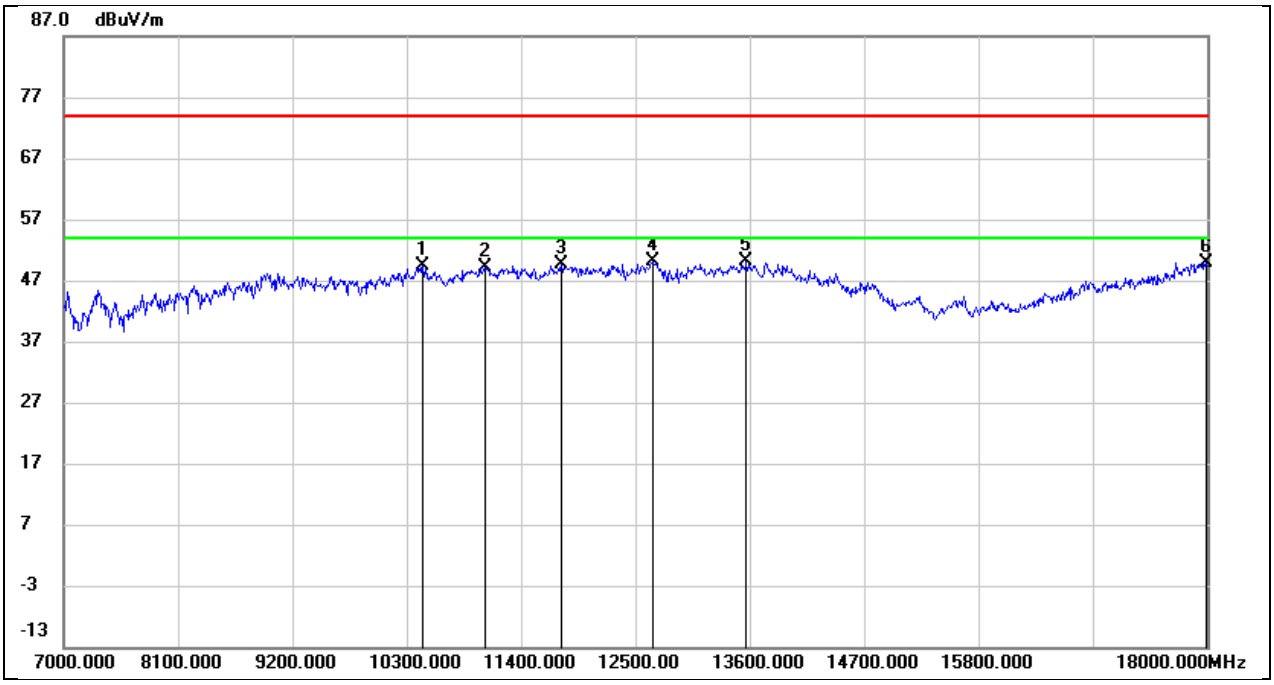
Test Mode:	802.11ac VHT80	Frequency(MHz):	5210
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9057.000	37.26	11.35	48.61	74.00	-25.39	peak
2	10432.000	40.13	13.31	53.44	74.00	-20.56	peak
3	11312.000	33.86	16.03	49.89	74.00	-24.11	peak
4	12236.000	31.61	18.66	50.27	74.00	-23.73	peak
5	13116.000	30.37	19.64	50.01	74.00	-23.99	peak
6	17802.000	23.02	26.13	49.15	74.00	-24.85	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

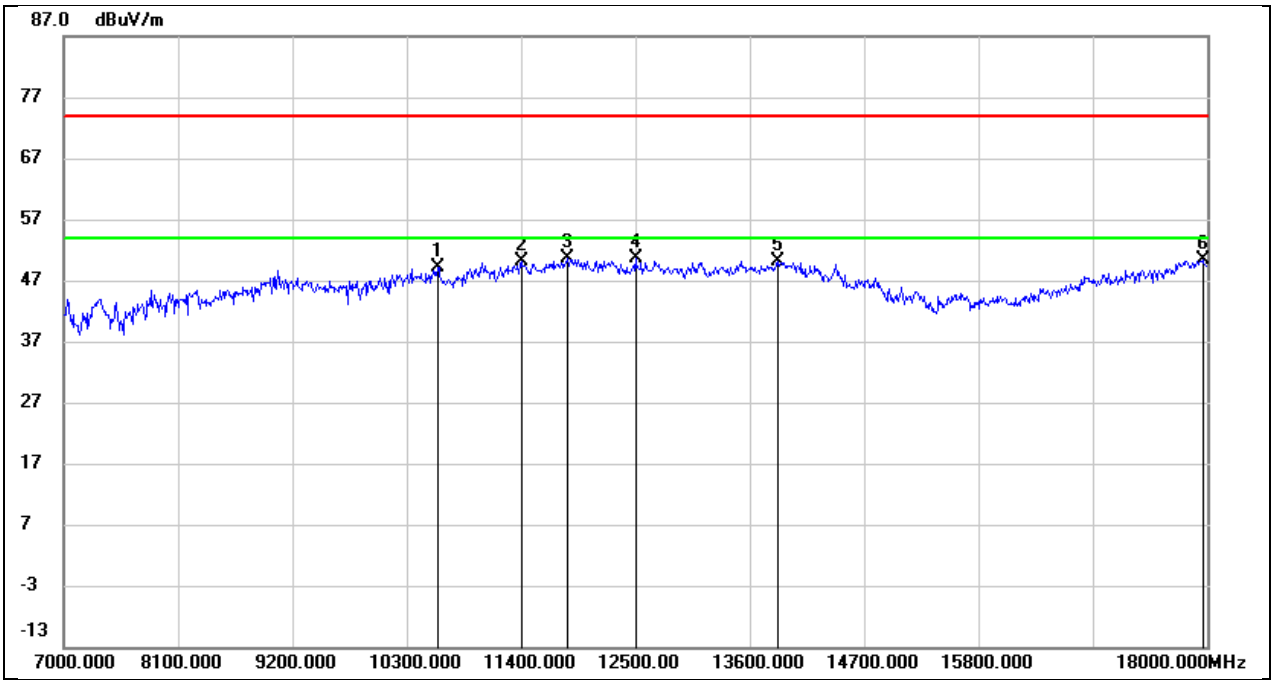
Test Mode:	802.11ac VHT80	Frequency(MHz):	5210
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10454.000	35.89	13.38	49.27	74.00	-24.73	peak
2	11059.000	34.23	15.02	49.25	74.00	-24.75	peak
3	11785.000	32.01	17.52	49.53	74.00	-24.47	peak
4	12665.000	31.61	18.48	50.09	74.00	-23.91	peak
5	13567.000	28.69	21.41	50.10	74.00	-23.90	peak
6	17989.000	22.93	26.92	49.85	74.00	-24.15	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

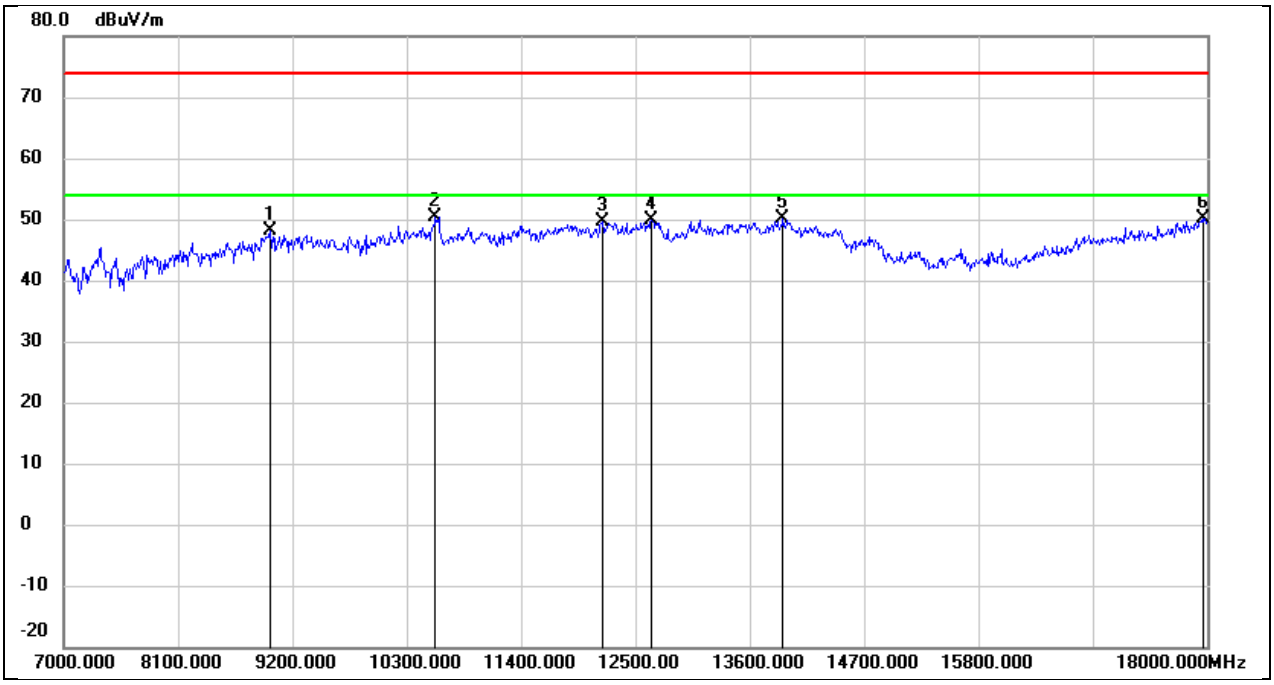
Test Mode:	802.11ac VHT80	Frequency(MHz):	5290
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	10597.000	35.31	13.77	49.08	74.00	-24.92	peak
2	11400.000	33.54	16.57	50.11	74.00	-23.89	peak
3	11851.000	32.74	17.83	50.57	74.00	-23.43	peak
4	12500.000	32.05	18.56	50.61	74.00	-23.39	peak
5	13864.000	27.77	22.45	50.22	74.00	-23.78	peak
6	17956.000	23.52	26.78	50.30	74.00	-23.70	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

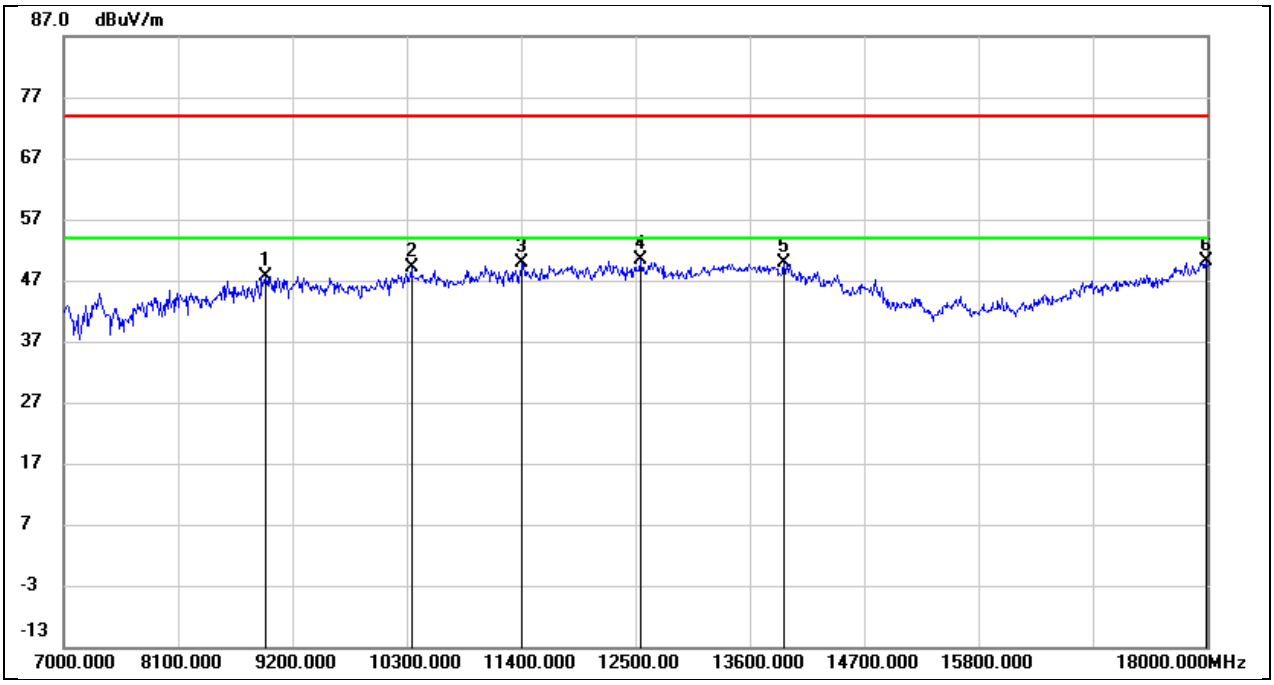
Test Mode:	802.11ac VHT80	Frequency(MHz):	5290
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8991.000	36.45	11.73	48.18	74.00	-25.82	peak
2	10575.000	36.64	13.70	50.34	74.00	-23.66	peak
3	12181.000	31.05	18.58	49.63	74.00	-24.37	peak
4	12654.000	31.36	18.44	49.80	74.00	-24.20	peak
5	13919.000	27.63	22.49	50.12	74.00	-23.88	peak
6	17956.000	23.39	26.78	50.17	74.00	-23.83	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

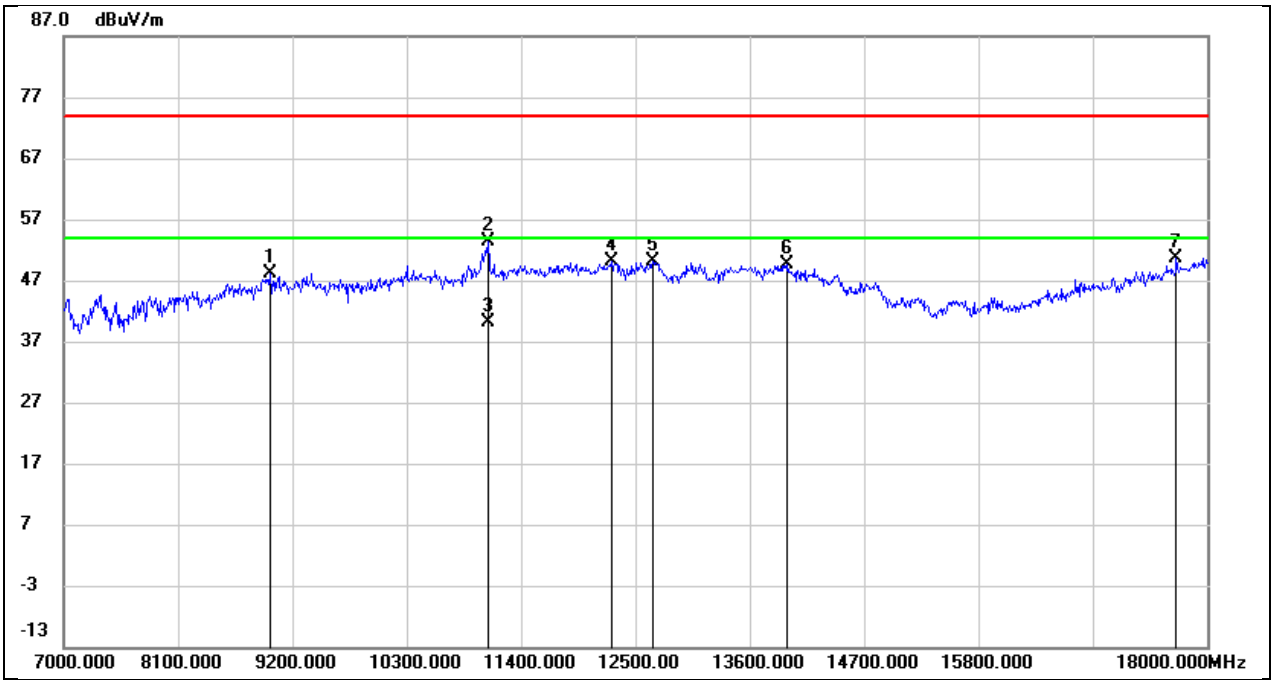
Test Mode:	802.11ac VHT80	Frequency(MHz):	5530
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8936.000	36.83	10.91	47.74	74.00	-26.26	peak
2	10344.000	36.03	12.98	49.01	74.00	-24.99	peak
3	11411.000	33.25	16.60	49.85	74.00	-24.15	peak
4	12544.000	31.99	18.46	50.45	74.00	-23.55	peak
5	13930.000	27.30	22.50	49.80	74.00	-24.20	peak
6	17989.000	23.29	26.92	50.21	74.00	-23.79	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

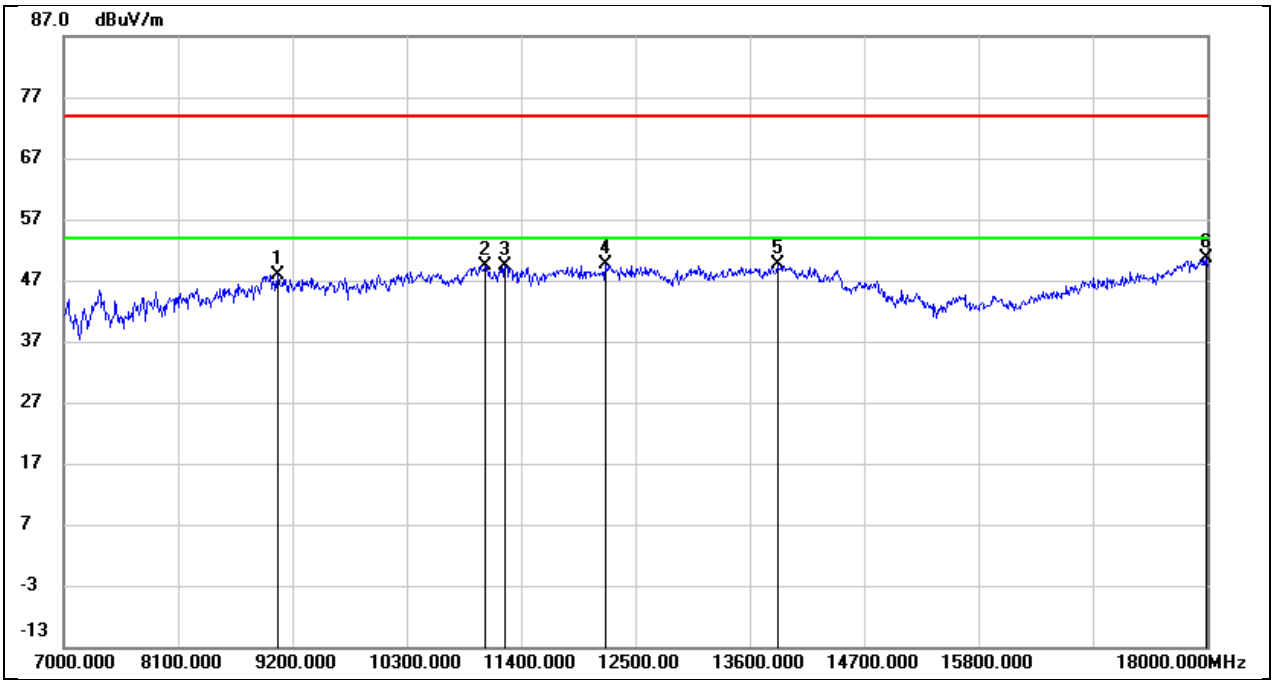
Test Mode:	802.11ac VHT80	Frequency(MHz):	5530
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8980.000	36.53	11.57	48.10	74.00	-25.90	peak
2	11081.000	38.19	15.08	53.27	74.00	-20.73	peak
3	11081.000	25.12	15.08	40.20	54.00	-13.80	AVG
4	12269.000	31.32	18.72	50.04	74.00	-23.96	peak
5	12665.000	31.74	18.48	50.22	74.00	-23.78	peak
6	13963.000	27.14	22.51	49.65	74.00	-24.35	peak
7	17703.000	25.59	25.01	50.60	74.00	-23.40	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

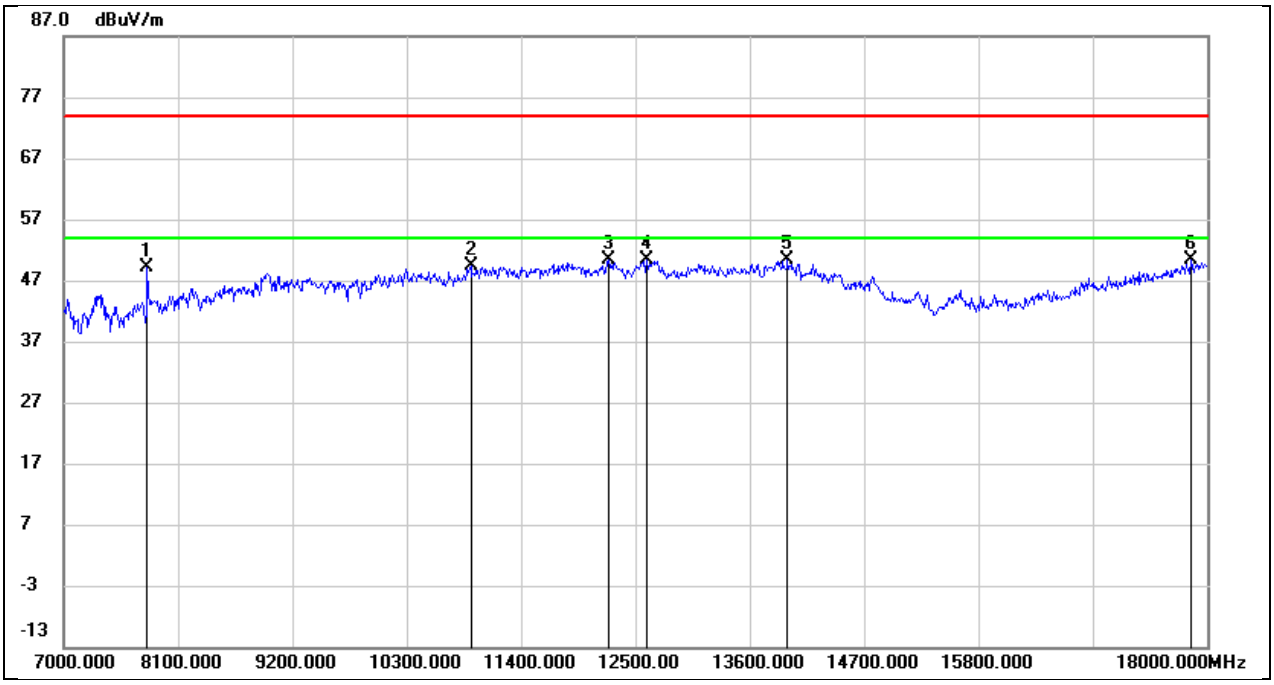
Test Mode:	802.11ac VHT80	Frequency(MHz):	5610
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9057.000	36.50	11.35	47.85	74.00	-26.15	peak
2	11059.000	34.26	15.02	49.28	74.00	-24.72	peak
3	11246.000	33.81	15.62	49.43	74.00	-24.57	peak
4	12214.000	30.91	18.61	49.52	74.00	-24.48	peak
5	13864.000	27.24	22.45	49.69	74.00	-24.31	peak
6	17989.000	23.73	26.92	50.65	74.00	-23.35	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

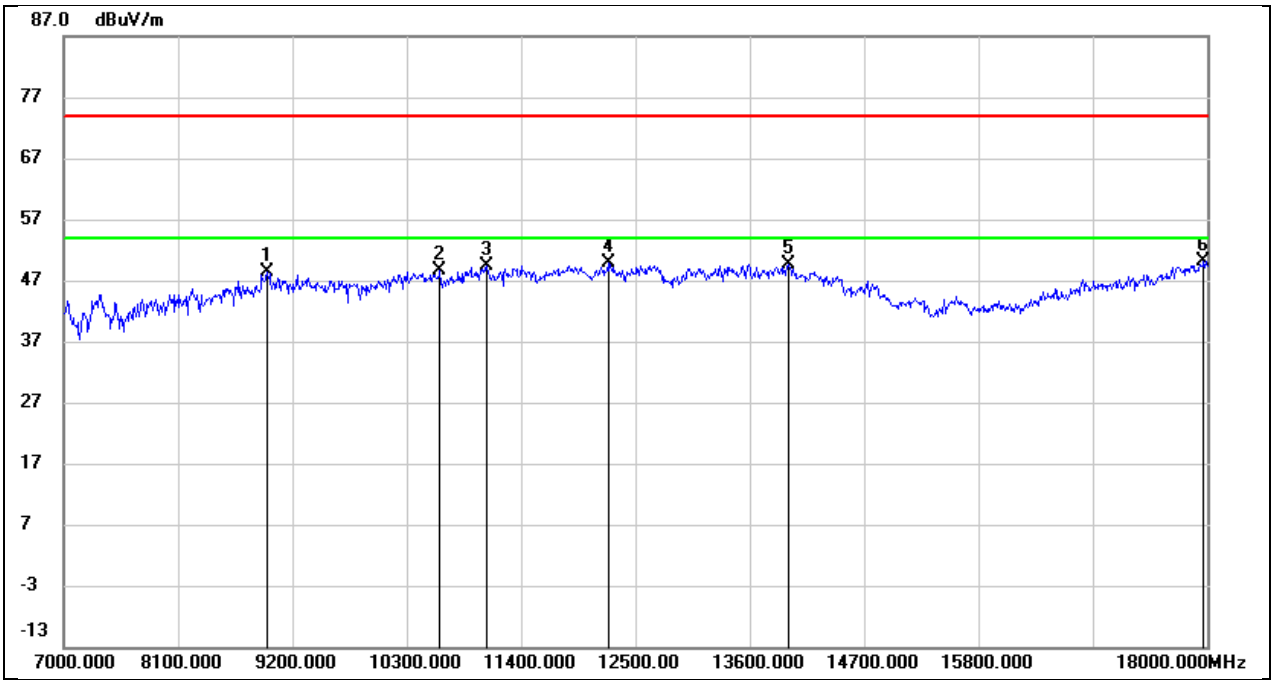
Test Mode:	802.11ac VHT80	Frequency(MHz):	5610
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	7803.000	42.39	6.84	49.23	74.00	-24.77	peak
2	10916.000	34.81	14.45	49.26	74.00	-24.74	peak
3	12247.000	31.76	18.68	50.44	74.00	-23.56	peak
4	12610.000	32.00	18.34	50.34	74.00	-23.66	peak
5	13963.000	27.98	22.51	50.49	74.00	-23.51	peak
6	17846.000	23.94	26.32	50.26	74.00	-23.74	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

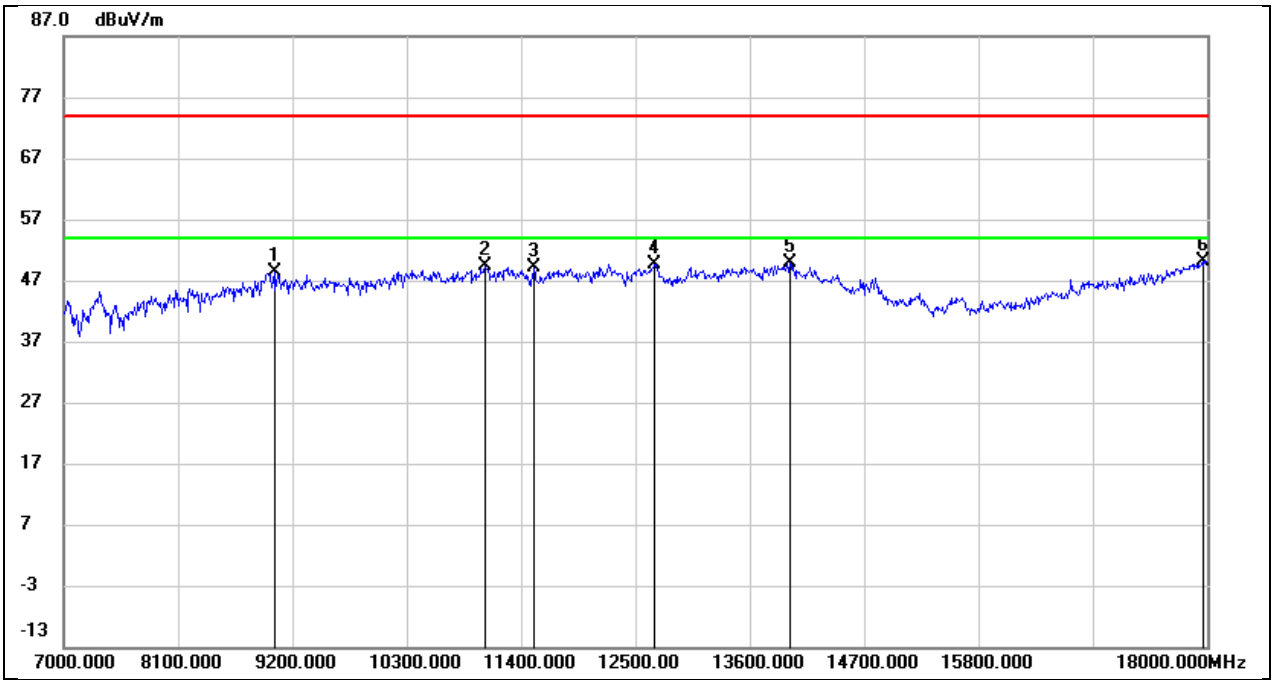
Test Mode:	802.11ac VHT80	Frequency(MHz):	5690
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8958.000	37.13	11.24	48.37	74.00	-25.63	peak
2	10619.000	34.88	13.78	48.66	74.00	-25.34	peak
3	11070.000	34.43	15.04	49.47	74.00	-24.53	peak
4	12236.000	31.28	18.66	49.94	74.00	-24.06	peak
5	13974.000	27.02	22.53	49.55	74.00	-24.45	peak
6	17967.000	23.38	26.83	50.21	74.00	-23.79	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

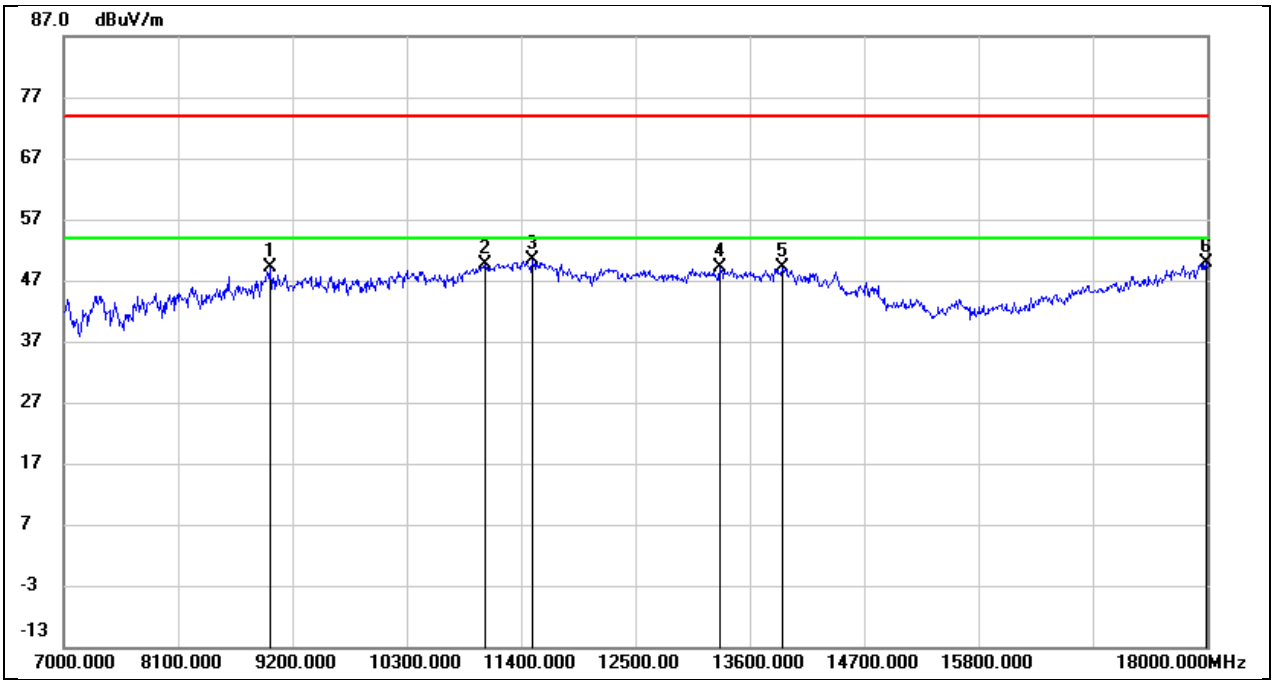
Test Mode:	802.11ac VHT80	Frequency(MHz):	5690
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9024.000	36.70	11.65	48.35	74.00	-25.65	peak
2	11048.000	34.44	14.99	49.43	74.00	-24.57	peak
3	11521.000	32.12	16.92	49.04	74.00	-24.96	peak
4	12687.000	31.19	18.53	49.72	74.00	-24.28	peak
5	13985.000	27.24	22.53	49.77	74.00	-24.23	peak
6	17956.000	23.28	26.78	50.06	74.00	-23.94	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

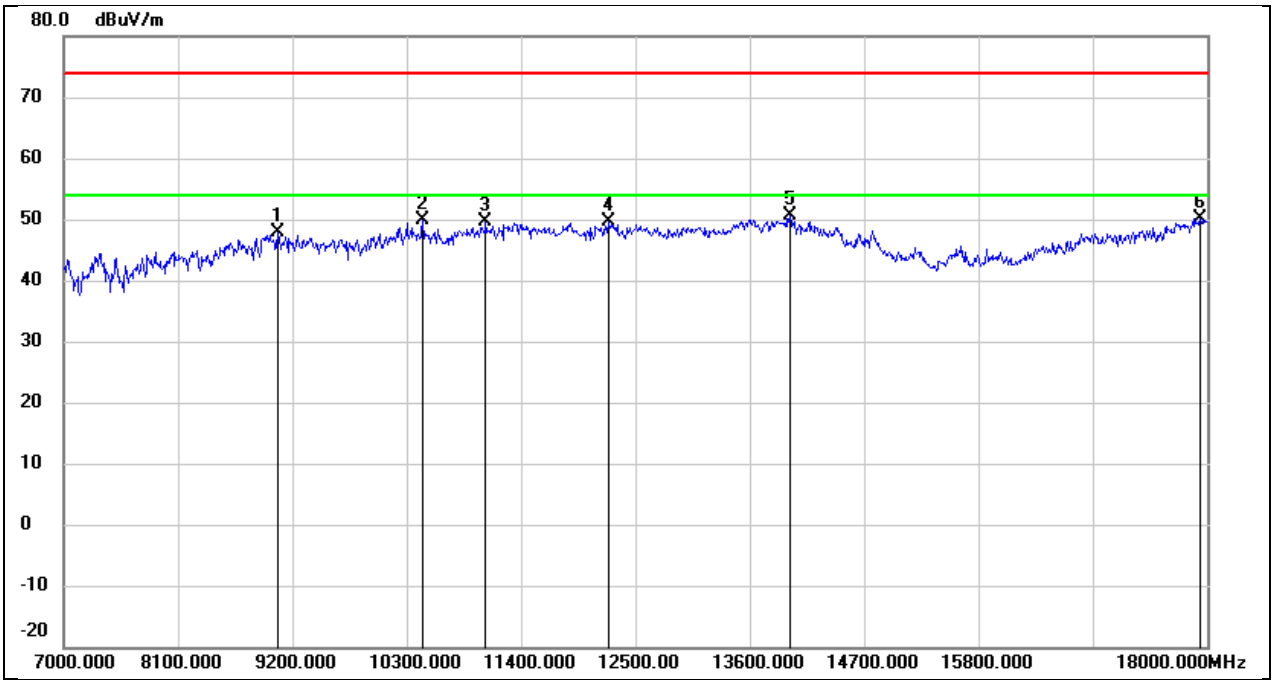
Test Mode:	802.11ac VHT80	Frequency(MHz):	5775
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	8980.000	37.57	11.57	49.14	74.00	-24.86	peak
2	11048.000	34.58	14.99	49.57	74.00	-24.43	peak
3	11510.000	33.49	16.90	50.39	74.00	-23.61	peak
4	13314.000	28.42	20.64	49.06	74.00	-24.94	peak
5	13919.000	26.64	22.49	49.13	74.00	-24.87	peak
6	17989.000	22.87	26.92	49.79	74.00	-24.21	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11ac VHT80	Frequency(MHz):	5775
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz

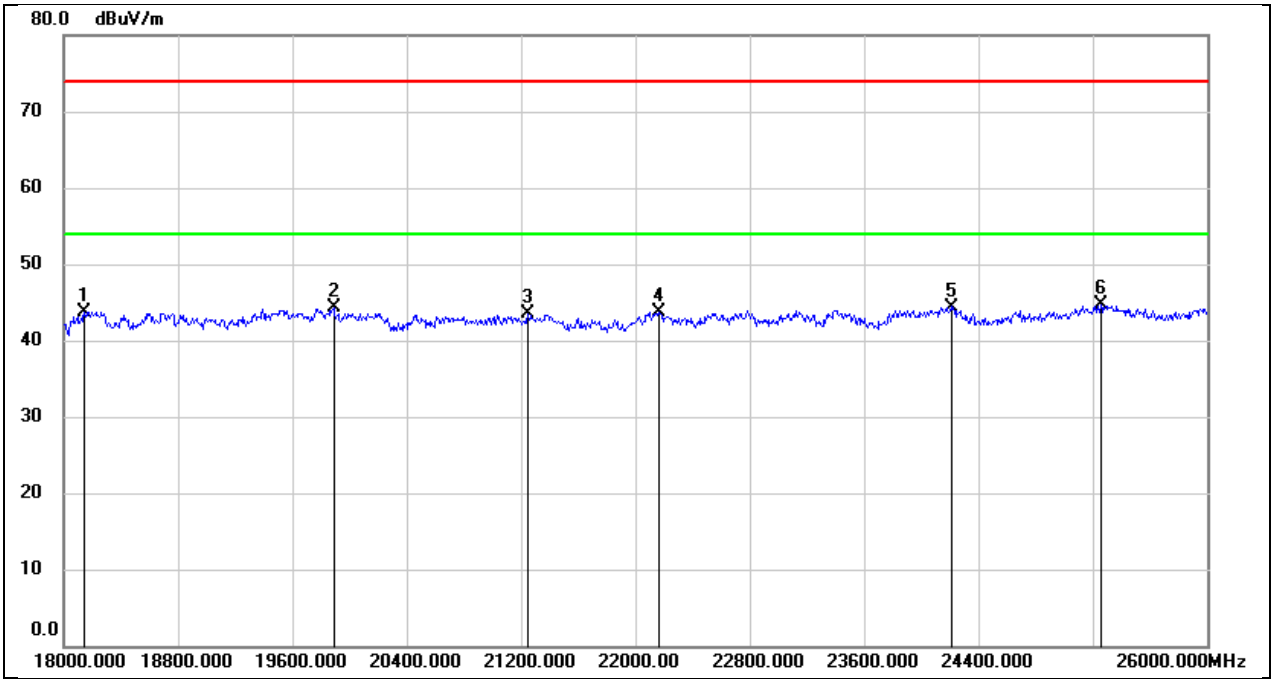


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	9057.000	36.50	11.35	47.85	74.00	-26.15	peak
2	10454.000	36.42	13.38	49.80	74.00	-24.20	peak
3	11059.000	34.51	15.02	49.53	74.00	-24.47	peak
4	12236.000	30.98	18.66	49.64	74.00	-24.36	peak
5	13985.000	28.03	22.53	50.56	74.00	-23.44	peak
6	17934.000	23.46	26.69	50.15	74.00	-23.85	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.4. SPURIOUS EMISSIONS(18 GHZ~26 GHZ)

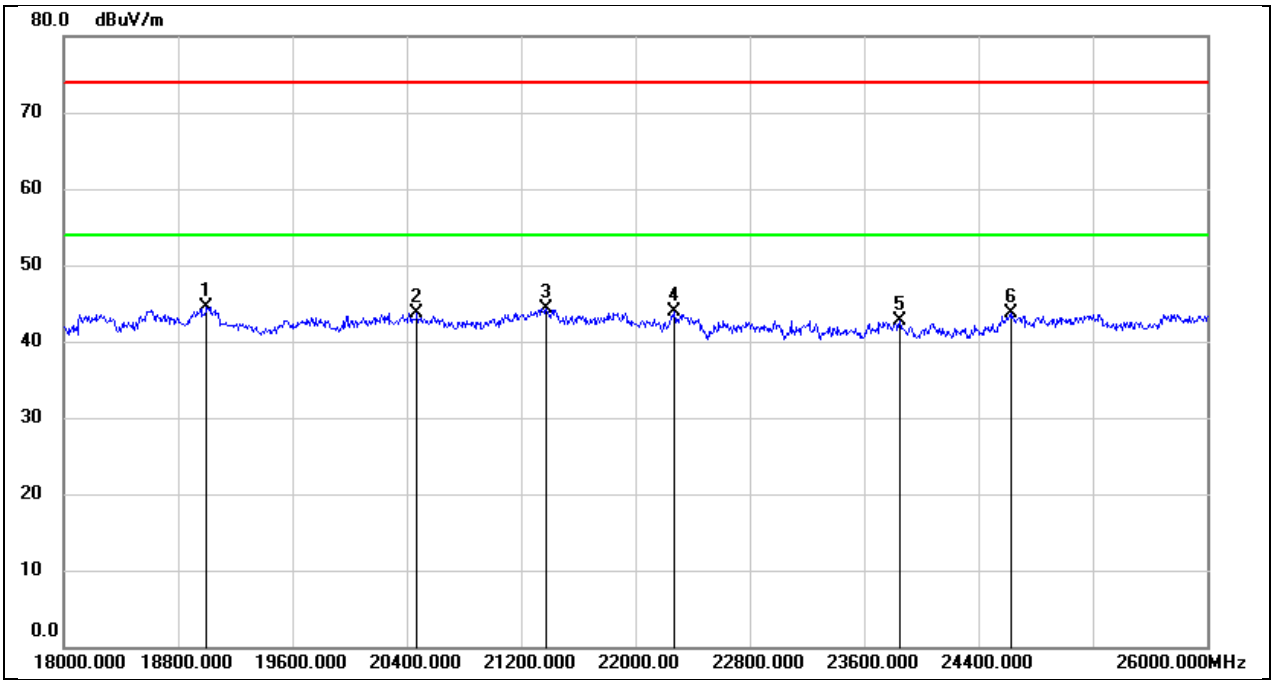
Test Mode:	802.11a 20	Frequency(MHz):	5180
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18144.000	49.27	-5.48	43.79	74.00	-30.21	peak
2	19888.000	49.57	-5.36	44.21	74.00	-29.79	peak
3	21248.000	48.29	-4.77	43.52	74.00	-30.48	peak
4	22160.000	48.08	-4.31	43.77	74.00	-30.23	peak
5	24208.000	47.21	-2.81	44.40	74.00	-29.60	peak
6	25256.000	46.29	-1.67	44.62	74.00	-29.38	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11a 20	Frequency(MHz):	5180
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz

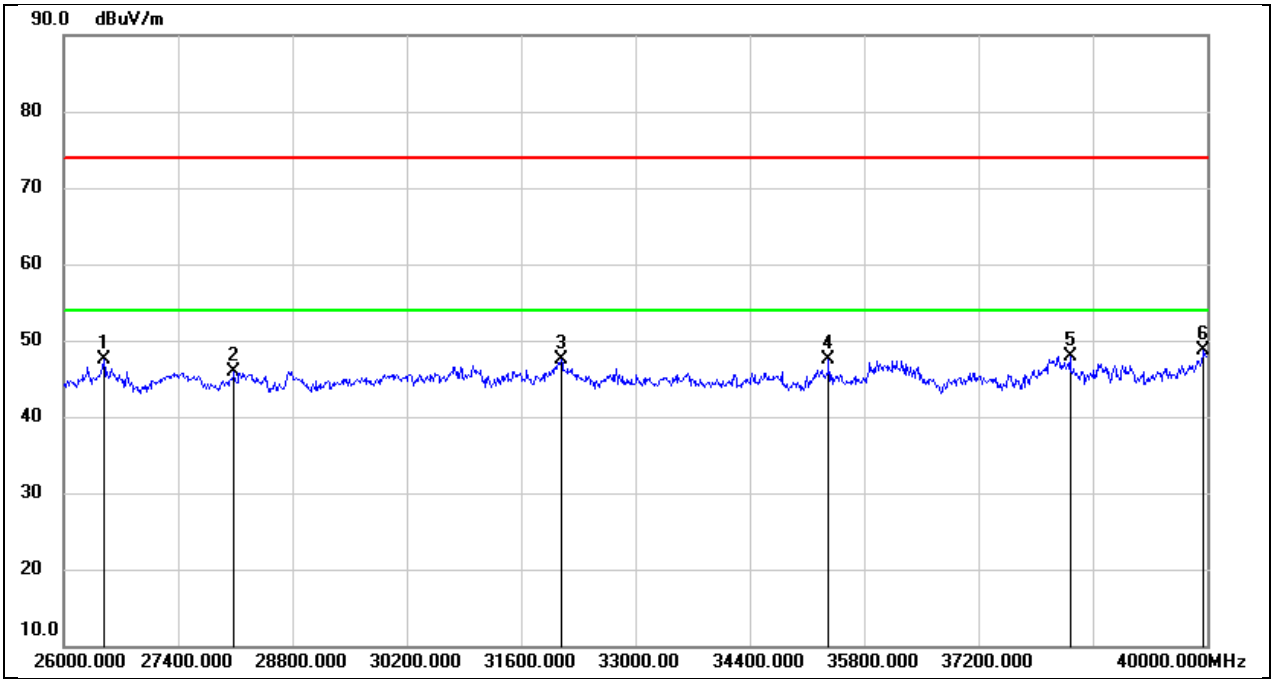


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	19000.000	49.70	-5.22	44.48	74.00	-29.52	peak
2	20472.000	49.07	-5.39	43.68	74.00	-30.32	peak
3	21376.000	48.99	-4.73	44.26	74.00	-29.74	peak
4	22272.000	48.08	-4.20	43.88	74.00	-30.12	peak
5	23848.000	45.68	-3.03	42.65	74.00	-31.35	peak
6	24624.000	45.99	-2.33	43.66	74.00	-30.34	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.5. SPURIOUS EMISSIONS(26 GHZ~40 GHZ)

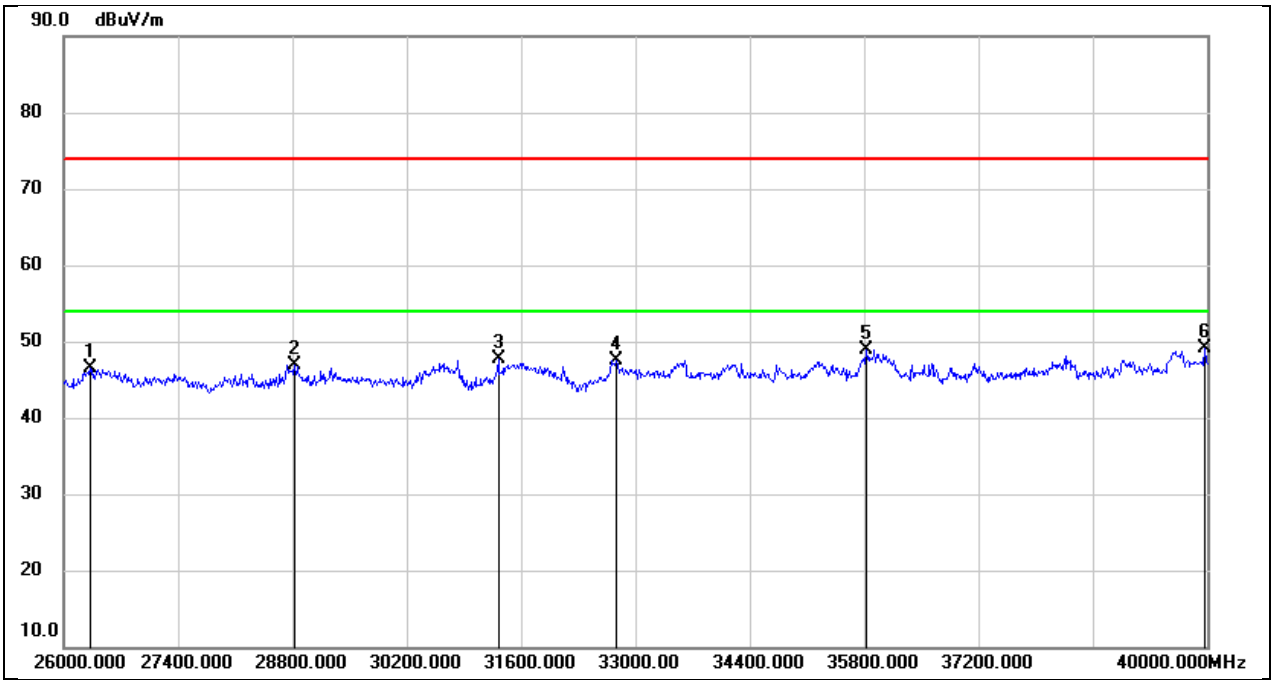
Test Mode:	802.11a 20	Frequency(MHz):	5180
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26490.000	52.29	-4.74	47.55	74.00	-26.45	peak
2	28086.000	49.41	-3.49	45.92	74.00	-28.08	peak
3	32090.000	49.23	-1.80	47.43	74.00	-26.57	peak
4	35366.000	44.90	2.59	47.49	74.00	-26.51	peak
5	38320.000	44.06	3.77	47.83	74.00	-26.17	peak
6	39958.000	43.58	5.12	48.70	74.00	-25.30	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11a 20	Frequency(MHz):	5180
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz

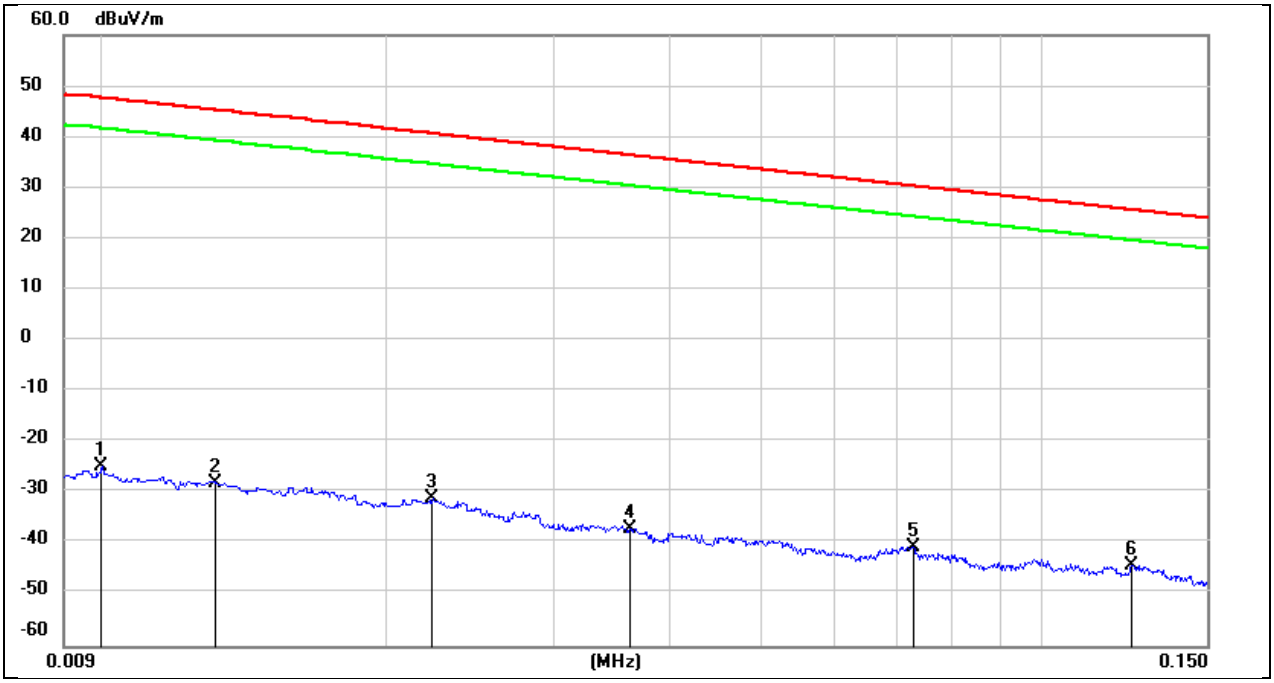


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	26322.000	51.62	-5.18	46.44	74.00	-27.56	peak
2	28828.000	47.63	-0.79	46.84	74.00	-27.16	peak
3	31320.000	48.61	-0.93	47.68	74.00	-26.32	peak
4	32762.000	48.78	-1.21	47.57	74.00	-26.43	peak
5	35828.000	45.25	3.67	48.92	74.00	-25.08	peak
6	39972.000	43.95	5.13	49.08	74.00	-24.92	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.6. SPURIOUS EMISSIONS(9 KHZ~30 MHZ)

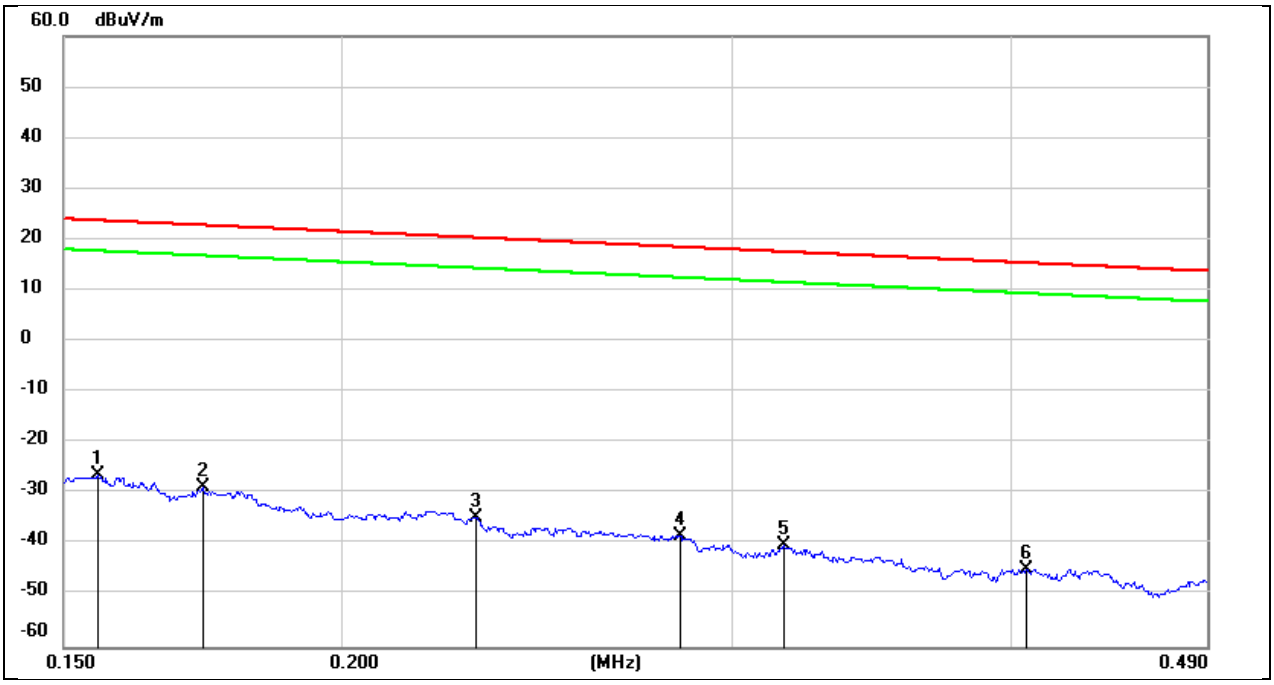
Test Mode:	802.11a20	Frequency(MHz):	5180
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0100	76.72	-101.40	-24.68	47.60	-72.28	peak
2	0.0131	73.45	-101.38	-27.93	45.25	-73.18	peak
3	0.0223	70.36	-101.35	-30.99	40.63	-71.62	peak
4	0.0362	64.51	-101.42	-36.91	36.43	-73.34	peak
5	0.0728	60.99	-101.58	-40.59	30.36	-70.95	peak
6	0.1246	57.39	-101.72	-44.33	25.70	-70.03	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

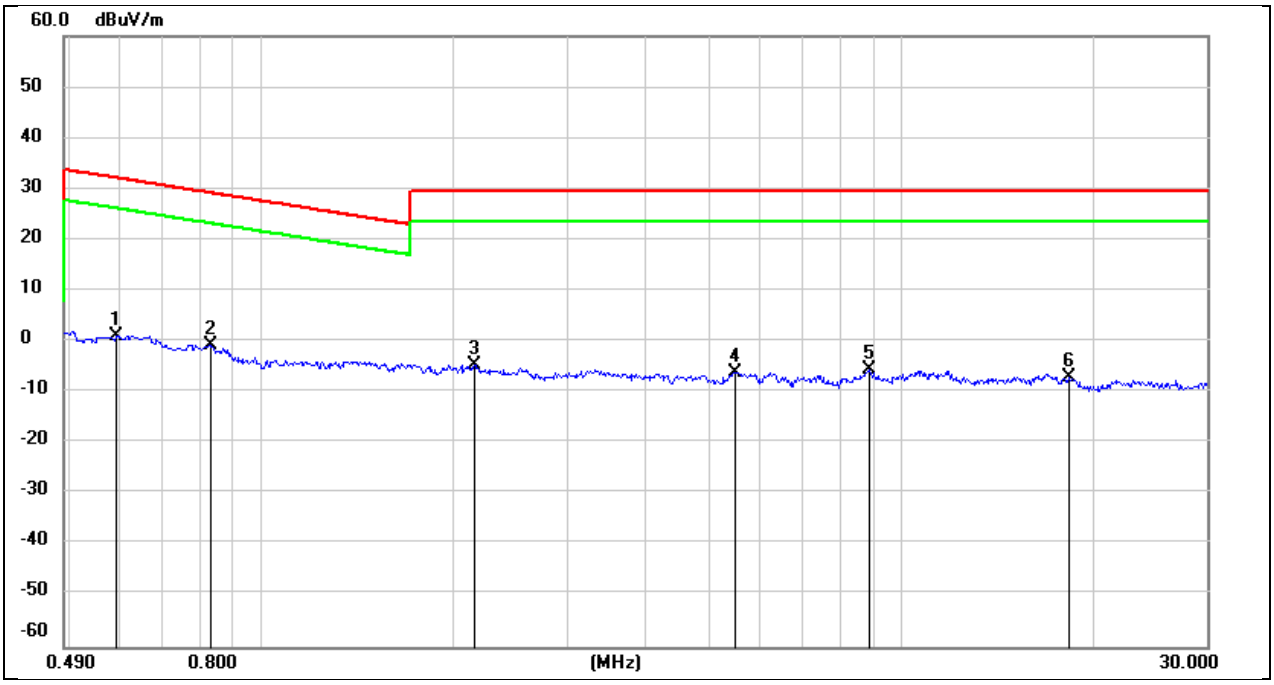
Test Mode:	802.11a20	Frequency(MHz):	5180
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.1554	75.27	-101.65	-26.38	23.77	-50.15	peak
2	0.1733	72.92	-101.67	-28.75	22.83	-51.58	peak
3	0.2298	67.05	-101.77	-34.72	20.37	-55.09	peak
4	0.2837	63.72	-101.83	-38.11	18.54	-56.65	peak
5	0.3163	61.70	-101.87	-40.17	17.60	-57.77	peak
6	0.4062	57.14	-101.96	-44.82	15.43	-60.25	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11a20	Frequency(MHz):	5180
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz

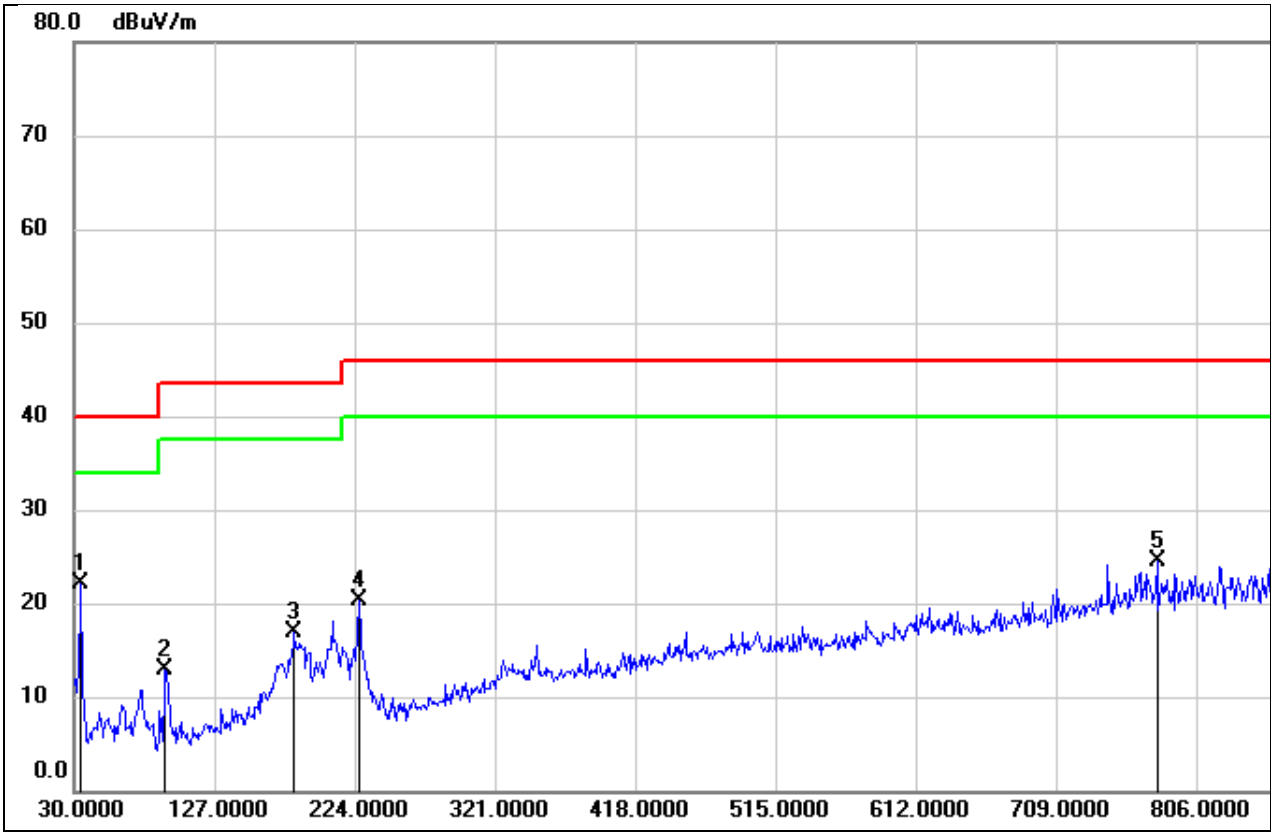


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.5917	63.24	-62.08	1.16	32.16	-31.00	peak
2	0.8296	61.44	-62.17	-0.73	29.23	-29.96	peak
3	2.1463	57.27	-61.79	-4.52	29.54	-34.06	peak
4	5.5066	55.39	-61.42	-6.03	29.54	-35.57	peak
5	8.9001	55.41	-60.95	-5.54	29.54	-35.08	peak
6	18.2545	53.93	-60.90	-6.97	29.54	-36.51	peak

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

8.7. SPURIOUS EMISSIONS(30 MHZ~1 GHZ)

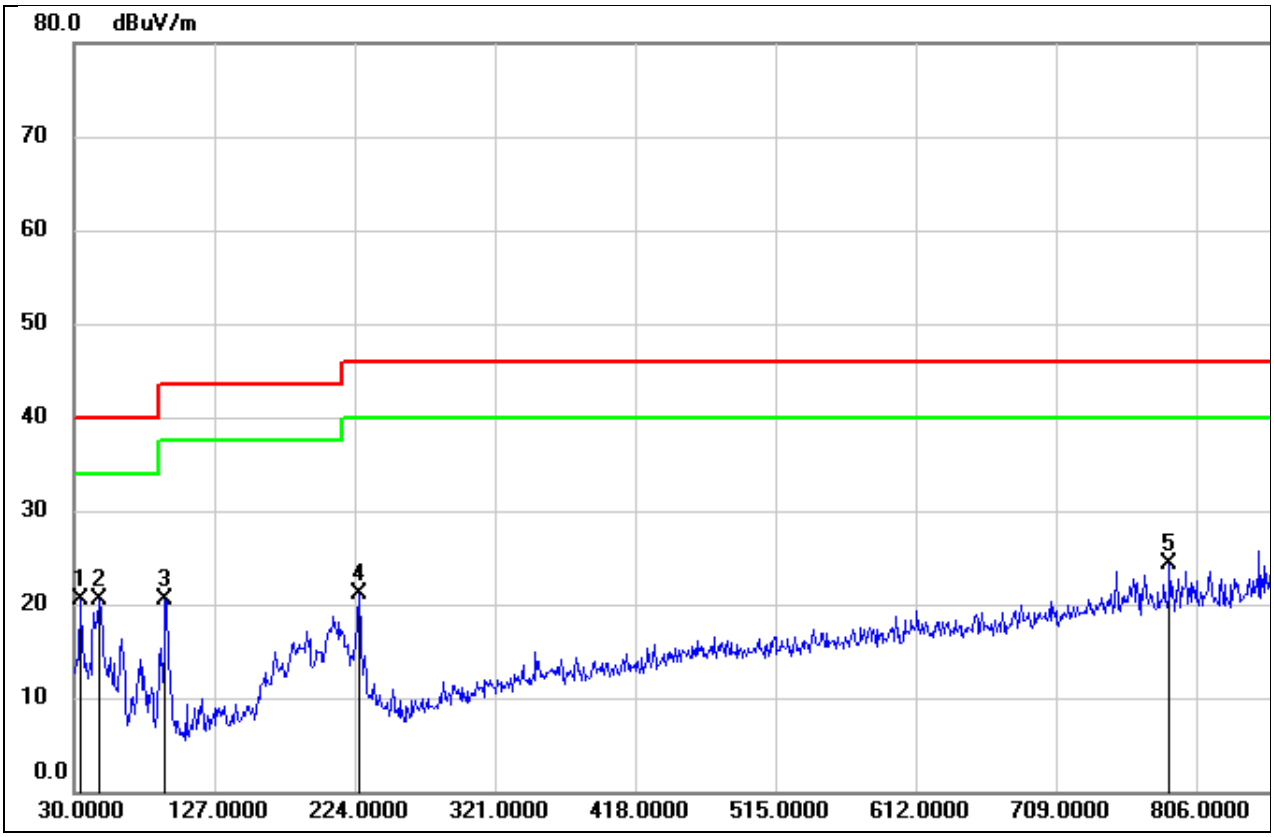
Test Mode:	802.11a 20	Frequency(MHz):	5180
Polarity:	Horizontal	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	34.8500	36.85	-14.75	22.10	40.00	-17.90	QP
2	93.0500	29.52	-16.71	12.81	43.50	-30.69	QP
3	182.2899	29.06	-12.06	17.00	43.50	-26.50	QP
4	226.9100	33.68	-13.32	20.36	46.00	-25.64	QP
5	778.8400	27.79	-3.24	24.55	46.00	-21.45	QP
6	900.0900	27.38	-1.34	26.04	46.00	-19.96	QP

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11a 20	Frequency(MHz):	5180
Polarity:	Vertical	Test Voltage:	AC 120V_60Hz



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	33.8800	35.09	-14.61	20.48	40.00	-19.52	QP
2	47.4600	35.91	-15.43	20.48	40.00	-19.52	QP
3	93.0500	37.23	-16.71	20.52	43.50	-22.98	QP
4	226.9100	34.49	-13.32	21.17	46.00	-24.83	QP
5	787.5700	27.52	-3.16	24.36	46.00	-21.64	QP
6	899.1200	27.17	-1.36	25.81	46.00	-20.19	QP

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

9. AC POWER LINE CONDUCTED EMISSION

LIMITS

Please refer to CFR 47 FCC §15.207 (a)

FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

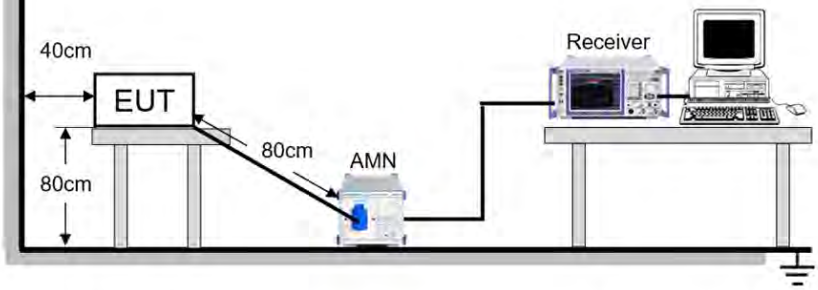
TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 6.2.

The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

TEST SETUP



TEST ENVIRONMENT

Temperature	23.6℃	Relative Humidity	56%

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

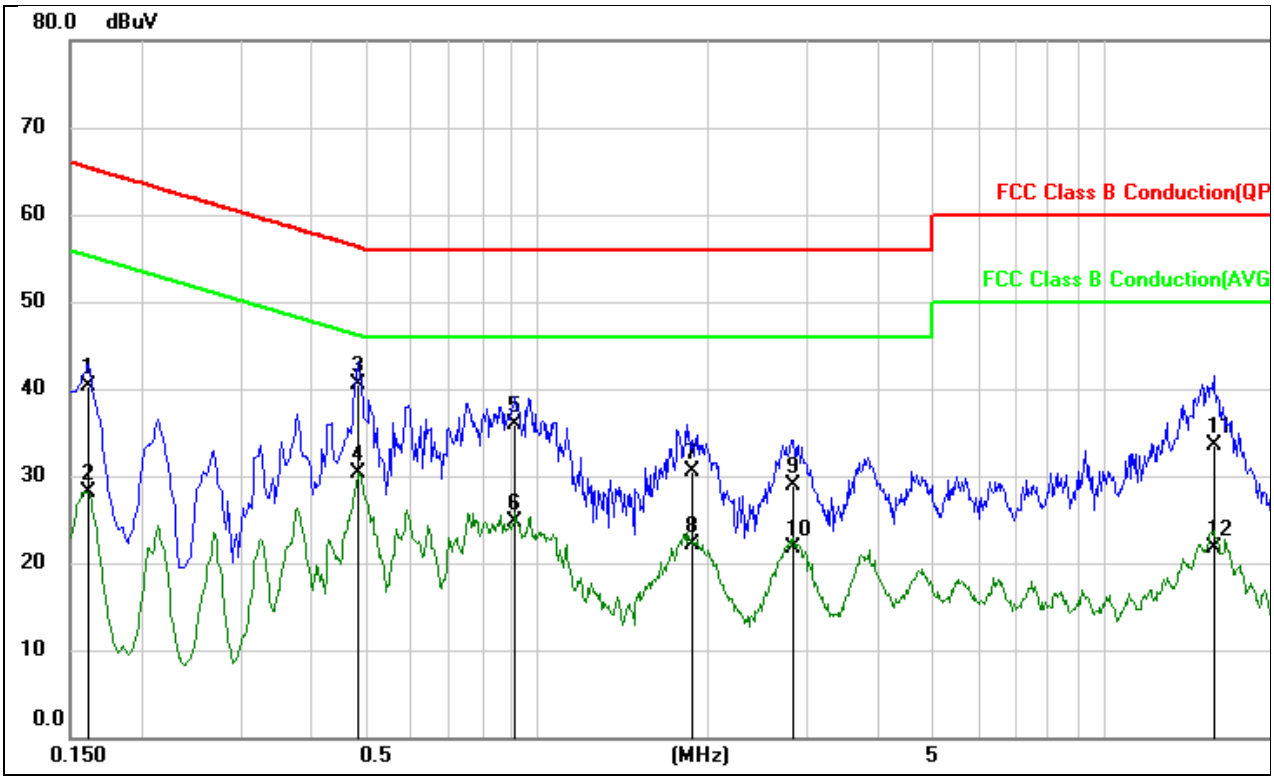
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

TEST DATE / ENGINEER

Test Date	May 15, 2024	Test By	James Qin

TEST RESULTS

Test Mode:	802.11a	Frequency(MHz):	5180
Line:	Line		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1609	30.05	10.32	40.37	65.42	-25.05	QP
2	0.1609	17.83	10.32	28.15	55.42	-27.27	AVG
3	0.4851	30.27	10.24	40.51	56.25	-15.74	QP
4	0.4851	20.08	10.24	30.32	46.25	-15.93	AVG
5	0.9140	25.74	10.09	35.83	56.00	-20.17	QP
6	0.9140	14.60	10.09	24.69	46.00	-21.31	AVG
7	1.8700	20.59	9.95	30.54	56.00	-25.46	QP
8	1.8700	12.07	9.95	22.02	46.00	-23.98	AVG
9	2.8265	18.89	10.05	28.94	56.00	-27.06	QP
10	2.8265	11.74	10.05	21.79	46.00	-24.21	AVG
11	15.5608	22.95	10.57	33.52	60.00	-26.48	QP
12	15.5608	11.16	10.57	21.73	50.00	-28.27	AVG

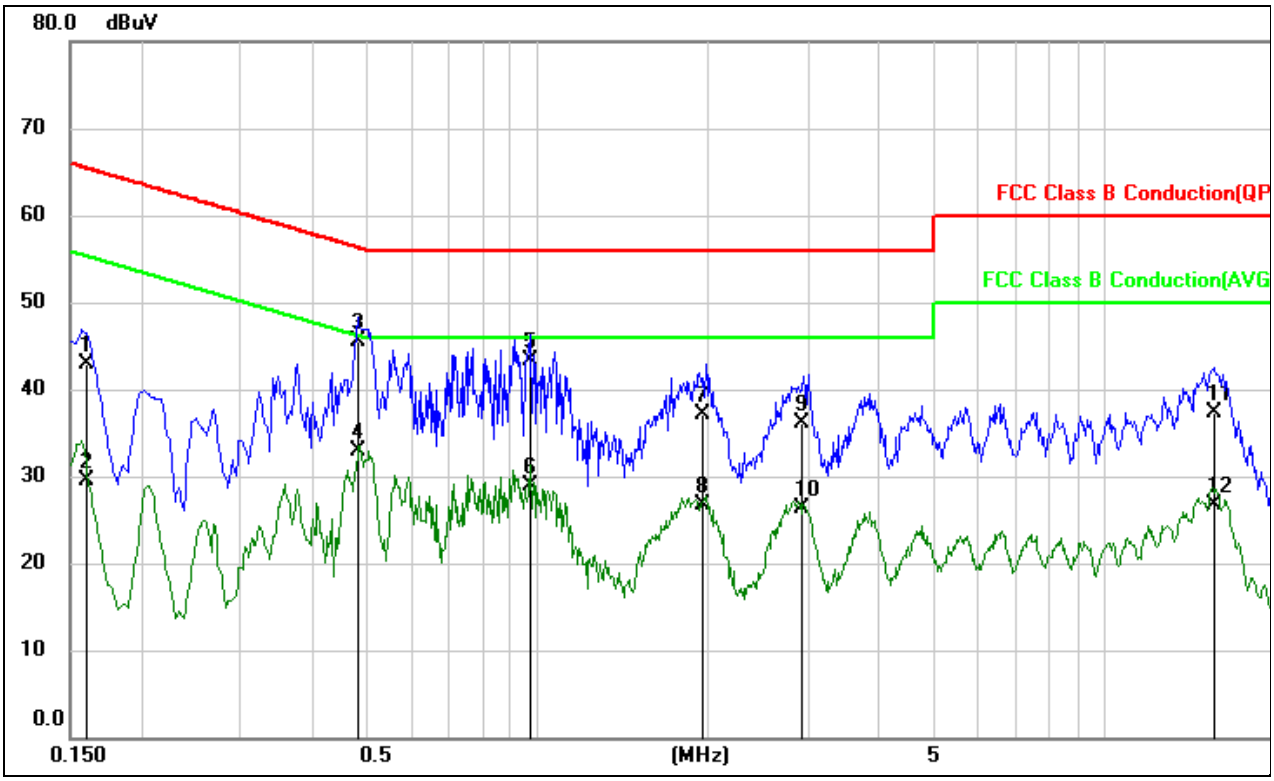
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Note:
1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes have been tested, only the worst data was recorded in the report.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Mode:	802.11a	Frequency(MHz):	5180
Line:	Neutral		



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1610	32.62	10.22	42.84	65.41	-22.57	QP
2	0.1610	19.32	10.22	29.54	55.41	-25.87	AVG
3	0.4840	35.51	10.05	45.56	56.27	-10.71	QP
4	0.4840	22.80	10.05	32.85	46.27	-13.42	AVG
5	0.9771	33.39	9.85	43.24	56.00	-12.76	QP
6	0.9771	19.06	9.85	28.91	46.00	-17.09	AVG
7	1.9555	27.07	10.03	37.10	56.00	-18.90	QP
8	1.9555	16.59	10.03	26.62	46.00	-19.38	AVG
9	2.9157	25.94	10.17	36.11	56.00	-19.89	QP
10	2.9157	16.14	10.17	26.31	46.00	-19.69	AVG
11	15.6142	26.54	10.68	37.22	60.00	-22.78	QP
12	15.6142	15.99	10.68	26.67	50.00	-23.33	AVG

Note:
1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

Note: All the modes have been tested, only the worst data was recorded in the report.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

10. ANTENNA REQUIREMENT

REQUIREMENT

Please refer to FCC part 15.203
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 shall be considered sufficient to comply with the provisions of this section. 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.

Please refer to FCC part 15.407(a)
For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DESCRIPTION

Pass

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11. TEST DATA

11.1. APPENDIX A: EMISSION BANDWIDTH

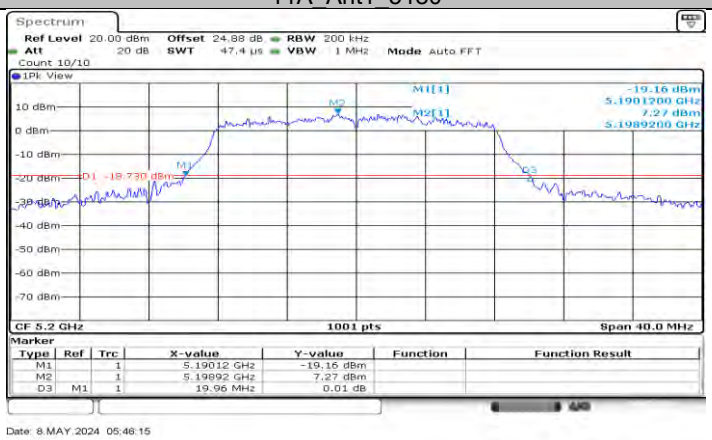
11.1.1. Test Result

Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]
11A	Ant1	5180	19.76	5170.04	5189.80
		5200	19.96	5190.12	5210.08
		5240	19.88	5229.92	5249.80
		5260	19.64	5250.28	5269.92
		5280	19.60	5270.24	5289.84
		5320	19.76	5310.04	5329.80
		5500	20.88	5489.24	5510.12
		5580	19.80	5570.04	5589.84
		5700	19.72	5690.24	5709.96
		5720	19.60	5710.28	5729.88
		5720_UNII-2C	14.72	5710.28	5725
		5720_UNII-3	4.88	5725	5729.88
		5745	19.88	5735.04	5754.92
		5785	20.56	5775.12	5795.68
		5825	19.72	5815.20	5834.92
11N20SISO	Ant1	5180	19.84	5169.96	5189.80
		5200	20.80	5189.28	5210.08
		5240	20.08	5230.04	5250.12
		5260	20.28	5249.80	5270.08
		5280	20.00	5269.92	5289.92
		5320	20.16	5309.96	5330.12
		5500	22.80	5487.40	5510.20
		5580	20.28	5569.88	5590.16
		5700	21.68	5689.72	5711.40
		5720	19.96	5709.96	5729.92
		5720_UNII-2C	15.04	5709.96	5725
		5720_UNII-3	4.92	5725	5729.92
		5745	20.00	5735.00	5755.00
		5785	20.04	5775.00	5795.04
		5825	19.96	5815.04	5835.00
11N40SISO	Ant1	5190	40.88	5169.52	5210.40
		5230	41.12	5209.52	5250.64
		5270	40.80	5249.68	5290.48
		5310	40.72	5289.60	5330.32
		5510	40.56	5489.68	5530.24
		5550	41.36	5529.20	5570.56
		5670	40.88	5649.44	5690.32
		5710	40.72	5689.52	5730.24
		5710_UNII-2C	35.48	5689.52	5725
		5710_UNII-3	5.24	5725	5730.24
		5755	41.20	5734.28	5775.48
		5795	41.20	5774.28	5815.48
11AC80SISO	Ant1	5210	81.28	5169.36	5250.64
		5290	81.28	5249.52	5330.80
		5530	81.60	5489.04	5570.64
		5610	81.44	5569.20	5650.64
		5690	81.76	5649.20	5730.96
		5690_UNII-2C	75.8	5649.20	5725
		5690_UNII-3	5.96	5725	5730.96
		5775	83.84	5731.96	5815.80

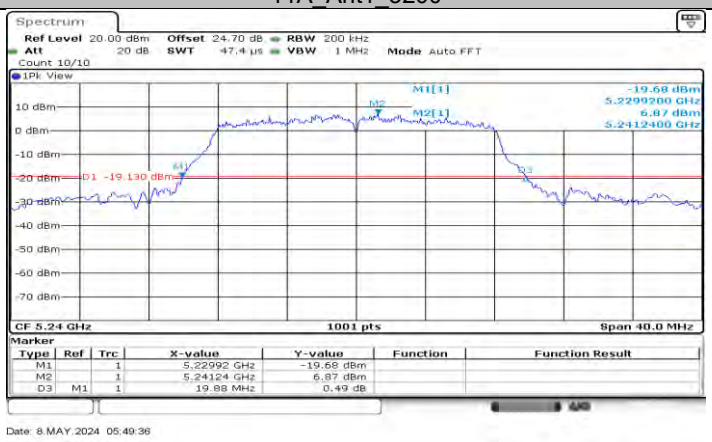
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.1.2. Test Graphs

11A_Ant1_5180

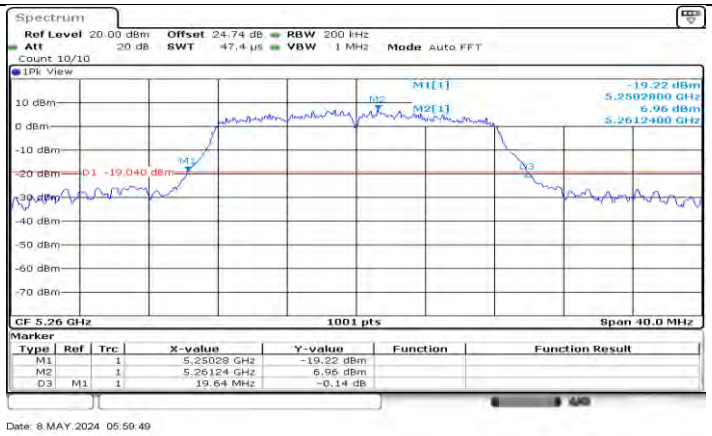


11A_Ant1_5200

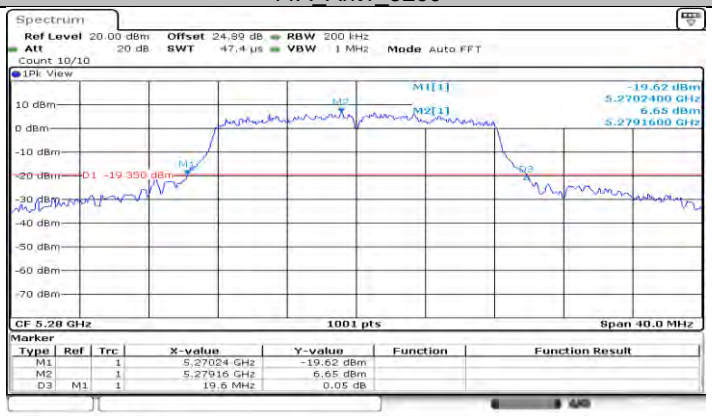


11A_Ant1_5240

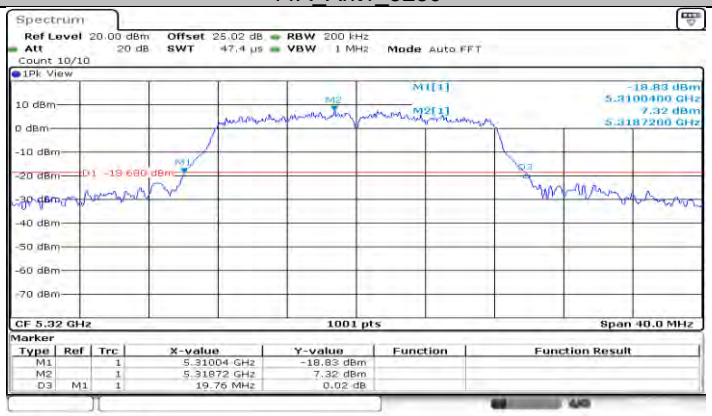
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11A_Ant1_5260

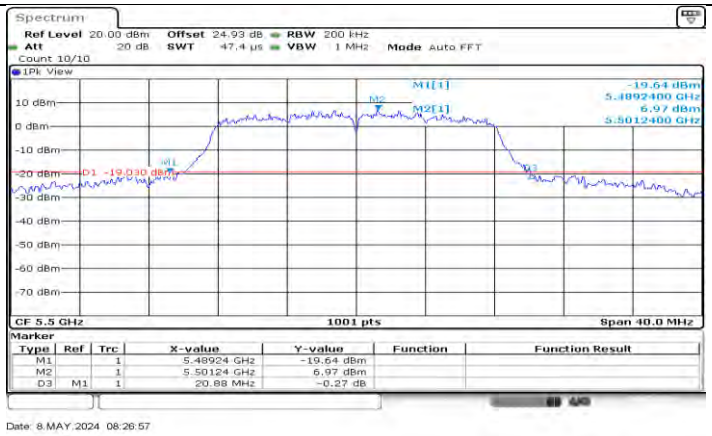


11A_Ant1_5280



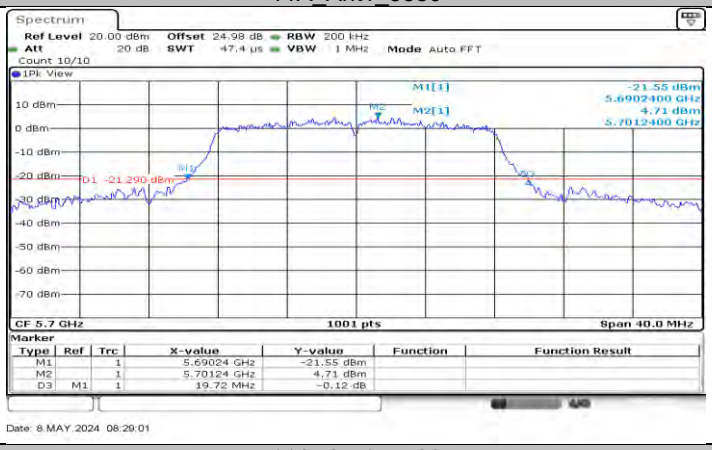
11A_Ant1_5320

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



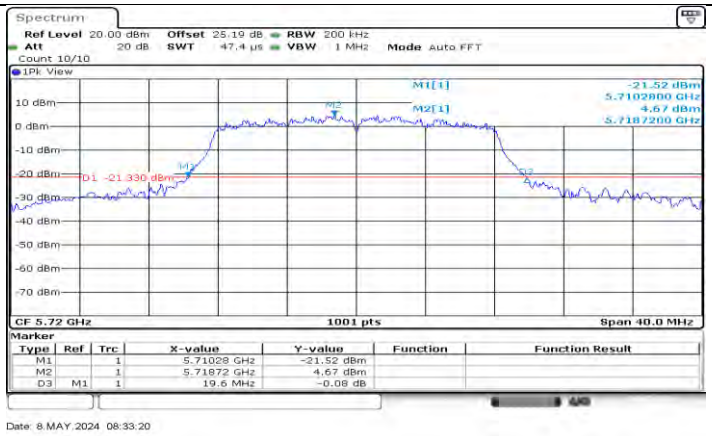
11A_Ant1_5500

11A_Ant1_5580

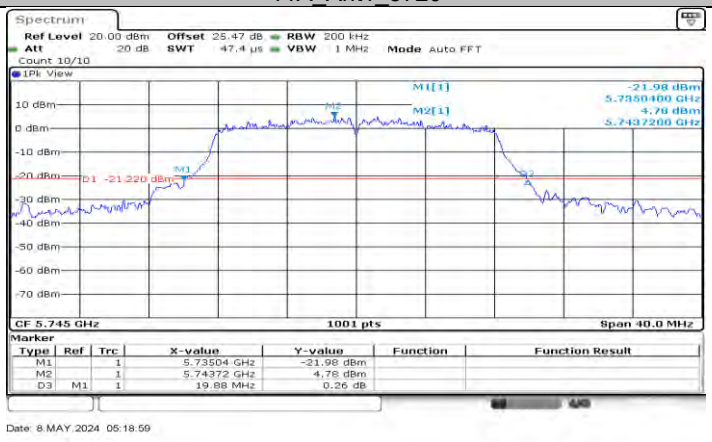


11A_Ant1_5700

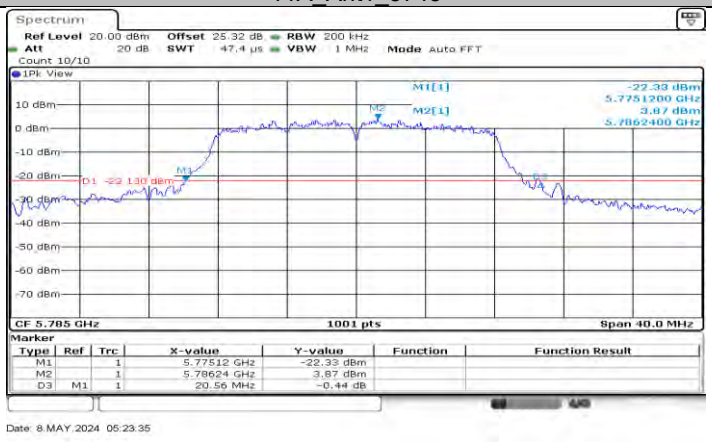
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11A_Ant1_5720

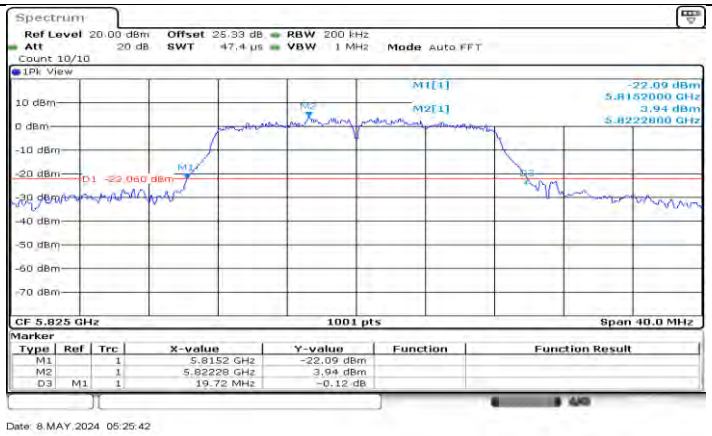


11A_Ant1_5745



11A_Ant1_5785

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

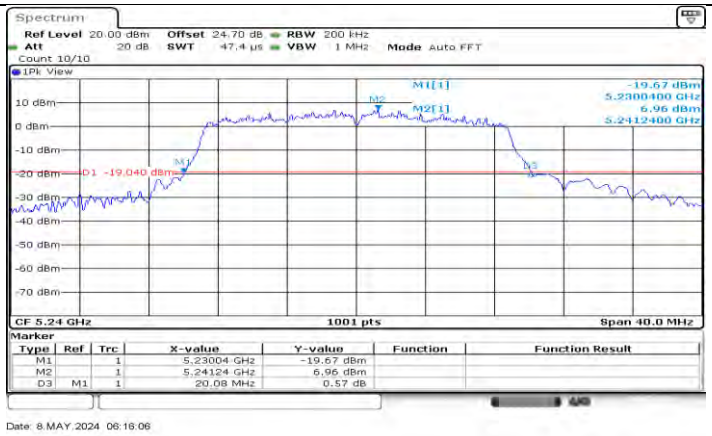


11A_Ant1_5825

11N20SISO_Ant1_5180

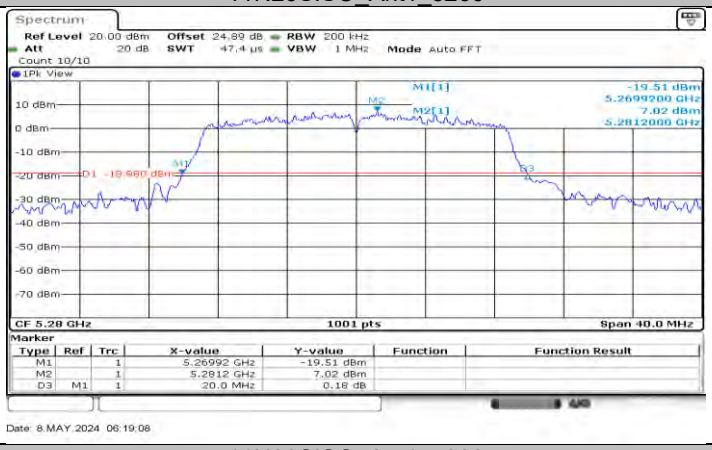
11N20SISO_Ant1_5200

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



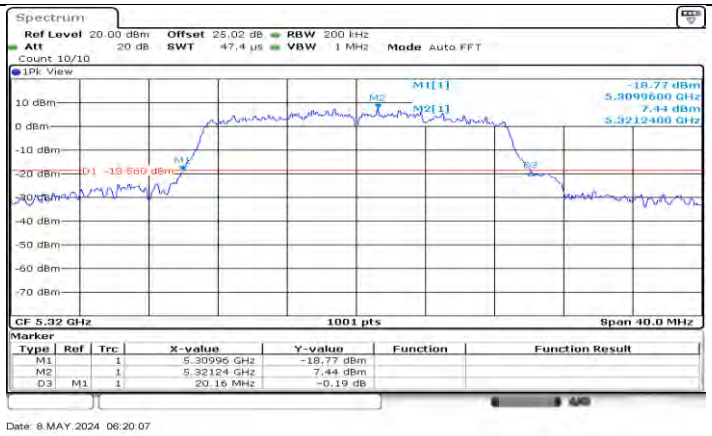
11N20SISO_Ant1_5240

11N20SISO_Ant1_5260



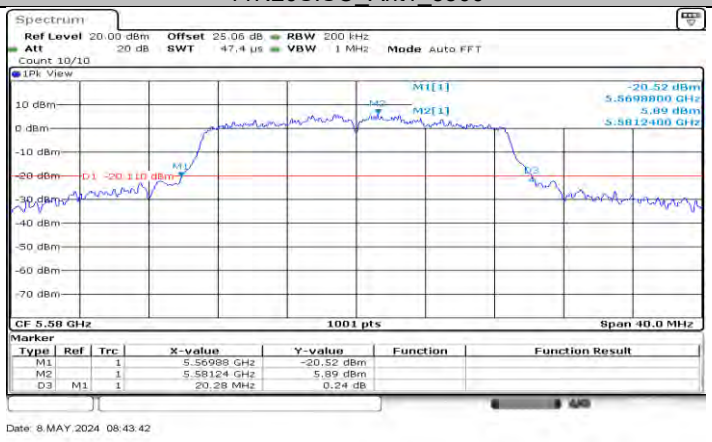
11N20SISO_Ant1_5280

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



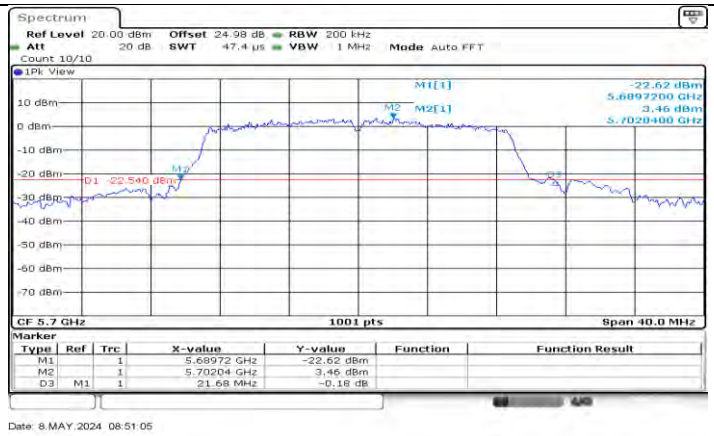
11N20SISO_Ant1_5320

11N20SISO_Ant1_5500



11N20SISO_Ant1_5580

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

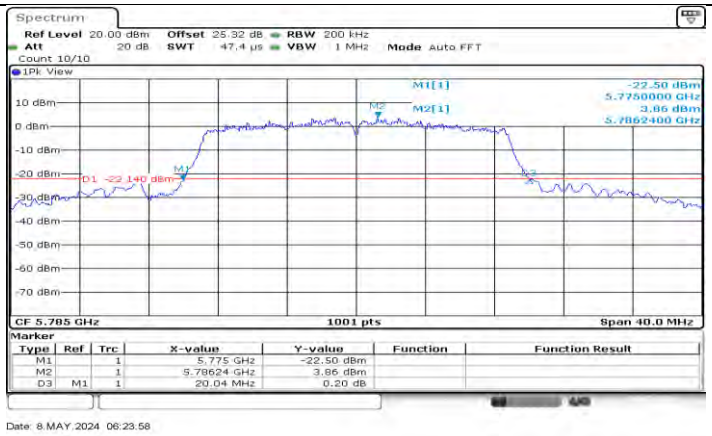


11N20SISO_Ant1_5700

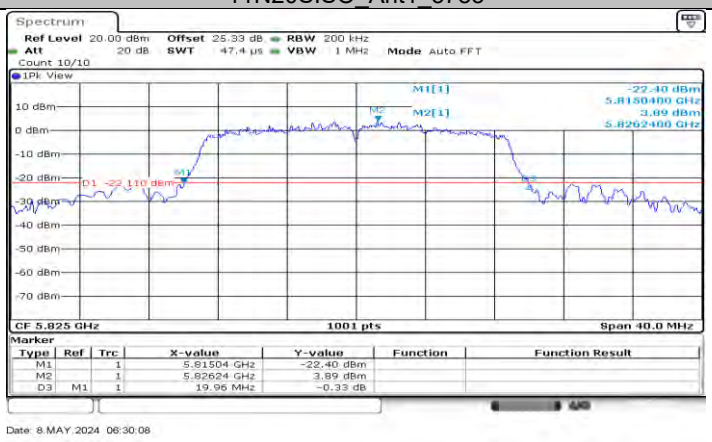
11N20SISO_Ant1_5720

11N20SISO_Ant1_5745

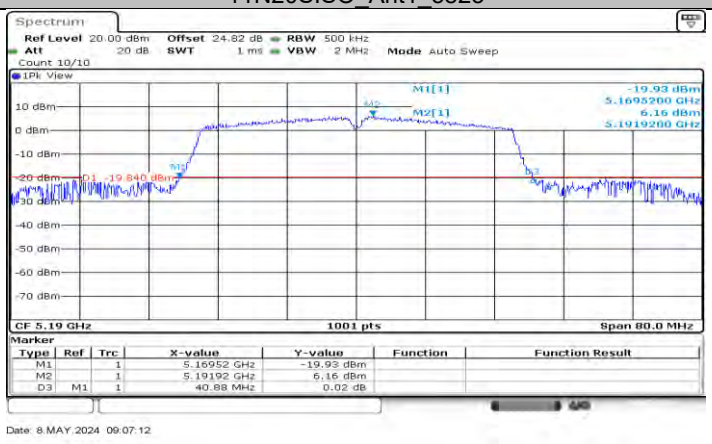
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N20SISO_Ant1_5785

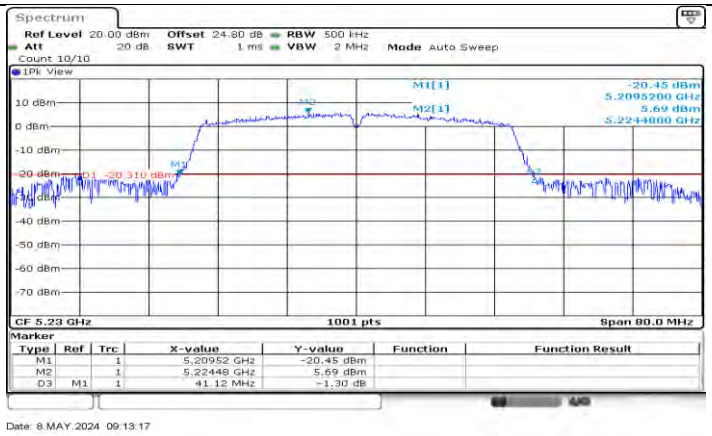


11N20SISO_Ant1_5825

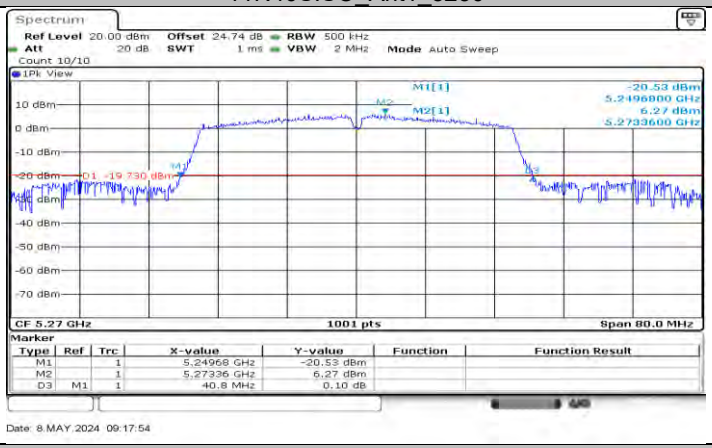


11N40SISO_Ant1_5190

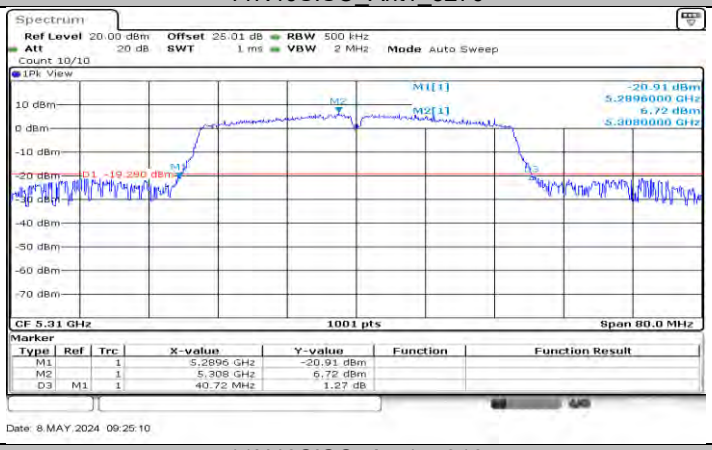
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N40SISO_Ant1_5230

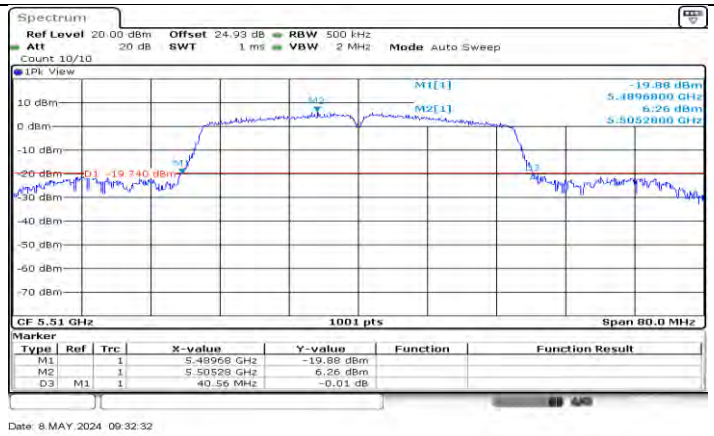


11N40SISO_Ant1_5270

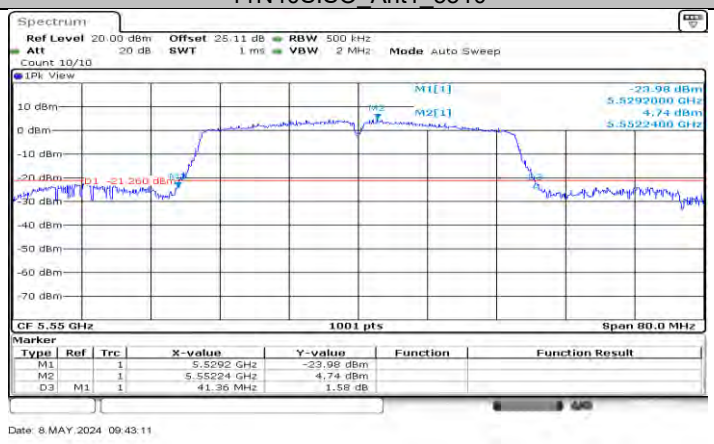


11N40SISO_Ant1_5310

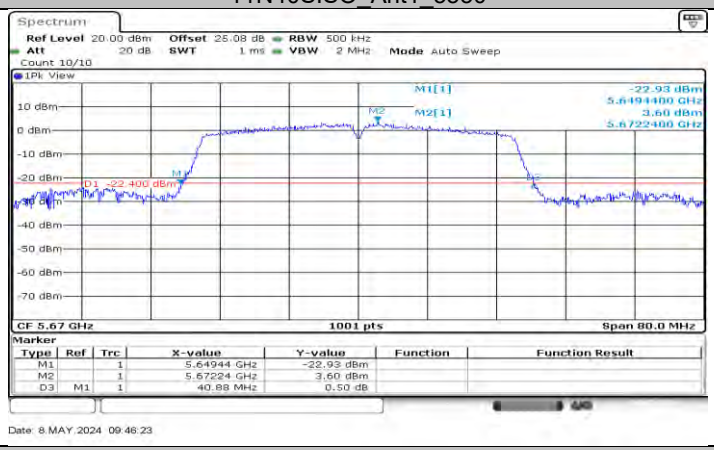
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N40SISO_Ant1_5510



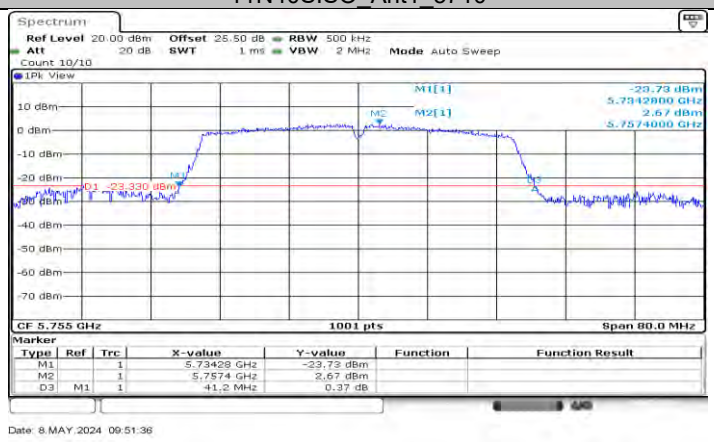
11N40SISO_Ant1_5550



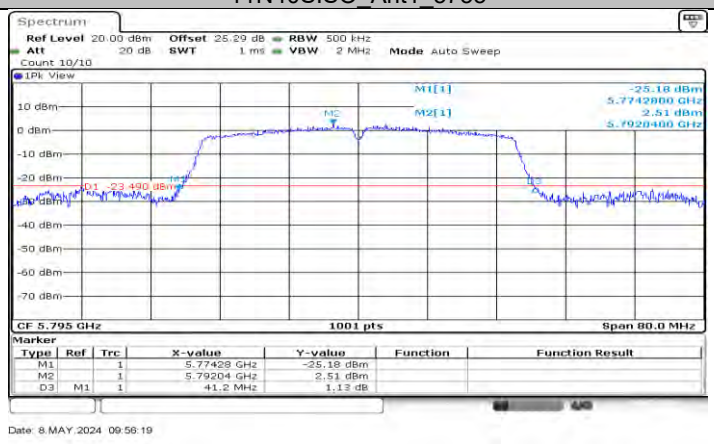
11N40SISO_Ant1_5670

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11N40SISO_Ant1_5710

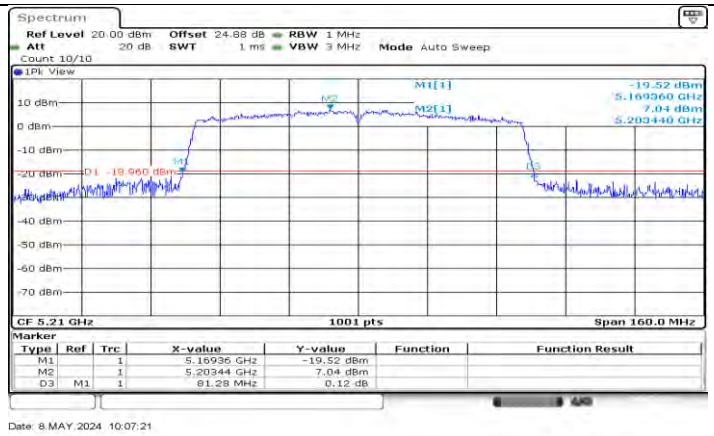


11N40SISO_Ant1_5755

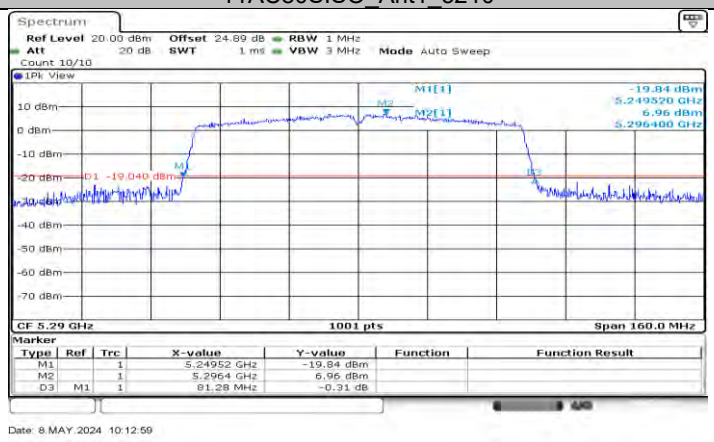


11N40SISO_Ant1_5795

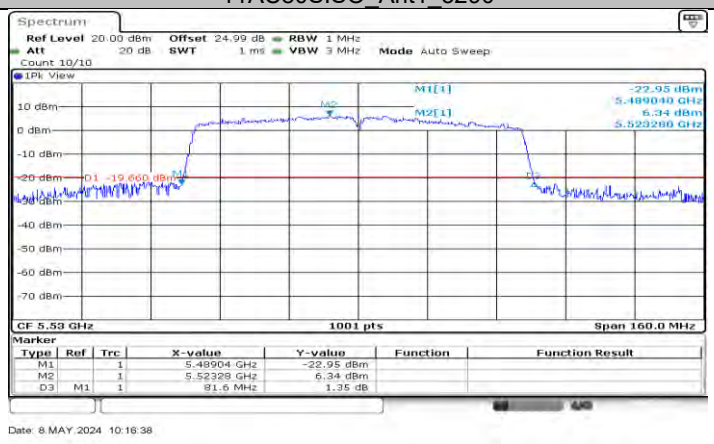
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11AC80SISO_Ant1_5210

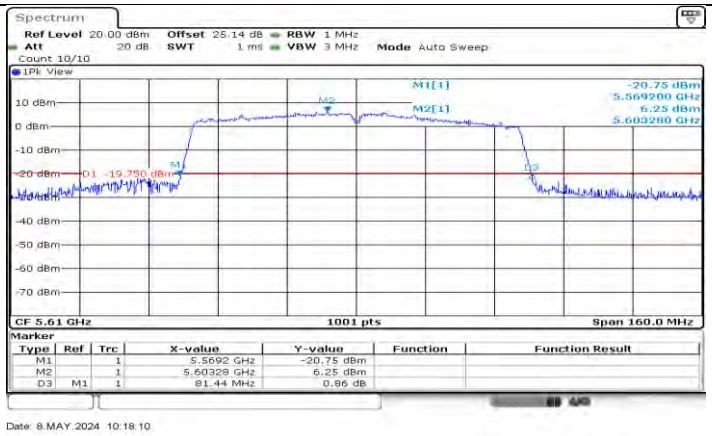


11AC80SISO_Ant1_5290



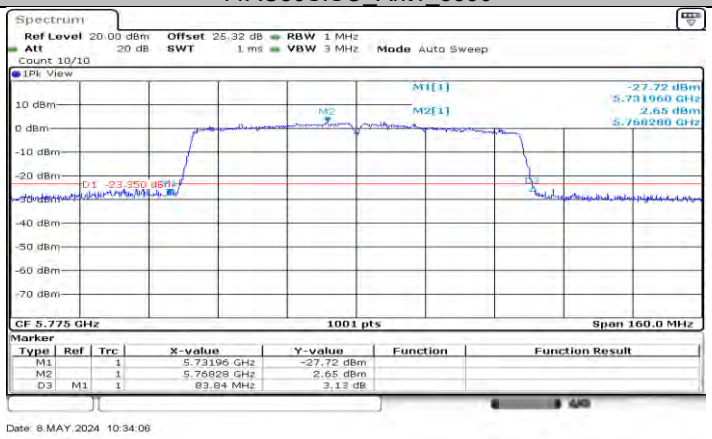
11AC80SISO_Ant1_5530

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11AC80SISO_Ant1_5610

11AC80SISO_Ant1_5690



11AC80SISO_Ant1_5775

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

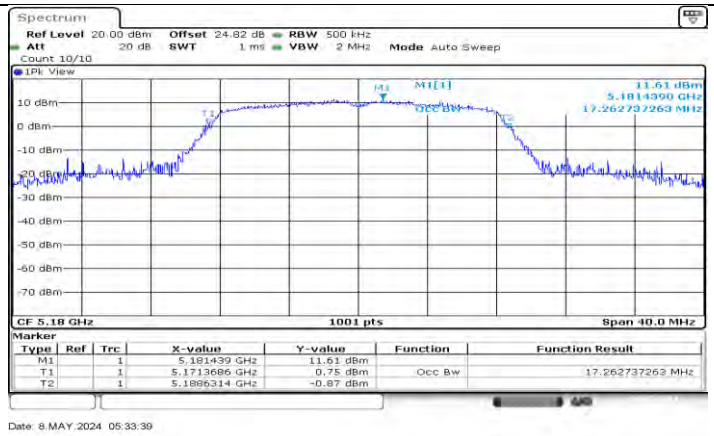
11.2. APPENDIX B: OCCUPIED CHANNEL BANDWIDTH

11.2.1. Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]
11A	Ant1	5180	17.263	5171.3686	5188.6314
		5200	17.343	5191.2887	5208.6314
		5240	17.263	5231.3686	5248.6314
		5260	17.223	5251.4086	5268.6314
		5280	17.343	5271.3287	5288.6713
		5320	17.303	5311.3287	5328.6314
		5500	17.502	5491.2088	5508.7113
		5580	17.343	5571.2887	5588.6314
		5700	17.343	5691.3287	5708.6713
		5720	17.423	5711.2488	5728.6713
		5720_UNII-2C	13.751	5711.2488	5725
		5720_UNII-3	3.671	5725	5728.6713
		5745	17.263	5736.3287	5753.5914
		5785	17.303	5776.3287	5793.6314
		5825	17.383	5816.3287	5833.7113
11N20SISO	Ant1	5180	18.142	5170.9690	5189.1109
		5200	18.302	5190.8092	5209.1109
		5240	18.302	5230.8492	5249.1508
		5260	18.262	5250.8492	5269.1109
		5280	18.222	5270.8891	5289.1109
		5320	18.222	5310.8492	5329.0709
		5500	18.382	5490.7692	5509.1508
		5580	18.382	5570.7692	5589.1508
		5700	18.302	5690.8092	5709.1109
		5720	18.382	5710.7293	5729.1109
		5720_UNII-2C	14.271	5710.7293	5725
		5720_UNII-3	4.111	5725	5729.1109
		5745	18.302	5735.8092	5754.1109
		5785	18.382	5775.7692	5794.1508
		5825	18.302	5815.8492	5834.1508
11N40SISO	Ant1	5190	36.523	5171.7782	5208.3017
		5230	36.523	5211.6983	5248.2218
		5270	36.523	5251.7782	5288.3017
		5310	36.603	5291.6983	5328.3017
		5510	36.763	5491.5385	5528.3017
		5550	36.763	5531.5385	5568.3017
		5670	36.683	5651.6184	5688.3017
		5710	36.523	5691.6983	5728.2218
		5710_UNII-2C	33.302	5691.6983	5725
		5710_UNII-3	3.222	5725	5728.2218
		5755	36.683	5736.5385	5773.2218
		5795	36.683	5776.6184	5813.3017
11AC80SISO	Ant1	5210	75.604	5172.1179	5247.7223
		5290	75.604	5252.2777	5327.8821
		5530	75.604	5491.9580	5567.5624
		5610	75.285	5572.1179	5647.4026
		5690	75.604	5652.1179	5727.7223
		5690_UNII-2C	72.882	5652.1179	5725
		5690_UNII-3	2.722	5725	5727.7223
		5775	75.924	5736.9580	5812.8821

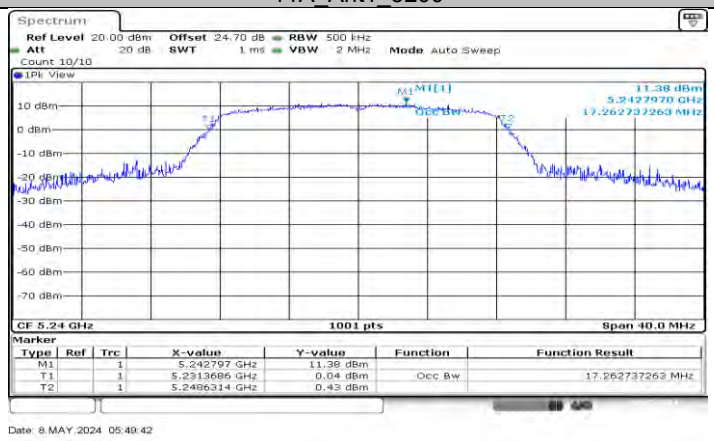
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

Test Graphs



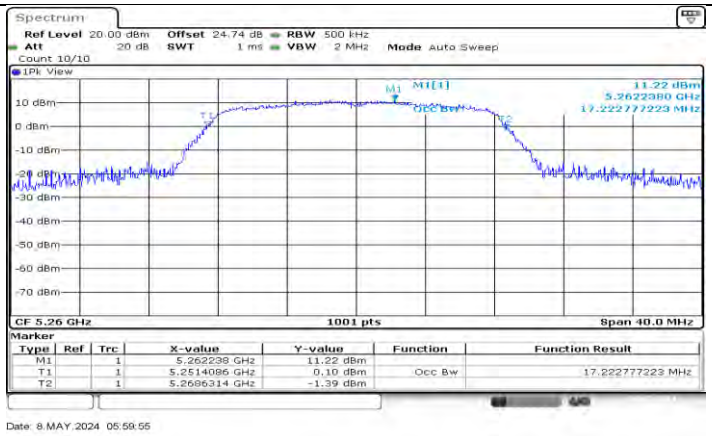
11A_Ant1_5180

11A_Ant1_5200

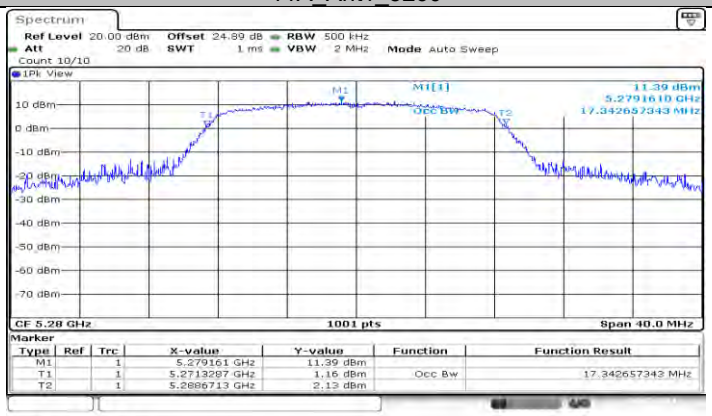


11A_Ant1_5240

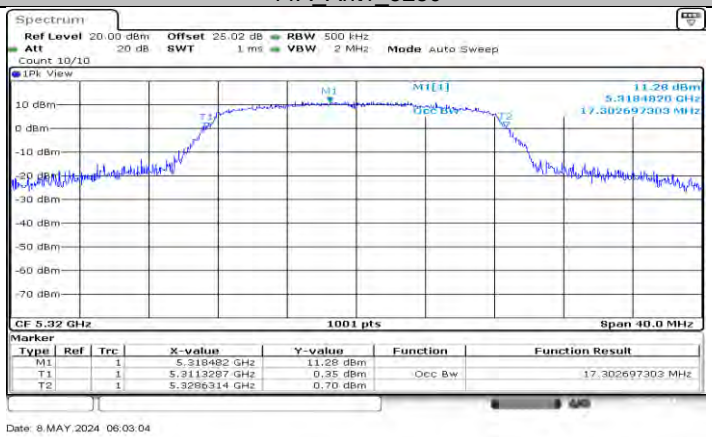
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11A_Ant1_5260

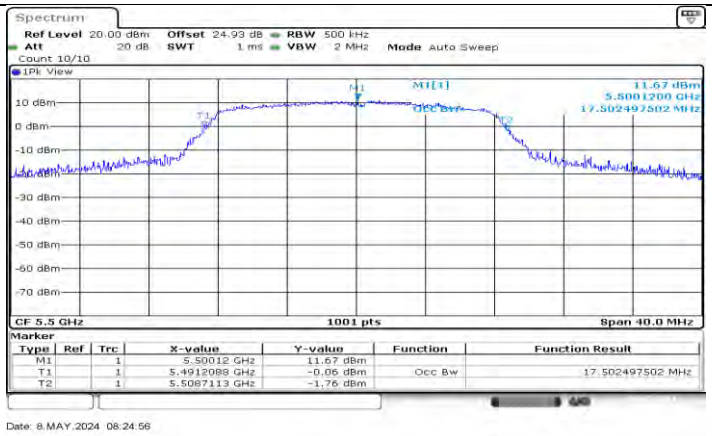


11A_Ant1_5280



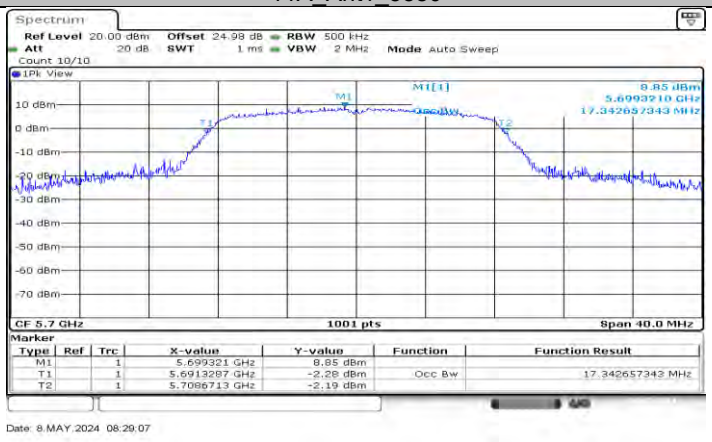
11A_Ant1_5320

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



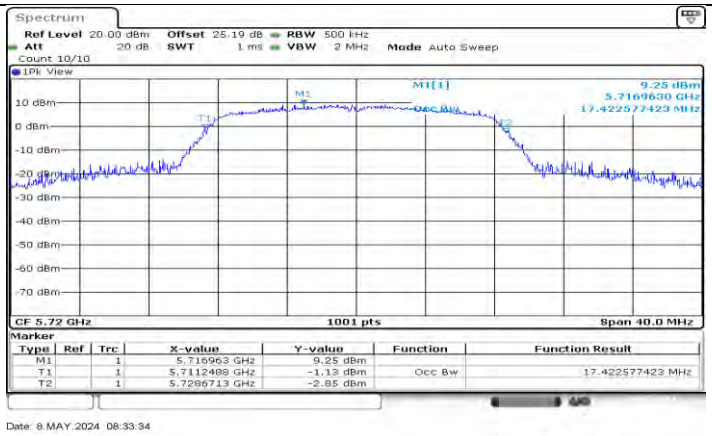
11A_Ant1_5500

11A_Ant1_5580

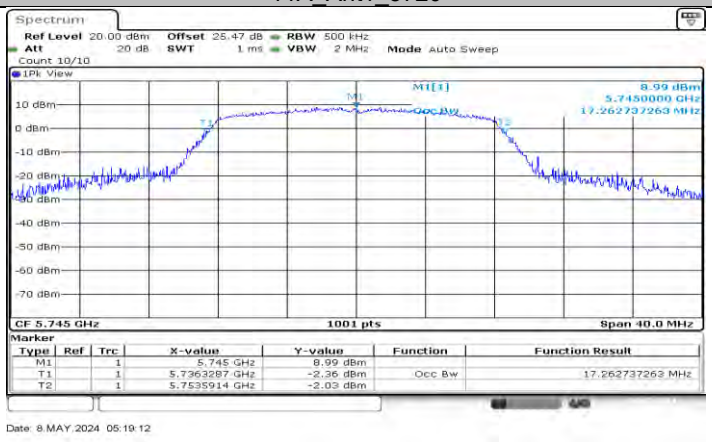


11A_Ant1_5700

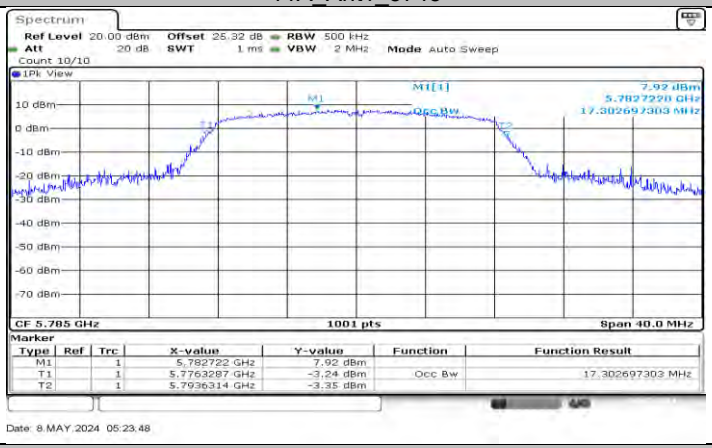
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11A_Ant1_5720

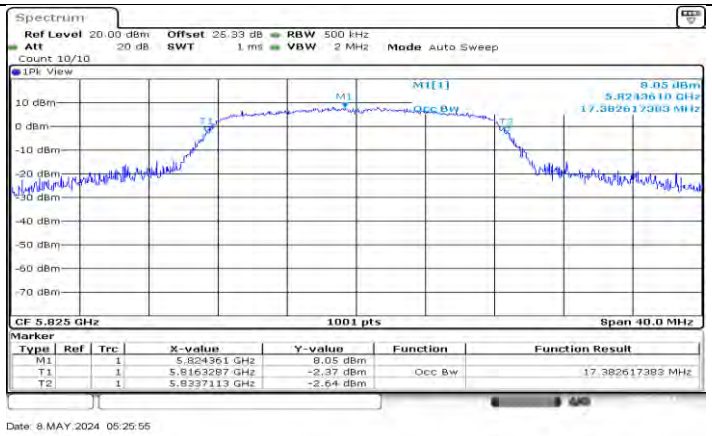


11A_Ant1_5745

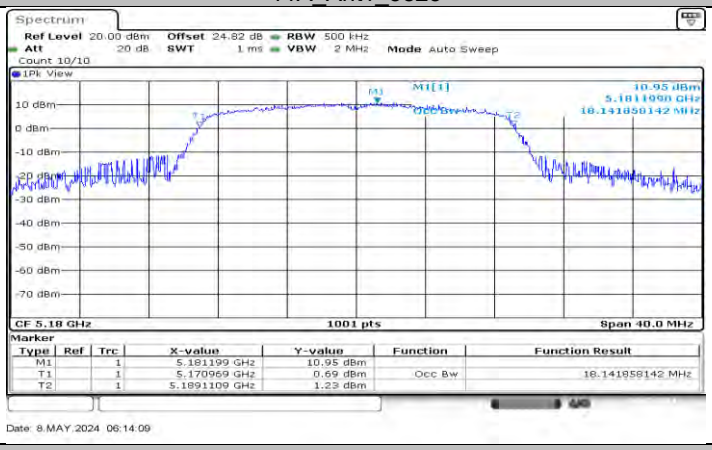


11A_Ant1_5785

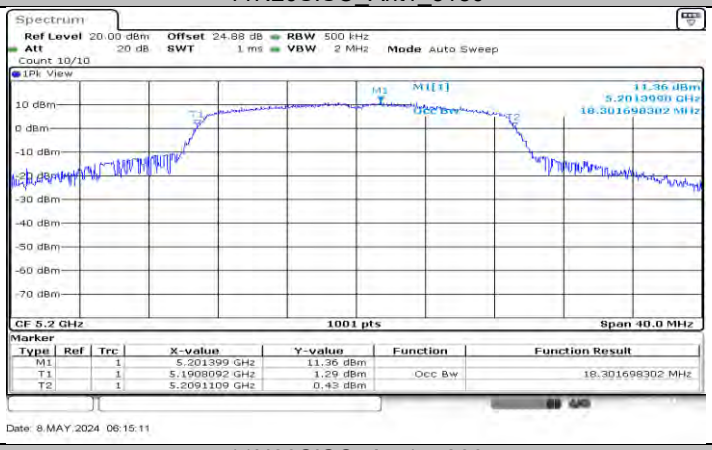
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11A_Ant1_5825

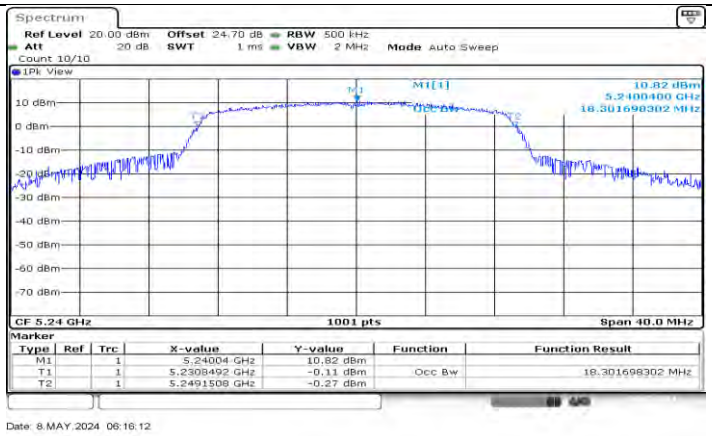


11N20SISO_Ant1_5180

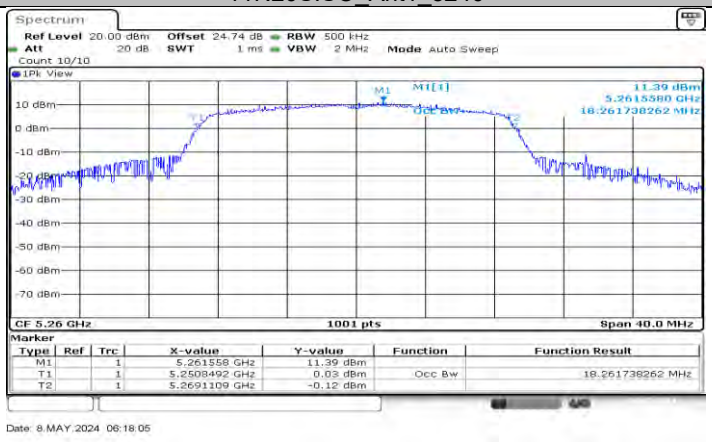


11N20SISO_Ant1_5200

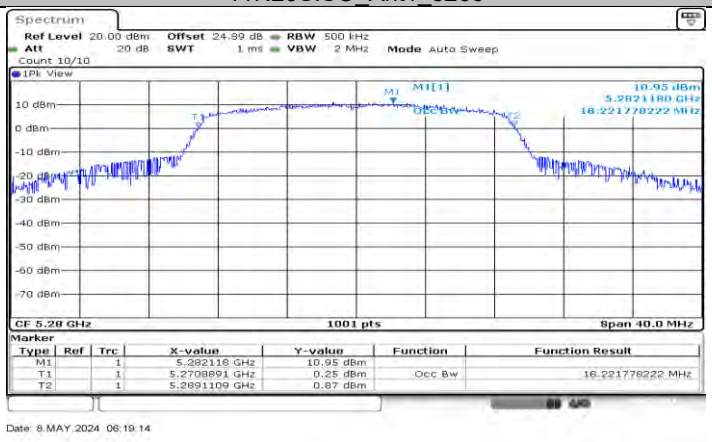
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N20SISO_Ant1_5240

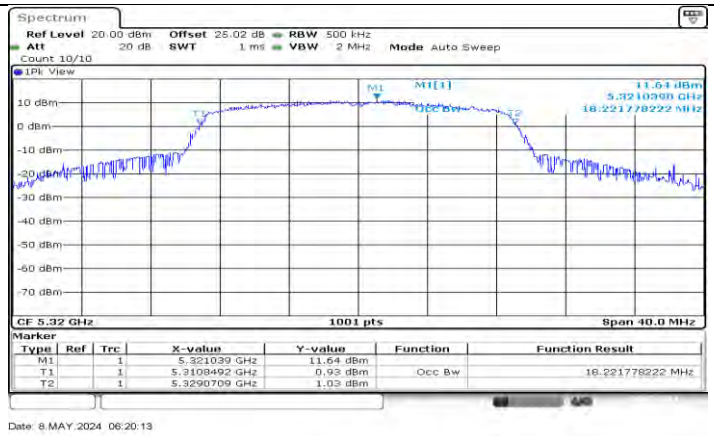


11N20SISO_Ant1_5260



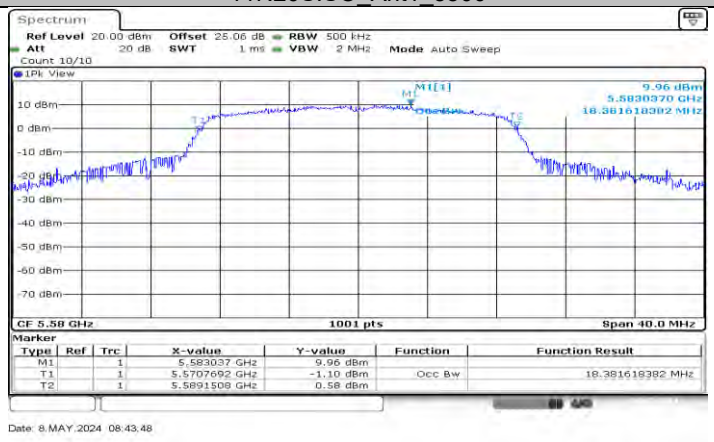
11N20SISO_Ant1_5280

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



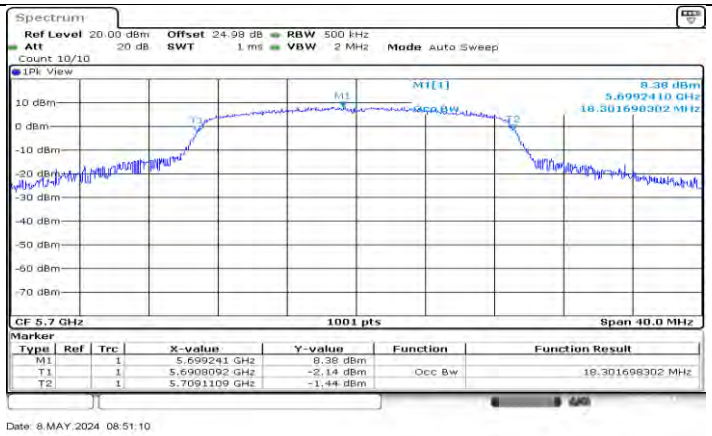
11N20SISO_Ant1_5320

11N20SISO_Ant1_5500

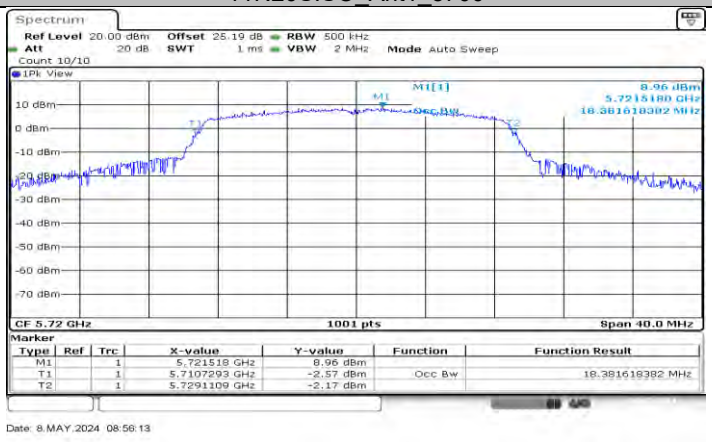


11N20SISO_Ant1_5580

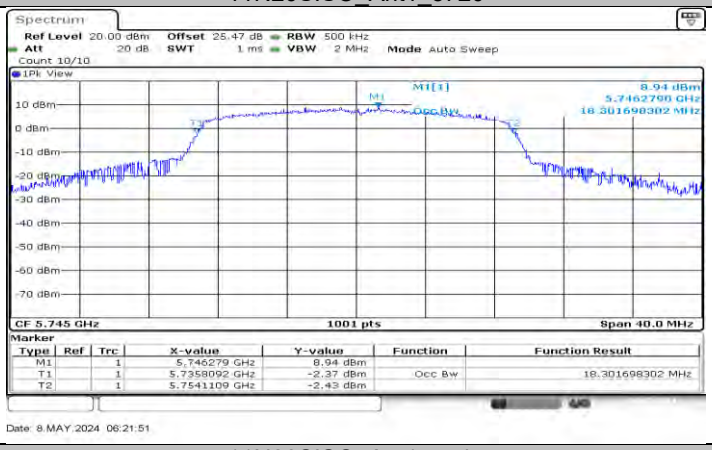
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N20SISO_Ant1_5700

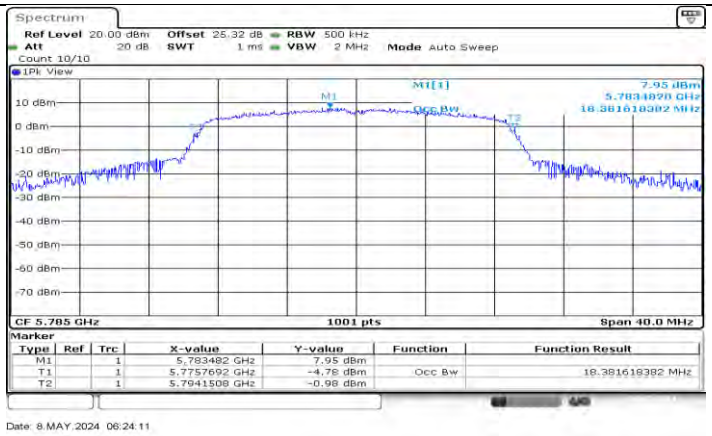


11N20SISO_Ant1_5720

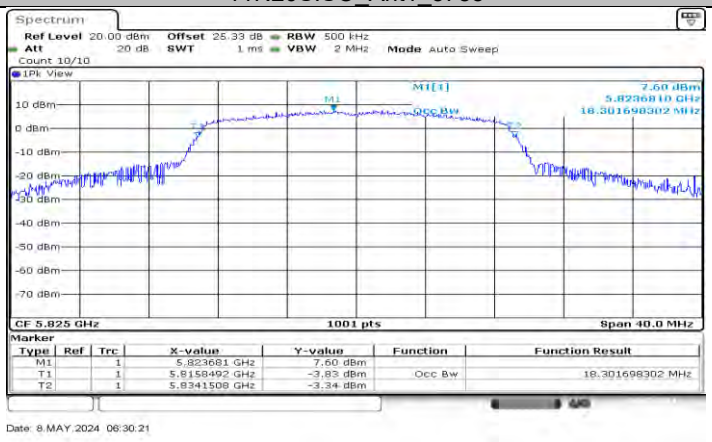


11N20SISO_Ant1_5745

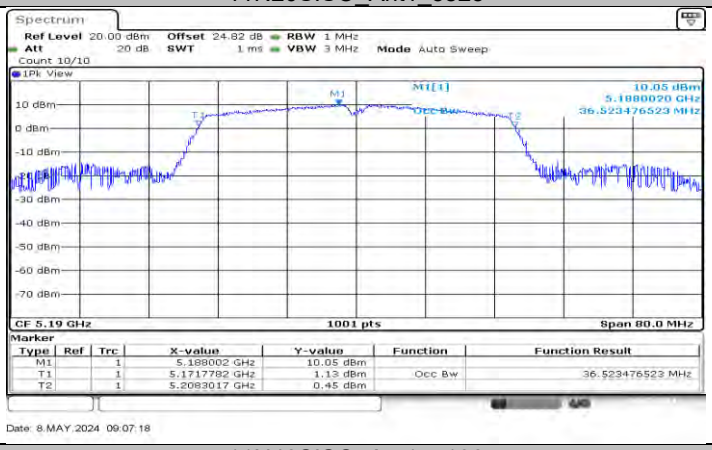
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N20SISO_Ant1_5785

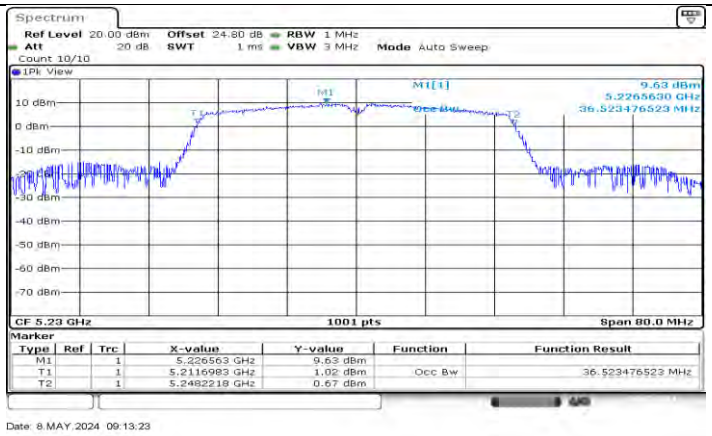


11N20SISO_Ant1_5825

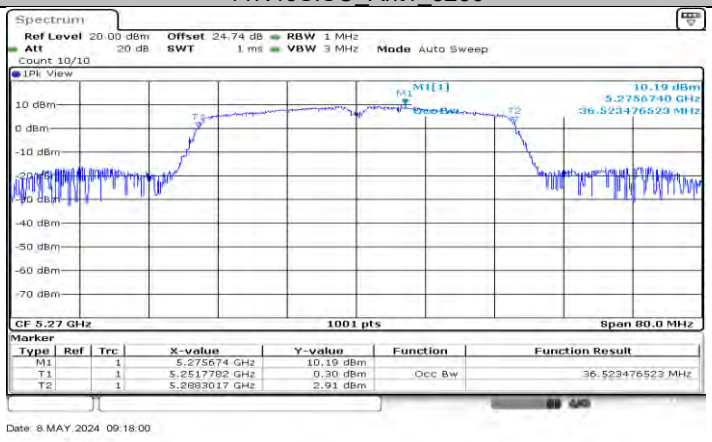


11N40SISO_Ant1_5190

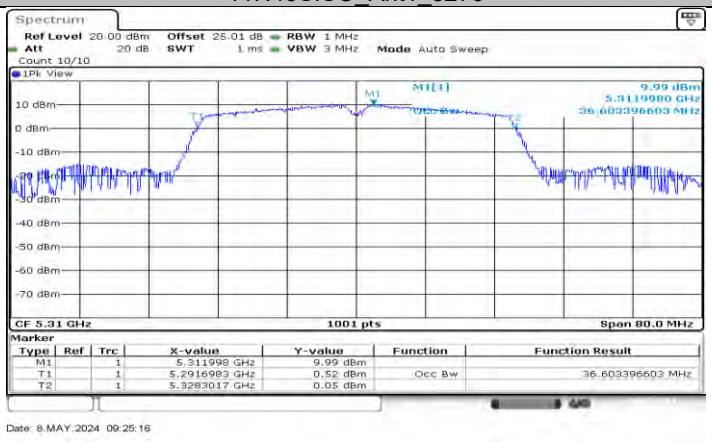
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N40SISO_Ant1_5230

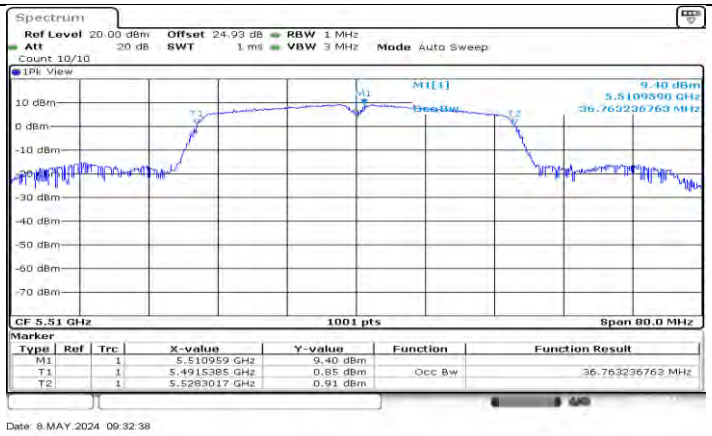


11N40SISO_Ant1_5270



11N40SISO_Ant1_5310

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



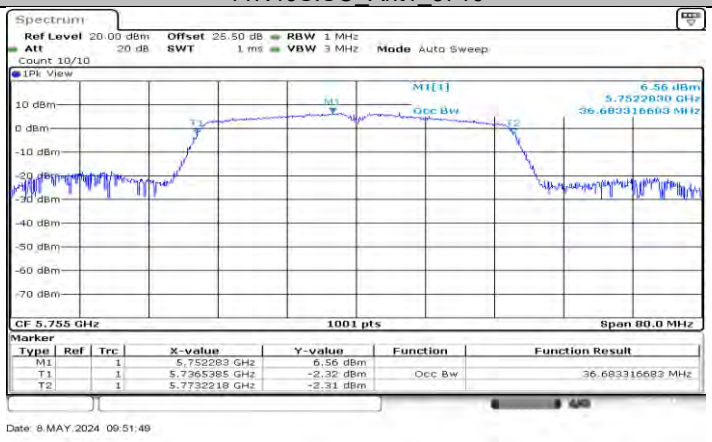
11N40SISO_Ant1_5510

11N40SISO_Ant1_5550

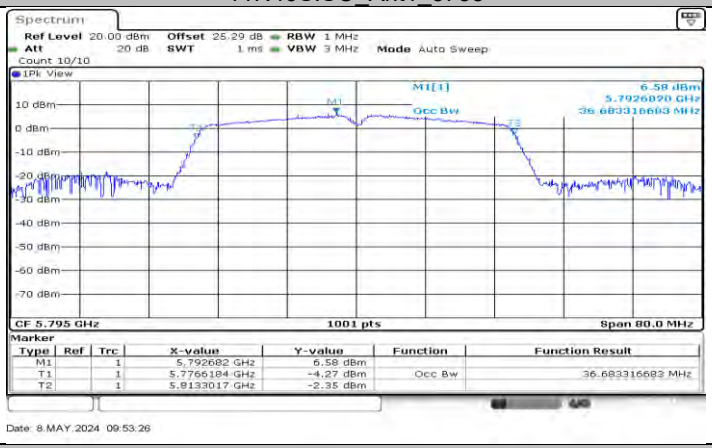
11N40SISO_Ant1_5670

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11N40SISO_Ant1_5710

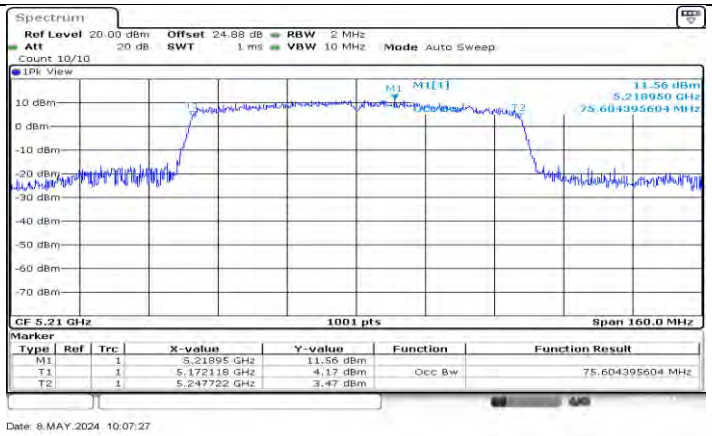


11N40SISO_Ant1_5755

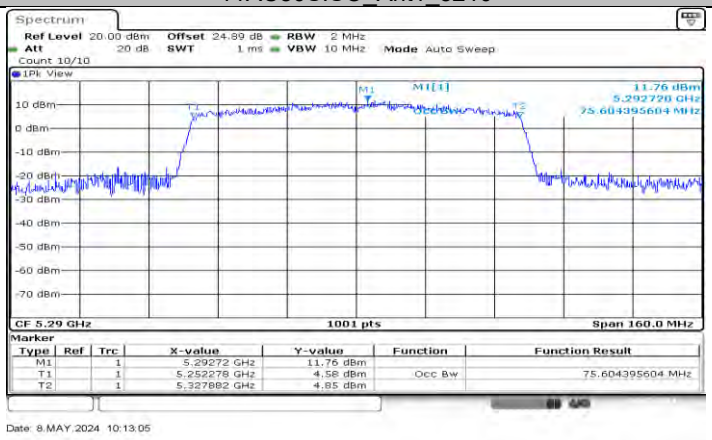


11N40SISO_Ant1_5795

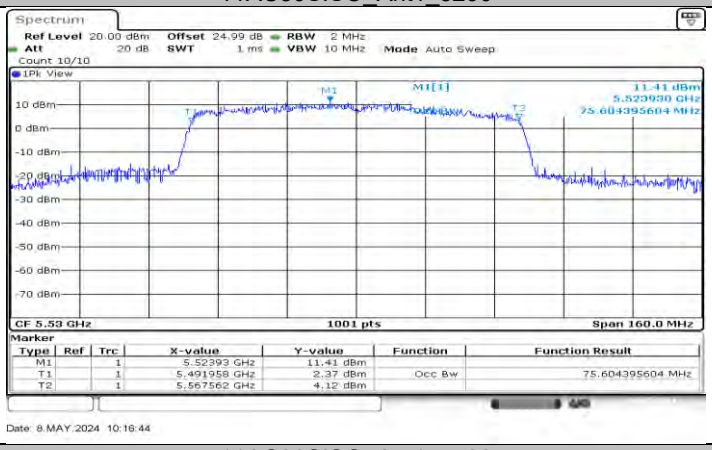
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11AC80SISO_Ant1_5210

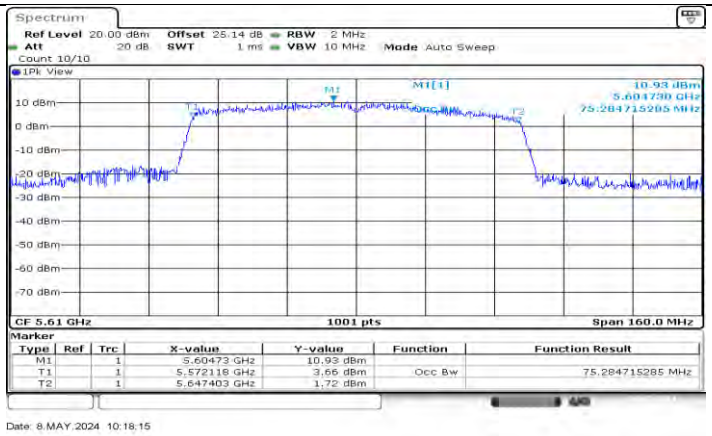


11AC80SISO_Ant1_5290

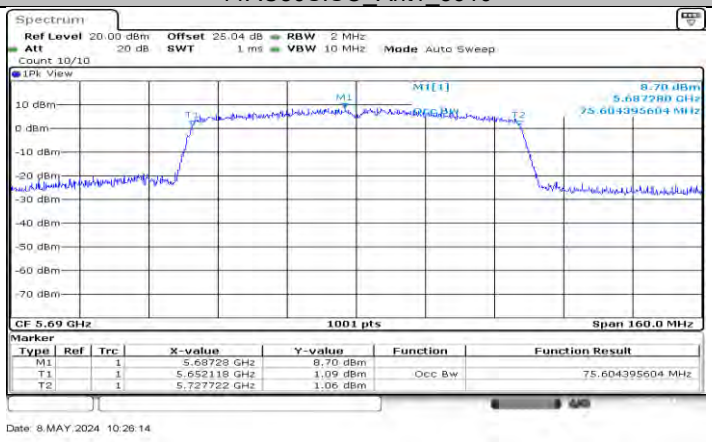


11AC80SISO_Ant1_5530

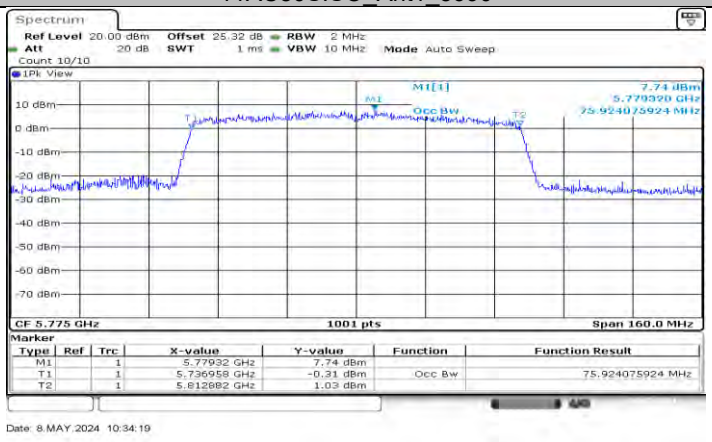
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11AC80SISO_Ant1_5610



11AC80SISO_Ant1_5690



11AC80SISO_Ant1_5775

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

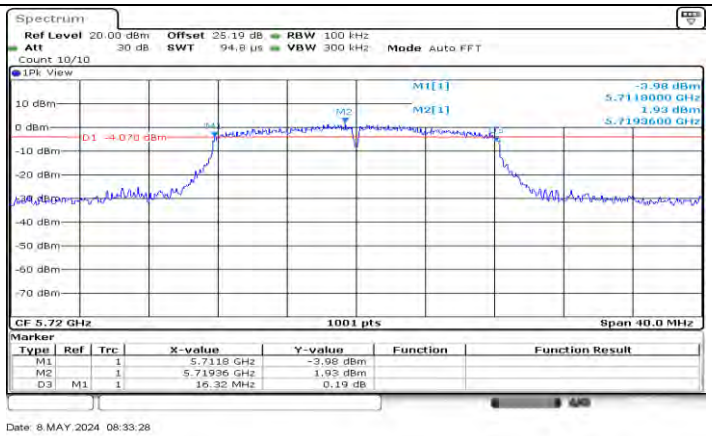
11.3. APPENDIX C: MIN EMISSION BANDWIDTH

11.3.1. Test Result

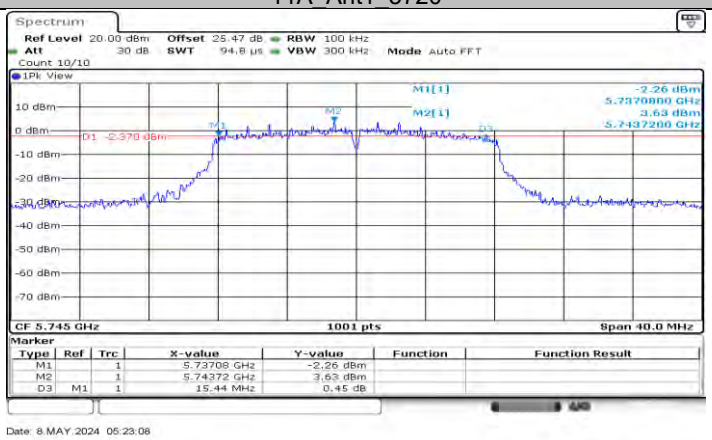
Test Mode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5720	16.32	5711.80	5728.12	≥0.5	PASS
		5720_UNII-3	3.12	5725	5728.12	≥0.5	PASS
		5745	15.44	5737.08	5752.52	≥0.5	PASS
		5785	15.12	5777.44	5792.56	≥0.5	PASS
		5825	15.04	5817.44	5832.48	≥0.5	PASS
11N20SISO	Ant1	5720	17.28	5711.20	5728.48	≥0.5	PASS
		5720_UNII-3	3.48	5725	5728.48	≥0.5	PASS
		5745	17.32	5736.20	5753.52	≥0.5	PASS
		5785	17.28	5776.20	5793.48	≥0.5	PASS
		5825	17.52	5816.20	5833.72	≥0.5	PASS
11N40SISO	Ant1	5710	35.20	5692.40	5727.60	≥0.5	PASS
		5710_UNII-3	2.6	5725	5727.60	≥0.5	PASS
		5755	35.12	5737.40	5772.52	≥0.5	PASS
		5795	35.12	5777.48	5812.60	≥0.5	PASS
11AC80SISO	Ant1	5690	75.04	5652.40	5727.44	≥0.5	PASS
		5690_UNII-3	2.44	5725	5727.44	≥0.5	PASS
		5775	75.04	5737.56	5812.60	≥0.5	PASS

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

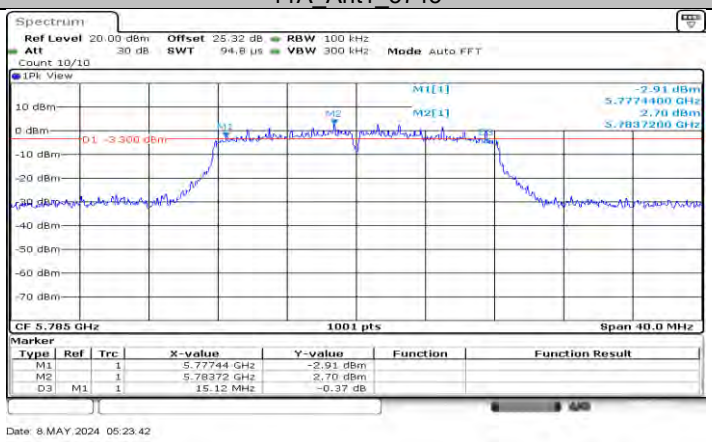
11.3.2. Test Graphs



11A_Ant1_5720

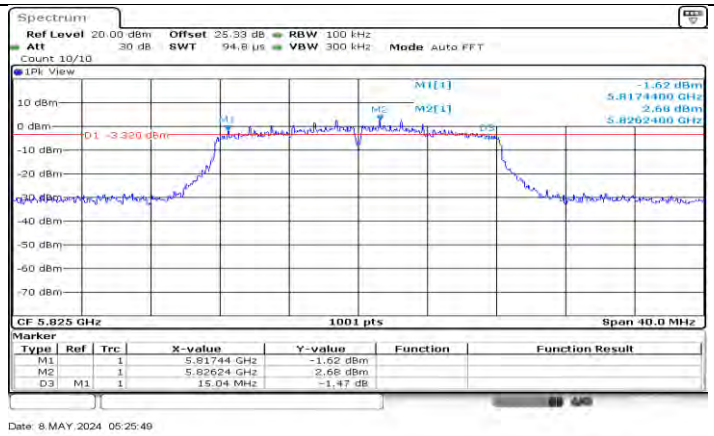


11A_Ant1_5745

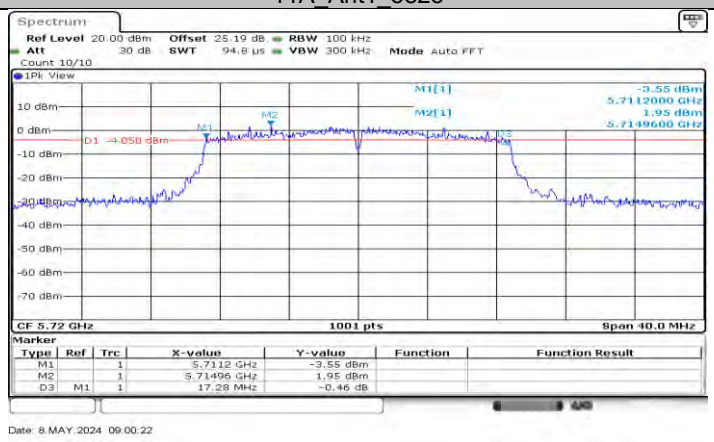


11A_Ant1_5785

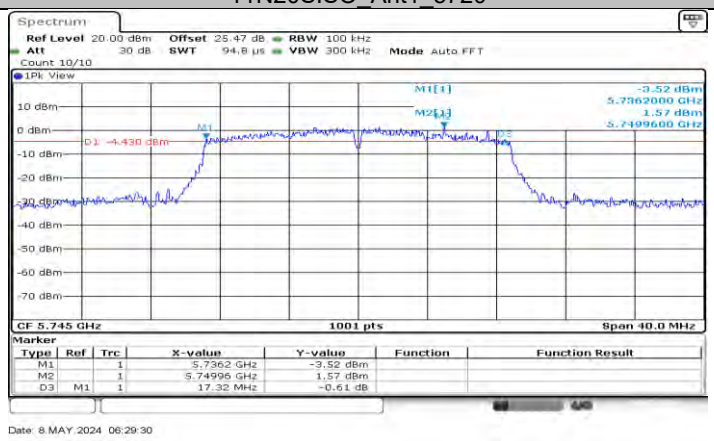
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11A_Ant1_5825

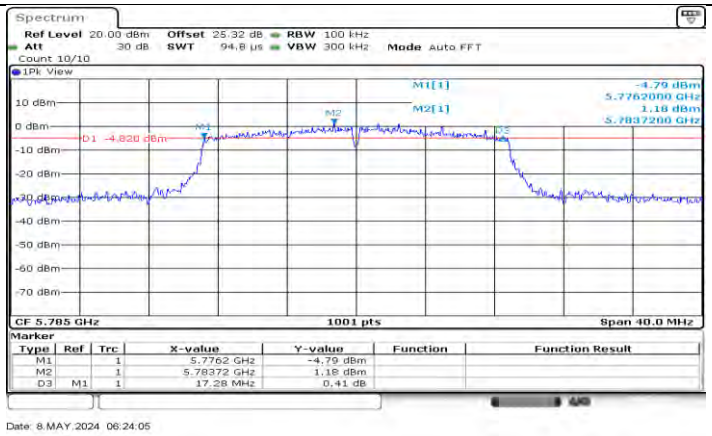


11N20SISO_Ant1_5720

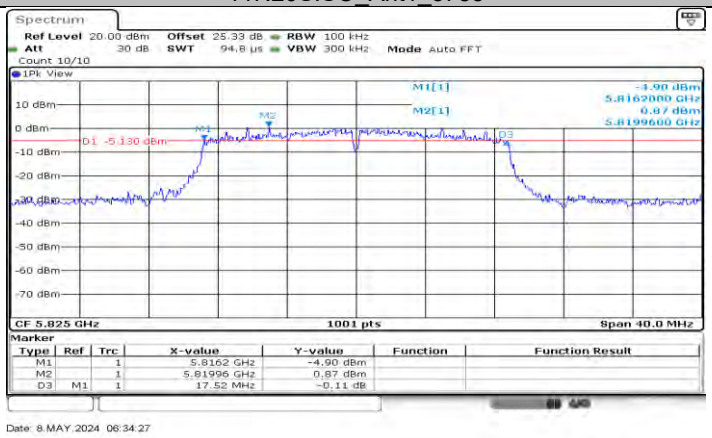


11N20SISO_Ant1_5745

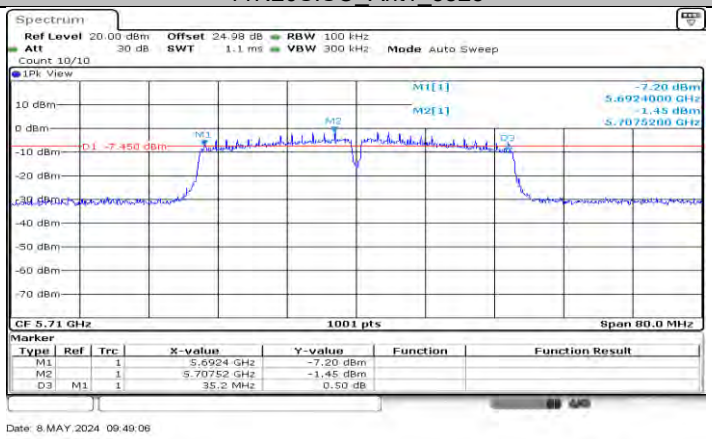
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N20SISO_Ant1_5785

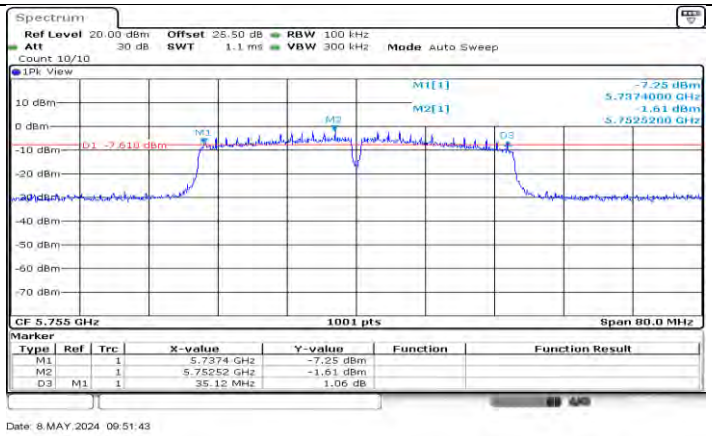


11N20SISO_Ant1_5825

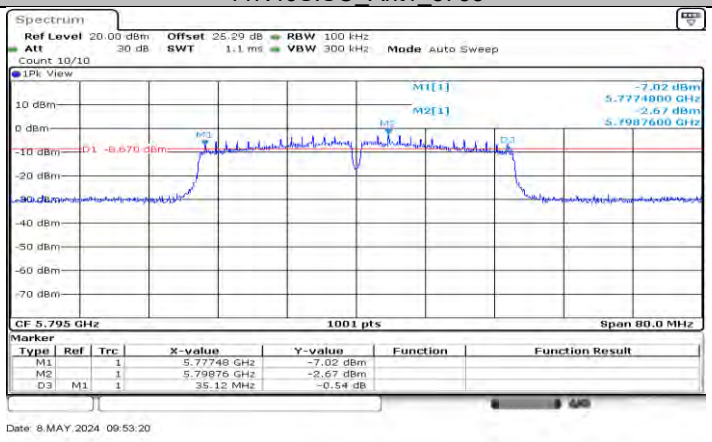


11N40SISO_Ant1_5710

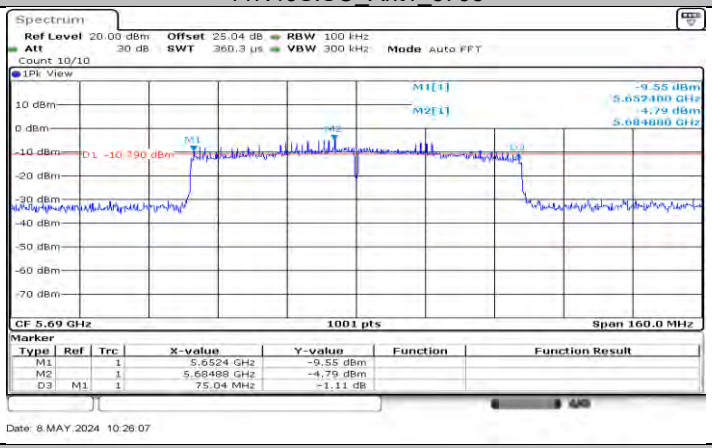
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N40SISO_Ant1_5755

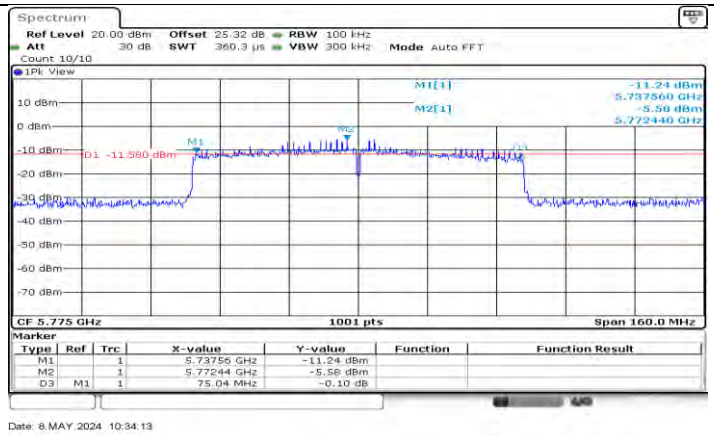


11N40SISO_Ant1_5795



11AC80SISO_Ant1_5690

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11AC80SISO_Ant1_5775

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.4. APPENDIX D: MAXIMUM CONDUCTED OUTPUT POWER

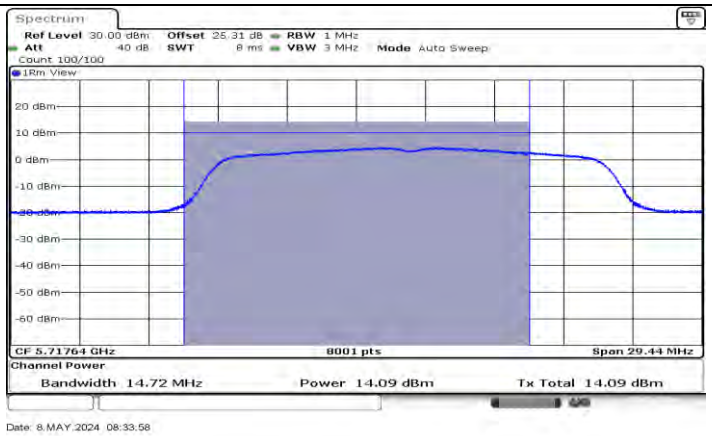
11.4.1. Test Result

Test Mode	Antenna	Frequency[MHz]	Power [dBm]	FCC Limit [dBm]	EIRP [dBm]	Verdict
11A	Ant1	5180	18.62	≤23.98	20.66	PASS
		5200	18.39	≤23.98	20.43	PASS
		5240	18.48	≤23.98	20.52	PASS
		5260	18.46	≤23.98	20.50	PASS
		5280	18.4	≤23.98	20.44	PASS
		5320	18.34	≤23.98	20.38	PASS
		5500	17.11	≤23.98	20.58	PASS
		5580	17.65	≤23.98	19.69	PASS
		5700	15.56	≤23.98	18.61	PASS
		5720_UNII-2C	14.09	≤22.68	16.13	PASS
		5720_UNII-3	6.11	≤30.00	8.15	PASS
		5745	15.81	≤30.00	17.85	PASS
		5785	15.26	≤30.00	17.30	PASS
		5825	15.6	≤30.00	17.64	PASS
11N20SISO	Ant1	5180	18.35	≤23.98	20.39	PASS
		5200	18.36	≤23.98	20.40	PASS
		5240	18.26	≤23.98	20.30	PASS
		5260	18.37	≤23.98	20.41	PASS
		5280	18.25	≤23.98	20.29	PASS
		5320	18.21	≤23.98	20.25	PASS
		5500	16.18	≤23.98	19.83	PASS
		5580	17.61	≤23.98	19.65	PASS
		5700	13.70	≤23.98	18.57	PASS
		5720_UNII-2C	14.00	≤22.77	16.04	PASS
		5720_UNII-3	6.44	≤30.00	8.48	PASS
		5745	15.81	≤30.00	17.85	PASS
		5785	15.30	≤30.00	17.34	PASS
		5825	15.44	≤30.00	17.48	PASS
11N40SISO	Ant1	5190	16.14	≤23.98	20.43	PASS
		5230	18.23	≤23.98	20.27	PASS
		5270	18.22	≤23.98	20.26	PASS
		5310	16.49	≤23.98	20.30	PASS
		5510	14.23	≤23.98	19.66	PASS
		5550	17.42	≤23.98	19.46	PASS
		5670	16.48	≤23.98	18.22	PASS
		5710_UNII-2C	14.21	≤23.98	16.25	PASS
		5710_UNII-3	1.33	≤30.00	3.37	PASS
		5755	15.66	≤30.00	17.70	PASS
		5795	15.17	≤30.00	17.21	PASS
11AC80SISO	Ant1	5210	16.75	≤23.98	18.79	PASS
		5290	16.21	≤23.98	18.60	PASS
		5530	14.18	≤23.98	17.92	PASS
		5610	15.5	≤23.98	17.54	PASS
		5690_UNII-2C	12.85	≤23.98	14.89	PASS
		5690_UNII-3	-3.29	≤30.00	-1.25	PASS
		5775	13.65	≤30.00	15.69	PASS

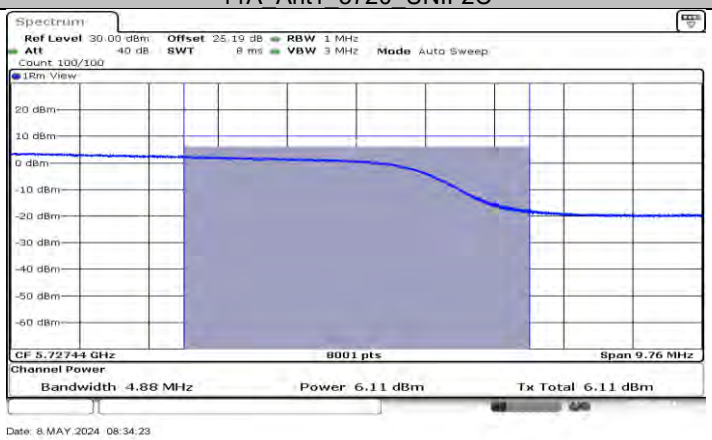
Note：The Duty Cycle Factor is compensated in the graph.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

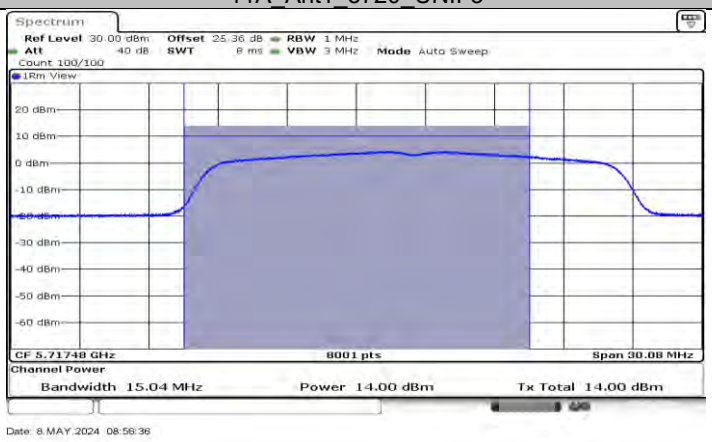
11.4.2. Test Graphs



11A_Ant1_5720_UNII-2C

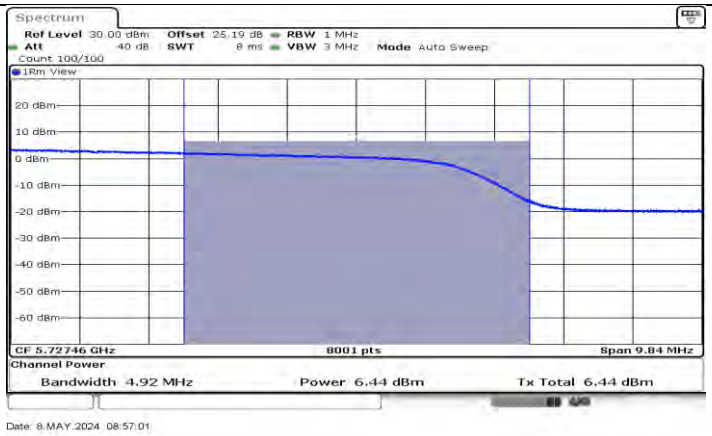


11A_Ant1_5720_UNII-3

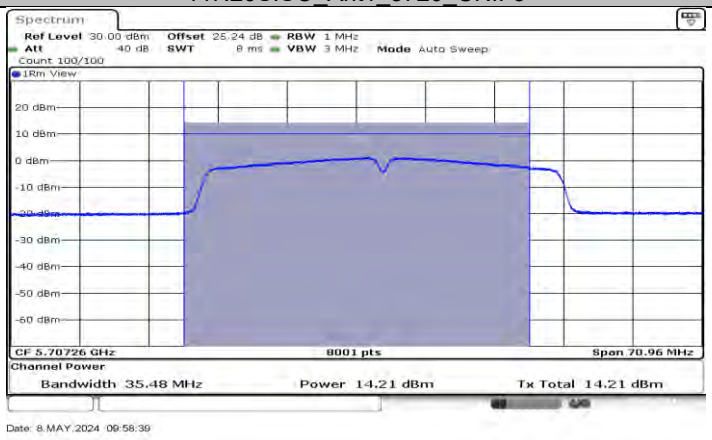


11N20SISO_Ant1_5720_UNII-2C

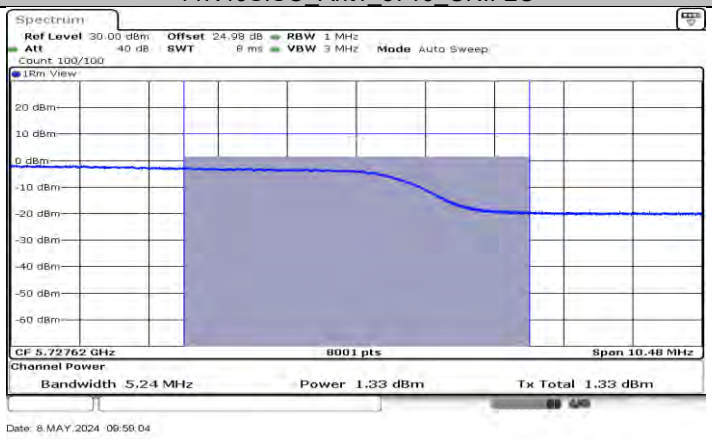
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N20SISO_Ant1_5720_UNII-3

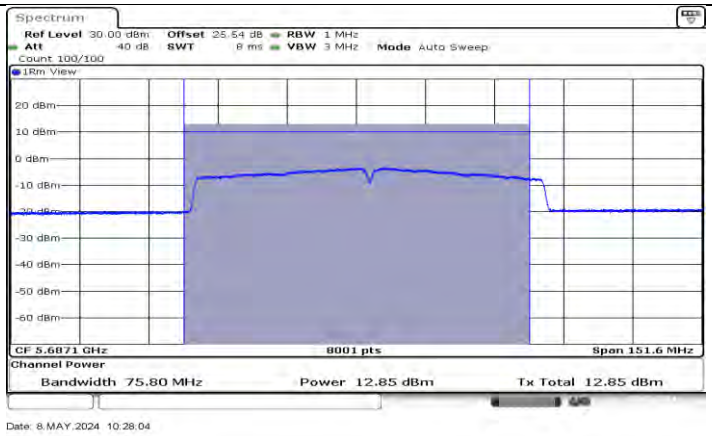


11N40SISO_Ant1_5710_UNII-2C



11N40SISO_Ant1_5710_UNII-3

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11AC80SISO_Ant1_5690_UNII-2C

11AC80SISO_Ant1_5690_UNII-3

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.5. APPENDIX E: MAXIMUM POWER SPECTRAL DENSITY

11.5.1. Test Result

Test Mode	Antenna	Frequency[MHz]	Power [dBm/MHz]	Limit [dBm/MHz]	EIRP [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	6.98	≤11.00	9.02	≤10.00	PASS
		5200	6.75	≤11.00	8.79	≤10.00	PASS
		5240	6.68	≤11.00	8.72	≤10.00	PASS
		5260	6.31	≤11.00	8.35	---	PASS
		5280	6.56	≤11.00	8.60	---	PASS
		5320	7.07	≤11.00	9.11	---	PASS
		5500	6.53	≤11.00	8.57	---	PASS
		5580	5.36	≤11.00	7.40	---	PASS
		5700	4.23	≤11.00	6.27	---	PASS
		5720_UNII-2C	4.41	≤11.00	6.45	---	PASS
		5720_UNII-3	-0.57	≤30.00	1.47	---	PASS
		5745	1.50	≤30.00	3.54	---	PASS
		5785	0.53	≤30.00	2.57	---	PASS
		5825	0.89	≤30.00	2.93	---	PASS
11N20SISO	Ant1	5180	6.54	≤11.00	8.58	≤10.00	PASS
		5200	6.44	≤11.00	8.48	≤10.00	PASS
		5240	6.03	≤11.00	8.07	≤10.00	PASS
		5260	6.20	≤11.00	8.24	---	PASS
		5280	6.35	≤11.00	8.39	---	PASS
		5320	6.62	≤11.00	8.66	---	PASS
		5500	5.82	≤11.00	7.86	---	PASS
		5580	5.19	≤11.00	7.23	---	PASS
		5700	4.27	≤11.00	6.31	---	PASS
		5720_UNII-2C	4.24	≤11.00	6.28	---	PASS
		5720_UNII-3	-0.63	≤30.00	1.41	---	PASS
		5745	1.32	≤30.00	3.36	---	PASS
		5785	0.44	≤30.00	2.48	---	PASS
		5825	0.52	≤30.00	2.56	---	PASS
11N40SISO	Ant1	5190	3.27	≤11.00	5.31	≤10.00	PASS
		5230	2.90	≤11.00	4.94	≤10.00	PASS
		5270	2.87	≤11.00	4.91	---	PASS
		5310	3.22	≤11.00	5.26	---	PASS
		5510	2.38	≤11.00	4.42	---	PASS
		5550	2.17	≤11.00	4.21	---	PASS
		5670	0.80	≤11.00	2.84	---	PASS
		5710_UNII-2C	1.16	≤11.00	3.20	---	PASS
		5710_UNII-3	-5.70	≤30.00	-3.66	---	PASS
		5755	-2.25	≤30.00	-0.21	---	PASS
		5795	-3.07	≤30.00	-1.03	---	PASS
11AC80SISO	Ant1	5210	-1.58	≤11.00	0.46	≤10.00	PASS
		5290	-1.57	≤11.00	0.47	---	PASS
		5530	-2.53	≤11.00	-0.49	---	PASS
		5610	-2.60	≤11.00	-0.56	---	PASS
		5690_UNII-2C	-3.71	≤11.00	-1.67	---	PASS
		5690_UNII-3	-10.58	≤30.00	-8.54	---	PASS
		5775	-7.25	≤30.00	-5.21	---	PASS

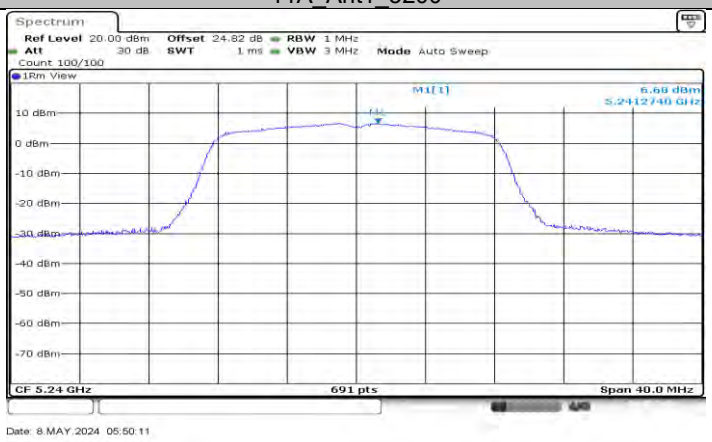
Note：1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.5.2. Test Graphs

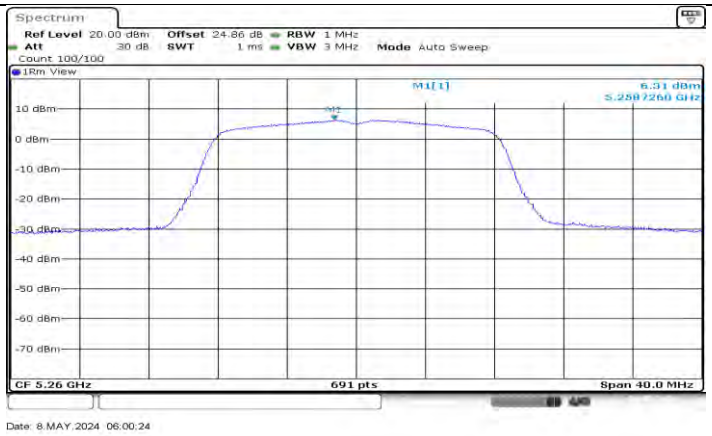
11A_Ant1_5180

11A_Ant1_5200



11A_Ant1_5240

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

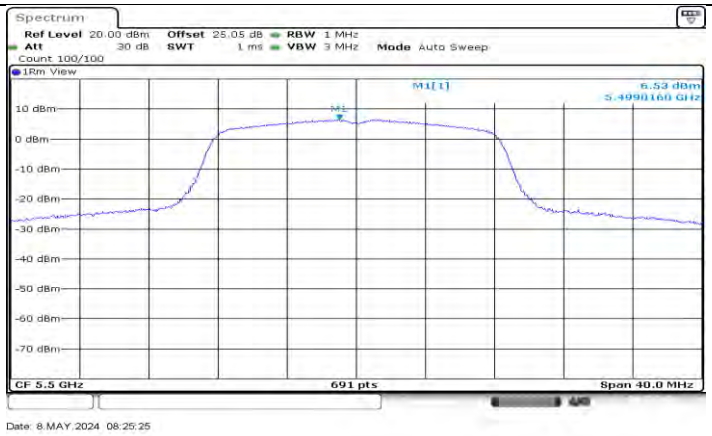


11A_Ant1_5260

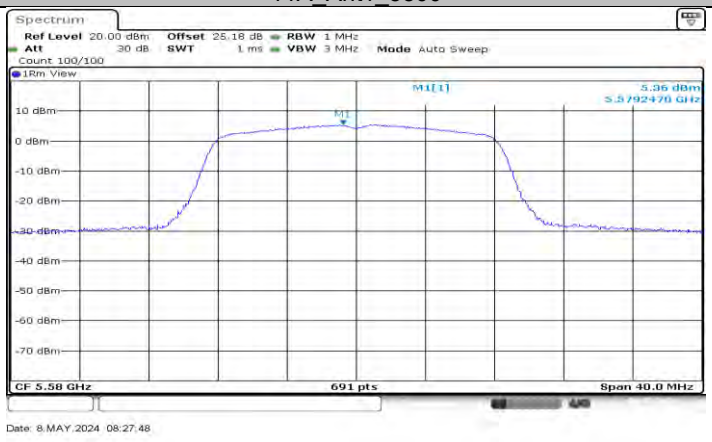
11A_Ant1_5280

11A_Ant1_5320

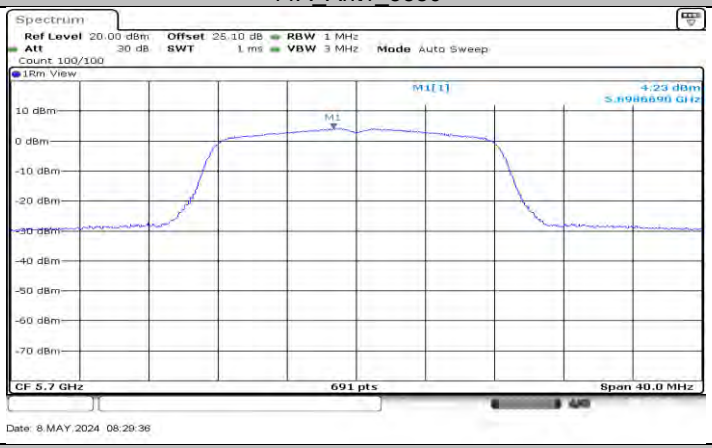
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11A_Ant1_5500

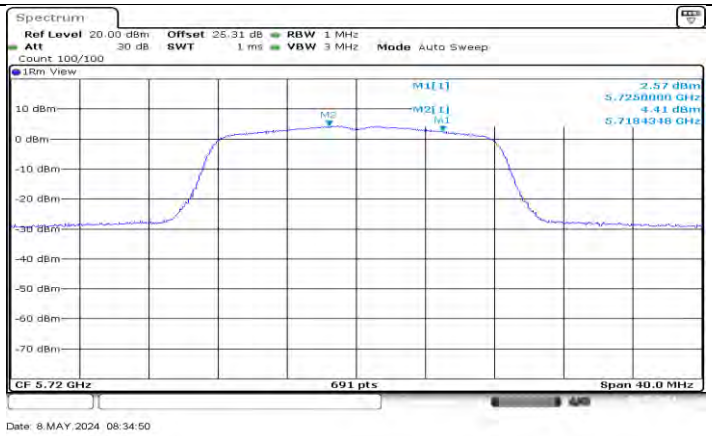


11A_Ant1_5580

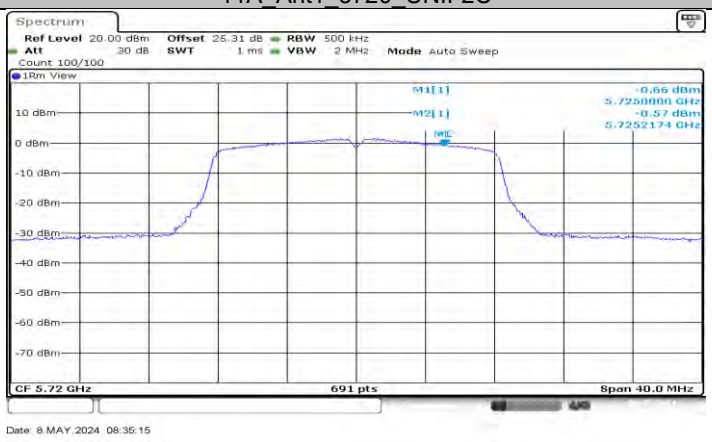


11A_Ant1_5700

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



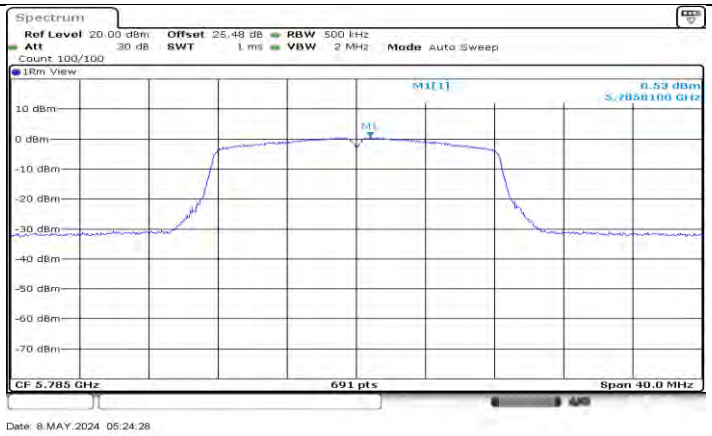
11A_Ant1_5720_UNII-2C



11A_Ant1_5720_UNII-3

11A_Ant1_5745

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



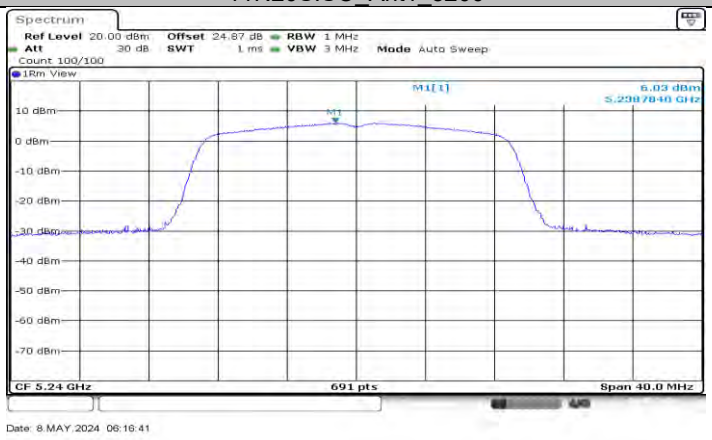
11A_Ant1_5785

11A_Ant1_5825

11N20SISO_Ant1_5180

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

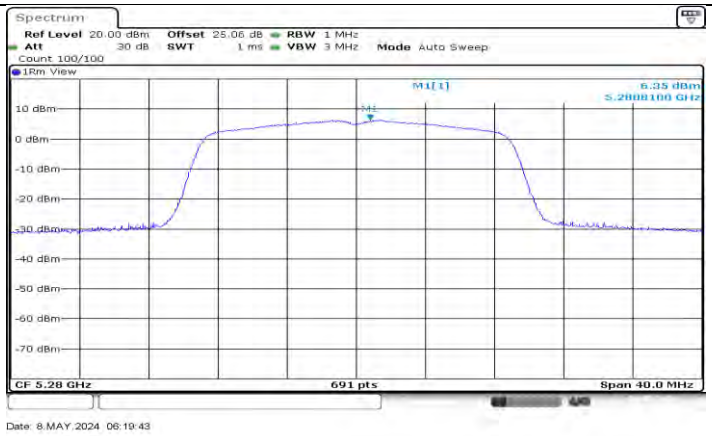
11N20SISO_Ant1_5200



11N20SISO_Ant1_5240

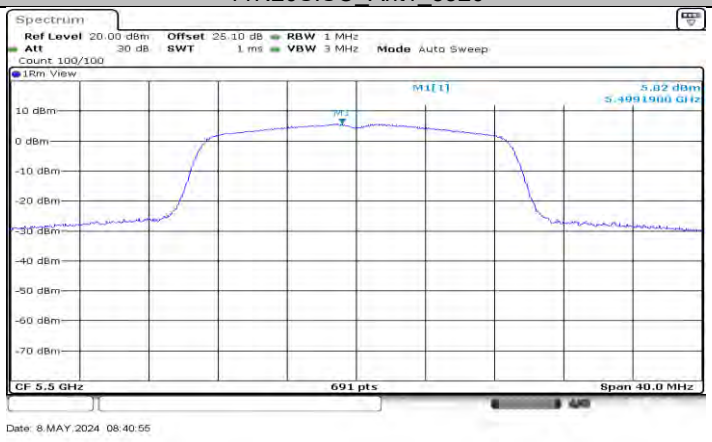
11N20SISO_Ant1_5260

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



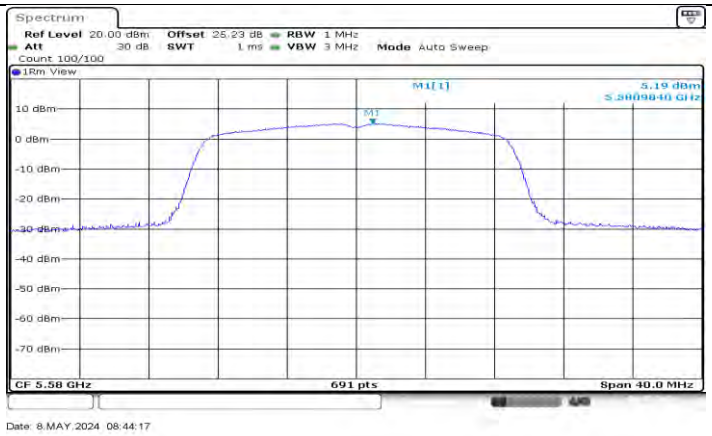
11N20SISO_Ant1_5280

11N20SISO_Ant1_5320

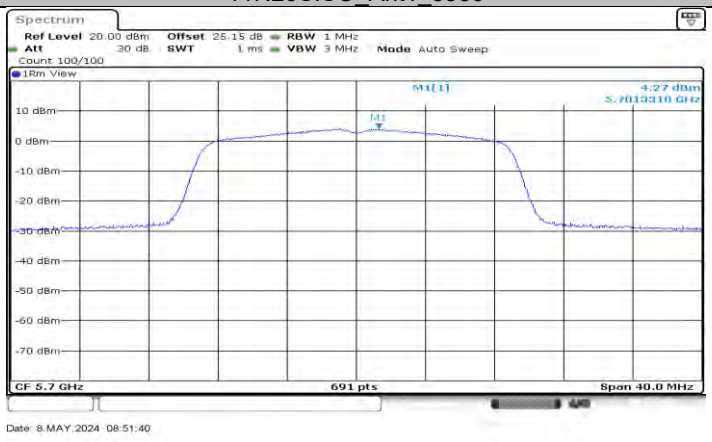


11N20SISO_Ant1_5500

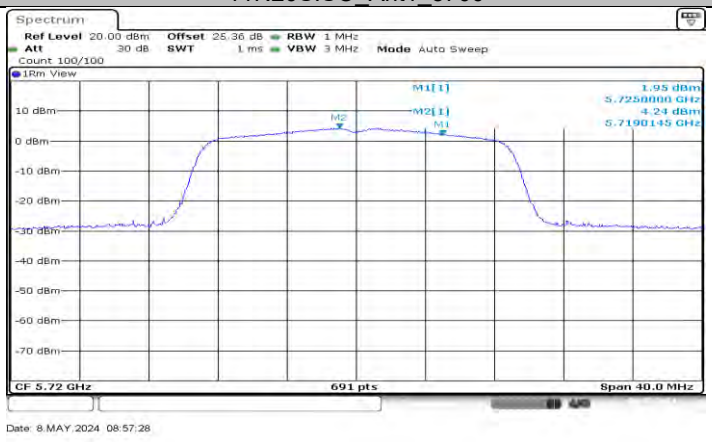
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N20SISO_Ant1_5580



11N20SISO_Ant1_5700



11N20SISO_Ant1_5720_UNII-2C

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

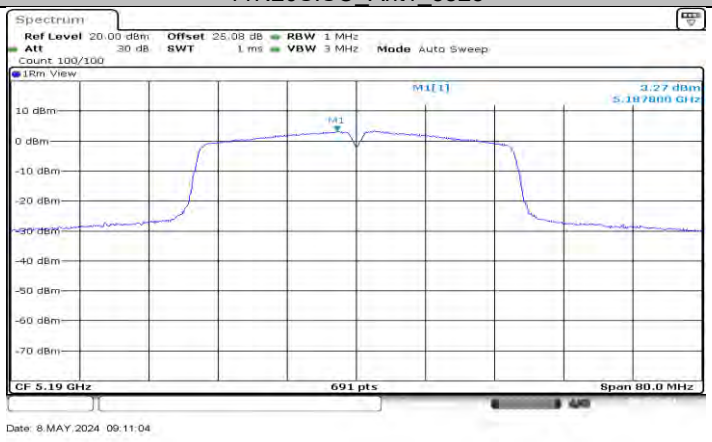
11N20SISO_Ant1_5720_UNII-3

11N20SISO_Ant1_5745

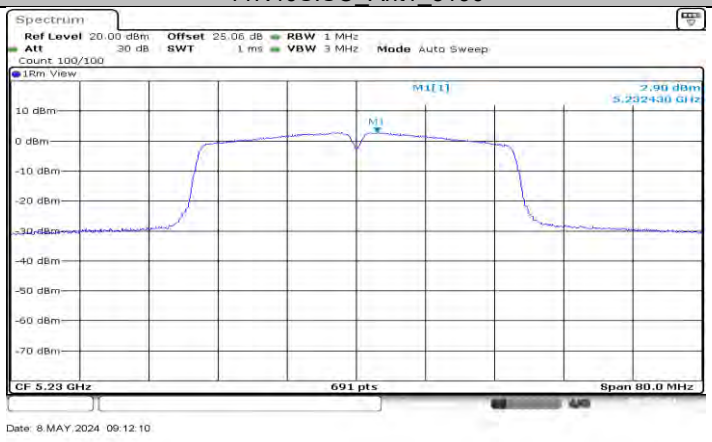
11N20SISO_Ant1_5785

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11N20SISO_Ant1_5825



11N40SISO_Ant1_5190

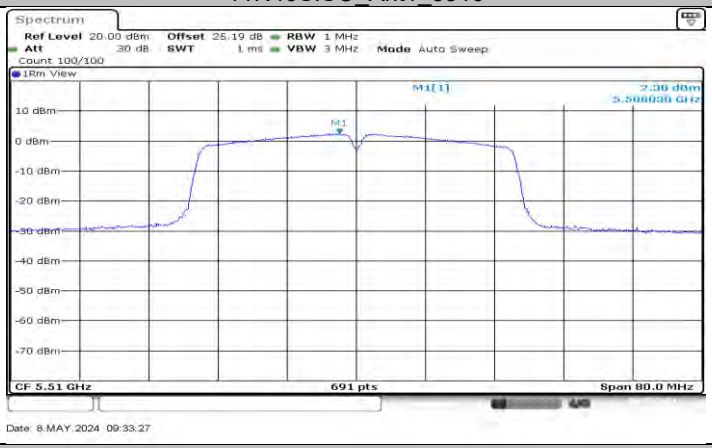


11N40SISO_Ant1_5230

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

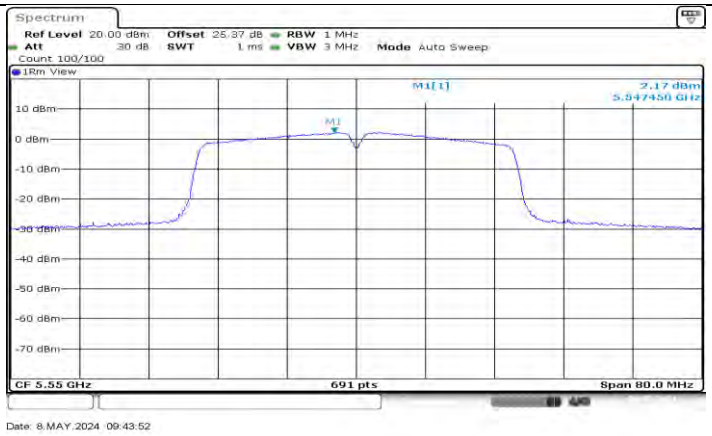
11N40SISO_Ant1_5270

11N40SISO_Ant1_5310



11N40SISO_Ant1_5510

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11N40SISO_Ant1_5550

11N40SISO_Ant1_5670

11N40SISO_Ant1_5710_UNII-2C

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

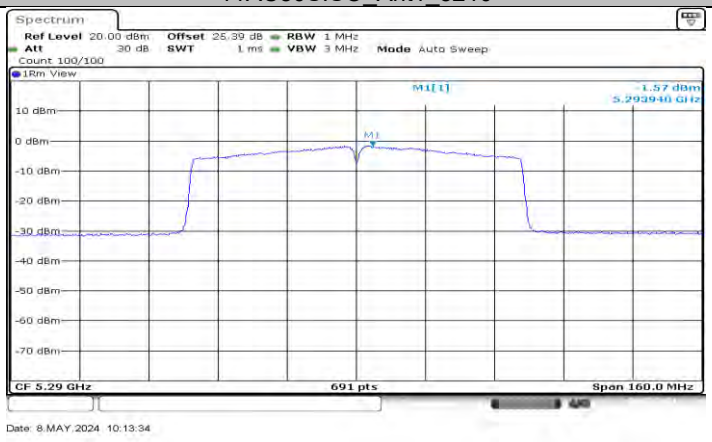
11N40SISO_Ant1_5710_UNII-3

11N40SISO_Ant1_5755

11N40SISO_Ant1_5795

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

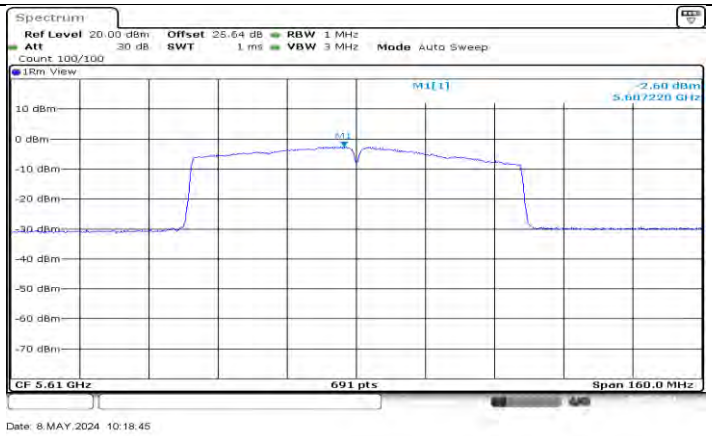
11AC80SISO_Ant1_5210



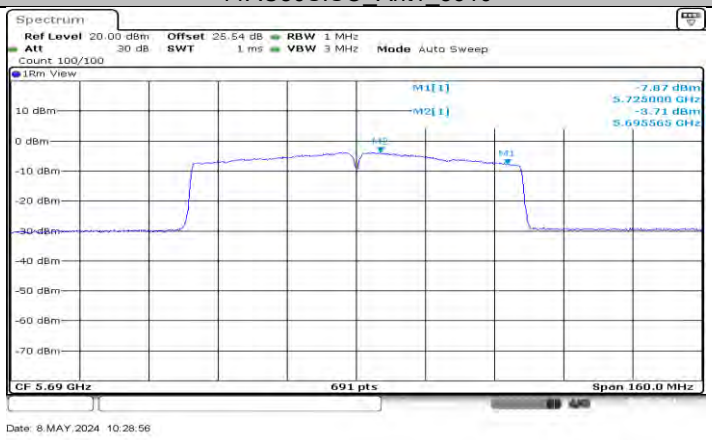
11AC80SISO_Ant1_5290

11AC80SISO_Ant1_5530

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11AC80SISO_Ant1_5610



11AC80SISO_Ant1_5690_UNII-2C

11AC80SISO_Ant1_5690_UNII-3

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11AC80SISO_Ant1_5775

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.6. APPENDIX F: FREQUENCY STABILITY

11.6.1. Test Result

Frequency Error vs. Voltage									
802.11a:5200MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
TN	VL	5200.0237	4.55	5199.9855	-2.78	5200.0185	3.55	5199.9959	-0.80
TN	VN	5200.0183	3.53	5199.9967	-0.64	5200.0053	1.03	5200.0229	4.40
TN	VH	5200.0207	3.97	5200.0221	4.25	5199.9844	-3.01	5200.0043	0.82

Frequency Error vs. Temperature									
802.11a:5200MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
35	VN	5199.9761	-4.59	5200.0065	1.25	5199.9956	-0.84	5200.0074	1.42
30	VN	5199.9977	-0.45	5199.9918	-1.58	5200.0022	0.42	5200.0115	2.21
20	VN	5200.0064	1.23	5199.9989	-0.21	5199.9760	-4.61	5199.9856	-2.77
10	VN	5199.9810	-3.65	5200.0099	1.91	5199.9938	-1.18	5199.9942	-1.12
0	VN	5199.9989	-0.21	5200.0213	4.09	5199.9896	-2.00	5200.0211	4.05

Note:
1. All antennas, test modes and test channels have been tested, only the worst data record in the report.
2. For the detail Test Conditions, please refer to section 7.5 TEST ENVIRONMENT.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.7. APPENDIX G: DUTY CYCLE

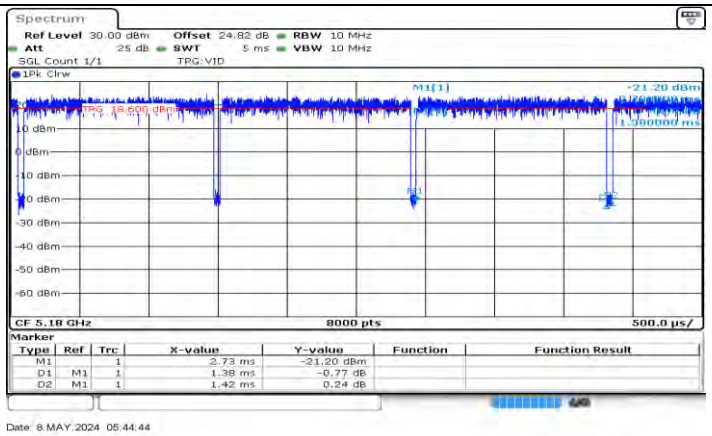
11.7.1. Test Result

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11A	1.38	1.42	0.9718	97.18	0.12	0.72	1
11N20SISO	1.28	1.33	0.9624	96.24	0.17	0.78	1
11N40SISO	0.64	0.68	0.9412	94.12	0.26	1.56	2
11AC80SISO	0.33	0.37	0.8919	89.19	0.50	3.03	4

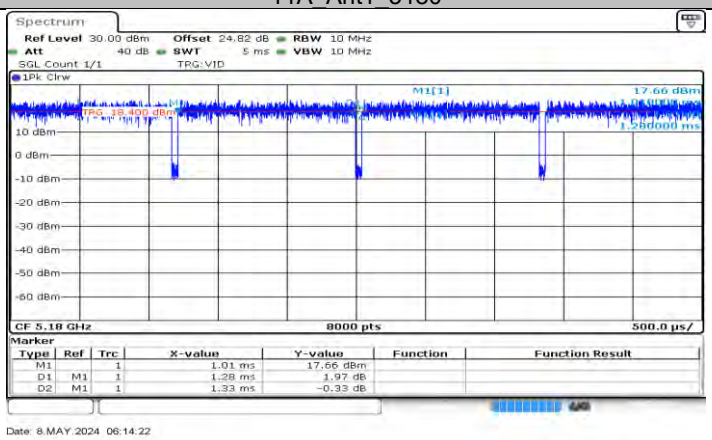
Note:
Duty Cycle Correction Factor=10log (1/x).
Where: x is Duty Cycle (Linear)
Where: T is On Time
If that calculated VBW is not available on the analyzer then the next higher value should be used.

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

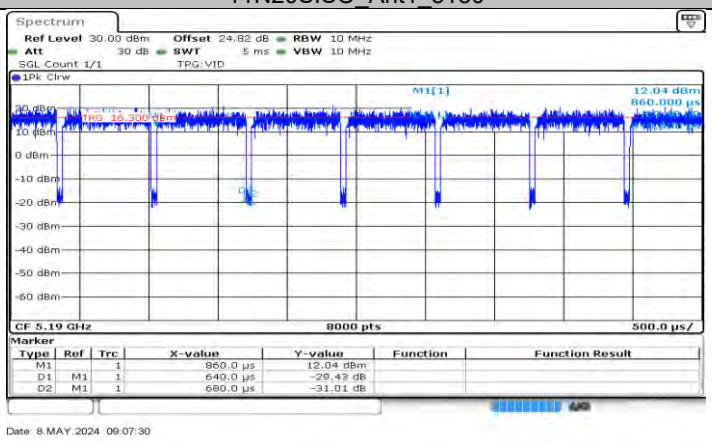
11.7.2. Test Graphs



11A_Ant1_5180

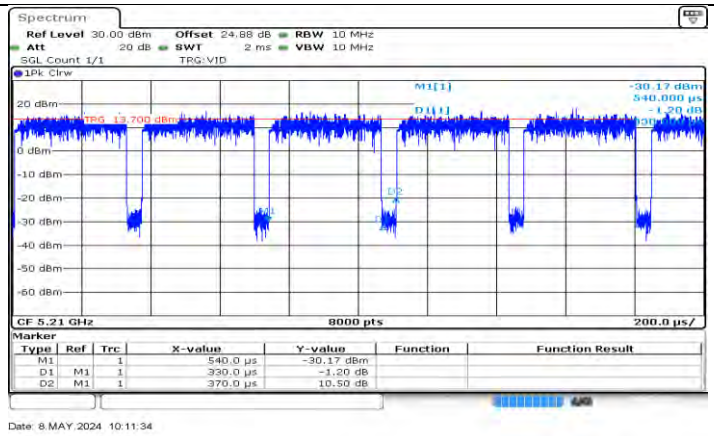


11N20SISO_Ant1_5180



11N40SISO_Ant1_5190

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.



11AC80SISO_Ant1_5210

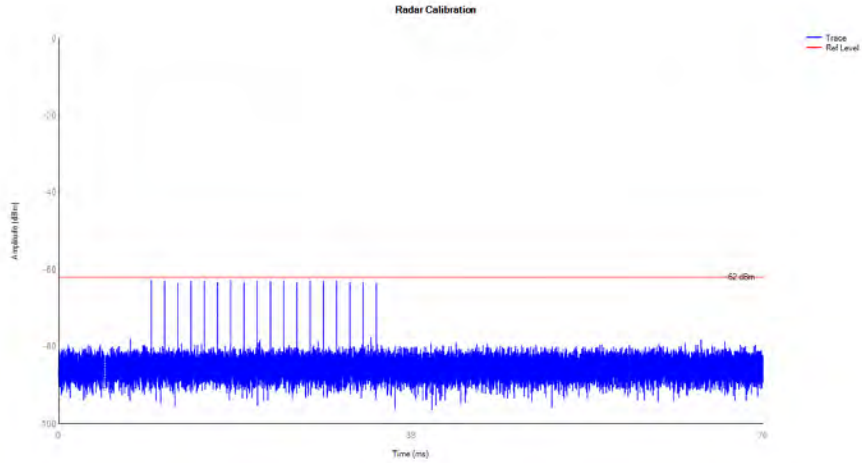
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.8. APPENDIX H: DYNAMIC FREQUENCY SELECTION

11.8.1. Calibration

Mode	Frequency (MHz)	Type	Result	Verdict
11AC80SISO	5530	DFS_FCC_T0	See test Graph	Pass

Test Graphs
5530MHz DFS_FCC_T0



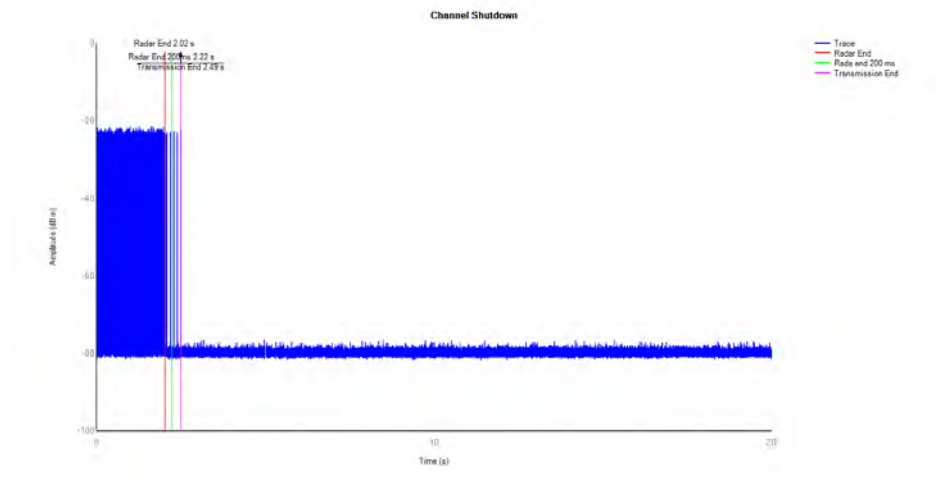
This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.8.2. Shutdown Time

Mode	Frequency (MHz)	Channel Move Time (s)	Limit Channel Move Time (s)	Close Transmission Time (s)	Limit Close Transmission Time (s)	Close Transmission Time after 200ms(s)	Limit Close Transmission Time after 200ms (s)	Verdict
11AC80SISO	5530	0.47	10	0.007	0.26	0.003	0.06	Pass

Test Graphs

11AC80SISO 5530MHz Shutdown

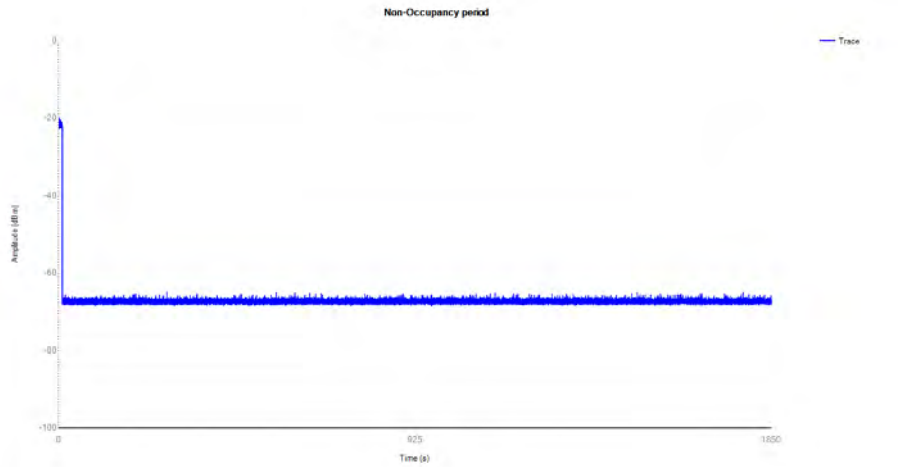


This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

11.8.3. Non-Occupancy

Mode	Frequency (MHz)	Result	Verdict
11AC80SISO	5530	See test Graph	Pass

Test Graphs
11AC80SISO 5530MHz Non-Occupancy



This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.

APPENDIX: PHOTOGRAPHS OF TEST CONFIGURATION

Referred to 4791221995-1_Appendix_EUTPhoto_External

APPENDIX: PHOTOGRAPHS OF THE EUT

Referred to 4791221995-1_Appendix_EUTPhoto_External

END OF REPORT

This report shall not be reproduced except in full, without the written approval of UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch.