# Appendix A

# RF Test Data for 2.4G WIFI (Conducted Measurement)

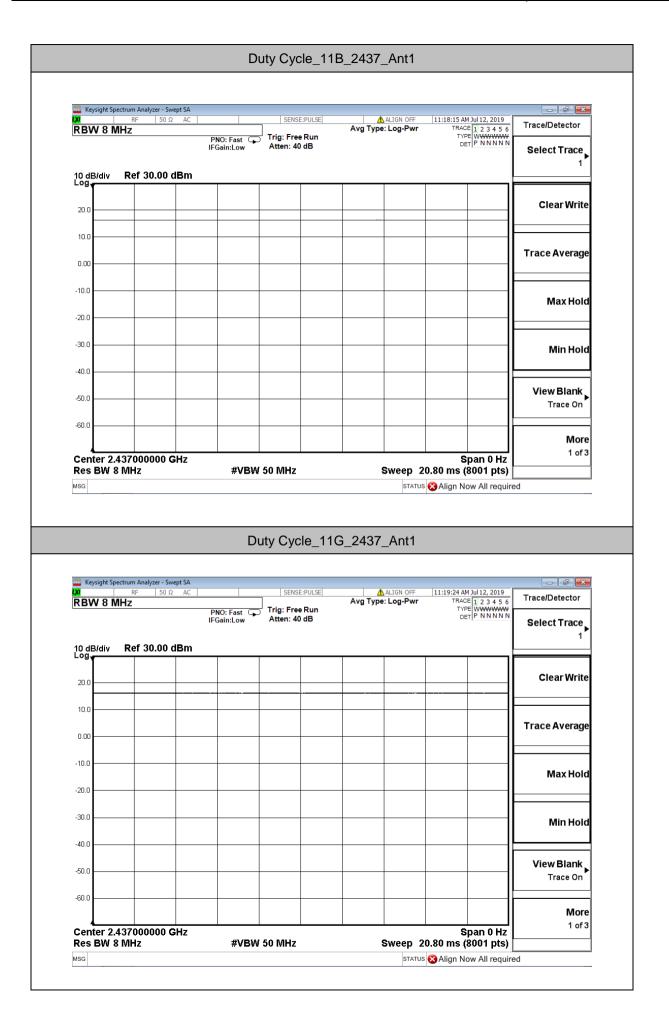
Product Name: wifi flood light Trade Mark: N/A Test Model: SFGD-002

### **Environmental Conditions**

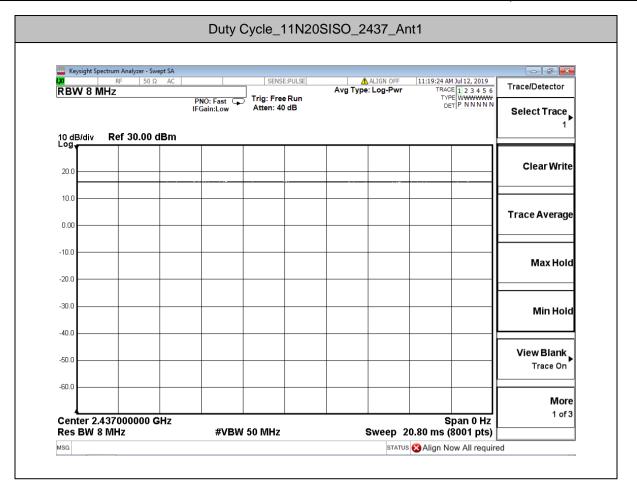
23.4 ° C
54.6%
100.0 kPa
CHUANG WANG
JAYDEN ZHUO

### A.1 Duty Cycle

Test Mode	Test Channel Ant		Duty Cycle[%]	Verdict
11B	2437	Ant1	100	PASS
11G	2437	Ant1	100	PASS
11N20SISO	2437	Ant1	100	PASS



### SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD. FCC ID: 2AI5T-SFGD-002 Report No.: LCS190321084AEA

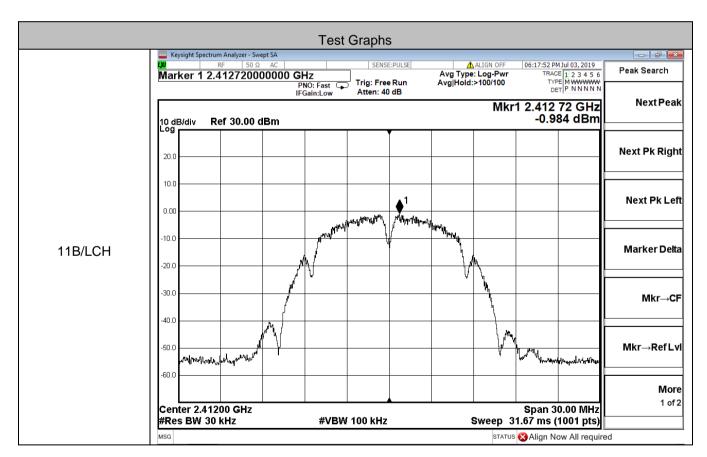


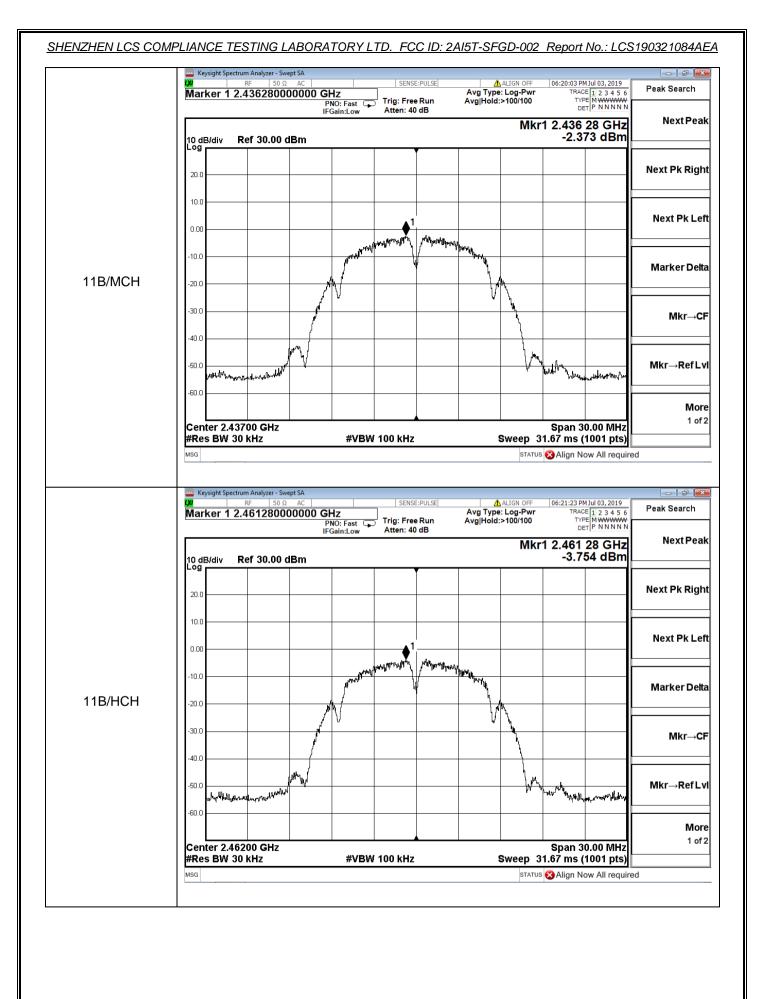
### **A.2 Maximum Conducted Output Power**

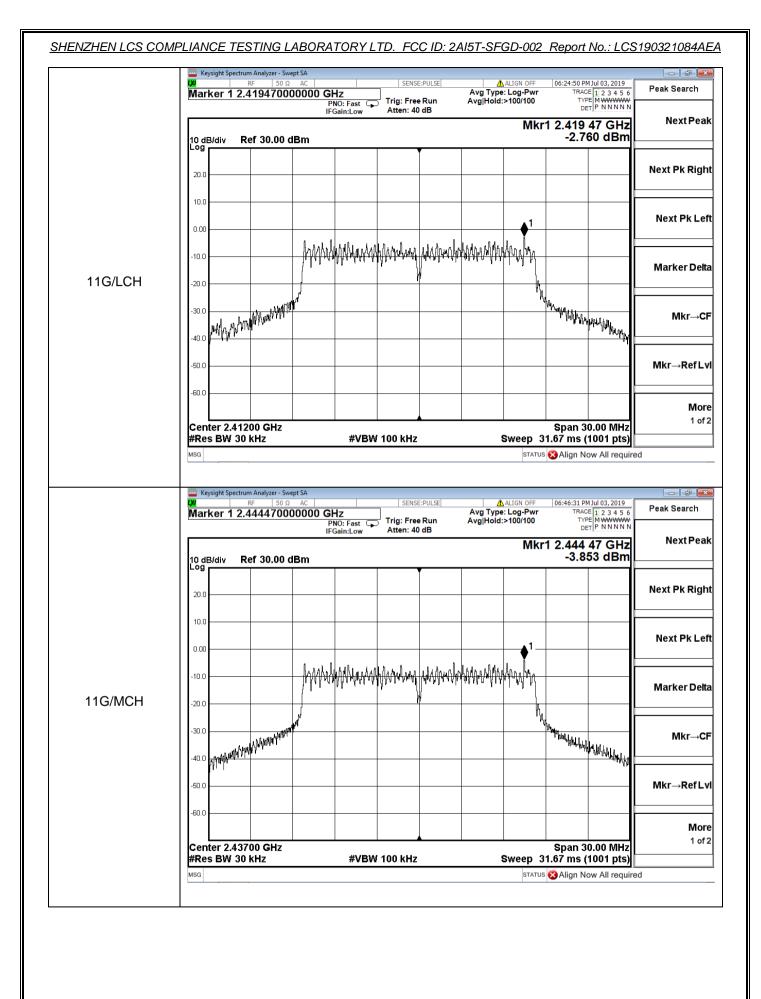
Mode	Mode Channel Meas. Peak Level [dBm]		Limit [dBm]	Verdict
	LCH	18.539	30	PASS
11B	MCH	17.258	30	PASS
	НСН	15.901	30	PASS
	LCH	18.390	30	PASS
11G	MCH	18.544	30	PASS
	НСН	18.083	30	PASS
	LCH	18.611	30	PASS
11N20SISO	MCH	17.815	30	PASS
	НСН	16.692	30	PASS

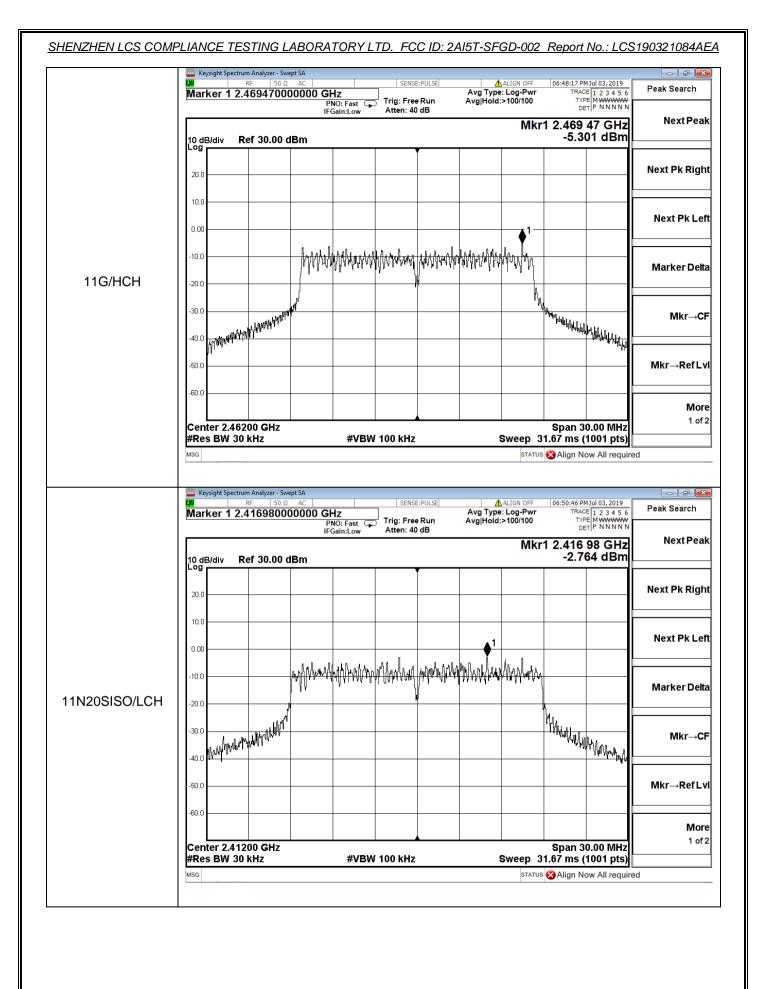
### A.3 Maximum Power Spectral Density

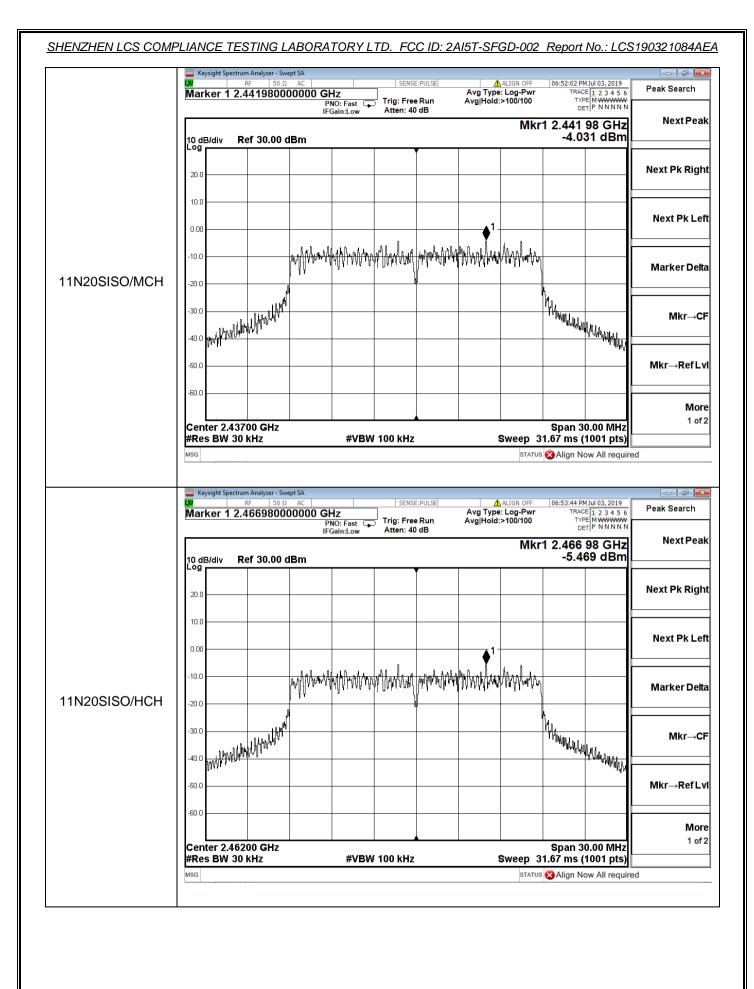
Mode	Channel	Meas.Level [dBm/30KHz]	Limit [dBm/3KHz]	Verdict
	LCH	-0.984	8	PASS
11B	MCH	-2.373	8	PASS
	НСН	-3.754	8	PASS
	LCH	-2.760	8	PASS
11G	MCH	-3.853	8	PASS
	НСН	-5.301	8	PASS
	LCH	-2.764	8	PASS
11N20SISO	MCH	-4.031	8	PASS
	HCH	-5.469	8	PASS





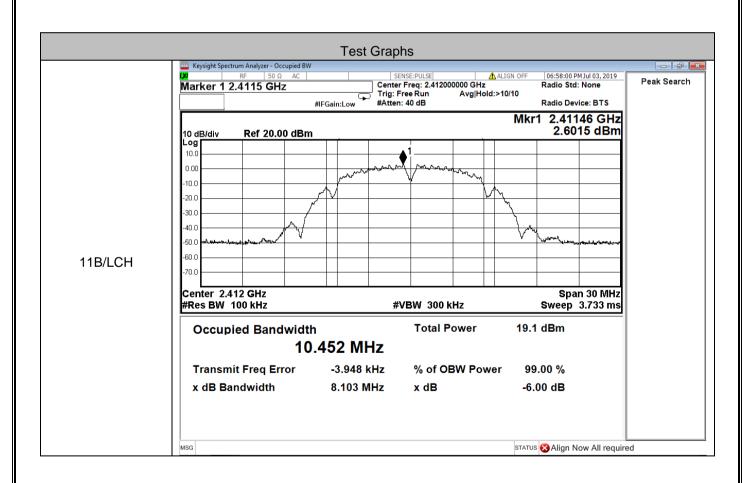




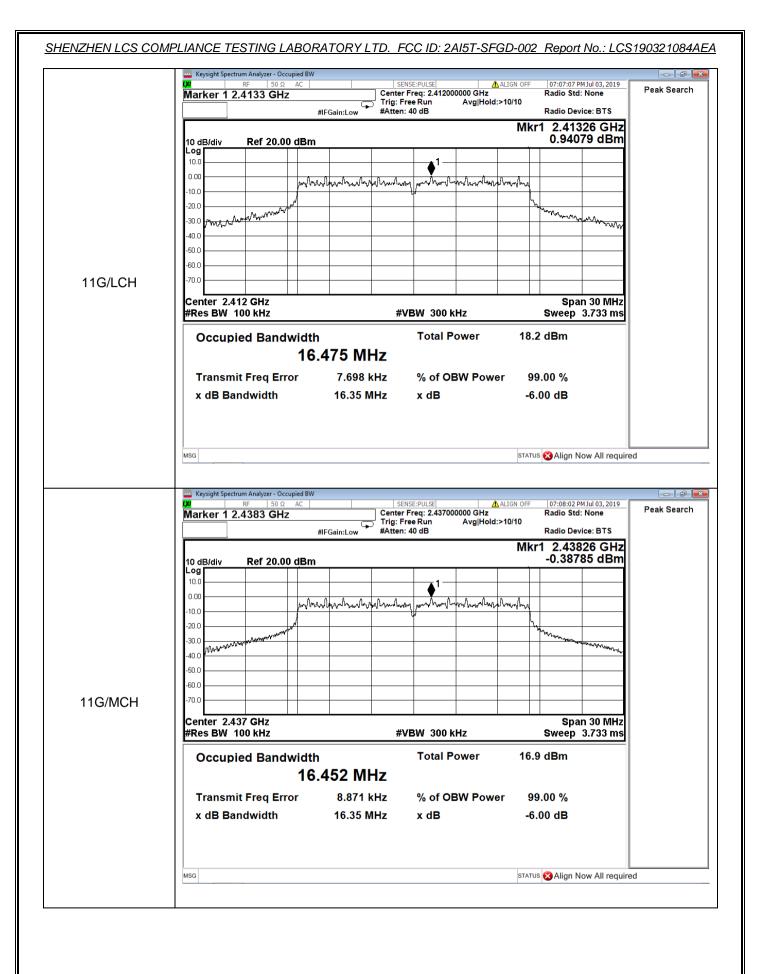


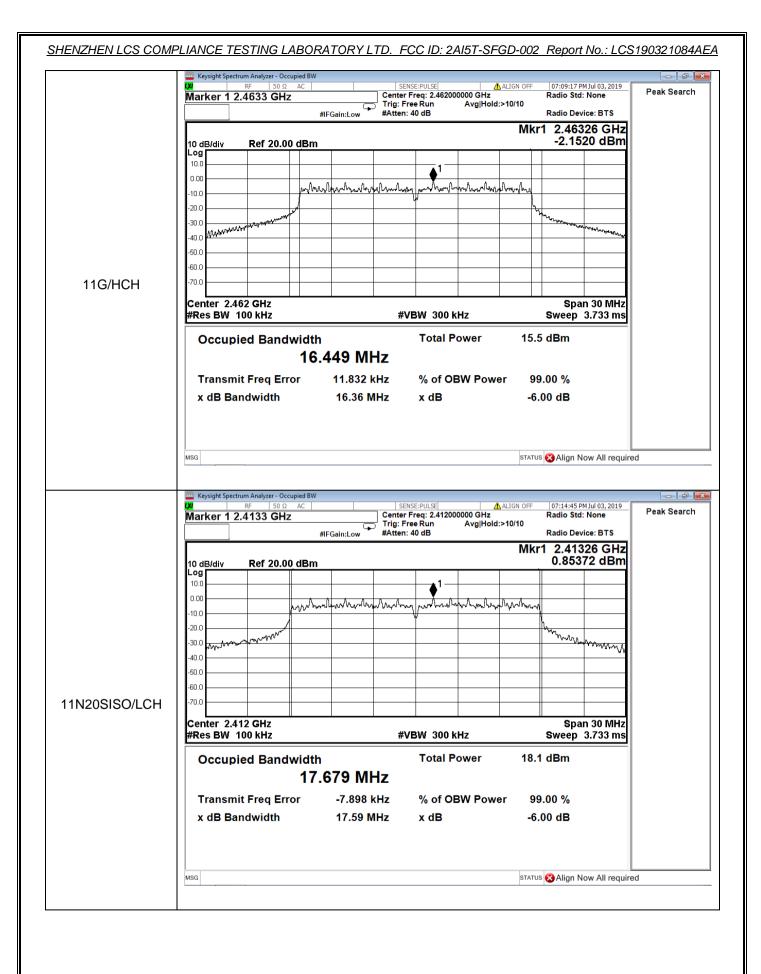
#### A.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
	LCH	8.103	≥0.5	PASS
11B	MCH	8.097	≥0.5	PASS
	HCH	8.563	≥0.5	PASS
	LCH	16.35	≥0.5	PASS
11G	MCH	16.35	≥0.5	PASS
	HCH	16.36	≥0.5	PASS
	LCH	17.59	≥0.5	PASS
11N20SISO	MCH	17.59	≥0.5	PASS
	HCH	17.60	≥0.5	PASS



#### SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD. FCC ID: 2AI5T-SFGD-002 Report No.: LCS190321084AEA SENSE:PULSE Center Freq: 2.437000000 GHz Trig: Free Run #Atten: 40 dB 07:03:29 PM Jul 03, 2019 Radio Std: None Peak Search Marker 1 2.4365 GHz #IFGain:Low Radio Device: BTS Mkr1 2.43649 GHz 1.6878 dBm Ref 20.00 dBm 10 dB/div 10.0 n no -10 C -20.0 -30.0 -4N C -50.0 -60.0 11B/MCH Center 2.437 GHz Span 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 3.733 ms Occupied Bandwidth **Total Power** 17.7 dBm 10.451 MHz -1.390 kHz % of OBW Power **Transmit Freq Error** 99.00 % x dB Bandwidth 8.097 MHz x dB -6.00 dB MSG STATUS Align Now All required SENSE:PULSE Center Freq: 2.462000000 GHz Trig: Free Run #Atten: 40 dB 07:04:24 PM Jul 03, 2019 Peak Search Marker 1 2.4615 GHz Radio Std: None #IFGain:Low Radio Device: BTS Mkr1 2.46149 GHz 0.28346 dBm Ref 20.00 dBm 10 dB/div 10.0 0.00 10.0 -20.0 -30.0 40.0 -50 C -60 C 11B/HCH Center 2.462 GHz Span 30 MHz #Res BW 100 kHz **#VBW 300 kHz** Sweep 3.733 ms **Occupied Bandwidth Total Power** 16.4 dBm 10.523 MHz -8.669 kHz % of OBW Power **Transmit Freq Error** 99.00 % x dB -6.00 dB x dB Bandwidth 8.563 MHz MSG STATUS Align Now All required

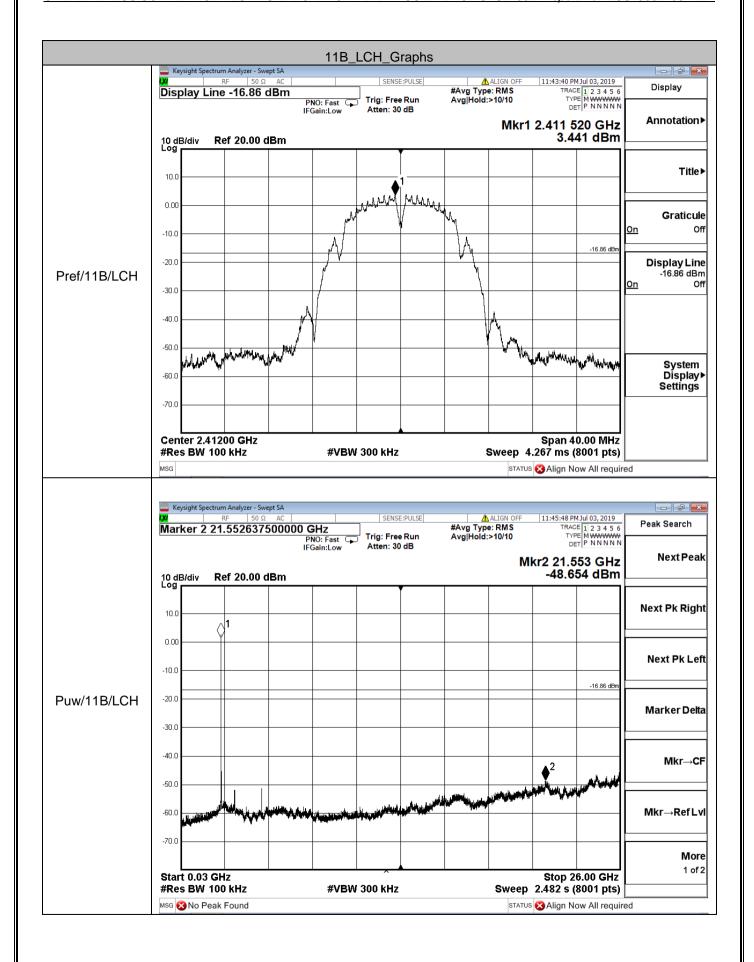


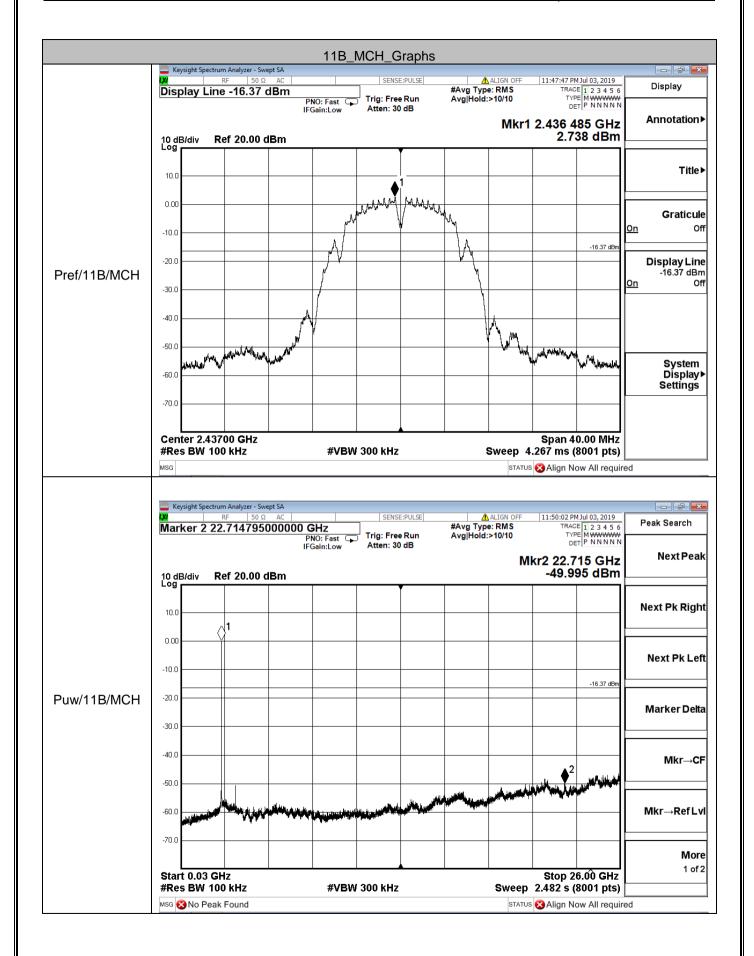


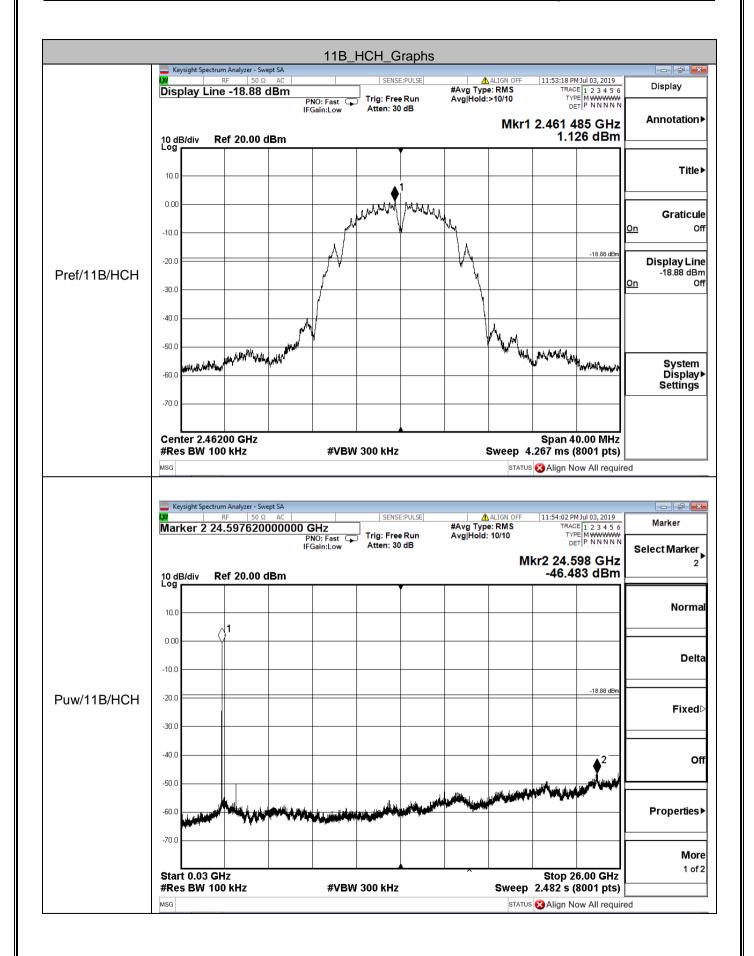
#### SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD. FCC ID: 2AI5T-SFGD-002 Report No.: LCS190321084AEA SENSE:PULSE Center Freq: 2.437000000 GHz Trig: Free Run #Atten: 40 dB 07:13:10 PM Jul 03, 2019 Radio Std: None Peak Search Marker 1 2.4383 GHz #IFGain:Low Radio Device: BTS Mkr1 2.43826 GHz -0.51535 dBm 10 dB/div Ref 20.00 dBm 10.0 n no -10 C -2n n mynny whinter -30.0 www. -4N C -50.0 -60.0 11N20SISO/MCH Center 2.437 GHz Span 30 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 3.733 ms Occupied Bandwidth **Total Power** 16.9 dBm 17.674 MHz -4.484 kHz % of OBW Power **Transmit Freq Error** 99.00 % x dB Bandwidth 17.59 MHz x dB -6.00 dB MSG STATUS Align Now All required 07:12:17 PM Jul 03, 2019 Radio Std: None SENSE:PULSE Center Freq: 2.462000000 GHz Trig: Free Run #Atten: 40 dB Peak Search Marker 1 2.4633 **G**Hz #IFGain:Low Radio Device: BTS Mkr1 2.46326 GHz -1.9025 dBm Ref 20.00 dBm 10 dB/div 10.0 0.00 10.0 -20.0 Manyongonogo www.hardwhiry -30.0 -40.C -50 C -60 C 11N20SISO/HCH Center 2.462 GHz Span 30 MHz #Res BW 100 kHz **#VBW 300 kHz** Sweep 3.733 ms **Occupied Bandwidth Total Power** 15.5 dBm 17.679 MHz -4.892 kHz % of OBW Power **Transmit Freq Error** 99.00 % x dB Bandwidth 17.60 MHz x dB -6.00 dB MSG STATUS Align Now All required

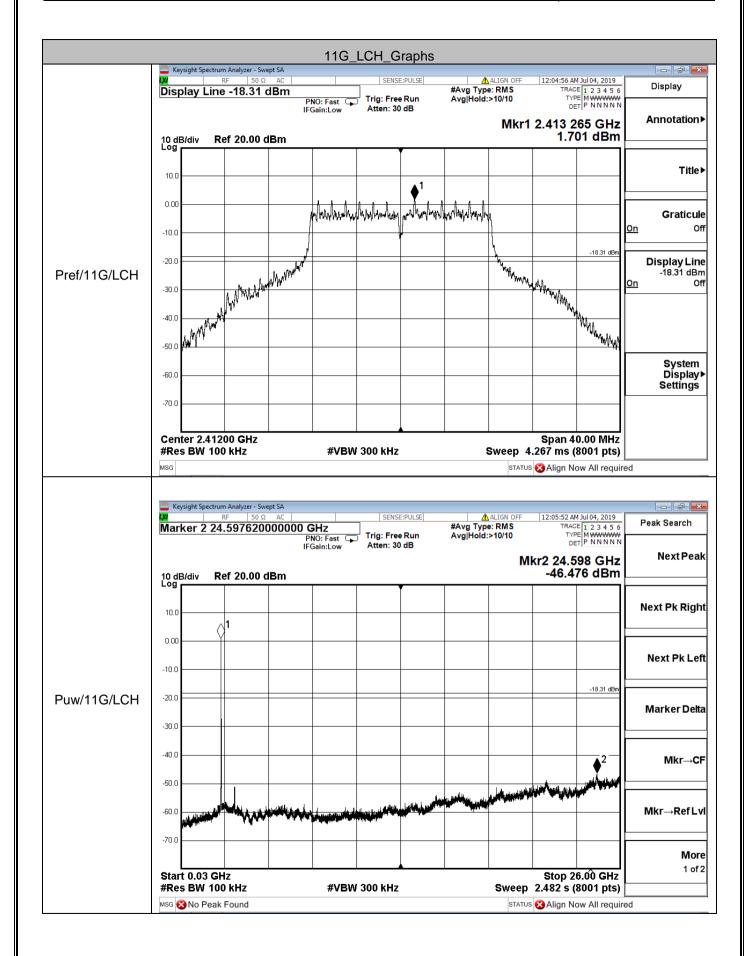
### **B.5 RF Conducted Spurious Emissions**

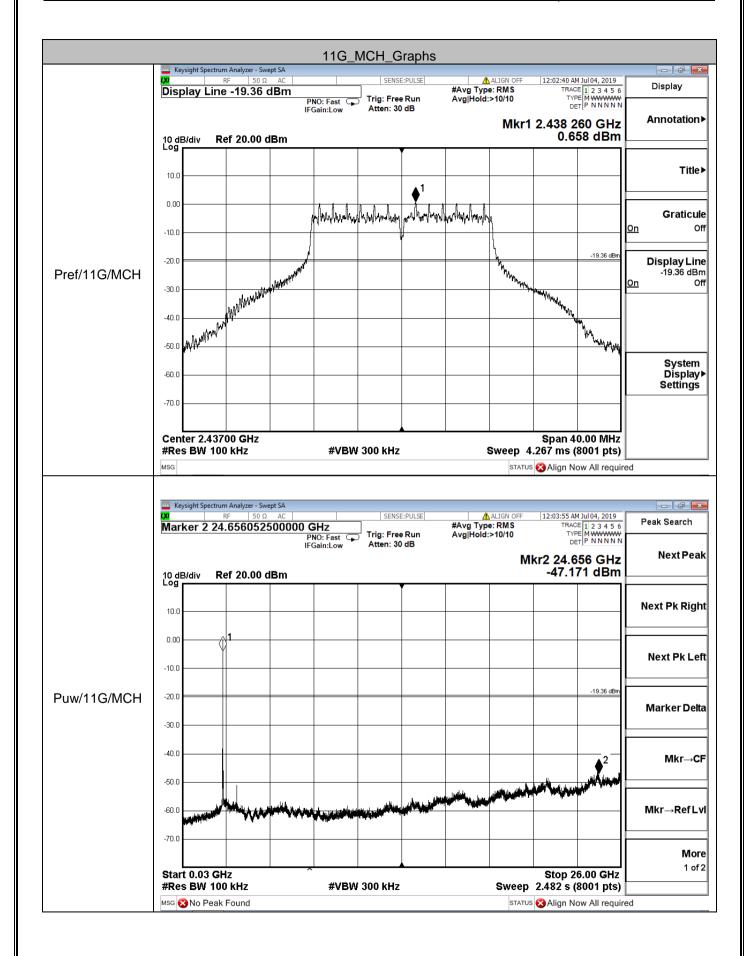
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
	LCH	3.441	-48.654	-16.56	PASS
11B	MCH	2.738	-49.995	-17.26	PASS
	HCH	1.126	-46.483	-18.87	PASS
	LCH	1.701	-46.476	-18.30	PASS
11G	MCH	0.658	-47.171	-19.34	PASS
	HCH	-0.956	-46.909	-20.96	PASS
	LCH	1.840	-46.391	-18.16	PASS
11N20	MCH	0.721	-46.709	-19.28	PASS
SISO	HCH	-0.889	-46.403	-20.89	PASS

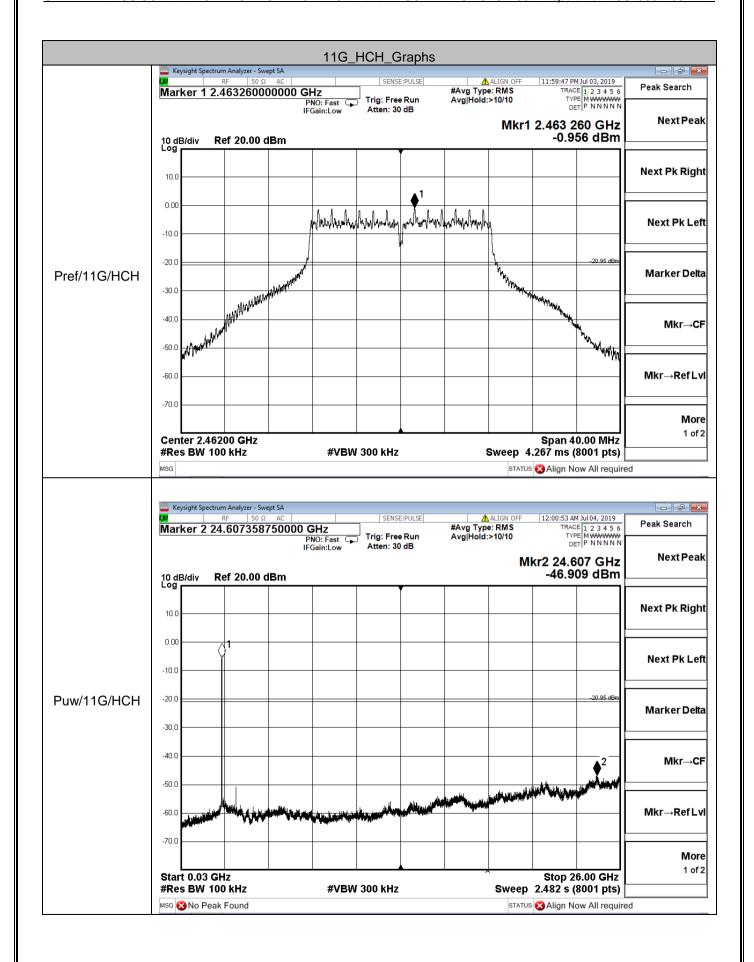


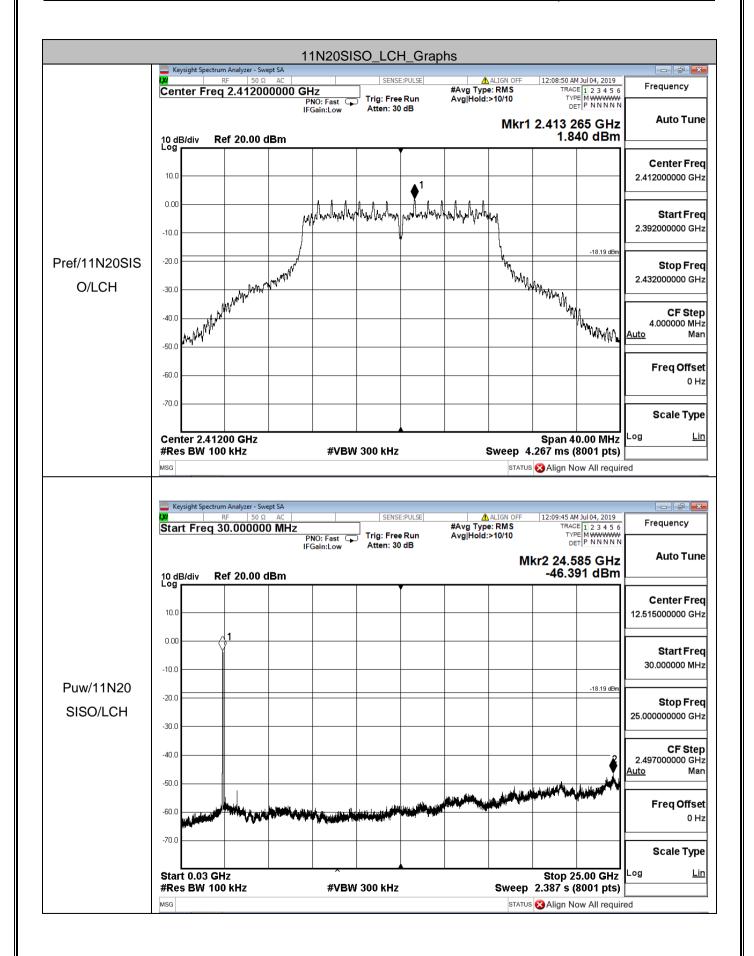


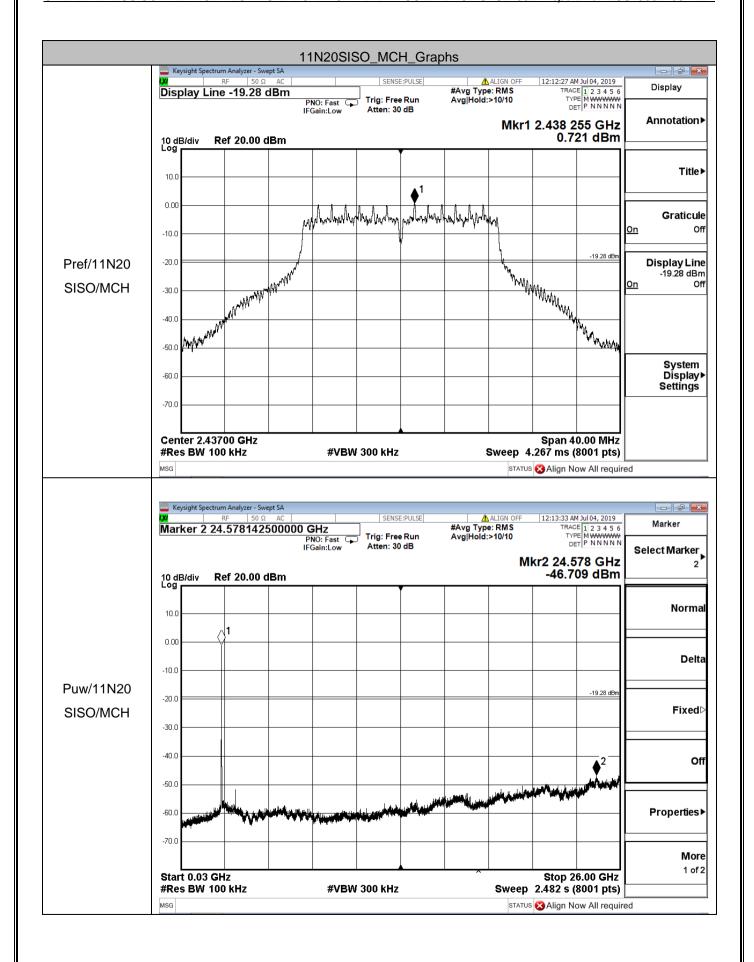


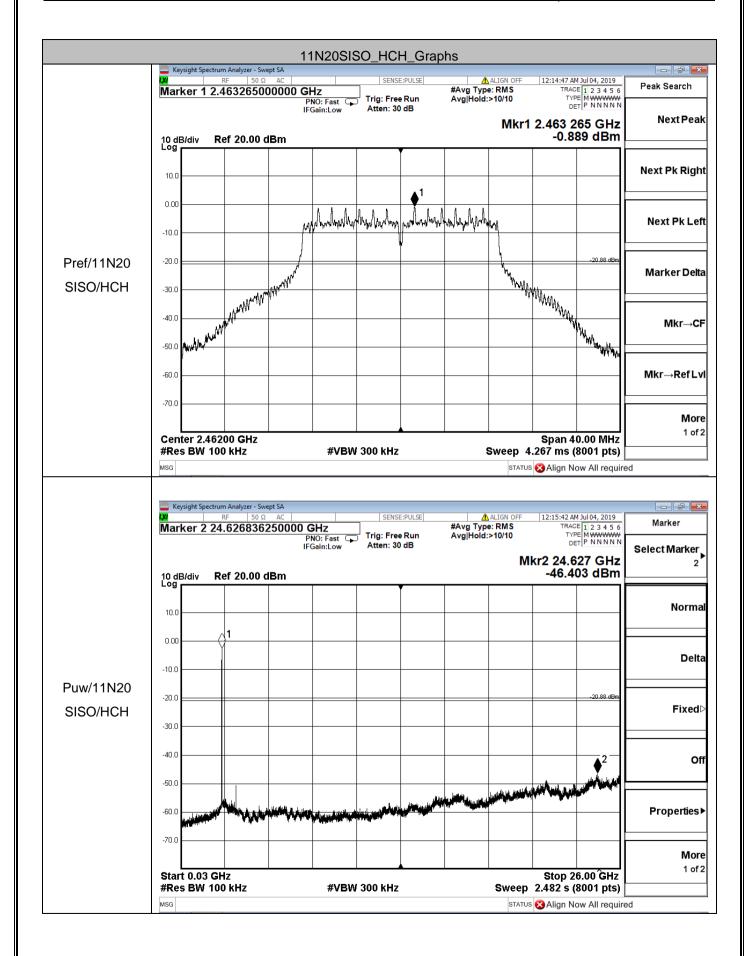






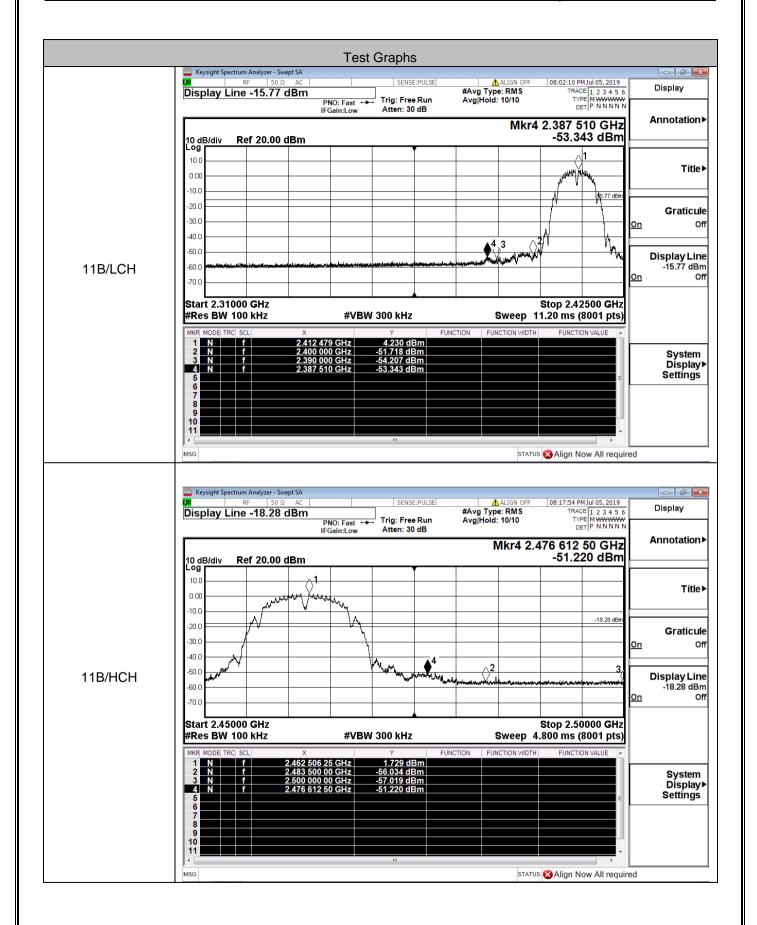


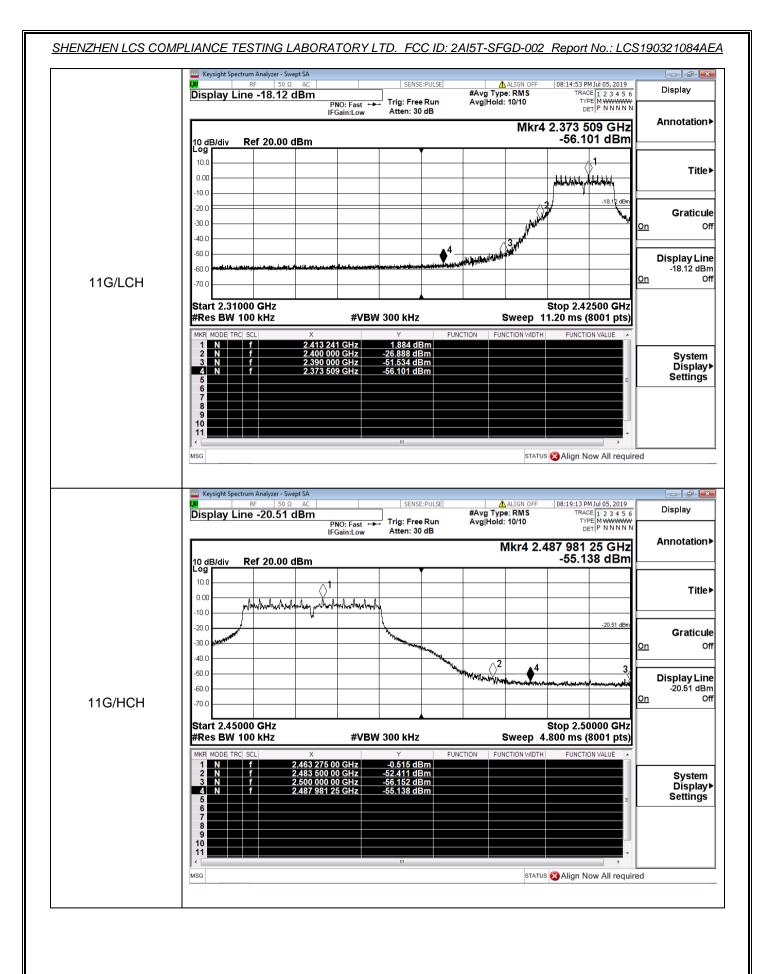


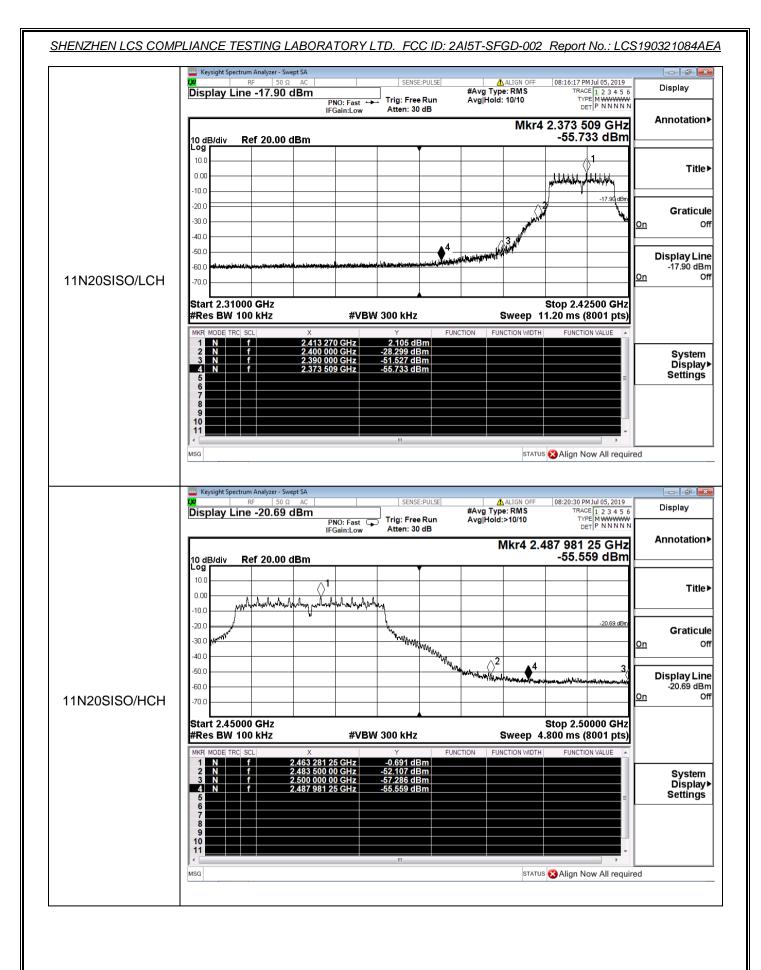


## **B.6 Band-edge for RF Conducted Emissions**

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
445	LCH	4.230	-51.718	-15.77	PASS
11B	НСН	1.729	-51.220	-18.27	PASS
	LCH	1.884	-26.888	-18.12	PASS
11G	HCH	-0.515	-52.411	-20.52	PASS
	LCH	2.105	-28.299	-17.90	PASS
11N20SISO	НСН	-0.691	-52.107	-20.69	PASS

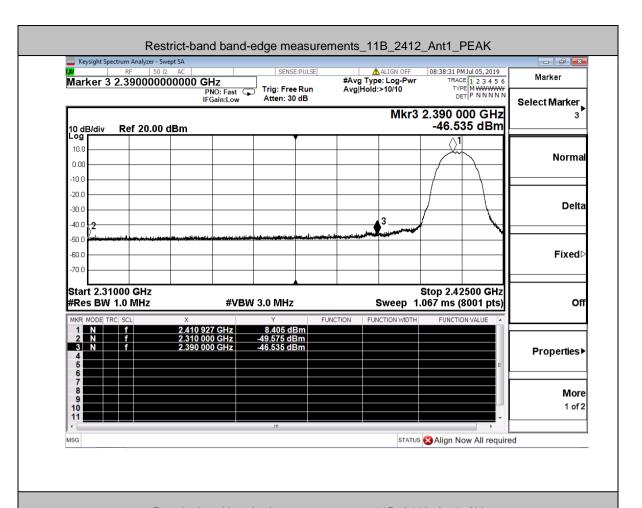


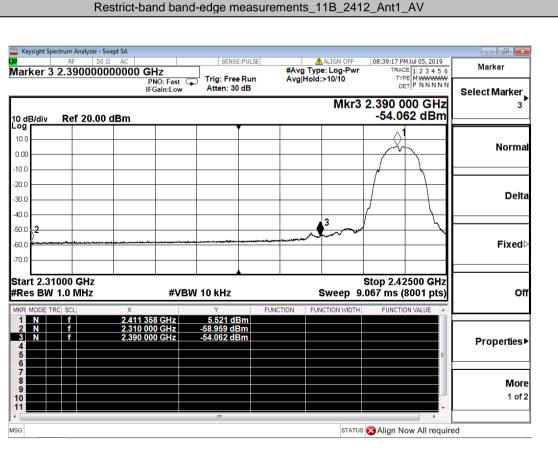


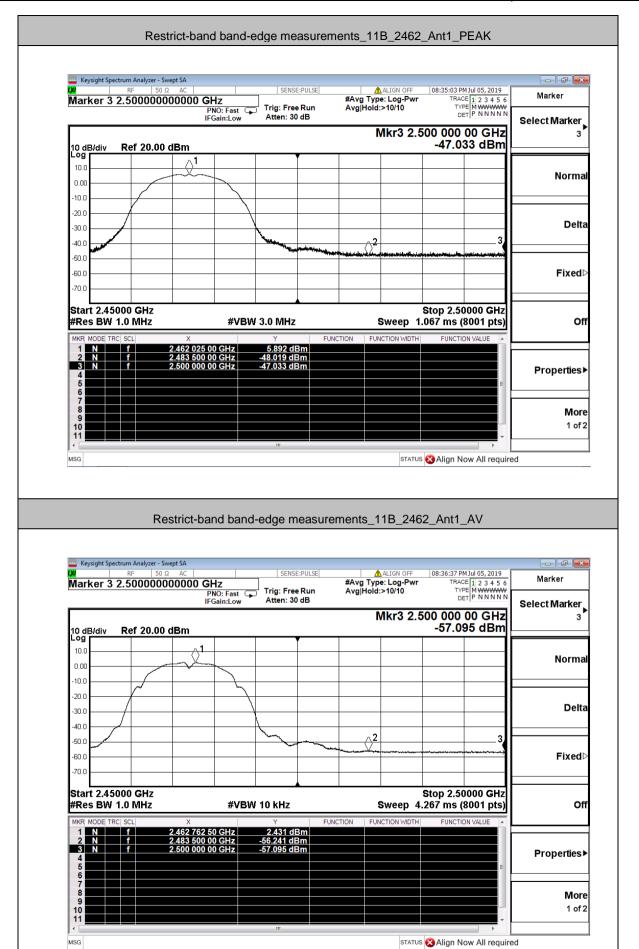


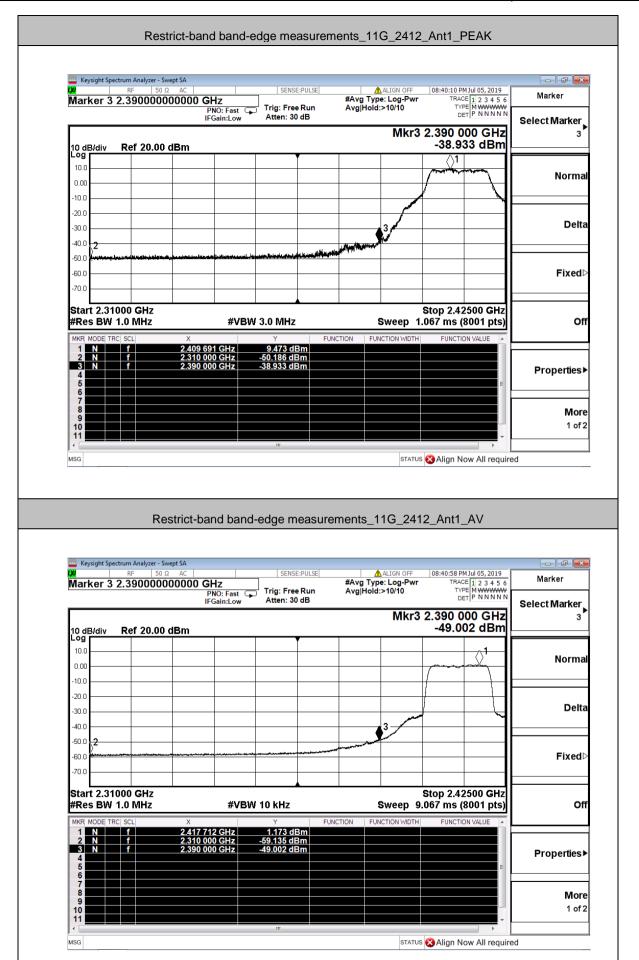
## **B.7 Restrict-band band-edge measurements**

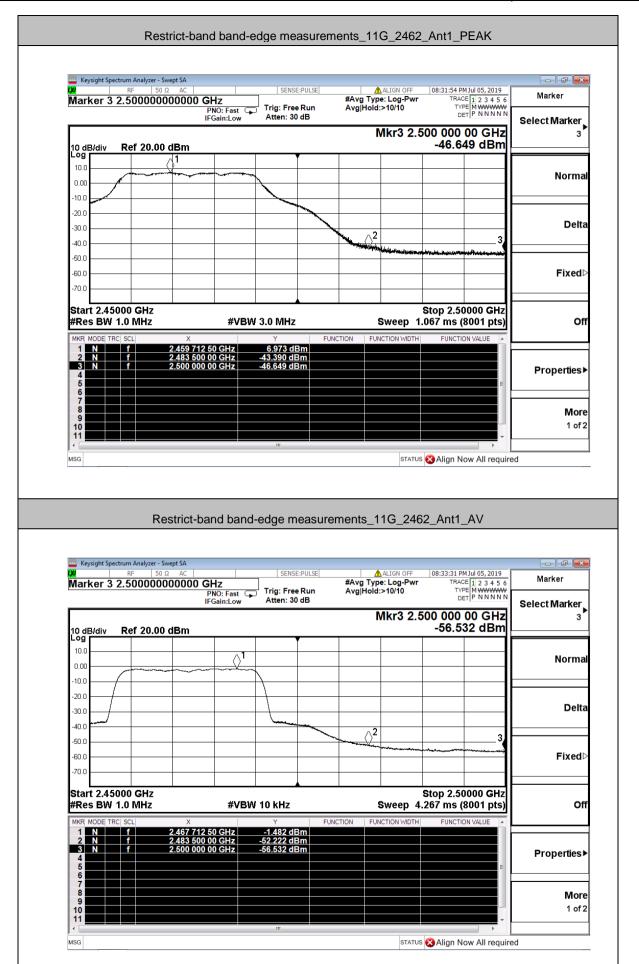
Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBu V/m]	Verdict
	2412	Ant1	2310.0	-49.575	2.0	0	47.66	PEAK	74	PASS
	2412	Ant1	2310.0	-58.959	2.0	0	38.27	AV	54	PASS
	2412	Ant1	2390.0	-46.535	2.0	0	50.70	PEAK	74	PASS
	2412	Ant1	2390.0	-54.062	2.0	0	43.17	AV	54	PASS
11B	2462	Ant1	2483.5	-48.019	2.0	0	49.21	PEAK	74	PASS
	2462	Ant1	2483.5	-56.241	2.0	0	40.99	AV	54	PASS
	2462	Ant1	2500.0	-47.033	2.0	0	50.20	PEAK	74	PASS
	2462	Ant1	2500.0	-57.095	2.0	0	40.14	AV	54	PASS
	2412	Ant1	2310.0	-50.186	2.0	0	47.04	PEAK	74	PASS
	2412	Ant1	2310.0	-59.135	2.0	0	38.10	AV	54	PASS
	2412	Ant1	2390.0	-38.933	2.0	0	58.30	PEAK	74	PASS
	2412	Ant1	2390.0	-49.002	2.0	0	48.23	AV	54	PASS
11G	2462	Ant1	2483.5	-43.390	2.0	0	53.84	PEAK	74	PASS
	2462	Ant1	2483.5	-52.222	2.0	0	45.01	AV	54	PASS
	2462	Ant1	2500.0	-46.649	2.0	0	50.58	PEAK	74	PASS
	2462	Ant1	2500.0	-56.532	2.0	0	40.70	AV	54	PASS
	2412	Ant1	2310.0	-48.767	2.0	0	48.46	PEAK	74	PASS
	2412	Ant1	2310.0	-59.109	2.0	0	38.12	AV	54	PASS
	2412	Ant1	2390.0	-33.968	2.0	0	63.26	PEAK	74	PASS
11N20	2412	Ant1	2390.0	-47.995	2.0	0	49.24	AV	54	PASS
SISO	2462	Ant1	2483.5	-40.521	2.0	0	56.71	PEAK	74	PASS
	2462	Ant1	2483.5	-52.397	2.0	0	44.83	AV	54	PASS
	2462	Ant1	2500.0	-46.364	2.0	0	50.87	PEAK	74	PASS
	2462	Ant1	2500.0	-56.607	2.0	0	40.62	AV	54	PASS

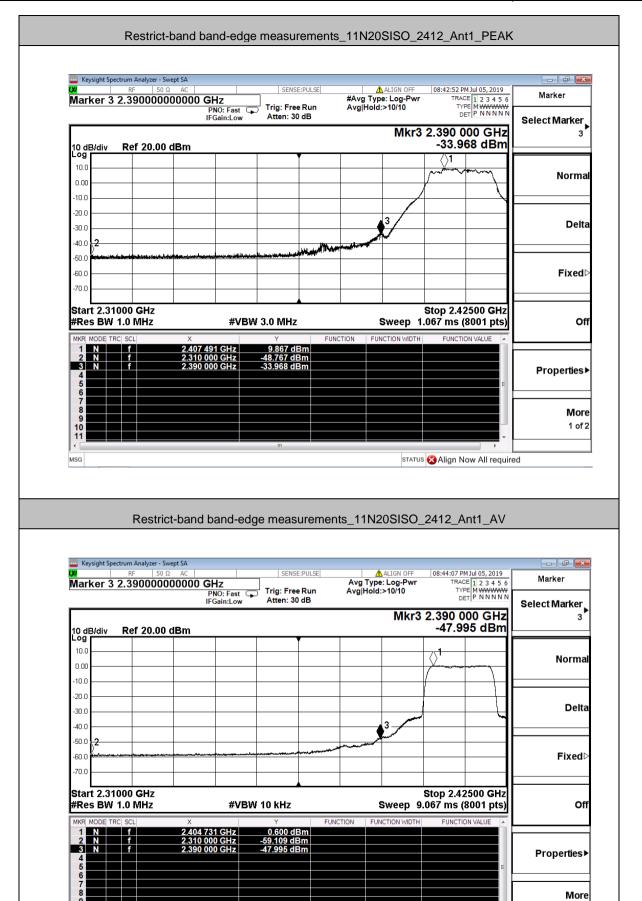












MSG

1 of 2

STATUS Align Now All required

