

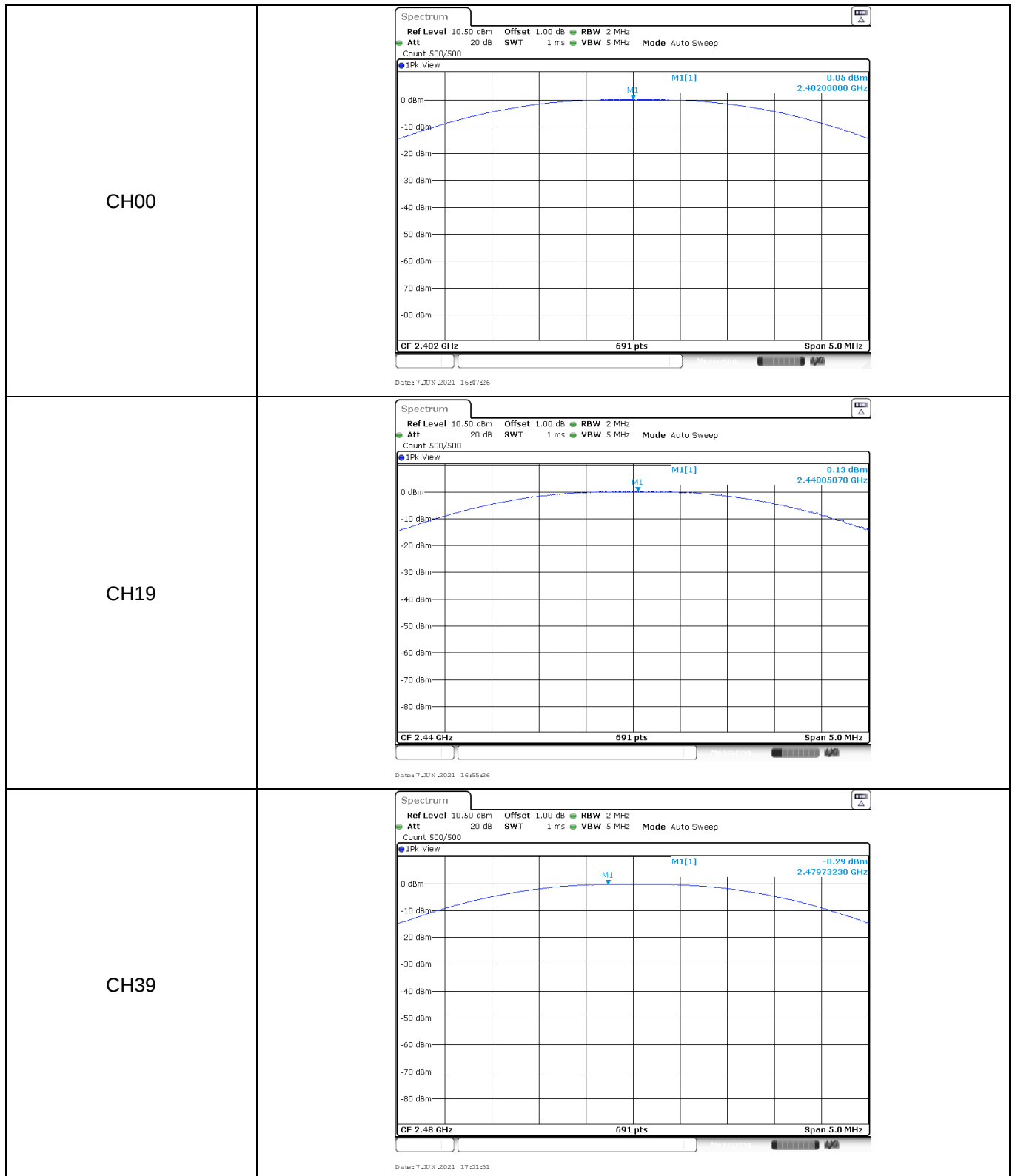
APPENDIX REPORT

Project No.	SHT2105044101EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT21050441007	Model No.	AKX00034
Start test date	2021-06-07	Finish date	2021-06-07
Temperature	25.6°C	Humidity	31%
Test Engineer	Qizhi Zhang	Auditor	Xiaodong Zhu

Appendix clause	Test item	Result
A	Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

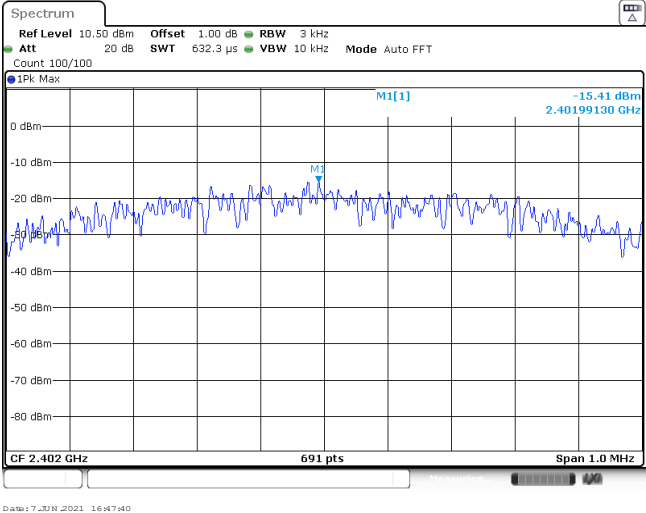
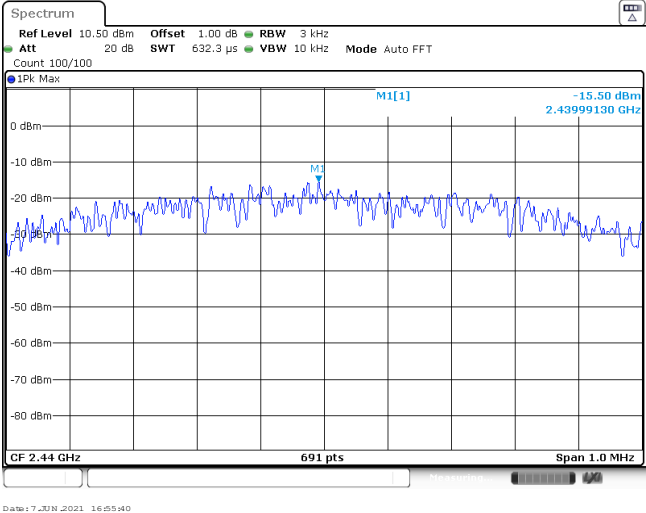
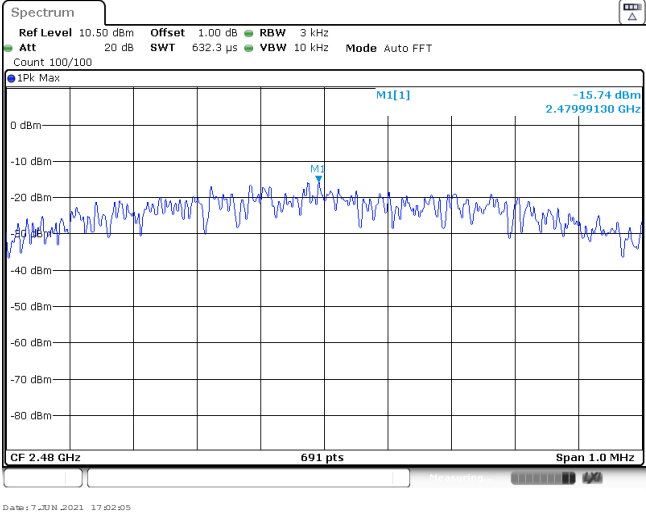
Appendix A: Peak Output Power

Type	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	0.05	0.04	≤ 30.00	Pass
	19	0.13	0.11		
	39	-0.29	-0.31		



Appendix B: Power Spectral Density

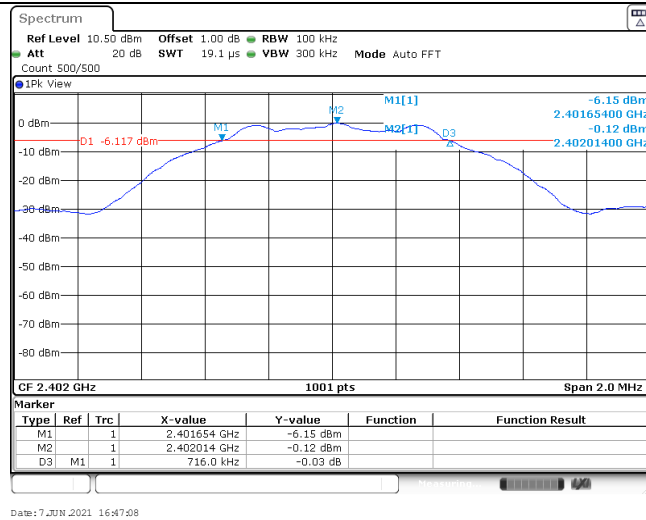
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-15.41	≤8.00	Pass
	19	-15.50		
	39	-15.74		

CH00	 Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz Att 20 dB SWT 632.3 μs VBW 10 kHz Mode Auto FFT Count 100/100 IPk Max M1[1] -15.41 dBm 2.40199130 GHz CF 2.402 GHz 691 pts Span 1.0 MHz Date: 7 JUN 2021 16:47:40
CH19	 Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz Att 20 dB SWT 632.3 μs VBW 10 kHz Mode Auto FFT Count 100/100 IPk Max M1[1] -15.50 dBm 2.43999130 GHz CF 2.44 GHz 691 pts Span 1.0 MHz Date: 7 JUN 2021 16:55:40
CH39	 Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 3 kHz Att 20 dB SWT 632.3 μs VBW 10 kHz Mode Auto FFT Count 100/100 IPk Max M1[1] -15.74 dBm 2.47999130 GHz CF 2.48 GHz 691 pts Span 1.0 MHz Date: 7 JUN 2021 17:02:05

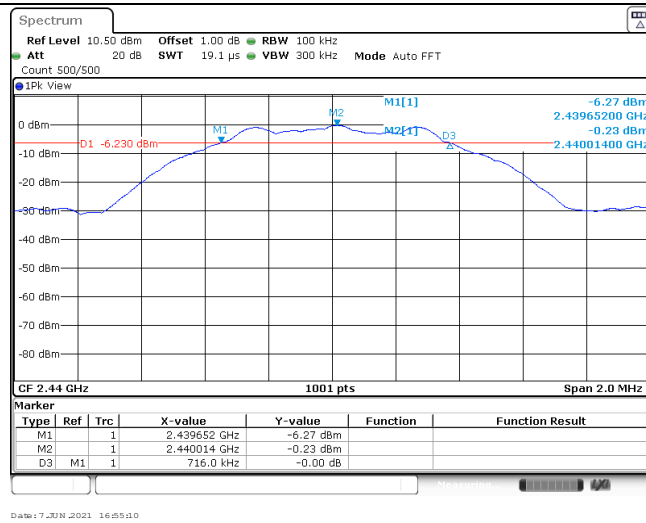
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	716.00	≥500	Pass
	19	716.00		
	39	720.00		

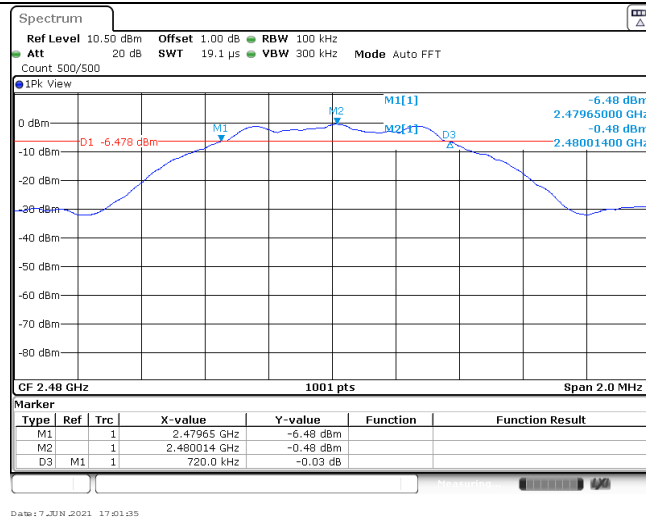
CH00



CH19



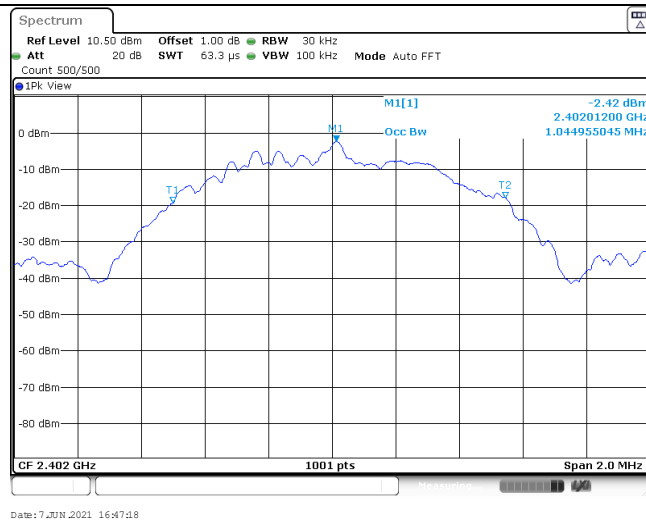
CH39



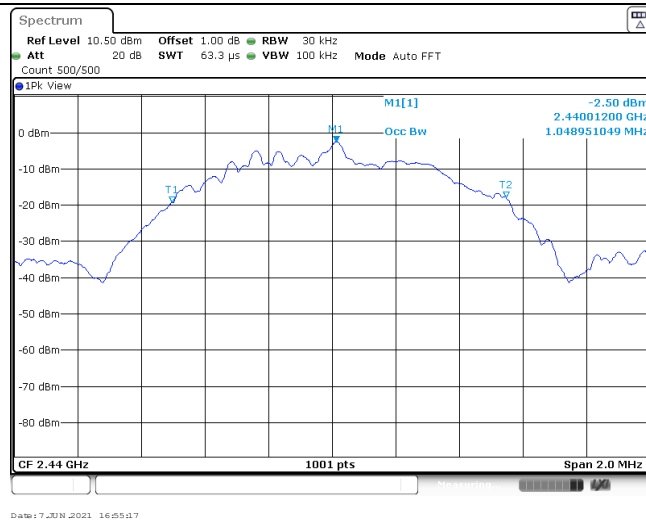
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.05	-	Pass
	19	1.05		
	39	1.05		

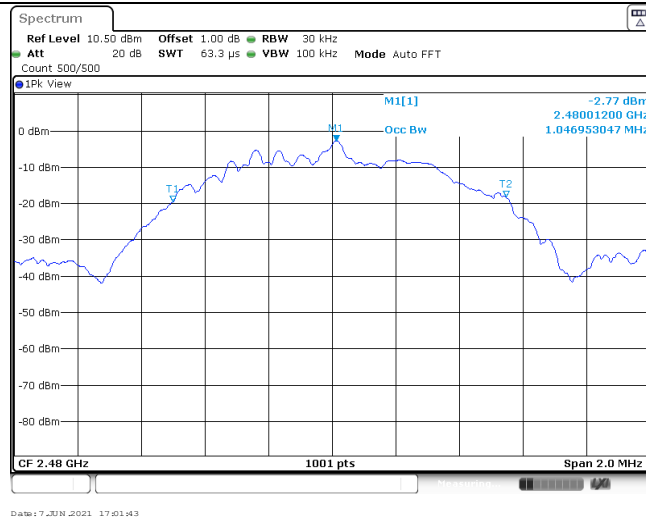
CH00



CH19

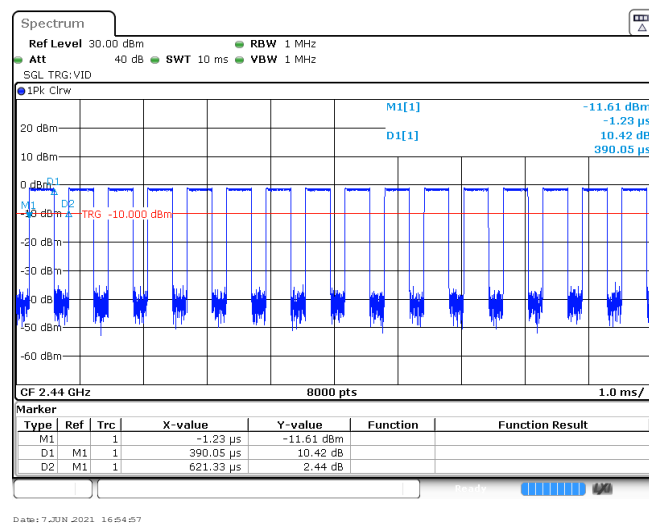


CH39



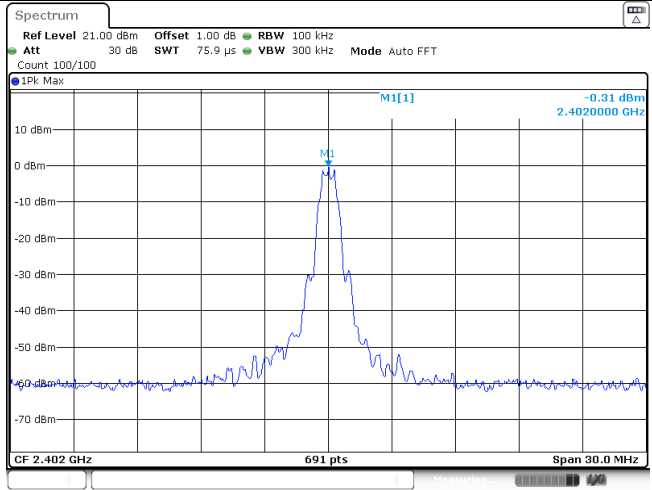
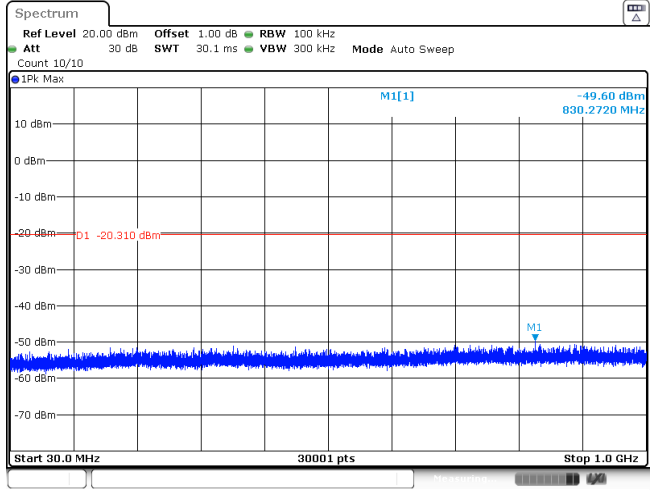
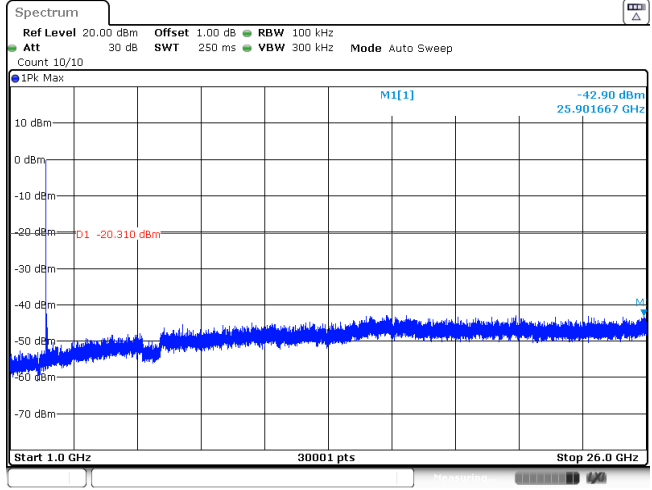
Appendix E: Duty cycle

Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.39	0.62	62.9%	2.6

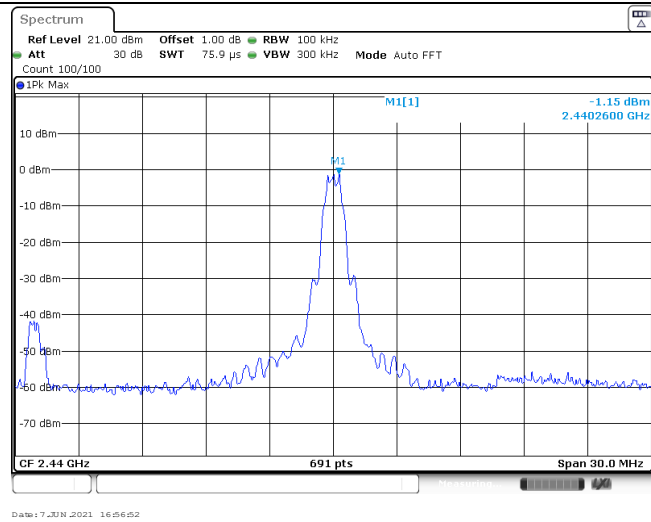


Appendix F: Band edge and Spurious Emissions (conducted)

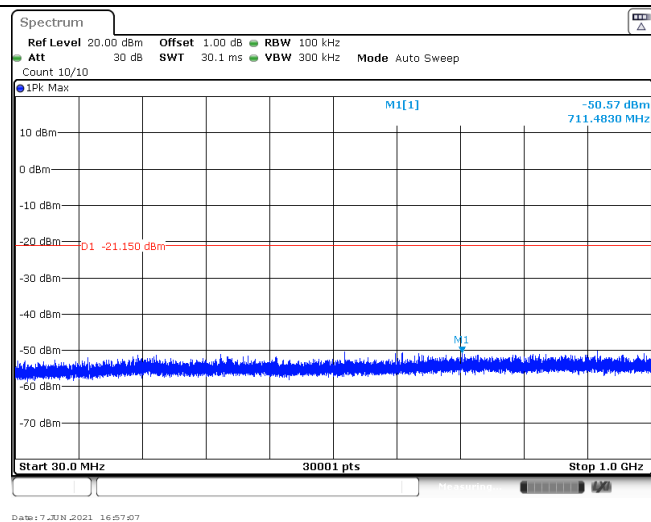
Test Item:	Band edge																																										
CH00	Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 1.1 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1Pk Max 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm M1[1] M2[1] M3 M4 M5 -0.51 dBm 2.402040 GHz -49.71 dBm 2.400000 GHz Start 2.31 GHz 691 pts Stop 2.405 GHz Marker <table><thead><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr></thead><tbody><tr><td>M1</td><td>1</td><td></td><td>2.40204 GHz</td><td>-0.51 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-49.71 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-61.12 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-62.47 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399768 GHz</td><td>-48.43 dBm</td><td></td><td></td></tr></tbody></table> Date: 7 JUN 2021 16:47:49	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.40204 GHz	-0.51 dBm			M2	1		2.4 GHz	-49.71 dBm			M3	1		2.39 GHz	-61.12 dBm			M4	1		2.31 GHz	-62.47 dBm			M5	1		2.399768 GHz	-48.43 dBm		
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CH39	Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 56.9 µs VBW 300 kHz Mode Auto FFT Count 100/100 1Pk Max 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm M1 M2[1] M3 M4 -0.53 dBm 2.4800220 GHz -55.88 dBm 2.4835000 GHz Start 2.478 GHz 691 pts Stop 2.5 GHz Marker <table><thead><tr><th>Type</th><th>Ref</th><th>Trc</th><th>X-value</th><th>Y-value</th><th>Function</th><th>Function Result</th></tr></thead><tbody><tr><td>M1</td><td>1</td><td></td><td>2.480022 GHz</td><td>-0.53 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-55.88 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-68.89 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.4835159 GHz</td><td>-56.24 dBm</td><td></td><td></td></tr></tbody></table> Date: 7 JUN 2021 17:02:14	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.480022 GHz	-0.53 dBm			M2	1		2.4835 GHz	-55.88 dBm			M3	1		2.5 GHz	-68.89 dBm			M4	1		2.4835159 GHz	-56.24 dBm									
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M4	1		2.4835159 GHz	-56.24 dBm																																							

Test Item:	SE
CH00 Reference level	 Spectrum Ref Level 21.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 75.9 μs VBW 300 kHz Mode Auto FFT Count 100/100 1Pk Max M1[1] -0.31 dBm 2.402000 GHz M1 CF 2.402 GHz 691 pts Span 30.0 MHz Date: 7 JUN 2021 16:47:57
CH00 30MHz~1000MHz	 Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1Pk Max M1[1] -49.60 dBm 830.2720 MHz D1 -20.310 dBm M1 Start 30.0 MHz 30001 pts Stop 1.0 GHz Date: 7 JUN 2021 16:48:12
CH00 1GHz~26GHz	 Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWT 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 1Pk Max M1[1] -42.90 dBm 25.901667 GHz D1 -20.310 dBm M1 Start 1.0 GHz 30001 pts Stop 26.0 GHz Date: 7 JUN 2021 16:48:27

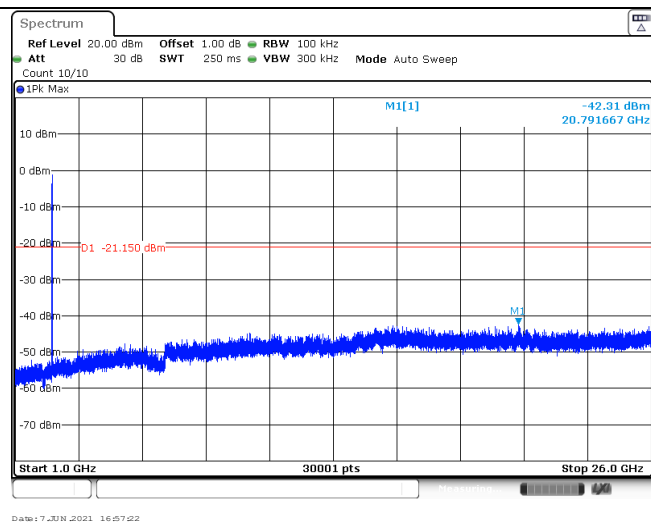
CH19
Reference level

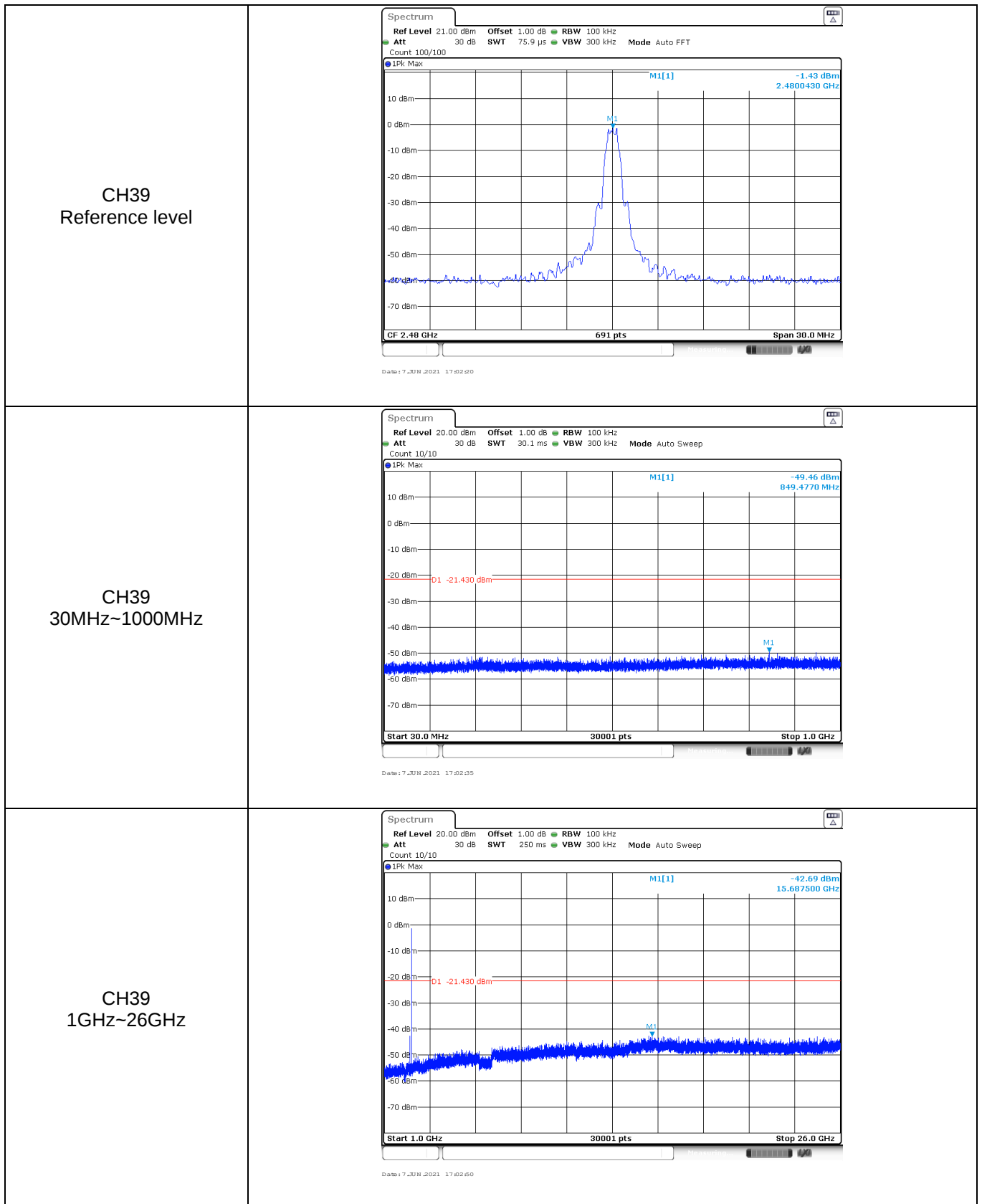


CH19
30MHz~1000MHz



CH19
1GHz~26GHz





-----End of Report-----