

APPENDIX REPORT

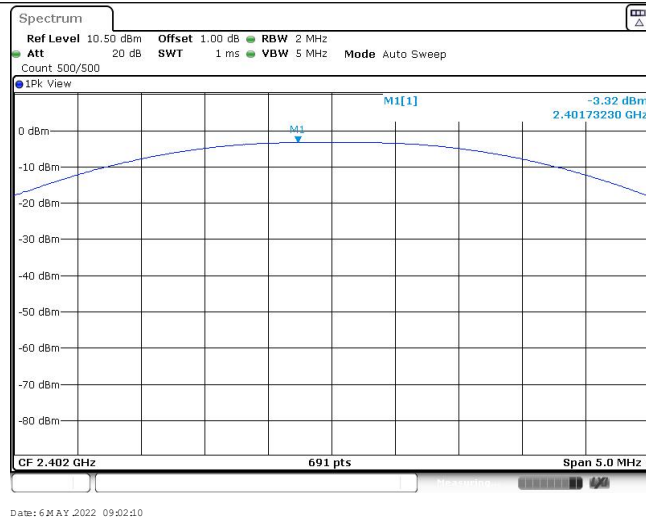
Project No.	SHT2201102103EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT22011021005	Model No.	A9
Start test date	2022-05-06	Finish date	2022-05-06
Temperature	24.7℃	Humidity	42%
Test Engineer	Xiaoqin Li	Auditor	Xiaodong Zhu

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

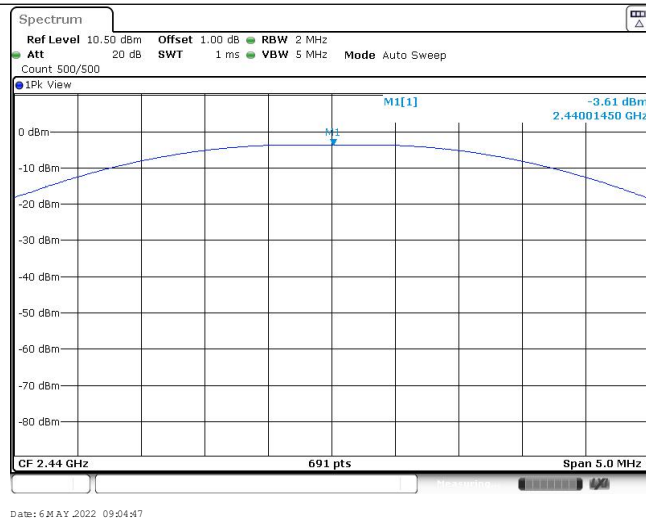
Appendix A: Peak Output Power

Type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	-3.32	-3.33	≤ 30.00	Pass
	19	-3.61	-3.63		
	39	-3.48	-3.49		

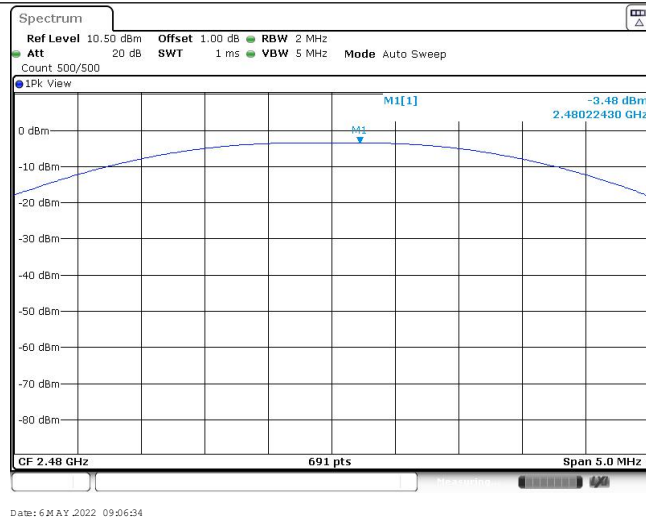
CH00



CH19



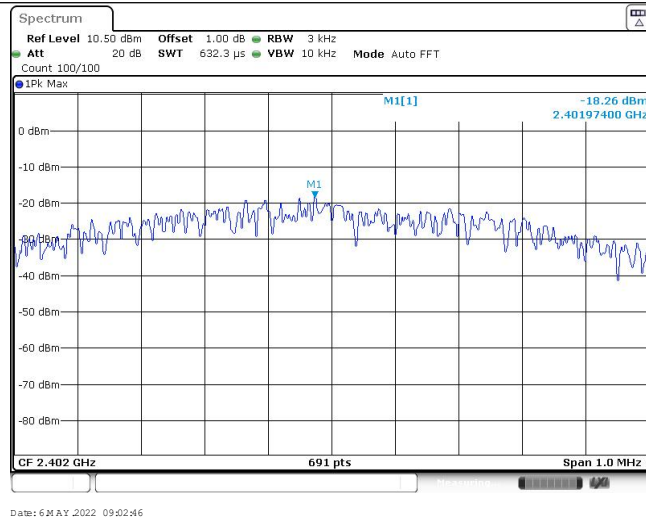
CH39



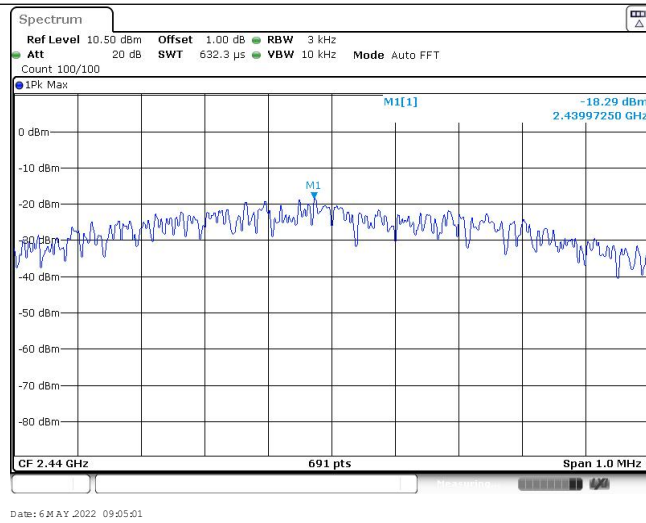
Appendix B: Power Spectral Density

Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-18.26	≤8.00	Pass
	19	-18.29		
	39	-18.31		

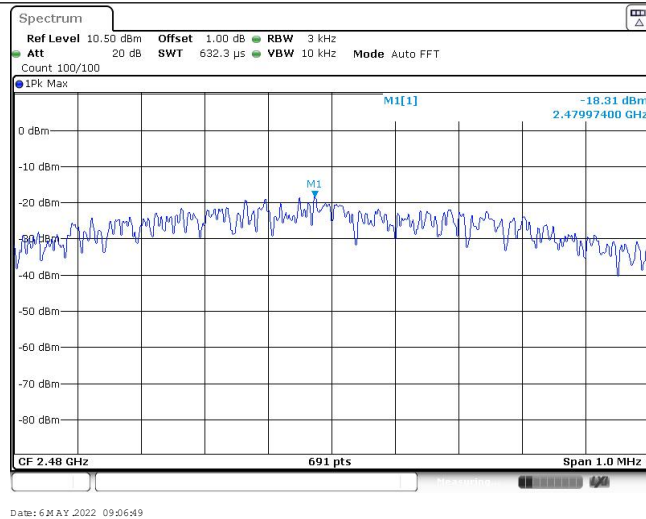
CH00



CH19



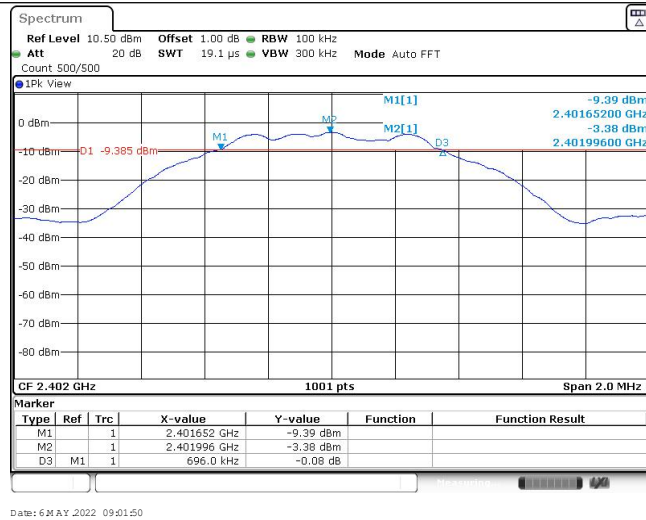
CH39



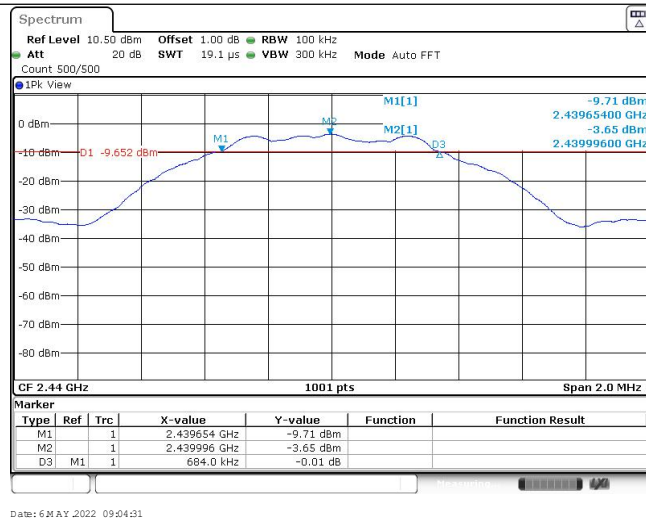
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	696.00	≥500	Pass
	19	684.00		
	39	708.00		

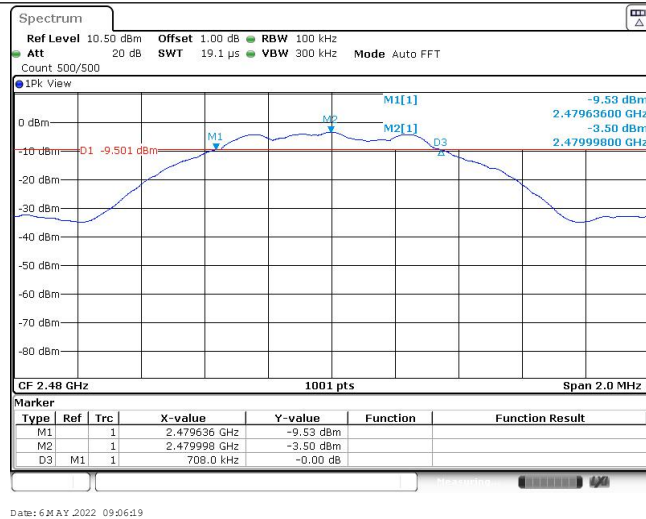
CH00



CH19



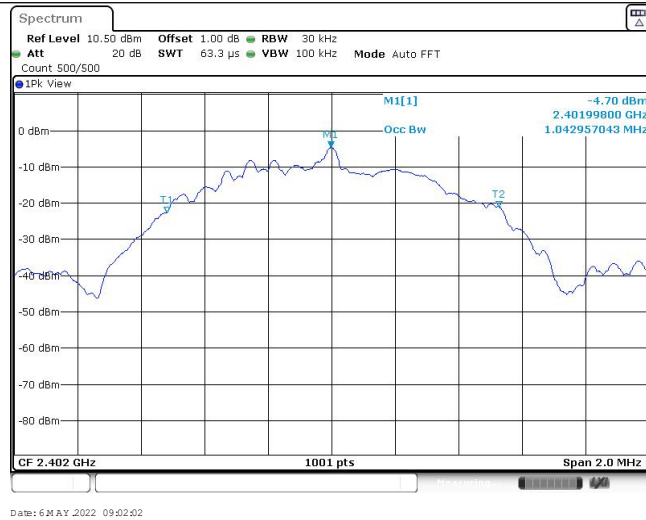
CH39



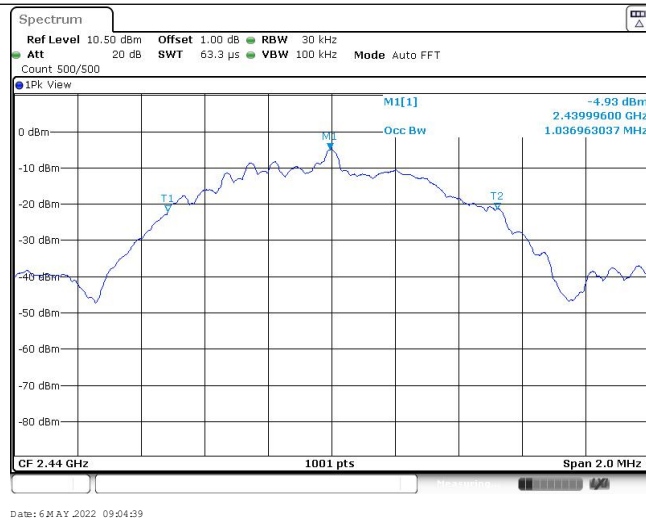
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.04	-	Pass
	19	1.04		
	39	1.05		

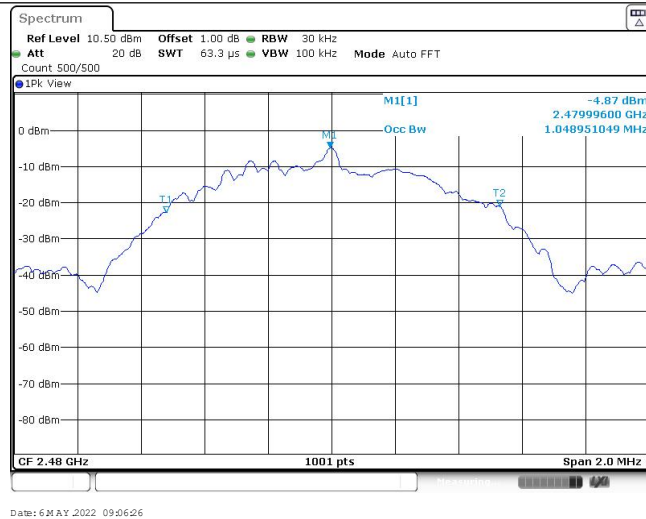
CH00



CH19

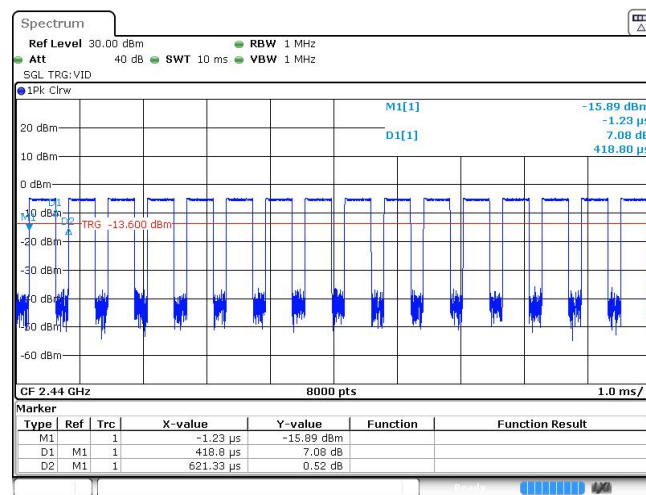


CH39



Appendix E: Duty cycle

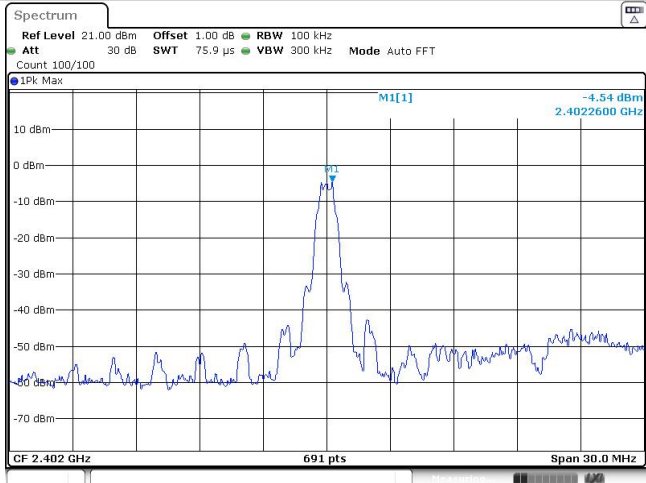
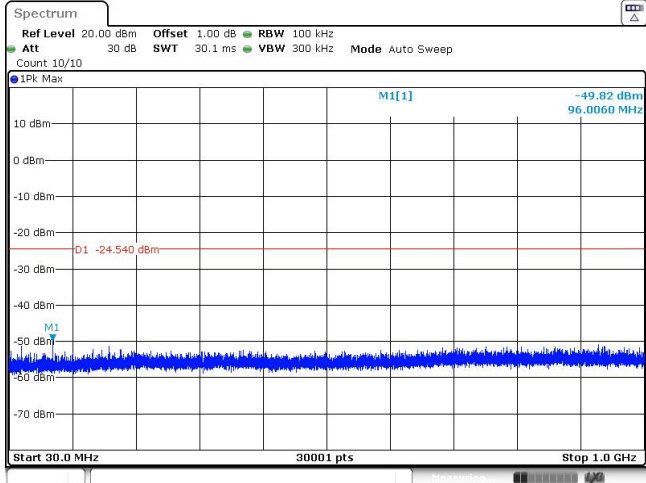
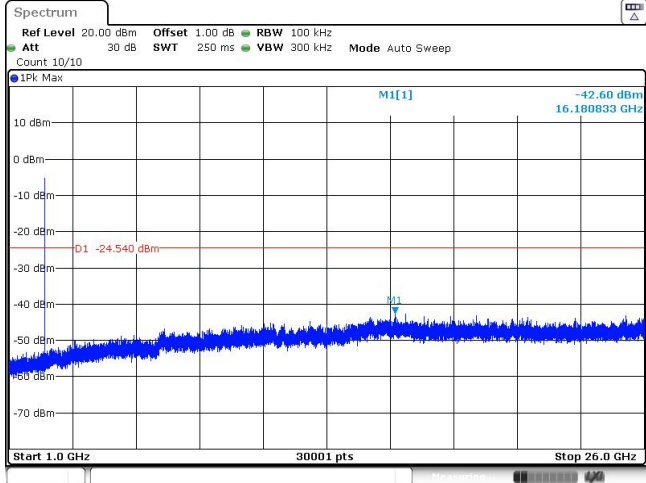
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.42	0.62	67.7%	2.38



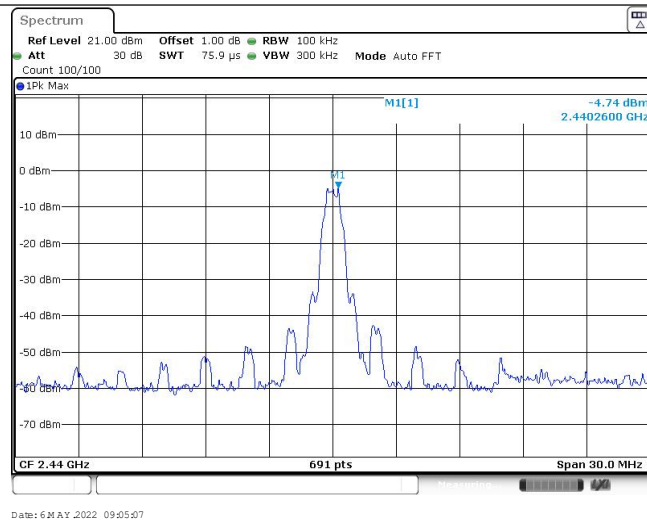
Date: 6 MAY 2022 09:04:19

Appendix F: Band edge and Spurious Emissions (conducted)

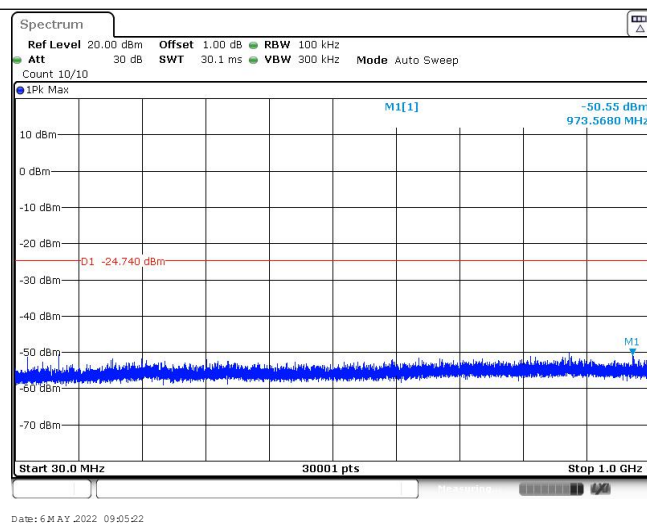
Test Item:	Band edge																																										
CH00	Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 1.1 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1Pk Max M1[1] -3.80 dBm 2.402040 GHz M2[1] -43.25 dBm 2.400000 GHz D1 -23.800 dBm M3 -56.23 dBm 2.39 GHz M4 -63.48 dBm 2.31 GHz M5 -45.41 dBm 2.399906 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>-3.80 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-43.25 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-56.23 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-63.48 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.399906 GHz</td><td>-45.41 dBm</td><td></td><td></td></tr></tbody></table> Date: 6 MAY 2022 09:02:55	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.40204 GHz	-3.80 dBm			M2	1		2.4 GHz	-43.25 dBm			M3	1		2.39 GHz	-56.23 dBm			M4	1		2.31 GHz	-63.48 dBm			M5	1		2.399906 GHz	-45.41 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 M1[1] -3.52 dBm 2.4799900 GHz M2[1] -65.24 dBm 2.4835000 GHz D1 -23.520 dBm M3 -64.85 dBm 2.5 GHz M4 -49.51 dBm 2.4838986 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>2.47999 GHz</td><td>-3.52 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4835 GHz</td><td>-65.24 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.5 GHz</td><td>-64.85 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.4838986 GHz</td><td>-49.51 dBm</td><td></td><td></td></tr></tbody></table> Date: 6 MAY 2022 09:06:58	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.47999 GHz	-3.52 dBm			M2	1		2.4835 GHz	-65.24 dBm			M3	1		2.5 GHz	-64.85 dBm			M4	1		2.4838986 GHz	-49.51 dBm									
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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] -4.54 dBm 2.4022600 GHz CF 2.402 GHz 691 pts Span 30.0 MHz Date: 6 MAY 2022 09:03:03
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] -49.82 dBm 96.0060 MHz D1 -24.540 dBm Start 30.0 MHz 30001 pts Stop 1.0 GHz Date: 6 MAY 2022 09:03:18
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] -42.60 dBm 16.180833 GHz D1 -24.540 dBm Start 1.0 GHz 30001 pts Stop 26.0 GHz Date: 6 MAY 2022 09:03:34

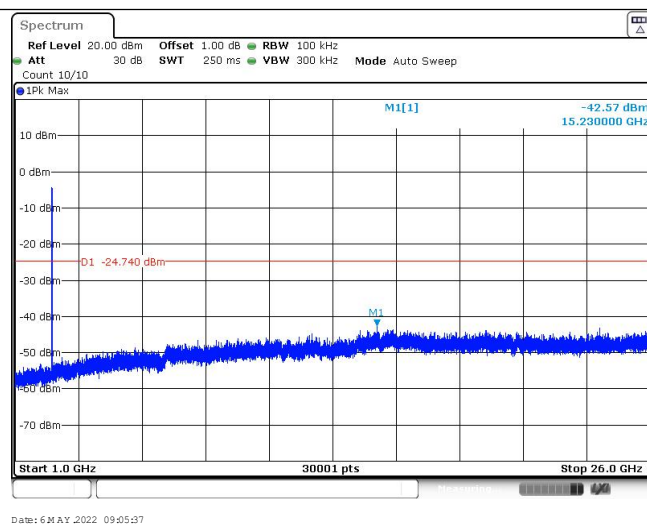
CH19
Reference level



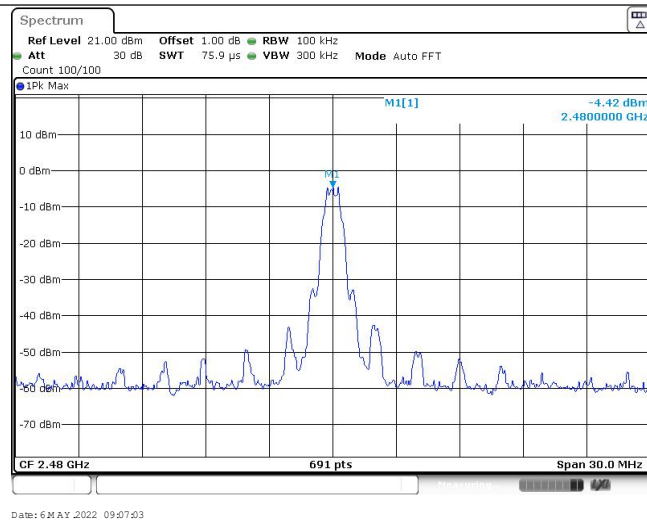
CH19
30MHz~1000MHz



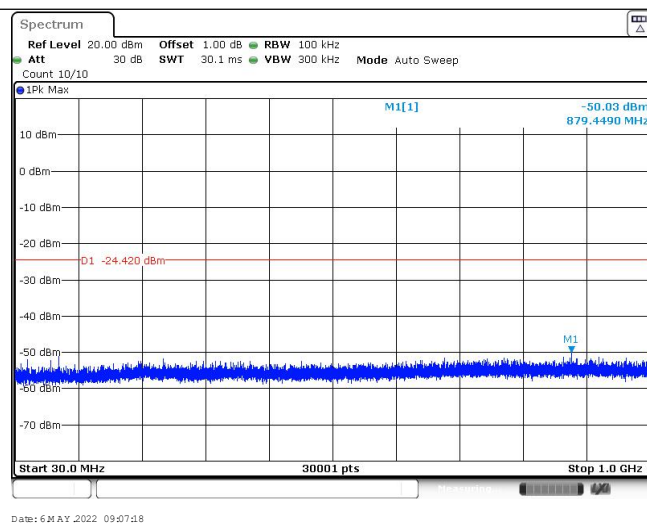
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1GHz~26GHz



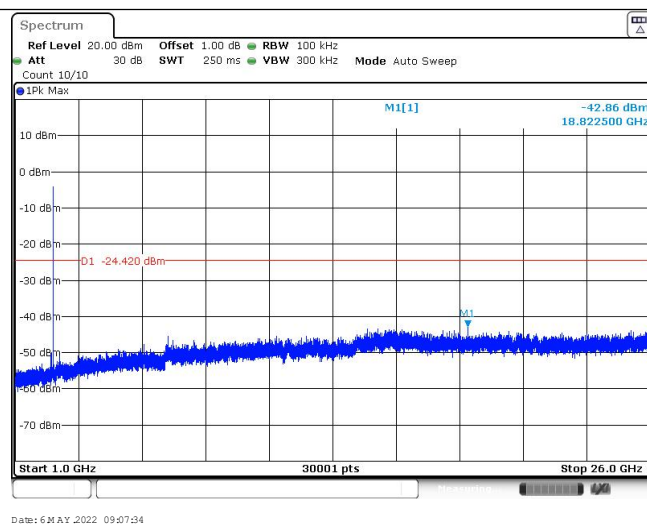
CH39
Reference level



CH39
30MHz~1000MHz



CH39
1GHz~26GHz



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