

APPENDIX REPORT

Project No.	SHT2011090201EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT20110902004	Model No.	W125K
Start test date	2020-11-30	Finish date	2020-11-30
Temperature	25.9°C	Humidity	42%
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

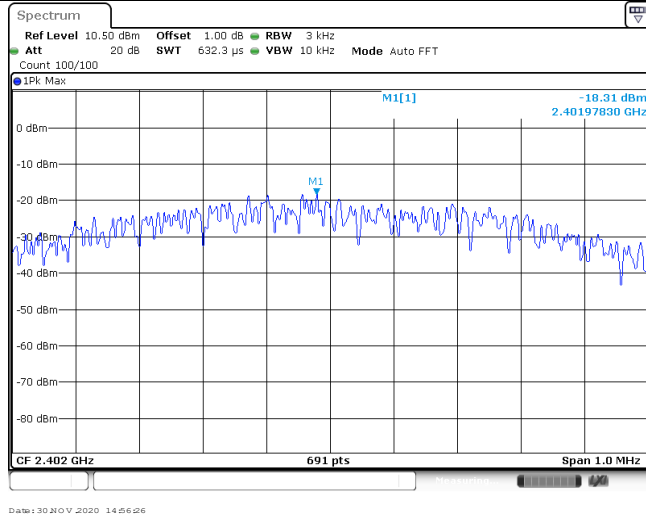
Appendix A: Peak Output Power

Type	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	-2.64	-2.63	≤ 30.00	Pass
	19	-2.19	-2.17		
	39	-2.55	-2.54		

Appendix B: Power Spectral Density

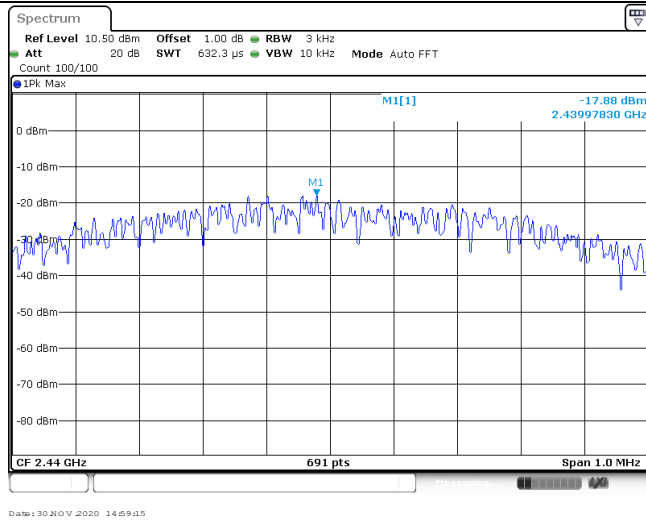
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-18.31	≤8.00	Pass
	19	-17.88		
	39	-18.20		

CH00



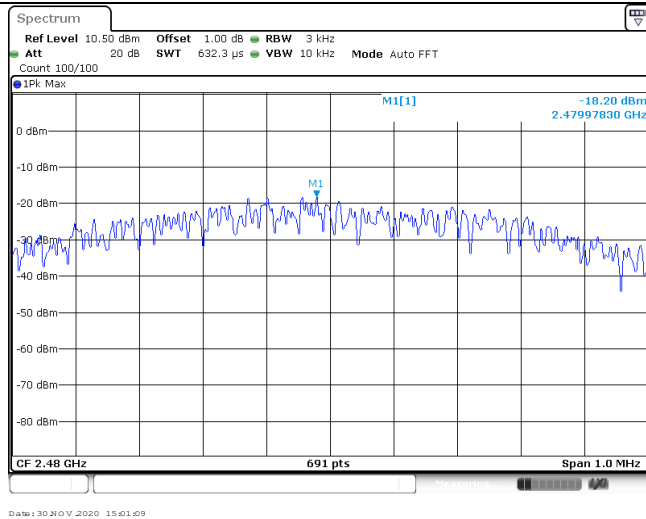
Date: 30 NOV 2020 14:56:26

CH19



Date: 30 NOV 2020 14:59:15

CH39

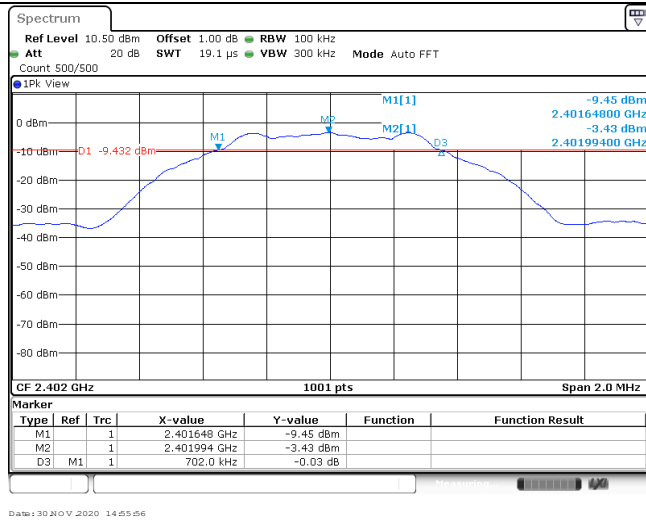


Date: 30 NOV 2020 15:01:09

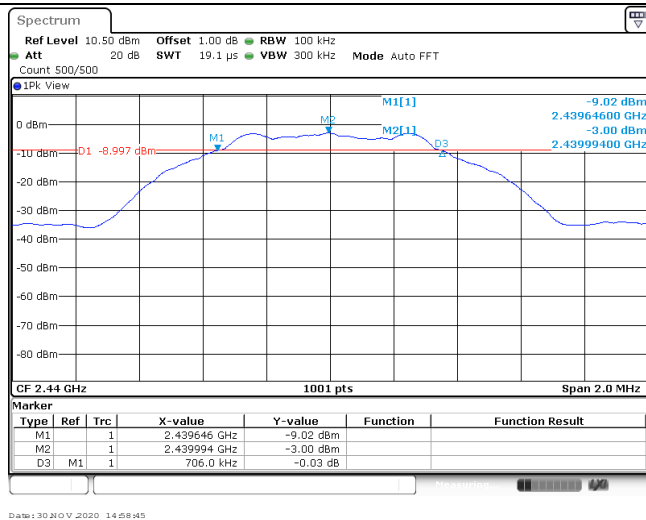
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	702.00	≥500	Pass
	19	706.00		
	39	706.00		

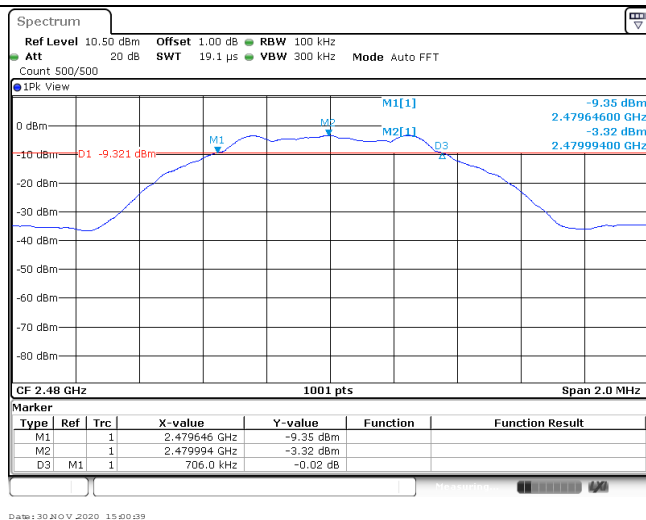
CH00



CH19



CH39



Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.01	-	Pass
	19	1.01		
	39	1.01		

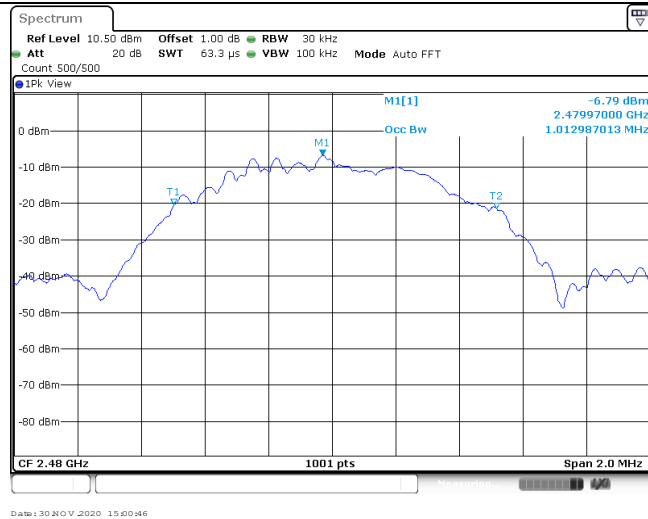
CH00



CH19

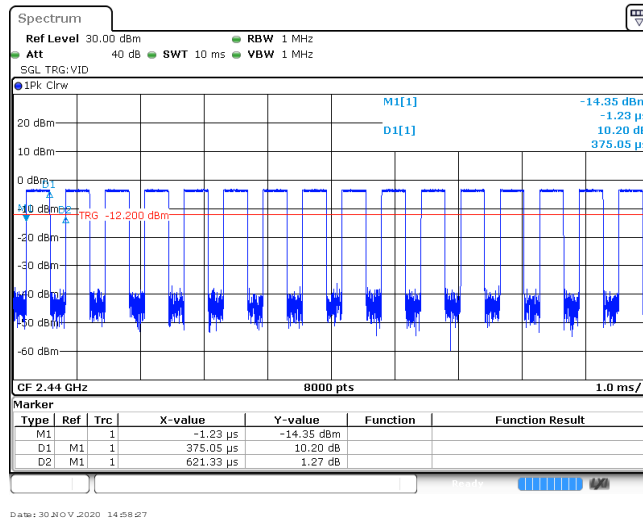


CH39

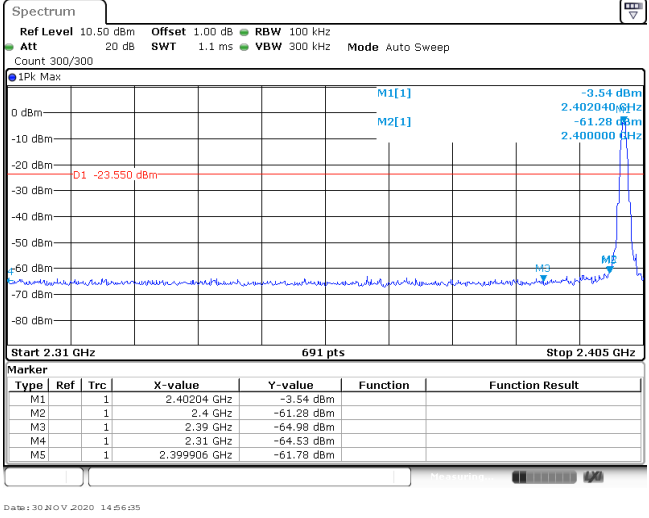
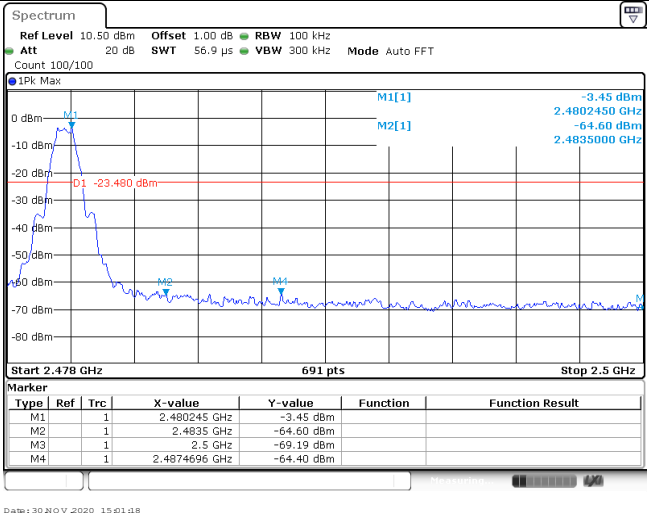


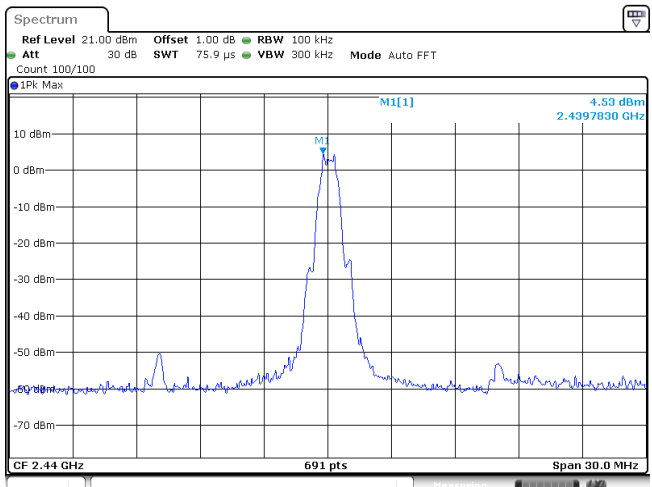
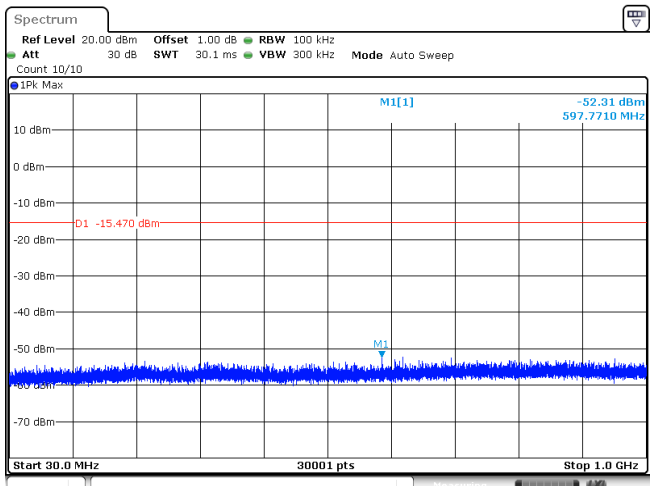
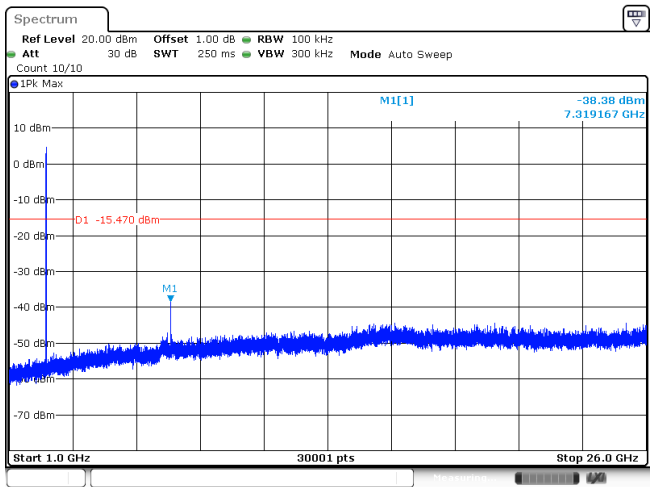
Appendix E: Duty cycle

Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.38	0.62	61.3%	2.6

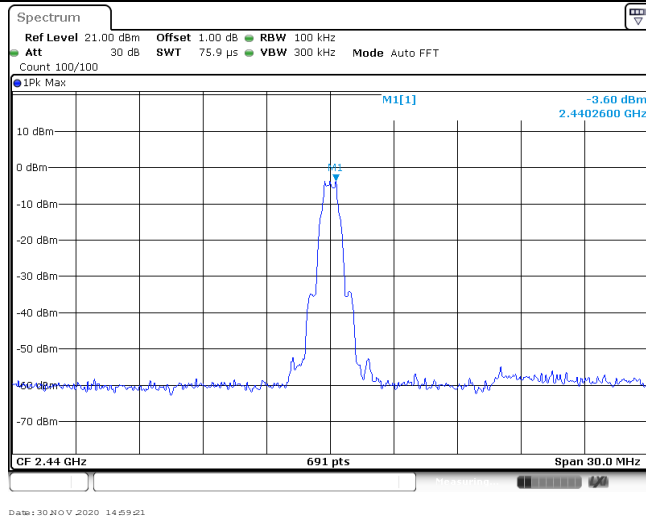


Appendix F: Band edge and Spurious Emissions (conducted)

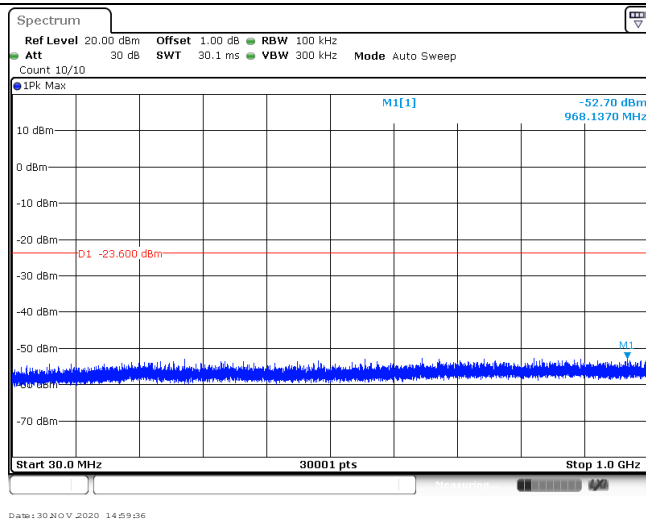
Test Item:	Band edge																																										
<p>CH00</p>	 <p>Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWT 1.1 ms VBW 300 kHz Mode Auto Sweep Count 300/300</p> <p>1Pk Max</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Ref</th> <th>Trc</th> <th>X-value</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>-3.54 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4 GHz</td> <td>-61.28 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.39 GHz</td> <td>-64.98 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.31 GHz</td> <td>-64.53 dBm</td> <td></td> <td></td> </tr> <tr> <td>M5</td> <td>1</td> <td></td> <td>2.399906 GHz</td> <td>-61.78 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Start 2.31 GHz 691 pts Stop 2.405 GHz</p> <p>Date: 30 NOV 2020 14:56:35</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.40204 GHz	-3.54 dBm			M2	1		2.4 GHz	-61.28 dBm			M3	1		2.39 GHz	-64.98 dBm			M4	1		2.31 GHz	-64.53 dBm			M5	1		2.399906 GHz	-61.78 dBm		
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<p>CH39</p>	 <p>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</p> <p>1Pk Max</p> <table border="1"> <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>2.480245 GHz</td> <td>-3.45 dBm</td> <td></td> <td></td> </tr> <tr> <td>M2</td> <td>1</td> <td></td> <td>2.4835 GHz</td> <td>-64.60 dBm</td> <td></td> <td></td> </tr> <tr> <td>M3</td> <td>1</td> <td></td> <td>2.5 GHz</td> <td>-69.19 dBm</td> <td></td> <td></td> </tr> <tr> <td>M4</td> <td>1</td> <td></td> <td>2.4874696 GHz</td> <td>-64.40 dBm</td> <td></td> <td></td> </tr> </tbody> </table> <p>Start 2.478 GHz 691 pts Stop 2.5 GHz</p> <p>Date: 30 NOV 2020 15:01:18</p>	Type	Ref	Trc	X-value	Y-value	Function	Function Result	M1	1		2.480245 GHz	-3.45 dBm			M2	1		2.4835 GHz	-64.60 dBm			M3	1		2.5 GHz	-69.19 dBm			M4	1		2.4874696 GHz	-64.40 dBm									
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Test Item:	SE
CH00 Reference level	 <p>Spectrum</p> <p>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</p> <p>1Pk Max</p> <p>M1[1] 4.53 dBm 2.4397830 GHz</p> <p>CF 2.44 GHz 691 pts Span 30.0 MHz</p> <p>Date: 30 NOV 2020 14:30:01</p>
CH00 30MHz~1000MHz	 <p>Spectrum</p> <p>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</p> <p>1Pk Max</p> <p>M1[1] -52.31 dBm 597.7710 MHz</p> <p>D1 -15.470 dBm</p> <p>Start 30.0 MHz 30001 pts Stop 1.0 GHz</p> <p>Date: 30 NOV 2020 14:30:16</p>
CH00 1GHz~26GHz	 <p>Spectrum</p> <p>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</p> <p>1Pk Max</p> <p>M1[1] -38.38 dBm 7.319167 GHz</p> <p>D1 -15.470 dBm</p> <p>Start 1.0 GHz 30001 pts Stop 26.0 GHz</p> <p>Date: 30 NOV 2020 14:30:32</p>

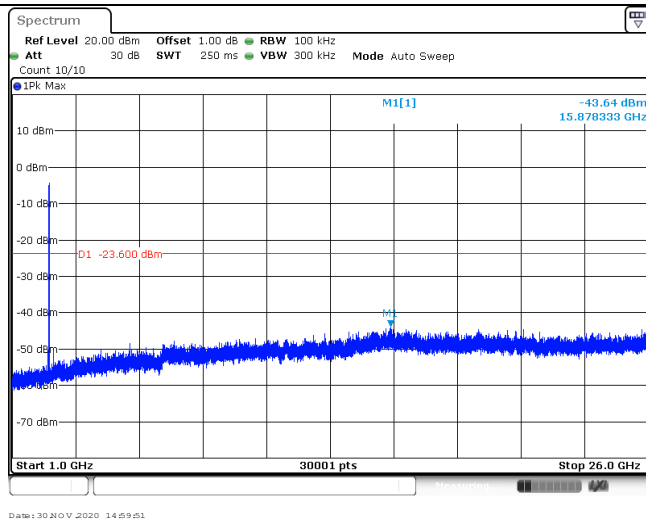
CH19
Reference level



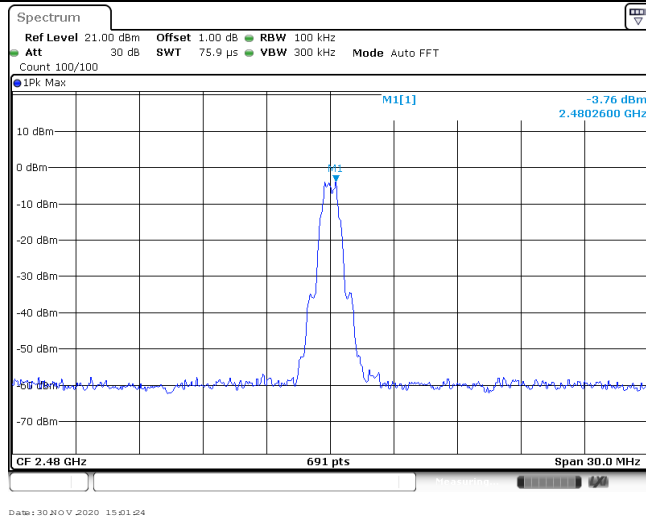
CH19
30MHz~1000MHz



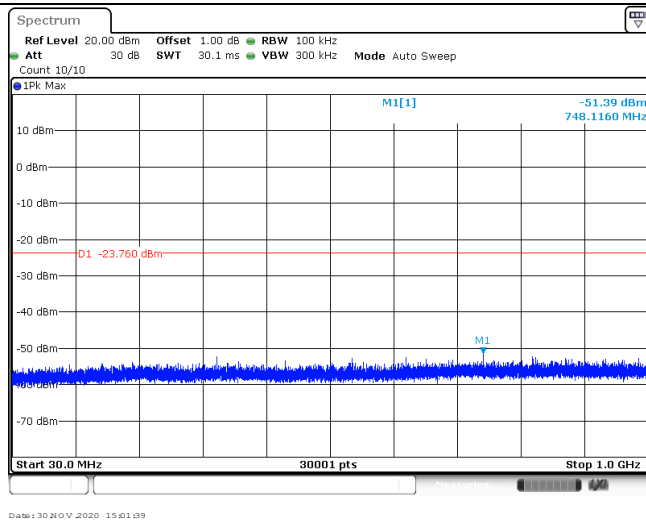
CH19
1GHz~26GHz



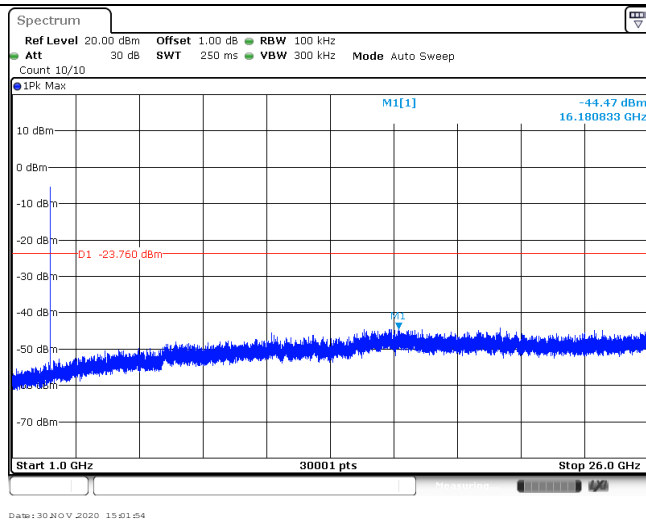
CH39
Reference level



CH39
30MHz~1000MHz



CH39
1GHz~26GHz



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