

APPENDIX REPORT

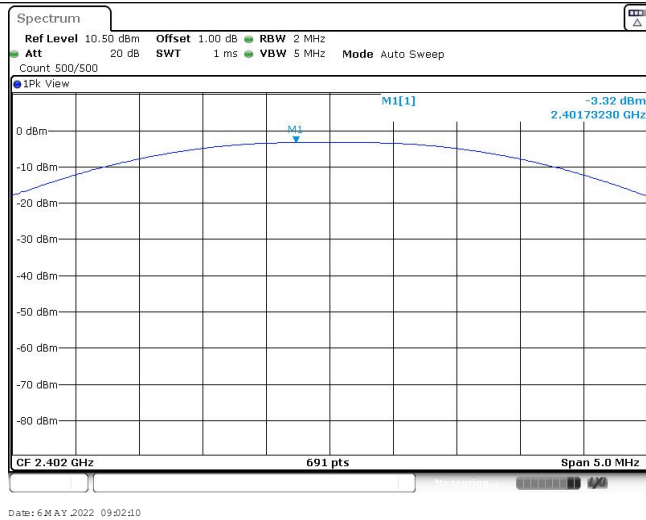
Project No.	SHT2201102103EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT22011021005	Model No.	A9
Start test date	2022-05-06	Finish date	2022-05-06
Temperature	24.7℃	Humidity	42%
Test Engineer	Xiaoqin Li	Auditor	Xiaodong Zhu

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

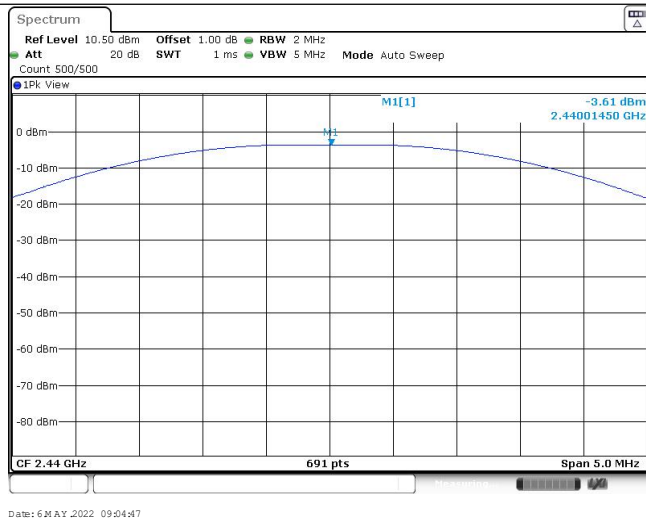
Appendix A: Peak Output Power

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		

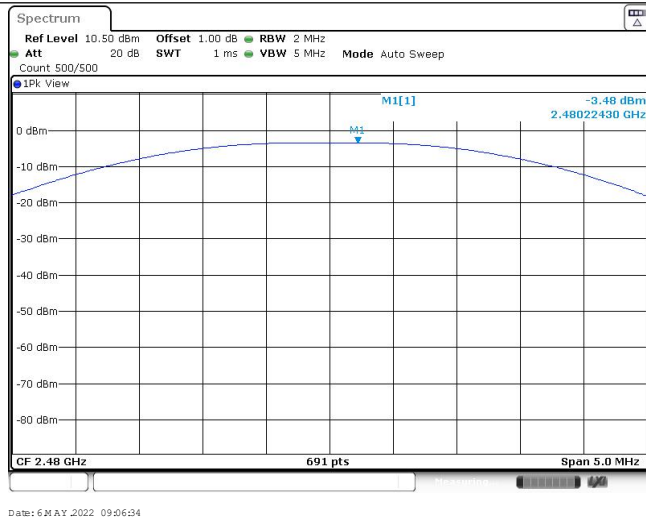
CH00



CH19



CH39



Appendix B: Power Spectral Density

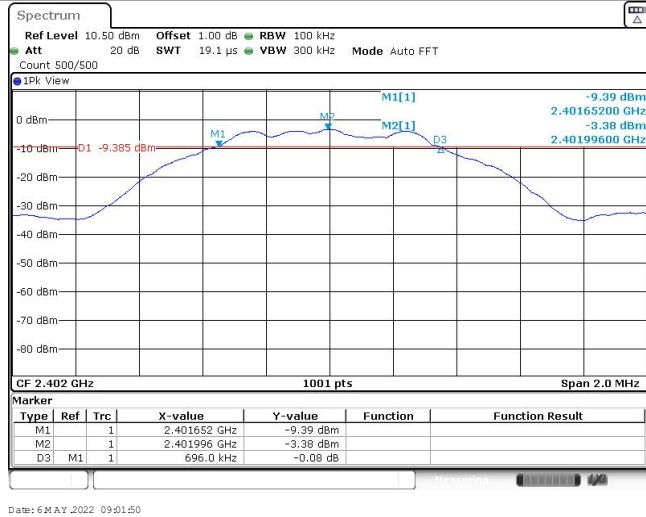
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-18.26	≤8.00	Pass
	19	-18.29		
	39	-18.31		

CH00	<p>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] -18.26 dBm 2.40197400 GHz CF 2.402 GHz 691 pts Span 1.0 MHz Date: 6 MAY 2022 09:02:46</p>
CH19	<p>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] -18.29 dBm 2.43997250 GHz CF 2.44 GHz 691 pts Span 1.0 MHz Date: 6 MAY 2022 09:05:01</p>
CH39	<p>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] -18.31 dBm 2.47997400 GHz CF 2.48 GHz 691 pts Span 1.0 MHz Date: 6 MAY 2022 09:06:49</p>

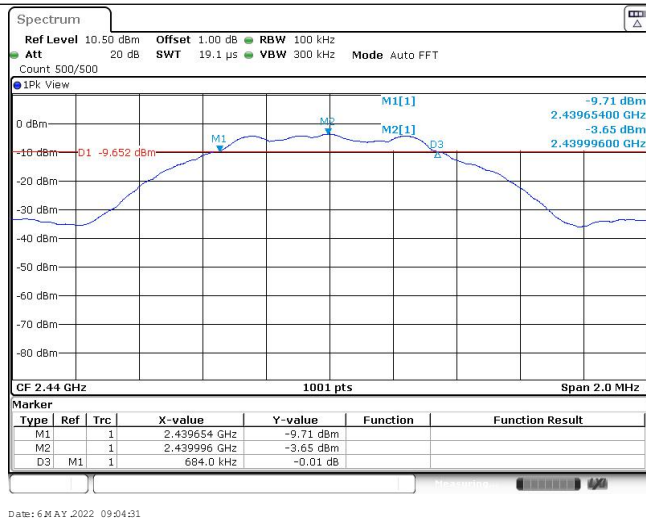
Appendix C: 6dB bandwidth

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

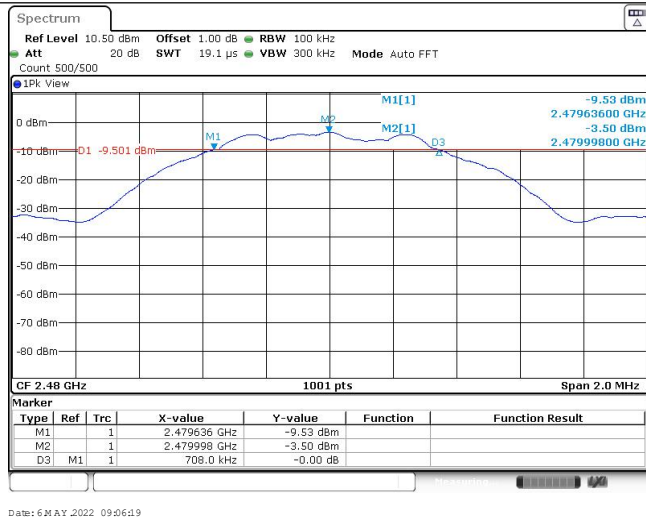
CH00



CH19



CH39



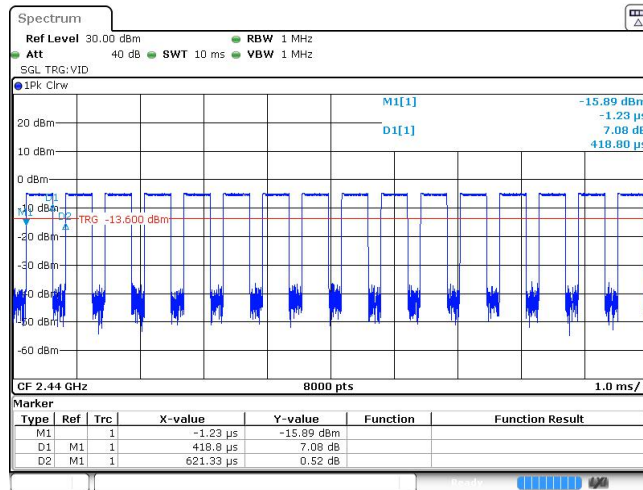
Appendix D: 99% Occupied Bandwidth

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

<p>CH00</p>	<p>Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 30 kHz Att 20 dB SWT 63.3 μs VBW 100 kHz Mode Auto FFT Count 500/500 IPK View M1[1] -4.70 dBm 2.40199800 GHz 1.042957043 MHz Occ Bw T1 T2 CF 2.402 GHz 1001 pts Span 2.0 MHz Date: 6 MAY 2022 09:02:02</p>
<p>CH19</p>	<p>Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 30 kHz Att 20 dB SWT 63.3 μs VBW 100 kHz Mode Auto FFT Count 500/500 IPK View M1[1] -4.93 dBm 2.43999600 GHz 1.036963037 MHz Occ Bw T1 T2 CF 2.44 GHz 1001 pts Span 2.0 MHz Date: 6 MAY 2022 09:04:39</p>
<p>CH39</p>	<p>Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 30 kHz Att 20 dB SWT 63.3 μs VBW 100 kHz Mode Auto FFT Count 500/500 IPK View M1[1] -4.87 dBm 2.47999600 GHz 1.048951049 MHz Occ Bw T1 T2 CF 2.48 GHz 1001 pts Span 2.0 MHz Date: 6 MAY 2022 09:06:26</p>

Appendix E: Duty cycle

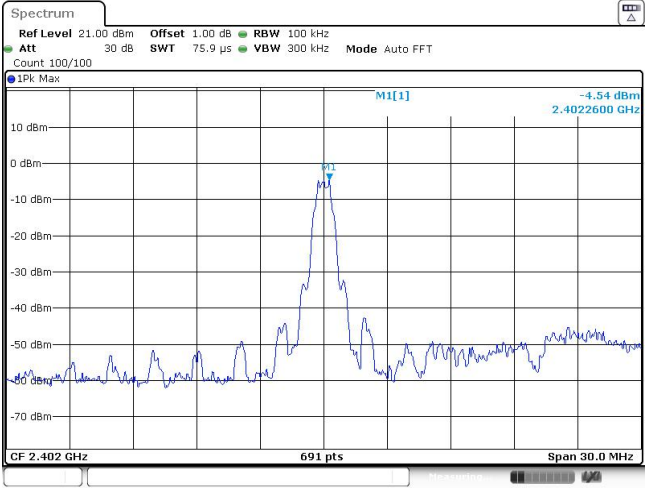
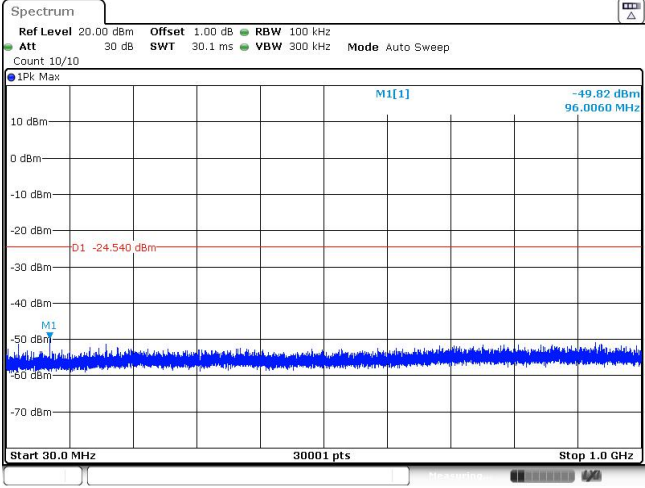
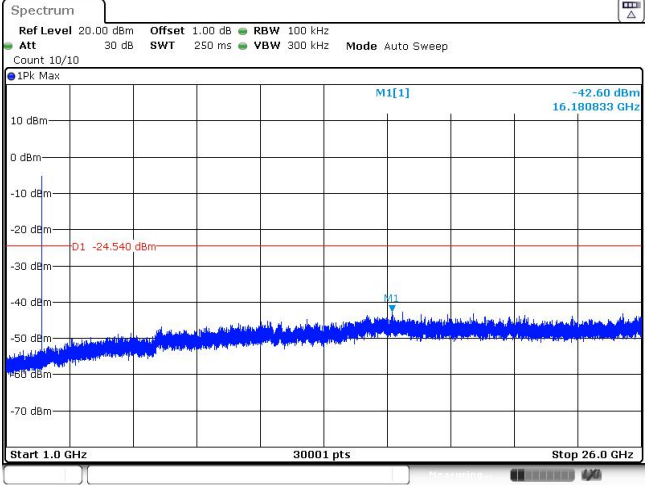
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.42	0.62	67.7%	2.38



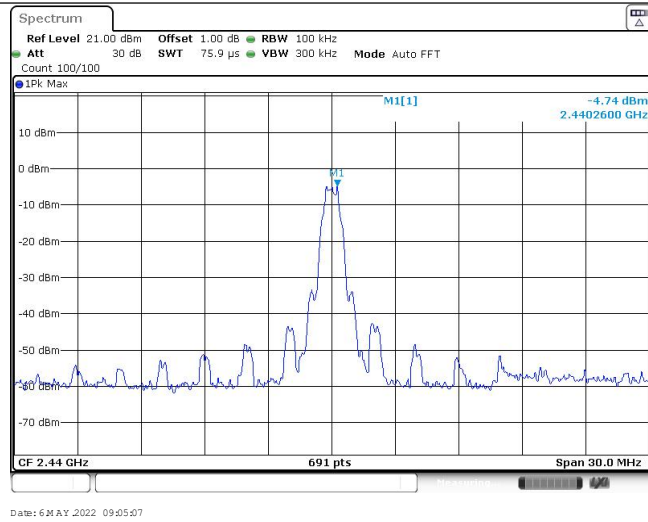
Date: 6 MAY 2022 09:04:19

Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge																																										
<p style="text-align: center;">CH00</p>	 <p>Marker Table:</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>-3.80 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> <p>Date: 6 MAY 2022 09:02:55</p>	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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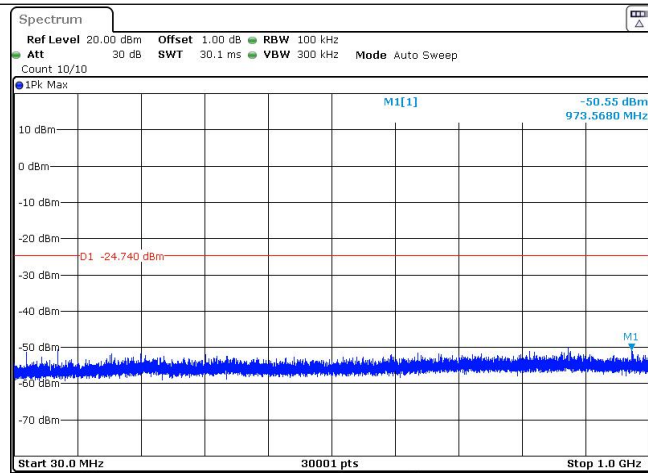
Test Item:	SE
<p>CH00 Reference level</p>	 <p>Date: 6 MAY 2022 09:03:03</p>
<p>CH00 30MHz~1000MHz</p>	 <p>Date: 6 MAY 2022 09:03:18</p>
<p>CH00 1GHz~26GHz</p>	 <p>Date: 6 MAY 2022 09:03:34</p>

CH19
Reference level



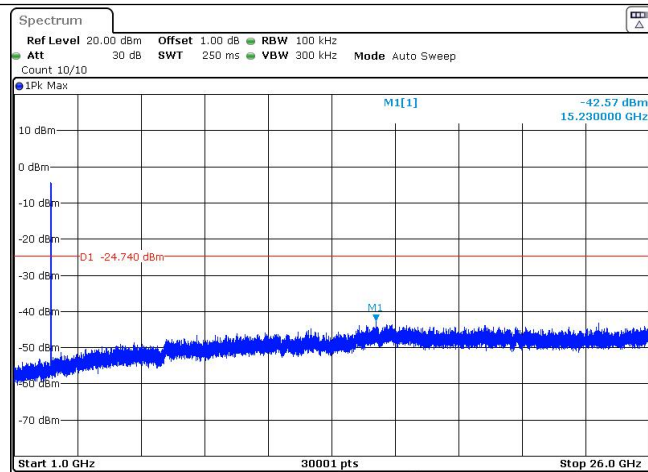
Date: 6 MAY 2022 09:05:07

CH19
30MHz~1000MHz

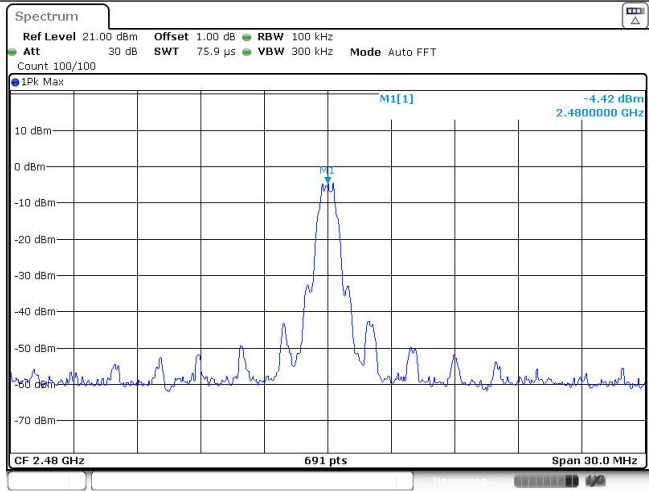
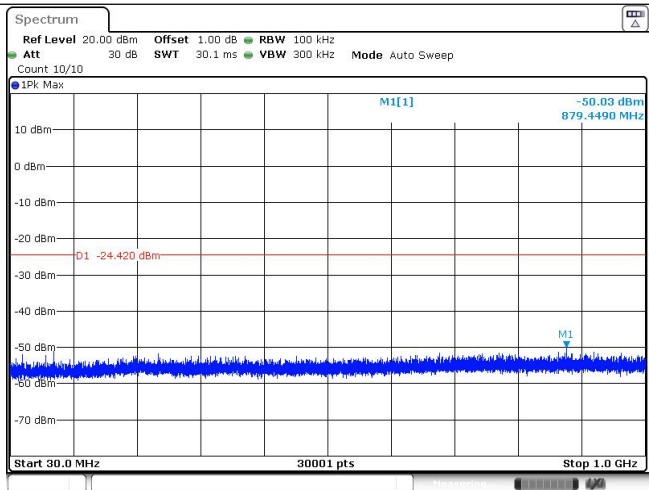
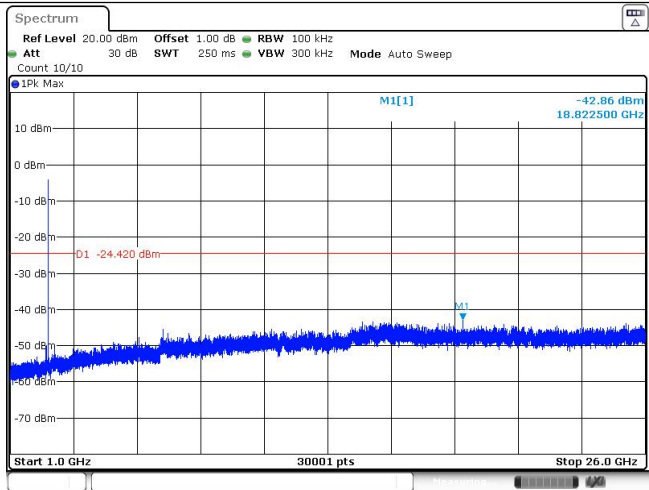


Date: 6 MAY 2022 09:05:22

CH19
1GHz~26GHz



Date: 6 MAY 2022 09:05:37

<p>CH39 Reference level</p>	 <p>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 IPK Max M1[1] -4.42 dBm 2.480000 GHz CF 2.48 GHz 691 pts Span 30.0 MHz Date: 6 MAY 2022 09:07:03</p>
<p>CH39 30MHz~1000MHz</p>	 <p>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 IPK Max M1[1] -50.03 dBm 879.4490 MHz D1 -24.420 dBm Start 30.0 MHz 30001 pts Stop 1.0 GHz Date: 6 MAY 2022 09:07:18</p>
<p>CH39 1GHz~26GHz</p>	 <p>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 IPK Max M1[1] -42.86 dBm 18.822500 GHz D1 -24.420 dBm Start 1.0 GHz 30001 pts Stop 26.0 GHz Date: 6 MAY 2022 09:07:34</p>

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