

APPENDIX REPORT

Project No.	SHT2009099801EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT20090994006	Model No.	N402
Start test date	2020/11/4	Finish date	2020/11/4
Temperature	25°C	Humidity	50%
Test Engineer	Hailey Chen	Auditor	Xiaodong Zhao

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

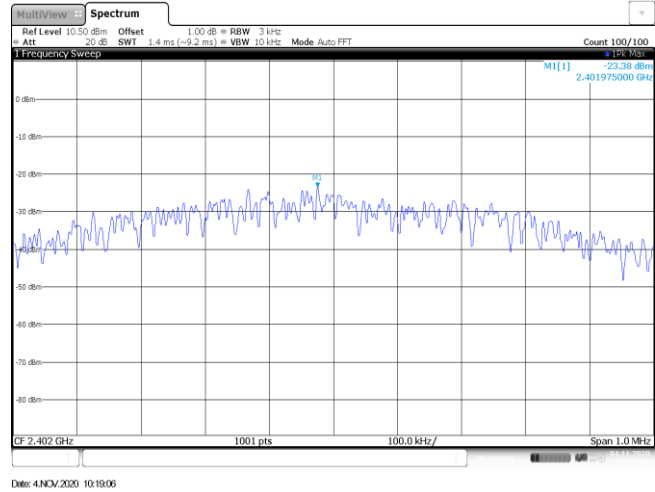
Appendix A: Peak Output Power

Type	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	-7.65	-7.66	≤ 30.00	Pass
	19	-7.95	-7.96		
	39	-7.85	-7.87		

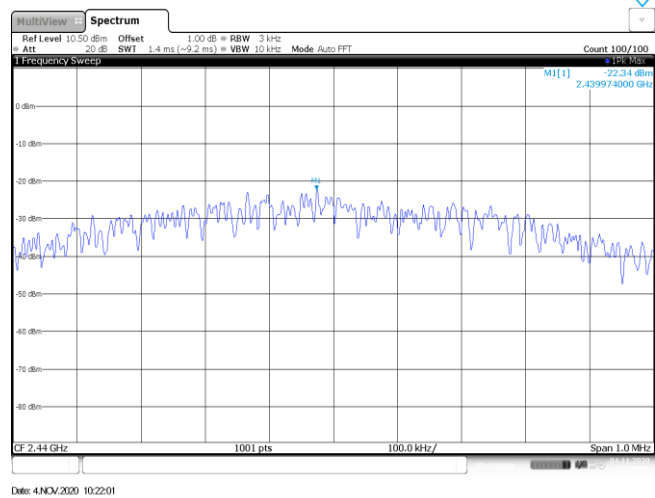
Appendix B: Power Spectral Density

Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-23.38	≤8.00	Pass
	19	-22.34		
	39	-22.46		

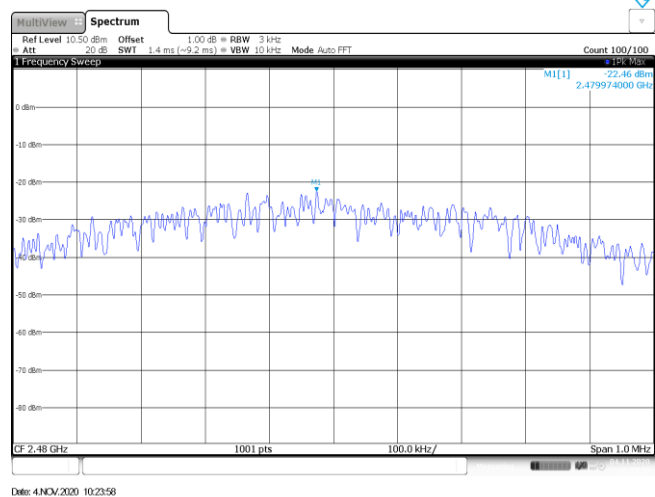
CH00



CH19



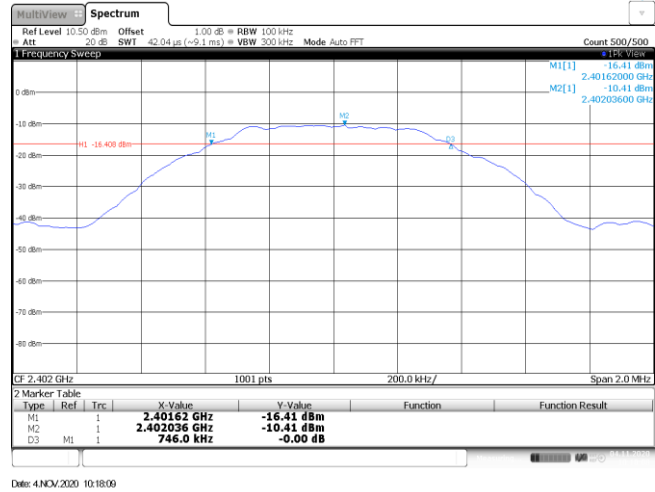
CH39



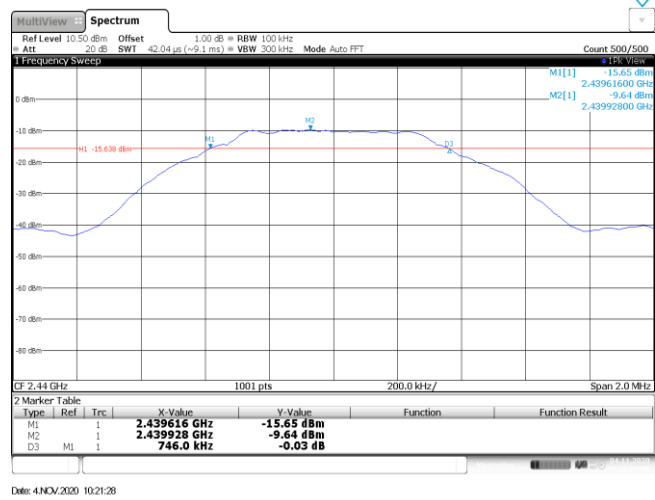
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	746.00	≥500	Pass
	19	746.00		
	39	744.00		

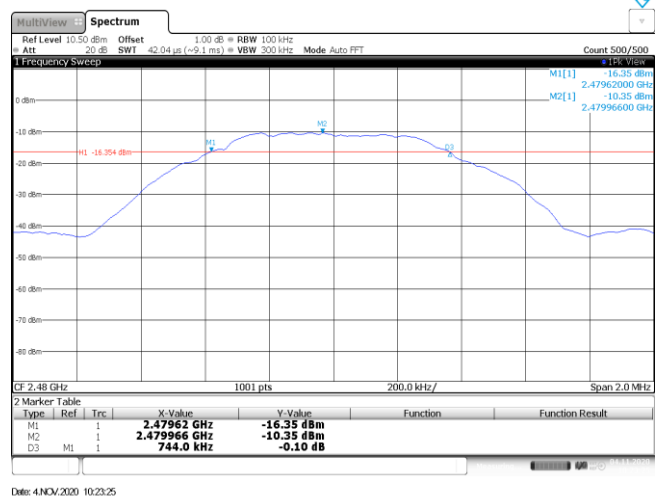
CH00



CH19



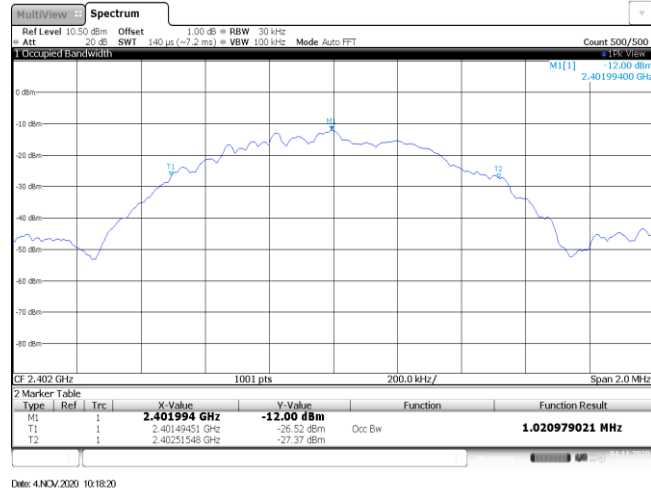
CH39



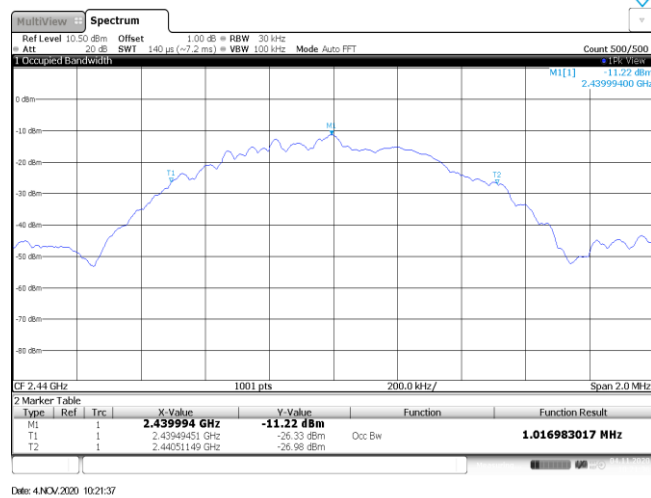
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.02	-	Pass
	19	1.02		
	39	1.02		

CH00



CH19

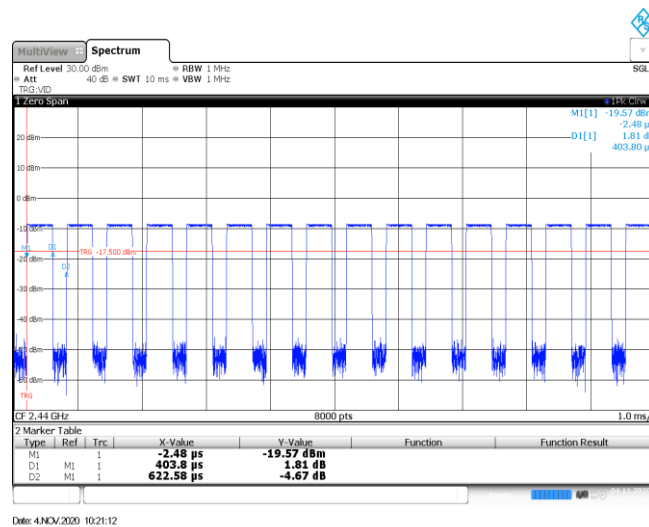


CH39



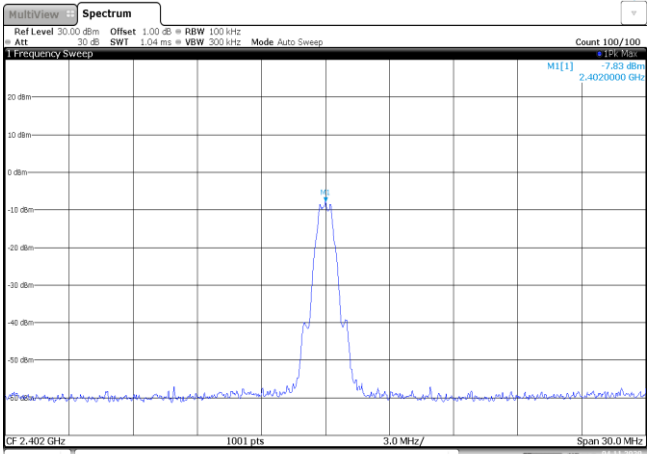
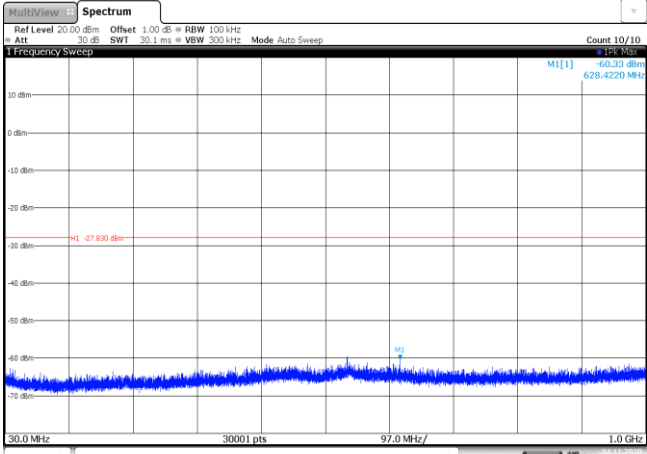
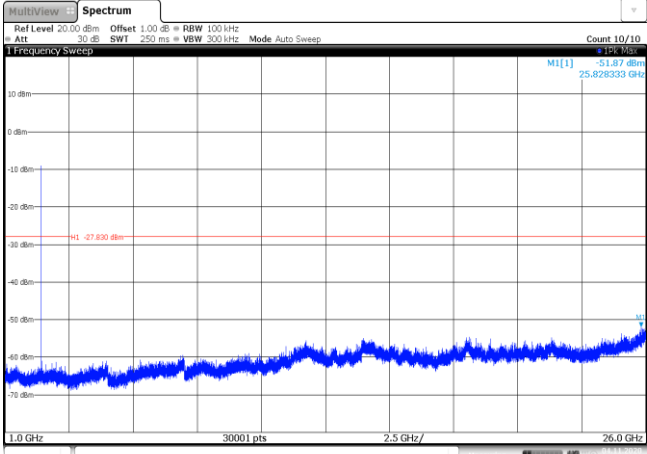
Appendix E: Duty cycle

Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.40	0.62	64.5%	2.5

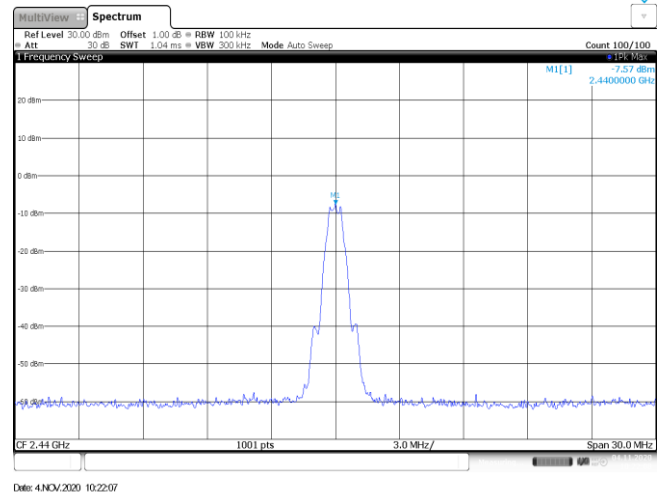


Appendix F: Band edge and Spurious Emissions (conducted)

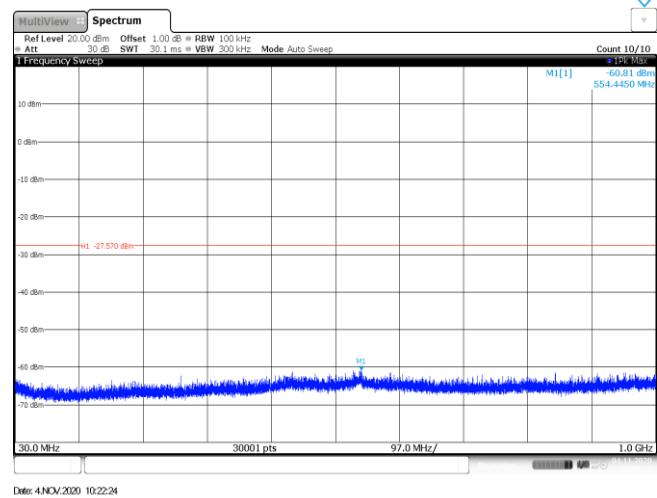
Test Item:	Band edge																																										
CH00	MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB BW 100 kHz Att 20 dB SWT 1.05 ms VBW 300 kHz Mode Auto Sweep Count 300/300 Frequency Sweep 8 dBm -18 dBm -28 dBm -38 dBm -48 dBm -58 dBm -68 dBm -78 dBm -88 dBm M1 -27.910 dBm M2 -68.92 dBm M3 -71.50 dBm M4 -71.76 dBm M5 -64.28 dBm 2.31 GHz 1001 pts 9.5 MHz/ 2.405 GHz <table><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><tr><td>M1</td><td>1</td><td></td><td>2.40201 GHz</td><td>-7.91 dBm</td><td></td><td></td></tr><tr><td>M2</td><td>1</td><td></td><td>2.4 GHz</td><td>-64.28 dBm</td><td></td><td></td></tr><tr><td>M3</td><td>1</td><td></td><td>2.39 GHz</td><td>-71.50 dBm</td><td></td><td></td></tr><tr><td>M4</td><td>1</td><td></td><td>2.31 GHz</td><td>-71.76 dBm</td><td></td><td></td></tr><tr><td>M5</td><td>1</td><td></td><td>2.369958 GHz</td><td>-68.92 dBm</td><td></td><td></td></tr></table> Date: 4.NOV.2020 10:19:59	Type	Ref	Trc	X-Value	Y-Value	Function	Function Result	M1	1		2.40201 GHz	-7.91 dBm			M2	1		2.4 GHz	-64.28 dBm			M3	1		2.39 GHz	-71.50 dBm			M4	1		2.31 GHz	-71.76 dBm			M5	1		2.369958 GHz	-68.92 dBm		
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Test Item:	SE
CH00 Reference level	 MultiView Spectrum Ref Level 30.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Frequency Sweep Count 100/100 M1[1] 17.23 dBm 2.4020000 GHz CF 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 4 NOV 2020 10:20:08
CH00 30MHz~1000MHz	 MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Frequency Sweep Count 10/10 M1[1] -60.53 dBm 628.4220 MHz H1 -27.80 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 4 NOV 2020 10:20:24
CH00 1GHz~26GHz	 MultiView Spectrum Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Frequency Sweep Count 10/10 M1[1] -51.87 dBm 25.828333 GHz H1 -27.80 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 4 NOV 2020 10:20:40

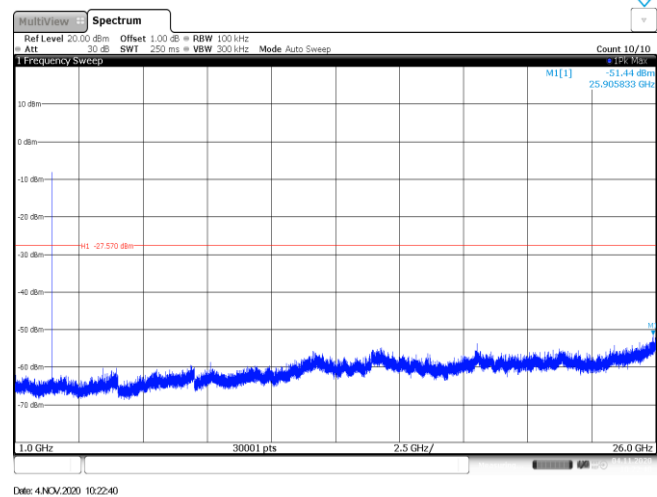
CH19
Reference level



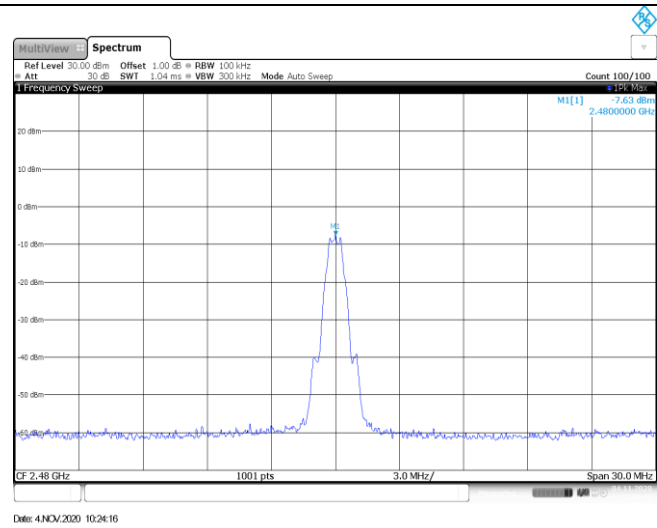
CH19
30MHz~1000MHz



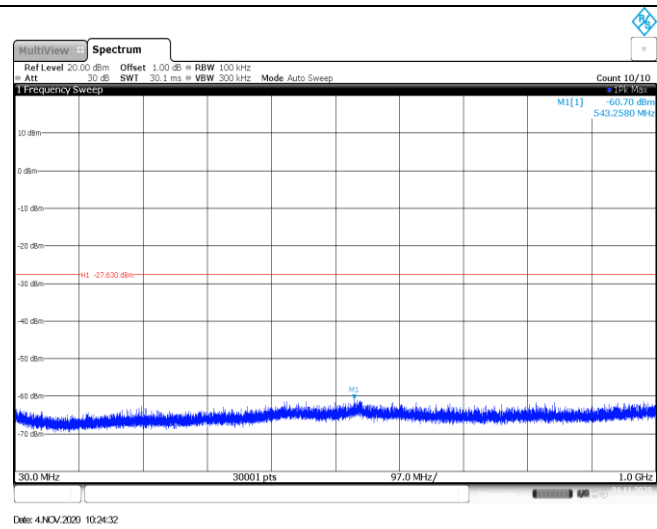
CH19
1GHz~26GHz



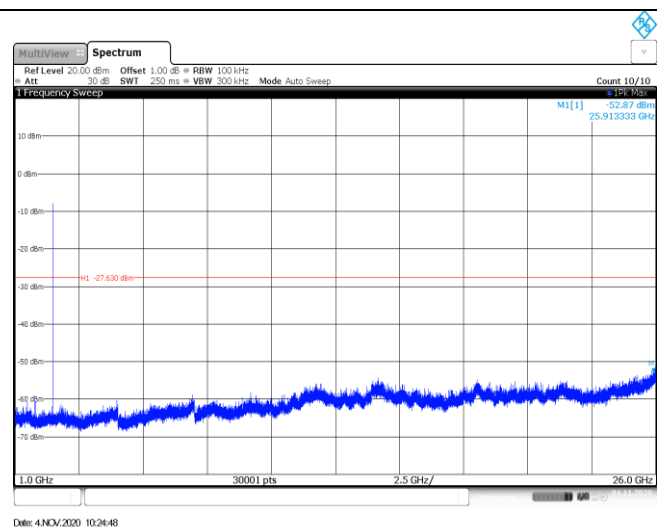
CH39
Reference level



CH39
30MHz~1000MHz



CH39
1GHz~26GHz



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