

APPENDIX REPORT

Project No.	SHT2010025501EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT20100255004	Model No.	U50
Start test date	2020/10/16	Finish date	2020/10/16
Temperature	25°C	Humidity	50%
Test Engineer	Hailey Chen	Auditor	Xiaodong Zhu

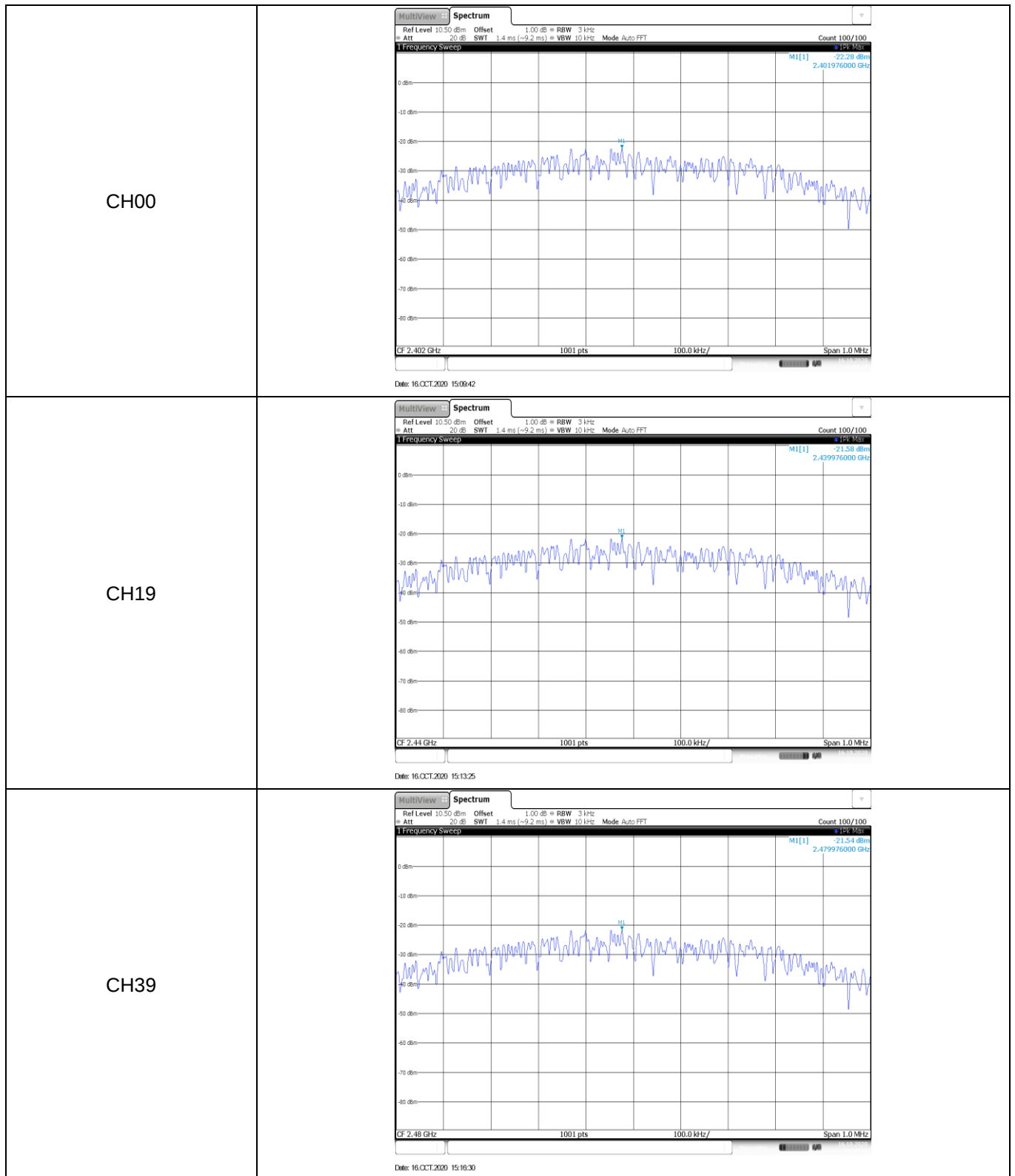
Appendix clause	Test item	Result
A	Peak Output Power	PASS
B	Power Spectral Density	PASS
C	6 dB Bandwidth	PASS
D	99% Occupied Bandwidth	PASS
E	Duty cycle	PASS
F	Band edge and Spurious Emissions (conducted)	PASS

Appendix A: Peak Output Power

Type	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	-6.55	-6.57	≤ 30.00	Pass
	19	-5.87	-5.88		
	39	-5.82	-5.83		

Appendix B: Power Spectral Density

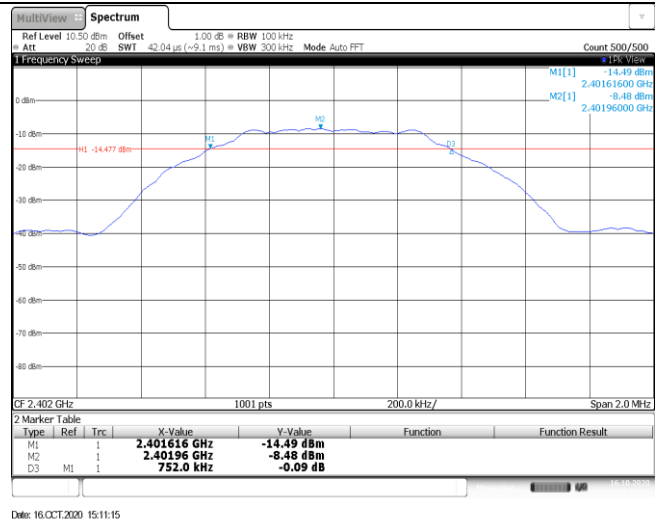
Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-22.28	≤8.00	Pass
	19	-21.58		
	39	-21.54		



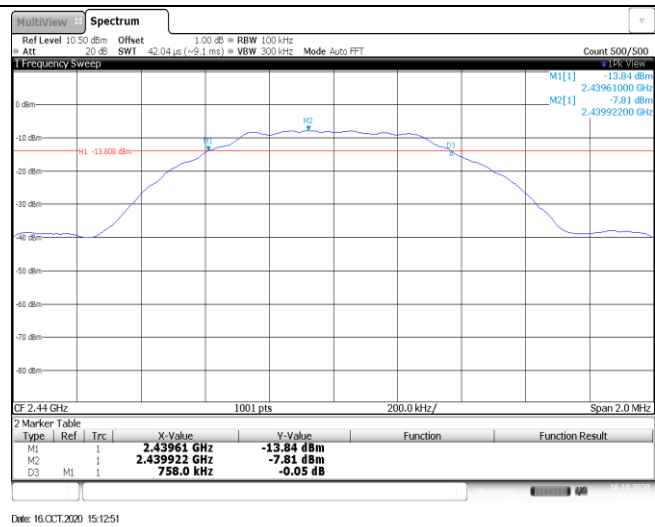
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	752.00	≥500	Pass
	19	758.00		
	39	756.00		

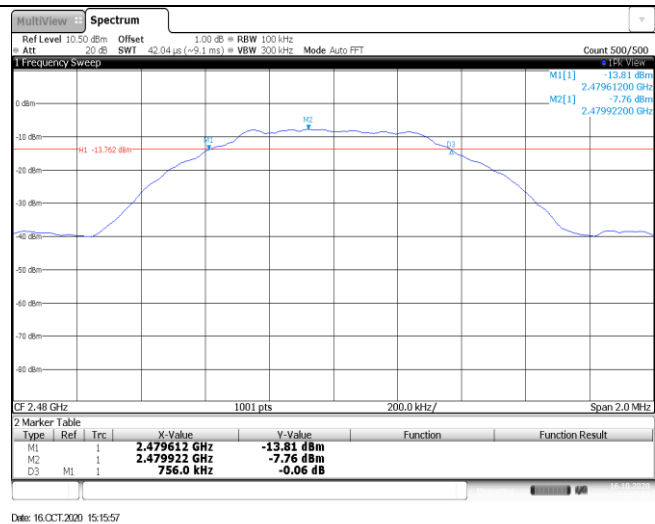
CH00



CH19



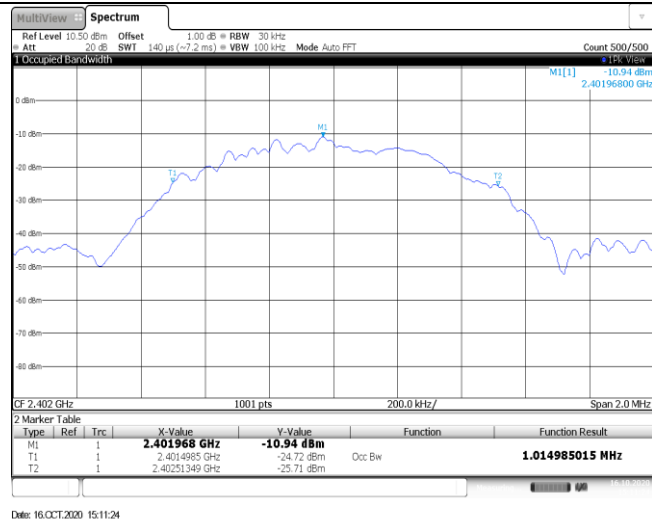
CH39



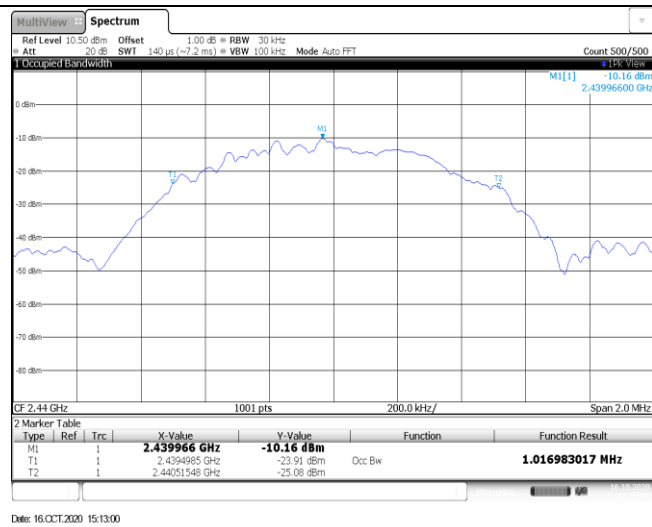
Appendix D: 99% Occupied Bandwidth

Type	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
BT-BLE	00	1.01	-	Pass
	19	1.02		
	39	1.02		

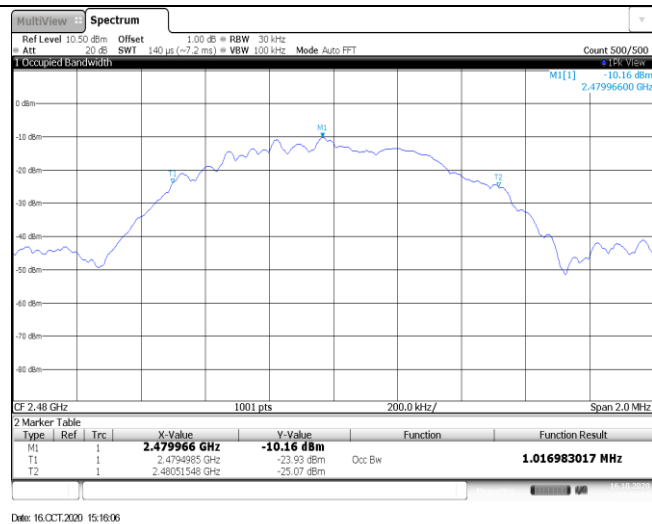
CH00



CH19

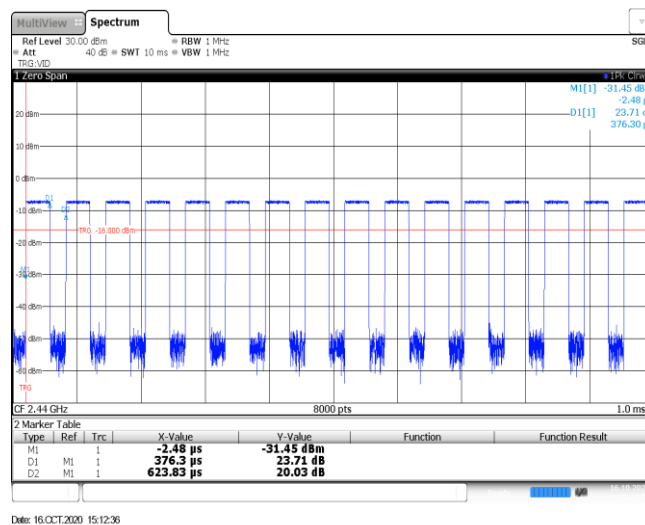


CH39



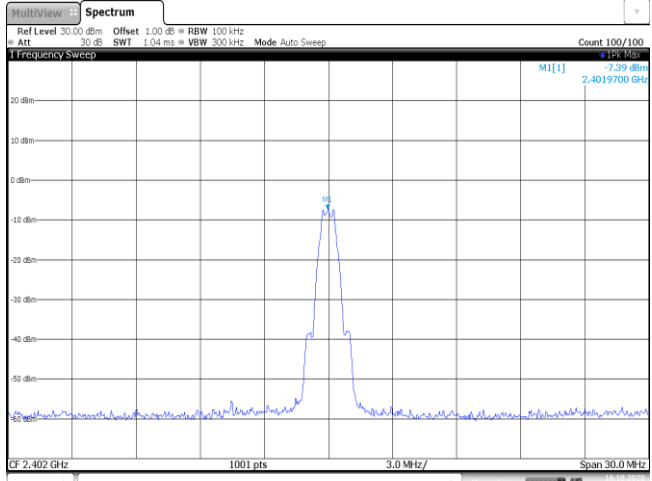
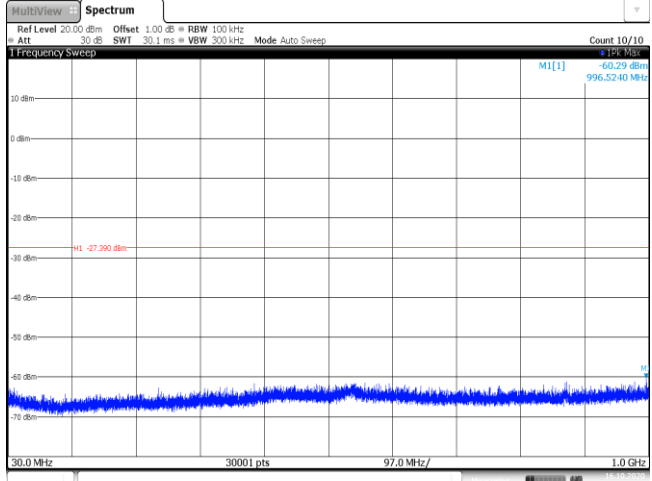
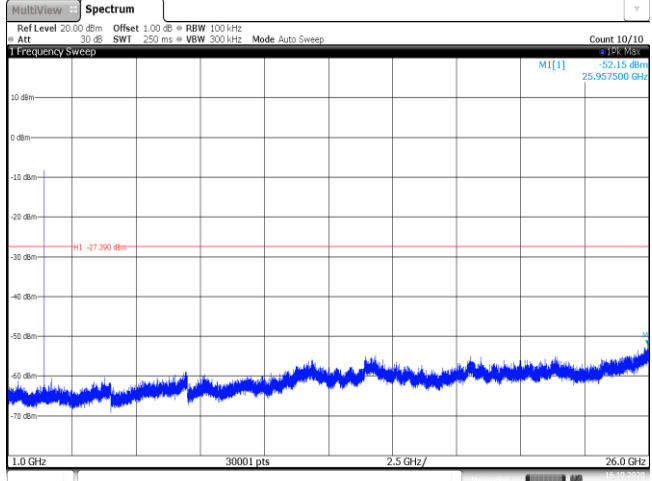
Appendix E: Duty cycle

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

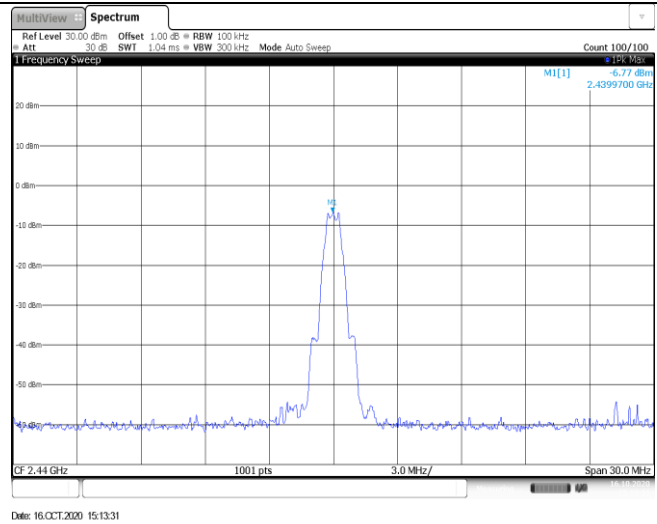


Appendix F: Band edge and Spurious Emissions (conducted)

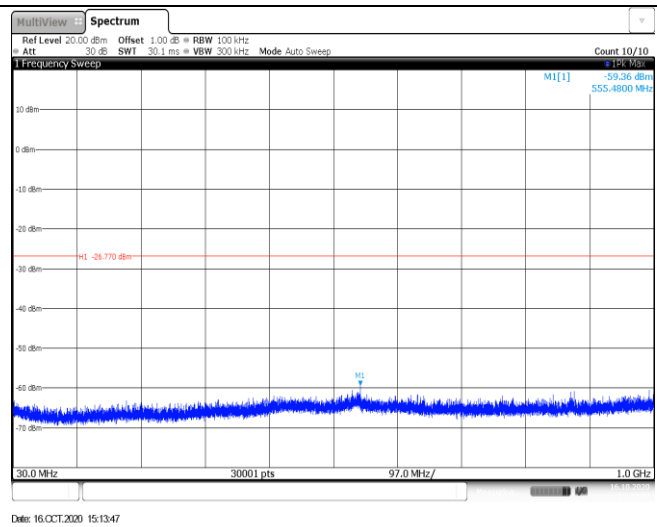
Test Item:	Band edge
CH00	MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz # Att 20 dB SWT 1.05 ms VBW 300 kHz Mode Auto Sweep Count 300/300 1 Frequency Sweep <

Test Item:	SE
CH00 Reference level	 Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] 7.39 dBm 2.4019700 GHz CF 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 16.OCT.2020 15:14:45
CH00 30MHz~1000MHz	 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 Count 10/10 M1[1] -60.29 dBm 996.5240 MHz 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 16.OCT.2020 15:15:01
CH00 1GHz~26GHz	 Ref Level 20.00 dBm Offset 1.00 dB RBW 100 kHz Att 30 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -52.15 dBm 25.957500 GHz 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 16.OCT.2020 15:15:18

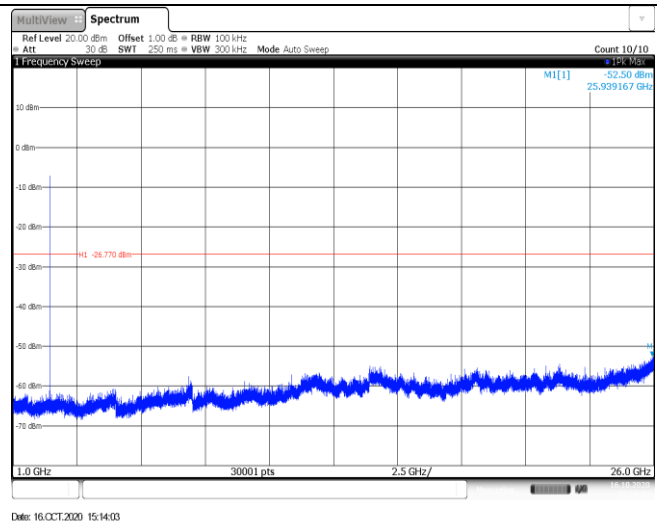
CH19
Reference level

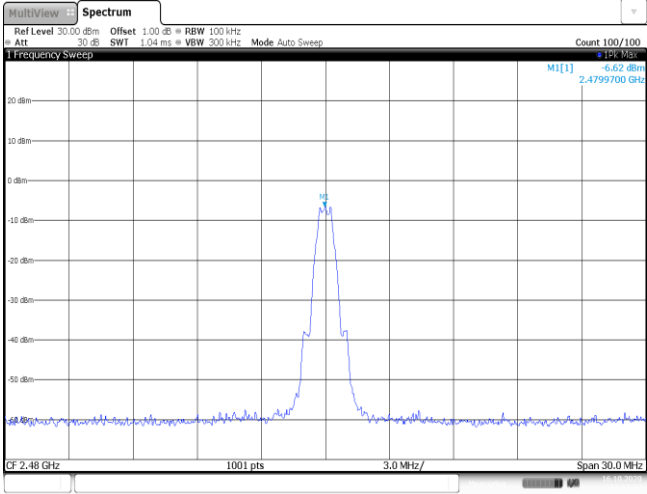
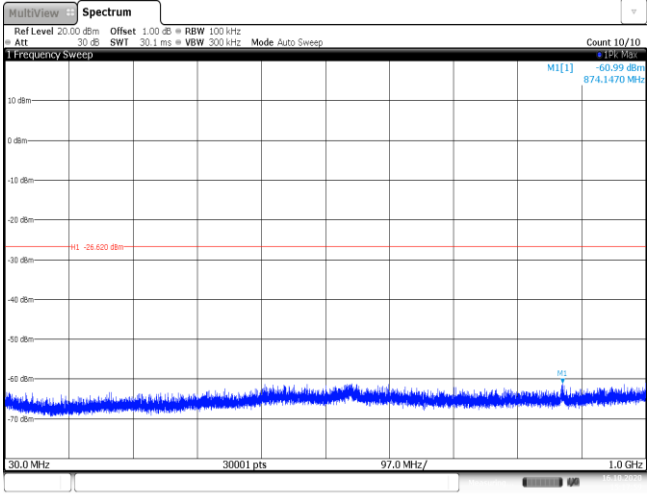
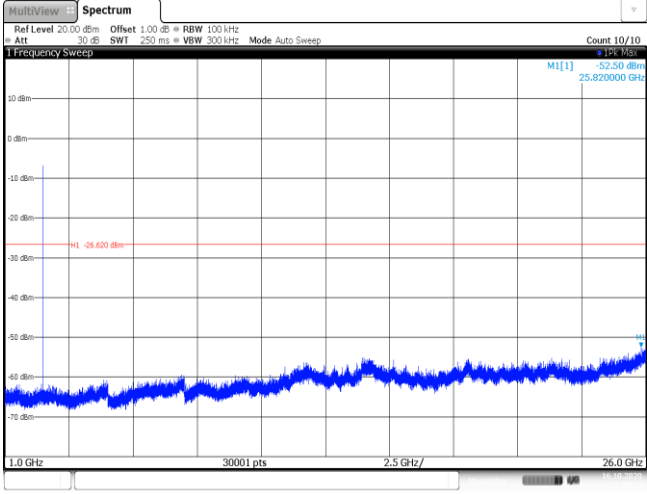


CH19
30MHz~1000MHz



CH19
1GHz~26GHz



CH39 Reference level	 The spectrum plot shows a single sharp peak at 2.4799700 GHz with a level of -6.62 dBm. The y-axis ranges from -80 dBm to 20 dBm, and the x-axis ranges from 2.48 GHz to 2.49 GHz. The plot is titled 'Spectrum' and includes parameters: Ref Level 30.00 dBm, Offset 1.00 dB, RBW 100 kHz, Att 30 dB, SWF 1.04 ms, VSW 300 kHz, Mode Auto Sweep. The date is 16.OCT.2020 15:17:42.
CH39 30MHz~1000MHz	 The spectrum plot shows a noise floor at -60.99 dBm across the frequency range 30.0 MHz to 1.0 GHz. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis ranges from 30.0 MHz to 1.0 GHz. The plot is titled 'Spectrum' and includes parameters: Ref Level 20.00 dBm, Offset 1.00 dB, RBW 100 kHz, Att 30 dB, SWF 30.1 ms, VSW 300 kHz, Mode Auto Sweep. The date is 16.OCT.2020 15:17:58.
CH39 1GHz~26GHz	 The spectrum plot shows a noise floor at -52.50 dBm across the frequency range 1.0 GHz to 26.0 GHz. The y-axis ranges from -70 dBm to 10 dBm, and the x-axis ranges from 1.0 GHz to 26.0 GHz. The plot is titled 'Spectrum' and includes parameters: Ref Level 20.00 dBm, Offset 1.00 dB, RBW 100 kHz, Att 30 dB, SWF 250 ms, VSW 300 kHz, Mode Auto Sweep. The date is 16.OCT.2020 15:18:14.

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