

APPENDIX REPORT

Project No.	SHT2012103601EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT201210360001	Model No.	N402i
Start test date	2021-01-06	Finish date	2021-01-06
Temperature	22.8°C	Humidity	35%
Test Engineer	Hailey Chen	Auditor	Xiaodong Zheo

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

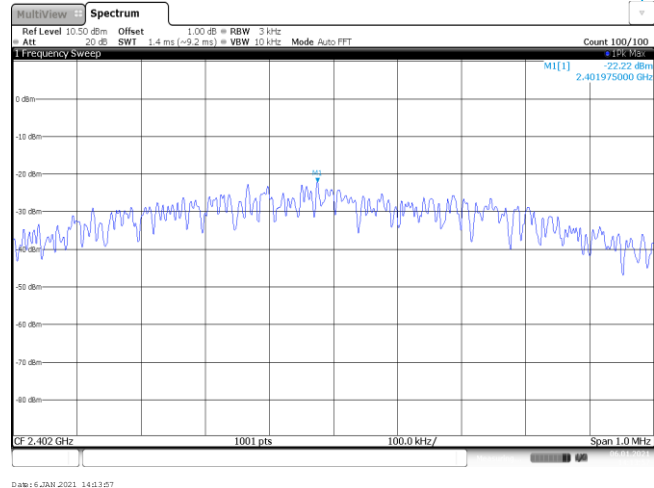
Appendix A: Peak Output Power

Type	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
BT-BLE	00	-7.40	-7.41	≤ 30.00	Pass
	19	-7.41	-7.42		
	39	-7.63	-7.65		

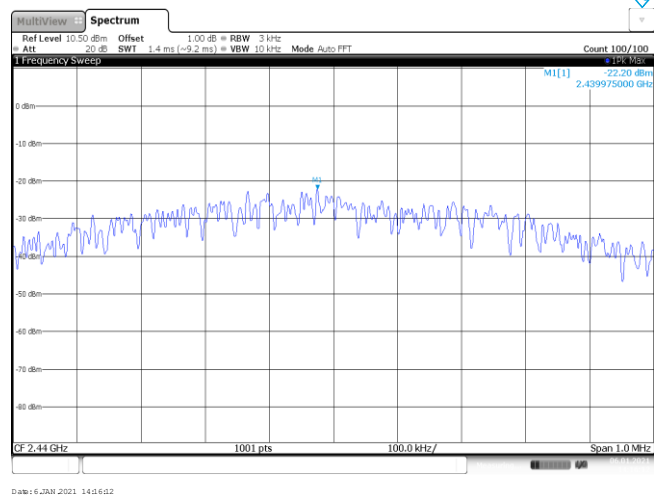
Appendix B: Power Spectral Density

Type	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
BT-BLE	00	-22.22	≤8.00	Pass
	19	-22.20		
	39	-22.52		

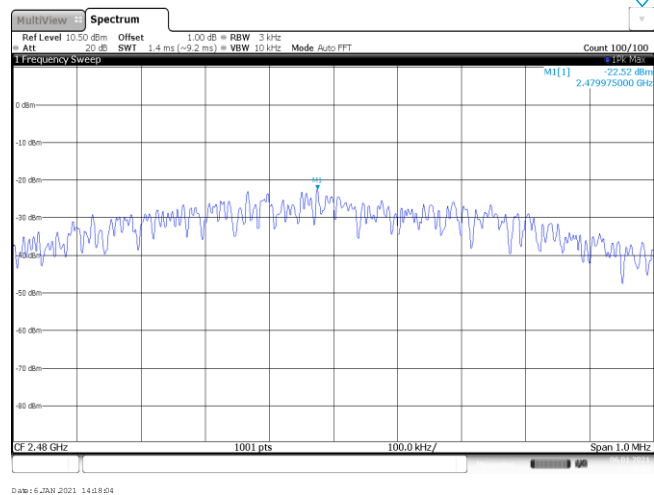
CH00



CH19



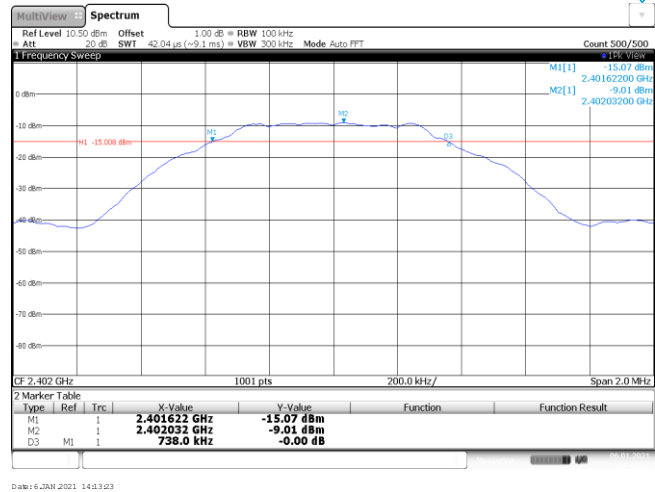
CH39



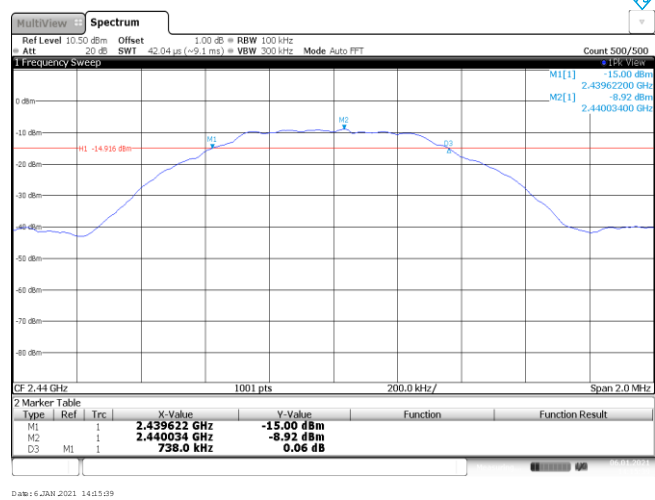
Appendix C: 6dB bandwidth

Type	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
BT-BLE	00	738.00	≥500	Pass
	19	738.00		
	39	732.00		

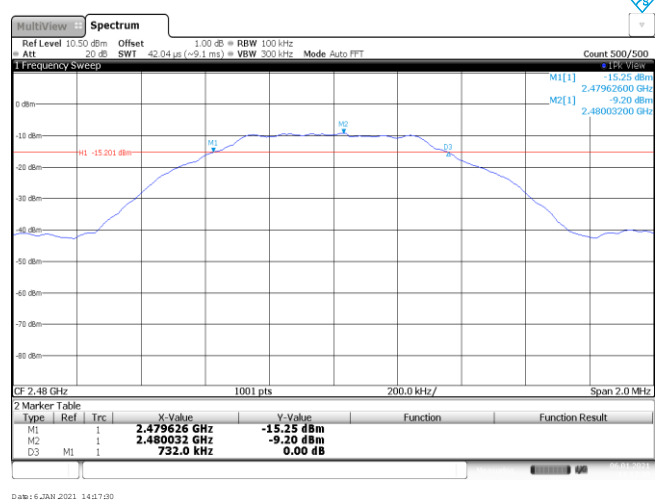
CH00



CH19



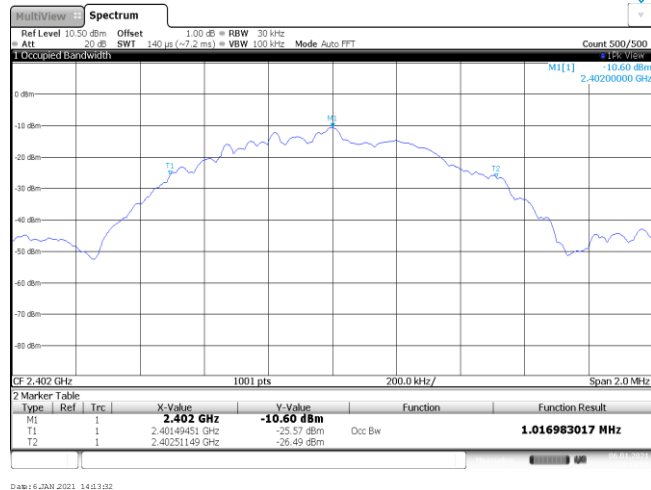
CH39



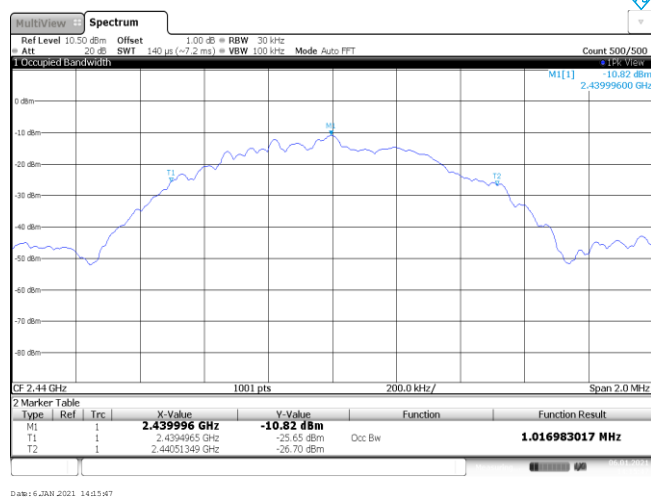
Appendix D: 99% Occupied Bandwidth

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

CH00



CH19

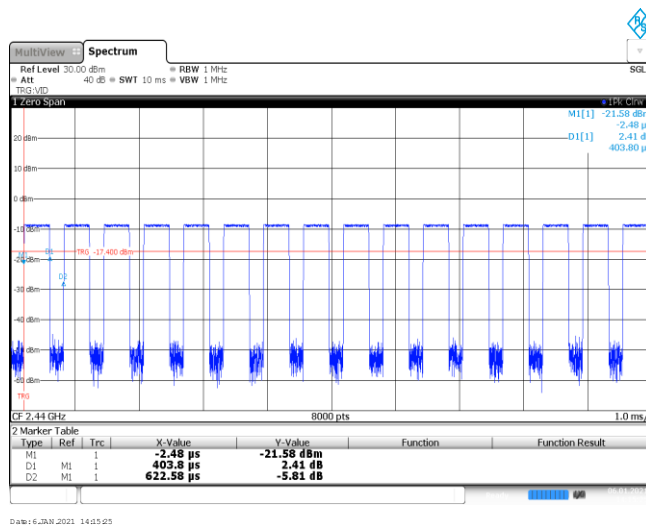


CH39



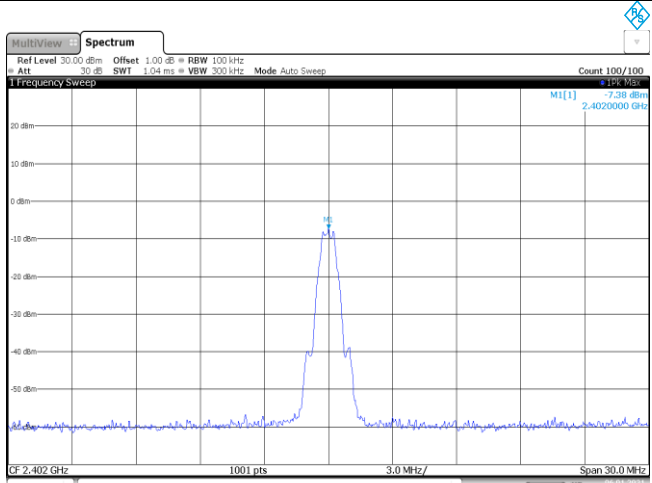
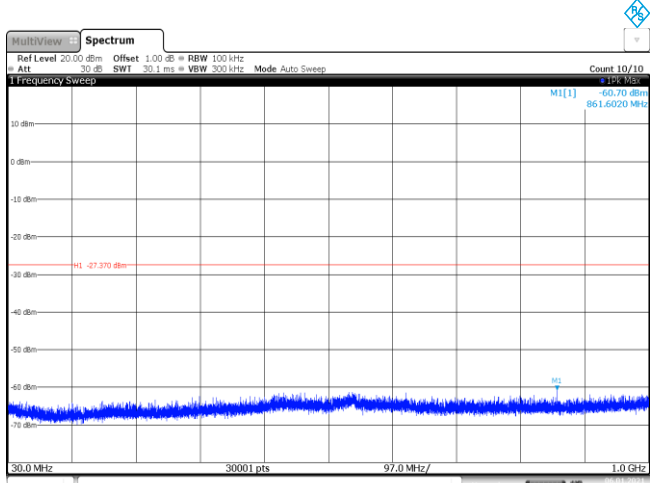
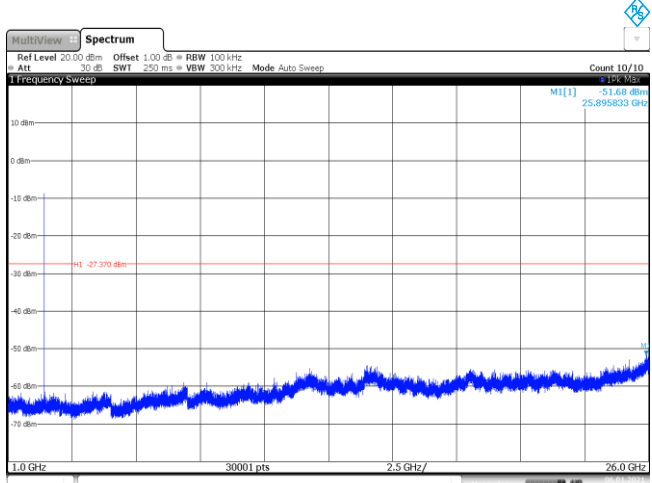
Appendix E: Duty cycle

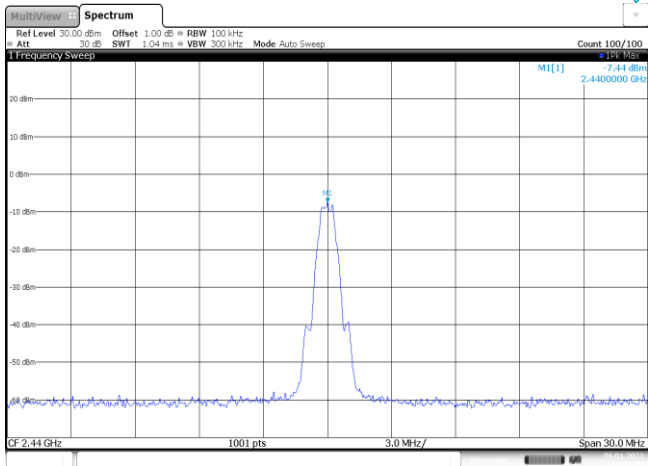
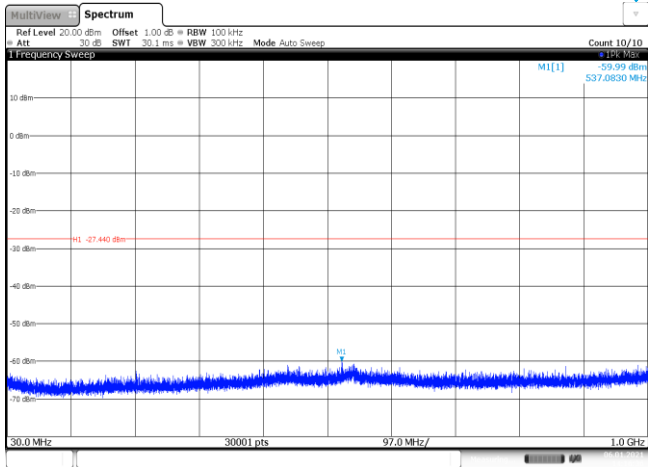
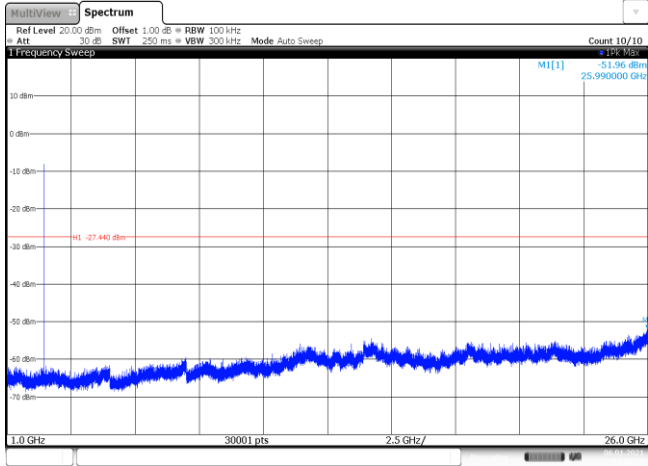
Test Frequency (MHz)	T _{on} time for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on} time (kHz)
2440	0.40	0.62	64.5%	2.5



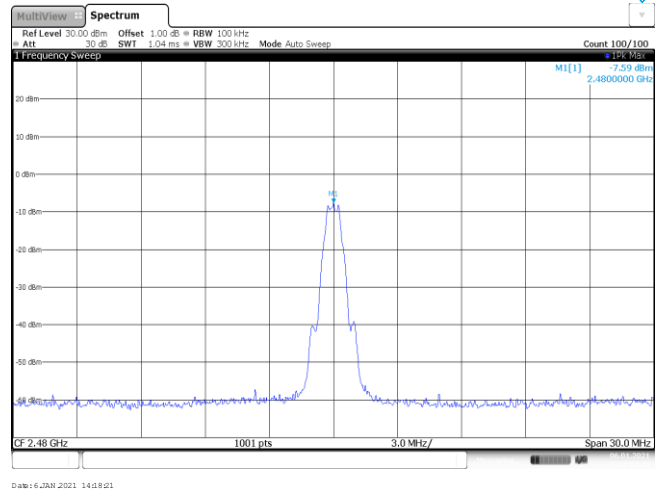
Appendix F: Band edge and Spurious Emissions (conducted)

Test Item:	Band edge
CH00	MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWI 1.05 ms VBW 300 kHz Mode Auto Sweep Count 300/300 Frequency Sweep 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm 2.31 GHz 1001 pts 9.5 MHz/ 2.405 GHz M1 -7.60 dBm M2 -68.45 dBm M3 -74.09 dBm M4 -71.54 dBm M5 -63.92 dBm 2.40201 GHz -7.60 dBm 2.4 GHz -63.92 dBm 2.39 GHz -71.54 dBm 2.31 GHz -74.09 dBm 2.369988 GHz -68.45 dBm Date: 6 JAN 2021 14:21:15
CH39	MultiView Spectrum Ref Level 10.50 dBm Offset 1.00 dB RBW 100 kHz Att 20 dB SWI 1.02 ms VBW 300 kHz Mode Auto Sweep Count 100/100 Frequency Sweep 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm -80 dBm 2.478 GHz 1001 pts 2.2 MHz/ 2.5 GHz M1 -7.88 dBm M2 -68.45 dBm M3 -74.48 dBm M4 -68.02 dBm 2.479989 GHz -7.88 dBm 2.4835 GHz -68.45 dBm 2.5 GHz -74.48 dBm 2.483962 GHz -68.02 dBm Date: 6 JAN 2021 14:18:14

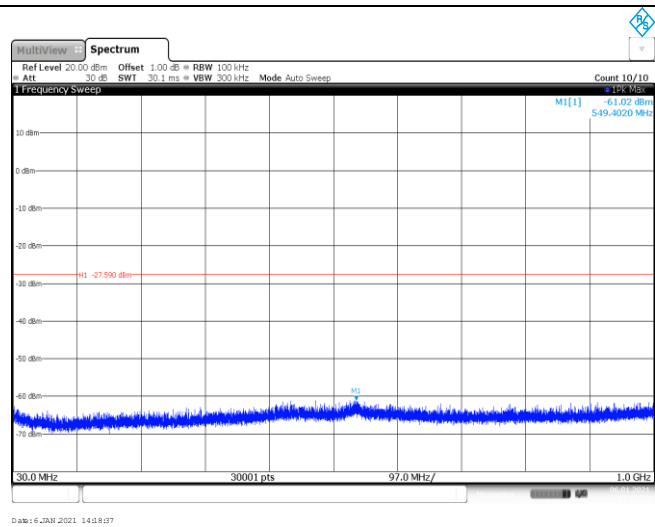
Test Item:	SE
CH00 Reference level	 Ref Level 30.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] -17.23 dBm 2.402000 GHz CF 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 6 JUN 2021 14:04:05
CH00 30MHz~1000MHz	 Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 30.1 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -60.70 dBm 861.6020 MHz H1 -70.370 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 6 JUN 2021 14:04:02
CH00 1GHz~26GHz	 Ref Level 20.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 250 ms VBW 300 kHz Mode Auto Sweep Count 10/10 M1[1] -51.68 dBm 25.895833 GHz H1 -70.370 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 6 JUN 2021 14:04:08

CH19 Reference level	 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 Count 100/100 M1[1] 7.44 dBm 2.440000 GHz CF 2.44 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 6 JAN 2021 14:06:19
CH19 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] -59.99 dBm 537.8630 MHz 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 6 JAN 2021 14:06:05
CH19 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] -51.96 dBm 25.990000 GHz 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 6 JAN 2021 14:06:02

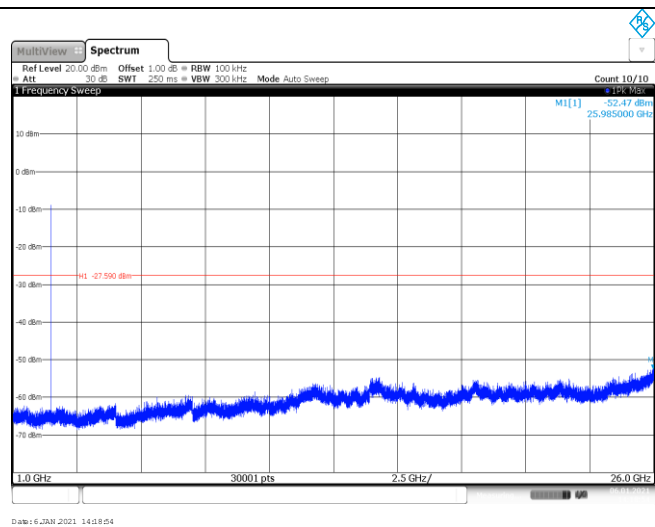
CH39
Reference level



CH39
30MHz~1000MHz



CH39
1GHz~26GHz



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