

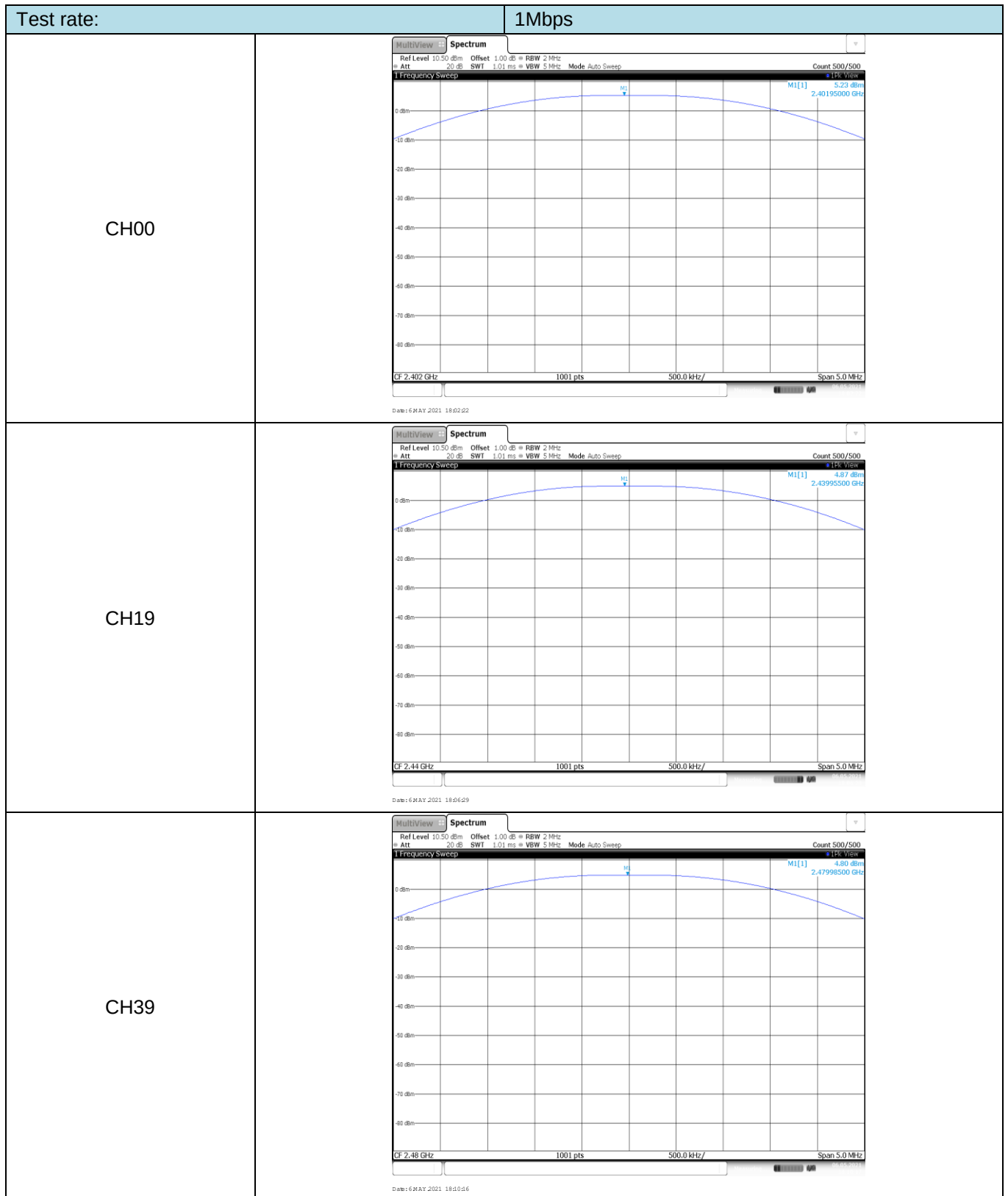
APPENDIX REPORT

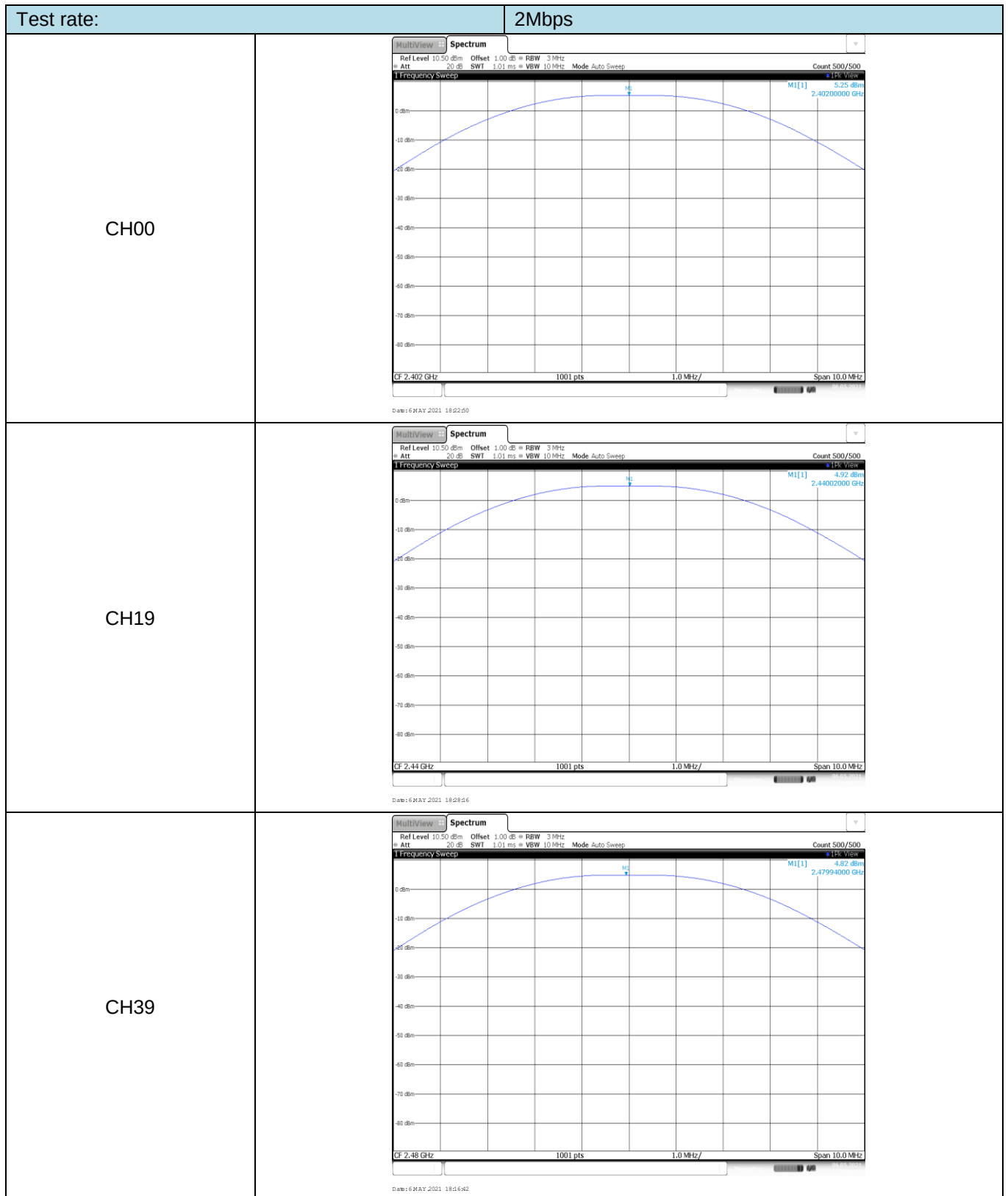
Project No.	SHT2104085601EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT21040856003	Model No.	ALPHA
Start test date	2021-05-06	Finish date	2021-05-06
Temperature	24.9°C	Humidity	37%
Test Engineer	Hailey Chen	Auditor	Xiaodong Zhu

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

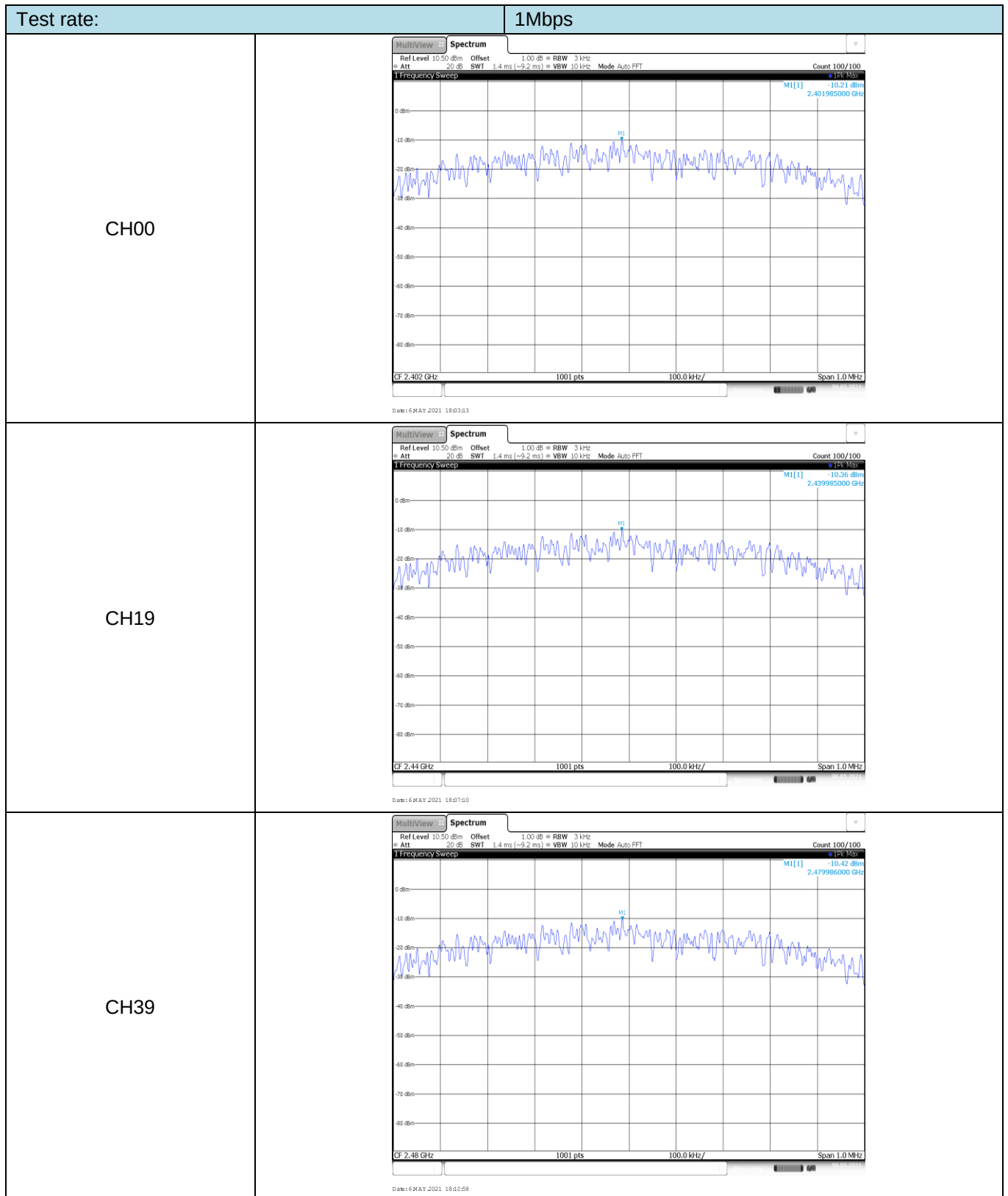
Test rate	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
1Mbps	00	5.23	5.20	≤ 30.00	Pass
	19	4.87	4.84		
	39	4.80	4.77		
2Mbps	00	5.25	5.21	≤ 30.00	Pass
	19	4.92	4.86		
	39	4.82	4.76		

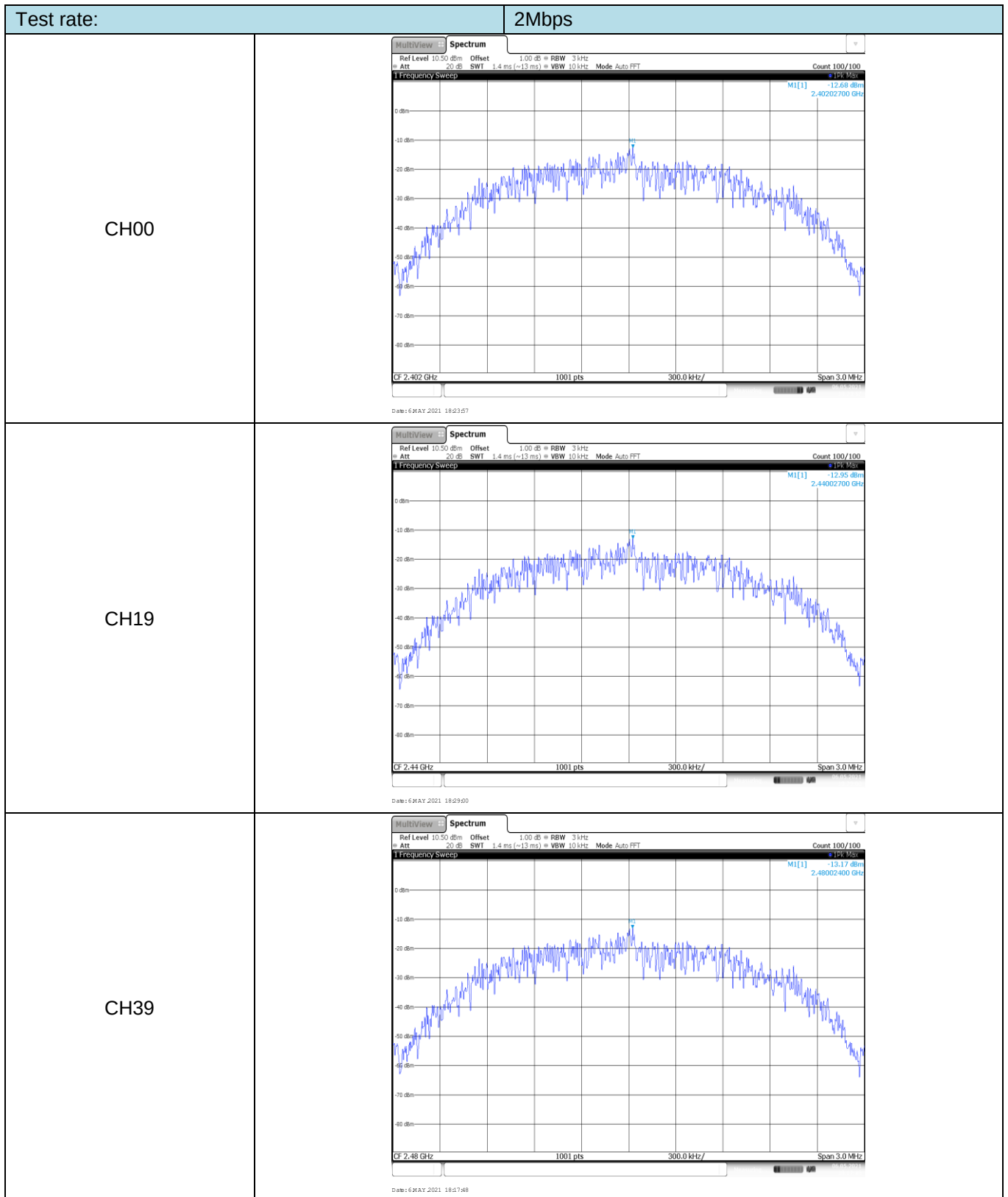




Appendix B: Power Spectral Density

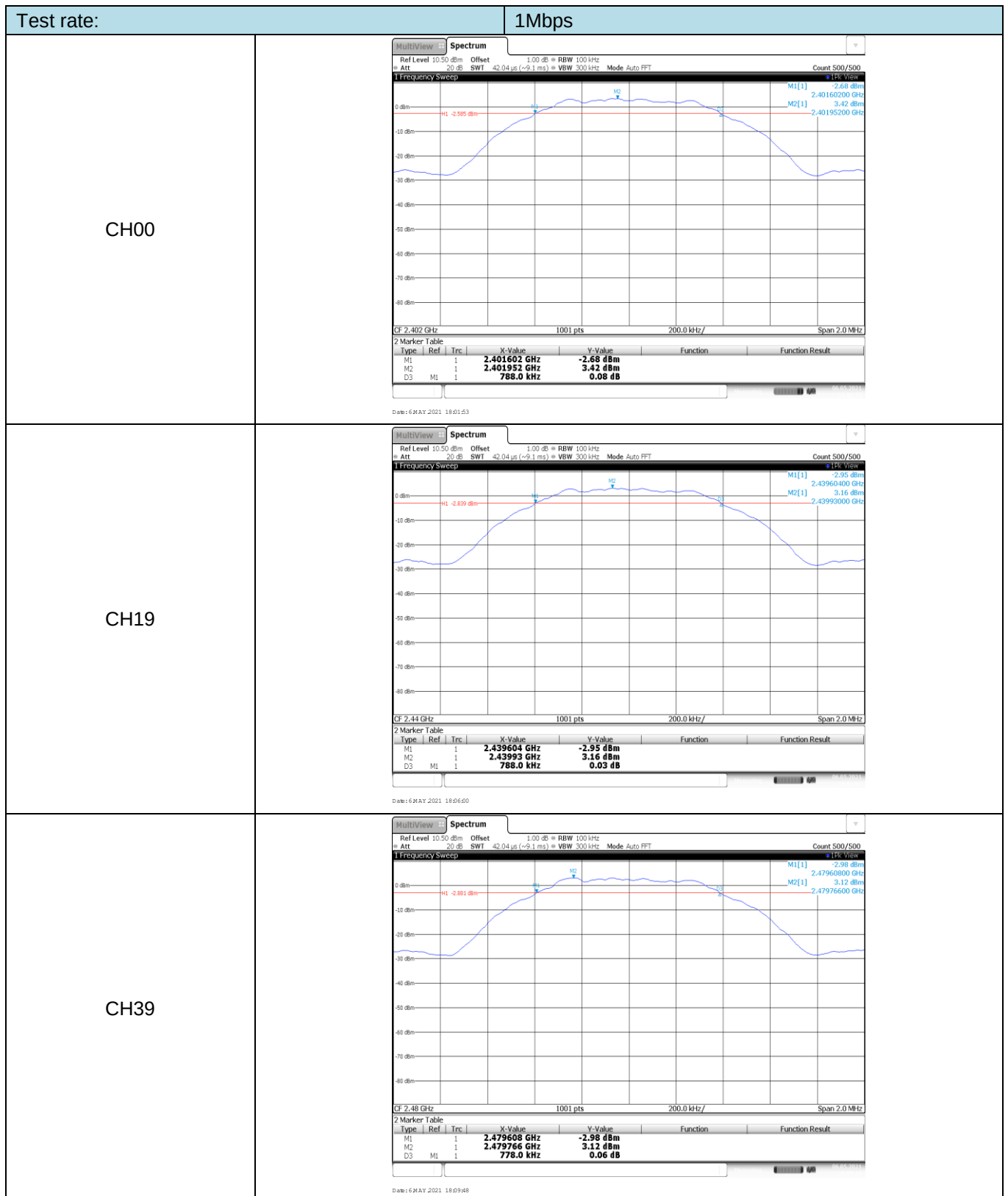
Test rate	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
1Mbps	00	-10.21	≤8.00	Pass
	19	-10.36		
	39	-10.42		
2Mbps	00	-12.68	≤8.00	Pass
	19	-12.95		
	39	-13.17		





Appendix C: 6dB bandwidth

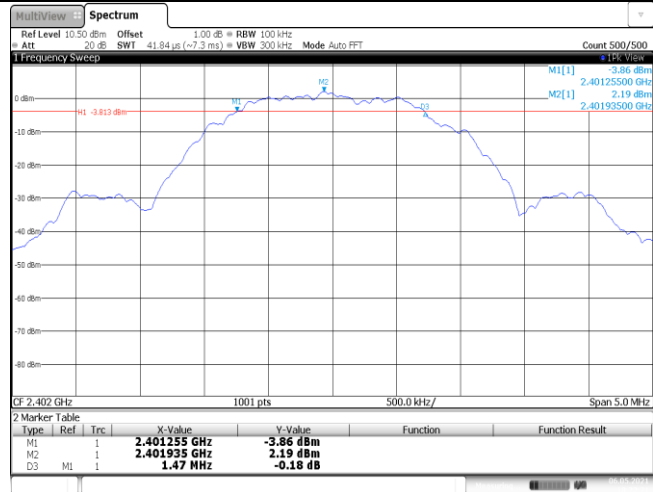
Test rate	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
1Mbps	00	788.00	≥500	Pass
	19	788.00		
	39	778.00		
2Mbps	00	1470.00	≥500	Pass
	19	1485.00		
	39	1450.00		



Test rate:

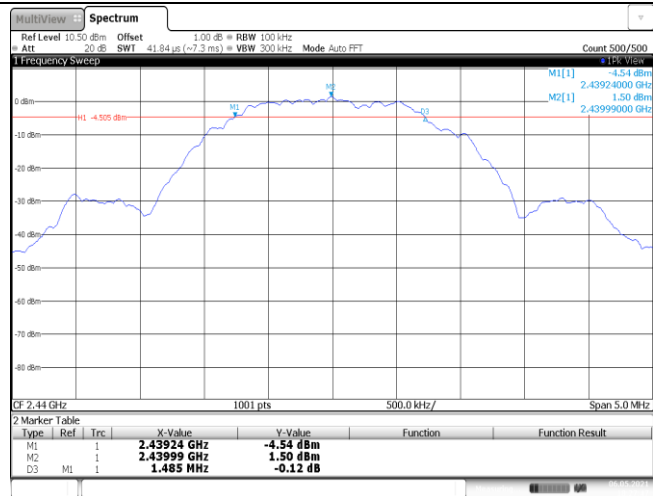
2Mbps

CH00



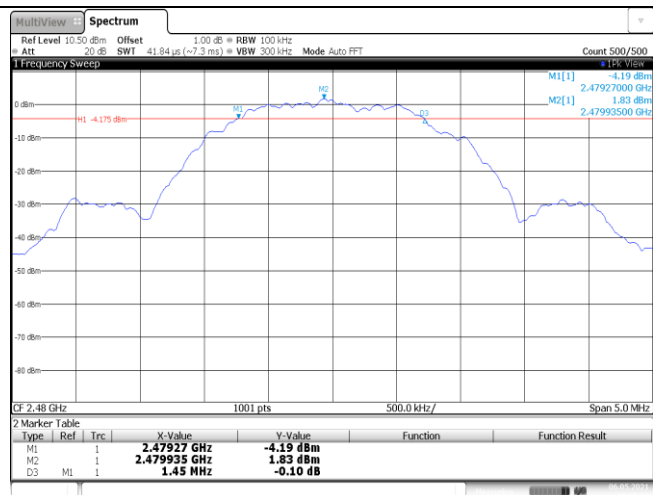
Date: 6 MAY 2021 18:22:22

CH19



Date: 6 MAY 2021 18:27:47

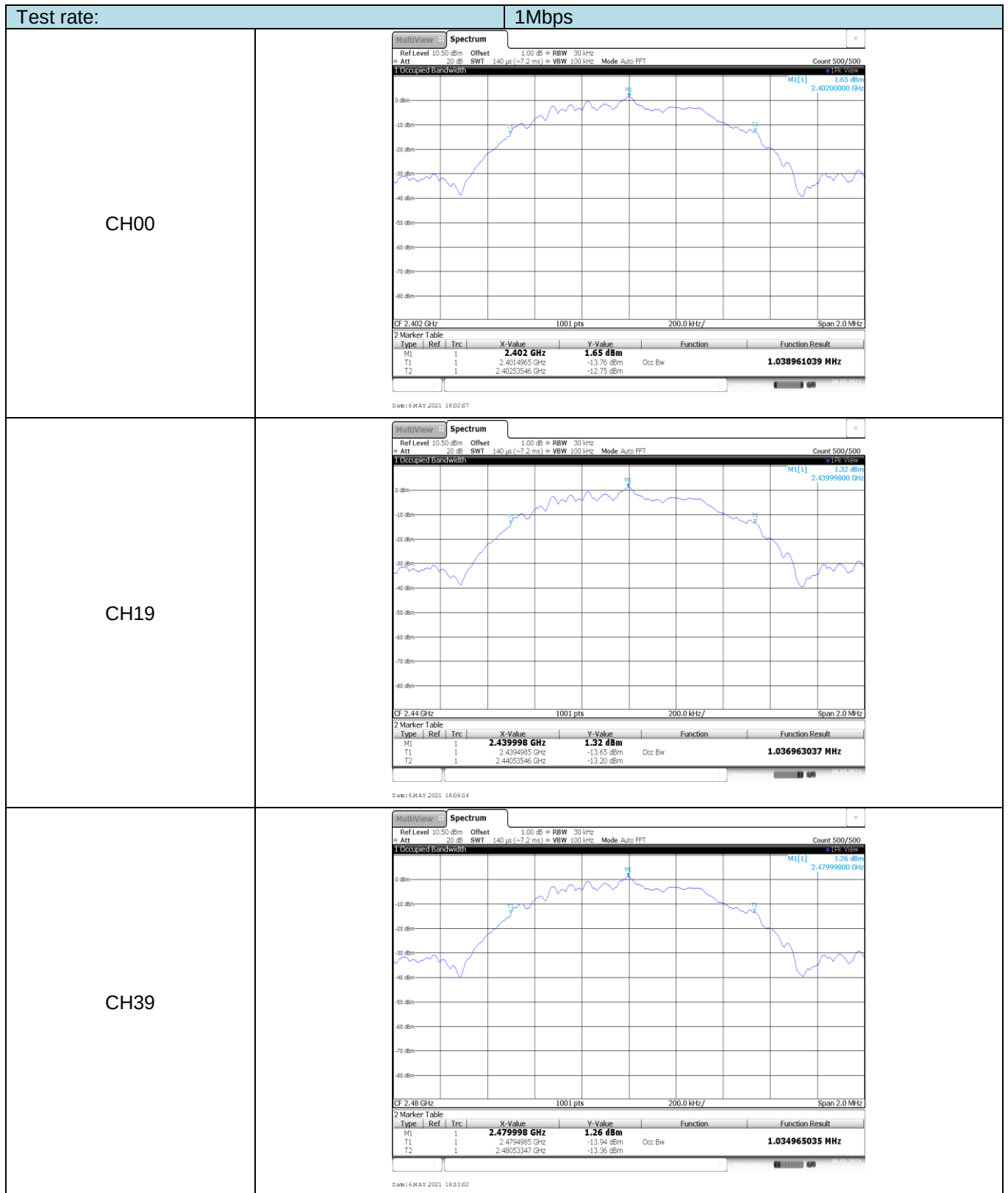
CH39

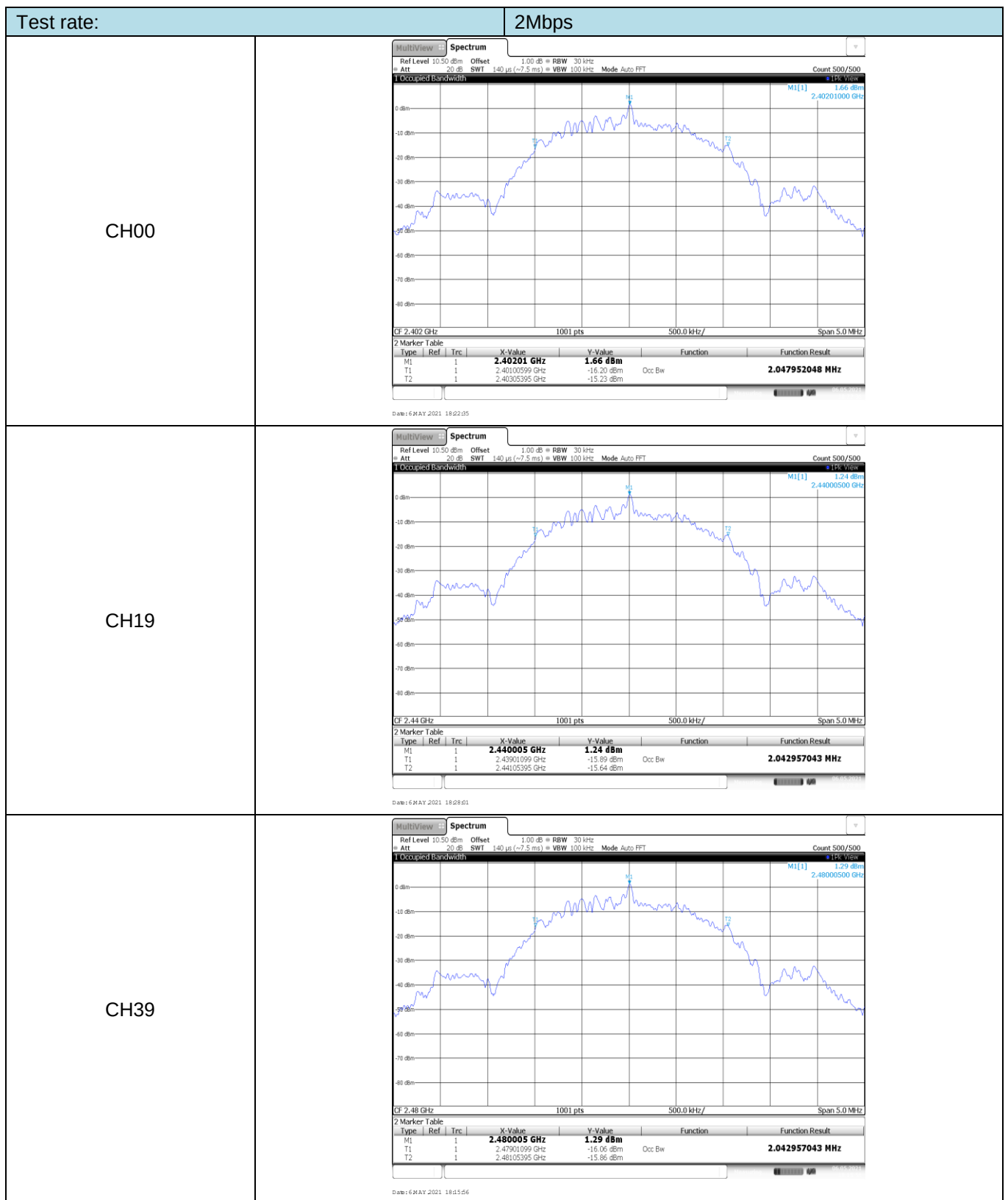


Date: 6 MAY 2021 18:15:29

Appendix D: 99% Occupied Bandwidth

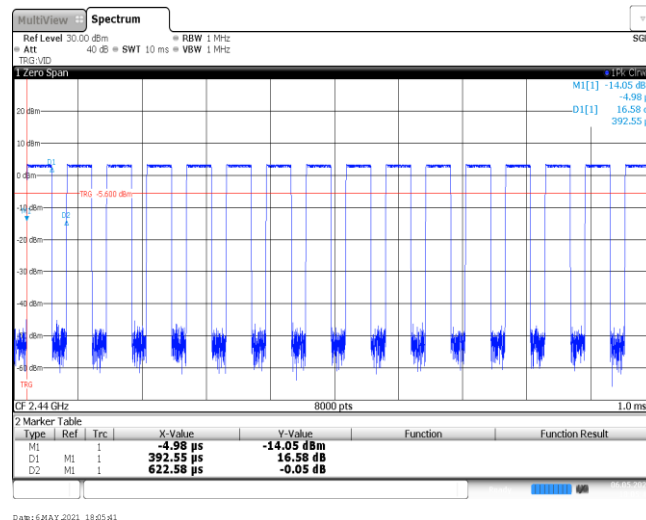
Test rate	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
1Mbps	00	1.04	-	Pass
	19	1.04		
	39	1.03		
2Mbps	00	2.05	-	Pass
	19	2.04		
	39	2.04		

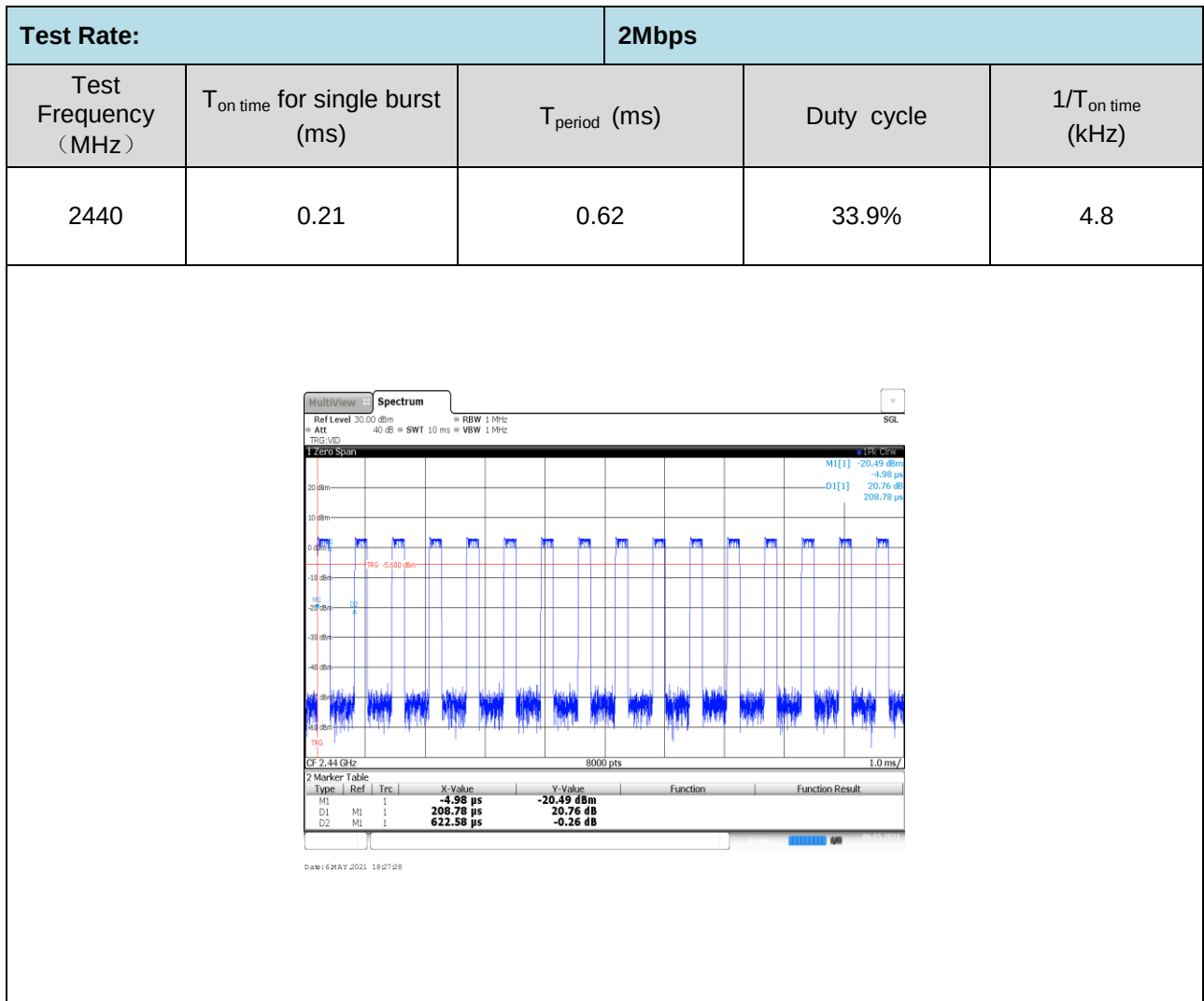


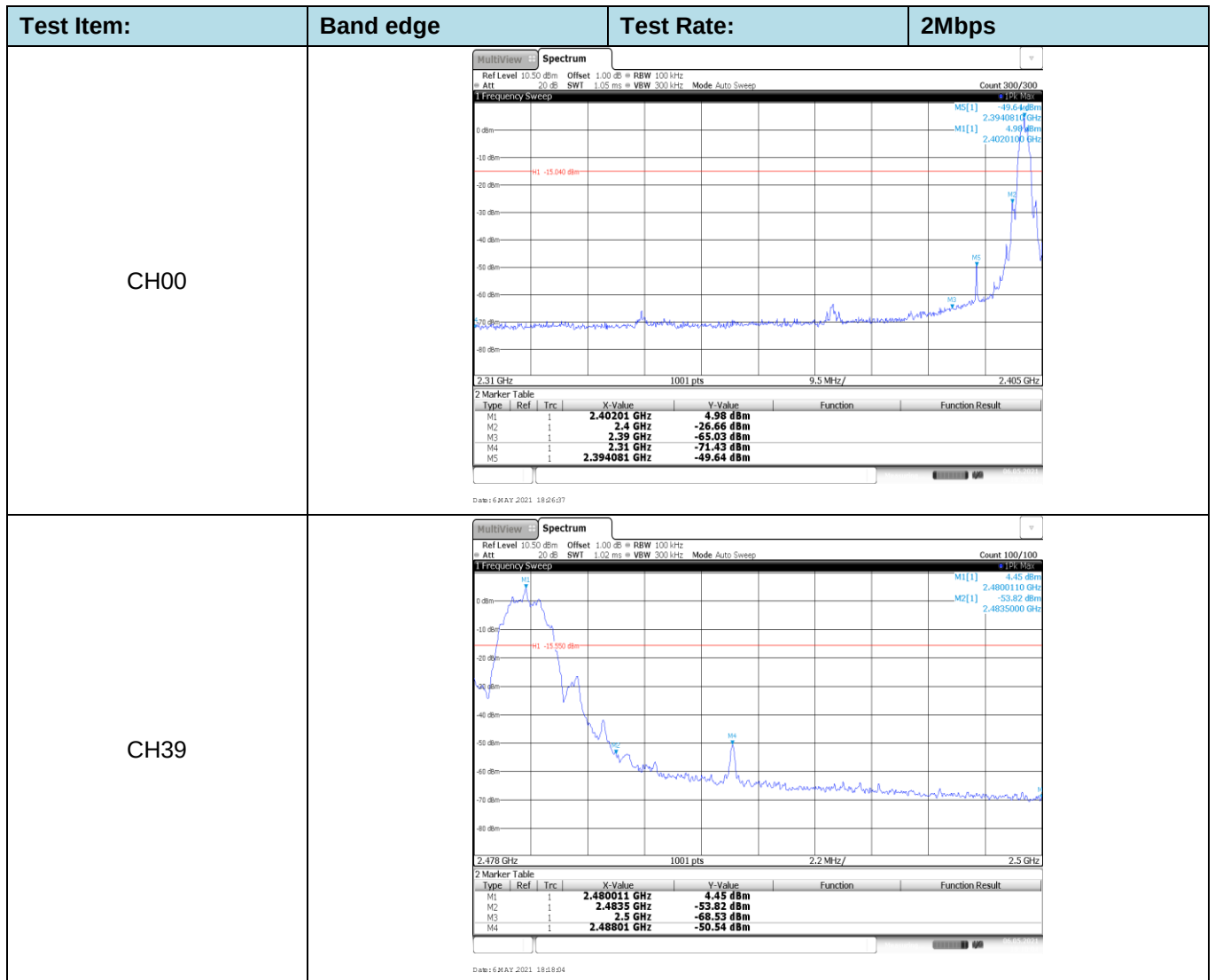


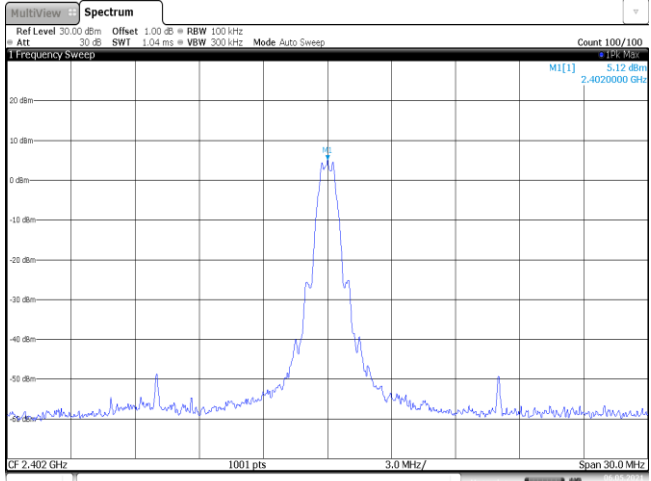
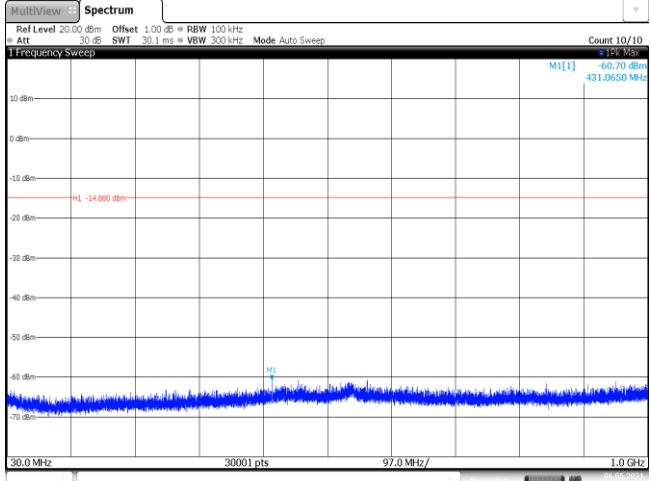
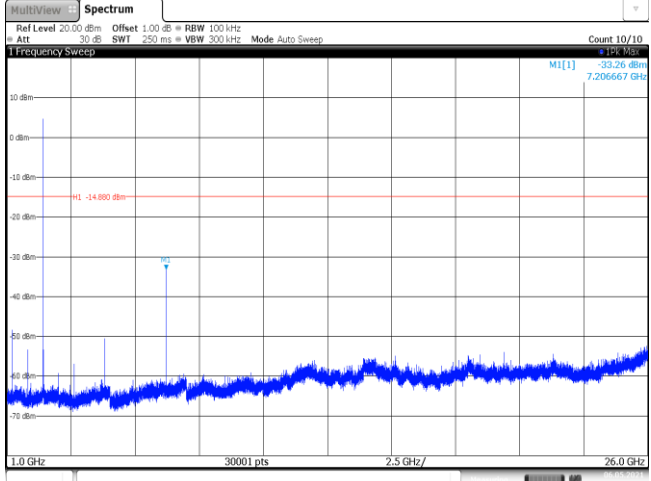
Appendix E: Duty cycle

Test Rate:			1Mbps	
Test Frequency (MHz)	T _{on time} for single burst (ms)	T _{period} (ms)	Duty cycle	1/T _{on time} (kHz)
2440	0.39	0.62	62.9%	2.6

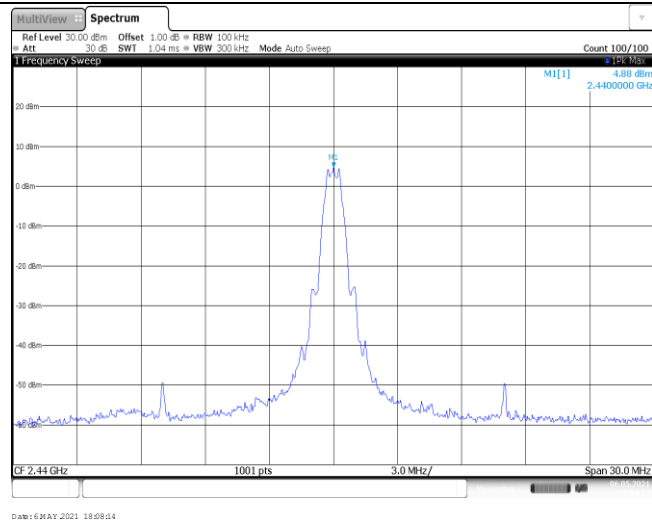




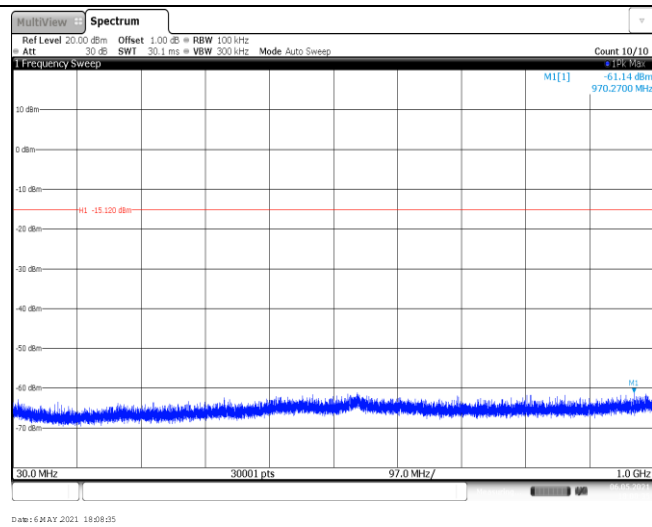


Test Item:	SE	Test Rate:	1Mbps
CH00 Reference level	 Ref Level 30.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] 5.12 dBm 2.402000 GHz 20 dBm 0 dBm -20 dBm -40 dBm -60 dBm -80 dBm 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 6 MAY 2021 18:03:41		
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 431.0650 MHz 20 dBm 0 dBm -20 dBm -40 dBm -60 dBm -80 dBm 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 6 MAY 2021 18:04:03		
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] -53.25 dBm 7.206667 GHz 20 dBm 0 dBm -20 dBm -40 dBm -60 dBm -80 dBm 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 6 MAY 2021 18:04:25		

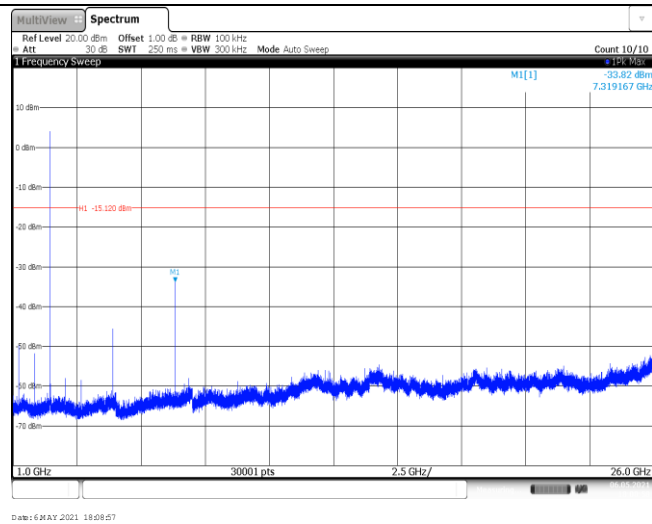
CH19
Reference level

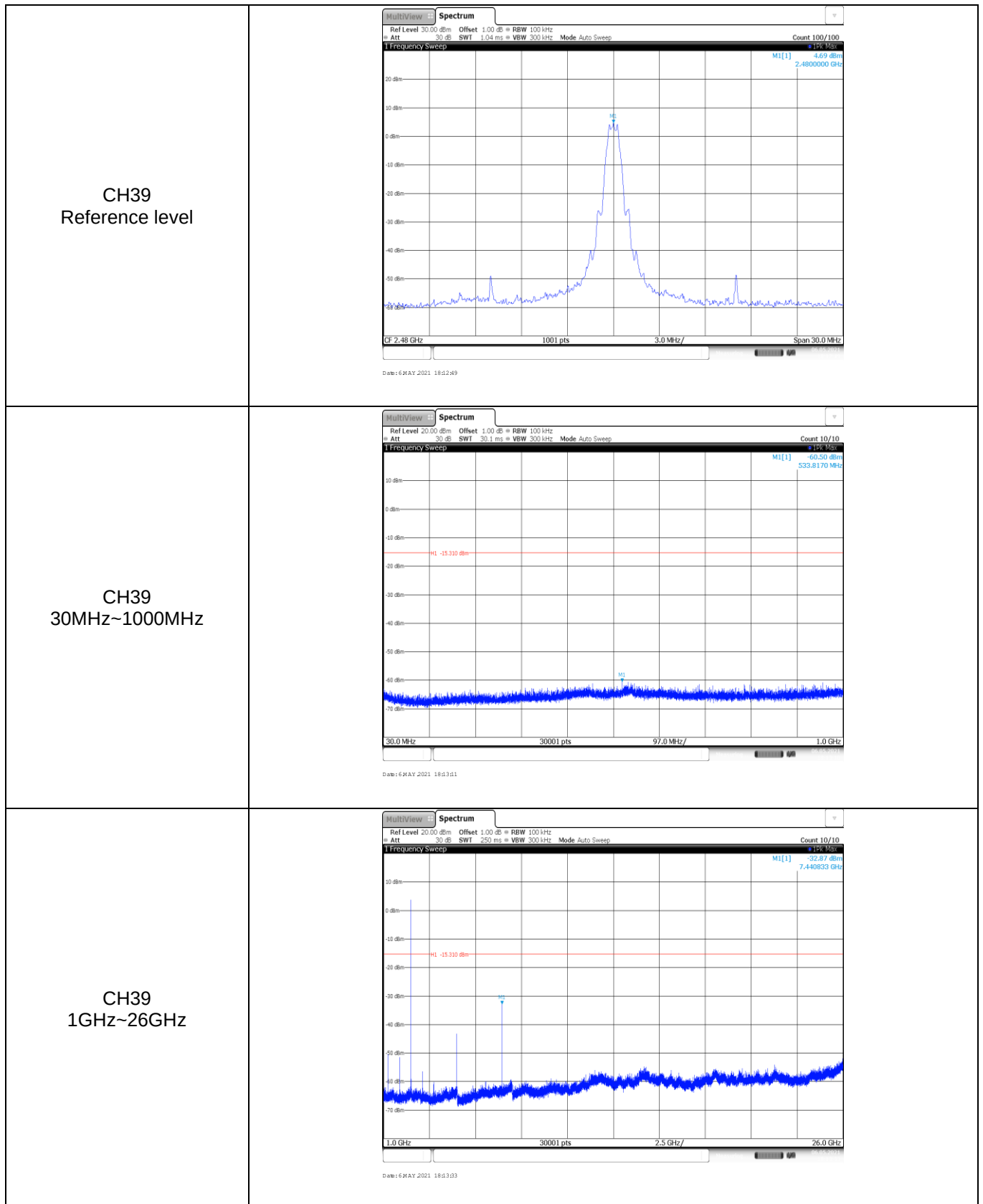


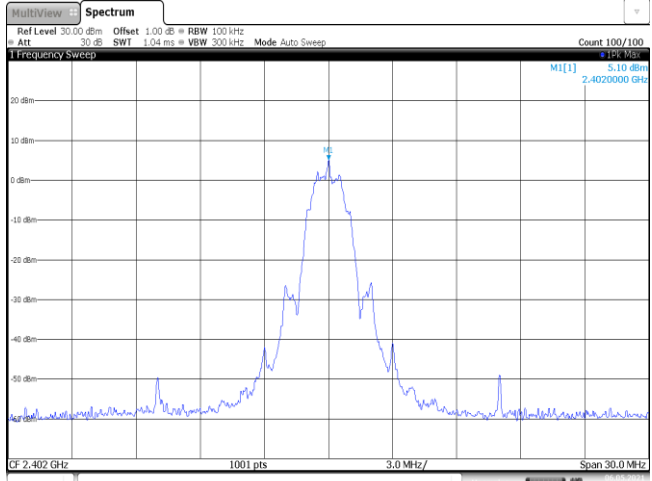
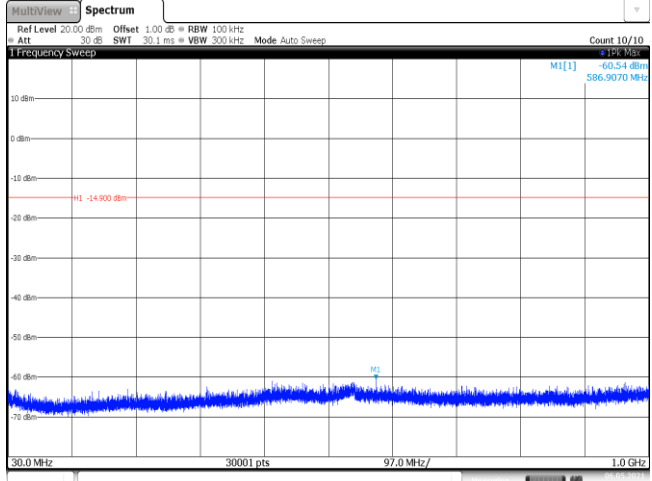
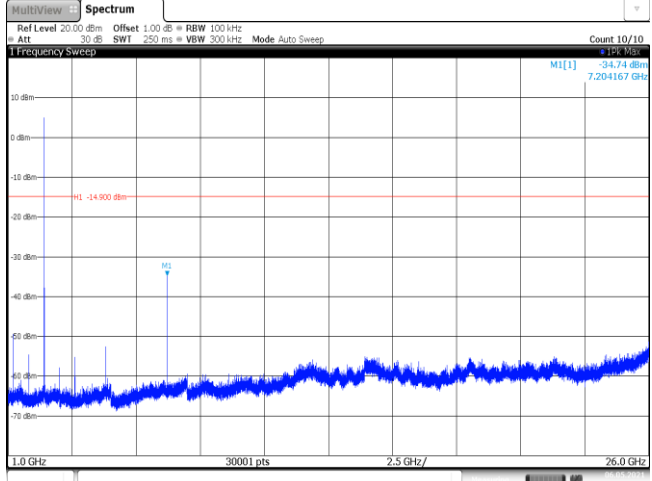
CH19
30MHz~1000MHz



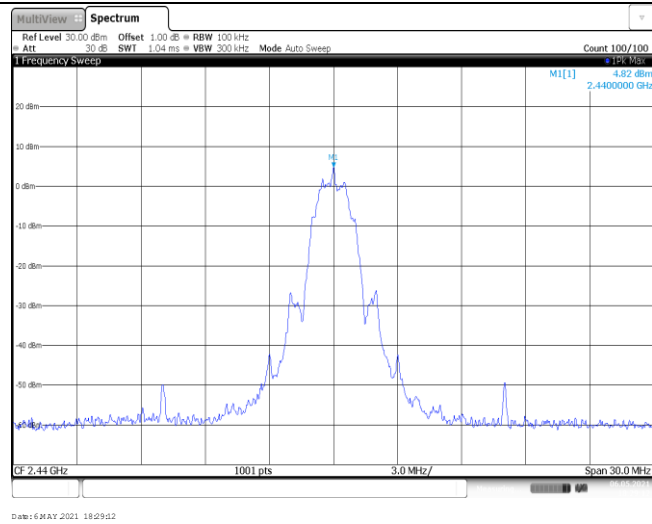
CH19
1GHz~26GHz



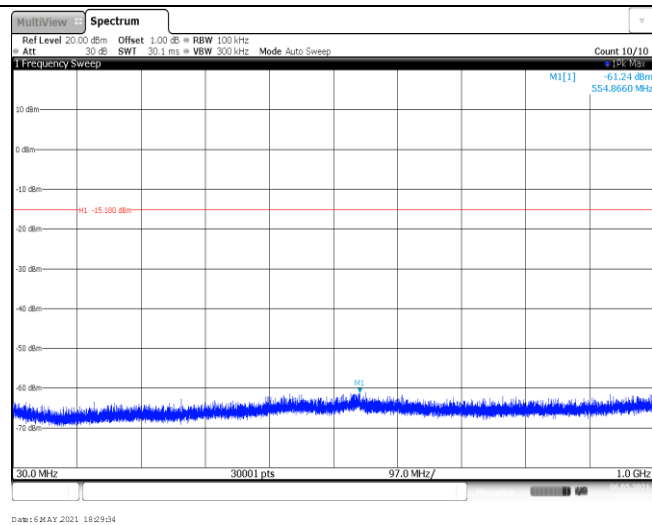


Test Item:	SE	Test Rate:	2Mbps
CH00 Reference level	 Ref Level 30.00 dBm Offset 1.00 dB BW 100 kHz Att 30 dB SWI 1.04 ms VBW 300 kHz Mode Auto Sweep Count 100/100 M1[1] 5.10 dBm 2.4020000 GHz 2.402 GHz 1001 pts 3.0 MHz/ Span 30.0 MHz Date: 6 MAY 2021 18:24:25		
CH00 30MHz~1000MHz	 Ref Level 20.00 dBm 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] -60.54 dBm 586.9070 MHz 30.0 MHz 30001 pts 97.0 MHz/ 1.0 GHz Date: 6 MAY 2021 18:24:46		
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] -54.74 dBm 7.204167 GHz 1.0 GHz 30001 pts 2.5 GHz/ 26.0 GHz Date: 6 MAY 2021 18:25:08		

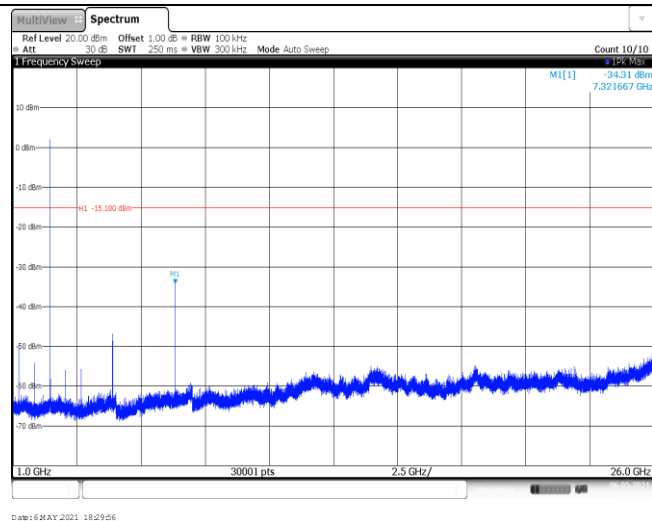
CH19
Reference level

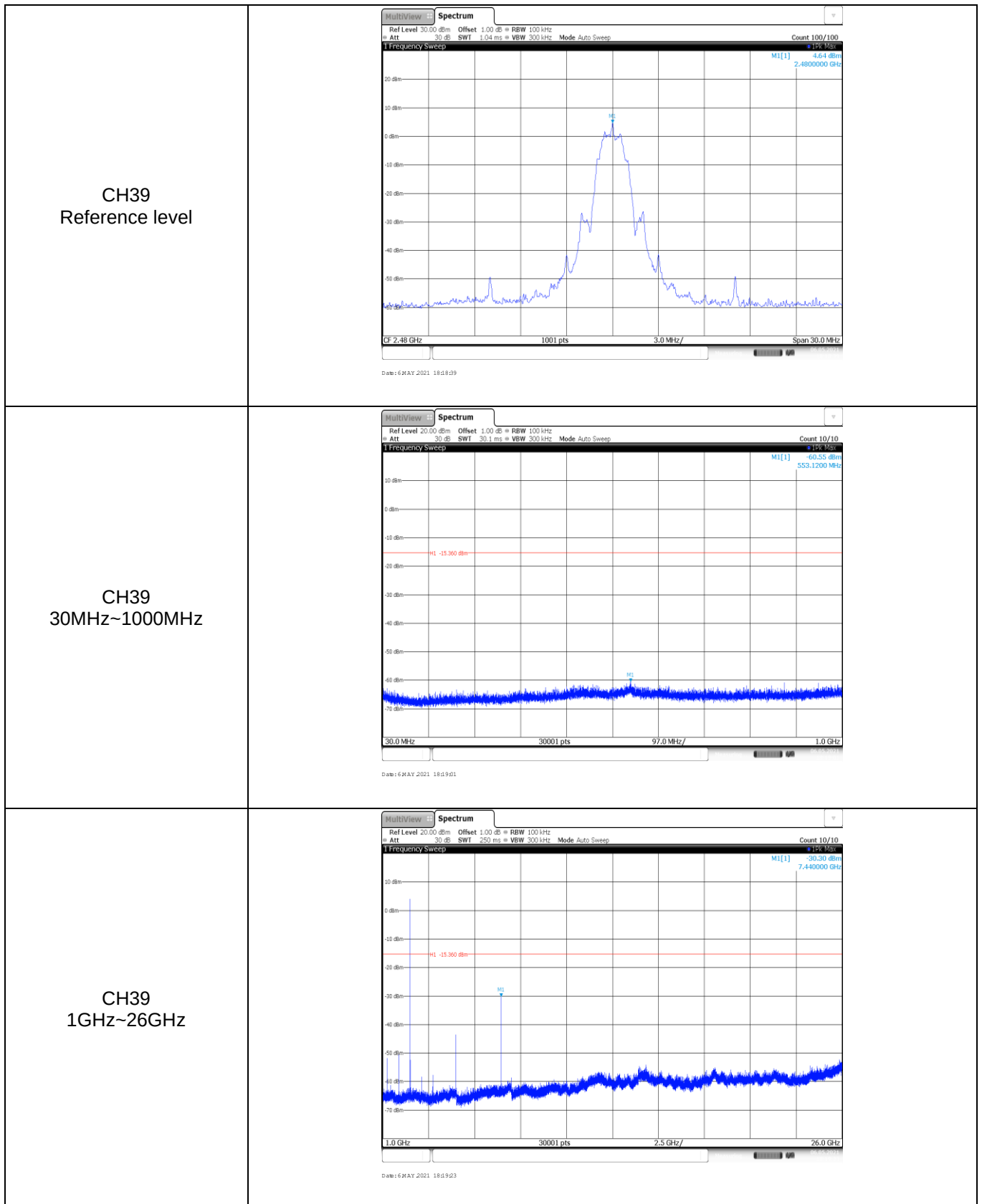


CH19
30MHz~1000MHz



CH19
1GHz~26GHz





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