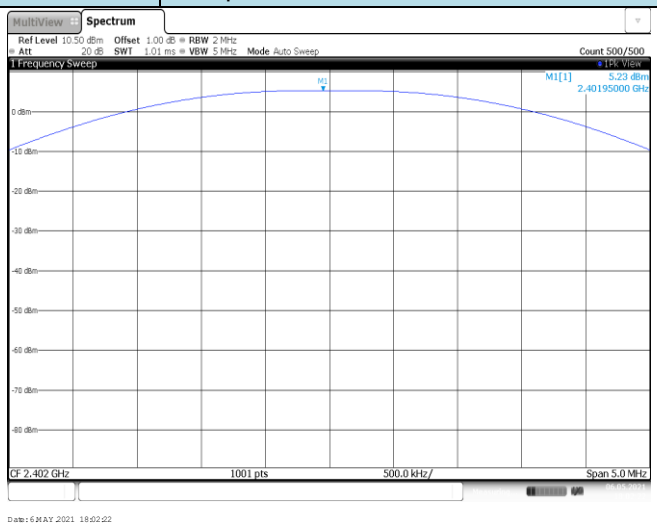
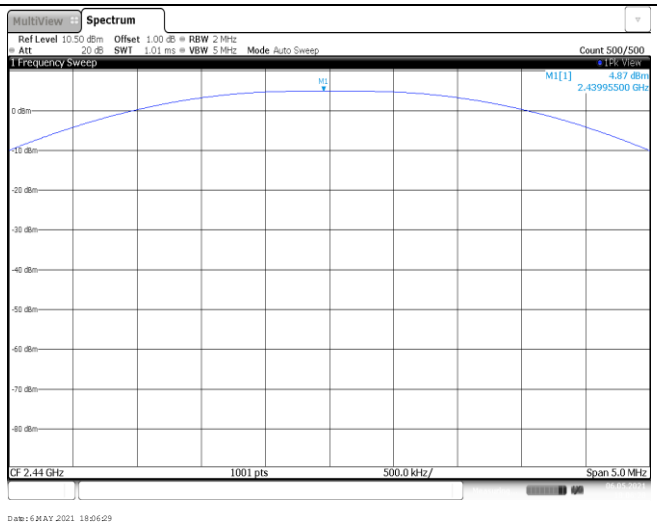
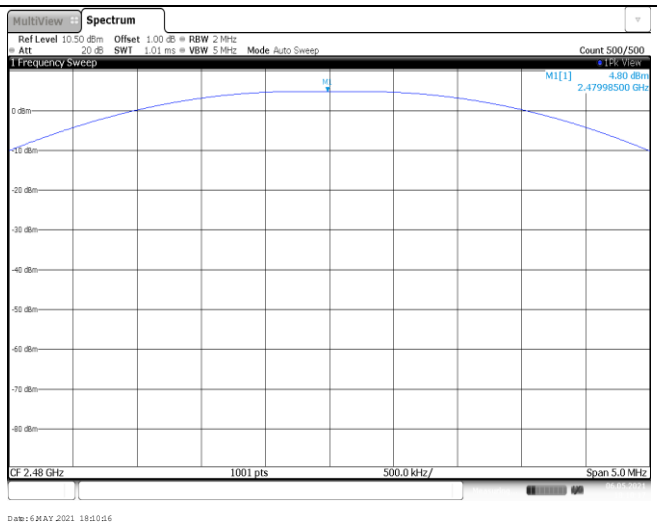
APPENDIX REPORT

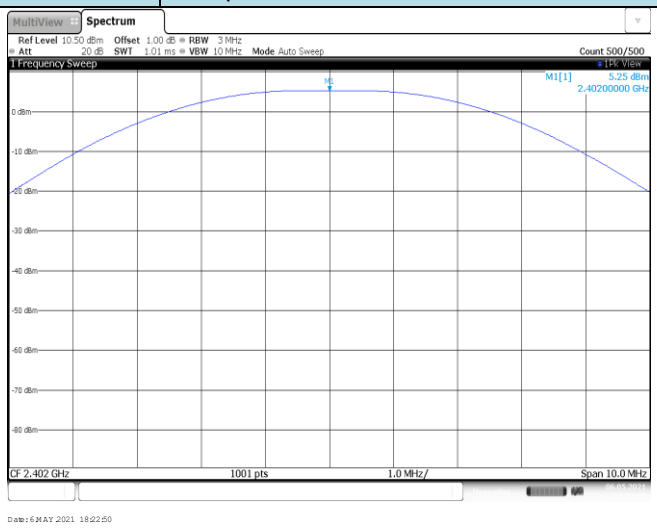
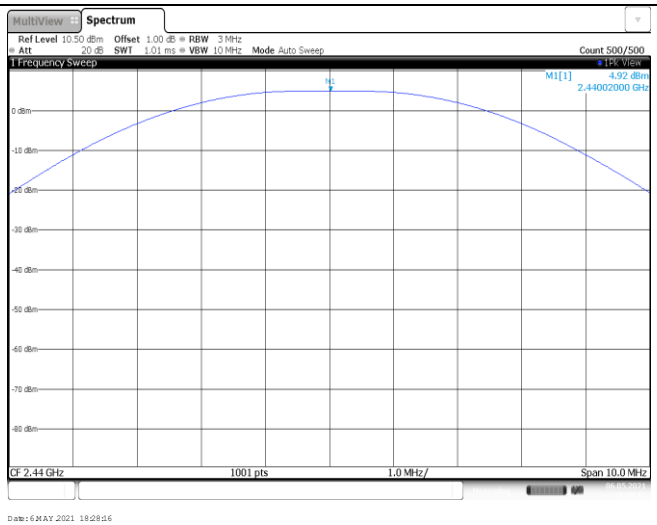
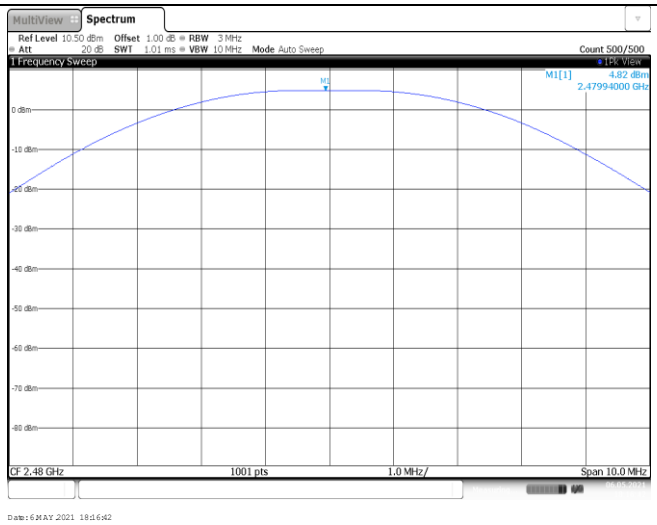
Project No.	SHT2104085601EW	Radio Specification	Bluetooth BLE
Test sample No.	YPHT21040856003	Model No.	ALPHA
Start test date	2021-05-06	Finish date	2021-05-06
Temperature	24.9°C	Humidity	37%
Test Engineer	Hailey Chen	Auditor	Xiaodong Zhao

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

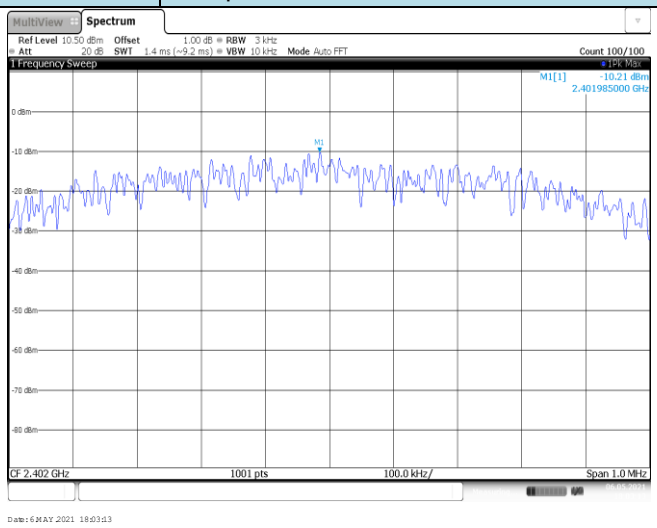
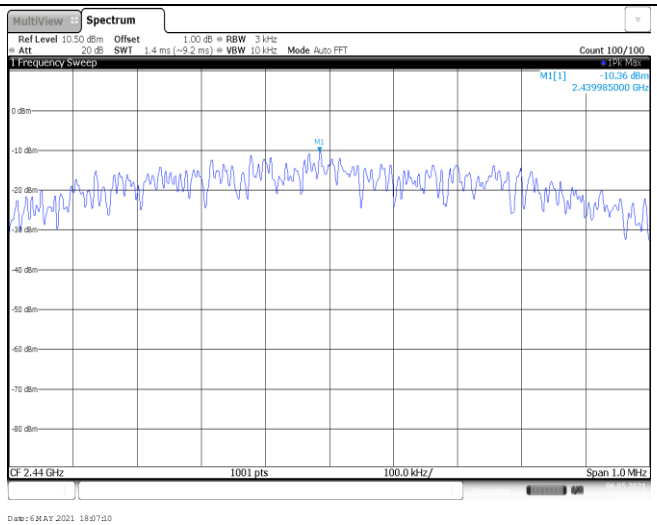
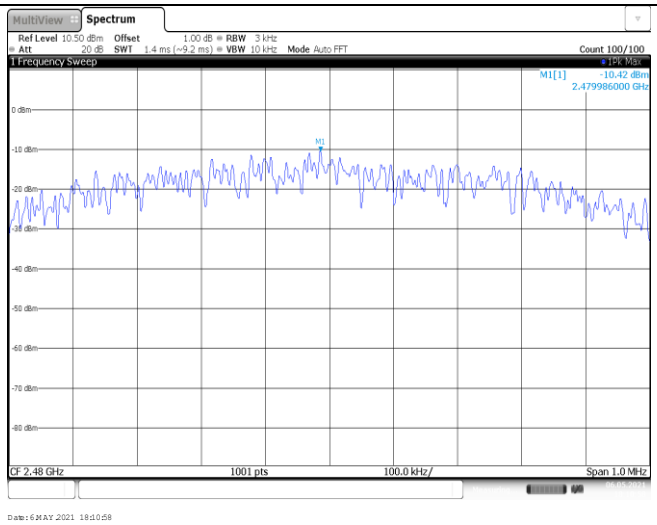
Test rate	Channel	Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
1Mbps	00	5.23	5.20	≤ 30.00	Pass
	19	4.87	4.84		
	39	4.80	4.77		
2Mbps	00	5.25	5.21	≤ 30.00	Pass
	19	4.92	4.86		
	39	4.82	4.76		

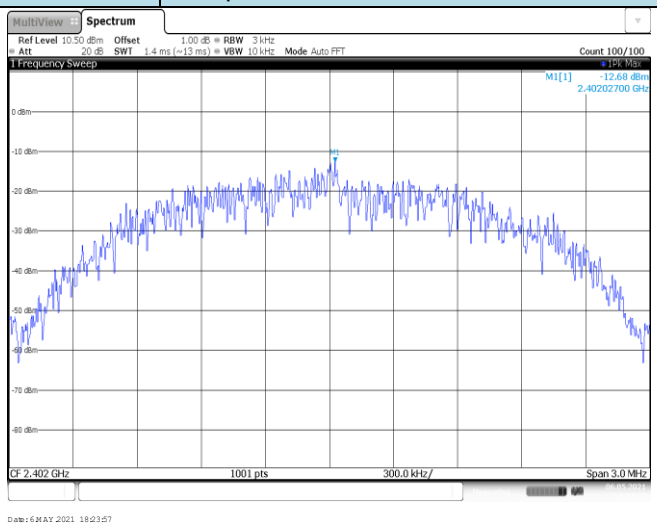
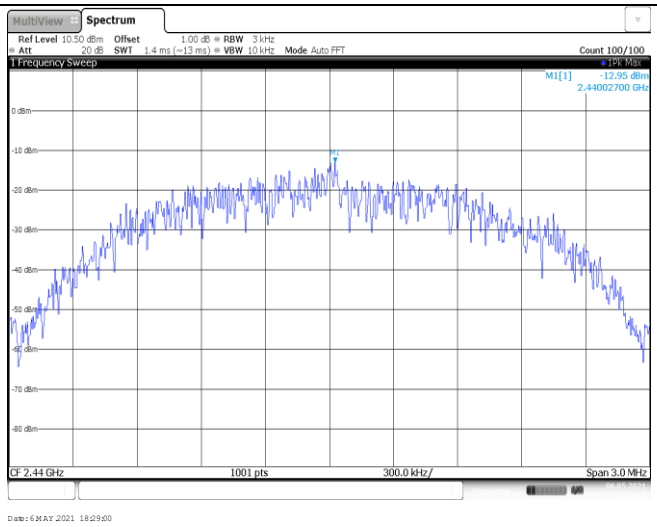
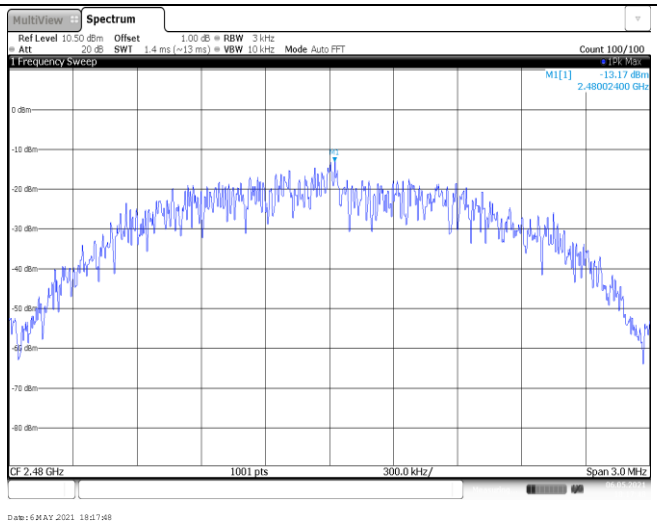
Test rate:	1Mbps
CH00	
CH19	
CH39	

Test rate:	2Mbps
CH00	
CH19	
CH39	

Appendix B：Power Spectral Density

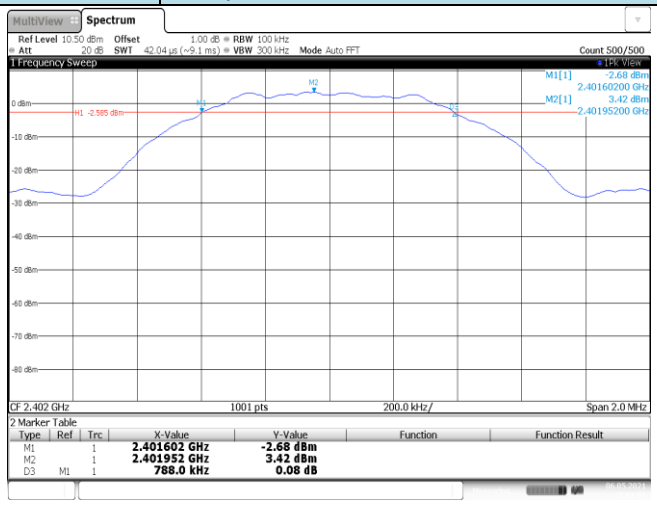
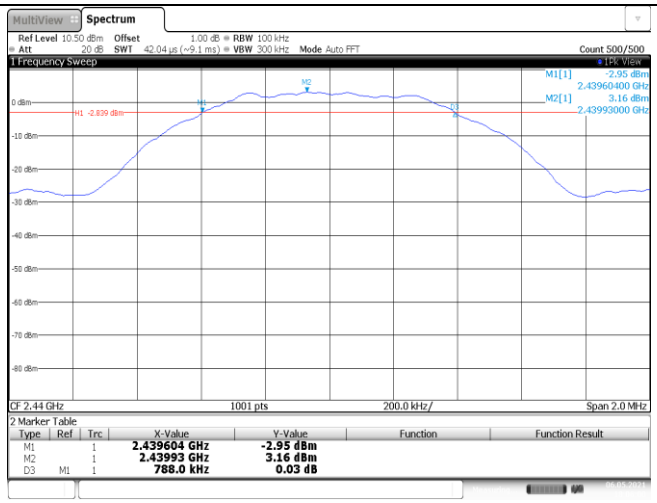
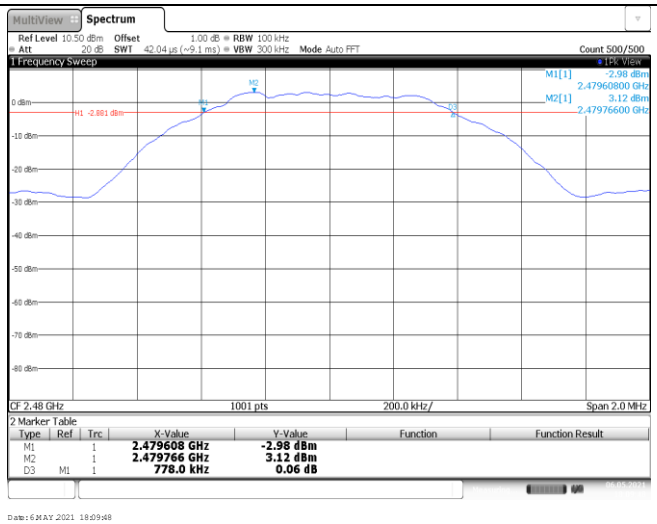
Test rate	Channel	Power Spectral Density(dBm/3KHz)	Limit (dBm/3KHz)	Result
1Mbps	00	-10.21	≤8.00	Pass
	19	-10.36		
	39	-10.42		
2Mbps	00	-12.68	≤8.00	Pass
	19	-12.95		
	39	-13.17		

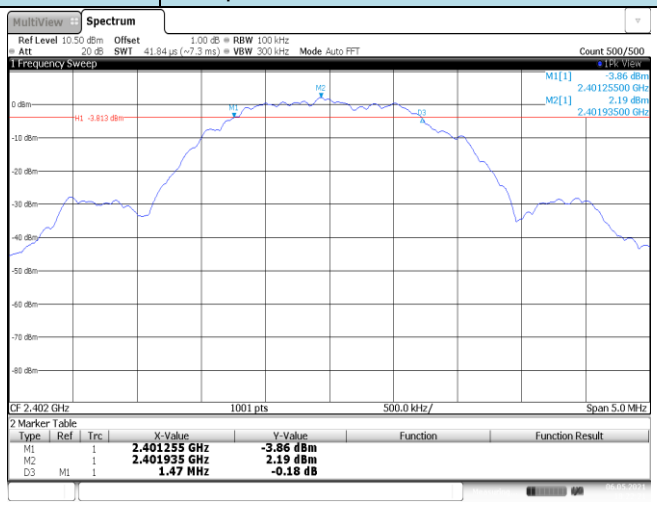
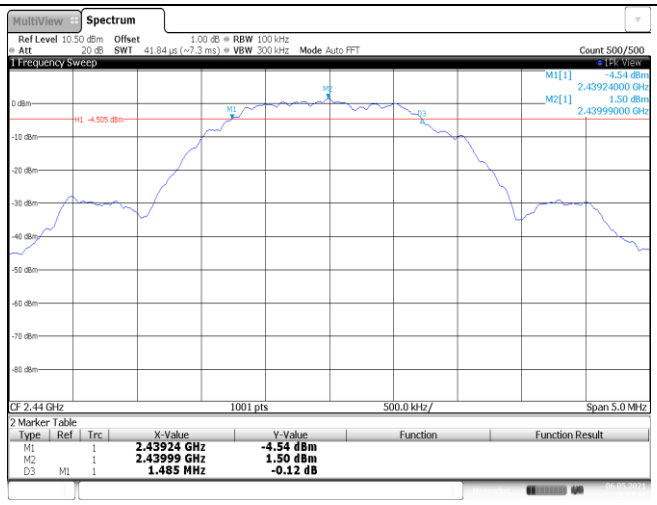
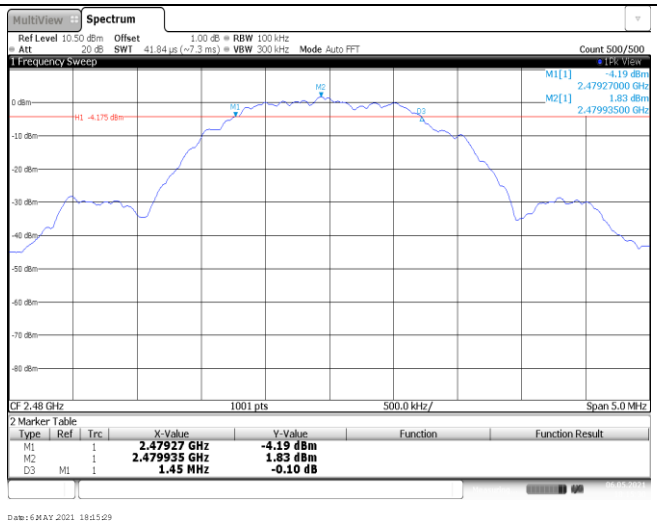
Test rate:	1Mbps
CH00	
CH19	
CH39	

Test rate:	2Mbps
CH00	
CH19	
CH39	

Appendix C：6dB bandwidth

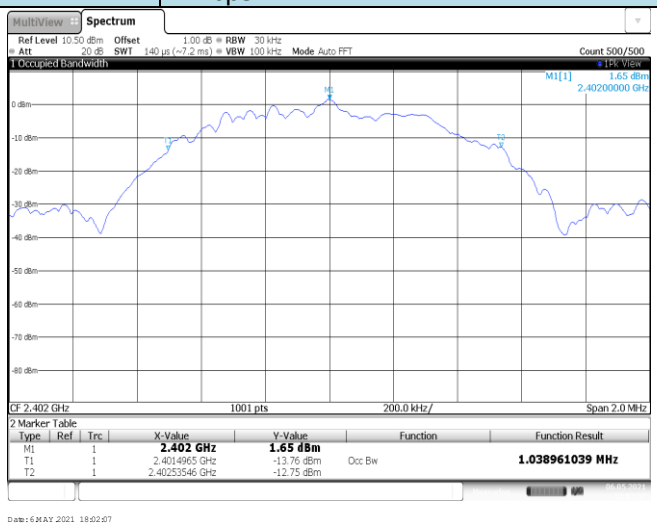
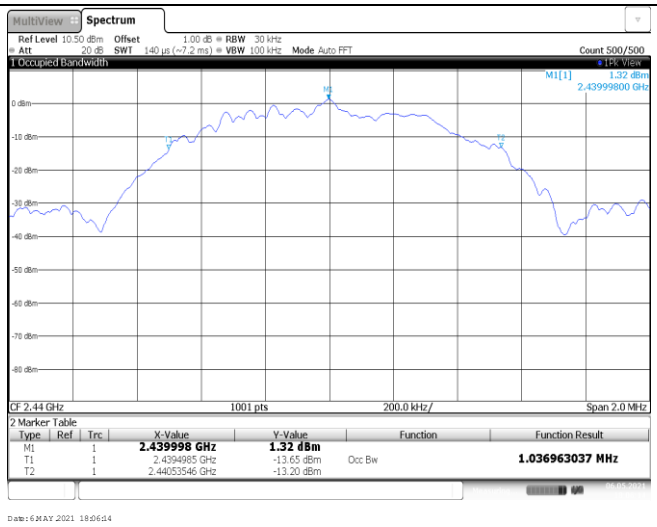
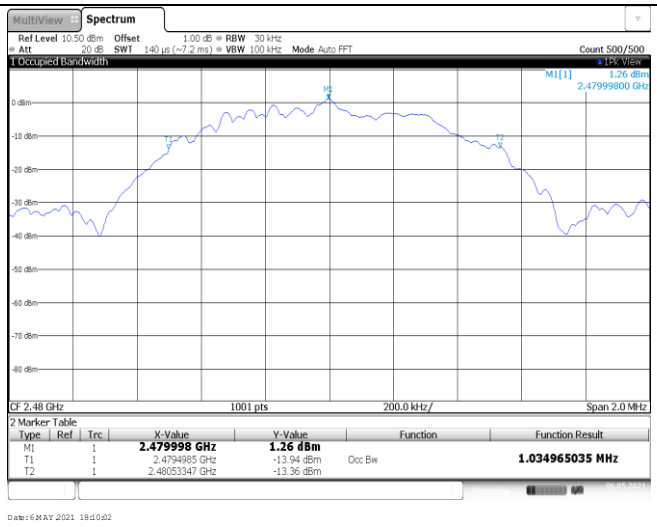
Test rate	Channel	6dB Bandwidth(kHz)	Limit (kHz)	Result
1Mbps	00	788.00	≥500	Pass
	19	788.00		
	39	778.00		
2Mbps	00	1470.00	≥500	Pass
	19	1485.00		
	39	1450.00		

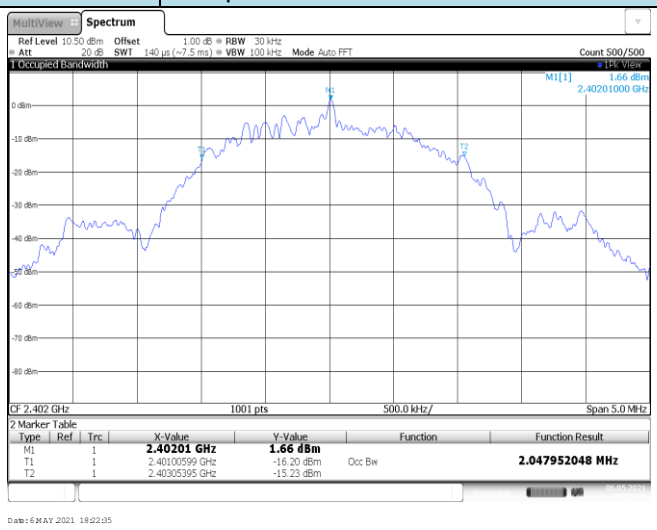
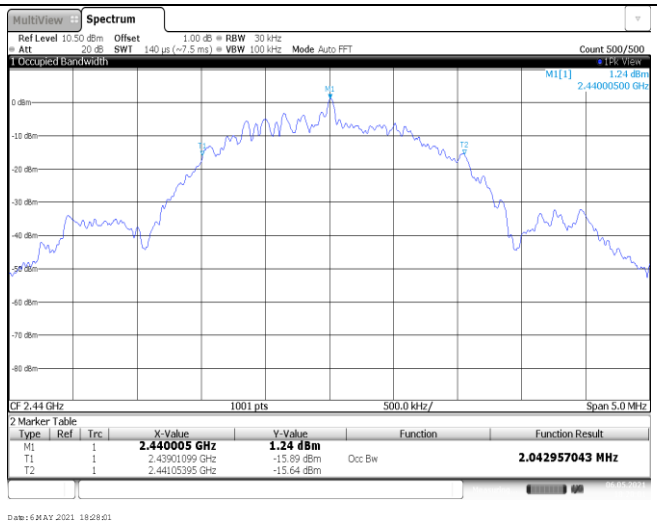
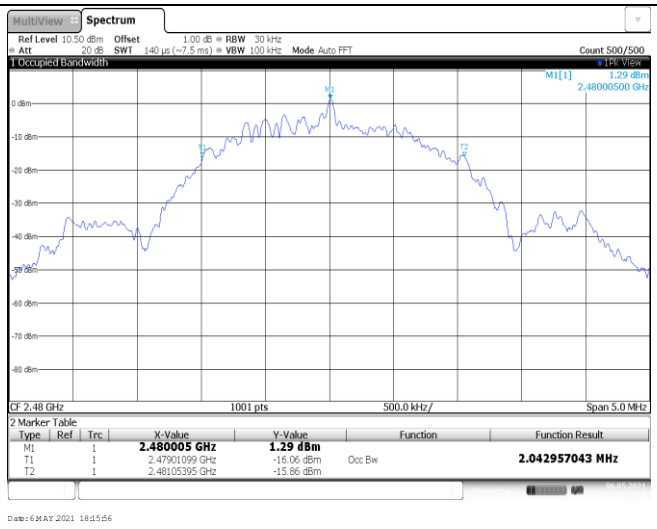
Test rate:	1Mbps
CH00	
CH19	
CH39	

Test rate:	2Mbps
CH00	
CH19	
CH39	

Appendix D：99% Occupied Bandwidth

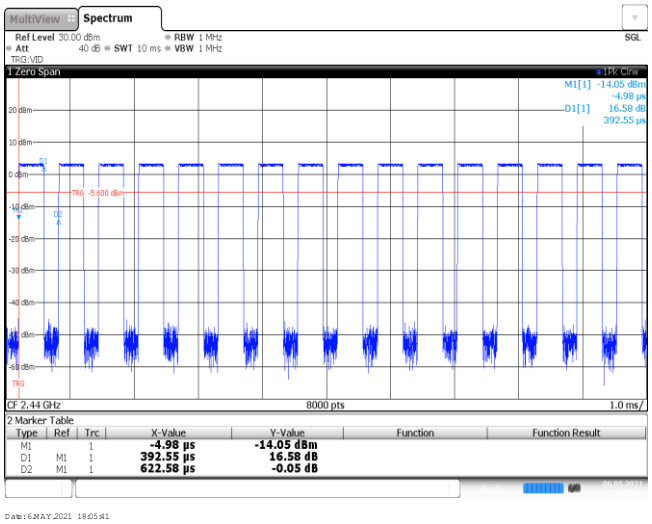
Test rate	Channel	99% Occupied Bandwidth(MHz)	Limit (kHz)	Result
1Mbps	00	1.04	-	Pass
	19	1.04		
	39	1.03		
2Mbps	00	2.05	-	Pass
	19	2.04		
	39	2.04		

Test rate:	1Mbps
CH00	
CH19	
CH39	

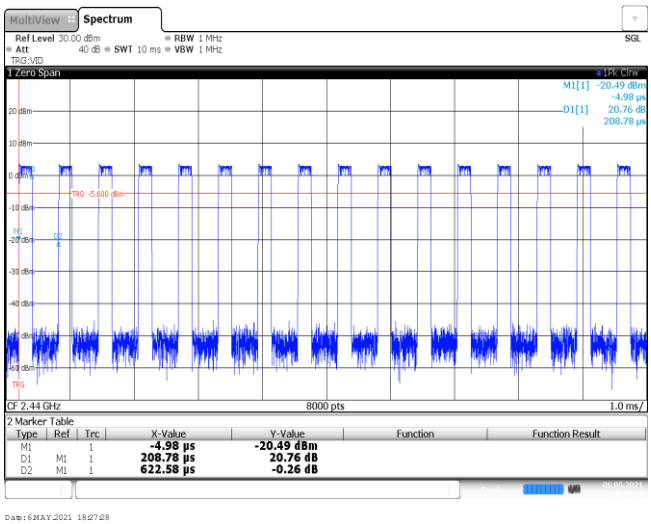
Test rate:	2Mbps
CH00	
CH19	
CH39	

Appendix E：Duty cycle

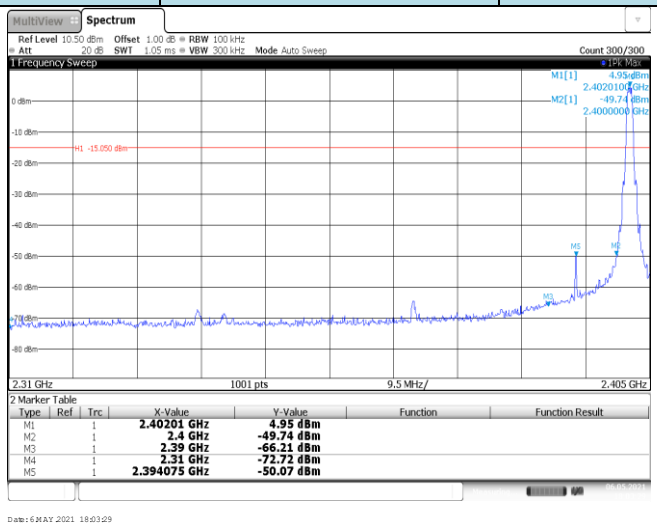
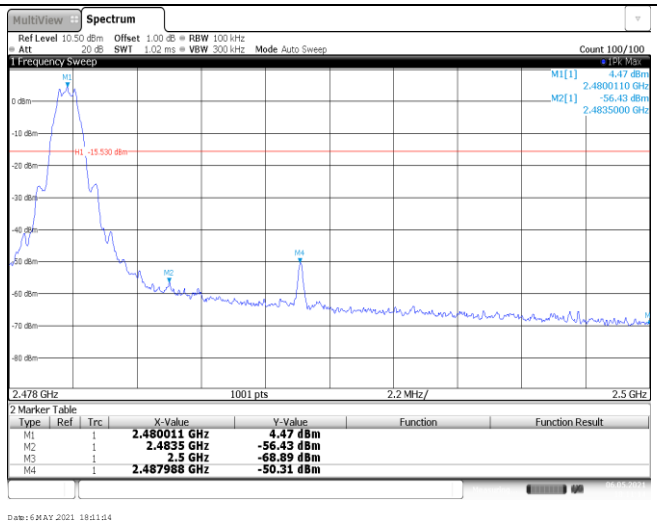
Test Rate:			**1Mbps**	
Test Frequency（MHz）	$T_{on\ time}$ for single burst (ms)	T_{period} (ms)	Duty cycle	$1/T_{on\ time}$ (kHz)
2440	0.39	0.62	62.9%	2.6

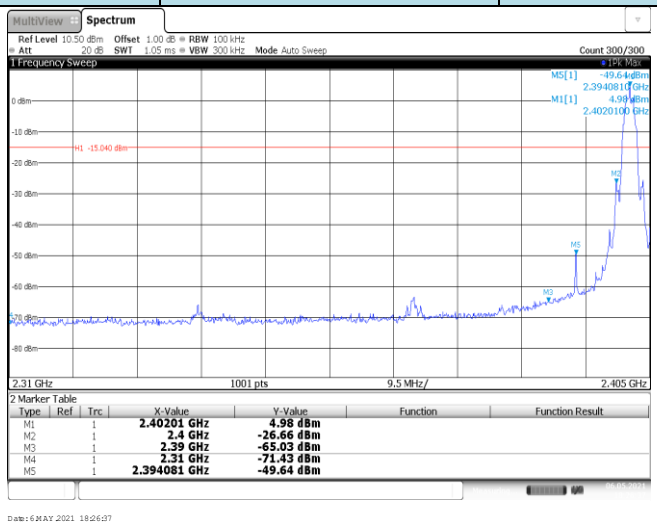
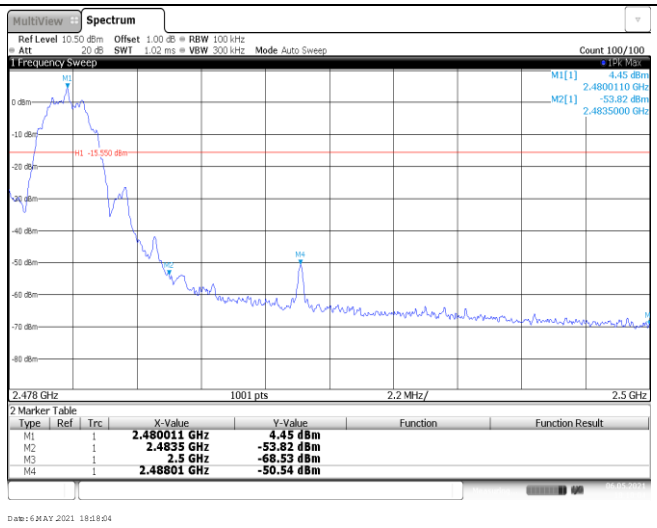


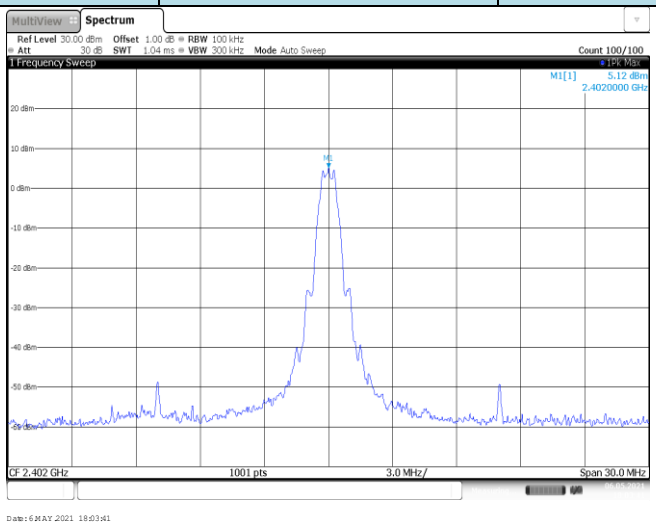
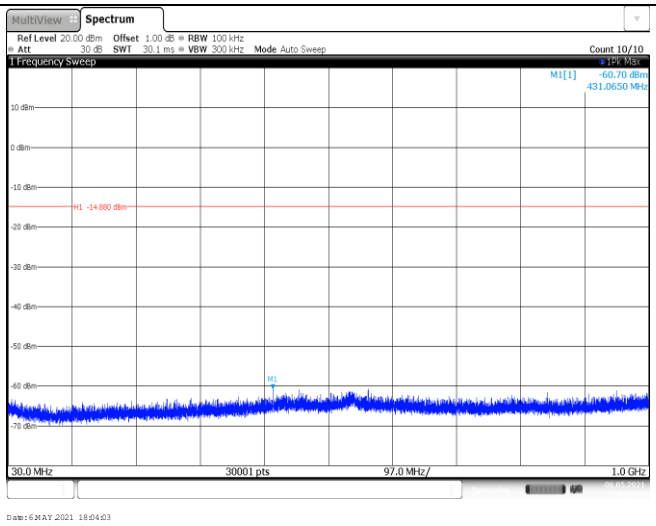
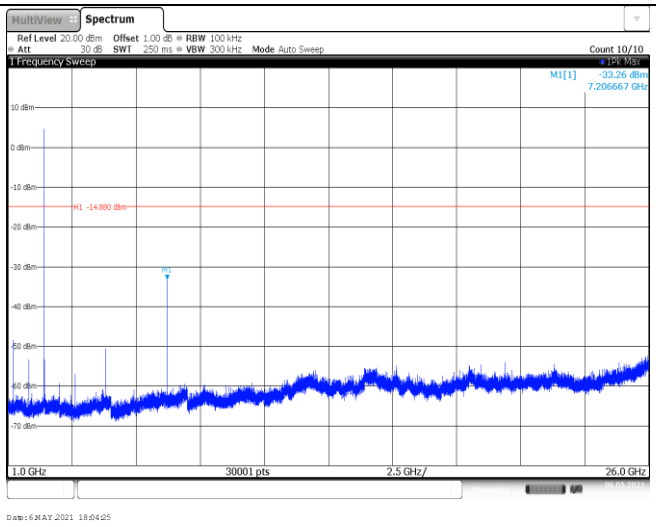
Test Rate:			**2Mbps**	
Test Frequency（MHz）	$T_{on\ time}$ for single burst (ms)	T_{period} (ms)	Duty cycle	$1/T_{on\ time}$ (kHz)
2440	0.21	0.62	33.9%	4.8

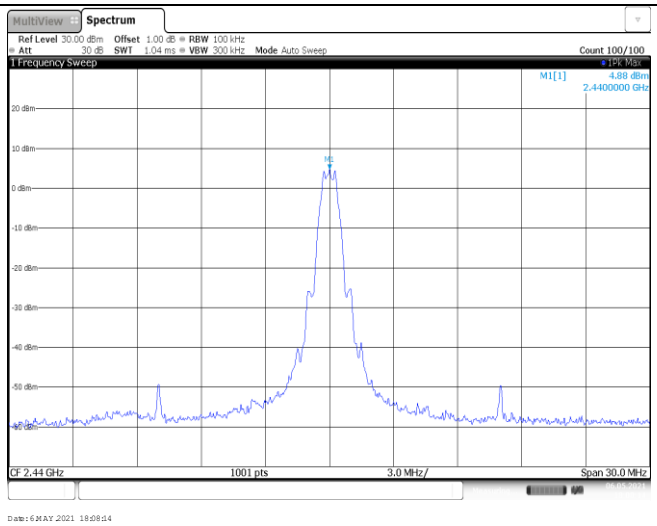
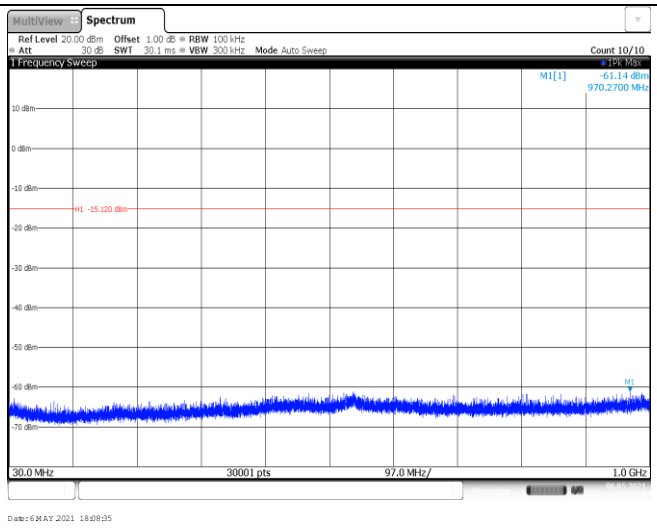
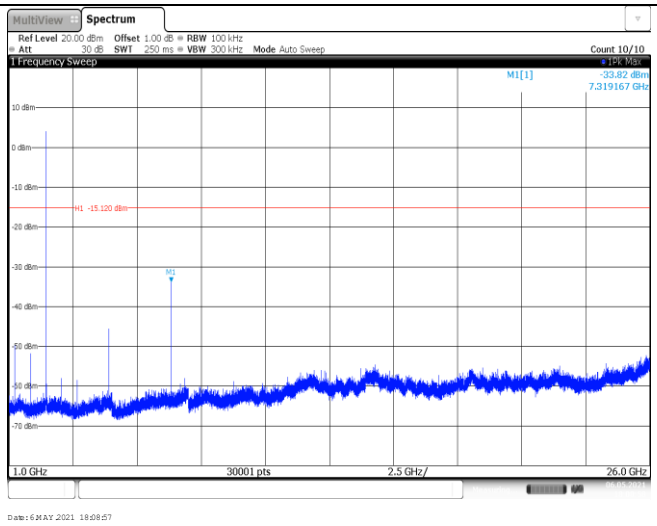


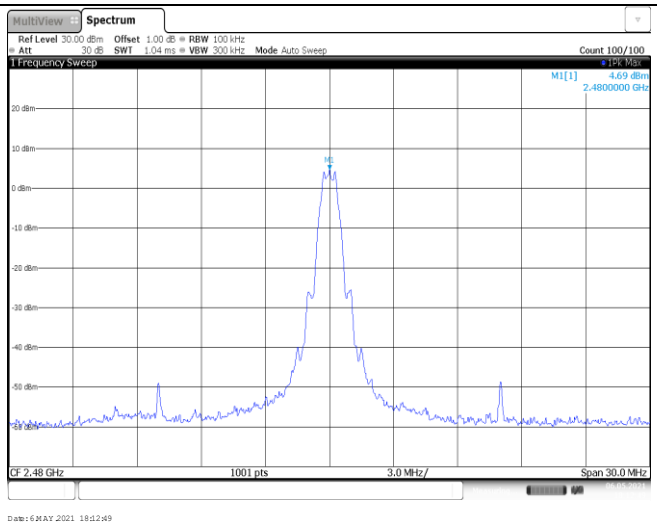
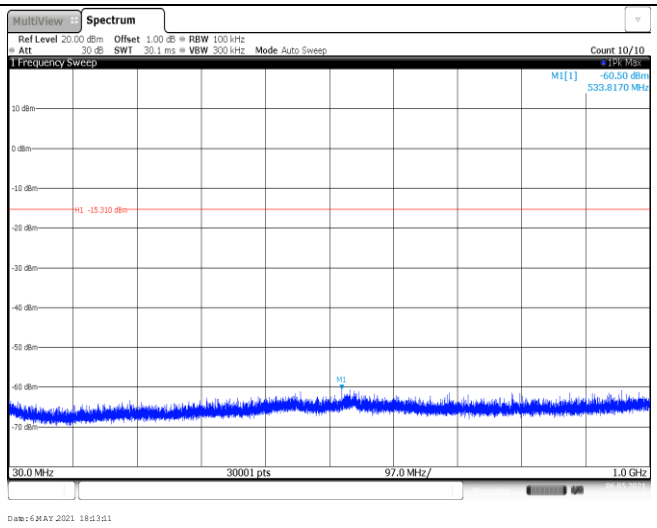
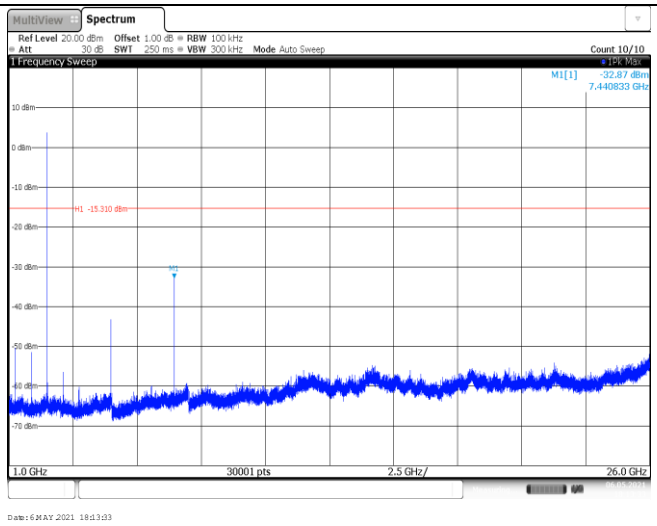
Appendix F：Band edge and Spurious Emissions (conducted)

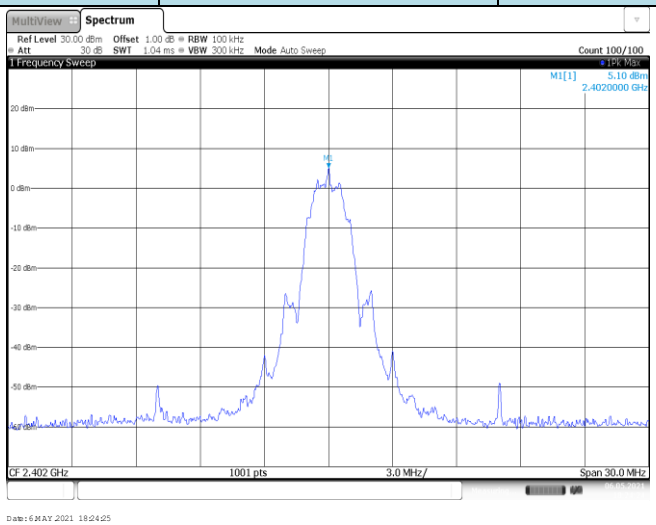
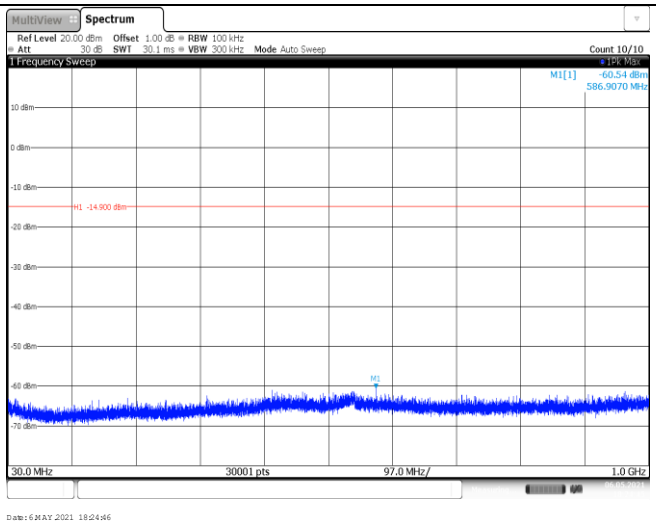
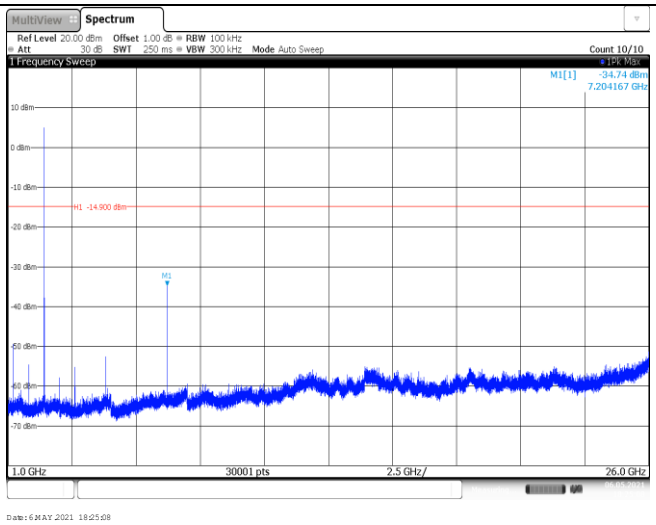
Test Item:	Band edge	Test Rate:	1Mbps
CH00			
CH39			

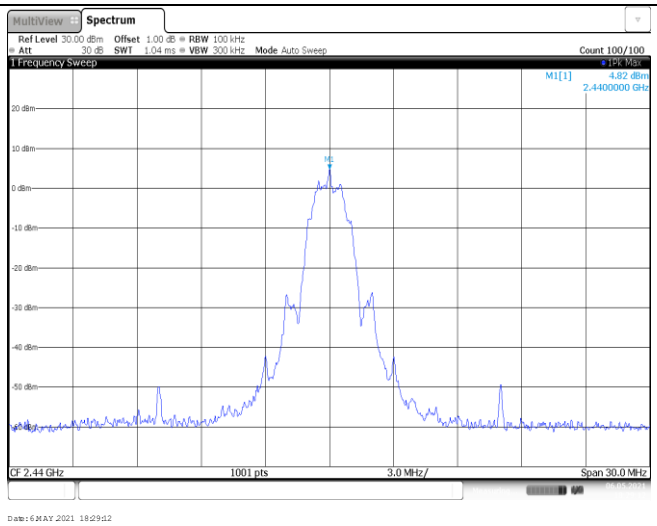
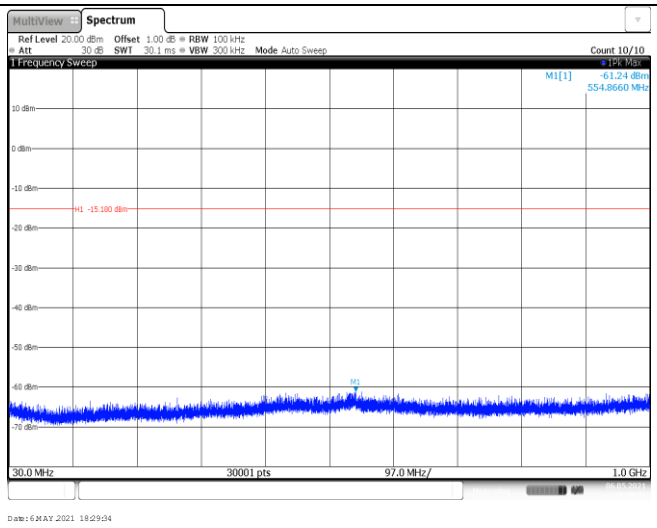
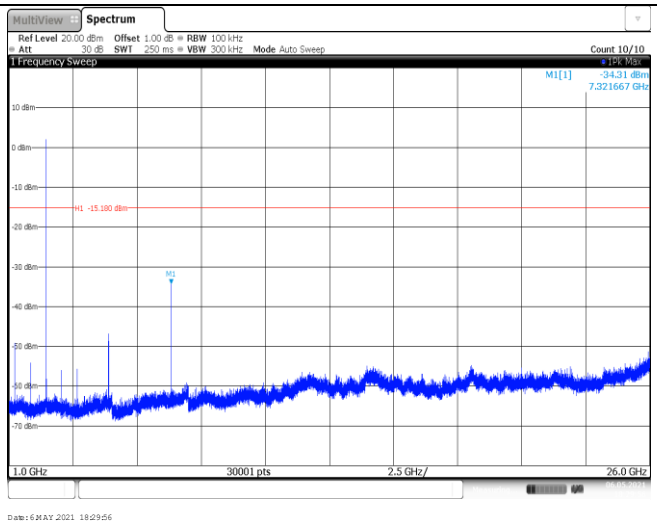
Test Item:	Band edge	Test Rate:	2Mbps
CH00			
CH39			

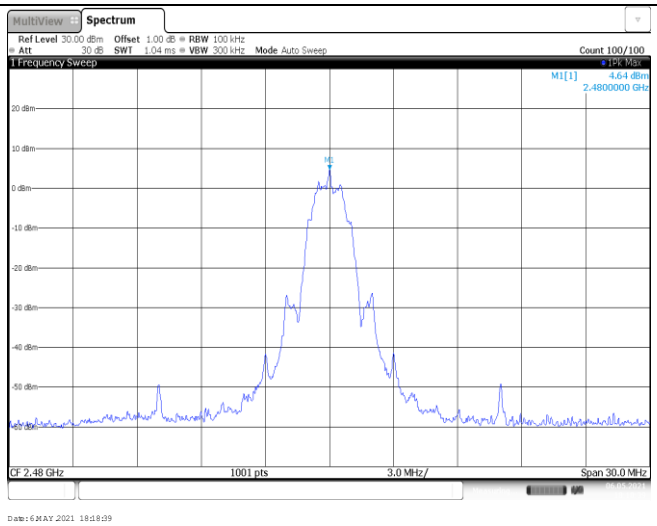
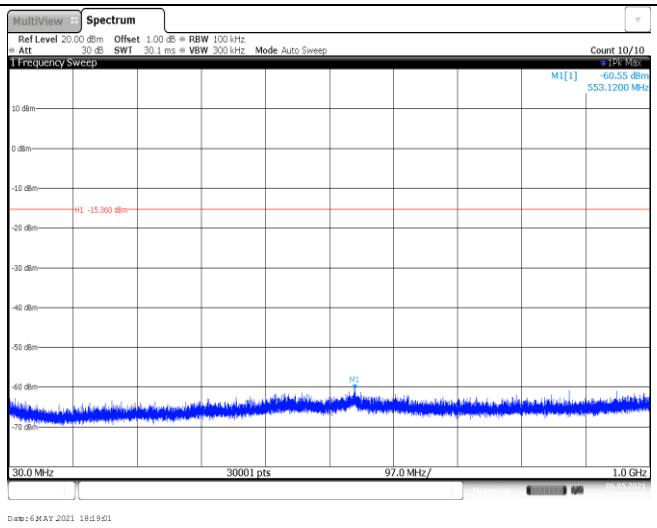
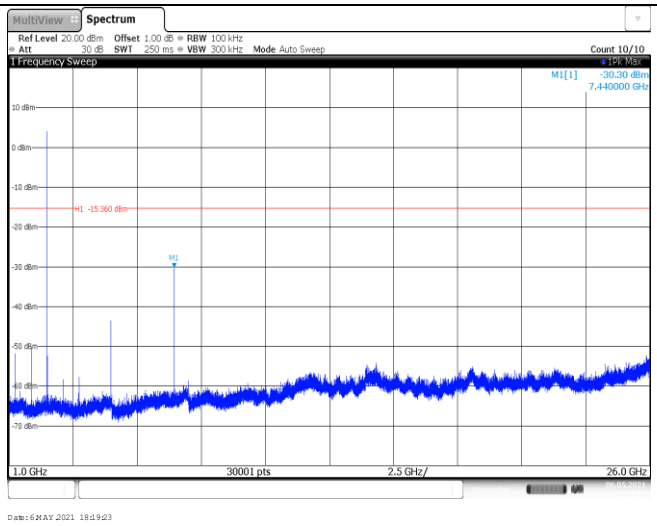
Test Item:	SE	Test Rate:	1Mbps
CH00 Reference level			
CH00 30MHz~1000MHz			
CH00 1GHz~26GHz			

CH19 Reference level	
CH19 30MHz~1000MHz	
CH19 1GHz~26GHz	

CH39 Reference level	
CH39 30MHz~1000MHz	
CH39 1GHz~26GHz	

Test Item:	SE	Test Rate:	2Mbps
CH00 Reference level			
CH00 30MHz~1000MHz			
CH00 1GHz~26GHz			

CH19 Reference level	
CH19 30MHz~1000MHz	
CH19 1GHz~26GHz	

CH39 Reference level	
CH39 30MHz~1000MHz	
CH39 1GHz~26GHz	

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