

Test Report No.10052793 10052795 001

Appendix D: Radiated Spurious Emission Data

(File: 10052793 10052795AppendixD)

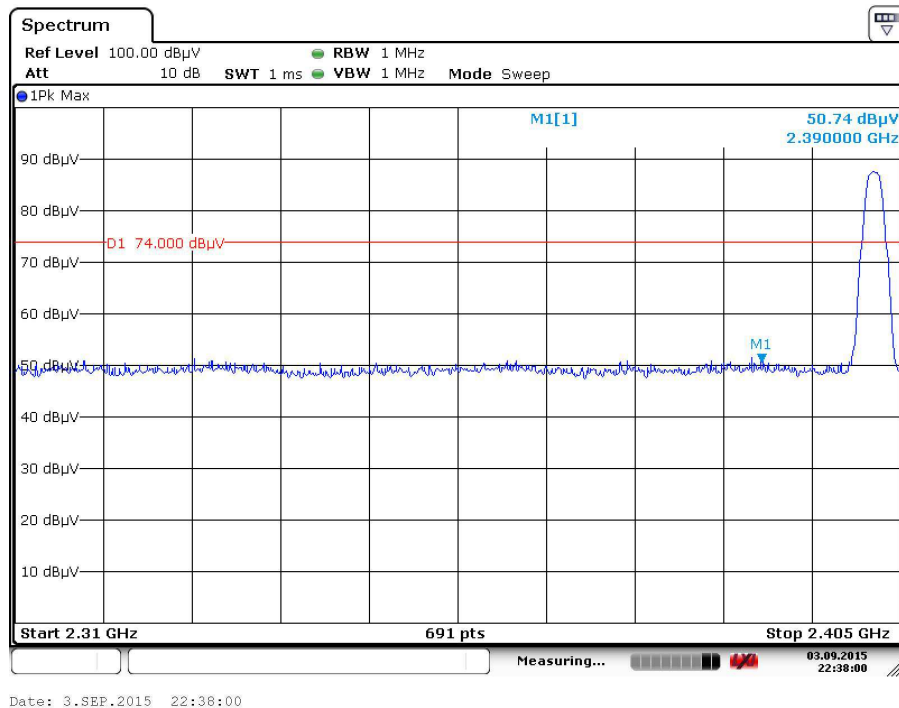
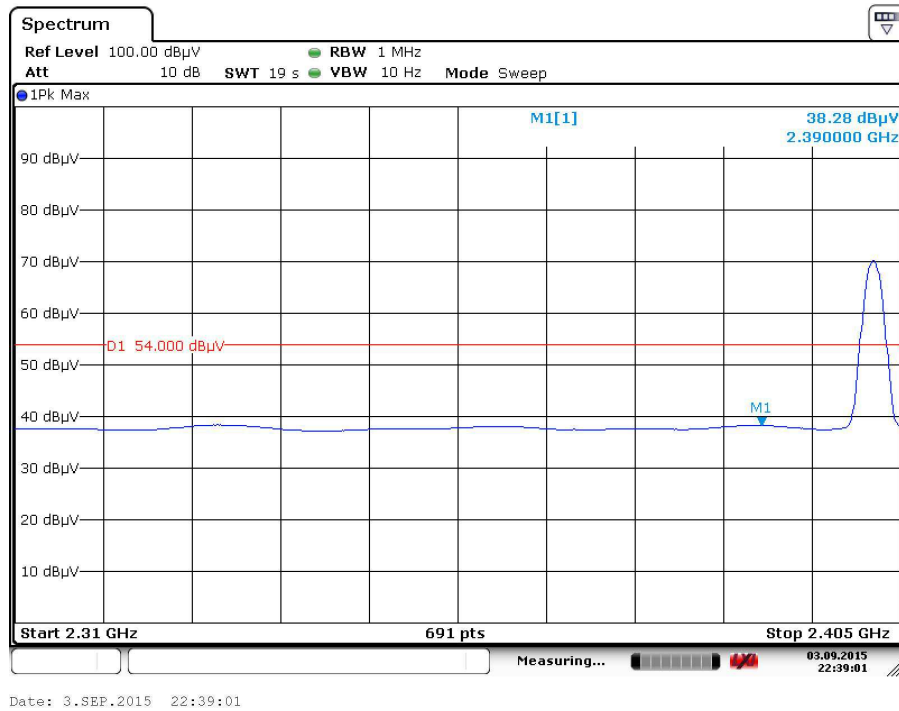
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Spurious Emissions, Band Edges, 2.35-2.5G

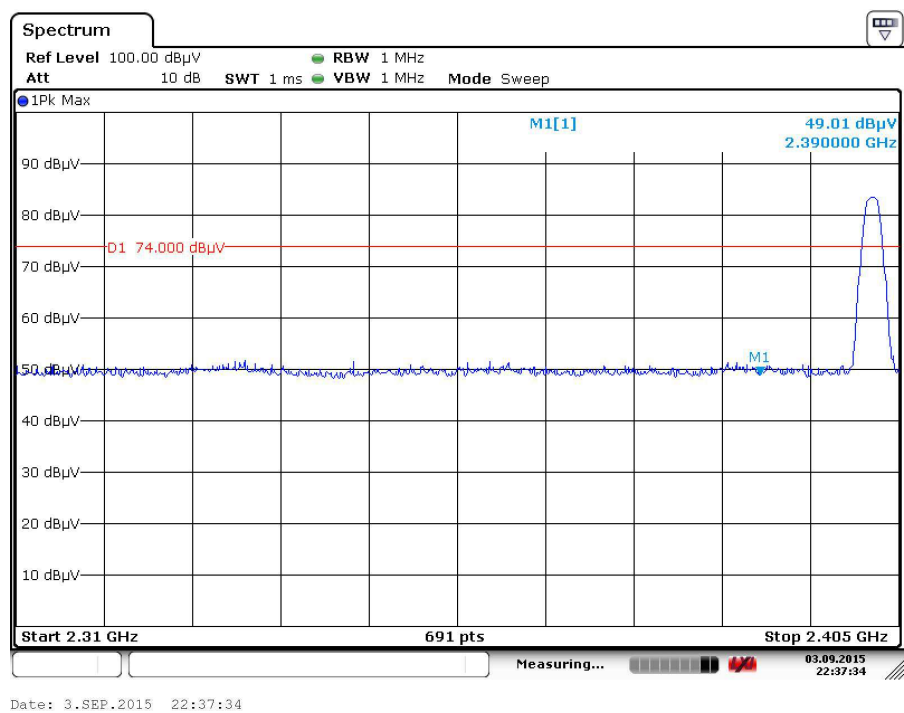
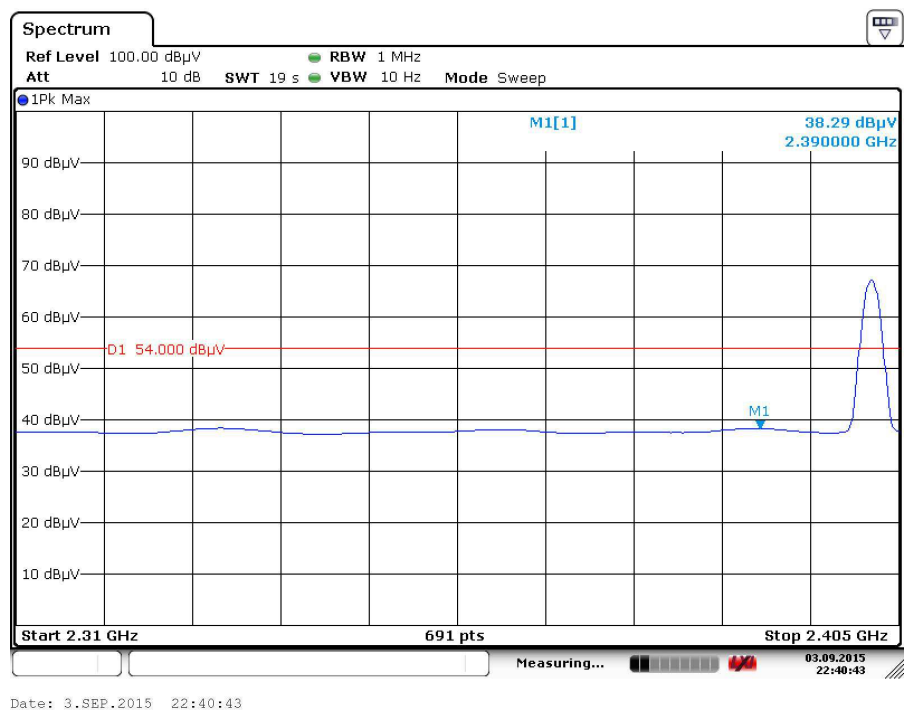
Radiated Bandedge (GFSK)

Low Channel (Hor)



Spurious Emissions, Band Edge, 2.35-2.5G

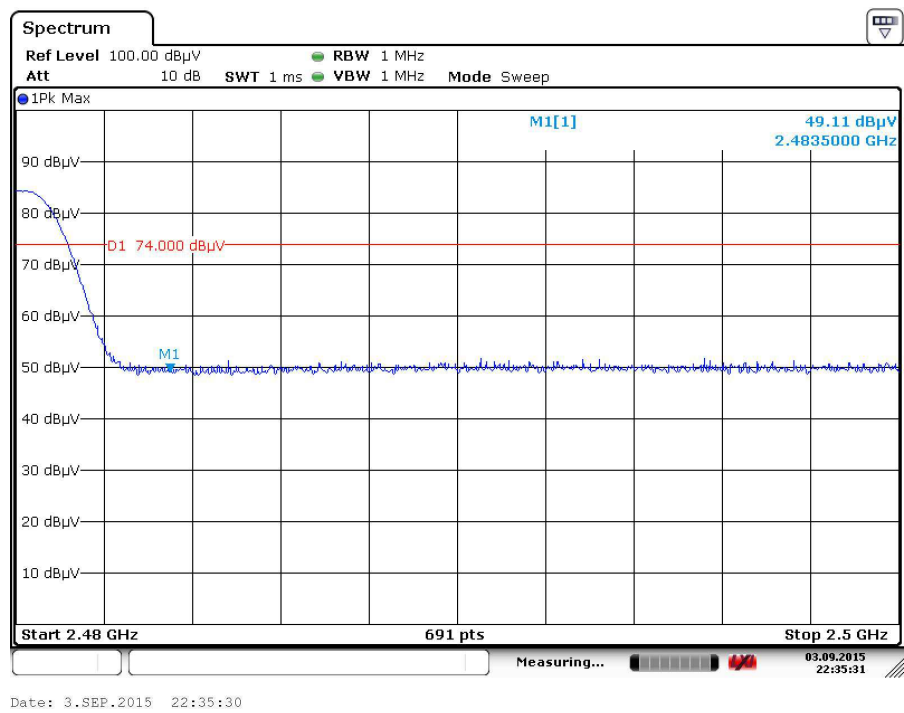
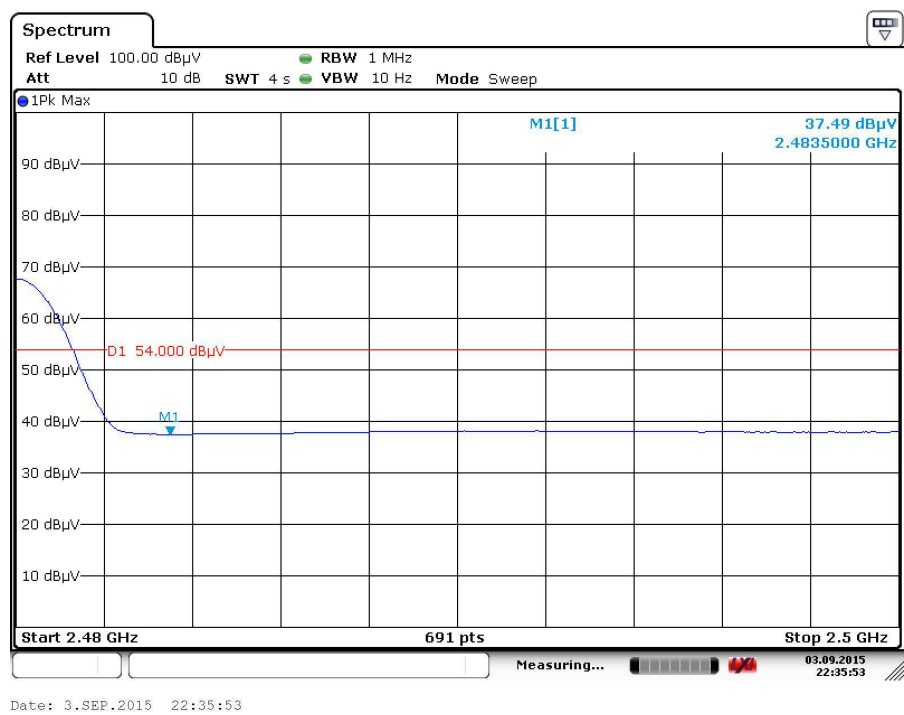
Low Channel (Ver)



Spurious Emissions, Band Edge, 2.35-2.5G

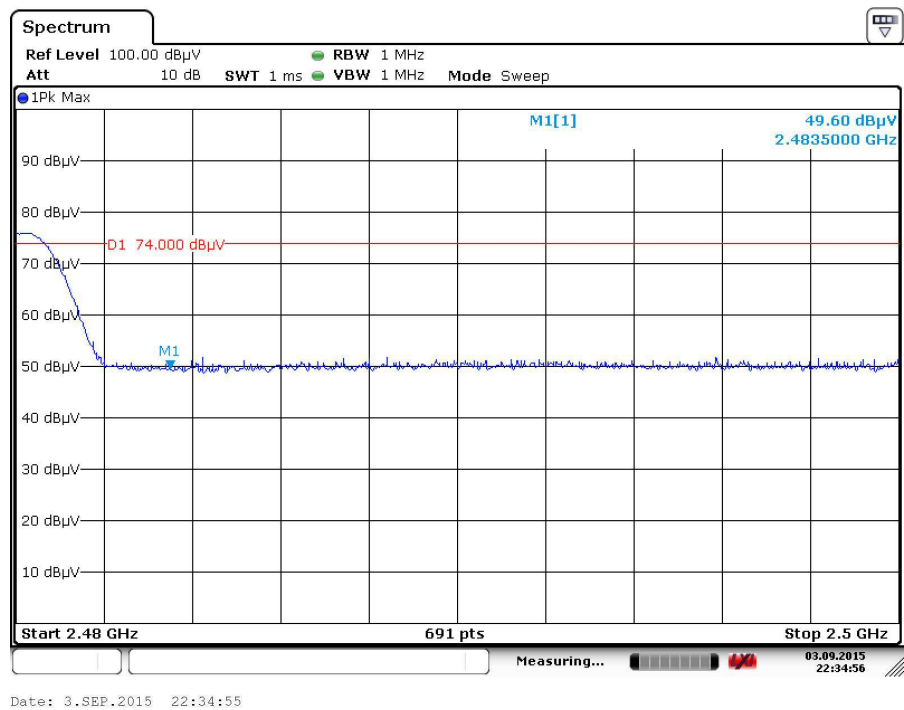
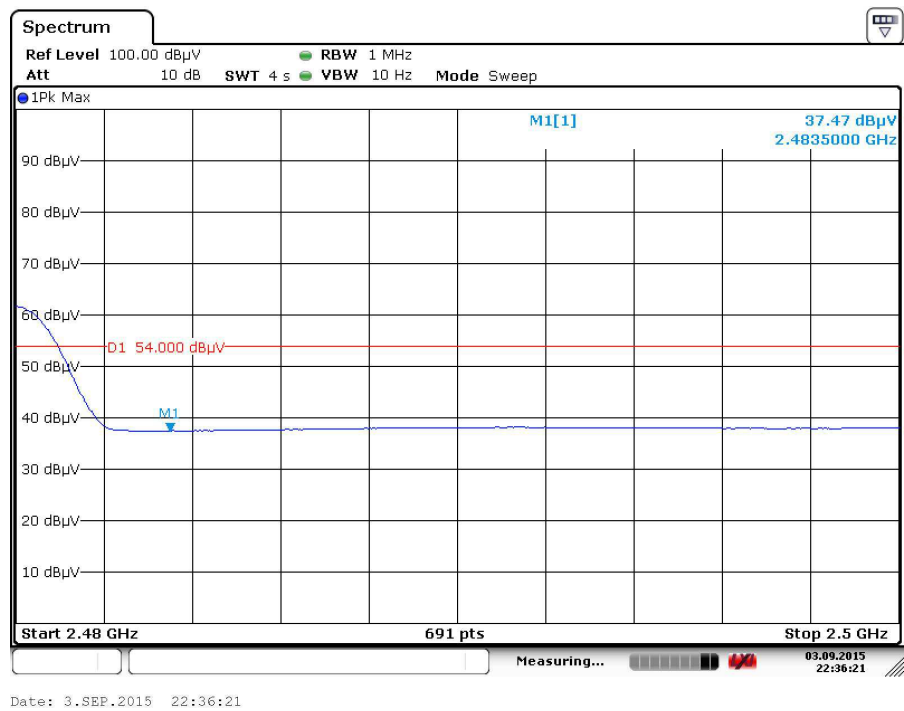
Radiated Bandedge (GFSK)

High Channel (Hor)



Spurious Emissions, Band Edge, 2.35-2.5G

High Channel (Ver)



Spurious Emissions, Band Edge, 2.35-2.5G

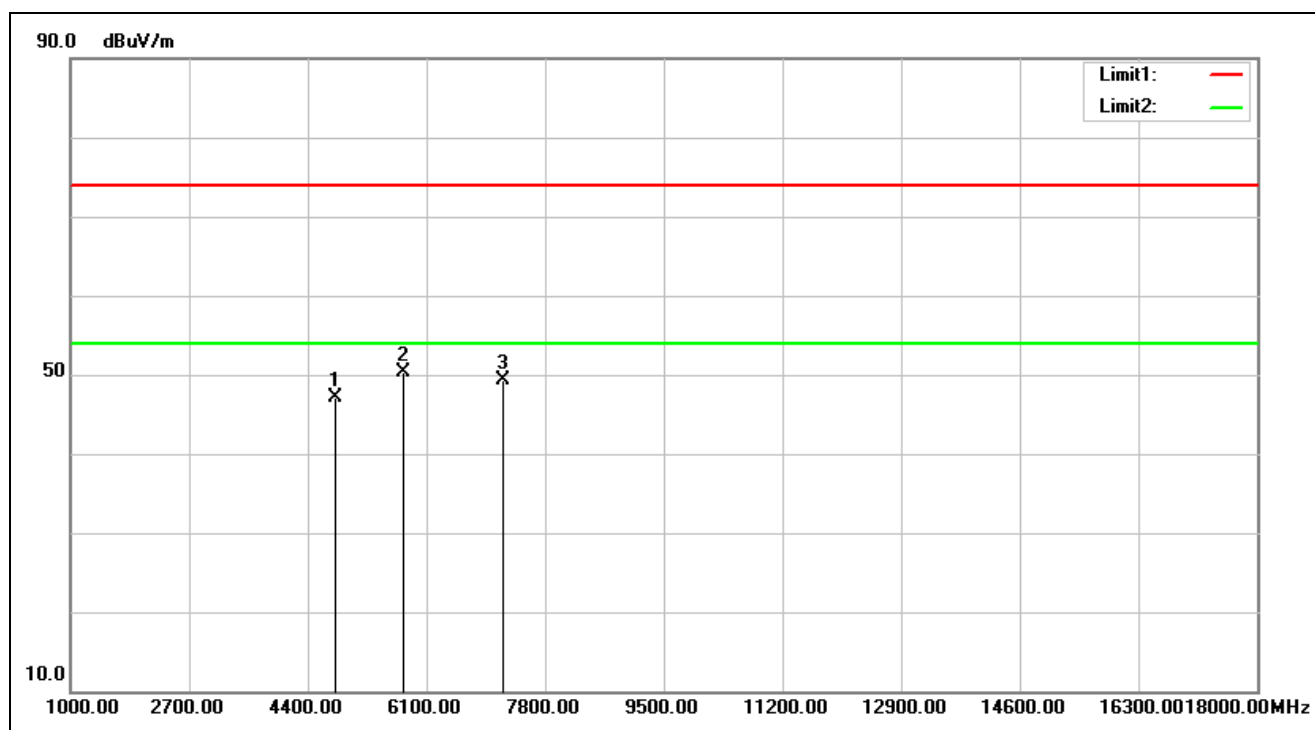
Spurious Emissions, TX Mode, 1-18G



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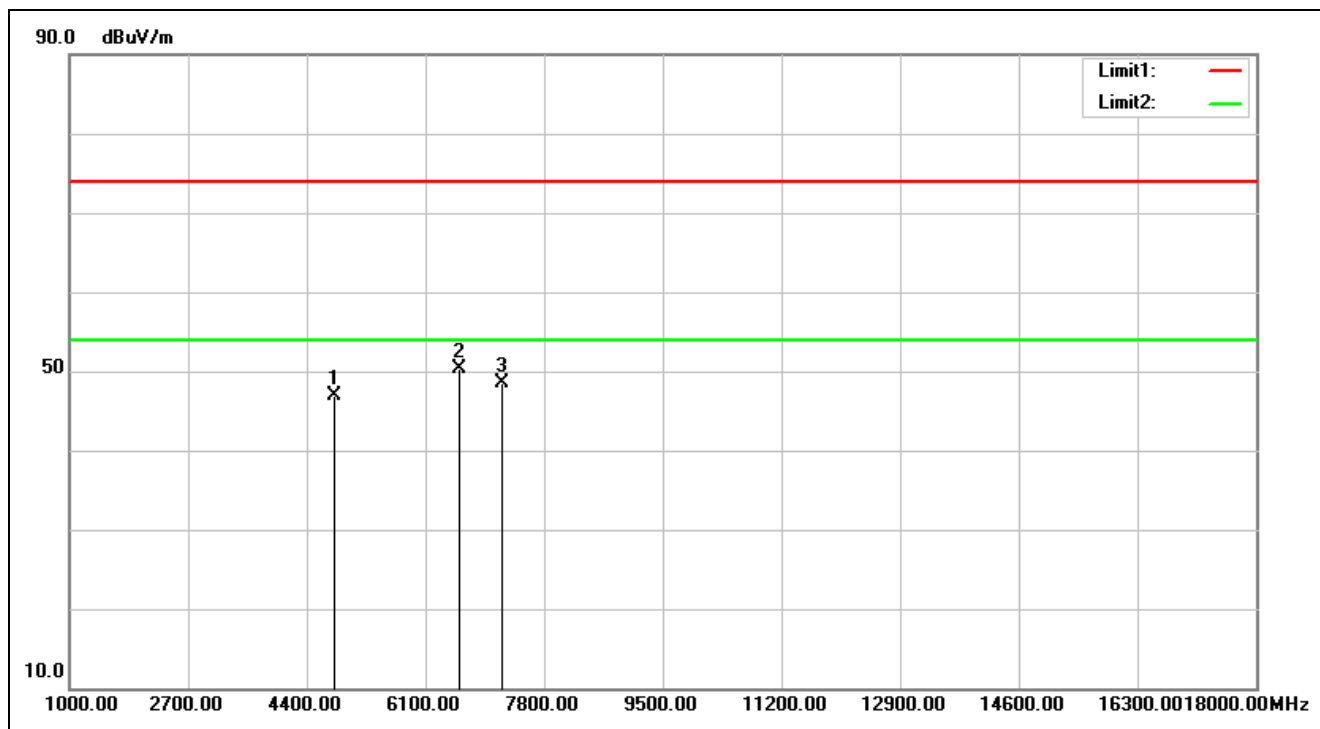
Tel:+886-2172-7000 fax:+886-2528-0018



Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 22:41:13
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2402-TX		
Remark:			

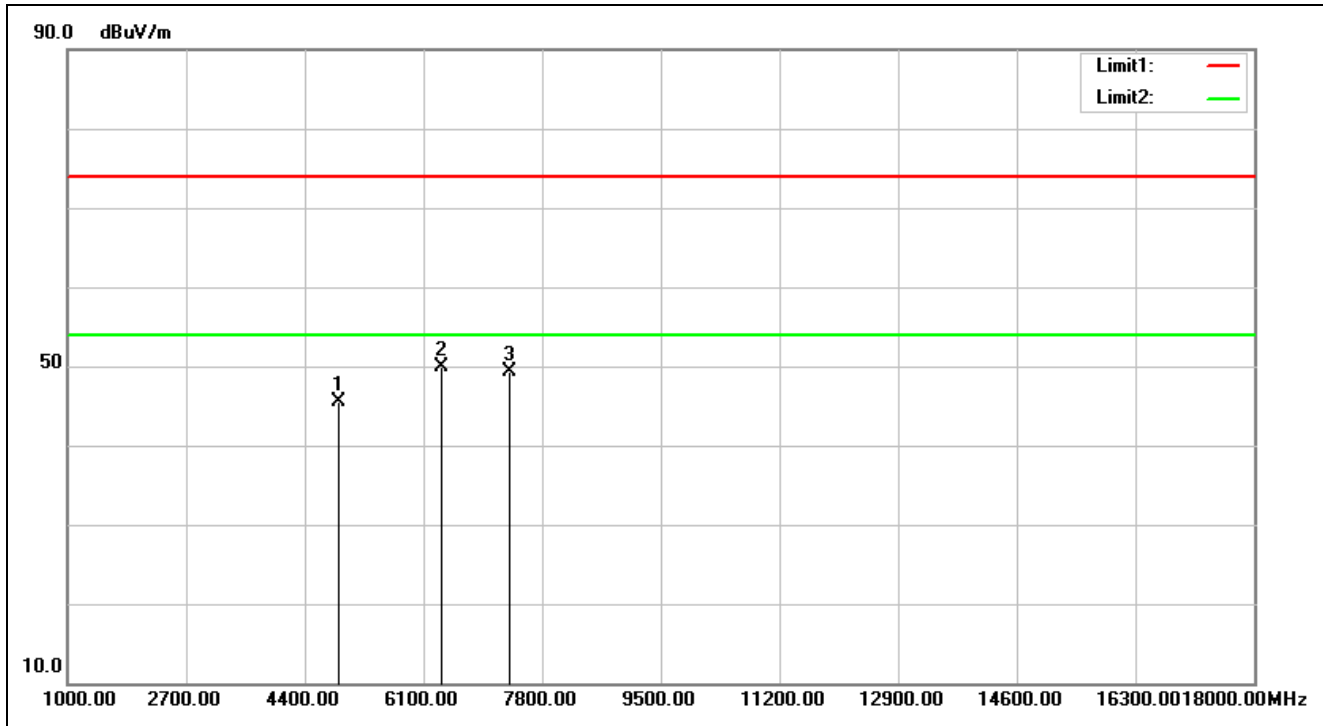
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4804.000	-2.35	49.54	47.19	74.00	-26.81	peak		0	
2	5777.000	2.63	47.70	50.33	74.00	-23.67	peak	100	188	
3	7206.000	5.78	43.46	49.24	74.00	-24.76	peak		0	

Spurious Emissions, TX Mode, 1-18G



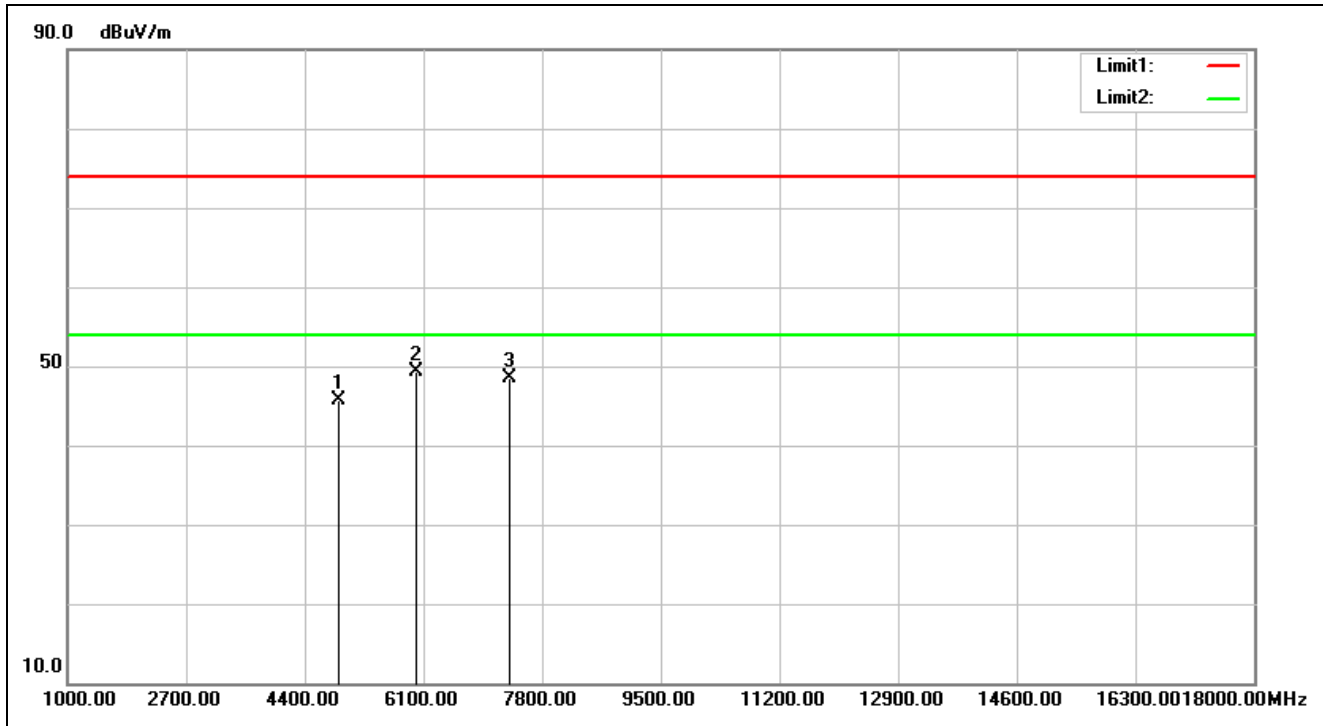
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Test	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 22:42:15
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2402-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4804.000	-2.35	49.25	46.90	74.00	-27.10	peak			
2	6593.000	5.87	44.48	50.35	74.00	-23.65	peak	100	288	
3	7206.000	5.78	42.75	48.53	74.00	-25.47	peak			



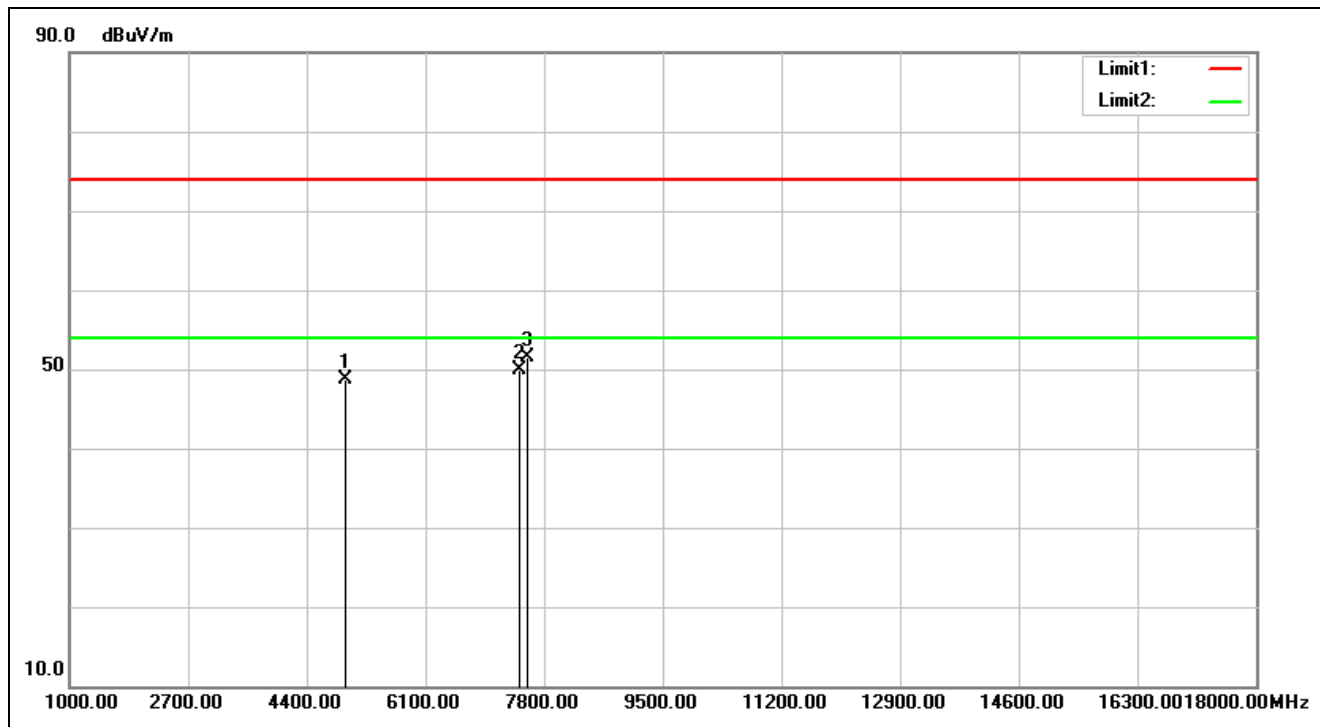
Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 22:46:36
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2440-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4880.000	-2.16	47.73	45.57	74.00	-28.43	peak			
2	6355.000	5.47	44.36	49.83	74.00	-24.17	peak	100	324	
3	7320.000	6.12	43.09	49.21	74.00	-24.79	peak			



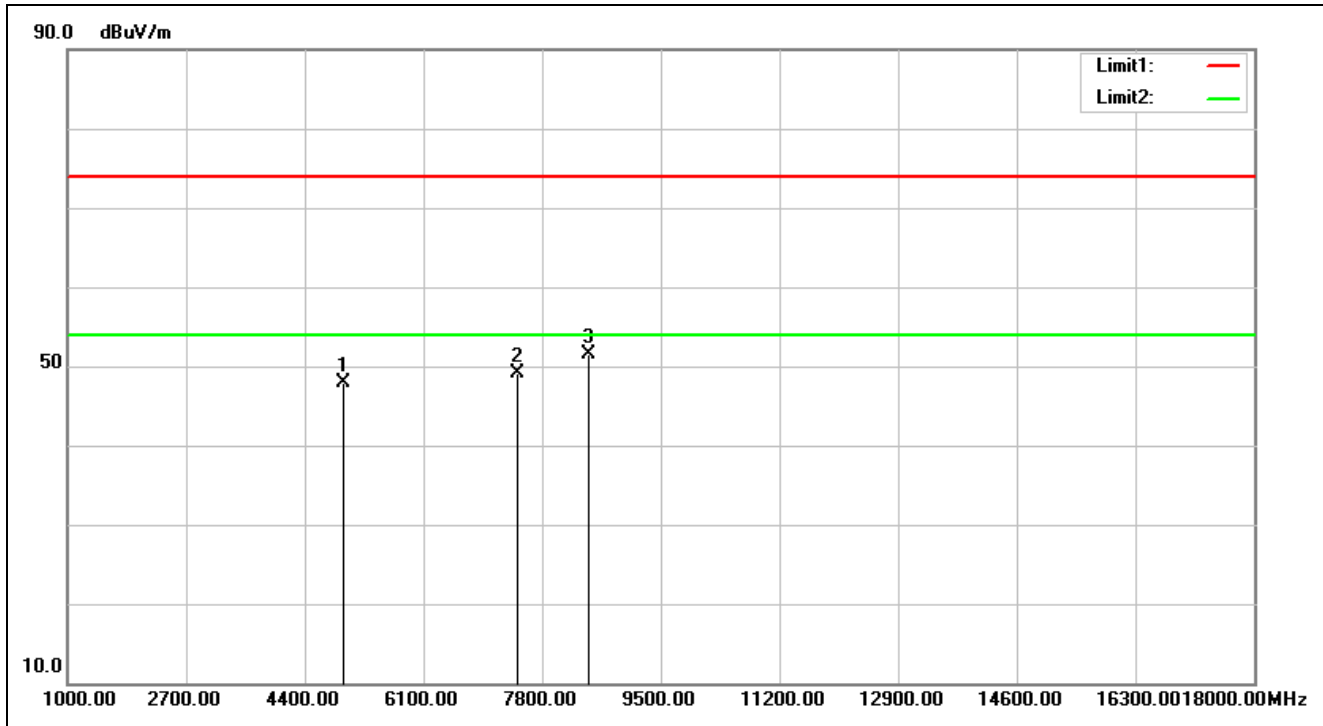
Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 22:47:39
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2440-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4880.000	-2.16	47.93	45.77	74.00	-28.23	peak			
2	5998.000	4.07	45.23	49.30	74.00	-24.70	peak	100	183	
3	7320.000	6.12	42.36	48.48	74.00	-25.52	peak			



Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 22:50:06
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2480-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4960.000	-1.97	50.59	48.62	74.00	-25.38	peak			
2	7440.000	6.47	43.47	49.94	74.00	-24.06	peak			
3	7562.000	6.64	44.78	51.42	74.00	-22.58	peak	100	108	



Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 22:51:09
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2480-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4960.000	-1.97	49.95	47.98	74.00	-26.02	peak			
2	7440.000	6.47	42.64	49.11	74.00	-24.89	peak			
3	8463.000	6.70	44.89	51.59	74.00	-22.41	peak	100	287	

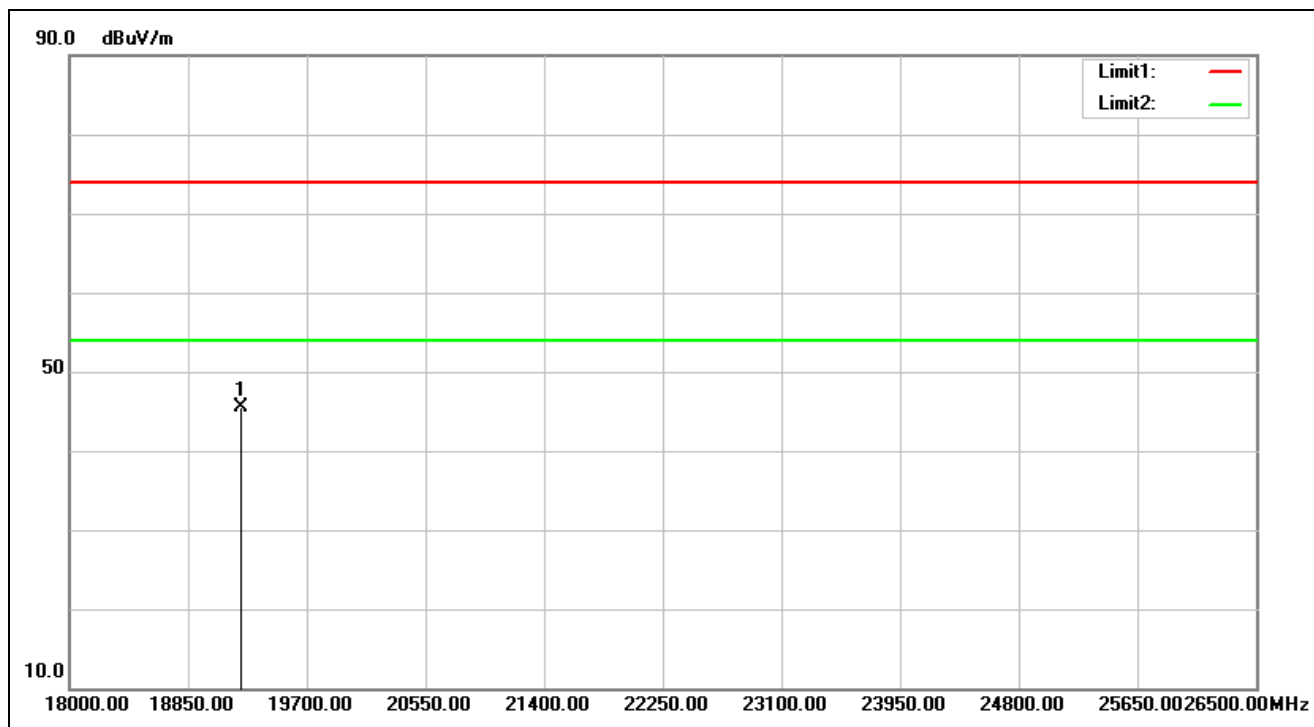
Spurious Emissions, TX Mode, 18-26G



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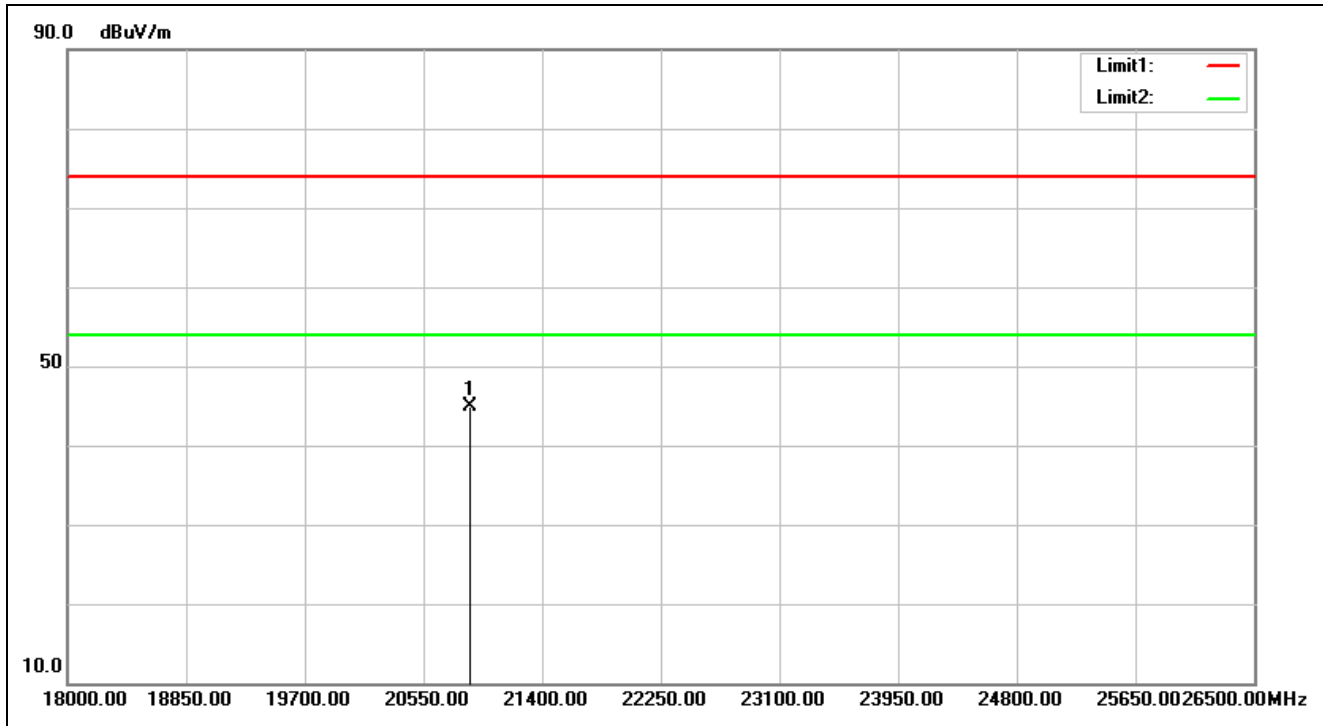
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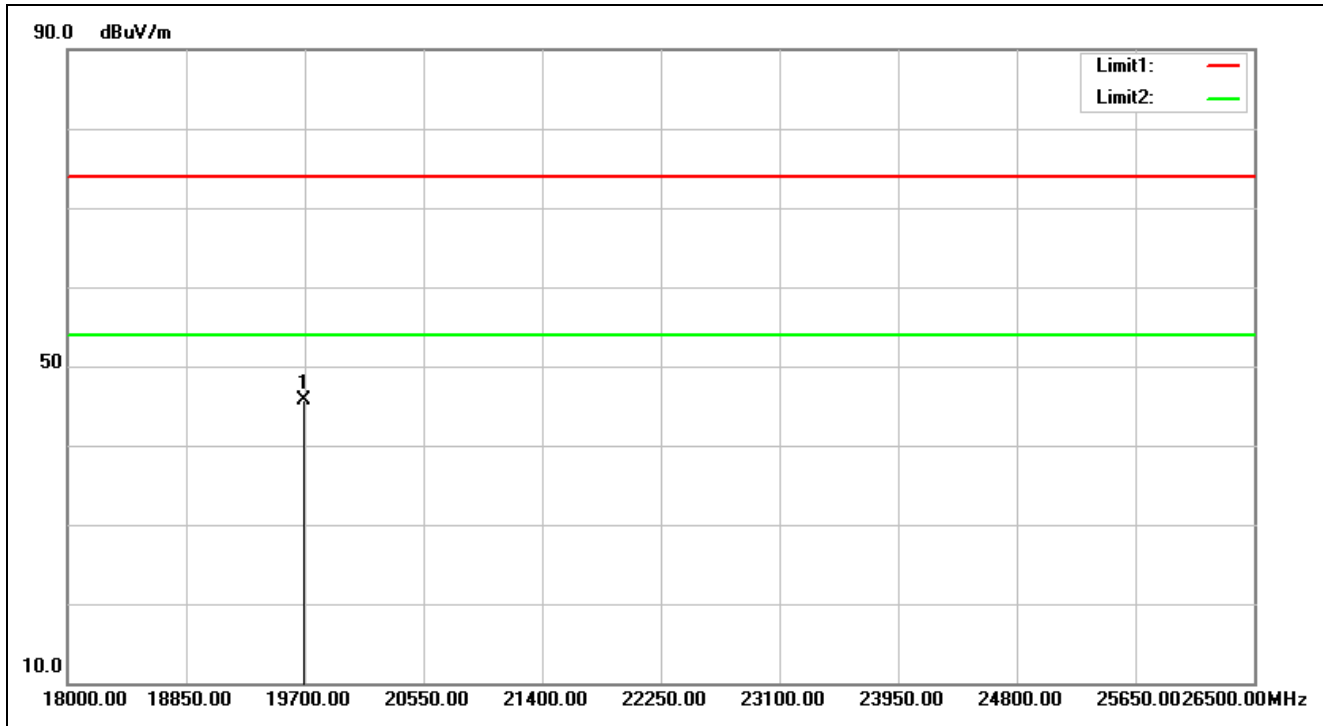
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Test	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 23:12:34
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2402-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19224.000	28.91	16.63	45.54	74.00	-28.46	peak		0	



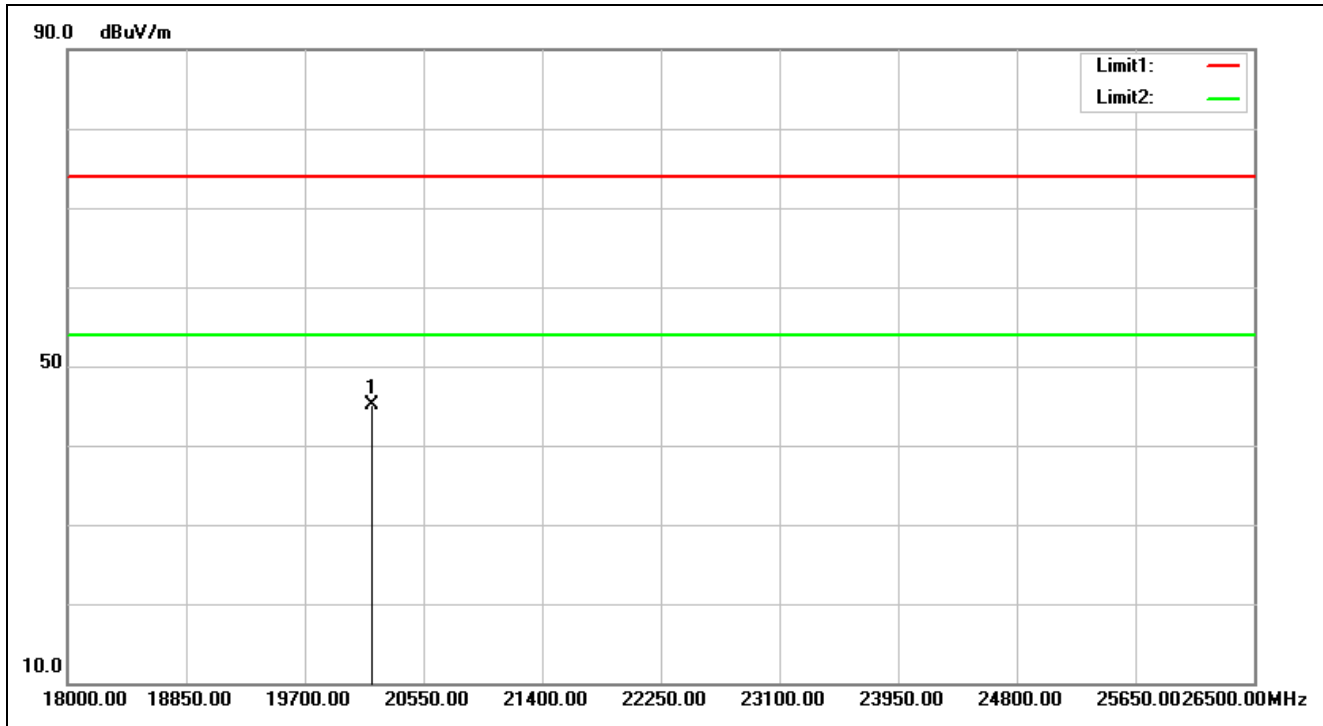
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Test	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 23:12:48
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2402-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20881.500	29.33	15.57	44.90	74.00	-29.10	peak			



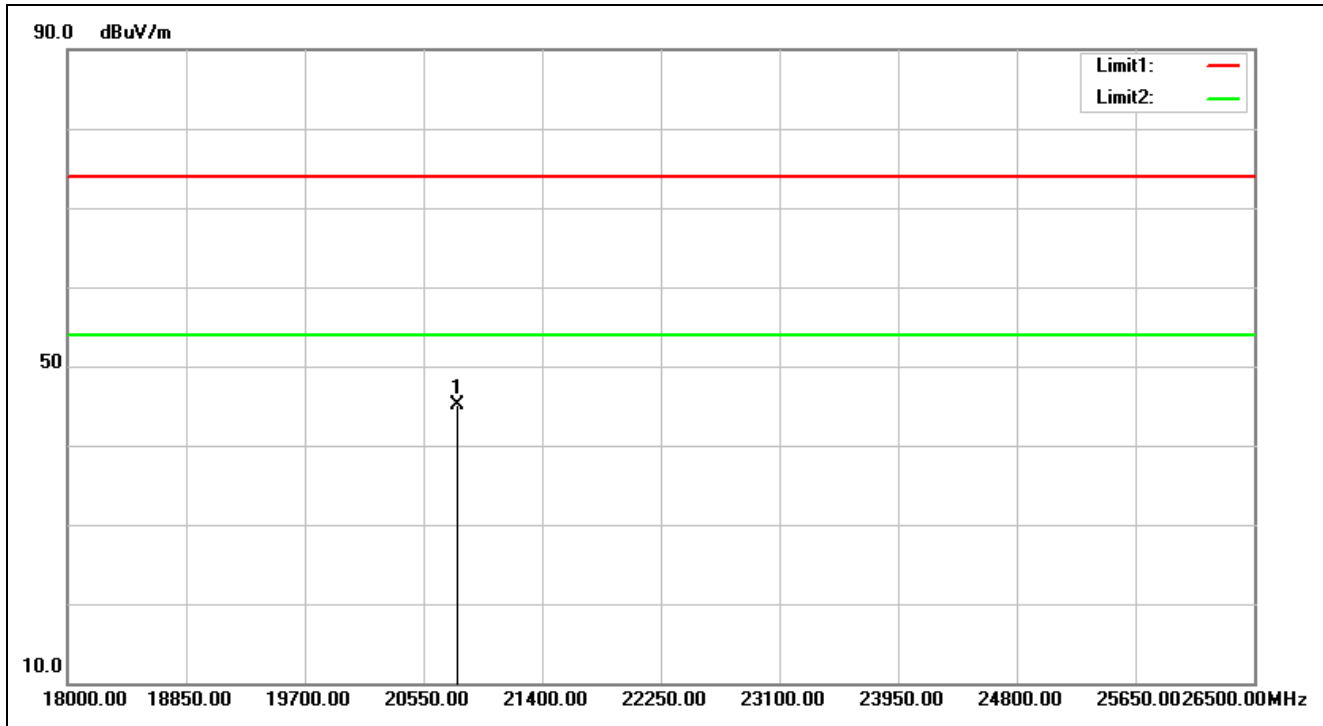
Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 23:13:09
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2440-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19691.500	28.95	16.67	45.62	74.00	-28.38	peak			



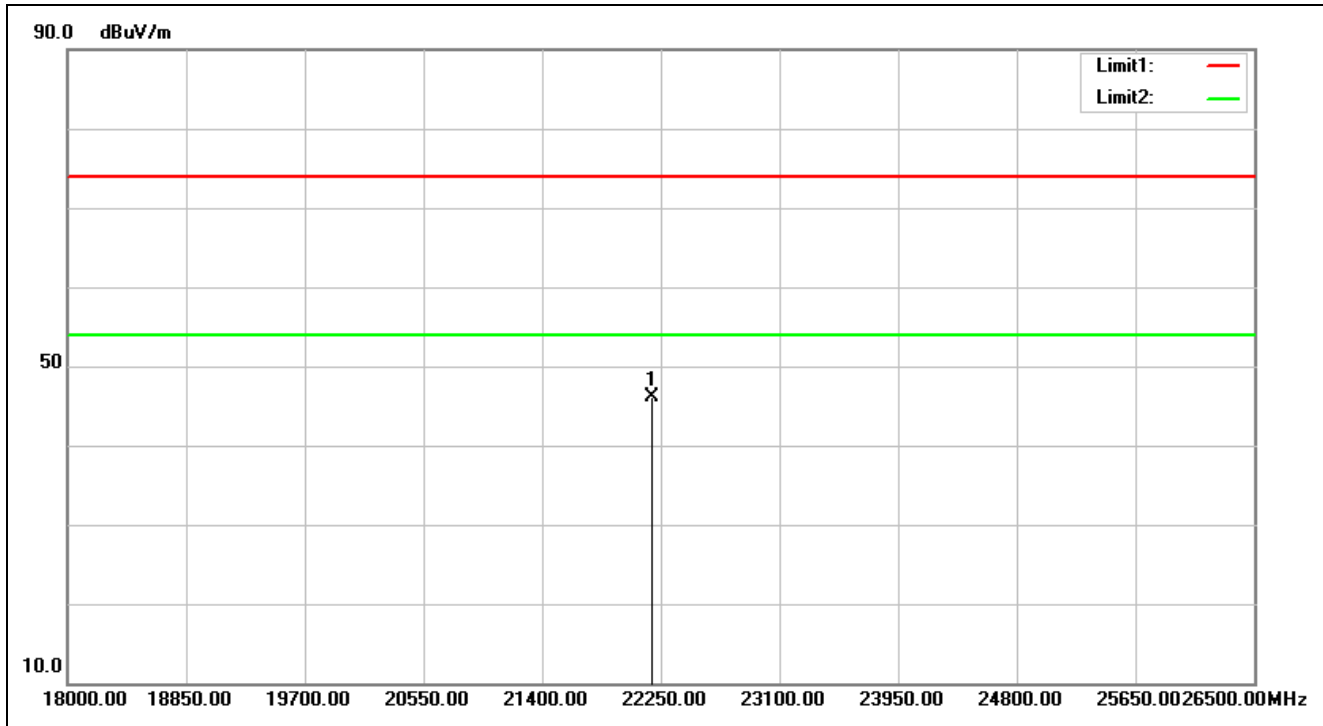
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Test	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 23:13:22
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2440-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20184.500	29.05	16.03	45.08	74.00	-28.92	peak			



Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 23:13:39
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2480-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20788.000	29.32	15.84	45.16	74.00	-28.84	peak			



Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 23:13:49
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2480-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22190.500	28.74	17.30	46.04	74.00	-27.96	peak			

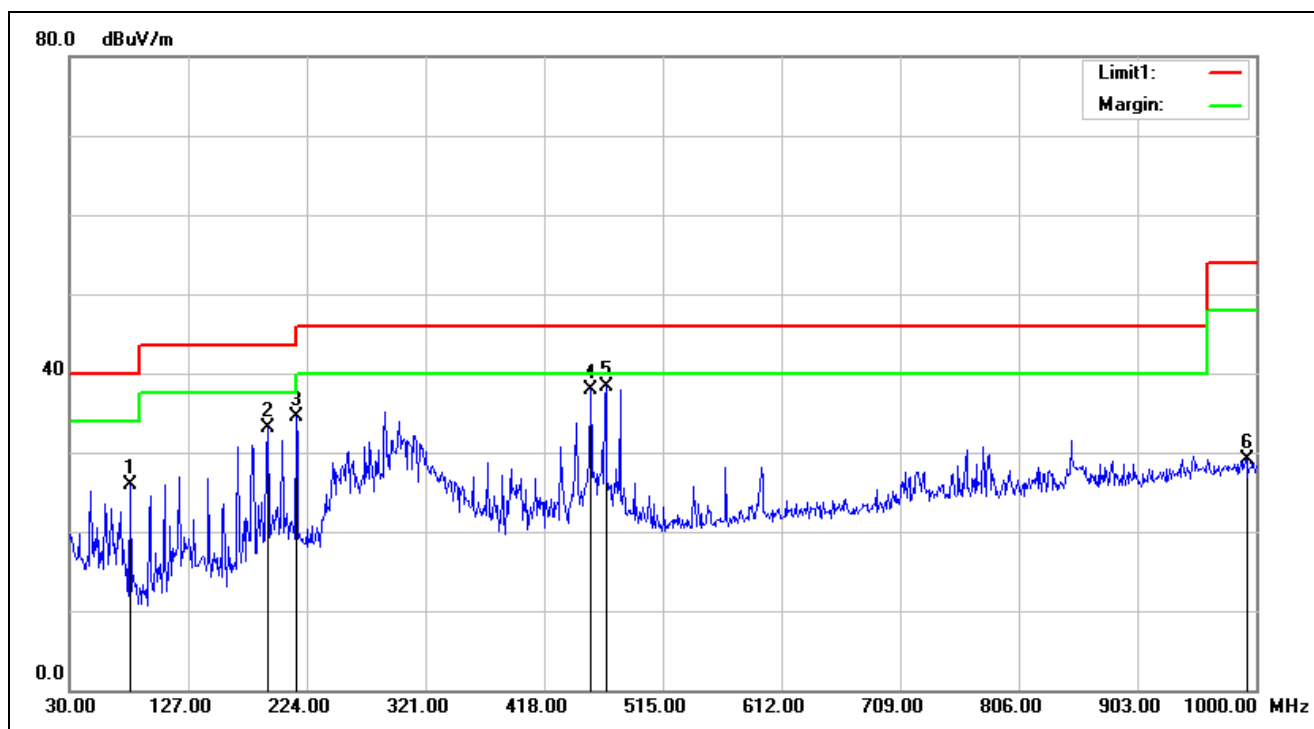
Spurious Emissions, TX Mode, 30M-1G



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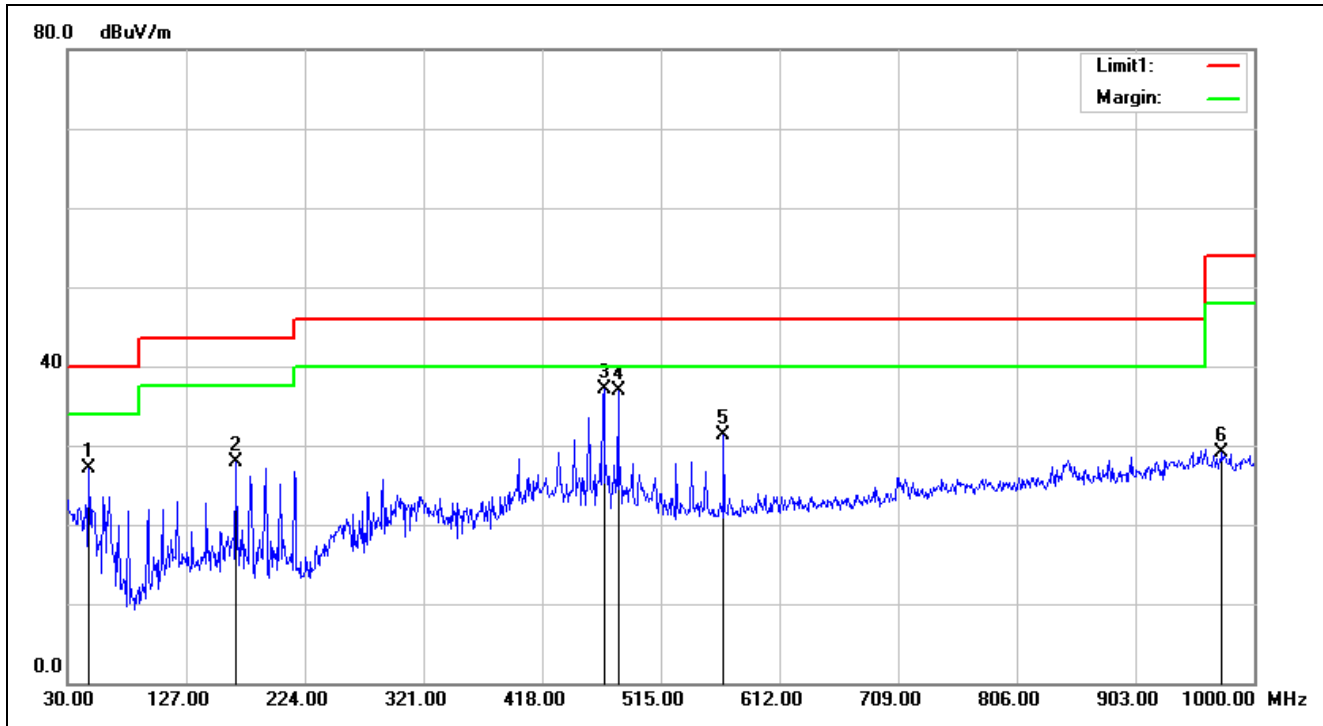
Tel:+886-2172-7000 fax:+886-2528-0018



Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/4 19:44:00
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	22.6(°C)/59%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2440-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	79.4700	-19.42	45.32	25.90	40.00	-14.10	QP	100	187	
2	191.9900	-16.87	50.06	33.19	43.50	-10.31	QP	100	223	
3	215.2700	-15.95	50.38	34.43	43.50	-9.07	QP	100	134	
4	455.8300	-9.26	47.09	37.83	46.00	-8.17	QP	100	67	
5	468.4400	-9.08	47.32	38.24	46.00	-7.76	QP	100	323	
6	992.2400	-1.22	30.41	29.19	54.00	-24.81	QP	100	296	

Spurious Emissions, RX Mode, 1-18G



Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/4 19:45:03
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	22.6(°C)/59%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2440-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	47.4600	-17.46	44.59	27.13	40.00	-12.87	QP	100	223	
2	167.7400	-16.09	44.08	27.99	43.50	-15.51	QP	100	187	
3	468.4400	-9.08	46.27	37.19	46.00	-8.81	QP	100	112	
4	480.0800	-8.90	45.78	36.88	46.00	-9.12	QP	100	134	
5	566.4100	-7.75	39.12	31.37	46.00	-14.63	QP	100	151	
6	973.8100	-1.21	30.32	29.11	54.00	-24.89	QP	100	9	

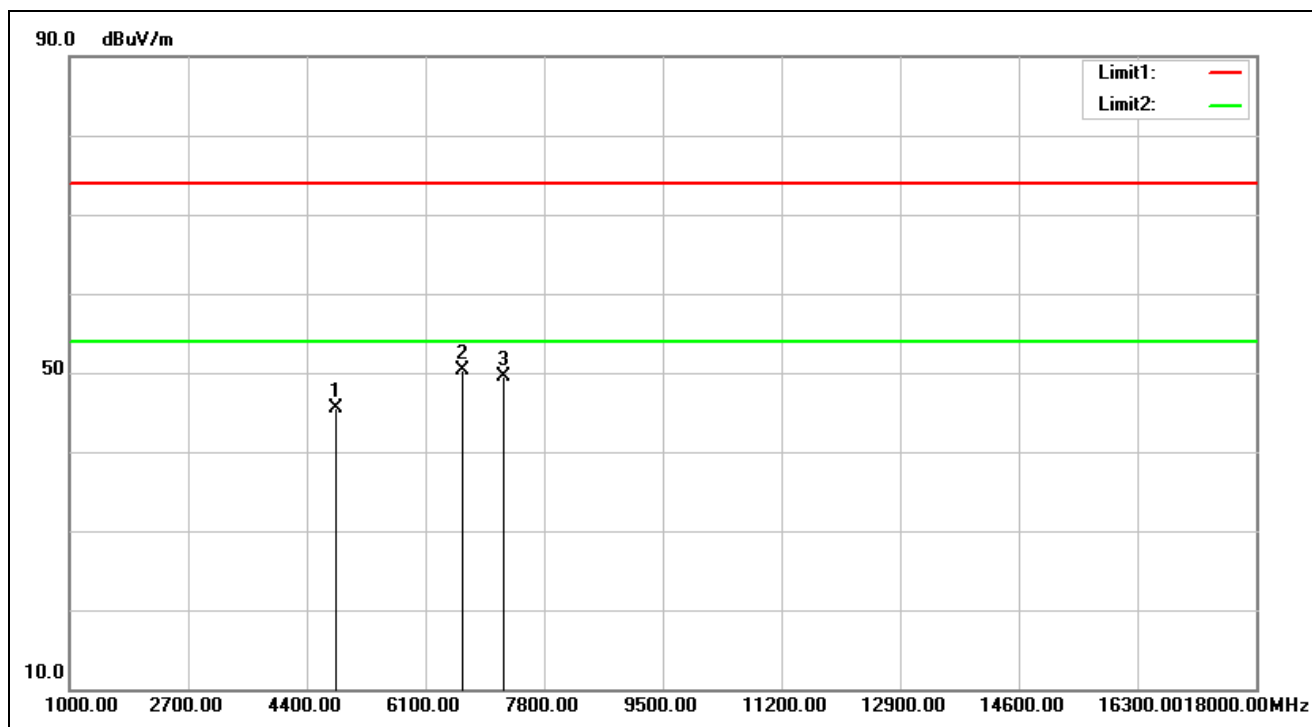
Spurious Emissions, RX Mode, 1-18G



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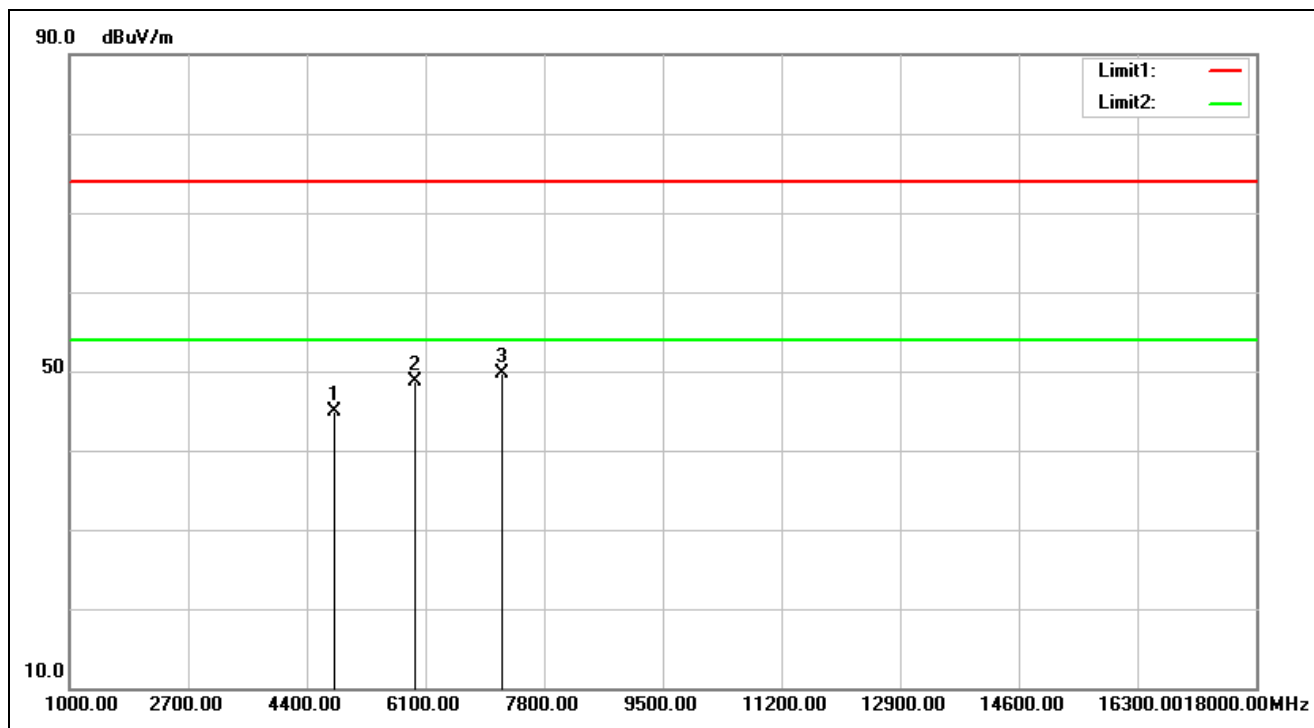
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Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 22:53:53
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2402-RX		
Remark:			

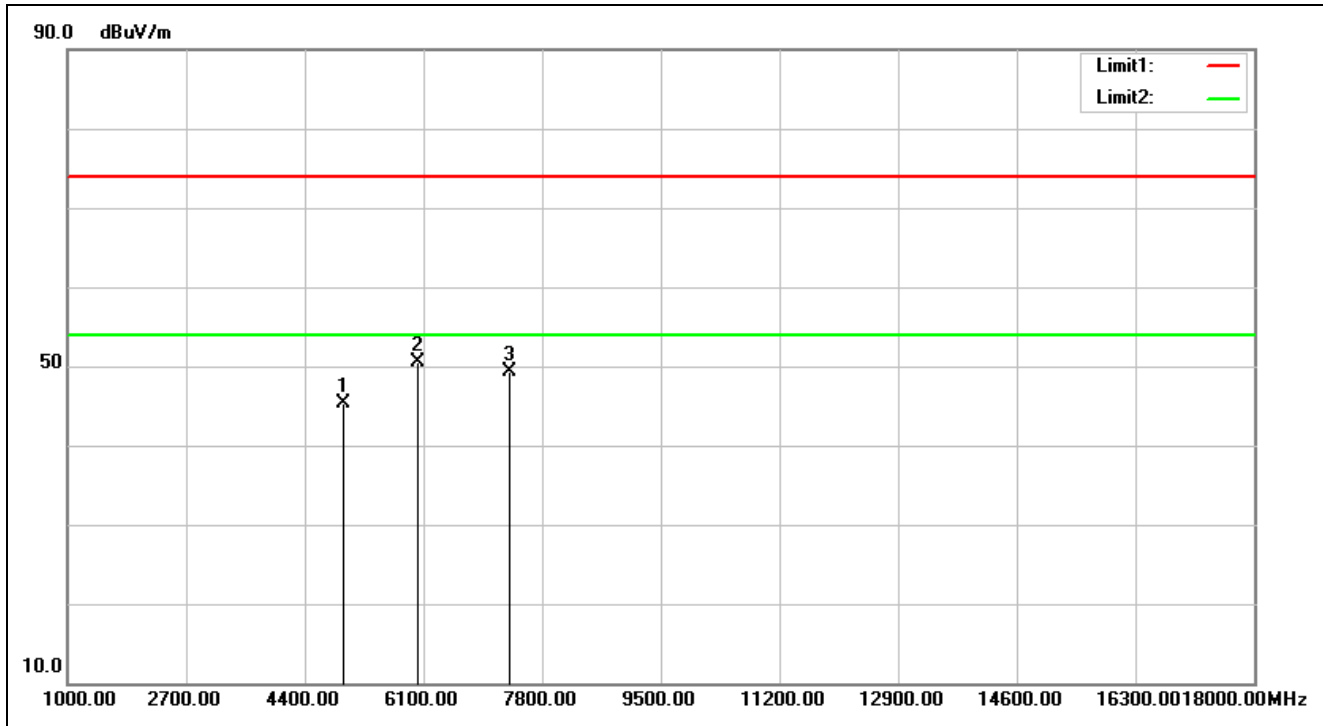
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4804.000	-2.35	47.95	45.60	74.00	-28.40	peak			
2	6627.000	5.81	44.55	50.36	74.00	-23.64	peak	100	97	
3	7206.000	5.78	43.79	49.57	74.00	-24.43	peak			

Spurious Emissions, RX Mode, 1-18G



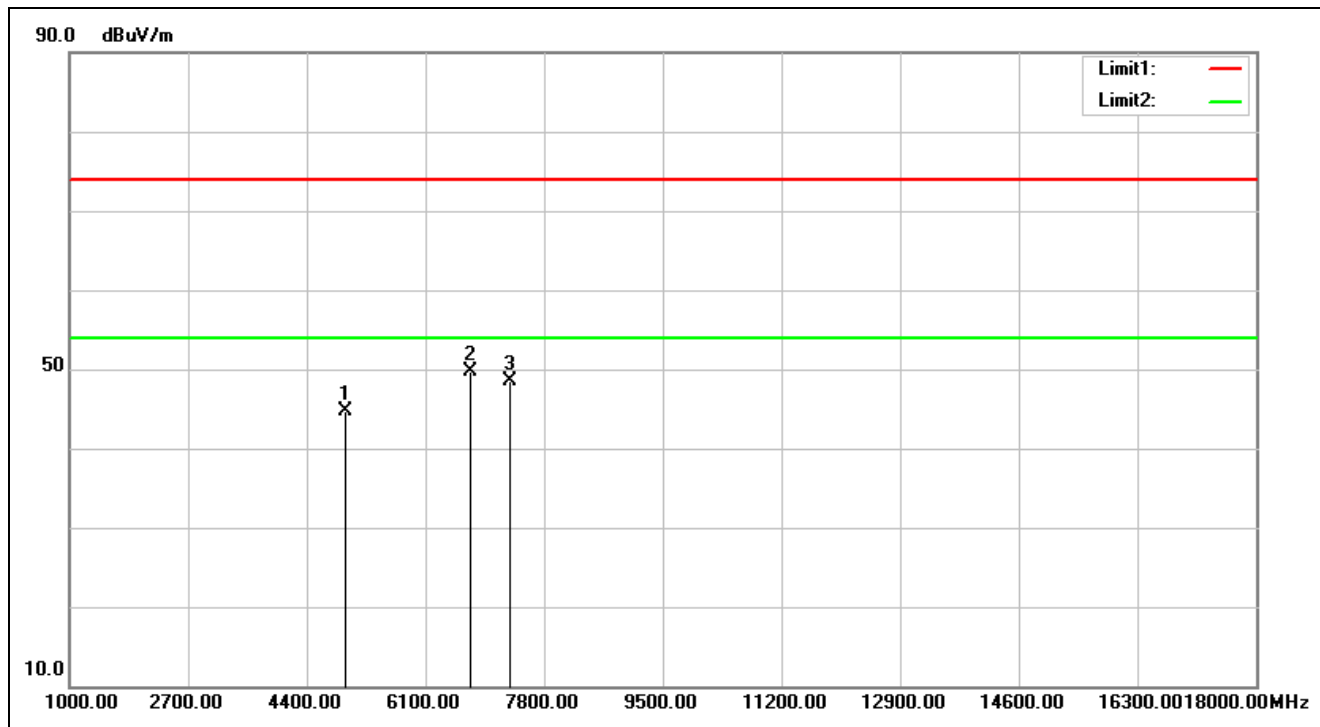
Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 22:54:55
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2402-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4804.000	-2.35	47.22	44.87	74.00	-29.13	peak			
2	5947.000	3.74	45.02	48.76	74.00	-25.24	peak	100	295	
3	7206.000	5.78	43.90	49.68	74.00	-24.32	peak			



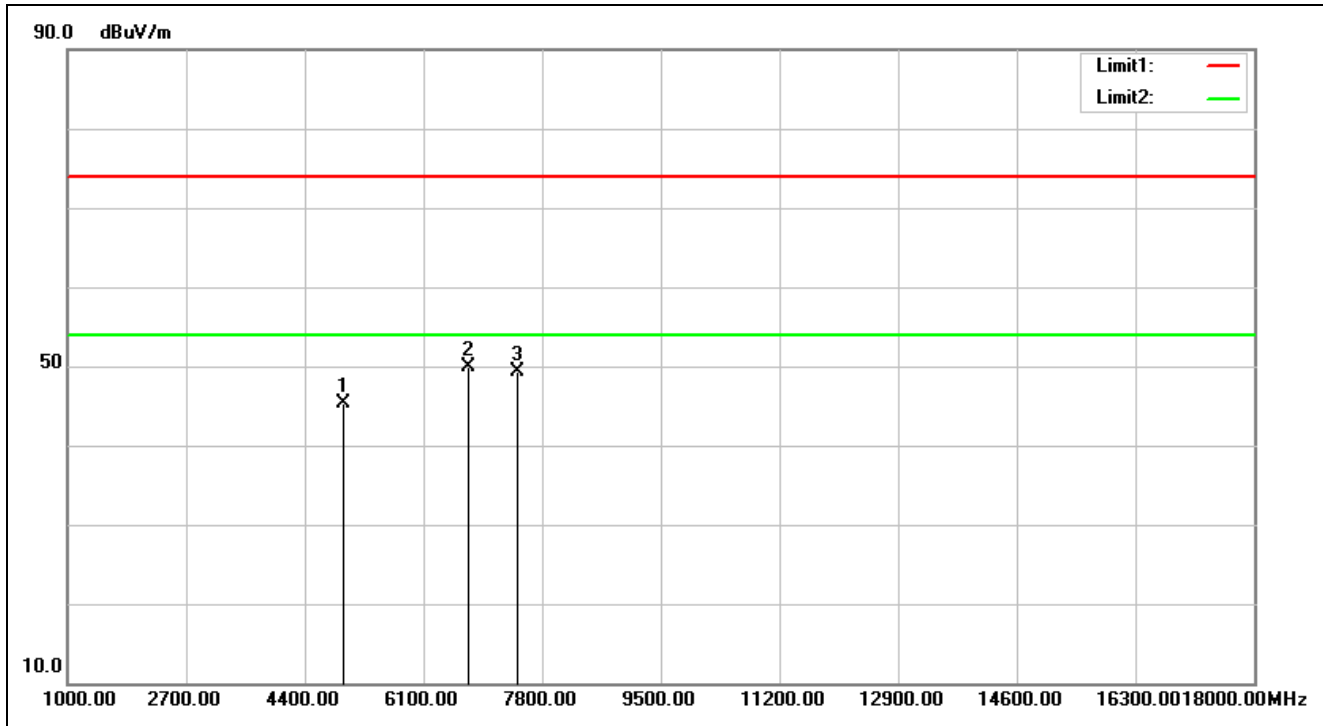
Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 22:57:22
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2440-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4960.000	-1.97	47.27	45.30	74.00	-28.70	peak			
2	6015.000	4.14	46.34	50.48	74.00	-23.52	peak	100	34	
3	7320.000	6.12	43.09	49.21	74.00	-24.79	peak			



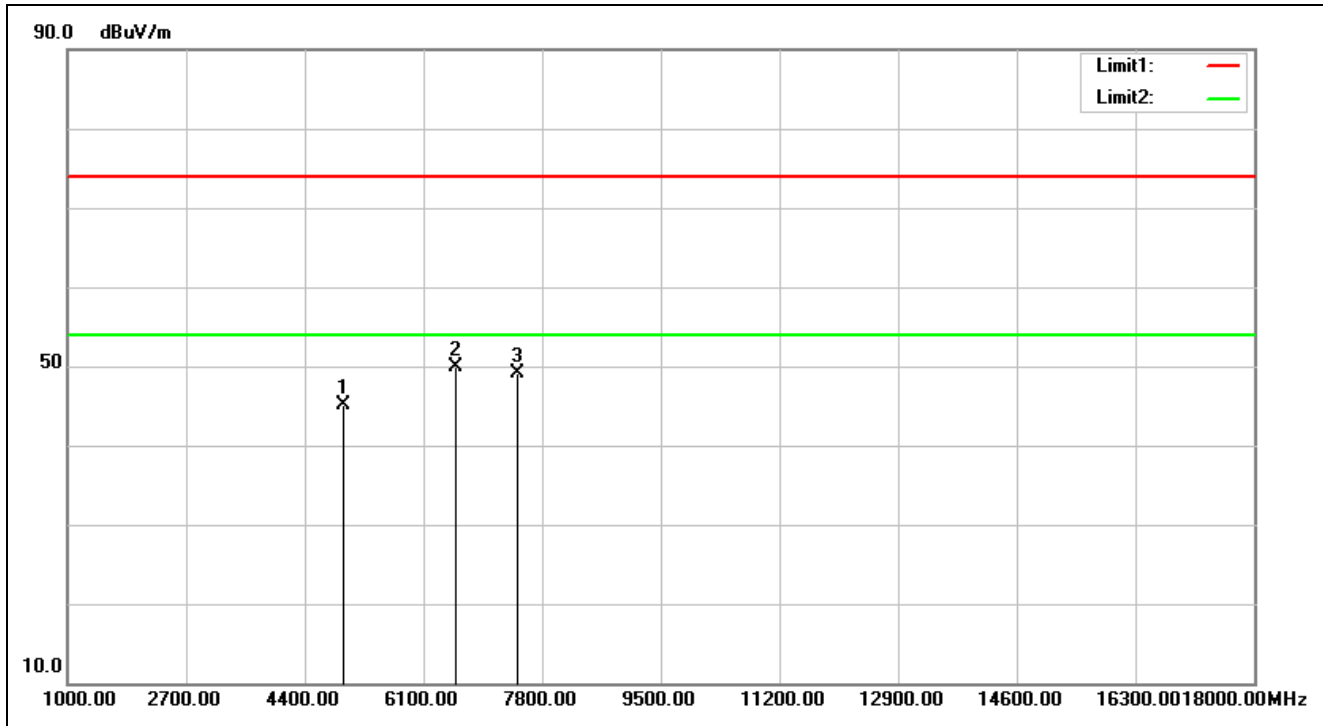
Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 22:58:24
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2440-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4960.000	-1.97	46.73	44.76	74.00	-29.24	peak			
2	6746.000	5.60	44.01	49.61	74.00	-24.39	peak	100	238	
3	7320.000	6.12	42.47	48.59	74.00	-25.41	peak			



Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 23:00:18
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2480-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4960.000	-1.97	47.22	45.25	74.00	-28.75	peak			
2	6746.000	5.60	44.23	49.83	74.00	-24.17	peak	100	56	
3	7440.000	6.47	42.86	49.33	74.00	-24.67	peak			



Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 23:01:20
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2480-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4960.000	-1.97	47.09	45.12	74.00	-28.88	peak			
2	6559.000	5.94	44.00	49.94	74.00	-24.06	peak	100	318	
3	7440.000	6.47	42.70	49.17	74.00	-24.83	peak			

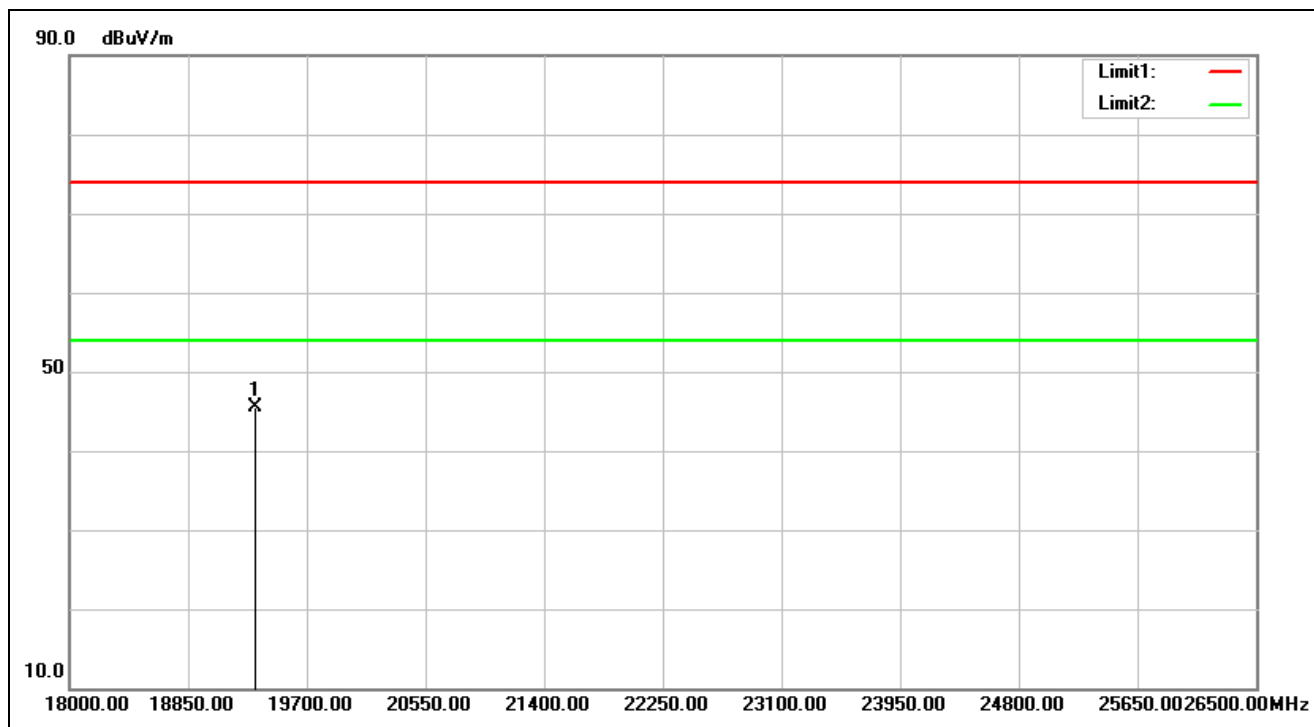
Spurious Emissions, RX Mode, 18-26G



TUV Taiwan

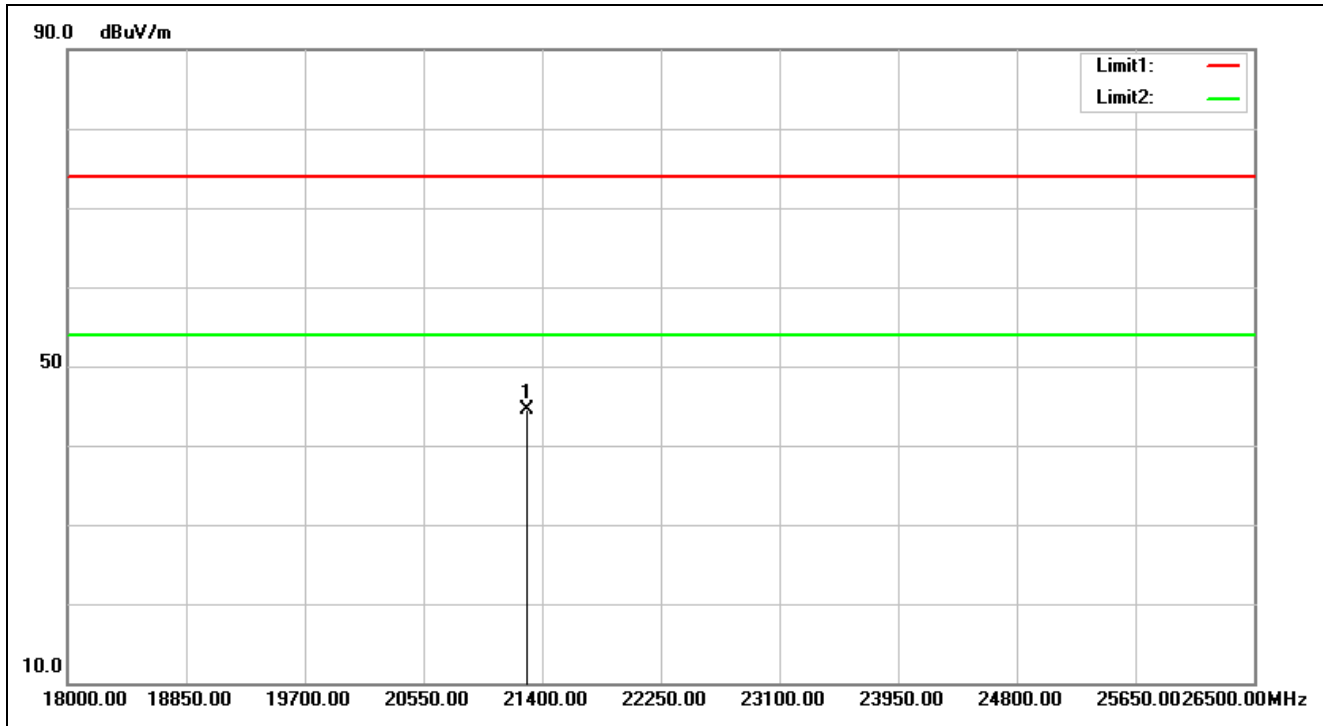
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

Tel:+886-2172-7000 fax:+886-2528-0018



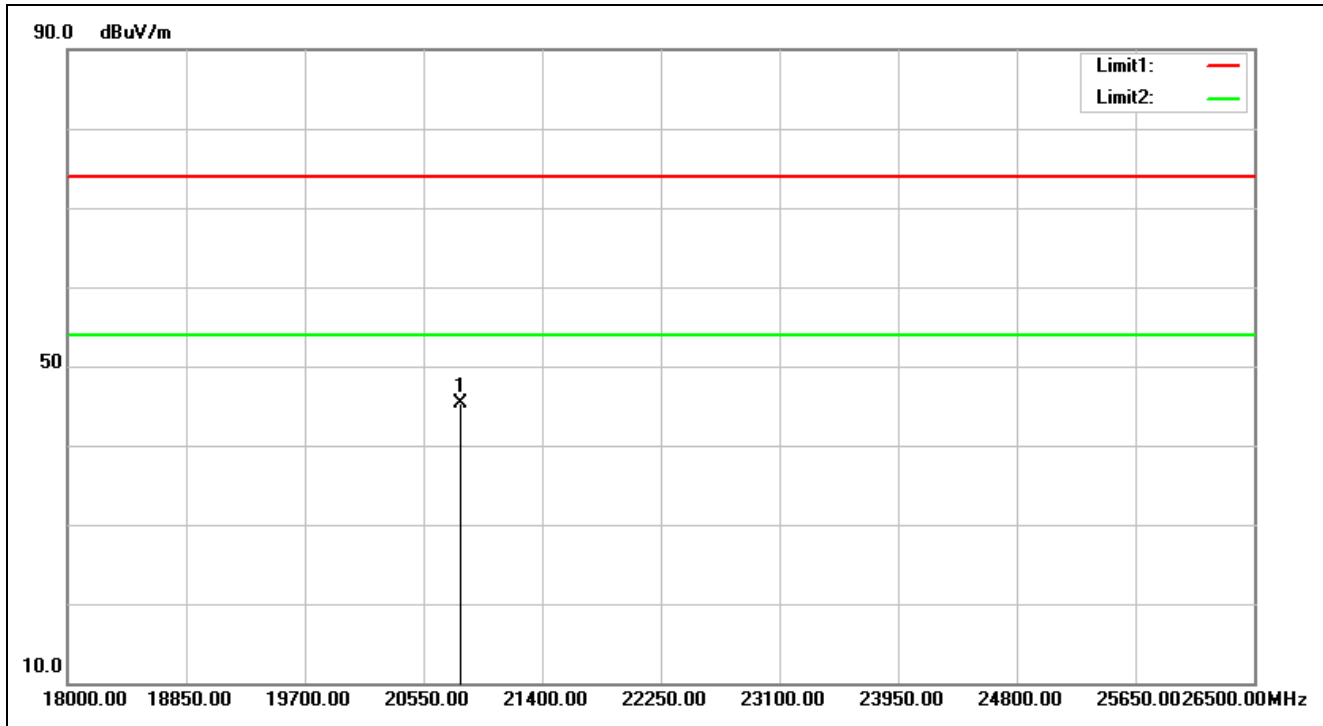
Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 23:14:17
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2402-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19334.500	28.94	16.59	45.53	74.00	-28.47	peak			



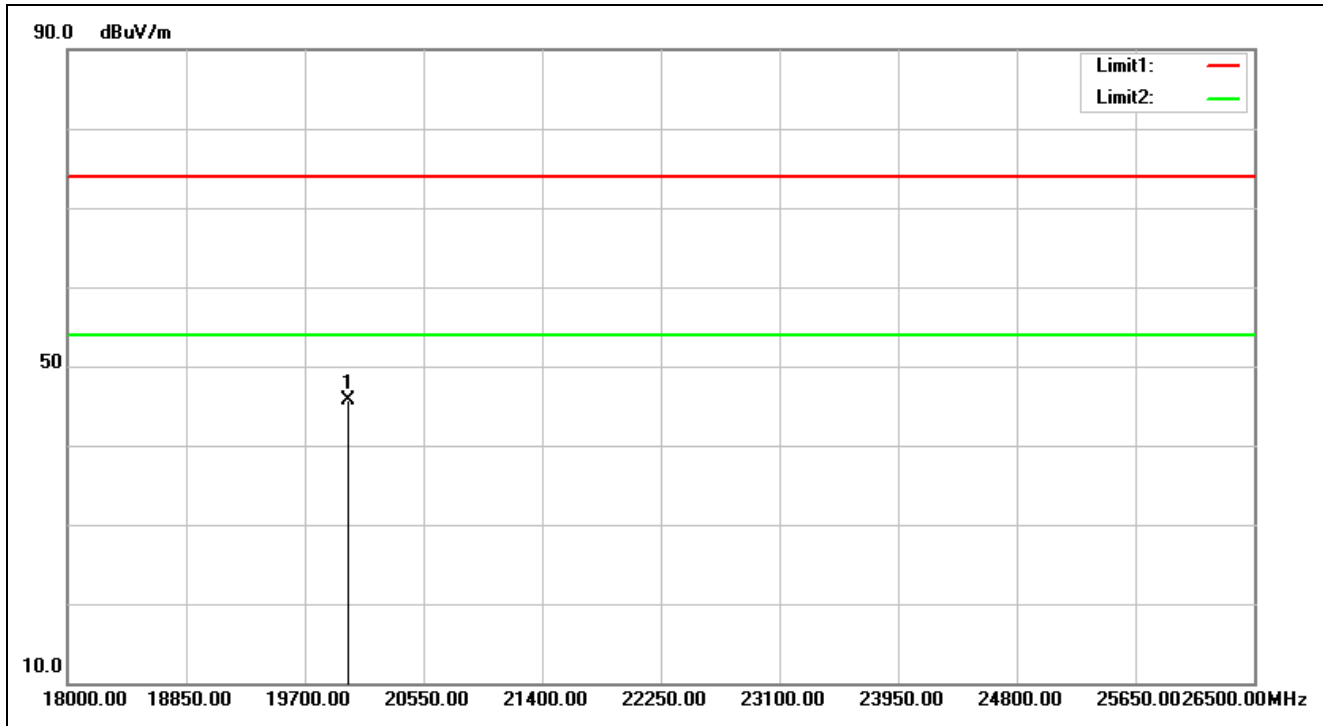
Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 23:14:28
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2402-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21289.500	29.10	15.32	44.42	74.00	-29.58	peak			



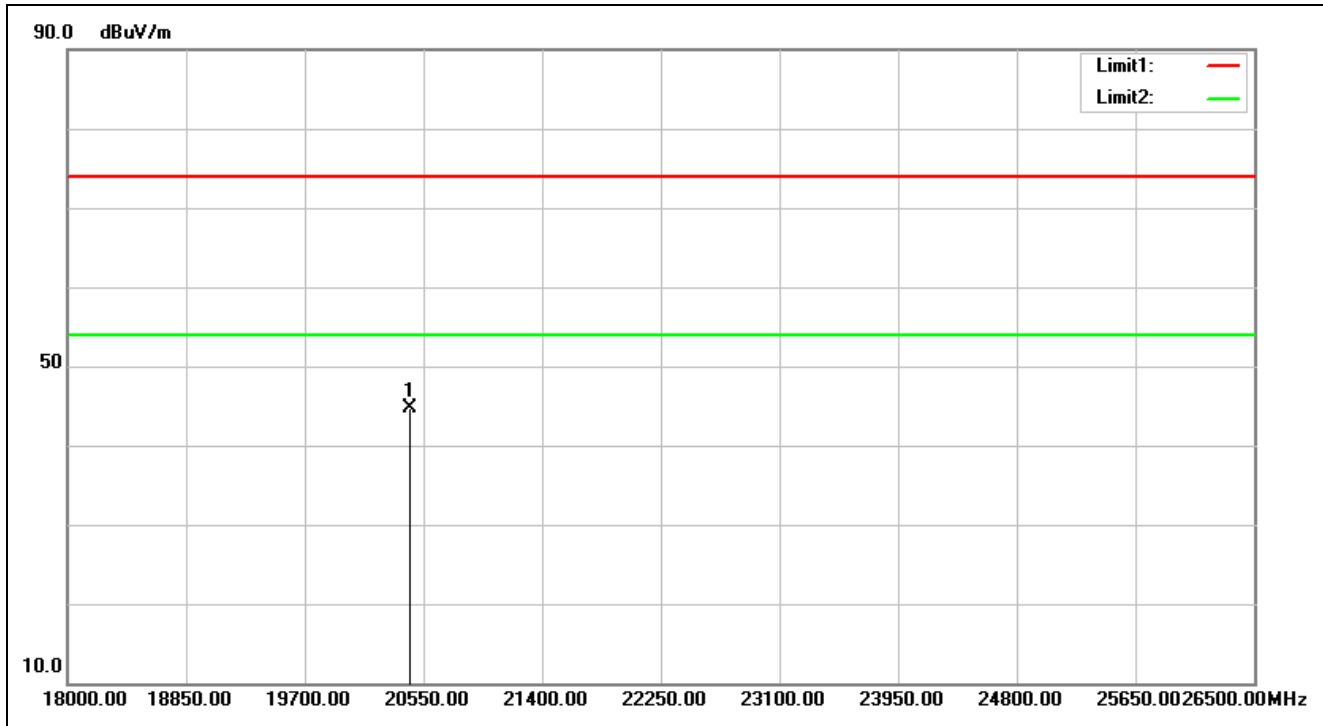
Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 23:14:44
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2440-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20813.500	29.31	16.01	45.32	74.00	-28.68	peak		0	



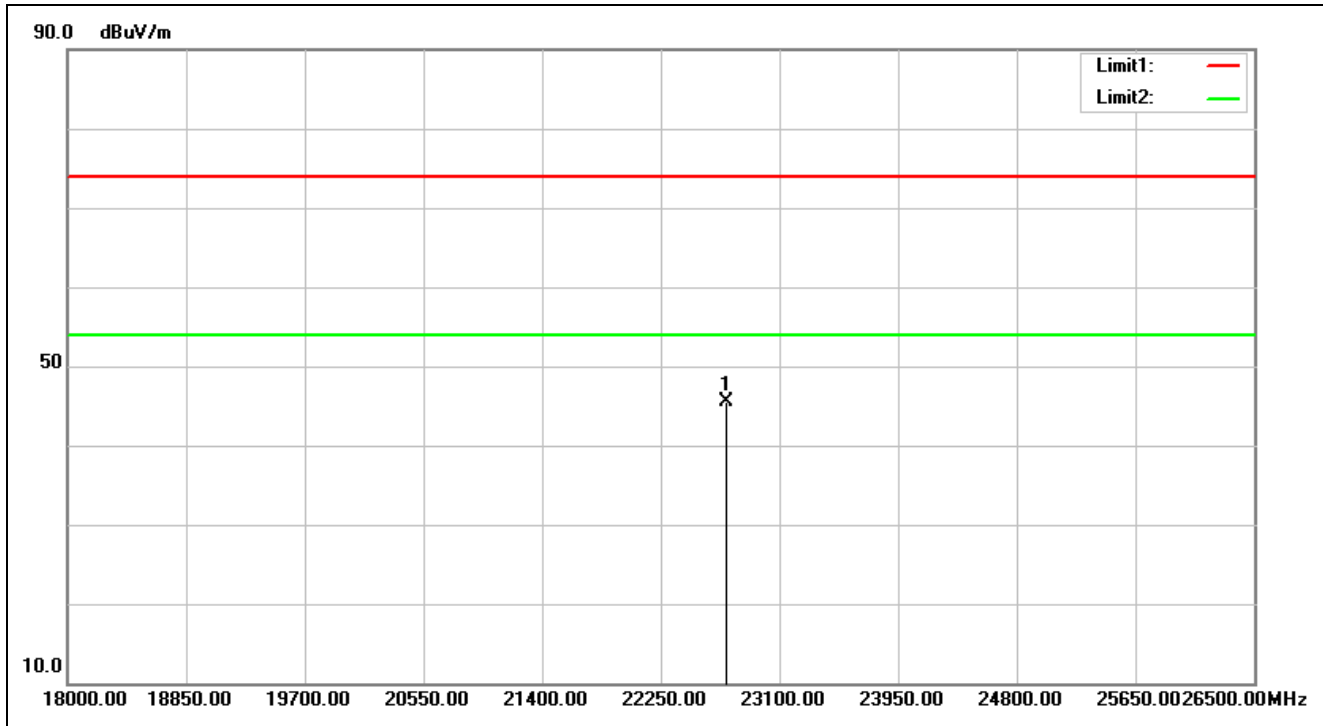
Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 23:14:54
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2440-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20014.500	28.93	16.83	45.76	74.00	-28.24	peak			



Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 23:15:18
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2480-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20456.500	29.22	15.55	44.77	74.00	-29.23	peak			



Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/3 23:15:29
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	23.1(°C)/52%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2480-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22717.500	29.53	15.90	45.43	74.00	-28.57	peak			

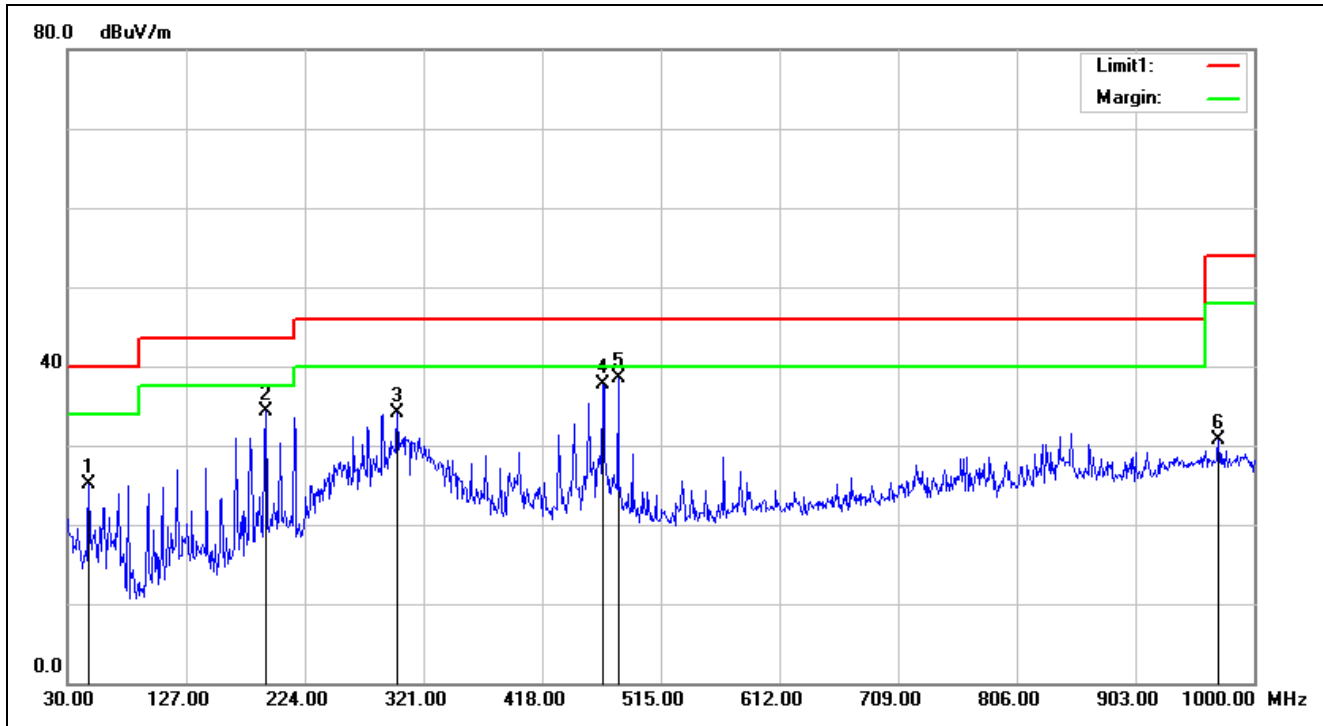
Spurious Emissions, RX Mode, 30M-1G



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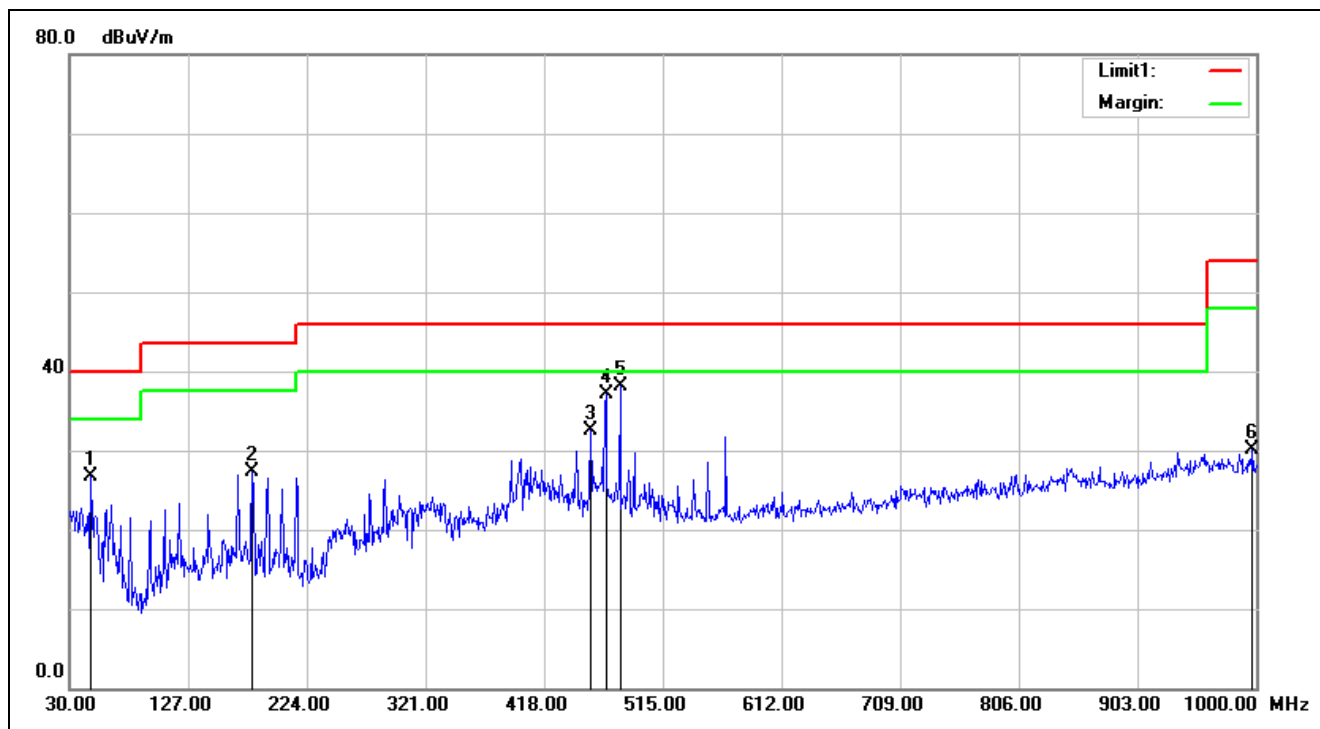
Tel:+886-2172-7000 fax:+886-2528-0018



Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/4 19:40:43
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	22.6(°C)/59%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2440-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	47.4600	-17.46	42.58	25.12	40.00	-14.88	QP	100	176	
2	191.9900	-16.87	51.19	34.32	43.50	-9.18	QP	100	243	
3	299.6600	-12.04	46.18	34.14	46.00	-11.86	QP	100	143	
4	467.4700	-9.09	46.72	37.63	46.00	-8.37	QP	100	65	
5	480.0800	-8.90	47.48	38.58	46.00	-7.42	QP	100	65	
6	970.9000	-1.21	31.89	30.68	54.00	-23.32	QP	100	174	

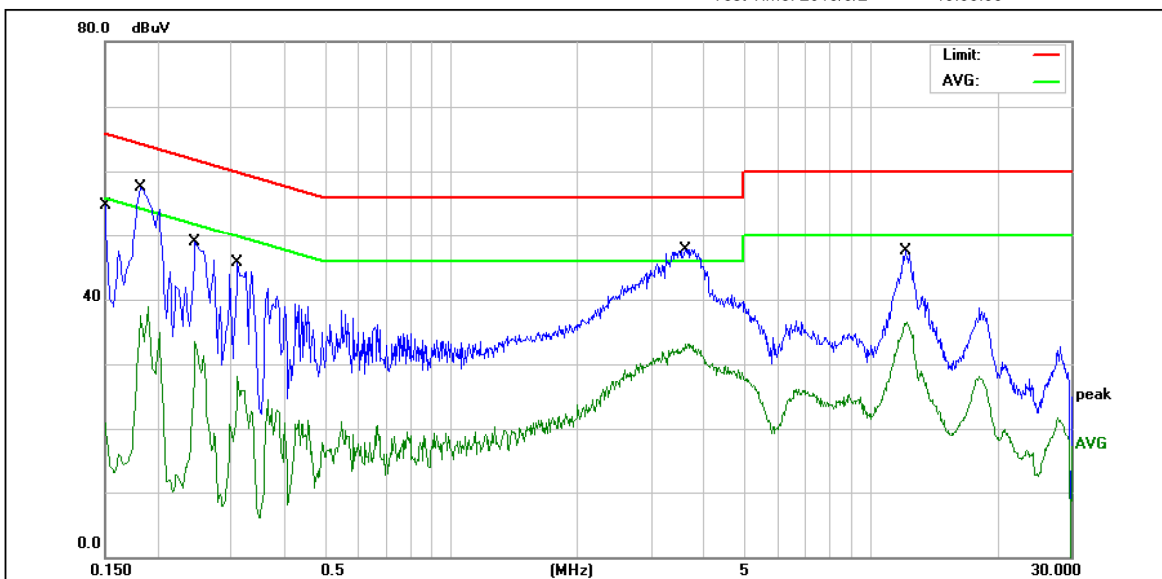
Spurious Emissions, RX Mode, 30M-1G



Service No.:	114039665-NCC	Test Distance:	3m
Test	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Standard:			
Test item:	Radiation Emission	Test Time:	2015/9/4 19:41:46
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	22.6(°C)/59%
Model No.:	FCC:BM78ABCDEFGH;NCC:BM78SPPS5MC2;RN4678	Test Engineer:	George Yang
Test Mode:	LE-2440-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	47.4600	-17.46	44.09	26.63	40.00	-13.37	QP	100	229	
2	179.3800	-17.02	44.32	27.30	43.50	-16.20	QP	100	179	
3	455.8300	-9.26	41.67	32.41	46.00	-13.59	QP	100	128	
4	468.4400	-9.08	46.18	37.10	46.00	-8.90	QP	100	151	
5	480.0800	-8.90	47.06	38.16	46.00	-7.84	QP	100	131	
6	997.0900	-1.24	31.37	30.13	54.00	-23.87	QP	100	215	

Mains Spurious Emissions



Service No.: 114039665(BM78)

Test Standard: FCC Class B Conduction(QP)

Test item: Conducted Emission

Phase: L1

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.2(°C) / 51 %

Product: Bluetooth Module

Power Rating: DC 5V

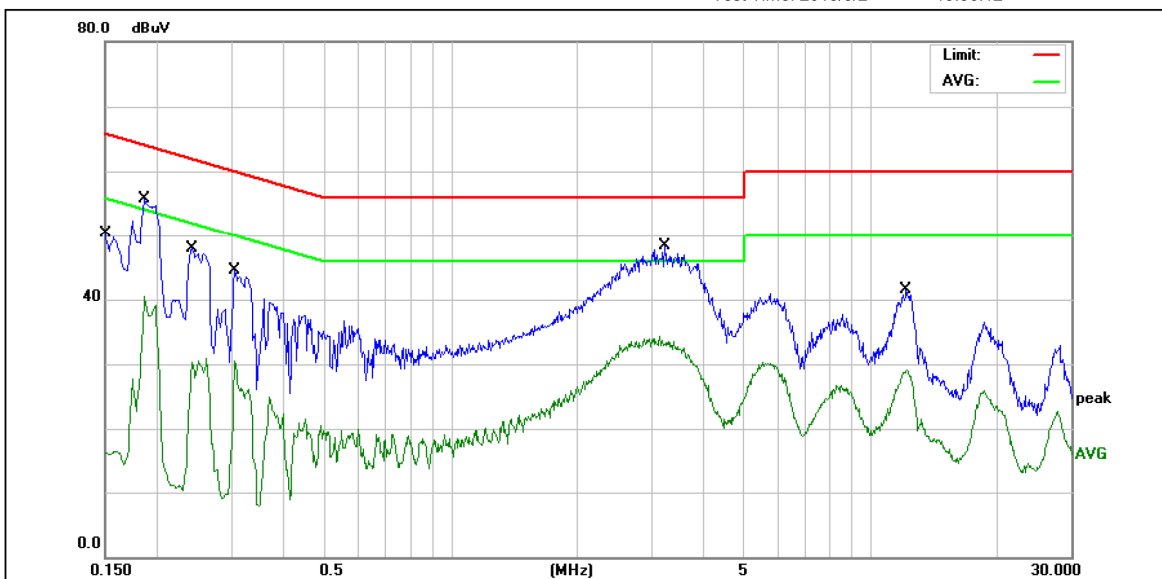
Model No.: BM78

Test Engineer: Kai Wang

Test Mode: (a)Normal Link

Remark:

No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1500	9.65	33.06	42.71	65.99	-23.28	QP	P	
2	0.1500	9.65	7.12	16.77	55.99	-39.22	AVG	P	
3	0.1819	9.63	45.02	54.65	64.39	-9.74	QP	P	
4	0.1819	9.63	25.30	34.93	54.39	-19.46	AVG	P	
5	0.2460	9.63	35.88	45.51	61.89	-16.38	QP	P	
6	0.2460	9.63	18.76	28.39	51.89	-23.50	AVG	P	
7	0.3100	9.63	31.73	41.36	59.97	-18.61	QP	P	
8	0.3100	9.63	15.21	24.84	49.97	-25.13	AVG	P	
9	3.6140	9.67	32.53	42.20	56.00	-13.80	QP	P	
10	3.6140	9.67	21.17	30.84	46.00	-15.16	AVG	P	
11	12.1180	9.78	30.52	40.30	60.00	-19.70	QP	P	
12	12.1180	9.78	24.54	34.32	50.00	-15.68	AVG	P	



Service No.: 114039665(BM78)

Test Standard: FCC Class B Conduction(QP)

Test item: Conducted Emission

Phase: N

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.2(°C) / 51 %

Product: Bluetooth Module

Power Rating: DC 5V

Model No.: BM78

Test Engineer: Kai Wang

Test Mode: (a)Normal Link

Remark:

No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1500	9.66	31.59	41.25	65.99	-24.74	QP	P	
2	0.1500	9.66	5.92	15.58	55.99	-40.41	AVG	P	
3	0.1860	9.65	43.54	53.19	64.21	-11.02	QP	P	
4	0.1860	9.65	27.40	37.05	54.21	-17.16	AVG	P	
5	0.2420	9.65	34.94	44.59	62.02	-17.43	QP	P	
6	0.2420	9.65	18.19	27.84	52.02	-24.18	AVG	P	
7	0.3060	9.64	30.70	40.34	60.08	-19.74	QP	P	
8	0.3060	9.64	15.55	25.19	50.08	-24.89	AVG	P	
9	3.2340	9.69	31.10	40.79	56.00	-15.21	QP	P	
10	3.2340	9.69	22.10	31.79	46.00	-14.21	AVG	P	
11	12.1300	9.82	24.19	34.01	60.00	-25.99	QP	P	
12	12.1300	9.82	15.53	25.35	50.00	-24.65	AVG	P	