

Test Report No.10051444 10051448 001

Appendix D: Radiated Spurious Emission Data

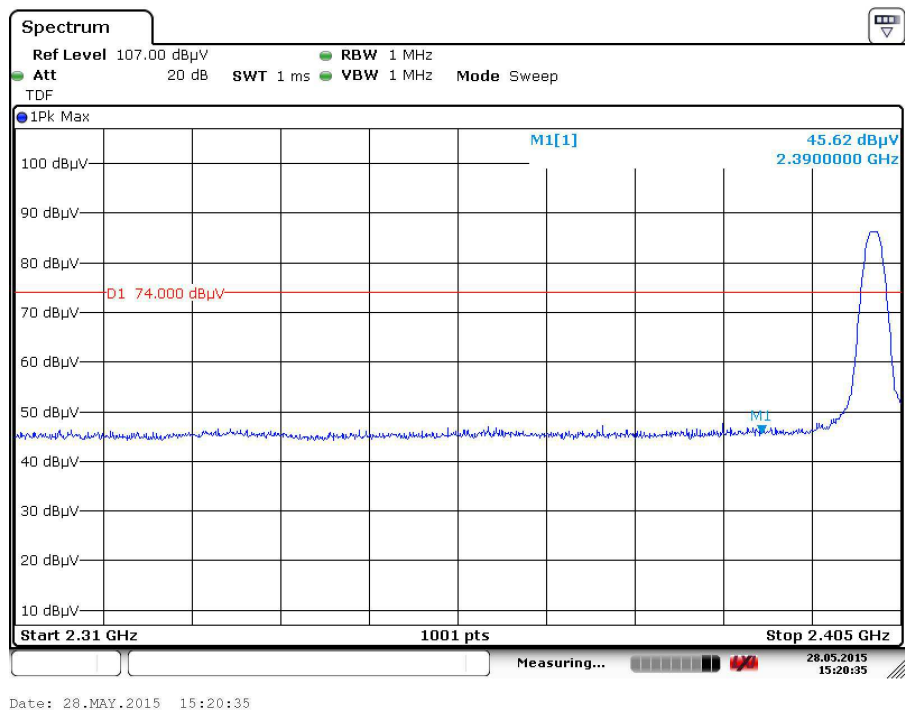
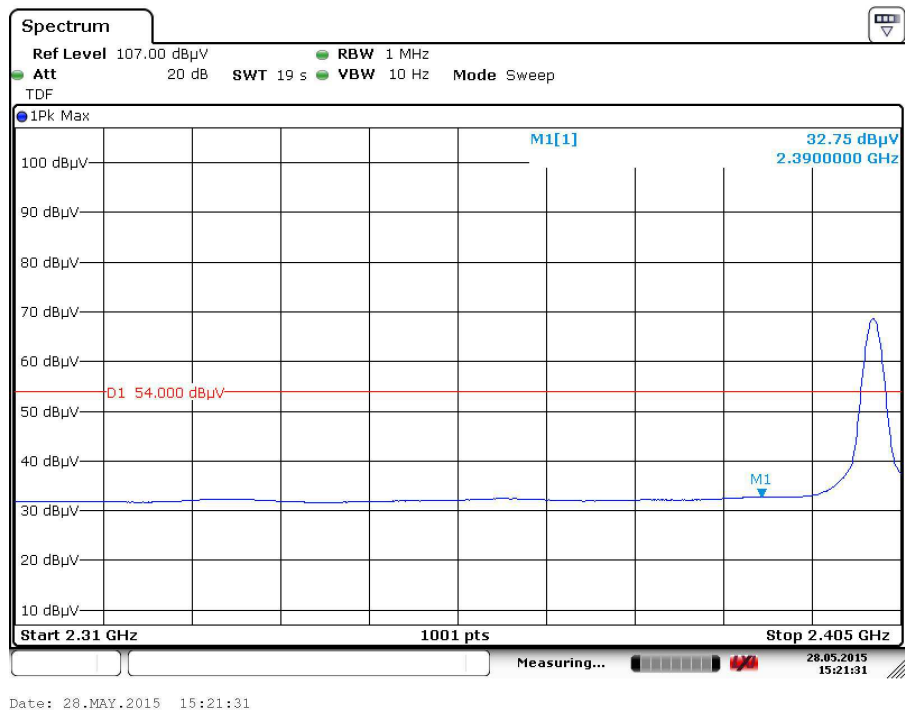
(File: 10051444 10051448AppendixD)

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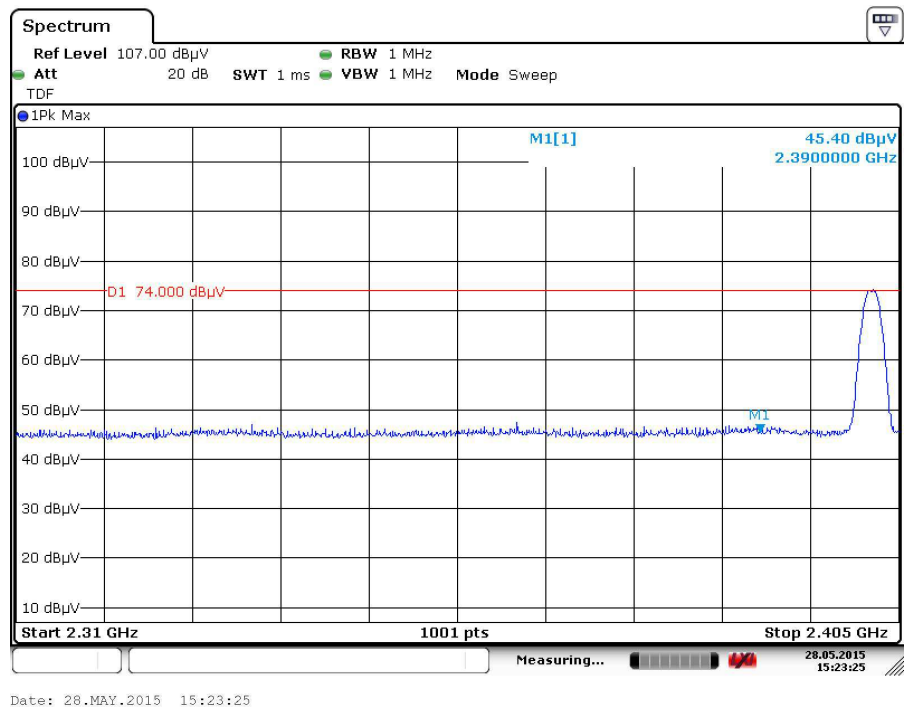
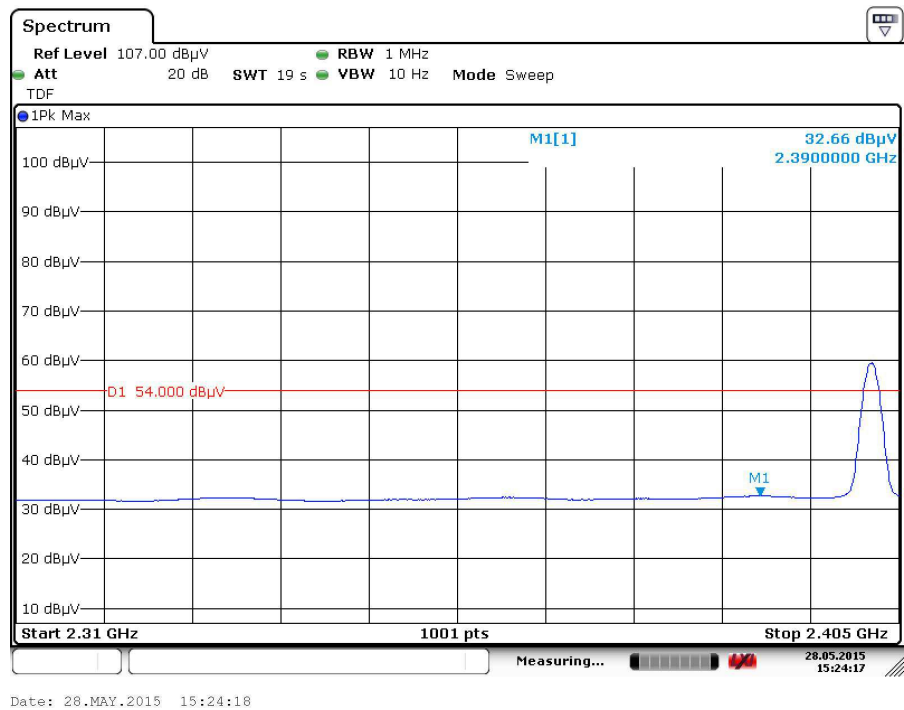
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Radiated Bandedge (GFSK)

Low Channel (Hor)



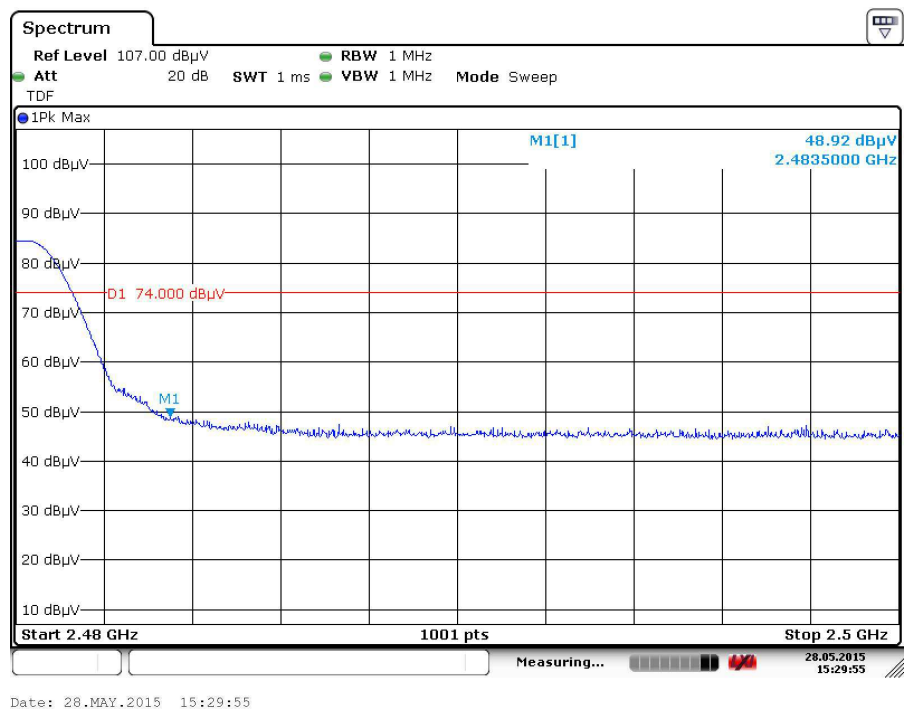
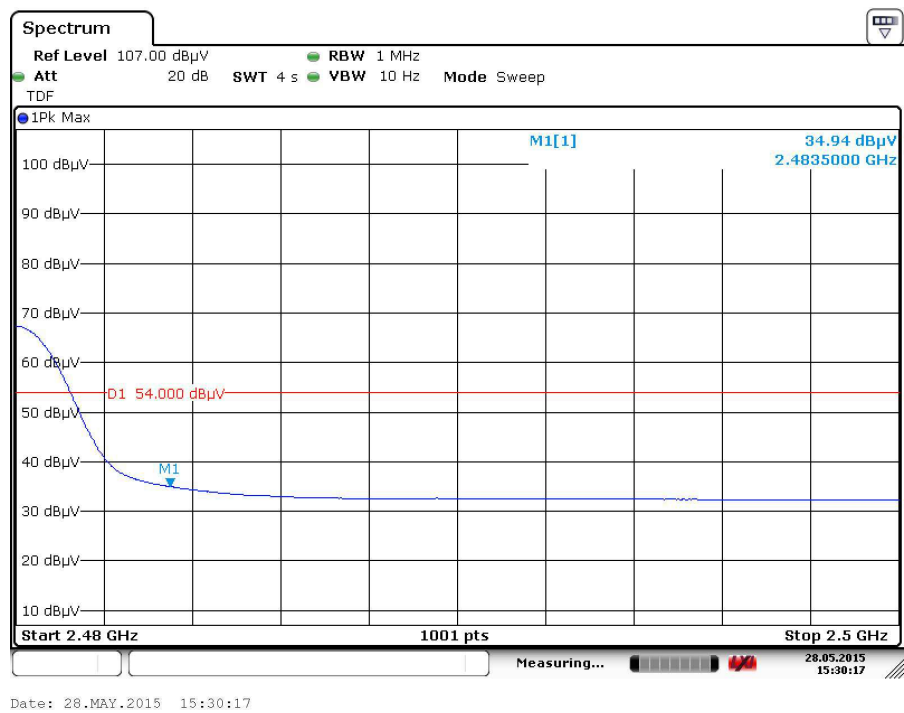
Low Channel (Ver)



Spurious Emissions, Band Edge, 2.35-2.5G

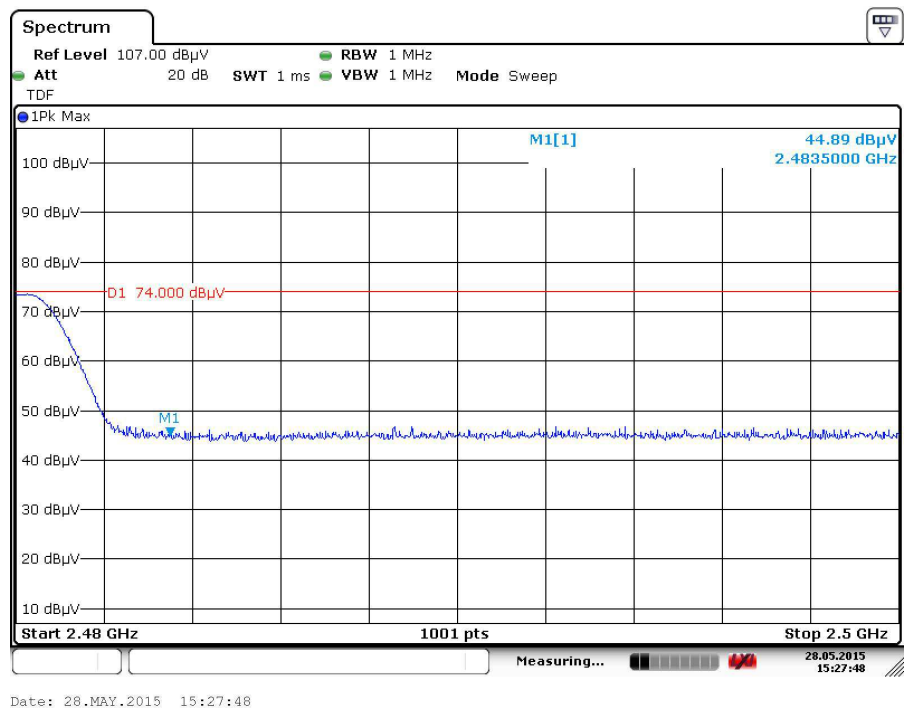
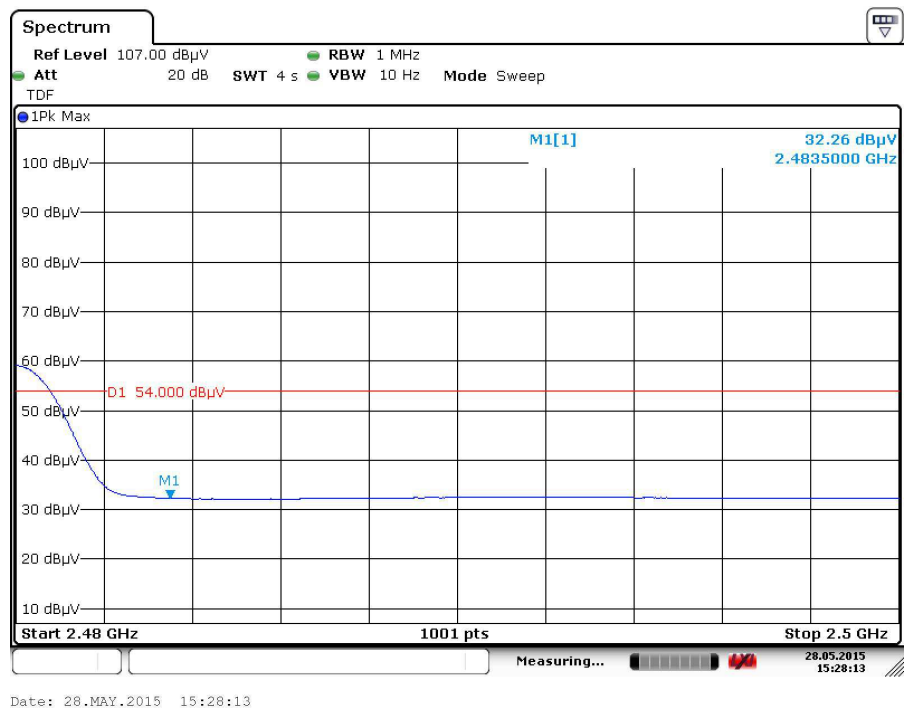
Radiated Bandedge (GFSK)

High Channel (Hor)



Spurious Emissions, Band Edge, 2.35-2.5G

High Channel (Ver)



Spurious Emissions, Band Edge, 2.35-2.5G

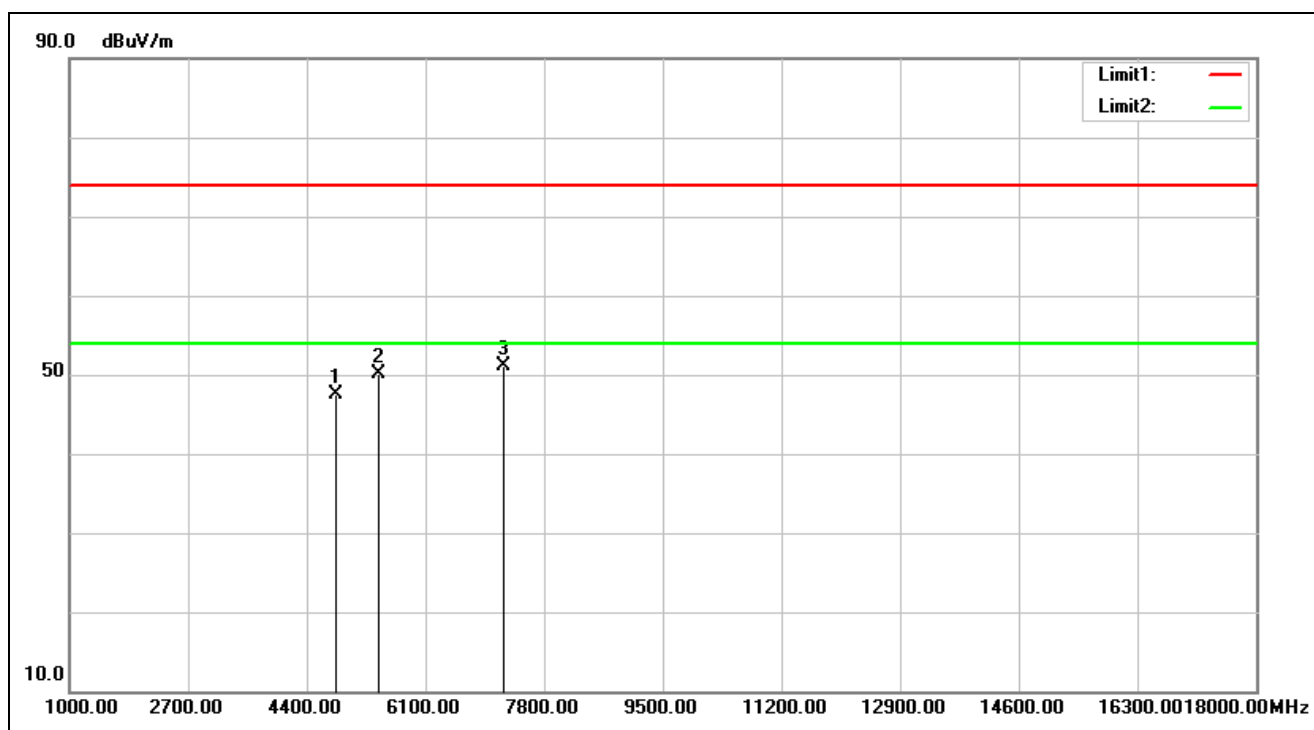
Spurious Emissions, TX Mode, 1-18G



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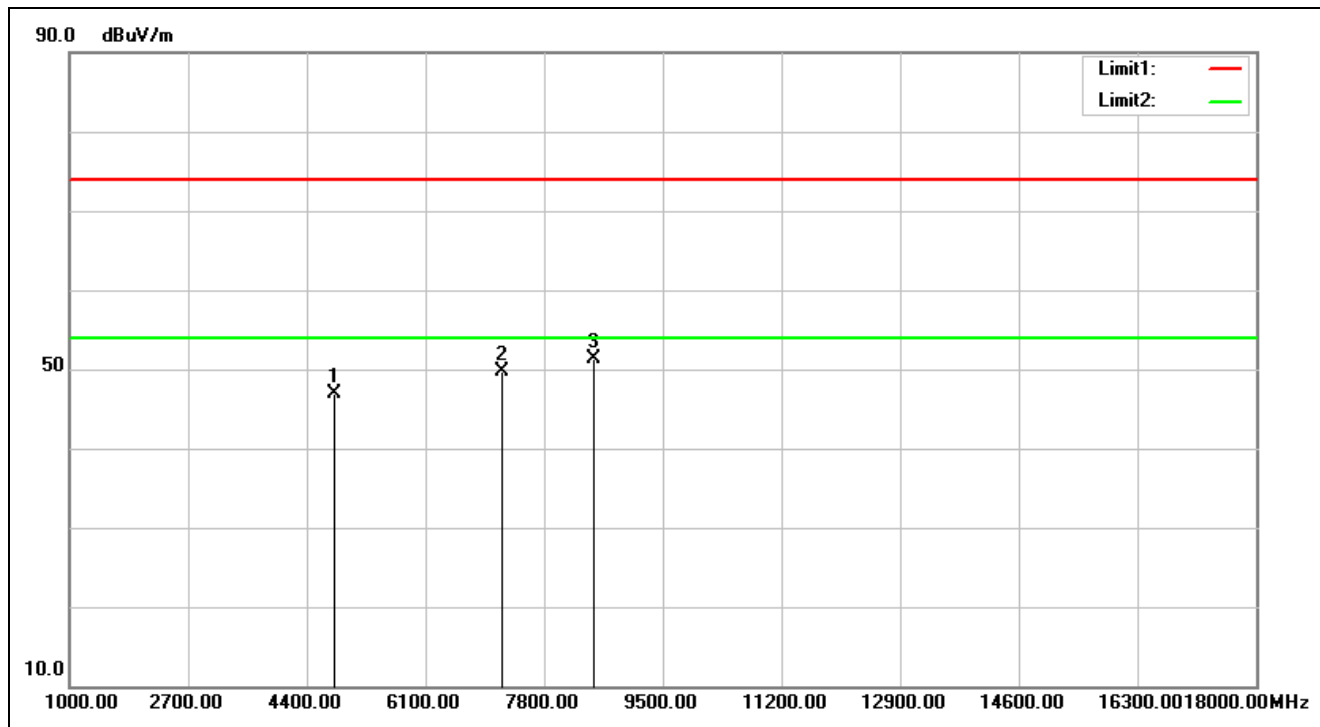
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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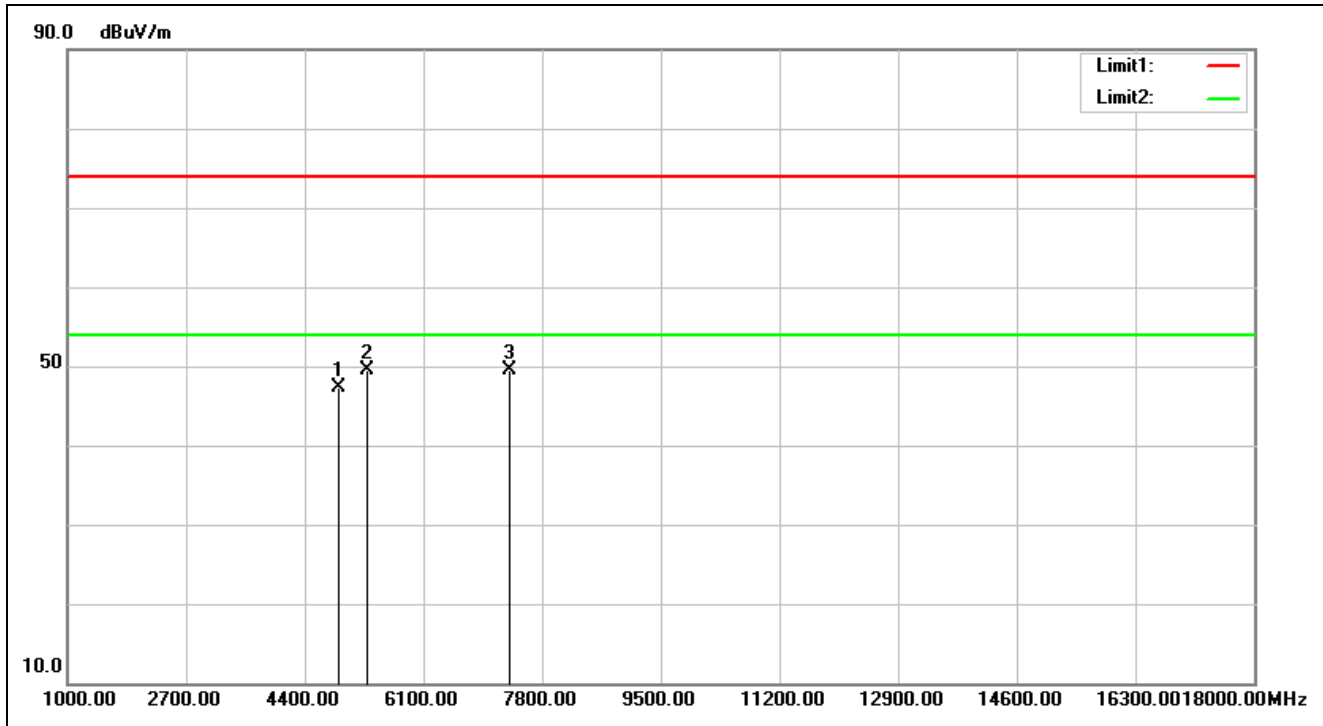
Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 14:50:17
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%)	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	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	49.84	47.49	74.00	-26.51	peak		0	
2	5420.000	0.39	49.72	50.11	74.00	-23.89	peak	100	122	
3	7206.000	5.78	45.38	51.16	74.00	-22.84	peak		0	



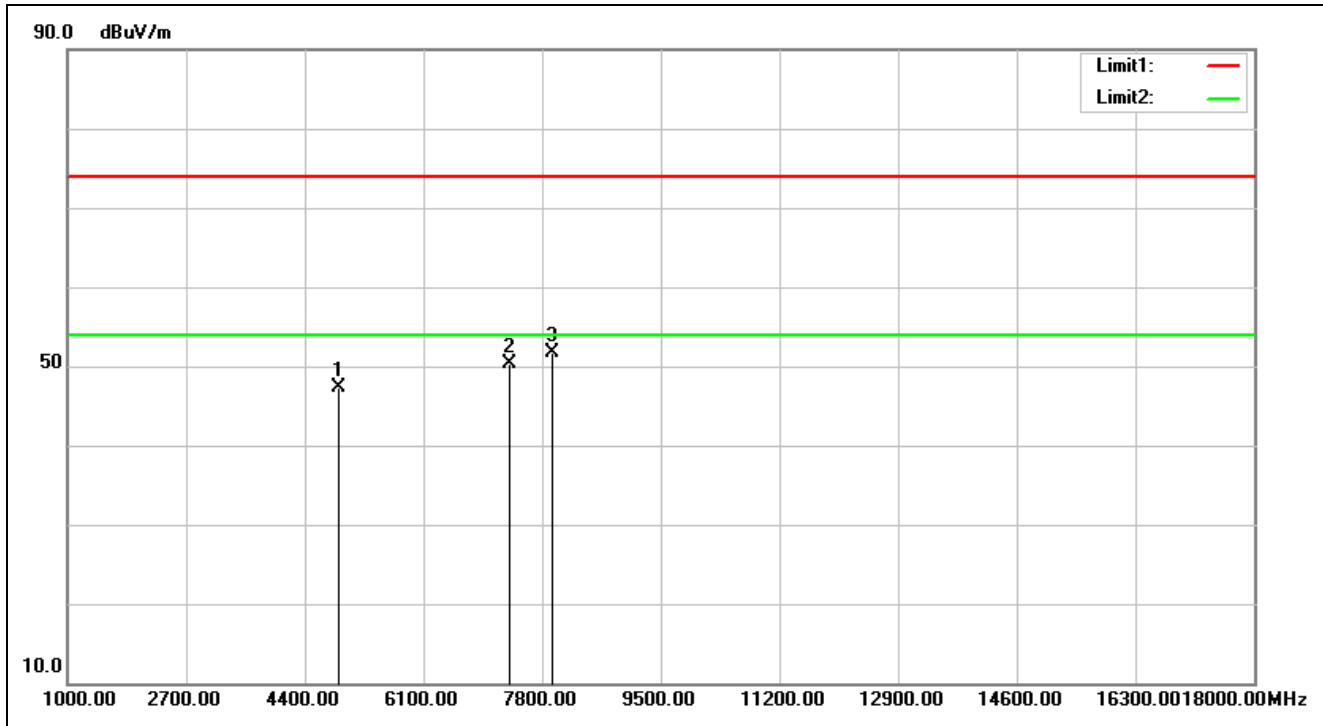
Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 14:51:20
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	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	49.17	46.82	74.00	-27.18	peak			
2	7206.000	5.78	43.85	49.63	74.00	-24.37	peak			
3	8514.000	6.73	44.64	51.37	74.00	-22.63	peak	100	358	



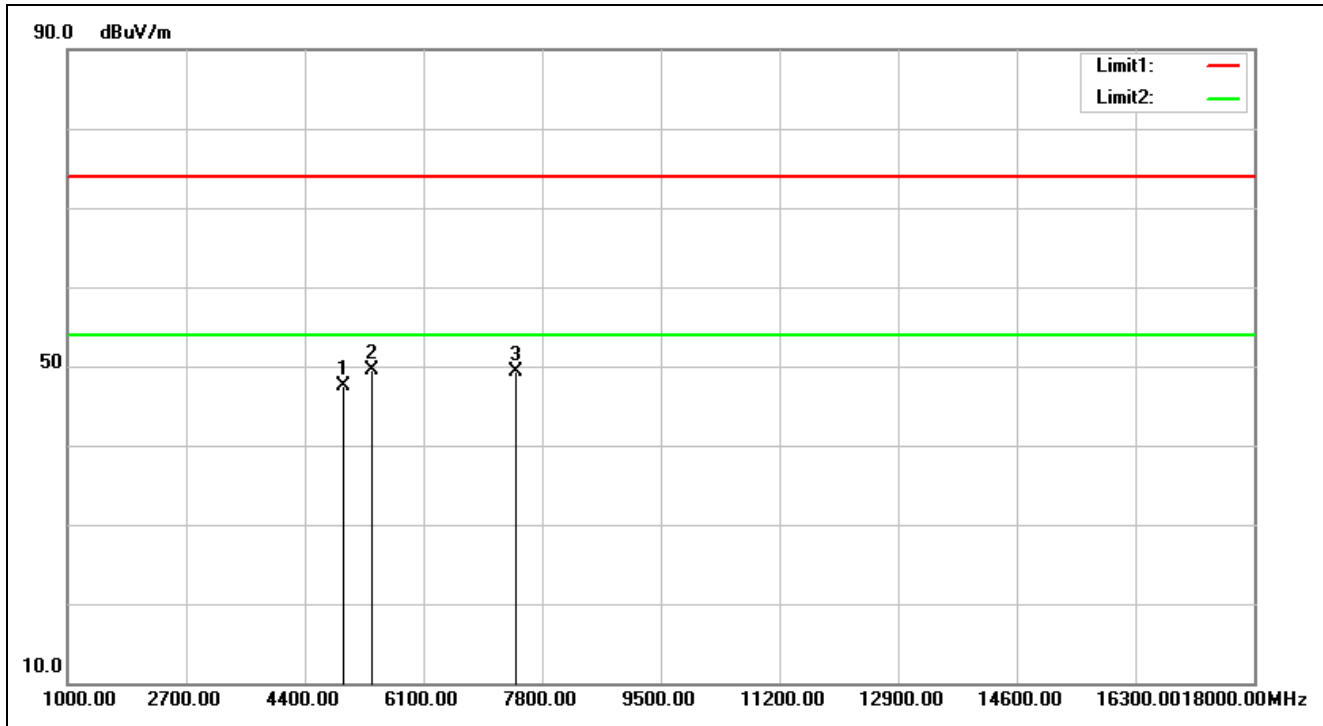
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Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 14:53:22
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%)	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	2442-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4884.000	-2.15	49.53	47.38	74.00	-26.62	peak			
2	5301.000	-0.24	49.76	49.52	74.00	-24.48	peak	100	307	
3	7326.000	6.14	43.44	49.58	74.00	-24.42	peak			



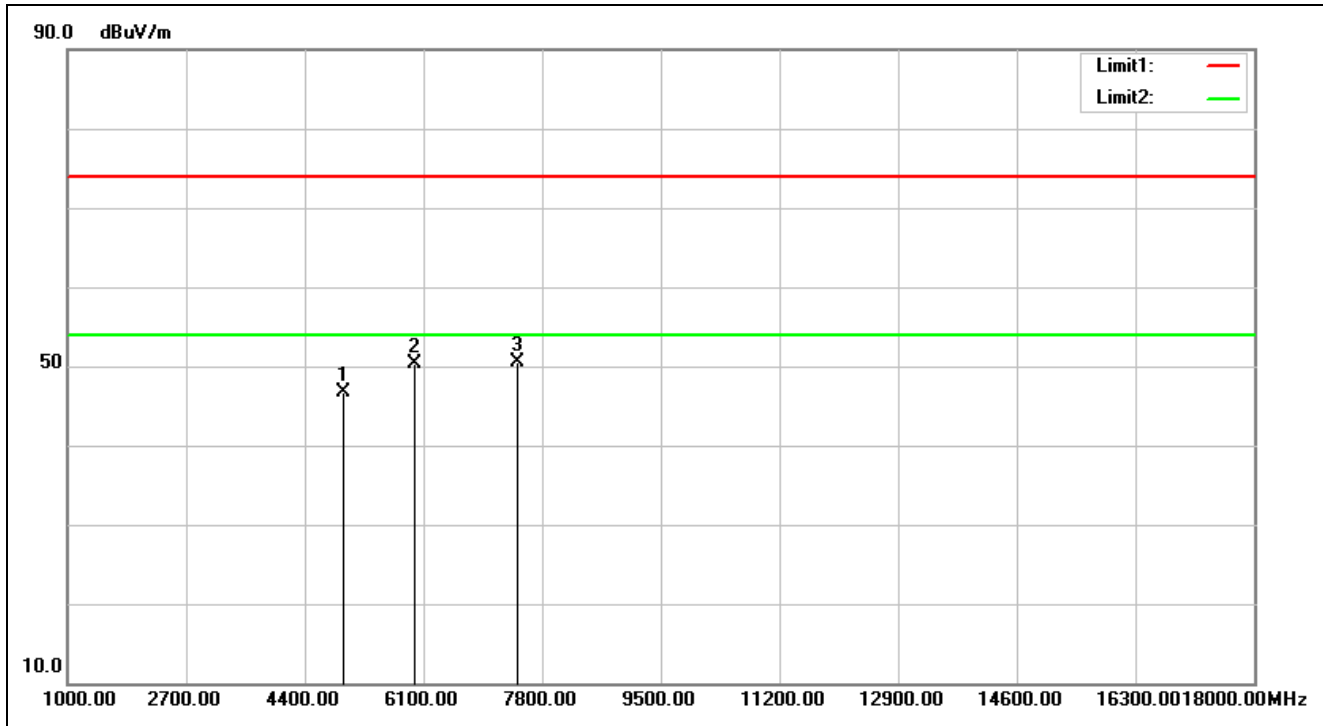
Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 14:54:24
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%)	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	2442-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4884.000	-2.15	49.54	47.39	74.00	-26.61	peak			
2	7326.000	6.14	44.19	50.33	74.00	-23.67	peak			
3	7936.000	6.58	45.11	51.69	74.00	-22.31	peak	100	299	



Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 14:56:36
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%)	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	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	49.49	47.52	74.00	-26.48	peak			
2	5369.000	0.12	49.34	49.46	74.00	-24.54	peak	100	14	
3	7440.000	6.47	42.89	49.36	74.00	-24.64	peak			



Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 14:57:38
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%)	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	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	48.62	46.65	74.00	-27.35	peak			
2	5964.000	3.85	46.43	50.28	74.00	-23.72	peak	100	0	
3	7440.000	6.47	43.98	50.45	74.00	-23.55	peak			

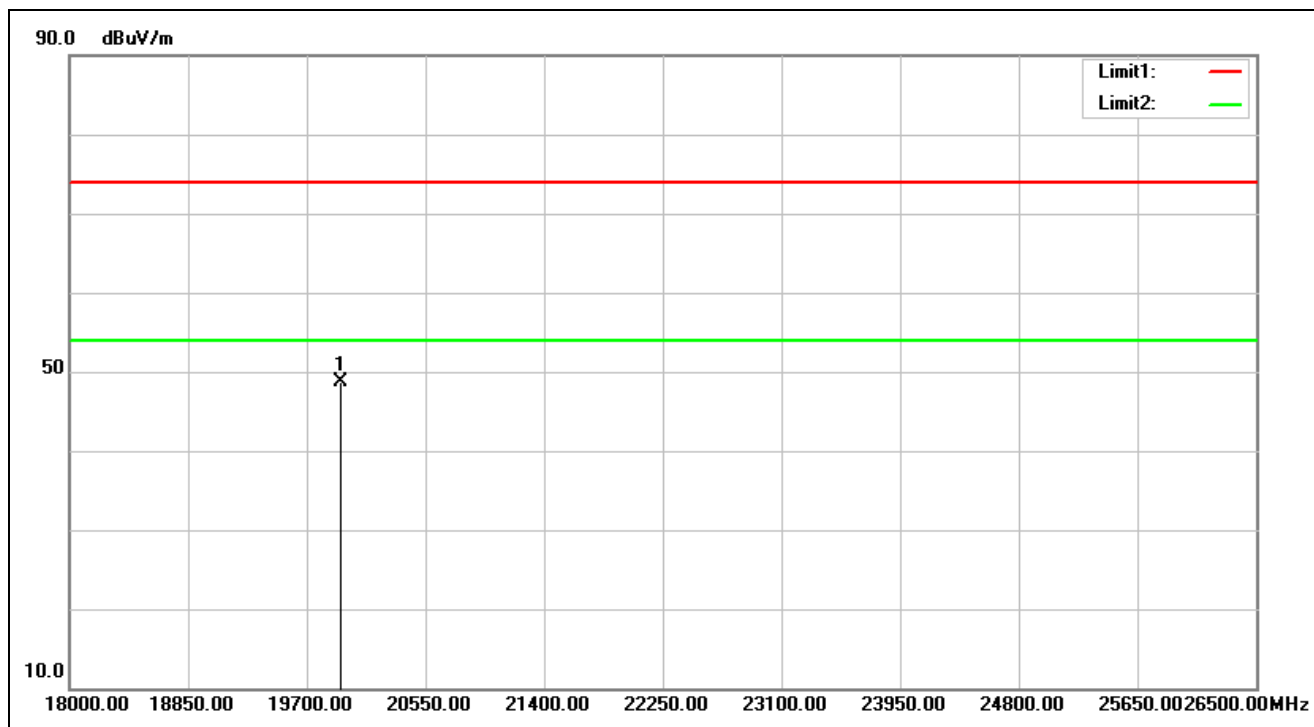
Spurious Emissions, TX Mode, 18-26G



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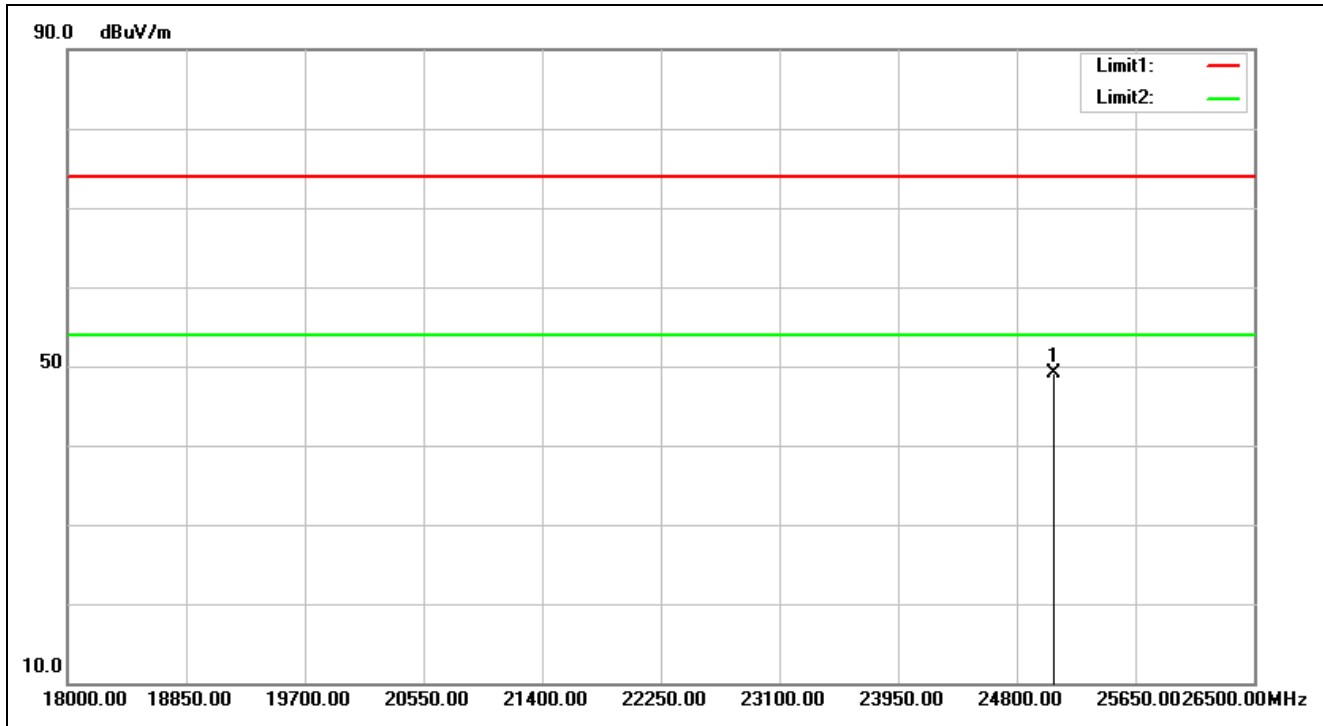
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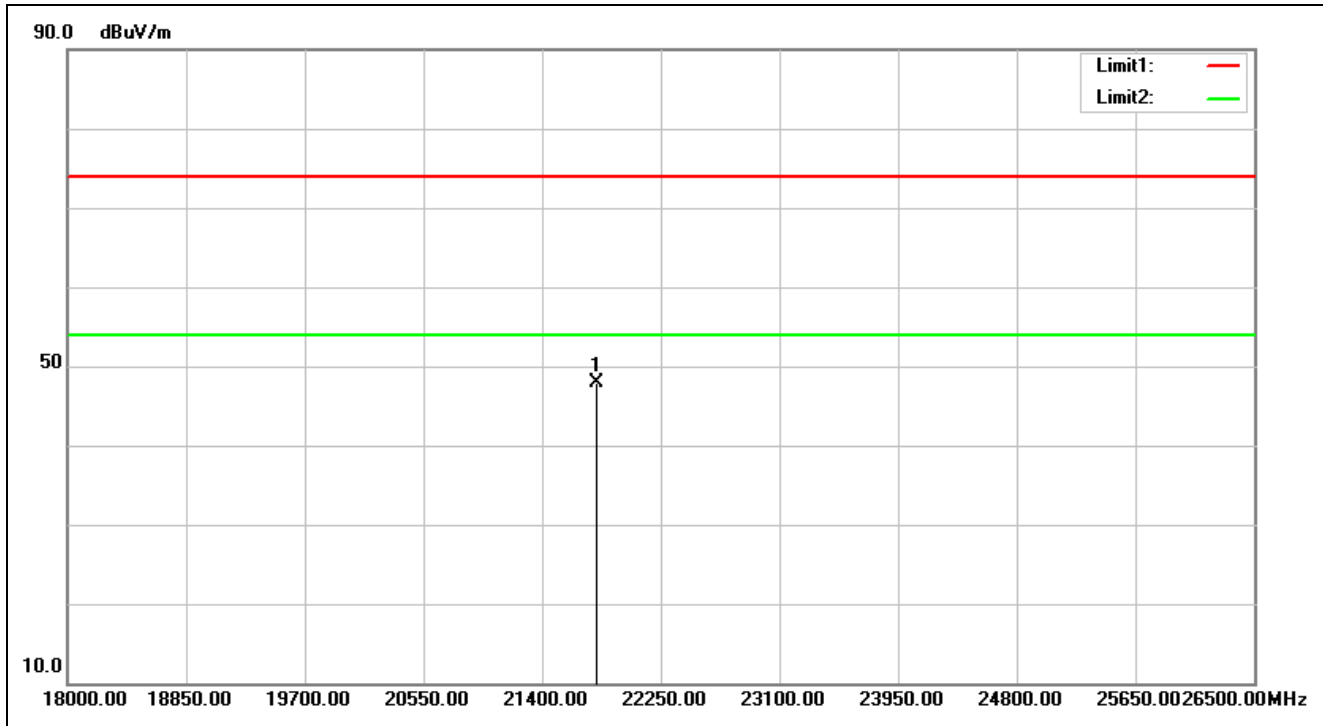
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Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 15:35:25
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%)	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	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	19946.500	28.93	19.79	48.72	74.00	-25.28	peak		0	



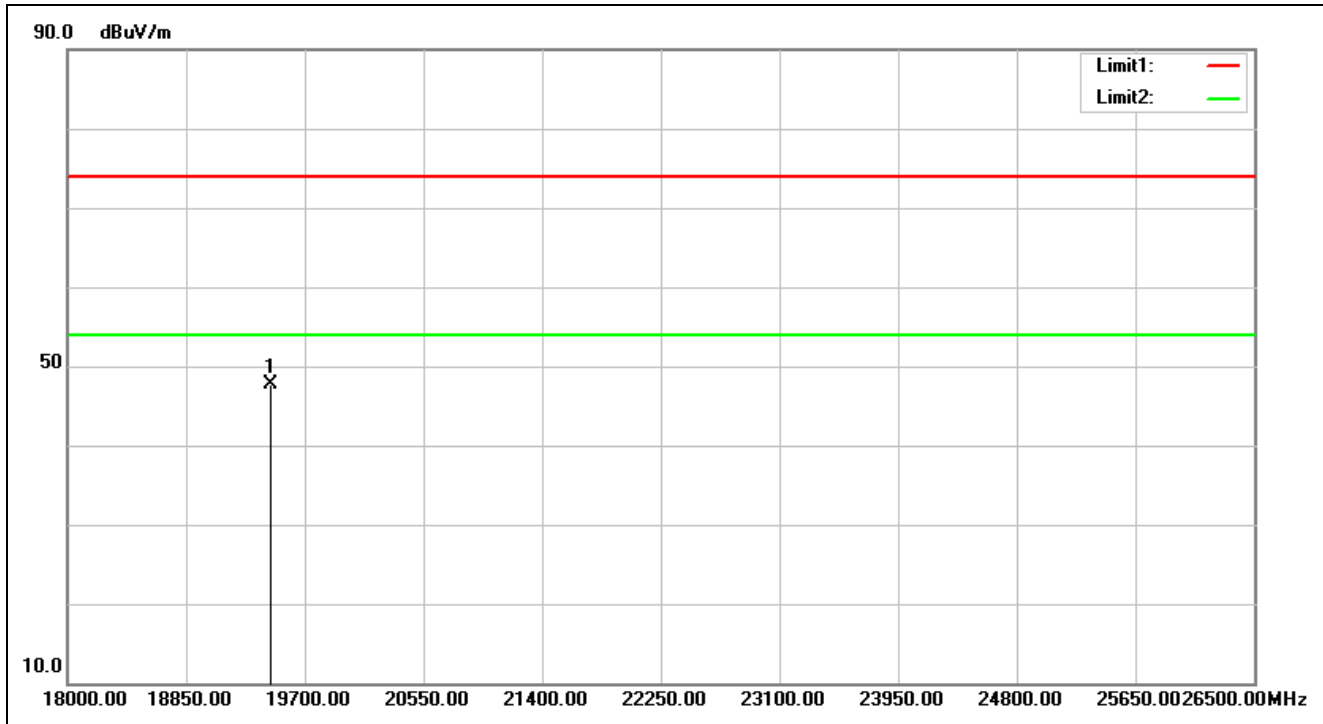
Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 15:35:33
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	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	25063.500	30.77	18.42	49.19	74.00	-24.81	peak			



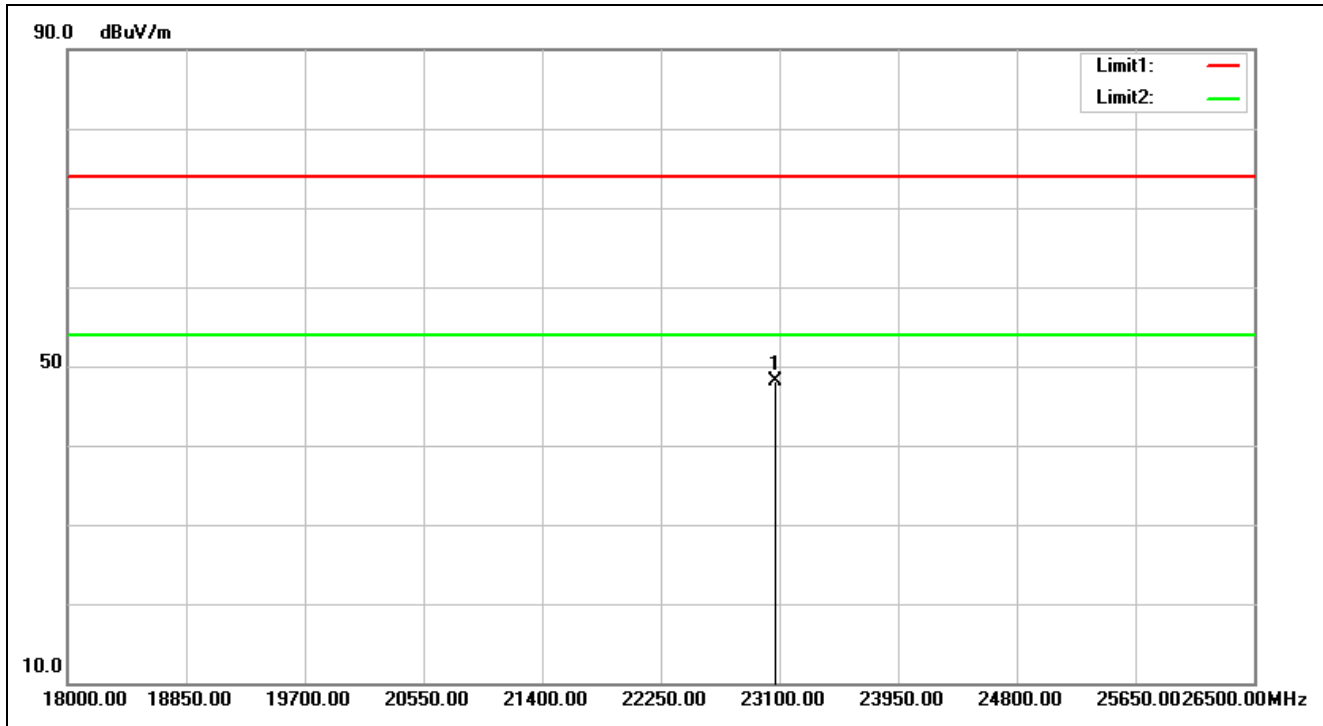
Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 15:35:46
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	2442-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21791.000	28.64	19.28	47.92	74.00	-26.08	peak			



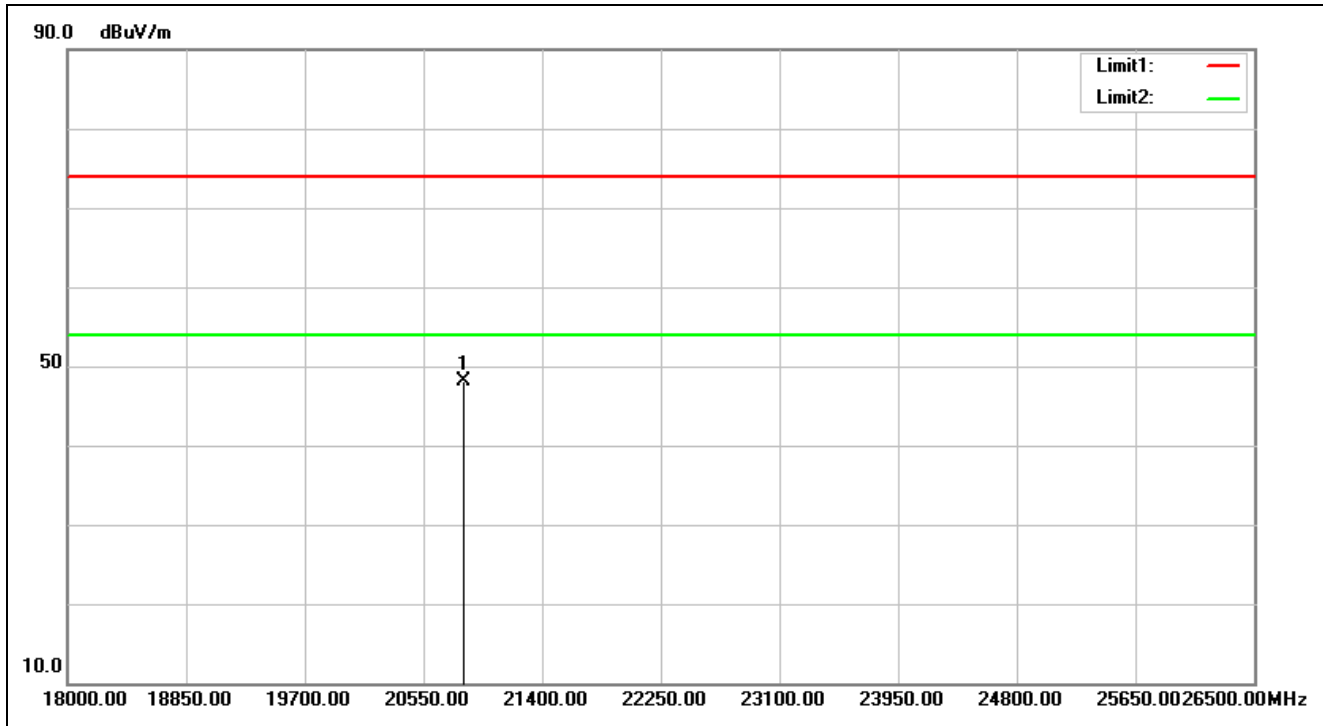
Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 15:35:54
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	2442-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19453.500	28.94	18.79	47.73	74.00	-26.27	peak			



Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 15:36:07
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	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	23074.500	29.84	18.29	48.13	74.00	-25.87	peak			



Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 15:36:31
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	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	20839.000	29.32	18.77	48.09	74.00	-25.91	peak			

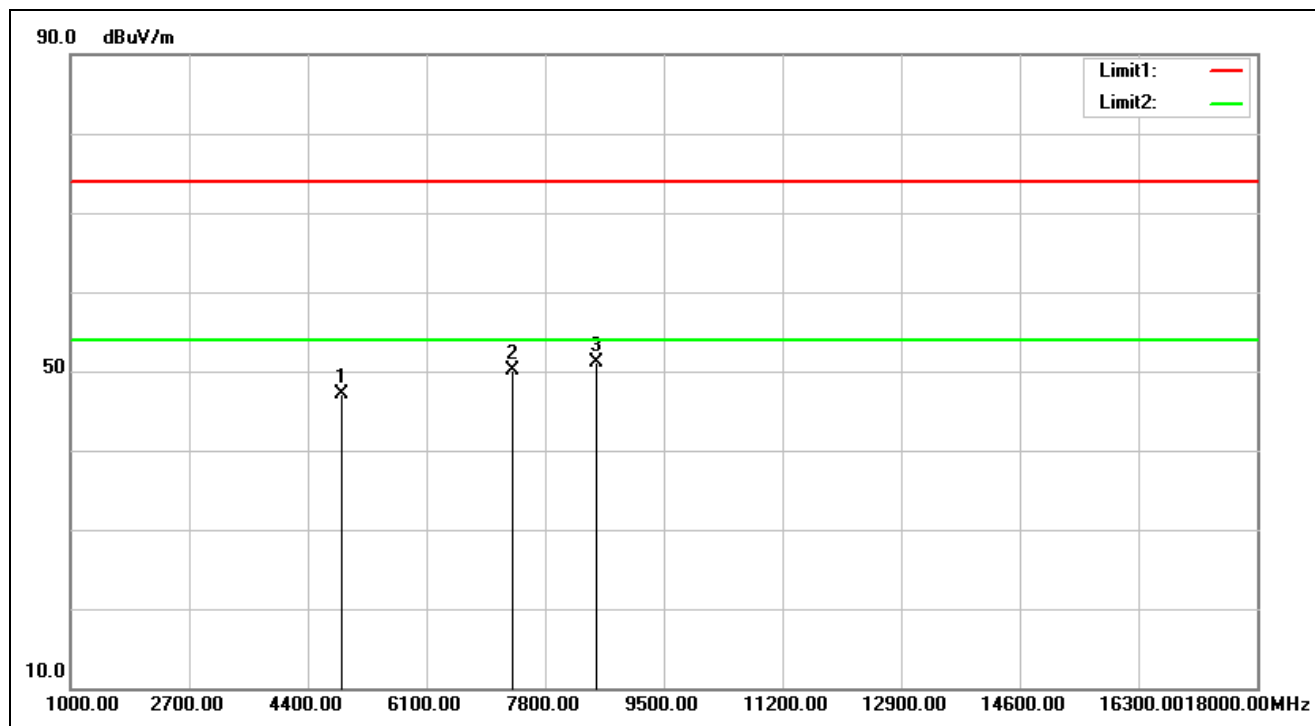
Spurious Emissions, TX Mode, For IC ,1-18G



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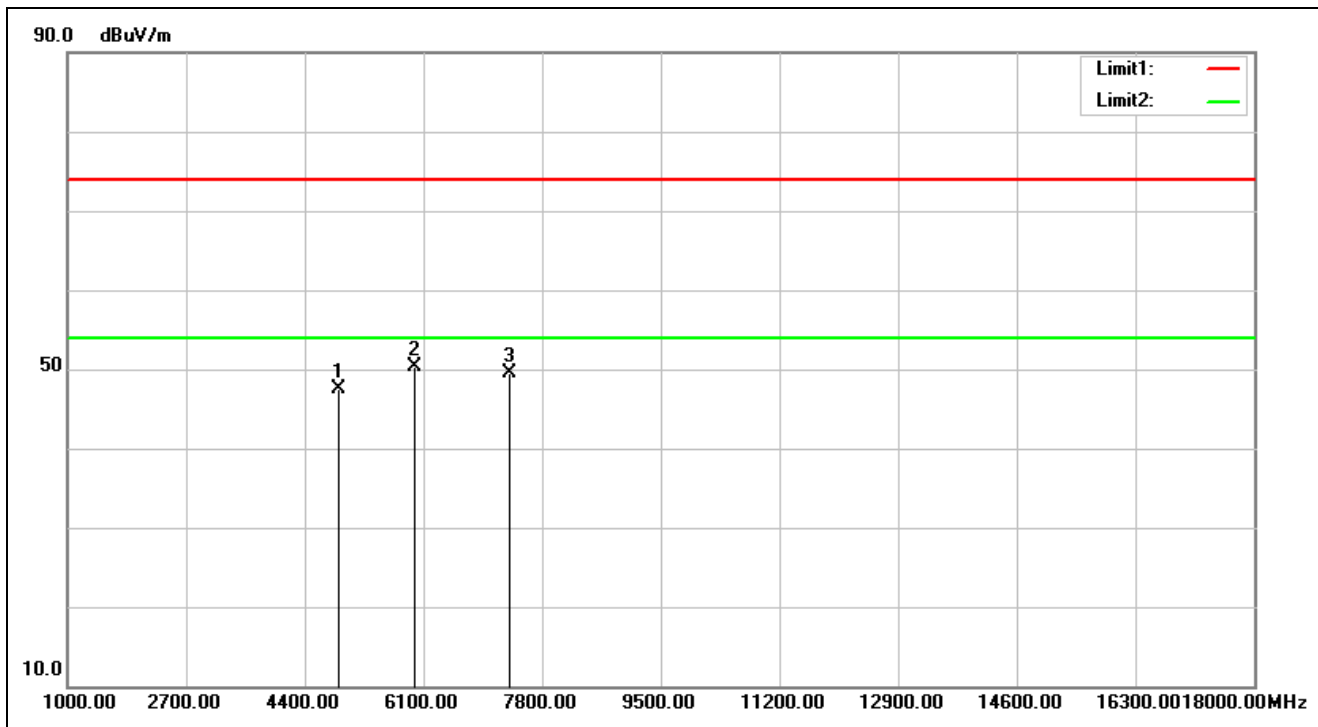
Tel: +886-2172-7000 fax: +886-2528-0018



Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	IC-Above 1G PEAK-H1.5m	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 15:11:40
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%)	19.4(°C)/55%
Model No.:	BM70abcdefg	Test Engineer:	Hugo Chang
Test Mode:	2442-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4884.000	-2.15	49.35	47.20	74.00	-26.80	peak		0	
2	7326.000	6.14	44.06	50.20	74.00	-23.80	peak		0	
3	8531.000	6.76	44.28	51.04	74.00	-22.96	peak	100	258	

Spurious Emissions, TX Mode, 18-26G



Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	IC-Above 1G PEAK-H1.5m	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 15:12:42
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%)	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	2442-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4884.000	-2.15	49.64	47.49	74.00	-26.51	peak			
2	5981.000	3.95	46.44	50.39	74.00	-23.61	peak	100	81	
3	7326.000	6.14	43.35	49.49	74.00	-24.51	peak			

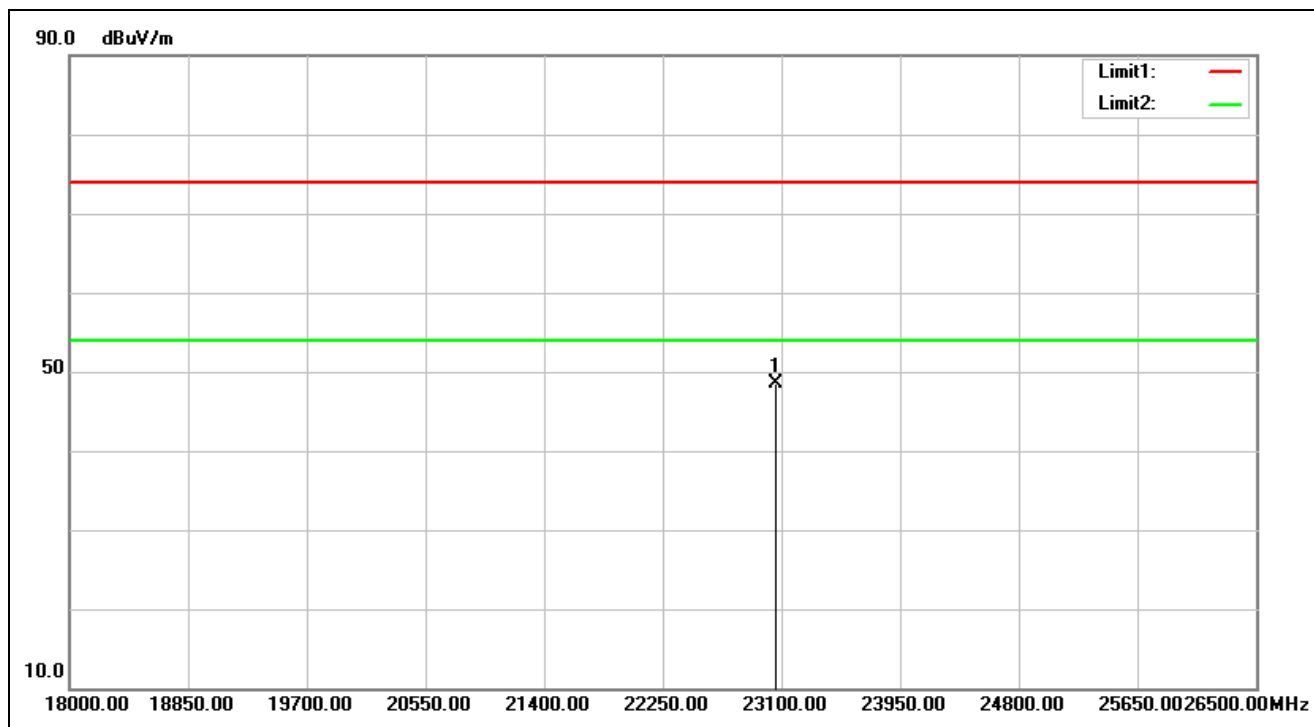
Spurious Emissions, TX Mode, For IC ,18-26.5G



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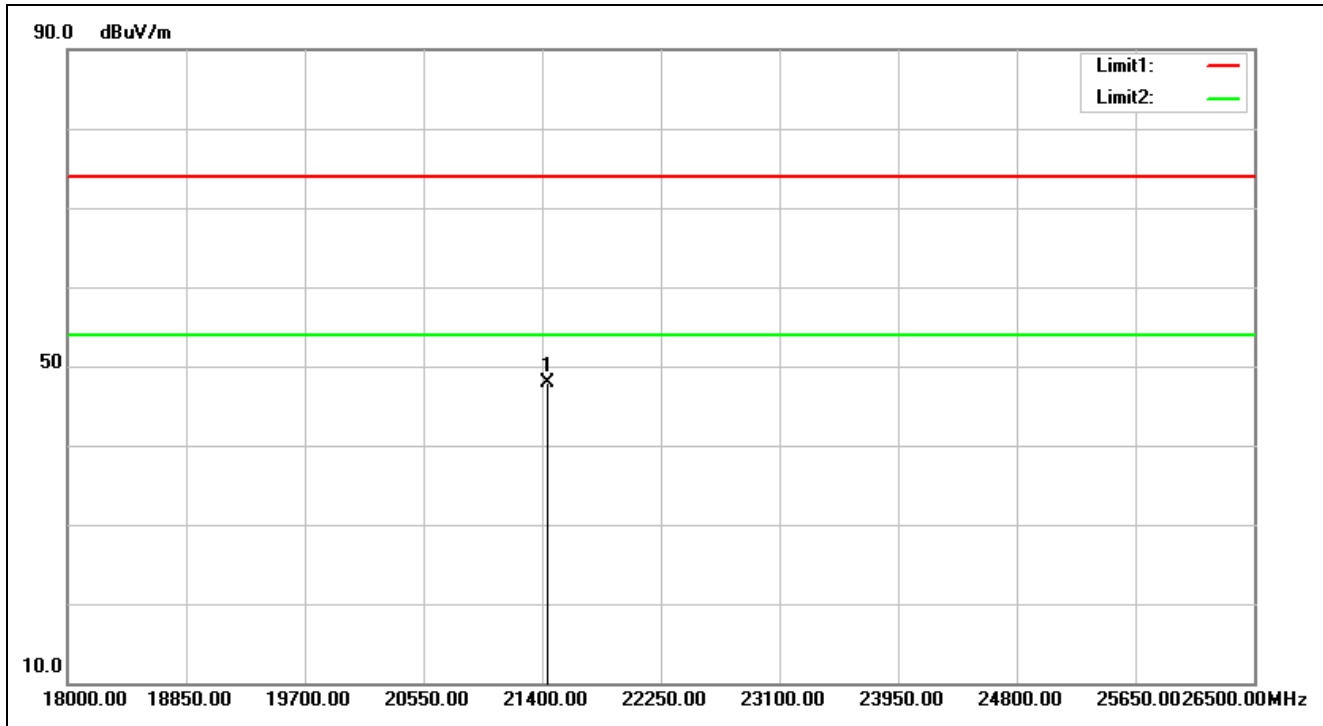
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Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	IC-Above 1G PEAK-H1.5m	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 15:34:12
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	2442-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23057.500	29.86	18.57	48.43	74.00	-25.57	peak	100	6	



Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	IC-Above 1G PEAK-H1.5m	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 15:34:21
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	2442-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21442.500	28.98	19.02	48.00	74.00	-26.00	peak	100	120	

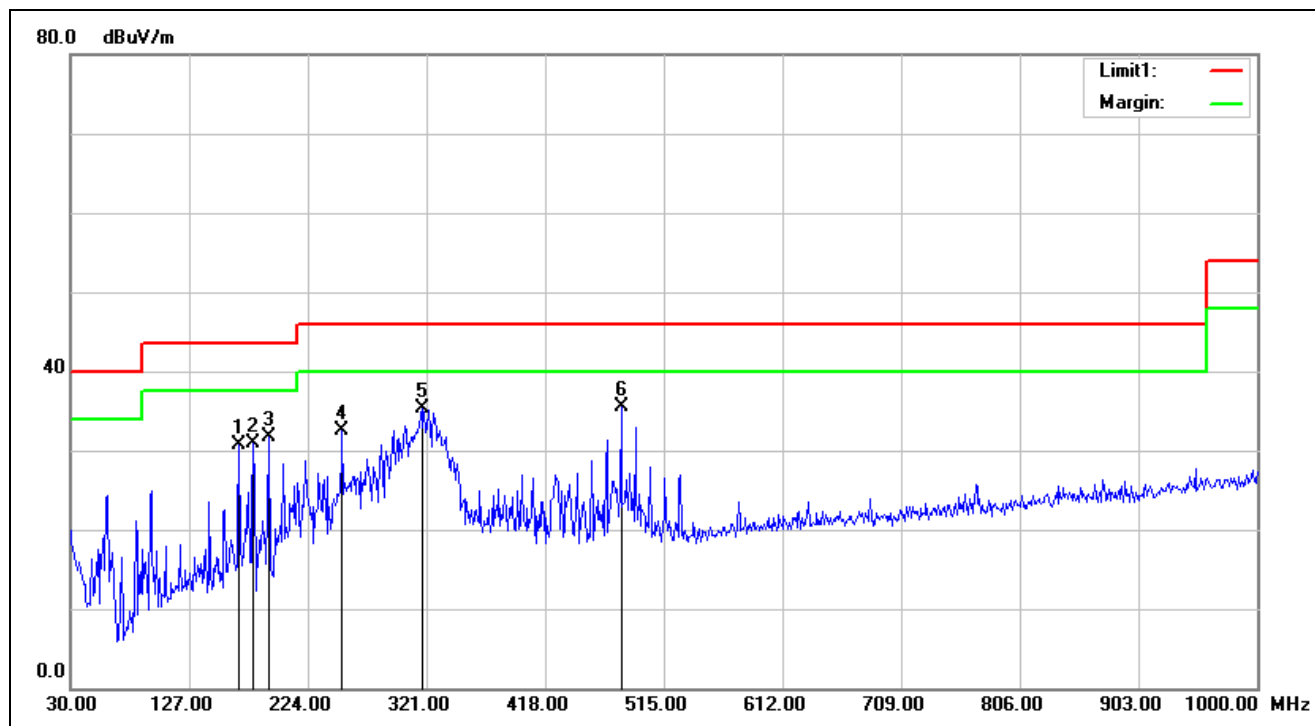
Spurious Emissions, TX Mode, 30M-1G



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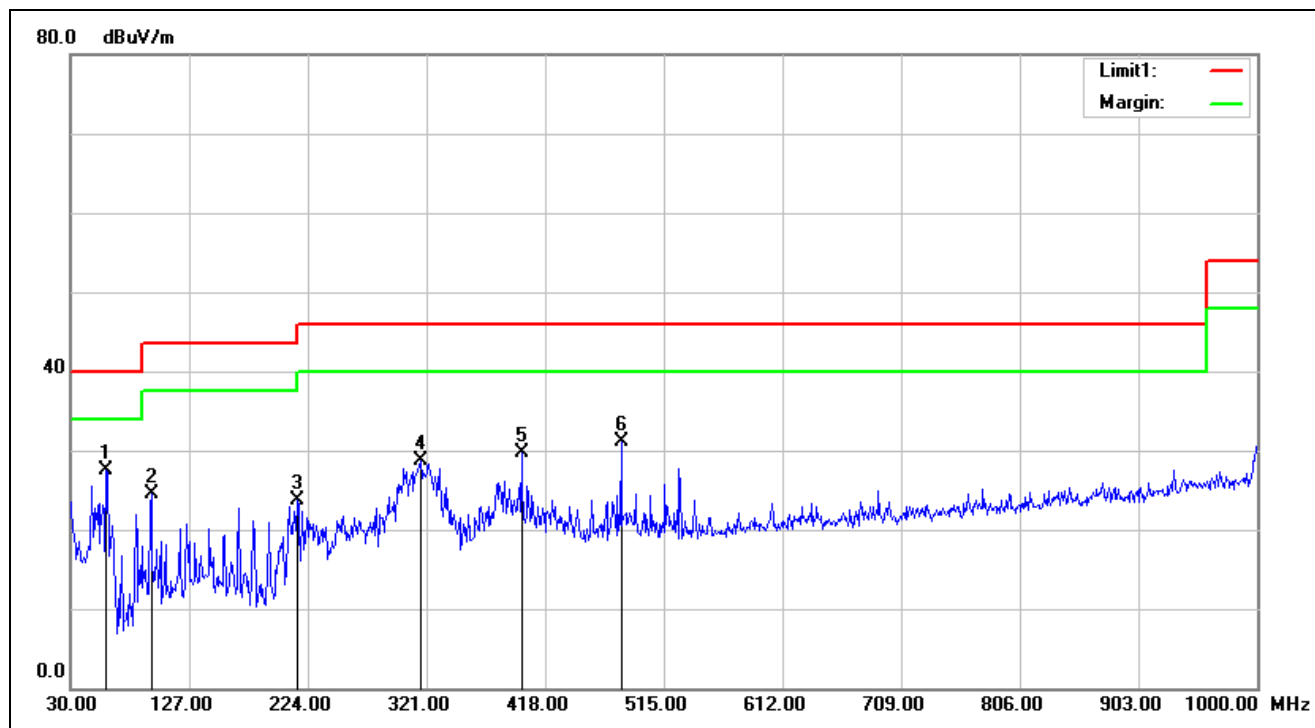
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Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 13:37:48
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	2442-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	167.7400	-14.55	45.20	30.65	43.50	-12.85	QP	100	242	
2	179.3800	-15.55	46.51	30.96	43.50	-12.54	QP	100	239	
3	191.9900	-15.21	46.99	31.78	43.50	-11.72	QP	100	245	
4	252.1300	-11.45	43.89	32.44	46.00	-13.56	QP	100	280	
5	317.1200	-10.12	45.45	35.33	46.00	-10.67	QP	100	141	
6	480.0800	-7.55	43.07	35.52	46.00	-10.48	QP	100	242	

Spurious Emissions, RX Mode, 1-18G



Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 13:38:51
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%)	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	2442-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	59.1000	-19.47	47.07	27.60	40.00	-12.40	QP	100	235	
2	95.9600	-15.43	39.98	24.55	43.50	-18.95	QP	100	85	
3	215.2700	-14.29	38.09	23.80	43.50	-19.70	QP	100	46	
4	316.1500	-10.14	38.94	28.80	46.00	-17.20	QP	100	147	
5	398.6000	-8.68	38.30	29.62	46.00	-16.38	QP	100	198	
6	480.0800	-7.55	38.63	31.08	46.00	-14.92	QP	100	160	

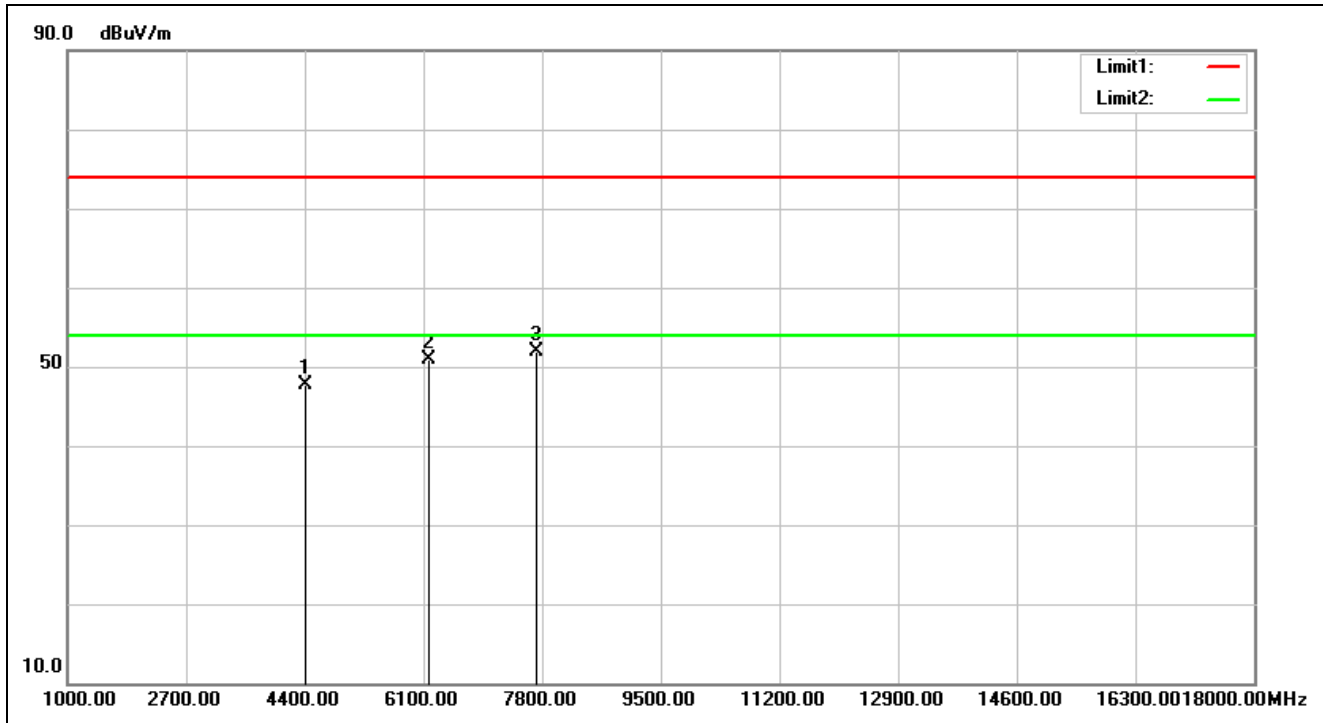
Spurious Emissions, RX Mode, 1-18G



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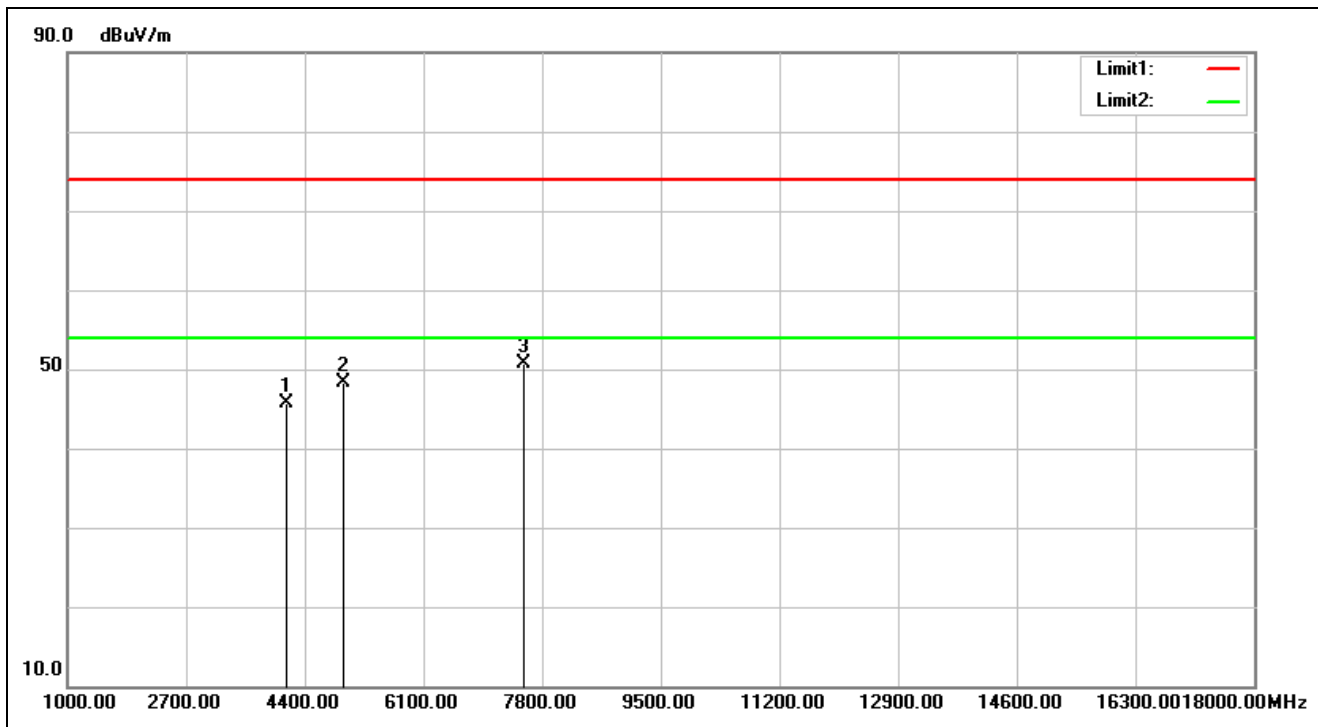
Tel: +886-2172-7000 fax: +886-2528-0018



Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 14:59:26
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%)	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	2402-RX		
Remark:			

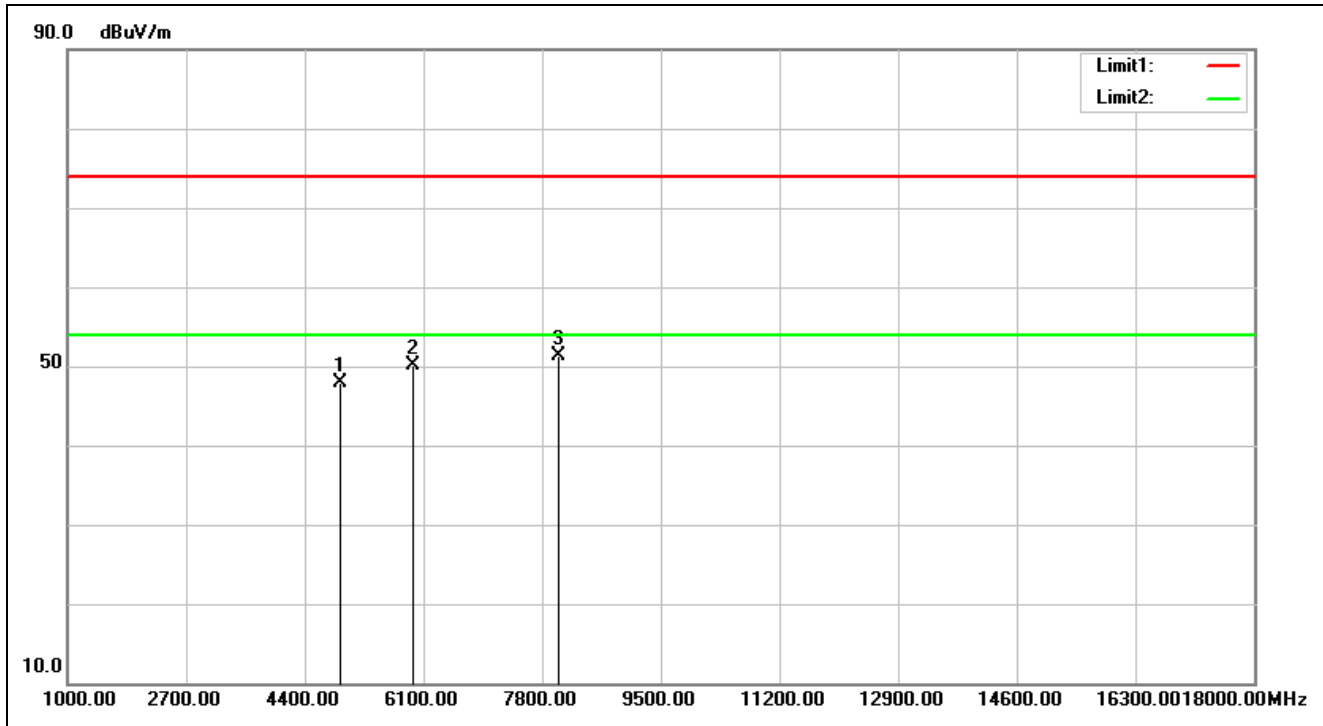
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4400.000	-3.50	51.15	47.65	74.00	-26.35	peak	100	277	
2	6168.000	4.73	46.08	50.81	74.00	-23.19	peak	100	307	
3	7715.000	6.62	45.33	51.95	74.00	-22.05	peak	100	160	

Spurious Emissions, RX Mode, 1-18G



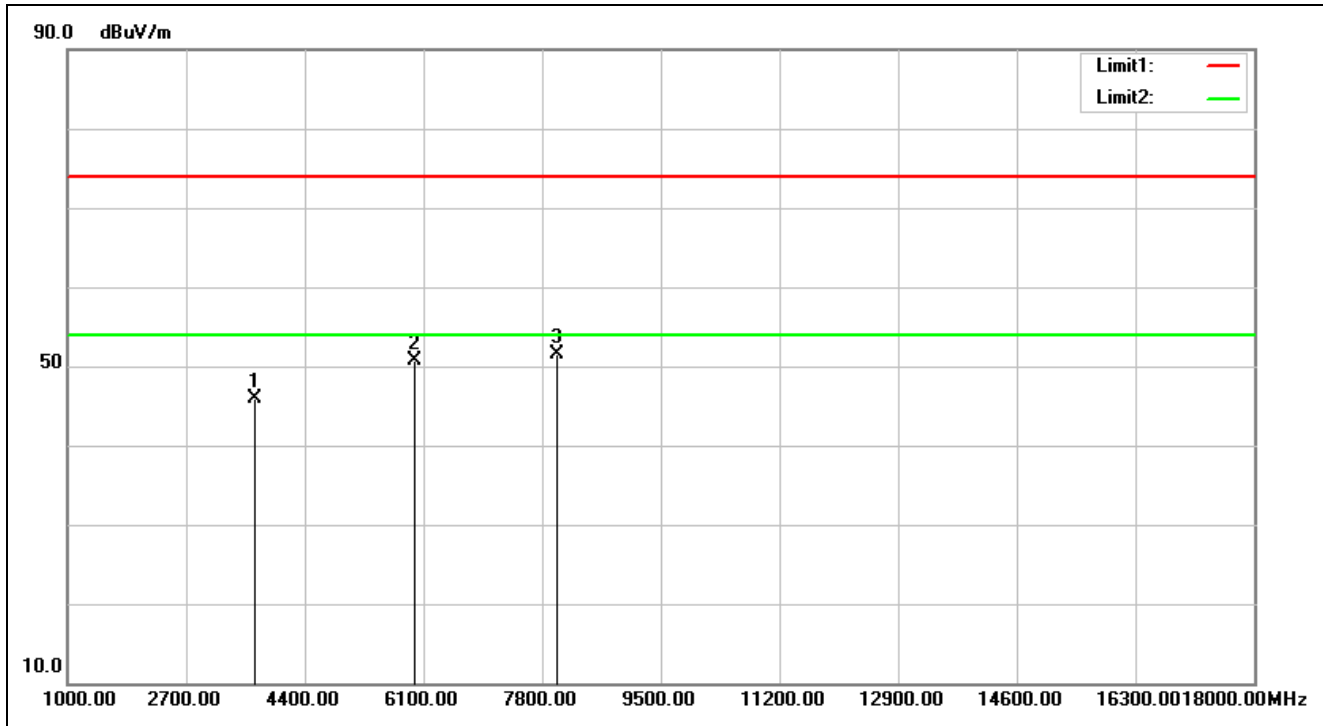
Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 15:00:29
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	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	4128.000	-4.58	50.21	45.63	74.00	-28.37	peak	100	255	
2	4961.000	-1.97	50.24	48.27	74.00	-25.73	peak	100	285	
3	7528.000	6.66	44.14	50.80	74.00	-23.20	peak	100	164	



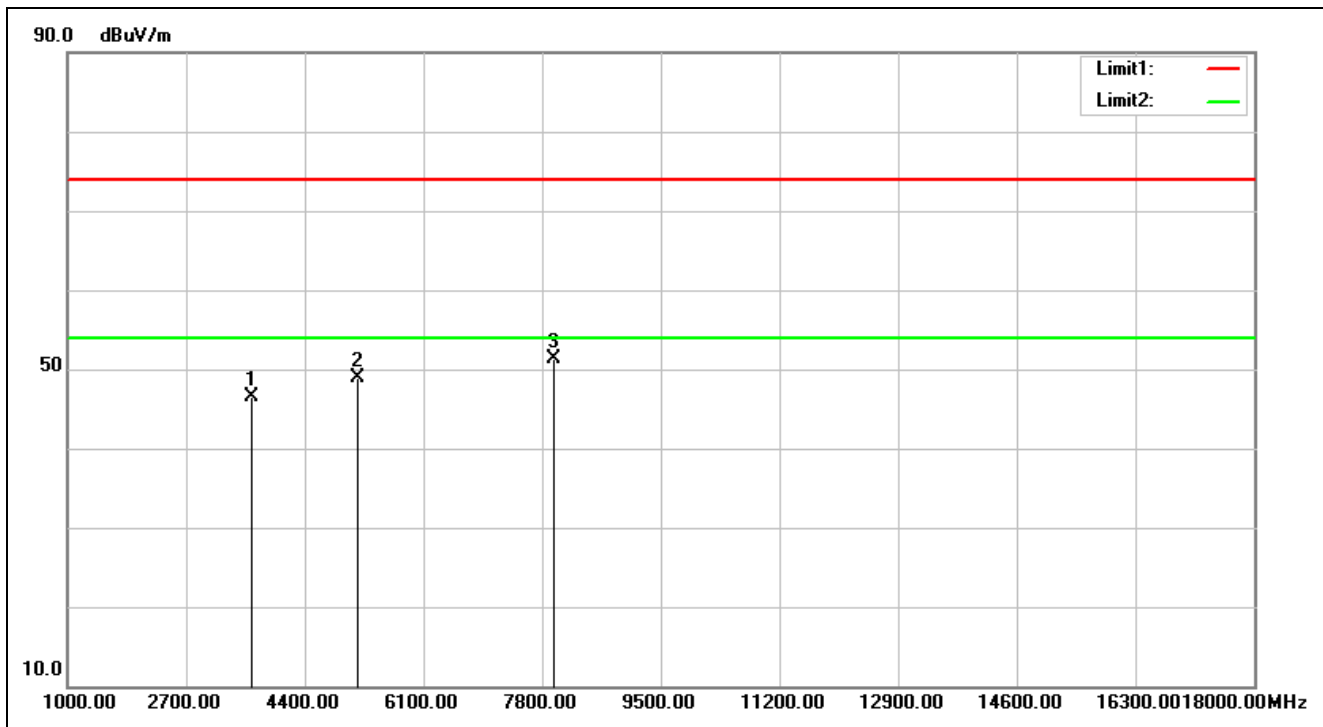
Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 15:01:54
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%)	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	2442-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4910.000	-2.08	49.99	47.91	74.00	-26.09	peak	100	243	
2	5947.000	3.74	46.35	50.09	74.00	-23.91	peak	100	202	
3	8038.000	6.57	44.64	51.21	74.00	-22.79	peak	100	168	



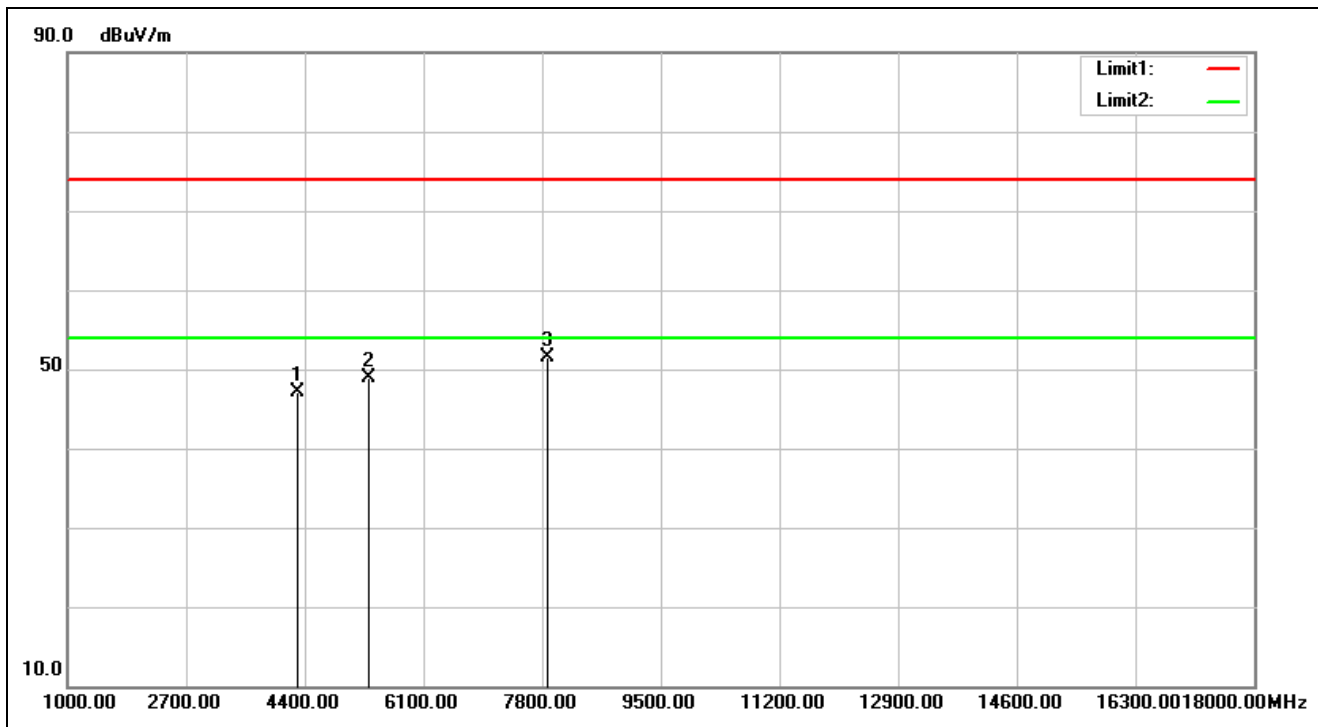
Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 15:02:56
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%)	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	2442-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	3686.000	-5.36	51.28	45.92	74.00	-28.08	peak	100	144	
2	5981.000	3.95	46.84	50.79	74.00	-23.21	peak	100	338	
3	8021.000	6.57	44.95	51.52	74.00	-22.48	peak	100	0	



Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 15:05:57
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	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	3635.000	-5.41	51.97	46.56	74.00	-27.44	peak	100	22	
2	5165.000	-0.98	49.83	48.85	74.00	-25.15	peak	100	152	
3	7970.000	6.57	44.75	51.32	74.00	-22.68	peak	100	69	



Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 15:07:00
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	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	4298.000	-3.89	50.92	47.03	74.00	-26.97	peak	100	349	
2	5318.000	-0.15	49.12	48.97	74.00	-25.03	peak	100	286	
3	7885.000	6.59	44.96	51.55	74.00	-22.45	peak	100	9	

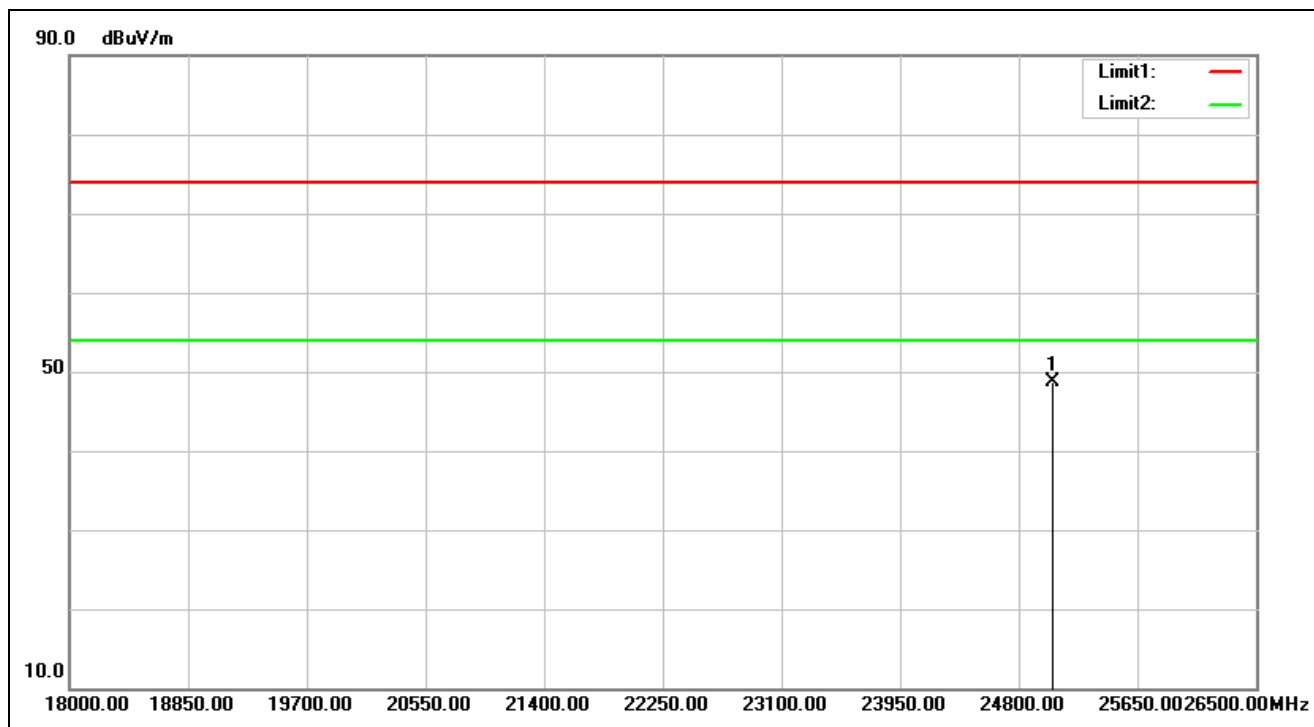
Spurious Emissions, RX Mode, 18-26G



TUV Taiwan

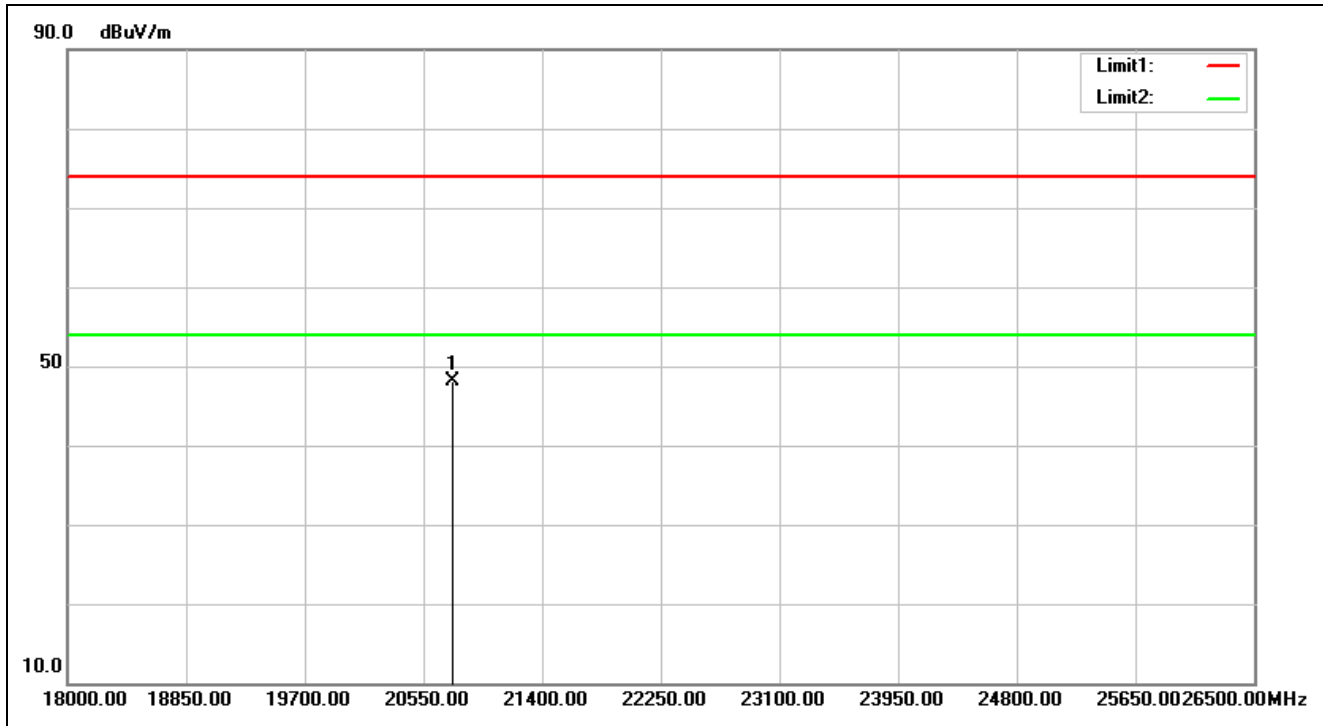
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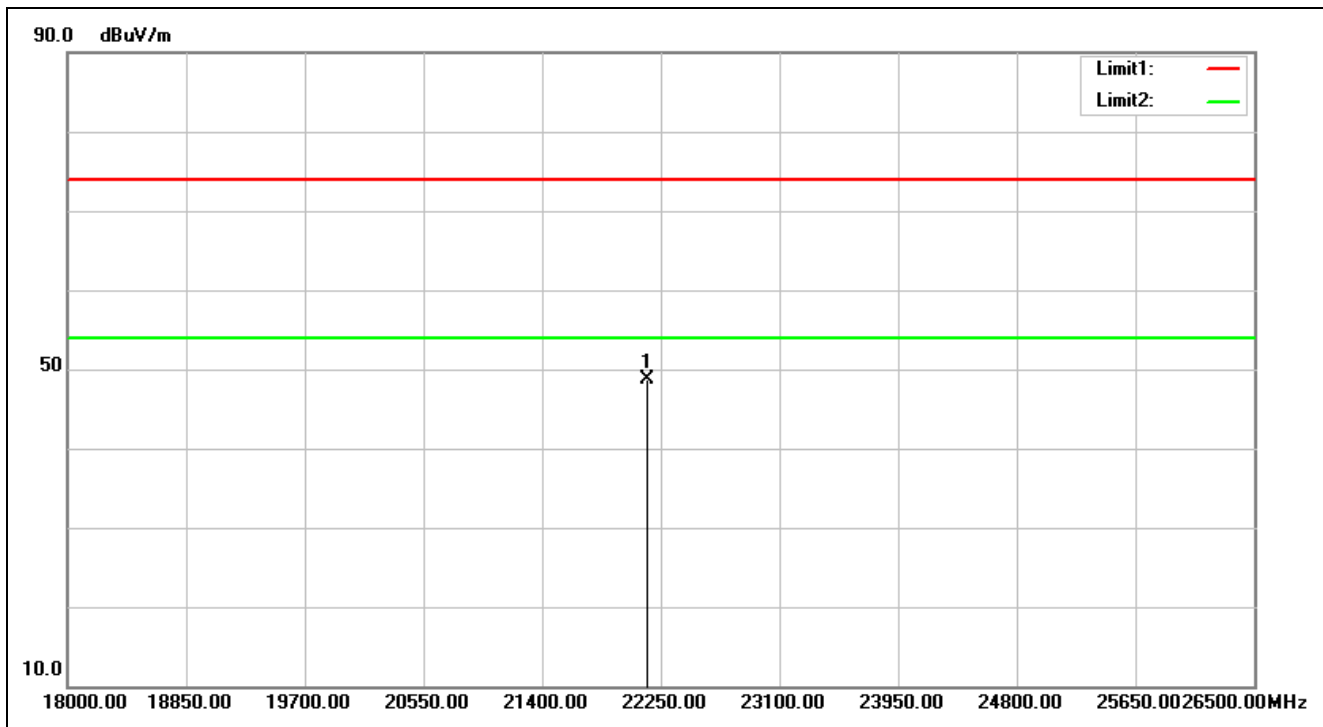
Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 15:36:45
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	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	25046.500	30.75	17.95	48.70	74.00	-25.30	peak		0	



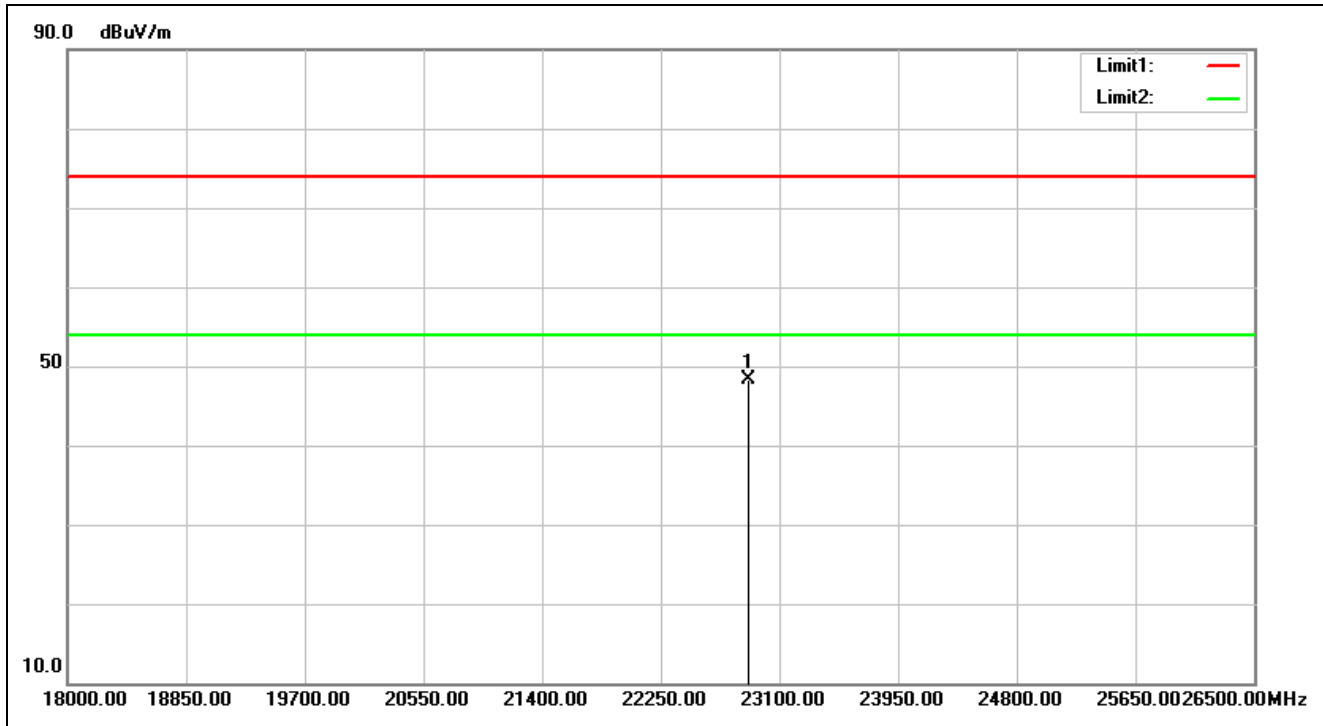
Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 15:36:53
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefghijklm	Test Engineer:	Hugo Chang
Test Mode:	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	20754.000	29.30	18.75	48.05	74.00	-25.95	peak			



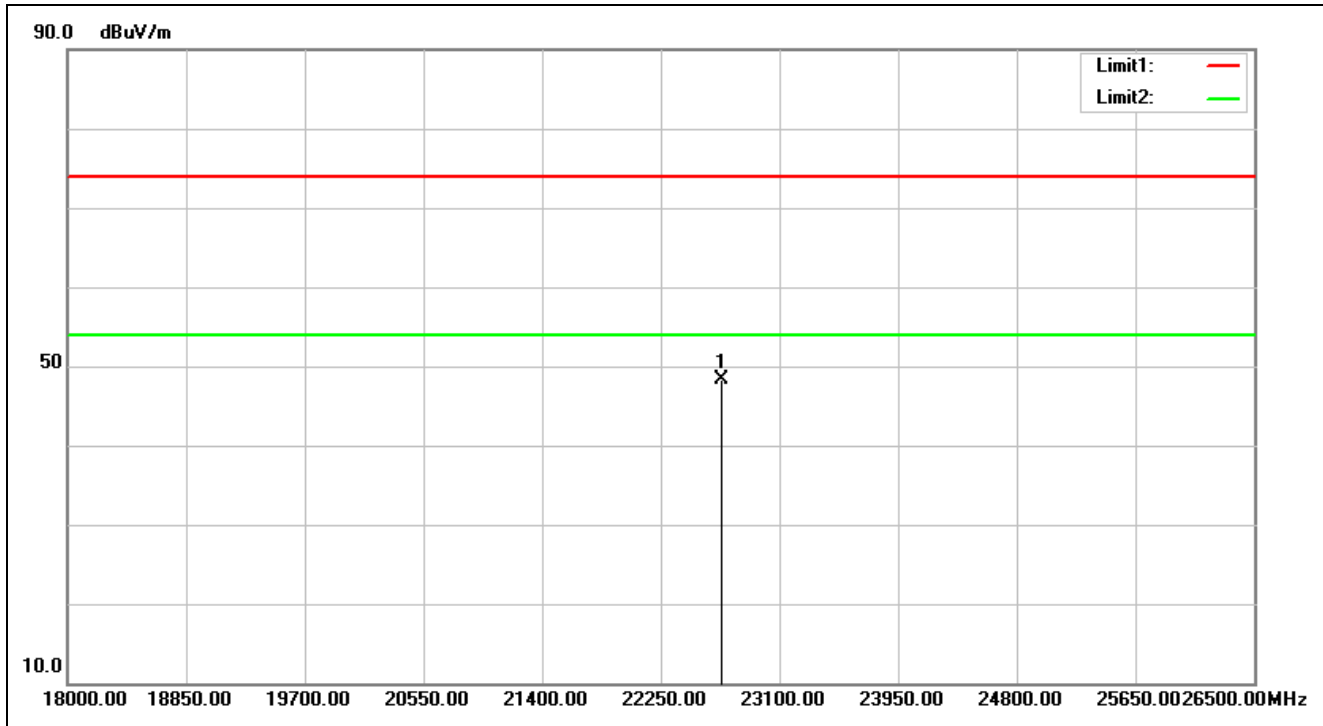
Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 15:37:05
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefg	Test Engineer:	Hugo Chang
Test Mode:	2442-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22148.000	28.67	20.09	48.76	74.00	-25.24	peak			



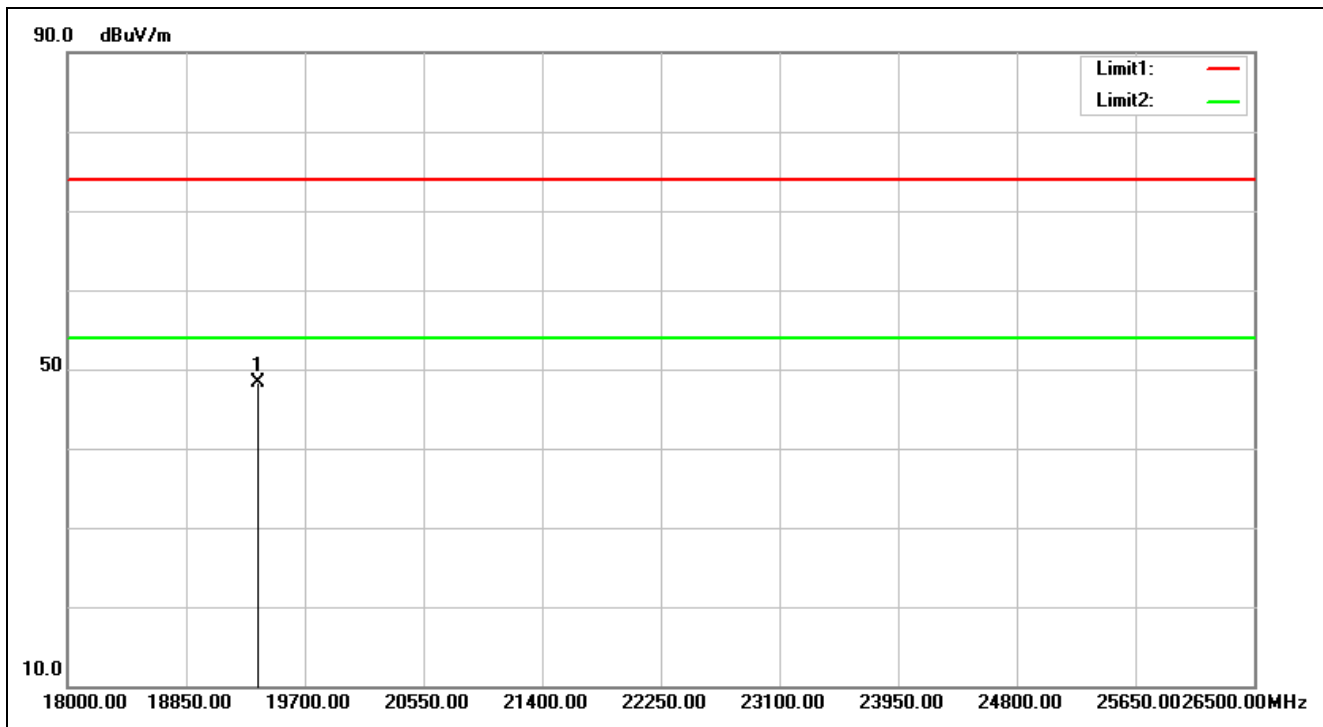
Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 15:37:14
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	2442-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22879.000	29.75	18.63	48.38	74.00	-25.62	peak			



Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 15:37:27
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	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	22683.500	29.49	18.81	48.30	74.00	-25.70	peak			



Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 15:37:35
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	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	19360.000	28.93	19.47	48.40	74.00	-25.60	peak			

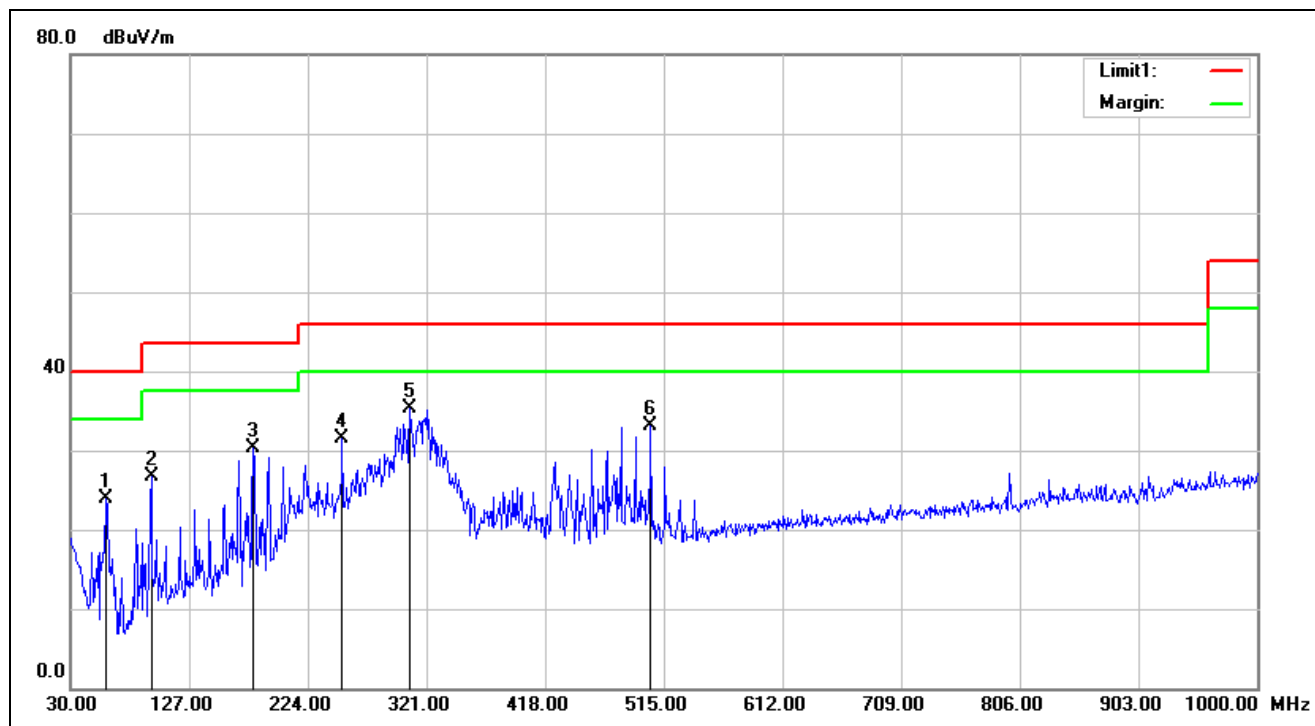
Spurious Emissions, RX Mode, 30M-1G



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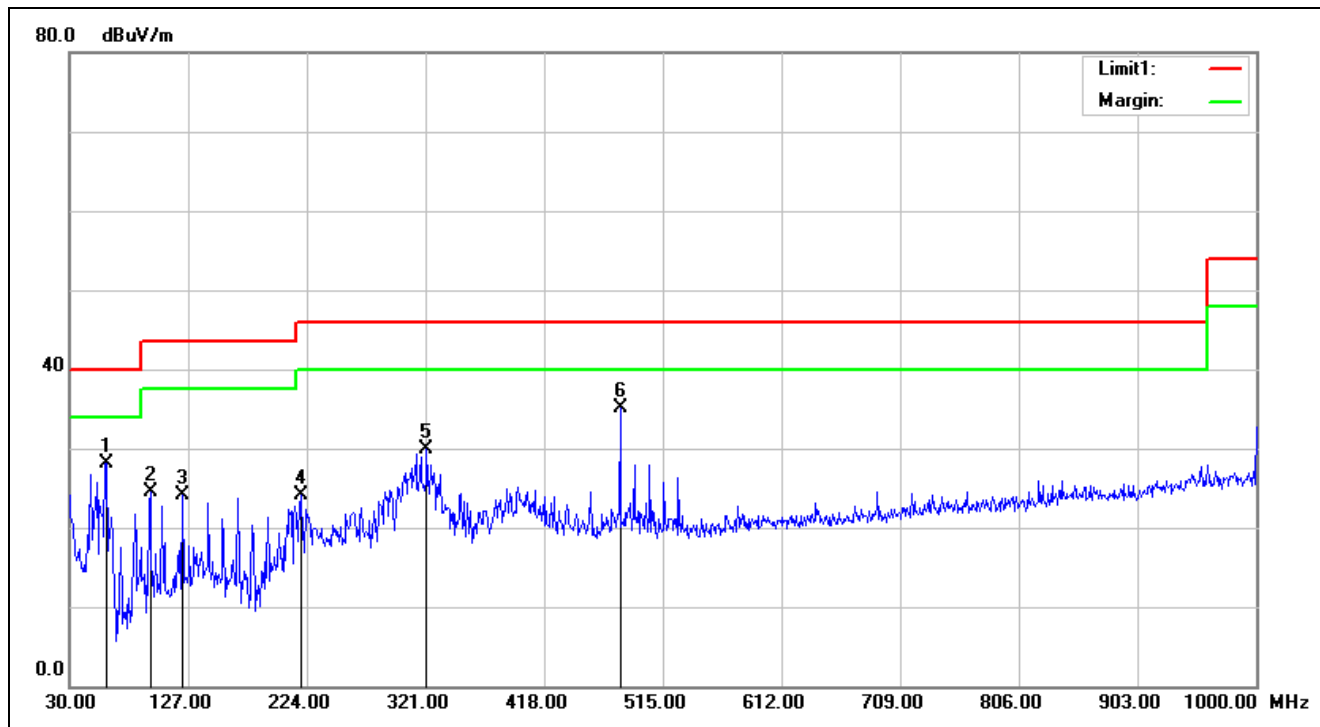
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Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2015/5/28 13:47:18
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefg	Test Engineer:	Hugo Chang
Test Mode:	2442-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	59.1000	-19.47	43.33	23.86	40.00	-16.14	QP	100	317	
2	95.9599	-15.43	42.12	26.69	43.50	-16.81	QP	100	149	
3	179.3800	-15.55	45.91	30.36	43.50	-13.14	QP	100	271	
4	252.1300	-11.45	42.95	31.50	46.00	-14.50	QP	100	279	
5	307.4200	-10.33	45.56	35.23	46.00	-10.77	QP	100	152	
6	504.3300	-7.22	40.31	33.09	46.00	-12.91	QP	100	340	

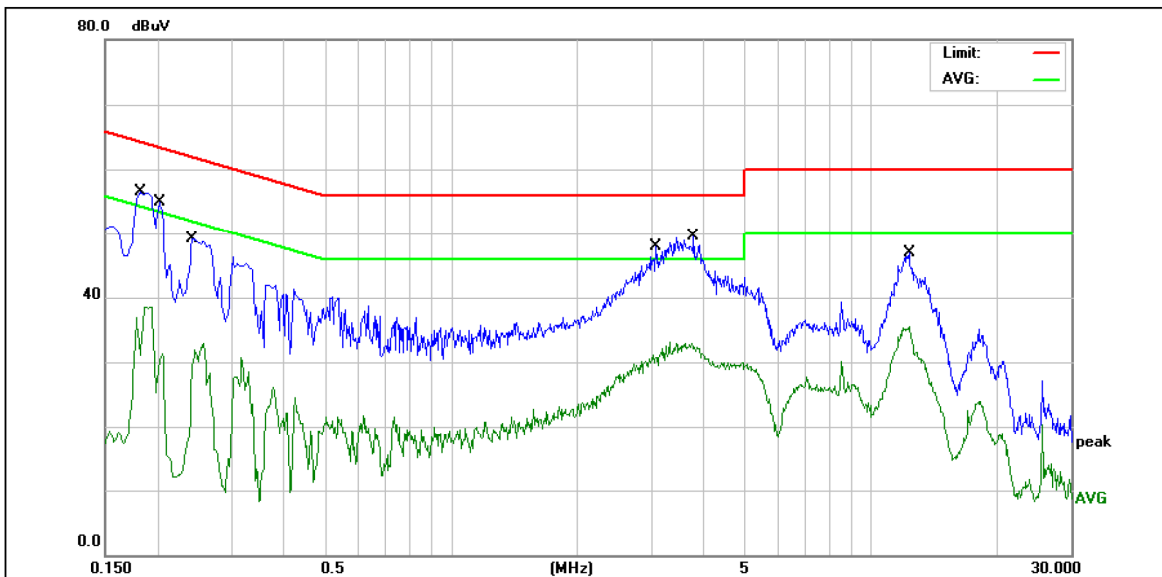
Spurious Emissions, RX Mode, 30M-1G



Service No.:	114035791-NCC	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2015/5/28 13:48:22
Applicant:	Microchip	Test Rating:	DC 5V
Product:	Bluetooth module	Temp.(°C)/Hum.(%):	19.4(°C)/55%
Model No.:	BM70abcdefgh	Test Engineer:	Hugo Chang
Test Mode:	2442-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	60.0700	-19.69	47.77	28.08	40.00	-11.92	QP	100	102	
2	95.9600	-15.43	39.90	24.47	43.50	-19.03	QP	100	0	
3	122.1500	-12.90	37.10	24.20	43.50	-19.30	QP	100	113	
4	219.1500	-14.21	38.22	24.01	46.00	-21.99	QP	100	336	
5	321.9700	-10.00	39.93	29.93	46.00	-16.07	QP	100	190	
6	480.0800	-7.55	42.60	35.05	46.00	-10.95	QP	100	157	

Mains Spurious Emissions



Service No.: 114035791

Test Standard: FCC Class B Conduction(QP)

Test item: Conducted Emission

Phase: L1

Applicant: Microchip

Temp.(°C)/Hum.(%): 23.7(°C) / 51 %

Product: Bluetooth Module

Power Rating: DC 5V

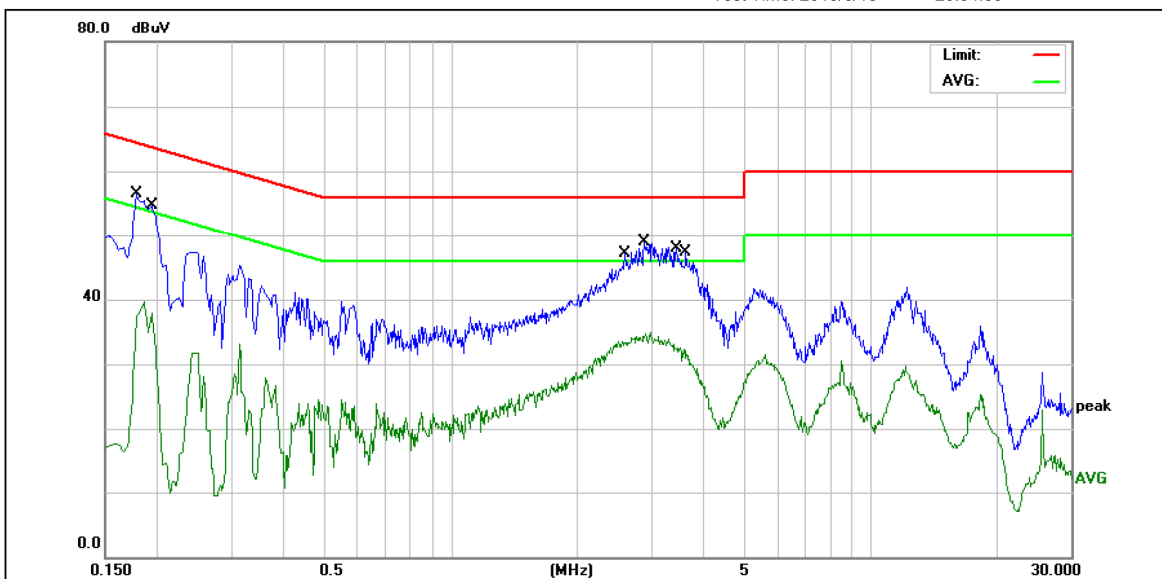
Model No.: BM70

Test Engineer: Sam Su

Test Mode: Normal link

Remark:

No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1819	9.63	45.20	54.83	64.39	-9.56	QP	P	
2	0.1819	9.63	26.45	36.08	54.39	-18.31	AVG	P	
3	0.2020	9.63	40.53	50.16	63.52	-13.36	QP	P	
4	0.2020	9.63	17.14	26.77	53.52	-26.75	AVG	P	
5	0.2420	9.63	36.74	46.37	62.02	-15.65	QP	P	
6	0.2420	9.63	18.96	28.59	52.02	-23.43	AVG	P	
7	3.0900	9.67	29.69	39.36	56.00	-16.64	QP	P	
8	3.0900	9.67	19.15	28.82	46.00	-17.18	AVG	P	
9	3.7860	9.66	32.05	41.71	56.00	-14.29	QP	P	
10	3.7860	9.66	20.95	30.61	46.00	-15.39	AVG	P	
11	12.3380	9.79	29.99	39.78	60.00	-20.22	QP	P	
12	12.3380	9.79	23.04	32.83	50.00	-17.17	AVG	P	



Service No.: 114035791

Test Standard: FCC Class B Conduction(QP)

Test item: Conducted Emission

Phase: N

Applicant: Microchip

Temp.(°C)/Hum.(%): 23.7(°C) / 51 %

Product: Bluetooth Module

Power Rating: DC 5V

Model No.: BM70

Test Engineer: Sam Su

Test Mode: Normal link

Remark:

No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1780	9.65	44.14	53.79	64.57	-10.78	QP	P	
2	0.1780	9.65	25.84	35.49	54.57	-19.08	AVG	P	
3	0.1940	9.65	41.88	51.53	63.86	-12.33	QP	P	
4	0.1940	9.65	22.43	32.08	53.86	-21.78	AVG	P	
5	2.5980	9.67	30.61	40.28	56.00	-15.72	QP	P	
6	2.5980	9.67	22.78	32.45	46.00	-13.55	AVG	P	
7	2.8900	9.68	31.75	41.43	56.00	-14.57	QP	P	
8	2.8900	9.68	23.31	32.99	46.00	-13.01	AVG	P	
9	3.4420	9.69	30.06	39.75	56.00	-16.25	QP	P	
10	3.4420	9.69	21.09	30.78	46.00	-15.22	AVG	P	
11	3.6260	9.69	29.52	39.21	56.00	-16.79	QP	P	
12	3.6260	9.69	19.71	29.40	46.00	-16.60	AVG	P	