

Test Report No.10055785 10055789 001

Appendix D: Radiated and Mains Spurious Emission Data

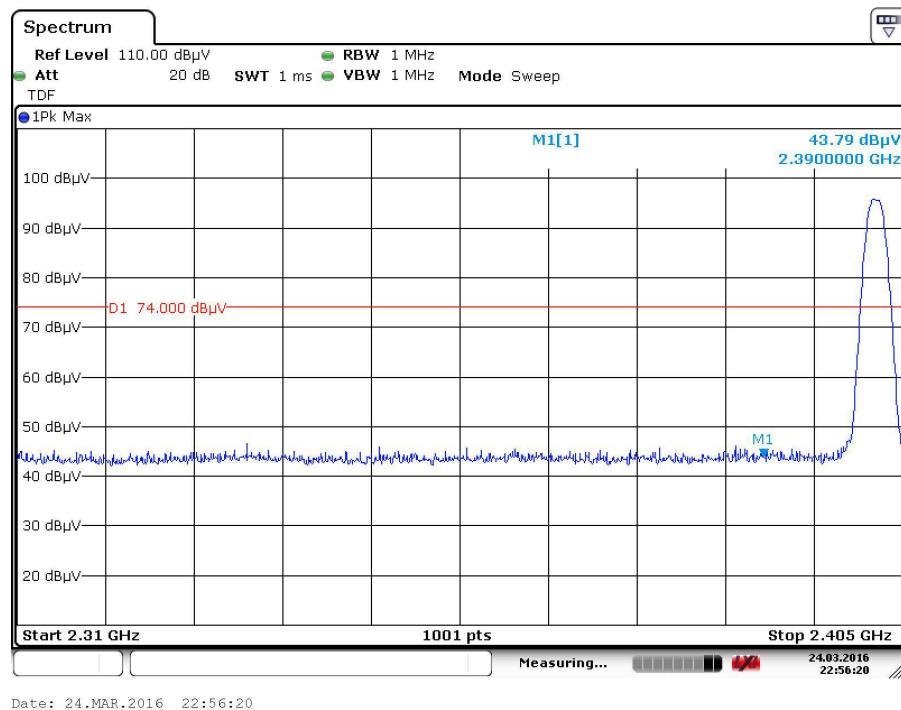
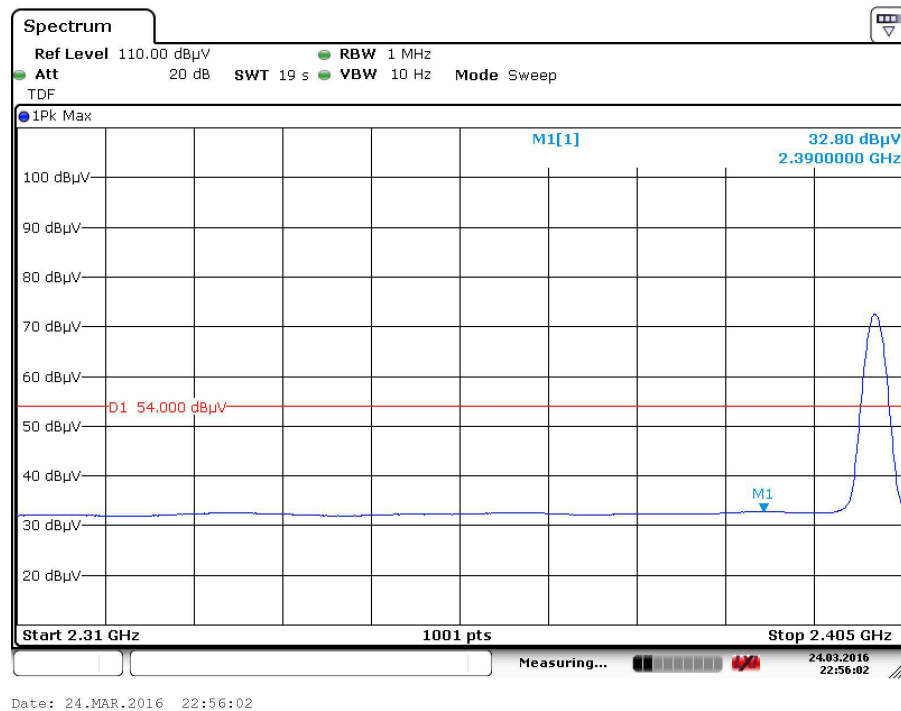
(File: 10055785 10055789AppendixD)

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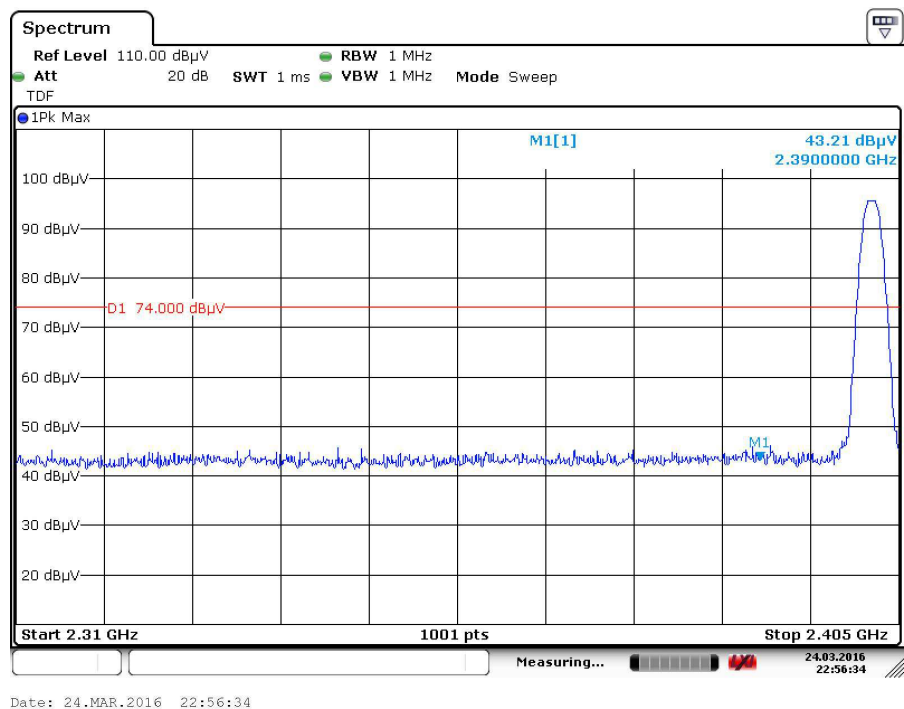
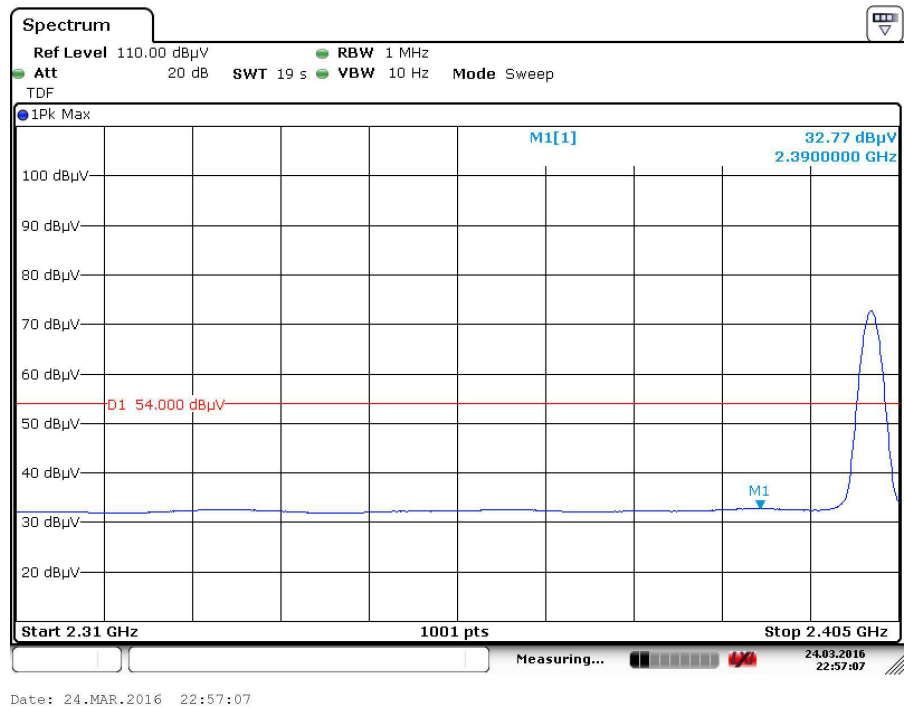
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Radiated Bandedge (GFSK)

Low Channel (Hor)



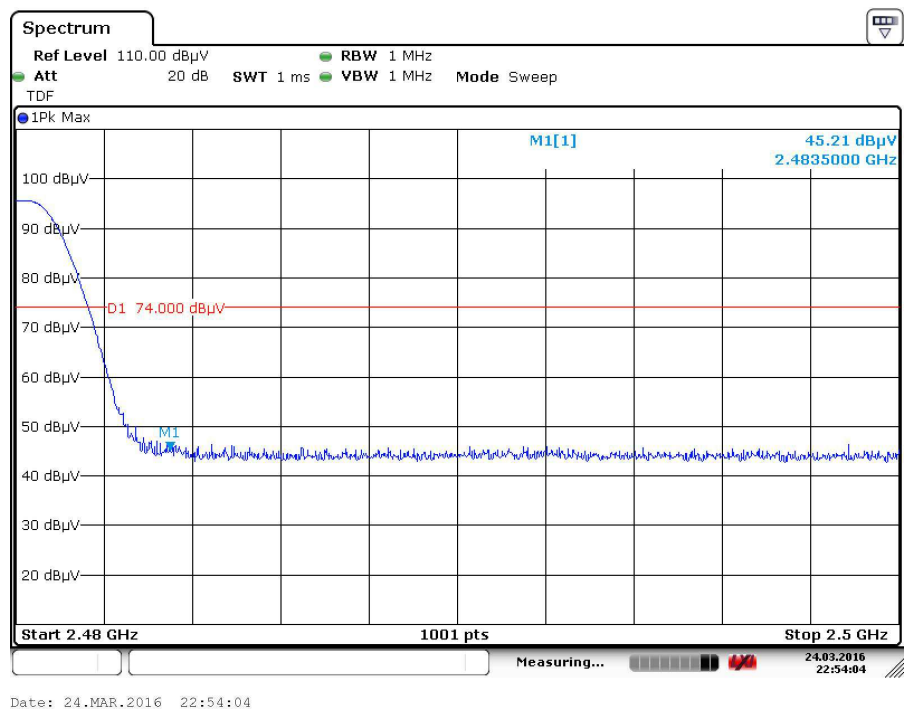
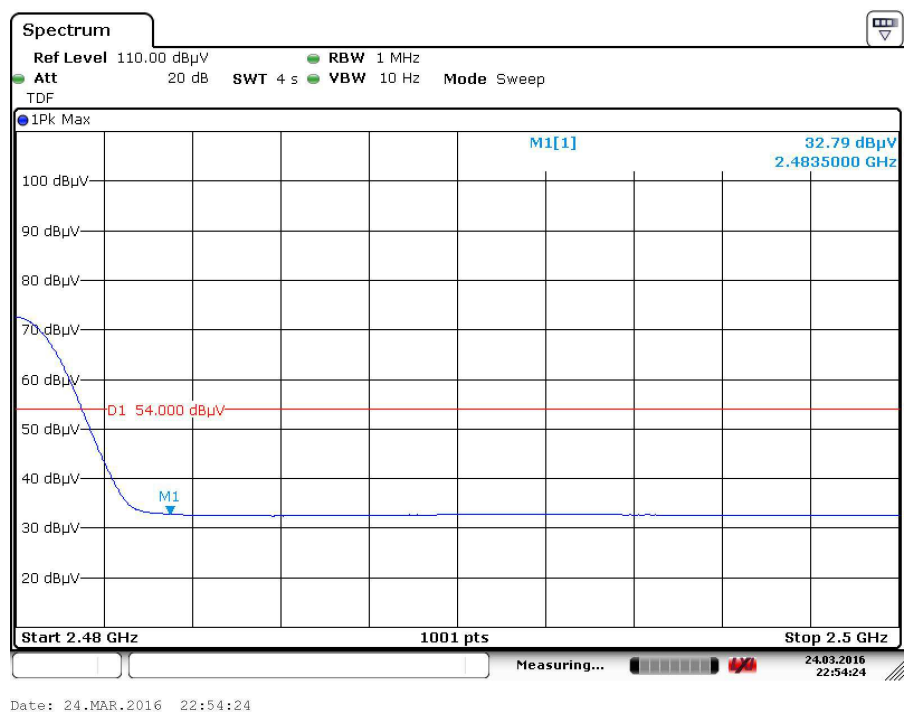
Low Channel (Ver)



Spurious Emissions, Band Edge, 2.35-2.5G

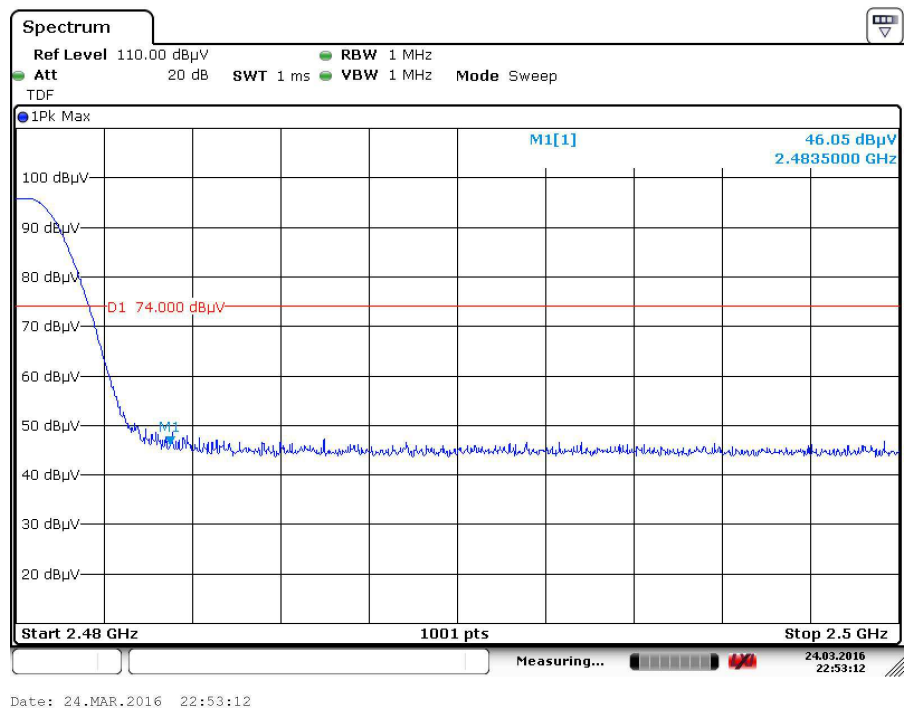
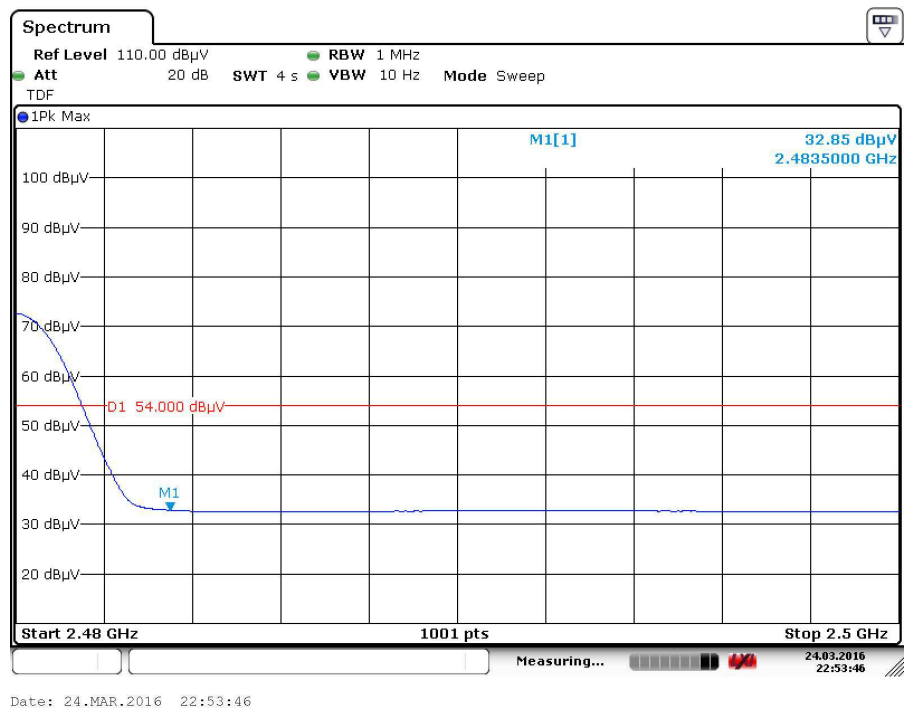
Radiated Bandedge (GFSK)

High Channel (Hor)



Spurious Emissions, Band Edge, 2.35-2.5G

High Channel (Ver)



Spurious Emissions, Band Edge, 2.35-2.5G

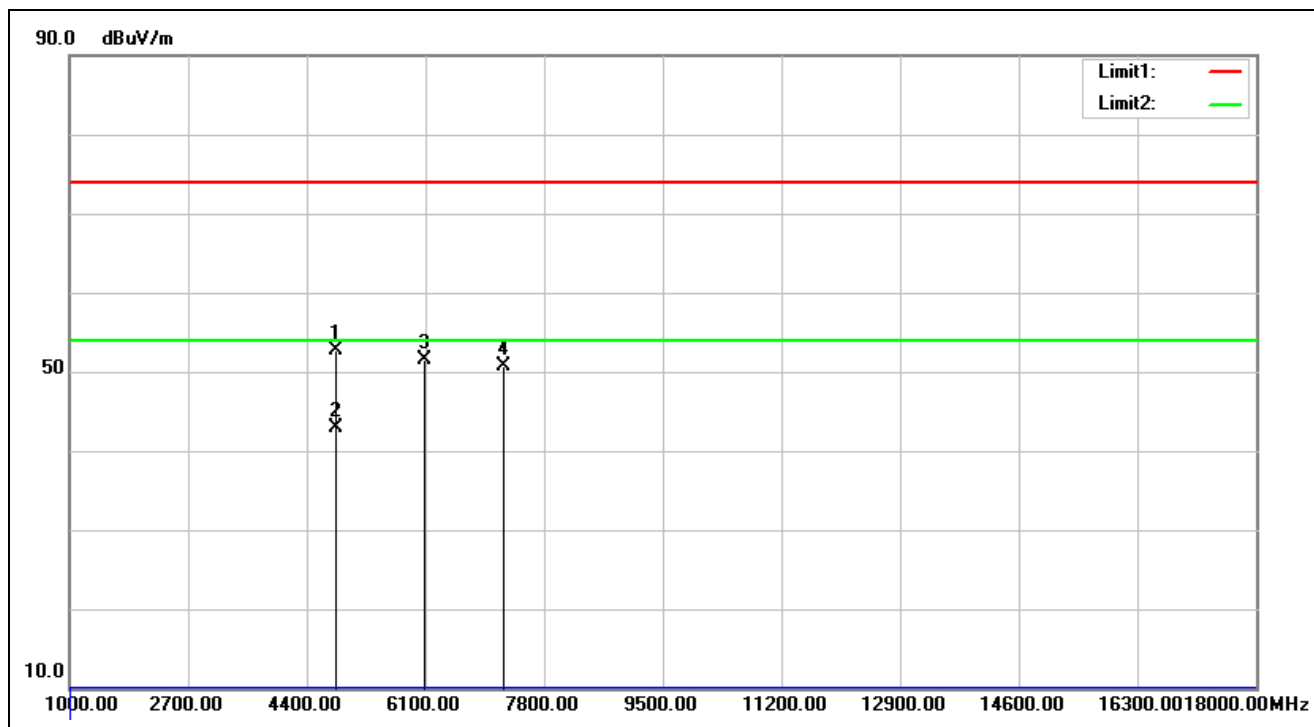
Spurious Emissions, TX Mode, 1-18G



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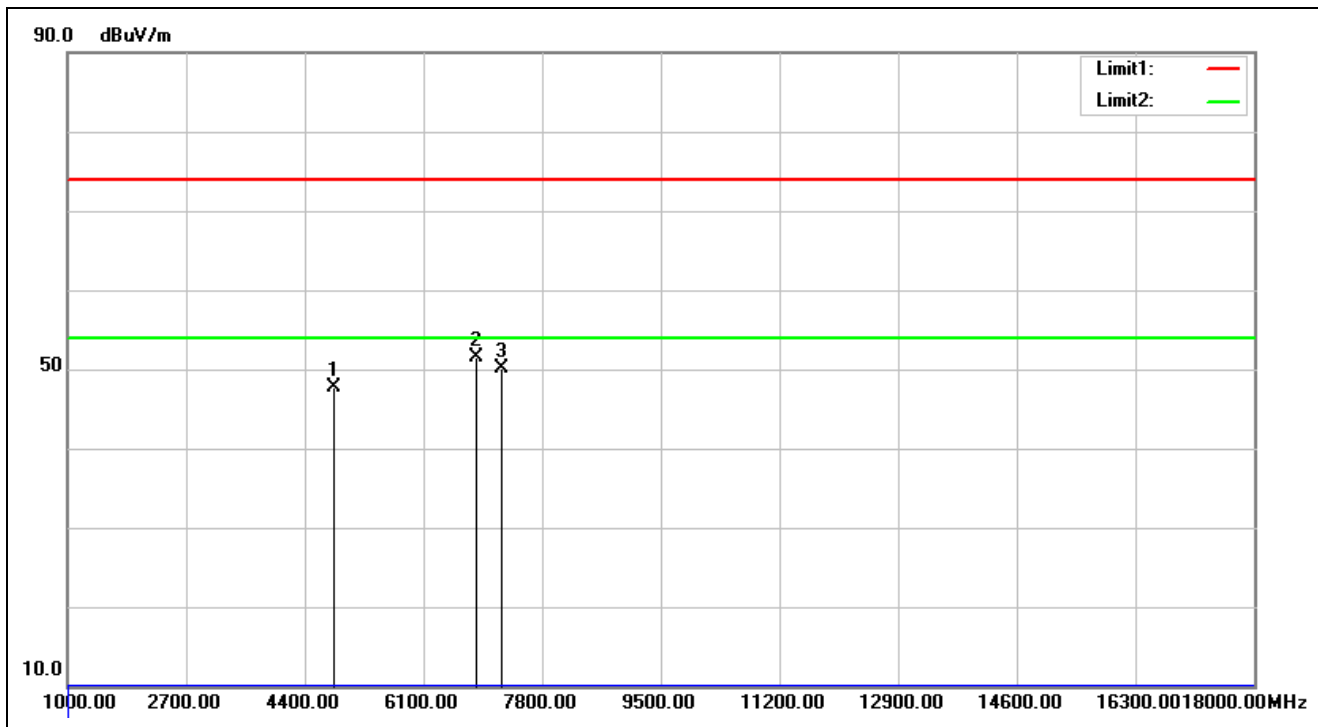
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



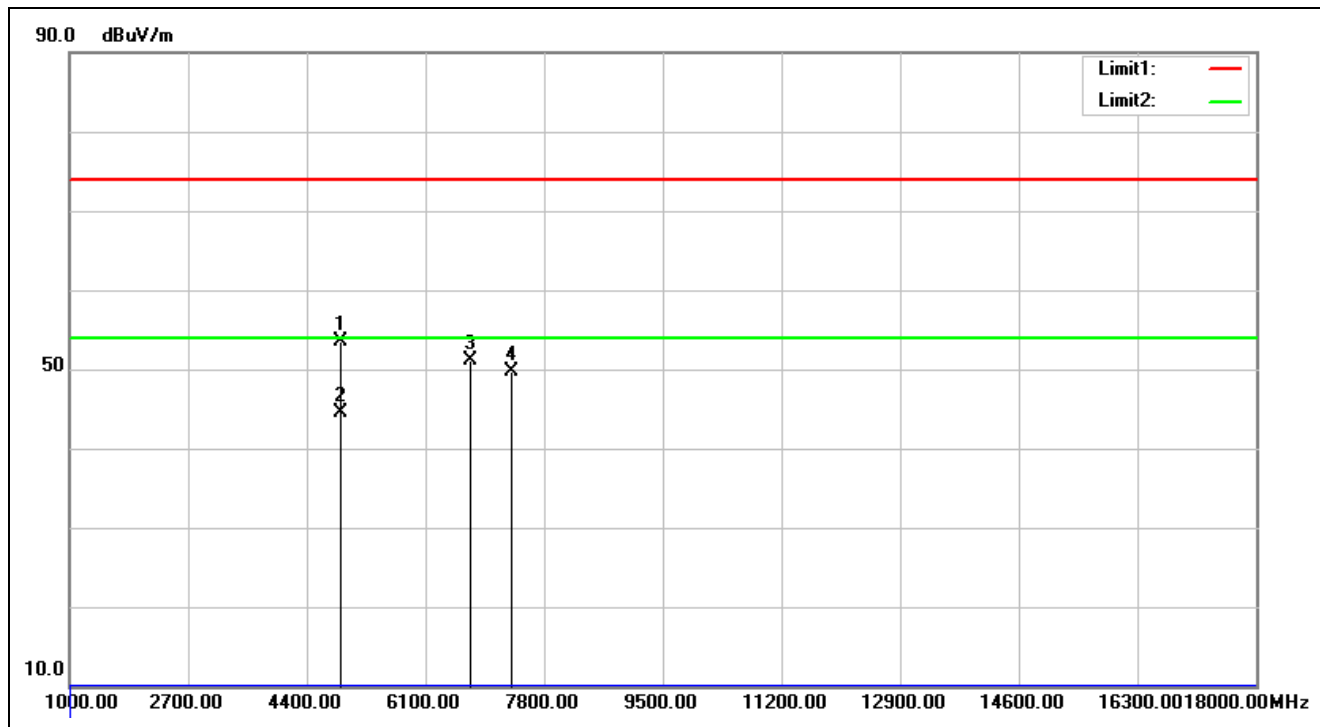
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/24 21:47:49
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	-2.28	54.95	52.67	74.00	-21.33	peak	100	9	
2	4804.000	-2.28	45.24	42.96	54.00	-11.04	AVG	100	9	
3	6083.000	4.45	47.08	51.53	74.00	-22.47	peak	100	56	
4	7206.000	5.77	44.87	50.64	74.00	-23.36	peak		0	



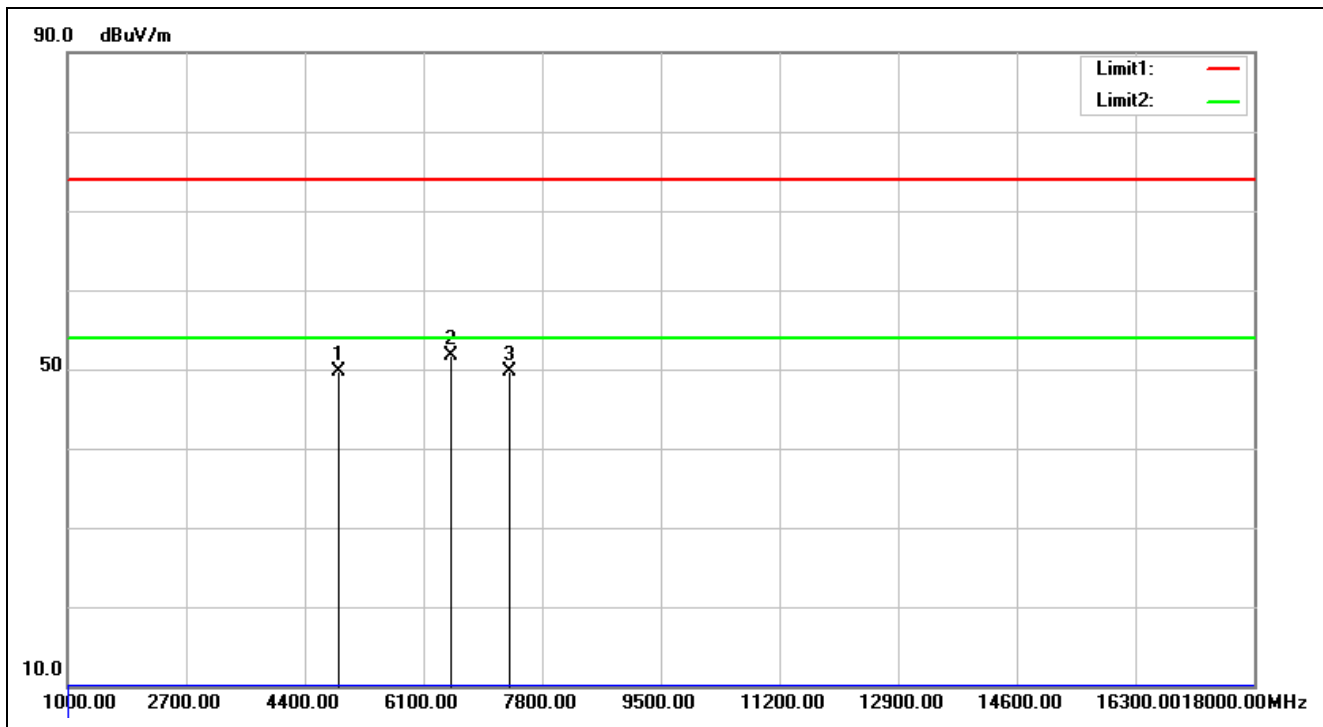
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 21:48:52
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	-2.28	49.90	47.62	74.00	-26.38	peak			
2	6865.000	5.40	46.12	51.52	74.00	-22.48	peak	100	205	
3	7206.000	5.77	44.42	50.19	74.00	-23.81	peak			



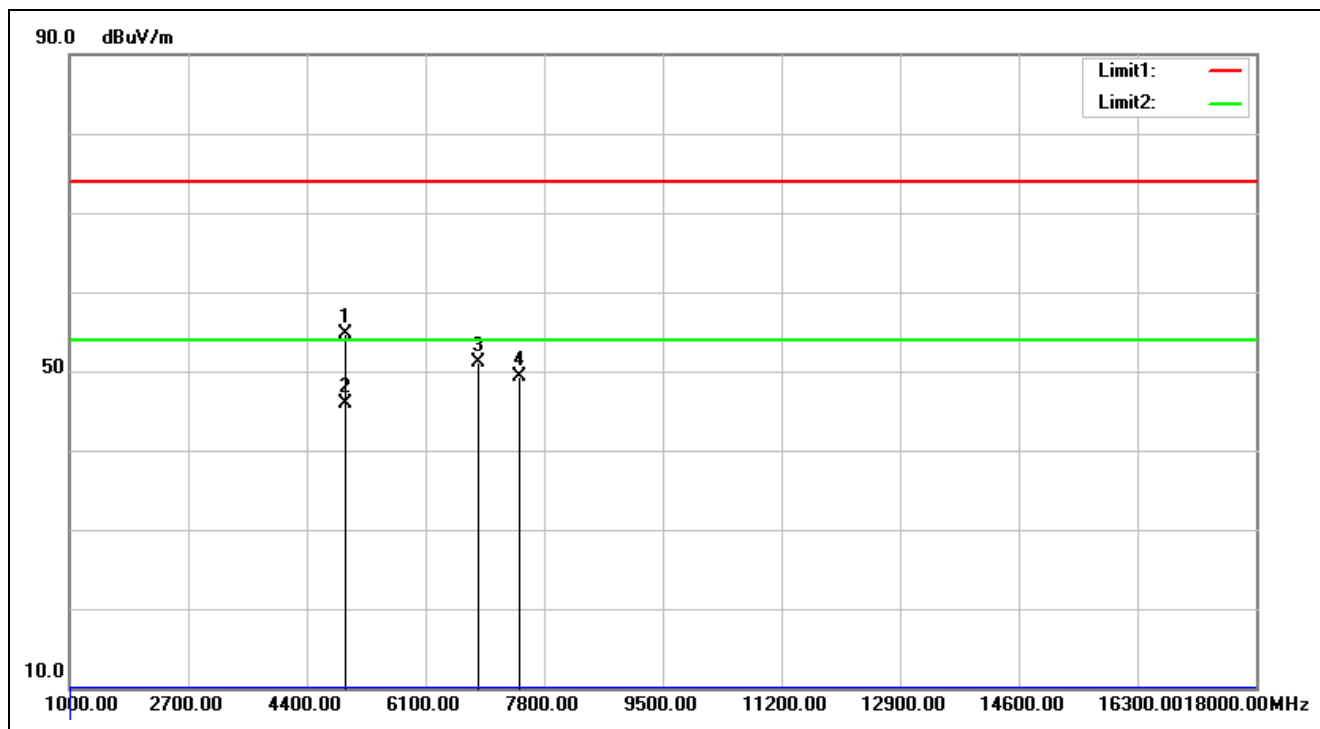
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/24 21:51:57
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	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	-2.10	55.68	53.58	74.00	-20.42	peak	100	0	
2	4880.000	-2.10	46.70	44.60	54.00	-9.40	AVG	100	0	
3	6746.000	5.60	45.57	51.17	74.00	-22.83	peak	100	200	
4	7320.000	6.10	43.52	49.62	74.00	-24.38	peak			



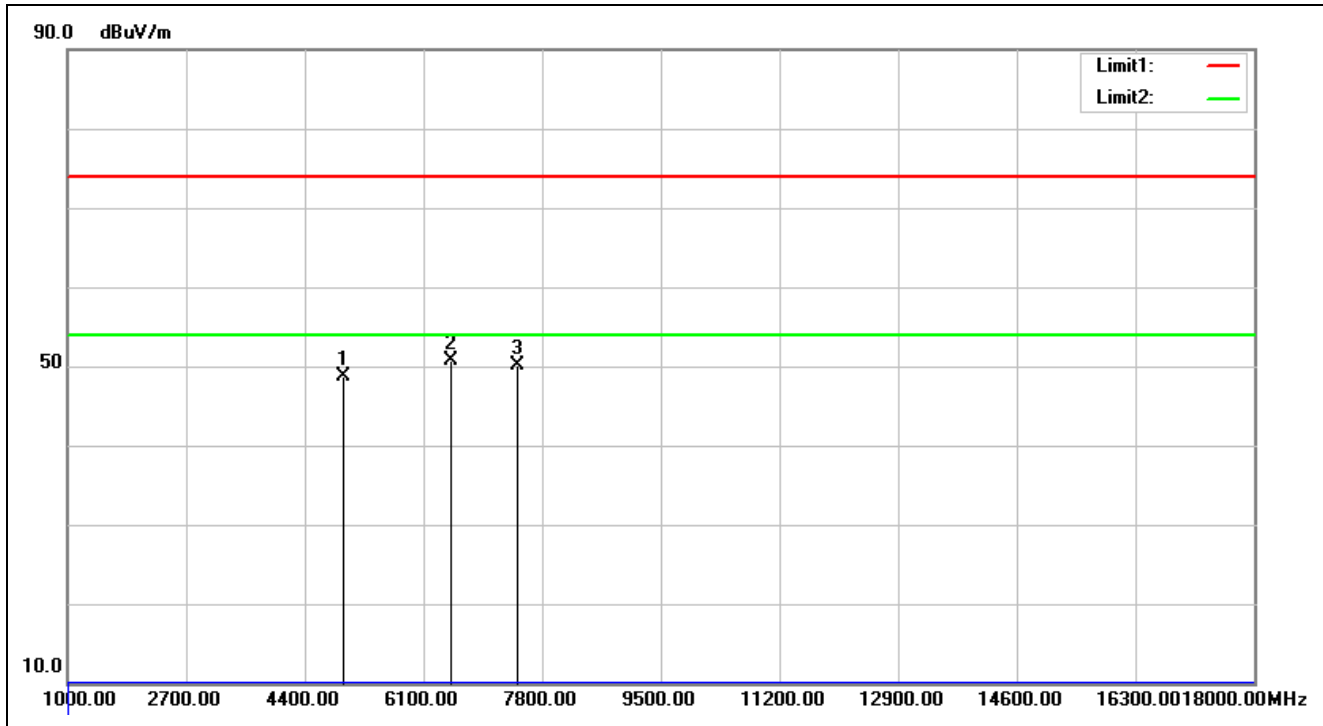
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Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 21:53:00
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	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	-2.10	51.81	49.71	74.00	-24.29	peak	100	175	
2	6491.000	5.99	45.74	51.73	74.00	-22.27	peak	100	313	
3	7320.000	6.10	43.53	49.63	74.00	-24.37	peak			



Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/24 21:55:47
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	-1.91	56.64	54.73	74.00	-19.27	peak	100	0	
2	4960.000	-1.91	47.81	45.90	54.00	-8.10	AVG	100	0	
3	6848.000	5.44	45.64	51.08	74.00	-22.92	peak	100	358	
4	7440.000	6.44	42.82	49.26	74.00	-24.74	peak			



Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 21:56:50
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	-1.91	50.71	48.80	74.00	-25.20	peak			
2	6491.000	5.99	44.81	50.80	74.00	-23.20	peak	100	64	
3	7440.000	6.44	43.64	50.08	74.00	-23.92	peak			

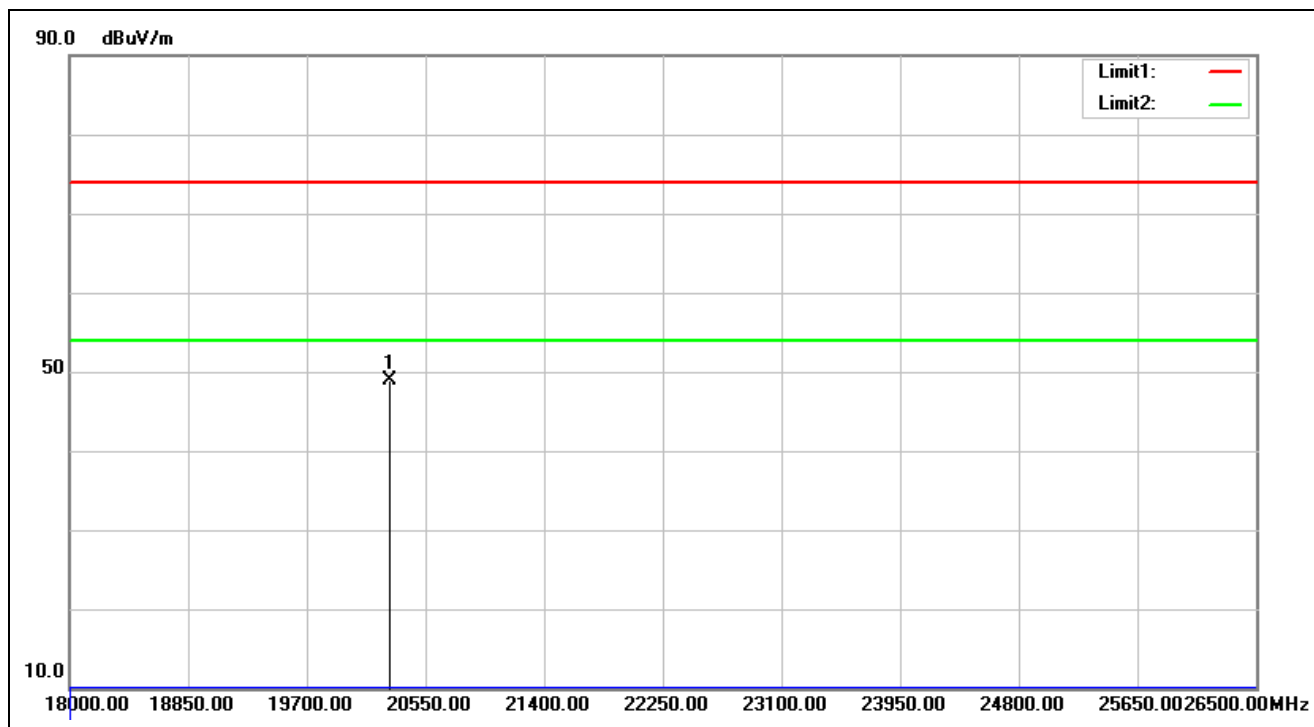
Spurious Emissions, TX Mode, 18-26G



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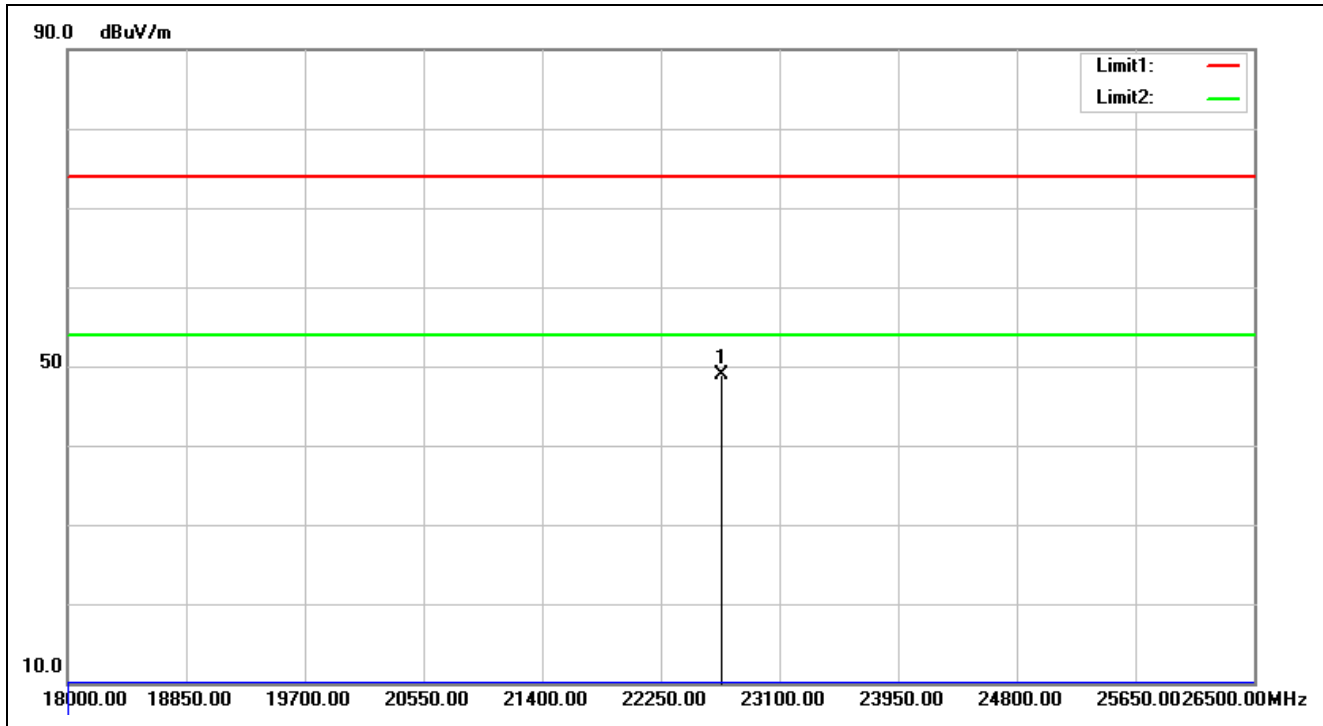
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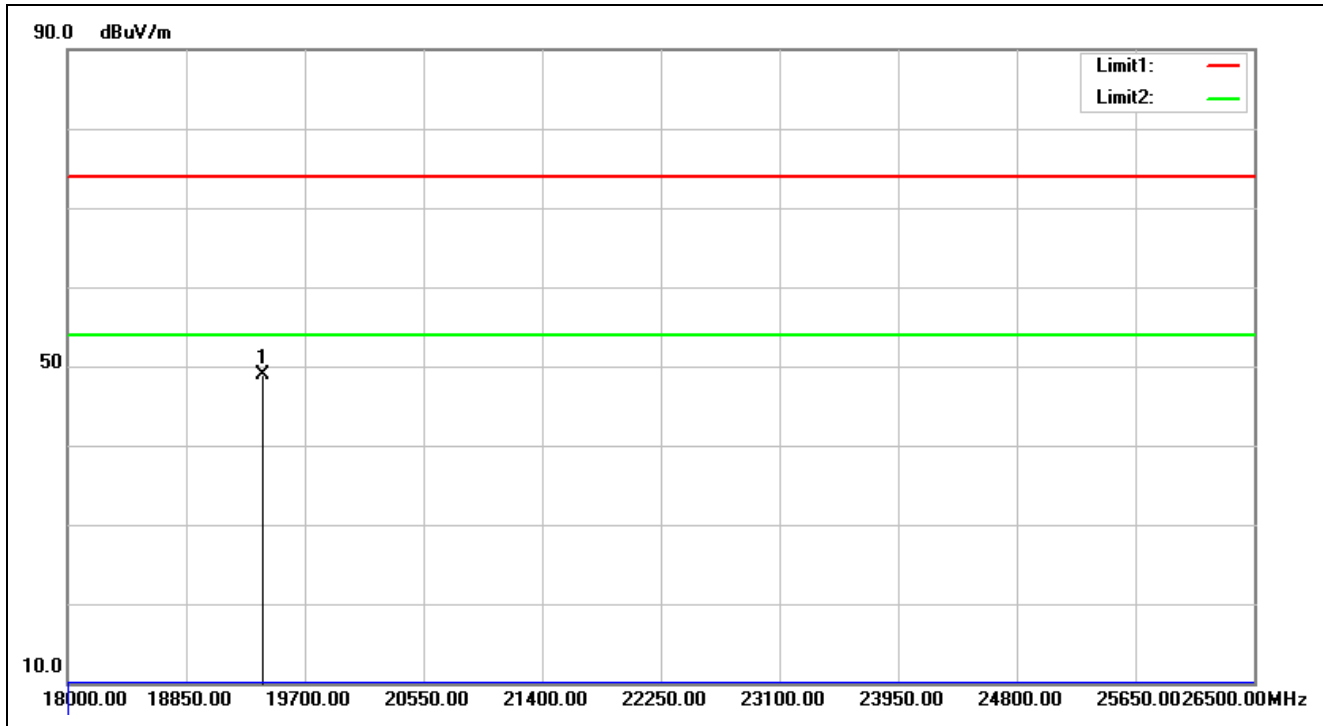
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Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/25 21:36:45
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	20295.000	29.74	19.18	48.92	74.00	-25.08	peak			



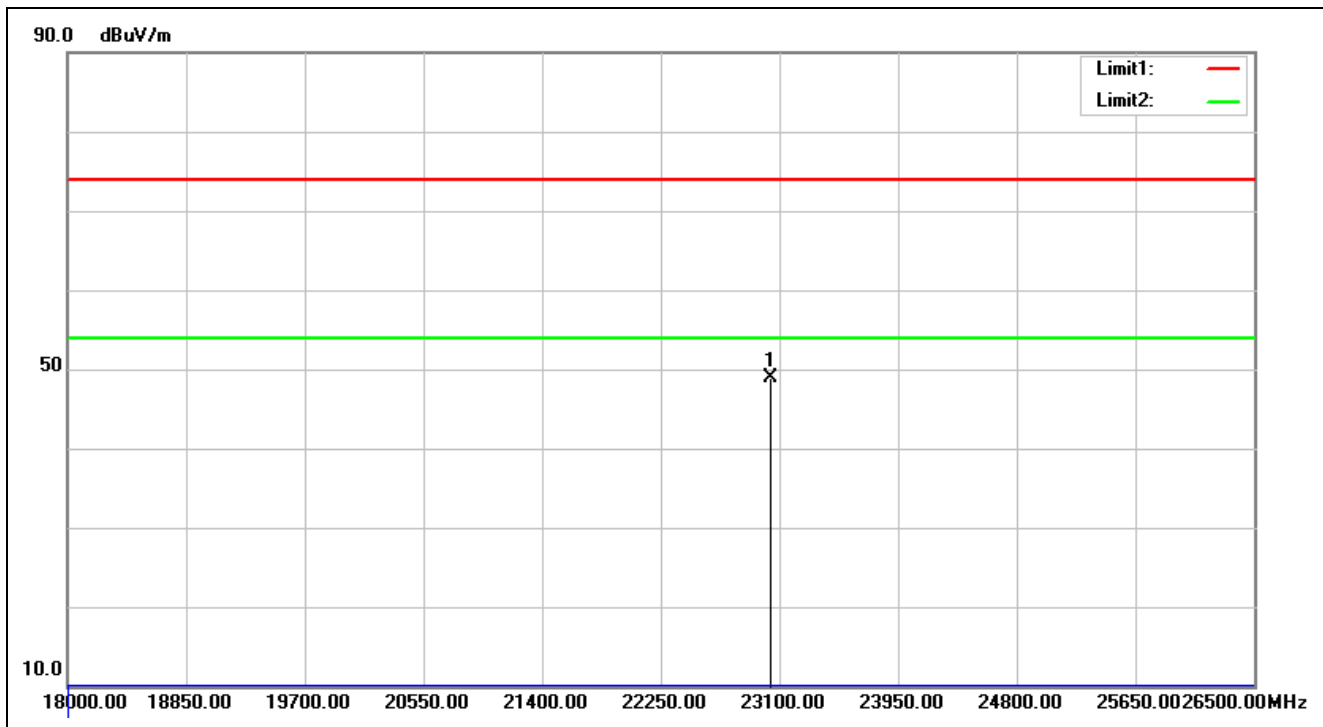
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/25 21:36:55
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	22683.500	30.02	18.86	48.88	74.00	-25.12	peak			



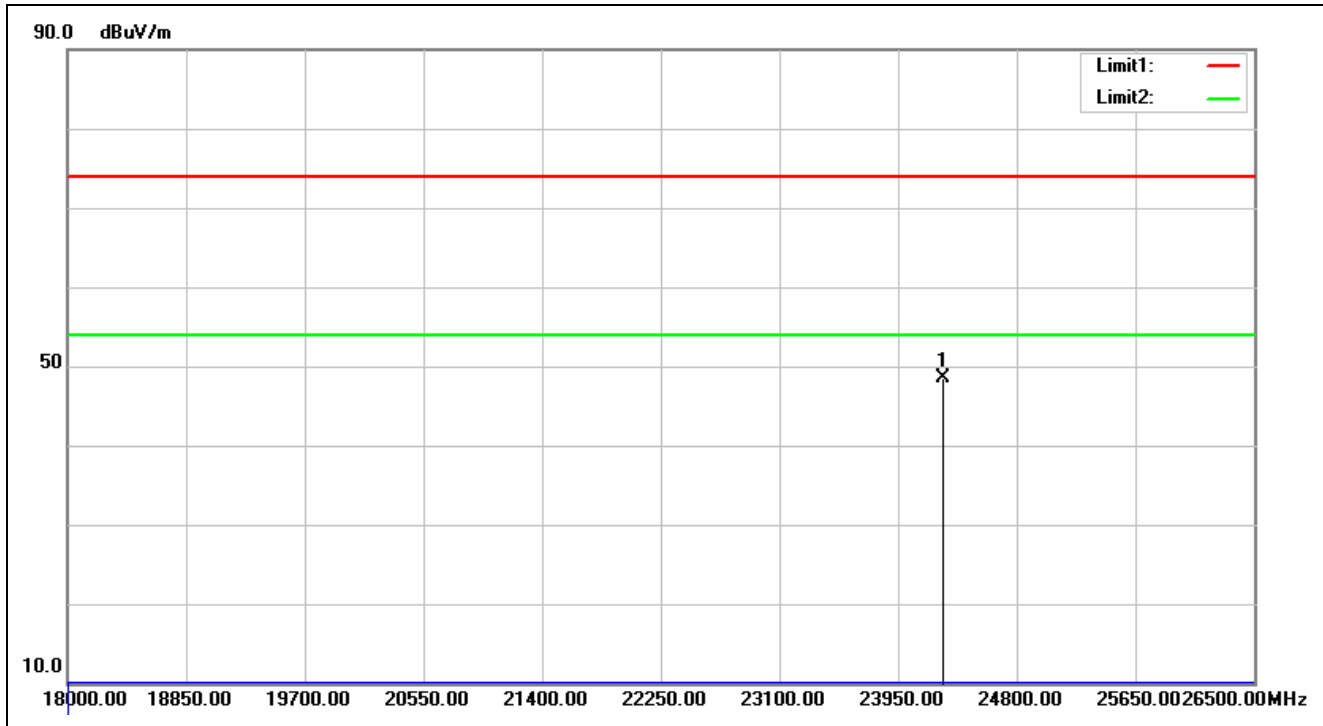
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/25 21:37:12
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	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	19394.000	29.52	19.38	48.90	74.00	-25.10	peak			



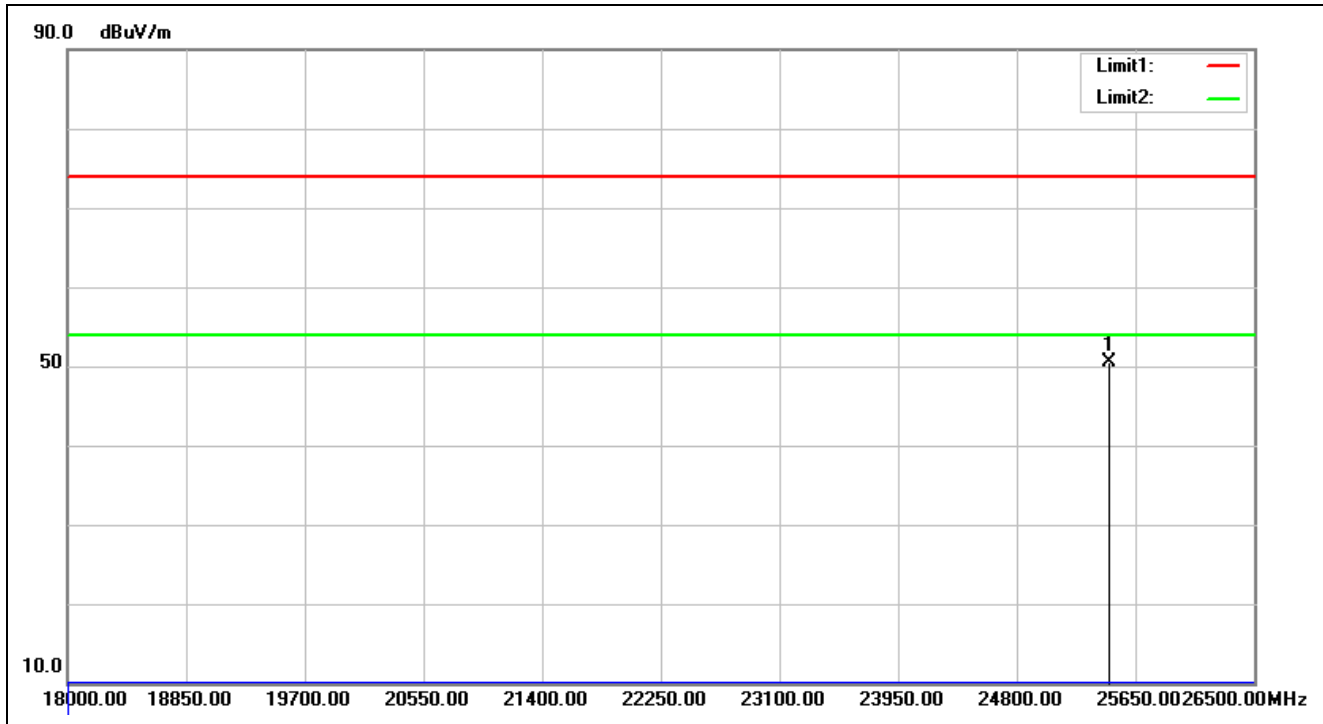
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Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/25 21:37:20
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	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	23032.000	30.45	18.48	48.93	74.00	-25.07	peak			



Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/25 21:37:36
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	24273.000	30.09	18.36	48.45	74.00	-25.55	peak			



Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/25 21:37:43
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	25463.000	31.75	18.70	50.45	74.00	-23.55	peak			

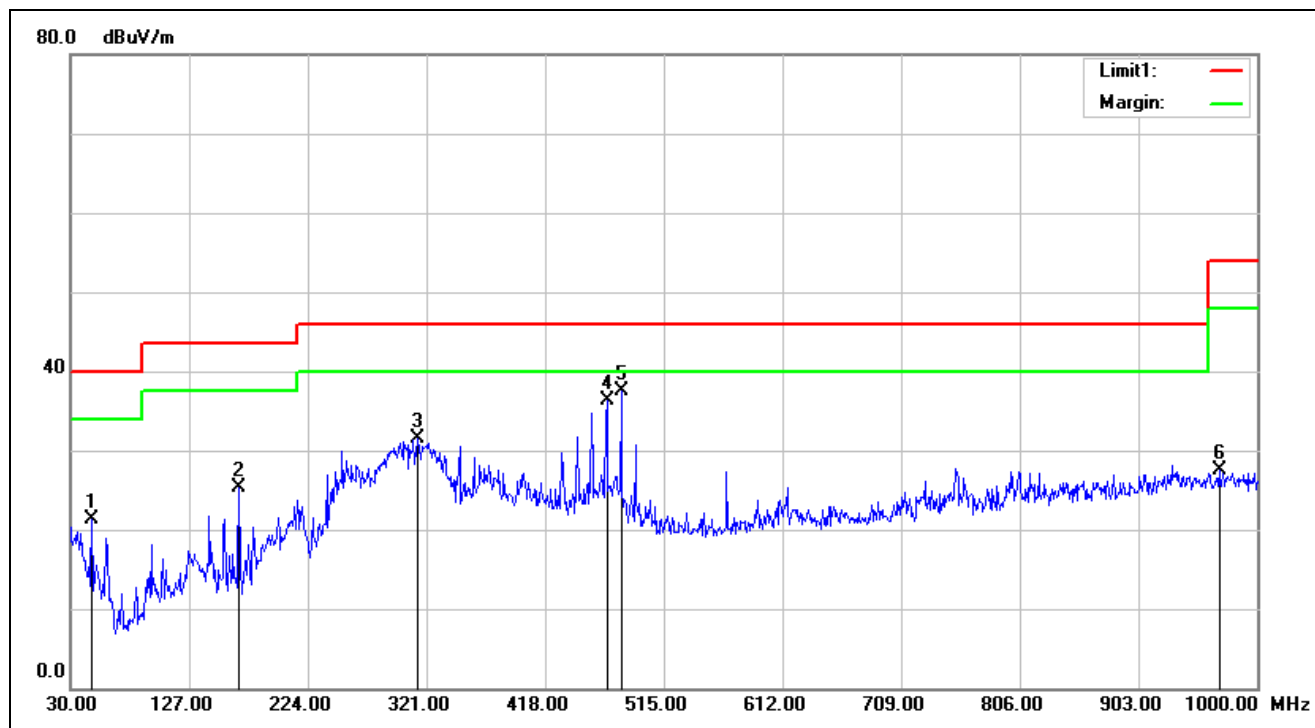
Spurious Emissions, TX Mode, 30M-1G



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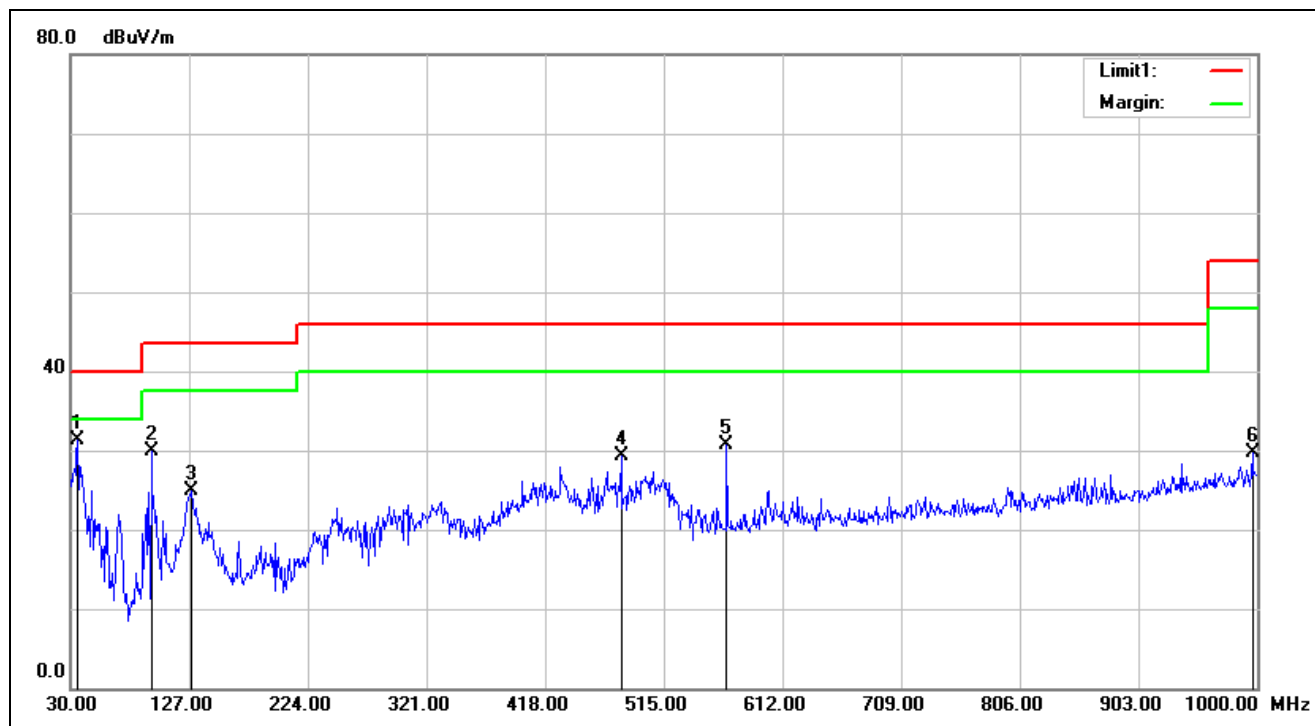
Tel:+886-2172-7000 fax:+886-2528-0018



Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/24 19:00:53
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	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	-15.67	37.04	21.37	40.00	-18.63	QP	100	179	
2	167.7400	-14.60	39.99	25.39	43.50	-18.11	QP	100	232	
3	314.2100	-10.17	41.74	31.57	46.00	-14.43	QP	100	125	
4	468.4400	-7.77	44.14	36.37	46.00	-9.63	QP	100	30	
5	480.0800	-7.59	45.10	37.51	46.00	-8.49	QP	100	53	
6	968.9600	-0.33	27.78	27.45	54.00	-26.55	QP	100	237	

Spurious Emissions, RX Mode, 1-18G



Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 19:01:56
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	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	35.8200	-9.10	40.45	31.35	40.00	-8.65	QP	100	80	
2	95.9600	-15.47	45.36	29.89	43.50	-13.61	QP	100	32	
3	128.9400	-12.69	37.54	24.85	43.50	-18.65	QP	100	237	
4	480.0800	-7.59	36.84	29.25	46.00	-16.75	QP	100	104	
5	566.4100	-6.66	37.35	30.69	46.00	-15.31	QP	100	158	
6	996.1200	-0.03	29.82	29.79	54.00	-24.21	QP	100	288	

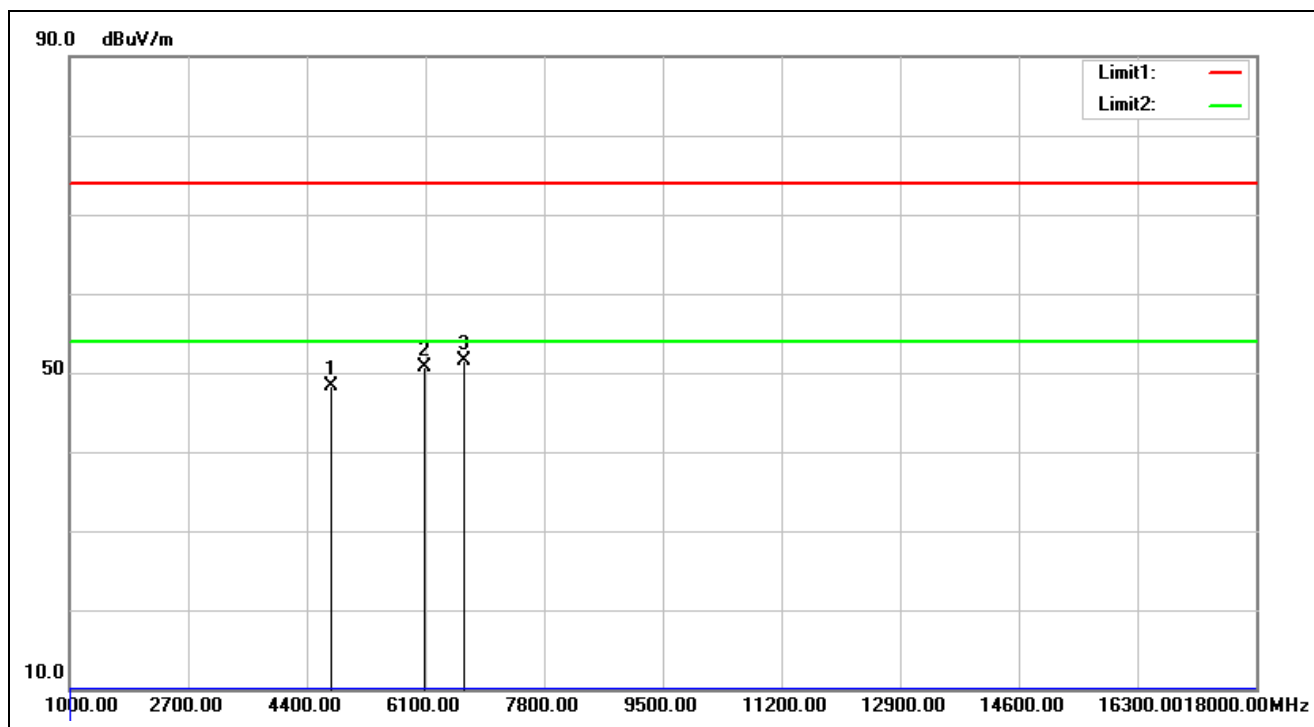
Spurious Emissions, RX Mode, 1-18G



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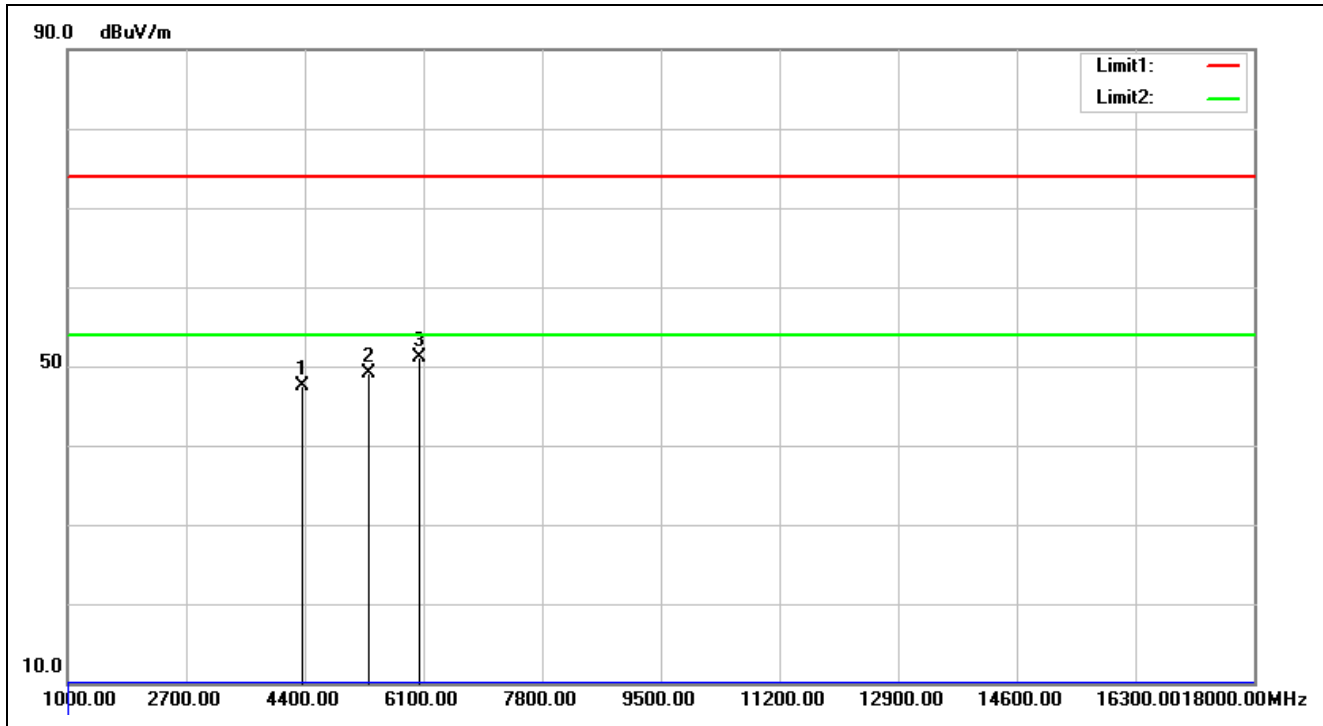
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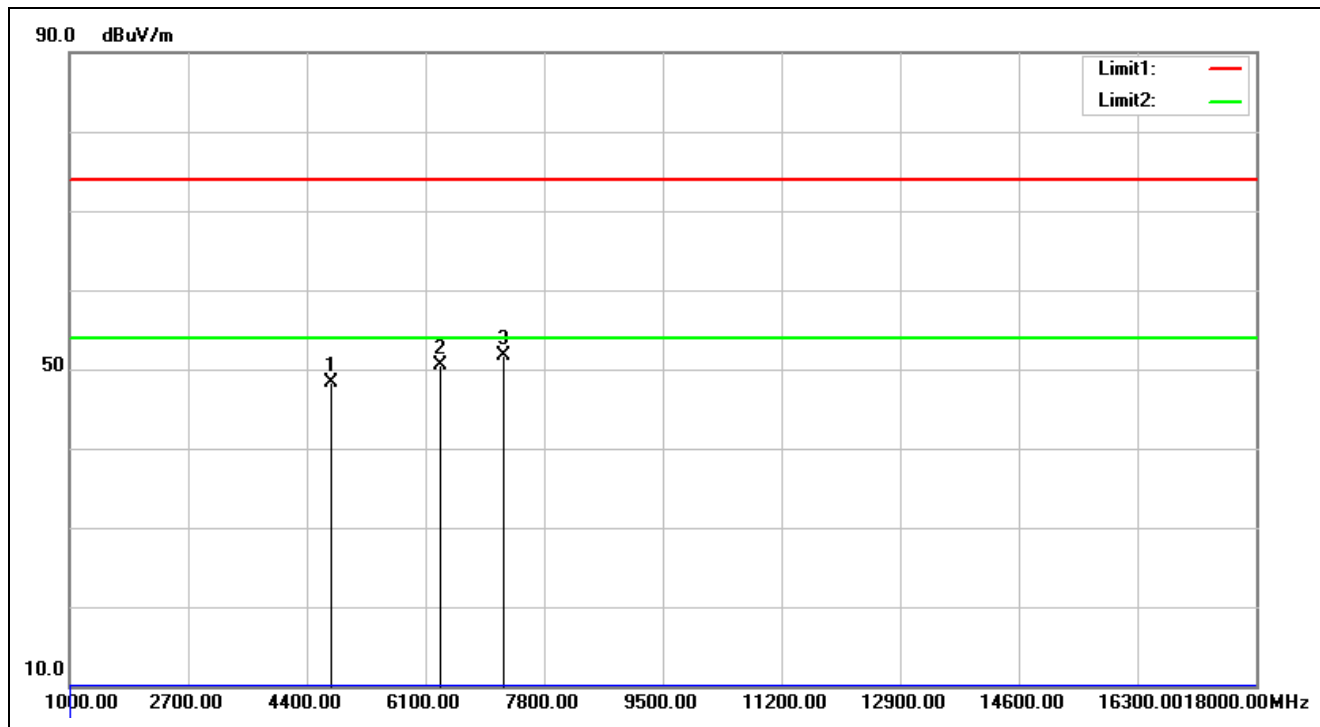
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/24 21:24:07
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	4757.000	-2.40	50.78	48.38	74.00	-25.62	peak	100	20	
2	6083.000	4.45	46.19	50.64	74.00	-23.36	peak	100	330	
3	6661.000	5.74	45.86	51.60	74.00	-22.40	peak	100	6	



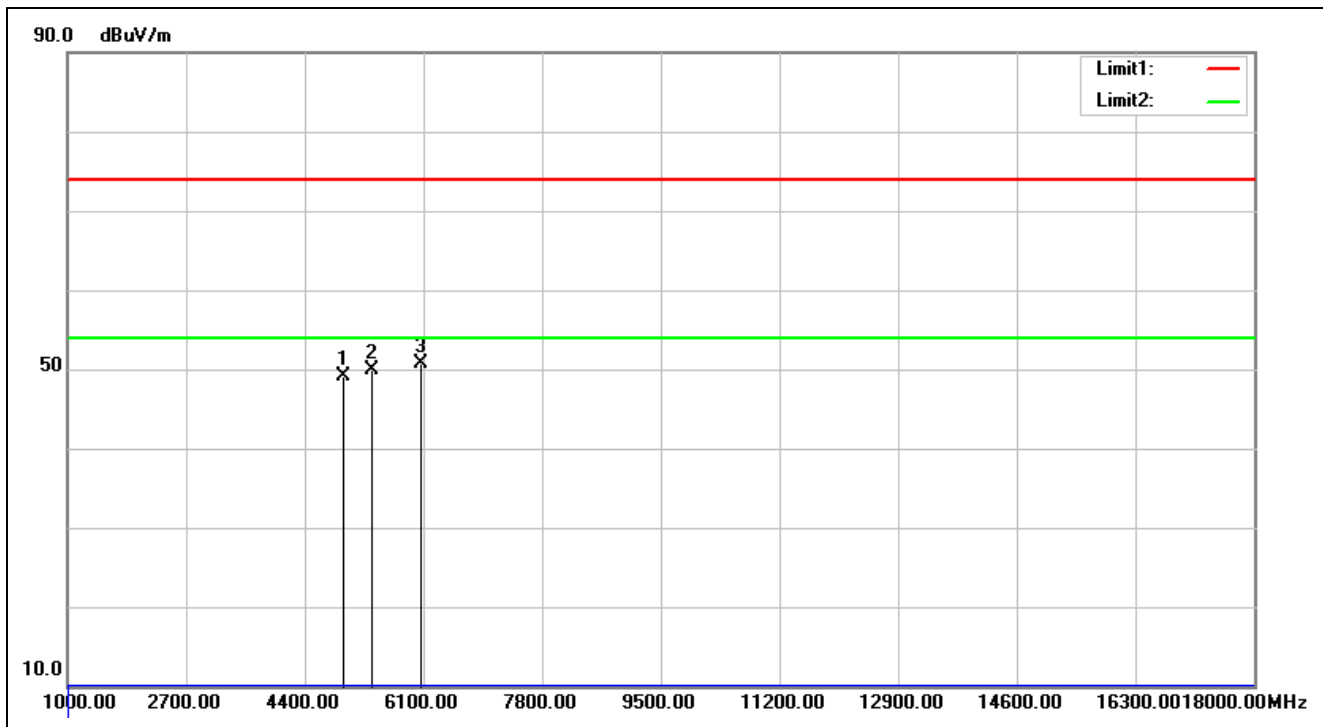
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 21:25:10
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	4366.000	-3.57	50.98	47.41	74.00	-26.59	peak	100	359	
2	5318.000	-0.12	49.29	49.17	74.00	-24.83	peak	100	199	
3	6049.000	4.32	46.86	51.18	74.00	-22.82	peak	100	132	



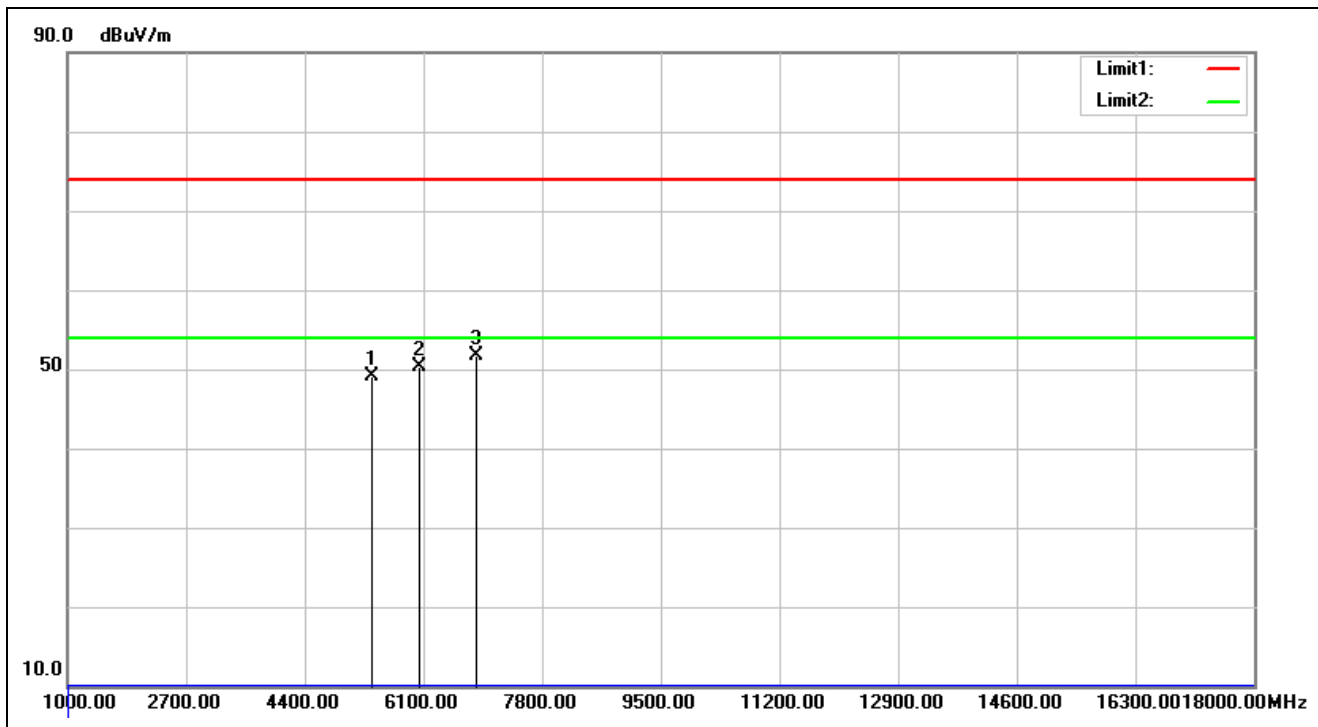
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/24 21:26:58
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	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	4757.000	-2.40	50.74	48.34	74.00	-25.66	peak	100	249	
2	6321.000	5.34	45.18	50.52	74.00	-23.48	peak	100	125	
3	7222.000	5.83	45.84	51.67	74.00	-22.33	peak	100	133	



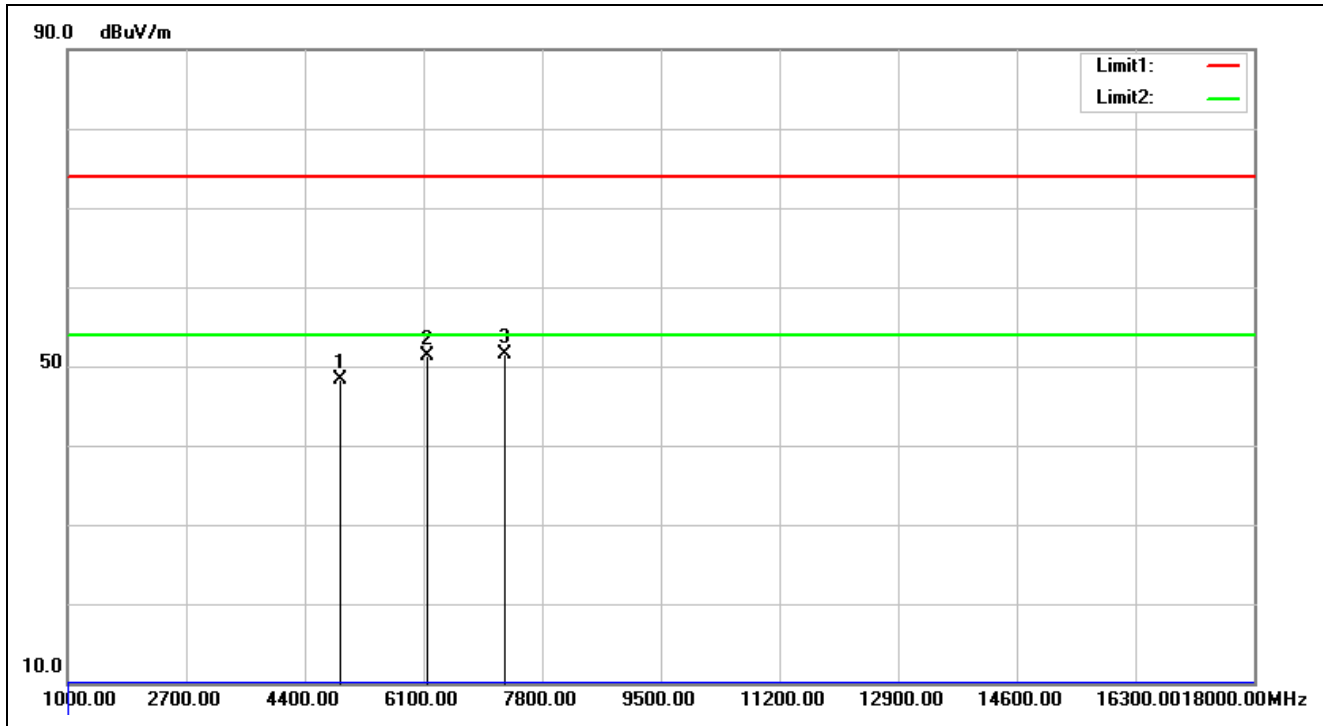
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 21:28:01
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	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	4944.000	-1.93	51.00	49.07	74.00	-24.93	peak	100	241	
2	5369.000	0.15	49.81	49.96	74.00	-24.04	peak	100	230	
3	6066.000	4.38	46.34	50.72	74.00	-23.28	peak	100	285	



Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/24 21:30:14
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	5369.000	0.15	49.03	49.18	74.00	-24.82	peak	100	34	
2	6032.000	4.26	46.04	50.30	74.00	-23.70	peak	100	56	
3	6865.000	5.40	46.33	51.73	74.00	-22.27	peak	100	338	



Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 21:31:17
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	4910.000	-2.02	50.27	48.25	74.00	-25.75	peak	100	38	
2	6151.000	4.70	46.52	51.22	74.00	-22.78	peak	100	69	
3	7256.000	5.92	45.62	51.54	74.00	-22.46	peak	100	315	

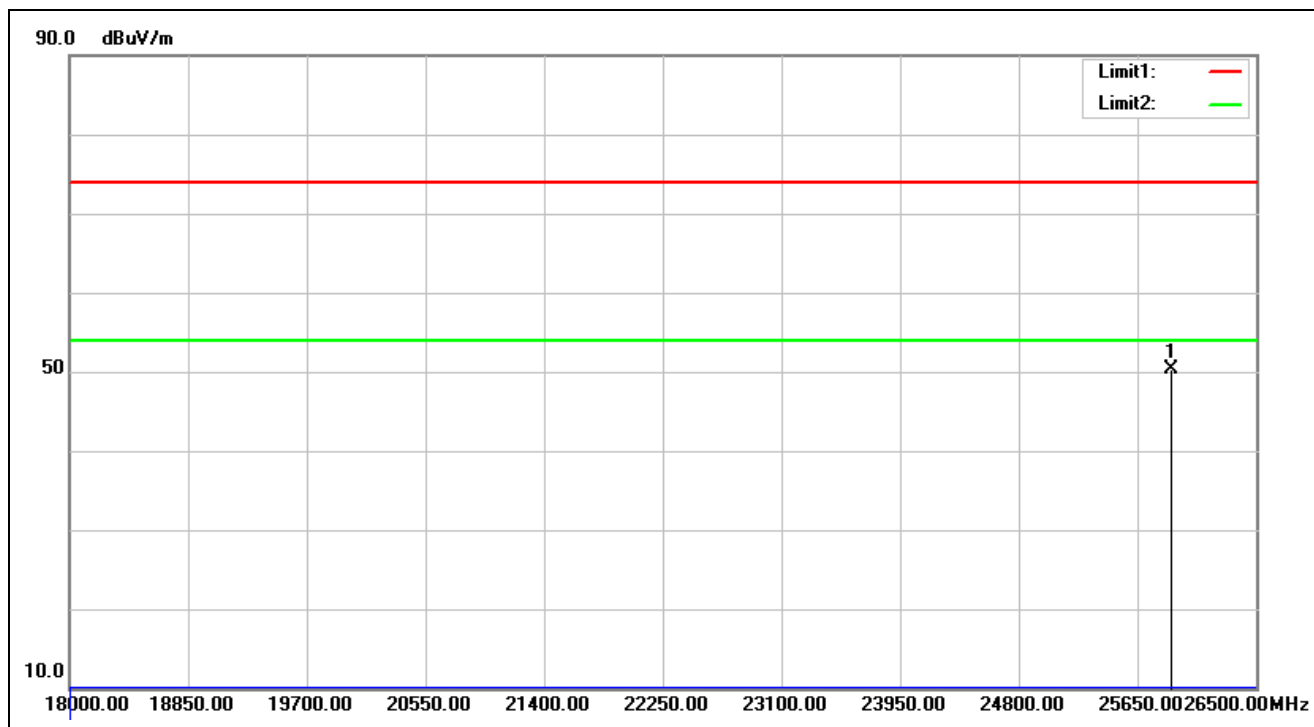
Spurious Emissions, RX Mode, 18-26G



TUV Taiwan

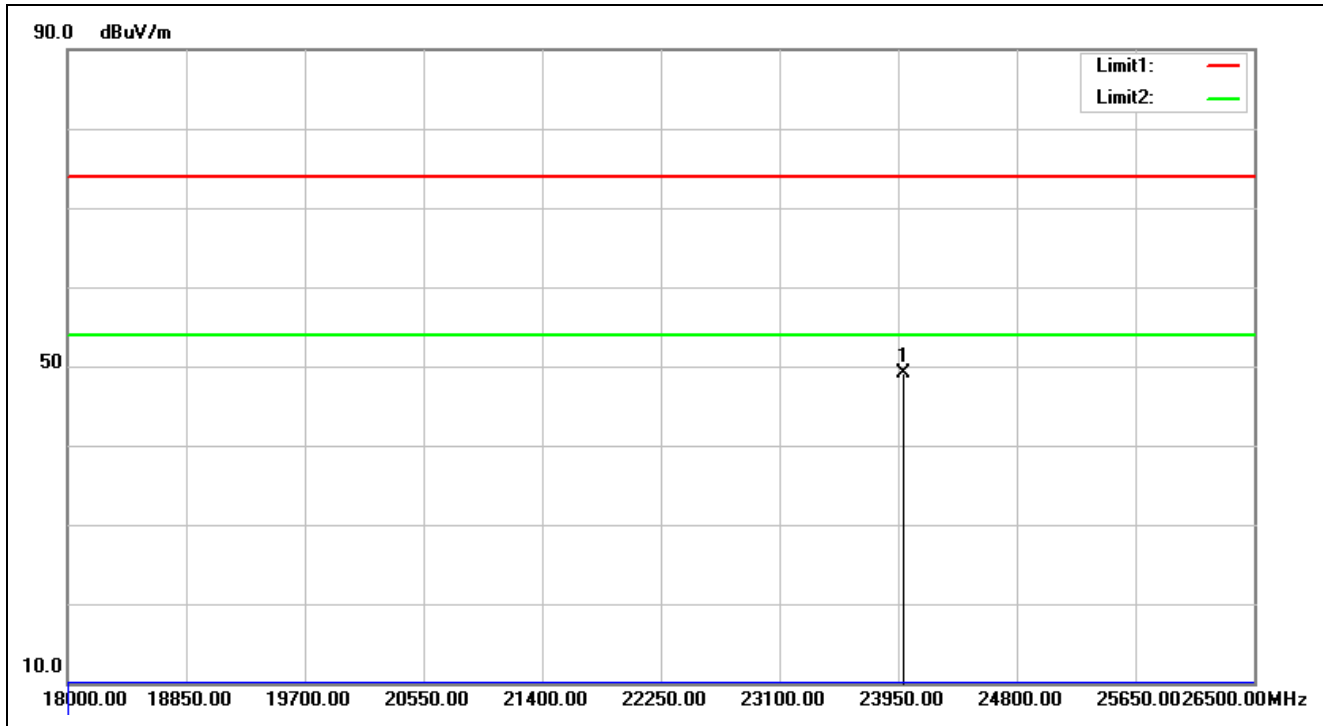
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



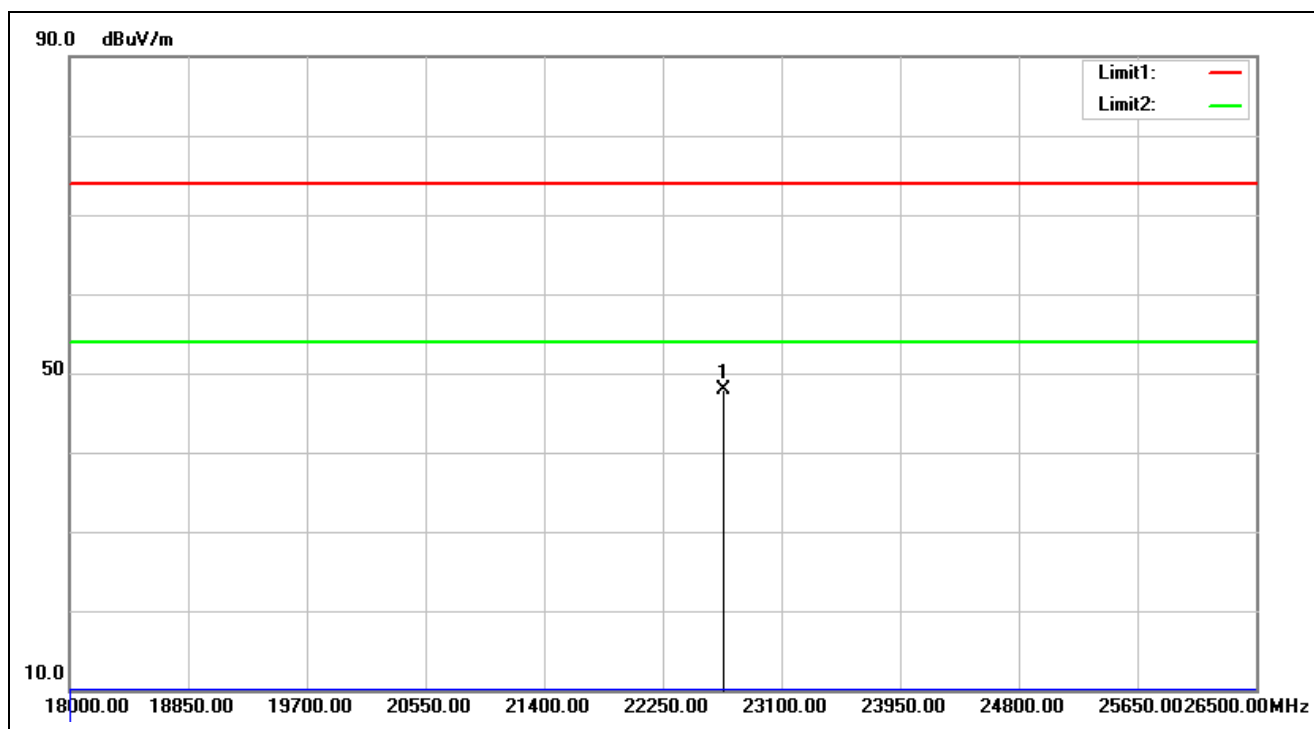
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/25 21:42:23
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	25888.000	32.31	17.97	50.28	74.00	-23.72	peak			



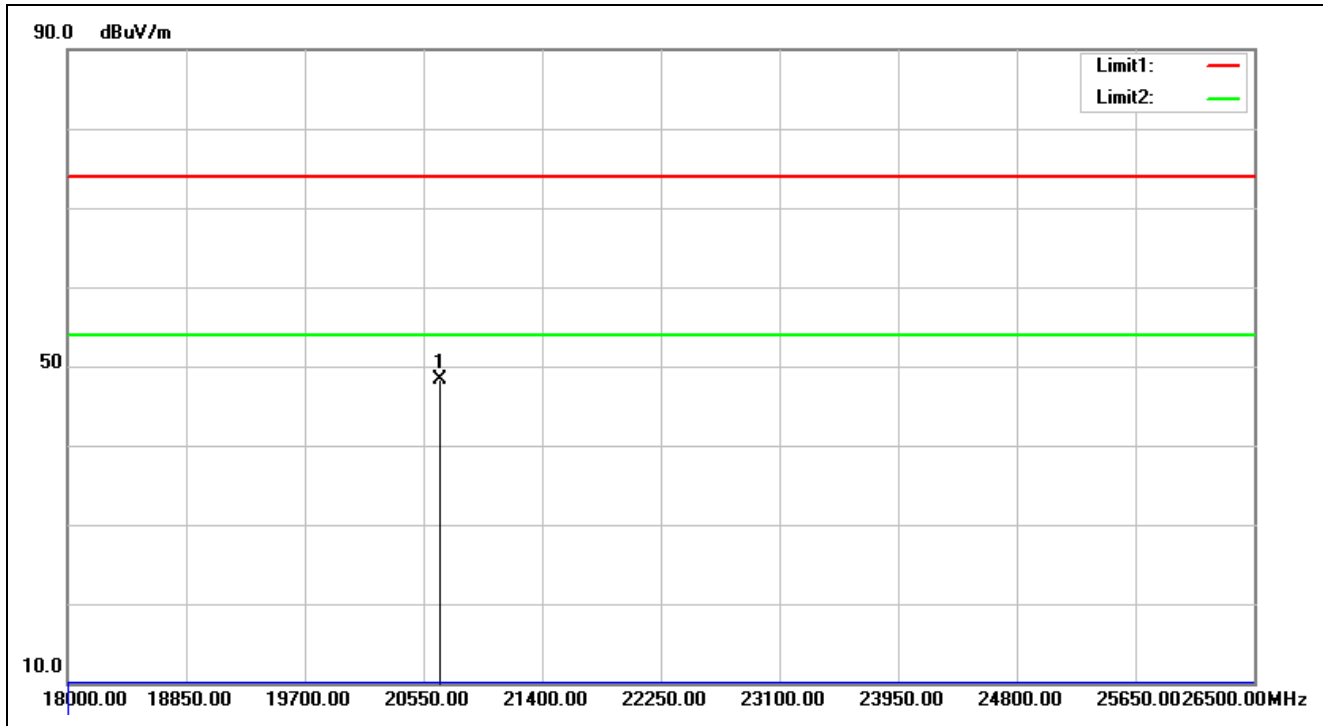
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/25 21:42:32
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	23984.000	29.68	19.34	49.02	74.00	-24.98	peak			



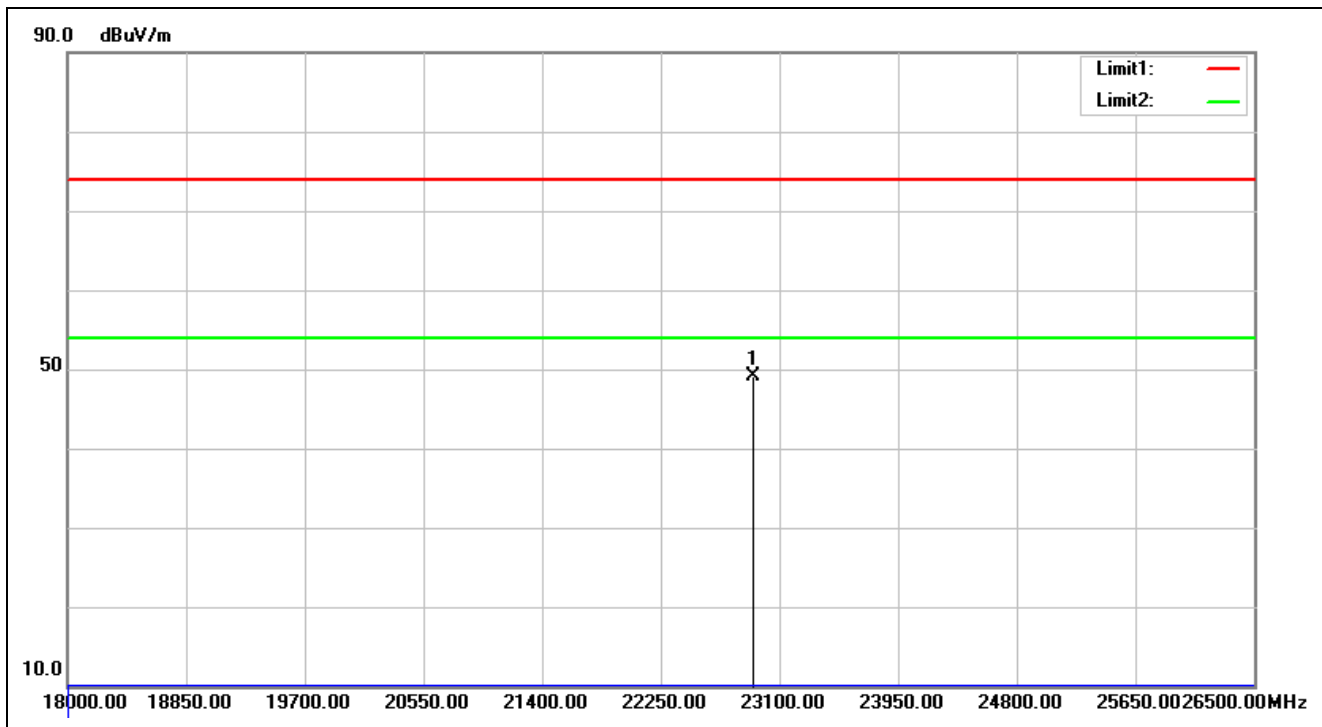
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/25 21:42:39
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	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	22683.500	30.02	17.83	47.85	74.00	-26.15	peak			



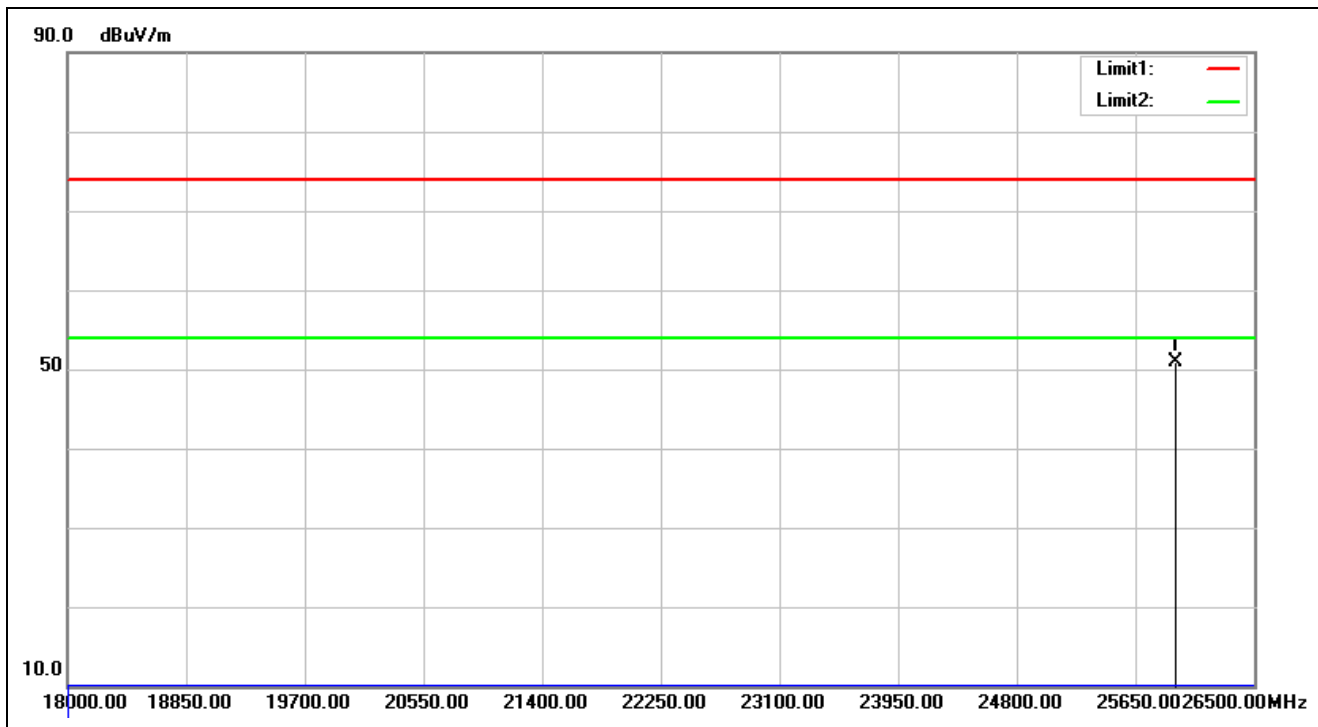
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/25 21:42:47
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	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	20669.000	29.90	18.33	48.23	74.00	-25.77	peak			



Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/25 21:43:28
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	22913.000	30.37	18.67	49.04	74.00	-24.96	peak			



Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/25 21:43:35
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
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	25939.000	32.38	18.62	51.00	74.00	-23.00	peak			

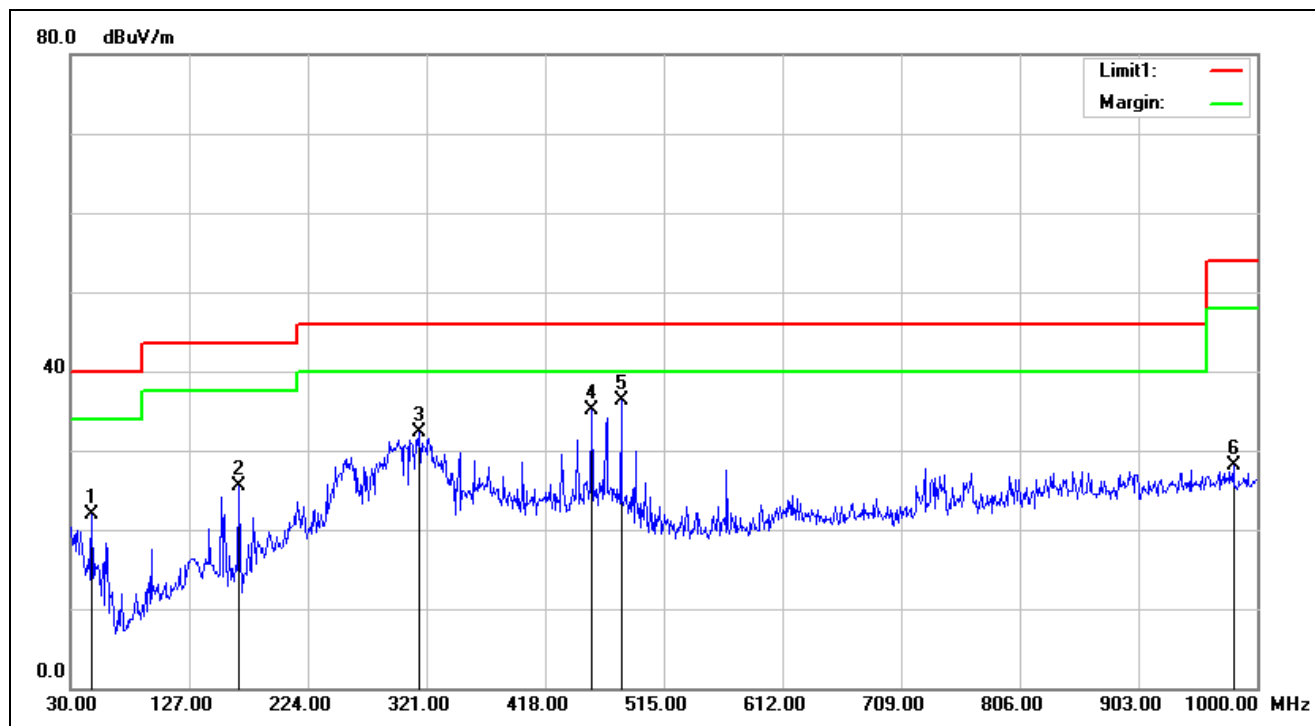
Spurious Emissions, RX Mode, 30M-1G



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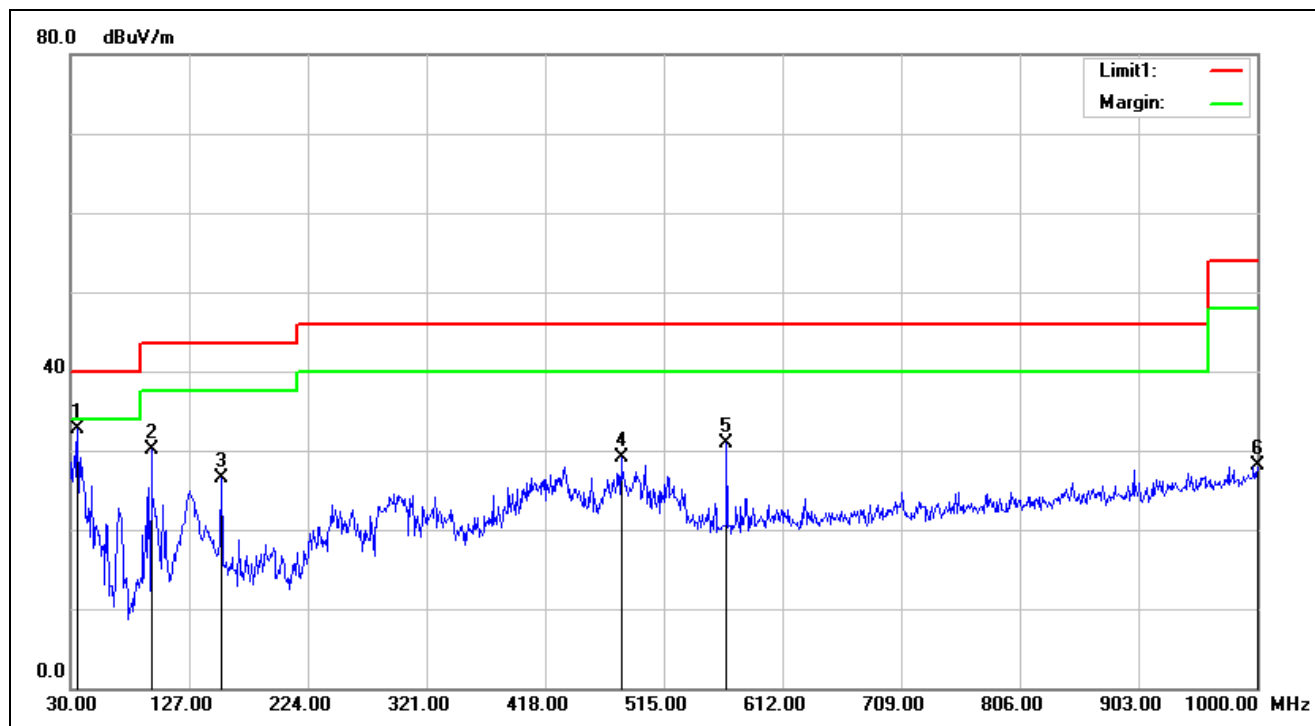
Tel: +886-2172-7000 fax: +886-2528-0018



Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/24 19:03:58
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	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	-15.67	37.54	21.87	40.00	-18.13	QP	100	194	
2	167.7400	-14.60	40.11	25.51	43.50	-17.99	QP	100	17	
3	315.1800	-10.14	42.50	32.36	46.00	-13.64	QP	100	115	
4	455.8300	-7.95	43.12	35.17	46.00	-10.83	QP	100	35	
5	480.0800	-7.59	43.99	36.40	46.00	-9.60	QP	100	49	
6	980.6000	-0.19	28.32	28.13	54.00	-25.87	QP	100	110	

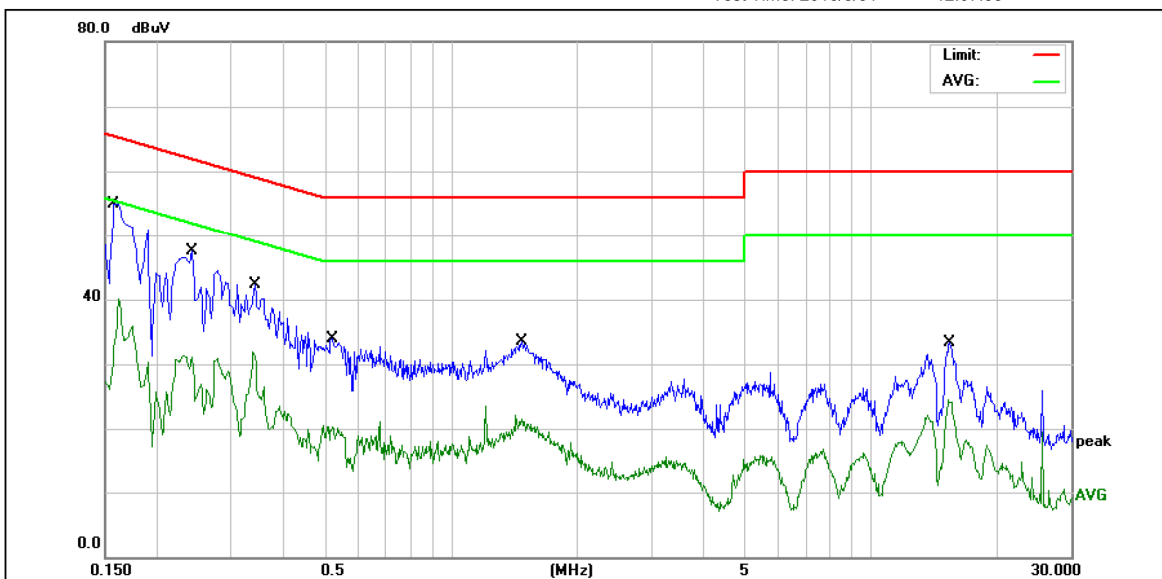
Spurious Emissions, Mains, 150kHz - 30MHz



Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 19:05:02
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	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	35.8200	-9.10	41.71	32.61	40.00	-7.39	QP	100	162	
2	95.9600	-15.47	45.50	30.03	43.50	-13.47	QP	100	37	
3	153.1900	-13.44	39.89	26.45	43.50	-17.05	QP	100	77	
4	480.0800	-7.59	36.63	29.04	46.00	-16.96	QP	100	115	
5	566.4100	-6.66	37.53	30.87	46.00	-15.13	QP	100	168	
6	1000.0000	0.01	28.04	28.05	54.00	-25.95	QP	100	301	

Mains Spurious Emissions



Service No.: 114047325(BM64SPKabcC2)

Test Standard: FCC Class B Conduction(QP)

Test item: Conducted Emission

Phase: L1

Applicant: Microchip

Temp.(°C)/Hum.(%): 20.6(°C) / 52 %

Product: Class II Module (Shielding)

Power Rating: AC 120V/60Hz

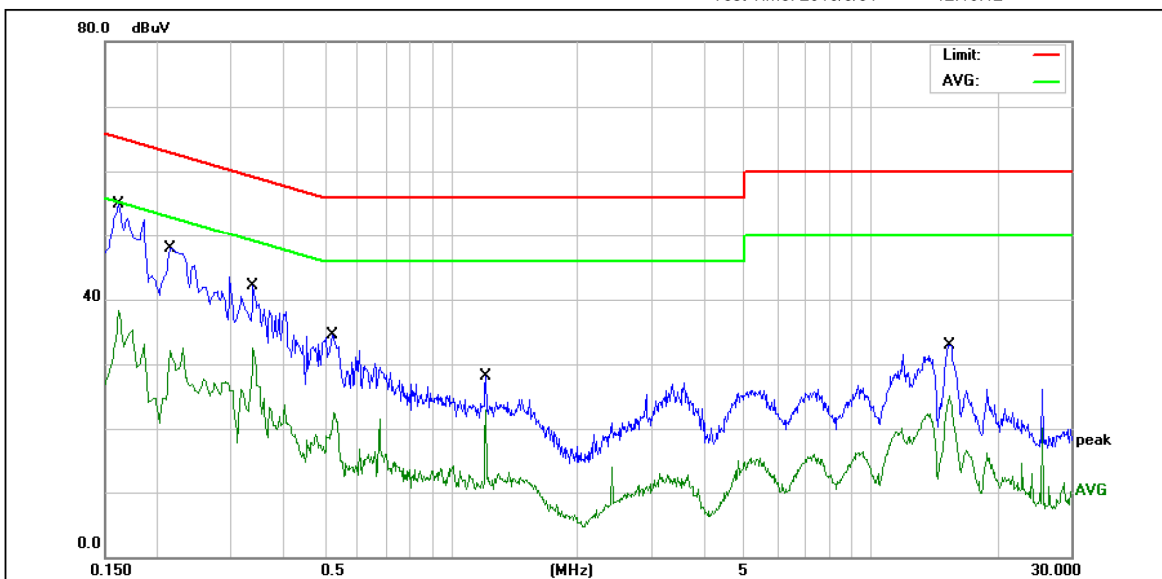
Model No.: BM64SPKabcC2

Test Engineer: Kevin Ma

Test Mode: Normal link

Remark:

No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1580	9.65	41.70	51.35	65.56	-14.21	QP	P	
2	0.1580	9.65	21.82	31.47	55.56	-24.09	AVG	P	
3	0.2420	9.63	31.38	41.01	62.02	-21.01	QP	P	
4	0.2420	9.63	17.94	27.57	52.02	-24.45	AVG	P	
5	0.3420	9.63	27.97	37.60	59.15	-21.55	QP	P	
6	0.3420	9.63	20.56	30.19	49.15	-18.96	AVG	P	
7	0.5220	9.63	21.77	31.40	56.00	-24.60	QP	P	
8	0.5220	9.63	11.17	20.80	46.00	-25.20	AVG	P	
9	1.4780	9.63	20.31	29.94	56.00	-26.06	QP	P	
10	1.4780	9.63	11.12	20.75	46.00	-25.25	AVG	P	
11	15.4620	9.84	18.62	28.46	60.00	-31.54	QP	P	
12	15.4620	9.84	13.40	23.24	50.00	-26.76	AVG	P	



Service No.: 114047325(BM64SPKabcC2)

Test Standard: FCC Class B Conduction(QP)

Test item: Conducted Emission

Phase: N

Applicant: Microchip

Temp.(°C)/Hum.(%): 20.6(°C) / 52 %

Product: Class II Module (Shielding)

Power Rating: AC 120V/60Hz

Model No.: BM64SPKabcC2

Test Engineer: Kevin Ma

Test Mode: Normal link

Remark:

No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1620	9.65	41.94	51.59	65.36	-13.77	QP	P	
2	0.1620	9.65	23.73	33.38	55.36	-21.98	AVG	P	
3	0.2140	9.63	35.29	44.92	63.04	-18.12	QP	P	
4	0.2140	9.63	18.56	28.19	53.04	-24.85	AVG	P	
5	0.3379	9.63	27.88	37.51	59.25	-21.74	QP	P	
6	0.3379	9.63	22.53	32.16	49.25	-17.09	AVG	P	
7	0.5220	9.63	21.25	30.88	56.00	-25.12	QP	P	
8	0.5220	9.63	11.21	20.84	46.00	-25.16	AVG	P	
9	1.2100	9.63	15.51	25.14	56.00	-30.86	QP	P	
10	1.2100	9.63	13.21	22.84	46.00	-23.16	AVG	P	
11	15.4540	9.84	18.46	28.30	60.00	-31.70	QP	P	
12	15.4540	9.84	13.26	23.10	50.00	-26.90	AVG	P	