

Test Report No.10055786 10055790 001

Appendix D: Radiated and Mains Spurious Emission Data

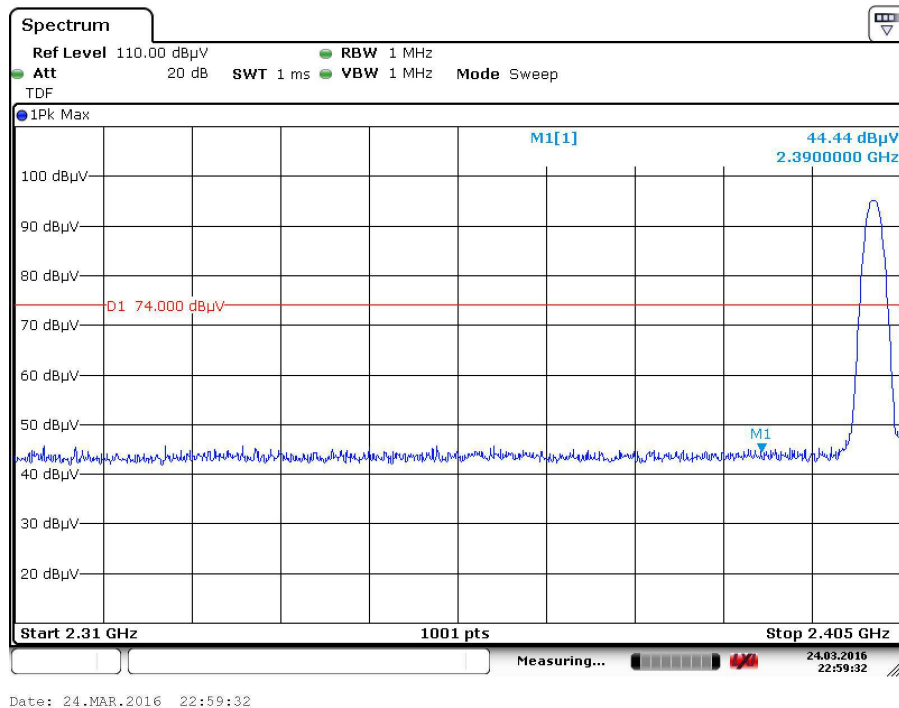
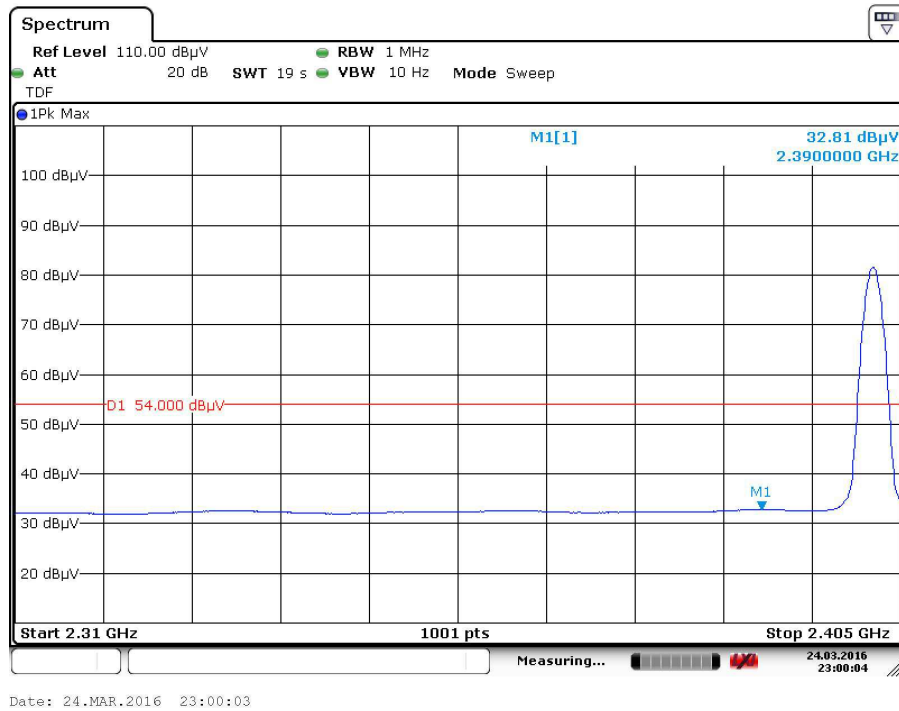
(File: 10055786 10055790AppendixD)

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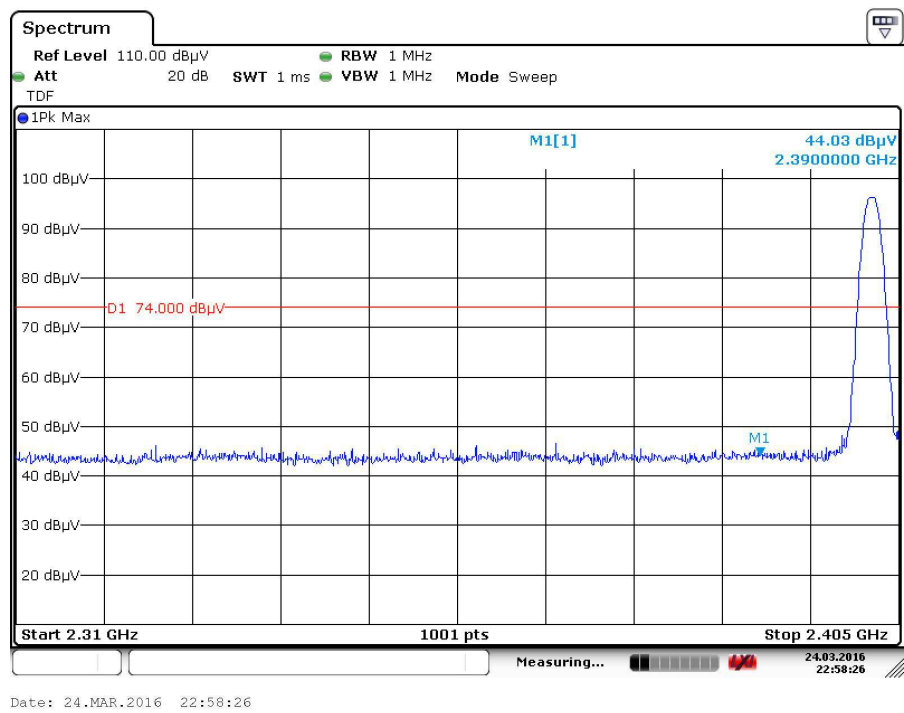
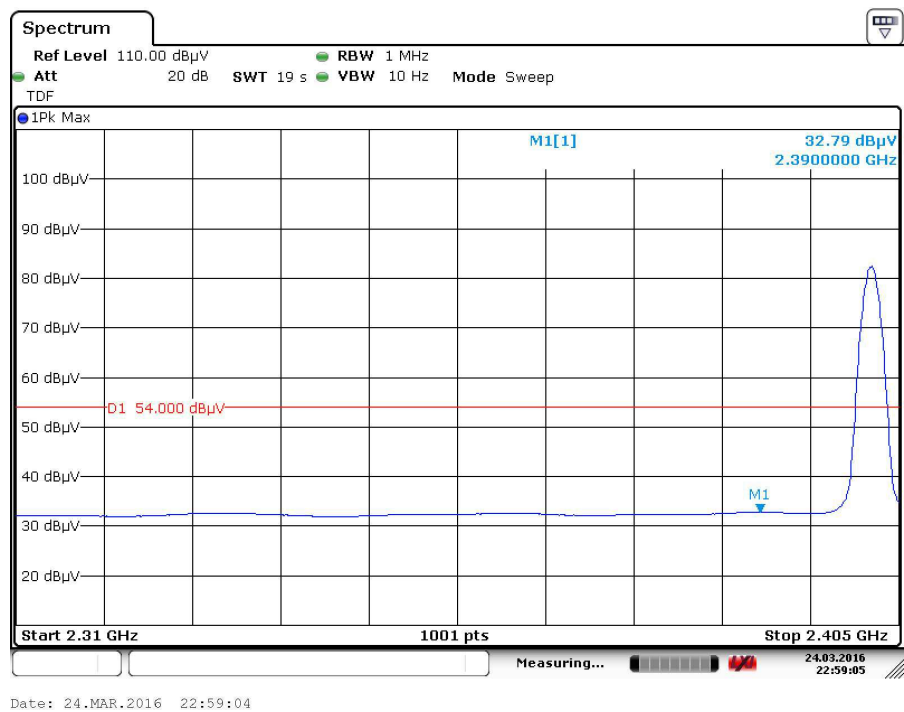
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Radiated Bandedge (GFSK)

Low Channel (Hor)



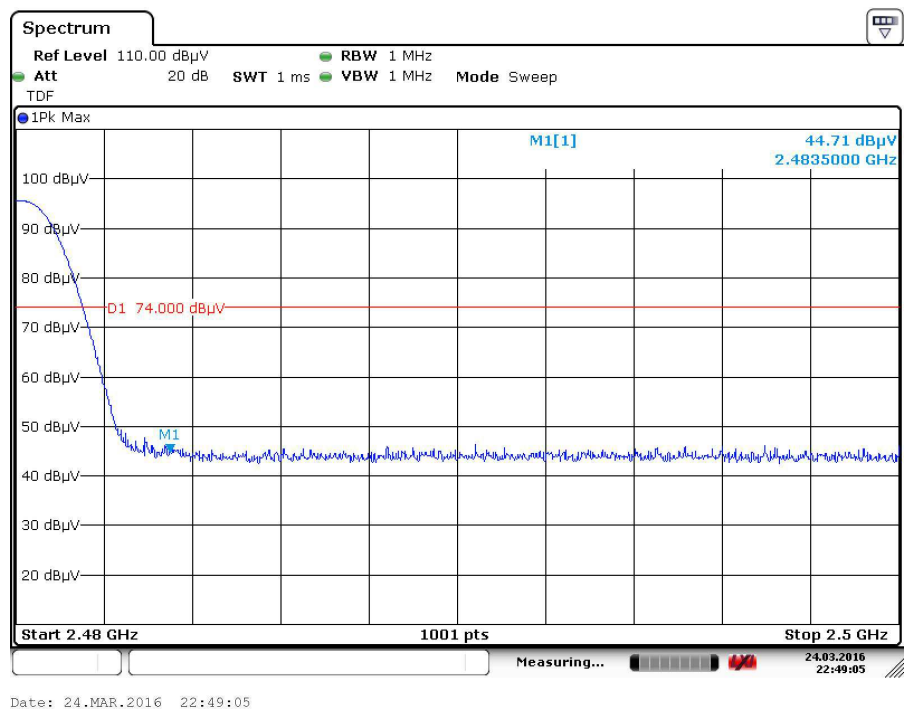
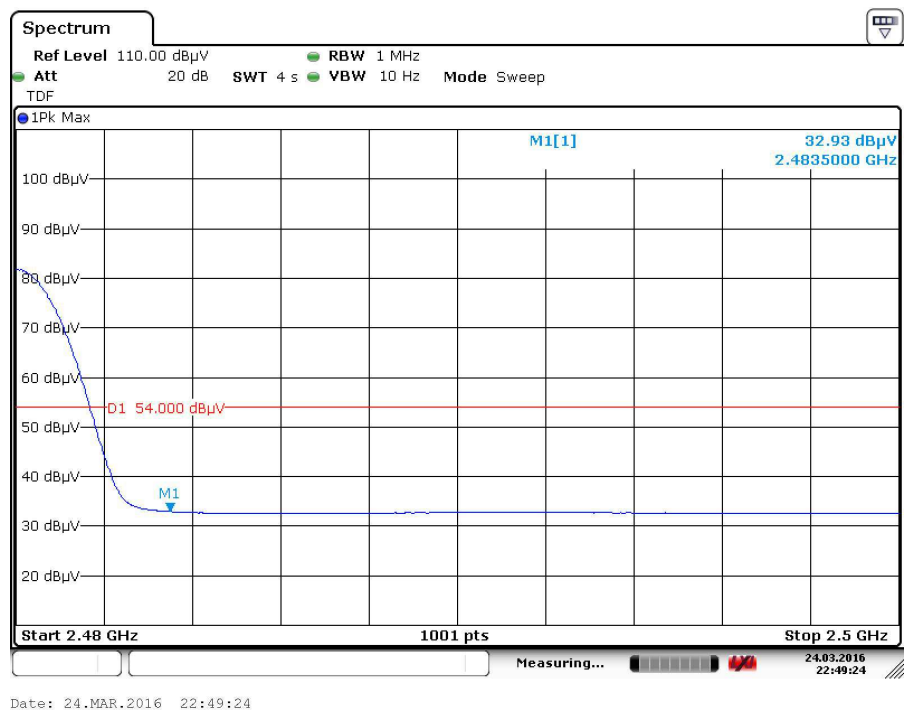
Low Channel (Ver)



Spurious Emissions, Band Edge, 2.35-2.5G

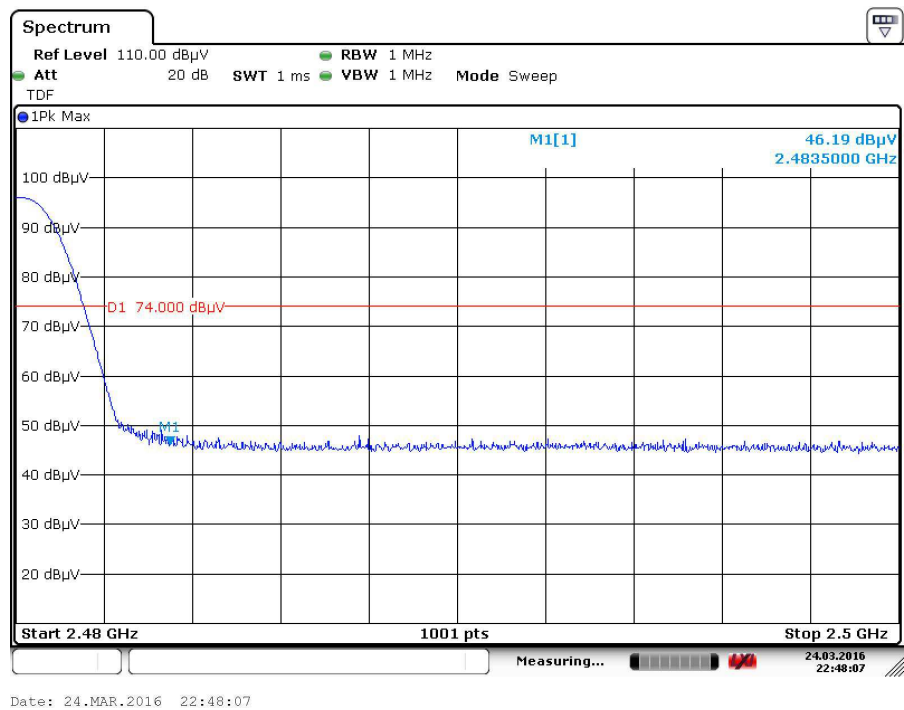
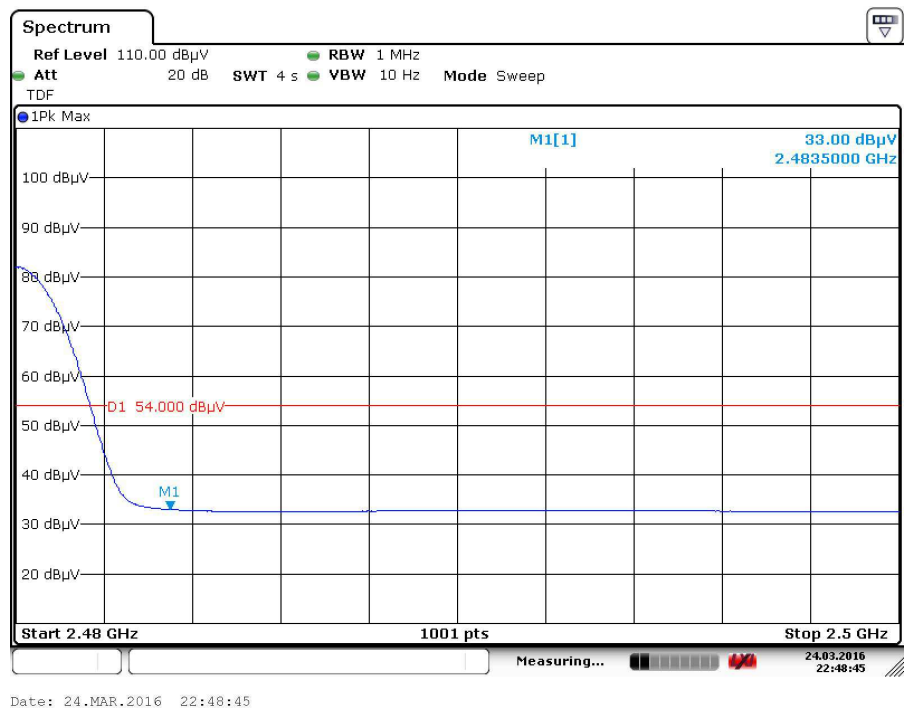
Radiated Bandedge (GFSK)

High Channel (Hor)



Spurious Emissions, Band Edge, 2.35-2.5G

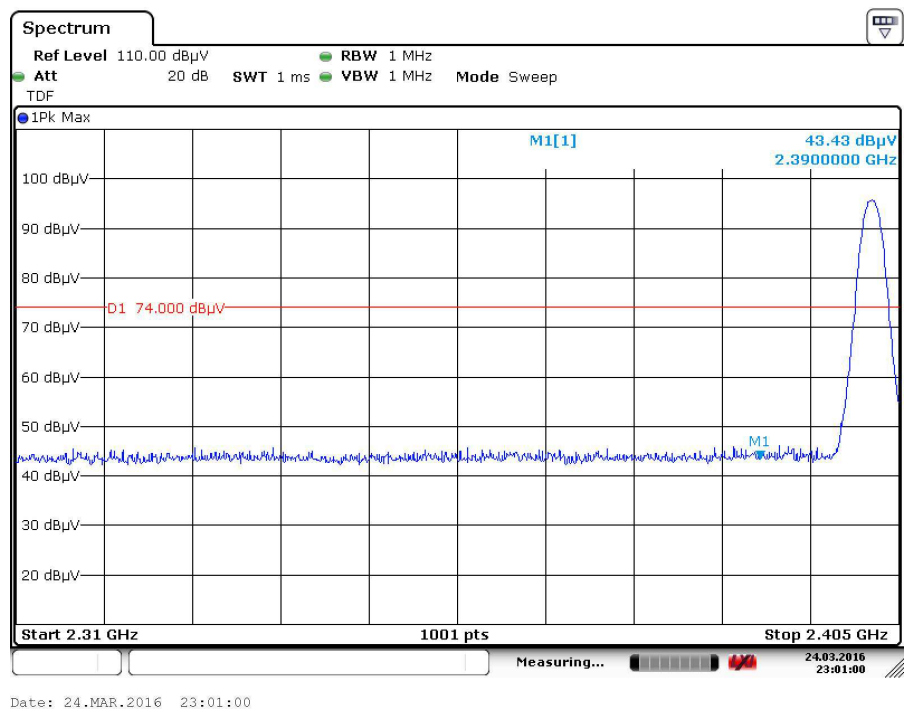
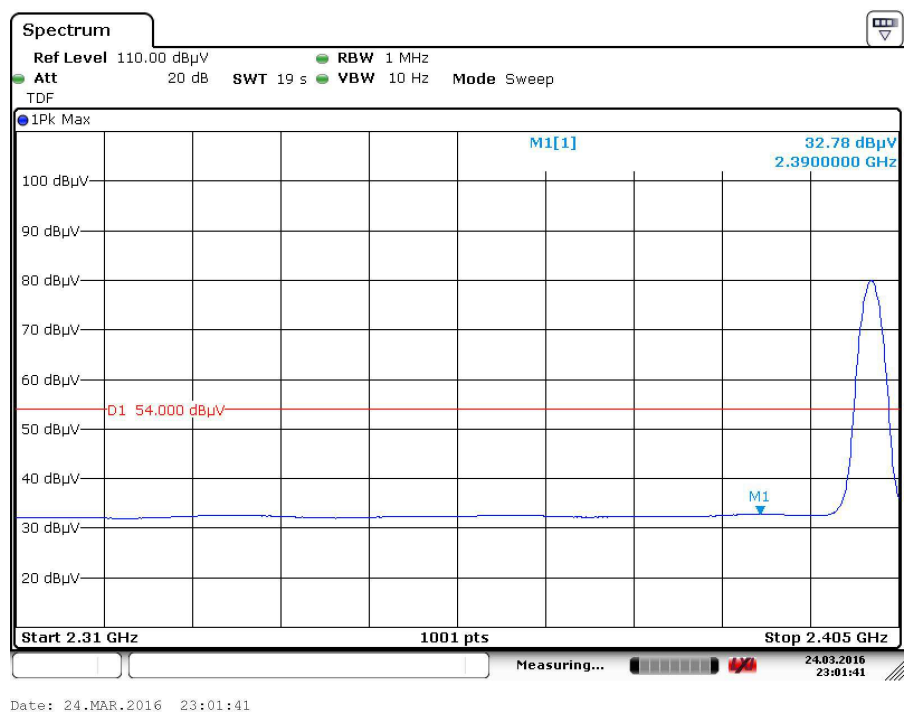
High Channel (Ver)



Spurious Emissions, Band Edge, 2.35-2.5G

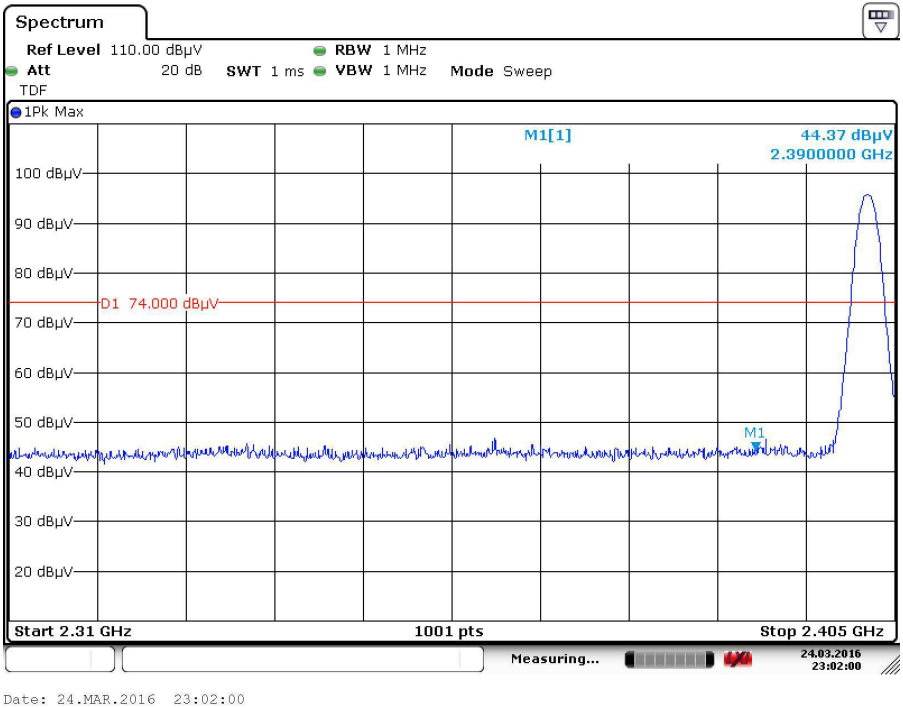
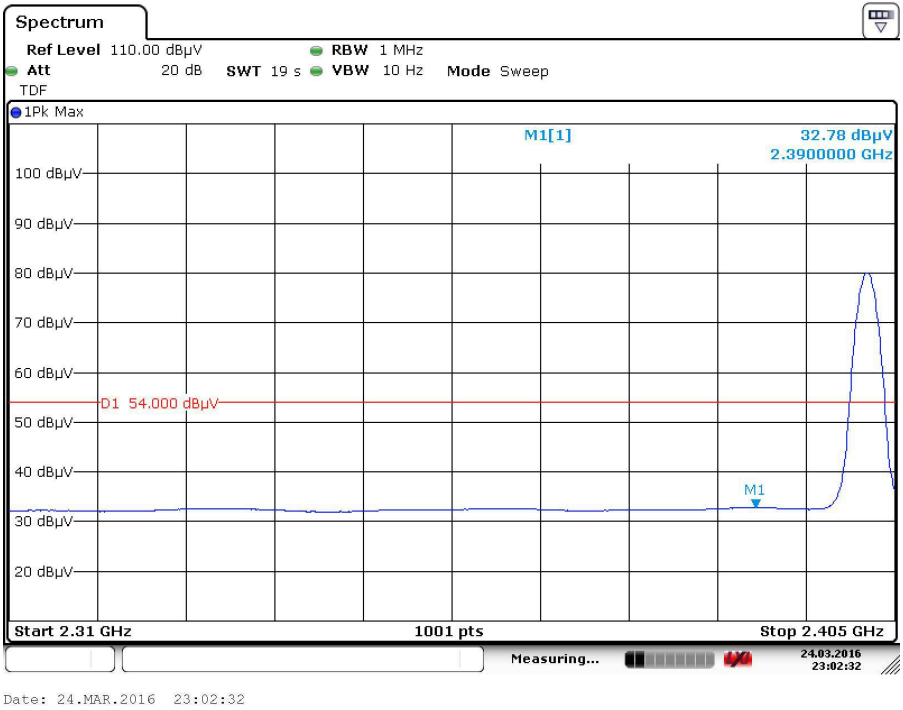
Radiated Bandedge (8DPSK)

Low Channel (Hor)



Spurious Emissions, Band Edge, 2.35-2.5G

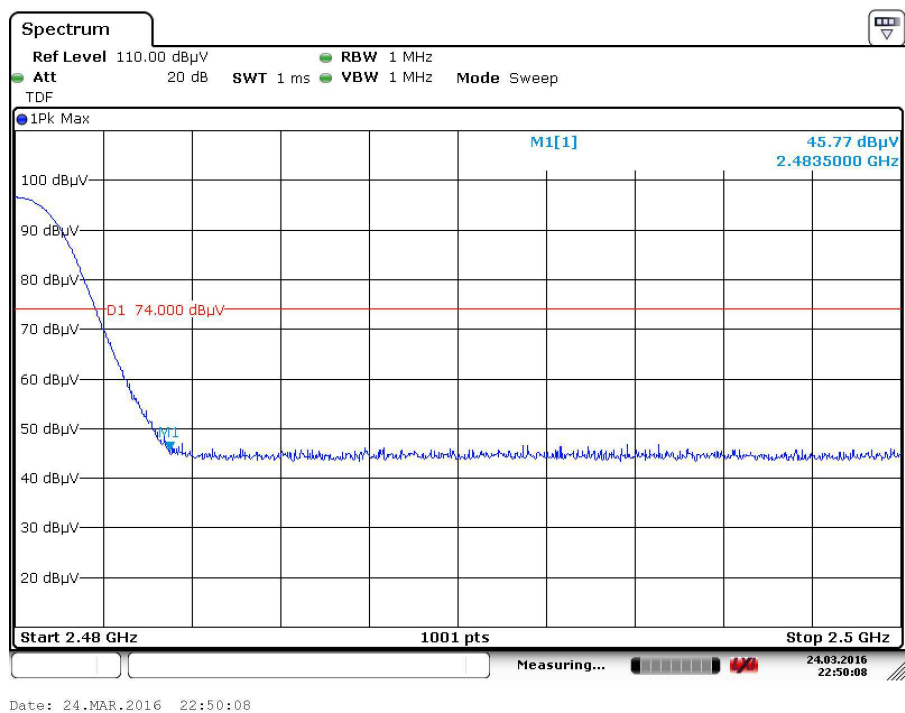
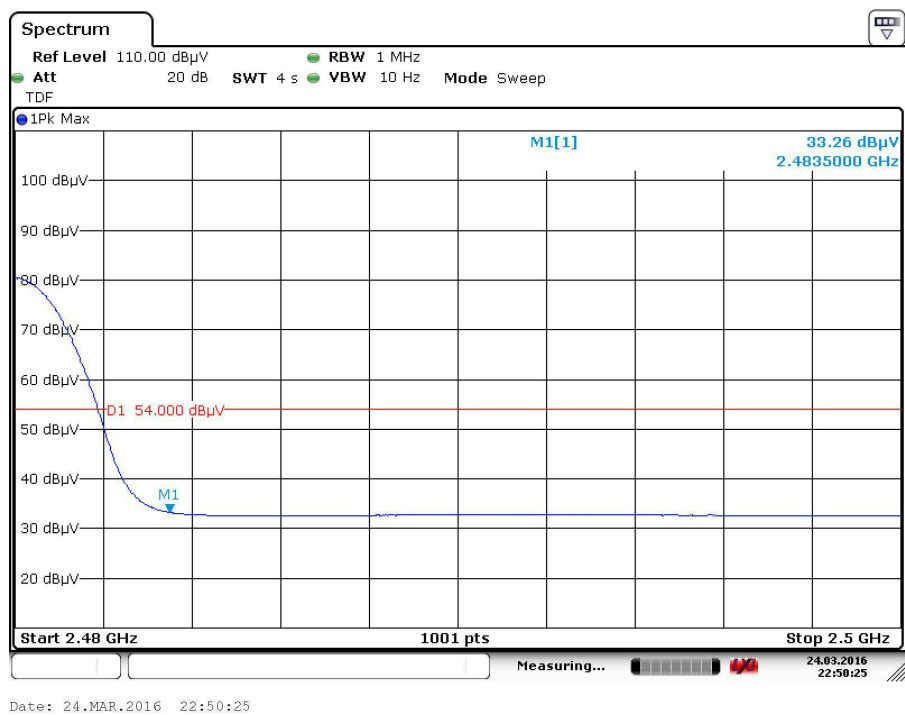
Low Channel (Ver)



Spurious Emissions, Band Edge, 2.35-2.5G

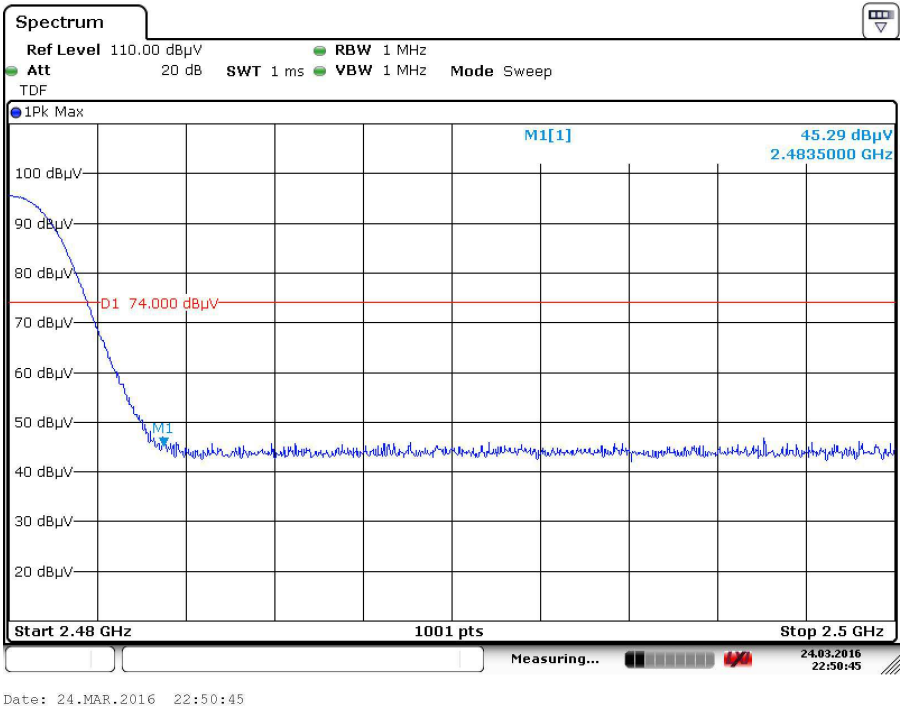
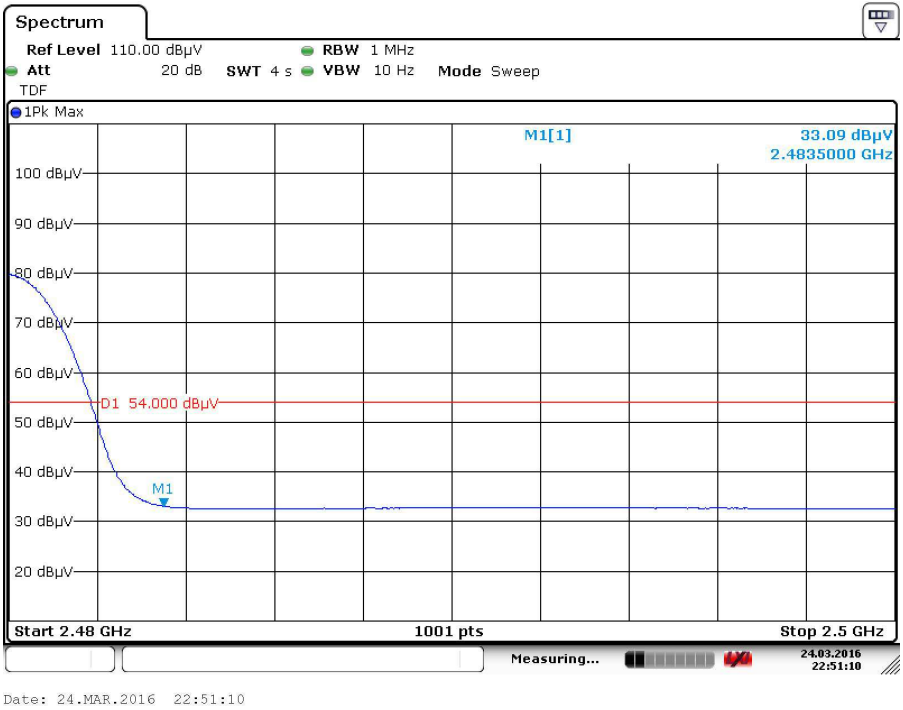
Radiated Bandedge (8DPSK)

High Channel (Hor)



Spurious Emissions, Band Edge, 2.35-2.5G

High Channel (Ver)



Spurious Emissions, Band Edge, 2.35-2.5G

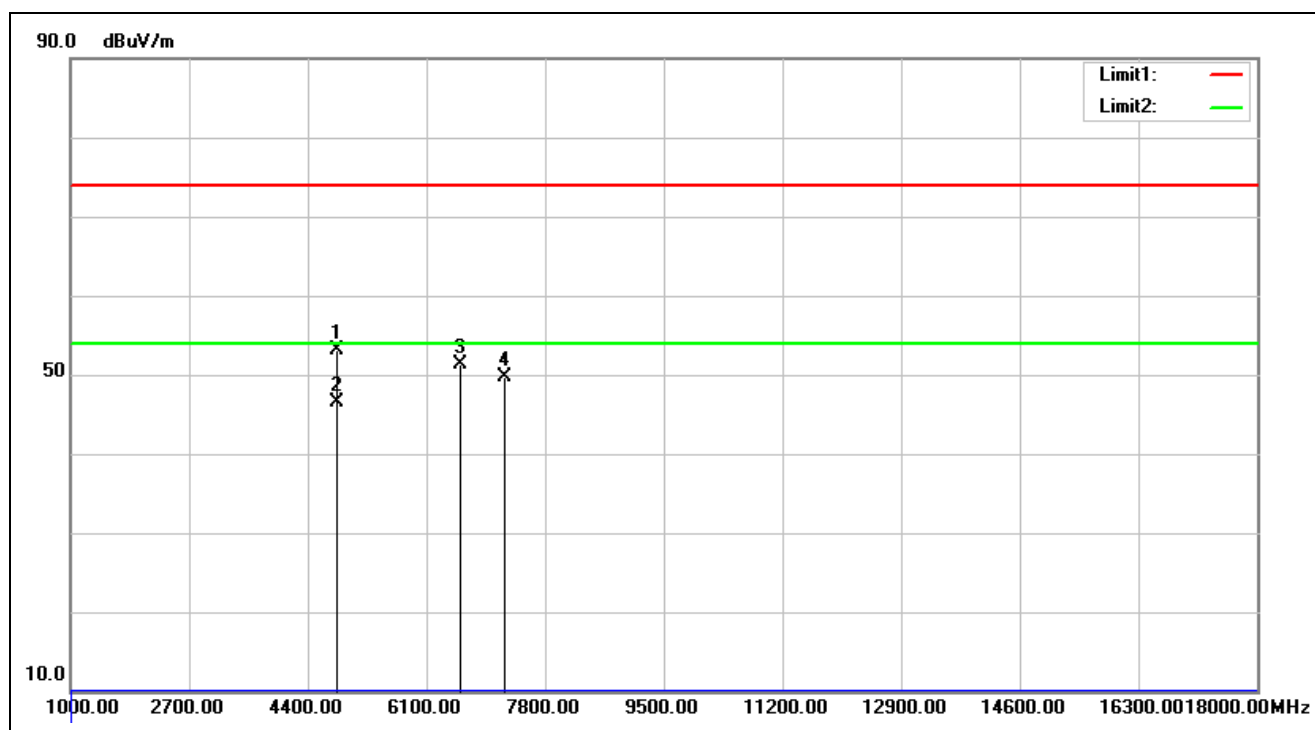
Spurious Emissions, TX Mode, 1-18G



TUV Taiwan

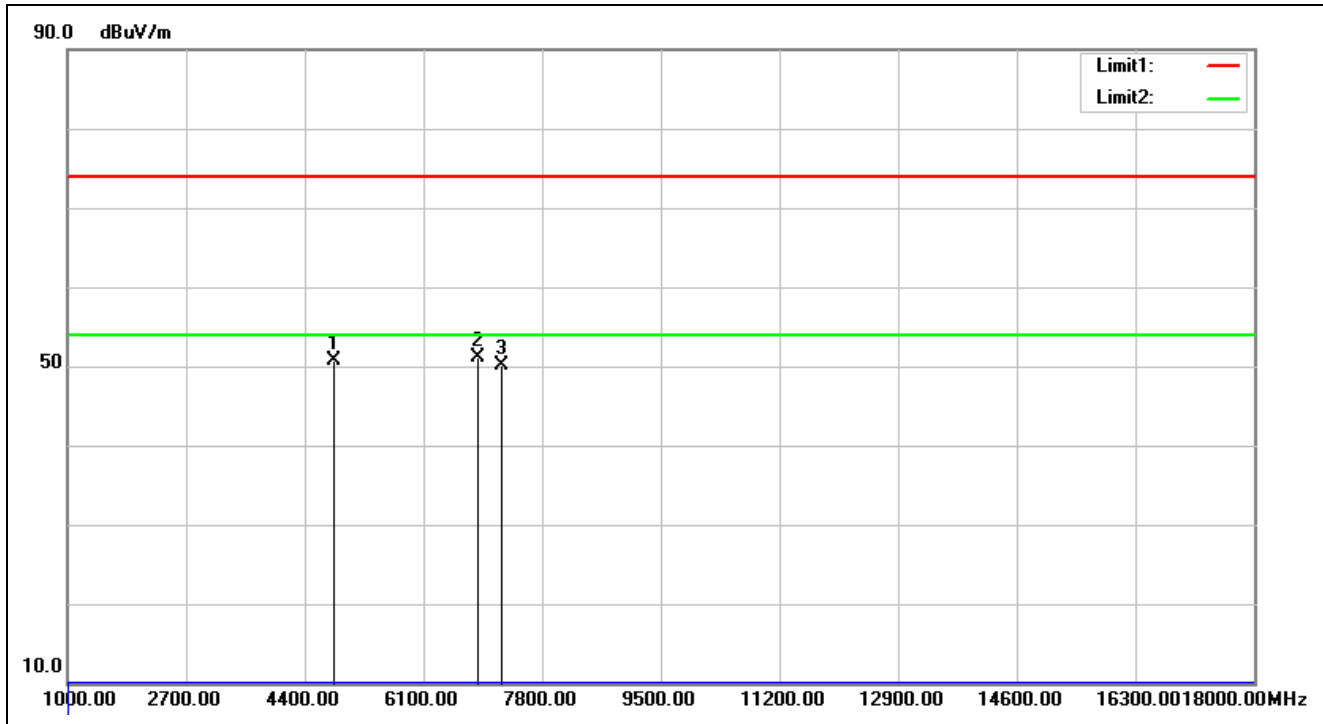
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



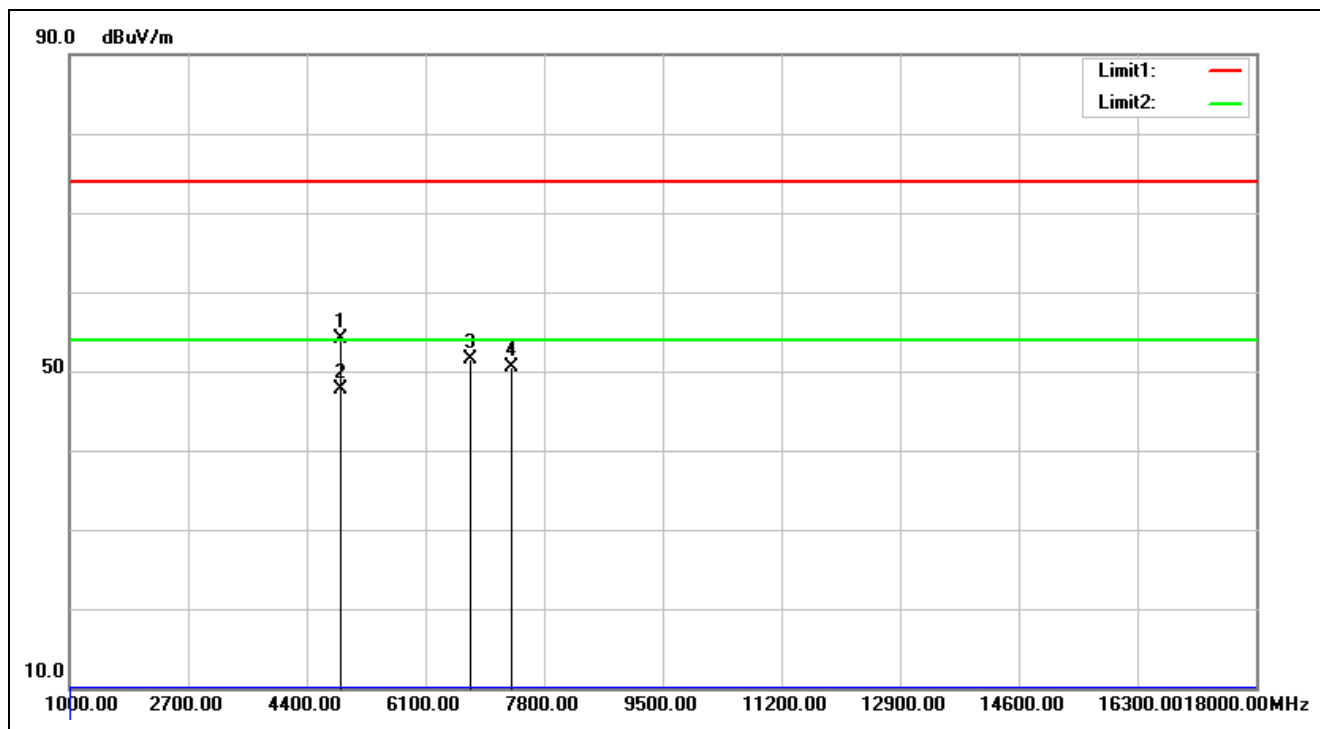
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Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/24 20:36:58
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2402-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	55.41	53.13	74.00	-20.87	peak	100	318	
2	4804.000	-2.28	48.81	46.53	54.00	-7.47	AVG	100	318	
3	6593.000	5.86	45.43	51.29	74.00	-22.71	peak	100	307	
4	7206.000	5.77	44.01	49.78	74.00	-24.22	peak		0	



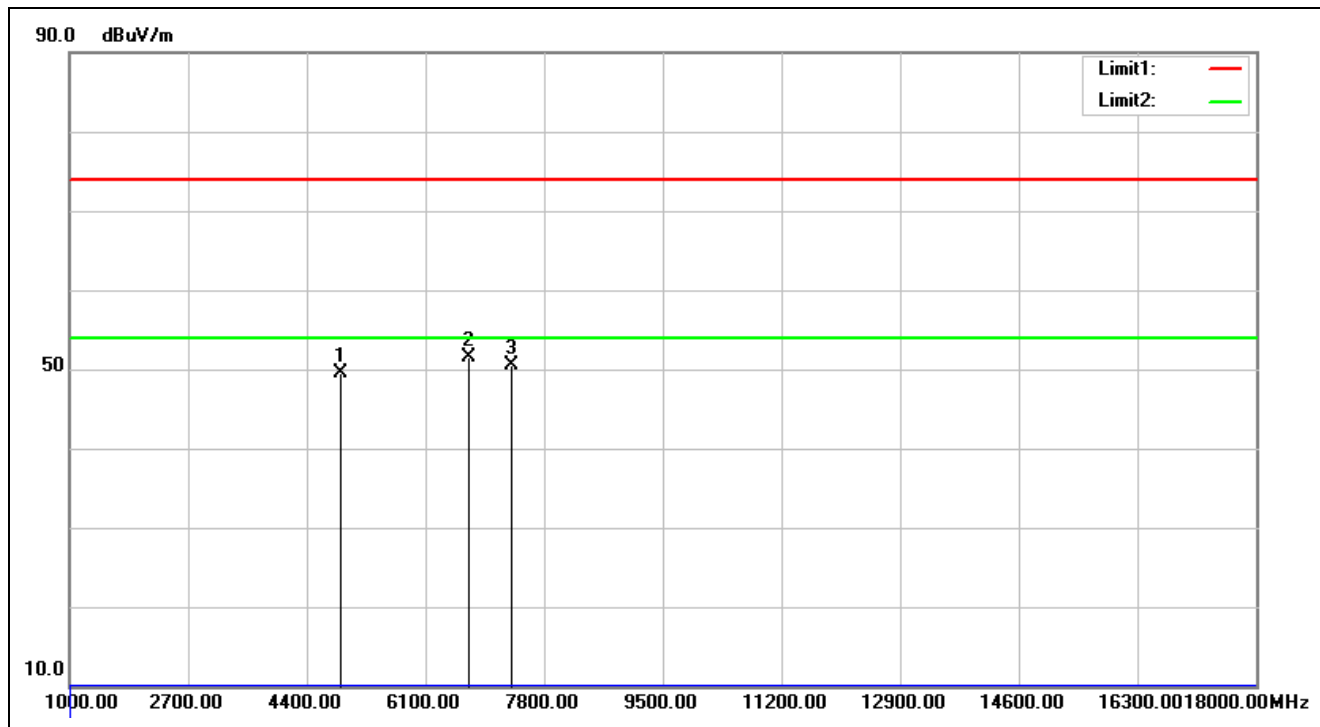
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 20:38:01
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2402-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	53.06	50.78	74.00	-23.22	peak	100	241	
2	6882.000	5.38	45.73	51.11	74.00	-22.89	peak	100	175	
3	7206.000	5.77	44.41	50.18	74.00	-23.82	peak			



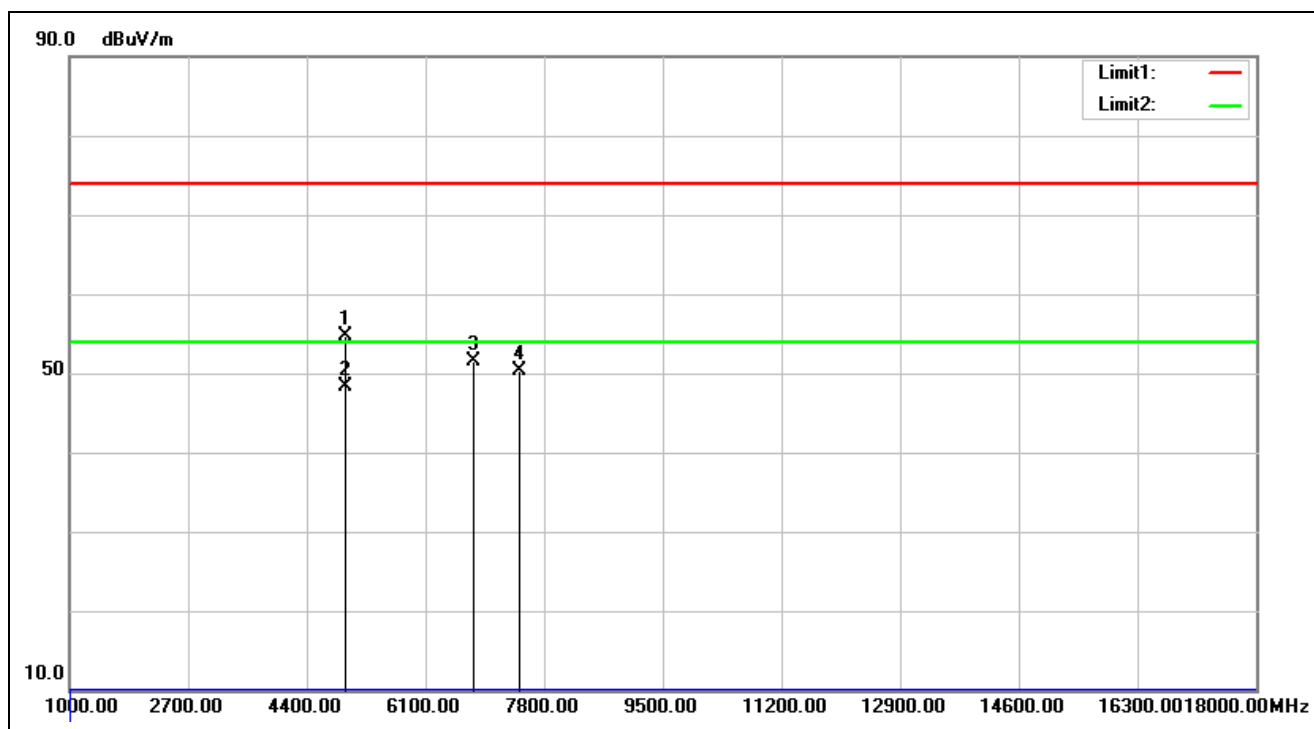
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/24 20:42:13
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2441-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4882.000	-2.10	56.30	54.20	74.00	-19.80	peak	100	360	
2	4882.000	-2.10	49.80	47.70	54.00	-6.30	AVG	100	360	
3	6746.000	5.60	45.98	51.58	74.00	-22.42	peak	100	130	
4	7323.000	6.11	44.40	50.51	74.00	-23.49	peak			



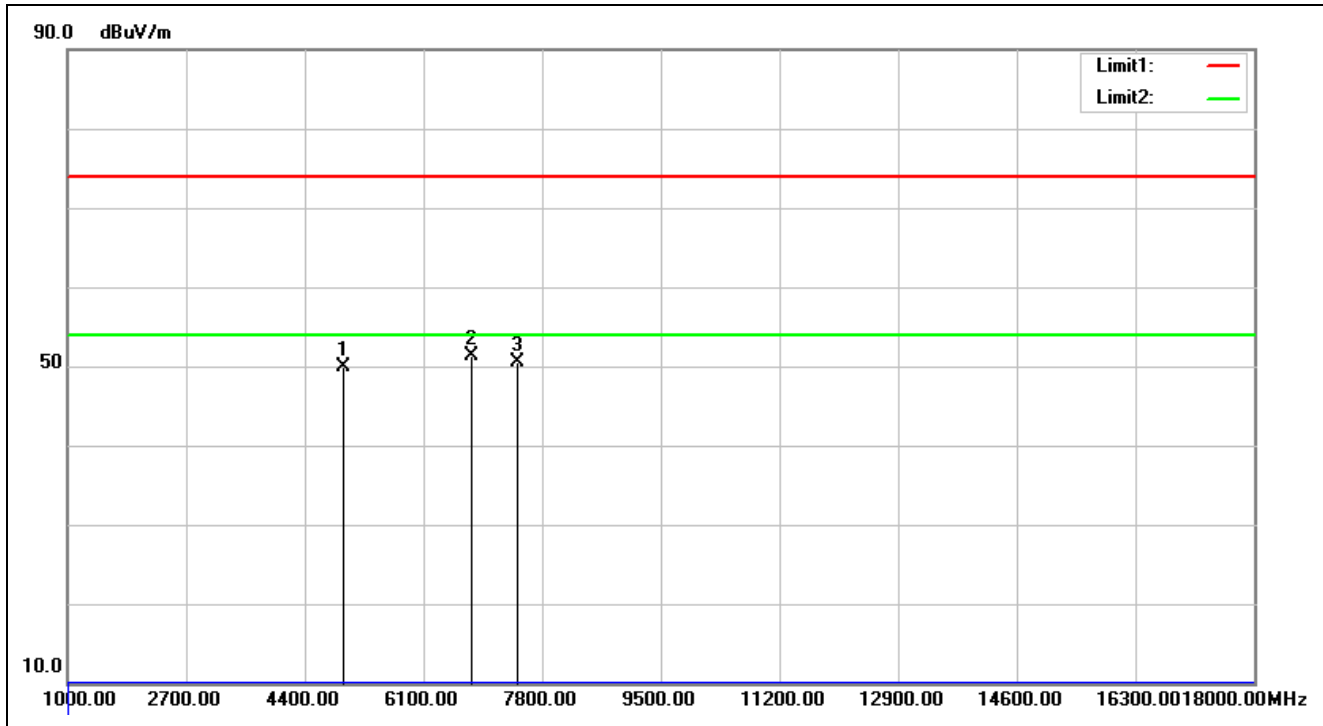
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Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 20:43:16
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2441-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4882.000	-2.10	51.69	49.59	74.00	-24.41	peak	100	294	
2	6729.000	5.64	45.88	51.52	74.00	-22.48	peak	100	67	
3	7323.000	6.11	44.38	50.49	74.00	-23.51	peak			



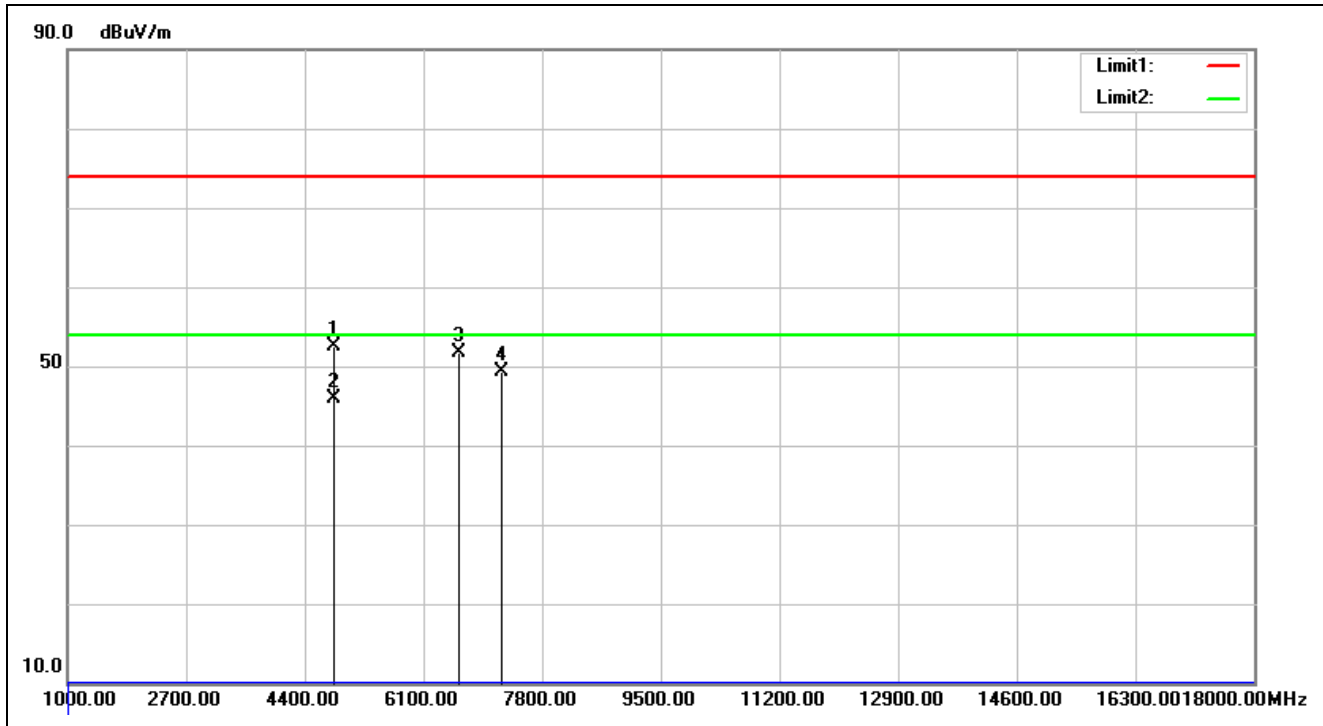
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Test item:	Radiation Emission	Test Time:	2016/3/24 20:46:17
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2480-TX		
Remark:			

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	56.67	54.76	74.00	-19.24	peak	100	2	
2	4960.000	-1.91	50.21	48.30	54.00	-5.70	AVG	100	2	
3	6780.000	5.55	45.95	51.50	74.00	-22.50	peak	100	315	
4	7440.000	6.44	43.82	50.26	74.00	-23.74	peak			



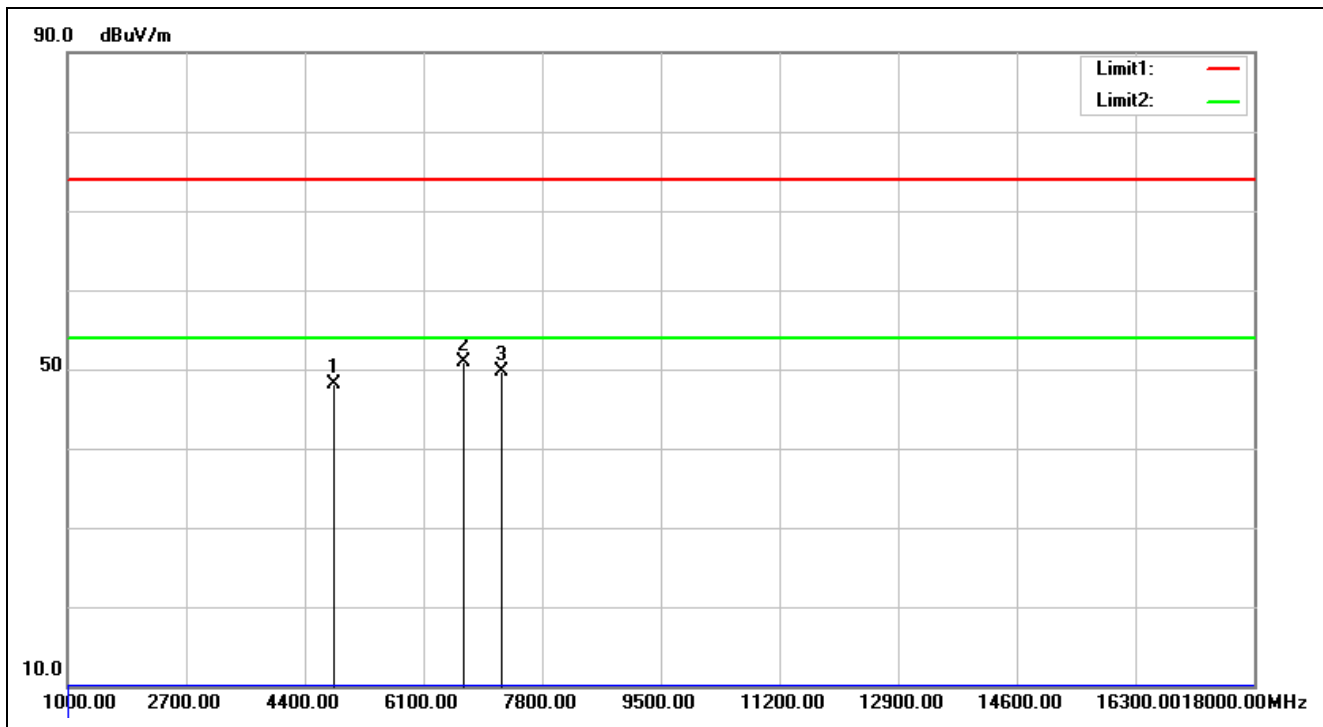
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Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 20:47:20
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2480-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	51.74	49.83	74.00	-24.17	peak	100	236	
2	6797.000	5.52	45.69	51.21	74.00	-22.79	peak	100	0	
3	7440.000	6.44	44.09	50.53	74.00	-23.47	peak			



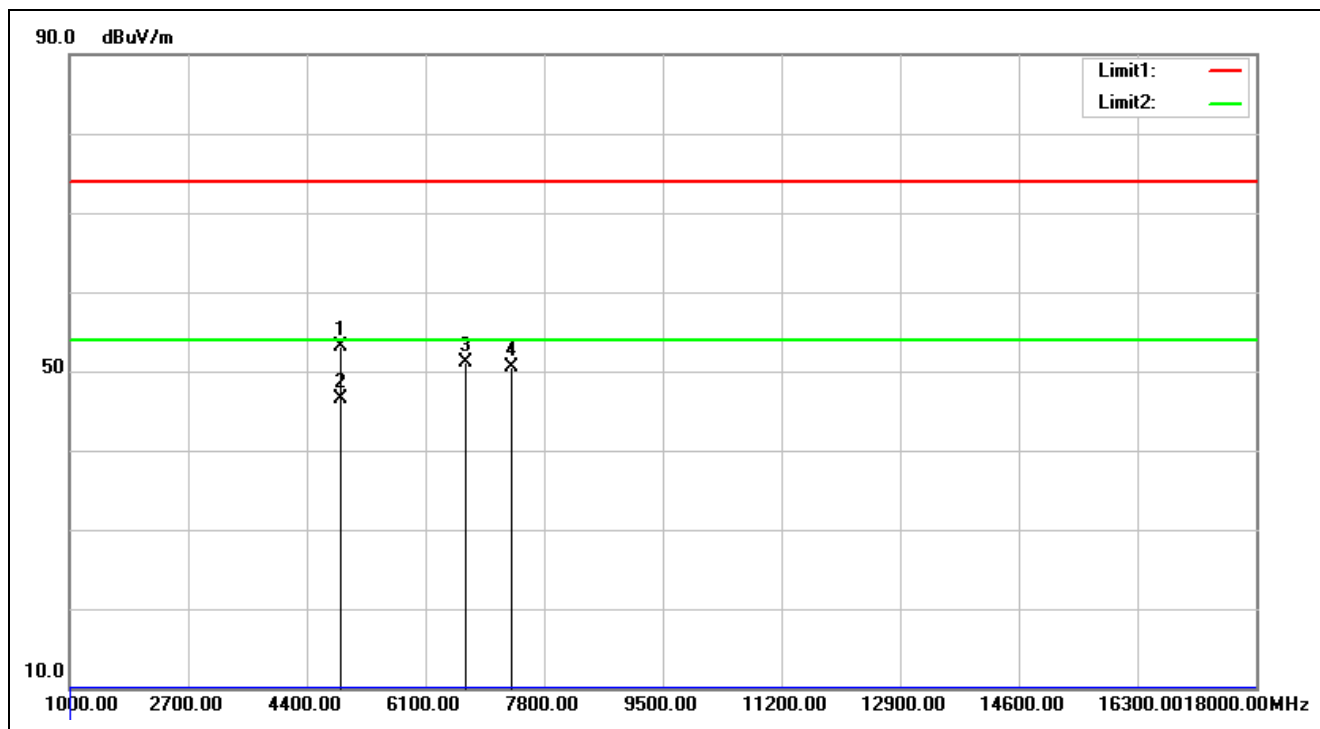
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/24 20:50:48
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	3DH5-2402-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	54.69	52.41	74.00	-21.59	peak	100	354	
2	4804.000	-2.28	48.18	45.90	54.00	-8.10	AVG	100	354	
3	6610.000	5.84	45.90	51.74	74.00	-22.26	peak	100	146	
4	7206.000	5.77	43.58	49.35	74.00	-24.65	peak			



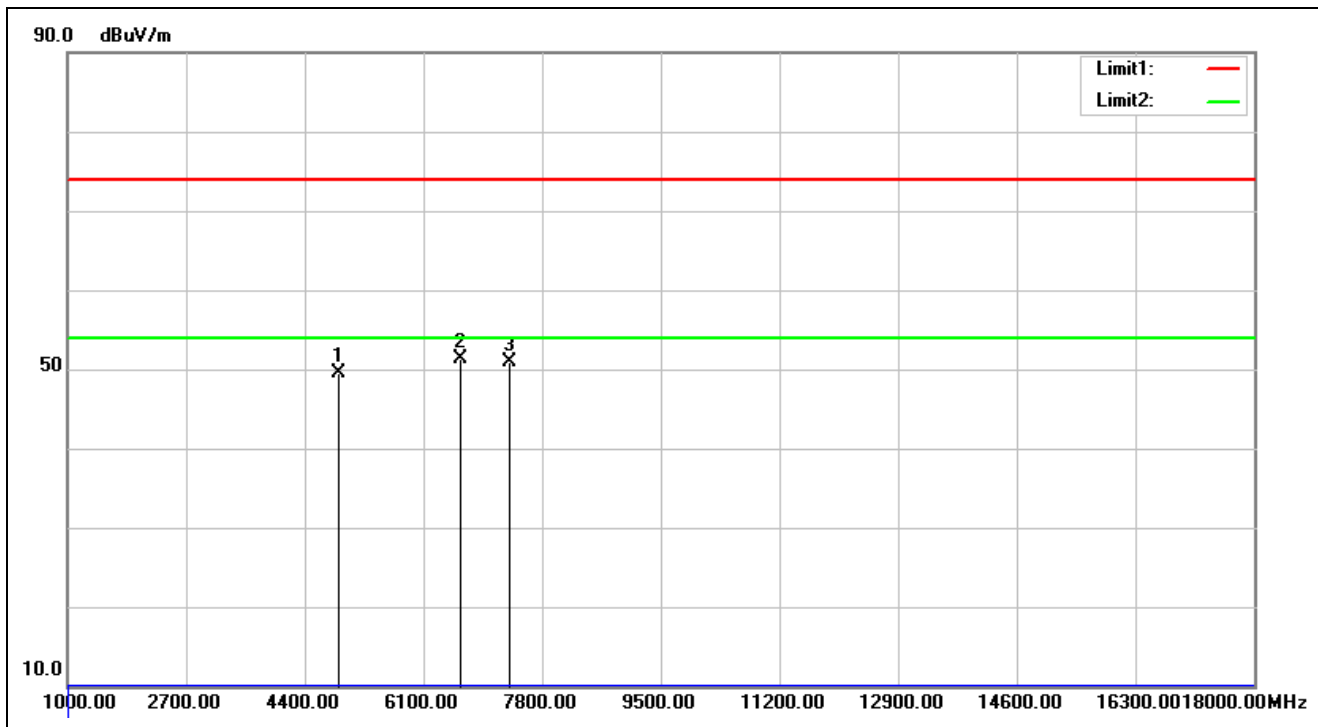
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 20:51:50
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	3DH5-2402-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	50.33	48.05	74.00	-25.95	peak			
2	6678.000	5.72	45.22	50.94	74.00	-23.06	peak	100	261	
3	7206.000	5.77	43.85	49.62	74.00	-24.38	peak			



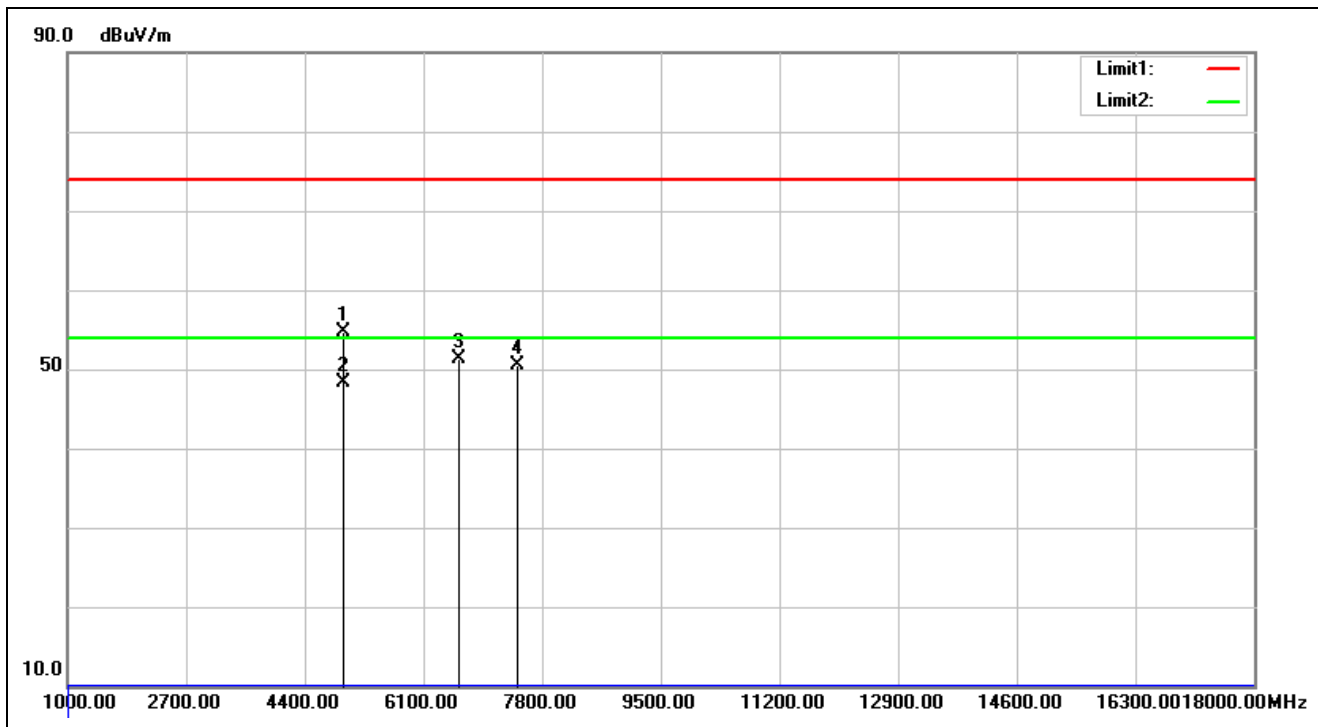
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Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/24 20:54:49
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	3DH5-2441-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4882.000	-2.10	55.15	53.05	74.00	-20.95	peak	100	0	
2	4882.000	-2.10	48.67	46.57	54.00	-7.43	AVG	100	0	
3	6678.000	5.72	45.45	51.17	74.00	-22.83	peak	100	254	
4	7323.000	6.11	44.33	50.44	74.00	-23.56	peak			



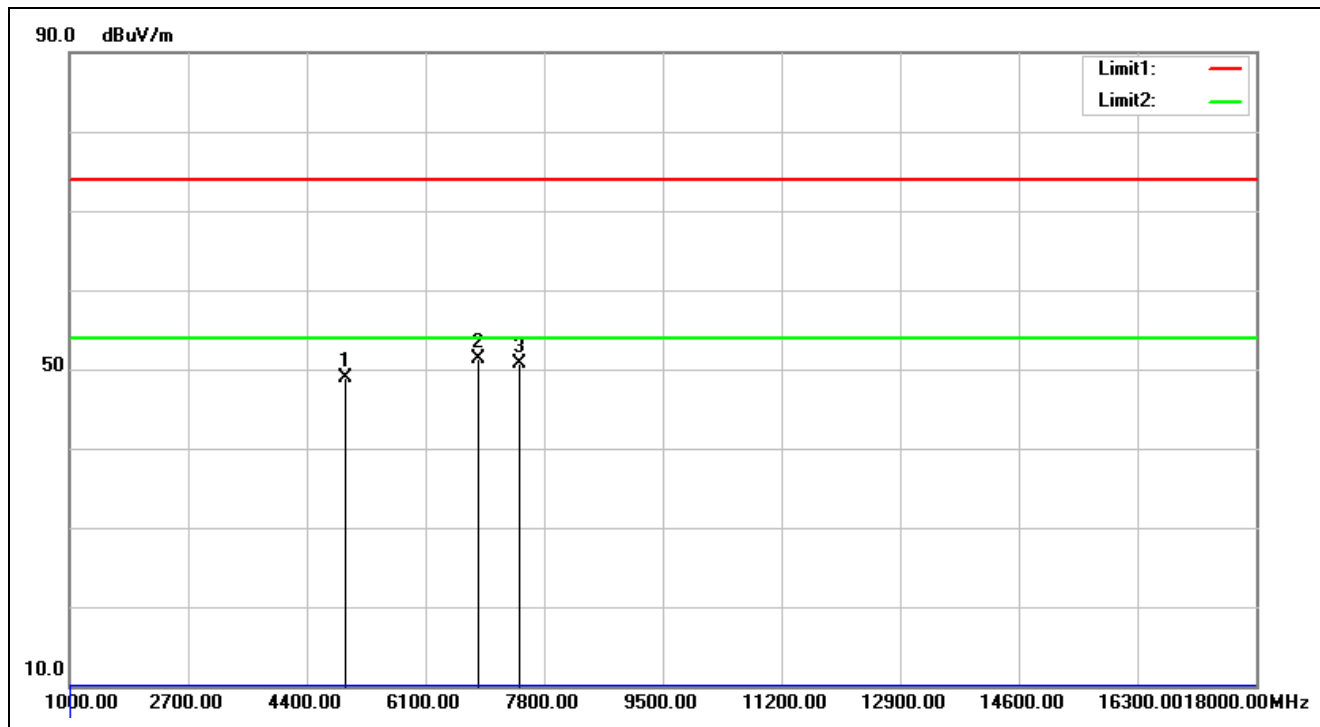
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Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 20:55:52
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	3DH5-2441-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4882.000	-2.10	51.61	49.51	74.00	-24.49	peak	100	230	
2	6627.000	5.80	45.48	51.28	74.00	-22.72	peak	100	164	
3	7323.000	6.11	44.89	51.00	74.00	-23.00	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 20:58:55
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:	3DH5-2480-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	50.31	48.40	54.00	-5.60	AVG	100	0	
3	6610.000	5.84	45.55	51.39	74.00	-22.61	peak	100	257	
4	7440.000	6.44	44.14	50.58	74.00	-23.42	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 20:59:57
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:	3DH5-2480-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	50.75	48.84	74.00	-25.16	peak			
2	6865.000	5.40	45.97	51.37	74.00	-22.63	peak	100	244	
3	7440.000	6.44	44.19	50.63	74.00	-23.37	peak			

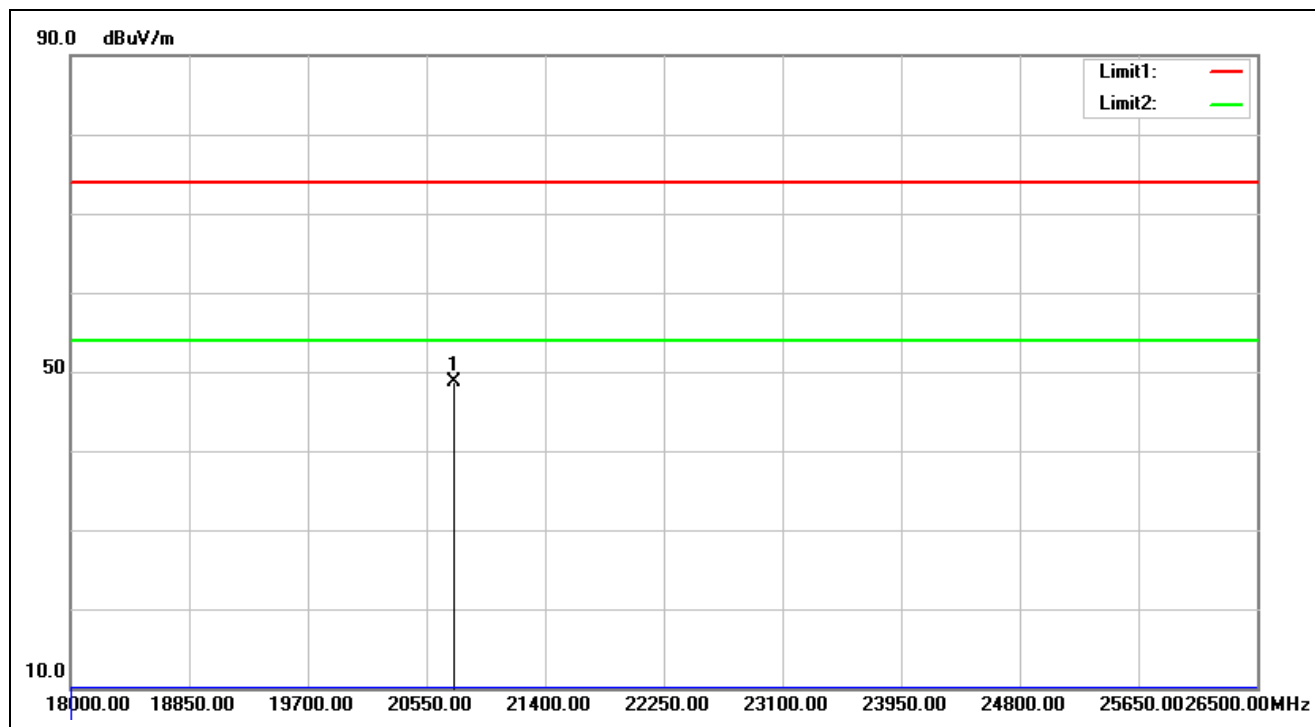
Spurious Emissions, TX Mode, 18-26G



TUV Taiwan

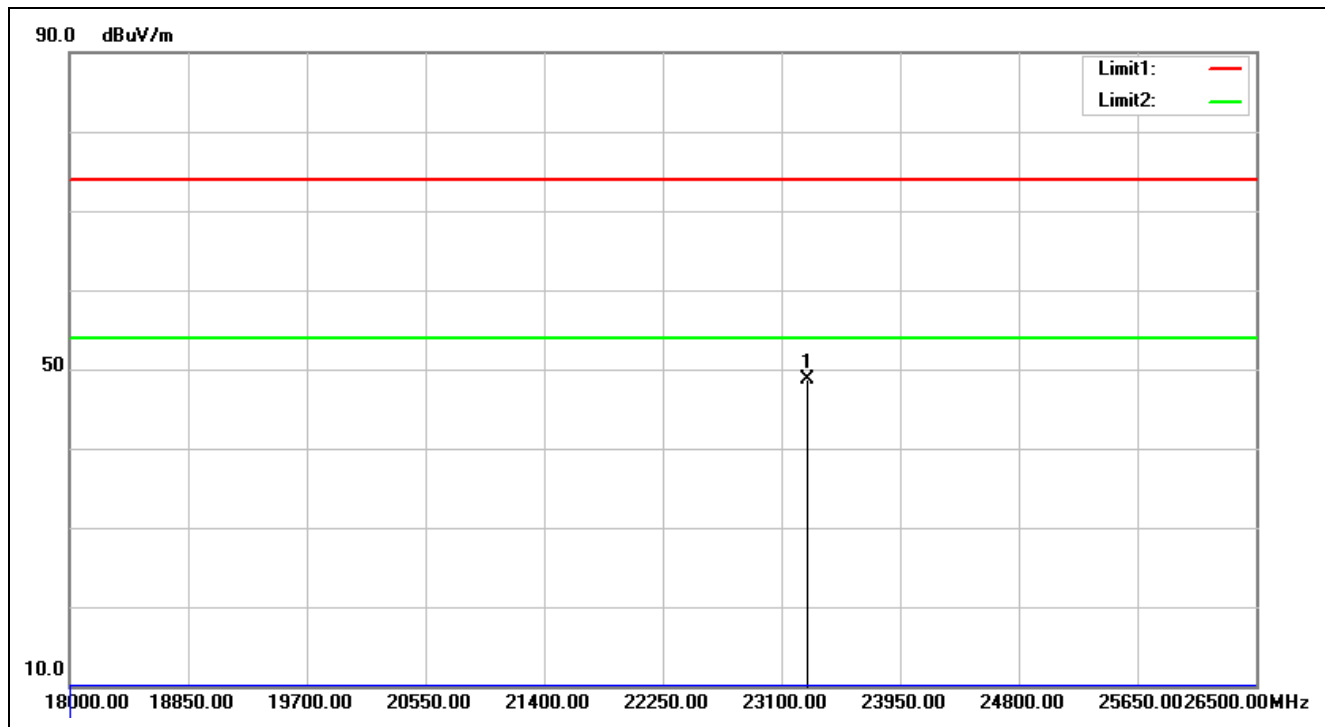
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



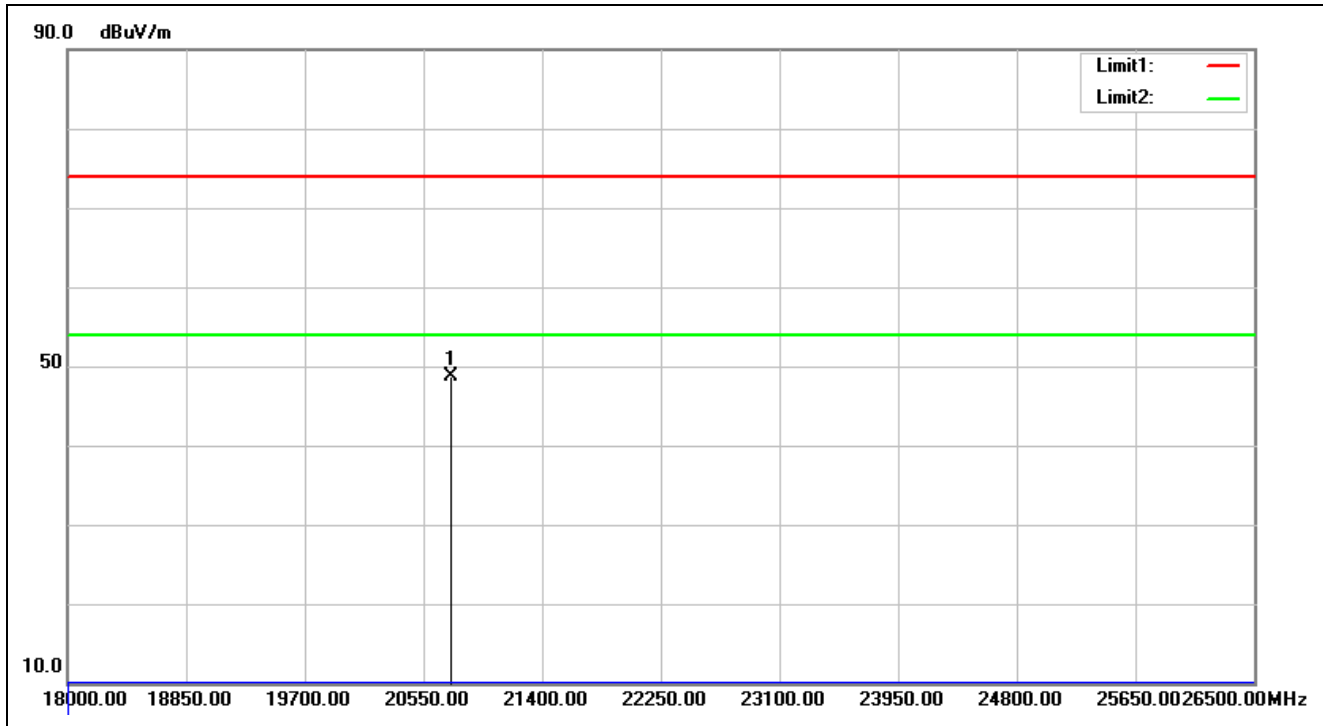
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/25 21:33:57
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2402-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20745.500	29.92	18.83	48.75	74.00	-25.25	peak		0	



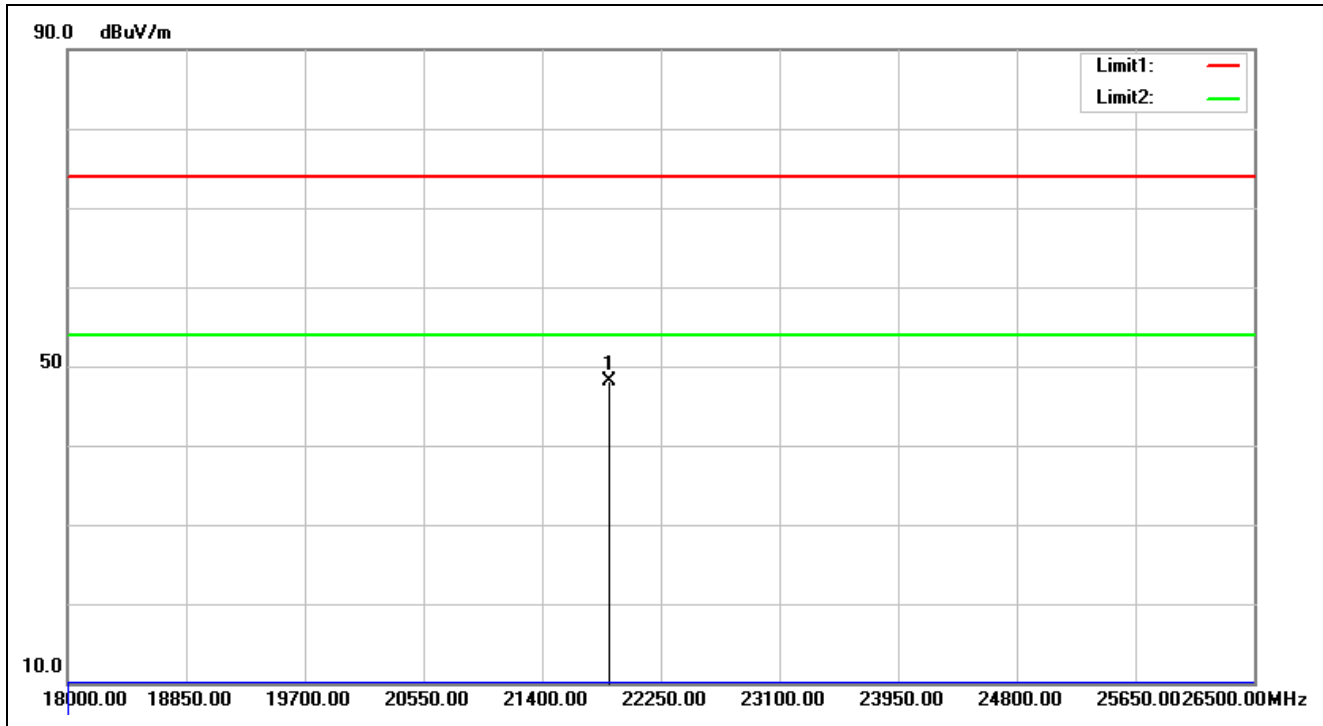
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/25 21:34:05
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2402-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23287.000	30.22	18.42	48.64	74.00	-25.36	peak			



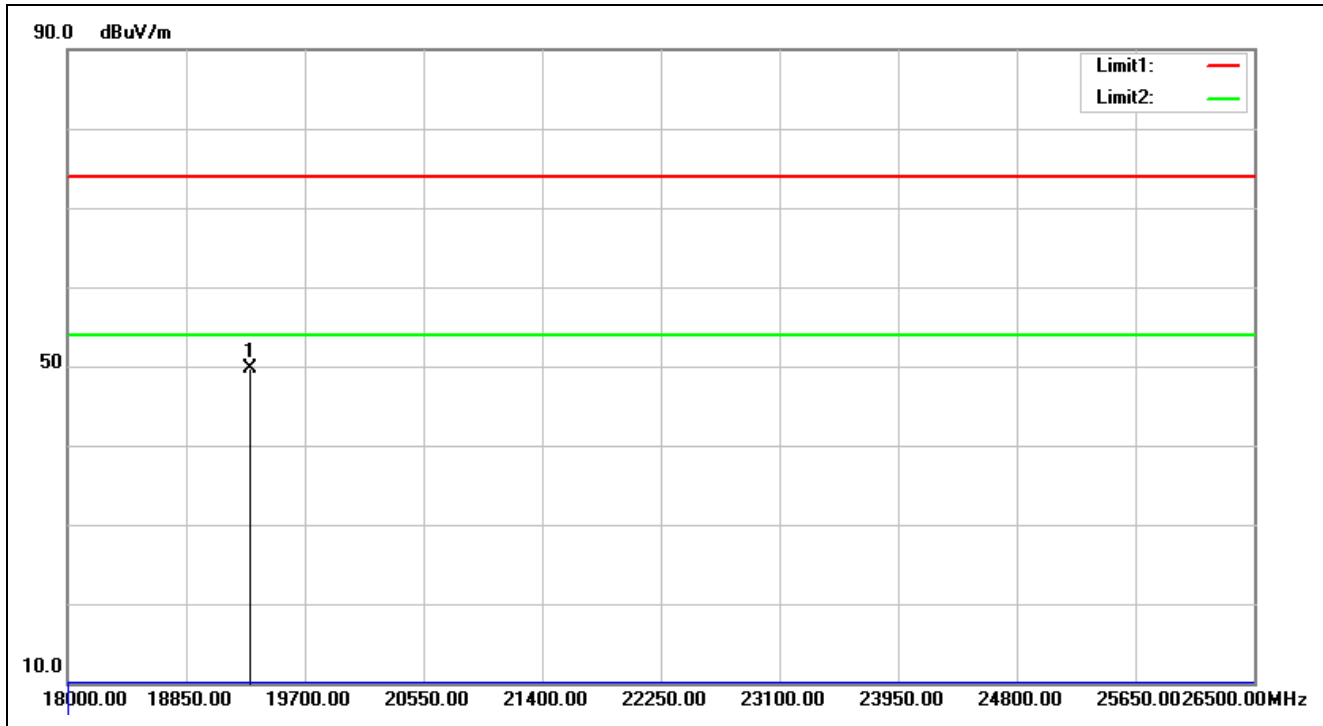
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/25 21:34:37
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2441-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20745.500	29.92	18.83	48.75	74.00	-25.25	peak			



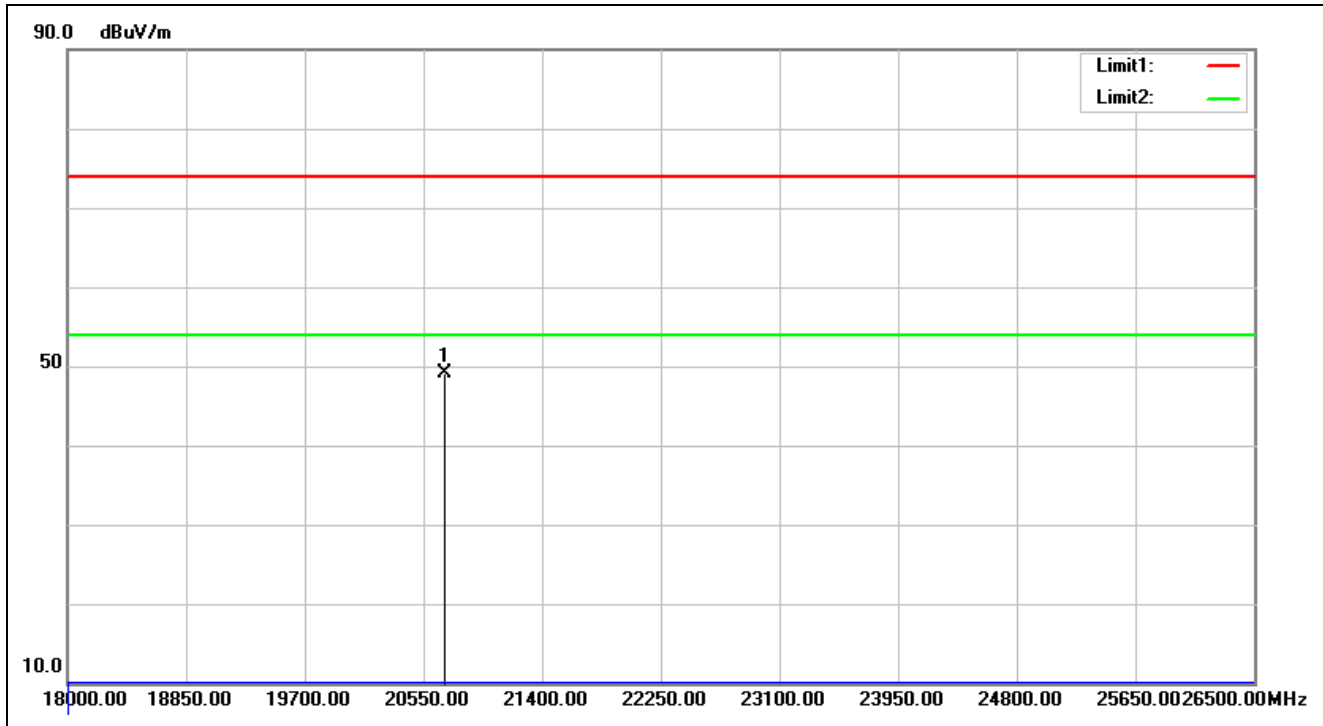
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/25 21:34:45
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2441-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21876.000	29.12	18.91	48.03	74.00	-25.97	peak			



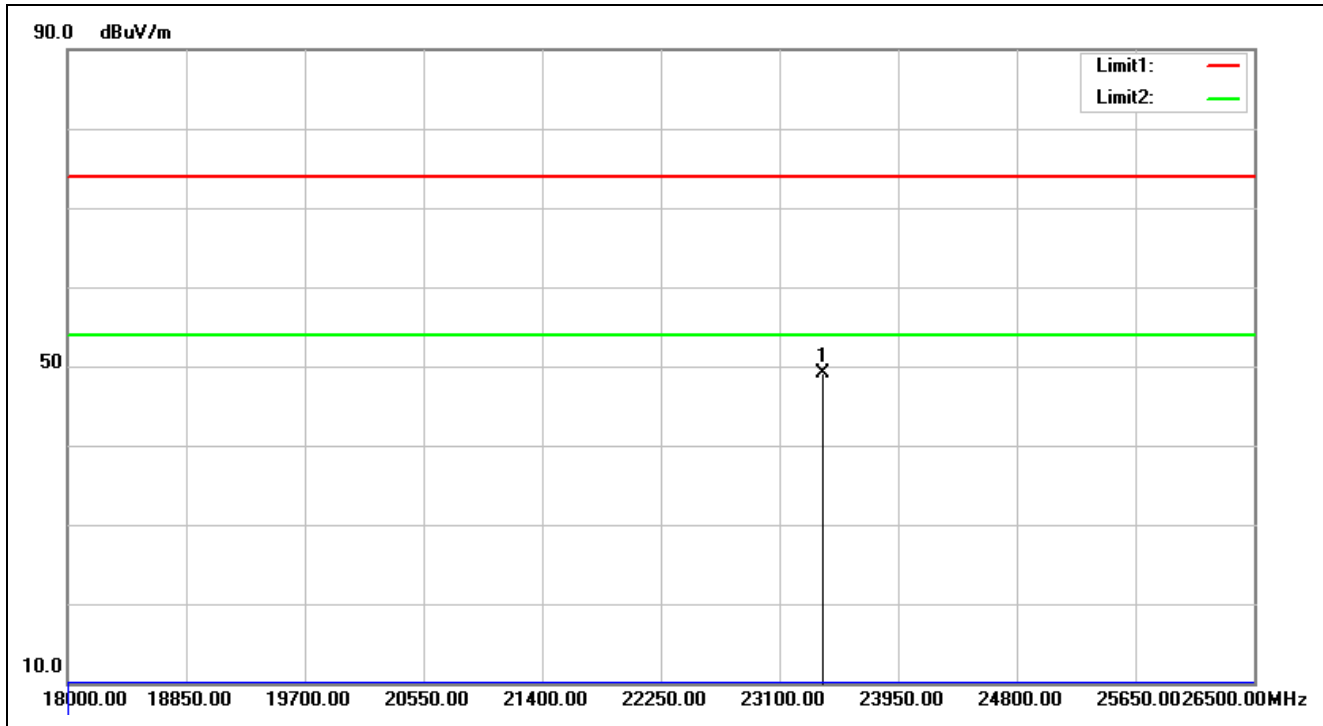
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/25 21:34:59
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2480-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19309.000	29.51	20.25	49.76	74.00	-24.24	peak			



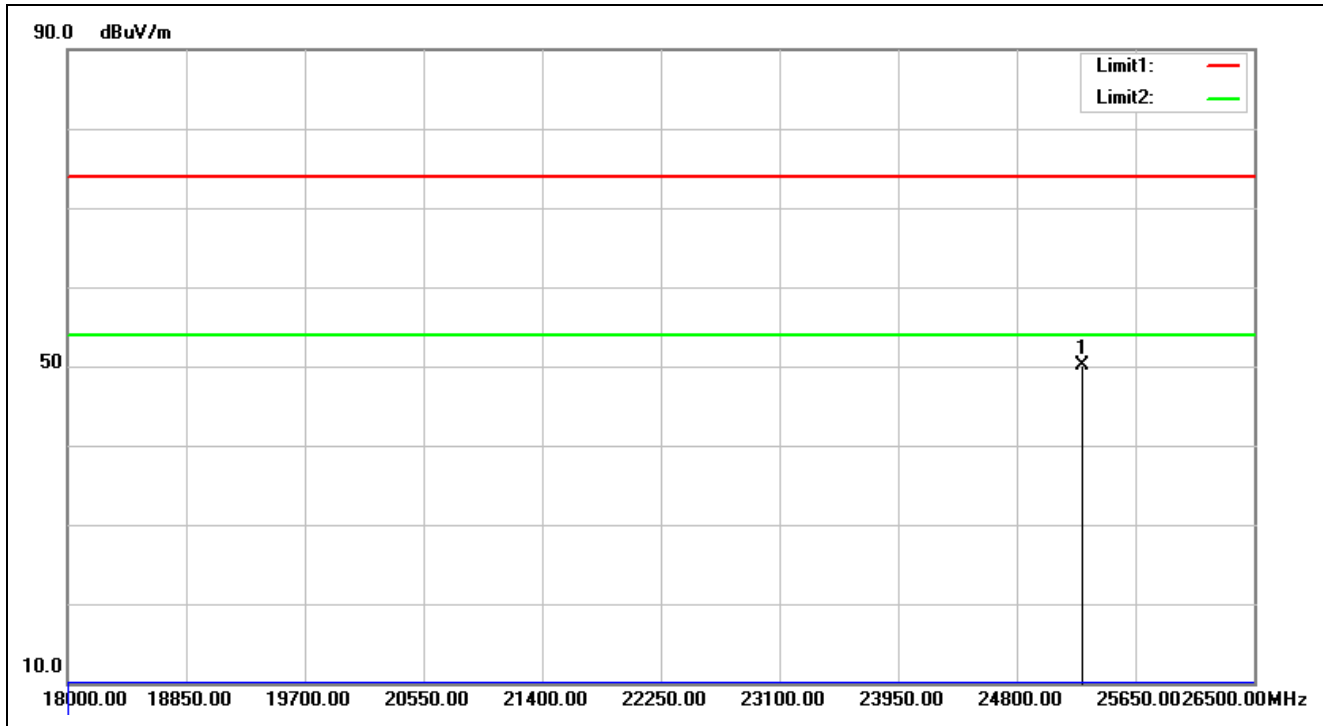
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/25 21:35:08
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2480-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20703.000	29.91	19.16	49.07	74.00	-24.93	peak			



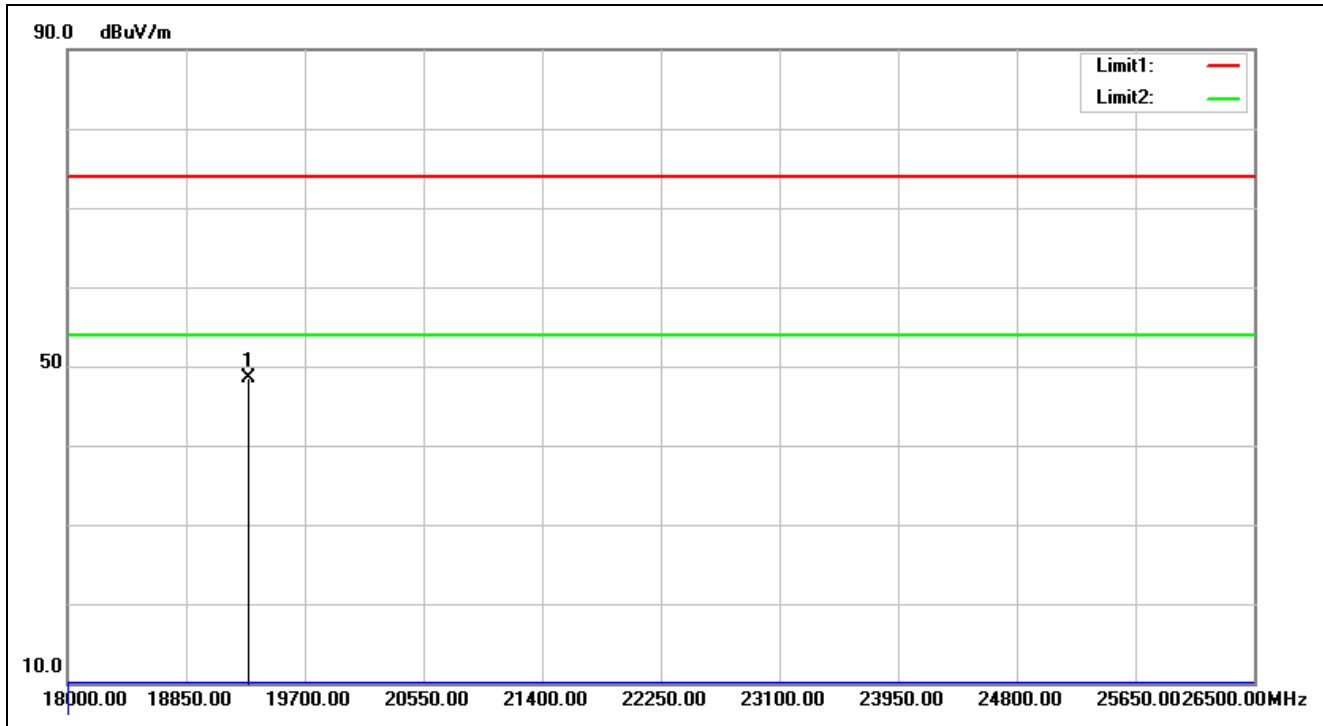
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/25 21:35:28
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	3DH5-2402-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23406.000	30.10	19.05	49.15	74.00	-24.85	peak			



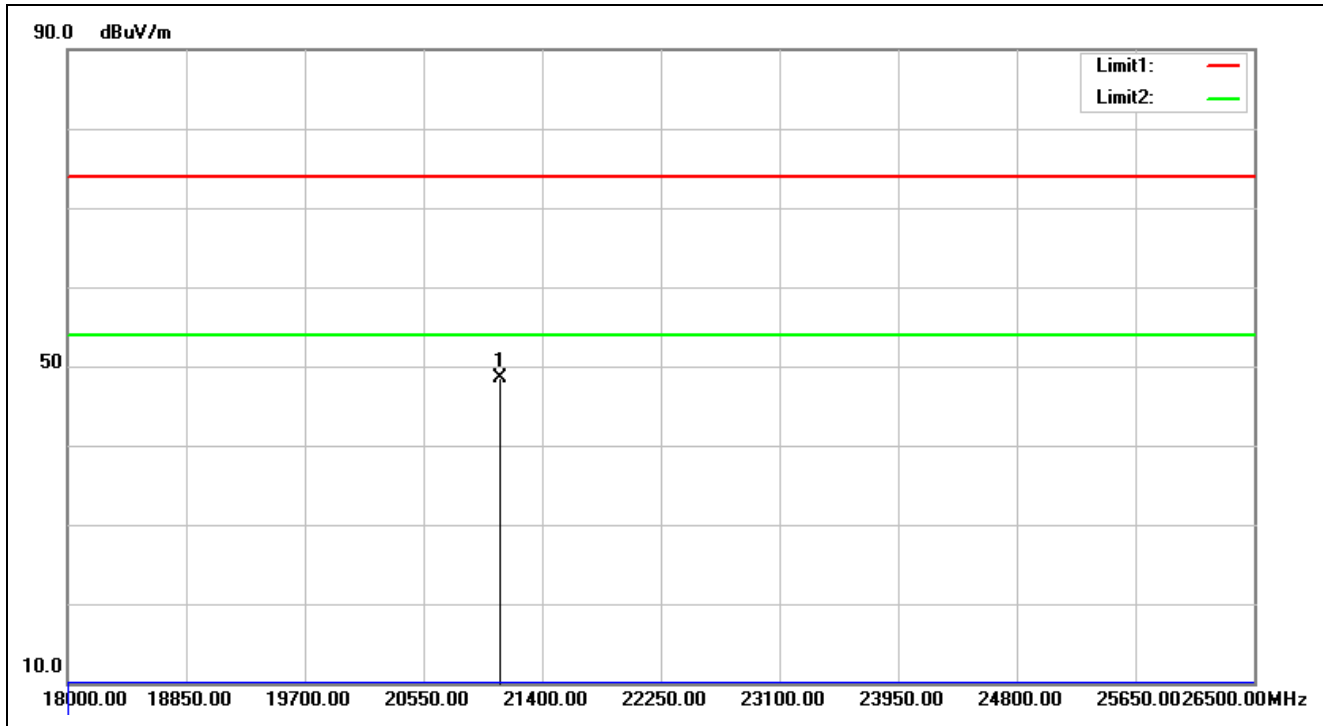
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/25 21:35:36
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	3DH5-2402-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	25267.500	31.54	18.58	50.12	74.00	-23.88	peak			



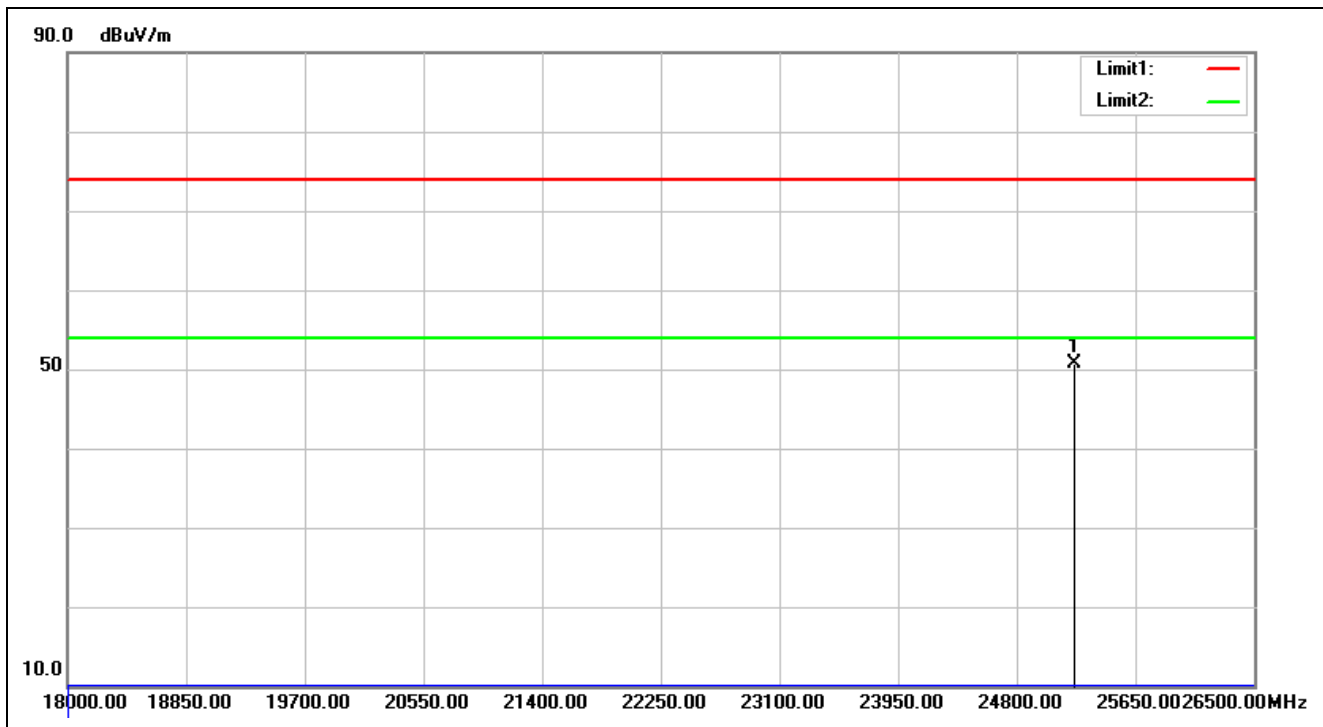
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/25 21:35:53
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	3DH5-2441-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	18900.500	29.51	18.90	48.41	74.00	-25.59	peak			



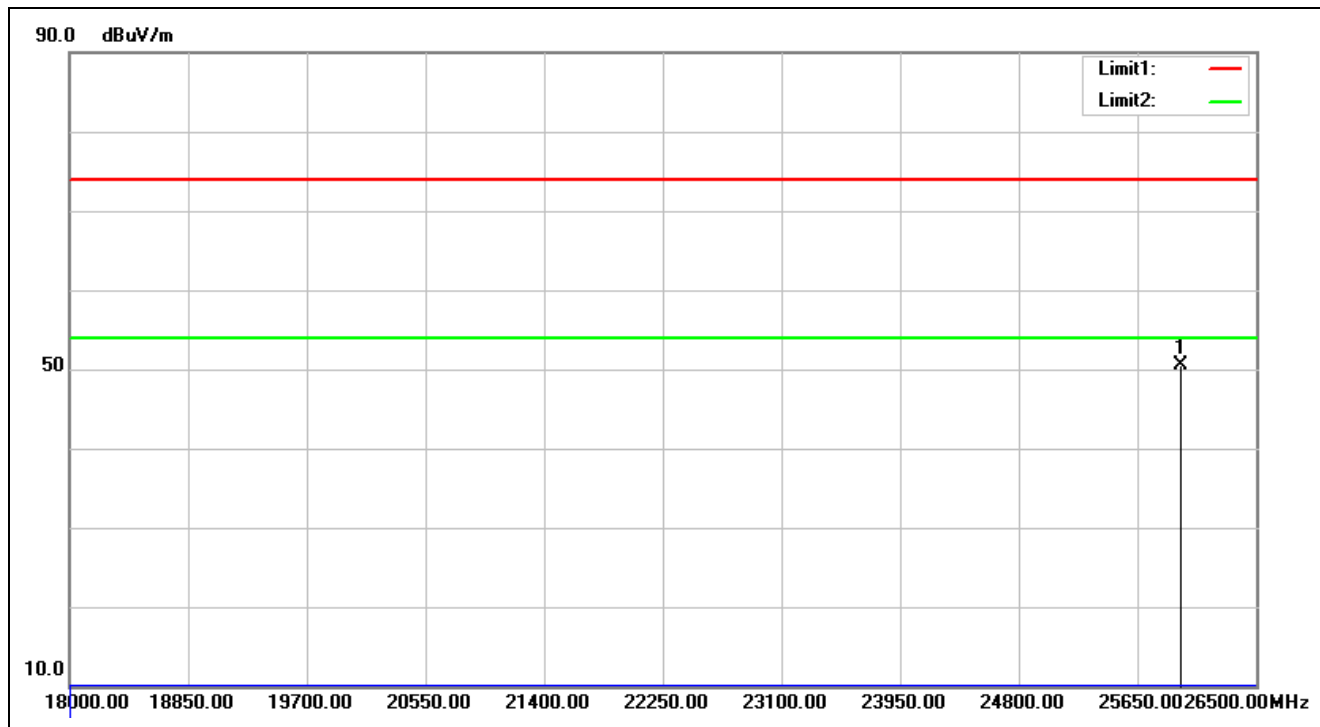
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Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/25 21:36:04
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	3DH5-2441-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21102.500	29.88	18.71	48.59	74.00	-25.41	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 21:36:19
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:	3DH5-2480-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	25216.500	31.49	19.20	50.69	74.00	-23.31	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 21:36:28
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:	3DH5-2480-TX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	25956.000	32.40	18.09	50.49	74.00	-23.51	peak			

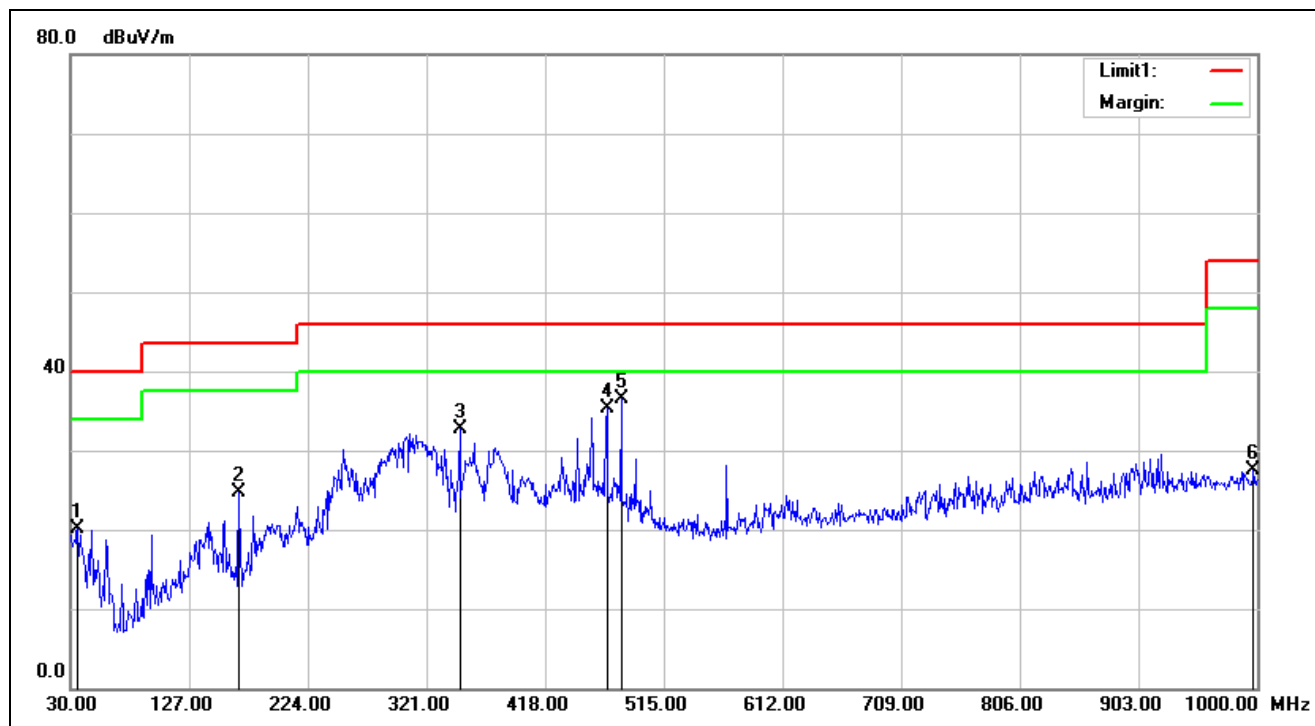
Spurious Emissions, TX Mode, 30M-1G



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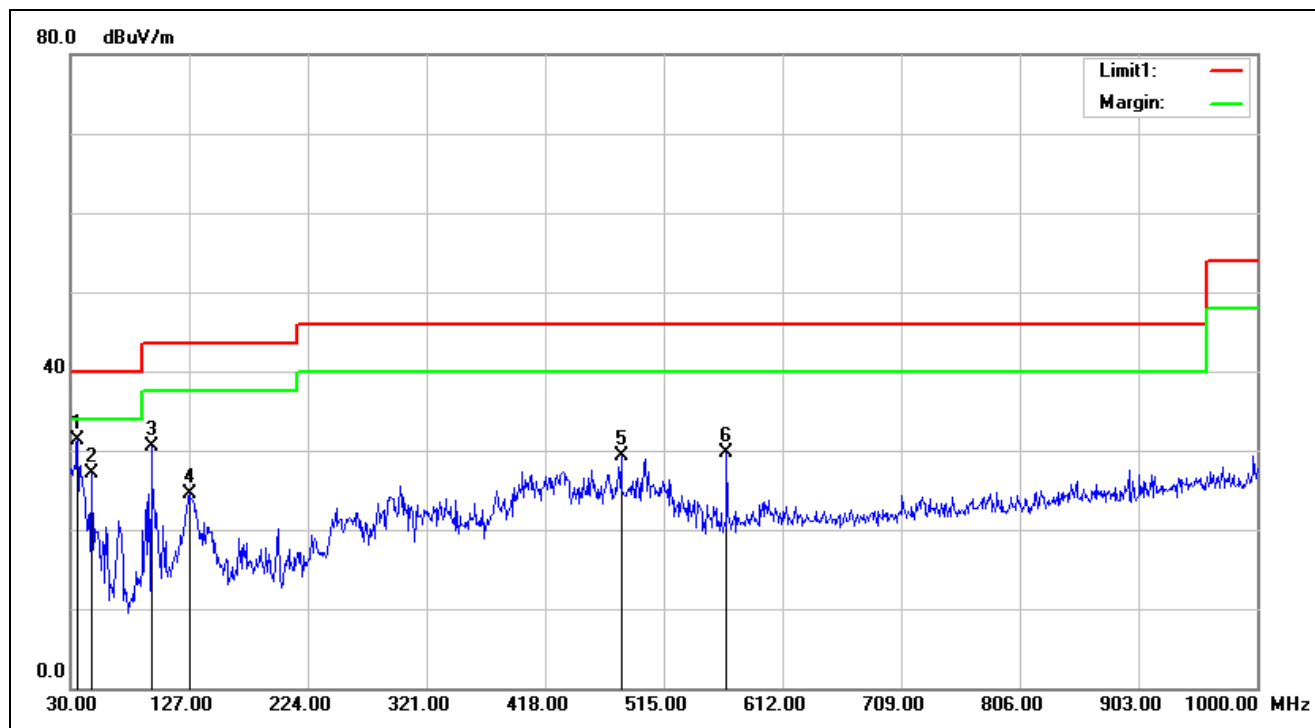
Tel:+886-2172-7000 fax:+886-2528-0018



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 18:52:10
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:	1DH5-2441-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	29.26	20.16	40.00	-19.84	QP	100	145	
2	167.7400	-14.60	39.40	24.80	43.50	-18.70	QP	100	341	
3	348.1600	-9.42	42.20	32.78	46.00	-13.22	QP	100	1	
4	468.4400	-7.77	43.12	35.35	46.00	-10.65	QP	100	54	
5	480.0800	-7.59	44.18	36.59	46.00	-9.41	QP	100	51	
6	997.0900	-0.03	27.63	27.60	54.00	-26.40	QP	100	91	

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 18:53:13
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:	1DH5-2441-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	40.40	31.30	40.00	-8.70	QP	100	96	
2	47.4600	-15.67	42.70	27.03	40.00	-12.97	QP	100	142	
3	95.9600	-15.47	45.89	30.42	43.50	-13.08	QP	100	6	
4	127.0000	-12.77	37.34	24.57	43.50	-18.93	QP	100	293	
5	480.0800	-7.59	36.99	29.40	46.00	-16.60	QP	100	107	
6	566.4100	-6.66	36.42	29.76	46.00	-16.24	QP	100	157	

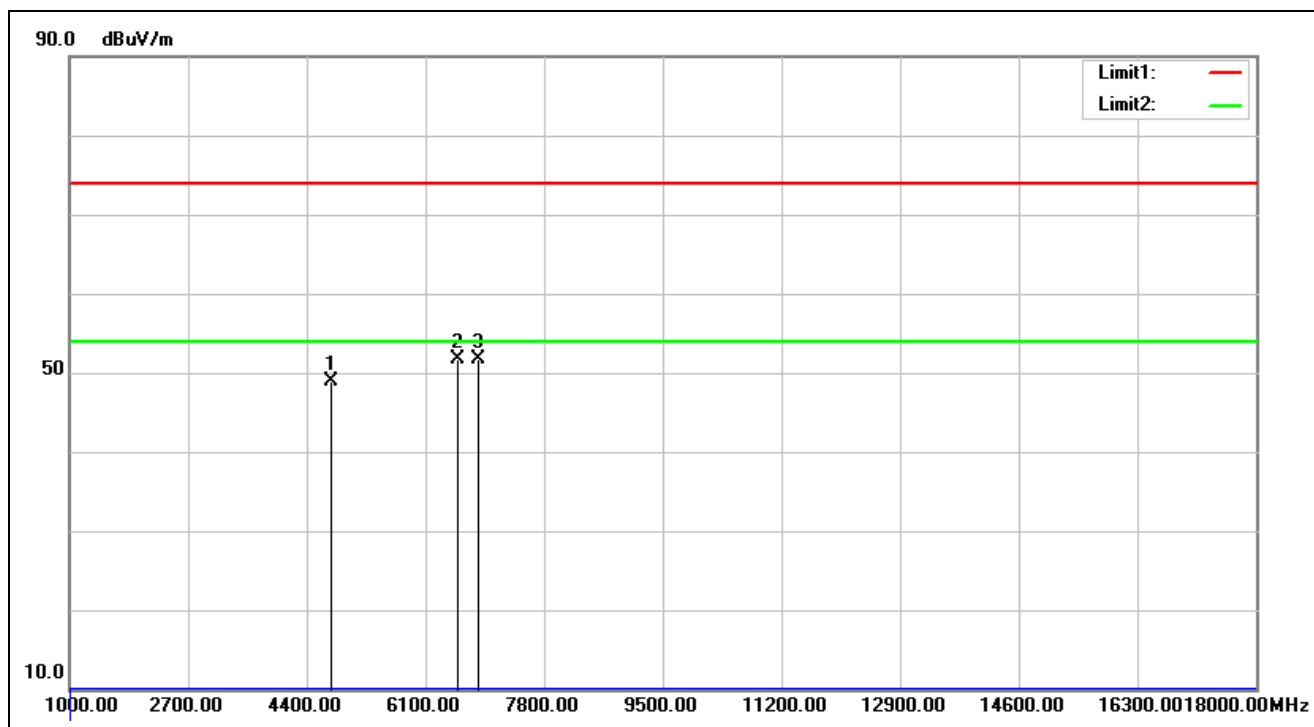
Spurious Emissions, RX Mode, 1-18G



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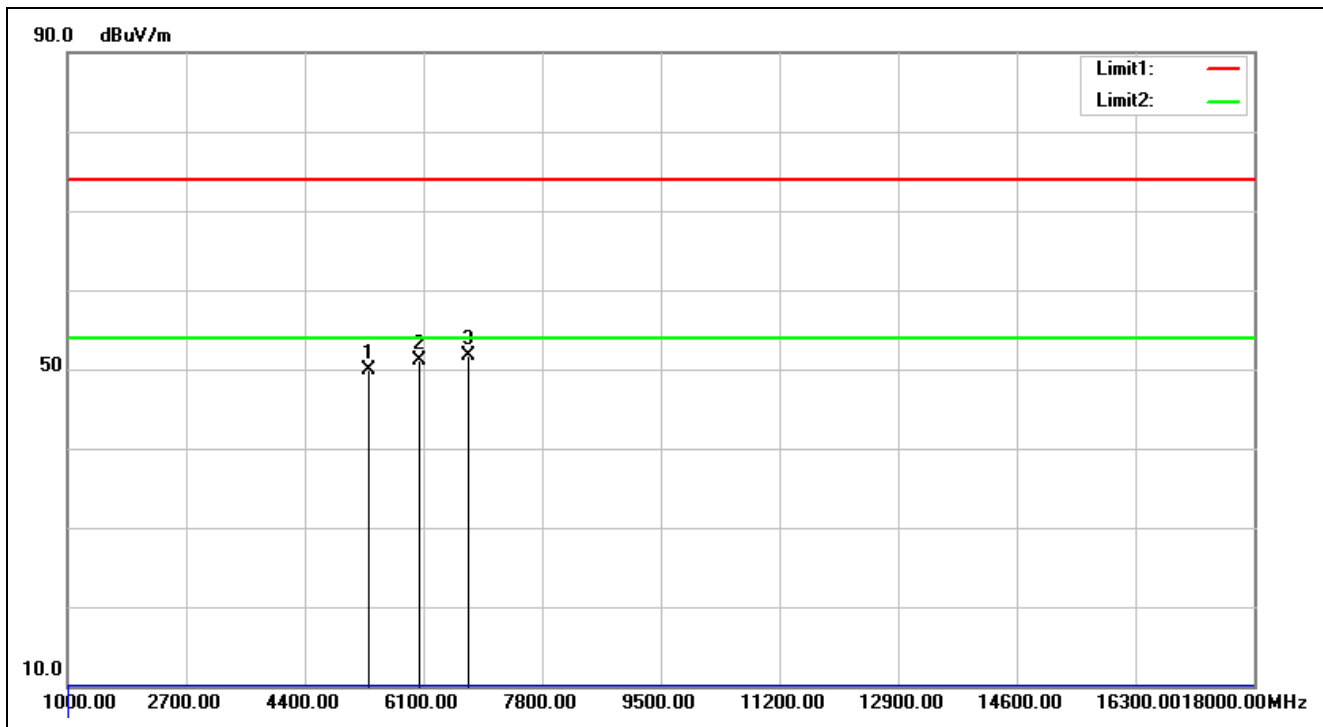
Tel: +886-2172-7000 fax: +886-2528-0018



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 21:07:24
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:	1DH5-2402-RX		
Remark:			

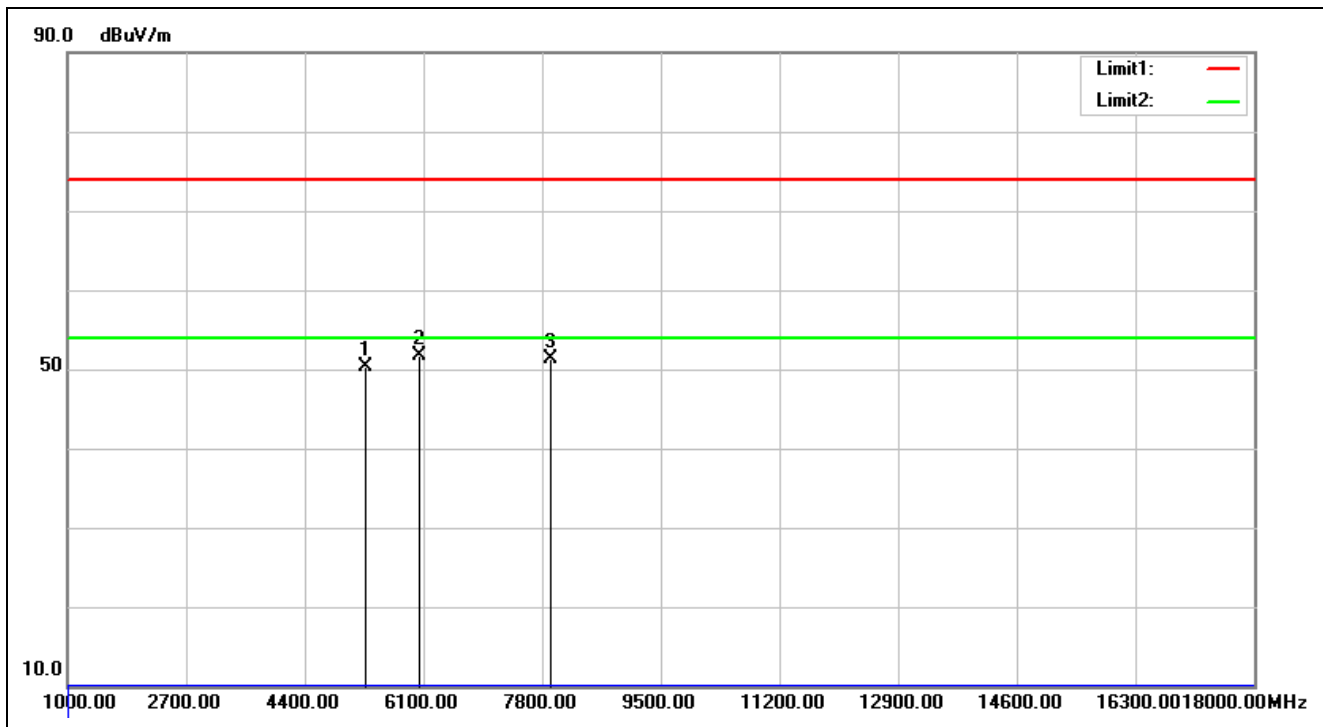
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4757.000	-2.40	51.30	48.90	74.00	-25.10	peak	100	125	
2	6559.000	5.92	45.75	51.67	74.00	-22.33	peak	100	208	
3	6865.000	5.40	46.40	51.80	74.00	-22.20	peak	100	1	

Spurious Emissions, RX Mode, 1-18G



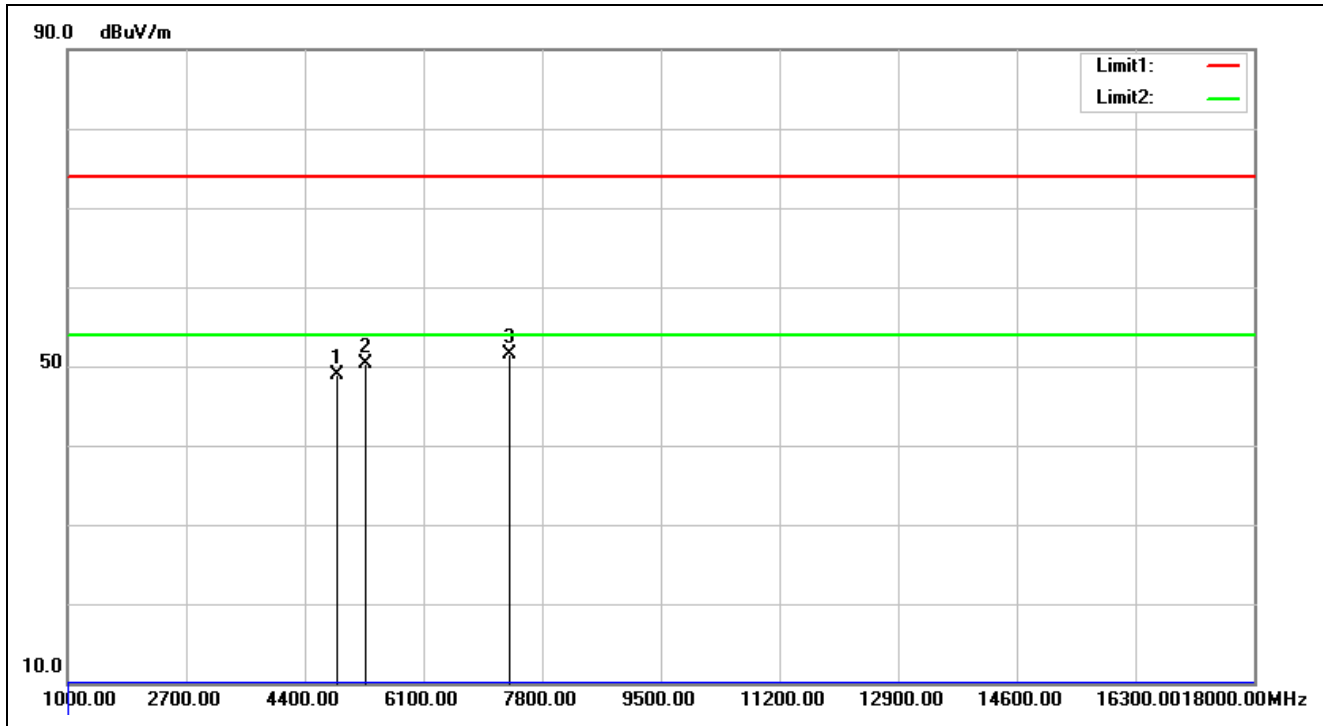
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 21:08:27
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2402-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	5318.000	-0.12	50.00	49.88	74.00	-24.12	peak	100	321	
2	6032.000	4.26	46.86	51.12	74.00	-22.88	peak	100	169	
3	6746.000	5.60	46.13	51.73	74.00	-22.27	peak	100	44	



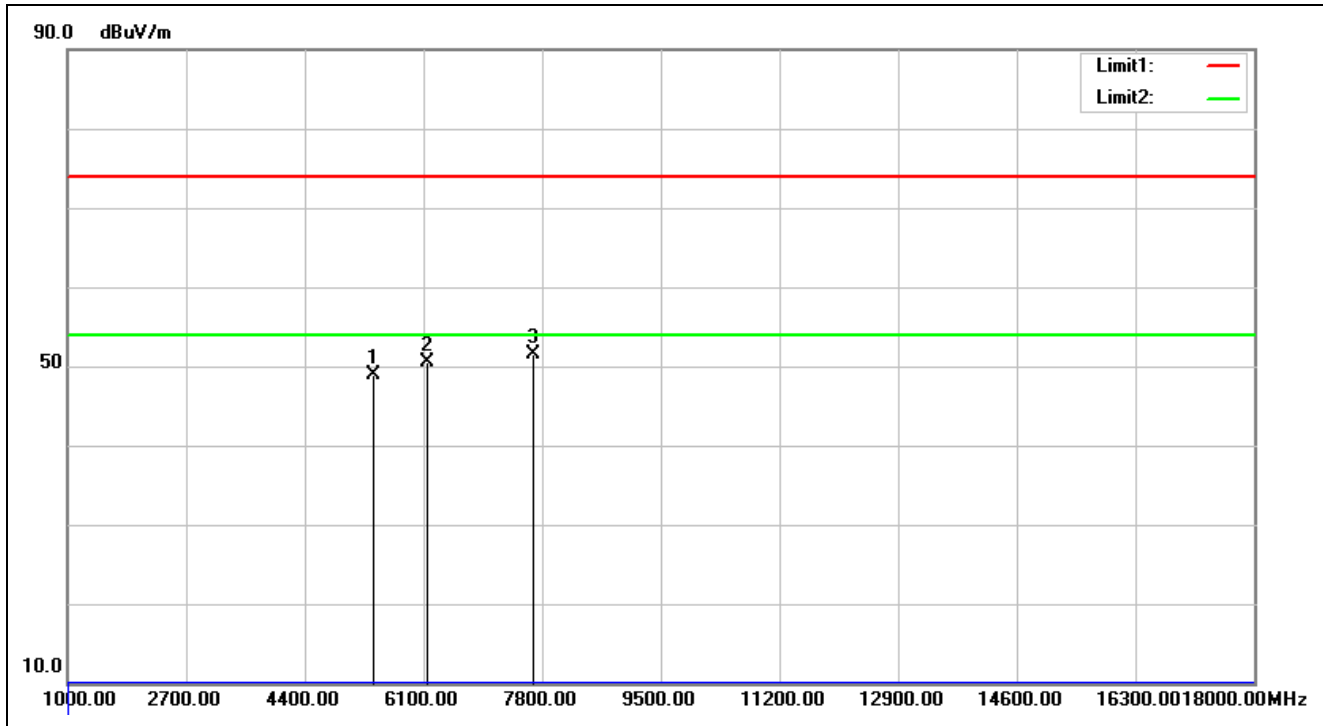
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/24 21:10:20
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2441-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	5267.000	-0.39	50.61	50.22	74.00	-23.78	peak	100	12	
2	6049.000	4.32	47.33	51.65	74.00	-22.35	peak	100	42	
3	7919.000	6.56	44.77	51.33	74.00	-22.67	peak	100	0	



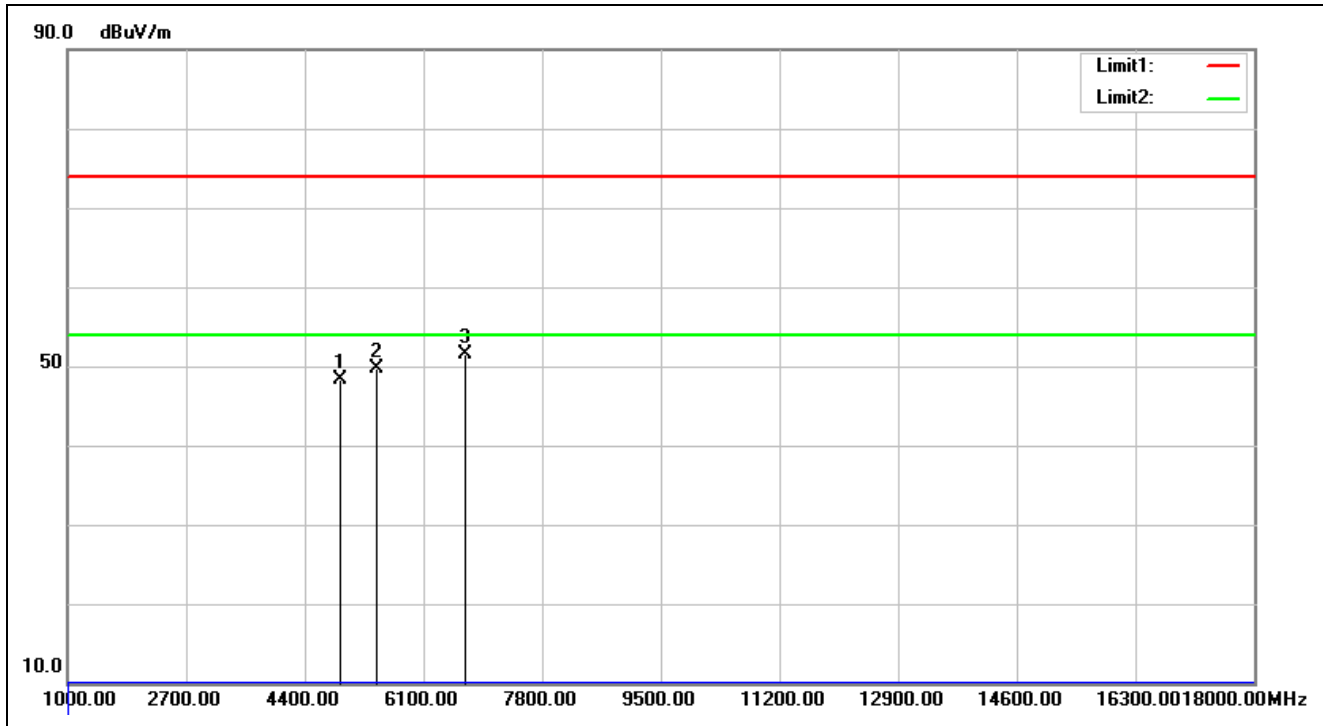
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Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 21:11:23
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2441-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4859.000	-2.15	50.96	48.81	74.00	-25.19	peak	100	36	
2	5267.000	-0.39	50.62	50.23	74.00	-23.77	peak	100	41	
3	7341.000	6.16	45.32	51.48	74.00	-22.52	peak	100	77	



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 21:12:54
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:	1DH5-2480-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	5386.000	0.24	48.75	48.99	74.00	-25.01	peak	100	128	
2	6151.000	4.70	45.71	50.41	74.00	-23.59	peak	100	299	
3	7664.000	6.59	44.85	51.44	74.00	-22.56	peak	100	330	



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 21:13:57
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:	1DH5-2480-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	50.26	48.24	74.00	-25.76	peak	100	284	
2	5420.000	0.41	49.29	49.70	74.00	-24.30	peak	100	356	
3	6695.000	5.70	45.80	51.50	74.00	-22.50	peak	100	321	

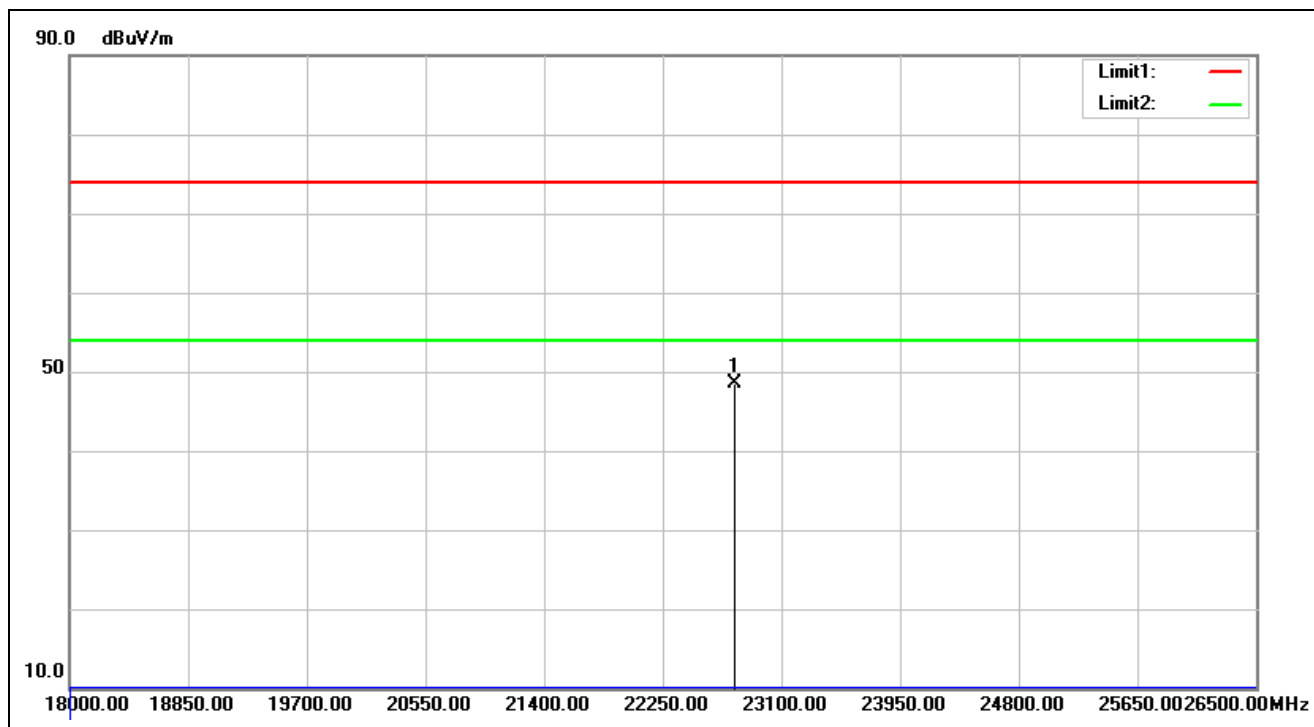
Spurious Emissions, RX Mode, 18-26G



TUV Taiwan

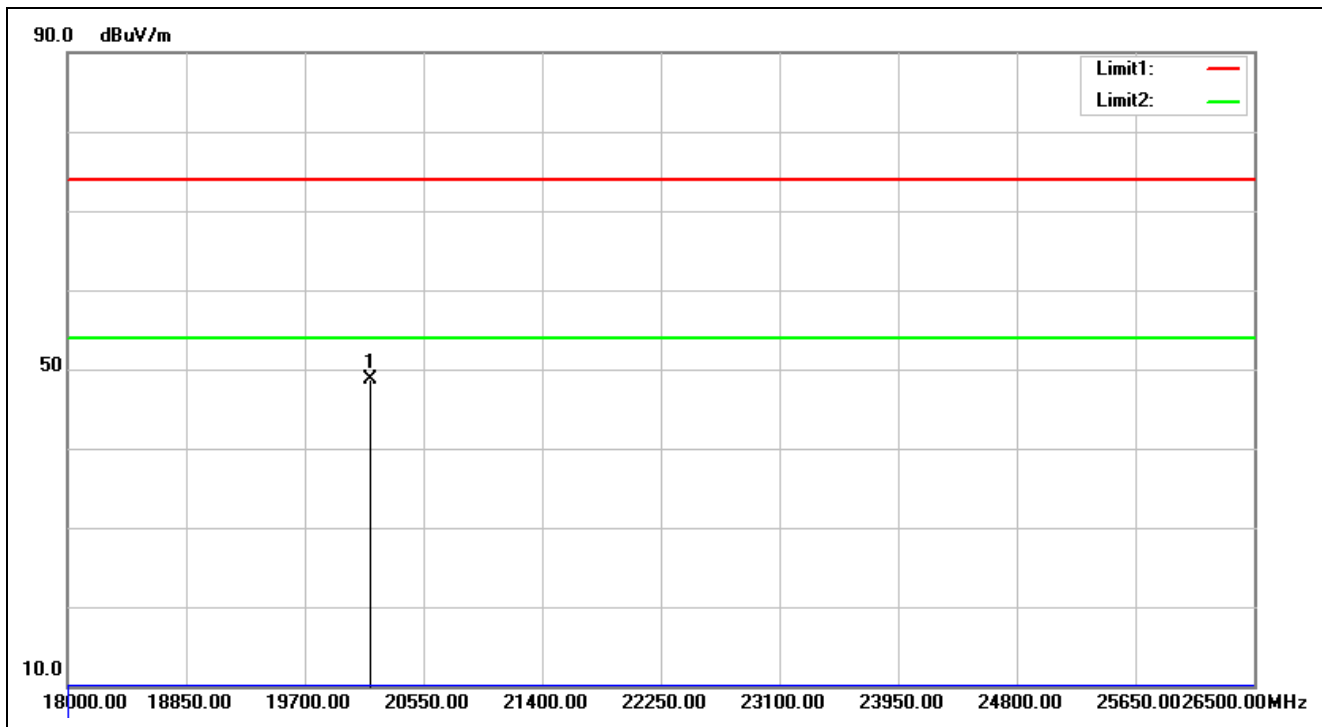
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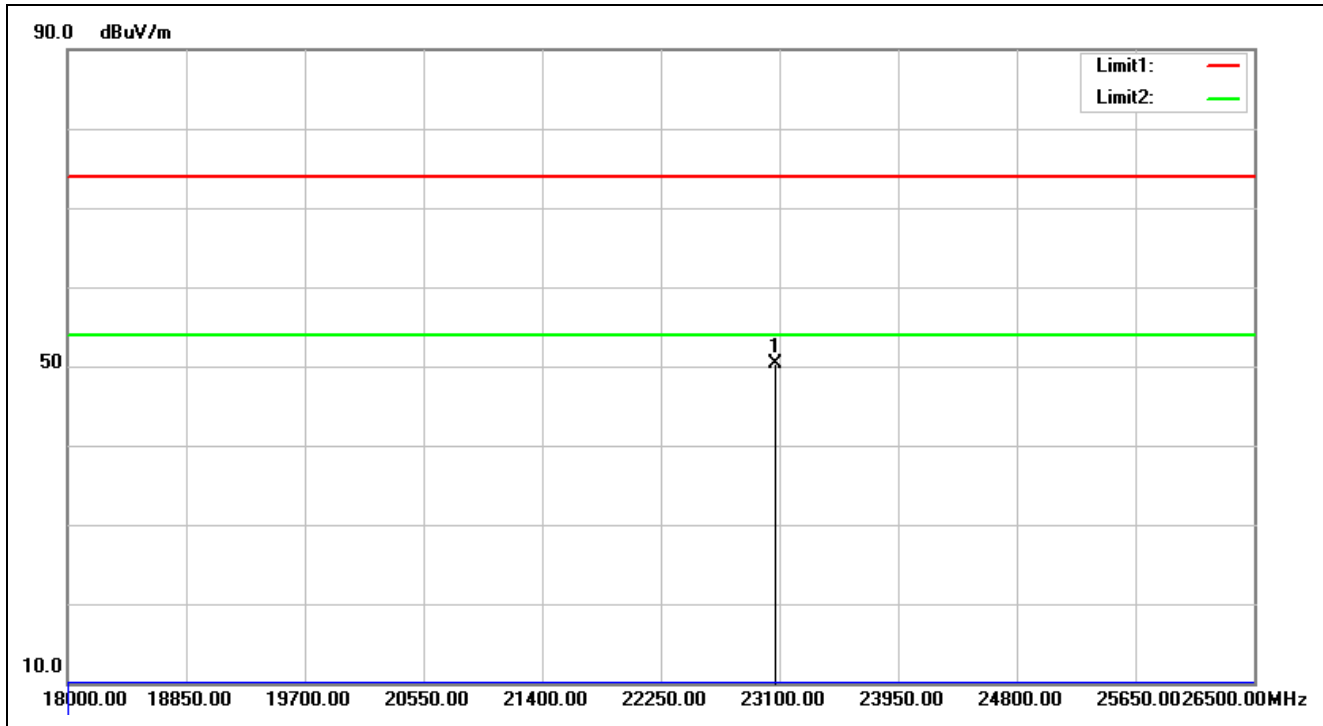
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/25 21:41:07
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2402-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22760.000	30.12	18.42	48.54	74.00	-25.46	peak		0	



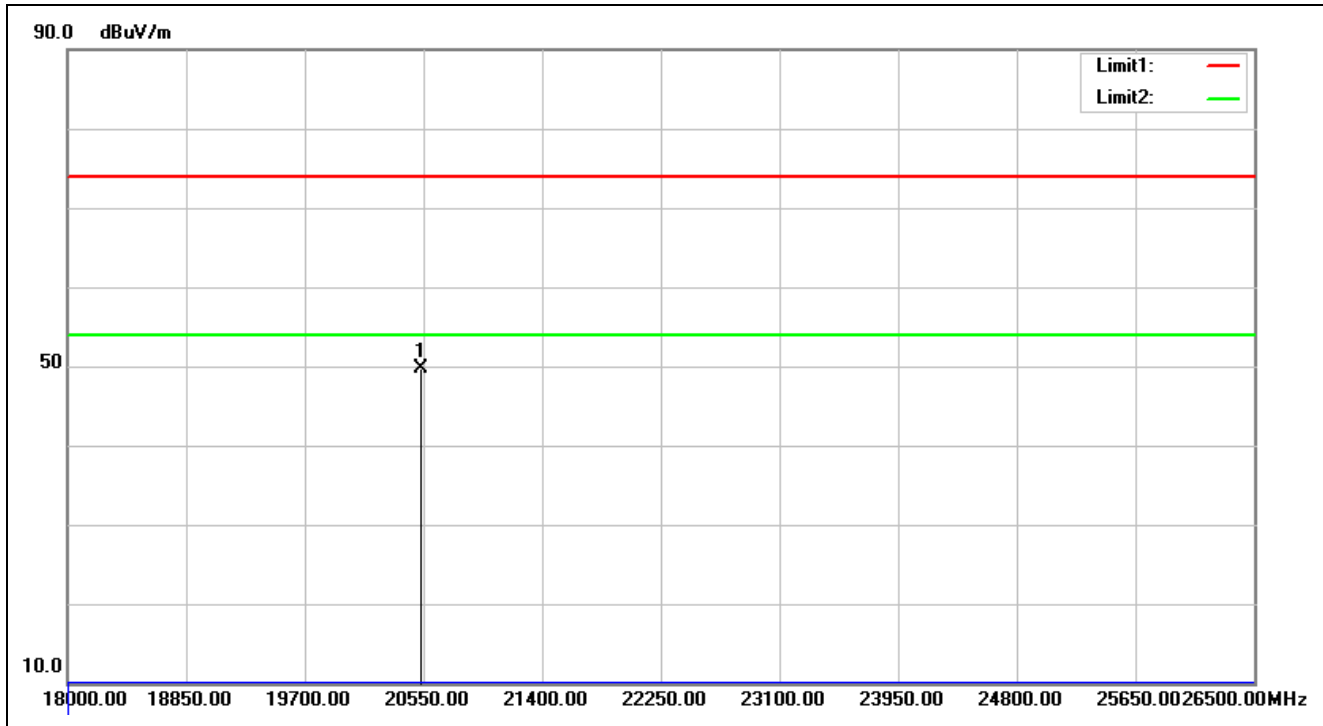
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/25 21:41:15
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2402-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20167.500	29.67	19.12	48.79	74.00	-25.21	peak			



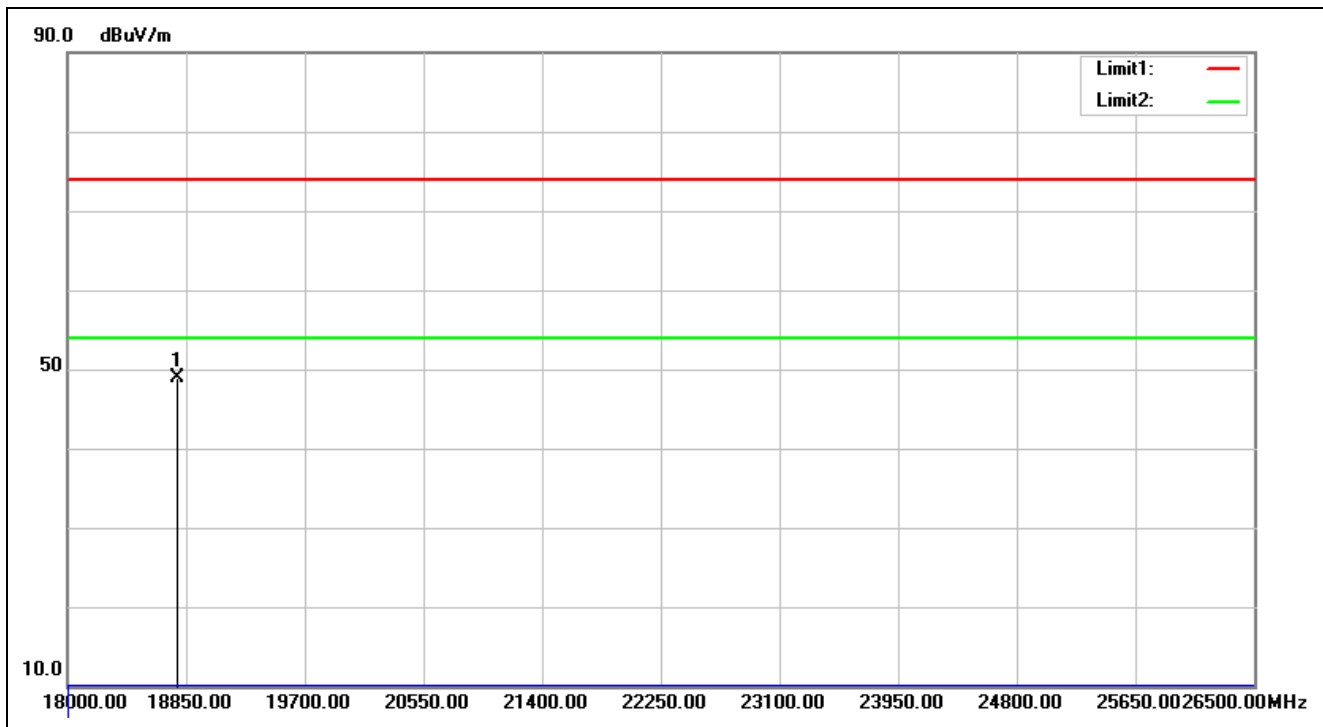
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/25 21:41:39
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2441-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23066.000	30.43	19.80	50.23	74.00	-23.77	peak			



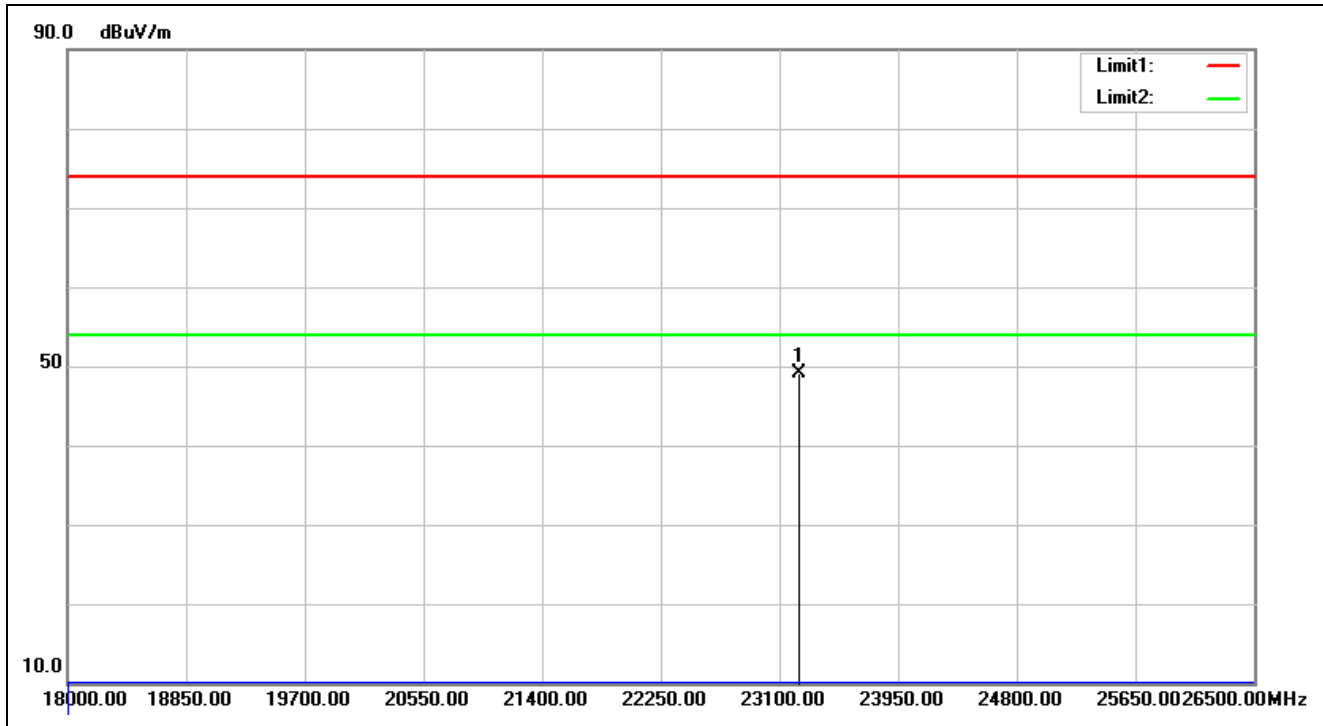
Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/25 21:41:47
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%):	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2441-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20533.000	29.87	19.91	49.78	74.00	-24.22	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 21:42:01
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:	1DH5-2480-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	18790.500	29.23	19.70	48.93	74.00	-25.07	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 21:42:09
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:	1DH5-2480-RX		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23236.000	30.26	18.91	49.17	74.00	-24.83	peak			

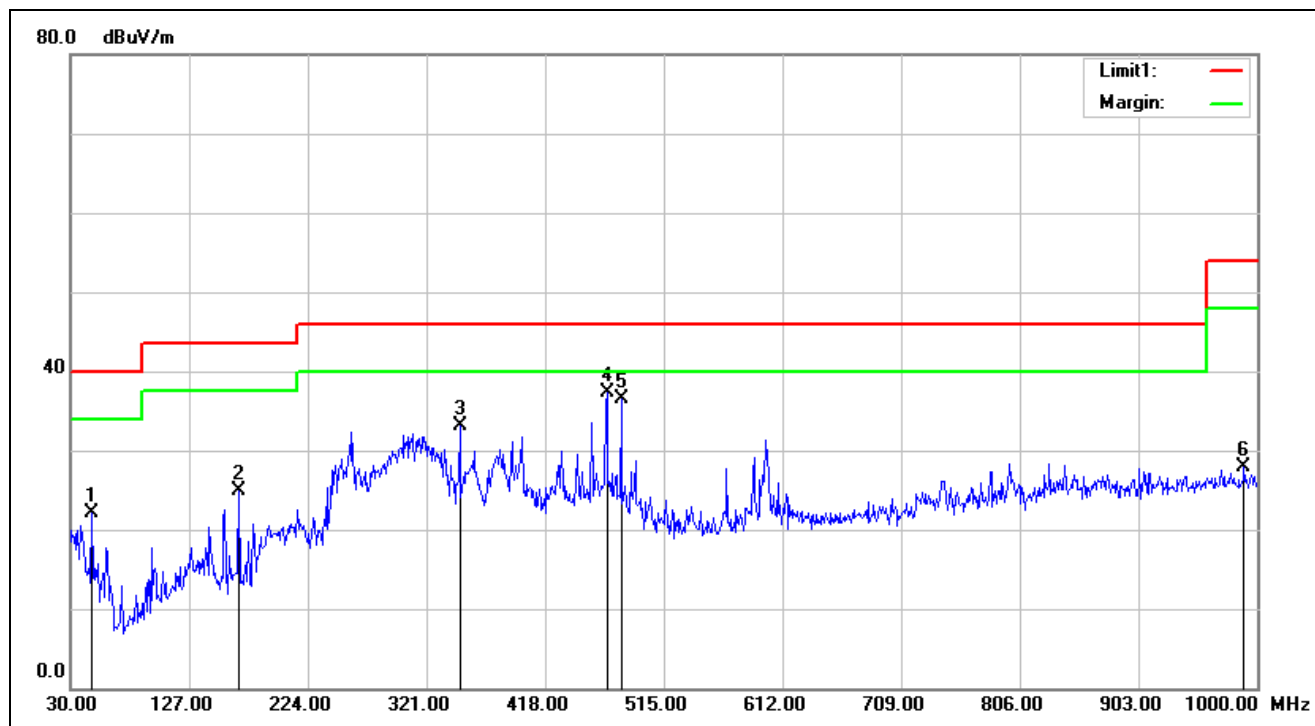
Spurious Emissions, RX Mode, 30M-1G



TUV Taiwan

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

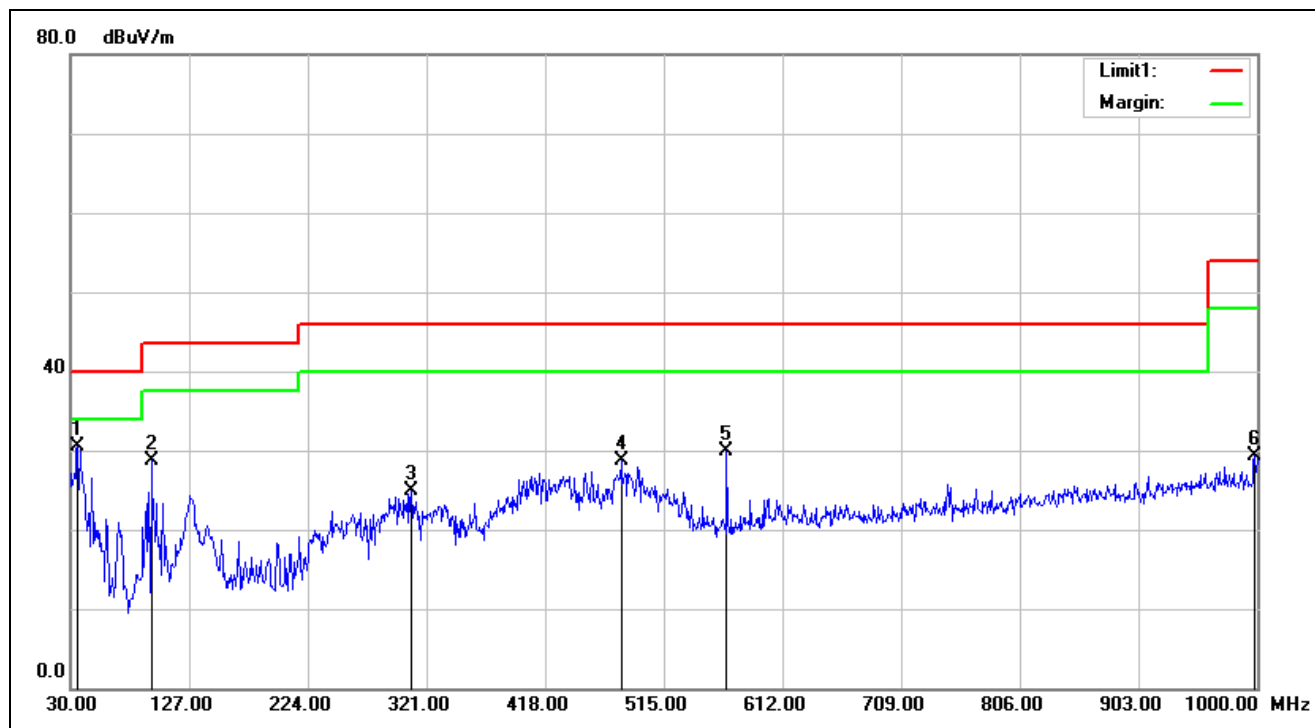
Tel:+886-2172-7000 fax:+886-2528-0018



Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2016/3/24 18:55:10
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:	1DH5-2441-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	37.68	22.01	40.00	-17.99	QP	100	171	
2	167.7400	-14.60	39.45	24.85	43.50	-18.65	QP	100	224	
3	348.1600	-9.42	42.59	33.17	46.00	-12.83	QP	100	22	
4	468.4400	-7.77	44.99	37.22	46.00	-8.78	QP	100	51	
5	480.0800	-7.59	44.08	36.49	46.00	-9.51	QP	100	46	
6	989.3300	-0.10	28.05	27.95	54.00	-26.05	QP	100	282	

Spurious Emissions, Mains, 150kHz - 30MHz

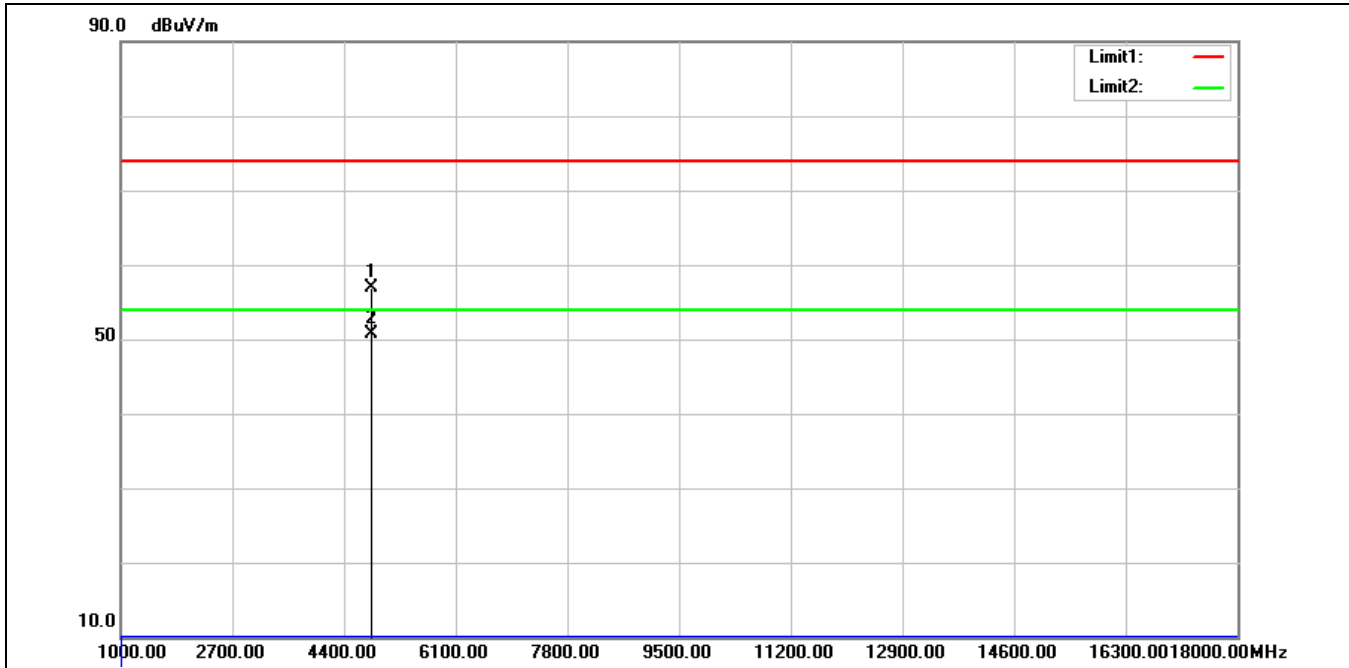


Service No.:	114047325-NCC	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2016/3/24 18:56:14
Applicant:	Microchip	Test Rating:	DC 3.3V
Product:	Bluetooth Module	Temp.(°C)/Hum.(%)	17.2(°C)/63%
Model No.:	BM64SPKabcC2	Test Engineer:	George Yang
Test Mode:	1DH5-2441-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	39.70	30.60	40.00	-9.40	QP	100	333	
2	95.9600	-15.47	44.17	28.70	43.50	-14.80	QP	100	43	
3	308.3900	-10.30	35.24	24.94	46.00	-21.06	QP	100	173	
4	480.0800	-7.59	36.30	28.71	46.00	-17.29	QP	100	99	
5	566.4100	-6.66	36.54	29.88	46.00	-16.12	QP	100	168	
6	998.0600	-0.01	29.24	29.23	54.00	-24.77	QP	100	320	

Spurious Emissions, Mains, 150kHz - 30MHz

Spurious Emissions, Second source pre-scan data



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Horizontal

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

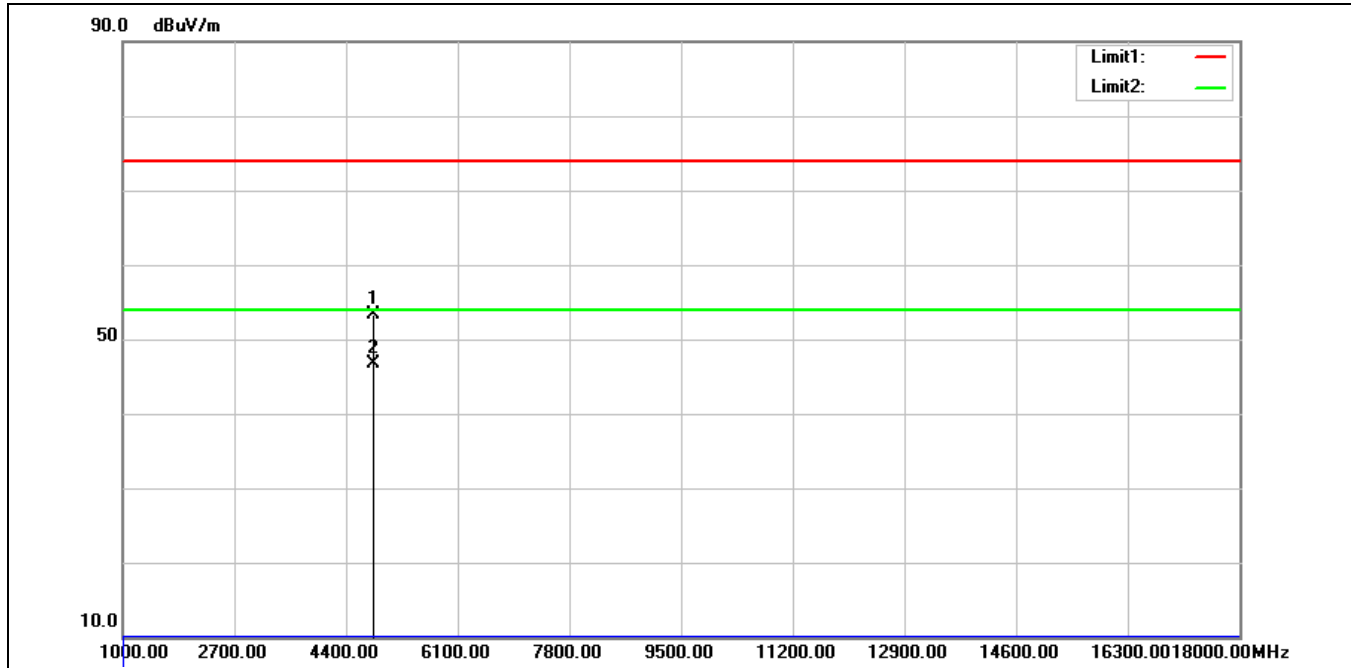
Test Engineer: Sam Su

Test Mode: 1DH5-2402-TX

Remark: Sample No.4

高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	59.27	56.99	74.00	-17.01	peak	100	359	P	
2	4804.000	-2.28	52.89	50.61	54.00	-3.39	AVG	167	359	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Vertical

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

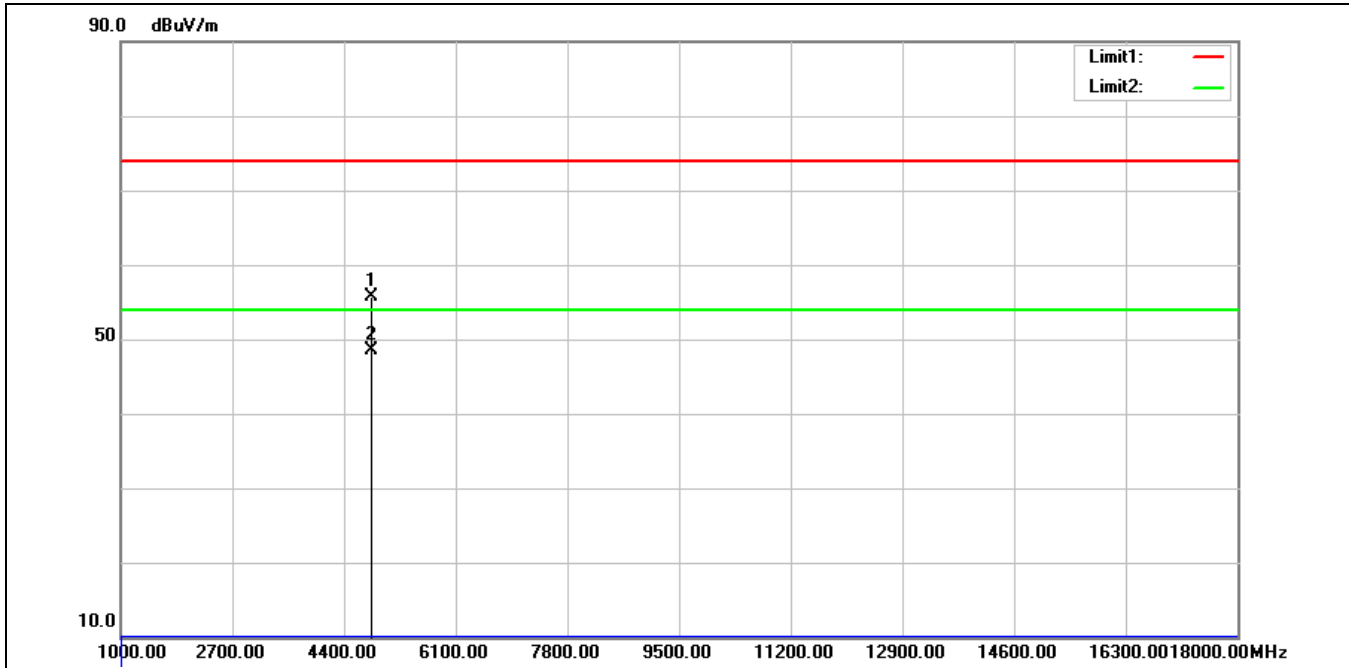
Test Engineer: Sam Su

Test Mode: 1DH5-2402-TX

Remark: Sample No.4

高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	55.55	53.27	74.00	-20.73	peak	100	187	P	
2	4804.000	-2.28	48.92	46.64	54.00	-7.36	AVG	100	187	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Horizontal

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

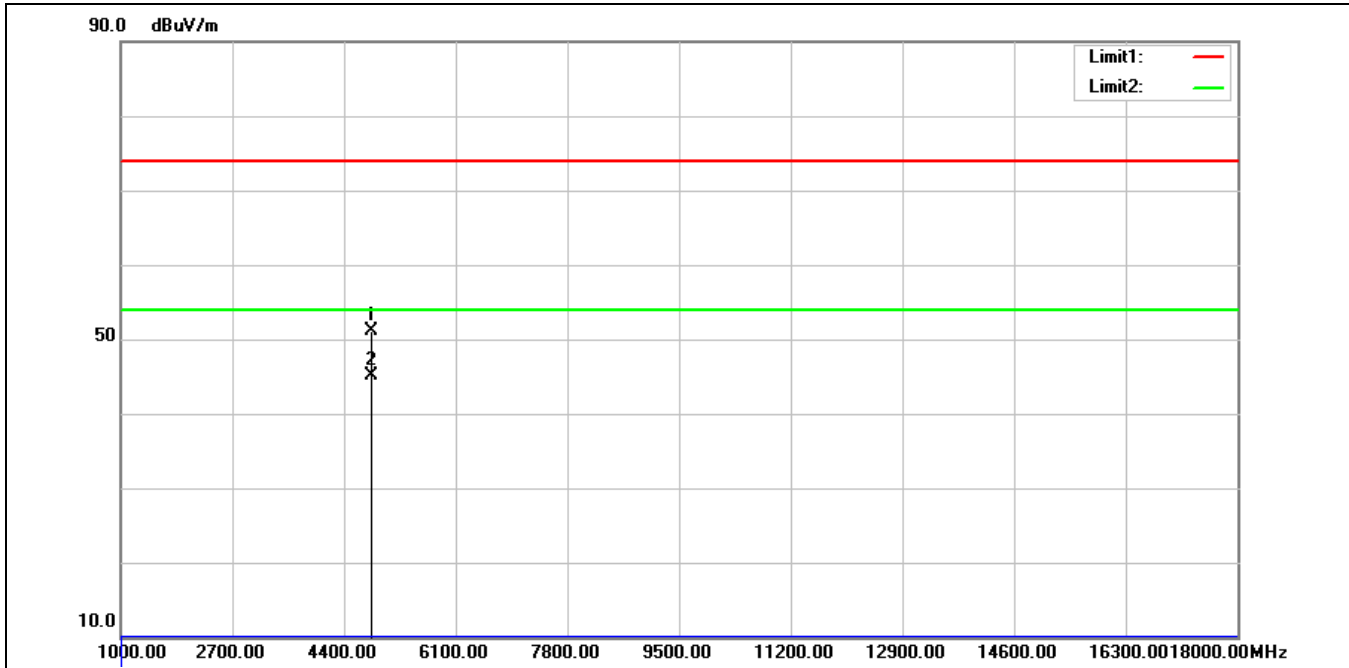
Test Engineer: Sam Su

Test Mode: 1DH5-2402-TX

Remark: Sample No.3

高創/希華

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	57.96	55.68	74.00	-18.32	peak	100	275	P	
2	4804.000	-2.28	50.82	48.54	54.00	-5.46	AVG	180	275	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Vertical

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

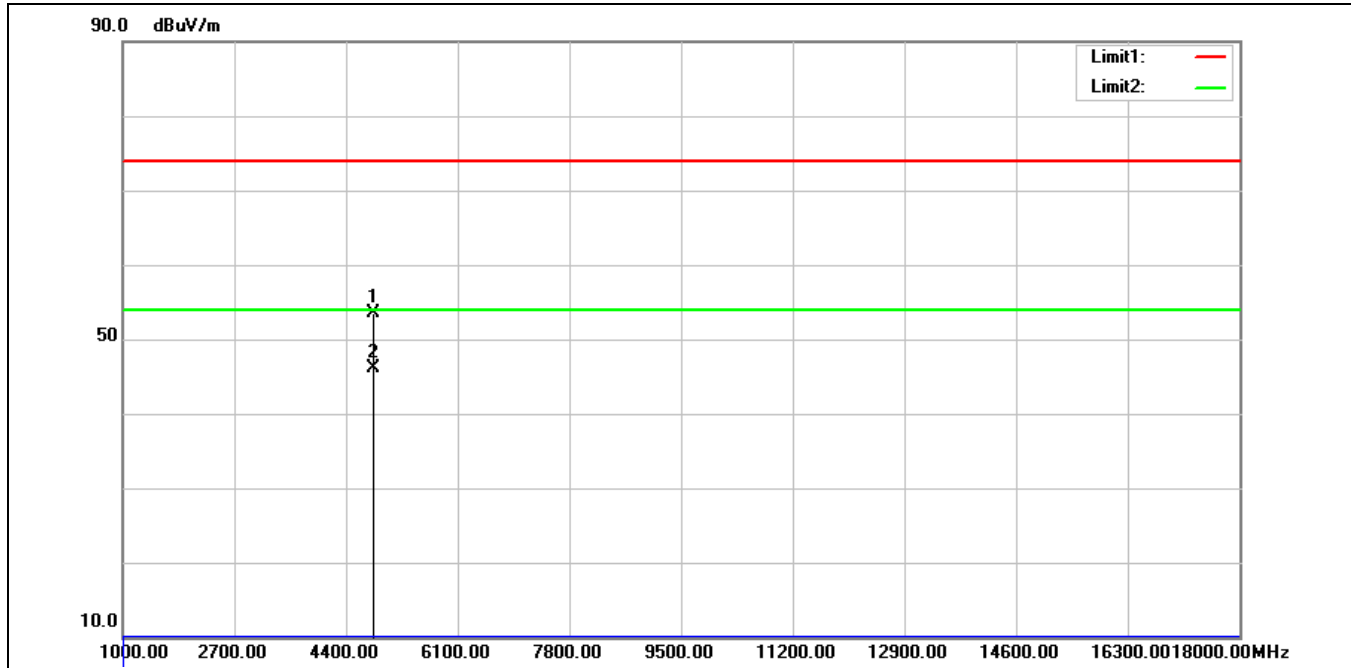
Test Engineer: Sam Su

Test Mode: 1DH5-2402-TX

Remark: Sample No.3

高創/希華

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	53.31	51.03	74.00	-22.97	peak	100	107	P	
2	4804.000	-2.28	47.31	45.03	54.00	-8.97	AVG	100	107	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Horizontal

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

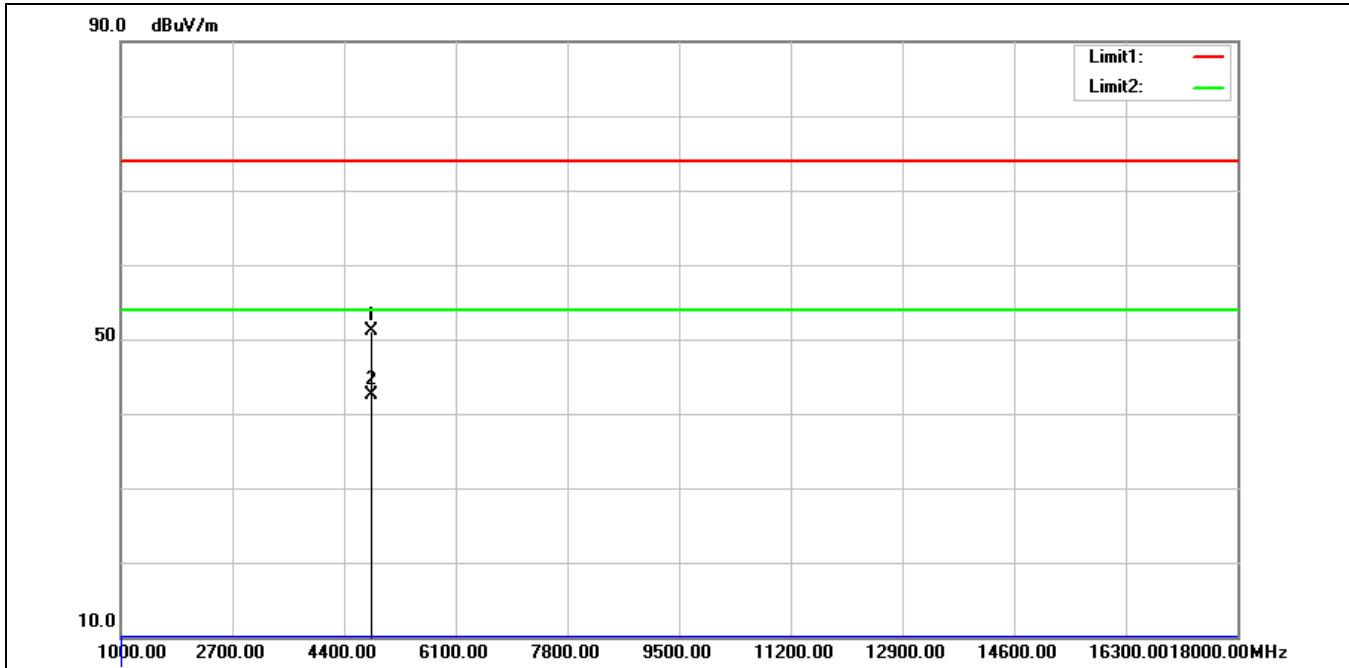
Test Engineer: Sam Su

Test Mode: 1DH5-2402-TX

Remark: Sample No.8

新丰/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	55.74	53.46	74.00	-20.54	peak	100	347	P	
2	4804.000	-2.28	48.45	46.17	54.00	-7.83	AVG	100	347	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Vertical

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

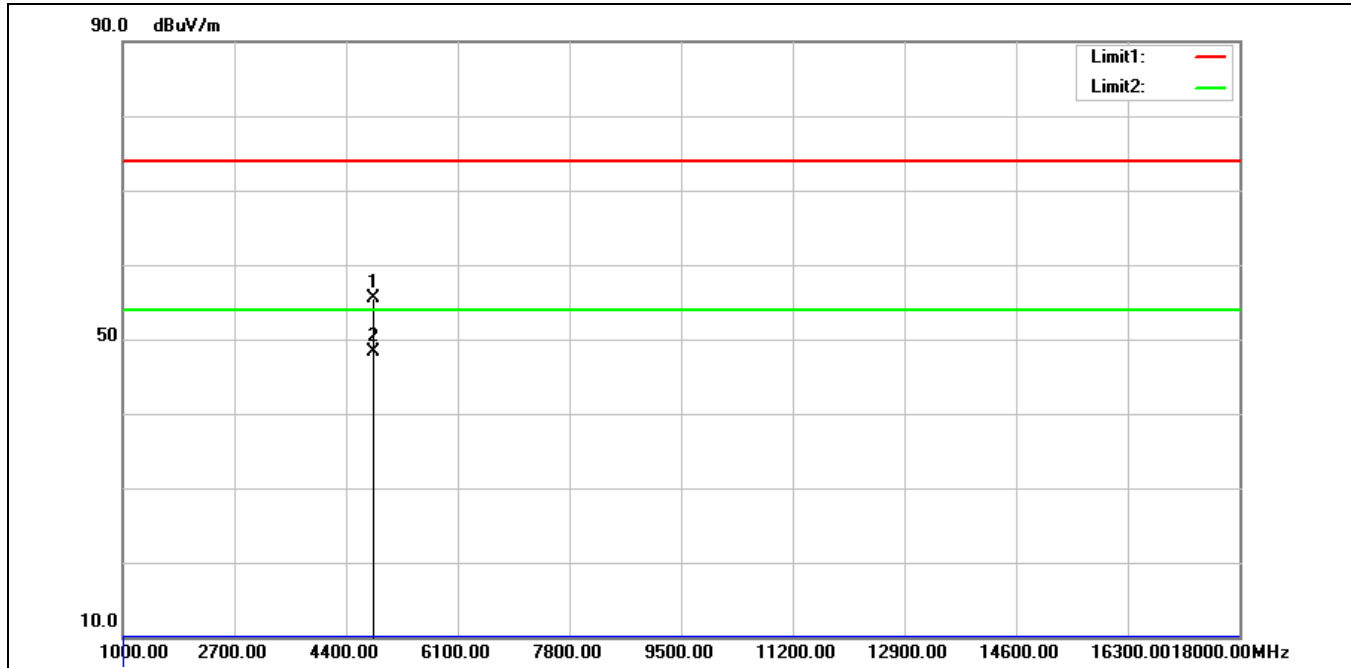
Test Engineer: Sam Su

Test Mode: 1DH5-2402-TX

Remark: Sample No.8

新丰/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	53.41	51.13	74.00	-22.87	peak	100	152	P	
2	4804.000	-2.28	44.87	42.59	54.00	-11.41	AVG	100	152	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Horizontal

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

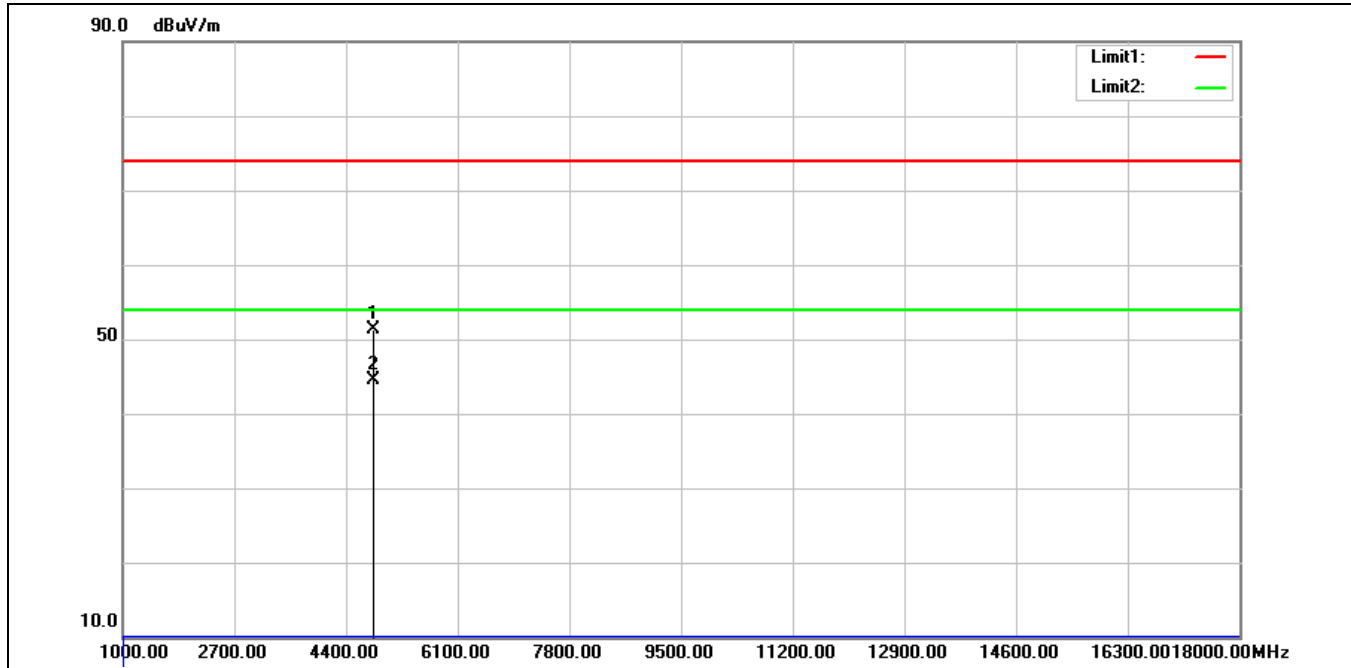
Test Engineer: Sam Su

Test Mode: 1DH5-2402-TX

Remark: Sample No.7

新聿/希華

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	57.71	55.43	74.00	-18.57	peak	100	309	P	
2	4804.000	-2.28	50.67	48.39	54.00	-5.61	AVG	210	309	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Vertical

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

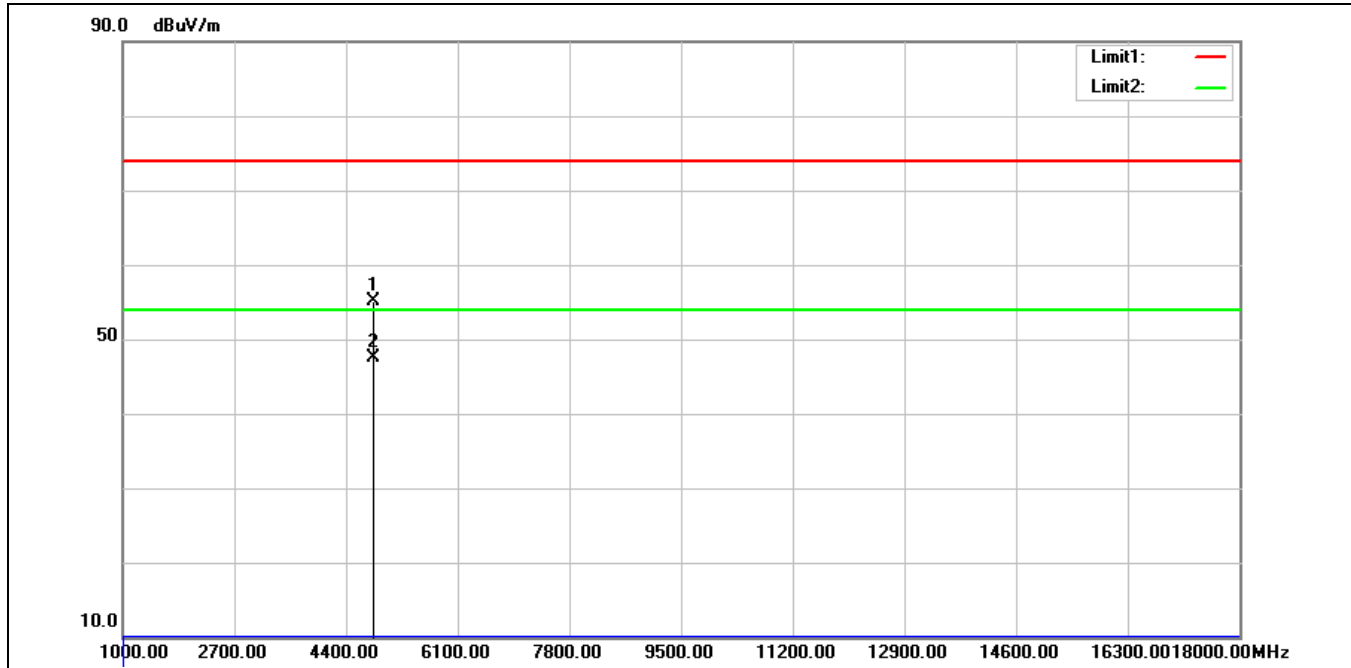
Test Engineer: Sam Su

Test Mode: 1DH5-2402-TX

Remark: Sample No.7

新聿/希華

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	53.52	51.24	74.00	-22.76	peak	100	142	P	
2	4804.000	-2.28	46.85	44.57	54.00	-9.43	AVG	100	142	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Horizontal

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

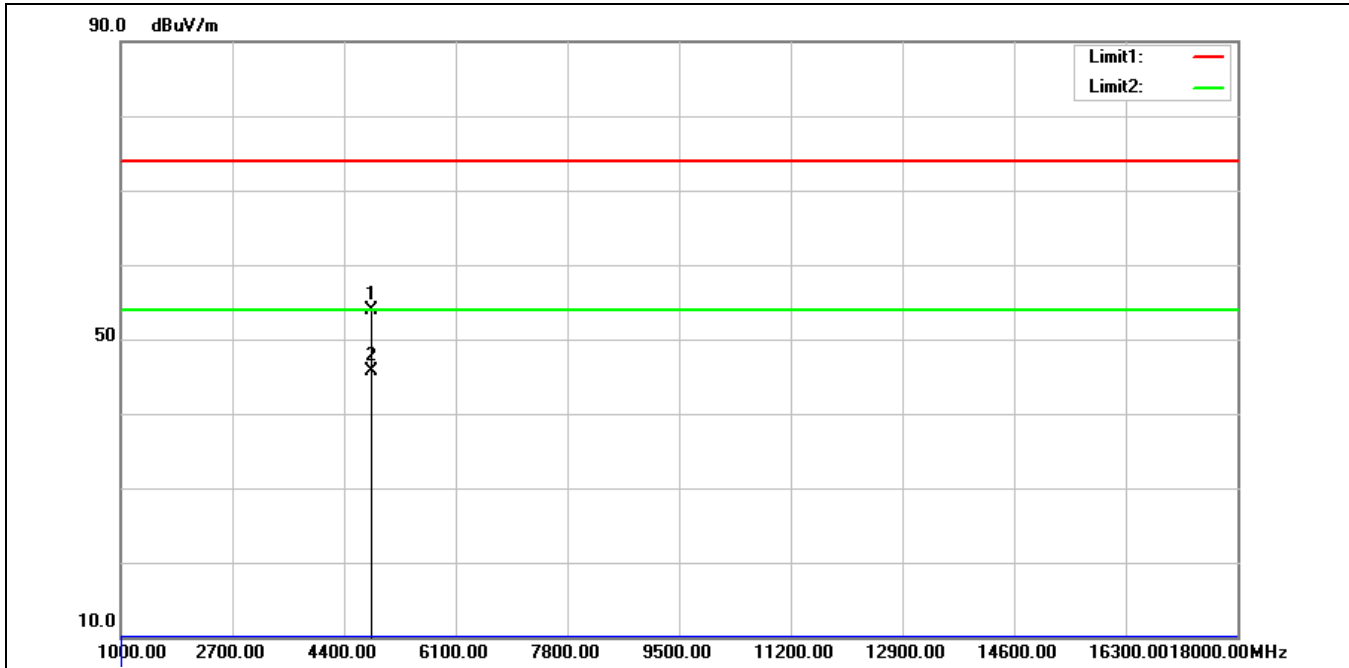
Test Engineer: Sam Su

Test Mode: 1DH5-2402-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	57.32	55.04	74.00	-18.96	peak	100	360	P	
2	4804.000	-2.28	49.81	47.53	54.00	-6.47	AVG	100	360	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Vertical

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

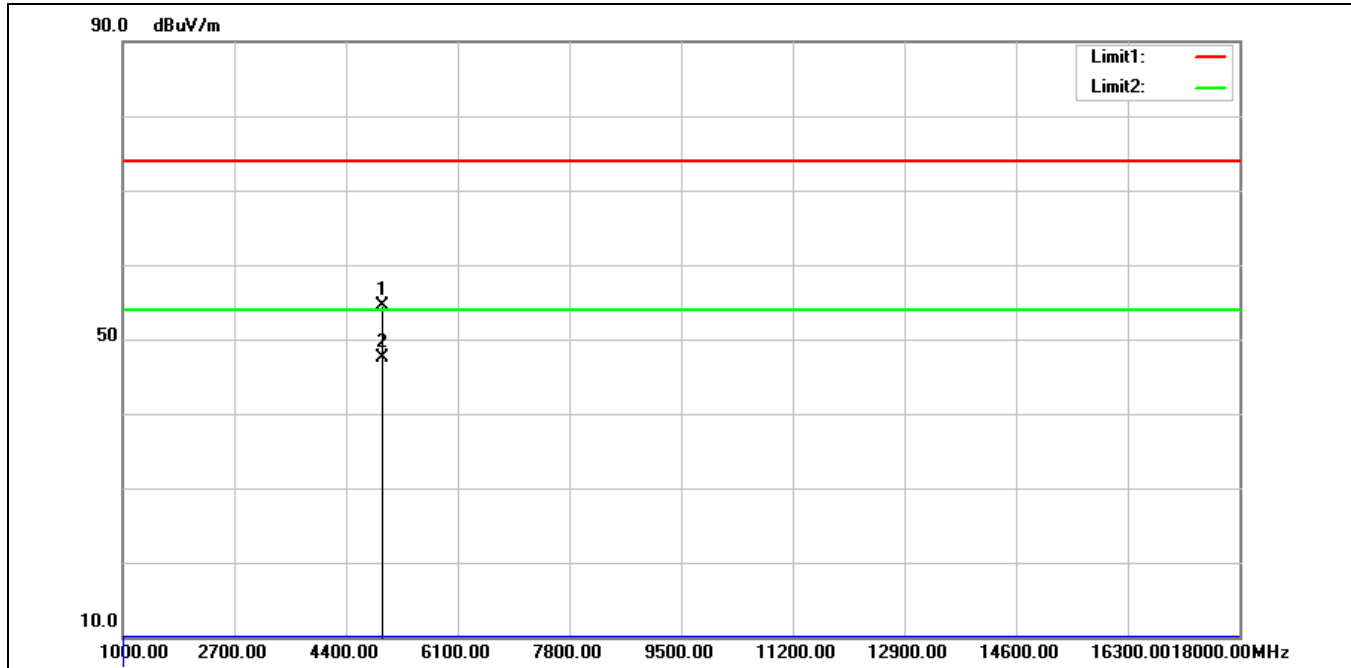
Test Engineer: Sam Su

Test Mode: 1DH5-2402-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	56.11	53.83	74.00	-20.17	peak	100	164	P	
2	4804.000	-2.28	47.95	45.67	54.00	-8.33	AVG	100	164	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Horizontal

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

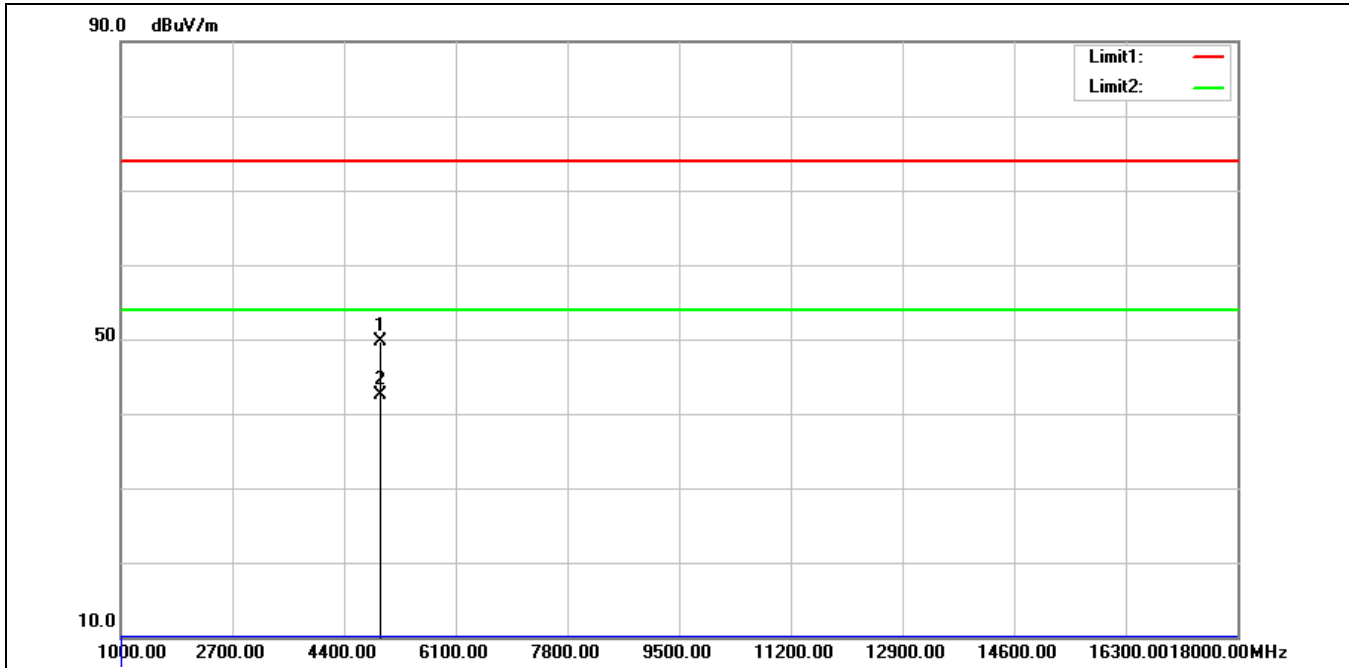
Test Engineer: Sam Su

Test Mode: 1DH5-2480-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4960.000	-1.91	56.41	54.50	74.00	-19.50	peak	100	347	P	
2	4960.000	-1.91	49.41	47.50	54.00	-6.50	AVG	100	347	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Vertical

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

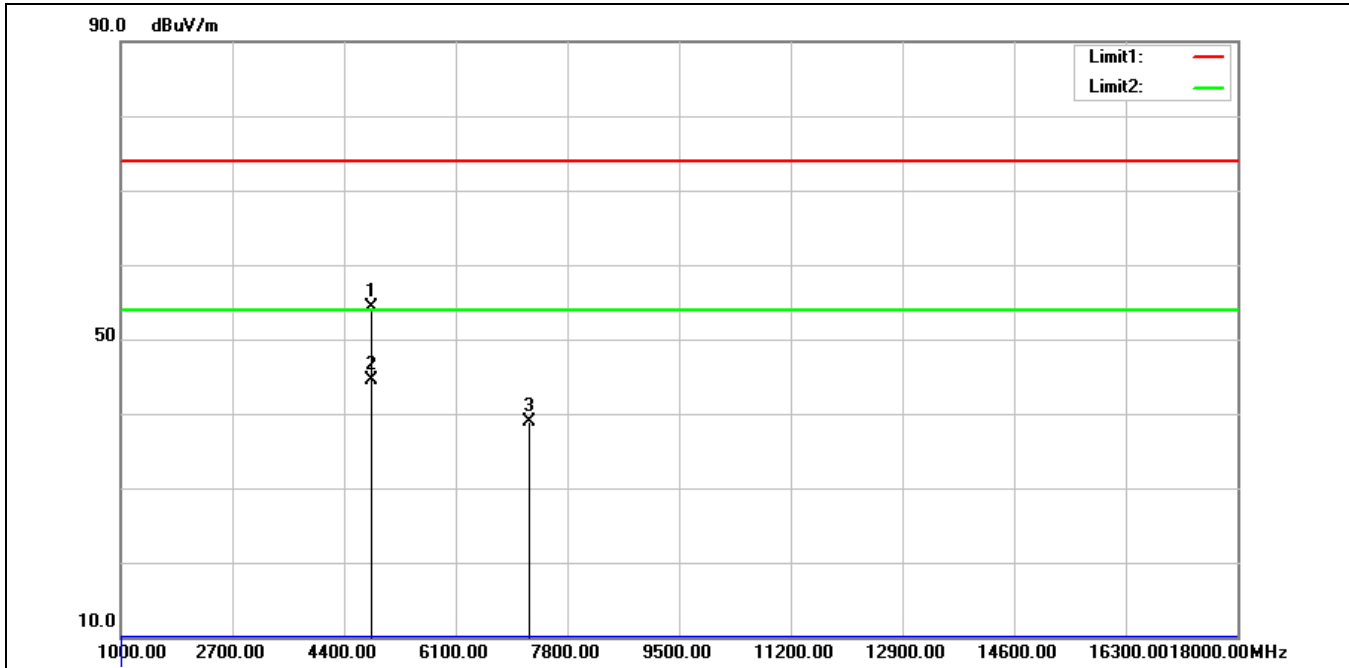
Test Engineer: Sam Su

Test Mode: 1DH5-2480-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4960.000	-1.91	51.69	49.78	74.00	-24.22	peak	100	140	P	
2	4960.000	-1.91	44.41	42.50	54.00	-11.50	AVG	100	140	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Horizontal

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

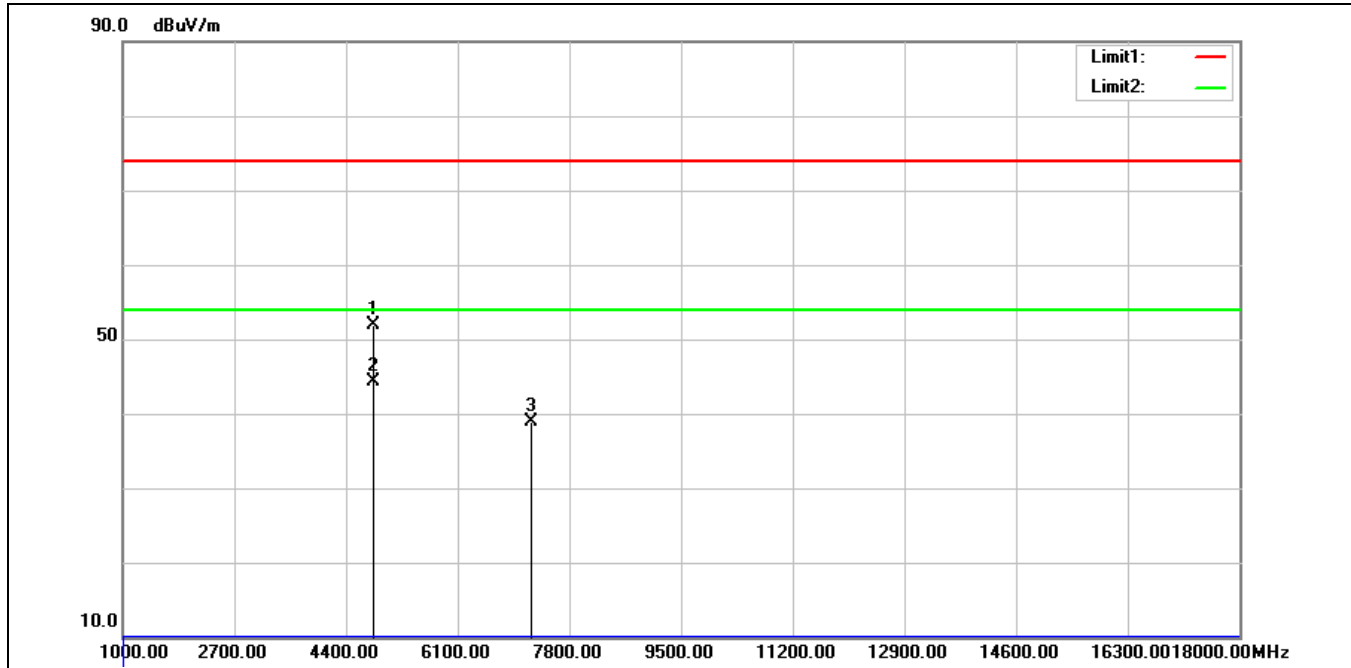
Test Engineer: Sam Su

Test Mode: 3DH5-2402-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	56.51	54.23	74.00	-19.77	peak	100	360	P	
2	4804.000	-2.28	46.69	44.41	54.00	-9.59	AVG	100	360	P	
3	7206.000	5.77	33.12	38.89	54.00	-15.11	AVG		0	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Vertical

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

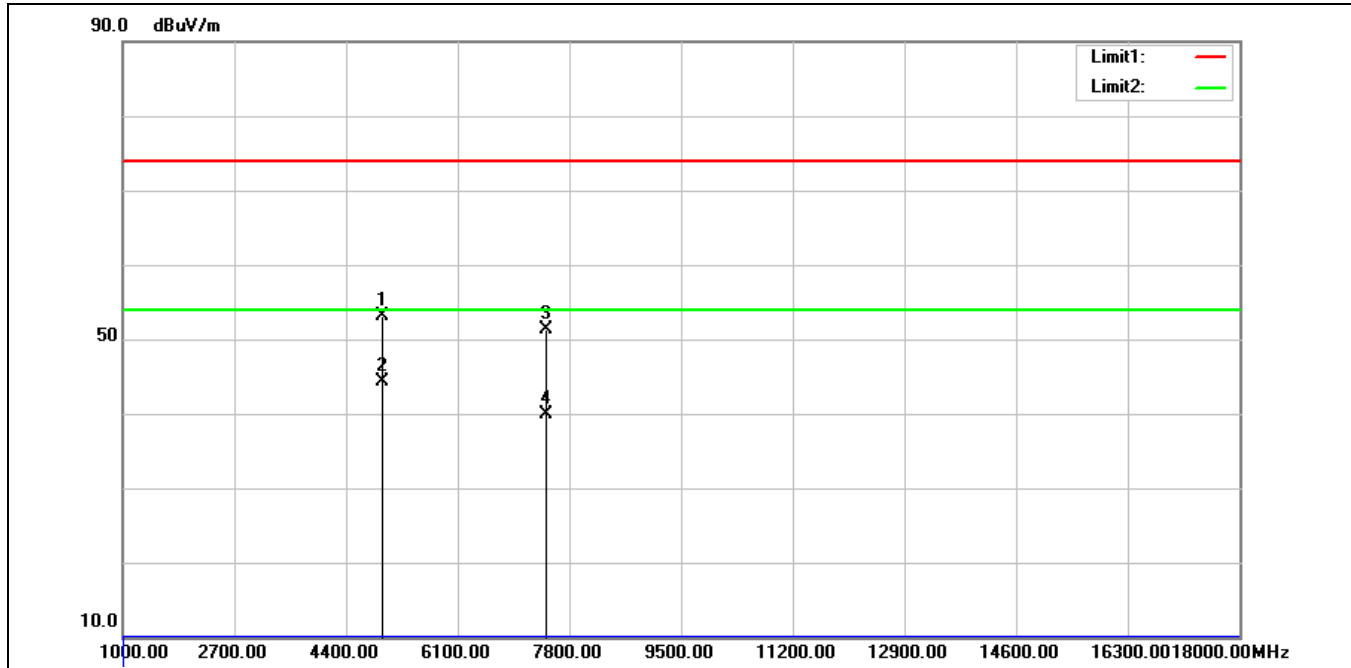
Test Engineer: Sam Su

Test Mode: 3DH5-2402-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	54.20	51.92	74.00	-22.08	peak	100	129	P	
2	4804.000	-2.28	46.56	44.28	54.00	-9.72	AVG	100	129	P	
3	7206.000	5.77	33.16	38.93	54.00	-15.07	AVG			P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test item: Radiation Emission

Applicant: Microchip

Product: BT module

Model No.: BM64

Test Distance: 3m

Ant. Polarization: Horizontal

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Test Rating: DC 5V

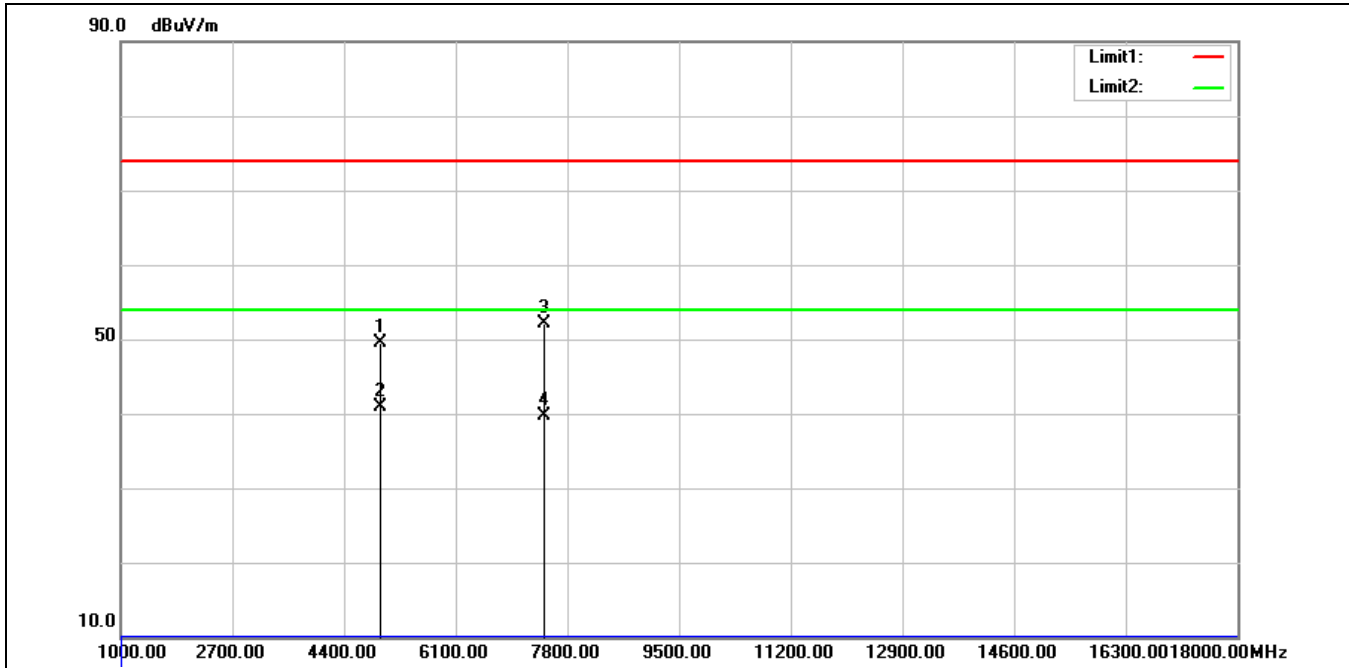
Test Engineer: Sam Su

Test Mode: 3DH5-2480-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4960.000	-1.91	55.03	53.12	74.00	-20.88	peak	100	343	P	
2	4960.000	-1.91	46.18	44.27	54.00	-9.73	AVG	100	343	P	
3	7440.000	6.44	44.79	51.23	74.00	-22.77	peak	100	116	P	
4	7440.000	6.44	33.50	39.94	54.00	-14.06	AVG	100	116	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Vertical

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

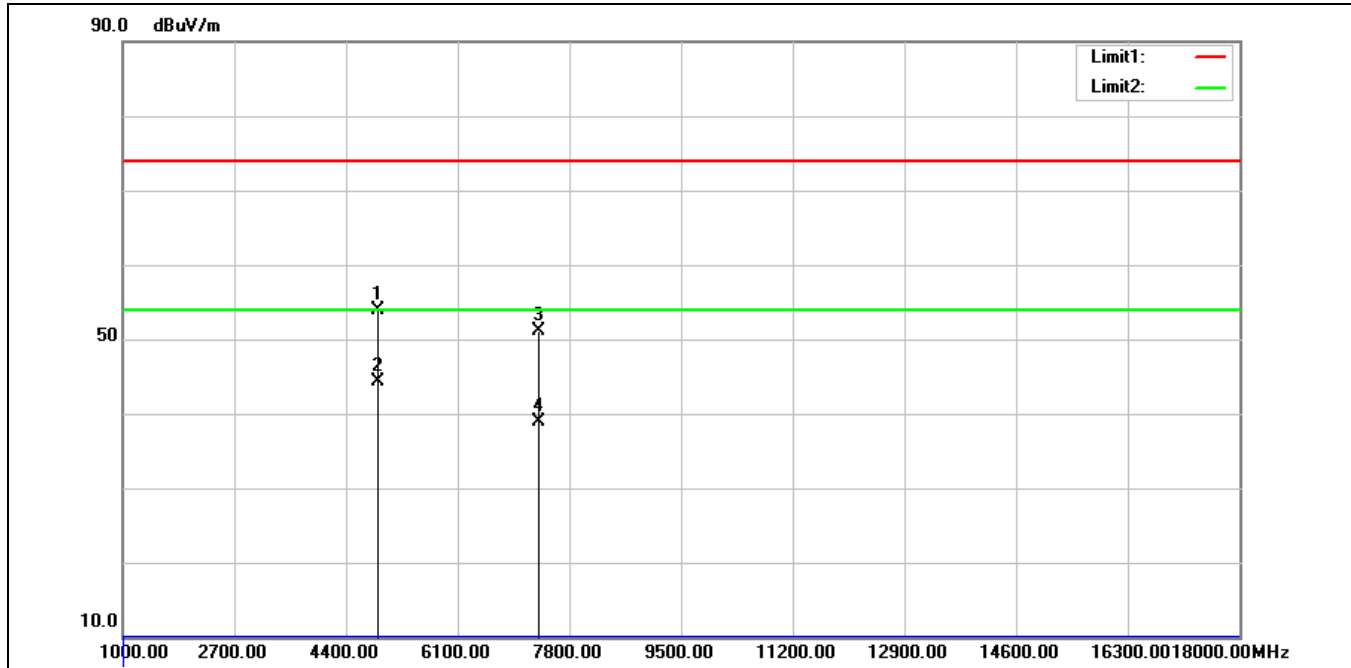
Test Engineer: Sam Su

Test Mode: 3DH5-2480-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4960.000	-1.91	51.43	49.52	74.00	-24.48	peak	100	137	P	
2	4960.000	-1.91	42.87	40.96	54.00	-13.04	AVG	100	137	P	
3	7440.000	6.44	45.76	52.20	74.00	-21.80	peak	100	4	P	
4	7440.000	6.44	33.18	39.62	54.00	-14.38	AVG	100	4	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Horizontal

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

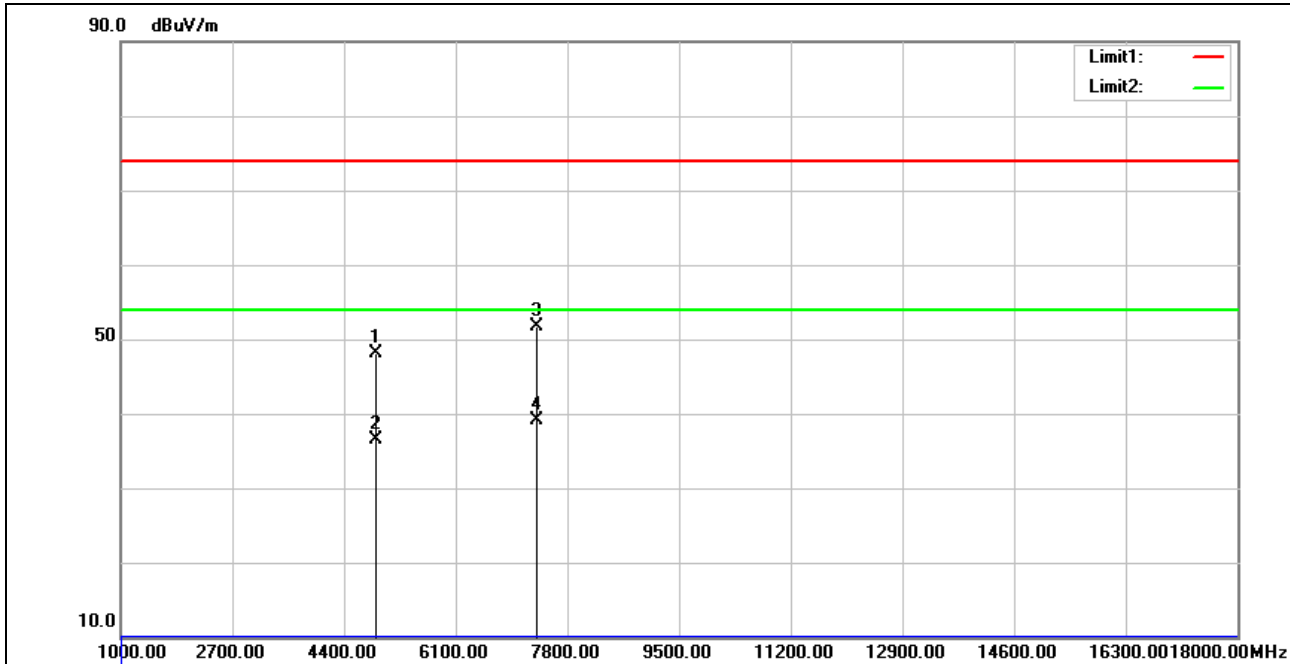
Test Engineer: Sam Su

Test Mode: 3DH5-2441-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4882.000	-2.10	55.95	53.85	74.00	-20.15	peak	100	356	P	
2	4882.000	-2.10	46.36	44.26	54.00	-9.74	AVG	100	356	P	
3	7323.000	6.11	45.04	51.15	74.00	-22.85	peak	100	163	P	
4	7323.000	6.11	32.83	38.94	54.00	-15.06	AVG	100	163	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Vertical

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

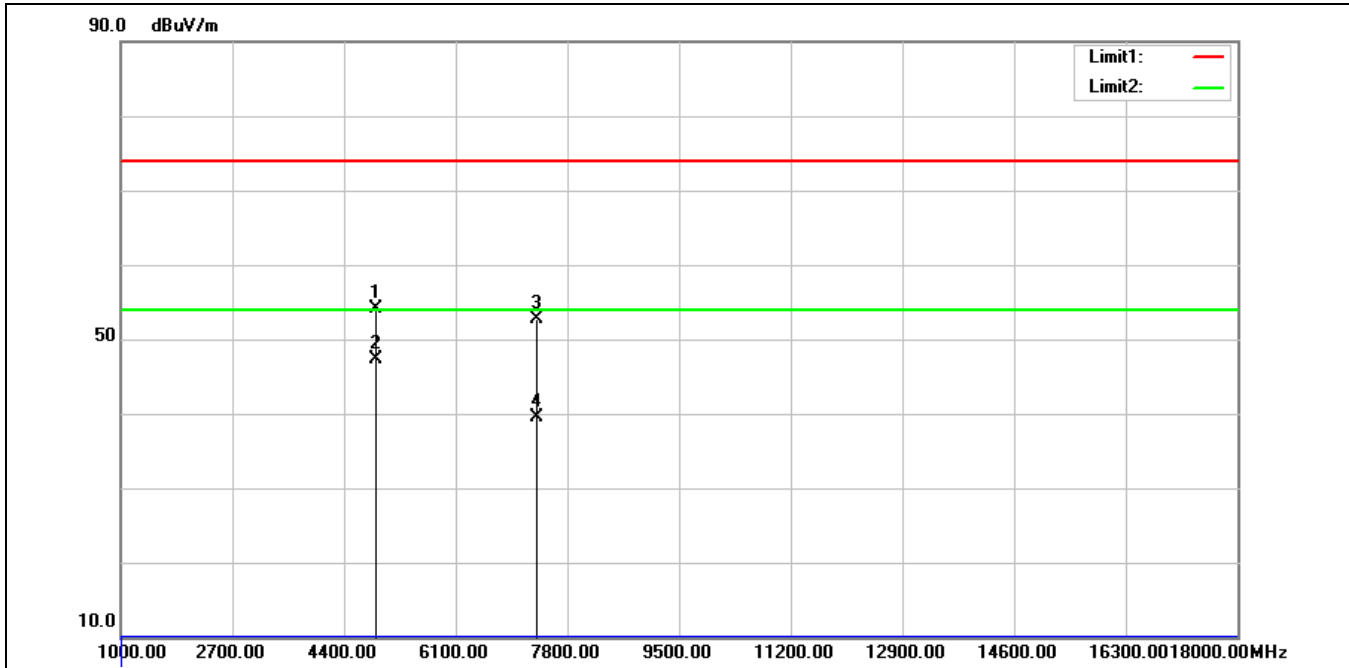
Test Engineer: Sam Su

Test Mode: 3DH5-2441-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4882.000	-2.10	50.20	48.10	74.00	-25.90	peak	100	316	P	
2	4882.000	-2.10	38.59	36.49	54.00	-17.51	AVG	100	316	P	
3	7323.000	6.11	45.69	51.80	74.00	-22.20	peak	100	357	P	
4	7323.000	6.11	32.93	39.04	54.00	-14.96	AVG	100	357	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Horizontal

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

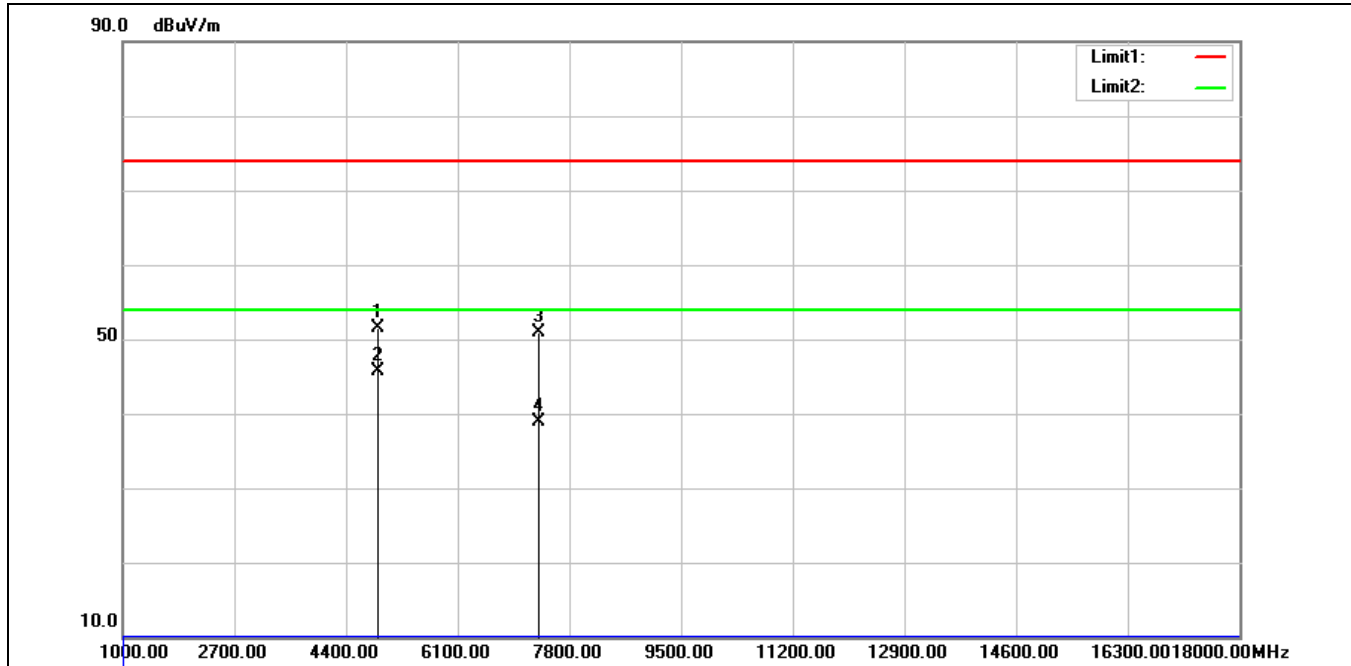
Test Engineer: Sam Su

Test Mode: 1DH5-2441-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4882.000	-2.10	56.16	54.06	74.00	-19.94	peak	100	359	P	
2	4882.000	-2.10	49.34	47.24	54.00	-6.76	AVG	100	359	P	
3	7323.000	6.11	46.66	52.77	74.00	-21.23	peak	100	133	P	
4	7323.000	6.11	33.43	39.54	54.00	-14.46	AVG	100	133	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Vertical

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

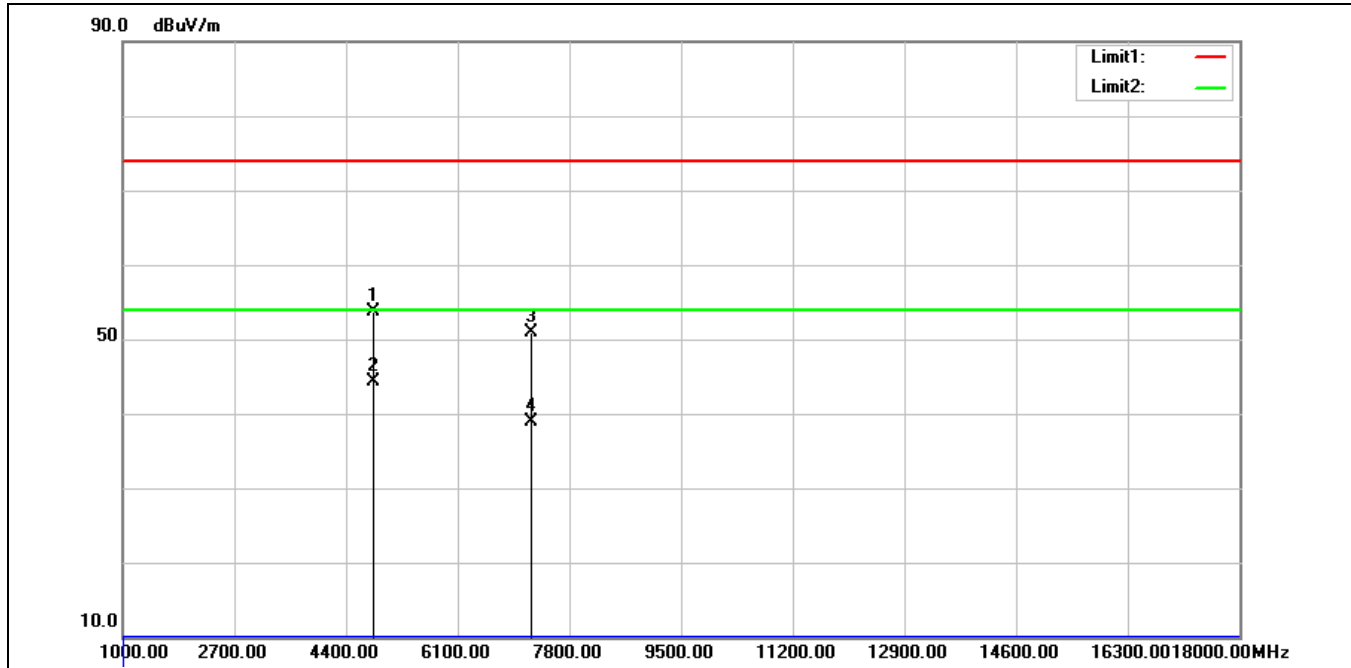
Test Engineer: Sam Su

Test Mode: 1DH5-2441-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4882.000	-2.10	53.54	51.44	74.00	-22.56	peak	100	136	P	
2	4882.000	-2.10	47.90	45.80	54.00	-8.20	AVG	100	136	P	
3	7323.000	6.11	44.85	50.96	74.00	-23.04	peak	100	66	P	
4	7323.000	6.11	32.80	38.91	54.00	-15.09	AVG	100	66	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test item: Radiation Emission

Applicant: Microchip

Product: BT module

Model No.: BM64

Test Distance: 3m

Ant. Polarization: Horizontal

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Test Rating: DC 5V

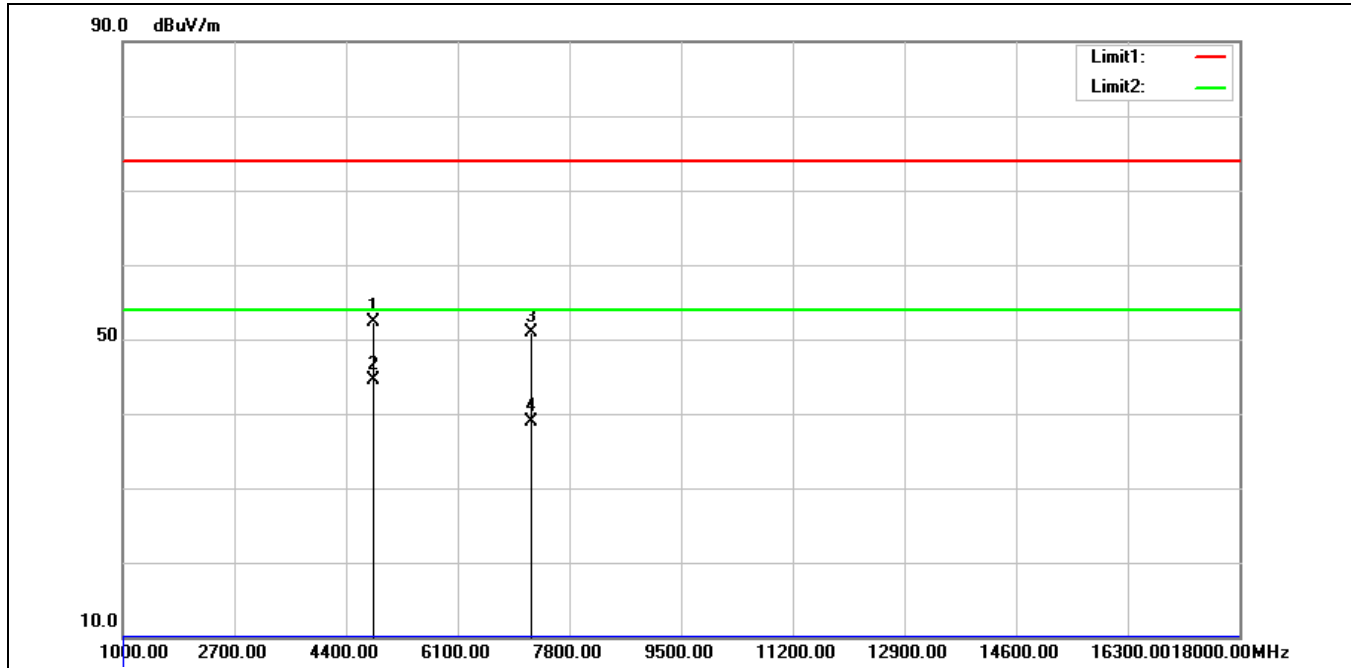
Test Engineer: Sam Su

Test Mode: 2DH5-2402-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	56.08	53.80	74.00	-20.20	peak	100	354	P	
2	4804.000	-2.28	46.52	44.24	54.00	-9.76	AVG	100	354	P	
3	7206.000	5.77	45.09	50.86	74.00	-23.14	peak	100	129	P	
4	7206.000	5.77	33.10	38.87	54.00	-15.13	AVG	100	129	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test item: Radiation Emission

Applicant: Microchip

Product: BT module

Model No.: BM64

Test Distance: 3m

Ant. Polarization: Vertical

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Test Rating: DC 5V

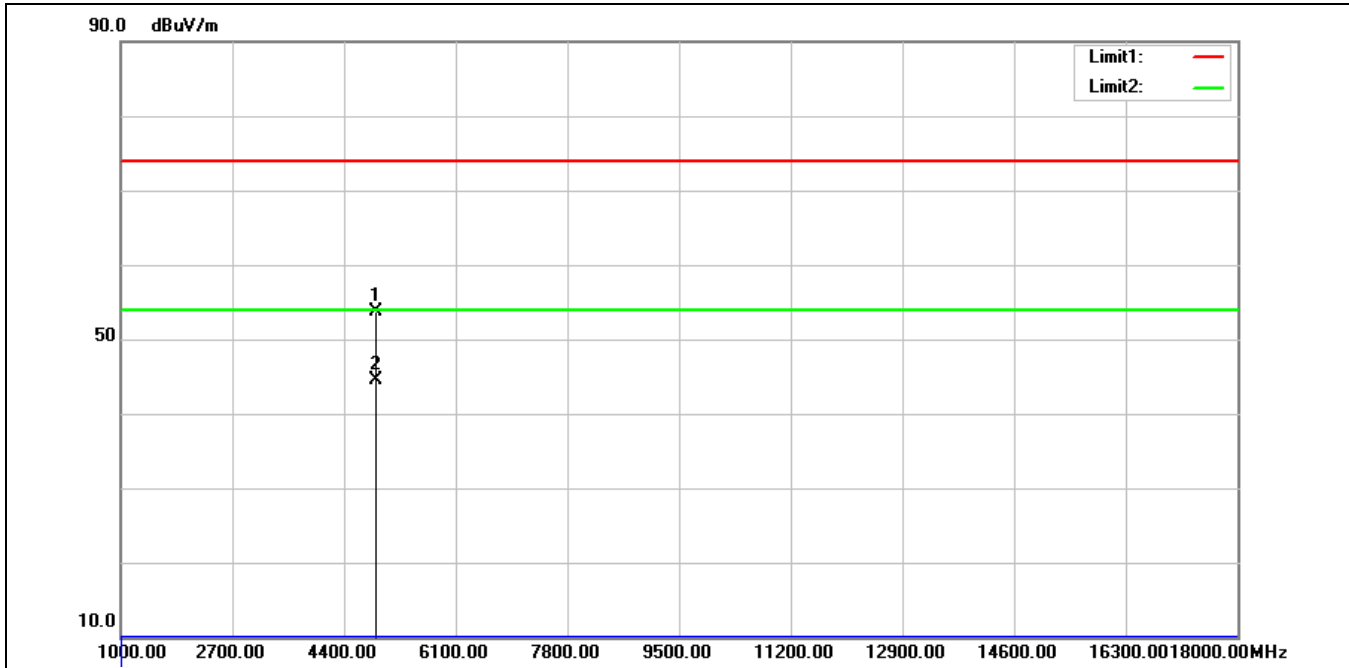
Test Engineer: Sam Su

Test Mode: 2DH5-2402-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	54.51	52.23	74.00	-21.77	peak	100	133	P	
2	4804.000	-2.28	46.76	44.48	54.00	-9.52	AVG	100	133	P	
3	7206.000	5.77	45.18	50.95	74.00	-23.05	peak	100	48	P	
4	7206.000	5.77	33.11	38.88	54.00	-15.12	AVG	100	48	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Horizontal

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

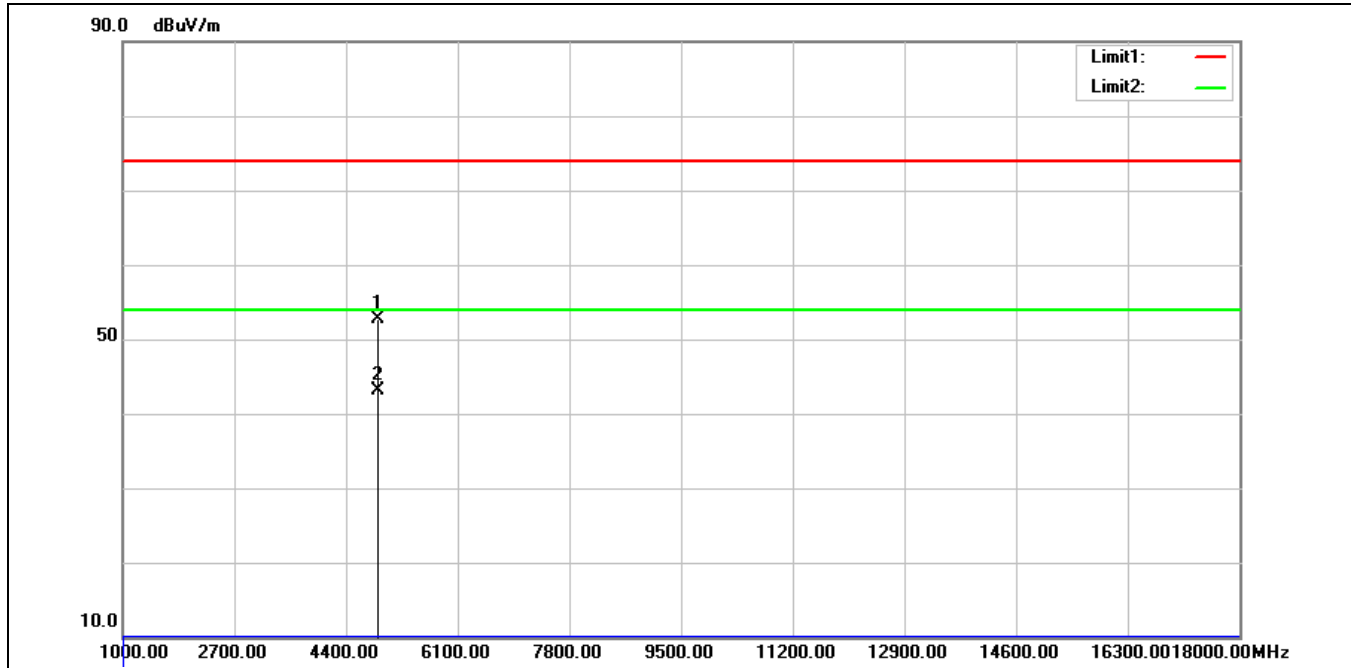
Test Engineer: Sam Su

Test Mode: 2DH5-2441-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4882.000	-2.10	55.83	53.73	74.00	-20.27	peak	100	1	P	
2	4882.000	-2.10	46.56	44.46	54.00	-9.54	AVG	100	1	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Vertical

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

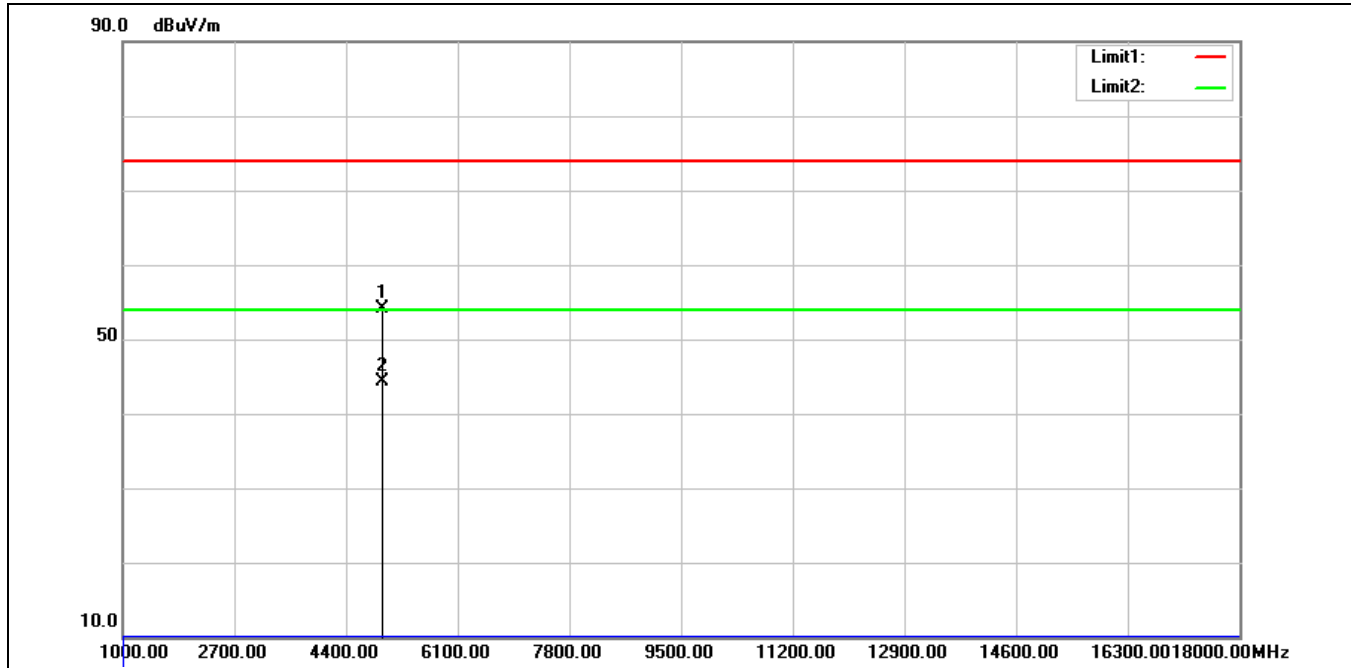
Test Engineer: Sam Su

Test Mode: 2DH5-2441-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4882.000	-2.10	54.84	52.74	74.00	-21.26	peak	100	133	P	
2	4882.000	-2.10	45.21	43.11	54.00	-10.89	AVG	100	133	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Horizontal

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

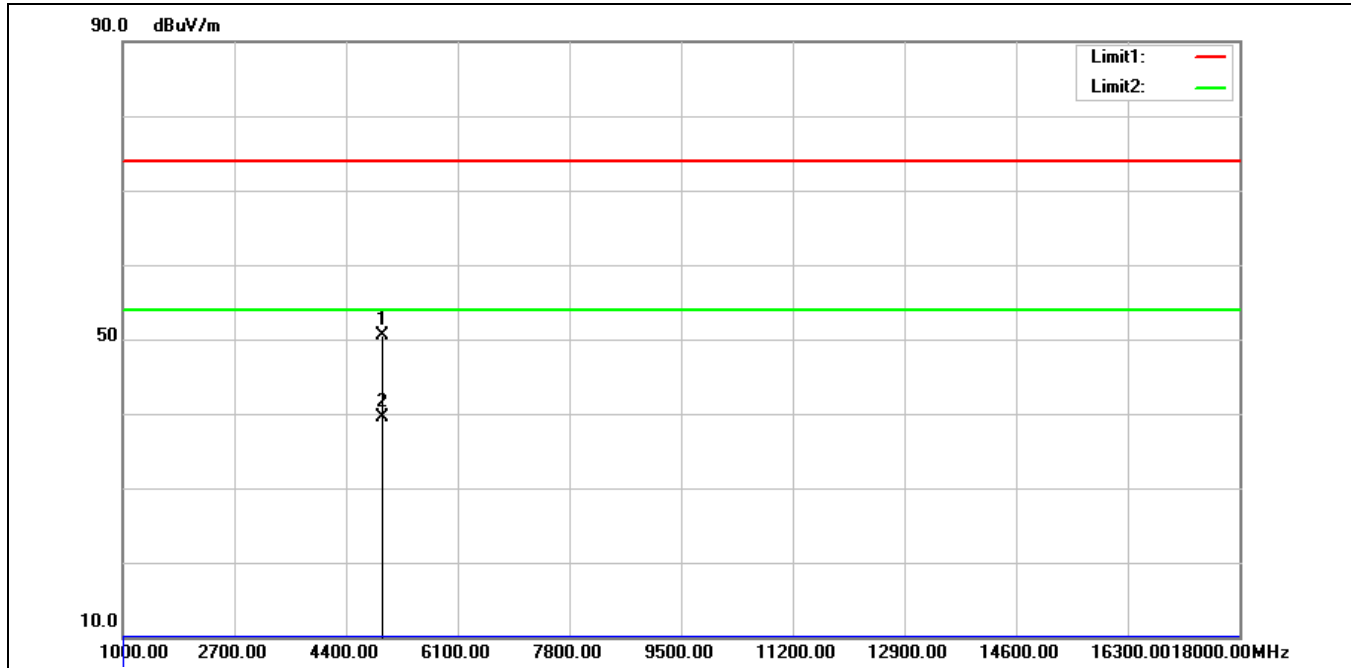
Test Engineer: Sam Su

Test Mode: 2DH5-2480-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4960.000	-1.91	56.11	54.20	74.00	-19.80	peak	100	358	P	
2	4960.000	-1.91	46.25	44.34	54.00	-9.66	AVG	100	358	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Vertical

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

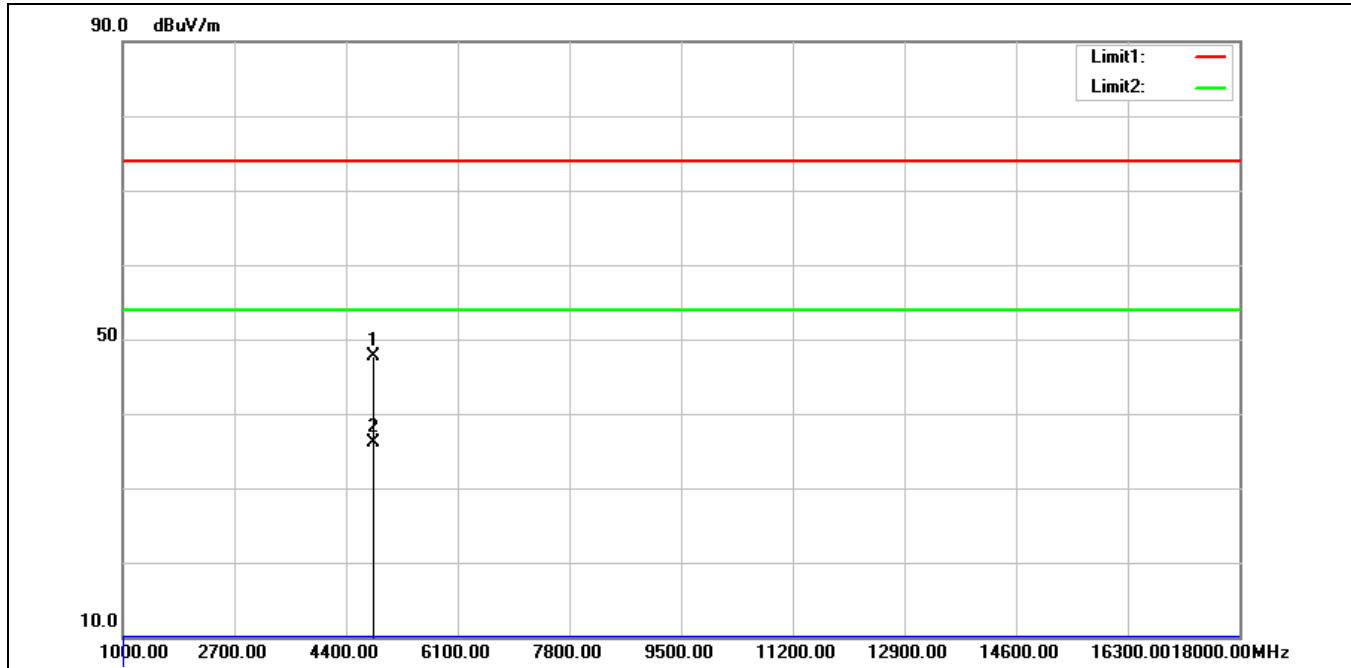
Test Engineer: Sam Su

Test Mode: 2DH5-2480-TX

Remark: Sample No.4

Power level -1 高創/嘉碩

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4960.000	-1.91	52.50	50.59	74.00	-23.41	peak	100	119	P	
2	4960.000	-1.91	41.43	39.52	54.00	-14.48	AVG	100	119	P	



Service No.: 20160106(BM64)

Test Standard: FCC Above 1G PEAK

Test Distance: 3m

Test item: Radiation Emission

Ant. Polarization: Horizontal

Applicant: Microchip

Temp.(°C)/Hum.(%): 22.1(°C) / 64 %

Product: BT module

Test Rating: DC 5V

Model No.: BM64

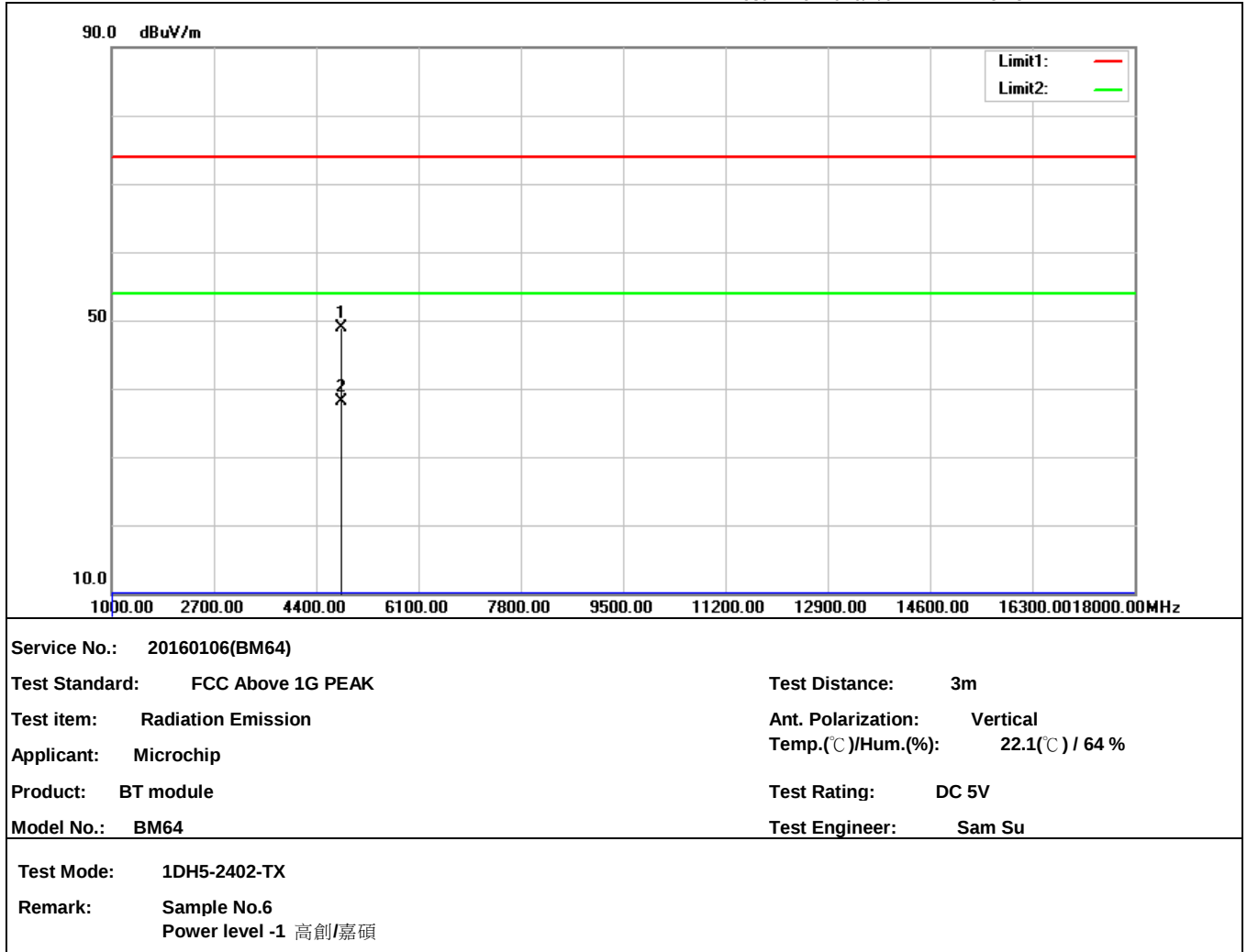
Test Engineer: Sam Su

Test Mode: 1DH5-2402-TX

Remark: Sample No.6

Power level -1 高創/嘉碩

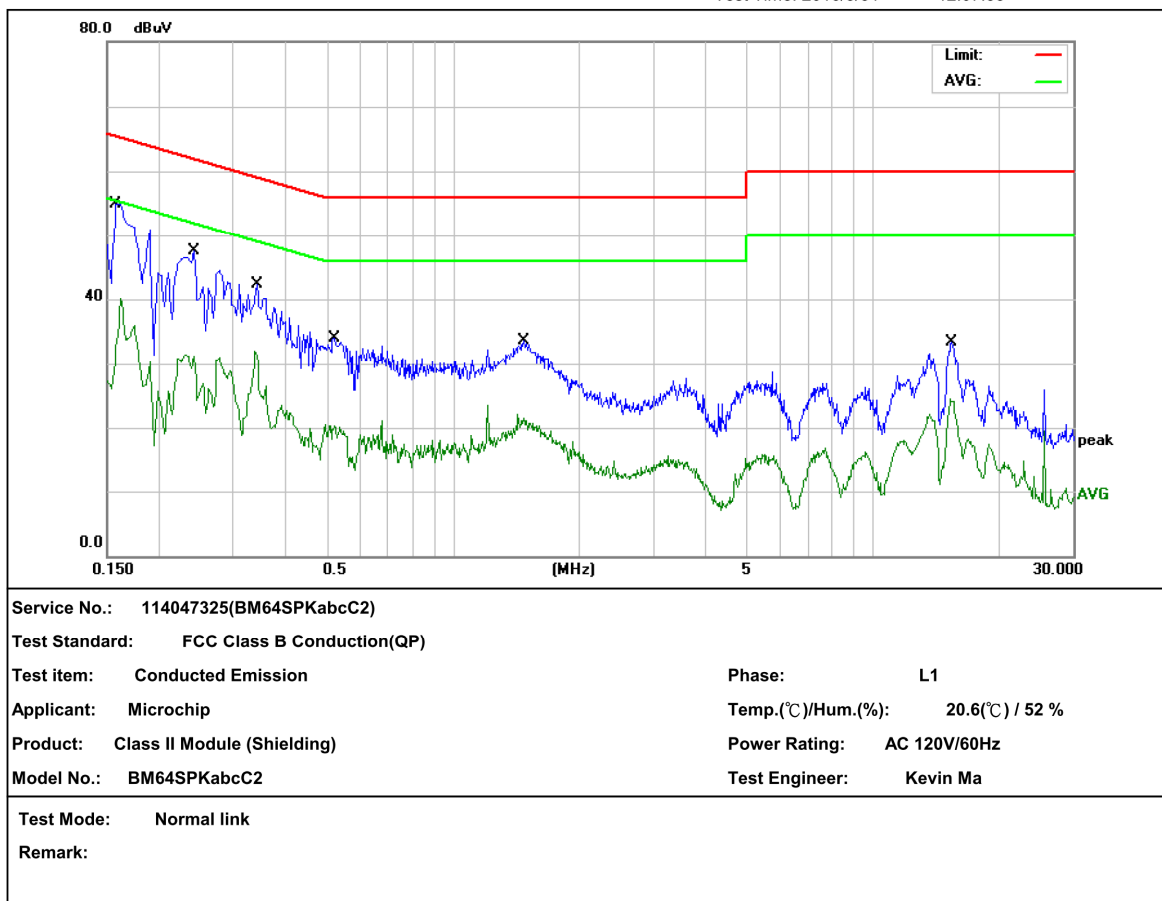
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	50.07	47.79	74.00	-26.21	peak	100	152	P	
2	4804.000	-2.28	38.42	36.14	54.00	-17.86	AVG	100	152	P	



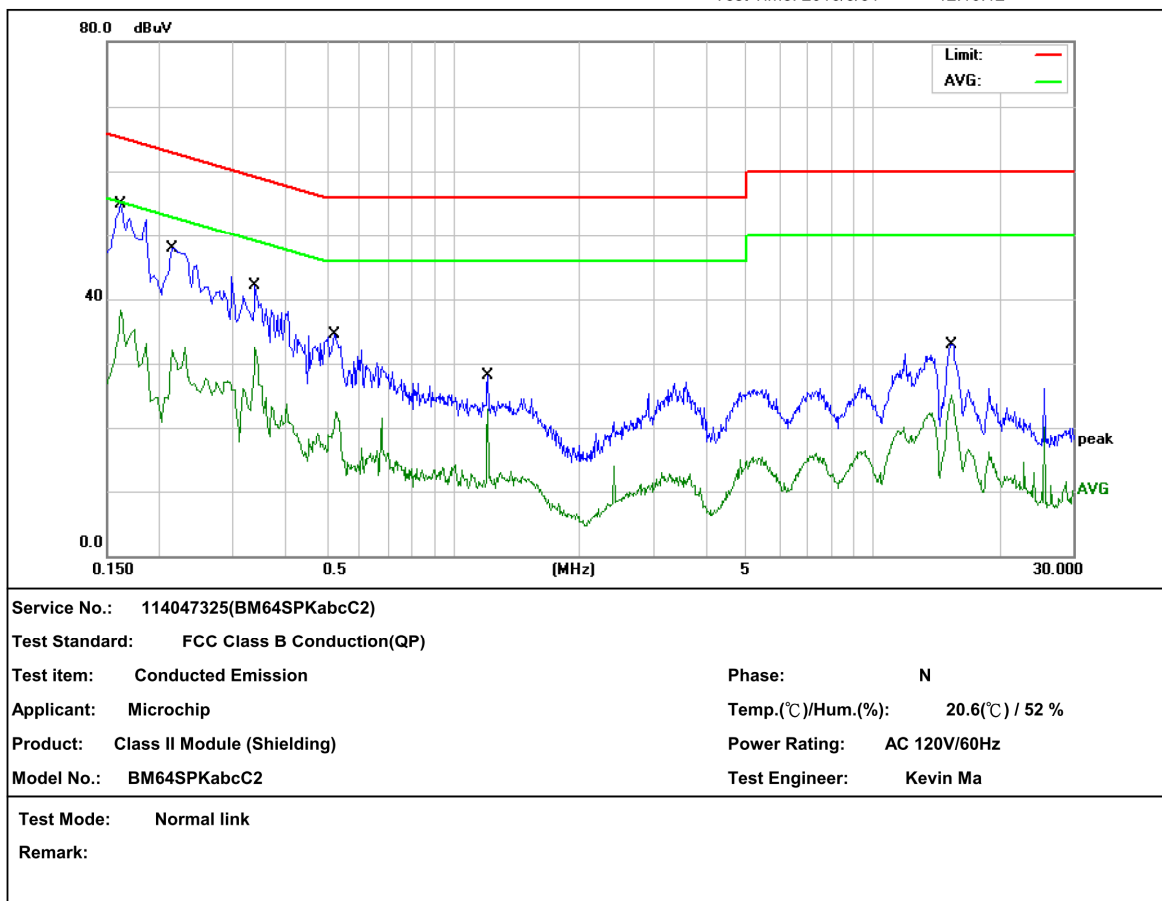
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height	Azimuth (°)	P/F	Remark
1	4804.000	-2.28	51.10	48.82	74.00	-25.18	peak	100	147	P	
2	4804.000	-2.28	40.41	38.13	54.00	-15.87	AVG	100	147	P	

Spurious Emissions, Mains, 150kHz - 30MHz

Mains Spurious Emissions



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	



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	