Test Report No.10053432 10053434 001

Appendix D: Radiated and Mains Spurious Emission Data

(File: 10053432 10053434AppendixD)

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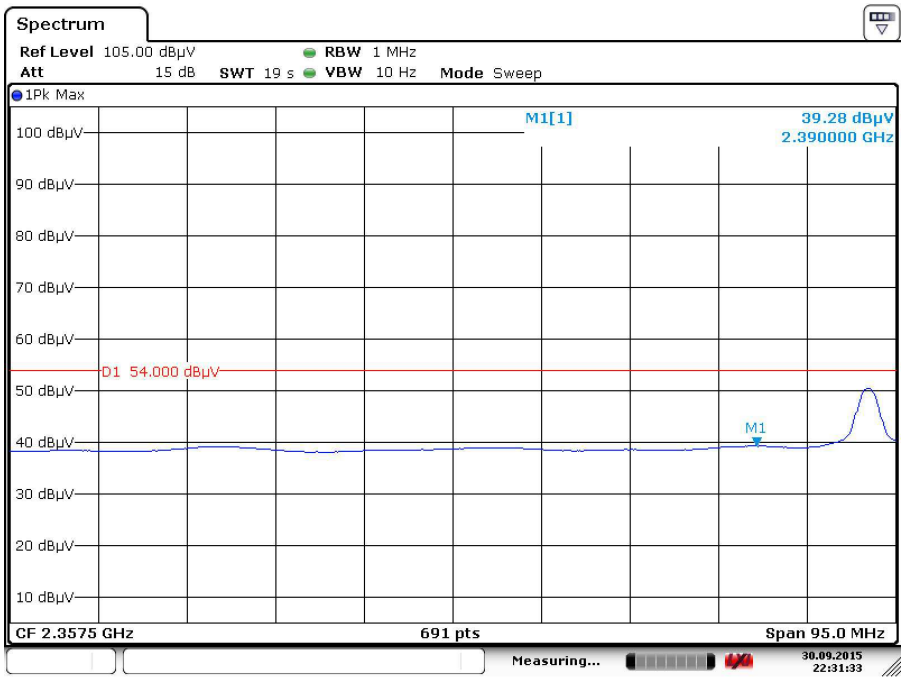
Radiated Bandedge (GFSK)

Low Channel (Hor)



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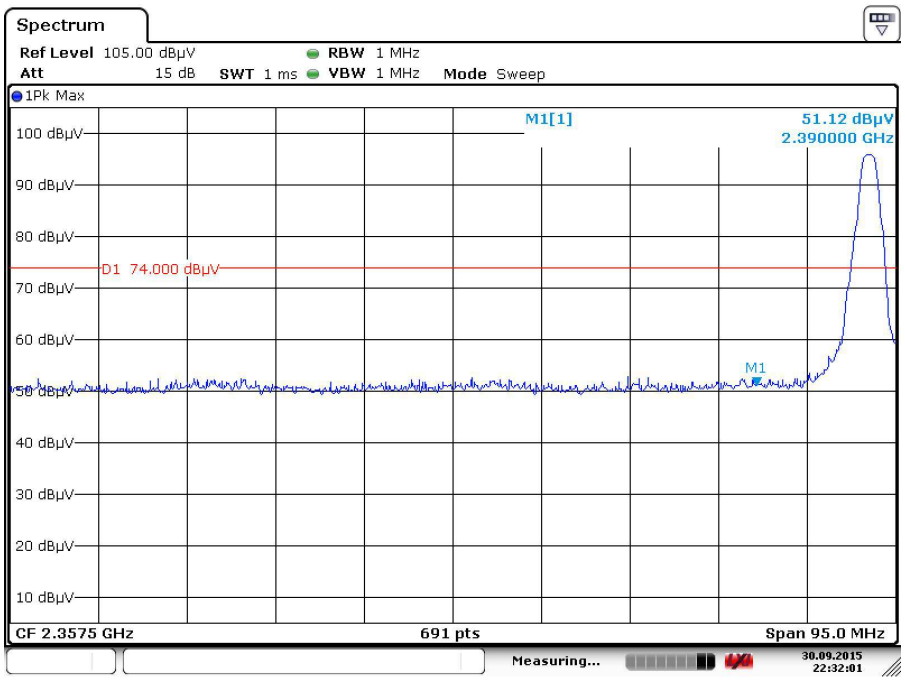

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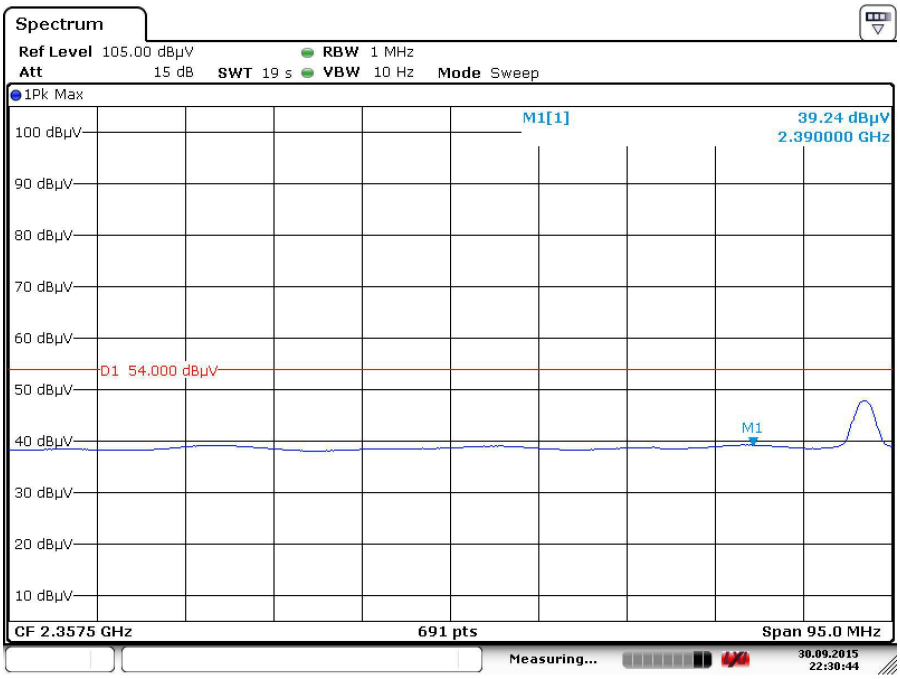
Low Channel (Ver)



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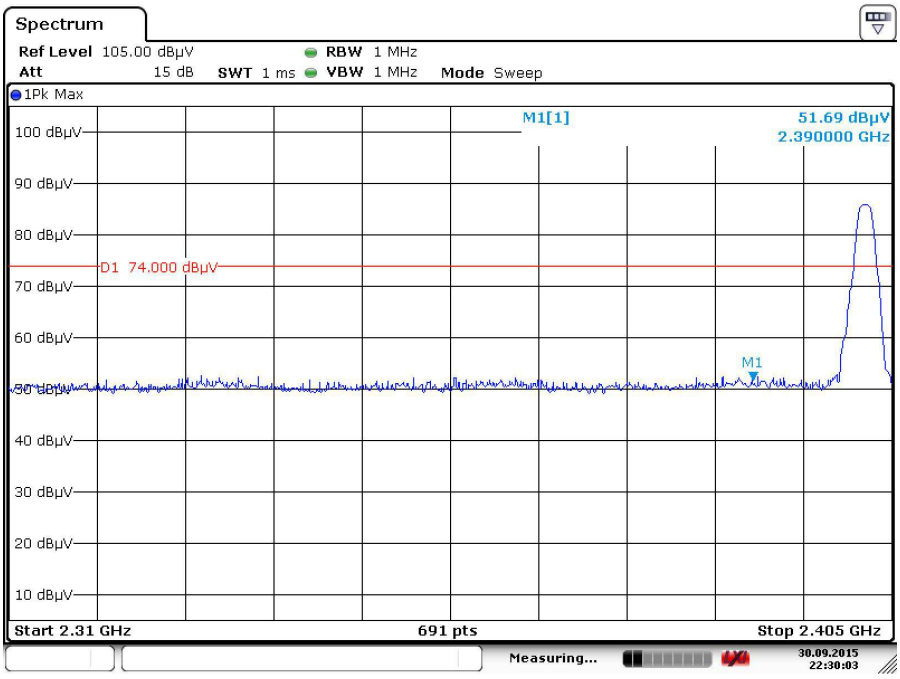

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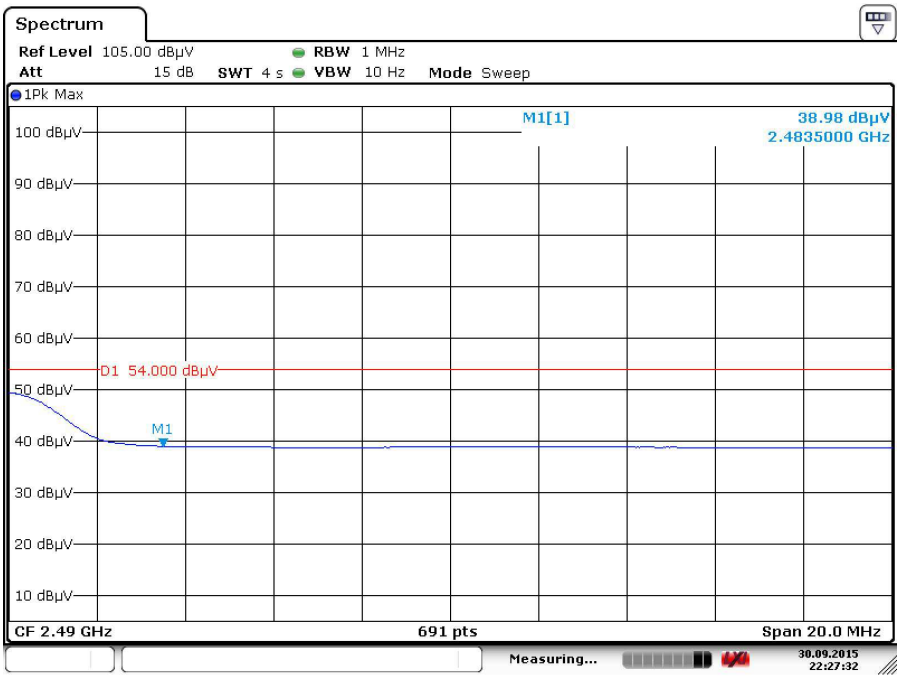
Spurious Emissions, Band Edge, 2.35-2.5G

Radiated Bandedge (GFSK)

High Channel (Hor)



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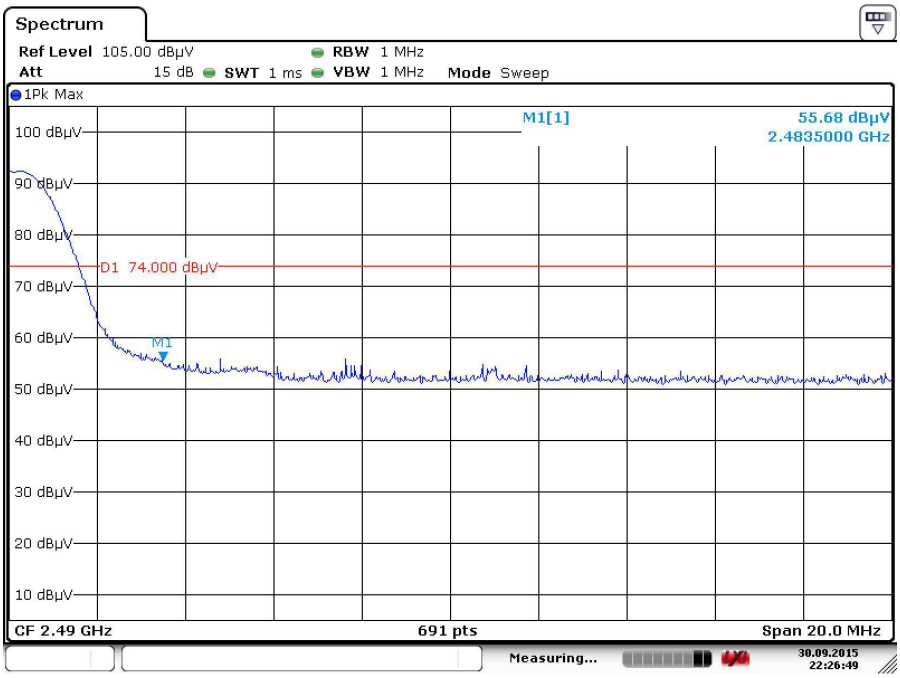

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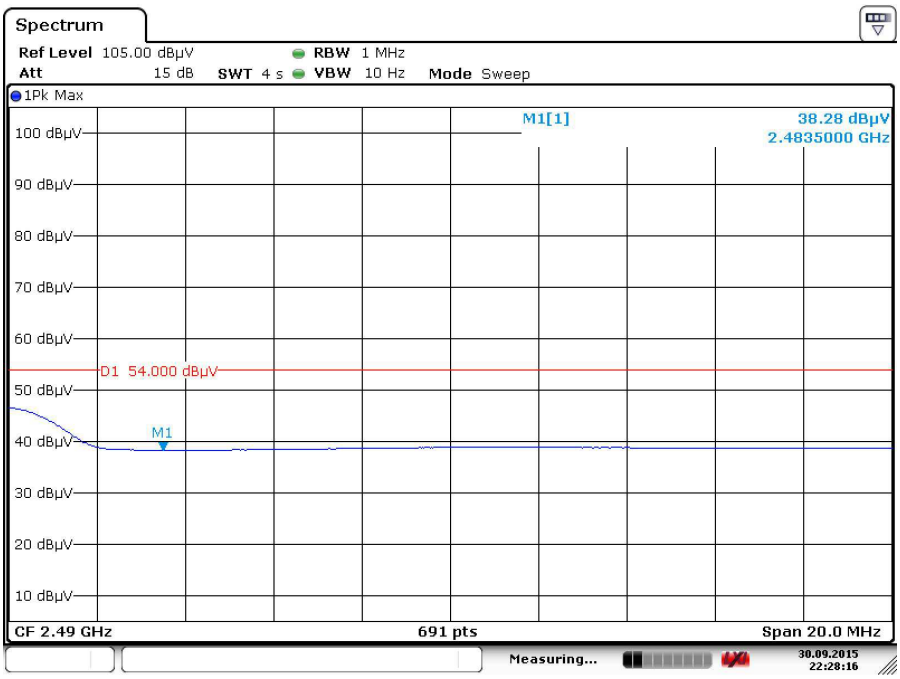
High Channel (Ver)



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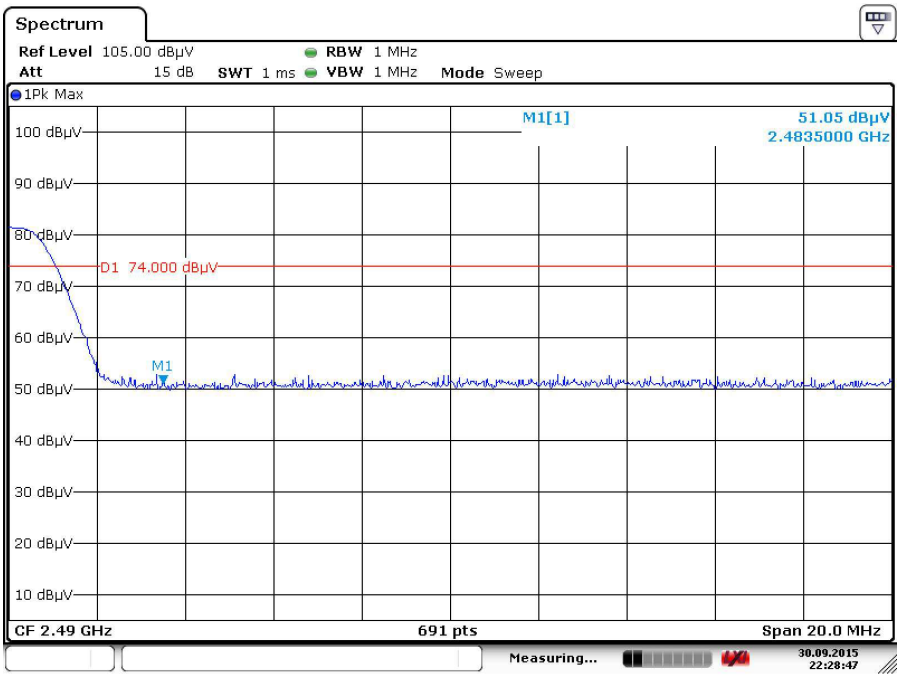

Date: 30.SEP.2015 22:28:47

Spurious Emissions, Band Edge, 2.35-2.5G

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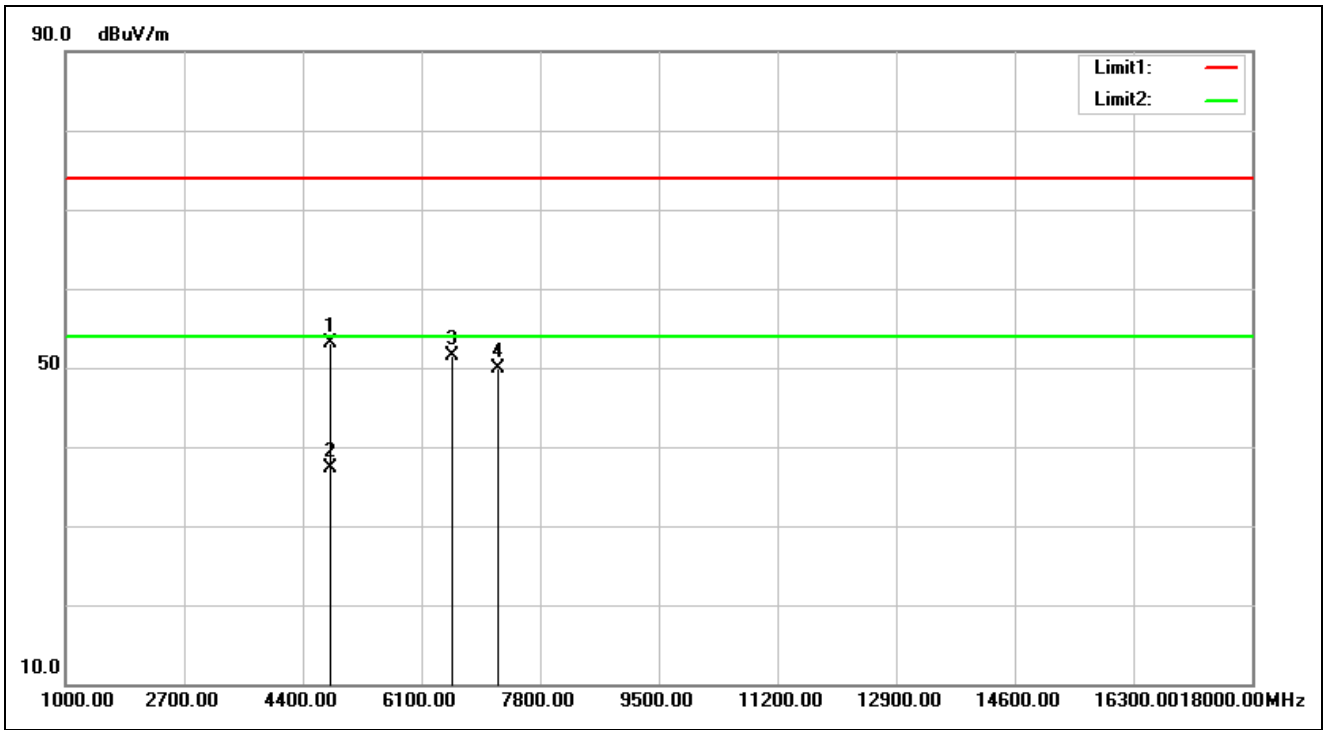

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:01:18**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**TX-2402**		
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	55.48	53.13	74.00	-20.87	peak	100	211	
2	4804.000	-2.35	39.60	37.25	54.00	-16.75	AVG	100	211	
3	6542.000	5.96	45.58	51.54	74.00	-22.46	peak	100	12	
4	7206.000	5.78	44.16	49.94	74.00	-24.06	peak		0	

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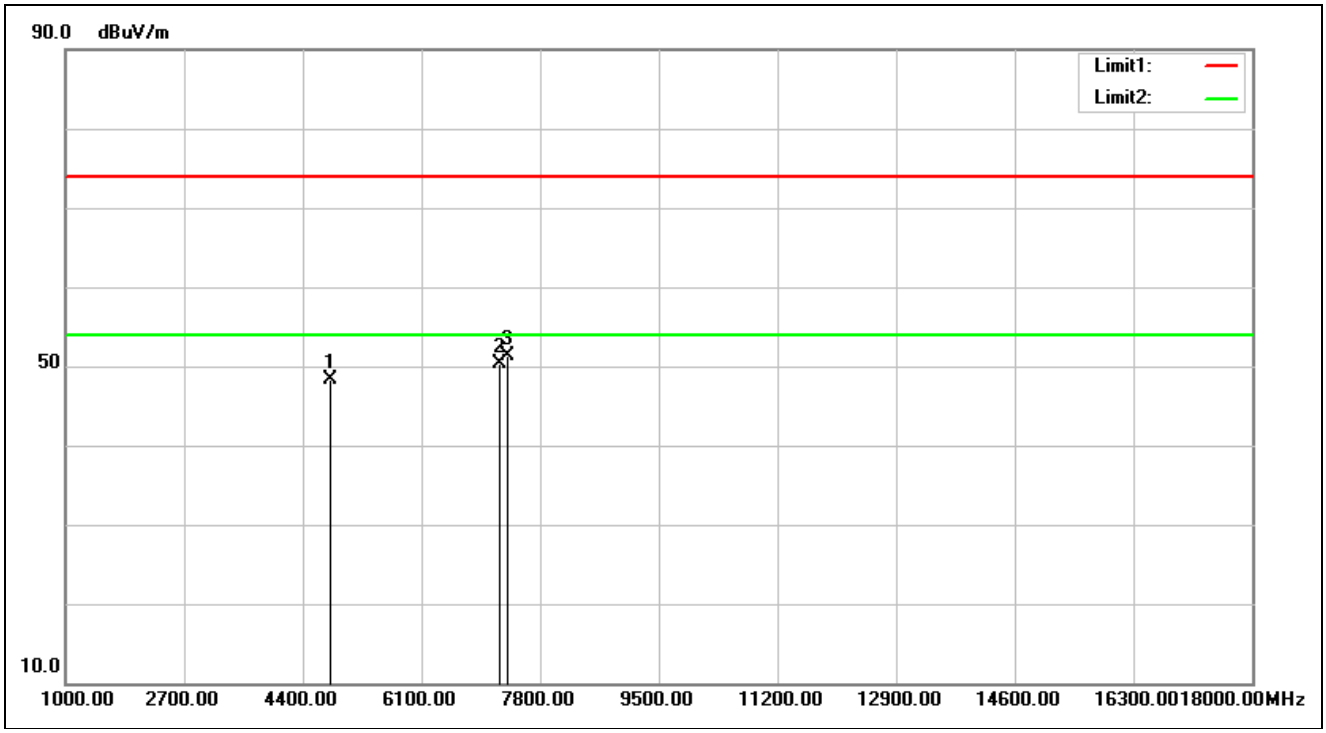

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:02:21**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**TX-2402**		
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	50.56	48.21	74.00	-25.79	peak			
2	7206.000	5.78	44.45	50.23	74.00	-23.77	peak			
3	7324.000	6.13	45.26	51.39	74.00	-22.61	peak	100	28	

Spurious Emissions, TX Mode, 1-18G

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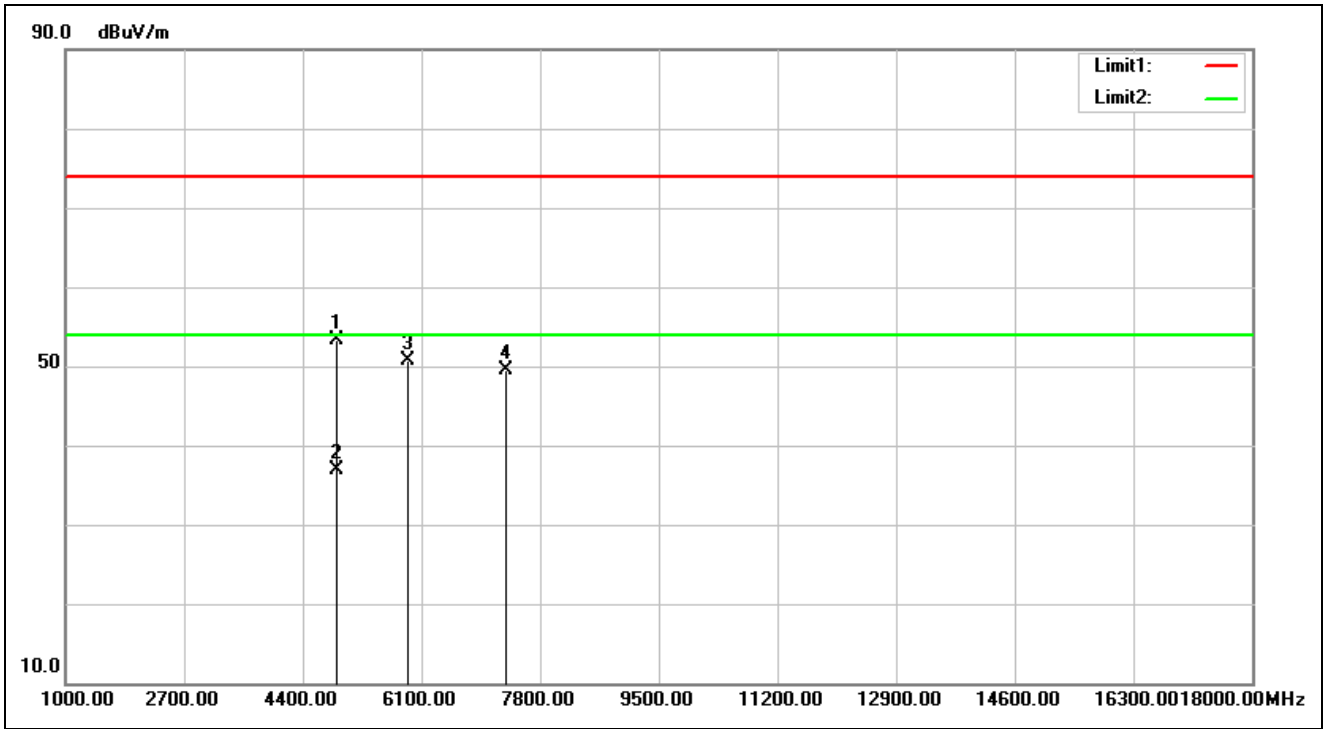

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:07:27**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**TX-2440**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	4880.000	-2.16	55.54	53.38	74.00	-20.62	peak	100	174	
2	4880.000	-2.16	38.98	36.82	54.00	-17.18	AVG	100	174	
3	5913.000	3.51	47.23	50.74	74.00	-23.26	peak	100	255	
4	7320.000	6.12	43.42	49.54	74.00	-24.46	peak			

Spurious Emissions, TX Mode, 1-18G

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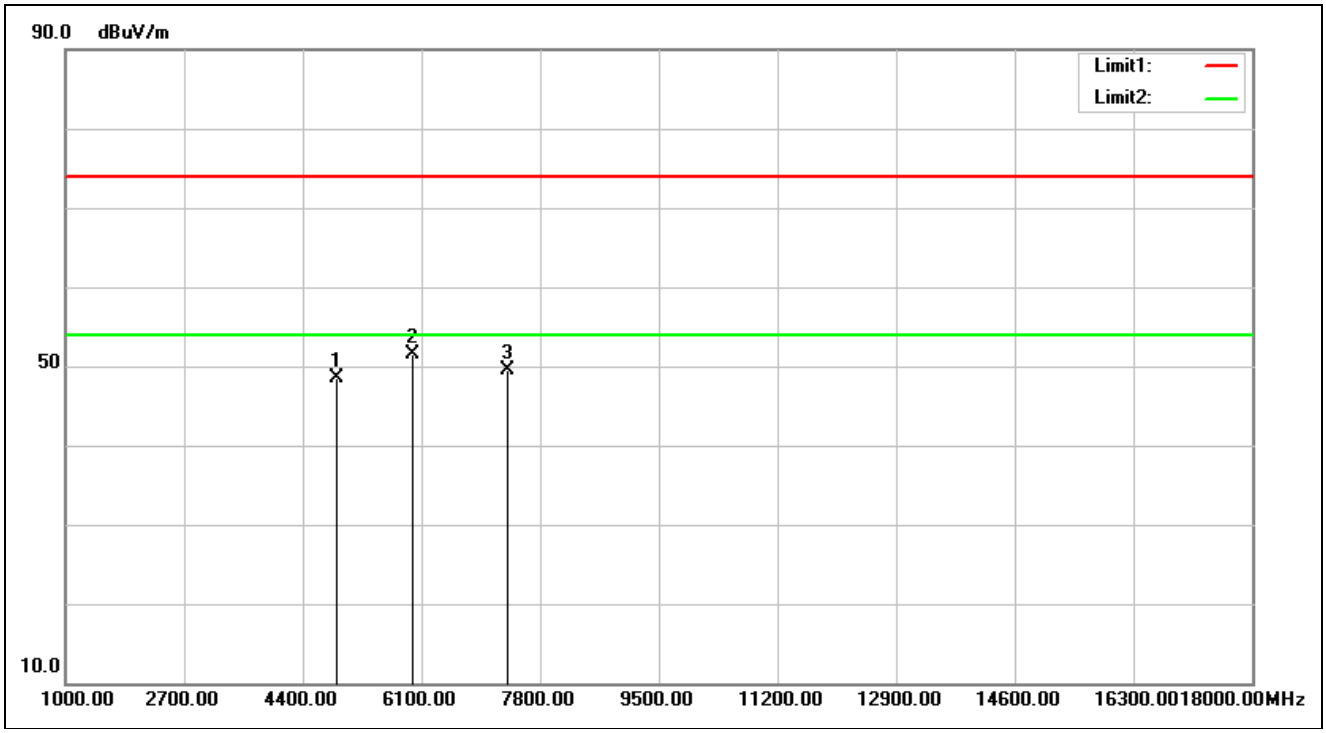

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:08:29**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**TX-2440**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	4880.000	-2.16	50.73	48.57	74.00	-25.43	peak	100	289	
2	5981.000	3.95	47.60	51.55	74.00	-22.45	peak	100	136	
3	7320.000	6.12	43.30	49.42	74.00	-24.58	peak			

Spurious Emissions, TX Mode, 1-18G

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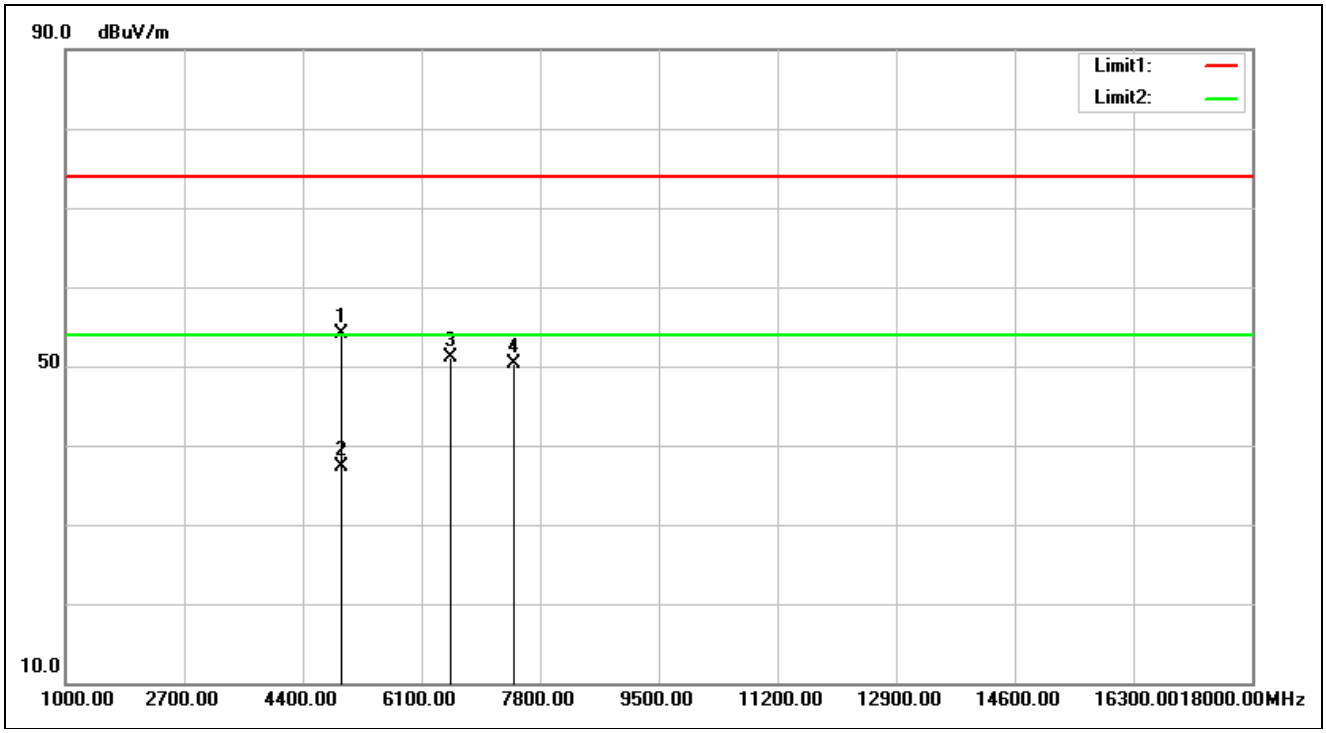

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:13:30**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**TX-2480**		
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	56.03	54.06	74.00	-19.94	peak	100	210	
2	4960.000	-1.97	39.32	37.35	54.00	-16.65	AVG	100	210	
3	6508.000	6.02	45.14	51.16	74.00	-22.84	peak	100	276	
4	7440.000	6.47	43.82	50.29	74.00	-23.71	peak			

Spurious Emissions, TX Mode, 1-18G

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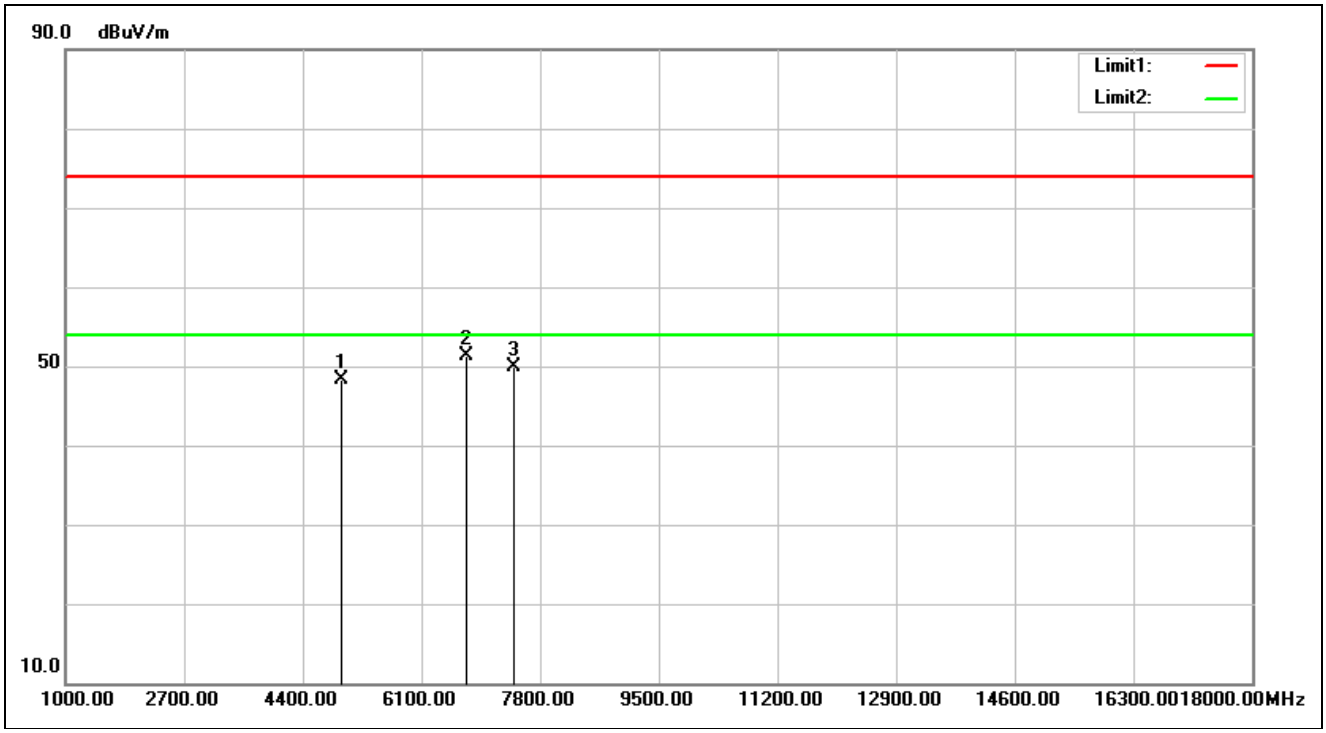

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:14:32**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**TX-2480**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	4960.000	-1.97	50.21	48.24	74.00	-25.76	peak	100	214	
2	6746.000	5.60	45.63	51.23	74.00	-22.77	peak	100	261	
3	7440.000	6.47	43.45	49.92	74.00	-24.08	peak			

Spurious Emissions, TX Mode, 1-18G

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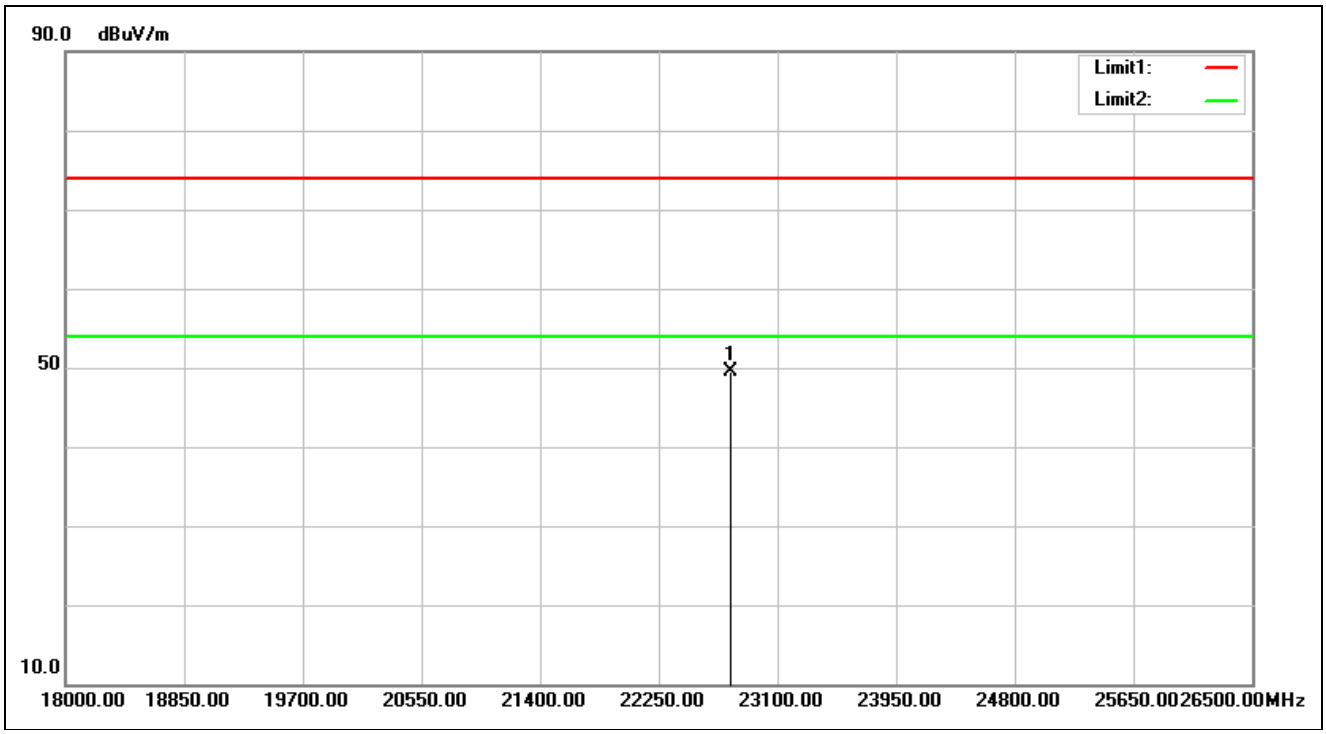

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:35:18**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**TX-2402**		
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	29.59	19.89	49.48	74.00	-24.52	peak	100	277	

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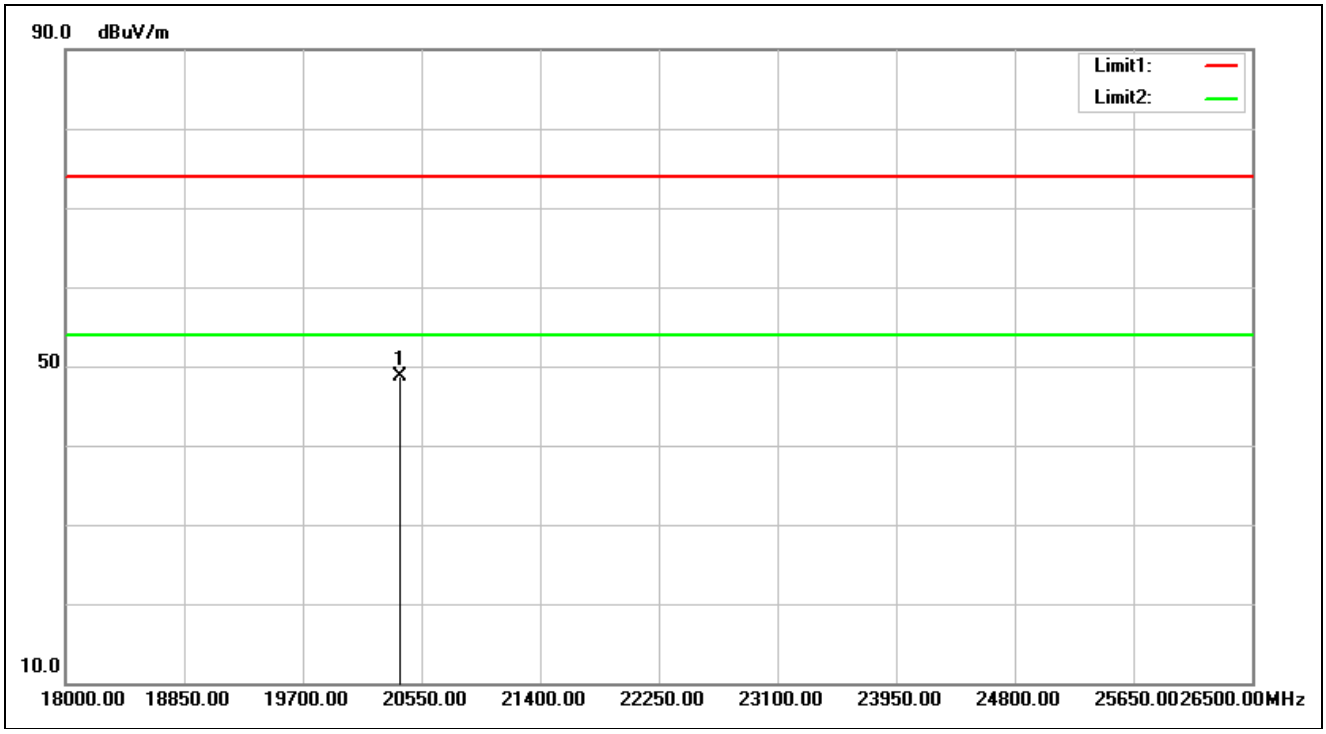

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:35:37**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**TX-2402**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	20397.000	29.18	19.56	48.74	74.00	-25.26	peak	100	117	

Spurious Emissions, TX Mode, 18-26G

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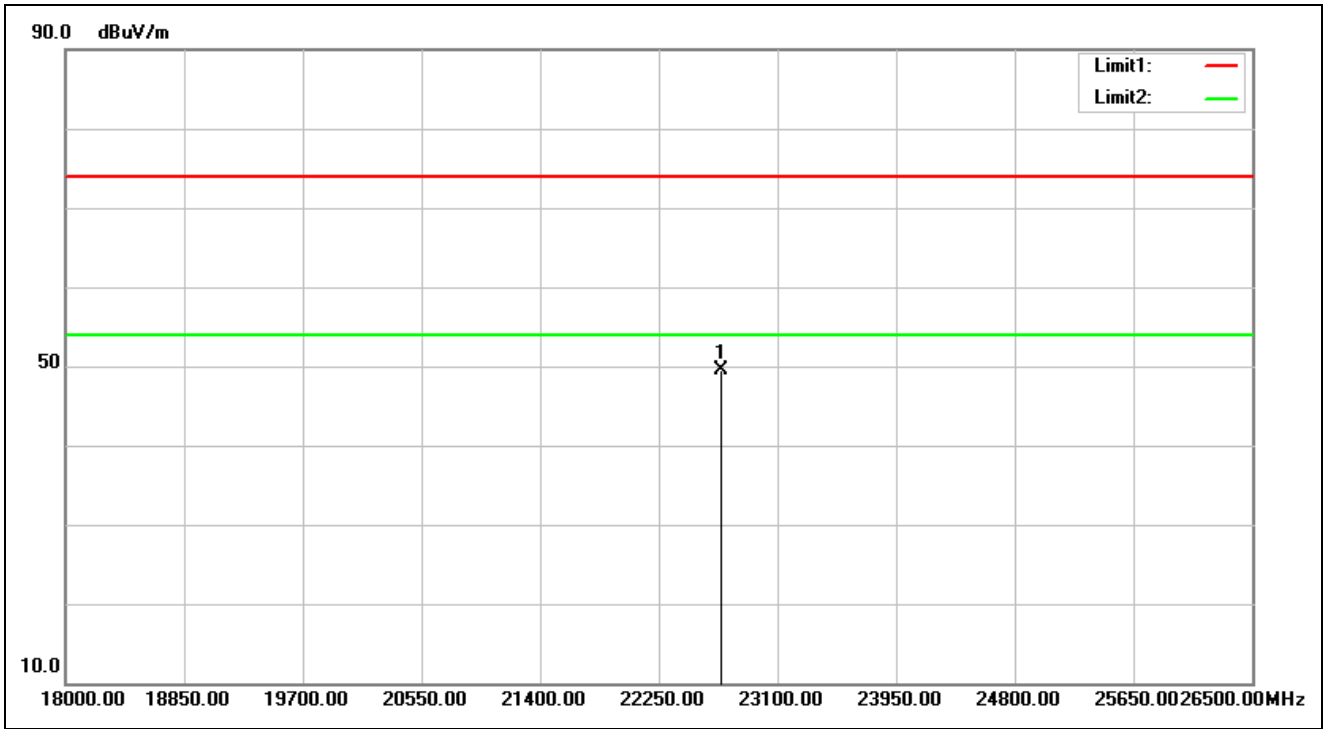

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:36:08**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**TX-2440**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	22700.500	29.52	19.94	49.46	74.00	-24.54	peak			

Spurious Emissions, TX Mode, 18-26G

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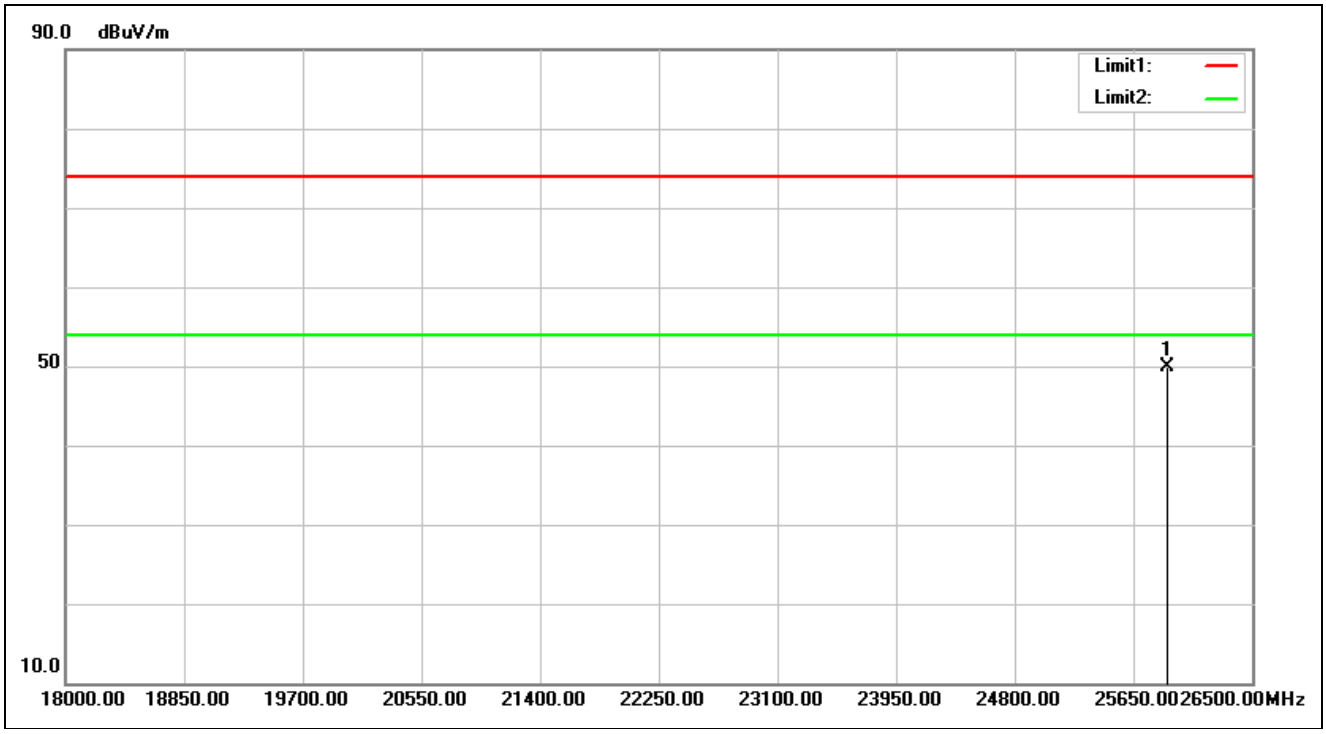

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:36:22**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**TX-2440**		
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	31.78	18.05	49.83	74.00	-24.17	peak			

Spurious Emissions, TX Mode, 18-26G

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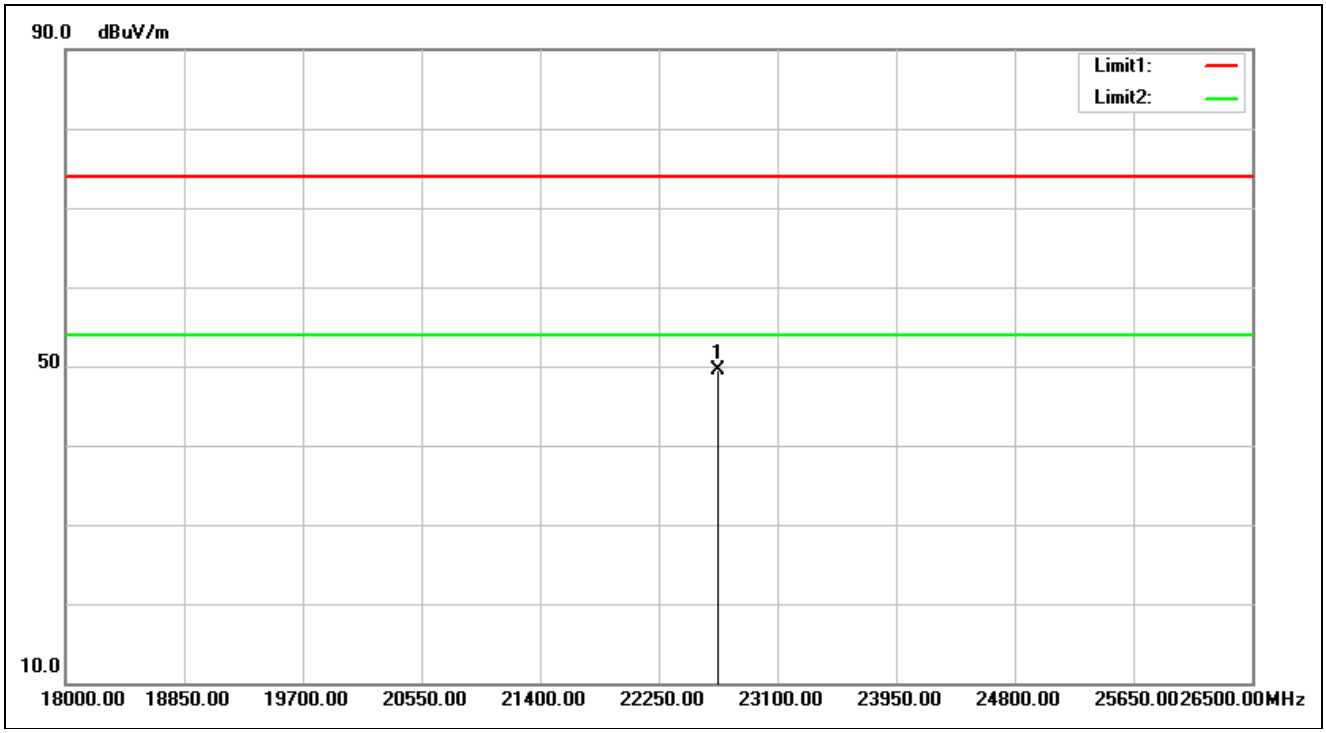

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:36:43**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**TX-2480**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	22675.000	29.47	19.99	49.46	74.00	-24.54	peak			

Spurious Emissions, TX Mode, 18-26G

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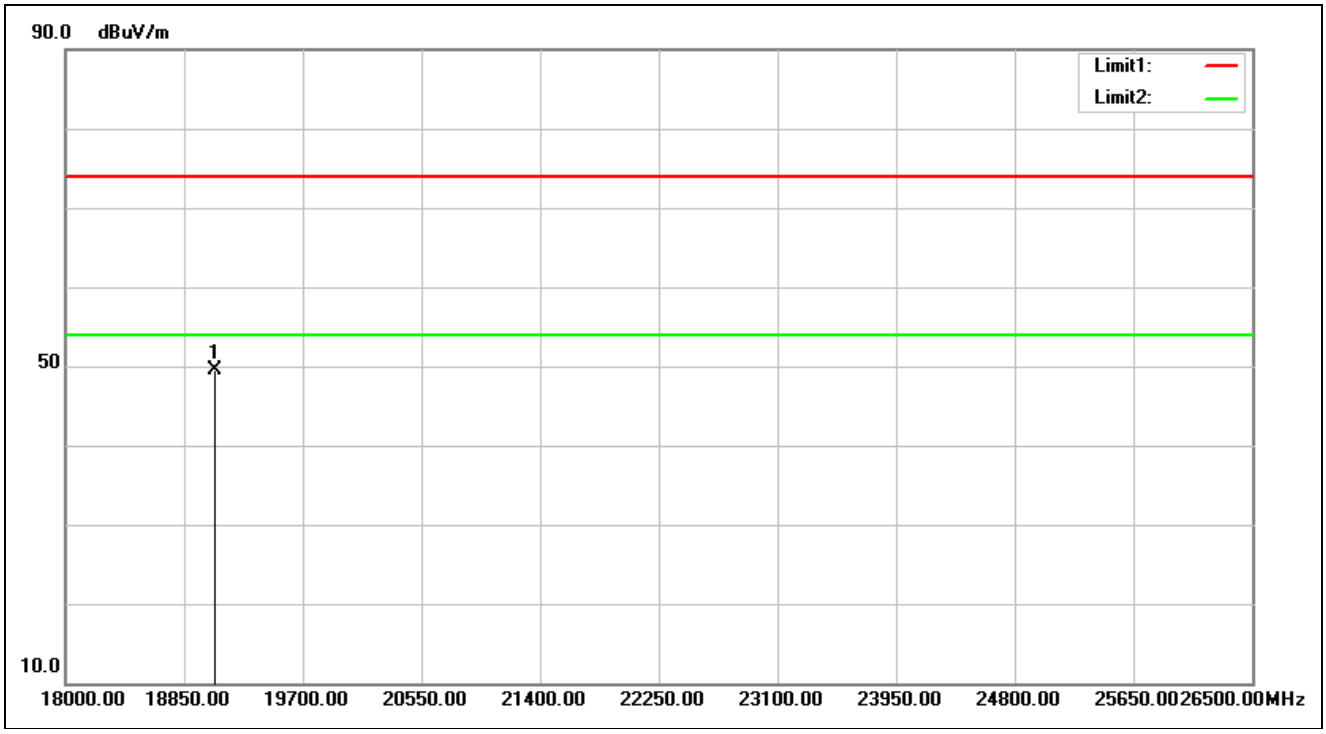

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:36:59**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**TX-2480**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	19071.000	28.89	20.58	49.47	74.00	-24.53	peak			

Spurious Emissions, TX Mode, 18-26G

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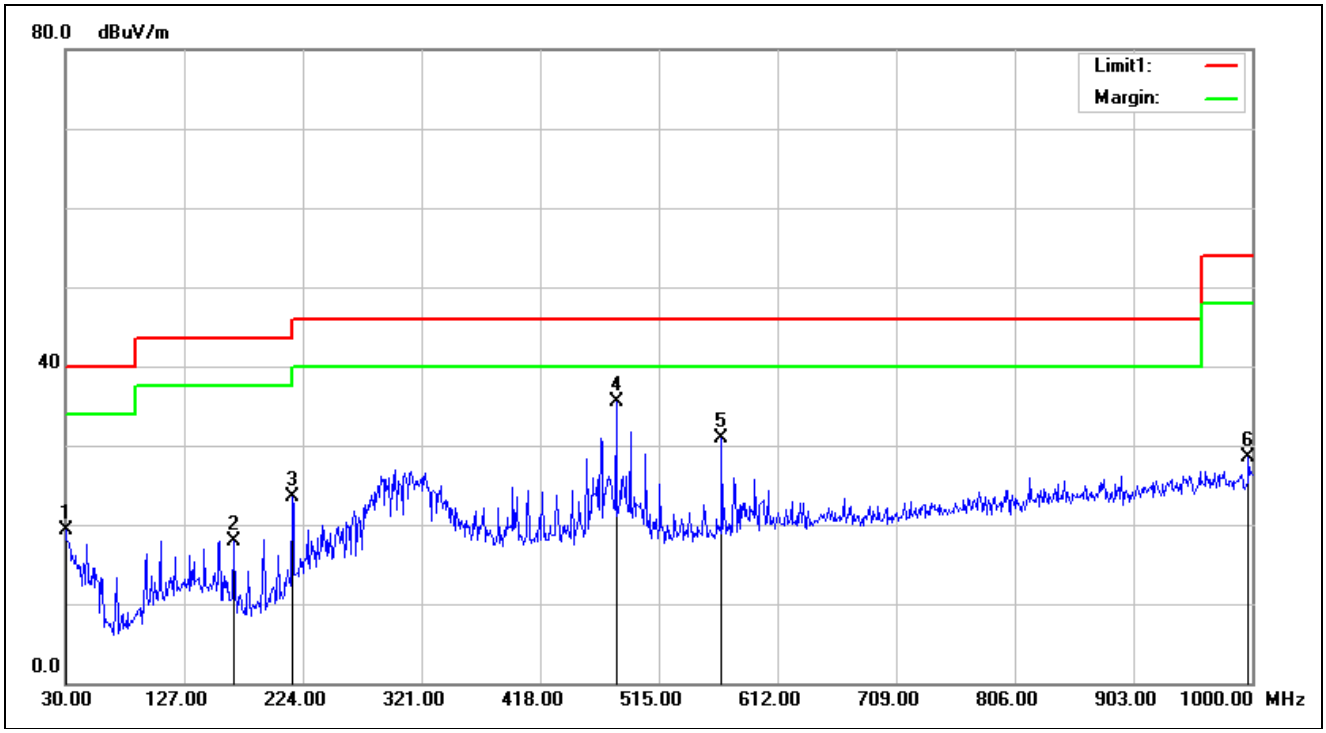

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Class B 3M Radiation**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 23:00:02**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**TX-2440**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	30.0000	-5.85	25.07	19.22	40.00	-20.78	QP	100	189	
2	167.7400	-14.60	32.52	17.92	43.50	-25.58	QP	100	106	
3	215.2700	-14.34	37.80	23.46	43.50	-20.04	QP	100	96	
4	480.0799	-7.59	43.16	35.57	46.00	-10.43	QP	100	299	
5	566.4099	-6.66	37.61	30.95	46.00	-15.05	QP	100	226	
6	997.0900	-0.03	28.60	28.57	54.00	-25.43	QP	100	8	

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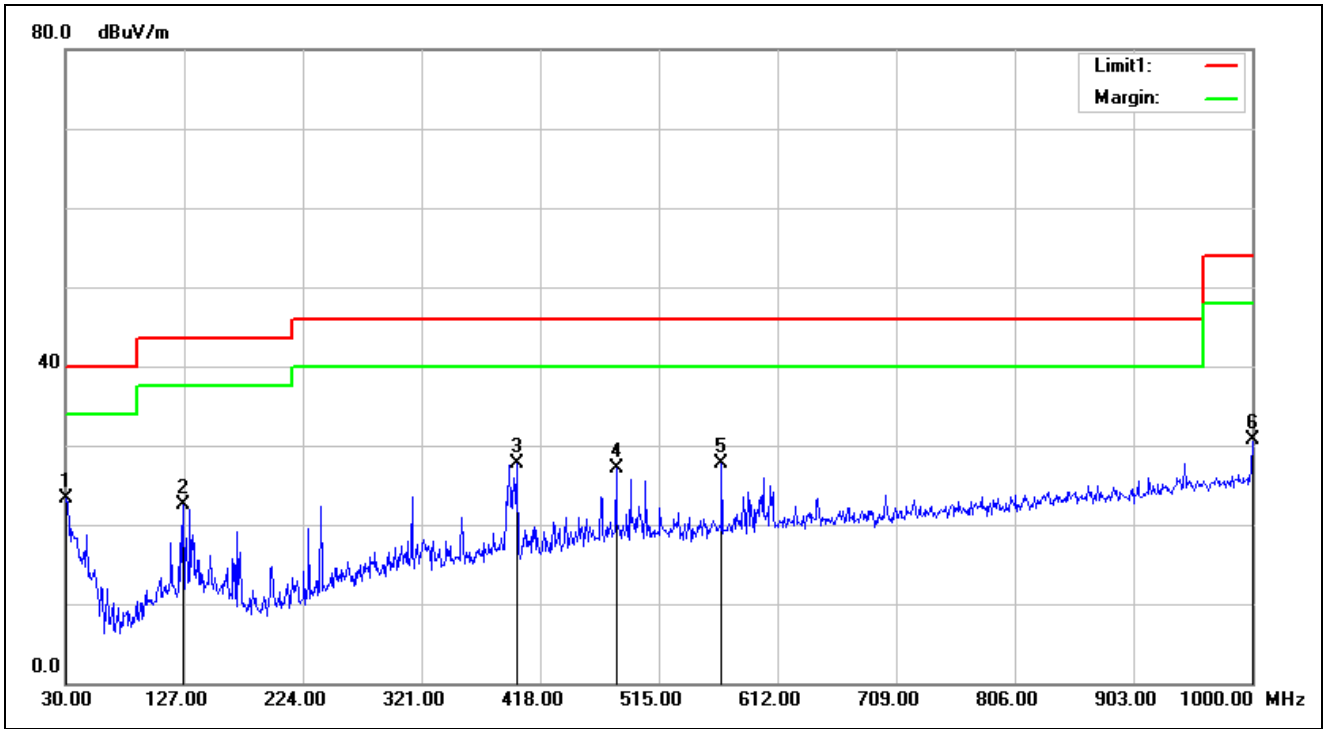

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Class B 3M Radiation**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 23:01:05**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**TX-2440**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	30.9700	-6.39	29.68	23.29	40.00	-16.71	QP	100	225	
2	126.0300	-12.80	35.40	22.60	43.50	-20.90	QP	100	4	
3	398.6000	-8.70	36.50	27.80	46.00	-18.20	QP	100	203	
4	480.0800	-7.59	34.75	27.16	46.00	-18.84	QP	100	166	
5	566.4099	-6.66	34.37	27.71	46.00	-18.29	QP	100	272	
6	1000.0000	0.01	30.61	30.62	54.00	-23.38	QP	100	214	

Spurious Emissions, TX Mode, 30M-1G

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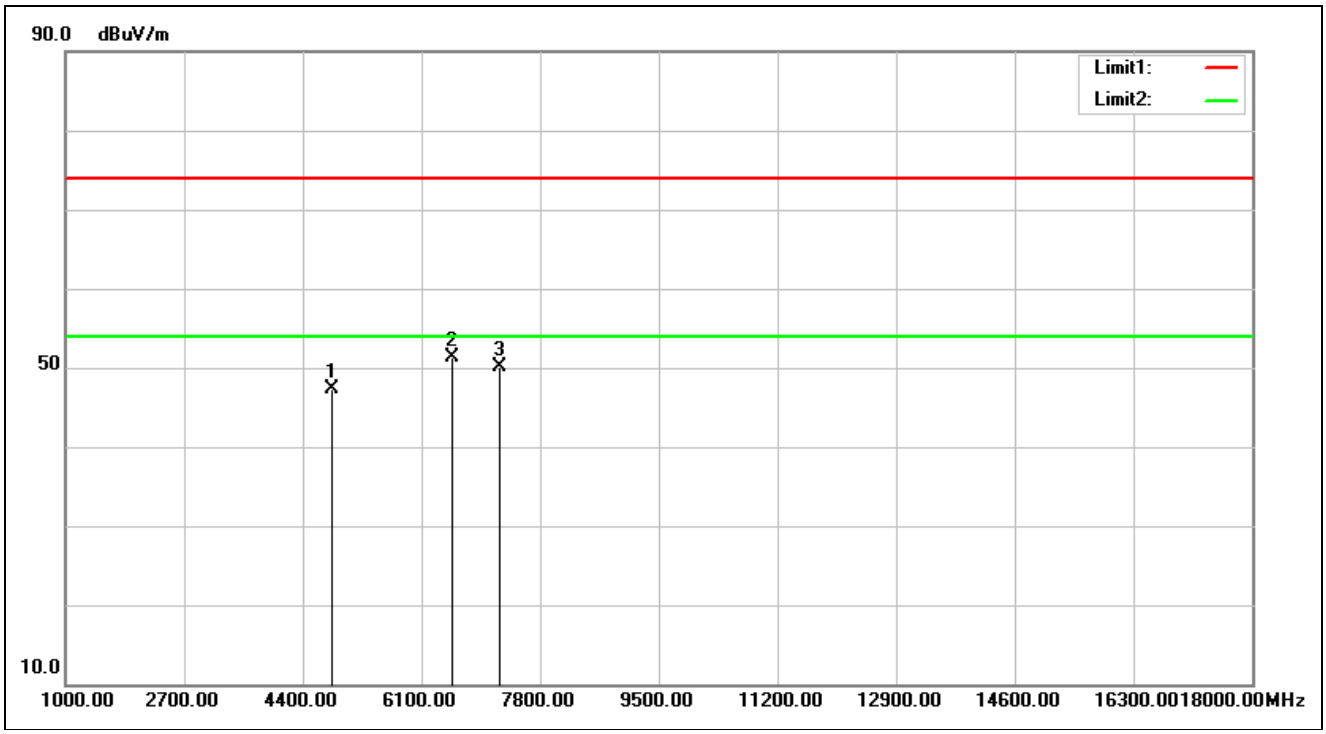

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 21:45:57**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**RX-2402**		
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	49.68	47.33	74.00	-26.67	peak		0	
2	6542.000	5.96	45.34	51.30	74.00	-22.70	peak	100	86	
3	7206.000	5.78	44.42	50.20	74.00	-23.80	peak		0	

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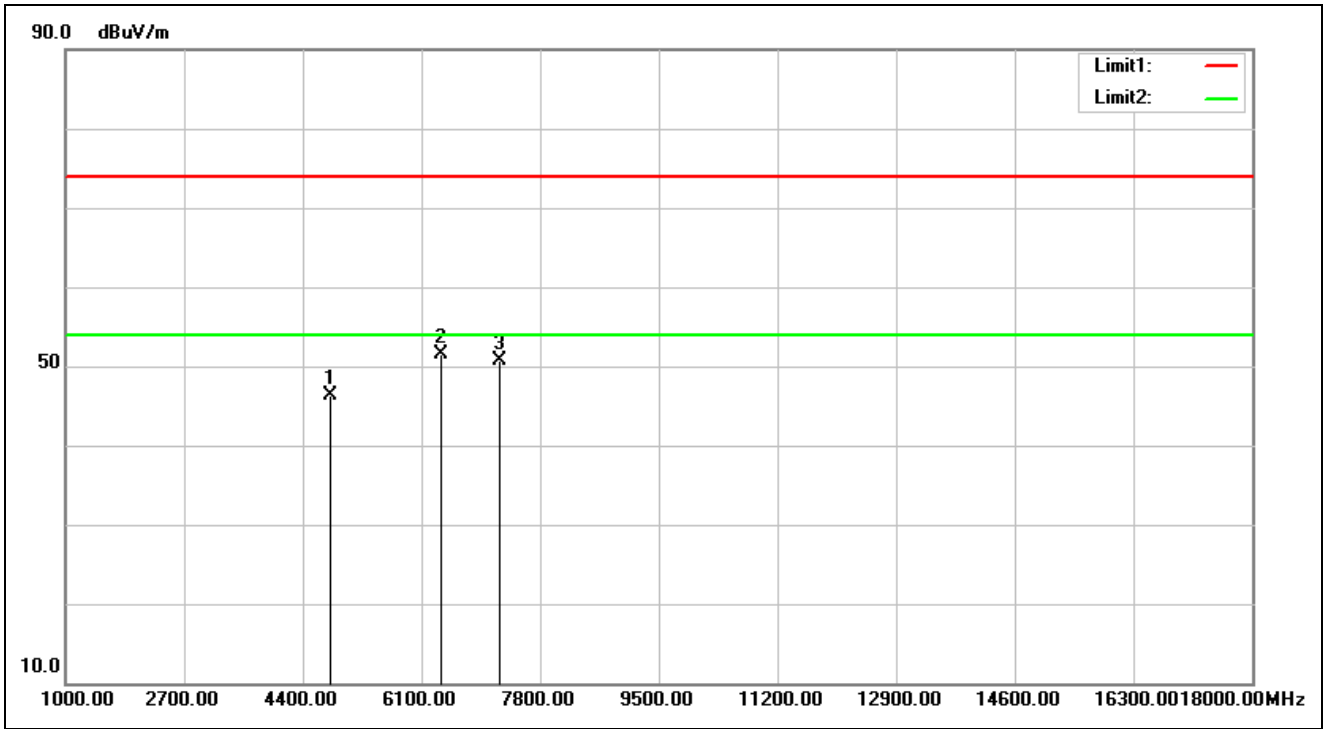

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 21:46:59**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**RX-2402**		
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	48.60	46.25	74.00	-27.75	peak			
2	6389.000	5.61	45.80	51.41	74.00	-22.59	peak	100	37	
3	7206.000	5.78	44.84	50.62	74.00	-23.38	peak			

Spurious Emissions, RX Mode, 1-18G

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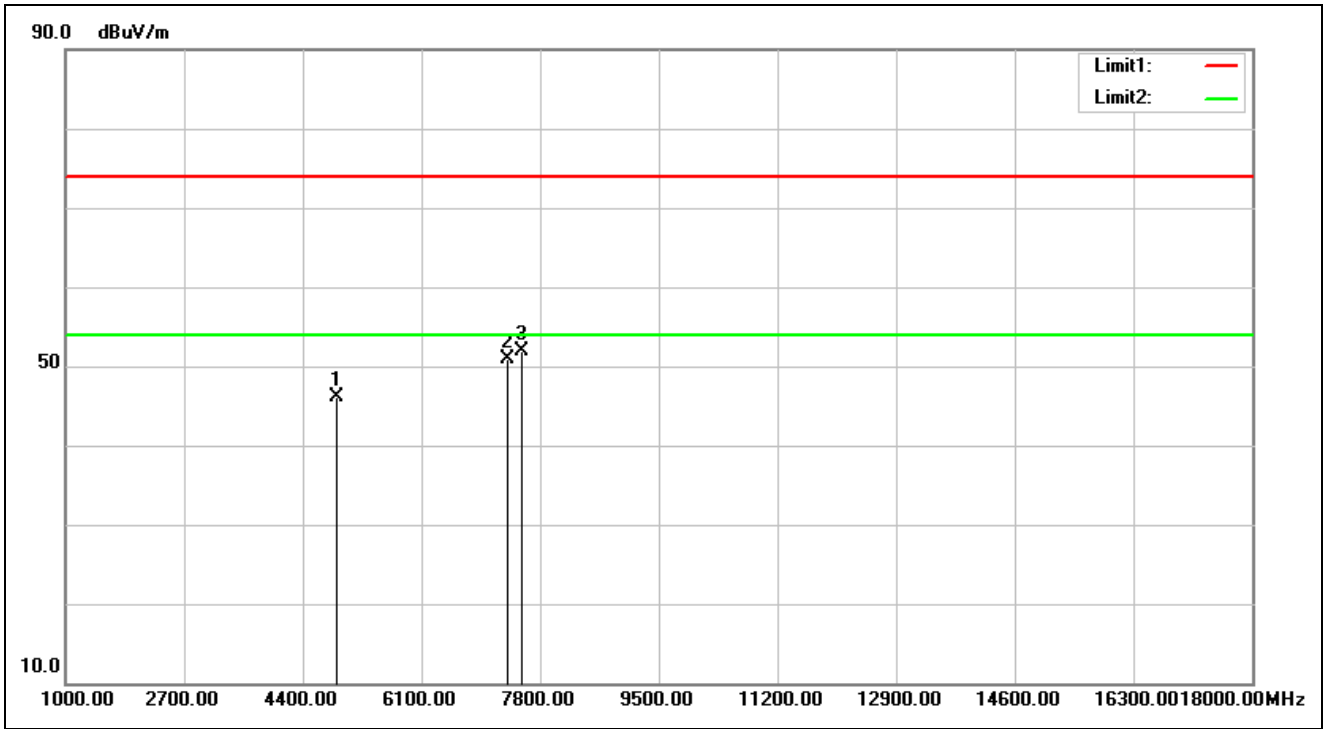

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 21:50:14**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**RX-2440**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (◦)	Remark
1	4880.000	-2.16	48.35	46.19	74.00	-27.81	peak			
2	7320.000	6.12	44.84	50.96	74.00	-23.04	peak			
3	7528.000	6.66	45.23	51.89	74.00	-22.11	peak	100	54	

Spurious Emissions, RX Mode, 1-18G

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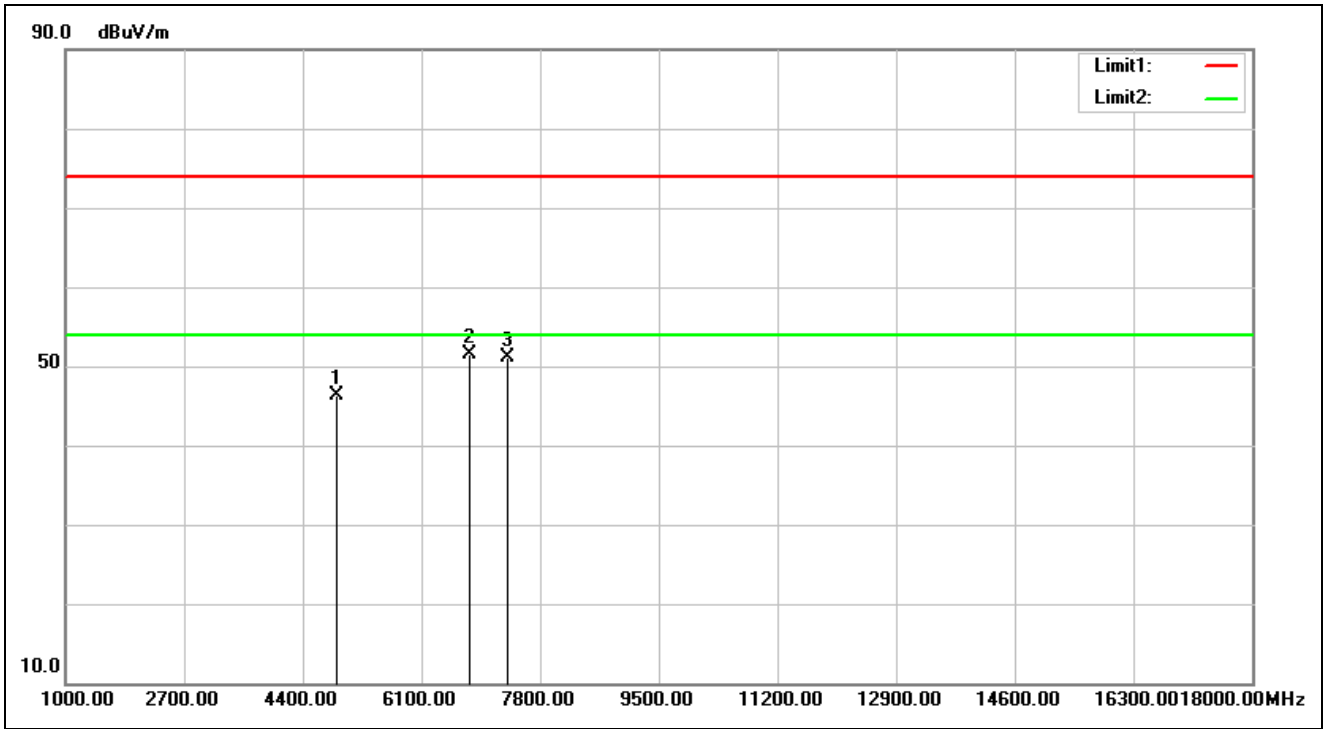

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 21:51:16**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**RX-2440**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	4880.000	-2.16	48.46	46.30	74.00	-27.70	peak			
2	6797.000	5.52	45.94	51.46	74.00	-22.54	peak	100	360	
3	7320.000	6.12	44.90	51.02	74.00	-22.98	peak			

Spurious Emissions, RX Mode, 1-18G

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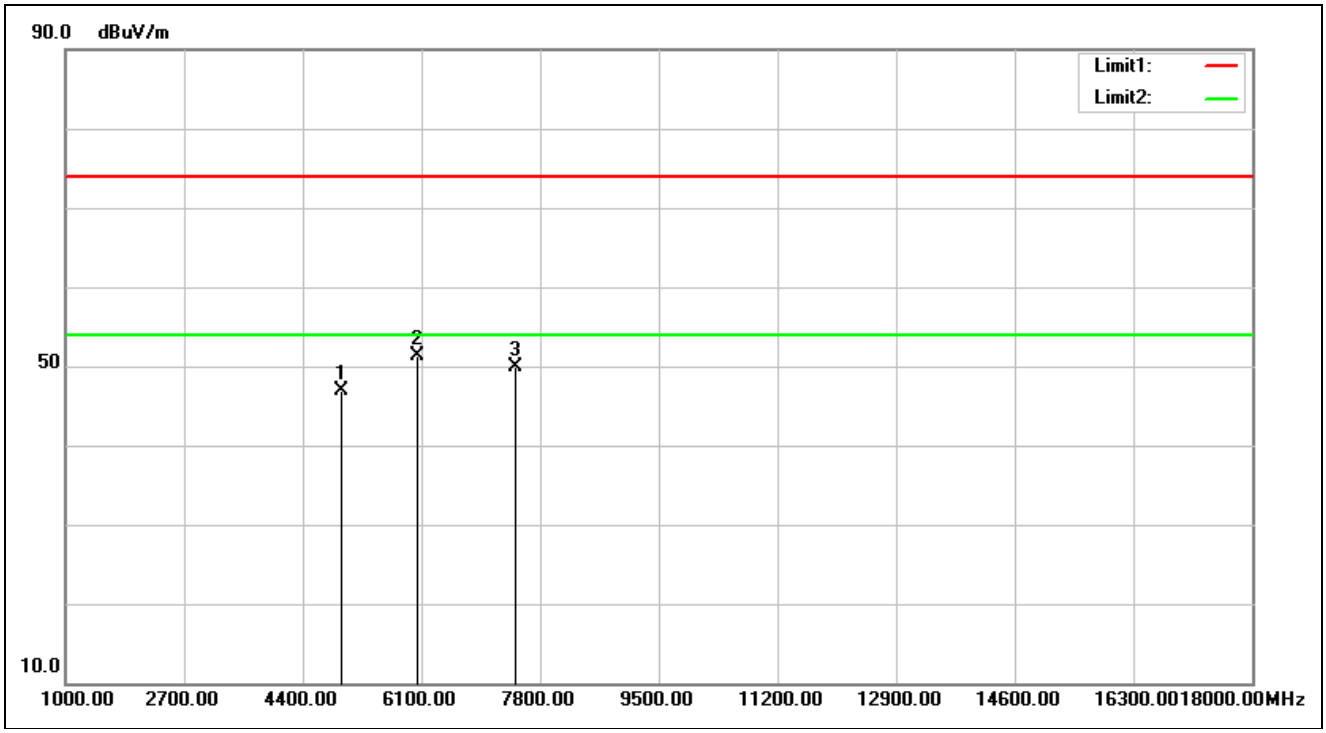

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 21:55:58**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**RX-2480**		
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	48.81	46.84	74.00	-27.16	peak			
2	6049.000	4.27	47.00	51.27	74.00	-22.73	peak	100	0	
3	7440.000	6.47	43.48	49.95	74.00	-24.05	peak			

Spurious Emissions, RX Mode, 1-18G

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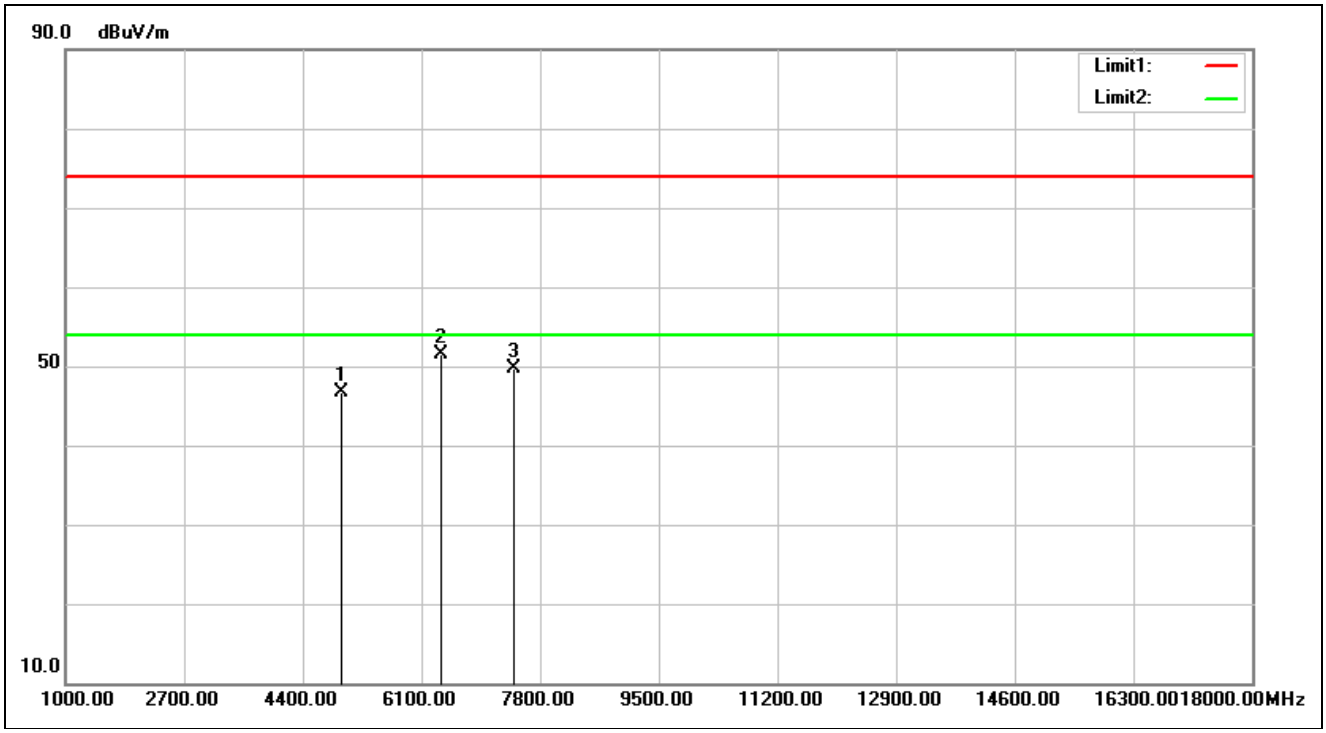

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 21:57:00**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**RX-2480**		
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	48.58	46.61	74.00	-27.39	peak			
2	6389.000	5.61	45.94	51.55	74.00	-22.45	peak	100	166	
3	7440.000	6.47	43.31	49.78	74.00	-24.22	peak			

Spurious Emissions, RX Mode, 1-18G

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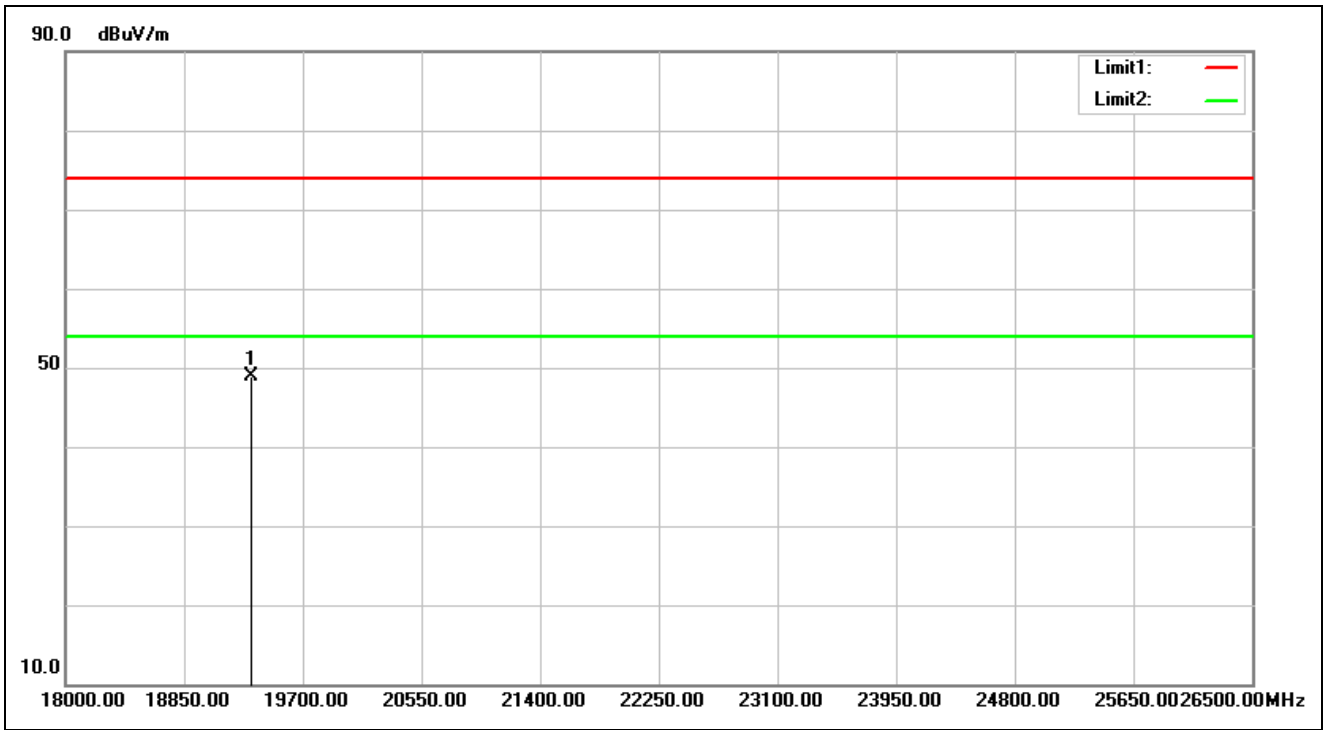

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:37:32**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**RX-2402**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	19334.500	28.94	19.94	48.88	74.00	-25.12	peak		0	

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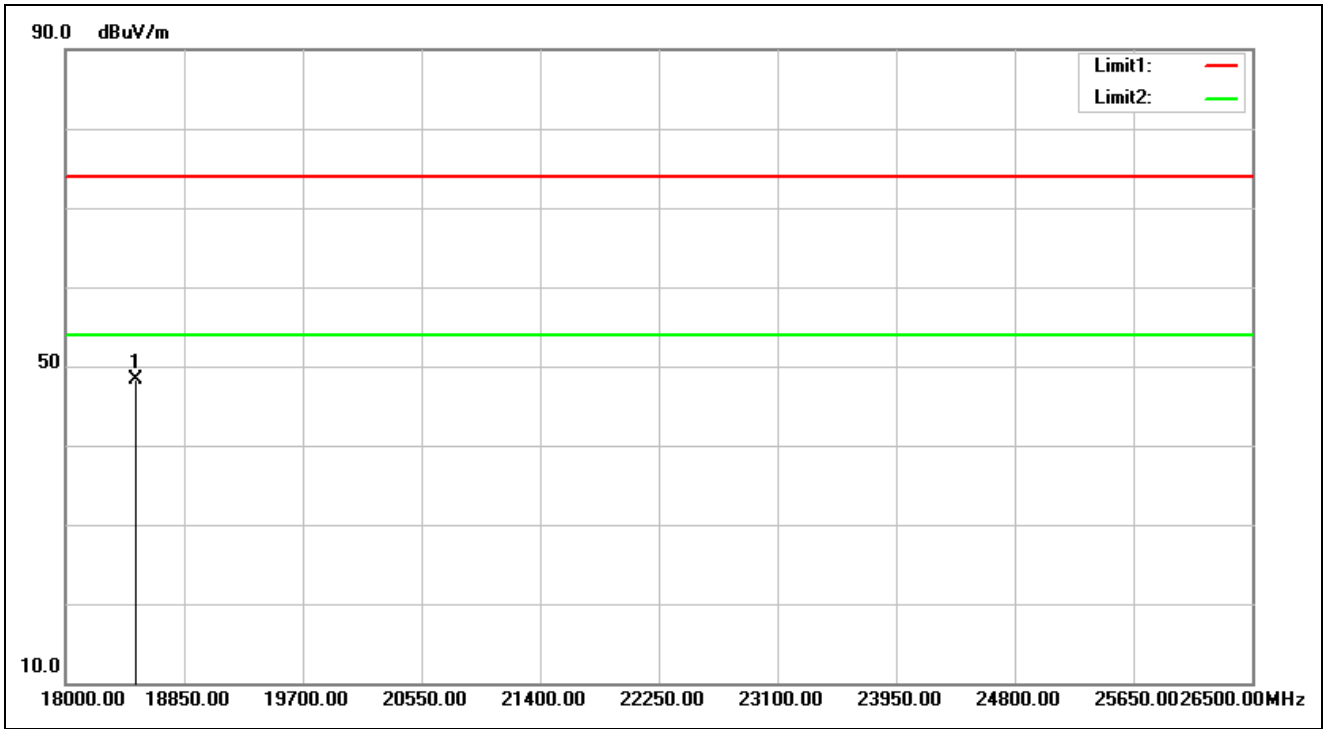

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:37:44**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**RX-2402**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	18501.500	28.33	19.98	48.31	74.00	-25.69	peak			

Spurious Emissions, RX Mode, 18-26G

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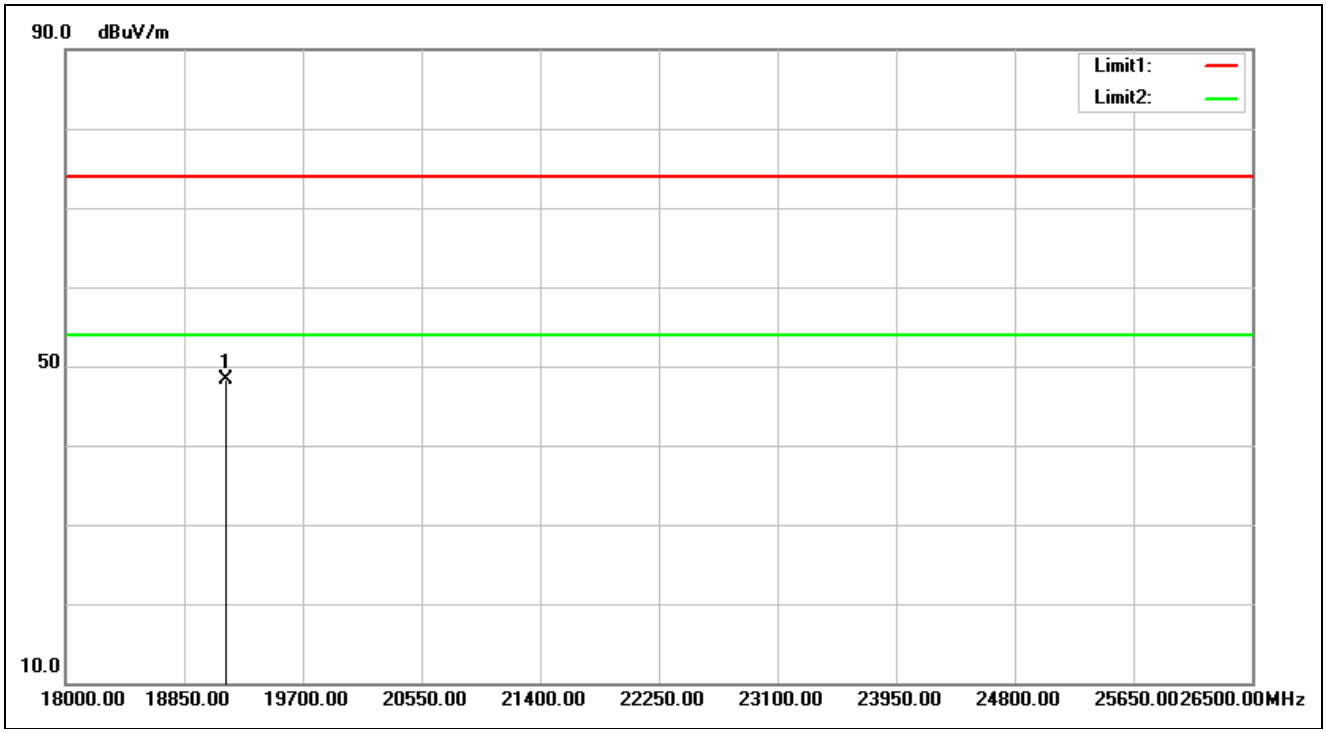

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:38:06**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**RX-2440**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	19147.500	28.91	19.36	48.27	74.00	-25.73	peak			

Spurious Emissions, RX Mode, 18-26G

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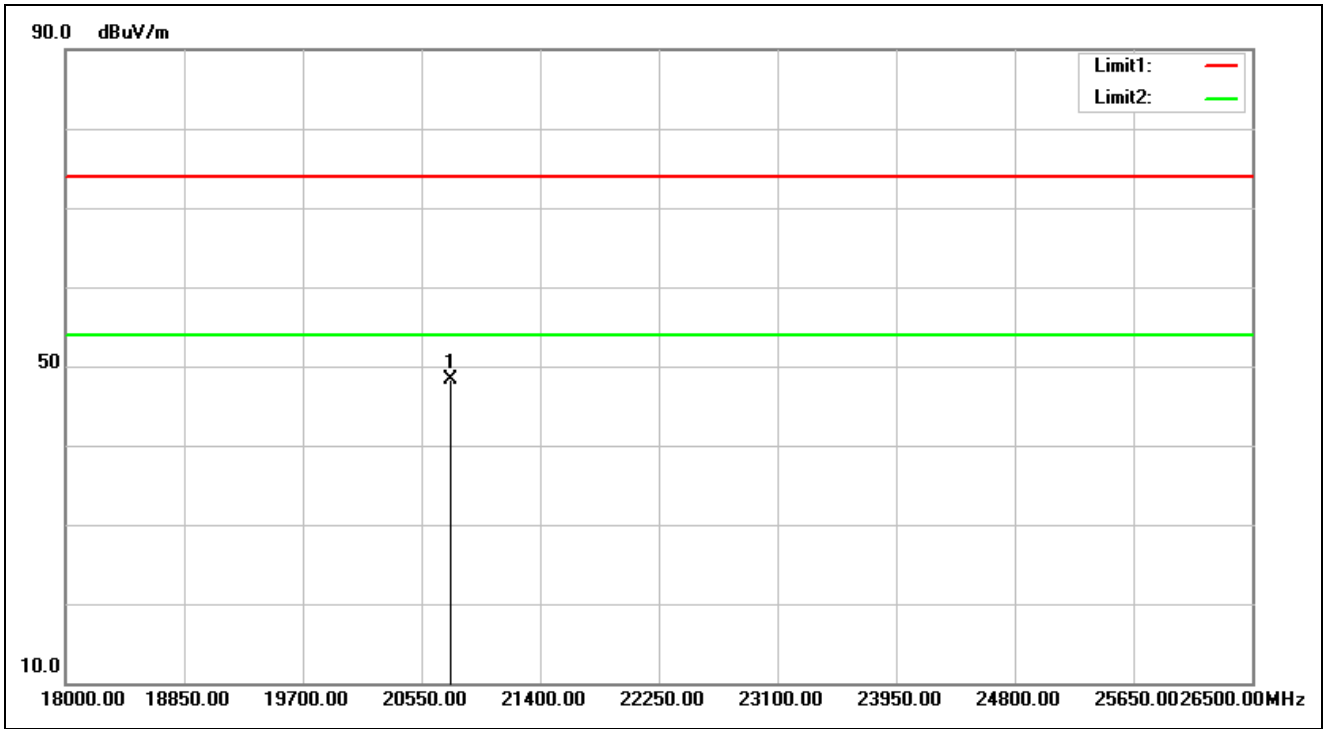

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:38:21**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**RX-2440**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	20762.500	29.30	19.02	48.32	74.00	-25.68	peak			

Spurious Emissions, RX Mode, 18-26G

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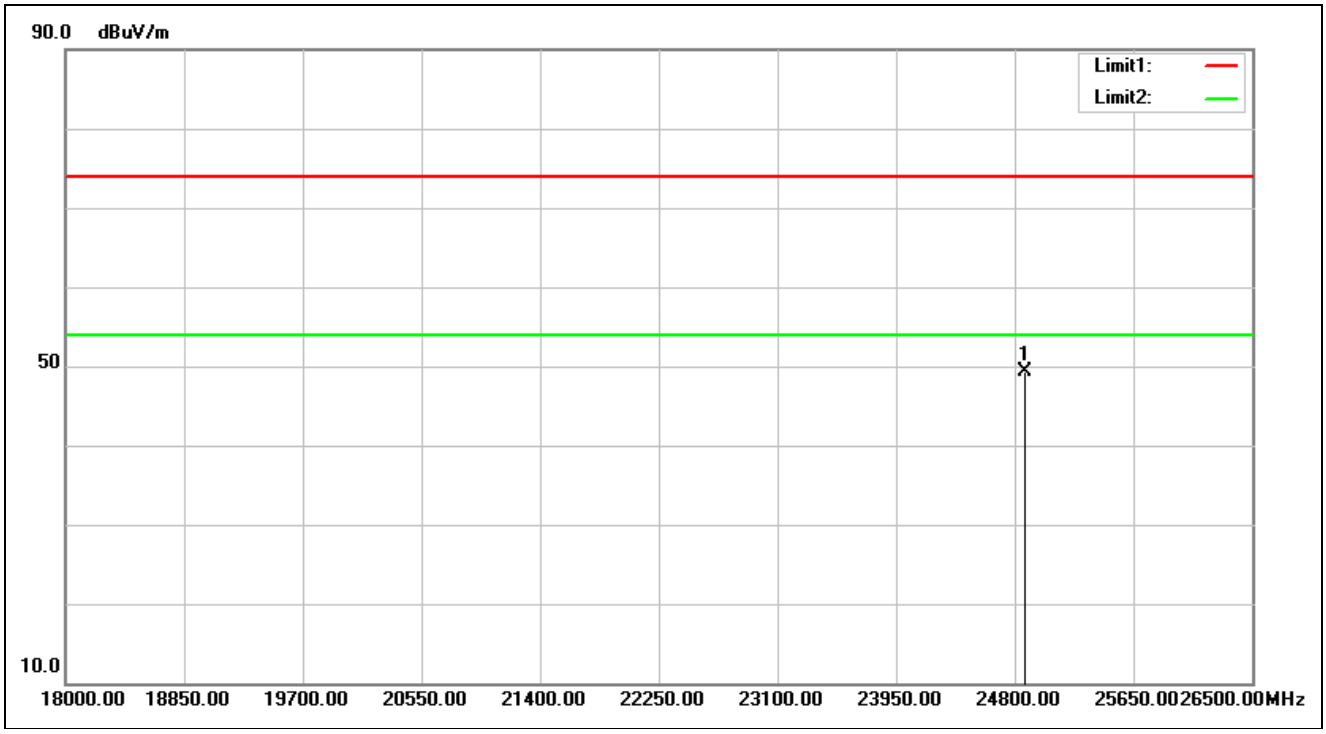

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:38:45**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**RX-2480**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	24876.500	30.48	18.86	49.34	74.00	-24.66	peak			

Spurious Emissions, RX Mode, 18-26G

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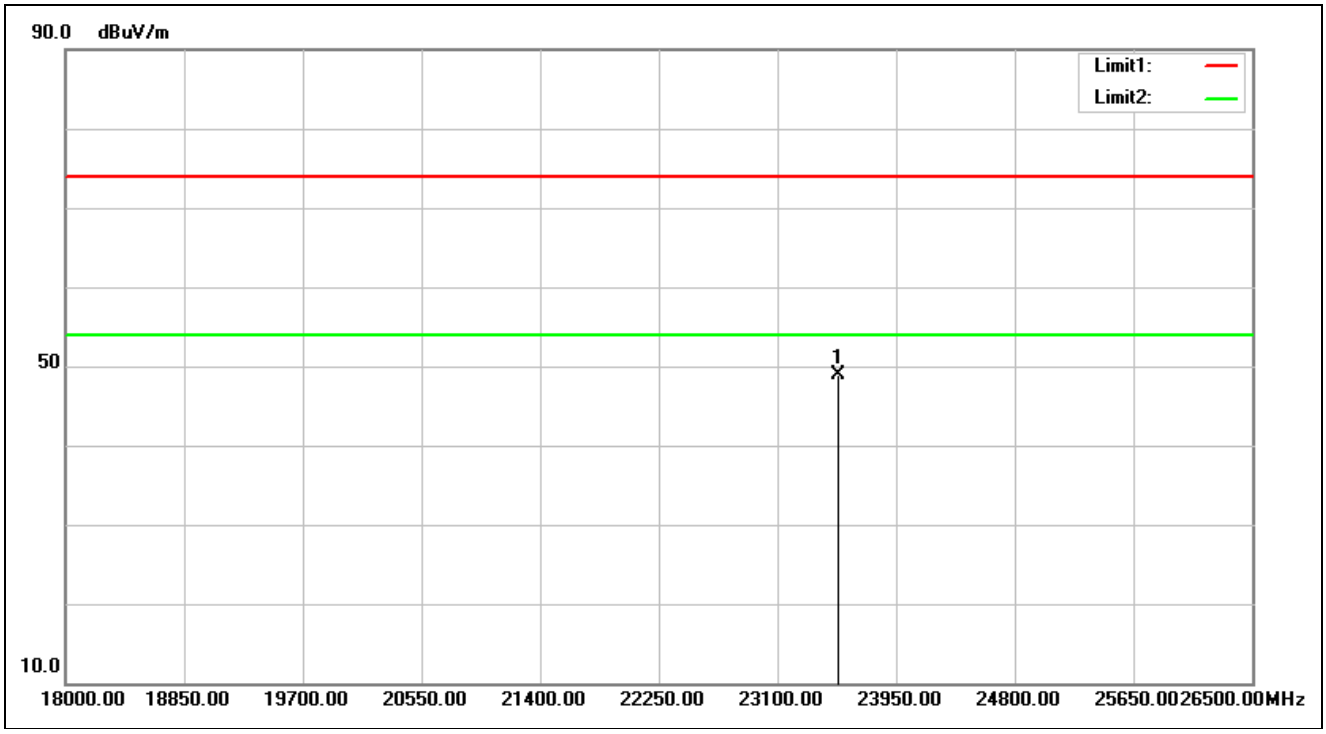

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 22:39:00**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**RX-2480**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	23533.500	29.39	19.42	48.81	74.00	-25.19	peak			

Spurious Emissions, RX Mode, 18-26G

Spurious Emissions, RX Mode, 30M-1G

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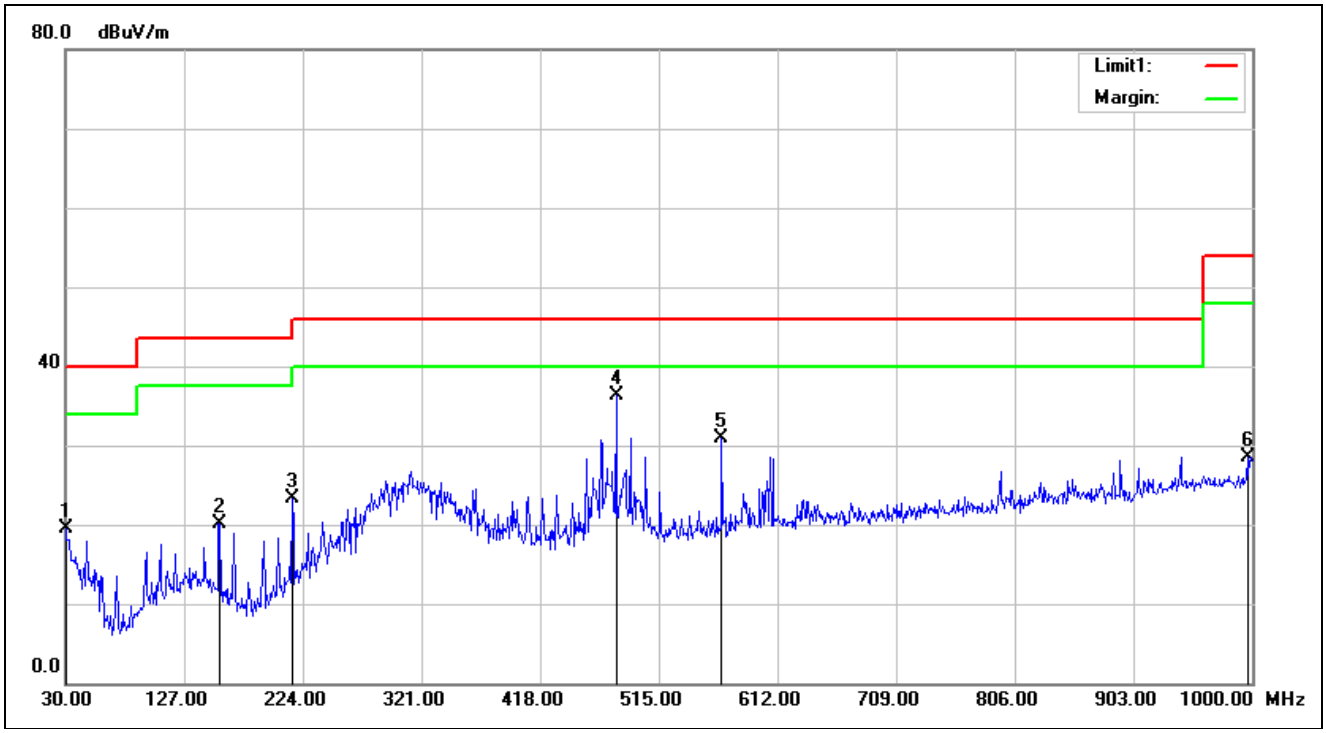

Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Class B 3M Radiation**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 23:02:47**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**RX-2440**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	30.0000	-5.85	25.42	19.57	40.00	-20.43	QP	100	125	
2	156.0999	-13.63	33.70	20.07	43.50	-23.43	QP	100	282	
3	215.2700	-14.34	37.65	23.31	43.50	-20.19	QP	100	112	
4	480.0799	-7.59	43.88	36.29	46.00	-9.71	QP	100	299	
5	566.4099	-6.66	37.63	30.97	46.00	-15.03	QP	100	224	
6	996.1200	-0.03	28.59	28.56	54.00	-25.44	QP	100	312	

Spurious Emissions, Mains, 150kHz - 30MHz

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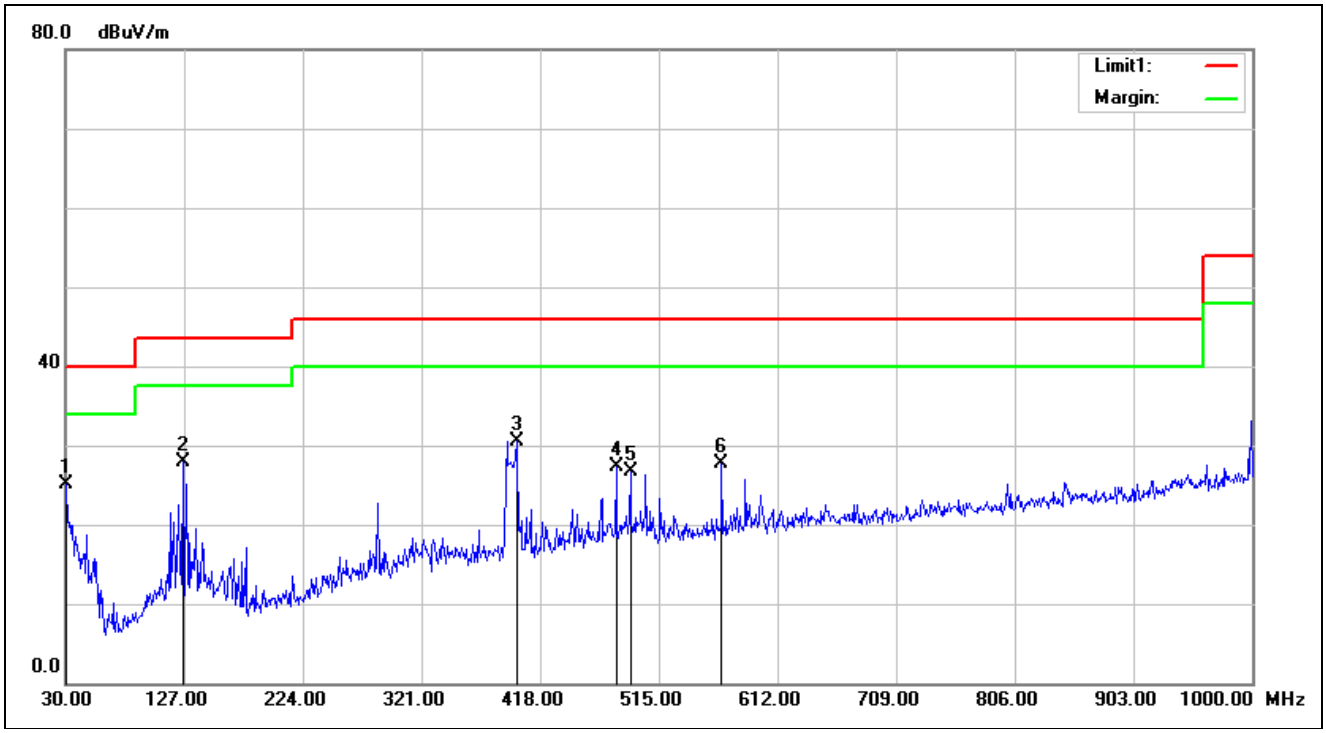


Service No.:	**114041001-NCC**	**Test Distance:**	**3m**
Test Standard:	**NCC Class B 3M Radiation**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2015/9/30 23:03:49**
Applicant:	**Microchip**	**Test Rating:**	**DC 3.3V**
Product:	**Bluetooth Module**	**Temp.(℃)/Hum.(%):**	**22.3(℃)/49%**
Model No.:	**BM71abcSeFC2, RN4871**	**Test Engineer:**	**George Yang**
Test Mode:	**RX-2440**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	30.9700	-6.39	31.45	25.06	40.00	-14.94	QP	100	81	
2	126.0300	-12.80	40.72	27.92	43.50	-15.58	QP	100	161	
3	398.6000	-8.70	39.23	30.53	46.00	-15.47	QP	100	219	
4	480.0800	-7.59	34.88	27.29	46.00	-18.71	QP	100	163	
5	491.7200	-7.43	34.07	26.64	46.00	-19.36	QP	100	277	
6	566.4099	-6.66	34.30	27.64	46.00	-18.36	QP	100	272	

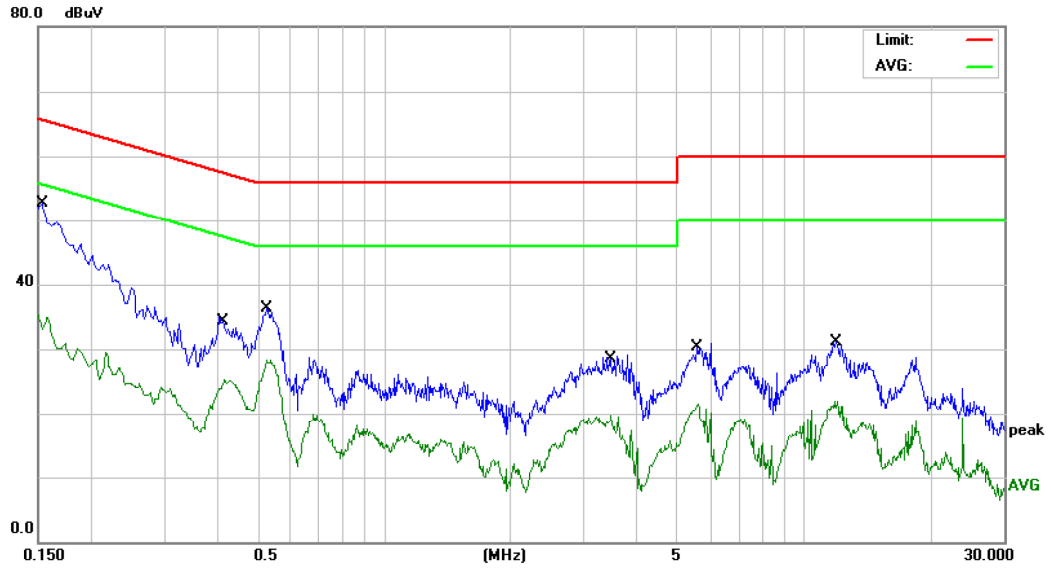
Spurious Emissions, Mains, 150kHz - 30MHz

Mains Spurious Emissions

TUV Rheinland Taiwan
11F.,No.758,Sec. 4,Bade Rd.,Songshan Dist.,Taipei 105,Taiwan
Tel:+886-2-2172-7000 Fax:+886-2-2528-0018

Site: Conduction

Test Time: 2015/10/2 20:20:08



Service No.: 114041001

Test Standard: FCC Class B Conduction(QP)

Test item: Conducted Emission

Phase: L1

Applicant: Microchip

Temp.(℃)/Hum.(%): 22.1(℃) / 51 %

Product: Bluetooth Module

Power Rating: DC 3.3V

Model No. BM71abcSeFC2, RN4871

Test Engineer: Kai Wang

Test Mode: Normal link

Remark:

No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1539	9.65	40.69	50.34	65.78	-15.44	QP	P	
2	0.1539	9.65	21.73	31.38	55.78	-24.40	AVG	P	
3	0.5260	9.63	22.95	32.58	56.00	-23.42	QP	P	
4	0.5260	9.63	17.59	27.22	46.00	-18.78	AVG	P	
5	5.6020	9.69	14.45	24.14	60.00	-35.86	QP	P	
6	5.6020	9.69	8.06	17.75	50.00	-32.25	AVG	P	
7	3.4900	9.67	12.85	22.52	56.00	-33.48	QP	P	
8	3.4900	9.67	7.29	16.96	46.00	-29.04	AVG	P	
9	0.4180	9.63	19.56	29.19	57.49	-28.30	QP	P	
10	0.4180	9.63	14.42	24.05	47.49	-23.44	AVG	P	
11	12.0300	9.78	14.94	24.72	60.00	-35.28	QP	P	
12	12.0300	9.78	9.41	19.19	50.00	-30.81	AVG	P	

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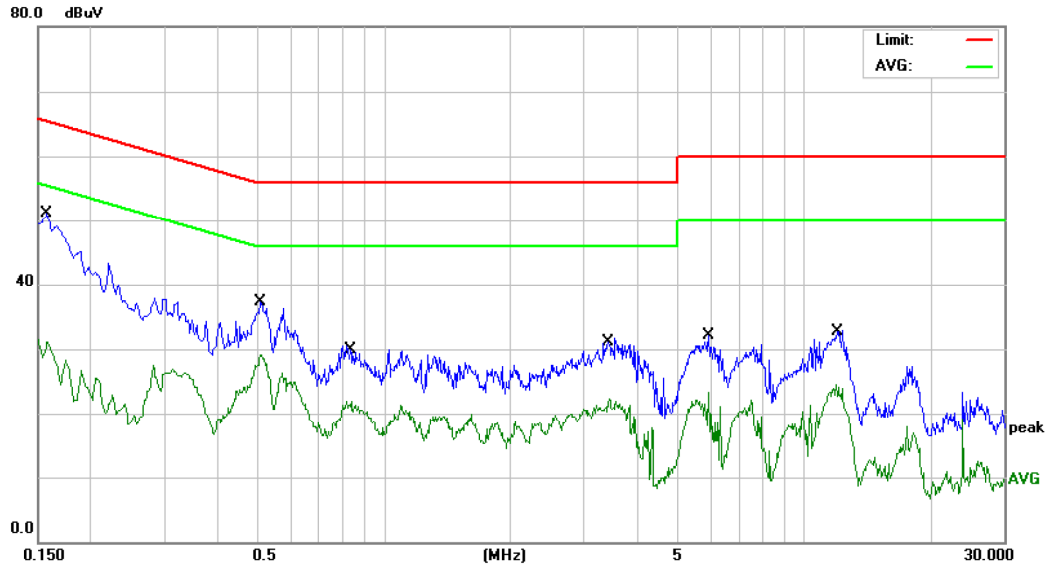
Spurious Emissions, Mains, 150kHz - 30MHz

TUV Rheinland Taiwan
11F.,No.758,Sec. 4,Bade Rd.,Songshan Dist.,Taipei 105,Taiwan
Tel:+886-2-2172-7000 Fax:+886-2-2528-0018

Site: Conduction

Test Time: 2015/10/2 20:23:07



Service No.: 114041001

Test Standard: FCC Class B Conduction(QP)

Test item: Conducted Emission

Phase: N

Applicant: Microchip

Temp.(℃)/Hum.(%): 22.1(℃) / 51 %

Product: Bluetooth Module

Power Rating: DC 3.3V

Model No. BM71abcSeFC2, RN4871

Test Engineer: Kai Wang

Test Mode: Normal link

Remark:

No.	Frequency (MHz)	Factor ()	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1580	9.66	36.66	46.32	65.56	-19.24	QP	P	
2	0.1580	9.66	19.60	29.26	55.56	-26.30	AVG	P	
3	0.5100	9.64	23.31	32.95	56.00	-23.05	QP	P	
4	0.5100	9.64	18.38	28.02	46.00	-17.98	AVG	P	
5	0.8380	9.64	15.40	25.04	56.00	-30.96	QP	P	
6	0.8380	9.64	10.66	20.30	46.00	-25.70	AVG	P	
7	3.4500	9.69	15.39	25.08	56.00	-30.92	QP	P	
8	3.4500	9.69	10.03	19.72	46.00	-26.28	AVG	P	
9	5.9500	9.72	13.88	23.60	60.00	-36.40	QP	P	
10	5.9500	9.72	5.25	14.97	50.00	-35.03	AVG	P	
11	11.9620	9.82	17.56	27.38	60.00	-32.62	QP	P	
12	11.9620	9.82	12.24	22.06	50.00	-27.94	AVG	P	

File:114041001\ #2 *Page: 1*

Spurious Emissions, Mains, 150kHz - 30MHz