

Test Report No.10045883 001

Appendix D: Radiated and Mains Spurious Emission Data

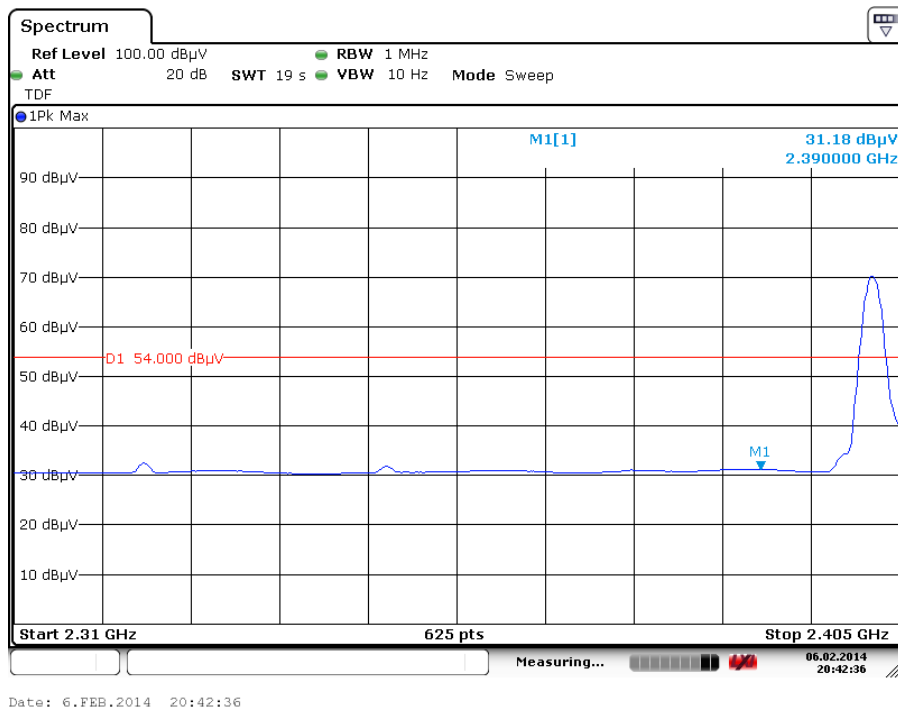
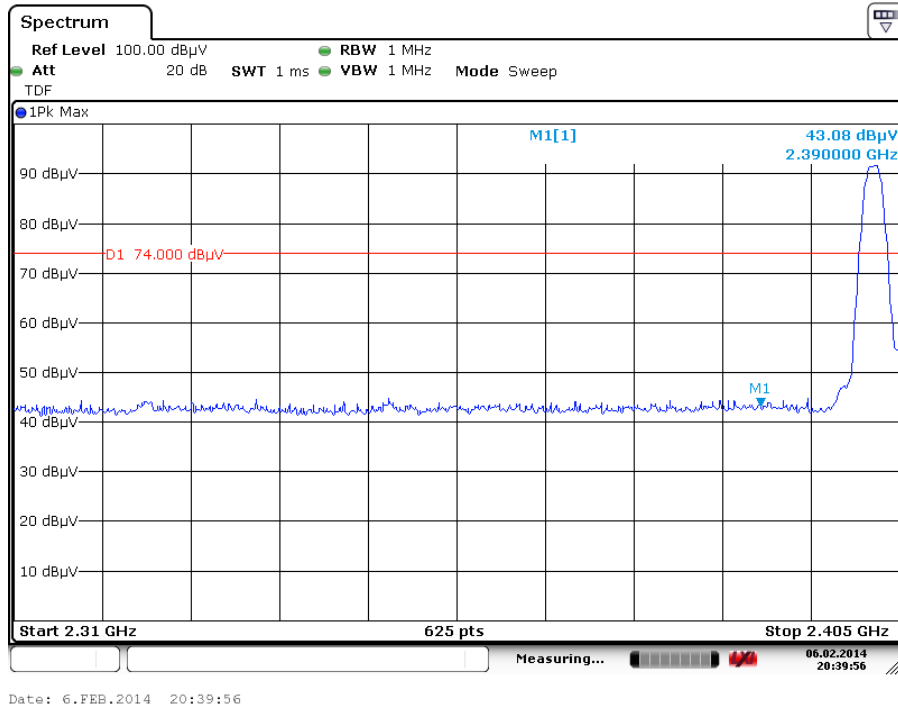
(File: 10045883AppendixD)

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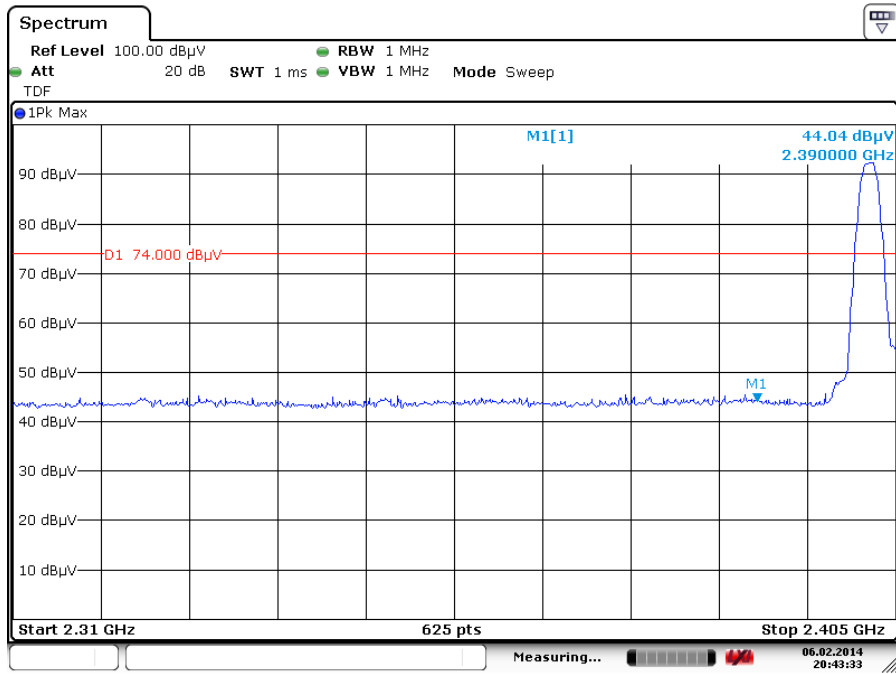
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Radiated Bandedge

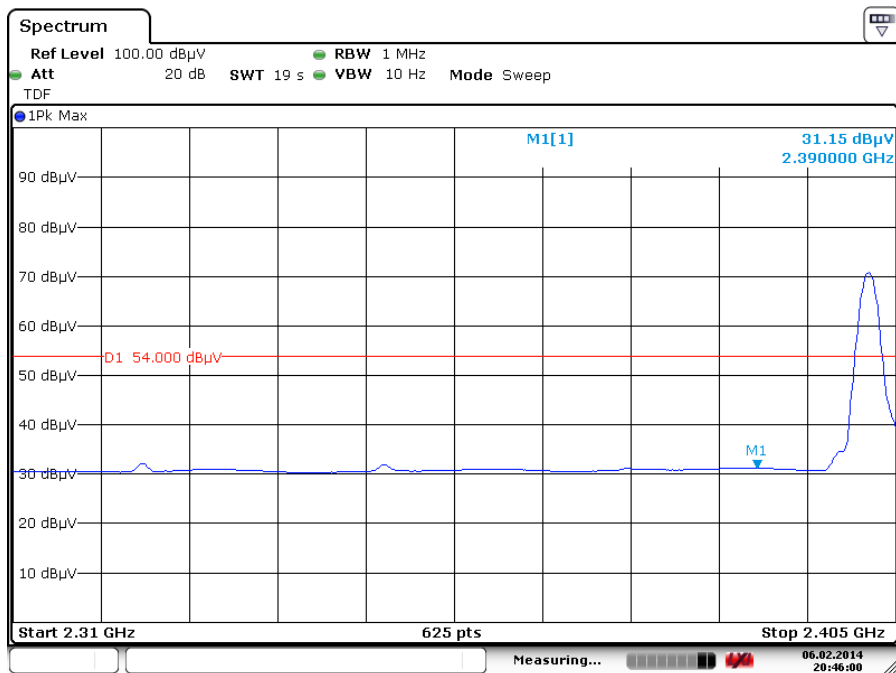
Low Channel (Hor)



Low Channel (Ver)



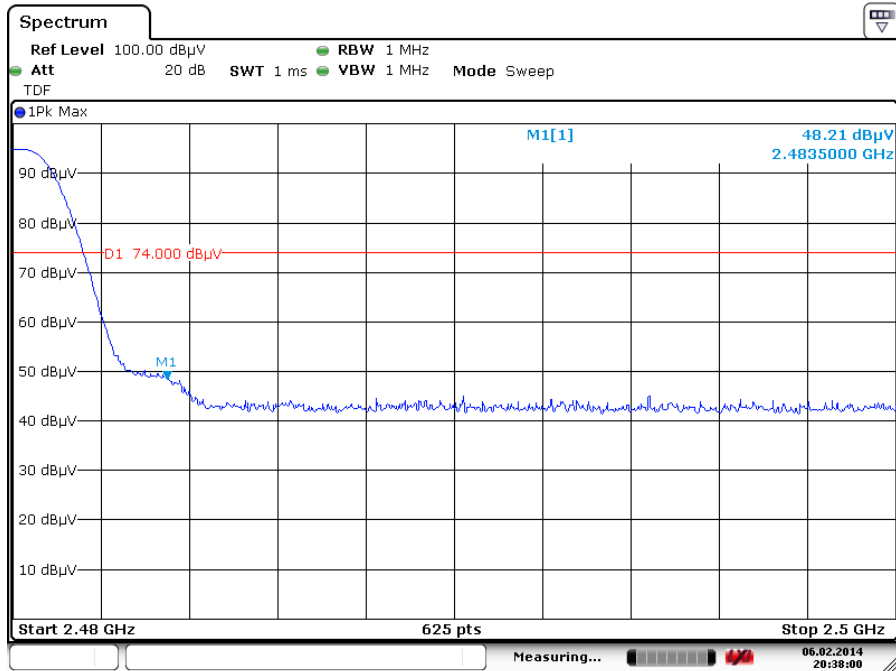
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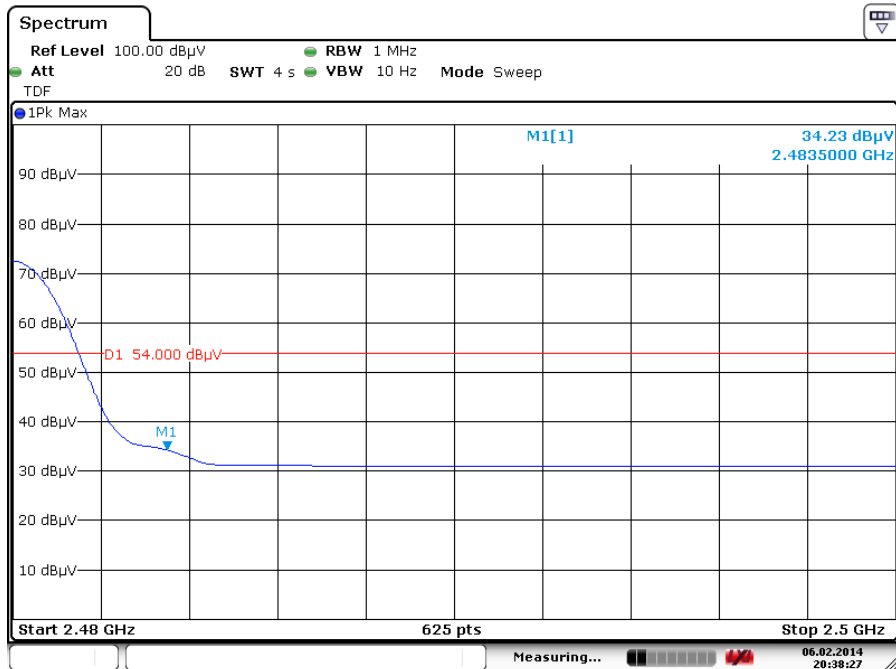
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Spurious Emissions, Band Edge, 2.35-2.5G

High Channel (Hor)



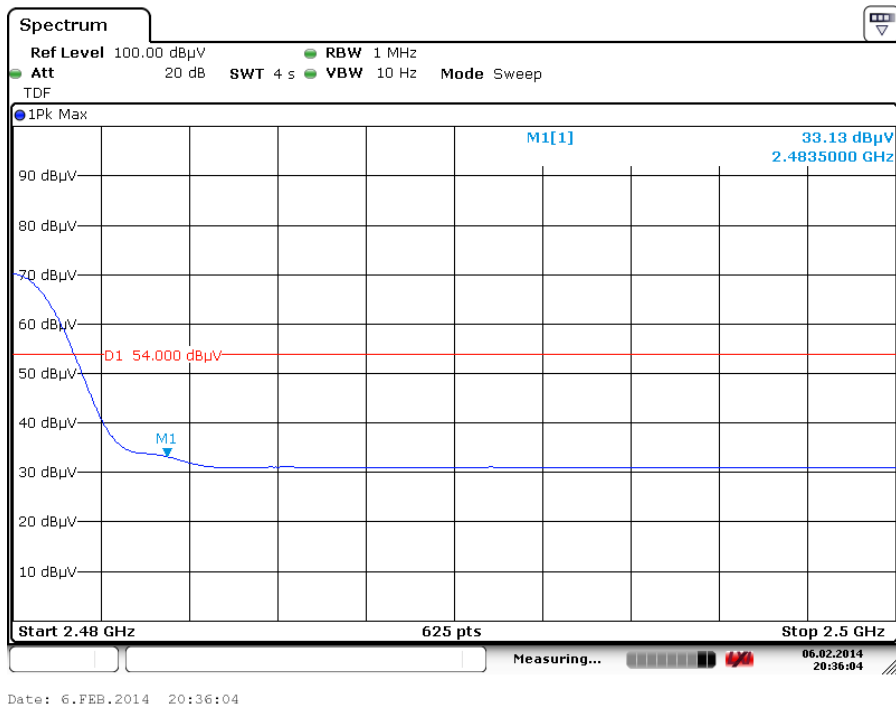
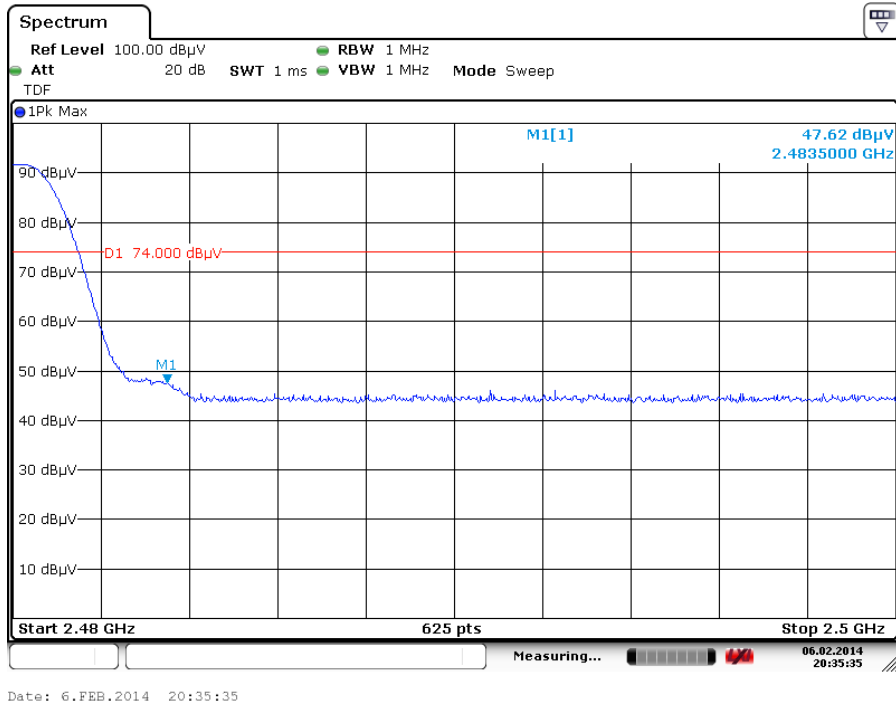
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Spurious Emissions, Band Edge, 2.35-2.5G

High Channel (Ver)

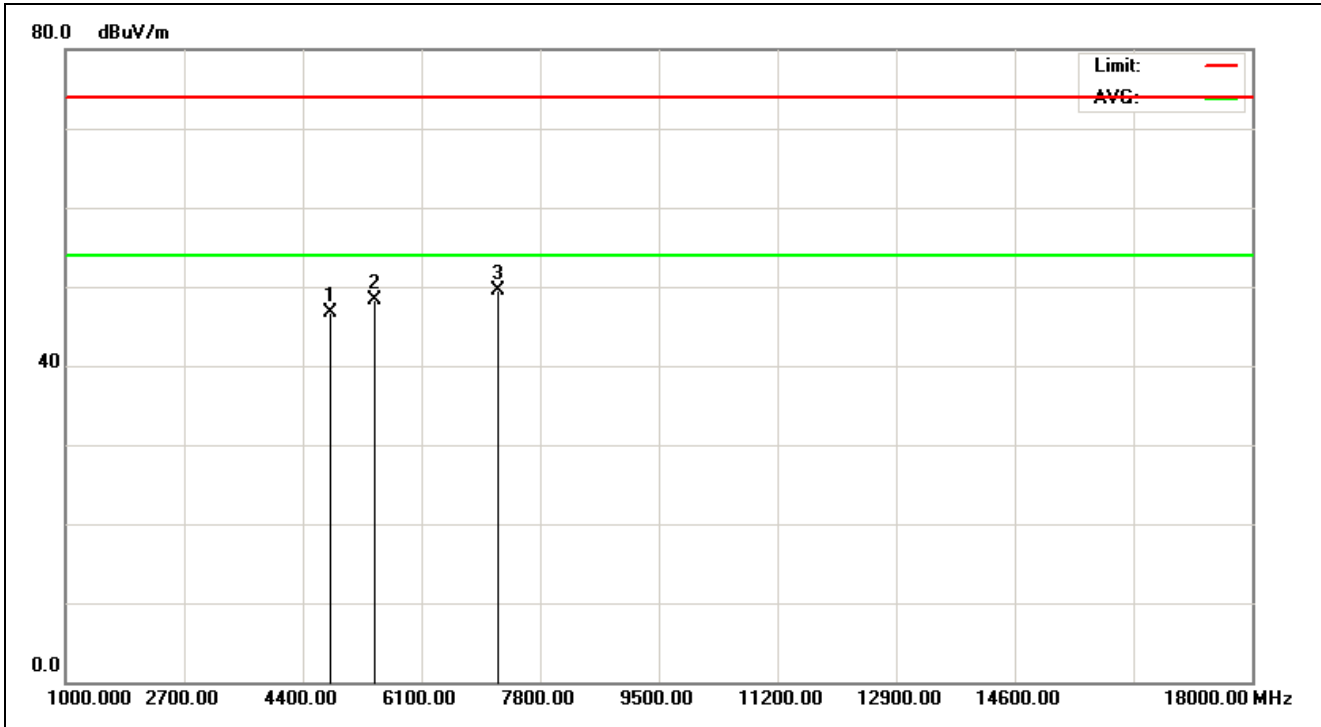


Spurious Emissions, Band Edge, 2.35-2.5G

Spurious Emissions, TX Mode, 1-18G

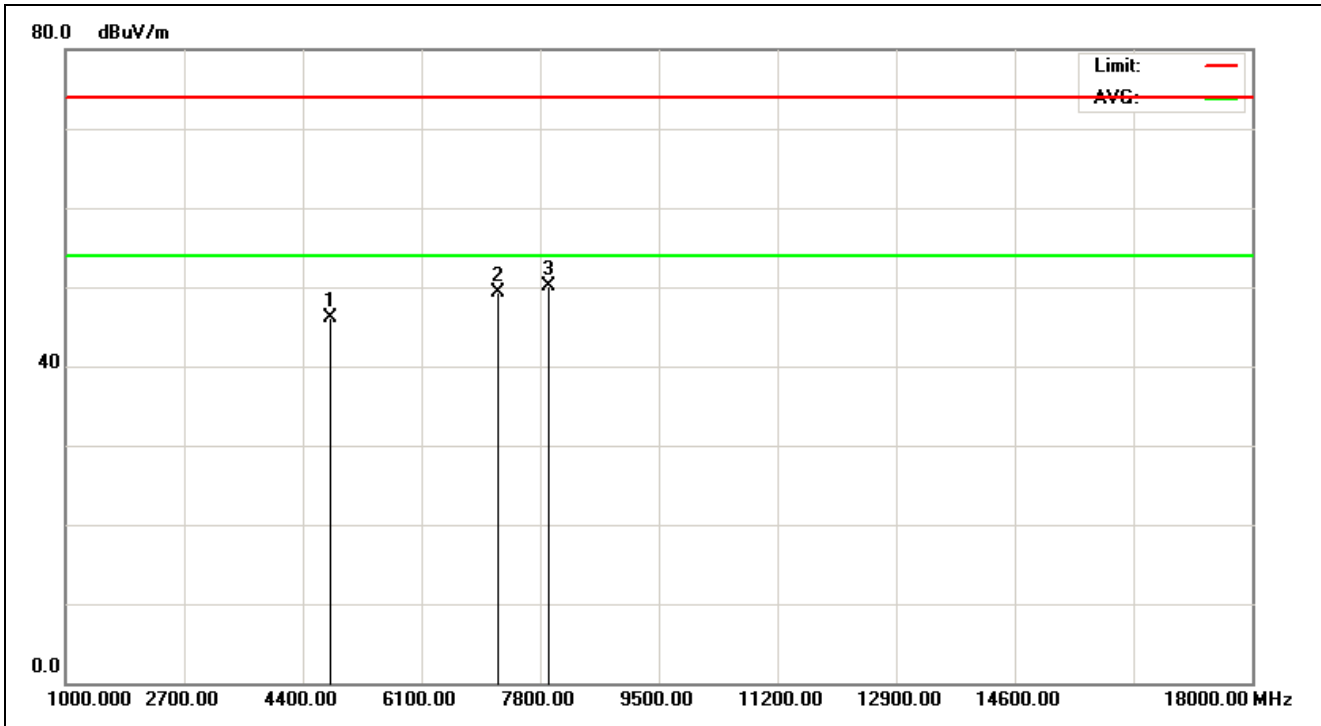


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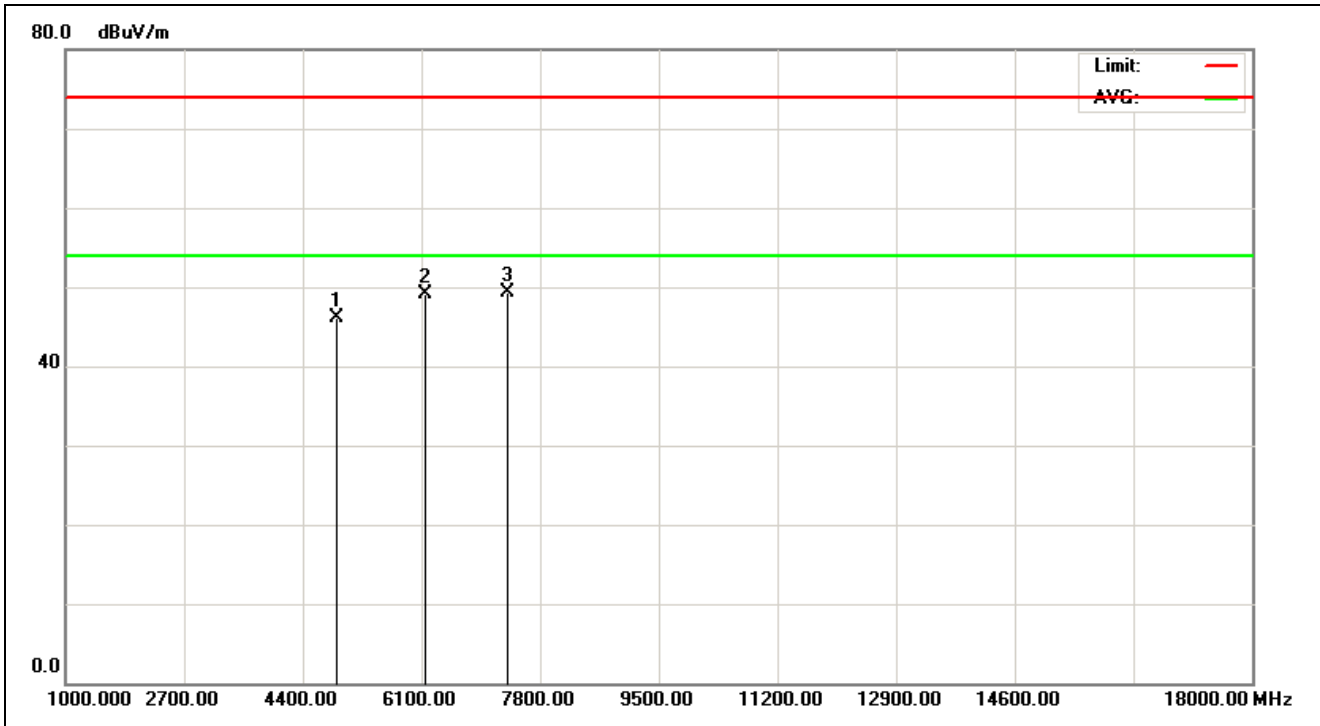
Service No.:	114017604-LE FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2014/2/6 20:13:03
Applicant:	Trans	Test Rating:	DC 5V
Product:	Bluetooth Music receiver	Temp.(°C)/Hum.(%):	20(°C)/60%
Model No.:	BTR-1020	Test Engineer:	Hugo Chang
Test Mode:	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	-2.59	49.33	46.74	74.00	-27.26	peak			
2	5440.705	0.06	48.29	48.35	74.00	-25.65	peak	100	336	
3	7206.000	5.44	43.98	49.42	74.00	-24.58	peak			



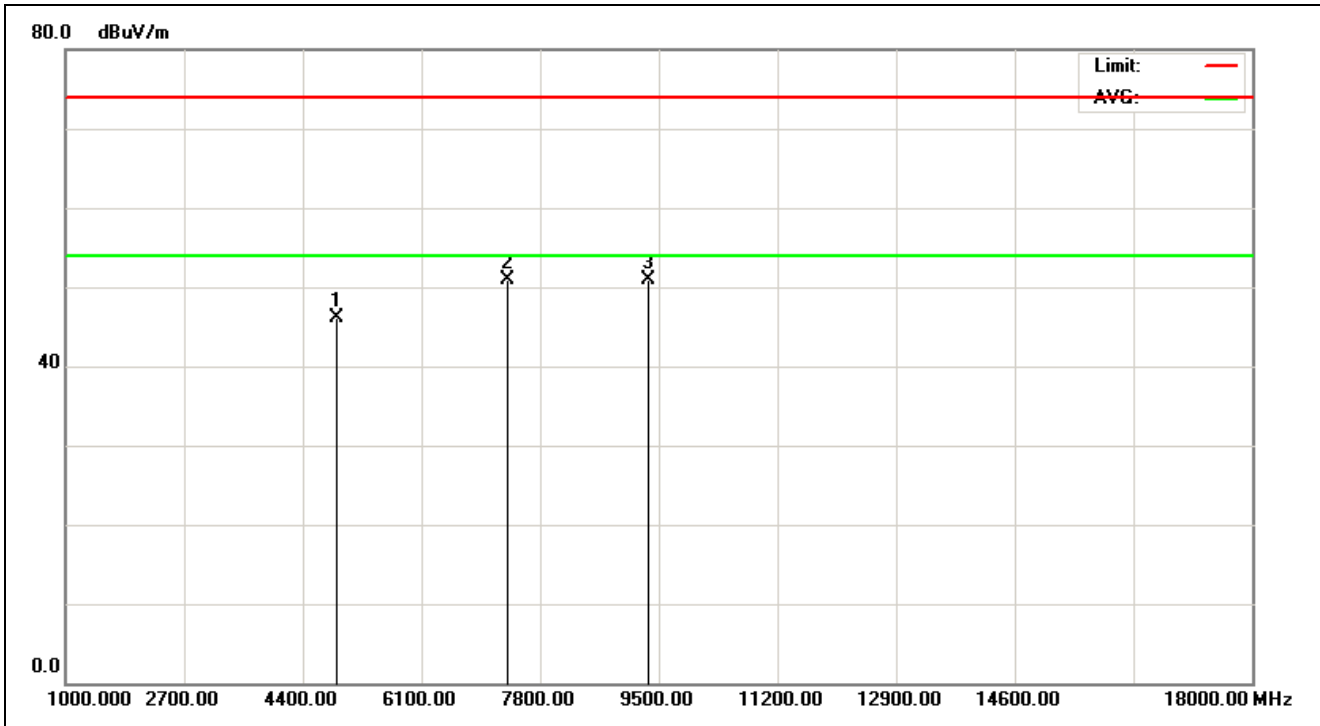
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2014/2/6 20:14:06
Applicant:	Trans	Test Rating:	DC 5V
Product:	Bluetooth Music receiver	Temp.(°C)/Hum.(%):	20(°C)/60%
Model No.:	BTR-1020	Test Engineer:	Hugo Chang
Test Mode:	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	-2.59	48.78	46.19	74.00	-27.81	peak			
2	7206.000	5.44	43.93	49.37	74.00	-24.63	peak			
3	7919.872	6.05	43.97	50.02	74.00	-23.98	peak	100	356	



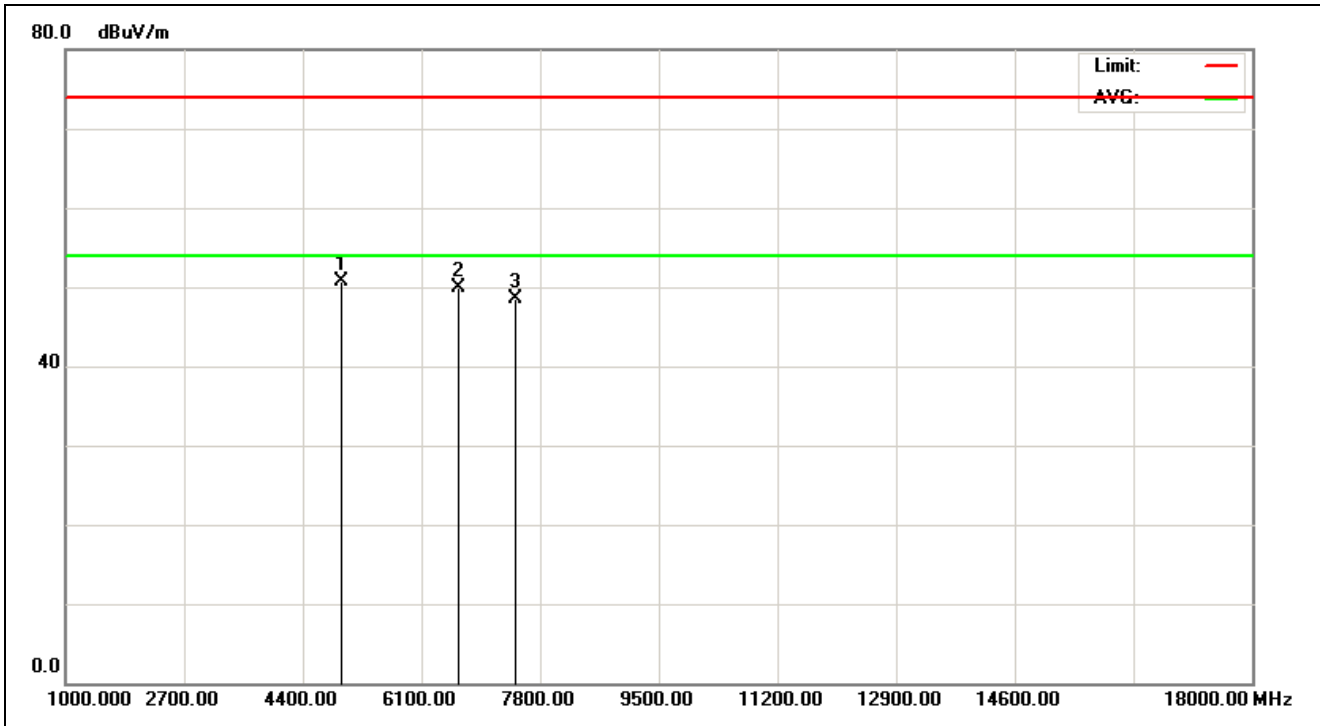
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2014/2/6 20:16:31
Applicant:	Trans	Test Rating:	DC 5V
Product:	Bluetooth Music receiver	Temp.(°C)/Hum.(%):	20(°C)/60%
Model No.:	BTR-1020	Test Engineer:	Hugo Chang
Test Mode:	2442		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4884.000	-2.38	48.43	46.05	74.00	-27.95	peak			
2	6149.038	4.23	44.94	49.17	74.00	-24.83	peak	100	113	
3	7326.000	5.78	43.44	49.22	74.00	-24.78	peak			



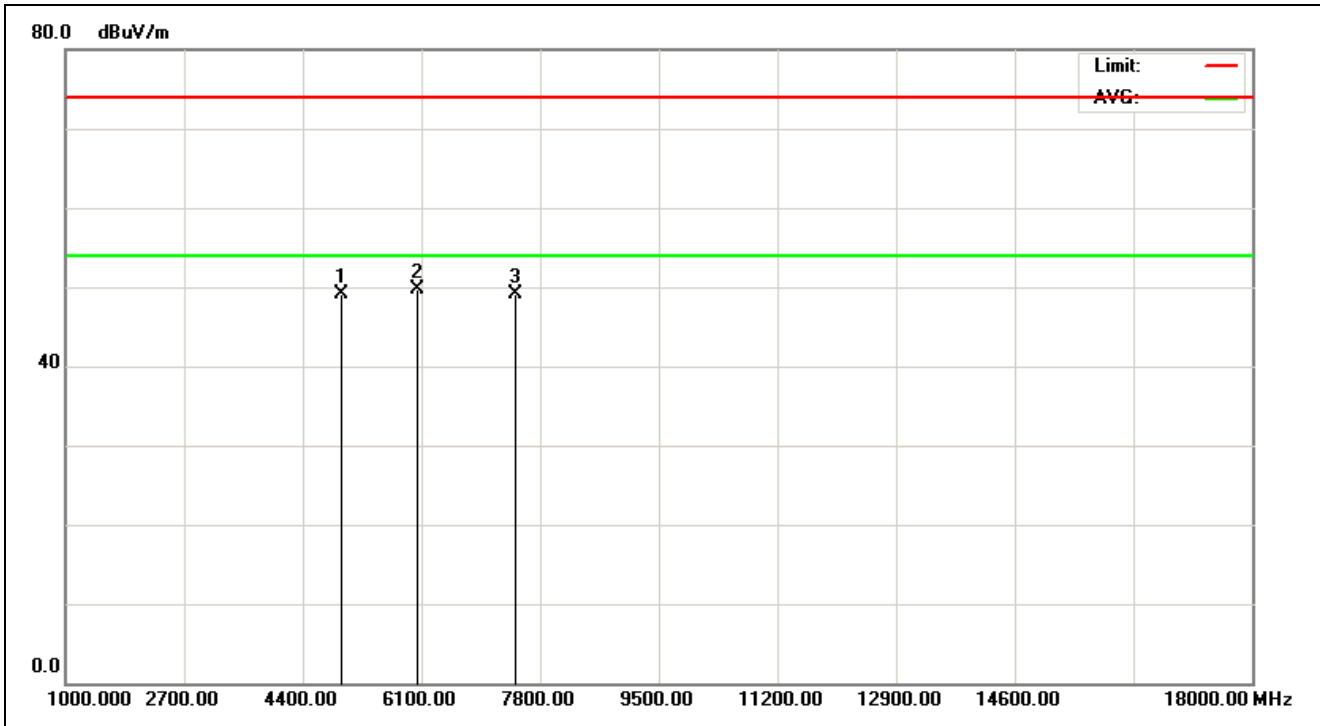
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2014/2/6 20:17:34
Applicant:	Trans	Test Rating:	DC 5V
Product:	Bluetooth Music receiver	Temp.(°C)/Hum.(%):	20(°C)/60%
Model No.:	BTR-1020	Test Engineer:	Hugo Chang
Test Mode:	2442		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4884.000	-2.38	48.42	46.04	74.00	-27.96	peak			
2	7326.000	5.78	45.07	50.85	74.00	-23.15	peak			
3	9363.782	6.60	44.23	50.83	74.00	-23.17	peak	100	205	



Service No.:	114017604-LE FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2014/2/6 20:20:52
Applicant:	Trans	Test Rating:	DC 5V
Product:	Bluetooth Music receiver	Temp.(°C)/Hum.(%):	20(°C)/60%
Model No.:	BTR-1020	Test Engineer:	Hugo Chang
Test Mode:	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	-2.19	52.84	50.65	74.00	-23.35	peak	100	105	
2	6639.423	5.29	44.59	49.88	74.00	-24.12	peak	100	97	
3	7440.000	6.09	42.46	48.55	74.00	-25.45	peak			



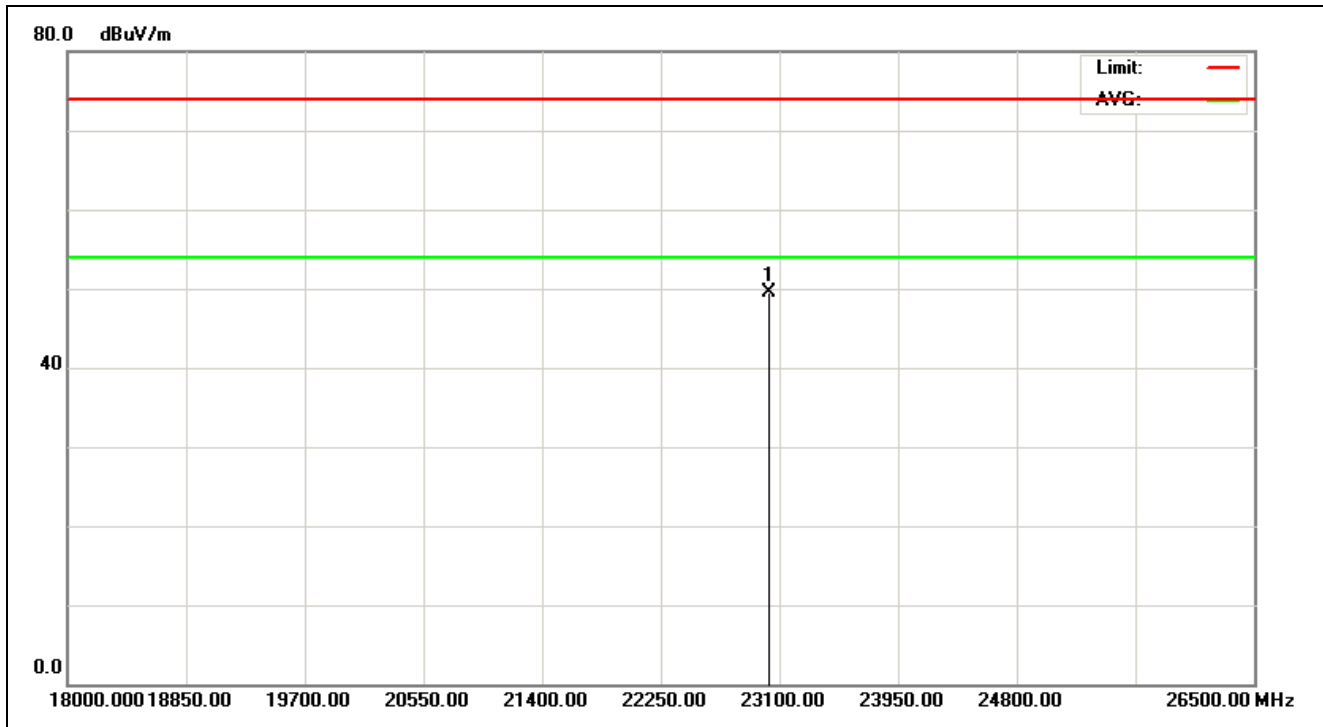
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Test item:	Radiation Emission	Test Time:	2014/2/6 20:21:54
Applicant:	Trans	Test Rating:	DC 5V
Product:	Bluetooth Music receiver	Temp.(°C)/Hum.(%):	20(°C)/60%
Model No.:	BTR-1020	Test Engineer:	Hugo Chang
Test Mode:	2480		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4960.000	-2.19	51.20	49.01	74.00	-24.99	peak	100	67	
2	6040.064	3.85	45.88	49.73	74.00	-24.27	peak	100	357	
3	7440.000	6.09	43.01	49.10	74.00	-24.90	peak			

Spurious Emissions, TX Mode, 18-26G

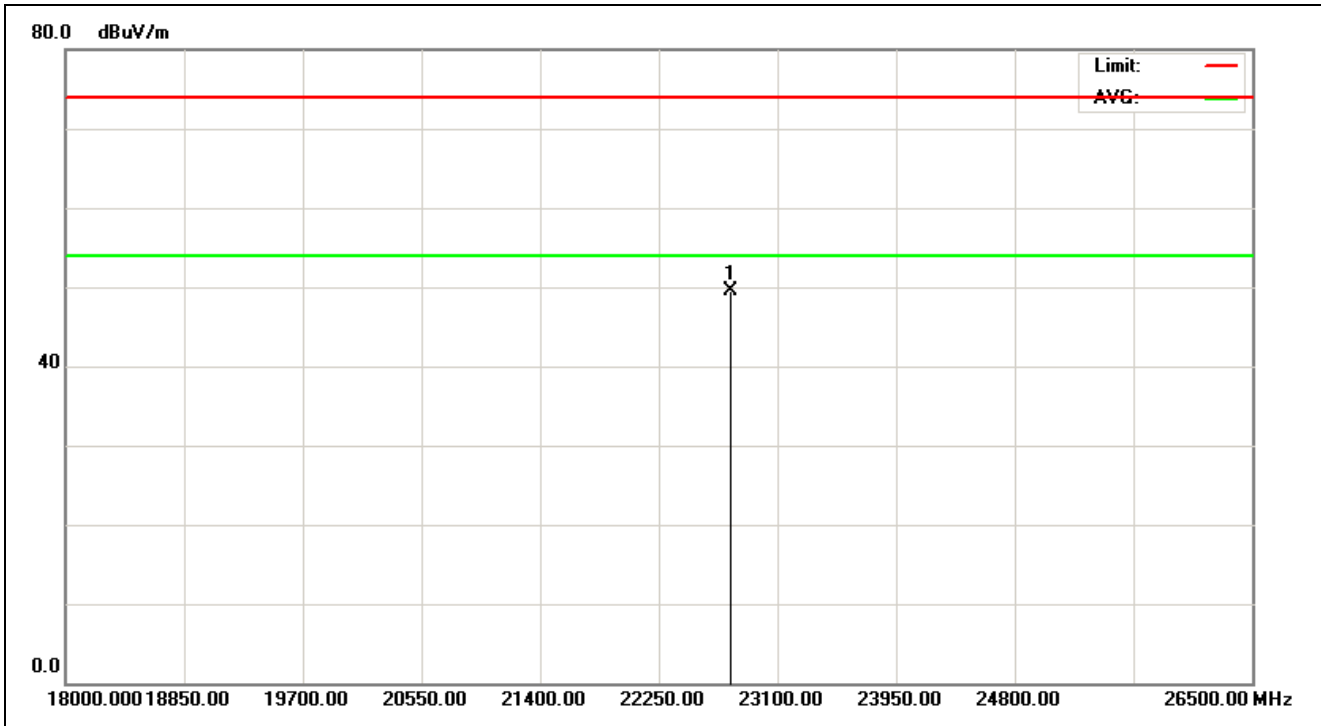


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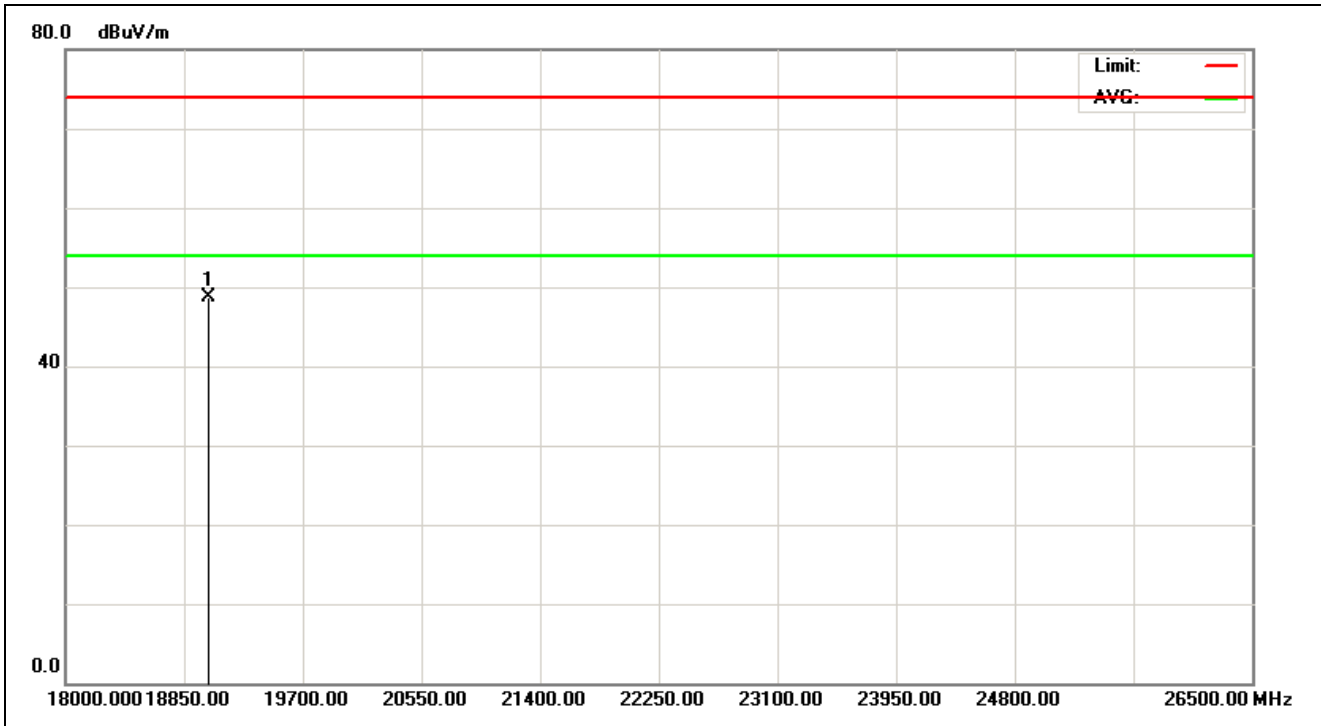
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2014/2/6 20:54:38
Applicant:	Trans	Test Rating:	DC 5V
Product:	Bluetooth Music receiver	Temp.(°C)/Hum.(%):	20(°C)/60%
Model No.:	BTR-1020	Test Engineer:	Hugo Chang
Test Mode:	2402		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23026.442	30.27	19.26	49.53	74.00	-24.47	peak			



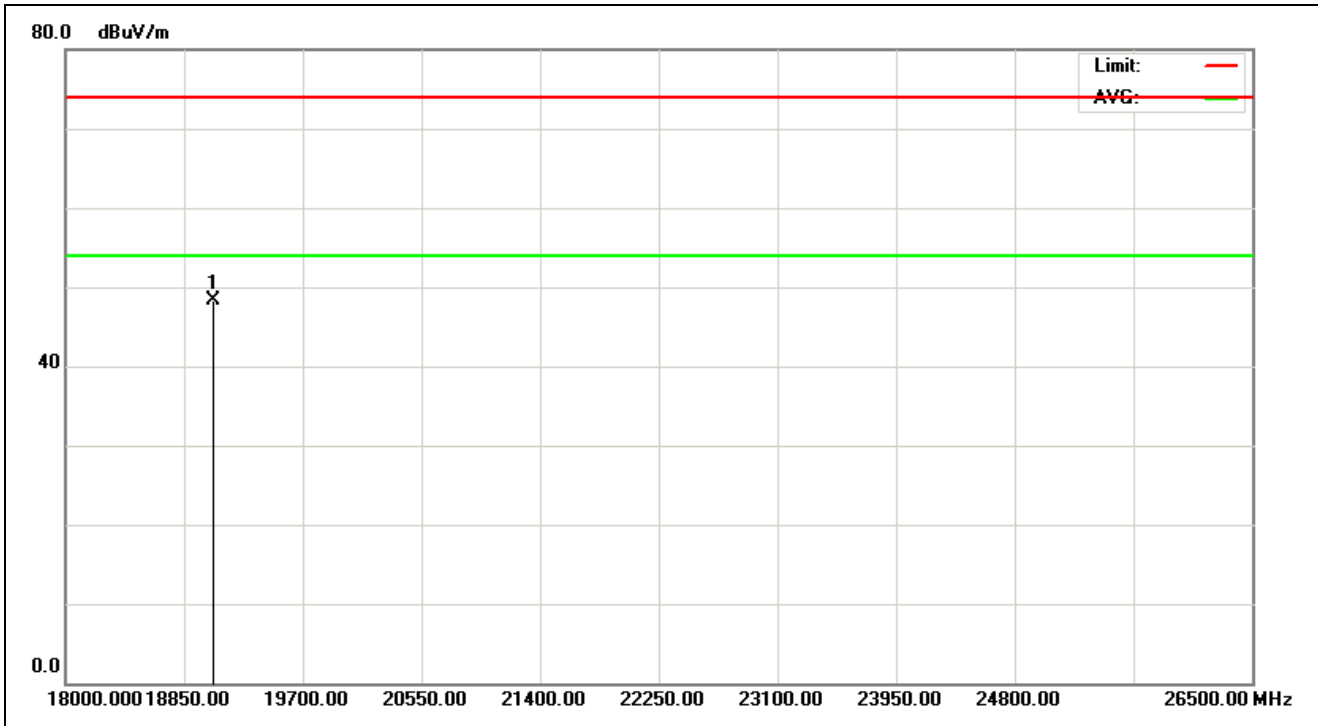
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Test item:	Radiation Emission	Test Time:	2014/2/6 20:55:37
Applicant:	Trans	Test Rating:	DC 5V
Product:	Bluetooth Music receiver	Temp.(°C)/Hum.(%):	20(°C)/60%
Model No.:	BTR-1020	Test Engineer:	Hugo Chang
Test Mode:	2402		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22767.628	29.68	19.75	49.43	74.00	-24.57	peak			



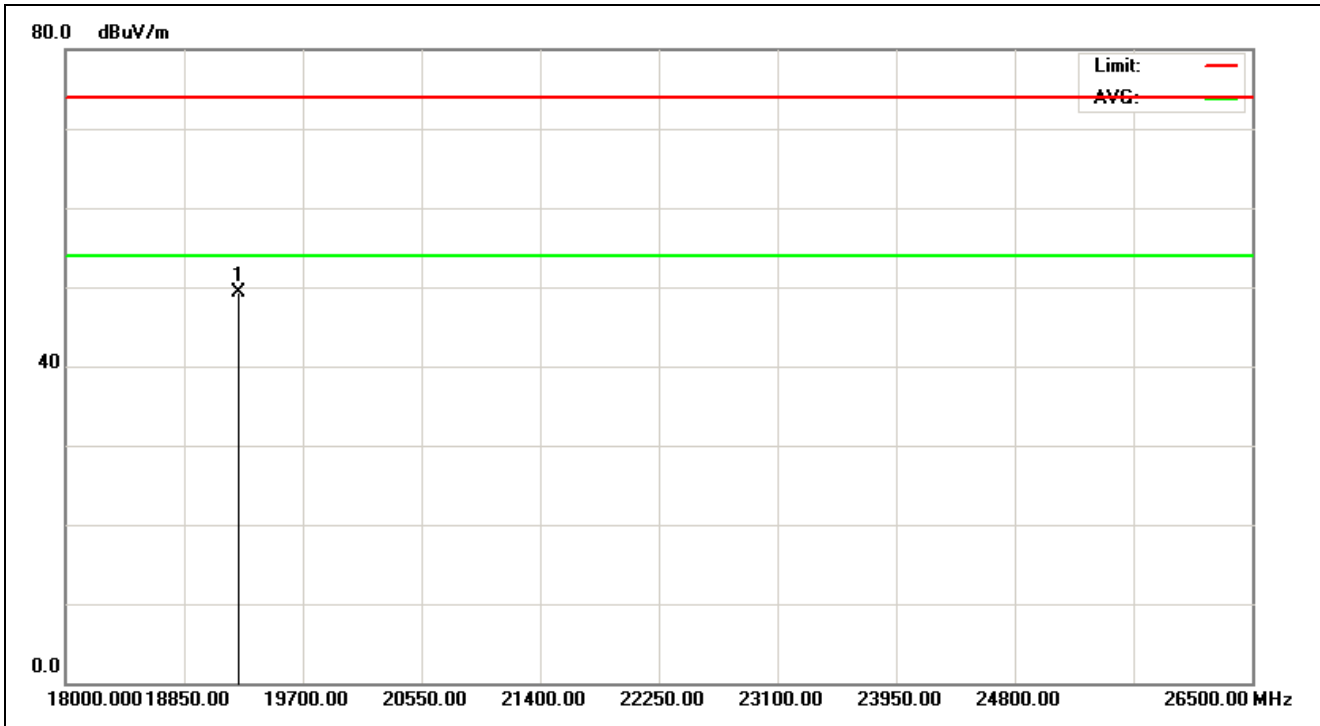
Service No.:	114017604-LE FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2014/2/6 20:56:06
Applicant:	Trans	Test Rating:	DC 5V
Product:	Bluetooth Music receiver	Temp.(°C)/Hum.(%):	20(°C)/60%
Model No.:	BTR-1020	Test Engineer:	Hugo Chang
Test Mode:	2442		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19021.635	29.93	18.76	48.69	74.00	-25.31	peak			



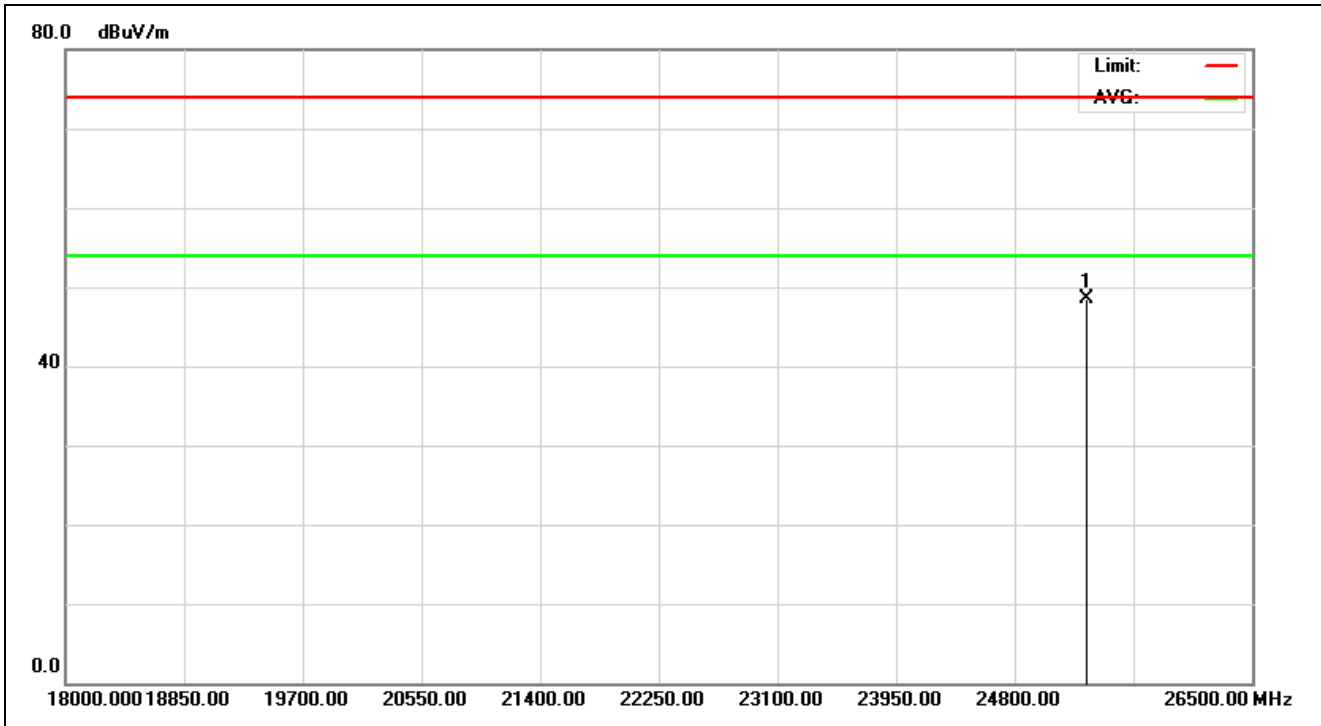
Service No.:	114017604-LE FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2014/2/6 20:56:34
Applicant:	Trans	Test Rating:	DC 5V
Product:	Bluetooth Music receiver	Temp.(°C)/Hum.(%):	20(°C)/60%
Model No.:	BTR-1020	Test Engineer:	Hugo Chang
Test Mode:	2442		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19062.500	29.84	18.42	48.26	74.00	-25.74	peak			



Service No.:	114017604-LE FCC	Test Distance:	3m
Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2014/2/6 20:57:03
Applicant:	Trans	Test Rating:	DC 5V
Product:	Bluetooth Music receiver	Temp.(°C)/Hum.(%):	20(°C)/60%
Model No.:	BTR-1020	Test Engineer:	Hugo Chang
Test Mode:	2480		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19239.583	29.44	19.83	49.27	74.00	-24.73	peak			



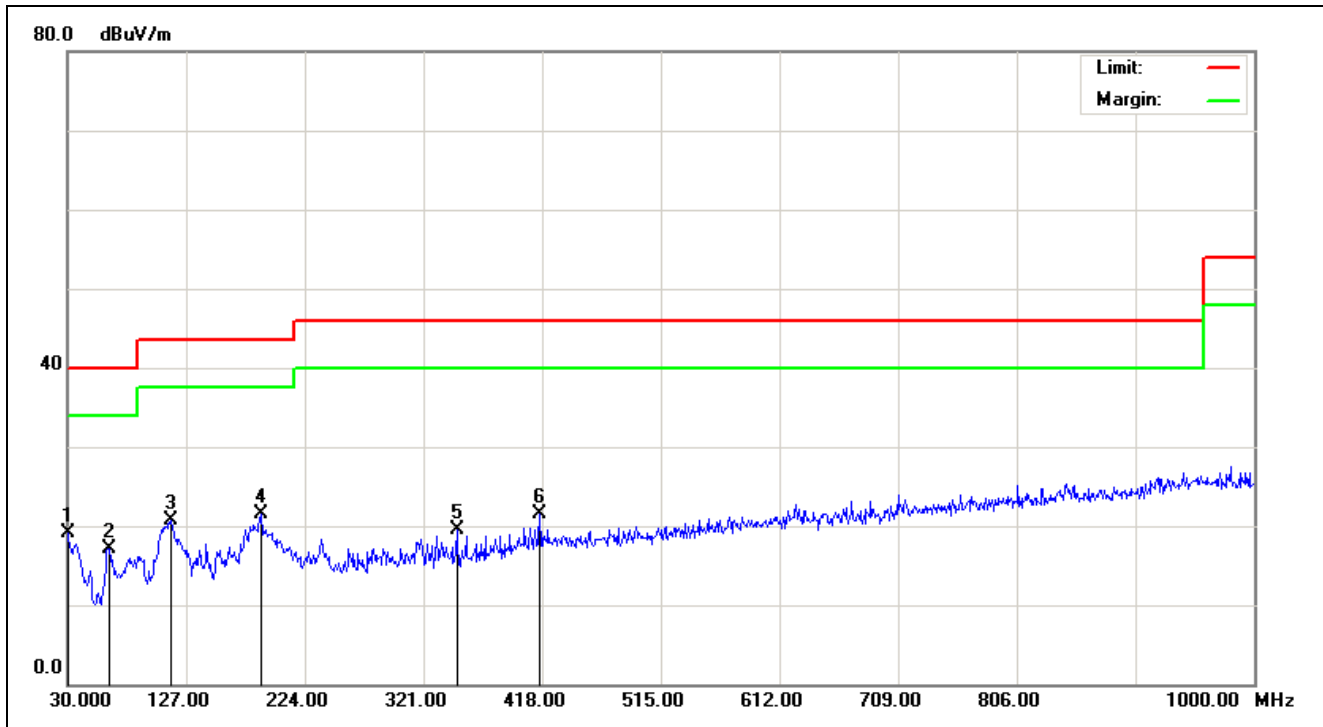
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Test Standard:	FCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2014/2/6 20:57:33
Applicant:	Trans	Test Rating:	DC 5V
Product:	Bluetooth Music receiver	Temp.(°C)/Hum.(%):	20(°C)/60%
Model No.:	BTR-1020	Test Engineer:	Hugo Chang
Test Mode:	2480		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	25314.904	30.71	17.89	48.60	74.00	-25.40	peak			

Spurious Emissions, TX Mode, 30M-1G



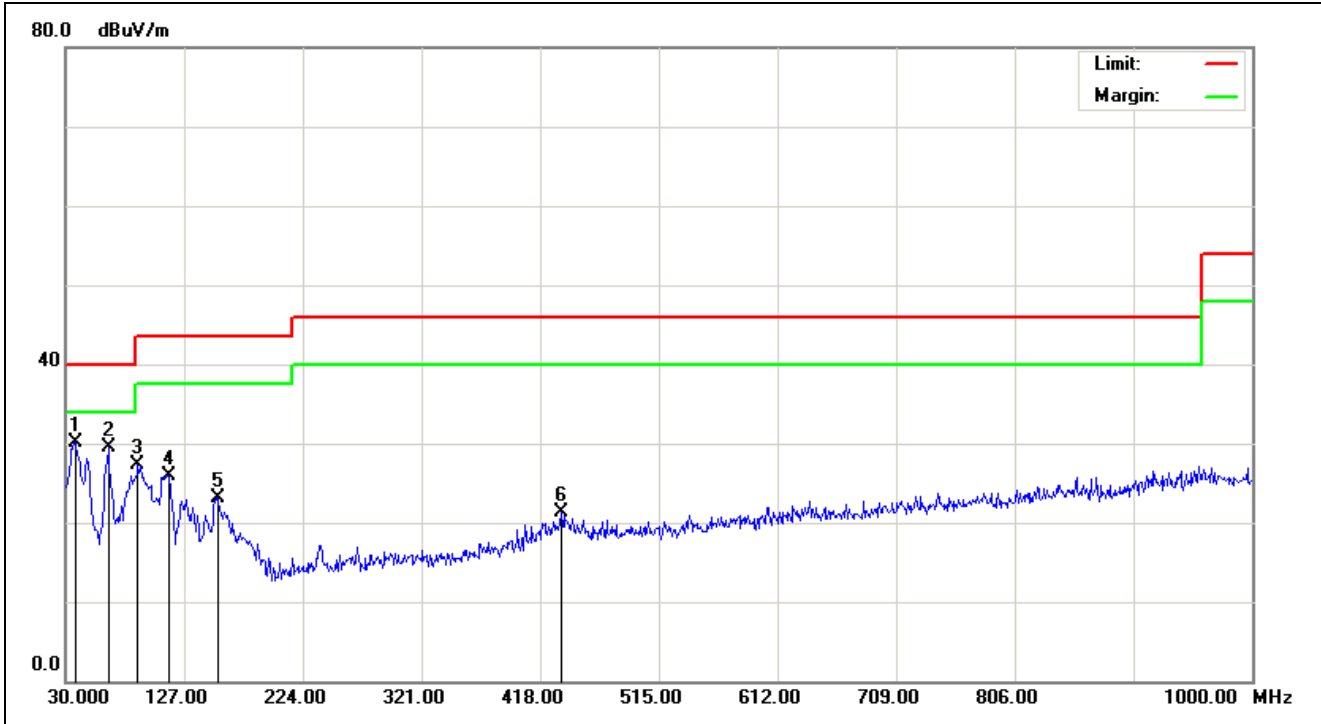
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Service No.:	114017604-LE FCC	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2014/2/6 14:28:17
Applicant:	Trans	Test Rating:	DC 5V
Product:	Bluetooth Music receiver	Temp.(°C)/Hum.(%):	20(°C)/60%
Model No.:	BTR-1020	Test Engineer:	Hugo Chang
Test Mode:			
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	-6.06	25.16	19.10	40.00	-20.90	QP	100	134	
2	63.9500	-19.31	36.38	17.07	40.00	-22.93	QP	100	283	
3	114.3900	-13.73	34.50	20.77	43.50	-22.73	QP	100	120	
4	188.1100	-15.56	37.09	21.53	43.50	-21.97	QP	100	142	
5	348.1600	-9.53	29.11	19.58	46.00	-26.42	QP	100	62	
6	416.0600	-8.39	29.96	21.57	46.00	-24.43	QP	100	155	

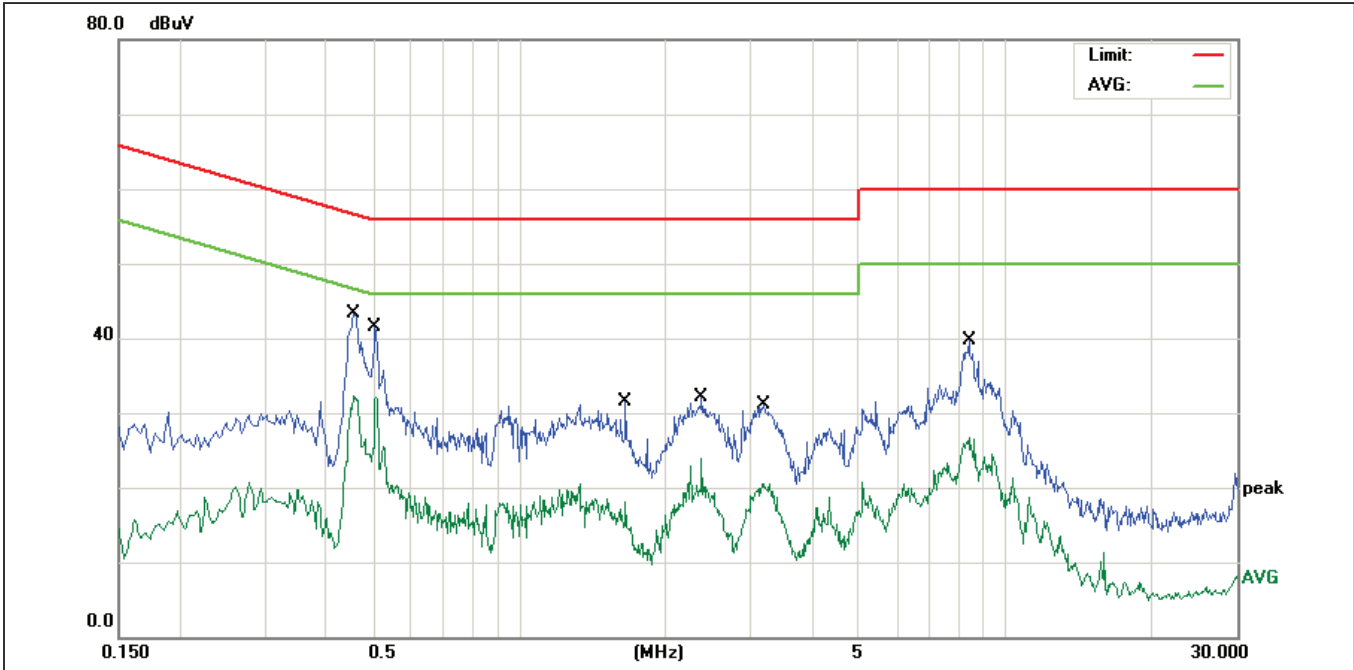
Spurious Emissions, TX Mode, 30M-1G



Service No.:	114017604-LE FCC	Test Distance:	3m
Test Standard:	FCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2014/2/6 14:29:20
Applicant:	Trans	Test Rating:	DC 5V
Product:	Bluetooth Music receiver	Temp.(°C)/Hum.(%):	20(°C)/60%
Model No.:	BTR-1020	Test Engineer:	Hugo Chang
Test Mode:			
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	38.7300	-10.90	41.09	30.19	40.00	-9.81	QP	100	226	
2	64.9200	-19.24	48.71	29.47	40.00	-10.53	QP	100	279	
3	89.1700	-16.73	44.06	27.33	43.50	-16.17	QP	100	295	
4	114.3900	-13.73	39.61	25.88	43.50	-17.62	QP	100	356	
5	155.1300	-13.64	36.69	23.05	43.50	-20.45	QP	100	293	
6	435.4600	-8.14	29.53	21.39	46.00	-24.61	QP	100	229	

Mains Spurious Emissions



Service No.: 114017604

Test Standard: FCC Part 15 Class B Conduction

Test item: Conducted Emission

Phase: L1

Applicant: Trans

Temp.(°C)/Hum.(%): 23(°C) / 54 %

Product: Bluetooth Music receiver

Power Rating: AC 120V/60Hz

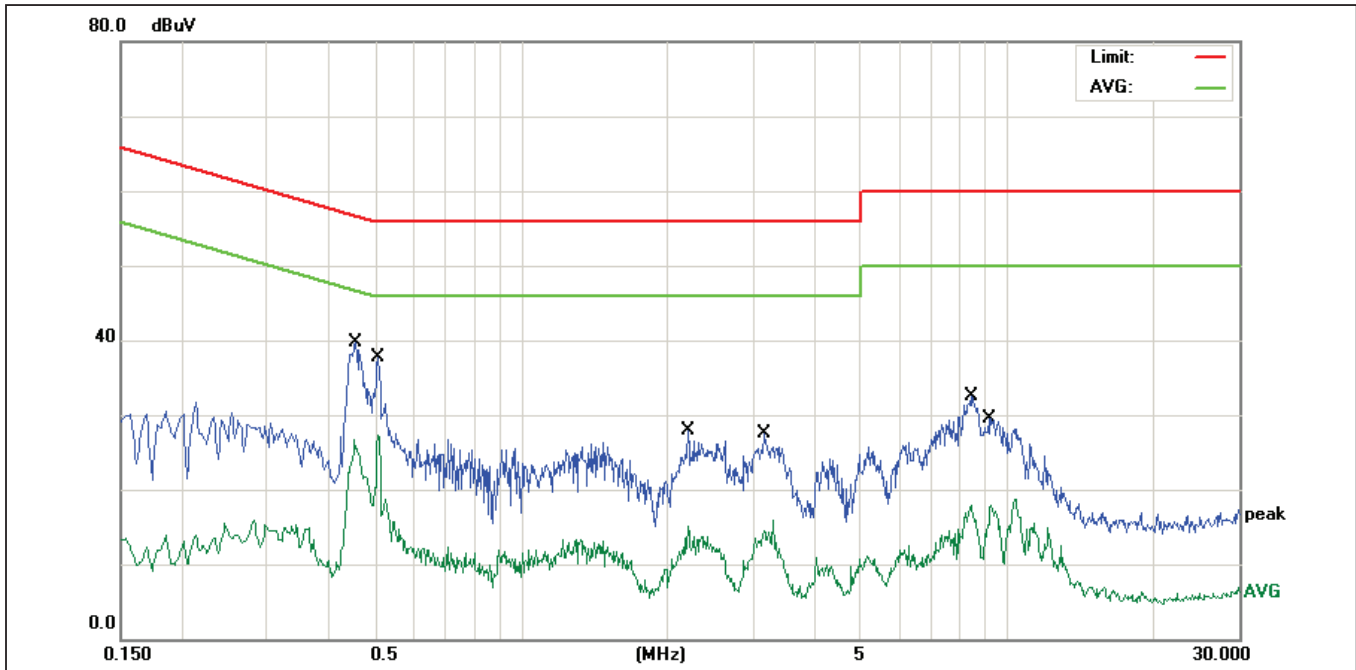
Model No.: BTR-1020

Test Engineer: Hugo Chang

Test Mode:

Remark: (a)Normal operation with audio port via adapter

No.	Frequency (MHz)	Factor (dBuV)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.4580	9.59	30.30	39.89	56.73	-16.84	QP	P	
2	0.4580	9.59	20.73	30.32	46.73	-16.41	AVG	P	
3	0.5060	9.59	27.98	37.57	56.00	-18.43	QP	P	
4	0.5060	9.59	22.07	31.66	46.00	-14.34	AVG	P	
5	1.6580	9.61	13.47	23.08	56.00	-32.92	QP	P	
6	1.6580	9.61	4.30	13.91	46.00	-32.09	AVG	P	
7	2.3780	9.63	18.49	28.12	56.00	-27.88	QP	P	
8	2.3780	9.63	9.63	19.26	46.00	-26.74	AVG	P	
9	3.1740	9.64	17.85	27.49	56.00	-28.51	QP	P	
10	3.1740	9.64	9.57	19.21	46.00	-26.79	AVG	P	
11	8.4379	9.69	24.28	33.97	60.00	-26.03	QP	P	
12	8.4379	9.69	13.83	23.52	50.00	-26.48	AVG	P	



Service No.: 114017604
 Test Standard: FCC Part 15 Class B Conduction
 Test item: Conducted Emission
 Applicant: Trans
 Product: Bluetooth Music receiver
 Model No.: BTR-1020
 Phase: N
 Temp.(°C)/Hum.(%): 23(°C) / 54 %
 Power Rating: AC 120V/60Hz
 Test Engineer: Hugo Chang

Test Mode:
 Remark: (a)Normal operation with audio port via adapter

No.	Frequency (MHz)	Factor (dBuV)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.4580	9.57	26.53	36.10	56.73	-20.63	QP	P	
2	0.4580	9.57	15.07	24.64	46.73	-22.09	AVG	P	
3	0.5100	9.57	24.09	33.66	56.00	-22.34	QP	P	
4	0.5100	9.57	17.37	26.94	46.00	-19.06	AVG	P	
5	2.2100	9.58	11.54	21.12	56.00	-34.88	QP	P	
6	2.2100	9.58	1.94	11.52	46.00	-34.48	AVG	P	
7	3.1700	9.61	11.72	21.33	56.00	-34.67	QP	P	
8	3.1700	9.61	2.81	12.42	46.00	-33.58	AVG	P	
9	8.4140	9.67	17.40	27.07	60.00	-32.93	QP	P	
10	8.4140	9.67	6.22	15.89	50.00	-34.11	AVG	P	
11	9.1620	9.67	12.70	22.37	60.00	-37.63	QP	P	
12	9.1620	9.67	4.59	14.26	50.00	-35.74	AVG	P	