Test Report No.50119564 001

Appendix D: Radiated and Mains Spurious Emission Data

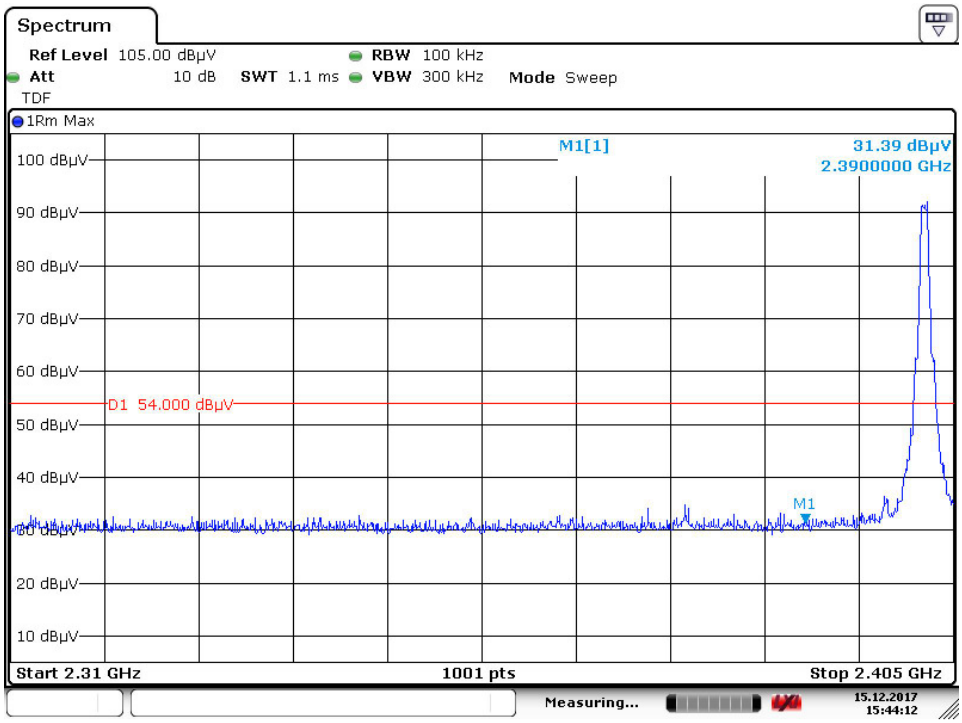
(File: 50119564AppendixD)

Contents

Spurious Emissions, Band Edges, 2.35-2.5G 2
Spurious Emissions, TX Mode, 1-18G 6
Spurious Emissions, TX Mode, 18-26.5G 12
Spurious Emissions, TX Mode, 30M-1G 18
Spurious Emissions, TX Mode, 150K-30M 20
Spurious Emissions, TX Mode, 9K-150K 21

Radiated Bandedge (GFSK)

Low Channel (Hor)



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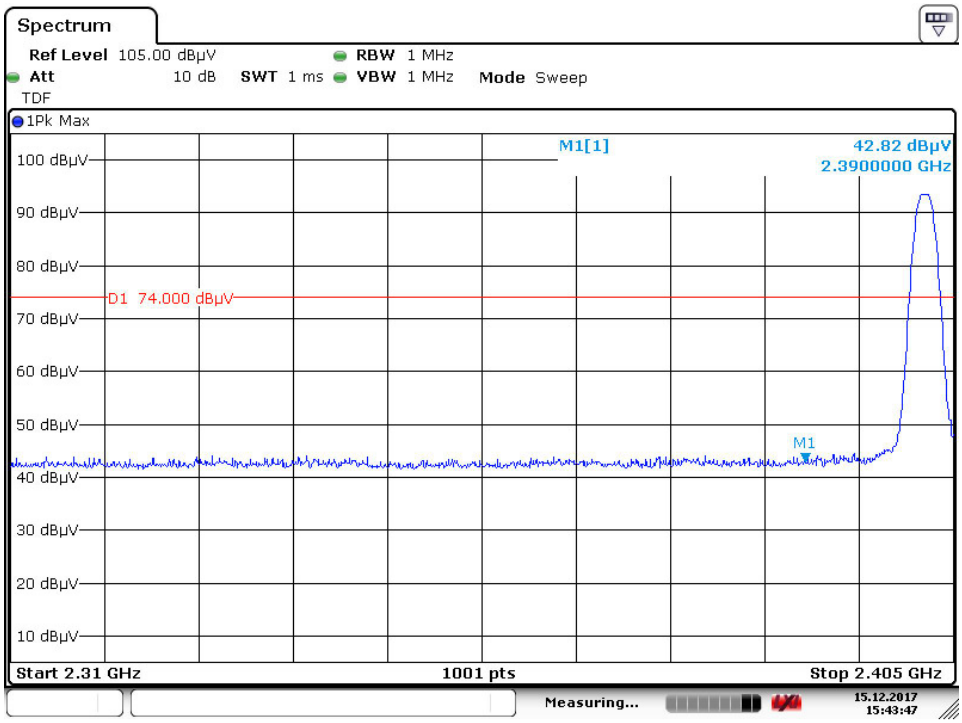

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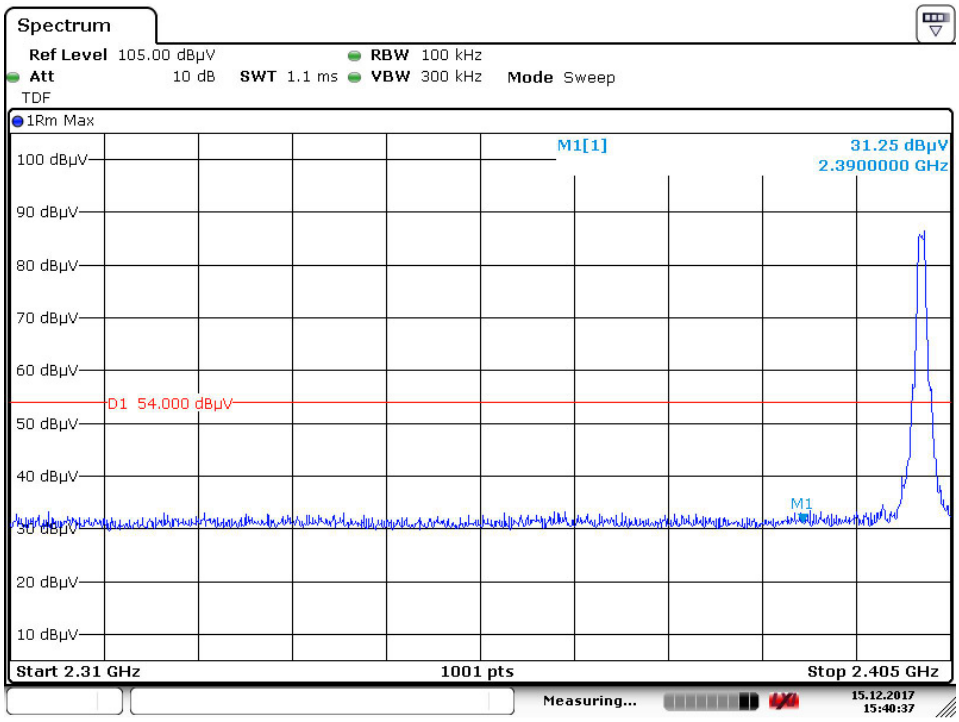
Low Channel (Ver)



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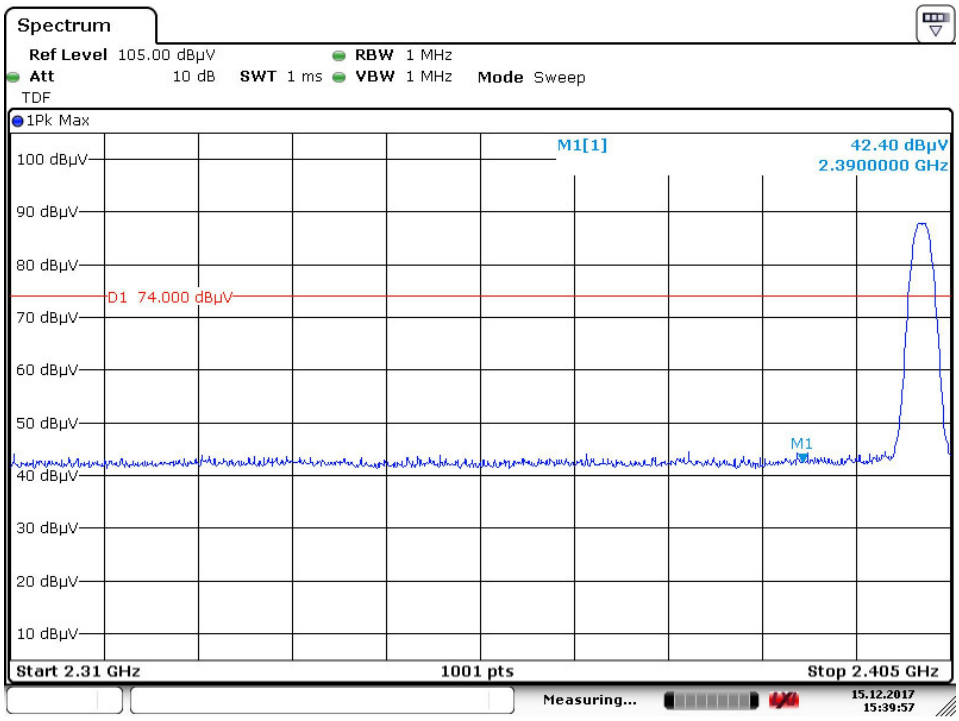
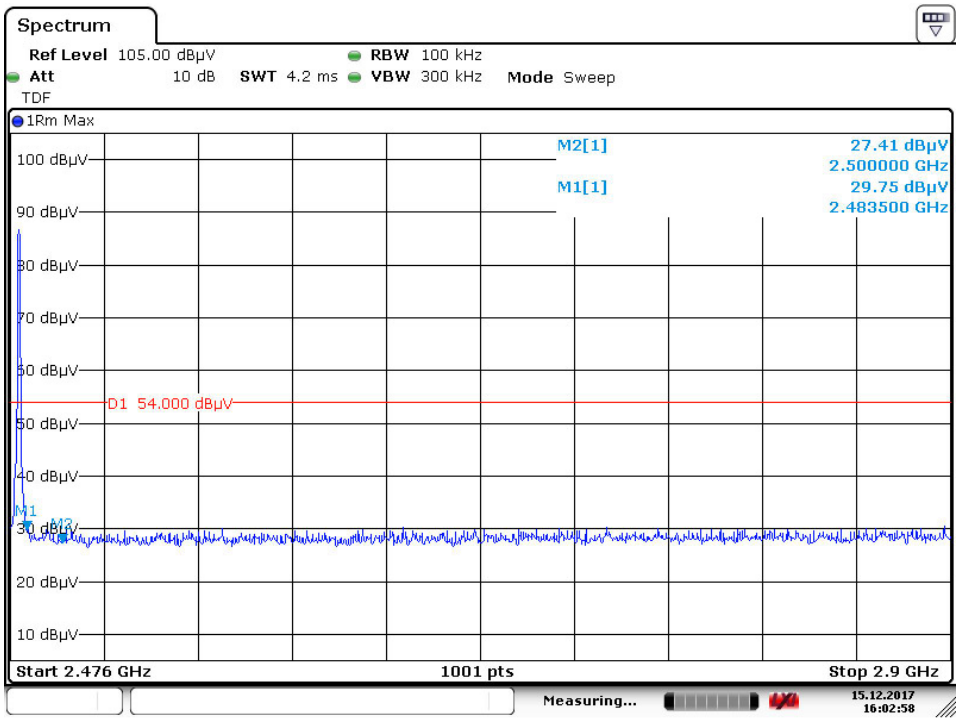


Date: 15.DEC.2017 15:39:58

Radiated Bandedge (GFSK)

High Channel (Hor)



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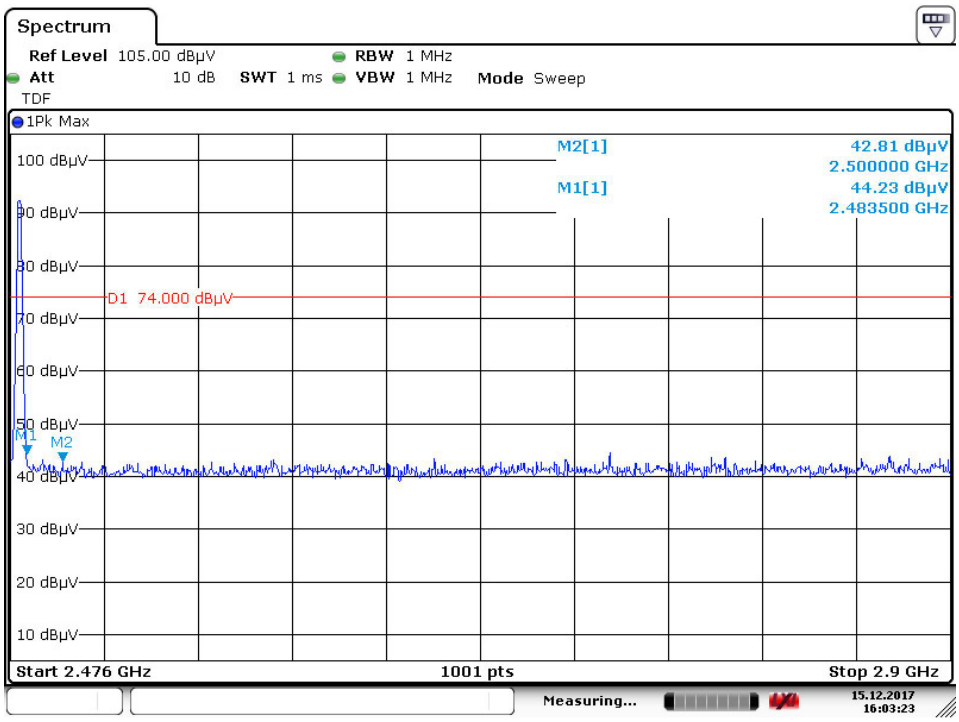
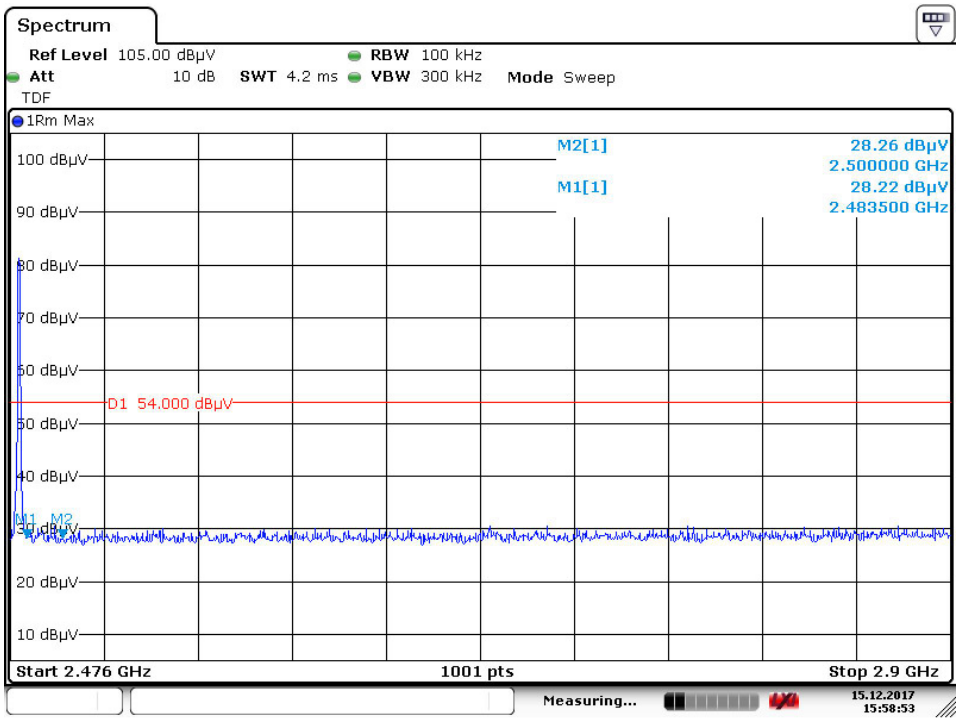
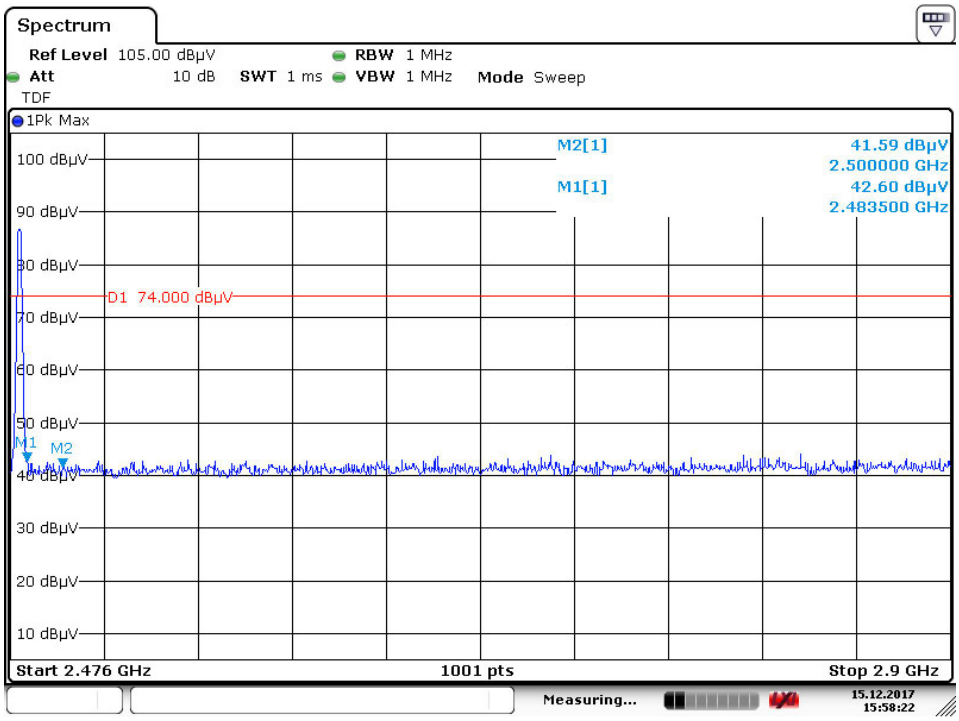


Date: 15.DEC.2017 16:03:23

High Channel (Ver)



Date: 15.DEC.2017 15:58:53



Date: 15.DEC.2017 15:58:22

Spurious Emissions, TX Mode, 1-18G

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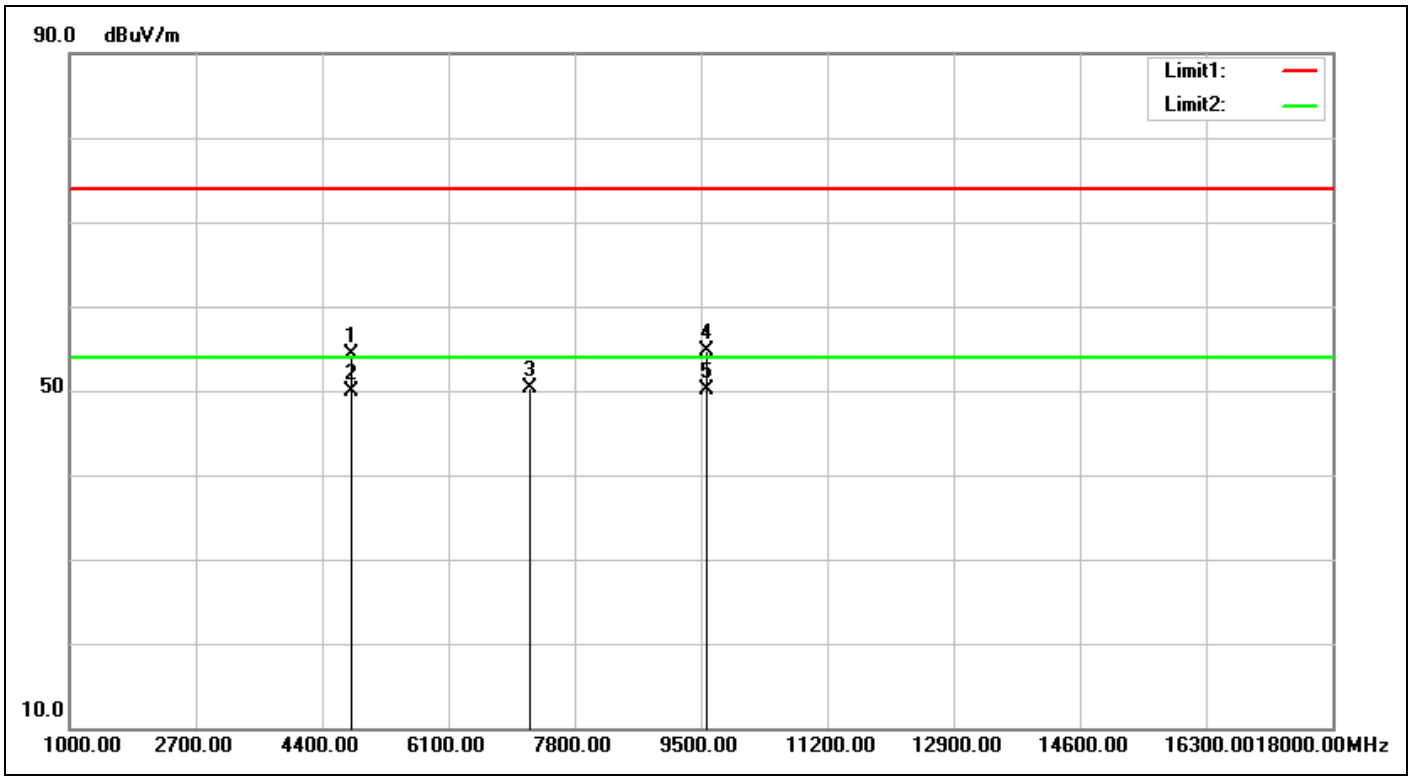

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 15:20:54**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2402-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	4791.000	-2.73	57.11	54.38	74.00	-19.62	peak	100	70	
2	4791.000	-2.73	52.71	49.98	54.00	-4.02	AVG	100	70	
3	7206.000	5.29	44.94	50.23	74.00	-23.77	peak	100	52	
4	9585.000	6.41	48.30	54.71	74.00	-19.29	peak	100	37	
5	9585.000	6.41	43.75	50.16	54.00	-3.84	AVG	100	37	

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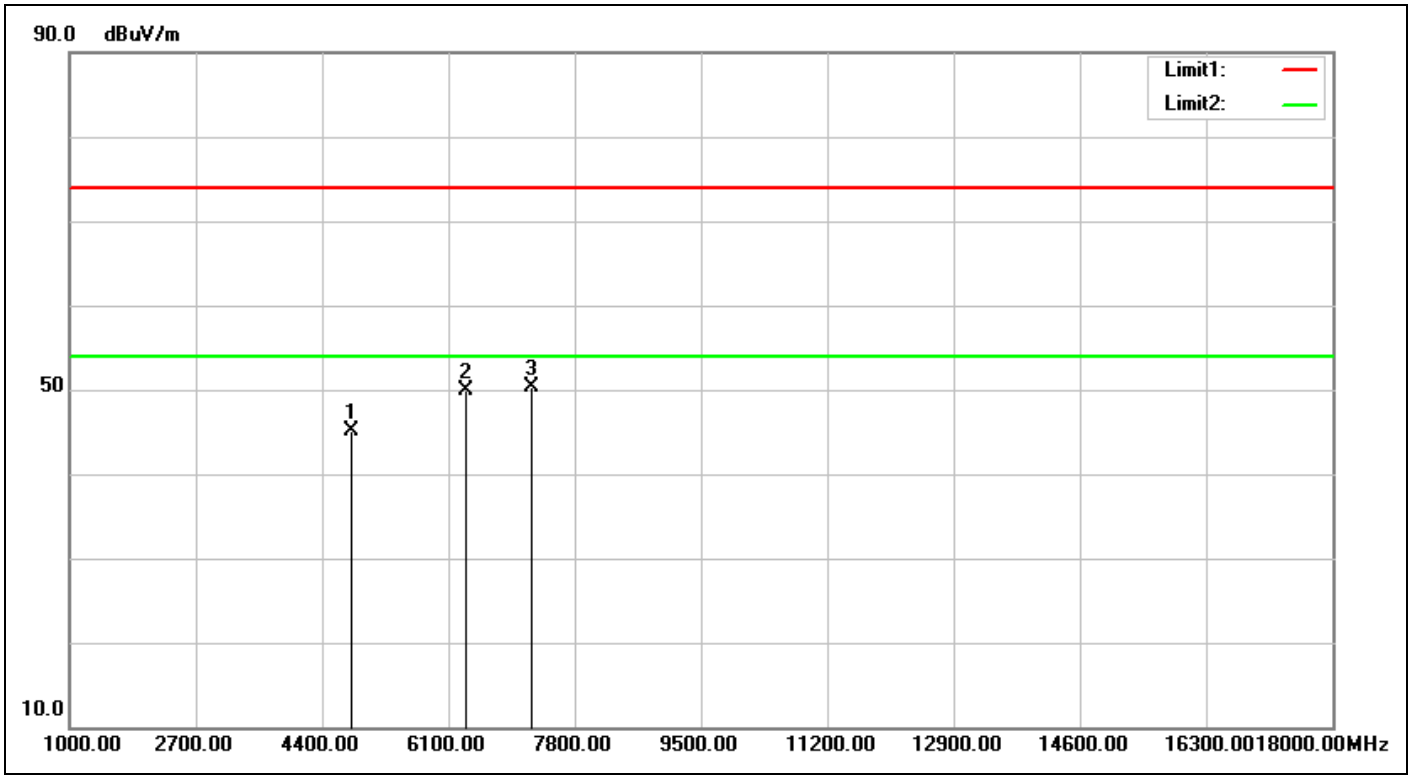

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 15:21:57**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2402-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	4804.000	-2.71	47.90	45.19	74.00	-28.81	peak	100	128	
2	6338.000	4.71	45.13	49.84	74.00	-24.16	peak	100	174	
3	7206.000	5.29	45.03	50.32	74.00	-23.68	peak	100	158	

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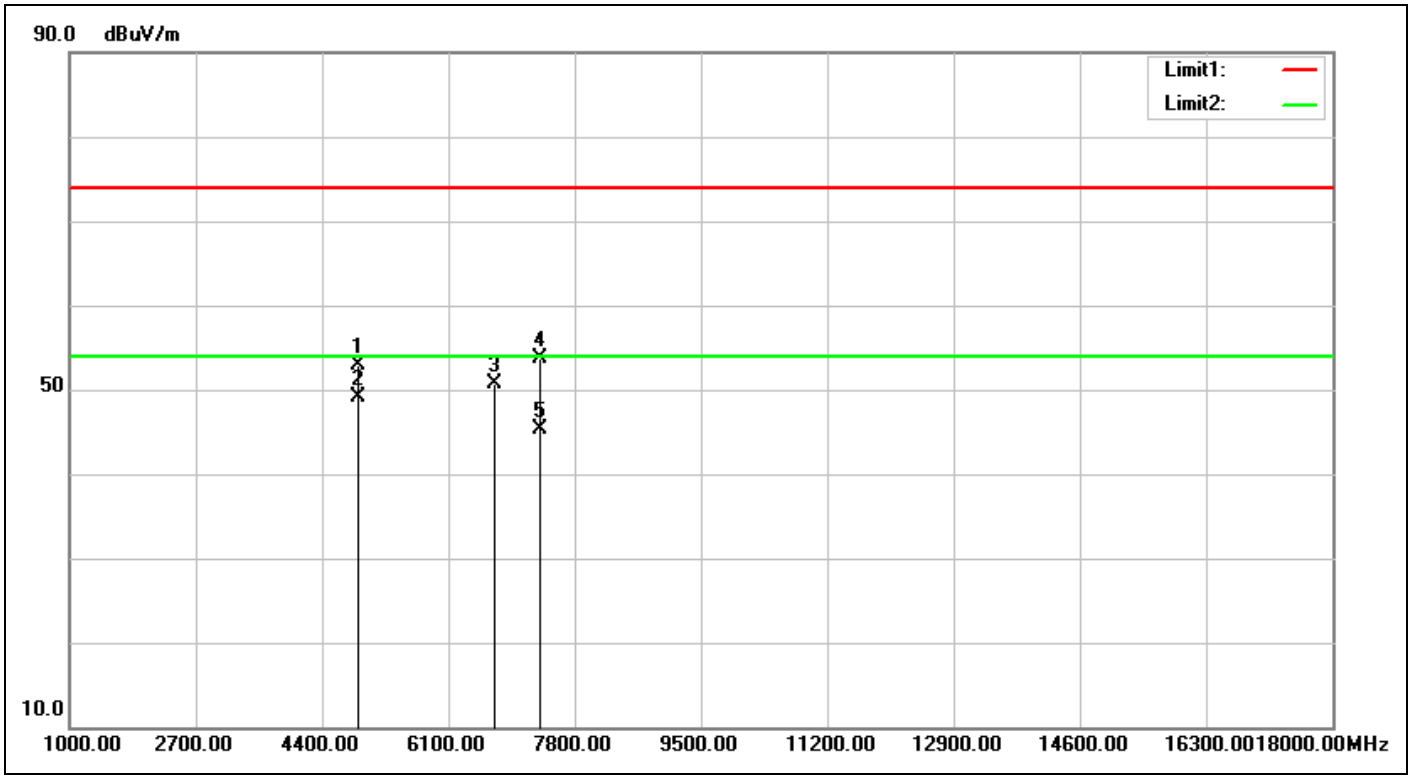

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 15:39:14**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2440-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	4876.000	-2.51	55.45	52.94	74.00	-21.06	peak	100	275	
2	4876.000	-2.51	51.71	49.20	54.00	-4.80	AVG	100	275	
3	6729.000	5.07	45.59	50.66	74.00	-23.34	peak	100	263	
4	7320.000	5.59	48.06	53.65	74.00	-20.35	peak	100	158	
5	7324.000	5.60	39.65	45.25	54.00	-8.75	AVG	100	158	

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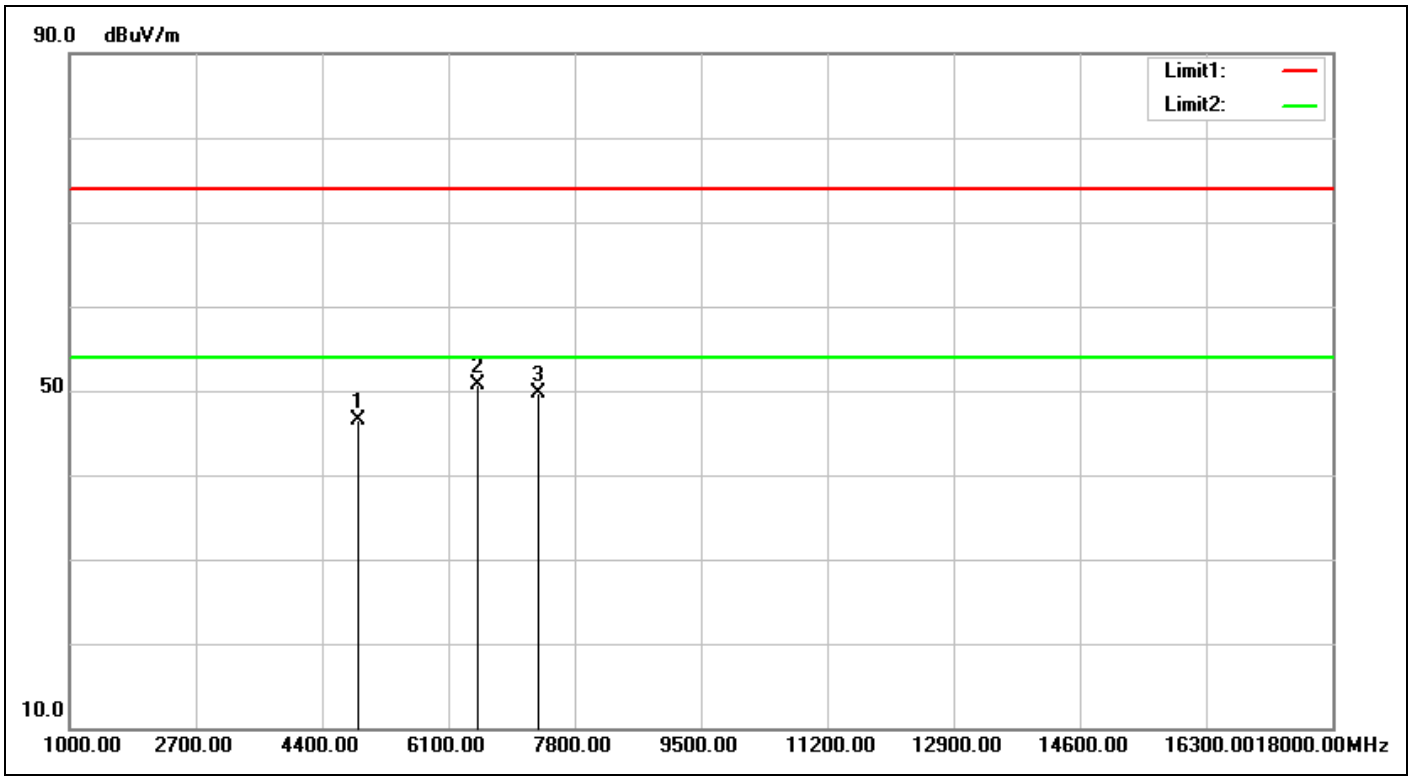

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 15:40:17**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2440-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	4880.000	-2.50	49.02	46.52	74.00	-27.48	peak	100	158	
2	6491.000	5.31	45.31	50.62	74.00	-23.38	peak	100	210	
3	7320.000	5.59	44.19	49.78	74.00	-24.22	peak	100	42	

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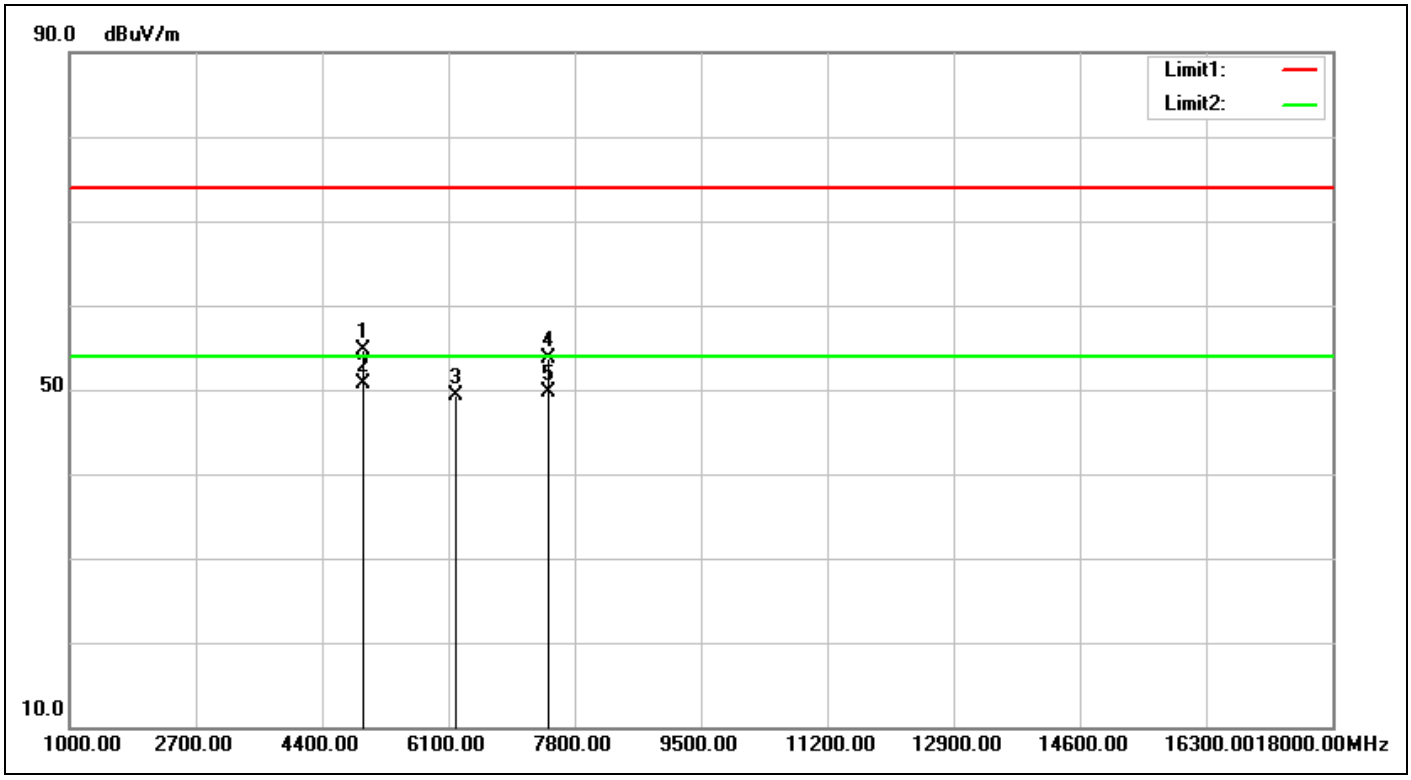

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 15:08:53**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2480-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	4960.000	-2.29	56.95	54.66	74.00	-19.34	peak	100	272	
2	4960.000	-2.29	53.04	50.75	54.00	-3.25	AVG	100	272	
3	6202.000	4.20	45.20	49.40	74.00	-24.60	peak	100	142	
4	7440.000	5.90	47.76	53.66	74.00	-20.34	peak	100	120	
5	7440.000	5.90	43.85	49.75	54.00	-4.25	AVG	100	120	

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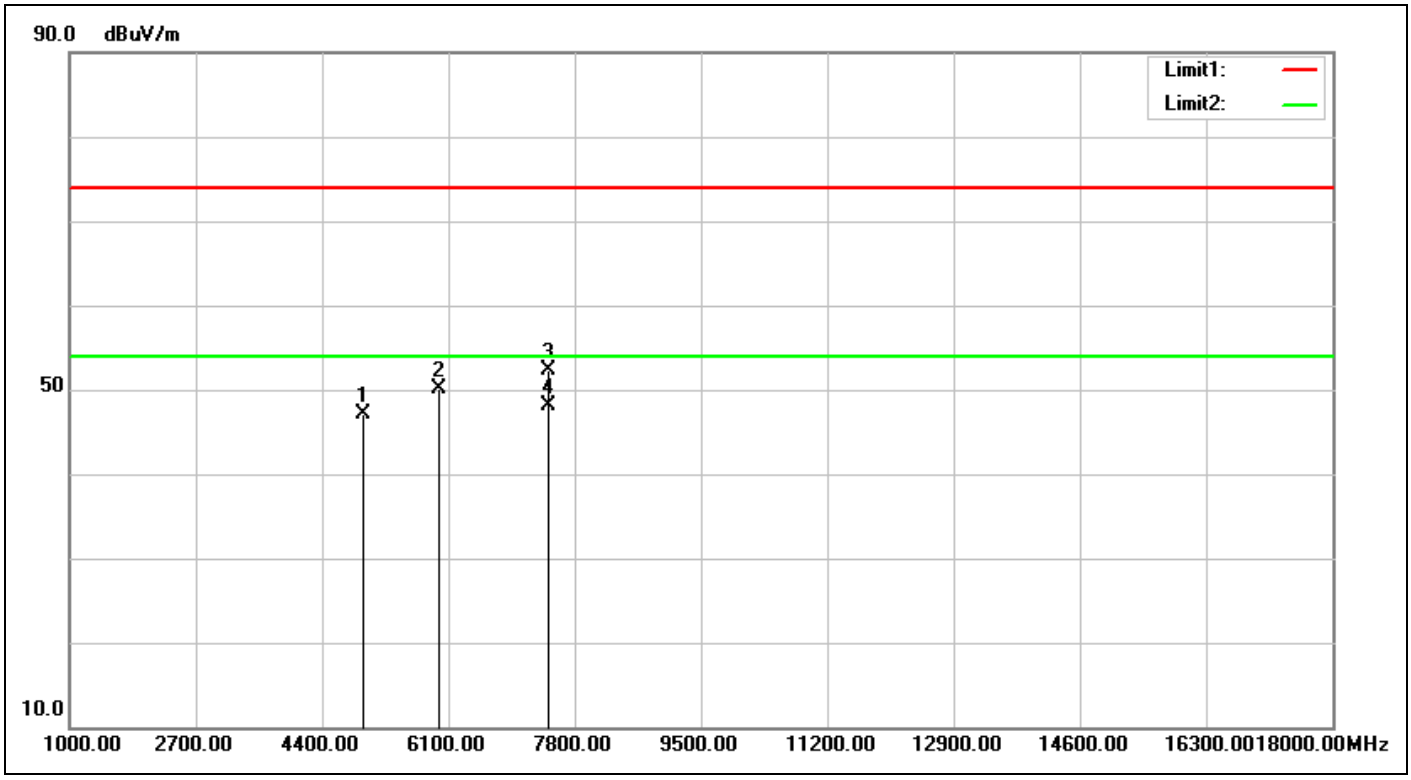

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 15:09:56**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2480-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	4960.000	-2.29	49.30	47.01	74.00	-26.99	peak	100	185	
2	5981.000	3.29	46.73	50.02	74.00	-23.98	peak	100	133	
3	7440.000	5.90	46.38	52.28	74.00	-21.72	peak	100	360	
4	7440.000	5.90	42.15	48.05	54.00	-5.95	AVG	100	360	

Spurious Emissions, TX Mode, 18-26.5G

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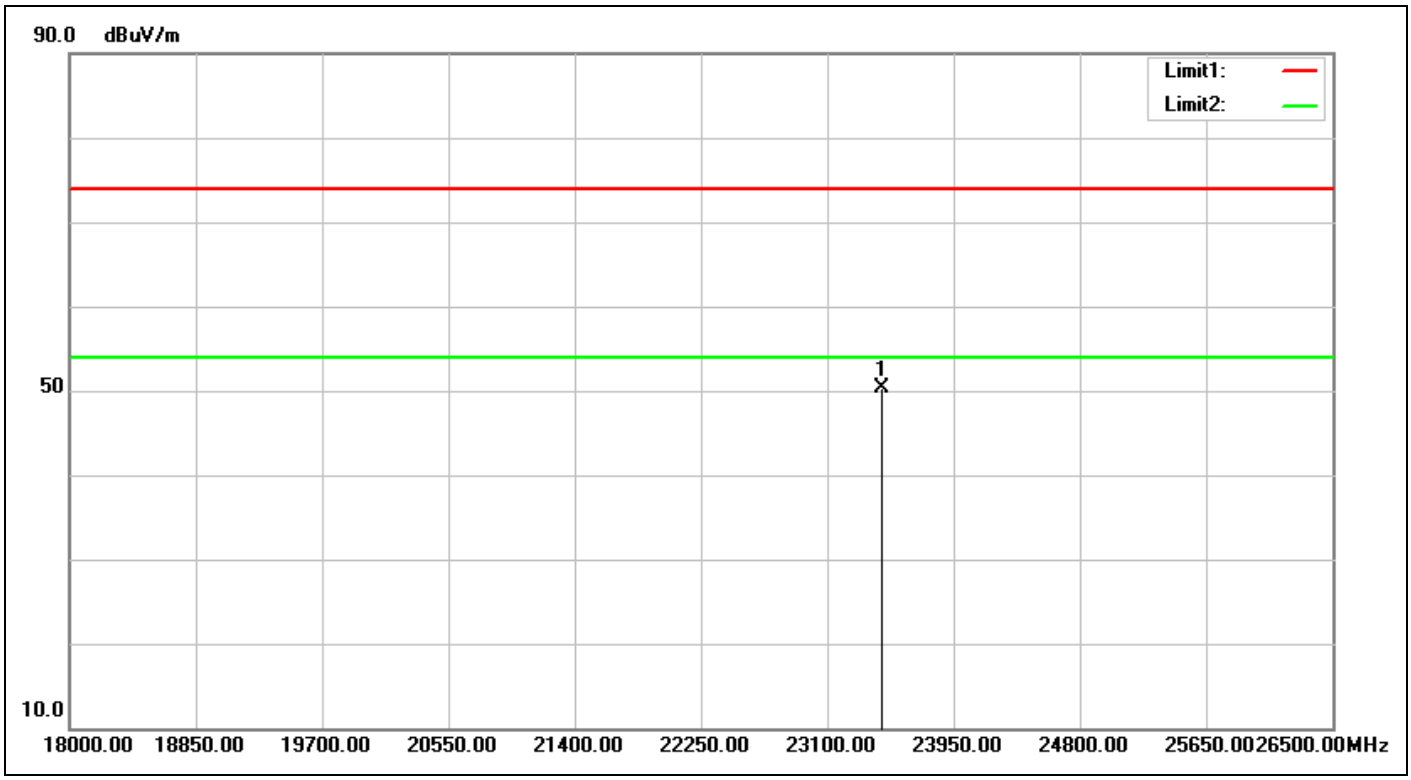

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 17:51:43**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2402-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	23465.500	32.40	18.00	50.40	74.00	-23.60	peak	100	300	

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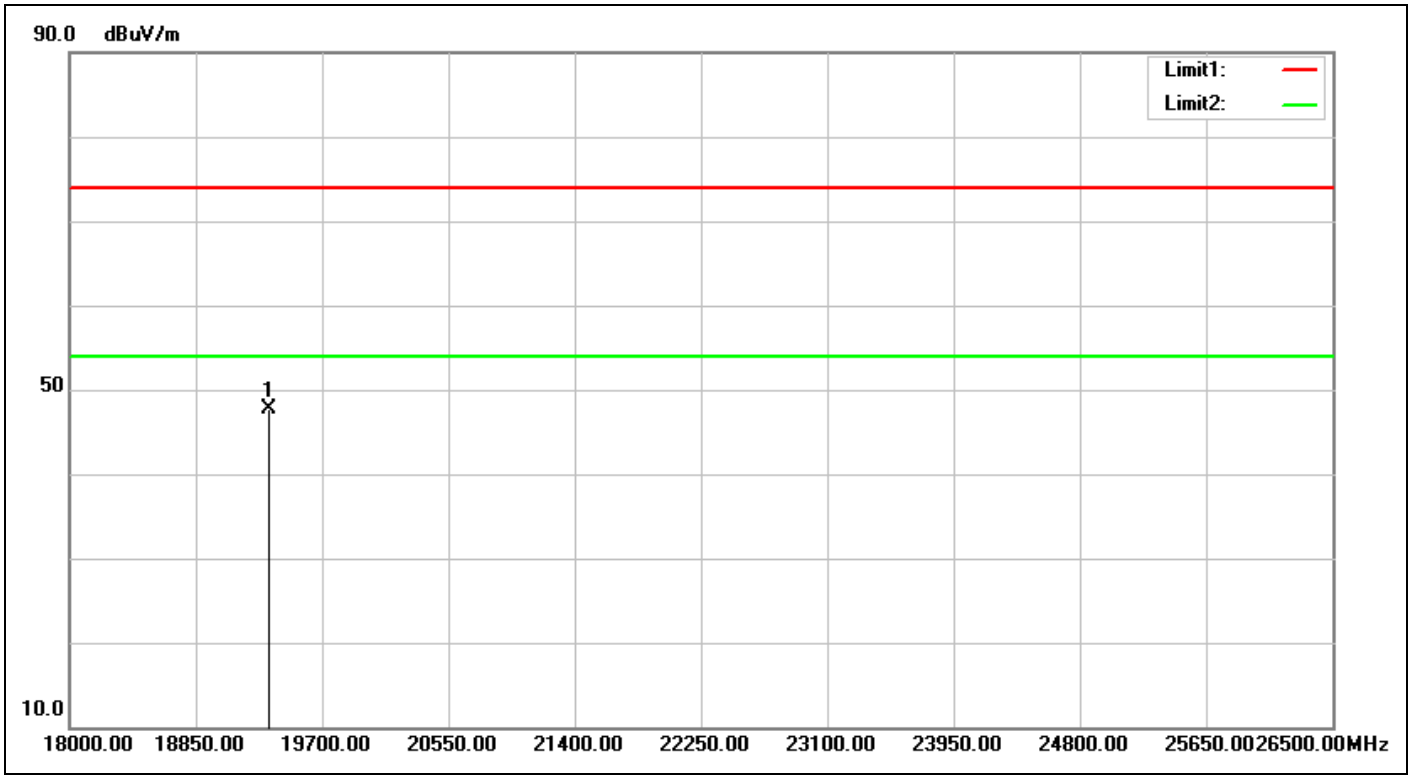

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 17:51:58**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2402-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	19343.000	29.74	18.06	47.80	74.00	-26.20	peak	100	327	

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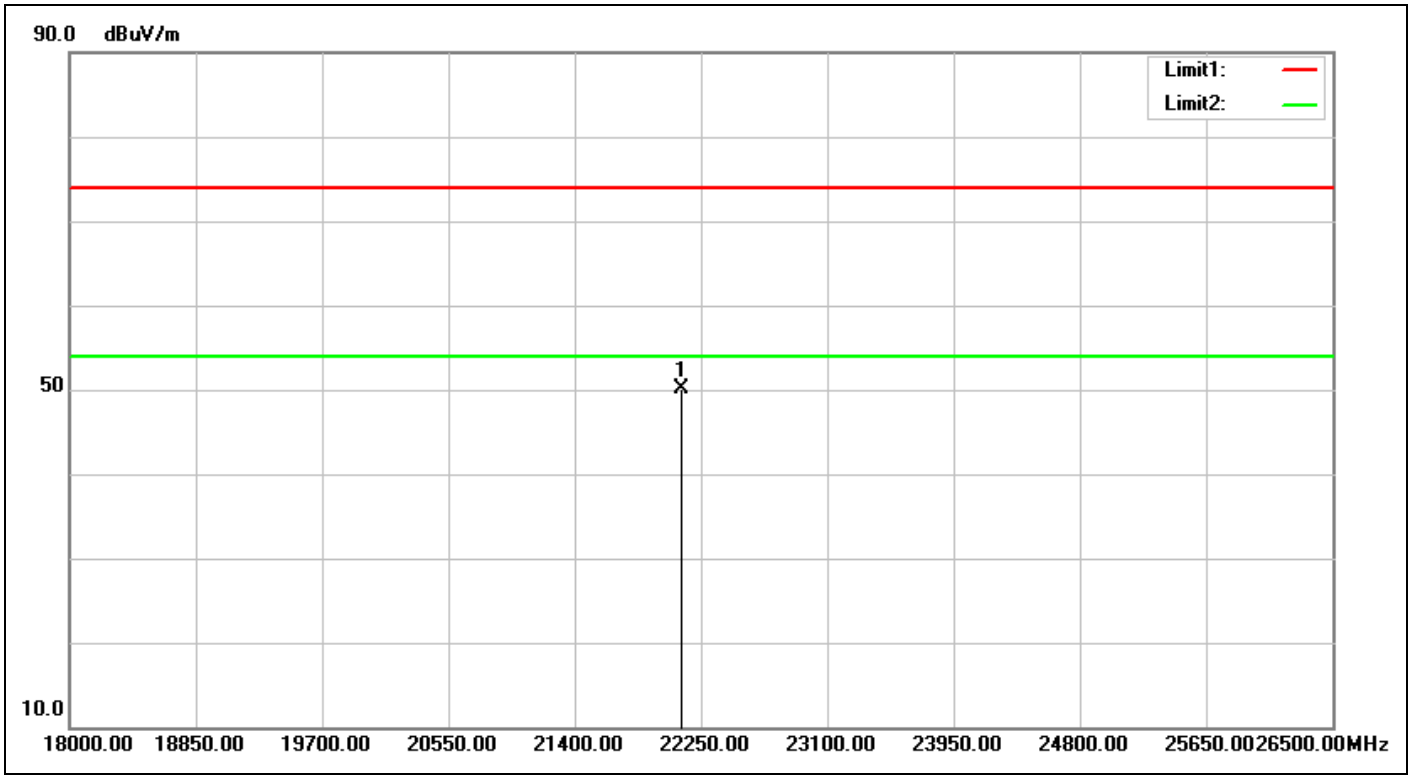

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 17:53:01**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2440-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	22122.500	32.50	17.68	50.18	74.00	-23.82	peak	100	128	

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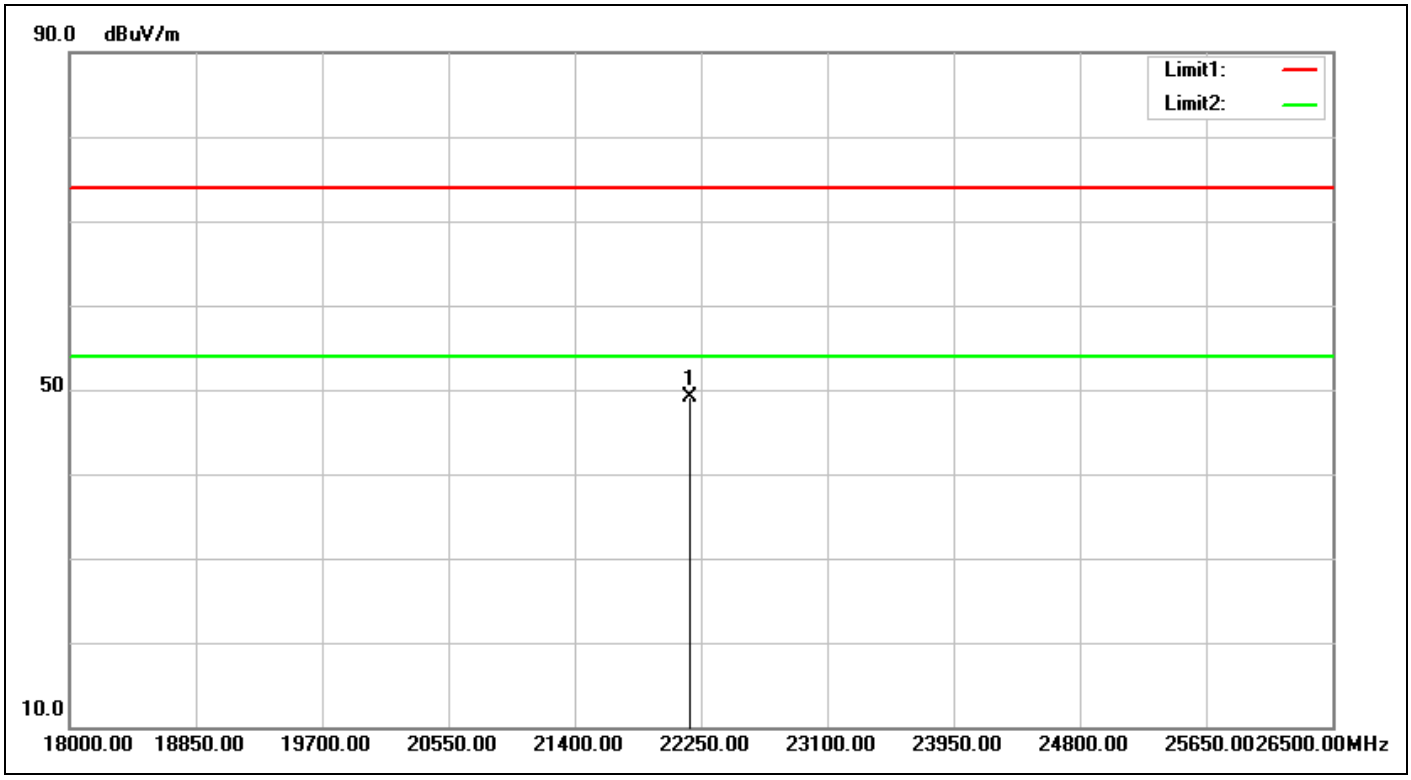

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 17:53:13**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2440-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	22173.500	32.47	16.70	49.17	74.00	-24.83	peak	100	135	

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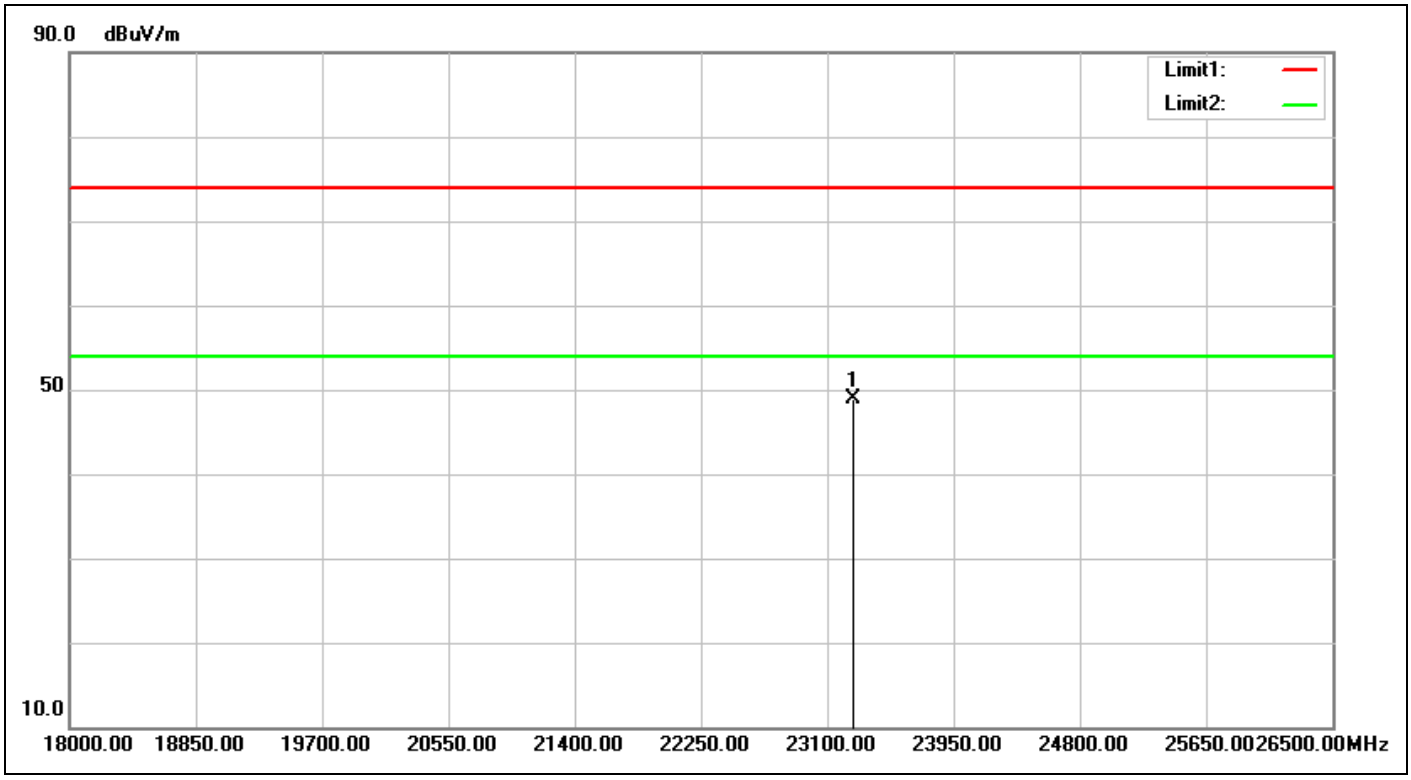

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC Above 1G PEAK**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 17:53:32**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2480-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	23270.000	32.20	16.73	48.93	74.00	-25.07	peak	100	135	

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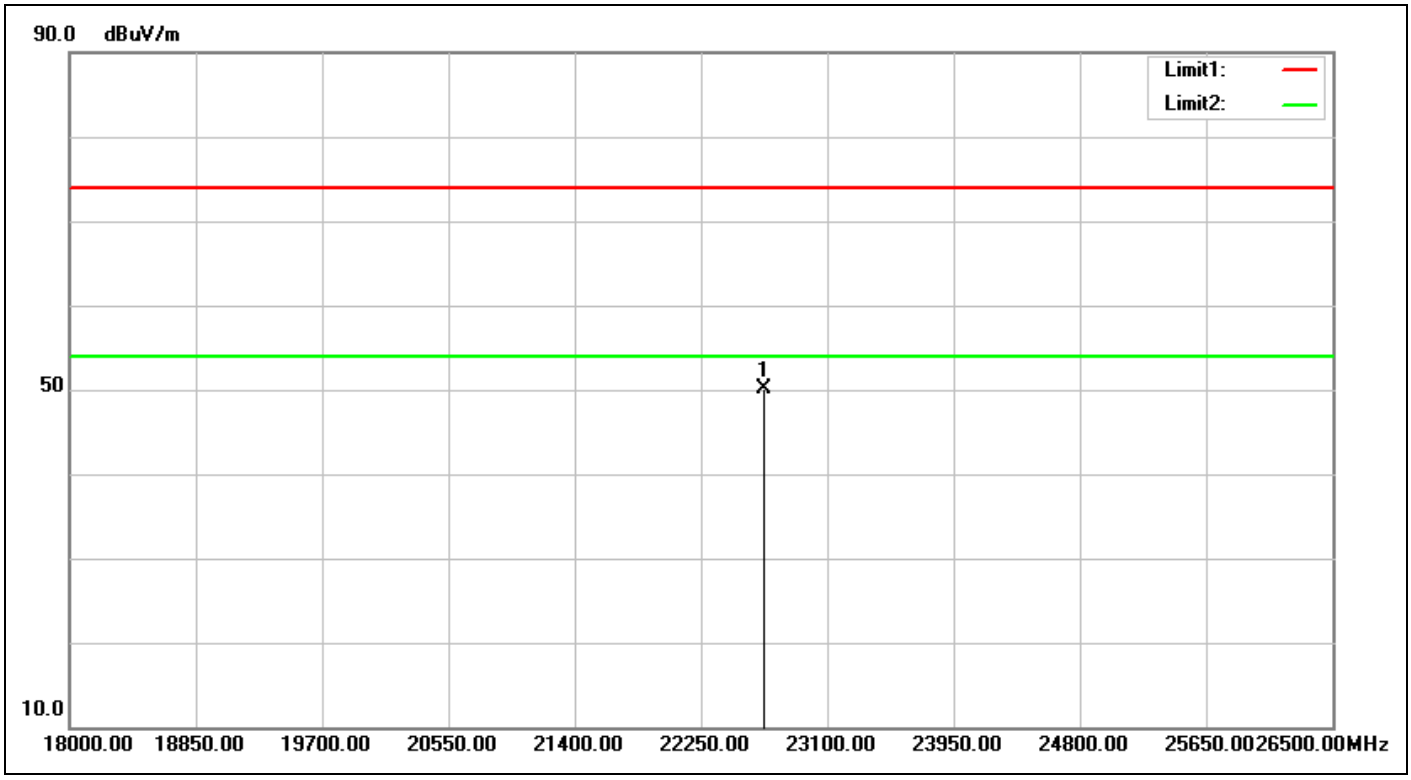

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC Above 1G PEAK**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 17:53:43**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2480-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	22675.000	32.13	17.88	50.01	74.00	-23.99	peak	100	167	

Spurious Emissions, TX Mode, 30M-1G

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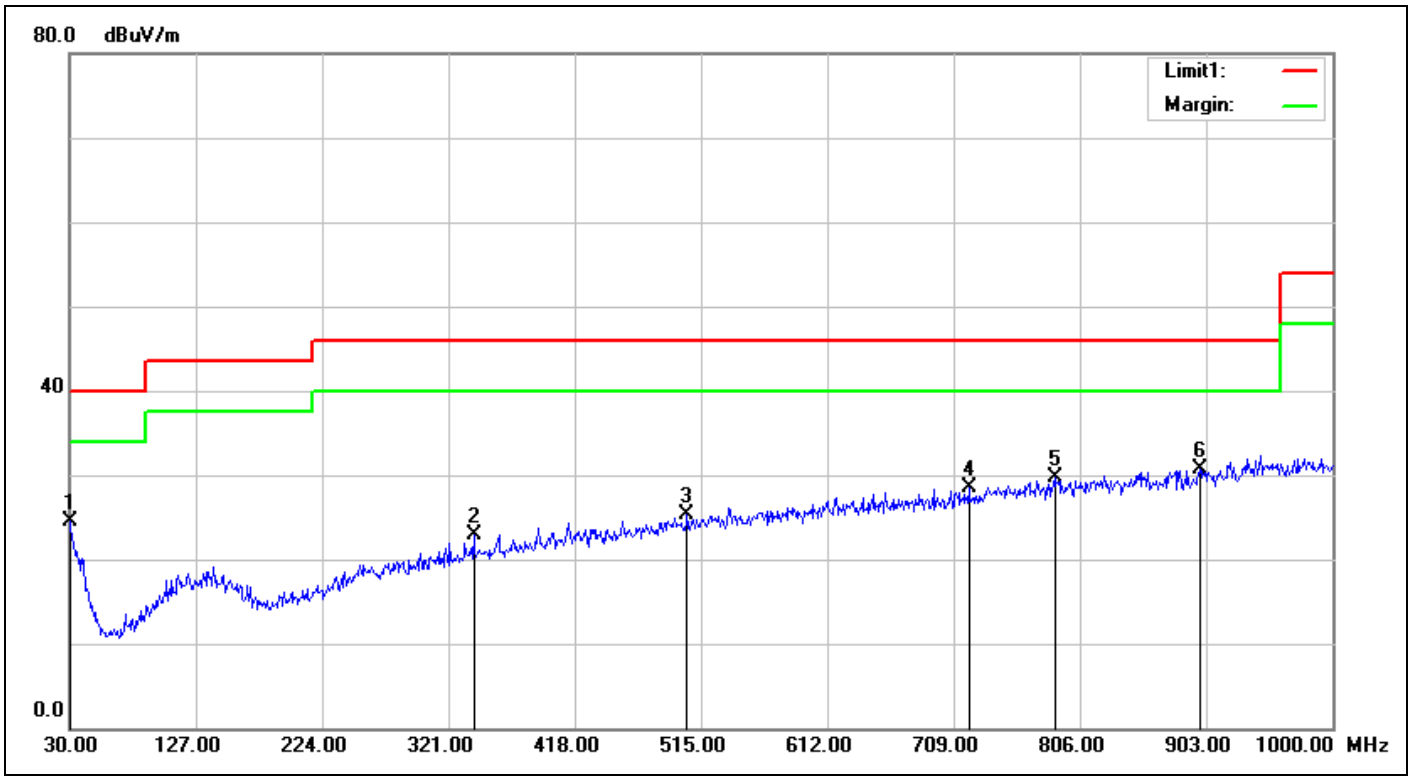

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC Class B 3M Radiation**	**Ant. Polarization:**	**Horizontal**
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 16:57:12**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2440-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	30.0000	-0.25	24.68	24.43	40.00	-15.57	QP	100	346	
2	340.4000	-3.59	26.54	22.95	46.00	-23.05	QP	100	23	
3	504.3300	-1.11	26.48	25.37	46.00	-20.63	QP	100	71	
4	720.6400	1.72	26.82	28.54	46.00	-17.46	QP	100	244	
5	786.6000	2.67	27.03	29.70	46.00	-16.30	QP	100	359	
6	898.1500	4.05	26.75	30.80	46.00	-15.20	QP	100	114	

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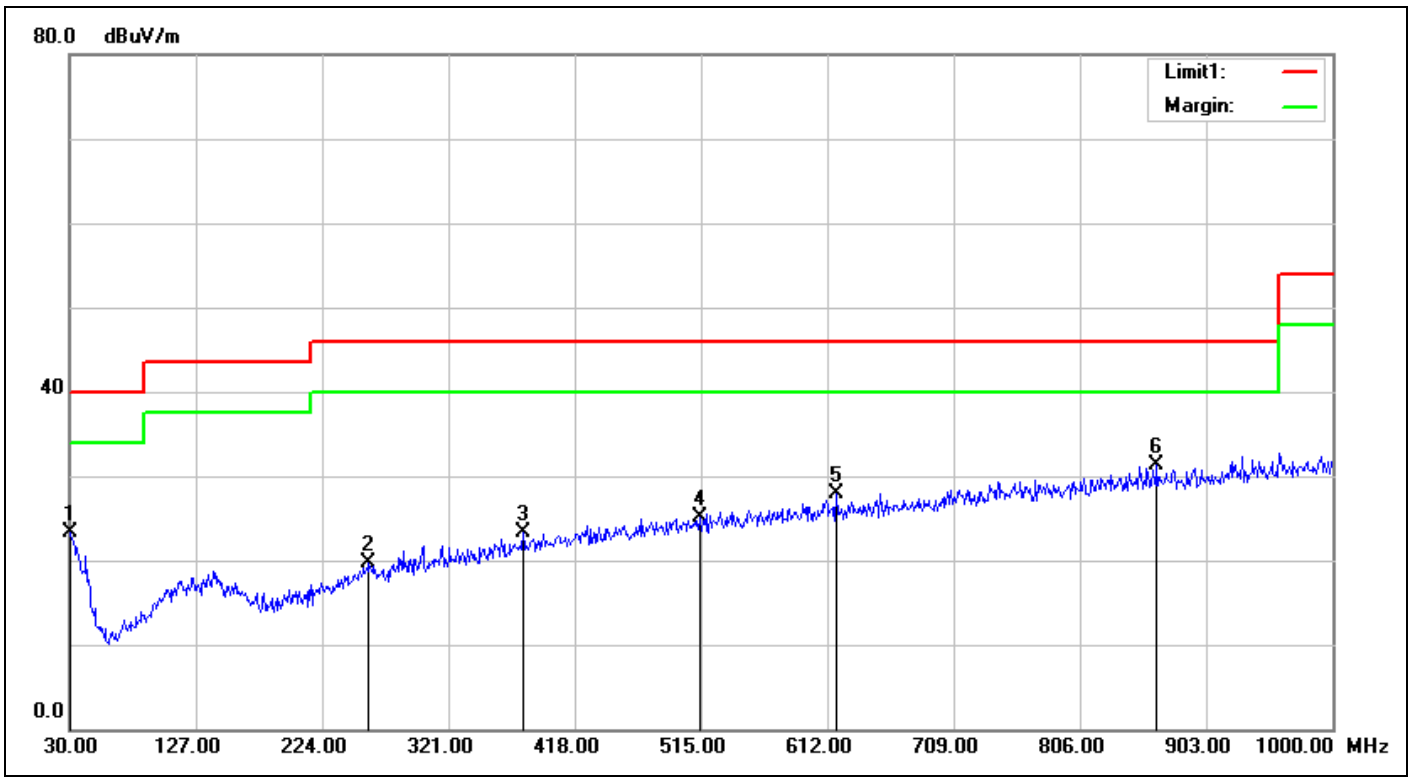

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC Class B 3M Radiation**	**Ant. Polarization:**	**Vertical**
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 16:58:15**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2440-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	30.0000	-0.25	23.54	23.29	40.00	-16.71	QP	100	27	
2	259.8900	-4.94	24.68	19.74	46.00	-26.26	QP	100	86	
3	378.2300	-2.83	26.05	23.22	46.00	-22.78	QP	100	180	
4	514.0300	-0.98	26.12	25.14	46.00	-20.86	QP	100	332	
5	618.7900	0.24	27.70	27.94	46.00	-18.06	QP	100	215	
6	865.1700	3.82	27.43	31.25	46.00	-14.75	QP	100	258	

Spurious Emissions, TX Mode, 150K-30M

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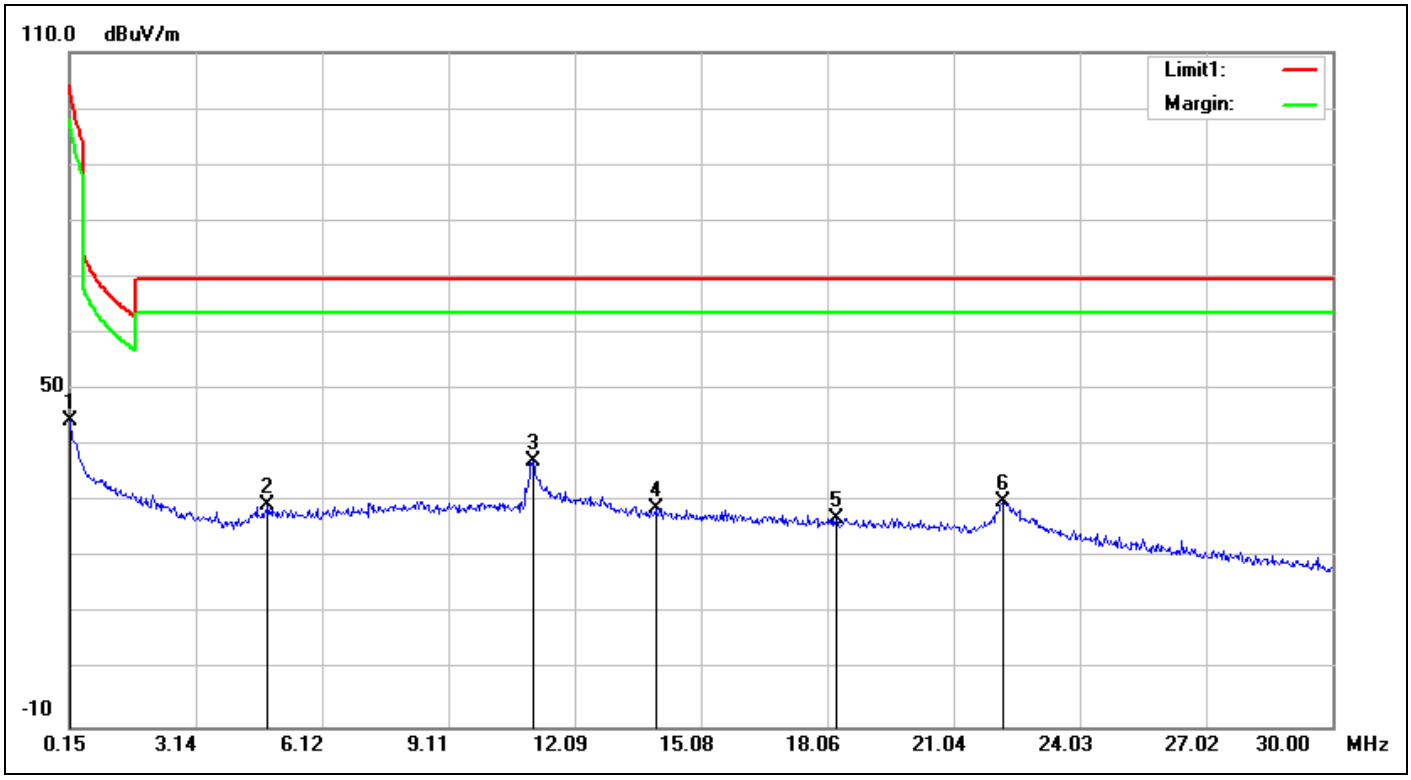

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC 15.209_9k-30M_3m(dBuV/m)**	**Ant. Polarization:**	
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 17:15:11**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2440-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	0.1500	19.08	25.38	44.46	104.08	-59.62	QP	100	255	
2	4.8364	19.66	9.81	29.47	69.54	-40.07	QP	100	178	
3	11.1049	20.42	16.81	37.23	69.54	-32.31	QP	100	307	
4	14.0004	20.93	8.03	28.96	69.54	-40.58	QP	100	111	
5	18.2689	21.68	5.49	27.17	69.54	-42.37	QP	100	222	
6	22.2091	22.13	7.83	29.96	69.54	-39.58	QP	100	296	

Spurious Emissions, TX Mode, 9K-150K

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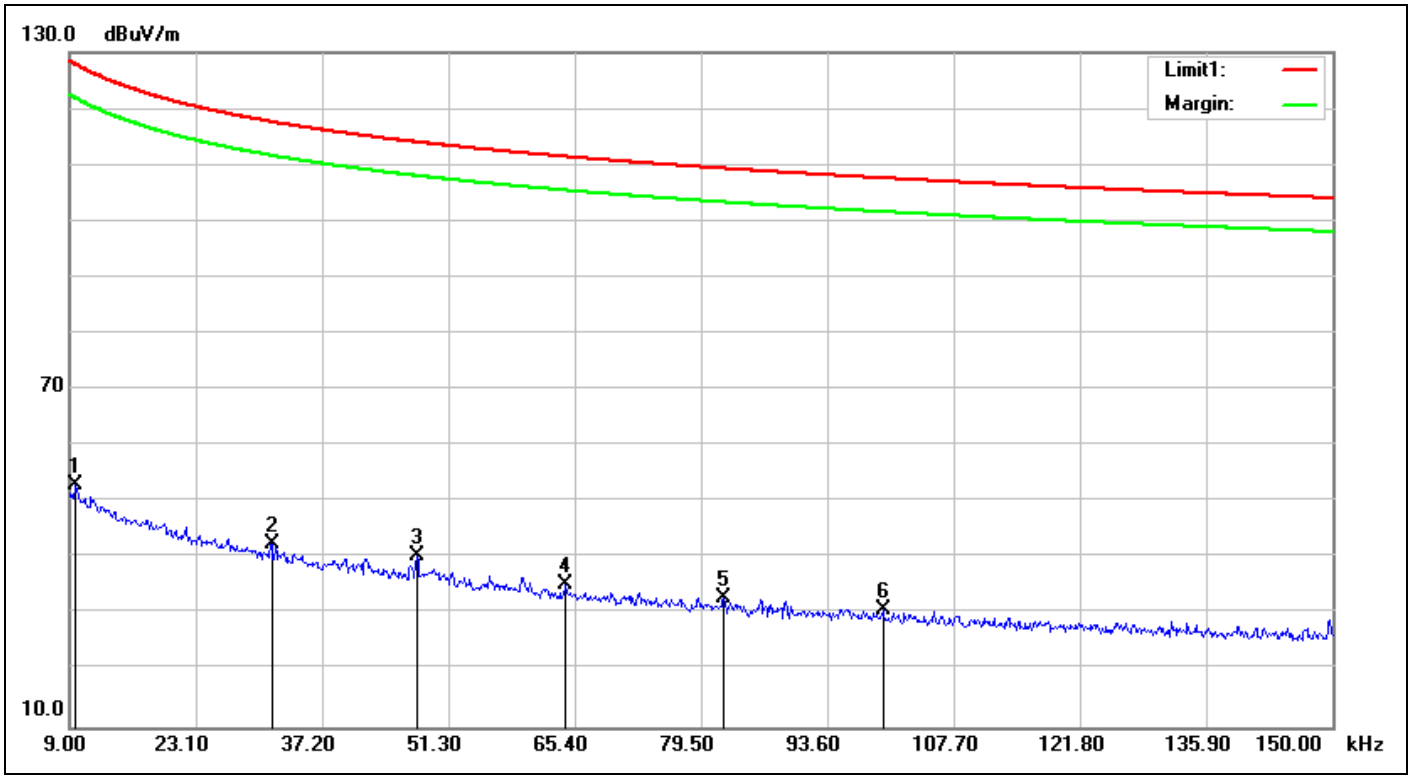

Service No.:	**114070205**	**Test Distance:**	**3m**
Test Standard:	**FCC 15.209_9k-30M_3m(dBuV/m)**	**Ant. Polarization:**	
Test item:	**Radiation Emission**	**Test Time:**	**2017/12/15 17:08:44**
Applicant:	**TracMo, Inc.**	**Test Rating:**	**DC 3V**
Product:	**TracMo**	**Temp.(℃)/Hum.(%):**	**25(℃)/56%**
Model No.:	**TRACMO3**	**Test Engineer:**	**Amy Hsu**
Test Mode:	**2440-TX**		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (∘)	Remark
1	0.0097	19.81	33.19	53.00	127.87	-74.87	QP	100	157	
2	0.0315	20.08	22.38	42.46	117.64	-75.18	QP	100	104	
3	0.0477	19.51	20.97	40.48	114.03	-73.55	QP	100	360	
4	0.0644	19.34	15.98	35.32	111.43	-76.11	QP	100	328	
5	0.0820	19.24	13.77	33.01	109.33	-76.32	QP	100	159	
6	0.0998	19.13	11.77	30.90	107.62	-76.72	QP	100	135	