# Test Report No.50068668 001

# Appendix D: Radiated and Mains Spurious Emission Data

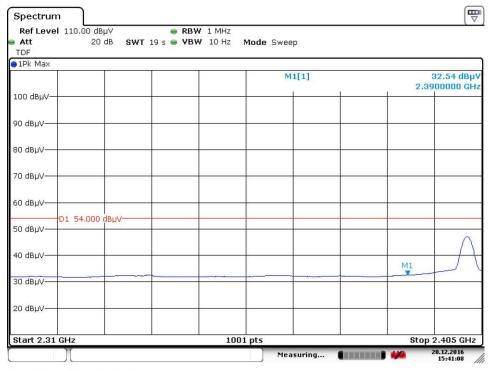
(File: 50068668AppendixD)

# Contents

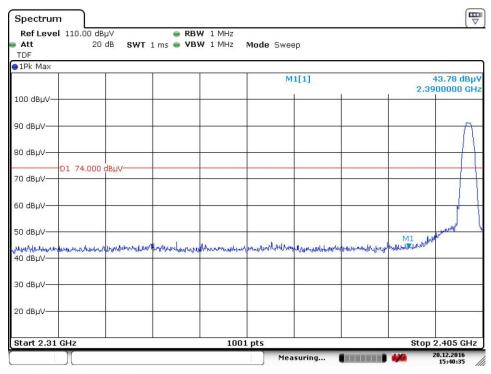
Spurious Emissions, Band Edges, 2.35-2.5G	2
Spurious Emissions, TX Mode, 1-18G	6
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# Radiated Bandedge (GFSK)

## Low Channel (Hor)

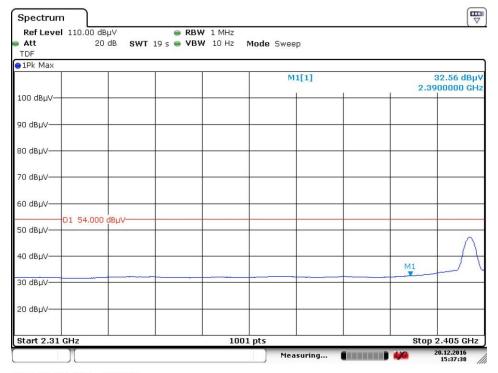


Date: 20.DEC.2016 15:41:08

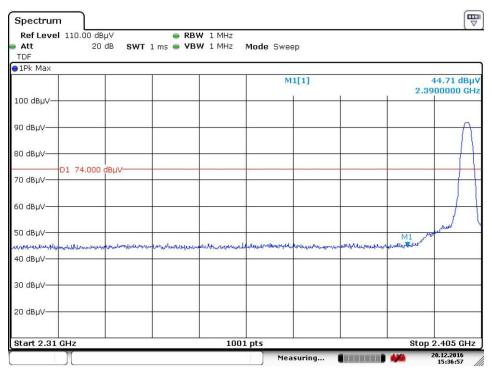


Date: 20.DEC.2016 15:40:35

## Low Channel (Ver)



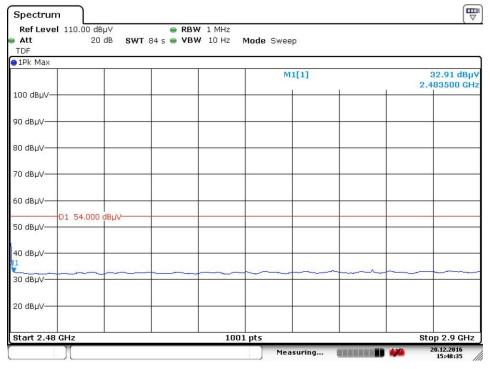
Date: 20.DEC.2016 15:37:38



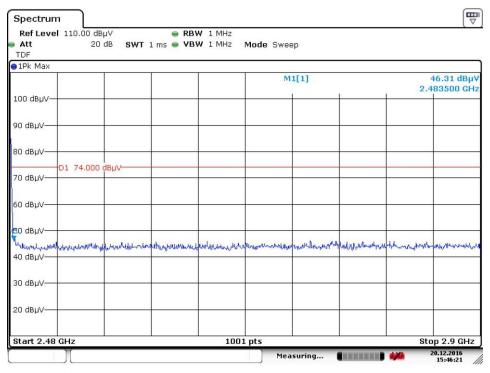
Date: 20.DEC.2016 15:36:57

# Radiated Bandedge (GFSK)

# **High Channel (Hor)**

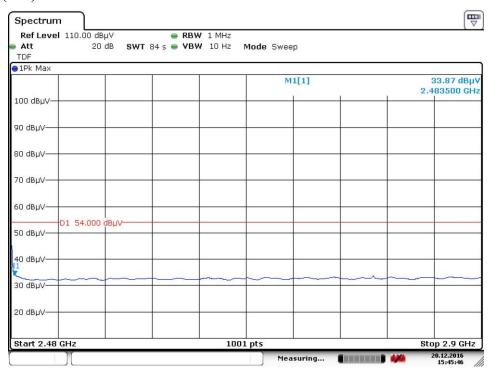


Date: 20.DEC.2016 15:48:35

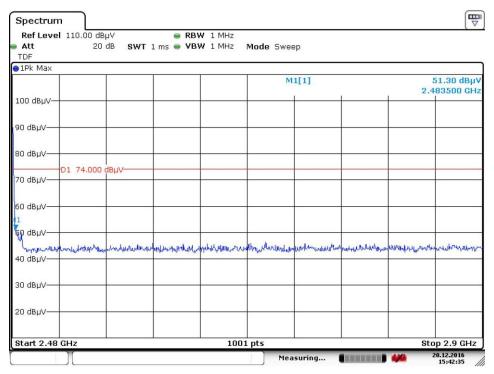


Date: 20.DEC.2016 15:46:21

# High Channel (Ver)



Date: 20.DEC.2016 15:45:46



Date: 20.DEC.2016 15:42:35

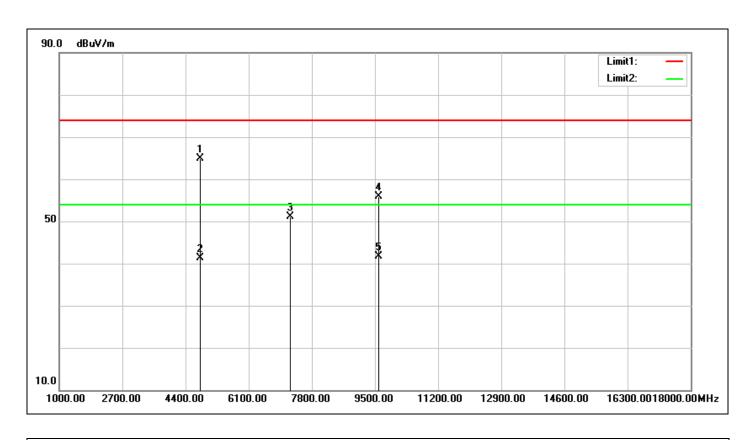
# Spurious Emissions, TX Mode, 1-18G



#### **TUV Taiwan**

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

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



Service No.: 114058182(BK3-12M-D)-FCC Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2016/12/20 14:33:27

Applicant: General Life Test Rating: DC 3V

Product: Multi-Monitoring System Temp.( $^{\circ}$ )/Hum.( $^{\circ}$ ): 21.2( $^{\circ}$ )/59%

Model No.: BK3-12M-D Test Engineer: George Yang

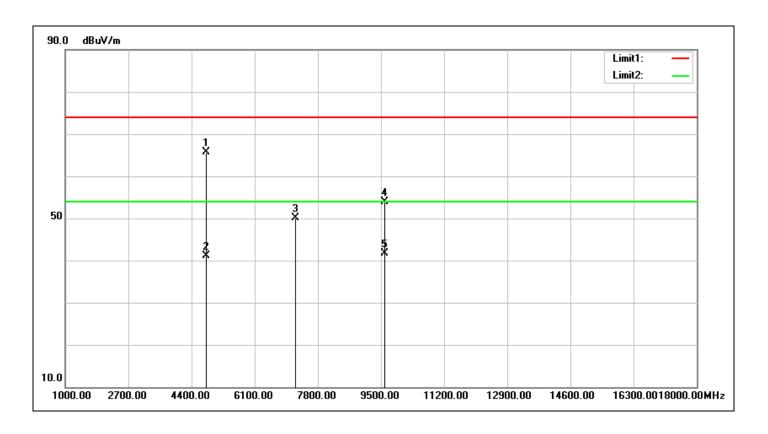
Test Mode: 2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4804.000	-2.66	67.50	64.84	74.00	-9.16	peak	100	239	
2	4804.000	-2.66	43.87	41.21	74.00	-32.79	peak	100	239	
3	7206.000	5.58	45.47	51.05	74.00	-22.95	peak		0	
4	9608.000	6.34	49.47	55.81	74.00	-18.19	peak	100	206	
5	9608.000	6.34	35.34	41.68	54.00	-12.32	AVG	100	206	



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

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



Service No.: 114058182(BK3-12M-D)-FCC Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2016/12/20 14:34:30

Applicant: General Life Test Rating: DC 3V

Product: Multi-Monitoring System Temp.(°C)/Hum.(%): 21.2(°C)/59%

Model No.: BK3-12M-D Test Engineer: George Yang

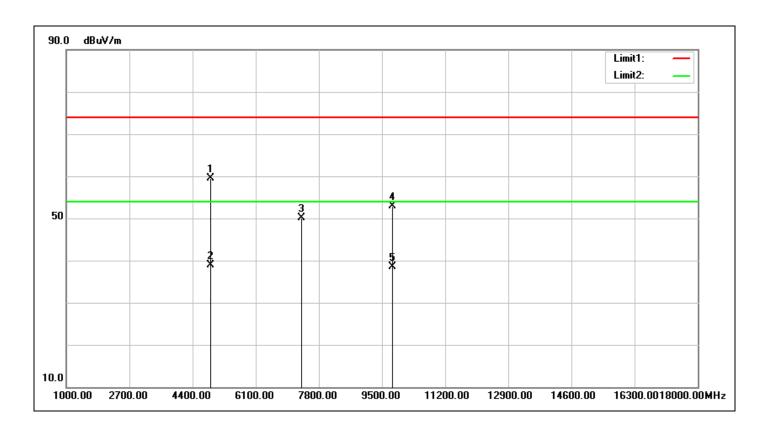
Test Mode: 2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4804.000	-2.66	68.38	65.72	74.00	-8.28	peak	100	168	
2	4804.000	-2.66	43.82	41.16	54.00	-12.84	AVG	100	168	
3	7206.000	5.58	44.55	50.13	74.00	-23.87	peak			
4	9608.000	6.34	47.54	53.88	74.00	-20.12	peak	100	183	
5	9608.000	6.34	35.32	41.66	54.00	-12.34	AVG	100	183	



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

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Service No.: 114058182(BK3-12M-D)-FCC Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2016/12/20 14:50:28

Applicant: General Life Test Rating: DC 3V

Product: Multi-Monitoring System Temp.(°C)/Hum.(%): 21.2(°C)/59%

Model No.: BK3-12M-D Test Engineer: George Yang

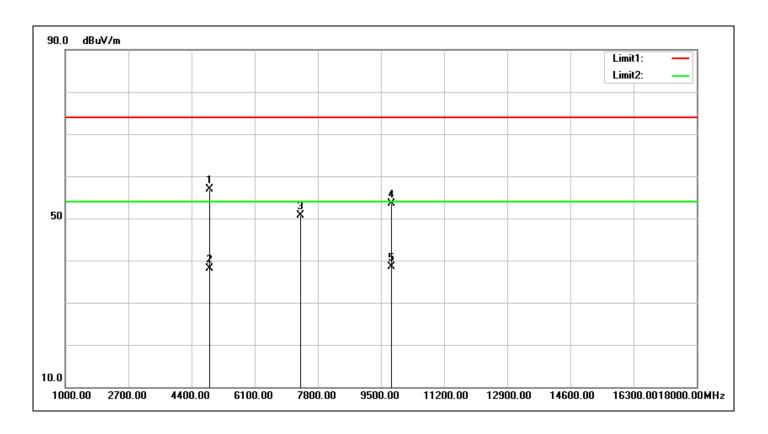
Test Mode: 2440-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4880.000	-2.48	62.00	59.52	74.00	-14.48	peak	100	190	
2	4880.000	-2.48	41.37	38.89	54.00	-15.11	AVG	100	190	
3	7320.000	5.93	44.12	50.05	74.00	-23.95	peak			
4	9760.000	6.02	46.87	52.89	74.00	-21.11	peak	100	96	
5	9760.000	6.02	32.50	38.52	54.00	-15.48	AVG	100	96	



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Service No.: 114058182(BK3-12M-D)-FCC Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2016/12/20 14:51:31

Applicant: General Life Test Rating: DC 3V

Product: Multi-Monitoring System Temp.(°C)/Hum.(%): 21.2(°C)/59%

Model No.: BK3-12M-D Test Engineer: George Yang

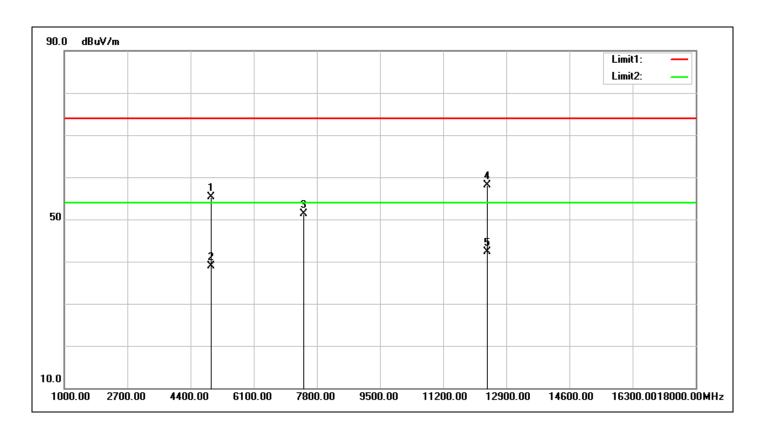
Test Mode: 2440-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4880.000	-2.48	59.43	56.95	74.00	-17.05	peak	100	186	
2	4880.000	-2.48	40.54	38.06	54.00	-15.94	AVG	100	186	
3	7320.000	5.93	44.80	50.73	74.00	-23.27	peak			
4	9760.000	6.02	47.50	53.52	74.00	-20.48	peak	100	131	
5	9760.000	6.02	32.51	38.53	54.00	-15.47	AVG	100	131	



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

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Service No.: 114058182(BK3-12M-D)-FCC Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2016/12/20 14:57:55

Applicant: General Life Test Rating: DC 3V

Product: Multi-Monitoring System Temp.(°C)/Hum.(%): 21.2(°C)/59%

Model No.: BK3-12M-D Test Engineer: George Yang

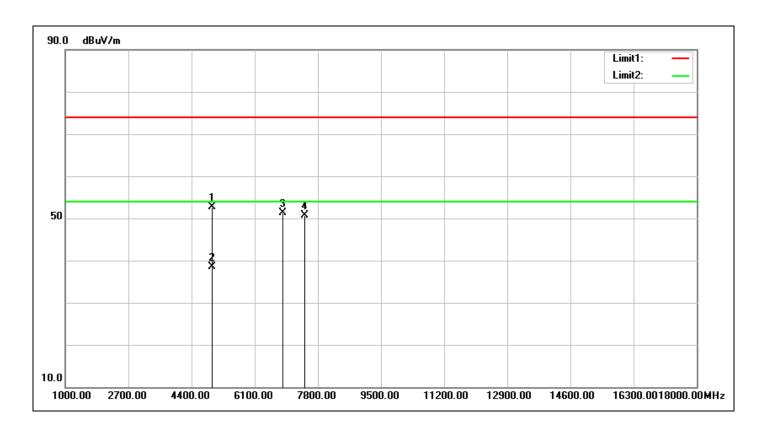
Test Mode: 2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	4960.000	-2.31	57.59	55.28	74.00	-18.72	peak	100	216	
2	4960.000	-2.31	41.12	38.81	54.00	-15.19	AVG	100	216	
3	7440.000	6.28	45.08	51.36	74.00	-22.64	peak			
4	12400.000	8.79	49.39	58.18	74.00	-15.82	peak	100	14	
5	12400.000	8.79	33.61	42.40	54.00	-11.60	AVG	100	14	



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

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Service No.: 114058182(BK3-12M-D)-FCC Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2016/12/20 14:58:58

Applicant: General Life Test Rating: DC 3V

Product: Multi-Monitoring System Temp.(°C)/Hum.(%): 21.2(°C)/59%

Model No.: BK3-12M-D Test Engineer: George Yang

Test Mode: 2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	4960.000	-2.31	55.10	52.79	74.00	-21.21	peak	100	171	
2	4960.000	-2.31	40.73	38.42	54.00	-15.58	AVG	100	171	
3	6865.000	5.12	46.12	51.24	74.00	-22.76	peak	100	326	
4	7440.000	6.28	44.40	50.68	74.00	-23.32	peak			

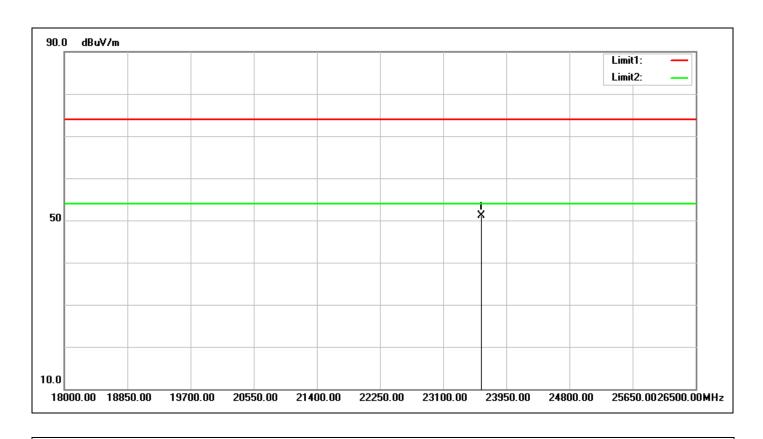
# Spurious Emissions, TX Mode, 18-26G



#### **TUV Taiwan**

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

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



Service No.: 114058182(BK3-12M-D)-FCC Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2016/12/20 15:13:38

Applicant: General Life Test Rating: DC 3V

Product: Multi-Monitoring System Temp.(°C)/Hum.(%): 21.2(°C)/59%

Model No.: BK3-12M-D Test Engineer: George Yang

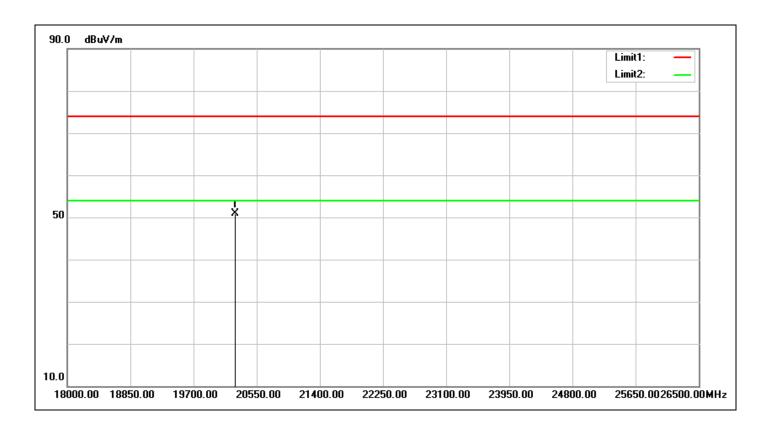
Test Mode: 2402-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	23618.500	32.60	18.47	51.07	74.00	-22.93	peak		0	



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

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Service No.: 114058182(BK3-12M-D)-FCC Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2016/12/20 15:13:46

Applicant: General Life Test Rating: DC 3V

Product: Multi-Monitoring System Temp.(°C)/Hum.(%): 21.2(°C)/59%

Model No.: BK3-12M-D Test Engineer: George Yang

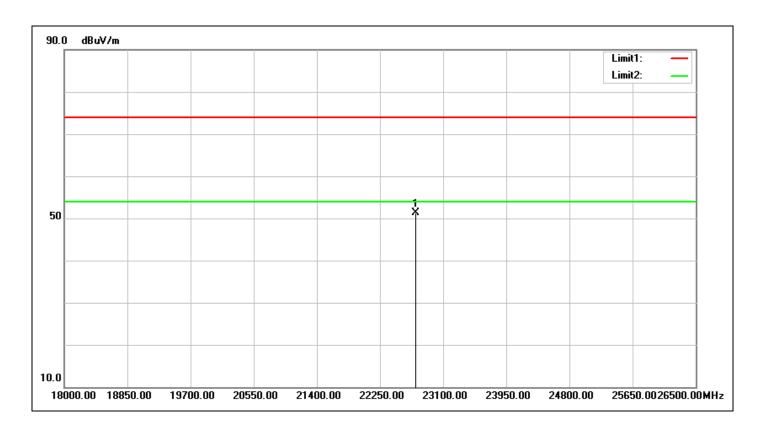
Test Mode: 2402-TX

I	No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
		(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
	1	20261.000	31.61	19.23	50.84	74.00	-23.16	peak			



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Service No.: 114058182(BK3-12M-D)-FCC Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2016/12/20 15:14:05

Applicant: General Life Test Rating: DC 3V

Product: Multi-Monitoring System Temp.(°C)/Hum.(%): 21.2(°C)/59%

Model No.: BK3-12M-D Test Engineer: George Yang

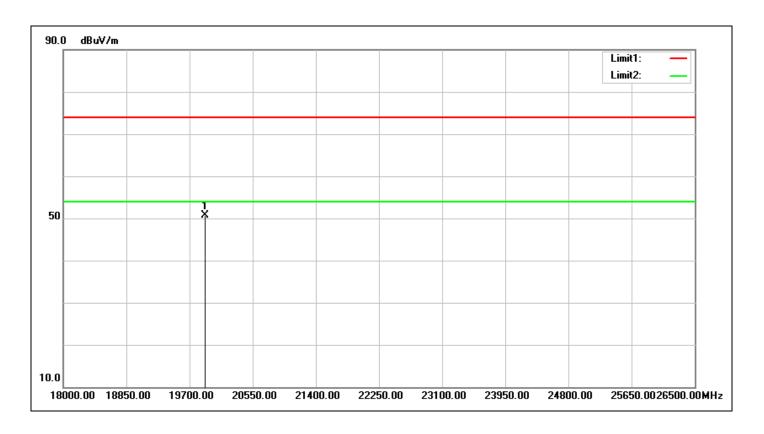
Test Mode: 2440-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	22726.000	32.71	18.68	51.39	74.00	-22.61	peak			



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



Service No.: 114058182(BK3-12M-D)-FCC Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2016/12/20 15:14:14

Applicant: General Life Test Rating: DC 3V

Product: Multi-Monitoring System Temp.(°C)/Hum.(%): 21.2(°C)/59%

Model No.: BK3-12M-D Test Engineer: George Yang

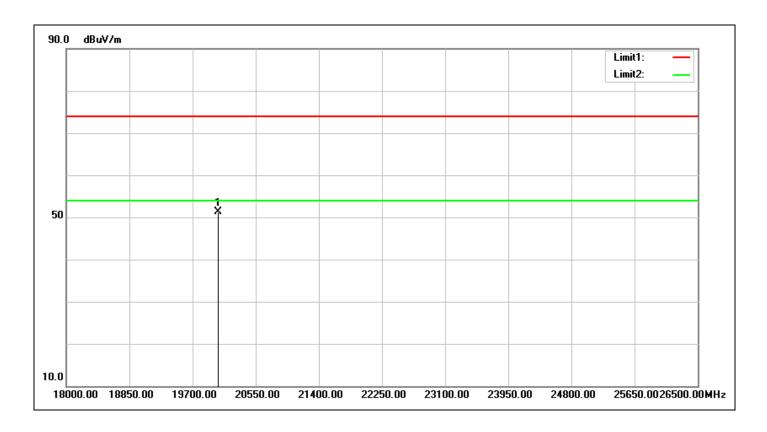
Test Mode: 2440-TX

No	. Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	19912.500	31.44	19.20	50.64	74.00	-23.36	peak			



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

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



Service No.: 114058182(BK3-12M-D)-FCC Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2016/12/20 15:14:26

Applicant: General Life Test Rating: DC 3V

Product: Multi-Monitoring System Temp.(°C)/Hum.(%): 21.2(°C)/59%

Model No.: BK3-12M-D Test Engineer: George Yang

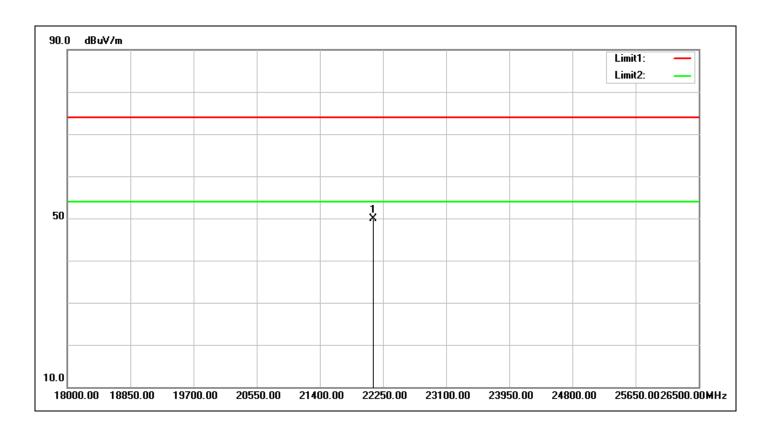
Test Mode: 2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	( • )	
1	20040.000	31.51	19.86	51.37	74.00	-22.63	peak			



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

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



Service No.: 114058182(BK3-12M-D)-FCC Test Distance: 3m

Test Standard: FCC Above 1G PEAK Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2016/12/20 15:14:36

Applicant: General Life Test Rating: DC 3V

Product: Multi-Monitoring System Temp.(°C)/Hum.(%): 21.2(°C)/59%

Model No.: BK3-12M-D Test Engineer: George Yang

Test Mode: 2480-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	22114.000	33.06	16.76	49.82	74.00	-24.18	peak			

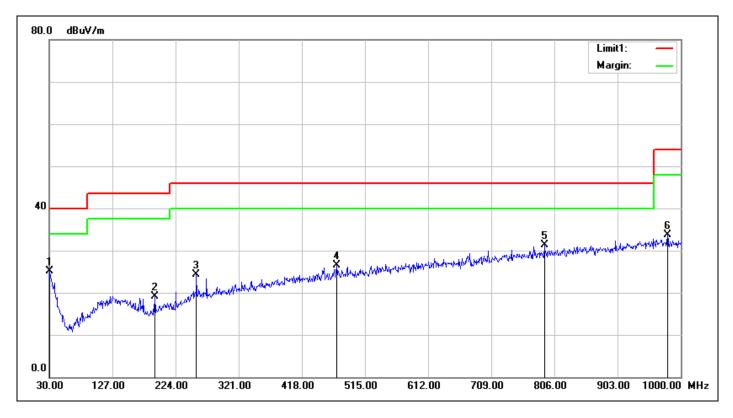
# Spurious Emissions, TX Mode, 30M-1G



#### **TUV Taiwan**

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

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



Service No.: 114058182(BK3-12M-D)-FCC Test Distance: 3m

Test Standard: FCC Class B 3M Radiation Ant. Polarization: Horizontal

Test item: Radiation Emission Test Time: 2016/12/20 15:25:39

Applicant: General Life Test Rating: DC 3V

Product: Multi-Monitoring System Temp.(°C)/Hum.(%): 21.2(°C)/59%

Model No.: BK3-12M-D Test Engineer: George Yang

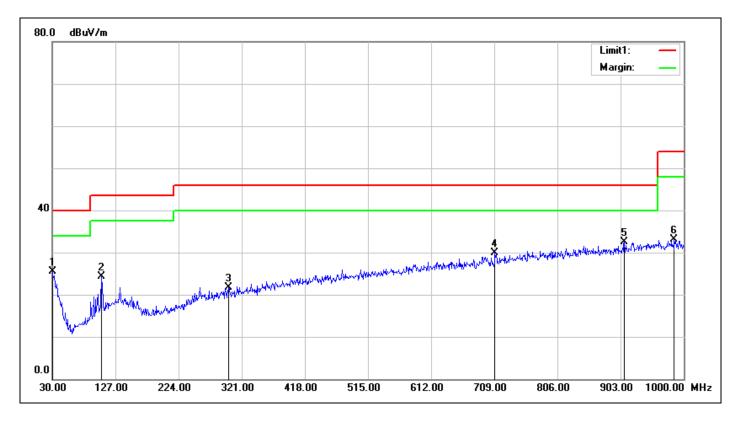
Test Mode: 2440-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	30.0000	-0.07	25.15	25.08	40.00	-14.92	QP	100	215	
2	191.9900	-9.43	28.56	19.13	43.50	-24.37	QP	100	188	
3	256.0099	-5.22	29.43	24.21	46.00	-21.79	QP	100	175	
4	471.3500	-1.74	28.27	26.53	46.00	-19.47	QP	100	64	
5	790.4800	2.72	28.53	31.25	46.00	-14.75	QP	100	78	
6	979.6299	5.65	28.09	33.74	54.00	-20.26	QP	100	97	



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

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



Service No.: 114058182(BK3-12M-D)-FCC Test Distance: 3m

Test Standard: FCC Class B 3M Radiation Ant. Polarization: Vertical

Test item: Radiation Emission Test Time: 2016/12/20 15:26:43

Applicant: General Life Test Rating: DC 3V

Product: Multi-Monitoring System Temp.(°C)/Hum.(%): 21.2(°C)/59%

Model No.: BK3-12M-D Test Engineer: George Yang

Test Mode: 2440-TX

No.	Frequency	Factor	Reading	Level	Limit	Margin	Det.	Height	Azimuth	Remark
	(MHz)	(dB/m)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)		(cm)	(•)	
1	30.0000	-0.07	25.56	25.49	40.00	-14.51	QP	100	193	
2	105.6599	-8.75	32.97	24.22	43.50	-19.28	QP	100	360	
3	300.6298	-4.46	26.12	21.66	46.00	-24.34	QP	100	64	
4	709.9699	1.33	28.67	30.00	46.00	-16.00	QP	100	155	
5	908.8200	4.38	28.07	32.45	46.00	-13.55	QP	100	48	
6	985.4500	5.70	27.47	33.17	54.00	-20.83	QP	100	2	