

Test Report No.50152542 001

Appendix D: Radiated and Mains Spurious Emission Data

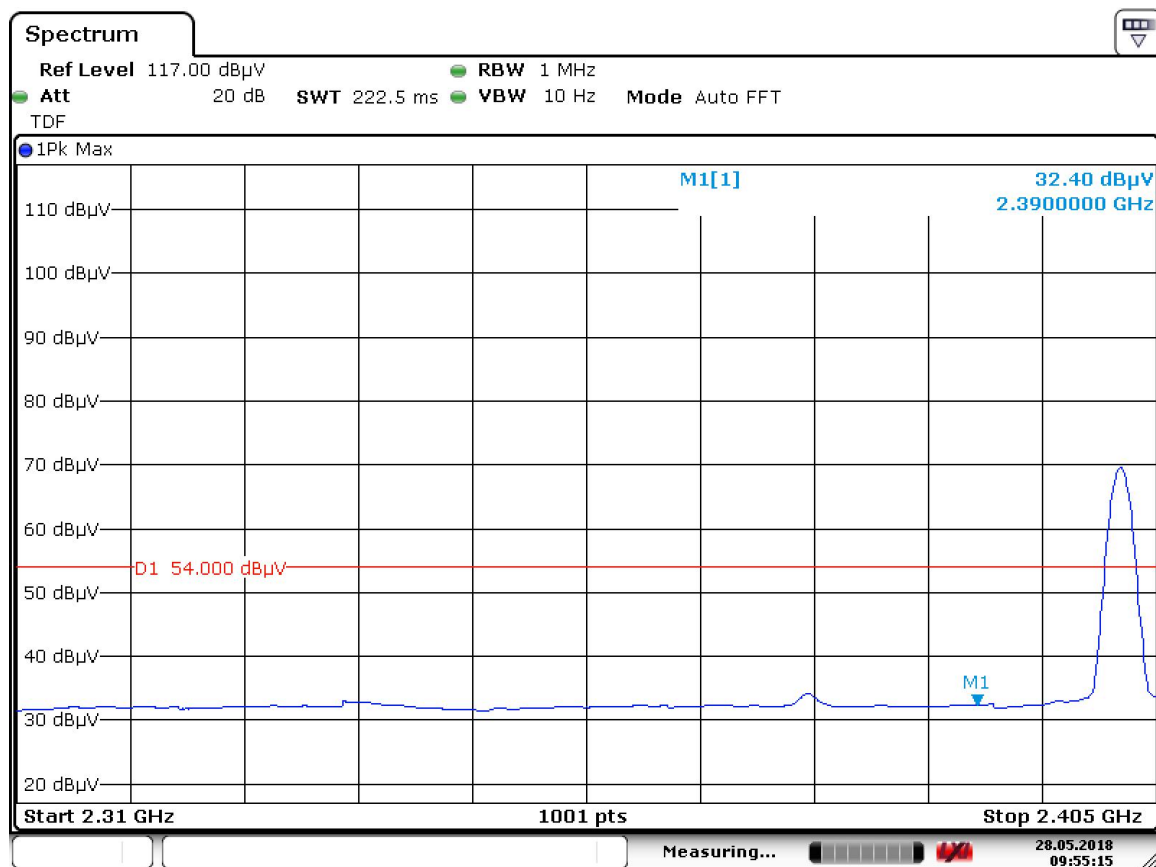
(File: 50152542AppendixD)

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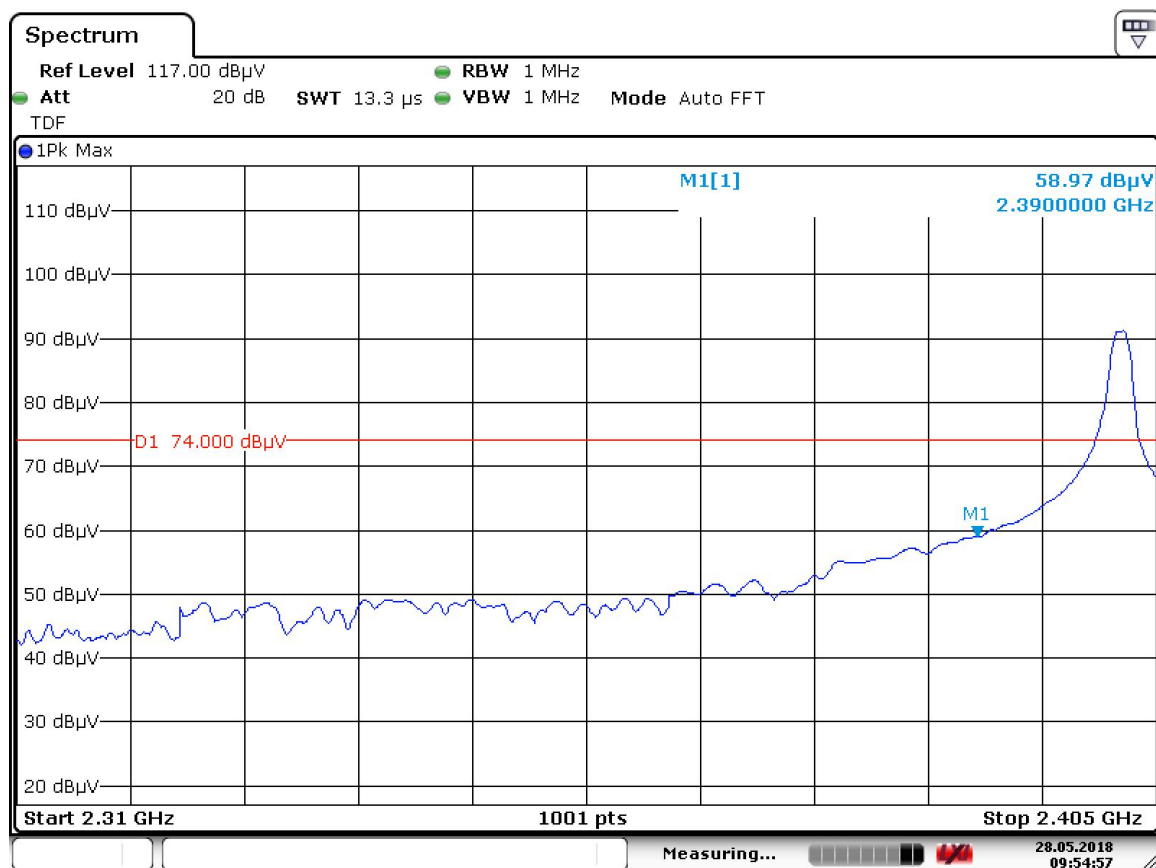
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Low Channel (Hor)

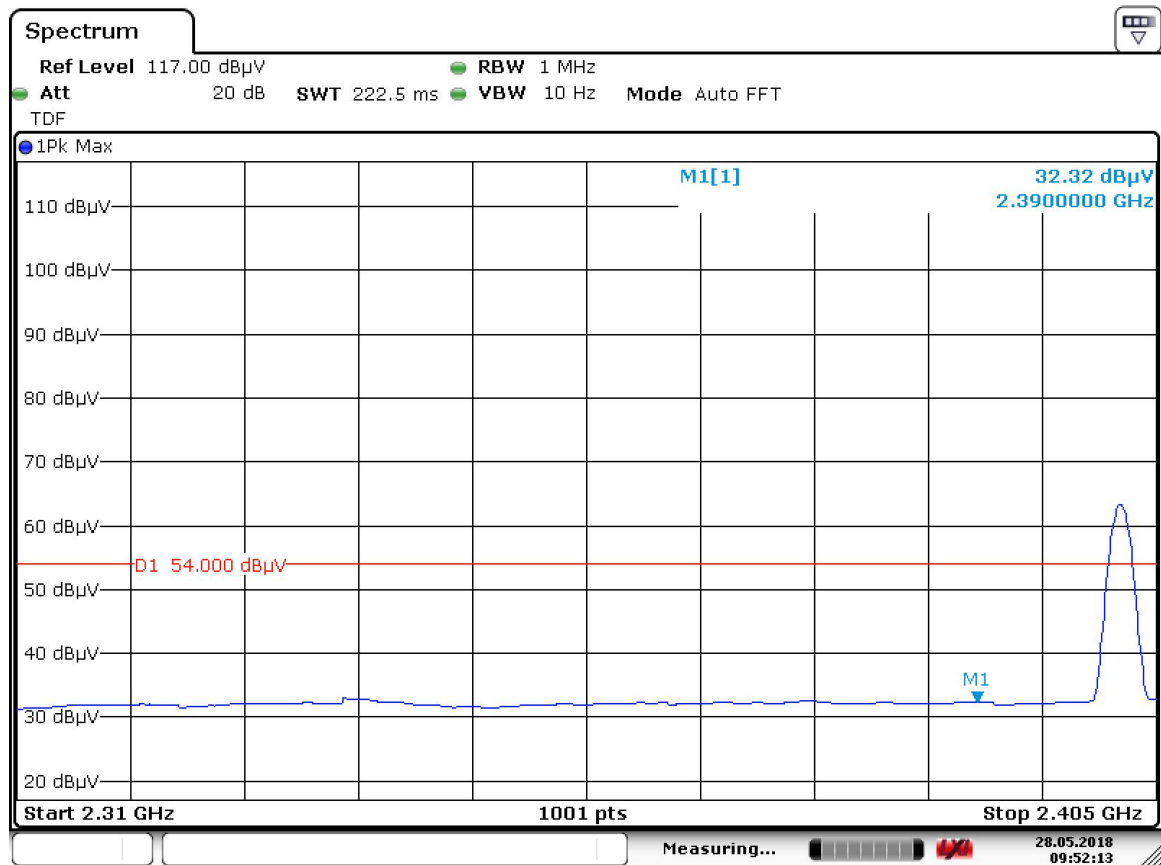


Date: 28.MAY.2018 09:55:15

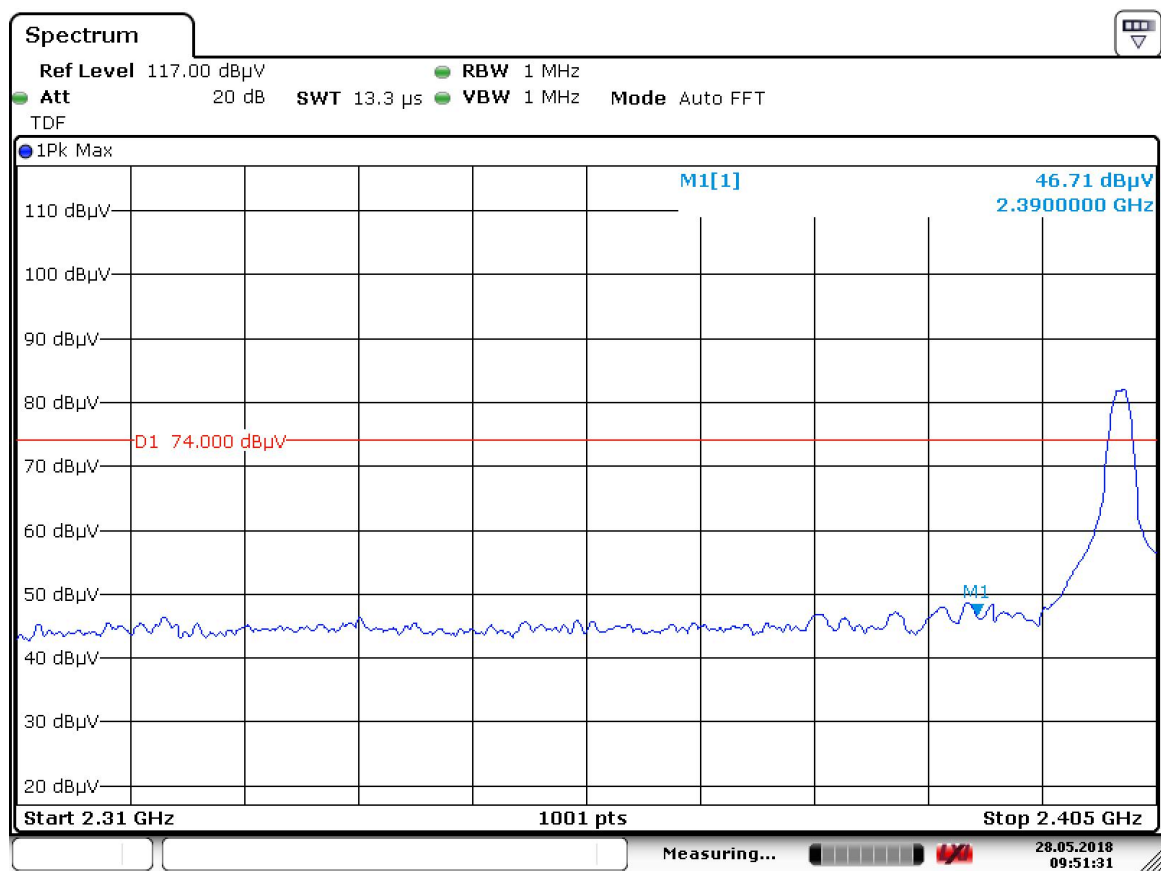


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Low Channel (Ver)

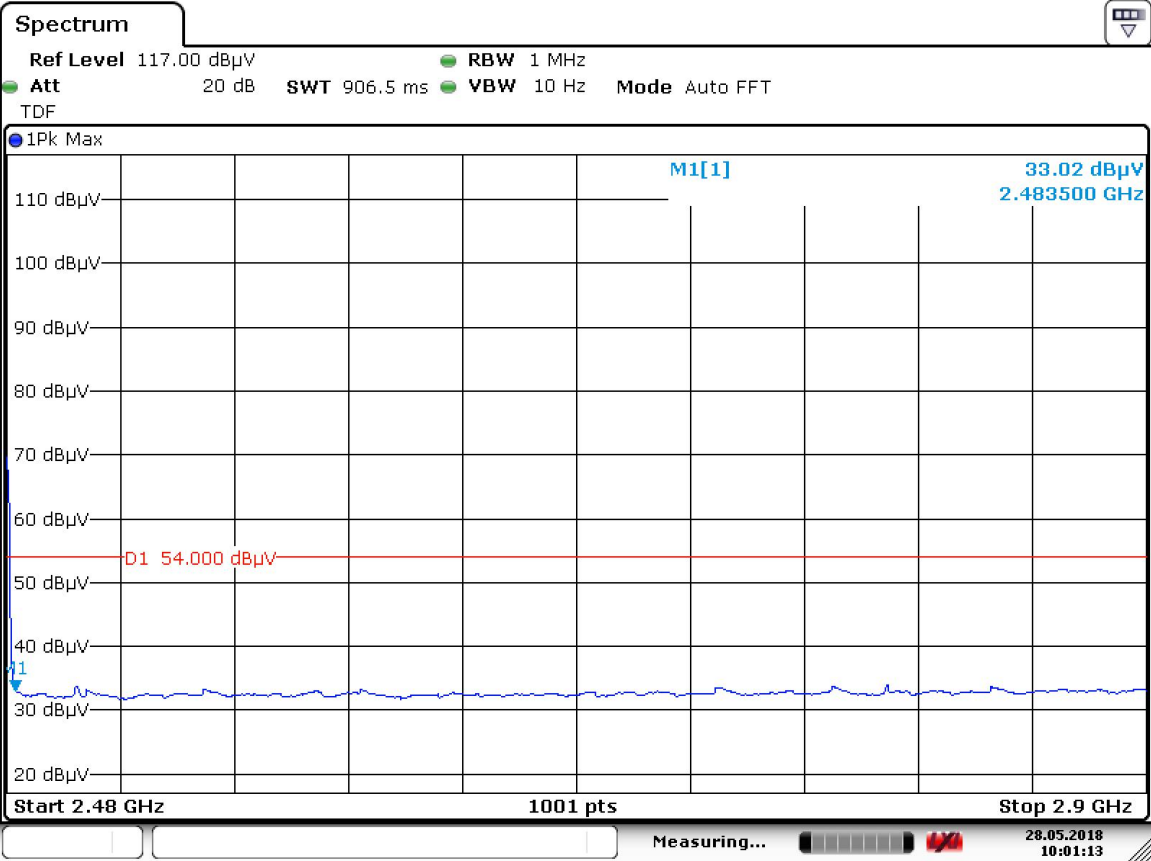


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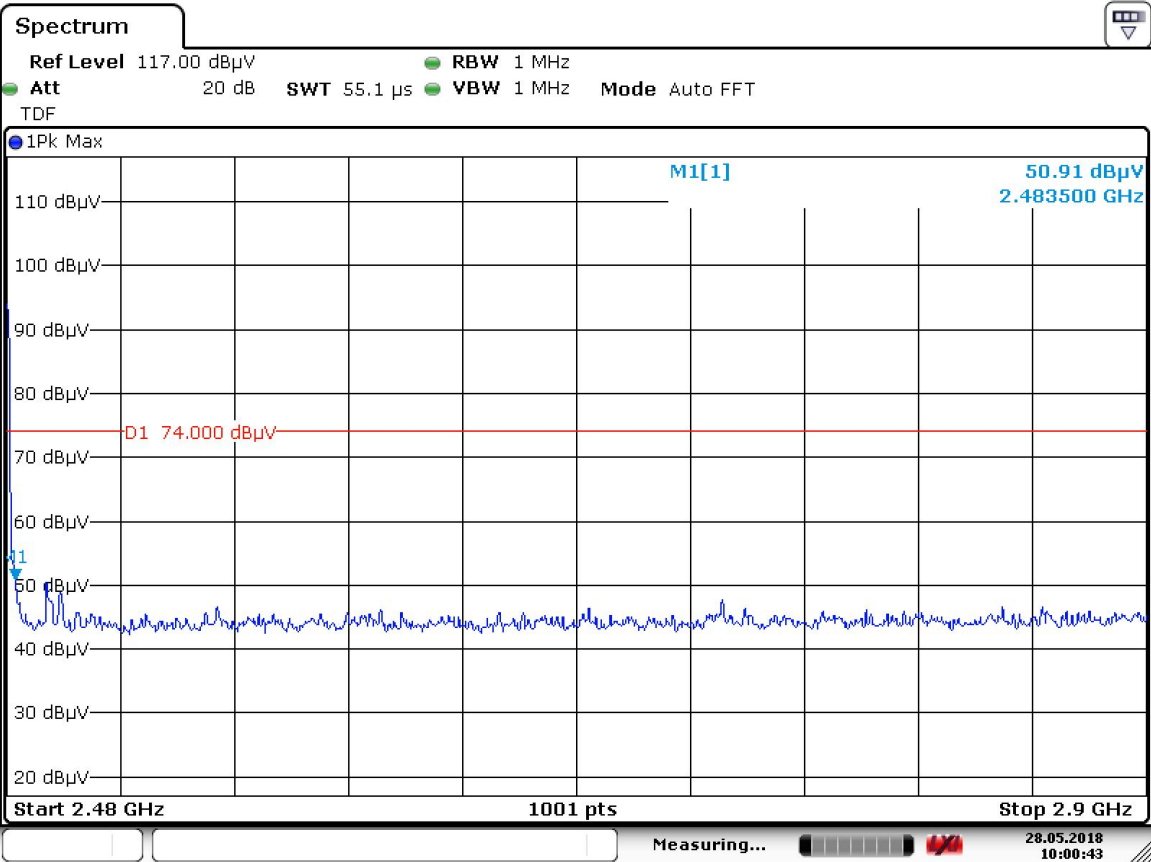


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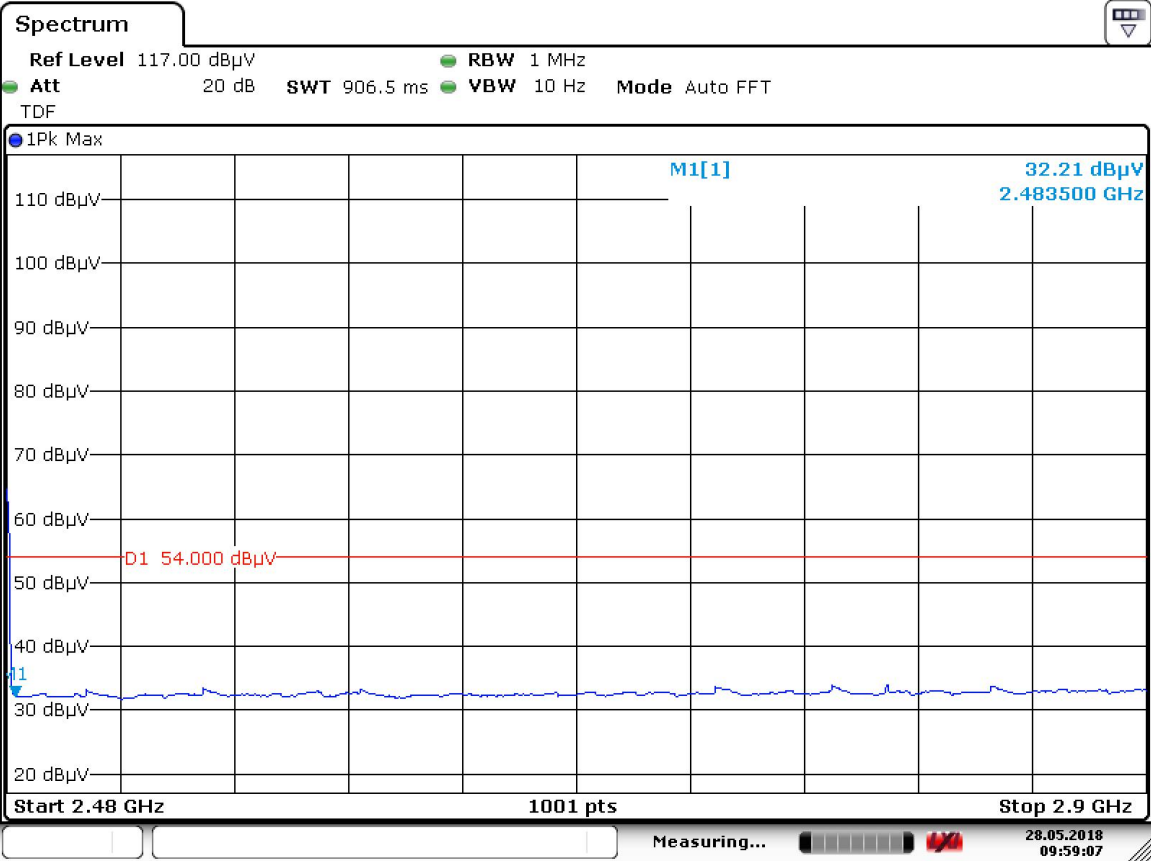


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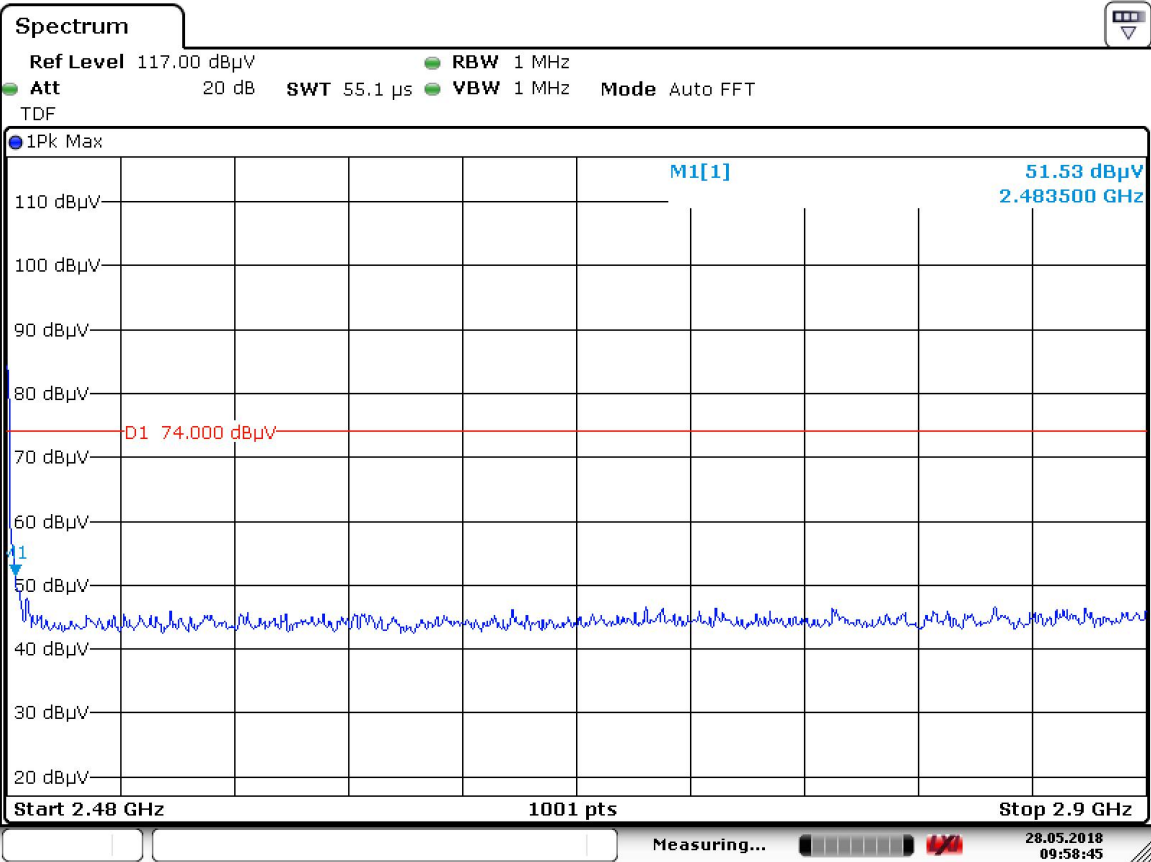


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High Channel (Ver)



Date: 28.MAY.2018 09:59:08



Date: 28.MAY.2018 09:58:45

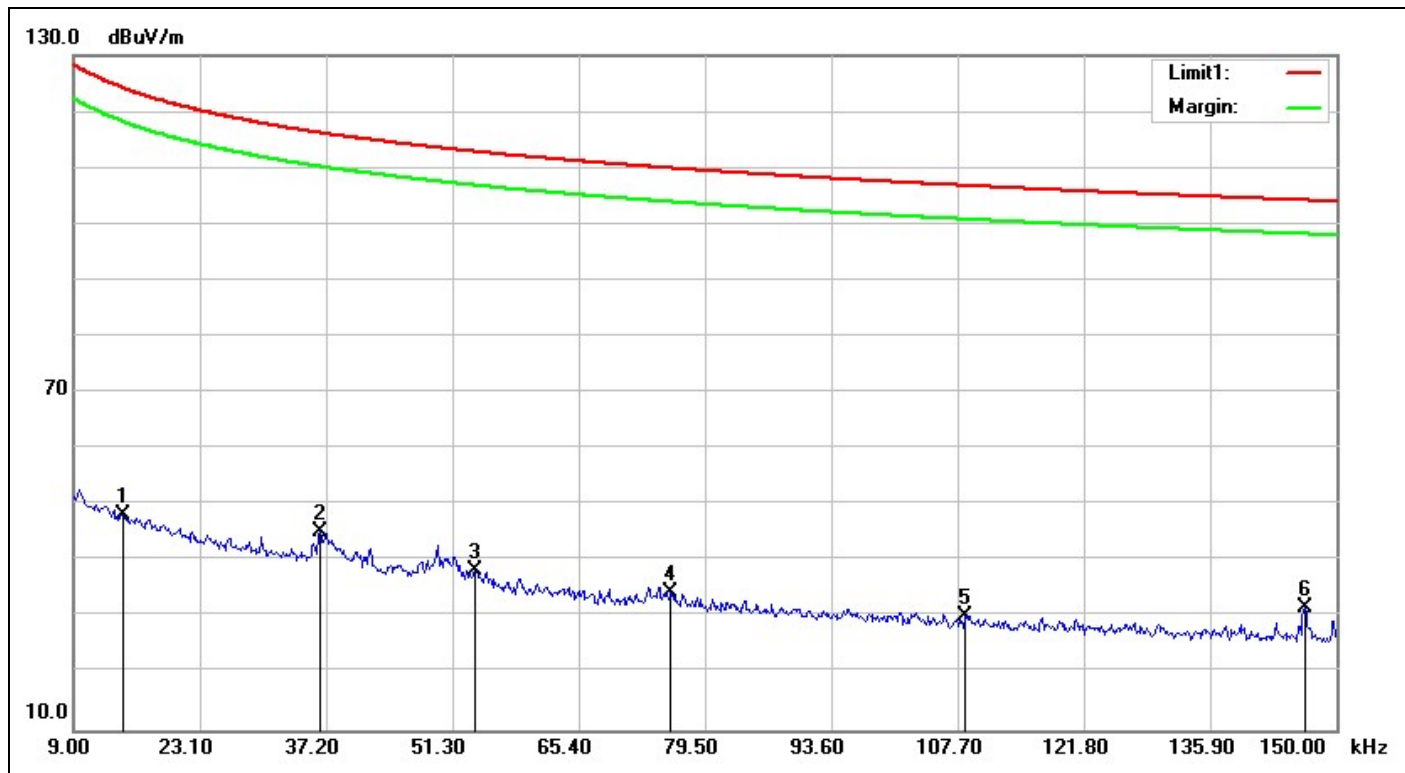
Spurious Emissions, TX Mode, 9K-30M



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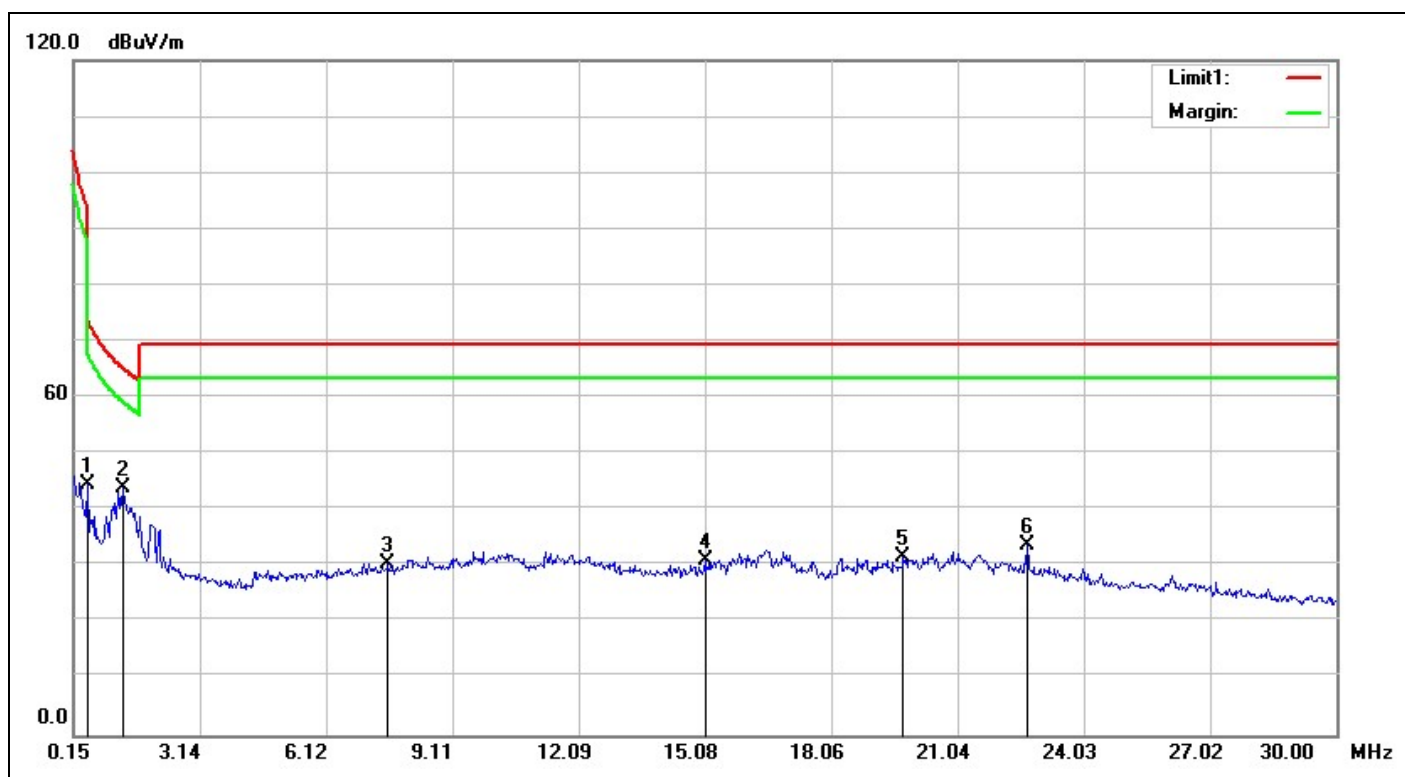
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/5/28 11:19:24
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%)	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	0.0145	19.98	28.38	48.36	124.19	-75.83	QP	100	274	
2	0.0365	19.90	25.24	45.14	116.22	-71.08	QP	100	185	
3	0.0538	19.41	18.85	38.26	112.87	-74.61	QP	100	349	
4	0.0757	19.28	15.09	34.37	109.92	-75.55	QP	100	108	
5	0.1085	19.12	11.15	30.27	106.81	-76.54	QP	100	241	
6	0.1465	19.08	12.53	31.61	104.22	-72.61	QP	100	188	



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/5/28 11:21:08
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%)	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	0.4783	18.87	25.58	44.45	94.01	-49.56	QP	100	39	
2	1.3141	18.91	25.10	44.01	65.26	-21.25	QP	100	274	
3	7.5827	20.00	10.44	30.44	69.50	-39.06	QP	100	318	
4	15.0750	21.11	10.01	31.12	69.50	-38.38	QP	100	280	
5	19.7615	21.94	9.65	31.59	69.50	-37.91	QP	100	26	
6	22.6868	22.16	11.61	33.77	69.50	-35.73	QP	100	4	

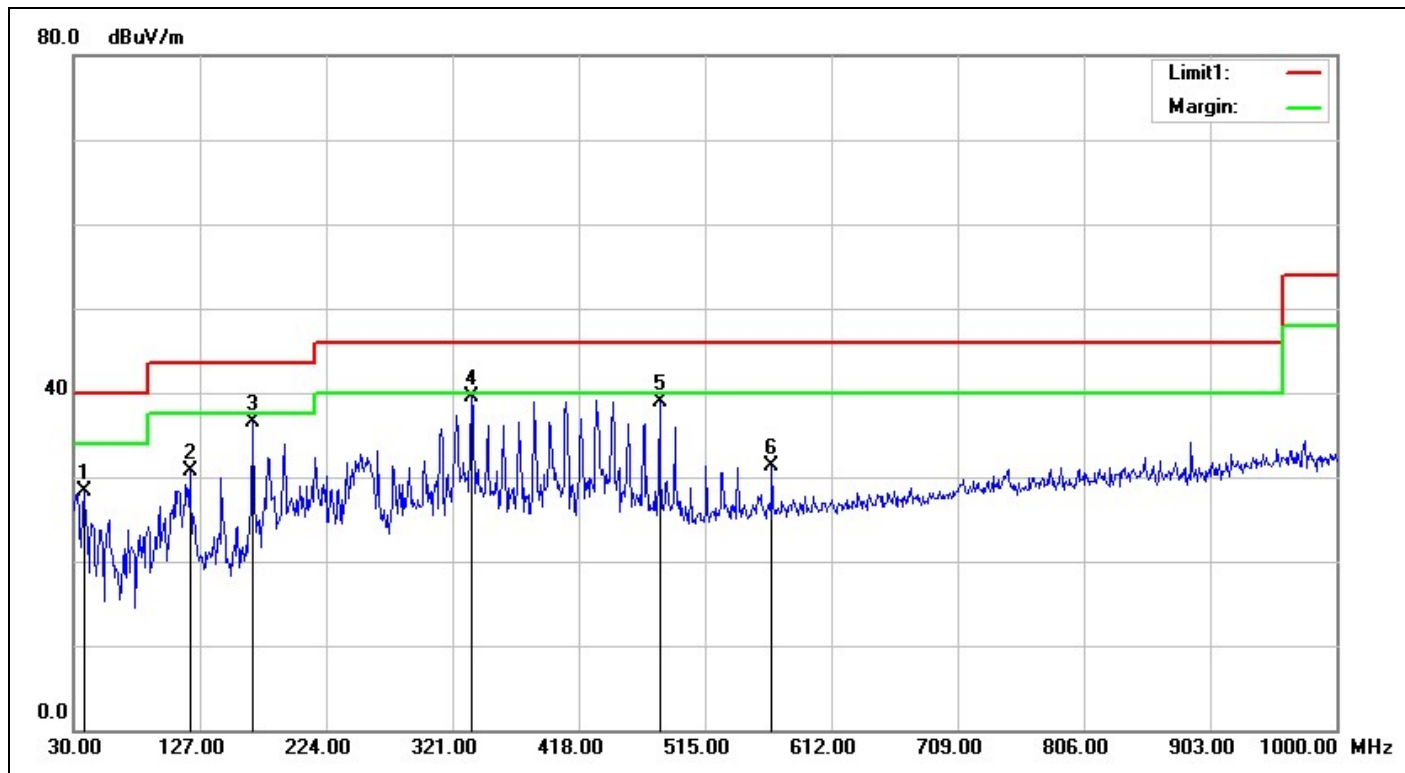
Spurious Emissions, TX Mode, 30M-1G



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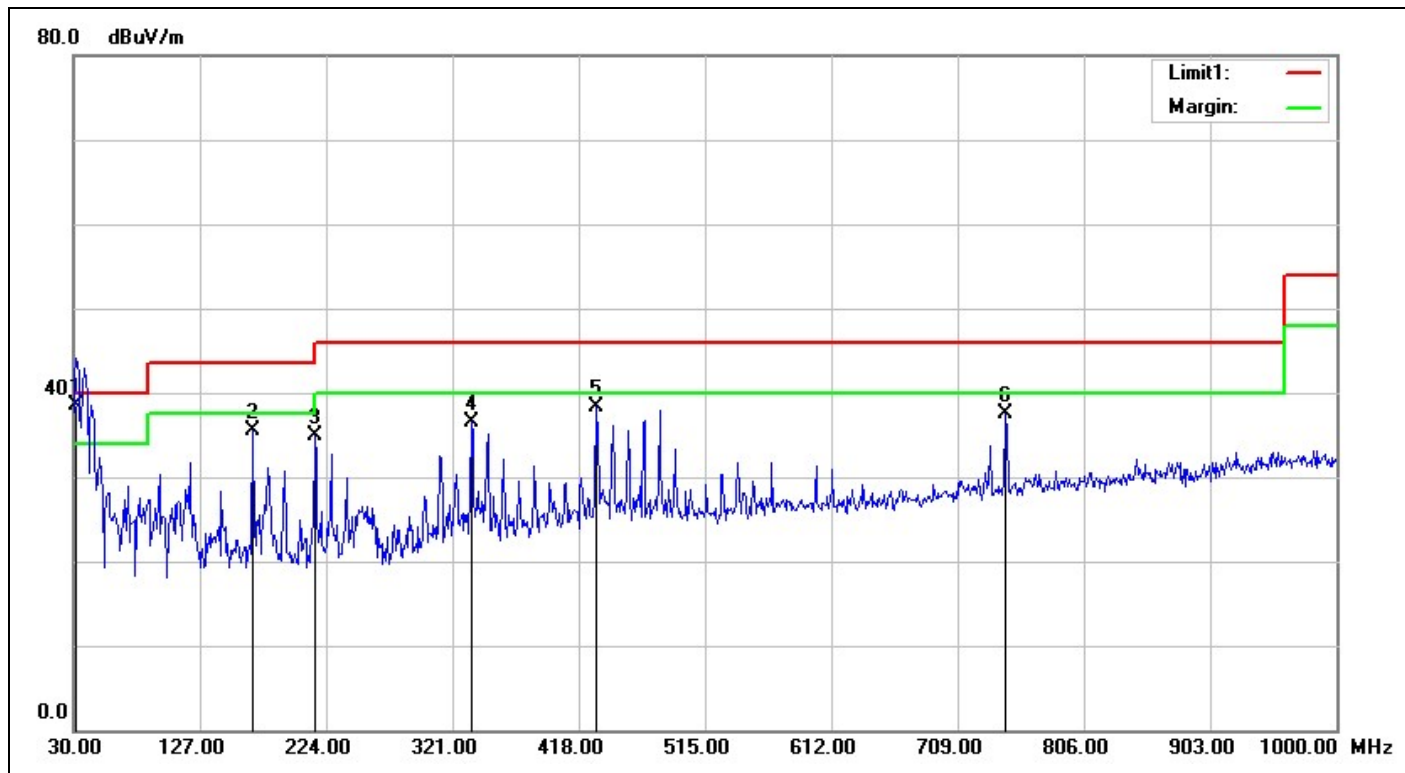
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/28 17:20:57
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	25(°C)/50%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	37.7600	-4.63	33.00	28.37	40.00	-11.63	QP	100	171	
2	119.2400	-7.50	38.22	30.72	43.50	-12.78	QP	100	107	
3	167.7400	-8.78	45.19	36.41	43.50	-7.09	QP	100	166	
4	335.5500	-3.70	43.23	39.53	46.00	-6.47	QP	100	57	
5	480.0800	-1.47	40.38	38.91	46.00	-7.09	QP	100	277	
6	566.4100	-0.28	31.52	31.24	46.00	-14.76	QP	100	144	



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/28 17:22:01
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	25(°C)/50%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	31.9400	-1.36	39.96	38.60	40.00	-1.40	QP	100	269	
2	167.7400	-8.78	44.25	35.47	43.50	-8.03	QP	100	112	
3	215.2700	-8.42	43.34	34.92	43.50	-8.58	QP	100	178	
4	335.5500	-3.70	40.21	36.51	46.00	-9.49	QP	100	173	
5	431.5800	-2.09	40.32	38.23	46.00	-7.77	QP	100	184	
6	745.8600	2.28	35.24	37.52	46.00	-8.48	QP	100	80	

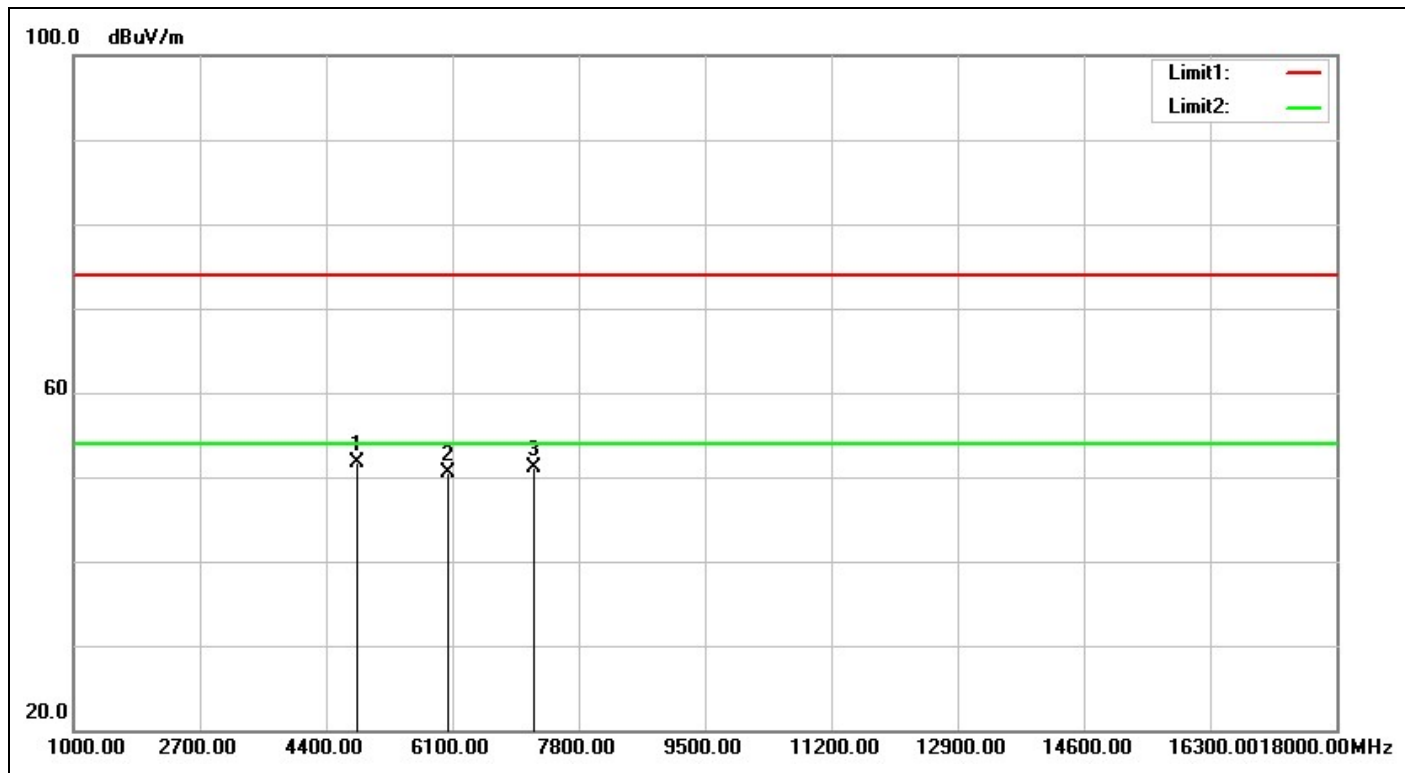
Spurious Emissions, TX Mode, 1G-18G



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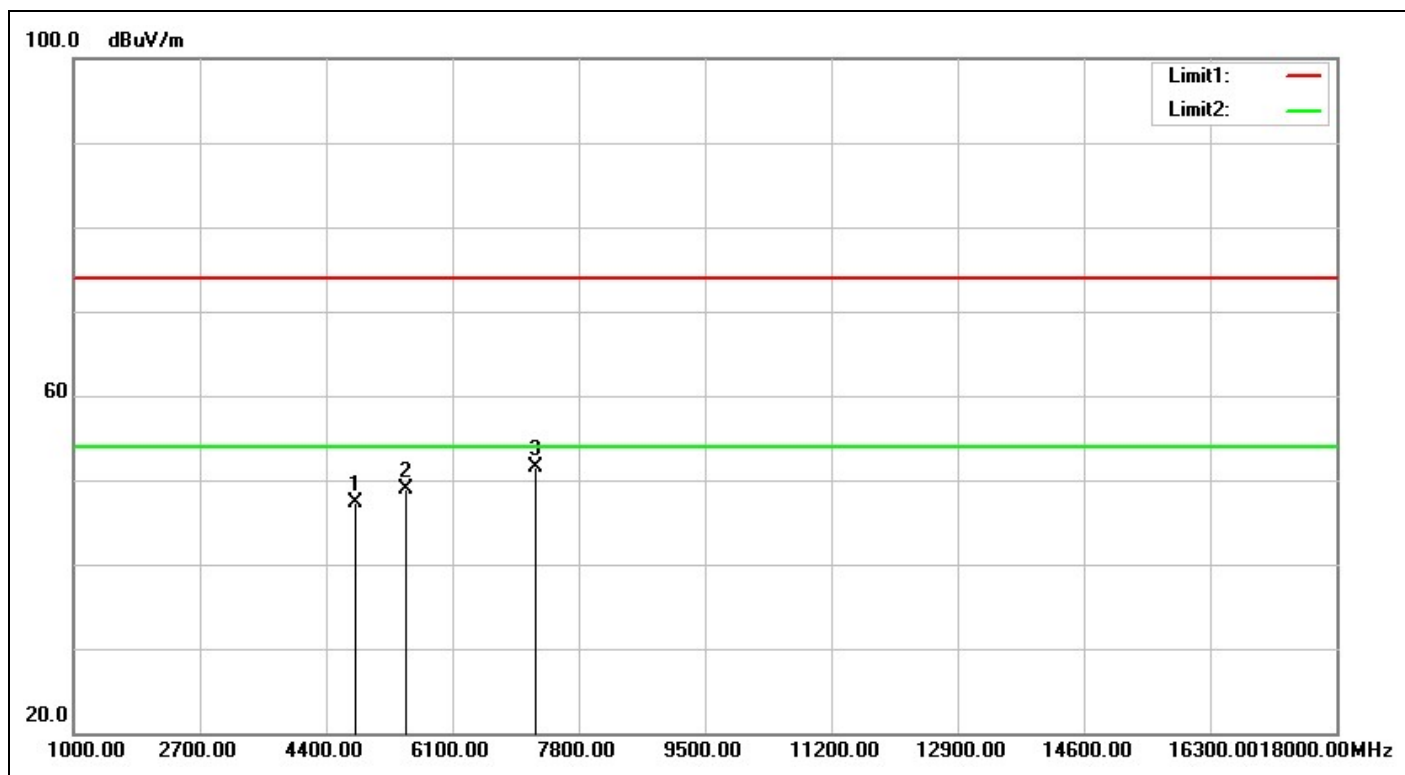
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



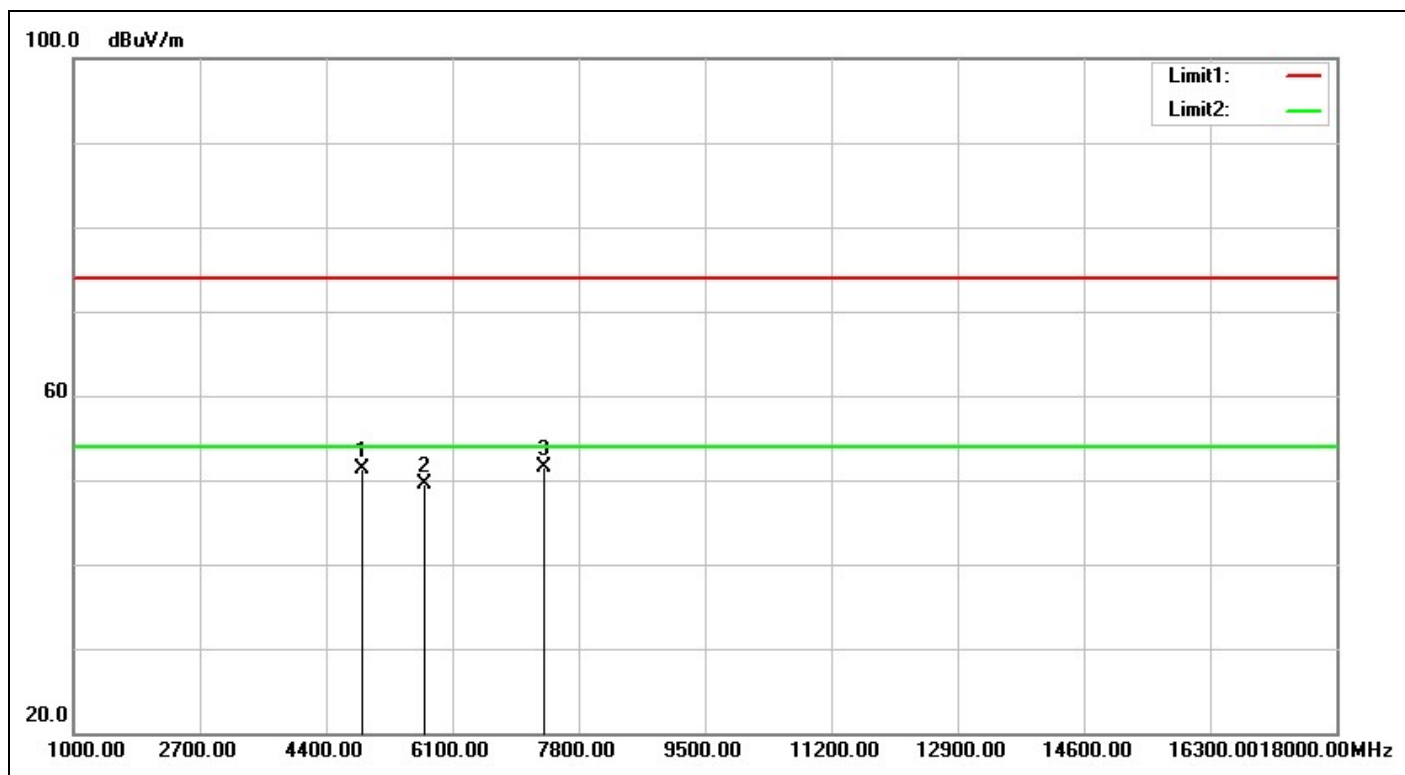
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/28 09:55:33
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	-2.98	54.67	51.69	74.00	-22.31	peak	100	263	
2	6032.000	3.42	47.15	50.57	74.00	-23.43	peak	100	30	
3	7206.000	5.19	45.82	51.01	74.00	-22.99	peak	100	128	



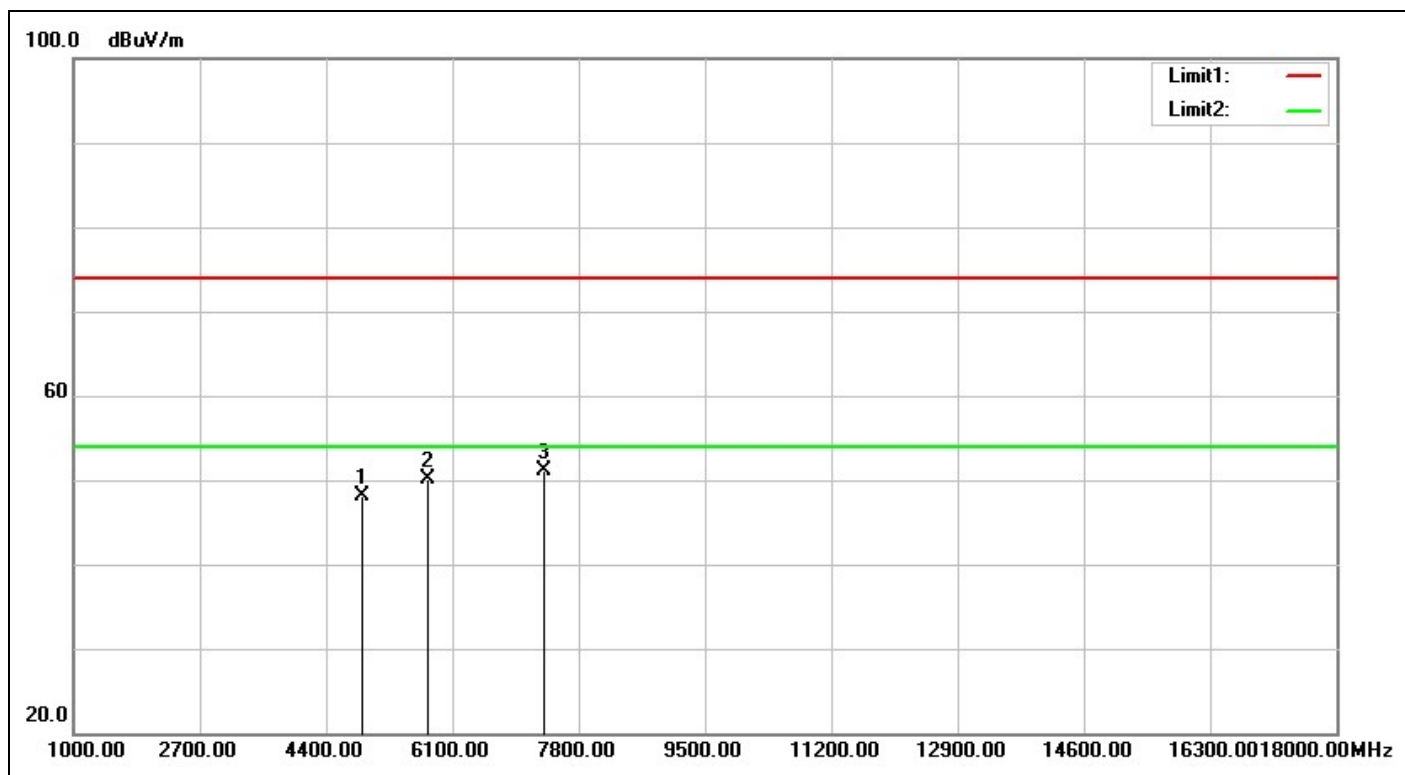
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/28 09:56:36
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	-2.98	50.23	47.25	74.00	-26.75	peak	100	231	
2	5471.000	-0.13	48.96	48.83	74.00	-25.17	peak	100	349	
3	7206.000	5.19	46.32	51.51	74.00	-22.49	peak	100	68	



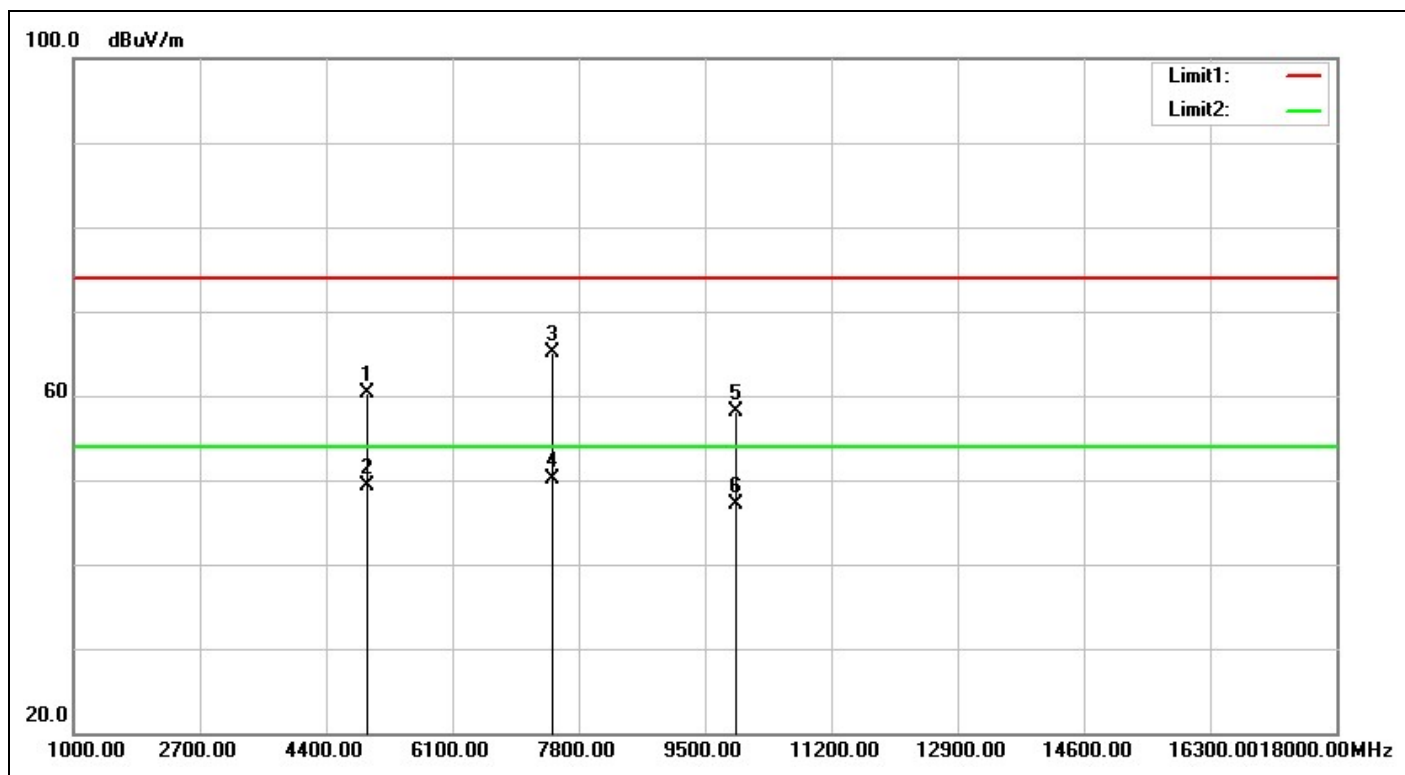
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/28 10:00:27
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	4884.000	-2.76	54.07	51.31	74.00	-22.69	peak	100	172	
2	5726.000	1.49	47.99	49.48	74.00	-24.52	peak	100	205	
3	7326.000	5.52	45.99	51.51	74.00	-22.49	peak	100	18	



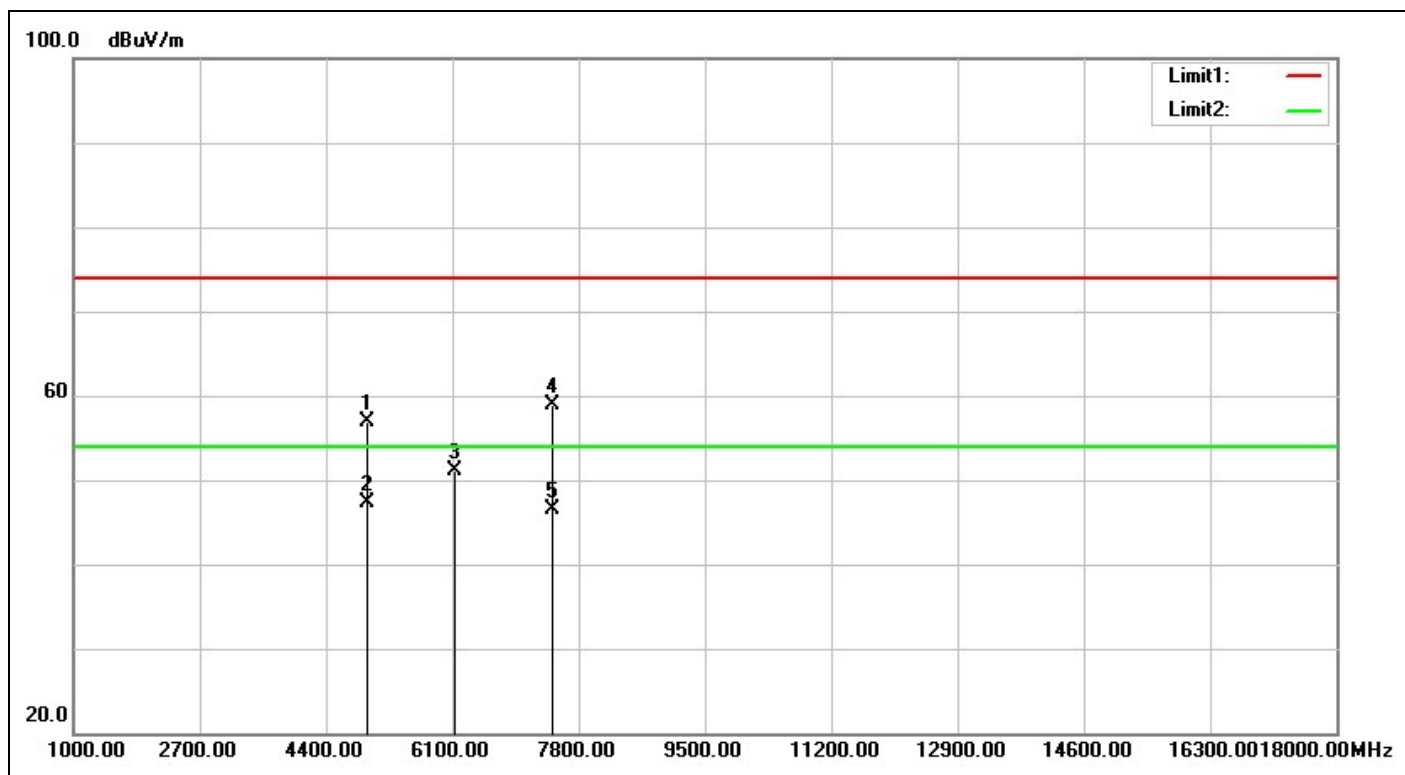
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/28 10:00:27
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%)	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	4884.000	-2.76	50.89	48.13	74.00	-25.87	peak	100	104	
2	5760.000	1.72	48.31	50.03	74.00	-23.97	peak	100	172	
3	7326.000	5.52	45.63	51.15	74.00	-22.85	peak	100	354	



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/28 10:09:37
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%)	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	-2.57	62.82	60.25	74.00	-13.75	peak	100	257	
2	4960.000	-2.57	51.84	49.27	54.00	-4.73	AVG	100	257	
3	7440.000	5.83	59.36	65.19	74.00	-8.81	peak	100	56	
4	7440.000	5.83	44.18	50.01	54.00	-3.99	AVG	100	56	
5	9920.000	5.66	52.42	58.08	74.00	-15.92	peak	100	56	
6	9920.000	5.66	41.36	47.02	54.00	-6.98	AVG	100	56	



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/28 10:10:40
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%)	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	-2.57	59.41	56.84	74.00	-17.16	peak	100	45	
2	4960.000	-2.57	49.86	47.29	54.00	-6.71	AVG	100	45	
3	6134.000	3.82	47.26	51.08	74.00	-22.92	peak	100	360	
4	7440.000	5.83	53.13	58.96	74.00	-15.04	peak	100	207	
5	7440.000	5.83	40.59	46.42	54.00	-7.58	AVG	100	207	

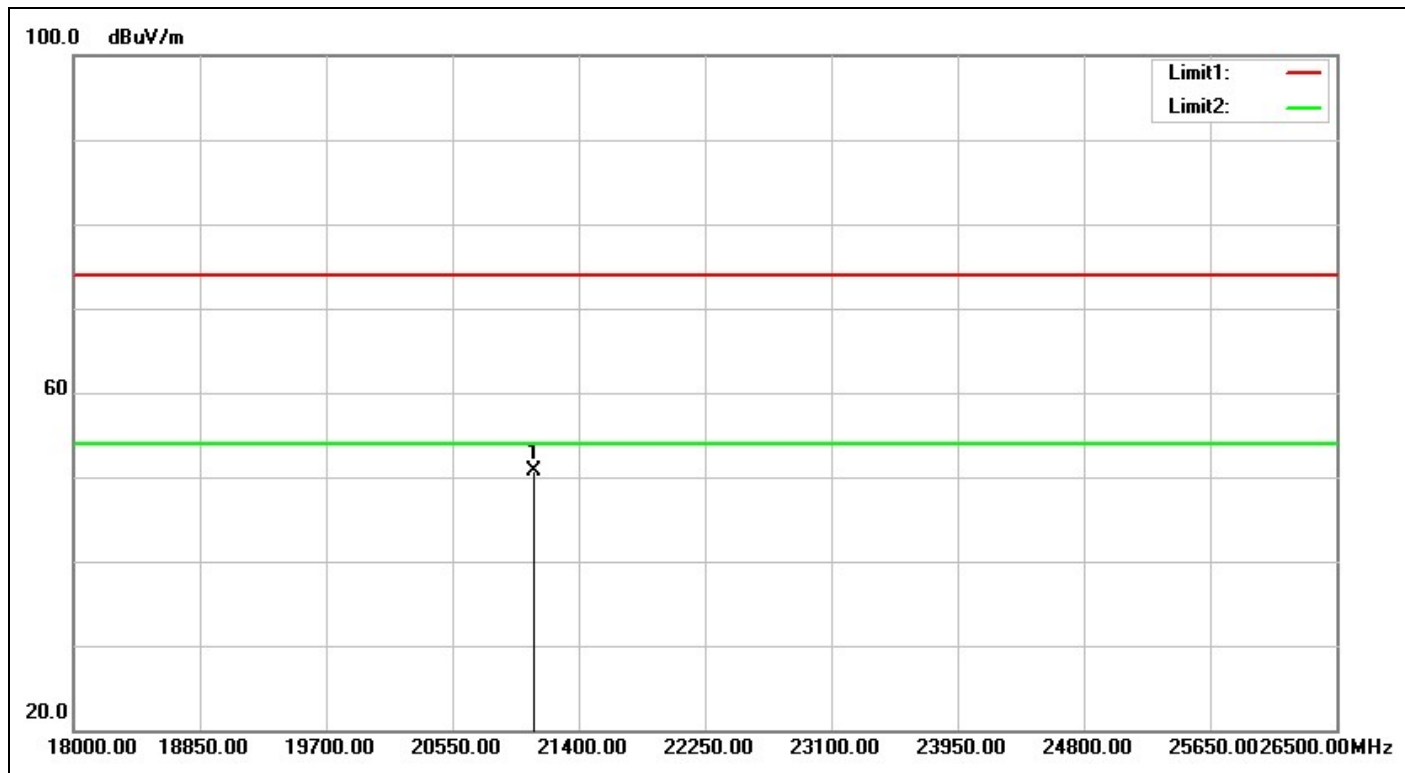
Spurious Emissions, TX Mode, 18G-26.5G



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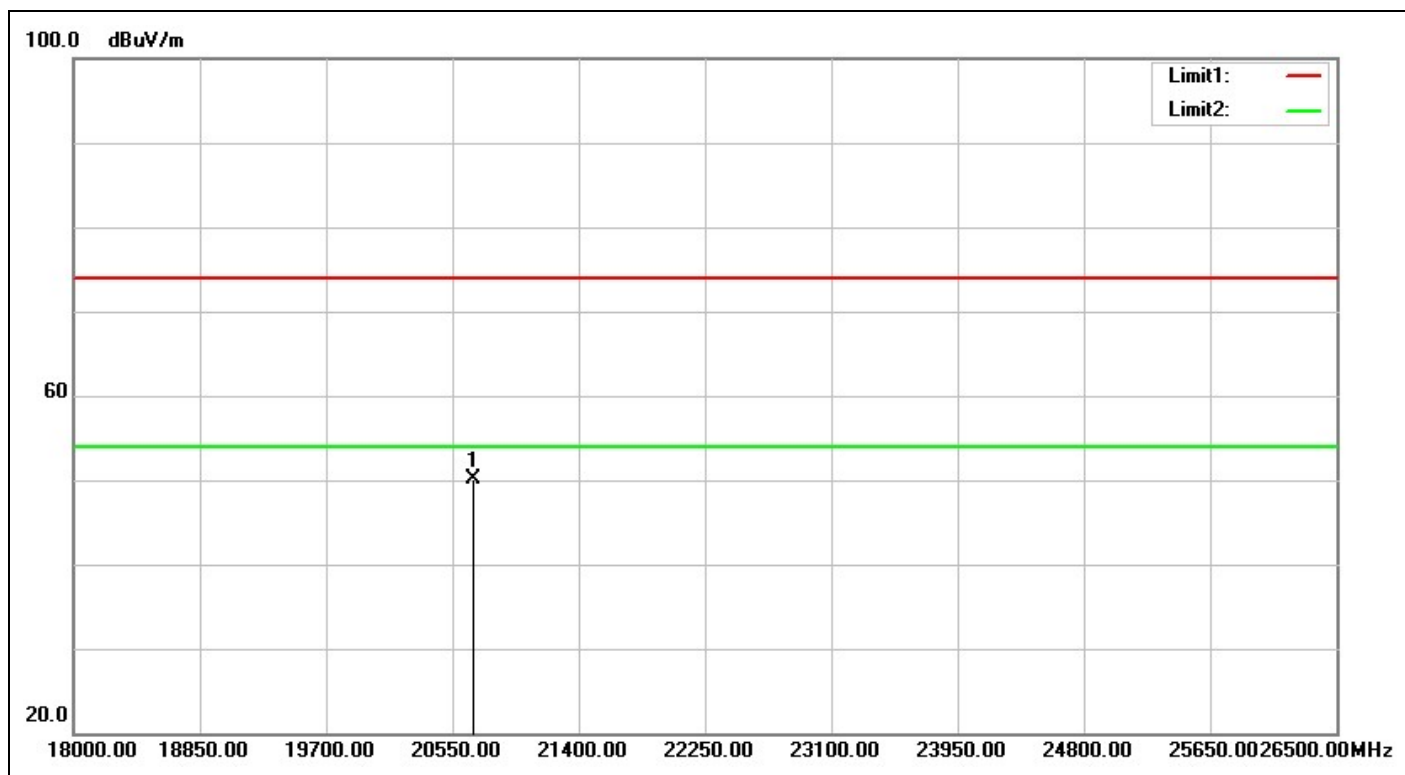
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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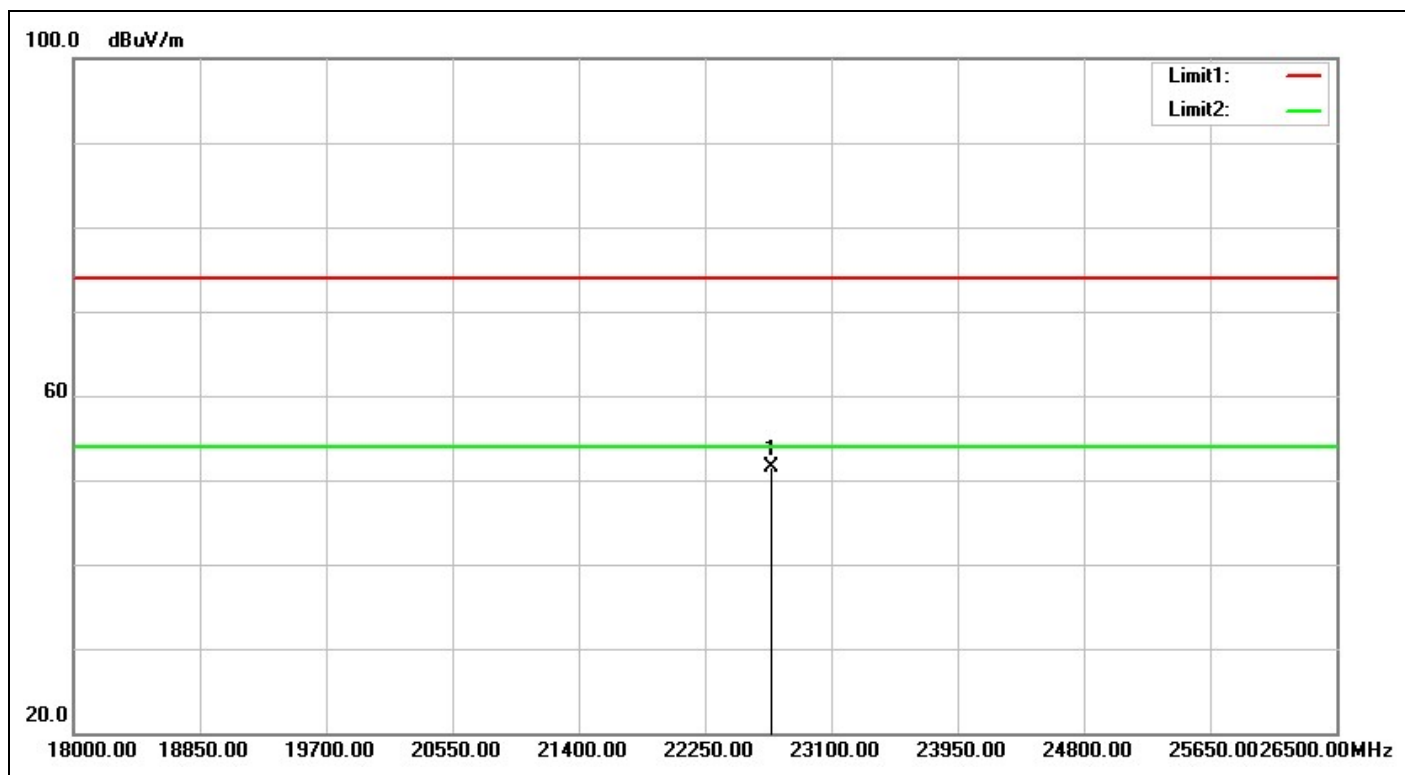
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/28 10:43:25
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	21102.500	32.53	18.15	50.68	74.00	-23.32	peak	100	357	



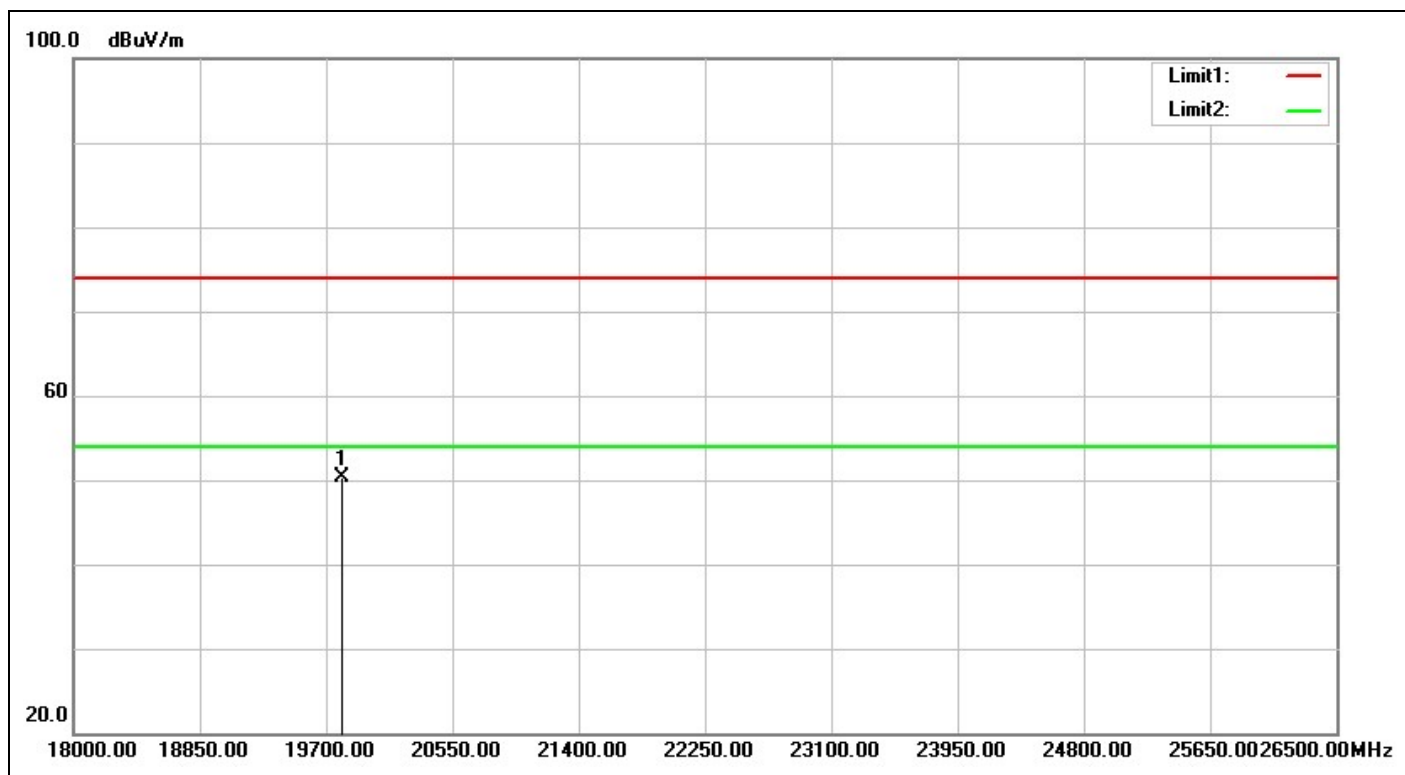
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/28 10:44:28
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	20686.000	31.78	18.34	50.12	74.00	-23.88	peak	100	9	



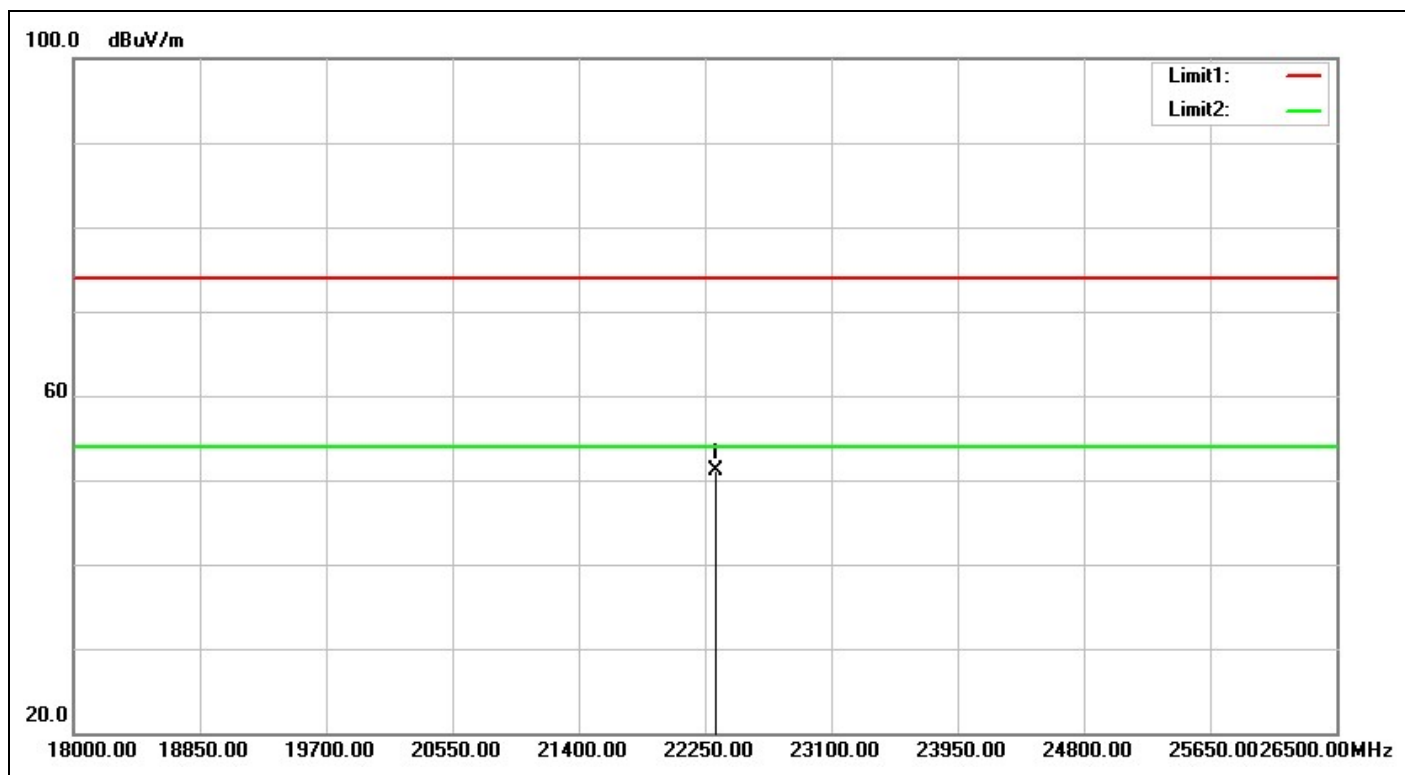
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/28 10:46:29
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	32.71	18.75	51.46	74.00	-22.54	peak	100	343	



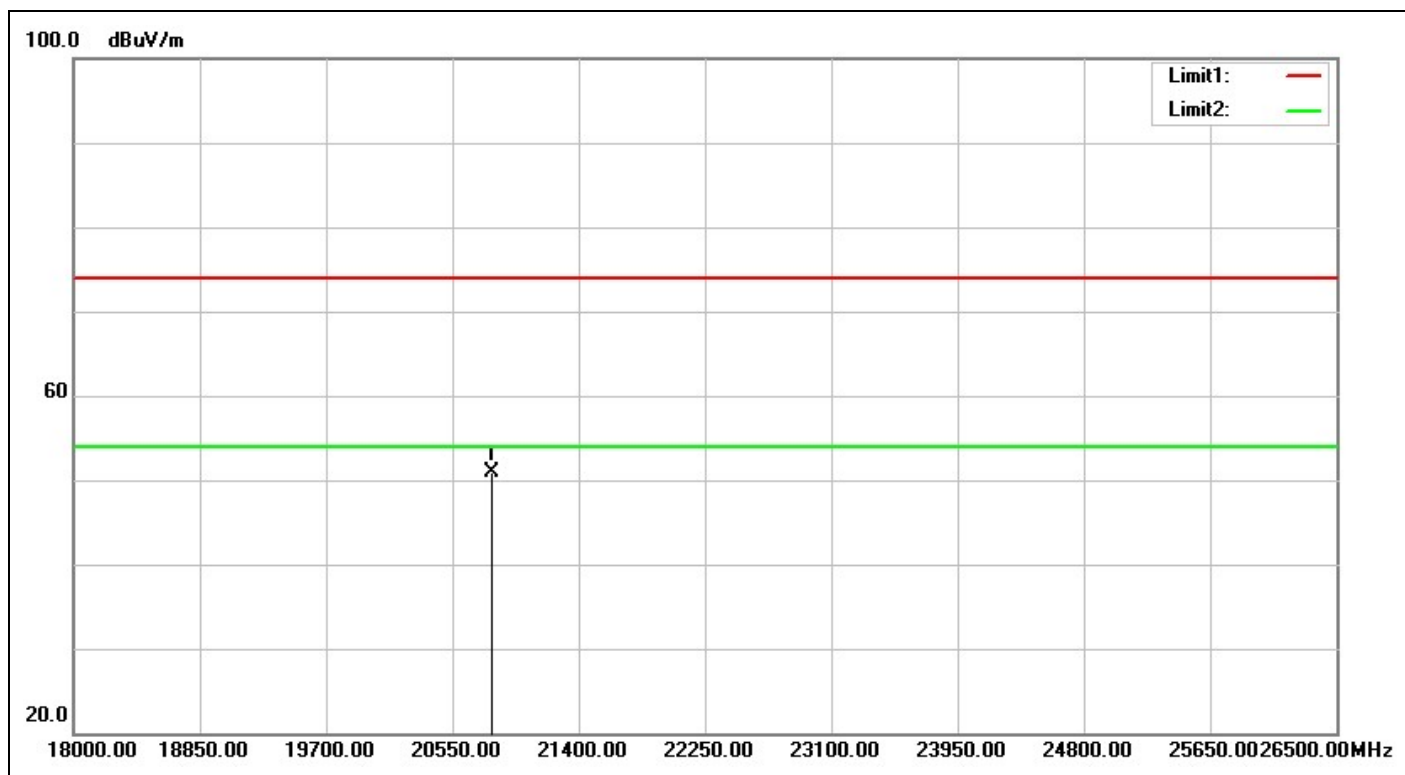
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/28 10:47:32
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	19810.500	30.93	19.42	50.35	74.00	-23.65	peak	100	125	



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/28 10:49:28
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	22326.500	32.62	18.58	51.20	74.00	-22.80	peak	100	360	



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/28 10:50:32
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	20813.500	32.06	18.79	50.85	74.00	-23.15	peak	100	4	

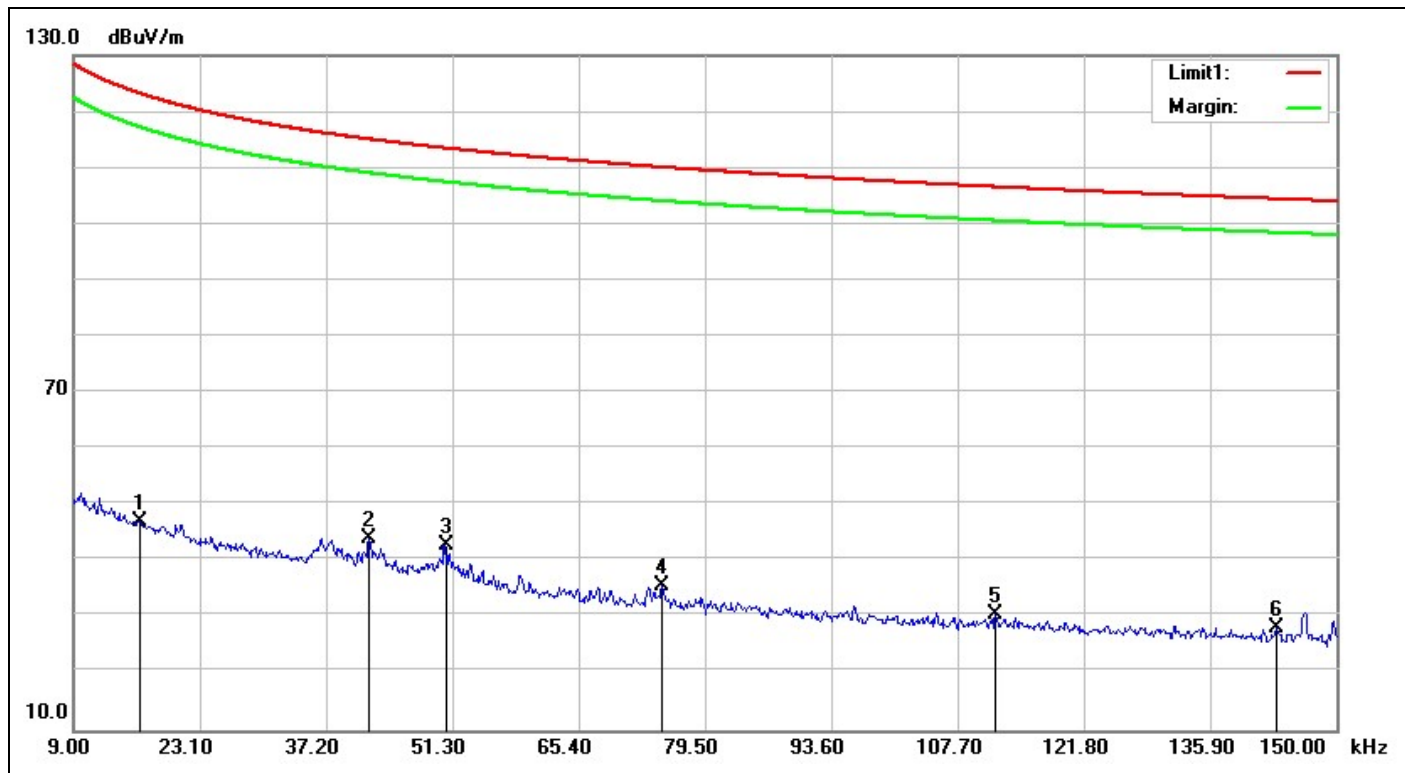
Spurious Emissions, RX Mode, 9K-30M



TUV Rheinland Taiwan Ltd.

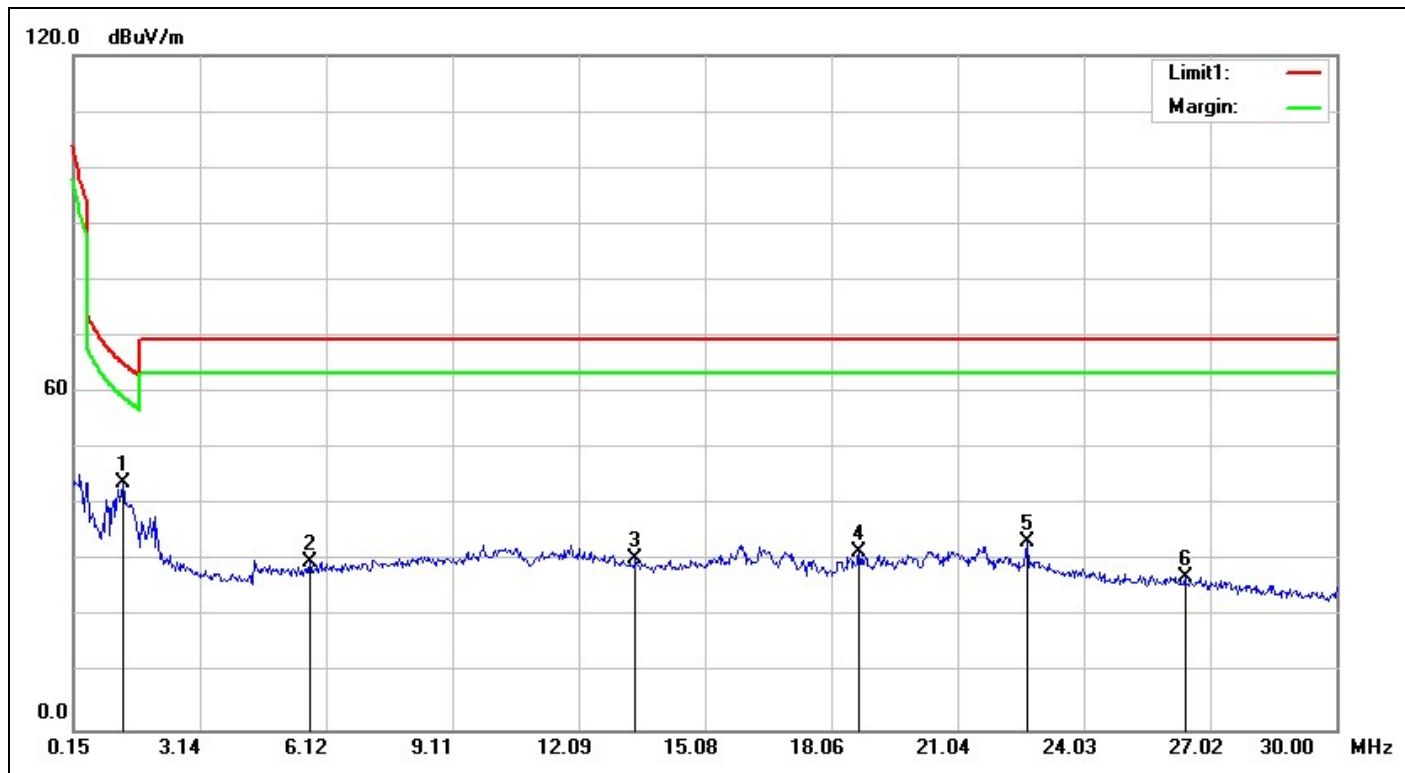
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/5/28 11:25:09
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%)	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	0.0163	19.99	27.19	47.18	123.26	-76.08	QP	100	330	
2	0.0420	19.71	24.36	44.07	115.07	-71.00	QP	100	36	
3	0.0505	19.43	23.40	42.83	113.47	-70.64	QP	100	251	
4	0.0747	19.28	16.27	35.55	110.08	-74.53	QP	100	56	
5	0.1119	19.12	11.56	30.68	106.58	-75.90	QP	100	108	
6	0.1432	19.09	9.15	28.24	104.45	-76.21	QP	100	124	



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/5/28 11:23:13
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	1.3141	18.91	24.93	43.84	65.26	-21.42	QP	100	12	
2	5.7320	19.83	10.05	29.88	69.50	-39.62	QP	100	49	
3	13.4332	20.82	9.63	30.45	69.50	-39.05	QP	100	308	
4	18.7167	21.76	9.88	31.64	69.50	-37.86	QP	100	211	
5	22.6868	22.16	11.17	33.33	69.50	-36.17	QP	100	105	
6	26.4180	22.42	4.80	27.22	69.50	-42.28	QP	100	23	

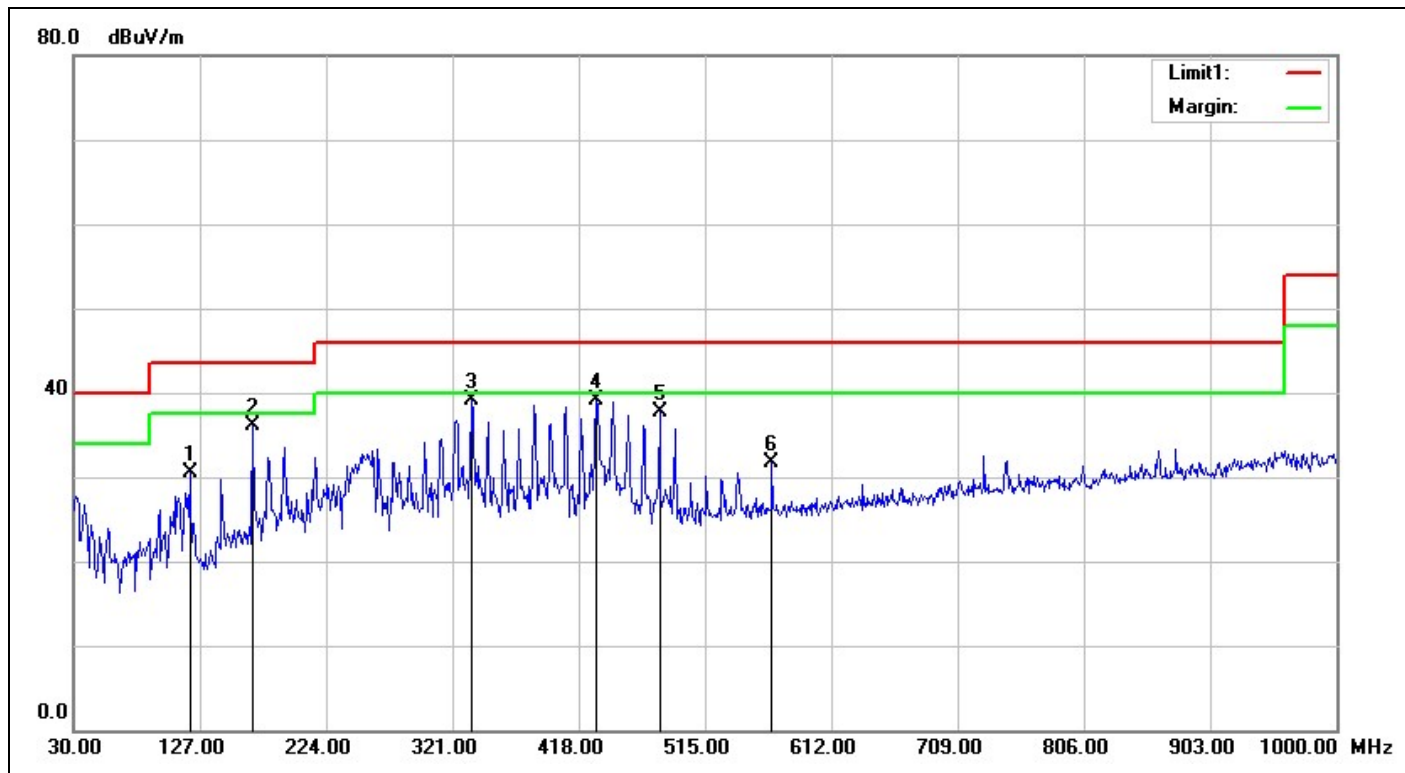
Spurious Emissions, RX Mode, 30M-1G



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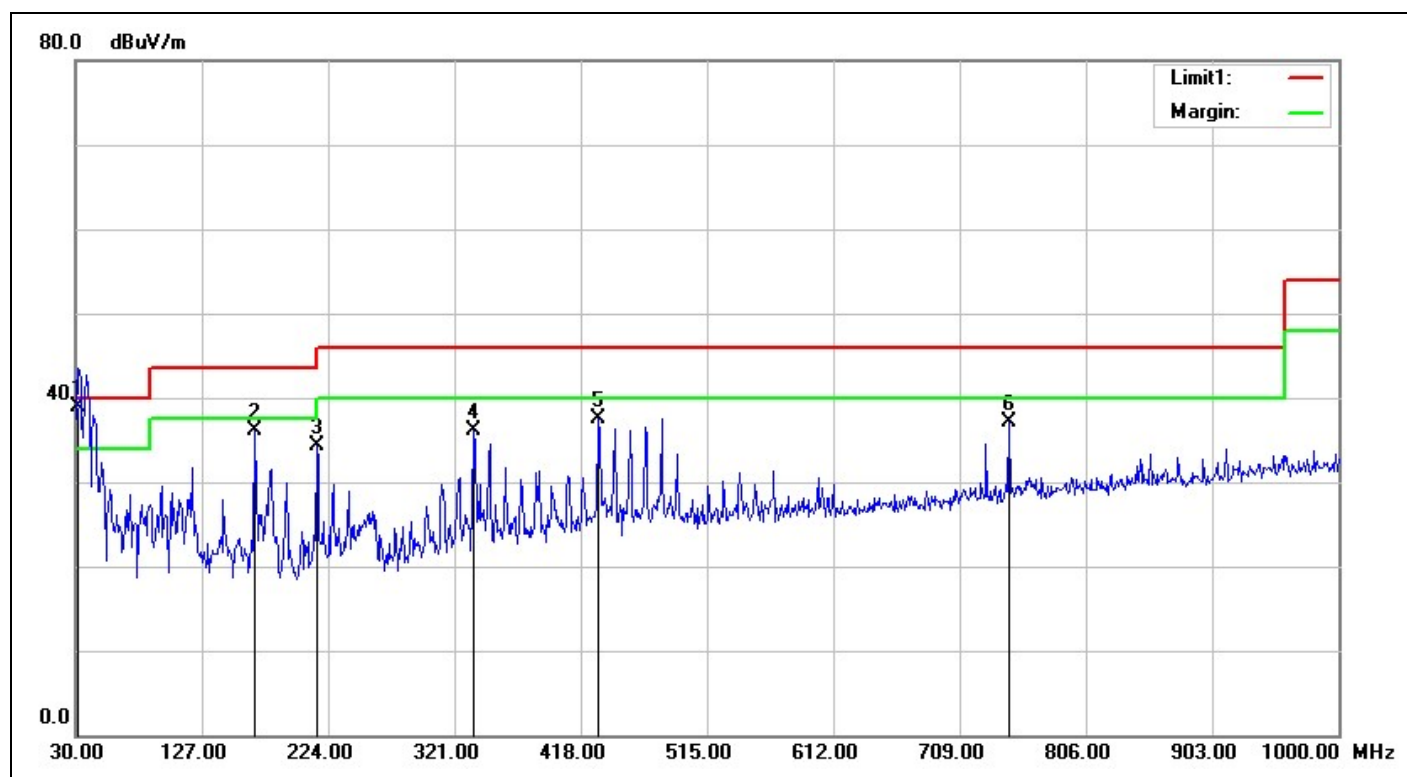
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Tel:+886-2172-7000 fax:+886-2528-0018



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/28 17:26:32
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%)	25(°C)/50%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	119.2400	-7.50	38.06	30.56	43.50	-12.94	QP	100	126	
2	167.7400	-8.78	44.84	36.06	43.50	-7.44	QP	100	181	
3	335.5500	-3.70	42.72	39.02	46.00	-6.98	QP	100	57	
4	431.5800	-2.09	41.21	39.12	46.00	-6.88	QP	100	59	
5	480.0800	-1.47	39.12	37.65	46.00	-8.35	QP	100	272	
6	566.4100	-0.28	32.04	31.76	46.00	-14.24	QP	100	147	



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/28 17:27:35
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%)	25(°C)/50%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	31.9400	-1.36	40.26	38.90	40.00	-1.10	QP	100	221	
2	167.7400	-8.78	44.83	36.05	43.50	-7.45	QP	100	104	
3	215.2700	-8.42	42.81	34.39	43.50	-9.11	QP	100	178	
4	335.5500	-3.70	39.76	36.06	46.00	-9.94	QP	100	186	
5	431.5800	-2.09	39.65	37.56	46.00	-8.44	QP	100	186	
6	746.8300	2.30	34.72	37.02	46.00	-8.98	QP	100	32	

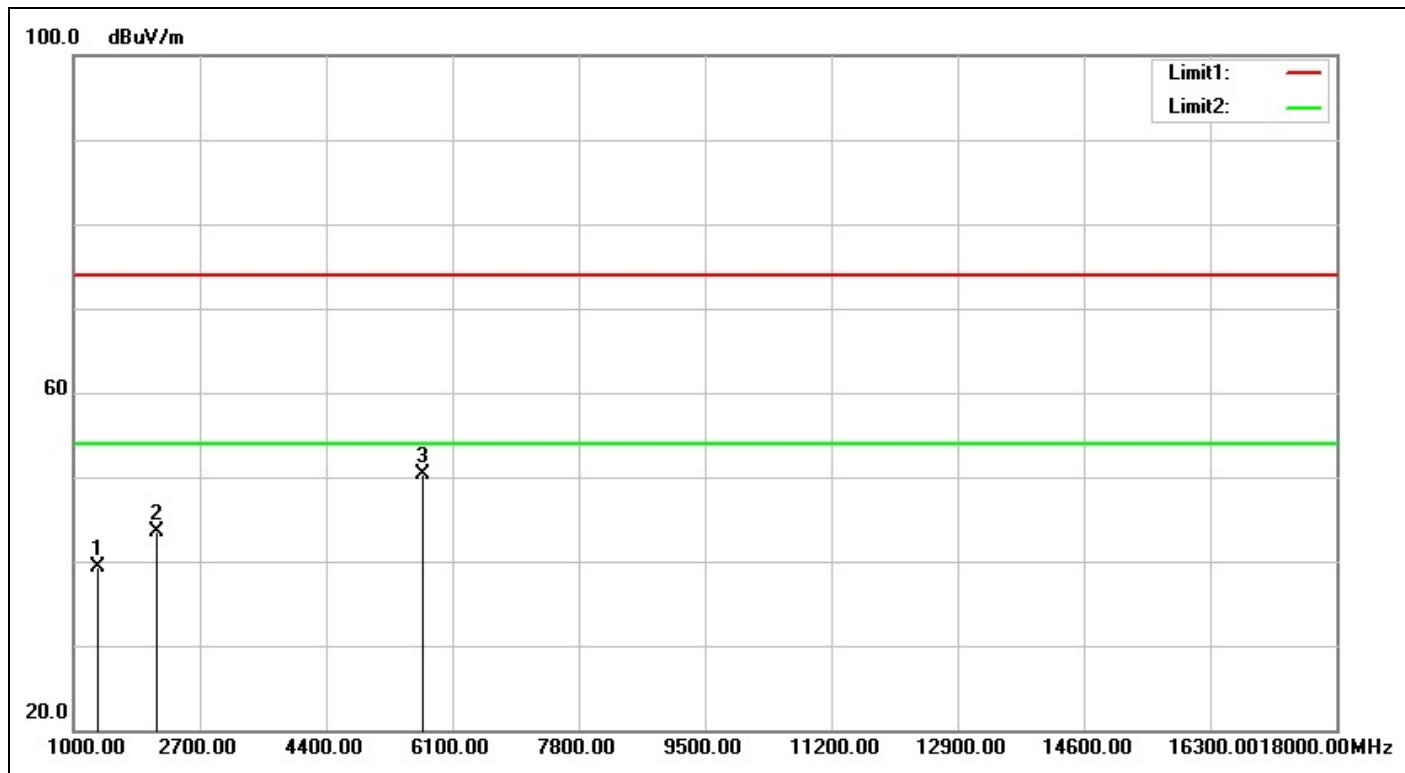
Spurious Emissions, RX Mode, 1G-18G



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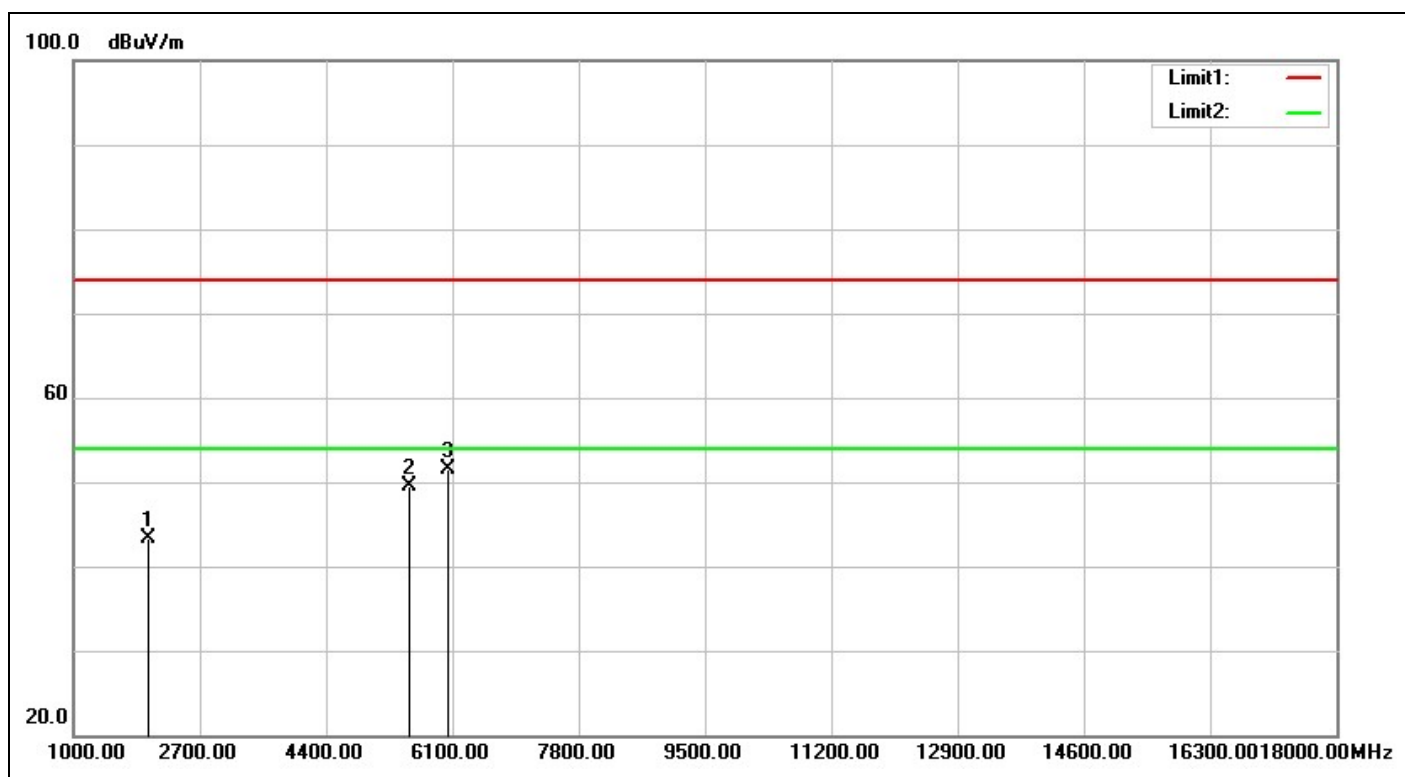
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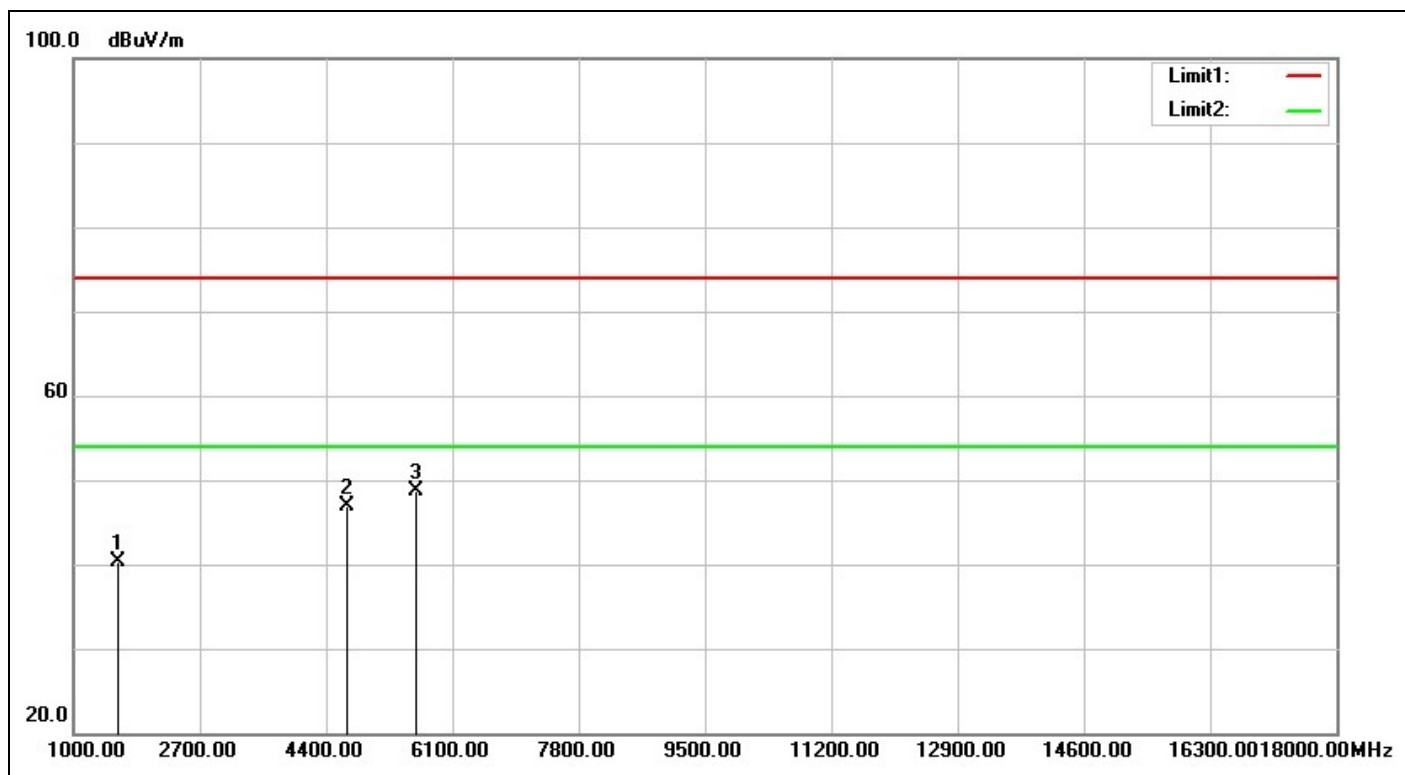
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/28 10:21:55
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	1323.000	-10.09	49.43	39.34	74.00	-34.66	peak	100	285	
2	2122.000	-7.73	51.21	43.48	74.00	-30.52	peak	100	185	
3	5692.000	1.27	49.01	50.28	74.00	-23.72	peak	100	180	



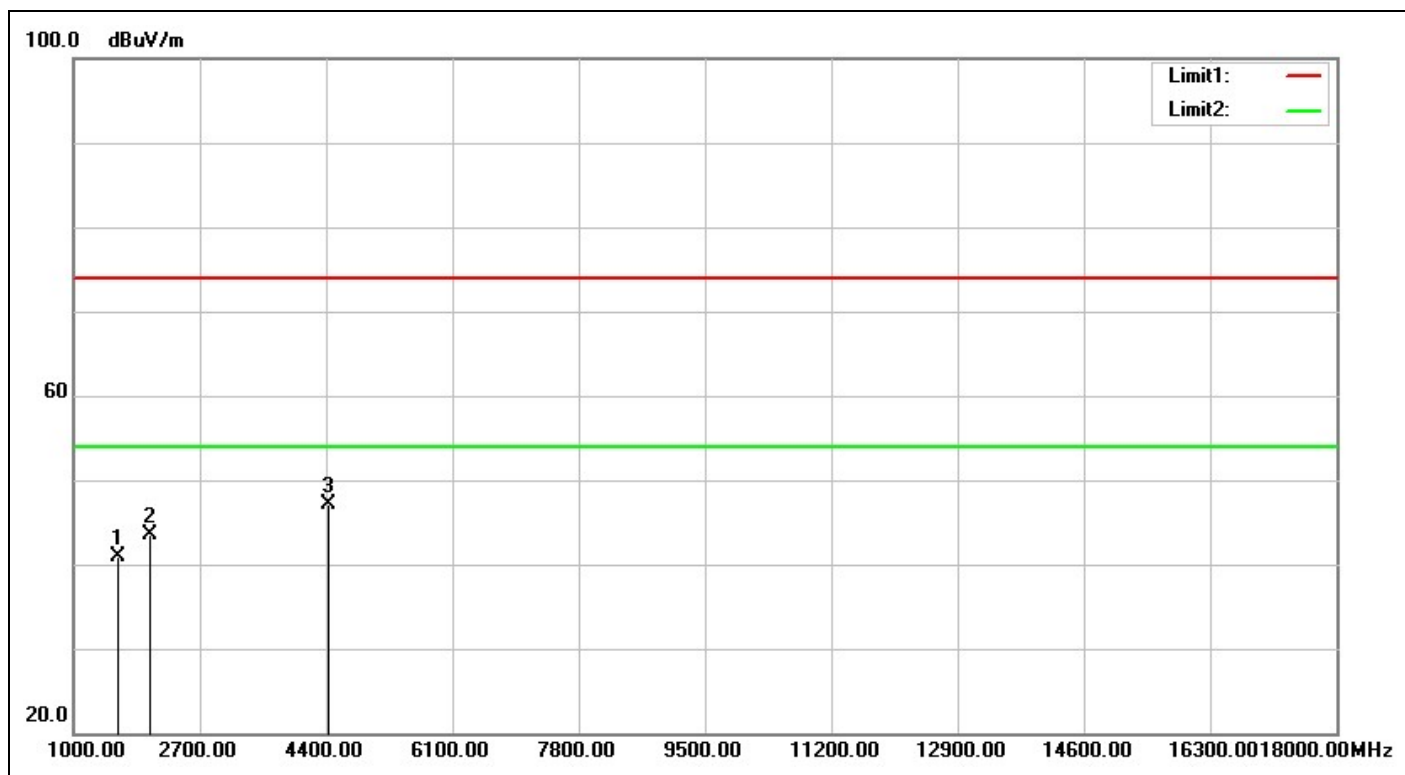
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/28 10:22:58
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%)	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	2003.000	-7.91	51.12	43.21	74.00	-30.79	peak	100	205	
2	5522.000	0.16	49.40	49.56	74.00	-24.44	peak	100	241	
3	6049.000	3.49	47.99	51.48	74.00	-22.52	peak	100	318	



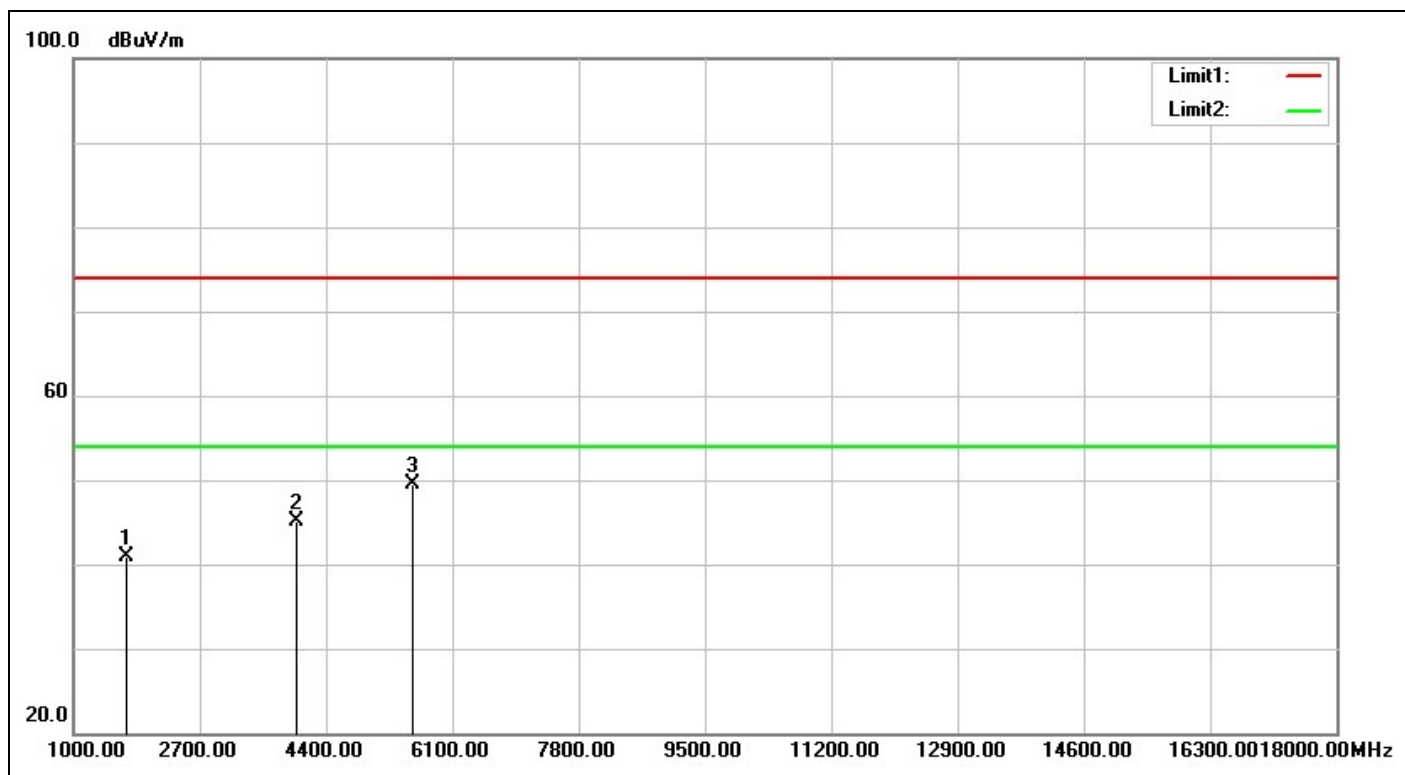
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/28 10:25:10
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%)	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	1595.000	-10.02	50.30	40.28	74.00	-33.72	peak	100	332	
2	4672.000	-3.32	50.29	46.97	74.00	-27.03	peak	100	53	
3	5607.000	0.71	47.91	48.62	74.00	-25.38	peak	100	180	



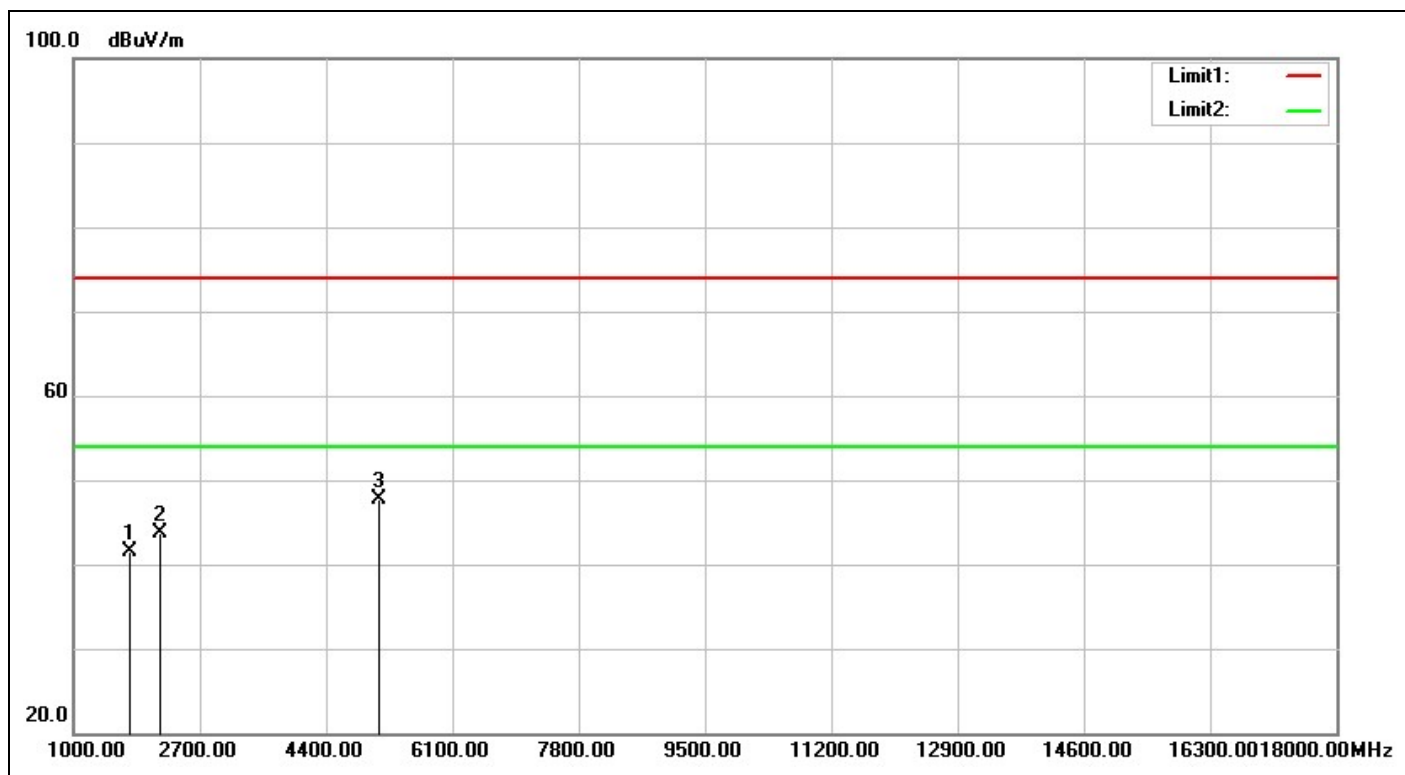
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/28 10:26:13
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%)	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	1595.000	-10.02	50.86	40.84	74.00	-33.16	peak	100	166	
2	2020.000	-7.88	51.37	43.49	74.00	-30.51	peak	100	1	
3	4434.000	-3.96	51.13	47.17	74.00	-26.83	peak	100	64	



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/28 10:28:15
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	1714.000	-9.40	50.36	40.96	74.00	-33.04	peak	100	139	
2	3992.000	-5.29	50.35	45.06	74.00	-28.94	peak	100	9	
3	5573.000	0.49	49.04	49.53	74.00	-24.47	peak	100	117	



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/28 10:29:18
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	1748.000	-9.22	50.63	41.41	74.00	-32.59	peak	100	168	
2	2156.000	-7.69	51.45	43.76	74.00	-30.24	peak	100	360	
3	5114.000	-1.90	49.69	47.79	74.00	-26.21	peak	100	249	

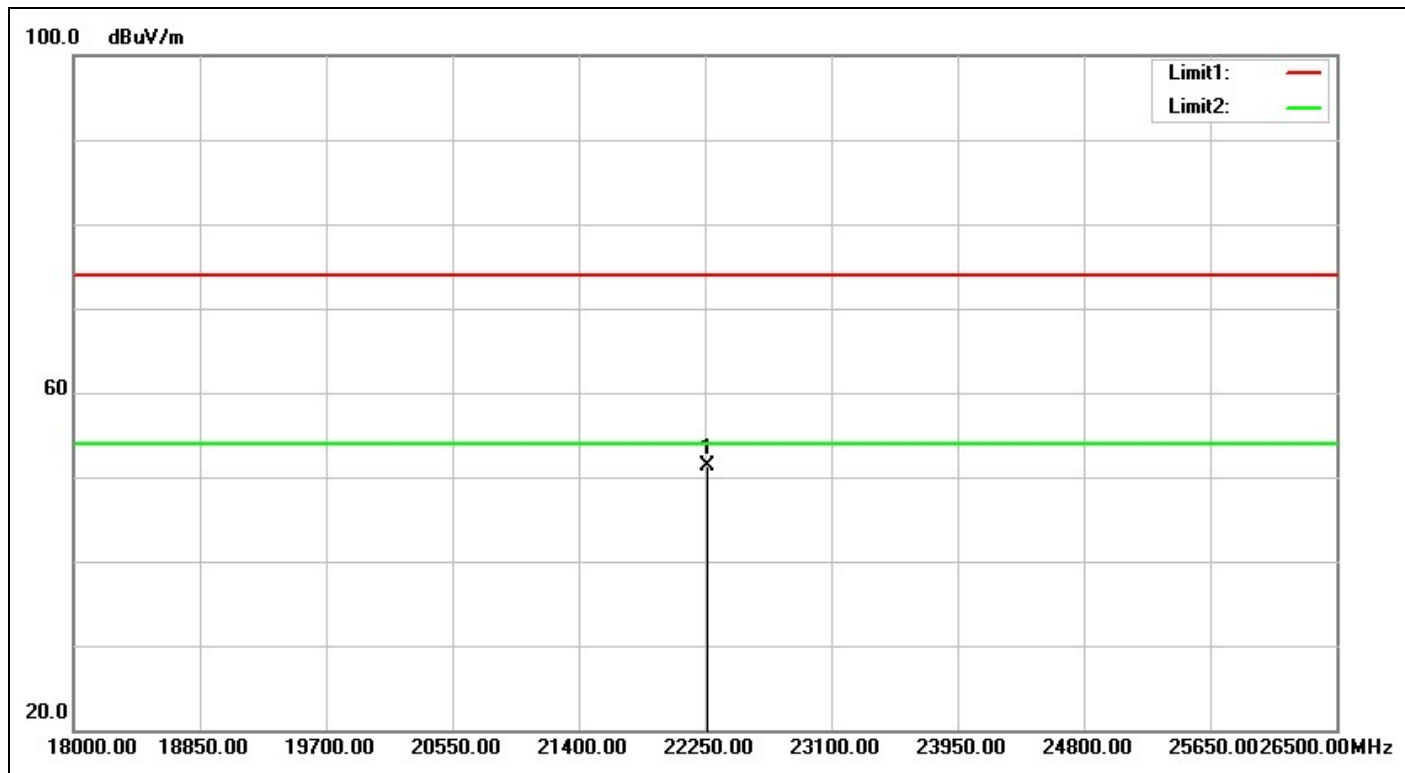
Spurious Emissions, RX Mode, 18G-26.5G



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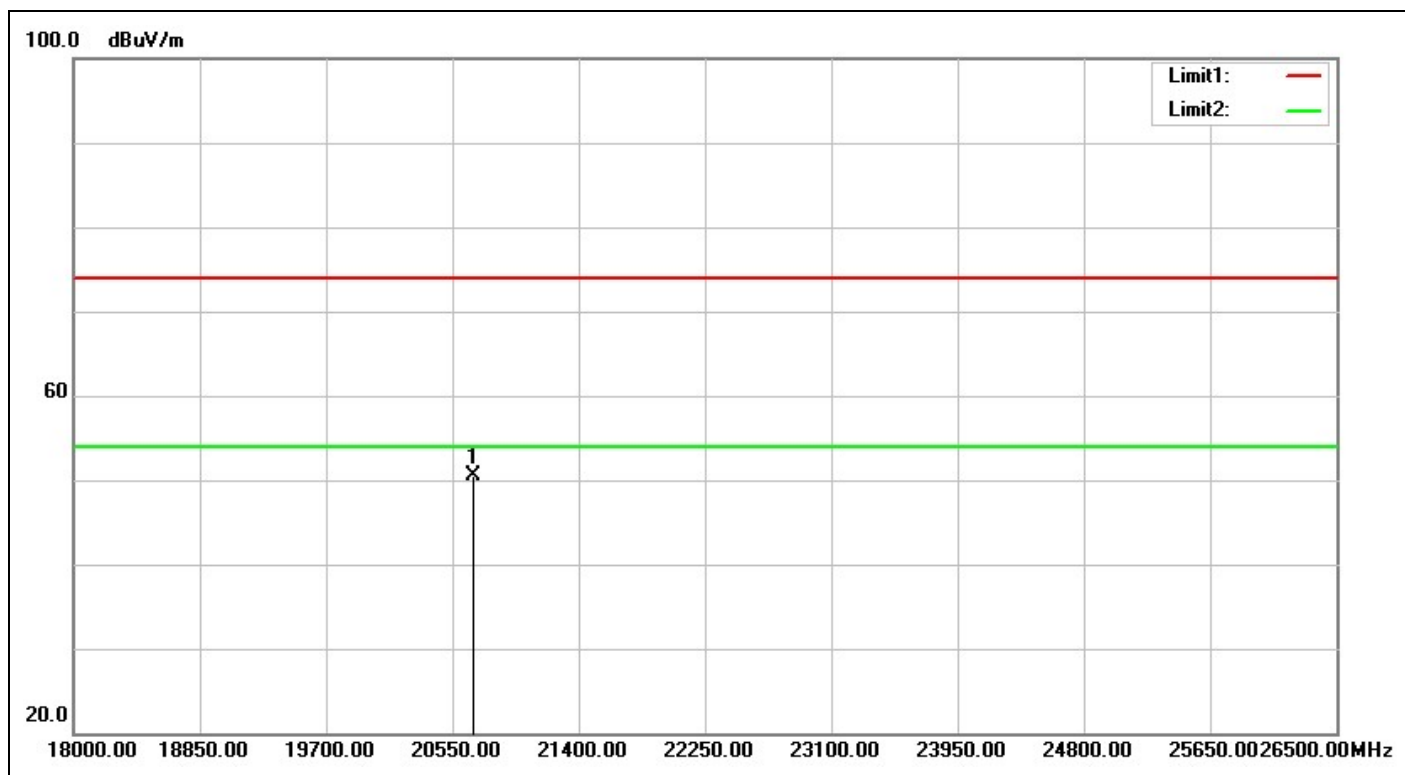
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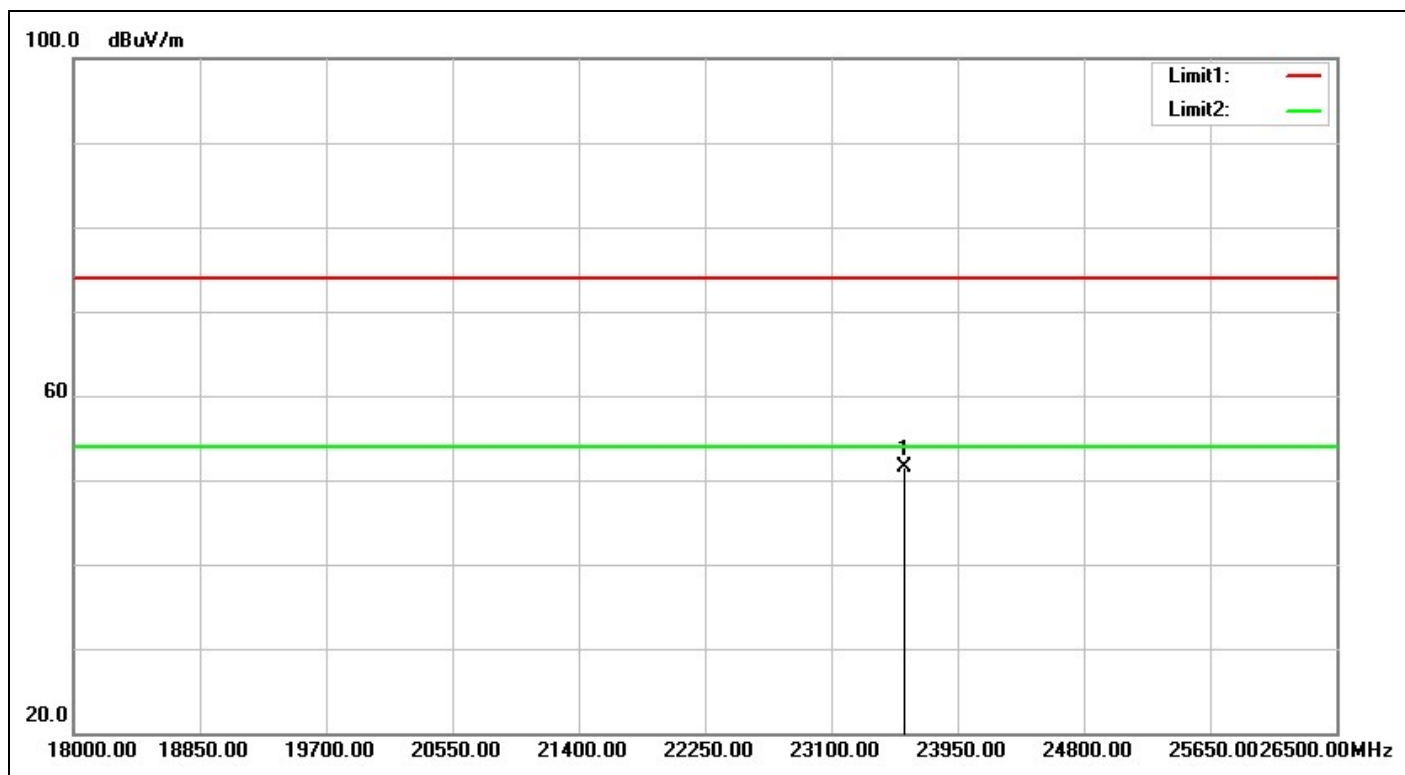
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/28 10:52:31
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%)	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	22267.000	32.61	18.78	51.39	74.00	-22.61	peak	100	197	



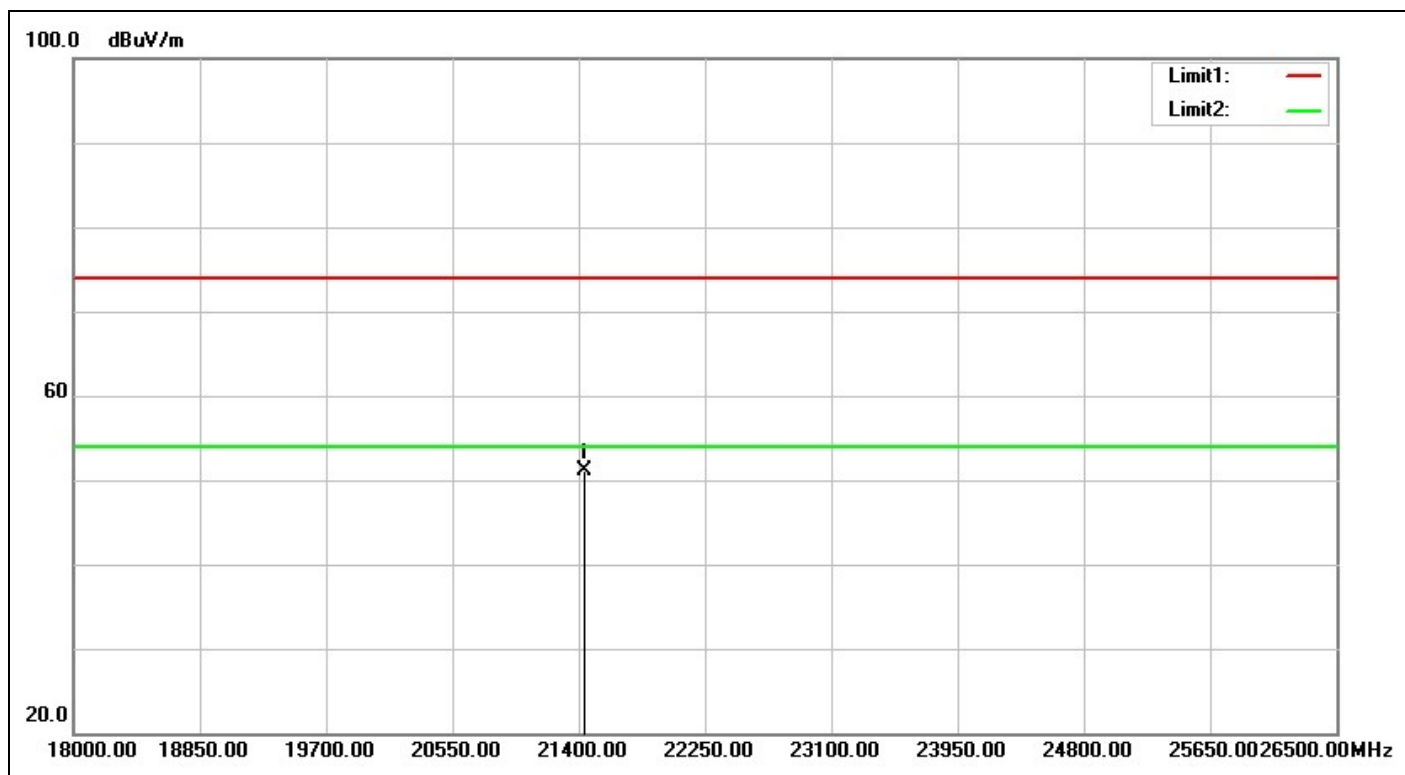
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/28 10:53:34
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	20694.500	31.81	18.60	50.41	74.00	-23.59	peak	100	1	



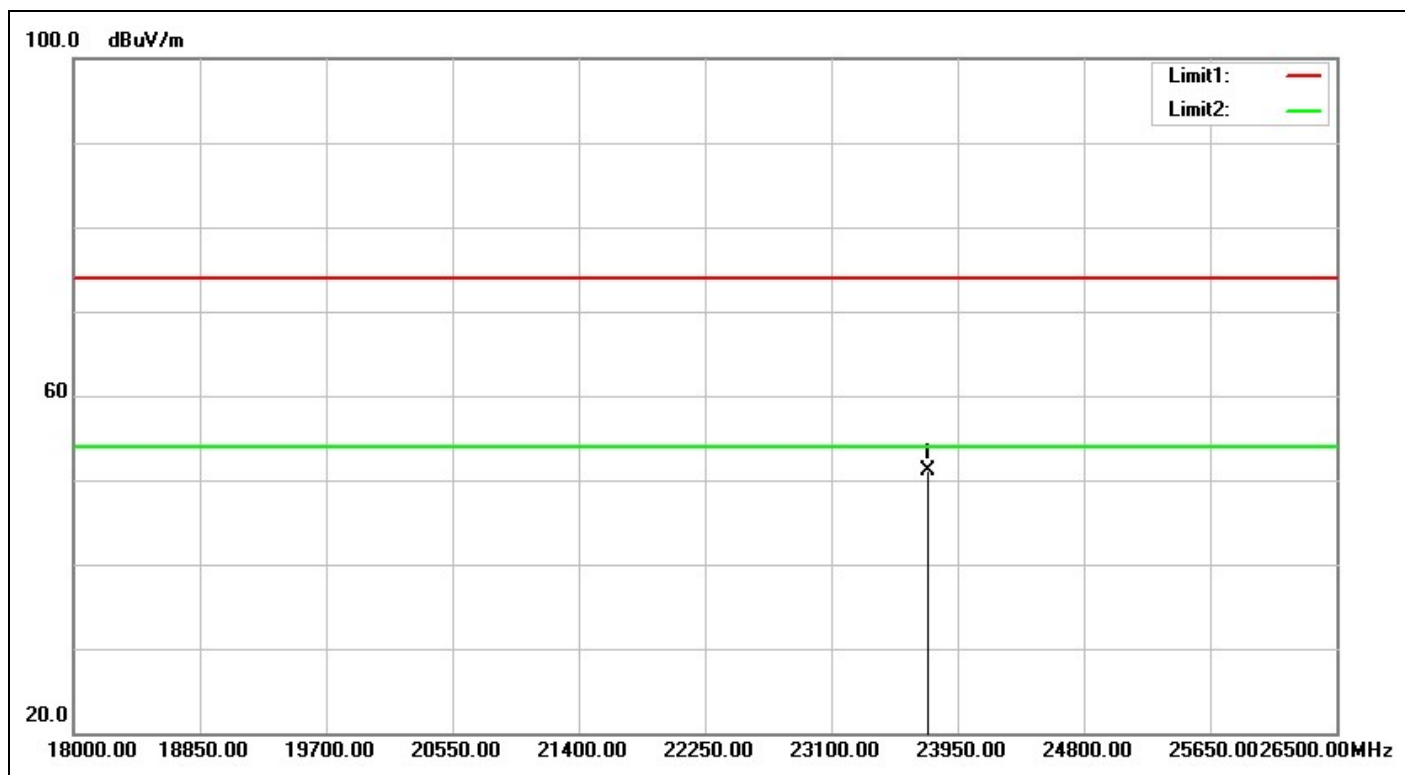
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/28 10:55:26
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	23593.000	33.21	18.33	51.54	74.00	-22.46	peak	100	177	



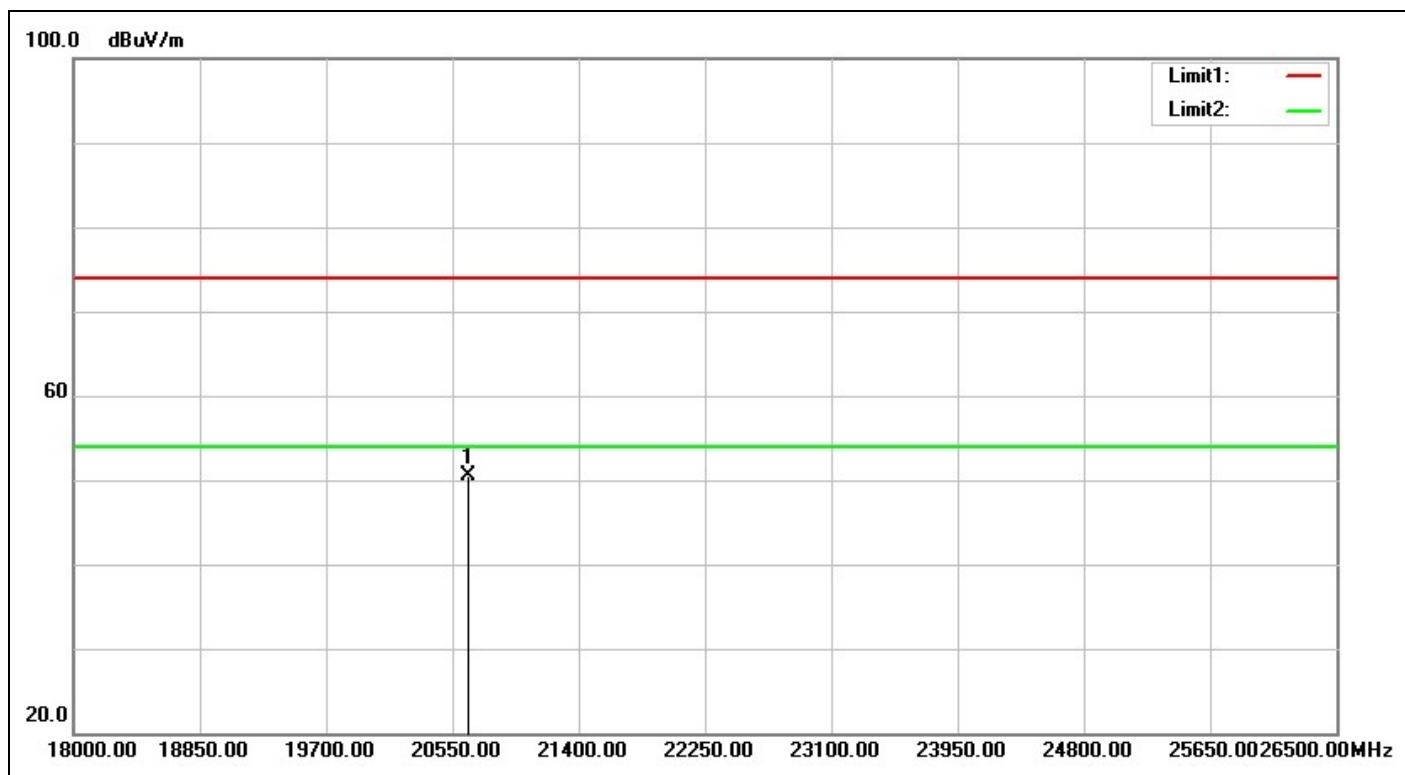
Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/28 10:56:29
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	21434.000	32.83	18.26	51.09	74.00	-22.91	peak	100	83	



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/5/28 10:58:22
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	23754.500	33.10	18.04	51.14	74.00	-22.86	peak	100	255	



Service No.:	114077537	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/5/28 10:59:25
Applicant:	Shiuan-Ruei(諠叡)	Test Rating:	DC 3.7V
Product:	藍弦(Bluetooth)	Temp.(°C)/Hum.(%):	30(°C)/59%
Model No.:	Tenergy	Test Engineer:	Kevin.Kuo
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	20660.500	31.73	18.72	50.45	74.00	-23.55	peak	100	346	

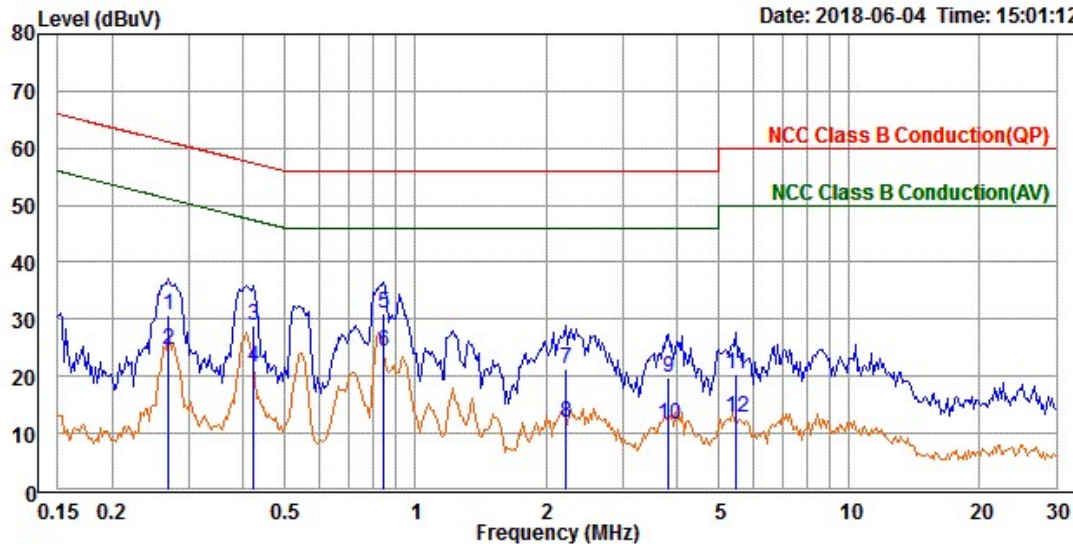
Spurious Emissions, Mains Conducted



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File: C:\EMC\Report\2018\Shiuan-ruei\NCC\114077537(Shiuan-ruei)_00003.EMI

Date: 2018-06-04 Time: 15:01:12



Trace: 1

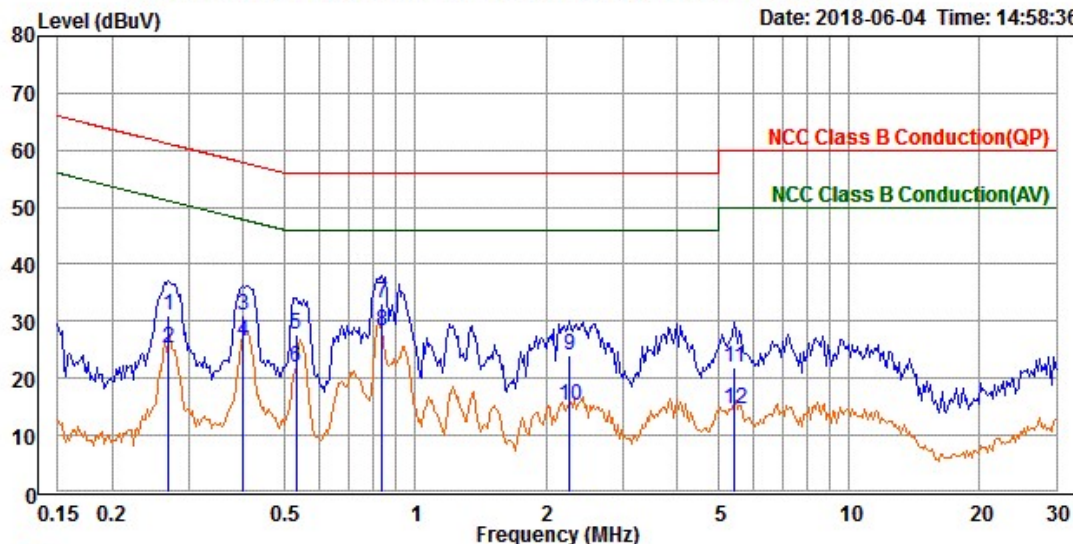
Site : Conduction room
Condition : NCC Class B Conduction(QP) neutral
Test Engineer: Kevin Kuo
Applicant : Shiuan-ruei

Test Rating : 110Vav/60Hz
Tmp/Hum : 23.9°C / 35%
Memo : AC Mains

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.270	21.08	9.66	30.74	61.13	-30.39	QP
2	0.270	15.09	9.66	24.75	51.13	-26.38	Average
3	0.422	19.14	9.66	28.80	57.41	-28.61	QP
4	0.422	12.05	9.66	21.71	47.41	-25.70	Average
5	0.846	21.49	9.67	31.16	56.00	-24.84	QP
6	0.846	14.71	9.67	24.38	46.00	-21.62	Average
7	2.218	11.47	9.70	21.17	56.00	-34.83	QP
8	2.218	2.07	9.70	11.77	46.00	-34.23	Average
9	3.832	9.91	9.72	19.63	56.00	-36.37	QP
10	3.832	1.97	9.72	11.69	46.00	-34.31	Average
11	5.481	10.72	9.74	20.46	60.00	-39.54	QP
12	5.481	3.04	9.74	12.78	50.00	-37.22	Average

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Date: 2018-06-04 Time: 14:58:36



Trace: 1

Site : Conduction room
Condition : NCC Class B Conduction(QP) line1
Test Engineer: Kevin Kuo
Applicant : Shiuan-ruei

Test Rating : 110Vav/60Hz
Tmp/Hum : 23.9°C / 35%
Memo : AC Mains

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.270	21.42	9.65	31.07	61.13	-30.06	QP
2	0.270	15.58	9.65	25.23	51.13	-25.90	Average
3	0.401	21.29	9.66	30.95	57.83	-26.88	QP
4	0.401	16.93	9.66	26.59	47.83	-21.24	Average
5	0.530	18.15	9.66	27.81	56.00	-28.19	QP
6	0.530	12.38	9.66	22.04	46.00	-23.96	Average
7	0.837	23.64	9.66	33.30	56.00	-22.70	QP
8	0.837	18.60	9.66	28.26	46.00	-17.74	Average
9	2.263	14.32	9.69	24.01	56.00	-31.99	QP
10	2.263	5.63	9.69	15.32	46.00	-30.68	Average
11	5.427	12.15	9.73	21.88	60.00	-38.12	QP
12	5.427	4.92	9.73	14.65	50.00	-35.35	Average