

# Test Report No.50241449 001

## Appendix D: Radiated and Mains Spurious Emission Data

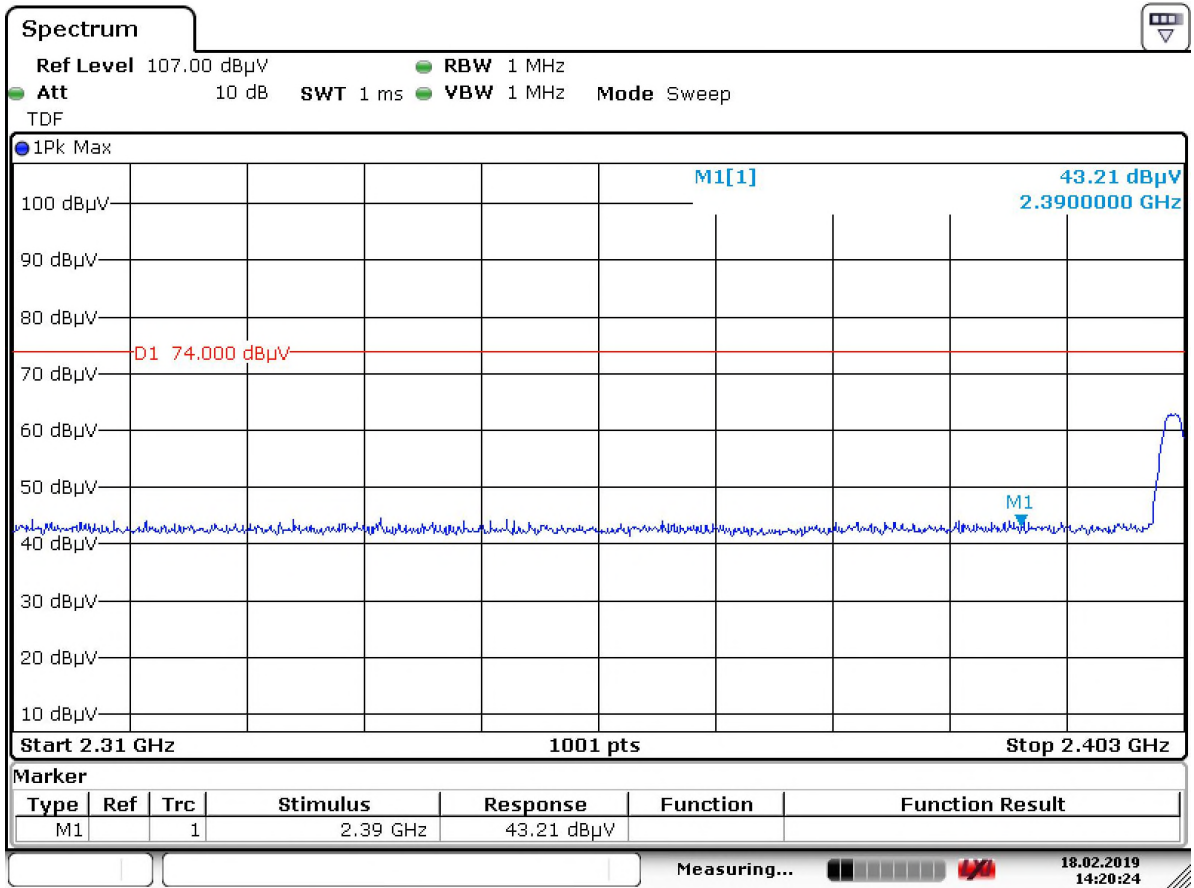
(File: 50241449 001AppendixD)

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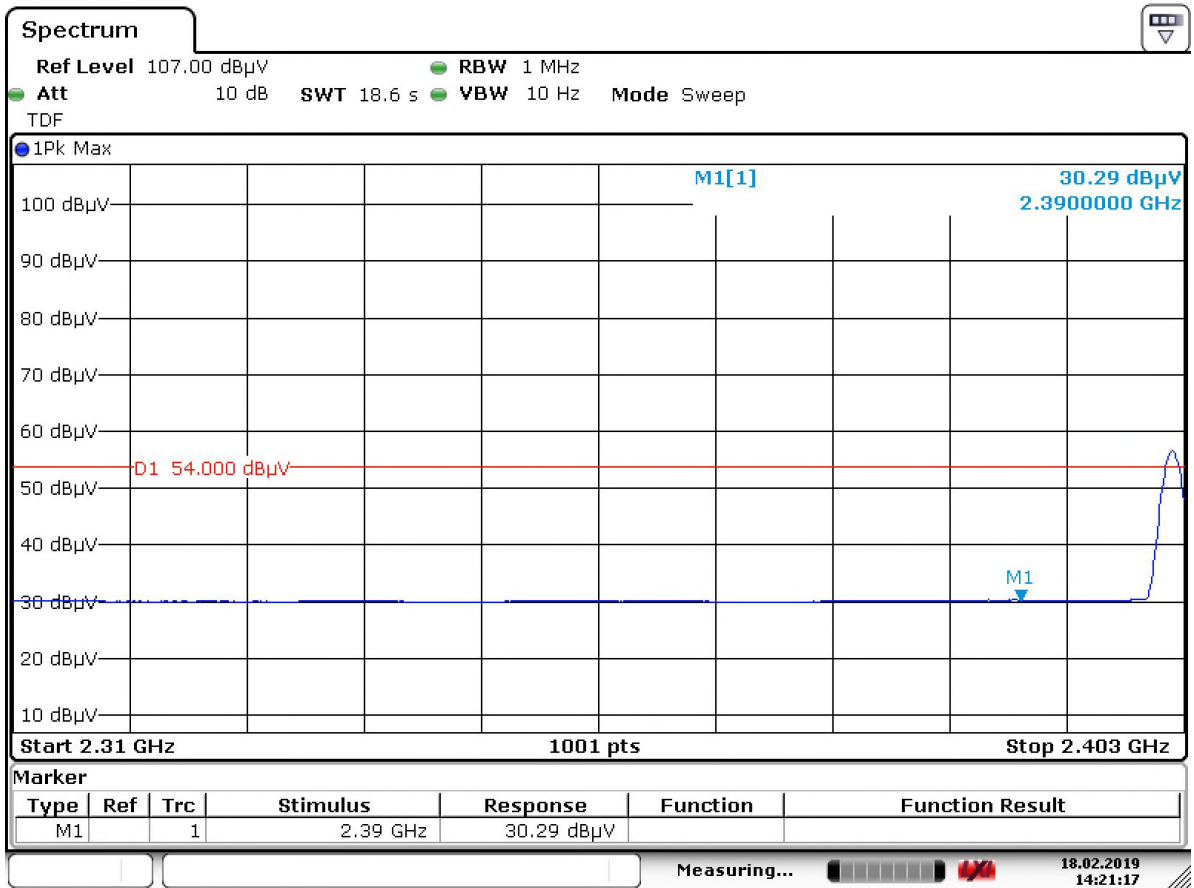
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# Spurious Emissions, Band Edges, 2.35-2.5G

Low Channel (Horizontal)

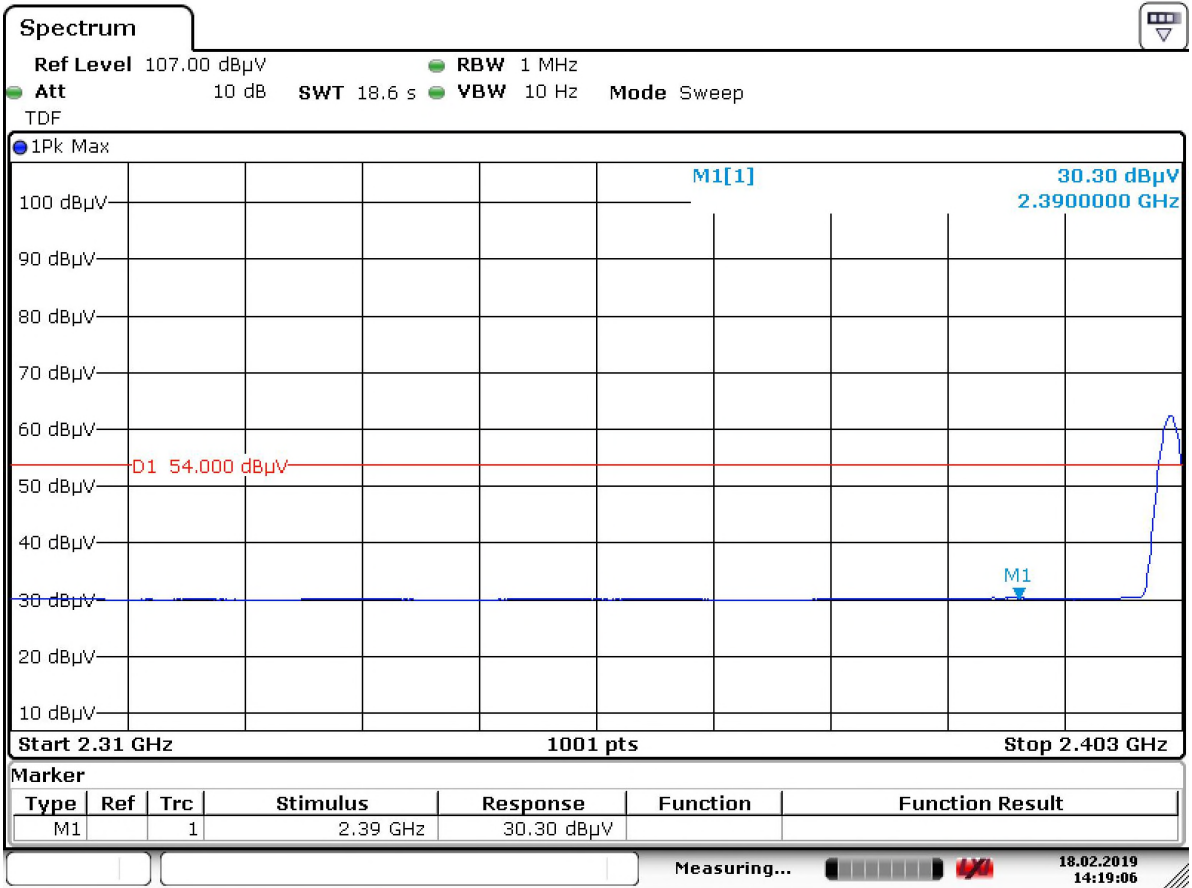


Date: 18.FEB.2019 14:20:24

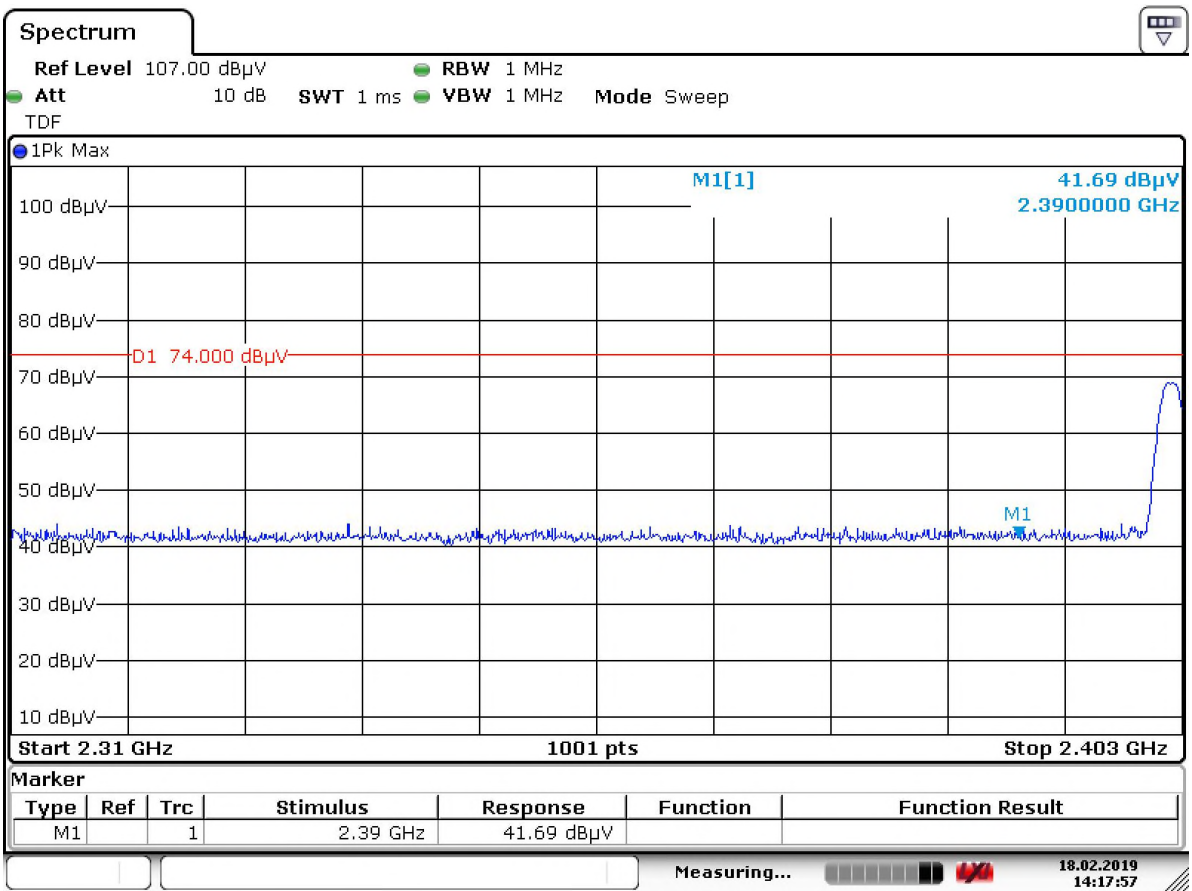


Date: 18.FEB.2019 14:21:17

Low Channel (Vertical)

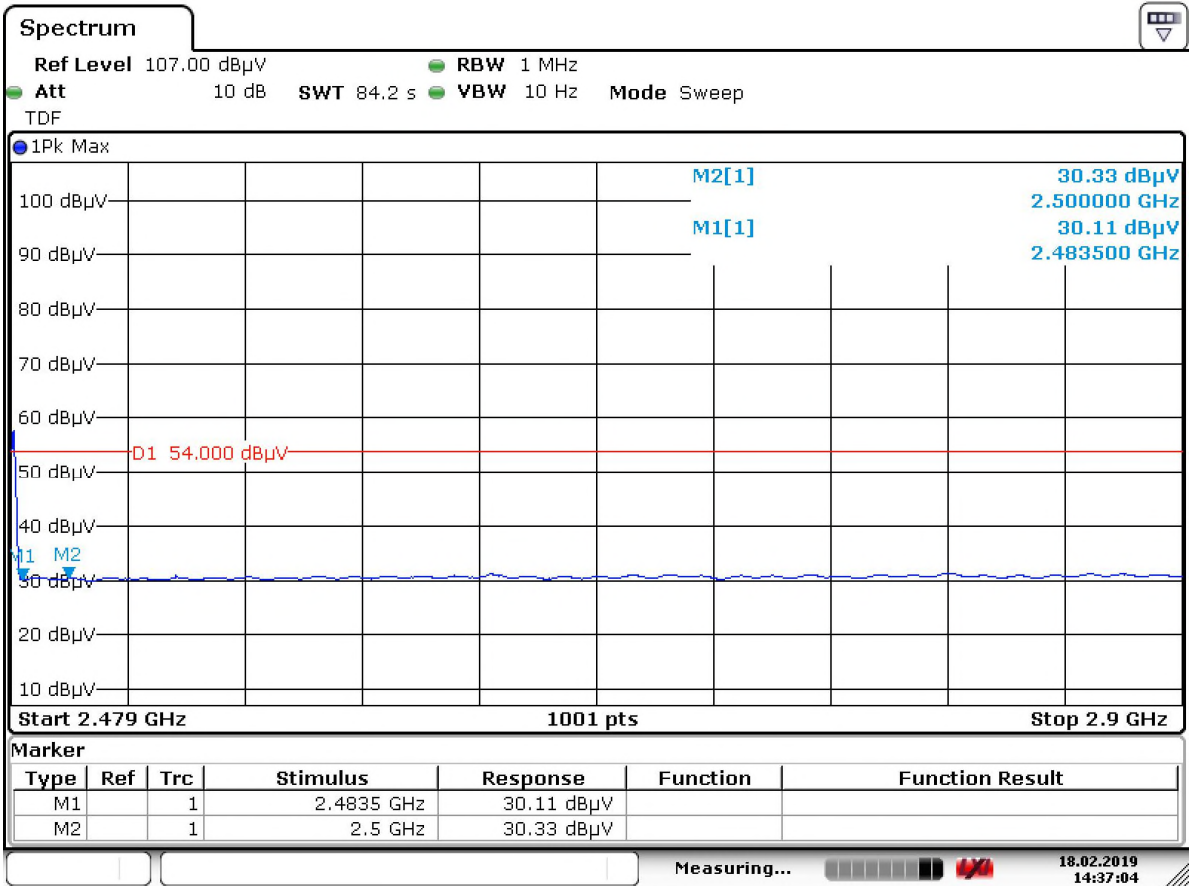


Date: 18.FEB.2019 14:19:06

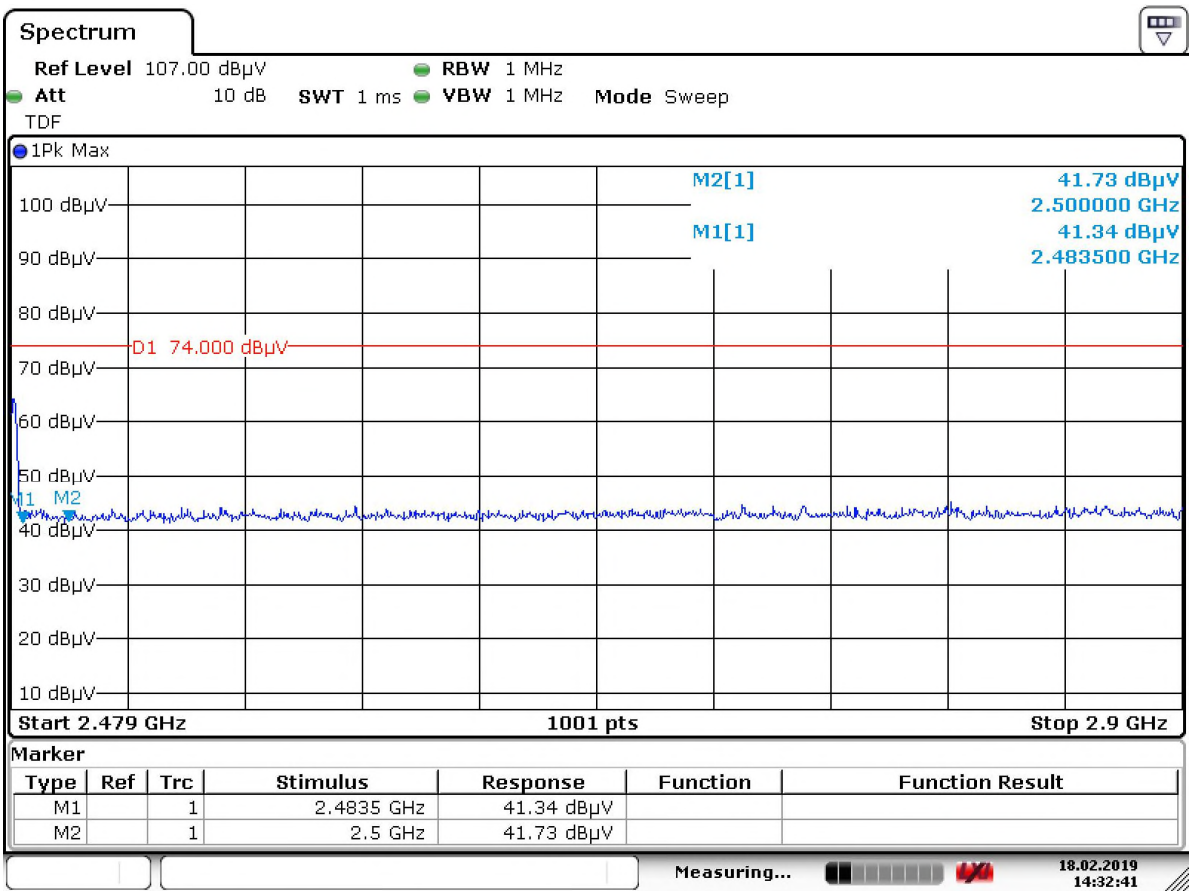


Date: 18.FEB.2019 14:17:57

# High Channel (Horizontal)

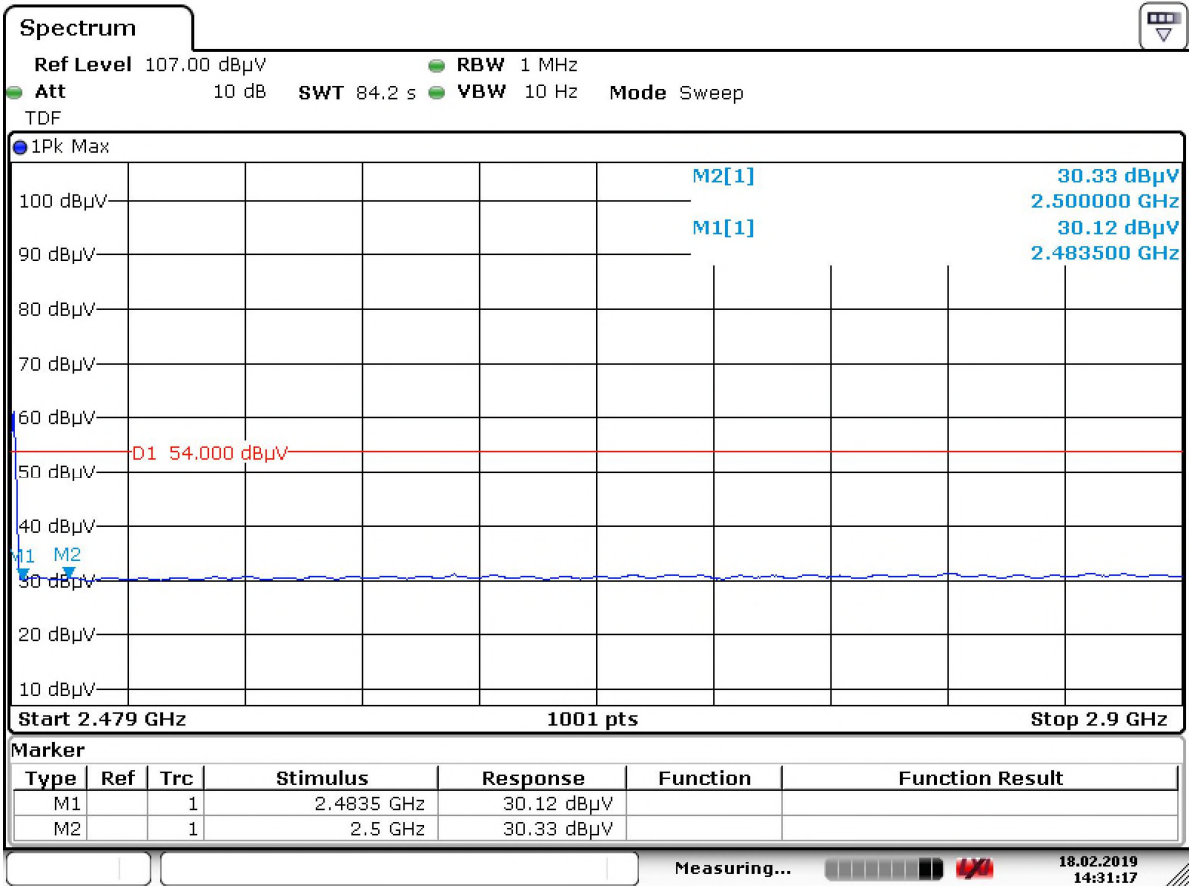


Date: 18.FEB.2019 14:37:04

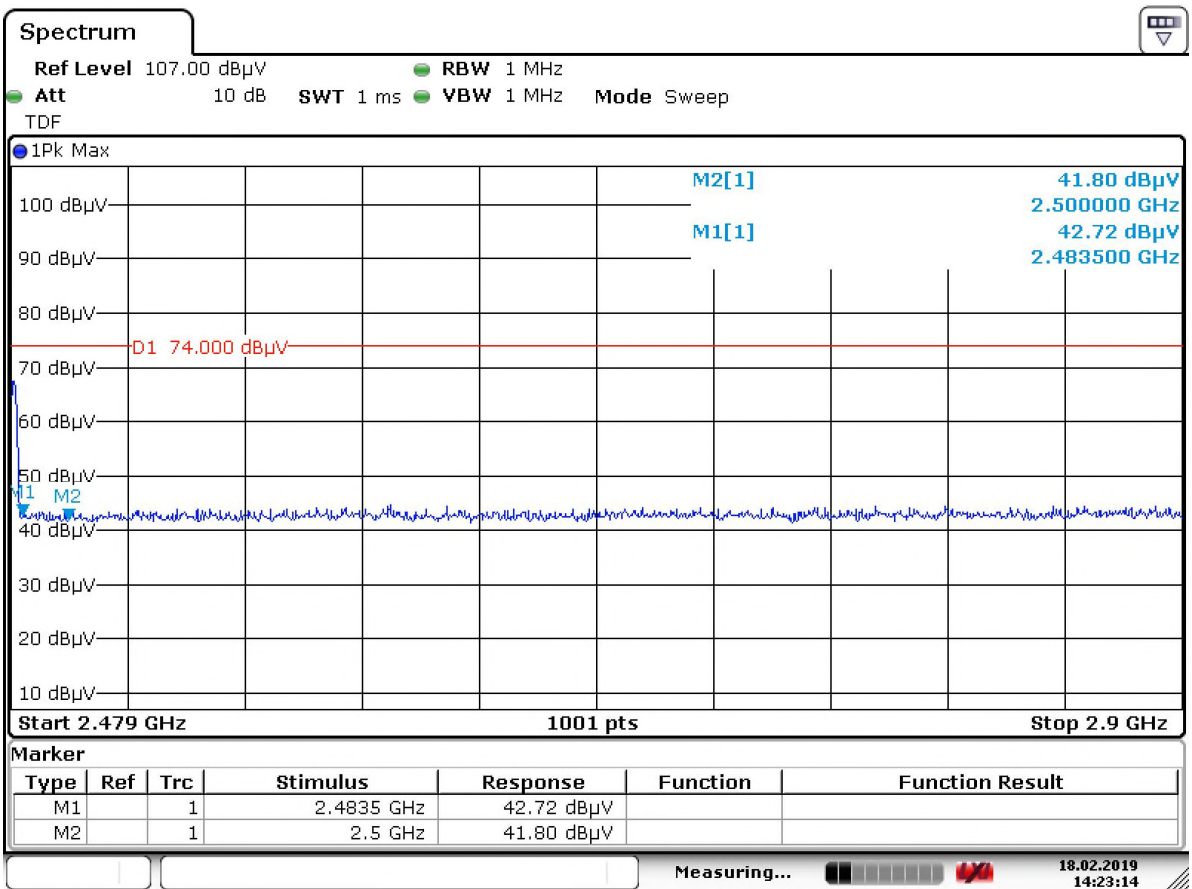


Date: 18.FEB.2019 14:32:41

# High Channel (Vertical)



Date: 18.FEB.2019 14:31:17



Date: 18.FEB.2019 14:23:14

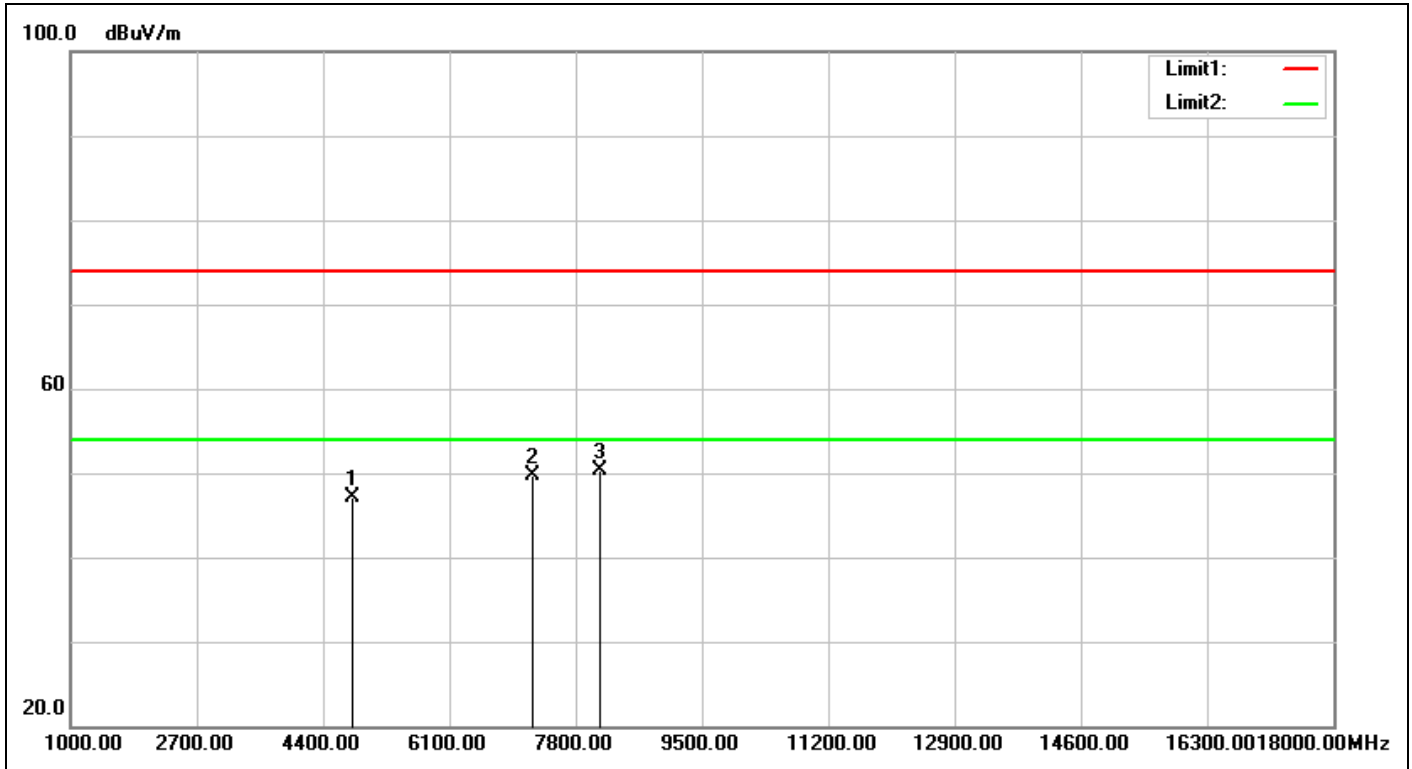
# Spurious Emissions, TX Mode, 1-18G



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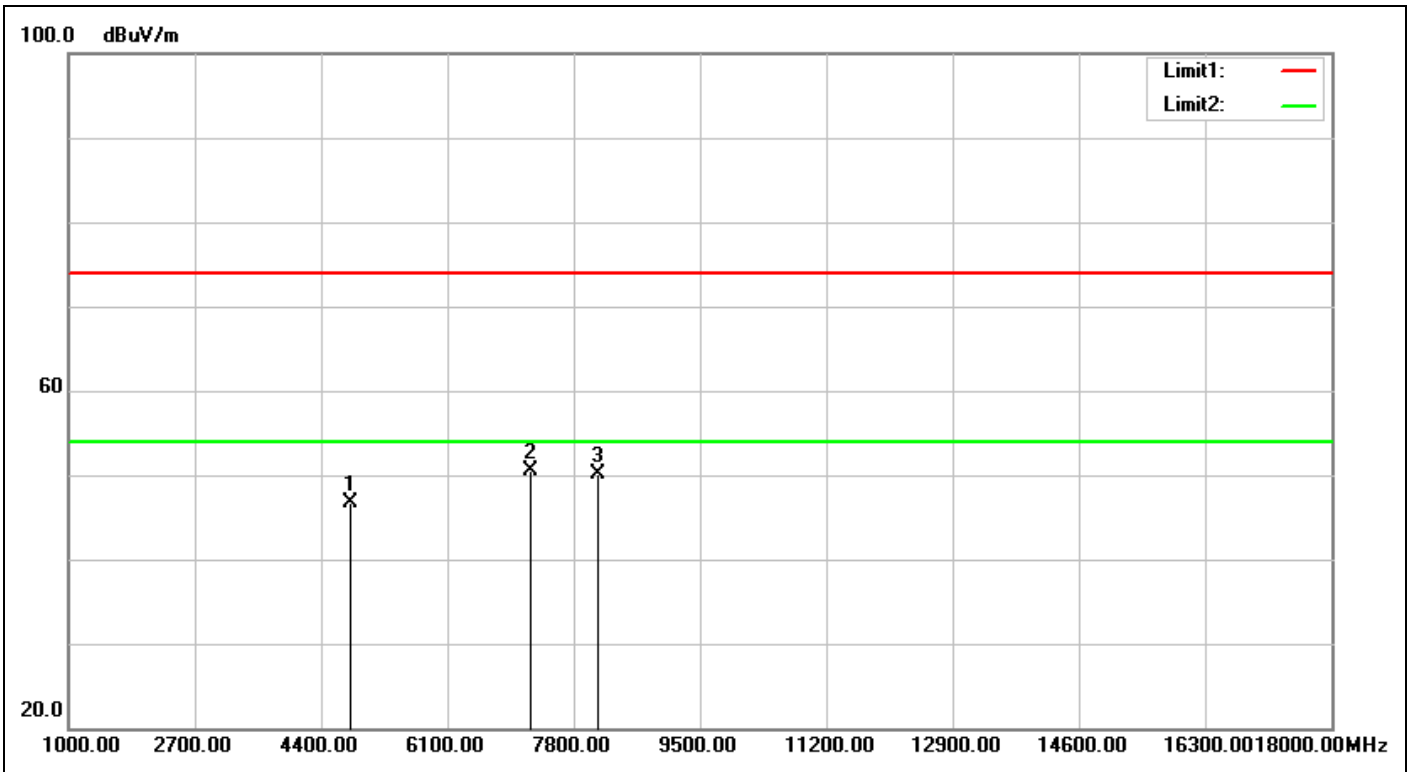
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



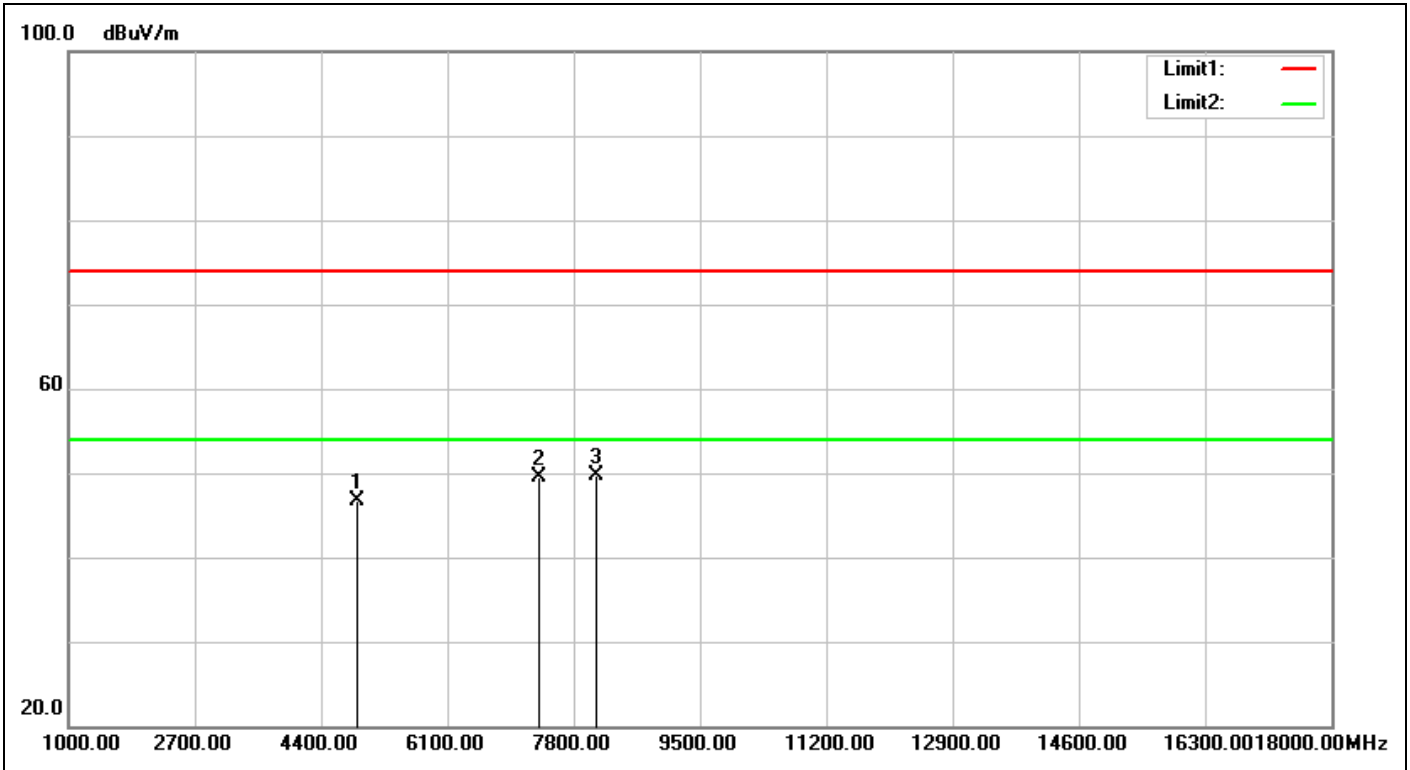
<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Horizontal</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 14:40:46</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2402-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4804.000	-2.64	49.70	47.06	74.00	-26.94	peak	100	84	
2	7206.000	5.26	44.46	49.72	74.00	-24.28	peak	100	360	
3	8123.000	5.93	44.28	50.21	74.00	-23.79	peak	100	63	



<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Vertical</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 14:41:38</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2402-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

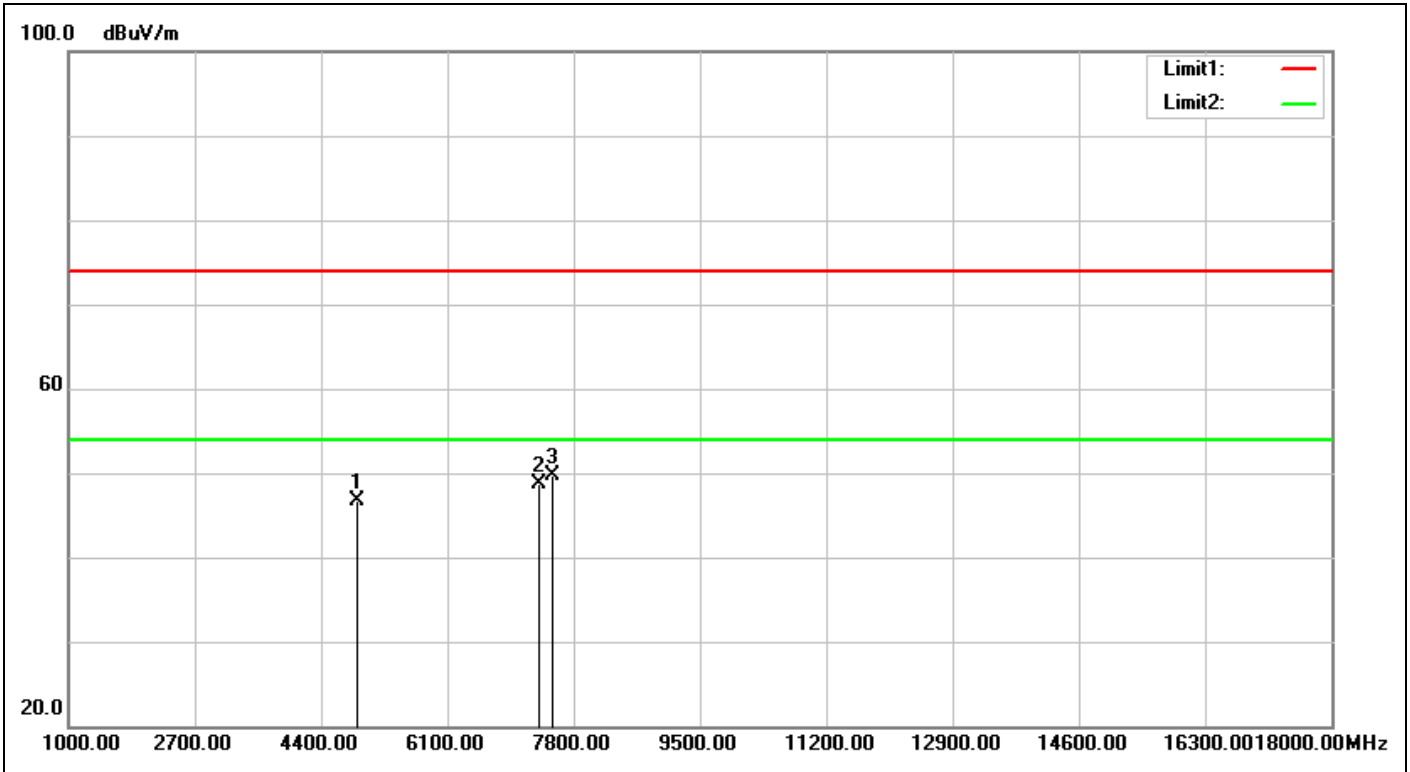
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4804.000	-2.64	49.34	46.70	74.00	-27.30	peak	100	137	
2	7206.000	5.26	45.31	50.57	74.00	-23.43	peak	100	171	
3	8123.000	5.93	44.15	50.08	74.00	-23.92	peak	100	144	



<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Horizontal</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 14:44:25</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2440-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

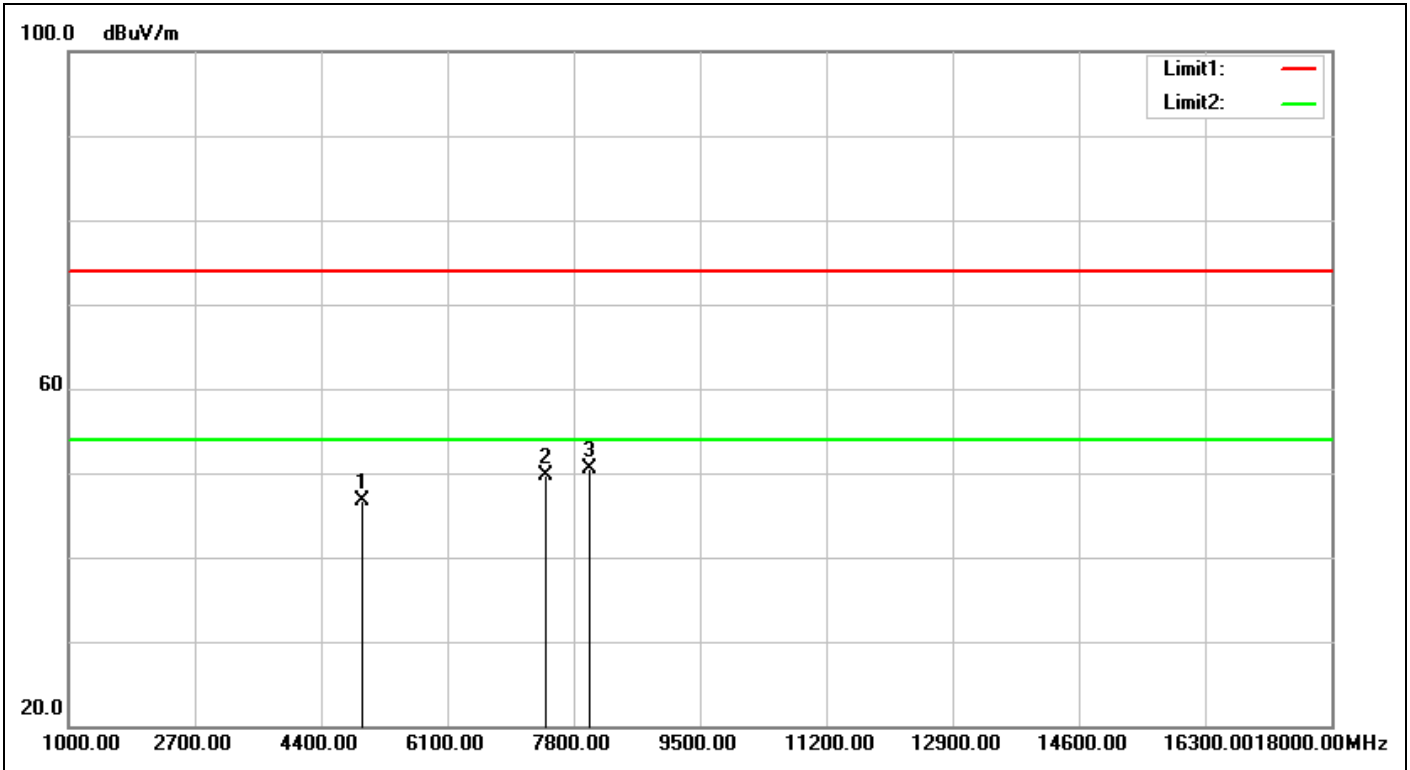
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4880.000	-2.45	49.14	46.69	74.00	-27.31	peak	100	189	
2	7320.000	5.54	44.06	49.60	74.00	-24.40	peak	100	354	
3	8106.000	5.91	43.75	49.66	74.00	-24.34	peak	100	207	





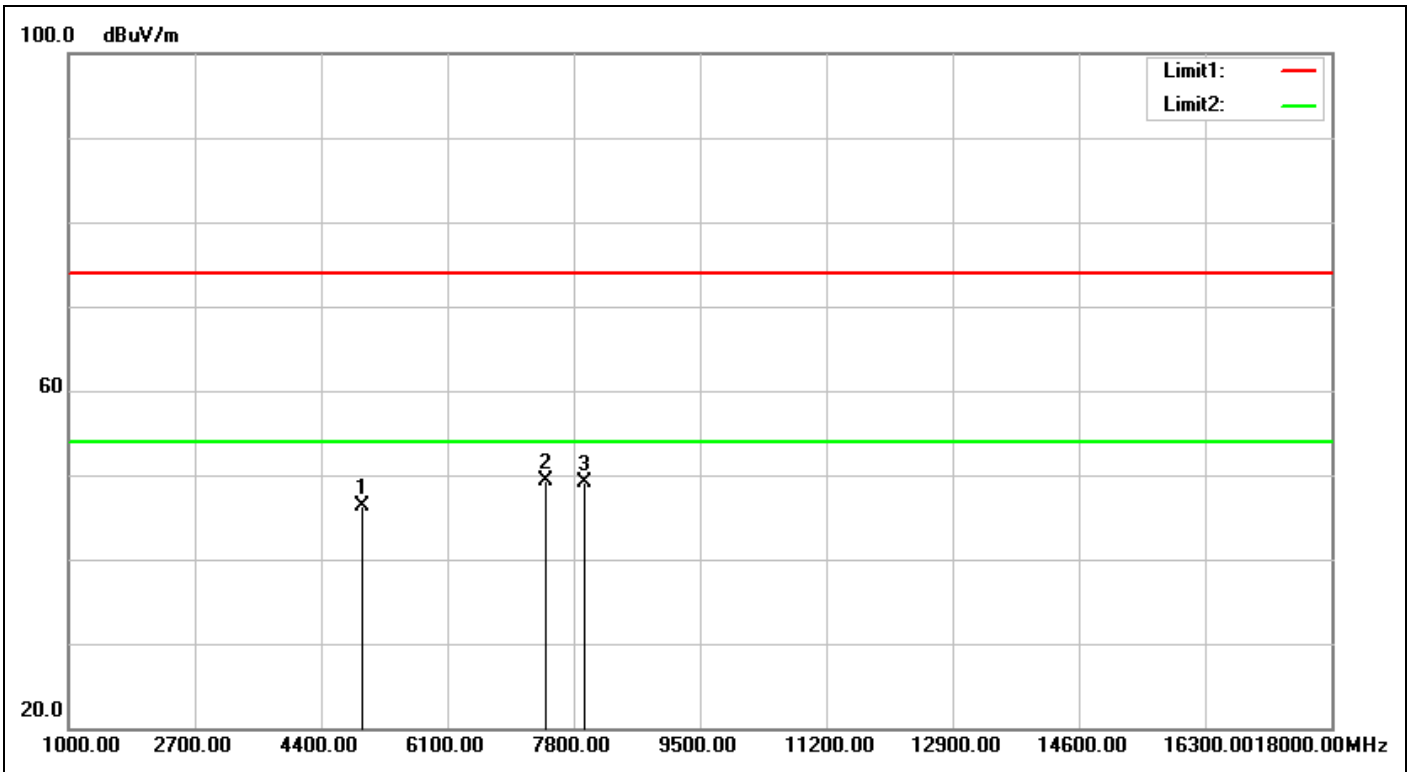
<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Vertical</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 14:45:17</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2440-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4880.000	-2.45	49.16	46.71	74.00	-27.29	peak	100	271	
2	7320.000	5.54	43.08	48.62	74.00	-25.38	peak	100	278	
3	7511.000	5.98	43.74	49.72	74.00	-24.28	peak	100	263	



<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Horizontal</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 14:47:12</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2480-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4960.000	-2.25	48.99	46.74	74.00	-27.26	peak	100	323	
2	7440.000	5.83	43.82	49.65	74.00	-24.35	peak	100	354	
3	8021.000	5.75	44.74	50.49	74.00	-23.51	peak	100	2	



<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Vertical</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 14:48:04</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2480-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4960.000	-2.25	48.53	46.28	74.00	-27.72	peak	100	195	
2	7440.000	5.83	43.45	49.28	74.00	-24.72	peak	100	0	
3	7936.000	5.76	43.40	49.16	74.00	-24.84	peak	100	359	

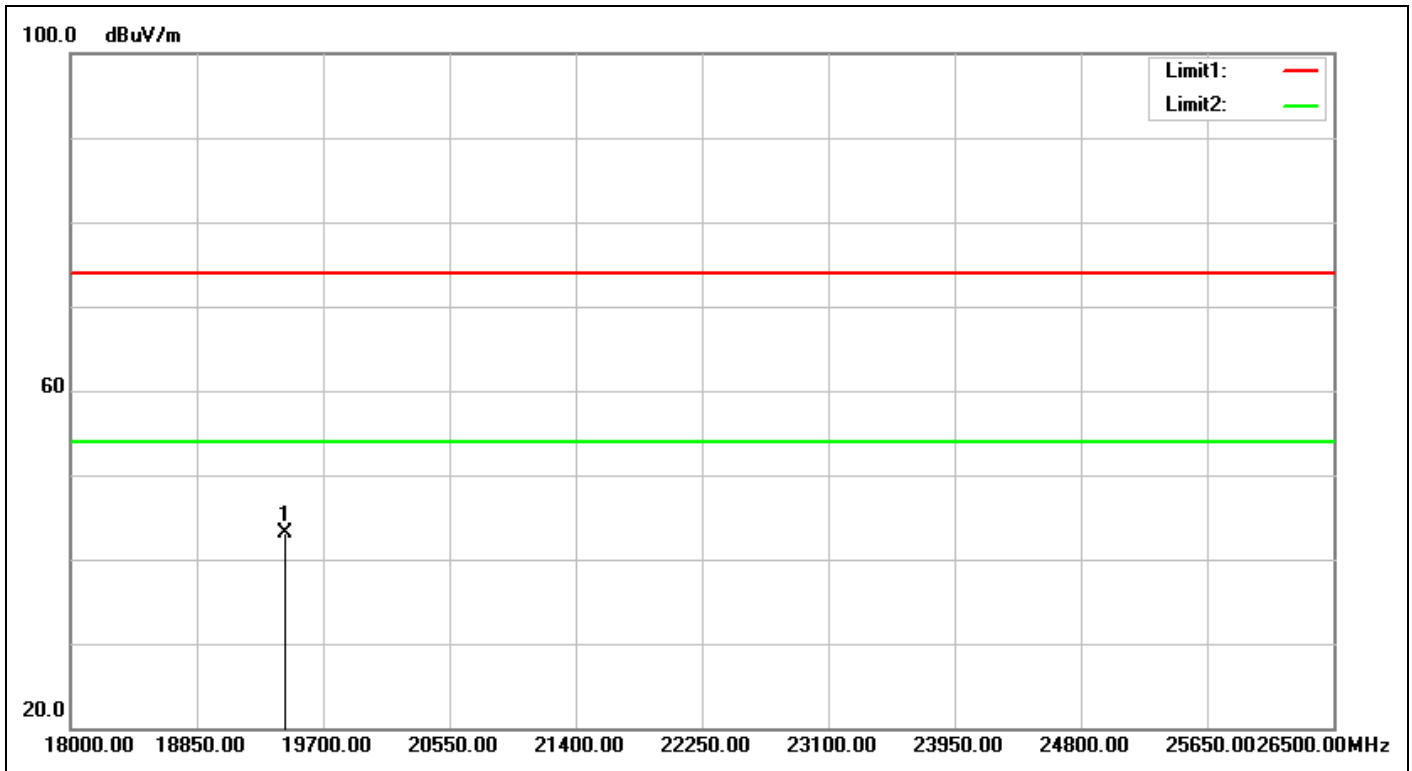
# Spurious Emissions, TX Mode, 18-26.5G



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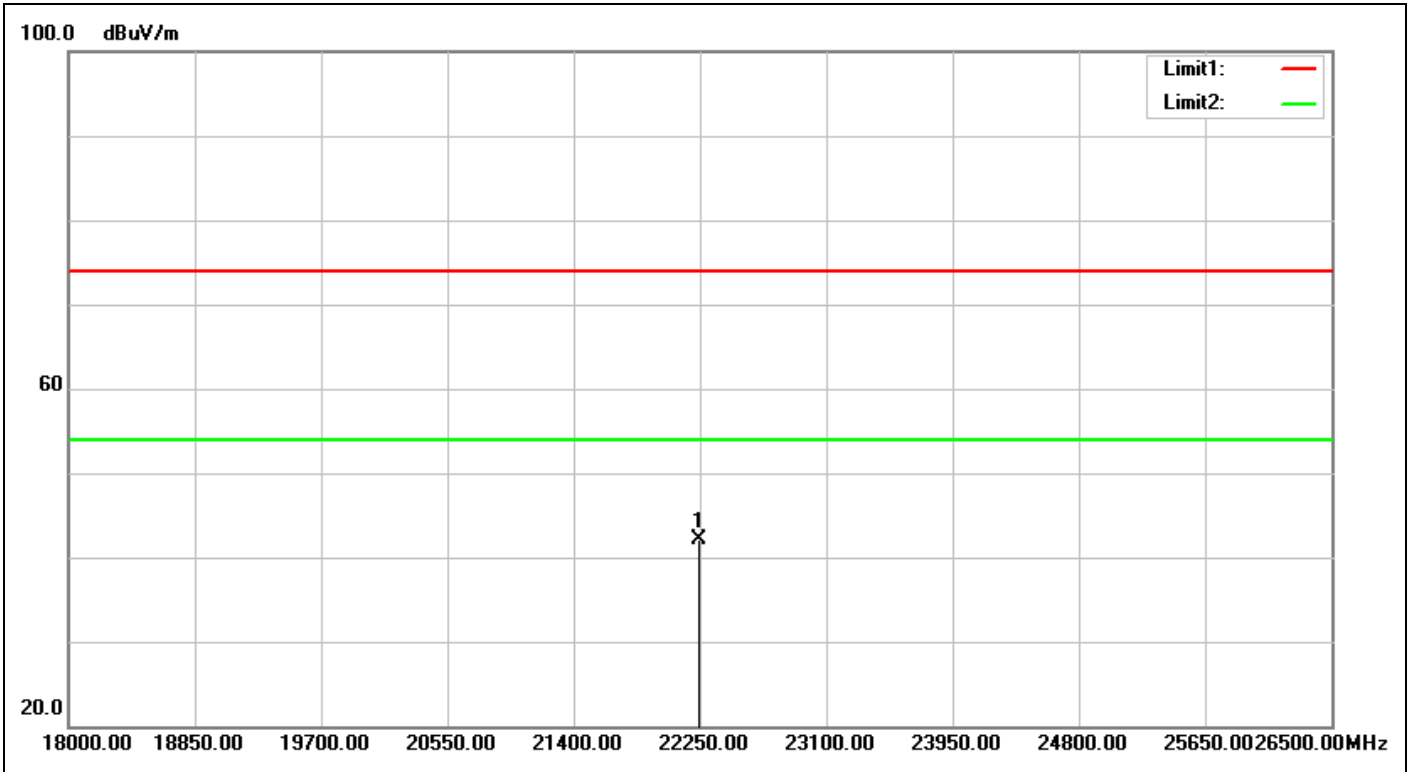
11F., No.758, Sec.4 Bade Road, Songshan Dist, Taipei City 105

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



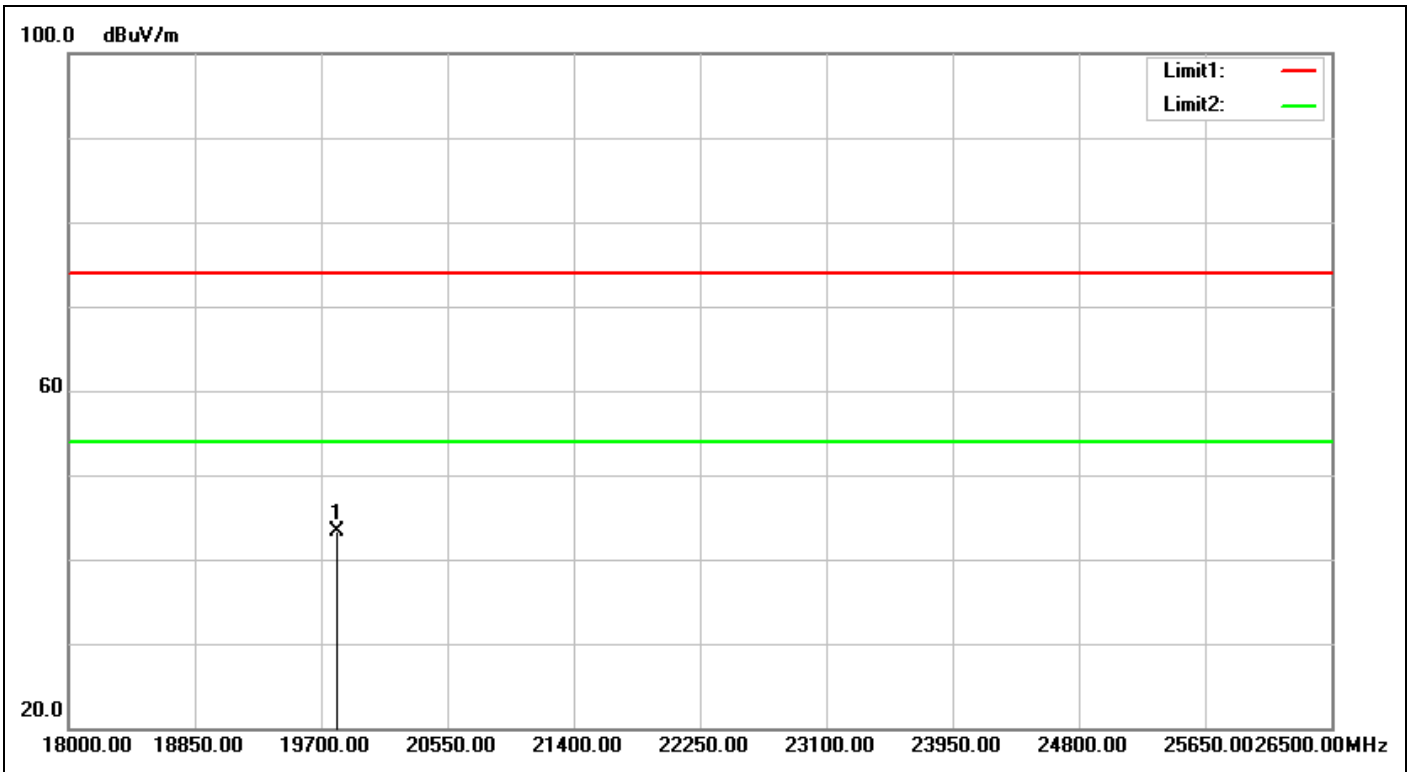
<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Horizontal</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 15:03:06</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2402-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19445.000	3.72	39.31	43.03	74.00	-30.97	peak	100	28	



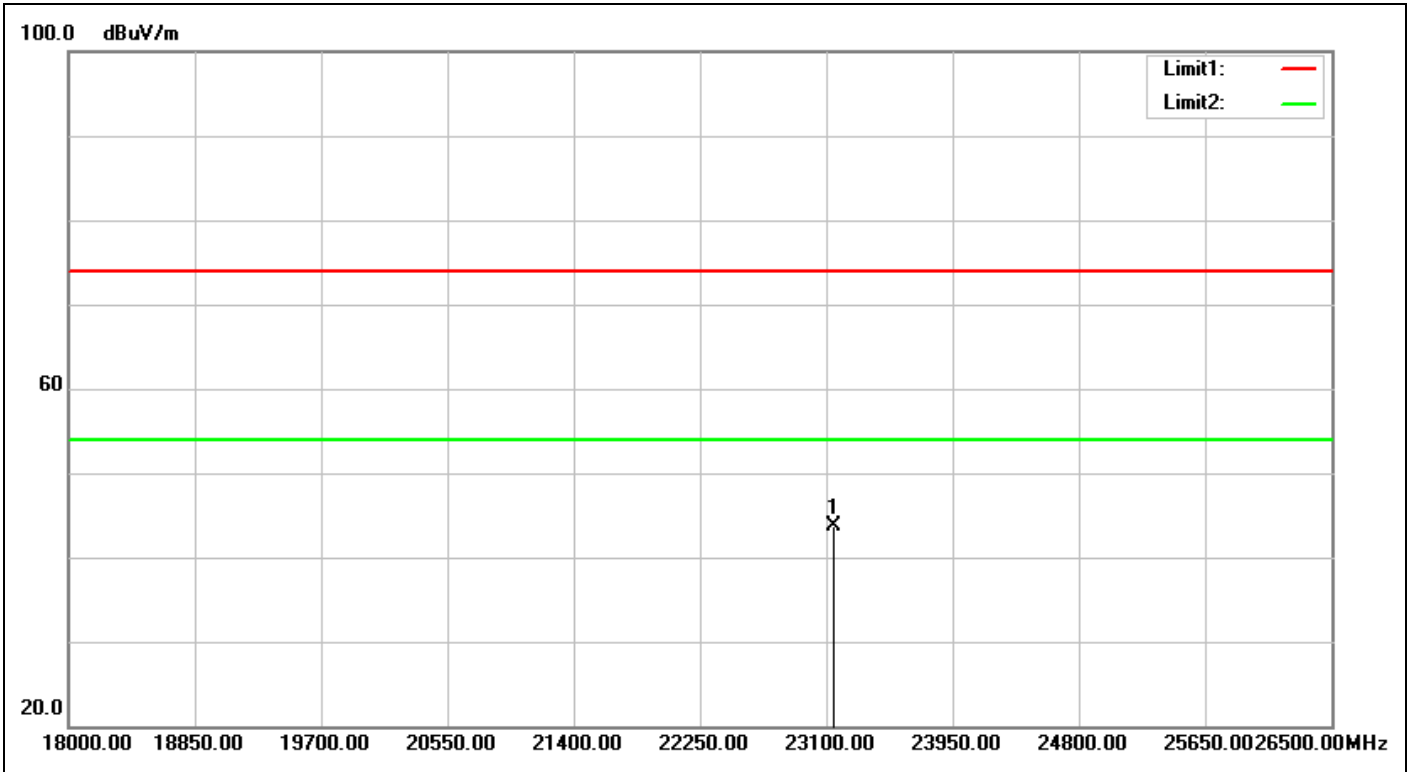
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<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Vertical</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 15:04:13</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2402-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22241.500	4.75	37.34	42.09	74.00	-31.91	peak	100	325	



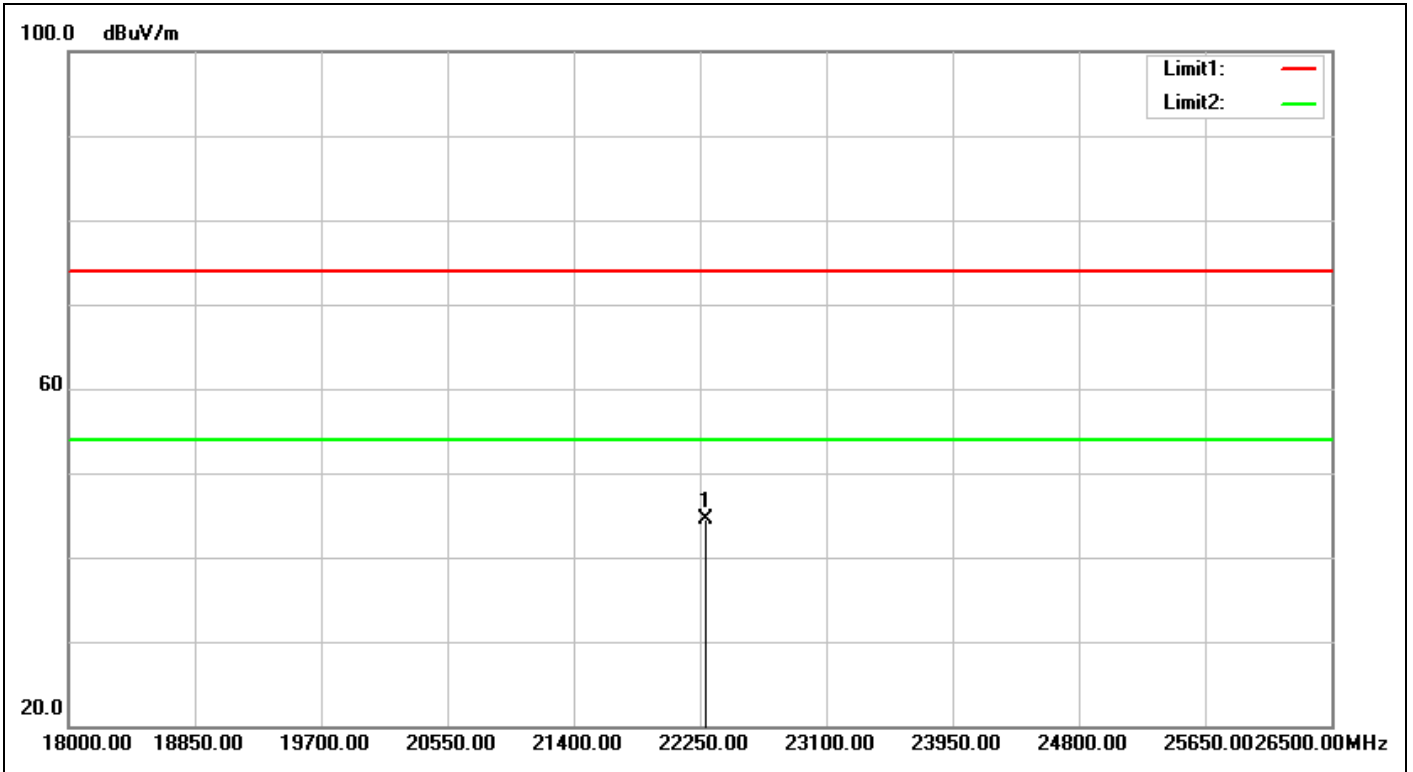
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<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Horizontal</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 15:05:40</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2440-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19802.000	3.65	39.65	43.30	74.00	-30.70	peak	100	224	



<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Vertical</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 15:06:46</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2440-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

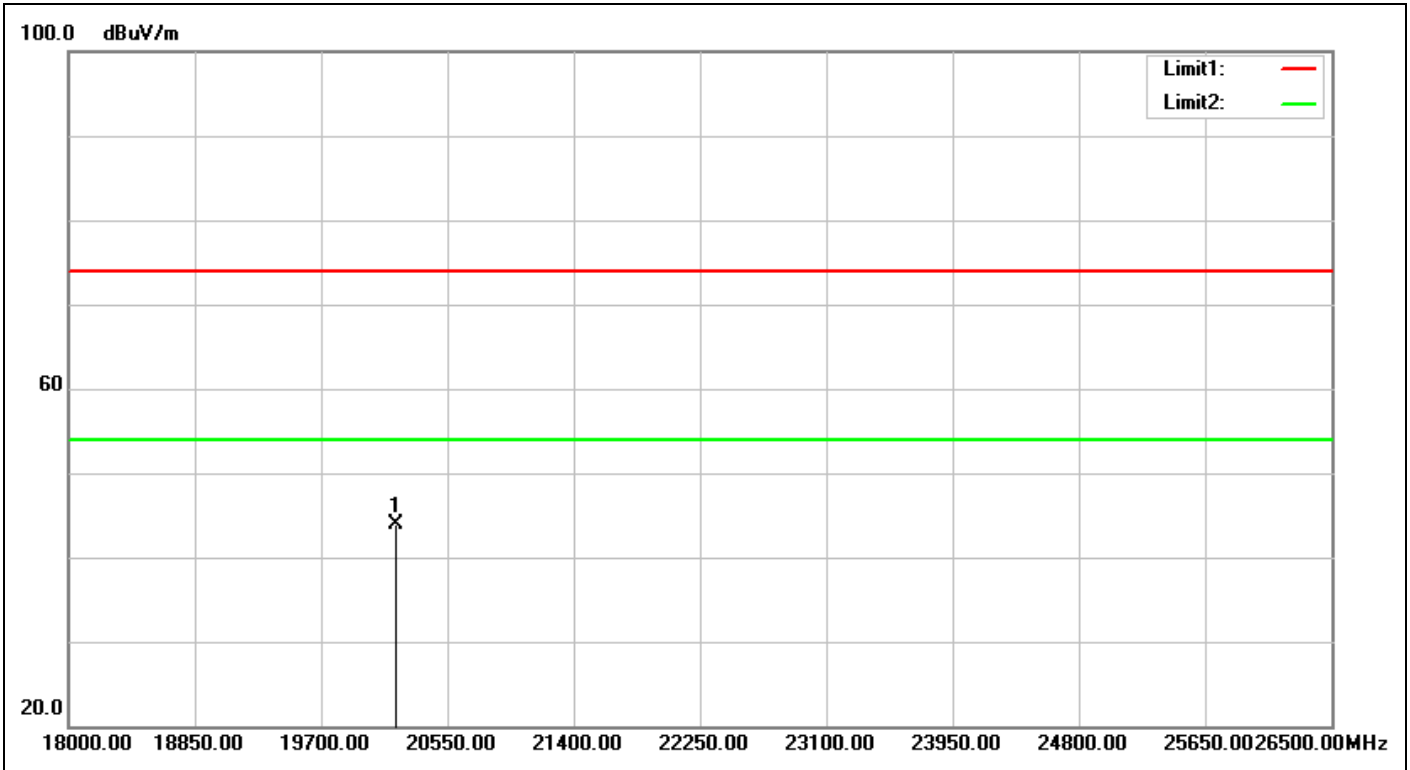
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23151.000	5.19	38.53	43.72	74.00	-30.28	peak	100	304	



<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Horizontal</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 15:07:16</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2480-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22292.500	4.71	39.80	44.51	74.00	-29.49	peak	100	341	





<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Vertical</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 15:08:23</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2480-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20201.500	4.40	39.43	43.83	74.00	-30.17	peak	100	117	

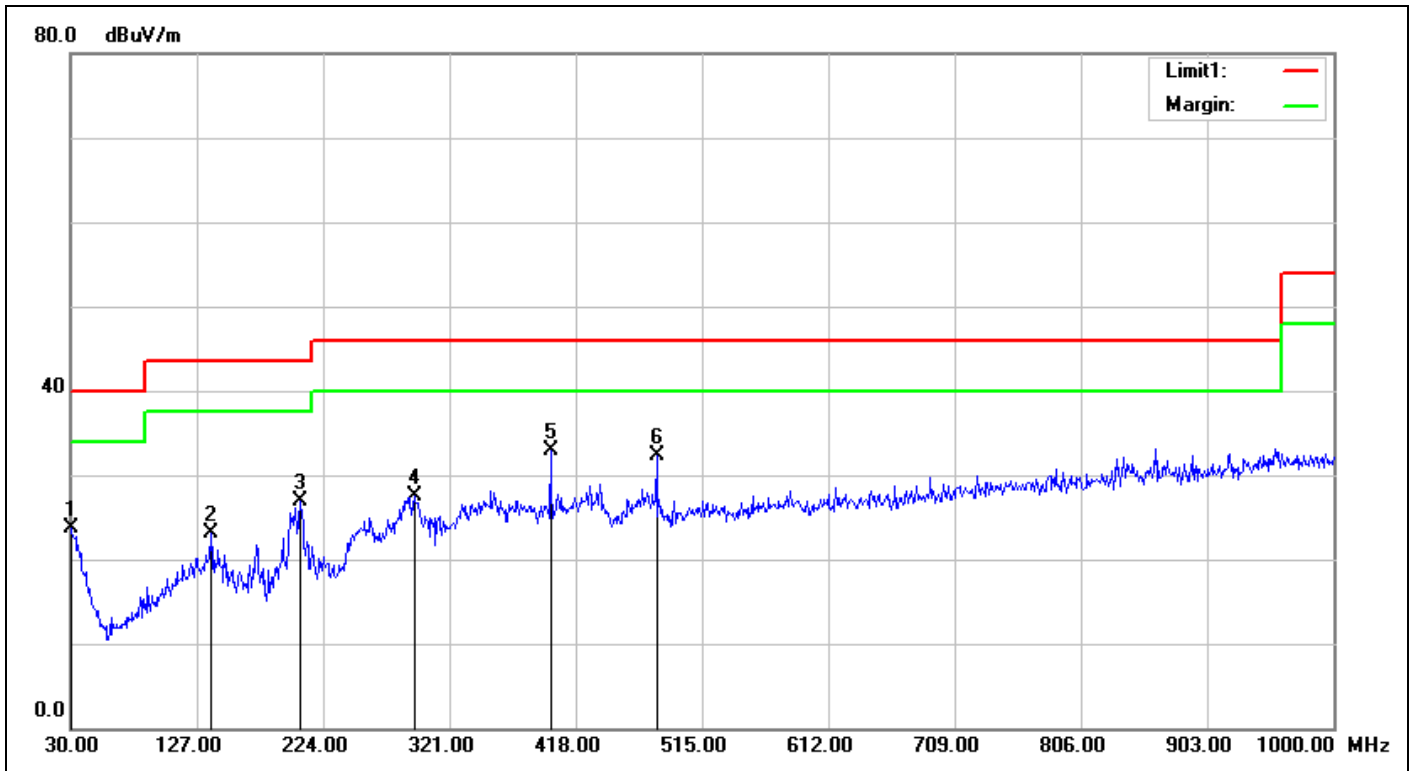
# Spurious Emissions, TX Mode, 30M-1G



**TUV Rheinland Taiwan Ltd.**

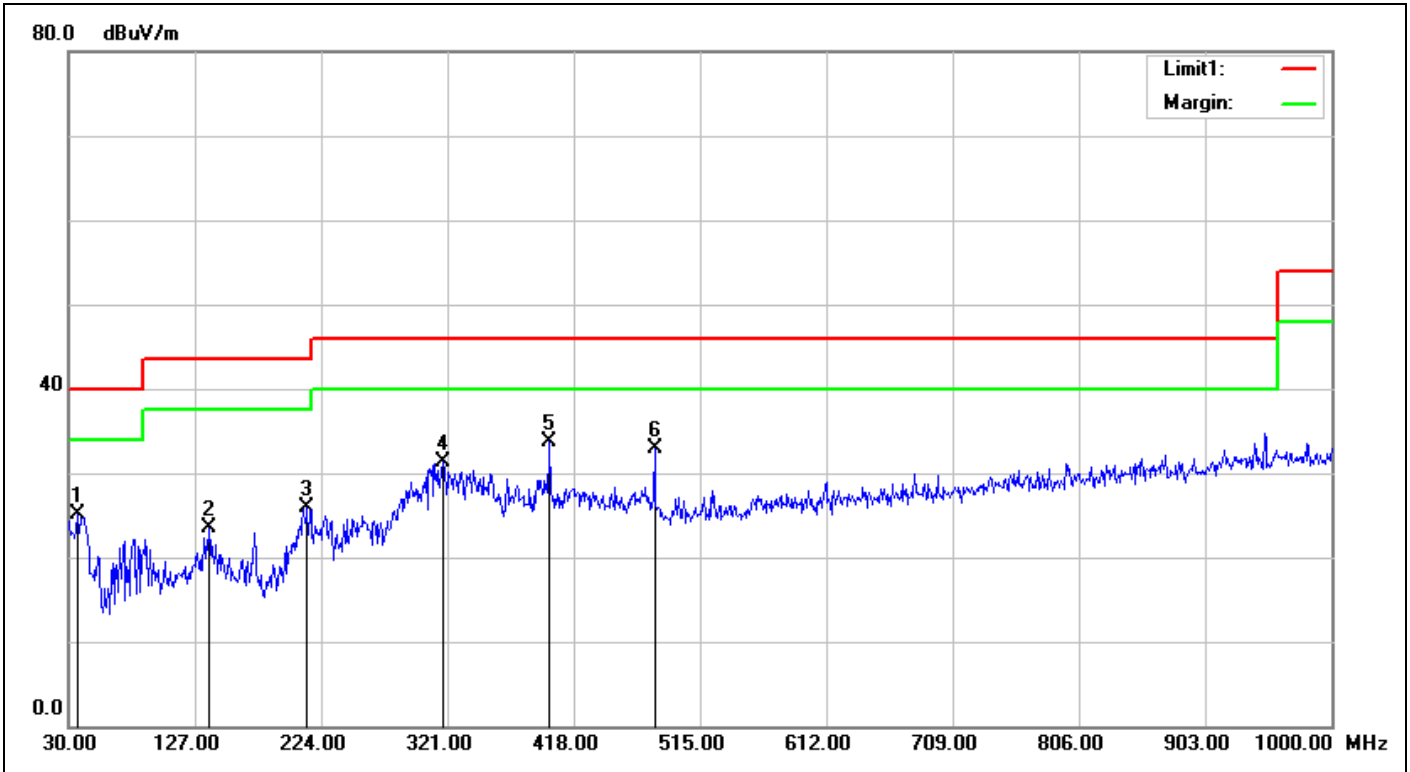
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



Service No.:	238100183	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 15:25:34
Applicant:	Hon Hai Precision Industry Co., Ltd.	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	BLE-TX-2440-setting-default		
Remark:	IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	30.0000	-0.03	23.68	23.65	40.00	-16.35	QP	100	277	
2	137.6699	-6.95	30.03	23.08	43.50	-20.42	QP	100	83	
3	206.5399	-8.60	35.43	26.83	43.50	-16.67	QP	100	99	
4	293.8399	-4.70	32.18	27.48	46.00	-18.52	QP	100	198	
5	398.6000	-2.37	35.28	32.91	46.00	-13.09	QP	100	328	
6	480.0799	-1.52	33.89	32.37	46.00	-13.63	QP	100	218	



<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Class B 3M Radiation</b>	<b>Ant. Polarization:</b>	<b>Vertical</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 15:26:28</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2440-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	36.7900	-3.95	29.01	25.06	40.00	-14.94	QP	100	225	
2	137.6700	-6.95	30.47	23.52	43.50	-19.98	QP	100	284	
3	213.3300	-8.56	34.43	25.87	43.50	-17.63	QP	100	205	
4	317.1200	-4.40	35.72	31.32	46.00	-14.68	QP	100	190	
5	399.5700	-2.33	36.10	33.77	46.00	-12.23	QP	100	66	
6	480.0800	-1.52	34.37	32.85	46.00	-13.15	QP	100	209	

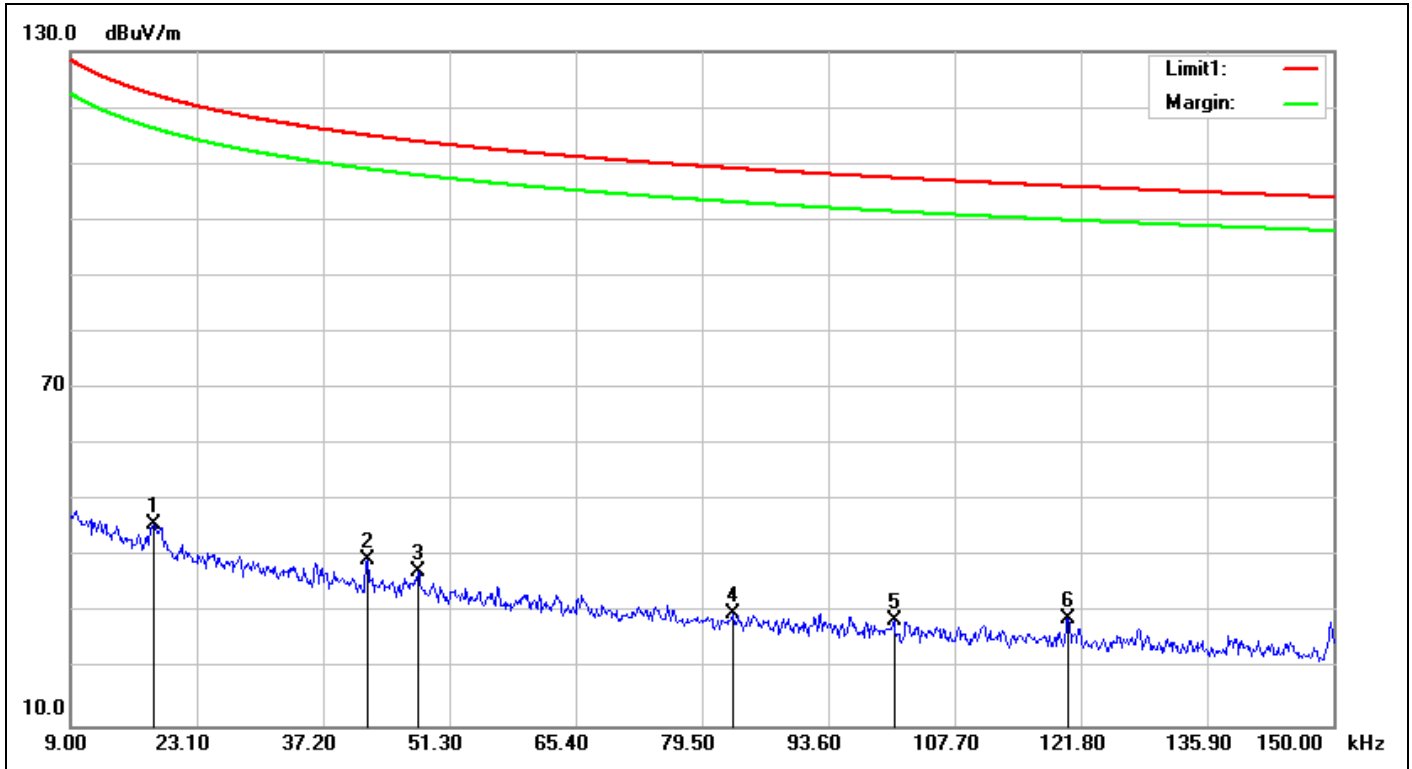
# Spurious Emissions, TX Mode, 9K-30M



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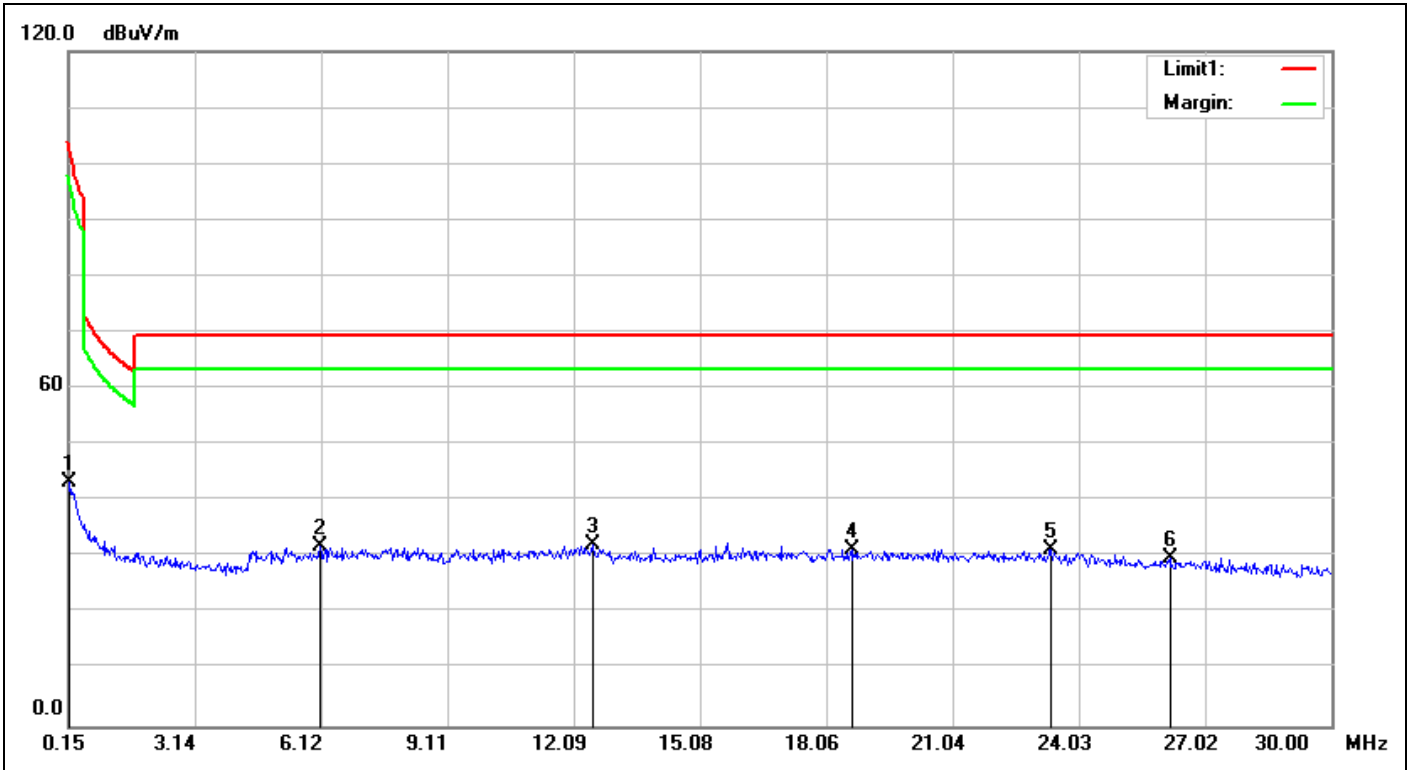
11F., No.758, Sec.4 Bade Road, Songshan Dist, Taipei City 105

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



Service No.:	238100183	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/2/18 15:38:33
Applicant:	Hon Hai Precision Industry Co., Ltd.	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	BLE-TX-2440-setting-default		
Remark:	IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0183	18.85	27.01	45.86	122.26	-76.40	QP	100	208	
2	0.0421	19.08	20.34	39.42	115.05	-75.63	QP	100	179	
3	0.0478	18.96	18.44	37.40	113.95	-76.55	QP	100	336	
4	0.0829	18.53	11.53	30.06	109.18	-79.12	QP	100	212	
5	0.1008	18.33	10.28	28.61	107.49	-78.88	QP	100	54	
6	0.1204	18.34	10.69	29.03	105.95	-76.92	QP	100	164	



<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC2.8_9k-1G_3m</b>	<b>Ant. Polarization:</b>	
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 15:39:26</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2440-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.1799	18.37	24.92	43.29	102.47	-59.18	QP	100	46	
2	6.0901	19.69	12.37	32.06	69.50	-37.44	QP	100	185	
3	12.5378	20.74	11.39	32.13	69.50	-37.37	QP	100	236	
4	18.6868	21.46	9.93	31.39	69.50	-38.11	QP	100	199	
5	23.3733	21.73	9.48	31.21	69.50	-38.29	QP	100	209	
6	26.1792	21.84	7.95	29.79	69.50	-39.71	QP	100	143	

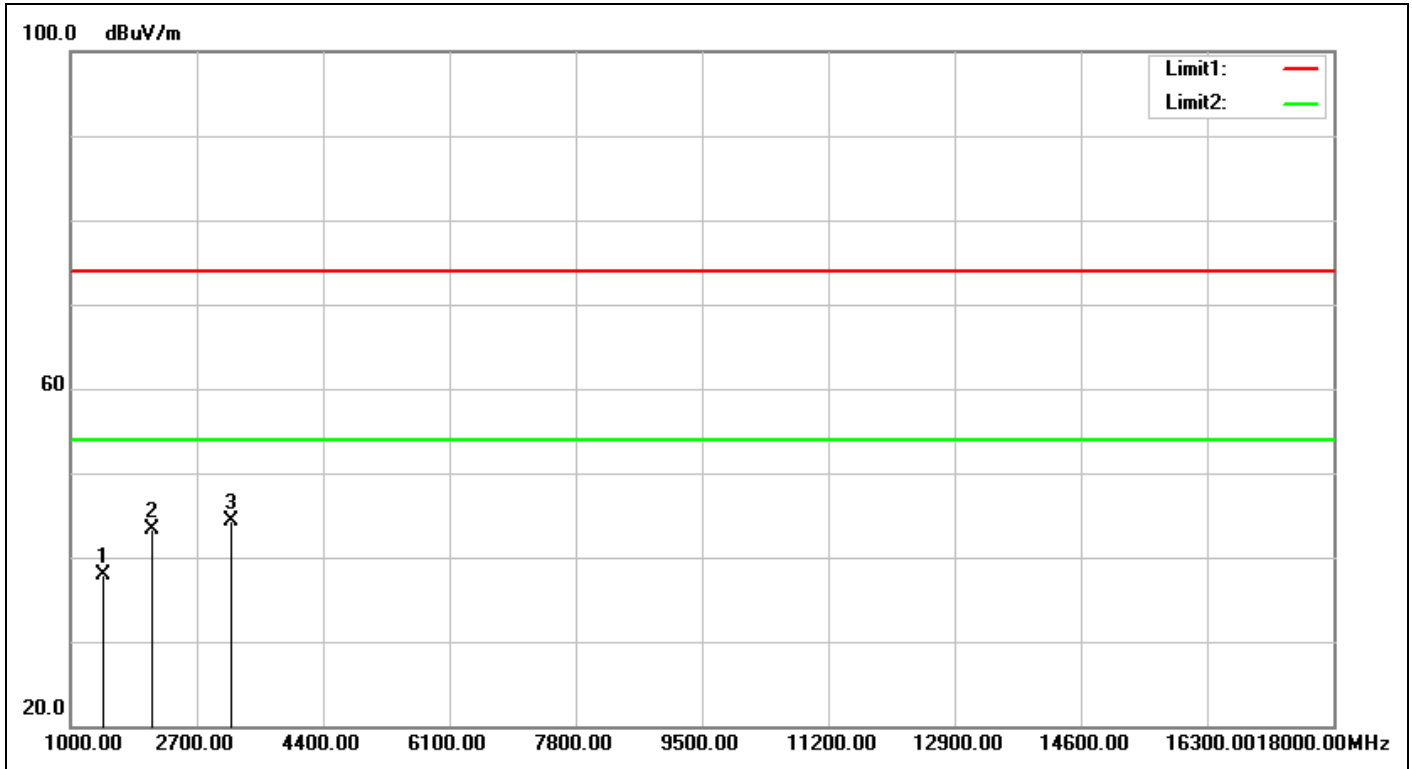
# Spurious Emissions, RX Mode, 1-18G



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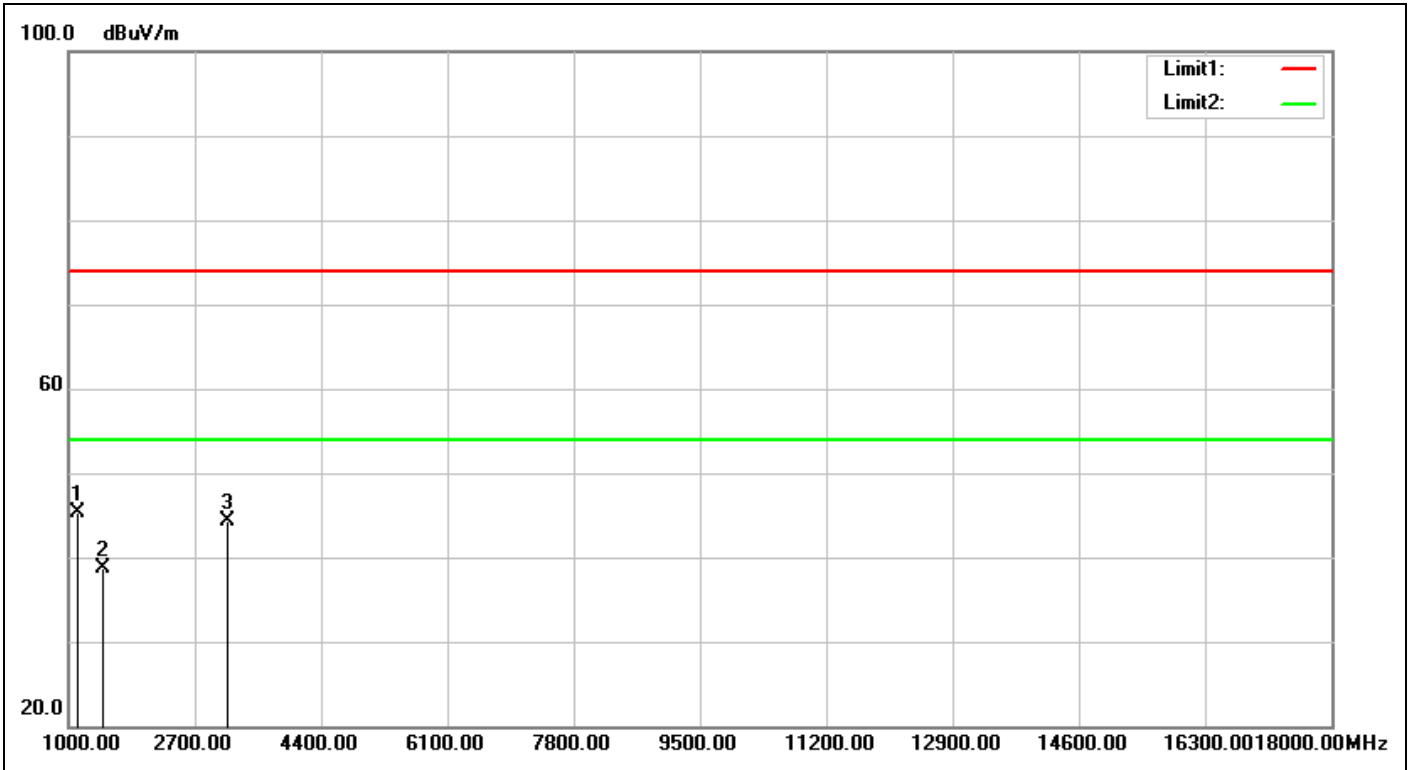
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Horizontal</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 14:49:31</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-RX-2440-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	1442.000	-10.53	48.52	37.99	74.00	-36.01	peak	100	114	
2	2105.000	-7.20	50.43	43.23	74.00	-30.77	peak	100	316	
3	3159.000	-6.49	50.74	44.25	74.00	-29.75	peak	100	359	



<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Vertical</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 14:50:24</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-RX-2440-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	1119.000	-9.73	54.99	45.26	74.00	-28.74	peak	100	355	
2	1459.000	-10.58	49.25	38.67	74.00	-35.33	peak	100	297	
3	3142.000	-6.51	50.80	44.29	74.00	-29.71	peak	100	57	

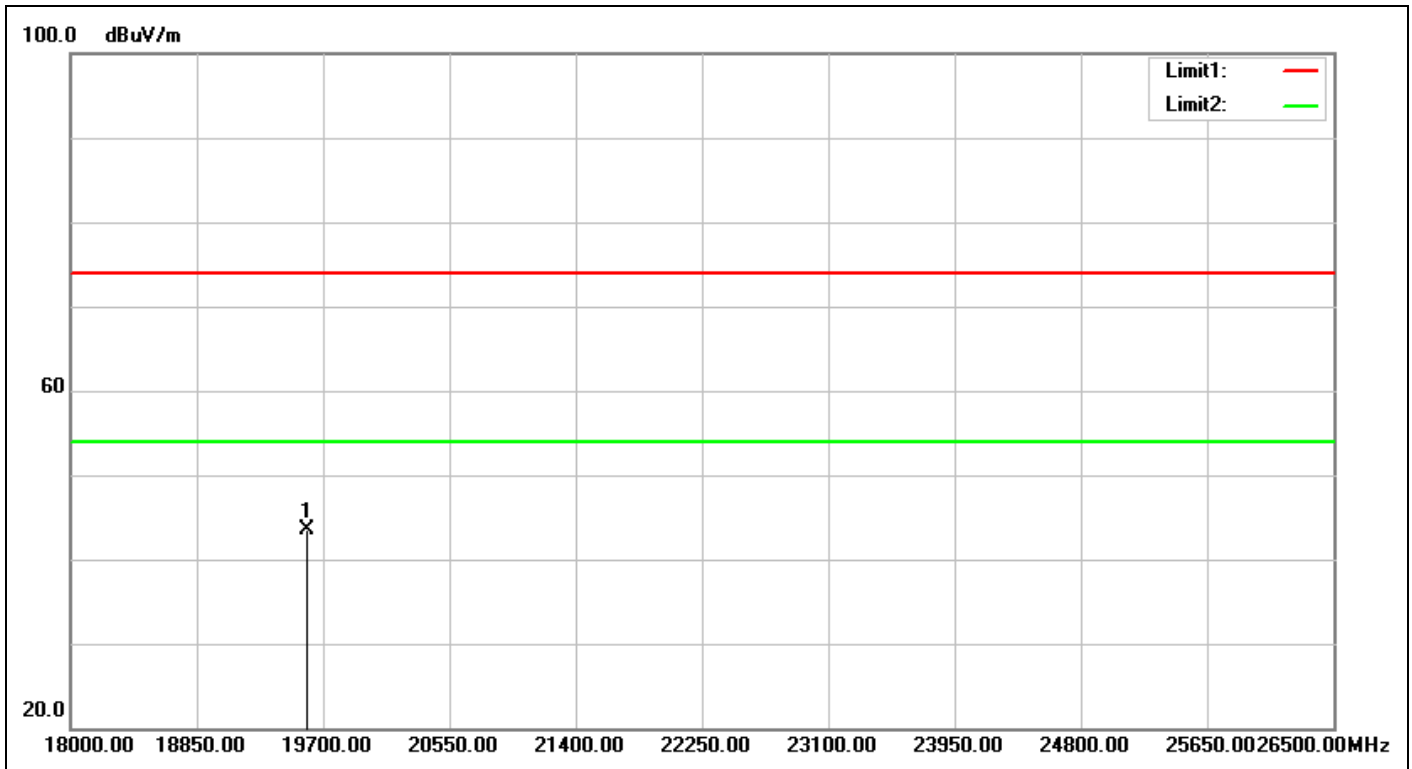
# Spurious Emissions, RX Mode, 18-26.5G



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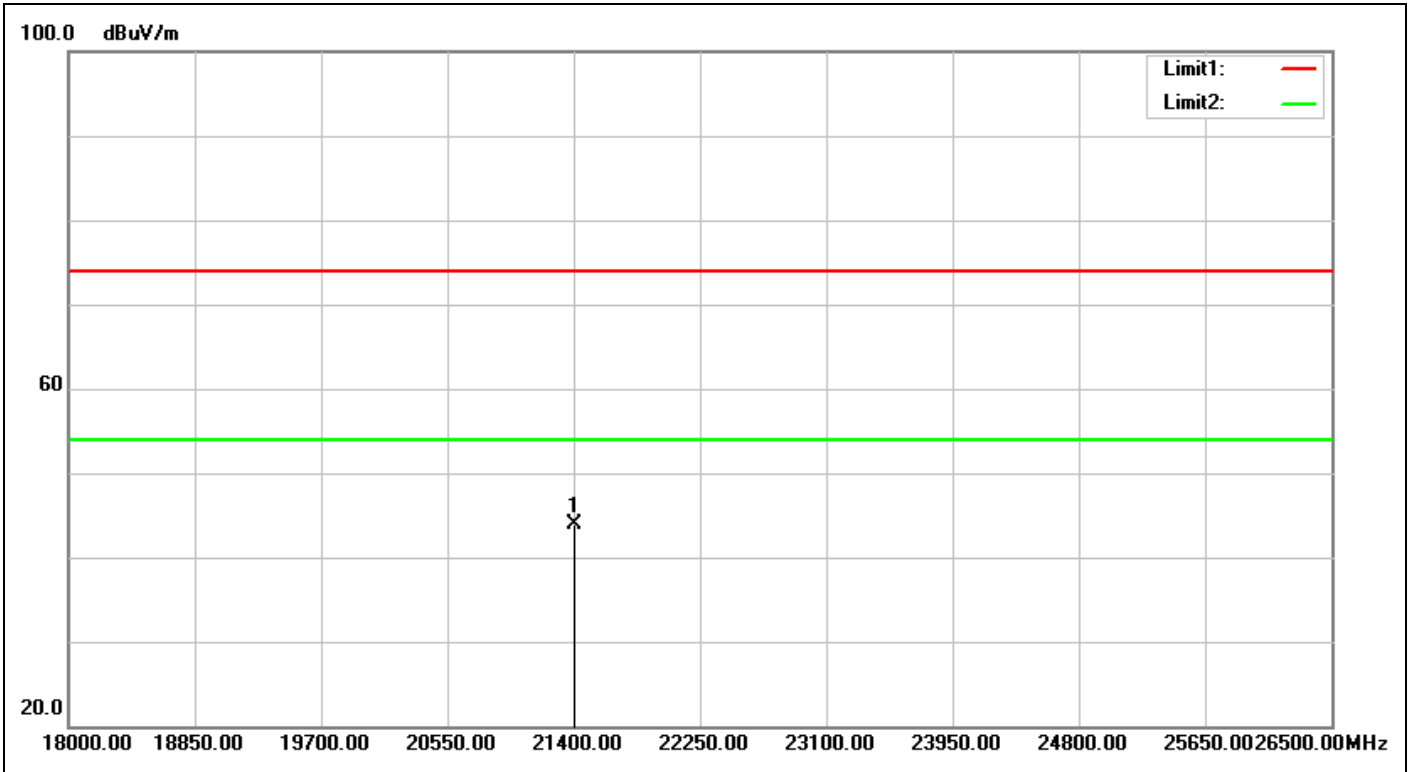
Tel:+886-2172-7000 fax:+886-2528-0018



<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Horizontal</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 15:00:39</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-RX-2440-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19589.500	3.61	39.99	43.60	74.00	-30.40	peak	100	193	





<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Above 1G PEAK</b>	<b>Ant. Polarization:</b>	<b>Vertical</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 15:01:31</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-RX-2440-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21400.000	4.46	39.53	43.99	74.00	-30.01	peak	100	358	

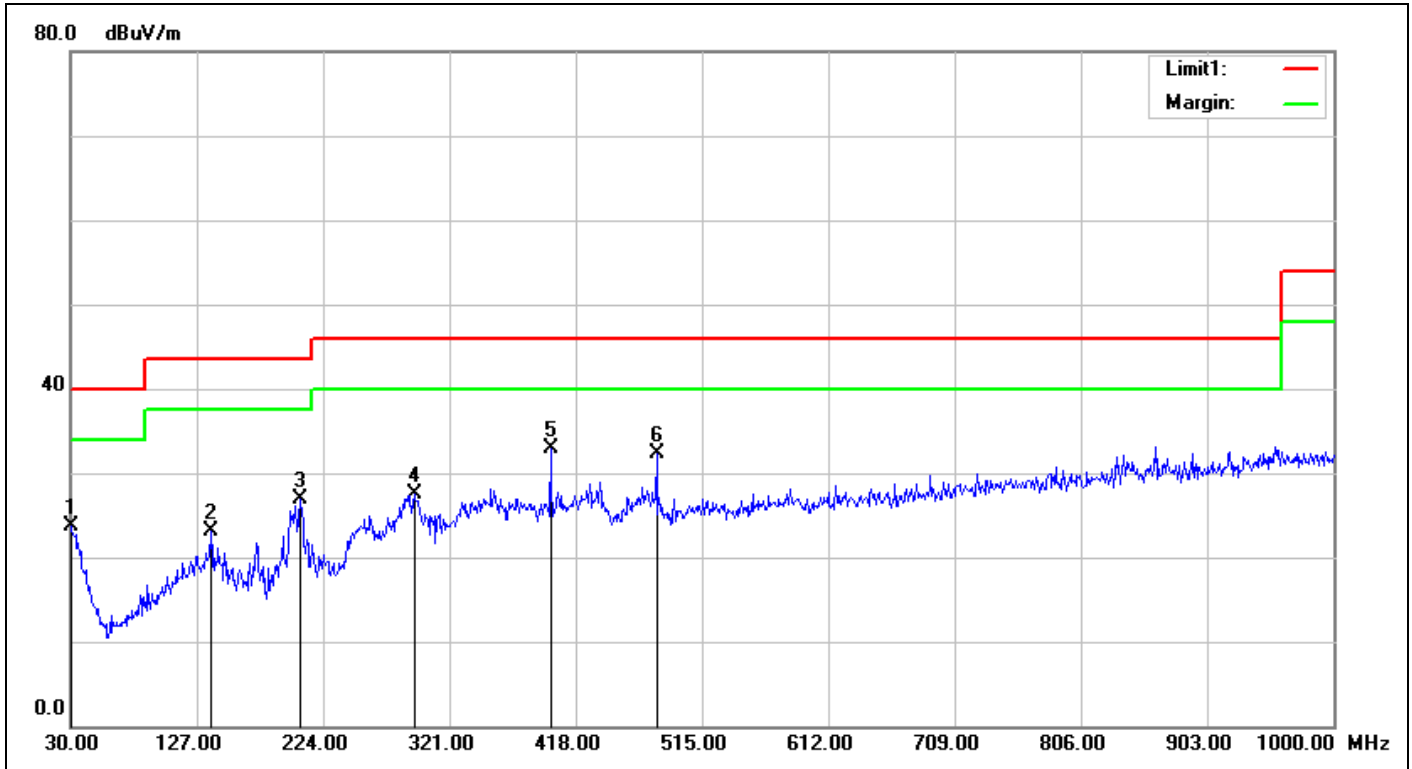
# Spurious Emissions, RX Mode, 30M-1G



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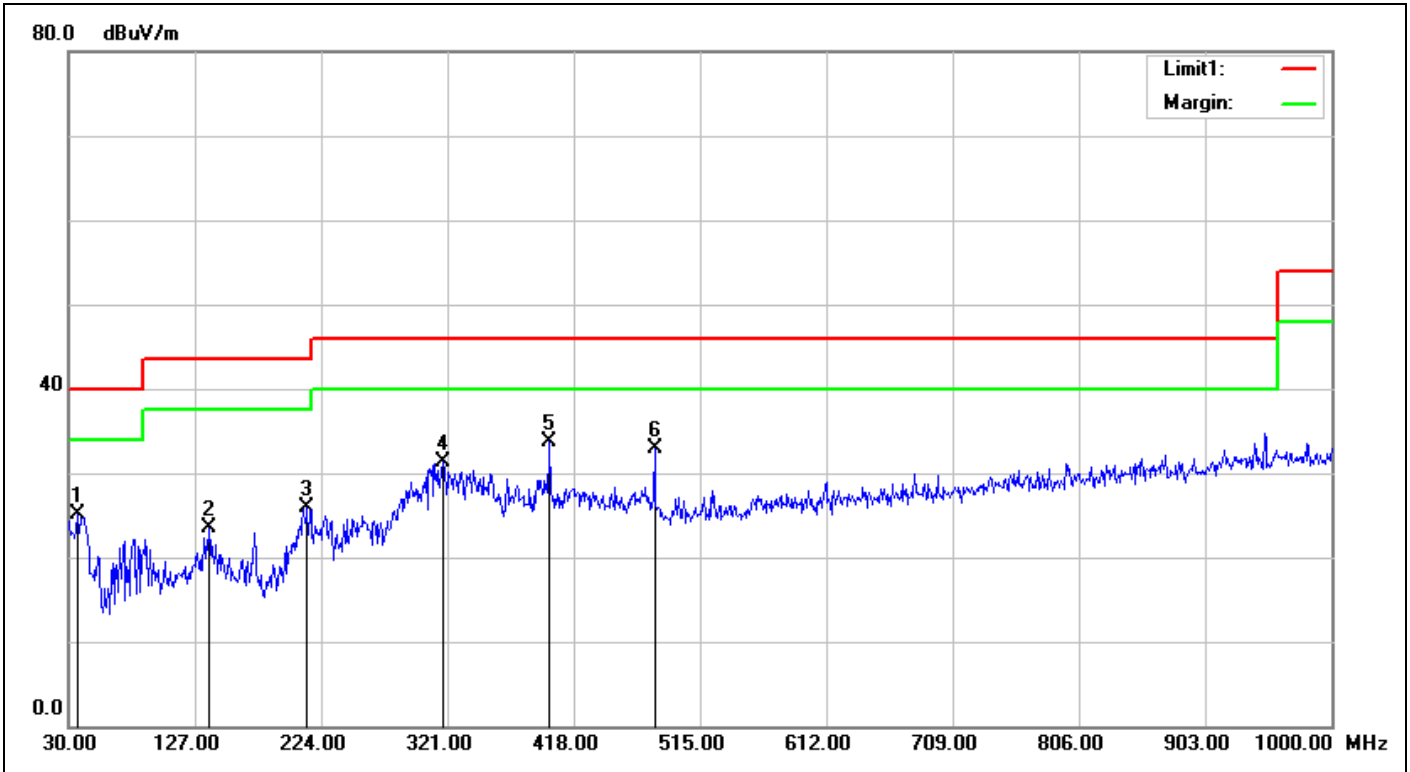
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Service No.:	238100183	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 15:25:34
Applicant:	Hon Hai Precision Industry Co., Ltd.	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	BLE-TX-2440-setting-default		
Remark:	IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	30.0000	-0.03	23.68	23.65	40.00	-16.35	QP	100	277	
2	137.6699	-6.95	30.03	23.08	43.50	-20.42	QP	100	83	
3	206.5399	-8.60	35.43	26.83	43.50	-16.67	QP	100	99	
4	293.8399	-4.70	32.18	27.48	46.00	-18.52	QP	100	198	
5	398.6000	-2.37	35.28	32.91	46.00	-13.09	QP	100	328	
6	480.0799	-1.52	33.89	32.37	46.00	-13.63	QP	100	218	



<b>Service No.:</b>	<b>238100183</b>	<b>Test Distance:</b>	<b>3m</b>
<b>Test Standard:</b>	<b>NCC Class B 3M Radiation</b>	<b>Ant. Polarization:</b>	<b>Vertical</b>
<b>Test item:</b>	<b>Radiation Emission</b>	<b>Test Time:</b>	<b>2019/2/18 15:26:28</b>
<b>Applicant:</b>	<b>Hon Hai Precision Industry Co., Ltd.</b>	<b>Test Rating:</b>	<b>DC 5V</b>
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	<b>19(°C)/52%</b>
<b>Model No.:</b>	<b>WBU042-IG5V</b>	<b>Test Engineer:</b>	<b>Kevin Kuo</b>
<b>Test Mode:</b>	<b>BLE-TX-2440-setting-default</b>		
<b>Remark:</b>	<b>IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module</b>		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	36.7900	-3.95	29.01	25.06	40.00	-14.94	QP	100	225	
2	137.6700	-6.95	30.47	23.52	43.50	-19.98	QP	100	284	
3	213.3300	-8.56	34.43	25.87	43.50	-17.63	QP	100	205	
4	317.1200	-4.40	35.72	31.32	46.00	-14.68	QP	100	190	
5	399.5700	-2.33	36.10	33.77	46.00	-12.23	QP	100	66	
6	480.0800	-1.52	34.37	32.85	46.00	-13.15	QP	100	209	

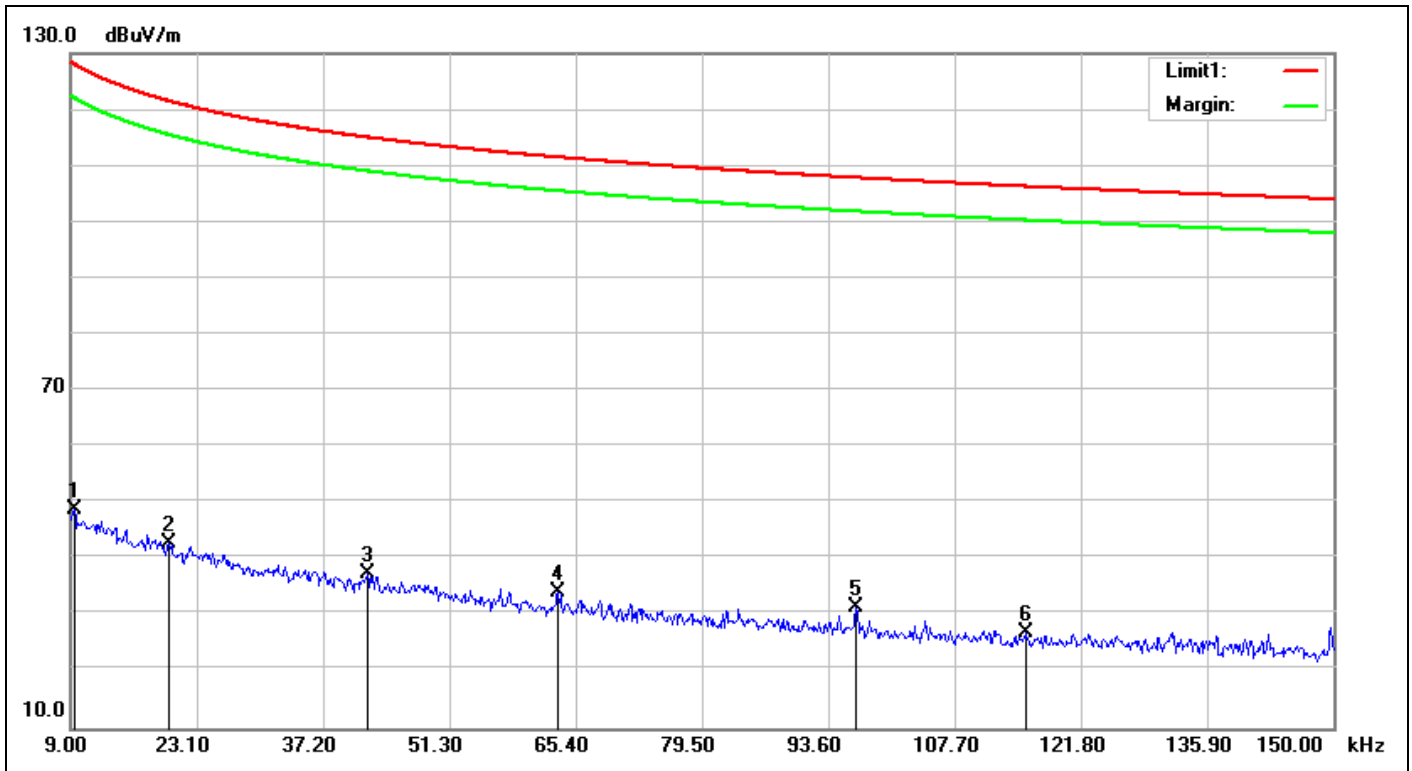
# Spurious Emissions, RX Mode, 9K-30M



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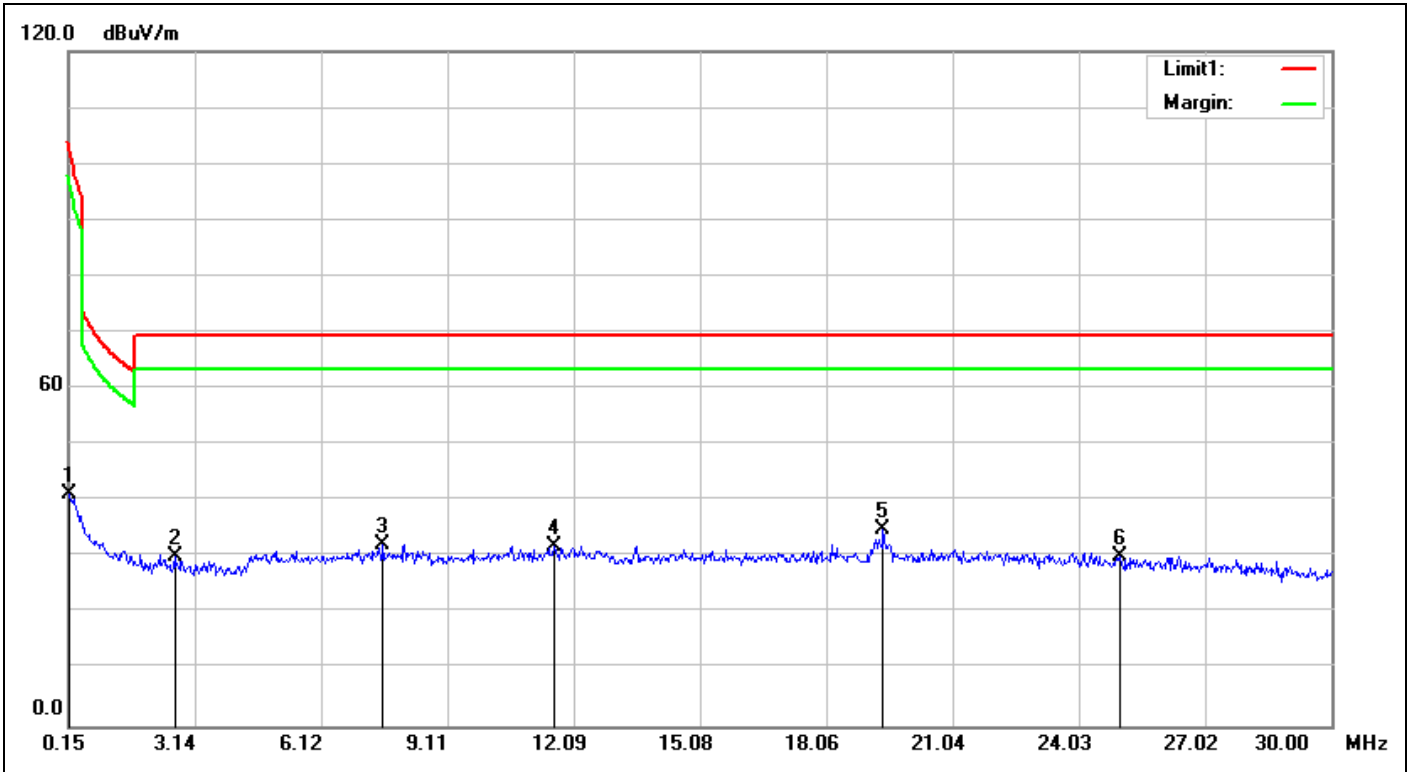
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



Service No.:	238100183	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/2/18 15:41:24
Applicant:	Hon Hai Precision Industry Co., Ltd.	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	BLE-RX-2440-setting-default		
Remark:	IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0094	18.41	30.33	48.74	128.03	-79.29	QP	100	228	
2	0.0200	18.92	23.85	42.77	121.49	-78.72	QP	100	165	
3	0.0421	19.08	18.47	37.55	115.05	-77.50	QP	100	308	
4	0.0634	18.76	15.34	34.10	111.50	-77.40	QP	100	176	
5	0.0967	18.37	12.97	31.34	107.85	-76.51	QP	100	42	
6	0.1156	18.34	8.75	27.09	106.30	-79.21	QP	100	193	



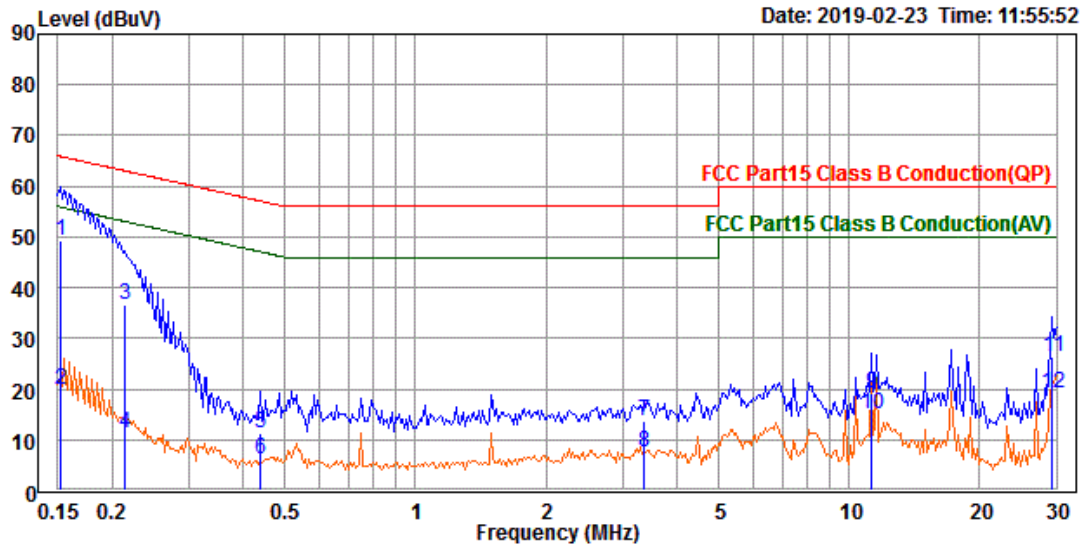
<b>Service No.:</b>	238100183	<b>Test Distance:</b>	3m
<b>Test Standard:</b>	NCC2.8_9k-1G_3m	<b>Ant. Polarization:</b>	
<b>Test item:</b>	Radiation Emission	<b>Test Time:</b>	2019/2/18 15:42:16
<b>Applicant:</b>	Hon Hai Precision Industry Co., Ltd.	<b>Test Rating:</b>	DC 5V
<b>Product:</b>		<b>Temp.(°C)/Hum.(%):</b>	19(°C)/52%
<b>Model No.:</b>	WBU042-IG5V	<b>Test Engineer:</b>	Kevin Kuo
<b>Test Mode:</b>	BLE-RX-2440-setting-default		
<b>Remark:</b>	IEEE 802.11 a/b/g/n/ac 2x2 + BT combo module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.1500	18.35	22.78	41.13	104.05	-62.92	QP	100	46	
2	2.6574	18.55	11.50	30.05	69.50	-39.45	QP	100	102	
3	7.5827	19.97	12.38	32.35	69.50	-37.15	QP	100	187	
4	11.6124	20.63	11.34	31.97	69.50	-37.53	QP	100	36	
5	19.4032	21.53	13.35	34.88	69.50	-34.62	QP	100	277	
6	24.9852	21.79	8.41	30.20	69.50	-39.30	QP	100	31	

# Spurious Emissions, AC Mains

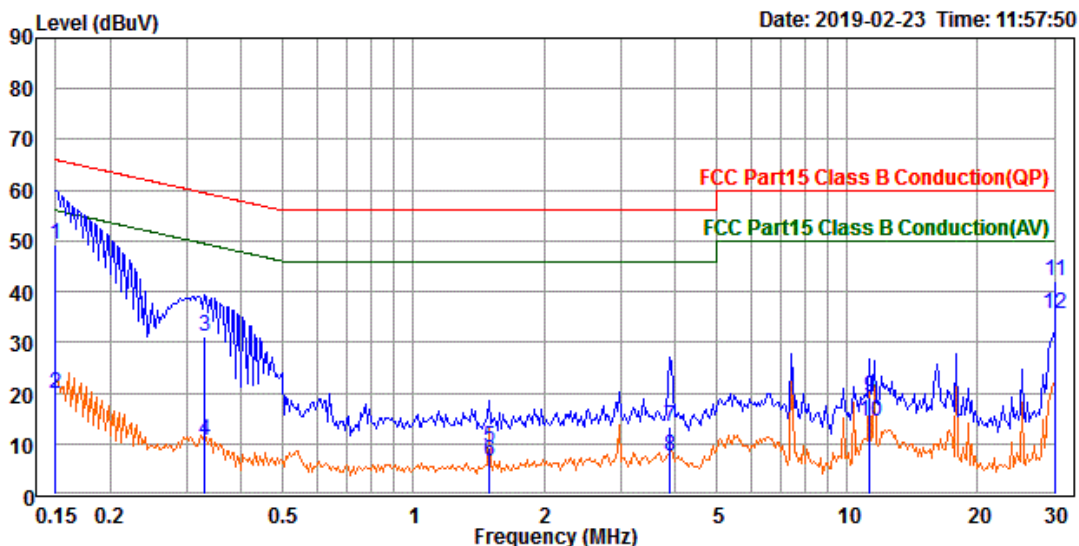


TUV Rheinland Taiwan Ltd.  
 11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105  
 Tel:+886-2172-7000 Fax:+886-2528-0018



Trace: 1  
 Site : Conduction room  
 Condition : FCC Part15 Class B Conduction(QP) line1  
 Test Engineer: Kevin Kuo  
 Applicant : Hon Hai Precision Industry Co.,Ltd  
 Product :  
 Model No. : WBU042-IG5V  
 Test Rating : 120Vac/60Hz  
 Tmp/Hum : 21°C/43%  
 Memo : BLE AC Mains

	Read Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.151	39.76	9.68	49.44	65.92	-16.48	QP
2	0.151	10.24	9.68	19.92	55.92	-36.00	Average
3	0.215	26.85	9.68	36.53	63.03	-26.50	QP
4	0.215	1.57	9.68	11.25	53.03	-41.78	Average
5	0.439	1.43	9.69	11.12	57.08	-45.96	QP
6	0.439	-3.51	9.69	6.18	47.08	-40.90	Average
7	3.368	4.02	9.74	13.76	56.00	-42.24	QP
8	3.368	-2.38	9.74	7.36	46.00	-38.64	Average
9	11.213	9.50	9.83	19.33	60.00	-40.67	QP
10	11.213	5.11	9.83	14.94	50.00	-35.06	Average
11	29.409	16.68	9.83	26.51	60.00	-33.49	QP
12	29.409	9.47	9.83	19.30	50.00	-30.70	Average



Trace: 1  
 Site : Conduction room  
 Condition : FCC Part15 Class B Conduction(QP) neutral  
 Test Engineer: Kevin Kuo  
 Applicant : Hon Hai Precision Industry Co.,Ltd  
 Product :  
 Model No. : WBU042-IG5V  
 Test Rating : 120Vac/60Hz  
 Tmp/Hum : 21°C/43%  
 Memo : BLE AC Mains

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.150	39.64	9.68	49.32	66.00	-16.68	QP
2	0.150	10.30	9.68	19.98	56.00	-36.02	Average
3	0.329	21.46	9.67	31.13	59.48	-28.35	QP
4	0.329	0.77	9.67	10.44	49.48	-39.04	Average
5	1.491	-0.52	9.71	9.19	56.00	-46.81	QP
6	1.491	-3.13	9.71	6.58	46.00	-39.42	Average
7	3.909	3.53	9.74	13.27	56.00	-42.73	QP
8	3.909	-2.28	9.74	7.46	46.00	-38.54	Average
9	11.213	9.20	9.84	19.04	60.00	-40.96	QP
10	11.213	4.55	9.84	14.39	50.00	-35.61	Average
11	30.000	32.00	9.95	41.95	60.00	-18.05	QP
12	30.000	25.73	9.95	35.68	50.00	-14.32	Average