

Test Report No.50246759 001

Appendix D: Radiated and Mains Spurious Emission Data

(File: 50246759 001AppendixD)

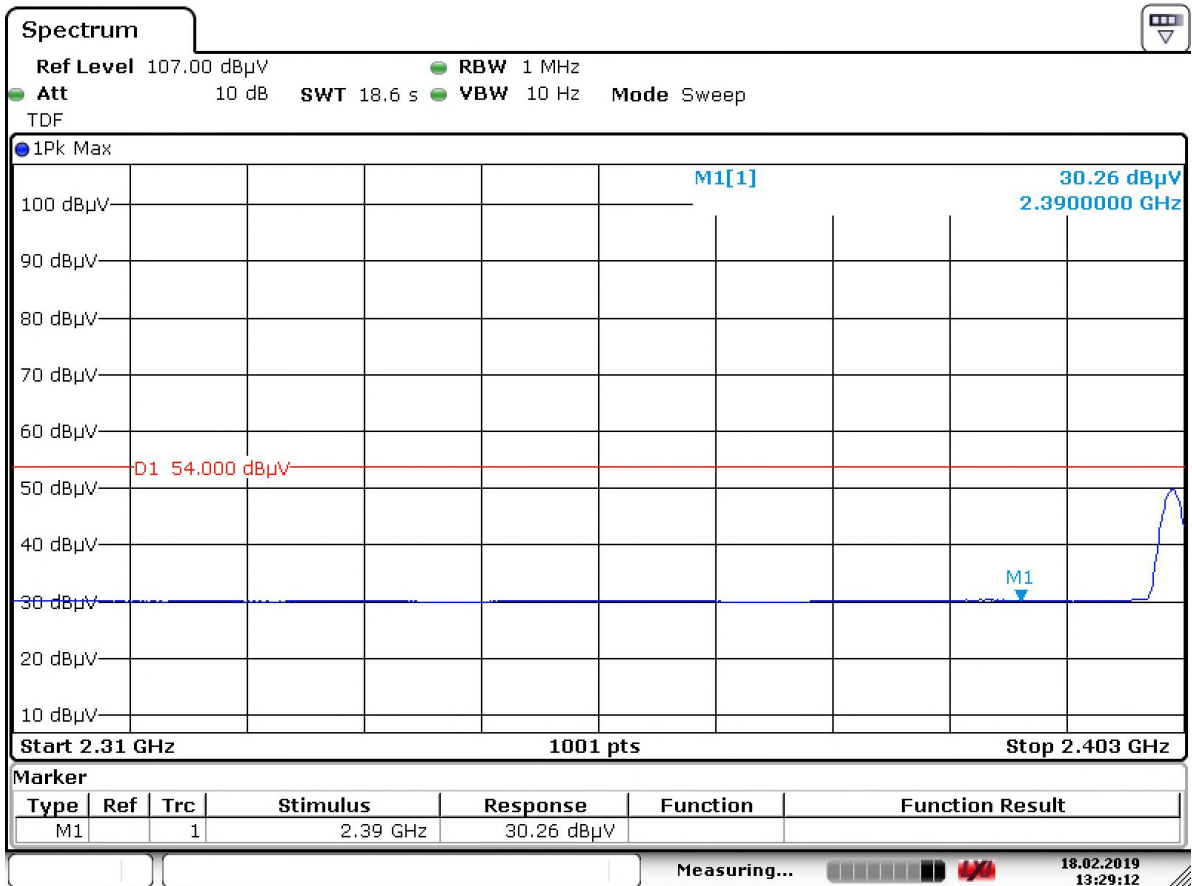
Contents

Spurious Emissions, Band Edges, 2.35-2.5G	2
Spurious Emissions, TX Mode, 1-18G.....	10
Spurious Emissions, TX Mode, 18-26.5G.....	22
Spurious Emissions, TX Mode, 30M-1G	34
Spurious Emissions, TX Mode, 9K-30M	36
Spurious Emissions, RX Mode, 1-18G	38
Spurious Emissions, RX Mode, 18-26.5G	40
Spurious Emissions, RX Mode, 30M-1G.....	42
Spurious Emissions, RX Mode, 9k-30M.....	44
Spurious Emissions, AC Mains	46

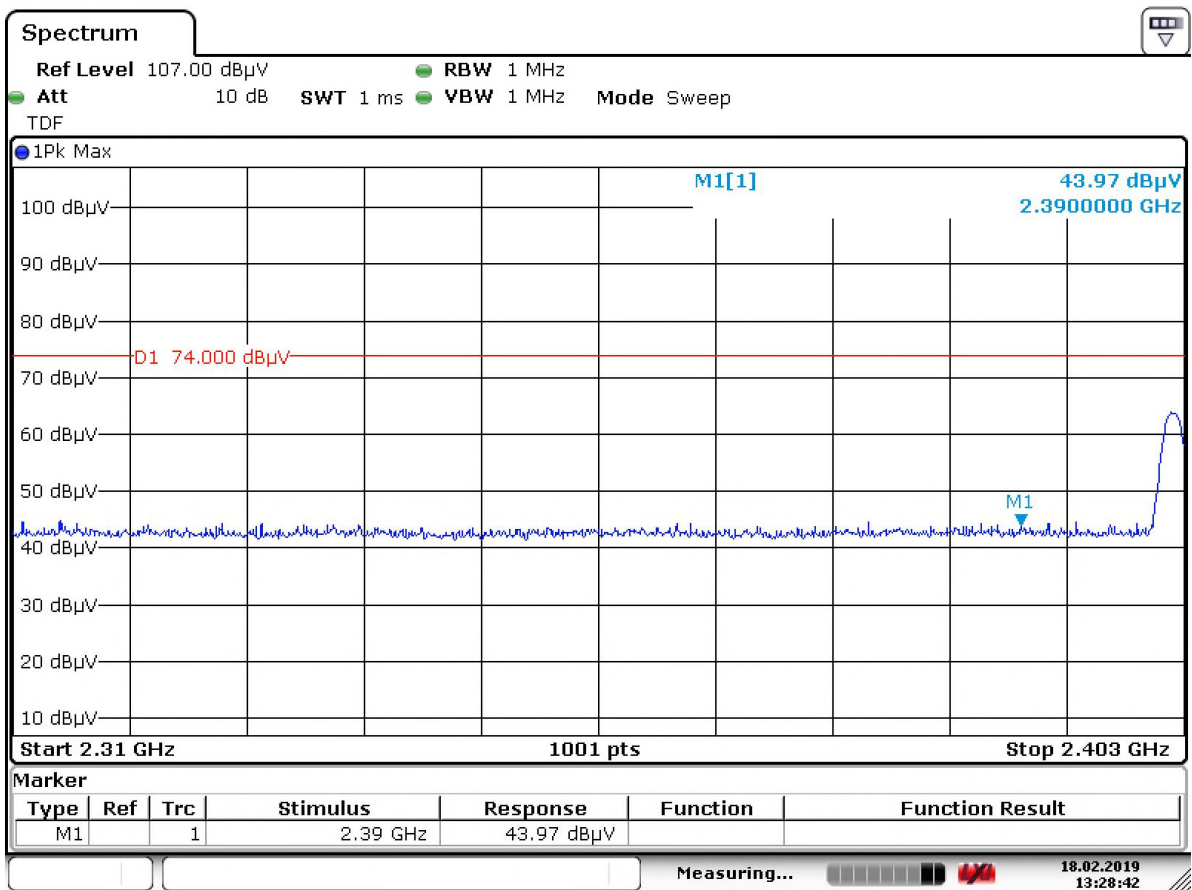
Spurious Emissions, Band Edges, 2.35-2.5G

1DH5

Low Channel (Horizontal)

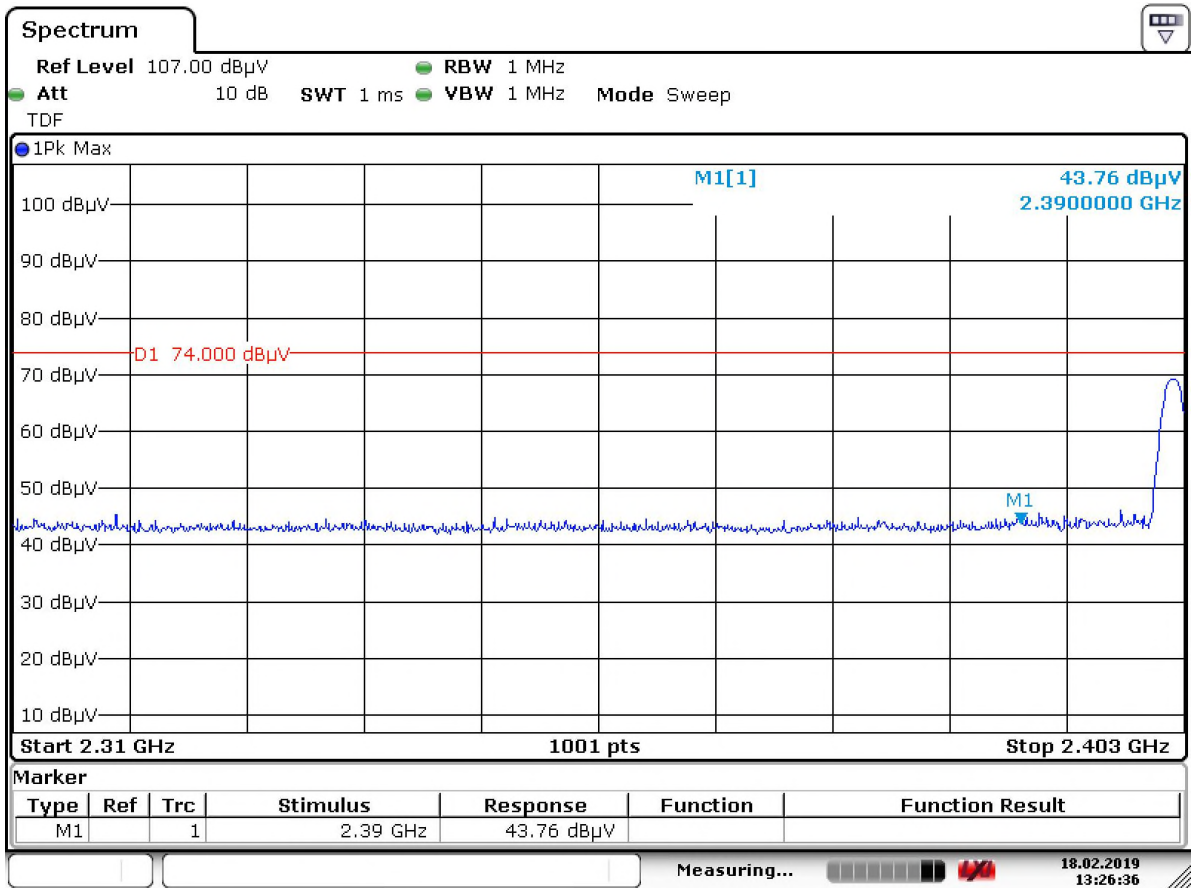


Date: 18.FEB.2019 13:29:12

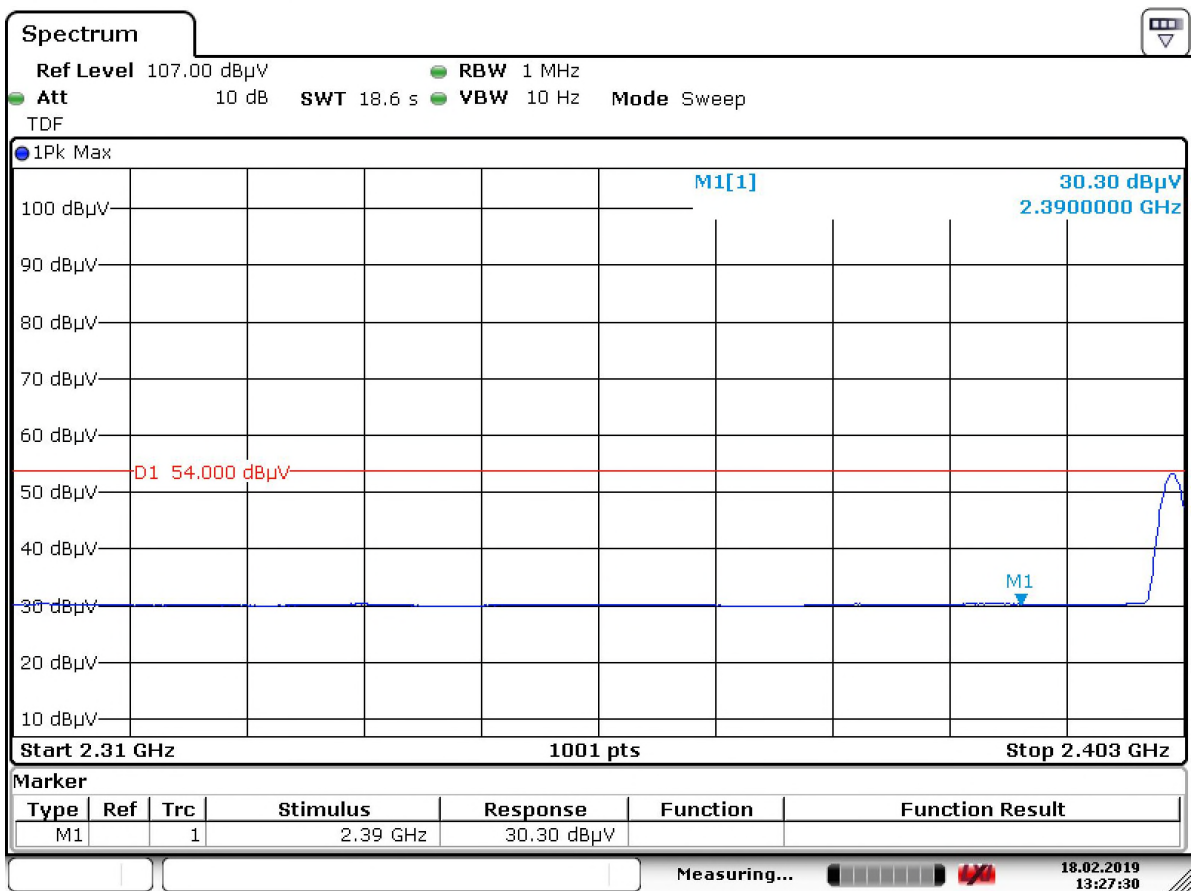


Date: 18.FEB.2019 13:28:42

Low Channel (Vertical)

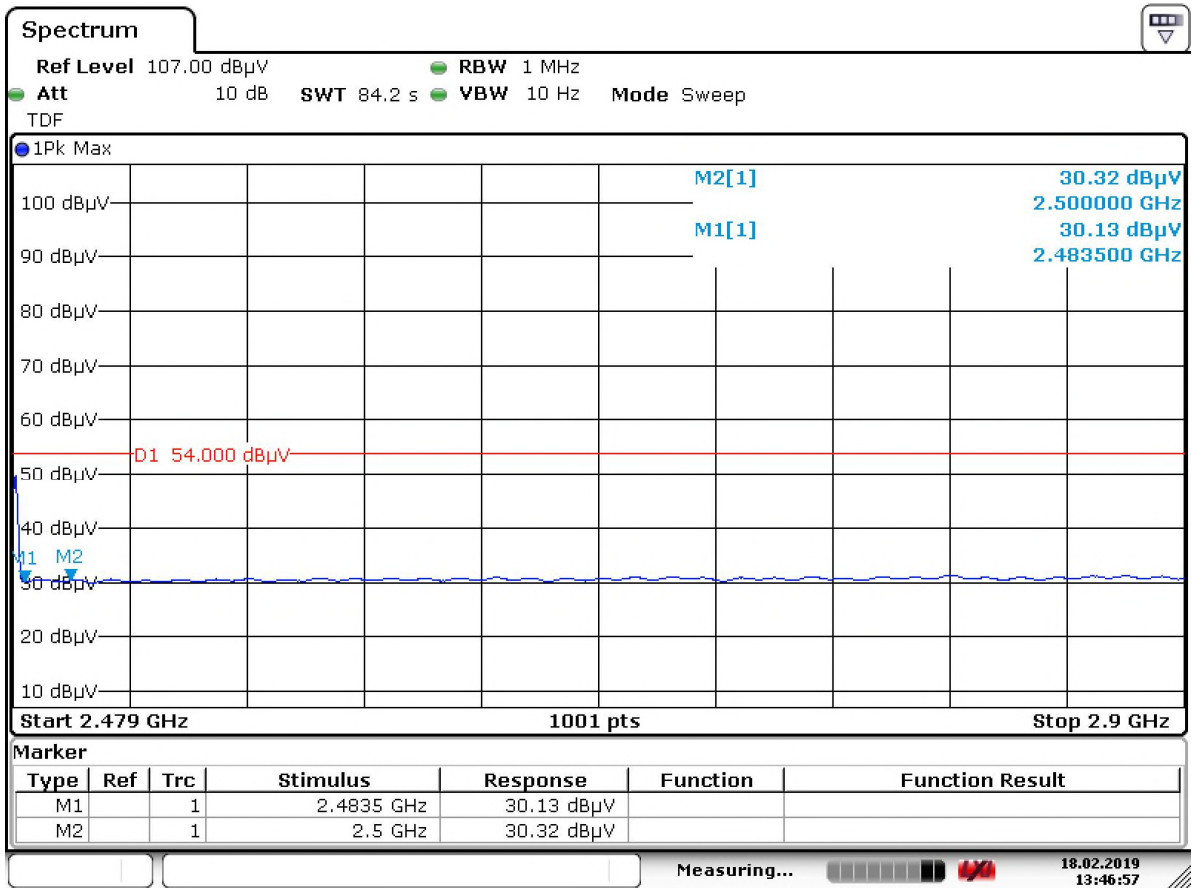


Date: 18.FEB.2019 13:26:36

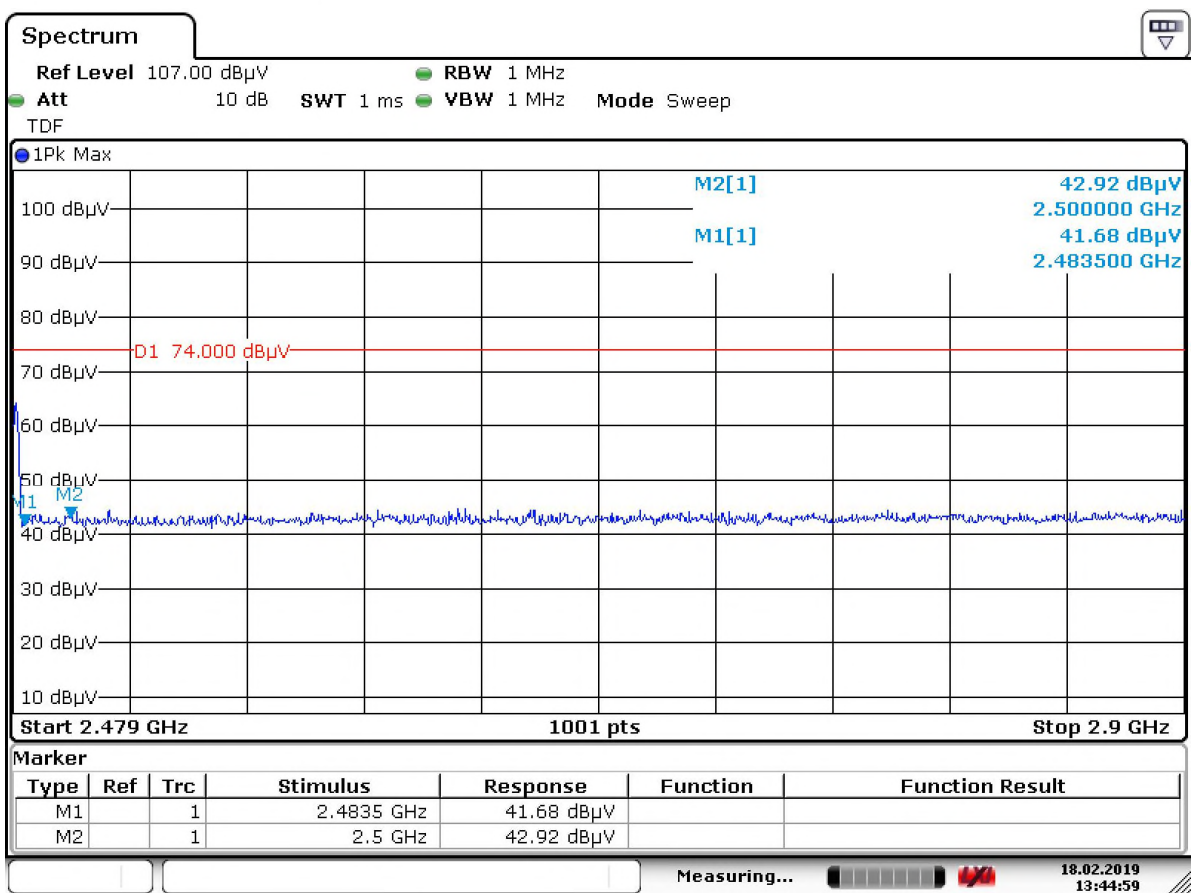


Date: 18.FEB.2019 13:27:30

High Channel (Horizontal)

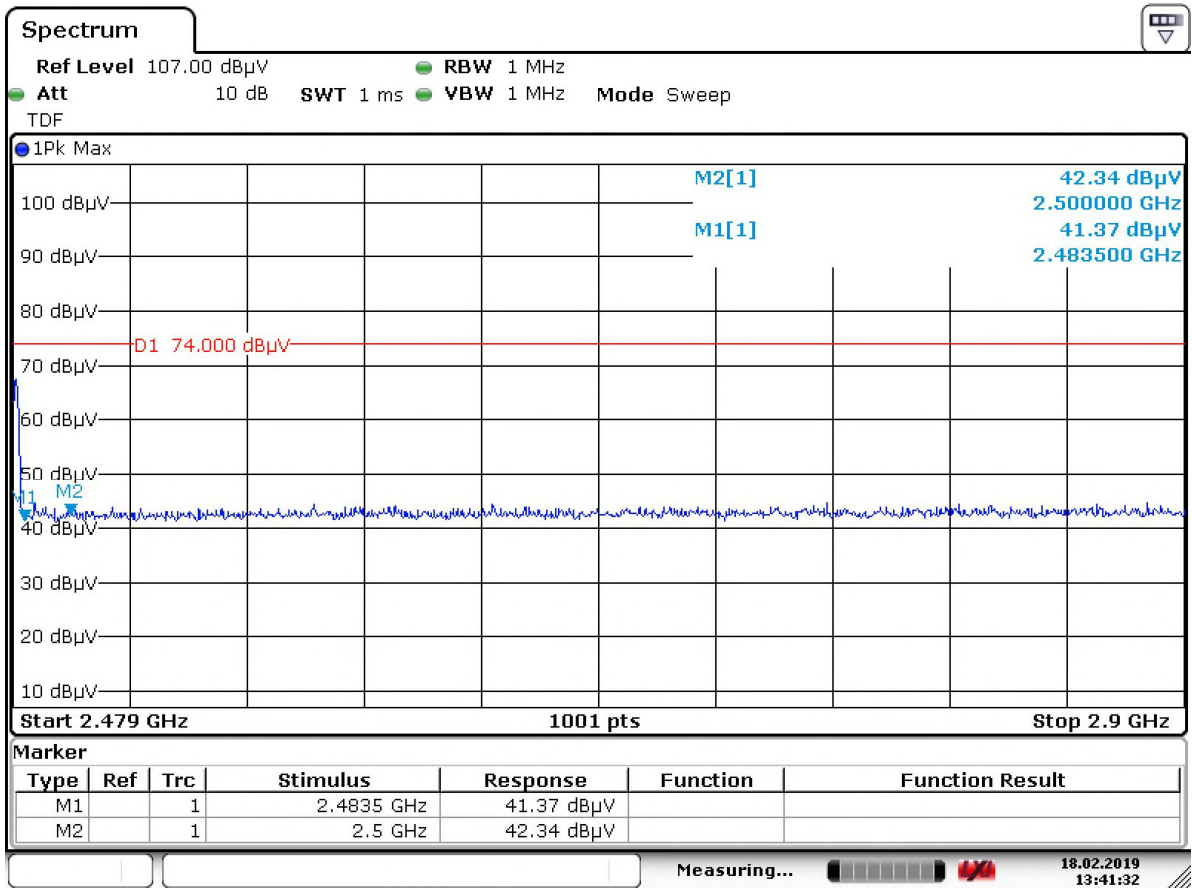


Date: 18.FEB.2019 13:46:57

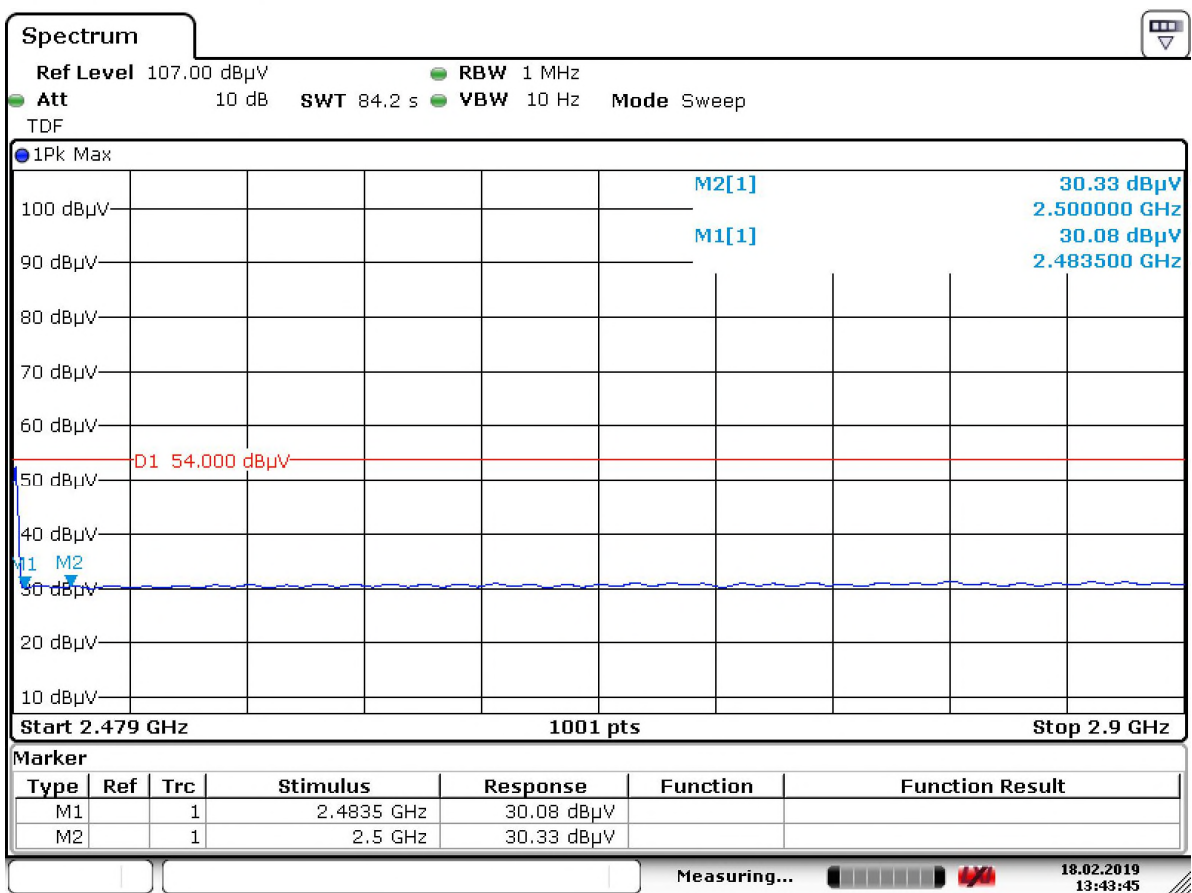


Date: 18.FEB.2019 13:44:59

High Channel (Vertical)

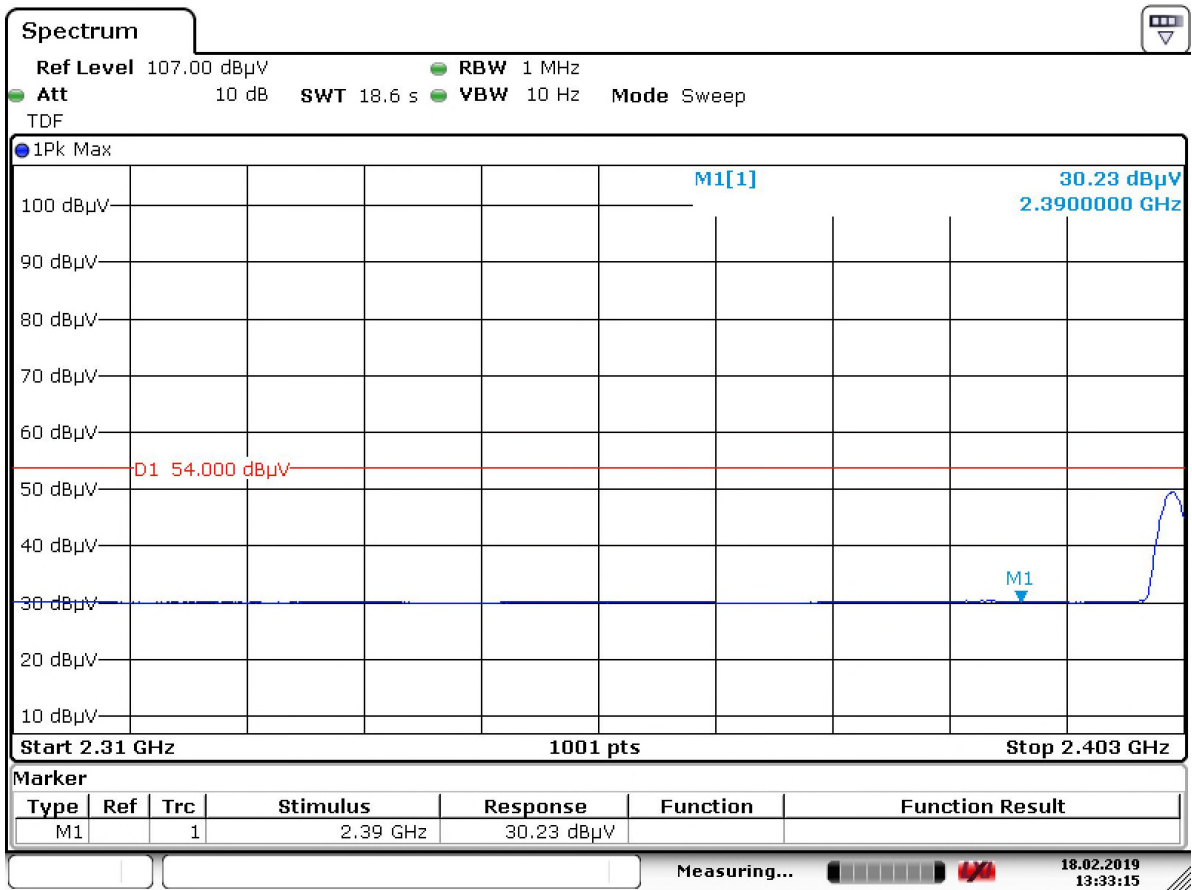


Date: 18.FEB.2019 13:41:32

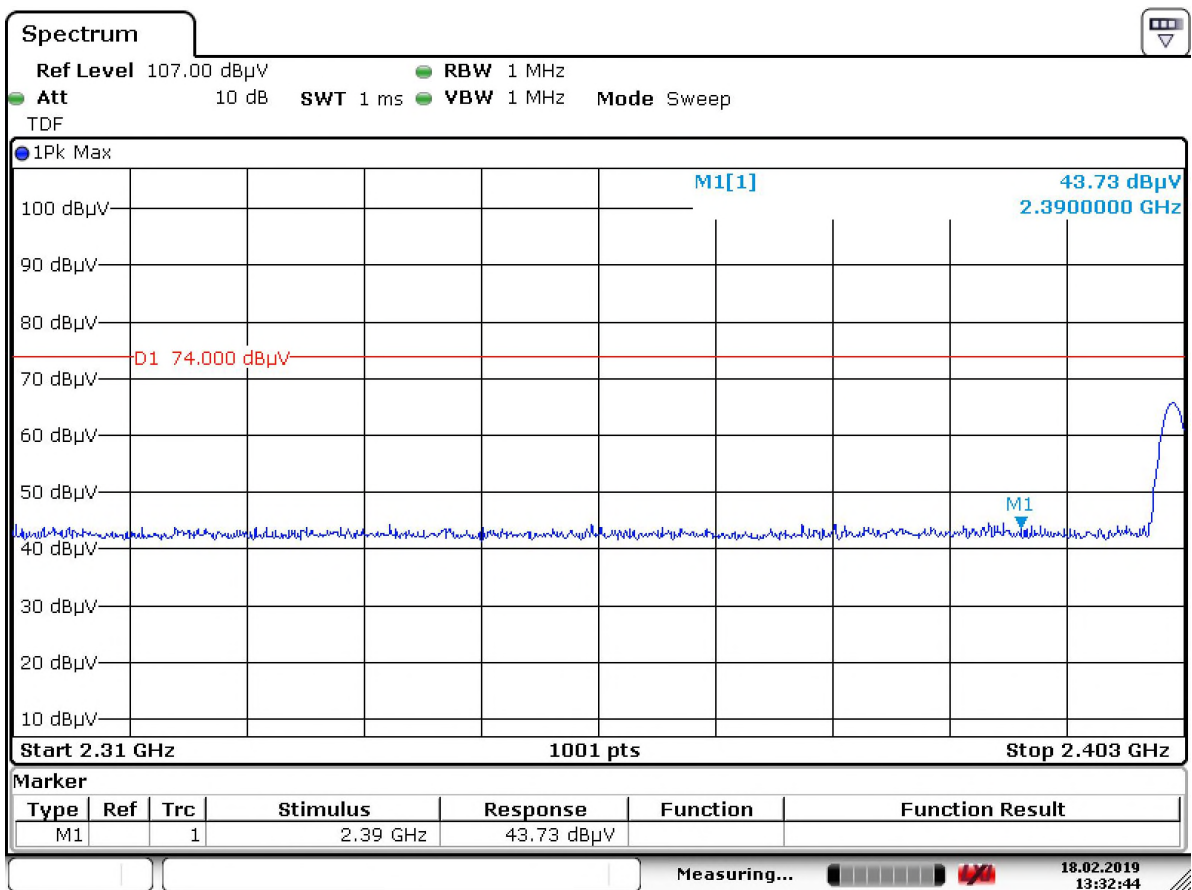


Date: 18.FEB.2019 13:43:45

Low Channel (Horizontal)

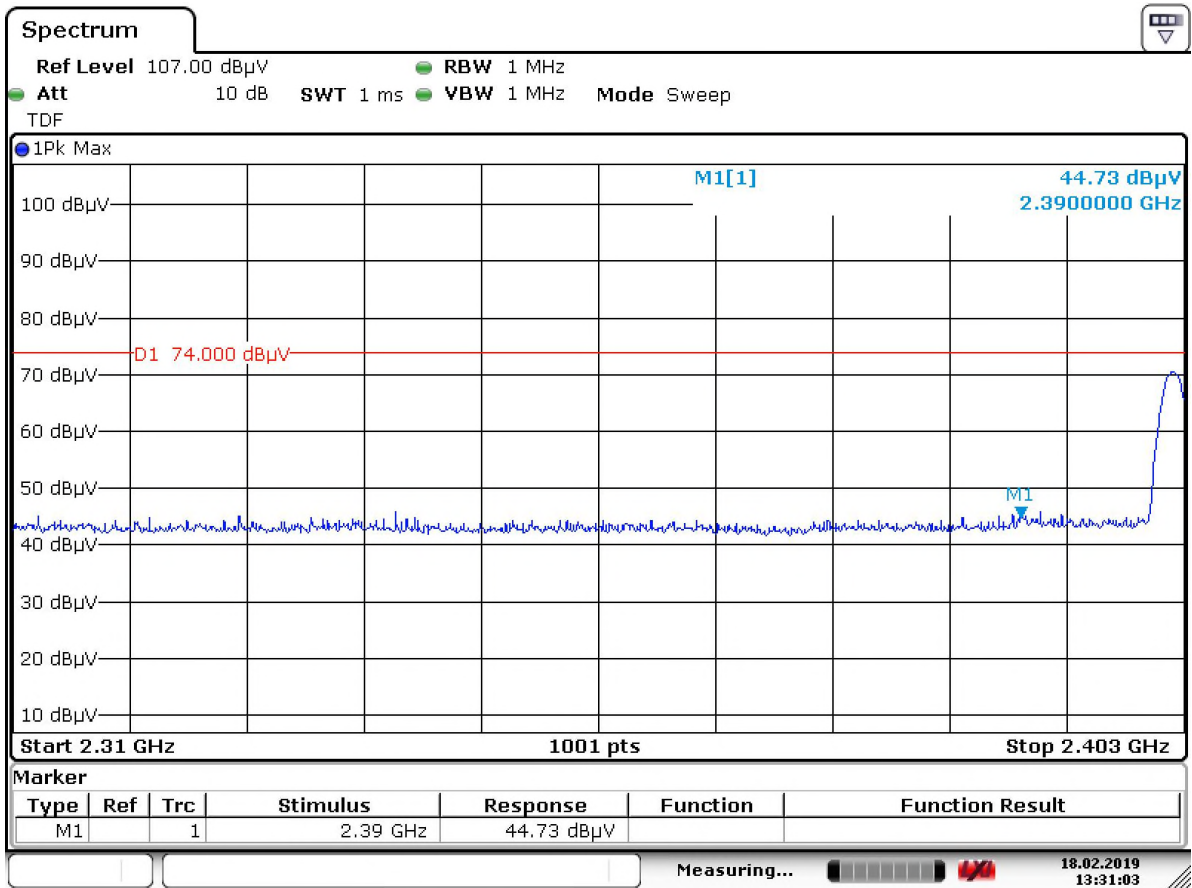


Date: 18.FEB.2019 13:33:15

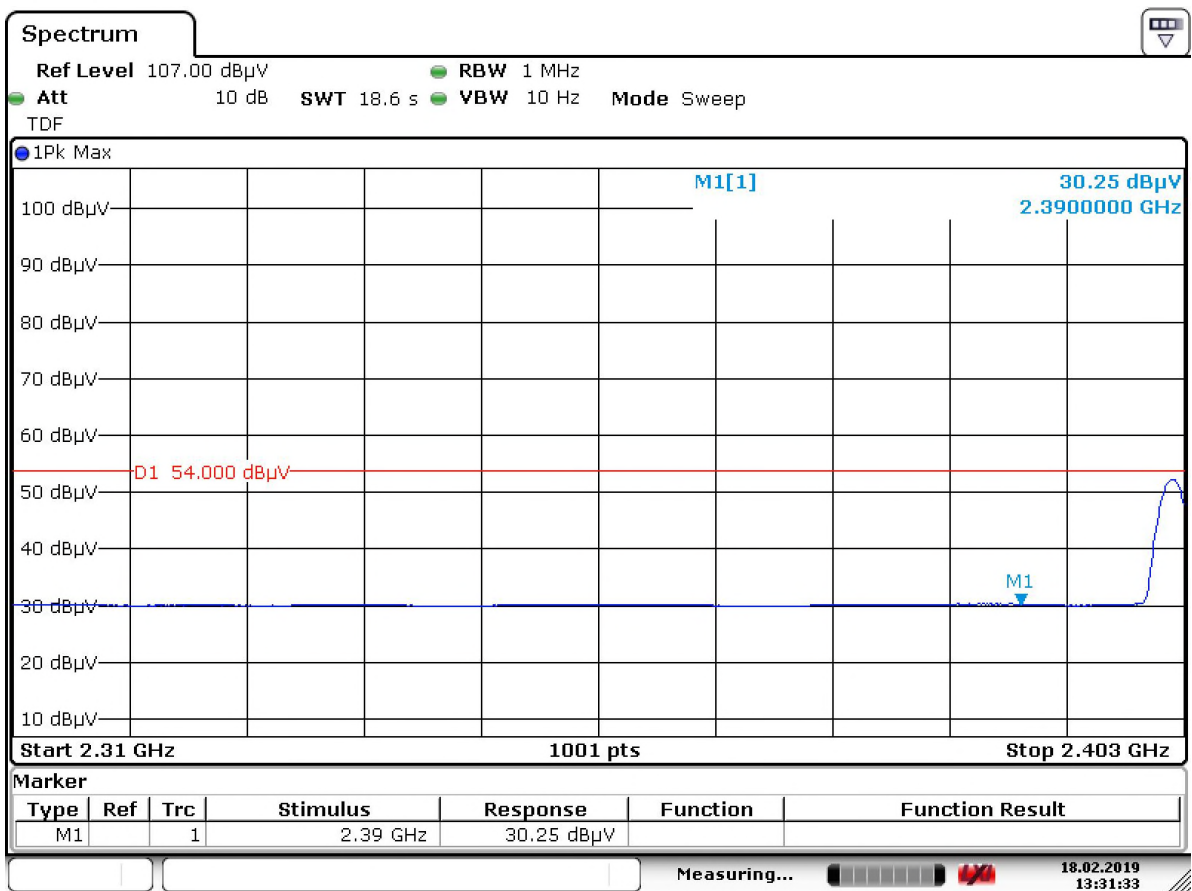


Date: 18.FEB.2019 13:32:45

Low Channel (Vertical)

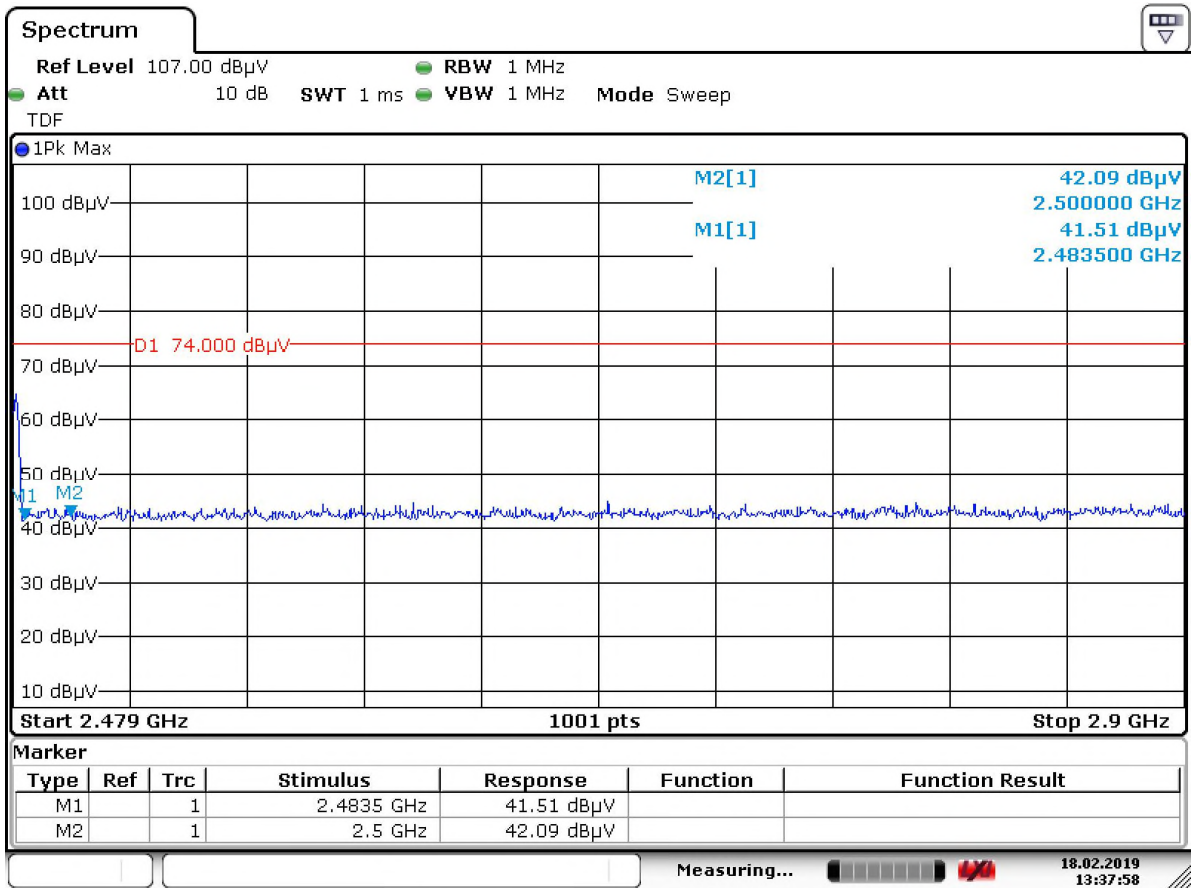


Date: 18.FEB.2019 13:31:03

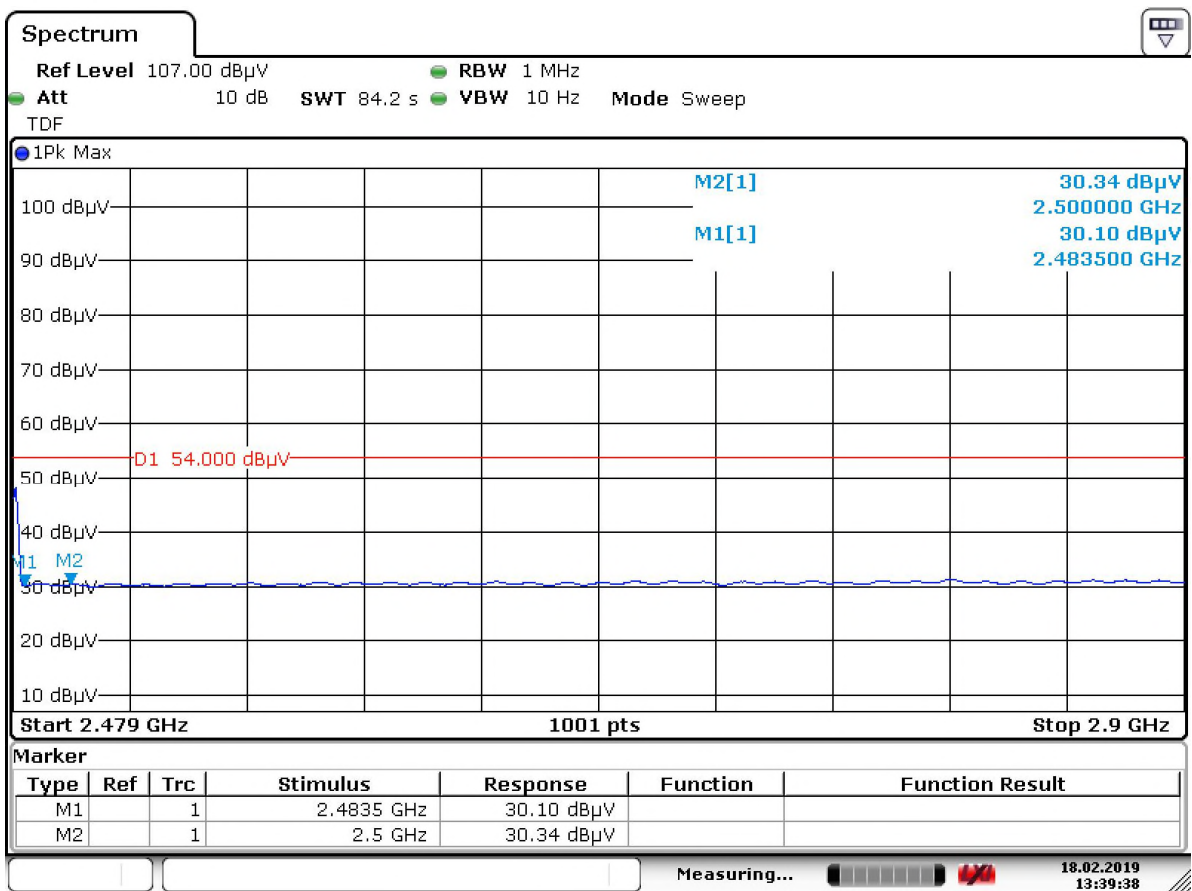


Date: 18.FEB.2019 13:31:34

High Channel (Horizontal)

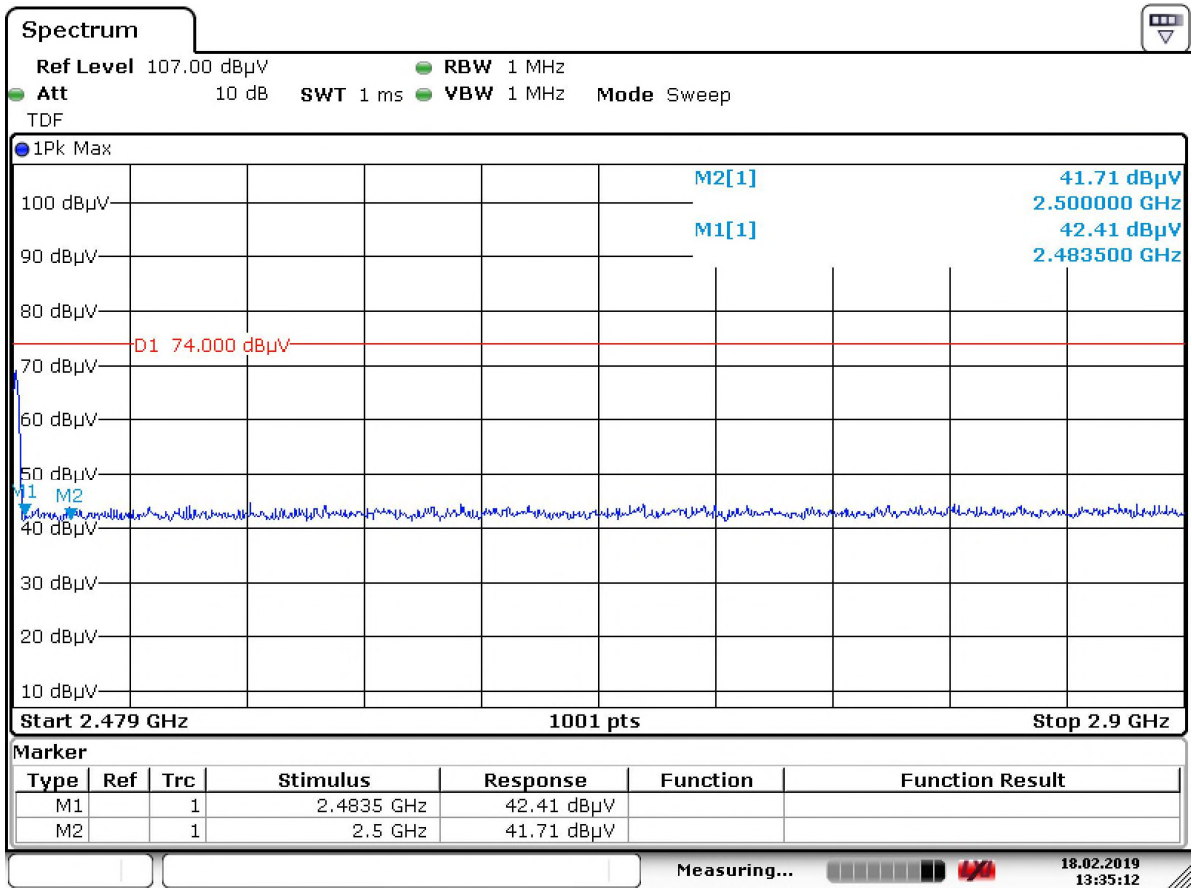


Date: 18.FEB.2019 13:37:59

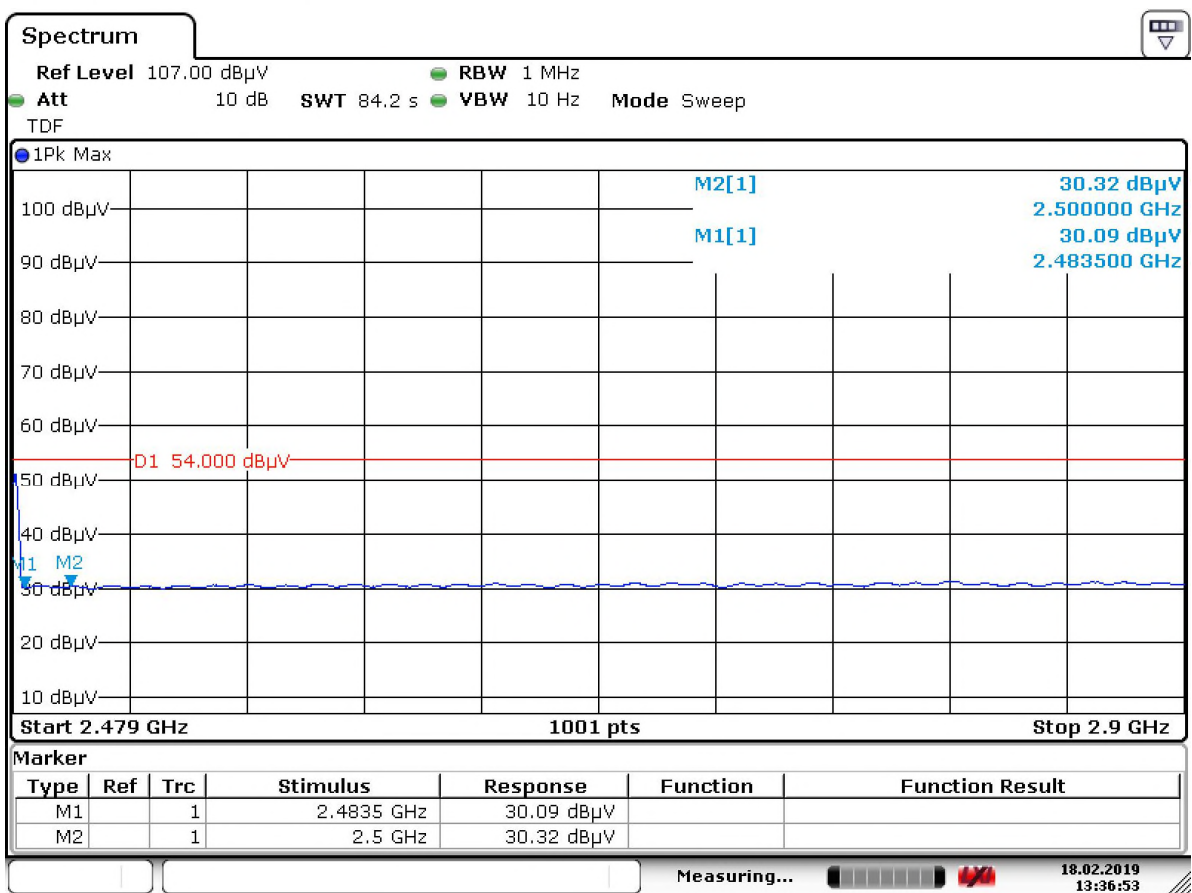


Date: 18.FEB.2019 13:39:38

High Channel (Vertical)



Date: 18.FEB.2019 13:35:12



Date: 18.FEB.2019 13:36:53

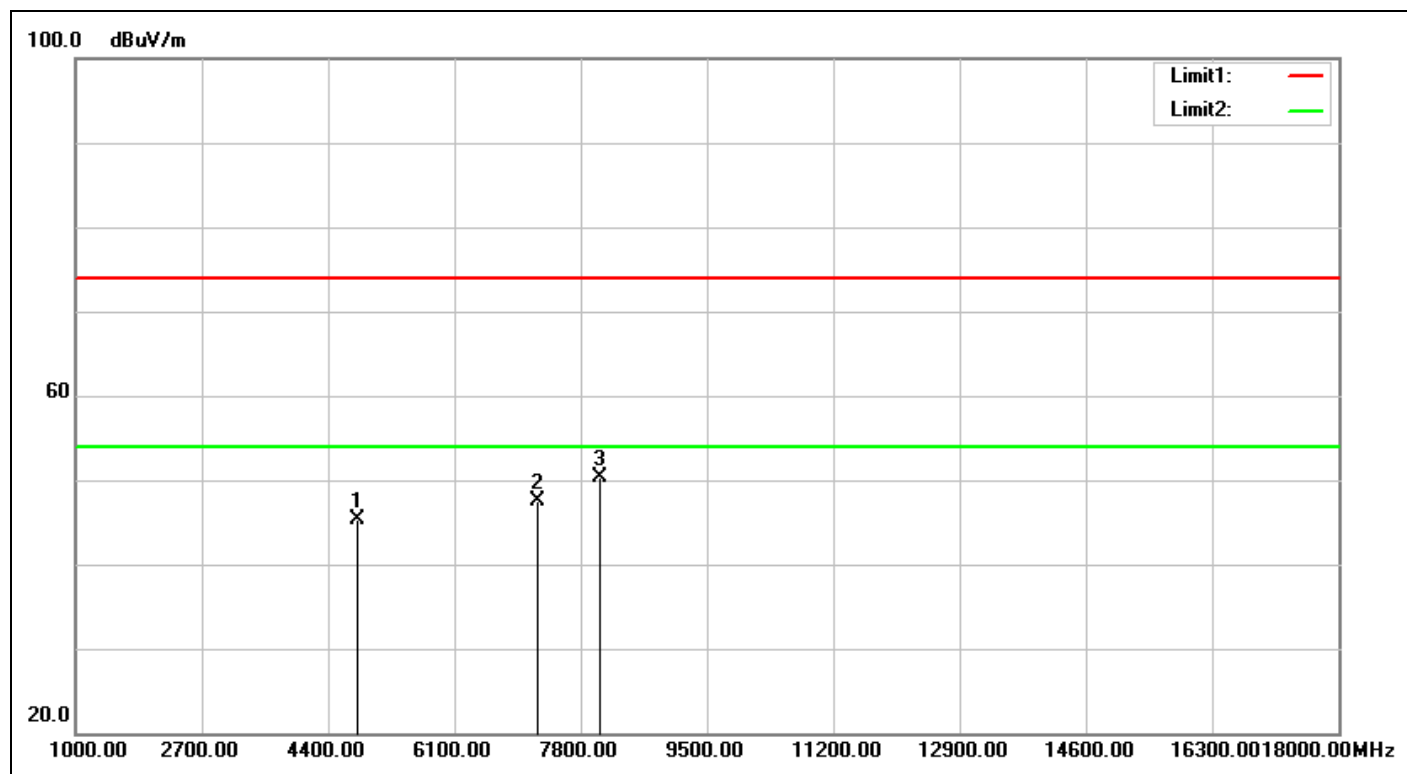
Spurious Emissions, TX Mode, 1-18G



TUV Rheinland Taiwan Ltd.

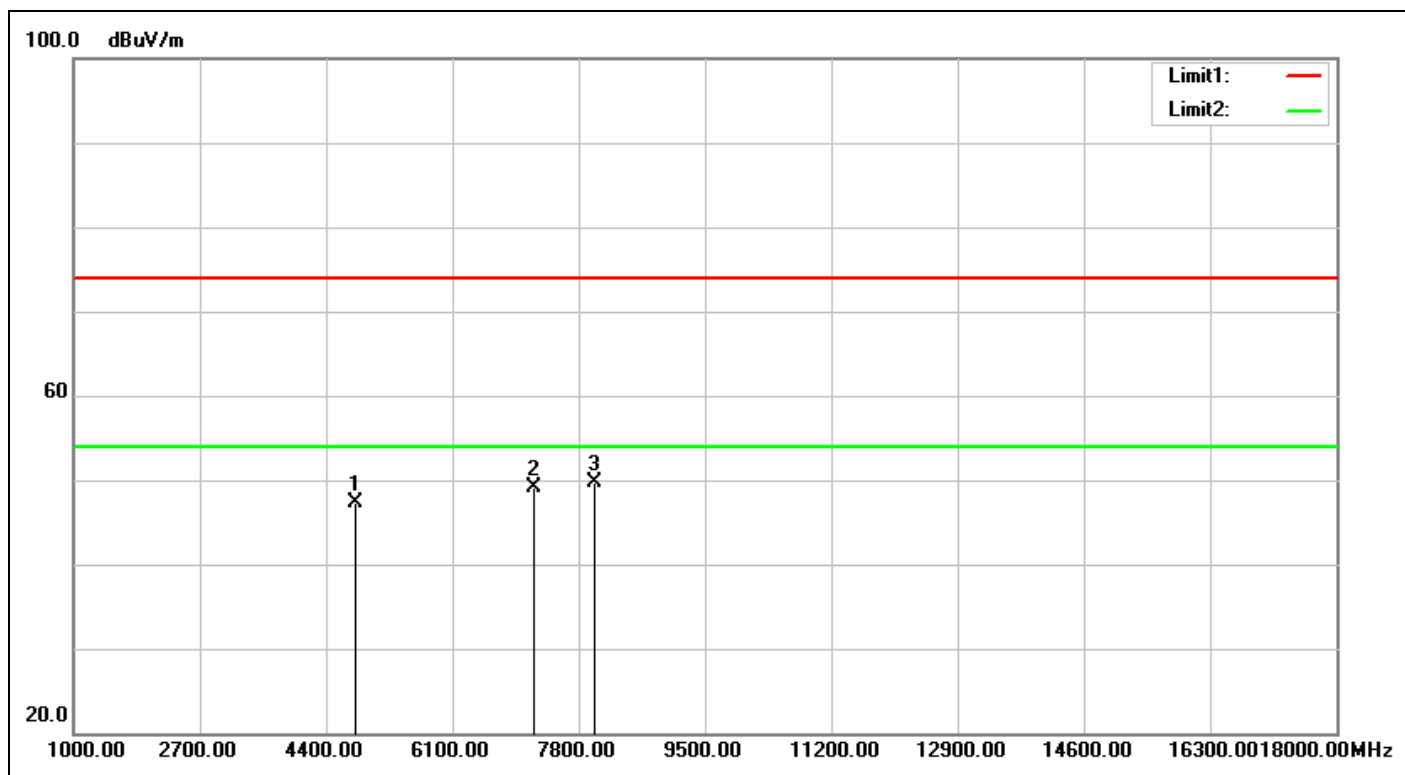
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



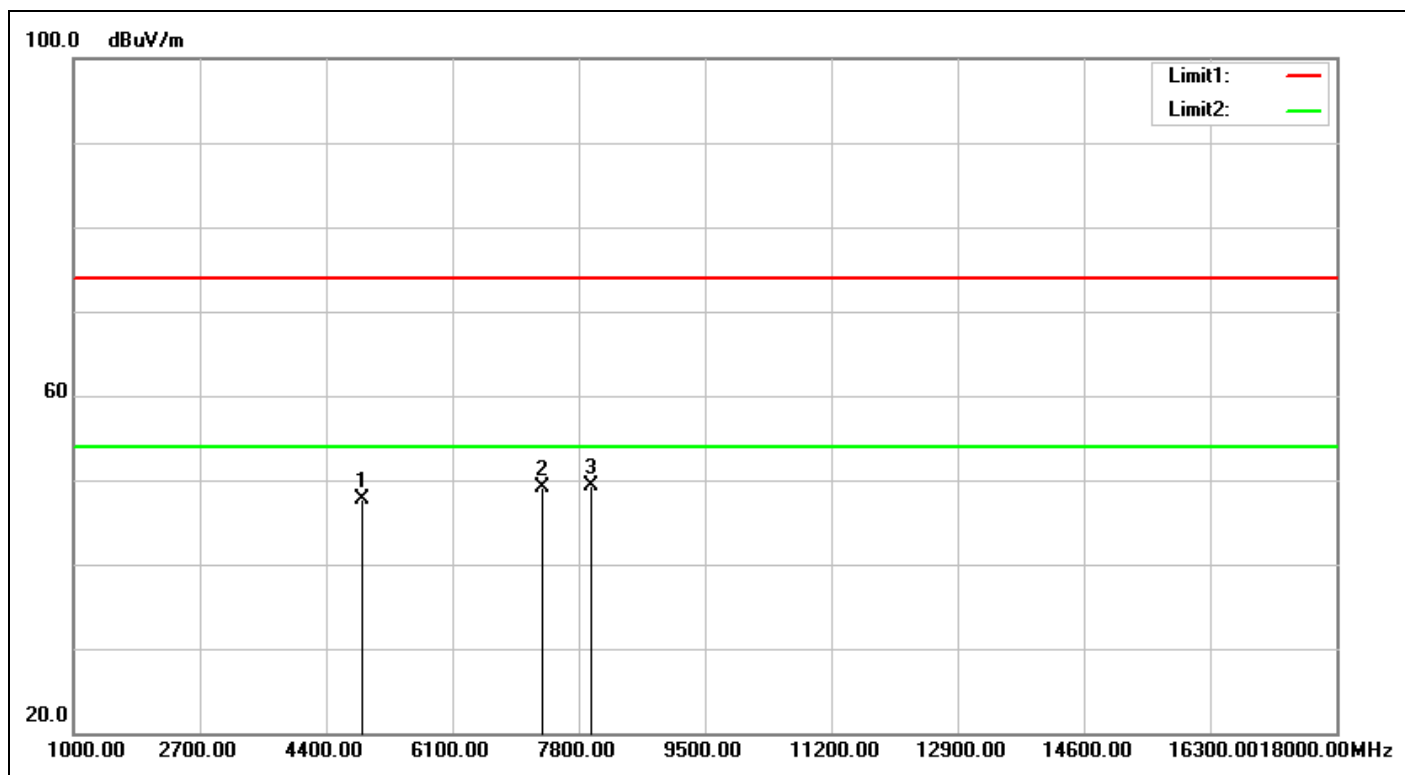
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 13:36:51
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2402-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

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	48.02	45.38	74.00	-28.62	peak	100	162	
2	7206.000	5.26	42.19	47.45	74.00	-26.55	peak	100	203	
3	8055.000	5.81	44.57	50.38	74.00	-23.62	peak	100	347	



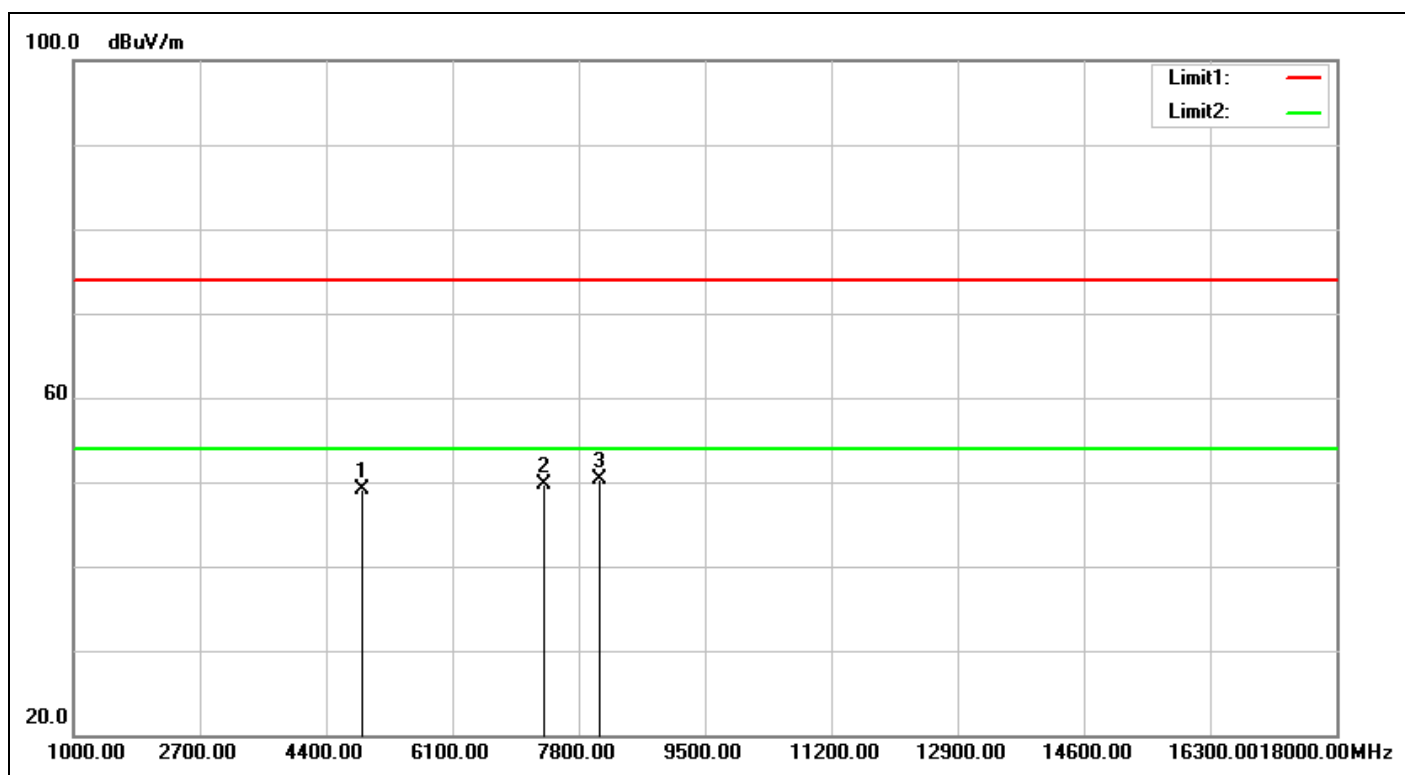
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 13:37:43
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2402-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

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	50.00	47.36	74.00	-26.64	peak	100	304	
2	7206.000	5.26	43.85	49.11	74.00	-24.89	peak	100	1	
3	8021.000	5.75	44.01	49.76	74.00	-24.24	peak	100	246	



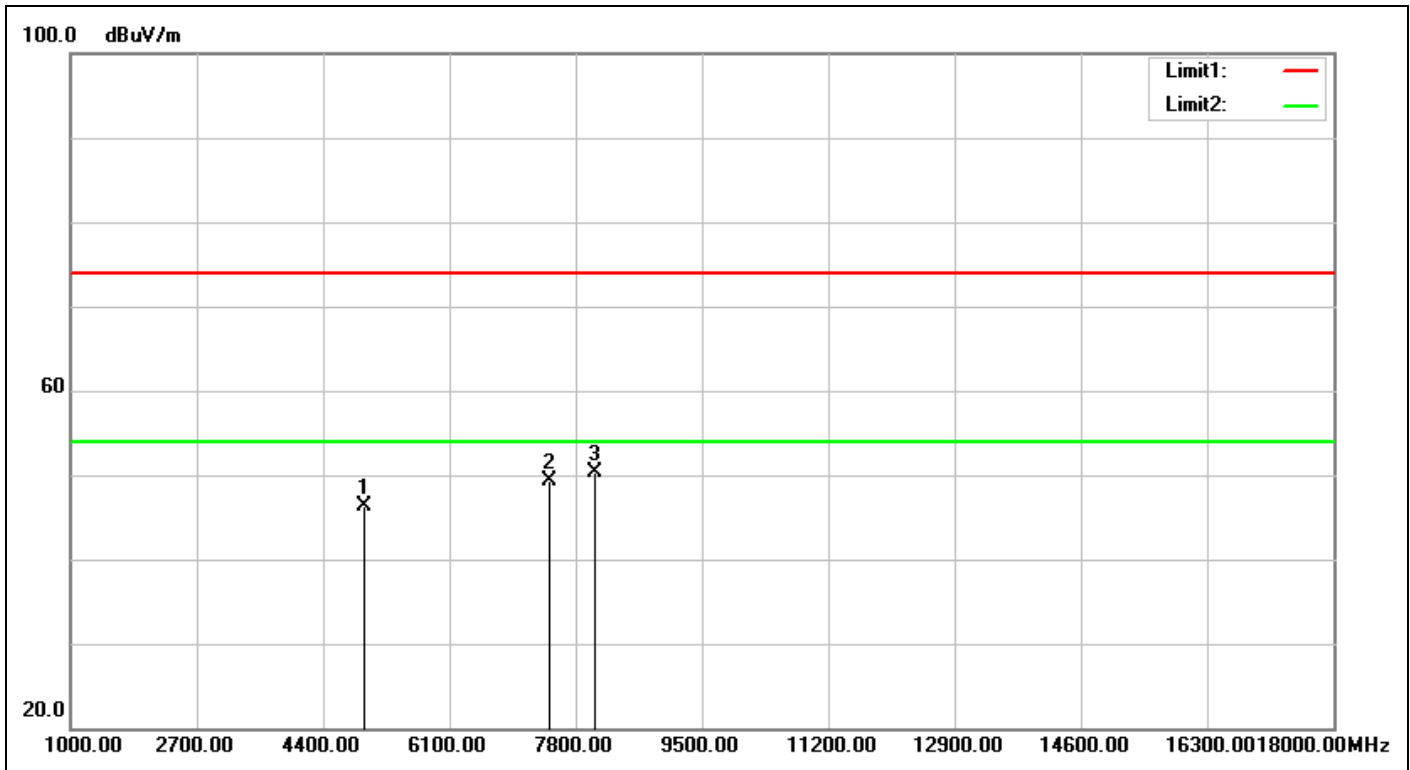
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 13:39:55
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%)	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2441-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4882.000	-2.45	50.23	47.78	74.00	-26.22	peak	100	326	
2	7323.000	5.54	43.58	49.12	74.00	-24.88	peak	100	18	
3	7970.000	5.74	43.56	49.30	74.00	-24.70	peak	100	42	



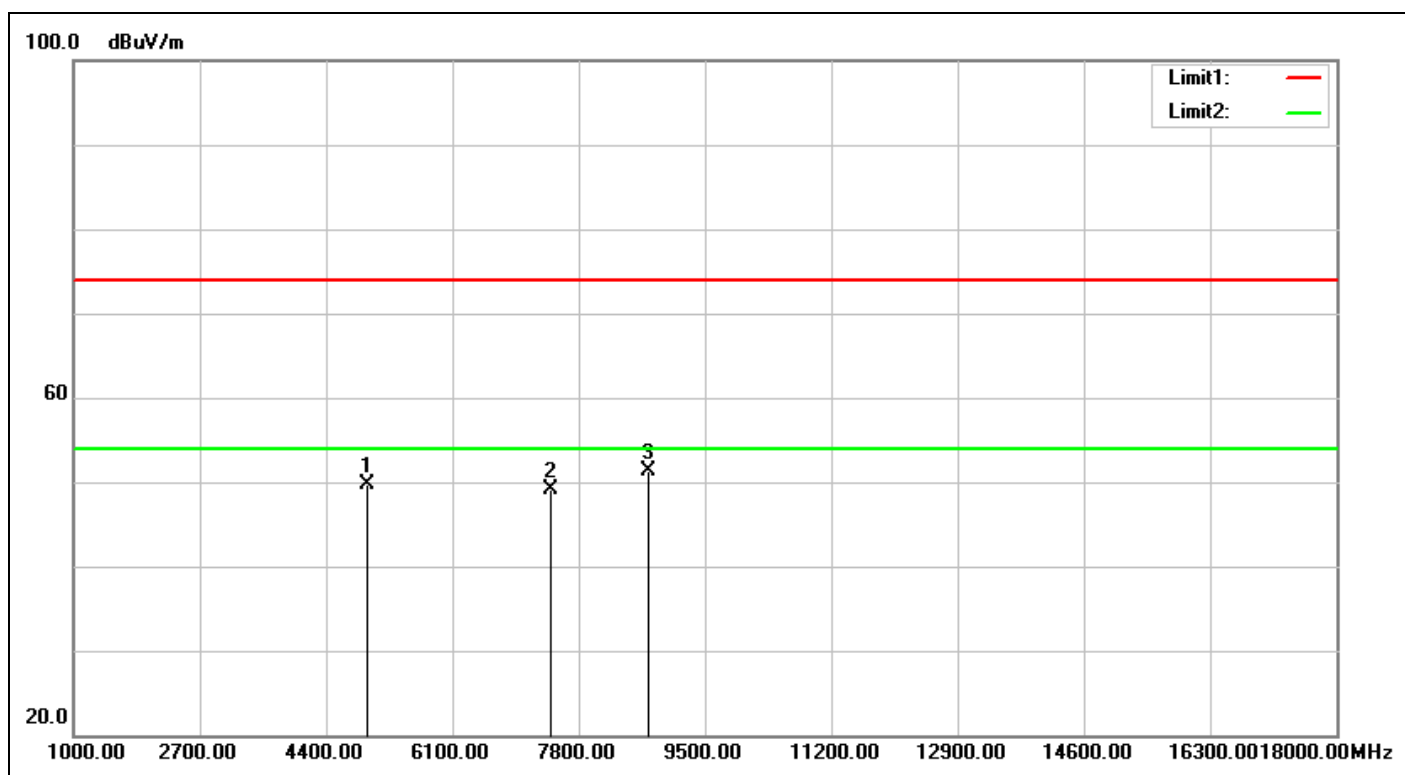
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 13:40:47
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2441-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4882.000	-2.45	51.46	49.01	74.00	-24.99	peak	100	17	
2	7323.000	5.54	44.23	49.77	74.00	-24.23	peak	100	127	
3	8072.000	5.84	44.56	50.40	74.00	-23.60	peak	100	353	



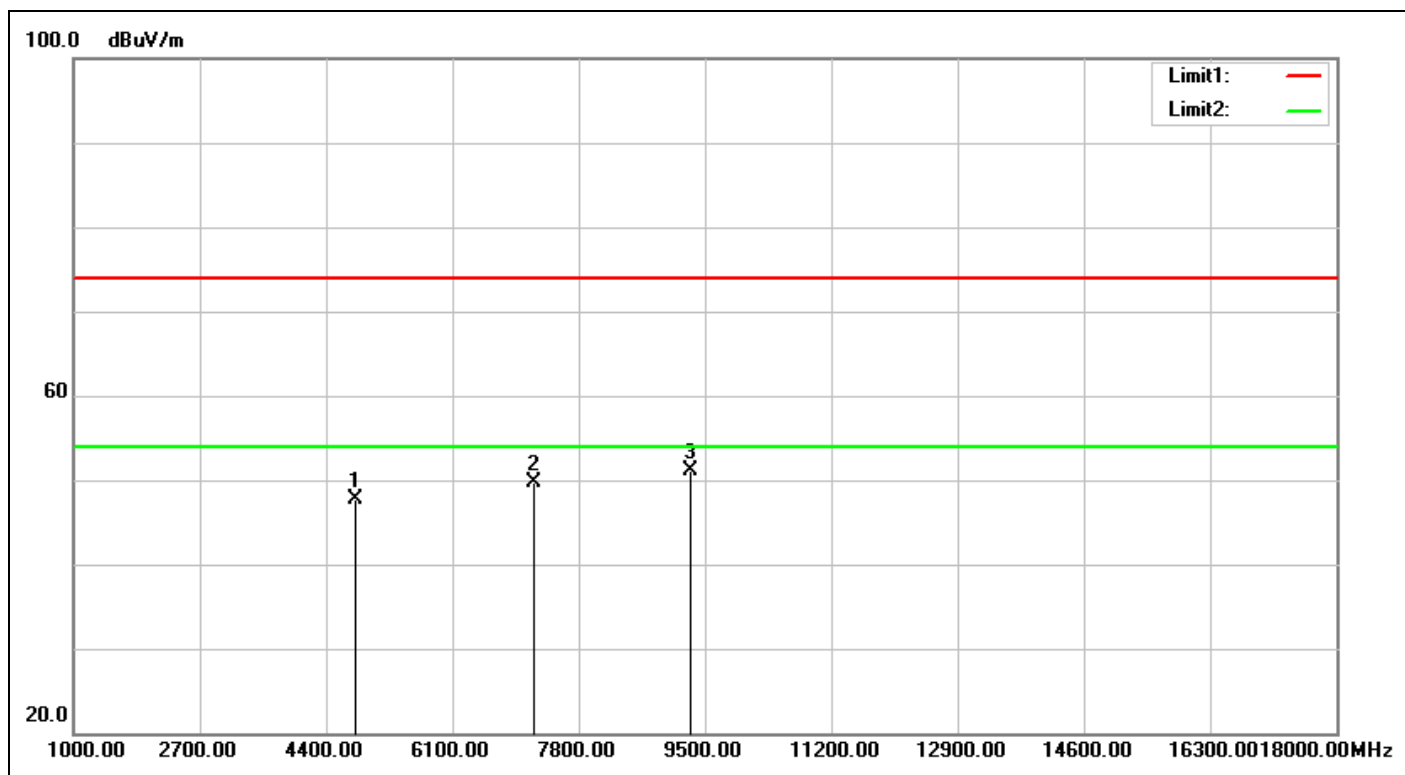
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 13:42:48
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2480-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

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	48.59	46.34	74.00	-27.66	peak	100	278	
2	7440.000	5.83	43.45	49.28	74.00	-24.72	peak	100	254	
3	8055.000	5.81	44.47	50.28	74.00	-23.72	peak	100	323	



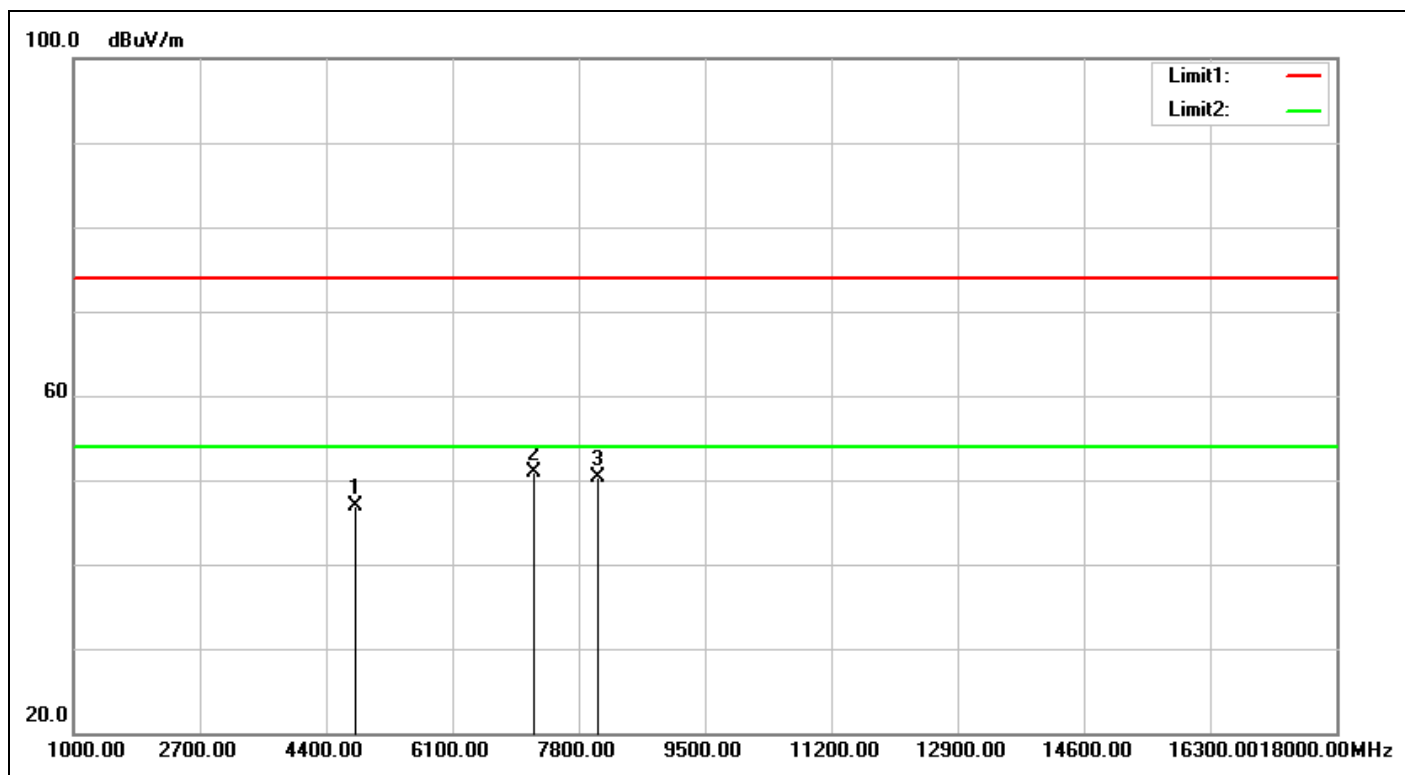
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 13:43:40
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2480-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

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	51.98	49.73	74.00	-24.27	peak	100	332	
2	7440.000	5.83	43.19	49.02	74.00	-24.98	peak	100	325	
3	8735.000	6.61	44.70	51.31	74.00	-22.69	peak	100	99	



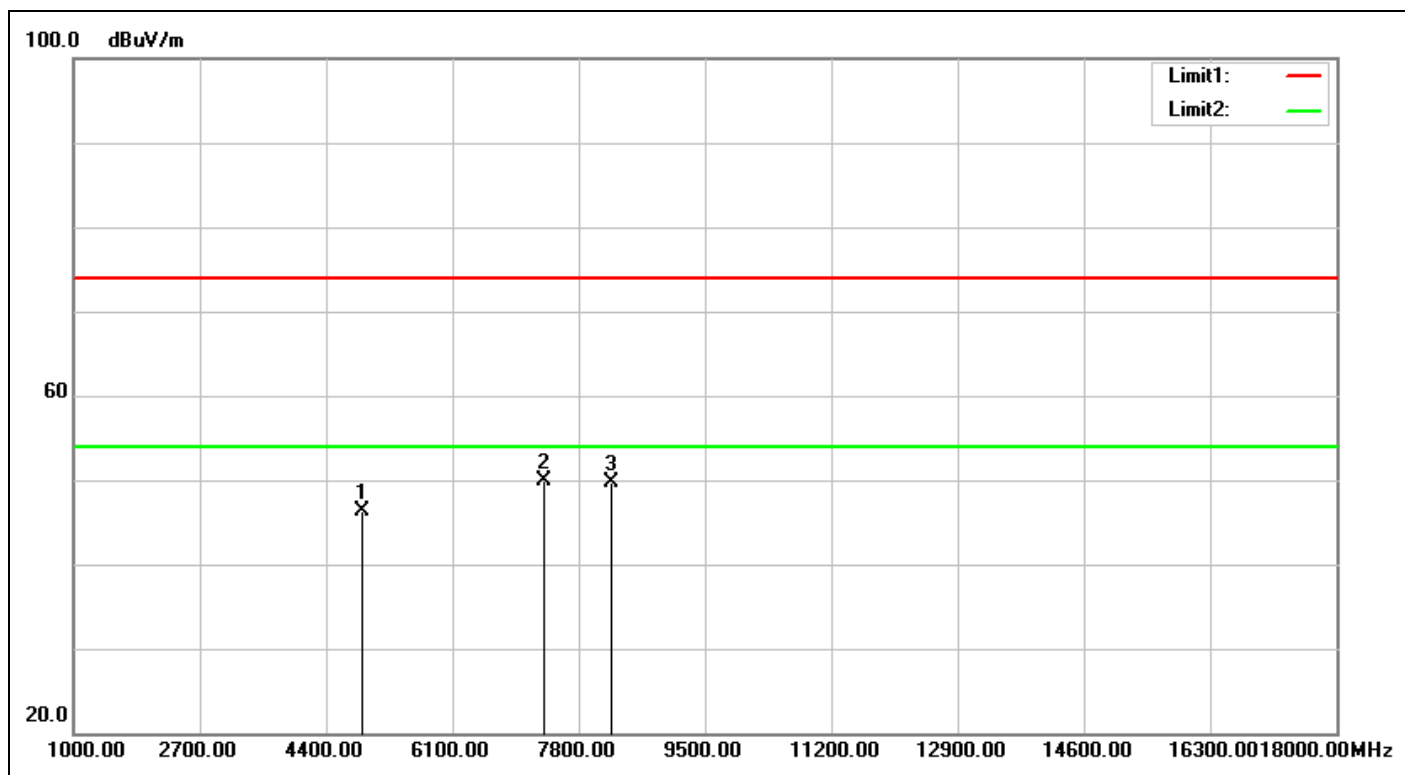
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 13:45:48
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%)	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	3DH5-TX-2402-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

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	50.42	47.78	74.00	-26.22	peak	100	196	
2	7206.000	5.26	44.54	49.80	74.00	-24.20	peak	100	182	
3	9313.000	6.48	44.61	51.09	74.00	-22.91	peak	100	151	



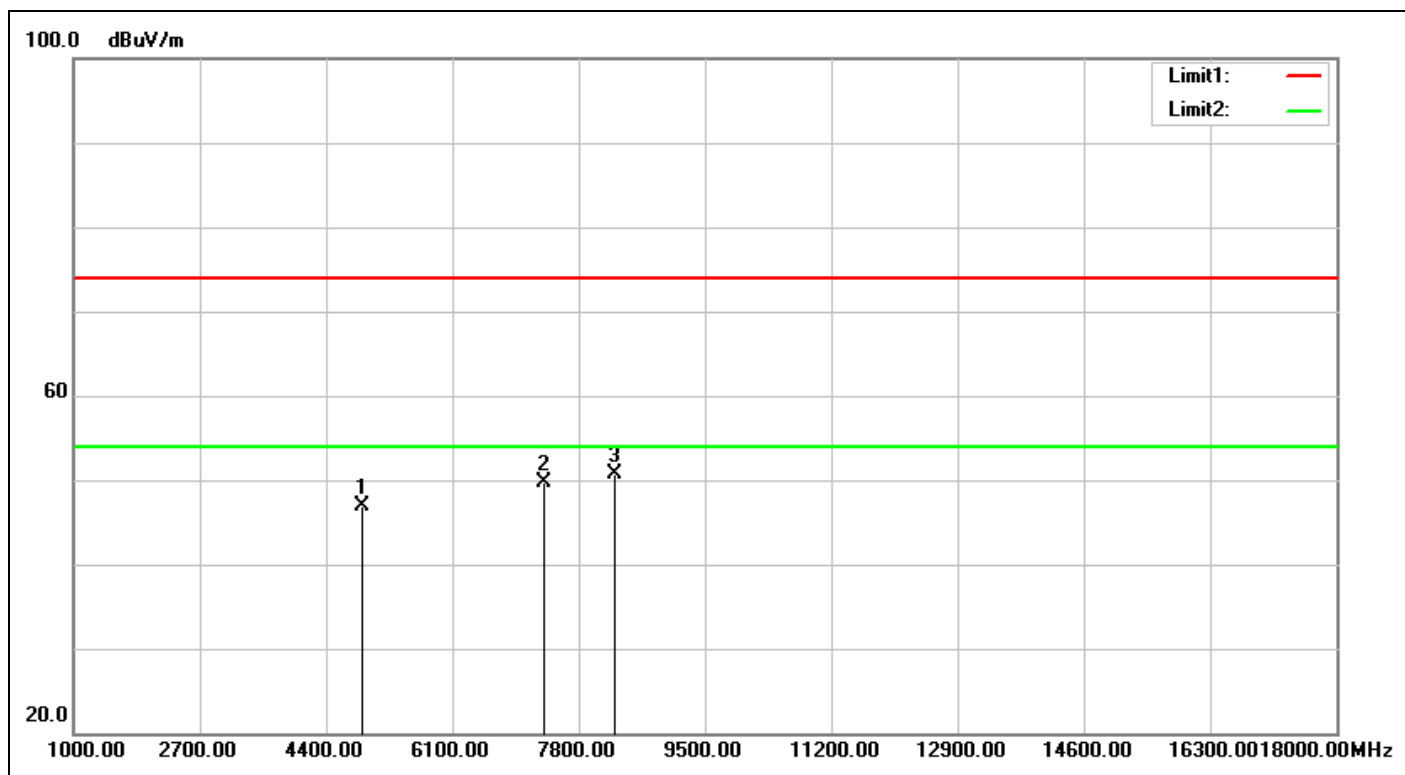
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 13:46:40
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	3DH5-TX-2402-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

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	49.53	46.89	74.00	-27.11	peak	100	205	
2	7206.000	5.26	45.69	50.95	74.00	-23.05	peak	100	86	
3	8055.000	5.81	44.57	50.38	74.00	-23.62	peak	100	243	



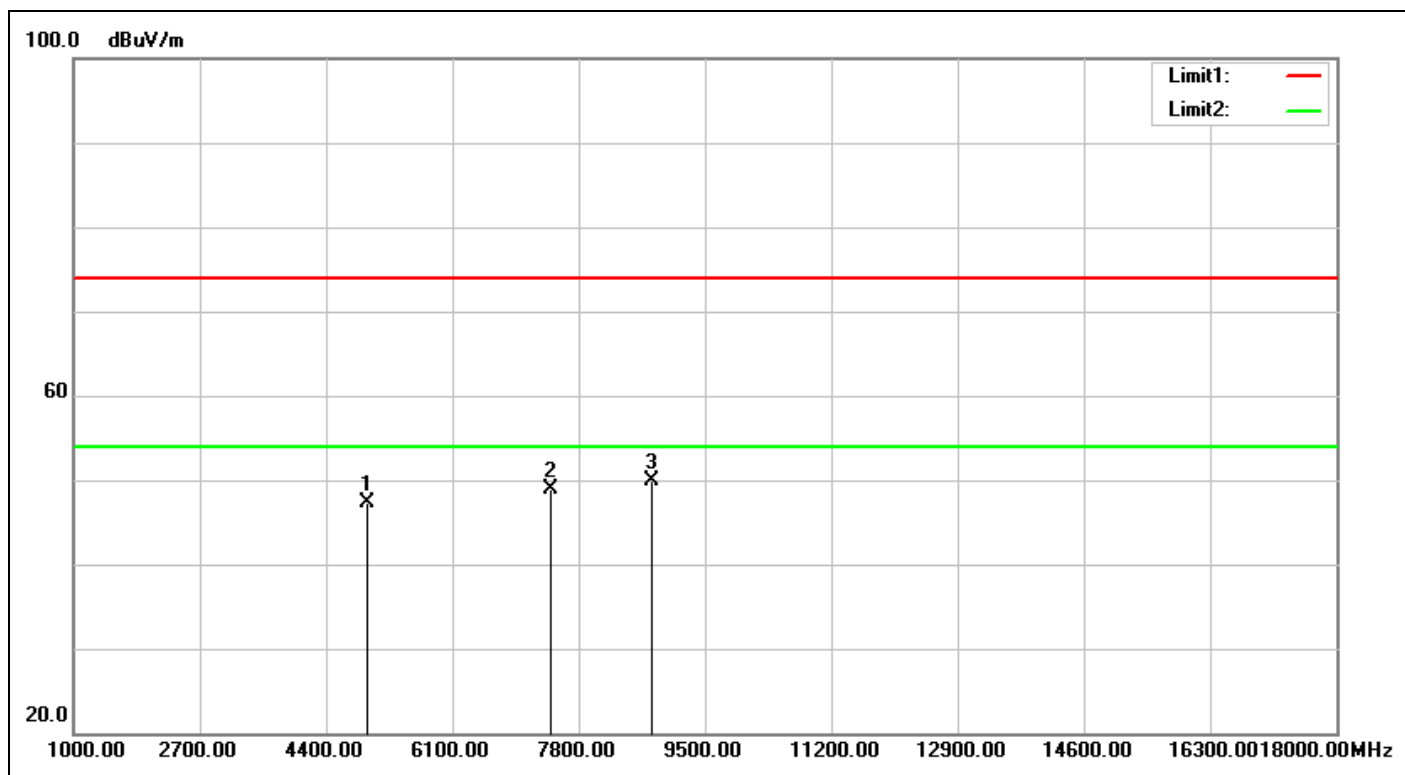
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 13:48:05
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	3DH5-TX-2441-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4882.000	-2.45	48.82	46.37	74.00	-27.63	peak	100	319	
2	7323.000	5.54	44.27	49.81	74.00	-24.19	peak	100	97	
3	8242.000	6.16	43.57	49.73	74.00	-24.27	peak	100	4	



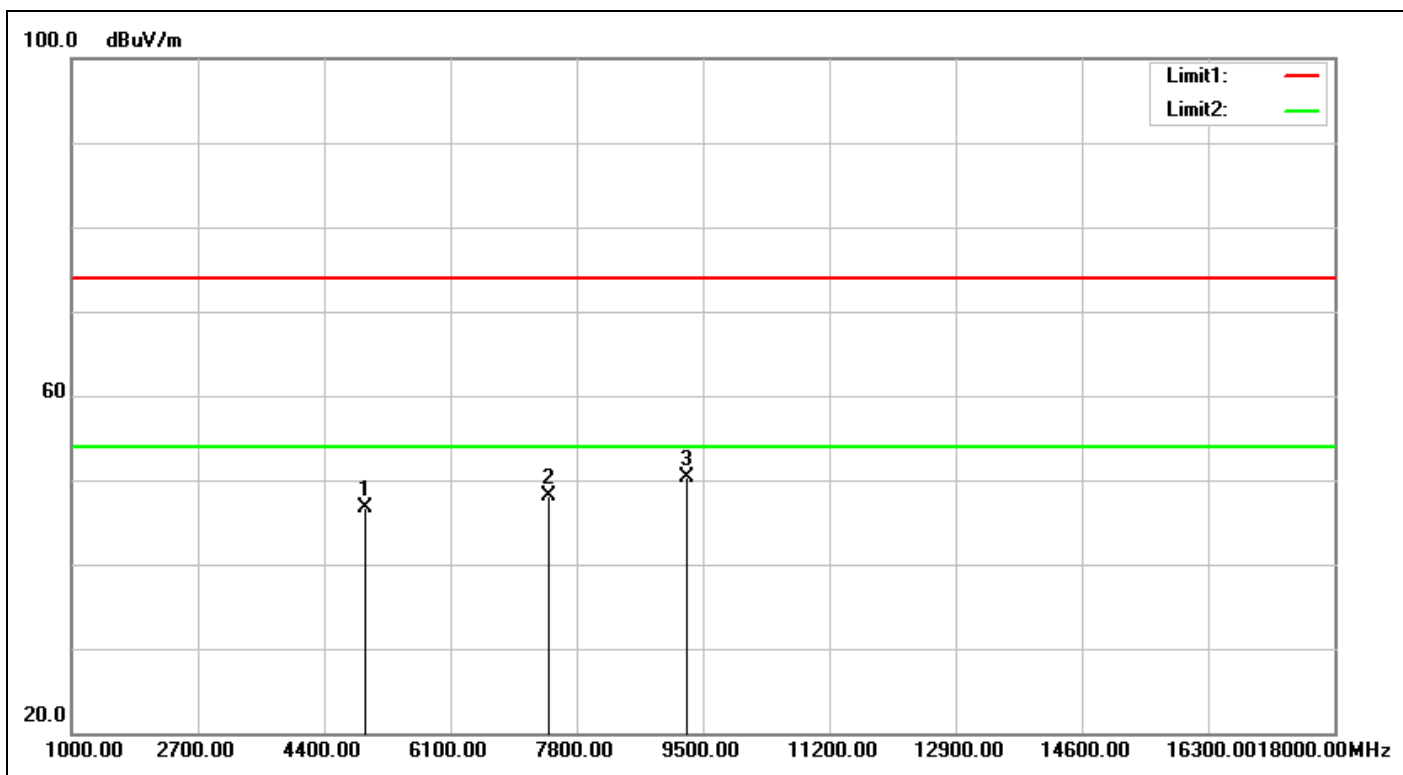
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 13:48:57
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	3DH5-TX-2441-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4882.000	-2.45	49.33	46.88	74.00	-27.12	peak	100	116	
2	7323.000	5.54	44.07	49.61	74.00	-24.39	peak	100	219	
3	8276.000	6.21	44.54	50.75	74.00	-23.25	peak	100	212	



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 13:51:13
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	3DH5-TX-2480-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

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	49.52	47.27	74.00	-26.73	peak	100	124	
2	7440.000	5.83	43.03	48.86	74.00	-25.14	peak	100	282	
3	8786.000	6.61	43.23	49.84	74.00	-24.16	peak	100	254	



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 13:52:06
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	3DH5-TX-2480-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

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	49.05	46.80	74.00	-27.20	peak	100	4	
2	7440.000	5.83	42.20	48.03	74.00	-25.97	peak	100	1	
3	9279.000	6.48	43.79	50.27	74.00	-23.73	peak	100	0	

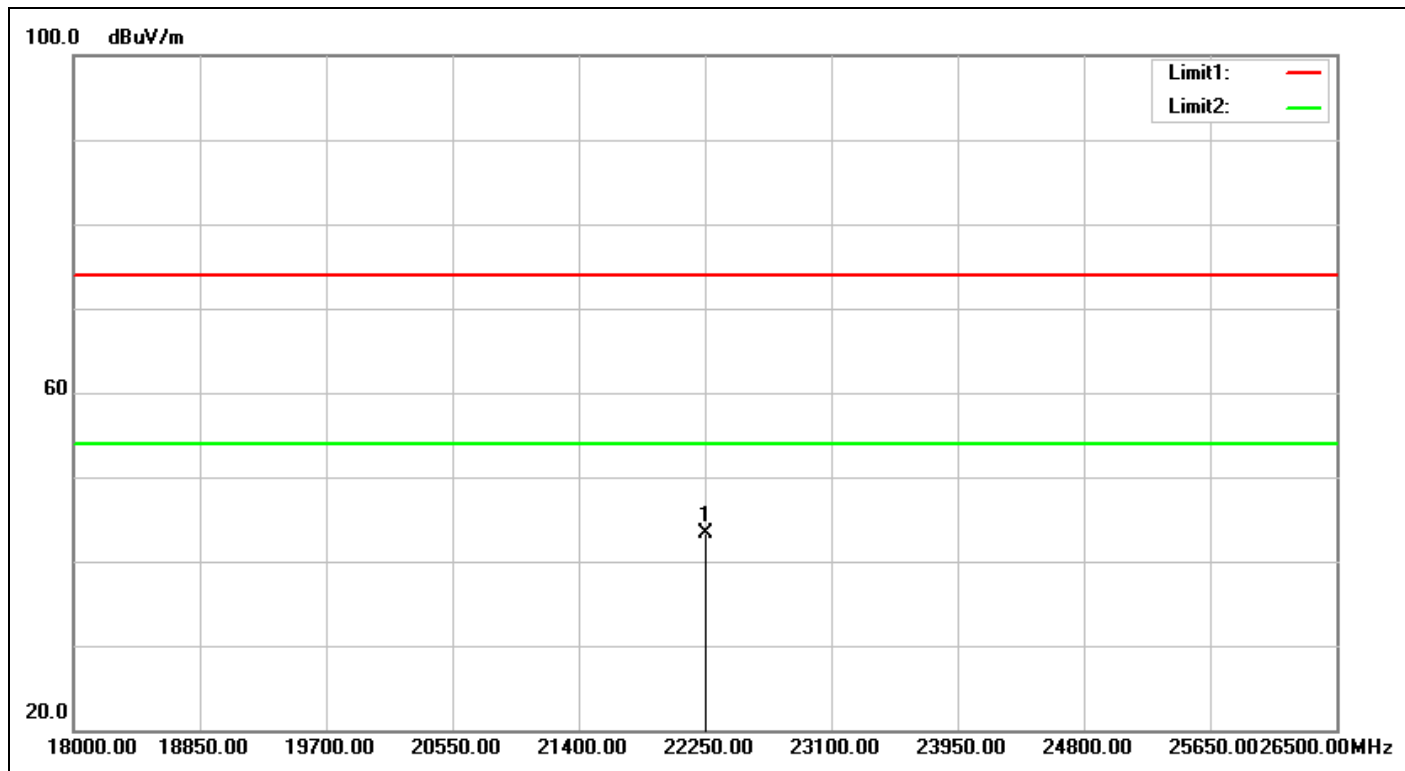
Spurious Emissions, TX Mode, 18-26.5G



TUV Rheinland Taiwan Ltd.

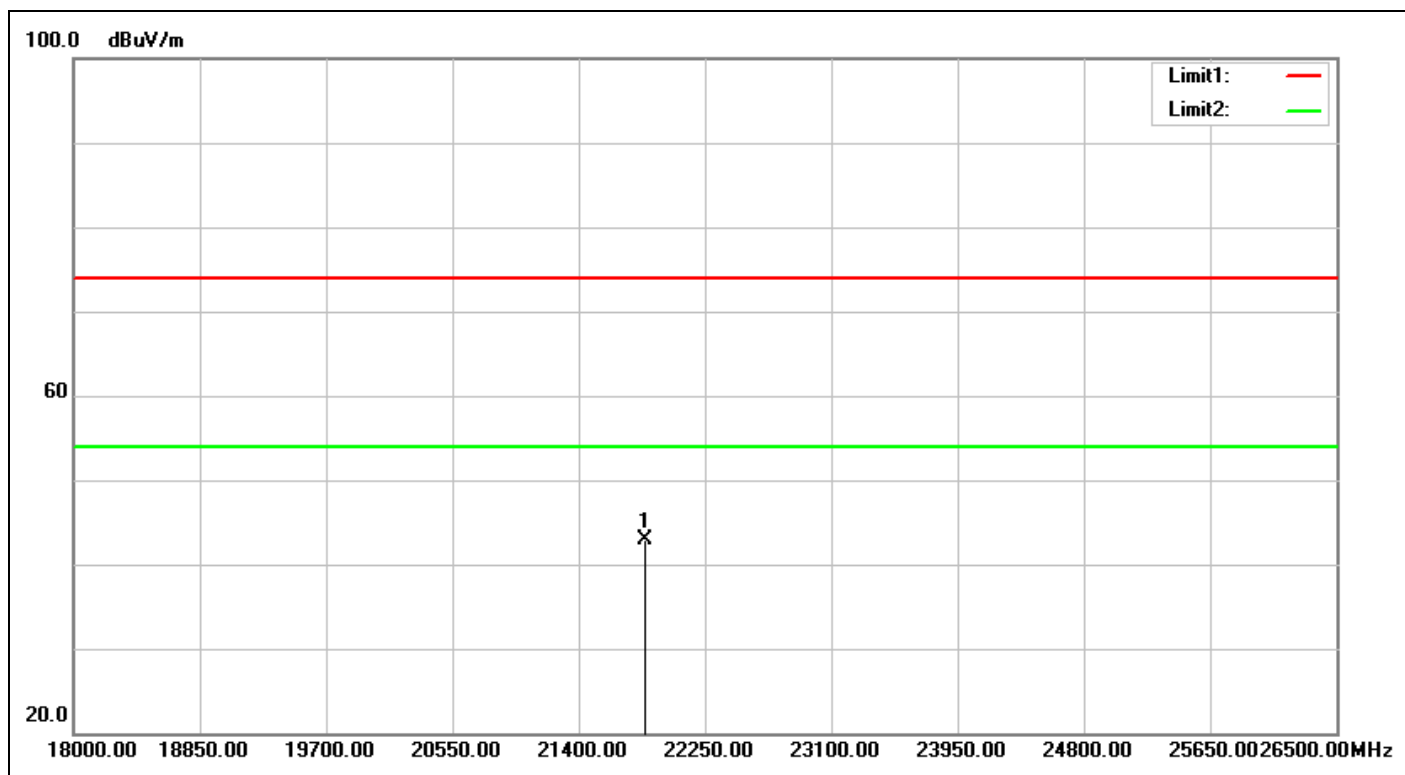
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



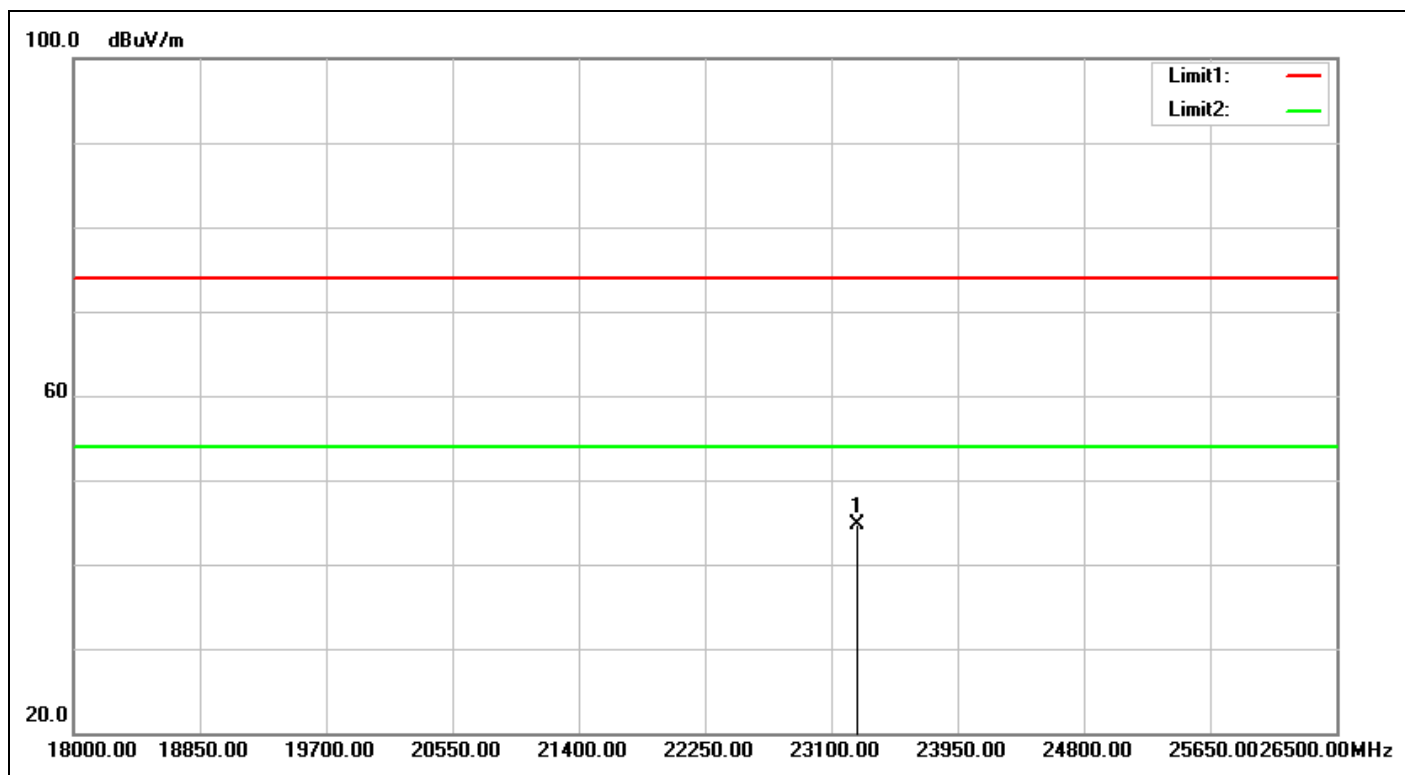
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 15:12:52
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2402-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	22258.500	4.75	38.57	43.32	74.00	-30.68	peak	100	34	



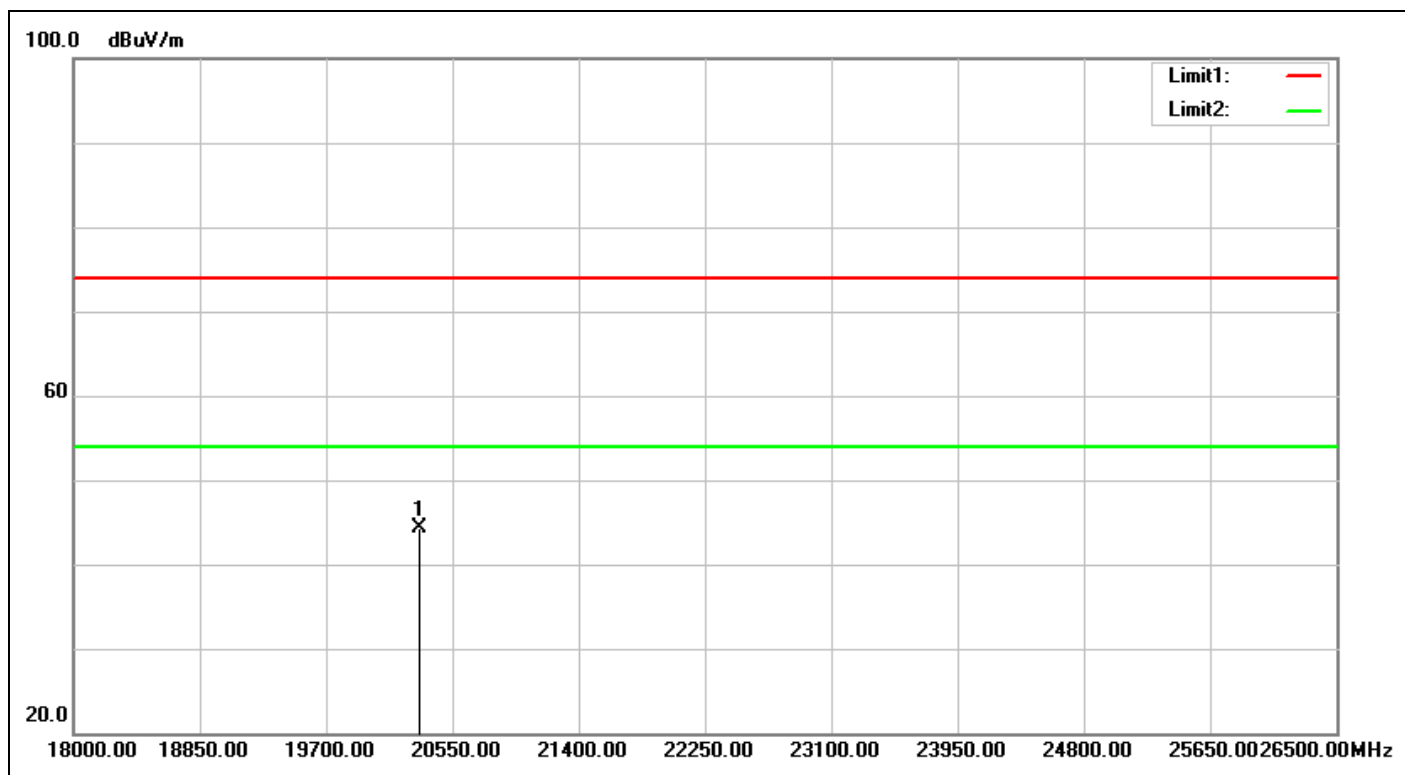
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 15:13:58
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2402-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	21842.000	4.32	38.62	42.94	74.00	-31.06	peak	100	229	



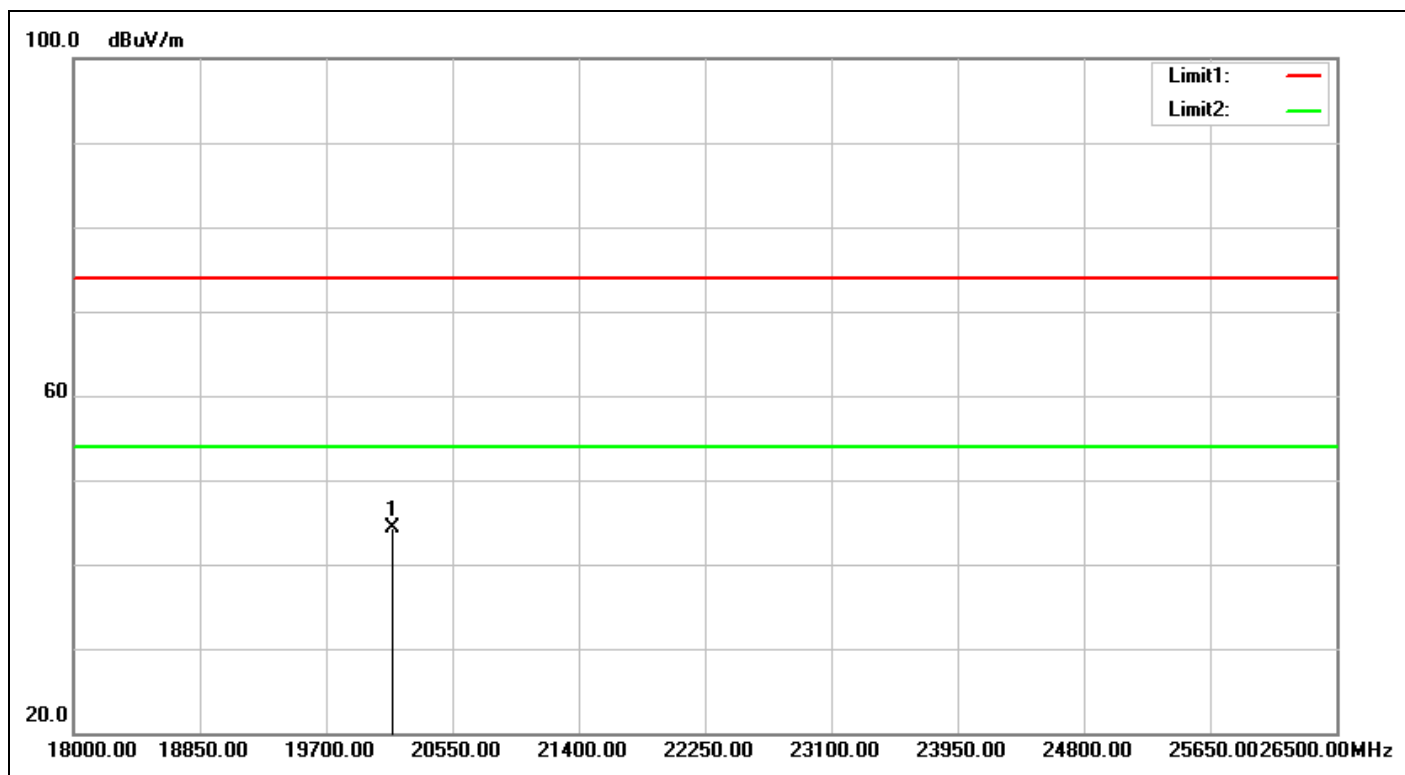
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 15:14:27
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2441-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23270.000	5.24	39.47	44.71	74.00	-29.29	peak	100	181	



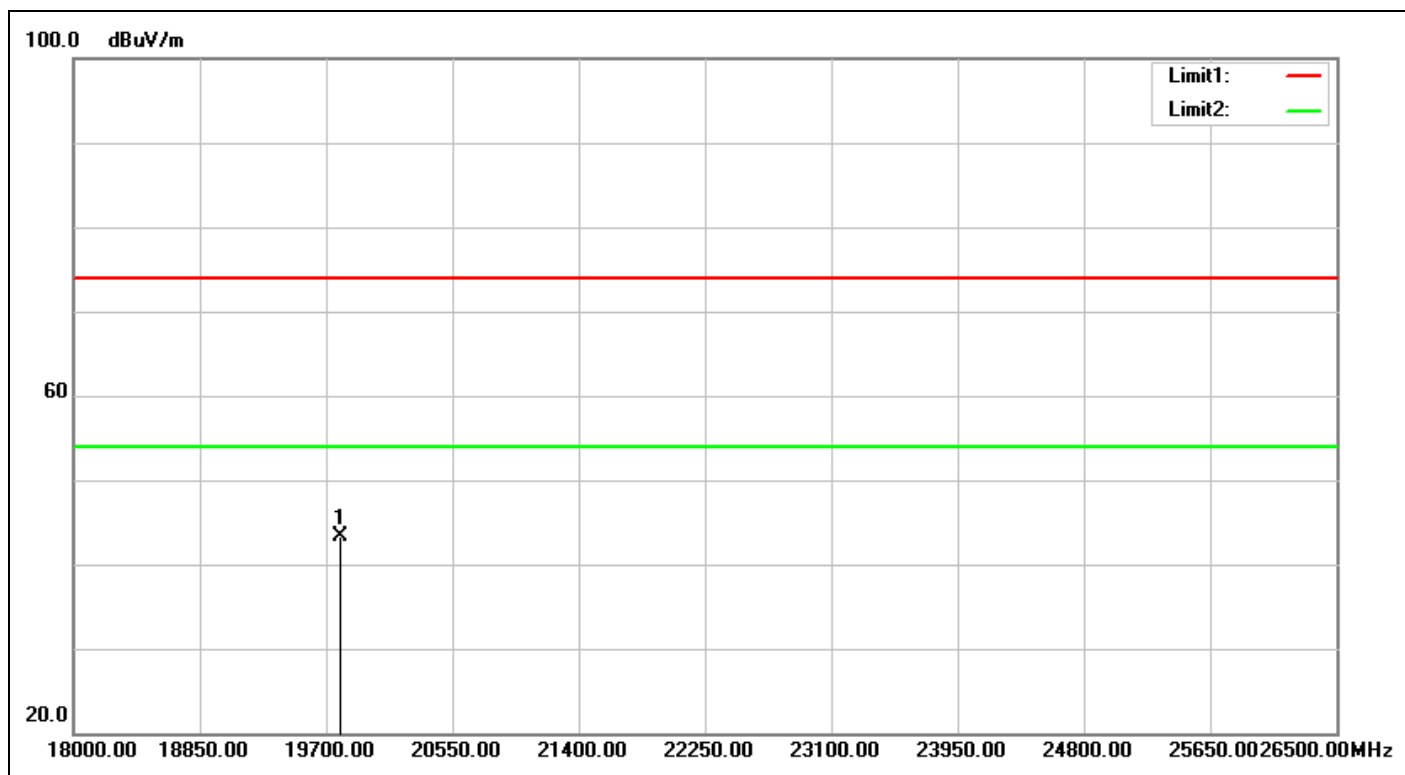
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 15:15:34
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2441-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20329.000	4.42	39.94	44.36	74.00	-29.64	peak	100	64	



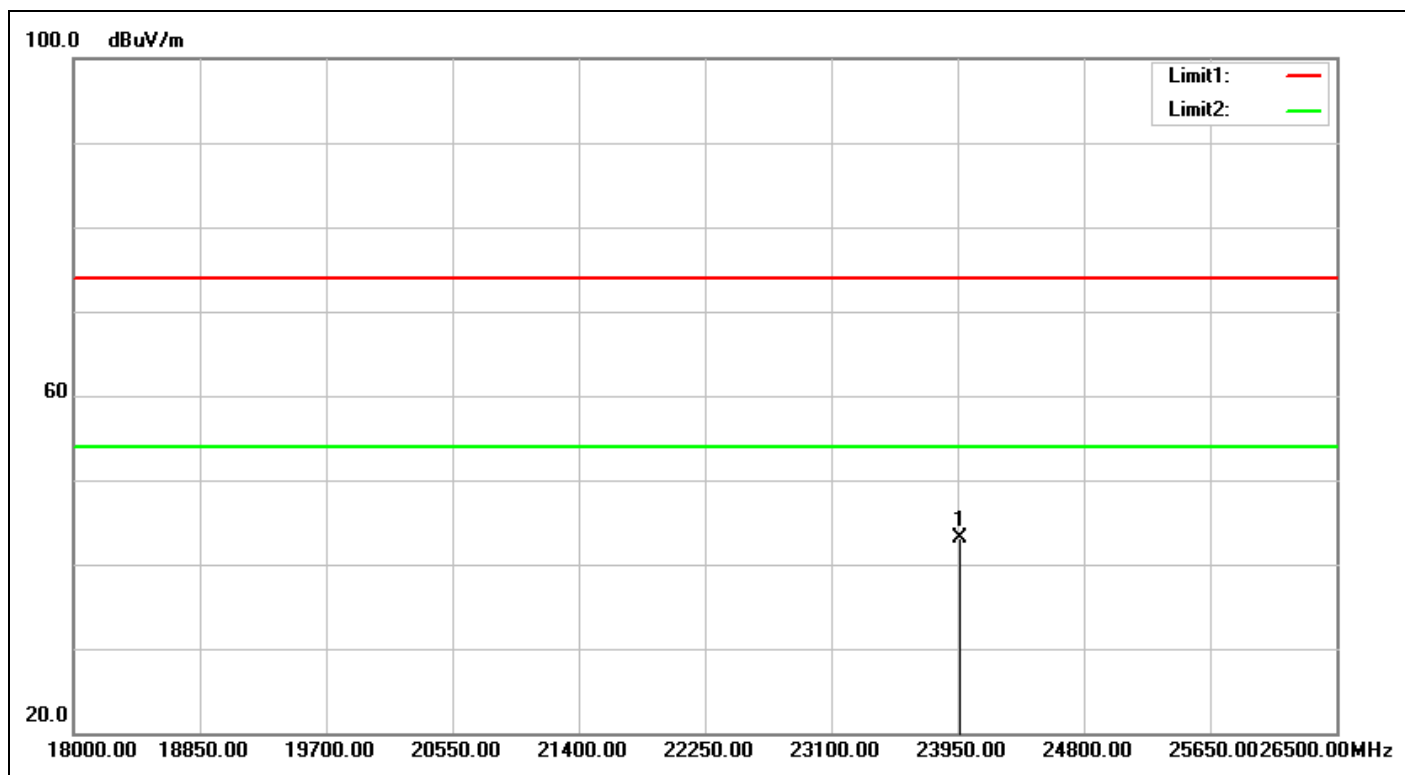
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 15:16:08
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2480-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20142.000	4.24	40.03	44.27	74.00	-29.73	peak	100	352	



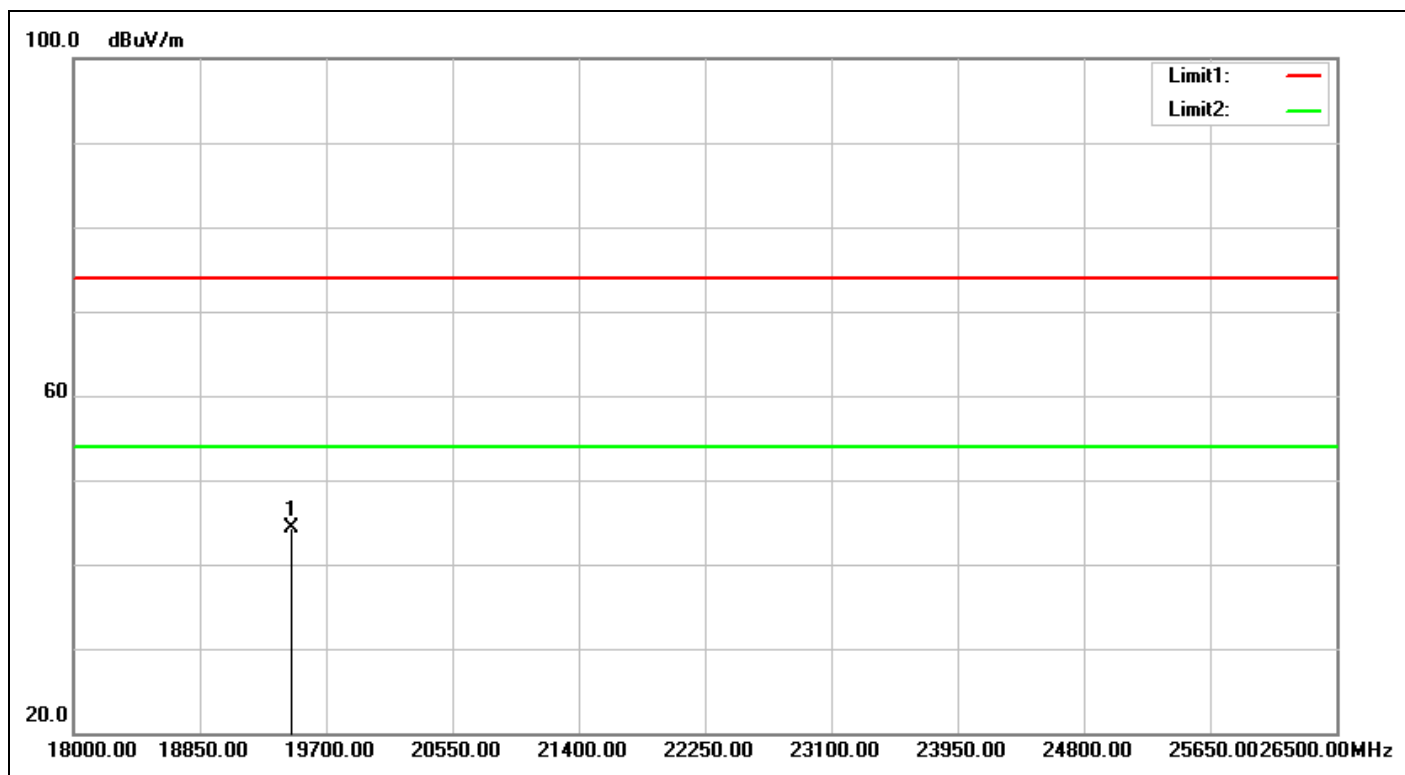
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 15:17:14
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2480-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19793.500	3.63	39.68	43.31	74.00	-30.69	peak	100	48	



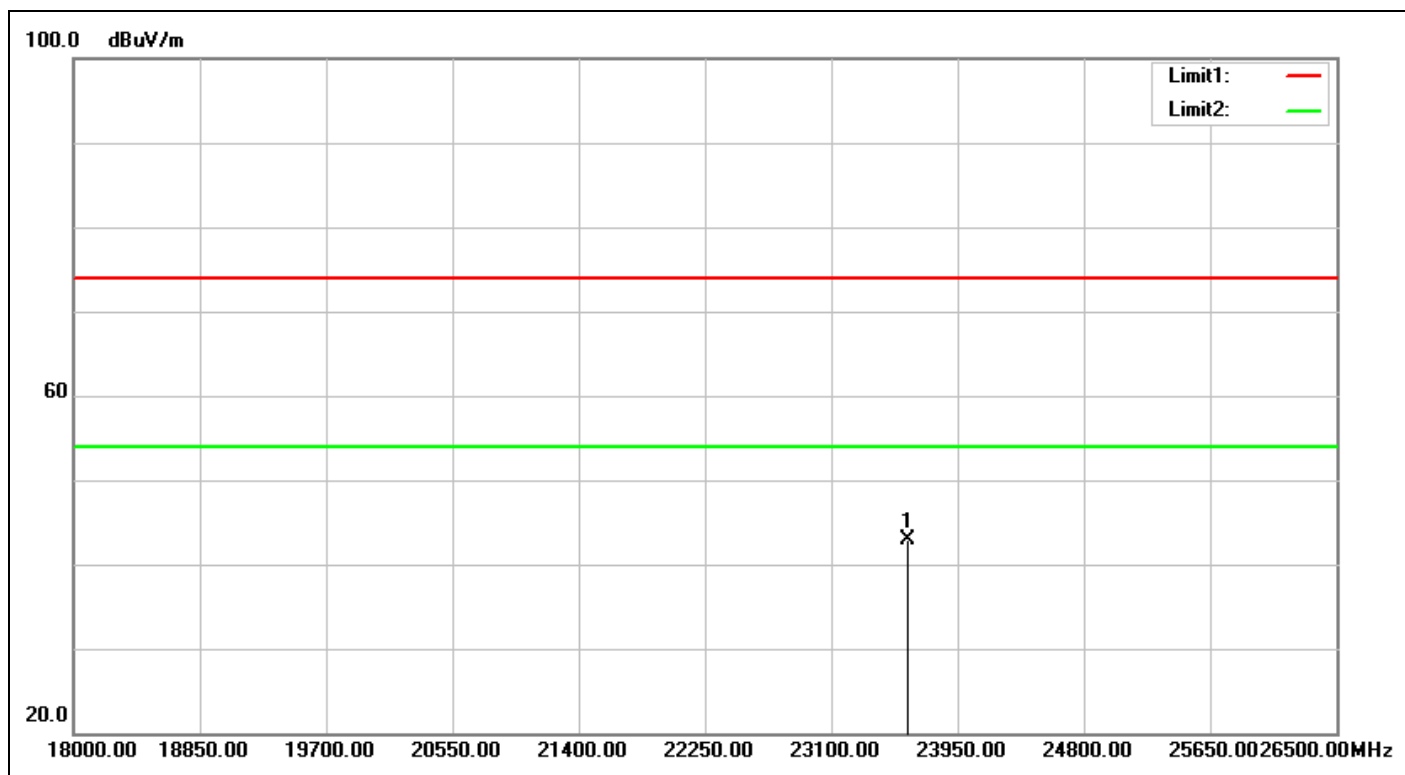
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 15:18:04
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	3DH5-TX-2402-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23967.000	5.33	37.79	43.12	74.00	-30.88	peak	100	102	



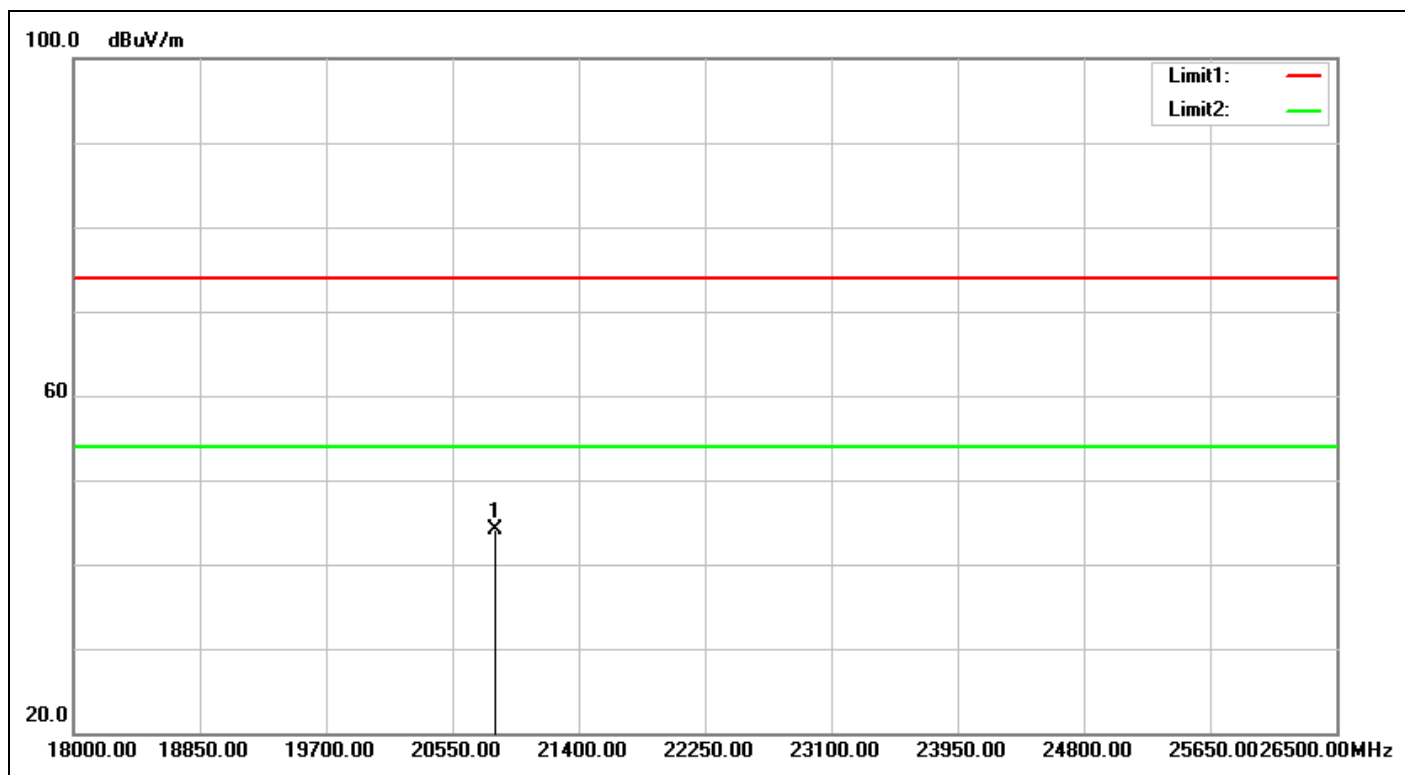
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 15:19:10
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	3DH5-TX-2402-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19470.500	3.67	40.54	44.21	74.00	-29.79	peak	100	155	



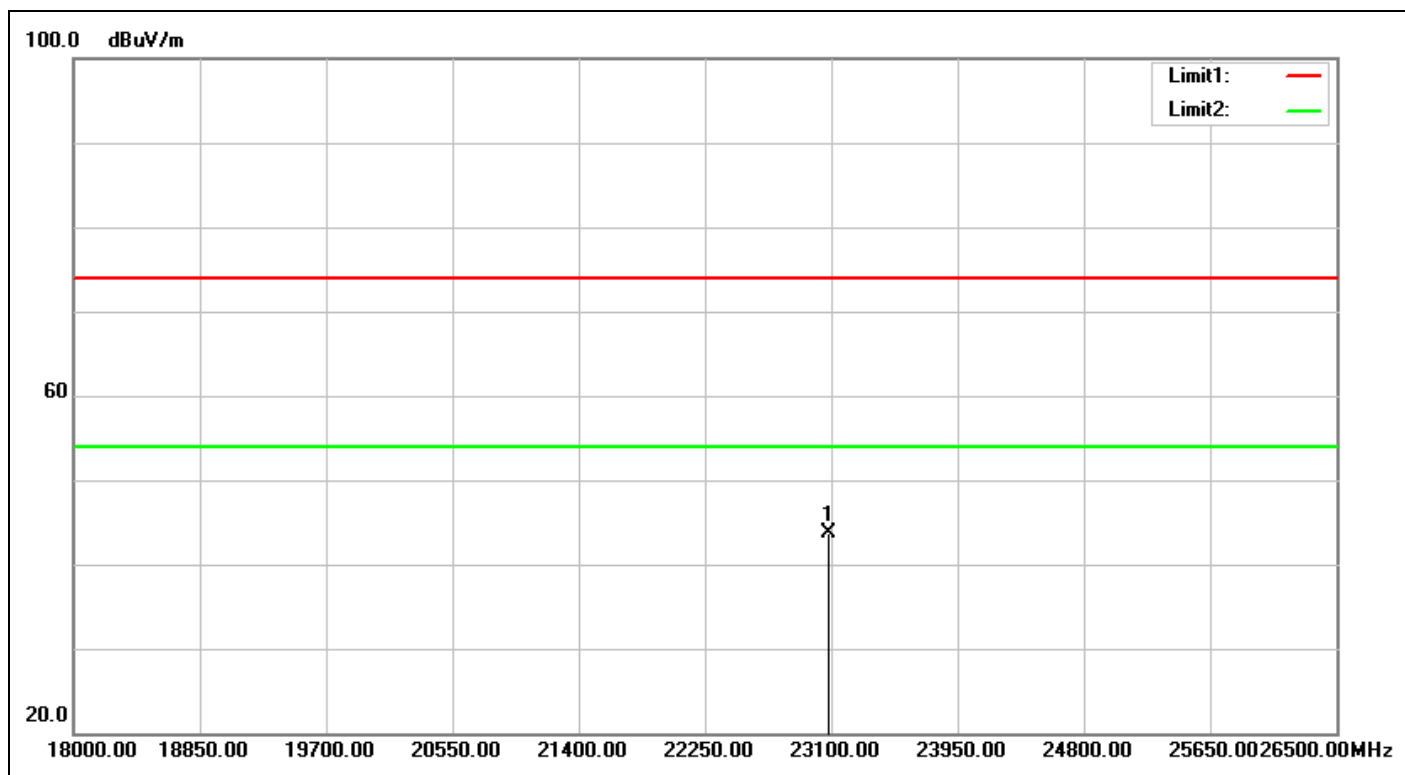
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 15:20:49
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	3DH5-TX-2441-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23618.500	5.26	37.74	43.00	74.00	-31.00	peak	100	129	



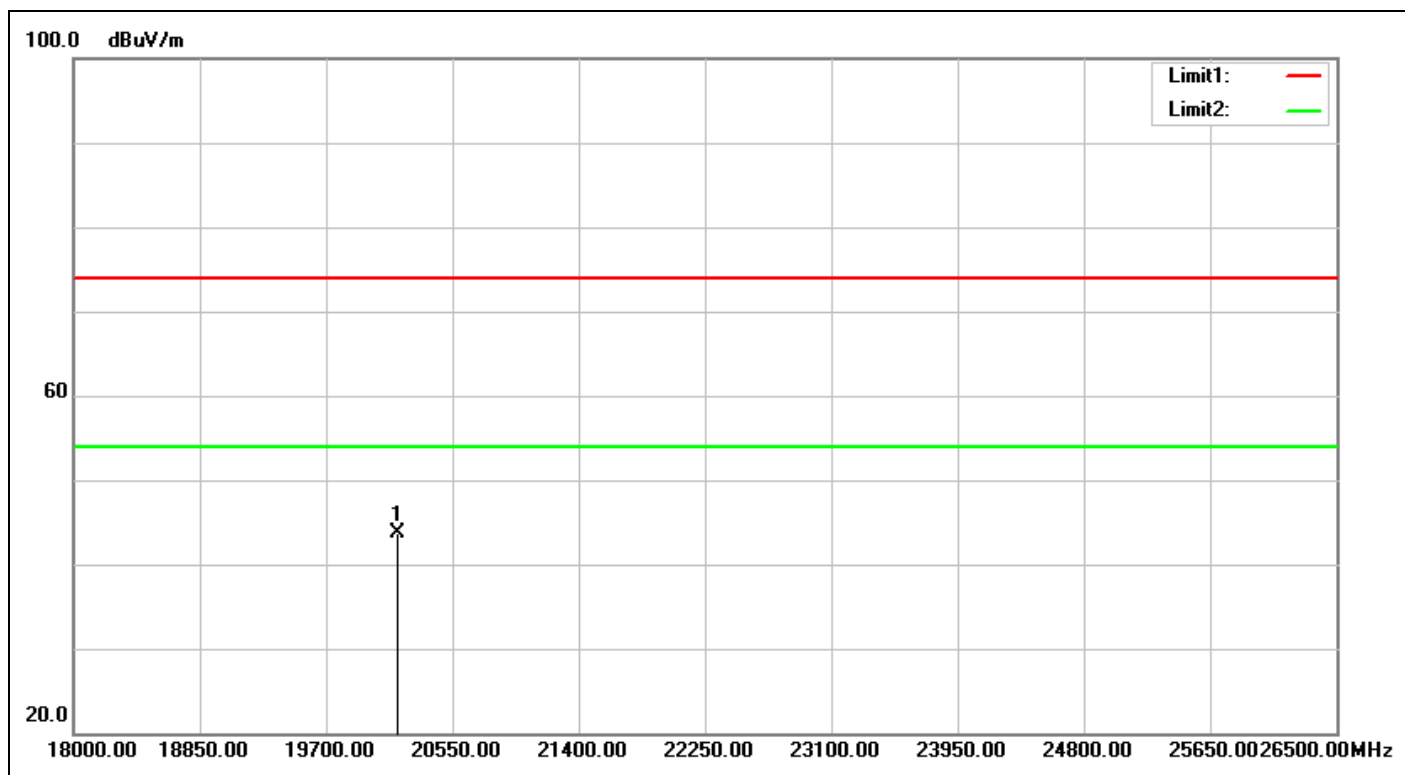
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 15:21:56
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	3DH5-TX-2441-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20839.000	4.33	39.78	44.11	74.00	-29.89	peak	100	355	



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 15:22:29
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	3DH5-TX-2480-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	23083.000	5.15	38.59	43.74	74.00	-30.26	peak	100	306	



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 15:23:36
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	3DH5-TX-2480-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20184.500	4.36	39.34	43.70	74.00	-30.30	peak	100	211	

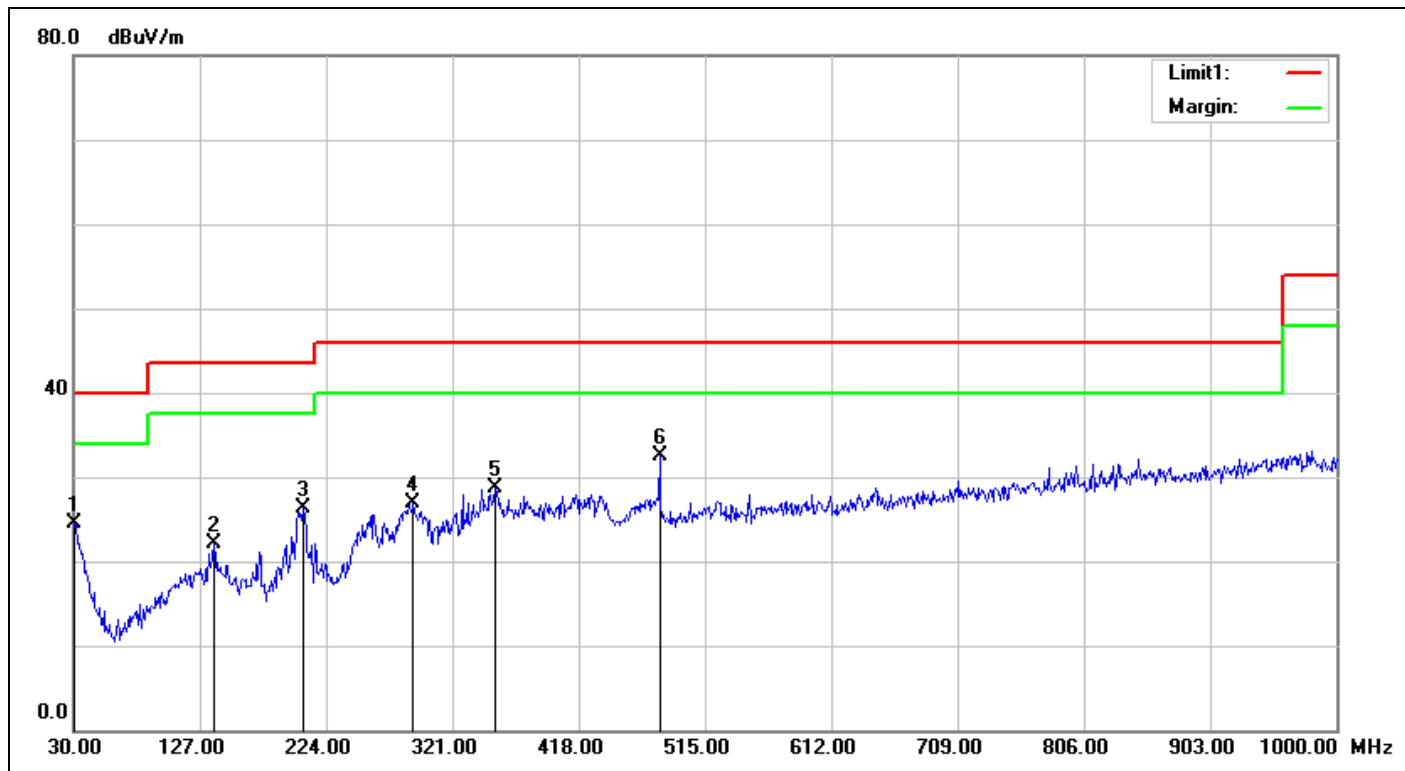
Spurious Emissions, TX Mode, 30M-1G



TUV Rheinland Taiwan Ltd.

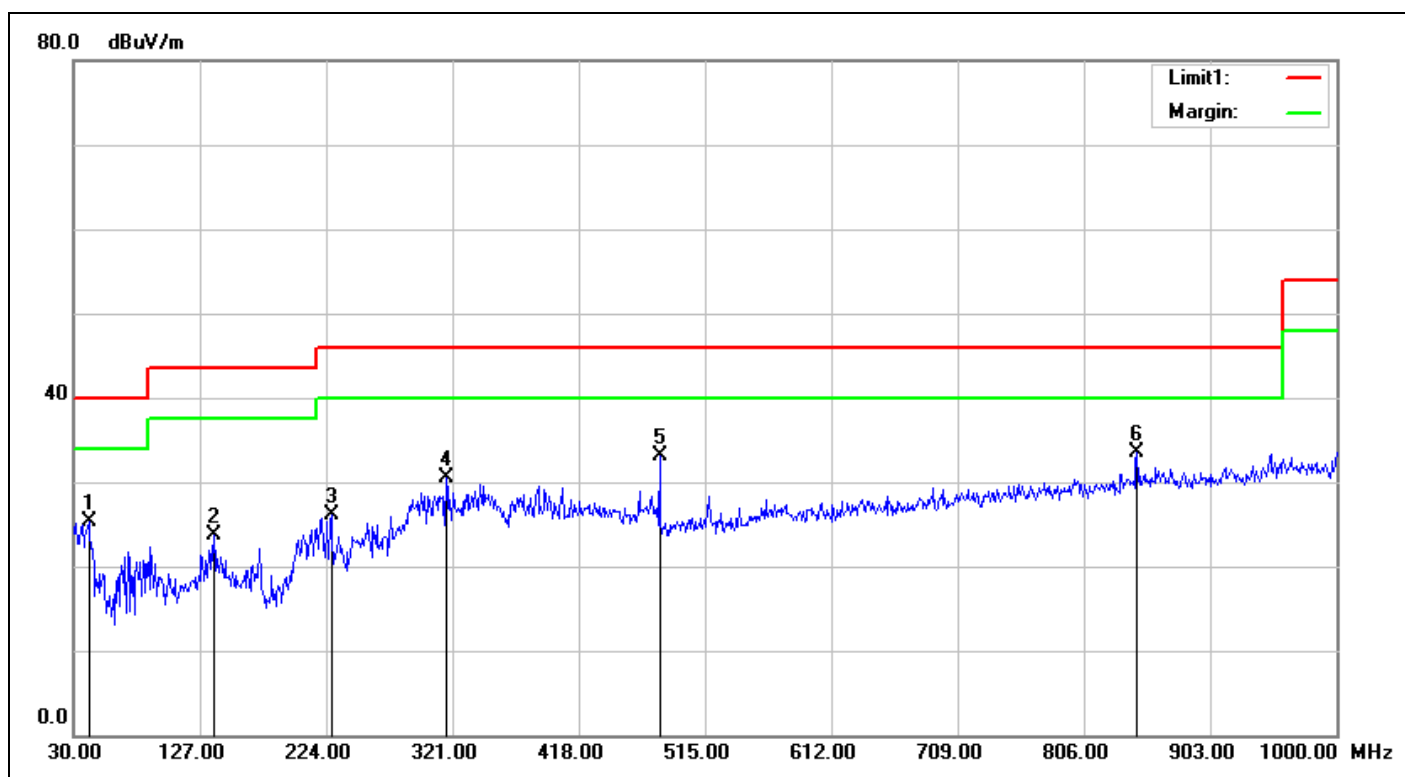
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC 2.8_9k-1G_3m	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 15:30:04
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%)	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2441-setting-7(max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless 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	24.50	24.47	40.00	-15.53	QP	100	249	
2	137.6699	-6.95	29.03	22.08	43.50	-21.42	QP	100	219	
3	206.5399	-8.60	34.82	26.22	43.50	-17.28	QP	100	249	
4	290.9300	-4.77	31.70	26.93	46.00	-19.07	QP	100	100	
5	353.9800	-3.19	31.96	28.77	46.00	-17.23	QP	100	116	
6	480.0799	-1.52	33.98	32.46	46.00	-13.54	QP	100	233	



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC 2.8_9k-1G_3m	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 15:31:58
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2441-setting-7(max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	41.6400	-6.75	32.14	25.39	40.00	-14.61	QP	100	193	
2	137.6700	-6.95	30.60	23.65	43.50	-19.85	QP	100	357	
3	227.8800	-7.72	33.83	26.11	46.00	-19.89	QP	100	177	
4	316.1500	-4.42	34.92	30.50	46.00	-15.50	QP	100	177	
5	480.0800	-1.52	34.72	33.20	46.00	-12.80	QP	100	209	
6	846.7400	3.85	29.74	33.59	46.00	-12.41	QP	100	320	

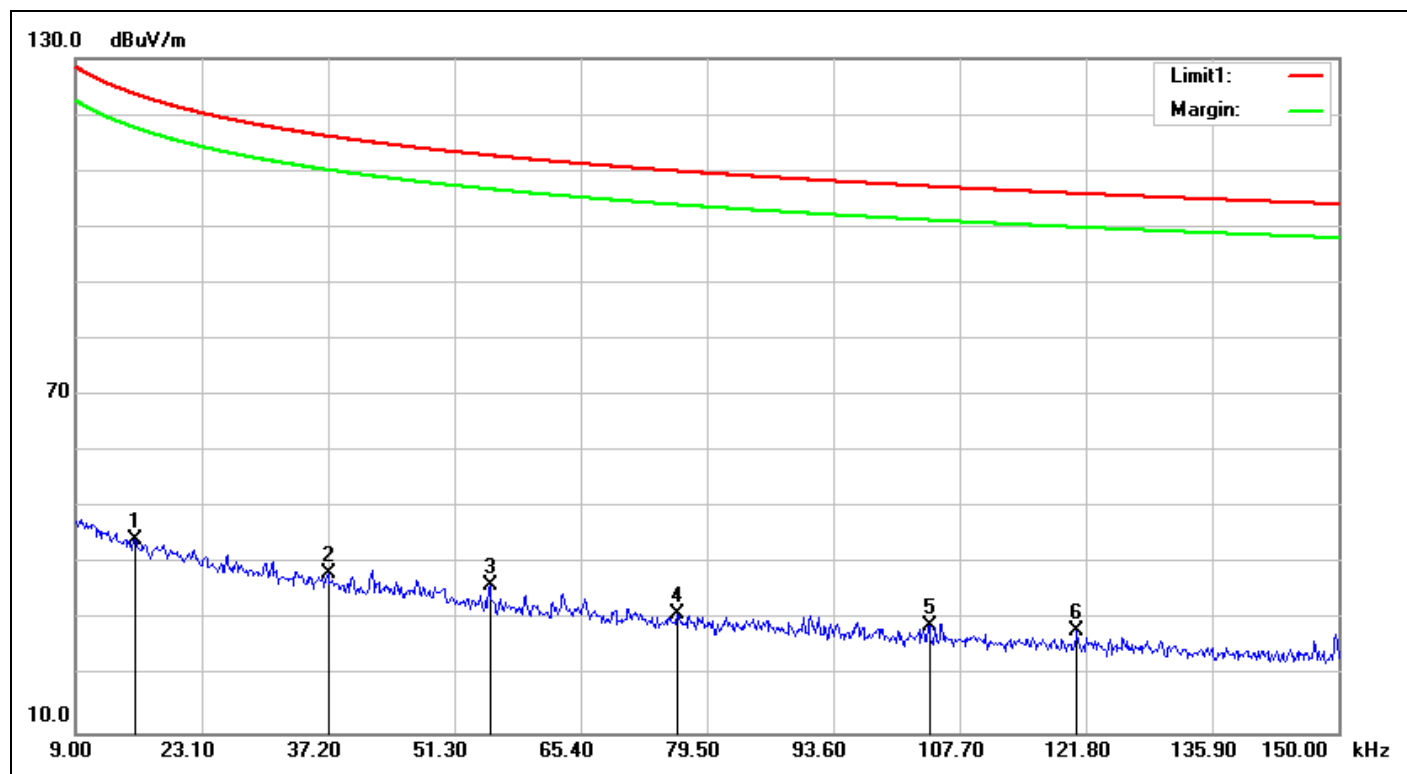
Spurious Emissions, TX Mode, 9K-30M



TUV Rheinland Taiwan Ltd.

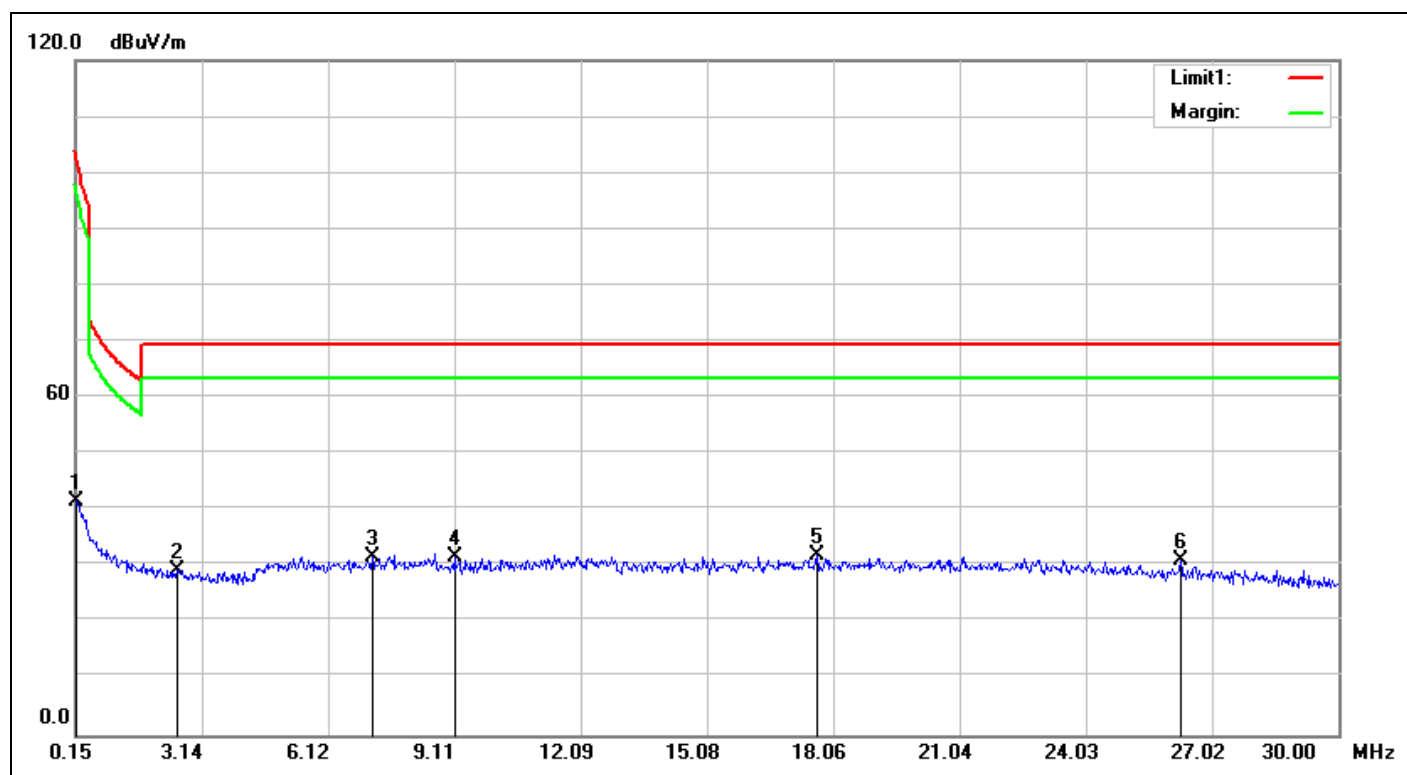
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC 2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/2/18 15:34:45
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2441-setting-7(max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0156	18.75	25.69	44.44	123.64	-79.20	QP	100	159	
2	0.0372	19.17	19.04	38.21	116.12	-77.91	QP	100	170	
3	0.0552	18.86	17.30	36.16	112.70	-76.54	QP	100	189	
4	0.0761	18.61	12.42	31.03	109.92	-78.89	QP	100	331	
5	0.1043	18.33	10.87	29.20	107.19	-77.99	QP	100	97	
6	0.1208	18.34	9.74	28.08	105.92	-77.84	QP	100	308	



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC 2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/2/18 15:35:18
Applicant:	鴻海精密工業股份有限公司	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-TX-2441-setting-7(max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

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	23.08	41.45	102.47	-61.02	QP	100	2	
2	2.5380	18.56	10.81	29.37	69.50	-40.13	QP	100	231	
3	7.1647	19.89	11.74	31.63	69.50	-37.87	QP	100	185	
4	9.1049	20.27	11.43	31.70	69.50	-37.80	QP	100	289	
5	17.6719	21.33	10.59	31.92	69.50	-37.58	QP	100	335	
6	26.2688	21.84	9.18	31.02	69.50	-38.48	QP	100	189	

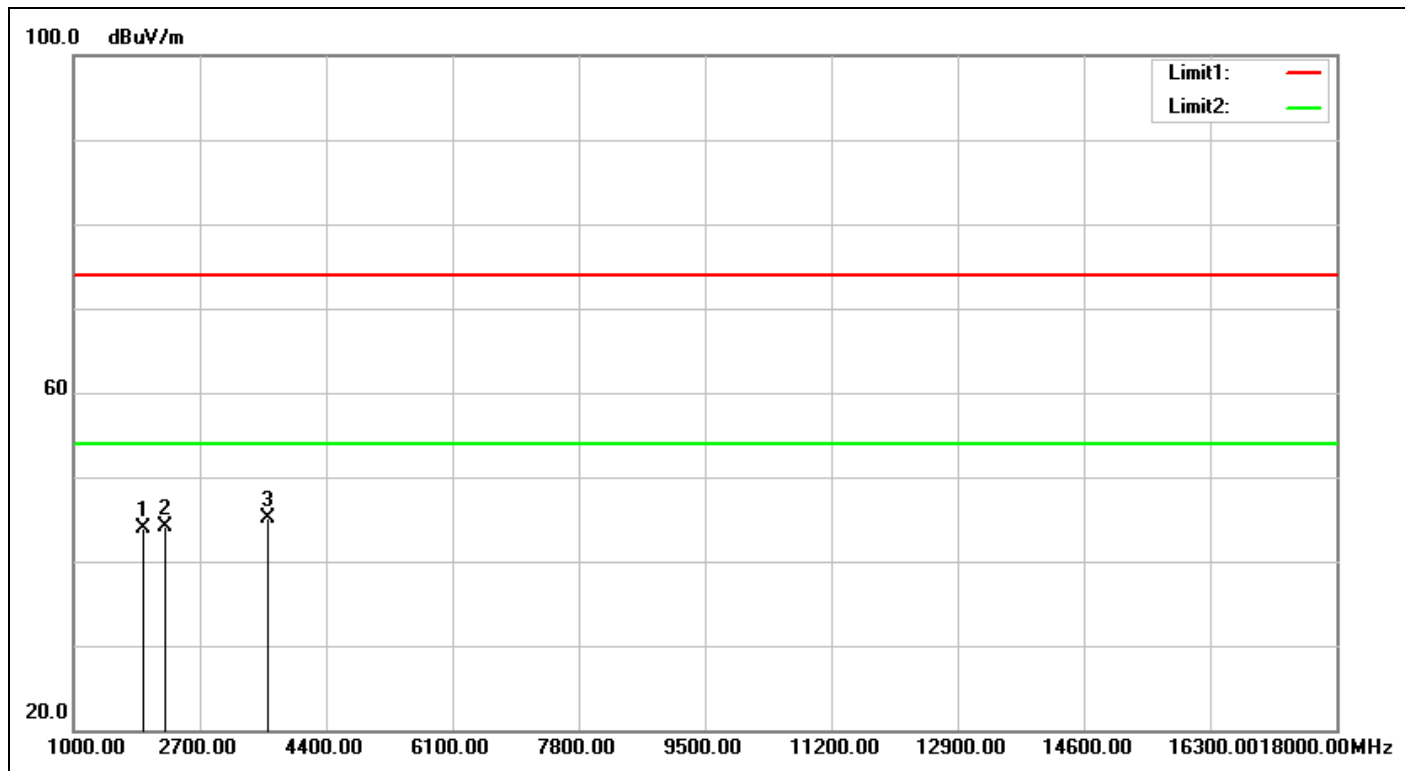
Spurious Emissions, RX Mode, 1-18G



TUV Rheinland Taiwan Ltd.

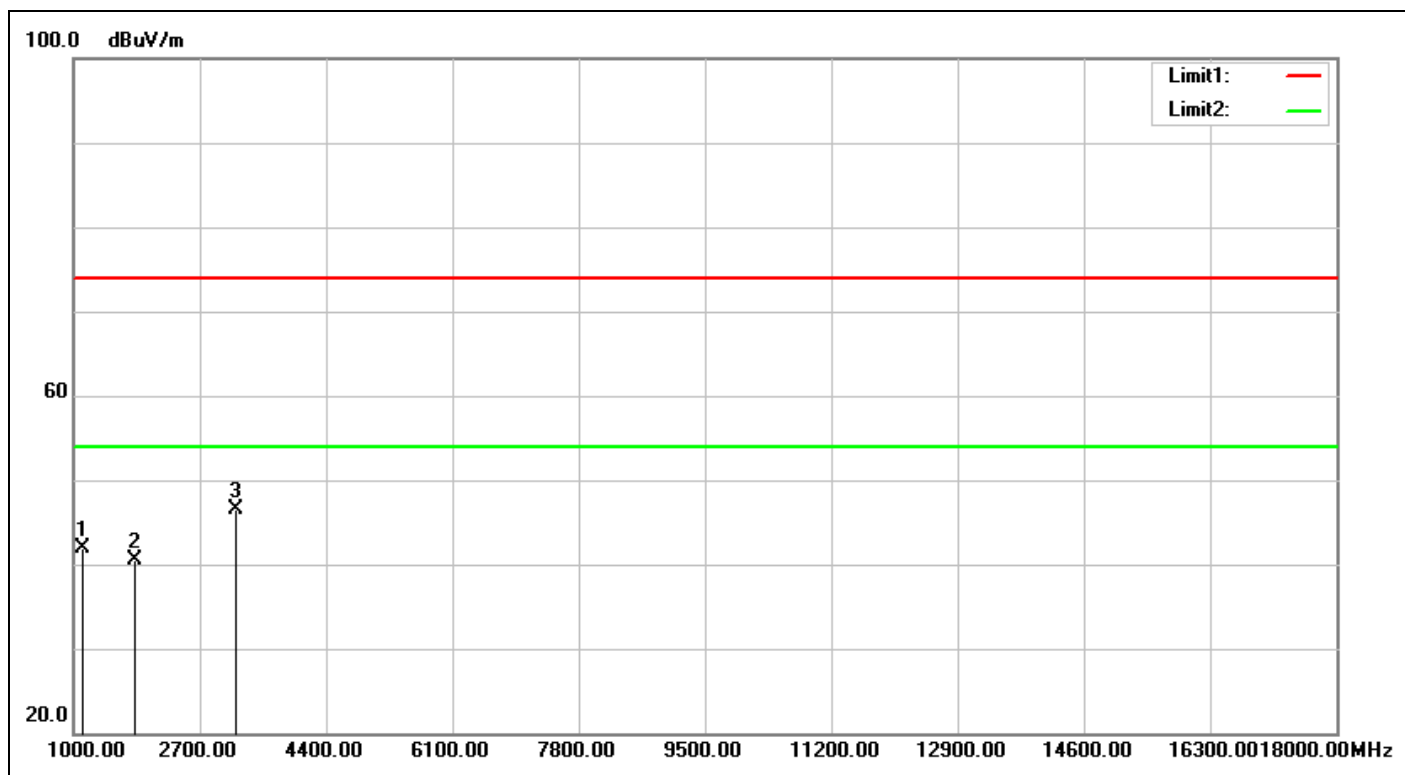
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 13:53:46
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:	1DH5-RX-2441-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	1935.000	-7.67	51.58	43.91	74.00	-30.09	peak	100	31	
2	2224.000	-7.18	51.34	44.16	74.00	-29.84	peak	100	76	
3	3618.000	-6.00	51.02	45.02	74.00	-28.98	peak	100	291	



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 13:54:38
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:	1DH5-RX-2441-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

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	51.62	41.89	74.00	-32.11	peak	100	281	
2	1833.000	-8.37	48.83	40.46	74.00	-33.54	peak	100	247	
3	3176.000	-6.48	53.05	46.57	74.00	-27.43	peak	100	158	

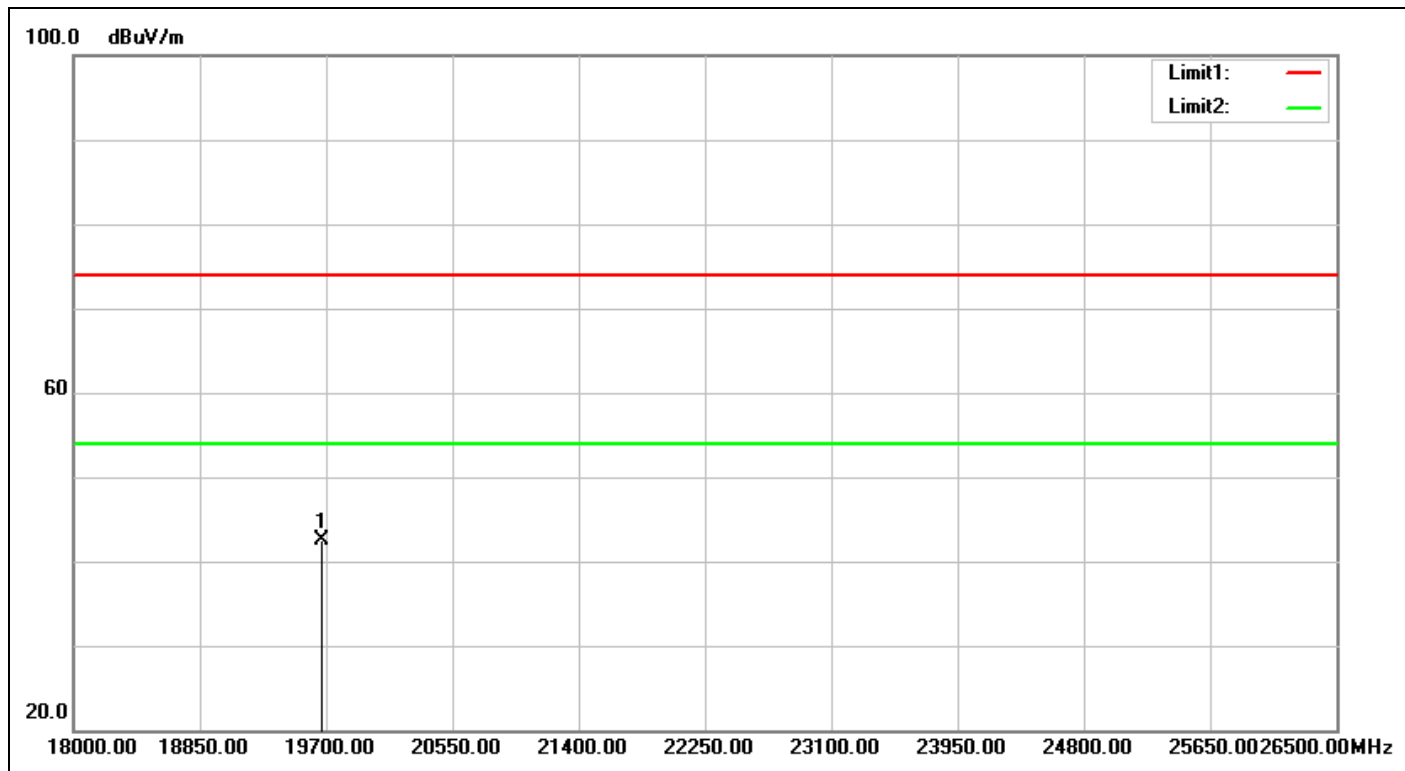
Spurious Emissions, RX Mode, 18-26.5G



TUV Rheinland Taiwan Ltd.

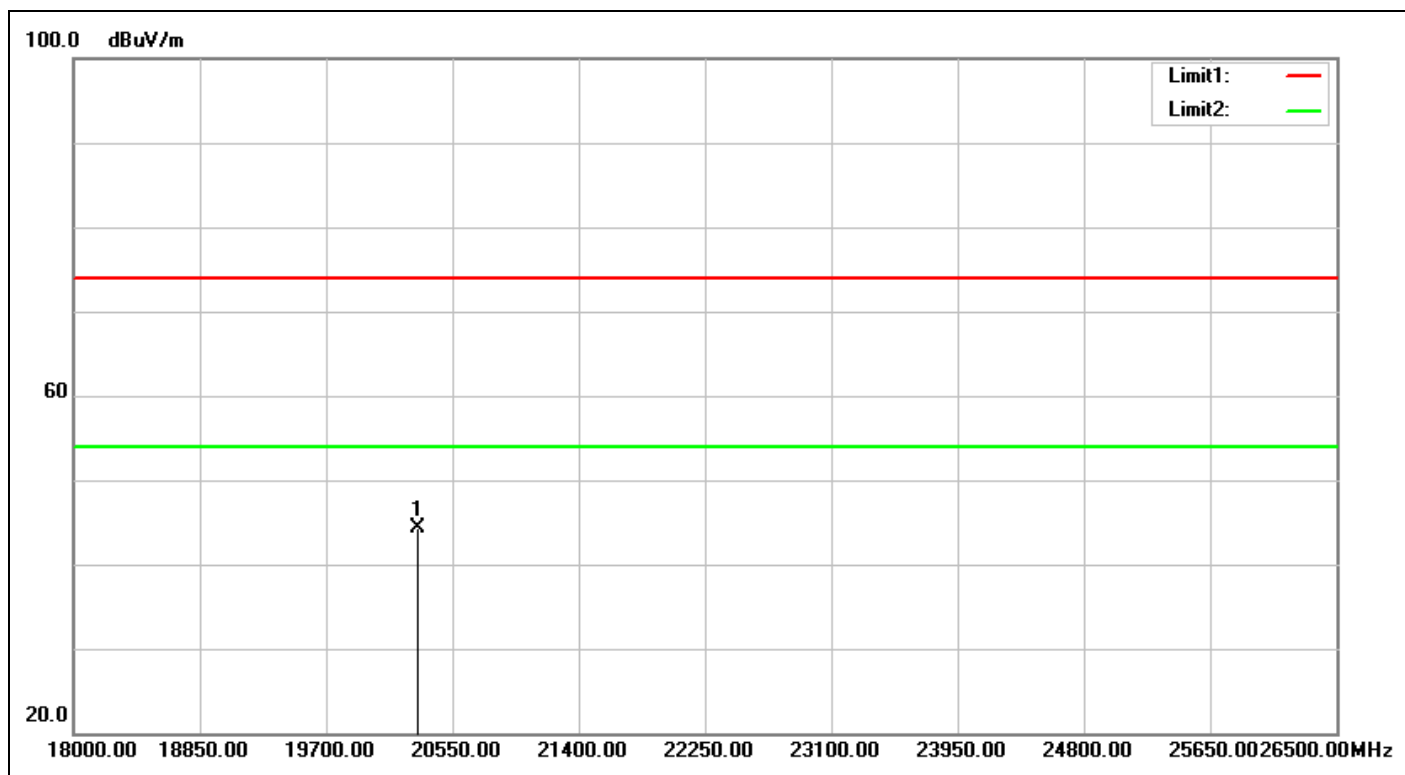
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 15:10:05
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:	1DH5-RX-2441-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	19674.500	3.60	38.96	42.56	74.00	-31.44	peak	100	278	



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 15:11:11
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:	1DH5-RX-2441-setting : 7(Max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20312.000	4.45	39.91	44.36	74.00	-29.64	peak	100	118	

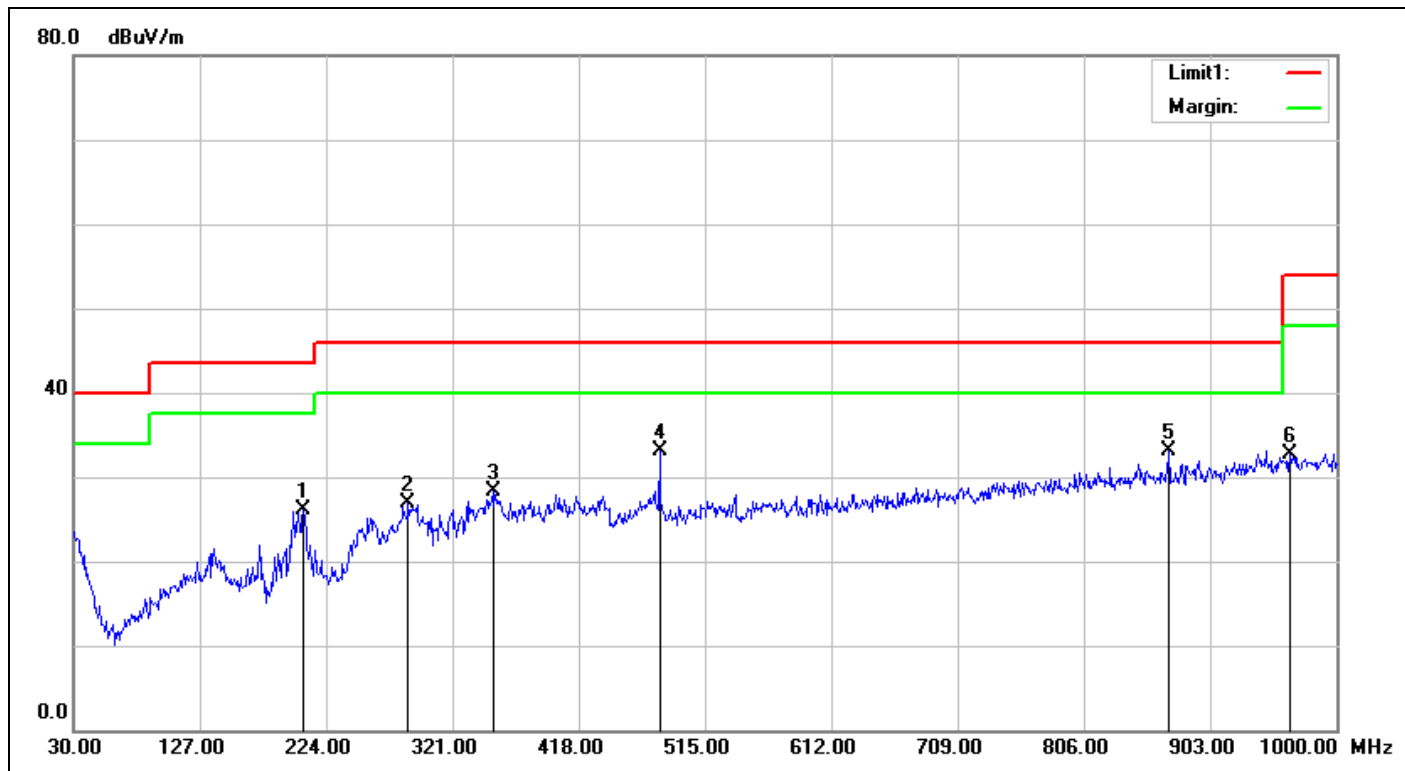
Spurious Emissions, RX Mode, 30M-1G



TUV Rheinland Taiwan Ltd.

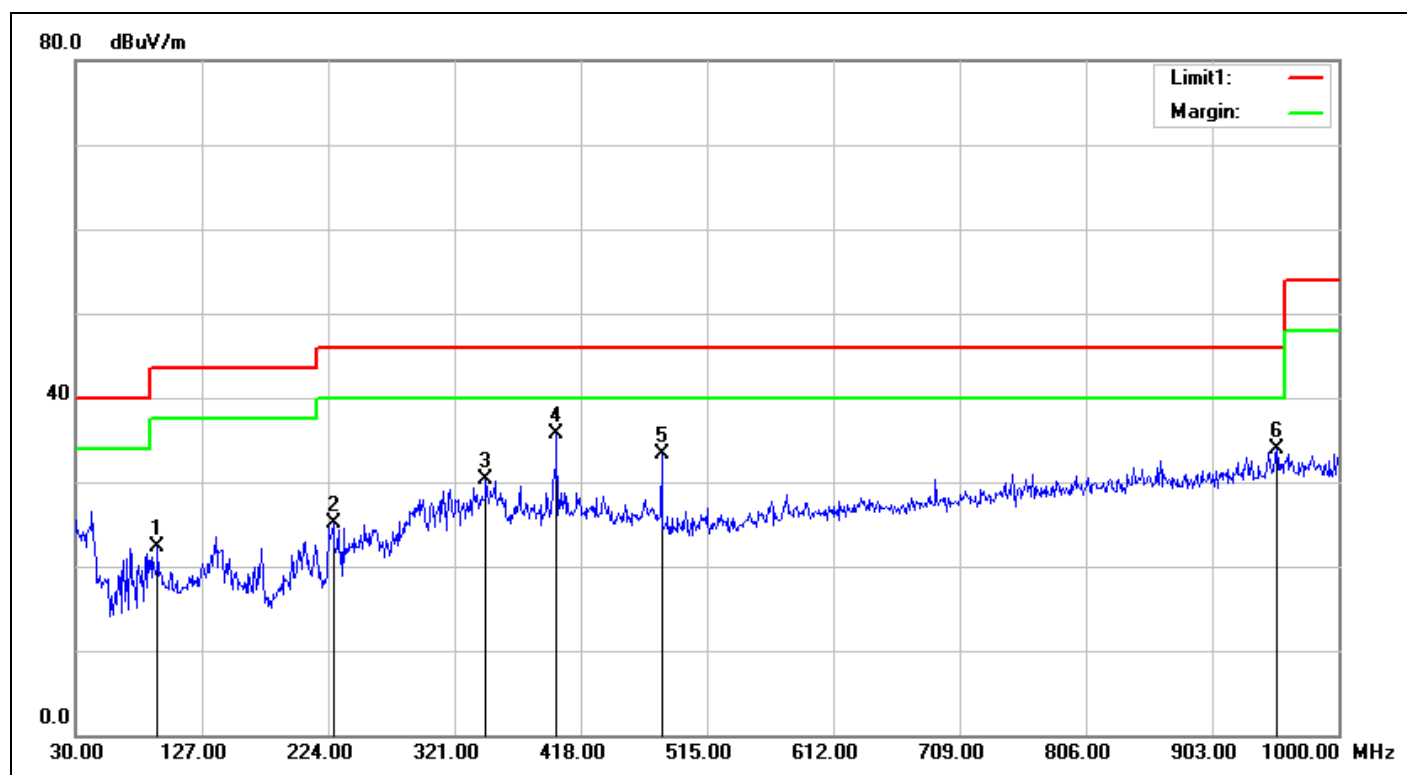
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC 2.8_9k-1G_3m	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2019/2/18 15:32:28
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:	1DH5-RX-2441-setting-7(max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	206.5399	-8.60	34.79	26.19	43.50	-17.31	QP	100	99	
2	287.0500	-4.88	31.87	26.99	46.00	-19.01	QP	100	81	
3	352.0400	-3.26	31.55	28.29	46.00	-17.71	QP	100	126	
4	480.0799	-1.52	34.70	33.18	46.00	-12.82	QP	100	218	
5	870.9900	4.21	28.86	33.07	46.00	-12.93	QP	100	194	
6	964.1100	5.95	26.68	32.63	54.00	-21.37	QP	100	279	



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC 2.8_9k-1G_3m	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2019/2/18 15:33:22
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:	1DH5-RX-2441-setting-7(max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	93.0500	-10.55	32.94	22.39	43.50	-21.11	QP	100	177	
2	227.8800	-7.72	32.91	25.19	46.00	-20.81	QP	100	170	
3	345.2500	-3.49	33.80	30.31	46.00	-15.69	QP	100	200	
4	399.5700	-2.33	37.96	35.63	46.00	-10.37	QP	100	39	
5	480.0800	-1.52	34.85	33.33	46.00	-12.67	QP	100	181	
6	952.4700	5.81	28.10	33.91	46.00	-12.09	QP	100	257	

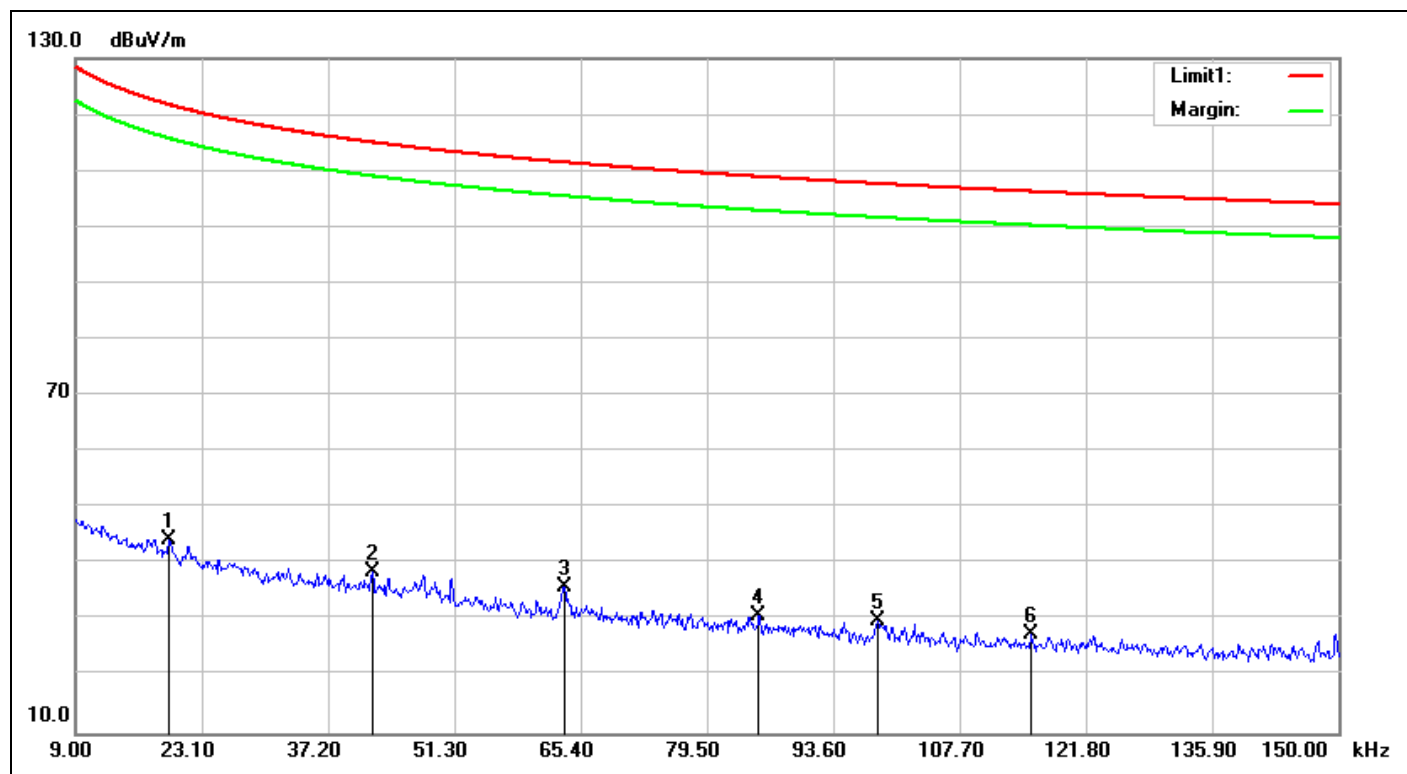
Spurious Emissions, RX Mode, 9k-30M



TUV Rheinland Taiwan Ltd.

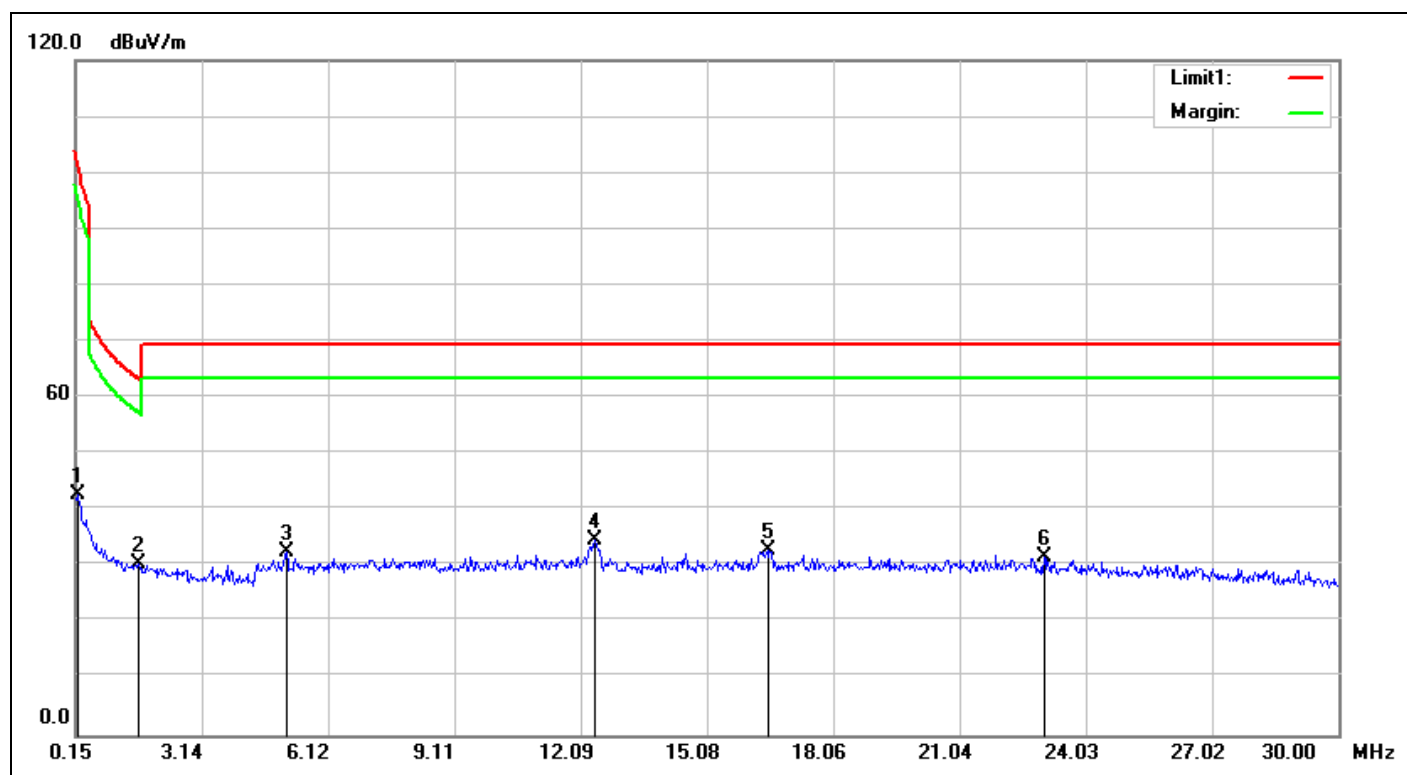
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC 2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/2/18 15:36:05
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:	1DH5-RX-2441-setting-7(max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.0194	18.90	25.38	44.28	121.75	-77.47	QP	100	306	
2	0.0421	19.08	19.63	38.71	115.05	-76.34	QP	100	271	
3	0.0636	18.76	17.23	35.99	111.47	-75.48	QP	100	188	
4	0.0853	18.50	12.40	30.90	108.93	-78.03	QP	100	340	
5	0.0985	18.35	11.53	29.88	107.69	-77.81	QP	100	18	
6	0.1157	18.34	9.20	27.54	106.29	-78.75	QP	100	254	



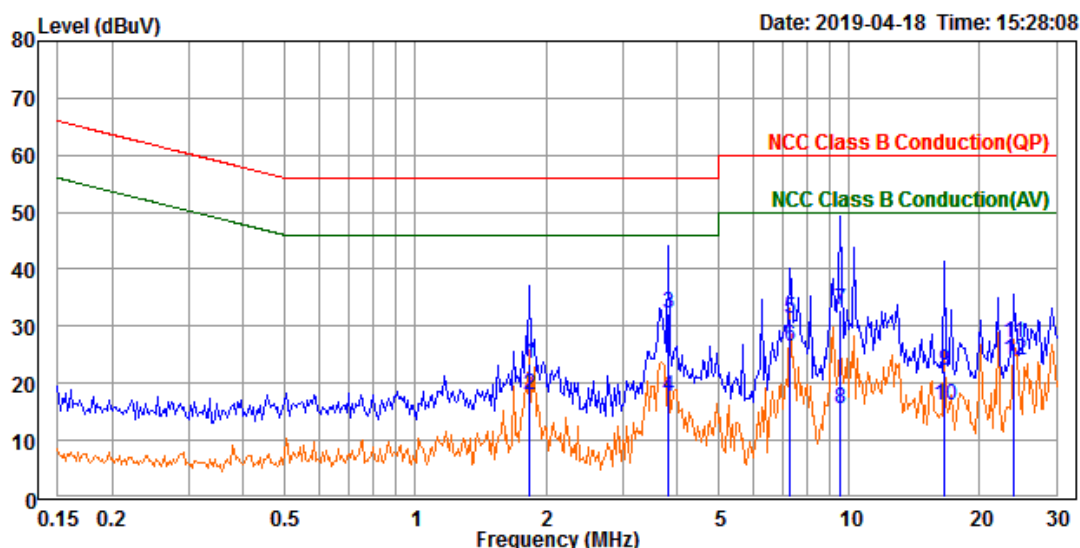
Service No.:	238104465	Test Distance:	3m
Test Standard:	NCC 2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2019/2/18 15:37:54
Applicant:	Hon Hai Precision Industry Co.,Ltd	Test Rating:	DC 5V
Product:		Temp.(°C)/Hum.(%):	19(°C)/52%
Model No.:	WBU042-IG5V	Test Engineer:	Kevin Kuo
Test Mode:	1DH5-RX-2441-setting-7(max)		
Remark:	BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module		

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	0.2097	18.39	24.50	42.89	101.13	-58.24	QP	100	279	
2	1.6425	18.63	11.79	30.42	63.32	-32.90	QP	100	246	
3	5.1349	19.49	13.19	32.68	69.50	-36.82	QP	100	174	
4	12.4184	20.73	14.06	34.79	69.50	-34.71	QP	100	189	
5	16.5376	21.20	11.77	32.97	69.50	-36.53	QP	100	35	
6	23.0450	21.71	9.82	31.53	69.50	-37.97	QP	100	304	

Spurious Emissions, AC Mains



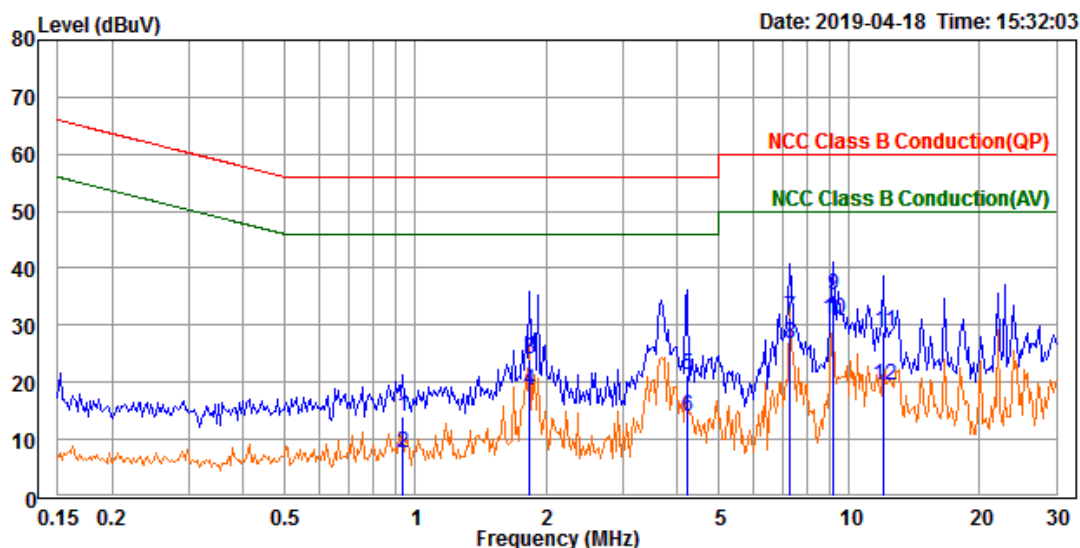
TUV Rheinland Taiwan Ltd.
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105
Tel:+886-2172-7000 Fax:+886-2528-0018



Trace: 1

Site : Conduction room
Condition : NCC Class B Conduction(QP) line1
Test Engineer: Kevin Kuo
Applicant : 鴻海精密工業股份有限公司
Product : BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module
Model No. : WBU042-IG5V
Test Rating : 120Vac/60Hz
Tmp/Hum : 22°C/36%
Memo : AC Mains (BT)

		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	1.837	13.60	9.72	23.32	56.00	-32.68	QP
2	1.837	8.11	9.72	17.83	46.00	-28.17	Average
3	3.832	22.63	9.74	32.37	56.00	-23.63	QP
4	3.832	8.01	9.74	17.75	46.00	-28.25	Average
5	7.313	21.58	9.79	31.37	60.00	-28.63	QP
6	7.313	16.68	9.79	26.47	50.00	-23.53	Average
7	9.564	22.92	9.83	32.75	60.00	-27.25	QP
8	9.564	5.77	9.83	15.60	50.00	-34.40	Average
9	16.523	12.22	9.85	22.07	60.00	-37.93	QP
10	16.523	6.27	9.85	16.12	50.00	-33.88	Average
11	23.869	17.27	9.85	27.12	60.00	-32.88	QP
12	23.869	14.19	9.85	24.04	50.00	-25.96	Average



Trace: 1

Site : Conduction room
Condition : NCC Class B Conduction(QP) neutral
Test Engineer: Kevin Kuo
Applicant : 鴻海精密工業股份有限公司
Product : BT5.0 + WLAN a/b/g/n/ac Combo Wireless Module
Model No. : WBU042-IG5V
Test Rating : 120Vac/60Hz
Tmp/Hum : 22°C/36%
Memo : AC Mains (BT)

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.934	4.37	9.70	14.07	56.00	-41.93	QP
2	0.934	-2.00	9.70	7.70	46.00	-38.30	Average
3	1.837	14.22	9.72	23.94	56.00	-32.06	QP
4	1.837	8.74	9.72	18.46	46.00	-27.54	Average
5	4.233	11.63	9.74	21.37	56.00	-34.63	QP
6	4.233	4.38	9.74	14.12	46.00	-31.88	Average
7	7.313	21.68	9.80	31.48	60.00	-28.52	QP
8	7.313	17.05	9.80	26.85	50.00	-23.15	Average
9	9.191	25.60	9.83	35.43	60.00	-24.57	QP
10	9.191	21.18	9.83	31.01	50.00	-18.99	Average
11	12.021	19.04	9.86	28.90	60.00	-31.10	QP
12	12.021	9.65	9.86	19.51	50.00	-30.49	Average