

Test Report No.50209834 001

Appendix D: Radiated and Mains Spurious Emission Data

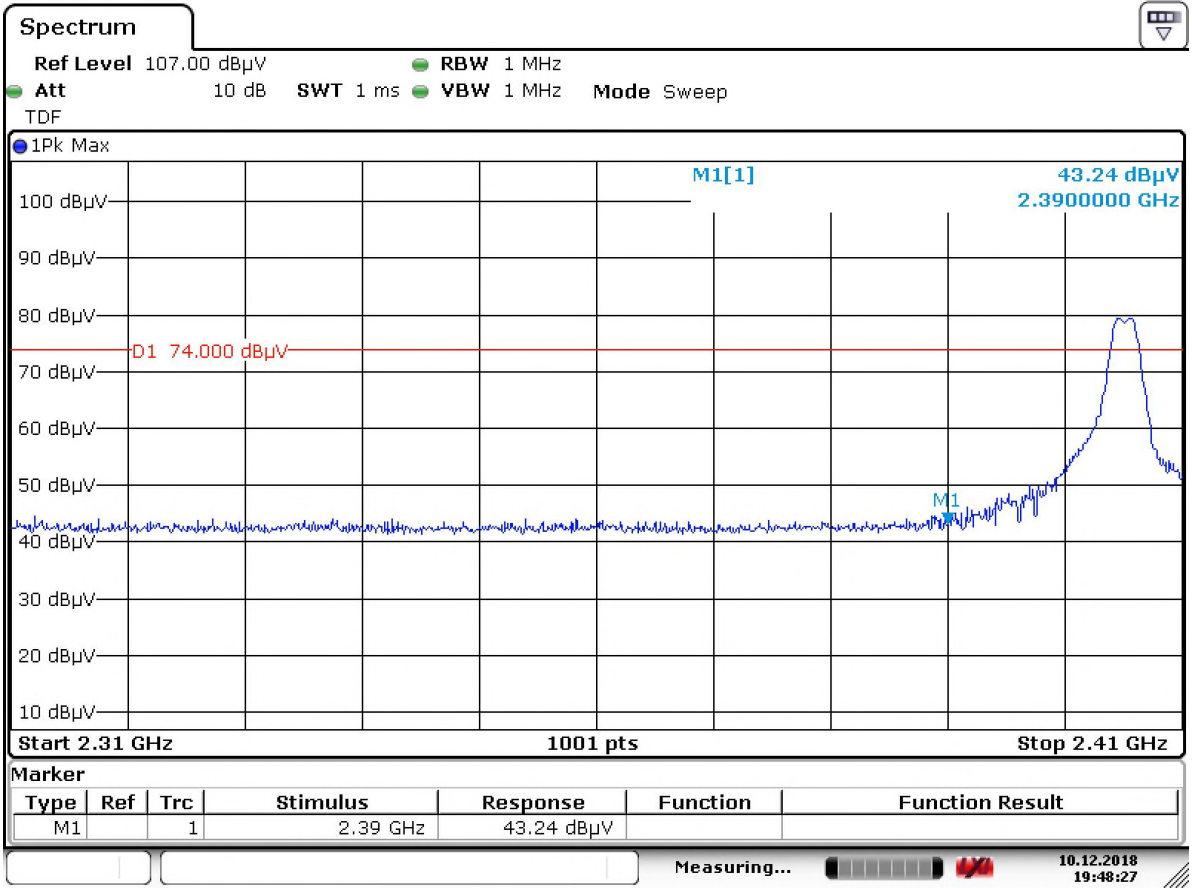
(File: 50209834 001 Appendix D)

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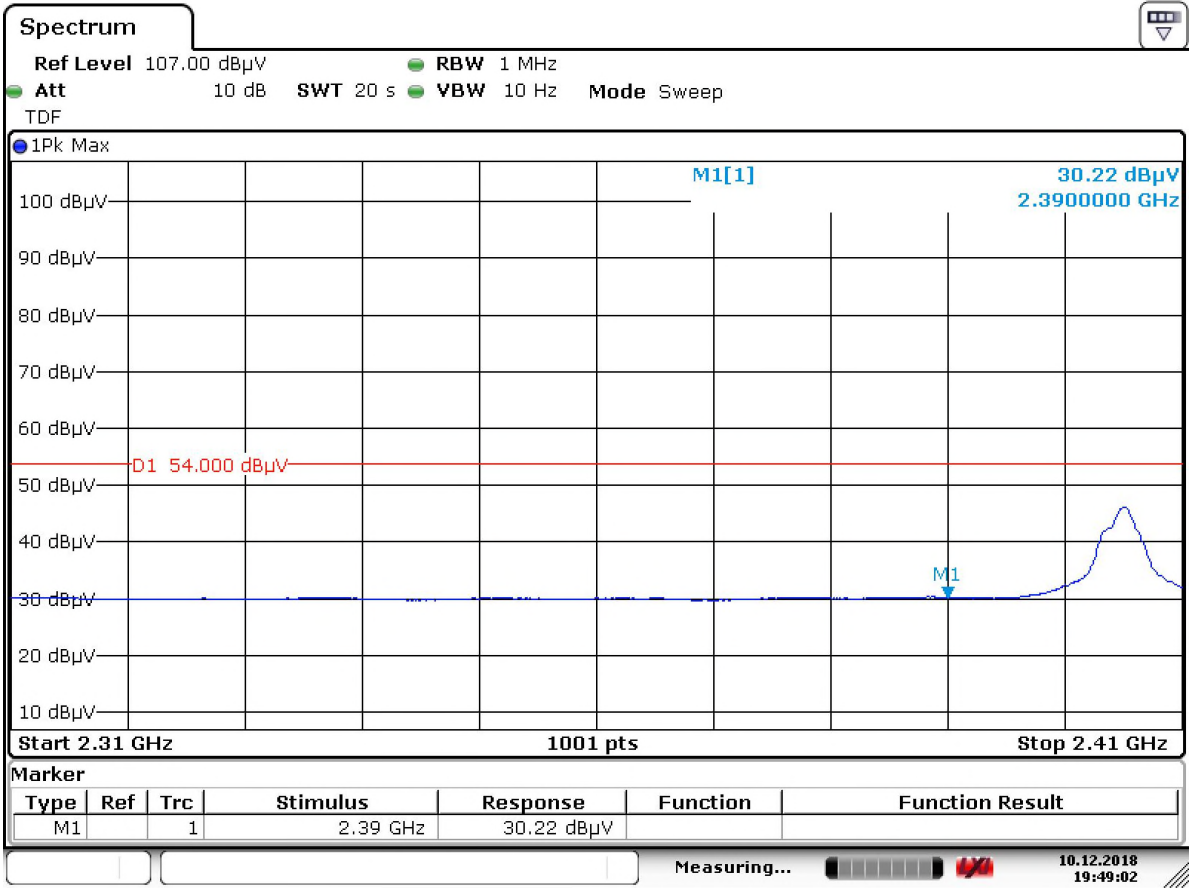
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Low Channel (Horizontal)

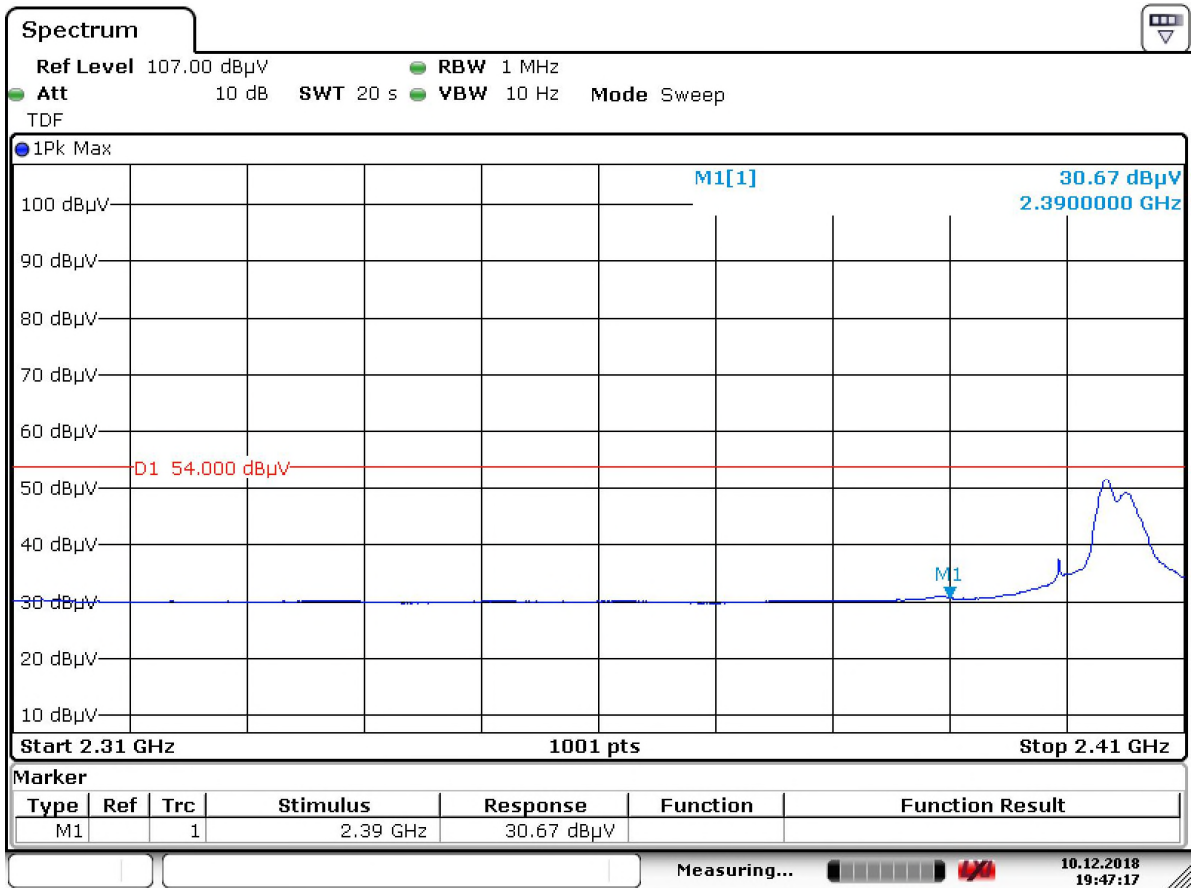


Date: 10.DEC.2018 19:48:28

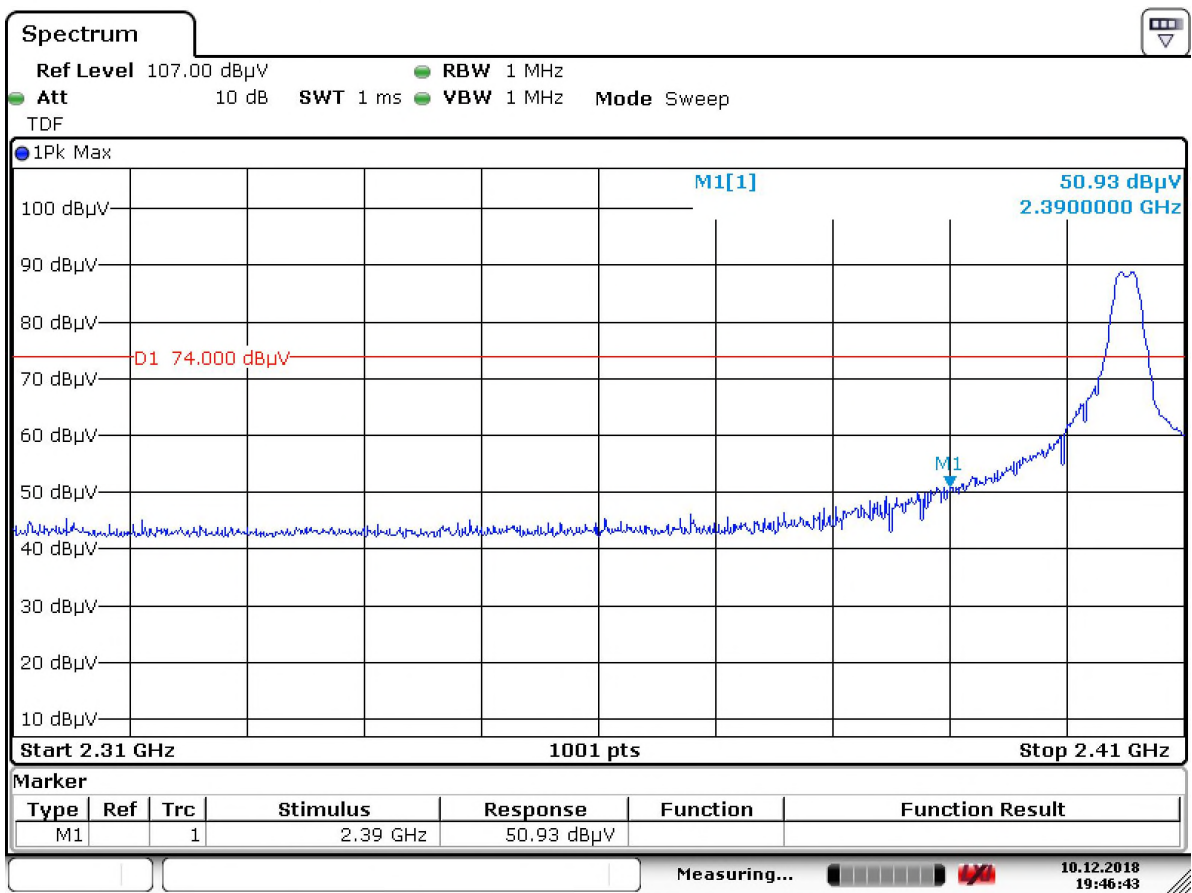


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Low Channel (Vertical)

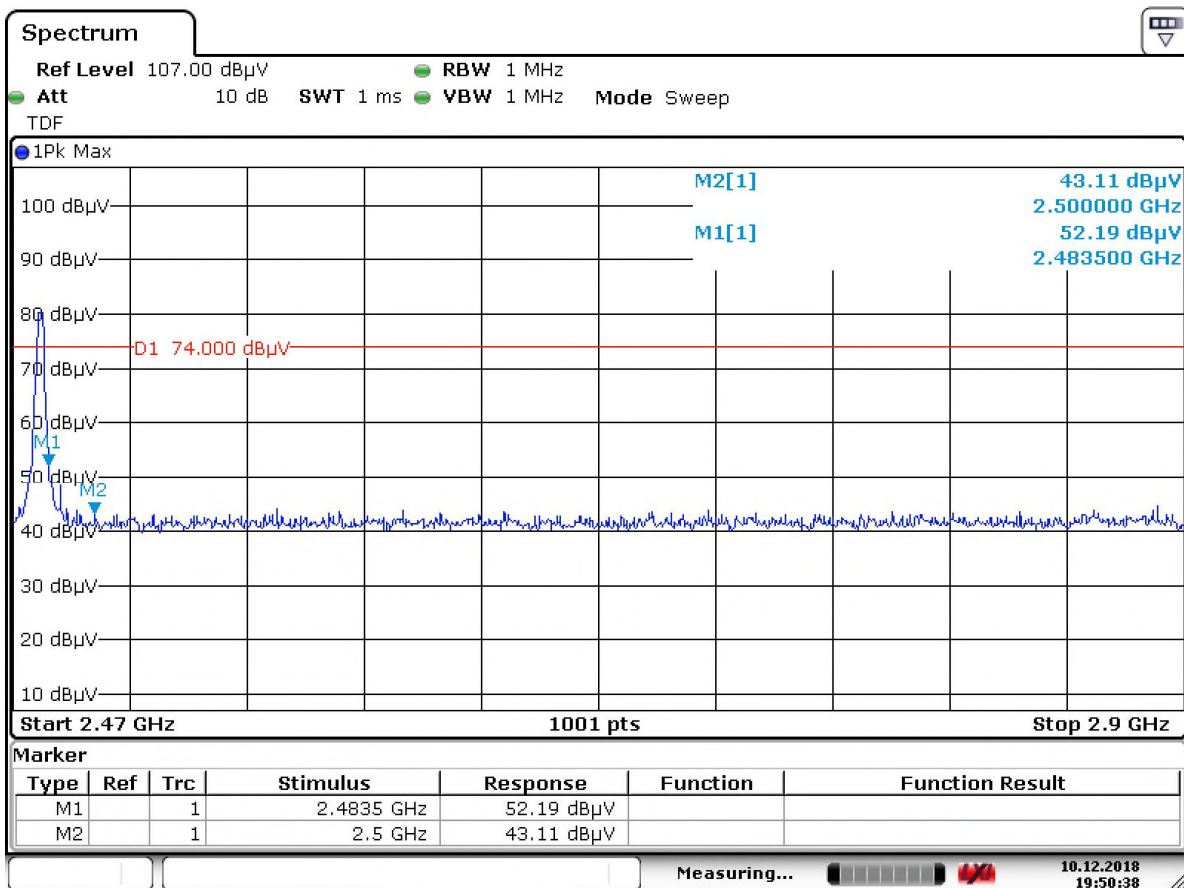


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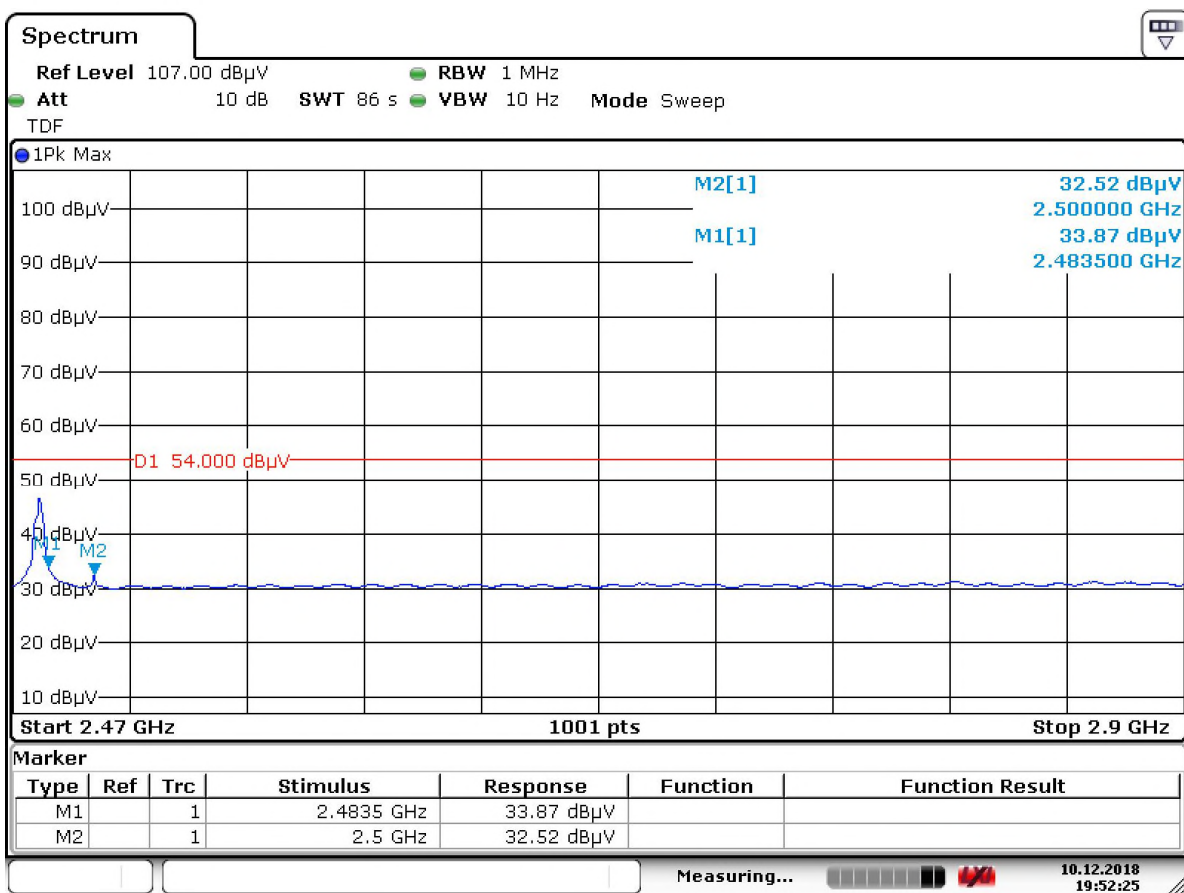


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High Channel (Horizontal)

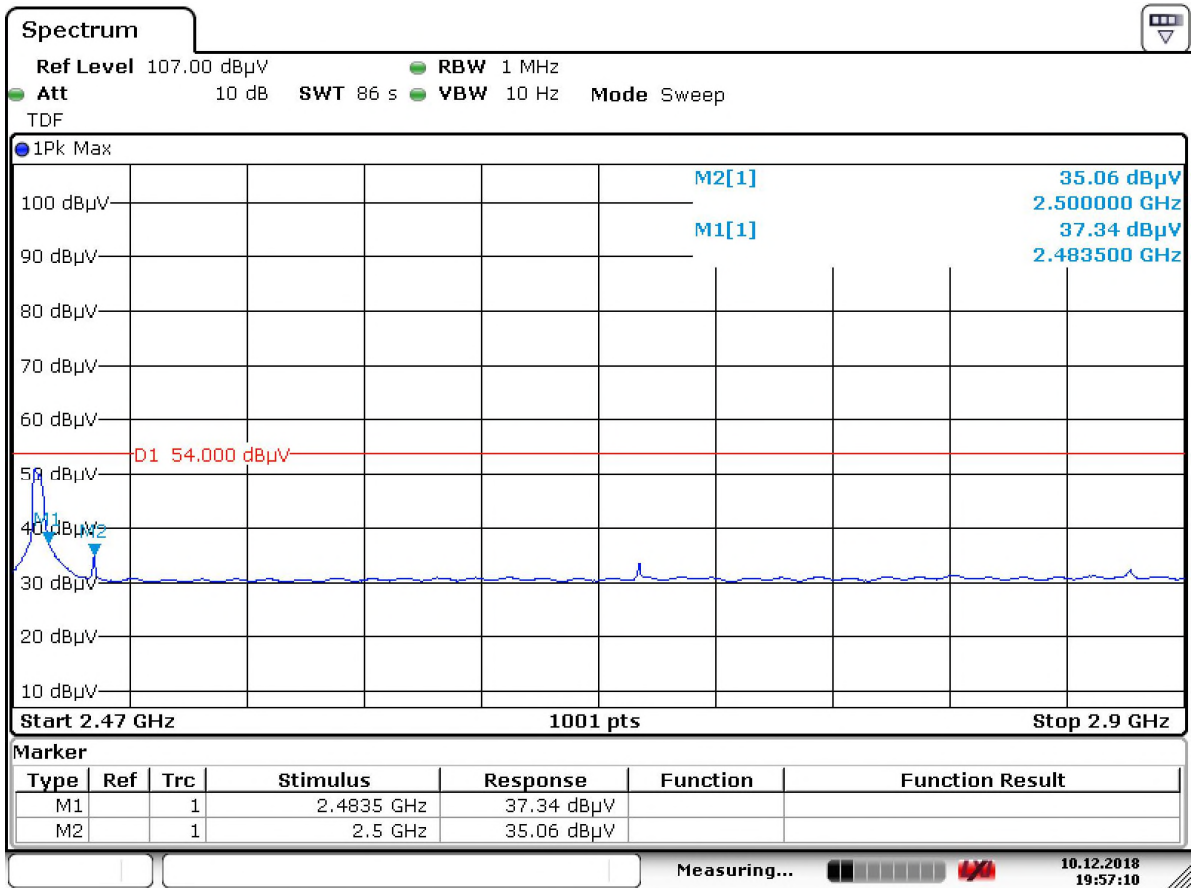


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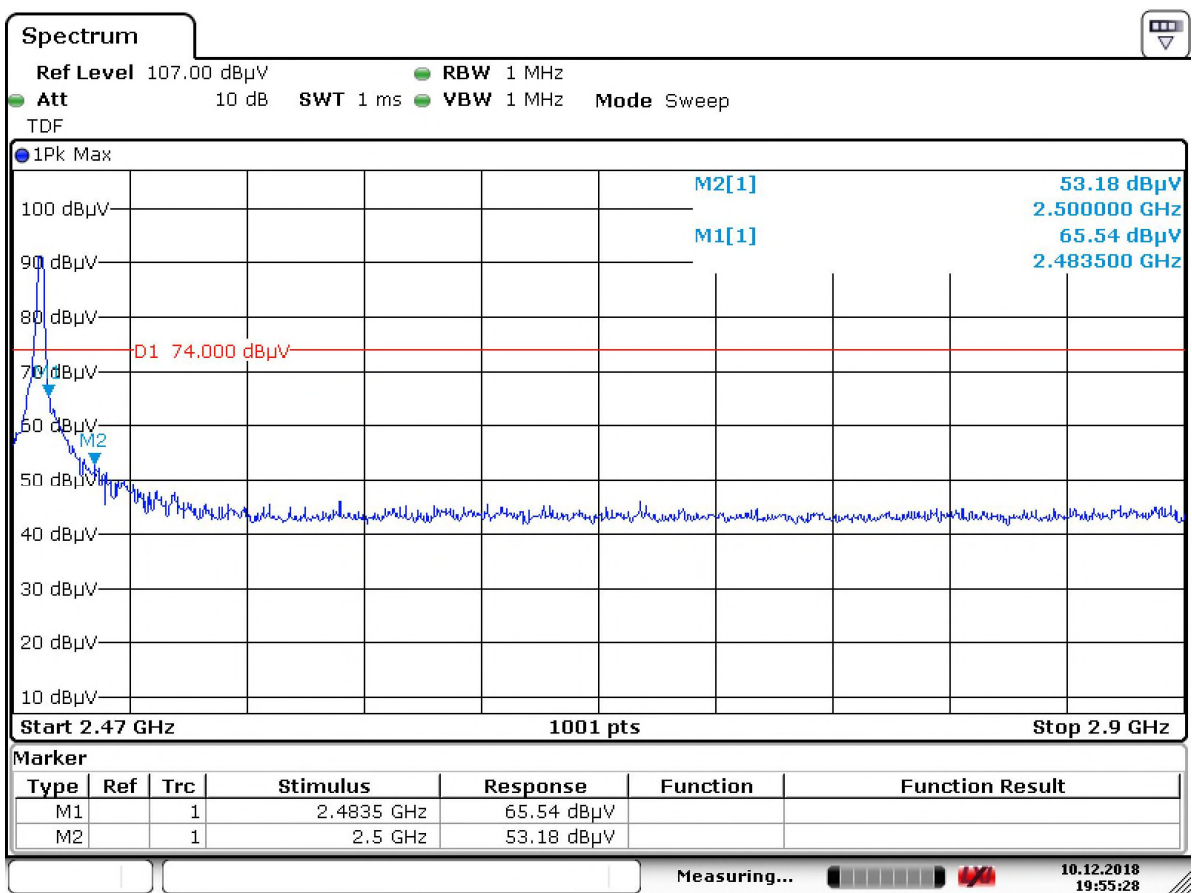


Date: 10.DEC.2018 19:52:25

High Channel (Vertical)



Date: 10.DEC.2018 19:57:11



Date: 10.DEC.2018 19:55:28

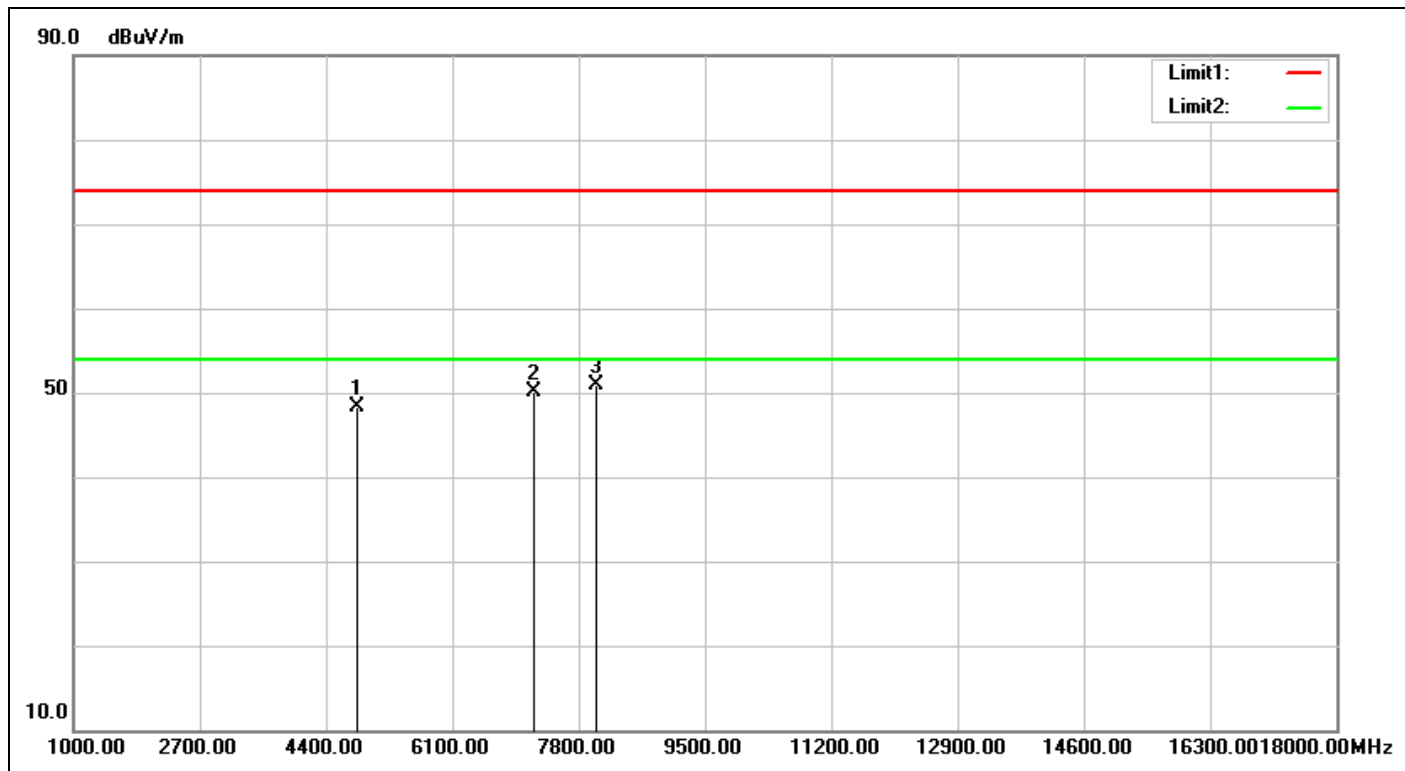
Spurious Emissions, TX Mode, 1-18G



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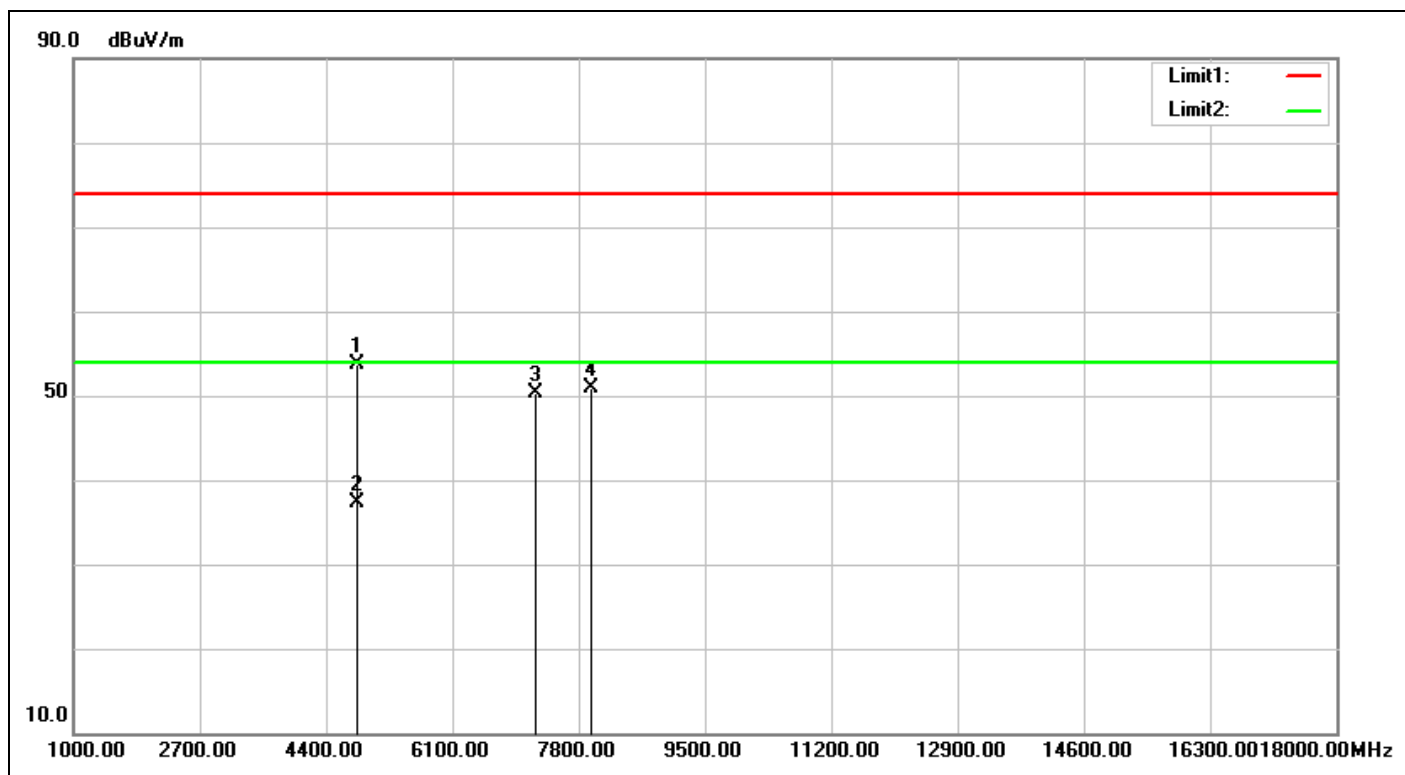
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/12/10 19:54:45
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%)	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
Test Mode:	TX-2405		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	4810.000	-2.63	50.86	48.23	74.00	-25.77	peak	100	333	
2	7215.000	5.27	44.89	50.16	74.00	-23.84	peak	100	121	
3	8038.000	5.79	45.06	50.85	74.00	-23.15	peak	100	254	



Service No.: 114082290

Test Distance: 3m

Test Standard: NCC Above 1G PEAK

Ant. Polarization: Vertical

Test item: Radiation Emission

Test Time: 2018/12/10 19:55:37

Applicant: 馨馳企業有限公司

Test Rating: DC 3.7V

Product: SPIKE HOLDER

Temp.(°C)/Hum.(%): 21(°C)/58%

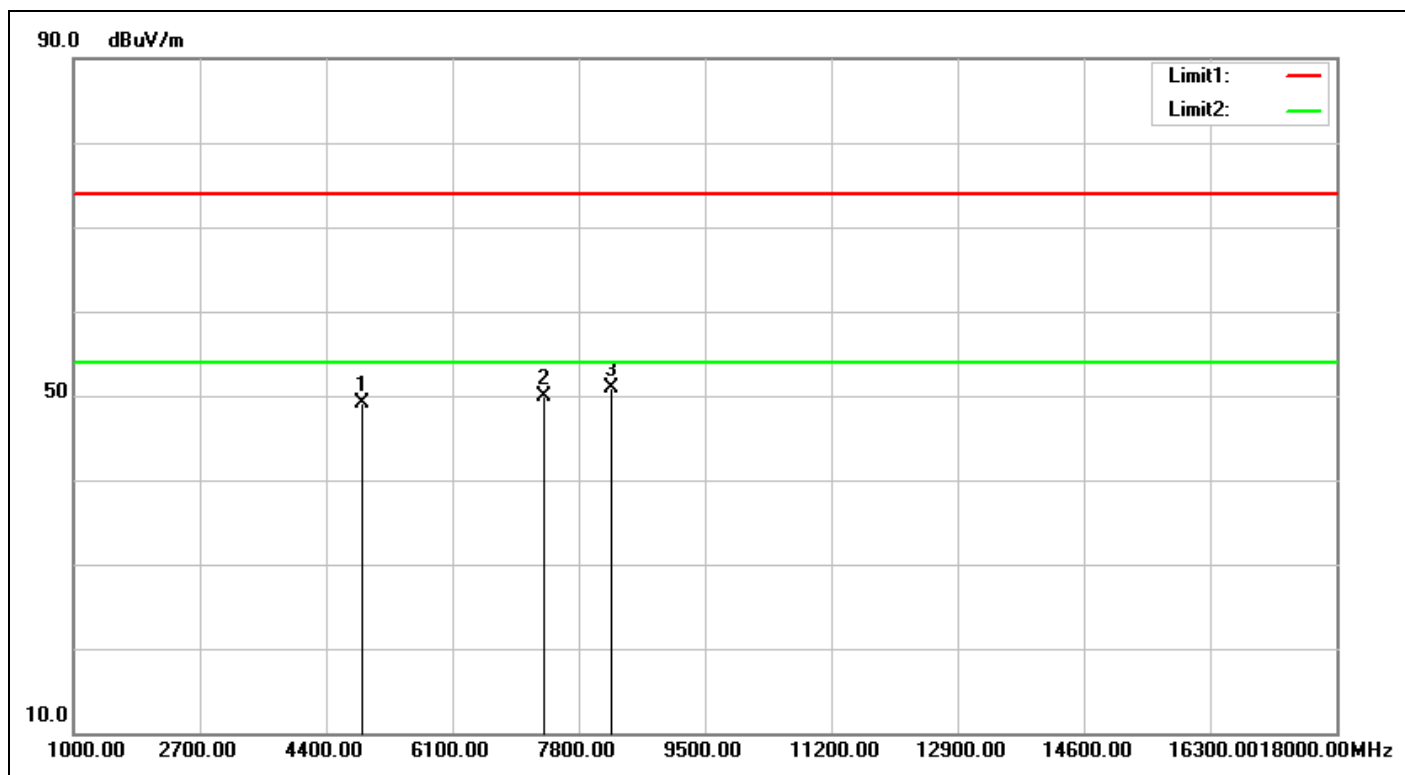
Model No.: HPEE-SENSOR-TH

Test Engineer: Curry Chen

Test Mode: TX-2405

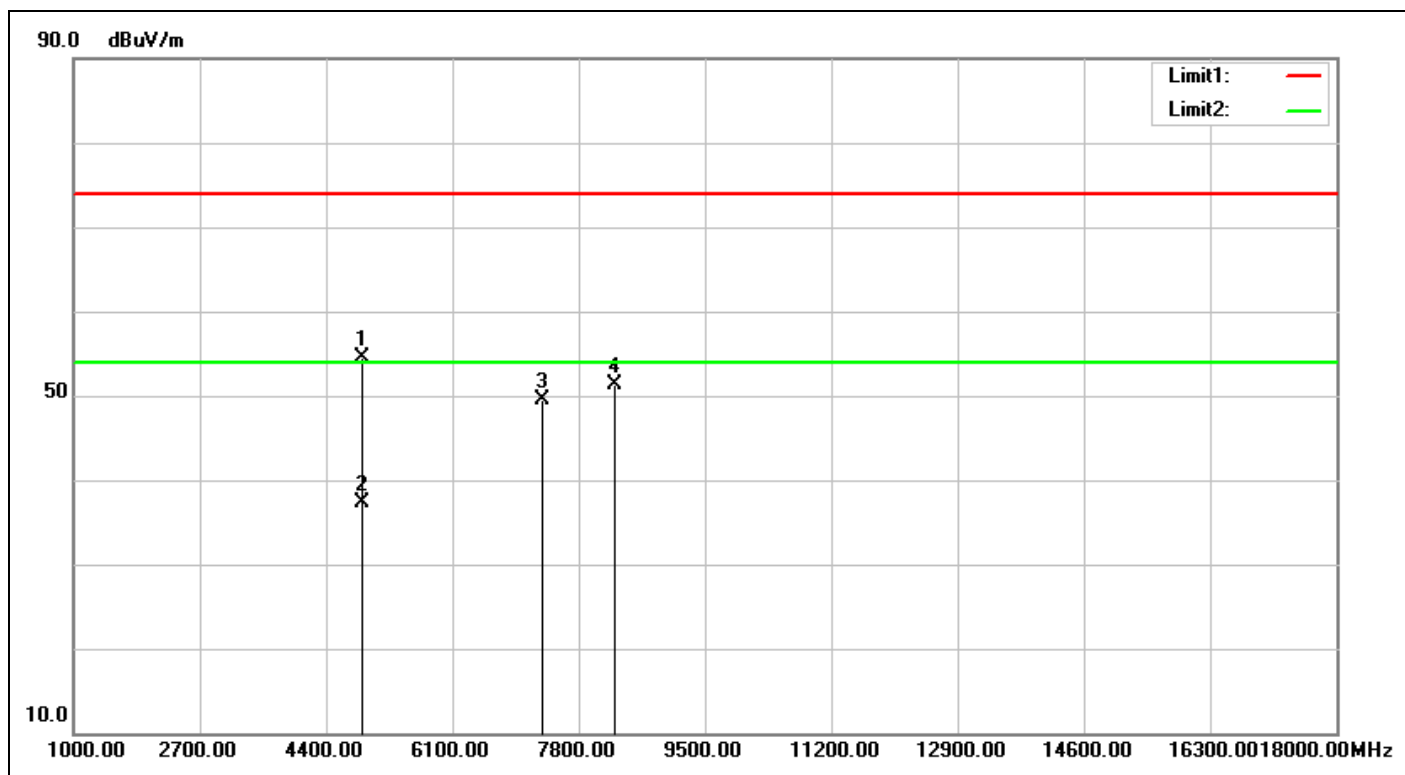
Remark:

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1	4810.000	-2.63	56.41	53.78	74.00	-20.22	peak	100	247	
2	4810.000	-2.63	39.85	37.22	54.00	-16.78	AVG	100	247	
3	7215.000	5.27	44.97	50.24	74.00	-23.76	peak	100	56	
4	7970.000	5.74	45.07	50.81	74.00	-23.19	peak	100	99	



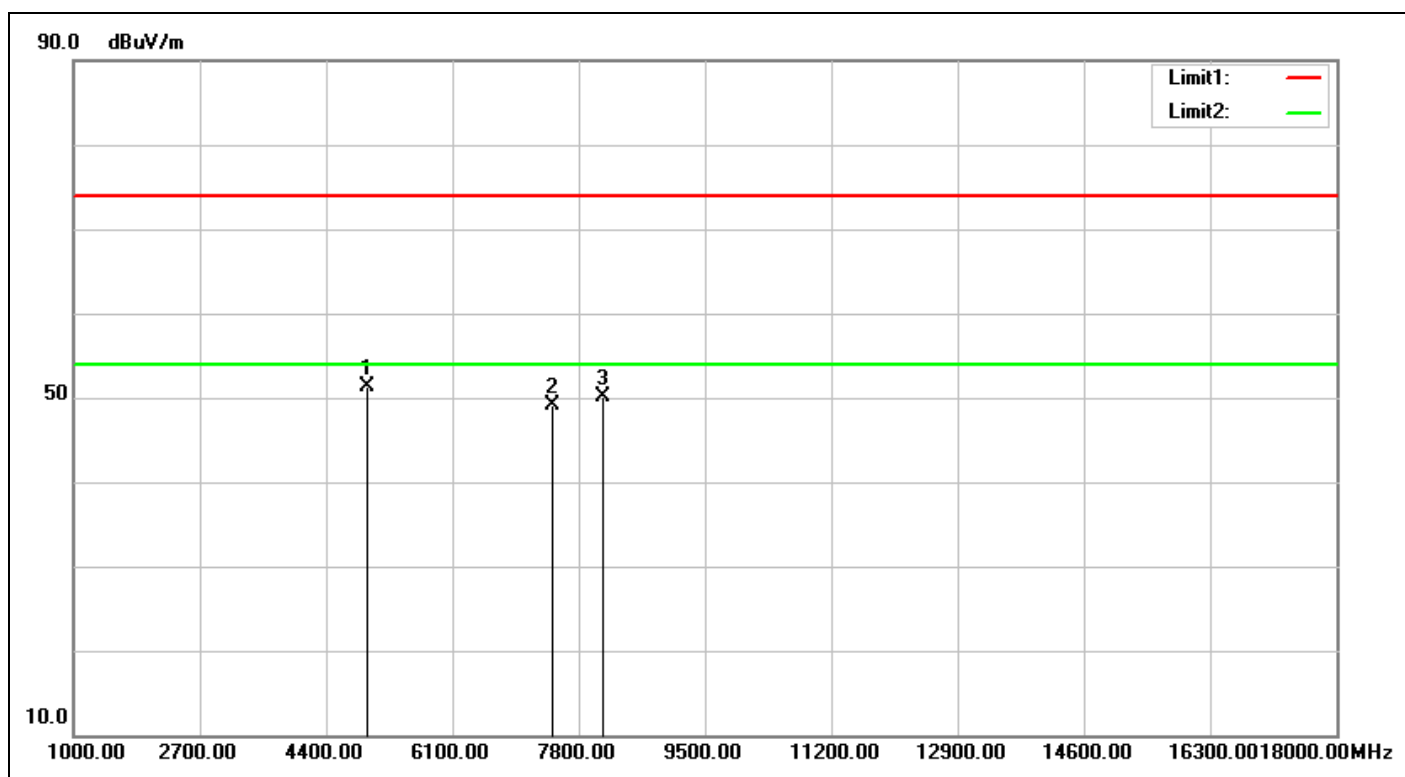
Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/12/10 20:01:28
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%)	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	4880.000	-2.45	51.50	49.05	74.00	-24.95	peak	100	307	
2	7320.000	5.54	44.39	49.93	74.00	-24.07	peak	100	300	
3	8242.000	6.16	44.67	50.83	74.00	-23.17	peak	100	246	



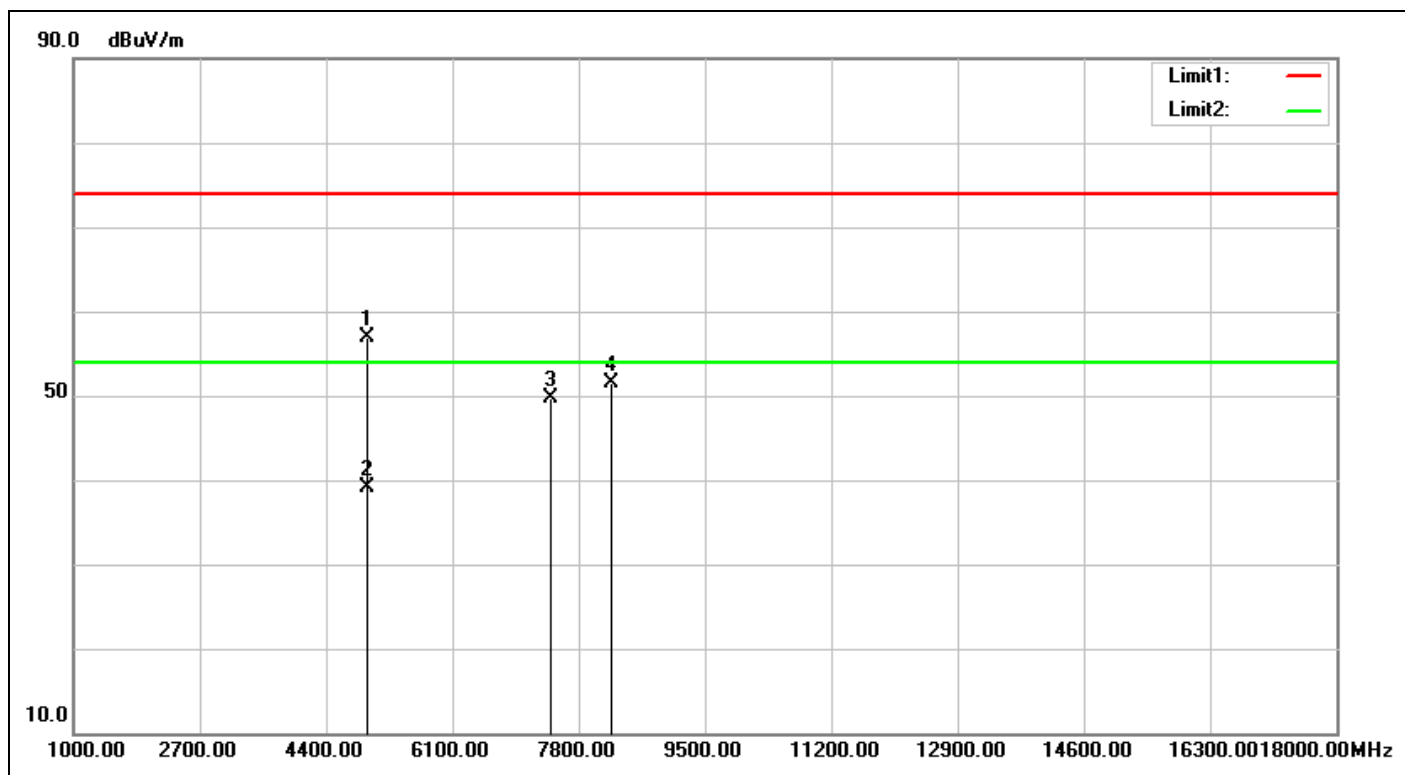
Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/12/10 20:02:20
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%):	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	4880.000	-2.45	57.02	54.57	74.00	-19.43	peak	100	11	
2	4880.000	-2.45	39.70	37.25	54.00	-16.75	AVG	100	11	
3	7320.000	5.54	43.87	49.41	74.00	-24.59	peak			
4	8293.000	6.24	45.06	51.30	74.00	-22.70	peak	100	1	



Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/12/10 20:07:41
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%):	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	-2.25	53.47	51.22	74.00	-22.78	peak	100	41	
2	7440.000	5.83	43.28	49.11	74.00	-24.89	peak	100	0	
3	8123.000	5.93	44.16	50.09	74.00	-23.91	peak	100	342	



Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/12/10 20:08:33
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%):	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	-2.25	59.08	56.83	74.00	-17.17	peak	100	360	
2	4960.000	-2.25	41.43	39.18	54.00	-14.82	AVG	100	360	
3	7440.000	5.83	43.97	49.80	74.00	-24.20	peak	100	0	
4	8242.000	6.16	45.29	51.45	74.00	-22.55	peak	100	52	

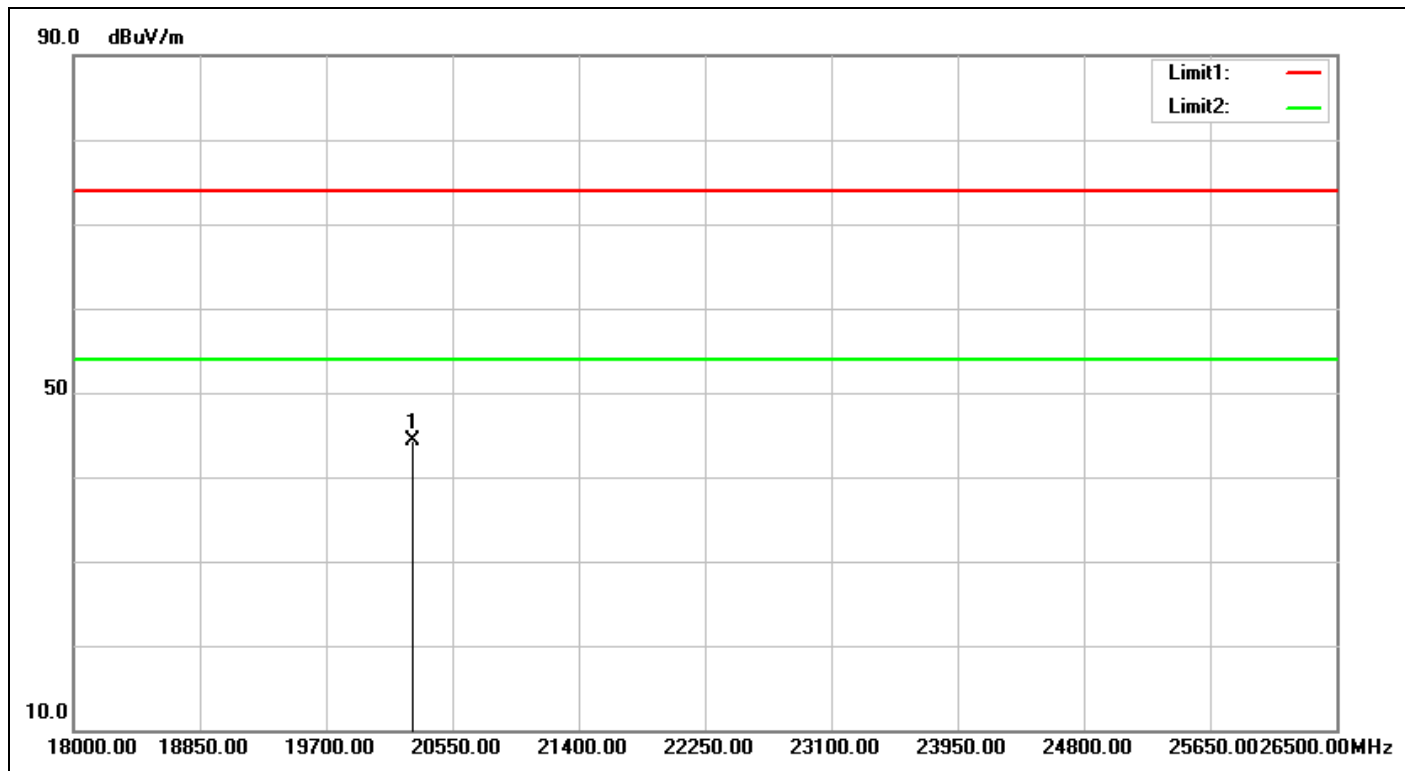
Spurious Emissions, TX Mode, 18-26G



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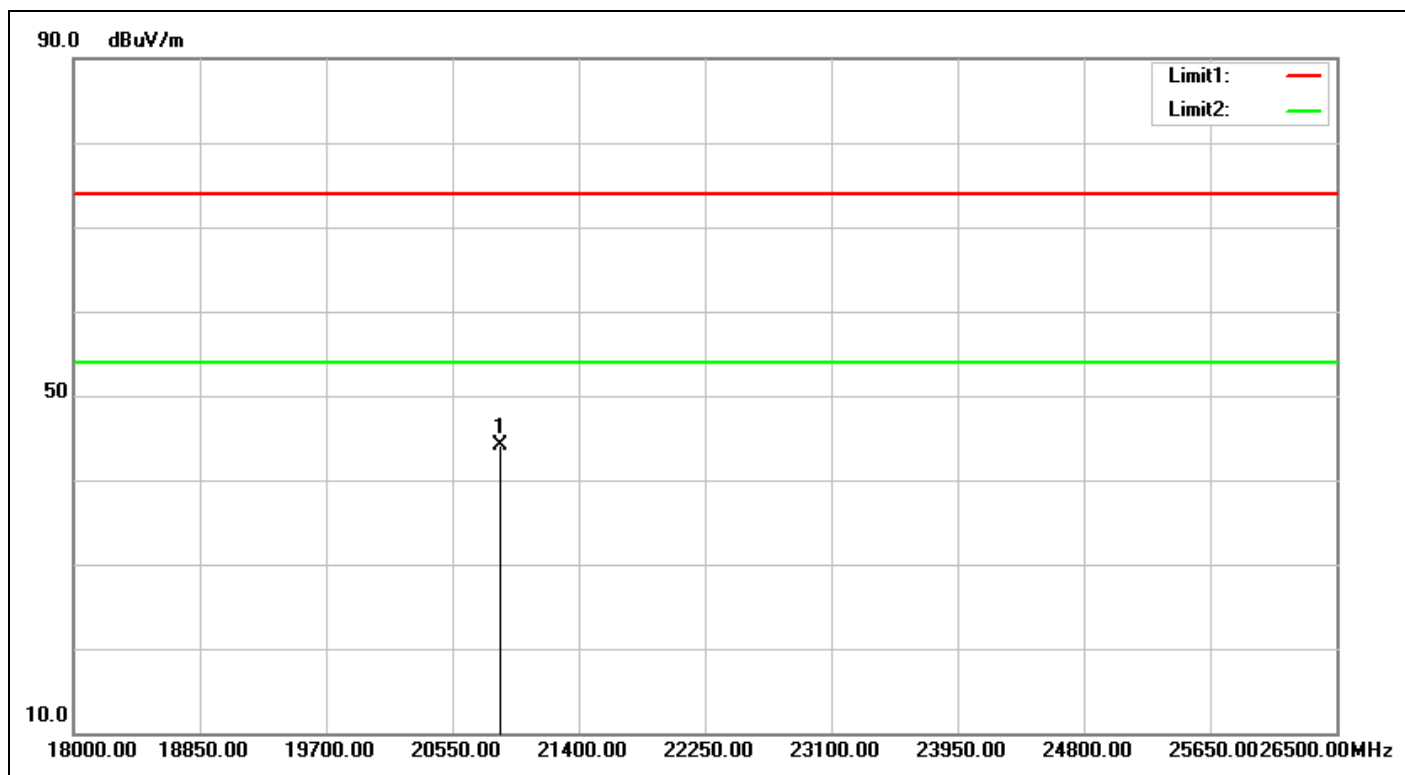
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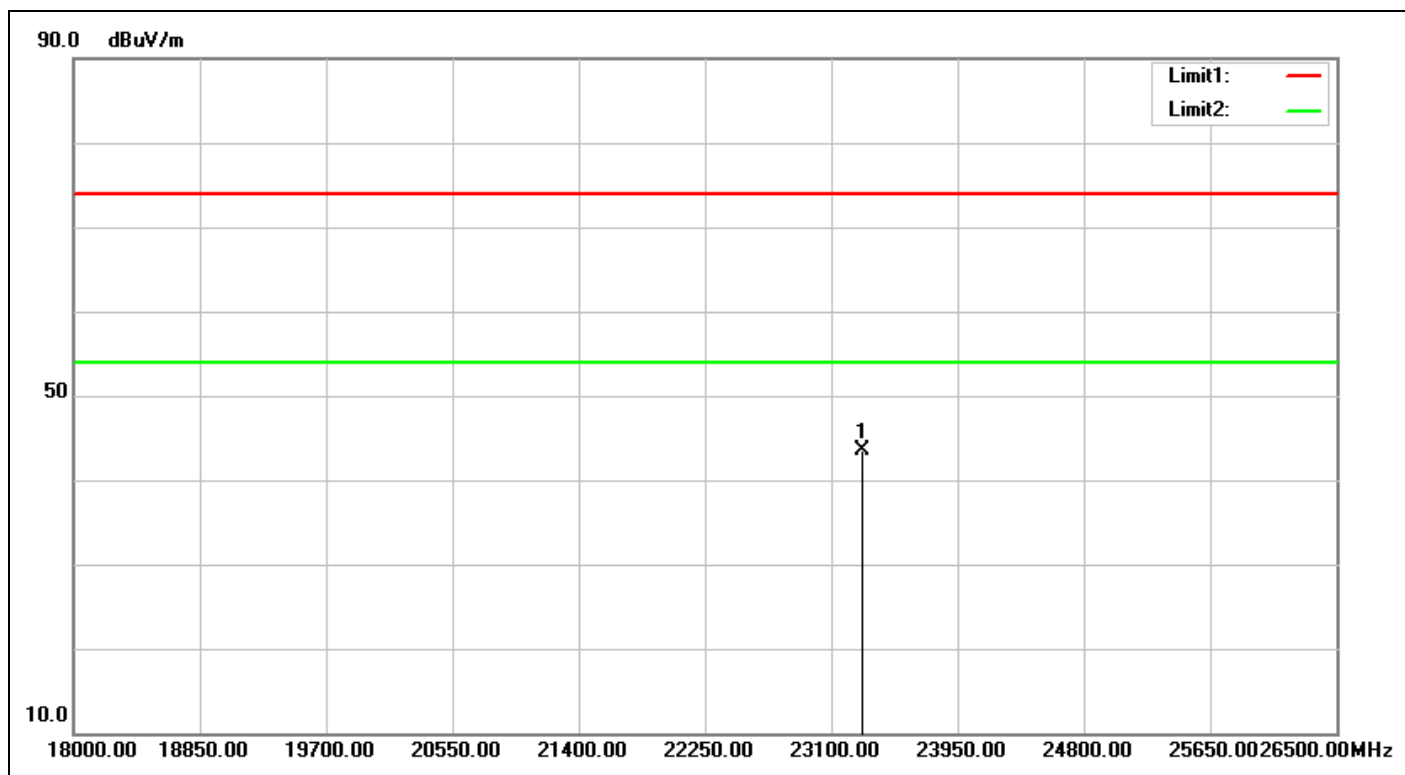
Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/12/10 20:25:28
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%)	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
Test Mode:	TX-2405		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20286.500	4.23	40.14	44.37	74.00	-29.63	peak	100	0	



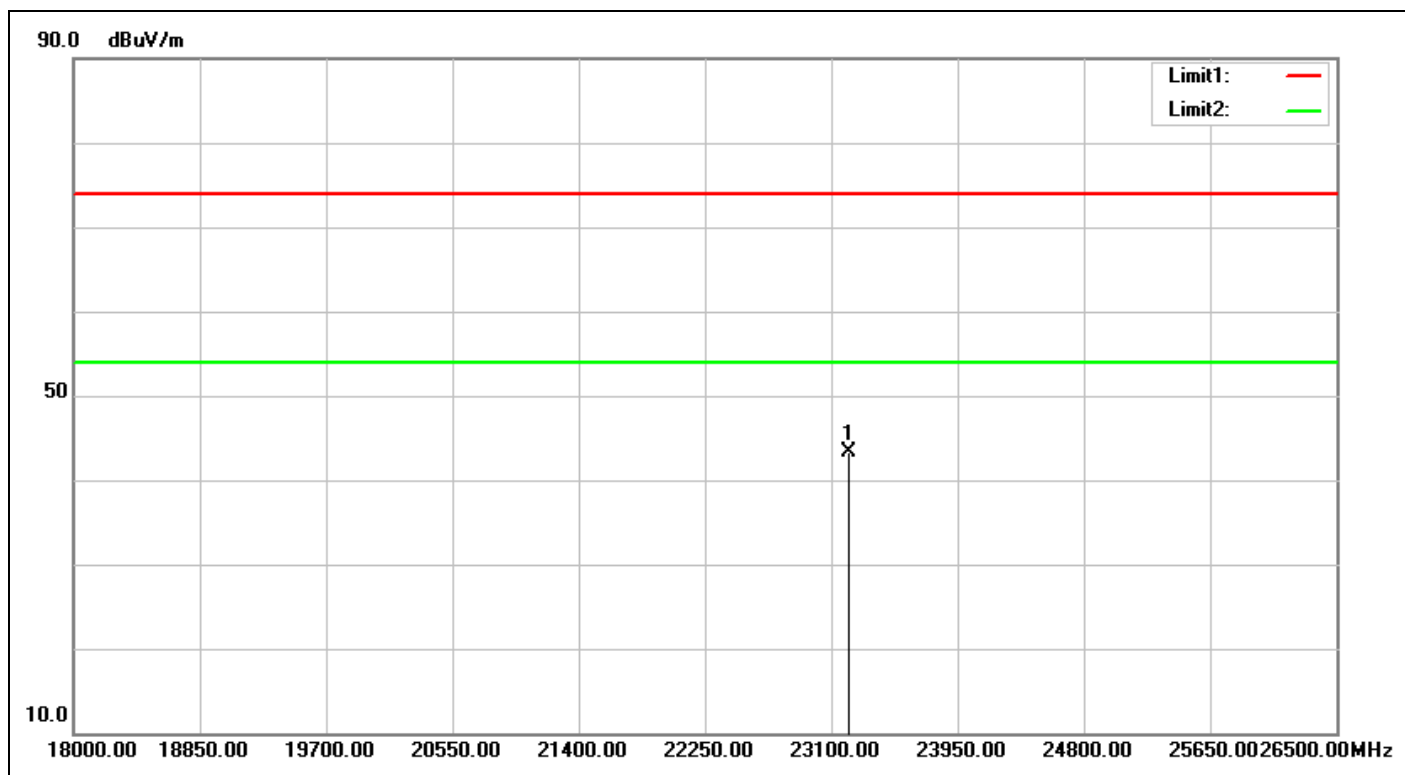
Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/12/10 20:25:35
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%):	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
Test Mode:	TX-2405		
Remark:			

No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (°)	Remark
1	20873.000	4.63	39.53	44.16	74.00	-29.84	peak	100	0	



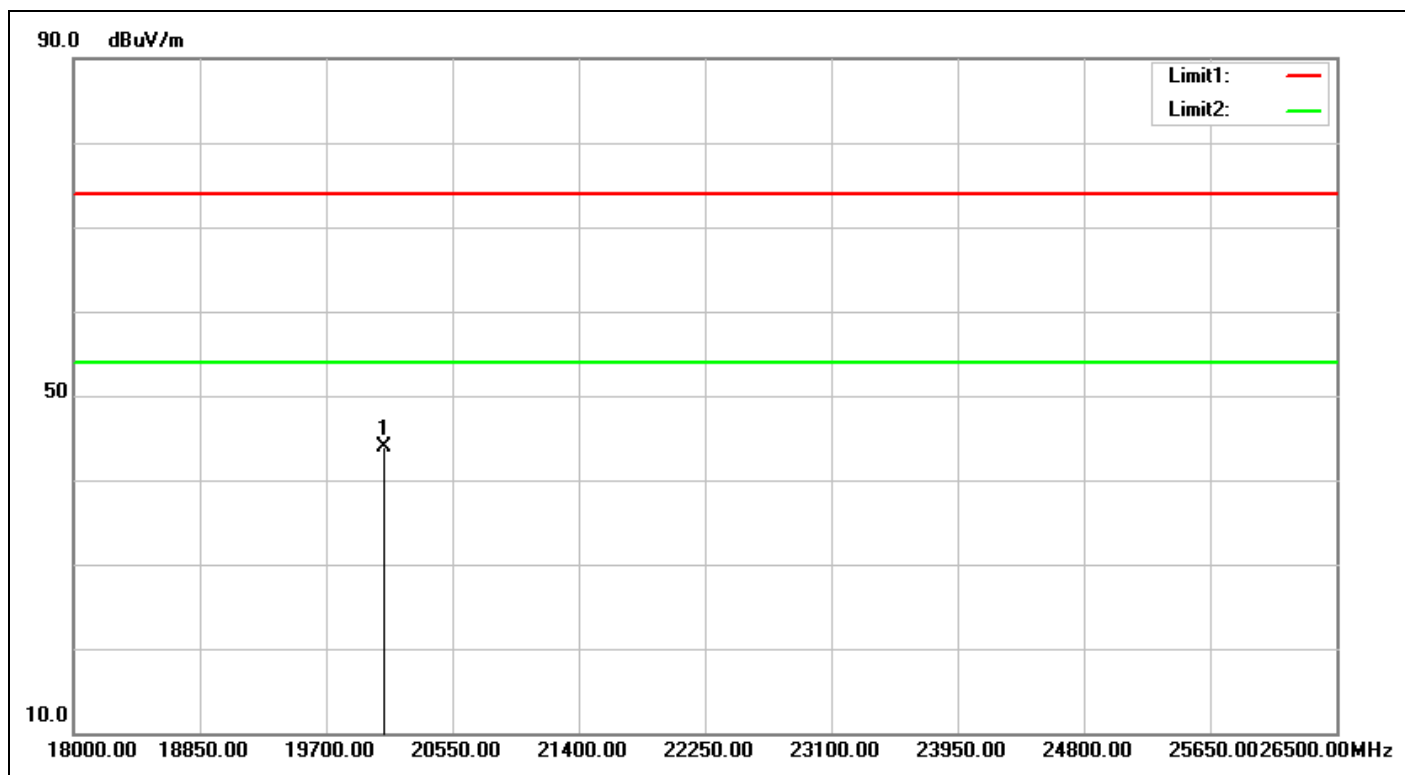
Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/12/10 20:25:59
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%):	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	23312.500	5.65	37.92	43.57	74.00	-30.43	peak	100	5	



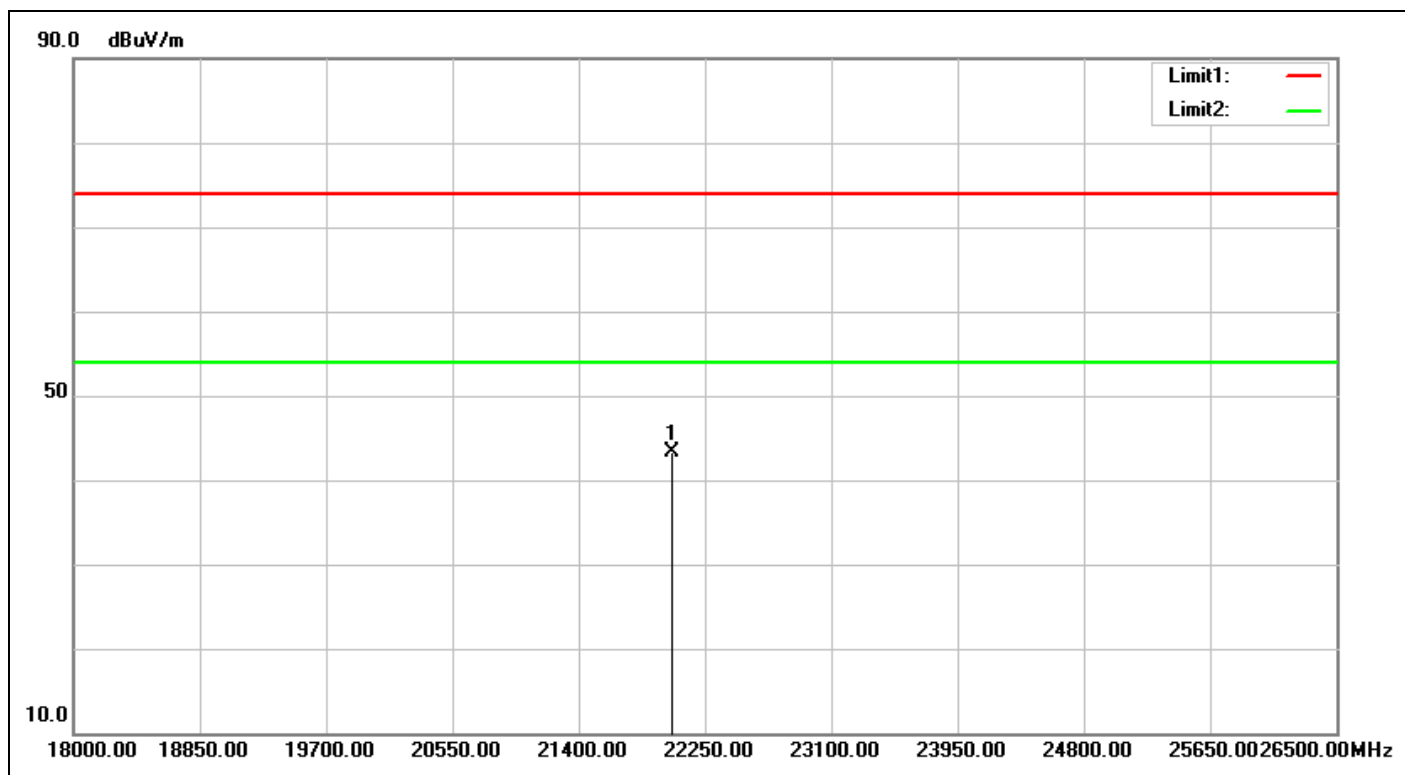
Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/12/10 20:26:06
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%):	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	23219.000	5.55	37.79	43.34	74.00	-30.66	peak	100	0	



Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/12/10 20:26:31
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%):	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	20091.000	4.26	39.70	43.96	74.00	-30.04	peak	100	0	



Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/12/10 20:26:37
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%):	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	22029.000	4.10	39.20	43.30	74.00	-30.70	peak	100	3	

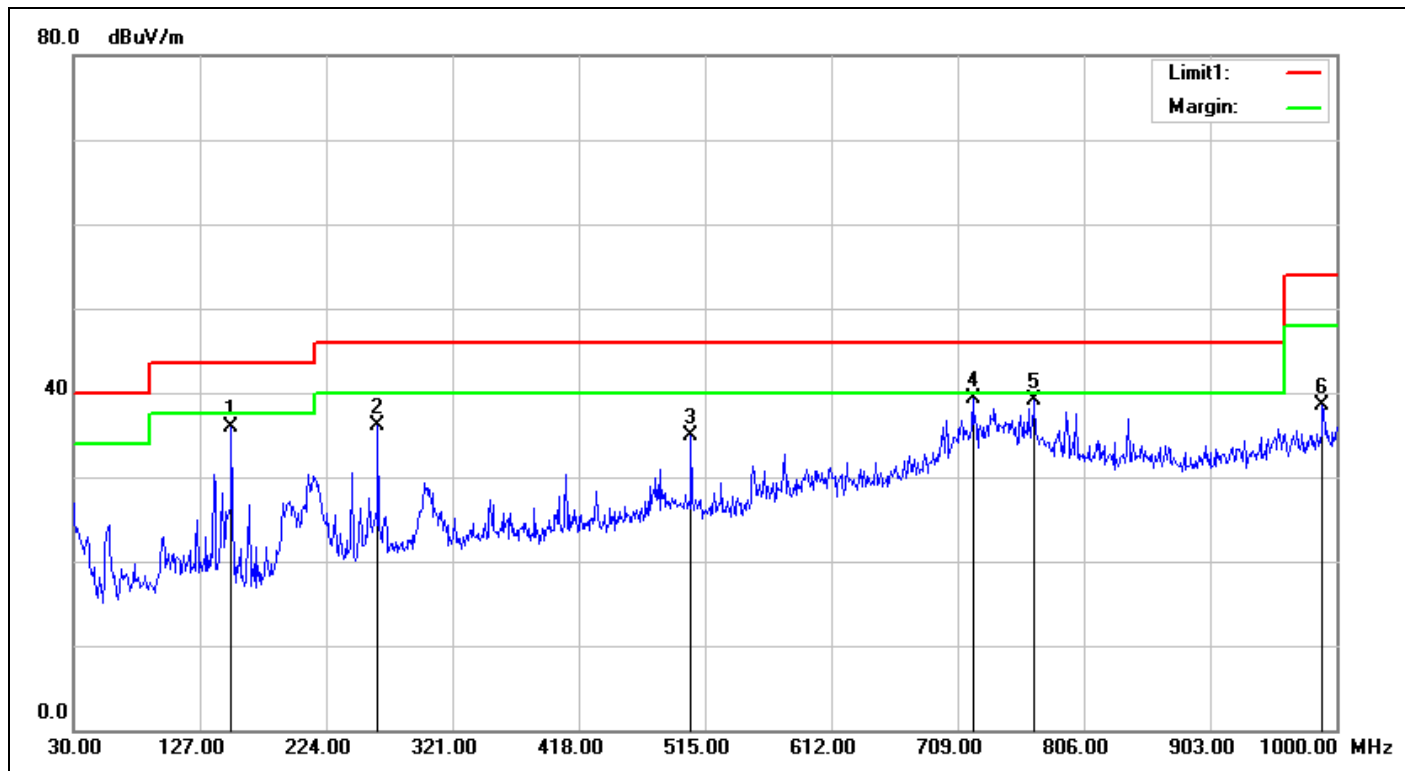
Spurious Emissions, TX Mode, 30M-1G



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Service No.: 114082290

Test Distance: 3m

Test Standard: NCC Class B 3M Radiation

Ant. Polarization: Horizontal

Test item: Radiation Emission

Test Time: 2018/12/10 21:00:01

Applicant: 馨馳企業有限公司

Test Rating: DC 3.7V

Product: SPIKE HOLDER

Temp.(°C)/Hum.(%): 21(°C)/58%

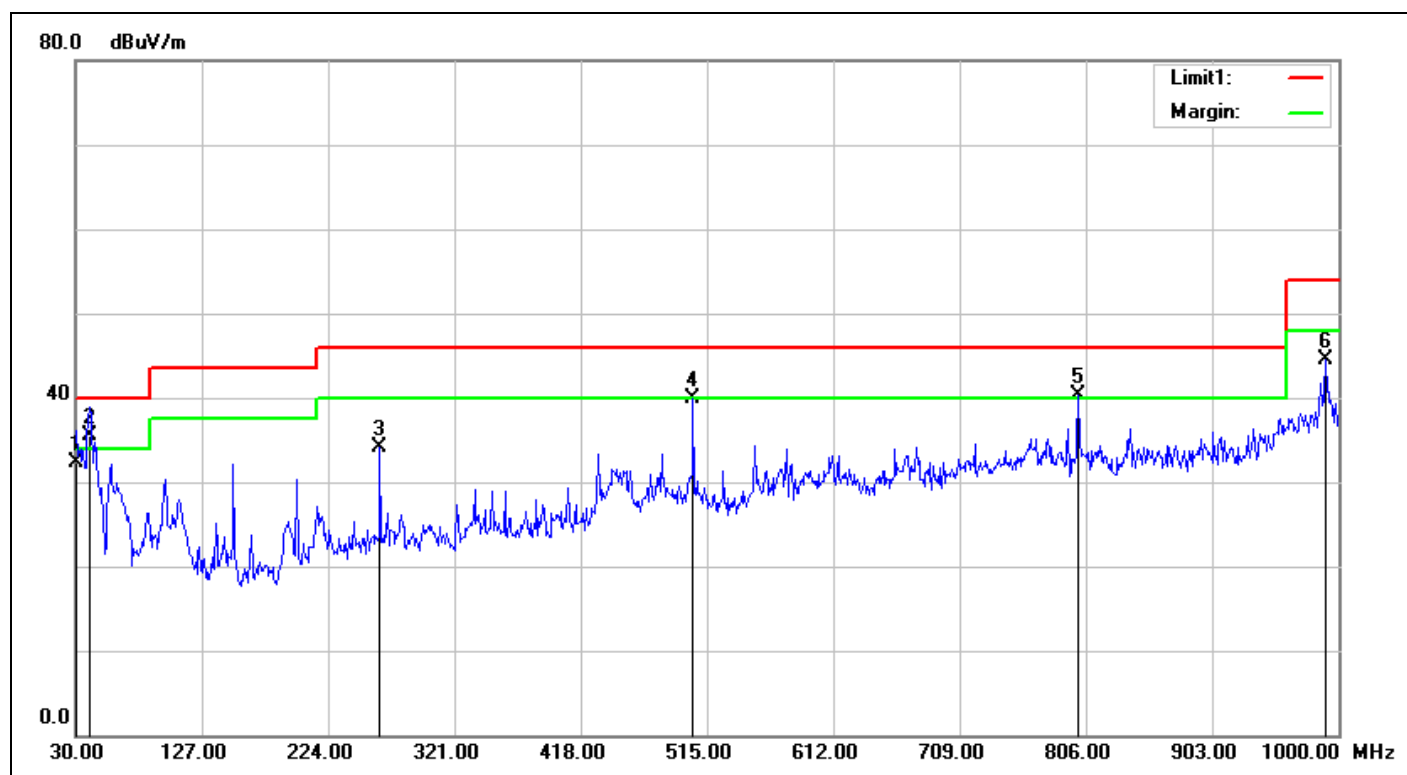
Model No.: HPEE-SENSOR-TH

Test Engineer: Curry Chen

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	151.2500	-7.41	43.29	35.88	43.50	-7.62	QP	100	164	
2	263.7699	-5.06	41.09	36.03	46.00	-9.97	QP	100	252	
3	504.3299	-1.05	36.04	34.99	46.00	-11.01	QP	100	200	
4	720.6399	1.73	37.48	39.21	46.00	-6.79	QP	100	266	
5	768.1699	2.73	36.46	39.19	46.00	-6.81	QP	100	279	
6	989.3300	5.94	32.61	38.55	54.00	-15.45	QP	100	351	



Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/12/10 21:00:54
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%)	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	30.9700	-0.52	32.92	32.40	40.00	-7.60	QP	100	249	
2	40.6699	-6.21	41.81	35.60	40.00	-4.40	QP	100	292	
3	263.7700	-5.06	39.12	34.06	46.00	-11.94	QP	100	255	
4	504.3300	-1.05	40.93	39.88	46.00	-6.12	QP	100	42	
5	800.1800	3.12	37.15	40.27	46.00	-5.73	QP	100	298	
6	990.3000	5.94	38.62	44.56	54.00	-9.44	QP	100	298	

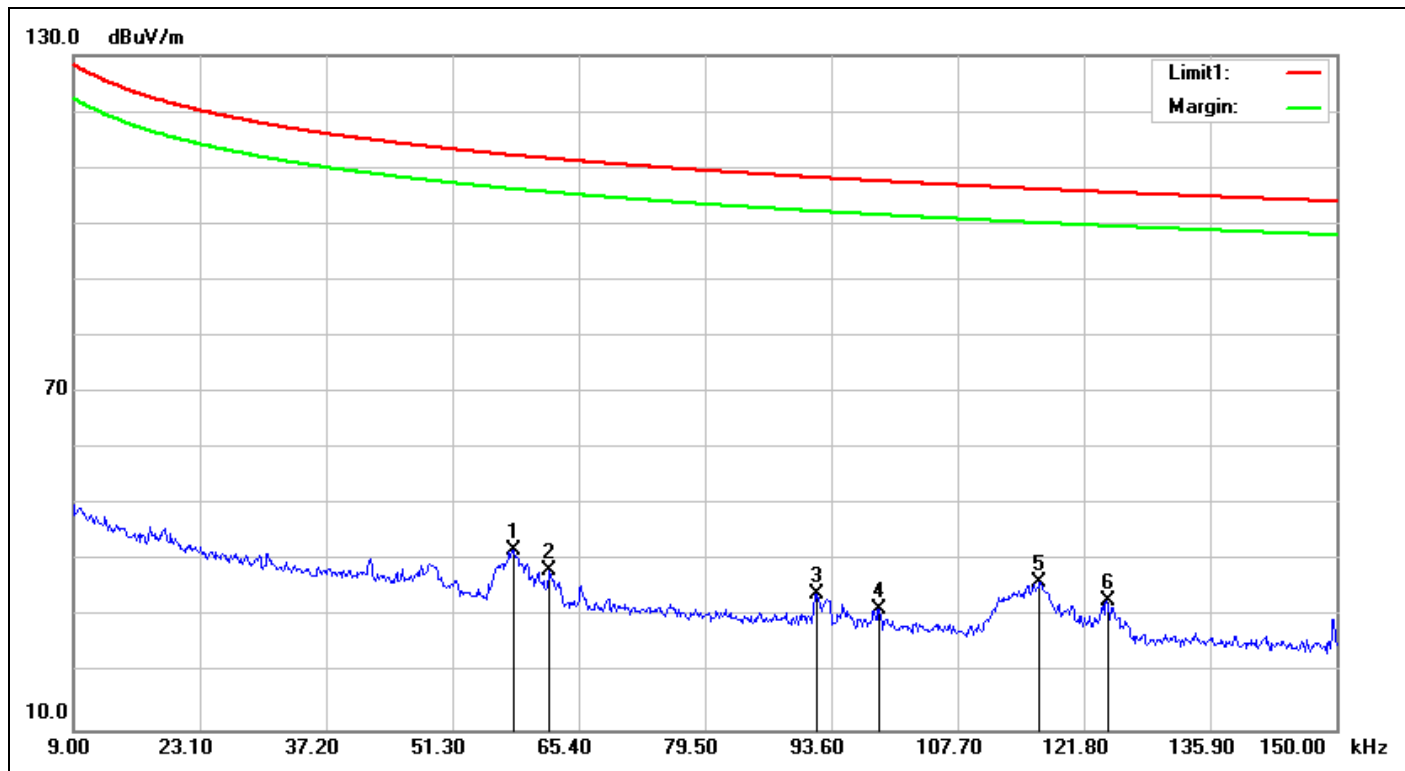
Spurious Emissions, TX Mode, 9K-30M



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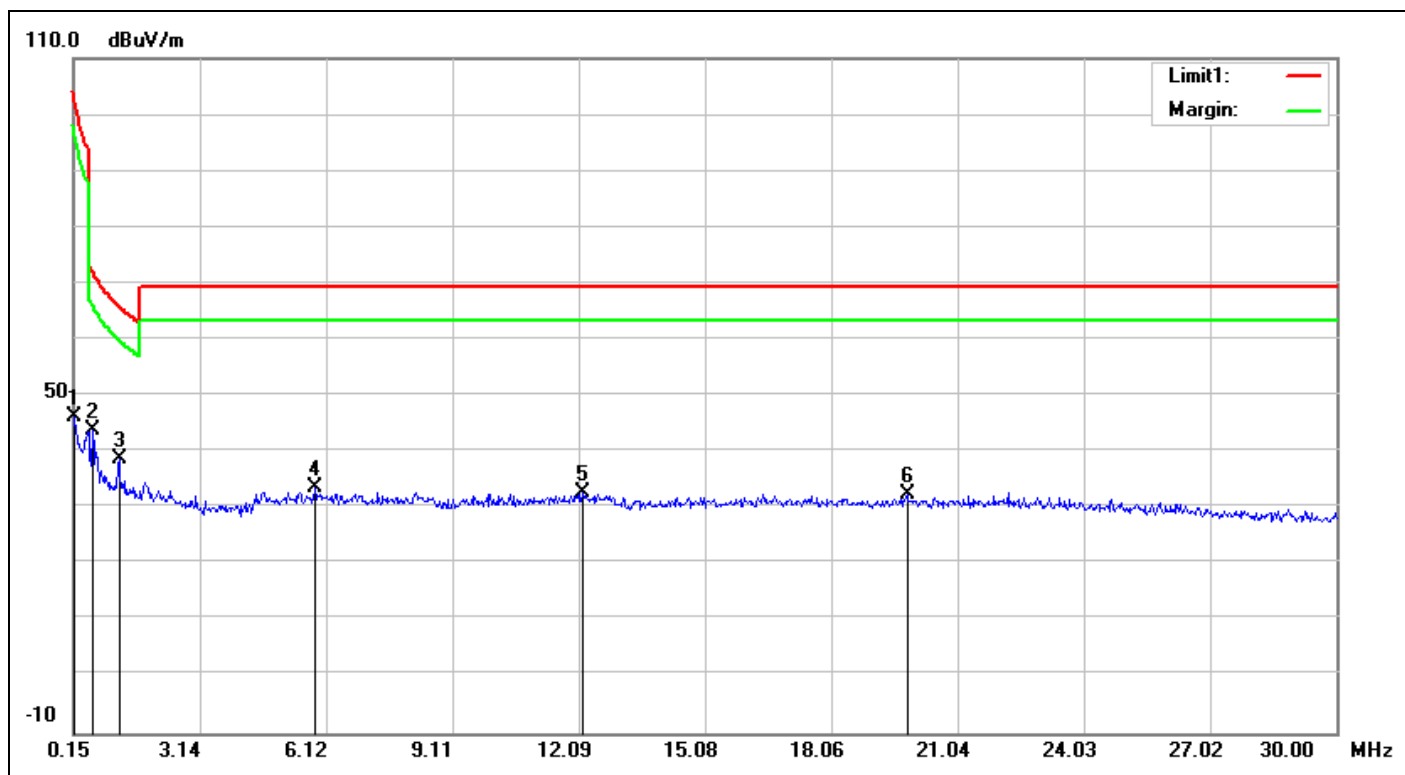
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/12/10 21:12:43
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%):	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	0.0580	18.82	23.21	42.03	112.22	-70.19	QP	100	134	
2	0.0621	18.77	19.61	38.38	111.63	-73.25	QP	100	157	
3	0.0919	18.42	15.87	34.29	108.25	-73.96	QP	100	160	
4	0.0989	18.34	13.03	31.37	107.61	-76.24	QP	100	321	
5	0.1168	18.34	18.04	36.38	106.18	-69.80	QP	100	144	
6	0.1243	18.34	14.47	32.81	105.64	-72.83	QP	100	147	



Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/12/10 21:15:19
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%)	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	0.1500	18.35	27.80	46.15	104.02	-57.87	QP	100	127	
2	0.5977	18.66	25.32	43.98	72.08	-28.10	QP	100	186	
3	1.2245	18.67	20.21	38.88	65.87	-26.99	QP	100	183	
4	5.8513	19.63	14.02	33.65	69.50	-35.85	QP	100	84	
5	12.1795	20.69	11.97	32.66	69.50	-36.84	QP	100	324	
6	19.8509	21.58	10.92	32.50	69.50	-37.00	QP	100	0	

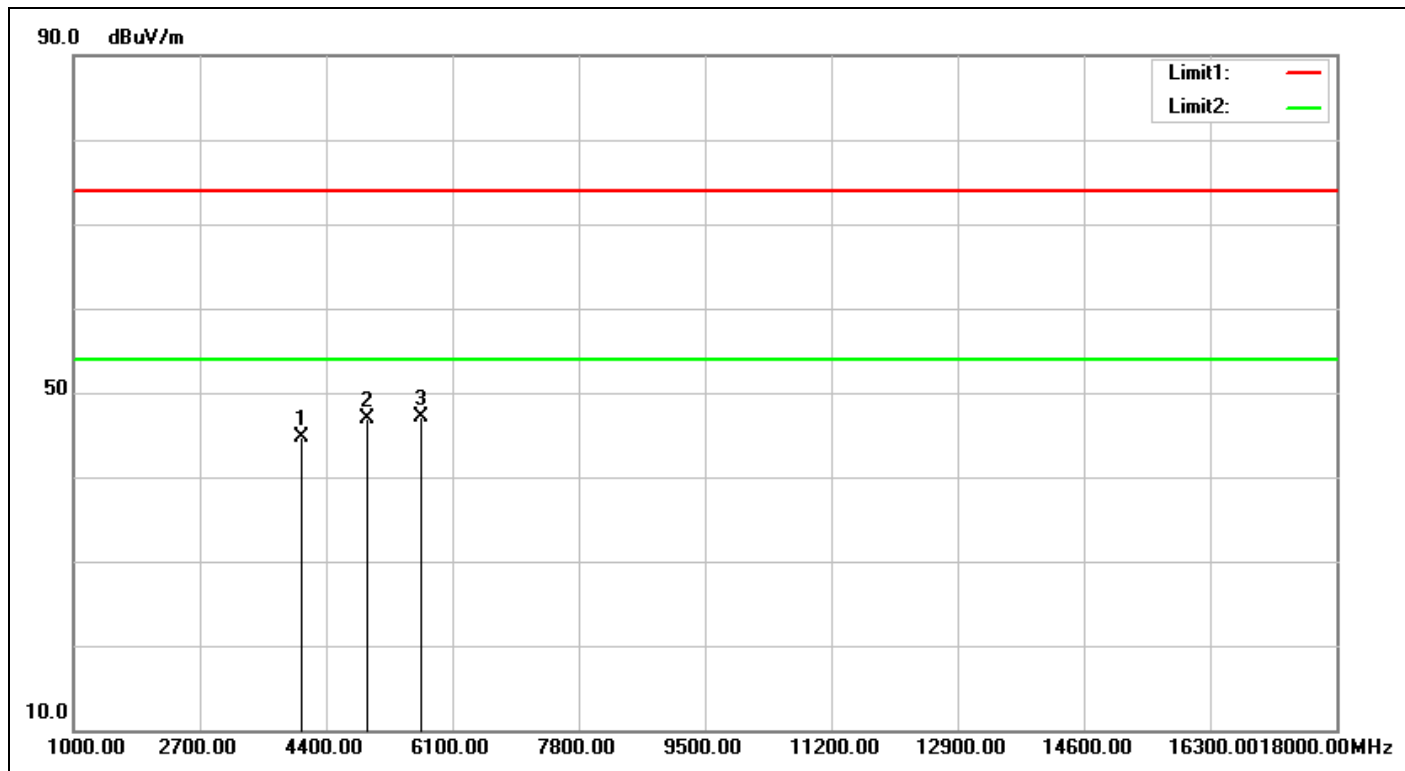
Spurious Emissions, RX Mode, 1-18G



TUV Rheinland Taiwan Ltd.

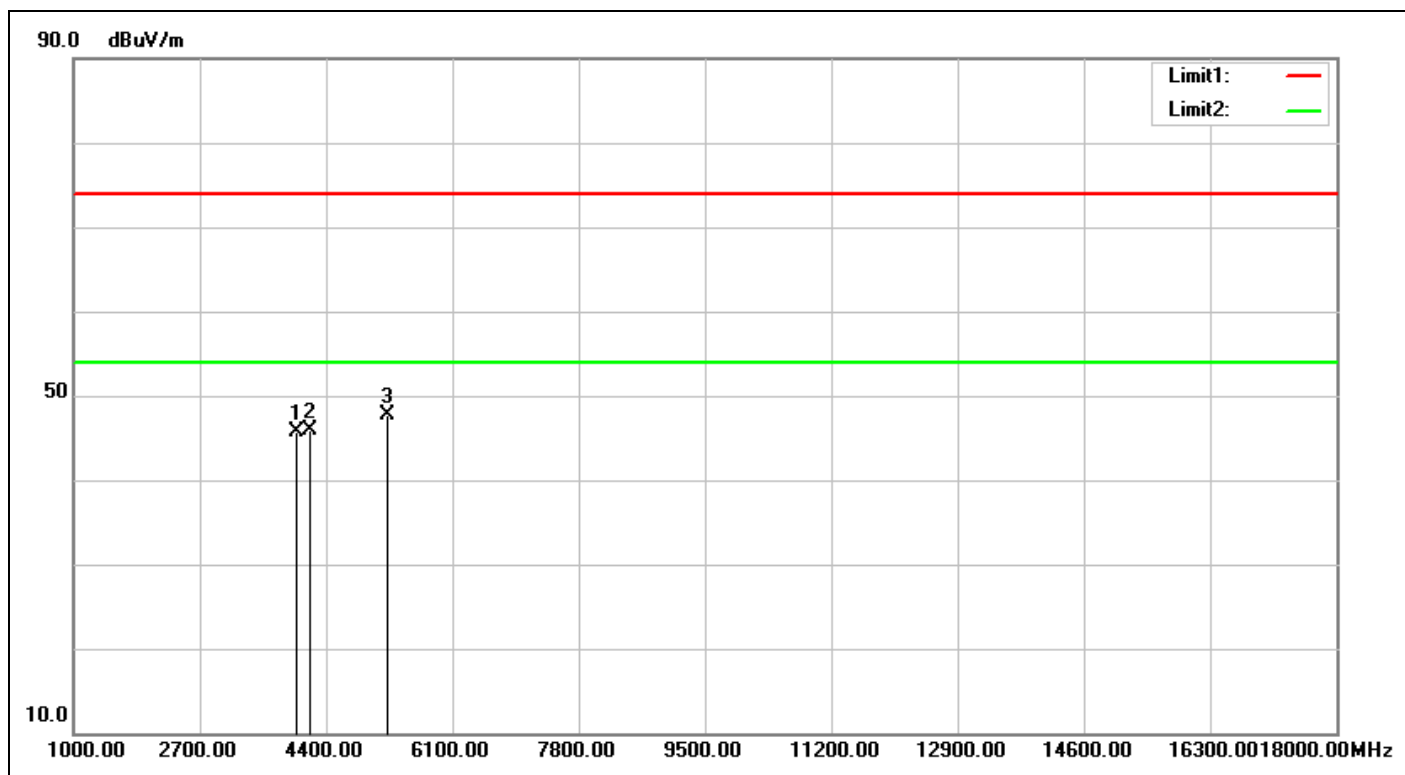
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/12/10 20:12:55
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%)	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	4077.000	-5.45	50.24	44.79	74.00	-29.21	peak	100	217	
2	4944.000	-3.25	50.14	46.89	74.00	-27.11	peak	100	271	
3	5675.000	0.22	46.89	47.11	74.00	-26.89	peak	100	83	



Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/12/10 20:13:47
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%):	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	3992.000	-5.75	51.54	45.79	74.00	-28.21	peak	100	61	
2	4179.000	-5.07	50.97	45.90	74.00	-28.10	peak	100	13	
3	5216.000	-2.20	49.98	47.78	74.00	-26.22	peak	100	245	

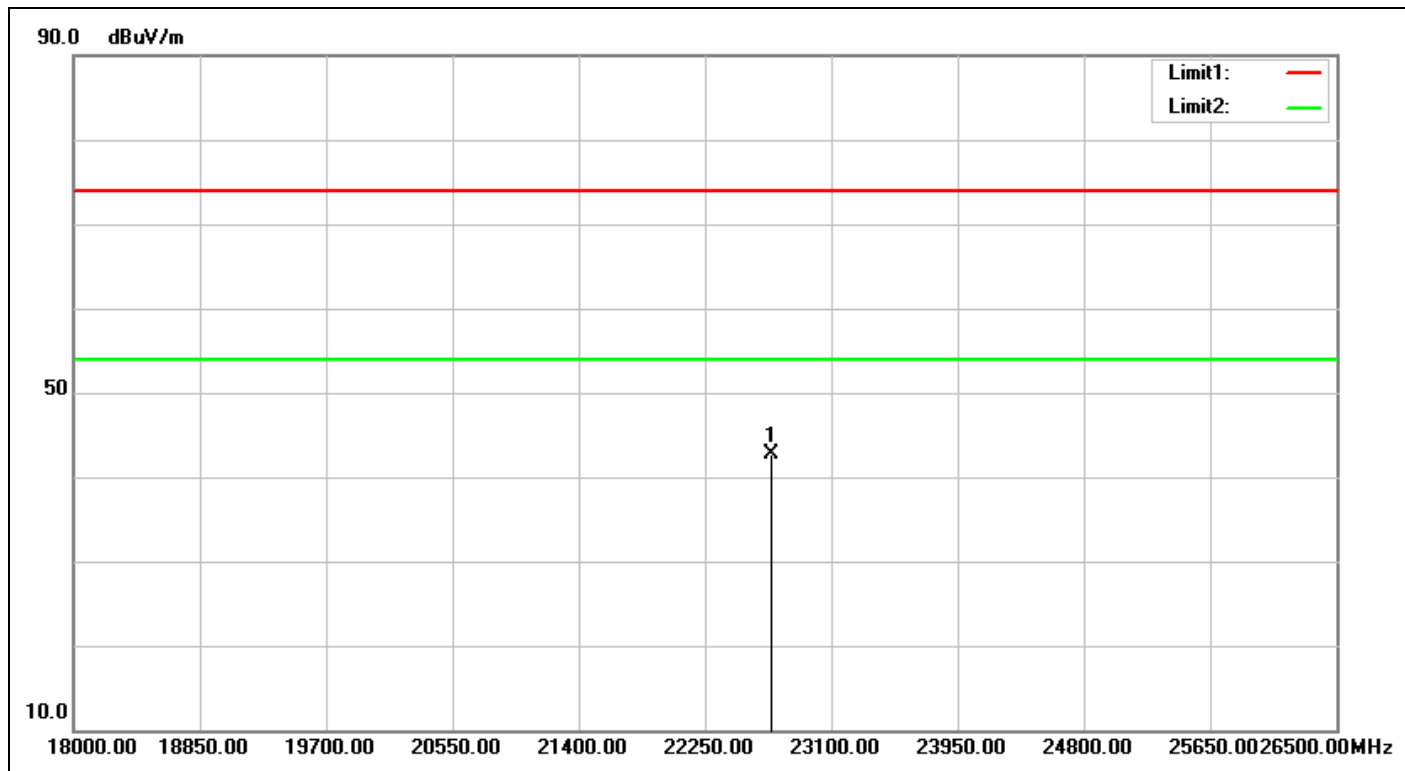
Spurious Emissions, RX Mode, 18-26G



TUV Rheinland Taiwan Ltd.

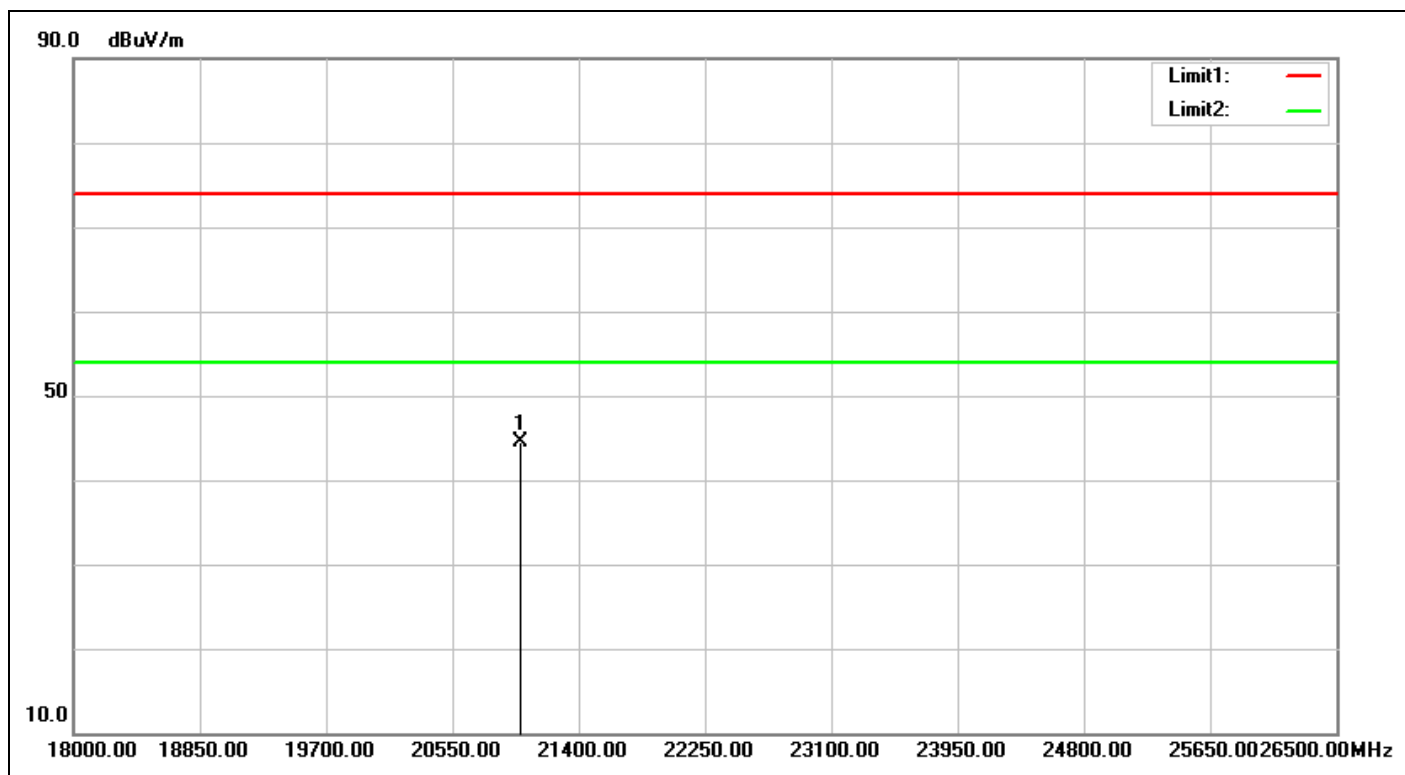
11F., No.758, Sec.4 Bade Road. Songshan Dist, Taipei City 105

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



Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Horizontal
Test item:	Radiation Emission	Test Time:	2018/12/10 20:27:19
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%):	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	22692.000	4.91	37.71	42.62	74.00	-31.38	peak	100	0	



Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Above 1G PEAK	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/12/10 20:27:26
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%):	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	21009.000	4.78	39.72	44.50	74.00	-29.50	peak	100	0	

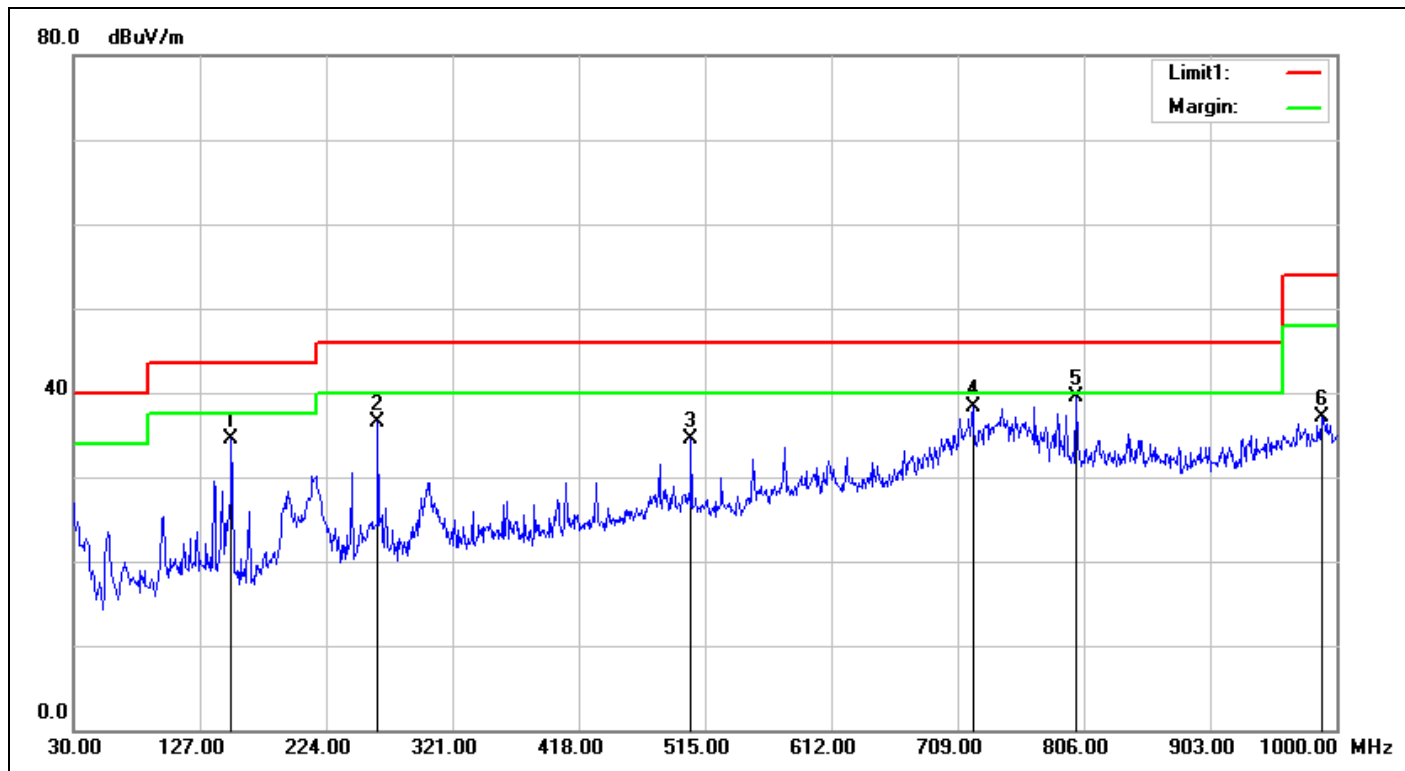
Spurious Emissions, RX Mode, 30M-1G



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.: 114082290

Test Distance: 3m

Test Standard: NCC Class B 3M Radiation

Ant. Polarization: Horizontal

Test item: Radiation Emission

Test Time: 2018/12/10 21:03:50

Applicant: 馨馳企業有限公司

Test Rating: DC 3.7V

Product: SPIKE HOLDER

Temp.(°C)/Hum.(%): 21(°C)/58%

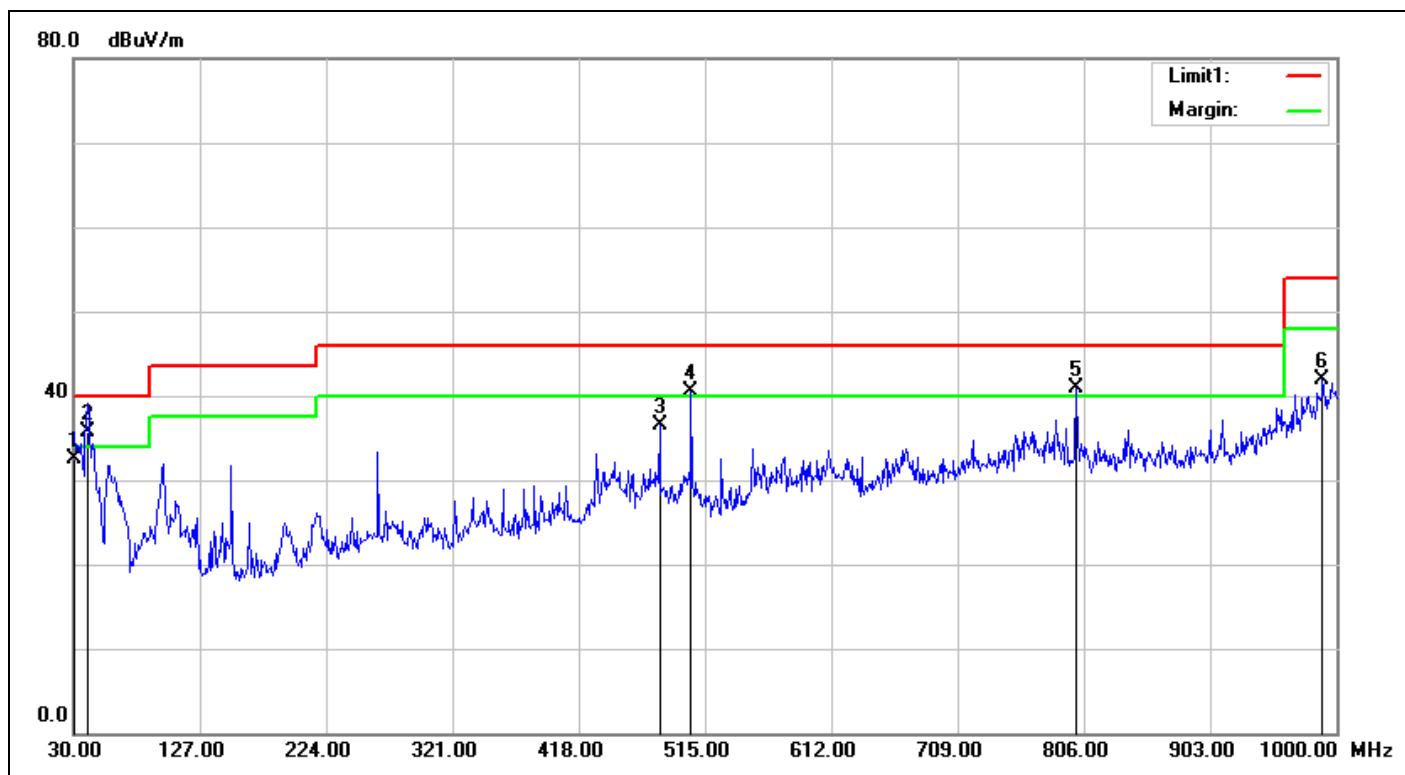
Model No.: HPEE-SENSOR-TH

Test Engineer: Curry Chen

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	151.2500	-7.41	41.98	34.57	43.50	-8.93	QP	100	144	
2	263.7699	-5.06	41.62	36.56	46.00	-9.44	QP	100	223	
3	504.3299	-1.05	35.49	34.44	46.00	-11.56	QP	100	200	
4	720.6399	1.73	36.64	38.37	46.00	-7.63	QP	100	272	
5	800.1799	3.12	36.43	39.55	46.00	-6.45	QP	100	276	
6	988.3600	5.91	31.10	37.01	54.00	-16.99	QP	100	101	



Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC Class B 3M Radiation	Ant. Polarization:	Vertical
Test item:	Radiation Emission	Test Time:	2018/12/10 21:04:43
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%):	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	30.0000	-0.03	32.53	32.50	40.00	-7.50	QP	100	285	
2	40.6699	-6.21	42.01	35.80	40.00	-4.20	QP	100	239	
3	480.0800	-1.52	37.95	36.43	46.00	-9.57	QP	100	65	
4	504.3300	-1.05	41.59	40.54	46.00	-5.46	QP	100	45	
5	800.1800	3.12	37.73	40.85	46.00	-5.15	QP	100	213	
6	989.3300	5.94	35.91	41.85	54.00	-12.15	QP	100	298	

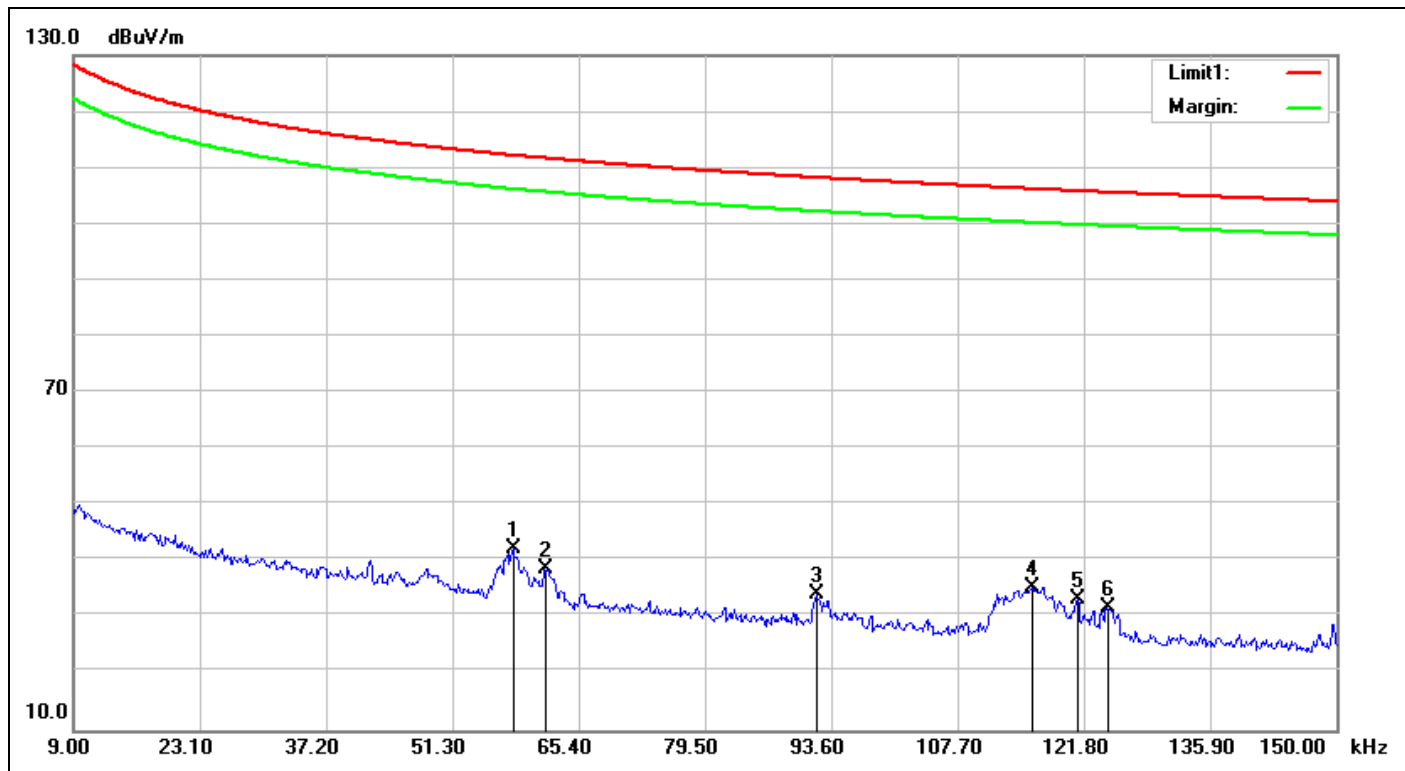
Spurious Emissions, RX Mode, 9K-30M



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.: 114082290

Test Distance: 3m

Test Standard: NCC2.8_9k-1G_3m

Ant. Polarization:

Test item: Radiation Emission

Test Time: 2018/12/10 21:13:36

Applicant: 馨馳企業有限公司

Test Rating: DC 3.7V

Product: SPIKE HOLDER

Temp.(°C)/Hum.(%): 21(°C)/58%

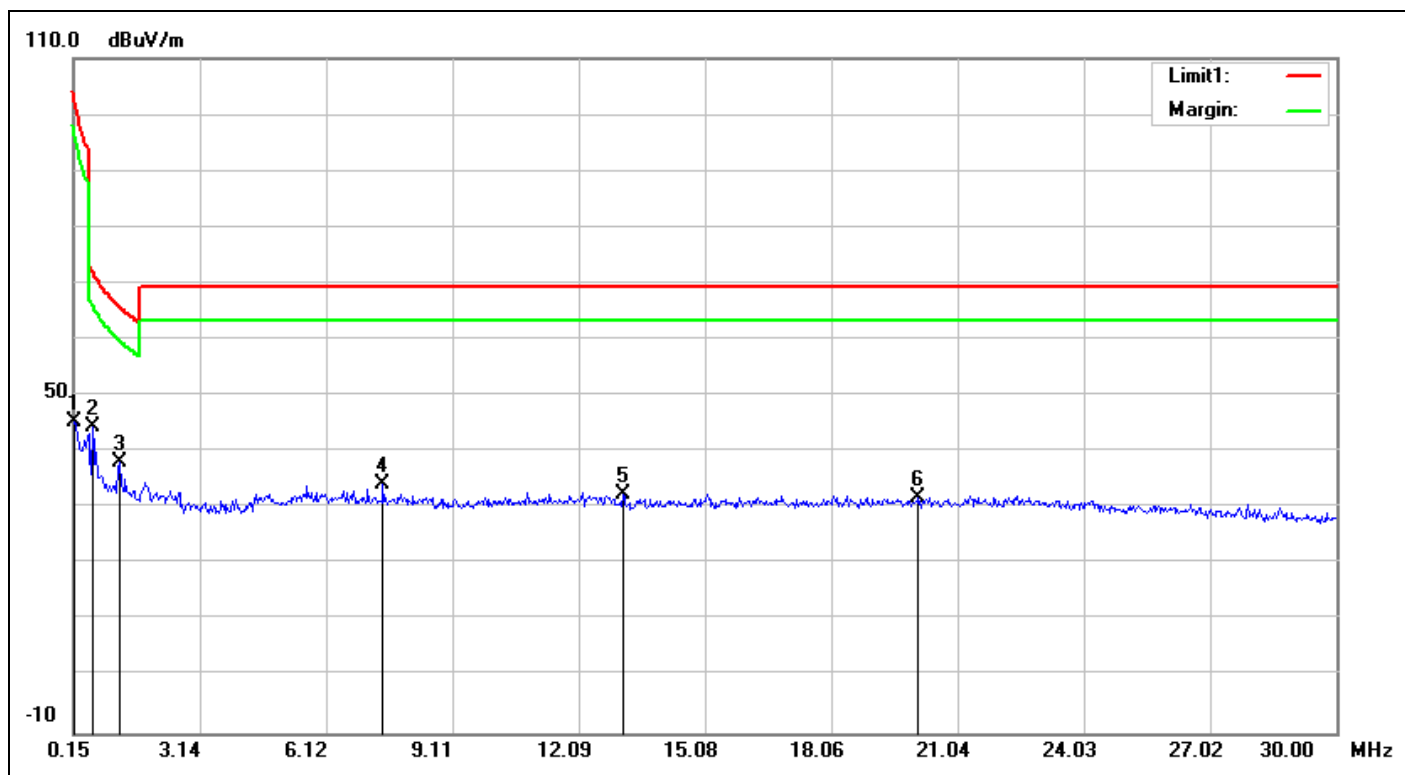
Model No.: HPEE-SENSOR-TH

Test Engineer: Curry Chen

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	0.0581	18.82	23.53	42.35	112.21	-69.86	QP	100	141	
2	0.0616	18.78	19.83	38.61	111.70	-73.09	QP	100	128	
3	0.0919	18.42	15.77	34.19	108.25	-74.06	QP	100	171	
4	0.1160	18.34	16.97	35.31	106.24	-70.93	QP	100	138	
5	0.1211	18.34	14.98	33.32	105.87	-72.55	QP	100	131	
6	0.1243	18.34	13.35	31.69	105.64	-73.95	QP	100	128	



Service No.:	114082290	Test Distance:	3m
Test Standard:	NCC2.8_9k-1G_3m	Ant. Polarization:	
Test item:	Radiation Emission	Test Time:	2018/12/10 21:16:12
Applicant:	馨馳企業有限公司	Test Rating:	DC 3.7V
Product:	SPIKE HOLDER	Temp.(°C)/Hum.(%):	21(°C)/58%
Model No.:	HPEE-SENSOR-TH	Test Engineer:	Curry Chen
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	0.1500	18.35	26.92	45.27	104.02	-58.75	QP	100	147	
2	0.5978	18.66	25.69	44.35	72.08	-27.73	QP	100	180	
3	1.2245	18.67	19.54	38.21	65.87	-27.66	QP	100	171	
4	7.4633	19.94	14.35	34.29	69.50	-35.21	QP	100	184	
5	13.1348	20.80	11.51	32.31	69.50	-37.19	QP	100	16	
6	20.1197	21.61	10.36	31.97	69.50	-37.53	QP	100	99	

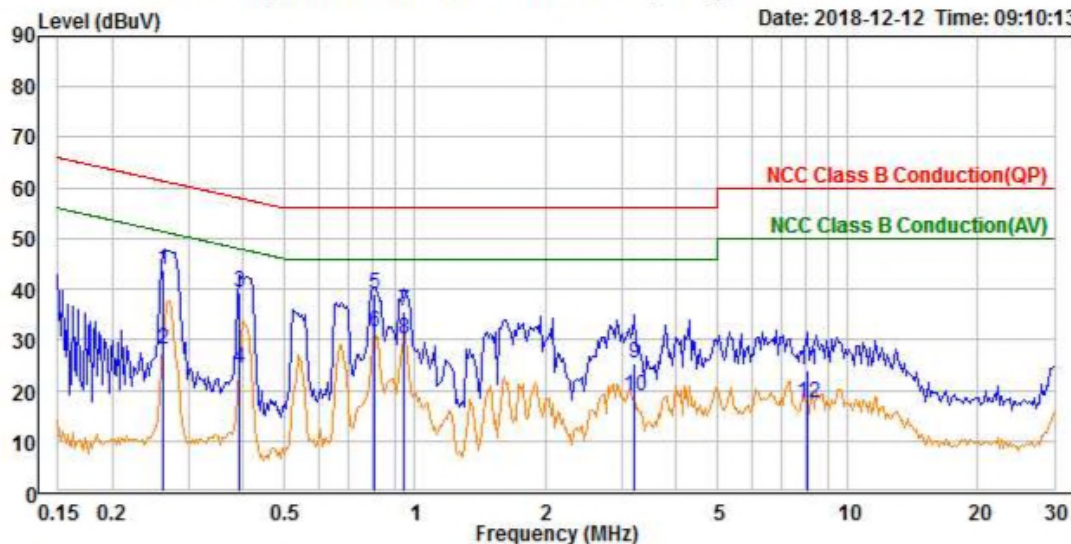
Spurious Emissions, AC Mains



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

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Date: 2018-12-12 Time: 09:10:13



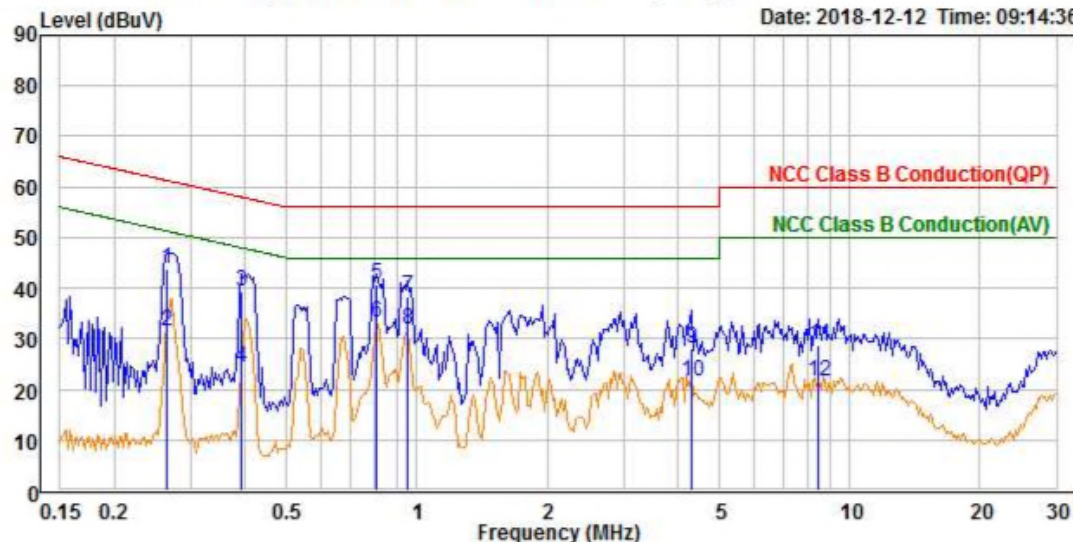
Trace: 1

Site : Conduction room
Condition : NCC Class B Conduction(QP) line1
Test Engineer: Amy Hsu
Applicant :
Product : SPIKE HOLDER
Model No. : HPEE-SENSOR-TH
Test Rating : 110Vac/60Hz
Tmp/Hum : 21.5°C/48%
Memo :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.262	34.04	9.68	43.72	61.38	-17.66	QP
2	0.262	18.32	9.68	28.00	51.38	-23.38	Average
3	0.393	29.76	9.69	39.45	57.99	-18.54	QP
4	0.393	14.67	9.69	24.36	47.99	-23.63	Average
5	0.805	29.39	9.70	39.09	56.00	-16.91	QP
6	0.805	21.88	9.70	31.58	46.00	-14.42	Average
7	0.944	25.99	9.70	35.69	56.00	-20.31	QP
8	0.944	20.37	9.70	30.07	46.00	-15.93	Average
9	3.205	15.64	9.74	25.38	56.00	-30.62	QP
10	3.205	8.96	9.74	18.70	46.00	-27.30	Average
11	8.077	14.00	9.81	23.81	60.00	-36.19	QP
12	8.077	7.62	9.81	17.43	50.00	-32.57	Average

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Date: 2018-12-12 Time: 09:14:36



Trace: 1
Site : Conduction room
Condition : NCC Class B Conduction(QP) neutral
Test Engineer: Amy Hsu
Applicant :
Product : SPIKE HOLDER
Model No. : HPEE-SENSOR-TH
Test Rating : 110Vac/60Hz
Tmp/Hum : 21.5°C/48%
Memo :

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.264	34.05	9.68	43.73	61.29	-17.56	QP
2	0.264	21.83	9.68	31.51	51.29	-19.78	Average
3	0.393	29.55	9.68	39.23	57.99	-18.76	QP
4	0.393	14.51	9.68	24.19	47.99	-23.80	Average
5	0.805	31.04	9.70	40.74	56.00	-15.26	QP
6	0.805	23.34	9.70	33.04	46.00	-12.96	Average
7	0.953	28.69	9.70	38.39	56.00	-17.61	QP
8	0.953	22.26	9.70	31.96	46.00	-14.04	Average
9	4.318	18.47	9.76	28.23	56.00	-27.77	QP
10	4.318	11.67	9.76	21.43	46.00	-24.57	Average
11	8.489	18.79	9.82	28.61	60.00	-31.39	QP
12	8.489	11.72	9.82	21.54	50.00	-28.46	Average