



FCC RADIO TEST REPORT

Applicant	: Pass & Seymour, Inc., d/b/a Legrand Home Systems On-Q/Nuvo
Address	: 301 Fulling Mill Road, Suite G, Middletown, Pennsylvania, United States
Equipment	: 2.4 GHz Band RF Lighting Controller
Module Model No.	: SA7522
Host Model No.	: HKRL50WH, HKRL60WH, HKRL10WH, HKRL20WH
Trade Name	: Legrand
FCC ID.	: YV8-SA7522

I HEREBY CERTIFY THAT :

The sample was received on May. 02, 2018 and the testing was carried out on May. 16, 2018 at CerpPASS Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of CerpPASS Technology Corp., the test report shall not be reproduced except in full.

Approved by:

Mark Liao / Assistant Manager

Tested by:

Spree Yei / Engineer

Laboratory Accreditation:

CerpPASS Technology Corporation Test Laboratory





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History of this test report

[illegible]



1. Summary of Test Procedure and Test Results

1.1 Applicable Standards

ANSI C63.4:2014

ANSI C63.10:2013

FCC Rules and Regulations Part 15 Subpart C §15.247

KDB558074

KDB662911

KDB447498

FCC Rule	Description of Test	Result
15.203	. Antenna Requirement	Pass
15.207	. AC Power Line Conducted Emission	Pass
15.209 15.205	. Radiated Spurious Emission	Pass
15.247(d)	. Conducted Spurious Emission	Pass
15.247(a)(2)	. 6dB Bandwidth	Pass
15.247(b)	. Maximum Peak and Average Output Power	Pass
15.247(e)	. Power Spectral Density	Pass
2.1091	. Radio Frequency Exposure	Pass

This EUT has been also tested and compiled with the requirement of FCC Part 15, Subpart B, recorded in a separate test report.



2. Test Configuration of Equipment under Test

2.1 Feature of Equipment

Equipment	2.4GHz Band RF Module
Module Model No.	SA7522
Host Model No.	HKRL50WH, HKRL60WH, HKRL10WH, HKRL20WH
Brand Name	Pass & Seymour
Product Description	Please refer to User's Manual.
Connecting I/O Port(s)	Please refer to User's Manual.
Frequency Range	802.11b/g/n: 2412-2462 MHz
Modulation Type	802.11b, 802.11g, 802.11n HT20
Data Rate	802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS23, HT20
Antenna Type/ gain	Chip antenna/ 1.5dBi

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.2 Carrier Frequency of Channels

802.11b, 802.11g, 802.11n HT20 (2412MHz~2462MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*01	2412	07	2442
02	2417	08	2447
03	2422	09	2452
04	2427	10	2457
05	2432	*11	2462
*06	2437	---	---

Note: Channels remarked * are selected to perform test.



2.3 Test Mode and Test Software

- During testing, the interface cables and equipment positions were varied according to ANSI C63.4.
- An executive program, "UI_mptool_1:V14" under WIN 7 was executed to transmit and receive data via WLAN.
- The following test modes were performed for the test:

Conducted Emissions from the AC power line and Radiated Spurious Emission (below 1GHz)	
Test Mode	Operating Description
1	802.11g (6Mbps)
Radiated Spurious Emission (above 1GHz)	
Test Mode	Operating Description
1	802.11b (1Mbps)
2	802.11g (6Mbps)
3	802.11n HT20 (6.5Mbps)
Conducted Spurious Emission, 6dB Bandwidth, Maximum Peak Output Power, Power Spectral Density	
Test Mode	Operating Description
1	802.11b (1Mbps)
2	802.11g (6Mbps)
3	802.11n HT20 (6.5Mbps)

2.4 Description of Test System

The EUT is test alone.



2.5 General Information of Test

Test Site	Cerpass Technology Corporation Test Laboratory Address: No.10, Ln. 2, Lianfu St., Luzhu Dist., Taoyuan City 33848, Taiwan (R.O.C.) Tel:+886-3-3226-888 Fax:+886-3-3226-881 Address: No.68-1, Shihbachongsi, Shihding Township, New Taipei City 223, Taiwan, R.O.C. Tel: +886-2-2663-8582	
	FCC	TW1079, TW1061, TW1439
	IC	4934E-1, 4934E-2
	VCCI	T-2205 for Telecommunication Test C-4663 for Conducted emission test R-4399, R-4218 for Radiated emission test G-812, G-813 for radiated disturbance above 1GHz
Frequency Range Investigated:	Conducted: from 150kHz to 30 MHz Radiation: from 30 MHz to 25,000MHz	
Test Distance:	The test distance of radiated emission from antenna to EUT is 3 M.	

2.6 Measurement Uncertainty

Measurement Item	Uncertainty
Radiated Spurious Emission(9KHz~30MHz)	±5.007dB
Radiated Spurious Emission(30MHz~1GHz)	±5.157dB
Radiated Spurious Emission(1GHz~18GHz)	±6.383dB
Radiated Spurious Emission(18GHz~40GHz)	±6.648dB
Conducted Spurious Emission	±1.253dB
6dB Bandwidth	±6.89%
Power Spectral Density	±0.630dB
26 dB Occupied Bandwidth	±6.10%
Frequency Stability	±375KHz
Channel Frequencies Separation	±6.10%
20dB Bandwidth	±6.12%
Dwell Time	±1.34%
Peak Output Power(Conducted Power Meter)	±0.86dB
Temperature	±1.2oC
Humidity	±2.7%
Channel Move Time	±4.53%
Channel Closing Transmission Time	±6.61%
Threshold	±0.631dB
Non occupancy period	±1.17%



3. Test Equipment and Ancillaries Used for Tests

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
EMI Receiver	R&S	ESCI3	100821	2017/09/08	2018/09/07
LISN	Schwarzbeck	NSLK 8127	8127-568	2018/02/26	2019/02/25
Pulse Limiter	R&S	ESH3-Z2	101934	2018/02/22	2019/02/21
Bilog Antenna	Schwarzbeck	VULB9168	275	2017/08/31	2018/08/30
Horn Antenna	EMCO	3115	31601	2017/09/11	2018/09/10
Horn Antenna	EMCO	3116	31970	2018/03/23	2019/03/22
Preamplifier	EM	EM330	60658	2017/09/08	2018/09/07
Preamplifier	EMC INSTRUMENTS	EMC051845SE	980333	2017/09/20	2018/09/19
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2017/11/10	2018/11/09
MXG MW Analog Signal Generator	KEYSIGHT	N5183A	MY50142931	2018/04/10	2019/04/09
Spectrum Analyzer	R&S	FSP40	100219	2017/07/01	2018/06/30
BLUETOOTH TESTER	R&S	CBT	101133	2018/04/02	2019/04/01
Attenuator	KEYSIGHT	8491B	MY39250705	2017/09/04	2018/09/03
Rotary Attenuator	Agilent	8495B	MY42146680	2018/03/29	2019/03/28
Temp & Humi chamber	T-MACHINE	TMJ-9712	T-12-040111	2017/09/04	2018/09/03
Series Power Meter	Anritsu	ML2495A	1224005	2018/03/23	2019/03/22
Power Sensor	Anritsu	MA2411B	1207295	2018/03/23	2019/03/22
Software	Farad	Ez-EMC	ver.ct3a1	N/A	N/A
Software	AUDIX	E3	V8.2014-8-6	N/A	N/A
Software	Keysight	N7607B Signal Studio	V3.0.0.0	N/A	N/A
Software	Keysight	Inservice MonitorUtility	N/A	N/A	N/A



4. Antenna Requirements

4.1 Antenna Construction and Directional Gain

Antenna Type	Chip Antenna
Antenna Gain	1.5 dBi



5. Test of AC Power Line Conducted Emission

5.1 Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz, according to the methods defined in ANSI C63.4-2014. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

Frequency (MHz)	Quasi Peak (dB μ V)	Average (dB μ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

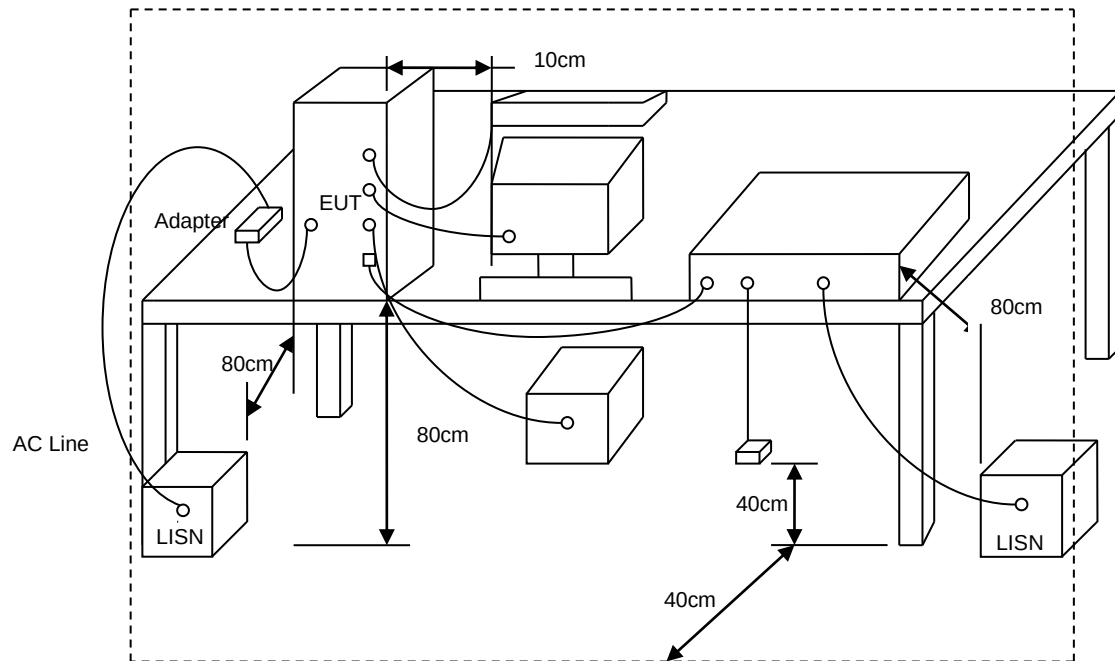
*Decreases with the logarithm of the frequency.

5.2 Test Procedures

- The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- Connect EUT to the power mains through a line impedance stabilization network (LISN).
- All the support units are connecting to the other LISN.
- The LISN provides 50 ohm coupling impedance for the measuring instrument.
- The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
- Both sides of AC line were checked for maximum conducted interference.
- The frequency range from 150 kHz to 30 MHz was searched.
- Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.



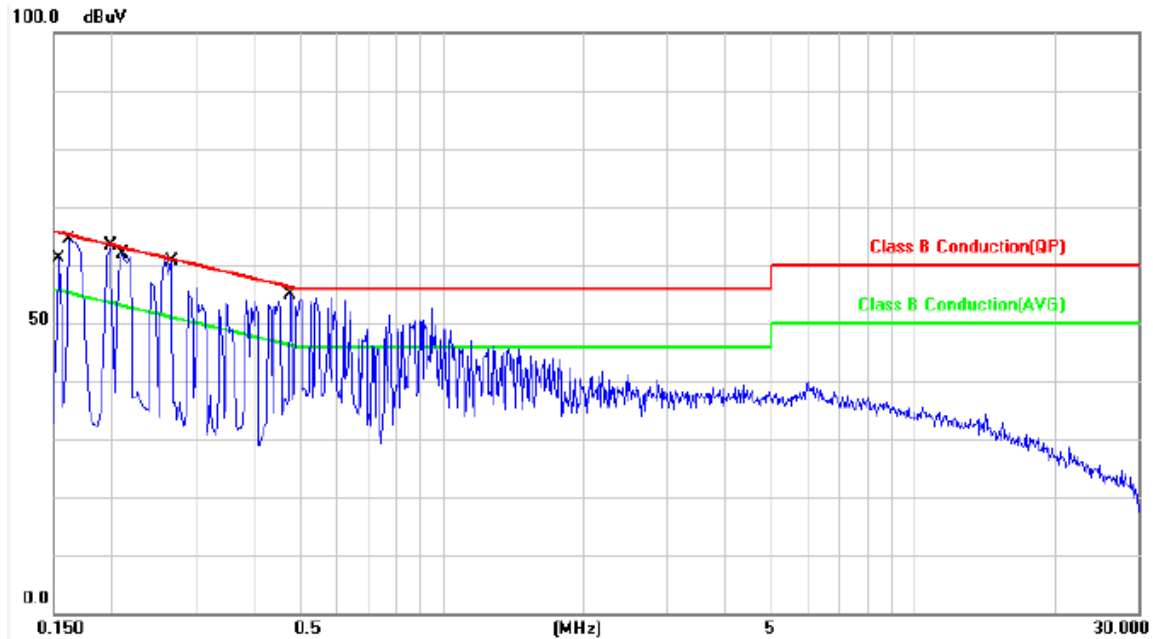
5.3 Typical Test Setup





5.4 Test Result and Data

Power	: AC 120V	Pol/Phase	: LINE
Test Mode	: Mode 1	Temperature	: 20 °C
Test date	: May. 03, 2018	Humidity	: 40 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1539	9.94	50.21	60.15	65.78	-5.63	QP	P
2	0.1539	9.94	32.03	41.97	55.78	-13.81	AVG	P
3	0.1620	9.94	51.05	60.99	65.36	-4.37	QP	P
4	0.1620	9.94	33.44	43.38	55.36	-11.98	AVG	P
5	0.1980	9.94	50.47	60.41	63.69	-3.28	QP	P
6	0.1980	9.94	33.48	43.42	53.69	-10.27	AVG	P
7	0.2100	9.94	45.28	55.22	63.20	-7.98	QP	P
8	0.2100	9.94	27.43	37.37	53.20	-15.83	AVG	P
9	0.2660	9.94	46.31	56.25	61.24	-4.99	QP	P
10	0.2660	9.94	29.09	39.03	51.24	-12.21	AVG	P
11	0.4780	9.96	39.19	49.15	56.37	-7.22	QP	P
12	0.4780	9.96	24.08	34.04	46.37	-12.33	AVG	P

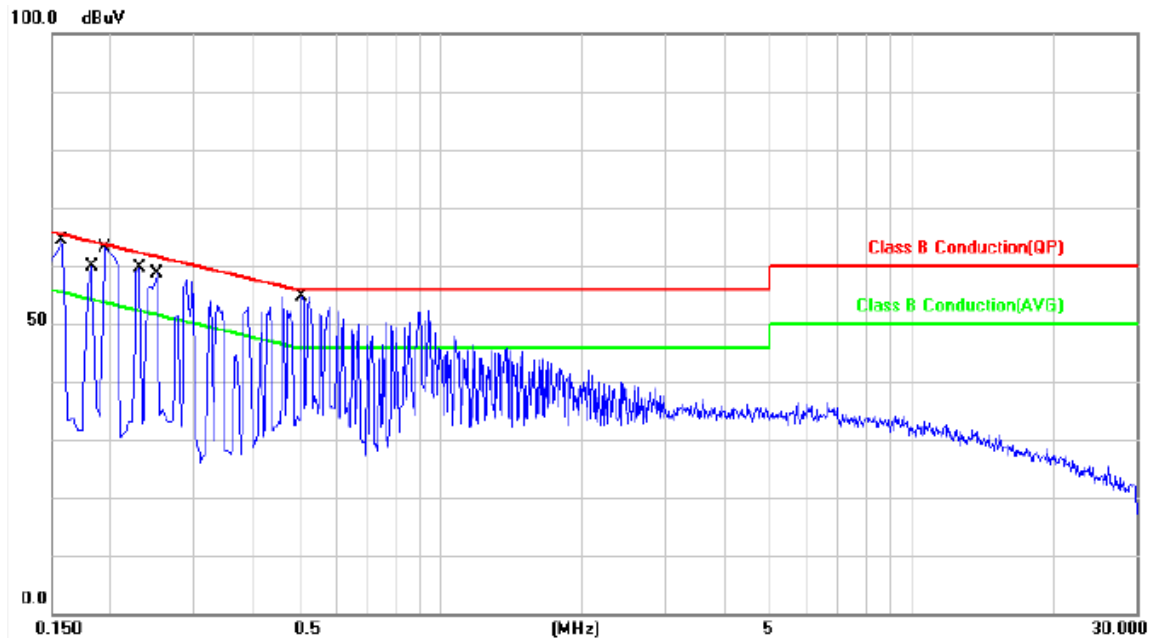
Note: Level = Reading + Factor

Margin = Level – Limit

Factor = (LISN, ISN, PLC or current probe) Factor + Cable Loss+ Attenuator



Power	: AC 120V	Pol/Phase	: NEUTRAL
Test Mode	: Mode 1	Temperature	: 20 °C
Test date	: May. 03, 2018	Humidity	: 40 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1580	9.94	50.49	60.43	65.56	-5.13	QP	P
2	0.1580	9.94	32.34	42.28	55.56	-13.28	AVG	P
3	0.1819	9.94	45.82	55.76	64.39	-8.63	QP	P
4	0.1819	9.94	27.15	37.09	54.39	-17.30	AVG	P
5	0.1940	9.94	50.85	60.79	63.86	-3.07	QP	P
6	0.1940	9.94	32.58	42.52	53.86	-11.34	AVG	P
7	0.2300	9.94	47.38	57.32	62.45	-5.13	QP	P
8	0.2300	9.94	29.94	39.88	52.45	-12.57	AVG	P
9	0.2500	9.94	42.16	52.10	61.75	-9.65	QP	P
10	0.2500	9.94	24.15	34.09	51.75	-17.66	AVG	P
11	0.5100	9.95	40.40	50.35	56.00	-5.65	QP	P
12	0.5100	9.95	24.81	34.76	46.00	-11.24	AVG	P

Note: Level = Reading + Factor

Margin = Level – Limit

Factor = (LISN, ISN, PLC or current probe) Factor + Cable Loss+ Attenuator



6. Test of Radiated Spurious Emission

6.1 Test Limit

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. If the transmitter measurement is based on the maximum conducted output power, the attenuation required under this paragraph shall be 30dB instead of 20dB. In addition, radiated emissions which fall in section 15.205(a) the restricted bands must also comply with the radiated emission limit specified in section 15.209(a).

Frequency (MHz)	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

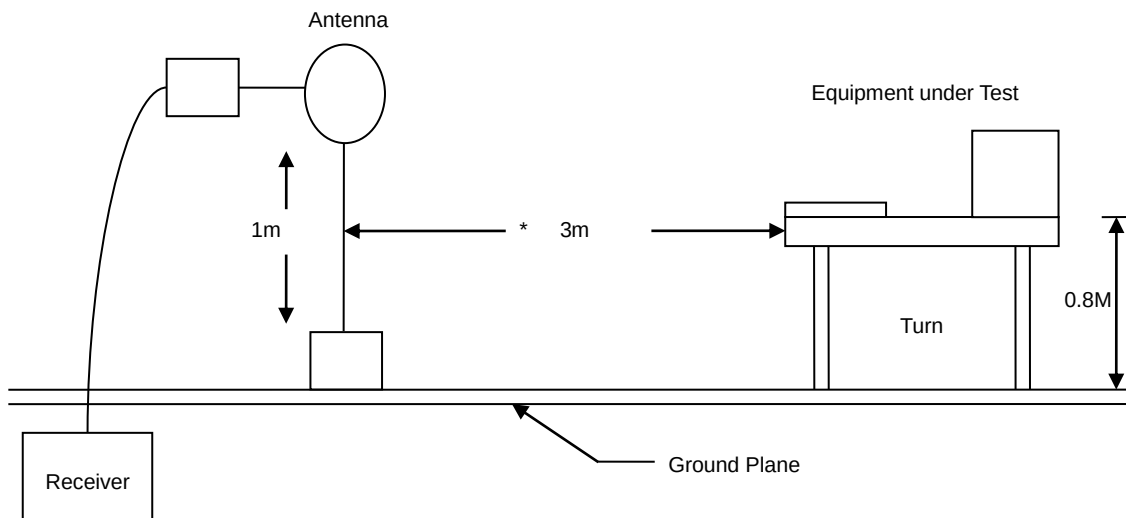
6.2 Test Procedures

- The EUT was placed on a rotatable table top 0.8 meter above ground.
- The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- The table was rotated 360 degrees to determine the position of the highest radiation.
- The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
- For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
- For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- "Cone of radiation" has been considered to be 3dB bandwidth of the measurement antenna.

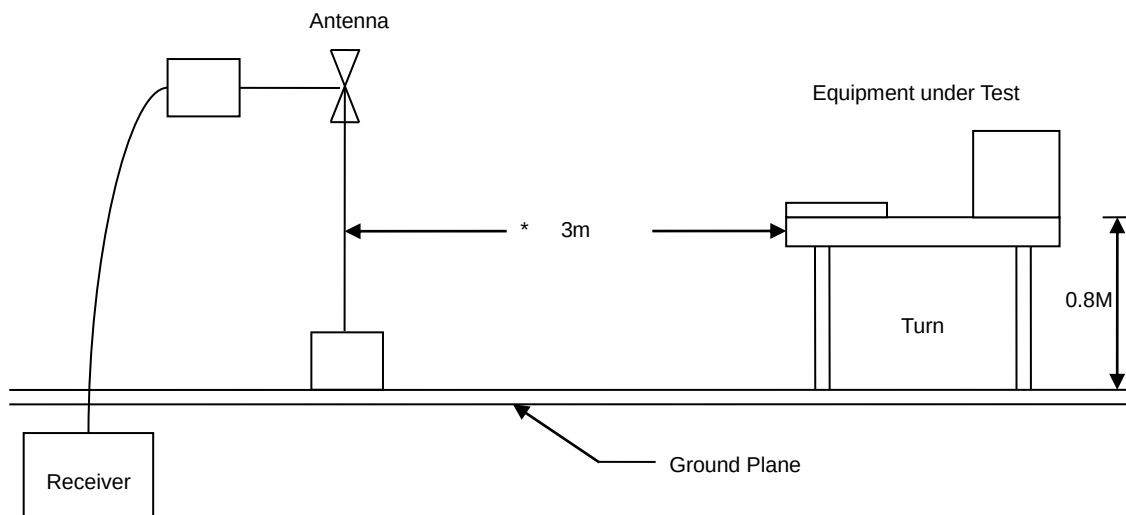


6.3 Typical Test Setup

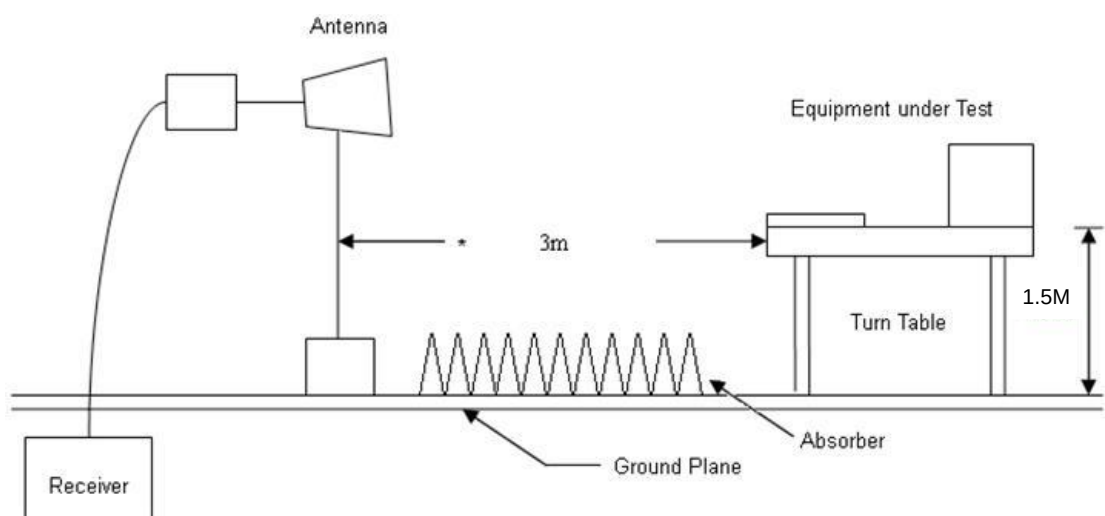
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup



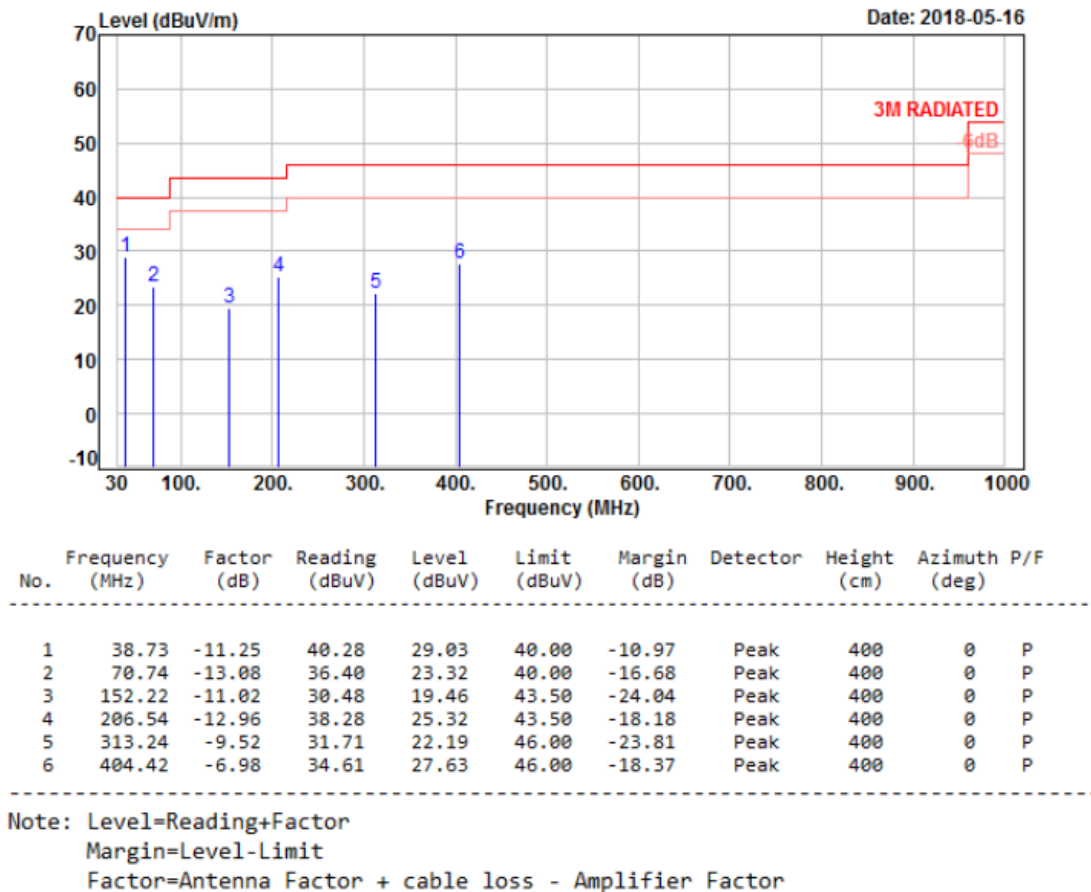


6.4 Test Result and Data (9KHz ~ 30MHz)

The 9kHz - 30MHz spurious emission is under limit 20dB more.

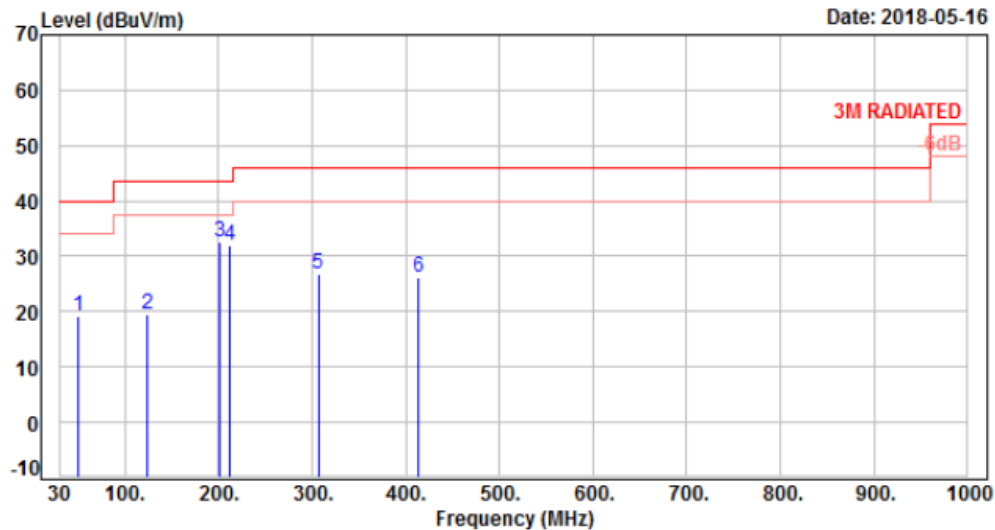
6.5 Test Result and Data (30MHz ~ 1GHz)

Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %





Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	49.40	-10.62	29.75	19.13	40.00	-20.87	Peak	100	0	P
2	124.09	-12.98	32.34	19.36	43.50	-24.14	Peak	100	0	P
3	201.69	-13.02	45.51	32.49	43.50	-11.01	Peak	100	0	P
4	212.36	-12.91	44.89	31.98	43.50	-11.52	Peak	100	0	P
5	306.45	-9.70	36.48	26.78	46.00	-19.22	Peak	100	0	P
6	414.12	-6.74	32.80	26.06	46.00	-19.94	Peak	100	0	P

Note: Level=Reading+Factor

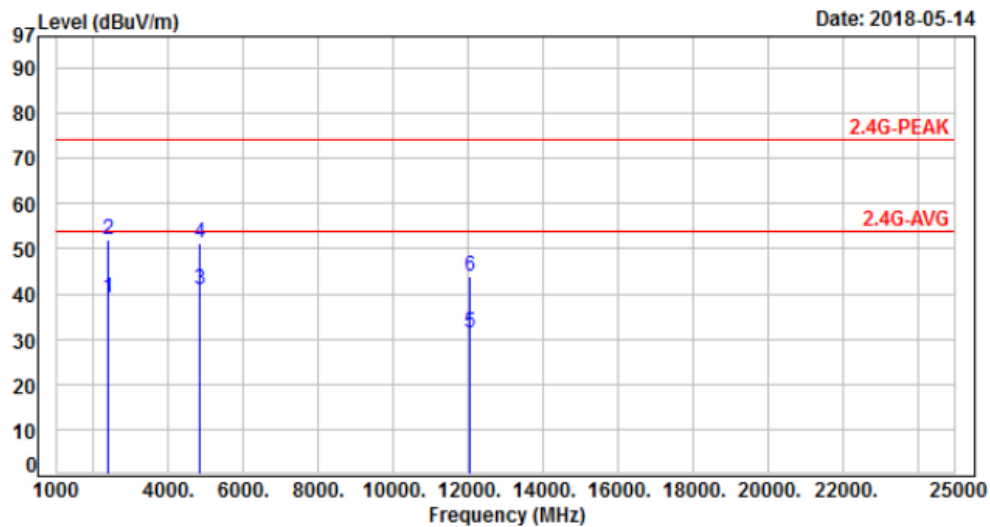
Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



6.6 Test Result and Data (1GHz ~ 25GHz)

Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH01	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-15.96	55.11	39.15	54.00	-14.85	Average	152	177	P
2	2390.00	-15.96	67.91	51.95	74.00	-22.05	Peak	152	177	P
3	4824.00	-8.80	49.79	40.99	54.00	-13.01	Average	141	120	P
4	4824.00	-8.80	60.21	51.41	74.00	-22.59	Peak	141	120	P
5	12060.00	1.21	30.21	31.42	54.00	-22.58	Average	100	122	P
6	12060.00	1.21	42.71	43.92	74.00	-30.08	Peak	100	122	P

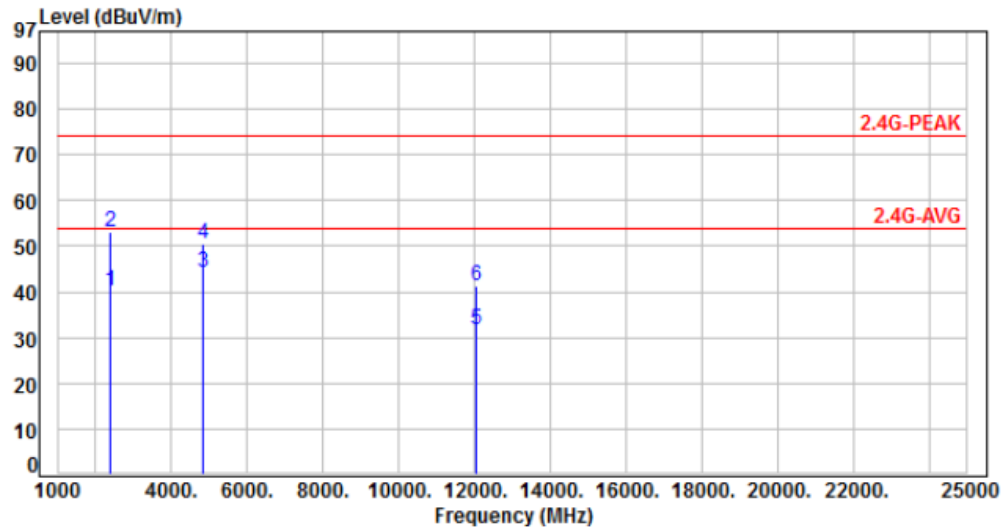
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH01	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-15.96	56.21	40.25	54.00	-13.75	Average	220	360	P
2	2390.00	-15.96	69.11	53.15	74.00	-20.85	Peak	220	360	P
3	4824.00	-8.80	53.13	44.33	54.00	-9.67	Average	290	0	P
4	4824.00	-8.80	59.19	50.39	74.00	-23.61	Peak	290	0	P
5	12060.00	1.21	30.51	31.72	54.00	-22.28	Average	106	77	P
6	12060.00	1.21	40.23	41.44	74.00	-32.56	Peak	106	77	P

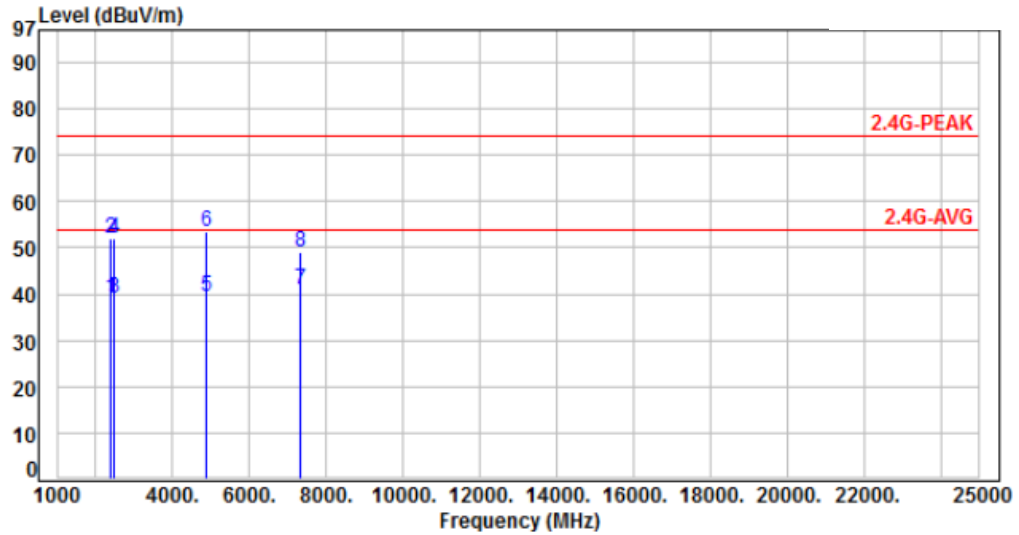
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH06	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-15.96	54.91	38.95	54.00	-15.05	Average	280	360	P
2	2390.00	-15.96	67.81	51.85	74.00	-22.15	Peak	280	360	P
3	2483.50	-15.65	54.70	39.05	54.00	-14.95	Average	280	360	P
4	2483.50	-15.65	67.50	51.85	74.00	-22.15	Peak	280	360	P
5	4874.00	-8.65	48.20	39.55	54.00	-14.45	Average	100	127	P
6	4874.00	-8.65	62.10	53.45	74.00	-20.55	Peak	100	127	P
7	7311.00	-4.69	45.49	40.80	54.00	-13.20	Average	100	291	P
8	7311.00	-4.69	53.59	48.90	74.00	-25.10	Peak	100	291	P

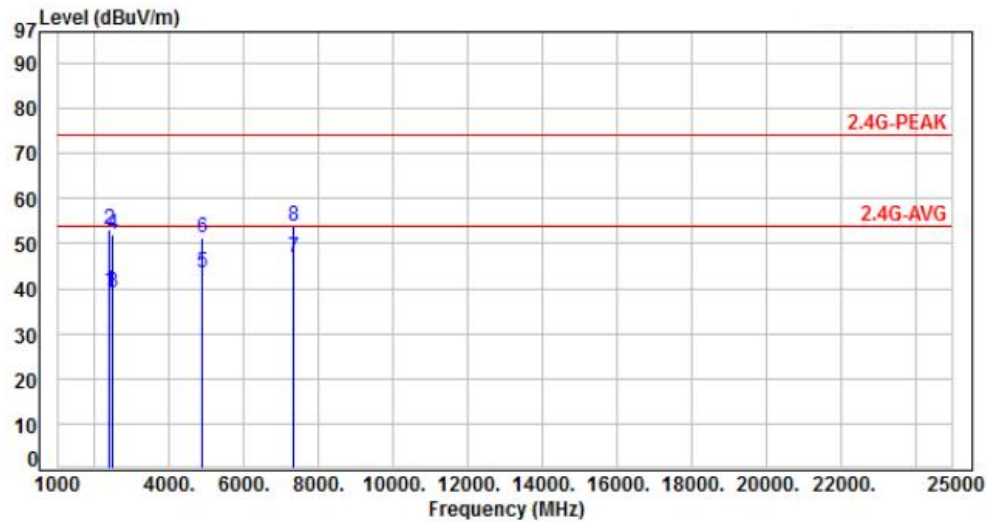
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH06	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-15.96	55.51	39.55	54.00	-14.45	Average	220	337	P
2	2390.00	-15.96	69.21	53.25	74.00	-20.75	Peak	220	337	P
3	2483.50	-15.65	54.80	39.15	54.00	-14.85	Average	220	337	P
4	2483.50	-15.65	67.60	51.95	74.00	-22.05	Peak	220	337	P
5	4874.00	-8.65	52.10	43.45	54.00	-10.55	Average	276	346	P
6	4874.00	-8.65	60.10	51.45	74.00	-22.55	Peak	276	346	P
7	7311.00	-4.69	51.59	46.90	54.00	-7.10	Average	232	290	P
8	7311.00	-4.69	58.59	53.90	74.00	-20.10	Peak	232	290	P

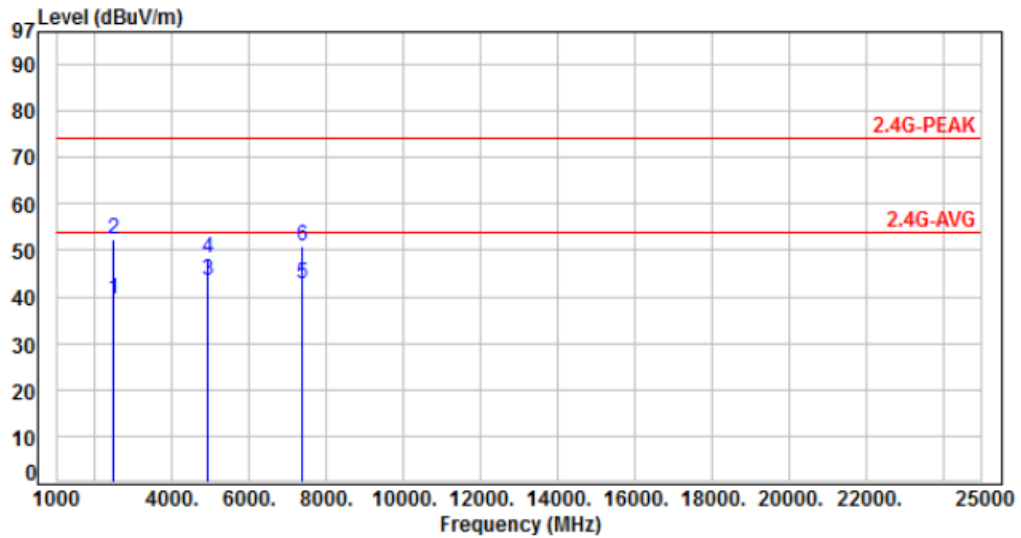
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH11	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2483.50	-15.65	55.10	39.45	54.00	-14.55	Average	334	16	P
2	2483.50	-15.65	68.20	52.55	74.00	-21.45	Peak	334	16	P
3	4924.00	-8.49	52.19	43.70	54.00	-10.30	Average	100	310	P
4	4924.00	-8.49	56.89	48.40	74.00	-25.60	Peak	100	310	P
5	7386.00	-4.48	47.20	42.72	54.00	-11.28	Average	110	152	P
6	7386.00	-4.48	55.30	50.82	74.00	-23.18	Peak	110	152	P

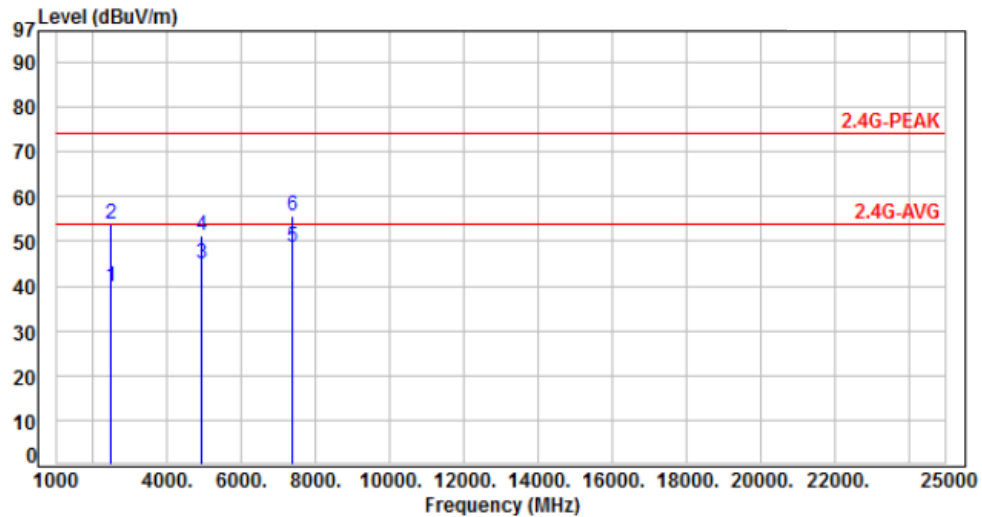
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH11	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2483.50	-15.65	55.60	39.95	54.00	-14.05	Average	100	343	P
2	2483.50	-15.65	69.50	53.85	74.00	-20.15	Peak	100	343	P
3	4924.00	-8.49	53.59	45.10	54.00	-8.90	Average	110	327	P
4	4924.00	-8.49	59.89	51.40	74.00	-22.60	Peak	110	327	P
5	7386.00	-4.48	53.10	48.62	54.00	-5.38	Average	100	20	P
6	7386.00	-4.48	60.21	55.73	74.00	-18.27	Peak	100	20	P

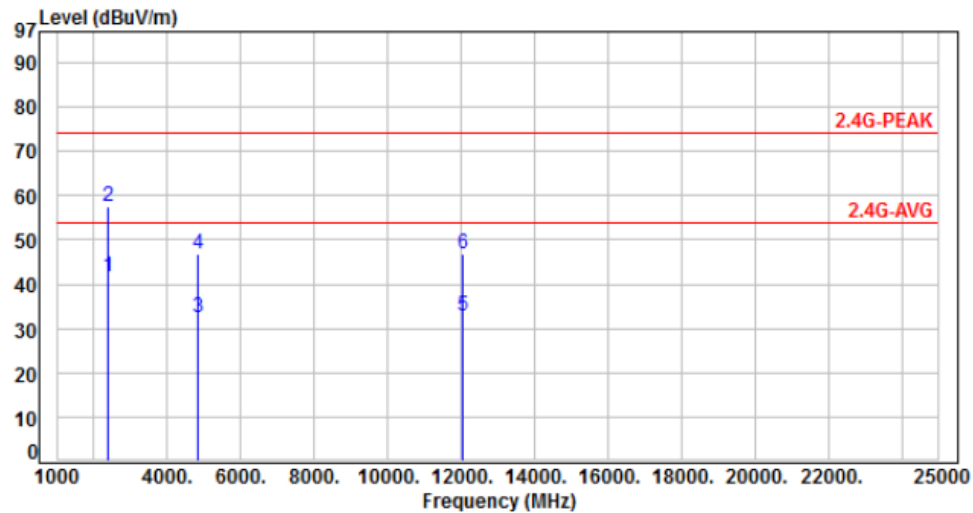
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, CH01	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-15.96	57.51	41.55	54.00	-12.45	Average	100	0	P
2	2390.00	-15.96	73.61	57.65	74.00	-16.35	Peak	100	0	P
3	4824.00	-8.80	41.19	32.39	54.00	-21.61	Average	288	120	P
4	4824.00	-8.80	55.59	46.79	74.00	-27.21	Peak	288	120	P
5	12060.00	1.21	31.65	32.86	54.00	-21.14	Average	100	166	P
6	12060.00	1.21	45.69	46.90	74.00	-27.10	Peak	100	166	P

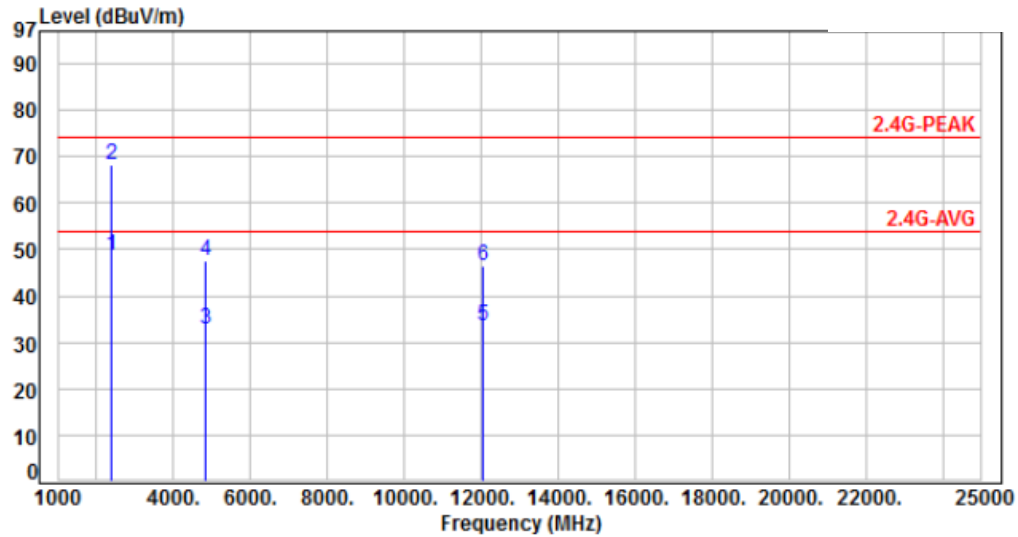
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, CH01	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-15.96	64.71	48.75	54.00	-5.25	Average	170	360	P
2	2390.00	-15.96	84.21	68.25	74.00	-5.75	Peak	170	360	P
3	4824.00	-8.80	41.69	32.89	54.00	-21.11	Average	361	360	P
4	4824.00	-8.80	56.19	47.39	74.00	-26.61	Peak	361	360	P
5	12060.00	1.21	32.31	33.52	54.00	-20.48	Average	100	57	P
6	12060.00	1.21	45.31	46.52	74.00	-27.48	Peak	100	57	P

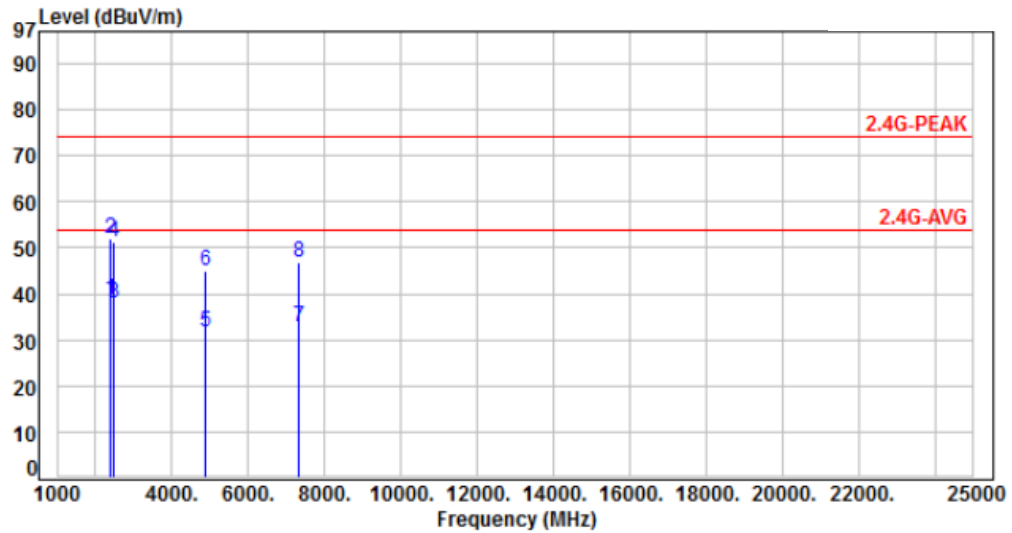
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, CH06	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-15.96	54.54	38.58	54.00	-15.42	Average	100	357	P
2	2390.00	-15.96	67.81	51.85	74.00	-22.15	Peak	100	357	P
3	2483.50	-15.65	53.70	38.05	54.00	-15.95	Average	100	357	P
4	2483.50	-15.65	66.90	51.25	74.00	-22.75	Peak	100	357	P
5	4874.00	-8.65	40.20	31.55	54.00	-22.45	Average	100	126	P
6	4874.00	-8.65	53.70	45.05	74.00	-28.95	Peak	100	126	P
7	7311.00	-4.69	37.49	32.80	54.00	-21.20	Average	345	151	P
8	7311.00	-4.69	51.49	46.80	74.00	-27.20	Peak	345	151	P

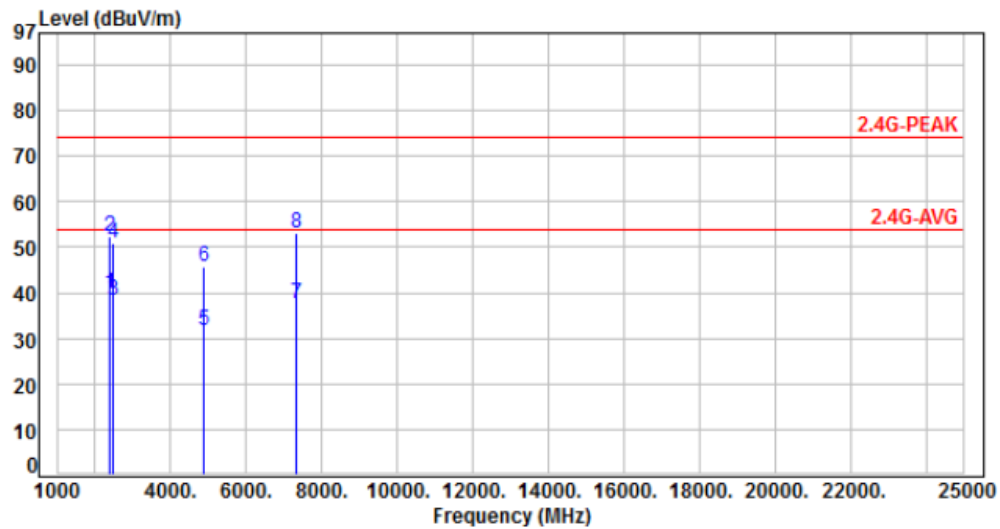
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, CH06	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-15.96	55.91	39.95	54.00	-14.05	Average	287	360	P
2	2390.00	-15.96	68.51	52.55	74.00	-21.45	Peak	287	360	P
3	2483.50	-15.65	53.90	38.25	54.00	-15.75	Average	287	360	P
4	2483.50	-15.65	66.60	50.95	74.00	-23.05	Peak	287	360	P
5	4874.00	-8.65	40.30	31.65	54.00	-22.35	Average	269	347	P
6	4874.00	-8.65	54.50	45.85	74.00	-28.15	Peak	269	347	P
7	7311.00	-4.69	42.29	37.60	54.00	-16.40	Average	100	280	P
8	7311.00	-4.69	57.89	53.20	74.00	-20.80	Peak	100	280	P

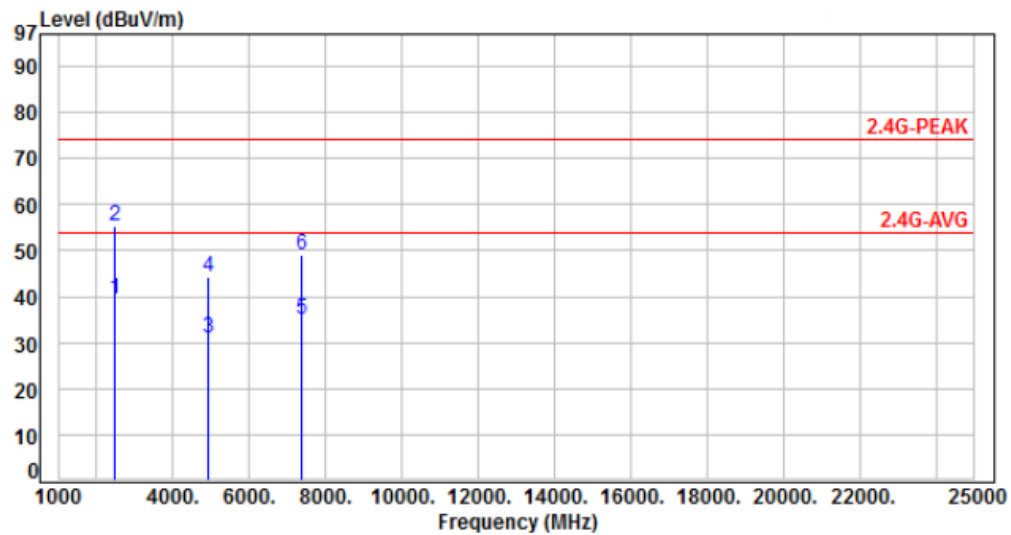
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, CH11	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2483.50	-15.65	55.20	39.55	54.00	-14.45	Average	210	346	P
2	2483.50	-15.65	70.80	55.15	74.00	-18.85	Peak	210	346	P
3	4924.00	-8.49	39.59	31.10	54.00	-22.90	Average	100	305	P
4	4924.00	-8.49	52.59	44.10	74.00	-29.90	Peak	100	305	P
5	7386.00	-4.48	39.60	35.12	54.00	-18.88	Average	110	155	P
6	7386.00	-4.48	53.50	49.02	74.00	-24.98	Peak	110	155	P

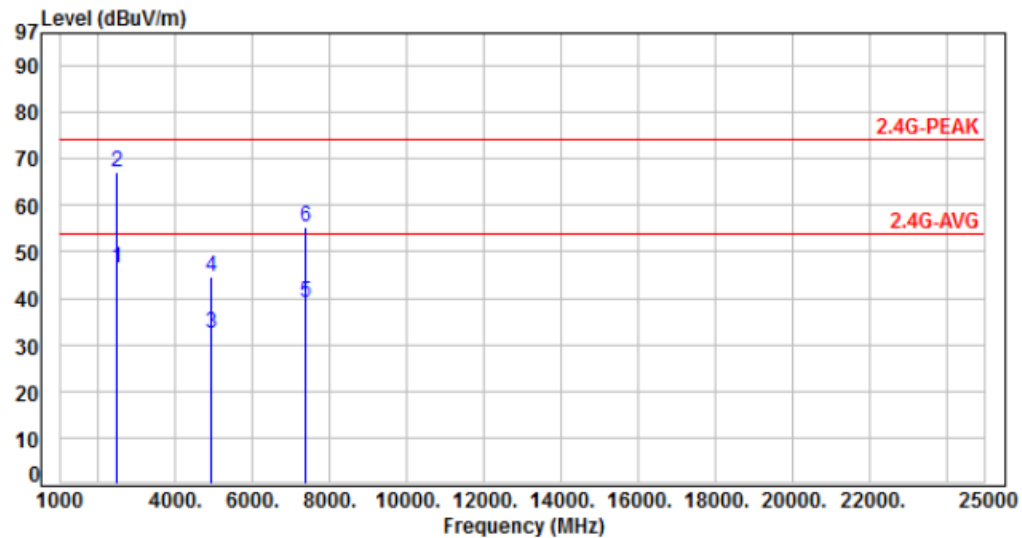
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, CH11	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2483.50	-15.65	62.30	46.65	54.00	-7.35	Average	111	24	P
2	2483.50	-15.65	82.60	66.95	74.00	-7.05	Peak	111	24	P
3	4924.00	-8.49	40.79	32.30	54.00	-21.70	Average	105	351	P
4	4924.00	-8.49	53.29	44.80	74.00	-29.20	Peak	105	351	P
5	7386.00	-4.48	43.70	39.22	54.00	-14.78	Average	100	30	P
6	7386.00	-4.48	59.80	55.32	74.00	-18.68	Peak	100	30	P

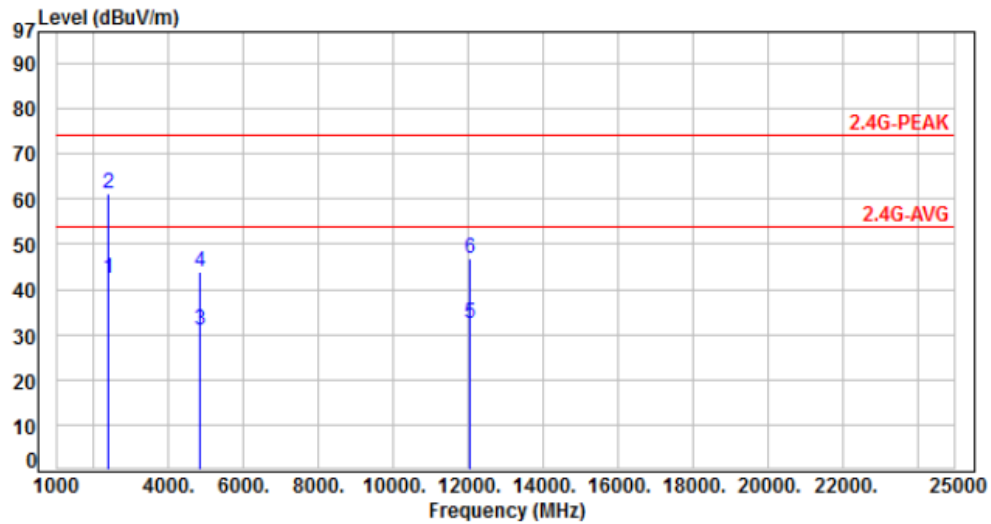
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 3, CH01	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-15.96	58.51	42.55	54.00	-11.45	Average	220	15	P
2	2390.00	-15.96	77.31	61.35	74.00	-12.65	Peak	220	15	P
3	4824.00	-8.80	39.63	30.83	54.00	-23.17	Average	107	351	P
4	4824.00	-8.80	52.59	43.79	74.00	-30.21	Peak	107	351	P
5	12060.00	1.21	31.34	32.55	54.00	-21.45	Average	100	167	P
6	12060.00	1.21	45.77	46.98	74.00	-27.02	Peak	100	167	P

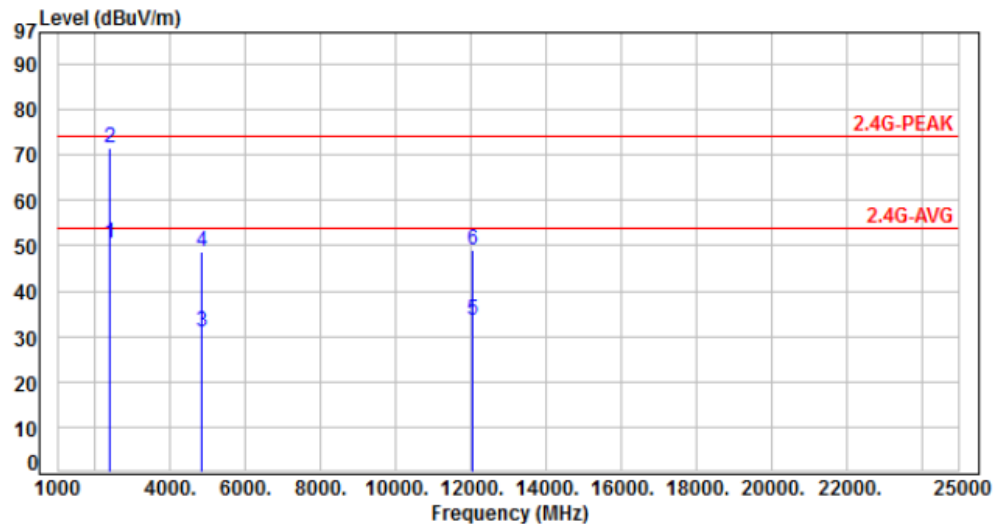
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, CH01	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-15.96	66.31	50.35	54.00	-3.65	Average	200	340	P
2	2390.00	-15.96	87.61	71.65	74.00	-2.35	Peak	200	340	P
3	4824.00	-8.80	39.79	30.99	54.00	-23.01	Average	362	360	P
4	4824.00	-8.80	57.49	48.69	74.00	-25.31	Peak	362	360	P
5	12060.00	1.21	32.23	33.44	54.00	-20.56	Average	105	282	P
6	12060.00	1.21	47.70	48.91	74.00	-25.09	Peak	105	282	P

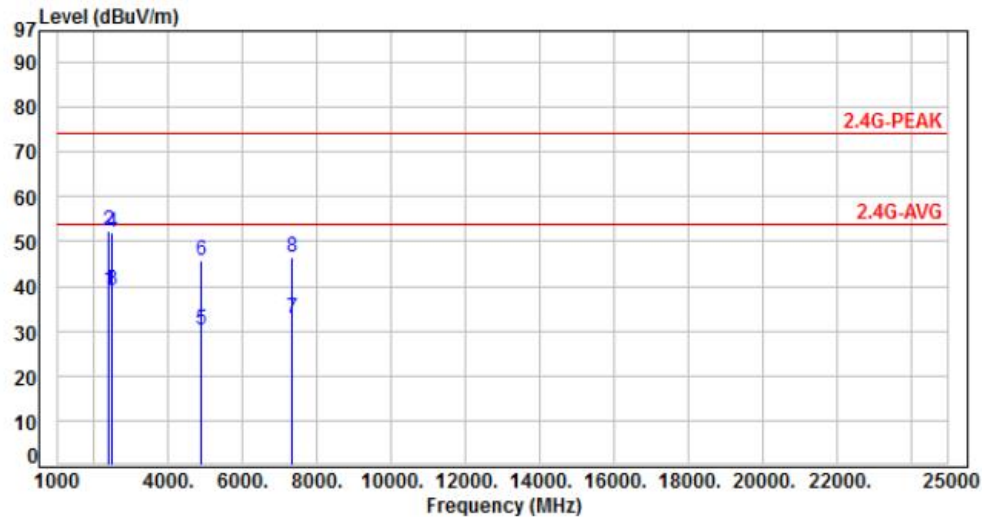
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 3, CH06	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-15.96	55.21	39.25	54.00	-14.75	Average	313	342	P
2	2390.00	-15.96	68.51	52.55	74.00	-21.45	Peak	313	342	P
3	2483.50	-15.65	54.80	39.15	54.00	-14.85	Average	313	342	P
4	2483.50	-15.65	67.70	52.05	74.00	-21.95	Peak	313	342	P
5	4874.00	-8.65	38.92	30.27	54.00	-23.73	Average	115	130	P
6	4874.00	-8.65	54.50	45.85	74.00	-28.15	Peak	115	130	P
7	7311.00	-4.69	37.49	32.80	54.00	-21.20	Average	309	156	P
8	7311.00	-4.69	51.21	46.52	74.00	-27.48	Peak	309	156	P

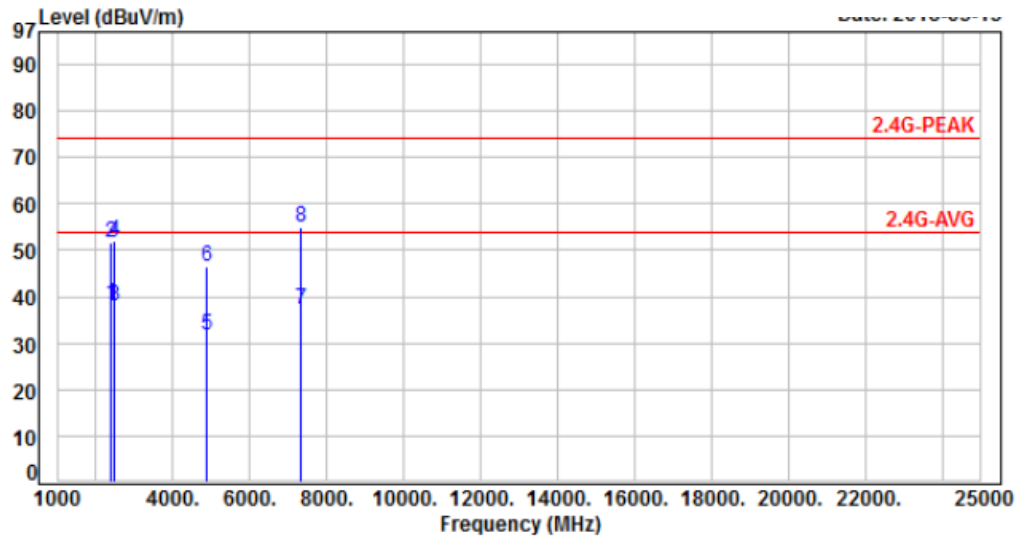
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, CH06	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-15.96	54.21	38.25	54.00	-15.75	Average	290	356	P
2	2390.00	-15.96	67.51	51.55	74.00	-22.45	Peak	290	356	P
3	2483.50	-15.65	53.80	38.15	54.00	-15.85	Average	290	356	P
4	2483.50	-15.65	67.60	51.95	74.00	-22.05	Peak	290	356	P
5	4874.00	-8.65	40.20	31.55	54.00	-22.45	Average	100	55	P
6	4874.00	-8.65	54.98	46.33	74.00	-27.67	Peak	100	55	P
7	7311.00	-4.69	42.09	37.40	54.00	-16.60	Average	270	292	P
8	7311.00	-4.69	59.49	54.80	74.00	-19.20	Peak	270	292	P

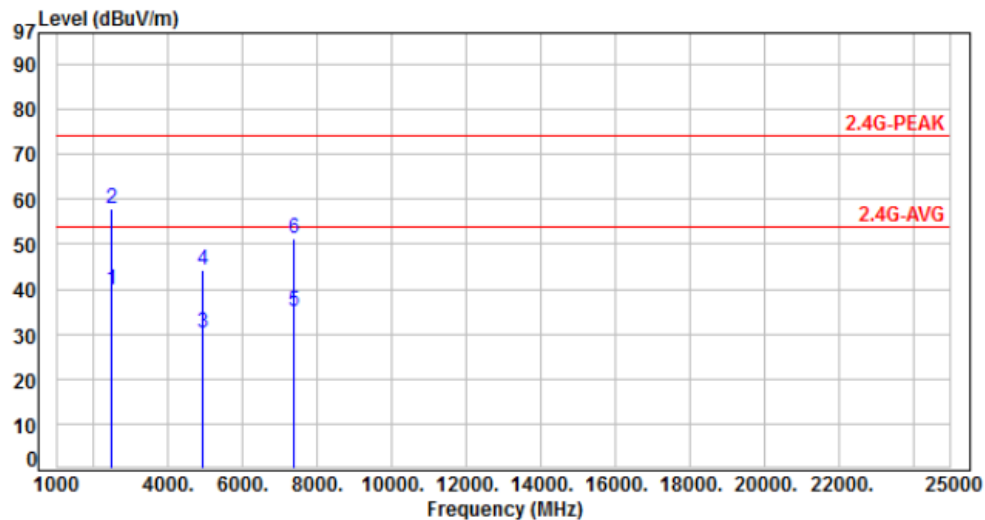
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: VERTICAL
Test Mode	: Mode 3, CH11	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2483.50	-15.65	55.60	39.95	54.00	-14.05	Average	100	325	P
2	2483.50	-15.65	73.60	57.95	74.00	-16.05	Peak	100	325	P
3	4924.00	-8.49	38.79	30.30	54.00	-23.70	Average	112	341	P
4	4924.00	-8.49	52.59	44.10	74.00	-29.90	Peak	112	341	P
5	7386.00	-4.48	39.55	35.07	54.00	-18.93	Average	100	151	P
6	7386.00	-4.48	55.60	51.12	74.00	-22.88	Peak	100	151	P

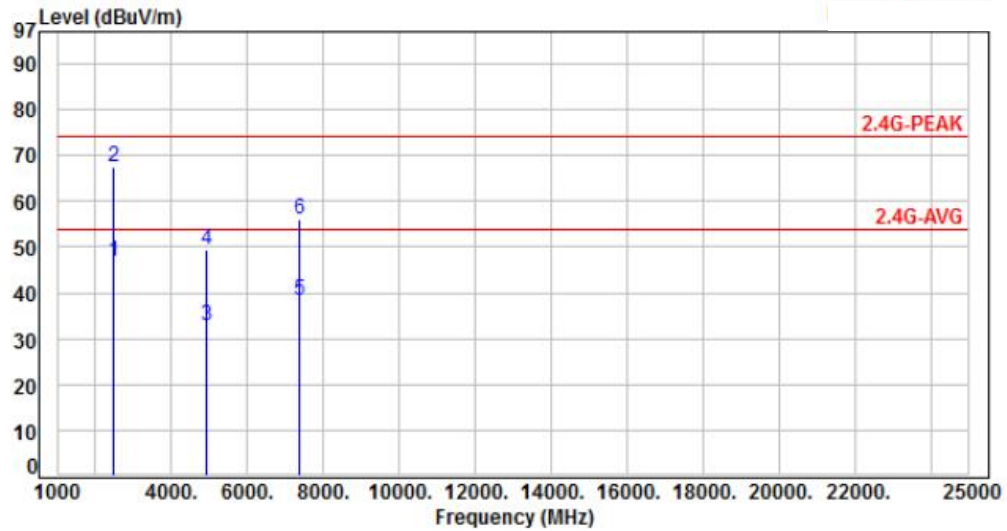
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, CH11	Temperature	: 21 °C
Test Date	: May. 14, 2018	Humidity	: 65 %



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV)	Limit (dBUV)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2483.50	-15.65	62.60	46.95	54.00	-7.05	Average	162	0	P
2	2483.50	-15.65	83.22	67.57	74.00	-6.43	Peak	162	0	P
3	4924.00	-8.49	41.19	32.70	54.00	-21.30	Average	100	312	P
4	4924.00	-8.49	57.79	49.30	74.00	-24.70	Peak	100	312	P
5	7386.00	-4.48	42.90	38.42	54.00	-15.58	Average	108	290	P
6	7386.00	-4.48	60.60	56.12	74.00	-17.88	Peak	108	290	P

Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



6.7 Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.09000 – 0.11000	16.42000 – 16.42300	399.9 – 410.0	4.500 – 5.250
0.49500 – 0.505**	16.69475 – 16.69525	608.0 – 614.0	5.350 – 5.460
2.17350 – 2.19050	16.80425 – 16.80475	960.0 – 1240.0	7.250 – 7.750
4.12500 – 4.12800	25.50000 – 25.67000	1300.0 – 1427.0	8.025 – 8.500
4.17725 – 4.17775	37.50000 – 38.25000	1435.0 – 1626.5	9.000 – 9.200
4.20725 – 4.20775	73.00000 – 74.60000	1645.5 – 1646.5	9.300 – 9.500
6.21500 – 6.21800	74.80000 – 75.20000	1660.0 – 1710.0	10.600 – 12.700
6.26775 – 6.26825	108.00000 – 121.94000	1718.8 – 1722.2	13.250 – 13.400
6.31175 – 6.31225	123.00000 – 138.00000	2200.0 – 2300.0	14.470 – 14.500
8.29100 – 8.29400	149.90000 – 150.05000	2310.0 – 2390.0	15.350 – 16.200
8.36200 – 8.36600	156.52475 – 156.52525	2483.5 – 2500.0	17.700 – 21.400
8.37625 – 8.38675	156.70000 – 156.90000	2655.0 – 2900.0	22.010 – 23.120
8.41425 – 8.41475	162.01250 – 167.17000	3260.0 – 3267.0	23.600 – 24.000
12.29000 – 12.29300	167.72000 – 173.20000	3332.0 – 3339.0	31.200 – 31.800
12.51975 – 12.52025	240.00000 – 285.00000	3345.8 – 3358.0	36.430 – 36.500
12.57675 – 12.57725	322.00000 – 335.40000	3600.0 – 4400.0	Above 38.6
13.36000 – 13.41000			

** : Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz



7. Test of Conducted Spurious Emission

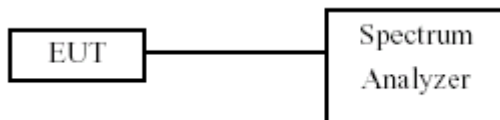
7.1 Test Limit

Below -20dB of the highest emission level of operating band (In 100 kHz Resolution Bandwidth)

7.2 Test Procedure

- The transmitter output was connected to the spectrum analyzer via a low lose cable.
- Set RBW of spectrum analyzer to 100 KHz and VBW of spectrum analyzer to 300 KHz with convenient frequency span including 100 KHz bandwidth from band edge.
- Peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20dB relative to the maximum measured in-band peak PSD level.
- The band edges was measured and recorded.

7.3 Test Setup Layout



7.4 Test Result and Data

Test Result : PASS

Test Date : May. 16, 2018

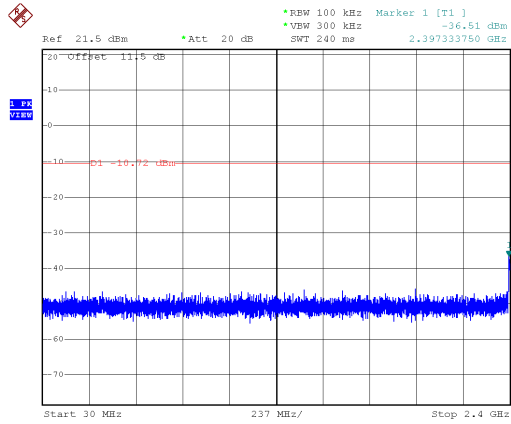
Temperature : 23°C

Humidity : 61%

Note: Test plots refers to the following pages.

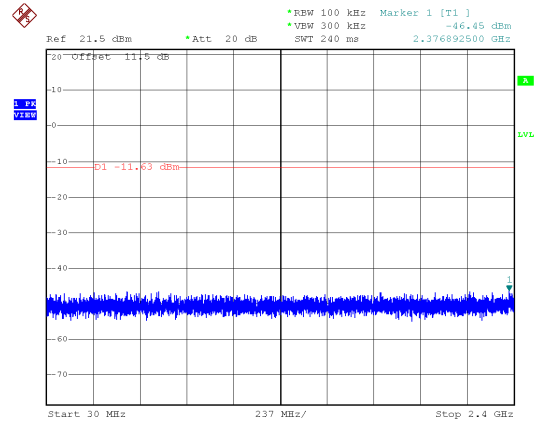


Modulation Type: 802.11b, CH 01

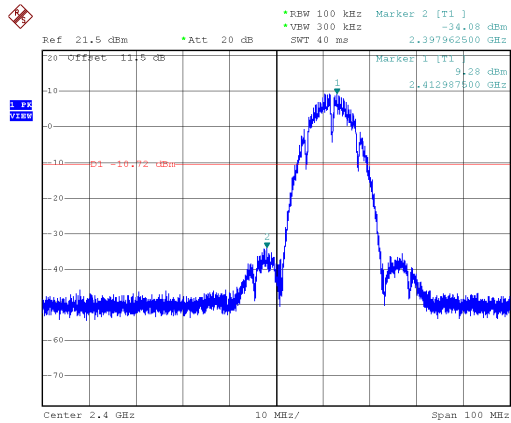


Date: 16.MAY.2018 16:43:29

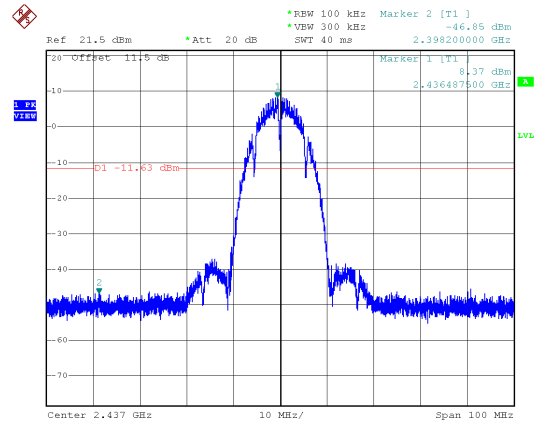
Modulation Type: 802.11b, CH 06



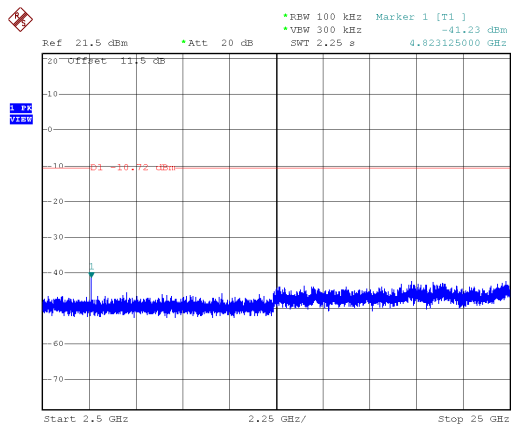
Date: 16.MAY.2018 16:45:01



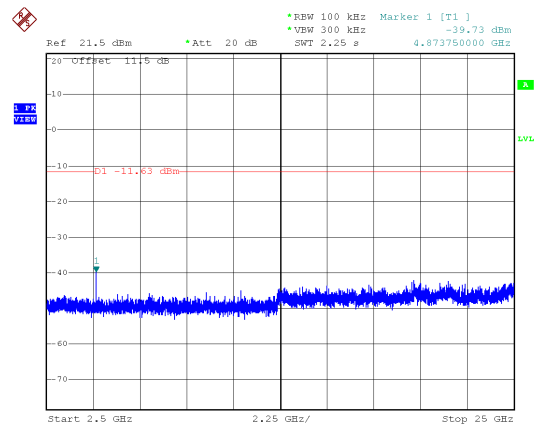
Date: 16.MAY.2018 16:42:55



Date: 16.MAY.2018 16:44:31



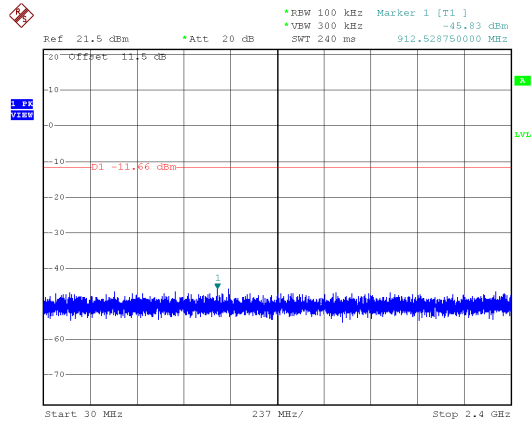
Date: 16.MAY.2018 16:43:48



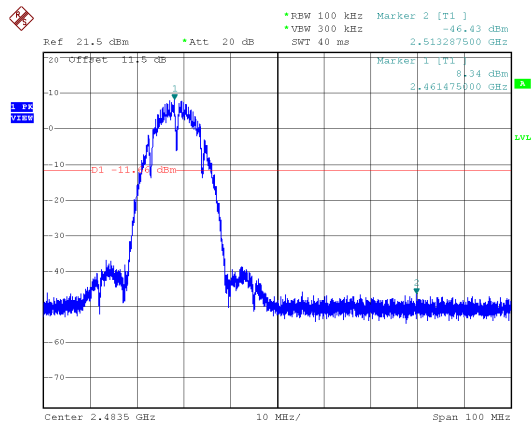
Date: 16.MAY.2018 16:45:22



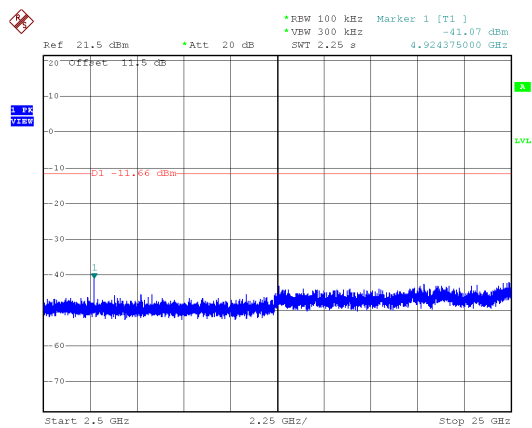
Modulation Type: 802.11b, CH 11



Date: 16.MAY.2018 16:46:23



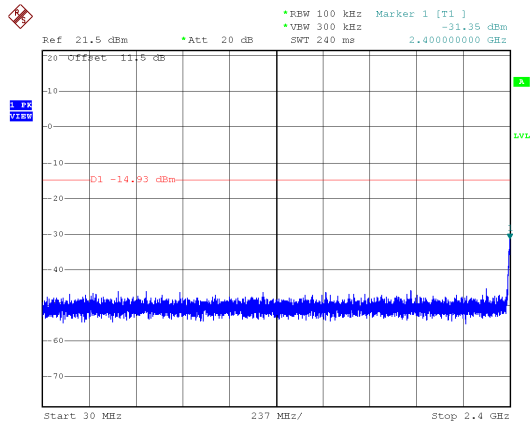
Date: 16.MAY.2018 16:46:05



Date: 16.MAY.2018 16:46:43

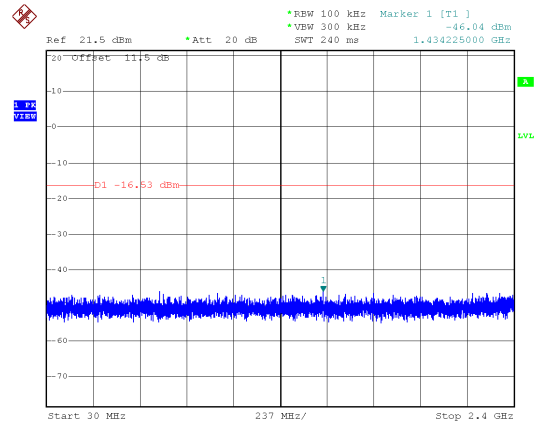


Modulation Type: 802.11g, CH 01

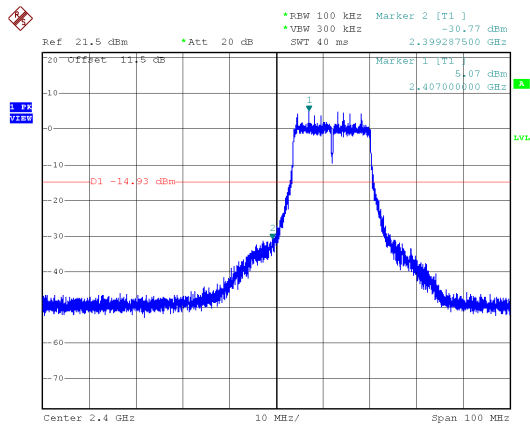


Date: 16.MAY.2018 16:48:32

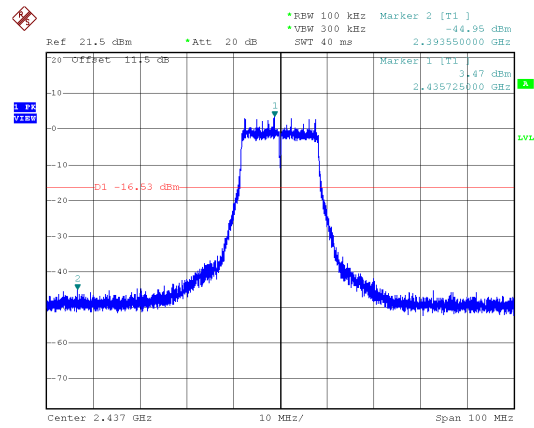
Modulation Type: 802.11g, CH 06



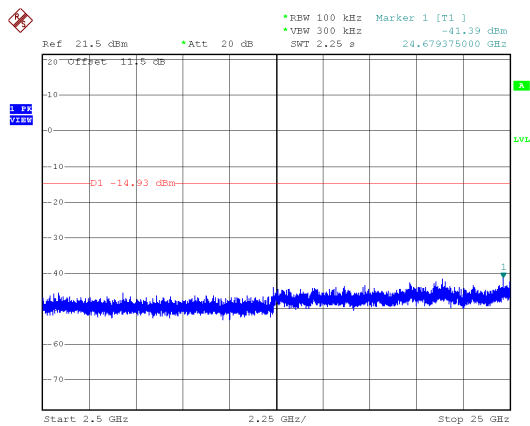
Date: 16.MAY.2018 16:50:46



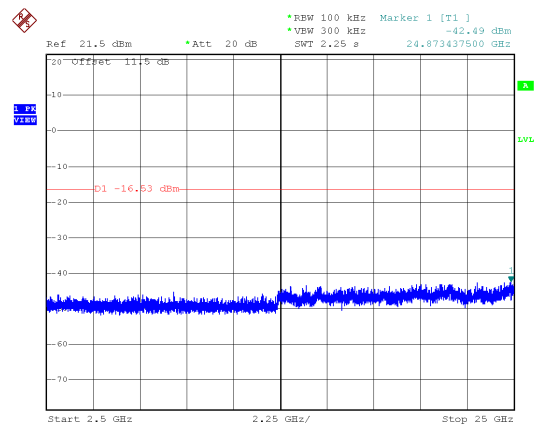
Date: 16.MAY.2018 16:48:09



Date: 16.MAY.2018 16:50:28



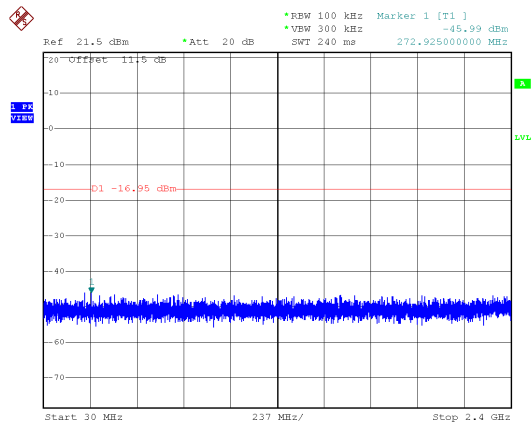
Date: 16.MAY.2018 16:48:52



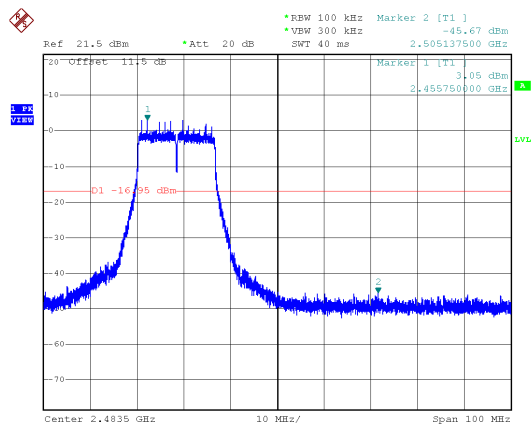
Date: 16.MAY.2018 16:51:09



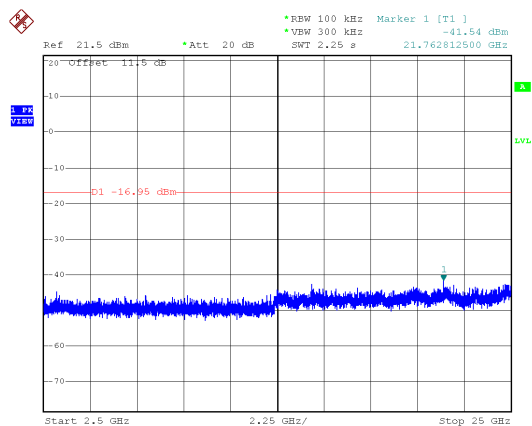
Modulation Type: 802.11g, CH 11



Date: 16.MAY.2018 16:52:27



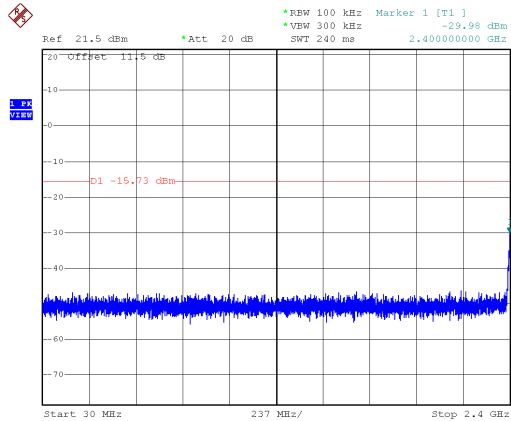
Date: 16.MAY.2018 16:52:08



Date: 16.MAY.2018 16:52:46

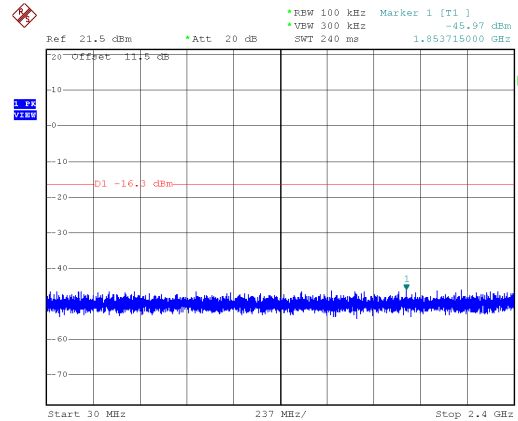


Modulation Type: 802.11ac VHT20, CH01

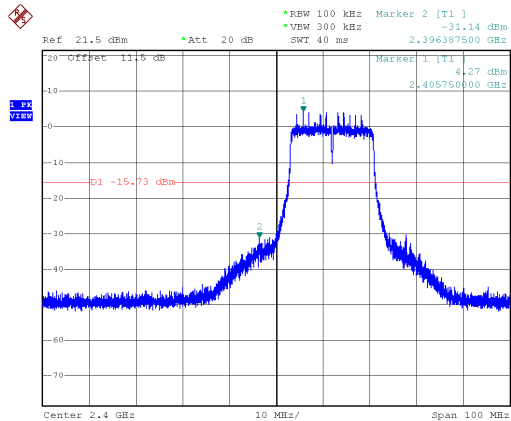


Date: 16.MAY.2018 16:54:08

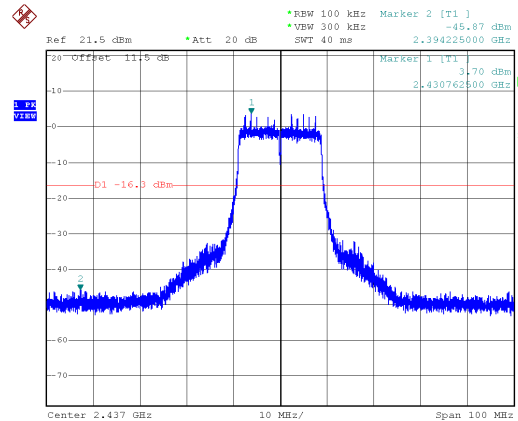
Modulation Type: 802.11ac VHT20, CH06



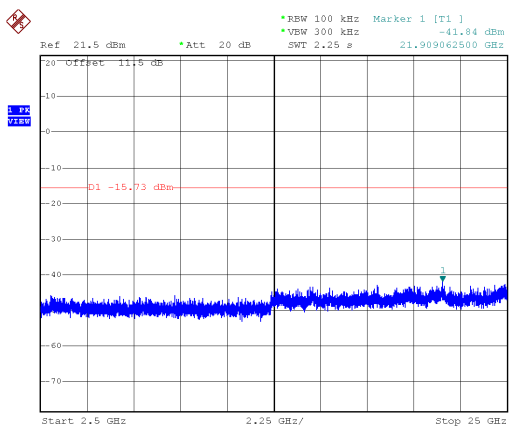
Date: 16.MAY.2018 16:55:41



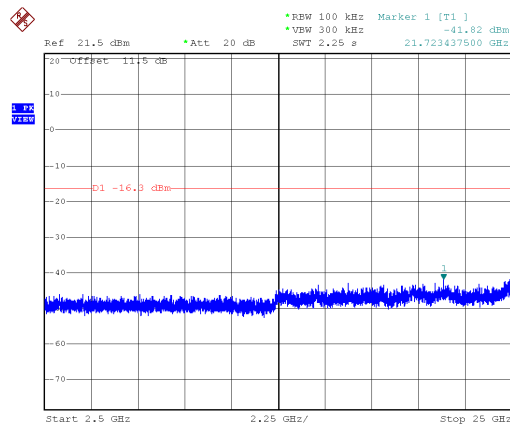
Date: 16.MAY.2018 16:53:47



Date: 16.MAY.2018 16:55:19



Date: 16.MAY.2018 16:54:30



Date: 16.MAY.2018 16:56:02



8. 6dB Bandwidth Measurement Data

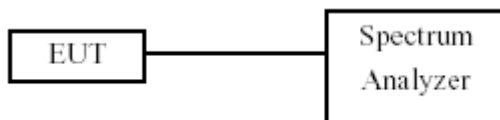
8.1 Test Limit

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

8.2 Test Procedures

- The transmitter output was connected to the spectrum analyzer.
- Set RBW of spectrum analyzer to 1~5% of the emission bandwidth and VBW $\geq 3 \times$ RBW.
- The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.
- The 6dB Bandwidth was measured and recorded.

8.3 Test Setup Layout



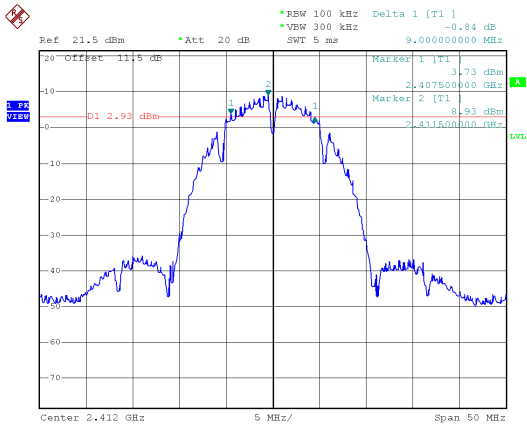
8.4 Test Result and Data

Temperature : 23°C

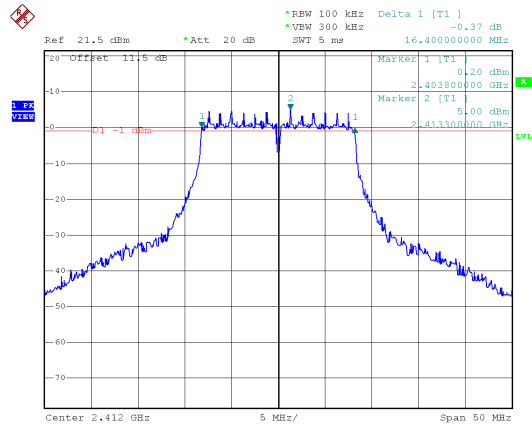
Humidity : 61%

Test Date : May. 16, 2018

Modulation Type	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
IEEE 802.11b (1Mbps)	01	2412	9.00	0.5
	06	2437	9.20	0.5
	11	2462	9.10	0.5
IEEE 802.11g (6Mbps)	01	2412	16.40	0.5
	06	2437	16.40	0.5
	11	2462	16.30	0.5
IEEE 802.11n HT20 (6.5Mbps)	01	2412	17.50	0.5
	06	2437	17.40	0.5
	11	2462	17.60	0.5

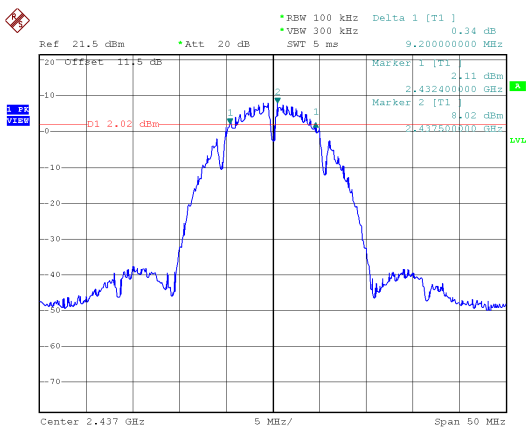
Modulation Type: 802.11b
CH01

Date: 16.MAY.2018 14:31:11

Modulation Type: 802.11g
CH01

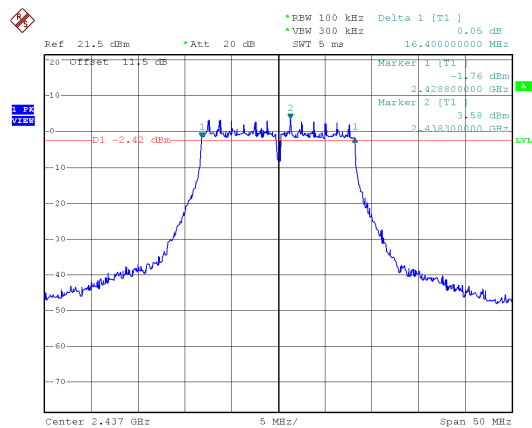
Date: 16.MAY.2018 14:34:36

CH06



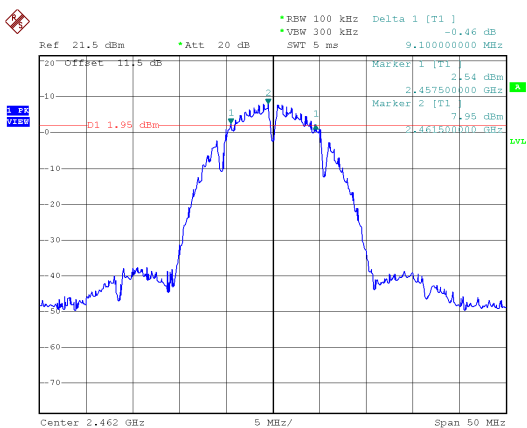
Date: 16.MAY.2018 14:13:38

CH06



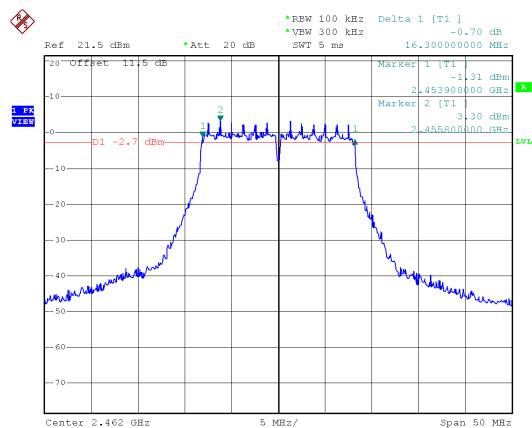
Date: 16.MAY.2018 14:33:45

CH11



Date: 16.MAY.2018 14:31:55

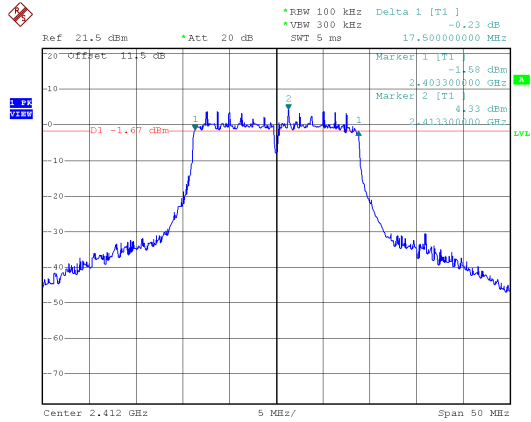
CH11



Date: 16.MAY.2018 14:32:46

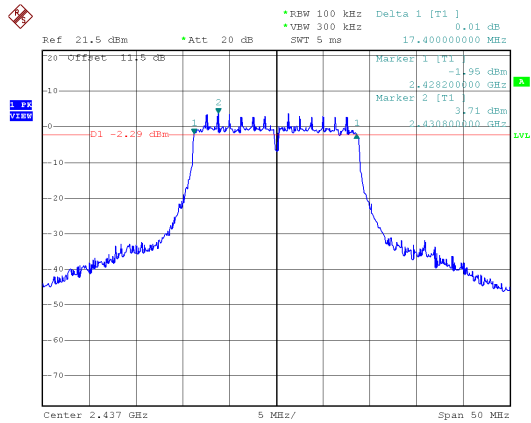


Modulation Type: 802.11n HT20
CH01



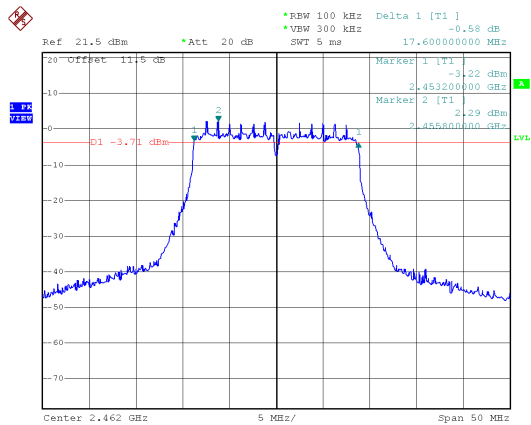
Date: 16.MAY.2018 14:35:33

CH06



Date: 16.MAY.2018 14:36:44

CH11



Date: 16.MAY.2018 14:37:47



9. Maximum Peak and Average Output Power

9.1 Test Limit

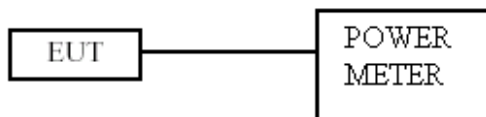
The Maximum Peak Output Power Measurement is 30dBm.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi

9.2 Test Procedures

The antenna port (RF output) of the EUT was connected to the input (RF input) of a power meter. Power was read directly from the meter and cable loss connection was added to the reading to obtain power at the EUT antenna terminal. The EUT Output Power was set to maximum to produce the worse case test result.

9.3 Test Setup Layout





9.4 Test Result and Data

Temperature : 23°C
Test Date : May. 16, 2018

Humidity : 61%

Modulation Type	Channel	Frequency (MHz)	Peak Power Output (dBm)	Total Peak Power (mW)	Total Peak Power (dBm)	Limit (dBm)
IEEE 802.11b (1Mbps)	01	2412	19.72	93.76	19.72	30.00
	06	2437	19.31	85.31	19.31	30.00
	11	2462	19.11	81.47	19.11	30.00
IEEE 802.11g (6Mbps)	01	2412	23.25	211.35	23.25	30.00
	06	2437	22.41	174.18	22.41	30.00
	11	2462	22.21	166.34	22.21	30.00
IEEE 802.11n HT20 (6.5Mbps)	01	2412	23.12	205.12	23.12	30.00
	06	2437	22.89	194.54	22.89	30.00
	11	2462	22.18	165.20	22.18	30.00

Modulation Type	Channel	Frequency (MHz)	Avg. Power Output (dBm)	Total Avg. Power (mW)	Total Avg. Power (dBm)
IEEE 802.11b (1Mbps)	01	2412	17.09	51.168	17.09
	06	2437	16.65	46.238	16.65
	11	2462	16.45	44.157	16.45
IEEE 802.11g (6Mbps)	01	2412	15.43	34.914	15.43
	06	2437	14.08	25.586	14.08
	11	2462	13.83	24.155	13.83
IEEE 802.11n HT20 (6.5Mbps)	01	2412	14.56	28.576	14.56
	06	2437	14.22	26.424	14.22
	11	2462	13.06	20.230	13.06

Note: Average power is for reference only.



10. Power Spectral Density

10.1 Test Limit

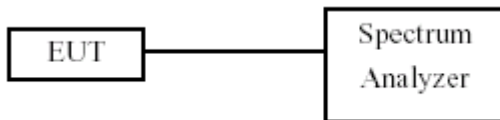
The Maximum of Power Spectral Density Measurement is 8dBm.

If transmitting antennas of directional gain greater than 6 dBi are used, the power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi

10.2 Test Procedures

- The transmitter output was connected to spectrum analyzer.
- The spectrum analyzer's resolution bandwidth were set at 3kHz RBW and 30KHz VBW as that of the fundamental frequency. Set the sweep time=auto couple.
- The power spectral density was measured and recorded.

10.3 Test Setup Layout



10.4 Test Result and Data

Temperature : 23°C

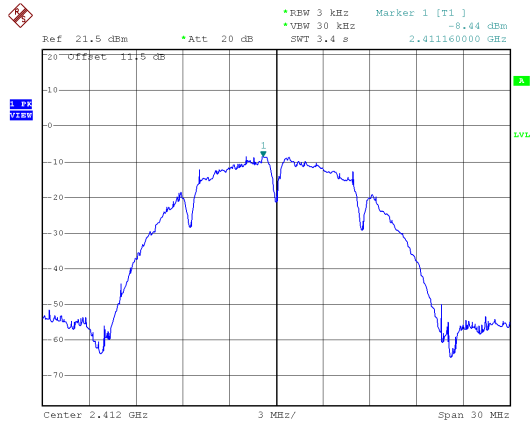
Humidity : 61%

Test Date : May. 16, 2018

Modulation Type	CH	Freq. (MHz)	Maximum Power Density of 3 kHz Bandwidth (dBm)	Sum chain (dBm)	Duty Cycle CF(dB)	Total PSD (dBm)	Limit (dBm)
IEEE 802.11b (1Mbps)	01	2412	-8.44	-8.44	0.00	-8.44	8.00
	06	2437	-7.99	-7.99	0.00	-7.99	8.00
	11	2462	-8.94	-8.94	0.00	-8.94	8.00
IEEE 802.11g (6Mbps)	01	2412	-12.53	-12.53	0.00	-12.53	8.00
	06	2437	-12.84	-12.84	0.00	-12.84	8.00
	11	2462	-12.75	-12.75	0.00	-12.75	8.00
IEEE 802.11n HT20 (6.5Mbps)	01	2412	-12.06	-12.06	0.00	-12.06	8.00
	06	2437	-13.15	-13.15	0.00	-13.15	8.00
	11	2462	-14.03	-14.03	0.00	-14.03	8.00

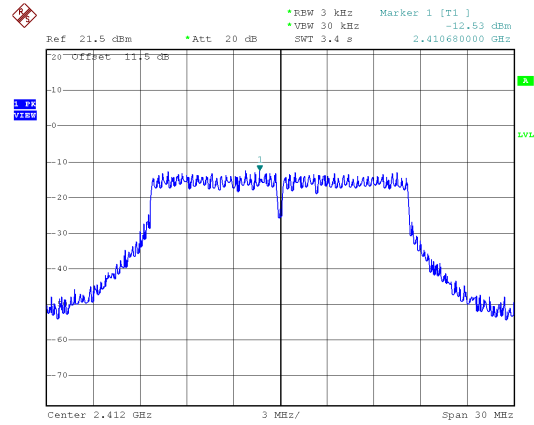


Modulation Type: 802.11b
CH01



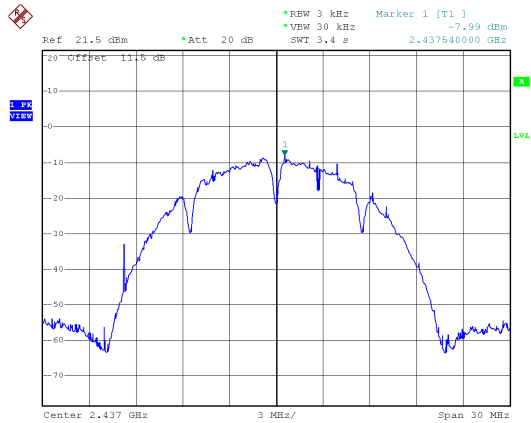
Date: 16.MAY.2018 14:44:01

Modulation Type: 802.11g
CH01



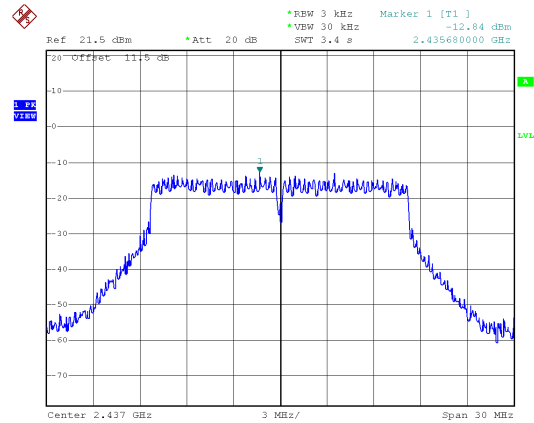
Date: 16.MAY.2018 14:48:40

CH06



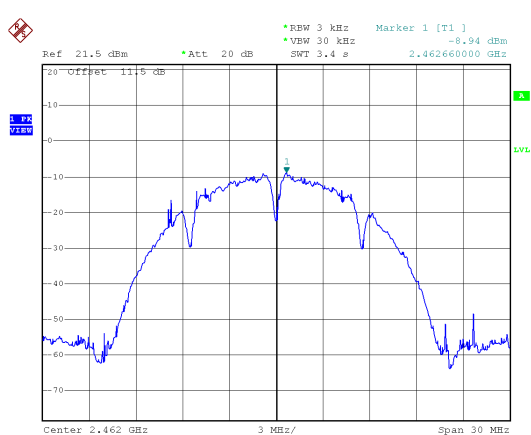
Date: 16.MAY.2018 14:44:57

CH06



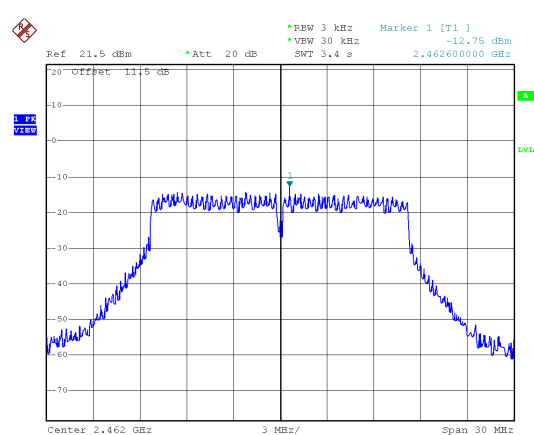
Date: 16.MAY.2018 14:47:42

CH11



Date: 16.MAY.2018 14:45:56

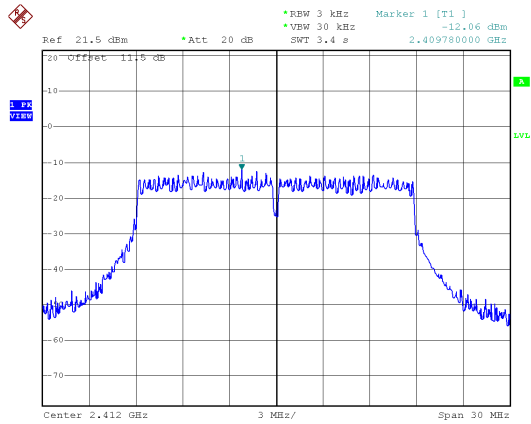
CH11



Date: 16.MAY.2018 14:47:12

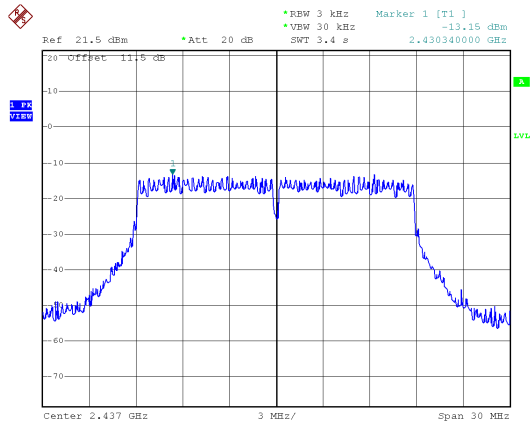


Modulation Type: 802.11n HT20
CH01



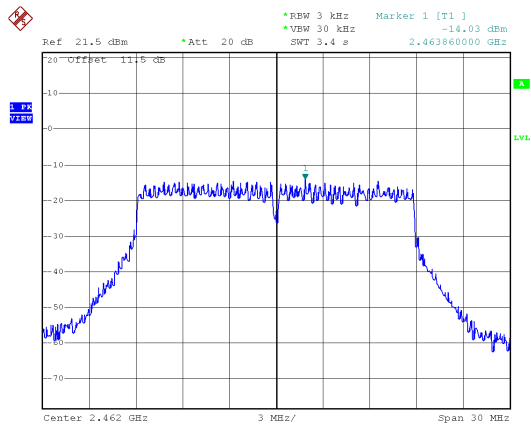
Date: 16.MAY.2018 14:49:09

CH06



Date: 16.MAY.2018 14:49:36

CH11



Date: 16.MAY.2018 14:50:07