



FCC RADIO TEST REPORT

Applicant : VIA Technologies, Inc.

Address : 8F, No. 535, Zhongzheng Rd., Xindian Dist., New
Taipei City, Taiwan, 231

Equipment : LCD Display

Model No. : P650IVF01.0-4K

Trade Name : VIA

FCC ID : NCI-P654K

I HEREBY CERTIFY THAT :

The sample was received on Jul. 26, 2024 and the testing was completed on Aug. 16, 2024 at Cerpass Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of Cerpass Technology Corp., the test report shall not be reproduced except in full.

Approved by:

Mark Liao / Supervisor

Laboratory Accreditation:

Cerpass Technology Corporation Test Laboratory





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History of this test report

Report No.	Issued Date	Description
24060229-TRFCC01	Aug. 28, 2024	Original



1. Summary of Test Procedure and Test Results

1.1 Applicable Standards

ANSI C63.10:2013

FCC Rules and Regulations Part 15 Subpart C §15.247

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

*The lab has reduced the uncertainty risk factor from test equipment, environment and staff technicians which according to the standard on contract. Therefore, the test result will only be determined by standard requirement, measurement uncertainty evaluation is not considered.



2. Test Configuration of Equipment under Test

2.1 Feature of Equipment

Operation Frequency Range	802.11b/g/n:2400MHz-2483.5MHz
Center Frequency Range	802.11b/g/n:2412MHz-2462MHz
Modulation Type	2.4GHz: 802.11b: CCK, DQPSK, DBPSK 802.11g/n: BPSK, QPSK, 16QAM, 64QAM
Modulation Technology	DSSS, OFDM
Data Rate	2.4GHz: 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS15, HT20/40
Antenna Type	PCB Antenna
Antenna Gain	2400-2500MHz: ANT 1: 5dBi, ANT 2: 5dBi (Antenna Cable Loss(dB): ANT 1: 1dB, ANT 2: 1dB) (Antenna Test Gain(dBi): ANT 1: 4dBi, ANT 2: 4dBi)
Adapter	Brand: Guangdong Mingxin Power Technologies Co.,Ltd Model: MX180Z-24006600
Remote control	Brand: ROWA,Model: V59
Power Extension Cord	Brand: SHEE LINE,Model: SL-4 + SL-3 +H05VV-F
RS232 Cable	Brand: UNITEK,Model: DB9 M to F
HDMI	Brand: UNI STAR,Model: HM-010B
USB A to B	Brand: BENEVO,Model: BUSB3030AMF

Note:For more details, please refer to the User's manual of the EUT.



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	---	---

802.11n HT40 (2422MHz~2452MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
---	---	07	2442
---	---	08	2447
*03	2422	*09	2452
04	2427	---	---
05	2432	---	---
*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 C63.10.
- The complete test system included Remote workstation and EUT for RF test. The Remote workstation included Notebook.
- An executive program, "Atheros Radio Test ver. 2.3" under Windows OS system was executed to transmit and receive data via WLAN.
- The following test modes were performed for the test:

Conducted Emissions from the AC mains power ports	
Test Mode	Operating Description
1	802.11b (1Mbps)
2	802.11g (6Mbps)
3	802.11n HT20 (6.5Mbps)
4	802.11n HT40 (13.5Mbps)
caused "Test Mode 2" generated the worst case, it was reported as the final data.	
Radiation Emissions (BELOW 1G)	
Test Mode	Operating Description
1	802.11b (1Mbps)
2	802.11g (6Mbps)
3	802.11n HT20 (6.5Mbps)
4	802.11n HT40 (13.5Mbps)
caused "Test Mode 2" generated the worst case, it was reported as the final data.	
Radiation Emissions (ABOVE 1G)	
Test Mode	Operating Description
1	802.11b (1Mbps)
2	802.11g (6Mbps)
3	802.11n HT20 (6.5Mbps)
4	802.11n HT40 (13.5Mbps)
caused "Test Mode 1~4" generated the worst case, they were reported as the final data.	

Note: There are two kinds of test voltage: AC 120V / 60Hz and AC 240V / 60Hz.

For AC Power Line Conducted Emission & Radiation Emissions (BELOW 1G)

AC 240V / 60Hz is worst case.

The EUT incorporates a MIMO function

Modulation Type	TX CONFIGURATION
802.11b	2TX
802.11g	2TX
802.11n HT20	2TX
802.11n HT40	2TX

**2.4 Description of Test System**

RF Conducted				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Power Cord	Longwell	LS-33	1.8/NS	N/A
Radiated Emissions				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Power Cord	Longwell	LS-33	1.8/NS	N/A
AC Power Line Conducted Emission				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Power Cord	Longwell	LS-33	1.8/NS	N/A



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	
	FCC	TW1439, TW1079
	IC	4934E-1, 4934E-2
Frequency Range Investigated	Conducted: from 150kHz to 30 MHz Radiation: from 9kHz to 25,000MHz	
Test Distance	The test distance of radiated emission from antenna to EUT is 3 M.	

Test Item	Test Site	Test period	Environmental Conditions	Tested By
RF Conducted	RFCON01-NK	2024/08/14	28.6°C / 37%	Leon Huang
Radiated Emissions	3M02-NK	2024/8/12~2024/8/16	20.4~24.3°C / 47~51%	Leon Huang
AC Power Line Conducted Emission	CON02-NK	2024/08/16	24.4°C / 52%	Leon Huang



2.6 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

Measurement Item	Uncertainty
AC Power Line Conduction(150K~30MHz)	±3.12dB
Radiated Spurious Emission(9KHz~30MHz)	±3.5dB
Radiated Spurious Emission(30MHz~1GHz)	±5.1dB
Radiated Spurious Emission(1GHz~40GHz)	±5.2dB
Conducted Spurious Emission	±2.1dB
6dB Bandwidth	±5.4%
20dB Bandwidth	±4.4%
Occupied Bandwidth	±4.5%
Peak Output Power(Conducted Power Meter)	±1.1dB
Dwell Time / Deactivation Time	±7.6%
Power Spectral Density	±2.0dB
Duty Cycle	±3.5%



3. Test Equipment and Ancillaries Used for Tests

Test Item	Radiated Emissions				
Test Site	Semi Anechoic Room(3M02-NK)				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
Bilog Antenna	Schwarzbeck	VULB9168	369	2024/02/19	2025/02/18
Active Loop Antenna	Schwarzbeck	FMZB 1513	414	2024/01/16	2025/01/15
Horn Antenna	EMCO	3115	31589	2024/02/26	2025/02/25
Horn Antenna	EMCO	3116	31974	2023/10/16	2024/10/15
EMI Receiver	ROHDE & SCHWARZ	ESR 7	101906	2024/05/13	2025/05/12
Spectrum Analyzer	ROHDE & SCHWARZ	FSV 40-N	101329	2024/07/16	2025/07/15
Preamplifier	Agilent	8449B	3008A01954	2024/03/01	2025/02/28
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2023/10/13	2024/10/12
Preamplifier	EM Electronics corp.	EM330	60659	2024/02/17	2025/02/16
Cable-6m(9k~300M)	N/A	EMC5D-BM-BM-6	130606	2024/03/13	2025/03/12
Cable-3in1(30M-1G)	HARBOUR INDUSTRIES	LL142	CCE1315	2024/02/23	2025/02/22
Cable-0.5m(1G-40G)	HUBER SUHNER	SUCOFLEX 104	805443/4	2024/03/05	2025/03/04
Cable-3m(1G-40G)	HUBER SUHNER	SUCOFLEX 104	805796/4	2024/03/05	2025/03/04
Cable-8m(1G-26.5G)	WOKEN	WCBA-WCA203SM	CCE1374	2024/03/05	2025/03/04
Cable-1m(1G-40G)	HUBER SUHNER	HUBER SUHNER / SF102	804398/2	2023/10/12	2024/10/11
Cable-3m(1G-40G)	HUBER SUHNER	HUBER SUHNER / SF102	804619/2	2023/10/12	2024/10/11
E3	AUDIX	v8.2014-8-6	RK-000529	NA	NA
Highpass Filter	Warison	WFIL-H3000-18000F-03	WRJ5CFWC2J1	2024/07/03	2025/07/02
Notch Filter	Warison	WFIL-N5925-7125F-04	WRQ4BFWC4M1	2024/03/11	2025/03/10
Hipass Filter	Warison	WFIL-H7500-18000F	WRQ4BFWC2J1	2024/03/11	2025/03/10

Test Item	RF Conducted				
Test Site	RFCON02-NK				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
CAX Signal Analyzer	KEYSIGHT	N9000B	MY57100339	2023/11/06	2024/11/05
Power Meter	Anritsu	ML2495A	1224005	2024/02/17	2025/02/16
Power Sensor	Anritsu	MA2411B	1207295	2024/02/17	2025/02/16
Attenuator	KEYSIGHT	8491B	MY39250703	2024/02/20	2025/02/19



Test Item	AC Power Line Conducted Emission				
Test Site	CON02-NK				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
EMI Receiver	ROHDE & SCHWARZ	ESR 7	101906	2024/05/13	2025/05/12
Line Impedance Stabilization Network	Schwarzbeck	NSLK 8127	8127516	2023/10/03	2024/10/02
Pulse Limiter	ROHDE & SCHWARZ	ESH3-Z2	101934	2024/03/01	2025/02/28
Cable-6m(9k~300M)	N/A	EMC5D-BM-BM-6	130606	2024/03/13	2025/03/12
E3	AUDIX	v8.2014-8-6	RK-000536	NA	NA



4. Antenna Requirements

4.1 Antenna Construction and Directional Gain

Antenna Type	PCB Antenna
Antenna Gain	2400-2500MHz: ANT 1: 5dBi, ANT 2: 5dBi (Antenna Cable Loss(dB): ANT 1: 1dB, ANT 2: 1dB) (Antenna Test Gain(dBi): ANT 1: 4dBi, ANT 2: 4dBi)

2412-2462MHz

For Power directional gain= G_{ant} = 4 dBi

For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$
= 7.01 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 C63.10-2013. 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

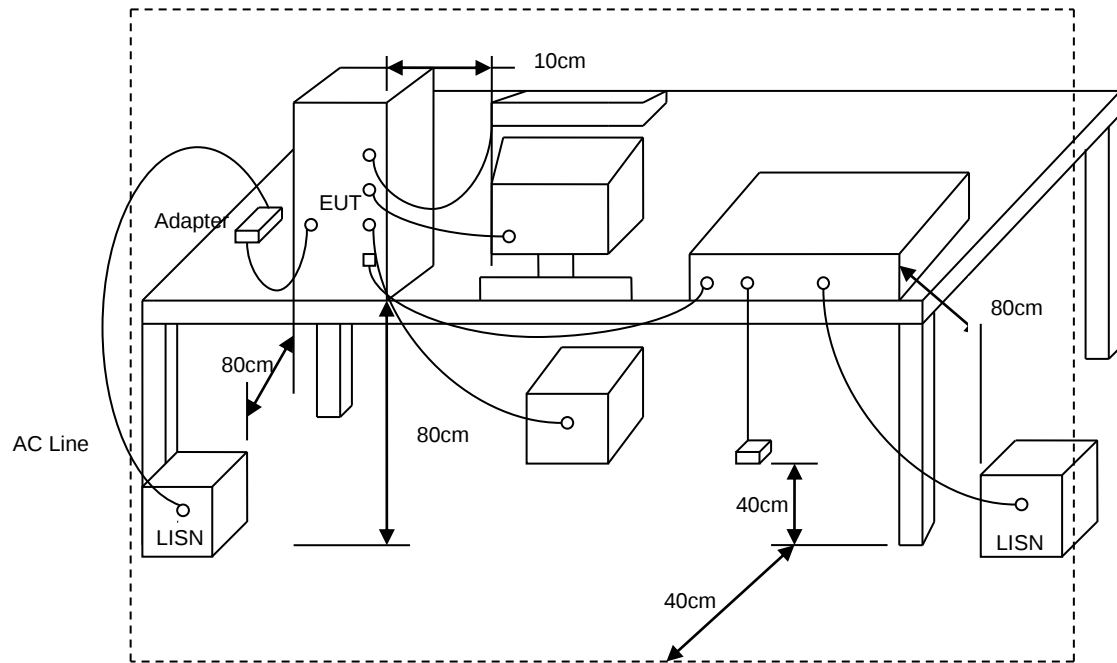
*Decreases with the logarithm of the frequency.

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.



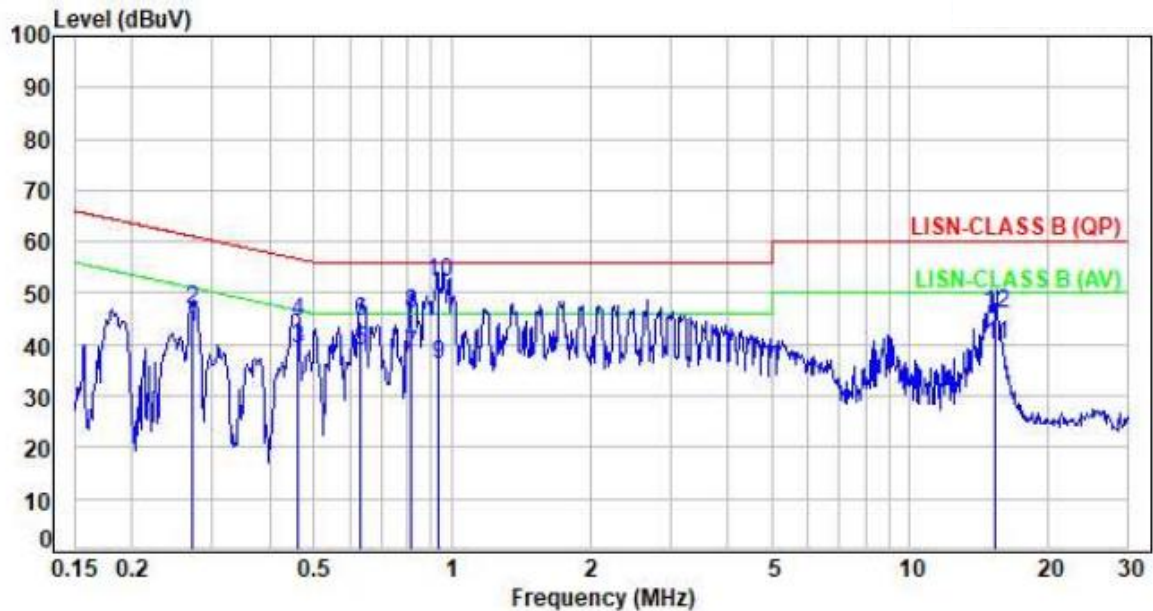
5.3 Typical Test Setup





5.4 Test Result and Data

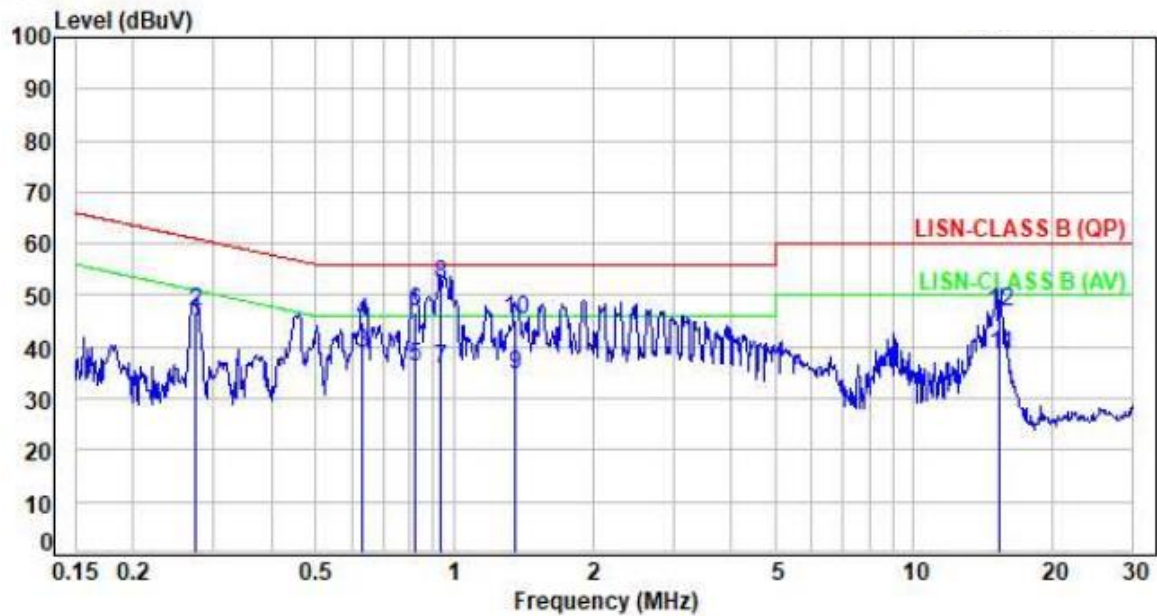
Power	: AC 240V / 60Hz	Pol/Phase	: LINE
Test Mode	: Mode 2		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2701	9.92	33.31	43.23	51.12	-7.89	Average	P
2	0.2701	9.92	36.94	46.86	61.12	-14.26	QP	P
3	0.4602	9.93	29.16	39.09	46.69	-7.60	Average	P
4	0.4602	9.93	34.70	44.63	56.69	-12.06	QP	P
5	0.6317	9.94	28.66	38.60	46.00	-7.40	Average	P
6	0.6317	9.94	34.48	44.42	56.00	-11.58	QP	P
7	0.8114	9.95	27.93	37.88	46.00	-8.12	Average	P
8	0.8114	9.95	36.14	46.09	56.00	-9.91	QP	P
9	0.9322	9.96	26.05	36.01	46.00	-9.99	Average	P
10	0.9322	9.96	42.03	51.99	56.00	-4.01	QP	P
11	15.4200	10.59	29.30	39.89	50.00	-10.11	Average	P
12	15.4200	10.59	35.39	45.98	60.00	-14.02	QP	P



Power	: AC 240V / 60Hz	Pol/Phase	: NEUTRAL
Test Mode	: Mode 2		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.2744	9.94	35.11	45.05	50.98	-5.93	Average	P
2	0.2744	9.94	36.75	46.69	60.98	-14.29	QP	P
3	0.6330	9.98	28.97	38.95	46.00	-7.05	Average	P
4	0.6330	9.98	34.70	44.68	56.00	-11.32	QP	P
5	0.8209	9.98	26.24	36.22	46.00	-9.78	Average	P
6	0.8209	9.98	36.92	46.90	56.00	-9.10	QP	P
7	0.9318	9.99	25.87	35.86	46.00	-10.14	Average	P
8	0.9318	9.99	42.16	52.15	56.00	-3.85	QP	P
9	1.3557	10.01	24.50	34.51	46.00	-11.49	Average	P
10	1.3557	10.01	35.11	45.12	56.00	-10.88	QP	P
11	15.4033	10.51	28.01	38.52	50.00	-11.48	Average	P
12	15.4033	10.51	36.36	46.87	60.00	-13.13	QP	P



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

- a. The EUT was placed on a rotatable table top 0.8 meter above ground.
- b. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- c. The table was rotated 360 degrees to determine the position of the highest radiation.
- d. 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.
- e. 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.
- f. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- g. 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.
- h. 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.
- i. "Cone of radiation" has been considered to be 3dB bandwidth of the measurement antenna.

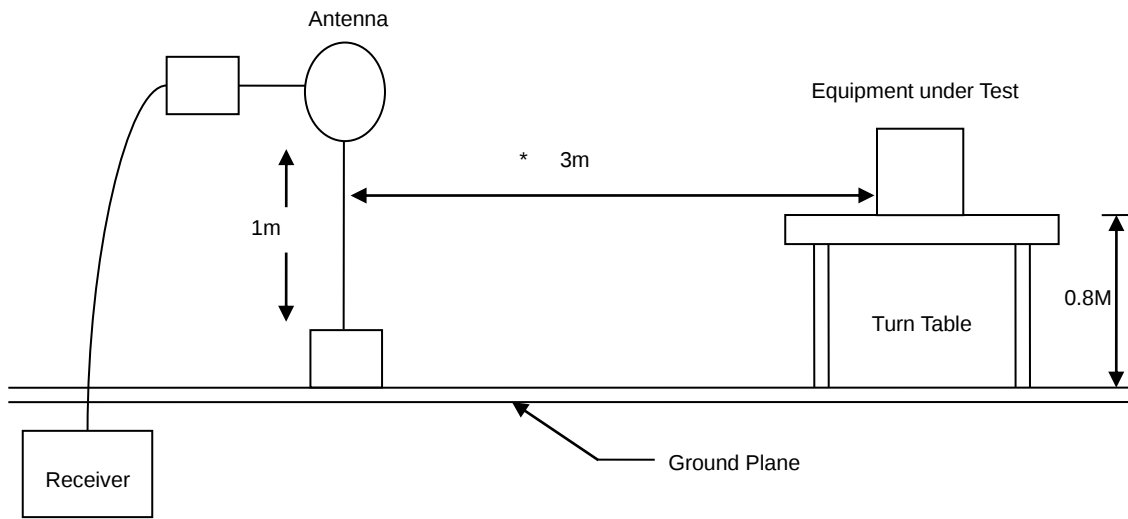
Note:

- 1.The supporting fixture shall permit orientation of the EUT in each of three orthogonal axis positions such that emissions from the EUT are maximized.
- 2.Due to the test software function limit the operation band setting(200dBuV/m).
There's no corresponding limitation in the actual test item.

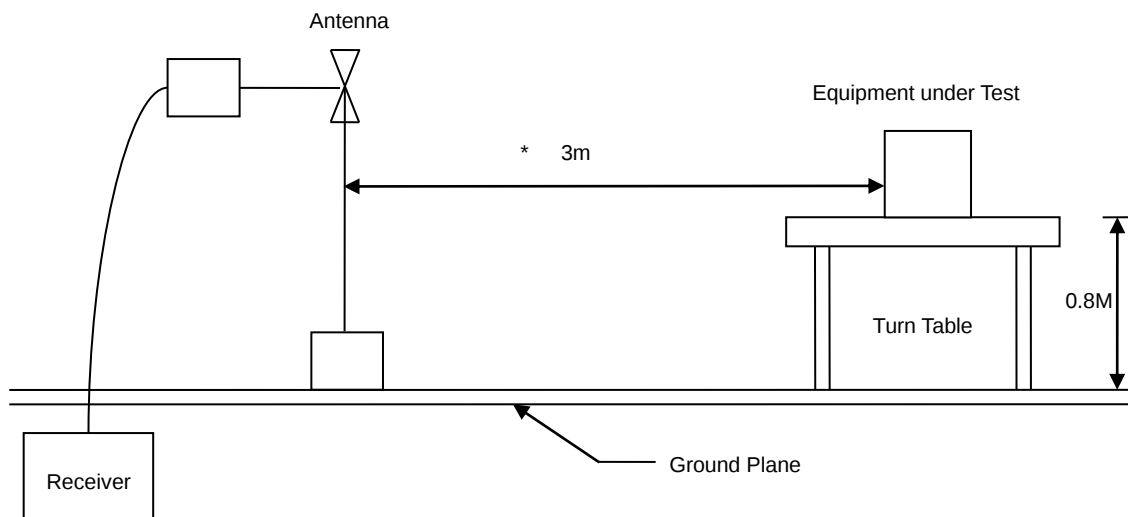


6.3 Typical Test Setup

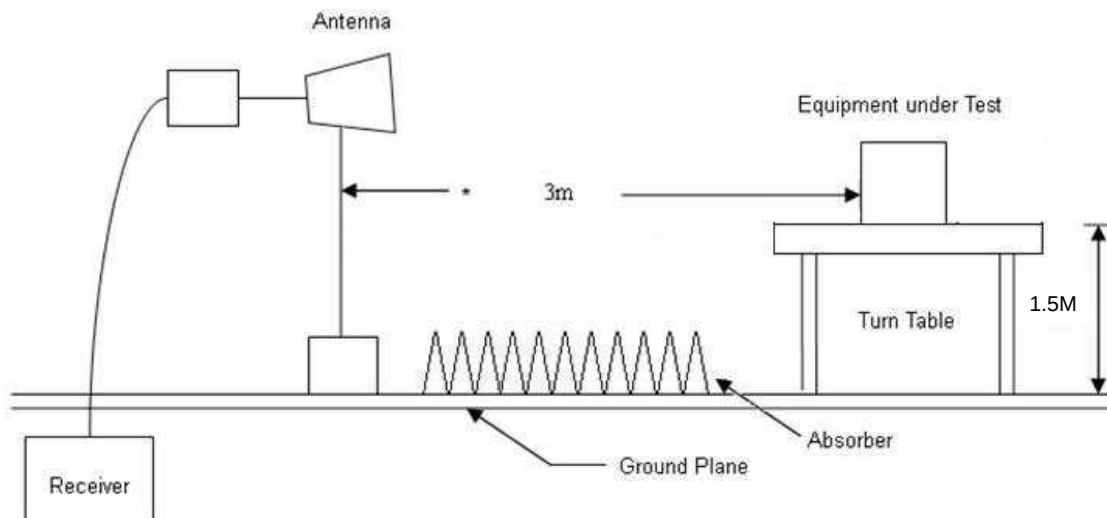
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup



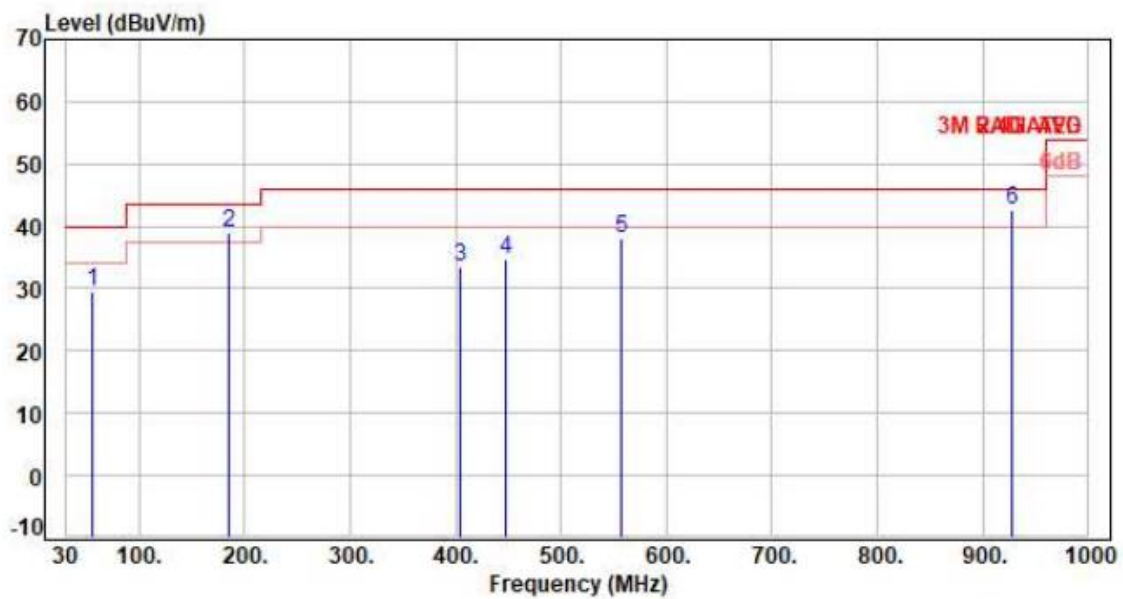


6.4 Test Result and Data (9KHz ~ 30MHz)

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

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

Power	: AC 240V / 60Hz	Pol/Phase	: VERTICAL
Test Mode	: Mode 2		



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	55.22	-9.22	38.72	29.50	40.00	-10.50	Peak	400	0	P
2	185.20	-11.17	50.05	38.88	43.50	-4.62	Peak	400	0	P
3	404.42	-5.58	39.19	33.61	46.00	-12.39	Peak	400	0	P
4	447.10	-4.41	39.15	34.74	46.00	-11.26	Peak	400	0	P
5	557.68	-2.02	40.05	38.03	46.00	-7.97	Peak	400	0	P
6	928.22	4.41	38.30	42.71	46.00	-3.29	Peak	400	0	P

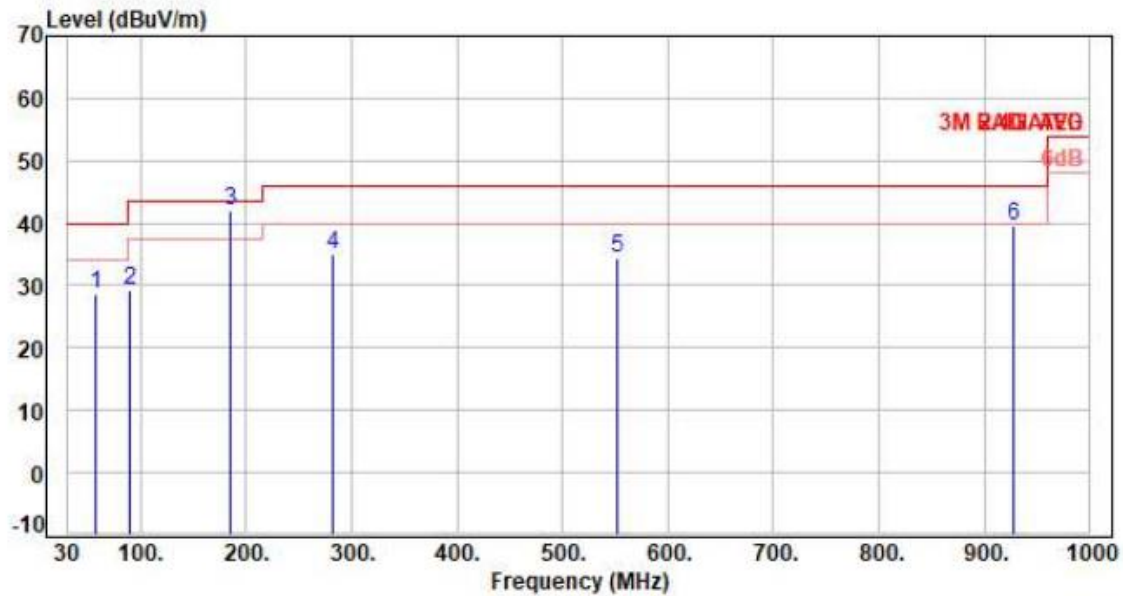
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 240V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	57.16	-9.18	37.71	28.53	40.00	-11.47	Peak	400	0	P
2	90.14	-15.94	45.18	29.24	43.50	-14.26	Peak	400	0	P
3	185.20	-11.17	53.28	42.11	43.50	-1.39	QP	100	137	P
4	282.20	-9.09	44.00	34.91	46.00	-11.09	Peak	400	0	P
5	551.86	-2.22	36.68	34.46	46.00	-11.54	Peak	400	0	P
6	928.22	4.41	35.15	39.56	46.00	-6.44	Peak	400	0	P

Note: Level=Reading+Factor

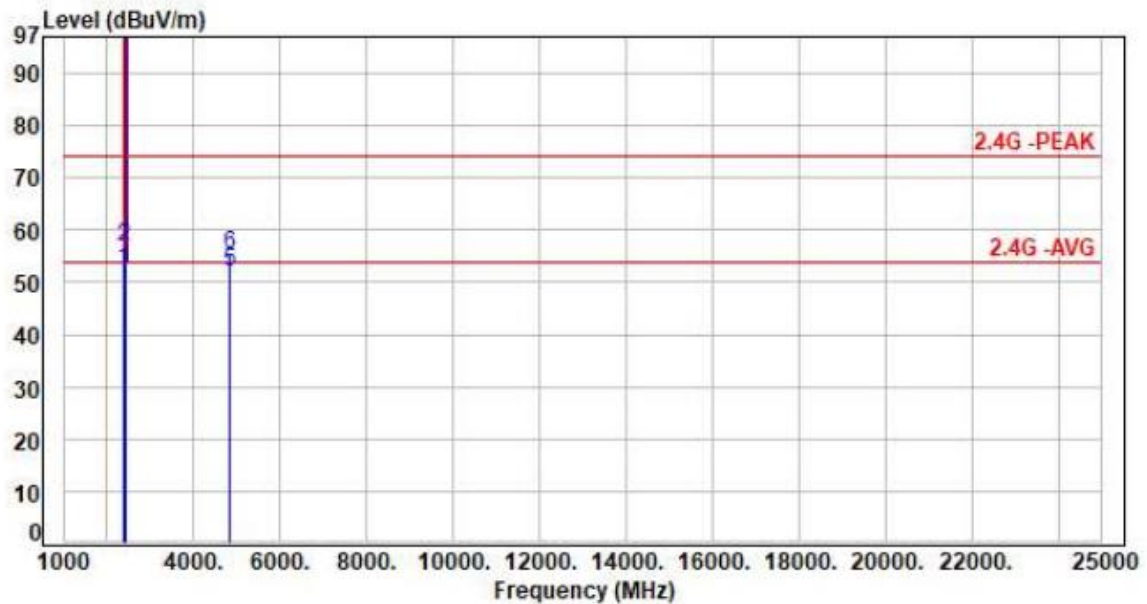
Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



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

Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, CH01		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	54.86	52.53	54.00	-1.47	Average	100	215	P
2	2390.00	-2.33	59.20	56.87	74.00	-17.13	Peak	100	215	P
3	2412.00	-2.29	107.10	104.81	200.00	-95.19	Average	100	215	P
4	2412.00	-2.29	110.64	108.35	200.00	-91.65	Peak	100	215	P
5	4824.00	5.98	45.86	51.84	54.00	-2.16	Average	100	166	P
6	4824.00	5.98	49.32	55.30	74.00	-18.70	Peak	100	166	P

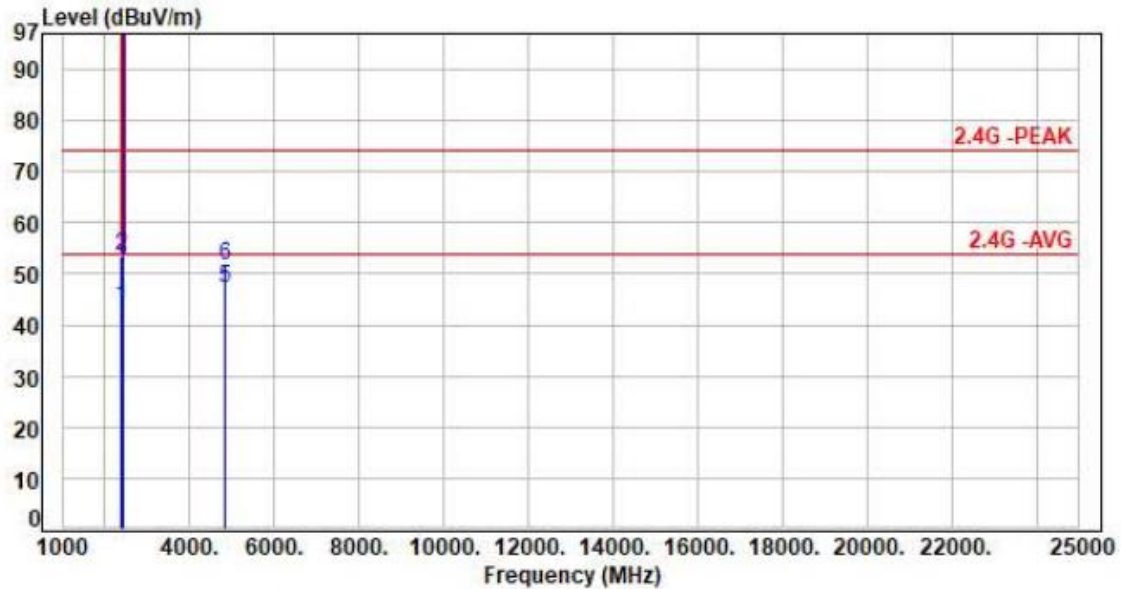
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH01		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	45.71	43.38	54.00	-10.62	Average	100	246	P
2	2390.00	-2.33	55.96	53.63	74.00	-20.37	Peak	100	246	P
3	2412.00	-2.29	104.35	102.06	200.00	-97.94	Average	100	246	P
4	2412.00	-2.29	107.18	104.89	200.00	-95.11	Peak	100	246	P
5	4824.00	5.98	41.15	47.13	54.00	-6.87	Average	100	130	P
6	4824.00	5.98	45.74	51.72	74.00	-22.28	Peak	100	130	P

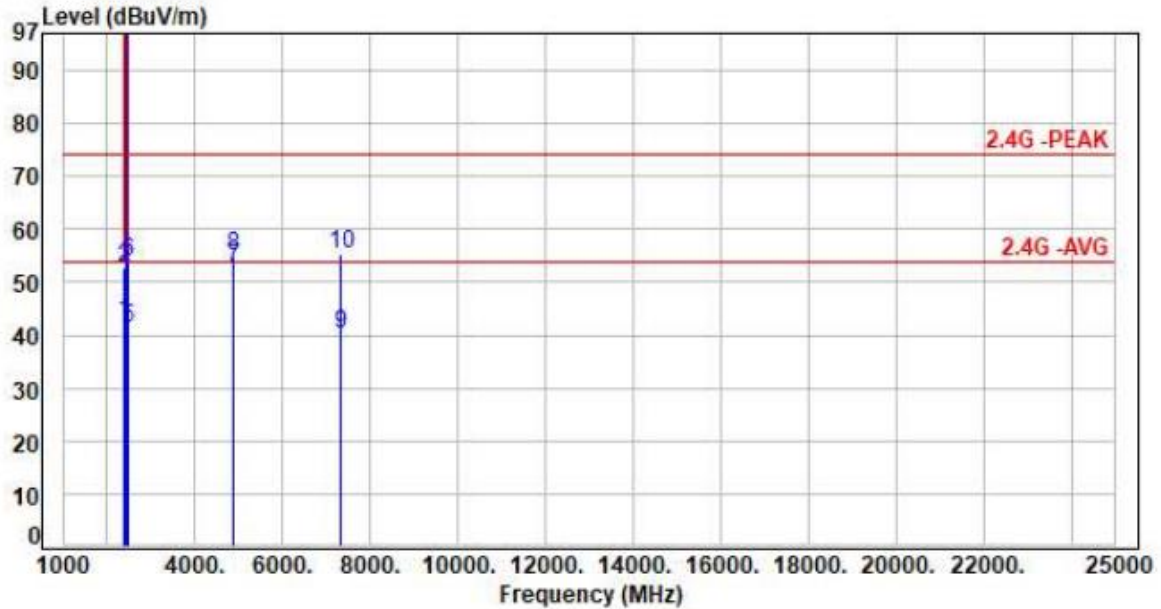
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: VERTICAL
Test Mode	: Mode 1, CH06		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	44.85	42.52	54.00	-11.48	Average	189	167	P
2	2390.00	-2.33	54.89	52.56	74.00	-21.44	Peak	189	167	P
3	2437.00	-2.17	106.11	103.94	200.00	-96.06	Average	189	167	P
4	2437.00	-2.17	109.62	107.45	200.00	-92.55	Peak	189	167	P
5	2483.50	-2.01	43.41	41.40	54.00	-12.60	Average	189	167	P
6	2483.50	-2.01	55.87	53.86	74.00	-20.14	Peak	189	167	P
7	4874.00	6.13	46.79	52.92	54.00	-1.08	Average	100	161	P
8	4874.00	6.13	48.66	54.79	74.00	-19.21	Peak	100	161	P
9	7311.00	11.23	28.79	40.02	54.00	-13.98	Average	110	207	P
10	7311.00	11.23	44.09	55.32	74.00	-18.68	Peak	110	207	P

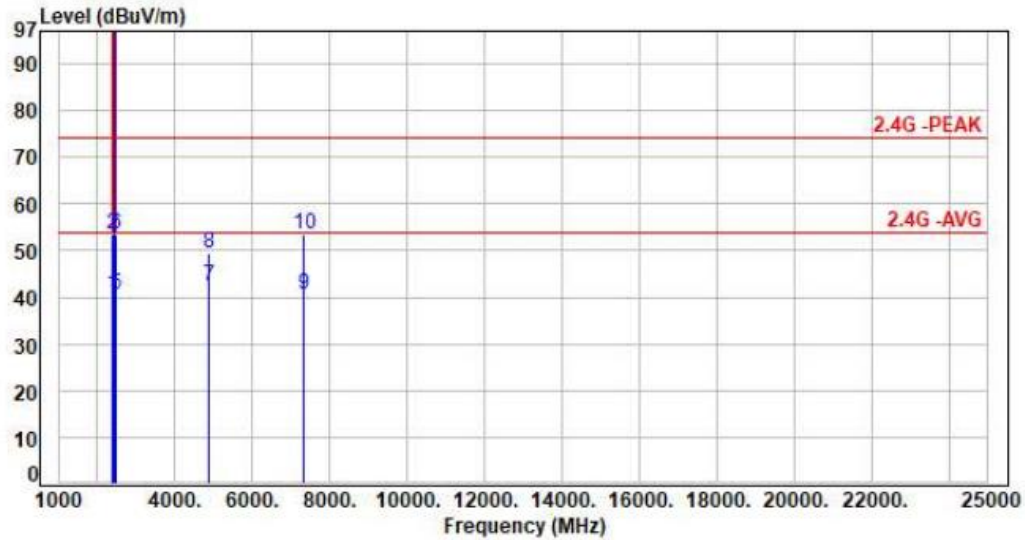
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH06		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	42.76	40.43	54.00	-13.57	Average	100	283	P
2	2390.00	-2.33	55.88	53.55	74.00	-20.45	Peak	100	283	P
3	2437.00	-2.17	105.30	103.13	200.00	-96.87	Average	100	283	P
4	2437.00	-2.17	108.60	106.43	200.00	-93.57	Peak	100	283	P
5	2483.50	-2.01	42.40	40.39	54.00	-13.61	Average	100	283	P
6	2483.50	-2.01	55.38	53.37	74.00	-20.63	Peak	100	283	P
7	4874.00	6.13	36.23	42.36	54.00	-11.64	Average	100	128	P
8	4874.00	6.13	43.21	49.34	74.00	-24.66	Peak	100	128	P
9	7311.00	11.23	29.38	40.61	54.00	-13.39	Average	100	109	P
10	7311.00	11.23	42.39	53.62	74.00	-20.38	Peak	100	109	P

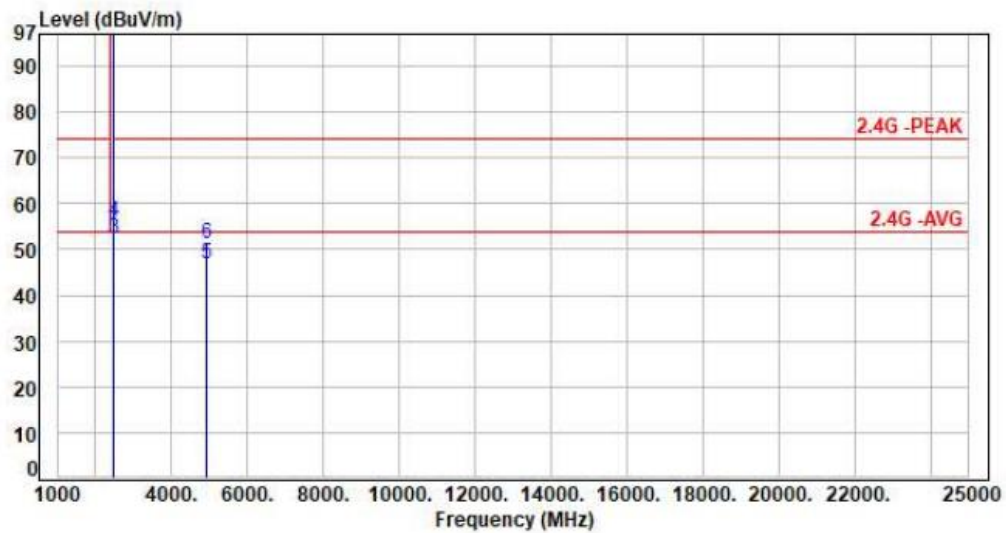
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 1, CH11		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.04	106.50	104.46	200.00	-95.54	Average	141	210	P
2	2462.00	-2.04	109.12	107.08	200.00	-92.92	Peak	141	210	P
3	2483.50	-2.01	54.35	52.34	54.00	-1.66	Average	141	210	P
4	2483.50	-2.01	58.25	56.24	74.00	-17.76	Peak	141	210	P
5	4924.00	6.29	40.51	46.80	54.00	-7.20	Average	100	150	P
6	4924.00	6.29	45.15	51.44	74.00	-22.56	Peak	100	150	P

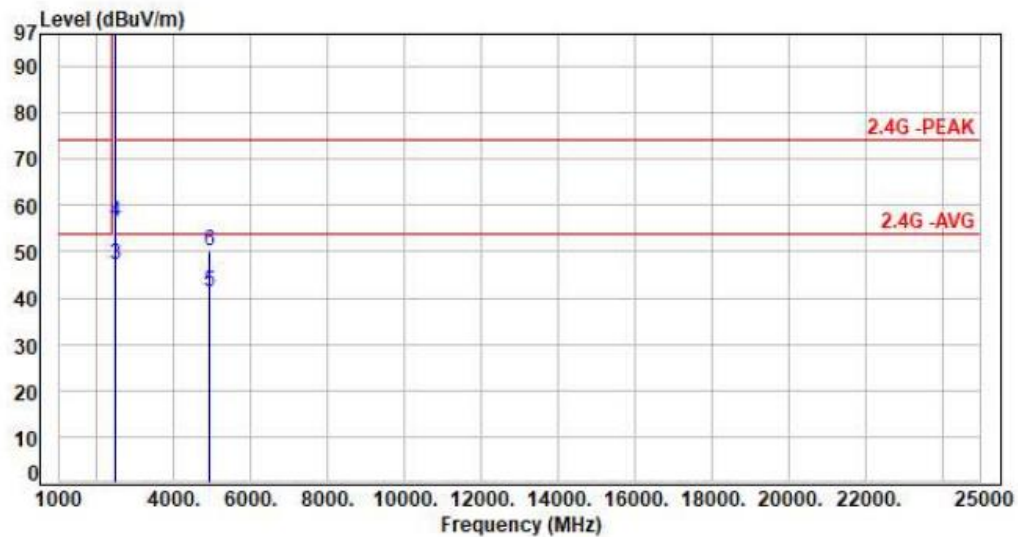
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 1, CH11		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.04	105.46	103.42	200.00	-96.58	Average	159	284	P
2	2462.00	-2.04	108.92	106.88	200.00	-93.12	Peak	159	284	P
3	2483.50	-2.01	49.31	47.30	54.00	-6.70	Average	159	284	P
4	2483.50	-2.01	58.27	56.26	74.00	-17.74	Peak	159	284	P
5	4924.00	6.29	34.84	41.13	54.00	-12.87	Average	100	117	P
6	4924.00	6.29	43.95	50.24	74.00	-23.76	Peak	100	117	P

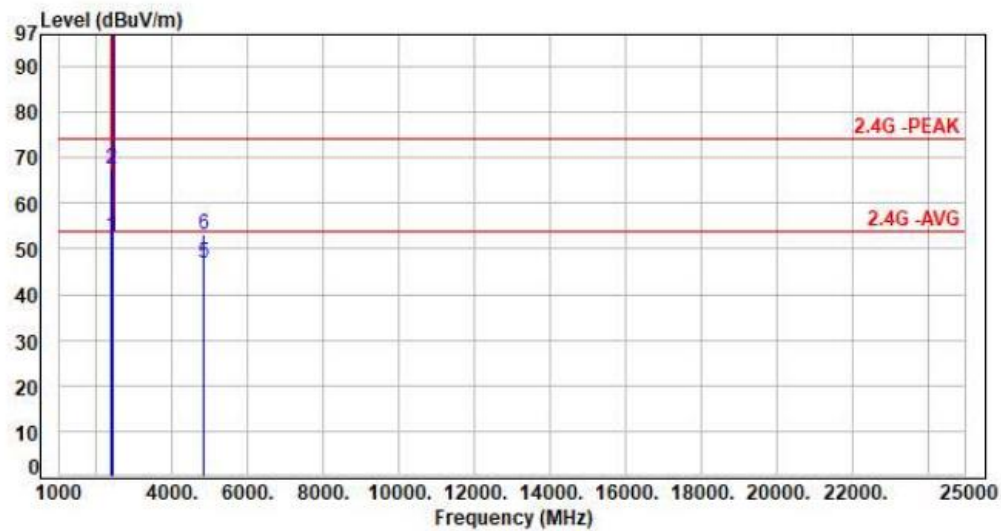
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: VERTICAL
Test Mode	: Mode 2, CH01		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	55.07	52.74	54.00	-1.26	Average	100	139	P
2	2390.00	-2.33	69.72	67.39	74.00	-6.61	Peak	100	139	P
3	2412.00	-2.29	101.99	99.70	200.00	-100.30	Average	100	139	P
4	2412.00	-2.29	112.64	110.35	200.00	-89.65	Peak	100	139	P
5	4824.00	5.98	40.99	46.97	54.00	-7.03	Average	100	192	P
6	4824.00	5.98	46.98	52.96	74.00	-21.04	Peak	100	192	P

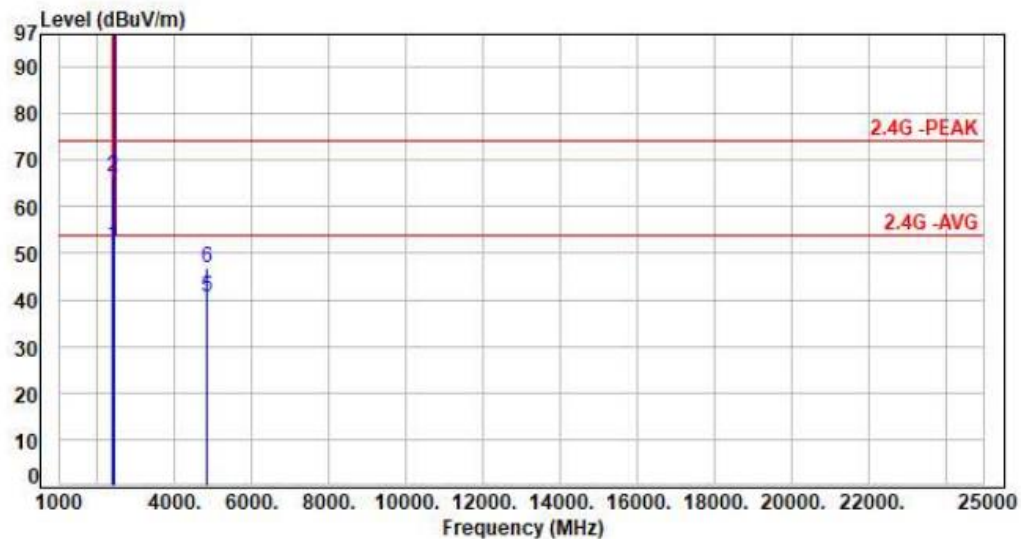
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, CH01		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	53.83	51.50	54.00	-2.50	Average	148	283	P
2	2390.00	-2.33	68.86	66.53	74.00	-7.47	Peak	148	283	P
3	2412.00	-2.29	99.61	97.32	200.00	-102.68	Average	148	283	P
4	2412.00	-2.29	109.47	107.18	200.00	-92.82	Peak	148	283	P
5	4824.00	5.98	34.63	40.61	54.00	-13.39	Average	100	208	P
6	4824.00	5.98	40.96	46.94	74.00	-27.06	Peak	100	208	P

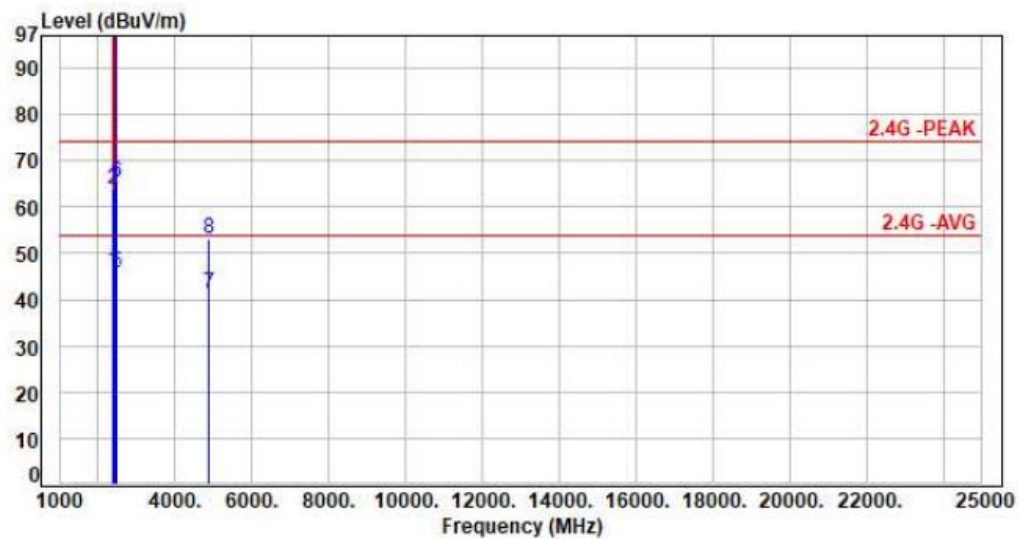
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	48.35	46.02	54.00	-7.98	Average	100	143	P
2	2390.00	-2.33	65.99	63.66	74.00	-10.34	Peak	100	143	P
3	2437.00	-2.17	107.21	105.04	200.00	-94.96	Average	100	143	P
4	2437.00	-2.17	116.39	114.22	200.00	-85.78	Peak	100	143	P
5	2483.50	-2.01	47.78	45.77	54.00	-8.23	Average	100	143	P
6	2483.50	-2.01	67.44	65.43	74.00	-8.57	Peak	100	143	P
7	4874.00	6.13	35.11	41.24	54.00	-12.76	Average	100	164	P
8	4874.00	6.13	46.93	53.06	74.00	-20.94	Peak	100	164	P

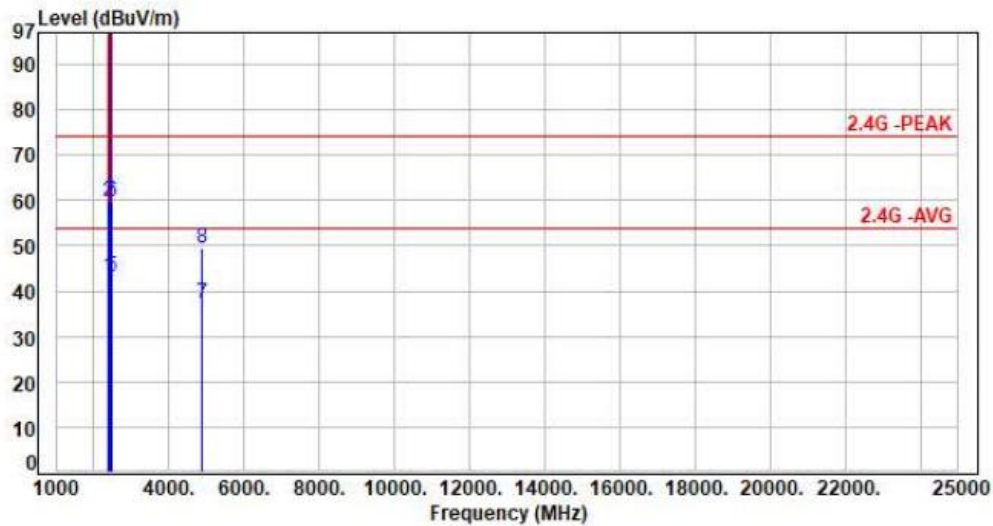
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, CH06		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	45.60	43.27	54.00	-10.73	Average	125	283	P
2	2390.00	-2.33	62.18	59.85	74.00	-14.15	Peak	125	283	P
3	2437.00	-2.17	105.08	102.91	200.00	-97.09	Average	125	283	P
4	2437.00	-2.17	114.47	112.30	200.00	-87.70	Peak	125	283	P
5	2483.50	-2.01	45.27	43.26	54.00	-10.74	Average	125	283	P
6	2483.50	-2.01	61.79	59.78	74.00	-14.22	Peak	125	283	P
7	4874.00	6.13	30.94	37.07	54.00	-16.93	Average	100	127	P
8	4874.00	6.13	43.46	49.59	74.00	-24.41	Peak	100	127	P

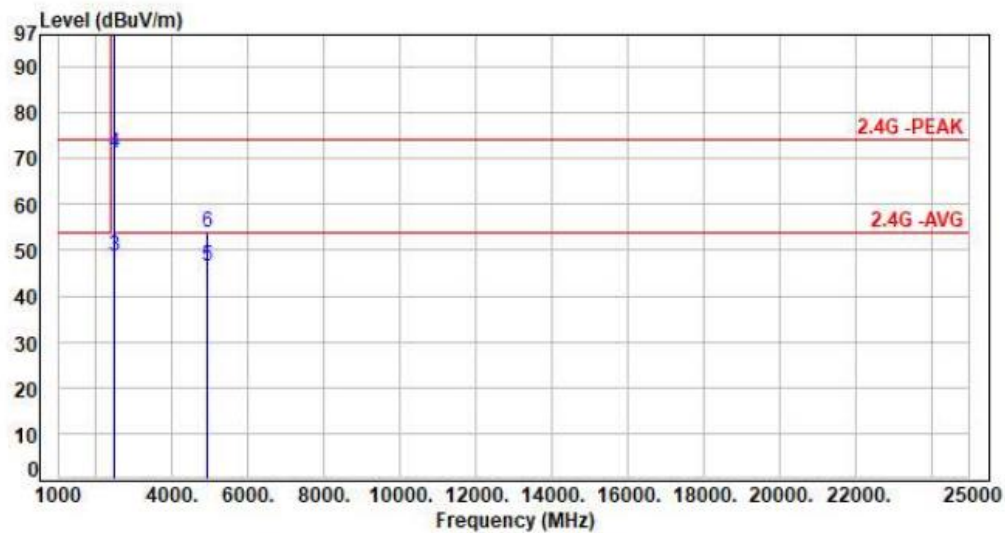
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 2, CH11		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.04	101.36	99.32	200.00	-100.68	Average	171	140	P
2	2462.00	-2.04	111.42	109.38	200.00	-90.62	Peak	171	140	P
3	2483.50	-2.01	50.52	48.51	54.00	-5.49	Average	171	140	P
4	2483.50	-2.01	73.34	71.33	74.00	-2.67	Peak	171	140	P
5	4924.00	6.29	40.28	46.57	54.00	-7.43	Average	100	169	P
6	4924.00	6.29	47.52	53.81	74.00	-20.19	Peak	100	169	P

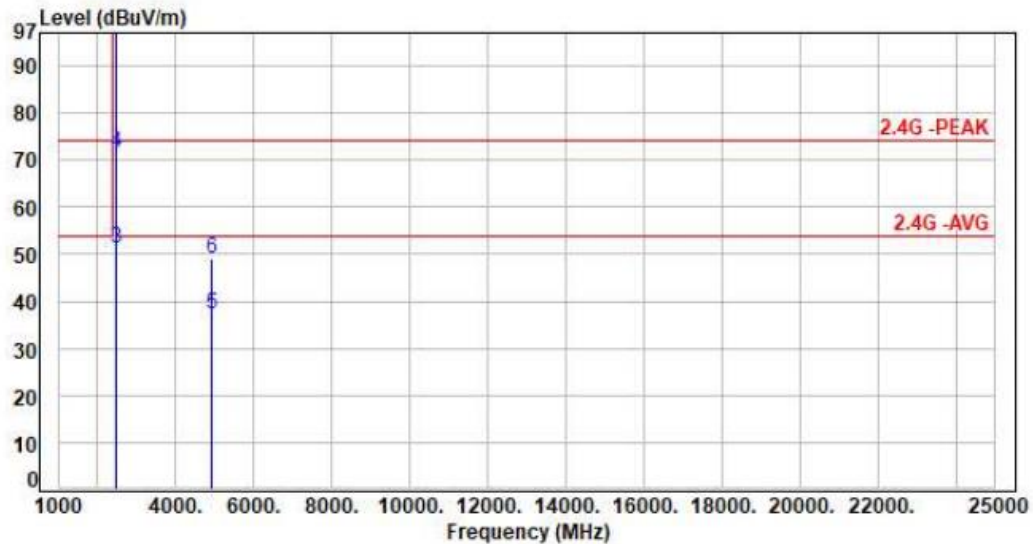
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 2, CH11		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.04	98.65	96.61	200.00	-103.39	Average	136	283	P
2	2462.00	-2.04	108.45	106.41	200.00	-93.59	Peak	136	283	P
3	2483.50	-2.01	53.22	51.21	54.00	-2.79	Average	136	283	P
4	2483.50	-2.01	73.51	71.50	74.00	-2.50	Peak	136	283	P
5	4924.00	6.29	31.10	37.39	54.00	-16.61	Average	100	209	P
6	4924.00	6.29	42.62	48.91	74.00	-25.09	Peak	100	209	P

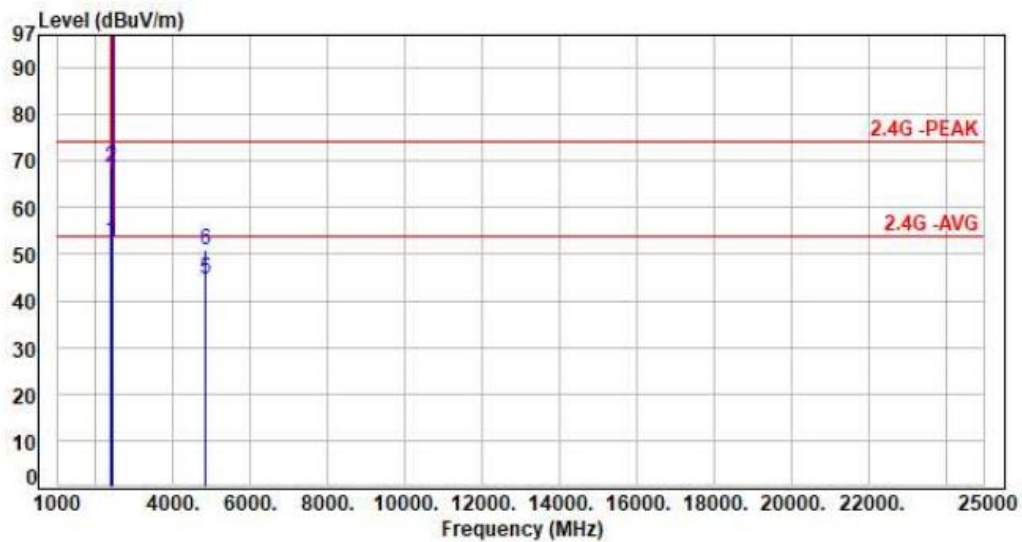
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: VERTICAL
Test Mode	: Mode 3, CH01		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	55.15	52.82	54.00	-1.18	Average	100	135	P
2	2390.00	-2.33	71.06	68.73	74.00	-5.27	Peak	100	135	P
3	2412.00	-2.29	101.11	98.82	200.00	-101.18	Average	100	135	P
4	2412.00	-2.29	111.11	108.82	200.00	-91.18	Peak	100	135	P
5	4824.00	5.98	38.51	44.49	54.00	-9.51	Average	100	203	P
6	4824.00	5.98	44.81	50.79	74.00	-23.21	Peak	100	203	P

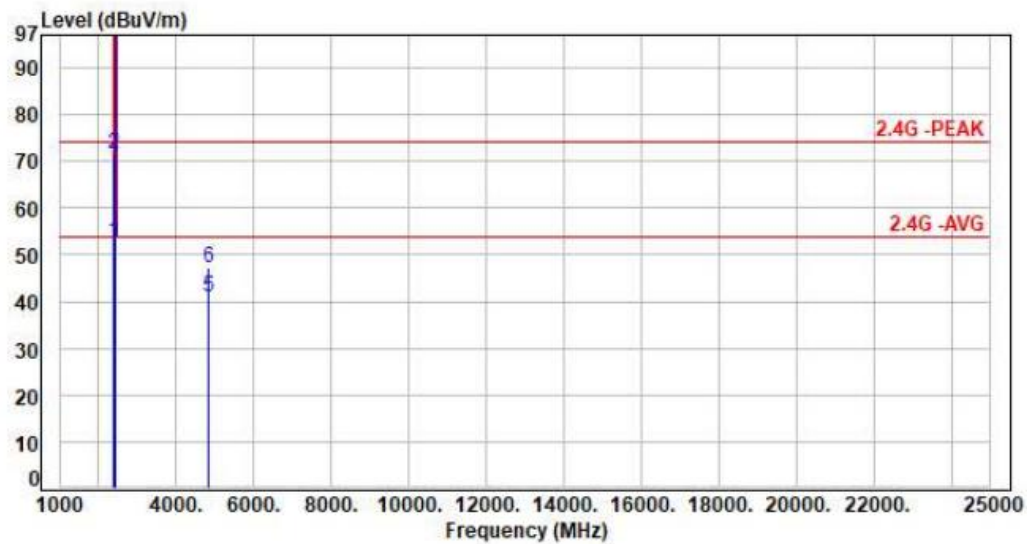
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, CH01		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	55.17	52.84	54.00	-1.16	Average	154	283	P
2	2390.00	-2.33	73.85	71.52	74.00	-2.48	Peak	154	283	P
3	2412.00	-2.29	98.04	95.75	200.00	-104.25	Average	154	283	P
4	2412.00	-2.29	108.71	106.42	200.00	-93.58	Peak	154	283	P
5	4824.00	5.98	34.97	40.95	54.00	-13.05	Average	100	224	P
6	4824.00	5.98	41.36	47.34	74.00	-26.66	Peak	100	224	P

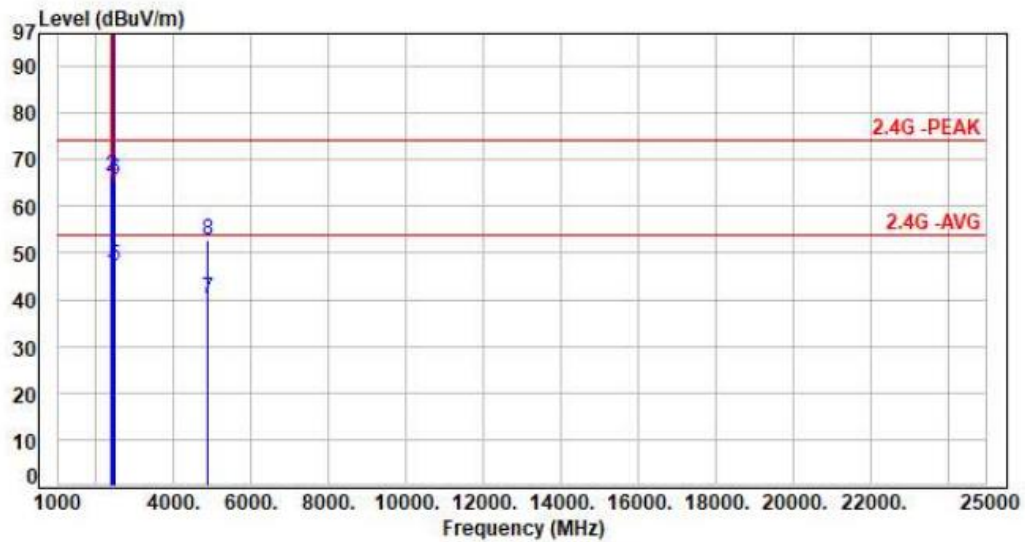
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	48.08	45.75	54.00	-8.25	Average	100	136	P
2	2390.00	-2.33	68.72	66.39	74.00	-7.61	Peak	100	136	P
3	2437.00	-2.17	107.22	105.05	200.00	-94.95	Average	100	136	P
4	2437.00	-2.17	117.04	114.87	200.00	-85.13	Peak	100	136	P
5	2483.50	-2.01	49.26	47.25	54.00	-6.75	Average	100	136	P
6	2483.50	-2.01	67.53	65.52	74.00	-8.48	Peak	100	136	P
7	4874.00	6.13	33.93	40.06	54.00	-13.94	Average	100	169	P
8	4874.00	6.13	46.43	52.56	74.00	-21.44	Peak	100	169	P

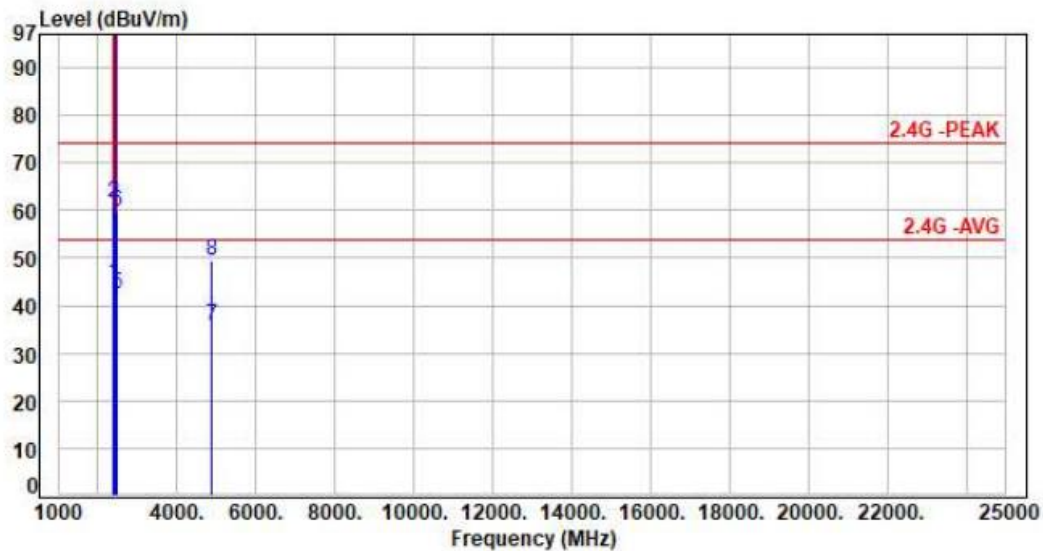
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, CH06		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	46.94	44.61	54.00	-9.39	Average	122	283	P
2	2390.00	-2.33	64.00	61.67	74.00	-12.33	Peak	122	283	P
3	2437.00	-2.17	104.67	102.50	200.00	-97.50	Average	122	283	P
4	2437.00	-2.17	114.70	112.53	200.00	-87.47	Peak	122	283	P
5	2483.50	-2.01	44.30	42.29	54.00	-11.71	Average	122	283	P
6	2483.50	-2.01	61.68	59.67	74.00	-14.33	Peak	122	283	P
7	4874.00	6.13	29.82	35.95	54.00	-18.05	Average	100	128	P
8	4874.00	6.13	43.34	49.47	74.00	-24.53	Peak	100	128	P

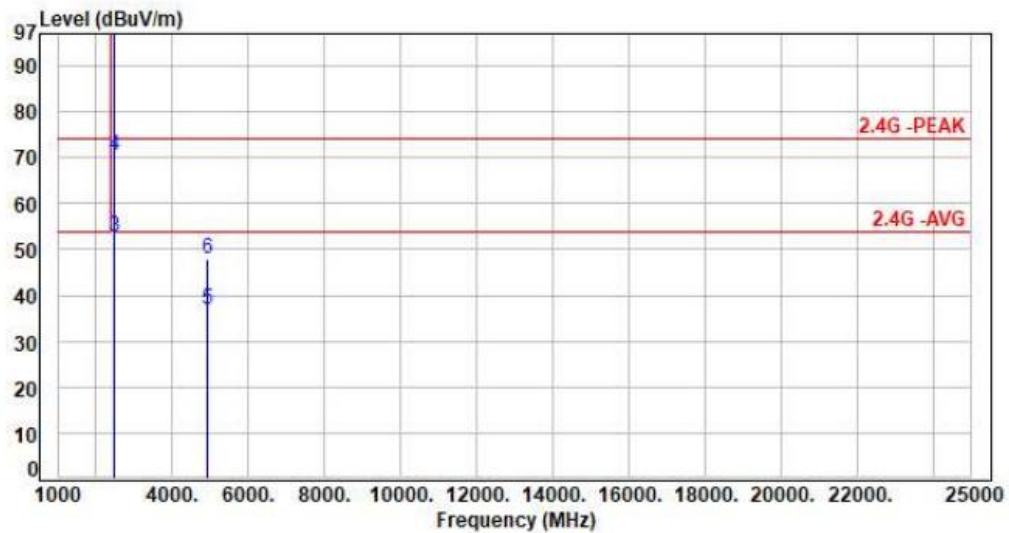
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 3, CH11		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.04	100.36	98.32	200.00	-101.68	Average	137	138	P
2	2462.00	-2.04	110.31	108.27	200.00	-91.73	Peak	137	138	P
3	2483.50	-2.01	54.63	52.62	54.00	-1.38	Average	137	138	P
4	2483.50	-2.01	72.41	70.40	74.00	-3.60	Peak	137	138	P
5	4924.00	6.29	30.69	36.98	54.00	-17.02	Average	100	192	P
6	4924.00	6.29	41.63	47.92	74.00	-26.08	Peak	100	192	P

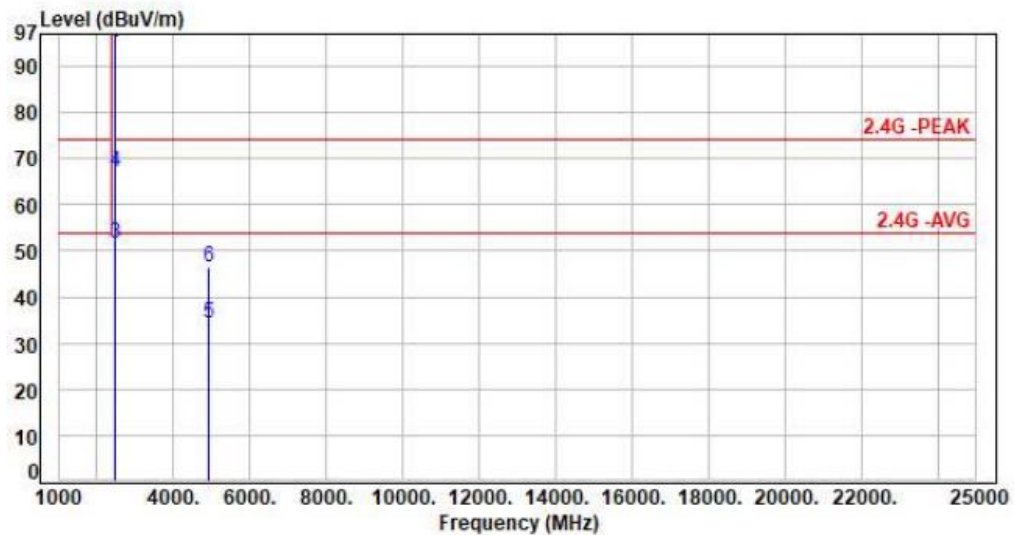
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 3, CH11		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-2.04	97.08	95.04	200.00	-104.96	Average	155	282	P
2	2462.00	-2.04	108.04	106.00	200.00	-94.00	Peak	155	282	P
3	2483.50	-2.01	53.82	51.81	54.00	-2.19	Average	155	282	P
4	2483.50	-2.01	69.23	67.22	74.00	-6.78	Peak	155	282	P
5	4924.00	6.29	27.93	34.22	54.00	-19.78	Average	100	206	P
6	4924.00	6.29	40.23	46.52	74.00	-27.48	Peak	100	206	P

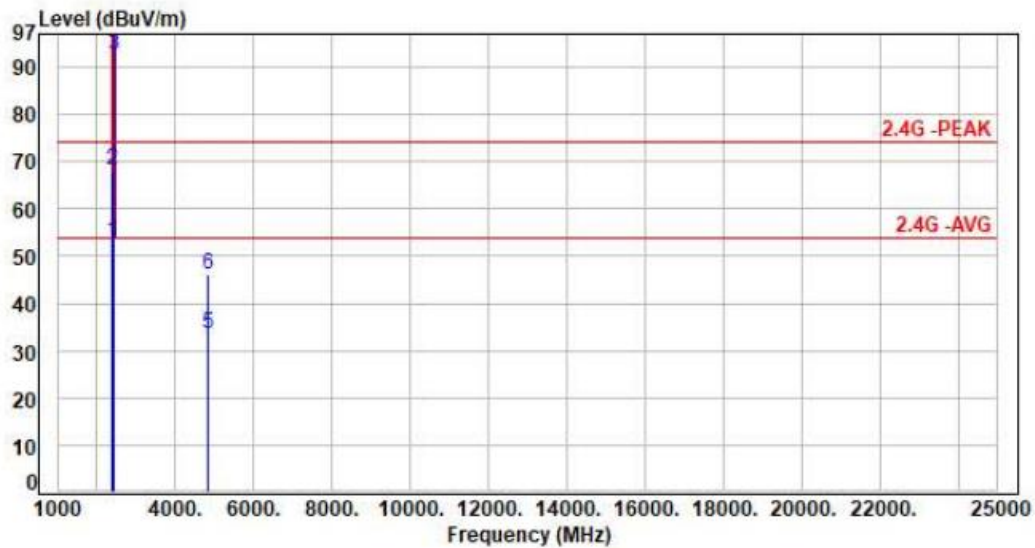
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: VERTICAL
Test Mode	: Mode 4, CH03		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	55.31	52.98	54.00	-1.02	Average	100	134	P
2	2390.00	-2.33	70.65	68.32	74.00	-5.68	Peak	100	134	P
3	2422.00	-2.19	94.60	92.41	200.00	-107.59	Average	100	134	P
4	2422.00	-2.19	105.34	103.15	200.00	-96.85	Peak	100	134	P
5	4844.00	6.04	27.39	33.43	54.00	-20.57	Average	100	112	P
6	4844.00	6.04	40.03	46.07	74.00	-27.93	Peak	100	112	P

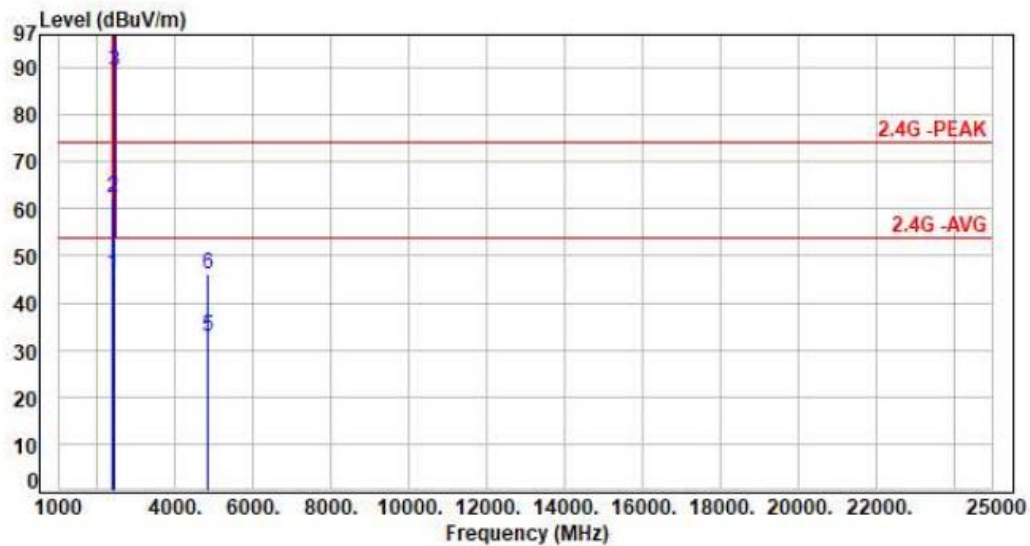
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH03		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	48.61	46.28	54.00	-7.72	Average	146	282	P
2	2390.00	-2.33	64.48	62.15	74.00	-11.85	Peak	146	282	P
3	2422.00	-2.19	91.42	89.23	200.00	-110.77	Average	146	282	P
4	2422.00	-2.19	100.57	98.38	200.00	-101.62	Peak	146	282	P
5	4844.00	6.04	26.94	32.98	54.00	-21.02	Average	100	215	P
6	4844.00	6.04	40.13	46.17	74.00	-27.83	Peak	100	215	P

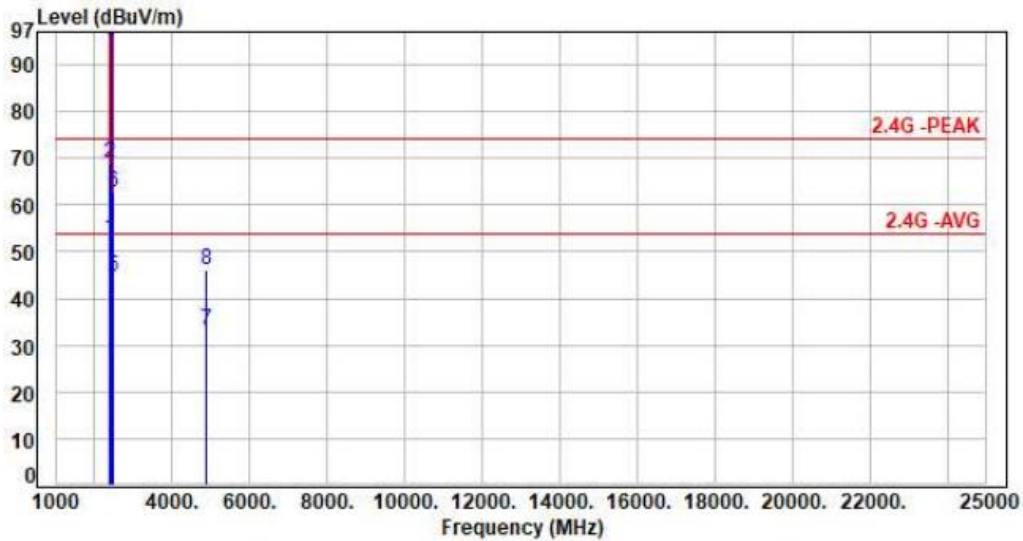
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, CH06		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	54.95	52.62	54.00	-1.38	Average	100	179	P
2	2390.00	-2.33	71.20	68.87	74.00	-5.13	Peak	100	179	P
3	2437.00	-2.17	97.50	95.33	200.00	-104.67	Average	100	179	P
4	2437.00	-2.17	107.70	105.53	200.00	-94.47	Peak	100	179	P
5	2483.50	-2.01	46.67	44.66	54.00	-9.34	Average	100	179	P
6	2483.50	-2.01	64.69	62.68	74.00	-11.32	Peak	100	179	P
7	4874.00	6.13	26.89	33.02	54.00	-20.98	Average	100	221	P
8	4874.00	6.13	40.05	46.18	74.00	-27.82	Peak	100	221	P

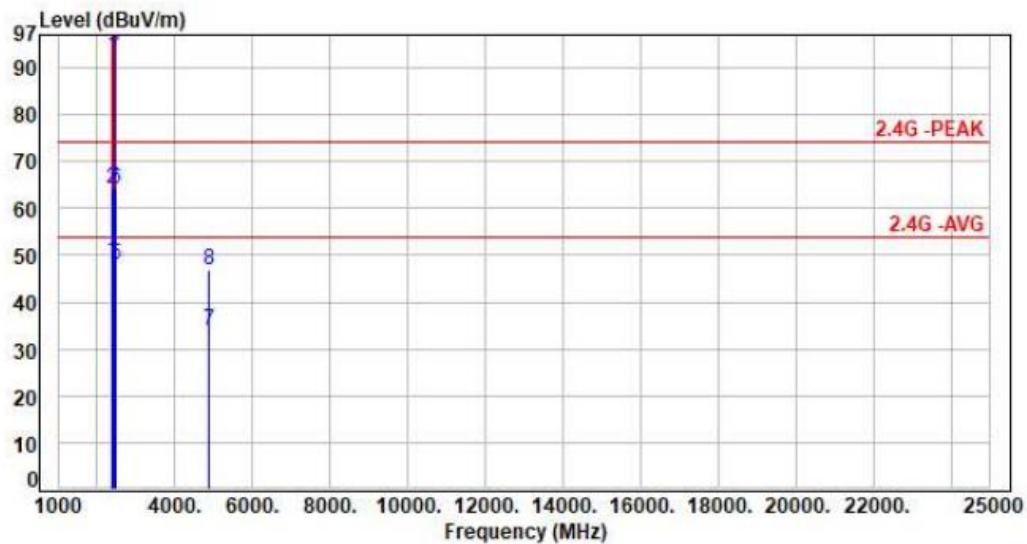
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH06		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-2.33	50.90	48.57	54.00	-5.43	Average	139	283	P
2	2390.00	-2.33	66.57	64.24	74.00	-9.76	Peak	139	283	P
3	2437.00	-2.17	96.64	94.47	200.00	-105.53	Average	139	283	P
4	2437.00	-2.17	105.07	102.90	200.00	-97.10	Peak	139	283	P
5	2483.50	-2.01	49.86	47.85	54.00	-6.15	Average	139	283	P
6	2483.50	-2.01	66.11	64.10	74.00	-9.90	Peak	139	283	P
7	4874.00	6.13	27.62	33.75	54.00	-20.25	Average	100	163	P
8	4874.00	6.13	40.62	46.75	74.00	-27.25	Peak	100	163	P

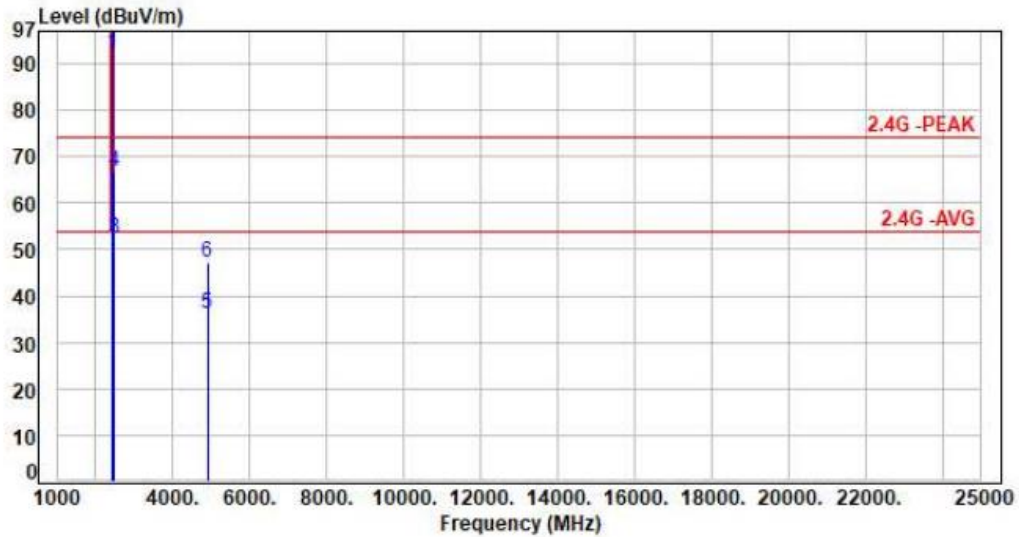
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	:	AC 120V / 60Hz	Pol/Phase	:	VERTICAL
Test Mode	:	Mode 4, CH09		:	



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2452.00	-2.13	94.52	92.39	200.00	-107.61	Average	100	138	P
2	2452.00	-2.13	105.11	102.98	200.00	-97.02	Peak	100	138	P
3	2483.50	-2.01	54.43	52.42	54.00	-1.58	Average	100	138	P
4	2483.50	-2.01	68.92	66.91	74.00	-7.09	Peak	100	138	P
5	4904.00	6.23	30.02	36.25	54.00	-17.75	Average	100	192	P
6	4904.00	6.23	40.88	47.11	74.00	-26.89	Peak	100	192	P

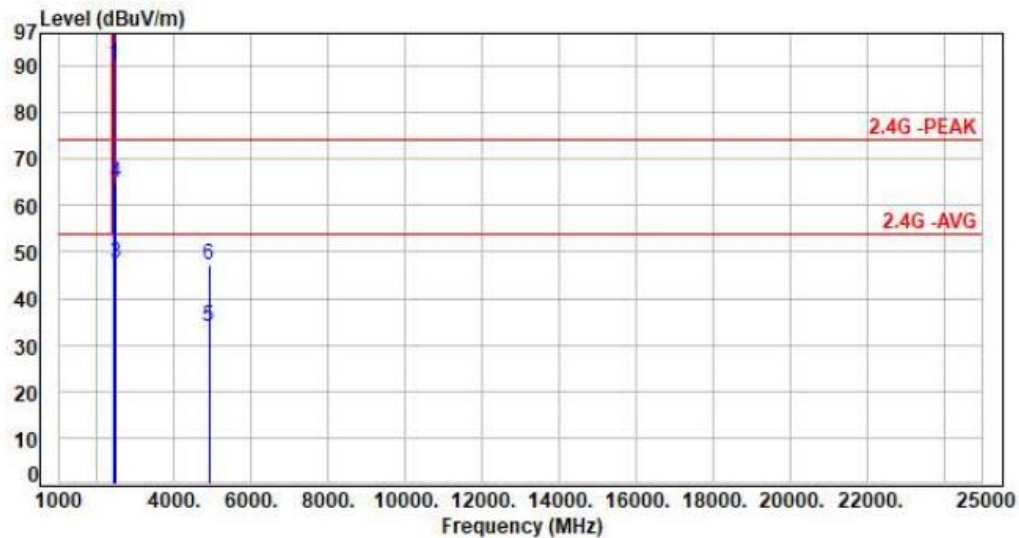
Note: Level=Reading+Factor

Margin=Level-Limit

Factor=Antenna Factor + cable loss - Amplifier Factor



Power	: AC 120V / 60Hz	Pol/Phase	: HORIZONTAL
Test Mode	: Mode 4, CH09		:



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2452.00	-2.13	92.50	90.37	200.00	-109.63	Average	158	284	P
2	2452.00	-2.13	102.57	100.44	200.00	-99.56	Peak	158	284	P
3	2483.50	-2.01	49.66	47.65	54.00	-6.35	Average	158	284	P
4	2483.50	-2.01	67.00	64.99	74.00	-9.01	Peak	158	284	P
5	4904.00	6.23	27.59	33.82	54.00	-20.18	Average	100	216	P
6	4904.00	6.23	41.02	47.25	74.00	-26.75	Peak	100	216	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

According to the methods defined in ANSI C63.10-2013 Section 11.11.1

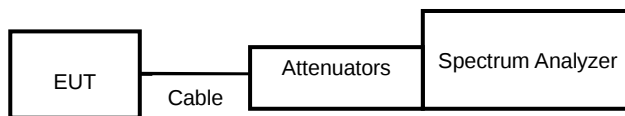
Below -20dB of the highest emission level of operating band (In 100 kHz Resolution Bandwidth)

7.2 Test Procedure

According to the methods defined in ANSI C63.10-2013 Section 11.11.2 & 11.11.3

- The transmitter output was connected to the spectrum analyzer via a low loss 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



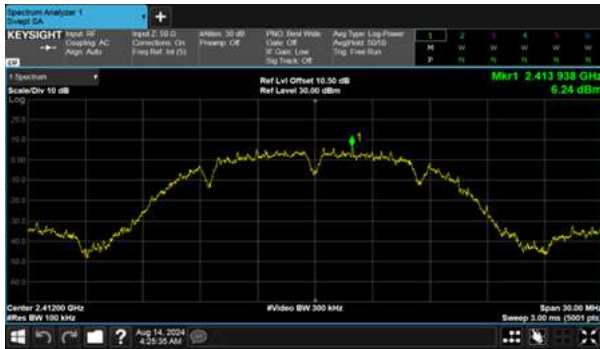
7.4 Test Result and Data

Note: Test plots refers to the following pages.

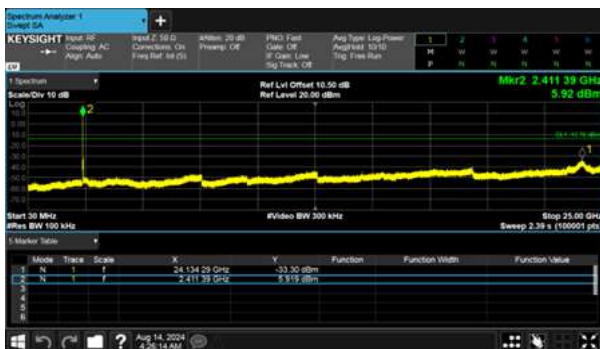
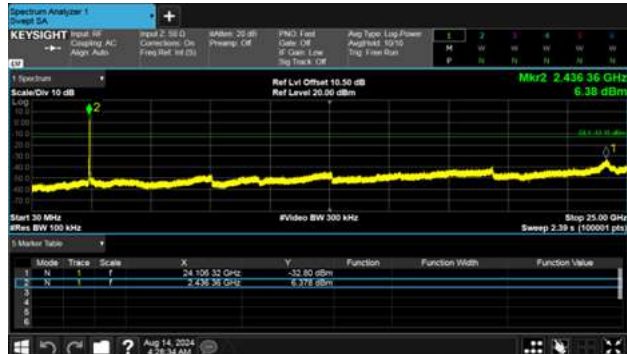
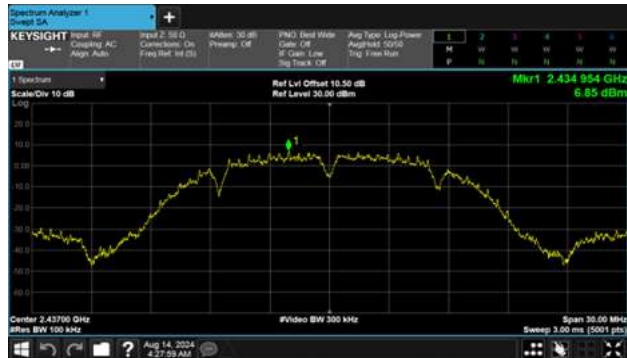


ANT 1

Modulation Type: 802.11b, CH 01



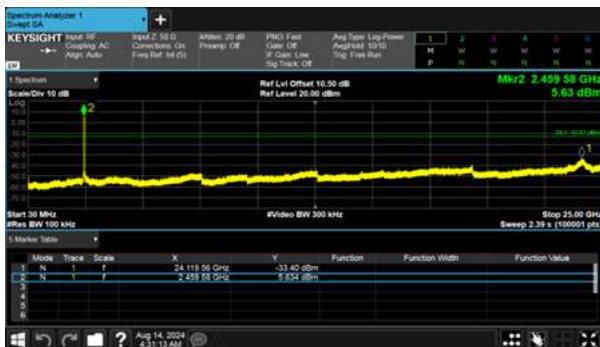
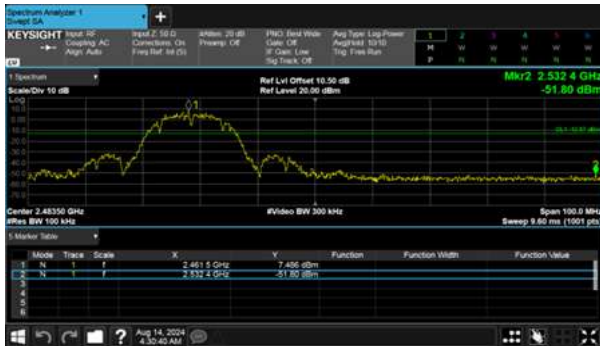
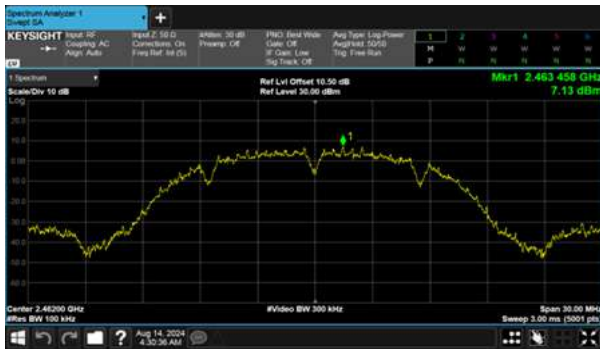
Modulation Type: 802.11b, CH 06





ANT 1

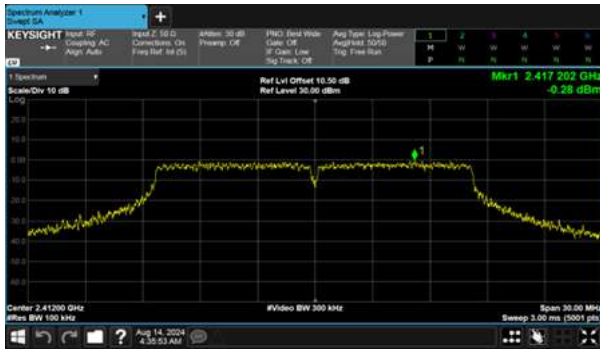
Modulation Type: 802.11b, CH 11



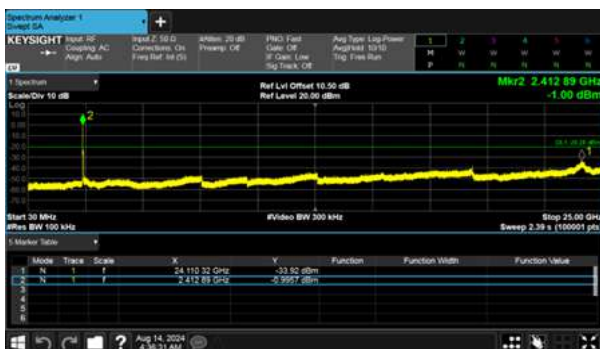
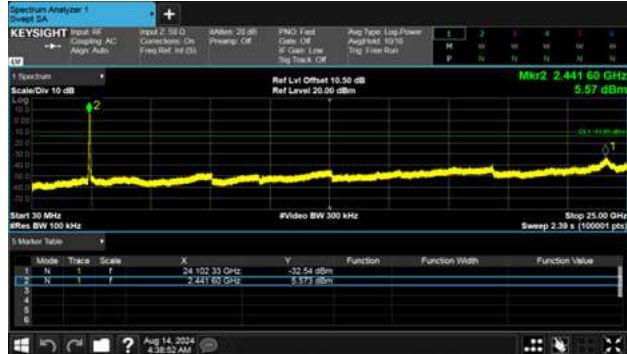
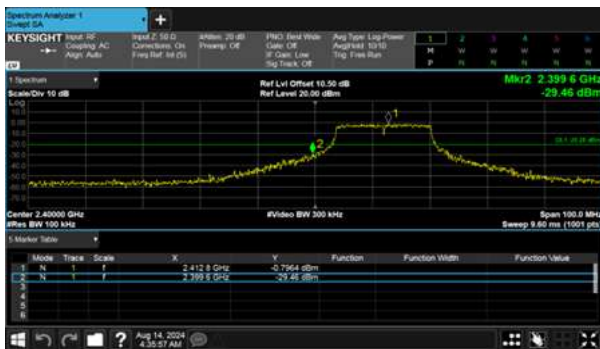
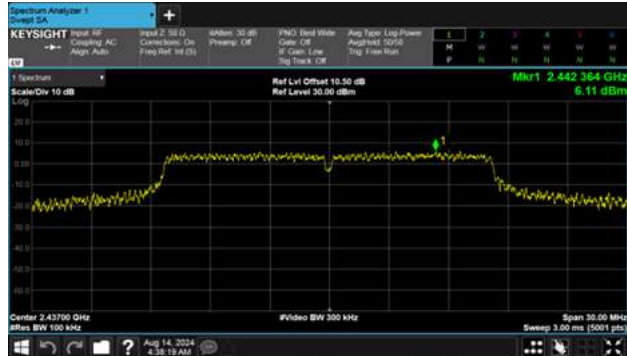


ANT 1

Modulation Type: 802.11g, CH01



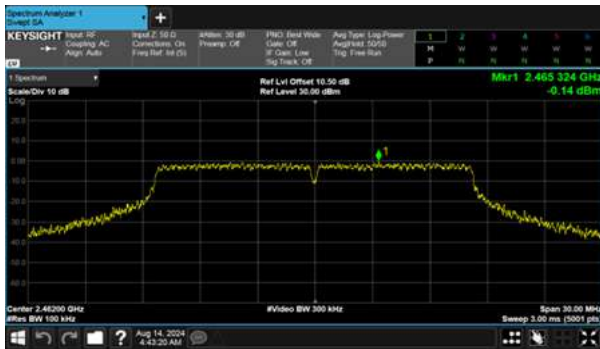
Modulation Type: 802.11g, CH06





ANT 1

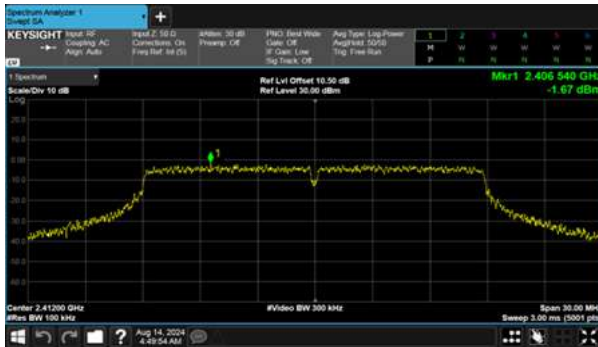
Modulation Type: 802.11g, CH11



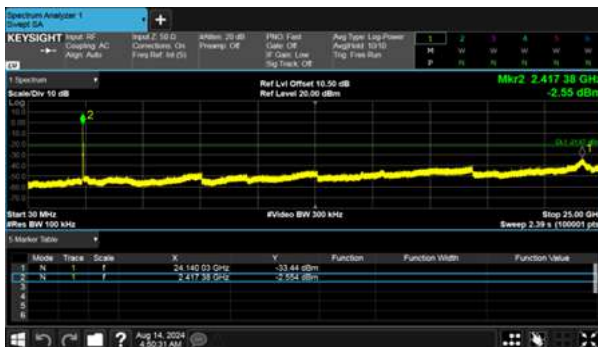
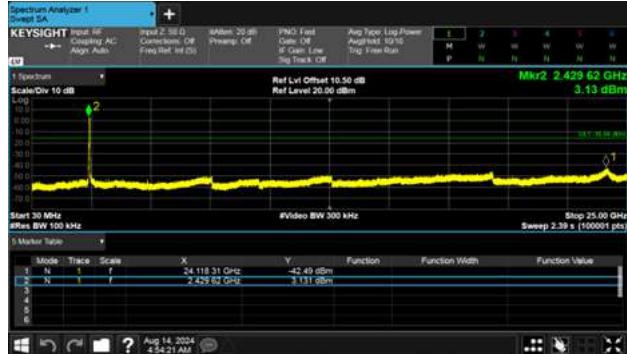
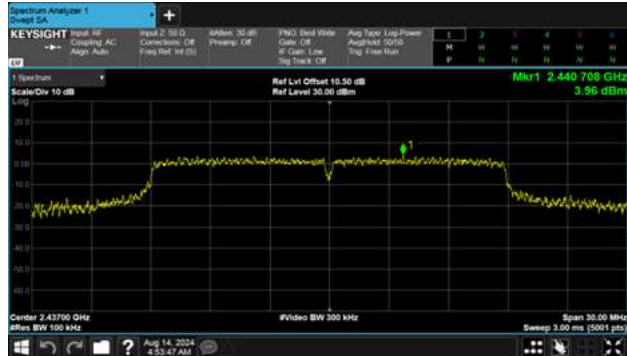


ANT 1

Modulation Type: 802.11n HT20, CH01



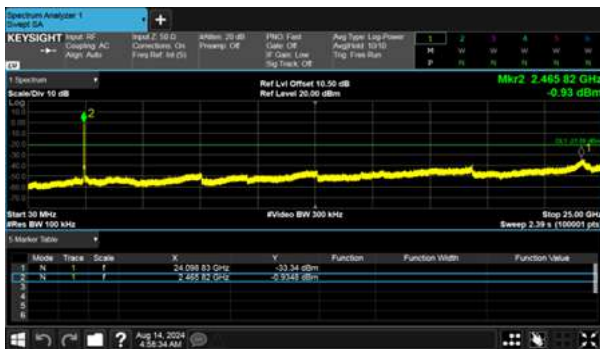
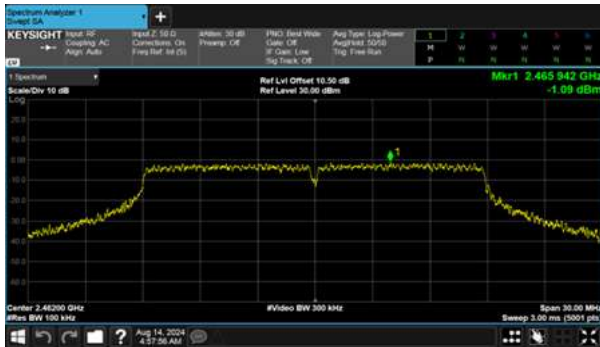
Modulation Type: 802.11n HT20, CH06





ANT 1

Modulation Type: 802.11n HT20, CH11



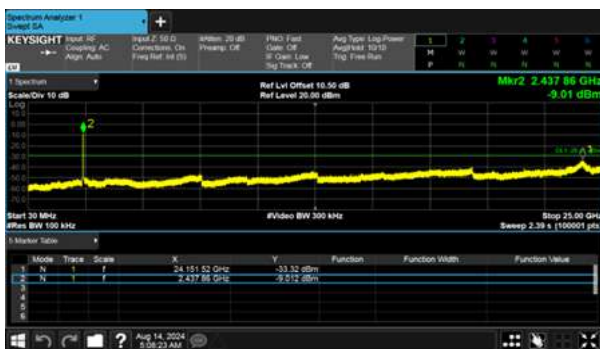
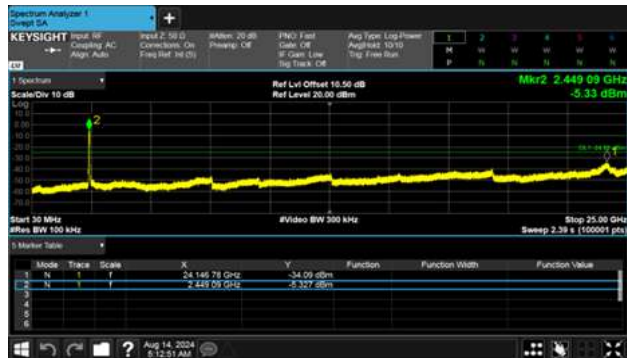
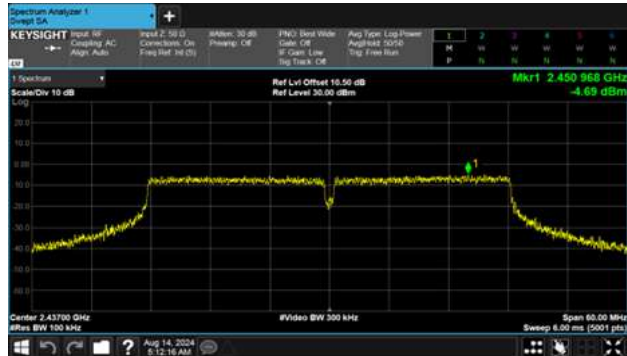


ANT 1

Modulation Type: 802.11n HT40, CH03



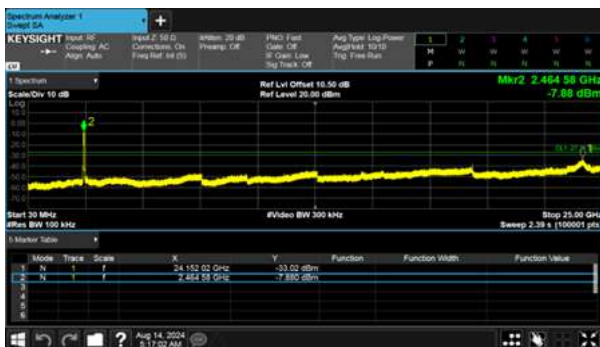
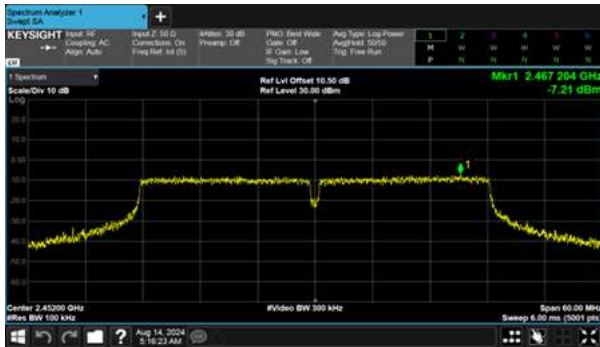
Modulation Type: 802.11n HT40, CH06





ANT 1

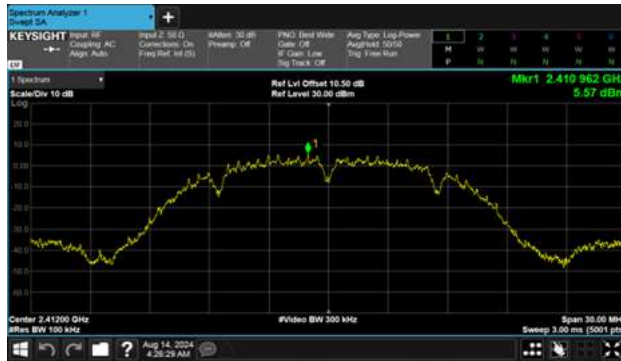
Modulation Type: 802.11n HT40, CH09



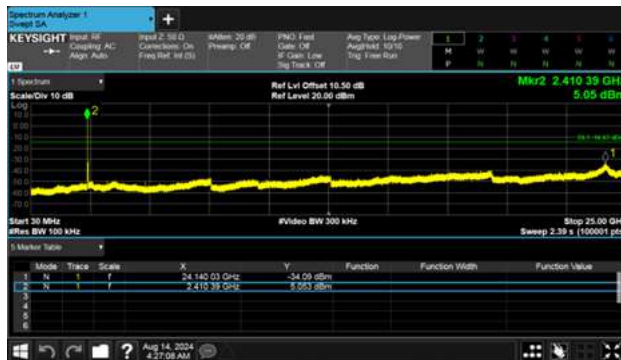
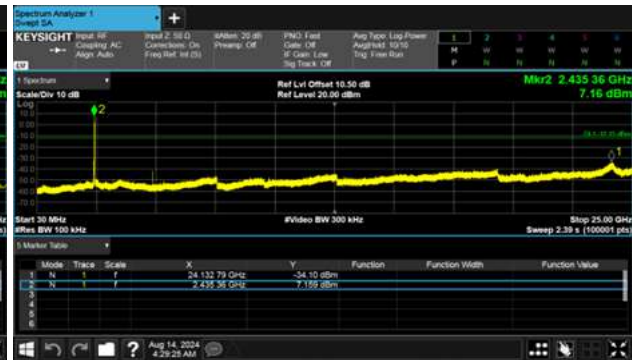
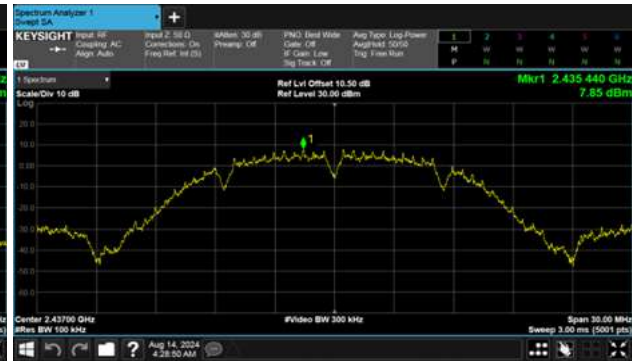


ANT 2

Modulation Type: 802.11b, CH 01



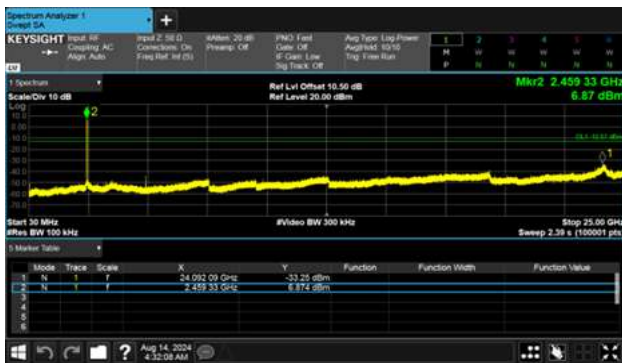
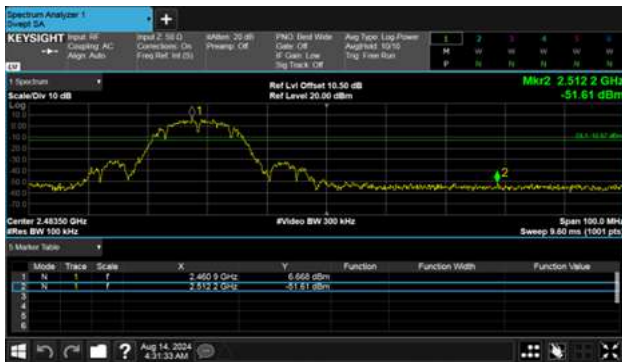
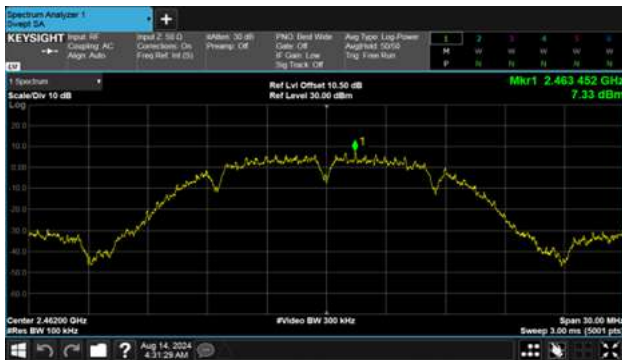
Modulation Type: 802.11b, CH 06





ANT 2

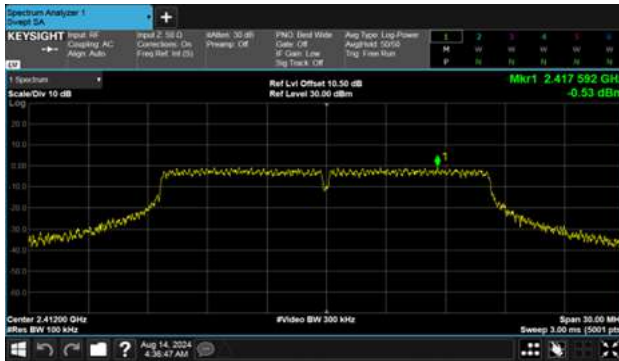
Modulation Type: 802.11b, CH 11



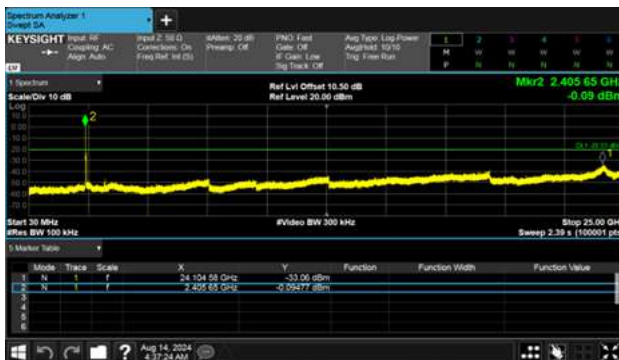
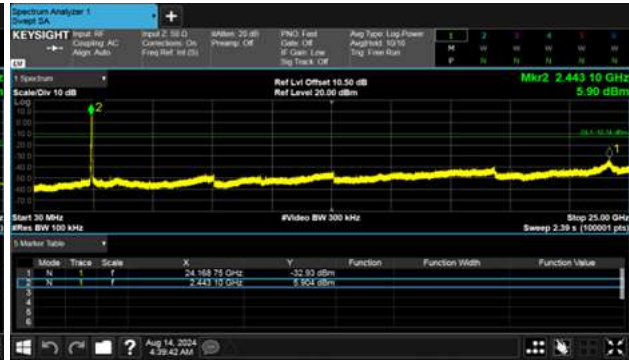
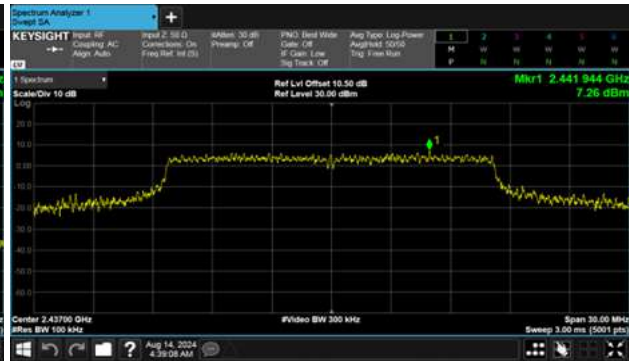


ANT 2

Modulation Type: 802.11g, CH01



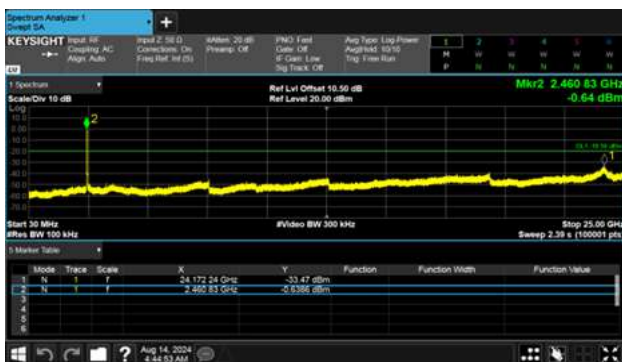
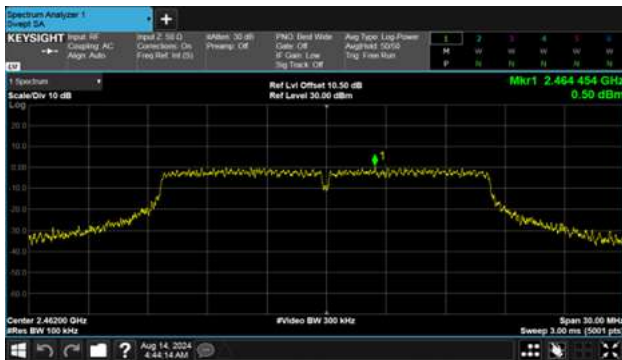
Modulation Type: 802.11g, CH06





ANT 2

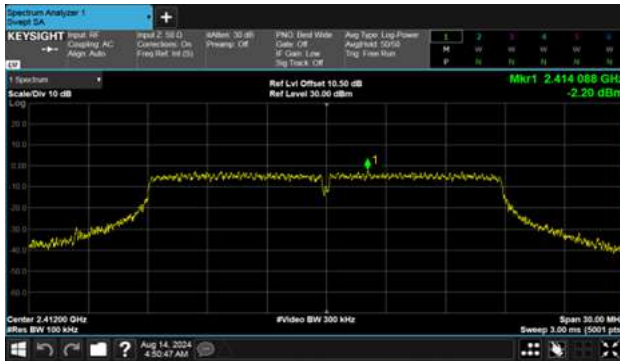
Modulation Type: 802.11g, CH11



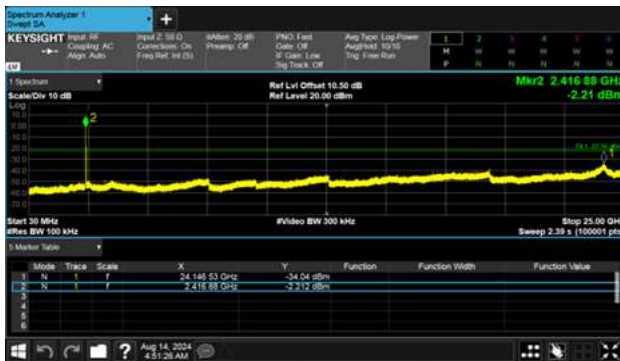
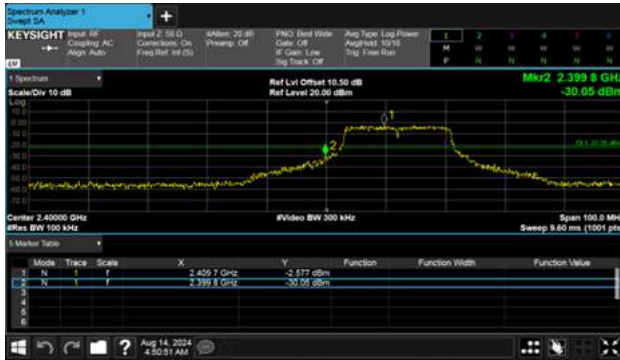
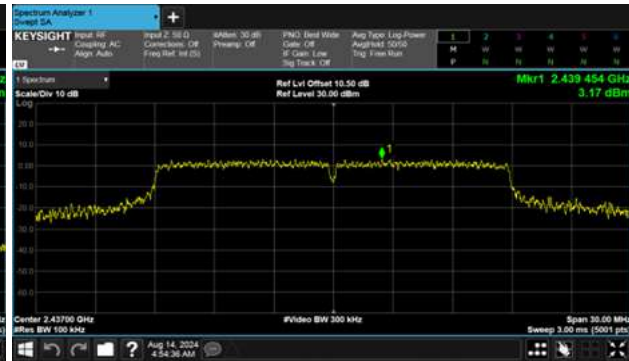


ANT 2

Modulation Type: 802.11n HT20, CH01



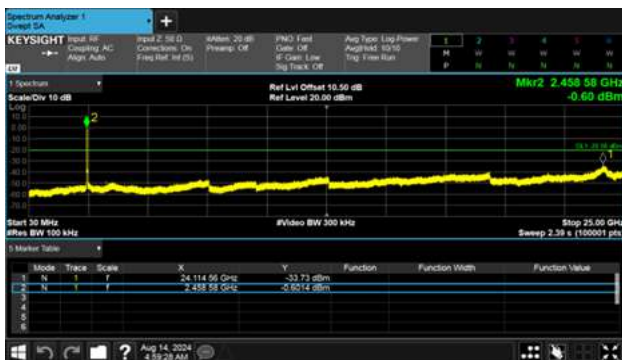
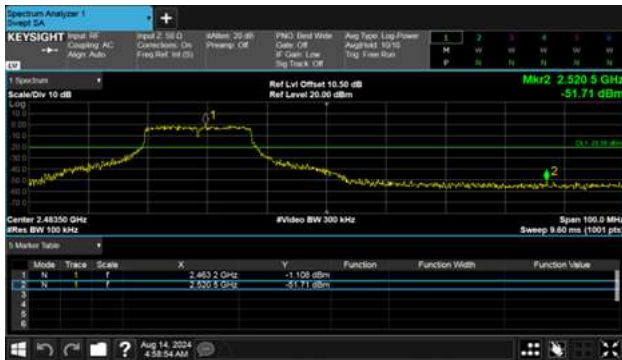
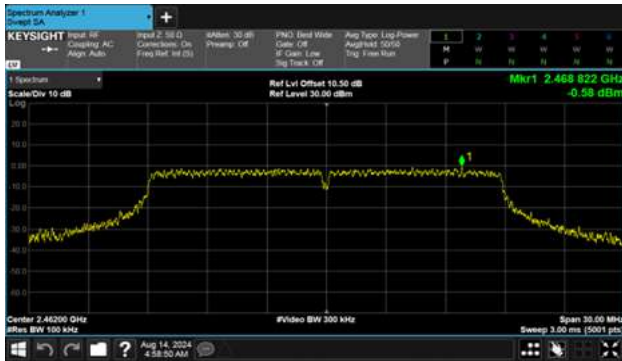
Modulation Type: 802.11n HT20, CH06





ANT 2

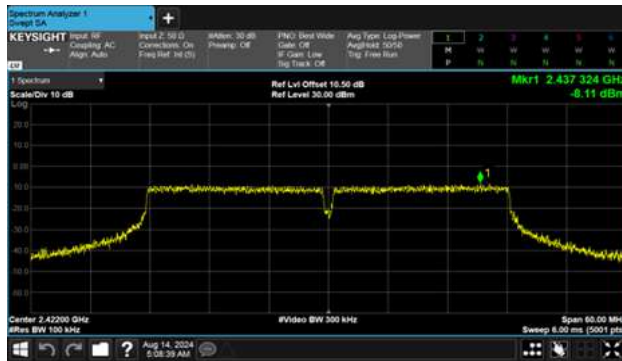
Modulation Type: 802.11n HT20, CH11



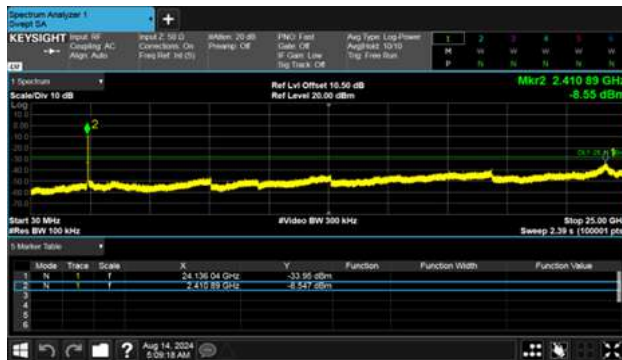
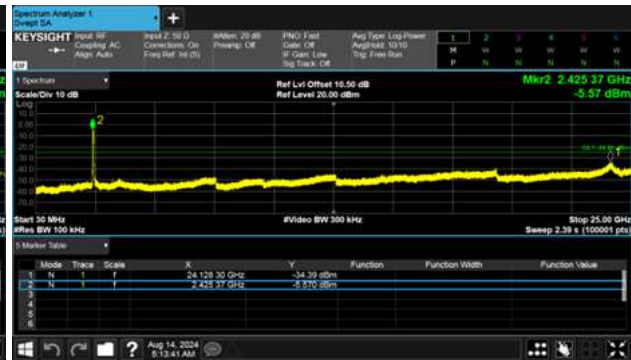
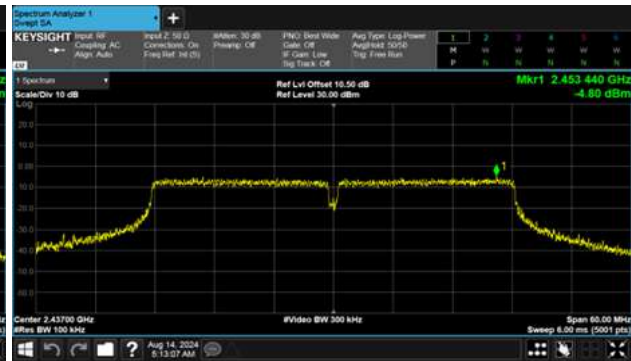


NT 2

Modulation Type: 802.11n HT40, CH03



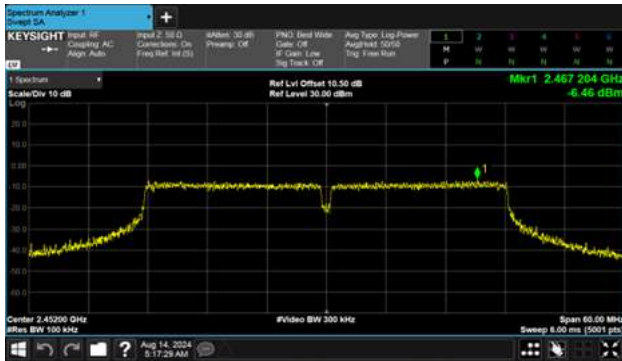
Modulation Type: 802.11n HT40, CH06





ANT 2

Modulation Type: 802.11n HT40, CH09





8. On Time, Duty Cycle and Measurement methods

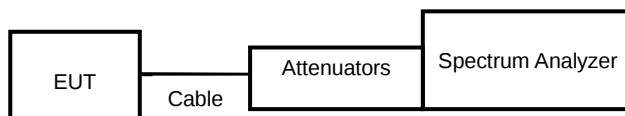
8.1 Test Limit

None; for reporting purposes only.

8.2 Test Procedure

According to the methods defined in ANSI C63.10-2013 Section 11.6
Zero-Span Spectrum Analyzer Method.

8.3 Test Setup Layout



8.4 Test Result and Data

Modulation Type	On Time (msec)	Period Time (msec)	Duty Cycle (%)
11b,1M	100.00	100.00	100.00%
11g,6M	100.00	100.00	100.00%
11n HT20	100.00	100.00	100.00%
11n HT40	100.00	100.00	100.00%



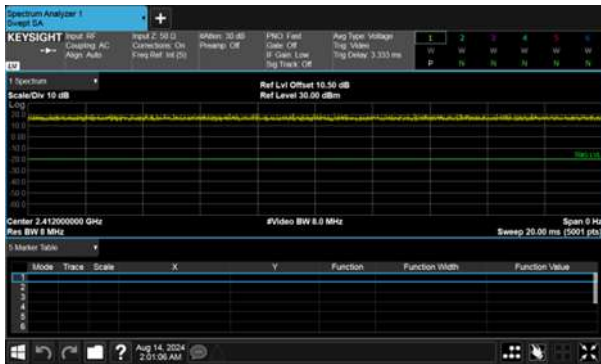
Modulation Type: 802.11b(1Mbps)



Modulation Type: 802.11n HT40(13.5Mbps)



Modulation Type: 802.11g(6Mbps)



Modulation Type: 802.11n HT20(6.5Mbps)





9. 6dB Bandwidth Measurement Data

9.1 Test Limit

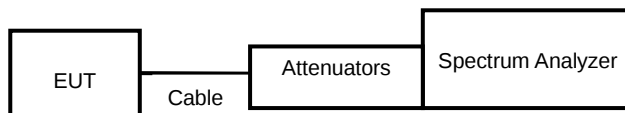
The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

9.2 Test Procedures

According to the methods defined in ANSI C63.10-2013 Section 11.8

- The transmitter output was connected to the spectrum analyzer.
- Set RBW of spectrum analyzer to 100 KHz and VBW to 300 KHz.
- 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.

9.3 Test Setup Layout



9.4 Test Result and Data

Modulation Type	Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Limit (MHz)
			ANT 1	ANT 2	
11b	1	2412	10.11	10.12	0.5
	6	2437	10.12	10.12	0.5
	11	2462	10.12	10.12	0.5
11g	1	2412	16.59	16.53	0.5
	6	2437	16.58	16.57	0.5
	11	2462	16.58	16.54	0.5
11n HT20	1	2412	17.79	17.81	0.5
	6	2437	17.79	17.81	0.5
	11	2462	17.82	17.80	0.5
11n HT40	3	2422	36.59	36.57	0.5
	6	2437	36.57	36.56	0.5
	9	2452	36.60	36.57	0.5



ANT 1

Modulation Type: 802.11b

CH01



Modulation Type: 802.11g

CH01



CH06



CH06



CH11



CH11





ANT 1

Modulation Type: 802.11n HT20
CH01Modulation Type: 802.11n HT40
CH03

CH06



CH06



CH11



CH09





ANT 2

Modulation Type: 802.11b

CH01



Modulation Type: 802.11g

CH01



CH06



CH06



CH11



CH11





ANT 2

Modulation Type: 802.11n HT20

CH01



Modulation Type: 802.11n HT40

CH03



CH06



CH06



CH11



CH09





10. Maximum Peak and Average Output Power

10.1 Test Limit

The Maximum Peak Output Power Measurement is 30dBm.

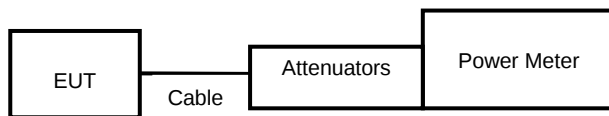
If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi

10.2 Test Procedures

According to the methods defined in ANSI C63.10-2013 Section 11.9.2.3.2

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.

10.3 Test Setup Layout



**10.4 Test Result and Data**

Setting	Modulation Mode	Channel	Frequency (MHz)	Conducted(peak) output power (dBm)		Total PK power (dBm)	Total PK power (mW)	Power Limit (dBm)
				ANT 1	ANT 2			
17	11b	1	2412	18.69	18.47	21.59	144.268	30.00
18.5		6	2437	19.97	20.23	23.11	204.750	30.00
18		11	2462	19.91	19.70	22.82	191.274	30.00
14	11g	1	2412	23.46	24.70	27.13	516.941	30.00
22		6	2437	26.29	26.51	29.41	873.312	30.00
15		11	2462	22.91	23.16	26.05	402.448	30.00
13	11n HT20	1	2412	22.11	23.60	25.93	391.642	30.00
22		6	2437	26.20	26.45	29.34	858.440	30.00
14.5		11	2462	22.48	23.23	25.88	387.389	30.00
9.5	11n HT40	3	2422	19.36	17.82	21.67	146.832	30.00
13		6	2437	22.35	22.86	25.62	364.988	30.00
11		9	2452	19.74	20.43	23.11	204.597	30.00

Setting	Modulation Mode	Channel	Frequency (MHz)	Conducted(average) output power (dBm)		Total AV power (dBm)	Total AV power (mW)	Power Limit (dBm)
				ANT 1	ANT 2			
17	11b	1	2412	16.44	16.34	19.40	87.108	NA
18.5		6	2437	17.77	18.19	21.00	125.759	NA
18		11	2462	18.02	17.65	20.85	121.597	NA
14	11g	1	2412	14.48	15.47	18.01	63.291	NA
22		6	2437	21.53	21.78	24.67	292.894	NA
15		11	2462	14.67	14.87	17.78	59.999	NA
13	11n HT20	1	2412	13.23	13.87	16.57	45.416	NA
22		6	2437	21.69	21.66	24.69	294.125	NA
14.5		11	2462	14.12	14.53	17.34	54.202	NA
9.5	11n HT40	3	2422	8.75	8.57	11.67	14.693	NA
13		6	2437	13.29	13.08	16.20	41.654	NA
11		9	2452	10.51	11.18	13.87	24.368	NA

Note: Average power is for reference only.



11. Power Spectral Density

11.1 Test Limit

The Maximum of Power Spectral Density Measurement is 8dBm.

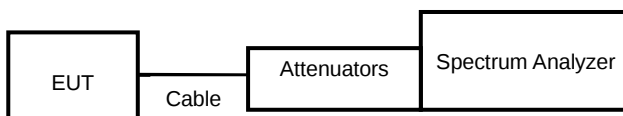
If transmitting antennas of directional gain greater than 6 dBi are used, the power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi

11.2 Test Procedures

According to the methods defined in ANSI C63.10-2013 Section 11.10

- The transmitter output was connected to spectrum analyzer.
- The spectrum analyzer's resolution bandwidth were set at 3kHz RBW and 10KHz VBW as that of the fundamental frequency. Set the sweep time=auto couple.
- The power spectral density was measured and recorded.

11.3 Test Setup Layout

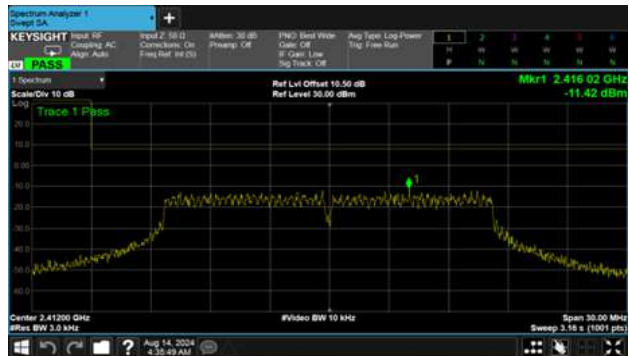


11.4 Test Result and Data

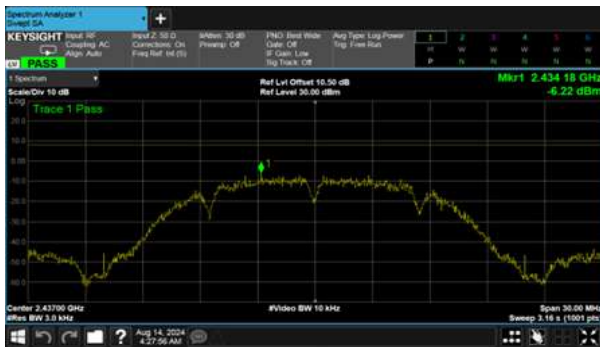
Modulation Type	Channel	Frequency (MHz)	Maximum Power Density of 3KHz Bandwidth(dBm)		Sum chain (dBm)	Duty Cycle CF(dB)	Total PSD (dBm)	Limit (dBm)
			ANT 1	ANT 2				
11b	1	2412	-8.38	-9.27	-5.79	0.00	-5.79	6.99
	6	2437	-6.22	-6.14	-3.17	0.00	-3.17	6.99
	11	2462	-7.58	-5.46	-3.38	0.00	-3.38	6.99
11g	1	2412	-11.42	-12.56	-8.94	0.00	-8.94	6.99
	6	2437	-5.45	2.78	3.39	0.00	3.39	6.99
	11	2462	-12.23	-11.32	-8.74	0.00	-8.74	6.99
11n HT20	1	2412	-14.07	-14.36	-11.20	0.00	-11.20	6.99
	6	2437	-7.63	-8.79	-5.16	0.00	-5.16	6.99
	11	2462	-11.23	-10.71	-7.95	0.00	-7.95	6.99
11n HT40	3	2422	-20.41	-19.15	-16.72	0.00	-16.72	6.99
	6	2437	-16.7	-15.94	-13.29	0.00	-13.29	6.99
	9	2452	-17.86	-18.23	-15.03	0.00	-15.03	6.99



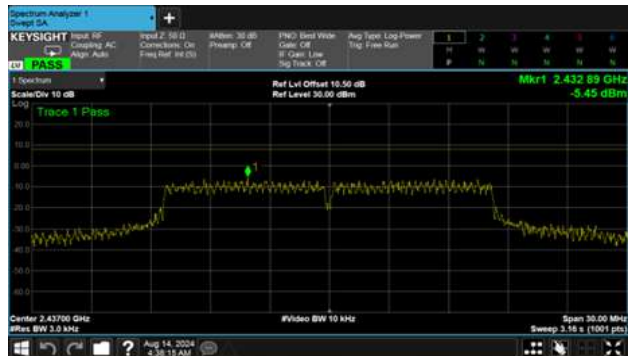
ANT 1

Modulation Type: 802.11b
CH01Modulation Type: 802.11g
CH01

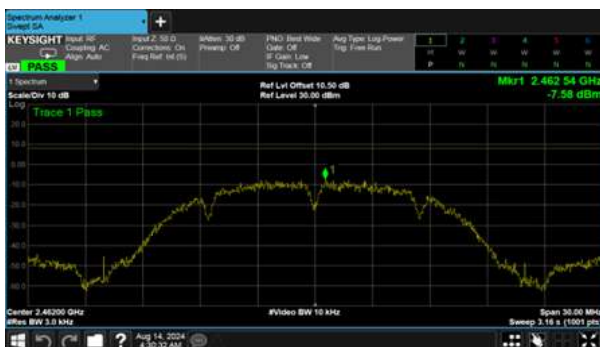
CH06



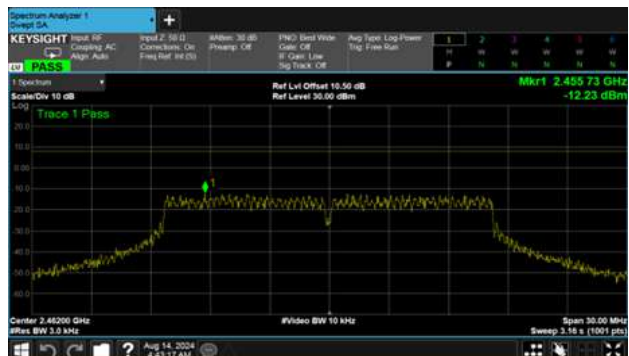
CH06



CH11

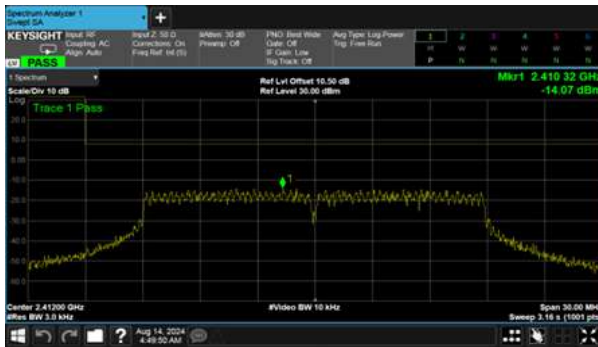


CH11





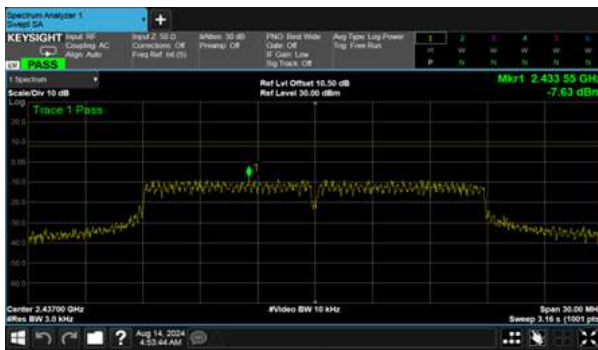
ANT 1
Modulation Type: 802.11n HT20
CH01



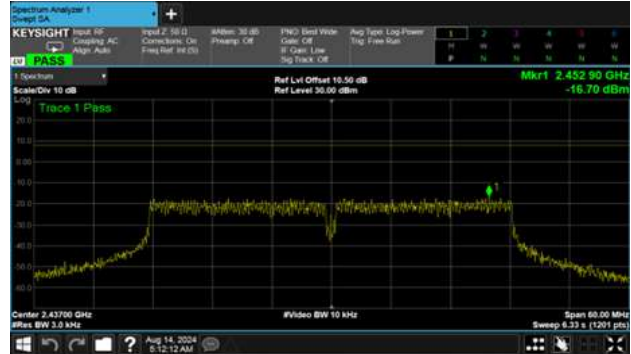
Modulation Type: 802.11n HT40
CH03



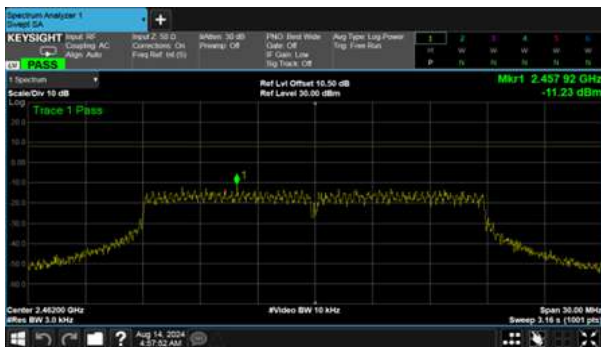
CH06



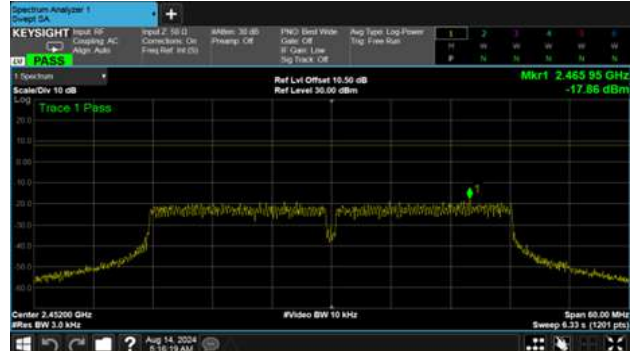
CH06



CH11

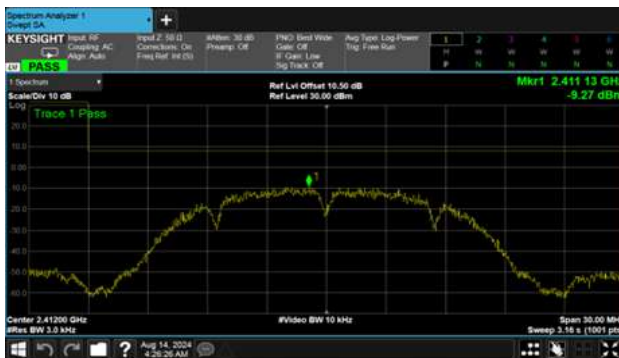


CH09

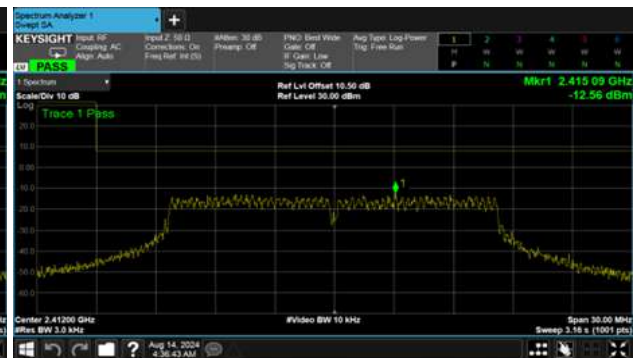




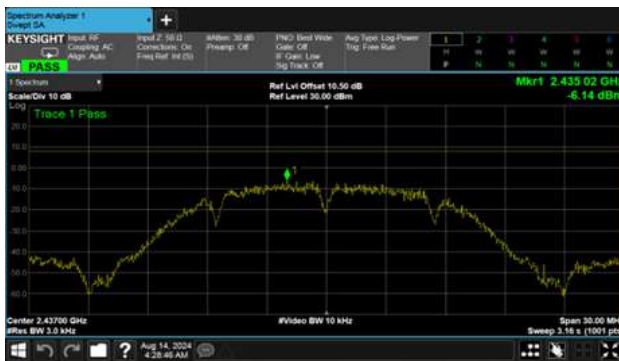
ANT 2
Modulation Type: 802.11b
CH01



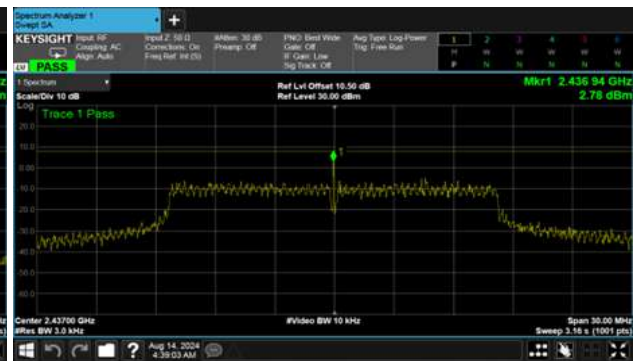
Modulation Type: 802.11g
CH01



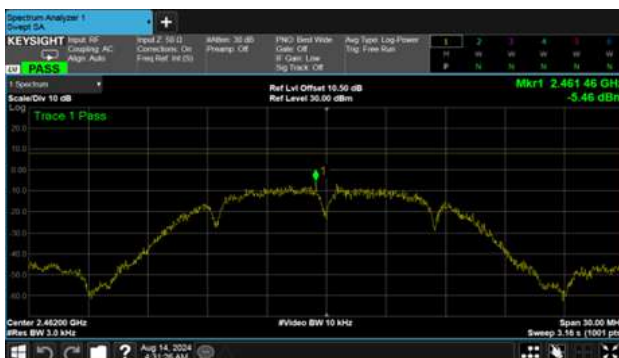
CH06



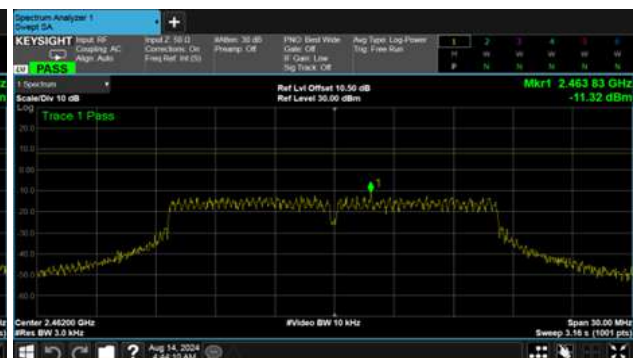
CH06



CH11

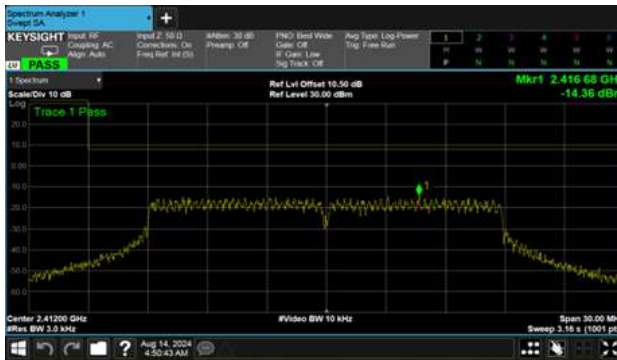


CH11

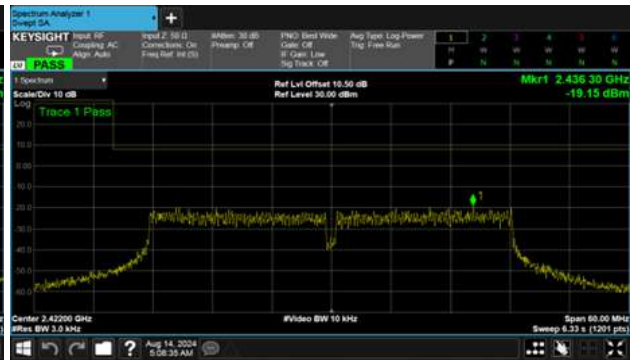




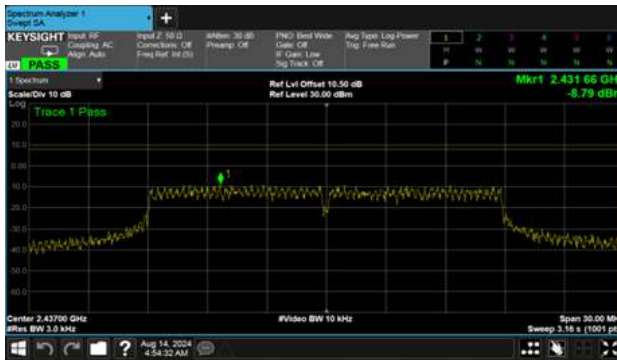
ANT 2
Modulation Type: 802.11n HT20
CH01



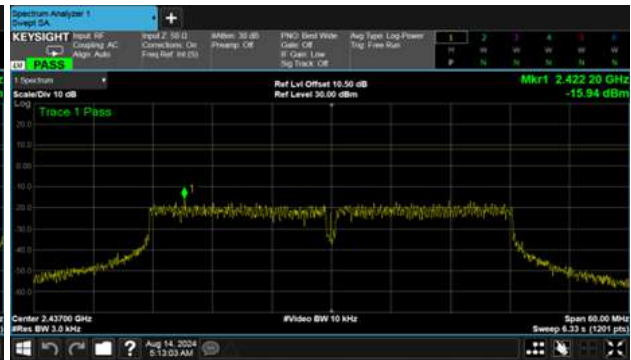
Modulation Type: 802.11n HT40
CH03



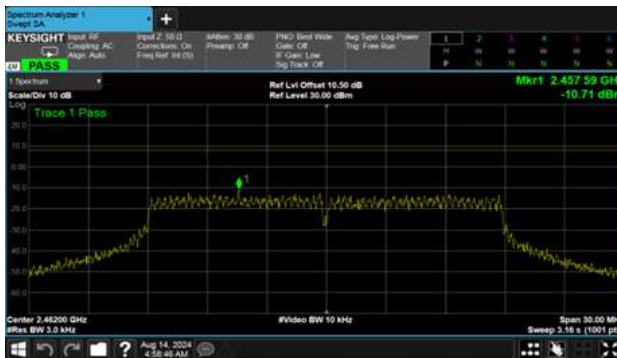
CH06



CH06



CH11



CH09

