



FCC RADIO TEST REPORT

Applicant : D-Link Corporation

Address : 14420 Myford Road Suite 100, Irvine, California
92606, United States

Equipment : Nuclias Connect AX3000 Outdoor Access Point

Model No. : DAP-X3060OU

Trade Name : D-Link

FCC ID : KA2APX3060OUA1

I HEREBY CERTIFY THAT :

The sample was received on Mar. 13, 2024 and the testing was completed on May. 02, 2024 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:

Kevin Liang/ Supervisor

Laboratory Accreditation:

CerpPASS Technology Corporation Test Laboratory





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History of this test report

Report No.	Issued Date	Description
24020130-TRFCC01	May. 30, 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)	. 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 under Test

Operation Frequency Range	802.11b/g/n/(Turbo QAM)/ax: 2400-2483.5MHz 802.11a/n/ac/ax: 5150-5250MHz, 5250-5350MHz, 5470-5725MHz, 5725-5850MHz
Center Frequency Range	802.11b/g/n/(Turbo QAM)/ax: 2412MHz~2462MHz 802.11a/n/ac/ax: 5180-5240MHz, 5260-5320MHz, 5500-5720MHz, 5745-5825MHz
Modulation Type	WLAN: 2.4GHz: 802.11b: CCK, DQPSK, DBPSK 802.11g/n: BPSK, QPSK, 16QAM, 64QAM, 256QAM(TurboQAM) 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM 5GHz: 802.11n/a: BPSK, QPSK, 16QAM, 64QAM 802.11ac: BPSK, QPSK, 16QAM, 64QAM, 256QAM 802.11ax: BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Modulation Technology	DSSS, OFDM, OFDMA
Data Rate	WLAN: 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 MCS0 – MCS9, VHT20/40(TurboQAM) 802.11ax: MCS0 – MCS11, HE20/40 5GHz: 802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0 – MCS15, HT20/40 802.11ac: MCS0 – MCS9, VHT20/40/80/160 802.11ax: MCS0 – MCS11, HE20/40/80/160
Antenna Type	Embedded Antenna
Antenna Gain	2400-2500MHz: ANT C: 5.0dBi, ANT D: 3.4dBi 5150-5250MHz: ANT A: 5.4dBi, ANT B: 5.5dBi 5250-5350MHz: ANT A: 5.1dBi, ANT B: 5.8dBi 5470-5725MHz: ANT A: 4.6dBi, ANT B: 7.3dBi 5725-5850MHz: ANT A: 4.5dBi, ANT B: 7.9dBi

Note:

1. EUT support TPC Function.
2. WLAN 2.4G and WLAN 5G can simultaneously transmission.
3. EUT support Master Mode.
4. WLAN 2.4G TurboQAM & 5GHz 11ac support beamforming Function.
5. WLAN 2.4 GHz / 5GHz 11ax support beamforming Function.
6. 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, VHT20, 802.11ax HE20 (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, VHT40, 802.11ax HE40 (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

- a. During testing, the interface cables and equipment positions were varied according to ANSI C63.10.
- b. The complete test system included remote workstation and EUT for RF test. The remote workstation included Notebook.
- c. An executive program, " QSPR ver. 5.0-00200" under Windows OS system was executed to transmit and receive data via WLAN.
- d. 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) , Power from PoE, Non BeamForming
2	802.11g (6Mbps) , Power from PoE ,Non BeamForming
3	802.11ax HE20 (7.3Mbps) , Power from PoE ,Non BeamForming
4	802.11ax HE40 (14.6Mbps) , Power from PoE,Non BeamForming
caused "Test Mode 3" generated the worst case, it was reported as the final data.	
Radiation Emissions (BELOW 1GHz)	
Test Mode	Operating Description
1	802.11b (1Mbps) , Power from PoE Non BeamForming
2	802.11g (6Mbps) , Power from PoE ,Non BeamForming
3	802.11ax HE20 (7.3Mbps) , Power from PoE,Non BeamForming
4	802.11ax HE40 (14.6Mbps) , Power from PoE ,Non BeamForming
caused "Test Mode 3" generated the worst case, they were reported as the final data.	
Radiation Emissions (1GHz ~ 25GHz)	
Test Mode	Operating Description
1	802.11b (1Mbps) , Power from PoE, Non BeamForming
2	802.11g (6Mbps) , Power from PoE,Non BeamForming
3	802.11ax HE20 (7.3Mbps) , Power from PoE,Non BeamForming
4	802.11ax HE40 (14.6Mbps) , Power from PoE ,Non BeamForming
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.

AC Power Line Conducted Emission is AC 240V / 60Hz worst case.

Radiation Emissions (BELOW 1GHz) is AC 240V / 60Hz 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
802.11n HT20(TurboQAM)	2TX
802.11n HT40(TurboQAM)	2TX
802.11ax HE20	2TX
802.11ax HE40	2TX



2.4 Description of Test System

RF Conducted				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	Lenovo	S2292L	N/A	Adapter / 1.8m / NS
POE	Bluewave	JS-100GT	N/A	N/A
RJ45 Cable*2	TE CONNECTIVITY	CAT5E	1.2m / NS	N/A
Radiated Emissions				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	Lenovo	S2292L	N/A	Adapter / 1.8m / NS
POE	Bluewave	JS-100GT	N/A	N/A
RJ45 Cable	TE CONNECTIVITY	CAT5E	1.2m / NS	N/A
RJ45 Cable	TE CONNECTIVITY	CAT5E	15m / NS	N/A
AC Power Line Conducted Emission				
Equipment	Brand	Model	Length/Type	Power cord/Length/Type
Notebook	Lenovo	S2292L	N/A	Adapter / 1.8m / NS
POE	Bluewave	JS-100GT	N/A	N/A
RJ45 Cable	TE CONNECTIVITY	CAT5E	1.2m / NS	N/A
RJ45 Cable	TE CONNECTIVITY	CAT5E	15m / NS	N/A



2.5 General Information of Test

☒ Test Site	CerpPASS 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	2024/04/17	21°C / 60%	Leon Huang
RF Conducted	RFCON01-NK	2024/05/02	23.8°C / 47%	Leon Huang
Radiated Emissions	3M03-NK	2024/04/18	23.7°C / 54%	Park Chen
Radiated Emissions	3M03-NK	2024/04/22	24°C / 60%	Park Chen
AC Power Line Conducted Emission	CON02-NK	2024/04/22	23.5°C / 58%	Park Chen



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(3M03-NK)				
Instrument	Manufacturer	Model No	Serial No	Calibration Date	Valid Date
Bilog Antenna	Sunol	JB1	A020514-2	2023/06/26	2024/06/25
Active Loop Antenna	Schwarzbeck	FMZB 1513	414	2024/01/16	2025/01/15
Horn Antenna	EMCO	3116	31974	2023/10/16	2024/10/15
Double Ridged Guide Horn Antenna	RF SPAN	DRH18-E	210309A18-ES	2023/08/17	2024/08/16
Spectrum Analyzer	ROHDE & SCHWARZ	FSV 40-N	102151	2023/08/15	2024/08/14
EMI Receiver	ROHDE & SCHWARZ	ESCI	101423	2023/07/05	2024/07/04
Preamplifier	EM Electronics corp.	EMC118A45V1SEE	980993	2023/10/16	2024/10/15
Preamplifier	EMC INSTRUMENTS	EMC184045	980065	2023/10/13	2024/10/12
Preamplifier	EM Electronics corp.	EM330	60820	2023/06/08	2024/06/07
Cable-6m(9k~300M)	NA	EMC5D-BM-BM-6	130606	2024/03/13	2025/03/12
Cable-8m(10M-26.5G)	HUBER SUHNER	SF126E	587396/126E	2023/10/12	2024/10/11
Cable-3m(10M-26.5G)	HUBER SUHNER	SF126E	587399/126E	2023/10/12	2024/10/11
Cable-3m(10M-40G)	HUBER SUHNER	SF102	804619/2	2023/10/12	2024/10/11
Cable-1m(10M-40G)	HUBER SUHNER	SF102	804398/2	2023/10/12	2024/10/11
Cable-1m(1G-26.5G)	HUBER SUHNER	SF126E	589848/126E	2023/10/12	2024/10/11
Cable-4m(30M-1G)	HUBER SUHNER	RG-214	02953M	2023/9/20	2024/09/19
Cable-1m(30M-1G)	HUBER SUHNER	RG-214	05094M	2023/9/4	2024/09/03
Cable-9m(30M-1G)	HUBER SUHNER	RG-214	00402M	2023/9/4	2024/09/03
E3	AUDIX	v8.2014-8-6	RK-000529	NA	NA
High Pass Filter	Warison	WFIL-H3000-18000F-03	WRJ5CFWC2J1	2023/07/03	2024/07/02

Test Item	RF Conducted				
Test Site	RFCON01-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	2023/05/08	2024/05/07
TWO-LINE V-NETWORK	ROHDE & SCHWARZ	ENV216	102185	2023/08/29	2024/08/28
Cable-6m(9k~300M)	NA	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 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

4.2 Antenna Construction and Directional Gain

Antenna Type	Embedded Antenna
Antenna Gain	2400-2500MHz: ANT C: 5.0dBi, ANT D: 3.4dBi

(Non-Beamforming)

For Power directional gain= $G_{ant}= 5.0$ dBi

For PSD directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2 / N_{ANT}]$
= 7.25 dBi

*MIMO type: Cyclic Delay Diversity (CDD) mode.

(Beamforming)

For Power directional gain= 7.25 dBi

For PSD directional gain = 7.25 dBi

*MIMO type: Cyclic Delay Diversity (CDD) mode.



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

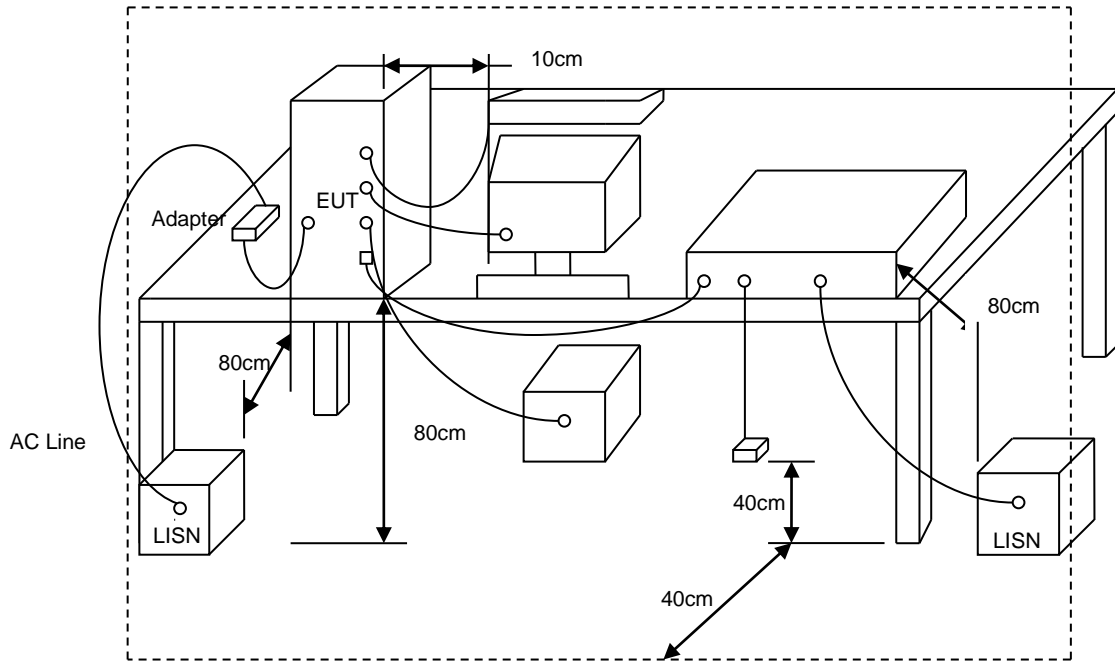
*Decreases with the logarithm of the frequency.

5.2 Test Procedures

- a. 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.
- b. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- c. All the support units are connecting to the other LISN.
- d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- e. The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
- f. Both sides of AC line were checked for maximum conducted interference.
- g. The frequency range from 150 kHz to 30 MHz was searched.
- h. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.



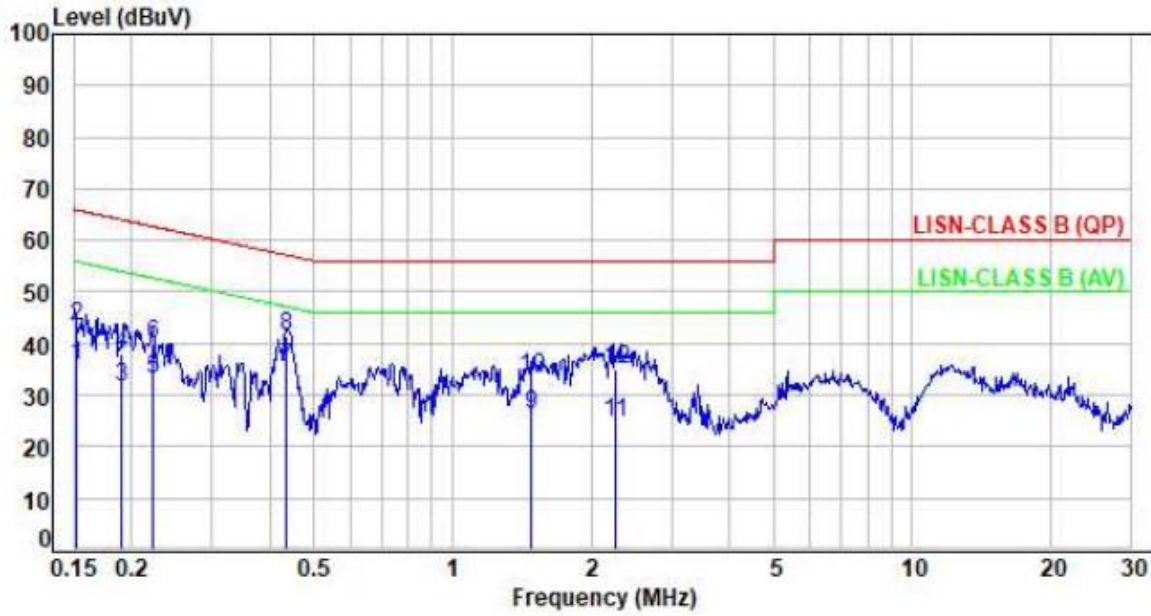
5.3 Typical Test Setup





5.4 Test Result and Data

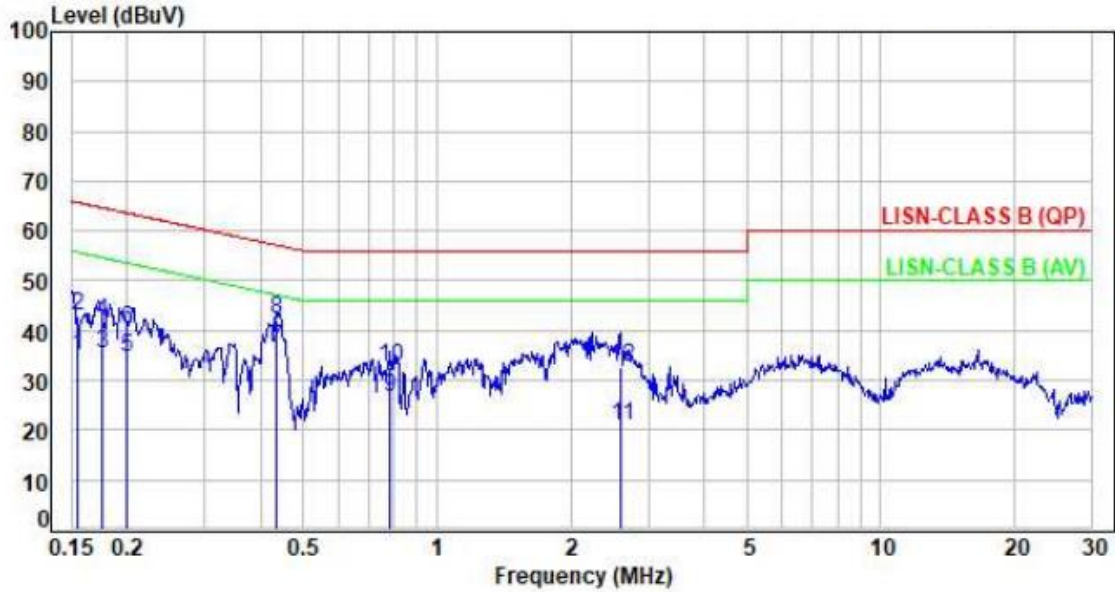
Power	: AC 240V / 60Hz	Pol/Phase	: LINE
Test Mode	: Mode 3		



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1513	9.65	25.98	35.63	55.93	-20.30	Average	P
2	0.1513	9.65	33.62	43.27	65.93	-22.66	QP	P
3	0.1904	9.63	22.00	31.63	54.02	-22.39	Average	P
4	0.1904	9.63	28.39	38.02	64.02	-26.00	QP	P
5	0.2221	9.63	23.30	32.93	52.74	-19.81	Average	P
6	0.2221	9.63	30.15	39.78	62.74	-22.96	QP	P
7	0.4341	9.65	25.53	35.18	47.17	-11.99	Average	P
8	0.4341	9.65	31.76	41.41	57.17	-15.76	QP	P
9	1.4894	9.67	16.48	26.15	46.00	-19.85	Average	P
10	1.4894	9.67	23.73	33.40	56.00	-22.60	QP	P
11	2.2604	9.71	15.03	24.74	46.00	-21.26	Average	P
12	2.2604	9.71	25.11	34.82	56.00	-21.18	QP	P



Power	: AC 240V / 60Hz	Pol/Phase	: NEUTRAL
Test Mode	: Mode 3		



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1543	9.55	25.56	35.11	55.77	-20.66	Average	P
2	0.1543	9.55	33.37	42.92	65.77	-22.85	QP	P
3	0.1757	9.57	25.63	35.20	54.69	-19.49	Average	P
4	0.1757	9.57	32.22	41.79	64.69	-22.90	QP	P
5	0.2001	9.58	25.00	34.58	53.60	-19.02	Average	P
6	0.2001	9.58	30.75	40.33	63.60	-23.27	QP	P
7	0.4349	9.56	26.87	36.43	47.16	-10.73	Average	P
8	0.4349	9.56	32.54	42.10	57.16	-15.06	QP	P
9	0.7810	9.58	16.95	26.53	46.00	-19.47	Average	P
10	0.7810	9.58	23.22	32.80	56.00	-23.20	QP	P
11	2.6063	9.66	11.36	21.02	46.00	-24.98	Average	P
12	2.6063	9.66	23.08	32.74	56.00	-23.26	QP	P

Note: Level=Reading+Factor
 Margin=Level-Limit
 Factor=(LISN or ISN or Current Probe)Factor + Cable Loss



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

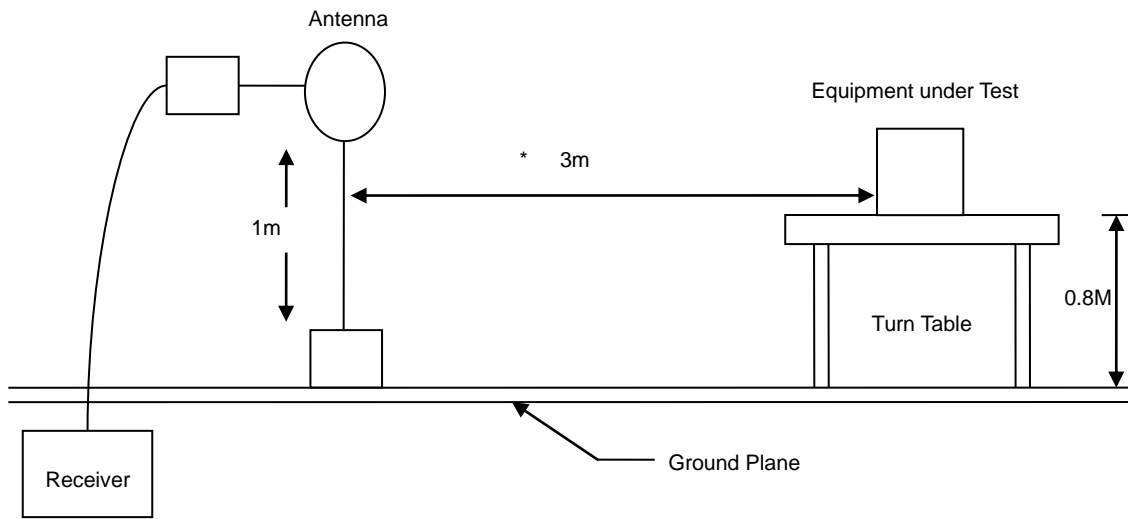
- a. The EUT was placed on a rotatable table top 0.8 meter above ground.
- b. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- c. The table was rotated 360 degrees to determine the position of the highest radiation.
- 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:

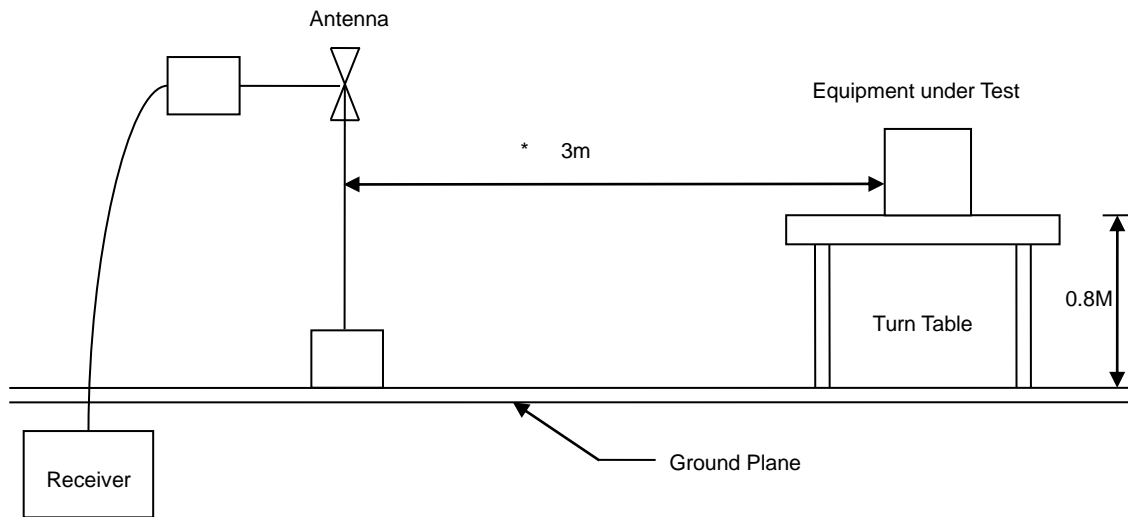
- 1.The supporting fixture shall permit orientation of the EUT in each of three orthogonal axis positions such that emissions from the EUT are maximized.
(Y-AXIS is the worst.)
- 2.Due to the test software function limit the operation band setting(200dBuV/m).
There's no corresponding limitation in the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

6.3 Typical Test Setup

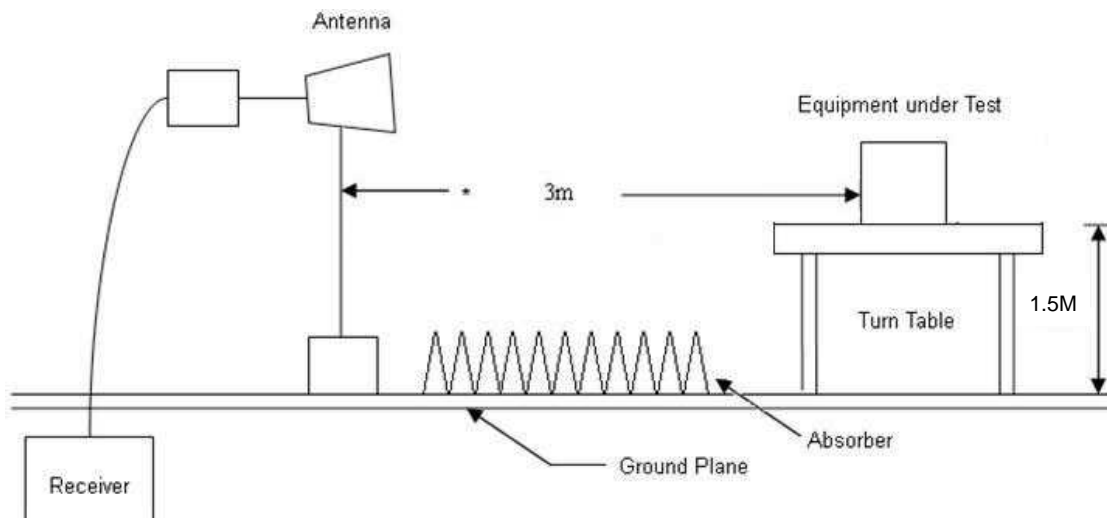
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup



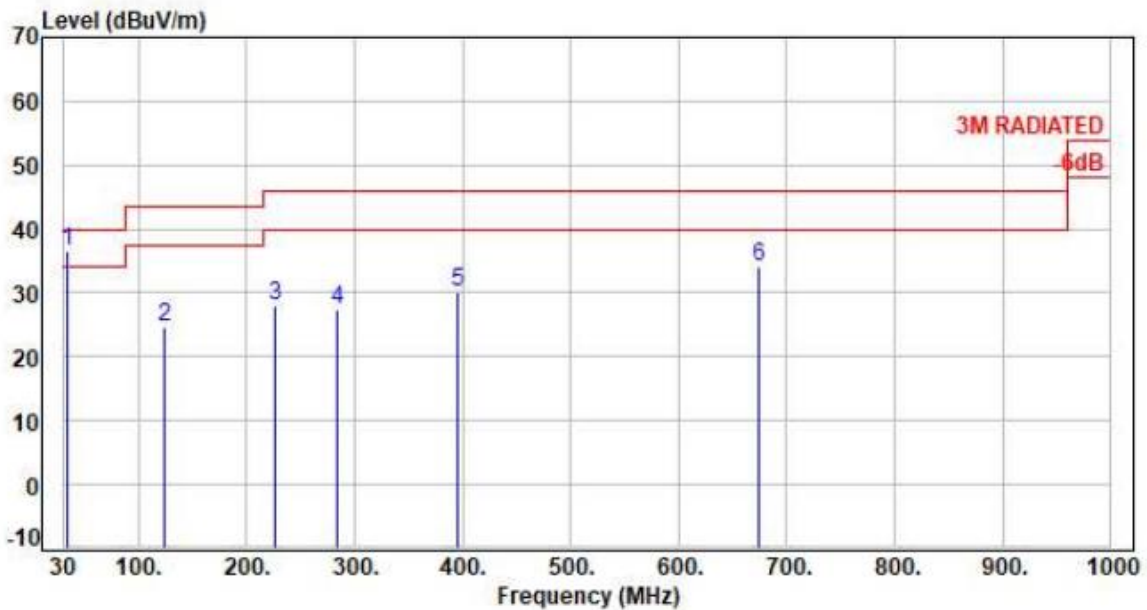


6.4 Test Result and Data (9KHz ~ 30MHz)

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 3		:

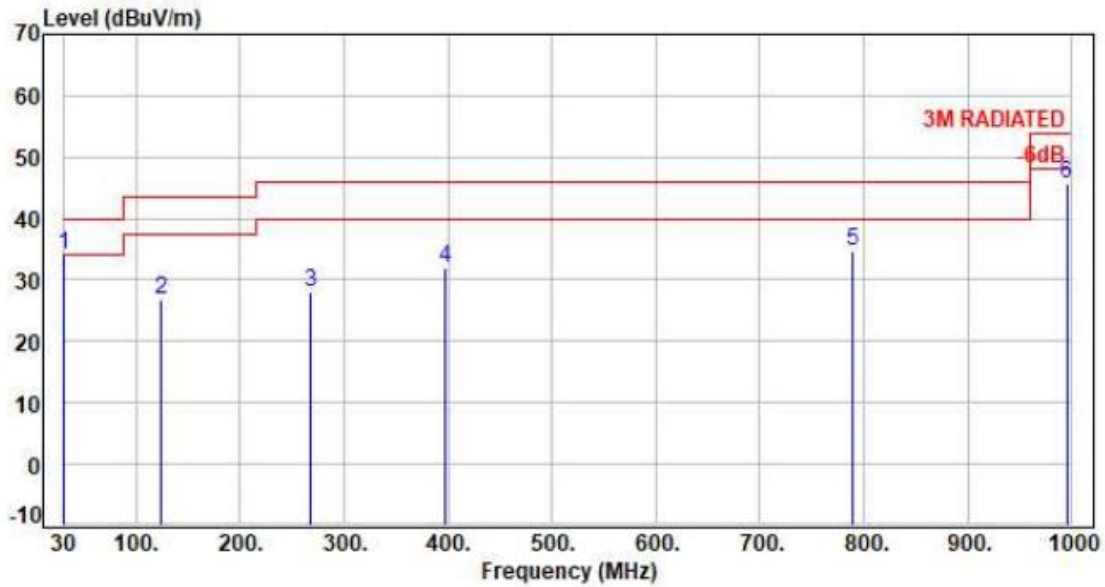


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	33.88	-6.36	42.86	36.50	40.00	-3.50	Peak	400	360	P
2	123.12	-10.70	35.24	24.54	43.50	-18.96	Peak	400	360	P
3	225.94	-13.15	41.22	28.07	46.00	-17.93	Peak	400	360	P
4	284.14	-10.31	37.66	27.35	46.00	-18.65	Peak	400	360	P
5	394.72	-7.68	37.78	30.10	46.00	-15.90	Peak	400	360	P
6	674.08	-2.00	36.08	34.08	46.00	-11.92	Peak	400	360	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 3		:



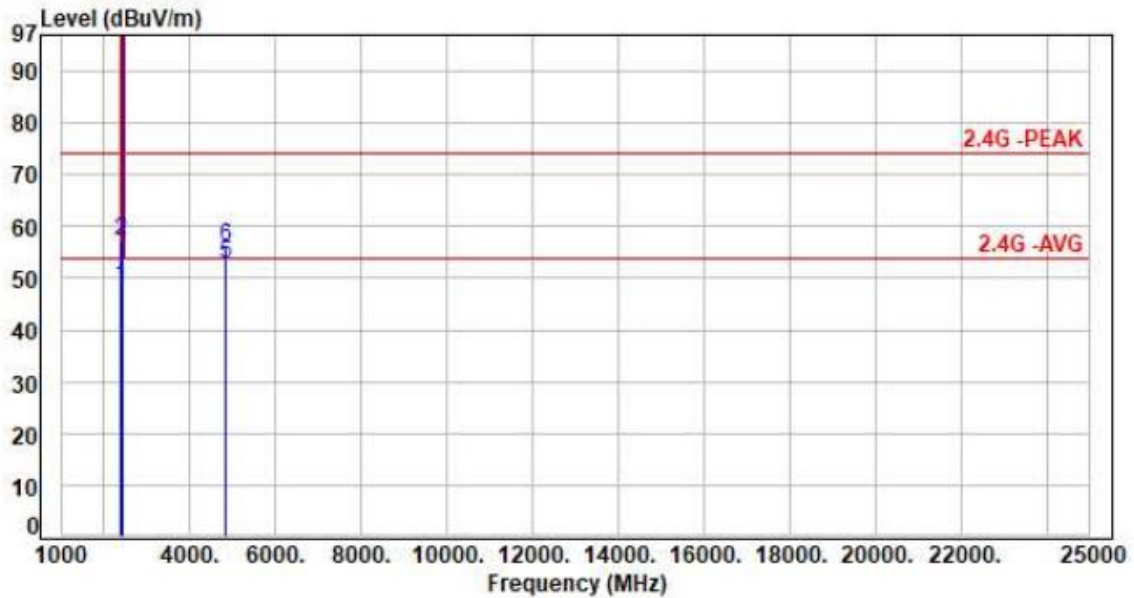
No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	30.00	-3.69	37.67	33.98	40.00	-6.02	Peak	400	360	P
2	123.12	-10.70	37.54	26.84	43.50	-16.66	Peak	400	360	P
3	268.62	-10.55	38.43	27.88	46.00	-18.12	Peak	400	360	P
4	396.66	-7.59	39.65	32.06	46.00	-13.94	Peak	400	360	P
5	788.54	-0.29	34.85	34.56	46.00	-11.44	Peak	400	360	P
6	995.15	2.23	43.44	45.67	54.00	-8.33	Peak	400	360	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		:

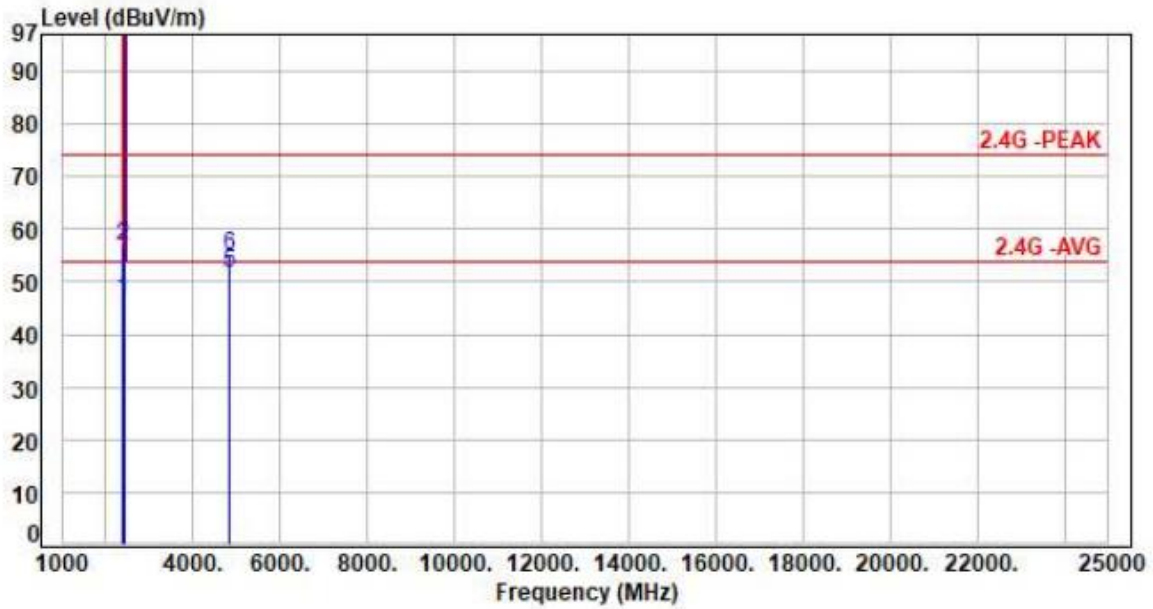


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	54.89	48.15	54.00	-5.85	Average	148	311	P
2	2390.00	-6.74	63.92	57.18	74.00	-16.82	Peak	148	311	P
3	2412.00	-6.83	116.96	110.13	200.00	-89.87	Average	148	311	P
4	2412.00	-6.83	119.33	112.50	200.00	-87.50	Peak	148	311	P
5	4824.00	0.03	52.62	52.65	54.00	-1.35	Average	100	179	P
6	4824.00	0.03	56.02	56.05	74.00	-17.95	Peak	100	179	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		:

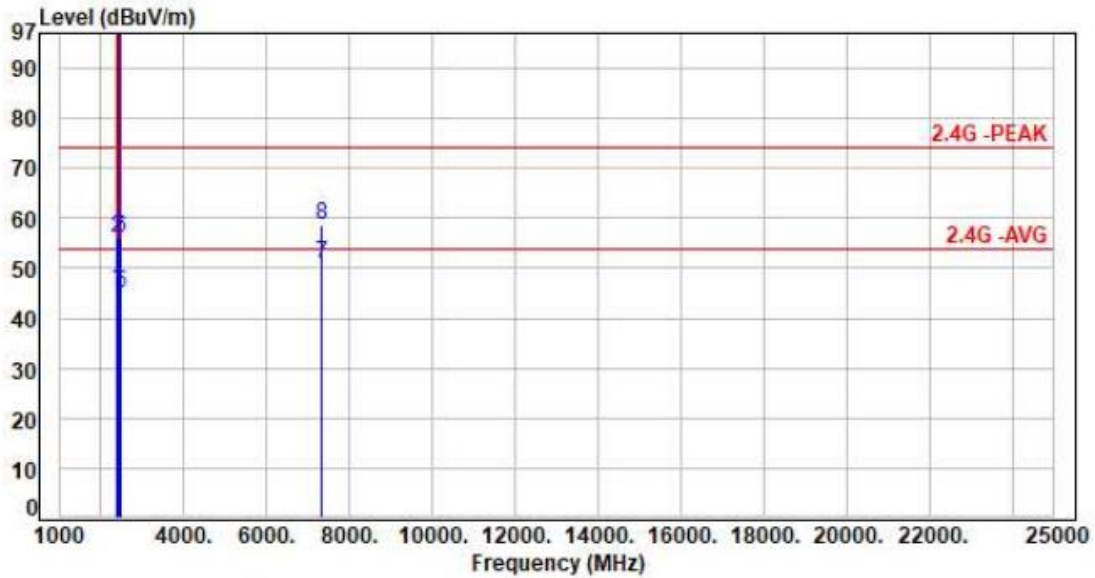


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	53.37	46.63	54.00	-7.37	Average	187	72	P
2	2390.00	-6.74	63.51	56.77	74.00	-17.23	Peak	187	72	P
3	2412.00	-6.83	112.58	105.75	200.00	-94.25	Average	187	72	P
4	2412.00	-6.83	114.81	107.98	200.00	-92.02	Peak	187	72	P
5	4824.00	0.03	51.54	51.57	54.00	-2.43	Average	100	35	P
6	4824.00	0.03	54.95	54.98	74.00	-19.02	Peak	100	35	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		:

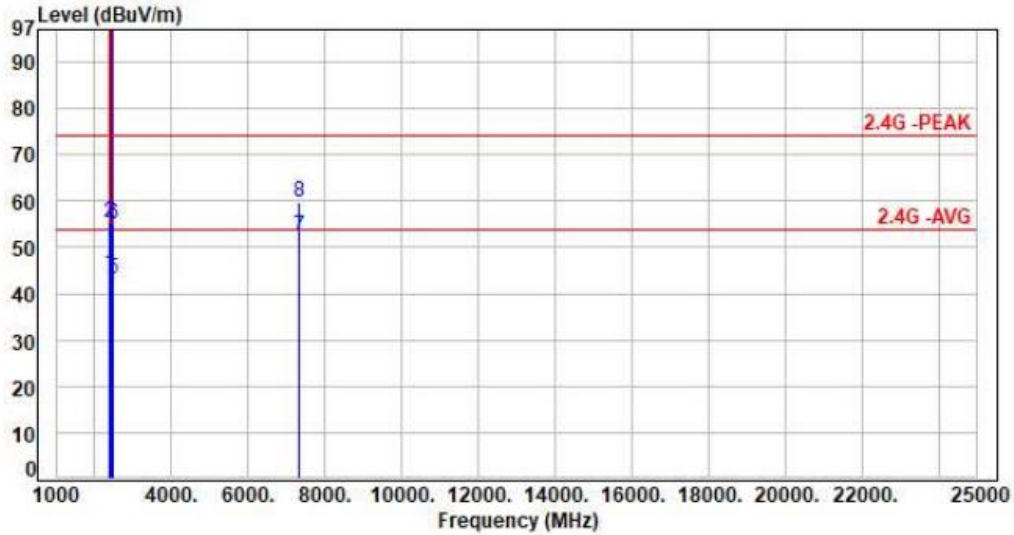


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	52.30	45.56	54.00	-8.44	Average	228	311	P
2	2390.00	-6.74	62.64	55.90	74.00	-18.10	Peak	228	311	P
3	2437.00	-6.90	114.25	107.35	200.00	-92.65	Average	228	311	P
4	2437.00	-6.90	116.74	109.84	200.00	-90.16	Peak	228	311	P
5	2483.50	-6.91	52.09	45.18	54.00	-8.82	Average	228	311	P
6	2483.50	-6.91	63.15	56.24	74.00	-17.76	Peak	228	311	P
7	7311.00	4.14	46.86	51.00	54.00	-3.00	Average	100	19	P
8	7311.00	4.14	54.49	58.63	74.00	-15.37	Peak	100	19	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		:

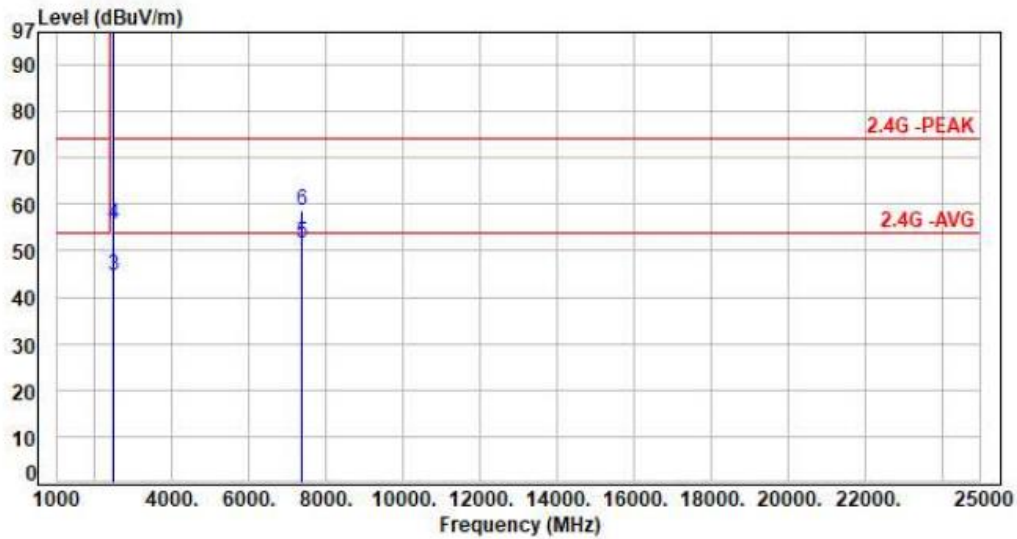


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	50.96	44.22	54.00	-9.78	Average	186	71	P
2	2390.00	-6.74	62.04	55.30	74.00	-18.70	Peak	186	71	P
3	2437.00	-6.90	111.64	104.74	200.00	-95.26	Average	186	71	P
4	2437.00	-6.90	113.76	106.86	200.00	-93.14	Peak	186	71	P
5	2483.50	-6.91	50.04	43.13	54.00	-10.87	Average	186	71	P
6	2483.50	-6.91	61.90	54.99	74.00	-19.01	Peak	186	71	P
7	7311.00	4.14	48.39	52.53	54.00	-1.47	Average	100	356	P
8	7311.00	4.14	55.43	59.57	74.00	-14.43	Peak	100	356	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		:

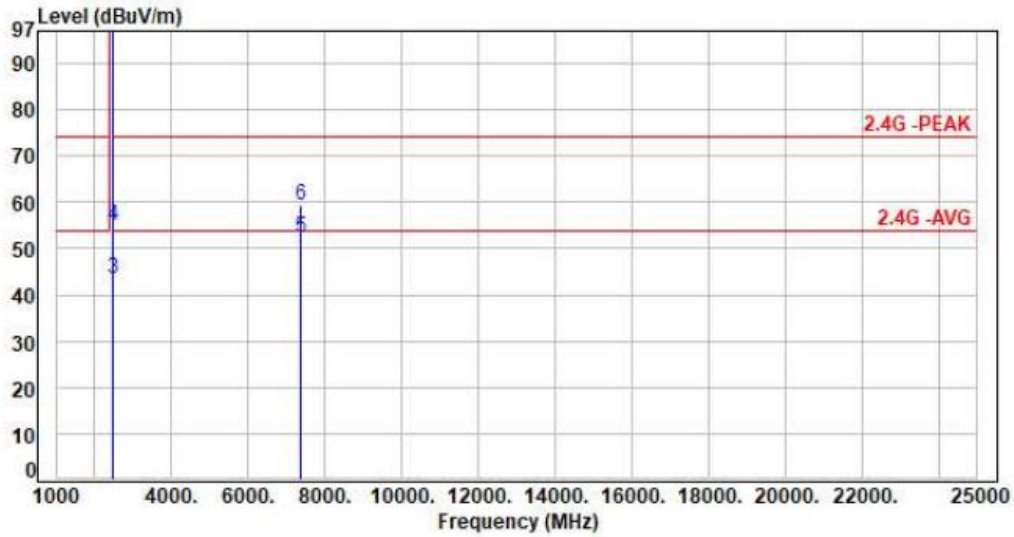


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-6.92	115.48	108.56	200.00	-91.44	Average	194	322	P
2	2462.00	-6.92	117.41	110.49	200.00	-89.51	Peak	194	322	P
3	2483.50	-6.91	51.56	44.65	54.00	-9.35	Average	194	322	P
4	2483.50	-6.91	62.47	55.56	74.00	-18.44	Peak	194	322	P
5	7386.00	4.09	47.37	51.46	54.00	-2.54	Average	139	14	P
6	7386.00	4.09	54.63	58.72	74.00	-15.28	Peak	139	14	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		:

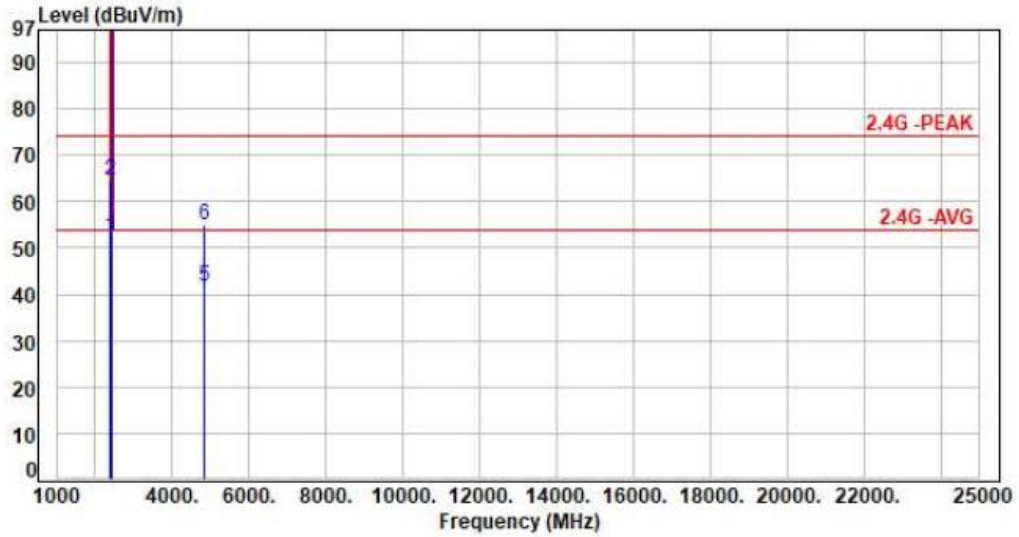


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-6.92	111.63	104.71	200.00	-95.29	Average	147	65	P
2	2462.00	-6.92	113.73	106.81	200.00	-93.19	Peak	147	65	P
3	2483.50	-6.91	50.57	43.66	54.00	-10.34	Average	147	65	P
4	2483.50	-6.91	61.69	54.78	74.00	-19.22	Peak	147	65	P
5	7386.00	4.09	48.44	52.53	54.00	-1.47	Average	100	353	P
6	7386.00	4.09	55.44	59.53	74.00	-14.47	Peak	100	353	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		:

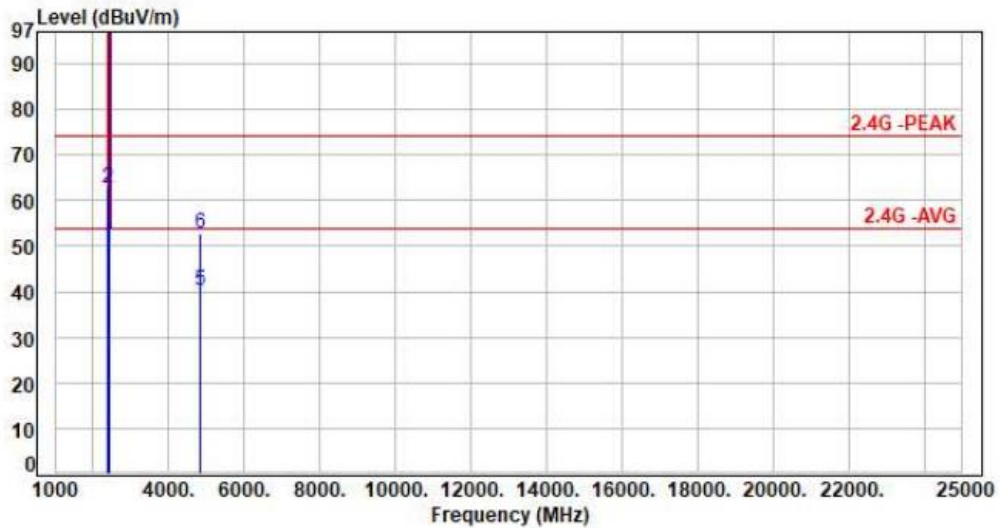


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	58.98	52.24	54.00	-1.76	Average	172	295	P
2	2390.00	-6.74	71.37	64.63	74.00	-9.37	Peak	172	295	P
3	2412.00	-6.83	114.19	107.36	200.00	-92.64	Average	172	295	P
4	2412.00	-6.83	123.68	116.85	200.00	-83.15	Peak	172	295	P
5	4824.00	0.03	41.52	41.55	54.00	-12.45	Average	100	164	P
6	4824.00	0.03	54.85	54.88	74.00	-19.12	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, CH01		:

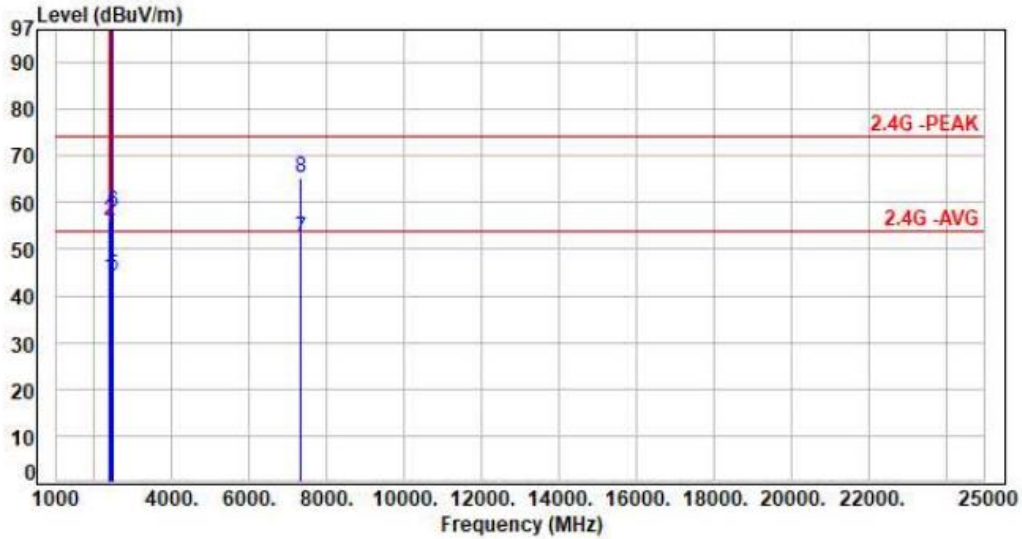


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	56.89	50.15	54.00	-3.85	Average	153	126	P
2	2390.00	-6.74	69.62	62.88	74.00	-11.12	Peak	153	126	P
3	2412.00	-6.83	111.54	104.71	200.00	-95.29	Average	153	126	P
4	2412.00	-6.83	121.06	114.23	200.00	-85.77	Peak	153	126	P
5	4824.00	0.03	40.27	40.30	54.00	-13.70	Average	100	272	P
6	4824.00	0.03	52.69	52.72	74.00	-21.28	Peak	100	272	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		:

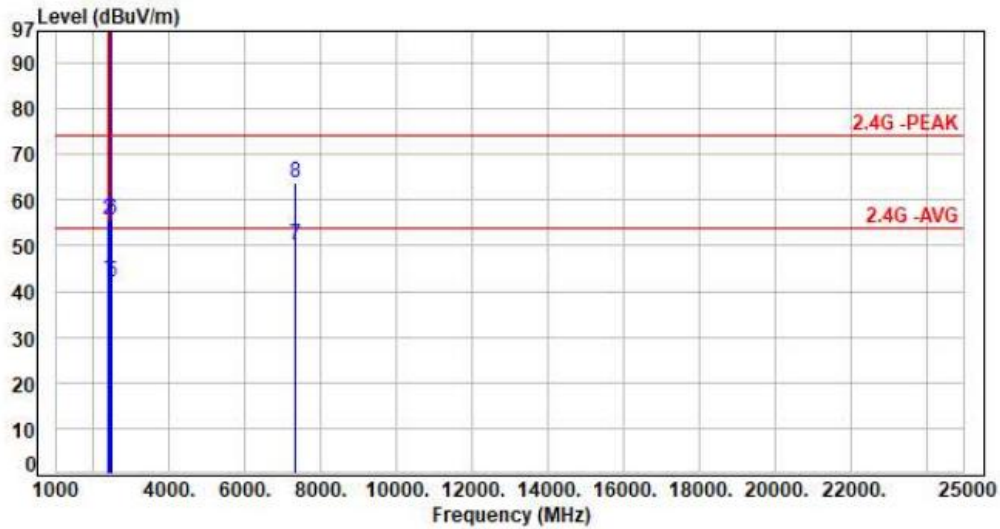


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	50.74	44.00	54.00	-10.00	Average	140	307	P
2	2390.00	-6.74	62.93	56.19	74.00	-17.81	Peak	140	307	P
3	2437.00	-6.90	113.16	106.26	200.00	-93.74	Average	140	307	P
4	2437.00	-6.90	122.58	115.68	200.00	-84.32	Peak	140	307	P
5	2483.50	-6.91	51.34	44.43	54.00	-9.57	Average	140	307	P
6	2483.50	-6.91	64.73	57.82	74.00	-16.18	Peak	140	307	P
7	7311.00	4.14	48.25	52.39	54.00	-1.61	Average	100	29	P
8	7311.00	4.14	61.05	65.19	74.00	-8.81	Peak	100	29	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		:

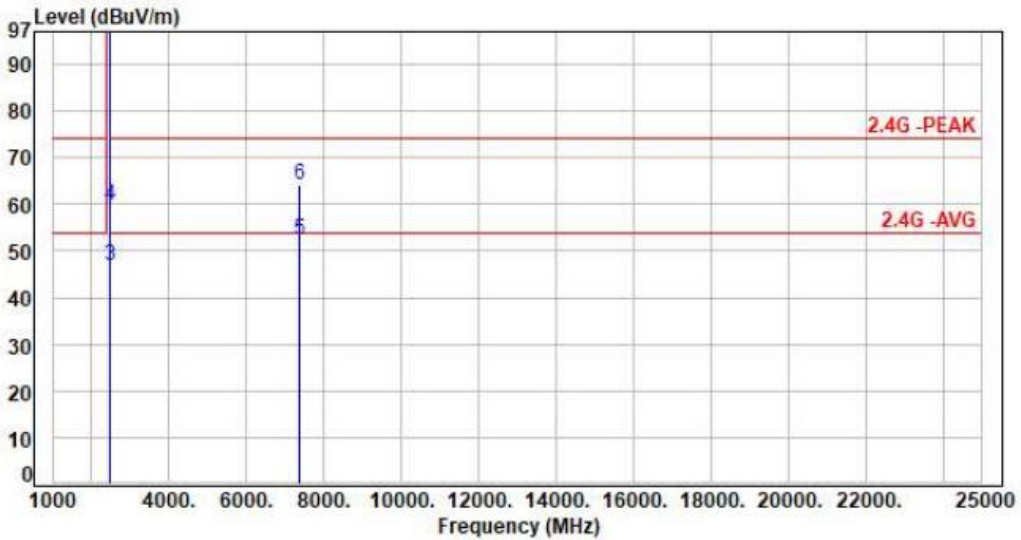


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	49.52	42.78	54.00	-11.22	Average	135	127	P
2	2390.00	-6.74	62.47	55.73	74.00	-18.27	Peak	135	127	P
3	2437.00	-6.90	110.27	103.37	200.00	-96.63	Average	135	127	P
4	2437.00	-6.90	119.70	112.80	200.00	-87.20	Peak	135	127	P
5	2483.50	-6.91	49.14	42.23	54.00	-11.77	Average	135	127	P
6	2483.50	-6.91	62.76	55.85	74.00	-18.15	Peak	135	127	P
7	7311.00	4.14	45.97	50.11	54.00	-3.89	Average	100	359	P
8	7311.00	4.14	59.63	63.77	74.00	-10.23	Peak	100	359	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		:

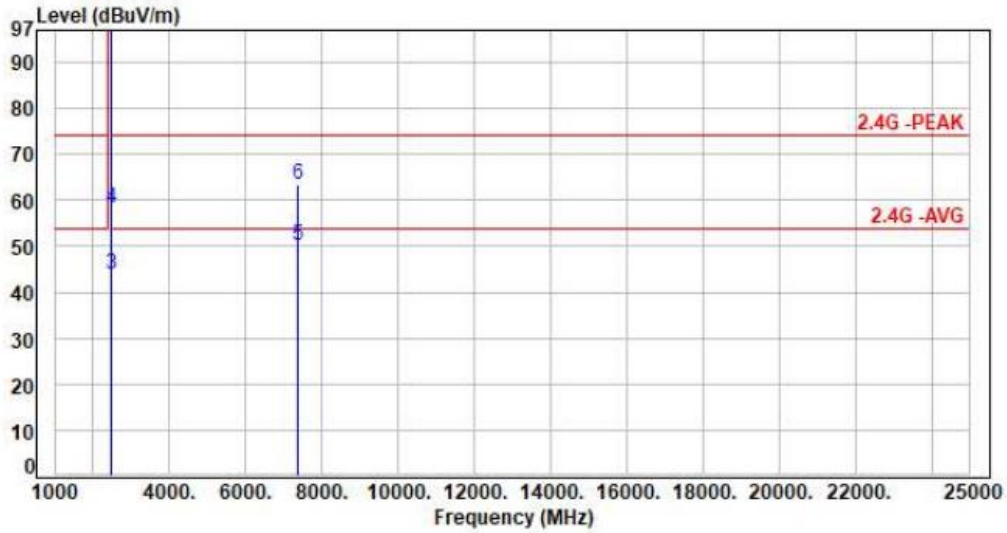


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-6.92	112.21	105.29	200.00	-94.71	Average	154	298	P
2	2462.00	-6.92	121.90	114.98	200.00	-85.02	Peak	154	298	P
3	2483.50	-6.91	53.88	46.97	54.00	-7.03	Average	154	298	P
4	2483.50	-6.91	66.77	59.86	74.00	-14.14	Peak	154	298	P
5	7386.00	4.09	48.16	52.25	54.00	-1.75	Average	105	28	P
6	7386.00	4.09	60.12	64.21	74.00	-9.79	Peak	105	28	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		:

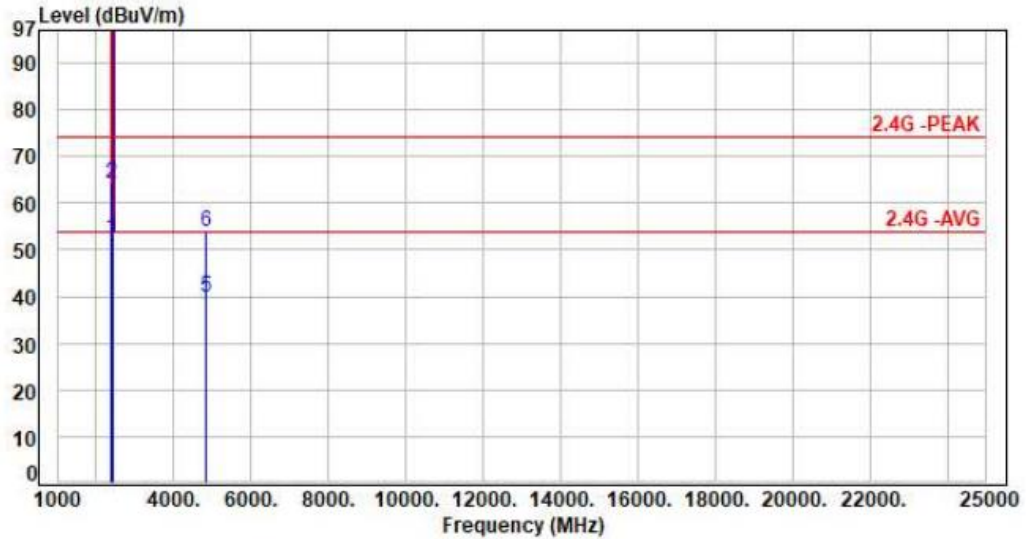


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-6.92	109.29	102.37	200.00	-97.63	Average	145	128	P
2	2462.00	-6.92	119.22	112.30	200.00	-87.70	Peak	145	128	P
3	2483.50	-6.91	50.63	43.72	54.00	-10.28	Average	145	128	P
4	2483.50	-6.91	65.17	58.26	74.00	-15.74	Peak	145	128	P
5	7386.00	4.09	46.25	50.34	54.00	-3.66	Average	116	1	P
6	7386.00	4.09	59.46	63.55	74.00	-10.45	Peak	116	1	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		:

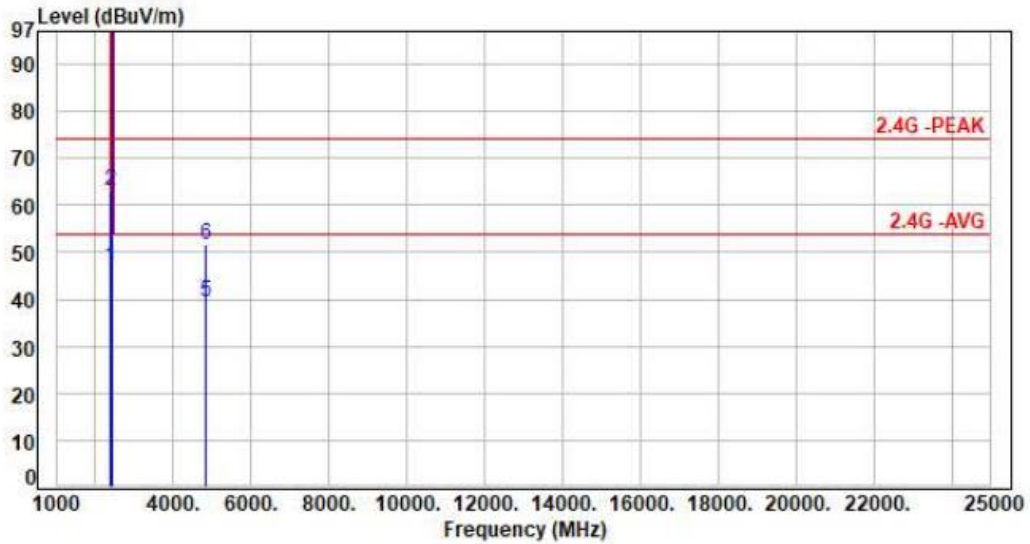


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	59.13	52.39	54.00	-1.61	Average	154	314	P
2	2390.00	-6.74	70.80	64.06	74.00	-9.94	Peak	154	314	P
3	2412.00	-6.83	111.63	104.80	200.00	-95.20	Average	154	314	P
4	2412.00	-6.83	125.48	118.65	200.00	-81.35	Peak	154	314	P
5	4824.00	0.03	39.73	39.76	54.00	-14.24	Average	0	197	P
6	4824.00	0.03	53.70	53.73	74.00	-20.27	Peak	0	197	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		:

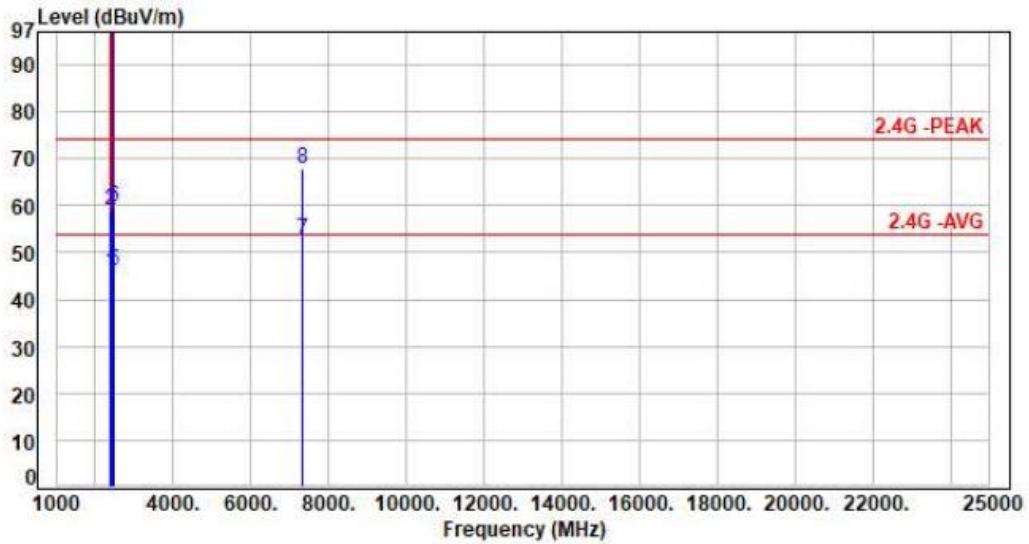


No.	Frequency (MHz)	Factor (dB)	Reading (dBUV)	Level (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	53.58	46.84	54.00	-7.16	Average	151	128	P
2	2390.00	-6.74	69.76	63.02	74.00	-10.98	Peak	151	128	P
3	2412.00	-6.83	109.50	102.67	200.00	-97.33	Average	151	128	P
4	2412.00	-6.83	122.91	116.08	200.00	-83.92	Peak	151	128	P
5	4824.00	0.03	39.36	39.39	54.00	-14.61	Average	100	279	P
6	4824.00	0.03	51.78	51.81	74.00	-22.19	Peak	100	279	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		:

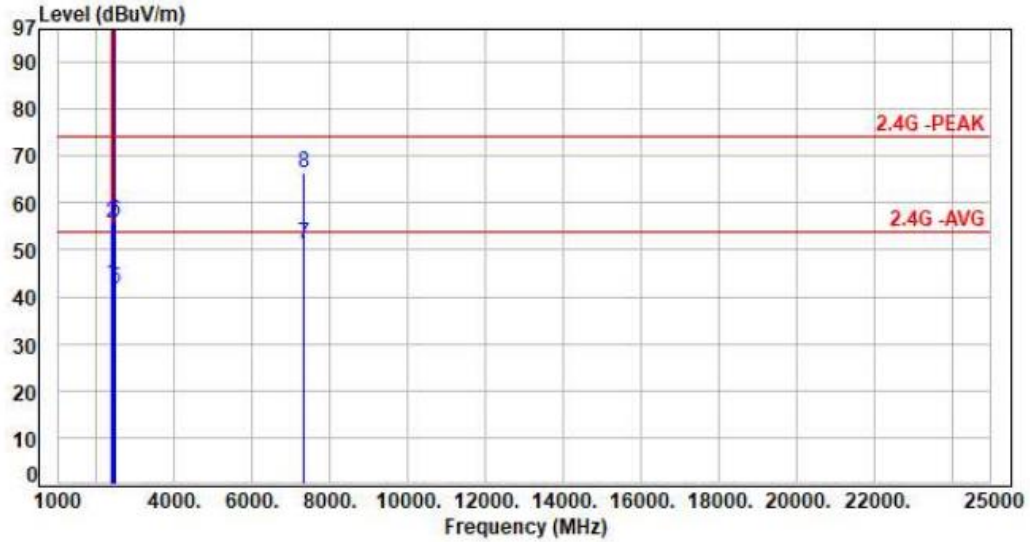


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	52.57	45.83	54.00	-8.17	Average	146	308	P
2	2390.00	-6.74	65.67	58.93	74.00	-15.07	Peak	146	308	P
3	2437.00	-6.90	113.06	106.16	200.00	-93.84	Average	146	308	P
4	2437.00	-6.90	126.57	119.67	200.00	-80.33	Peak	146	308	P
5	2483.50	-6.91	53.06	46.15	54.00	-7.85	Average	146	308	P
6	2483.50	-6.91	66.78	59.87	74.00	-14.13	Peak	146	308	P
7	7311.00	4.14	48.44	52.58	54.00	-1.42	Average	100	29	P
8	7311.00	4.14	63.57	67.71	74.00	-6.29	Peak	100	29	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		:

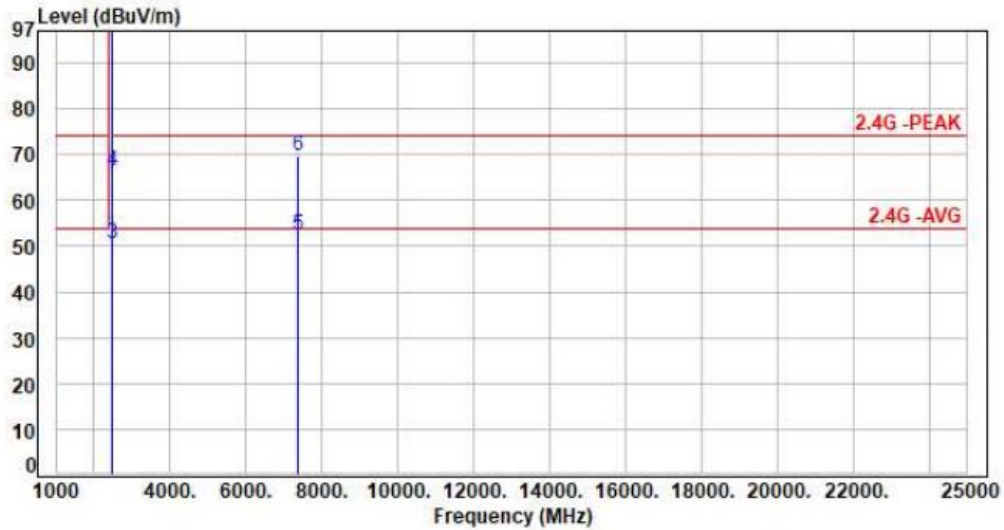


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	49.37	42.63	54.00	-11.37	Average	134	127	P
2	2390.00	-6.74	62.47	55.73	74.00	-18.27	Peak	134	127	P
3	2437.00	-6.90	109.74	102.84	200.00	-97.16	Average	134	127	P
4	2437.00	-6.90	123.20	116.30	200.00	-83.70	Peak	134	127	P
5	2483.50	-6.91	48.70	41.79	54.00	-12.21	Average	134	127	P
6	2483.50	-6.91	62.92	56.01	74.00	-17.99	Peak	134	127	P
7	7311.00	4.14	47.15	51.29	54.00	-2.71	Average	128	360	P
8	7311.00	4.14	62.15	66.29	74.00	-7.71	Peak	128	360	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		:

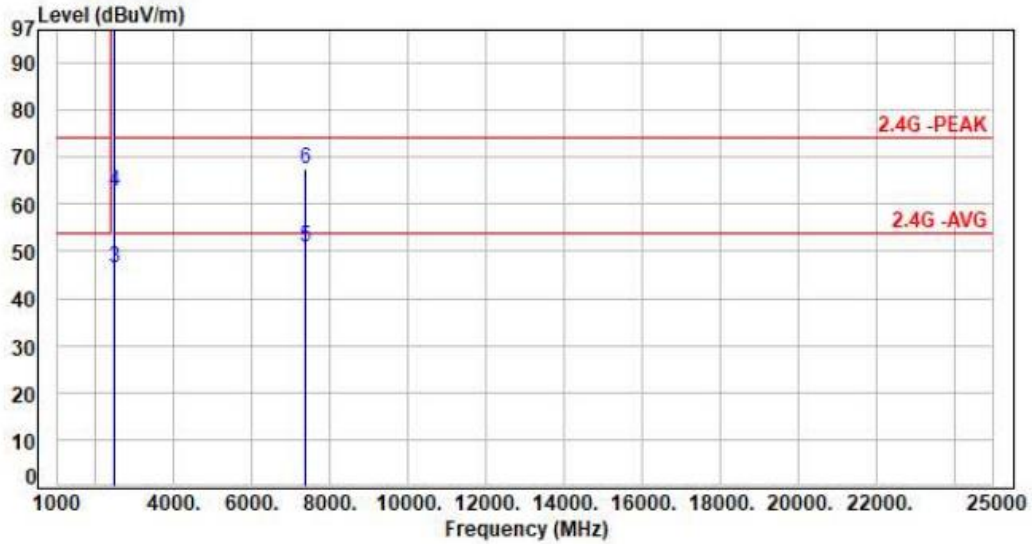


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-6.92	112.11	105.19	200.00	-94.81	Average	164	294	P
2	2462.00	-6.92	126.13	119.21	200.00	-80.79	Peak	164	294	P
3	2483.50	-6.91	57.39	50.48	54.00	-3.52	Average	164	294	P
4	2483.50	-6.91	73.38	66.47	74.00	-7.53	Peak	164	294	P
5	7386.00	4.09	48.12	52.21	54.00	-1.79	Average	110	29	P
6	7386.00	4.09	65.50	69.59	74.00	-4.41	Peak	110	29	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		:

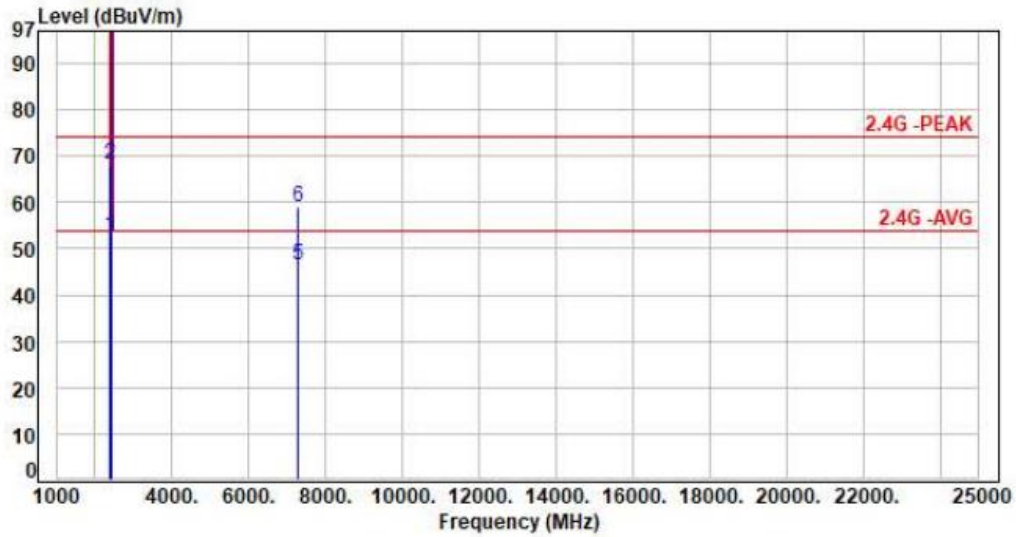


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2462.00	-6.92	109.21	102.29	200.00	-97.71	Average	164	128	P
2	2462.00	-6.92	122.62	115.70	200.00	-84.30	Peak	164	128	P
3	2483.50	-6.91	53.24	46.33	54.00	-7.67	Average	164	128	P
4	2483.50	-6.91	69.45	62.54	74.00	-11.46	Peak	164	128	P
5	7386.00	4.09	46.98	51.07	54.00	-2.93	Average	139	43	P
6	7386.00	4.09	63.54	67.63	74.00	-6.37	Peak	139	43	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		:

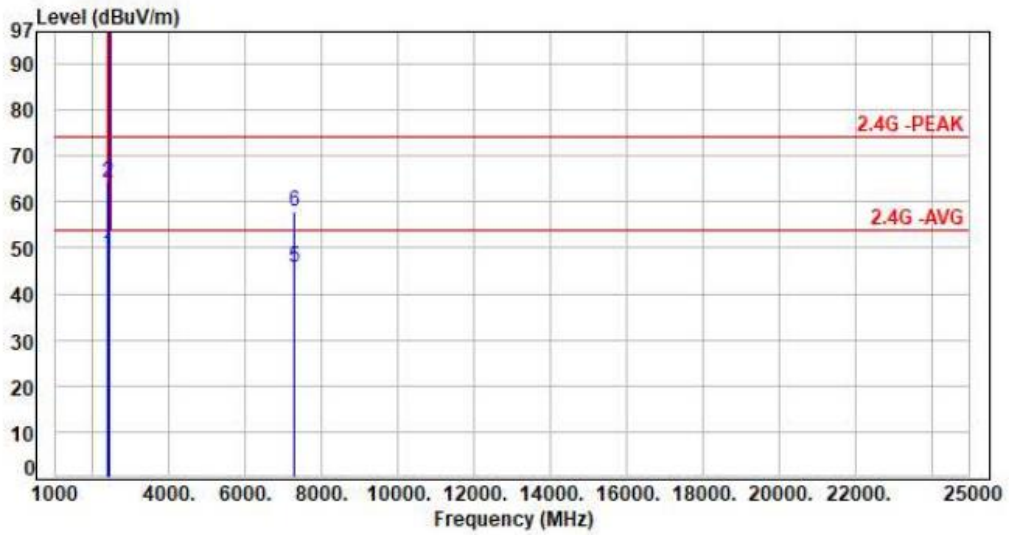


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	59.38	52.64	54.00	-1.36	Average	159	303	P
2	2390.00	-6.74	75.12	68.38	74.00	-5.62	Peak	159	303	P
3	2422.00	-6.83	108.57	101.74	200.00	-98.26	Average	159	303	P
4	2422.00	-6.83	121.11	114.28	200.00	-85.72	Peak	159	303	P
5	7266.00	4.08	42.50	46.58	54.00	-7.42	Average	100	25	P
6	7266.00	4.08	54.91	58.99	74.00	-15.01	Peak	100	25	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		:

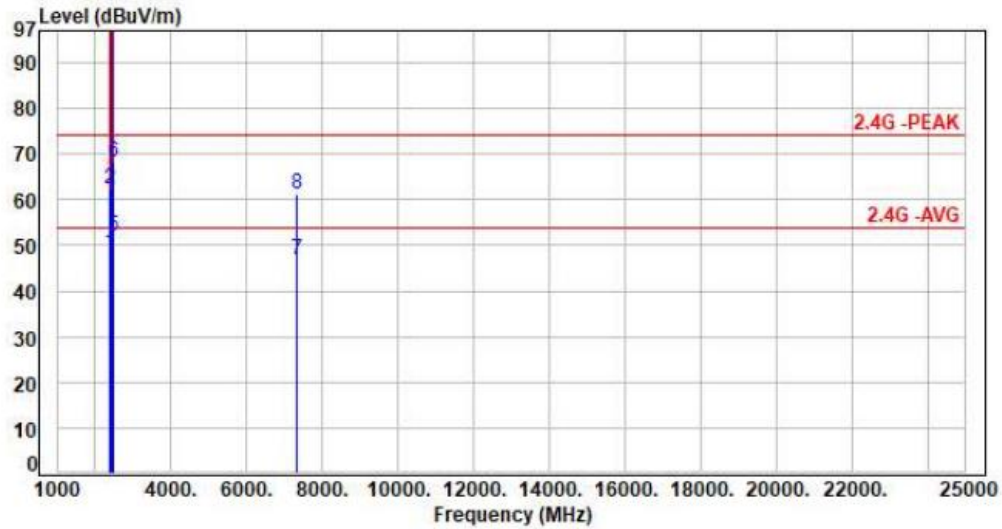


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	55.41	48.67	54.00	-5.33	Average	164	127	P
2	2390.00	-6.74	70.97	64.23	74.00	-9.77	Peak	164	127	P
3	2422.00	-6.83	105.50	98.67	200.00	-101.33	Average	164	127	P
4	2422.00	-6.83	118.67	111.84	200.00	-88.16	Peak	164	127	P
5	7266.00	4.08	41.75	45.83	54.00	-8.17	Average	100	2	P
6	7266.00	4.08	53.75	57.83	74.00	-16.17	Peak	100	2	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		:

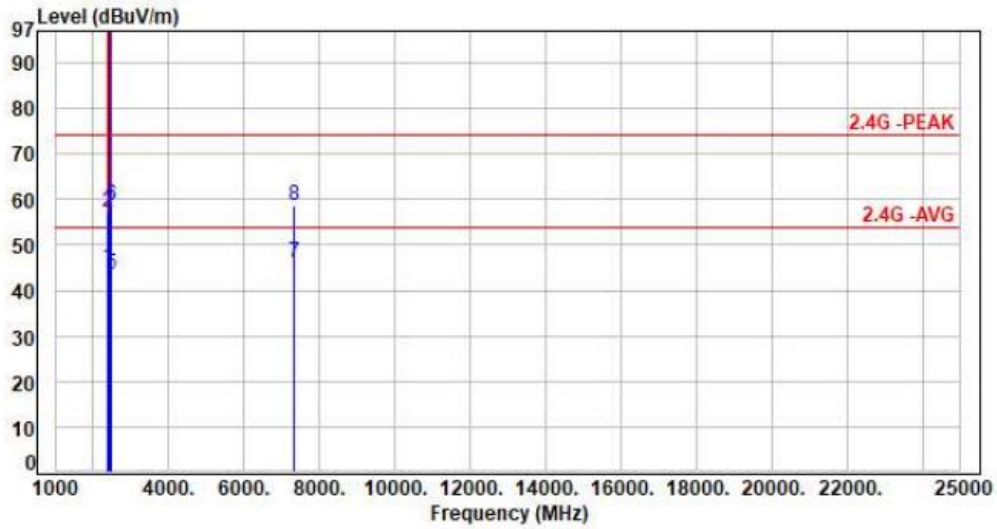


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	54.90	48.16	54.00	-5.84	Average	153	289	P
2	2390.00	-6.74	68.97	62.23	74.00	-11.77	Peak	153	289	P
3	2437.00	-6.90	108.65	101.75	200.00	-98.25	Average	153	289	P
4	2437.00	-6.90	121.16	114.26	200.00	-85.74	Peak	153	289	P
5	2483.50	-6.91	59.08	52.17	54.00	-1.83	Average	153	289	P
6	2483.50	-6.91	75.03	68.12	74.00	-5.88	Peak	153	289	P
7	7311.00	4.14	42.82	46.96	54.00	-7.04	Average	107	28	P
8	7311.00	4.14	57.22	61.36	74.00	-12.64	Peak	107	28	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		:

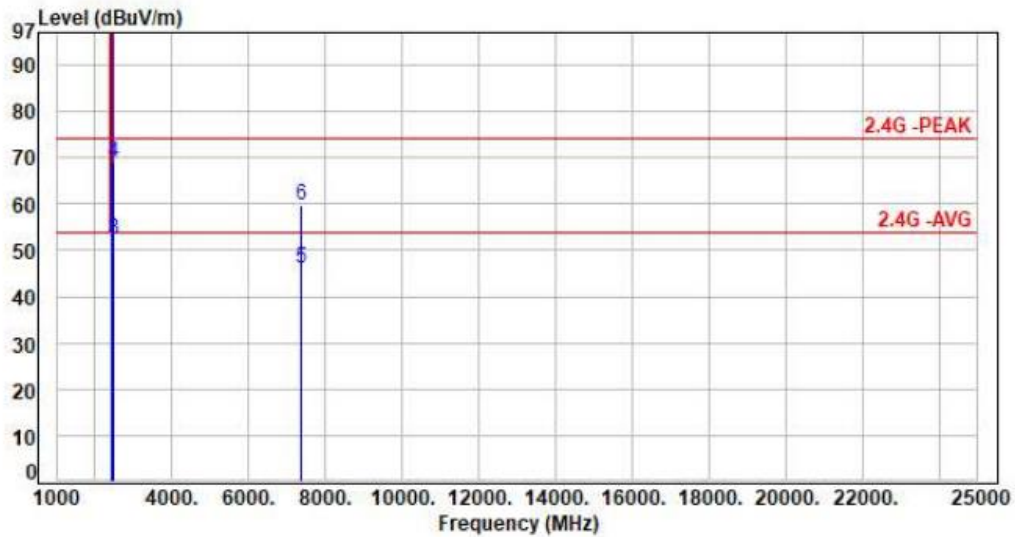


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2390.00	-6.74	51.74	45.00	54.00	-9.00	Average	150	126	P
2	2390.00	-6.74	63.98	57.24	74.00	-16.76	Peak	150	126	P
3	2437.00	-6.90	105.56	98.66	200.00	-101.34	Average	150	126	P
4	2437.00	-6.90	117.68	110.78	200.00	-89.22	Peak	150	126	P
5	2483.50	-6.91	50.57	43.66	54.00	-10.34	Average	150	126	P
6	2483.50	-6.91	65.66	58.75	74.00	-15.25	Peak	150	126	P
7	7311.00	4.14	41.85	45.99	54.00	-8.01	Average	130	5	P
8	7311.00	4.14	54.34	58.48	74.00	-15.52	Peak	130	5	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		:

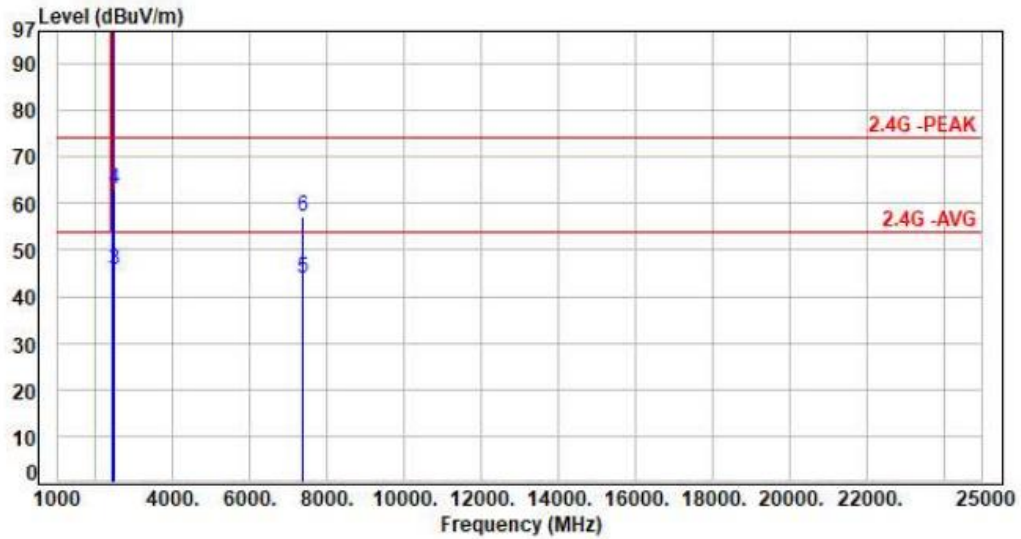


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg)	P/F
1	2452.00	-6.92	107.52	100.60	200.00	-99.40	Average	171	286	P
2	2452.00	-6.92	120.63	113.71	200.00	-86.29	Peak	171	286	P
3	2483.50	-6.91	59.17	52.26	54.00	-1.74	Average	171	286	P
4	2483.50	-6.91	75.91	69.00	74.00	-5.00	Peak	171	286	P
5	7356.00	4.17	41.98	46.15	54.00	-7.85	Average	125	29	P
6	7356.00	4.17	55.68	59.85	74.00	-14.15	Peak	125	29	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	-6.92	103.77	96.85	200.00	-103.15	Average	141	128	P
2	2452.00	-6.92	115.72	108.80	200.00	-91.20	Peak	141	128	P
3	2483.50	-6.91	52.73	45.82	54.00	-8.18	Average	141	128	P
4	2483.50	-6.91	70.01	63.10	74.00	-10.90	Peak	141	128	P
5	7356.00	4.17	39.89	44.06	54.00	-9.94	Average	146	360	P
6	7356.00	4.17	53.09	57.26	74.00	-16.74	Peak	146	360	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

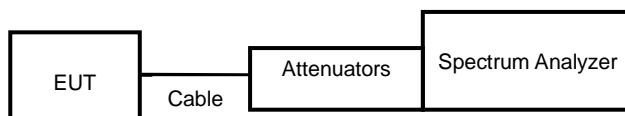
Below -30dB of the highest emission level of operating band (In 100 kHz Resolution Bandwidth)

7.2 Test Procedure

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

- a. The transmitter output was connected to the spectrum analyzer via a low loss cable.
- b. 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.
- c. Peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 30dB relative to the maximum measured in-band peak PSD level.
- d. The band edges was measured and recorded.

7.3 Test Setup Layout



7.4 Test Result and Data

1st plot : fundamental frequency

2nd plot : bandedge emission

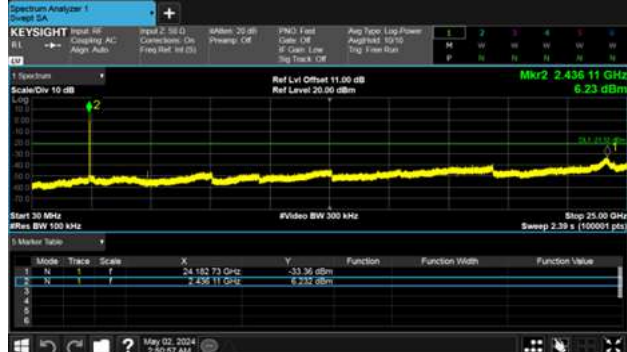
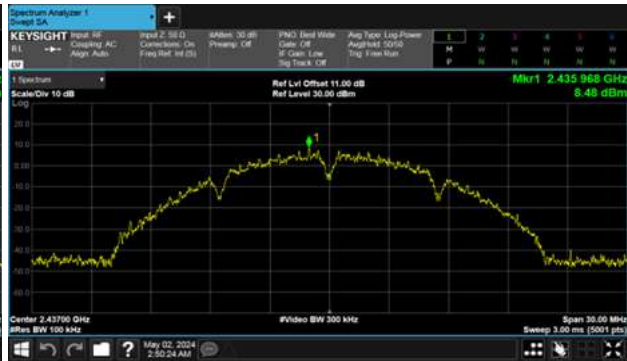
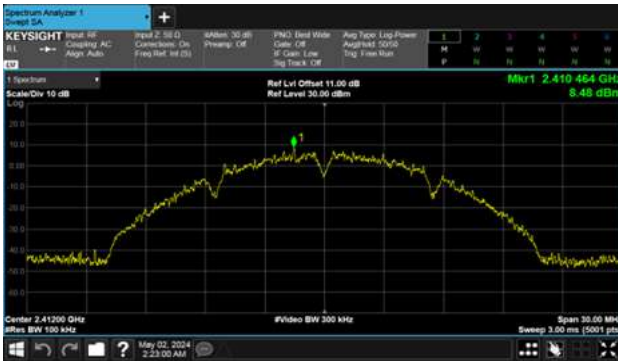
3rd plot : outband emissions



ANT C

Modulation Type: 802.11b, CH 01

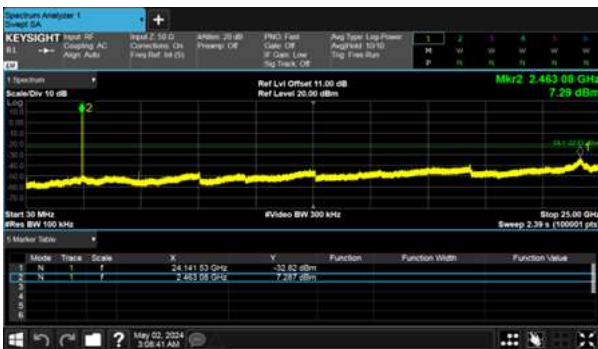
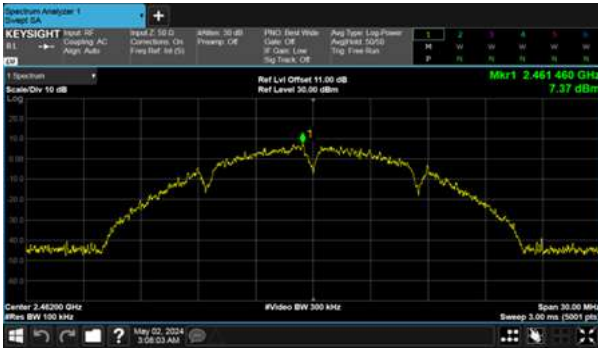
Modulation Type: 802.11b, CH 06





ANT C

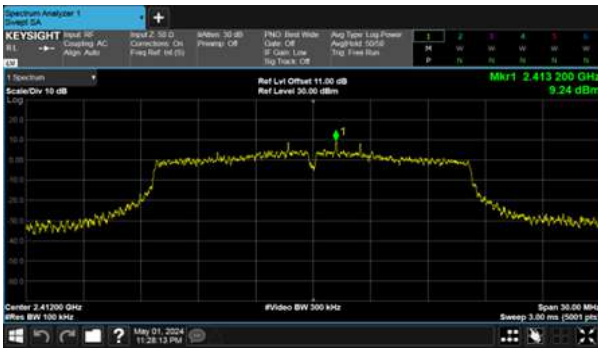
Modulation Type: 802.11b, CH 11



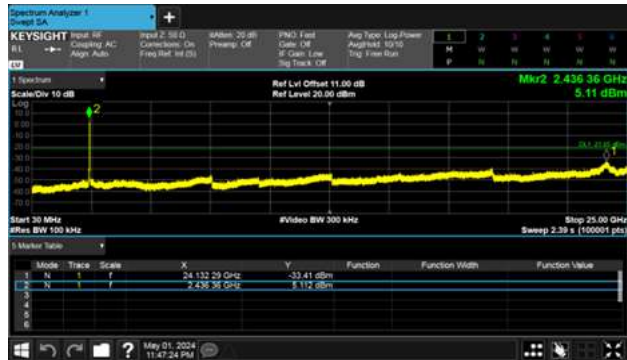
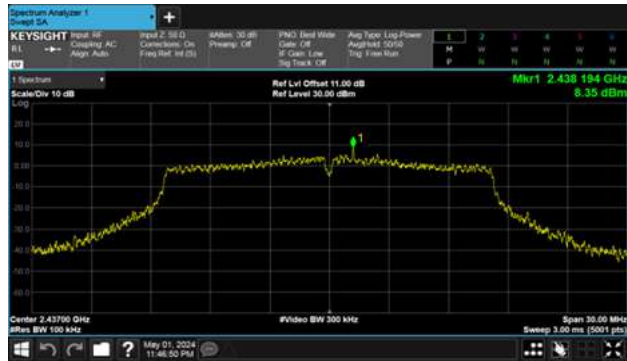


ANT C

Modulation Type: 802.11g, CH 01



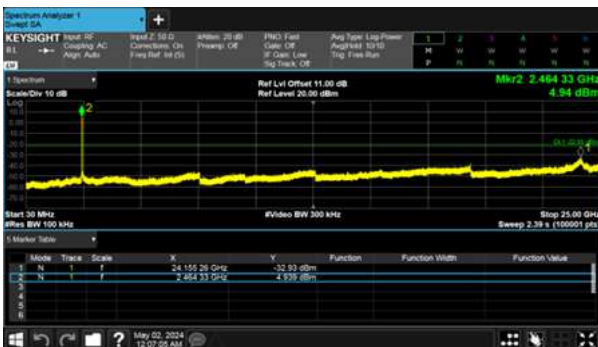
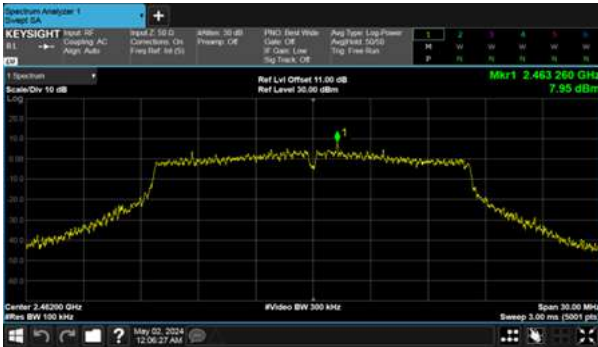
Modulation Type: 802.11g, CH 06





ANT C

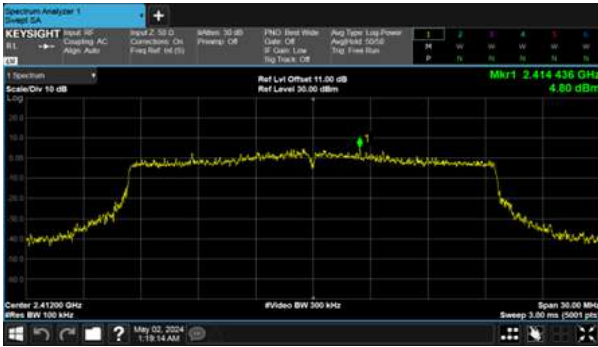
Modulation Type: 802.11g, CH 11



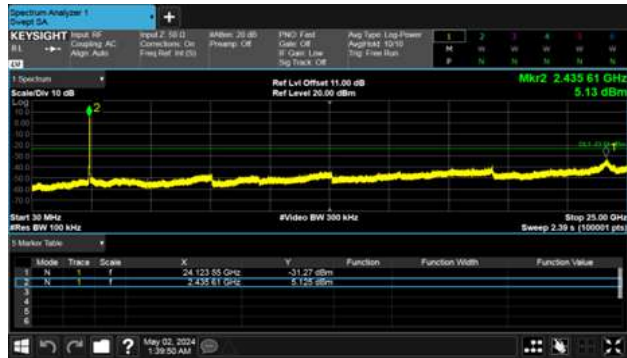
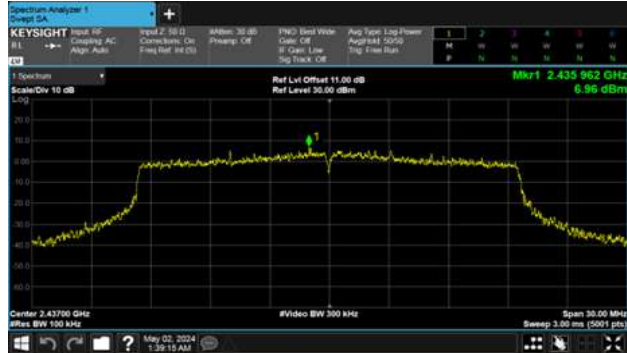


ANT C

Modulation Type: 802.11ax HE20, CH01



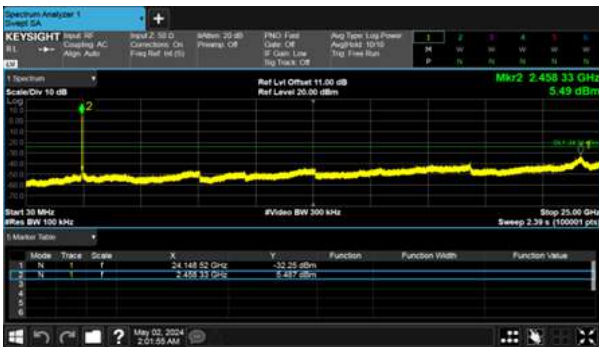
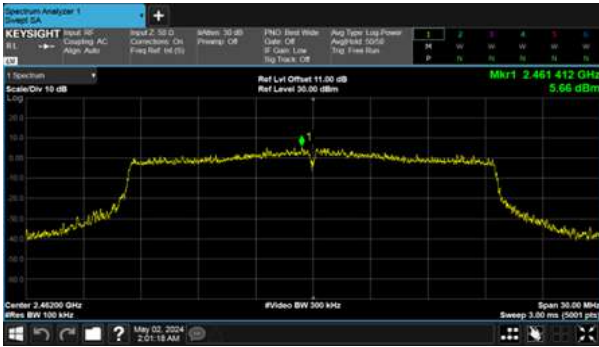
Modulation Type: 802.11ax HE20, CH06





ANT C

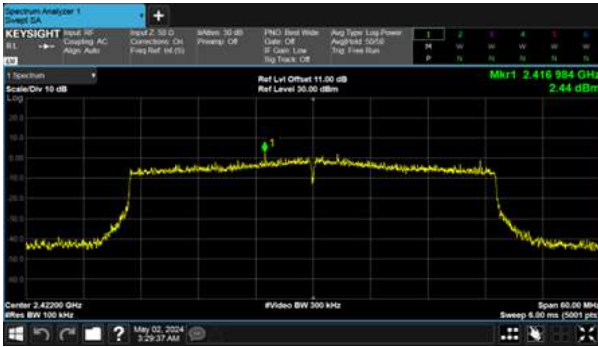
Modulation Type: 802.11ax HE20, CH11



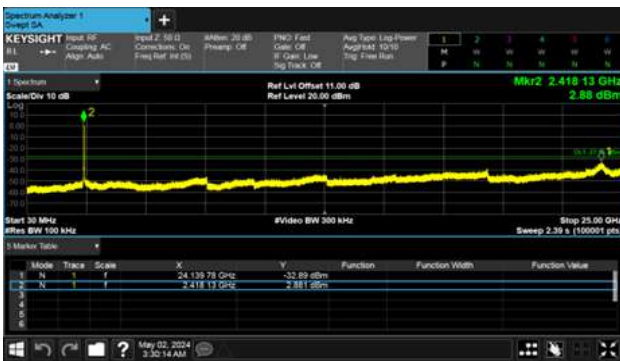
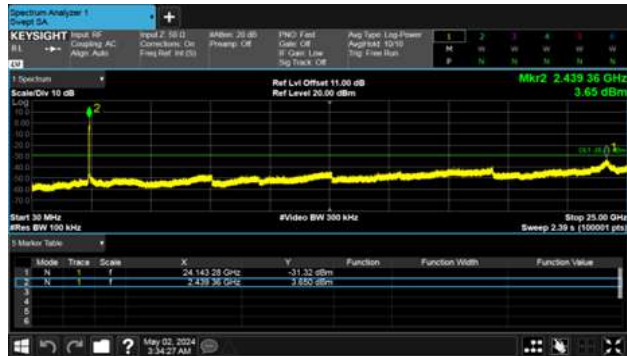
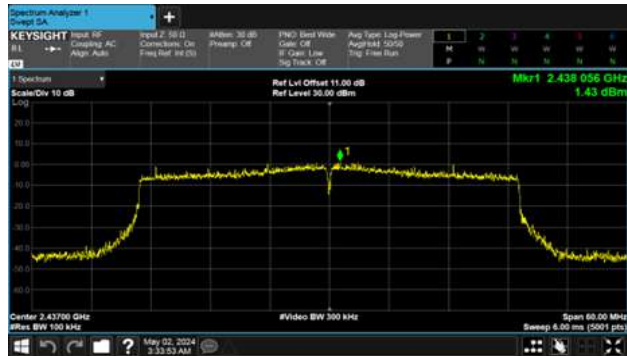


ANT C

Modulation Type: 802.11ax HE40, CH03



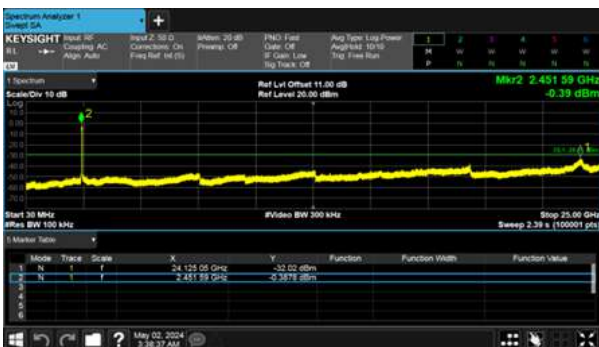
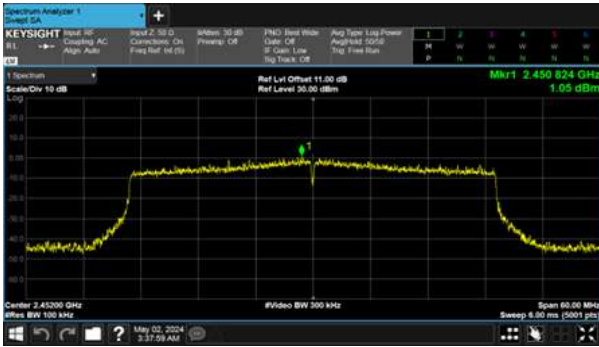
Modulation Type: 802.11ax HE40, CH06





ANT C

Modulation Type: 802.11ax HE40, CH09

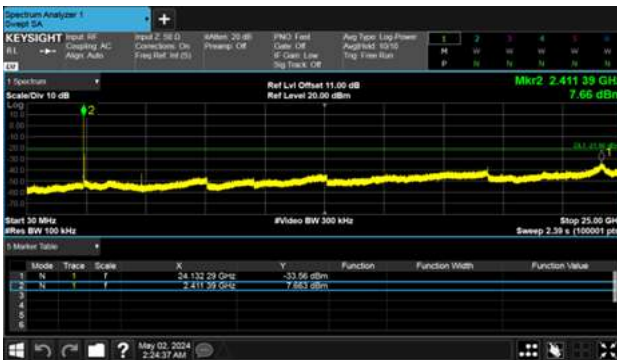
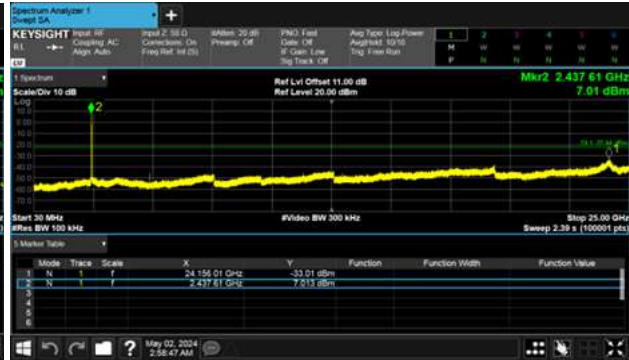
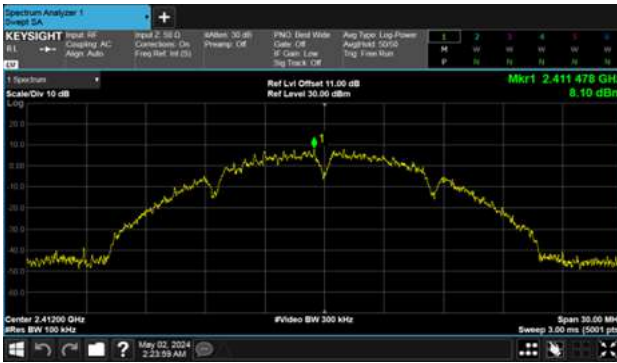




ANT D

Modulation Type: 802.11b, CH 01

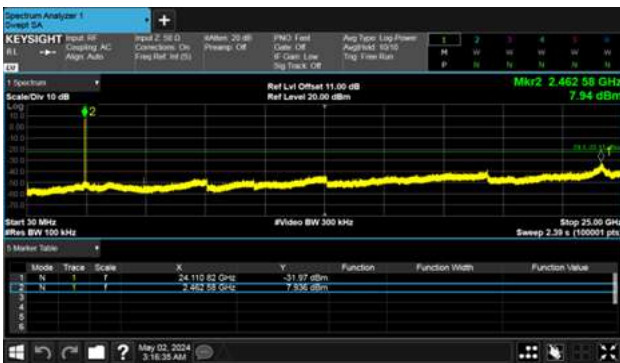
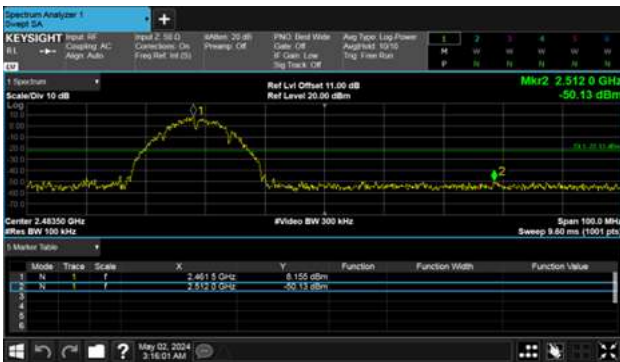
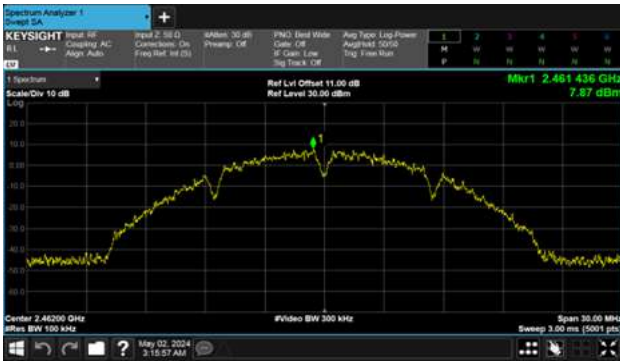
Modulation Type: 802.11b, CH 06





ANT D

Modulation Type: 802.11b, CH 11

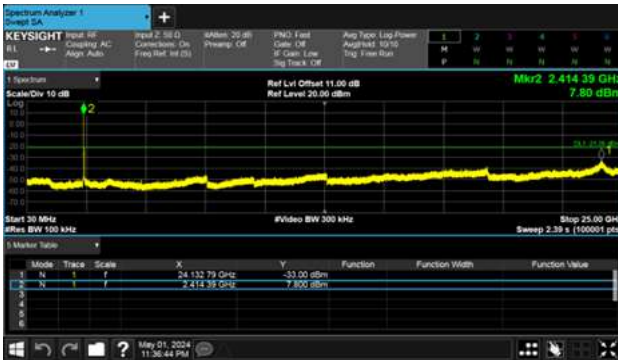
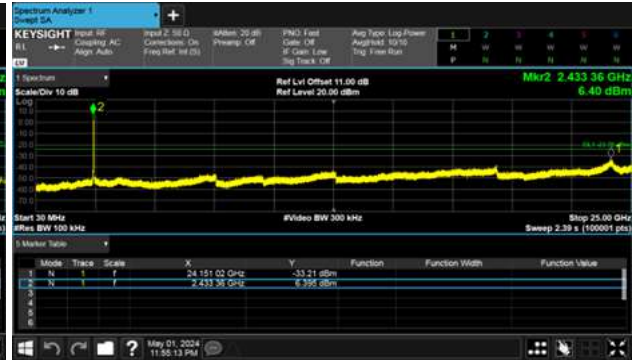
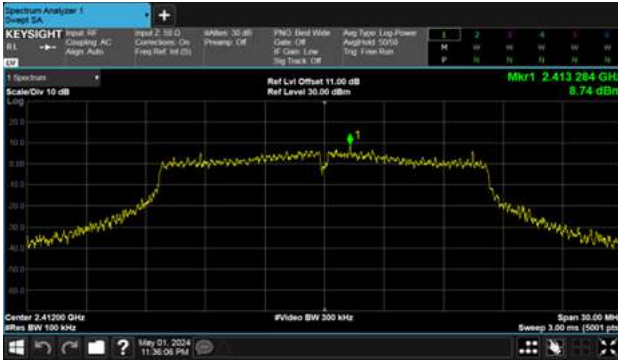




ANT D

Modulation Type: 802.11g, CH 01

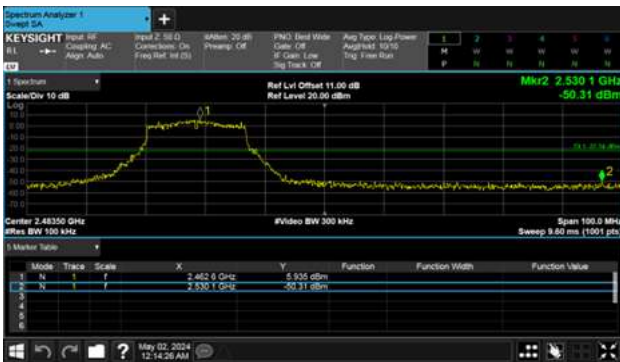
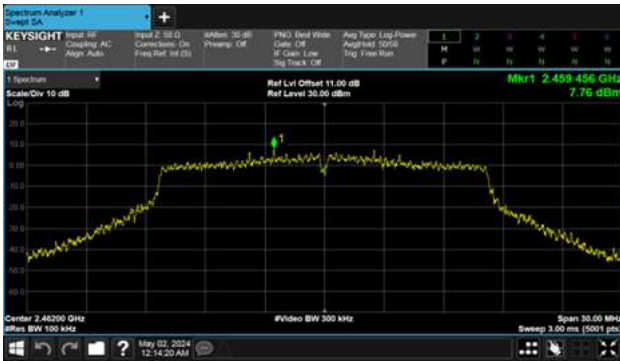
Modulation Type: 802.11g, CH 06





ANT D

Modulation Type: 802.11g, CH 11

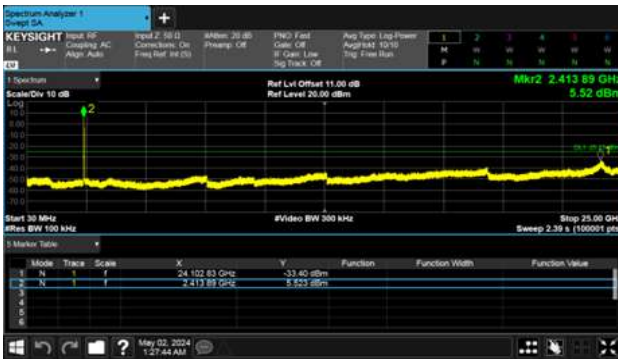
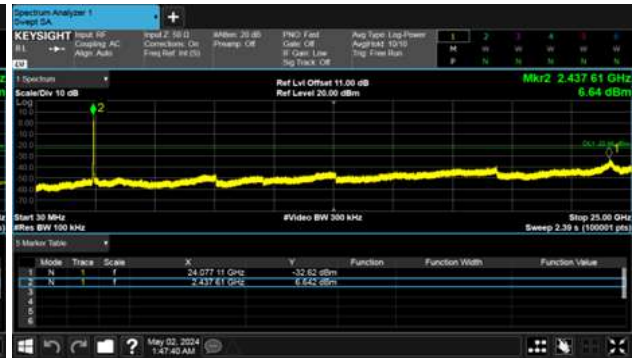
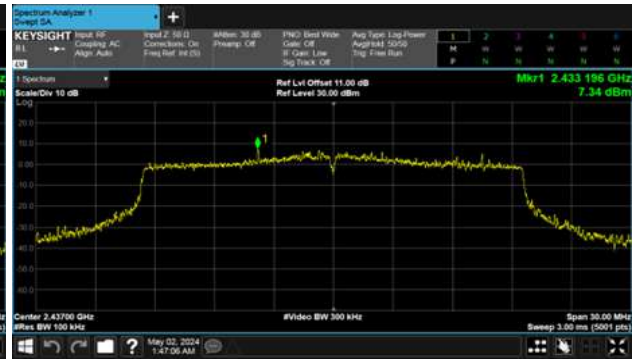
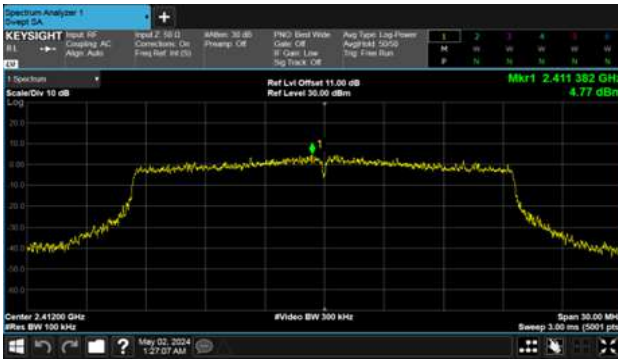




ANT D

Modulation Type: 802.11ax HE20, CH01

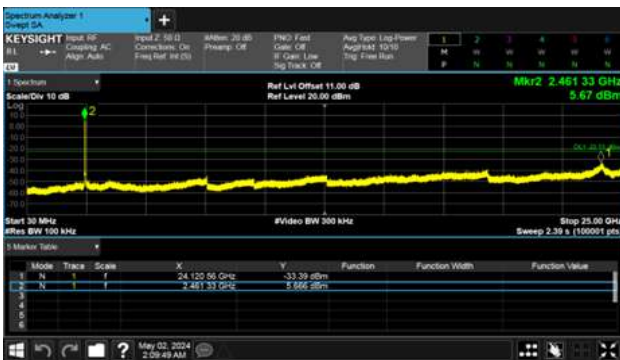
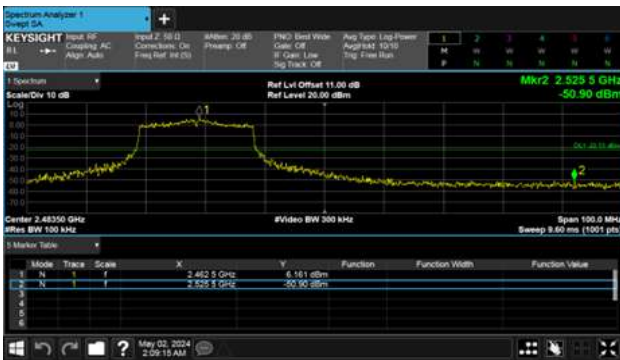
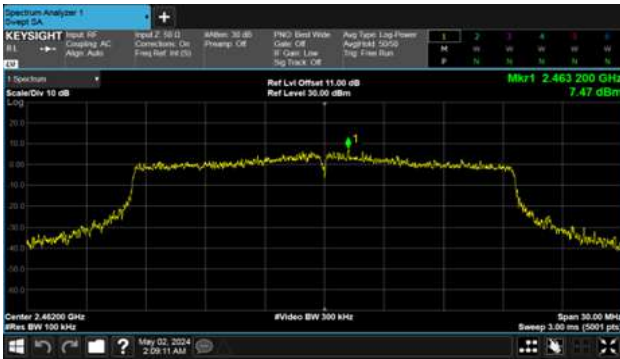
Modulation Type: 802.11ax HE20, CH06





ANT D

Modulation Type: 802.11ax HE20, CH11

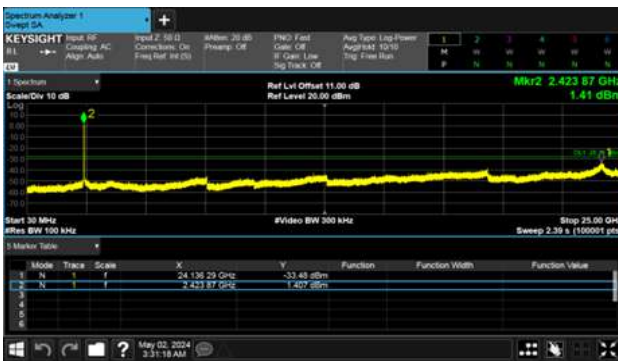
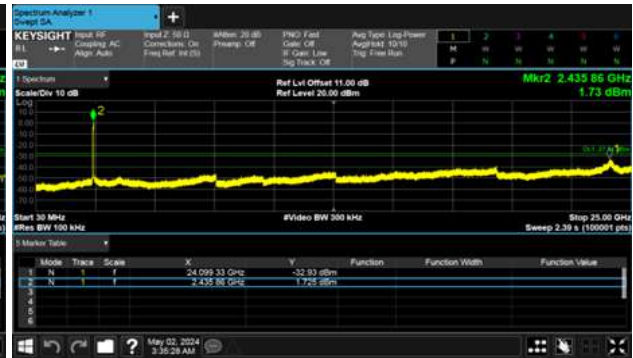
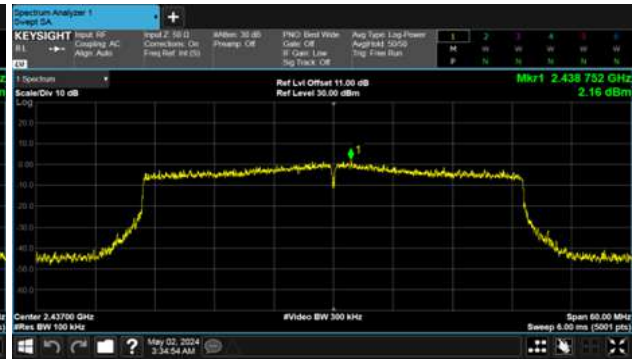
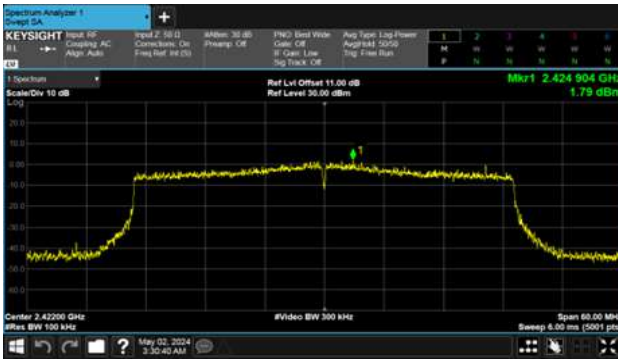




ANT D

Modulation Type: 802.11ax HE40, CH03

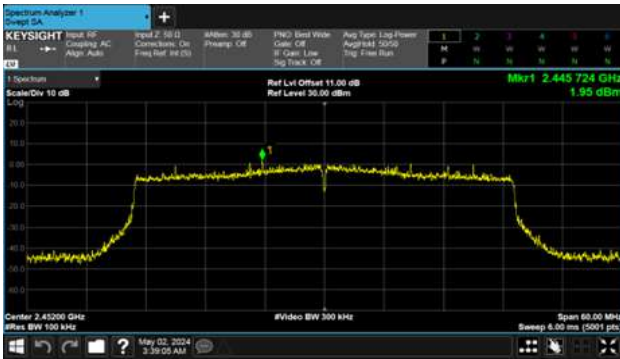
Modulation Type: 802.11ax HE40, CH06





ANT D

Modulation Type: 802.11ax HE40, CH09





8. On Time, Duty Cycle and Measurement methods

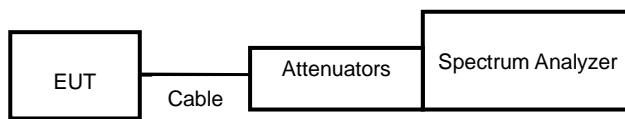
8.1 Test Limit

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 (ms)	Period Time (ms)	Duty Cycle (%)
11b,1M	0.70	1.07	64.95%
11g,6M	1.98	2.14	92.44%
11ax HE20	5.48	6.39	85.73%
11ax HE40	5.46	5.90	92.54%



Modulation Type: 802.11b(1Mbps)



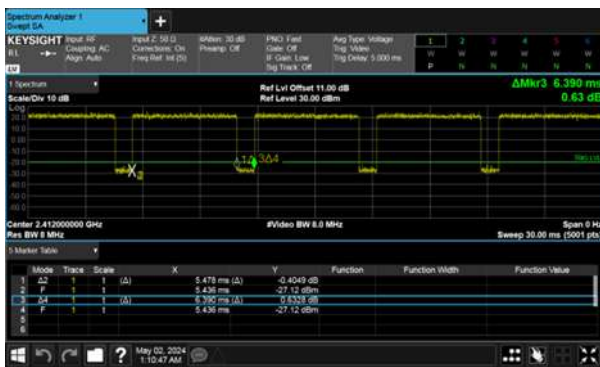
Modulation Type: 802.11ax HE40(14.6Mbps)



Modulation Type: 802.11g(6Mbps)



Modulation Type: 802.11ax HE20(7.3Mbps)





9. 6dB Bandwidth Measurement Data

9.1 Test Limit

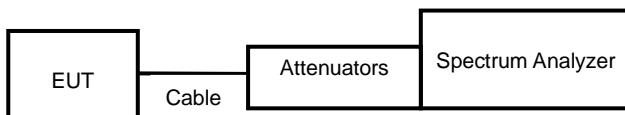
The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

9.2 Test Procedures

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

- a. The transmitter output was connected to the spectrum analyzer.
- b. Set RBW of spectrum analyzer to 100 KHz and VBW to 300 KHz.
- c. The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.
- d. 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 C	ANT D	
11b	1	2412	8.05	8.08	0.5
	6	2437	7.62	8.08	0.5
	11	2462	8.04	8.05	0.5
11g	1	2412	15.07	15.11	0.5
	6	2437	15.10	15.11	0.5
	11	2462	15.11	15.10	0.5
11ax HE20	1	2412	15.07	15.12	0.5
	6	2437	15.03	15.03	0.5
	11	2462	15.08	15.06	0.5
11ax HE40	3	2422	32.72	34.75	0.5
	6	2437	33.48	34.97	0.5
	9	2452	33.88	33.77	0.5



6dB Bandwidth-ANT C
Modulation Type: 802.11b
CH01



Modulation Type: 802.11b
CH01



CH06



CH06



CH11



CH11





6dB Bandwidth-ANT C
Modulation Type: 802.11ax HE20(7.3Mbps)
CH01



Modulation Type: 802.11ax HE40(14.6Mbps)
CH03



CH06



CH06



CH11



CH09





6dB Bandwidth-ANT D
Modulation Type: 802.11b
CH01



Modulation Type: 802.11b
CH01



CH06



CH06



CH11



CH11





6dB Bandwidth-ANT D
Modulation Type: 802.11ax HE20(7.3Mbps)
CH01



Modulation Type: 802.11ax HE40(14.6Mbps)
CH03



CH06



CH06



CH11



CH09





10. Maximum Average Output Power

10.1 Test Limit

The Maximum Average Output Power Measurement is 30dBm.

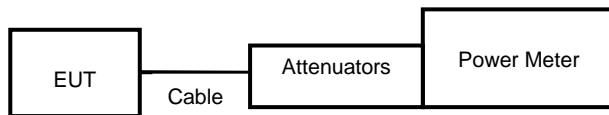
If transmitting antennas of directional gain greater than 6 dBi are used, the average output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi

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

Non Beamforming

Data Rate	Setting	Modulation Mode	Channel	Frequency (MHz)	Conducted(average) output power (dBm)		Total AV power (dBm)	Total AV power (mW)	Power Limit (dBm)
					ANT C	ANT D			
1	18	11b	1	2412	16.61	17.31	19.98	99.641	30.00
	17		6	2437	16.23	16.90	19.59	90.954	30.00
	17.5		11	2462	16.73	17.38	20.08	101.799	30.00
6	19	11g	1	2412	17.64	18.33	21.01	126.153	30.00
	18		6	2437	17.09	17.77	20.45	111.009	30.00
	17.5		11	2462	16.75	17.36	20.08	101.765	30.00
NSS1-MCS0	18	11ax HE20	1	2412	16.87	17.43	20.17	103.976	30.00
	19		6	2437	18.29	18.90	21.62	145.078	30.00
	18.5		11	2462	17.75	18.50	21.15	130.361	30.00
NSS1-MCS0	17	11ax HE40	3	2422	15.97	16.61	19.31	85.351	30.00
	17		6	2437	16.37	17.03	19.72	93.817	30.00
	16		9	2452	16.47	17.05	19.78	95.060	30.00

Beamforming

Data Rate	Setting	Modulation Mode	Channel	Frequency (MHz)	Conducted(average) output power (dBm)		Total AV power (dBm)	Total AV power (mW)	Power Limit (dBm)
					ANT C	ANT D			
NSS1-MCS0	15	11ax HE20	1	2412	13.90	14.47	17.20	52.537	28.75
	16.5		6	2437	15.78	16.45	19.14	82.001	28.75
	16		11	2462	15.27	15.85	18.58	72.110	28.75
NSS1-MCS0	15	11ax HE40	3	2422	13.61	14.32	16.99	50.001	28.75
	15		6	2437	14.18	14.62	17.42	55.155	28.75
	14.5		9	2452	13.90	14.34	17.14	51.711	28.75



11. Power Spectral Density

11.1 Test Limit

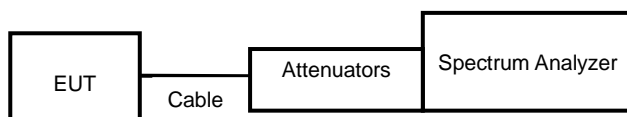
The Maximum of Power Spectral Density Measurement is 8dBm.

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

11.3 Test Setup Layout



11.4 Test Result and Data

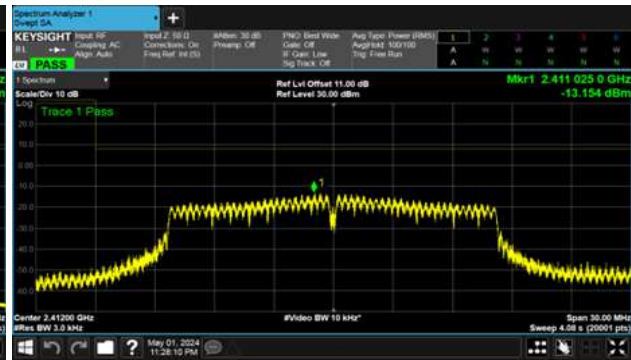
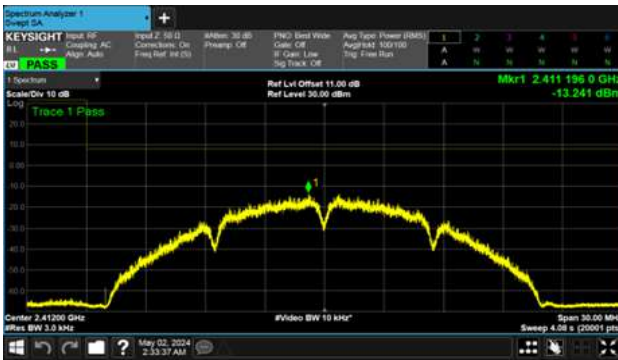
Modulation Type	Channel	Frequency (MHz)	Maximum Power Density of 3KHz Bandwidth(dBm)		Sum chain (dBm)	Duty Cycle CF(dB)	Total PSD (dBm)	Limit (dBm)
			ANT C	ANT D				
11b	1	2412	-13.241	-12.862	-10.04	1.87	-8.17	6.75
	6	2437	-13.437	-13.146	-10.28	1.87	-8.41	6.75
	11	2462	-13.396	-12.05	-9.66	1.87	-7.79	6.75
11g	1	2412	-13.154	-12.216	-9.65	0.34	-9.31	6.75
	6	2437	-13.875	-12.834	-10.31	0.34	-9.97	6.75
	11	2462	-13.896	-13.286	-10.57	0.34	-10.23	6.75
11ax HE20	1	2412	-17.372	-16.888	-14.11	0.67	-13.44	6.75
	6	2437	-15.761	-15.229	-12.48	0.67	-11.81	6.75
	11	2462	-16.462	-14.957	-12.63	0.67	-11.96	6.75

Modulation Type	Channel	Frequency (MHz)	Maximum Power Density of 100KHz Bandwidth(dBm)		Sum chain (dBm)	Duty Cycle CF(dB)	Total PSD (dBm)	Limit (dBm)
			ANT C	ANT D				
11ax HE40	3	2422	-6.522	-6.074	-3.28	0.34	-2.94	6.75
	6	2437	-6.172	-5.766	-2.95	0.34	-2.61	6.75
	9	2452	-7.103	-6.834	-3.96	0.34	-3.62	6.75



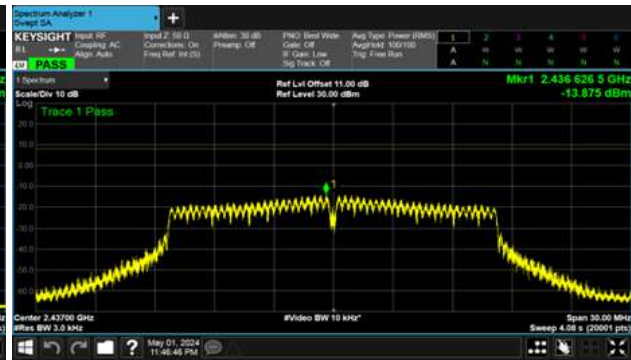
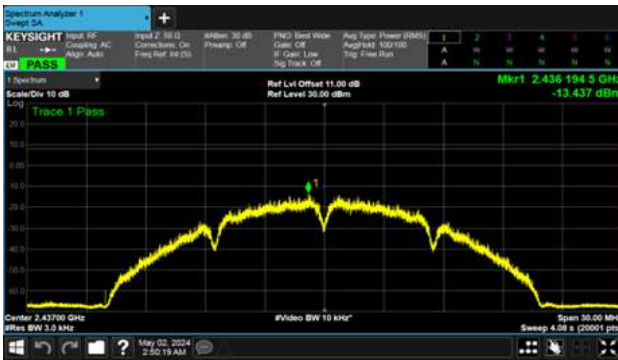
ANT C
Modulation Type: 802.11b
CH01

Modulation Type: 802.11g
CH01



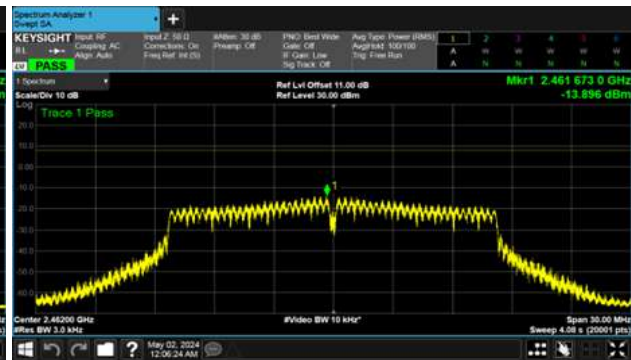
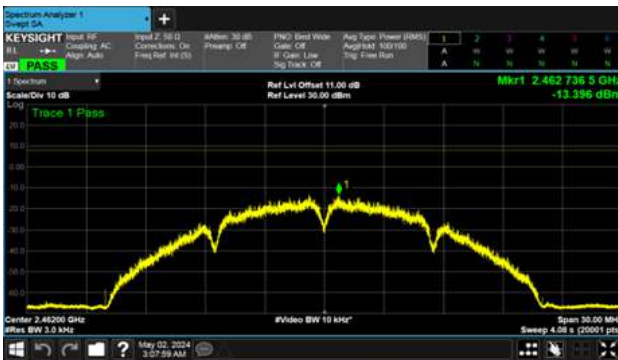
CH06

CH06



CH11

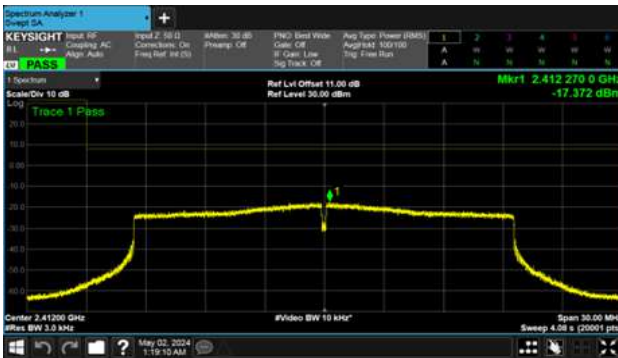
CH11



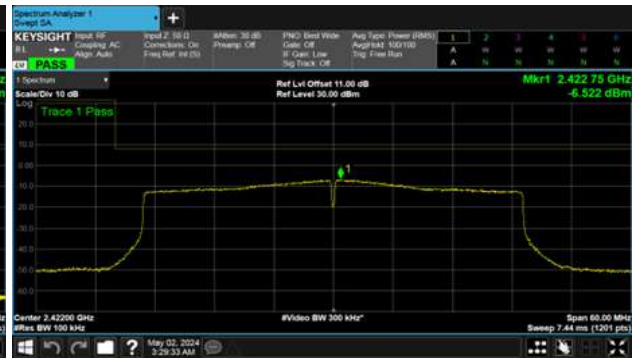


ANT C

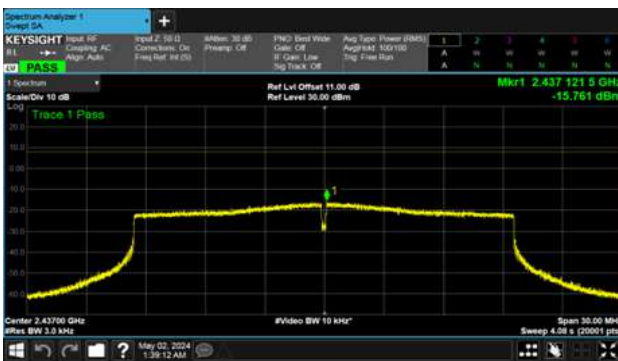
Modulation Type: 802.11ax HE20(7.3Mbps)
CH01



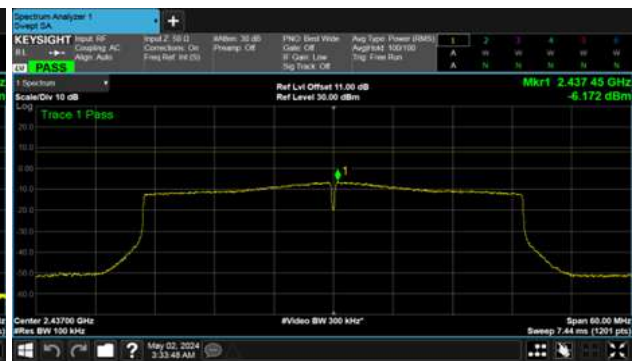
Modulation Type: 802.11ax HE40(14.6Mbps)
CH03



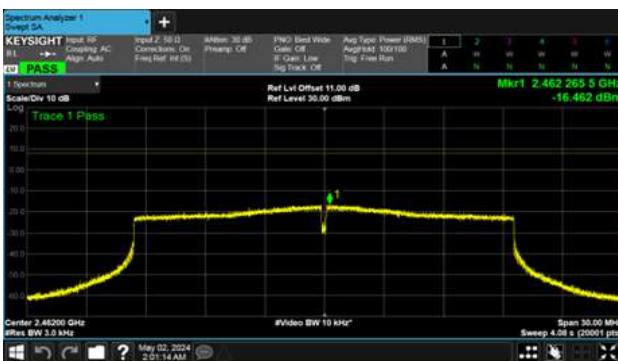
CH06



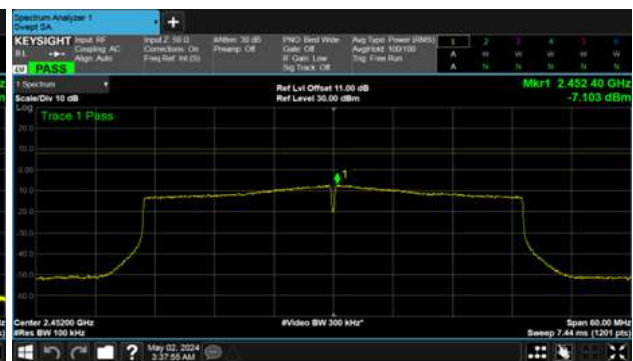
CH06



CH11



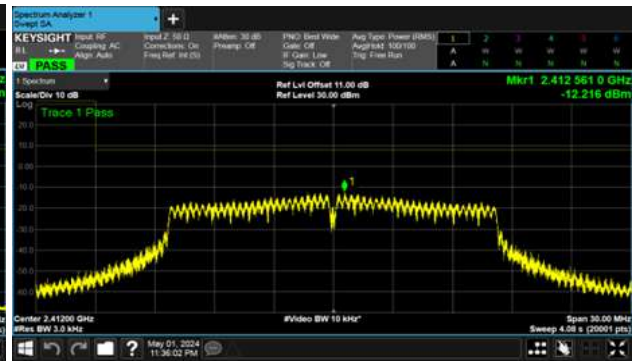
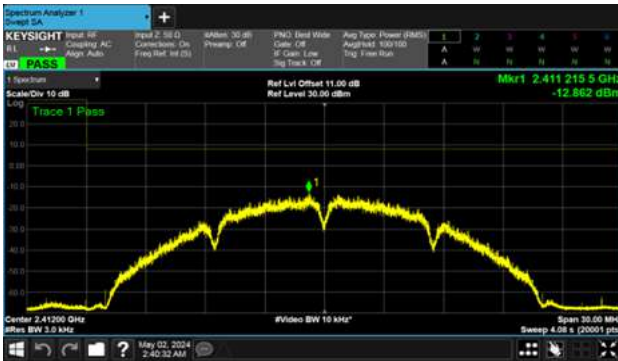
CH09





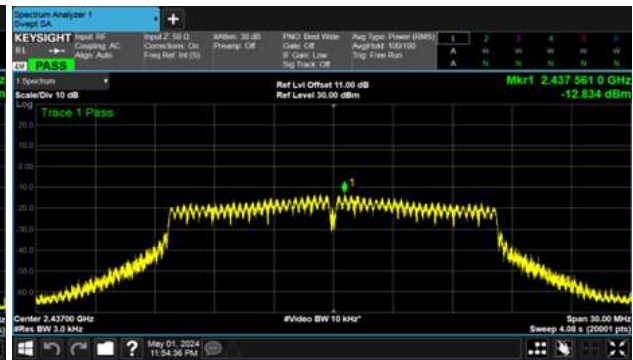
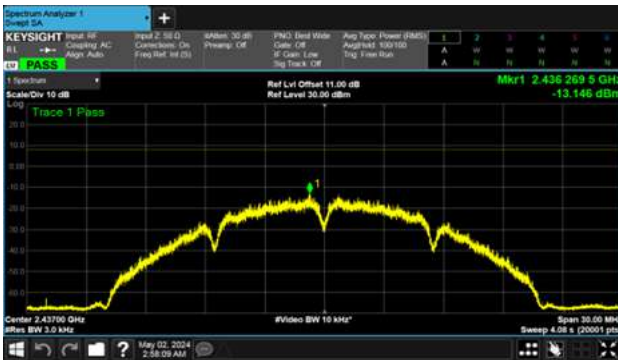
ANT D
Modulation Type: 802.11b
CH01

Modulation Type: 802.11g
CH01



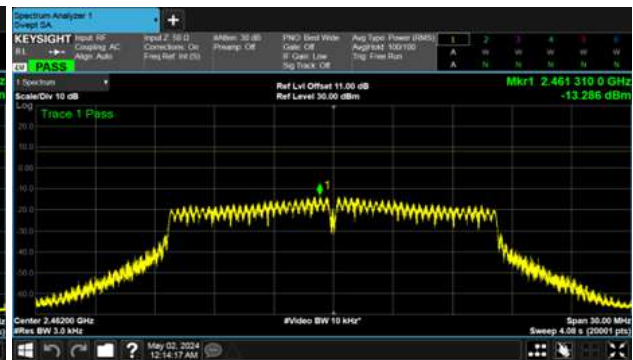
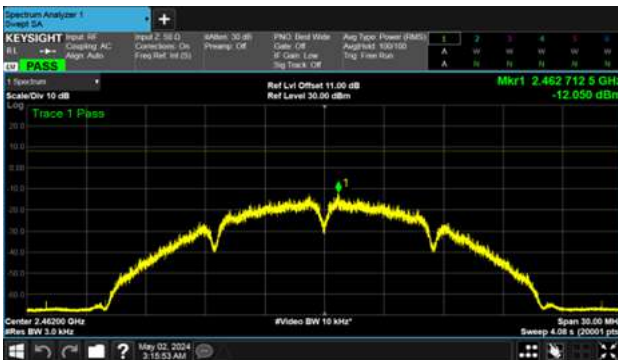
CH06

CH06



CH11

CH11

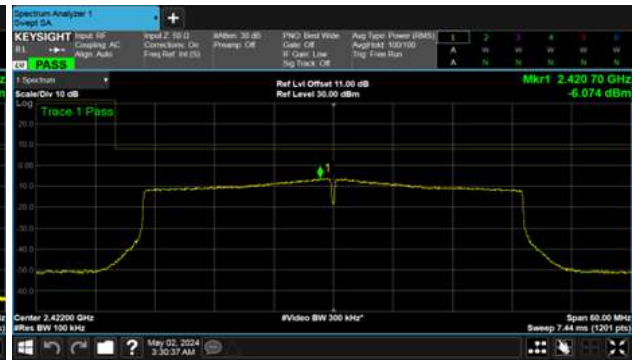
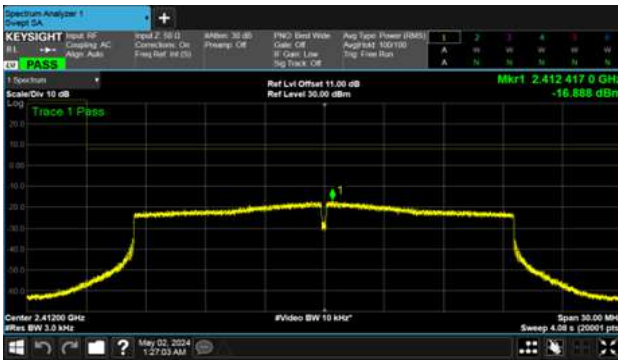




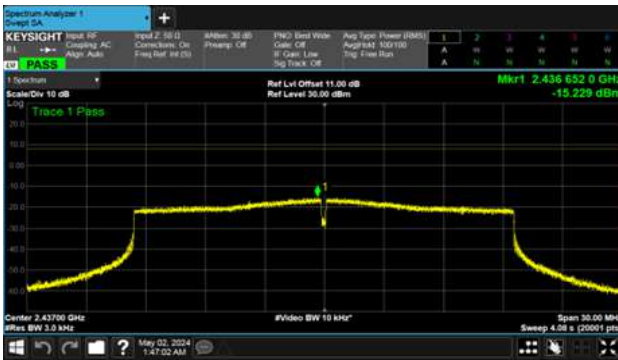
ANT D

Modulation Type: 802.11ax HE20(7.3Mbps)
CH01

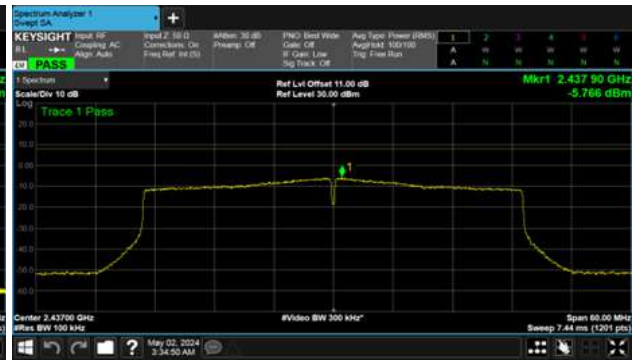
Modulation Type: 802.11ax HE40(14.6Mbps)
CH03



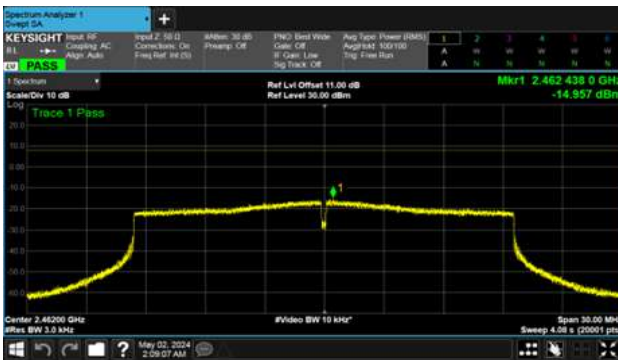
CH06



CH06



CH11



CH09

