TEST REPORT

Verified Code: 562587

Report No.:	E202101295124-5	**Application No.:**	E202101295124
Client:	DMAI,Inc.		
Address:	10940 Wilshire Blvd #1100, Los Angeles, CA 90024, USA		
Sample Description:	Education tablet,a preschool learning system		
Model:	X4C-US21		
Test Specification:	CFR 47, FCC Part 15 Subpart C RADIO FREQUENCY DEVICES: Subpart C Intentional Radiators		
Receipt Date:	2021-02-20		
Test Date:	2021-03-13 to 2021-03-24		
Issue Date:	2021-05-17		
Test Result:	Pass		

Prepared By:	**Reviewed By:**	**Approved By:**
Test Engineer	Technical Manager	Manager
Xie Fang	Wu Haoting	GUANGZHOU GRG METROLOGY & TEST CO.,LTD. GRGTEST APPROVED(03)

Other Aspects:

Note: Note

Abbreviations: *ok / P = passed; fail / F = failed; n.a. / N = not applicable;*

The test result in this test report refers exclusively to the presented test sample. This report shall not be reproduced except in full, without the written approval of GRGT.

DIRECTIONS OF TEST

1. **This station carries out test task according to the national regulation of verifications which can be traced to National Primary Standards and BIPM.**

2. **The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test result without the written permission of the test laboratory.**

3. **If there is any objection concerning the test, the client should inform the laboratory within 15 days from the date of receiving the test report.**

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1. TEST RESULT SUMMARY

Standard	Item	Limit / Severity	Result
CFR 47, FCC Part 15 Subpart C (§15.247)	Antenna Requirement	§15.203	PASS
	Conducted Emissions	§15.207 (a)	PASS
	Radiated Spurious Emission	§15.247(d)	PASS
	6 dB Bandwidth	§15.247 (a)(2)	PASS
	Maximum Peak Output Power	§15.247(b)(3)	PASS
	Power Spectral Density	§15.247(e)	PASS
	Conducted band edges and Spurious Emission	§15.247(d)	PASS
	Restricted bands of operation	§15.205	PASS

The EUT have one wifi antenna. It is FPC antenna.
The max gain of antenna is 2.8dBi.which accordance 15.203.is considered sufficient to comply with the provisions of this section.

2. GENERAL DESCRIPTION OF EUT

2.1. APPLICANT

Name:	DMAI,Inc.
Address:	10940 Wilshire Blvd #1100, Los Angeles, CA 90024, USA

2.2. MANUFACTURER

Name:	DMAI,Inc.
Address:	10940 Wilshire Blvd #1100, Los Angeles, CA 90024, USA

2.3. FACTORY

Name:	Shenzhen Valley Ventures Inc
Address:	9F-10F, Block 4, Cloud Park, Xuegang North Road, Bantian Street, Longgang district Shenzhen, 518129, China

2.4. BASIC DESCRIPTION OF EQUIPMENT UNDER TEST

Equipment:	Education tablet,a preschool learning system
Model No.:	X4C-US21
Adding Model:	/
Trade Name:	AILA Sit & Play™ Animal Island Learning Adventure™ DMAI™
FCC ID:	2AYDJ-X4C-US21
Power Supply:	DC5V power supplied by adapter
Adapter Specification:	Model: AS1201A-0502000USU Input: 100-240V~50/60Hz 0.35A Max Output: 5V ⎓ 2000mA
Frequency Range	2412MHz~2462MHz: 802.11b; 802.11g; 802.11n(HT20) 2422MHz~2452MHz: 802.11n(HT40);
Transmit Power:	12.06dBm for 802.11b mode 11.74dBm for 802.11g mode 11.75dBm for 802.11n HT20 mode 11.83dBm for 802.11n HT40 mode
Modulation type:	DSSS for 802.11b mode; OFDM for 802.11g mode; OFDM for 802.11n mode.
Channel space:	5MHz
Antenna Specification:	FPC antenna with 2.8dBi gain (Max.)

Temperature Range:	0°C ~+40°C
Hardware Version:	MT8168-P71-V1.1
Software Version:	ys_mssi_t_64_userdebug_10_QP1A.190711.020mp3v4104 test-keys
Sample No:	E202101295124-0002
Note:	The adapter have two color of appearance: White,Green.

2.5. TEST OPERATION MODE

Mode No.	Description of the modes
1	2.4GHz fixed frequency transmitting

2.6. LOCAL SUPPORTIVE INSTRUMENTS

Name of Equipment	Manufacturer	Model	Serial Number	Note
/	/	/	/	/
Cable				
/	/	/	/	/

Test software:

Software version	Test level
MT6631 software	802.11B Mode 2412MHz:15 2437MHz:16 2462MHz:16 802.11G Mode 2412MHz:16 2437MHz:16 2462MHz:16 802.11N20 Mode 2412MHz:16 2437MHz:16 2462MHz:16 802.11N40 Mode 2422MHz:16 2437MHz:16 2452MHz:13

3. LABORATORY AND ACCREDITATIONS

3.1. LABORATORY

The tests & measurements refer to this report were performed by Shenzhen EMC Laboratory of Guangzhou GRG Metrology & Test Co,. Ltd.

Add : Address: No.1301 Guanguang Road Xinlan Community, Guanlan Street, Longhua District Shenzhen, 518110, People's Republic of China

P.C. : 518000

Tel : 0755-61180008

Fax : 0755-61180008

3.2. ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to GB/T 27025(ISO/IEC 17025:2017)

USA	A2LA(Certificate #:2861.01)

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

Canada	Industry Canada
USA	FCC

Copies of granted accreditation certificates are available for downloading from our web site, http://www.grgtest.com

3.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement		Frequency	Uncertainty
Radiated Emission	Horizontal	30MHz~1000MHz	4.30dB
		1GHz~18GHz	5.60dB
		18GHz~26GHz	3.65dB
		26GHz~40GHz	4.00dB
	Vertical	30MHz~1000MHz	4.30dB
		1GHz~18GHz	5.60dB
		18GHz~26GHz	3.65dB
		26GHz~40GHz	4.00dB
Conduction Emission		9 kHz ~ 150 kHz	2.80dB
		150 kHz ~ 10 MHz	2.80dB
		10 MHz ~ 30 MHz	2.20dB

This uncertainty represents an expanded uncertainty factor of k=2.

4. LIST OF USED TEST EQUIPMENT AT GRGT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Conducted Emissions				
TEST RECEIVER	R&S	ESCI	100783	2021-10-08
LISN(EUT)	R&S	ENV216	101543	2022-03-21
EZ-EMC	EZ	CCS-3A1-CE	/	/
Radiated Spurious Emission& Restricted bands of operation				
Spectrum Analyzer	Agilent	N9010A	MY52221469	2021-05-16
Bilog Antenna	Schwarzbeck	VULB 9163	01279	2022-02-25
Horn Antenna	Schwarzbeck	BBHA 9120D(1201)	02143	2021-12-27
Board-Band Horn Antenna	Schwarzbeck	BBHA 9170	BBHA 9170-497	2021-11-05
Amplifier	Tonscend	TAP9E6343	AP20E806065	2021-06-28
Amplifier	Tonscend	TAP01018048	AP20E8060075	2021-06-28
Amplifier	Tonscend	TAP184050	AP20E806071	2021-06-15
Test S/W	Tonscend	JS32-RE/2.5.2.4		
6 dB Bandwidth				
Spectrum Analyzer	Agilent	N9010A	MY52221469	2021-05-16
Maximum Peak Output Power				
Pulse power sensor	Anritsu	MA2411B	1126150	2021-04-13
Power Meter	Anritsu	NL2495A	1204003	2021-04-13
Conducted band edges and Spurious Emission				
Spectrum Analyzer	Agilent	N9010A	MY52221469	2021-05-16
Power Spectral Density				
Spectrum Analyzer	Agilent	N9010A	MY52221469	2021-05-16

Note: The calibration interval of the above test instruments is 12 months.

5. CONDUCTED EMISSION MEASUREMENT

5.1. LIMITS

Frequency range	Limits (dBμV)	
	Quasi-peak	Average
150kHz ~ 0.5MHz	66~56	56~46
0.5 MHz ~ 5 MHz	56	46
5 MHz ~ 30 MHz	60	50

NOTE: (1) The lower limit shall apply at the transition frequencies.
(2) The limit decreases in line with the logarithm of the frequency in the range of 150 kHz to 0.5MHz.

5.2. TEST PROCEDURES

Procedure of Preliminary Test

Test procedures follow ANSI C63.10:2013.
For measurement of the disturbance voltage the equipment under test (EUT) is connected to the power supply mains and any other extended network via one or more artificial network(s). An EUT, whether intended to be grounded or not, and which is to be used on a table is configured as follows:

– Either the bottom or the rear of the EUT shall be at a controlled distance of 40 cm from a reference ground plane. This ground plane is normally the wall or floor of a shielded room. It may also be a grounded metal plane of at least 2 m by 2 m. This is physically accomplished as follows:

1) place the EUT on a table of non-conducting material which is at least 80 cm high. Place the EUT so that it is 40 cm from the wall of the shielded room, or place the EUT on a table of non-conducting material which is 40 cm high so that the bottom of the EUT is 40 cm above the ground plane;

– All other conductive surfaces of the EUT shall be at least 80 cm from the reference ground plane;

– The EUT are placed on the floor that one side of the housings is 40 cm from the vertical reference ground plane and other metallic parts;

Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth forming a bundle 30 cm to 40 cm long, hanging approximately in the middle between the ground plane and the table.

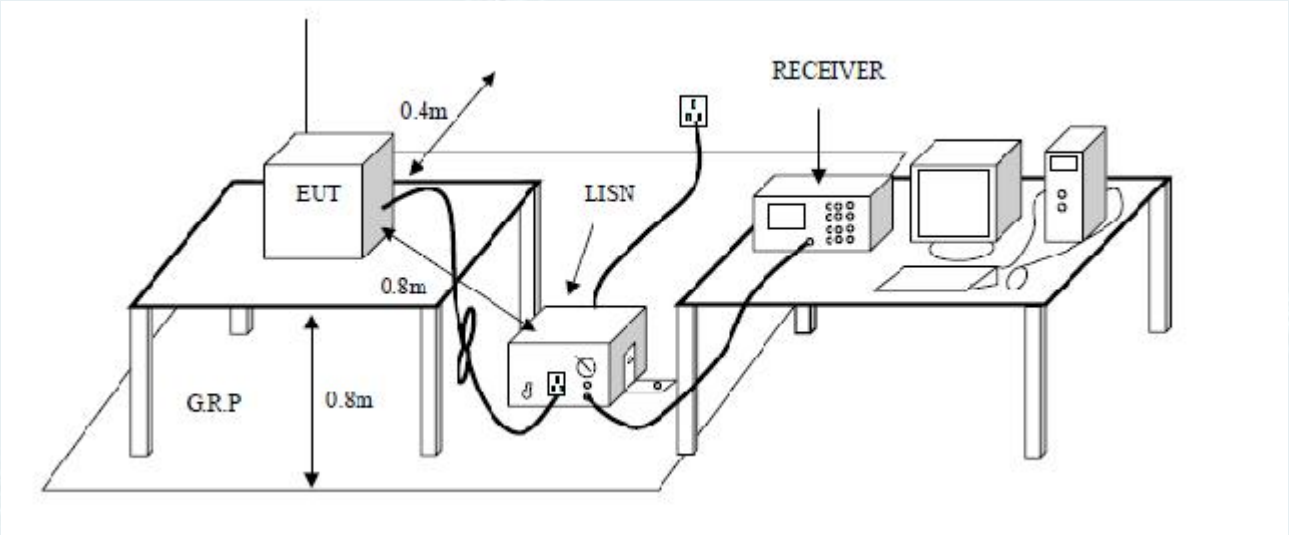
– I/O cables that are connected to a peripheral shall be bundled in the centre. The end of the cable may be terminated if required using correct terminating impedance. The total length shall not exceed 1 m.

The test mode(s) described in Item 2.4 were scanned during the preliminary test. After the preliminary scan, we found the test mode described in Item 2.4 producing the highest emission level. The EUT configuration and cable configuration of the above highest emission levels were recorded for reference of the final test.

Procedure of Final Test

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test. A scan was taken on both power lines, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. The test data of the worst-case condition(s) was recorded.

5.3. TEST SETUP



5.4. DATA SAMPLE

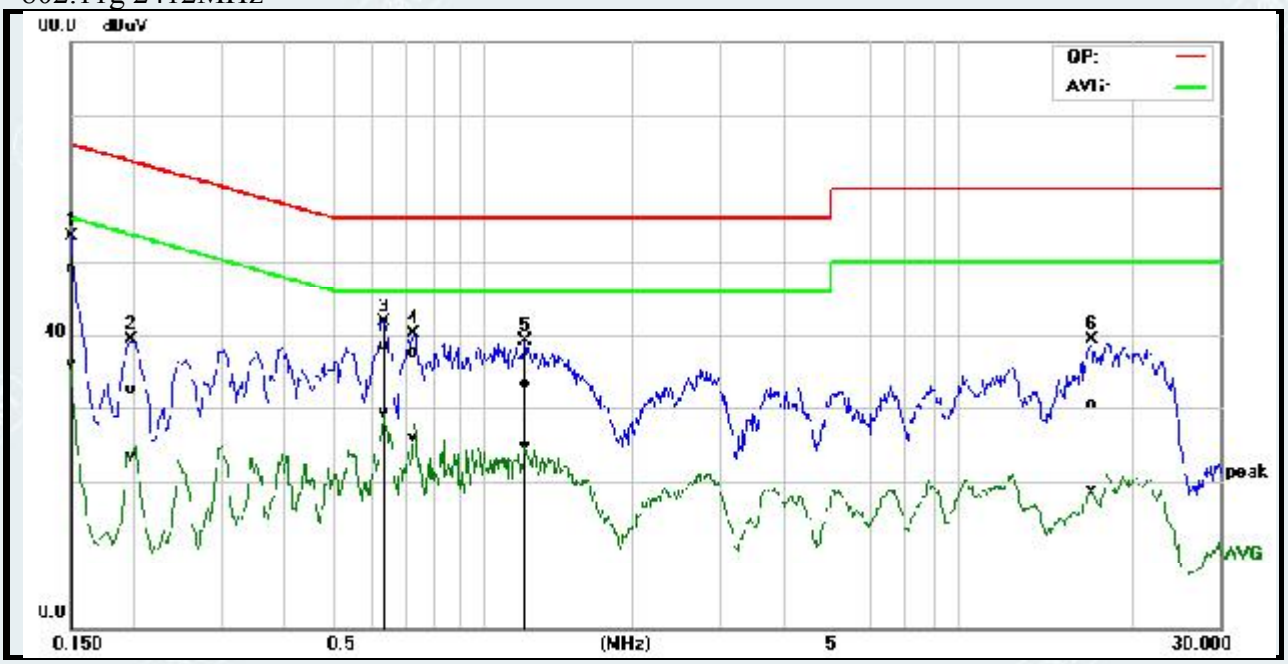
Frequency (MHz)	QuasiPeak Reading (dBuV)	Average Reading (dBuV)	Correction Factor (dB)	QuasiPeak Result (dBuV)	Average Result (dBuV)	QuasiPeak Limit (dBuV)	Average Limit (dBuV)	QuasiPeak Margin (dB)	Average Margin (dB)	Remark (Pass/Fail)
X.XXXX	32.69	25.65	11.52	44.21	37.17	65.78	55.79	-21.57	-18.62	Pass

Factor = Insertion loss of LISN + Cable Loss
Result = Quasi-peak Reading/ Average Reading + Factor
Limit = Limit stated in standard
Margin = Result (dBuV) – Limit (dBuV)

5.5. TEST RESULTS

EUT Name	Education tablet,a preschool learning system	Model	X4C-US21
Environmental Conditions	24.8℃/57%RH	Test Mode	Mode 1
Power supply	AC120V/60Hz	Tested By	Chen Xiaocong
Test Date	2021-03-15	Sample No.	E202101295124-0002

802.11g 2412MHz

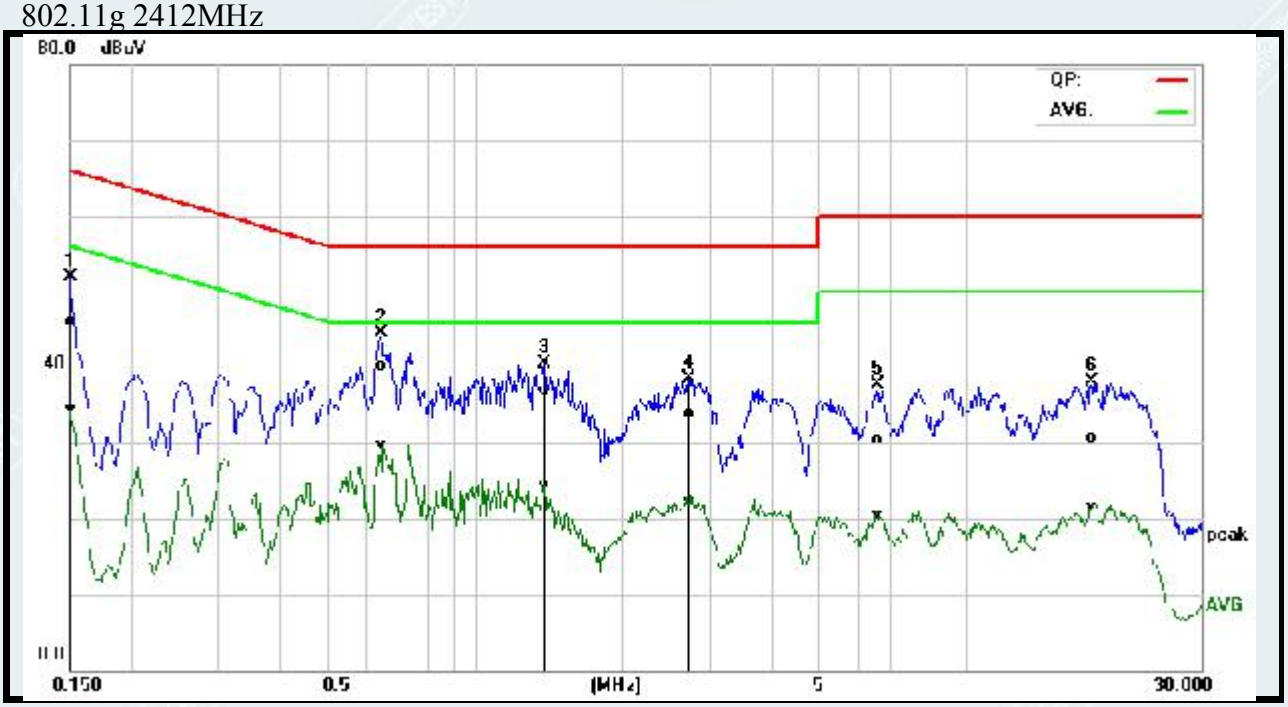


No.	Frequency	QuasiPeak reading	Average reading	Correction factor	QuasiPeak result	Average result	QuasiPeak limit	Average limit	QuasiPeak margin	Average margin	Remark
	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(dB)	
1	0.1500	39.49	26.37	9.61	49.10	35.98	65.99	56.00	-16.89	-20.02	Pass
2	0.1980	22.89	13.64	9.61	32.50	23.25	63.69	53.69	-31.19	-30.44	Pass
3*	0.6340	28.89	19.70	9.61	38.50	29.31	56.00	46.00	-17.50	-16.69	Pass
4	0.7300	27.89	16.22	9.61	37.50	25.83	56.00	46.00	-18.50	-20.17	Pass
5	1.2180	23.78	15.15	9.62	33.40	24.77	56.00	46.00	-22.60	-21.23	Pass
6	16.7220	20.69	9.06	9.81	30.50	18.87	60.00	50.00	-29.50	-31.13	Pass

Note: *L = Live Line*

EUT Name	Education tablet,a preschool learning system	Model	X4C-US21
Environmental Conditions	24.8℃/57%RH	Test Mode	Mode 1
Power supply	AC120V/60Hz	Tested By	Chen Xiaocong
Test Date	2021-03-15	Sample No.	E202101295124-0002

802.11g 2412MHz



No.	Frequency	OuasiPeak reading	Average reading	Correction factor	OuasiPeak result	Average result	OuasiPeak limit	Average limit	OuasiPeak margin	Average margin	Remark
	(MHz)	(dBuV)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dBuV)	(dBuV)	(dB)	(dB)	
1	0.1500	36.60	24.76	9.60	46.20	34.36	65.99	56.00	-19.79	-21.64	Pass
2*	0.6460	30.59	20.10	9.61	40.20	29.71	56.00	46.00	-15.80	-16.29	Pass
3	1.3860	27.29	14.60	9.61	36.90	24.21	56.00	46.00	-19.10	-21.79	Pass
4	2.7300	24.27	12.49	9.63	33.90	22.12	56.00	46.00	-22.10	-23.88	Pass
5	6.6100	20.81	10.85	9.69	30.50	20.54	60.00	50.00	-29.50	-29.46	Pass
6	18.0180	20.98	11.73	9.82	30.80	21.55	60.00	50.00	-29.20	-28.45	Pass

Note: N = Neutral Line.

6. RADIATED SPURIOUS EMISSIONS

6.1. LIMITS

In any 100 kHz 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 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

Frequency (MHz)	Quasi-peak(μV/m)	Measurement distance(m)	Quasi-peak(dBμV/m)@distance 3m
0.009-0.490	2400/F(kHz)	300	53.8~88.5
0.490-1.705	24000/F(kHz)	30	43~53.8
1.705-30.0	30	30	49.5
30 ~ 88	100	3	40
88~216	150	3	43.5
216 ~ 960	200	3	46
Above 960	500	3	54

NOTE: (1) The lower limit shall apply at the transition frequencies.
NOTE: (2) Above 18G Limit=74+20log(3/1)=83.54 (dB μV/m).

6.2. TEST PROCEDURES (please refer to measurement standard)

1) Sequence of testing 9 kHz to 30 MHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions.

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Pre measurement:

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna height is 0.8 meter.

--- At each turntable position the analyzer sweeps with peak detection to find the maximum of all emissions

Final measurement:

--- Identified emissions during the pre measurement the software maximizes by rotating the turntable position (0° to 360°) and by rotating the elevation axes (0° to 360°).

--- The final measurement will be done in the position (turntable and elevation) causing the highest emissions with QPK detector.

--- The final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement and the limit will be stored.

2) Sequence of testing 30 MHz to 1 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Pre measurement:

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna is polarized vertical and horizontal.

--- The antenna height changes from 1 to 3 meter.

--- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

Final measurement:

--- The final measurement will be performed with minimum the six highest peaks.

--- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position (± 45°) and antenna movement between 1 and 4 meter.

--- The final measurement will be done with QP detector with an EMI receiver.

--- The final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.

3) Sequence of testing 1 GHz to 18 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Pre measurement:

--- The turntable rotates from 0° to 315° using 45° steps.

--- The antenna is polarized vertical and horizontal.

--- The antenna height scan range is 1 meter to 2.5 meter.

--- At each turntable position and antenna polarization the analyzer sweeps with peak detection to find the maximum of all emissions.

Final measurement:

--- The final measurement will be performed with minimum the six highest peaks.

--- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position (± 45°) and antenna movement between 1 and 4 meter. This procedure is repeated for both antenna polarizations.

--- The final measurement will be done in the position (turntable, EUT-table and antenna polarization) causing the highest emissions with Peak and Average detector.
--- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement with marked maximum final measurements and the limit will be stored.

4) Sequence of testing above 18 GHz
Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 1 meter.

--- The EUT was set into operation.

Pre measurement:

--- The antenna is moved spherical over the EUT in different polarisations of the antenna.

Final measurement:

--- The final measurement will be performed at the position and antenna orientation for all detected emissions that were found during the premeasurements with Peak and Average detector.
--- The final levels, frequency, measuring time, bandwidth, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

NOTE: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor (10 log(1/duty cycle)).

6.3. TEST SETUP

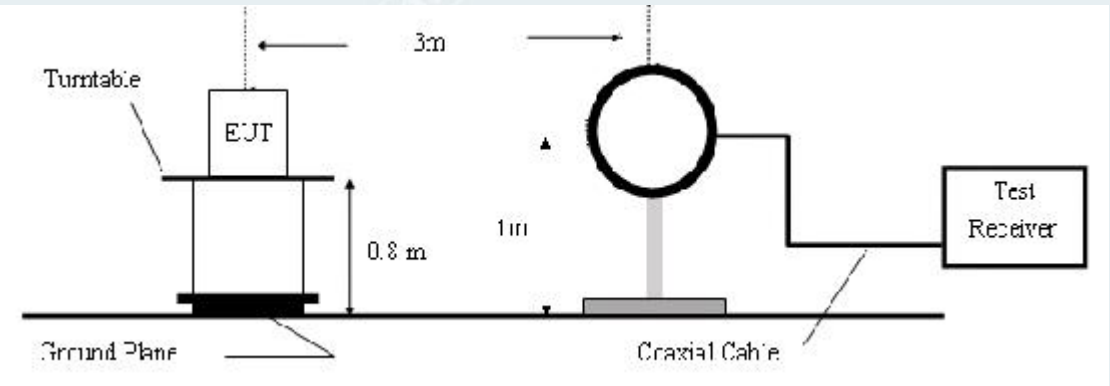


Figure 1. 9 KHz to 30MHz radiated emissions test configuration

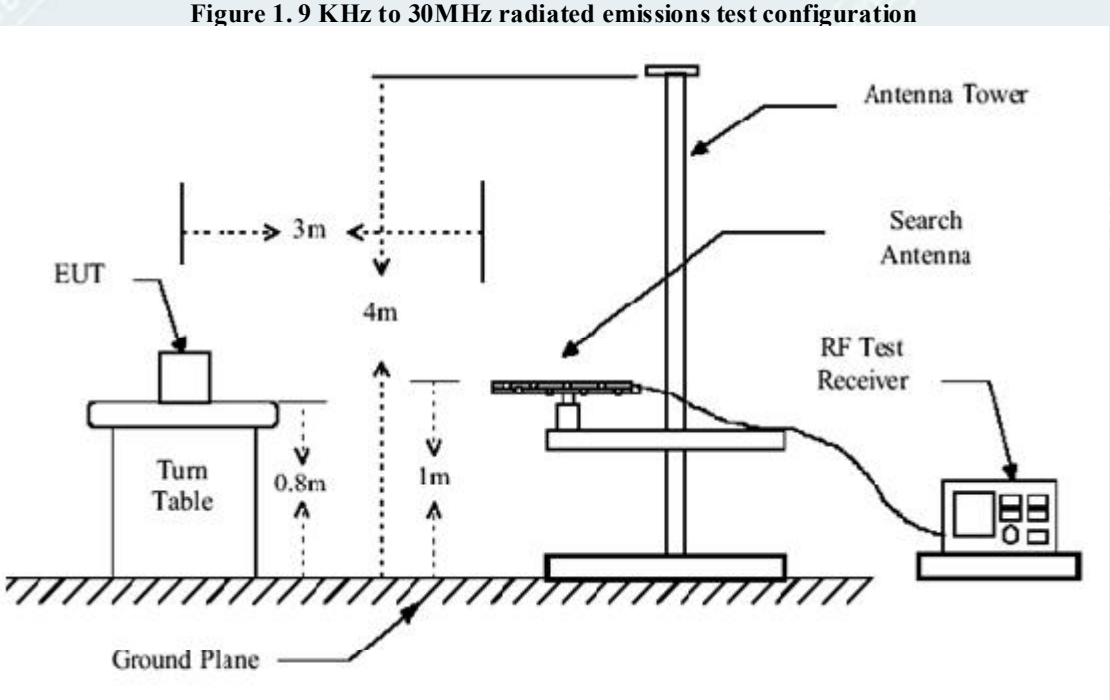


Figure 2. 30MHz to 1GHz radiated emissions test configuration

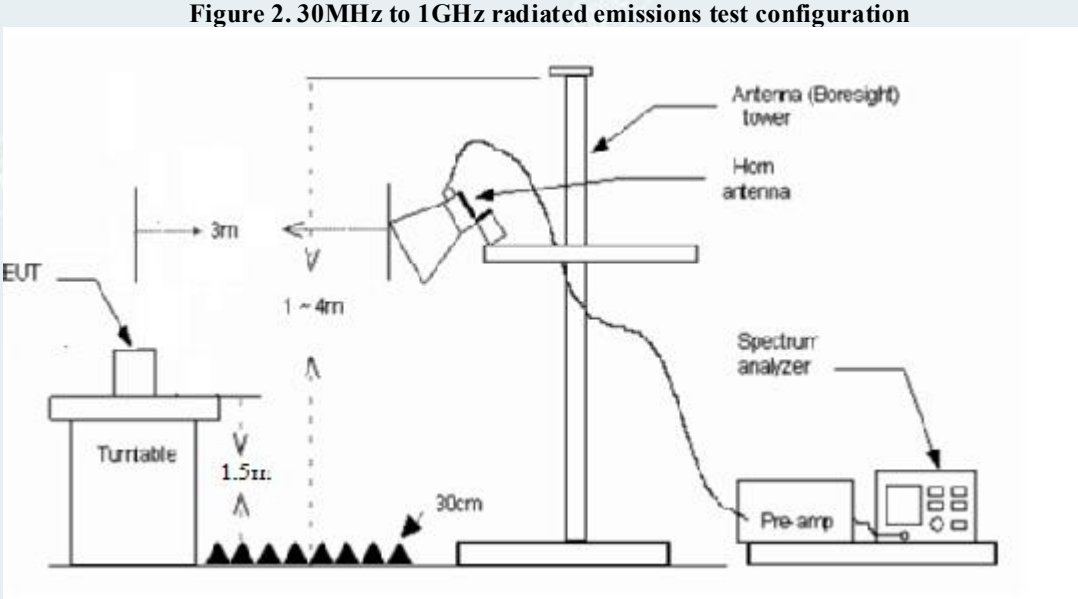


Figure 3. Above 1GHz radiated emissions test configuration

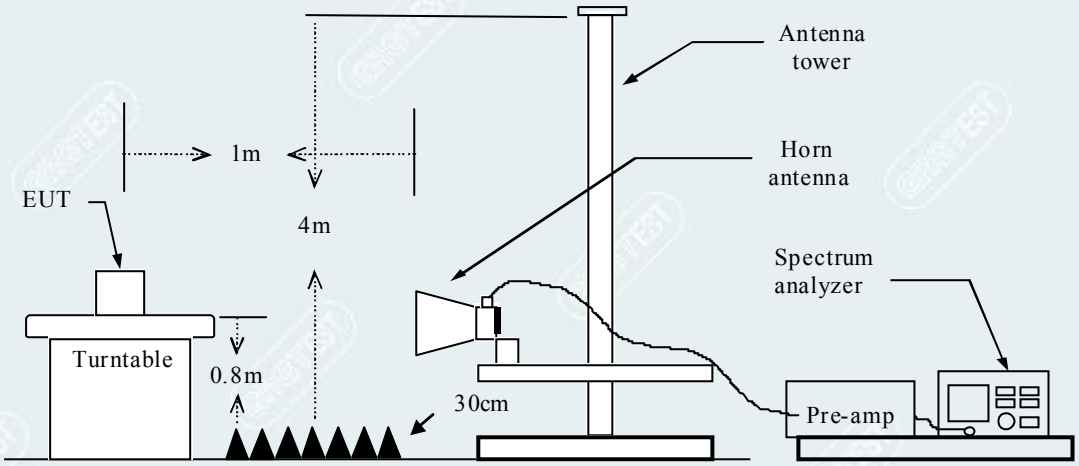


Figure 4. Above 18GHz radiated emissions test configuration

6.4. DATA SAMPLE

30MHz to 1GHz

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Pole
xxx	xxx	37.06	-15.48	21.58	40.00	-18.42	QP	Vertical

Above 1 GHz

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Pole
xxx	xxx	65.45	-11.12	54.33	74.00	-19.67	peak	Vertical
xxx	xxx	63.00	-11.12	51.88	54.00	-2.12	AVG	Vertical

Above 18 GHz

No.	Frequency (MHz)	Reading (dBuV/m)	Level (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Remark	Pole
xxx	xxx	59.22	58.58	-0.64	83.54	24.96	peak	Vertical
xxx	xxx	53.01	52.37	-0.64	63.54	11.17	AVG	Vertical

Frequency (MHz) = Emission frequency in MHz

Ant.Pol. (H/V) = Antenna polarization

Reading (dBuV) = Uncorrected Analyzer / Receiver reading

Correction Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain

Result (dBuV/m) = Reading (dBuV) + Correction Factor (dB/m)

Limit (dBuV/m) = Limit stated in standard

Margin (dB) = Remark Result (dBuV/m) – Limit (dBuV/m)

Peak = Peak Reading

QP = Quasi-peak Reading

AVG = Average Reading

6.5. TEST RESULTS

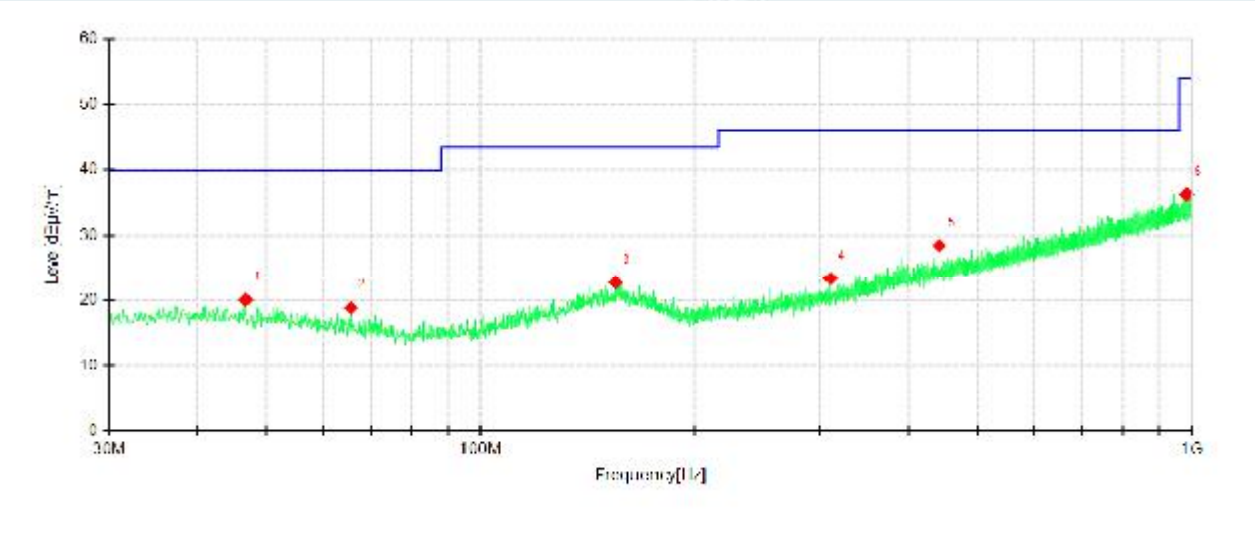
30MHz to 1GHz

Recorded the worst case results in this report (IEEE 802.11b)

Mode: TX/ IEEE 802.11g

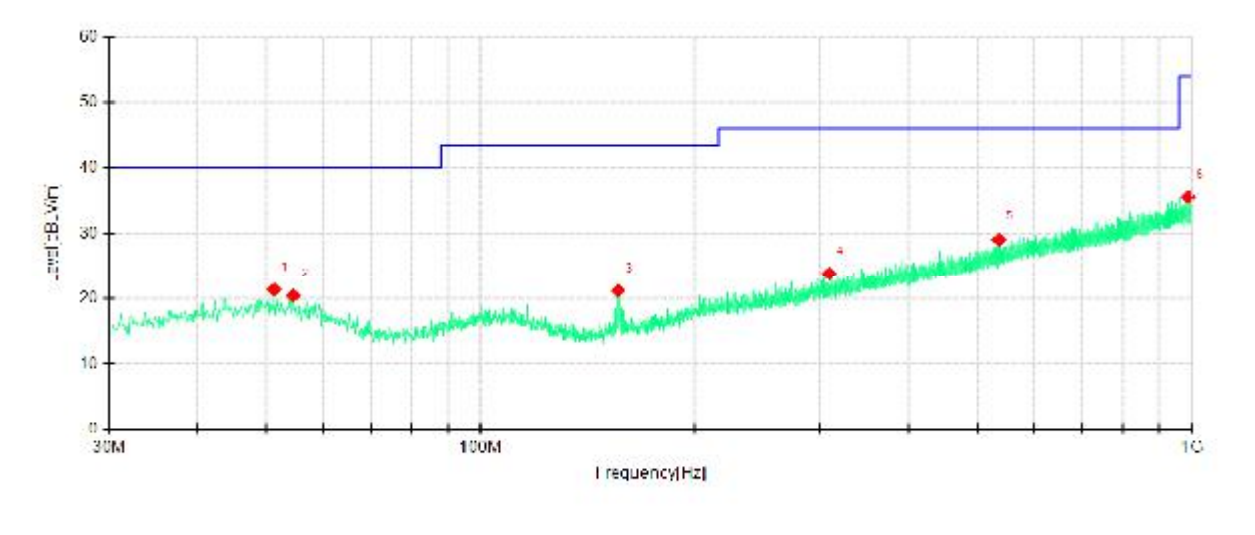
Lowest channel (2412MHz) Date: 2021-03-24

Polarity Vertical



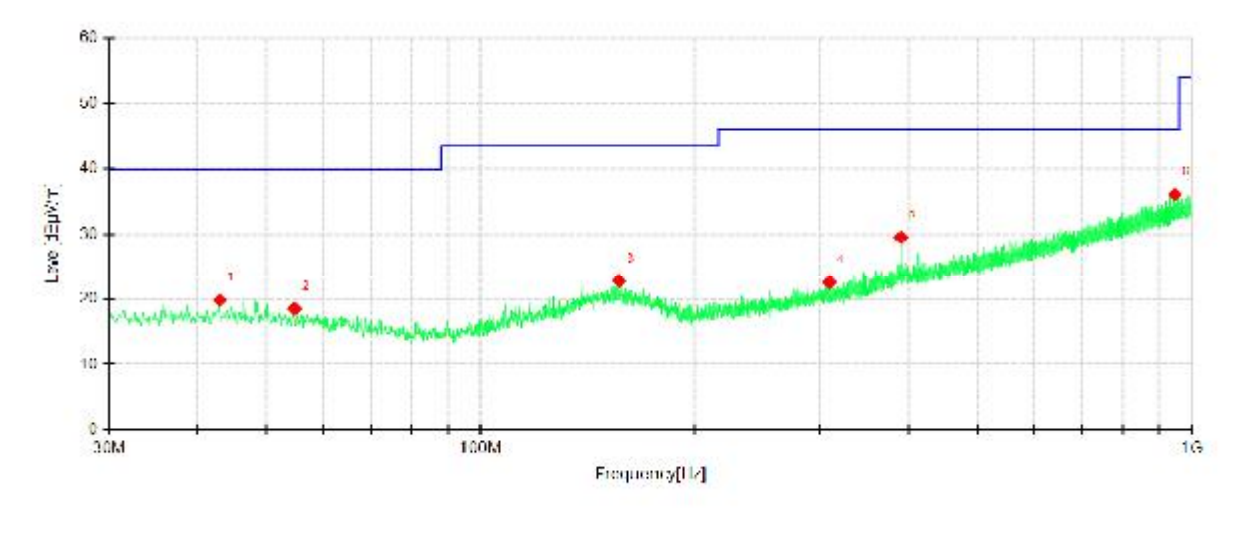
Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	46.7325	48.89	20.11	-28.78	40.00	19.89	200	1	Vertical
2	65.6475	49.14	18.84	-30.30	40.00	21.16	200	106	Vertical
3	154.7663	48.56	22.69	-25.87	43.50	20.81	100	340	Vertical
4	310.3300	49.03	23.36	-25.67	46.00	22.64	200	151	Vertical
5	442.0075	50.50	28.43	-22.07	46.00	17.57	100	152	Vertical
6	983.5100	48.76	36.28	-12.48	54.00	17.72	200	245	Vertical

Mode: TX/ IEEE 802.11g
Lowest channel (2412MHz) Date: 2021-03-24
Polarity Horizontal



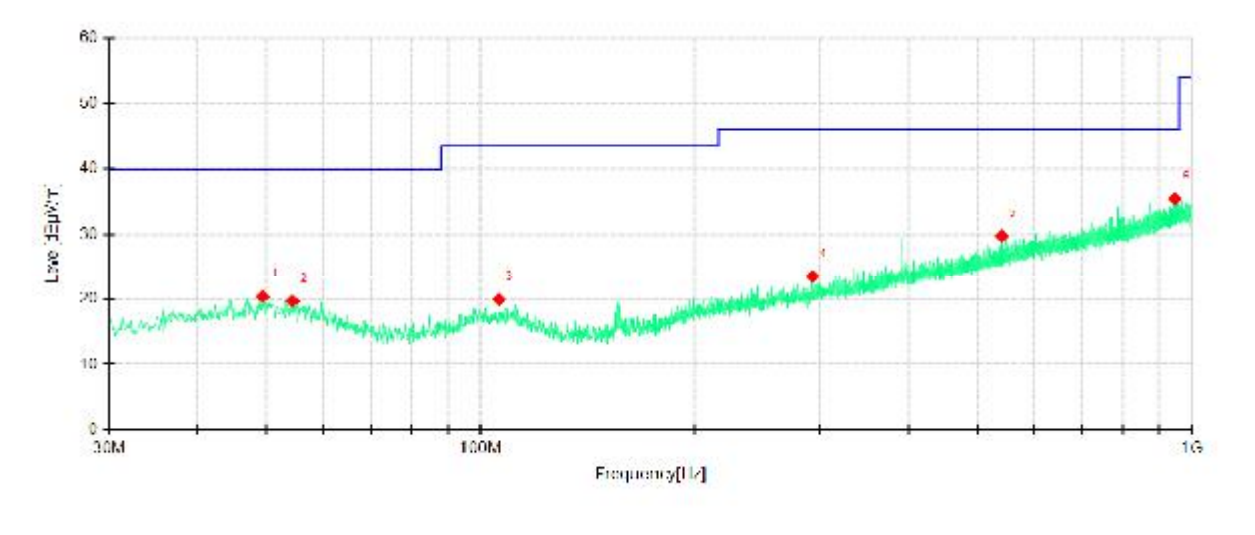
Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	51.2188	48.93	21.31	-27.62	40.00	18.69	200	38	Horizontal
2	54.4925	48.46	20.42	-28.04	40.00	19.58	100	10	Horizontal
3	155.9788	52.44	21.17	-31.27	43.50	22.33	200	91	Horizontal
4	308.9963	48.84	23.79	-25.05	46.00	22.21	200	158	Horizontal
5	535.4913	48.91	29.08	-19.83	46.00	16.92	200	224	Horizontal
6	989.9363	48.78	35.58	-13.20	54.00	18.42	100	341	Horizontal

Mode: TX/ IEEE 802.11g
Highest channel (2462MHz) Date: 2021-03-24
Polarity Vertical



Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	42.9738	48.49	19.81	-28.68	40.00	20.19	200	98	Vertical
2	54.7350	47.72	18.47	-29.25	40.00	21.53	200	77	Vertical
3	156.4638	48.71	22.78	-25.93	43.50	20.72	100	176	Vertical
4	309.2388	48.25	22.55	-25.70	46.00	23.45	200	77	Vertical
5	389.9913	52.93	29.56	-23.37	46.00	16.44	100	96	Vertical
6	946.6500	49.02	36.09	-12.93	46.00	9.91	100	289	Vertical

Mode: TX/ IEEE 802.11g
Highest channel (2462MHz) Date: 2021-03-24
Polarity Horizontal



Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	49.4000	47.91	20.38	-27.53	40.00	19.62	200	180	Horizontal
2	54.3713	47.69	19.67	-28.02	40.00	20.33	100	242	Horizontal
3	106.0238	48.97	19.92	-29.05	43.50	23.58	100	56	Horizontal
4	292.8700	48.84	23.47	-25.37	46.00	22.53	200	47	Horizontal
5	540.3413	49.47	29.74	-19.73	46.00	16.26	200	121	Horizontal
6	946.6500	49.07	35.44	-13.63	46.00	10.56	100	42	Horizontal

Remark:

1 No emission found between lowest internal used/generated frequency to 30MHz.
2 Radiated emissions measured in frequency range from 9 kHz to 1GHz were made with an instrument using Quasi-peak detector mode.
3 Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
4 The IF bandwidth of Receiver between 30MHz to 1GHz was 120 kHz.

Above 1GHz-18GHz:

Mode: TX / IEEE 802.11b
Lowest channel (2412MHz) Date: 2021-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1248.0000	60.71	36.44	-24.27	74.00	37.56	100	105	Horizontal
2	1299.7500	62.52	38.45	-24.07	74.00	35.55	100	105	Horizontal
3	4094.2500	58.94	43.99	-14.95	74.00	30.01	200	37	Horizontal
4	4824.0000	65.23	54.59	-10.64	74.00	19.41	100	10	Horizontal
5	7254.7500	51.48	46.37	-5.11	74.00	27.63	200	129	Horizontal
6	9181.5000	48.95	47.90	-1.05	74.00	26.10	200	255	Horizontal

PK Final Data List					
NO.	Freq. [MHz]	Factor [dB]	Height [cm]	Angle [°]	Polarity
1	4824.0482	-10.64	140	13	Horizontal

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4824.0482	-10.64	62.09	51.45	54.00	2.55	140	13	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1248.0000	60.50	36.23	-24.27	74.00	37.77	200	105	Vertical
2	1300.0000	62.39	38.32	-24.07	74.00	35.68	100	359	Vertical
3	4095.0000	57.34	42.40	-14.94	74.00	31.60	200	255	Vertical
4	4824.0000	64.96	54.32	-10.64	74.00	19.68	200	255	Vertical
5	7974.7500	49.04	45.89	-3.15	74.00	28.11	200	127	Vertical
6	9370.5000	47.71	47.62	-0.09	74.00	26.38	200	19	Vertical

PK Final Data List					
NO.	Freq. [MHz]	Factor [dB]	Height [cm]	Angle [°]	Polarity
1	4824.0482	-10.64	181	2	Vertical

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4824.0482	-10.64	61.40	50.76	54.00	3.24	181	2	Vertical

Mode: TX/ IEEE 802.11b
Middle channel (2437 MHz) Date: 2021-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1300.0000	63.10	39.03	-24.07	74.00	34.97	100	105	Horizontal
2	1769.7500	59.79	37.41	-22.38	74.00	36.59	200	105	Horizontal
3	4095.7500	58.68	43.75	-14.93	74.00	30.25	200	17	Horizontal
4	4874.2500	58.76	48.00	-10.76	74.00	26.00	200	8	Horizontal
5	7967.2500	48.86	45.65	-3.21	74.00	28.35	200	218	Horizontal
6	9405.7500	47.40	47.65	0.25	74.00	26.35	100	255	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1248.0000	62.15	37.88	-24.27	74.00	36.12	100	105	Vertical
2	1300.0000	62.83	38.76	-24.07	74.00	35.24	100	105	Vertical
3	4095.0000	58.01	43.07	-14.94	74.00	30.93	200	4	Vertical
4	4874.2500	60.44	49.68	-10.76	74.00	24.32	200	1	Vertical
5	7158.0000	50.29	45.63	-4.66	74.00	28.37	100	255	Vertical
6	10835.2500	46.61	49.51	2.90	74.00	24.49	100	26	Vertical

PK Final Data List					
NO.	Freq. [MHz]	Factor [dB]	Height [cm]	Angle [°]	Polarity
1	4874.0063	-10.76	190	2	Vertical

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4874.0063	-10.76	58.51	47.75	54.00	6.25	190	2	Vertical

Mode: TX / IEEE 802.11b
Highest channel (2462MHz) Date: 2021-03-18

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1247.7500	60.54	36.26	-24.28	74.00	37.74	100	105	Horizontal
2	1300.0000	62.69	38.62	-24.07	74.00	35.38	100	105	Horizontal
3	3703.5000	55.77	40.01	-15.76	74.00	33.99	200	255	Horizontal
4	4095.7500	58.93	44.00	-14.93	74.00	30.00	200	39	Horizontal
5	4923.7500	59.35	48.36	-10.99	74.00	25.64	200	4	Horizontal
6	8187.7500	48.96	46.23	-2.73	74.00	27.77	100	146	Horizontal

PK Final Data List

NO.	Freq. [MHz]	Factor [dB]	Height [cm]	Angle [°]	Polarity
1	4924.0454	-10.98	188	7	Horizontal

AV Final Data List

NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4924.0454	-10.98	57.25	46.27	54.00	7.73	188	7	Horizontal

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1247.7500	60.63	36.35	-24.28	74.00	37.65	100	119	Vertical
2	1300.2500	61.97	37.90	-24.07	74.00	36.10	100	360	Vertical
3	2145.0000	60.30	38.60	-21.70	74.00	35.40	200	105	Vertical
4	4095.0000	57.30	42.36	-14.94	74.00	31.64	200	255	Vertical
5	4923.7500	59.54	48.55	-10.99	74.00	25.45	200	1	Vertical
6	8151.7500	49.43	46.48	-2.95	74.00	27.52	200	183	Vertical

PK Final Data List

NO.	Freq. [MHz]	Factor [dB]	Height [cm]	Angle [°]	Polarity
1	4924.0454	-10.98	197	7	Vertical

AV Final Data List

NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4924.0454	-10.98	57.07	46.09	54.00	7.91	197	7	Vertical

Mode: TX / IEEE 802.11g
Lowest channel (2412MHz) Date: 2021-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1248.5000	60.52	36.25	-24.27	74.00	37.75	100	105	Horizontal
2	1300.0000	61.98	37.91	-24.07	74.00	36.09	100	105	Horizontal
3	4093.5000	58.94	43.98	-14.96	74.00	30.02	200	37	Horizontal
4	4821.0000	59.27	48.61	-10.66	74.00	25.39	100	4	Horizontal
5	8044.5000	49.47	46.31	-3.16	74.00	27.69	200	201	Horizontal
6	9171.0000	48.96	47.92	-1.04	74.00	26.08	200	10	Horizontal

PK Final Data List					
NO.	Freq. [MHz]	Factor [dB]	Height [cm]	Angle [°]	Polarity
1	4823.1695	-10.66	140	3	Horizontal

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4823.1695	-10.66	48.26	37.60	54.00	16.40	140	3	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1300.0000	62.30	38.23	-24.07	74.00	35.77	100	360	Vertical
2	1746.2500	60.02	37.48	-22.54	74.00	36.52	200	339	Vertical
3	3706.5000	55.74	39.99	-15.75	74.00	34.01	100	255	Vertical
4	4095.0000	57.29	42.35	-14.94	74.00	31.65	200	255	Vertical
5	4821.7500	59.96	49.31	-10.65	74.00	24.69	200	255	Vertical
6	8165.2500	49.41	46.54	-2.87	74.00	27.46	100	183	Vertical

PK Final Data List					
NO.	Freq. [MHz]	Factor [dB]	Height [cm]	Angle [°]	Polarity
1	4824.0644	-10.66	197	355	Vertical

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4824.0644	-10.66	47.64	36.98	54.00	17.02	197	355	Vertical

Mode: TX/ IEEE 802.11g
Middle channel (2437 MHz) Date: 2021-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1247.7500	60.48	36.20	-24.28	74.00	37.80	100	105	Horizontal
2	1300.5000	61.31	37.24	-24.07	74.00	36.76	100	105	Horizontal
3	4093.5000	58.40	43.44	-14.96	74.00	30.56	200	23	Horizontal
4	4869.7500	57.30	46.58	-10.72	74.00	27.42	100	255	Horizontal
5	7462.5000	50.65	45.80	-4.85	74.00	28.20	200	14	Horizontal
6	9346.5000	48.32	47.83	-0.49	74.00	26.17	200	79	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1143.7500	61.00	36.32	-24.68	74.00	37.68	100	105	Vertical
2	1300.0000	62.74	38.67	-24.07	74.00	35.33	100	105	Vertical
3	4094.2500	57.23	42.28	-14.95	74.00	31.72	200	255	Vertical
4	4870.5000	56.44	45.72	-10.72	74.00	28.28	200	255	Vertical
5	7356.7500	49.99	45.07	-4.92	74.00	28.93	200	210	Vertical
6	8186.2500	48.93	46.19	-2.74	74.00	27.81	200	118	Vertical

Mode: TX/ IEEE 802.11g
Highest channel (2462MHz) Date: 2021-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1300.0000	62.35	38.28	-24.07	74.00	35.72	100	105	Horizontal
2	1351.7500	61.26	37.39	-23.87	74.00	36.61	200	105	Horizontal
3	4094.2500	58.82	43.87	-14.95	74.00	30.13	200	20	Horizontal
4	4922.2500	51.77	40.78	-10.99	74.00	33.22	200	119	Horizontal
5	7139.2500	50.86	45.85	-5.01	74.00	28.15	200	255	Horizontal
6	7953.7500	49.92	46.59	-3.33	74.00	27.41	200	83	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1300.2500	62.30	38.23	-24.07	74.00	35.77	100	105	Vertical
2	1351.7500	61.50	37.63	-23.87	74.00	36.37	100	360	Vertical
3	4094.2500	57.14	42.19	-14.95	74.00	31.81	200	255	Vertical
4	4922.2500	56.20	45.21	-10.99	74.00	28.79	200	255	Vertical
5	7704.7500	50.00	45.98	-4.02	74.00	28.02	200	119	Vertical
6	9660.0000	46.99	47.82	0.83	74.00	26.18	200	255	Vertical

Mode: TX / IEEE 802.11n HT20
Lowest channel (2412MHz) Date: 2021-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1247.5000	60.56	36.28	-24.28	74.00	37.72	100	105	Horizontal
2	1300.2500	61.78	37.71	-24.07	74.00	36.29	100	105	Horizontal
3	4095.0000	58.61	43.67	-14.94	74.00	30.33	200	27	Horizontal
4	4824.7500	60.99	50.35	-10.64	74.00	23.65	100	4	Horizontal
5	7543.5000	50.70	45.91	-4.79	74.00	28.09	200	90	Horizontal
6	9699.7500	47.10	47.53	0.43	74.00	26.47	200	255	Horizontal

PK Final Data List					
NO.	Freq. [MHz]	Factor [dB]	Height [cm]	Angle [°]	Polarity
1	4821.3968	-10.64	145	6	Horizontal

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4821.3968	-10.64	47.40	36.76	54.00	17.24	145	6	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1299.7500	63.02	38.95	-24.07	74.00	35.05	100	105	Vertical
2	3705.7500	55.33	39.58	-15.75	74.00	34.42	100	255	Vertical
3	4094.2500	57.52	42.57	-14.95	74.00	31.43	200	255	Vertical
4	4827.7500	60.21	49.58	-10.63	74.00	24.42	200	0	Vertical
5	6921.0000	51.48	44.64	-6.84	74.00	29.36	100	255	Vertical
6	7493.2500	50.45	45.76	-4.69	74.00	28.24	100	255	Vertical

PK Final Data List					
NO.	Freq. [MHz]	Factor [dB]	Height [cm]	Angle [°]	Polarity
1	4826.4706	-10.63	197	360	Vertical

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4826.4706	-10.63	46.71	36.08	54.00	17.92	197	360	Vertical

Mode: TX/ IEEE 802.11n HT20
Middle channel (2437 MHz) Date: 2021-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1300.2500	62.51	38.44	-24.07	74.00	35.56	100	105	Horizontal
2	3705.7500	55.30	39.55	-15.75	74.00	34.45	200	255	Horizontal
3	4094.2500	58.82	43.87	-14.95	74.00	30.13	200	19	Horizontal
4	4873.5000	55.73	44.98	-10.75	74.00	29.02	100	4	Horizontal
5	8178.0000	48.73	45.94	-2.79	74.00	28.06	100	118	Horizontal
6	9710.2500	47.20	47.58	0.38	74.00	26.42	100	237	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1247.7500	61.45	37.17	-24.28	74.00	36.83	200	105	Vertical
2	1300.0000	62.68	38.61	-24.07	74.00	35.39	100	104	Vertical
3	1778.2500	61.71	39.40	-22.31	74.00	34.60	200	306	Vertical
4	4094.2500	57.85	42.90	-14.95	74.00	31.10	200	255	Vertical
5	4873.5000	61.38	50.63	-10.75	74.00	23.37	200	255	Vertical
6	8150.2500	49.14	46.18	-2.96	74.00	27.82	200	255	Vertical

PK Final Data List					
NO.	Freq. [MHz]	Factor [dB]	Height [cm]	Angle [°]	Polarity
1	4872.7202	-10.75	180	359	Vertical

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	4872.7202	-10.75	42.06	31.31	54.00	22.69	180	359	Vertical

Mode: TX/ IEEE 802.11n HT20
Highest channel (2462MHz) Date: 2021-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1248.0000	61.07	36.80	-24.27	74.00	37.20	100	34	Horizontal
2	1300.0000	62.93	38.86	-24.07	74.00	35.14	100	26	Horizontal
3	4095.0000	58.91	43.97	-14.94	74.00	30.03	200	105	Horizontal
4	4917.7500	53.68	42.69	-10.99	74.00	31.31	200	357	Horizontal
5	6925.5000	51.70	44.94	-6.76	74.00	29.06	200	114	Horizontal
6	8161.5000	49.57	46.68	-2.89	74.00	27.32	200	360	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1300.0000	62.32	38.25	-24.07	74.00	35.75	100	0	Vertical
2	2145.2500	60.85	39.15	-21.70	74.00	34.85	200	57	Vertical
3	3705.7500	55.36	39.61	-15.75	74.00	34.39	100	338	Vertical
4	4095.0000	57.29	42.35	-14.94	74.00	31.65	200	357	Vertical
5	4926.0000	53.86	42.88	-10.98	74.00	31.12	200	334	Vertical
6	8374.5000	49.59	46.58	-3.01	74.00	27.42	100	354	Vertical

Mode: TX / IEEE 802.11n HT40
Lowest channel (2422MHz) Date: 2021-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1299.7500	62.16	38.09	-24.07	74.00	35.91	100	20	Horizontal
2	3705.7500	55.59	39.84	-15.75	74.00	34.16	200	340	Horizontal
3	4094.2500	58.58	43.63	-14.95	74.00	30.37	200	105	Horizontal
4	4848.0000	55.71	45.16	-10.55	74.00	28.84	100	360	Horizontal
5	8150.2500	49.85	46.89	-2.96	74.00	27.11	200	286	Horizontal
6	8967.0000	48.44	47.08	-1.36	74.00	26.92	100	105	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1248.2500	60.55	36.28	-24.27	74.00	37.72	100	233	Vertical
2	1299.7500	61.58	37.51	-24.07	74.00	36.49	100	255	Vertical
3	4095.0000	57.36	42.42	-14.94	74.00	31.58	200	351	Vertical
4	4839.7500	57.44	46.86	-10.58	74.00	27.14	200	105	Vertical
5	6150.0000	51.01	43.07	-7.94	74.00	30.93	200	105	Vertical
6	8390.2500	49.39	46.58	-2.81	74.00	27.42	200	105	Vertical

Mode: TX/ IEEE 802.11n HT40
Middle channel (2437 MHz) Date: 2021-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1300.0000	62.32	38.25	-24.07	74.00	35.75	100	7	Horizontal
2	4094.2500	58.92	43.97	-14.95	74.00	30.03	200	105	Horizontal
3	4871.2500	55.67	44.94	-10.73	74.00	29.06	100	105	Horizontal
4	7219.5000	50.51	45.79	-4.72	74.00	28.21	200	259	Horizontal
5	8974.5000	48.80	47.51	-1.29	74.00	26.49	100	278	Horizontal
6	9387.0000	47.42	47.58	0.16	74.00	26.42	200	105	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1247.7500	61.22	36.94	-24.28	74.00	37.06	200	255	Vertical
2	1300.0000	62.06	37.99	-24.07	74.00	36.01	100	1	Vertical
3	4095.0000	58.28	43.34	-14.94	74.00	30.66	200	360	Vertical
4	4872.7500	56.82	46.08	-10.74	74.00	27.92	200	359	Vertical
5	6549.7500	52.05	44.17	-7.88	74.00	29.83	200	260	Vertical
6	8397.7500	49.47	46.75	-2.72	74.00	27.25	100	168	Vertical

Mode: TX/ IEEE 802.11n HT40
Highest channel (2452MHz) Date: 2021-03-18

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1248.2500	60.56	36.29	-24.27	74.00	37.71	100	41	Horizontal
2	1300.2500	61.77	37.70	-24.07	74.00	36.30	100	48	Horizontal
3	4095.0000	59.27	44.33	-14.94	74.00	29.67	200	105	Horizontal
4	4903.5000	54.36	43.37	-10.99	74.00	30.63	200	359	Horizontal
5	7743.0000	49.74	46.37	-3.37	74.00	27.63	100	215	Horizontal
6	9690.7500	47.21	47.73	0.52	74.00	26.27	100	105	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1248.5000	60.79	36.52	-24.27	74.00	37.48	200	1	Vertical
2	1300.2500	62.61	38.54	-24.07	74.00	35.46	100	255	Vertical
3	2144.7500	60.16	38.46	-21.70	74.00	35.54	100	64	Vertical
4	4096.5000	57.60	42.68	-14.92	74.00	31.32	200	352	Vertical
5	4902.7500	55.88	44.89	-10.99	74.00	29.11	200	105	Vertical
6	8163.7500	48.97	46.10	-2.87	74.00	27.90	100	359	Vertical

Above 18GHz-26.5GHz:

Pre-scan all modes and recorded the worst case results in this report (IEEE 802.11b)

Mode: TX / IEEE 802.11b

Lowest channel (2412MHz) Date: 2021-03-17

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18394.8250	58.03	46.50	-11.53	83.50	37.00	100	31	Horizontal
2	19927.3750	57.36	46.50	-10.86	83.50	37.00	100	185	Horizontal
3	21006.4500	56.15	45.85	-10.30	83.50	37.65	100	337	Horizontal
4	22102.9500	56.45	46.61	-9.84	83.50	36.89	100	234	Horizontal
5	24255.5750	55.32	47.12	-8.20	83.50	36.38	100	95	Horizontal
6	26479.6000	54.90	47.38	-7.52	83.50	36.12	100	337	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	19175.1250	57.39	46.31	-11.08	83.50	37.19	100	252	Vertical
2	20441.2000	56.20	45.67	-10.53	83.50	37.83	100	136	Vertical
3	21610.8000	55.53	45.61	-9.92	83.50	37.89	100	239	Vertical
4	23181.6000	54.66	45.81	-8.85	83.50	37.69	100	328	Vertical
5	23777.0250	55.32	46.83	-8.49	83.50	36.67	100	213	Vertical
6	26392.0500	54.71	47.22	-7.49	83.50	36.28	100	36	Vertical

Mode: TX / IEEE 802.11b

Highest channel (2462MHz) Date: 2021-03-17

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18281.3500	58.93	47.36	-11.57	83.50	36.14	100	353	Horizontal
2	19931.2000	57.89	47.03	-10.86	83.50	36.47	100	342	Horizontal
3	20488.8000	56.55	46.05	-10.50	83.50	37.45	100	2	Horizontal
4	23231.7500	55.27	46.44	-8.83	83.50	37.06	100	138	Horizontal
5	23796.1500	55.29	46.82	-8.47	83.50	36.68	100	330	Horizontal
6	25719.7000	55.67	47.64	-8.03	83.50	35.86	100	253	Horizontal

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	18869.9750	57.32	46.10	-11.22	83.50	37.40	100	147	Vertical
2	19898.9000	56.50	45.64	-10.86	83.50	37.86	100	323	Vertical
3	20513.4500	56.27	45.79	-10.48	83.50	37.71	100	107	Vertical
4	22987.3750	55.17	46.23	-8.94	83.50	37.27	100	273	Vertical
5	23894.3250	55.20	46.83	-8.37	83.50	36.67	100	7	Vertical
6	26427.3250	54.81	47.32	-7.49	83.50	36.18	100	107	Vertical

7. 6DB BANDWIDTH

7.1. LIMITS

Systems using digital modulation techniques may operate in the 902 928 MHz, 2400 2483.5 MHz, and 5725−5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

7.2. TEST PROCEDURES

1) Remove the antenna from the EUT, and then connect a low loss RF cable from antenna port to the spectrum analyzer.
2) Set resolution bandwidth (RBW) = 100kHz.Set the video bandwidth (VBW) ≥ 3 x RBW. Detector = Peak. Trace mode = max hold. Sweep = auto couple. Allow the trace to stabilize, record 6dB bandwidth value.
3) Repeat above procedures until all frequencies measured were complete.

7.3. TEST SETUP

7.4. TEST RESULTS

Test mode: IEEE 802.11b

Channel No.	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
1	2412	8097	>500	PASS
6	2437	8583		PASS
11	2462	7570		PASS

Test mode: IEEE 802.11g

Channel No.	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
1	2412	15130	>500	PASS
6	2437	15150		PASS
11	2462	15140		PASS

Test mode: IEEE 802.11n HT20

Channel No.	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
1	2412	16110	>500	PASS
6	2437	15170		PASS
11	2462	15160		PASS

Test mode: IEEE 802.11n HT40

Channel No.	Frequency (MHz)	Bandwidth (kHz)	Limit (kHz)	Test Result
3	2422	33950	>500	PASS
6	2437	35140		PASS
9	2452	35150		PASS

802.11b mode:

Channel 2412MHz

802.11b mode:

Channel 2437MHz

802.11b mode:

Channel 2462MHz

802.11g mode:

Channel 2412MHz

802.11g mode:

Channel 2437MHz

802.11g mode:

Channel 2462MHz

802.11n HT20 mode:

Channel 2412MHz

802.11n HT20 mode:

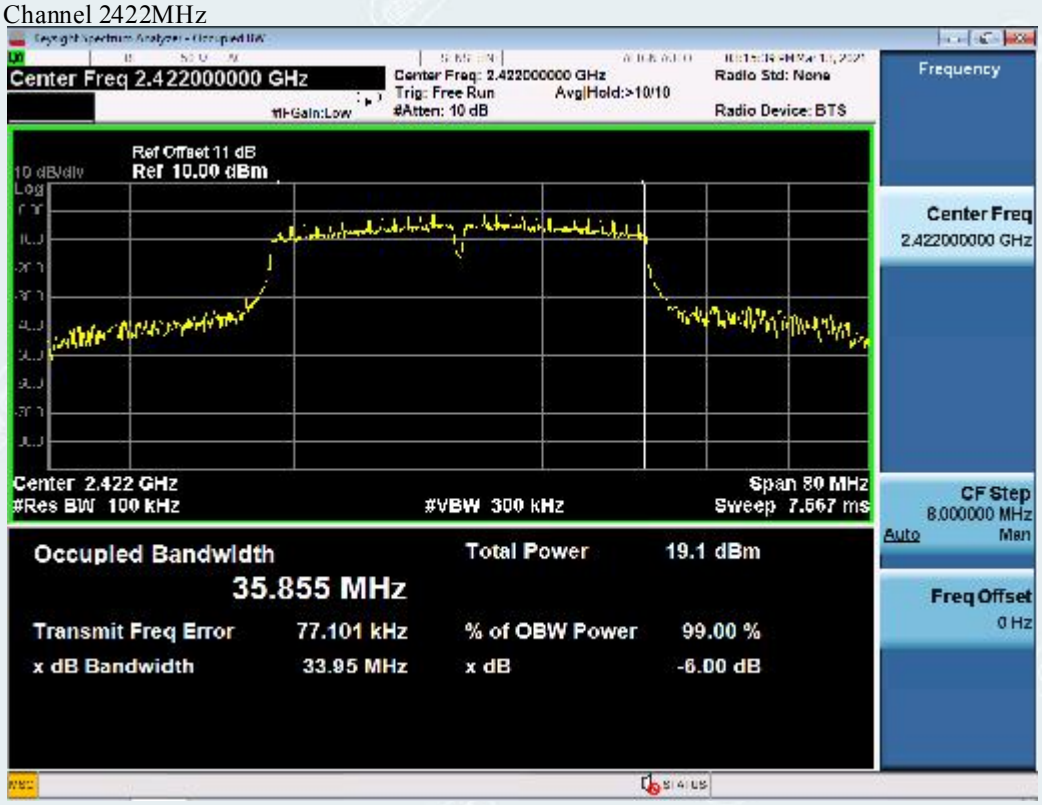
Channel 2437MHz

802.11n HT20 mode:

Channel 2462MHz

802.11n HT40 mode:

Channel 2422MHz



802.11n HT40 mode:

Channel 2437MHz

802.11n HT40 mode:

Channel 2452MHz

8. MAXIMUM PEAK OUTPUT POWER

8.1. LIMITS

The maximum Peak output power measurement is 1W

8.2. TEST PROCEDURES

1) Place the EUT on a bench and set it in transmitting mode.
2) Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to an EMI Test Receiver.
3) The spectrum analyzer resolution bandwidth that is ≤EBW. So we test the Maximum Conducted Output Power ——Integrated band power method.
4) Set the analyzer span≥ 1.5 x DTS bandwidth. Set the RBW = 1 MHz. Set the VBW ≥ 3 MHz. Sweep time = auto couple. Detector = peak. Allow trace to fully stabilize.

8.3. TEST SETUP

8.4. TEST RESULTS

	MODE	ON time	Total time	Duty cycle	Duty factor
duty cycle<98%	B	8.394	8.436	99.502%	0.00
	G	1.394	1.436	97.075%	0.13
	N20	1.304	1.346	96.880%	0.14
	N40	0.649	0.693	93.651%	0.28

802.11b Mode:

Channel No.	Frequency (MHz)	Measured Channel Power (dBm)	Detection	Duty Factor	Total Power with Duty Factor (dBm)	Limit	Result
1	2412	14.40	Peak	0.00	14.15	1W (30dBm)	Pass
6	2437	14.35		0.00	14.35		Pass
11	2462	14.52		0.00	14.52		Pass

802.11g Mode:

Channel No.	Frequency (MHz)	Measured Channel Power (dBm)	Detection	Duty Factor	Total Power with Duty Factor (dBm)	Limit	Result
1	2412	21.50	Peak	0.13	21.63	1W (30dBm)	Pass
6	2437	21.60		0.13	21.73		Pass
11	2462	21.70		0.13	21.83		Pass

802.11n HT20 Mode:

Channel No.	Frequency (MHz)	Measured Channel Power (dBm)	Detection	Duty Factor	Total Power with Duty Factor (dBm)	Limit	Result
1	2412	21.96	Peak	0.14	22.10	1W (30dBm)	Pass
6	2437	21.94		0.14	22.08		Pass
11	2462	21.69		0.14	21.83		Pass

802.11n HT40 Mode:

Channel No.	Frequency (MHz)	Measured Channel Power (dBm)	Detection	Duty Factor	Total Power with Duty Factor (dBm)	Limit	Result
3	2422	21.75	Peak	0.28	22.03	1W (30dBm)	Pass
6	2437	21.85		0.28	22.13		Pass
9	2452	21.75		0.28	20.76		Pass

9. POWER SPECTRAL DENSITY

9.1. LIMITS

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

9.2. TEST PROCEDURES

1) Remove the antenna from the EUT, and then connect a low loss RF cable from antenna port to the spectrum analyzer.
2) Position the EUT was set without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3) Set the analyzer span to 1.5 times the DTS bandwidth. Set the RBW = 3 kHz. Set the VBW ≥3 RBW. Detector = peak. Ensure that the number of measurement points in the sweep ≥ 2 x span/RBW (use of a greater number of measurement points than this minimum requirement is recommended).
4) Repeat above procedures until all frequencies measured were complete.

9.3. TEST SETUP

9.4. TEST RESULTS

	MODE	ON time	Total time	Duty cycle	Duty factor
duty cycle<98%	B	8.394	8.436	99.502%	0.000
	G	1.394	1.436	97.075%	0.130
	N20	1.304	1.346	96.880%	0.140
	N40	0.649	0.693	93.651%	0.280

802.11b Mode:

Channel No.	Frequency (MHz)	PSD (dBm/3kHz)	Duty Factor	Total PSD with Duty Factor (dBm/3kHz)	Limit (dBm/ 3kHz)	Result
1	2412	-8.427	0.000	-8.427	8	Pass
6	2437	-9.410	0.000	-9.410	8	Pass
11	2462	-8.785	0.000	-8.785	8	Pass

802.11g Mode:

Channel No.	Frequency (MHz)	PSD (dBm/3kHz)	Duty Factor	Total PSD with Duty Factor (dBm/3kHz)	Limit (dBm/ 3kHz)	Result
1	2412	-12.744	0.130	-12.614	8	Pass
6	2437	-11.129	0.130	-10.999	8	Pass
11	2462	-12.440	0.130	-12.310	8	Pass

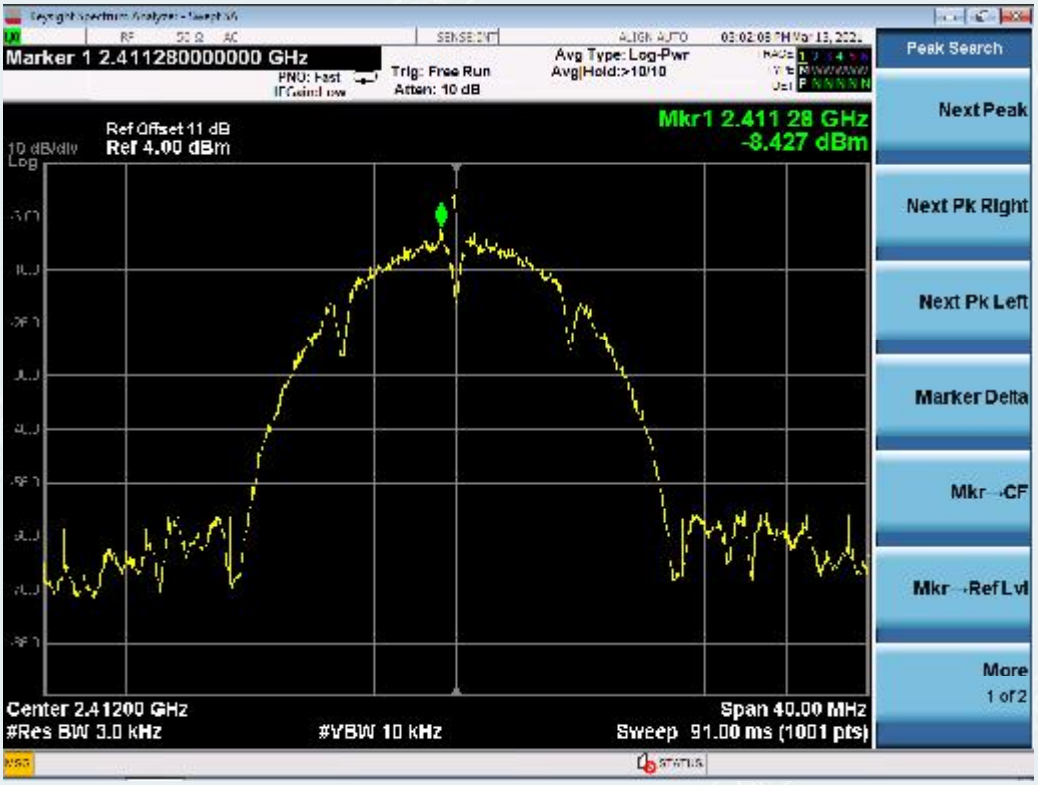
802.11n HT20 Mode:

Channel No.	Frequency (MHz)	PSD (dBm/3kHz)	Duty Factor	Total PSD with Duty Factor (dBm/3kHz)	Limit (dBm/ 3kHz)	Result
1	2412	-12.938	0.140	-12.798	8	Pass
6	2437	-11.628	0.140	-11.488	8	Pass
11	2462	-11.327	0.140	-11.187	8	Pass

802.11n HT40 Mode:

Channel No.	Frequency (MHz)	PSD (dBm/3kHz)	Duty Factor	Total PSD with Duty Factor (dBm/3kHz)	Limit (dBm/ 3kHz)	Result
3	2422	-14.249	0.280	-13.969	8	Pass
6	2437	-13.728	0.280	-13.448	8	Pass
9	2452	-14.549	0.280	-14.269	8	Pass

802.11b mode:
Channel 2412MHz



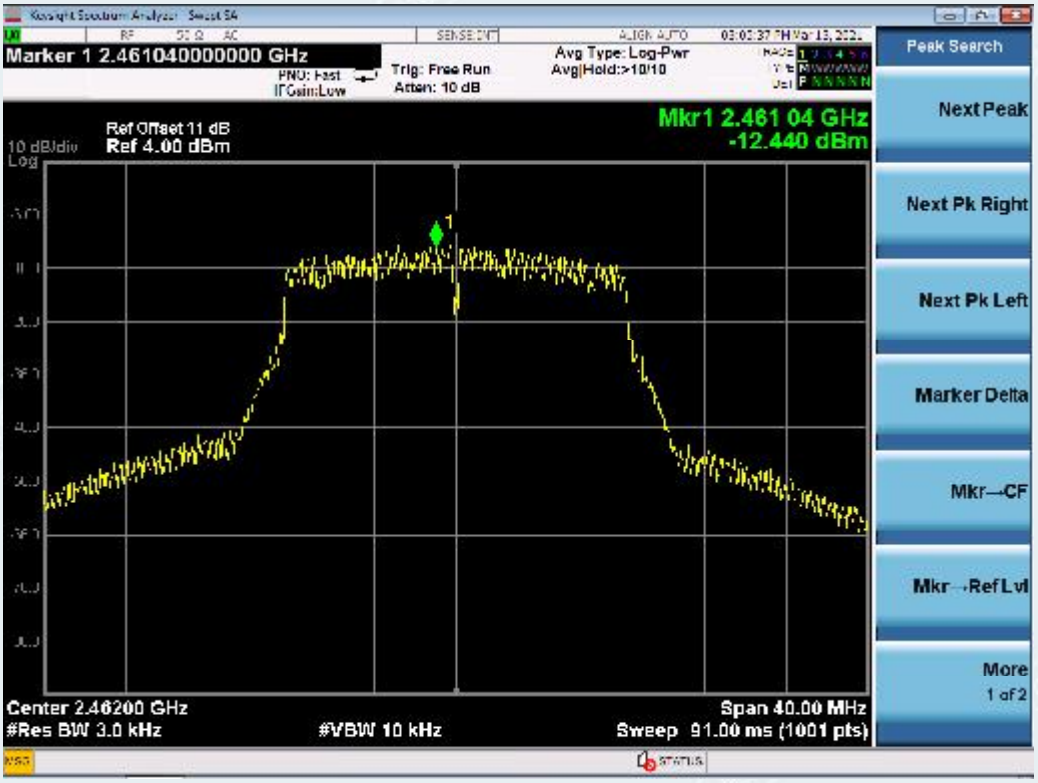
802.11b mode:
Channel 2437MHz

802.11b mode:
Channel 2462MHz

802.11g mode:
Channel 2412MHz

802.11g mode:
Channel 2437MHz

802.11g mode:
Channel 2462MHz

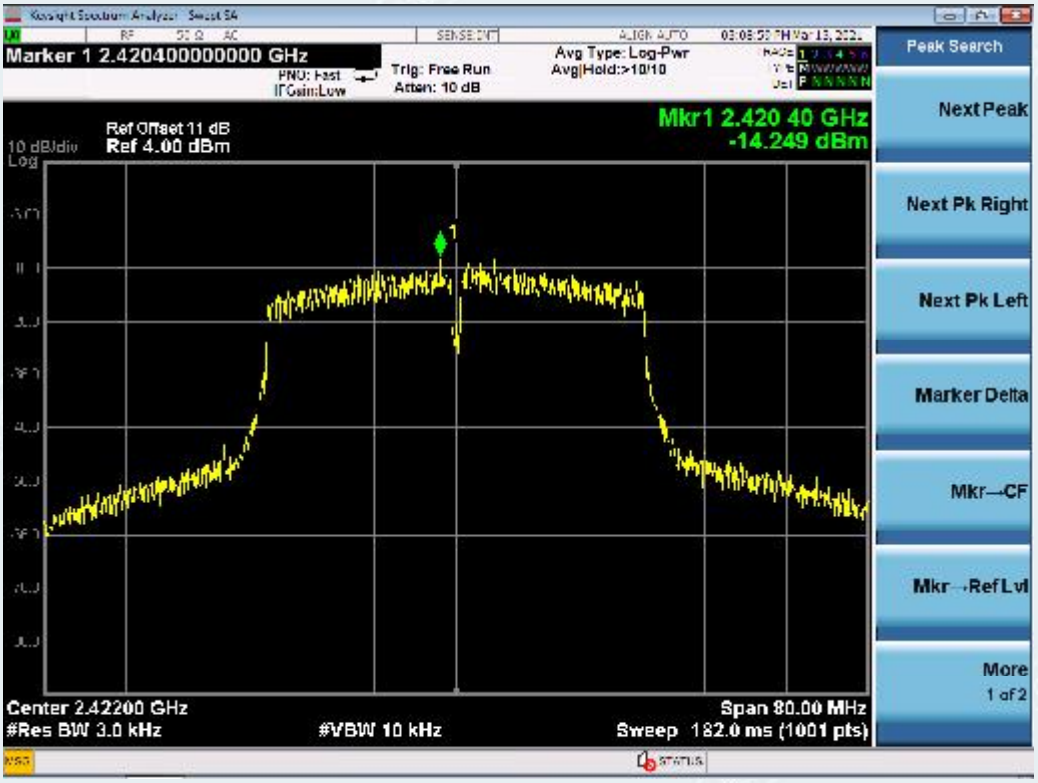


802.11n HT20 mode:
Channel 2412MHz

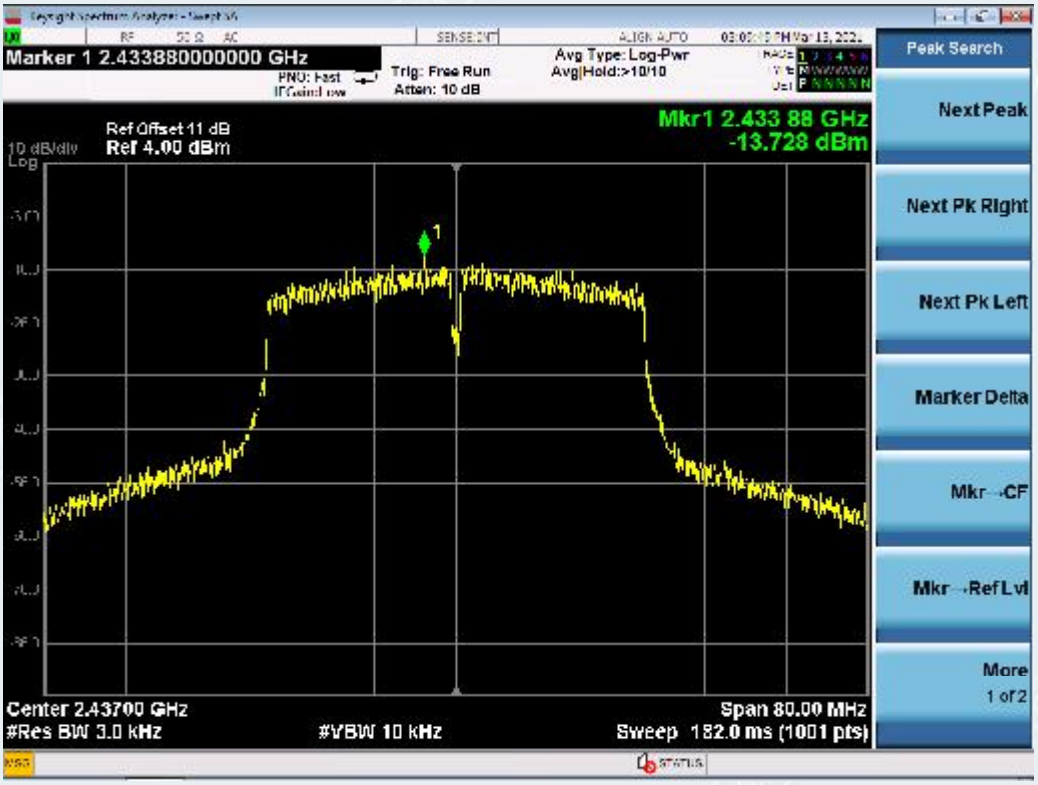
802.11n HT20 mode:
Channel 2437MHz

802.11n HT20 mode:
Channel 2462MHz

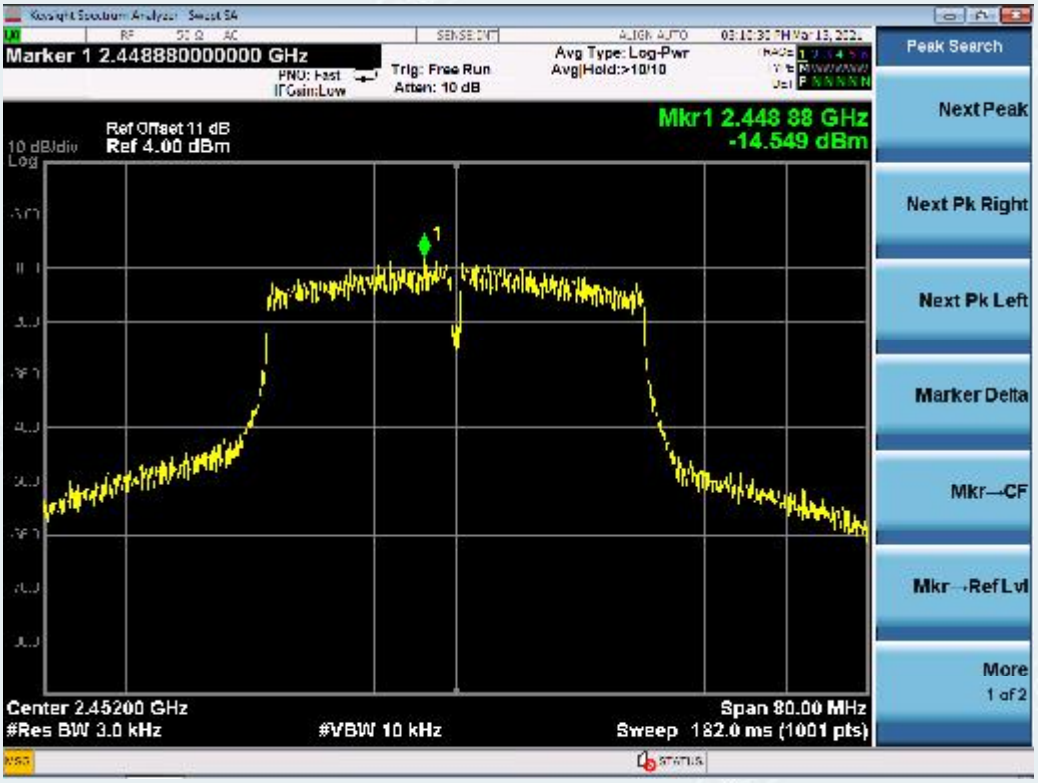
802.11n HT40 mode:
Channel 2422MHz



802.11n HT40 mode:
Channel 2437MHz



802.11n HT40 mode:
Channel 2452MHz



10. CONDUCTED BAND EDGES AND SPURIOUS EMISSIONS

10.1. LIMITS

(d) In any 100 kHz 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 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

10.2. TEST PROCEDURES

Test procedures follow KDB 558074 D01 DTS Measurement Guidance v03r01.

Remove the antenna from the EUT and then connect a low attenuation cable from the antenna port to the spectrum.

1) Remove the antenna from the EUT and then connect a low attenuation cable from the antenna port to the spectrum.
2) Set the spectrum analyzer: RBW =100KHz; VBW =300KHz, Span = 30MHz to 26.5GHz; Sweep = auto; Detector Function = Peak. Trace = Max, hold.
3) Measure and record the results in the test report.
4) The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

10.3. TEST SETUP

10.4. TEST RESULTS

802.11b mode:
Channel 2412MHz
0.03GHz-26.5GHz

2.31GHz-2.422GHz

802.11b mode:
Channel 2437MHz
0.03GHz-26.5GHz

802.11b mode:
Channel 2462MHz
0.03GHz-26.5GHz

2.452GHz-2.5GHz

802.11g mode:
Channel 2412MHz
0.03GHz-26.5GHz

2.31GHz-2.425GHz

802.11g mode:
Channel 2437MHz
0.03GHz-26.5GHz

802.11g mode:
Channel 2462MHz
0.03GHz-26.5GHz

2.452GHz-2.5GHz

802.11n HT20 mode:
Channel 2412MHz
0.03GHz-26.5GHz

2.31GHz-2.425GHz

802.11n HT20 mode:
Channel 2437MHz
0.03GHz-26.5GHz

802.11n HT20 mode:
Channel 2462MHz
0.03GHz-26.5GHz

2.452GHz-2.5GHz

802.11n HT40 mode:
Channel 2422MHz
0.03GHz-26.5GHz

2.31GHz-2.450GHz

802.11n HT40 mode:
Channel 2437MHz
0.03GHz-26.5GHz

802.11n HT40 mode:
Channel 2452MHz
0.03GHz-26.5GHz

2.432GHz-2.5GHz

11. RESTRICTED BANDS OF OPERATION

11.1. LIMITS

Section 15.247(d) In addition, Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

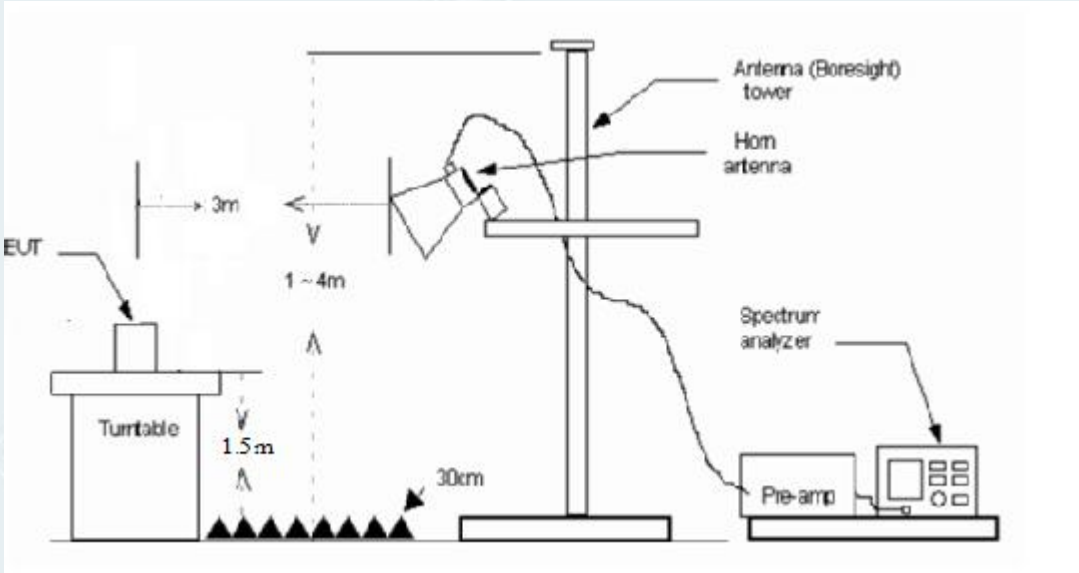
MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 -	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.69525	960 - 1240	7.25 - 7.75
4.125 - 4.128	16.80425 -	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	16.80475	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	25.5 - 25.67	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	37.5 - 38.25	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	73 - 74.6	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	74.8 - 75.2	2200 - 2300	14.47 - 14.5
8.291 - 8.294	108 - 121.94	2310 - 2390	15.35 - 16.2
8.362 - 8.366	123 - 138	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	149.9 - 150.05	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	156.52475 -	3260 - 3267	23.6 - 24.0
12.29 - 12.293	156.52525	3332 - 3339	31.2 - 31.8
12.51975 -	156.7 - 156.9	3345.8 - 3358	36.43 - 36.5
12.52025	162.0125 - 167.17	3600 - 4400	
12.57675 -	167.72 - 173.2		
12.57725	240 - 285		
13.36 - 13.41	322 - 335.4		

11.2. TEST PROCEDURES

Test procedures follow KDB 558074 D01 DTS Meas Guidance v03r01.

1) The EUT is placed on a turntable, which is 1.5m above the ground plane.
2) The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3) EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4) Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
   a) PEAK: RBW=1MHz / VBW=1MHz / Sweep=AUTO
   b) AVERAGE: RBW=1MHz / VBW=1/T / Sweep=AUTO
5) Repeat the procedures until all the PEAK and AVERAGE versus POLARIZATION are measured.

11.3. TEST SETUP



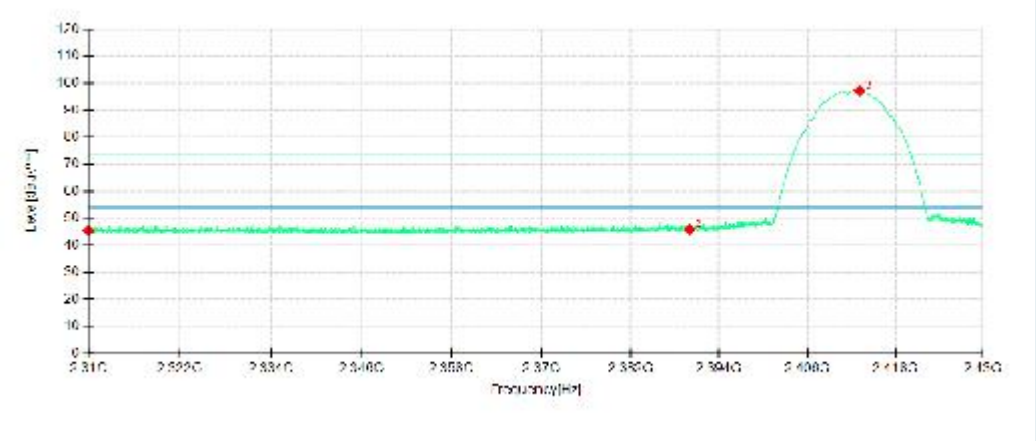
11.4. TEST RESULTS

802.11b mode

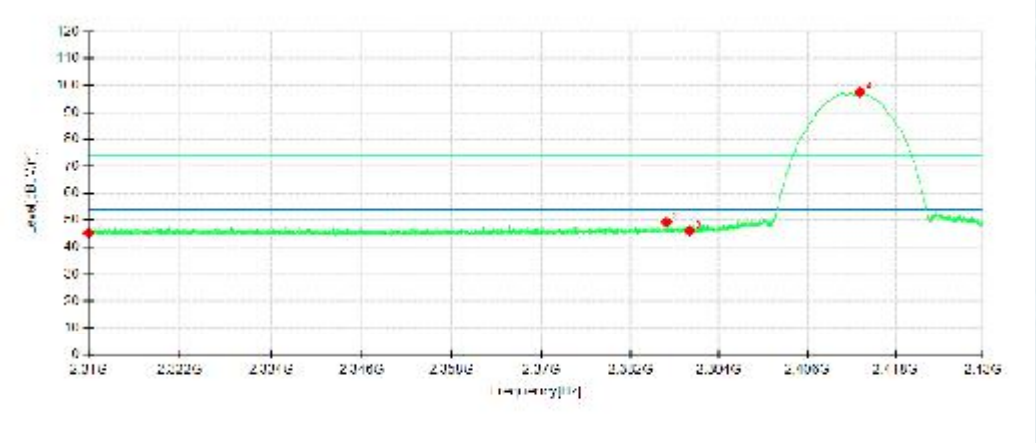
Lowest Channel

Channel 2412MHz

Detector mode: Peak Polarity: Horizontal



Detector mode: Peak Polarity: Vertical



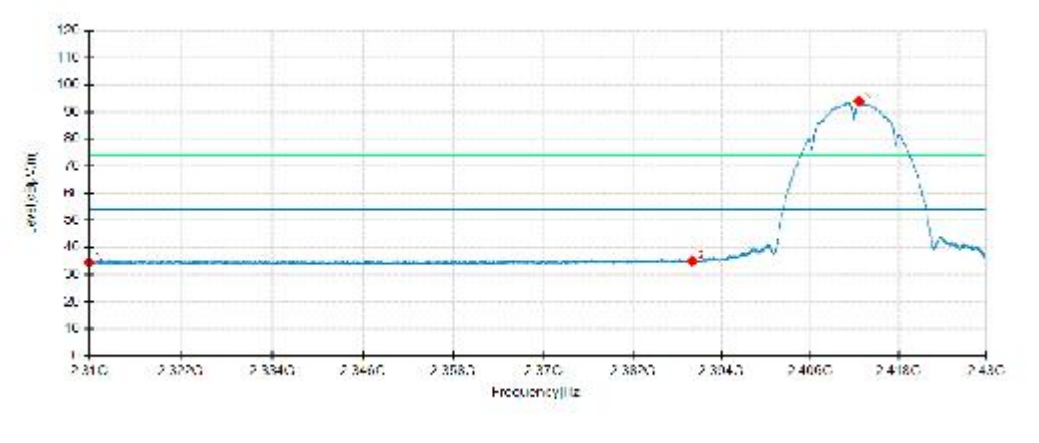
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2310.0000	42.44	45.43	2.99	74.00	28.57	100	351	Horizontal	/
2	2390.0000	42.67	45.86	3.19	74.00	28.14	200	218	Horizontal	/
3	2413.1250	93.86	97.24	3.38	74.00	-23.24	100	223	Horizontal	No limit
1	2310.0000	42.26	45.25	2.99	74.00	28.75	200	308	Vertical	/
2	2386.8600	46.15	49.29	3.14	74.00	24.71	100	113	Vertical	/
3	2390.0000	42.83	46.02	3.19	74.00	27.98	200	349	Vertical	/
4	2413.1850	94.19	97.57	3.38	74.00	-23.57	200	234	Vertical	No limit

802.11b mode

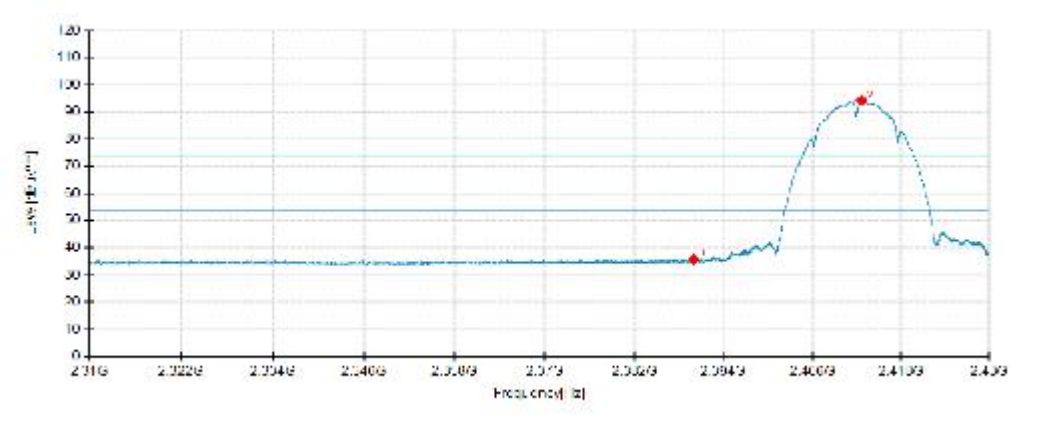
Lowest Channel

Channel 2412MHz

Detector mode: Average Polarity: Horizontal



Detector mode: Average Polarity: Vertical



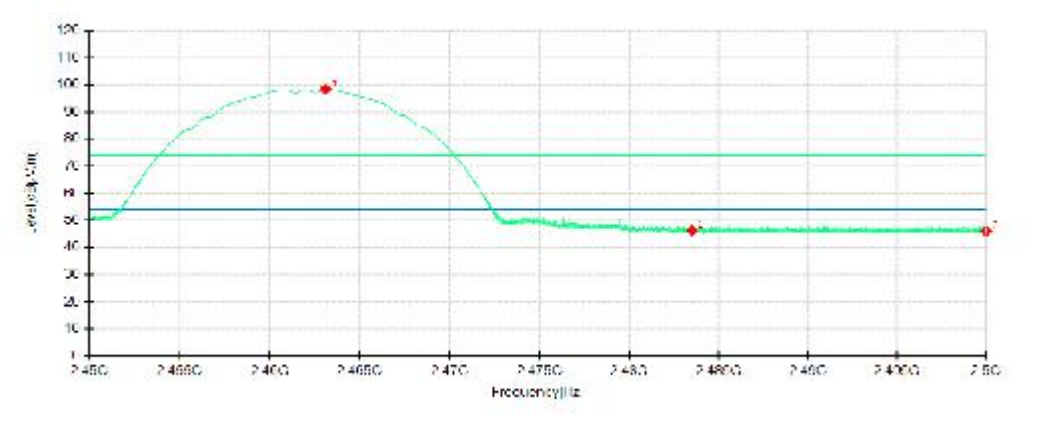
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2310.0000	31.44	34.43	2.99	54.00	19.57	100	346	Horizontal	/
2	2390.0000	31.76	34.95	3.19	54.00	19.05	100	224	Horizontal	/
3	2412.6600	90.58	93.96	3.38	54.00	-39.96	100	224	Horizontal	No limit
1	2390.0000	32.66	35.85	3.19	54.00	18.15	200	252	Vertical	/
2	2412.6450	90.85	94.23	3.38	54.00	-40.23	200	232	Vertical	No limit

802.11b mode

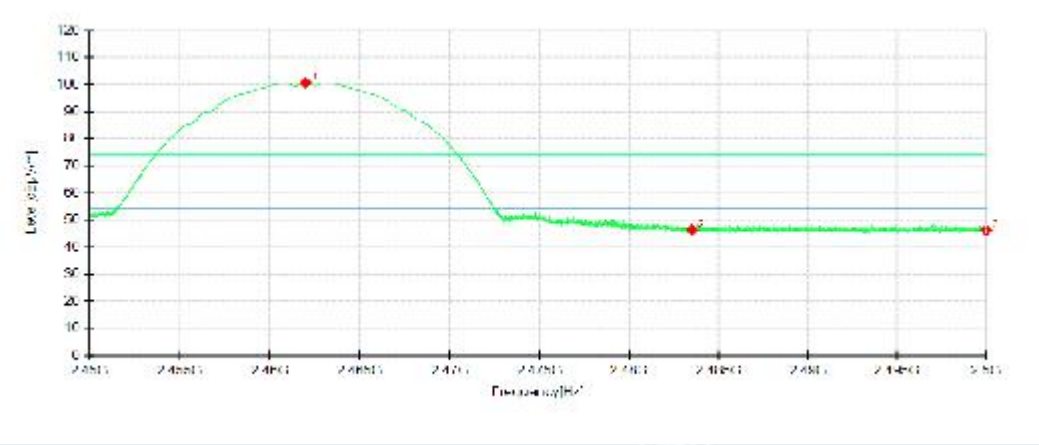
Highest Channel

Channel 2462MHz

Detector mode: Peak Polarity: Horizontal



Detector mode: Peak Polarity: Vertical



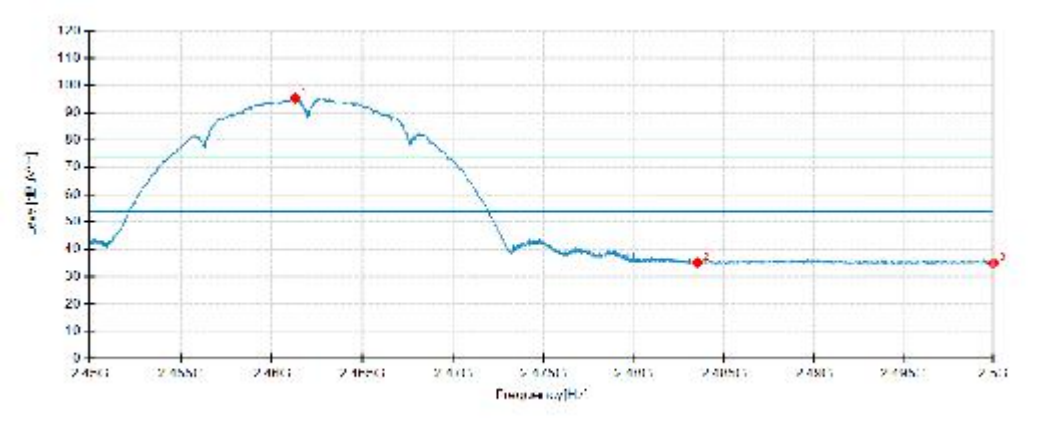
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2463.0875	94.92	98.45	3.53	74.00	-24.45	100	223	Horizontal	No limit
2	2483.5000	42.73	46.29	3.56	74.00	27.71	200	30	Horizontal	/
3	2500.0000	42.38	45.96	3.58	74.00	28.04	100	356	Horizontal	/
1	2461.9938	97.12	100.65	3.53	74.00	-26.65	200	240	Vertical	No limit
2	2483.5000	42.93	46.49	3.56	74.00	27.51	200	192	Vertical	/
3	2500.0000	42.73	46.31	3.58	74.00	27.69	100	73	Vertical	/

802.11b mode

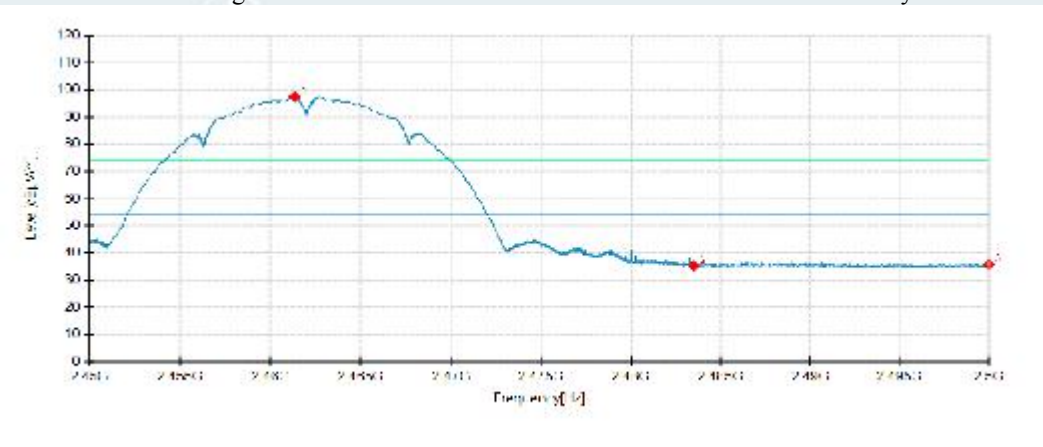
Highest Channel

Channel 2462MHz

Detector mode: Average Polarity: Horizontal



Detector mode: Average Polarity: Vertical



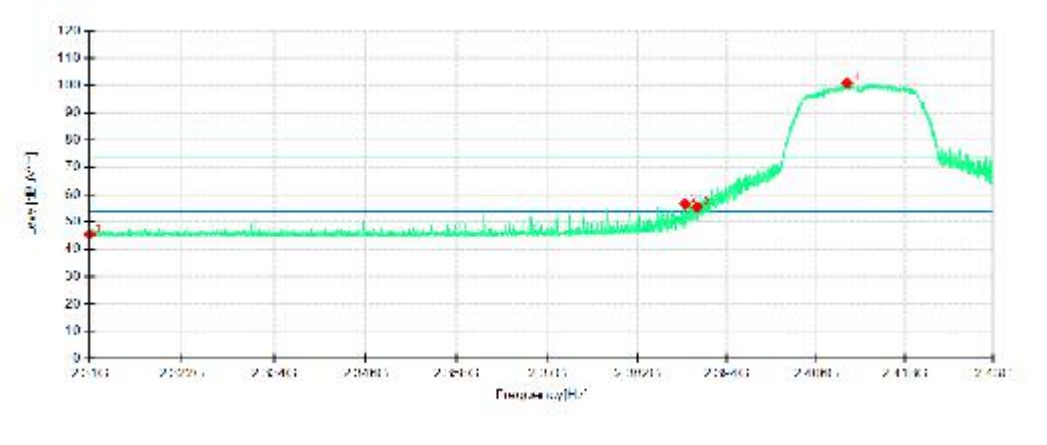
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2461.2938	91.91	95.44	3.53	54.00	-41.44	100	222	Horizontal	No limit
2	2483.5000	31.58	35.14	3.56	54.00	18.86	100	318	Horizontal	/
3	2500.0000	31.39	34.97	3.58	54.00	19.03	100	297	Horizontal	/
1	2461.3375	94.01	97.54	3.53	54.00	-43.54	200	239	Vertical	No limit
2	2483.5000	31.75	35.31	3.56	54.00	18.69	100	113	Vertical	/
3	2500.0000	32.29	35.87	3.58	54.00	18.13	100	346	Vertical	/

802.11g mode

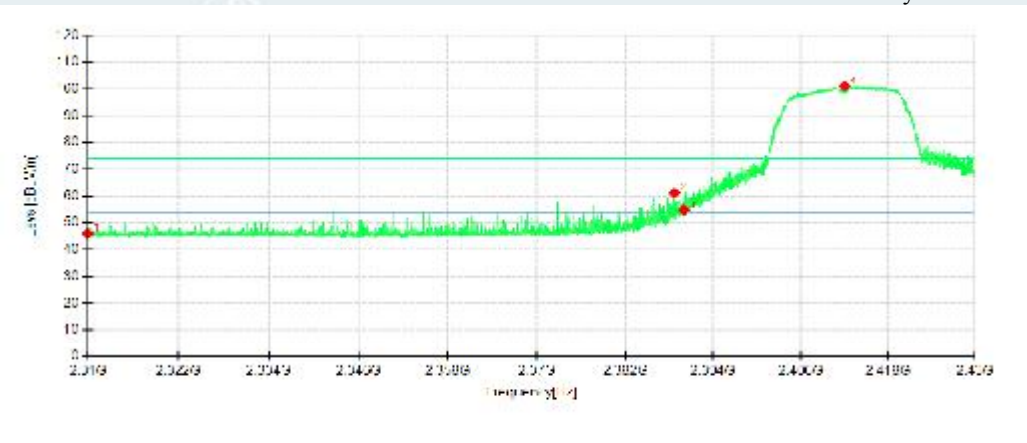
Lowest Channel

Channel 2412MHz

Detector mode: Peak Polarity: Horizontal



Detector mode: Peak Polarity: Vertical



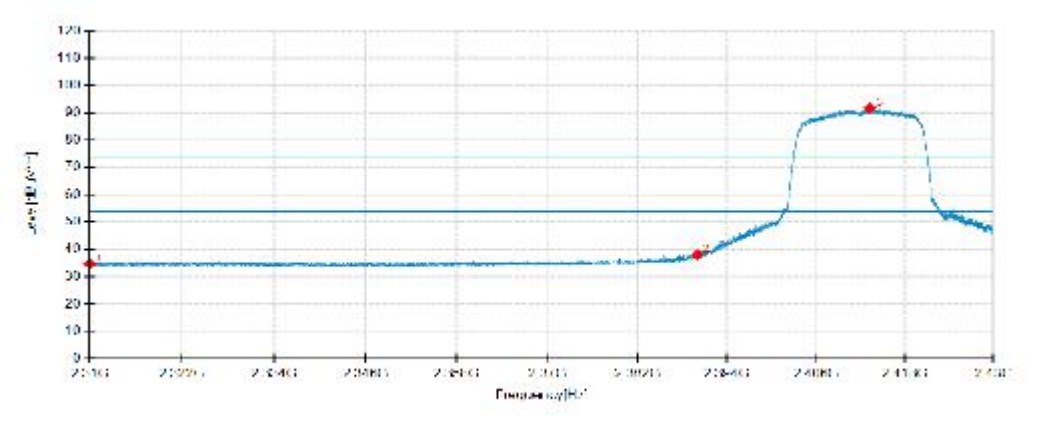
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2310.0000	42.47	45.46	2.99	74.00	28.54	100	273	Horizontal	/
2	2388.3900	53.37	56.53	3.16	74.00	17.47	100	135	Horizontal	/
3	2390.0000	52.27	55.46	3.19	74.00	18.54	100	239	Horizontal	/
4	2410.2000	97.49	100.86	3.37	74.00	-26.86	100	225	Horizontal	No limit
1	2310.0000	43.00	45.99	2.99	74.00	28.01	100	120	Vertical	/
2	2388.7200	58.00	61.17	3.17	74.00	12.83	200	233	Vertical	/
3	2390.0000	51.51	54.70	3.19	74.00	19.30	200	110	Vertical	/
4	2412.0450	97.70	101.08	3.38	74.00	-27.08	200	260	Vertical	No limit

802.11g mode

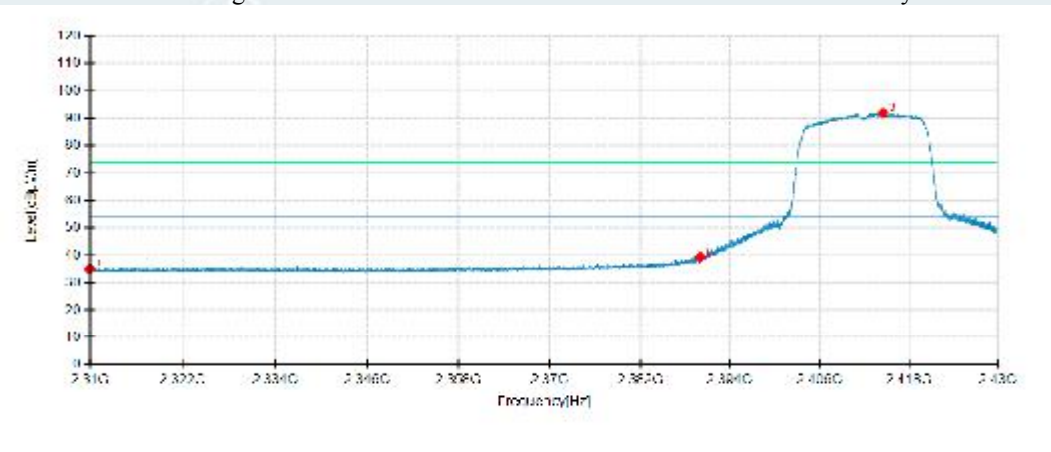
Lowest Channel

Channel 2412MHz

Detector mode: Average Polarity: Horizontal



Detector mode: Average Polarity: Vertical



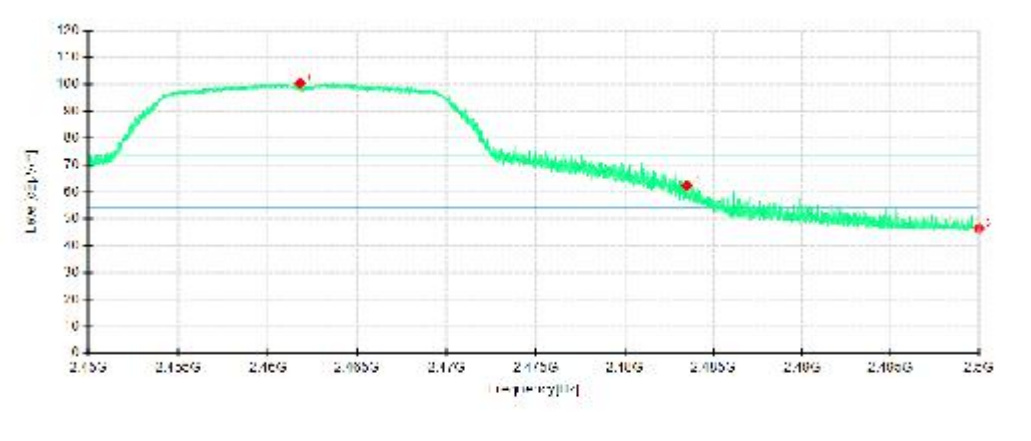
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2310.0000	31.69	34.68	2.99	54.00	19.32	100	209	Horizontal	/
2	2390.0000	34.88	38.07	3.19	54.00	15.93	200	220	Horizontal	/
3	2413.2600	88.41	91.80	3.39	54.00	-37.80	100	223	Horizontal	No limit
1	2310.0000	32.09	35.08	2.99	54.00	18.92	100	345	Vertical	/
2	2390.0000	36.15	39.34	3.19	54.00	14.66	200	247	Vertical	/
3	2414.4900	88.52	91.91	3.39	54.00	-37.91	200	233	Vertical	No limit

802.11g mode

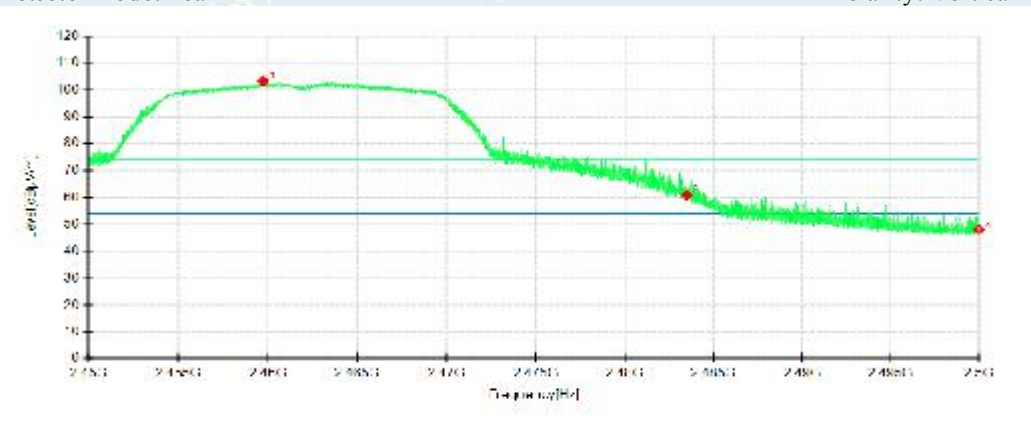
Highest Channel

Channel 2462MHz

Detector mode: Peak Polarity: Horizontal



Detector mode: Peak Polarity: Vertical



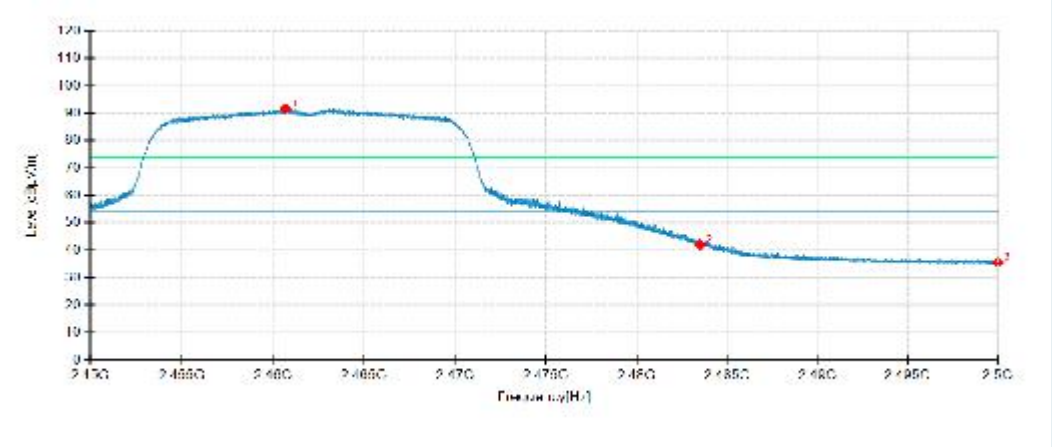
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2461.7750	96.88	100.41	3.53	74.00	-26.41	100	216	Horizontal	No limit
2	2483.5000	58.81	62.37	3.56	74.00	11.63	100	229	Horizontal	/
3	2500.0000	42.90	46.48	3.58	74.00	27.52	200	226	Horizontal	/
1	2459.7375	99.65	103.17	3.52	74.00	-29.17	200	247	Horizontal	No limit
2	2483.5000	57.33	60.89	3.56	74.00	13.11	100	79	Vertical	/
3	2500.0000	44.46	48.04	3.58	74.00	25.96	100	93	Vertical	/

802.11g mode

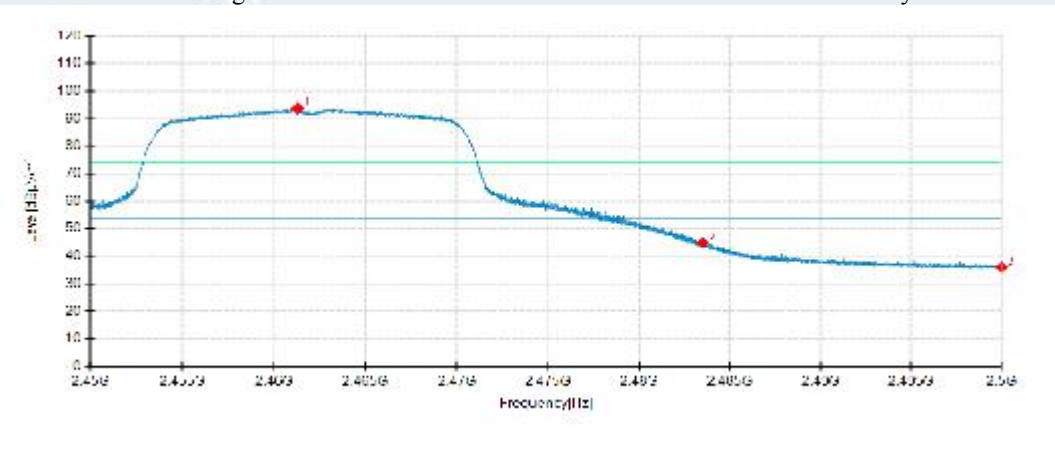
Highest Channel

Channel 2462MHz

Detector mode: Average Polarity: Horizontal



Detector mode: Average Polarity: Vertical



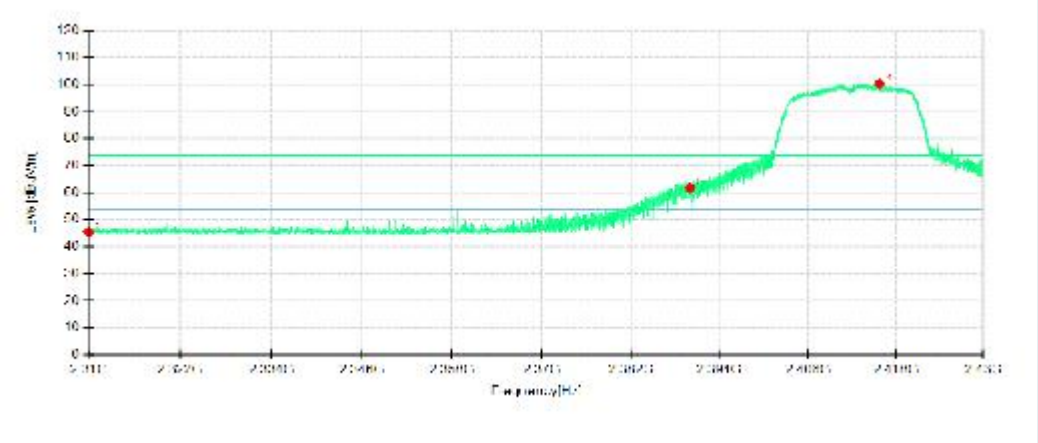
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2460.6938	88.09	91.61	3.52	54.00	-37.61	100	224	Horizontal	No limit
2	2483.5000	38.48	42.04	3.56	54.00	11.96	100	224	Horizontal	/
3	2500.0000	32.03	35.61	3.58	54.00	18.39	200	226	Horizontal	/
1	2461.2875	90.18	93.71	3.53	54.00	-39.71	200	240	Vertical	No limit
2	2483.5000	41.28	44.84	3.56	54.00	9.16	200	247	Vertical	/
3	2500.0000	32.46	36.04	3.58	54.00	17.96	200	220	Vertical	/

802.11n HT20 mode

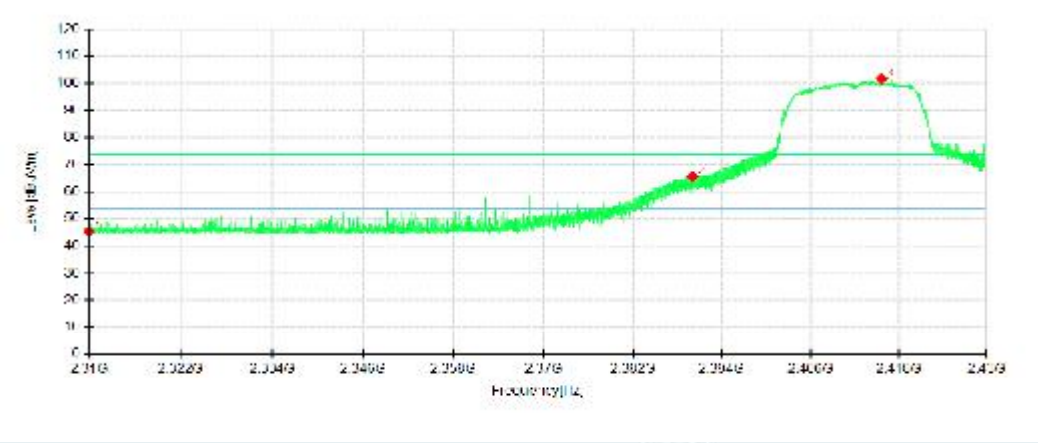
Lowest Channel

Channel 2412MHz

Detector mode: Peak Polarity: Horizontal



Detector mode: Peak Polarity: Vertical



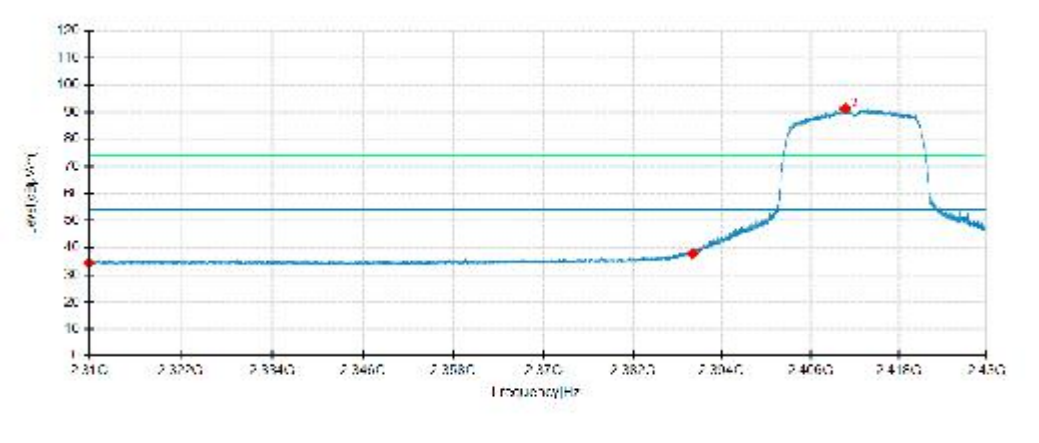
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2310.0000	42.44	45.43	2.99	74.00	28.57	100	263	Horizontal	/
2	2390.0000	58.56	61.75	3.19	74.00	12.25	200	220	Horizontal	/
3	2415.7650	96.94	100.33	3.39	74.00	-26.33	100	216	Horizontal	No limit
1	2310.0000	42.37	45.36	2.99	74.00	28.64	200	0	Vertical	/
2	2390.0000	62.47	65.66	3.19	74.00	8.34	200	240	Vertical	/
3	2415.6900	98.34	101.73	3.39	74.00	-27.73	200	240	Vertical	No limit

802.11n HT20 mode

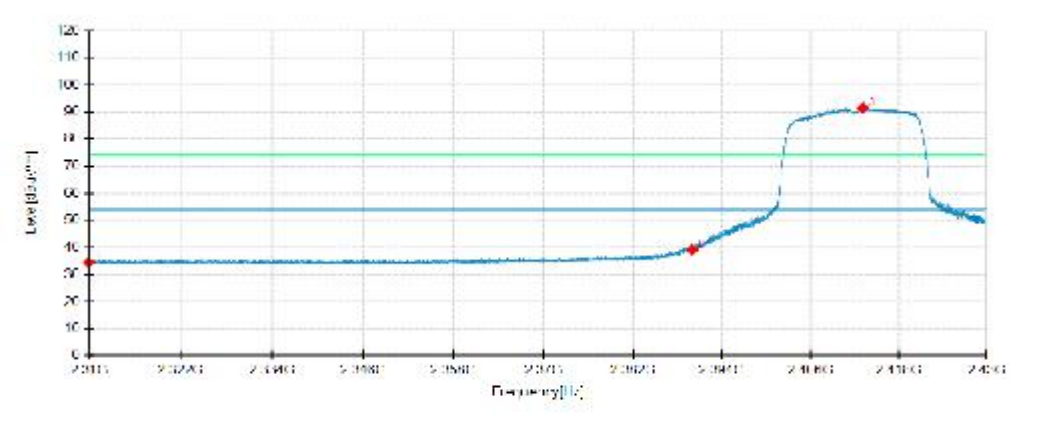
Lowest Channel

Channel 2412MHz

Detector mode: Average Polarity: Horizontal



Detector mode: Average Polarity: Vertical



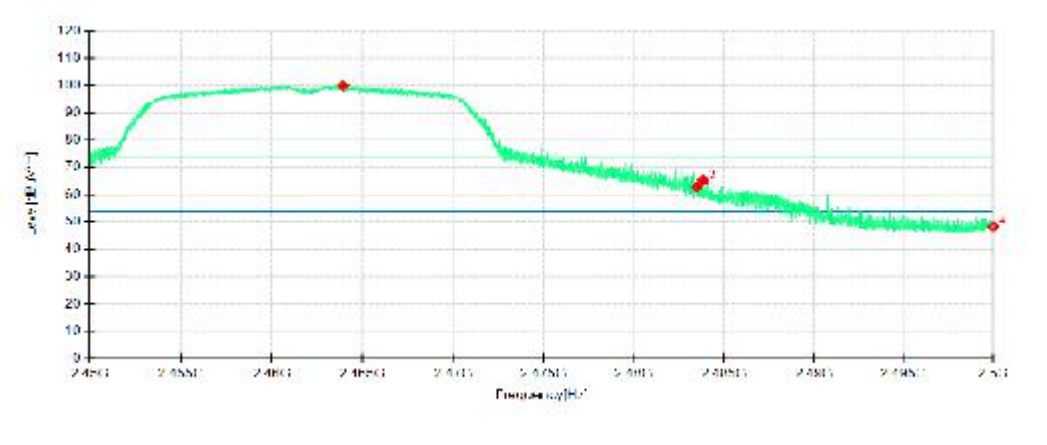
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2310.0000	31.33	34.32	2.99	54.00	19.68	100	264	Horizontal	/
2	2390.0000	34.57	37.76	3.19	54.00	16.24	100	134	Horizontal	/
3	2410.7250	87.98	91.36	3.38	54.00	-37.36	100	223	Horizontal	No limit
1	2310.0000	31.47	34.46	2.99	54.00	19.54	100	147	Vertical	/
2	2390.0000	35.99	39.18	3.19	54.00	14.82	200	234	Vertical	/
3	2413.1100	88.16	91.54	3.38	54.00	-37.54	200	247	Vertical	No limit

802.11n HT20 mode

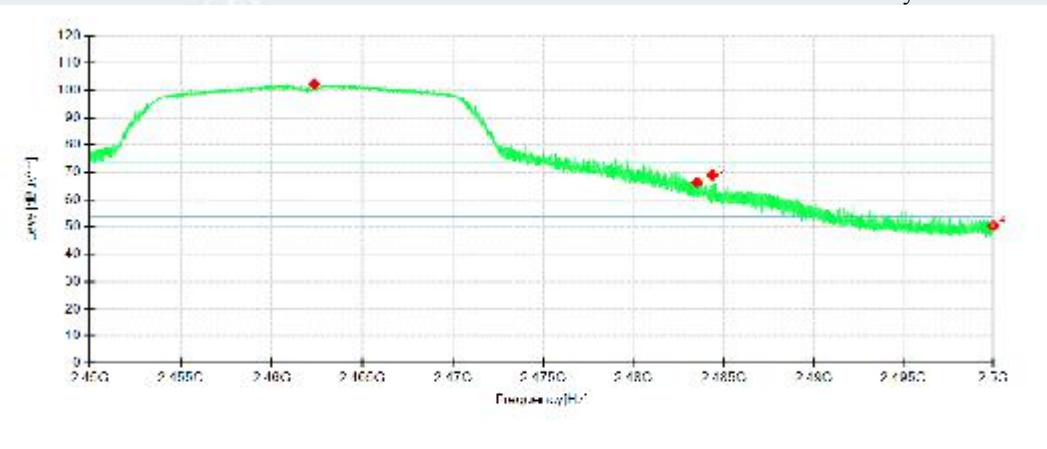
Highest Channel

Channel 2462MHz

Detector mode: Peak Polarity: Horizontal



Detector mode: Peak Polarity: Vertical



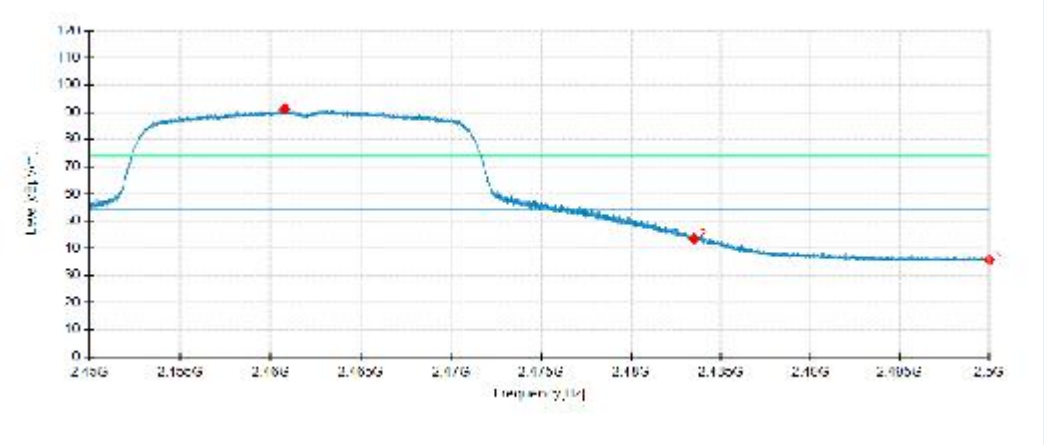
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2463.9313	96.43	99.96	3.53	74.00	-25.96	100	228	Horizontal	No limit
2	2483.5000	59.33	62.89	3.56	74.00	11.11	200	240	Horizontal	/
3	2483.8188	61.86	65.42	3.56	74.00	8.58	200	308	Horizontal	/
4	2500.0000	44.73	48.31	3.58	74.00	25.69	100	317	Horizontal	/
1	2462.3375	98.91	102.44	3.53	74.00	-28.44	200	246	Vertical	No limit
2	2483.5000	62.71	66.27	3.56	74.00	7.73	200	253	Vertical	/
3	2484.3625	65.37	68.93	3.56	74.00	5.07	200	246	Vertical	/
4	2500.0000	46.85	50.43	3.58	74.00	23.57	200	233	Vertical	/

802.11n HT20 mode

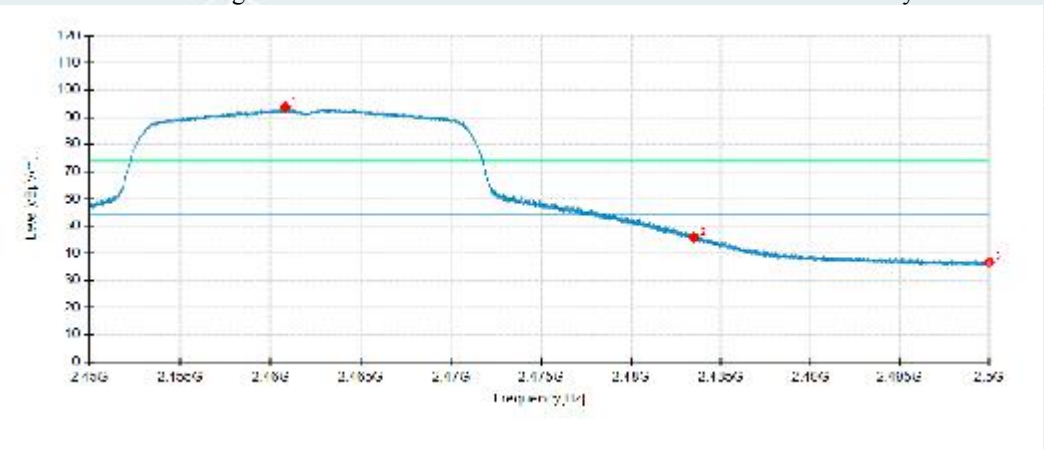
Highest Channel

Channel 2462MHz

Detector mode: Average Polarity: Horizontal



Detector mode: Average Polarity: Vertical



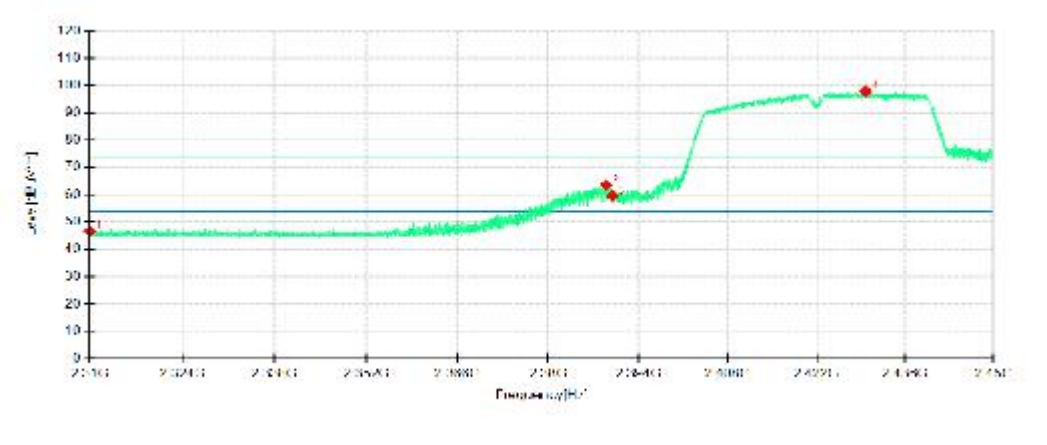
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2460.7875	87.75	91.28	3.53	54.00	-37.28	100	223	Horizontal	No limit
2	2483.5000	39.93	43.49	3.56	54.00	10.51	100	237	Horizontal	/
3	2500.0000	32.03	35.61	3.58	54.00	18.39	200	308	Horizontal	/
1	2460.8250	90.26	93.79	3.53	54.00	-39.79	200	247	Vertical	No limit
2	2483.5000	42.31	45.87	3.56	54.00	8.13	200	247	Vertical	/
3	2500.0000	33.20	36.78	3.58	54.00	17.22	200	233	Vertical	/

802.11n HT40 mode

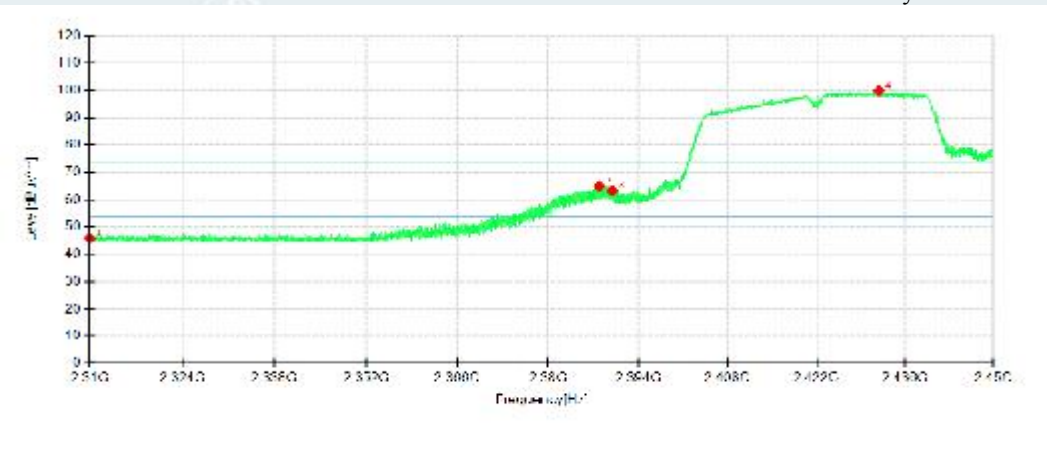
Lowest Channel

Channel 2422MHz

Detector mode: Peak Polarity: Horizontal



Detector mode: Peak Polarity: Vertical



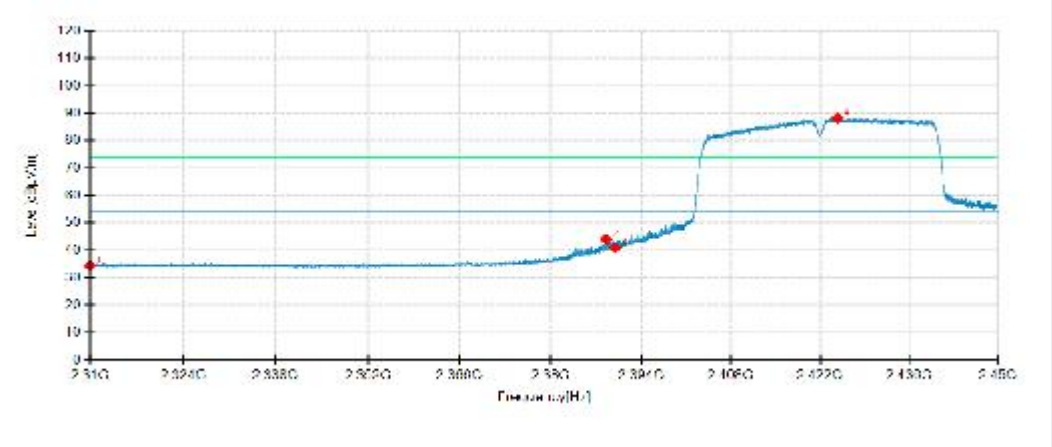
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2310.0000	43.62	46.61	2.99	74.00	27.39	100	209	Horizontal	/
2	2389.0125	60.37	63.54	3.17	74.00	10.46	100	223	Horizontal	/
3	2390.0000	56.31	59.50	3.19	74.00	14.50	100	209	Horizontal	/
4	2429.7350	94.44	97.88	3.44	74.00	-23.88	100	230	Horizontal	No limit
1	2310.0000	42.93	45.92	2.99	74.00	28.08	200	132	Vertical	/
2	2387.9625	61.77	64.92	3.15	74.00	9.08	200	247	Vertical	/
3	2390.0000	60.04	63.23	3.19	74.00	10.77	200	247	Vertical	/
4	2431.8175	96.40	99.85	3.45	74.00	-25.85	200	234	Vertical	No limit

802.11n HT40 mode

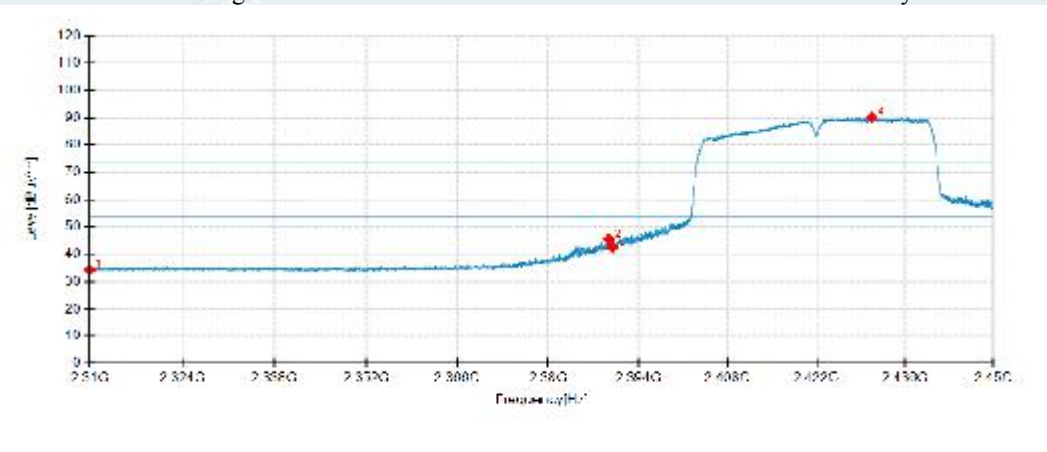
Lowest Channel

Channel 2422MHz

Detector mode: Average Polarity: Horizontal



Detector mode: Average Polarity: Vertical



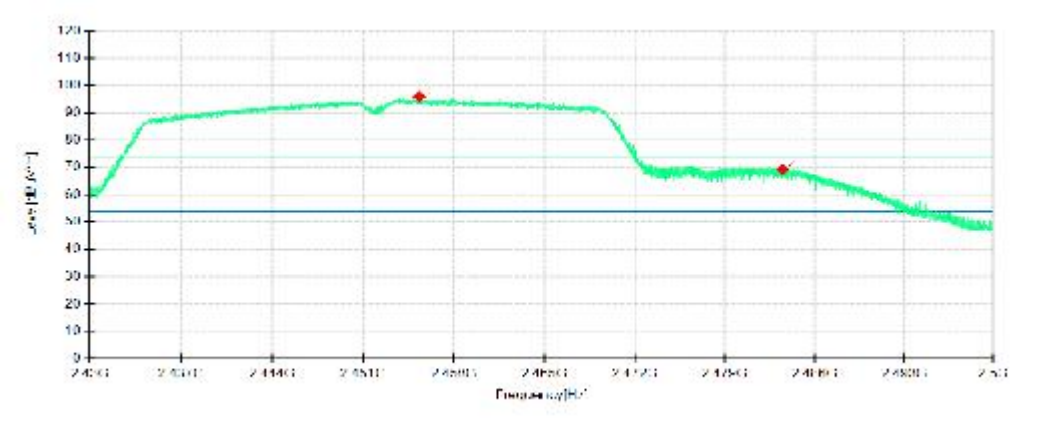
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2310.0000	31.45	34.44	2.99	54.00	19.56	200	288	Horizontal	/
2	2388.5750	40.95	44.11	3.16	54.00	9.89	100	215	Horizontal	/
3	2390.0000	37.77	40.96	3.19	54.00	13.04	200	226	Horizontal	/
4	2424.6950	84.79	88.21	3.42	54.00	-34.21	100	222	Horizontal	No limit
1	2310.0000	31.41	34.40	2.99	54.00	19.60	100	86	Vertical	/
2	2389.4500	42.40	45.58	3.18	54.00	8.42	200	254	Vertical	/
3	2390.0000	39.35	42.54	3.19	54.00	11.46	200	268	Vertical	/
4	2430.7150	86.73	90.17	3.44	54.00	-36.17	200	240	Vertical	No limit

802.11n HT40 mode

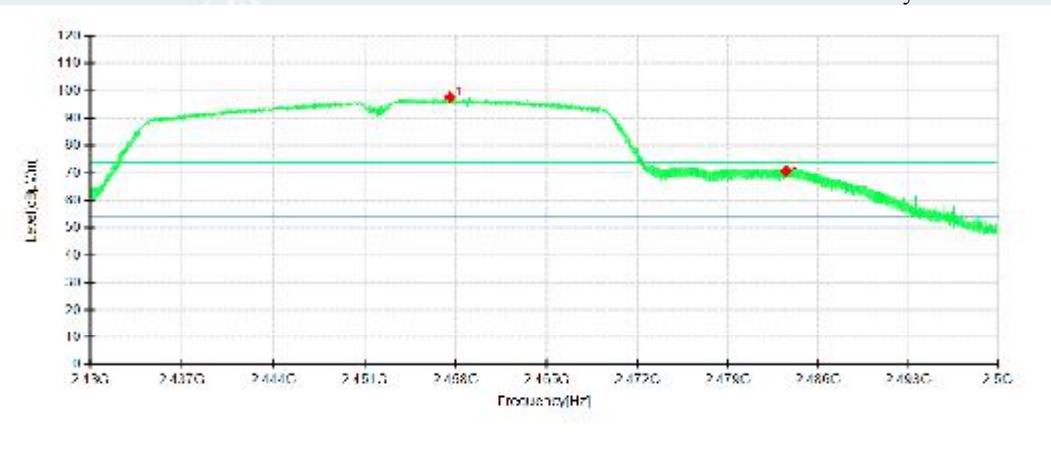
Highest Channel

Channel 2452MHz

Detector mode: Peak Polarity: Horizontal



Detector mode: Peak Polarity: Vertical



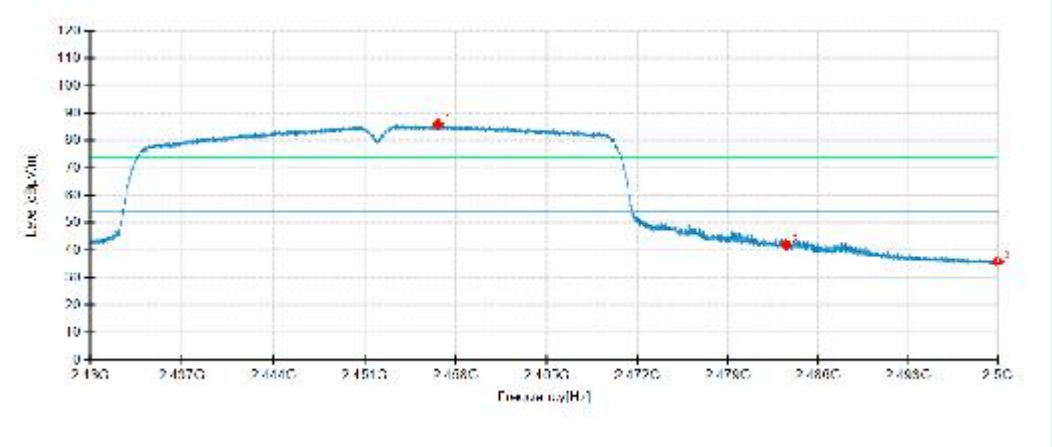
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2455.2963	92.46	95.98	3.52	74.00	-21.98	100	223	Horizontal	No limit
2	2483.5000	65.72	69.28	3.56	74.00	4.72	100	223	Horizontal	/
1	2457.5275	94.12	97.64	3.52	74.00	-23.64	200	233	Vertical	No limit
2	2483.5000	67.22	70.78	3.56	74.00	3.22	200	226	Vertical	/

802.11n HT40 mode

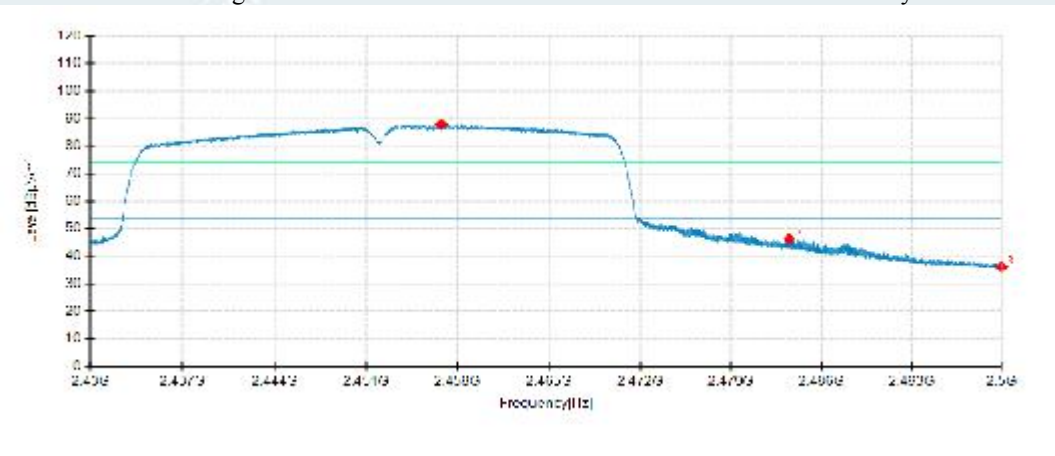
Highest Channel

Channel 2452MHz

Detector mode: Average Polarity: Horizontal



Detector mode: Average Polarity: Vertical



No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Comment
1	2456.6175	82.53	86.05	3.52	54.00	-32.05	100	223	Horizontal	No limit
2	2483.5000	38.42	41.98	3.56	54.00	12.02	100	216	Horizontal	/
3	2500.0000	32.37	35.95	3.58	54.00	18.05	200	206	Horizontal	/
1	2456.7225	84.39	87.91	3.52	54.00	-33.91	200	240	Vertical	No limit
2	2483.5000	42.67	46.23	3.56	54.00	7.77	200	247	Vertical	/
3	2500.0000	32.58	36.16	3.58	54.00	17.84	200	233	Vertical	/

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