

## ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

## CLASS II &amp; IV PC REPORT

OF

**Applicant:** Framework Computer Inc  
1870 Ogden Dr, Burlingame, CA, 94010

**Product Name:** Intel WiFi 6E AX210 Module

**Brand Name:** Framework

**Model No.:** AX210NGW

**Model Difference:** N/A

**Report Number:** ER/2021/50048

**FCC ID** 2AZR6-FRANBBAT12

**IC:** 27217-FRANBBAT12

**FCC Rule Part:** §15.247, Cat: DSS

**IC RSS:** RSS-247 issue 2 Feb 2017

**Issue Date:** July 9, 2021

**Date of Test:** June 7, 2021- June 15, 2021


**Date of EUT Received:** April 29, 2021

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Central RF Lab. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10:2013 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits. The test results of this report relate only to the tested sample identified in this report.

Approved By: \_\_\_\_\_

Blue Yang / Asst. Manager



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## Revision History

Report Number	Revision	Description	Issue Date	Revised By
ER/2021/50048	00	Original.	July 9, 2021	Karen Huang

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## 1 GENERAL INFORMATION

### 1.1 Product description

Product Name of Host:	Portable Computer
Brand Name of Host:	Framework
Marketing Name of Host:	Framework Laptop
Model No. of Host:	FRANBP0000
Hardware Version:	N/A
Software Version:	N/A
Model No. of BT/WLAN Module:	AX210NGW
Scope:	AX210NGW INSTALLED IN Notebook Computer
Class II & Class IV Permissive change:	The test report covers the radiated emissions requirements of the standards referenced in the report to allow system level approval of the module in this specific host.
EUT Series No.:	1D300C2C-E2EA-479B-990C-0F8D63BEC3DC
Power Supply:	15.4V DC from rechargeable Li-ion battery or 5.0V=3.0A 15.0W, 9.0V=3.0A 27.0W, 15.0V=3.0A 45.0W, 20.0V=3.0A 60.0W from adapter.

Radio Technology:	Bluetooth BR+EDR
Channel number:	79 channels
Modulation type:	GFSK + $\pi/4$ DQPSK + 8DPSK
Frequency Range:	2.402GHz – 2.480GHz
Dwell Time:	$\leq 0.4s$

### 1.2 Antenna Designation

Antenna Type	Brand	Main / Aux	Antenna Part No.	Freq.	Peak Antenna Gain (dBi)	Worst Antenna Gain
PIFA	AWAN	Aux	AXF6Y200005(DC33002JW00)	2.4GHz	1.238	-

Note:

1. Pre-scanned was done on the above antennas, measurements were demonstrated by using the antenna with the highest gain as the worst case scenarios.
2. Antenna information is provided by the applicant.

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### 1.3 Test Methodology of Applied Standards

FCC Part 15, Subpart C §15.247

FCC KDB 558074 D01 15.247 Meas. Guidance v05r02

RSS-247 issue 2 Feb. 2017

RSS-Gen Issue 5, Amendment 2, February 2021

ANSI C63.10:2013

### 1.4 Test Facility

Laboratory	Test Site Address	Test Site Name	FCC Designation number	IC CAB identifier
SGS Taiwan Ltd. Central RF Lab. (TAF code 3702)	No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan.	SAC 1	TW0027	TW3702
		SAC 3		
		Conduction 1		
		Conducted 1		
		Conducted 2		
		Conducted 3		
		Conducted 4		
		Conducted 5		
		Conducted 6		
	No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333	Conduction A	TW0028	TW3702
		SAC C		
		SAC D		
		SAC G		
		Conducted A		
		Conducted B		
		Conducted C		
		Conducted D		
		Conducted E		
		Conducted F		
		Conducted G		

**Note:** Test site name is remarked on the equipment list in each section of this report as an indication where measurements occurred in specific test site and address.

### 1.5 Special Accessories

There is no special accessory used while test was conducted.

### 1.6 Equipment Modifications

There was no modification incorporated into the EUT.

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## 2 SYSTEM TEST CONFIGURATION

### 2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

### 2.2 EUT Exercise

An engineering test mode (software/firmware) that applicant provided was utilized to manipulate the EUT into transmit, selection of the test channel, and modulation scheme.

### 2.3 Test Procedure

#### 2.3.1 Radiated Emissions

The EUT is placed on a turn table. For emissions testing at or below 1 GHz, the table height shall be 0.8 m above the reference ground plane. For emission measurements above 1 GHz, the table height shall be 1.5 m. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna.

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## 2.4 Measurement Results Explanation Example

### 2.4.1 Radiated Emission Test Sites For Measurements From 9 kHz To 30 MHz

Radiated emission below 30MHz is measured in a 9m\*9m\*6m semi-anechoic chamber, the measurements correspond to those obtained at an open-field test site.

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

## 2.5 Configuration of Tested System

Fig. 2-1 Radiated Emission



Table 2-1 Equipment Used in Tested System

Item	Equipment	MRF/Brand	Model/Type No.	Series No.	Version
1	DRTU	N/A	N/A	N/A	21.350120.0.0-01117

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### 3 SUMMARY OF TEST RESULTS

FCC Rules	IC Rules	Description Of Test	Result
§15.209 §15.247(d)	RSS-247 §5.5 RSS-Gen §8.9	Radiated Spurious Emission	Compliant

### 4 DESCRIPTION OF TEST MODES

#### 4.1 Operated in 2400 ~ 2483.5MHz Band

79 channels are provided for Bluetooth

ITEM	FREQUENCY	ITEM	FREQUENCY	ITEM	FREQUENCY	ITEM	FREQUENCY
1	2402 MHz	21	2422 MHz	41	2442 MHz	71	2462 MHz
2	2403 MHz	22	2423 MHz	42	2443 MHz	72	2463 MHz
3	2404 MHz	23	2424 MHz	43	2444 MHz	73	2464 MHz
4	2405 MHz	24	2425 MHz	44	2445 MHz	74	2465 MHz
5	2406 MHz	25	2426 MHz	45	2446 MHz	75	2466 MHz
6	2407 MHz	26	2427 MHz	46	2447 MHz	76	2467 MHz
7	2408 MHz	27	2428 MHz	47	2448 MHz	77	2468 MHz
8	2409 MHz	28	2429 MHz	48	2449 MHz	78	2469 MHz
9	2410 MHz	29	2430 MHz	49	2450 MHz	79	2470 MHz
10	2411 MHz	30	2431 MHz	50	2451 MHz	70	2471 MHz
11	2412 MHz	31	2432 MHz	51	2452 MHz	71	2472 MHz
12	2413 MHz	32	2433 MHz	52	2453 MHz	72	2473 MHz
13	2414 MHz	33	2434 MHz	53	2454 MHz	73	2474 MHz
14	2415 MHz	34	2435 MHz	54	2455 MHz	74	2475 MHz
15	2416 MHz	35	2436 MHz	55	2456 MHz	75	2476 MHz
16	2417 MHz	36	2437 MHz	56	2457 MHz	76	2477 MHz
17	2418 MHz	37	2438 MHz	57	2458 MHz	77	2478 MHz
18	2419 MHz	38	2439 MHz	58	2459 MHz	78	2479 MHz
19	2420 MHz	39	2440 MHz	59	2460 MHz	79	2480 MHz
20	2421 MHz	40	2441 MHz	60	2461 MHz		

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## 4.2 The Worst Test Modes and Channel Details

- 1 The EUT has been tested under operating condition.
- 2 Test program used to control the EUT for staying in continuous transmitting and receiving mode is programmed.
- 3 Investigation has been done on all the possible configurations for searching the worst case.

RADIATED EMISSION TEST (BELOW 1 GHz)				
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	PACKET TYPE
Bluetooth	0 to 78	39	GFSK	DH5
RADIATED EMISSION TEST (ABOVE 1 GHz)				
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	PACKET TYPE
Bluetooth	0 to 78	0,39,78	GFSK / 8DPSK	DH5 / 2DH5

**Note:** The field strength of radiation emission was measured as **NB plane**.

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## 5 MEASUREMENT UNCERTAINTY

Test Items	Uncertainty
AC Power Line Conducted Emission	+/- 2.34 dB
Peak Output Power	+/- 1 dB
Emission Bandwidth	+/- 1.53 Hz
100 kHz Bandwidth Of Frequency Band Edges	+/- 1.69 dB
Frequency Separation	+/- 1.53 Hz
Number of hopping frequency	+/- 1.53 Hz
Time of Occupancy	+/- 1.53 Hz
Temperature	+/- 0.4 °C
Humidity	+/- 3.5 %
DC / AC Power Source	+/- 1 %

Radiated Spurious Emission Measurement Uncertainty		
Polarization: Vertical	+/- 2.64 dB	9kHz~30MHz
	+/- 4.93 dB	30MHz - 1000MHz
	+/- 4.81 dB	1GHz - 18GHz
	+/- 4.52 dB	18GHz - 40GHz
Polarization: Horizontal	+/- 2.64 dB	9kHz~30MHz
	+/- 4.45 dB	30MHz - 1000MHz
	+/- 4.81 dB	1GHz - 18GHz
	+/- 4.52 dB	18GHz - 40GHz

### Note:

1. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.
2. The conformity assessment statement in this report is based solely on the test results, measurement uncertainty is excluded.

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## 6 RADIATED BANDEDGE AND SPURIOUS EMISSION MEASUREMENT

### 6.1 Standard Applicable

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. In addition, radiated emissions which fall in the restricted bands must also comply with the §15.209 and RSS-Gen §8.9 Table 5 and 6 limit as below.

And according to §15.33(a) (1) & RSS-Gen §6.13.2.a, for an intentional radiator operates below 10GHz, the frequency range of measurements: to the tenth harmonic of the highest fundamental frequency or to 40GHz, whichever is lower.

Frequency (MHz)	Field strength (microvolts/meter)	Distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

**Note:**

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBμV/m) = 20 log Emission level (μV/m)

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## 6.2 Measurement Equipment Used

Radiated Emission Test Site: SAC 3					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Horn Antenna	SCHWARZBECK	BBHA9170	184	12/11/2020	12/10/2021
Horn Antenna	SCHWARZBECK	BBHA9120D	1441	10/16/2020	10/15/2021
Bi-log Antenna	SCHWARZBECK	VULB9168	378	08/06/2020	08/05/2021
Loop Antenna	ETS.LINDGREN	6502	148045	10/19/2020	10/18/2021
PXA Spectrum Analyzer	Agilent	N9030A	MY53120760	04/27/2021	04/26/2022
EMI Test Receiver	R&S	ESCI 7	100759	07/13/2020	07/12/2021
Pre-Amplifier	HP	8449B	3008A00578	12/16/2020	12/15/2021
Pre-Amplifier	EMC Instruments	EMC184045B	980135	12/16/2020	12/15/2021
Pre-Amplifier	HP	8447D	2944A07676	12/16/2020	12/15/2021
Attenuator	Mini-Circuit	BW-S10W2+	4	12/16/2020	12/15/2021
Filter 2400-2483.5 MHz	EWT	EWT-14-0166	M1	12/16/2020	12/15/2021
High Pass Filter	WI	WHKX4.0/18G-10SS	22	12/16/2020	12/15/2021
Coaxial Cable	Huber Suhner	SUCOFLEX 102	MY2636/2	12/16/2020	12/15/2021
Coaxial Cable	Huber Suhner	SUCOFLEX 104	340057/4	12/16/2020	12/15/2021
Coaxial Cable	Huber Suhner	SUCOFLEX 104PEA	800052/2	12/16/2020	12/15/2021
Coaxial Cable	Huber Suhner	SUCOFLEX 102	MY2621/2	12/16/2020	12/15/2021
Coaxial Cable	Huber Suhner	SUCOFLEX 102	MY2617/2	12/16/2020	12/15/2021
Coaxial Cable	Huber Suhner	SUCOFLEX 102	MY2630/2	12/16/2020	12/15/2021
Coaxial Cable	Huber Suhner	SUCOFLEX 102	MY22962/2	12/16/2020	12/15/2021
Site Cal	SGS	SAC III chamber	N/A	01/01/2021	12/31/2021
Test Software	audix	e3	Ver. 6.11-20180413	N.C.R	N.C.R

**NOTE:** N.C.R refers to Not Calibrated Required.

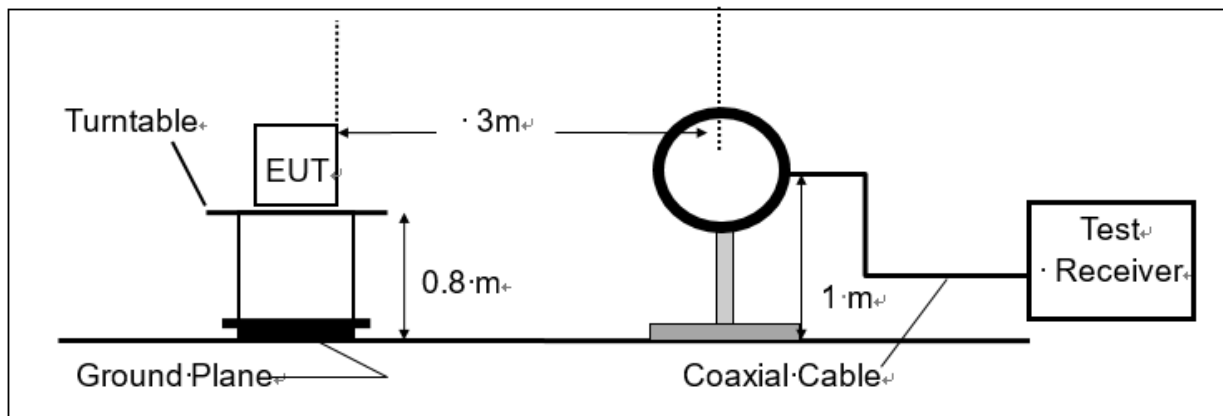
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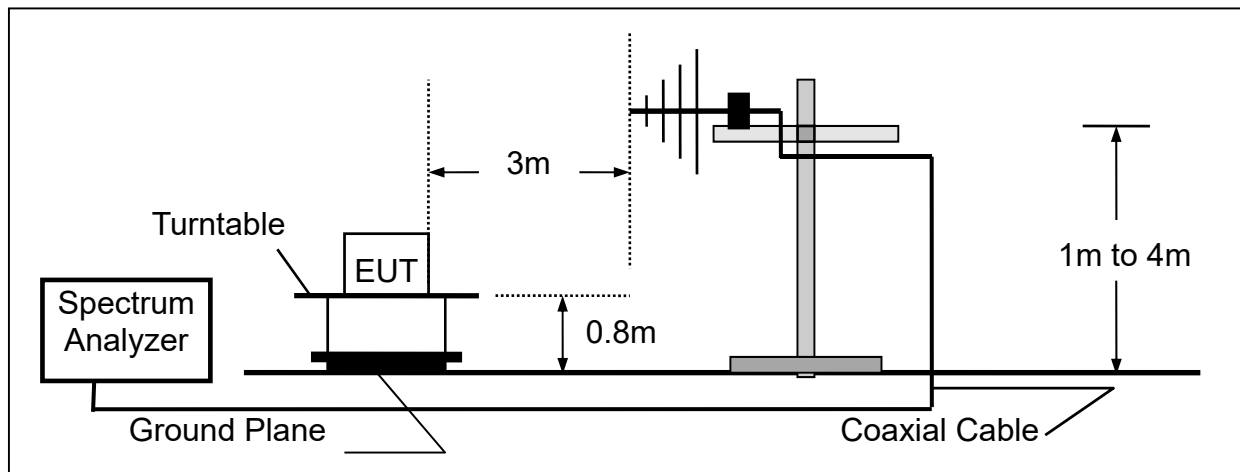
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## 6.3 Test SET-UP

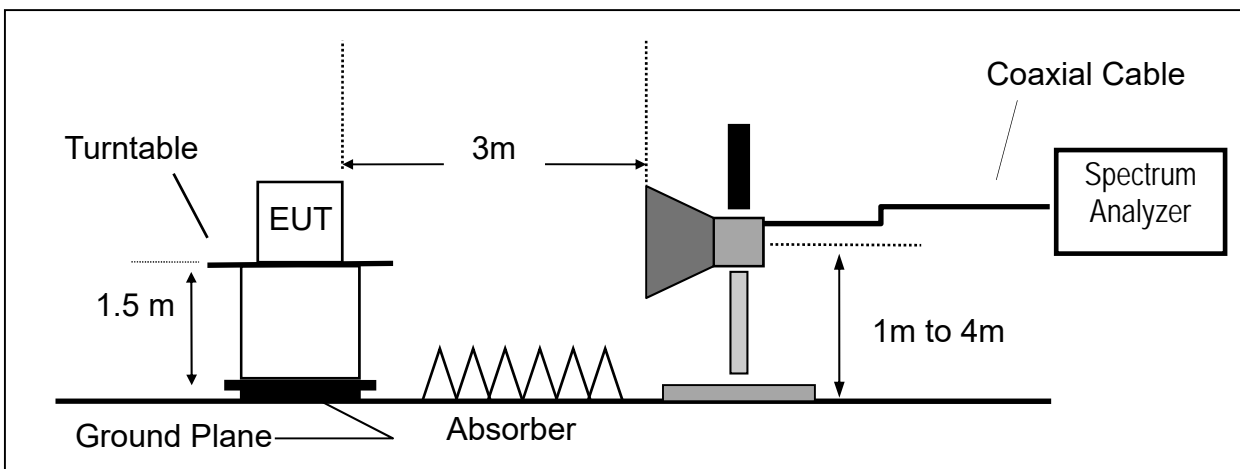
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz.



(B) Radiated Emission Test Set-Up, Frequency Form 30MHz to 1000MHz



(C) Radiated Emission Test Set-Up, Frequency Above 1 GHz



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## 6.4 Measurement Procedure

### 6.4.1 Radiated Emission

1. The testing follows the Measurement Procedure of ANSI C63.10:2013.
2. The EUT was placed on a turn table with 0.8m for frequency < 1GHz and 1.5m for frequency > 1GHz above ground plan.
3. The turn table shall rotate 360 degrees to determine the position of maximum emission level.
4. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
5. Set the spectrum analyzer as RBW=120 kHz and VBW=300 kHz for Peak Detector (PK) and Quasi-peak (QP) at frequency below 1 GHz.
6. Set the spectrum analyzer as RBW=1 MHz, VBW=3 MHz for Peak Detector at frequency above 1 GHz.
7. Set the spectrum analyzer as RBW=1 MHz, VBW=10 Hz (Duty cycle > 98%) or VBW  $\geq 1/T$  (Duty cycle < 98%) for Average Detector at frequency above 1 GHz.
8. When measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna.
9. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
10. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. On spectrum, change spectrum mode in linear display mode, and reduce VBW = 10Hz if average reading is measured.
11. Repeat above procedures until all default test channel measured were complete.

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## 6.5 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

**Where** *FS* = Field Strength

*CL* = Cable Attenuation Factor (Cable Loss)

*RA* = Reading Amplitude

*AG* = Amplifier Gain

*AF* = Antenna Factor

*The limit of the emission level is expressed in dBuV/m, which converts  $20 \cdot \log(uV/m)$*

*Actual FS(dBuV/m) = SPA. Reading level(dBuV) + Factor(dB)*

*Factor(dB) = Antenna Factor(dBuV/m) + Cable Loss(dB) – Pre\_Amplifier Gain(dB)*

## 6.6 Test Results of Radiated Spurious Emissions form 9 kHz to 30 MHz

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit per 15.31(o) & RSS-GEN §6.13.2 was not reported.

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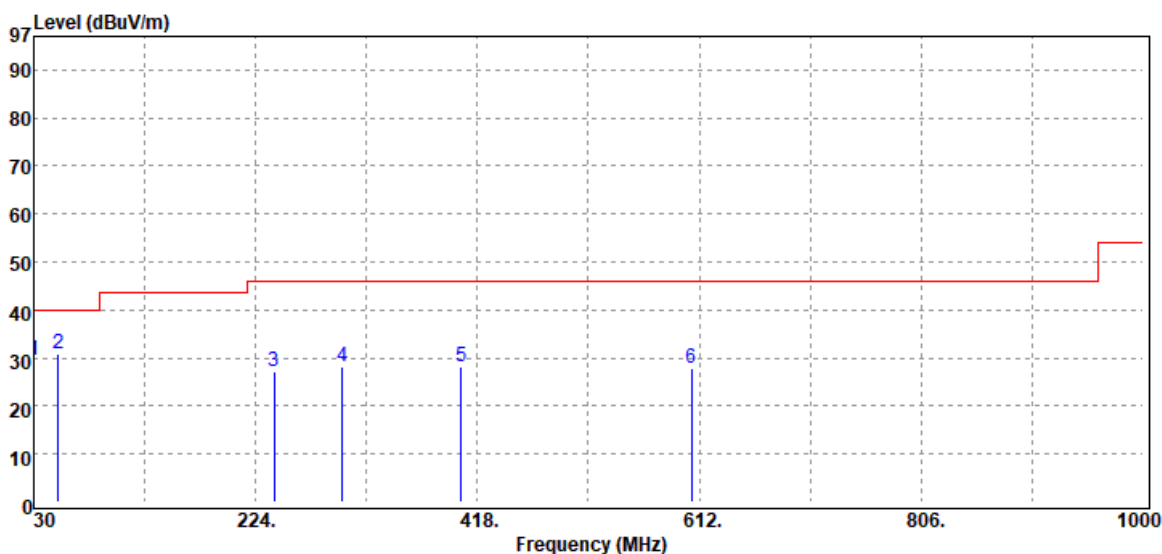
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## 6.7 Measurement Result:

### 6.7.1 Radiated Spurious Emission form 30MHz to 1000MHz:

Report Number	:ER-2021-50048	Test Site	:SAC III Chamber
Operation Mode	:BT BR	Test Date	:2021-06-08
Test Frequency	:2441 MHz	Temp./Humi.	:23.7/64
Test Mode	:Tx CH Mid	Antenna Pol.	:VERTICAL
EUT Pol	:NB Plane	Engineer	:Nick Lin



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB
30.00	QP	39.13	-9.68	29.45	40.00	-10.55
51.34	Peak	39.92	-8.89	31.03	40.00	-8.97
240.49	Peak	36.11	-9.04	27.07	46.00	-18.93
299.66	Peak	35.04	-6.69	28.35	46.00	-17.65
403.45	Peak	33.18	-4.89	28.29	46.00	-17.71
605.21	Peak	28.18	-0.16	28.02	46.00	-17.98

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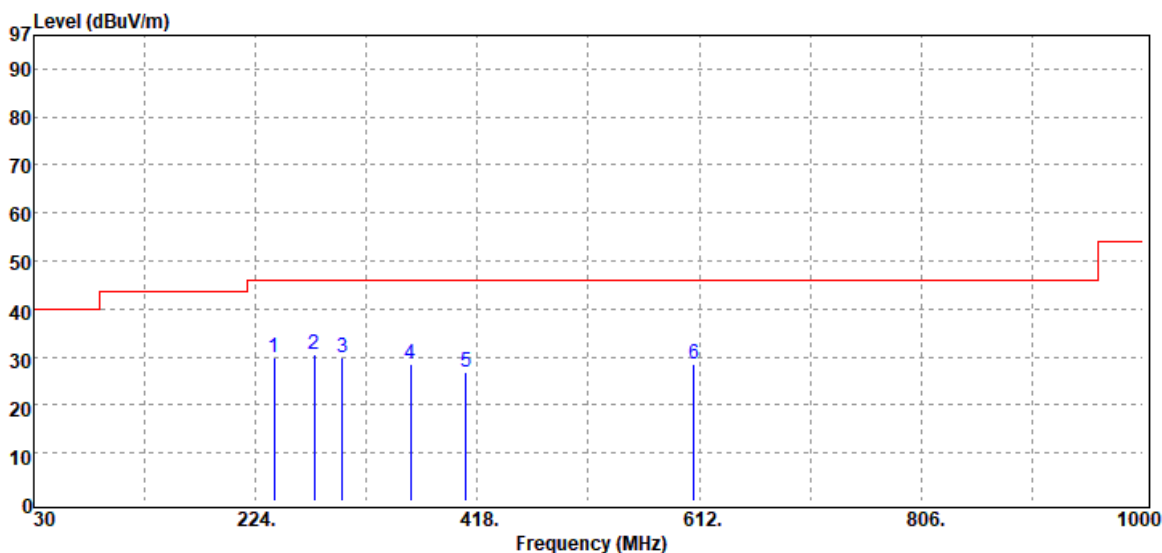
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Report Number :ER-2021-50048  
 Operation Mode :BT BR  
 Test Frequency :2441 MHz  
 Test Mode :Tx CH Mid  
 EUT Pol :NB Plane

Test Site :SAC III Chamber  
 Test Date :2021-06-08  
 Temp./Humi. :23.7/64  
 Antenna Pol. :HORIZONTAL  
 Engineer :Nick Lin



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBuV	Factor dB	Actual FS dBuV/m	Limit @3m dBuV/m	Margin dB
240.49	Peak	38.85	-9.04	29.81	46.00	-16.19
275.41	Peak	38.00	-7.41	30.59	46.00	-15.41
299.66	Peak	36.52	-6.69	29.83	46.00	-16.17
359.80	Peak	34.02	-5.64	28.38	46.00	-17.62
408.30	Peak	31.82	-4.82	27.00	46.00	-19.00
607.15	Peak	28.51	-0.06	28.45	46.00	-17.55

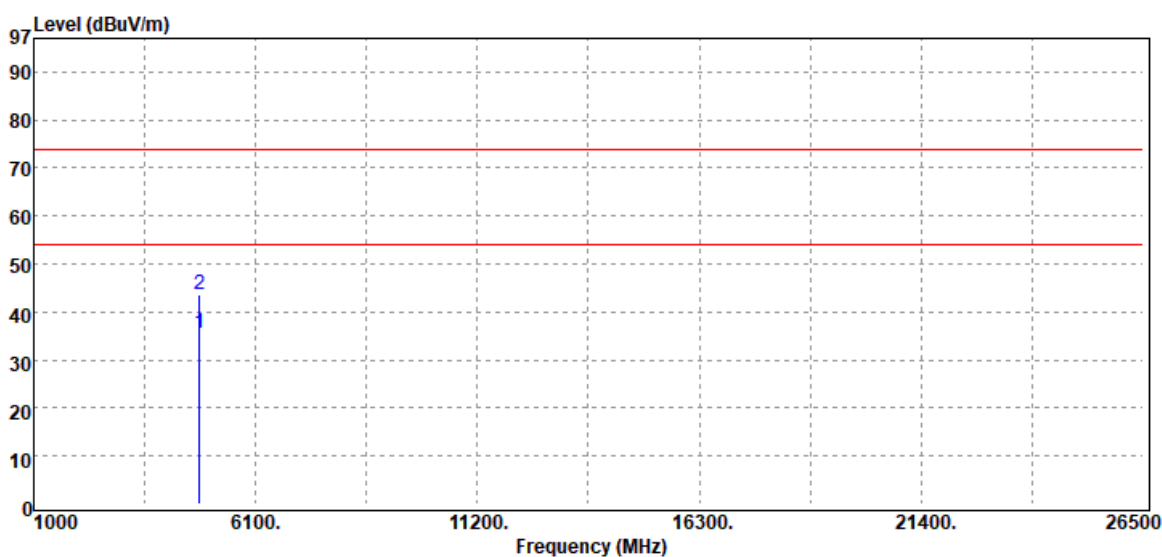
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## 6.7.2 Radiated Spurious Emission above 1 GHz:

Report Number	:ER-2021-50048	Test Site	:SAC III Chamber
Operation Mode	:BT BR	Test Date	:2021-06-08
Test Frequency	:2402 MHz	Temp./Humi.	:23.7/64
Test Mode	:Tx CH Low	Antenna Pol.	:VERTICAL
EUT Pol	:NB Plane	Engineer	:Nick Lin



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
4804.00	Average	27.98	7.48	35.46	54.00	-18.54
4804.00	Peak	36.30	7.48	43.78	74.00	-30.22

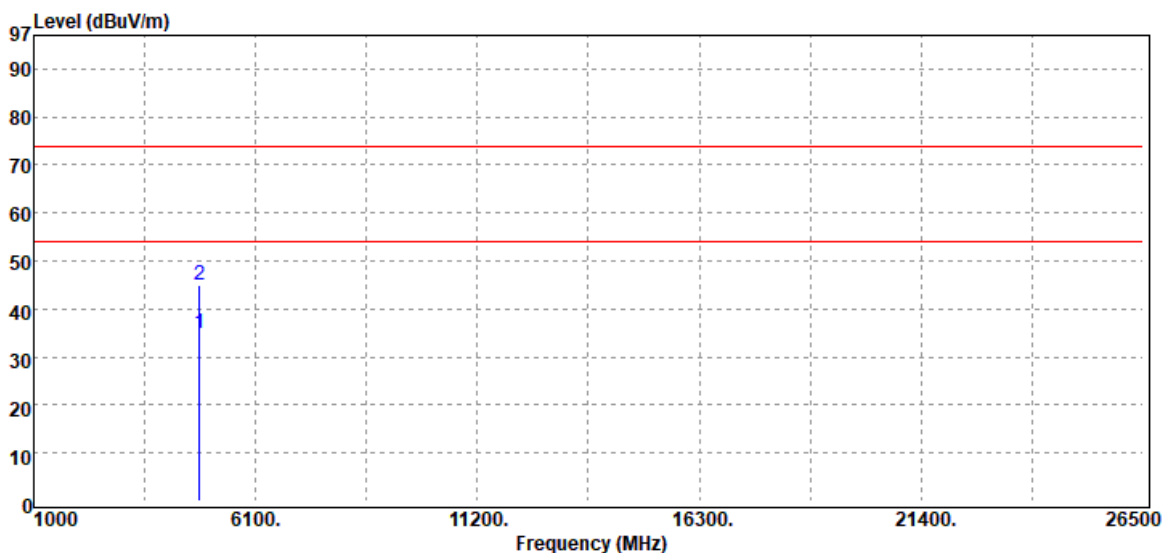
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Report Number :ER-2021-50048  
 Operation Mode :BT BR  
 Test Frequency :2402 MHz  
 Test Mode :Tx CH Low  
 EUT Pol :NB Plane

Test Site :SAC III Chamber  
 Test Date :2021-06-08  
 Temp./Humi. :23.7/64  
 Antenna Pol. :HORIZONTAL  
 Engineer :Nick Lin



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
4804.00	Average	27.49	7.48	34.97	54.00	-19.03
4804.00	Peak	37.33	7.48	44.81	74.00	-29.19

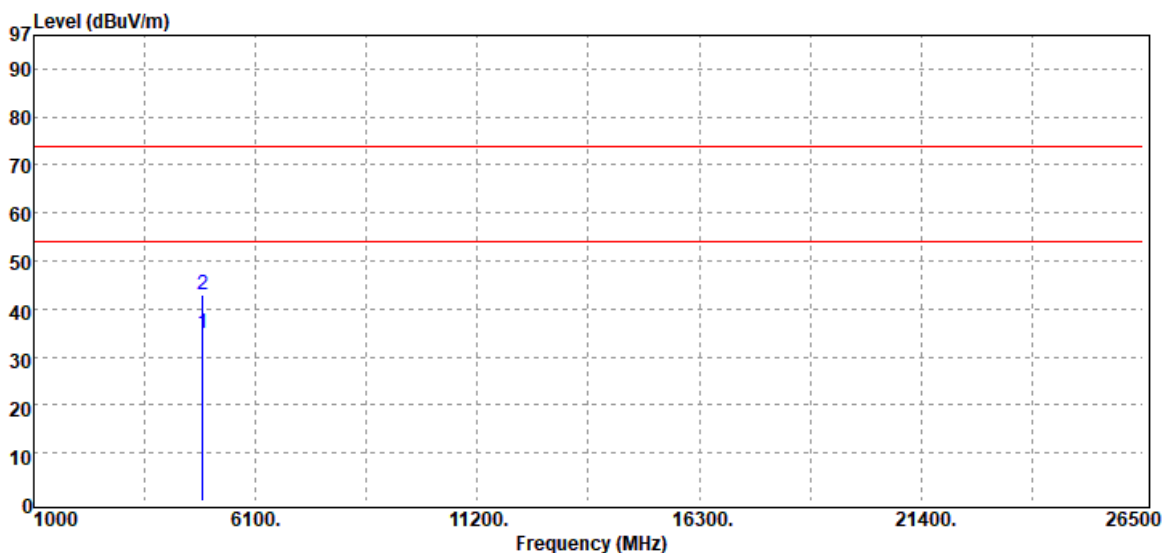
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Report Number :ER-2021-50048  
 Operation Mode :BT BR  
 Test Frequency :2441 MHz  
 Test Mode :Tx CH Mid  
 EUT Pol :NB Plane

Test Site :SAC III Chamber  
 Test Date :2021-06-08  
 Temp./Humi. :23.7/64  
 Antenna Pol. :VERTICAL  
 Engineer :Nick Lin



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
4882.00	Average	27.99	7.03	35.02	54.00	-18.98
4882.00	Peak	35.93	7.03	42.96	74.00	-31.04

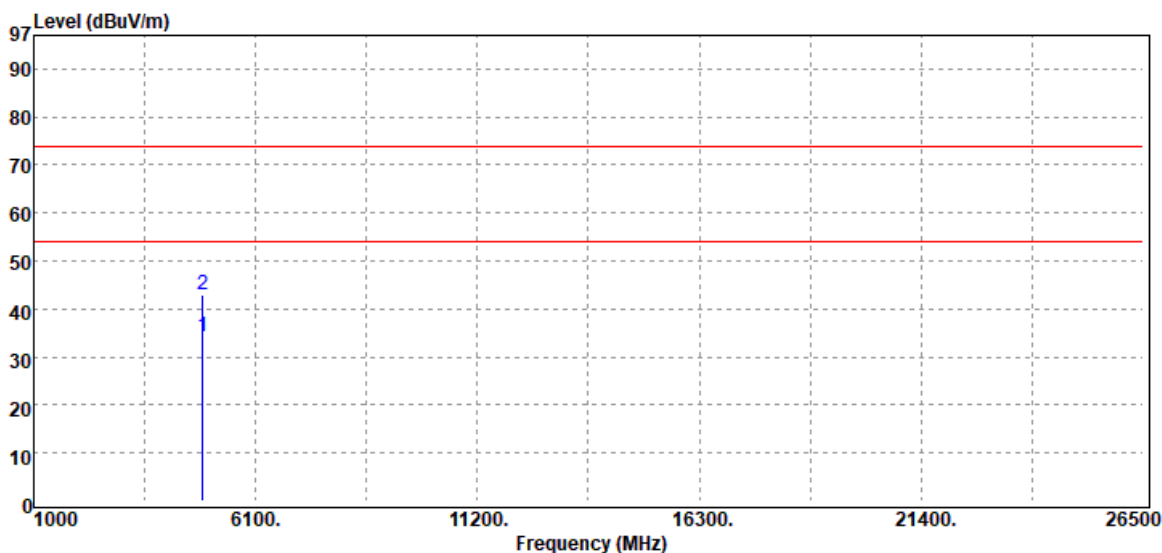
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Report Number :ER-2021-50048  
 Operation Mode :BT BR  
 Test Frequency :2441 MHz  
 Test Mode :Tx CH Mid  
 EUT Pol :NB Plane

Test Site :SAC III Chamber  
 Test Date :2021-06-08  
 Temp./Humi. :23.7/64  
 Antenna Pol. :HORIZONTAL  
 Engineer :Nick Lin



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBUV	Factor dB	Actual FS dBUV/m	Limit @3m dBUV/m	Margin dB
4882.00	Average	27.22	7.03	34.25	54.00	-19.75
4882.00	Peak	36.00	7.03	43.03	74.00	-30.97

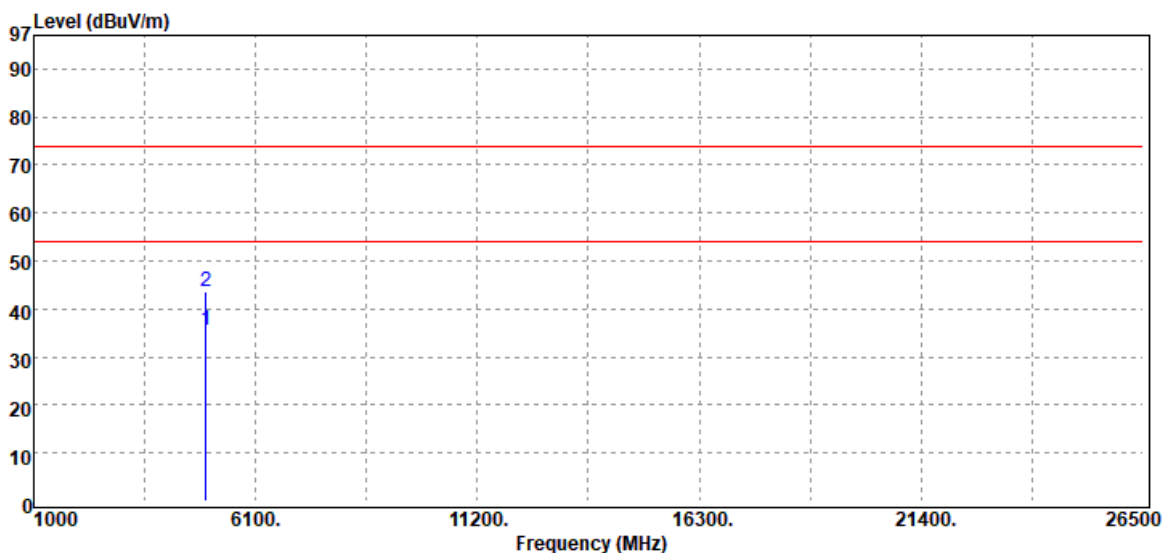
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Report Number :ER-2021-50048  
 Operation Mode :BT BR  
 Test Frequency :2480 MHz  
 Test Mode :Tx CH High  
 EUT Pol :NB Plane

Test Site :SAC III Chamber  
 Test Date :2021-06-08  
 Temp./Humi. :23.7/64  
 Antenna Pol. :VERTICAL  
 Engineer :Nick Lin



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
4960.00	Average	28.31	7.40	35.71	54.00	-18.29
4960.00	Peak	36.36	7.40	43.76	74.00	-30.24

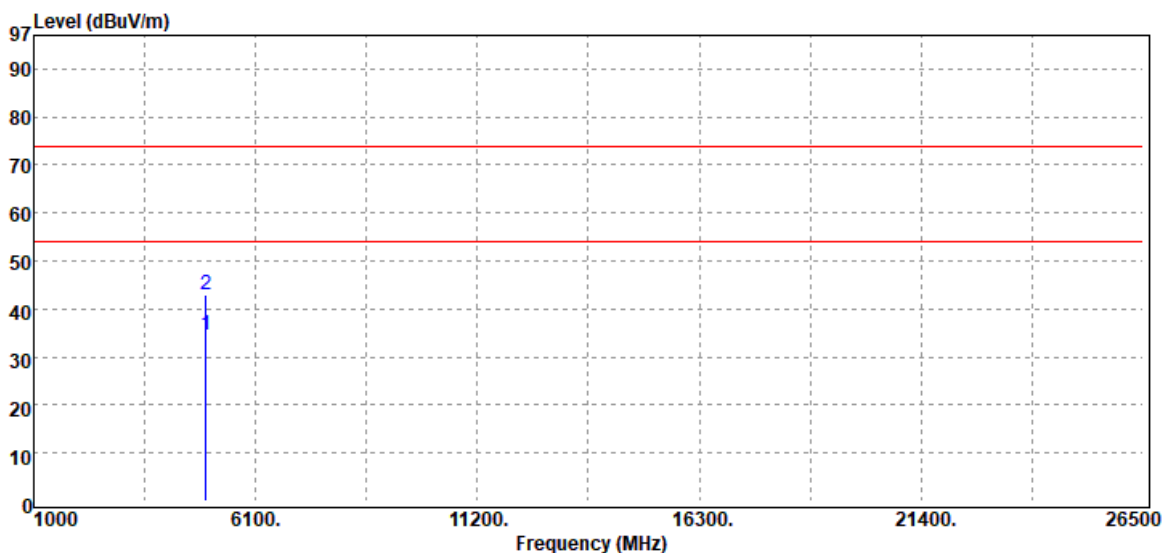
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Report Number :ER-2021-50048  
 Operation Mode :BT BR  
 Test Frequency :2480 MHz  
 Test Mode :Tx CH High  
 EUT Pol :NB Plane

Test Site :SAC III Chamber  
 Test Date :2021-06-08  
 Temp./Humi. :23.7/64  
 Antenna Pol. :HORIZONTAL  
 Engineer :Nick Lin



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBUV	Factor dB	Actual FS dBUV/m	Limit @3m dBUV/m	Margin dB
4960.00	Average	27.22	7.40	34.62	54.00	-19.38
4960.00	Peak	35.68	7.40	43.08	74.00	-30.92

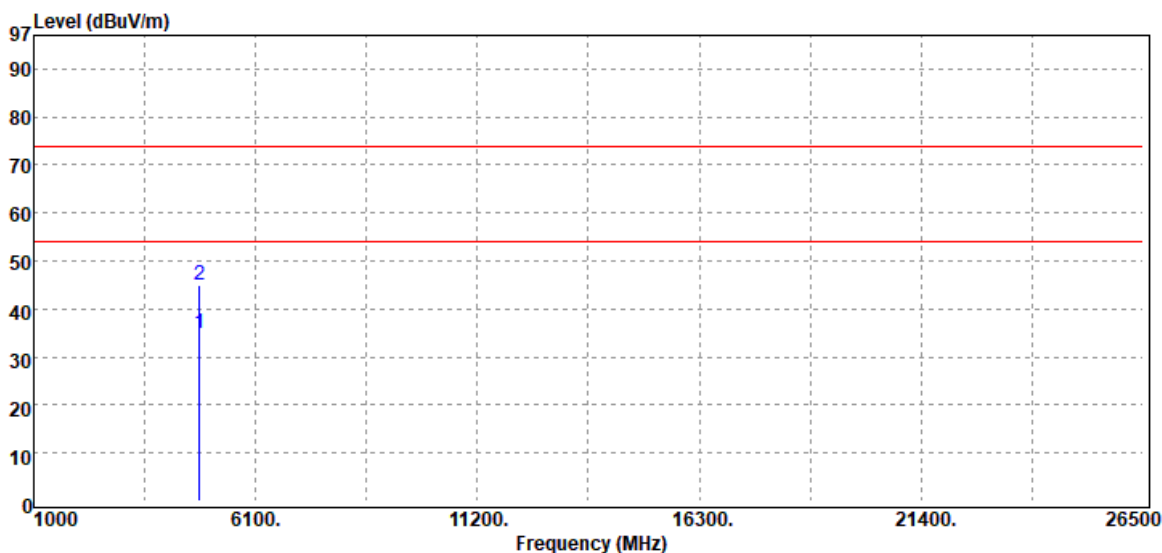
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Report Number :ER-2021-50048  
 Operation Mode :BT EDR  
 Test Frequency :2402 MHz  
 Test Mode :Tx CH Low  
 EUT Pol :NB Plane

Test Site :SAC III Chamber  
 Test Date :2021-06-08  
 Temp./Humi. :23.7/64  
 Antenna Pol. :VERTICAL  
 Engineer :Nick Lin



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
4804.00	Average	27.58	7.48	35.06	54.00	-18.94
4804.00	Peak	37.49	7.48	44.97	74.00	-29.03

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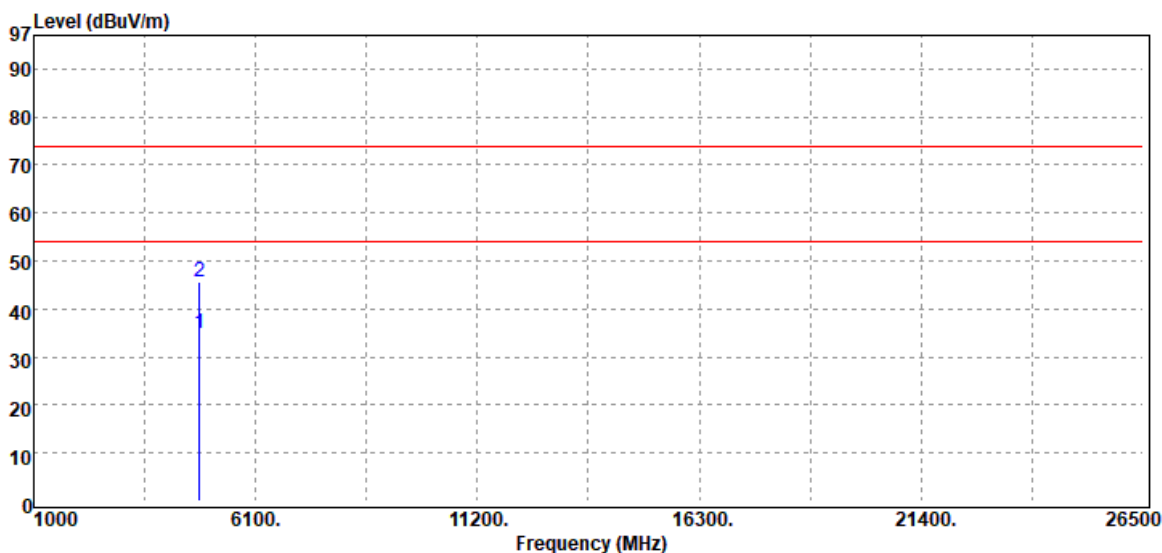
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Report Number :ER-2021-50048  
 Operation Mode :BT EDR  
 Test Frequency :2402 MHz  
 Test Mode :Tx CH Low  
 EUT Pol :NB Plane

Test Site :SAC III Chamber  
 Test Date :2021-06-08  
 Temp./Humi. :23.7/64  
 Antenna Pol. :HORIZONTAL  
 Engineer :Nick Lin



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
4804.00	Average	27.31	7.48	34.79	54.00	-19.21
4804.00	Peak	38.19	7.48	45.67	74.00	-28.33

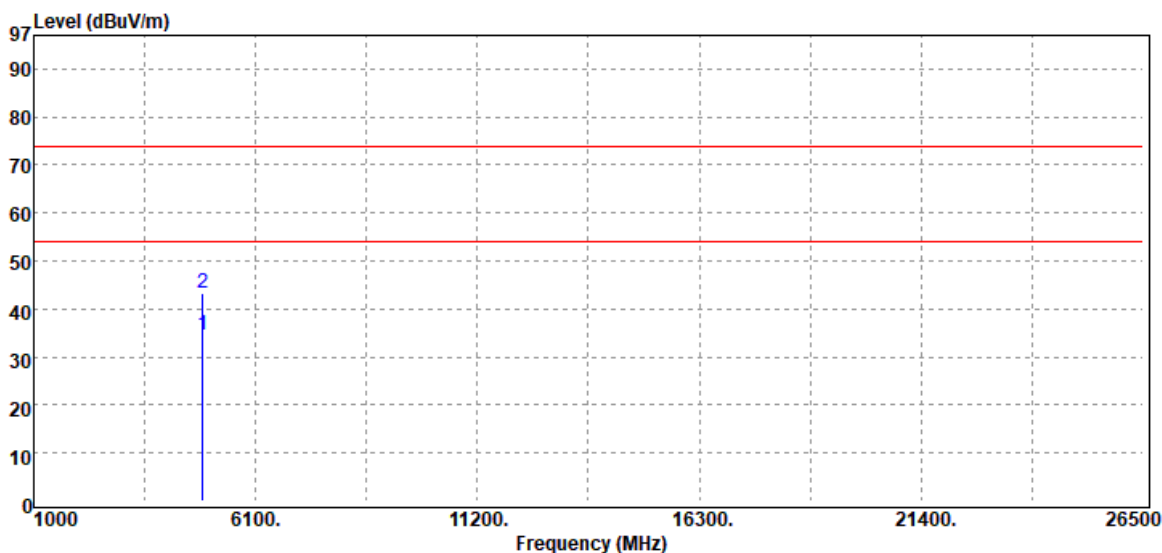
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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Report Number :ER-2021-50048  
 Operation Mode :BT EDR  
 Test Frequency :2441 MHz  
 Test Mode :Tx CH Mid  
 EUT Pol :NB Plane

Test Site :SAC III Chamber  
 Test Date :2021-06-08  
 Temp./Humi. :23.7/64  
 Antenna Pol. :VERTICAL  
 Engineer :Nick Lin



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
4882.00	Average	27.51	7.03	34.54	54.00	-19.46
4882.00	Peak	36.13	7.03	43.16	74.00	-30.84

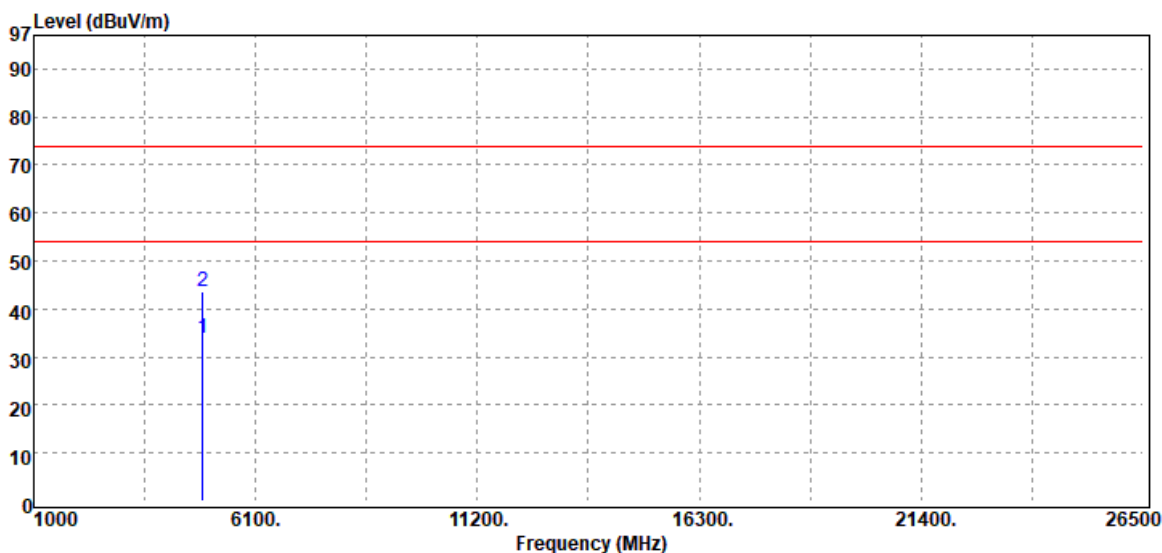
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Report Number :ER-2021-50048  
 Operation Mode :BT EDR  
 Test Frequency :2441 MHz  
 Test Mode :Tx CH Mid  
 EUT Pol :NB Plane

Test Site :SAC III Chamber  
 Test Date :2021-06-08  
 Temp./Humi. :23.7/64  
 Antenna Pol. :HORIZONTAL  
 Engineer :Nick Lin



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBUV	Factor dB	Actual FS dBUV/m	Limit @3m dBUV/m	Margin dB
4882.00	Average	26.88	7.03	33.91	54.00	-20.09
4882.00	Peak	36.69	7.03	43.72	74.00	-30.28

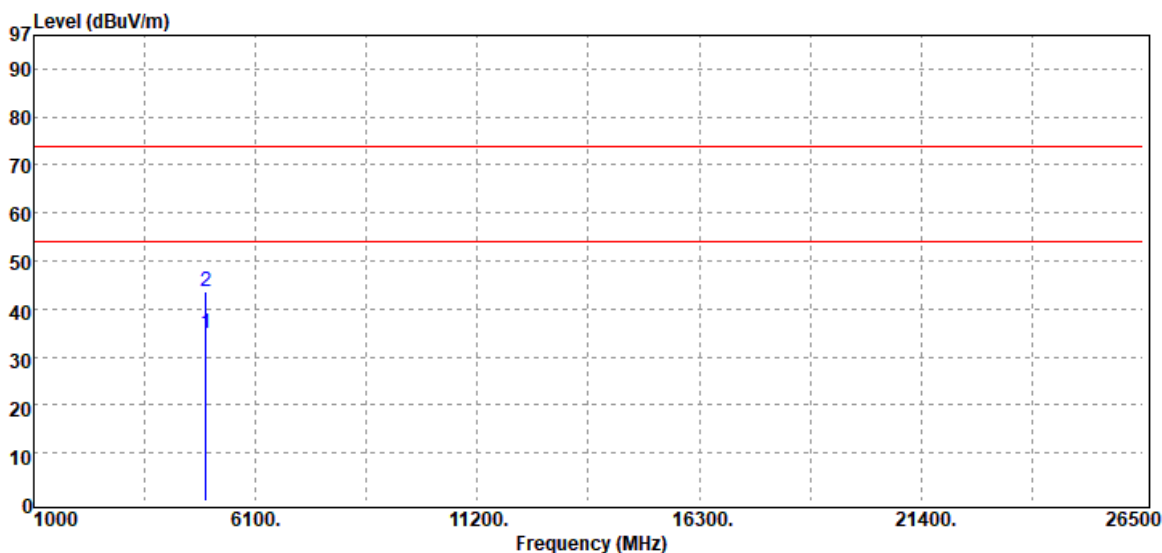
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Report Number :ER-2021-50048  
 Operation Mode :BT EDR  
 Test Frequency :2480 MHz  
 Test Mode :Tx CH High  
 EUT Pol :NB Plane

Test Site :SAC III Chamber  
 Test Date :2021-06-08  
 Temp./Humi. :23.7/64  
 Antenna Pol. :VERTICAL  
 Engineer :Nick Lin



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
4960.00	Average	27.64	7.40	35.04	54.00	-18.96
4960.00	Peak	36.13	7.40	43.53	74.00	-30.47

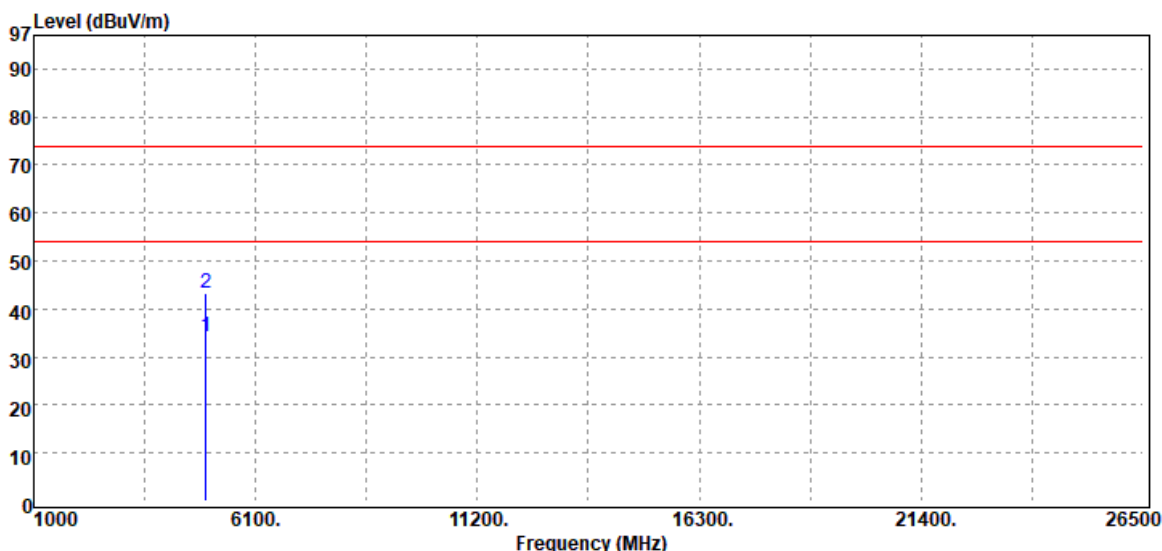
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Report Number :ER-2021-50048  
 Operation Mode :BT EDR  
 Test Frequency :2480 MHz  
 Test Mode :Tx CH High  
 EUT Pol :NB Plane

Test Site :SAC III Chamber  
 Test Date :2021-06-08  
 Temp./Humi. :23.7/64  
 Antenna Pol. :HORIZONTAL  
 Engineer :Nick Lin



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dB $\mu$ V	Factor dB	Actual FS dB $\mu$ V/m	Limit @3m dB $\mu$ V/m	Margin dB
4960.00	Average	26.75	7.40	34.15	54.00	-19.85
4960.00	Peak	35.79	7.40	43.19	74.00	-30.81

**~ End of Report ~**

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