

**ELECTROMAGNETIC EMISSIONS  
COMPLIANCE REPORT**

**Applicant:** Samsara, Inc.  
1 De Haro Street, San Francisco, CA, 94107, USA

**Manufacturer:** Jabil Circuit de Mexico, S. de R.L. de C.V.  
Av Guadalupe 420-A Guadalajara Technology Park, Carretera  
a Nogales Km 13.5, Zapopan, Jal, 45010. MEXICO

**Product Name:** AT11

**Brand Name:** Samsara

**Model No.:** 030-00007

**Report Number:** TERF2409002578E2

**FCC ID** 2AIHD-AT11

**Date of EUT Received:** September 3, 2024

**Date of Test:** September 4, 2024 ~ September 5, 2024

**Issue Date:** September 30, 2024

**Approved By****Arno Hsieh****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 comply with FCC rule part §15.247.

The results of this report relate only to the sample identified in this report.

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## Revision History

Report Number	Revision	Description	Issue Date	Revised By	Remark
TERF2409002578E2	00	C2PC for Changing L6, C35 & C36 Inductance and Antenna gain	September 30, 2024	Yuri Tsai	

**Note:**

- 1、The remark "\*" indicates modification of the report upon requests from certification body.
- 2、This is an addendum test report reference to the test report *TERF2405001260E2*.

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## 1 GENERAL INFORMATION

### 1.1 Product Description

Product Name:	AT11
Brand Name:	Samsara
Model No.:	030-00007
Hardware Version:	01-01:02
Firmware Version:	v105.12.1398
EUT Series No.:	GAVR-X6R-YMW
Power Supply:	3Vdc
Test Software (Name/Version)	PuTTY 0.76

### 1.2 RF Specification

Radio Technology:	BLE
Frequency Range:	2402 – 2480MHz
Channel number:	40 channels
Modulation type:	GFSK

### 1.3 Antenna Designation

Antenna Type	Freq. (MHz)	Peak Antenna Gain (dBi)
Planar inverted-F	2.4GHz	0.9

**Note:**

1. Antenna information is provided by the applicant.

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## 1.4 Test Methodology of Applied Standards

FCC Part 15, Subpart C §15.247

FCC KDB 558074 D01 15.247 Meas Guidance v05r02

ANSI C63.10:2013

## 1.5 Test Facility

Laboratory	Test Site Address	Test Site Name	FCC Designa- tion 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 2		
		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 C	TW0028	
		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.

## 1.6 Special Accessories

There are no special accessories used while test was conducted.

## 1.7 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.

### 2.4 Measurement Results Explanation Example

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

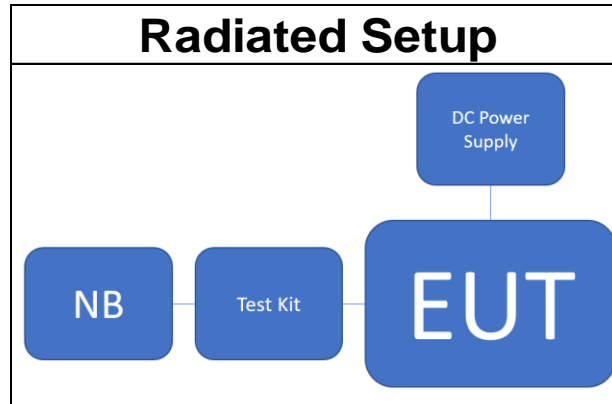
Radiated emission below 30MHz is measured in a 9m\*6m\*6m semi-anechoic chamber, the measurements correspond to those obtained at an open-field test site.

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

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## 2.5 Test Configuration



## 2.6 Control Unit(s)

Radiated Emission Test Site: SAC C					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
Test Kit	mercury electronics	MCS-73LV	N/A	N/A	N/A
Notebook	Lenovo	T470	P0001293	N/A	N/A

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### 3 SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§15.247(d) §15.209	Radiated Band Edge and Spurious Emission	Compliant

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## 4 DESCRIPTION OF TEST MODES

### 4.1 Operating Frequencies

2400~2483.5 MHz							
CH	Freq. (MHz)	CH	Freq. (MHz)	CH	Freq. (MHz)	CH	Freq. (MHz)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

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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. The field strength of radiation emission was measured as the EUT positioned in different orthogonal planes (E1/E2/H) based on actual usage of the EUT to pre-scan the emissions for determining the worst case scenario.
4. Investigation has been done on all the possible configurations for searching the worst case.

TRANSMIT RADIATED EMISSION TEST (BELOW 1 GHz)				
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
Bluetooth LE	0 to 39	20	GFSK	1
TRANSMIT RADIATED EMISSION TEST (ABOVE 1 GHz)				
MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
Bluetooth LE	0 to 39	0,20,39	GFSK	1

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## 5 MEASUREMENT UNCERTAINTY

Test Items	Uncertainty
AC Power Line Conducted Emission	+/- 1.54 dB
Output Power measurement	+/- 0.97 dB
Emission Bandwidth	+/- 1.38 Hz
Conducted emission measurement	+/- 0.77 dB
Peak Power Density	+/- 0.61 dB
Temperature	+/- 0.6 °C
Humidity	+/- 3 %
DC / AC Power Source	+/- 1 %

Radiated Spurious Emission Measurement Uncertainty				
Polarization: Vertical	+/-	1.89	dB	9kHz~30MHz
	+/-	4.15	dB	30MHz - 1000MHz
	+/-	3.43	dB	1GHz - 18GHz
	+/-	3.86	dB	18GHz - 40GHz
Polarization: Horizontal	+/-	1.89	dB	9kHz~30MHz
	+/-	4.02	dB	30MHz - 1000MHz
	+/-	3.43	dB	1GHz - 18GHz
	+/-	3.86	dB	18GHz - 40GHz
Radiated Spurious Emission	+/-	2	dB	33GHz-50GHz
	+/-	1.59	dB	50GHz-60GHz
	+/-	1.7	dB	60GHz-90GHz
	+/-	1.64	dB	90GHz-140GHz
	+/-	3.83	dB	140GHz-220GHz

### 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 MEASUREMENT EQUIPMENT USED

### 6.1 Radiated Measurement

Radiated Emission Test Site: SAC C					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
3m Site NSA	SGS	966 chamber C	N/A	03/02/2024	03/01/2025
Active Loop Antenna	COM-POWER	AL-130R	10160105	12/04/2023	12/03/2024
Attenuator	Woken	WATT-218FS-10	RF17	11/15/2023	11/14/2024
Band Rejection Filter	K&L	3TNF-800/1000-0.2-N/N	RF184	11/15/2023	11/14/2024
Band Rejection Filter	Micro Tronics	BRM50701-01	RF201	11/15/2023	11/14/2024
Broadband Antenna	SCHWARZBECK	VULB 9168	9168-300	11/02/2023	11/01/2024
Coaxial Cable	Huber+Suhner	EMC106-SM-SM-9100	150704	11/15/2023	11/14/2024
Coaxial Cable	Huber+Suhner	RG 214/U	W22.03	11/15/2023	11/14/2024
Coaxial Cable	Huber+Suhner	SUCOFLEX 104	MY17388/4	11/15/2023	11/14/2024
DC Power Supply	HOLA	DP-3003	D7070035	06/14/2024	06/13/2025
EMI Test Receiver	R&S	ESU 40	100363	04/30/2024	04/29/2025
High Pass Filter	Titan Microwave	T04H86002600060S01	210619-2-8	11/15/2023	11/14/2024
Horn Antenna	Schwarzbeck	BBHA9120D	1187	01/24/2024	01/23/2025
Horn Antenna	Schwarzbeck	BBHA9170	185	08/15/2024	08/14/2025
Lowpass Filter	Woken	EWT-56-0019	RF173	11/15/2023	11/14/2024
Pre-Amplifier	EMC Instruments	EMC118A45SE	980789	11/15/2023	11/14/2024
Pre-Amplifier	EMC Instruments	EMC18405SEE	980881	11/15/2023	11/14/2024
Pre-Amplifier	EMC Instruments	EMC330	980096	11/15/2023	11/14/2024
Spectrum Analyzer	KEYSIGHT	N9010B	MY63440390	02/16/2024	02/15/2025
Test Software	audix	e3	E3 20923 SGS Ver.9 (C)	N.C.R	N.C.R

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

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## 7 RADIATED BANDEDGE AND SPURIOUS EMISSION MEASUREMENT

### Spurious Emission

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 limit as below.

And according to §15.33(a) (1) 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

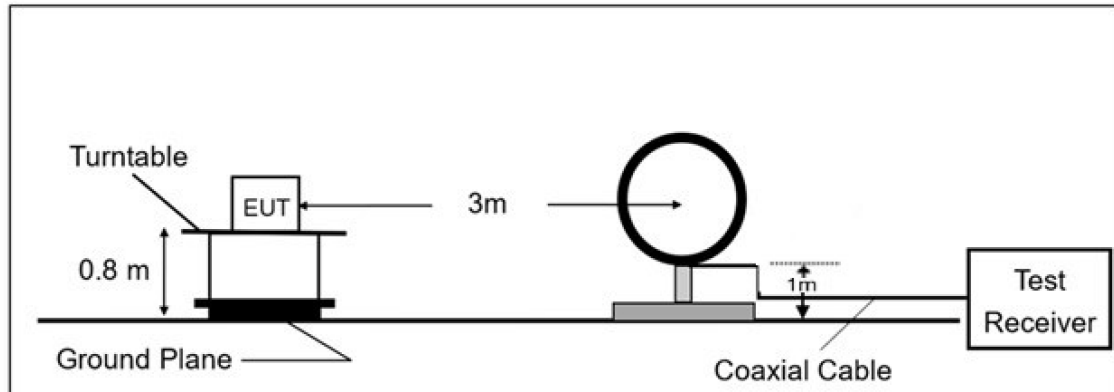
**Note:** The lower limit shall apply at the transition frequencies.

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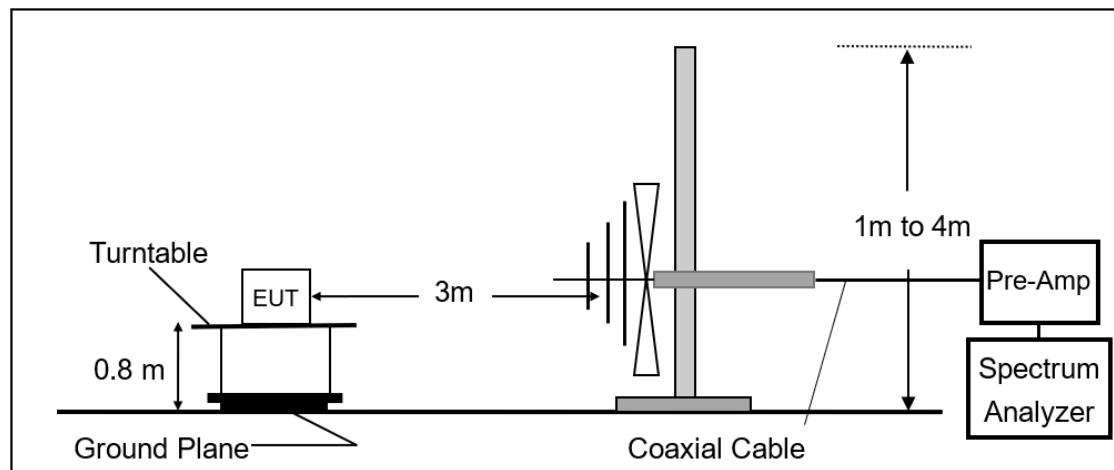
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## 7.1 Test Setup

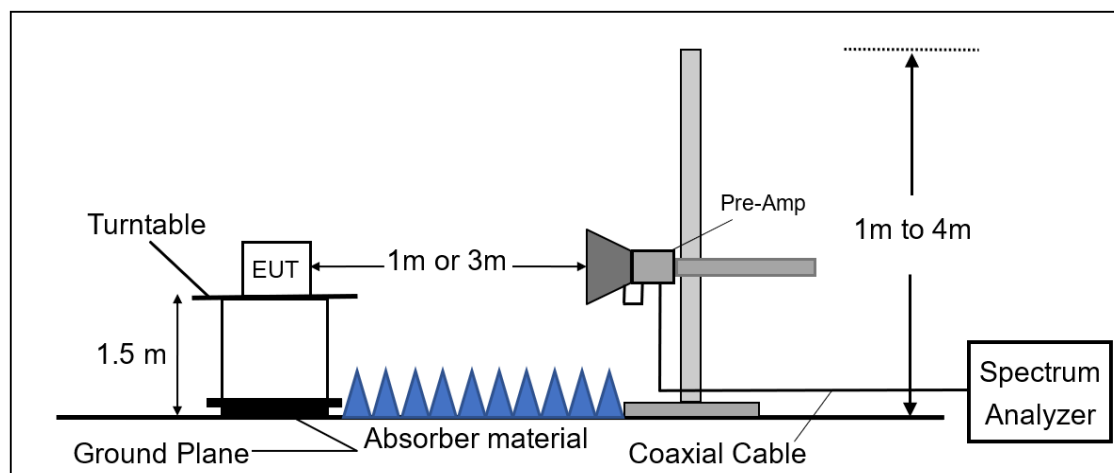
### (A) Radiated Emission Test Set-Up, Frequency Below 30MHz.



### (B) Radiated Emission Test Set-Up, Frequency From 30MHz to 1000MHz.



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



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## 7.2 Measurement Procedure

1. The testing follows the Measurement Procedure of FCC KDB 558074 D01 DTS Meas. Guidance.
2. The EUT was placed on a turn table with 0.8m for frequency < 1GHz and 1.5m for frequency > 1GHz above ground plane.
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=100 kHz and VBW=300 kHz for Peak Detector (PK) at frequency between 30MHz and 1 GHz.
6. Use receiver mode as RBW=120 kHz for Quasi-peak (QP) at frequency between 30MHz and 1 GHz.
7. Set the spectrum analyzer as RBW=1 MHz, VBW=3 MHz for Maximum Emission Measurements at frequency above 1 GHz.
8. Set the spectrum analyzer as RBW=1 MHz, VBW=10 Hz (Duty cycle > 98%) or VBW ≥ 1/T (Duty cycle < 98%) for Average Emission Measurements at frequency above 1 GHz.
9. 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.
10. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
11. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
12. Repeat above procedures until all default test channel measured were complete.

## 7.3 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  
*RA* = Reading Amplitude  
*AF* = Antenna Factor

*CL* = Cable Attenuation Factor (Cable Loss)  
*AG* = Amplifier Gain

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

$Actual\ FS(dB\mu V/m) = SPA.\ Reading\ level(dB\mu V) + Factor(dB)$

$Factor(dB) = Antenna\ Factor(dB\mu V/m) + Cable\ Loss(dB) - Pre\_Amplifier\ Gain(dB)$

#### 7.4 Test Results of Radiated Spurious Emissions from 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) was not reported.

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SGS Taiwan Ltd.

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## 7.4.1 Radiated Band Edge Measurement Result

Report Number :TERF2409002578E2

Test Site :SAC C

Operation Mode :BLE 1M

Test Date :2024-09-05

Test Frequency :2402 MHz

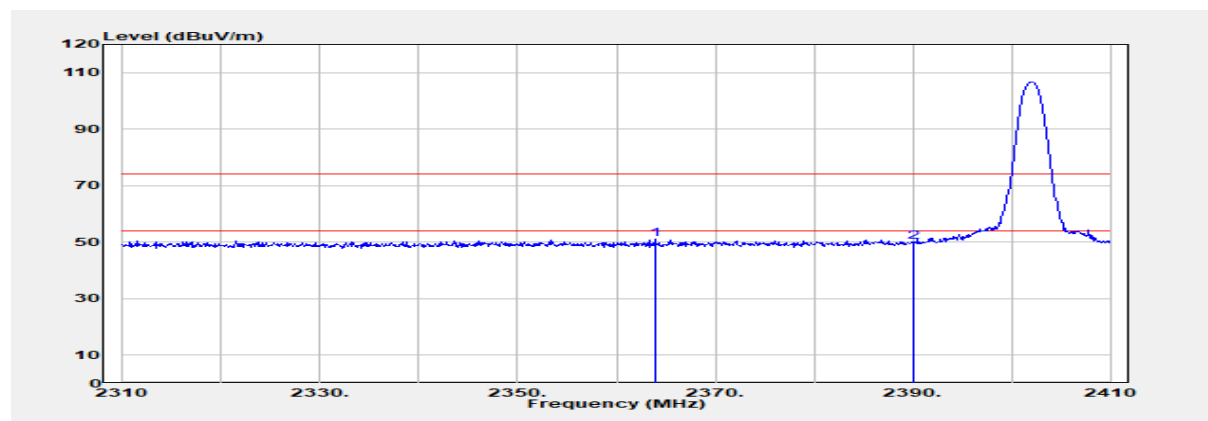
Temp./Humi. :22.2°C/54%

Test Mode :Bandedge

Antenna Pol. :Vertical

EUT Pol :E2 Plane

Engineer :Alex Li



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
2363.900	Peak	55.25	-4.03	51.21	74.00	-22.79
2390.000	Peak	54.46	-4.25	50.21	74.00	-23.79

Freq. MHz	Detector Mode AV	Peak Actual FS (dB $\mu$ V/m)	Duty Cycle Factor (dB)	Average Value (dB $\mu$ V/m)	Average Limit@3m (dB $\mu$ V/m)	Margin (dB)
2363.900	Average	51.21	-47.96	3.25	54.00	-50.75
2390.000	Average	50.21	-47.96	2.25	54.00	-51.75

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Report Number :TERF2409002578E2

Test Site :SAC C

Operation Mode :BLE 1M

Test Date :2024-09-05

Test Frequency :2402 MHz

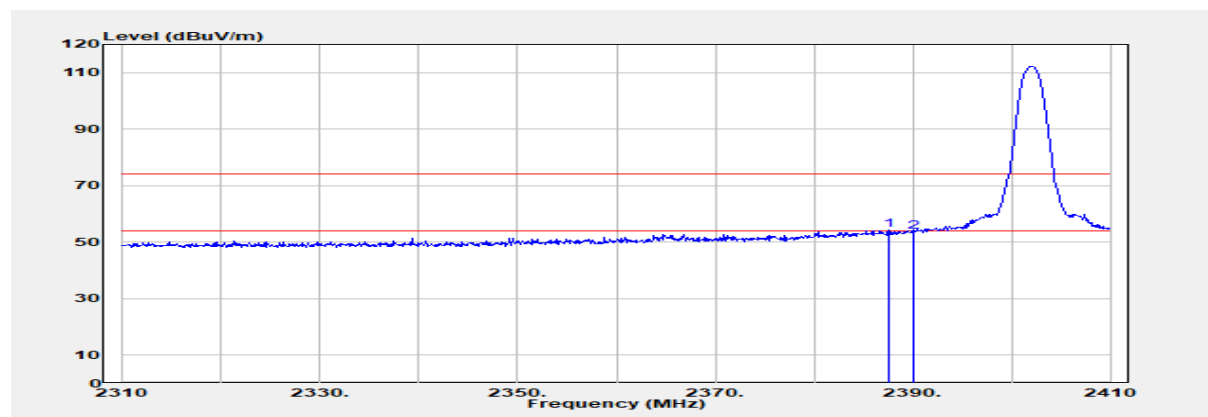
Temp./Humi. :22.2°C/54%

Test Mode :Bandedge

Antenna Pol. :Horizontal

EUT Pol :E2 Plane

Engineer :Alex Li



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
2387.600	Peak	58.55	-4.23	54.32	74.00	-19.68
2390.000	Peak	57.91	-4.25	53.66	74.00	-20.34

Freq. MHz	Detector Mode AV	Peak Actual FS (dB $\mu$ V/m)	Duty Cycle Factor (dB)	Average Value (dBuV/m)	Average Limit@3m (dBuV/m)	Margin (dB)
2387.600	Average	54.32	-47.96	6.36	54.00	-47.64
2390.000	Average	53.66	-47.96	5.70	54.00	-48.30

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Report Number :TERF2409002578E2

Test Site :SAC C

Operation Mode :BLE 1M

Test Date :2024-09-05

Test Frequency :2480 MHz

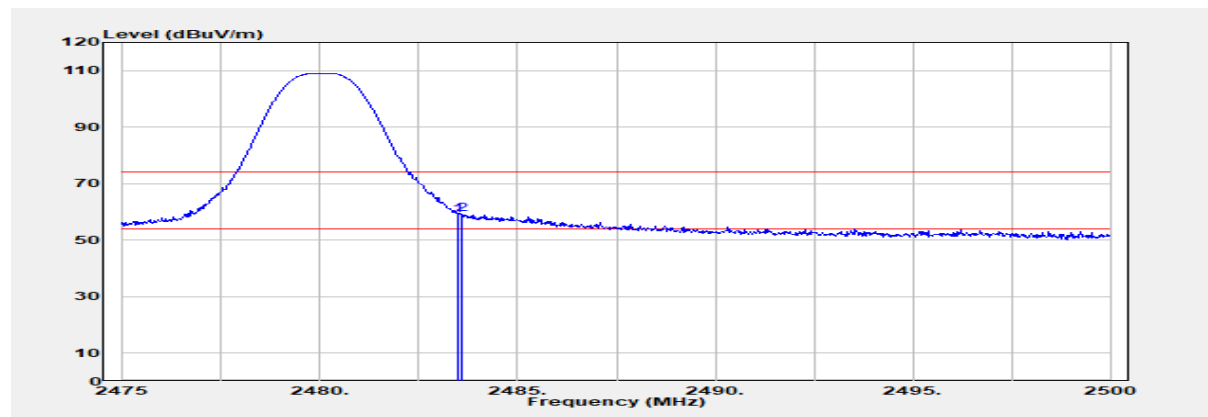
Temp./Humi. :22.2°C/54%

Test Mode :Bandedge

Antenna Pol. :Vertical

EUT Pol :E2 Plane

Engineer :Alex Li



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
2483.500	Peak	62.80	-3.82	58.98	74.00	-15.02
2483.600	Peak	62.87	-3.82	59.05	74.00	-14.95

Freq. MHz	Detector Mode AV	Peak Actual FS (dB $\mu$ V/m)	Duty Cycle Factor (dB)	Average Value (dBuV/m)	Average Limit@3m (dBuV/m)	Margin (dB)
2483.500	Average	58.98	-47.96	11.02	54.00	-42.98
2483.600	Average	59.05	-47.96	11.09	54.00	-42.91

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Report Number :TERF2409002578E2

Test Site :SAC C

Operation Mode :BLE 1M

Test Date :2024-09-05

Test Frequency :2480 MHz

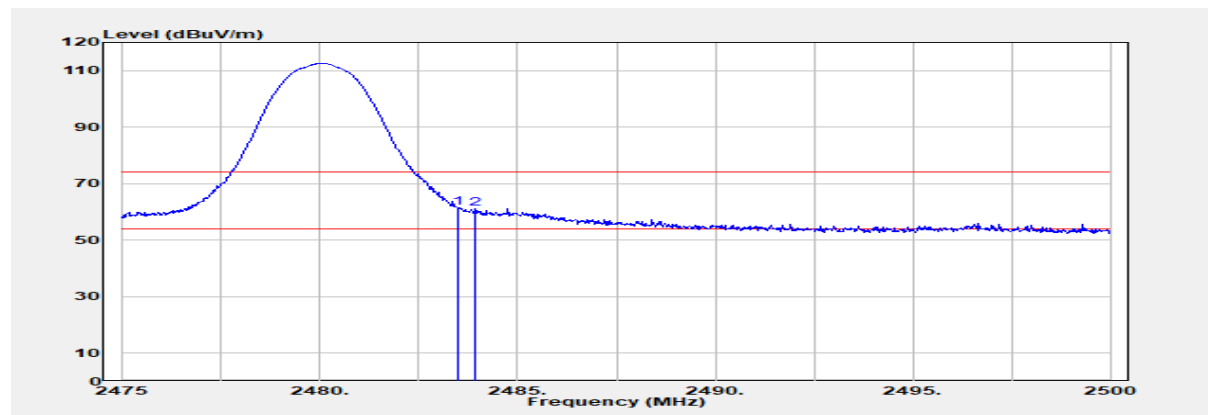
Temp./Humi. :22.2°C/54%

Test Mode :Bandedge

Antenna Pol. :Horizontal

EUT Pol :E2 Plane

Engineer :Alex Li



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
2483.500	Peak	65.34	-3.82	61.52	74.00	-12.48
2483.925	Peak	65.09	-3.82	61.27	74.00	-12.73

Freq. MHz	Detector Mode AV	Peak Actual FS (dBμV/m)	Duty Cycle Factor (dB)	Average Value (dBuV/m)	Average Limit@3m (dBuV/m)	Margin (dB)
2483.500	Average	61.52	-47.96	13.56	54.00	-40.44
2483.925	Average	61.27	-47.96	13.31	54.00	-40.69

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## 7.4.2 Radiated Spurious Emission

Report Number :TERF2409002578E2

Test Site :SAC C

Operation Mode :BLE 1M

Test Date :2024-09-05

Test Frequency :2442 MHz

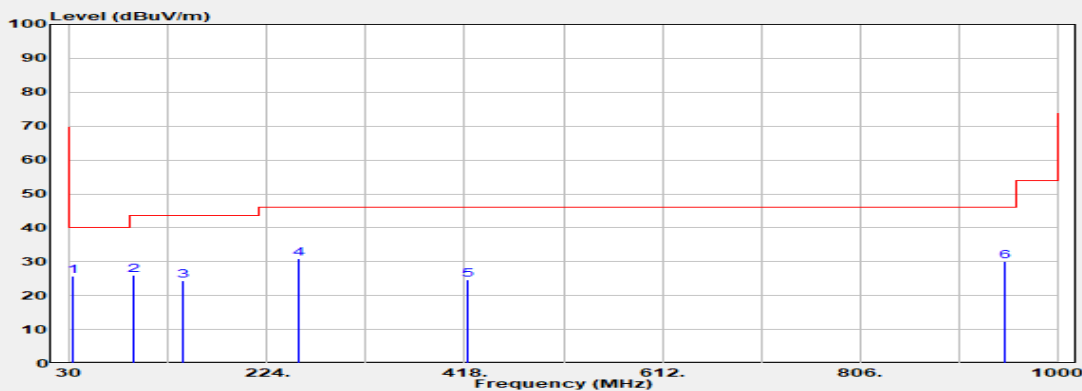
Temp./Humi. :22.2°C/54%

Test Mode :Tx

Antenna Pol. :Vertical

EUT Pol :E2 Plane

Engineer :Alex Li



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
33.880	QP	43.20	-17.37	25.83	40.00	-14.17
92.080	Peak	47.56	-21.48	26.08	43.50	-17.42
140.580	Peak	41.05	-16.57	24.48	43.50	-19.02
255.040	Peak	47.83	-16.82	31.01	46.00	-14.99
420.910	Peak	35.68	-11.12	24.56	46.00	-21.44
948.590	Peak	31.31	-1.19	30.13	46.00	-15.87

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Report Number :TERF2409002578E2

Test Site :SAC C

Operation Mode :BLE 1M

Test Date :2024-09-05

Test Frequency :2442 MHz

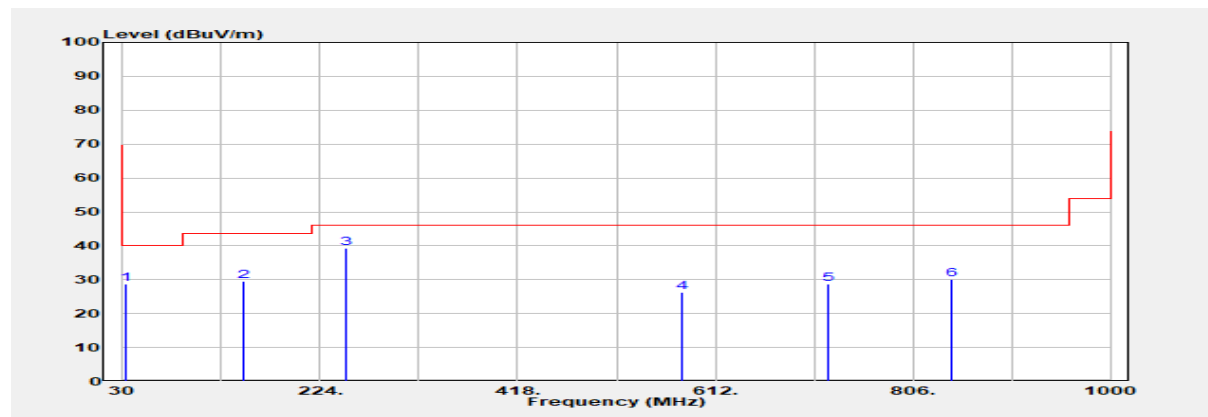
Temp./Humi. :22.2°C/54%

Test Mode :Tx

Antenna Pol. :Horizontal

EUT Pol :E2 Plane

Engineer :Alex Li



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
33.880	Peak	46.11	-17.37	28.74	40.00	-11.26
148.340	Peak	45.41	-15.74	29.66	43.50	-13.84
250.190	Peak	56.22	-16.86	39.36	46.00	-6.64
579.020	Peak	33.78	-7.55	26.23	46.00	-19.77
722.580	Peak	33.57	-4.78	28.79	46.00	-17.21
844.800	Peak	32.45	-2.50	29.96	46.00	-16.04

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Report Number :TERF2409002578E2

Test Site :SAC C

Operation Mode :BLE 1M

Test Date :2024-09-05

Test Frequency :2402 MHz

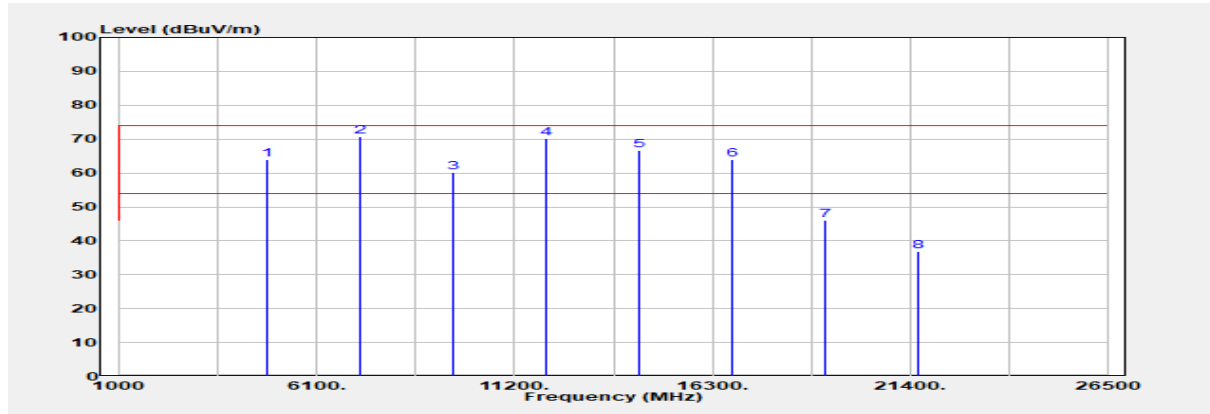
Temp./Humi. :22.2°C/54%

Test Mode :Tx

Antenna Pol. :Vertical

EUT Pol :E2 Plane

Engineer :Alex Li



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
4804.000	Peak	63.19	0.66	63.85	74.00	-10.15
7206.000	Peak	63.74	6.89	70.64	74.00	-3.36
9608.000	Peak	52.13	8.06	60.19	74.00	-13.81
12010.000	Peak	62.68	7.59	70.27	74.00	-3.73
14412.000	Peak	57.19	9.57	66.76	74.00	-7.24
16814.000	Peak	55.45	8.51	63.96	74.00	-10.04
19216.000	Peak	48.46	-2.48	45.98	74.00	-28.02
21618.000	Peak	37.75	-0.86	36.88	74.00	-37.12

Freq. MHz	Detector Mode AV	Peak Actual FS (dBμV/m)	Duty Cycle Factor (dB)	Average Value (dBuV/m)	Average Limit@3m (dBuV/m)	Margin (dB)
4804.000	Average	63.85	-47.96	15.89	54.00	-38.11
7206.000	Average	70.64	-47.96	22.68	54.00	-31.32
9608.000	Average	60.19	-47.96	12.23	54.00	-41.77
12010.000	Average	70.27	-47.96	22.31	54.00	-31.69
14412.000	Average	66.76	-47.96	18.80	54.00	-35.20
16814.000	Average	63.96	-47.96	16.00	54.00	-38.00
19216.000	Average	45.98	-47.96	-1.98	54.00	-55.98
21618.000	Average	36.88	-47.96	-11.08	54.00	-65.08

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Report Number :TERF2409002578E2

Test Site :SAC C

Operation Mode :BLE 1M

Test Date :2024-09-05

Test Frequency :2402 MHz

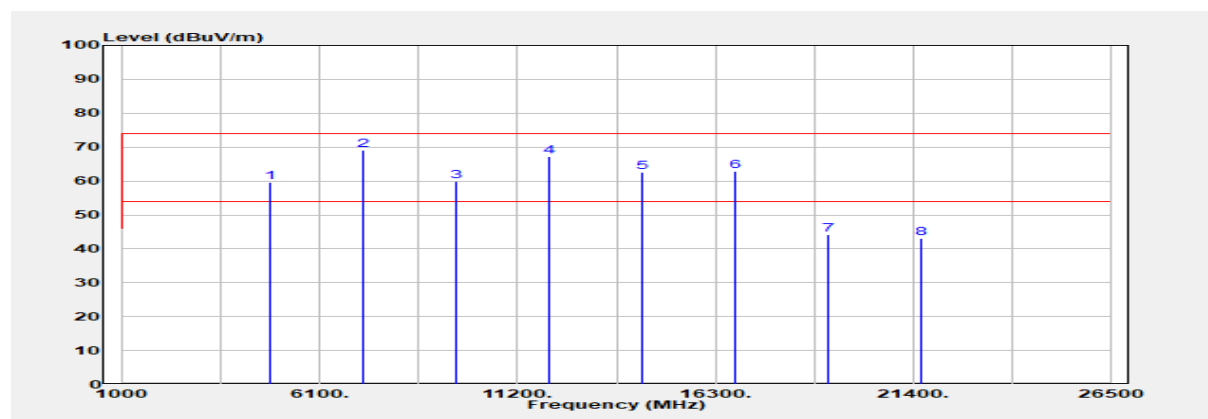
Temp./Humi. :22.2°C/54%

Test Mode :Tx

Antenna Pol. :Horizontal

EUT Pol :E2 Plane

Engineer :Alex Li



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
4804.000	Peak	58.93	0.66	59.59	74.00	-14.41
7206.000	Peak	62.11	6.89	69.00	74.00	-5.00
9608.000	Peak	51.71	8.06	59.77	74.00	-14.23
12010.000	Peak	59.57	7.59	67.16	74.00	-6.84
14412.000	Peak	52.95	9.57	62.52	74.00	-11.48
16814.000	Peak	54.28	8.51	62.79	74.00	-11.21
19216.000	Peak	46.67	-2.48	44.19	74.00	-29.81
21618.000	Peak	44.09	-0.86	43.22	74.00	-30.78

Freq. MHz	Detector Mode AV	Peak Actual FS (dBμV/m)	Duty Cycle Factor (dB)	Average Value (dBuV/m)	Average Limit@3m (dBuV/m)	Margin (dB)
4804.000	Average	59.59	-47.96	11.63	54.00	-42.37
7206.000	Average	69.00	-47.96	21.04	54.00	-32.96
9608.000	Average	59.77	-47.96	11.81	54.00	-42.19
12010.000	Average	67.16	-47.96	19.20	54.00	-34.80
14412.000	Average	62.52	-47.96	14.56	54.00	-39.44
16814.000	Average	62.79	-47.96	14.83	54.00	-39.17
19216.000	Average	44.19	-47.96	-3.77	54.00	-57.77
21618.000	Average	43.22	-47.96	-4.74	54.00	-58.74

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Report Number :TERF2409002578E2

Test Site :SAC C

Operation Mode :BLE 1M

Test Date :2024-09-05

Test Frequency :2442 MHz

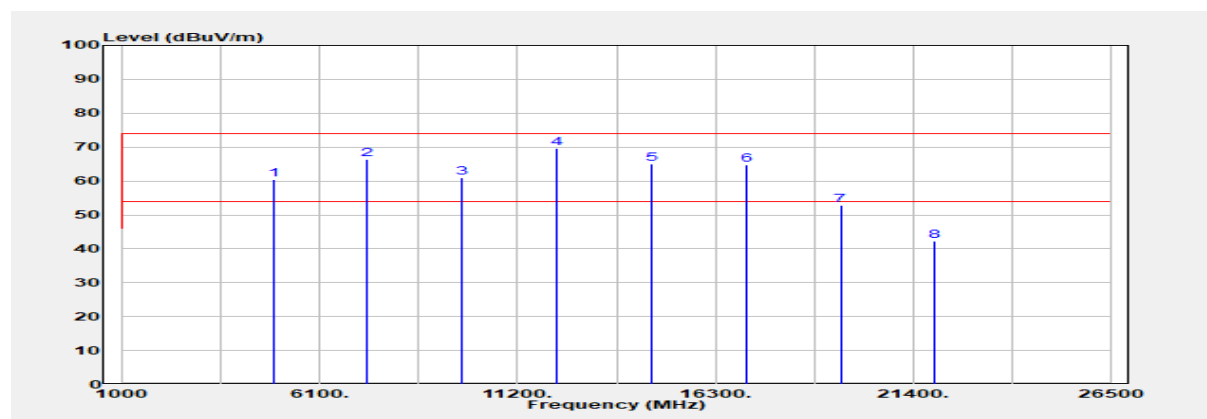
Temp./Humi. :22.2°C/54%

Test Mode :Tx

Antenna Pol. :Vertical

EUT Pol :E2 Plane

Engineer :Alex Li



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
4884.000	Peak	60.11	0.41	60.52	74.00	-13.48
7326.000	Peak	59.90	6.38	66.27	74.00	-7.73
9768.000	Peak	52.39	8.46	60.85	74.00	-13.15
12210.000	Peak	62.28	7.47	69.76	74.00	-4.24
14652.000	Peak	55.79	9.32	65.11	74.00	-8.89
17094.000	Peak	56.62	8.21	64.84	74.00	-9.16
19536.000	Peak	54.70	-1.97	52.73	74.00	-21.27
21978.000	Peak	43.54	-1.23	42.31	74.00	-31.69

Freq. MHz	Detector Mode AV	Peak Actual FS (dBμV/m)	Duty Cycle Factor (dB)	Average Value (dBuV/m)	Average Limit@3m (dBuV/m)	Margin (dB)
4884.000	Average	60.52	-47.96	12.56	54.00	-41.44
7326.000	Average	66.27	-47.96	18.31	54.00	-35.69
9768.000	Average	60.85	-47.96	12.89	54.00	-41.11
12210.000	Average	69.76	-47.96	21.80	54.00	-32.20
14652.000	Average	65.11	-47.96	17.15	54.00	-36.85
17094.000	Average	64.84	-47.96	16.88	54.00	-37.12
19536.000	Average	52.73	-47.96	4.77	54.00	-49.23
21978.000	Average	42.31	-47.96	-5.65	54.00	-59.65

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Report Number :TERF2409002578E2

Test Site :SAC C

Operation Mode :BLE 1M

Test Date :2024-09-05

Test Frequency :2442 MHz

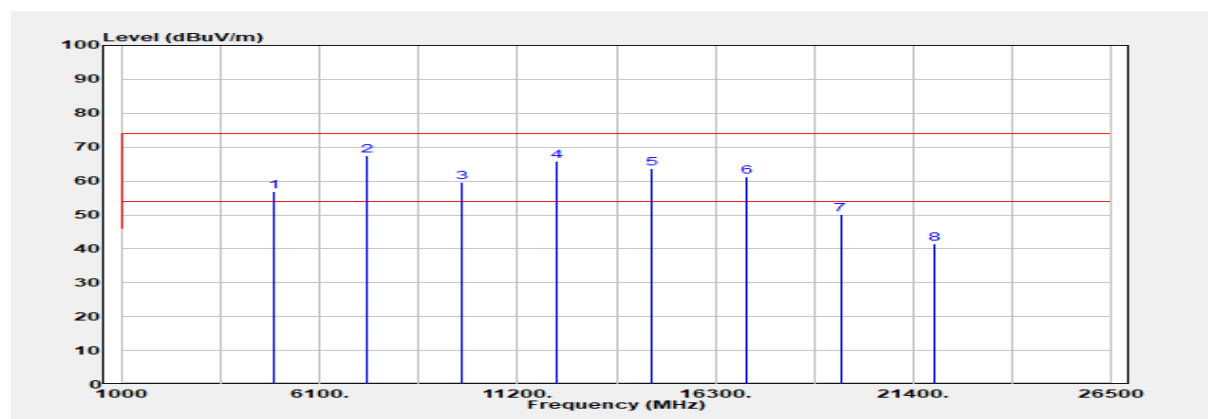
Temp./Humi. :22.2°C/54%

Test Mode :Tx

Antenna Pol. :Horizontal

EUT Pol :E2 Plane

Engineer :Alex Li



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
4884.000	Peak	56.38	0.41	56.79	74.00	-17.21
7326.000	Peak	61.06	6.38	67.44	74.00	-6.56
9768.000	Peak	51.15	8.46	59.61	74.00	-14.39
12210.000	Peak	58.46	7.47	65.93	74.00	-8.07
14652.000	Peak	54.30	9.32	63.62	74.00	-10.38
17094.000	Peak	52.96	8.21	61.17	74.00	-12.83
19536.000	Peak	52.05	-1.97	50.08	74.00	-23.92
21978.000	Peak	42.68	-1.23	41.45	74.00	-32.55

Freq. MHz	Detector Mode AV	Peak Actual FS (dBμV/m)	Duty Cycle Factor (dB)	Average Value (dBuV/m)	Average Limit@3m (dBuV/m)	Margin (dB)
4884.000	Average	56.79	-47.96	8.83	54.00	-45.17
7326.000	Average	67.44	-47.96	19.48	54.00	-34.52
9768.000	Average	59.61	-47.96	11.65	54.00	-42.35
12210.000	Average	65.93	-47.96	17.97	54.00	-36.03
14652.000	Average	63.62	-47.96	15.66	54.00	-38.34
17094.000	Average	61.17	-47.96	13.21	54.00	-40.79
19536.000	Average	50.08	-47.96	2.12	54.00	-51.88
21978.000	Average	41.45	-47.96	-6.51	54.00	-60.51

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Report Number :TERF2409002578E2

Test Site :SAC C

Operation Mode :BLE 1M

Test Date :2024-09-05

Test Frequency :2480 MHz

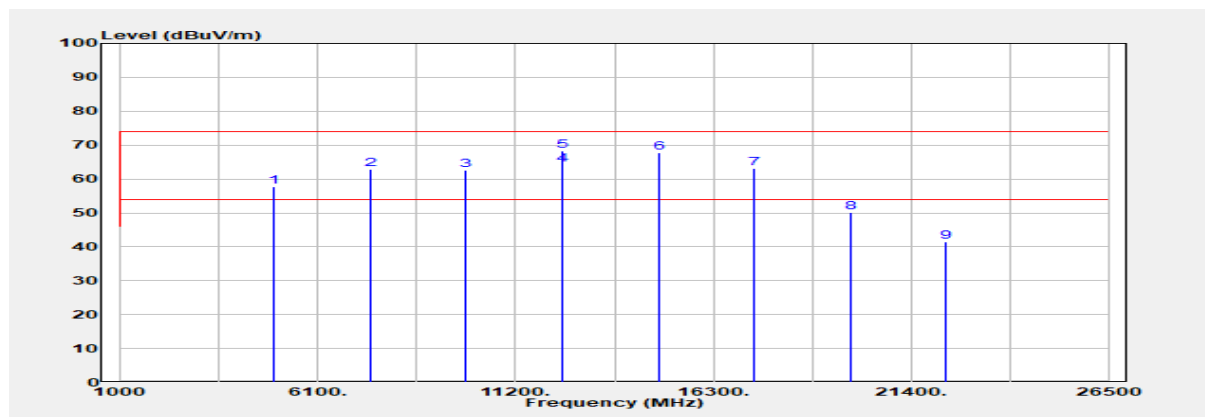
Temp./Humi. :22.2°C/54%

Test Mode :Tx

Antenna Pol. :Vertical

EUT Pol :E2 Plane

Engineer :Alex Li



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
4960.000	Peak	56.95	0.70	57.64	74.00	-16.36
7440.000	Peak	56.48	6.52	62.99	74.00	-11.01
9920.000	Peak	54.45	8.23	62.67	74.00	-11.33
12400.000	Peak	61.54	6.81	68.35	74.00	-5.65
14880.000	Peak	58.96	8.76	67.72	74.00	-6.28
17360.000	Peak	53.44	9.77	63.21	74.00	-10.79
19840.000	Peak	51.57	-1.40	50.17	74.00	-23.83
22320.000	Peak	42.05	-0.64	41.41	74.00	-32.59

Freq. MHz	Detector Mode AV	Peak Actual FS (dBμV/m)	Duty Cycle Factor (dB)	Average Value (dBuV/m)	Average Limit@3m (dBuV/m)	Margin (dB)
4960.000	Average	57.64	-47.96	9.68	54.00	-44.32
7440.000	Average	62.99	-47.96	15.03	54.00	-38.97
9920.000	Average	62.67	-47.96	14.71	54.00	-39.29
12400.000	Average	68.35	-47.96	20.39	54.00	-33.61
14880.000	Average	67.72	-47.96	19.76	54.00	-34.24
17360.000	Average	63.21	-47.96	15.25	54.00	-38.75
19840.000	Average	50.17	-47.96	2.21	54.00	-51.79
22320.000	Average	41.41	-47.96	-6.55	54.00	-60.55

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Member of SGS Group

Report Number :TERF2409002578E2

Test Site :SAC C

Operation Mode :BLE 1M

Test Date :2024-09-05

Test Frequency :2480 MHz

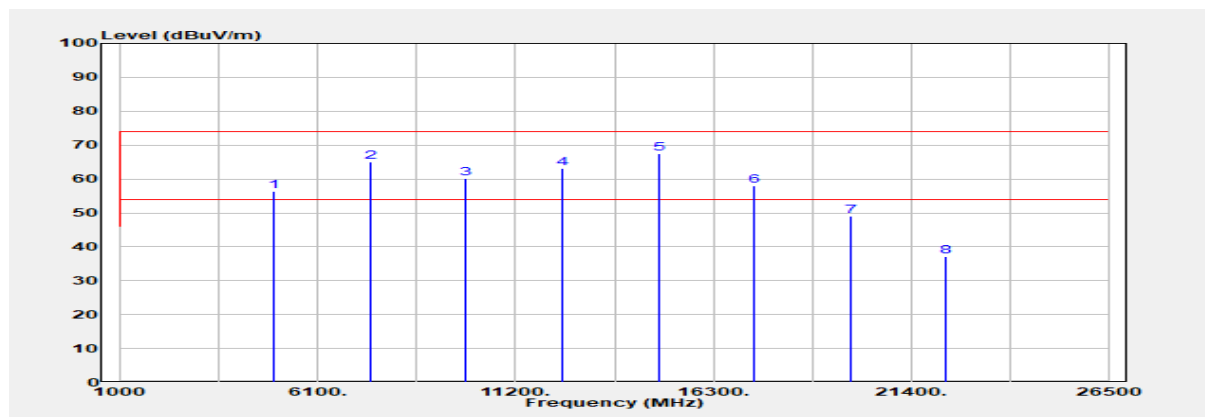
Temp./Humi. :22.2°C/54%

Test Mode :Tx

Antenna Pol. :Horizontal

EUT Pol :E2 Plane

Engineer :Alex Li



Freq. MHz	Detector Mode PK/QP/AV	Spectrum Reading Level dBμV	Factor dB	Actual FS dBμV/m	Limit @3m dBμV/m	Margin dB
4960.000	Peak	55.68	0.70	56.37	74.00	-17.63
7440.000	Peak	58.58	6.52	65.10	74.00	-8.90
9920.000	Peak	51.87	8.23	60.10	74.00	-13.90
12400.000	Peak	56.37	6.81	63.18	74.00	-10.82
14880.000	Peak	58.82	8.76	67.58	74.00	-6.42
17360.000	Peak	48.19	9.77	57.96	74.00	-16.04
19840.000	Peak	50.39	-1.40	48.99	74.00	-25.01
22320.000	Peak	37.80	-0.64	37.16	74.00	-36.84
Freq. MHz	Detector Mode AV	Peak Actual FS (dBμV/m)	Duty Cycle Factor (dB)	Average Value (dBμV/m)	Average Limit@3m (dBμV/m)	Margin (dB)
4960.000	Average	56.37	-47.96	8.41	54.00	-45.59
7440.000	Average	65.10	-47.96	17.14	54.00	-36.86
9920.000	Average	60.10	-47.96	12.14	54.00	-41.86
12400.000	Average	63.18	-47.96	15.22	54.00	-38.78
14880.000	Average	67.58	-47.96	19.62	54.00	-34.38
17360.000	Average	57.96	-47.96	10.00	54.00	-44.00
19840.000	Average	48.99	-47.96	1.03	54.00	-52.97
22320.000	Average	37.16	-47.96	-10.80	54.00	-64.80

~ End of Report ~

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