

Page: 1 of 27

# **ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT**





**Applicant:** Quanta Computer Inc.

No. 188, Wenhua 2nd Road, Guishan District, Taoyuan City

33377, Taiwan

Manufacturer: Quanta Computer Inc.

No. 188, Wenhua 2nd Road, Guishan District, Taoyuan City

33377, Taiwan

Clover Flex Pocket **Product Name:** 

**Brand Name:** Clover

Model No.: C407

**Model Difference:** N/A

**Report Number:** TERF2405001302E2

FCC ID HFS-C407

IC: 1787B-C407

Date of EUT Received: May 7, 2024

Date of Test: May 7, 2024~May 22, 2024

**Issue Date:** June 18, 2024

Approved By

### 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, ISED RSS-247.

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

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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Page: 2 of 27

Revision History							
Report Number	Revision	Description	Issue Date	Revised By	Remark		
TERF2405001302E2	00	Original.	June 18, 2024	Karen Huang			

### Note:

1 . The remark "\*" indicates modification of the report upon requests from certification body.

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Page: 3 of 27

# **Contents**

1	GENERAL INFORMATION	4
	SYSTEM TEST CONFIGURATION	
3	SUMMARY OF TEST RESULTS	9
4	DESCRIPTION OF TEST MODES	10
5	MEASUREMENT UNCERTAINTY	12
6	MEASUREMENT EQUIPMENT USED	13
7	PEAK OUTPUT POWER MEASUREMENT	14
8	RADIATED BANDEDGE AND SPURIOUS EMISSION MEASUREMENT	17

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Page: 4 of 27

## **GENERAL INFORMATION**

#### 1.1 **Product Description**

Product Name:	Clover Flex Pocket
Brand Name:	Clover
Model No.:	C407
Model Difference:	N/A
Hardware Version:	N/A
Firmware Version:	N/A
EUT Series No.:	C047UG41450106
Power Supply:	3.8Vdc with rechargeable Li-ion polymer battery
Test Software (Name/Version)	QRCT V4.0

#### 1.2 **RF Specification**

Radio Technology:	BT BR+EDR	
Channel number:	79 channels	
Modulation type:	GFSK + π/4DQPSK + 8DPSK	
Transmit Power:	6.34dBm	
Frequency Range:	2.402GHz – 2.480GHz	
Dwell Time:	≦ 0.4s	

#### 1.3 **Antenna Designation**

Antenna Type	Supplier	Antenna Part No	Freq.	Peak Antenna Gain (dBi)
Dipole	AWAN	DQ60ALF0011	2.4GHz	-1.11

### Note:

Antenna information is provided by the applicant.

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Page: 5 of 27

## 1.4 Test Methodology of Applied Standards

FCC Part 15, Subpart C §15.247 FCC KDB 558074 D01 15.247 Meas. Guidance v05r02 RSS-247 issue 3 Aug. 2023 RSS-Gen, Issue 5 April 2018, Amendment 2 (February 2021) ANSI C63.10:2013

## 1.5 Test Facility

Laboratory	Test Site Address	Test Site Name	FCC Designa- tion number	IC CAB identifier
		SAC 1		
		SAC 2		
		SAC 3		
	No 124 Wu Kung Dood New Toingi	Conduction 1		
	No.134, Wu Kung Road, New Taipei	Conducted 1	TW0027	TW3702
	Industrial Park, Wuku District, New Taipei City, Taiwan.	Conducted 2	1 440027	
		Conducted 3		
		Conducted 4		
		Conducted 5		
SGS Taiwan Ltd.		Conducted 6		
Central RF Lab.		Conduction C	_ - -	
(TAF code 3702)		SAC C		
		SAC D		
		SAC G		
	No 2 Koji 1et Pd. Cujeban Dietriet	Conducted A		
	No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333	Conducted B	TW0028	
	lauyuan Oity, Taiwan 333	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 is no special accessory used while test was conducted.

### 1.7 Equipment Modifications

There was no modification incorporated into the EUT.

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Page: 6 of 27

### 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 **Conducted Emissions**

The EUT is a placed on a table which is 0.8 m above ground plane. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz. The CISPR Quasi-Peak and Average detector mode is employed. The two LISNs provide 50uH/50 ohm of coupling impedance for the measuring instrument. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

#### 2.3.2 **Conducted Test (RF)**

The active antenna port of the unlicensed wireless device is connected to the spectrum analyzer with attenuator to protect the instrumentation. If a second antenna port is available, it is tested at one operating frequency, with other port(s) appropriately terminated, to verify it has similar output characteristics as the fully tested port.

#### 2.3.3 **Radiated Emissions**

The EUT is a 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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Page: 7 of 27

## **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-ane choic 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.

### 2.4.2 For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuation factor between EUT conducted port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly EUT RF output level.

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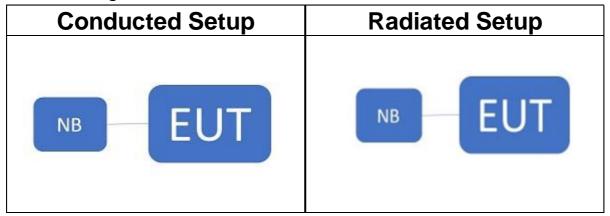
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Page: 8 of 27

#### Test Configuration 2.5



#### 2.6 Control Unit(s)

Conducted Emission Test Site: Conducted F								
EQUIPMENT TYPE	PE MFR MODEL NUMBER SERIAL NUMBER		LAST CAL.	CAL DUE.				
USB Cable	PowerSync	CUBCEARA0015	N/A	N/A	N/A			
Notebook HP		HSN-Q35C-4	P0003858 N/A		N/A			
	Radiated Emission Test Site: SAC C							
EQUIPMENT TYPE MFR MODEL NUMBER SERIAL NUMBER LAST CAL. CAL DUE.								
Notebook	HP	HSN-Q35C-4	N/A	N/A	N/A			
USB Cable	Qionho	USB-C100	N/A	N/A	N/A			

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Page: 9 of 27

## 3 SUMMARY OF TEST RESULTS

FCC Rules	ISED Rules	Description Of Test	Result
§15.247(b)(1)	RSS-247 §5.4 b	Peak Output Power	Compliant
§15.247(d) §15.209	RSS-247 §5.5 RSS-Gen §8.9	Radiated Band Edge and Spurious Emission	Compliant

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Page: 10 of 27

## **DESCRIPTION OF TEST MODES**

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

2400~2483.5 MHz							
СН	Freq. (MHz)	СН	Freq. (MHz)	СН	Freq. (MHz)	СН	Freq. (MHz)
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461		

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Page: 11 of 27

### The Worst Test Modes and Channel Details

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

ANTNNA PORT CONDUCTED TEST							
MODE	AVAILABLE	TESTED	MODULATION	PACKET			
MODE	CHANNEL	CHANNEL	WIODOLATION	TYPE			
Peak Output Power							
	0 to 78	0,39,78	GFSK	DH5			
Bluetooth	0 to 78	0,39,78	π/4-DQPSK	2DH5			
	0 to 78	0,39,78	8-DPSK	3DH5			
MODE	AVAILABLE	TESTED	MODULATION	PACKET			
MODE	CHANNEL	CHANNEL	MODULATION	TYPE			
	TRANSMIT RAD	DIATED EMISSION TE	EST (BELOW 1 GHz)				
Bluetooth	0 to 78	0	8-DPSK	3DH5			
	TRANSMIT RADIATED EMISSION TEST (ABOVE 1 GHz)						
Bluetooth	0 to 78	0	8-DPSK	3DH5			

**Note:** The field strength of radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for channel Low, Mid and High, the worst case position was reported.

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Page: 12 of 27

## **MEASUREMENT UNCERTAINTY**

Test Items	U	Incertair	nty
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
Frequency Separation	+/-	1.48	Hz
Number of hopping frequency	+/-	1.48	Hz
Time of Occupancy	+/-	1.48	Hz
Temperature	+/-	0.6	°C
Humidity	+/-	3	%
DC / AC Power Source	+/- 1 %		

Radiated Spurious Emission Measurement Uncertainty						
	+/-	1.89	dB	9kHz~30MHz		
Polarization: Vertical	+/-	4.15	dB	30MHz - 1000MHz		
Polarization. Vertical	+/-	3.43	dB	1GHz - 18GHz		
	+/-	3.86	dB	18GHz - 40GHz		
	+/-	1.89	dB	9kHz~30MHz		
Polarization: Horizontal	+/-	4.02	dB	30MHz - 1000MHz		
Polarization. Horizontal	+/-	3.43	dB	1GHz - 18GHz		
	+/-	3.86	dB	18GHz - 40GHz		
	+/-	2	dB	33GHz-50GHz		
	+/-	1.59	dB	50GHz-60GHz		
Radiated Spurious Emission	+/-	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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Page: 13 of 27

## MEASUREMENT EQUIPMENT USED

#### 6.1 **Conducted Measurement**

Conducted Emission Test Site: Conducted F									
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.				
Spectrum Analyzer	KEYSIGHT	N9010B	MY59071570	06/15/2023	06/14/2024				
Power Meter	Anritsu	ML2496A	1326001	08/22/2023	08/21/2024				
Power Sensor	Anritsu	MA2411B	1315048	08/22/2023	08/21/2024				
Power Sensor	Anritsu	MA2411B	1315049	08/22/2023	08/21/2024				
Test Software	SGS Taiwan	Radio Test Software	Ver.21	N.C.R	N.C.R				
Attenuator	Woken	WATT-218FS-10	RF18	11/15/2023	11/14/2024				
Attenuator	Woken	WATT-218FS-10	RF22	11/15/2023	11/14/2024				
DC Block	PASTERNACK	PE8210	RF153	11/15/2023	11/14/2024				

#### 6.2 **Radiated Measurement**

	Radiated Emission Test Site: SAC C								
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.				
Broadband Antenna	SCHWARZBECK	VULB 9168	9168-300	11/02/2023	11/01/2024				
Horn Antenna	Schwarzbeck	BBHA9170	185	08/21/2023	08/20/2024				
Horn Antenna	Schwarzbeck	BBHA9120D	1187	01/24/2024	01/23/2025				
Active Loop Antenna	COM-POWER	AL-130R	10160105	12/04/2023	12/03/2024				
3m Site NSA	SGS	966 chamber C	N/A	03/02/2024	03/01/2025				
Spectrum Analyzer	KEYSIGHT	N9010A	MY57120290	04/10/2024	04/09/2025				
Test Software	audix	e3	E3 20923 SGS Ver.9 ( C )	N.C.R	N.C.R				
Pre-Amplifier	EMC Instruments	EMC330	980096	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				
Attenuator	Woken	WATT-218FS-10	RF17	11/15/2023	11/14/2024				
Coaxial Cable	Huber+Suhner	SUCOFLEX 104	MY17388/4	11/15/2023	11/14/2024				
Coaxial Cable	Huber+Suhner	RG 214/U	W22.03	11/15/2023	11/14/2024				

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

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Page: 14 of 27

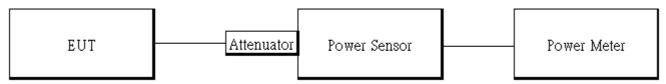
### PEAK OUTPUT POWER MEASUREMENT

#### 7.1 Standard Applicable

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 hopping channels, The Limit: 1Watt. For all other frequency hopping systems in the 2400 - 2483.5MHz band: The Limit: 0.125 Watts. The power limit for 1Mbps is 1watt, and 2Mbps, 3Mbps and AFH mode are 0.125 watts.

The e.i.r.p. shall not exceed 4 W.

#### 7.2 **Test Setup**



#### 7.3 **Measurement Procedure:**

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. The testing follows ANSI C63.10 Measurement Guidelines.
- 3. Duty cycle of test signal is < 98 %, duty factor shall be considered.
- 4. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the power meter or spectrum. (Max Hold, Detector = Peak, RBW >= 20dB bandwidth)
- 5. Record the max. reading.
- 6. Repeat above procedures until all default test channel is completed.

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Page: 15 of 27

## **Peak & Average Power Measurement Result**

### 1M BR mode (Peak):

This Bit mode (i cat).								
СН	Freq. (MHz)	Power Setting	Peak Output Power (dBm)	Output Power (mW)	Limit (mW)			
Low	2402	8	5.92	3.908	1000			
Mid	2441	8	5.87	3.864	1000			
High	2480	8	5.48	3.532	1000			

### 1M BR mode (Average):

СН	Freq. (MHz)	Power Setting	Avg. Output Power (dBm)	Output Power (mW)	Limit (mW)
Low	2402	8	5.58	3.617	1000
Mid	2441	8	5.49	3.543	1000
High	2480	8	5.23	3.337	1000

### 2M EDR mode (Peak):

СН	Freq. (MHz)	Power Setting	Peak Output Power (dBm)	Output Power (mW)	Limit (mW)
Low	2402	8	6.11	4.083	125
Mid	2441	8	6.09	4.064	125
High	2480	8	6.05	4.027	125

#### 2M EDR mode (Average):

СН	Freq. (MHz)	Power Setting	Avg. Output Power (dBm)	Output Power (mW)	Limit (mW)
Low	2402	8	3.66	2.321	125
Mid	2441	8	3.64	2.310	125
High	2480	8	3.32	2.146	125

### 3M EDR mode (Peak):

СН	Freq. (MHz)	Power Setting	Peak Output Power (dBm)	Output Power (mW)	Limit (mW)
Low	2402	8	6.34	4.305	125
Mid	2441	8	6.28	4.246	125
High	2480	8	6.06	4.036	125

### 3M EDR mode (Average):

om Ebit mode (Attendge).							
СН	Freq. (MHz)	Power Setting	Avg. Output Power (dBm)	Output Power (mW)	Limit (mW)		
Low	2402	8	3.91	2.458	125		
Mid	2441	8	3.81	2.402	125		
High	2480	8	3.33	2.151	125		

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Page: 16 of 27

### 7.5 EIRP Measurement Result

### 1M BR mode EIRP

Channel	Frequency (MHz)	Power Setting	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (mW)	Limit (mW)
Low	2402	8	5.58	-1.11	2.801	4000
Mid	2441	8	5.49	-1.11	2.744	4000
High	2480	8	5.23	-1.11	2.585	4000

### 2M EDR mode EIRP

Channel	Frequency (MHz)	Power Setting	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (mW)	Limit (mW)
Low	2402	8	3.66	-1.11	1.797	4000
Mid	2441	8	3.64	-1.11	1.789	4000
High	2480	8	3.32	-1.11	1.662	4000

### 3M EDR mode EIRP

Channel	Frequency (MHz)	Power Setting	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (mW)	Limit (mW)
Low	2402	8	3.91	-1.11	1.904	4000
Mid	2441	8	3.81	-1.11	1.861	4000
High	2480	8	3.33	-1.11	1.666	4000

\* Note: EIRP = Average Power + Gain

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Page: 17 of 27

### 8 RADIATED BANDEDGE AND SPURIOUS EMISSION MEASUREMENT

## 8.1 Standard Applicable

## 8.1.1 Duty Cycle Correction Factor

According to 15. 35(c) and RSS-Gen §8.2, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value. The exact method of calculating the average field strength shall be submitted with any application for certification.

## 8.1.2 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 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.

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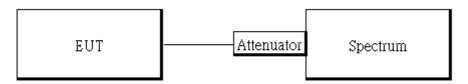


Page: 18 of 27



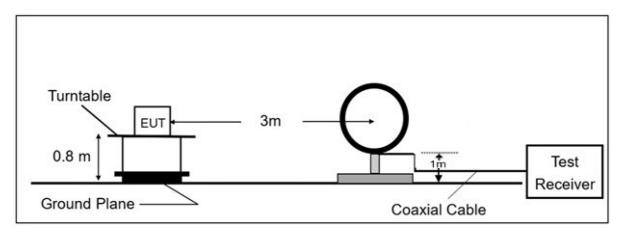
## **Test Setup**

#### 8.2.1 **Duty Cycle Correction Factor**

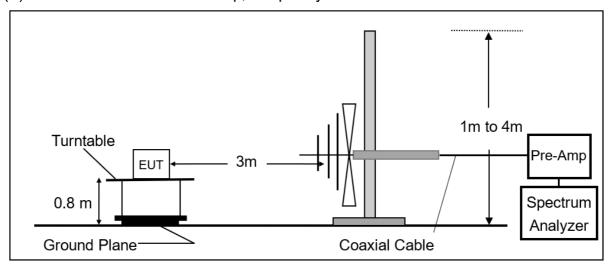


#### 8.2.2 **Radiated Emission**

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



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



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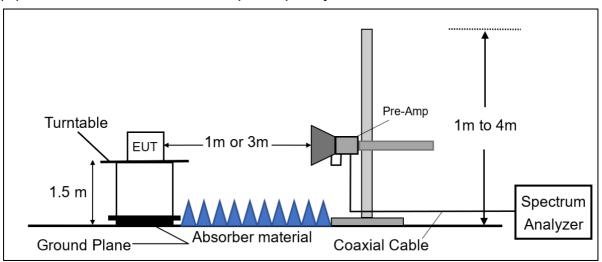
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Page: 19 of 27

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



#### 8.3 **Measurement Procedure**

#### 8.3.1 **Duty Cycle Correction Factor**

- 1. Adjust and configure any EUT switches, controls, or input data streams to ensure that the EUT is transmitting or encoded to obtain the "worst-case" pulse ON time.
- 2. The testing follows ANSI C63.10:2013.
- 3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 4. Set center frequency of spectrum analyzer = operating frequency.
- 5. Set the spectrum analyzer as RBW, VBW=1MHz, 3MHz, Span = 0Hz, Detector = Peak, Adjust Sweep=100ms.
- 6. Repeat above procedures until all frequency of the interest measured were complete.

#### 8.3.2 Radiated Emission

- 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 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.

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Page: 20 of 27

- 7. Set the spectrum analyzer as RBW=1 MHz, VBW=3 MHz for Maximum Emission Measurements at frequency above 1 GHz.
- 8. According to C63.10:2013 Section 7.5 Procedure for determining the average value of pulsed emissions with duty cycle correction factor 20 log (Ton/100ms).
- 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.

#### **Field Strength Calculation** 8.4

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\*log(uV/m)

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

Factor(dB) = Antenna Factor(dBµV/m) + Cable Loss(dB) – Pre Amplifier Gain(dB)

Average value(dBµV/m)=Peak Actual FS(dBµV/m)+ Duty Cycle Correction Factor(dB)

Duty Cycle Correction Factor(dB) = 20 log (T<sub>on</sub>/100 ms)

#### 8.5 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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Page: 21 of 27

## 8.6 Measurement Result:

## 8.6.1 Duty Cycle Correction Factor

### **Bluetooth 3M**

Time ON of 100ms: 5.800 ms Duty Cycle=5.8ms / 100ms= 0.058

Duty Cycle correction factor=20 LOG 0.058 = -24.73 dB

## 8.6.2 Duty Cycle test plot

**EDR** 



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Page: 22 of 27



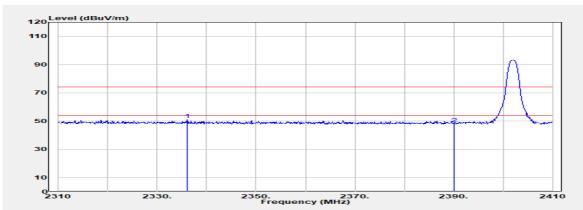
## 8.6.3 Bandedge Result

Report Number :TERF2405001302E2 Test Site :SAC C

Operation Mode :EDR 3M Test Date :2024-05-22 Test Frequency :2402 MHz Temp./Humi. :24.8°C/62%

Test Mode :Bandedge Antenna Pol. :Vertical

EUT Pol :E2 Plane Engineer :Howard Huang



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level	15	FS	@3m	
MHz	PK/QP/AV	dΒμV	dB	dBµV/m	dBμV/m	dB
2336.000	Peak	55.03	-3.84	51.19	74.00	-22.81
2390.000	Peak	52.47	-4.25	48.22	74.00	-25.78
Freq.	Detector	Peak Actual	Duty Cycle	Average	Average	Margin
	Mode	FS	Factor	Value	Limit@3m	
MHz	AV	(dBµV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
2336.000	Average	51.19	-24.73	26.46	54.00	-27.54
2390.000	Average	48.22	-24.73	23.49	54.00	-30.51

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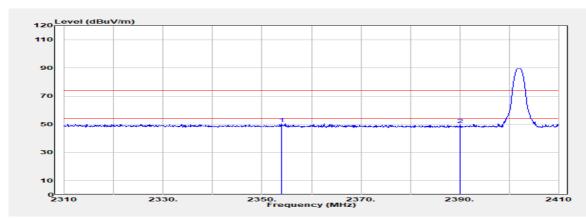


Page: 23 of 27

Report Number :TERF2405001302E2 Test Site :SAC C

Operation Mode :EDR 3M Test Date :2024-05-22 Test Frequency :2402 MHz Temp./Humi. :24.8 $^{\circ}$ C/62 $^{\circ}$  Test Mode :Bandedge Antenna Pol. :Horizontal

EUT Pol :E2 Plane Engineer :Howard Huang



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dBµV/m	dBµV/m	dB
2353.900	Peak	54.50	-3.95	50.55	74.00	-23.45
2390.000	Peak	53.98	-4.25	49.73	74.00	-24.27
_	5	5	5 ( 0 )		•	
Freq.	Detector	Peak Actual	Duty Cycle	Average	Average	Margin
	Mode	FS	Factor	Value	Limit@3m	( ID)
MHz	AV	(dBµV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
2353.900	Average	50.55	-24.73	25.82	54.00	-28.18
2390.000						

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Page: 24 of 27

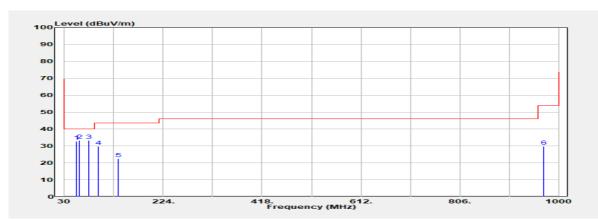
## Radiated Spurious Emission

Report Number :TERF2405001302E2 Test Site :SAC C

Operation Mode: EDR 3M Test Date :2024-05-22 Test Frequency :2402 MHz Temp./Humi. :24.8°C/62%

Test Mode :Tx Antenna Pol. :Vertical

**EUT Pol** :E2 Plane Engineer :Howard Huang



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dBµV	dB	dBµV/m	dBµV/m	dB
53.280	Peak	48.19	-15.52	32.68	40.00	-7.32
59.100	Peak	49.91	-16.58	33.33	40.00	-6.67
78.500	Peak	53.55	-20.09	33.46	40.00	-6.54
96.930	Peak	50.73	-21.01	29.72	43.50	-13.78
134.760	Peak	39.62	-17.06	22.56	43.50	-20.94
970.900	Peak	30.80	-0.90	29.90	54.00	-24.10

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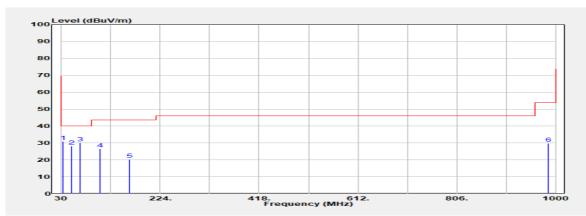
Page: 25 of 27

Report Number :TERF2405001302E2 Test Site :SAC C

Operation Mode: EDR 3M Test Date :2024-05-22 Test Frequency :2402 MHz Temp./Humi. :24.8°C/62%

:Tx Test Mode Antenna Pol. :Horizontal

**EUT Pol** :E2 Plane Engineer :Howard Huang



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dBµV/m	dBµV/m	dB
33.880	Peak	48.27	-17.28	30.98	40.00	-9.02
50.370	Peak	43.32	-15.26	28.06	40.00	-11.94
65.890	Peak	48.20	-17.99	30.20	40.00	-9.80
106.630	Peak	46.20	-19.64	26.56	43.50	-16.94
162.890	Peak	36.34	-15.96	20.37	43.50	-23.13
985.450	Peak	30.49	-0.61	29.87	54.00	-24.13

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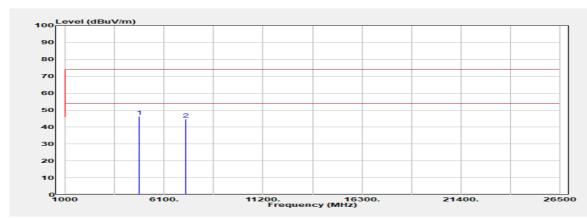
Page: 26 of 27

Report Number :TERF2405001302E2 Test Site :SAC C

Operation Mode: EDR 3M Test Date :2024-05-22 Test Frequency :2402 MHz Temp./Humi. :24.8°C/62%

:Tx Antenna Pol. :Vertical Test Mode

**EUT Pol** :E2 Plane Engineer :Howard Huang



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
4804.000	Peak	45.63	0.66	46.29	74.00	-27.71
7206.000	Peak	37.94	6.89	44.84	74.00	-29.16
_					_	
Freq.	Detector	Peak Actual	Duty Cycle	Average	Average	Margin
	Mode	FS	Factor	Value	Limit@3m	
MHz	AV	(dBµV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
4804.000	Average	46.29	-24.73	21.56	54.00	-32.44
7206.000	Average	44.84	-24.73	20.11	54.00	-33.89

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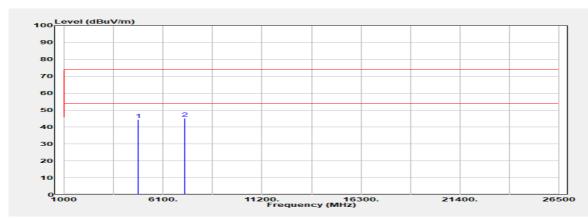
Page: 27 of 27

Report Number :TERF2405001302E2 Test Site :SAC C

Operation Mode: EDR 3M :2024-05-22 Test Date Test Frequency :2402 MHz Temp./Humi. :24.8°C/62%

:Tx Test Mode Antenna Pol. :Horizontal

**EUT Pol** :E2 Plane Engineer :Howard Huang



Freq.	Detector	Spectrum	Factor	Actual	Limit	Margin
	Mode	Reading Level		FS	@3m	
MHz	PK/QP/AV	dΒμV	dB	dBµV/m	dBμV/m	dB
4804.000	Peak	43.78	0.66	44.44	74.00	-29.56
7206.000	Peak	38.24	6.89	45.13	74.00	-28.87
Freq.	Detector	Peak Actual	Duty Cycle	Average	Average	Margin
	Mode	FS	Factor	Value	Limit@3m	
MHz	AV	(dBµV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
4804.000	Average	44.44	-24.73	19.71	54.00	-34.29
7206.000	Average	45.13	-24.73	20.40	54.00	-33.60
	_					

## ~ End of Report ~

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