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ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT





CLASS II & IV PC REPORT

Applicant: Acer Incorporated

8F., No. 88, Sec. 1, Xintai 5th Rd., Xizhi, New Taipei City

22181, Taiwan (R.O.C)

802.11 a/b/g/n/ac RTL8822CE Combo Module **Product Name:**

Brand Name: Acer

Model No.: RTL8822CE

Model Difference: N/A

Report Number: E2/2021/80033

FCC ID HLZRTL8822CE

IC: 1754F-RTL8822CE

Issue Date: October 7, 2021

Date of Test: September 30, 2021 ~ October 1, 2021

Date of EUT Received: August 9, 2021

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.

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Revision History					
Report Number	Revision	Description	Issue Date	Revised By	
E2/2021/80033	00	Original	October 7, 2021	Yuri Tsai	

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GENERAL INFORMATION

1.1 **Product description**

Product Name:	Notebook Computer
Brand Name:	acer
Model No. of FCC Host:	N21Q5
Model No. of IC Host:	CB514-2H,CB514-2HT
Model Difference:	For Marketing Purpose
Hardware Version:	N/A
Software Version:	N/A
EUT Series No.:	N/A
Model No. of BT/WLAN Module:	RTL8822CE
Class II & Class IV	802.11 a/b/g/n/ac RTL8822CE Combo Module INSTALLED IN
Permissive change:	Notebook Computer
Power Supply:	11.55Vdc from Rechargeable Li-ion Battery or 5V/ 9V/ 12V/ 15/ 20Vdc from AC/DC Adapter

1.2 **RF Specification**

Radio Technology:	BT BR+EDR
Channel number:	79 channels
Modulation type:	GFSK + π/4DQPSK + 8DPSK
Transmit Power:	12.88 dBm
Frequency Range:	2.402GHz – 2.480GHz
Dwell Time:	≦ 0.4s

1.3 **Antenna Designation**

Antenna Type	Supplier	Antenna Part No.	Freq. (MHz)	Peak An- tenna Gain (dBi)	Worst An- tenna Gain	
PIFA	WNC	DQ6K15G5900(81EABK15.G59)	2402 – 2480	1.15	-	
Note: 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 KDB 558074 D01 v05r02 DSS Meas. Guidance RSS-247 issue 2 Feb. 2017 RSS-Gen Issue 5, 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 3		
		Conduction 1		
	No.134, Wu Kung Road, New Taipei	Conducted 1		
	Industrial Park, Wuku District, New	Conducted 2	TW0027	
	Taipei City, Taiwan.	Conducted 3		
		Conducted 4		
		Conducted 5		
SGS Taiwan Ltd.		Conducted 6		
Central RF Lab.		Conduction C		TW3702
(TAF code 3702)	No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333	SAC C		1003702
(1A1 code 3/02)		SAC D		
		SAC G		
		Conducted A		
		Conducted B	TW0028	
	laoydan Oity, Taiwan 555	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.

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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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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 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.

2.3.2 **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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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.

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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2.5 **Configuration of Tested System** Fig. 2-1 Radiated Emission



Fig. 2-2 Conducted (Antenna Port) Configuration



Table 2-1 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Data Cable	Power Cord
1	Bluetooth Test Software	N/A	N/A	N/A	N/A	N/A
2	Adapter	LITEON	PA-1650-58	N/A	N/A	N/A

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3 SUMMARY OF TEST RESULTS

FCC Rules	IC 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 Spurious Emission	Compliant

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DESCRIPTION OF TEST MODES

4.1 Operated in 2400 ~ 2483.5MHz Band

79 channels are provided for Bluetooth

	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

- 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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	PACKET TYPE			
	RADIATED EMISSION TEST (ABOVE 1 GHz)						
Bluetooth	0 to 78	0,39,78	GFSK/8-DPSK	DH5/3DH5			

Note:

The field strength of radiation emission was measured as NB plane. Transmitter for channel Low, Mid and High.

ANTNNA PORT CONDUCTED TEST						
MODE	AVAILABLE	TESTED	MODULATION	PACKET		
MODE CHANNEL		CHANNEL	MODULATION	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		

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MEASUREMENT UNCERTAINTY

Test Items		Uncertainty		
Peak Output Power	+/-	1	dB	

Radiated Spurio	Radiated Spurious Emission Measurement Uncertainty					
	+/-	2.64	dB	9kHz~30MHz		
Polarization: Vertical	+/-	4.93	dB	30MHz - 1000MHz		
Polarization, vertical	+/-	4.81	dB	1GHz - 18GHz		
	+/-	4.52	4 dB 9kHz~30MHz 3 dB 30MHz - 1000 1 dB 1GHz - 18G 2 dB 18GHz - 40G 4 dB 9kHz~30MH 5 dB 30MHz - 1000 1 dB 1GHz - 18G	18GHz - 40GHz		
	+/-	/- 4.52 dB /- 2.64 dB	9kHz~30MHz			
Polarization: Horizontal	+/-	4.45	dB	30MHz - 1000MHz		
Polarization: Horizontal	+/-	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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PEAK OUTPUT POWER MEASUREMENT

6.1 Standard Applicable

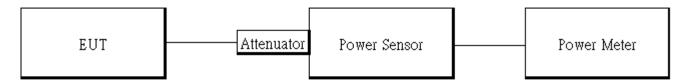
For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 hopping channels, The Limit: 1Watt. For all other frequency hopping systems in the 2400 - 2483.5MHz band: The Limit: 0.125 Watts. The power limit for 1Mbps is 1watt, and 2Mbps, 3Mbps and AFH mode are 0.125 watts.

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

6.2 **Measurement Equipment Used**

Conducted Emission Test Site: Conducted G										
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUM- BER	LAST CAL.	CAL DUE.					
Power Meter	Anritsu	ML2496A	1326001	08/12/2021	08/11/2022					
Power Sensor	Anritsu	MA2411B	1315048	08/12/2021	08/11/2022					
Power Sensor	Anritsu	MA2411B	1315049	08/12/2021	08/11/2022					
Attenuator	Marvelous	WATT- 218FS-10	RF18	11/19/2020	11/18/2021					
Attenuator	Marvelous	WATT- 218FS-10	RF23	11/19/2020	11/18/2021					

6.3 Test Set-up:



6.4 **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. 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)
- 4. Record the max. reading.
- 5. Repeat above procedures until all default test channel is completed.

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6.5 **Peak & Average Power Measurement Result**

1M BR mode (Peak):

Sit mode (i cary.								
СН	Freq. (MHz)	Power set	Peak Output Power (dBm)	Output Power (mW)	Limit (mW)			
Low	2402	0x47	12.88	19.409	1000			
Mid	2441	0x49	12.03	15.959	1000			
High	2480	0x49	11.45	13.964	1000			

1M BR mode (Average):

СН	Freq. (MHz)	Power set	Max. Avg.Output include tune up tolerance Power (dBm)	Output Power (mW)	Limit (mW)
Low	2402	0x47	12.79	19.003	1000
Mid	2441	0x49	12.00	15.842	1000
High	2480	0x49	11.39	13.766	1000

2M FDR mode (Peak):

Zin Ebit mode (reak).							
СН	Freq. (MHz)	Power set	Peak Output Power (dBm)	Output Power (mW)	Limit (mW)		
Low	2402	0x47	11.86	15.346	125		
Mid	2441	0x49	10.99	12.560	125		
High	2480	0x49	10.12	10.280	125		

2M EDR mode (Average):

	(
СН	Freq. (MHz)	Power set	Max. Avg.Output include tune up tolerance Power (dBm)	Output Power (mW)	Limit (mW)
Low	2402	0x47	9.31	8.525	125
Mid	2441	0x49	8.92	7.793	125
High	2480	0x49	7.93	6.204	125

3M EDR mode (Peak):

СН	Freq. (MHz)	Power set	Peak Output Power (dBm)	Output Power (mW)	Limit (mW)
Low	2402	0x47	12.28	16.904	125
Mid	2441	0x49	11.44	13.932	125
High	2480	0x49	10.68	11.695	125

3M	EDR	mode	(Average):
0111		mouc	www.ugo,.

СН	Freq. (MHz)	Power set	Max. Avg.Output include tune up tolerance Power (dBm)	Output Power (mW)	Limit (mW)
Low	2402	0x47	9.45	8.801	125
Mid	2441	0x49	8.96	7.862	125
High	2480	0x49	8.11	6.464	125

NOTE: cable loss as 11.1dB that offsets in the power meter

*Note: Max. Output include tune up tolerance Power measured by using average detector.

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6.6 **EIRP Measurement Result**

1M BR mode EIRP

Channel	Frequency (MHz)	Power set	Max. Avg. Output include tune up tolerance Power (dBm)	Antenna Gain (dBi)	EIRP (mW)	Limit (mW)
Low	2402	0x47	12.79	1.15	24.764	4000
Mid	2441	0x49	12.00	1.15	20.645	4000
High	2480	0x49	11.39	1.15	17.940	4000

2M EDR mode EIRP

Channel	Frequency (MHz)	Power set	Max. Avg.Output include tune up tolerance Power (dBm)	Antenna Gain (dBi)	EIRP (mW)	Limit (mW)
Low	2402	0x47	9.31	1.15	11.110	4000
Mid	2441	0x49	8.92	1.15	10.155	4000
High	2480	0x49	7.93	1.15	8.085	4000

3M EDR mode EIRP

Channel	Frequency (MHz)	Power set	Max. Avg.Output include tune up tolerance Power (dBm)	Antenna Gain (dBi)	EIRP (mW)	Limit (mW)
Low	2402	0x47	9.45	1.15	11.469	4000
Mid	2441	0x49	8.96	1.15	10.245	4000
High	2480	0x49	8.11	1.15	8.424	4000

* Note: EIRP = Average Power + Gain

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RADIATED BANDEDGE AND SPURIOUS EMISSION MEASUREMENT

7.1 **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 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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7.2 Measurement Equipment Used

Radiated Emission Test Site: SAC C							
EQUIPMENT TYPE	MFR	MODEL NUM- BER	SERIAL NUM- BER	LAST CAL.	CAL DUE.		
Horn Antenna	Schwarzbeck	BBHA9170	184	12/11/2020	12/10/2021		
Horn Antenna	Schwarzbeck	BBHA9120D	1187	01/11/2021	01/10/2022		
EMI Test Receiver	R&S	ESU 40	100363	04/28/2021	04/27/2022		
Pre-Amplifier	EMC Instru- ments	EMC0011830	980199	11/19/2020	11/18/2021		
Pre-Amplifier	EMC Instru- ments	EMC184045B	980135	10/27/2020	10/26/2021		
Band Rejection Filter	Micro-Tronics	BRM50701-01	RF201	11/19/2020	11/18/2021		
Coaxial Cable	Huber Suhner	SUCOFLEX 104	MY17388/4	11/19/2020	11/18/2021		
Coaxial Cable	Huber Suhner	RG 214/U	W22.03	11/19/2020	11/18/2021		
Test Software	audix	e3	20923 sgs Ver.9	N.C.R	N.C.R		

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

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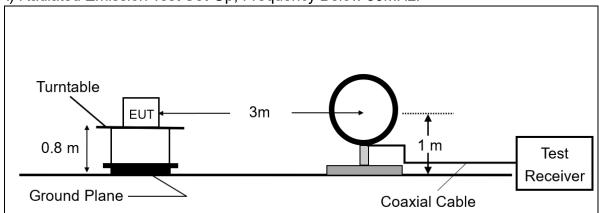
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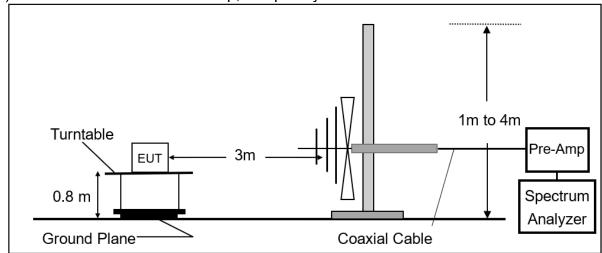
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7.3 **Test SET-UP**

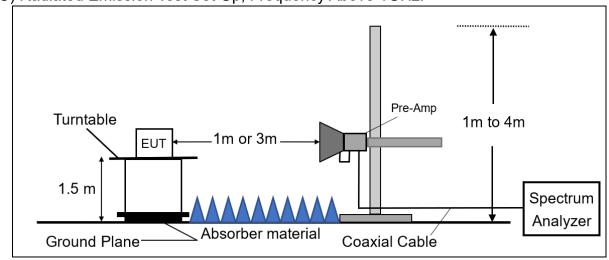
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz.



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



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



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7.4 **Measurement Procedure**

7.4.1 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 plane.
- 3. The turn table shall rotate 360 degrees to determine the position of maximum emission
- 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 Peak Detector 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 Detector 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. On spectrum, change spectrum mode in linear display mode, and reduce VBW = 10Hz if average reading is measured.
- 12. Repeat above procedures until all default test channel measured were complete.

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7.5 **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*log(uV/m)

Actual $FS(dB\mu V/m) = SPA$. Reading level(dB μV) + Factor(dB) $Factor(dB) = Antenna\ Factor(dB\mu V/m) + Cable\ Loss(dB) - Pre_Amplifier\ Gain(dB)$

7.6 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) & RSS-GEN §6.13.2 was not reported.

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7.7 **Measurement Result:**

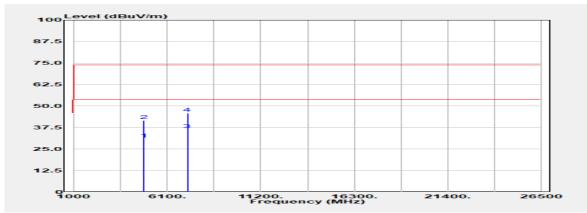
Radiated Spurious Emission above 1 GHz:

:SAC C Report Number :E2/2021/80033 Test Site

Operation Mode :BT BR :2021-09-16 Test Date

Test Frequency :2402 MHz Temp./Humi. :23.5/54 Test Mode :TX CH LOW Antenna Pol.: Vertical

EUT Pol :NB Plane Engineer :Enzo Chang



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	Average	19.89	10.87	30.76	54.00	-23.24
4804.000	Peak	30.83	10.87	41.70	74.00	-32.30
7206.000	Average	19.11	17.27	36.38	54.00	-17.62
7206.000	Peak	28.71	17.27	45.99	74.00	-28.01

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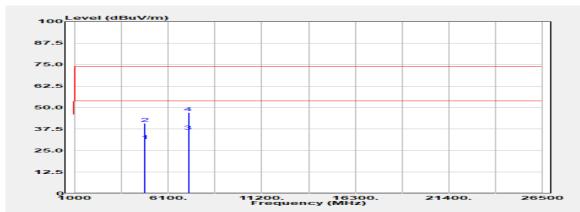
Test Site :SAC C Report Number :E2/2021/80033

Operation Mode: BT BR Test Date :2021-09-16

Test Frequency :2402 MHz Temp./Humi. :23.5/54

Antenna Pol. :Horizontal Test Mode :TX CH LOW

EUT Pol :NB Plane :Enzo Chang Engineer



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	Average	19.91	10.87	30.78	54.00	-23.22
4804.000	Peak	29.98	10.87	40.85	74.00	-33.15
7206.000	Average	19.12	17.27	36.39	54.00	-17.61
7206.000	Peak	29.74	17.27	47.01	74.00	-26.99

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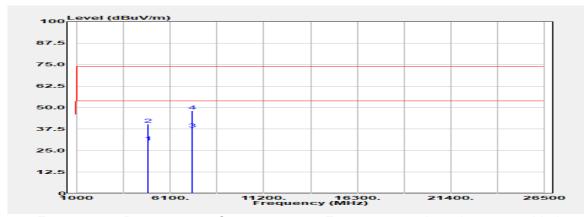
Test Site :SAC C Report Number :E2/2021/80033

Operation Mode: BT BR Test Date :2021-09-16

Test Frequency :2441 MHz Temp./Humi. :23.5/54

Test Mode :TX CH MID Antenna Pol. :Vertical

EUT Pol :NB Plane Engineer :Enzo Chang



Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
Average	19.90	10.12	30.02	54.00	-23.98
Peak	30.27	10.12	40.39	74.00	-33.61
Average	19.09	18.49	37.58	54.00	-16.42
Peak	29.57	18.49	48.06	74.00	-25.94
	Mode PK/QP/AV Average Peak Average	Mode Reading Level dBμV Average 19.90 Peak 30.27 Average 19.09	Mode PK/QP/AV Reading Level dBμV dB Average Peak 30.27 10.12 Average Average 19.09 18.49	Mode PK/QP/AV Reading Level dB μV FS dB μV/m Average 19.90 10.12 30.02 Peak 30.27 10.12 40.39 Average 19.09 18.49 37.58	Mode PK/QP/AV Reading Level dBμV FS dBμV/m @3m dBμV/m Average 19.90 10.12 30.02 54.00 Peak 30.27 10.12 40.39 74.00 Average 19.09 18.49 37.58 54.00

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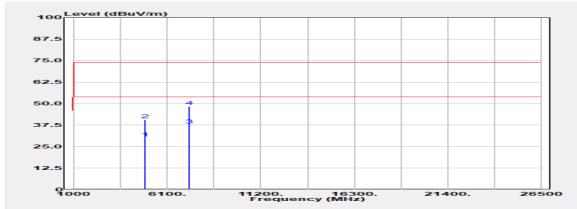
Test Site :SAC C Report Number :E2/2021/80033

Operation Mode: BT BR Test Date :2021-09-16

Test Frequency :2441 MHz Temp./Humi. :23.5/54

Antenna Pol. :Horizontal Test Mode :TX CH MID

EUT Pol :NB Plane :Enzo Chang Engineer



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
4882.000	Average	19.85	10.12	29.97	54.00	-24.03
4882.000	Peak	30.55	10.12	40.67	74.00	-33.33
7323.000	Average	19.08	18.49	37.57	54.00	-16.43
7323.000	Peak	29.83	18.49	48.31	74.00	-25.69

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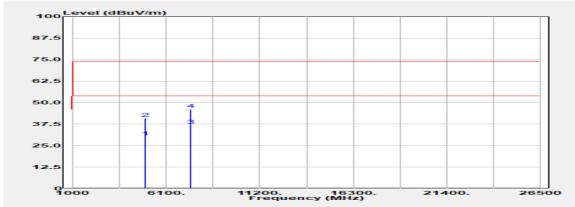
Test Site :SAC C Report Number :E2/2021/80033

Operation Mode: BT BR Test Date :2021-09-16

Test Frequency :2480 MHz Temp./Humi. :23.5/54

Test Mode :TX CH HIGH Antenna Pol. :Vertical

EUT Pol :NB Plane Engineer :Enzo Chang



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
4960.000	Average	19.88	10.20	30.08	54.00	-23.92
4960.000	Peak	30.69	10.20	40.90	74.00	-33.10
7440.000	Average	19.05	17.86	36.91	54.00	-17.09
7440.000	Peak	28.26	17.86	46.12	74.00	-27.88

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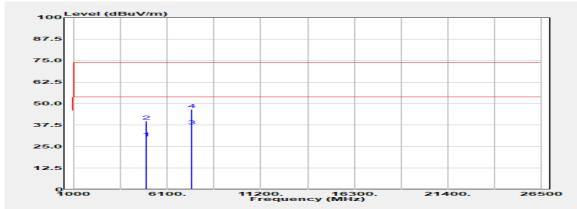
Test Site :SAC C Report Number :E2/2021/80033

Operation Mode: BT BR Test Date :2021-09-16

Test Frequency :2480 MHz Temp./Humi. :23.5/54

Antenna Pol. :Horizontal Test Mode :TX CH HIGH

EUT Pol :NB Plane :Enzo Chang Engineer



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
4960.000	Average	19.82	10.20	30.02	54.00	-23.98
4960.000	Peak	29.57	10.20	39.78	74.00	-34.22
7440.000	Average	19.12	17.86	36.98	54.00	-17.02
7440.000	Peak	28.67	17.86	46.53	74.00	-27.47

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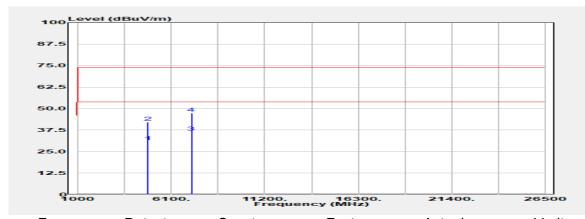
Report Number :E2/2021/80033 Test Site :SAC C

Operation Mode :BT EDR Test Date :2021-09-16

Test Frequency :2402 MHz Temp./Humi. :23.6/57

Test Mode :TX CH LOW Antenna Pol. :Vertical

EUT Pol :NB Plane Engineer :Enzo Chang



Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
Average	19.95	10.87	30.82	54.00	-23.18
Peak	31.30	10.87	42.17	74.00	-31.83
Average	19.13	17.27	36.40	54.00	-17.60
Peak	30.15	17.27	47.42	74.00	-26.58
	Average Peak Average	Mode PK/QP/AV Reading Level dBμV Average 19.95 Peak 31.30 Average 19.13	Mode PK/QP/AV Reading Level dBμV dB Average Peak 31.30 10.87 Average Average 19.13 17.27	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Mode PK/QP/AVReading Level dBμVFS dBμV/m@3m dBμV/mAverage Peak 31.3010.8730.8254.00Average Peak 31.3010.8742.1774.00Average Peak 31.3017.2736.4054.00

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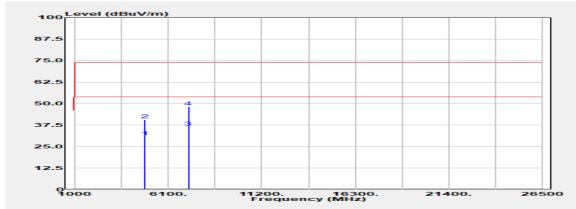
Test Site :SAC C Report Number :E2/2021/80033

Operation Mode: BT EDR Test Date :2021-09-16

Test Frequency :2402 MHz Temp./Humi. :23.6/57

Antenna Pol. :Horizontal Test Mode :TX CH LOW

EUT Pol :NB Plane :Enzo Chang Engineer



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	Average	19.83	10.87	30.70	54.00	-23.30
4804.000	Peak	29.75	10.87	40.62	74.00	-33.38
7206.000	Average	19.17	17.27	36.44	54.00	-17.56
7206.000	Peak	30.91	17.27	48.19	74.00	-25.81

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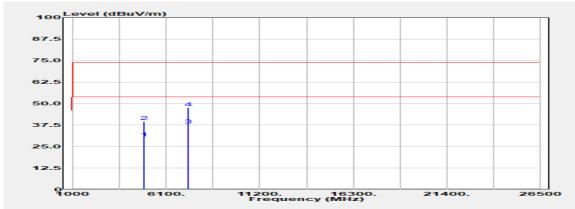
Test Site :SAC C Report Number :E2/2021/80033

Operation Mode: BT EDR Test Date :2021-09-16

Test Frequency :2441 MHz Temp./Humi. :23.6/57

Test Mode :TX CH MID Antenna Pol. :Vertical

EUT Pol :NB Plane Engineer :Enzo Chang



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
4882.000	Average	19.84	10.12	29.96	54.00	-24.04
4882.000	Peak	29.43	10.12	39.54	74.00	-34.46
7323.000	Average	19.12	18.49	37.61	54.00	-16.39
7323.000	Peak	29.10	18.49	47.59	74.00	-26.41

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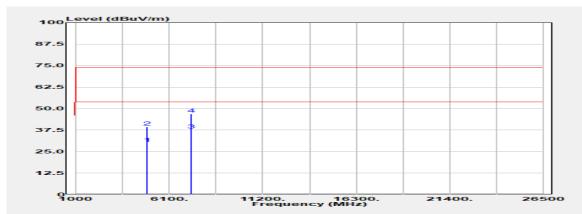
Report Number :E2/2021/80033 Test Site :SAC C

Operation Mode :BT EDR Test Date :2021-09-16

Test Frequency :2441 MHz Temp./Humi. :23.6/57

Test Mode :TX CH MID Antenna Pol. :Horizontal

EUT Pol :NB Plane Engineer :Enzo Chang



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
4882.000	Average	19.81	10.12	29.93	54.00	-24.07
4882.000	Peak	29.28	10.12	39.39	74.00	-34.61
7323.000	Average	19.08	18.49	37.57	54.00	-16.43
7323.000	Peak	28.31	18.49	46.80	74.00	-27.20

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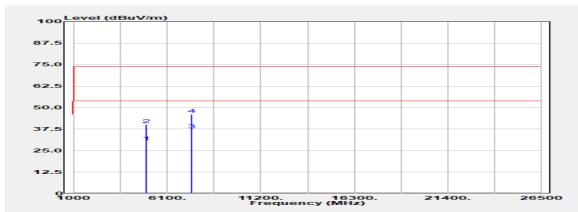
Test Site :SAC C Report Number :E2/2021/80033

Operation Mode: BT EDR Test Date :2021-09-16

Test Frequency :2480 MHz Temp./Humi. :23.6/57

Test Mode :TX CH HIGH Antenna Pol. :Vertical

EUT Pol :NB Plane Engineer :Enzo Chang



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
4960.000	Average	19.79	10.20	29.99	54.00	-24.01
4960.000	Peak	29.93	10.20	40.13	74.00	-33.87
7440.000	Average	19.11	17.86	36.97	54.00	-17.03
7440.000	Peak	28.34	17.86	46.21	74.00	-27.79

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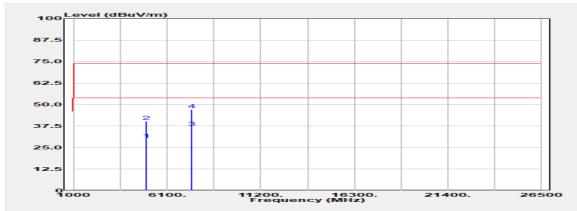
Test Site :SAC C Report Number :E2/2021/80033

Operation Mode: BT EDR Test Date :2021-09-16

Test Frequency :2480 MHz Temp./Humi. :23.6/57

Antenna Pol. :Horizontal Test Mode :TX CH HIGH

EUT Pol :NB Plane Engineer :Enzo Chang



Freq.	Detector Mode	Spectrum Reading Level	Factor	Actual FS	Limit @3m	Margin
MHz	PK/QP/AV	dΒμV	dB	dBμV/m	dBμV/m	dB
4960.000	Average	19.71	10.20	29.91	54.00	-24.09
4960.000	Peak	30.03	10.20	40.23	74.00	-33.77
7440.000	Average	19.07	17.86	36.93	54.00	-17.07
7440.000	Peak	29.31	17.86	47.17	74.00	-26.83

~ End of Report ~

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