



FCC Radio Test Report FCC ID: 2AYGCVNE-N41

This report concerns: Original Grant

Project No. : 2204C233
Equipment : Smart Phone
Brand Name : HONOR
Test Model : VNE-N41
Series Model : N/A

Applicant : Honor Device Co., Ltd.

Address : Shum Yip Sky Park, No. 8089, Hongli West Road, Shenzhen, China

Manufacturer : Honor Device Co., Ltd.

Address : Shum Yip Sky Park, No. 8089, Hongli West Road, Shenzhen, China

Date of Receipt : Apr. 22, 2022

Date of Test : Apr. 25, 2022 ~ May 26, 2022

Issued Date : Jun. 15, 2022

Report Version : R01

Standard(s) : 47 CFR FCC Part 27 Subpart M

47 CFR FCC Part 2 ANSI/TIA/EIA-603-E-2016

FCC KDB 971168 D01 Power Meas License Digital Systems v03r01

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

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lac-MRA



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Declaration

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BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

determining the Pass/Fail results.

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective. Please note that the measurement uncertainty is provided for informational purpose only and is not use in



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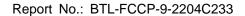




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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-9-2204C233	R00	Original Report.	May 27, 2022	Invalid
BTL-FCCP-9-2204C233	R01	Updated the factory of adapter.	Jun. 15, 2022	Valid



1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC Part 27 Subpart M & Part 2									
Standard(s) Section	Judgment	Remark							
2.1046 27.50(h)(2)	Output Power& Equivalent Isotropic Radiated Power	PASS							
2.1049	Occupied Bandwidth	PASS							
2.1051 27.53(m)(4)&(m)(6)	Conducted Spurious Emissions	PASS							
2.1047	Modulation Characteristics	PASS							
2.1051 27.53(m)(4)&(m)(6)	Band Edge Measurements	PASS							
-	Peak To Average Ratio	PASS	Record Only						
2.1055 27.54	Frequency Stability	PASS							

Note:

(1) "N/A" denotes test is not applicable in this test report.



1.1 TEST FACILITY

The test facilities used to collect the test data of conduted in this report is at the location of Room 108, Building 2, No.1, Yile Road, Songshan Lake Zone, Dongguan City, Guangdong, People's Republic of China.

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

1.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))

The BTL measurement uncertainty as below table:

Parameter	Uncertainty
Transmit Output Power Output Data	U = 0.40 dB
RF Power Density, Conducted	U = 0.66 dB
Bandwidth	200kHz: U=9.06kHz 1.4MHz: U=9.48kHz 3MHz: U=10.86kHz 5MHz: U=13.84kHz 10MHz: U=22.32kHz 15MHz: U=31.9kHz 20MHz: U=41.78kHz
Band Edge Compliance	U = 0.9 dB
Spurious Emissions, Conducted	20MHz~3.6GHz: U=0.88dB 3.6GHz~8.4GHz: U=1.08dB 8.4GHz~13.6GHz: U=1.24dB 13.6GHz~22GHz: U=1.34dB 22GHz~26.5GHz: U=1.36dB
Frequency Sta ility	800MHz: U=24.08Hz 900MHz: U=24.54Hz 1900MHz: U=34.7Hz 2100MHz: U=36.96Hz 2300MHz: U=39.24Hz 2500MHz: U=41.58Hz 2600MHz: U=42.74Hz

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By
Output Power & EIRP	15 ~ 35°C	25 ~ 75%	DC 3.87V	Rick Liao
Occupied Bandwidth	15 ~ 35°C	25 ~ 75%	DC 3.87V	Rick Liao
Conducted Spurious Emissions	15 ~ 35°C	25 ~ 75%	DC 3.87V	Rick Liao
Band Edge	15 ~ 35°C	25 ~ 75%	DC 3.87V	Rick Liao
Peak to Average Ratio	15 ~ 35°C	25 ~ 75%	DC 3.87V	Rick Liao
Frequency Stability	Normal & Extreme	25 ~ 75%	Normal & Extreme	Rick Liao



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	Smart Phone	Smart Phone						
Brand Name	HONOR	HONOR						
Test Model	VNE-N41	VNE-N41						
Series Model	N/A							
Model Difference(s)	N/A							
Hardware Version	HN2VNEM							
Software Version	4.2.0.55(C900E55R1P1)							
Power Source	1# DC voltage supplied fro 2# Supplied from battery.	om AC adapter.						
Power Rating	1# I/P: 100-240V~ 50/60H 10V === 2.25A 2# DC 3.87V, Rated Capa	z 0.75A O/P: 5V === 2A or city: 4900mAh	9V === 2A or					
IMEI No.	864258060052858, 86425	58060052197, 86425806005332	8					
Radio System Type	SA&NSA	SA&NSA						
SCS	15KHz, 30KHz							
Operation Bands	n7 / n38 / n41							
Bandwidth	n7: 5MHz, 10MHz, 15MHz n38: 20MHz n41: 20MHz, 30MHz, 40N	MHz, 50MHz, 60MHz, 80MHz, 9	0MHz, 100MHz					
	5G NR n7	PC3						
Power Class	5G NR n38	PC3						
	5G NR n41 DFT-s-OFDM PI/2 BPSK	PC2						
	DFT-s-OFDM QPSK	DFT-s-OFDM QPSK						
Modulation Type	DFT-s-OFDM 16QAM	DFT-s-OFDM 16QAM						
Modulation Type		· ·						
	DFT-s-OFDM 64QAM	DFT-s-OFDM 64QAM						
	DFT-s-OFDM 256QAM	DFT-s-OFDM 256QAM	ID.					
	5G NR n7	24.14	dBm					
Max. EIRP	5G NR n38	25.27	dBm					
	5G NR n41	29.24	dBm					

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. Channel List:

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	5G NR n7 (2500-2570MHz)									
	Bandwidth	Low	Low Mid High Low		Mid	High				
	Danuwium	Channel	Channel	Channel	Frequency	Frequency	Frequency			
	5	500500	507000	513500	2502.5	2535	2567.5			
	10	501000	507000	513000	2505	2535	2565			
	15	501500	507000	512500	2507.5	2535	2562.5			
	20	502000	507000	512000	2510	2535	2560			



5G NR n38 (2570-2620MHz)								
Bandwidth Low Mid High Low Mid Channel Channel Channel Frequency Frequency						High Frequency		
20	516000	519000	522000	2580	2595	2610		

5G NR n41 (2496-2690MHz)									
5 1	Low	Mid	High	Low	Mid	High			
Bandwidth	Channel	Channel	Channel	Frequency	Frequency	Frequency			
20	501204	518598	535998	2506.02	2592.99	2679.99			
30	502200	518598	534996	2526.0	2592.99	2659.98			
40	503202	518598	534000	2516.01	2592.99	2670			
50	504204	518598	532998	2521.02	2592.99	2664.99			
60	505200	518598	531996	2526	2592.99	2659.98			
80	507204	518598	529998	2536.02	2592.99	2649.99			
90	508200	518598	528996	2541	2592.99	2644.98			
100	509202	518598	528000	2546.01	2592.99	2640			

3. RB allocation:

Bandwidth	50	40	30	25	20	15	10	5
SCS 15KHz	RB							
CP-OFDM	Size/							
CF-OFDIVI	Offset							
Edge_1RB_Left	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0
Inner_1RB_Left	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Inner_1RB_Right	1/268	1/214	1/158	1/131	1/104	1/77	1/50	1/23
Edge_1RB_Right	1/269	1/215	1/159	1/132	1/105	1/78	1/51	1/24
Edge_Full_Left	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0
Edge_Full_Right	2/268	2/214	2/158	2/131	2/104	2/77	2/50	2/23
Inner_Full	135/67	108/54	80/40	67/33	53/26	39/19	26/13	13/6
Outer_Full	270/0	216/0	160/0	133/0	106/0	79/0	52/0	25/0

Bandwidth	50	40	30	25	20	15	10	5
SCS 15KHz	RB							
DFT-s-OFDM	Size/							
DF 1-8-OFDIVI	Offset							
Edge_1RB_Left	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0
Inner_1RB_Left	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Inner_1RB_Right	1/268	1/214	1/158	1/131	1/104	1/77	1/50	1/23
Edge_1RB_Right	1/269	1/215	1/159	1/132	1/105	1/78	1/51	1/24
Edge_Full_Left	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0
Edge_Full_Right	2/268	2/214	2/158	2/131	2/104	2/77	2/50	2/23
Inner_Full	135/67	108/54	80/40	64/32	50/25	36/18	25/12	12/6
Outer_Full	270/0	216/0	160/0	128/0	100/0	75/0	50/0	25/0



Bandwidth	100	90	80	60	50	40	30	25	20	15	10
SCS	RB	RB	RB	RB	RB	RB	RB	RB	RB	RB	RB
30KHz	Size/	Size/	Size/	Size/	Size/	Size/	Size/	Size/	Size/	Size/	Size/
CP-OFDM	Offset	Offset	Offset	Offset	Offset	Offset	Offset	Offset	Offset	Offset	Offset
Edge_1RB _Left	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0
Inner_1RB _Left	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Inner_1RB _Right	1/271	1/243	1/215	1/160	1/131	1/104	1/76	1/63	1/49	1/36	1/22
Edge_1RB _Right	1/272	1/244	1/216	1/161	1/132	1/105	1/77	1/64	1/50	1/37	1/23
Edge_Full _Left	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0	2/0
Edge_Full _Right	2/271	2/243	2/215	2/160	2/131	2/104	2/76	2/63	2/49	2/36	2/22
Inner _Full	137/68	123/61	109/54	81/40	67/33	53/26	39/19	33/16	25/12	19/9	12/6
Outer _Full	273/0	245/0	217/0	162/0	133/0	106/0	78/0	65/0	51/0	36/0	24/0
Bandwidth	100	90	80	60	50	40	30	25	20	15	10
SCS 30KHz	RB	RB Size/	RB Size/	RB Size/	RB Size/	RB	RB Size/	RB Size/	RB Size/	RB Size/	RB Size/
DFT-s-	Size/					Size/					
DFT-s- OFDM	Offset	Offset	Offset	Offset	Offset	Offset	Offset	Offset	Offset	Offset	Offset
DFT-s- OFDM Edge_1RB _Left											
OFDM Edge_1RB	Offset	Offset	Offset	Offset	Offset	Offset	Offset	Offset	Offset	Offset	Offset
OFDM Edge_1RB _Left Inner_1RB	Offset 1/0	Offset 1/0	Offset 1/0	Offset 1/0	Offset 1/0	Offset 1/0	Offset 1/0	Offset 1/0	Offset 1/0	Offset 1/0	Offset 1/0
OFDM Edge_1RB _Left Inner_1RB _Left Inner_1RB	1/0 1/1	1/0 1/1	1/0 1/1	1/0 1/1	1/0 1/1	1/0 1/1	1/0 1/1	1/0 1/1	1/0 1/1	1/0 1/1	1/0 1/0
OFDM Edge_1RB _Left Inner_1RB _Left Inner_1RB _Right Edge_1RB _Right Edge_Full _Left	Offset 1/0 1/1 1/271	Offset 1/0 1/1 1/243	Offset 1/0 1/1 1/215	1/0 1/1 1/160	1/0 1/1 1/131	1/0 1/1 1/104	1/0 1/1 1/76	1/0 1/1 1/63	1/0 1/1 1/49	1/0 1/1 1/36	1/0 1/0 1/22
OFDM Edge_1RB _Left Inner_1RB _Left Inner_1RB _Right Edge_1RB _Right Edge_Full	Offset 1/0 1/1 1/271 1/272	Offset 1/0 1/1 1/243 1/244	1/0 1/1 1/215 1/216	1/0 1/1 1/160 1/161	1/0 1/1 1/131 1/132	1/0 1/1 1/104 1/105	1/0 1/1 1/76 1/77	1/0 1/1 1/63 1/64	1/0 1/1 1/49 1/50	1/0 1/1 1/36 1/37	1/0 1/0 1/22 1/23
OFDM Edge_1RB _Left Inner_1RB _Left Inner_1RB _Right Edge_1RB _Right Edge_Full _Left Edge_Full	Offset 1/0 1/1 1/271 1/272 2/0	1/0 1/1 1/243 1/244 2/0	1/0 1/1 1/215 1/216 2/0	1/0 1/1 1/160 1/161 2/0	1/0 1/1 1/131 1/132 2/0	1/0 1/1 1/104 1/105 2/0	1/0 1/1 1/76 1/77 2/0	1/0 1/1 1/63 1/64 2/0	1/0 1/1 1/49 1/50 2/0	1/0 1/1 1/36 1/37 2/0	1/0 1/0 1/22 1/23 2/0



4. Table for Filed Antenna:

Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
				1.9	5G NR n7
N/A	N/A	Integral	N/A	1.9	5G NR n38
				1.9	5G NR n41

Note: The antenna gain is provided by the manufacturer.

5. The EUT contains following accessory devices:

Object / Part No.	Manufacturer / Trademark	Type / Model Name	Technical Data
Adapter	Honor Device Co., Ltd.	HN-100225E00	I/D: 400 040V
	(Factory: Salcomp)	HN-100225U00	I/P: 100-240V ~50/60Hz, 0.75A
		HW-100225E00	O/P: 5V === 2A or
	Honor Device Co., Ltd. (Factory: Huntkey)	HW-100225U00	9V === 2A or 10V === 2.25A
	(. acie.ja	HW-100225B00	10V === 2.25A
	Honor Device Co., Ltd.	HB496590EFW	Rated capacity:
Battery -	(Manufacturer: SCUD)	HB496590EFW-F	4900 mAh Nominal Voltage:
	Honor Device Co., Ltd.	HB496590EFW	+3.87V Charging Voltage:
	(Manufacturer: SCUD)	HB496590EFW-F	+4.45V



2.2 DESCRIPTION OF TEST MODES

Following mode(s) is (were) found to be the worst case(s) and selected for the final test.

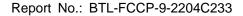
5G NR n7						
Test Item	Tested Channel	Channel Bandwidth	Modulation	RB allocation		
	Low, Mid, High	5MHz		Outer Full		
Output Power & EIRP	Low, Mid, High	15MHz	DFT-s-OFDM: PI/2 BPSK,QPSK, 16QAM	Inner 1RB Left Inner 1RB Right		
LIIVI	Low, Mid, High	20MHz	TOQAW	Inner Full		
	Mid	5MHz	DFT-s-OFDM: PI/2 BPSK,QPSK,			
Peak To Average Ratio	Mid	15MHz	16QAM, 64QAM,256QAM CP-OFDM: QPSK, 16QAM,	Outer Full		
Natio	Mid	20MHz	64QAM,256QAM			
Modulation Characteristics	Mid	20MHz	DFT-s-OFDM: PI/2 BPSK,QPSK, 16QAM, 64QAM,256QAM CP-OFDM: QPSK, 16QAM, 64QAM,256QAM	Outer Full		
	Low, Mid, High	5MHz	DFT-s-OFDM: PI/2 BPSK,QPSK,	Outer Full		
Occupied	Low, Mid, High	10MHz	16QAM, 64QAM,256QAM CP-OFDM: QPSK, 16QAM,			
Bandwidth	Low, Mid, High	15MHz				
	Low, Mid, High	20MHz	64QAM,256QAM	<u> </u>		
	Low, High	5MHz	DFT-s-OFDM: PI/2 BPSK,QPSK, 16QAM, 64QAM,256QAM	Edge 1RB Left Edge 1RB Right		
Band Edge	Low, High	20MHz	CP-OFDM: QPSK, 16QAM, 64QAM,256QAM	Outer Full Inner Full		
On a divinta d	Low, Mid, High	5MHz		Edge 1RB Left		
Conducted Spurious Emission	Low, Mid, High	15MHz	CP-OFDM QPSK	Edge 1RB Right		
Spanious Emission	Low, Mid, High	20MHz		Outer Full		
Frequency Stability	Mid	20MHz	DFT-s-OFDM QPSK	Outer Full		



5G NR n38						
Test Item	Tested Channel	Channel Bandwidth	Modulation	RB allocation		
Output Power & EIRP	Low, Mid, High	20MHz	DFT-s-OFDM: PI/2 BPSK,QPSK, 16QAM	Outer Full Inner 1RB Left Inner 1RB Right Inner Full		
Peak To Average Ratio	Mid	20MHz	DFT-s-OFDM: PI/2 BPSK,QPSK, 16QAM, 64QAM,256QAM CP-OFDM: QPSK, 16QAM, 64QAM,256QAM	Outer Full		
Modulation Characteristics	Mid	20MHz	DFT-s-OFDM: PI/2 BPSK,QPSK, 16QAM, 64QAM,256QAM CP-OFDM: QPSK, 16QAM, 64QAM,256QAM	Outer Full		
Occupied Bandwidth	Low, Mid, High	20MHz	DFT-s-OFDM: PI/2 BPSK,QPSK, 16QAM, 64QAM,256QAM CP-OFDM: QPSK, 16QAM, 64QAM,256QAM	Outer Full		
Band Edge	Low, High	20MHz	DFT-s-OFDM: PI/2 BPSK,QPSK, 16QAM, 64QAM,256QAM CP-OFDM: QPSK, 16QAM, 64QAM,256QAM	Edge 1RB Left Edge 1RB Right Outer Full Inner Full		
Conducted Spurious Emission	Low, Mid, High	20MHz	CP-OFDM QPSK	Edge 1RB Left Edge 1RB Right Outer Full		
Frequency Stability	Mid	20MHz	DFT-s-OFDM QPSK	Outer Full		



5G NR n41						
Test Item	Tested Channel	Channel Bandwidth	Modulation	RB allocation		
0	Low, Mid, High	20MHz		Outer Full		
Output Power & EIRP	Low, Mid, High	60MHz	DFT-s-OFDM: PI/2 BPSK,QPSK, 16QAM	Inner 1RB Left Inner 1RB Right		
LIKI	Low, Mid, High	100MHz	TOQAW	Inner Full		
	Mid	20MHz	DFT-s-OFDM: PI/2 BPSK,QPSK,			
Peak To Average Ratio	Mid	60MHz	16QAM, 64QAM,256QAM CP-OFDM: QPSK, 16QAM,	Outer Full		
Ivalio	Mid	100MHz	64QAM,256QAM			
Modulation Characteristics	Mid	100MHz	DFT-s-OFDM: PI/2 BPSK,QPSK, 16QAM, 64QAM,256QAM CP-OFDM: QPSK, 16QAM, 64QAM,256QAM	Outer Full		
	Low, Mid, High	20MHz		Outer Full		
	Low, Mid, High	30MHz	DFT-s-OFDM: PI/2 BPSK,QPSK, 16QAM, 64QAM,256QAM CP-OFDM: QPSK, 16QAM, 64QAM,256QAM			
	Low, Mid, High	40MHz				
Occupied	Low, Mid, High	50MHz				
Bandwidth	Low, Mid, High	60MHz				
	Low, Mid, High	80MHz				
	Low, Mid, High	90MHz				
	Low, Mid, High	100MHz				
Band Edge	Low, High	20MHz	DFT-s-OFDM: PI/2 BPSK,QPSK, 16QAM, 64QAM,256QAM	Edge 1RB Left Edge 1RB Right		
Danu Euge	Low, High	100MHz	CP-OFDM: QPSK, 16QAM, 64QAM,256QAM	Outer Full Inner Full		
0	Low, Mid, High	20MHz		Edge 1RB Left		
Conducted Spurious Emission	Low, Mid, High	60MHz	CP-OFDM QPSK	Edge 1RB Right		
	Low, Mid, High	100MHz		Outer Full		
Frequency Stability	Mid	100MHz	DFT-s-OFDM QPSK	Outer Full		





3. TEST RESULT

3.1 OUTPUT POWER MEASUREMENT

3.1.1 LIMIT

Mobile / Portable station are limited to 2 watts e.i.r.p. (Part 27 Subpart M)

3.1.2 TEST PROCEDURE

The testing follows FCC KDB 971168 v03r01 Section 5.

EIRP:

EIRP = Output Power + Antenan gain

ERP:

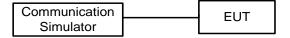
ERP = EIRP-2.15

Output Power:

The EUT was set up for the maximum power with WCDMA and LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

3.1.3 TEST SETUP LAYOUT

Output Power Measurement



3.1.4 TEST DEVIATION

No deviation.

3.1.5 TEST RESULTS



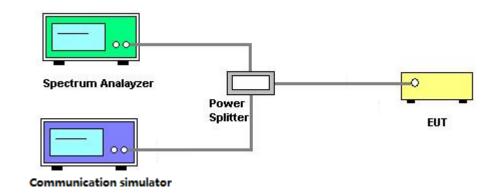
3.2 OCCUPIED BANDWIDTH MEASUREMENT

3.2.1 TEST PROCEDURE

The testing follows FCC KDB 971168 v03r01 Section 4.

- 1. The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth and 26dB bandwidth.
- 2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
- 3. RBW=(1% ~ 5%)*EBW VBW≥3* RBW
- 4. Set spectrum analyzer with Peak detector.

3.2.2 TEST SETUP LAYOUT



3.2.3 TEST DEVIATION

No deviation.

3.2.4 TEST RESULTS



3.3 CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

3.3.1 LIMIT

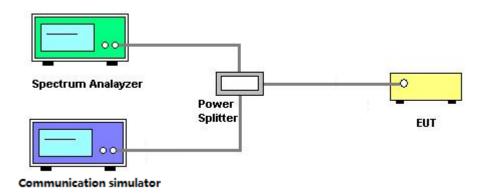
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to -13dBm.

3.3.2 TEST PROCEDURES

The testing follows FCC KDB 971168 v03r01 Section 6.

- 1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
- 2. The band edges of low and high channels for the highest RF powers were measured. Set RBW>=1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
- 3. Set spectrum analyzer with Peak detector.
- 4. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.3.3 TEST SETUP LAYOUT



3.3.4 TEST DEVIATION

No deviation.

3.3.5 TEST RESULTS



3.4 BAND EDGE MEASUREMENT

3.4.1 LIMIT

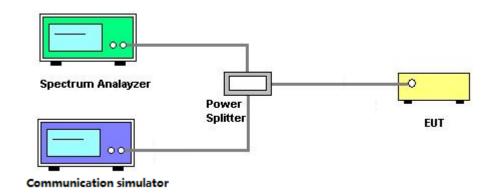
A Power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

3.4.2 TEST PROCEDURES

The testing follows FCC KDB 971168 v03r01 Section 6.

- 1. All measurements were done at low and high operational frequency range.
- 2. Record the max trace plot into the test report.

3.4.3 TEST SETUP LAYOUT



3.4.4 TEST DEVIATION

No deviation.

3.4.5 TEST RESULTS



3.5 PEAK TO AVERAGE RATIO MEASUREMENT

3.5.1 LIMIT

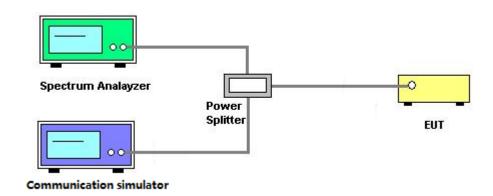
In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.5.2 TEST PROCEDURES

The testing follows FCC KDB 971168 v03r01 Section 5.7.

- 1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
- 2. Set the number of counts to a value that stabilizes the measured CCDF curve;
- 3. Record the maximum PAPR level associated with a probability of 0.1%.

3.5.3 TEST SETUP LAYOUT



3.5.4 TEST DEVIATION

No deviation.

3.5.5 TEST RESULTS



3.6 FREQUENCY STABILITY MEASUREMENT

3.6.1 LIMIT

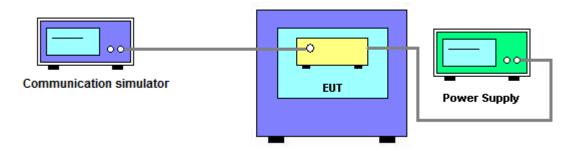
±1.5 ppm is for base and fixed station. ±2.5 ppm is for mobile station.

3.6.2 TEST PROCEDURES

The testing follows FCC KDB 971168 v03r01 Section 9.

- 1. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
- 2. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- 3. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5°C during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.
- 4. The frequency error was recorded frequency error from the communication simulator.

3.6.3 TEST SETUP LAYOUT



3.6.4 TEST DEVIATION

No deviation.

3.6.5 TEST RESULTS





4. LIST OF MEASUREMENT EQUIPMENTS

	Conducted Measurement							
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until			
1	Universal Radio Communication Tester	Keysight	E7515B	MY60192688	Sep. 26, 2022			
2	Signal Analyzer	R&S	FSW26	102415	Sep. 26, 2022			
3	Signal Analyzer	R&S	FSW43	101998	Sep. 26, 2022			
4	Vector Signal Generator	R&S	SMW200A	109896	Sep. 27, 2022			
5	Temperature Chamber	Espec	SH-642	93018298	Apr. 27, 2023			
6	DC Power Supply	KEITHLEY	2303	000500E	Dec. 21, 2022			

Remark: "N/A" denotes no model name, serial no. or calibration specified. All calibration period of equipment list is one year.

End of Test Report