Shenzhen Huatongwei International Inspection Co.,Ltd.
Huatongwei 101, No.006, Keji south 12th Road, High-tech zone community, Yuehai Street,
Nanshan District, Shenzhen, Guangdong, China
Phone:86-755-26715499 E-mail: cs@szhtw.com.cn Website:http://www.szhtw.com.cn

FCC REPORT

For LTE

Report No. ..... :	**CHTEW23110049**	Report Verification:
Project No.....:	**SHT2310045701EW**	
FCC ID..... :	**2BCINEC2**	
Applicant ..... :	**SENTRY CS LTD**	
Address.....:	**5 Derech Hashalom, Tel Aviv, Israel**	
Product Name ..... :	**Eclipse II (Drone tracking system)**	
Trade Mark .....:	-	
Model No. .....:	CVX-EC2-BU (Antenna model: CVX-EC2-D-ANT)	
Listed Model(s) .....:	-	
Standard ..... :	**FCC CFR Title 47 Part 2** **FCC CFR Title 47 Part 24 Subpart E** **FCC CFR Title 47 Part 27**	
Date of receipt of test sample.....:	Apr.06, 2023	
Date of testing.....:	Apr.06, 2023- Jun. 28, 2024	
Date of issue.....:	Jul. 01, 2024	
Result..... .....:	**Pass**	

Compiled by (position+printedname+signature)...:	File administrator Xiaodong Zhao	Xiaodong Zhao
Supervised by (position+printedname+signature)....:	Project Engineer Xiaodong Zhao	Xiaodong Zhao
Approved by (position+printedname+signature)....:	RF Manager Xu Yang	Xu Yang

Testing Laboratory Name ..... :	**Shenzhen Huatongwei International Inspection Co., Ltd.**
Old Address.....:	1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China
New Address .....:	Building 7, Baiwang Idea Factory, No.1051, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong, China

Contents

1. TEST STANDARDS AND REPORT VERSION

1.1. Applicable Standards

The tests were performed according to following standards:

FCC CFR Title 47 Part 2: Frequency Allocations and Radio Treaty Matters; General Rules and Regulations

FCC CFR Title 47 Part 24 Subpart E: Broadband PCS

FCC CFR Title 47 Part 27: Miscellaneous Wireless Communications Services

ANSI C63.26-2015: American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

KDB 971168 D01 Power Meas License Digital Systems v03: MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS

1.2. Report version information

Revision No.	Date of issue	Description
N/A	2024-07-01	Original

2. TEST DESCRIPTION

Section	Test Item	Section in CFR 47	Result #1	Test Engineer
-	Conducted Output Power	Part 2.1046 Part 24.232(c) Part 27.50	Pass*	Xiaodong Zhao
-	Peak-to-Average Ratio	Part 24.232 Part 27.50	Pass*	-
-	99% Occupied Bandwidth & 26 dB Bandwidth	Part 2.1049 Part 24.238(b) Part 27.53	Pass*	-
-	Band Edge	Part 2.1051 Part 24.238 Part 27.53	Pass*	-
-	Conducted Spurious Emissions	Part 2.1051 Part 24.238 Part 27.53	Pass*	-
-	Frequency stability vs temperature	Part 2.1055(a)(1)(b) Part 24.235 Part 27.54	Pass*	-
-	Frequency stability vs voltage	Part 2.1055(d)(1)(2) Part 24.235 Part 27.54	Pass*	-
5.1	ERP and EIRP	Part 24.232(b) Part 27.50	Pass**	Yifang Wang
5.2	Radiated Spurious Emissions	Part 2.1053 Part 24.238 Part 27.53	Pass**	Yifang Wang

Note:

1) #1: The test result does not include measurement uncertainty value
2) *: Refer to module FCC ID: N7NEM75. EUT only uses LTE Band 2 and Band 12, and the rest of the band is turned off by software.
3) **: These tests were done at the old lab location. The test runs from April 6, 2023 to Aug. 23, 2023.
4) Conducted Output Power: These tests were done at the new lab location. The test will take place on June 28, 2024.

3. SUMMARY

3.1. Client Information

Applicant:	SENTRY CS LTD
Address:	5 Derech Hashalom, Tel Aviv, Israel
Manufacturer:	SENTRY CS LTD
Address:	5 Derech Hashalom, Tel Aviv, Israel

3.2. Product Description

Main unit information:	
Product Name:	Eclipse II (Drone tracking system)
Trade Mark:	-
Model No.:	CVX-EC2-BU (Antenna model: CVX-EC2-D-ANT)
Listed Model(s):	-
Power supply:	AC 100-240V 50Hz/60Hz
Test voltage:	AC 120V 60Hz
Hardware version:	Eclipse ll
Software version:	Eclipse ll

3.3. Radio Specification Description

Support Operating Band:	☒ LTE Band 2 ☒ LTE Band 12
Operating Frequency Range:	Please refer to note #2
Channel bandwidth:	Please refer to note #3
Uplink Modulation type:	☒ QPSK ☒ 16QAM ☒ 64QAM
Downlink Modulation type:	☒ QPSK ☒ 16QAM ☒ 64QAM
Antenna type:	Flexible FPCB Antenna
Antenna gain [#4]:	Band 2: 2.5dBi; Band 12: 1.0dBi

Note:

- ☒: means that this feature is supported; ☐: means that this feature is not supported
- #2: Operating frequency range is as follow:

LTE Band	Uplink frequency	Downlink frequency
LTE Band 2	1850.7 – 1909.3 MHz	1930.7 – 1989.3 MHz
LTE Band 12	699.7 – 715.3 MHz	729.7 – 745.3 MHz

- Supported channel bandwidth is as follow:

LTE Band	1.4MHz	3MHz	5MHz	10MHz	15MHz	20MHz
LTE Band 2	√	√	√	√	√	√
LTE Band 12	√	√	√	√	-	-

√: means that this feature is supported; -: means that this feature is not supported

- #4: The antenna gain is provided by the applicant, and the applicant should be responsible for its authenticity, HTW lab has not verified the authenticity of its information

3.4. Testing Laboratory Information

Laboratory Name	Shenzhen Huatongwei International Inspection Co., Ltd.	
Laboratory Location (Old)	1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China	
Laboratory Location (New)	Building 7, Baiwang Idea Factory, No.1051, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong, China	
Contact information:	Tel: 86-755-26715499 E-mail: cs@szhtw.com.cn http://www.szhtw.com.cn	
Qualifications	Type	Accreditation Number
	FCC	762235

4. TEST CONFIGURATION

4.1. Test frequency list

LTE Band 2

Test Frequency ID	Bandwidth [MHz]	N_{UL}	Frequency of Uplink [MHz]	N_{DL}	Frequency of Downlink [MHz]
Low Range	1.4	18607	1850.7	607	1930.7
	3	18615	1851.5	615	1931.5
	5	18625	1852.5	625	1932.5
	10	18650	1855	650	1935
	15 [1]	18675	1857.5	675	1937.5
	20 [1]	18700	1860	700	1940
Mid Range	1.4/3/5/10 15 [1]/20 [1]	18900	1880	900	1960
High Range	1.4	19193	1909.3	1193	1989.3
	3	19185	1908.5	1185	1988.5
	5	19175	1907.5	1175	1987.5
	10	19150	1905	1150	1985
	15 [1]	19125	1902.5	1125	1982.5
	20 [1]	19100	1900	1100	1980

NOTE 1: Bandwidth for which a relaxation of the specified UE receiver sensitivity requirement (TS 36.101 [27] Clause 7.3) is allowed.

LTE Band 12

Table 4.3.1.1.12-1: Test frequencies for E-UTRA channel bandwidth for operating band 12

Test Frequency ID	Bandwidth [MHz]	N_{UL}	Frequency of Uplink [MHz]	N_{DL}	Frequency of Downlink [MHz]
Low Range	1.4	23017	699.7	5017	729.7
	3	23025	700.5	5025	730.5
	5 [1]	23035	701.5	5035	731.5
	10 [1]	23060	704	5060	734
Mid Range	1.4/3 5 [1]/10 [1]	23095	707.5	5095	737.5
High Range	1.4	23173	715.3	5173	745.3
	3	23165	714.5	5165	744.5
	5 [1]	23155	713.5	5155	743.5
	10 [1]	23130	711	5130	741

NOTE 1: Bandwidth for which a relaxation of the specified UE receiver sensitivity requirement (TS 36.101 [27] Clause 7.3) is allowed.

4.2. Test mode

Test mode	Link mode

1) Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems and ANSI C63.26 with maximum output power.

2) Radiated measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission.

Test configuration is as follow:

Test Items	Bandwidth	Modulation	RB #		
			1	Half	Full
Radiated Spurious Emission	#5	#6	○	-	-
Conducted Output Power	The reference module power is tested at the point of maximum power for each bandwidth.				

Note:

- #5: Test all kind of bandwith in section 3.3
- #6: Test all kind of uplink modulation in section 3.3
- ○: means that this configuration is chosen for testing
- -: means that this configuration is not test.
- The device is investigatedfrom 30MHz to10 times offundamental signal for radiated spurious emission test under different bandwidth,modulations and RB size/offset in exploratory test. Subsequently, only the worst case emissions(highest bandwidth,QPSK,and 1RB0) are reported.

4.3. Test sample information

Test item	HTW sample no.
Radiated test items	YPHT23040066001
Conducted Output Power	YPHT23040066001

Note:

Radiated test items: Radiated Spurious Emission

Conducted test items: Conducted Output Power

4.4. Support unit used in test configuration and system

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The following peripheral devices and interface cables were connected during the measurement:

Whether support unit is used?				
✓ No				
Item	Equipment	Trade Name	Model No.	Other
1	-	-	-	-
2	-	-	-	-

4.5. Testing environmental condition

Voltage	VN=Nominal Voltage	AC 120V
Temperature	TN=Normal Temperature	25 °C
Humidity	30~60 %	
Air Pressure	950-1050 hPa	

4.6. Statement of the measurement uncertainty

No.	Test Items	Measurement Uncertainty
1	Conducted Output Power	0.66
2	Radiated Spurious Emission	4.54dB for 30MHz-1GHz 5.10dB for above 1GHz

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

4.7. Equipments Used during the Test

● Radiated Spurious Emission							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Semi-Anechoic Chamber	Albatross projects	HTWE0122	SAC-3m-01	C11121	2018/09/27	2023/09/26
●	Spectrum Analyzer	R&S	HTWE0098	FSP40	100597	2022/08/25	2023/08/24
●	Loop Antenna	R&S	HTWE0546	HFH2-Z2E	101073	2021/05/25	2024/05/24
●	Horn Antenna	ETS	HTWE0548	3117	240120	2022/05/20	2025/05/19
●	Ultra-Broadband Antenna	SCHWARZBECK	HTWE0547	VULB9163	945	2022/05/23	2025/05/22
○	Horn Antenna	STEATITE	HTWE0549	QMS-00880	25661	2022/05/20	2025/05/19
●	Pre-amplifier	CD	HTWE0071	PAP-0102	12004	2022/11/04	2023/11/03
●	Broadband Preamplifier	SCHWARZBECK	HTWE0201	BBV 9718	9718-248	2023/02/27	2024/02/26
●	RF Connection Cable	HUBER+SUHNER	HTWE0120-01	6m 18GHz S Serisa	N/A	2023/02/24	2024/02/23
●	RF Connection Cable	HUBER+SUHNER	HTWE0120-02	6m 3GHz RG Serisa	N/A	2023/02/24	2024/02/23
●	RF Connection Cable	HUBER+SUHNER	HTWE0119-05	6m 3GHz RG Serisa	N/A	2023/02/24	2024/02/23
●	RF Connection Cable	HUBER+SUHNER	HTWE0120-04	6m 3GHz RG Serisa	N/A	2023/02/24	2024/02/23
●	EMI Test Software	Audix	N/A	E3	N/A	N/A	N/A

● Auxiliary Equipment							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Radio communication tester	R&S	HTWE0287	CMW500	137688-Lv	2022/08/25	2023/08/24
●	High pass filter	Wainwright	HTWE0297	WHKX3.0/18G-10SS	38	2023/05/15	2024/05/14
○	Band Stop filter	-	HTWE0039	N/A	N/A	2023/01/26	2024/01/25

● RF Conducted test item							
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Spectrum Analyzer	Agilent	HTWE0286	N9020A	MY50510187	2023/08/22	2024/08/21
●	Radio communication tester	R&S	HTWE0287	CMW500	137688-Lv	2023/08/25	2024/08/24
●	Test software	Tonscend	N/A	JS1120	N/A	N/A	N/A
●	T-Cock	Weinschel	HTWE0289	1580	SC329	2023/08/22	2024/08/21

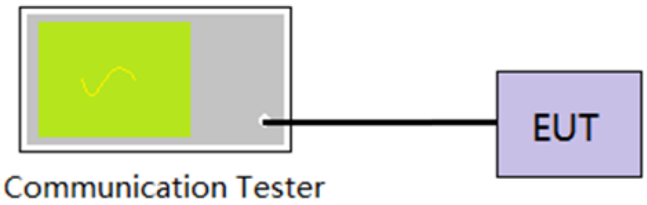
5. TEST CONDITIONS AND RESULTS

5.1. Conducted Output Power

LIMIT

N/A

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT output port was connected to communication tester.
2. Set EUT at maximum power through communication tester.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure the maximum burst average power.

TEST MODE

Please refer to the clause 4.2

TEST RESULTS

☒ **Passed** ☐ **Not Applicable**

TEST DATA

Spot Check Data:

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band2	1.4MHz	QPSK	18607	1RB#3	22.07	PASS
Band2	3MHz	QPSK	18615	1RB#0	22.05	PASS
Band2	5MHz	QPSK	18625	1RB#0	22.12	PASS
Band2	10MHz	QPSK	18650	1RB#0	22.35	PASS
Band2	15MHz	QPSK	18675	1RB#0	22.30	PASS
Band2	20MHz	QPSK	18700	1RB#0	22.47	PASS
Band12	1.4MHz	QPSK	23173	1RB#3	22.55	PASS
Band12	3MHz	QPSK	23165	1RB#0	22.65	PASS
Band12	5MHz	QPSK	23155	1RB#0	22.70	PASS
Band12	10MHz	QPSK	23130	1RB#0	22.72	PASS

Original Module Data:

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band2	1.4MHz	QPSK	18607	1RB#3	22.11	PASS
Band2	3MHz	QPSK	18615	1RB#0	22.08	PASS
Band2	5MHz	QPSK	18625	1RB#0	22.18	PASS
Band2	10MHz	QPSK	18650	1RB#0	22.42	PASS
Band2	15MHz	QPSK	18675	1RB#0	22.35	PASS
Band2	20MHz	QPSK	18700	1RB#0	22.55	PASS
Band12	1.4MHz	QPSK	23173	1RB#3	22.60	PASS
Band12	3MHz	QPSK	23165	1RB#0	22.69	PASS
Band12	5MHz	QPSK	23155	1RB#0	22.75	PASS
Band12	10MHz	QPSK	23130	1RB#0	22.76	PASS

The results of product spot check and module data comparison are as follows:

Band	Bandwidth	Spot Check Data		Module Data (dBm)		Deviation (%)
		dBm	W	dBm	W	
Band2	1.4MHz	22.07	0.1611	22.11	0.1626	-0.92
Band2	3MHz	22.05	0.1603	22.08	0.1614	-0.69
Band2	5MHz	22.12	0.1629	22.18	0.1652	-1.37
Band2	10MHz	22.35	0.1718	22.42	0.1746	-1.60
Band2	15MHz	22.30	0.1698	22.35	0.1718	-1.14
Band2	20MHz	22.47	0.1766	22.55	0.1799	-1.83
Band12	1.4MHz	22.55	0.1799	22.60	0.1820	-1.14
Band12	3MHz	22.65	0.1841	22.69	0.1858	-0.92
Band12	5MHz	22.70	0.1862	22.75	0.1884	-1.14
Band12	10MHz	22.72	0.1871	22.76	0.1888	-0.92

5.2. ERP and EIRP

LIMIT

LTE Band 2: 2W(33dBm) EIRP

LTE Band 12: 3W(34.77dBm) ERP

TEST PROCEDURE

1. According to the power tested in section 5.1, select the maximum power in each mode, and use the following formula to calculate the corresponding ERP/EIRP.
2. ERP = conducted power + Gain(dBd)
3. EIRP = conducted power + Gain(dBi)

   ERP = EIRP - 2.15

TEST RESULTS

☒ **Passed** ☐ **Not Applicable**

TEST DATA

Band	Bandwidth	Mode	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP		Limit (W)	Verdict
					(dBm)	(W)		
Band 2	1.4MHz	QPSK	22.11	2.50	24.61	0.29	2	PASS
		16QAM	21.43	2.50	23.93	0.25	2	PASS
		64QAM	20.29	2.50	22.79	0.19	2	PASS
	3MHz	QPSK	22.08	2.50	24.58	0.29	2	PASS
		16QAM	21.49	2.50	23.99	0.25	2	PASS
		64QAM	20.27	2.50	22.77	0.19	2	PASS
	5MHz	QPSK	22.18	2.50	24.68	0.29	2	PASS
		16QAM	21.52	2.50	24.02	0.25	2	PASS
		64QAM	20.36	2.50	22.86	0.19	2	PASS
	10MHz	QPSK	22.42	2.50	24.92	0.31	2	PASS
		16QAM	21.72	2.50	24.22	0.26	2	PASS
		64QAM	20.59	2.50	23.09	0.20	2	PASS
	15MHz	QPSK	22.35	2.50	24.85	0.31	2	PASS
		16QAM	21.67	2.50	24.17	0.26	2	PASS
		64QAM	20.57	2.50	23.07	0.20	2	PASS
	20MHz	QPSK	22.55	2.50	25.05	0.32	2	PASS
		16QAM	21.89	2.50	24.39	0.27	2	PASS
		64QAM	20.71	2.50	23.21	0.21	2	PASS

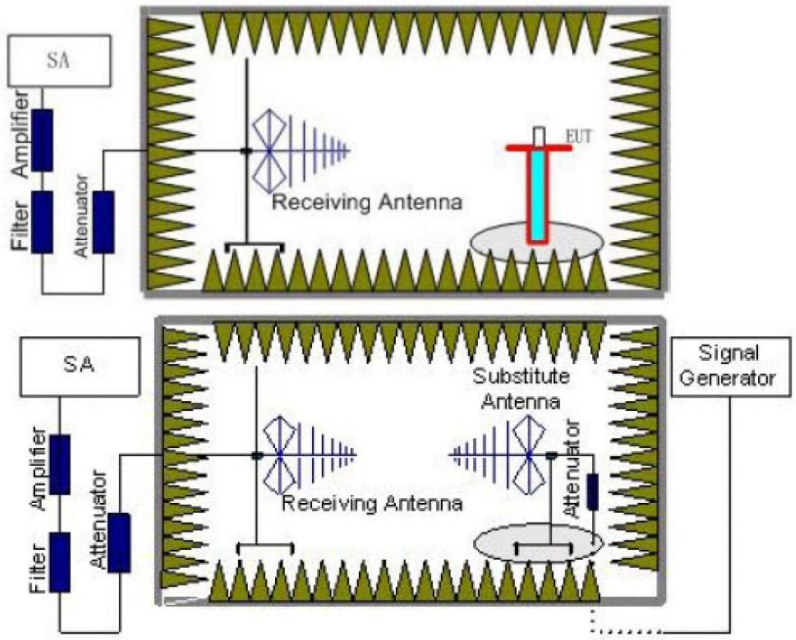
Band	Bandwidth	Mode	Conducted Power (dBm)	Antenna Gain (dBi)	ERP		Limit (W)	Verdict
					(dBm)	(W)		
Band 12	1.4MHz	QPSK	22.60	1.00	23.60	0.23	3	PASS
		16QAM	21.88	1.00	22.88	0.19	3	PASS
		64QAM	20.79	1.00	21.79	0.15	3	PASS
	3MHz	QPSK	22.69	1.00	23.69	0.23	3	PASS
		16QAM	22.07	1.00	23.07	0.20	3	PASS
		64QAM	21.01	1.00	22.01	0.16	3	PASS
	5MHz	QPSK	22.75	1.00	23.75	0.24	3	PASS
		16QAM	22.06	1.00	23.06	0.20	3	PASS
		64QAM	20.93	1.00	21.93	0.16	3	PASS
	10MHz	QPSK	22.76	1.00	23.76	0.24	3	PASS
		16QAM	22.04	1.00	23.04	0.20	3	PASS
		64QAM	20.98	1.00	21.98	0.16	3	PASS

5.3. Radiated Spurious Emission

LIMIT

LTE Band 2/12: -13dBm;

TEST CONFIGURATION



TEST PROCEDURE

1. Place the EUT in the center of the turntable.
   a) For radiated emissions measurements performed at frequencies less than or equal to 1 GHz, the EUT shall be placed on a RF-transparent table at a nominal height of 80 cm above the reference ground plane
   b) For radiated measurements performed at frequencies above 1 GHz, the EUT shall be placed on an RF transparent table at a nominal height of 1.5 m above the ground plane.
2. Unless the EUT uses an integral antenna, the EUT shall be terminated with a non-radiating transmitter load. In cases where the EUT uses an adjustable antenna, the antenna shall be adjusted through typical positions and lengths to maximize emissions levels.
3. The EUT shall be tested while operating on the frequency per manufacturer specification. Set the transmitter to operate in continuous transmit mode.
4. Receiver or Spectrum set as follow:
   Below 1GHz, RBW=100kHz, VBW=300kHz, Detector=Peak, Sweep time=Auto
   Above 1GHz, RBW=1MHz, VBW=3MHz, Detector=Peck, Sweep time=Auto
5. Each emission under consideration shall be evaluated:
   a) Raise and lower the measurement antenna from 1 m to 4 m, as necessary to enable detection of the maximum emission amplitude relative to measurement antenna height.
   b) Rotate the EUT through 360° to determine the maximum emission level relative to the axial position.
   c) Return the turntable to the azimuth where the highest emission amplitude level was observed.
   d) Vary the measurement antenna height again through 1 m to 4 m again to find the height associated with the maximum emission amplitude.
   e) Record the measured emission amplitude level and frequency
6. Repeat step 5 for each emission frequency with the measurement antenna oriented in both the horizontal and vertical polarizations to determine the orientation that gives the maximum emissions amplitude.
7. Set-up the substitution measurement with the reference point of the substitution antenna located as near

as possible to where the center of the EUT radiating element was located during the initial EUT measurement.

8. Maintain the previous measurement instrument settings and test set-up, with the exception that the EUT is removed and replaced by the substitution antenna.
9. Connect a signal generator to the substitution antenna; locate the signal generator so as to minimize any potential influences on the measurement results. Set the signal generator to the frequency where emissions are detected, and set an output power level such that the radiated signal can be detected by the measurement instrument, with sufficient dynamic range relative to the noise floor.
10. For each emission that was detected and measured in the initial test
    a) Vary the measurement antenna height between 1 m to 4 m to maximize the received (measured) signal amplitude.
    b) Adjust the signal generator output power level until the amplitude detected by the measurement instrument equals the amplitude level of the emission previously measured directly in step 5 and step 6.
    c) Record the output power level of the signal generator when equivalence is achieved in step b).
11. Repeat step 8 through step 10 with the measurement antenna oriented in the opposite polarization.
12. Calculate the emission power in dBm referenced to a half-wave dipole using the following equation:

    Pe = Ps(dBm) − cable loss (dB) + antenna gain (dBd)

    where

    Pe = equivalent emission power in dBm

    Ps = source (signal generator) power in dBm

    NOTE—dBd refers to the measured antenna gain in decibels relative to a half-wave dipole.
13. Correct the antenna gain of the substitution antenna if necessary to reference the emission power to a half-wave dipole. When using measurement antennas with the gain specified in dBi, the equivalent dipole-referenced gain can be determined from:

    gain (dBd) = gain (dBi) − 2.15 dB.

    If necessary, the antenna gain can be calculated from calibrated antenna factor information
14. Provide the complete measurement results as a part of the test report.

TEST MODE

Please refer to the clause 4.2

TEST RESULTS

☒ **Passed** ☐ **Not Applicable**

Note: only show the worse case for QPSK modulation.

LTE Band 2			
Test channel:	Low	Polarization:	Horizontal

Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	32.99	-76.59	26.67	1.04	30.71	-79.59	-13.00	-66.59	Peak
2	591.82	-80.78	27.49	4.87	29.77	-78.19	-13.00	-65.19	Peak
3	1393.45	-70.54	37.15	7.88	29.09	-54.60	-13.00	-41.60	Peak
4	2480.73	-70.89	39.38	11.03	27.20	-47.68	-13.00	-34.68	Peak
5	4996.69	-59.85	44.35	6.09	35.75	-45.16	-13.00	-32.16	Peak
6	10507.31	-70.70	51.70	9.76	36.04	-45.28	-13.00	-32.28	Peak

Test channel:	Low	Polarization:	Vertical

Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	108.28	-80.87	24.66	1.95	30.62	-84.88	-13.00	-71.88	Peak
2	634.94	-80.77	28.28	5.06	29.83	-77.26	-13.00	-64.26	Peak
3	1574.17	-71.59	37.76	8.46	28.92	-54.29	-13.00	-41.29	Peak
4	2335.27	-71.01	40.08	10.62	28.48	-48.79	-13.00	-35.79	Peak
5	4996.69	-59.83	44.50	6.09	35.75	-44.99	-13.00	-31.99	Peak
6	9809.40	-71.35	50.35	9.50	33.53	-45.03	-13.00	-32.03	Peak

Test channel:	Mid	Polarization:	Horizontal

Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	59.35	-77.56	24.46	1.42	30.84	-82.52	-13.00	-69.52	Peak
2	800.80	-80.29	29.86	5.77	29.66	-74.32	-13.00	-61.32	Peak
3	1407.29	-70.67	37.11	7.94	29.01	-54.63	-13.00	-41.63	Peak
4	2127.07	-70.69	40.31	10.03	28.94	-49.29	-13.00	-36.29	Peak
5	4983.99	-58.34	44.30	6.08	35.81	-43.77	-13.00	-30.77	Peak
6	9759.59	-70.54	50.44	9.46	33.66	-44.30	-13.00	-31.30	Peak

Test channel:	Mid	Polarization:	Vertical

Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	161.11	-77.79	20.99	2.41	30.48	-84.87	-13.00	-71.87	Peak
2	847.15	-82.44	29.82	5.96	29.33	-75.99	-13.00	-62.99	Peak
3	1459.25	-70.85	37.76	8.09	28.95	-53.95	-13.00	-40.95	Peak
4	2212.88	-73.05	41.57	10.30	29.05	-50.23	-13.00	-37.23	Peak
5	4996.69	-51.81	44.50	6.09	35.75	-36.97	-13.00	-23.97	Peak
6	9784.47	-70.39	50.28	9.48	33.44	-44.07	-13.00	-31.07	Peak

Test channel:	High	Polarization:	Horizontal

Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	38.78	-80.15	27.60	1.13	30.62	-82.04	-13.00	-69.04	Peak
2	847.15	-81.58	29.80	5.96	29.33	-75.15	-13.00	-62.15	Peak
3	1438.56	-70.49	36.92	8.02	28.79	-54.34	-13.00	-41.34	Peak
4	2239.79	-72.81	40.73	10.38	28.67	-50.37	-13.00	-37.37	Peak
5	4996.69	-56.55	44.35	6.09	35.75	-41.86	-13.00	-28.86	Peak
6	9809.40	-70.58	50.59	9.50	33.53	-44.02	-13.00	-31.02	Peak

Test channel:	High	Polarization:	Vertical

Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	108.28	-81.47	24.66	1.95	30.62	-85.48	-13.00	-72.48	Peak
2	659.98	-81.54	28.21	5.18	29.66	-77.81	-13.00	-64.81	Peak
3	1396.51	-70.51	37.75	7.90	29.09	-53.95	-13.00	-40.95	Peak
4	2247.18	-72.62	41.14	10.38	28.61	-49.71	-13.00	-36.71	Peak
5	4996.69	-57.03	44.50	6.09	35.75	-42.19	-13.00	-29.19	Peak
6	10480.59	-69.97	52.25	9.75	36.05	-44.02	-13.00	-31.02	Peak

LTE Band 12			
Test channel:	Low	Polarization:	Horizontal

Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	41.75	-95.57	26.96	1.18	0.00	-67.43	-13.00	-54.43	Peak
2	461.06	-94.75	25.81	4.25	0.00	-64.69	-13.00	-51.69	Peak
3	1746.25	-57.36	36.52	3.52	37.86	-55.18	-13.00	-42.18	Peak
4	2376.15	-60.92	39.95	4.25	37.58	-54.30	-13.00	-41.30	Peak
5	3728.63	-65.83	42.26	5.20	36.95	-55.32	-13.00	-42.32	Peak
6	10971.98	-69.21	52.84	9.99	35.91	-42.29	-13.00	-29.29	Peak

Test channel:	Low	Polarization:	Vertical

Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	143.46	-89.23	21.38	2.26	0.00	-65.59	-13.00	-52.59	Peak
2	494.65	-92.31	26.12	4.41	0.00	-61.78	-13.00	-48.78	Peak
3	1498.91	-60.42	37.76	3.20	37.40	-56.86	-13.00	-43.86	Peak
4	2500.25	-58.94	39.23	4.19	37.67	-53.19	-13.00	-40.19	Peak
5	4895.97	-69.17	44.06	6.11	35.90	-54.90	-13.00	-41.90	Peak
6	10860.83	-69.63	52.66	9.93	35.94	-42.98	-13.00	-29.98	Peak

Test channel:	Mid	Polarization:	Horizontal

Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	93.74	-87.20	18.02	1.81	0.00	-67.37	-13.00	-54.37	Peak
2	401.97	-93.71	25.47	3.94	0.00	-64.30	-13.00	-51.30	Peak
3	1741.81	-56.50	36.51	3.50	37.83	-54.32	-13.00	-41.32	Peak
4	2370.11	-61.53	39.99	4.22	37.60	-54.92	-13.00	-41.92	Peak
5	4996.69	-66.83	44.35	6.09	35.75	-52.14	-13.00	-39.14	Peak
6	10888.51	-69.72	52.64	9.95	35.93	-43.06	-13.00	-30.06	Peak

Test channel:	Mid	Polarization:	Vertical

Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	143.46	-89.07	21.38	2.26	0.00	-65.43	-13.00	-52.43	Peak
2	417.82	-94.08	25.36	4.03	0.00	-64.69	-13.00	-51.69	Peak
3	1498.91	-59.99	37.76	3.20	37.40	-56.43	-13.00	-43.43	Peak
4	2500.25	-58.71	39.23	4.19	37.67	-52.96	-13.00	-39.96	Peak
5	6078.64	-70.58	45.06	6.91	34.89	-53.50	-13.00	-40.50	Peak
6	10860.83	-70.34	52.66	9.93	35.94	-43.69	-13.00	-30.69	Peak

Test channel:	High	Polarization:	Horizontal

Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	143.46	-88.86	17.66	2.26	0.00	-68.94	-13.00	-55.94	Peak
2	438.91	-94.22	26.04	4.13	0.00	-64.05	-13.00	-51.05	Peak
3	1746.25	-56.65	36.52	3.52	37.86	-54.47	-13.00	-41.47	Peak
4	2370.11	-60.70	39.99	4.22	37.60	-54.09	-13.00	-41.09	Peak
5	4570.77	-67.32	43.38	6.29	36.12	-53.77	-13.00	-40.77	Peak
6	10888.51	-68.89	52.64	9.95	35.93	-42.23	-13.00	-29.23	Peak

Test channel:	High	Polarization:	Vertical

Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	143.46	-88.34	21.38	2.26	0.00	-64.70	-13.00	-51.70	Peak
2	431.26	-93.32	25.51	4.09	0.00	-63.72	-13.00	-50.72	Peak
3	1498.91	-59.73	37.76	3.20	37.40	-56.17	-13.00	-43.17	Peak
4	2500.25	-59.21	39.23	4.19	37.67	-53.46	-13.00	-40.46	Peak
5	4996.69	-67.76	44.50	6.09	35.75	-52.92	-13.00	-39.92	Peak
6	10860.83	-69.05	52.66	9.93	35.94	-42.40	-13.00	-29.40	Peak

6. TEST SETUP PHOTOS OF THE EUT

Please refer to Appendix A

7. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

Refer to the test report No.: CHTEW23110047

----------End of Report----------