

FCC TEST REPORT

(PART 24)

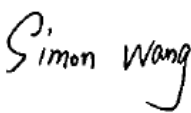
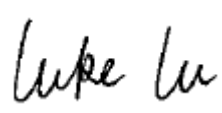
Applicant:	i.safe MOBILE GmbH
Address:	i_Park Tauberfranken 10 97922 Lauda-Koenigshofen Germany

Manufacturer or Supplier:	i.safe MOBILE GmbH
Address:	i_Park Tauberfranken 10 97922 Lauda-Koenigshofen Germany
Product:	Smartphone
Brand Name:	i.safe MOBILE
Model Name:	M540A01
Marketing Name:	IS540.1,IS540.M1,IS540.2,IS540.RG
FCC ID:	2AACZ-M540A01
Date of tests:	Nov. 24, 2022 ~ Feb. 03, 2023

The tests have been carried out according to the requirements of the following standard:

☒ **FCC PART 24, Subpart E** ☒ **FCC PART 2**
☒ **ANSI/TIA/EIA-603-D** ☒ **ANSI/TIA/EIA-603-E** ☒ **ANSI C63.26-2015**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
	
Date: Feb. 03, 2023	Date: Feb. 03, 2023

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P22110036RF05	Original release	Feb. 03, 2023

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 24 & Part 2		
STANDARD SECTION	TEST TYPE	RESULT
§2.1046	Coducted Output Power	Compliance
§24.232(c)	Equivalent Isotropic Radiated Power	Compliance
§2.1055 §24.235	Frequency Stability	Compliance
§2.1049	Occupied Bandwidth	Compliance
§24.232(d)	Peak to average ratio	Compliance
§24.238(a)(b)	Band Edge Measurements	Compliance
§2.1051 §24.238(a)(b)	Conducted Spurious Emissions	Compliance
§2.1053 §24.238(a)(b)	Radiated Spurious Emissions	Compliance

1.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	UNCERTAINTY
Frequency Stability	$\pm 76.97\text{Hz}$
Radiated emissions (9KHz~30MHz)	$\pm 2.68\text{dB}$
Radiated emissions & Radiated Power (30MHz~1GHz)	$\pm 4.98\text{dB}$
Radiated emissions & Radiated Power (1GHz ~6GHz)	$\pm 4.70\text{dB}$
Radiated emissions (6GHz ~18GHz)	$\pm 4.60\text{dB}$
Radiated emissions (18GHz ~40GHz)	$\pm 4.12\text{dB}$
Conducted emissions	$\pm 4.01\text{dB}$
Occupied Channel Bandwidth	$\pm 43.58\text{KHz}$
Conducted Output power	$\pm 2.06\text{dB}$
Band Edge Measurements	$\pm 4.70\text{dB}$
Peak to average ratio	$\pm 0.76\text{dB}$

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.



1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Feb. 21,22	Feb. 20,23
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.15,22	May.14,23
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.04,22	Sep.03,23
Bilog Antenna	ETS-LINDGRE N	3143B	00161965	Mar. 06,22	Mar. 05,23
Horn Antenna	ETS-LINDGRE N	3117	00168692	Mar. 06,22	Mar. 05,23
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K- SG/QMS-00361	15433	Aug. 24, 22	Aug. 23, 23
Radio Communication Analyzer	ANRITSU	MT8820C	6201465426	Feb. 15,22	Feb. 14,23
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May.12,22	May.11,23
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.12,22	May.11,23
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 21,22	Feb.20,23
3m Semi-anechoic Chamber	ETS-LINDGRE N	9m*6m*6m	Euroshieldpn- CT0001143-121 6	May. 19,20	May. 18,23
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	JS1120	3.1.36	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	May. 07,22	May. 06,23
Power Meter	Anritsu	ML2495A	1506002	Feb. 22,22	Feb. 21,23
Power Sensor	Anritsu	MA2411B	1339352	May. 07,22	May. 06,23
Temperature Chamber	ESPEC	SH-242	93000855	May. 12,22	May. 11,23
MXG Analog Microwave Signal Generator	KEYSIGHT	N5183A	MY50143024	Feb. 18,22	Feb. 17,23
Base station R&S CMW500	Rohde&Schwa rz	CMW500	153085	May.12,22	May.11,23
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 24,22	Aug. 23,23

NOTE: 1. The calibration interval of the above test instruments is 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.

3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.

4. The FCC Site Registration No. is 525120; The Designation No. is CN1171.

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Smartphone	
BRAND NAME	i.safe MOBILE	
MODEL NAME	M540A01	
MARKETING NAME	IS540.1,IS540.M1,IS540.2,IS540.RG	
NOMINAL VOLTAGE	5.0Vdc(adapter or host equipment) 3.7Vdc (Li-ion, battery)	
MODULATION TYPE	GSM: GMSK EDGE: 8PSK WCDMA: BPSK, QPSK LTE Band 2/25: QPSK, 16QAM, 64QAM	
FREQUENCY RANGE	GSM, EDGE	1850.2MHz ~ 1909.8MHz
	WCDMA	1852.4MHz ~ 1907.6MHz
	LTE Band 2 Channel Bandwidth: 1.4MHz	1850.7MHz ~ 1909.3MHz
	LTE Band 2 Channel Bandwidth: 3MHz	1851.5MHz ~ 1908.5MHz
	LTE Band 2 Channel Bandwidth: 5MHz	1852.5MHz ~ 1907.5MHz
	LTE Band 2 Channel Bandwidth: 10MHz	1855.0MHz ~ 1905.0MHz
	LTE Band 2 Channel Bandwidth: 15MHz	1857.5MHz ~ 1902.5MHz
	LTE Band 2 Channel Bandwidth: 20MHz	1860.0MHz ~ 1900.0MHz
	LTE Band 25 Channel Bandwidth: 1.4MHz	1850.7MHz ~ 1914.3MHz
	LTE Band 25 Channel Bandwidth: 3MHz	1851.5MHz ~ 1913.5MHz
	LTE Band 25 Channel Bandwidth: 5MHz	1852.5MHz ~ 1912.5MHz
	LTE Band 25 Channel Bandwidth: 10MHz	1855.0MHz ~ 1910.0MHz
	LTE Band 25 Channel Bandwidth: 15MHz	1857.5MHz ~ 1907.5MHz
	LTE Band 25 Channel Bandwidth: 20MHz	1860.0MHz ~ 1905.0MHz

MAX. EIRP POWER	GSM	739.61mW
	EDGE	312.61mW
	WCDMA	194.09mW
	LTE Band 2 Channel Bandwidth: 1.4MHz	172.58mW
	LTE Band 2 Channel Bandwidth: 3MHz	172.19mW
	LTE Band 2 Channel Bandwidth: 5MHz	172.19mW
	LTE Band 2 Channel Bandwidth: 10MHz	174.18mW
	LTE Band 2 Channel Bandwidth: 15MHz	171.4mW
	LTE Band 2 Channel Bandwidth: 20MHz	174.58mW
	LTE Band 25 Channel Bandwidth: 1.4MHz	179.47mW
	LTE Band 25 Channel Bandwidth: 3MHz	177.42mW
	LTE Band 25 Channel Bandwidth: 5MHz	177.42mW
	LTE Band 25 Channel Bandwidth: 10MHz	178.65mW
	LTE Band 25 Channel Bandwidth: 15MHz	178.65mW
	LTE Band 25 Channel Bandwidth: 20MHz	179.89mW
EMISSION DESIGNATOR	GSM	246KGXW
	EDGE	244KG7W
	WCDMA	4M17F9W
	LTE Band 25 Channel Bandwidth: 1.4MHz	QPSK: 1M71G7D
		16QAM: 1M09W7D
		64QAM: 1M09W7D
	LTE Band 25 Channel Bandwidth: 3MHz	QPSK: 2M69G7D
		16QAM: 2M70W7D
		64QAM: 2M70W7D

EMISSION DESIGNATOR	LTE Band 25 Channel Bandwidth: 5MHz	QPSK: 4M50G7D
		16QAM: 4M50W7D
		64QAM: 4M50W7D
	LTE Band 25 Channel Bandwidth: 10MHz	QPSK: 9M00G7D
		16QAM: 9M00W7D
		64QAM: 8M98W7D
	LTE Band 25 Channel Bandwidth: 15MHz	QPSK: 13M5G7D
		16QAM: 13M5W7D
		64QAM: 13M5W7D
	LTE Band 25 Channel Bandwidth: 20MHz	QPSK: 18M0G7D
		16QAM: 17M9W7D
		64QAM: 17M9W7D
ANTENNA TYPE	PIFA Antenna with -0.5dBi gain for GSM1900/ WCDMA II/LTE B2/ LTE B25	
HW VERSION	V02	
SW VERSION	IS540_ROW_00.00_1_20221017	
I/O PORTS	Refer to user's manual	
CABLE SUPPLIED	USB cable1: non-shielded cable, with w/o ferrite core, 1.0 meter USB cable2: non-shielded cable, with w/o ferrite core, 1.0 meter	
EXTREME TEMPERATURE	-10-50 °C	
EXTREME VOLTAGE	3.6V - 4.2V	

NOTE:

- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receiver.

MODULATION MODE	TX FUNCTION
GSM/GPRS/EDGE	1TX/1RX
WCDMA	1TX/1RX
LTE	1TX/1RX

- For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

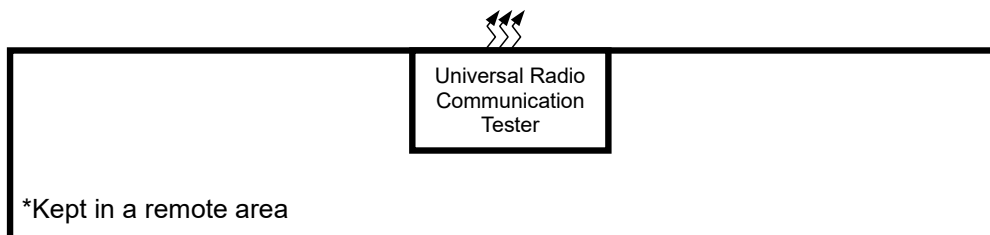
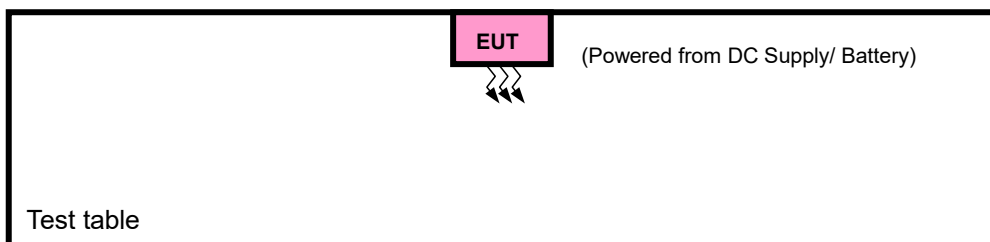
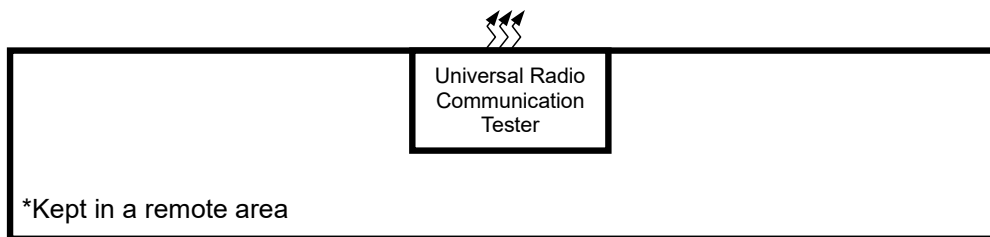
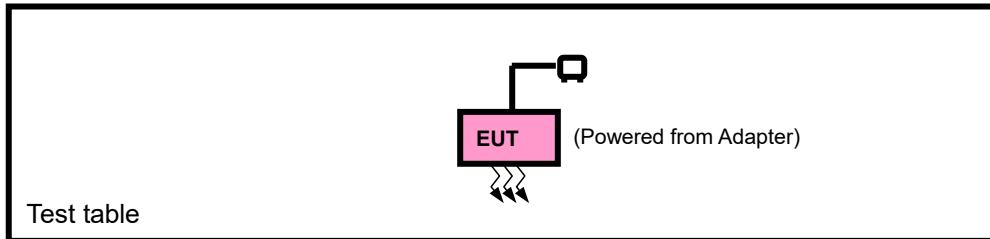
List of Accessory:

ACCESSORIES	BRAND	MANUFACTURER	MODEL	SPECIFICATION
Battery	N/A	FPR Connectivity Technology Inc.	MBP540A01	Capacity : 3.7Vdc, 4400mAh
AC Adapter	N/A	SHENZHEN SHI YINGYUAN POWER SUPPLY TECHNOLOGY CO., LTD.	ICP12-050-2000B	I/P: 100-240Vac, 0.3A, O/P: 5.0Vdc, 2A
USB Cable 1	N/A	Winpower Technology Co., LTD	PROTECTOR 2.0	Signal Line, 1.0meter
USB Cable 2	N/A	Winpower Technology Co., LTD	USB2.0	Signal Line, 1.0meter



2.2 CONFIGURATION OF SYSTEM UNDER TEST

FOR RADIATION EMISSION TEST





2.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	DC source	Kikusui/JP	PMX18-5A	0000001	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	DC Line: Unshielded, Detachable 1.0m

2.4 TEST ITEM AND TEST CONFIGURATION

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The worst case in EIRP and radiated emission was found when positioned on X-plane for GSM/EDGE/ LTE. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
A	EUT + Adapter with GSM or WCDMA or LTE link
B	EUT + DC Supply with GSM or WCDMA or LTE link

GSM MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
A	EIRP	512 to 810	512, 661, 810	GSM,EDGE
B	FREQUENCY STABILITY	512 to 810	512, 661, 810	GSM,EDGE
A	OCCUPIED BANDWIDTH	512 to 810	512, 661, 810	GSM,EDGE
A	PEAK TO AVERAGE RATIO	512 to 810	512, 661, 810	GSM,EDGE
A	BAND EDGE	512 to 810	512, 810	GSM,EDGE
A	CONDUCTED EMISSION	512 to 810	512, 661, 810	GSM,EDGE
A	RADIATED EMISSION	512 to 810	512, 661, 810	GSM,EDGE

WCDMA

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
A	EIRP	9262 to 9538	9262, 9400, 9538	WCDMA
B	FREQUENCY STABILITY	9262 to 9538	9262, 9400, 9538	WCDMA
A	OCCUPIED BANDWIDTH	9262 to 9538	9262, 9400, 9538	WCDMA
A	PEAK TO AVERAGE RATIO	9262 to 9538	9262, 9400, 9538	WCDMA
A	BAND EDGE	9262 to 9538	9262, 9538	WCDMA
A	CONDUCTED EMISSION	9262 to 9538	9262, 9400, 9538	WCDMA
A	RADIATED EMISSION	9262 to 9538	9262, 9400, 9538	WCDMA

LTE BAND 2 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	18607 to 19193	18607, 18900, 19193	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		18615 to 19185	18615, 18900, 19185	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		18625 to 19175	18625, 18900, 19175	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		18650 to 19150	18650, 18900, 19150	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		18675 to 19125	18675, 18900, 19125	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		18700 to 19100	18700, 18900, 19100	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset

Note: 1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

2. LTE Band 2 are covered by LTE Band 25, Because it is a subset of LTE Band 25 with the same output power and supported bandwidths, So the conducted test data and RSE test data please refer to LTE Band 25



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LTE BAND 25 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		26055 to 26675	26055, 26365, 26675	3MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		26065 to 26665	26065, 26365, 26665	5MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		26090 to 26640	26090, 26365 26640	10MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		26115 to 26615	26115, 26365, 26615	15MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		26140 to 26590	26140, 26365, 26590	20MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK,16QAM, 64QAM	6 RB / 0 RB Offset
		26055 to 26675	26055, 26365, 26675	3MHz	QPSK,16QAM, 64QAM	15 RB / 0 RB Offset
		26065 to 26665	26065, 26365, 26665	5MHz	QPSK,16QAM, 64QAM	25 RB / 0 RB Offset
		26090 to 26640	26090, 26365 26640	10MHz	QPSK,16QAM, 64QAM	50 RB / 0 RB Offset
		26115 to 26615	26115, 26365, 26615	15MHz	QPSK,16QAM, 64QAM	75 RB / 0 RB Offset
		26140 to 26590	26140, 26365, 26590	20MHz	QPSK,16QAM, 64QAM	100 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK,16QAM, 64QAM	6 RB / 0 RB Offset
		26055 to 26675	26055, 26365, 26675	3MHz	QPSK,16QAM, 64QAM	15 RB / 0 RB Offset
		26065 to 26665	26065, 26365, 26665	5MHz	QPSK,16QAM, 64QAM	25 RB / 0 RB Offset
		26090 to 26640	26090, 26365 26640	10MHz	QPSK,16QAM, 64QAM	50 RB / 0 RB Offset
		26115 to 26615	26115, 26365, 26615	15MHz	QPSK,16QAM, 64QAM	75 RB / 0 RB Offset
		26140 to 26590	26140, 26365, 26590	20MHz	QPSK,16QAM, 64QAM	100 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset 6 RB / 0 RB Offset
		26055 to 26675	26055, 26365, 26675	3MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset 15 RB / 0 RB Offset
		26065 to 26665	26065, 26365, 26665	5MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset
		26090 to 26640	26090, 26365 26640	10MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
		26115 to 26615	26115, 26365, 26615	15MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset 75 RB / 0 RB Offset
		26140 to 26590	26140, 26365, 26590	20MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset 100 RB / 0 RB Offset

A	BAND EDGE	26047 to 26683	26047	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
			26683	1.4MHz	QPSK, 16QAM, 64QAM	6 RB / 0 RB Offset
		26055 to 26675	26055	3MHz	QPSK, 16QAM, 64QAM	1 RB / 5 RB Offset
			26675	3MHz	QPSK, 16QAM, 64QAM	6 RB / 0 RB Offset
		26065 to 26665	26065	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
			26665	5MHz	QPSK, 16QAM, 64QAM	15 RB / 0 RB Offset
		26090 to 26640	26090	10MHz	QPSK, 16QAM, 64QAM	1 RB / 14 RB Offset
			26640	10MHz	QPSK, 16QAM, 64QAM	15 RB / 0 RB Offset
		26115 to 26615	26115	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
			26615	15MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		26140 to 26590	26140	20MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset
			26590	20MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
			26055, 26365, 26675	3MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
		26065 to 26665	26065, 26365, 26665	5MHz	QPSK, 16QAM, 64QAM	1 RB / 49 RB Offset
			26090, 26365, 26640	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
A	CONDCUDED EMISSION	26047 to 26683	26047, 26365, 26683	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		26055 to 26675	26055, 26365, 26675	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		26065 to 26665	26065, 26365, 26665	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		26090 to 26640	26090, 26365, 26640	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		26115 to 26615	26115, 26365, 26615	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		26140 to 26590	26140, 26365, 26590	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	26047 to 26683	26365	1.4MHz	QPSK	1 RB / 0 RB Offset
		26055 to 26675	26365	3MHz	QPSK	1 RB / 0 RB Offset
		26065 to 26665	26365	5MHz	QPSK	1 RB / 0 RB Offset
		26090 to 26640	26090, 26365, 26640	10MHz	QPSK	1 RB / 0 RB Offset
		26115 to 26615	26365	15MHz	QPSK	1 RB / 0 RB Offset
		26140 to 26590	26365	20MHz	QPSK	1 RB / 0 RB Offset

Note: This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
EIRP	25deg. C, 57%RH	DC 5V By Adapter	Jace Hu
FREQUENCY STABILITY	23deg. C, 61%RH	DC 3.6V/3.7V/4.2V By DC Supply	James Fu
OCCUPIED BANDWIDTH	23deg. C, 61%RH	DC5V By Adapter	James Fu
PEAK TO AVERAGE RATIO	23deg. C, 61%RH	DC 5V By Adapter	James Fu
BAND EDGE	23deg. C, 61%RH	DC5V By Adapter	James Fu
CONDCUDED EMISSION	23deg. C, 61%RH	DC5V By Adapter	James Fu
RADIATED EMISSION	23deg. C, 70%RH	DC5V By Adapter	Jace Hu

2.5 EUT OPERATING CONDITIONS

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

2.6 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 2

FCC 47 CFR Part 24

KDB 971168 D01 Power Meas License Digital Systems v03r01

ANSI/TIA/EIA-603-D

ANSI/TIA/EIA-603-E

ANSI C63.26-2015

NOTE: All test items have been performed and recorded as per the above standards.

3 TEST TYPES AND RESULTS

3.1 OUTPUT POWER MEASUREMENT

3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

Mobile and portable stations are limited to 2 watts EIRP.

3.1.2 TEST PROCEDURES

EIRP MEASUREMENT:

Per KDB 971168 D01 Power Meas License Digital Systems v03r01 or subclause 5.2.5.5 of ANSI C63.26-2015, the relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_T - L_C$$

Where:

ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively

(expressed in the same units as P_{Meas} , typically dBW or dBm);

P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;

G_T = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

L_C = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

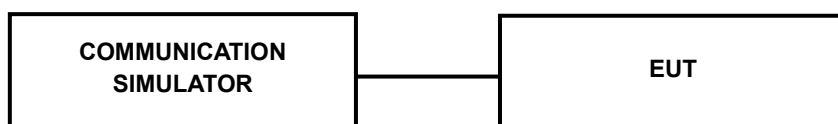
CONDUCTED POWER MEASUREMENT:

The EUT was set up for the maximum power with WCDMA 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

EIRP / ERP Measurement:

CONDUCTED POWER MEASUREMENT:



3.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

Band	GSM1900		
Channel	512	661	810
Frequency	1850.2	1880	1909.8
GSM	29.01	29.19	29.11
GPRS (GMSK, 1Tx-slot)	29.00	29.16	29.09
GPRS (GMSK, 2Tx-slot)	27.27	27.09	27.16
GPRS (GMSK, 3Tx-slot)	25.56	25.54	25.50
GPRS (GMSK, 4Tx-slot)	23.56	24.05	24.01
EDGE (8PSK, 1Tx-slot)	25.17	25.45	25.29
EDGE (8PSK, 2Tx-slot)	25.00	25.30	25.18
EDGE (8PSK, 3Tx-slot)	21.14	21.40	21.36
EDGE (8PSK, 4Tx-slot)	20.21	20.10	20.23

Band	WCDMA II		
Channel	9262	9400	9538
Frequency	1852.4	1880	1907.6
RMC 12.2K	23.35	23.38	23.26
HSDPA Subtest-1	22.31	22.33	22.21
HSDPA Subtest-2	22.27	22.37	22.21
HSDPA Subtest-3	21.81	21.83	21.75
HSDPA Subtest-4	21.79	21.86	21.71
DC-HSDPA Subtest-1	22.28	22.33	22.24
DC-HSDPA Subtest-2	22.27	22.36	22.21
DC-HSDPA Subtest-3	21.83	21.80	21.74
DC-HSDPA Subtest-4	21.77	21.82	21.68
HSUPA Subtest-1	19.79	19.83	19.79
HSUPA Subtest-2	19.77	19.81	19.80
HSUPA Subtest-3	19.79	19.78	19.80
HSUPA Subtest-4	19.71	19.75	19.77
HSUPA Subtest-5	22.27	22.35	22.20



**BUREAU
VERITAS**

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LTE BAND 2

Band/BW	Modulation	RB Size	RB Offset	Low CH 18607	Mid CH 18900	High CH 19193
				Frequency 1850.7 MHz	Frequency 1880 MHz	Frequency 1909.3 MHz
2/ 1.4	QPSK	1	0	22.87	22.80	22.77
		1	2	22.80	22.52	22.67
		1	5	22.76	22.66	22.63
		3	0	22.70	22.49	22.60
		3	1	22.83	22.59	22.54
		3	3	22.64	22.44	22.55
		6	0	22.15	21.95	21.84
	16QAM	1	0	22.13	21.96	21.99
		1	2	22.04	21.79	21.90
		1	5	22.08	21.82	21.90
		3	0	21.94	21.76	21.85
		3	1	22.01	21.83	21.90
		3	3	21.90	21.84	21.83
		6	0	21.04	20.83	20.91
	64QAM	1	0	21.07	20.98	21.06
		1	2	20.81	20.72	20.60
		1	5	20.97	20.80	20.93
		3	0	21.06	20.89	20.86
		3	1	20.29	20.24	20.07
		3	3	20.45	20.27	20.37
		6	0	20.02	19.78	19.83

Band/BW	Modulation	RB Size	RB Offset	Low CH 18615	Mid CH 18900	High CH 19185
				Frequency 1851.5 MHz	Frequency 1880 MHz	Frequency 1908.5 MHz
2/3	QPSK	1	0	22.86	22.79	22.80
		1	7	22.81	22.50	22.67
		1	14	22.73	22.65	22.67
		8	0	22.02	21.82	21.87
		8	3	22.06	21.90	21.87
		8	7	21.95	21.77	21.90
		15	0	22.10	21.99	21.81
	16QAM	1	0	22.11	21.98	22.02
		1	7	21.98	21.85	21.87
		1	14	22.11	21.82	21.89
		8	0	20.90	20.75	20.82
		8	3	21.03	20.82	20.89
		8	7	20.87	20.84	20.82
		15	0	21.04	20.78	20.91
	64QAM	1	0	21.07	20.98	21.06
		1	7	20.81	20.72	20.59
		1	14	20.91	20.87	20.93
		8	0	20.10	19.90	19.86
		8	3	19.27	19.25	19.11
		8	7	19.46	19.30	19.30
		15	0	20.00	19.81	19.85

Band/BW	Modulation	RB Size	RB Offset	Low CH 18625	Mid CH 18900	High CH 19175
				Frequency 1852.5 MHz	Frequency 1880 MHz	Frequency 1907.5 MHz
2/ 5	QPSK	1	0	22.86	22.85	22.76
		1	12	22.76	22.53	22.67
		1	24	22.72	22.66	22.63
		12	0	21.99	21.82	21.90
		12	6	22.06	21.89	21.86
		12	13	21.91	21.81	21.89
		25	0	22.12	21.96	21.78
	16QAM	1	0	22.10	22.02	22.02
		1	12	22.01	21.82	21.88
		1	24	22.11	21.82	21.90
		12	0	20.90	20.77	20.85
		12	6	21.06	20.78	20.93
		12	13	20.92	20.82	20.79
		25	0	21.04	20.77	20.94
	64QAM	1	0	21.13	21.01	21.00
		1	12	20.84	20.66	20.59
		1	24	20.98	20.82	20.93
		12	0	20.09	19.93	19.87
		12	6	19.33	19.18	19.12
		12	13	19.42	19.31	19.33
		25	0	20.04	19.75	19.87



Band/BW	Modulation	RB Size	RB Offset	Low CH 18650	Mid CH 18900	High CH 19150
				Frequency 1855 MHz	Frequency 1880 MHz	Frequency 1905 MHz
2/ 10	QPSK	1	0	22.91	22.83	22.74
		1	24	22.79	22.55	22.63
		1	49	22.76	22.72	22.64
		25	0	22.00	21.82	21.91
		25	12	22.13	21.89	21.87
		25	25	21.91	21.75	21.89
		50	0	22.15	21.97	21.83
	16QAM	1	0	22.15	22.02	21.98
		1	24	22.02	21.82	21.90
		1	49	22.07	21.88	21.88
		25	0	20.96	20.73	20.89
		25	12	21.01	20.80	20.90
		25	25	20.91	20.83	20.82
		50	0	21.09	20.80	20.88
	64QAM	1	0	21.08	21.00	21.04
		1	24	20.87	20.67	20.60
		1	49	20.93	20.80	20.93
		25	0	20.13	19.93	19.86
		25	12	19.28	19.18	19.07
		25	25	19.48	19.34	19.34
		50	0	20.04	19.75	19.87



Band/BW	Modulation	RB Size	RB Offset	Low CH 18675	Mid CH 18900	High CH 19125
				Frequency 1857.5 MHz	Frequency 1880 MHz	Frequency 1902.5 MHz
2/ 15	QPSK	1	0	22.84	22.83	22.77
		1	37	22.81	22.50	22.68
		1	74	22.70	22.69	22.63
		36	0	22.03	21.81	21.90
		36	19	22.12	21.84	21.87
		36	39	21.93	21.74	21.89
		75	0	22.15	21.99	21.78
	16QAM	1	0	22.11	21.95	21.98
		1	37	22.03	21.81	21.90
		1	74	22.11	21.83	21.86
		36	0	20.92	20.73	20.88
		36	19	21.07	20.76	20.94
		36	39	20.86	20.85	20.79
		75	0	21.08	20.77	20.95
	64QAM	1	0	21.08	20.98	21.07
		1	37	20.88	20.72	20.60
		1	74	20.91	20.81	20.93
		36	0	20.13	19.91	19.91
		36	19	19.32	19.25	19.07
		36	39	19.46	19.30	19.36
		75	0	20.05	19.77	19.86



Band/BW	Modulation	RB Size	RB Offset	Low CH 18700	Mid CH 18900	High CH 19100
				Frequency 1860 MHz	Frequency 1880 MHz	Frequency 1900 MHz
2/ 20	QPSK	1	0	22.92	22.87	22.82
		1	50	22.83	22.58	22.69
		1	99	22.78	22.73	22.68
		50	0	22.06	21.87	21.92
		50	25	22.14	21.91	21.92
		50	50	21.99	21.82	21.91
		100	0	22.16	22.01	21.86
	16QAM	1	0	22.18	22.03	22.04
		1	50	22.06	21.87	21.92
		1	99	22.13	21.90	21.91
		50	0	20.98	20.81	20.90
		50	25	21.09	20.84	20.95
		50	50	20.94	20.89	20.84
		100	0	21.10	20.85	20.96
	64QAM	1	0	21.14	21.03	21.08
		1	50	20.89	20.74	20.65
		1	99	20.99	20.88	20.95
		50	0	20.14	19.95	19.94
		50	25	19.35	19.26	19.13
		50	50	19.50	19.35	19.38
		100	0	20.06	19.83	19.88

**LTE BAND 25**

Band/BW	Modulation	RB Size	RB Offset	Low CH 26047	Mid CH 26365	High CH 26683
				Frequency 1850.7 MHz	Frequency 1882.5 MHz	Frequency 1914.3 MHz
25/ 1.4	QPSK	1	0	23.04	22.98	22.94
		1	2	22.98	22.91	22.88
		1	5	22.90	22.83	22.90
		3	0	22.86	22.78	22.79
		3	1	22.92	22.85	22.84
		3	3	22.84	22.77	22.85
		6	0	22.18	22.18	22.15
	16QAM	1	0	22.35	22.33	22.34
		1	2	22.20	22.20	22.21
		1	5	22.20	22.18	22.17
		3	0	22.19	22.14	22.12
		3	1	22.16	22.22	22.16
		3	3	22.19	22.05	22.11
		6	0	21.12	21.09	21.11
	64QAM	1	0	21.49	21.49	21.37
		1	2	21.36	21.29	21.36
		1	5	21.34	21.31	21.26
		3	0	21.10	21.03	21.06
		3	1	21.19	21.13	21.16
		3	3	21.14	21.02	21.14
		6	0	20.17	20.09	20.18



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Band/BW	Modulation	RB Size	RB Offset	Low CH 26055	Mid CH 26365	High CH 26675
				Frequency 1851.5 MHz	Frequency 1882.5 MHz	Frequency 1913.5 MHz
25/ 3	QPSK	1	0	22.99	22.93	22.97
		1	7	22.96	22.94	22.92
		1	14	22.83	22.87	22.86
		8	0	22.13	22.14	22.12
		8	3	22.20	22.18	22.08
		8	7	22.11	22.14	22.14
		15	0	22.17	22.18	22.16
	16QAM	1	0	22.41	22.26	22.38
		1	7	22.16	22.21	22.17
		1	14	22.23	22.14	22.20
		8	0	21.24	21.12	21.09
		8	3	21.18	21.16	21.19
		8	7	21.20	21.11	21.05
		15	0	21.15	21.07	21.13
	64QAM	1	0	21.54	21.45	21.41
		1	7	21.36	21.35	21.30
		1	14	21.36	21.28	21.30
		8	0	20.10	20.05	20.09
		8	3	20.19	20.13	20.17
		8	7	20.11	20.09	20.13
		15	0	20.17	20.09	20.19



Band/BW	Modulation	RB Size	RB Offset	Low CH 26065	Mid CH 26365	High CH 26665
				Frequency 1852.5 MHz	Frequency 1882.5 MHz	Frequency 1912.5 MHz
25/ 5	QPSK	1	0	22.97	22.99	22.97
		1	12	22.99	22.94	22.93
		1	24	22.85	22.87	22.87
		12	0	22.14	22.10	22.12
		12	6	22.16	22.21	22.11
		12	13	22.17	22.07	22.14
		25	0	22.14	22.17	22.12
	16QAM	1	0	22.37	22.32	22.33
		1	12	22.17	22.20	22.20
		1	24	22.20	22.13	22.17
		12	0	21.19	21.14	21.12
		12	6	21.16	21.22	21.15
		12	13	21.13	21.12	21.11
		25	0	21.16	21.10	21.11
	64QAM	1	0	21.47	21.50	21.41
		1	12	21.37	21.32	21.29
		1	24	21.32	21.34	21.28
		12	0	20.10	20.07	20.09
		12	6	20.13	20.20	20.16
		12	13	20.12	20.05	20.13
		25	0	20.13	20.15	20.17

Band/BW	Modulation	RB Size	RB Offset	Low CH 26090	Mid CH 26365	High CH 26640
				Frequency 1855 MHz	Frequency 1882.5 MHz	Frequency 1910 MHz
25/ 10	QPSK	1	0	22.99	22.92	23.00
		1	24	23.02	22.97	22.86
		1	49	22.84	22.81	22.86
		25	0	22.18	22.09	22.12
		25	12	22.22	22.16	22.11
		25	25	22.13	22.07	22.14
		50	0	22.20	22.15	22.19
	16QAM	1	0	22.35	22.30	22.34
		1	24	22.22	22.17	22.21
		1	49	22.18	22.16	22.17
		25	0	21.23	21.13	21.12
		25	12	21.22	21.17	21.16
		25	25	21.15	21.05	21.11
		50	0	21.19	21.13	21.11
	64QAM	1	0	21.50	21.43	21.37
		1	24	21.40	21.31	21.35
		1	49	21.32	21.28	21.29
		25	0	20.10	20.05	20.09
		25	12	20.18	20.15	20.16
		25	25	20.16	20.04	20.13
		50	0	20.17	20.10	20.15

Band/BW	Modulation	RB Size	RB Offset	Low CH 26115	Mid CH 26365	High CH 26615
				Frequency 1857.5 MHz	Frequency 1882.5 MHz	Frequency 1907.5 MHz
25/ 15	QPSK	1	0	22.99	22.95	23.01
		1	37	23.02	22.97	22.89
		1	74	22.83	22.82	22.90
		36	0	22.20	22.11	22.11
		36	19	22.21	22.22	22.10
		36	39	22.15	22.10	22.14
		75	0	22.16	22.21	22.17
	16QAM	1	0	22.41	22.26	22.38
		1	37	22.16	22.21	22.17
		1	74	22.23	22.14	22.20
		36	0	21.25	21.14	21.06
		36	19	21.18	21.21	21.17
		36	39	21.19	21.06	21.08
		75	0	21.14	21.07	21.17
	64QAM	1	0	21.54	21.49	21.35
		1	37	21.34	21.29	21.31
		1	74	21.36	21.35	21.27
		36	0	20.16	20.01	20.13
		36	19	20.15	20.18	20.14
		36	39	20.17	20.02	20.14
		75	0	20.11	20.10	20.18



Band/BW	Modulation	RB Size	RB Offset	Low CH 26140	Mid CH 26365	High CH 26590
				Frequency 1860 MHz	Frequency 1882.5 MHz	Frequency 1905 MHz
25/ 20	QPSK	1	0	23.05	23.00	23.02
		1	50	23.03	22.99	22.94
		1	99	22.91	22.89	22.92
		50	0	22.21	22.15	22.14
		50	25	22.24	22.23	22.16
		50	50	22.19	22.15	22.16
		100	0	22.22	22.23	22.20
	16QAM	1	0	22.43	22.34	22.39
		1	50	22.24	22.25	22.22
		1	99	22.26	22.20	22.22
		50	0	21.26	21.19	21.14
		50	25	21.24	21.24	21.21
		50	50	21.21	21.13	21.13
		100	0	21.20	21.15	21.19
	64QAM	1	0	21.55	21.51	21.43
		1	50	21.41	21.37	21.37
		1	99	21.38	21.36	21.31
		50	0	20.18	20.09	20.14
		50	25	20.21	20.21	20.18
		50	50	20.19	20.10	20.15
		100	0	20.19	20.17	20.20



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EIRP POWER (dBm)

GSM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
512	1850.2	29.01	-0.5	28.51	709.58	2
661	1880.0	29.19	-0.5	28.69	739.61	2
810	1909.8	29.11	-0.5	28.61	726.11	2

EDGE

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
512	1850.2	25.17	-0.5	24.67	293.09	2
661	1880.0	25.45	-0.5	24.95	312.61	2
810	1909.8	25.29	-0.5	24.79	301.3	2

WCDMA

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
9262	1852.4	23.35	-0.5	22.85	192.75	2
9400	1880	23.38	-0.5	22.88	194.09	2
9538	1907.6	23.26	-0.5	22.76	188.8	2



**BUREAU
VERITAS**

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LTE BAND 2

CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _{T-Lc} (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18607	1850.7	22.87	-0.5	22.37	172.58	2
18900	1880.0	22.8	-0.5	22.3	169.82	2
19193	1909.3	22.77	-0.5	22.27	168.66	2

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _{T-Lc} (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18607	1850.7	22.13	-0.5	21.63	145.55	2
18900	1880.0	21.96	-0.5	21.46	139.96	2
19193	1909.3	21.99	-0.5	21.49	140.93	2

CHANNEL BANDWIDTH: 1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _{T-Lc} (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18607	1850.7	21.07	-0.5	20.57	114.02	2
18900	1880.0	20.98	-0.5	20.48	111.69	2
19193	1908.3	21.06	-0.5	20.56	113.76	2

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18615	1851.5	22.86	-0.5	22.36	172.19	2
18900	1880.0	22.79	-0.5	22.29	169.43	2
19185	1908.5	22.8	-0.5	22.3	169.82	2

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18615	1851.5	22.11	-0.5	21.61	144.88	2
18900	1880.0	21.98	-0.5	21.48	140.6	2
19185	1908.5	22.02	-0.5	21.52	141.91	2

CHANNEL BANDWIDTH: 3MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18615	1851.5	21.07	-0.5	20.57	114.02	2
18900	1880.0	20.98	-0.5	20.48	111.69	2
19185	1908.5	21.06	-0.5	20.56	113.76	2



BUREAU
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Test Report No.: W7L-P22110036RF05

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18625	1852.5	22.86	-0.5	22.36	172.19	2
18900	1880.0	22.85	-0.5	22.35	171.79	2
19175	1907.5	22.76	-0.5	22.26	168.27	2

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18625	1852.5	22.11	-0.5	21.61	144.88	2
18900	1880.0	22.02	-0.5	21.52	141.91	2
19175	1907.5	22.02	-0.5	21.52	141.91	2

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18625	1852.5	21.13	-0.5	20.63	115.61	2
18900	1880.0	21.01	-0.5	20.51	112.46	2
19175	1907.5	21	-0.5	20.5	112.2	2

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18650	1855.0	22.91	-0.5	22.41	174.18	2
18900	1880.0	22.83	-0.5	22.33	171	2
19150	1905.0	22.74	-0.5	22.24	167.49	2

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18650	1855.0	22.15	-0.5	21.65	146.22	2
18900	1880.0	22.02	-0.5	21.52	141.91	2
19150	1905.0	21.98	-0.5	21.48	140.6	2

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18650	1855.0	21.08	-0.5	20.58	114.29	2
18900	1880.0	21	-0.5	20.5	112.2	2
19150	1905.0	21.04	-0.5	20.54	113.24	2

**CHANNEL BANDWIDTH: 15MHz QPSK**

Channel	Frequency (MHz)	Conducted Power (dBm)	G _{T-Lc} (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18675	1857.5	22.84	-0.5	22.34	171.4	2
18900	1880.0	22.83	-0.5	22.33	171	2
19125	1902.5	22.77	-0.5	22.27	168.66	2

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _{T-Lc} (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18675	1857.5	22.11	-0.5	21.61	144.88	2
18900	1880.0	21.95	-0.5	21.45	139.64	2
19125	1902.5	21.98	-0.5	21.48	140.6	2

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _{T-Lc} (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18675	1857.5	21.08	-0.5	20.58	114.29	2
18900	1880.0	20.98	-0.5	20.48	111.69	2
19125	1902.5	21.07	-0.5	20.57	114.02	2

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18700	1860	22.92	-0.5	22.42	174.58	2
18900	1880	22.87	-0.5	22.37	172.58	2
19100	1900	22.82	-0.5	22.32	170.61	2

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18700	1860	22.18	-0.5	21.68	147.23	2
18900	1880	22.03	-0.5	21.53	142.23	2
19100	1900	22.04	-0.5	21.54	142.56	2

CHANNEL BANDWIDTH: 20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
18700	1860	21.14	-0.5	20.64	115.88	2
18900	1880	21.03	-0.5	20.53	112.98	2
19100	1900	21.08	-0.5	20.58	114.29	2

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).



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VERITAS

Test Report No.: W7L-P22110036RF05

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CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
26047	1850.7	23.04	-0.5	22.54	179.47	2
26365	1882.5	22.98	-0.5	22.48	177.01	2
26683	1914.3	22.94	-0.5	22.44	175.39	2

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
26047	1850.7	22.35	-0.5	21.85	153.11	2
26365	1882.5	22.33	-0.5	21.83	152.41	2
26683	1914.3	22.34	-0.5	21.84	152.76	2

CHANNEL BANDWIDTH: 1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
26047	1850.7	21.49	-0.5	20.99	125.6	2
26365	1882.5	21.49	-0.5	20.99	125.6	2
26683	1914.3	21.37	-0.5	20.87	122.18	2

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
26055	1851.5	22.99	-0.5	22.49	177.42	2
26365	1882.5	22.94	-0.5	22.44	175.39	2
26675	1913.5	22.97	-0.5	22.47	176.6	2

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
26055	1851.5	22.41	-0.5	21.91	155.24	2
26365	1882.5	22.26	-0.5	21.76	149.97	2
26675	1913.5	22.38	-0.5	21.88	154.17	2

CHANNEL BANDWIDTH: 3MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
26047	1851.5	21.54	-0.5	21.04	127.06	2
26365	1882.5	21.45	-0.5	20.95	124.45	2
26683	1913.5	21.41	-0.5	20.91	123.31	2