

FCC LTE REPORT

Certification

Applicant Name: Date of Issue: SAMSUNG Electronics Co., Ltd. July 15, 2020 Location: Address: HCT CO., LTD., 129, Samsung-ro, Yeongtong-gu, 74, Seoicheon-ro 578beon-gil, Majang-myeon, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA Report No.: HCT-RF-2007-FC027 FCC ID:

A3LSMT878U

APPLICANT:

SAMSUNG Electronics Co., Ltd.

Model(s): SM-T878U EUT Type: Tablet FCC Classification: PCS Licensed Transmitter (PCB) FCC Rule Part(s): §90, §2

Mada	Tx Frequency (MHz)	Emission Designator		ERP		
Mode (MHz)			Modulation	Max. Power	Max. Power	
				(W)	(dBm)	
	790.5 –795.5	4M52G7D	QPSK	0.144	21.57	
LTE Dond14 (E)		4M49W7D	16QAM	0.126	21.01	
LTE – Band14 (5)		4M50W7D	64QAM	0.094	19.71	
		4M52W7D	256QAM	0.047	16.75	
	793.0	8M97G7D	QPSK	0.146	21.65	
LTE – Band14 (10)		8M96W7D	16QAM	0.131	21.16	
	793.0	8M97W7D	64QAM	0.086	19.34	
		8M97W7D	256QAM	0.045	16.54	

The measurements shown in this report were made in accordance with the procedures specified in CFR47 section §2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998,21 U.S. C.853(a)



REVIEWED BY

Report prepared by : Se Wook Park Engineer of Telecommunication Testing Center

Report approved by : Jong Seok Lee Manager of Telecommunication Testing Center

This report only responds to the tested sample and may not be reproduced, except in full, without written approval of the HCT Co., Ltd.

This test results were applied only to the test methods required by the standard.

This laboratory is not accredited for the test results marked *. The above Test Report is the accredited test result by KOLAS(Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA. (HCT Accreditation No.: KT197)



<u>Version</u>

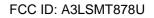
TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-2007-FC027	July 15, 2020	- First Approval Report

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.



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MEASUREMENT REPORT

1. GENERAL INFORMATION

Applicant Name:	SAMSUNG Electronics Co., Ltd.
Address:	129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Rep. of Korea
FCC ID:	A3LSMT878U
Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter (PCB)
FCC Rule Part(s):	§90, §2
EUT Type:	Tablet
Model(s):	SM-T878U
Tx Frequency:	790.5 MHz –795.5 MHz (LTE – BAND 14 (5MHz)) 793.0 MHz (LTE – BAND 14 (10 MHz))
Date(s) of Tests:	June 07, 2020 ~ July 13, 2020



2. INTRODUCTION

2.1. DESCRIPTION OF EUT

The EUT was a Tablet with UMTS and LTE, Sub6.

It also supports IEEE 802.11 a/b/g/n/ac/ax (HT20/40/80), Bluetooth, BT LE, WPT, mmWave(n260/261).

2.2. MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

2.3. TEST FACILITY

The Fully-anechoic chamber and conducted measurement facility used to collect the radiated data are located at the **74**, **Seoicheon-ro 578beon-gil**, **Majang-myeon**, **Icheon-si**, **Gyeonggi-do**, **17383**, **Rep. of KOREA**.



3. DESCRIPTION OF TESTS

3.1 TEST PROCEDURE

Test Description	Test Procedure Used
Occupied Bandwidth	- KDB 971168 D01 v03r01 – Section 4.3
	- ANSI C63.26-2015 – Section 5.4.4
Band Edge	- KDB 971168 D01 v03r01 – Section 6.0
Dand Luge	- ANSI C63.26-2015 – Section 5.7
Spurious and Harmonic Emissions at Antenna	- KDB 971168 D01 v03r01 – Section 6.0
Terminal	- ANSI C63.26-2015 – Section 5.7
Conducted Output Power	- N/A (See SAR Report)
Frequency stability	- ANSI C63.26-2015 – Section 5.6
Effective Radiated Power/	- KDB 971168 D01 v03r01 – Section 5.2 & 5.8
Effective Isotropic Radiated Power	- ANSI/TIA-603-E-2016 – Section 2.2.17
Padiated Spurious and Harmonia Emissions	- KDB 971168 D01 v03r01 – Section 6.2
Radiated Spurious and Harmonic Emissions	- ANSI/TIA-603-E-2016 – Section 2.2.12

3.2 RADIATED POWER

Test Overview

Radiated tests are performed in the Fully-anechoic chamber.

The equipment under test is placed on a non-conductive table 3-meters away from the receive antenna in accordance with ANSI/TIA-603-E-2016 Clause 2.2.17.

Test Settings

1. Radiated power measurements are performed using the signal analyzer's "channel power"

measurement capability for signals with continuous operation.

- 2. RBW = 1 5% of the expected OBW, not to exceed 1MHz
- 3. VBW \ge 3 x RBW
- 4. Span = 1.5 times the OBW
- 5. No. of sweep points > 2 x span / RBW
- 6. Detector = RMS
- 7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto".
- 8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation.
- 9. Trace mode = trace averaging (RMS) over 100 sweeps
- 10. The trace was allowed to stabilize

Test Note

- 1. The turntable is rotated through 360 degrees, and the receiving antenna scans in order to determine the level of the maximized emission.
- 2. A half wave dipole is then substituted in place of the EUT. For emissions above 1GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator and the previously recorded signal was duplicated.

The power is calculated by the following formula;

 $P_{d(dBm)} = Pg_{(dBm)} - cable loss_{(dB)} + antenna gain_{(dB)}$

Where: P_d is the dipole equivalent power and P_g is the generator output power into the substitution antenna.

3. The maximum value is calculated by adding the forward power to the calibrated source plus its appropriate gain value. These steps are repeated with the receiving antenna in both vertical and horizontal polarization. the difference

between the gain of the horn and an isotropic antenna are taken into consideration

- 4. The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
- 5. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.



3.3 RADIATED SPURIOUS EMISSIONS

Test Overview

Radiated tests are performed in the Fully-anechoic chamber. Radiated Spurious Emission Measurements at 3 meters by Substitution Method according to ANSI/TIA-603-E-2016.

Test Settings

- 1. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
- 2. VBW ≥ 3 x RBW
- 3. Span = 1.5 times the OBW
- 4. No. of sweep points > 2 x span / RBW
- 5. Detector = Peak
- 6. Trace mode = Max Hold
- 7. The trace was allowed to stabilize
- 8. Test channel : Low/ Middle/ High
- 9. Frequency range : We are performed all frequency to 10th harmonics from 9 kHz.

Test Note

1. Measurements value show only up to 3 maximum emissions noted, or would be lesser

if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit)

and considered that's already beyond the background noise floor.

2. The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.

The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the test data

3. For spurious emissions above 1GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator and the previously recorded signal was duplicated.

The spurious emissions is calculated by the following formula;

Result_(dBm) = Pg_(dBm) - cable loss _(dB) + antenna gain _(dBi)

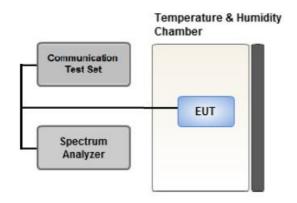
Where: P_gis the generator output power into the substitution antenna.

If the fundalmatal frequency is below 1GHz, RF output power has been converted to EIRP.

 $\mathsf{EIRP}_{(\mathsf{dBm})} = \mathsf{ERP}_{(\mathsf{dBm})} + 2.15$



3.4 OCCUPIED BANDWIDTH.



Test setup

The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 % of the total mean power of a given emission.

The EUT makes a call to the communication simulator.

The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

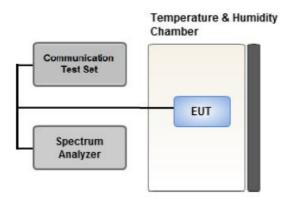
The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth

Test Settings

- 1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99% occupied bandwidth and the 26dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
- 2. RBW = 1 5% of the expected OBW
- 3. VBW \ge 3 x RBW
- 4. Detector = Peak
- 5. Trace mode = max hold
- 6. Sweep = auto couple
- 7. The trace was allowed to stabilize
- 8. If necessary, steps 2 7 were repeated after changing the RBW such that it would be within
 - 1-5% of the 99% occupied bandwidth observed in Step 7



3.5 SPURIOUS AND HARMONIC EMISSIONS AT ANTENNA TERMINAL



Test setup

Test Overview

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic.

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

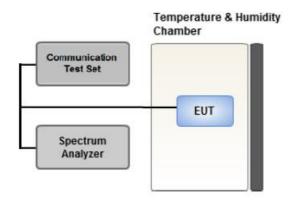
All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

Test Settings

- 1. RBW = 1 MHz
- 2. VBW ≥ 3 MHz
- 3. Detector = RMS
- 4. Trace Mode = trace average
- 5. Sweep time = auto
- 6. Number of points in sweep $\ge 2 \times \text{Span} / \text{RBW}$



3.6 BAND EDGE



Test setup

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

Test Settings

- 1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
- 2. Span was set large enough so as to capture all out of band emissions near the band edge
- 3. RBW > 1% of the emission bandwidth
- 4. VBW > $3 \times RBW$
- 5. Detector = RMS
- 6. Number of sweep points \geq 2 x Span/RBW
- 7. Trace mode = trace average
- 8. Sweep time = auto couple
- 9. The trace was allowed to stabilize



Test Notes

§90.543(e)

- 1. On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.
- 2. On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.
- 3. On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.
- 4. Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.
- 5. Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater.

However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

Test Notes

According to FCC 22.917, 24.238, 27.53 specified that 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

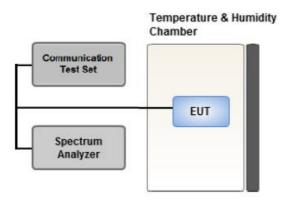
the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

All measurements were done at 2 channels(low and high operational frequency range.)

The band edge measurement used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.



3.7 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE



Test setup

Test Overview

Frequency stability testing is performed in accordance with the guidelines of ANSI C63.26-2015.

The frequency stability of the transmitter is measured by:

1. Temperature:

The temperature is varied from -30°C to +50°C in 10°C increments using an

environmental chamber.

- 2. Primary Supply Voltage:
 - .- Unless otherwise specified, vary primary supply voltage from 85% to 115% of the nominal value

for other than hand carried battery equipment.

.- For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.

Test Settings

1. The carrier frequency of the transmitter is measured at room temperature

(20°C to provide a reference).

- 2. The equipment is turned on in a "standby" condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
- 3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.



3.8 WORST CASE(RADIATED TEST)

- The EUT was tested in three orthogonal planes(X, Y, Z) and in all possible test configurations and positioning.
- All modes of operation were investigated and the worst case configuration results are reported.
- The worst case is reported with the EUT positioning, modulations, RB sizes and offsets,

and channel bandwidth configurations shown in the test data.

- Please refer to the table below.

Test Description	Modulation	RB size	RB offset	Axis			
	QPSK,		0	Z			
Effective Isotropic Radiated Power	16QAM,	16QAM, 64QAM, 1					
	64QAM,						
	256QAM						
Radiated Spurious and Harmonic Emissions	QPSK	1	0	Z			

[Worst case]



3.9 WORST CASE(CONDUCTED TEST)

- Worst case : Of all modulation, We have tested modulation of the high Conducted Output Power.

Conducted Output Power value can be confirmed on the SAR report.

[Worst case]

Test Description	Modulation	Bandwidth (MHz)	Frequency	RB size	RB offset
Occupied Bandwidth	QPSK, 16QAM, 64QAM, 256QAM	5, 10	Mid	Full RB	0
		5	Low	1	0
	QPSK		High	1	24
		10	Mid	1	0
Band Edge				1	49
		5	Low, High	Full RB	0
		10	Mid	Full RB	0
			Low,		
Spurious and Harmonic Emissions at	ODSK	5	Mid,	1	0
Antenna Terminal	QPSK		High		
		10	Mid	1	0



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4. LIST OF TEST EQUIPMENT

Manufacture	Model/ Equipment	Serial Number	Calibration Date	Calibrati on Interval	Calibration Due
T&M SYSTEM	FBSR-02B(WHK1.2/15G-10EF)/H.P.F	-	03/09/2020	Annual	03/09/2021
T&M SYSTEM	FBSR-02B(WHK3.3/18G-10EF)/H.P.F	-	03/09/2020	Annual	03/09/2021
WAINWRIGHT INSTRUMENT	WHNX6.0/26.5G-6SS/H.P.F	1	03/19/2020	Annual	03/19/2021
Hewlett Packard	11667B / Power Splitter(DC~26.5 GHz)	11275	04/27/2020	Annual	04/27/2021
Hewlett Packard	E3632A/DC Power Supply	MY4004427	09/27/2019	Annual	09/27/2020
Schwarzbeck	UHAP/ Dipole Antenna	557	03/29/2019	Biennial	03/29/2021
Schwarzbeck	UHAP/ Dipole Antenna	558	03/29/2019	Biennial	03/29/2021
ESPEC	SU-642 / Chamber	93000717	08/14/2019	Annual	08/14/2020
Schwarzbeck	BBHA 9120D/ Horn Antenna(1~18GHz)	147	08/29/2019	Biennial	08/29/2021
Schwarzbeck	BBHA 9120D/ Horn Antenna(1~18GHz)	9120D-1298	09/25/2019	Biennial	09/25/2021
Schwarzbeck	BBHA 9170/ Horn Antenna(15~40GHz)	BBHA9170342	04/29/2019	Biennial	04/29/2021
Schwarzbeck	BBHA 9170/ Horn Antenna(15~40GHz)	BBHA9170124	02/11/2020	Biennial	02/11/2022
Agilent	N9020A/Signal Analyzer(10Hz~26.5GHz)	MY51110063	04/27/2020	Annual	04/27/2021
Hewlett Packard	8493C/ATTENUATOR(20dB)	17280	06/04/2020	Annual	06/04/2021
REOHDE & SCHWARZ	FSV40/Spectrum Analyzer(10Hz~40GHz)	100931	10/14/2019	Annual	10/14/2020
Agilent	8960 (E5515C)/ Base Station	MY48360800	08/27/2019	Annual	08/27/2020
Schwarzbeck	FMZB1513/ Loop Antenna(9kHz~30MHz)	1513-175	04/26/2019	Biennial	04/26/2021
Schwarzbeck	VULB9160/ Bilog Antenna	9160-3368	08/09/2018	Biennial	08/09/2020
Schwarzbeck	VULB9160/ Hybrid Antenna	760	03/22/2019	Biennial	03/22/2021
Anritsu Corp.	MT8821C/Wideband Radio Communication Tester	6201502997	08/09/2019	Annual	08/09/2020
Anritsu Corp.	MT8820C/Wideband Radio Communication Tester	6201026545	01/22/2020	Annual	01/22/2021
REOHDE & SCHWARZ	SMB100A/ SIGNAL GENERATOR (100kHz~40GHz)	177633	07/15/2019	Annual	07/15/2020
KEYSIGHT	E7515B / 5G Wireless Tester	MY58300756	01/07/2020	Annual	01/07/2021
KEYSIGHT	N9030B / Signal Analyzer(5Hz~40.0GHz)	MY55480167	06/04/2020	Annual	06/04/2021
Mini-Circuits	ZC4PD-K1844+ / 4-Way Divider	942907	09/05/2019	Annual	09/05/2020
HCT CO., LTD.,	FCC LTE Mobile Conducted RF Automation Test Software	-	-	-	-

Note:

- 1. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.
- 2. Espectially, all antenna for measurement is calibrated in accordance with the requirements of C63.5 (Version : 2017).

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5. MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4:2014. All measurement uncertainty values are shown with a coverage factor of k = 2 to indicate a 95 % level of confidence. The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Parameter	Expanded Uncertainty (±dB)
Conducted Disturbance (150 kHz ~ 30 MHz)	1.82
Radiated Disturbance (9 kHz ~ 30 MHz)	3.40
Radiated Disturbance (30 MHz ~ 1 GHz)	4.80
Radiated Disturbance (1 GHz ~ 18 GHz)	5.70
Radiated Disturbance (18 GHz ~ 40 GHz)	5.05



6. SUMMARY OF TEST RESULTS

6.1 Test Condition : Conducted Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Occupied Bandwidth	§2.1049	N/A	PASS
Band Edge / Spurious and Harmonic Emissions at Antenna Terminal.	§2.1051, §90.543(e)	< 43 + 10log10 (P[Watts]) at Band Edge and for all out-of-band emissions	PASS
On all frequencies between 769- 775 MHz and 799-805 MHz.	§90.543(e)	< 65 + 10log10 (P[Watts])	PASS <u>(See Note3)</u>
Conducted Output Power	§2.1046	N/A	See Note1
Frequency stability / variation of ambient temperature	§2.1055, §90.539(e)	< 2.5 ppm	PASS

Note:

- 1. See SAR Report
- 2. The same samples were used for SAR and EMC
- Since it was not possible to set the resolution bandwidth to 6.25 kHz with the available equipment, a bandwidth of 10 kHz was used instead to show compliance.

6.2 Test Condition : Radiated Test

Test Description	FCC Part Section(s)	Test Limit	Test Result
Effective Radiated Power	Effective Radiated Power §90.542(a)(7)		PASS
Radiated Spurious and Harmonic	§2.1053,	< 43 + 10log10 (P[Watts]) for	PASS
Emissions	§90.543(e)	all out-of band emissions	FA00
Undesirable Emissions in	§2.1053,	< -70dBW/MHz EIRP (wideband)	PASS
the 1559 – 1610 MHz band	§90.543(f)	< -80dBW EIRP (narrowband)	FA00



7. SAMPLE CALCULATION

7.1 ERP Sample Calculation

Ch./ Freq.		Measured	Substitute	Ant. Gain	C.L	Pol.	EF	RP
channel	Freq.(MHz)	Level(dBm)	Level(dBm)	(dBd)	U.L	POI.	w	dBm
128	824.20	-21.37	38.40	-10.61	0.95	Н	0.483	26.84

ERP = Substitute LEVEL(dBm) + Ant. Gain – CL(Cable Loss)

1) The EUT mounted on a non-conductive turntable is 2.5 meter above test site ground level.

2) During the test, the turn table is rotated until the maximum signal is found.

3) Record the field strength meter's level.

4) Replace the EUT with dipole/Horn antenna that is connected to a calibrated signal generator.

5) Increase the signal generator output till the field strength meter's level is equal to the item (3).

6) The signal generator output level with Ant. Gain and cable loss are the rating of effective radiated power.

7.2 EIRP Sample Calculation

Ch	Ch./ Freq. Measured		Substitute Ant. Gain		C.L	Pol.	EIRP	
channel	Freq.(MHz)	Level(dBm)	Level(dBm)	(dBi)	U.L	POI.	w	dBm
20175	1,732.50	-15.75	18.45	9.90	1.76	Н	0.456	26.59

EIRP = Substitute LEVEL(dBm) + Ant. Gain – CL(Cable Loss)

1) The EUT mounted on a non-conductive turntable is 2.5 meter above test site ground level.

2) During the test, the turn table is rotated until the maximum signal is found.

3) Record the field strength meter's level.

4) Replace the EUT with dipole/Horn antenna that is connected to a calibrated signal generator.

5) Increase the signal generator output till the field strength meter's level is equal to the item (3).

6) The signal generator output level with Ant. Gain and cable loss are the rating of equivalent isotropic radiated power.

7.3. Emission Designator

GSM Emission Designator

Emission Designator = 249KGXW GSM BW = 249 kHz G = Phase Modulation X = Cases not otherwise covered

W = Combination (Audio/Data)

EDGE Emission Designator

Emission Designator = 249KG7W GSM BW = 249 kHz G = Phase Modulation 7 = Quantized/Digital Info W = Combination (Audio/Data)

WCDMA Emission Designator	QPSK Modulation					
Emission Designator = 4M17F9W	Emission Designator = 4M48G7D					
WCDMA BW = 4.17 MHz	LTE BW = 4.48 MHz					
F = Frequency Modulation	G = Phase Modulation					
9 = Composite Digital Info	7 = Quantized/Digital Info					
W = Combination (Audio/Data)	D = Data transmission; telemetry; telecommand					

16QAM Modulation

Emission Designator = 4M48W7D LTE BW = 4.48 MHz W = Amplitude/Angle Modulated 7 = Quantized/Digital Info D = Data transmission; telemetry; telecommand



8. TEST DATA

8.1 EFFECTIVE RADIATED POWER

Freq	Mod	Medulation	Measured	Substitute	Ant.	C.L	Del	Limit	EF	RP
(MHz)	(Bandwidth)	Modulation	Level (dBm)	Level (dBm)	Gain(dBd)	U.L	Pol	w	W	dBm
		QPSK	-29.98	8 32.81 -10.11 1.2	1.26	V		0.139	21.44	
790.5		16-QAM	-30.61	32.18	-10.11	1.26	V		0.120	20.81
790.5		64-QAM	-32.49	30.30	-10.11	1.26	V		0.078	18.93
	LTE B14	256-QAM	-34.74	28.05	-10.11	1.26	V	-< 3.00	0.047	16.68
		QPSK	-30.07	32.86	-10.12	1.26	V		0.141	21.48
793.0		16-QAM	-30.67	32.26	-10.12	1.26	V		0.122	20.88
793.0	(5 MHz)	64-QAM	-32.18	30.75	-10.12	1.26	V		0.086	19.37
		256-QAM	-34.80	28.13	-10.12	1.26	V		0.047	16.75
		QPSK	-30.09	32.95	-10.13	1.26	V		0.144	21.57
795.5		16-QAM	-30.65	32.39	-10.13	1.26	V		0.126	21.01
		64-QAM	-31.95	31.09	-10.13	1.26	V		0.094	19.71
		256-QAM	-34.91	28.13	-10.13	1.26	V		0.047	16.75

Freq	Mod	Modulation	Measured	Substitute	Ant.	C.L	L Pol	Limit	EF	RP
(MHz)	(Bandwidth)		Level (dBm)	Level (dBm)	Gain(dBd)	U.L	FUI	W	W	dBm
793.0		QPSK	-29.90	33.03	-10.12	1.26	V		0.146	21.65
	LTE B14	16-QAM	-30.39	32.54	-10.12	1.26	V	. 2.00	0.131	21.16
	(10 MHz)	64-QAM	-32.21	30.72	-10.12	1.26	V	< 3.00	0.086	19.34
		256-QAM	-35.01	27.92	-10.12	1.26	V		0.045	16.54



8.2 RADIATED SPURIOUS EMISSIONS

I MODE:	LTE B14
MODULATION SIGNAL:	<u>5 MHz QPSK</u>
DISTANCE:	3 meters

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit
	1,581.0	-54.47	9.05	-63.57	1.80	Н	-56.32	-13.00
23305 (790.5)	2,371.5	-44.57	10.05	-48.32	2.25	Н	-40.52	-13.00
(10010)	3,162.0	-58.75	11.28	-59.92	2.61	Н	-51.25	-13.00
	1,586.0	-55.33	9.12	-64.64	1.81	Н	-57.33	-13.00
23330 (793.0)	2,379.0	-43.75	10.05	-47.24	2.25	Н	-39.44	-13.00
(10010)	3,172.0	-58.90	11.35	-59.74	2.61	Н	-51.00	-13.00
	1,591.0	-55.42	9.18	-64.95	1.81	Н	-57.58	-13.00
23355 (795.5)	2,386.5	-44.53	10.09	-48.21	2.26	V	-40.38	-13.00
(795.5)	3,182.0	-58.79	11.35	-59.85	2.64	Н	-51.14	-13.00



MODE:	<u>LTE B14</u>
MODULATION SIGNAL:	<u>10 MHz QPSK</u>

DISTANCE:

3 meters

Ch	Freq (MHz)	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Limit
	1,586.0	-56.06	9.12	-65.37	1.81	V	-58.06	-13.00
23330 (793.0)	2,379.0	-50.99	10.05	-54.48	2.25	Н	-46.68	-13.00
(1.0010)	3,172.0	-59.50	11.35	-60.34	2.61	Н	-51.60	-13.00



1559 MHz ~ 1610 MHz BAND

OPERATING FREQUENCY:	<u>790.5 MHz, 793.0 MHz, 795.5 MHz</u>
MEASURED OUTPUT POWER:	<u>5 MHz QPSK</u>
DISTANCE:	<u>3 meters</u>
WIDEBAND EMISSION LIMIT:	<u>-80 dBW/ MHz (= -50 dBm/ MHz)</u>

Operating Frequency (MHz)	Measured Frequency (MHz)	EMISSION TYPE	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Margin (dB)
790.5	1576.6		-64.52	9.05	-73.62	1.80	V	-66.37	16.37
793.0	1581.6	Narrow Band	-63.67	9.05	-72.77	1.80	V	-65.52	15.52
795.5	1586.7		-63.11	9.18	-72.64	1.81	Н	-65.27	15.27

Note:

The lower narrowband limit was applied because the spurious emission was not found.

OPERATING FREQUENCY:	<u>793.0 MHz</u>
MEASURED OUTPUT POWER:	10 MHz QPSK
DISTANCE:	<u>3 meters</u>
WIDEBAND EMISSION LIMIT:	<u>-80 dBW/ MHz (= -50 dBm/ MHz)</u>

Operating Frequency (MHz)	Measured Frequency (MHz)	EMISSION TYPE	Measured Level (dBm)	Ant. Gain (dBi)	Substitute Level (dBm)	C.L	Pol	Result (dBm)	Margin (dB)
793.0	1609.4	Narrow Band	-65.05	9.35	-75.16	1.81	V	-67.62	17.62

Note:

The lower narrowband limit was applied because the spurious emission was not found.



8.3 OCCUPIED BANDWIDTH

Band	Band Width	Frequency (MHz)	Modulation	Resource Block Size	Resource Block Offset	Data (MHz)
			QPSK	25	0	4.5167
	5 MHz	793.0	16-QAM	25	0	4.4893
	3 MHZ		64-QAM	25	0	4.5015
14			256-QAM	25	0	4.5168
14	10 MHz		QPSK	50	0	8.9733
			16-QAM	50	0	8.9604
			64-QAM	50	0	8.9688
			256-QAM	50	0	8.9660

Note:

1. Plots of the EUT's Occupied Bandwidth are shown Page 34 ~ 41.



8.4 CONDUCTED SPURIOUS EMISSIONS

Band	Band Width (MHz)	Frequency (MHz)	Frequency of Maximum Harmonic (GHz)	Factor (dB)	Measurement Maximum Data (dBm)	Result (dBm)	Limit (dBm)	
14	5	790.5	790.5 3.6950		-67.293	-39.317		
		5	793.0	3.6795	27.976	-67.184	-39.208	-13.00
		795.5	3.6880	27.976	-66.898	-38.922	-13.00	
	10	793.0	3.6880	27.976	-67.270	-39.294		

Note:

1. Plots of the EUT's Conducted Spurious Emissions are shown Page 58 ~ 61.

2. Conducted Spurious Emissions was Tested QPSK Modulation, Resource Block Size 1 and Resource Block Offset 0

3. Result (dBm) = Measurement Maximum Data (dBm) + Factor (dB)

4. Factor(dB) = Cable Loss + Attenuator + Power Splitter

Frequency Range (GHz)	Factor [dB]
0.03 – 1	25.270
1 – 5	27.976
5 – 10	28.591
10 – 15	29.116
15 – 20	29.489
Above 20	30.131

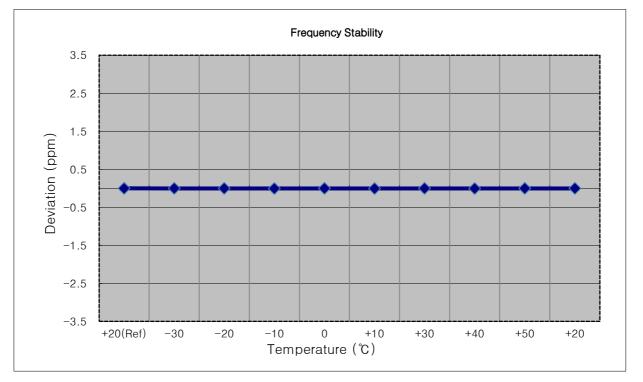
8.5 BAND EDGE

- Plots of the EUT's Band Edge are shown Page 42 ~ 57.

8.6 FREQUENCY STABILITY / VARIATION OF AMBIENT TEMPERATURE

MODE:	<u>LTE 14</u>
OPERATING FREQUENCY:	<u>790,500,000 Hz</u>
CHANNEL:	<u>23305 (5 MHz)</u>
REFERENCE VOLTAGE:	<u>3.85 VDC</u>
DEVIATION LIMIT:	<u>2.5ppm</u>

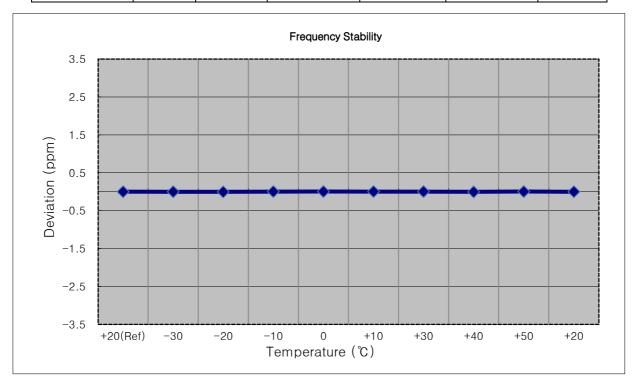
Voltage	Power	Temp.	Frequency	Frequency	Deviation		
(%)	(VDC)	VDC) (°C) (Hz)		Error (Hz)	(%)	ppm	
100%		+20(Ref)	790 500 003	0.00	0.000 000	0.0000	
100%		-30	790 500 000	-2.90	0.000 000	-0.0037	
100%		-20	790 500 001	-2.20	0.000 000	-0.0028	
100%		-10	790 500 000	-3.30	0.000 000	-0.0042	
100%	3.850	0	790 500 000	-2.90	0.000 000	-0.0037	
100%		+10	790 500 000	-3.50	0.000 000	-0.0044	
100%		+30	790 500 001	-2.40	0.000 000	-0.0030	
100%		+40	790 499 999	-4.00	-0.000 001	-0.0051	
100%		+50	790 500 001	-2.20	0.000 000	-0.0028	
Batt. Endpoint	3.400	+20	790 500 001	-1.90	0.000 000	-0.0024	





■ MODE:	<u>LTE 14</u>
OPERATING FREQUENCY:	<u>793,000,000 Hz</u>
CHANNEL:	<u>23330 (5 MHz)</u>
REFERENCE VOLTAGE:	<u>3.85 VDC</u>
DEVIATION LIMIT:	<u>2.5ppm</u>

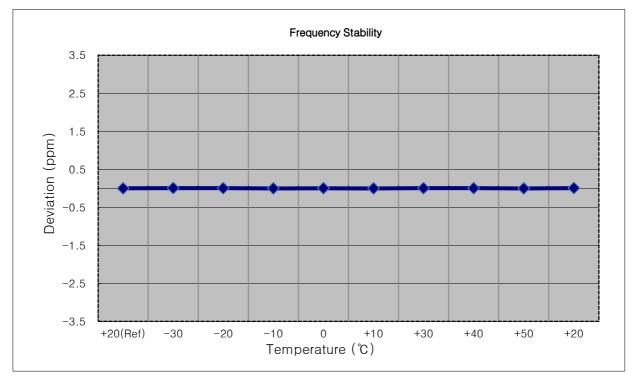
Voltage	Power	Temp.	Frequency	Frequency	Deviation		
(%)	(VDC)	(°C) (Hz)		Error (Hz)	(%)	ppm	
100%		+20(Ref)	793 000 003	0.00	0.000 000	0.0000	
100%		-30	793 000 002	-1.20	0.000 000	-0.0015	
100%		-20	793 000 000	-3.20	0.000 000	-0.0040	
100%		-10	793 000 006	2.50	0.000 000	0.0032	
100%	3.850	0	793 000 006	3.20	0.000 000	0.0040	
100%		+10	793 000 005	1.40	0.000 000	0.0018	
100%		+30	793 000 005	1.60	0.000 000	0.0020	
100%		+40	793 000 001	-2.60	0.000 000	-0.0033	
100%		+50	793 000 006	3.20	0.000 000	0.0040	
Batt. Endpoint	3.400	+20	793 000 002	-1.20	0.000 000	-0.0015	





I MODE:	<u>LTE 14</u>
OPERATING FREQUENCY:	<u>795,500,000 Hz</u>
CHANNEL:	<u>23355 (5 MHz)</u>
REFERENCE VOLTAGE:	<u>3.85 VDC</u>
DEVIATION LIMIT:	<u>2.5ppm</u>

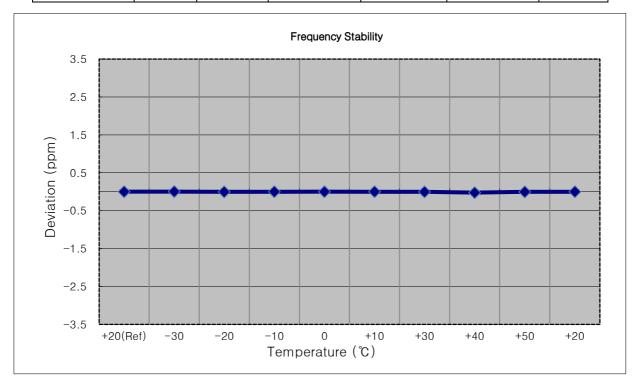
Voltage	Power	Power Temp. Frequency Frequen		Frequency	Deviation		
(%)	6) (VDC) (°C) (Hz)		Error (Hz)	(%)	ppm		
100%		+20(Ref)	795 500 002	0.00	0.000 000	0.0000	
100%		-30	795 500 007	4.60	0.000 001	0.0058	
100%		-20	795 500 005	2.50	0.000 000	0.0031	
100%		-10	795 500 001	-1.60	0.000 000	-0.0020	
100%	3.850	0	795 500 004	1.90	0.000 000	0.0024	
100%		+10	795 500 000	-2.70	0.000 000	-0.0034	
100%		+30	795 500 006	3.20	0.000 000	0.0040	
100%		+40	795 500 005	2.80	0.000 000	0.0035	
100%		+50	795 500 001	-1.60	0.000 000	-0.0020	
Batt. Endpoint	3.400	+20	795 500 007	4.40	0.000 001	0.0055	





MODE:	<u>LTE 14</u>
OPERATING FREQUENCY:	<u>793,000,000 Hz</u>
CHANNEL:	<u>23330 (10 MHz)</u>
REFERENCE VOLTAGE:	<u>3.85 VDC</u>
DEVIATION LIMIT:	<u>2.5ppm</u>

Voltage	Power	Temp.	Frequency Frequency		Deviation		
(%)	(%) (VDC)		(°C) (Hz)		(%)	ppm	
100%		+20(Ref)	792 999 997	0.00	0.000 000	0.0000	
100%		-30	792 999 999	2.10	0.000 000	0.0026	
100%		-20	792 999 994	-2.50	0.000 000	-0.0032	
100%		-10	792 999 995	-1.40	0.000 000	-0.0018	
100%	3.850	0	792 999 998	1.00	0.000 000	0.0013	
100%		+10	792 999 995	-1.20	0.000 000	-0.0015	
100%		+30	792 999 995	-2.10	0.000 000	-0.0026	
100%		+40	792 999 978	-19.00	-0.000 002	-0.0240	
100%		+50	792 999 994	-3.10	0.000 000	-0.0039	
Batt. Endpoint	3.400	+20	792 999 995	-1.70	0.000 000	-0.0021	





FCC ID: A3LSMT878U

9. TEST PLOTS



	ectrum Analyzer - Occu	•									_	
Cepter B	RF 50 Ω Freq 793.000				SE:INT eq: 793.000	000 MHz	ALIGN	AUTO	07:24:17 F Radio Std:	M Jun 07, 2020 None	Freq	uency
PASS	100733.000			Trig: Free #Atten: 20	Run	Avg Hold	: 500/	500	Radio Dev	DTC		
		#IFG	ain:Low	#Atten: 20					Radio Dev	ICE: DTS		
10 dB/div	Ref Offset Ref 40.0											
Log 30.0											Ce	nter Freq
												DOOOO MHz
20.0		~~~	mm	mm	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<u>~~~</u>					
10.0												
0.00												
-10.0							\vdash	1				
-20.0	N							1				
-30.0 m	mmm	\sim						ب لہا -	Vmm All	wwww		
-40.0												
-50.0											4.00	CF Step
Center 7	793 MHz								Spa	n 10 MHz	1.00 Auto	00000 MHz Man
#Res BW	/ 100 kHz			#VB	W 390 k	Hz			Swe	ep 1ms		
Occu	pied Band	width			Total P	ower		31.6	dBm		Fr	eq Offset
	4.5167 MHz								0 Hz			
Trans	mit Freq Err	or 1	17.893 kl	Hz	OBW P	ower		99.	00 %			
x dB	Bandwidth		4.943 MI	Hz	x dB			-26.0	0 dB			
MSG							Į,	STATUS				

BAND 14. Occupied Bandwidth Plot (Ch.23330 QPSK RB 25) 5 MHz



	Spectrum Analyzer - Occu											
LXI RL	r Freq 793.000		SENSE:INT		IGN AUTO	07:23:44 PM Jun 07, 2020 Radio Std: None	Frequency					
PASS		++	Trig: Free Run	Avg Hold: {	500/500							
FASS		#IFGain:Low	#Atten: 20 dB		ŀ	Radio Device: BTS						
10 dB/di	Ref Offset iv Ref 40.00											
Log 30.0							Center Freq					
							793.000000 MHz					
20.0		man	mannon	mann	~							
10.0												
0.00												
-10.0					- <u>\</u>							
-20.0					- L	ham al have he						
-30.0 ᄊ	man					more and the property						
-40.0												
-50.0												
-30.0							CF Step 1.000000 MHz					
	793 MHz	·				Span 10 MHz Sweep 1 ms	<u>Auto</u> Man					
#Res B	3W 100 kHz	#VBW 390	/BW 390 kHz									
Occupied Bandwidth Total Power 30.7 dBm							Freq Offset					
			47				0 Hz					
	4.4893 MHz											
Trar	Transmit Freq Error 11.517 kH			2 OBW Power		0 %						
x dE	3 Bandwidth	4.908	/Hz xdB	x dB		dB						
MSG					I STATUS							
					V							

BAND 14. Occupied Bandwidth Plot (Ch.23330 16-QAM RB 25) 5 MHz



	ectrum Analyzer - Occupied B											
LXI RL	RF 50 Ω AC Freq 793.000000		SENSE:INT	00000 MHz	ALIGN AUTO	07:24:01 PM Radio Std: N		Frequency				
PASS	req 795.000000	÷	Trig: Free Run	e Run Avg Hold: 500/500								
FASS	_	#IFGain:Low	#Atten: 20 dB			Radio Devic	e: BTS					
10 dB/div	Ref Offset 26.8 Ref 40.00 dE											
Log 30.0								Center Freq				
20.0								793.000000 MHz				
10.0		mohmon	m	provention of the	~~							
0.00					<u> </u>							
-10.0					<u> </u>							
-20.0		/										
-30.0						Murray	hunner					
-40.0												
-50.0								CF Step				
								1.000000 MHz				
Center 7 #Res BW	<u>Auto</u> Man											
Occupied Bandwidth				Total Power 29.		.7 dBm		Freq Offset				
	4.5015 MHz											
Trans	Transmit Freq Error 15.762 kHz			OBW Power		99.00 %						
x dB	x dB Bandwidth 4.914 MHz			x dB		-26.00 dB						
MSG						6						
					<u> </u>							

BAND 14. Occupied Bandwidth Plot (Ch.23330 64-QAM RB 25) 5 MHz



🊺 Ag	ilent Spectru	ım Analyzer - Occ	upied BW											
LXI RI	-	RF 50 Ω cq 793.000		U 7			NSE:INT req: 793.00	0000 MHz	ALIG	SN AUTO	01:38:02	PM Jun 10, 2020	F	requency
PAS		q 795.000				Trig: Fre	e Run	Avg Hol	ld: 50	0/500				
FAS				#IFGain:	Low	#Atten: 2	0 dB				Radio Dev	ice: BTS		
10 dE	3/div	Ref Offset Ref 40.0												
Log 30.0														Center Freq
20.0														3.000000 MHz
10.0				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	ᡔᡗᠰᡗᡙᠬᠾᠬ	hon man		mlm					
0.00										1				
-10.0										h				
-20.0										<u> </u>				
-30.0	MmMM	malahan	W VV							W	ᢑ᠕᠋ᠬᠬᠿᠬᠬ	hmhm		
-40.0														
-50.0														CF Step
														1.000000 MHz
	ter 793	3 MHz 100 kHz				44) / 1	3W 3901				Spa	n 10 MHz	<u>Auto</u>	Man
#Re	SDW					#VI	244 2901	МПZ			SWG	eep 1 ms		
0	ccupi	ied Band	lwidth				Total F	ower		27.5	dBm			Freq Offset
			4.5	16 8	MH	z								0 Hz
Т	ransm	it Freq Er	ror	14.	434 kl	Hz	OBW P	ower		99	.00 %			
x	dB Ba	ndwidth		4.9	992 MI	Hz	x dB			-26.0	00 dB			
MSG									Q	STATUS				
	-													

BAND 14. Occupied Bandwidth Plot (Ch.23330 256-QAM RB 25) 5 MHz



🎉 Agilent Spectrum			-							
Center Fred			7		NSE:INT reg: 793.000	000 MHz	ALIGN AUTO	07:30:34 Radio Sto	PM Jun 07, 2020 : None	Frequency
PASS				Trig: Fre #Atten: 2		Avg Hole	d: 500/500	Padio De	vice: BTS	
		#11	-Gain:Low	#Atten: 2	U U D			Radio De	vice. D13	
10 dB/div	Ref Offset 2 Ref 40.00	6.8 dB								
Log 30.0										Center Freq
										793.000000 MHz
20.0		<i>س</i> ر	L. M. W.	ᡟᡯᠧᡄᡗᡀᢞᡗ᠋ᢇᠥᡟ	alson follow and a start of	Murylohanglen	-m-v-n			
10.0										
0.00									+	
-10.0										
-20.0								man	<u> </u>	
-30.0 -30.0	mar Annon							war	mannet	
-40.0										
-50.0										
-30.0										CF Step 2.000000 MHz
Center 793		· · ·							an 20 MHz	
#Res BW 20	0 kHz			#VE	3W 820 k	Hz		Sw	eep 1 ms	
Occupie	d Bandv	width			Total P	ower	31	.5 dBm		Freq Offset
			733 MH	-						0 Hz
			33 IVII							
Transmit	Freq Erro	or	26.073 k	Hz	OBW P	ower	ę	99.00 %		
x dB Ban	dwidth		9.846 M	Hz	x dB		-20	6.00 dB		
MSG							I stat	rus		
							<u> </u>	[

BAND 14. Occupied Bandwidth Plot (Ch.23330 QPSK RB 50) 10 MHz



		Analyzer - Occu											_	- 6 🔀
LXI RL Cent		RF <u>50 Ω</u> 793.000	AC	Hz			ENSE:INT Freq: 793.00			SN AUTO	07:30:02	M Jun 07, 2020	Fre	equency
PAS				#IFGain:L	••• .ow	Trig: Fr #Atten:		Avg Ho	ld: 50	0/500	Radio Dev	ice: BTS		
10 dB	J/div	Ref Offset Ref 40.0												
Log														enter Freq 000000 MHz
20.0 -				mm	mm	Manan	pfrantmarray	pay Anna An	uhh-m				100	
0.00			/							\ \				
-10.0			<u> </u>							\				
-20.0	mar ala	winner	and							hand	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	my man		
-30.0	wiper der Trailer ich											A tuppe + # OF.		
-40.0 -														05.044.0
L													2.	CF Step 000000 MHz
	er 793 BW 20					#V	BW 820	kHz				n 20 MHz ep 1 ms	<u>Auto</u>	Man
0	ccupie	d Band	width				Total	Power		30.5	dBm		F	req Offset
			8.9	604	MH	Z								0 Hz
Tr	ansmit	Freq Err	or	23.4	452 kl	Hz	OBW I	Power		99	.00 %			
X	dB Ban	dwidth		9.7	43 MI	Hz	x dB			-26.0	00 dB			
										1				
MSG									[STATUS				

BAND 14. Occupied Bandwidth Plot (Ch.23330 16-QAM RB 50) 10 MHz



X RL RF 50 Ω AC SENSE:INT ALIGN AUTO 07:30:18 PM Jun 07 Center Freq 793.000000 MHz Center Freq: 793.000000 MHz Radio Std: None	2020
	Frequency
RACC Ing: Free Run Avg Hold: 500/500	
#FGain:Low #Atten: 20 dB Radio Device: BT	
Ref Offset 26.8 dB 10 dB/div Ref 40.00 dBm	
100g 30.0	Center Freq
20.0	793.000000 MHz
10.0	
-10.0	_
-20.0	
-20.0 -30.0 -30.0 -30.0 -30.0	
-40.0	
-50.0	CF Step
Center 793 MHz Span 20 M	2.000000 MHz
Center 793 MHzSpan 20 M#Res BW 200 kHz#VBW 820 kHzSweep 1	
Occupied Bandwidth Total Power 29.5 dBm	Freq Offset
8.9688 MHz	0 Hz
Transmit Freq Error 17.571 kHz OBW Power 99.00 %	
x dB Bandwidth 9.758 MHz x dB -26.00 dB	
MSG STATUS	

BAND 14. Occupied Bandwidth Plot (Ch.23330 64-QAM RB 50) 10 MHz



	ent Spectrum	n Analyzer - Occ	•											ð <mark>- X-</mark>
KI RL	or Frod	RF 50 Ω				SENS Center Fre	E:INT a: 793.00	0000 MHz		GN AUTO	01:39:26 Radio Std	PM Jun 10, 2020	Frequen	су
PAS		4793.000				Trig: Free	Run	Avg H		0/500				
FAS	<u> </u>		#	#FGain:L	ow 7	#Atten: 20	dB				Radio Dev	vice: BTS		
10 dB	/div	Ref Offset Ref 40.0												
Log 30.0													Cente	r Frea
20.0 -													793.00000	
10.0 -				mantrad	vul-m	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ᡁᢥ᠋ᢦᢏᢞᡁ᠕ᢪᠥᠬ	mon	rub.	5				
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-20.0														
-30.0 😾	᠈ᢉᡁᡗᡘ᠊ᠬᠬᠰ	John Manuel	y aylyn b							~\v	ᠬᡟᡅᠬ᠕ᠰᠬ	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
-40.0 —														
-50.0													CF	Step
		B 41 1-									0		2.00000	00 MHz
	er 793 BW 20					#VB	N 8201	kHz				n 20 MHz eep 1 ms	<u>Auto</u>	Man
00	ccupie	ed Band	lwidth				Total P	ower		27.5	dBm		Freq	Offset
					MHz	Ζ								0 Hz
Tra	ansmit	Freq Er	ror	23.3	300 kH	z	OBW P	ower		99	.00 %			
xc	B Ban	dwidth		9.7	76 MH	z	x dB			-26.	00 dB			
MSG										I ostatus	5			

BAND 14. Occupied Bandwidth Plot (Ch.23330 256-QAM RB 50) 10 MHz



							um Analyzer - Swept SA	
	07:22:10 PM Jun 07, 2020 TRACE 1 2 3 4 5 6	ALIGN AUTO e: RMS	#Avg Typ	NSE:INT	SEN	1Hz	RF 50 Ω AC eq 788.000000 N	LXI RL
A					Trig: Free #Atten: 20	PNO: Fast ↔→ IFGain:Low		Contor 1
Auto Tune	1 788.000 MHz -18.053 dBm	Mkr					Ref Offset 26.8 dB Ref 26.80 dBm	10 dB/div Log r
Center Freq 788.000000 MHz								16.8
Start Freq 775.000000 MHz								6.80 -3.20
Stop Freq 801.000000 MHz	-13.00 dBm		1	.1				-13.2
CF Step 2.600000 MHz <u>Auto</u> Man								-33.2
Freq Offset 0 Hz	RMS	and the second sec						-43.2
								-63.2
j	Span 26.00 MHz 1.000 s (1001 pts)	#Sweep			300 kHz	#VBW 3		Center 78 #Res BW
		I STATUS						MSG

BAND 14 Lower Band Edge Plot (5M BW Ch.23305 QPSK_RB1 OFFSET_0)



	ctrum Analyzer - Swept SA								
Contor 5	RF 50 Ω AC req 788.000000		SEN	SE:INT	#Avg Typ	ALIGN AUTO		M Jun 07, 2020	Frequency
Center F	req 788.000000	PNO: Fast ++-	Trig: Free				TYF		
		IFGain:Low	#Atten: 20	aB		MIL			Auto Tune
	Ref Offset 26.8 dB					IVIK	r1 788.0	00 MH2 27 dBm	
10 dB/div Log	Ref 26.80 dBm						21.0		
									Center Freq
16.8									788.000000 MHz
6.80				[Start Freq
									775.000000 MHz
-3.20									
-13.2								-13.00 dBm	
-13.2									Stop Freq
-23.2				1					801.000000 MHz
-33.2									CF Step 2.600000 MHz
			all all and the approximate			ware whole		RMS	<u>Auto</u> Man
-43.2	سم معدمانه مر	man the second second	A Contraction of the second				- martine - mart		
	and the second second								Freq Offset
-53.2	market and a second sec								0 Hz
c2 2									
-63.2									
Center 78	38.00 MHz		000				Span 2	6.00 MHz 1001 pts)	
#Res BW	TUU KHZ	#VBW	300 kHz					1001 pts)	
MSG							3		

BAND 14 Lower Band Edge Plot (5M BW Ch.23305 QPSK_RB_25)



	ectrum Analyzer - Swept SA							
Center F	RF 50 Ω AC Freq 772.000000 I	MHz	SENSE:INT	#Avg Type	ALIGN AUTO e: RMS	TRACE	1 Jun 07, 2020	Frequency
		PNO: Wide +++ I rig	j: Free Run ten: 20 dB				A WWWWW A A A A A A A	
10 dB/div	Ref Offset 26.8 dB Ref -10.00 dBm				Mki	r1 773.0 -65.20	02 MHz 05 dBm	Auto Tune
								Center Freq
-20.0								772.000000 MHz
-30.0							-35.00 dBm	Start Freq
-40.0								769.000000 MHz
-50.0								Stop Freq
-60.0				4				775.000000 MHz
- scarperas	๛ๅ๛๚๛๛๛๛๛๚๚๚๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛	Hallman produced and a second second	welten approximation	and and a state of the	างรู้หรือเรื่อง การสะ ได้ใจสิ่งส	and the second second	RMS	CF Step
-70.0								600.000 kHz <u>Auto</u> Man
-80.0								
-90.0								Freq Offset 0 Hz
-100								
Start 760	.000 MHz					Stop 775.	000 MHz	
#Res BW		#VBW 30 k	Hz		#Sweep	1.000 s (1	000 minž 1001 pts)	
MSG					I STATUS			

BAND 14 Lower Emission Mask (769 MHz ~ 775 MHz) Plot (5M BW Ch.23305 QPSK_RB1_0)-1



	um Analyzer - Swept SA					
Center Fre	RF 50 Ω AC eq 772.000000 N	1H7	SENSE:INT	ALIGN AUTO #Avg Type: RMS	07:21:44 PM Jun 07, 2020 TRACE 1 2 3 4 5 6	Frequency
		PNO: Wide ++++	Trig: Free Run #Atten: 20 dB			
	Ref Offset 26.8 dB Ref -10.00 dBm			Mk	r1 769.156 MHz -65.103 dBm	Auto Tune
-20.0						Center Freq 772.000000 MHz
-30.0					-35.00 dBm	Start Freq 769.000000 MHz
-50.0						Stop Freq 775.000000 MHz
-70.0	9879 <mark>-9396-999987-999987-99998999999999999999999</mark>	mghangananang ang ang ang ang ang ang ang a	and New York and the second	ารรักกั และ โกระเรียก คระเราสุด และสีมูลไม่สัญร์เหลงการส	KMS	CF Step 600.000 kHz <u>Auto</u> Man
-90.0						Freq Offset 0 Hz
-100 Start 769.0		#\/D\\/		#611400	Stop 775.000 MHz	
#Res BW 1		#VBW 3		#Sweep	1.000 s (1001 pts)	

BAND 14 Lower Emission Mask (769 MHz ~ 775 MHz) Plot (5M BW Ch.23305 QPSK_RB25_0)-2



						trum Analyzer - Swept SA	
Frequency	07:29:17 PM Jun 07, 2020 TRACE 1 2 3 4 5 6	ALIGN AUTO Type: RMS			MHz	RF 50Ω AC req 788.000000 M	Center F
				Trig: Free #Atten: 20	PNO: Fast ↔→ IFGain:Low		Content
Auto Tune	1 788.000 MHz -30.235 dBm	Mkı				Ref Offset 26.8 dB Ref 26.80 dBm	10 dB/div Log
Center Freq 788.000000 MHz							16.8
Start Freq 775.000000 MHz							6.80 -3.20
Stop Freq 801.000000 MHz	-13.00 dBm						-13.2
CF Step 2.600000 MHz <u>Auto</u> Man							-33.2
Freq Offset 0 Hz	KMS		<u> </u>		~~~		-43.2
							-63.2
	Span 26.00 MHz 1.000 s (1001 pts)	#Sweep		300 kHz	#VBW	8.00 MHz 100 kHz	Center 78 #Res BW
							MSG

BAND 14 Lower Band Edge Plot (10M BW Ch.23330 QPSK_RB1 OFFSET_0)



	ctrum Analyzer - Swept SA						
LXI RL	RF 50Ω AC req 788.000000 M		SENSE:INT	ALIGN #Avg Type: RN		28:32 PM Jun 07, 2020 TRACE 1 2 3 4 5 6	Frequency
Center F		PNO: Fast +++	Trig: Free Run #Atten: 20 dB				
10 dB/div Log	Ref Offset 26.8 dB Ref 26.80 dBm				Mkr1 7	88.000 MHz 32.290 dBm	Auto Tune
16.8							Center Freq 788.000000 MHz
6.80 -3.20					****_***		Start Freq 775.000000 MHz
-13.2						-13.00 dBm	Stop Freq 801.000000 MHz
-33.2		and and a second and a second and	1			RMS	CF Step 2.600000 MHz <u>Auto</u> Man
-53.2							Freq Offset 0 Hz
	8.00 MHz				Sp	an 26.00 MHz 0 s (1001 pts)	
#Res BW		#VBW 3	UU KHZ		STATUS	u s (1001 pts)	

BAND 14. Lower & Upper Band Edge Plot (10M BW Ch.23330 QPSK RB50_0)



	ctrum Analyzer - Swept SA					
Center F	RF 50 Ω AC req 772.000000 M	MHz	SENSE:INT	ALIGN AUTO #Avg Type: RMS	07:29:37 PM Jun 07, 2020 TRACE 1 2 3 4 5 6	Frequency
		PNO: Wide ↔ Trig: F IFGain:Low #Atten	ree Run : 20 dB			
10 dB/div Log	Ref Offset 26.8 dB Ref -10.00 dBm			Mk	r1 772.546 MHz -65.291 dBm	Auto Tune
_ • g						Center Freq
-20.0						772.000000 MHz
-30.0					-35.00 dBm	Start Freq
-40.0						769.000000 MHz
-50.0						Otop Erog
						Stop Freq 775.000000 MHz
-60.0	where the provide the start of	؞؞؞؇ٵ؞؇ۥڗٳ ؆؇؋؞؇؋ڔٳ؆؇؞؋ڔٵڮٵ؋؞ڔ؆ڹ؋ٳٞ؇ؿۣۯ؞؞ؚڡ؞ؾٵڛٳ؋؇ۯؠ؇؞؇؞ڮ	and the shades and the	1	RMS	CF Step
-70.0						600.000 kHz Auto Man
-80.0						<u>Marto</u>
-90.0						Freq Offset 0 Hz
-100						
Start 769. #Res BW		#VBW 30 kH;	2	#Sweep	Stop 775.000 MHz 1.000 s (1001 pts)	
MSG				I STATU		

BAND 14 Lower Emission Mask (769 MHz ~ 775 MHz) Plot (10M BW Ch.23330 QPSK_RB50_0)-1



	Spectrum Analyzer - Swept SA					
LXI RL	RF 50 Ω AC		NSE:INT	ALIGN AUTO	07:28:52 PM Jun 07, 2020	Frequency
Center	Freq 772.000000	MIIIZ PNO: Wide ↔→→ IFGain:Low #Atten: 2	e Run	g Type: RMS	TRACE 1 2 3 4 5 6 TYPE A WWWWW DET A A A A A A	
10 dB/div Log	Ref Offset 26.8 dB Ref -10.00 dBm			Mk	r1 772.816 MHz -65.316 dBm	Auto Tune
-20.0						Center Freq 772.000000 MHz
-30.0					-35.00 dBm	Start Freq 769.000000 MHz
-50.0				1		Stop Freq 775.000000 MHz
-70.0	n, n gan ann an	หมายใหม่อารุกฏหารหรือ-10-10-86 (1) ให้มูล่างการกำ	nysource	([Podf#gg	RMS phy-uphuhy-mytemplation-phytemplation	CF Step 600.000 kHz <u>Auto</u> Man
-90.0						Freq Offset 0 Hz
	69.000 MHz W 10 kHz	#VBW 30 kHz		#Sweep	Stop 775.000 MHz 1.000 s (1001 pts)	
MSG						

BAND 14 Lower Emission Mask (769 MHz ~ 775 MHz) Plot (10M BW Ch.23330 QPSK_RB50_0)-2





BAND 14 Upper Band Edge Plot (5M BW Ch.23355 QPSK_RB1_Offset 24)



	ectrum Analyzer - Swept SA								
(X) RL Center	RF 50 Ω AC Freq 798.000000 Γ		SENSE		#Avg Type	LIGN AUTO		M Jun 07, 2020	Frequency
Center	-Teq 738.0000001	PNO: Wide ↔→ IFGain:Low	Trig: Free R #Atten: 20 c	lun			TYP DE		Auto Turo
10 dB/div Log	Ref Offset 26.8 dB Ref 26.80 dBm					Mkı	1 798.0 -26.4	08 MHz 02 dBm	Auto Tune
16.8									Center Freq 798.000000 MHz
6.80									Start Freq 796.000000 MHz
-13.2				1				-13.00 dBm	Stop Freq 800.000000 MHz
-33.2				har and the second second	<u>~~, ,</u>	مىن <u>مە</u> رەمەر مەرەر مەرەپ	14.p.1	RMS	CF Step 400.000 kHz <u>Auto</u> Man
-43.2									Freq Offset 0 Hz
-63.2							0		
	98.000 MHz / 100 kHz	#VBW :	300 kHz			#Sweep	span 4. 1.000 s (000 MHz 1001 pts)	
MSG						I STATUS			

BAND 14 Upper Band Edge Plot (5M BW Ch.23355 QPSK_RB_25_0)



	rum Analyzer - Swept						
Center Fr	RF 50 Ω eq 802.0000	AC 000 MHz	SENSE:	#Avg Ty	ALIGN AUTO	07:26:59 PM Jun 07, 2020 TRACE 1 2 3 4 5 6	Frequency
		PNO: Wide • IFGain:Low	Trig: Free Ru #Atten: 20 dE				
10 dB/div Log	Ref Offset 26.8 Ref -10.00 d	dB Bm			Mk	r1 799.828 MHz -37.931 dBm	Auto Tune
-20.0							Center Freq 802.000000 MHz
-30.0	1					-35.00 dBm	Start Freq 799.000000 MHz
-50.0							Stop Freq 805.000000 MHz
-70.0		In present of the second s	norther after a start of the st	NANGULAN IN TO A GULANGULAN PROPERTY	aller manager and a	RMS กระเทศใหร่งคลิตรับทั้งสิทธิพระที่สุดทาง	CF Step 600.000 kHz <u>Auto</u> Man
-80.0							Freq Offset 0 Hz
-100 Start 799.0	000 MHz					Stop 805.000 MHz	
#Res BW 1		#VB	W 30 kHz		#Sweep	1.000 s (1001 pts)	
MSG					I o status		

BAND 14 Upper Emission Mask (799 MHz ~805 MHz) Plot (5M BW Ch.23355 QPSK_RB1_24)



	ctrum Analyzer - Swept SA					
Center F	RF 50 Ω AC req 802.000000	MHz	SENSE:INT	ALIGN AUTO #Avg Type: RMS	07:26:11 PM Jun 07, 2020 TRACE 1 2 3 4 5 6	Frequency
		PNO: Wide +++ T	rig: Free Run Atten: 20 dB			
10 dB/div	Ref Offset 26.8 dB Ref -10.00 dBm			Mk	r1 799.030 MHz -42.311 dBm	Auto Tune
-20.0						Center Freq 802.000000 MHz
-30.0 -40.0	Mytron internet and a state of the state of	P.M. 2000			-35.00 dBm	Start Freq 799.000000 MHz
-50.0		and	Mart Ball and a start and proved	wayshall washer and a participation of the second	RMS ที่งานประสะที่ได้หัวที่ได้สารางสูงสาราช	Stop Freq 805.000000 MHz
-70.0						CF Step 600.000 kHz <u>Auto</u> Man
-90.0						Freq Offset 0 Hz
-100	000 MHz				Stop 805.000 MHz	
#Res BW		#VBW 30) kHz	#Sweep	1.000 s (1001 pts)	
MSG				Γ ο STATU	S	

BAND 14 Upper Emission Mask (799 MHz ~805 MHz) Plot (5M BW Ch.23355 QPSK_RB25_0)-2





BAND 14 Upper Band Edge Plot (10M BW Ch.23330 QPSK_RB1_Offset_49)



Center Freq 798.000000 MHz Trig: Free Run #Avg Type: RMS Trace D2 # AAAAAA IP 0: Wide ++ Trig: Free Run #Atten: 20 dB Mkr1 798.004 MHz Auto Tune 10 dB/div Ref Offset 26.8 dB Mkr1 798.004 MHz -30.947 dBm Center Freq 600	🗾 Agilent Spectrum Analyzer - Swept SA					
Control File Pro: Wide - Atten: 20 dB Trig: Free Run Atten: 20 dB Auto Tune Ref Offset 26.8 dB Mkr1 798.0004 MHz -30.947 dBm 10 dB/div Ref 26.80 dBm -30.947 dBm 10 dD -30.947 dBm -30.947 dBm	XIRL RF 50Ω AC	MHz	SENSE:INT	ALIGN AUTO #Avg Type: RMS	07:31:42 PM Jun 07, 2020 TRACE 1 2 3 4 5 6	Frequency
Ref Offset 26.8 dB HMK 1 / 99.004 HMP2 10 dB/div Ref 26.80 dBm -30.947 dBm 16 d -30.947 dBm -30.947 dBm 17 d -30.947 dBm -30.947 dBm -30 d -30.947 dB		PNO: Wide +			TYPE A WWWWW	
Center Freq 680 320 132 133 324 325 326 327 328 329	10 dB/div Ref 26.80 dBm			Mkı	1 798.004 MHz -30.947 dBm	Auto Tune
3.20 Start Freq 3.20 13.00 dBm 13.20 1 14.20 1 15.20 1 15.20 1						
-13.2 Stop Freq -23.2 1 -33.2 1 -33.2 -31.2 -43.2 -32.2 -53.2<						
-33.2 -33.2					-13.00 dBm	
-53.2 -63.2 -63.2 Center 798.000 MHz #Res BW 100 kHz #VBW 300 kHz #VBW 300 kHz #VBW 300 kHz #VBW 300 kHz #VBW 300 kHz #VBW 300 kHz #Sweep 1.000 s (1001 pts)				an a	KMS	400.000 kHz
Center 798.000 MHz Span 4.000 MHz #Res BW 100 kHz #VBW 300 kHz #Sweep 1.000 s (1001 pts)						
#Res BW 100 kHz #VBW 300 kHz #Sweep 1.000 s (1001 pts)					Span 4.000 MHz	
	#Res BW 100 kHz	#VBW	300 kHz	#Sweep		

BAND 14 Upper Band Edge Plot (10M BW Ch.23330 QPSK_QPSK_RB_50)



	nt Spectrum Analyzer - Swept SA					
Cente	RF 50 Ω AC er Freq 802.00000		SENSE:INT	ALIGN AUTO #Avg Type: RMS	07:32:49 PM Jun 07, 2020 TRACE 1 2 3 4 5 6	Frequency
		PNO: Wide ↔→ IFGain:Low	Trig: Free Run #Atten: 20 dB			
10 dB/c	Ref Offset 26.8 dE div Ref -10.00 dBn	3 n		Mk	r1 799.000 MHz -61.796 dBm	Auto Tune
Log —						Center Freq 802.000000 MHz
-30.0						Start Freq 799.000000 MHz
-50.0 -						Stop Freq 805.000000 MHz
-70.0 —	- helded allow of regional and an analysis	in Adams Adaption and a start a start a start a start a start a	ซากำระแบงโทริกษณ์ 	alfonalealtheorem and an and an and an and an and an	RMS	CF Step 600.000 kHz <u>Auto</u> Man
-80.0 — -90.0 —						Freq Offset 0 Hz
-100 -	799.000 MHz					
	799.000 MHZ BW 10 kHz	#VBW	30 kHz	#Sweep	Stop 805.000 MHz 1.000 s (1001 pts)	
MSG					3	

BAND 14 Upper Emission Mask (793 MHz ~805 MHz) Plot (10M BW Ch.23330 QPSK_RB1_49)-1



	ent Spect	rum Analyzer -	Swept SA									
LXI RL	or Er	RF 5 eq 802.0		MHZ	SEI	NSE:INT	#Avg Typ	ALIGN AUTO	TRAC	M Jun 07, 2020	F	requency
Gent		eq 002.0	1000001	PNO: Wide ++ IFGain:Low	Trig: Free #Atten: 2				TYP DE			
10 dB/ Log r	/div	Ref Offset Ref -10.0	:26.8 dB 00 dBm					Mk	r1 799.0 -43.5	48 MHz 39 dBm		Auto Tune
-20.0												Center Freq 2.000000 MHz
-30.0 -										-35.00 dBm		Start Freq
-40.0	1										799	9.000000 MHz
-50.0 - -60.0 -	uter and the second	tones protogenes	*r*bushr*hlot	^{LACL} YRDON (NAF BLADYN NYDDAU AMERICAN AMERICAN (NAF AMERICAN	Mandalawaya	aller all and a life of the	موسيهم والمعرفين	a Maderica Managary	∼T _{YLL} ∩t≴.∧vγ vel.q I	RMS In All And All And All And All And All All All All All All All All All Al	80	Stop Freq 5.000000 MHz
-70.0 -											<u>Auto</u>	CF Step 600.000 kHz Man
-90.0 —												Freq Offset 0 Hz
-100 —												
		000 MHz 10 kHz		#VBM	30 kHz			#Sween	Stop 805. 1.000 s (.000 MHz 1001 pts)		
MSG									-			
mod	_							Norking				

BAND 14 Upper Emission Mask (793 MHz ~805 MHz) Plot (10M BW Ch.23330 QPSK_RB50_0)-2



🎉 Agilent Spect		- Swept SA									
LXIRL		50 Ω AC		SEN	SE:INT	#Avg Typ	ALIGN AUTO		M Jun 07, 2020	Freq	uency
Center Fr	eq 5.01	5000000	PNO: Fast +	📕 Trig: Free	Run	#AV9 19P	e. King	TYF			
			IFGain:Low	#Atten: 20	dB			DE			
							Mk	r1 3.69	5 0 GHz	A	uto Tune
10 dB/div	Ref 10.	00 dBm						-67.2	93 dBm		
	< <mark>2</mark>										
0.00	Υ										nter Freq
-10.0										5.01500	00000 GHz
-20.0											
-30.0										s	tart Freq
-40.0											00000 MHz
-50.0										00.00	0000 11112
-60.0				1							
		al mast				مناد مناقد غاطم			RMS	S	top Freq
-70.0										10.00000	00000 GHz
-80.0											
Start 30 IV	IH7							Stop 10	.000 GHz		CF Step
#Res BW			#VB	W 3.0 MHz		s	weep 17	.33 ms (2	0001 pts)	997.00	00000 MHz
MKR MODE TR		X		Y	FUNCTI		NCTION WIDTH		DN VALUE	<u>Auto</u>	Man
	f	3.	695 0 GHz	-67.293 dB	m			FONCTIO	N VALUE		
2 N 1 3	f		789.2 MHz	-4.526 dB	m					Ere	eq Offset
4											0 Hz
5									Ξ		UTIL
7											
8											
10											
11									•		
							The arter in		•		
MSG											

BAND 14. Conducted Spurious Plot (23305ch_5MHz_QPSK_RB 1_0)



🎉 Agilent Spect		•											- da - X-
LXIRL	RF				SEN	SE:INT	#Ava		ERMS		PM Jun 07, 2020 CE <mark>1 2 3 4 5</mark> (ncy
Center Fr	eq 5.0	150000):Fast ↔	. Trig: Free	Run	#Avg	Type		TV	PE Λ ΙΑΛΑΠΑΛΑΛΑ		
				in:Low	#Atten: 20	dB				D			
									M	r1 3 67	9 5 GHz	Aut	o Tune
10 dB/div	Ref 1	0.00 dBi	m							-67.1	84 dBm		
Log													
0.00	$\gamma \vdash$											Cent	er Freq
-10.0												5.015000	000 GHz
-20.0													
-30.0													
													rt Freq
-40.0												30.0000	000 MHz
-50.0													
-60.0	_			1.									
-70.0											RMS		p Freq
and the second				¥								10.000000	000 GHz
-80.0													
Start 30 N	1H7									Ston 10	.000 GHz		F Step
#Res BW		7		#VBW	3.0 MHz			Sv	veep 17	.33 ms (2	0001 pts)	997.0000	
									-			Auto	Man
MKR MODE TR	C SCL		× 3.679 5	CH2	Y -67.184 dB		ICTION	FUNG	CTION WIDTH	FUNCTI	ON VALUE		
2 N 1	f		791.7	MHz	-3.887 dB							_	
3												Freq	Offset
4 5											=		0 Hz
6													
7 8													
9													
10													
11					111								
MSG										2			
mod	_								Norkito.	,			

BAND 14. Conducted Spurious Plot (23330ch_5MHz_QPSK_RB 1_0)



Center Freq 5.015000000 GHz PN0: Fast + Atten: 20 dB Trig: Free Run #Atten: 20 dB Mkr1 3.688 0 GHz -66.898 dBm -66.898 dBm -66.8		trum Analyzer - Sw	•								
Center Pred 3.01300000 GHz Trig: Free Run Matter: 20 dB Trig: Free Run Matter: 20 dB Trig: Free Run Matter: 20 dB Auto Tune 10 dB/div Ref 10.00 dBm -66.898 dBm -66.898 dBm -66.598 dBm Center Freq 5.01500000 GHz 10 dB/div Ref 10.00 dBm -66.898 dBm -66.598 dBm -66.598 dBm Center Freq 5.01500000 GHz 300 -0 -0 -0 -0 -0 -0 -0 400 -0 -0 -0 -0 -0 -0 -0 300 -0 -0 -0 -0 -0 -0 -0 -0 400 -0	LXI RL				SEN	SE:INT	#Avg T				Frequency
IFGain:Low #Atten: 20 dB OFFERATARE Mkr1 3.6583 0 GHz -66.898 dBm Auto Tune 10 dB/div Ref 10.00 dBm -66.898 dBm 000 0 0 000 0 0 000 0 0 100 0 0 100 0 0 100 0 0 200 0 0 200 0 0 200 0 0 400 0 0 400 0 0 400 0 0 400 0 0 400 0 0 400 0 0 400 0 0 400 0 0 1 0 0 0 800 0 0 0 0 0 800 0 0 0 0 0 0 800 0 0 0 0 0 0 0 0 <td>Center Fr</td> <td>req 5.0150</td> <td>00000</td> <td>PNO: Fast ←</td> <td></td> <td></td> <td>#4191</td> <td>ype. Kino</td> <td>TY</td> <td>PE A WWWWW</td> <td></td>	Center Fr	req 5.0150	00000	PNO: Fast ←			#4191	ype. Kino	TY	PE A WWWWW	
Mikr 3.888 0 GHZ -66.898 dBm 000 -66.898 dBm -66.898 dBm 200 -00 </td <td></td> <td></td> <td></td> <td></td> <td>#Atten: 20</td> <td>) dB</td> <td></td> <td></td> <td>D</td> <td></td> <td></td>					#Atten: 20) dB			D		
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BAND 14. Conducted Spurious Plot (23355ch_5MHz_QPSK_ RB 1_0)



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-30.0 -40.0 -50.0											Start Freq 30.000000 MHz
-60.0 -70.0 -80.0										RMS	Stop Freq 10.000000000 GHz
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BAND 14. Conducted Spurious Plot (Ch.23330 10 MHz QPSK RB 1, Offset 0)



10. APPENDIX A_ TEST SETUP PHOTO

Please refer to test setup photo file no. as follows;

No.	Description
1	HCT-RF-2007-FC027-P