

# **TEST REPORT**

# Report Number.: R15343302-E1

- Applicant : COGNYTE Software LP 35 Pinelawn Road, Suite 204, Melville, NY, 11747 USA
  - Model : FalcoNET
  - FCC ID : 2A7A2-FNV1
- EUT Description : GI2S/FalcoNet
- Test Standard(s) : FCC CFR 47 PART 27A, 27C

# Date Of Issue:

2024-11-11

# Prepared by:

UL LLC. 12 Laboratory Drive Research Triangle Park, NC 27518, U.S.A. TEL: (919) 549-1400



### **Revision History**

Rev.	lssue Date	Revisions	Revised By	
V1	2024-11-11	Initial Review	Noah Bennett	

Page 2 of 99

# TABLE OF CONTENTS

1.		ATTE	ESTATION OF TEST RESULTS	5
2.		SUMI	MARY OF TEST RESULTS	6
3.		TEST	METHODOLOGY	6
4.		FACI	LITIES AND ACCREDITATION	7
5.		DECI	SION RULES AND MEASUREMENT UNCERTAINTY	7
	5.	1. N	METROLOGICAL TRACEABILITY	7
	5.	2. C	DECISION RULES	7
	5.	3. N	MEASUREMENT UNCERTAINTY	7
	5.	4. S	SAMPLE CALCULATION	7
6.		DESC	CRIPTION OF EUT	8
	6.	1. C	DESCRIPTION OF EUT	8
	6.	2. N	MAXIMUM OUTPUT POWER	8
	6.	3. S	SOFTWARE AND FIRMWARE	0
	6.	4. N	MAXIMUM ANTENNA GAIN	0
	6.	5. V	VORST-CASE CONFIGURATION AND MODE1	0
	6.	6. C	DESCRIPTION OF TEST SETUP 1	1
7.		TEST	AND MEASUREMENT EQUIPMENT1	2
8.		RF O	UTPUT POWER VERIFICATION1	5
	8.	1. C	CONDUCTED OUTPUT POWER MEASUREMENT PROCEDURE	5
		8.1.1.	. LTE BAND 30	8
		8.1.2.	. 5G NR N301	8
		8.1.3.	. LTE BAND 70 1	9
		8.1.4.	. 5G NR N702	0
9.		CON	DUCTED TEST RESULTS2	1
	9.	1. C	DCCUPIED BANDWIDTH	1
	9.	2. E	EMISSION MASK2	3
		9.2.1.	. LTE BAND 30 & 5G NR N30	4
		9.2.2.	. LTE BAND 70 & 5G NR N70	7
	9.	3. C	OUT OF BAND EMISSIONS	0
		9.3.1.	. LTE BAND 30 & 5G NR N30	1
		9.3.2.	. LTE BAND 70 & 5G NR N70	5

Page 3 of 99

9.4. FR	EQUENCY STABILITY	
9.4.1.	LTE BAND 30 & 5G NR N30	41
9.4.2.	LTE BAND 70 & 5G NR N70	43
10. RADI	IATED TEST RESULTS	45
10.1. FIE	ELD STRENGTH OF SPURIOUS RADIATION, ABOVE 1GHz	
10.1.1.	LTE BAND 30 & 5G NR N30	47
10.1.2.	LTE BAND 70 & 5G NR N70	66
11. WOR	ST CASE RADIATED EMISSIONS	91
<b>11. WOR</b> 11.1. WC	<b>ST CASE RADIATED EMISSIONS</b> DRST CASE BELOW 30MHZ	<b>91</b> 91
11. WOR 11.1. WC 11.2. WC	R <b>ST CASE RADIATED EMISSIONS</b> DRST CASE BELOW 30MHZ DRST CASE BELOW 1 GHZ	<b>91</b> 91 93
11. WOR 11.1. WC 11.2. WC 11.3. WC	RST CASE RADIATED EMISSIONS DRST CASE BELOW 30MHZ DRST CASE BELOW 1 GHZ DRST CASE 18-26 GHZ	91 
11. WOR 11.1. WC 11.2. WC 11.3. WC 11.4. WC	RST CASE RADIATED EMISSIONS DRST CASE BELOW 30MHZ DRST CASE BELOW 1 GHZ DRST CASE 18-26 GHZ DRST CASE 26-40 GHZ	91 91 93 93 95 97
<ol> <li>WOR</li> <li>11.1. WC</li> <li>11.2. WC</li> <li>11.3. WC</li> <li>11.4. WC</li> <li>12. SETU</li> </ol>	RST CASE RADIATED EMISSIONS. DRST CASE BELOW 30MHZ. DRST CASE BELOW 1 GHZ. DRST CASE 18-26 GHZ. DRST CASE 26-40 GHZ. JP PHOTOS.	91 91 93 93 95 97 97

# **1. ATTESTATION OF TEST RESULTS**

S	TANDARD	TEST RESULTS
	APPLICABLE STANDARDS	
DATE TESTED:	2024-10-07 thru 2024-10-18	
SAMPLE RECEIPT DATE:	2024-10-07	
FCC ID:	2A7A2-FNV1	
SERIAL NUMBER:	22CU037710556	
EUT DESCRIPTION:	GI2S/FalcoNet	
COMPANY NAME:	COGNYTE Software LP 35 Pinelawn Road, Suite 204, Melville, NY, 11747 USA	

CFR 47 Part 2

CFR 47 Part 27

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document.

Approved & Released For UL LLC. By:



Dan Coronia Operations Leader Consumer Technology Division UL Verification Services Inc. Prepared By:

hinser

Complies

Compiles

Noah Bennett Engineering Project Associate Consumer Technology Division UL LLC

Page 5 of 99

# 2. SUMMARY OF TEST RESULTS

This report contains data provided by the customer, which can impact the validity of results. UL LLC. is only responsible for the validity of results after the integration of the data provided by the customer. Below is a list of data provided by the customer:

- 1. Worst-Case Antenna Gain (section 6.4)
- 2. EUT Cable Loss (used in section 8/9 data)
- 3. EUT Supported Bands, Modes, Modulations and Power Settings. (section 6.1, 6.5)
- 4. Software and Firmware Versions (section 6.3)

Requirement Description	Band	Requirement Clause Number (FCC)	Result	Remarks
Equivalent Isotropic	70	27.50 (d) (2)	Complies	
Radiated Power	30	27.50 (a) (1)	Complies	

Requirement Description	Requirement Clause Number (FCC)	Result	Remarks
Occupied Bandwidth	2.1049	Complies	
Band Edge and Emission Mask		Complies	
Out of Band Emissions	2.1051, 27.53 (a) (h)	Complies	See Note 1
Field Strength of Spurious Radiation		Complies	
Frequency Stability	2.1055, 27.54,	Complies	
Peak-to-Average Ratio	27.50 (a) (1)	Complies	

Note 1: The objective of this report is to add support for LTE and 5G NR bands via a C2PC submission to an already existing host. This test report covers the RF testing of the additional bands added. Refer to section 6.1 for bands added.

# 3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with the following:

- ANSI C63.26:2015
- FCC CFR 47 Part 2, Part 27.
- <u>FCC KDB 971168 D01 v03r01</u>: Power Meas License Digital Systems
- FCC KDB 971168 D02 v02r02: Misc Rev Approv License Devices
- FCC KDB 412172 D01 v01r01. Determining ERP and EIRP

Page 6 of 99

# 4. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, certification # 0751.06, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
$\boxtimes$	Building: 2800 Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A	US0067	27265	825374

# 5. DECISION RULES AND MEASUREMENT UNCERTAINTY

# 5.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

# 5.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

### 5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	U <sub>Lab</sub>		
Radio Frequency (Spectrum Analyzer)	141.2 Hz		
Occupied Channel Bandwidth	1.22%		
RF output power conducted	1.3 dB (PK)		
	0.45 dB (AV)		
Unwanted Emissions, conducted	1.94 dB		
All emissions radiated	6.01 dB		
Temperature	0.57°C		
Humidity	3.39%		
DC Supply voltages	1.70%		
Power Spectral Density	2.46 dB		

Uncertainty figures are valid to a confidence level of 95%.

# 5.4. SAMPLE CALCULATION

### RADIATED EMISSIONS

Where relevant, the following sample calculation is provided: Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB) 36.5 dBuV + 18.7 dB/m + 0.6 dB - 26.9 dB = 28.9 dBuV

Page 7 of 99

# 6. DESCRIPTION OF EUT

# 6.1. DESCRIPTION OF EUT

The EUT is a base station simulator, GI2S/FalcoNet that supports the following WWAN Bands and modes.

Wireless technologies	Frequency bands	Operating mode	Supported Bandwidths	Additional Configurations
GSM	850 1900	Voice (GMSK) GPRS (GMSK) EDGE (8PSK)	-	Does this device support DTM (Dual Transfer Mode)? ⊠No
W-CDMA (UMTS)	Band II Band IV Band V	UMTS Rel. 99 (Voice & Data) HSDPA (Rel. 5) HSUPA (Rel. 6)	-	-
LTE	FDD Band 2/25 FDD Band 4/66 FDD Band 5/26(90S)/26(22H) FDD Band 12/17 FDD Band 13 FDD Band 14 FDD Band 30 FDD Band 70 FDD Band 71	QPSK Rel. 15 Does not support Carrier Aggregation (CA)	5MHz 10MHz (B30)	
5G NR (FR1)	FDD 5G NR N71 FDD 5G NR N30 FDD 5G NR N70	CP-OFDM: QPSK	5MHz 20MHz (n71)	SCS: 15kHz
Notes:	•	•	•	*

# 6.2. MAXIMUM OUTPUT POWER

#### EIRP/ERP TEST PROCEDURE

ANSI C63.26:2015 KDB 971168 D01 Section 5.6

ERP/EIRP = PMeas + GT - LC

where: ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm);

PMeas = measured transmitter output power or PSD, in dBm or dBW;

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

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

For devices utilizing multiple antennas, KDB 662911 provides guidance for determining the effective array transmit antenna gain term to be used in the above equation.

The transmitter has a maximum average conducted and ERP / EIRP output powers as follows:

Page 8 of 99

### LTE Band 30

Part 27(a)(1)	)							
EIRP Limit (W/MHz)		400.00						
Antenna Gain (dBi)		3.00						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	2350.0	2360.0	16.99	19.99	0.100	4484.5	4M48G7D
10.0	QPSK	2350.0	2360.0	15.70	18.70	0.074	8931.3	8M93G7D

#### <u>5G NR N30</u>

Part 27(a)(1)								
EIRP Limit (	W/MHz)	400.00						
Antenna Gai	n (dBi)	3.00						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	2350.0	2360.0	13.92	16.92	0.049	4490.7	4M49G7D

#### LTE BAND 70

Part 27(d)(2	2)		_					
EIRP Limit (W/MHz)		1640.00						
Antenna Gain (dBi)		4.00						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	1995.0	2020.0	13.00	17.00	0.050	4486.8	4M49G7D
10.0	QPSK	1995.0	2020.0	12.99	16.99	0.050	8952.9	8M95G7D

#### <u>5G NR N70</u>

Part 27(d)(2	2)		_					
EIRP Limit	(W/MHz)	1640.00						
Antenna Ga	ain (dBi)	4.00						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	1995.0	2020.0	15.97	19.97	0.099	4484.9	4M48G7D

Page 9 of 99

## 6.3. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was version v60.2.89

The EUT hardware version used during testing was: Falconet

### 6.4. MAXIMUM ANTENNA GAIN

The antenna(s) gain, as provided by the manufacturer' are as follows:

Chain	Designation in Documentation	Туре	Frequency Range (MHz)	Maximum Gain (dBi)
RF1-9	TRA6927M3NB-001	External Shot	2350 – 2360	3.0
		glass style	1995 - 2020	4.0

# 6.5. WORST-CASE CONFIGURATION AND MODE

The worst-case scenario for conducted measurements is based on an engineering evaluation made on conducted average power found during pretesting. Output power measurements were measured on each BTS unit, 1-9 on all 3 TX Ports, on all channels, and bands supported by the EUT at max power. Only the worst-case conducted antenna port band data per BTS is reported.

For Radiated Emissions testing, the worst case BTS unit per Tx port on each antenna was performed. For testing purposes, data in section 9 and 10 was set at or above the certification target power as worst-case.

The following is the worst-case BTS unit per antenna port, for Conducted Output Power:

Worst Case BTS per RF Port	Tx1	Tx2	Tx3
LTE30	BTS-7	BTS-9	BTS-2
N30	BTS-5	BTS-9	BTS-2
LTE70	BTS-3	No Support	BTS-7
N70	BTS-3	No Support	BTS-8

Worst Case emissions from 9kHz-30Mhz, 30-1000MHz, 18-26.5GHz, and 26.5GHz-40GHz were done on the modes with the highest conducted average power. This test data is reported in section 10.2, which shows worst case emissions for all antennas.

Per customer declarations, both the EUT, associated support equipment and external antenna pucks are only meant to be installed in one orientation. Therefore, all radiated testing was only performed in this orientation.

# 6.6. DESCRIPTION OF TEST SETUP

#### SUPPORT EQUIPMENT

Support Equipment List						
Description	Manufacturer	Model	Serial Number	FCC ID		
40dB Attenuator	Mini-Circuits	BW-40N100W+	N953400814	N/A		
20dB Attenuator	Mini-Circuits	BW-S20W5+	N/A	N/A		
EUT Power Supply	TE Connectivity	46-140-0109	22CU027710689	N/A		
Support Laptop	Lenovo	T14s Gen2	PF-3KPAS1	N/A		
Receive Amplifier	Amphenol	46-140-0244	234A127100007	N/A		

#### I/O CABLES

/O Cable List						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	NEMA 5-15R	1	NEMA 5-15P	Shielded	<3m	Connects AC Mains to PSU
2	36V DC (S1)	1	3 Pin	Shielded	<1m	Connects PSU to EUT
3-1 3-2	RJ45	2	RJ45	3-1 Shielded 3-2 Unshielded	3-1: >3m 3-2: <3m	3-1: Used to configure the EUT 3-2: Connects to Rx Amp
4	GPS	1	3 pin wiring harness	Shielded	<1m	Cable Assembly Terminated w/ SMA Loads.
5-1 5-2 5-3	N-Male	3	N-Male	Shielded	<3m	Connects EUT ports to External Puck Antennas.
6	NWL	1	SMA	N/A	N/A	Terminated w/ SMA Load.

\*\*Not Subject to test

#### TEST SETUP

The EUT was configured to transmit at max power for the duration of the test via customer-controlled firmware. Customer provided loads were used to terminate active EUT I/O ports.

# 7. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment U	sed - Wireless	Conducted	<b>Measurement</b>	Equipment	

Equipment ID	ipment ID Description		Model Number	Last Cal.	Next Cal.
	Common Equipment				
	Conducted Room 1				
90410	Spectrum Analyzer	Keysight Technologies	N9030A	2024-06-14	2025-06-14
90411	Spectrum Analyzer	Keysight Technologies	N9030A	2024-08-01	2025-08-01
207726	Temp/Humid Chamber	Thermotron	SM-32-8200	2024-01-12	2025-01-12
248881	Environmental Meter	Control Company	06-662-4	2024-04-10	2026-04-10
245765	Environmental Meter	Control Company	06-662-4	2024-01-24	2026-01-24
209010 (PS216)	Variable Voltage Power Source	Elgar	CW2501M-1	NA	NA
SOFTEMI	Antenna Port Software	UL	Version 2022.8.16	NA	NA
ETSI Power Software	EMPower ETSI Burst Measurement System	ETS-Lindgren	Version 1.0.3.18	NA	NA
Power Software	Boonton Power Analyzer	Boonton	Version 3.0.13.0	NA	NA
	Additional Equipment used				
211056	Real-Time Peak Power Sensor 50MHz to 8GHz	Boonton	RTP5000	2024-08-01	2025-08-01
211055	Real-Time Peak Power Sensor 50MHz to 8GHz	Boonton	RTP5000	2024-08-01	2025-08-01
211057	Real-Time Peak Power Sensor 50MHz to 8GHz	Boonton	RTP5000	2024-08-01	2025-08-01
211058	Real-Time Peak Power Sensor 50MHz to 8GHz	Boonton	RTP5000	2024-08-01	2025-08-01

Page 12 of 99

#### Test Equipment Used - Wireless Conducted Attenuators, Cables, and Couplers

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
	Attenuators				
226551	SMA Coaxial 20dB Attenuator 25MHz- 18GHz	CentricRF	C18S2-20	2024-03-19	2025-03-19
226552	SMA Coaxial 20dB Attenuator 25MHz- 18GHz	CentricRF	C18S2-20	2024-04-04	2025-04-04
226559	SMA Coaxial 10dB Attenuator 25MHz- 18GHz	CentricRF	C18S2-10	2024-02-29	2025-02-28
226562	SMA Coaxial 10dB Attenuator 25MHz- 18GHz	CentricRF	C18S2-10	2024-04-11	2025-04-11
226564	SMA Coaxial 10dB Attenuator 25MHz- 18GHz	CentricRF	C18S2-10	2024-04-04	2025-04-04
	Cables				
89245 (CBL012)	Micro-Coax UTiFLEX Cable Assembly, Low Loss	Carlisle Interconnect Technologies	UFB293C-0-2400- 300300	2024-02-29	2025-02-28
171695	SMA Cable, 30 Feet	Pasternack	PE341-360	2024-03-07	2025-03-07
89245 (CBL013)	SMA Cable	Micro-coax	UFB293C-0-1440- 300300	2024-03-21	2025-03-21
245309 (CBL010)	SMA Cable	Huber + Suhner	104PEA	2024-03-01	2025-03-01
89312 (CBL036)	N-Male to SMA Cable, 6FT	Times Microwave Systems	LMR-240	2023-11-29	2024-11-29
89313 (CBL037)	N-Male to SMA Cable, 6FT	Times Microwave Systems	LMR-240	2023-11-29	2024-11-29
	High-Pass Filters				
92494 (HPF015)	4GHz high-pass filter, 2W, Fhigh =18GHz	Micro-Tronics	HPM13351	2024-03-01	2025-03-01

Page 13 of 99

#### Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville - Chamber 2)

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
	0.009-30MHz				
8939	Passive Loop Antenna	EMCO	EM-6872	2023-10-19	2024-10-19
8940	Passive Loop Antenna	EMCO	EM-6871	2023-10-19	2024-10-19
	30-1000 MHz				
159203	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2024-03-05	2026-03-05
	1-18 GHz				
86408	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2023-06-19	2025-06-19
	18-40 GHz				
204704	Horn Antenna, 18- 26.5GHz	Com-Power	AH-826	2023-07-20	2025-07-20
204705	Horn Antenna, 26- 40GHz	Com-Power	AH-640	2023-07-20	2025-07-20
	Gain-Loss Chains				
91975	Gain-loss string: 0.009-30MHz	Various	Various	2024-05-10	2025-05-10
91978	Gain-loss string: 25- 1000MHz	Various	Various	2024-05-10	2025-05-10
91977	Gain-loss string: 1- 18GHz	Various	Various	2024-07-17	2025-07-17
136042	Gain-loss string: 18-40GHz	Various	Various	2024-05-10	2025-05-10
	Receiver & Software				
206496	Spectrum Analyzer	Rohde & Schwarz	ESW44	2024-08-29	2025-08-29
81018	Spectrum Analyzer	Agilent	E4446A	2024-07-31	2025-07-31
SOFTEMI	EMI Software	UL	Version	9.5 (18 Oct 202	1)
	Additional Equipment used				
200540	Environmental Meter	Fisher Scientific	15-077-963	2023-07-19	2025-07-19
183309 BRF017	2.4GHz Band Reject Filter	Micro-Tronics	•	2024-04-10	2025-04-10
169108 (BRF010)	1.85-1.97GHz notch filter, 2W, Fhigh = 9GHz	Micro-Tronics	BRM50714-01	2024-03-01	2025-03-01
150716 (LPF008)	DC-1000MHz low- pass filter	Pasternack	PE8720	2024-03-04	2025-03-04

# 8. RF OUTPUT POWER VERIFICATION

### 8.1. CONDUCTED OUTPUT POWER MEASUREMENT PROCEDURE

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS 38.521-1 specification.

The allowed MPR for SRS, PUCCH formats 0, 1, 3 and 4, and PRACH shall be as specified for QPSK modulated DFTs-OFDM of equivalent RB allocation. The allowed MPR for PUCCH format 2 shall be as specified for QPSK modulated CP-OFDM of equivalent RB allocation.

Modulation		MPR (dB)			
		Edge RB allocations Outer RB allocations		Inner RB allocations	
		≤ 3.5 <sup>1</sup>	≤ 1.2 <sup>1</sup>	≤ 0.2 <sup>1</sup>	
	FIZ DESK	≤ 0	).5 <sup>2</sup>	0 <sup>2</sup>	
	Pi/2 BPSK	≤ 0.5 <sup>2</sup>	02	2	
	w Pi/2				
DFT-s-	BPSK				
OFDM	DMRS				
	QPSK	4	1	0	
	16 QAM	VI	2	≤ 1	
	64 QAM	≤ 2.5			
	256 QAM	≤ 4.5			
	QPSK	≤ 3		≤ 1.5	
CR OFDM	16 QAM	≤ 3		≤ 2	
CF-OI DIVI	64 QAM				
	256 QAM	≤ 6.5			
NOTE 1: A	pplicable for UE	operating in TDD mode w	ith Pi/2 BPSK modulation a	and UE indicates support	
fo	or UE capability $\mu$	oowerBoosting-pi2BPSK a	nd if the IE powerBoostPi2	BPSK is set to 1 and 40	
%	6 or less slots in	radio frame are used for U	IL transmission for bands n	40, n41, n77, n78 and	
n	<ol><li>The reference</li></ol>	e power of 0dB MPR is 26	6dBm.		
NOTE 2: A	pplicable for UE	operating in FDD mode, o	or in TDD mode in bands ot	her than n40, n41, n77,	
n	n78 and n79 with Pi/2 BPSK modulation and if the IE powerBoostPi2BPSK is set to 0 and if				
m	nore than 40% of	slots in radio frame are u	sed for UL transmission for	bands n40, n41, n77,	
n	78 and n79.			·	

Table 6.2.2.3-1: Maximum power reduction (MPR) for power class 3

Page 15 of 99

Modulation		MPR (dB)				
		Edge RB allocations	Outer RB allocations	Inner RB allocations		
	Pi/2 BPSK	≤ 3.5	≤ 0.5	0		
DET a	QPSK	≤ 3.5	≤ 1	0		
OFT-S-	16 QAM	≤ 3.5	≤ 2	≤ 1		
OFDIVI	64 QAM	≤ 3.5 ≤ 2.5				
	256 QAM	≤ 4.5				
	QPSK	≤ 3.5	≤ 3	≤ 1.5		
CR OFDM	16 QAM	≤ 3.5	≤ 3	≤ 2		
CP-OFDM	64 QAM	≤ 3.5				
	256 QAM	≤ 6.5				

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS 36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS\_01".

Network Signalling value	Requirements (subclause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N <sub>RB</sub> )	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	N/A
			3	>5	≤ <b>1</b>
		2 4 10 22 25	5	>6	≤ 1
NS_03	6.6.2.2.1	2, 4, 10, 23, 25,	10	>6	≤ 1
_		35, 30, 60, 70	15	>8	⊻ <b>1</b>
			20	>10	≤ <b>1</b>
NS_04	6.6.2.2.2, 6.6.3.3.19	41	5, 10, 15, 20	Table 6.2.4-4,	Table 6.2.4-4a

The allowed A-MPR values specified below in Table 6.2.3.3.1-1 of 3GPP TS 38.521-1 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS\_01".

Table 6.2.3.3.1-1: Additional maximum power reduction (A-MPR)

Network signalling label	Requirements (subclause)	NR Band	Channel bandwidth (MHz)	Resources blocks ( <i>N</i> <sub>RB</sub> )	A-MPR (dB)
NS_01		Table 5.2-1	5, 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100	Table 5.3.2-1	N/A
NS_03	6.5.2.3.3.3	n2, n25, n66, n70, n86			Clause 6.2.3.3.7
NS_03U	6.5.2.3.3.3, 6.5.2.4.2.3	n2, n25, n66, n86			Clause 6.2.3.3.7
NS_04	6.5.2.3.3.2, 6.5.3.3.3.1	n41	10, 15, 20, 40, 50, 60, 80, 90, 100		Clause 6.2.3.3.2

#### AVERAGE OUTPUT POWER TEST PROCEDURE

The transmitter output is connected to a power meter.

The power output was measured on the EUT antenna port using SMA cable connected to a power meter via wideband average power sensor. Gated average output power was read directly from power meter.

#### PEAK OUTPUT POWER TEST PROCEDURE

The transmitter output is connected to a power meter.

The power output was measured on the EUT antenna port using SMA cable connected to a power meter via wideband peak power sensor. Peak output power was read directly from power meter.

#### LIMIT

In addition, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the highest PAPR during periods of continuous transmission.

PAPR was calculated by subtracting the peak measured power by the average measured power.

#### RESULT

 Test Engineer ID:
 22797/46722
 Test Date:
 10-07-2024

Page 17 of 99

#### 8.1.1. LTE BAND 30

LTE Band	Bandwidth (MHz)	Modulation	DL Channel	DL Frequency (MHz)	BTS1 Measured Avg Power (dBm)	BTS2 Measured Avg Power (dBm)	BTS3 Measured Avg Power (dBm)	BTS4 Measured Avg Power (dBm)	BTS5 Measured Avg Power (dBm)	BTS6 Measured Avg Power (dBm)	BTS7 Measured Avg Power (dBm)	BTS8 Measured Avg Power (dBm)	BTS9 Measured Avg Power (dBm)
			9795	2352.5	16.81	16.08	16.33	16.55	16.78	16.57	16.89	16.40	16.76
30	5	QPSK	9820	2355	16.36	16.99	16.60	16.99	16.59	16.47	16.75	16.29	16.74
			9845	2357.5	16.89	16.45	16.28	16.73	16.32	16.31	16.28	16.78	16.14
30	10	QPSK	9820	2355	15.19	14.94	15.39	15.66	15.53	15.40	15.70	15.27	15.57

LTE Band	Bandwidth (MHz)	Modulation	Channel	Frequency (MHz)	BTS1 Measured Peak Power (dBm)	BTS2 Measured Peak Power (dBm)	BTS3 Measured Peak Power (dBm)	BTS4 Measured Peak Power (dBm)	BTS5 Measured Peak Power (dBm)	BTS6 Measured Peak Power (dBm)	BTS7 Measured Peak Power (dBm)	BTS8 Measured Peak Power (dBm)	BTS9 Measured Peak Power (dBm)
			9795	2352.5	27.26	26.57	26.83	27.02	27.21	26.96	27.33	26.79	27.18
30	5	QPSK	9820	2355	26.86	27.30	27.08	27.57	26.96	26.92	27.16	26.73	27.22
			9845	2357.5	27.41	26.96	26.76	27.21	26.67	26.80	26.70	27.11	26.62
30	10	QPSK	9820	2355	26.53	26.21	26.71	27.02	26.82	26.60	26.93	26.52	26.87

LTE Band	Bandwidth (MHz)	Modulation	Channel	Frequency (MHz)	BTS1 Peak to Average Ratio (dB)	BTS2 Peak to Average Ratio (dB)	BTS3 Peak to Average Ratio (dB)	BTS4 Peak to Average Ratio (dB)	BTS5 Peak to Average Ratio (dB)	BTS6 Peak to Average Ratio (dB)	BTS7 Peak to Average Ratio (dB)	BTS8 Peak to Average Ratio (dB)	BTS9 Peak to Average Ratio (dB)
			9795	2352.5	10.44	10.49	10.50	10.47	10.44	10.39	10.44	10.39	10.42
30	5	QPSK	9820	2355	10.50	10.31	10.48	10.58	10.37	10.45	10.41	10.44	10.48
			9845	2357.5	10.52	10.51	10.48	10.48	10.35	10.49	10.43	10.33	10.47
30	10	QPSK	9820	2355	11.34	11.27	11.33	11.37	11.30	11.20	11.23	11.25	11.30

### 8.1.2. 5G NR N30

5G NR Band	Bandwidth (MHz)	Modulation	DL Channel	DL Frequency (MHz)	BTS1 Measured Avg Power (dBm)	BTS2 Measured Avg Power (dBm)	BTS3 Measured Avg Power (dBm)	BTS4 Measured Avg Power (dBm)	BTS5 Measured Avg Power (dBm)	BTS6 Measured Avg Power (dBm)	BTS7 Measured Avg Power (dBm)	BTS8 Measured Avg Power (dBm)	BTS9 Measured Avg Power (dBm)
			470500	2352.5	13.30	13.82	13.78	13.53	13.92	13.55	13.86	13.43	13.53
N30	5	QPSK	471100	2355.5	13.43	13.16	13.18	13.37	13.65	13.43	13.62	13.25	13.50
			471380	2356.9	13.69	13.06	13.05	13.40	13.43	13.15	13.53	13.11	13.41

5G NR Band	Bandwidth (MHz)	Modulation	Channel	Frequency (MHz)	BTS1 Measured Peak Power (dBm)	BTS2 Measured Peak Power (dBm)	BTS3 Measured Peak Power (dBm)	BTS4 Measured Peak Power (dBm)	BTS5 Measured Peak Power (dBm)	BTS6 Measured Peak Power (dBm)	BTS7 Measured Peak Power (dBm)	BTS8 Measured Peak Power (dBm)	BTS9 Measured Peak Power (dBm)
			470500	2352.5	24.71	25.12	25.09	25.24	24.80	24.81	25.17	24.71	24.88
N30	5	QPSK	471100	2355.5	24.95	24.51	24.61	24.80	24.94	24.67	24.94	24.54	24.80
			471380	2356.9	25.05	24.55	24.42	24.88	24.85	24.51	24.92	24.45	24.77

5G NR	Bandwidth	Modulation	Channel	Frequency	BTS1 Peak to Average	BTS2 Peak to Average	BTS3 Peak to Average	BTS4 Peak to Average	BTS5 Peak to Average	BTS6 Peak to Average	BTS7 Peak to Average	BTS8 Peak to Average	BTS9 Peak to Average
Band	(IVIHZ)			(IVIHZ)	Ratio (dB)								
			470500	2352.5	11.41	11.30	11.31	11.71	10.88	11.26	11.31	11.29	11.35
N30	5	QPSK	471100	2355.5	11.52	11.35	11.43	11.43	11.29	11.25	11.32	11.29	11.29
			471380	2356.9	11.36	11.49	11.37	11.47	11.41	11.37	11.39	11.34	11.36

Page 18 of 99

#### 8.1.3. LTE BAND 70

LTE Band	Bandwidth (MHz)	Modulation	DL Channel	DL Frequency (MHz)	BTS1 Measured Avg Power (dBm)	BTS2 Measured Avg Power (dBm)	BTS3 Measured Avg Power (dBm)	BTS4 Measured Avg Power (dBm)	BTS5 Measured Avg Power (dBm)	BTS6 Measured Avg Power (dBm)	BTS7 Measured Avg Power (dBm)	BTS8 Measured Avg Power (dBm)
			68361	1997.5	12.75	12.41	12.61	12.58	12.62	12.35	13.00	12.35
70	5	QPSK	68411	2002.5	12.70	12.37	12.95	12.43	12.30	12.99	12.79	12.82
			68461	2007.5	12.61	12.33	12.79	12.23	12.01	12.69	12.64	12.87
			68386	2000	12.38	12.49	12.71	12.15	12.28	12.98	12.68	12.99
70	10	QPSK	68411	2002.5	12.60	11.97	12.61	12.51	12.17	12.85	12.61	12.94
			68436	2005	12.32	12.45	12.57	12.34	12.91	12.61	12.47	12.79

LTE Band	Bandwidth (MHz)	Modulation	Channel	Frequency (MHz)	RF1 Port 1 Measured Peak Power (dBm)	RF1 Port 2 Measured Peak Power (dBm)	RF1 Port 3 Measured Peak Power (dBm)	RF1 Port 4 Measured Peak Power (dBm)	RF1 Port 5 Measured Peak Power (dBm)	RF1 Port 6 Measured Peak Power (dBm)	RF1 Port 7 Measured Peak Power (dBm)	RF1 Port 8 Measured Peak Power (dBm)
			68361	1997.5	23.22	22.87	23.09	23.04	23.11	22.94	23.52	22.95
70	5	QPSK	68411	2002.5	23.17	22.83	23.47	23.04	22.89	23.74	23.33	24.13
			68461	2007.5	23.04	22.80	23.32	22.78	22.51	23.24	23.13	23.32
			68386	2000	23.65	23.79	24.03	23.99	23.74	24.34	24.10	24.40
70	10	QPSK	68411	2002.5	23.94	23.16	23.94	23.83	23.48	24.29	24.01	24.33
			68436	2005	23.62	23.84	23.87	23.69	24.23	23.95	23.78	24.10

					RF1 Port 1	RF1 Port 2	RF1 Port 3	RF1 Port 4	RF1 Port 5	RF1 Port 6	RF1 Port 7	RF1 Port 8
LTE	Bandwidth	Modulation	Channel	Frequency	Peak to							
Band	(MHz)	wouldtion	Chaimer	(MHz)	Average							
					Ratio (dB)							
			68361	1997.5	10.48	10.46	10.49	10.47	10.49	10.59	10.53	10.60
70	5	QPSK	68411	2002.5	10.47	10.47	10.52	10.61	10.59	10.75	10.55	11.31
			68461	2007.5	10.42	10.47	10.52	10.55	10.50	10.54	10.50	10.44
			68386	2000	11.26	11.30	11.32	11.84	11.46	11.36	11.41	11.40
70	10	QPSK	68411	2002.5	11.34	11.19	11.34	11.32	11.31	11.44	11.40	11.39
			68436	2005	11.30	11.39	11.31	11.35	11.32	11.34	11.32	11.31

### 8.1.4. 5G NR N70

5G NR BAND	Bandwidth (MHz)	Modulation	DL Channel	DL Frequency (MHz)	BTS1 Measured Avg Power (dBm)	BTS2 Measured Avg Power (dBm)	BTS3 Measured Avg Power (dBm)	BTS4 Measured Avg Power (dBm)	BTS5 Measured Avg Power (dBm)	BTS6 Measured Avg Power (dBm)	BTS7 Measured Avg Power (dBm)	BTS8 Measured Avg Power (dBm)
			399500	1997.5	15.59	15.26	15.97	15.43	15.33	15.52	15.67	15.55
N70	5	QPSK	400540	2002.7	15.48	15.19	15.80	15.25	15.45	15.65	15.42	15.82
			401500	2007.5	15.47	15.18	15.68	15.10	15.73	15.42	15.33	15.73

5G NR BAND	Bandwidth (MHz)	Modulation	Channel	Frequency (MHz)	RF1 Port 1 Measured Peak Power (dBm)	RF1 Port 2 Measured Peak Power (dBm)	RF1 Port 3 Measured Peak Power (dBm)	RF1 Port 4 Measured Peak Power (dBm)	RF1 Port 5 Measured Peak Power (dBm)	RF1 Port 6 Measured Peak Power (dBm)	RF1 Port 7 Measured Peak Power (dBm)	RF1 Port 8 Measured Peak Power (dBm)
			399500	1997.5	26.87	26.62	27.17	26.62	26.70	26.84	26.96	26.88
N70	5	QPSK	400540	2002.7	26.80	26.51	27.06	26.48	26.79	27.04	26.84	27.19
			401500	2007.5	26.79	26.49	27.17	26.57	27.10	26.86	26.77	27.17

					RF1 Port 1	RF1 Port 2	RF1 Port 3	RF1 Port 4	RF1 Port 5	RF1 Port 6	RF1 Port 7	RF1 Port 8
5G NR	Bandwidth		Channel	Frequency	Peak to							
BAND	(MHz)	iviodulation	Channel	(MHz)	Average							
					Ratio (dB)							
			399500	1997.5	11.28	11.36	11.21	11.20	11.37	11.31	11.29	11.33
N70	5	QPSK	400540	2002.7	11.32	11.31	11.26	11.22	11.34	11.39	11.42	11.36
			401500	2007.5	11.32	11.31	11.49	11.47	11.37	11.45	11.44	11.43

Page 20 of 99

# 9. CONDUCTED TEST RESULTS

# 9.1. OCCUPIED BANDWIDTH

### RULE PART(S)

FCC: §2.1049

#### LIMITS

For reporting purposes only.

#### TEST PROCEDURE

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the middle channel in each band. The 99% and -26dB bandwidths was also measured and recorded.

#### **RESULTS**

There is no limit required and power is the same for low, middle and high channel; therefore, only middle channel was tested.

Band	Mode	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE Bond 20	5MHz, QPSK, RB25-0	2355.0	4.4845	4.881
LIE Danu 30	10MHz, QPSK, RB50-0	2355.0	8.9313	9.669
5G NR N30	5MHz, QPSK, RB25-0	2355.5	4.4907	4.955
ITE Bond 70	5MHz, QPSK, RB25-0	2002.5	4.4868	4.873
LIE Banu 70	10MHz, QPSK, RB50-0	2002.5	8.9529	9.730
5G NR N70	5MHz, QPSK, RB25-0	2002.7	4.4849	4.944

#### REPORT NO: R15343302-E1 EUT MODEL: FalcoNET



Page 22 of 99

# 9.2. EMISSION MASK

For Spectrum Emission Mask plots, the SA is configured to sweep with a moving integration window, the width of which can be adjusted to different sizes across the sweep. The window width is configured to be greater than or equal to the required reference bandwidth. The center frequencies of the integration window for the different integration windows was set such that the upper and lower edges of the windows are aligned with the transition points in the reference bandwidths. This is achieved by setting the start / stop frequencies of the window with an offset equal to the reference bandwidth / 2 from the transition point.

#### RULE PART(S)

FCC: 27.53 (a), 27.53 (h)

#### TEST PROCEDURE

ANSI C63.26-2015, Section 5.7

The band edge emissions were measured at the required operating frequencies in each band on the Spectrum Analyzer. For each band edge measurement:

- 1. Set the spectrum analyzer span to include the block edge frequency.
- 2. Set a marker to point the corresponding band edge frequency in each test case.
- 3. Set display line at -13, -20, -25, -40, -42, -45, and -46dBm
- 4. Set resolution bandwidth to at least 1% of emission bandwidth.

#### TEST PROCEDURE (FCC BAND 30)

(5) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the channel blocks at 2305, 2310, 2315, 2320, 2345, 2350, 2355, and 2360 MHz, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (*i.e.*, 1 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

#### **TEST PROCEDURE (FCC BAND 70)**

(i) Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

(ii) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits.

(iii) The measurements of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.

#### **RESULTS**

Page 23 of 99

### 9.2.1. LTE BAND 30 & 5G NR N30

#### LIMITS

#### FCC: §27.53

(a) For operations in the 2305-2320 MHz band and the 2345-2360 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power P (with averaging performed only during periods of transmission) within the licensed band(s) of operation, in watts, by the following amounts:

(1) For base and fixed stations' operations in the 2305-2320 MHz band and the 2345-2360 MHz band:

(i) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, and not less than 75 + 10 log (P) dB on all frequencies between 2320 and 2345 MHz;

(ii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 70 + 10 log (P) dB on all frequencies between 2287.5 and 2300 MHz, 72 + 10 log (P) dB on all frequencies between 2285 and 2287.5 MHz, and 75 + 10 log (P) dB below 2285 MHz;

(iii) By a factor of not less than  $43 + 10 \log (P) dB$  on all frequencies between 2360 and 2362.5 MHz, 55 + 10 log (P) dB on all frequencies between 2362.5 and 2365 MHz, 70 + 10 log (P) dB on all frequencies between 2365 and 2367.5 MHz, 72 + 10 log (P) dB on all frequencies between 2367.5 and 2370 MHz, and 75 + 10 log (P) dB above 2370 MHz.

Page 24 of 99

#### LTE BAND 30 EMISSION MASK



Page 25 of 99

#### 5G NR N30 EMISSION MASK

Keysight Spectrum Analyzer - Spectrum Emission Mask		Keysight Spectrum A	nalyzer - Spectrum Emission Mask	k j						
L RF 50 0 DC SENSE:INT ALIGN AUTO 10:37:49 AM Oct 09, 2024	Frequency	Center Fred 2	50 Ω DC	Center	SENSE:INT Freq: 2.356900	AL1	IGN AUTO 00 Ra	3:46:41 PM Oct 08, 2024 dio Std: None	Frequency	
ASS Avg: 100.00% of 100		PASS		Trig: F	ree Run	Avg: 100.00	% of 100	dia Daviasi B76		
IFGain:Low WAttern: 2 db Radio Device: B 15			IFGain:	Low whiten	. 2 00		Na	dio Device: B 1 5		
Ref Offset 40.68 dB		10 dBidistrut	ef Offset 40.68 dB							
		Log	er 50.0 dbin					Readive Line		
	Center Freq	20.0							Center Free	
	2.352500000 GHz	10.0		~					2.356900000 GH	
		0.00								
		-10.0					_			
		-20.0								
		-30.0		- 1						
)		-40.0			- U 1			Absolute Lind		
		-50.0			_			Spectrus		
		-60.0			_			JUU		
nter 2.353 GHz Span 50 MHz	CF Step	Center 2.357 0	GHz					Span 50 MHz	CF Step	
	5.500000 MHz								5.500000 MHz	
al Power Ref 14.00 dBm / 5 MHz	Auto Man	Total Power R	ef 24.02 dBm /	5 MHz					Auto Man	
Lower <- Peak -> Unner					Lower	<- Peak -3	Unne	r		
art Freq Stop Freq Integ BW dBm ΔLim(dB) Freq (Hz) dBm ΔLim(dB) Freq (Hz)	Freq Offset	Start Freq	Stop Freq Integ BW	dBm ∆l	Lim(dB) Freq	(Hz) dB	Im ∆Lim(dl	B) Freq (Hz)	Freq Offse	
526 MHz 3.400 MHz 51.00 kHz -43.82 (-30.82) -2.526 M -42.30 (-29.30) 2.526 M	0 Hz	2.526 MHz	3.400 MHz 51.00 kHz	-32.72 (-	19.72) -2.	526 M -32	.49 (-19.4	9) 2.526 M 🧾	0 Hz	
400 MHz 7.500 MHz 1.000 MHz ()42.86 (-29.86) 3.400 M		3.400 MHz	12.50 MHz 1.000 MHz		()	29	.00 (-16.0	0) 3.400 M		
000 MHz 11.50 MHz 1.000 MHz ()46.32 (-1.32) 8.000 M * 2.00 MHz 15.50 MHz 1.000 MHz ()46.70 (-1.70) 12.00 M		13.00 MHz 17.00 MHz	16.50 MHZ 1.000 MHZ 20.50 MHz 1.000 MHz		()	47	.1/ (-2.1	7) 13.00 M 1) 17.00 M		
3.00 MHz 19.50 MHz 1.000 MHz () 47.70 (-2.70) 16.00 M		21.00 MHz	24.50 MHz 1.000 MHz		()	48	63 (-3.6	3) 21.07 M		
0.00 MHz 27.50 MHz 1.000 MHz ()48.39 (-3.39) 20.11 M		25.00 MHz	27.50 MHz 1.000 MHz		()	48	68 (-3.6	8) 25.99 M		
400 MHz 4.000 MHz 1.000 MHz -42.88 (-29.88) -3.400 M ()		3.400 MHz	4.000 MHz 1.000 MHz	-27.21 (-	14.21) -3/	433 M	(	) 🗊		
STATUS		MSG					STATUS			
rysight Spectrum Analyzer - Spectrum Emission Mask	08	Keysight Spectrum A	nalyzer - Spectrum Emission Mask	k .	course to al	1			- 4 🕰	
projekt Spectrum Analyser - Spectrum Emission Mark L 69 50 0 0C 50 400 50,2024 Ver Freq 2,3252500000 GHz Center Free: 2,325500000 GHz Radio 5td: None	Frequency	Keysight Spectrum A	nalyzer - Spectrum Emission Mask	Center	SENSE:INT Freq: 2.356900	AL1	IGN AUTO 0	3:40:06 PM Oct 08, 2024 dio Std: None	Attenuation	
spisjelt Spectrum Analyzer - Spectrum Emission Mark         SDNEE.INT         ALIGN AUTO         10:32:03 AM 00:00, 2024           k         #F         For a Context Freq: 2:352500000 GHz         Radio Std: None           ter Freq 2:352500000 GHz         Center Freq: 2:352500000 GHz         Radio Std: None           SS         If Calm raw         After: 4 dB         Avg: 100.00% of 100           Radio Device: BTS         Radio Device: BTS	Frequency	Keysight Spectrum A RL RF Mech Atten 2 PASS	nalyzer - Spectrum Emission Mask   50 Ω DC   dB   EGalint	Center Trig: F	SENSE:INT Freq: 2.356900 ree Run : 2 dB	AL 0000 GHz Avg: 100.00	IGN AUTO 0 Ra % of 100 Ra	3:40:06 PM Oct 08, 2024 dio Std: None dio Device: BTS	Attenuation	
Spectrum Analyzer - Spectrum Emission Mark         SDREE.INT         ALLON AUTO         10:32:03 AM 0oc 06, 2024           Lef Freq 2.352500000 GHz         Center Freq: 2.352500000 GHz         Radio Std: None           SS         IFGeint.Low         Freq: 2.456 Vig: 100.00% of 100 RAtter: 4 dB         Radio Device: BTS	Frequency	Keysight Spectrum A RL SF Mech Atten 2 PASS	nalyzer - Spectrum Emission Masi So Ω DC dB IFGain:	Center Trig: F Low #Atten	SENSE:INT  Freq: 2.356900 ree Run : 2 dB	AL1 0000 GHz Avg: 100.001	IGN AUTO 60 Ra % of 100 Ra	3:40:06 PM Oct 08, 2024 dio Std: None dio Device: BTS	Attenuation Mech Atten 2 dB	
Spectrum Analyzer - Spectrum Emmission Mark         6100 EMMI         4100 AUTO         150.32.03 AMOR109, 2024           Lefter Freq 2.355500000 GHz         Center Freq 2.355500000 GHz         Radio Stdt: None         Radio Stdt: None           IS         IFGebruic-w         Fig: Free Run #Atten: 4 dB         Avg: 100.00% of 100         Radio Device: BTS           Ref Offset 40.68 dB         B         B         B         B         B	Frequency	Mickeysight Spectrum A OXI RL 85 PASS 10 dBaldiaWedeed R	relyzer - Spectrum Emission Masi 50 0 0C dB IFGein: tef Offset 40.68 dB tef 30.0 dBm	Center Trig: F Low #Atten	SENSE:INT Freq: 2.356900 ree Run : 2 dB	0000 GHz Avg: 100.001	IGN AUTO 0 Ra % of 100 Ra	3:40:06 PM Oct 08, 2024 dio Std: None dio Device: BTS	Attenuation Mech Atten 2 dB	
Spectrum Analyzer - Spectrum Einwisch Mark         Spectrum Frage         ALION AUTO         10:32:03 AHOct 09, 2034           L         AF         56:05         BC         B	Frequency	Michael and Alternation	nalyzer - Spectrum Emission Mask 50 0 00 dB IFGain: tef Offset 40.68 dB tef 30.0 dBm	Center Trig: F Low #Atten	SENSE:INT Freq: 2.356900 ree Run : 2 dB	AL 0000 GHz Avg: 100.001	IGN AUTO 0 Ra % of 100 Ra	3:40:06 PH Oct 08, 2024 dio Std: None dio Device: BTS	Attenuation Mech Atten 2 dB	
ysight Spectrum Analyzer - Spectrum Envision Mark         EStreE : Int         ALlow AUTO         10:32:03 AM 0ct 09, 3024           Kef         For Freq. 2.352500000 GHz         Center Freq. 2.352500000 GHz         Radio Std: None           SS         IF Gain.Low         Trig: Free Run #Atten: 4 dB         Avg: 100.00% of 100         Radio Device: BTS           Biglightwoden:         Ref 30.0 dBm         More Press (and pres	Frequency Center Freq	III Keysight Spectrum A W RL SF Mech Atten 2 PASS 10 dBildis/Weiter1 R Log 20.0	nalyzer - Spectrum Emission Mask   50 Ω DC   dB   IFGain: lef Offset 40,69 dB lef 30.0 dBm	Center Trig: F Low #Atten	SENSE:INT Freq: 2.356900 ree Run : 2 dB	0000 GHz Avg: 100.001	IGN AUTO 00 Ra % of 100 Ra	3:40:06 PM Oct 08, 2024 dio Std: None dio Device: BTS Readys Link	Attenuation Mech Atten 2 dB	
projekt Spectrum Analyzer. Spectrum Innision Mark         STINE: SPIT         ALDIN: AUTO         18.03.243 AUTO: 10.0214 (0.0016)           SS         STINE: SPIT         ALDIN: AUTO         18.03.243 AUTO: 10.0216 (0.0016)         Radio Site: None           SS         IFGain1.cow         STINE: SPIT         Avg: 100.0016 of 100         Radio Site: None           Ref Offset 40.68 dB         Ref Offset 40.68 dB         Ref Offset 10.00 Bm         Reserved auto: Log	Frequency Center Freq 2.352500000 GHz	Keysight Spectrum A RL SF Mech Atten 2 PASS 10 dB/diamedee1 R Log 200 10.0	nalyzer - Spectrum Emission Mask S0 0 0C dB IFGain: tef Offset 40,69 dB tef 30.0 dBm	Center Trig: F Low #Atten	SENSE:INT Freq: 2.356901 ree Run : 2 dB	0000 GHz Avg: 100.001	IGN AUTO 0 Ra % of 100 Ra	3:40:06 PH Oct 08, 2024 dio Std: None dio Device: BTS Readire Line	Attenuation Mech Atten 2 dB	
ysight Spectrum Analyzer - Spectrum Einsteine Mark L L L L L L L L L L L L L L L L L L L	Frequency Center Freq 2.352500000 GHz	Keysight Spectrum A RL BF Mech Atten 2 PASS 10 dB/dia/Weden R 200 10.0 0.00	salyzer-Spectrum Timission Mask 30 0 0C dB IFGain: lef Offset 40.69 dB lef 30.0 dBm	Center Trig: F #Atten	SENSE:INT Freq: 2.356900 ree Run : 2 dB	ALD 0000 GHz Avg: 100.009	IGN AUTO 0 Ra % of 100 Ra	3:40:06 PH Oct 08, 2024 dio Std: None dio Device: BTS Relative Line	Attenuation Mech Atten 2 dB	
sight Spectrum Analyzer - Spectrum Enission Mark Sector Freq 2.3525000000 GHz Genter Freq 2.3525000000 GHz Genter Freq 2.352500000 GHz Radio Std: None Radio Device: BTS Ref Offset 40.69 dB Sector Freq 2.352500000 GHz Radio Device: BTS Ref Offset 40.69 dB Sector Freq 2.352500000 GHz Ref Offset 40.69 dB Sector Freq 2.352500000 GHz Ref Offset 40.69 dB Sector Freq 2.352500000 GHz Ref Offset 40.69 dB	Frequency Center Freq 2.35250000 GHz	Keysight Spectrum A     RL SF     Mech Atten 2     PASS     10 dB/dia/www.m     RL     0     0     0     0     0     0     0     0	salyzer - Spectrum Emission Masi Si 0 20 dB IFGein: bef Offset 40.68 dB lef 30.0 dBm	Center Trig: F Low #Atten	SENSE:INT Freq: 2.356900 ree Run : 2 dB	ALD 0000 GHz Avg: 100.009	IGN AUTO 0 Ra % of 100 Ra	3:40:06 PH Oct 08, 2024 dio Std: None dio Device: BTS Relative Link	Attenuation Mech Atten 2 dB	
pight Sectors Analyses. Spectrom Envision Mark         STMC::DVT         18:32:43 MOX:109, 2224           Center Freq 2.352500000 GHz         Center Freq.2.352500000 GHz         Radio Sid: None           IS         IFGain1.cov         Center Freq.2.352500000 GHz         Radio Sid: None           Ref Offset 40.68 dB         Ref Offset 40.68 dB         Ref Offset 40.68 dB	Frequency Center Freq 2.35250000 GHz	Republic Spectrum A           Mach Atten 2           PASS           10 dip/dia/windown1           R           00 dip/dia/windown1           R           00 dip/dia/windown1	salyrer - Spectrum Emission Mask 30 0 00 IFGsin3 ef Offset 40.68 dB lef 30.0 dBm	Center Trig: F Low #Atten	SENSE:INT  Freq: 2.356901 ; 2 dB	ALD 0000 GHz Avg: 100.001	IGN AUTO 0 Ra % of 100 Ra	3x4046 PH Oct 08, 2024 dio Std: None dio Device: BTS	Attenuation Mech Atten 2 dB	
polgić Spectrum Analyzer - Spectrum Emission Mark  Center Freq 2.3552500000 GHz  Figlin Low  Figlin L	Center Freq 2.352500000 GHz	Image: Regularit Spectrum A           0         R.L         %F           Mech Atten 2         PASS         10           10         dBalainetaan         R           20         100         100           100         100         200           100         200         200           200         200         200	salyzer -Spectrum Emission Masi [300 DC] IFGain: IFGain: art Offreet 40.69 dB IFGain: art Offreet 40.69 dB	Center Trig: F FAtten	SENSE:INT  Freq: 2.35690( : 2 dB	ALD 0000 GHz Avg: 100.001	IGN AUTO 60 Ra % of 100 Ra	314006 PH Oct 08, 2024 dilo Std: None dilo Device: BTS	Attenuation Mech Atten 2 dB	
control for an and the second se	Frequency Center Freq 2.352500000 GHz	Image: Specific Spectrum A         PF           38         RL         BF           Mech Attac         P           PASS         P           10         dB/dd(atmost response)         R           10.0         0.0         0.0         0.0           10.0         0.0         0.0         0.0           10.0         0.0         0.0         0.0	salyzer - Spectrum Emission Masi [30 0 CC] dB IFGain: lef Offset 40.69 dB lef 30.0 dBm	Center Trig: F #Atten	SENSE:INT  Freq: 2.356900 Iree Run : 2 dB	0000 GHz Avg: 100.00	Ra AUTO (0) Ra % of 100 Ra	3140.06 PM Oct 06, 2024 dio Std: None dio Device: BTS Reader to the Reader Land	Attenuation Mech Atten 2 dB	
right Spectrum Analyzer -Spectrum Intellion Mark Terr Freq 2.352500000 GHz S IFGaint_ow FGaint_ow Ref Offset 40.68 dB add[windows] Ref Offset 40.68 dB add Statistics Ref Offset 40.68 dB add Stati	Frequency Center Freq 2.352500000 GHz	Image: Section of A s	salyzer Spectrum Emission Mass Solo DC d IFGain: erf Offset 40.68 dB erf 30.0 dBm	Conter Trig: F #Atten	SENSE:INT  Freq: 2.356900 ree Run : 2 dB	Aug: 100.00	IGN AUTO (6) Ra % of 100 Ra	3x40x06 PM Oct 08, 2024 dio Stdr. None dio Device: BTS	Attenuation Mech Atten 2 dB	
sight Spectrum Analyzer - Spectrum Disisten Mark Terr Freq 2.352500000 GHz S IFGain Low Ref Offset 40.68 dB bidleWeden1 Ref 30.0 dBm Ref Offset 40.68 dB bidleWeden1 Ref 30.0 dBm Ref Offset 40.68 dB	Center Freq 2.352500000 GHz	Image: Specific Spectral of Specific Specif	salyzer -Spectrum Emission Mass [30 DC] IFGain: ef Offset 40.69 dB lef 30.0 dBm	Center Trig: F EAtten	SENSE:INT  Freq: 2.35500 free Run : 2 dB	2410000 GHz Avg: 100.007	Ken Auto (6) Ra % of 100 Ra	3-40-06 PH Oct 06, 2024 dio Std: None dio Device: BTS	Attenuation Mech Atten 2 dB	
siget Spectrum Analyzer - Spectrum Intelline Mark ter Freq 2.3552500000 GHz S IFGainLow Fig: 12455500000 GHz Fig: Free Run Arg: 100.00% of 100 RAtten: 4 dB Ref Offset 40.68 dB ball (whole: 1 Ref Offset 40.68 dB common (whole: 1	Center Freq 2.352500000 GHz	Kech Atten 2     PASS     O	edger Spectrum Enailon Masi 60 00 00 00 ef Offset 40.68 dB ef Offset 40.68 dB	Center Trig: F Low #Atten	SENSE INT	00000 GHz Avg: 100.007	Ken Auto (6) Ra Ra % of 100 Ra	3140-06 PM Oct 06, 2024 dio Std: None dio Device: BTS Peace the Peace Lad	Adjust Atten for Min Clip	
Sign Science         State Science         Science <td>CF Step</td> <td>Rech Atten 2     PASS     O</td> <td>salyzer Spectrum Emission Mass Solo DC d dB IFGains ref Offset 40,68 dB ref 30.0 dBm GHz</td> <td> Center Trig: F Low #Atten</td> <td>SPISE:INT  Free: 2.35500 free Run : 2 dB</td> <td>0000 GHz Avg: 100.007</td> <td>Kanto (K) Kanto (K) Kanto</td> <td>3-40-06 PM Oct 00, 203-4 dio Std: None dio Device: BTS Read-or Lag Construction Span 50 MHz</td> <td>Attenuation Mech Atten 2 dB Adjust Atten for Min Clip</td>	CF Step	Rech Atten 2     PASS     O	salyzer Spectrum Emission Mass Solo DC d dB IFGains ref Offset 40,68 dB ref 30.0 dBm GHz	Center Trig: F Low #Atten	SPISE:INT  Free: 2.35500 free Run : 2 dB	0000 GHz Avg: 100.007	Kanto (K) Kanto	3-40-06 PM Oct 00, 203-4 dio Std: None dio Device: BTS Read-or Lag Construction Span 50 MHz	Attenuation Mech Atten 2 dB Adjust Atten for Min Clip	
tight Spectrum Analyzer -Spectrum Finisten Made Ter Freq 2.352500000 GHz S Ref Offset 40.69 dB Ref Offset 40.69 dB Ref 30.0 dBm Ter 2.3553 GHz Span 50 MHz	Center Freq 2.352500000 GHz	Koulget Spectrom // Recharder 2 PASS     10 dialed weeds-1     R     Cog     0	salyzer Spectrum Emission Mass Solo DC dB IFGalm: ef Offset 40,68 dB lef 30.0 dBm GHz	Center Trig. F Atten	SENSE UNT Free: 2.35590 ree Run 2. dB	2420000 GHz Avg: 100.007	Kon AUTO (K) Kon	Stello 68 PM Oct 06, 2024 dio Std: None dio Device: BTS Research Genetic Span 50 MHz	Attenuation Mech Atten 2 dB	
and be and a set of the set of th	Center Freq 2.352500000 GHz	Mech Atten 2 PASS 10 dipletive-1 20 100 200 200 200 200 200 200	ef 24.01 dBm/	Center Contraction RATION 5 MHz	SINGUNT Freq: 2.35500 ree Run 2. db	Aug: 100.001	R AJTO (0) R A R A R A R A R A R A R A R A R A R A	Stell-06 PH Oct 06, 2024 dio Std: None dio Device: BTS Please type Resources Geneticat Span 50 MHz	Attenuation Mech Atter 2 di	
Spectral Spectrum Davisors - Spectrum Training Mark         Spectral Spectrum         ALSIA JUTO         19.32-03 JUGO 109 J2024           Terr Freq 2.352500000 GHz         Figure Freq 2.352500000 GHz         Radio Std: None         Radio Std: None           SS         IFGelmLow         Center Freq 2.352500000 GHz         Radio Std: None           Ref Offset 40.68 dB         Ref 075et 40.68 dB         Ref 075et 40.68 dB           Gellerthoder:         Ref 0.0 dBm         Ref 0.0 dBm           Iter 2.353 GHz         Span 50 MHz           Iter 2.353 GHz         Span 50 MHz           Iter 2.353 GHz         Span 50 MHz	CF Step 5.500000 MHz Auto Man	Rech Atten 2     Rech Atten 2     PASS     10 diplefamment R     10 diplefamment R	ddydar Spectrum Einiaion Masi Sol OC dd B Fer Griset 40,68 dB Fer 30.0 dBm GHz GHz	E SMHz	SINGLINT	0000 GHz Avg: 100.00	IGN AUTO (00) Ra % of 100 Ra	3-40-06 PM Oct 08, 2034 dio Std: None dio Device: BTS Readow Lind Span 50 MHz	Attenuation MechAtter 2 de Adjust Atter for Min Clip	
Polyt Spectrom Analyzer. Spectrom Tension Mark  Processor Spectrom Processor Spectrom Processor Spectrom Processor Spectrom Processor P	Center Freq 2.352500000 GHz 5.500000 MHz <u>Auto</u> Man	Recharded Sector A	dd B If Gain: ef Offset 40,68 dB ef 30.0 dBm ef 30.0 dBm ef 30.0 dBm GHz ef 24.01 dBm/ Stop Freq Integ BW	5 MHz	Stace INT Frag: 2.35590 ter Rb 2. db	<-Peak.d	Ken AUTO (€() % of 100 Ra	stel od PM Oct 06, 2024 dio Std: None dio Device: BTS Reserve Link Span 50 MHz B) Freq (Hz)	Attenuation Mech Atter 2 de Adjust Atter for Min Clip	
Bit Barton Andyzer. Spottom Innivolm Makt         Strikt ENM         ALSN AUTO         19-32-03 auto do 3, 2024           ter Freq 2.352500000 GHz	Center Freq 2.35250000 GHz 6.0000 MHz Auto Man Freq Offset 0 Hz	Kendelight Sensora 2     Rech Atten 2     PASS     10 dipidight Sensora 2     Rech Atten 2     PASS     10 dipidight Sensora 2     Rech Atten 2     Rech A	edger Spectrum Enailon Maria GB IFGein: ef Offset 40.68 dB ef Offset 40.68 dB GB IFGein: ef Offset 40.68 dB ef 24.01 dBm/ Stop Freq Integ BW 3.400 MHz 51.00 kHz	S MHz	5792C 1971 Free: 2.35590 : 2 dB 		CGN AUTO (€) Ra % of 100 Ra Ra Participation (100 Ra Ra Ra Ra Ra Ra Ra Ra Ra Ra Ra Ra Ra R	Stell-06 PH Oct 06, 2024 dio Std: None dio Device: BTS fellene Led Span 50 MHz B) Freq (Hz) 9 2, 528 M [2]	Attenuation Mech Atter 2 di Adjust Atter for Min Clij Mech Atten Ster 2 dB 10 di	
Set of the set of th	CF Step 5.500000 MHz Auto Man Freq Offset 0 Hz	Rech Atten 2     Rech Atten 2     Rech Atten 2     PASS     O diplefighteeters     O d	adyzer Spectrum Ernation Masis Solo DC   dB    FGain: ef Offset 40,68 dB    FGain: ef Offset 40,68 dB     ef Offset 40,68 dB     ef 24,01 dBm /   Stop Freq Integ BW 3,400 MHz 100 kHz 100 kHz	5 MHz	2002 (1971) Freq: 2,25590 : 2 dB Lower Lower Lim(dB) Freq 19 62) -2 15 221 -3.	Peak	KGR AUTO (€) (€) (€) (€) (€) (€) (€) (€) (€) (€)	2-46-06 PM Oct 06, 203-4 dio Std: None dio Device: BTS Read-or Lea Span 50 MHz P) Freq (Hz) 9) 2. 520 M (2)	Attenuation Mech Atter 2 di Adjust Atter for Min Clip Mech Atten Step 2 di 10 de	
Note:         State:         State: </td <td>Center Freq 2.352500000 GHz 5.500000 GHz Auto Man Freq Offset 0 Hz</td> <td>Rech atter         Rech atter           0         0         0           0         0         0           0         0         0           0.00         0         0</td> <td>salyzer         Spectrum Emission Masis           150.0         DC           dB         IFGalin:           ef Offset 40, 66 dB         IEGalin:           ef Offset 40, 66 dB         IEGalin:           of dB</td> <td>5 MHz</td> <td>Since INT Frag: 2,35590 Frag: 2,35590 Frag: 2,35590 Frag: 2,35590 Frag: 2,155 Frag: 2,155</td> <td>C-Pask-3 (1/2)</td> <td>&gt; Upper → Upper →</td> <td>1-40-04 PM Oct 00, 2024     dio Std: None     dio Device: BTS      foreire Link      Span 50 MHz      Span 50 MHz      9) 2.526 M (2)     </td> <td>Attenuation Mech Atter 2 dB Mech Atter for Min Clip Mech Atten Step 2 dB 10 dB</td>	Center Freq 2.352500000 GHz 5.500000 GHz Auto Man Freq Offset 0 Hz	Rech atter         Rech atter           0         0         0           0         0         0           0         0         0           0.00         0         0	salyzer         Spectrum Emission Masis           150.0         DC           dB         IFGalin:           ef Offset 40, 66 dB         IEGalin:           ef Offset 40, 66 dB         IEGalin:           of dB	5 MHz	Since INT Frag: 2,35590 Frag: 2,35590 Frag: 2,35590 Frag: 2,35590 Frag: 2,155 Frag: 2,155	C-Pask-3 (1/2)	> Upper →	1-40-04 PM Oct 00, 2024     dio Std: None     dio Device: BTS      foreire Link      Span 50 MHz      Span 50 MHz      9) 2.526 M (2)	Attenuation Mech Atter 2 dB Mech Atter for Min Clip Mech Atten Step 2 dB 10 dB	
Bit Base of Control         State         State         State         Radio State         Rad	Frequency Frequency 2.352500000 GHz 5.500000 MHz Man Freq Offset 0 Hz	Kendelight Sensora 2     Rech Atten 2     PASS     O dipidigneed in the sensor 2     O dipidigneed in t	adyzer - Spectrum Entailon Maria [50 0C] dB IF Gelin: ef Offset 40.68 dB ef 3.0 dBm GHz ef 24.01 dBm / Stop Freq Integ BW 3.400 MHz 51.00 MHz 12.50 MHz 1.000 MHz 20.50 MHz 1.000 MHz 20.50 MHz 1.000 MHz	5 MHz	STACL (1971 Free: 2.35590) : 2 dB Lover Lim(dB) Free Lim(dB) Free (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	Pask -3 (1/2) dB (1/2) dB (2/2) d	Kon AUTO     Kon AUTO     Ra     Ra     Ko of 100     Ra     Ra     Ko of 100     Ra	3-46-06 PM Oct 06, 2034           dio Std: None           dio Device: BTS           Restrict Ltd           Span 50 MHz           **	Attenuation Mech Atter 2 di Adjust Atter for Min Clip Mech Atten Step 2 db 10 db	
Set of the set of th	Frequency Frequency 2.352500000 GHz 5.500000 MHz Auto Man Freq Offset 0 Hz	Rech Atten 2     R	salyzer         Spectrum Emailon Masil           [5:0]         0C           dB         IFGalari           ef Offset 40,68 dB         IE           ef Offset 40,68 dB         IE           gd a         0.0 dBm           gd a         1.0 dBm           3.400 MHz         51.00 MHz           1.500 MHz         1.000 MHz           24.50 MHz         1.000 MHz           24.50 MHz         1.000 MHz           27.50 MHz         1.000 MHz	5 MHz	Energy 1	ALI     Constraints	> Uppa m AUTO 6 Ra % of 100 Ra Ra Ra Ra Ra Ra Ra Ra Ra Ra Ra Ra Ra R		Attenuation Mech Atter 2 di Adjust Atten for Min Clip 2 di 10 dB Max Mixer LV -10.000 dBm	
right Spectrum Analyzer. Spectrum Instation Made         right Spectrum Analyzer. Spectrum Instation Made           Center Freq 2.355500000 GHz         Radio Satt None           Satt None <th colsp<="" td=""><td>Center Freq 2.352500000 GHz 5.500000 MHz Auto Man Freq Offset 0 Hz</td><td>Start Freq           2.520 MHz           3.400 MHz</td><td>Statute         Spectrum Emission Mail           10.0         0C           dB         IFGain:           ef Offset 40, 66 dB         IFGain:           ef Offset 40, 66 dB         IFGain:           statut         IFGain:           of JD         0C           of Offset 40, 66 dB         IFGain:           of Offset 40, 66 dB         IFGain:           of JD         IFG           of JD         IFG     &lt;</td><td>5 MHz 2 2822 ( </td><td>Cover Lover Lim(B) Free 19 62 2- 19 62 2- 19 62 2- 19 62 2- 15 22 3- (-31) -11 (-2 39) -21 (-3)</td><td>C-Peak -3 Avg: 100.00 (1/2) dB 526 M -32 (1/2) d</td><td>× 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td><td>1-40-04 PM Oct 04, 2024     dio Std: None     dio Device: BTS      file         Std: None         Std: None</td><td>Attenuation Mech Atter 2 di Adjust Atter for Min Clip Mech Atten Step 2 db 10 db Max Mixer Lv -10.000 dBr</td></th>	<td>Center Freq 2.352500000 GHz 5.500000 MHz Auto Man Freq Offset 0 Hz</td> <td>Start Freq           2.520 MHz           3.400 MHz</td> <td>Statute         Spectrum Emission Mail           10.0         0C           dB         IFGain:           ef Offset 40, 66 dB         IFGain:           ef Offset 40, 66 dB         IFGain:           statut         IFGain:           of JD         0C           of Offset 40, 66 dB         IFGain:           of Offset 40, 66 dB         IFGain:           of JD         IFG           of JD         IFG     &lt;</td> <td>5 MHz 2 2822 ( </td> <td>Cover Lover Lim(B) Free 19 62 2- 19 62 2- 19 62 2- 19 62 2- 15 22 3- (-31) -11 (-2 39) -21 (-3)</td> <td>C-Peak -3 Avg: 100.00 (1/2) dB 526 M -32 (1/2) d</td> <td>× 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td> <td>1-40-04 PM Oct 04, 2024     dio Std: None     dio Device: BTS      file         Std: None         Std: None</td> <td>Attenuation Mech Atter 2 di Adjust Atter for Min Clip Mech Atten Step 2 db 10 db Max Mixer Lv -10.000 dBr</td>	Center Freq 2.352500000 GHz 5.500000 MHz Auto Man Freq Offset 0 Hz	Start Freq           2.520 MHz           3.400 MHz	Statute         Spectrum Emission Mail           10.0         0C           dB         IFGain:           ef Offset 40, 66 dB         IFGain:           ef Offset 40, 66 dB         IFGain:           statut         IFGain:           of JD         0C           of Offset 40, 66 dB         IFGain:           of Offset 40, 66 dB         IFGain:           of JD         IFG           of JD         IFG     <	5 MHz 2 2822 ( 	Cover Lover Lim(B) Free 19 62 2- 19 62 2- 19 62 2- 19 62 2- 15 22 3- (-31) -11 (-2 39) -21 (-3)	C-Peak -3 Avg: 100.00 (1/2) dB 526 M -32 (1/2) d	× 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1-40-04 PM Oct 04, 2024     dio Std: None     dio Device: BTS      file         Std: None         Std: None	Attenuation Mech Atter 2 di Adjust Atter for Min Clip Mech Atten Step 2 db 10 db Max Mixer Lv -10.000 dBr
Special Section         ALSE NUM         (ALSE NUM           Section         ALSE NUM         Ref Offset 40.88 dB           Section         ALSE NUM         Ref Offset 40.88 dB           Section         Auge 100.00% of 100         Radio Stdt: None           Ref Offset 40.88 dB           Section         Auge 100.00% of 100         Ref Offset 40.88 dB           Section         Auge 100.00% of 100         Ref Offset 40.88 dB           Section         Auge 100.00% of 100         Ref Offset 40.88 dB           Section         Auge 100.00% of 100         Ref Offset 40.88 dB           Section         Auge 100.00% of 100         Ref Offset 40.88 dB           Section         Section         Section         Note 100.00 Mit           If Colspan= 200 Mit 2         Section 400.00 Mit 2         Section 400.00 Mit 2           Section 400.00 Mit 2         Section 400.00 Mit 2         Section 400.00 Mit 2           If Freq UI         Colspan= 200 Mit 2 <th colsp<="" td=""><td>Frequency Frequency Center Freq 2.352500000 GHz 5.500000 MHz Auto Man Freq Offset 0 Hz</td><td>Kendel Sensor Attended     Kendel Sensor At</td><td>adyzer - Spectrum Emission Masis [50 0C] dB IF Gelin: ef Offset 40.68 dB ef 30.0 dBm GHz ef 24.01 dBm / Stop Freq Integ BW 3400 MHz 1000 MHz 20.50 MHz 1000 MHz 20.50 MHz 1000 MHz 20.50 MHz 1000 MHz</td><td>5 MHz 5 MHz 4 dBm Al 3 202 (c </td><td>Struct UNT Free: 2 35500 : 2 dB Lover Lim(dB) Free Unt(dB) Free Un</td><td>C-Peak -3 (12) C-Peak -3 (13) C-Peak -3 (13) C-Peak -3 (14) C-Peak -3 (15) C-Peak -4 (1</td><td>&gt; Upper → Upper →</td><td>Analosis Principal Control 2023 dio Std: None dio Device: BTS</td><td>Attenuation Mech Atter 2 di Adjust Atter for Min Cilj Mech Atten Ster 2 di 10 di</td></th>	<td>Frequency Frequency Center Freq 2.352500000 GHz 5.500000 MHz Auto Man Freq Offset 0 Hz</td> <td>Kendel Sensor Attended     Kendel Sensor At</td> <td>adyzer - Spectrum Emission Masis [50 0C] dB IF Gelin: ef Offset 40.68 dB ef 30.0 dBm GHz ef 24.01 dBm / Stop Freq Integ BW 3400 MHz 1000 MHz 20.50 MHz 1000 MHz 20.50 MHz 1000 MHz 20.50 MHz 1000 MHz</td> <td>5 MHz 5 MHz 4 dBm Al 3 202 (c </td> <td>Struct UNT Free: 2 35500 : 2 dB Lover Lim(dB) Free Unt(dB) Free Un</td> <td>C-Peak -3 (12) C-Peak -3 (13) C-Peak -3 (13) C-Peak -3 (14) C-Peak -3 (15) C-Peak -4 (1</td> <td>&gt; Upper → Upper →</td> <td>Analosis Principal Control 2023 dio Std: None dio Device: BTS</td> <td>Attenuation Mech Atter 2 di Adjust Atter for Min Cilj Mech Atten Ster 2 di 10 di</td>	Frequency Frequency Center Freq 2.352500000 GHz 5.500000 MHz Auto Man Freq Offset 0 Hz	Kendel Sensor Attended     Kendel Sensor At	adyzer - Spectrum Emission Masis [50 0C] dB IF Gelin: ef Offset 40.68 dB ef 30.0 dBm GHz ef 24.01 dBm / Stop Freq Integ BW 3400 MHz 1000 MHz 20.50 MHz 1000 MHz 20.50 MHz 1000 MHz 20.50 MHz 1000 MHz	5 MHz 5 MHz 4 dBm Al 3 202 (c 	Struct UNT Free: 2 35500 : 2 dB Lover Lim(dB) Free Unt(dB) Free Un	C-Peak -3 (12) C-Peak -3 (13) C-Peak -3 (13) C-Peak -3 (14) C-Peak -3 (15) C-Peak -4 (1	> Upper →	Analosis Principal Control 2023 dio Std: None dio Device: BTS	Attenuation Mech Atter 2 di Adjust Atter for Min Cilj Mech Atten Ster 2 di 10 di

Page 26 of 99

### 9.2.2. LTE BAND 70 & 5G NR N70

#### LIMITS

FCC: 27.53

(h)(1) *General protection levels.* Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log<sub>10</sub> (P) dB.

(2) Additional protection levels. Notwithstanding the foregoing paragraph (h)(1) of this section:

(i) Operations in the 2180-2200 MHz band are subject to the out-of-band emission requirements set forth in <u>§</u> <u>27.1134</u> for the protection of federal government operations operating in the 2200-2290 MHz band.

(ii) For operations in the 2000-2020 MHz band, the power of any emissions below 2000 MHz shall be attenuated below the transmitter power (P) in watts by at least  $70 + 10 \log_{10}(P) dB$ .

(iii) For operations in the 1915-1920 MHz band, the power of any emission between 1930-1995 MHz shall be attenuated below the transmitter power (P) in watts by at least  $70 + 10 \log_{10}(P) dB$ .

(iv) For operations in the 1995-2000 MHz band, the power of any emission between 2005-2020 MHz shall be attenuated below the transmitter power (P) in watts by at least 70 + 10  $\log_{10}(P)$  dB.

Page 27 of 99

#### LTE BAND 70 EMISSION MASK



Page 28 of 99

#### 5G NR N70 EMISSION MASK

🇱 Keysight Spectrum A	Analyzer - Spectrum Emission Mask,I	0-22797						🛤 Keysight Spectru	m Analyzer - Spectrur	m Emission Mask, ID:	2797						
L RF	50 Ω DC	SE	NSE:INT	ALIGN AUTO	12:18:5	9 PM Oct 09, 2024	Frequency	UNI L	RF 50 Ω D	c I		SENSE:INT		ALIGN AU	TO 12:40:3	14 PM Oct 09, 2024	Frequency
Center Freq 1	1.997500000 GHz	Center F	req: 1.997500000 GI	iz	Radio S	td: None	riequeity	Center Free	q 2.0075000	00 GHz	Ce	nter Freq: 2.0	007500000 GH	Z 00.00% -4.4	Radio S	itd: None	Fieddency
PASS	IFGain:L	w #Atten: 4	dB Avg.	100.00% 01 100	Radio D	evice: BTS		PASS		IFGain:Low	#A	ten: 6 dB	Avg. 1	00.00% 011	Radio D	evice: BTS	
10 diBildiaWester 1 R	Ref Offset 40.19 dB Ref 30.0 dBm							10 dBielieWedee	Ref Offset 40. Ref 20.0 dE	19 dB Sm							
20.0 10.0						Nederve Calle	Center Freq 1.997500000 GHz	10.0 0.00				[]				Nodeve Line	Center Freq 2.007500000 GHz
-10.0						Aboolute Line		-20.0									
-40.0		N	J.			Spectrue		-40.0 -50.0 -50.0			-1		4-	-		Spectrum	
-60.0	011-							-70.0									
Center 1.998	GHZ				5	oan ou MHZ	CF Step	Center 2.00	8 GHZ						5	pan su MHz	CF Step 5 000000 MHz
Total Power R	Ref 25.55 dBm / 5	MHz					<u>Auto</u> Man	Total Power	Ref 17.0	6 dBm / 5 N	1Hz						<u>Auto</u> Man
Start Freq	Stop Freq Integ BW	Lo dBm ΔLir	m(dB) Freq (Hz)	Peak -> dBm ∆	Upper Lim(dB)	Freq (Hz)	Freq Offset	Start Freq	Stop Freq	Integ BW	dBm	Lower <u> <u> </u> </u>	Freq (Hz)	Peak -> dBm	Upper <u> <u> </u> </u>	Freq (Hz)	Freq Offset
2.526 MHz 4.000 MHz	4.000 MHz 51.00 KHz 7.500 MHz 1.000 MHz	-30.77 (-17	(.77) -2.526 M (.73) -4.000 M	-30.21 -29.51	-17.21) -16.51)	2.526 M A		2.526 MHz 4.000 MHz	4.000 MHz 25.00 MHz	51.00 kHz 1.000 MHz	-40.21	(-27.21)	-2.526 M	-39.89 -41.35	(-26.89) (-28.35)	2.526 M A	
8.000 MHz	22.00 MHz 1.000 MHz	'	()	-42.62	(-2.62)	8.000 M		4.000 MHz	7.000 MHz	1.000 MHz	-41.39	(-28.39)	-4.015 M		()	8	
22.50 MHz	25.00 MHz 1.000 MHz		()	-46.44	-33.44)	22.71 M		7.500 MHz	25.00 MHz	1.000 MHz	-44.43	(-4.43)	-7.500 M		()	[]	
22.00 MHz	22.50 MHz 1.000 MHz	-45.94 (-32	.94) -22.07 M	-46.37	-33.37)	22.19 M		7.000 MHz	7.500 MHz	1.000 MHz	-44.51	(-31.51)	-7.008 M		()		
7.500 MHz	8.000 MHz 1.000 MHz	-41.52 (-28	.52) -7.500 M	-42.22	-29.22)	7.510 M		1.000 MHz	2.000 MHz	100.0 kHz		()			()		
8.000 MHz	25.00 MHz 1.000 MHz	-41.91 (-28	.91) -8.000 M		()			1.000 MHz	2.000 MHz	100.0 kHz		()			()		
MSG				STAT	15			MSG						ST	ATUS		
	5G NR N70 QPSK 5M RB25-0 Low Ch								5G	NR N7	70 Q	PSK	5M F	RB25	-0 Hi	gh Ch	

Page 29 of 99

# 9.3. OUT OF BAND EMISSIONS

#### TEST PROCEDURE

ANSI C63.26-2015, Section 5.7.3

The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded using an RMS detector to ensure that the worst-case emissions were caught.

For each out of band emissions measurement:

- Set display line at -40dBm and -45dBm according to the band Limit
- Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz. (NOTE: Worst case set RBW/VBW to 1MHz/3MHz)
- The Sweep time was set to > T<sub>sp</sub> \* Sweep Points for Max Hold mode or set to auto for trace averaging mode to sufficiently measure maximum power.
- The number of sweep points was set to > 2 \* Span/RBW.

#### **RESULTS**

Page 30 of 99

### 9.3.1. LTE BAND 30 & 5G NR N30

#### **LIMITS**

FCC: §27.53 (a)

The minimum permissible attenuation level of any spurious emissions is 75 + 10 log (P) dB where transmitting power (P) in Watts.

#### LTE BAND 30



#### DATE: 2024-11-11 FCC ID: 2A7A2-FNV1



Page 32 of 99

#### <u>5G NR N30</u>



Keysight Spectrum Analyzer - AP2024 2.23,22797/85502,			
Start Freq 30.000000 MHz PNO: Fast	ALIGN AUTO         02:59:58 PM Oct 08, 2024           Avg Type: RMS         TRACE           Avg/Hold:         100/100	Frequency	
IFGain:Low #Atten: 20 dB Ref Offset 20.88 dB 10 dB/div Ref 22.38 dBm	Mkr2 3.150 02 GHz -47.227 dBm	Auto Tune	
Log		Center Freq 2.015000000 GHz	
- 7 0 6 		Start Freq 30.000000 MHz	
		Stop Freq 4.00000000 GHz	
Start 30 MHz #Res BW 1.0 MHz #VBW 3.0 MHz*	Stop 4.000 GHz Sweep 8.000 ms (40001 pts)	CF Step 397.000000 MHz Auto Man	
1 N 1 f 2,356 02 GHz 22,336 dBm 2 N 1 f 3,150 02 GHz 47,227 dBm 3 4 5	FUNCTION FUNCTION WOTH FUNCTION VALUE	Freq Offset 0 Hz	
6 7 8 9 10			
	·		
MSG	STATUS		
Image: Keysight Spectrum Analyzer - AP2024.2.23,22797/85502,           L         RF         50 Ω         DC         SENSE::IN	NT ALIGN AUTO 03:01:36 PM Oct 08, 2024	Paak Saarah	
Marker 1 23.69400000000 GHz PNO: Fast Trig: Free Run	Avg Type: RMS TRACE 1 2 3 4 5 6 Avg/Hold: 100/100 TYPE A www.ww	Peak Search	BLANK
IFGain:Low #Atten: 10 dB Ref Offset 22.38 dB 10 dB/div Ref 22.38 dBm	Mkr1 23.694 0 GHz -49.382 dBm	Next Peak	
2.00 7.62		Next Pk Right	
.17.6 -27.6 		Next Pk Left	
475 676 675	45.00 5	Marker Delta	
Start 4.00 GHz #Res BW 1.0 MHz #VBW 3.0 MHz*	Stop 24.00 GHz Sweep 34.67 ms (40001 pts)	Mkr→CF	
2 3 4 5		Mkr→RefLvl	
6 7 8 9		More 1 of 2	
11			
MSG	STATUS		
5G NR N30 QPS	K 5M RB25-0 High Ch	<u></u> ו	

Page 34 of 99

### 9.3.2. LTE BAND 70 & 5G NR N70

#### **LIMITS**

FCC: §27.53 (h)

The minimum permissible attenuation level of any spurious emissions is 70 + 10 log (P) dB where transmitting power (P) in Watts.

#### LTE BAND 70

Keysight Spectrum Analyzer - AP2024.2.23,22797/85502,		Keysight Spectrum Analyzer - AP2024.2.23,2279	7/85502,		
L RF 50 0 DC SENSE:INT ALIGN AUTO 01:23:05 PM Oct 08, 2024     Start Frag: 30 000000 MHz     #Avg Type: RMS TRACE 12.3.4 St	Frequency	Start Fred 30 00000 MHz	SENSE:INT	#Avg Type: RMS TRACE 2 3 4 5 6	Frequency
PNO: Fast Trig: Free Run Avg/Hold: 100/100 TVPE A		Start Freq 50.00000 mm2	PNO: Fast Trig: Free Run	Avg/Hold: 100/100 TYPE A WWWWW	
IFGain:High #Atten: U dB	Auto Tune		FGain:Low #Atten: 4 dB		Auto Tun
Ref Offset 40.19 dB MKr2 1.936 5 GH2		Ref Offset 40.19 dB		MKr2 1.942 9 GHZ	
adBidiv Ref 20.19 dBm -42.07 9 dBm		10 dB/div Ref 34.19 dBm		-41.800 UBII	
0.2	Center Freq	24.2			Center Fre
190	5.015000000 GHz	14.2			5.015000000 GH
		4.19			
9.8		6.81			
10.0	Start Freq	15.01			Start Fre
230	30.000000 MHz	15.0			30.000000 MH
39.8		-25.8			
49.8	Stop Freq	-35.8		-42.00 (854)	Stop Fre
99.0	10.00000000 GHz	-45.8			10.00000000 GH
99.0		-65.8			
Start 30 MHz Stop 10 000 GHz	CE Step	Start 30 MHz		Stop 10 000 CHz	CE Sto
Res BW 1.0 MHz #VBW 3.0 MHz* Sweep 17.68 ms (20401 pts)	997.000000 MHz	#Res BW 1.0 MHz	#VBW 3.0 MHz*	Sweep 17.68 ms (20401 pts)	997.000000 MH
work work frank work work and the second s	Auto Man	Internal second second second			Auto Ma
1 N 1 f 1.999 1 GHz 8.549 dBm		1 N 1 f 2.00	3 5 GHz 8.748 dBm	INCTION FORCIDON WOTH FORCION SECOL	
2 N 1 f 1.936 5 GHz -42.879 dBm	Freq Offset	2 N 1 f 1.94	2 9 GHz -41.866 dBm		FreqOffse
4	0 Hz	4			0 H
5		6			
7		7			
9		8			
10		10			
11		11			
SG STATUS		MSG		STATUS	
			3 44745	0	
Keysight Spectrum Analyzer - AV2024.2.25,22791/85302,     L		Keysight spectrum Analyzer - AP2024 2.23,2279	V/83904, SENSE-INT	ALIGN AUTO 11:42:43 AM Oct 08, 2024	
Marker 1 19.888000000000 GHz #Avg Type: RMS TRACE 2345	Peak Search	Start Freq 10.00000000 G	Hz	#Avg Type: RMS TRACE 1 2 3 4 5 6	Frequency
PNO: Fast Trig: Free Run Avg Hold: 100/100 DET A.NNNN	í l		PNO: Fast Trig: Free Run EGain:High #Atten: 0 dB	Avg Hold: 100/100 DET A NNNNN	
Mkr1 10 999 0 CH	Next Peak		ounanyn	Mkr1 19 912 0 GHz	Auto Tun
Ref Offset 40.19 dB -42,770 dBm -42,770 dBm		Ref Offset 40.19 dB		-42.823 dBm	
		Log			
10.2	Next Pk Picht	10.2			Center Free
190	NEXT PK RIGHT	0.190			15.10000000 GH
9.81		-9.81			
19.8		-19.8			Start Fra
298	Next Pk Left	-29.8			Start Fre
-40.0		.39.0		-40.00	10.00000000 GP
		.49.8			
	Marker Date	10.0			Stop Fre
	Marker Deita	Cond			20.200000000 GH
69.8		409.8			
Start 10.000 GHz Stop 20.200 GHz		Start 10.000 GHz		Stop 20,200 GHz	CF Ster
Res BW 1.0 MHz #VBW 3.0 MHz* Sweep 17.68 ms (20401 pts)	Mkr→CF	#Res BW 1.0 MHz	#VBW 3.0 MHz*	Sweep 17.68 ms (20401 pts)	1.020000000 GH
NOT MODE TRC SCL X FUNCTION WIDTH FUNCTION VALUE >		MOR MODI TRC SCL X	Y R	INCTION FUNCTION WOTH FUNCTION VALUE	<u>Auto</u> Ma
N 1 f 19.888 0 GHz -42.770 dBm		1 N 1 f 19.91	2 0 GHz -42.823 dBm		
3	Mkr. Doff ut	3			Freq Offse
4	WIKT→RetLVI	4			0 H
6		6			
7		7			
9	More	9			
10	1 of 2	10			
		×.			
		Meg		STATUS	
5G STATUS		10-0-0-0			
LTE BAND 70 QPSK 5M RB25-0 Low C	 Ch	LTE BA	ND 70 QPSK	5M RB25-0 Mid Cl	<u>า</u>

#### REPORT NO: R15343302-E1 EUT MODEL: FalcoNET

#### DATE: 2024-11-11 FCC ID: 2A7A2-FNV1



Page 36 of 99

#### DATE: 2024-11-11 FCC ID: 2A7A2-FNV1



Page 37 of 99

#### <u>5G NR N70</u>



Page 38 of 99

#### REPORT NO: R15343302-E1 EUT MODEL: FalcoNET

#### DATE: 2024-11-11 FCC ID: 2A7A2-FNV1

Non-Theory Documents     Landson Transmitter     Transmitter     Transmitter     Transmitter     Transmitter       Name Transmitter     Transmitter     Transmitter     Transmitter     Transmitter     Transmitter       Name Transmitter     Transmitter     Transmitter     Transmitter     Transmitter     Auto Tume       Name Transmitter     Transmitter     Transmitter     Transmitter     Auto Tume       Name Transmitter     Transmitter     Transmitter     Auto Tume       Name Transmitter     Transmitter     Stop Freq       Start 10 MHz     Stop Freq     Stop Freq       Start 10 MHz     SVBW 3.0 MHz*     Stop Freq       Start 10 MHz     Stop Freq     Stop Freq       Start 10 MHz     Stop Freq     Marker 1 18.8000000000 GHz     Stop Freq       Start 10 MHz     Stop Freq     Marker 1 18.8000000000 GHz     Stop Freq       Start 10 MHz     Stop Freq     Marker 1 18.8000000000 GHz     Marker 1 18.8000000000 GHz       Start 10 Miz     Stop Freq     Marker 1 18.800000000 GHz     Marker 1 18.8000000 GHz    <	Keysight Spectrum Analyzer - AP2024.2.	23,22797/85502,		
Product Addition         Product Addition         Product Addition         Auto Tune           0         Mir/2         1.948         CH         Auto Tune           0         Mir/2         1.948         CH         Center Freq           0         Mir/2         1.948         Center Freq         5.015000000 CHz           0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0<	Start Freq 30.000000 M	HZ Tria: Erre Due	#Aug Type: RMS TRACE 1 2 3 4 5 6 Avg Hold: 100/100 Type: A 100/100	Frequency
Ref Officet 40.19 4B     Mikr2 1.948 2 GHz       40.242 dBm     -40.242 dBm       Center Freq     5015000000 GHz       30     -40.242 dBm       31     -40.242 dBm       32     -40.242 dBm       33     -31       34     -40.242 dBm       35     -50500000 GHz       34     -31       35     -32       36     -40.242 dBm       37     -32       38     -40.242 dBm       39     -32       30     -32       31     -32       31     -32       31     -32       31     -32       31     -32       32     -32       33     -32       34     -32       34     -32       35     -32       34     -32       35     -32       36     -32       37     -342       38     -342       38     -40.242 dBm       38     -40.2		PNO: Fast Thg: Free Run IFGain:Low #Atten: 4 dB	DET A NNNN	Auto T
0 dBlody         Ref 20.19 dBm         -40.442 CBH         Center Freq           0 dBlody         Ref 20.19 dBm         -40.442 CBH         Center Freq           0 dBlody         Ref 20.19 dBm         -40.442 CBH         Start Freq           0 dBlody         Ref 20.19 dBm         -40.442 CBH         Start Freq           0 dBlody         Ref 20.19 dBm         -40.442 CBH         Start Freq           0 dBlody         Ref 20.19 dBm         -40.442 CBH         Start Freq           0 dBlody         Ref 20.19 dBm         -40.442 CBH         Start Freq           0 dBlody         Ref 20.19 dBm         -40.442 CBH         Start Freq           0 dBlody         Ref 20.19 dBm         -40.422 dBm         -40.422 dBm         -40.422 dBm           1 N 1 f         1.948 2 GHz         -40.422 dBm         -70.4000 HHz         -70.4000 HHz         -70.4000 HHz           1 N 1 f         1.948 2 GHz         -40.422 dBm         -70.4000 HHz         -40.422 dBm         -40.422 dBm           1 N 1 f         1.948 2 GHz         -40.422 dBm         -70.4000 Hz         -70.4000 Hz         -70.4100 H	Ref Offset 40.19 d	iB	Mkr2 1.948 2 GHz	Auto Tune
Center Freq Subsection Center Freq Subsection Start Freq Subsection Star	o dB/div Ref 20.19 dBm	1	-40.242 dBm	
Sol 1000000 GHz       Sol 100000 GHz         Start Freq 30.000000 GHz       Stop 10.000 GHz         Stop 10.000 GHz       Stop 7 CR         Stop 10.000 GHz       Stop 10.000 GHz         Stop 1	0.2			Center Freq
Image: start 30 MHz       Stop 10.000 GHz       Stop 500000 MHz         Image: start 30 MHz       SVEW 3.0 MHz       Stop 10.000 GHz       GF Step 997.0000 MHz         Image: start 30 MHz       SVEW 3.0 MHz       Stop 10.000 GHz       GF Step 997.0000 MHz         Image: start 30 MHz       SVEW 3.0 MHz       Stop 10.000 GHz       GF Step 997.0000 MHz         Image: start 30 MHz       SVEW 3.0 MHz       Stop 10.000 GHz       GF Step 997.0000 MHz         Image: start 30 MHz       Stop 10.000 GHz       GF Step 997.0000 MHz       Man         Image: start 30 MHz       Stop 10.000 GHz       GF Step 997.0000 MHz       Man         Image: start 30 MHz       Stop 10.000 GHz       GF Step 997.0000 MHz       Man         Image: start 30 MHz       Stop 10.000 GHz       Man       Freq Offset 0 Hz         Image: start 30 MHz       Stop 10.000 GHz       Mar       Not 11 Start 30 MHz       Not 11 Start 30 MHz         Image: start 10.000 GHz       Mar       Mar       Mar       Next Pk Left       Marker Delta         Image: start 10.000 GHz       Stop 20.200 GHz       Marker Delta       Marker Delta       Marker Delta       Marker Delta	190			5.015000000 GHz
Image: second	.81			
30       30 <td< td=""><td>19.8</td><td></td><td></td><td>Start Freq</td></td<>	19.8			Start Freq
Bit All 10.000 CHZ       FVEX 100       Stop 10.000 CHZ       Stop 10.000 CHZ         Bit Ker 119.860.000 COUDO CHZ       FVEX 100       Stop 10.000 CHZ       FVEX 100         Bit Ker 119.860.000 COUDO CHZ       FVEX 100       Stop 10.000 CHZ       FVEX 100         Bit Ker 119.860.000 COUDO CHZ       FVEX 100       Stop 10.000 CHZ       FVEX 100         Bit Ker 119.860.000 COUDO CHZ       FVEX 100       Stop 10.000 CHZ       FVEX 100         Bit Ker 119.860.000 CHZ       FVEX 100       Stop 10.000 CHZ       FVEX 100         Bit Ker 119.860.000 CHZ       FVEX 100       Stop 10.000 CHZ       Next Peak         Bit Ker 119.860.000 CHZ       FVEX 100       Stop 10.200 CHZ       Next Peak         Bit Ker 119.860.000 CHZ       FVEX 100       Stop 20.200 CHZ       Next Peak         Bit Ker 119.860.000 CHZ       FVEX 100       Stop 20.200 CHZ       Next PE k Right         Bit Ker 10.00 CHZ       Stop 20.200 CHZ       Next PE k Right       Next PE k Right	39.8 <b>2</b>		-40.00 dbm	30.000000 MHz
Start 30 MHz     Stop 10.000 GHz       Start 30 MHz     #VBW 3.0 MHz*       Res BW 1.0 MHz     #VBW 3.0 MHz*       Stop 17.68 ms (20041 pts)       N     1       1.948 2 GHz     40.242 dBm       1.948 2 GHz     50.00 GHz       1.948 2 GHz     42.900 dBm       1.	49.8			
Bit       B	39.8			Stop Freq
tart 30 MHz       #VBW 3.0 MHz*       Stop 10.000 GHz         Stop 10.000 GHz       #VBW 3.0 MHz*       Stop 10.000 GHz         Stop 10.000 GHz       #VBW 3.0 MHz*       Stop 10.000 GHz         Stop 10.000 GHz       #VBW 3.0 MHz*       Stop 10.000 GHz         Stop 10.000 GHz       10.000 GHz       #VBW 3.0 MHz*         Stop 10.000 GHz       10.000 GHz       #VBW 3.0 MHz*         Stop 10.000 GHz       #VBW 3.0 MHz*       #VBW 3.0 MHz*         Stop 10.000 GHz       #VBW 3.0 MHz*       #VBW 3.0 MHz*         Stop 10.000 GHz       #VBW 3.0 MHz*       #VBW 3.0 MHz*         Stop 10.000 GHz       #VBW 3.0 MHz*       #VBW 3.0 MHz*         Stop 10.000 GHz       #VBW 3.0 MHz*       #VBW 3.0 MHz*         Stop 10.000 GHz       #VBW 3.0 MHz*       #VBW 3.0 MHz*         Stop 10.000 GHz       #VBW 3.0 MHz*       #VBW 3.0 MHz*         Stop 10.000 GHz       #VBW 3.0 MHz*       #VBW 3.0 MHz*         Stop 20.000 GHz       #VBW 3.0 MHz*       #VBW 3.0 MHz*         Stop 20.000 GHz       #VBW 3.0 MHz*       #VBW 3.0 MHz*         Stop 20.000 GHz       #VBW 3.0 MHz*       #VBW 3.0 MHz*         Stop 20.000 GHz       #VBW 3.0 MHz*       #VBW 3.0 MHz*         Stop 20.000 GHz       #VBW 3.0 MHz*       #VBW 3.0 MHz*	9.8			10.0000000 GHz
RRes BW 1.0 MHz       #VBW 3.0 MHz*       Sweep 17.68 ms (20401 pts)       997.00000 0Hz         Image: Sweep 17.68 ms (20401 pts)       997.00000 0Hz       Man         Image: Sweep 17.68 ms (2040 pts)       997.00000 0Hz       Man         Image: Sweep 17.68 ms (2040 pts)       997.00000 0Hz       Man         Image: Sweep 17.68 ms (2040 pts)       997.00000 0Hz       Man         Image: Sweep 17.68 ms (2040 pts)       997.00000 0Hz       Man         Image: Sweep 17.68 ms (2040 pts)       997.00000 0Hz       Man         Image: Sweep 17.68 ms (2040 pts)       997.00000 0Hz       0Hz         Image: Sweep 17.68 ms (2040 pts)       997.00000 0Hz       997.00000 0Hz         Image: Sweep 17.68 ms (2040 pts)       997.00000 0Hz       997.00000 0Hz         Image: Sweep 17.68 ms (2040 pts)       12.44.13 MMOR 0Hz       997.00000 0Hz         Image: Sweep 17.68 ms (2040 pts)       12.44.13 MMOR 0Hz       988.86.000000         Image: Sweep 17.68 ms (2040 pts)       12.44.13 MMOR 0Hz       Next Peak         Image: Sweep 17.68 ms (2040 pts)       12.44.13 MMOR 0Hz       Next Pk Right         Image: Sweep 17.68 ms (2040 pts)       12.44.13 MMOR 0Hz       Next Pk Right         Image: Sweep 17.68 ms (2040 pts)       12.44.13 MMOR 0Hz       Next Pk Left         Image: Sweep 17.68 ms (2040 pts)	Start 30 MHz		Stop 10.000 GHz	CF Step
Display Line (Ket)       Z       A       I       A       A       I       A       A       I       I       A       A       I       I       A	#Res BW 1.0 MHz	#VBW 3.0 MHz*	Sweep 17.68 ms (20401 pts)	997.000000 MHz
N       i       1348 2 GHz       402222 dBm         I       102222 dBm       0Hz         I       I       0Hz         I       I       I         I	MOR MODEL TRC SCL	2 007 4 GHz 10 899 dBm	UNCTION FUNCTION WIDTH FUNCTION VALUE	Man Man
Image: Start 1     Image: Start	2 N 1 f	1.948 2 GHz -40.242 dBm		Freg Offset
Image: Addition dealyser     Addition dealyser     Addition dealyser     Addition dealyser       Image: Addition dealyser     Addition dealyser     Addition dealyser     Addition dealyser       Image: Addition dealyser     Addition dealyser     Addition dealyser     Peak Search       Image: Addition dealyser     Addition dealyser     Addition dealyser     Peak Search       Image: Addition dealyser     Marker 1 19,860 00 GHz     Peak Search       Image: Addition dealyser     Marker 1 19,860 0 GHz     Next Peak       Image: Addition dealyser     Addition dealyser	4			0 Hz
Image: Section Analyse - AF20X231277775000     Image: Section Analyse - AF20X231277775000       Image: Section Analyse - AF20X231277775000     Image: Section Analyse - AF20X231277775000       Image: Section Analyse - AF20X231277775000     Image: Section Analyse - AF20X231277775000       Image: Section Analyse - AF20X231277775000     Image: Section Analyse - AF20X231277775000       Image: Section Analyse - AF20X231277775000     Image: Section Analyse - AF20X231277775000       Image: Section Analyse - AF20X231277775000     Image: Section Analyse - AF20X231277775000       Image: Section Analyse - AF20X231277775000     Image: Section Analyse - AF20X231277775000       Image: Section Analyse - AF20X231277775000     Image: Section Analyse - AF20X231277775000       Image: Section Analyse - AF20X231277775000     Image: Section Analyse - AF20X231277775000       Image: Section Analyse - AF20X231277775000     Image: Section Analyse - AF20X231277775000       Image: Section Analyse - AF20X231277775000     Image: Section Analyse - AF20X231277775000       Image: Section Analyse - AF20X2312777775000     Image: Section Analyse - AF20X2312777775000       Image: Section Analyse - AF20X2312777775000     Image: Section Analyse - AF20X2312777775000       Image: Section Analyse - AF20X2312777775000     Image: Section Analyse - AF20X2312777775000       Image: Section Analyse - AF20X2312777775000     Image: Section Analyse - AF20X2312777775000       Image: Section Analyse - AF20X2312777775000     Image: Section Analyse - AF20X230000000	6		1	
Compared Spectrum Andigue - APC0A 223 2279 (25002)     Compared Spectrum Andigue - APC0A 223 2270 (25002)     Compar	8			
signed Spectra Additional and a second additional additionadditionadditional additional additional additional additional	10			
Image: space of the s				
Bit Style         Marker 1 19.860000000000 GHz         Stillstein         Austrantion         Peak Search           Arright         Austrantion         Trace [1:3:4:4:10000         Trace [1:3:4:4:10000         Peak Search           Barker 1 19.860000000000 GHz         Trig: Free Run         Austrantion         Trace [1:3:4:4:10000         Peak Search           Barker 1 19.860000000000 GHz         Trig: Free Run         Austrantion         Trace [1:3:4:4:10000         Peak Search           0 dB/dv         Ref Offset 40.19 dB         Mkr1 19.860 0 GHz         Next Peak           0 dB/dv         Ref 20.19 dB         -42.900 dBm         Next Peak           0 dB/dv         Ref 20.19 dB         -42.900 dBm         Next Peak           0 dB/dv         Ref 20.19 dB         -42.900 dBm         Next Peak           0 dB/dv         Ref 20.19 dB         -42.900 dBm         Next Peak           0 dB/dv         Ref 20.19 dB         -42.900 dBm         Next Peak           0 dB/dv         Ref 20.19 dBm         -42.900 dBm         Next Peak           0 dB/dv         -42.900 dBm         -42.900 dBm         Next Peak           0 dB         -42.900 dBm         -42.900 dBm         Next Peak           0 dB         -40.90 dBm         -40.90 dBm         Next Peak	sg		STATUS	
Rarker 1 19.860000000000 CHz         Charker 1 19.860000000000 CHz         Charker 1 19.8600000000000 CHz         Charker 1 19.8600000000000 CHz         Charker 1 19.8600000000000 CHz         Peak Search         Peak Search         Next Peak           PGL/H         FGL/H         Train Free Run         Arg/Prier RUE         FGL/H         Next 19.8600 CHz         Peak Search         Next Peak           0 GE/div         Ref Offset 40 19 dB         Mkr1 19.860 0 CHZ         Next Peak         Next Peak           0 GE/div         Ref 20.19 dB	Keysight Spectrum Analyzer - AP2024.2.	23,22797/85502,	4100 AUTO 1104413 010-10 305-	
PHO: Fast     Fig: Prevent     Avgride: 100100     Percent for the fast of the fas	arker 1 19.860000000	000 GHz	#Avg Type: RMS TRACE 12:3456	Peak Search
Ref Offset 40.19 dB dB/dv Ref 20.19 dBm -42.900 dBm Next Pe k Next Pk Right Next Pk Left Marker Deta art 10.000 GHz Ref 20.19 dBm Next Pk Right Next Pk Left Marker Deta		PNO: Fast Trig: Free Run IFGain:High #Atten: 0 dB	Avginoid: 100/100 TIPELA WWWWW DET A NNNNN	
0 481div Ref 20.19 dBm - 42.900 dBm Next Pk Right	Ref Offset 40.19 d	iB	Mkr1 19.860 0 GHz	Next Peak
Image: Constraint of the second se	dB/div Ref 20.19 dBm	1	-42.900 dBm	
1100     Next Pk Right       101     Next Pk Left       102     Next Pk Left       103     Next Pk Left       104     Next Pk Left       105     Next Pk Left       106     Next Pk Left       107     Next Pk Left       108     Next Pk Left       109     Next Pk Left       100     Stop 20.200 GHz	10.2			
001     001       100     001       201     001       202     001       203     001	0.190			Next Pk Right
198	9.81			
Next PK Left Next PK Left Marker Delta Marker Delta	19.8		+	No. 4 Division
Marker Detta	29.8		1	Next Pk Left
Marker Detta	-39.8		-40.00	
Start 10,000 GHz Stop 20,200 GHz	49.8			Markey Dob
Start 10,000 GHz Stop 20,200 GHz His of	69.8			Marker Delta
Start 10.000 GHz Stop 20.200 GHz	03.0			
	Start 10.000 GHz		Stop 20.200 GHz	Mike of
	1 N 1 f	x 19.860 0 GHz -42.900 dBm	UNCTION FUNCTION WIDTH FUNCTION VALUE	
N 1 f 19.860 GHz 42.900 GHz 42.900 GHz	2 3			Mkr. Baflad
2 3 4 1 1 1 1 19.880 0 GHz 42.900 dBm	4 5			MKr→KerLVI
2 N 1 f 19.860 0 GHz 42.900 dBm 2 3 3 5	6 7		1	
2004 Loop Loop Loop Loop Loop Loop Loop Loo	8			More
20 Loca Loca Loca Loca Loca Loca Loca Loca	10			1 of 2
2 Control to the test of	*		*	
Control No         Control	MSG		STATUS	
N         f         19.860 0 GHz         42.900 dBm         20/4/0/1         20/4/0/4         20/4/0/4         20/4/0/4         20/4/0/4         1         MkrRefLvi         MkrRefLvi         MkrRefLvi         MkrRefLvi         More 1 of 2         1         0         1         1         1         1         1         1         1         1         1 <th1< th=""> <th1< th=""> <th1< th=""> <!--</td--><td>56 1</td><td>VR N70 OPSK</td><td>5M RB25-0 High Ch</td><td></td></th1<></th1<></th1<>	56 1	VR N70 OPSK	5M RB25-0 High Ch	
N         1         19.860 0 GHz         42.900 dBm         20/4/0/1         20/4/0/4         20/4/0/4         MkrRefLvl           2         -	101			1

Page 39 of 99

## 9.4. FREQUENCY STABILITY

#### TEST PROCEDURE

ANSI C63.26:2015 Section 5.6

- Temp. =  $0^{\circ}$ C to + $50^{\circ}$ C
- Voltage = (85% 115%)

Low voltage, 102VDC, Normal, 120VAC and High voltage, 138VAC.

#### Frequency Stability vs Temperature:

The EUT is place inside a temperature chamber. The temperature is set to 20°C and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10 degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until +50°C is reached.

#### Frequency Stability vs Voltage:

The peak frequency error is recorded (worst-case).

#### **RESULTS**

See the following pages.

Test Engineer ID:	22797/85502	Test Date:	2024-10-09; 2024-10-10
-------------------	-------------	------------	------------------------

Page 40 of 99

### 9.4.1. LTE BAND 30 & 5G NR N30

#### <u>LIMITS</u>

FCC: §27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

#### LTE BAND 30 QPSK (10MHz BANDWIDTH)

Band	30	Frequen	cy Range		Limit	
Conditi		2350	2360	Frequency		
Conditi	on	Freq Reading	Freq Reading	Reading	Within	
Temperature	Voltage	(MHz)	(MHz)	(Hz)	Authorized Frequency Block	
Normal (20°C)		2350.1941	2359.8059		(Hz)	
Extreme (50°C)		2350.1953	2359.8071	1187	Yes	
Extreme (40°C)	Normal	2350.1929	2359.8047	-1227	Yes	
Extreme (30°C)	Normai	2350.1963	2359.8081	2227	Yes	
Extreme (10°C)		2350.1966	2359.8084	2461	Yes	
Extreme (0°C)		2350.1960	2359.8078	1926	Yes	
		· · · · · · · · · · · · · · · · · · ·				
20%C	15%	2350.1928	2359.8046	-1269	Yes	
20 C	-15%	2350.1954	2359.8072	1324	Yes	

Page 41 of 99

#### 5G NR N30 QPSK (5MHz BANDWIDTH)

Band	30	Frequen	cy Range		Limit	
Conditi	- m	2350	2360	Frequency		
Conditi	on	Freq Reading	Freq Reading	Reading	Within	
Temperature	Voltage	(MHz)	(MHz)	(Hz)	Authorized Frequency Block	
Normal (20°C)		2350.2255	2359.1725		(Hz)	
Extreme (50°C)		2350.2221	2359.1691	-3384	Yes	
Extreme (40°C)	Namal	2350.2204	2359.1674	-5066	Yes	
Extreme (30°C)	Norman	2350.2214	2359.1684	-4119	Yes	
Extreme (10°C)		2350.2213	2359.1683	-4169	Yes	
Extreme (0°C)		2350.2211	2359.1681	-4429	Yes	
20°C	15%	2350.2179	2359.1649	-7564	Yes	
20 C	-15%	2350.2203	2359.1673	-5185	Yes	

Page 42 of 99

### 9.4.2. LTE BAND 70 & 5G NR N70

#### <u>LIMITS</u>

FCC: §27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block

#### LTE BAND 70 QPSK (10MHz BANDWIDTH)

Band	70	Frequen	cy Range		Limit		
Conditi		1995	1995 2020				
Conditi	on	Freq Reading	Freq Reading	Reading	Within		
Temperature	Voltage	(MHz)	(MHz)	(Hz)	Authorized		
Normal (20°C)		1995.2284	2009.7784		(Hz)		
Extreme (50°C)		1995.2327	2009.7827	4267	Yes		
Extreme (40°C)	Normal	1995.2268	2009.7768	-1646	Yes		
Extreme (30°C)	Normai	1995.2295	2009.7795	1050	Yes		
Extreme (10°C)		1995.2287	2009.7787	286	Yes		
Extreme (0°C)		1995.2316	2009.7816	3169	Yes		
		·		•			
20%C	15%	1995.2299	2009.7799	1523	Yes		
20°C	-15%	1995.2357	2009.7857	7348	Yes		

Page 43 of 99

#### 5G NR N70 QPSK (5MHz BANDWIDTH)

Band	70	Frequen	cy Range		Limit		
Conditi		1995 2020		Frequency			
Conditi	on	Freq Reading	Freq Reading	Reading	Within		
Temperature	Voltage	(MHz)	(MHz)	(Hz)	Authorized		
Normal (20°C)		1995.2147	2009.7824		(Hz)		
Extreme (50°C)		1995.2042	2009.7719	-10482	Yes		
Extreme (40°C)	Normal	1995.2039	2009.7716	-10794	Yes		
Extreme (30°C)	Normai	1995.2071	2009.7748	-7645	Yes		
Extreme (10°C)		1995.2065	2009.7742	-8178	Yes		
Extreme (0°C)		1995.2061	2009.7738	-8649	Yes		
20%C	15%	1995.2065	2009.7742	-8196	Yes		
2010	-15%	1995.2070	2009.7747	-7734	Yes		

Page 44 of 99

# **10. RADIATED TEST RESULTS**

#### Radiated measurement using the Field Strength Method

Using the test configuration shown in Figure 6 below, We measure the radiated emissions directly from the EUT and convert the measured field strength or received power to ERP or EIRP, as required, for comparison to the applicable limits. As stated in 5.5.1 of ANSI C63.26-2015, the field strength measurement method using a test site validated to the requirements of ANSI C63.4 is an alternative to the substitution measurement method.



Figure 6 — Test site-up for radiated ERP and/or EIRP measurements

#### Radiated Power Measurement Calculation According to ANSI C63.26-2015

a) E (dB $\mu$ V/m) = Measured amplitude level (dB $\mu$ V) + Cable Loss (dB) + Antenna Factor (dB/m).

b) E (dBµV/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m).

c) E (dB $\mu$ V/m) = EIRP (dBm) – 20log(D) + 104.8; where D is the measurement distance (in the far field region) in m.

d) EIRP (dBm) = E (dBµV/m) + 20log(D) - 104.8; where D is the measurement distance (in the far field region) in m.

So, from d)

The measuring distance is usually at 3m, then 20\*Log(3)=9.5424

Then, EIRP (dBm) = E (dB $\mu$ V/m) + 9.5424 - 104.8 = E (dB $\mu$ V/m) - 95.2576

Page 45 of 99

# 10.1. FIELD STRENGTH OF SPURIOUS RADIATION, ABOVE 1GHz

#### TEST PROCEDURE

FCC KDB 971168 D01 /D02

All measurements above 1GHz were done with a Resolution Bandwidth of 1MHz, and a Video Bandwidth of 3MHz.

#### **RESULTS**

Page 46 of 99

### 10.1.1. LTE BAND 30 & 5G NR N30

#### <u>LIMITS</u>

FCC: §27.53 (a)

By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, and not less than 75 + 10 log (P) dB on all frequencies between 2320 and 2345 MHz.

Note: Due to proximity of the emission limit to the noise floor, A Reduced Video Bandwidth range was run at >6GHz to confirm no emissions were visible.

#### **RESULTS**

Page 47 of 99

#### LTE Band 30





Page 48 of 99

#### REPORT NO: R15343302-E1 EUT MODEL: FalcoNET

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	86408 (dB/m)	Gain/Loss (dB)	CF (dB)	Gain/Loss (dB)	Corrected Reading dBm	-45dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	1.90875	-75.79	Pk	31	-22.3	11.8	.9	-54.39	-45	-9.39	0-360	299	V
3	1.96125	-75.35	Pk	31.3	-22.3	11.8	1.1	-53.45	-45	-8.45	0-360	100	Н
2	2.13119	-77.2	RMS	32	-22.9	11.8	1.5	-54.8	-45	-9.8	360	166	V
1	2.2141	-84.09	RMS	32	-23	11.8	1.9	-61.39	-45	-16.39	157	323	Н
5	4.50375	-78.5	Pk	33.9	-20.1	11.8	.7	-52.2	-45	-7.2	0-360	299	V
6	4.51375	-77.1	Pk	33.9	-20.4	11.8	.7	-51.1	-45	-6.1	0-360	199	Н

Pk - Peak detector

RMS - RMS detection

Page 49 of 99





Page 50 of 99

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	86408 (dB/m)	Gain/Loss (dB)	CF (dB)	Gain/Loss (dB)	Corrected Reading dBm	- 45dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	1.19625	-74.74	Pk	28.7	-23.4	11.8	.7	-56.94	-45	-11.94	0-360	199	V
1	1.27625	-76.04	Pk	29.4	-23.1	11.8	.7	-57.24	-45	-12.24	0-360	200	Н
4	2.22204	-78.55	RMS	32	-23	11.8	1.9	-55.85	-45	-10.85	0	231	V
3	2.21774	-80.36	RMS	32	-23	11.8	1.9	-57.66	-45	-12.66	352	321	Н
6	5.53625	-75.12	Pk	34.6	-23.1	11.8	.5	-51.32	-45	-6.32	0-360	299	V
5	5.50194	-84.8	RMS	34.5	-23.3	11.8	.5	-61.3	-45	-16.3	311	367	Н

Pk - Peak detector

RMS - RMS detection

Page 51 of 99

### Tx Port 3



Page 52 of 99

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	86408 (dB/m)	Gain/Loss (dB)	CF (dB)	Gain/Loss (dB)	Corrected Reading dBm	- 45dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	1.7925	-75.96	Pk	30.4	-22.1	11.8	.7	-55.16	-45	-10.16	0-360	201	Н
4	1.91625	-76.29	Pk	31.1	-22.1	11.8	.9	-54.59	-45	-9.59	0-360	300	V
1	2.20871	-80.46	RMS	32	-23	11.8	1.9	-57.76	-45	-12.76	326	104	Н
5	2.17785	-71.52	RMS	32	-23.1	11.8	1.9	-48.92	-45	-3.92	5	133	V
2	4.67383	-88.2	RMS	34.1	-21	11.8	.6	-62.7	-45	-17.7	208	325	Н
6	5.56738	-85.96	RMS	34.6	-23.2	11.8	.5	-62.26	-45	-17.26	351	188	V

Pk - Peak detector, RMS - RMS detection

Page 53 of 99

#### <u>5G NR N30</u>

### TX Port 1



Page 54 of 99

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	86408 (dB/m)	Gain/Loss (dB)	CF (dB)	Gain/Loss (dB)	Corrected Reading dBm	- 45dBm	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.15509	-79.08	RMS	32	-22.5	11.8	1.8	-55.98	-45	-10.98	162	106	Н
4	2.13833	-69.17	RMS	32	-22.7	11.8	1.6	-46.47	-45	-1.47	358	128	V
5	3.705	-75.7	Pk	33.1	-22.1	11.8	.5	-52.4	-45	-7.4	0-360	199	V
2	4.32181	-85.47	RMS	33.5	-20.5	11.8	.4	-60.27	-45	-15.27	90	133	Н
6	4.88875	-76.34	Pk	34.1	-21.2	11.8	.5	-51.14	-45	-6.14	0-360	199	V
3	5.85575	-83.57	RMS	34.9	-23	11.8	.5	-59.37	-45	-14.37	333	148	Н

Pk - Peak detector

RMS - RMS detection

Page 55 of 99