

# TEST REPORT

**Report Number:** 14561665-E1V2

**Applicant :** COGNYTE SOFTWARE LP  
35 PINELAWN ROAD, SUITE 204  
MELVILLE, NEW YORK 11747, USA

**Model :** SERIES03 BOX

**Brand :** COGNYTE

**FCC ID :** 2A7A2-S3

**EUT Description :** PORTABLE TDD BTS

**Test Standard(s) :** FCC CFR 47 Part 27

**Date Of Issue:**  
2023-02-23

**Prepared by:**  
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Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
V1	2023-02-07	Initial Review	--
V2	2023-02-23	Updated Section 6.2 and 6.3 antenna gain	Tina Chu

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# 1. ATTESTATION OF TEST RESULTS

Applicant Name and Address	COGNYTE SOFTWARE LP 35 PINELAWN ROAD, SUITE 204 MELVILLE, NEW YORK 11747, USA
Model	SERIES03 BOX
Brand	COGNYTE
FCC ID	2A7A2-S3
EUT Description	PORTABLE TDD BTS
Serial Number	21VM2447926
Sample Receipt Date	2023-01-19
Date Tested	2023-01-19 to 2023-01-23
Applicable Standards	FCC CFR 47 PART 27
Test Results	COMPLIES

UL Verification Services Inc. 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 Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, any agency of the Federal Government, or any agency of the U.S. government.

Approved & Released By:	Reviewed By:	Prepared By:
		
Dan Corona Operations Leader UL Verification Services Inc.	Tina Chu Senior Project Engineer UL Verification Services Inc.	Glenn Escano Senior Test Engineer UL Verification Services Inc.

## 2. SUMMARY OF TEST RESULTS

This report contains data provided by the customer which can impact the validity of results. UL Verification Services Inc. is only responsible for the validity of results after the integration of the data provided by the customer.

Below is a list of the data provided by the customer:

1. Antenna gain and type (see section 6.4)

Requirement Description	Requirement Clause Number (FCC)	Result	Remarks
Equivalent Isotropic Radiated Power	27.50 (j) (2)	Complies	
Occupied Bandwidth	2.1049	Complies	
Band Edge and Emission Mask	2.1051, 27.53 (l) (1)	Complies	
Out of Band Emissions	2.1051, 27.53 (l) (1)	Complies	
Frequency Stability	2.1055, 27.54	Complies	
Peak-to-Average Ratio	27. (j) (4)	Complies	
Field Strength of Spurious Radiation	2.1051, 27.53 (l) (1)	Complies	

## 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
- [FCC KDB 971168 D01 v03r01](#): Power Meas License Digital Systems
- [FCC KDB 971168 D02 v02r01](#): Misc Rev Approv License Devices
- [FCC KDB 412172 D01 v01r01](#): Determining ERP and EIRP

## 4. FACILITIES AND ACCREDITATION

UL Verification Services Inc. is accredited by A2LA, certification #0751.05, 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
<input checked="" type="checkbox"/>	Building 1: 47173 Benicia Street, Fremont, CA 94538, USA	US0104	2324A	550739
<input type="checkbox"/>	Building 2: 47266 Benicia Street, Fremont, CA 94538, USA	US0104	2324A	550739
<input checked="" type="checkbox"/>	Building 4: 47658 Kato Rd, Fremont, CA 94538, USA	US0104	2324A	550739

## 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>
Worst Case Radiated Disturbance, 9KHz to 30 MHz	2.84 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	6.01 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.73 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.51 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.29 dB
Occupied Channel Bandwidth	±1.22 %
Temperature	±2.26%
Supply voltages	±0.57 %
Time	±3.39 %

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/m

#### MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.  
36.5 dBuV + 0 dB + 10.1 dB + 0 dB = 46.6 dBuV

## 6. EQUIPMENT UNDER TEST

### 6.1. DESCRIPTION OF EUT

The EUT Series03 Box is a portable TDD BTS 5G box supporting band n77.

### 6.2. MAXIMUM OUTPUT POWER

#### EIRP/ERP TEST PROCEDURE

ANSI C63.26:2015  
 KDB 971168 D01 Section 5.6

$$ERP/EIRP = P_{Meas} + GT - LC$$

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

P<sub>Meas</sub> = 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:

#### 5G NR n77 (FCC Part 27 3700-3980MHz) - Directional antenna with Tripod

Part 27								
EIRP Limit (W/MHz)		1640.00						
Antenna Gain (dBi)		13.00						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
20.0	QPSK	3711.36	3969.12	28.26	41.26	13.366	18292	18M3XXW



### 6.3. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was FW: v6.59. Software: SW: 58.2.168.

### 6.4. MAXIMUM ANTENNA GAIN

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

LTE Bands	Frequency Range (MHz)	Omni-Directional antenna with Magnetic Base Antenna Gain (dBi)	Directional antenna with Tripod Antenna Gain (dBi)
5G NR n77	3700-3980	1.5	13

### 6.5. WORST-CASE CONFIGURATION AND MODE

The EUT supports the following LTE and 5G NRs:  
5G NR n77.

All measurements are tested on QPSK modulation for 5G NR (20MHz BW only).

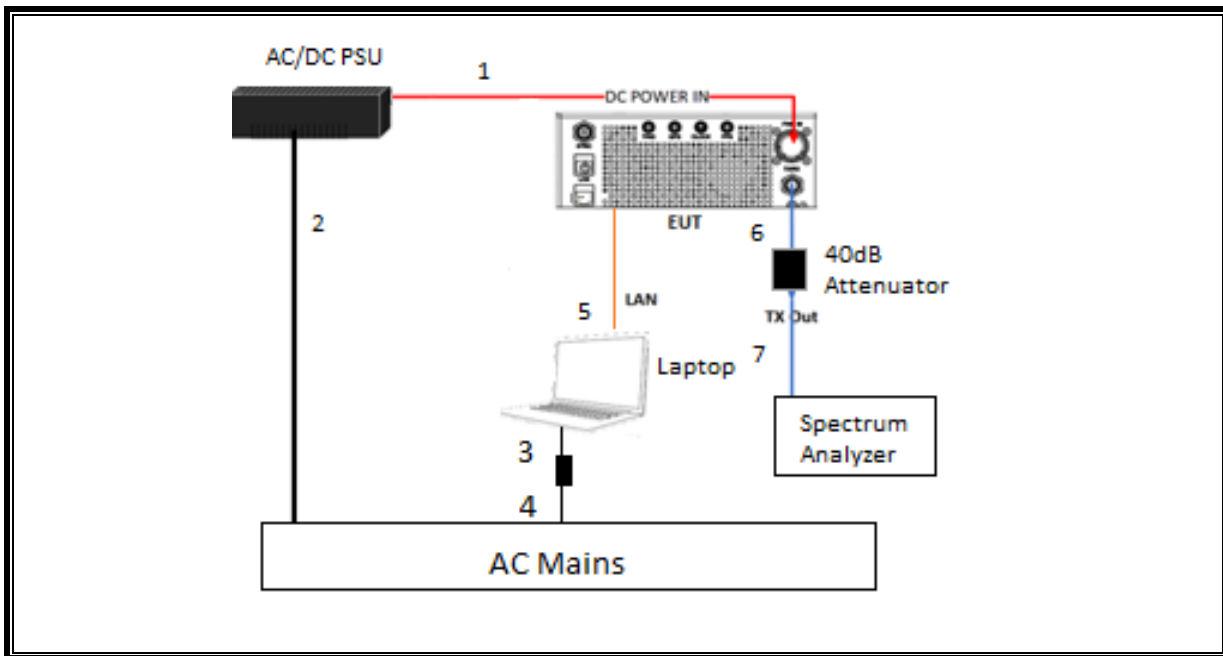
The full tests of the EUT was on the Directional antenna with Tripod as it has the highest antenna peak gain as the worst case. The EUT's antenna is set at default upright orientation; therefore, all radiated testing was performed with the antenna upright orientation. Radiated spurious emissions were investigated from 30MHz-1GHz, above 1GHz and above 18GHz.

Radiated spurious emissions were investigated from 9kHz to 30MHz, 30MHz-1GHz and 18GHz-40GHz. There were no emissions found with less than 20dB of margin from 9kHz to 30MHz, 30MHz-1GHz and 18GHz-40GHz.

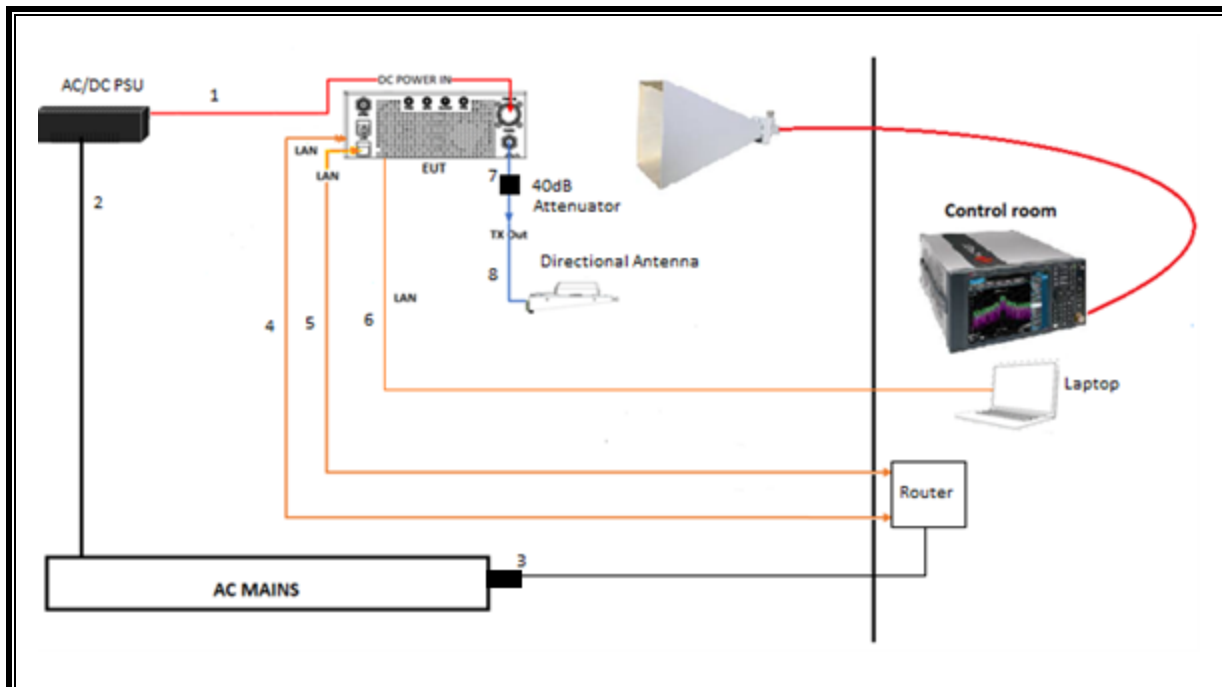
## 6.6. DESCRIPTION OF TEST SETUP

SUPPORT TEST EQUIPMENT						
Description	Manufacturer	Model	Serial Number	FCC ID/ DoC		
Laptop	Lenovo	ThinkPad T14 Gen 2, Intel Core i7	SL11D53347	DoC		
Laptop AC/DC adapter	Lenovo	ADLX65YAC3D	8SSA10R1696A1AWH	DoC		
EUT switching power adapter (Amphenol D38999/26ZC4BN, GFJ.3B.308.CLLD72Z)	FSP Group Inc.	FSP330-AAAN3	H2231000069	DoC		
40 dB Attenuator	Mini-Circuits	BW-40N100W+	VN118201621	DoC		
Router	ASUS	RT-AC56U	-	MSQ-RTAC56UA		
Router AC/DC adapter	ASUS	EZA1206UH	-	DoC		
Directional Panel Antenna	SIRIO	SMP 5G LTE	23-100-0037	DoC		
I/O CABLES (RF CONDUCTED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC DPSU	1	TE connectivity and Amphenol	Shielded	1	N/A
2	AC DPSU	1	AC power cord (3-Prong Grounded Male)	Unshielded	2	N/A
3	DC	1	USB Type C	Unshielded	1.8	N/A
4	AC	1	3-Prong Grounded Male	Unshielded	2	N/A
5	LAN	1	RJ-45	Shielded	3	N/A
6	RF In/Out	1	SMA cable	Shielded	0.5	N/A
7	Antenna Port	1	N-Type/M/ST	Shielded	3	N/A
I/O CABLES (RF RADIATED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC DPSU	1	TE connectivity and Amphenol	Shielded	1	To AC Mains
2	AC DPSU	1	AC power cord (3-Prong Grounded Male)	Unshielded	2	To EUT
3	AC/DC	1	2-Prong	Unshielded	2.5	To Router
4	LAN	1	RJ-45	Shielded	>3	From EUT to router
5	LAN	1	RJ-45	Shielded	>3	From EUT to router
6	LAN	1	RJ-45	Shielded	>3	From EUT to laptop EUT
7	RF In/Out	1	SMA cable	Shielded	0.5	
8	Antenna Port	1	N-Type/M/ST	Shielded	3	

**CONDUCTED SETUP**



**RADIATED SETUP**



## 7. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	Asset	Cal Due
Antenna, Passive Loop 30Hz - 1MHz	ELECTRO METRICS	EM-6871	219909	2023-05-10
Antenna, Passive Loop 100KHz - 30MHz	ELECTRO METRICS	EM-6872	219911	2023-05-10
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences Corp.	JB1	80813	2023-06-08
Amplifier, 9KHz to 1GHz, 32dB	SONOMA INSTRUMENT	310	175953	2023-02-08
RF Filter Box, 1-18GHz, 8 Port	FREMONT	SAC 8 port rf box 1	197920	2023-04-19
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	223083	2023-10-25
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	169927	2023-02-16
Antenna, Horn 18 to 26.5GHz	ARA	MWH-1826/B	172364	2023-03-08
Amplifier 18-26.5GHz, +5Vdc, 60dB min	AMPLICAL	AMP18G26.5-60	215705	2023-02-26
Antenna, Horn 26.5GHz to 40GHz	ARA	MWH-2640/B	81104	2023-12-05
Rf Amplifier, 26-40GHz Kit	AMPLICAL	AMP26G40-65	172345	2023-06-22
Environmental Chamber	Thermotron Industries	SE-600-10-10	79361	2024-01-04
PSA Series Analyzer, 3Hz – 26.5GHz	Keysight Technologies	E4440A	80386	2023-03-02
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight Technologies	N9030A	80396	2023-02-01
UL AUTOMATION SOFTWARE				
Radiated test software	UL	UL EMC	2022-07-06, 2021-04-28, 2020-11-09, 2022-05-18	

## 8. RF OUTPUT POWER VERIFICATION

### 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 with directional coupler 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 with directional coupler connected to a power meter via wideband peak power sensor. Peak output power was read directly from power meter.

### RESULTS

<b>Test Engineer ID:</b>	27966 PV	<b>Test Date:</b>	2023-01-19
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5G NR Band	SCS (kHz)	Bandwidth (MHz)	Modulation	Channel	Frequency (MHz)	Antenna Meas Conducted Avg Power (dBm)
n77 (3700-3980MHz)	15	20	QPSK	647424	3711.36	28.26
				655968	3839.52	27.62
				664608	3969.12	28.24

## 9. CONDUCTED TEST RESULTS

### 9.1. OCCUPIED BANDWIDTH

#### RULE PART(S)

FCC: §2.1049, §27.53

#### 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.

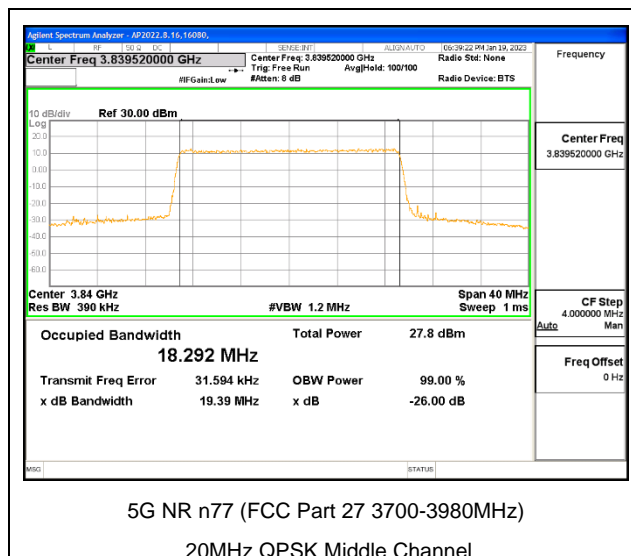
#### RESULTS

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

#### 5G NR n77(FCC Part 27 3700-3980MHz)

Antenna Type	Mode	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
Directional antenna with tripod	20MHz, QPSK	3839.52	18.292	19.39

<b>Test Engineer ID:</b>	27966 PV	<b>Test Date:</b>	2023-01-19
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## 9.2. BAND EDGE/EMISSION MASK AND ADJACENT CHANNEL POWER

For Spectrum Emission Mask plots, the Keysight PXA N9030A 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.

### TEST PROCEDURE

The transmitter output was configured to operate at maximum power. 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 dBm
4. Set resolution bandwidth to at least 1% of emission bandwidth.

### RESULTS

### 9.2.1. 5G NR n77 EMISSION MASK (FCC Part 27 3700-3980MHz)

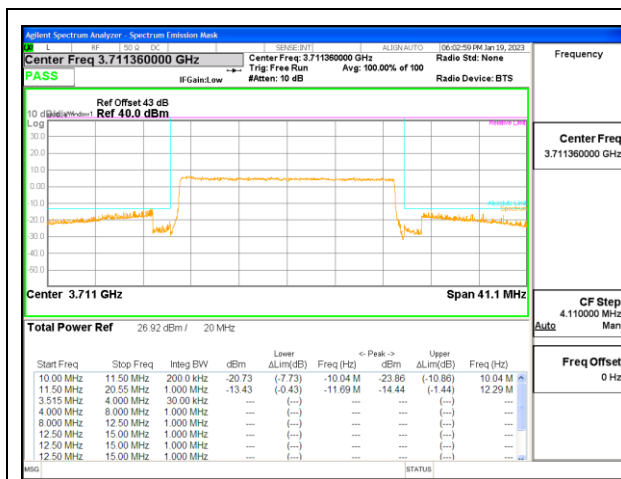
#### LIMITS

FCC: §27.53

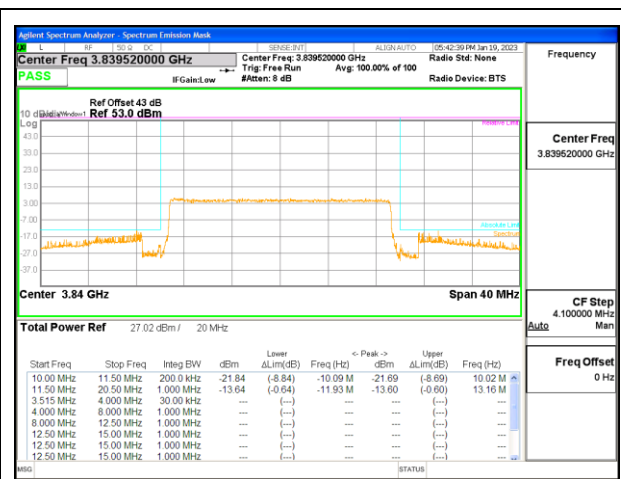
(l) (1) For base station operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (l)(1) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz 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.

#### Directional antenna with Tripod

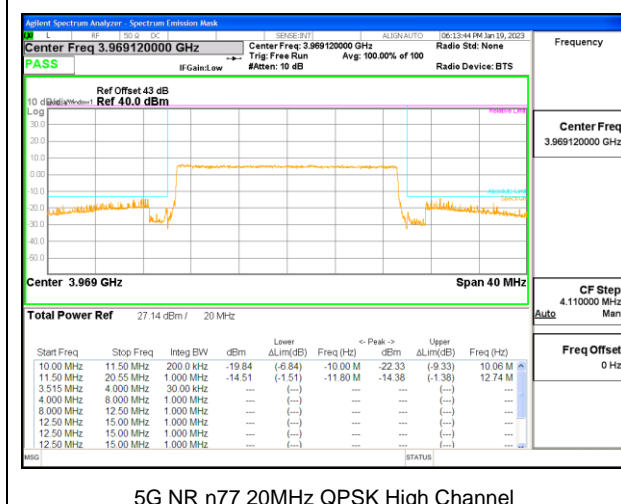
Test Engineer ID:	27966 PV	Test Date:	2023-01-19
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5G NR n77 20MHz QPSK Low Channel



5G NR n77 20MHz QPSK Mid Channel



5G NR n77 20MHz QPSK High Channel



### **9.3. OUT OF BAND EMISSIONS**

#### **TEST PROCEDURE**

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 in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

For each out of band emissions measurement:

- Set display line at -13 dBm 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)

#### **RESULTS**

### 9.3.1. 5G NR n77 (FCC Part 27 3700-3980MHz)

#### LIMITS

FCC: §27.53

(l) (1) For base station operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (l)(1) 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.

#### Directional antenna with Tripod

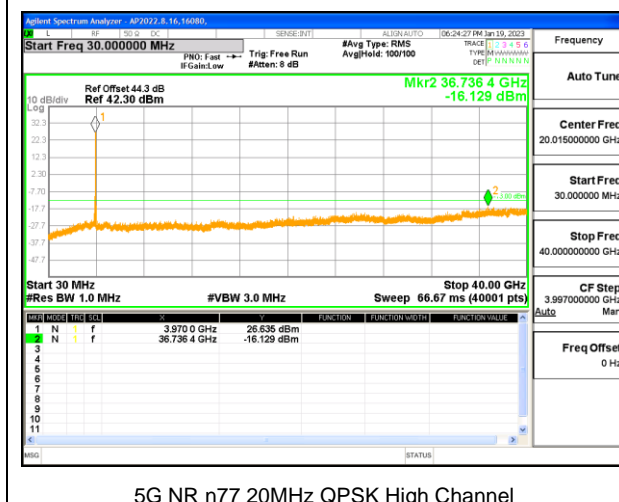
Test Engineer ID:	27966 PV	Test Date:	2023-01-19
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5G NR n77 20MHz QPSK Low Channel



5G NR n77 20MHz QPSK Mid Channel



5G NR n77 20MHz QPSK High Channel

## 9.4. FREQUENCY STABILITY

### TEST PROCEDURE

FCC §2.1055

- Temp. = 0°C to +50°C
- Voltage = (85% - 115%)

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

#### **Frequency Stability vs Temperature:**

The EUT is placed 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.

**9.4.1. 5G NR n77 (FCC Part 27 3700-3980MHz)**

**LIMITS**

FCC: §27.54

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

**5G NR n77 QPSK (20MHz BANDWIDTH)**

**Directional antenna with Tripod**

<b>Test Engineer ID:</b>	27966 PV	<b>Test Date:</b>	2023-01-19
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Band		77	Frequency Range		Limit	
Condition		3700	3980	NA		
Temperature	Voltage	Freq Reading @ Low End (MHz)	Freq Reading @ High End (MHz)	Frequency Stability (ppm)	Within Authorized Frequency Block (Hz)	
Normal (20°C)	Normal	3701.7907	3978.5208			
Extreme (50°C)		3702.0756	3978.5722	NA	Yes	
Extreme (40°C)		3702.1111	3978.3428	NA	Yes	
Extreme (30°C)		3702.1199	3978.4498	NA	Yes	
Extreme (10°C)		3701.5768	3979.0319	NA	Yes	
Extreme (0°C)		3701.4051	3979.1596	NA	Yes	
20°C		15%	3701.8350	3978.3901	NA	Yes
	-15%	3701.8369	3978.3926	NA	Yes	

## 9.5. PEAK-TO-AVERAGE POWER RATIO

### 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.

### RESULT

The results from all CCDF measurements are passed with 13dB peak-to-average power ratio criteria.

#### 9.5.1. 5G NR n77 (FCC Part 27 3700-3980MHz)

##### Directional antenna with Tripod

Test Engineer ID:	27966 PV	Test Date:	2023-01-19
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## 10. RADIATED TEST RESULTS

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

#### TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r01

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

#### RESULTS

Only QPSK and 20MHz bandwidth is tested.

### 10.1.1. 5G NR n77 (FCC Part 27 3700-3980MHz)

#### LIMITS

FCC: §27.53

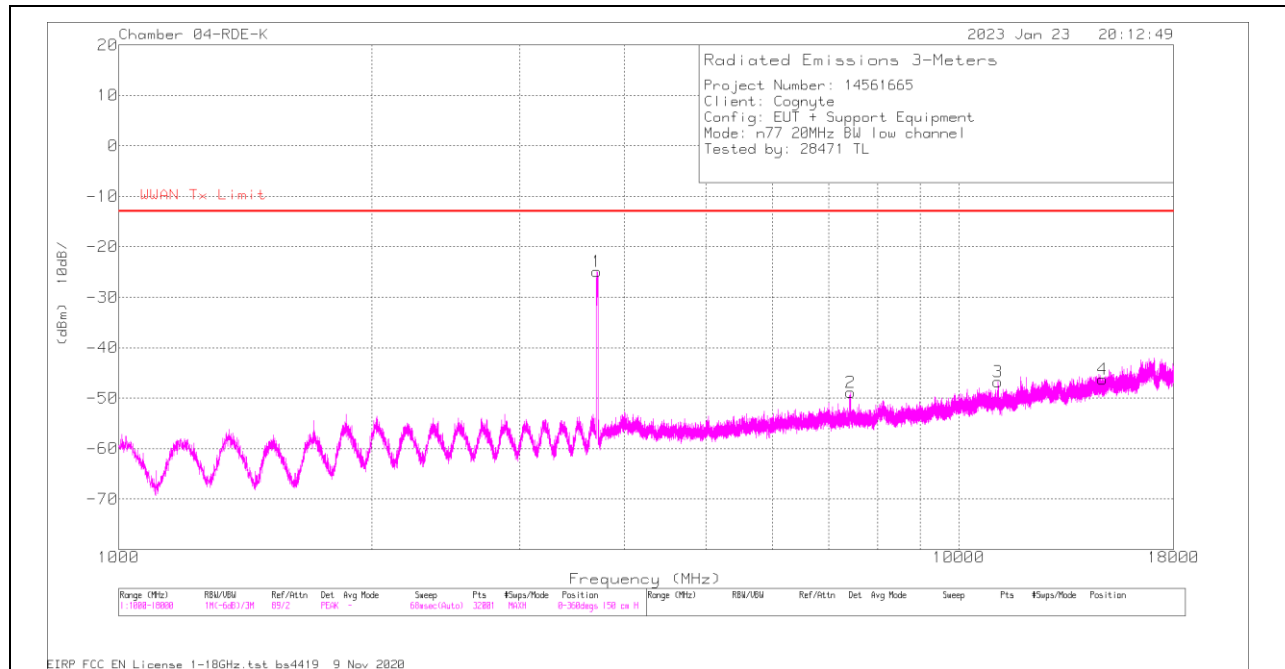
Emission limits

(l) 3.7 GHz Service. The following emission limits apply to stations transmitting in the 3700-3980 MHz band:

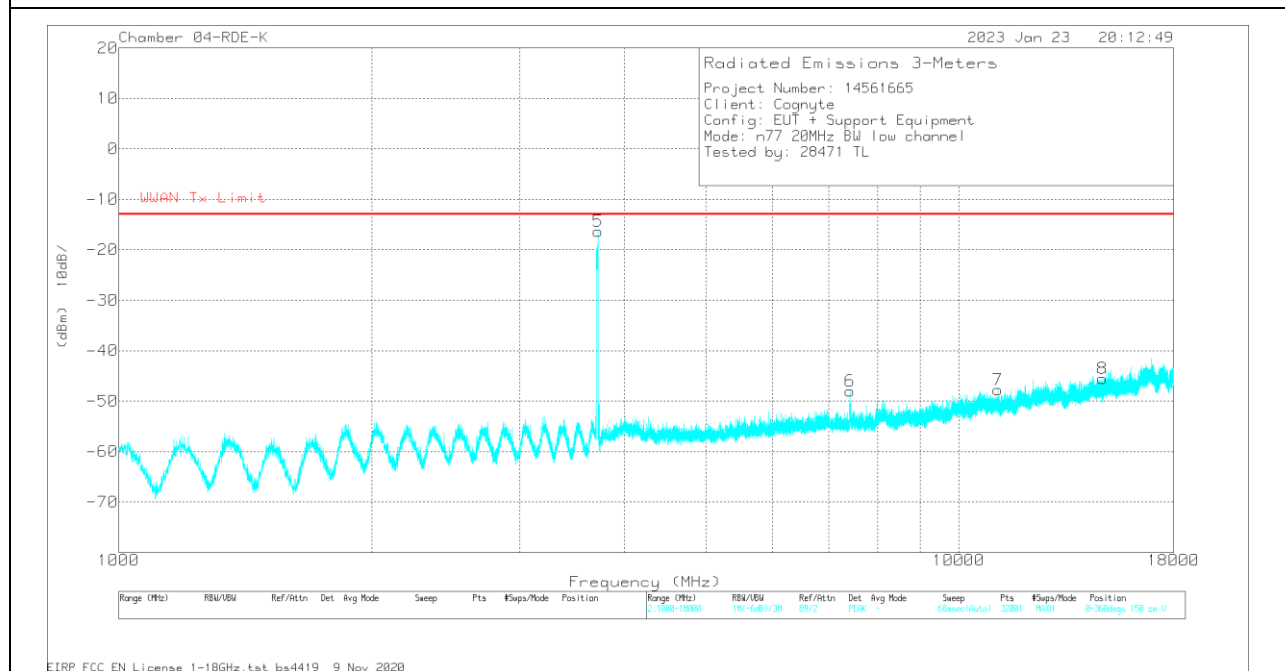
(1) The minimum permissible conducted power of emissions is -13dBm/MHz.

**5G NR n77 QPSK (20.0MHZ BANDWIDTH)**

**LOW CHANNEL RESULTS**



**HORIZONTAL**



**VERTICAL**



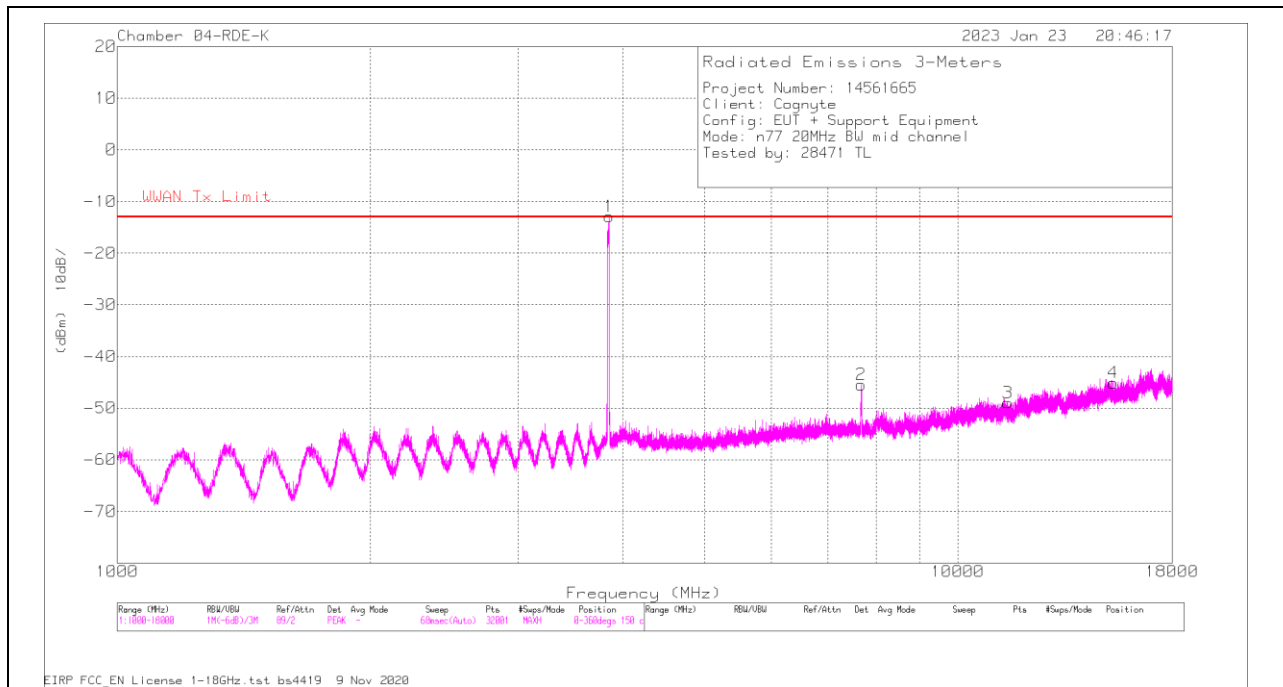
### Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB) 3mH	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	WWAN Tx Limit (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	7426	48.66	Pk	35.7	-38	-95.2	-48.84	-13	-35.84	0-360	150	H
3	11130.938	47.2	Pk	38	-36.8	-95.2	-46.8	-13	-33.8	0-360	150	H
4	14828.969	43.97	Pk	40	-35	-95.2	-46.23	-13	-33.23	0-360	150	H
6	7416.438	49.51	Pk	35.7	-38	-95.2	-47.99	-13	-34.99	0-360	150	V
7	11130.938	46.25	Pk	38	-36.8	-95.2	-47.75	-13	-34.75	0-360	150	V
8	14817.813	44.73	Pk	40	-35	-95.2	-45.47	-13	-32.47	0-360	150	V

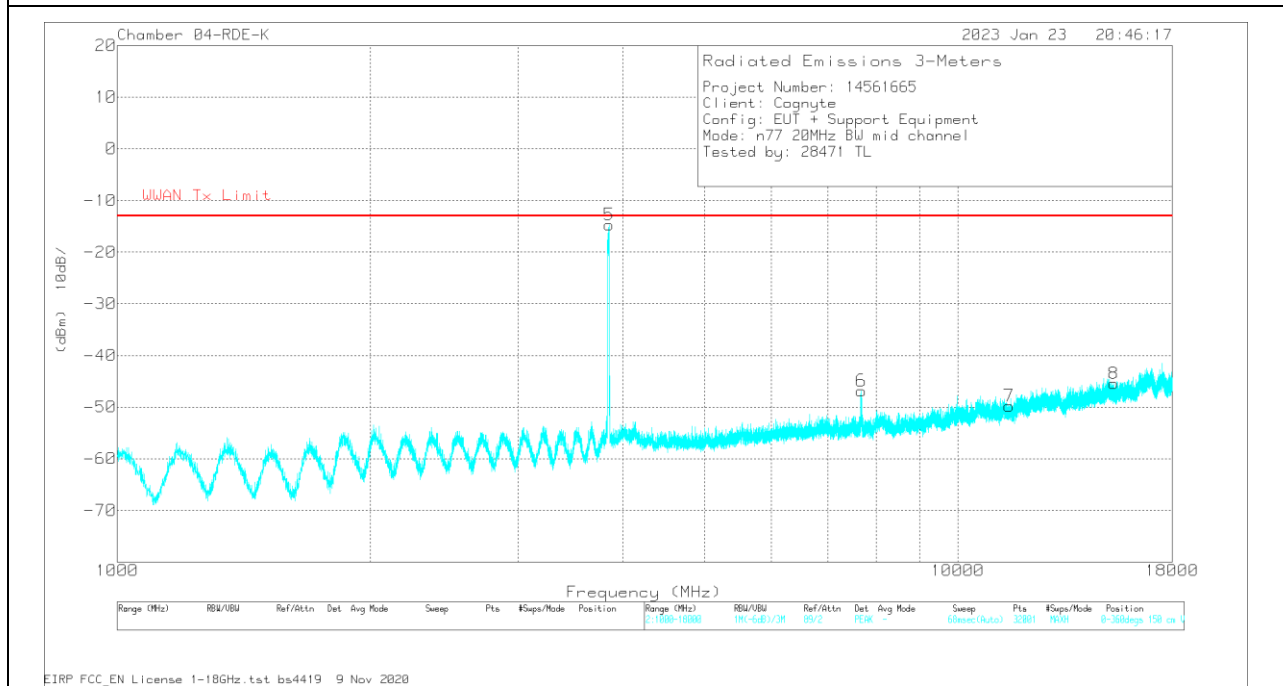
Pk - Peak detector

Marker 1 and marker 5 are fundamental signals.

### MID CHANNEL RESULTS



### HORIZONTAL



### VERTICAL

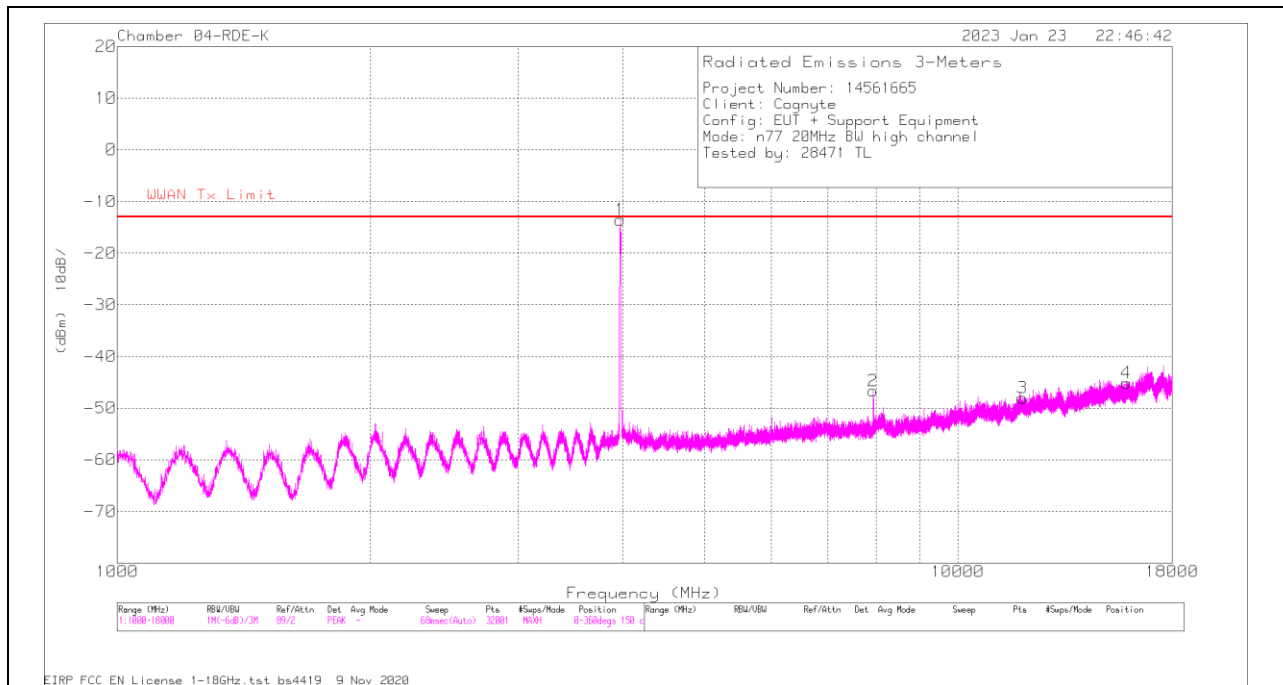
## Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB) 3mH	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	WWAN Tx Limit (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	7676.219	52.33	Pk	35.8	-38.4	-95.2	-45.47	-13	-32.47	0-360	150	H
3	11471.469	44.44	Pk	37.9	-36.1	-95.2	-48.96	-13	-35.96	0-360	150	H
4	15310.813	43.49	Pk	40.1	-33.5	-95.2	-45.11	-13	-32.11	0-360	150	H
6	7680.469	50.83	Pk	35.8	-38.3	-95.2	-46.87	-13	-33.87	0-360	150	V
7	11513.969	43.52	Pk	37.9	-36	-95.2	-49.78	-13	-36.78	0-360	150	V
8	15342.156	43.57	Pk	40.1	-33.9	-95.2	-45.43	-13	-32.43	0-360	150	V

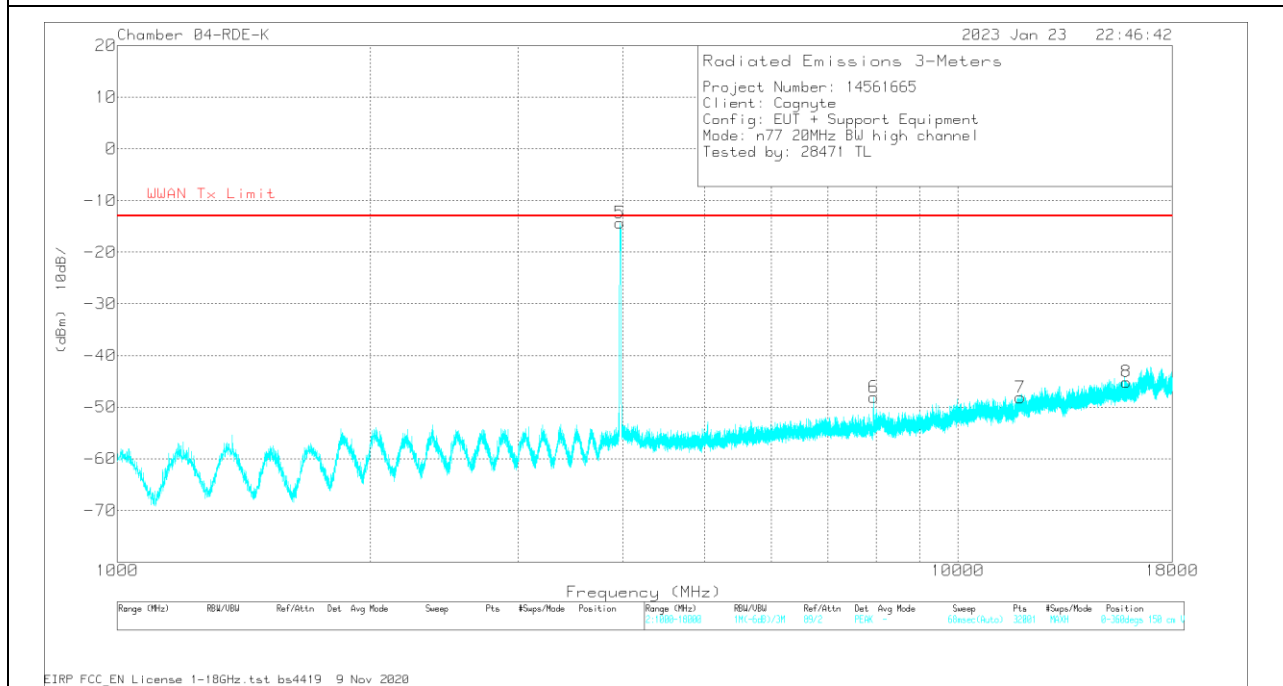
Pk - Peak detector

Marker 1 and marker 5 are fundamental signals.

### HIGH CHANNEL RESULTS



### HORIZONTAL



### VERTICAL

### Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	223083 ACF (dB) 3mH	Amp/Cbl (dB)	EIRP CF	Corrected Reading (dBm)	WWAN Tx Limit (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	7933.344	50.73	Pk	35.8	-38	-95.2	-46.67	-13	-33.67	0-360	150	H
3	11938.969	43.98	Pk	38.5	-35.3	-95.2	-48.02	-13	-35.02	0-360	150	H
4	15876.594	43.55	Pk	40.2	-33.7	-95.2	-45.15	-13	-32.15	0-360	150	H
6	7940.25	49.32	Pk	35.8	-38	-95.2	-48.08	-13	-35.08	0-360	150	V
7	11873.094	44.06	Pk	38.4	-35.4	-95.2	-48.14	-13	-35.14	0-360	150	V
8	15864.906	43.28	Pk	40.2	-33.4	-95.2	-45.12	-13	-32.12	0-360	150	V

Pk - Peak detector

Marker 1 and marker 5 are fundamental signals.