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Radio Test report – Radio 4471 B30

Report ID
REP037319

Project ID
PRJ0054979

Applicant:
Ericsson AB

Product name:
Radio Unit

Model (PMN):
Radio 4471 B30

Part number:
KRC 161 4430/31

FCC Identifier
FCC ID: TA8AKRC1614430

ISED certification number:
IC: 287AB-AS1614430

HVIN:
AS1614430

Requirements/Summary:

Standard	Environmental phenomenon	Compliance
FCC 47 CFR Part 27	Miscellaneous wireless communications services	Yes
RSS-195 Issue 2, Apr 24, 2014	Wireless Communication Service (WCS) Equipment Operating in the Bands 2305-2320 MHz and 2345-2360 MHz	Yes

Date of issue: May 23, 2024

Nimish Kapoor, EMC/RF Test Specialist

Tested by

Signature

Sarveshkumar Patel, EMC/RF Test Specialist

Tested by

Signature

David Duchesne, Senior EMC/Wireless Specialist

Reviewed by

Signature

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The tests included in this report are within the scope of this accreditation.
The ANAB symbol is an official symbol of the ANSI National Accreditation Board, used under licence.

ANAB File Number: AT-3195 (Ottawa/Almonte); AT-3193 (Pointe-Claire); AT-3194 (Cambridge)



Two test locations

Company name	Nemko Canada Inc.	
Address	303 River Road	349 Terry Fox
City	Ottawa	Ottawa
Province	Ontario	Ontario
Postal code	K1V 1H2	K2K 2V6
Country	Canada	Canada
Telephone	+1 613 737 9680	+1 613 963 8000
Facsimile	+1 613 737 9691	
Toll free	+1 800 563 6336	
Website	www.nemko.com	
Site number	FCC test site registration number: CA2040, IC: 2040A-4 (3 m semi anechoic chamber)	

Limits of responsibility

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.

This test report has been completed in accordance with the requirements of ISO/IEC 17025. All results contain in this report are within Nemko Canada's ISO/IEC 17025 accreditation.

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Section 1. Report summary

1.1 Applicant

Company name	Ericsson AB
Address	PEU Radio Torshamnsgatan 23, Stockholm, Sweden 164 80

1.2 Manufacturer

Company name	Ericsson Canada Inc.
Address	349 Terry Fox Drive, Ottawa, ON, Canada, K2K 2V6

1.3 Test specifications

FCC 47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
FCC 47 CFR Part 27	Miscellaneous wireless communications services (2345–2360 MHz)
RSS-195 Issue 2, April. 24, 2014	Wireless Communication Service (WCS) Equipment Operating in the Bands 2305-2320 MHz and 2345-2360 MHz
SRSP-516, Issue 1, April 24, 2014	Technical Requirements for Wireless Communication Service (WCS) Operating in the Bands 2305-2320 MHz and 2345-2360 MHz
RSS-Gen, Issue 5, April 2018	General Requirements for Compliance of Radio Apparatus

1.4 Test method

ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
KDB 662911 D01	Multiple Transmitter Output v02r01
KDB 662911 D02	MIMO with Cross-Polarized Antennas v01

1.5 Statement of compliance

In the configuration tested, the EUT was found compliant. Testing was completed against customer test plan. Results obtained indicate that the product under test complies in full with the requirements tested.

This test report (**REP037319**) applies to the *Radio 4471 B30* with part number *KRC 161 4430/31*. See “Summary of test results” for full details.

EUT Configuration(s) SRO/MRO:

B30:

LTE : 5, 10 MHz, Max 2 Carriers

NR : 5, 10 MHz, Max 2 Carriers

LTE + NR, NR + LTE

1.6 Test report revision history

Table 1.6-1: Test report revision history

Report ID	Date of issue	Details of changes made to test report
REP037319	May 23, 2024	Original report issued



Section 2. Summary of test results

2.1 Testing location

Test location (s) Ottawa

2.2 Testing period

Test start date April 10, 2024 Test end date April 15, 2024

2.3 Sample information

Receipt date April 10, 2024 Nemko sample ID number PRJ00549790001

2.4 FCC Part 27 test results

Table 2.4-1: FCC results summary

Part	Test description	Verdict
§27.50(a)	Maximum output power at RF antenna connector	Pass
§27.53	Spurious emissions at RF antenna connector	Pass
§27.53	Radiated spurious emissions	Pass
§27.54	Frequency stability	Pass
§2.1049	Occupied bandwidth	Pass

Notes: Only tests requested by the client have been performed.

2.5 RSS-195 test results

Table 2.5-1: ISED results summary

Part	Test description	Verdict
RSS-195, 5.1	Automatic Transmit Power Control	Not applicable ¹
RSS-195, 5.2	Frequency Plan	Pass ²
RSS-195, 5.3	Types of Modulation	Pass ³
RSS-195, 5.4	Frequency stability	Pass
RSS-195, 5.5	Transmitter Output Power and Equivalent Isotropically Radiated Power	Pass
RSS-195, 5.6	Transmitter Unwanted Emissions (conducted and radiated)	Pass
RSS-Gen, 6.7	Occupied bandwidth	Pass
RSS-Gen, 7.4	Receiver conducted spurious emissions	Pass

Notes: Only tests requested by the client have been performed

¹EUT is fixed station equipment

²EUT transmits within 2350–2360 MHz frequency range

³EUT employs digital modulation (QPSK)

Section 3. Equipment under test (EUT) details

3.1 EUT information

Product name	Radio Unit
Model	Radio 4471 B30
Part number	KRC 161 4430/31
Revision	R1A
Serial number	EA2A845550, EA2A847916 (for radiated spurious emissions)
Antenna ports	4 TX/RX
RF BW / IBW	10 MHz
FDD	45 MHz
Frequency	TX (DL): 2350 – 2360 MHz RX (UL): 2305 – 2315 MHz
Nominal O/P per Antenna port	25 W
Accuracy (nominal)	±0.1 ppm
Nominal voltage	-48 VDC (-36 to -58.5 VDC)
RAT	LTE, NR
Modulation	LTE: QPSK, 16 QAM, 64 QAM, 256 QAM NR: QPSK, 16 QAM, 64 QAM, 256 QAM
Channel bandwidth	LTE: 5, 10 MHz NR: 5, 10 MHz
Maximum combined OBW per port	10 MHz
CPRI	2.5 – 24.3 Gbps (Data 1, 2)
Channel raster	LTE: 100 kHz NR: 100 kHz
Regulatory requirements	Radio: FCC Part 2, 27, RSS-Gen, RSS-195 EMC: FCC Part 15, ICES-003 Safety: IEC/EN 62368-1, UL/CSA 62368-1 IEC/EN 60950-22, UL 50E /CAN/CSA, IEC/EN 60529, Type 3 Enclosure
Emission Designator	LTE: 5M00W7D, 10M0W7D NR: 5M00W7D, 10M0W7D
Supported Configurations	Single Antenna, TX Diversity, MIMO, Carrier Aggregation, Ericsson Spectral Sharing (ESS)
Operating temperature	-40 °C to +55 °C
Max RF Power	100 W total / radio (= 4 ports x 25W)
Supported carriers /band/ port SRO/MRO	Up to 2 carriers /band/port Max 2 LTE carriers/band/port Max 2 NR carriers/band/port
Carrier Configuration:	SRO: LTE, NR MRO: NR+LTE
RAT SC Carrier Power (max)	LTE/NR: 25 W LTE/NR: 25 W

3.2 Product description and theory of operation

EUT description of the methods used to exercise the EUT and all relevant ports:

Description/theory of operation	<p>Radio 4471 B30 is a multi-standard remote Single Band radio forming part of the Ericsson RBS (Radio Base Station) equipment. Radio 4471 provides radio access for mobile and fixed devices and is designed for the outdoor environment. Radio 4471 operates over the band 30 via 4 TX/RX ports connected directly into an integrated antenna. Radio 4471 transmits and receive on all 4 ports. Radio unit installation is designed for pole, wall or rail mount options. A fiber optic interface (2) provides the RRU/RBS control and digital interface between the Radio and the RBS. Radio 4471 product is convection cooled and can be mounted either vertically or horizontally.</p> <p>Output RF Power is rated at 4 x 25 W. Altitude during operation: Below 4000 m.</p> <p>Radio 4471 is a synthesized Transceiver designed for use in the 3GPP (Third Generation Partnership Project) for LTE (Long Term Evolution) - E-UTRA Base Station, and NR (New Radio).</p> <p>Radio product is KRC 161 4430/31 which is a SW locked customer deliverable. Tests were executed on the KRC 161 4430/3 which is a SW unlocked variant of the KRC 161 4430/31 radio to enable efficient testing for compliance. Both variants are electrically identical.</p>																							
Ports/Interface	<table border="1"> <thead> <tr> <th>Port</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>A, B, C, D</td> <td>RF Ports</td> </tr> <tr> <td>Data 1, 2</td> <td>Optical Interface</td> </tr> <tr> <td>Alarm / Fan</td> <td>Alarm / Fan</td> </tr> <tr> <td>AISG</td> <td>AISG communication port</td> </tr> <tr> <td>-48VDC</td> <td>DC Input</td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>			Port	Description	A, B, C, D	RF Ports	Data 1, 2	Optical Interface	Alarm / Fan	Alarm / Fan	AISG	AISG communication port	-48VDC	DC Input									
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Software details	CXP2021113/1_R19C166																							
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NTB 101 4430/3	R1A	Label Kit																						
Product Identification / Markings and Labels	<div style="display: flex; align-items: flex-start;"> <div style="flex: 1;"> <p>Radio 4471 B30</p> <p>B30 UL 2305-2315 MHz DL 2350-2360 MHz</p> <p>FCC ID: TA8AKRC1614430 IC: 287AB-AS1614430 AS1614430</p> <p>IP 65 / Type 3 Enclosure</p> </div> <div style="flex: 1; padding-left: 20px;"> <p>This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation. CAN ICES-3 (B)/NMB-3(B)</p> </div> <div style="flex: 0.5; text-align: center;"> <p>I.T.E. 113613</p> </div> </div>																							

3.3 EUT test details

EUT setup/configuration rationale for Down link:

RAT	Modulation	Test Model / Configuration
LTE	QPSK	TM1.1
LTE	16QAM	TM3.2
LTE	64QAM	TM3.1
LTE	256QAM	TM3.1a
NR	QPSK	TM1.1
NR	16QAM	TM3.2
NR	64QAM	TM3.1
NR	256QAM	TM3.1a

LTE Single Carrier B30

Bandwidth, MHz	LTE Transmit / DL, MHz					
	B	EARFCN	M	EARFCN	T	EARFCN
5	2352.5	9795	2355.0	9820	2357.5	9845
10	n/a	n/a	2355.0	9820	n/a	n/a

Bandwidth, MHz	LTE Receive / UL, MHz					
	B	EARFCN	M	EARFCN	T	EARFCN
5	2307.5	27685	2310.0	27710	2312.5	27735
10	n/a	n/a	2310.0	27710	n/a	n/a

NR Single Carrier B30

Bandwidth, MHz	Transmit / DL, MHz					
	B	NR-ARFCN	M	NR-ARFCN	T	NR-ARFCN
5	2352.5	470500	2355.0	471000	2357.5	471500
10	n/a	n/a	2355.0	471000	n/a	n/a

Bandwidth, MHz	Receive / UL, MHz					
	B	NR-ARFCN	M	NR-ARFCN	T	NR-ARFCN
5	2307.5	461500	2310.0	462000	2312.5	462500
10	n/a	n/a	2310.0	462000	n/a	n/a

B30 LTE Configurations Tested:

Carrier configurations	Transmit / DL, MHz
SC, 5MHz, Bottom	2352.5
SC, 5MHz, Middle	2355.0
SC, 5MHz, Top	2357.5
SC, 10MHz	2355.0
2C, 5MHz	2352.5+2357.5

EUT test details, continued

B30 NR Configurations Tested:

Carrier configurations	Transmit / DL, MHz
SC, 5MHz, Bottom	2352.5
SC, 5MHz, Middle	2355.0
SC, 5MHz, Top	2357.5
SC, 10MHz	2355.0
2C, 5MHz	2352.5+2357.5

B30 Mixed Mode Configurations Tested:

Carrier configurations	Transmit / DL, MHz
2C, N5+L5	2352.5+2357.5
2C, L5+N5	2352.5+2357.5

Configurations Tested for Radiated Spurious Emissions:

Carrier configurations	Transmit / DL, MHz
2C, L5+N5	2352.5+2357.5

3.4 EUT setup diagram

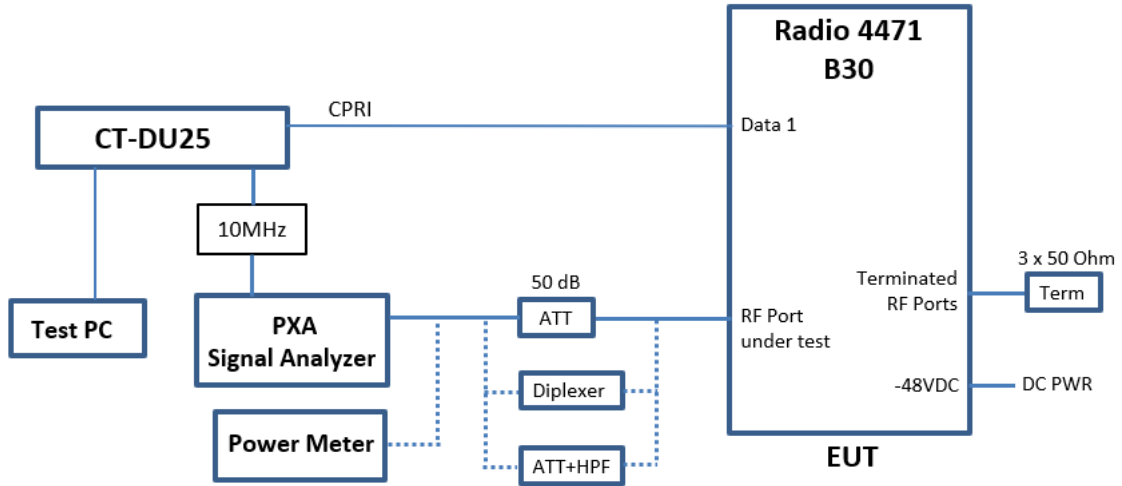


Figure 3.4-1: Setup diagram – Radio Compliance

3.5 Setup photographs

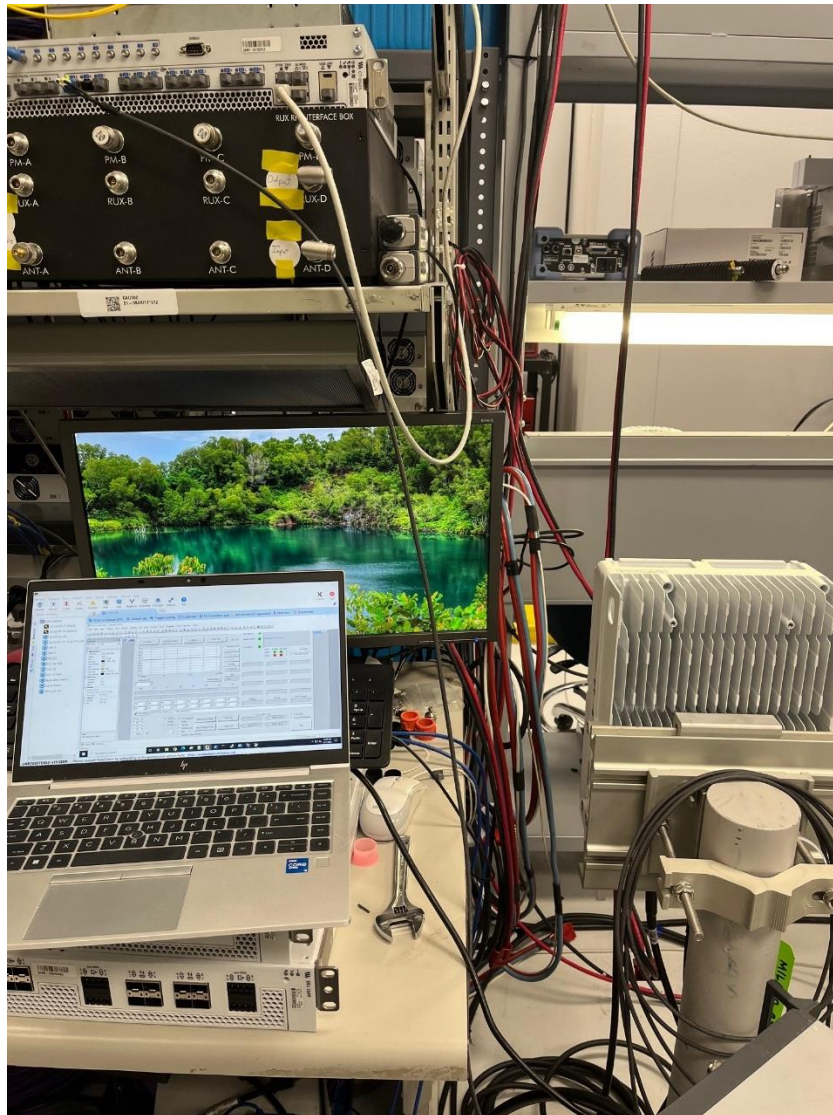


Figure 3.5-1: Set up photo for Radio Compliance Testing

Setup photographs, continued



Figure 3.5-2: EUT Set-up photo for Radiated Compliance Testing

Setup photographs, continued



Figure 3.5-3: EUT Set-up photo for Radiated Emissions [30 MHz to 1000 MHz]

Setup photographs, continued

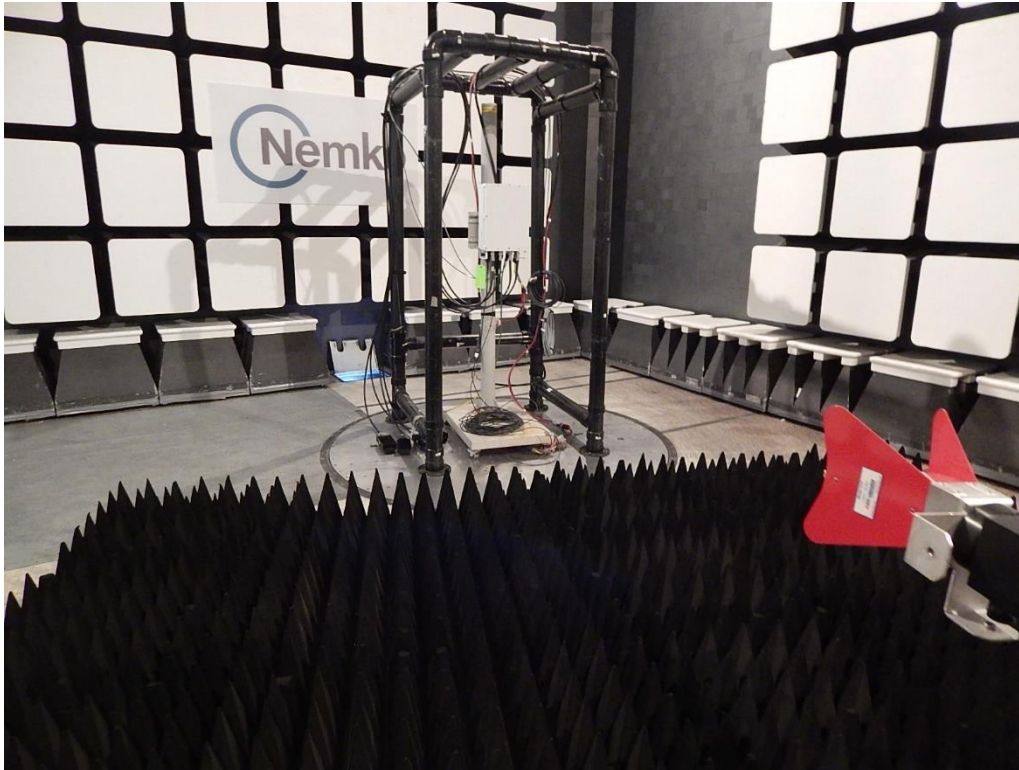


Figure 3-5-4: EUT Set-up photo for Radiated Emissions [1-3 GHz]

Setup photographs, continued

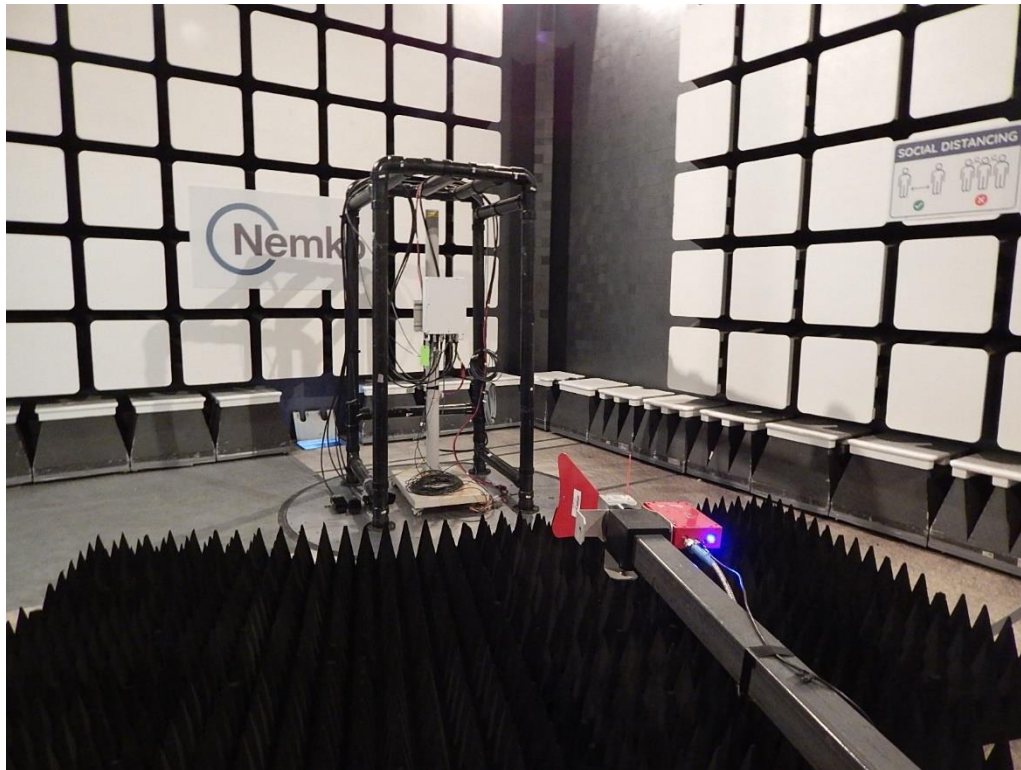


Figure 3.5-5: EUT Set-up photo for Radiated Emissions [3-18 GHz]

Setup photographs, continued

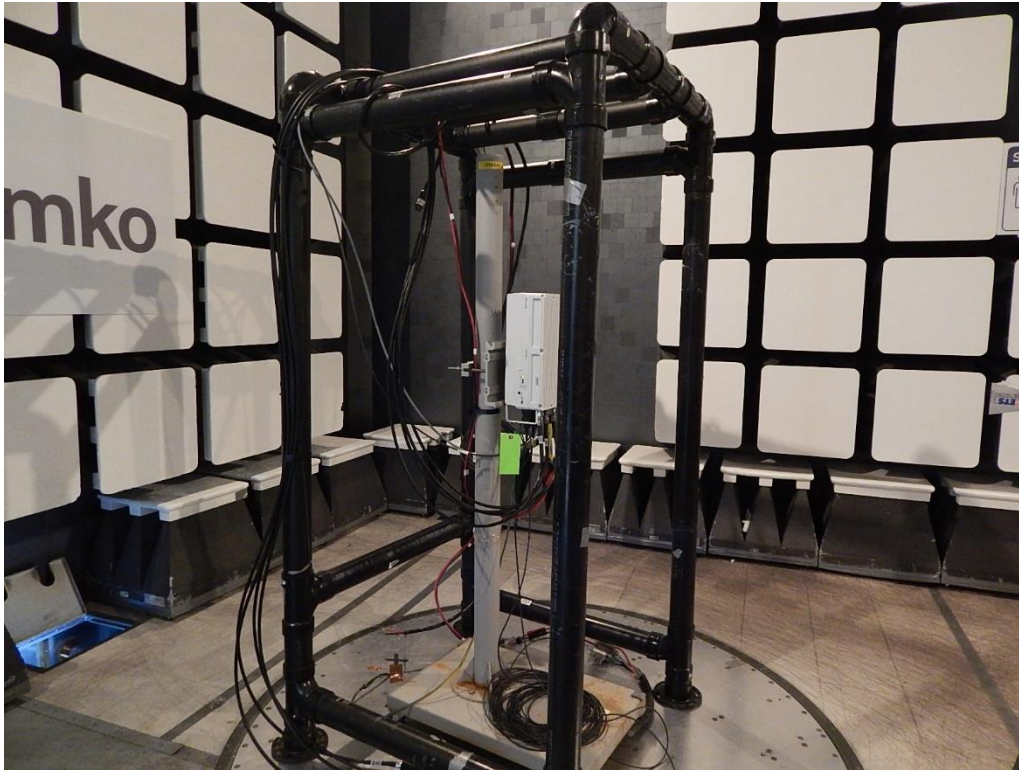


Figure 3.5-6: EUT Set-up photo for Radiated Emissions [18-24 GHz]

Section 4. Engineering considerations

4.1 Modifications incorporated in the EUT

There were no modifications performed to the EUT during this assessment.

4.2 Technical judgment

None

4.3 Deviations from laboratory tests procedures

No deviations were made from laboratory procedures.

Section 5. Test conditions

5.1 Atmospheric conditions

Temperature	15–30 °C
Relative humidity	20–75 %
Air pressure	860–1060 mbar

When it is impracticable to carry out tests under these conditions, a note to this effect stating the ambient temperature and relative humidity during the tests shall be recorded and stated.

5.2 Power supply range

The normal test voltage for equipment to be connected to the mains shall be the nominal mains voltage. For the purpose of the present document, the nominal voltage shall be the declared voltage, or any of the declared voltages $\pm 5\%$, for which the equipment was designed.

Section 6. Measurement uncertainty

6.1 Uncertainty of measurement

Measurement	Measurement uncertainty, \pm dB
Radiated spurious emissions (30 MHz to 1 GHz)	5.8
Radiated spurious emissions (1 GHz to 6 GHz)	4.7
Radiated spurious emissions (6 GHz to 18 GHz)	5.0
Radiated spurious emissions (18 GHz to 26 GHz)	5.0
Radiated spurious emissions (18 GHz to 40 GHz)	5.2
RF Output power measurement using Spectrum Analyzer ¹	0.71
RF Output power measurement using Power Meter	0.54
Conducted spurious emissions	0.90
Other antenna port measurements	0.81

Notes: UKAS Lab 34, TIA-603 and ETSI TR 100 028-1&2 have been used as guidance for measurement uncertainty reasonable estimations with regards to previous experience and validation of data. Nemko Canada Inc. follows these test methods in order to satisfy ISO/IEC 17025 requirements for estimation of uncertainty of measurement for wireless products. Measurement uncertainty calculations assume a coverage factor of $K = 2$ with 95% certainty.

Section 7. Test equipment

7.1 Test equipment list

Table 7.1-1: Equipment list

Equipment	Manufacturer	Model no.	Asset no.	Cal cycle	Next cal.
3 m EMI test chamber	TDK	SAC-3	FA002047	1 year	January 18, 2025
Flush mount turntable	Sunol	FM2022	FA002082	—	NCR
Controller	Sunol	SC104V	FA002060	—	NCR
Antenna mast	Sunol	TLT2	FA002061	—	NCR
DC Power source	Ametek	SGA80X125C-0AAA	FA002737	—	NCR
Receiver/spectrum analyzer	Rohde & Schwarz	ESU 40	FA002071	1 year	March 7, 2025
Horn (1–18 GHz)	ETS Lindgren	3117	FA002840	1 year	March 8, 2025
Preamp (1–18 GHz)	ETS Lindgren	124334	FA002877	1 year	November 24, 2024
Horn antenna (18–40 GHz)	EMCO	3116	FA001847	1 year	June 15, 2024
Pre-amplifier (18–26 GHz)	Narda	BBS-1826N612	FA001550	1 year	February 9, 2025
Bilog antenna (20–3000 MHz)	Sunol	JB3	FA002108	1 year	March 27, 2025
High pass filter (3-18 GHz)	Thilithic Inc.	6HC3000/18000-1.3-KK	FA002231	1 year	June 9, 2024
50 Ω coax cable	Carlisle	WHU18-1818-072	FA002391	1 year	October 17, 2024
50 Ω coax cable	Huber+Suhner	104B11NX2/11000	FA003441	1 year	October 17, 2024
PXA Signal Analyzer	Keysight	N9030B	MY57144347	1 year	April 3, 2025
Power Meter	Rohde & Schwarz	NRP2	101814	2 years	March 21, 2025
Power Sensor	Rohde & Schwarz	NRP-Z11	100070	2 years	March 31, 2025
CT-DU25*	Ericsson	LPC 102 500/1	T01G525053	—	NCR
ENA Network Analyzer	Keysight	E5080B	MY59202549	1 year	April 4, 2025
TFU B30 (diplex bandreject)	Ericsson	LPC 107 131/30	4072663	—	VOU
Diplexer (HP 4–13 GHz)	K&L Microwave	ULK 904 240/1	S/N 13	—	VOU
Highpass Filter (3.8–26.5 GHz)	Wainwright	WHNX3.8/26.5G-6SS	SN 14	—	VOU
DC Power Supply	Xantrex	XKW 60-50	E00109863	—	VOU

Notes: NCR - no calibration required, VOU - verify on use.

* CT-DU25 is the test equipment that drives the radios traffic.

Section 8. Testing data

8.1 Maximum output power at RF antenna connector (Band 30)

8.1.1 Definitions and limits

FCC §27.50(a) The following power limits and related requirements apply to stations transmitting in the 2305-2320 MHz band or the 2345-2360 MHz band.

(1) Base and fixed stations.

(i) For base and fixed stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band:

(A) The average equivalent isotropically radiated power (EIRP) must not exceed 2,000 watts within any 5 megahertz of authorized bandwidth and must not exceed 400 watts within any 1 megahertz of authorized bandwidth.

(B) The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

(ii) For base and fixed stations transmitting in the 2315-2320 MHz band or the 2345-2350 MHz band, the peak EIRP must not exceed 2,000 watts.

RSS-195, Section 5.5: Transmitter Output Power and Equivalent Isotropically Radiated Power

The equivalent isotropically radiated power (e.i.r.p.) of base and fixed station equipment shall comply with the e.i.r.p. limit in SRSP-516.

Section 5.5.1 Peak to Average Power Ratio (PAPR) for Base and Fixed Station Equipment in the Frequency Ranges 2305-2315 MHz and 2350-2360 MHz

The PAPR of the transmitter output power of base and fixed station equipment shall not exceed 13 dB for more than 0.1% of the time, using a signal that corresponds to the highest PAPR during periods of continuous transmission.

SRSP-516, Section 5: Technical Criteria

5.1 Radiated Power Limits

5.1.1 Base and Fixed Stations

5.1.1.1. The equivalent isotropically radiated power (e.i.r.p.) of the base and fixed stations (with the exception of fixed subscriber stations) operating in the band 2305-2315 MHz or in the band 2350-2360 MHz shall not exceed 400 watts within any 1 MHz band; and shall not exceed 2000 W within any 5 MHz of bandwidth. The peak to average power ratio (PAPR) of these transmissions shall comply with the limits specified in RSS-195.

5.1.1.2. The e.i.r.p. of the base and fixed stations (with the exception of fixed subscriber stations) operating in the band 2315-2320 MHz or in the band 2345-2350 MHz shall not exceed 2000 W within either 5 MHz band

8.1.2 Test summary

Test date	April 10, 2024
Test engineer	Nimish Kapoor

8.1.3 Observations, settings, and special notes

Output power was measured with RMS power meter per ANSI C63.26 Paragraph 5.2.4.2 method. PSD was measured using method described in paragraph 5.2.4.4.

- Randomly selected sample plots provided for information and settings only
- Total MIMO PSD was calculated as follows: PSD from one antenna port + $10 \times \text{Log}_{10}(4)$
- RBS (Radio Base Station) EIRP Limits are deployment dependent. To ensure compliance with legal limits detailed in section 8.1.1, RBS set up and carrier configurations are addressed during site commissioning.
- Test Report results are compiled for the maximum rated output power for worst case emission assessment.
- This radio unit is tested without the antenna. Licensees are required to assess and consider installation and deployment criteria along with maximum power settings, antenna gain, and feeder loss for all carrier configurations to ensure compliance against EIRP limits as defined by the FCC/ISED regulations. (See section 8.1.1)
- Total MIMO PSD was calculated for a single 5MHz carrier /port as follows: Maximum port PSD measured + $10 \times \text{Log}(4)$.
- EIRP for Radio 4471 B30 is calculated based on an antenna gain of 13.0 dBi and a feeder loss of 0.7 dB to demonstrate compliance against 400W/MHz and / or 2000W/5MHz. Power settings and carrier configurations will be limited to lower power as warranted based on deployment scenarios as per FCC/ISED regulations as defined in section 8.1.1.

Observations, settings, and special notes, continued

Spectrum analyzer settings for PSD:

Detector mode	RMS
Resolution bandwidth	1 MHz and 5 MHz
Video bandwidth	>RBW
Measurement mode	Power over emission bandwidth
Trace mode	Averaging
Measurement time	Auto

8.1.4 Test data

Table 8.1-1: EIRP calculation based on the worst-case PSD measurement [1 MHz]

Frequency, MHz	RF power density, dBm/MHz	Total MIMO PSD, dBm/MHz	Cable loss, dB	Antenna gain, dBi	EIRP PSD, dBm/MHz	EIRP limit, dBm/MHz	Margin, dB
2352.5	37.69	43.71	0.7	13.0	56.01	56.02	0.01

Table 8.1-2: EIRP calculation based on the worst-case PSD measurement [5 MHz]

Frequency, MHz	RF power density, dBm/5 MHz	Total MIMO PSD, dBm/5 MHz	Cable loss, dB	Antenna gain, dBi	EIRP PSD, dBm/5 MHz	EIRP limit, dBm/5 MHz	Margin, dB
2355.0	43.15	49.17	0.7	13.0	61.47	63.01	1.54

Table 8.1-3: RF power density measurement results of a single-carrier operation for LTE on 5 MHz channel [1 MHz RBW]

Frequency, MHz	RF power density, dBm/MHz	Total MIMO PSD, dBm/MHz	EIRP limit, dBm/MHz	Margin, dB
2352.5	37.69	43.71	56.02	12.31
2355.0	37.68	43.70	56.02	12.32
2357.5	37.67	43.69	56.02	12.33

Table 8.1-4: RF power density measurement results of a single-carrier operation for LTE on 5 MHz channel [5 MHz RBW]

Frequency, MHz	RF power density, dBm/5 MHz	Total MIMO PSD, dBm/5 MHz	EIRP limit, dBm/5 MHz	Margin, dB
2352.5	43.14	49.16	63.01	13.85
2355.0	43.15	49.17	63.01	13.84
2357.5	42.99	49.01	63.01	14.00

Table 8.1-5: RF power density measurement results of a single-carrier operation for NR on 5 MHz channel [1 MHz RBW]

Frequency, MHz	RF power density, dBm/MHz	Total MIMO PSD, dBm/MHz	EIRP limit, dBm/MHz	Margin, dB
2352.5	37.66	43.68	56.02	12.34
2355.0	37.62	43.64	56.02	12.38
2357.5	37.64	43.66	56.02	12.36

Test data, continued

Table 8.1-6: RF power density measurement results of a single-carrier operation for NR on 5 MHz channel [5 MHz RBW]

Frequency, MHz	RF power density, dBm/5		Total MIMO PSD, dBm/5	EIRP limit, dBm/5 MHz	Margin, dB
	MHz	MHz			
2352.5	43.08	49.10	63.01	13.91	
2355.0	43.13	49.15	63.01	13.86	
2357.5	42.98	49.00	63.01	14.01	

Table 8.1-7: RF power density measurement results of a single-carrier operation for LTE on 10 MHz channel [1 MHz RBW]

Frequency, MHz	RF power density, dBm/MHz	Total MIMO PSD, dBm/MHz	EIRP limit, dBm/MHz	Margin, dB
2355.0	34.66	40.68	56.02	15.34

Table 8.1-8: RF power density measurement results of a single-carrier operation for LTE on 10 MHz channel [5 MHz RBW]

Frequency, MHz	RF power density, dBm/5		Total MIMO PSD, dBm/5 MHz	EIRP limit, dBm/5 MHz	Margin, dB
	MHz	MHz			
2355.0	41.35	47.37	63.01	15.64	

Table 8.1-9: RF power density measurement results of a single-carrier operation for NR on 10 MHz channel [1 MHz RBW]

Frequency, MHz	RF power density, dBm/MHz	Total MIMO PSD, dBm/MHz	EIRP limit, dBm/MHz	Margin, dB
2355.0	34.47	40.49	56.02	15.53

Table 8.1-10: RF power density measurement results of a single-carrier operation for NR on 10 MHz channel [5 MHz RBW]

Frequency, MHz	RF power density, dBm/5		Total MIMO PSD, dBm/5 MHz	EIRP limit, dBm/5 MHz	Margin, dB
	MHz	MHz			
2355.0	41.23	47.25	63.01	15.76	

Test data, continued

Table 8.1-11: RF power density measurement results of a multi-carrier operation for LTE on 5 MHz channel [Contiguous] [1 MHz RBW]

Notes	RF power density, dBm/MHz	Total MIMO PSD, dBm/MHz	EIRP limit, dBm/MHz	Margin, dB
2 carriers	34.54	40.56	56.02	15.46

Table 8.1-12: RF power density measurement results of a multi-carrier operation for LTE on 5 MHz channel [Contiguous] [5 MHz RBW]

Notes	RF power density, dBm/5 MHz	Total MIMO PSD, dBm/5 MHz	EIRP limit, dBm/5 MHz	Margin, dB
2 carriers	40.84	46.86	63.01	16.15

Table 8.1-13: RF power density measurement results of a multi-carrier operation for NR on 5 MHz channel [Contiguous] [1 MHz RBW]

Notes	RF power density, dBm/MHz	Total MIMO PSD, dBm/MHz	EIRP limit, dBm/MHz	Margin, dB
2 carriers	34.56	40.58	56.02	15.44

Table 8.1-14: RF power density measurement results of a multi-carrier operation for NR on 5 MHz channel [Contiguous] [5 MHz RBW]

Notes	RF power density, dBm/5 MHz	Total MIMO PSD, dBm/5 MHz	EIRP limit, dBm/5 MHz	Margin, dB
2 carriers	40.87	46.89	63.01	16.12

Test data, continued

Table 8.1-15: RF power density measurement results of a multi-RAT operation [1 MHz RBW]

Notes	RF power density, dBm/MHz	Total MIMO PSD, dBm/MHz	EIRP limit, dBm/MHz	Margin, dB
NR 5 MHz + LTE 5 MHz	34.56	40.58	56.02	15.44
LTE 5 MHz + NR 5 MHz	34.51	40.53	56.02	15.49

Note: "+" : contiguous channels

Table 8.1-16: RF power density measurement results of a multi-RAT operation [5 MHz RBW]

Notes	RF power density, dBm/5 MHz	Total MIMO PSD, dBm/5 MHz	EIRP limit, dBm/5 MHz	Margin, dB
NR 5 MHz + LTE 5 MHz	40.91	46.93	63.01	16.08
LTE 5 MHz + NR 5 MHz	40.91	46.93	63.01	16.08

Note: "+" : contiguous channels

Test data, continued

Table 8.1-17: RF total channel power measurement results for LTE [5 MHz]

Remarks	5 MHz channel (25 W)
Low channel, QPSK	43.70
Mid channel, QPSK	43.80
Top channel, QPSK	43.65

Note: all results in the table are in dBm units

Table 8.1-18: RF total channel power measurement results for NR [5 MHz]

Remarks	5 MHz channel (25 W)
Low channel, QPSK	43.85
Mid channel, QPSK	43.87
Top channel, QPSK	43.70

Note: all results in the table are in dBm units

Table 8.1-19: RF total channel power measurement results for LTE [10 MHz]

Remarks	10 MHz channel (25 W)
Mid channel, QPSK	43.75

Note: all results in the table are in dBm units

Table 8.1-20: RF total channel power measurement results for NR [10 MHz]

Remarks	15 MHz channel (25 W)
Mid channel, QPSK	43.81

Note: all results in the table are in dBm units

Table 8.1-21: RF total channel power measurement results for LTE Multi-carrier [Contiguous]

Carriers	5 MHz channel (25 W)
2 Carriers, QPSK	43.70

Note: all results in the table are in dBm units

Table 8.1-22: RF total channel power measurement results for NR Multi-carrier [Contiguous]

Carriers	5 MHz channel (25 W)
2 Carriers, QPSK	43.72

Note: all results in the table are in dBm units

Table 8.1-23: RF total channel power measurement results for multi-RAT operation

Remarks	Power (dBm)
NR 5 MHz + LTE 5 MHz	43.74
LTE 5 MHz + NR 5 MHz	43.75

Note: "+": contiguous channels

Test data, continued

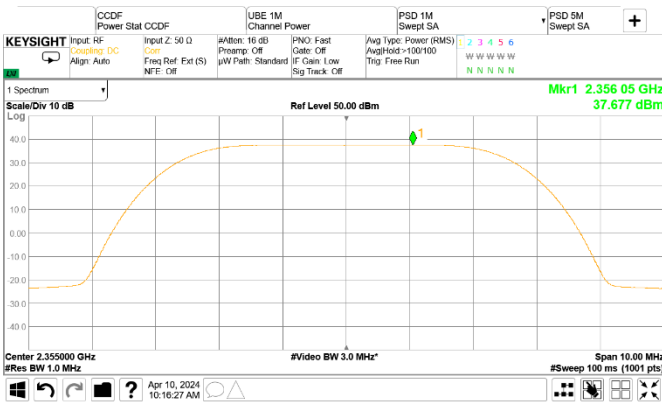


Figure 8.1-1: PSD of LTE 5 MHz channel bandwidth, single carrier operation, sample plot [1 MHz RBW]

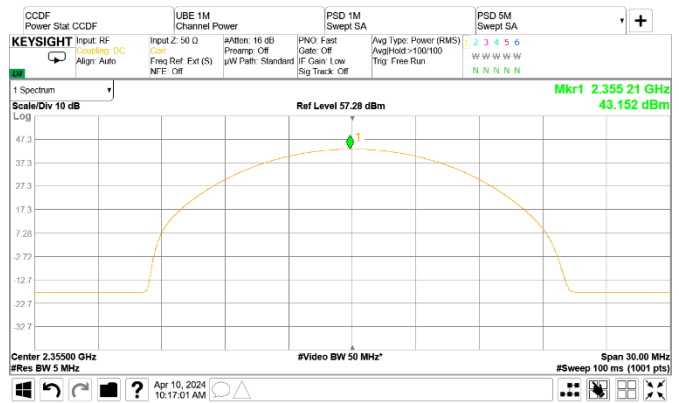


Figure 8.1-2: PSD of LTE 5 MHz channel bandwidth, single carrier operation, sample plot [5 MHz RBW]

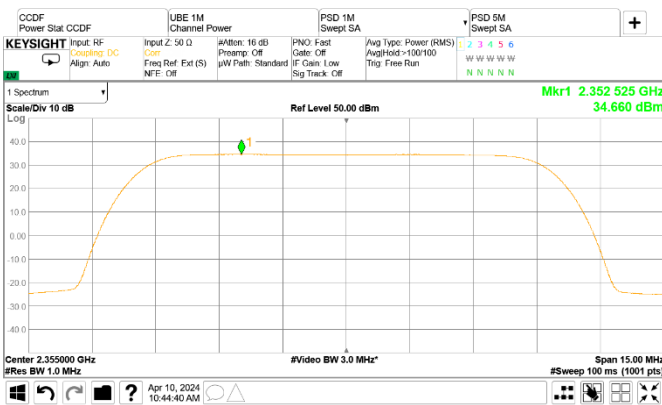


Figure 8.1-3: PSD of LTE 10 MHz channel bandwidth, single carrier operation, sample plot [1 MHz RBW]

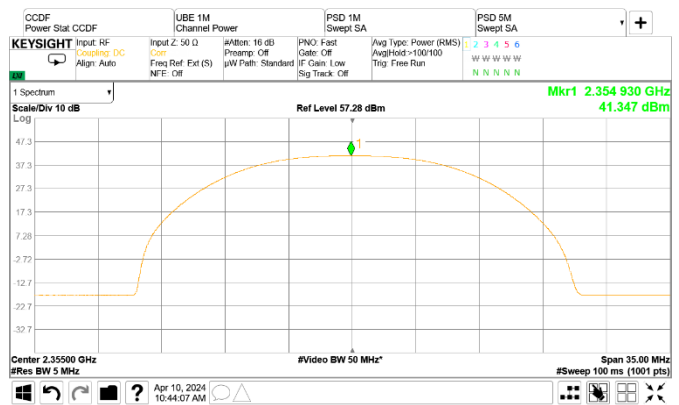


Figure 8.1-4: PSD of LTE 10 MHz channel bandwidth, single carrier operation, sample plot [5 MHz RBW]

Test data, continued

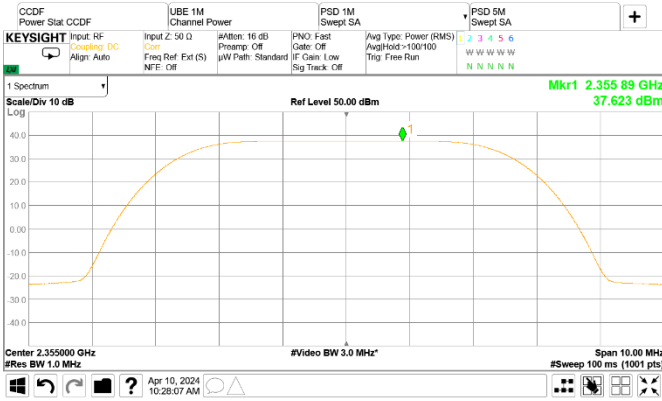


Figure 8.1-5: PSD of NR 5 MHz channel bandwidth, single carrier operation, sample plot [1 MHz RBW]

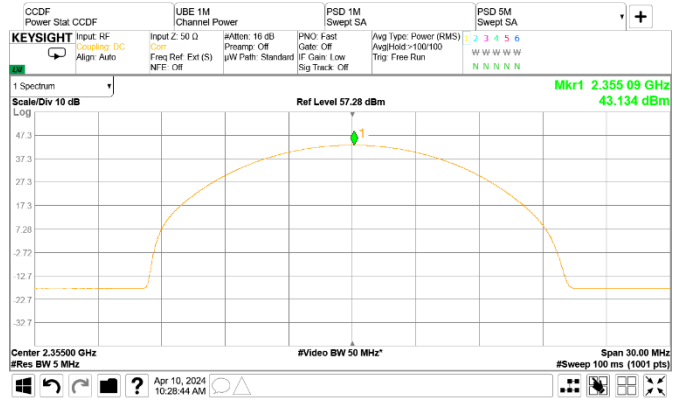


Figure 8.1-6: PSD of NR 5 MHz channel bandwidth, single carrier operation, sample plot [5 MHz RBW]

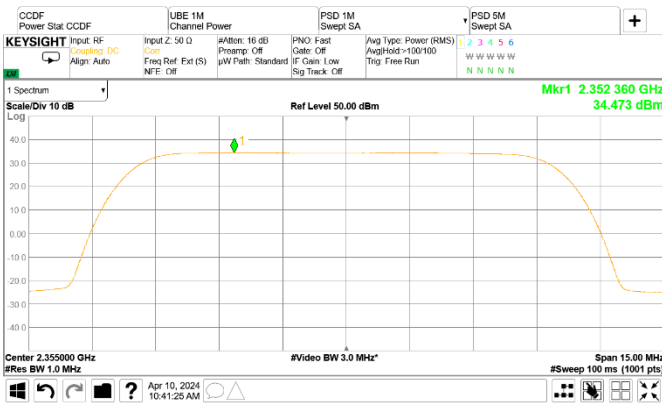


Figure 8.1-7: PSD of NR 10 MHz channel bandwidth, single carrier operation, sample plot [1 MHz RBW]

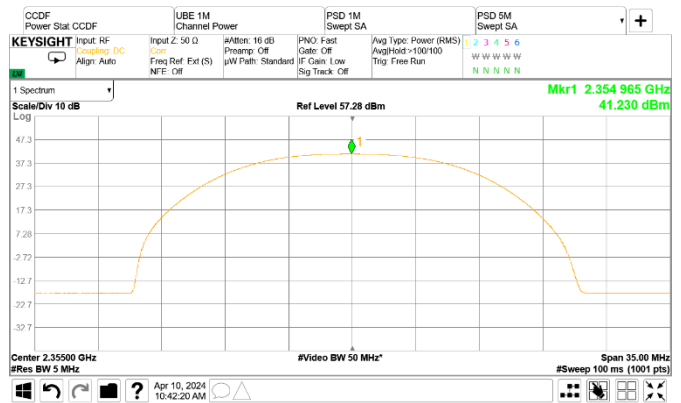


Figure 8.1-8: PSD of NR 10 MHz channel bandwidth, single carrier operation, sample plot [5 MHz RBW]

Test data, continued

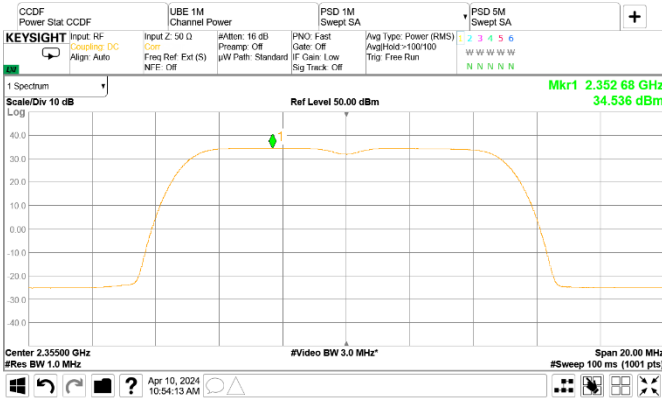


Figure 8.1-9: PSD of LTE 5 MHz channel bandwidth, multi-carrier operation, sample plot, Contiguous [1 MHz RBW]

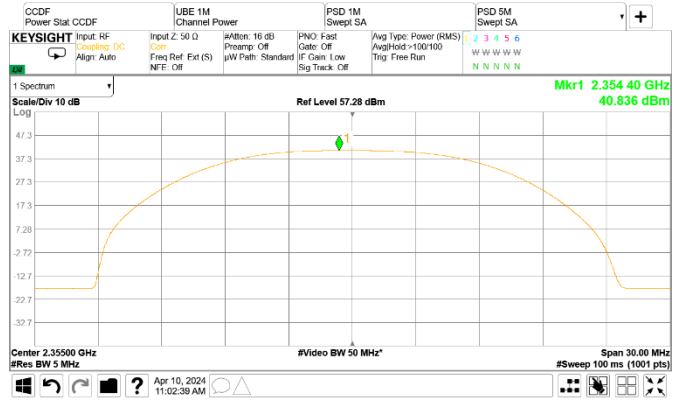


Figure 8.1-10: PSD of LTE 5 MHz channel bandwidth, multi-carrier operation, sample plot, Contiguous [5 MHz RBW]

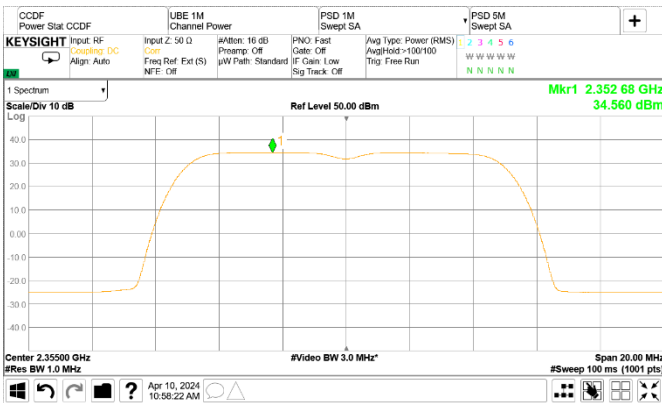


Figure 8.1-11: PSD of NR 5 MHz channel bandwidth, multi-carrier operation, sample plot, Contiguous [1 MHz RBW]

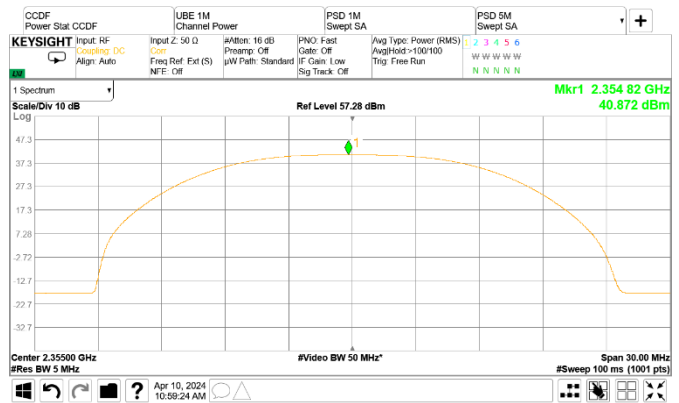


Figure 8.1-12: PSD of NR 5 MHz channel bandwidth, multi-carrier operation, sample plot, Contiguous [5 MHz RBW]

Test data, continued

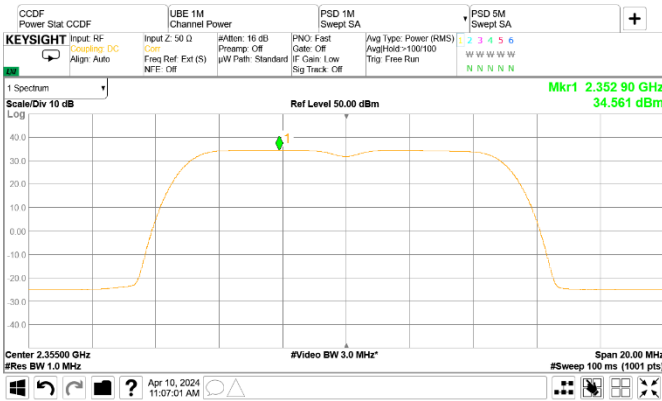


Figure 8.1-13: PSD of multi-RAT operation, NR 5 MHz and LTE 5 MHz [1 MHz RBW]

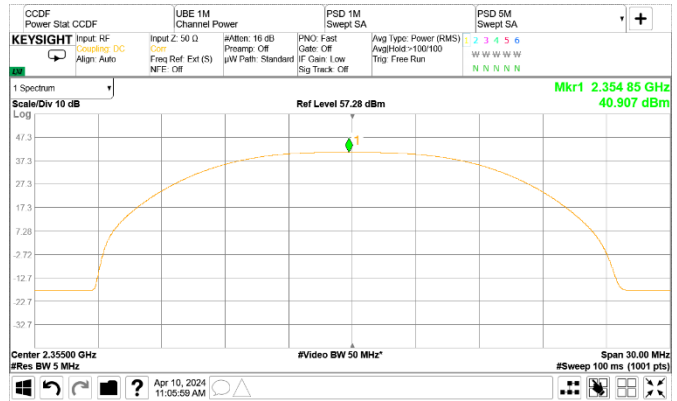


Figure 8.1-14: PSD of multi-RAT operation, NR 5 MHz and LTE 5 MHz [5 MHz RBW]

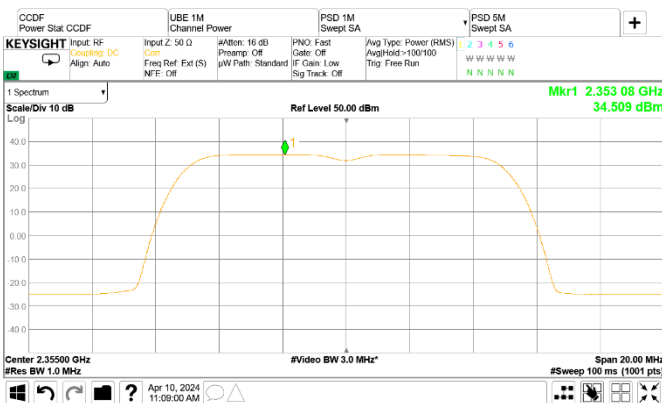


Figure 8.1-15: PSD of multi-RAT operation, LTE 5 MHz and NR 5 MHz [1 MHz RBW]

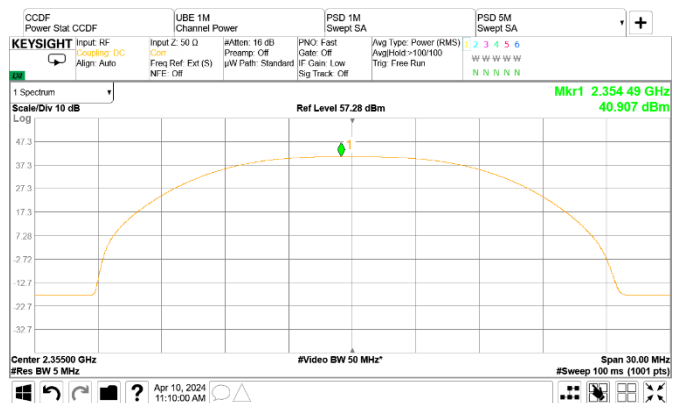


Figure 8.1-16: PSD of multi-RAT operation, LTE 5 MHz and NR 5 MHz [5 MHz RBW]

Test data, continued

Table 8.1-24: Complementary Cumulative Distribution Function (CCDF) of the PAPR reduction measurement results for single carrier operation for LTE 5 MHz

Remarks	Frequency, MHz	0.1% CCDF, dB	PAPR reduction limit, dB	Margin, dB
5 MHz, Low channel	2352.5	7.28	13.00	5.72
5 MHz, Mid channel	2355.0	7.24	13.00	5.76
5 MHz, Top channel	2357.5	7.28	13.00	5.72

Table 8.1-25: Complementary Cumulative Distribution Function (CCDF) of the PAPR reduction measurement results for single carrier operation for LTE 10 MHz

Remarks	Frequency, MHz	0.1% CCDF, dB	PAPR reduction limit, dB	Margin, dB
10 MHz, Mid channel	2355.0	7.28	13.00	5.72

Table 8.1-26: Complementary Cumulative Distribution Function (CCDF) of the PAPR reduction measurement results for single carrier operation for NR 5 MHz

Remarks	Frequency, MHz	0.1% CCDF, dB	PAPR reduction limit, dB	Margin, dB
5 MHz, Low channel	2352.5	7.23	13.00	5.77
5 MHz, Mid channel	2355.0	7.24	13.00	5.76
5 MHz, Top channel	2357.5	7.26	13.00	5.74

Table 8.1-27: Complementary Cumulative Distribution Function (CCDF) of the PAPR reduction measurement results for single carrier operation for NR 10 MHz

Remarks	Frequency, MHz	0.1% CCDF, dB	PAPR reduction limit, dB	Margin, dB
10 MHz, Mid channel	2355.0	7.26	13.00	5.74

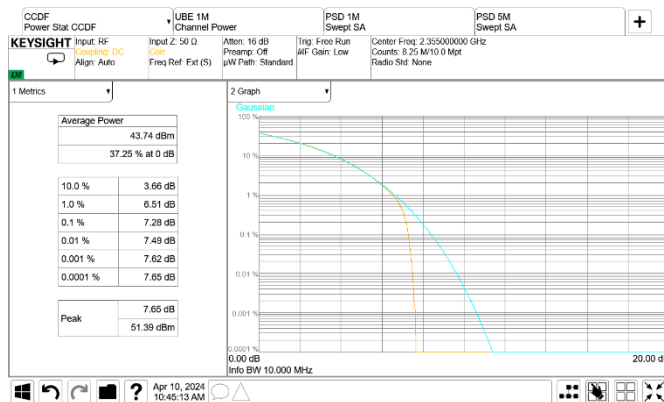


Figure 8.1-17: CCDF sample plot, LTE

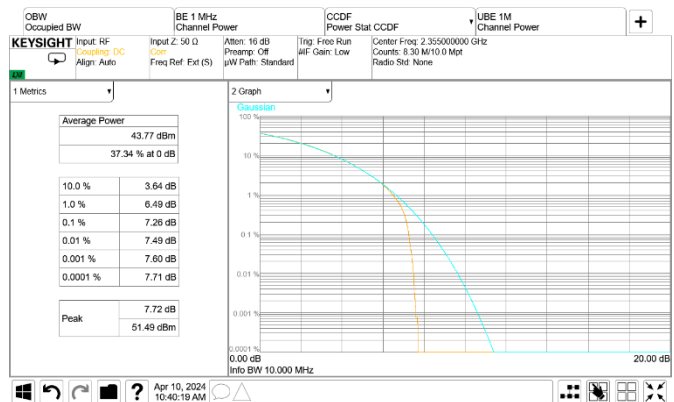


Figure 8.1-18: CCDF sample plot, NR

8.2 Spurious emissions at RF antenna connector (Band 30)

8.2.1 Definitions and limits

FCC §27.53: Emission limits

(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 $43 + 10 \log_{10}(P)$ 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 $75 + 10 \log_{10}(P)$ dB on all frequencies between 2320 and 2345 MHz;
- (ii) By a factor of not less than $43 + 10 \log_{10}(P)$ dB on all frequencies between 2300 and 2305 MHz, $70 + 10 \log_{10}(P)$ dB on all frequencies between 2287.5 and 2300 MHz, $72 + 10 \log_{10}(P)$ dB on all frequencies between 2285 and 2287.5 MHz, and $75 + 10 \log_{10}(P)$ dB below 2285 MHz;
- (iii) By a factor of not less than $43 + 10 \log_{10}(P)$ dB on all frequencies between 2360 and 2362.5 MHz, $55 + 10 \log_{10}(P)$ dB on all frequencies between 2362.5 and 2365 MHz, $70 + 10 \log_{10}(P)$ dB on all frequencies between 2365 and 2367.5 MHz, $72 + 10 \log_{10}(P)$ dB on all frequencies between 2367.5 and 2370 MHz, and $75 + 10 \log_{10}(P)$ dB above 2370 MHz.

(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.

Definitions and limits, continued

RSS-195, Section 5.6: Transmitter Unwanted Emissions

The transmitter unwanted emissions shall be measured with a resolution bandwidth of 1 MHz. A smaller resolution bandwidth is permitted provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz. However, in the 1 MHz bands immediately adjacent to the edges of the frequency range(s) in which the equipment is allowed to operate, a resolution bandwidth of as close as possible to, without being less than 1% of the occupied bandwidth, shall be employed provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz. For all equipment, the TRP or total conducted power (sum of conducted power across all antenna connectors) of the unwanted emissions outside the frequency block or frequency block group shall not exceed the limits shown in table below:

Table 8.2-1: Unwanted emissions limits for Based Station, Fixed Station and High-Power Fixed Subscriber Equipment

Frequency (MHz)	Attenuation (dB)
< 2200	43 + 10 log ₁₀ (P)
2200 – 2285	75 + 10 log ₁₀ (P)
2285 – 2287.5	72 + 10 log ₁₀ (P)
2287.5 – 2300	70 + 10 log ₁₀ (P)
2300 – 2305	43 + 10 log ₁₀ (P)
2305 – 2320	43 + 10 log ₁₀ (P) *
2320 – 2345	75 + 10 log ₁₀ (P)
2345 – 2360	43 + 10 log ₁₀ (P) *
2360 – 2362.5	43 + 10 log ₁₀ (P)
2362.5 – 2365	55 + 10 log ₁₀ (P)
2365 – 2367.5	70 + 10 log ₁₀ (P)
2367.5 – 2370	72 + 10 log ₁₀ (P)
2370 – 2395	75 + 10 log ₁₀ (P)
> 2395	43 + 10 log ₁₀ (P)

Notes: * Measured at the edges of the highest and lowest frequency range(s) in which the equipment is designed to operate. See Section 5.2 for the permitted frequency ranges for the various equipment types.

8.2.2 Test summary

Test date	April 11 and 15, 2024
Test engineer	Nimish Kapoor

8.2.3 Observations, settings and special notes

- The spectrum was searched from 30 MHz to the 10th harmonic.
- All measurements were performed using an average (RMS) detector per ANSI C63.26 Paragraph 5.7.2 method.
- The spurious emissions from 2345 MHz to 2362.5 MHz was covered during Band-edge measurements.
- All the limit lines were adjusted for MIMO operation by 6 dB*: for example: -13 dBm – 6 dB = -19 dBm
 *MIMO correction factor for 4 antenna ports: 10 × Log₁₀(4) = 6 dB
- RBW 1 MHz, VBW was wider than RBW.

8.2.4 Test data

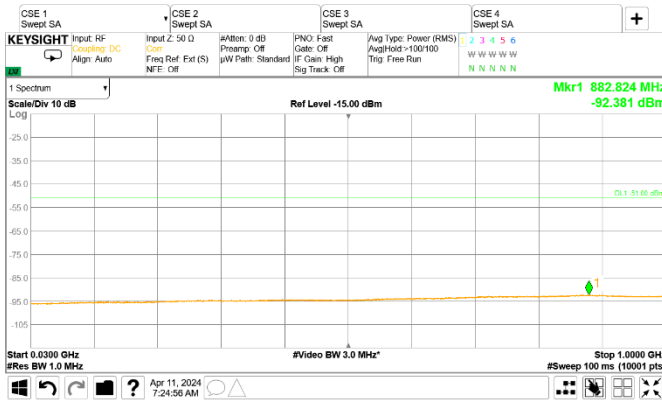


Figure 8.2-1: Conducted spurious emissions of LTE 5 MHz low channel, single carrier operation [30 MHz to 1 GHz]

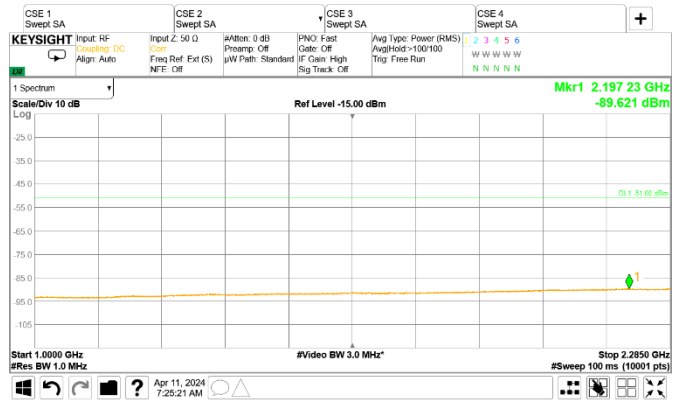


Figure 8.2-2: Conducted spurious emissions of LTE 5 MHz low channel, single carrier operation [1 GHz to 2.285 GHz]

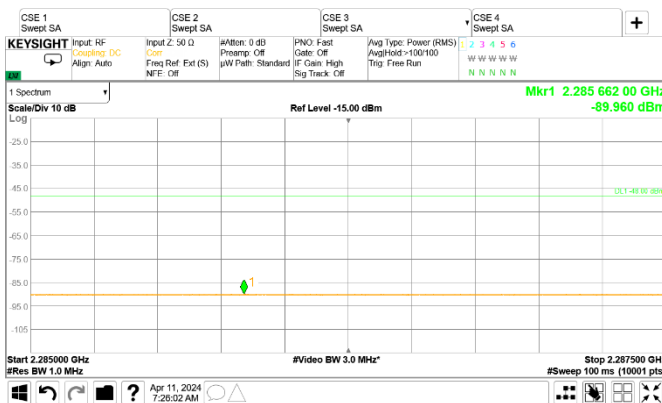


Figure 8.2-3: Conducted spurious emissions of LTE 5 MHz low channel, single carrier operation [2.285 GHz to 2.2875 GHz]

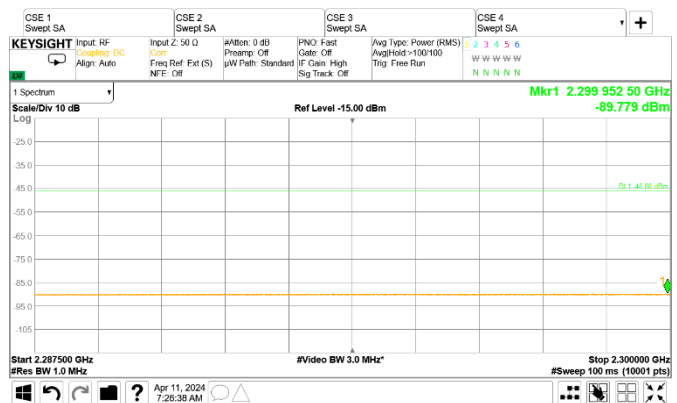


Figure 8.2-4: Conducted spurious emissions of LTE 5 MHz low channel, single carrier operation [2.2875 GHz to 2.30 GHz]

Test data, continued

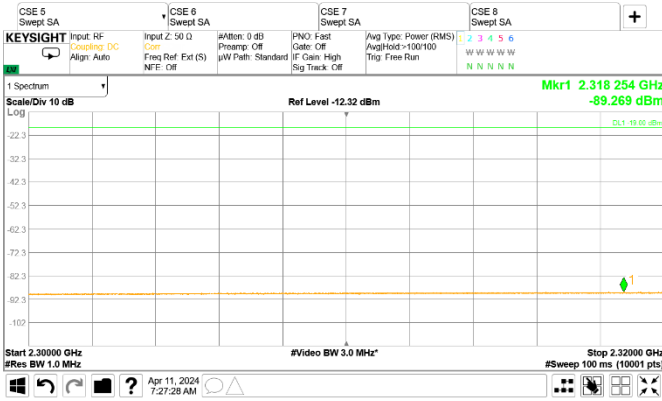


Figure 8.2-5: Conducted spurious emissions of LTE 5 MHz low channel, single carrier operation [2.30 GHz to 2.32 GHz]

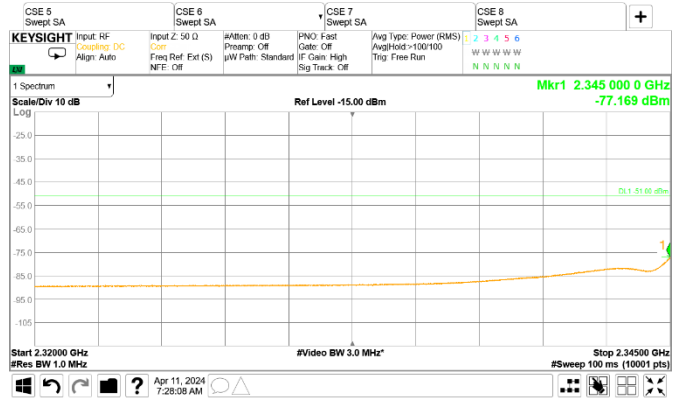


Figure 8.2-6: Conducted spurious emissions of LTE 5 MHz low channel, single carrier operation [2.32 GHz to 2.345 GHz]

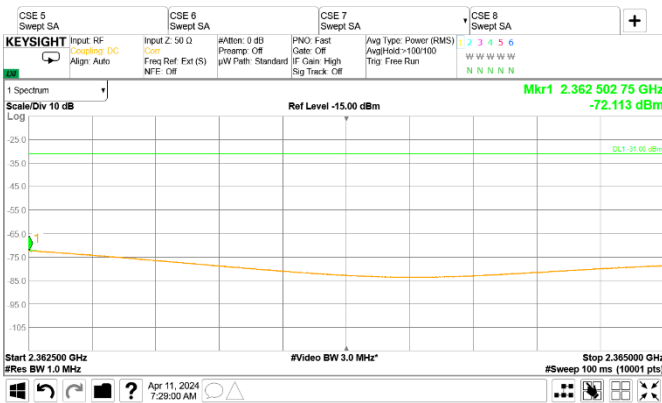


Figure 8.2-7: Conducted spurious emissions of LTE 5 MHz low channel, single carrier operation [2.3625 GHz to 2.365 GHz]



Figure 8.2-8: Conducted spurious emissions of LTE 5 MHz low channel, single carrier operation [2.365 GHz to 2.3675 GHz]

Test data, continued

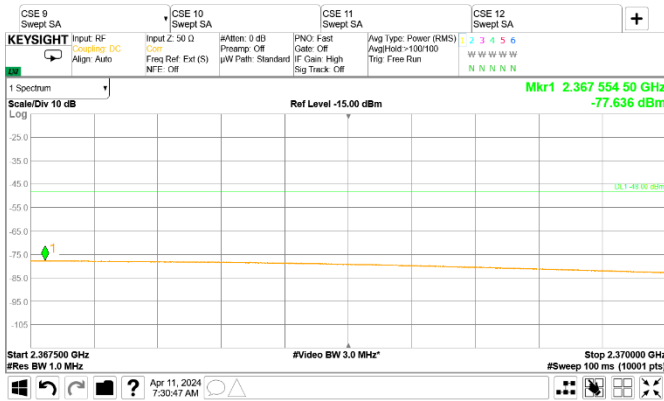


Figure 8.2-9: Conducted spurious emissions of LTE 5 MHz low channel, single carrier operation [2.3675 GHz to 2.70 GHz]

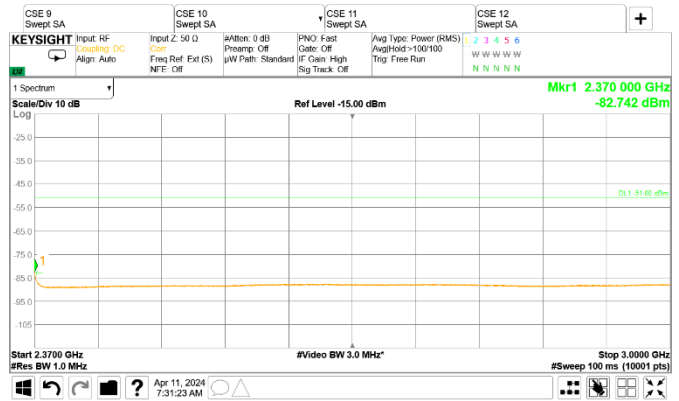


Figure 8.2-10: Conducted spurious emissions of LTE 5 MHz low channel, single carrier operation [2.70 GHz to 3 GHz]

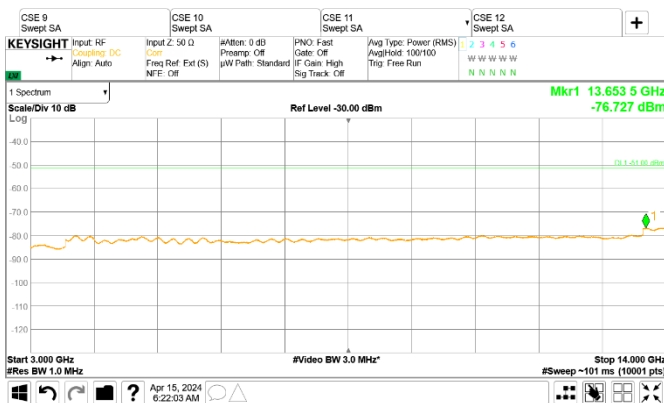


Figure 8.2-11: Conducted spurious emissions of LTE 5 MHz low channel, single carrier operation [3 GHz to 14 GHz]

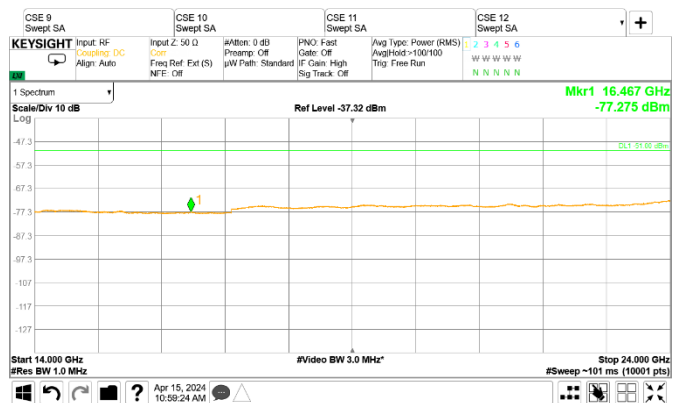


Figure 8.2-12: Conducted spurious emissions of LTE 5 MHz low channel, single carrier operation [14 GHz to 24 GHz]

Test data, continued

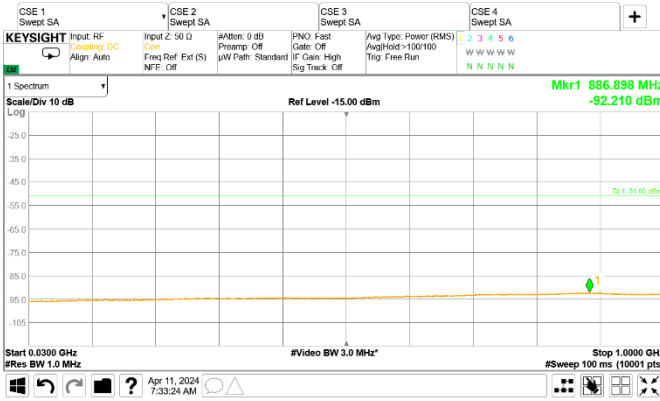


Figure 8.2-13: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation [30 MHz to 1 GHz]



Figure 8.2-14: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation [1 GHz to 2.285 GHz]

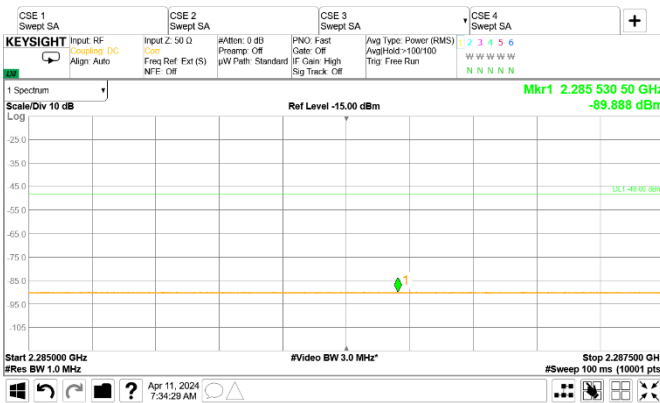


Figure 8.2-15: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation [2.285 GHz to 2.2875 GHz]



Figure 8.2-16: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation [2.2875 GHz to 2.30 GHz]

Test data, continued

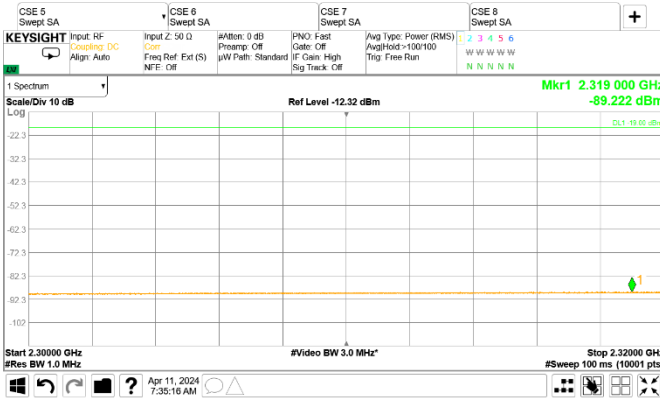


Figure 8.2-17: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation [2.30 GHz to 2.32 GHz]

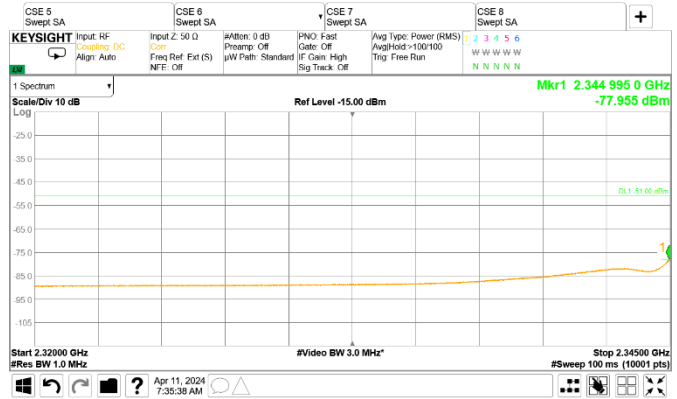


Figure 8.2-18: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation [2.32 GHz to 2.345 GHz]

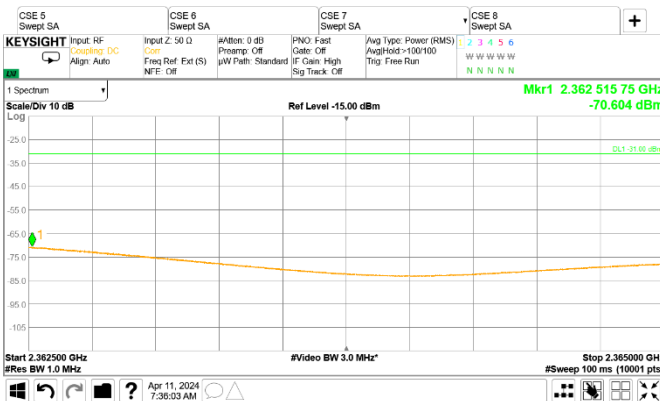


Figure 8.2-19: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation [2.3625 GHz to 2.365 GHz]

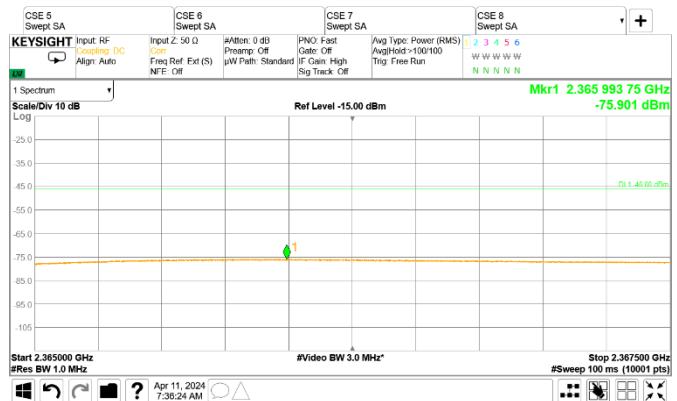


Figure 8.2-20: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation [2.365 GHz to 2.3675 GHz]

Test data, continued

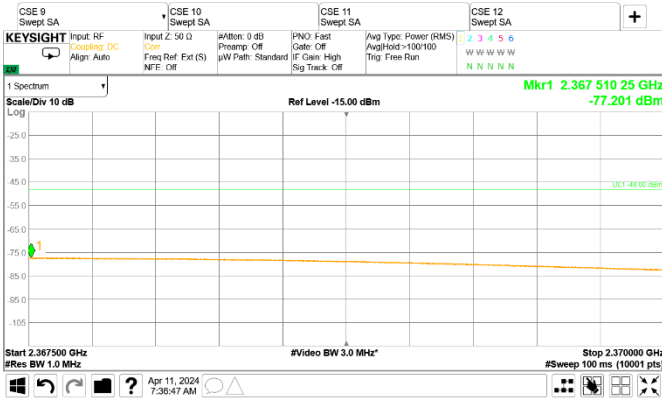


Figure 8.2-21: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation [2.3675 GHz to 2.70 GHz]



Figure 8.2-22: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation [2.70 GHz to 3 GHz]

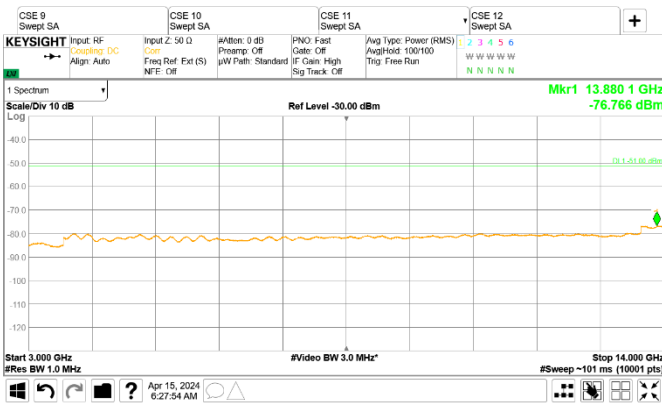


Figure 8.2-23: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation [3 GHz to 14 GHz]

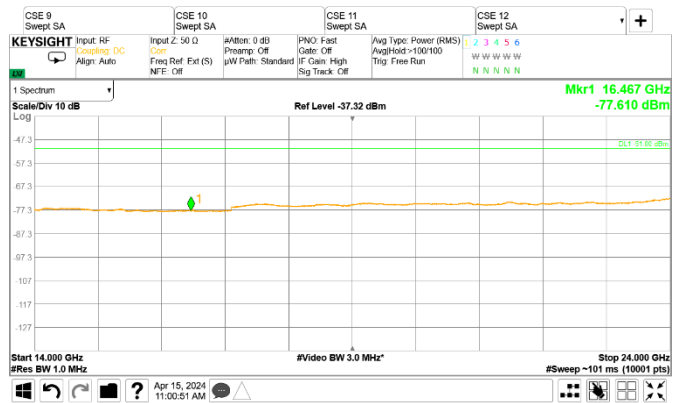


Figure 8.2-24: Conducted spurious emissions of LTE 5 MHz mid channel, single carrier operation [14 GHz to 24 GHz]

Test data, continued

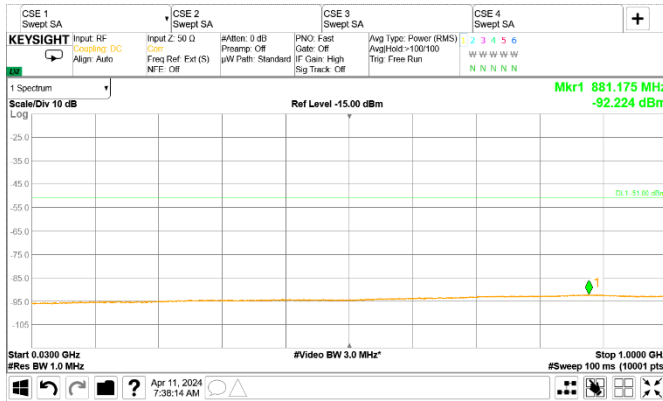


Figure 8.2-25: Conducted spurious emissions of LTE 5 MHz top channel, single carrier operation [30 MHz to 1 GHz]

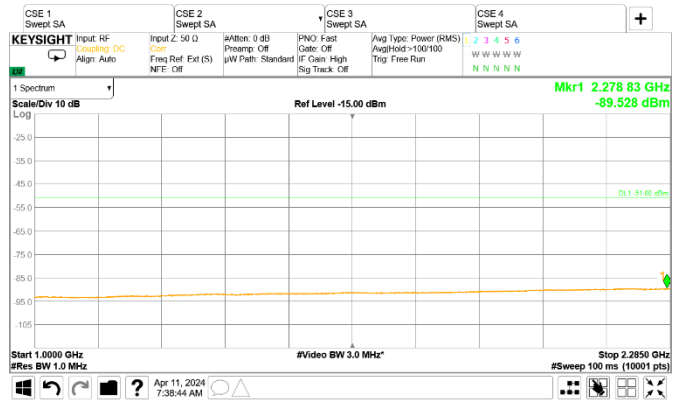


Figure 8.2-26: Conducted spurious emissions of LTE 5 MHz top channel, single carrier operation [1 GHz to 2.285 GHz]

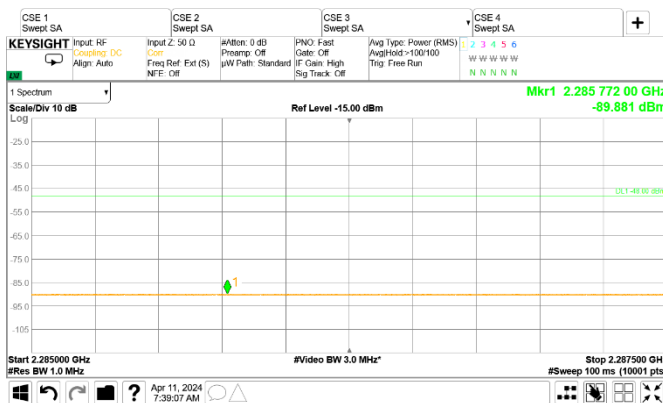


Figure 8.2-27: Conducted spurious emissions of LTE 5 MHz top channel, single carrier operation [2.285 GHz to 2.2875 GHz]

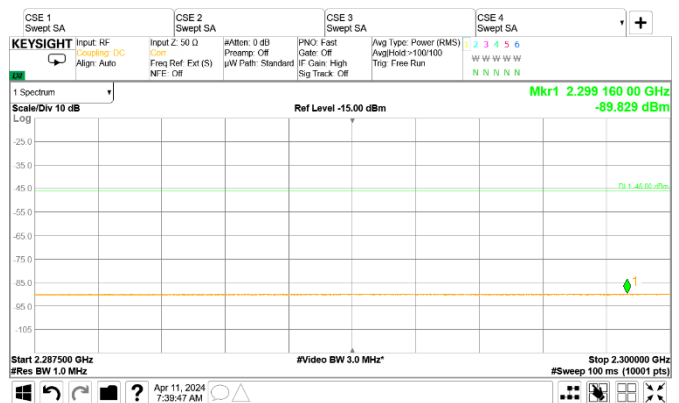


Figure 8.2-28: Conducted spurious emissions of LTE 5 MHz top channel, single carrier operation [2.2875 GHz to 2.30 GHz]

Test data, continued

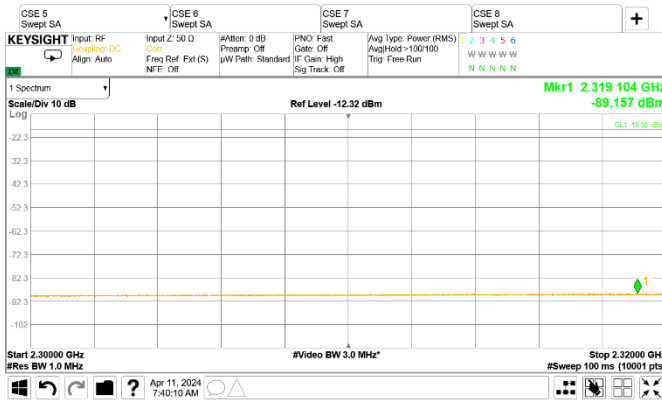


Figure 8.2-29: Conducted spurious emissions of LTE 5 MHz top channel, single carrier operation [2.30 GHz to 2.32 GHz]

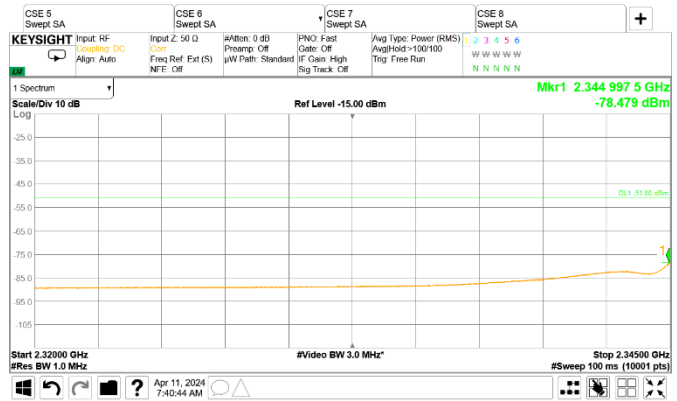


Figure 8.2-30: Conducted spurious emissions of LTE 5 MHz top channel, single carrier operation [2.32 GHz to 2.345 GHz]

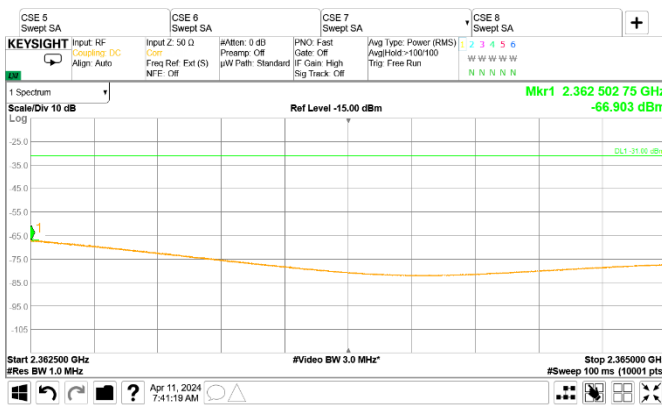


Figure 8.2-31: Conducted spurious emissions of LTE 5 MHz top channel, single carrier operation [2.3625 GHz to 2.365 GHz]

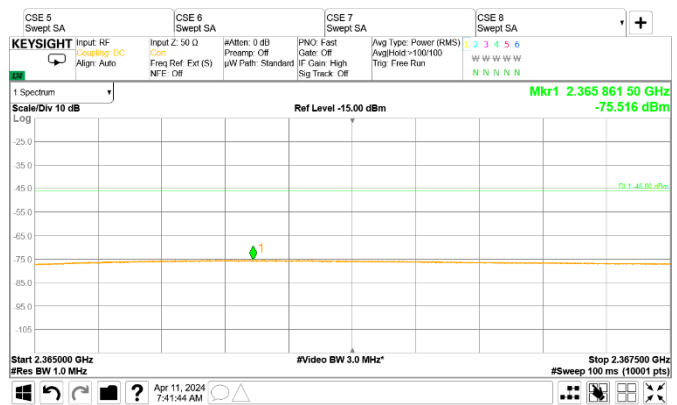


Figure 8.2-32: Conducted spurious emissions of LTE 5 MHz top channel, single carrier operation [2.365 GHz to 2.3675 GHz]

Test data, continued

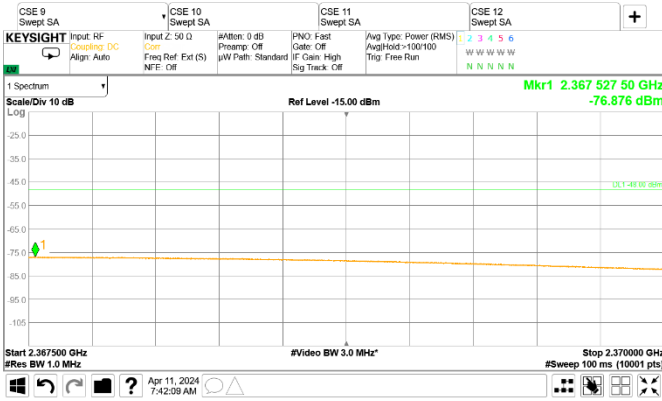


Figure 8.2-33: Conducted spurious emissions of LTE 5 MHz top channel, single carrier operation [2.3675 GHz to 2.70 GHz]



Figure 8.2-34: Conducted spurious emissions of LTE 5 MHz top channel, single carrier operation [2.70 GHz to 3 GHz]

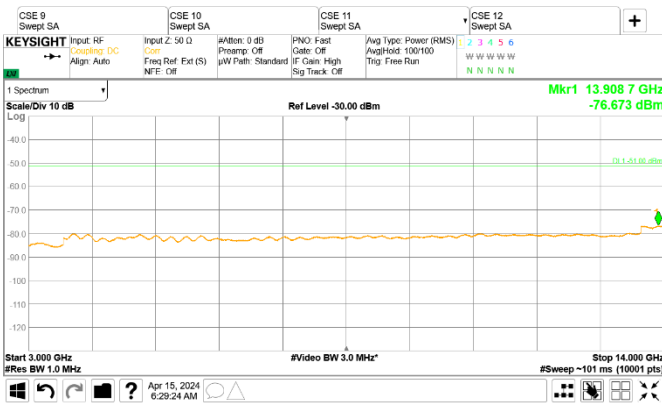


Figure 8.2-35: Conducted spurious emissions of LTE 5 MHz top channel, single carrier operation [3 GHz to 14 GHz]

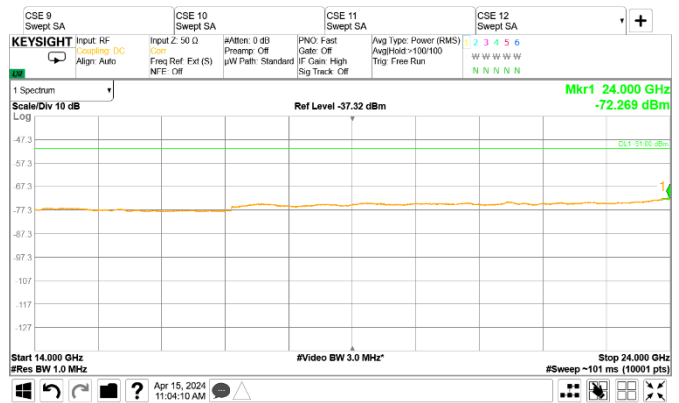


Figure 8.2-36: Conducted spurious emissions of LTE 5 MHz top channel, single carrier operation [14 GHz to 24 GHz]

Test data, continued



Figure 8.2-37: Conducted spurious emissions of LTE 10 MHz, single carrier operation [30 MHz to 1 GHz]



Figure 8.2-38: Conducted spurious emissions of LTE 10 MHz, single carrier operation [1 GHz to 2.285 GHz]

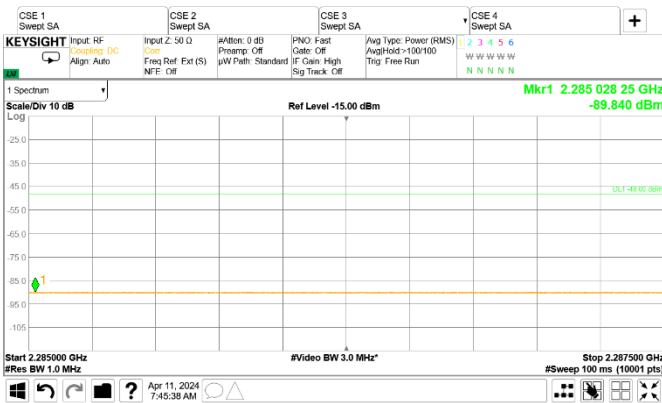


Figure 8.2-39: Conducted spurious emissions of LTE 10 MHz, single carrier operation [2.285 GHz to 2.2875 GHz]



Figure 8.2-40: Conducted spurious emissions of LTE 10 MHz, single carrier operation [2.2875 GHz to 2.30 GHz]

Test data, continued

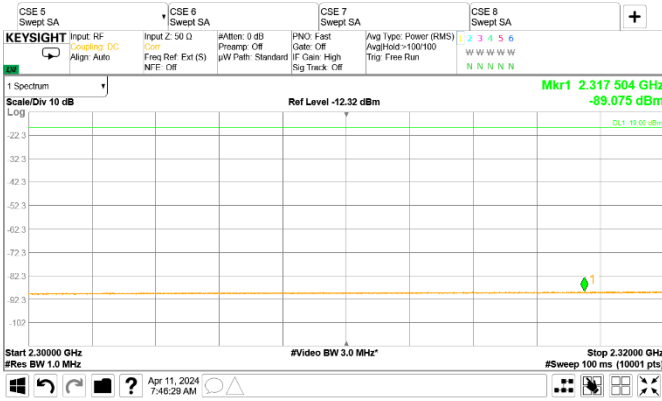


Figure 8.2-41: Conducted spurious emissions of LTE 10 MHz, single carrier operation [2.30 GHz to 2.32 GHz]



Figure 8.2-42: Conducted spurious emissions of LTE 10 MHz, single carrier operation [2.32 GHz to 2.345 GHz]

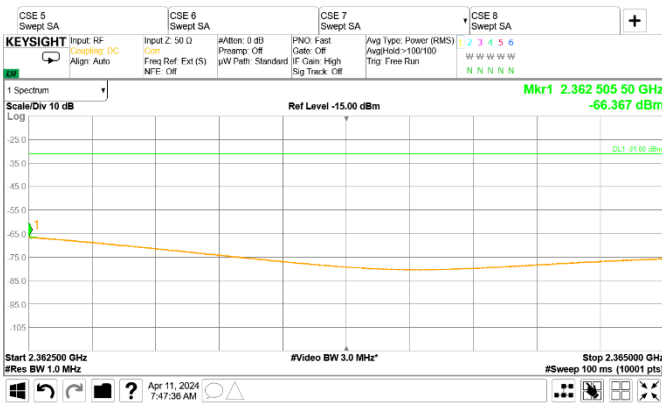


Figure 8.2-43: Conducted spurious emissions of LTE 10 MHz single carrier operation [2.3625 GHz to 2.365 GHz]

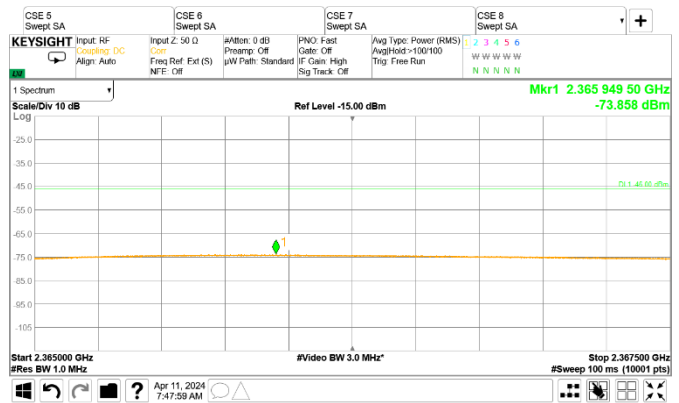


Figure 8.2-44: Conducted spurious emissions of LTE 10 MHz, single carrier operation [2.365 GHz to 2.3675 GHz]

Test data, continued

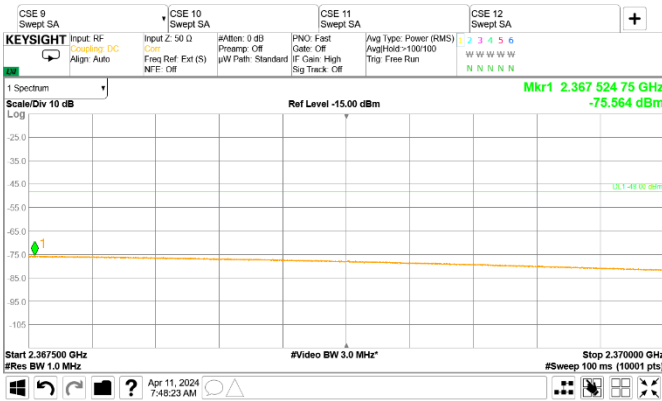


Figure 8.2-45: Conducted spurious emissions of LTE 10 MHz, single carrier operation [2.3675 GHz to 2.70 GHz]

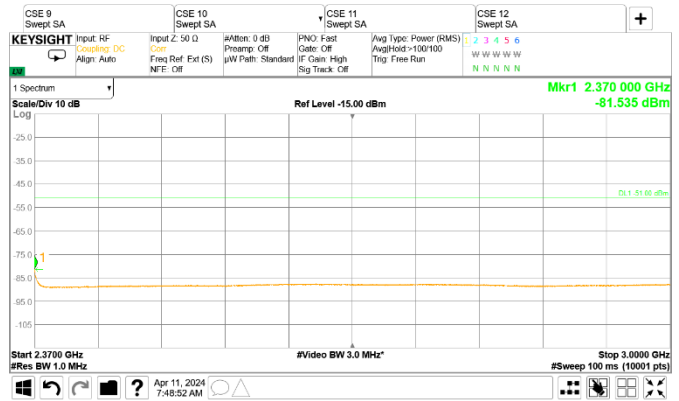


Figure 8.2-46: Conducted spurious emissions of LTE 10 MHz, single carrier operation [2.70 GHz to 3 GHz]

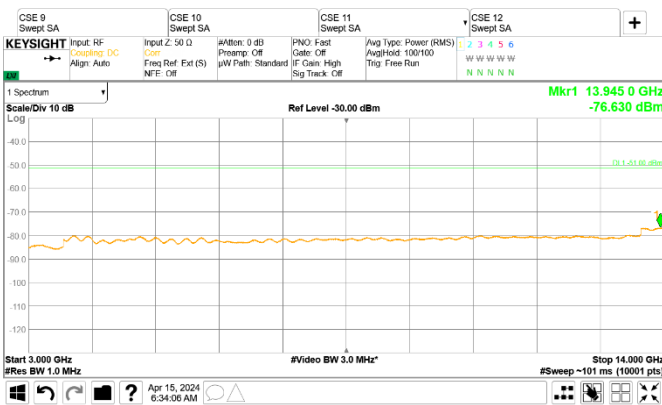


Figure 8.2-47: Conducted spurious emissions of LTE 10 MHz, single carrier operation [3 GHz to 14 GHz]

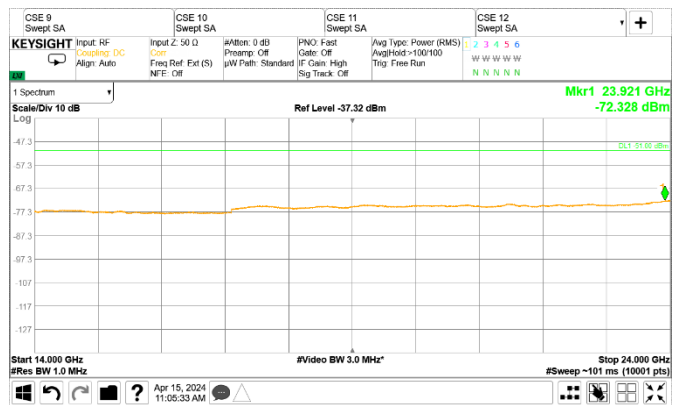


Figure 8.2-48: Conducted spurious emissions of LTE 10 MHz, single carrier operation [14 GHz to 24 GHz]

Test data, continued

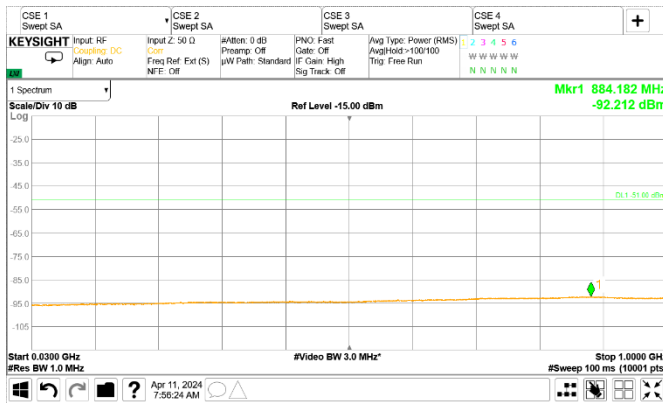


Figure 8.2-49: Conducted spurious emissions of LTE 5 MHz, Contiguous Channels, two carrier operation [30 MHz to 1 GHz]

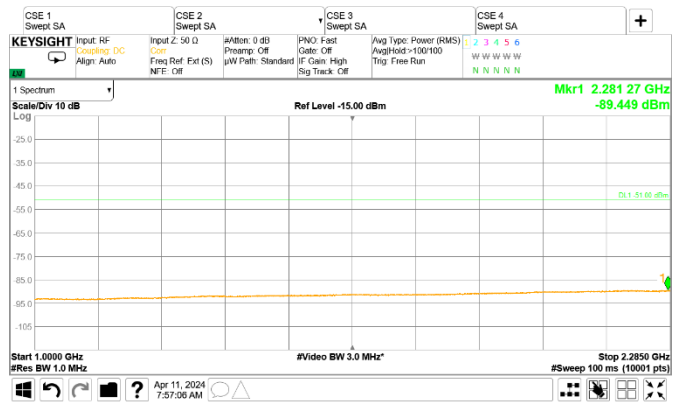


Figure 8.2-50: Conducted spurious emissions of LTE 5 MHz, Contiguous Channels, two carrier operation [1 GHz to 2.285 GHz]

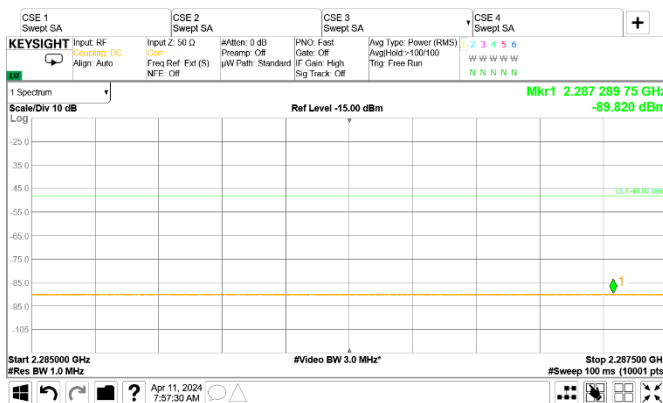


Figure 8.2-51: Conducted spurious emissions of LTE 5 MHz, Contiguous Channels, two carrier operation [2.285 GHz to 2.2875 GHz]

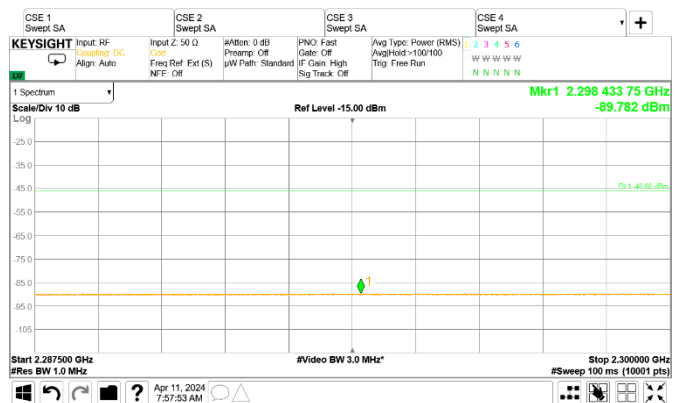


Figure 8.2-52: Conducted spurious emissions of LTE 5 MHz, Contiguous Channels, two carrier operation [2.2875 GHz to 2.30 GHz]

Test data, continued

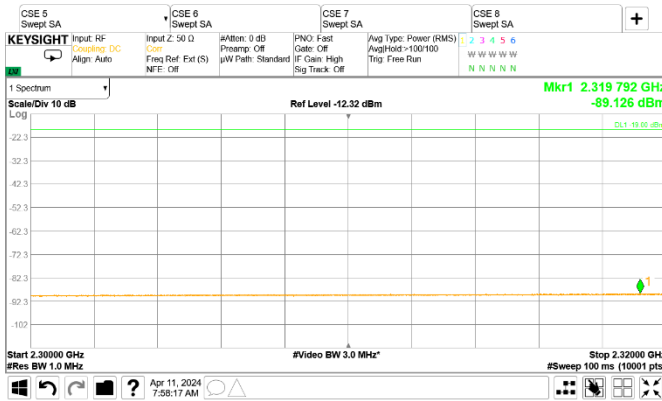


Figure 8.2-53: Conducted spurious emissions of LTE 5 MHz, Contiguous Channels, two carrier operation [2.30 GHz to 2.32 GHz]

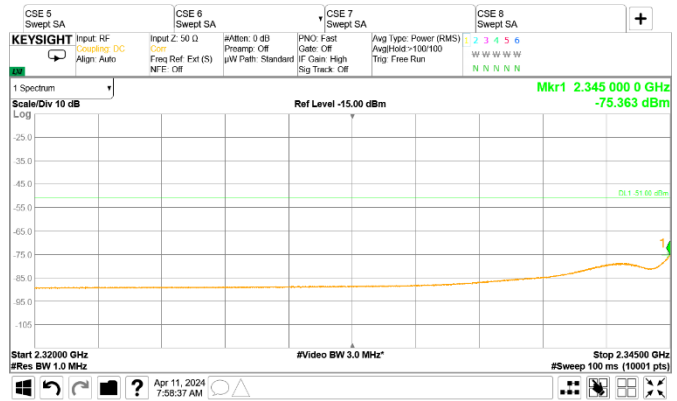


Figure 8.2-54: Conducted spurious emissions of LTE 5 MHz, Contiguous Channels, two carrier operation [2.32 GHz to 2.345 GHz]

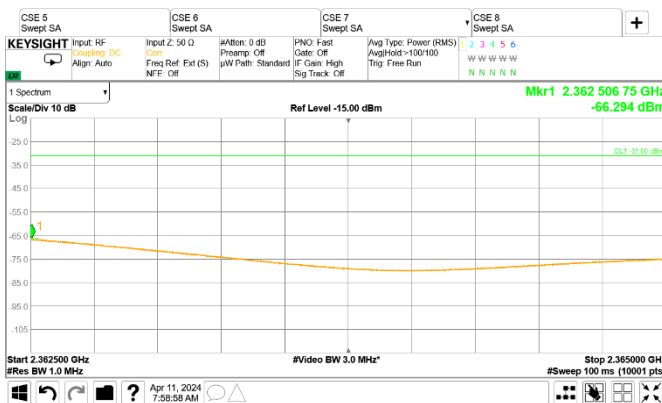


Figure 8.2-55: Conducted spurious emissions of LTE 5 MHz, Contiguous Channels, two carrier operation [2.3625 GHz to 2.365 GHz]

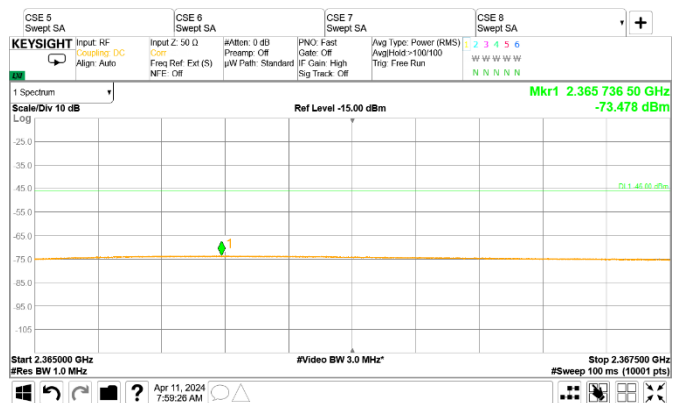


Figure 8.2-56: Conducted spurious emissions of LTE 5 MHz, Contiguous Channels, two carrier operation [2.365 GHz to 2.3675 GHz]

Test data, continued

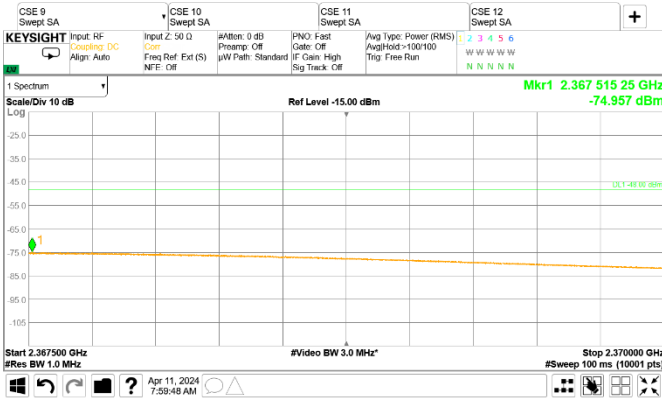


Figure 8.2-57: Conducted spurious emissions of LTE 5 MHz, Contiguous Channels, two carrier operation [2.3675 GHz to 2.70 GHz]



Figure 8.2-58: Conducted spurious emissions of LTE 5 MHz, Contiguous Channels, two carrier operation [2.70 GHz to 3 GHz]

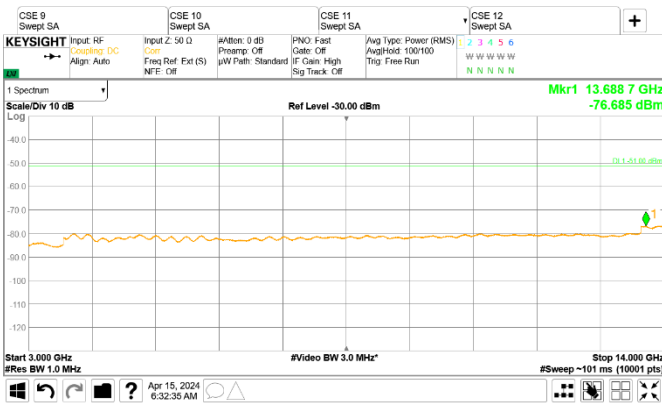


Figure 8.2-59: Conducted spurious emissions of LTE 5 MHz, Contiguous Channels, two carrier operation [3 GHz to 14 GHz]

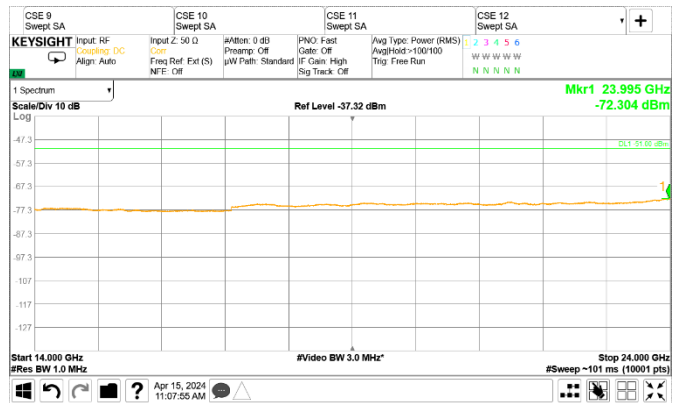


Figure 8.2-60: Conducted spurious emissions of LTE 5 MHz, Contiguous Channels, two carrier operation [14 GHz to 24 GHz]

Test data, continued



Figure 8.2-61: Conducted spurious emissions of NR 5 MHz low channel, single carrier operation [30 MHz to 1 GHz]



Figure 8.2-62: Conducted spurious emissions of NR 5 MHz low channel, single carrier operation [1 GHz to 2.285 GHz]

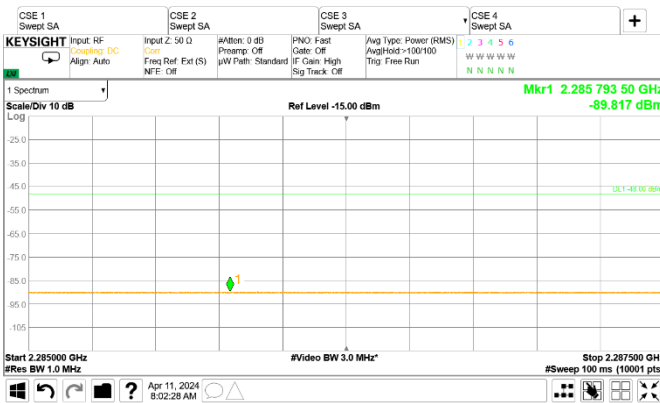


Figure 8.2-63: Conducted spurious emissions of NR 5 MHz low channel, single carrier operation [2.285 GHz to 2.2875 GHz]



Figure 8.2-64: Conducted spurious emissions of NR 5 MHz low channel, single carrier operation [2.2875 GHz to 2.30 GHz]