Report Reference ID:	REP074708

Test specification:	Title 47 – Telecommunication Chapter I – Federal Communications Commission Subchapter D – Safety and special radio services Part 90 – Private land mobile services Subpart I – General technical standards

Applicant:	TEKO Telecom Srl. Via Meucci, 24/a 40024 – Castel S. Pietro Terme (BO) – Italy
Apparatus:	Medium Power Remote Unit
Model:	TRU67E8AEWM/AC-WT
FCC ID:	XM2-MP67E8AE

Testing laboratory:	**Nemko Italy Spa** Via del Carroccio, 4 20853 Biassono (MB) – Italy Telephone: +39 039 2201201 Facsimile: +39 039 2201221

	Name and title	**Date**
Tested by:	P. Barbieri, Wireless/EMC Specialist	2024-12-24
Reviewed by:	Digitally signed by Giampaglia Roberto R. Giampaglia, Laboratory manager	2024-12-24

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Section 1: Report summary

1.1 Test specification

Specifications	**Part 90 – Private land mobile services**

1.2 Statement of compliance

Compliance	In the configuration tested the EUT was found compliant Yes ☒ No ☐ Test method: ANSI C63.26-2015, 935210 D05 Measurements guidance for industrial and non-consumer signal booster, repeater and amplifier devices v01r04.

1.3 Exclusions

Exclusions	None

1.4 Registration number

FCC site number	682159

1.5 Test report revision history

Revision #	Details of changes made to test report
REP074708	Original report issued

1.6 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.

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Section 2: Summary of test results

2.1 FCC Part 90, test results

Part	Methods	Test description	Verdict
	§ 935210 D05v01r04 (4.2)	AGC threshold	Pass
	§ 935210 D05v01r04 (4.3)	Out of band rejection	Pass
§90.209 §90.219(e)(4)	§ 935210 D05v01r04 (4.4)	Occupied bandwidth	Pass
§90.205 §90.542(a)(3) §90.219(e)(1)	§ 935210 D05v01r04 (4.5)	Output power at RF antenna connector	Pass
§90.219(e)(2)	§ 935210 D05v01r04 (4.6)	Noise Figure	Pass
§90.543(e) §90.219(e)(3)	§ 935210 D05v01r04 (4.7)	Spurious emissions at RF antenna connector	Pass
§90.543(e) §90.219(e)(3)	§ 935210 D05v01r04 (4.9)	Radiated spurious emissions	Pass
§90.543(f) §90.219(e)(3)	§ 935210 D05v01r03 (4.9)	Radiated spurious emissions within 1559–1610 MHz band	Pass
§90.213	§ 935210 D05v01r04 (4.8)	Frequency stability	N/A a)

Notes:

a) NOT APPLICABLE: Modulation/frequency conversion circuitry not in use. No frequency change in EUT (input and output have same frequency)

Section 3: Equipment under test (EUT) and application details

3.1 Applicant details

Applicant complete business name	Name:	Teko Telecom Srl
	Federal Registration Number (FRN):	0018963462
	Grantee code	XM2
Mailing address	Address: City: Province/State: Post code: Country:	Via Meucci, 24/a Castel S. Pietro Terme Bologna 40024 Italy

3.2 Modular equipment

a) Single modular approval	Single modular approval Yes ☐ No ☒
b) Limited single modular approval	Limited single modular approval Yes ☐ No ☒

3.3 Product details

FCC ID	Grantee code:	XM2
	Product code:	-MP67E8AE
Equipment class	B2I	
Description of product as it is marketed	Booster	
	Model name/number:	TRU67E8AEWM/AC-WT
	Serial number:	1012791001

3.4 Application purpose

Type of application	☐ Original certification ☐ Change in identification of presently authorized equipment Original FCC ID: Grant date: ☒ Class II permissive change or modification of presently authorized equipment

Section 3: Equipment under test

3.5 Composite/related equipment

a) Composite equipment	The EUT is a composite device subject to an additional equipment authorization Yes ☒ No ☐
b) Related equipment	The EUT is part of a system that operates with, or is marketed with, another device that requires an equipment authorization Yes ☐ No ☒
c) Related FCC ID	If either of the above is "yes": ☐ has been granted under the FCC ID(s) listed below: ☐ is in the process of being filled under the FCC ID(s) listed below: ☐ is pending with the FCC ID(s) listed below: ☐ has a mix of pending and granted statues under the FCC ID(s) listed below: i FCC ID: XM2-MP67E8AE ii FCC ID:

3.6 Sample information

Receipt date:	2024-12-13
Nemko sample ID number:	PRJ007185400004

3.7 EUT technical specifications

Operating band:	Down Link: 758–768 MHz, Up Link: 788-798 MHz
Operating frequency:	Wideband
Modulation type:	5G NR (QAM and QPSK)
Occupied bandwidth:	5G NR: 5 MHz to 10 MHz
Channel spacing:	standard
Emission designator:	5G NR: D7W
RF Output	Down Link: 33dBm (2W) Up Link: N.A. (The EUT does not transmit over the air in the up-link direction)
Gain	Down Link: 38dB Up Link: N.A. (The EUT does not transmit over the air in the up-link direction)
Antenna type:	External Antenna is not provided, equipment that has an external 50 Ω RF connector
Power source:	100-240 Vac

Section 3: Equipment under test

3.8 Accessories and support equipment

The following information identifies accessories used to exercise the EUT during testing:

Item # 1	
Type of equipment:	Master Unit - Subrack
Brand name:	Teko Telecom srl
Model name or number:	SUB-TRX-PSU
Serial number:	1007067005
Nemko sample number:	----------
Connection port:	----------
Cable length and type:	----------
Item # 2	
Type of equipment:	Master Unit – Management Module
Brand name:	Teko Telecom srl
Model name or number:	TSPV-EBB
Serial number:	1007944030
Nemko sample number:	----------
Connection port:	LAN port
Cable length and type:	----------
Item # 3	
Type of equipment:	Master Unit – Optical Module
Brand name:	Teko Telecom srl
Model name or number:	TTRU4W-S-M
Serial number:	1008678019
Nemko sample number:	----------
Connection port:	DL/UL RF connector (to connect to the base station) Optical port (to connect to remote unit)
Cable length and type:	----------
Item # 4	
Type of equipment:	Master Unit – Power Supply
Brand name:	Teko Telecom srl
Model name or number:	TPSU/AC
Serial number:	100012284
Nemko sample number:	----------
Connection port:	----------
Cable length and type:	----------

Section 3: Equipment under test

3.9 Operation of the EUT during testing

Details:	In down-link direction, normal working at max gain with max RF power output.

3.10 EUT setup diagram

In this system, Remote Unit is the EUT. Master Unit includes only management module and optical module (to convert RF signal in optical signal in down link direction and vice versa optical signal in RF signal in uplink direction). As described in “Operational description”, master unit is connected directly to base station, so the system doesn’t use another equipment (under another FCC ID) to exercise the EUT. Signal generator is linked directly to the RF connector of optical module in the Master Unit.

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Test setup for output power, occupied bandwidth, spurious emissions:

Procedure

Connect the signal modulated generator to the input of the EUT, so that the EUT works at the max gain. Raise the input level to the EUT until reach the maximum output power. Connect the spectrum analyzer to the RF output connector of the EUT.

Section 4: Engineering considerations

4.1 Modifications incorporated in the EUT

Modifications	Modifications performed to the EUT during this assessment None ☒ Yes ☐, performed by Client ☐ or Nemko ☐ Details:

4.2 Deviations from laboratory tests procedures

Deviations	Deviations from laboratory test procedures None ☒ Yes ☐ - details are listed below:

4.3 Technical judgment

Judgment	None

Section 5: Test conditions

5.1 Deviations from laboratory tests procedures

No deviations were made from laboratory test procedures.

5.2 Test conditions, power source and ambient temperatures

Normal temperature, humidity and air pressure test conditions	Temperature: 18–33 °C Relative humidity: 25–75 % Air pressure: 86–106 kPa 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.
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 ±5 %, for which the equipment was designed.

5.3 Measurement uncertainty

The measurement uncertainty was calculated for each test and quantity listed in this test report, according to CISPR 16-4-2 and other specific test standard and is documented in Nemko Spa working manual WML1002. The assessment of conformity for each test performed on the equipment is performed not taking into account the measurement uncertainty. The two following possible verdicts are stated in the report:
P (Pass) - The measured values of the equipment respect the specification limit at the points tested. The specific risk of false accept is up to 50% when the measured result is close to the limit.
F (Fail) - One or more measured values of the equipment do not respect the specification limit at the points tested. The specific risk of false reject is up to 50% when the measured result is close to the limit.
Hereafter Nemko's measurement uncertainties are reported:

Section 5: Test conditions, continued

EUT	Type	Test	Range	Measurement Uncertainty	Notes
Transmitter	Conducted	Frequency error	0.001 MHz ÷ 40 GHz	0.08 ppm	(1)
		Carrier power RF Output Power	0.009 MHz ÷ 30 MHz	1.1 dB	(1)
			30 MHz ÷ 18 GHz	1.5 dB	(1)
			18 MHz ÷ 40 GHz	3.0 dB	(1)
			40 MHz ÷ 140 GHz	5.0 dB	(1)
		Adjacent channel power	1 MHz ÷ 18 GHz	1.4 dB	(1)
		Conducted spurious emissions	0.009 MHz ÷ 18 GHz	3.0 dB	(1)
			18 GHz ÷ 40 GHz	4.2 dB	(1)
			40 GHz ÷ 220 GHz	6.0 dB	(1)
		Intermodulation attenuation	1 MHz ÷ 18 GHz	2.2 dB	(1)
		Attack time – frequency behaviour	1 MHz ÷ 18 GHz	2.0 ms	(1)
		Attack time – power behaviour	1 MHz ÷ 18 GHz	2.5 ms	(1)
		Release time – frequency behaviour	1 MHz ÷ 18 GHz	2.0 ms	(1)
		Release time – power behaviour	1 MHz ÷ 18 GHz	2.5 ms	(1)
		Transient behaviour of the transmitter– Transient frequency behaviour	1 MHz ÷ 18 GHz	0.2 kHz	(1)
		Transient behaviour of the transmitter – Power level slope	1 MHz ÷ 18 GHz	9%	(1)
		Frequency deviation - Maximum permissible frequency deviation	0.001 MHz ÷ 18 GHz	1.3%	(1)
		Frequency deviation - Response of the transmitter to modulation frequencies above 3 kHz	0.001 MHz ÷ 18 GHz	0.5 dB	(1)
		Dwell time	-	3%	(1)
		Hopping Frequency Separation	0.01 MHz ÷ 18 GHz	1%	(1)
		Occupied Channel Bandwidth	0.01 MHz ÷ 18 GHz	2%	(1)
		Modulation Bandwidth	0.01 MHz ÷ 18 GHz	2%	(1)
	Radiated	Radiated spurious emissions	0.009 MHz ÷ 26.5 GHz	6.0 dB	(1)
			26.5 GHz ÷ 66 GHz	8.0 dB	(1)
			66 GHz ÷ 220 GHz	10 dB	(1)
		Effective radiated power transmitter	10 kHz ÷ 26.5 GHz	6.0 dB	(1)
			26.5 GHz ÷ 66 GHz	8.0 dB	(1)
			66 GHz ÷ 220 GHz	10 dB	(1)
Receiver	Radiated	Radiated spurious emissions	0.009 MHz ÷ 26.5 GHz	6.0 dB	(1)
			26.5 GHz ÷ 66 GHz	8.0 dB	(1)
			66 GHz ÷ 220 GHz	10 dB	(1)
		Sensitivity measurement	1 MHz ÷ 18 GHz	6.0 dB	(1)
	Conducted	Conducted spurious emissions	0.009 MHz ÷ 18 GHz	3.0 dB	(1)
			18 GHz ÷ 40 GHz	4.2 dB	(1)
			40 GHz ÷ 220 GHz	6.0 dB	(1)

NOTES:
(1) The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k = 2, which for a normal distribution corresponds to a coverage probability of approximately 95 %

Section 5: Test conditions, continued

5.4 Test equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Next cal.
Vector Signal Generator	Keysight	N5182B MXG	MY59100262	2025-07
Vector Signal Generator	Keysight	N5182B MXG	MY61252595	2025-11
Spectrum Analyzer	Keysight	N9030B PXA	MY62282033	2024-12
Combiner	Miczen	MZP200506GA (0.5-6 GHz)	210314001	COU
Antenna Trilog 25MHz - 8GHz	Schwarzbeck	VULB9168	9168-242	2025-06
Antenna 1-18 GHz	Schwarzbeck	STLP 9148	STPL 9148-123	2025-06
Double Ridge Horn Antenna	RFSpin	DRH40	061106A40	2026-05
Broadband Amplifier	Schwarzbeck	BBV9718C	00121	2025-03
Broadband Bench Top Amplifier	Sage	STB-1834034030-KFKF-L1	18490-01	2025-05
EMI Receiver	Rohde & Schwarz	ESU8	100202	2025-09
Spectrum analyzer	R&S	FSW43	101767	2025-01
Controller	Maturo	FCU3.0	10041	NCR
Tilt antenna mast	Maturo	TAM4.0-E	10042	NCR
Turntable	Maturo	TT4.0-5T	2.527	NCR
3m Semi anechoic chamber	Comtest	SAC-3	1711-150	NCR

Note: N/A = Not Applicable, NCR = No Cal Required, COU = CAL On Use
(*) Equipment supplied by manufacturer's

Appendix A: Test results

Clause 935210 D05v01r04 (4.2) AGC threshold

Measure of EUT AGC Threshold

Test date: 2024-12-16 to 2024-12-19

Test results: Pass

Special notes

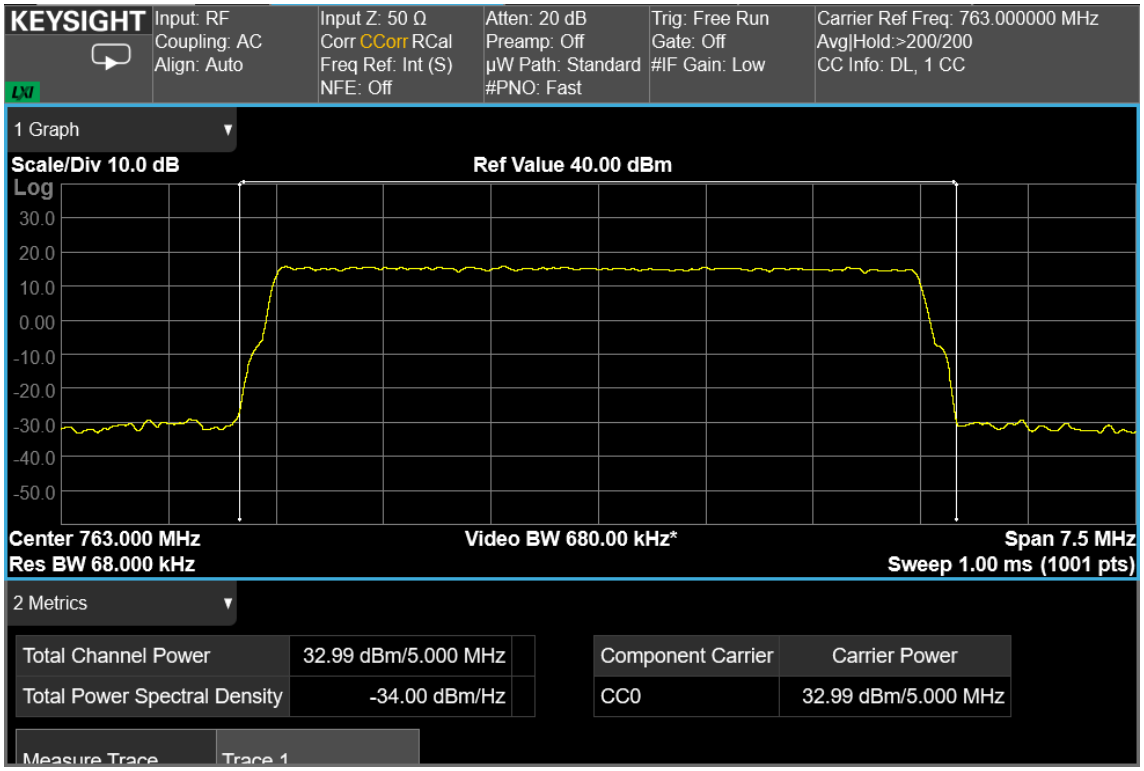
–

Test equipment

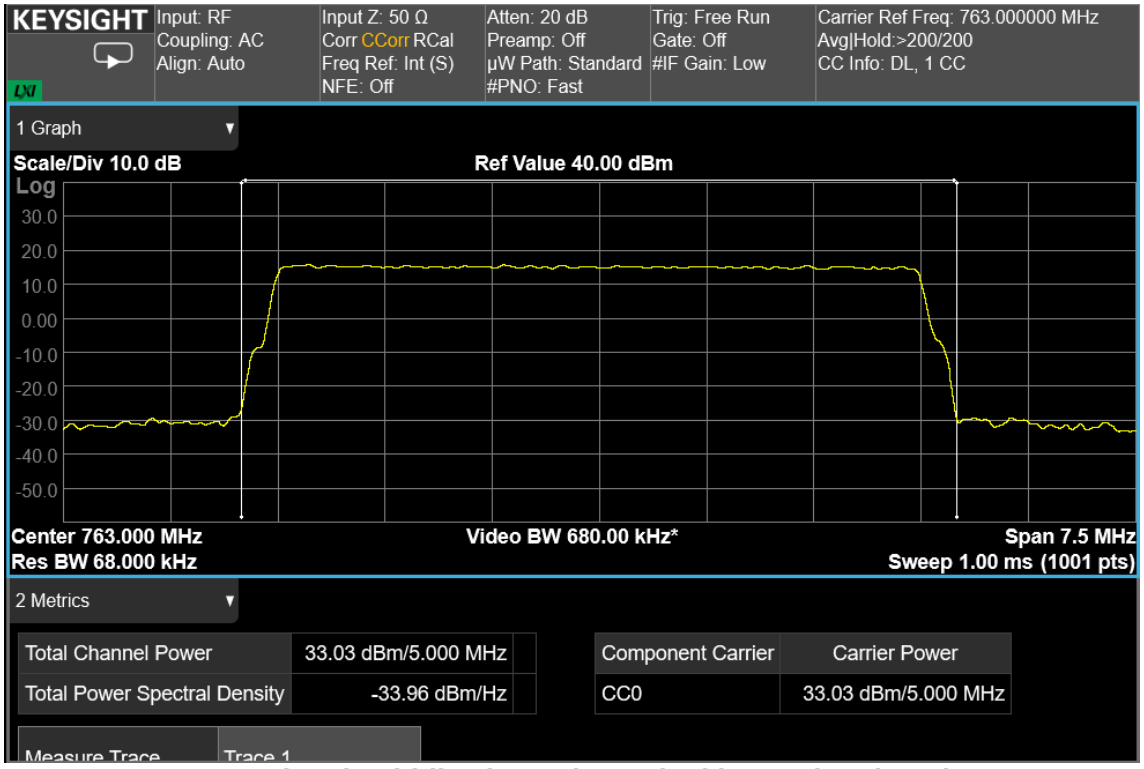
Equipment	Manufacturer	Model No.	Asset/Serial No.	Next cal.
Vector Signal Generator	Keysight	N5182B MXG	MY59100262	2025-07
Spectrum Analyzer	Keysight	N9030B PXA	MY62282033	2024-12

Note: N/A = Not Applicable, NCR = No Cal Required, COU = CAL On Use
(*) Equipment supplied by manufacturer's

Test data



5 MHz signal, middle channel, nominal input signal



5 MHz signal, middle channel, nominal input signal +1 dB

Clause 935210 D05v01r04 (4.3) Out of band rejection

Out of Band Rejection – Test for rejection of out of band signals.

Test date: 2024-12-16 to 2024-12-19

Test results: Pass

Special notes

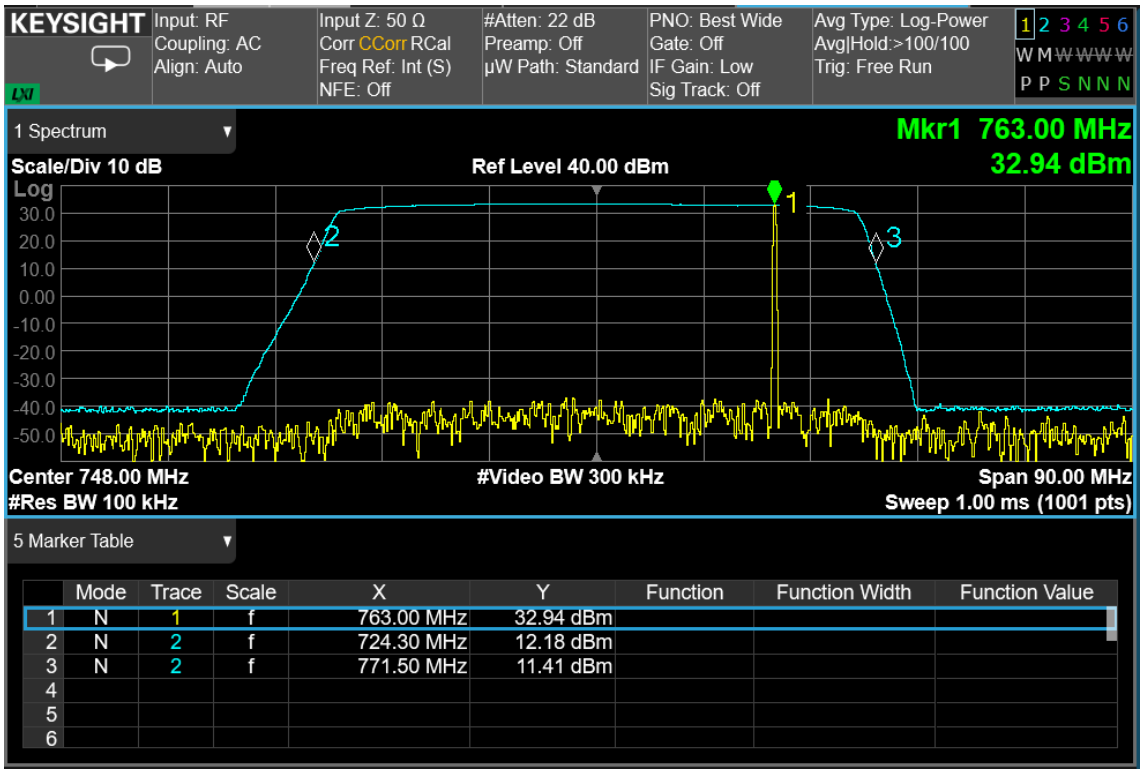
–

Test equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Next cal.
Vector Signal Generator	Keysight	N5182B MXG	MY59100262	2025-07
Spectrum Analyzer	Keysight	N9030B PXA	MY62282033	2024-12

Note: N/A = Not Applicable, NCR = No Cal Required, COU = CAL On Use
(*) Equipment supplied by manufacturer's

Test data


KEYSIGHT
Input: RF
Coupling: AC
Align: Auto
Input Z: 50 Ω
Corr CCorr RCal
Freq Ref: Int (S)
NFE: Off
#Atten: 22 dB
Preamp: Off
µW Path: Standard
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
Avg Type: Log-Power
Avg|Hold:>100/100
Trig: Free Run
1 Spectrum
Mkr1 763.00 MHz
32.94 dBm
Scale/Div 10 dB
Ref Level 40.00 dBm
Log
30.0
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
Center 748.00 MHz
#Res BW 100 kHz
#Video BW 300 kHz
Span 90.00 MHz
Sweep 1.00 ms (1001 pts)
5 Marker Table
Mode Trace Scale X Y Function Function Width Function Value
1 N 1 f 763.00 MHz 32.94 dBm
2 N 2 f 724.30 MHz 12.18 dBm
3 N 2 f 771.50 MHz 11.41 dBm
4
5
6

Clause 90.209, 90.219(e)(4) Occupied bandwidth

§ 90.219(e)(4)
A signal booster must be designed such that all signals that it retransmits meet the following requirements:

(i) The signals are retransmitted on the same channels as received. Minor departures from the exact provider or reference frequencies of the input signals are allowed, *provided that* the retransmitted signals meet the requirements of § 90.213.

(ii) There is no change in the occupied bandwidth of the retransmitted signals.

(iii) The retransmitted signals continue to meet the unwanted emissions limits of § 90.210 applicable to the corresponding received signals (assuming that these received signals meet the applicable unwanted emissions limits by a reasonable margin).

Test date: 2024-12-16 to 2024-12-19

Test results: Pass

Special notes

-

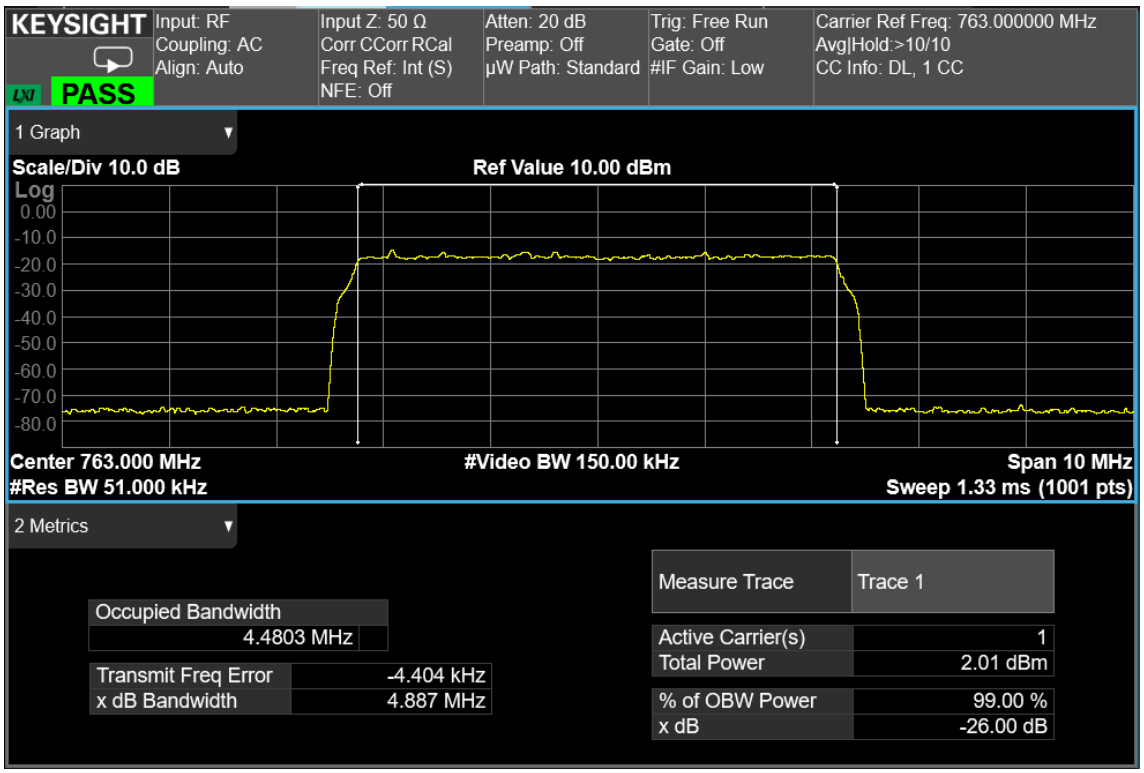
Test equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Next cal.
Vector Signal Generator	Keysight	N5182B MXG	MY59100262	2025-07
Spectrum Analyzer	Keysight	N9030B PXA	MY62282033	2024-12

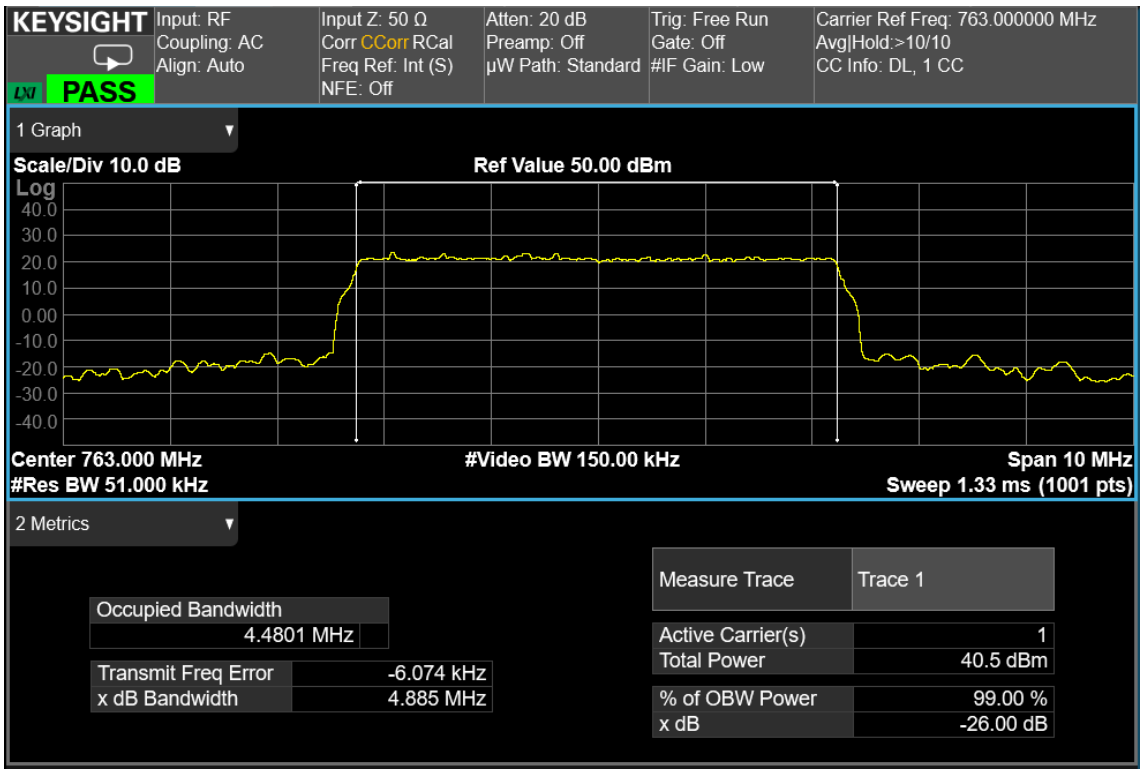
Note: N/A = Not Applicable, NCR = No Cal Required, COU = CAL On Use
(*) Equipment supplied by manufacturer's

Test data

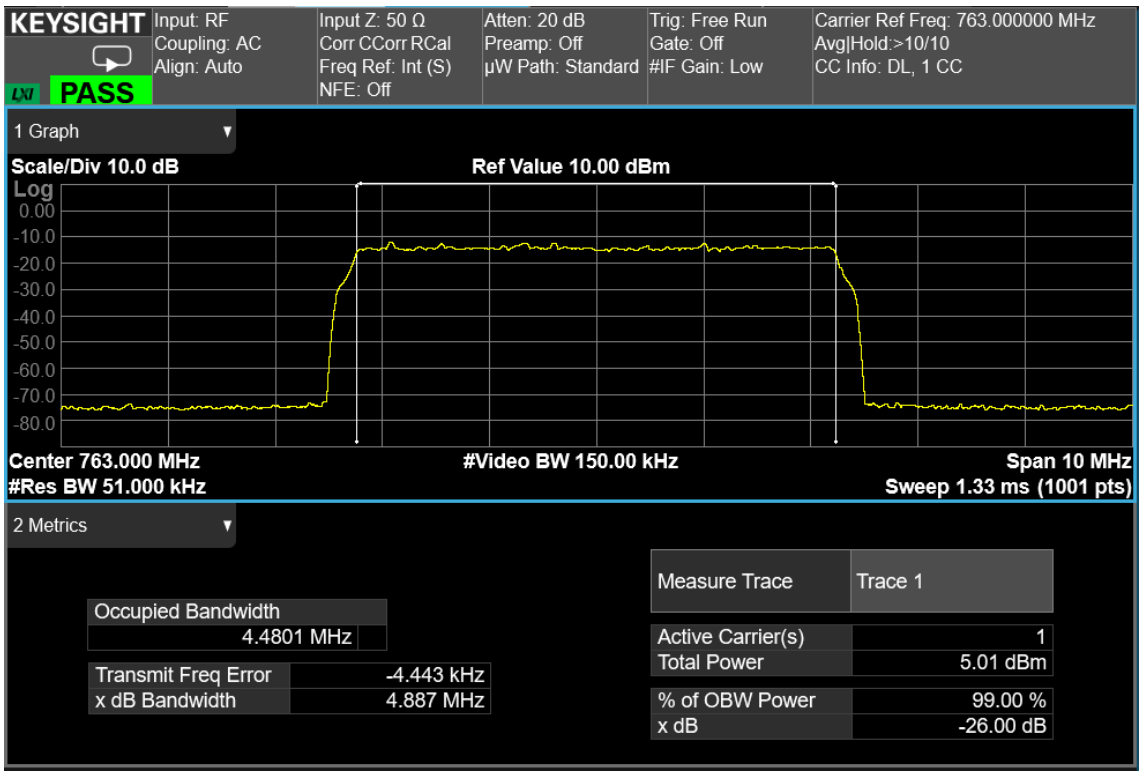
5 MHz signal, middle channel, nominal input signal - Output



5 MHz signal, middle channel, nominal input signal - Input



5 MHz signal, middle channel, nominal input signal + 3dB - Output



5 MHz signal, middle channel, nominal input signal + 3dB - Input

Clause 90.205, 90.542(a)(3), 90.219(e)(1) Output power at RF antenna connector

§ 90.205

Applicants for licenses must request and use no more power than the actual power necessary for satisfactory operation. Except where otherwise specifically provided for, the maximum power that will be authorized to applicants whose license applications for new stations are filed after August 18, 1995 is as follows:

(j) 758-775 MHz and 788-805 MHz. Power and height limitations are specified in §§ 90.541 and 90.542.

§ 90.542(a)(3)

(a) The following power limits apply to the 758-768/788-798 MHz band:

(3) Fixed and base stations transmitting a signal in the 758-768 MHz band with an emission bandwidth greater than 1 MHz must not exceed an ERP of 1000 watts/MHz and an antenna height of 305 m HAAT, except that antenna heights greater than 305 m HAAT are permitted if power levels are reduced below 1000 watts/MHz ERP accordance with Table 3 of this section.

§ 90.219(e)(1)

The output power capability of a signal booster must be designed for deployments providing a radiated power not exceeding 5 Watts ERP for each retransmitted channel.

Test date: 2024-12-16 to 2024-12-19

Test results: Pass

Special notes

-

Test equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Next cal.
Vector Signal Generator	Keysight	N5182B MXG	MY59100262	2025-07
Spectrum Analyzer	Keysight	N9030B PXA	MY62282033	2024-12

Note: N/A = Not Applicable, NCR = No Cal Required, COU = CAL On Use
(*) Equipment supplied by manufacturer's

Test data

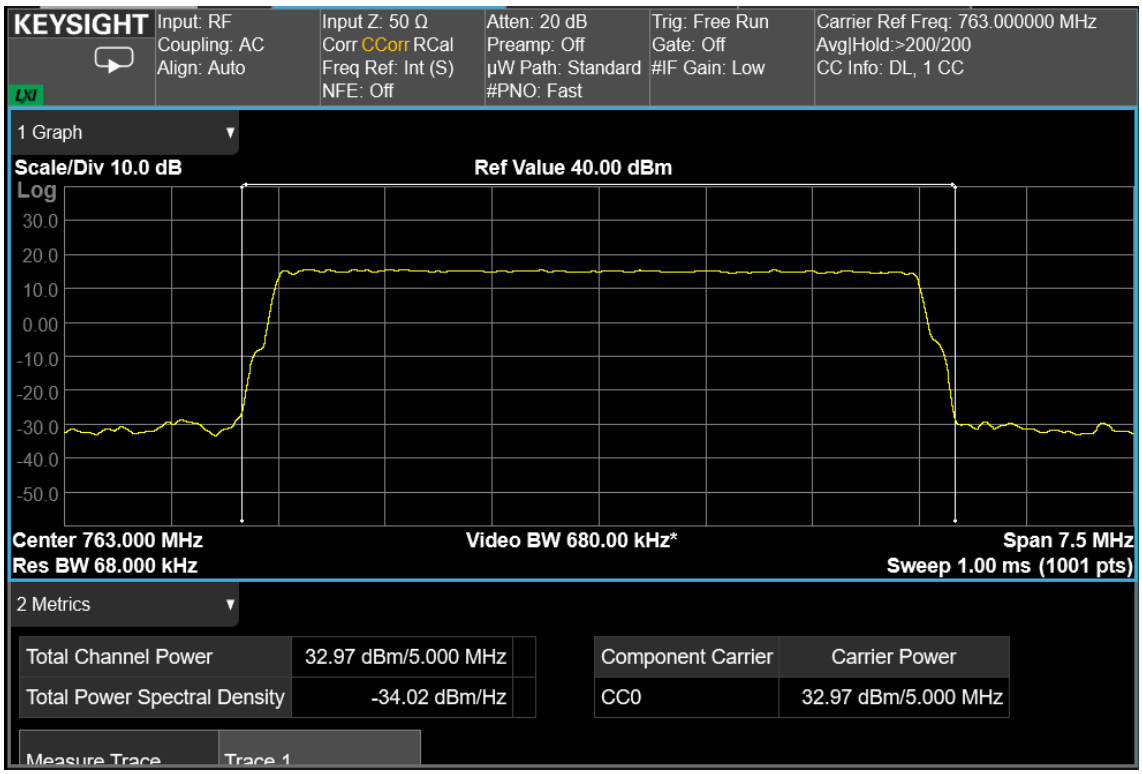
AWGN signal, nominal input signal

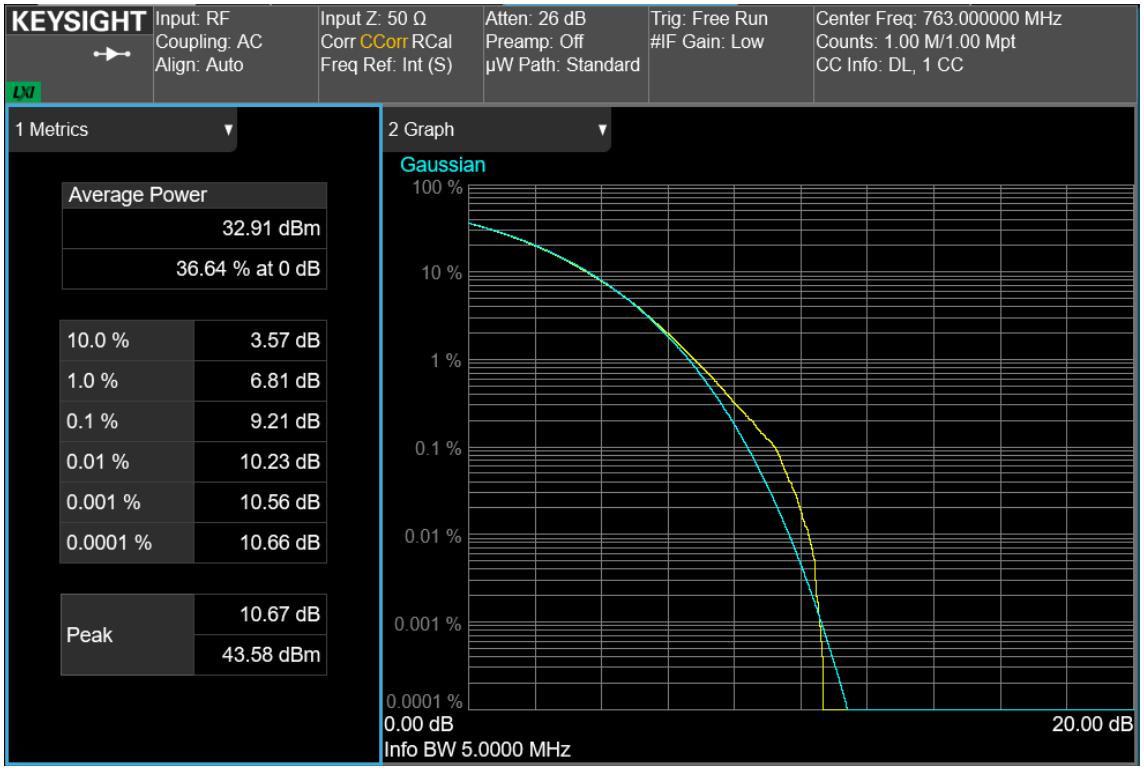
Test data						
Direction	Modulation	Frequency (MHz)	RF output Power (dBm)	RF output channel Power (W)	RF output Power (W/MHz)	PAR (dB)
Down-link	5G NR, 5 MHz	763.0	33.0	2.0	0.4	10.7

AWGN signal, nominal input signal + 3dB

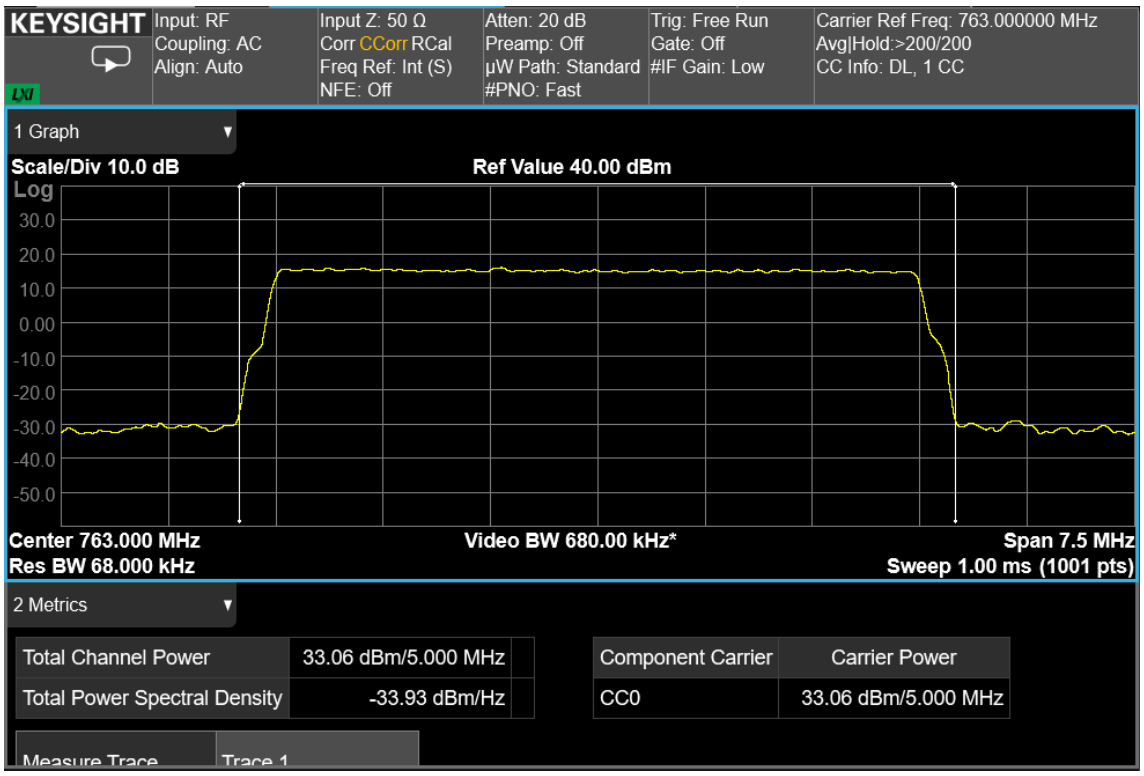
Test data						
Direction	Modulation	Frequency (MHz)	RF output Power (dBm)	RF output channel Power (W)	RF output Power (W/MHz)	PAR (dB)
Down-link	5G NR, 5 MHz	763.0	33.1	2.0	0.4	10.5

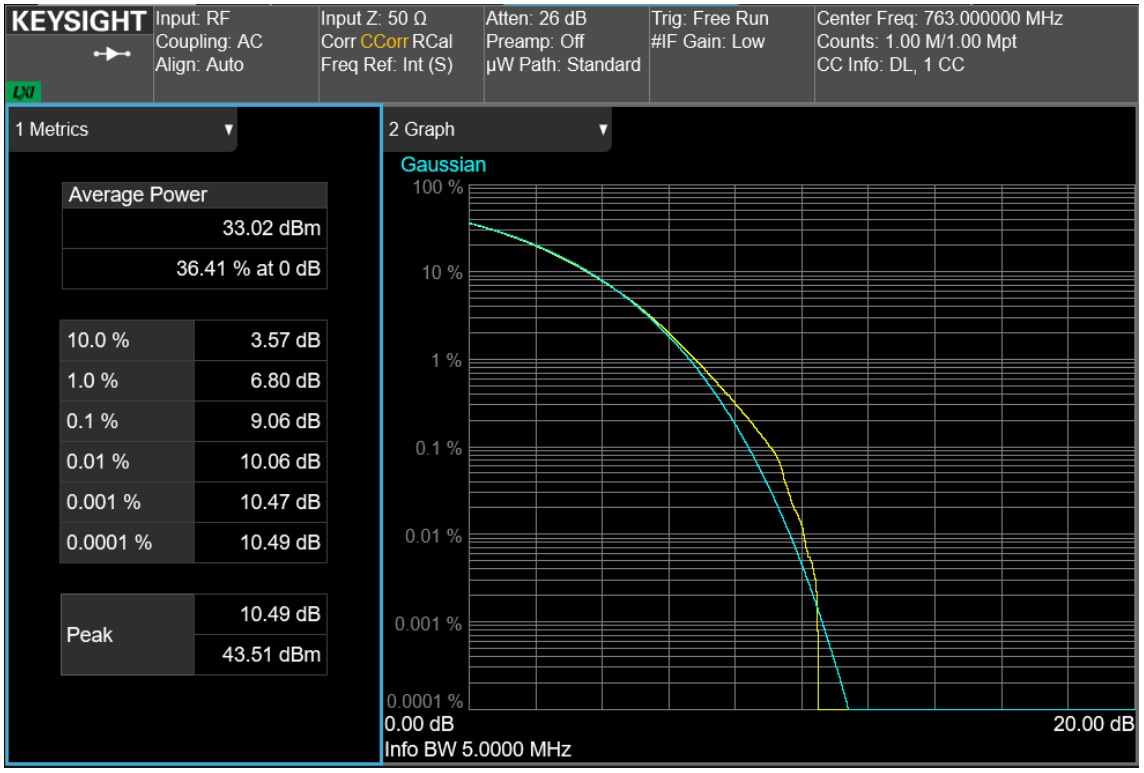
Note: PAR measure is performed by the “CCDF” function installed on Spectrum analyzer that provides average power (the same measured with “Channel power” function), peak power and PAR.





5 MHz signal, middle channel, nominal input signal





5 MHz signal, middle channel, nominal input signal + 3dB

Clause 935210 D05v01 (4.6) Noise figure

§ 90.219(e)(2)
The noise figure of a signal booster must not exceed 9 dB in either direction.

Test date: N/A

Test results: N/A

Special notes

For Class 2 Permissive Change new tests were not performed.
For previous test outcomes see **372719-4TRFWL.pdf** report.

Clause 90.543(e), 90.219(e)(3) Spurious emissions at the antenna terminal

§ 90.543(e)
For operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:
(1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.
(2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.
(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.
(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.
(5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

§ 90.219(e)(3)
Spurious emissions from a signal booster must not exceed –13dBm within any 100 kHz measurement bandwidth.

Test date: 2024-12-16 to 2024-12-19

Test results: Pass

Special notes

For Class 2 Permissive Change new tests were performed only on band edges intermodulation.
For previous spurious emissions tests at RF antenna connector see **372719-4TRFWL.pdf** report.

Test equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Next cal.
Vector Signal Generator	Keysight	N5182B MXG	MY59100262	2025-07
Vector Signal Generator	Keysight	N5182B MXG	MY61252595	2025-11
Spectrum Analyzer	Keysight	N9030B PXA	MY62282033	2024-12
Combiner	Miczen	MZP200506GA (0.5-6 GHz)	210314001	COU

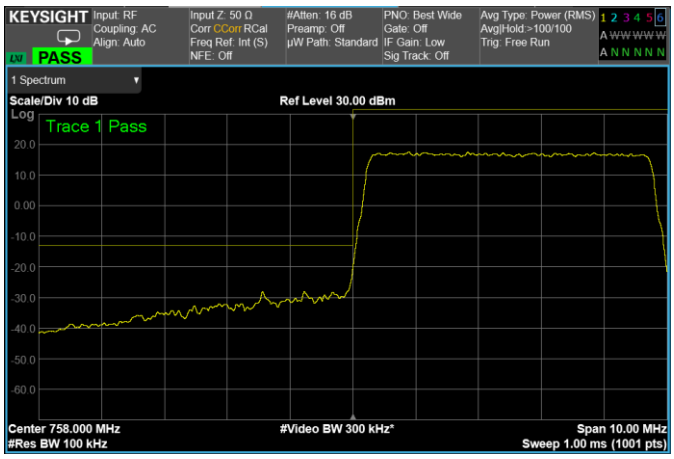
Note: N/A = Not Applicable, NCR = No Cal Required, COU = CAL On Use
(*) Equipment supplied by manufacturer's

Test data
See Plots below

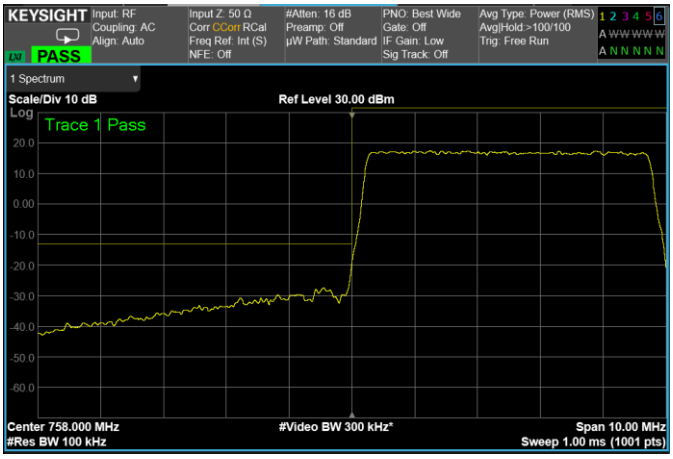
Spurious emissions measurement results:

Frequency (MHz)	Spurious emission (dBm)	Limit (dBm)	Margin (dB)
First channel	Negligible	-13	
Mid channel	Negligible	-13	
Last channel	Negligible	-13	

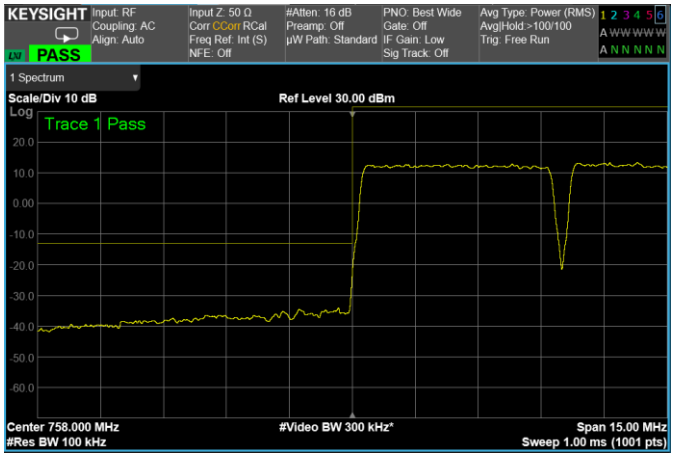
Test data, continued: band edges Inter modulation



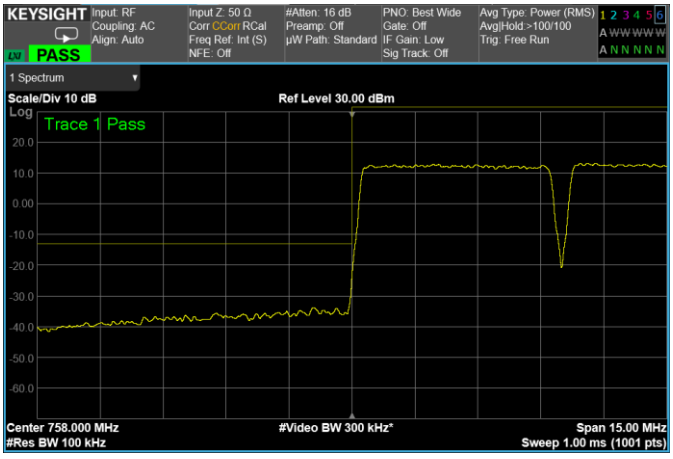
5 MHz signal, Low Band Edge, 1 carrier, nominal input signal



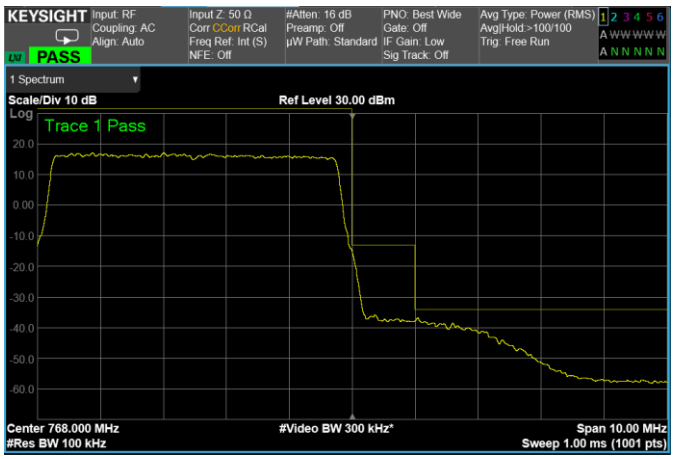
5 MHz signal, Low Band Edge, 1 carrier, nominal input signal + 3dB



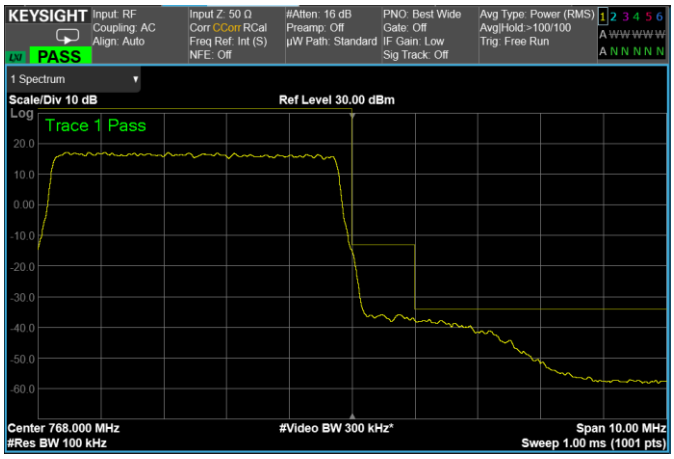
5 MHz signals, Low Band Edge, 2 carriers, nominal input signal



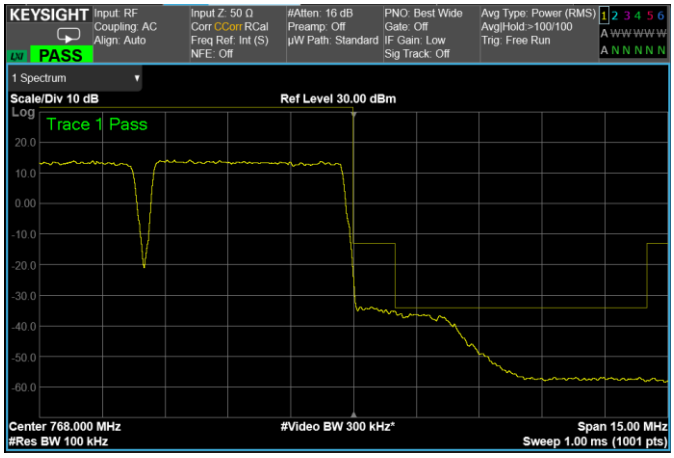
5 MHz signals, Low Band Edge, 2 carriers, nominal input signal + 3dB



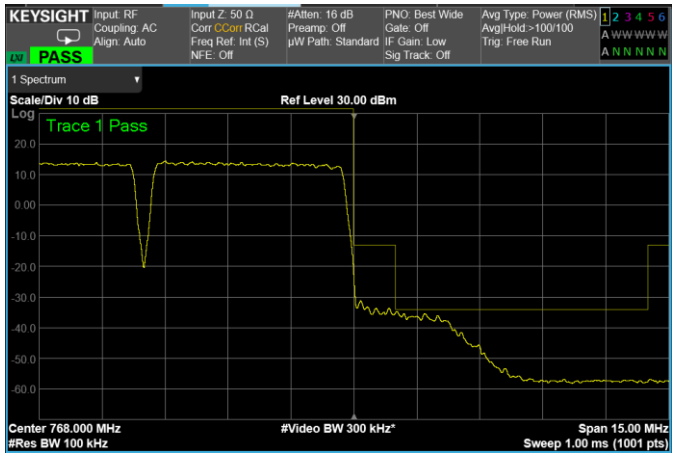
5 MHz signal, High Band Edge, 1 carrier, nominal input signal



5 MHz signal, High Band Edge, 1 carrier, nominal input signal + 3dB



5 MHz signals, High Band Edge, 2 carriers, nominal input signal



5 MHz signals, High Band Edge, 2 carriers, nominal input signal + 3dB

Clause 90.543(e), 90.219(e)(3) Spurious emissions radiated

§ 90.543(e)
For operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:
(1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.
(2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.
(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.
(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.
(5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

§ 90.219(e)(3)
Spurious emissions from a signal booster must not exceed –13dBm within any 100 kHz measurement bandwidth.

Test date: N/A

Test results: N/A

Special notes

- Test not performed because not requested for a Class 2 Permissive Change.
- For previous radiated spurious emission tests see **372719-4TRFWL.pdf** report.

Test equipment

Equipment	Manufacturer	Model No.	Asset/Serial No.	Next cal.

Note: N/A = Not Applicable, NCR = No Cal Required, COU = CAL On Use
(*) Equipment supplied by manufacturer's

Clause 90.543(e), 90.219(e)(3) Spurious emissions radiated, continued

Test data

Spurious emissions measurement results:

Frequency (MHz)	Polarization. V/H	Field strength (dBm)	Limit (dBm)	Margin (dB)
Low channel				
-				
-				
-				
Mid channel				
High channel				
-				
-				
-				

Note:

Clause 90.543(f) Radiated spurious emissions within 1559–1610 MHz band

§ 90.543(f)
For operations in the 758-775 MHz and, 788-805 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation

Note:
Method of measurement according to TIA-603-C (EIRP in GNSS band: 1.556 to 1.610 GHz) .
∆ Band = 51 MHz, Correction Factor calculated at central band 1604.5 MHz. in Fraunhofer Region.

Test date: N/A

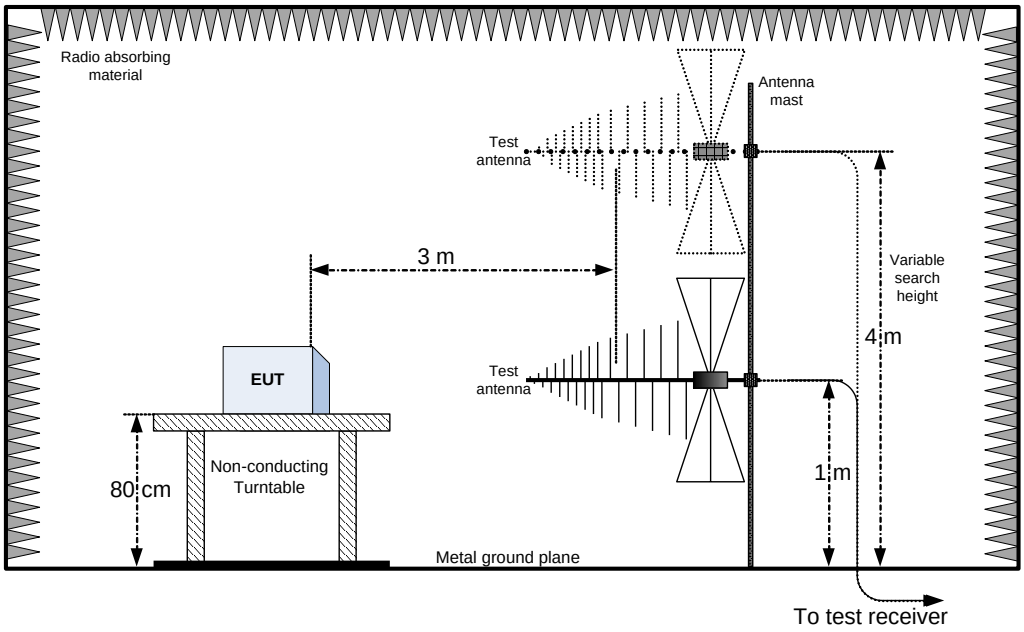
Test results: N/A

Special notes

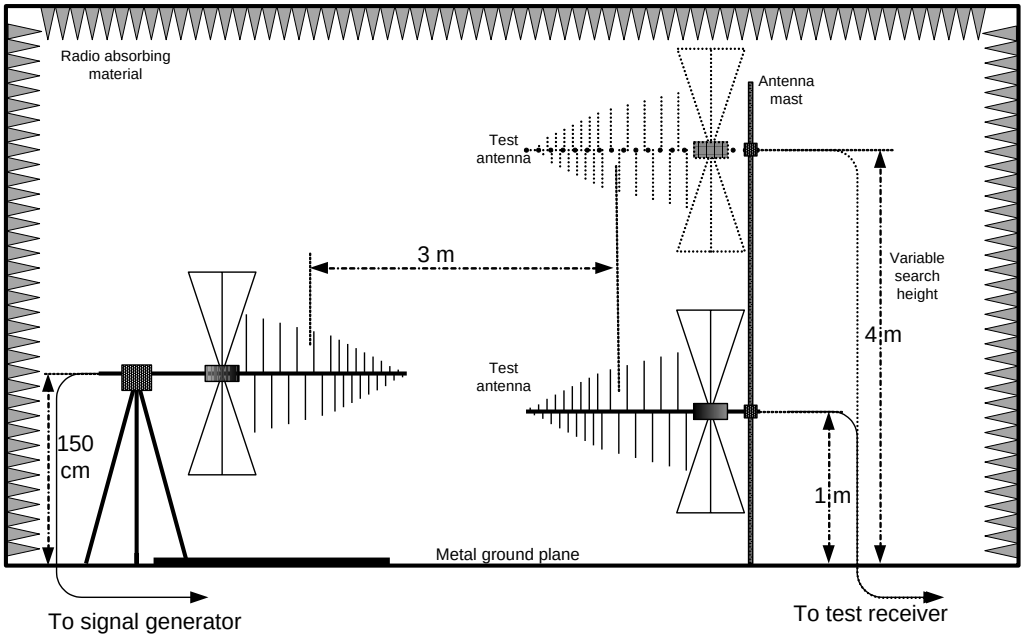
- Test not performed because not requested for a Class 2 Permissive Change.
- For previous radiated spurious emission tests see **372719-4TRFWL.pdf** report.

Appendix B: Block diagrams of test set-ups

Radiated emissions set-up



Substitution method set-up



Appendix C: EUT Photos

Photo Set up

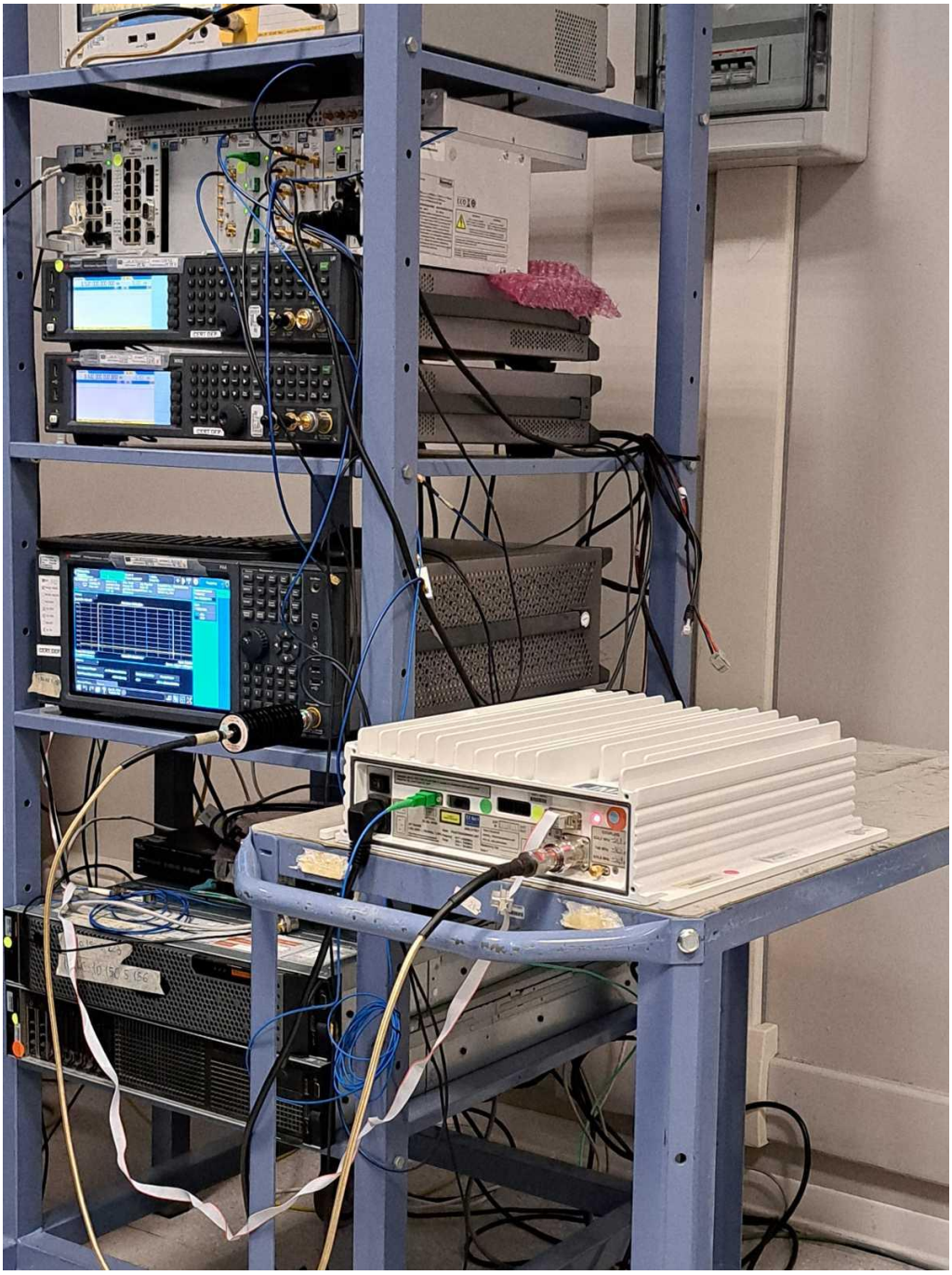
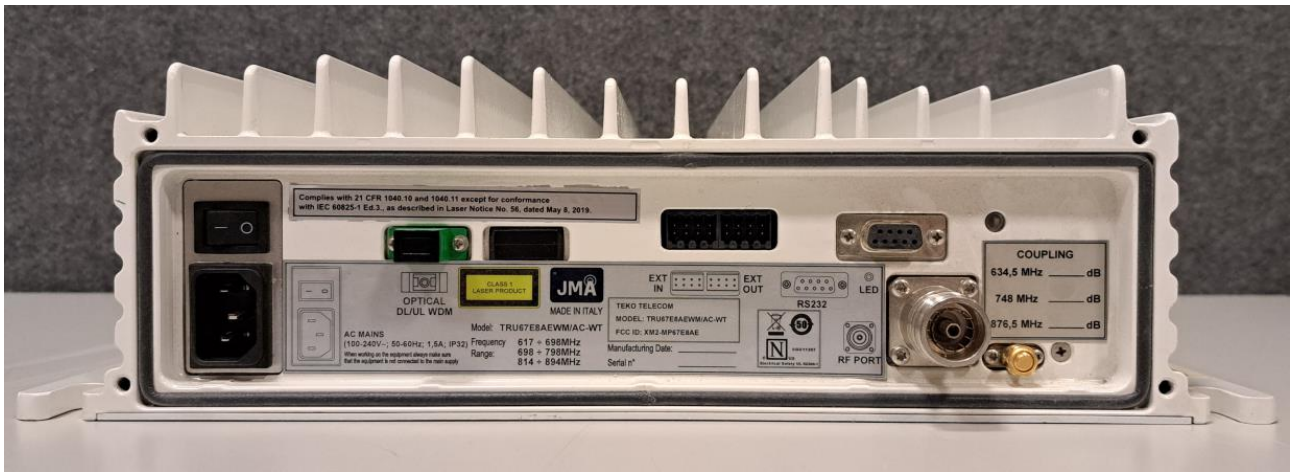
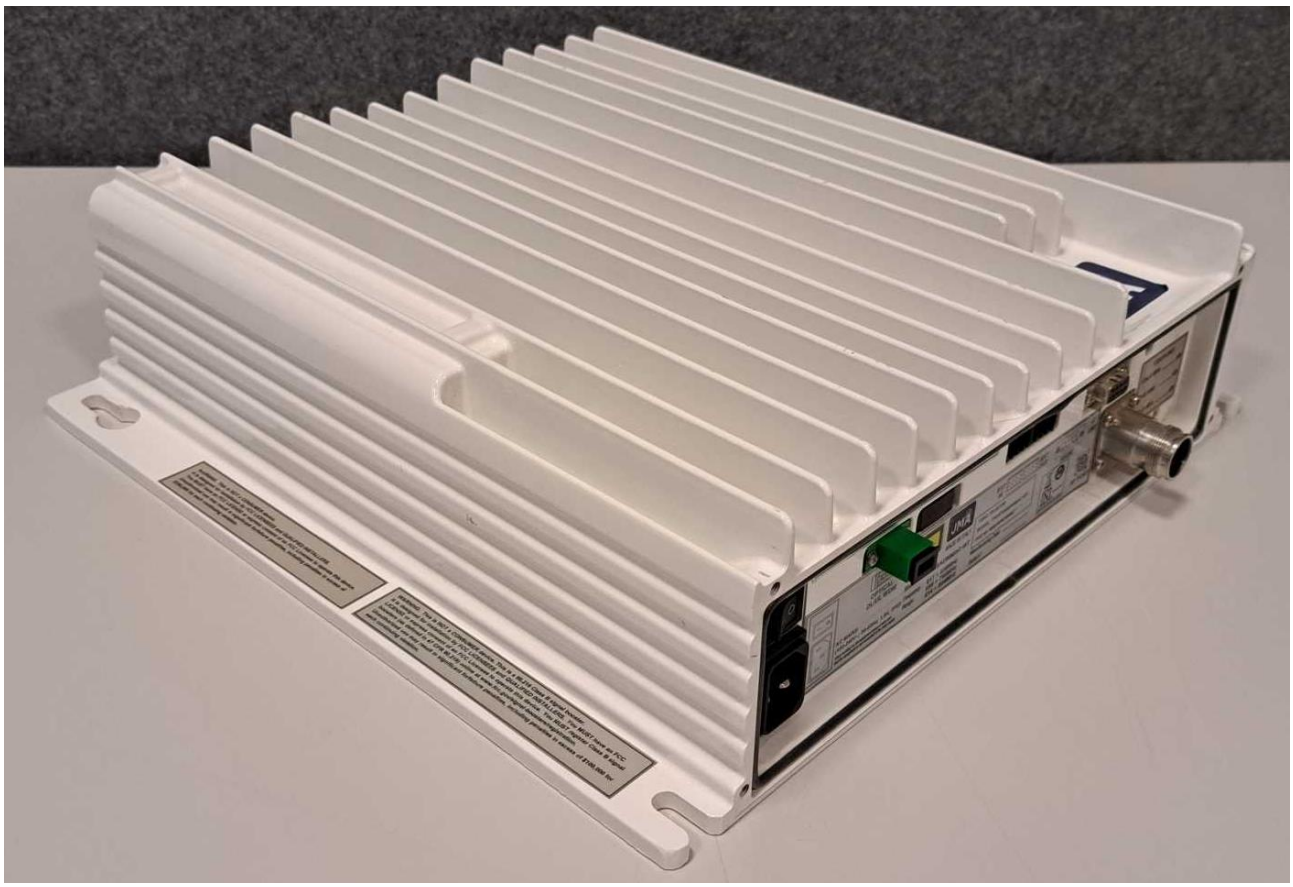


Photo EUT


JMA


Complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed.3., as described in Laser Notice No. 56, dated May 8, 2019.
OPTICAL DL/UL WDM
JMA
MADE IN ITALY
AC MAINS
Model: TRU67E8AEWM/AC-WT
Frequency 617 ÷ 698MHz
Range: 698 ÷ 798MHz
814 ÷ 894MHz
EXT IN
EXT OUT
LED
RS232
TEKO TELECOM
MODEL: TRU67E8AEWM/AC-WT
FCC ID: XM2-MP67E8AE
Manufacturing Date:
Serial n°
RF PORT
COUPLING
634,5 MHz dB
748 MHz dB
876,5 MHz dB




JMA
COUPLING
634,5 MHz dB
748 MHz dB
876,5 MHz dB
EXT IN
EXT OUT
LED
RS232
RF PORT
MADE IN ITALY

- END OF REPORT -