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| Report Reference ID: | 372837-3TRFWL |
|-----------------------------|---------------|

| | |
|----------------------------|--|
| 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 I-40024 Castel S. Pietro Terme (BO) (Italy) |
| Apparatus: | Medium Power Remote Unit |
| Model: | TRU7FL8P9PWM/AC-WT |
| FCC ID: | XM2-MP7FL8P9PP |

| | |
|----------------------------|---|
| 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 | 06/24/2019 |
| Reviewed by: |  _____ R. Giampaglia, Wireless/EMC Specialist | 06/24/2019 |

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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 | <p>In the configuration tested the EUT was found compliant Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>This report contains an assessment of apparatus against specifications based upon tests carried out on samples submitted at Nemko Spa. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 90. Radiated tests were conducted in accordance with ANSI C63.26-2015.</p> |
|-------------------|--|

1.3 Exclusions

| | |
|-------------------|------|
| Exclusions | None |
|-------------------|------|

1.4 Registration number

| | |
|--------------------------------|--------|
| Test site FCC ID number | 682159 |
|--------------------------------|--------|

1.5 Test report revision history

| Revision # | Details of changes made to test report |
|------------|--|
| TRF | Original report issued |
| R1TRF | ---- |

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.

This test report has been completed in accordance with the requirements of ISO/IEC 17025. Nemko Spa authorizes the applicant to reproduce this report provided it is reproduced in its entirety and for use by the company's employees only.

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Section 2: Summary of test results

2.1 FCC Part 90, test results

| Part | Methods | Test description | Verdict |
|--|-----------------------------|--|---------|
| | § 935210 D05v01r03 (4.2) | AGC threshold | Pass |
| | § 935210 D05v01r03 (4.3) | Out of band rejection | Pass |
| §90.209 §90.210(g) §90.210 (h) §90.691 §90.219(e)(4) | § 935210 D05v01r03 (4.4) | Occupied bandwidth | Pass |
| §90.205 §90.219(e)(1) | § 935210 D05v01r03 (4.5) | Output power at RF antenna connector | Pass |
| §90.219(e)(2) | § 935210 D05v01r03 (4.6) | Noise Figure | Pass |
| §90.209 §90.210(g) §90.210 (h) §90.691 §90.219(e)(3) | § 935210 D05v01r03 (4.7) | Spurious emissions at RF antenna connector | Pass |
| §90.219(e)(3) | § 935210 D05v01r03 (4.9) | Radiated spurious emissions | Pass |
| §90.213 | § 935210 D05v01r03 (4.9) | 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: | Via Meucci, 24/a |
| | City: | Castel S. Pietro Terme |
| | Province/State: | Bologna |
| | Post code: | 40024 |
| | Country: | Italy |

3.2 Modular equipment

| | |
|---|--|
| a) Single modular approval | Single modular approval Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| b) Limited single modular approval | Limited single modular approval Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |

3.3 Product details

| | | |
|---|--------------------|--------------------|
| FCC ID | Grantee code: | XM2 |
| | Product code: | -MP7FL8P9PP |
| Equipment class | B9B | |
| Description of product as it is marketed | Booster | |
| | Model name/number: | TRU7FL8P9PWM/AC-WT |
| | Serial number: | 1012793001 |

3.4 Application purpose

| | |
|----------------------------|---|
| Type of application | <input checked="" type="checkbox"/> Original certification |
| | <input type="checkbox"/> Change in identification of presently authorized equipment Original FCC ID: _____ Grant date: _____ |
| | <input type="checkbox"/> 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 <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| 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 <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| c) Related FCC ID | If either of the above is "yes": <input type="checkbox"/> has been granted under the FCC ID(s) listed below: <input type="checkbox"/> is in the process of being filled under the FCC ID(s) listed below: <input type="checkbox"/> is pending with the FCC ID(s) listed below: <input type="checkbox"/> has a mix of pending and granted statuses under the FCC ID(s) listed below: i FCC ID: XM2-MP7FL8P9PP ii FCC ID: |

3.6 Sample information

| | |
|--------------------------------|------------|
| Receipt date: | 05/27/2019 |
| Nemko sample ID number: | ----- |

3.7 EUT technical specifications

| | |
|-----------------------------|---|
| Operating band: | Down Link: 851–862 MHz, Up Link: 806-817 MHz |
| Operating frequency: | Narrowband |
| Modulation type: | P25, FM |
| Occupied bandwidth: | Standard |
| Channel spacing: | Standard |
| Emission designator: | F1E, F1D, F3E |
| RF Output | Down Link: 33dBm (2,00W) 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:

No other FCC-ID equipment are 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: | 101083001 |
| 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-R |
| Serial number: | 110942253 |
| 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: | 110679007 |
| 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: | 081063004 |
| Nemko sample number: | ----- |
| Connection port: | ----- |
| Cable length and type: | ----- |
| | |

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 viceversa optical signal in RF signal in up link 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.

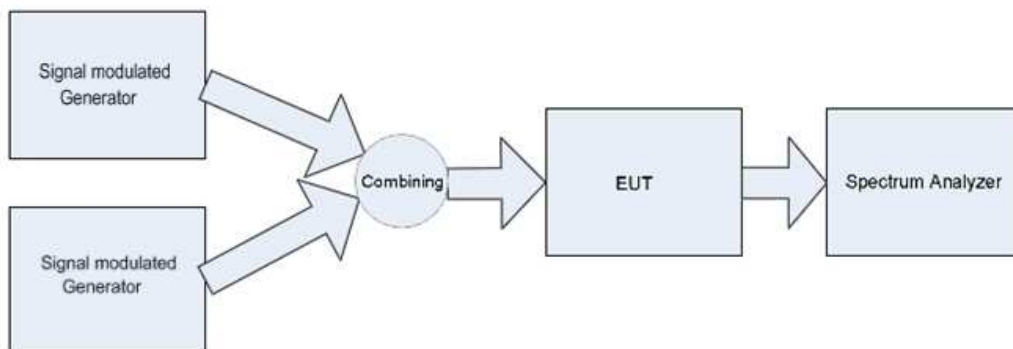
Test setup for output power, occupied bandwidth, spurious emissions:



Procedure

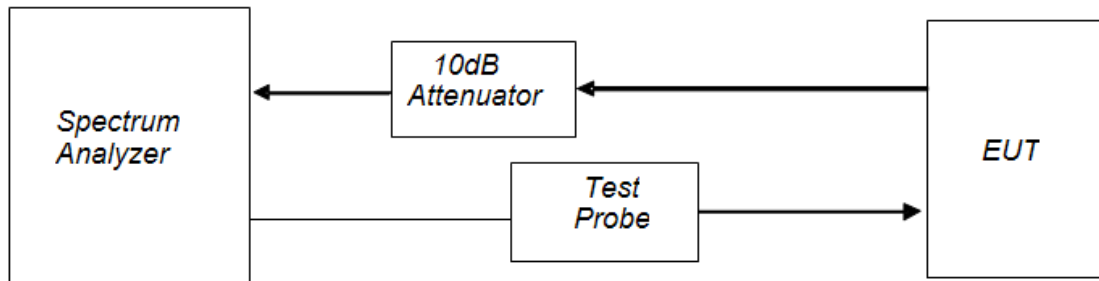
Connect the signal modulated generator to the input of the EUT, so that the EUT works at the max gain. Raise the input level to the EUT until reach the maximum output power. Connect the spectrum analyzer to the RF output connector of the EUT.

Test setup for intermodulation:



Procedure

Connect two signal modulated generators to the input of the EUT, so that the two input signals are same level. 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. At maximum drive level, for each modulation applies two tones for fulfill two tests (high-band edge and low-band-edge)

Test setup for Noise figure:**Procedure**

Connect the EUT with the spectrum analyzer as described in the picture below. Connect the "Output Noise Source" spectrum analyzer with the RF input connector of the Remote Unit. Connect the output RF connector with the spectrum analyzer. Between spectrum analyzer and Remote Unit use a "Noise Source" (Test probe), so the noise of reference is generated. Set the EUT at max gain.

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

| | |
|--|--|
| <p>Normal temperature, humidity and air pressure test conditions</p> | <p>Temperature: 15–30 °C Relative humidity: 20–75 % Air pressure: 86–106 kPa</p> <p>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.</p> |
| <p>Power supply range:</p> | <p>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.</p> |

Section 5: Test conditions, continued

| 5.3 Measurement uncertainty | | | | | |
|-----------------------------|--------------------------------------|---|--------------------------|-------------------------|-------|
| EUT | Type | Test | Range and Setup features | Measurement Uncertainty | Notes |
| Transmitter | Conducted | Frequency error | 0.001 MHz ÷ 40 GHz | 0.08 ppm | (1) |
| | | Carrier power RF Output Power | 10 kHz ÷ 30 MHz | 1.0 dB | (1) |
| | | | 30 MHz ÷ 18 GHz | 1.5 dB | (1) |
| | | | 18 MHz ÷ 40 GHz | 3.0 dB | (1) |
| | | Adjacent channel power | 1 MHz ÷ 18 GHz | 1.6 dB | (1) |
| | | Conducted spurious emissions | 10 kHz ÷ 26 GHz | 3.0 dB | (1) |
| | | | 26 GHz ÷ 40 GHz | 4.5 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 | 10 kHz ÷ 26.5 GHz | 6.0 dB | (1) | |
| | | 26.5 GHz ÷ 40 GHz | 8.0 dB | (1) | |
| | Effective radiated power transmitter | 10 kHz ÷ 26.5 GHz | 6.0 dB | (1) | |
| | | 26.5 GHz ÷ 40 GHz | 8.0 dB | (1) | |
| Receiver | Radiated | Radiated spurious emissions | 10 kHz ÷ 26.5 GHz | 6.0 dB | (1) |
| | | | 26.5 GHz ÷ 40 GHz | 8.0 dB | (1) |
| | | Sensitivity measurement | 1 MHz ÷ 18 GHz | 6.0 dB | (1) |
| | Conducted | Conducted spurious emissions | 10 kHz ÷ 26 GHz | 3.0 dB | (1) |
| | | | 26 GHz ÷ 40 GHz | 4.5 dB | (1) |

(1) The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k = 2$ which has been derived from the assumed normal probability distribution with infinite degrees of freedom and for a coverage probability of 95 %

5.4 Test equipment

| Equipment | Manufacturer | Model No. | Asset/Serial No. | Next cal. |
|---|--------------|---------------------------|------------------|-----------|
| Vector Signal Generator | Agilent | E4432B ESG | GB38450308 | 08/2019 |
| Vector Signal Generator | Agilent | E4438C ESG | MY45094485 | 08/2019 |
| Spectrum Analyzer | Agilent | N9030A PXA | MY53120882 | 12/2019 |
| Trilog Broad Band Antenna 25-8000 MHz | Schwarzbeck | VULB 9162 | VULB 9162-25 | 07/2021 |
| Antenna 1-18 GHz | Schwarzbeck | STLP 9148 | STPL 9148-123 | 07/2021 |
| Double ridge horn antenna (4 ÷ 40 GHz) | RFSpin | DRH40 | 061106A40 | 02/2020 |
| Broadband preamplifier (18 ÷ 40 GHz) | Miteq | JS44-18004000-35-8P-R | 1.627 | 09/2019 |
| Broadband preamplifier 1-18 GHz | Schwarzbeck | BBV 9718 | 9718-137 | 08/2019 |
| EMI receiver 20 Hz ÷ 8 GHz | R&S | ESU8 | 100202 | 01/2020 |
| EMI receiver 2 Hz ÷ 44 GHz | R&S | ESW44 | 101620 | 05/2019 |
| Hydraulic revolving platform | Nemko | RTPL 01 | 4.233 | NCR |
| Turning-table | R&S | HCT | 835 803/03 | NCR |
| Antenna mast | R&S | HCM | 836 529/05 | NCR |
| Controller | R&S | HCC | 836 620/7 | NCR |
| Semi-anechoic chamber | Nemko | 10m semi-anechoic chamber | 530 | 09/2021 |
| Shielded room | Siemens | 10m control room | 1947 | NCR |
| Semi-anechoic chamber | Nemko | 10m semi-anechoic chamber | 70 | NCR |
| Shielded Room | Siemens | 3m semi-anechoic chamber | 3 | NCR |
| Motor controller | Emco | 1051-25 | 9012-1559 | NCR |
| Motor controller | Emco | 1061-1.521 | 9012-1508 | NCR |
| Antenna Tower | Emco | 2071-2 | 9601-1940 | NCR |
| Controller pole/table | Emco | 2090 | 9511-1099 | 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 D05v01 (4.2) AGC threshold

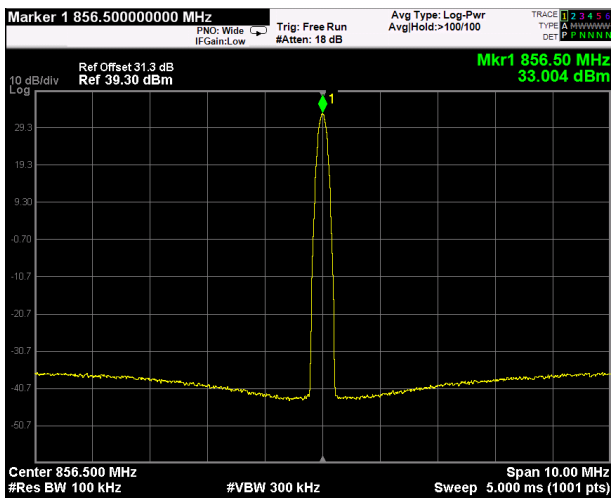
Measure of EUT AGC Threshold

Test date: 05/27/2019 to 06/24/2019

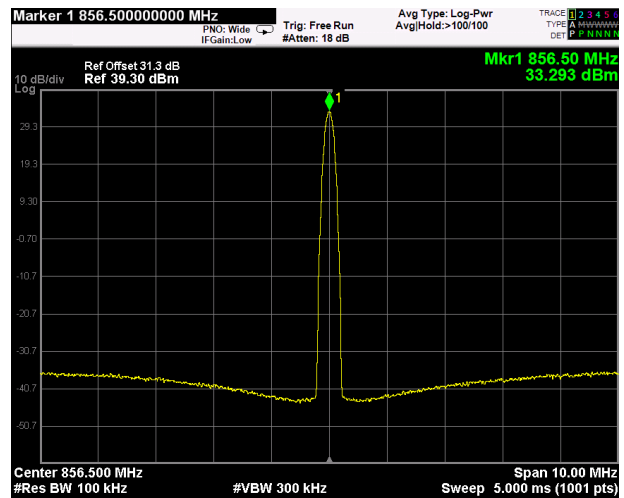
Test results: Pass

Special notes

Test data



CW signal, nominal input signal



CW signal, nominal input signal +1 dB

Clause 935210 D05v01 (4.3) Out of band rejection

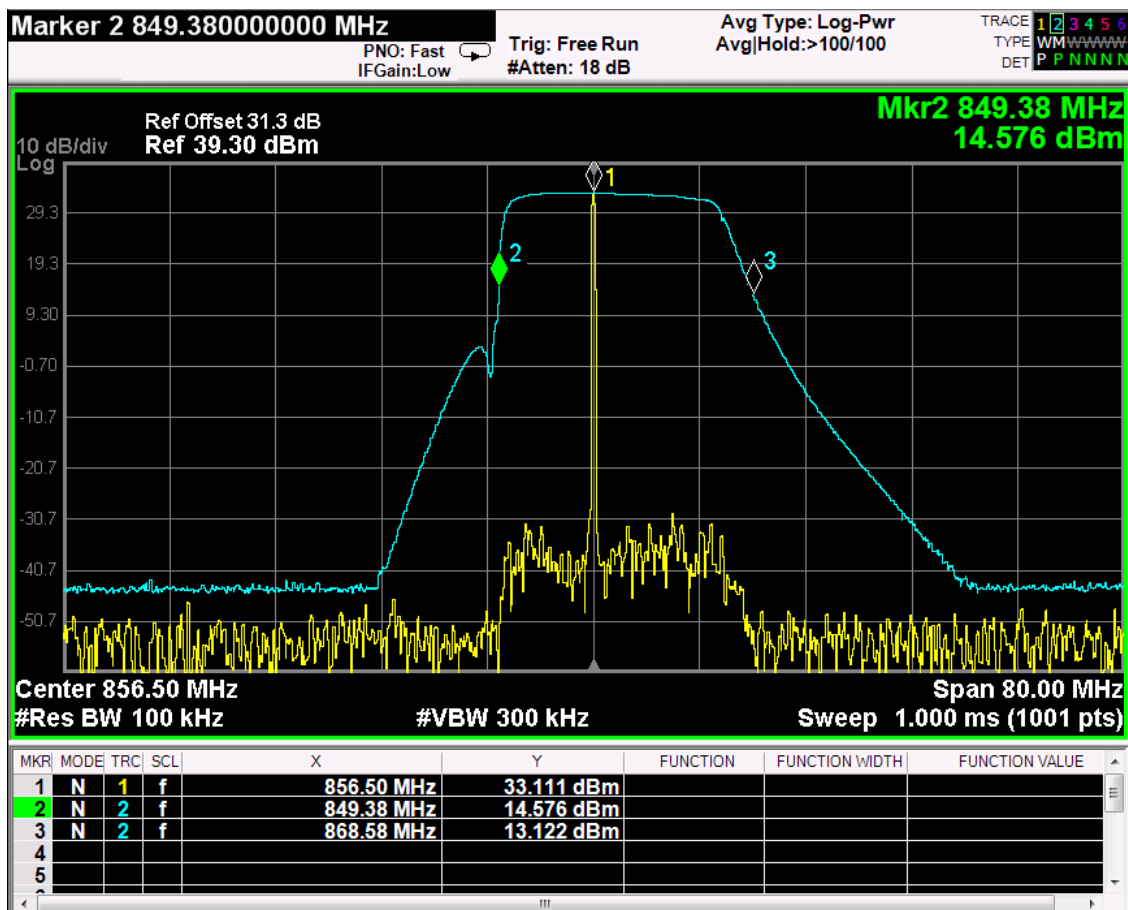
Out of Band Rejection – Test for rejection of out of band signals.

Test date: 05/27/2019 to 06/24/2019

Test results: Pass

Special notes

Test data



Clause 90.209, 90.210(g), 90.210(h), 90.219(e)(4), 90.691 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: 05/27/2019 to 06/24/2019

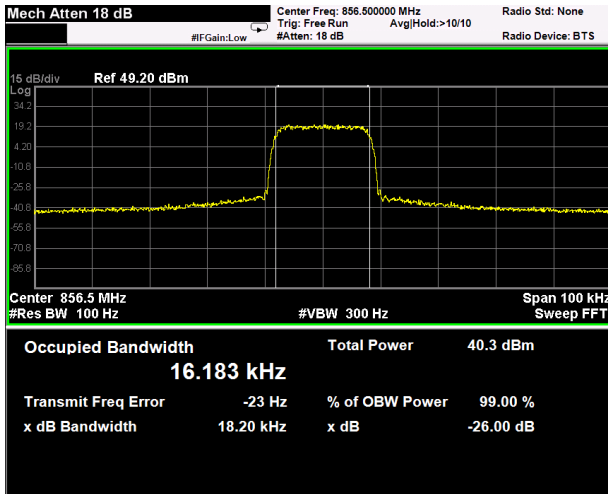
Test results: Pass

Special notes

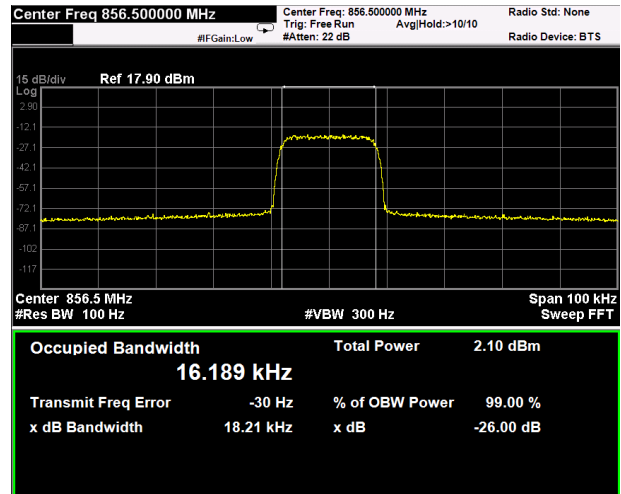
Occupied bandwidth, continued

Test data

16k signal, nominal input signal (856,5MHz)

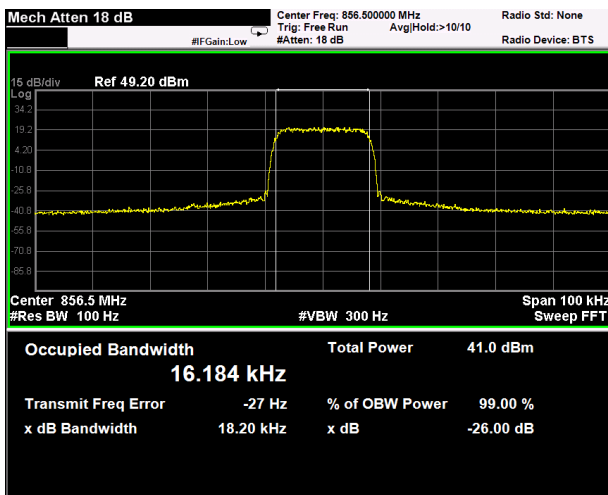


Output

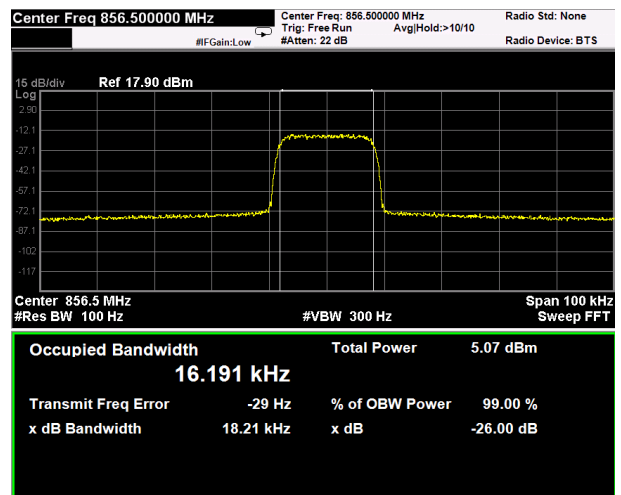


Input

16k signal, nominal input signal + 3dB (856,5MHz)

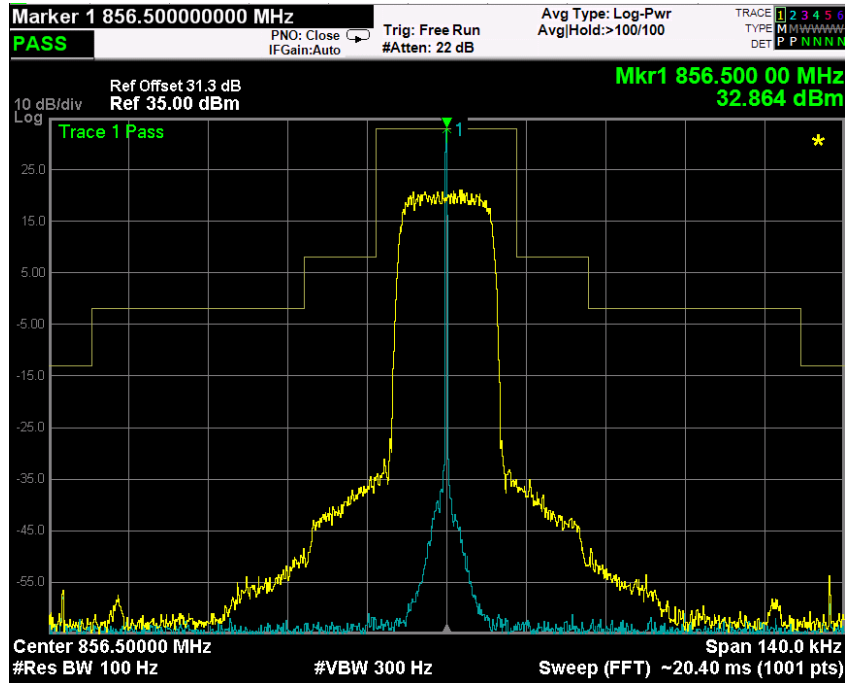


Output



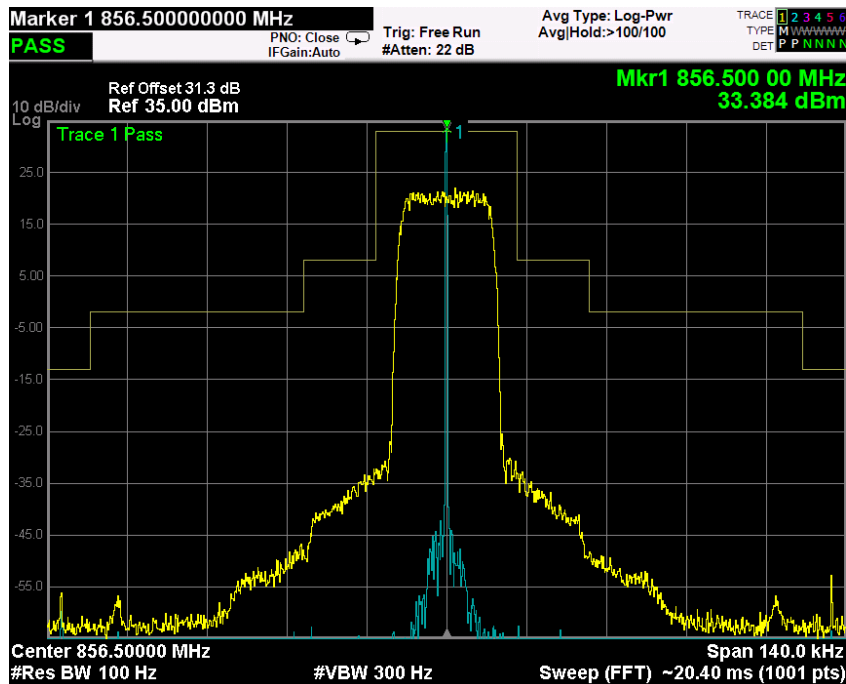
Input

16k signal, nominal input signal (856,5MHz)



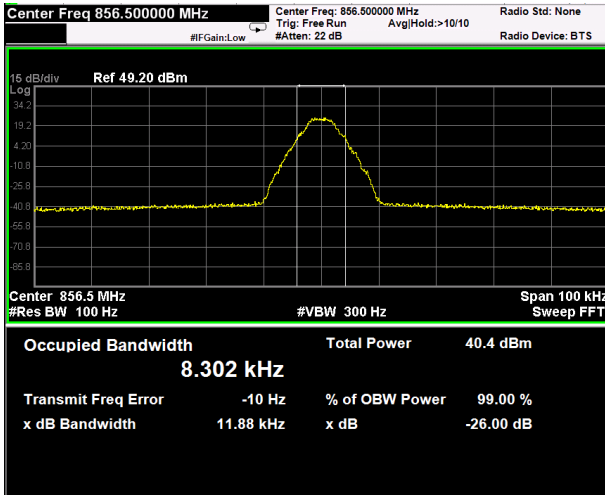
Mask B

16k signal, nominal input signal + 3dB (856,5MHz)

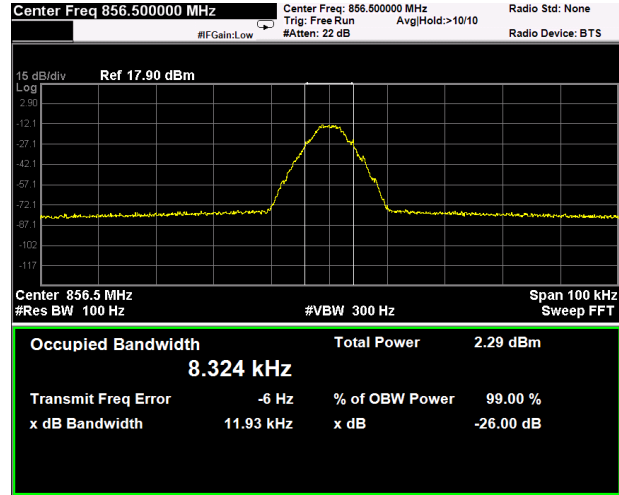


Mask B

P25 signal, nominal input signal (856,5MHz)

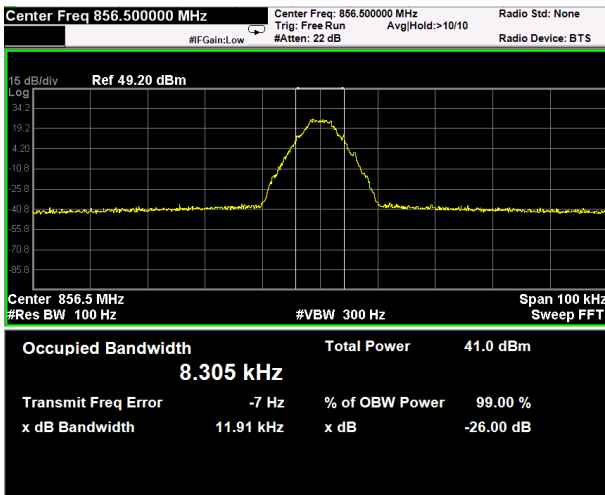


Output

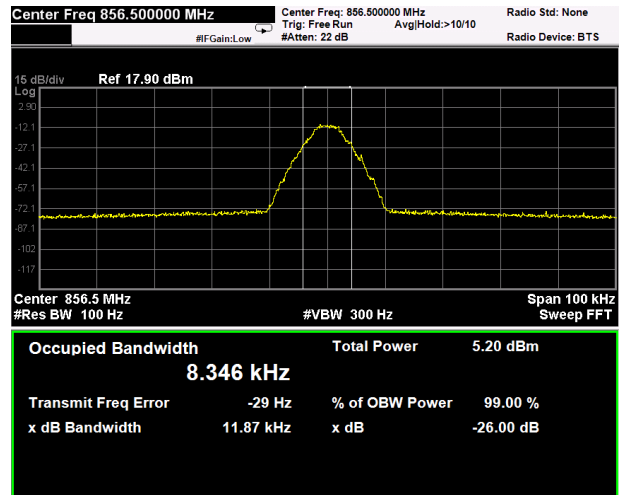


Input

P25 signal, nominal input signal + 3dB (856,5MHz)

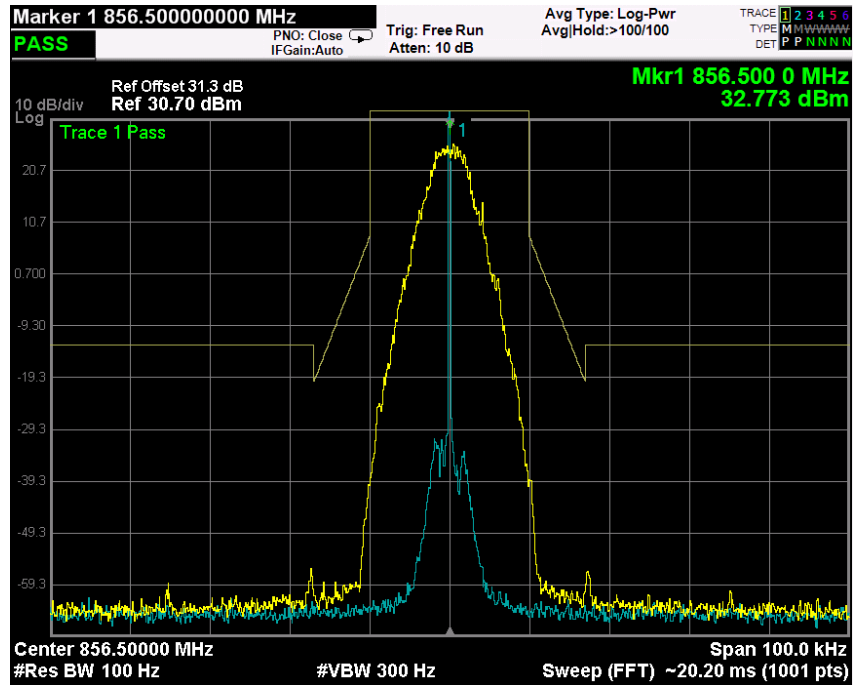


Output



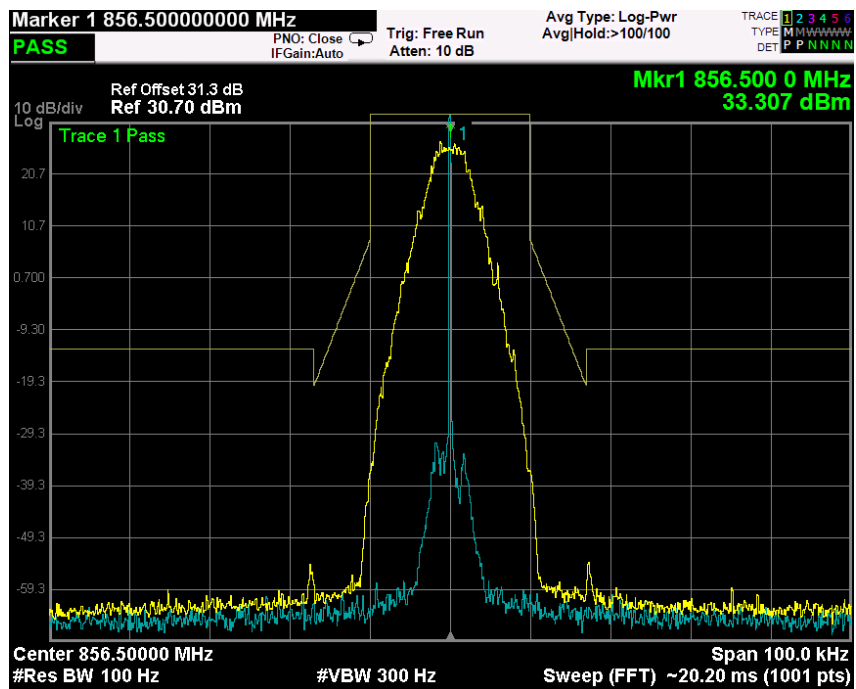
Input

P25 signal, nominal input signal (856,5MHz)



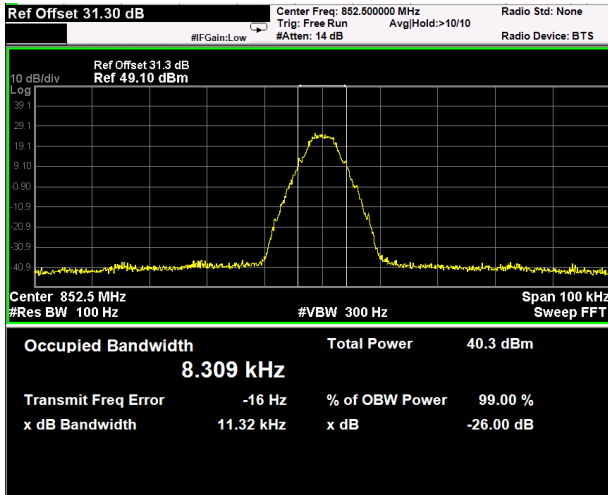
Mask G

P25 signal, nominal input signal + 3dB (856,5MHz)

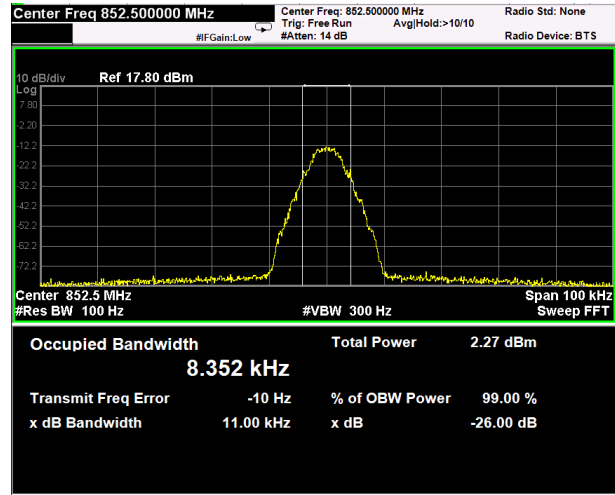


Mask G

P25 signal, nominal input signal (852,5MHz)

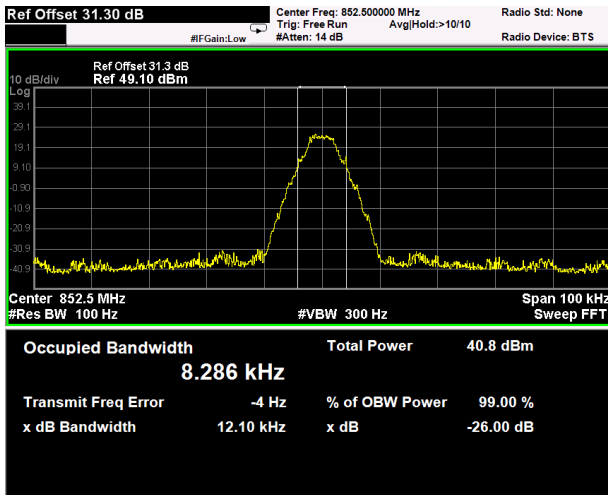


Output

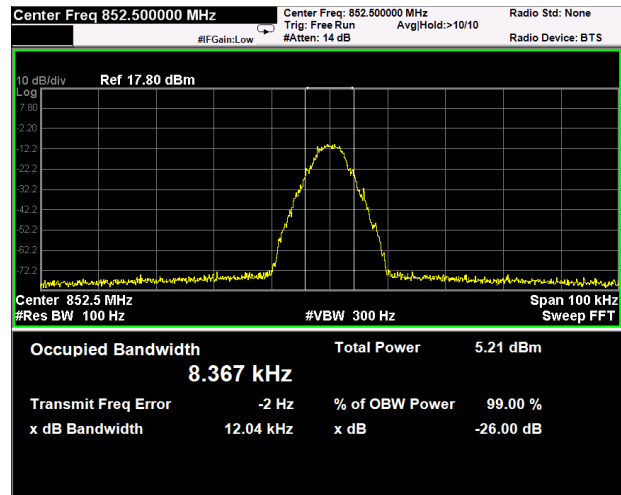


Input

P25 signal, nominal input signal + 3dB (852,5MHz)

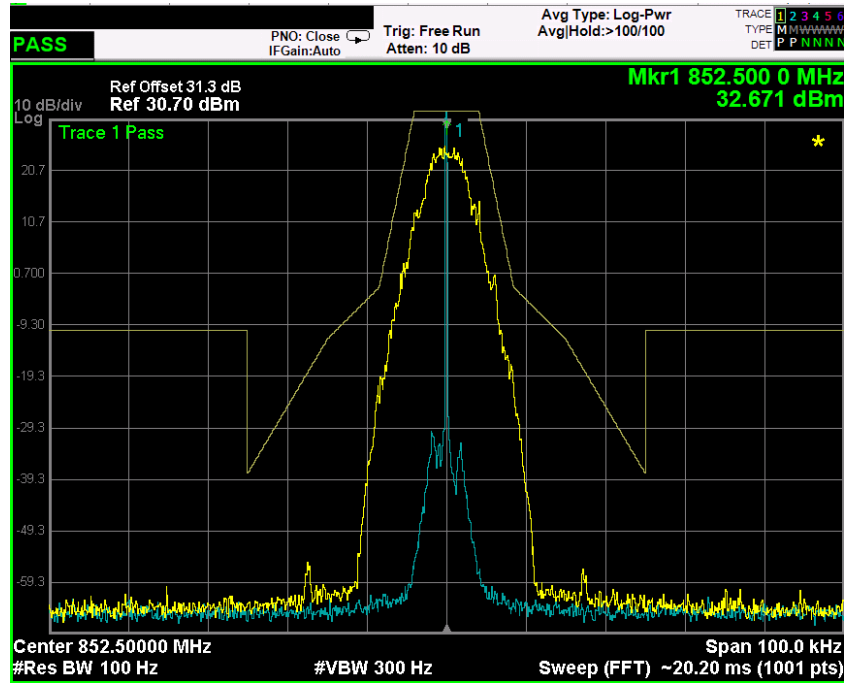


Output



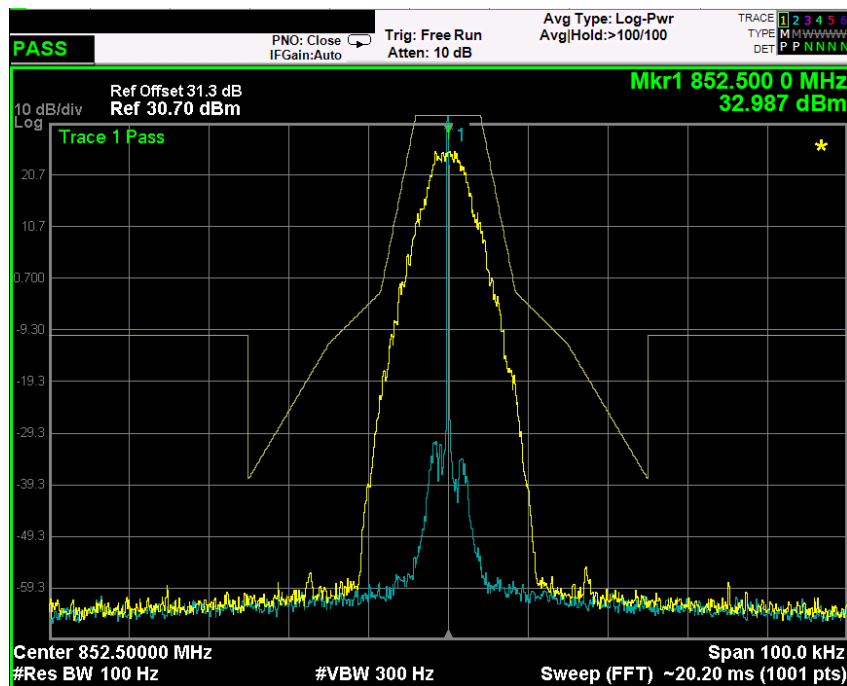
Input

P25 signal, nominal input signal (852,5MHz)



Mask H

P25 signal, nominal input signal + 3dB (852,5MHz)



Mask H

Clause 90.205, 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 in FCC Part 90.205 (a) through (r).

§ 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: 05/27/2019 to 06/24/2019

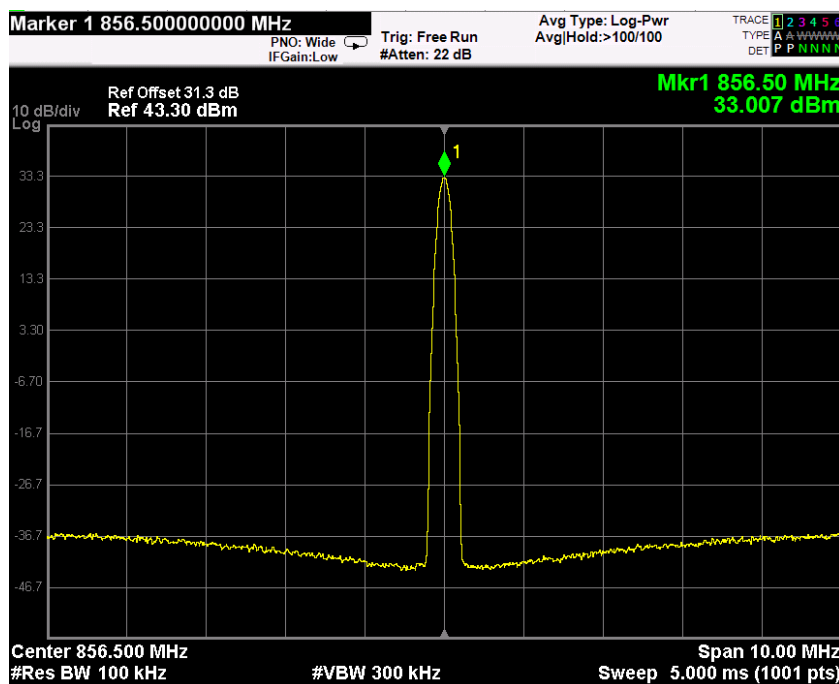
Test results: Pass

Special notes

Output power at RF antenna connector

CW signal, nominal input signal

| Test data | | | | | |
|-----------|------------|-----------------|-----------------------|-----------------------------|-------------------------|
| Direction | Modulation | Frequency (MHz) | RF output Power (dBm) | RF output channel Power (W) | RF output Power (W/MHz) |
| Down-link | CW | 856,5 | 33,007 | 2,00 | 0,125 |



Test result

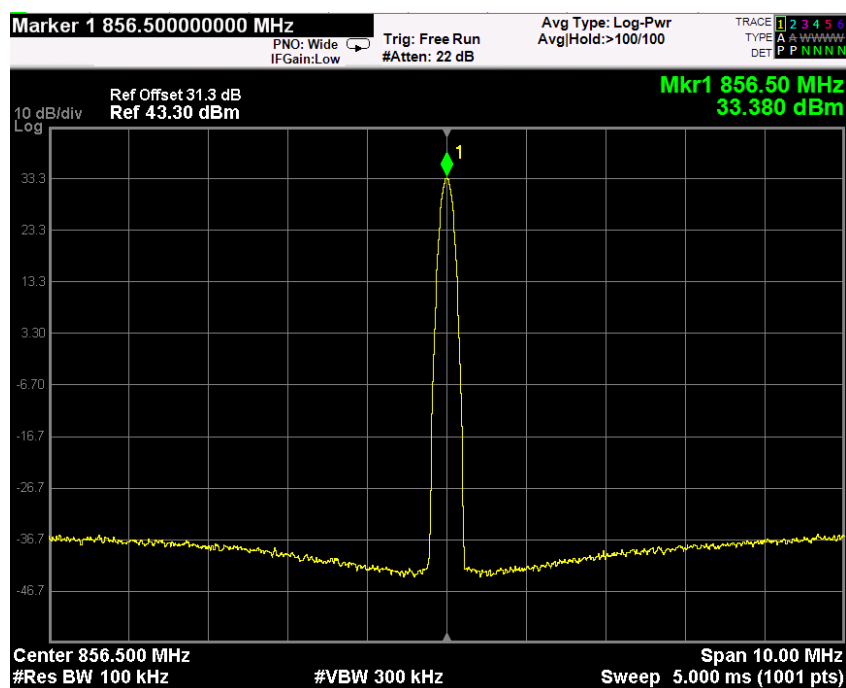
G_{max} antenna gain (dBi) = 39 - 33.00 = 6.00 dBi

EIRP = 33.00 + 6.00 = 39 dBm

ERP = 39 - 2.14 = 36.86dBm = 4.85W < 5 W ERP

CW 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) |
| Down-link | CW | 856,5 | 33,380 | 2,177 | 0,13 |



Clause 935210 D05v01 (4.6) Noise figure

§ 90.219(e)(2)

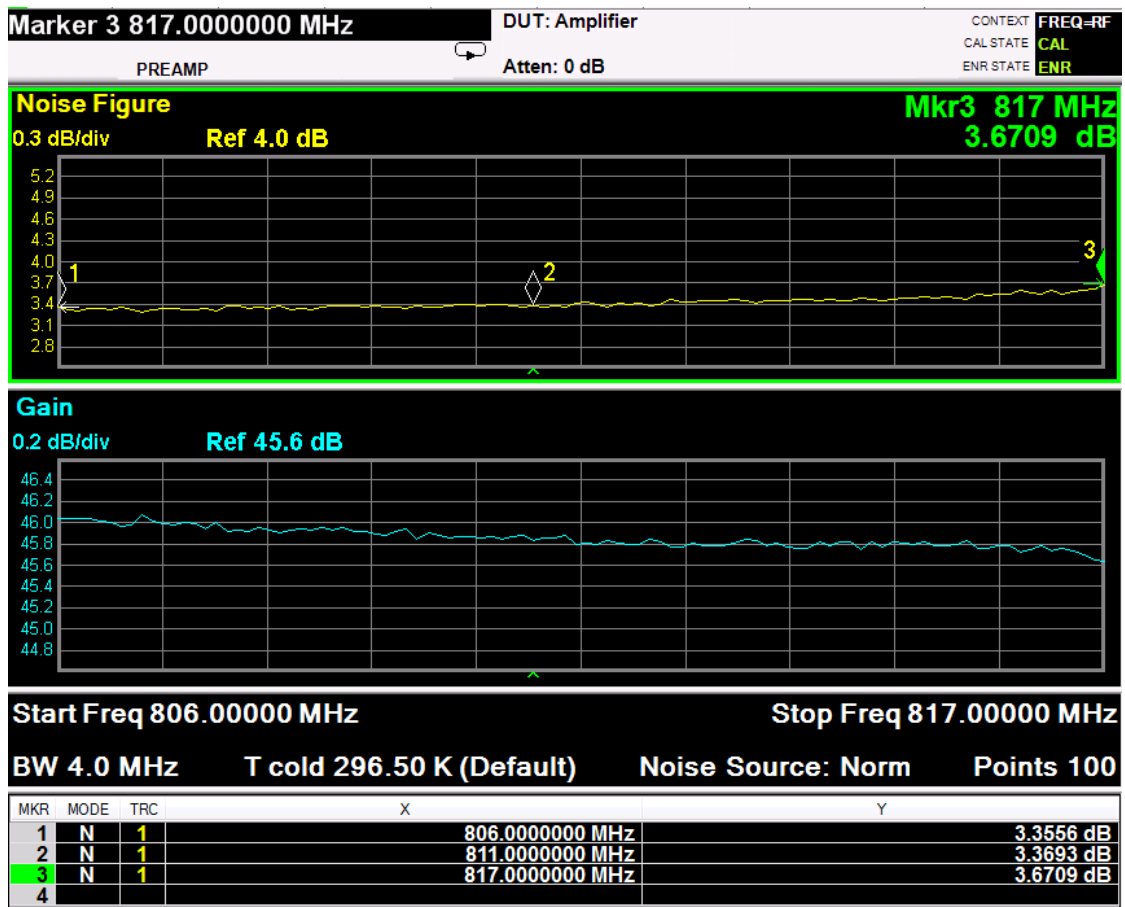
The noise figure of a signal booster must not exceed 9 dB in either direction.

Test date: 05/27/2019 to 06/24/2019

Test results: Pass

Special notes

In the Remote Unit, only up-link measurement can be performed (test probe is connect to antenna port)



Clause 90.209, 90.210(g), 90.210(h), 90.219(e)(3), 90.691 Spurious emissions at the antenna terminal**§ 90.210(g)**

Emission Mask G. For transmitters that are not equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power (P) as follows:

(2) On any frequency removed from the center of the authorized bandwidth by more than 250 percent of the authorized bandwidth: At least $43 + 10 \log (P)$ dB

§ 90.210(h)

Emission Mask H. For transmitters that are not equipped with an audio low-pass filter, the power of any emission must be attenuated below the unmodulated carrier power (P) as follows:

(5) On any frequency removed from the center of the authorized bandwidth by more than 25 kHz: At least $43 + \log (P)$ dB.

§ 90.219(e)(3)

Spurious emissions from a signal booster must not exceed -13 dBm within any 100 kHz measurement bandwidth.

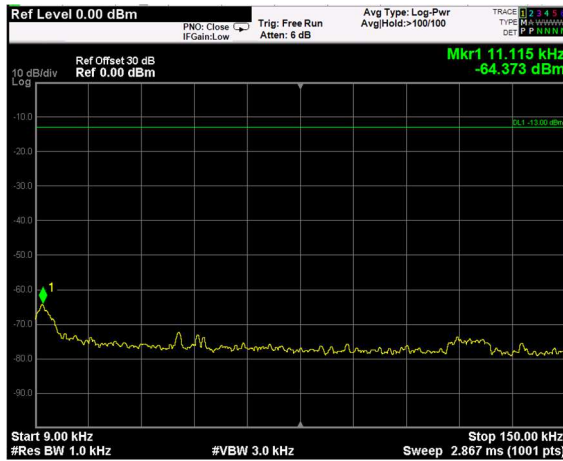
Test date: [05/27/2019 to 06/24/2019](#)

Test results: [Pass](#)

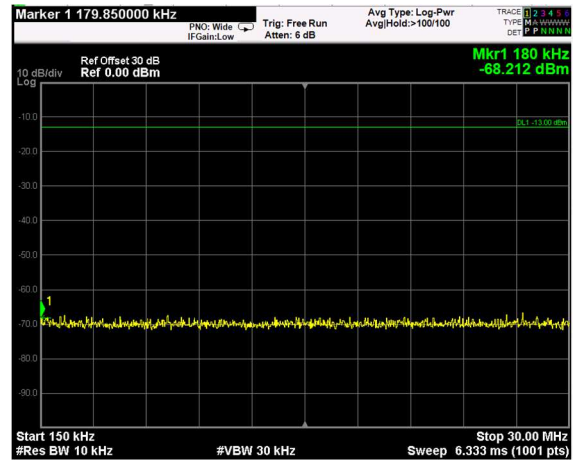
Special notes

Test data: Spurious emissions at RF antenna connector

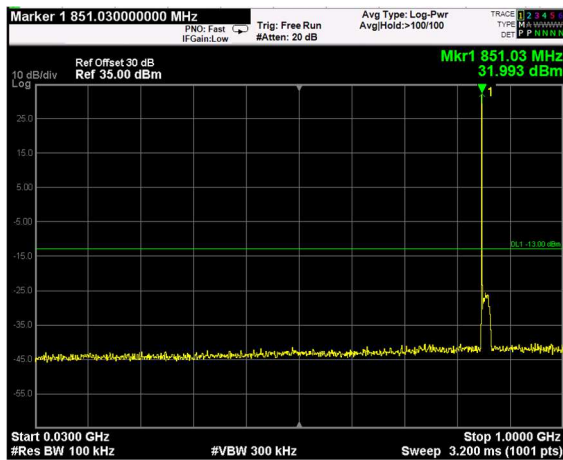
CW signal – First Channel (851,025MHz)



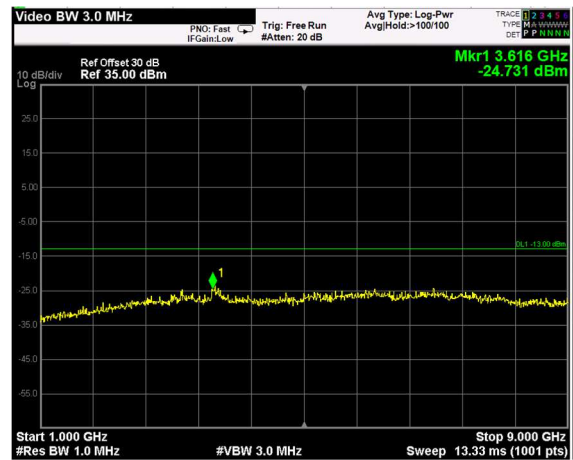
9KHz-150KHz



150KHz-30MHz

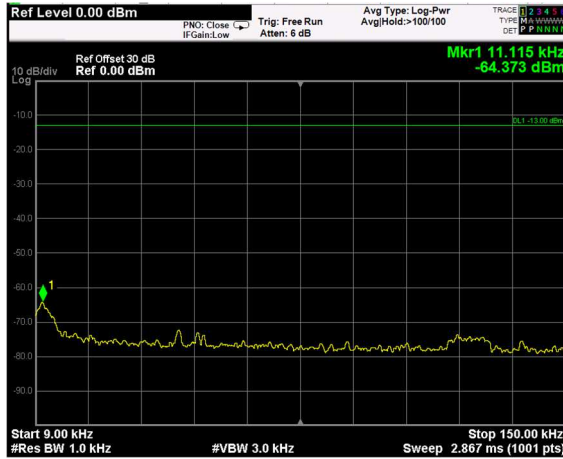


30MHz-1GHz

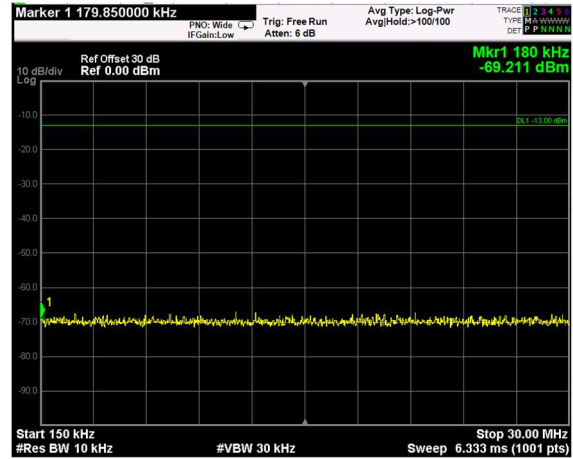


1GHz-9GHz

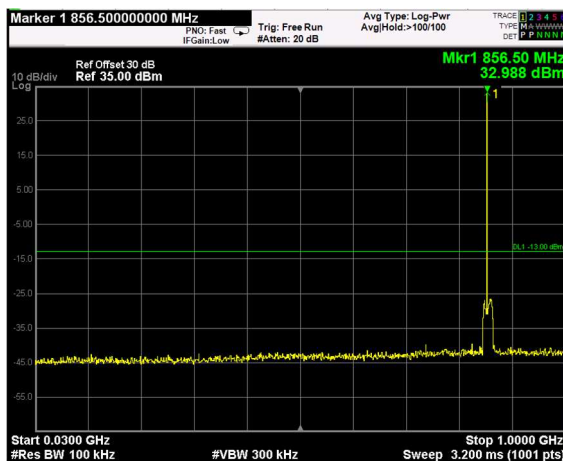
CW signal – Middle Channel (856,5MHz)



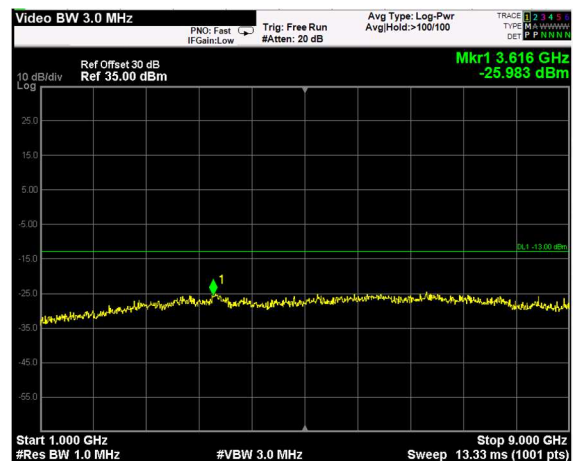
9KHz-150KHz



150KHz-30MHz

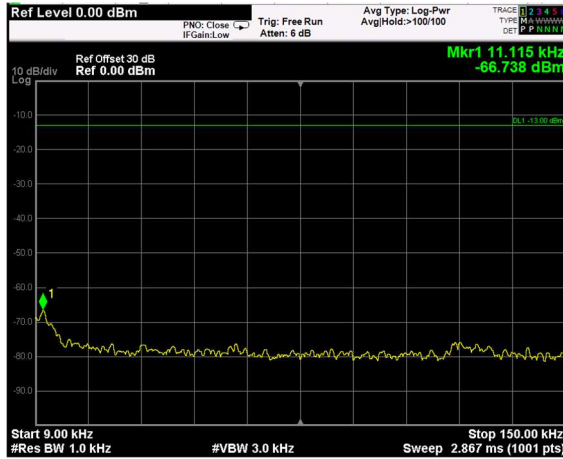


30MHz-1GHz

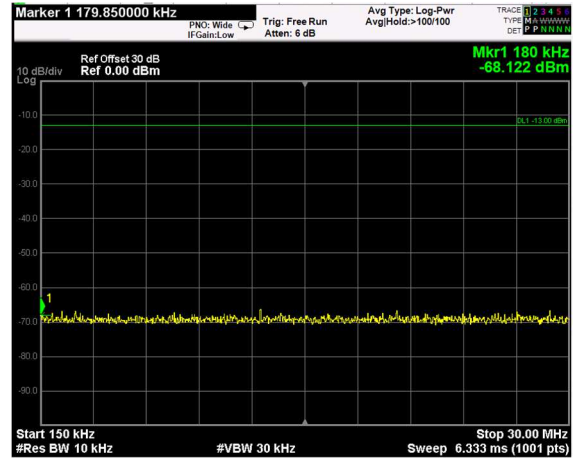


1GHz-9GHz

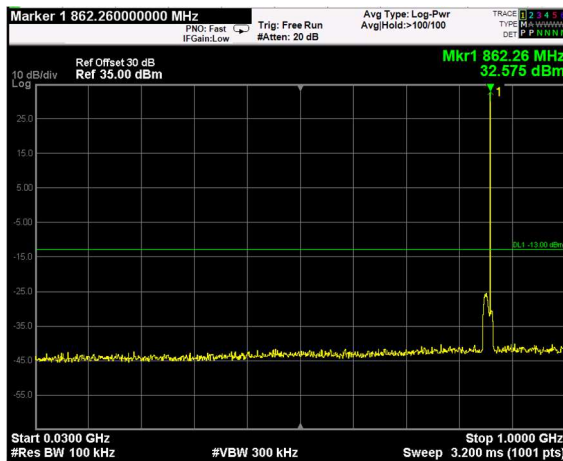
CW signal – Last Channel (861,975MHz)



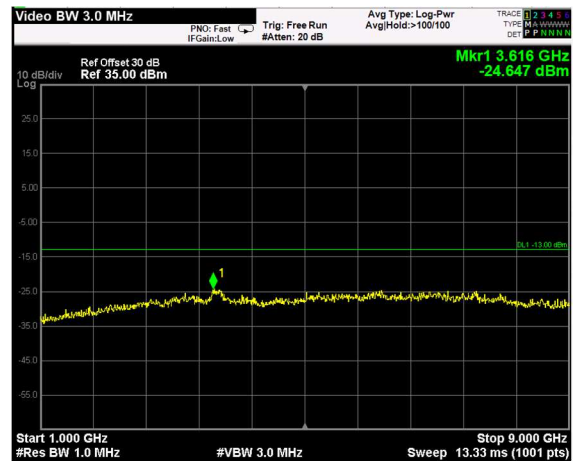
9KHz-150KHz



150KHz-30MHz

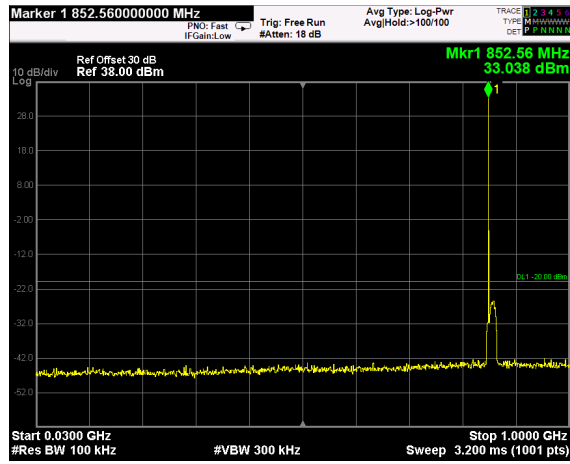


30MHz-1GHz

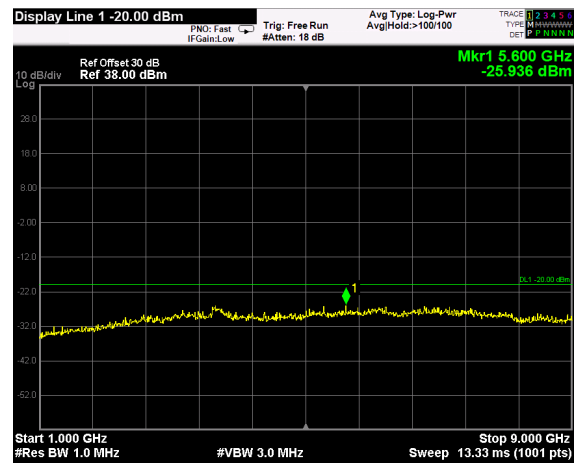


1GHz-9GHz

Spurious emissions at RF antenna connector: Mod. FM (P25) (Freq. band 851-854MHz)



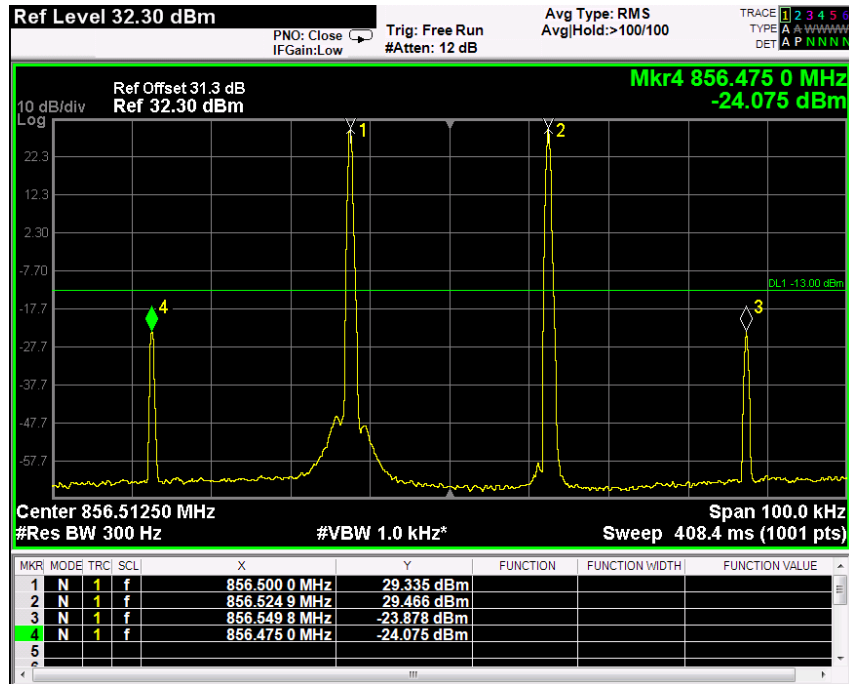
30MHz-1GHz



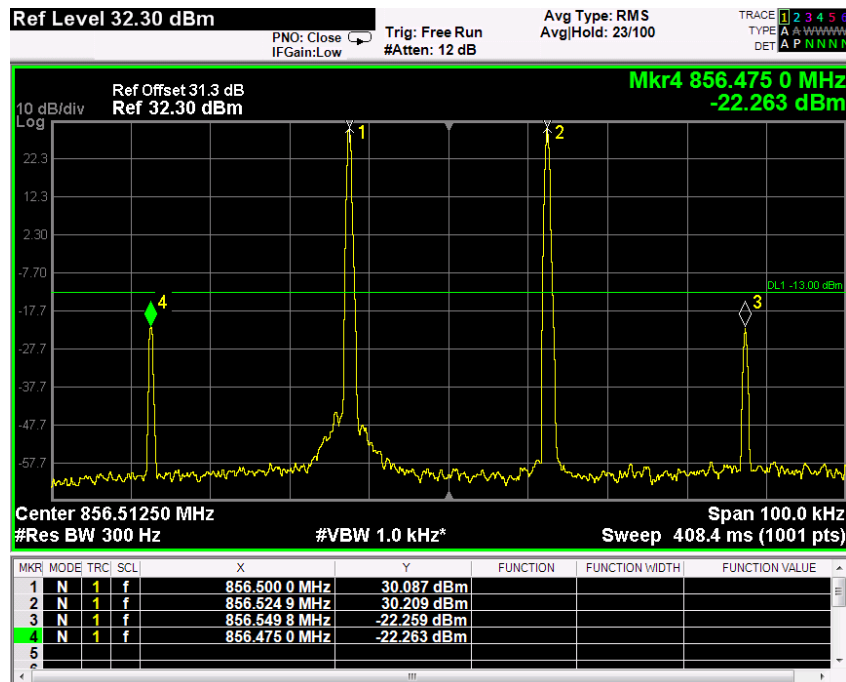
1GHz-9GHz

Spurious emissions at RF antenna connector: intermodulation

Nominal input signal



Nominal input signal + 3dB



Clause 90.219(e)(3) Spurious emissions radiated**§ 90.219(e)(3)**

Spurious emissions from a signal booster must not exceed -13dBm within any 100 kHz measurement bandwidth.

Test date: [05/27/2019 to 06/24/2019](#)

Test results: [Pass](#)

Special notes

Radiated spurious emissions, continued

Test data

The D.U.T. was positioned according to the radiated emissions set-up

The D.U.T. antenna connector was terminated by a 50 Ω shielded dummy load.

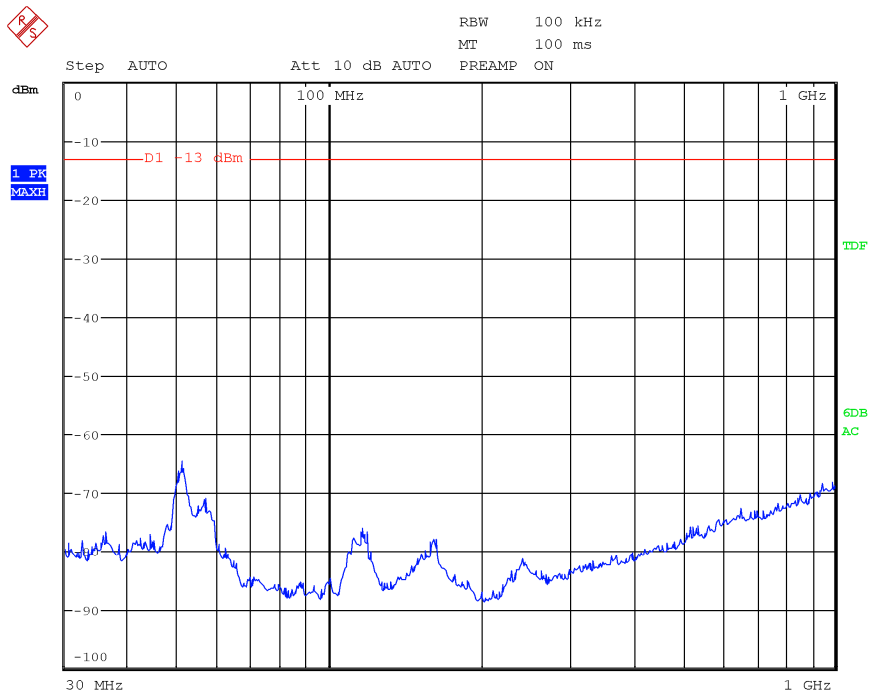
The spectrum was searched from 30 MHz to 1 GHz (RBW 100 kHz) & 1 GHz (RBW 1 MHz) to the tenth harmonic of the carrier.

There were no emissions detected above the noise floor which was at least 20 dB below the specification limit.

Spurious emissions measurement results:

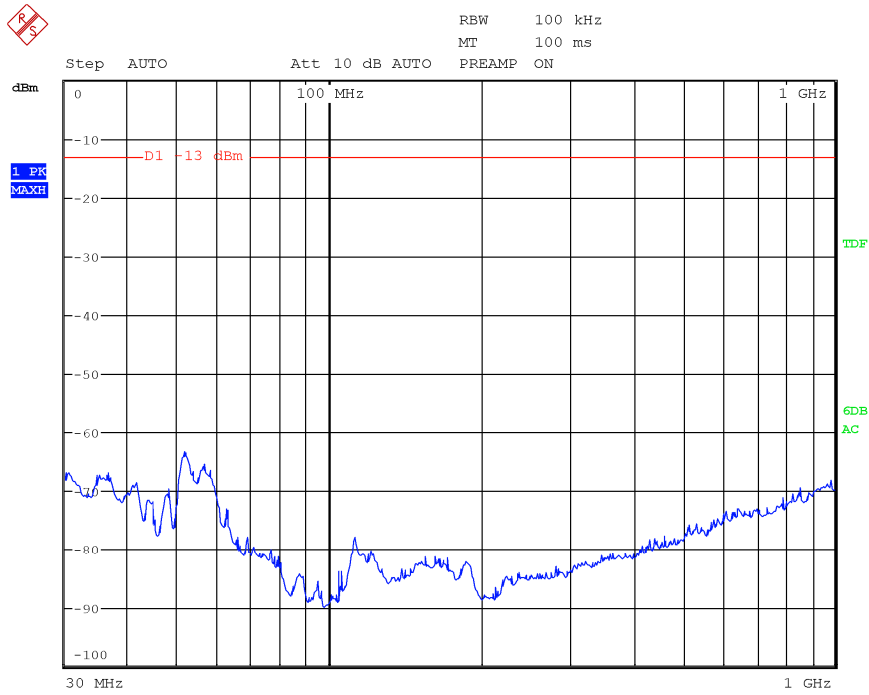
| Frequency (MHz) | Polarization. V/H | Field strength (dBm) | Limit (dBm) | Margin (dB) |
|-----------------|-------------------|----------------------|-------------|-------------|
| Low channel | | | | |
| First Channel | V/H | Negligible | -13 | |
| Mid channel | | | | |
| 856.5 | V/H | Negligible | -13 | |
| High channel | | | | |
| Last Channel | V/H | Negligible | -13 | |

Note: Field strength includes correction factor of antenna, cable loss, amplifier, and attenuators where applicable.



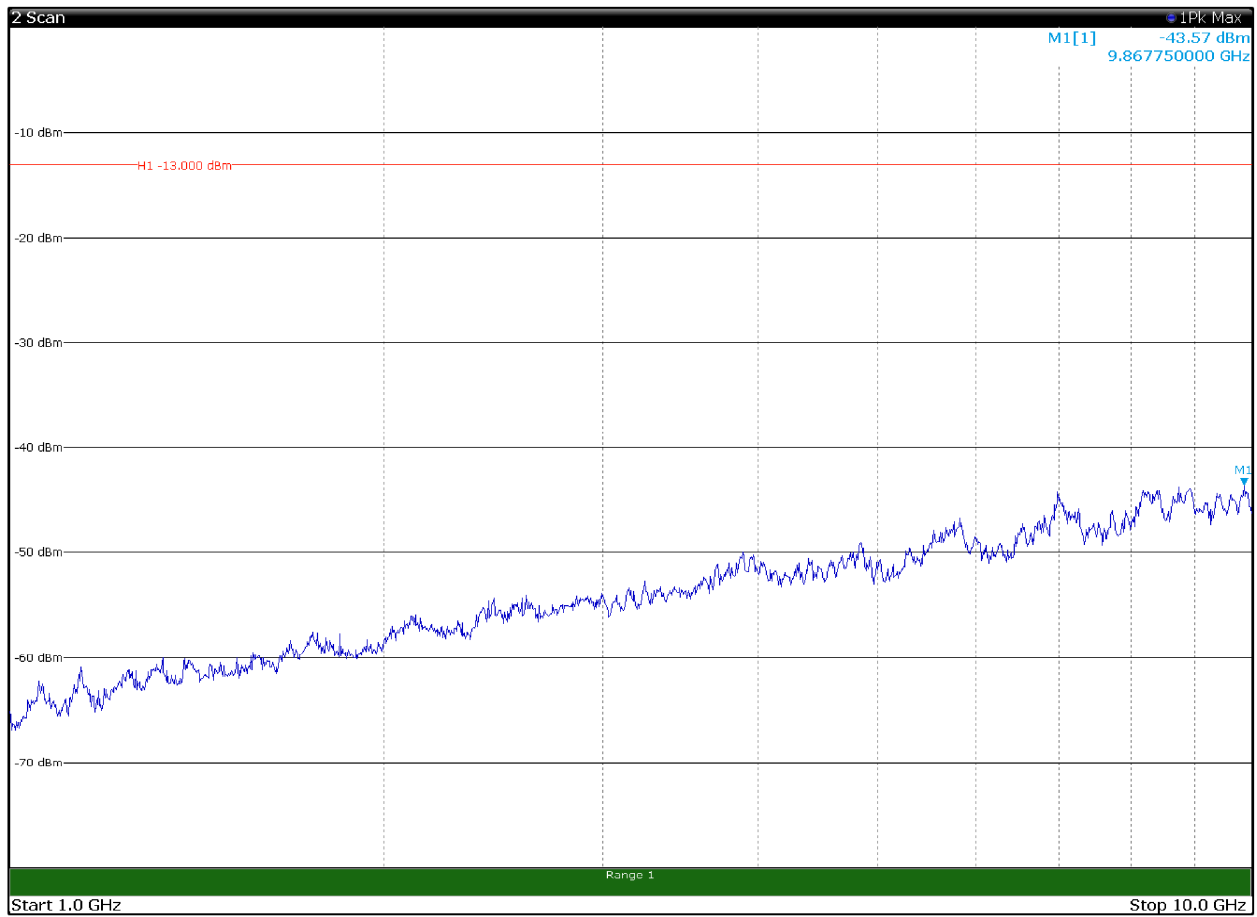
Date: 19.JUN.2019 11:47:21

30MHz-1GHz – H Pol



Date: 19.JUN.2019 11:46:05

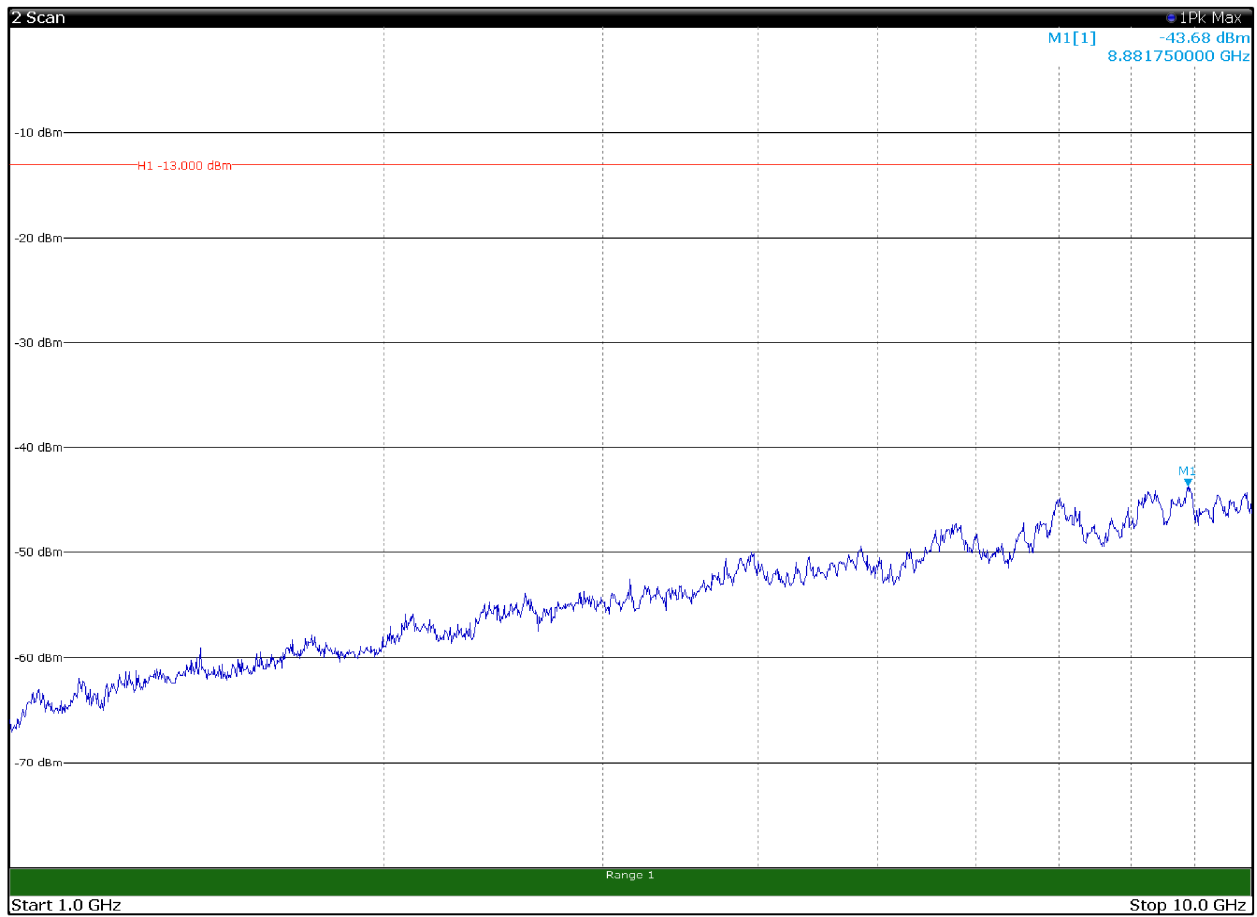
30MHz-1GHz – V Pol



09:59:27 18.06.2019

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1GHz-10GHz – H Pol



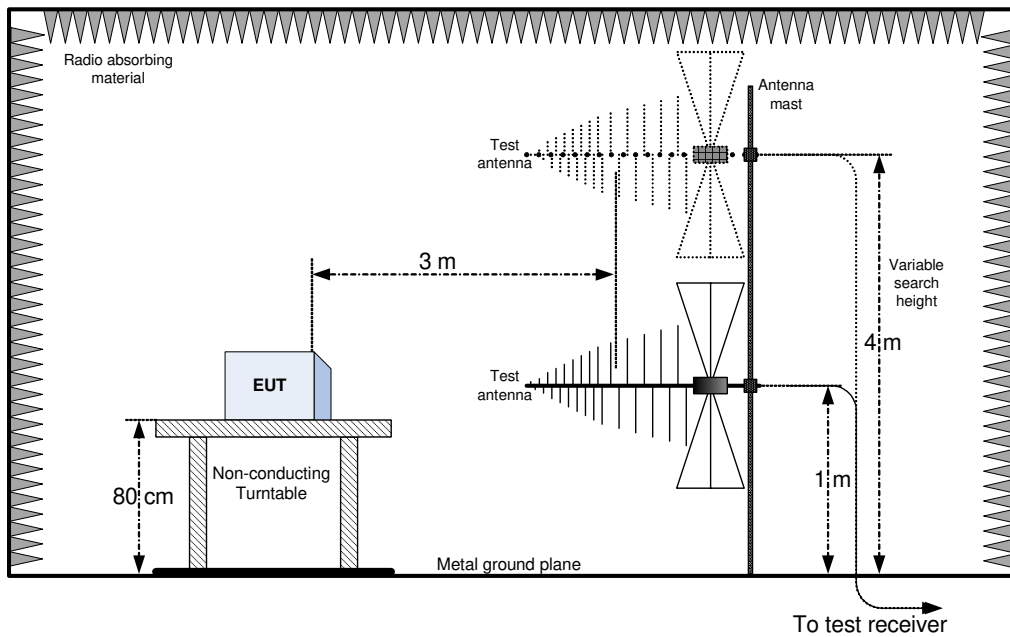
09:59:48 18.06.2019

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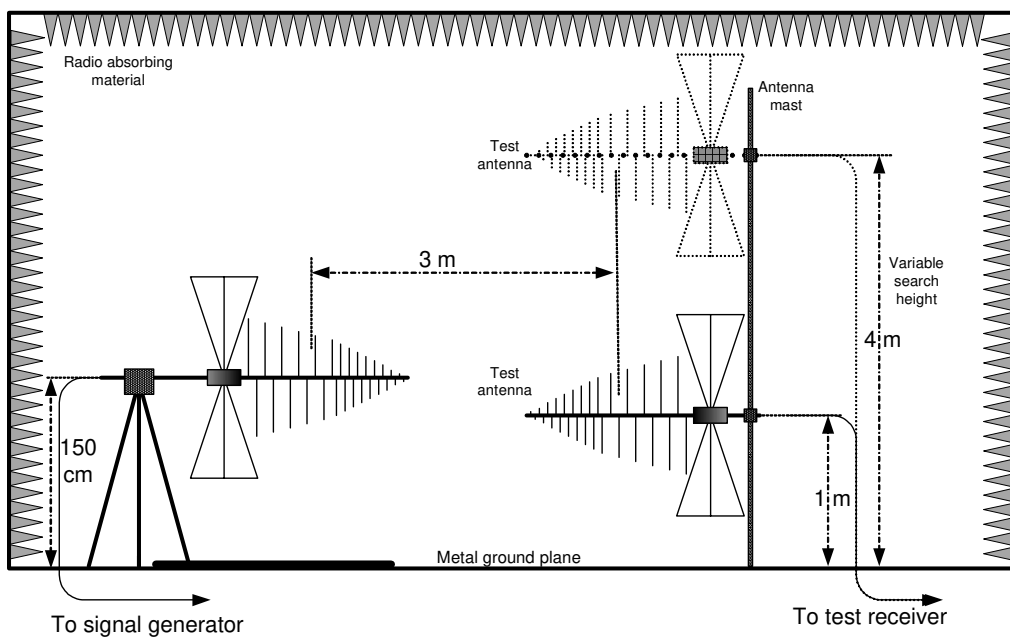
1GHz-10GHz – V Pol

Appendix B: Block diagrams of test set-ups

Radiated emissions set-up



Substitution method set-up



Appendix C: EUT Photos

Photo Set up

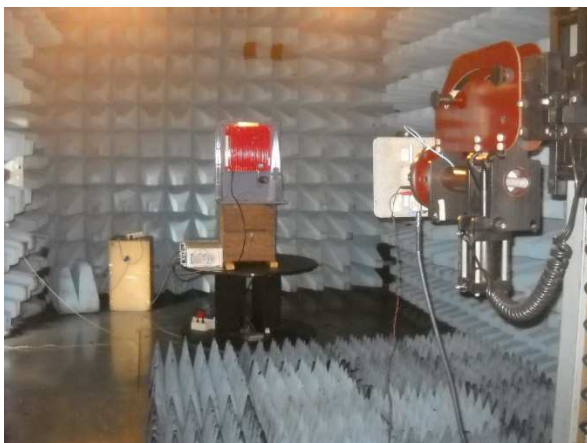
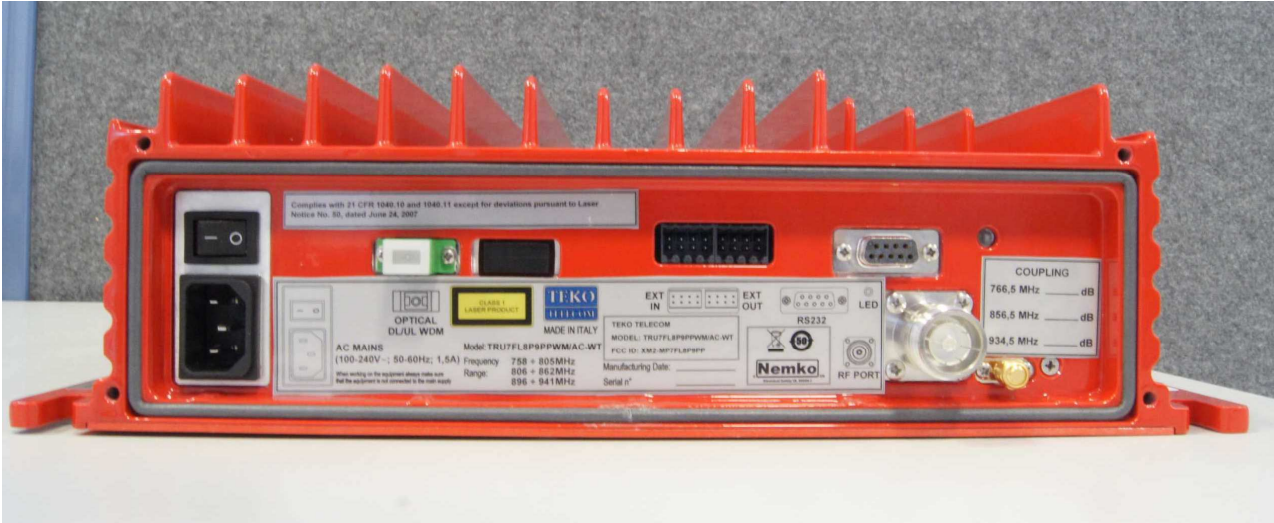
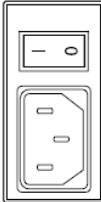



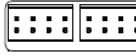

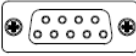





Photo EUT





Label EUT

| | | | | | | | |
|---|---|---|---|--|--|---|---|
|  |  OPTICAL DL/UL WDM |  CLASS 1 LASER PRODUCT |  TEKO TELECOM MADE IN ITALY | EXT IN  | EXT OUT  |  RS232 |  LED |
| AC MAINS (100-240V~; 50-60Hz; 1,5A) <small>When working on the equipment always make sure that the equipment is not connected to the main supply</small> | Model: TRU7FL8P9PPWM/AC-WT | Frequency 758 + 805MHz Range: 806 + 862MHz 896 + 941MHz | TEKO TELECOM MODEL: TRU7FL8P9PPWM/AC-WT FCC ID: XM2-MP7FL8P9PP | Manufacturing Date: _____ Serial n° _____ |  Nemko <small>Electrical Safety UL 60950-1</small> |  RF PORT | |

WARNING. This is NOT a CONSUMER device.
It is designed for installation by FCC LICENSEES and QUALIFIED INSTALLERS.
You MUST have an FCC LICENSE or express consent of an FCC Licensee to operate this device.
Unauthorized use may result in significant forfeiture penalties, including penalties in excess of \$100,000 for each continuing violation.

WARNING. This is NOT a CONSUMER device. This is a 90.219 Class B signal booster.
It is designed for installation by FCC LICENSEES and QUALIFIED INSTALLERS. You MUST have an FCC LICENSE or express consent of an FCC Licensee to operate this device. You MUST register Class B signal boosters (as defined in 47 CFR 90.219) online at www.fcc.gov/signal-boosters/registration.
Unauthorized use may result in significant forfeiture penalties, including penalties in excess of \$100,000 for each continuing violation.

END OF REPORT