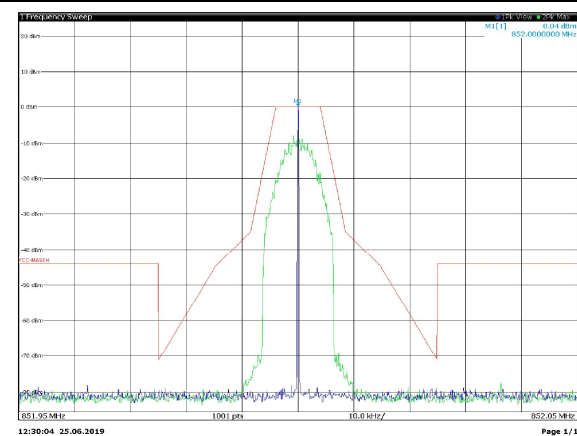
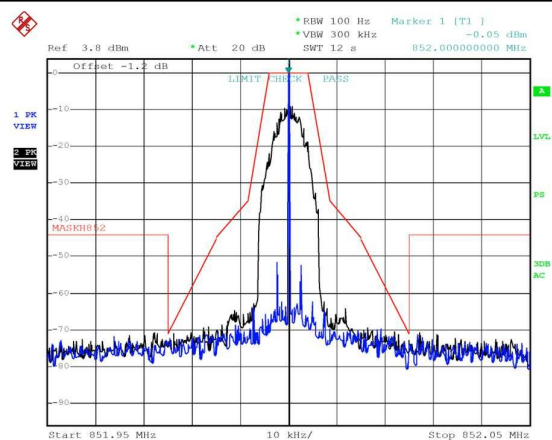


## Test data



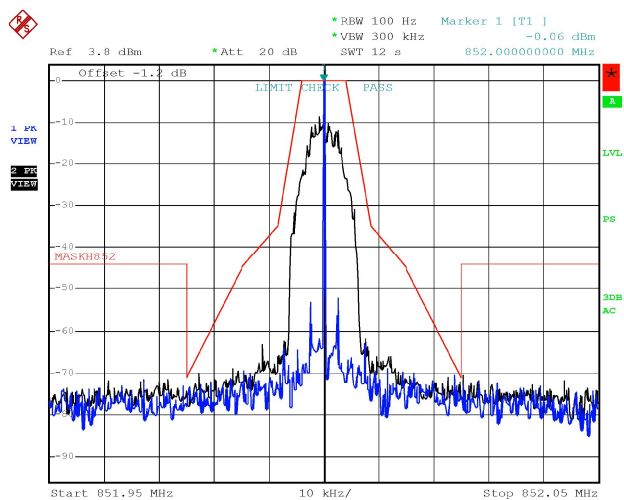
Input



Output

Emission mask H with input at AGC threshold with 8K70D1W signal at 852 MHz

## Test data

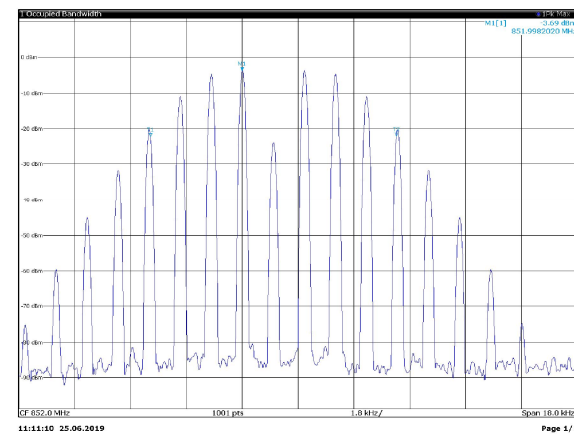


Output

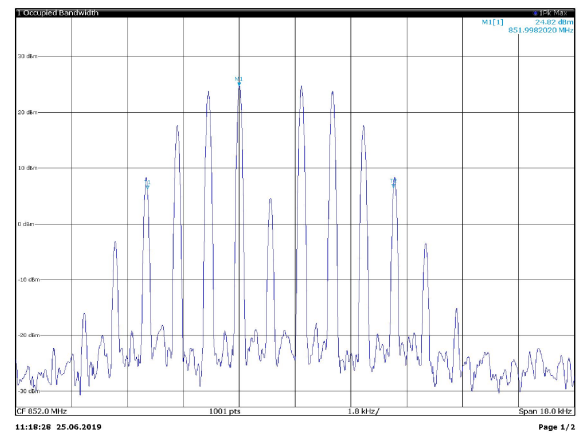
Emission mask H with input at AGC threshold + 3 dB with 8K70D1W signal at 852 MHz



## Test data



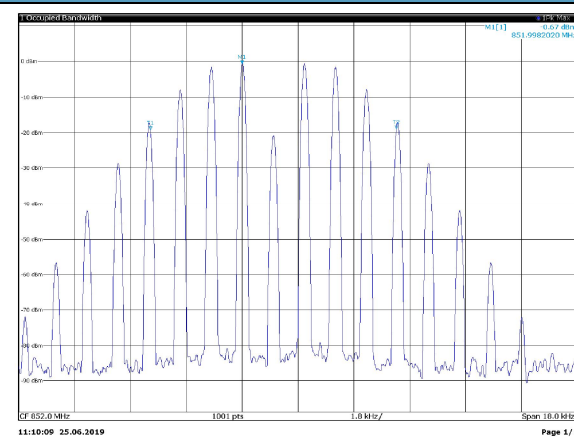
Input



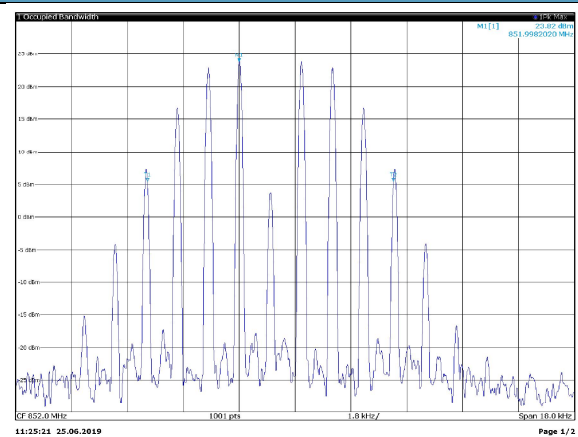
Output

99% occupied band with input at AGC threshold with 11K0F3E signal at 852 MHz

## Test data



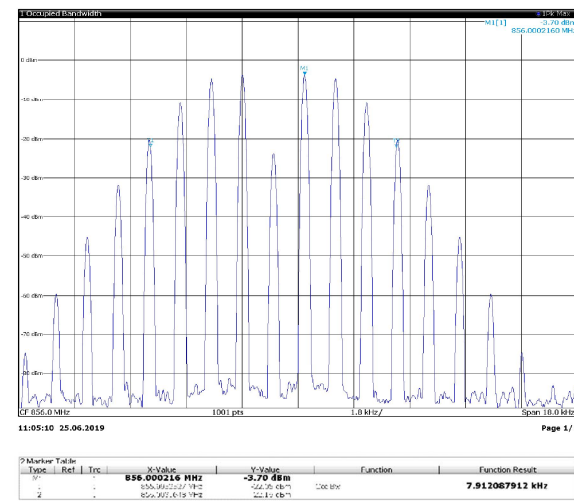
Input



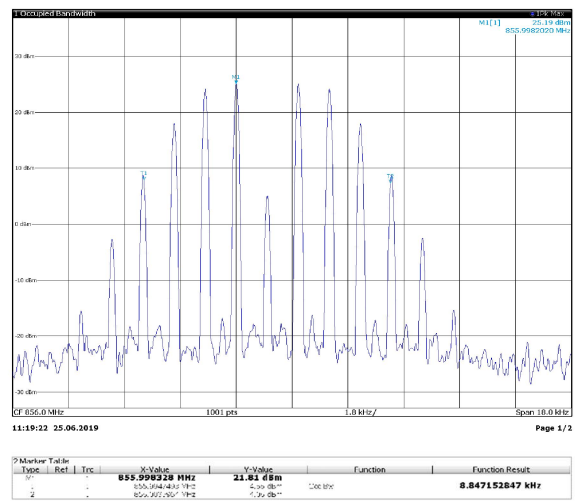
Output

99% occupied band input at AGC threshold +3dB with 11K0F3E signal at 852 MHz

## Test data



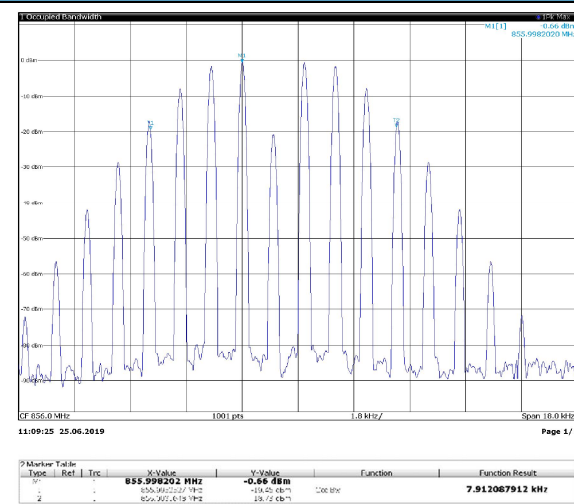
Input



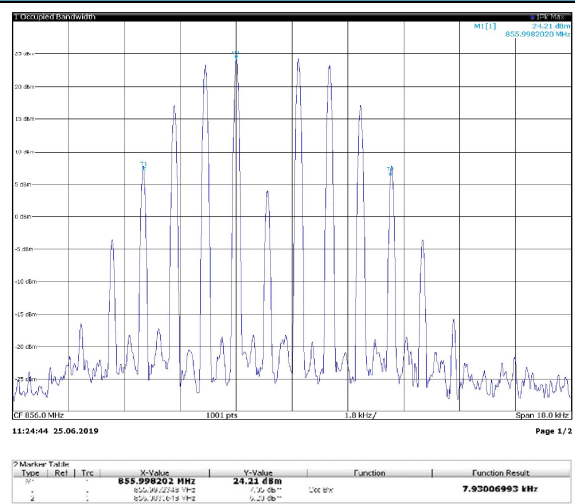
Output

99% occupied band with input at AGC threshold with 11K0F3E signal at 856 MHz

## Test data



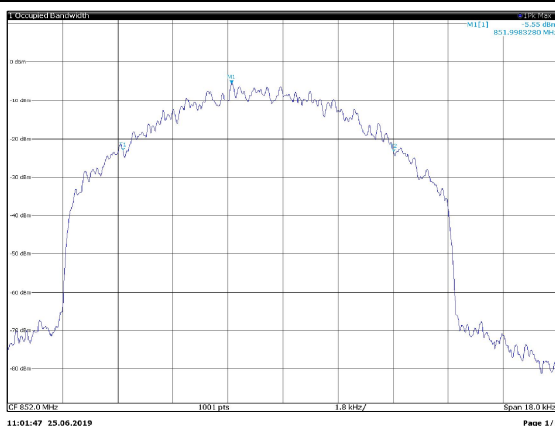
Input



Output

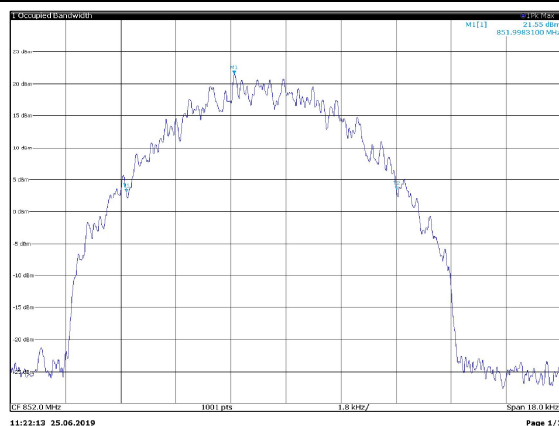
99% occupied band input at AGC threshold +3dB with 11K0F3E signal at 856 MHz

## Test data



| Type | Ref | Trc | Y-Value        | Y-Value    | Function | Function Result |
|------|-----|-----|----------------|------------|----------|-----------------|
| M1   | 1   |     | 851.996328 MHz | -6.56 dBm  |          |                 |
| T1   | 1   |     | 851.996328 MHz | -25.13 dBm | Occ Sw   | 8.847152847 kHz |
| T2   | 1   |     | 852.000344 MHz | -25.48 dBm |          |                 |

Input

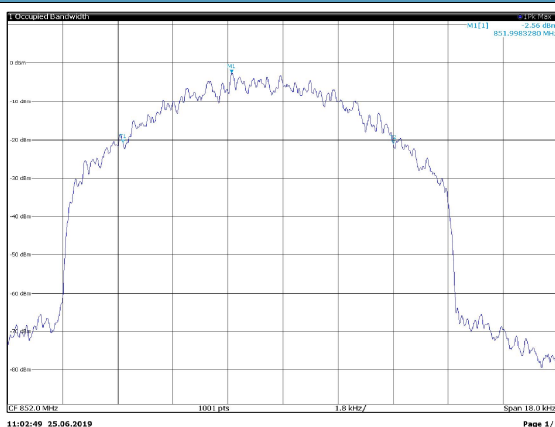


| Type | Ref | Trc | Y-Value        | Y-Value   | Function | Function Result |
|------|-----|-----|----------------|-----------|----------|-----------------|
| M1   | 1   |     | 851.99631 MHz  | 21.55 dBm |          |                 |
| T1   | 1   |     | 851.99631 MHz  | 3.10 dBm  | Occ Sw   | 8.829170829 kHz |
| T2   | 1   |     | 852.000344 MHz | 3.43 dBm  |          |                 |

Output

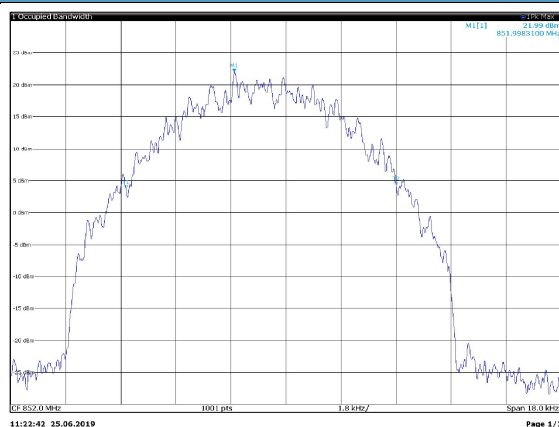
99% occupied band with input at AGC threshold with 8K70D1W signal at 852 MHz

## Test data



| Type | Ref | Trc | Y-Value        | Y-Value    | Function | Function Result |
|------|-----|-----|----------------|------------|----------|-----------------|
| M1   | 1   |     | 851.996328 MHz | -2.56 dBm  |          |                 |
| T1   | 1   |     | 851.996328 MHz | -20.11 dBm | Occ Sw   | 8.829170829 kHz |
| T2   | 1   |     | 852.000344 MHz | -20.45 dBm |          |                 |

Input

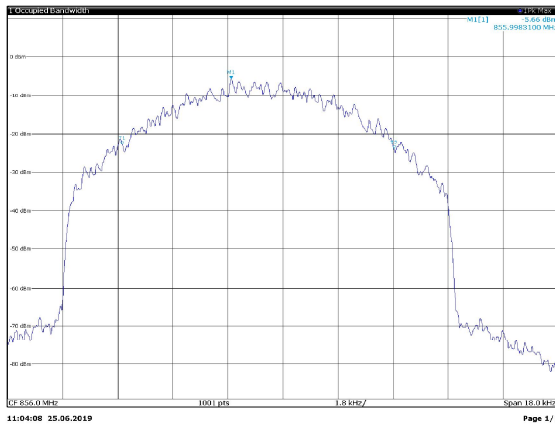


| Type | Ref | Trc | Y-Value        | Y-Value   | Function | Function Result |
|------|-----|-----|----------------|-----------|----------|-----------------|
| M1   | 1   |     | 851.99631 MHz  | 21.55 dBm |          |                 |
| T1   | 1   |     | 851.99631 MHz  | 3.77 dBm  | Occ Sw   | 8.829170829 kHz |
| T2   | 1   |     | 852.000344 MHz | 4.35 dBm  |          |                 |

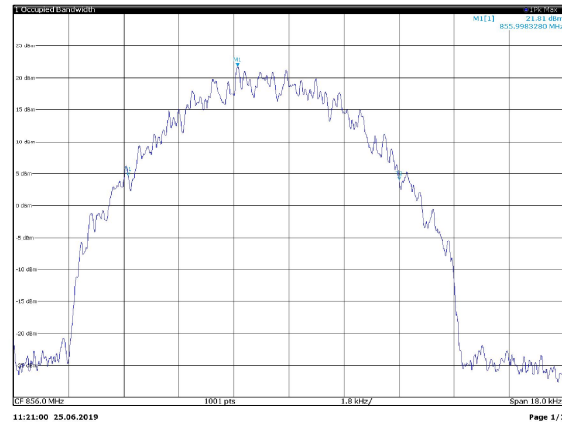
Output

99% occupied band input at AGC threshold +3dB with 8K70D1W signal at 852 MHz

## Test data



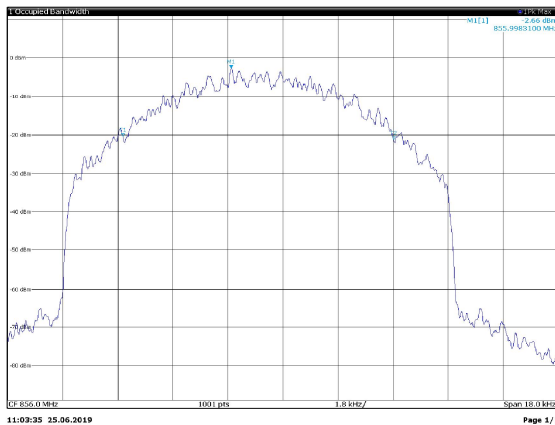
Input



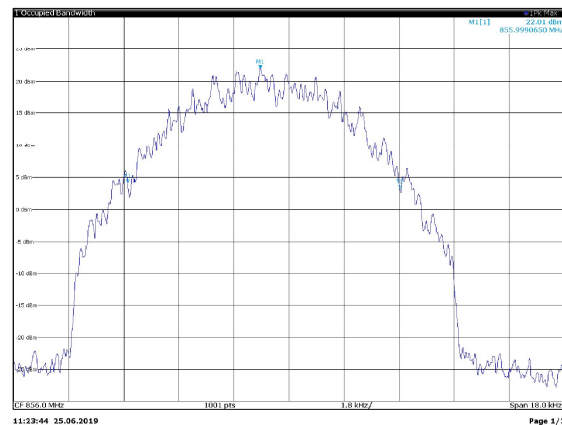
Output

99% occupied band with input at AGC threshold with 8K70D1W signal at 856 MHz

## Test data



Input



Output

99% occupied band input at AGC threshold +3dB with 8K70D1W signal at 856 MHz

## 6.4 Input/output power and amplifier/booster gain

### FCC 90.635(a)

The effective radiated power and antenna height for base stations may not exceed 1 kilowatt (30 dBw) and 304 m. (1,000 ft.) above average terrain (AAT), respectively, or the equivalent thereof as determined from the Table. These are maximum values, and applicants will be required to justify power levels and antenna heights requested.

### FCC 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.

### RSS-131 clause 6.2

The output power of the zone enhancer shall comply with the transmitter output power of the equipment with which it is to be used (as specified in RSS-119) and shall be within  $\pm 1.0$  dB of the zone enhancer manufacturer's rated output power

### RSS-119 clause 5.4

The output power shall be within  $\pm 1$  dB of the manufacturer's rated power listed in the equipment specifications. The transmitter output power limits set forth in Table 2 will come into force upon the publication of Issue 12 of this standard and will apply to newly certified equipment.

Table 2 — Transmitter Output Power

| Frequency Bands (MHz)                   | Transmitter Output Power (W)               |                                      |
|-----------------------------------------|--------------------------------------------|--------------------------------------|
|                                         | Base/Fixed Equipment                       | Mobile Equipment                     |
| 27.41-28 and 29.7-50                    | 300                                        | 30                                   |
| 72-76                                   | No limit                                   | 1                                    |
| 138-174                                 | 110                                        | 60                                   |
| 217-218 and 219-220                     | 110                                        | 30                                   |
| 220-222                                 | See <a href="#">SRSP-512</a> for ERP limit | 50                                   |
| 406.1-430 and 450-470                   | 110                                        | 60                                   |
| 768-776 and 798-806                     | See <a href="#">SRSP-511</a> for ERP limit | 30<br>3 W ERP for portable equipment |
| 806-821/851-866 and 821-824/866-869     | 110                                        | 30                                   |
| 896-901/935-940                         | 110                                        | 60                                   |
| 929-930/931-932                         | 110                                        | 30                                   |
| 928-929/952-953 and 932-932.5/941-941.5 | 110                                        | 30                                   |
| 932.5-935/941.5-944                     | 110                                        | 30                                   |

Test date: 2019-06-26

Test results: Pass

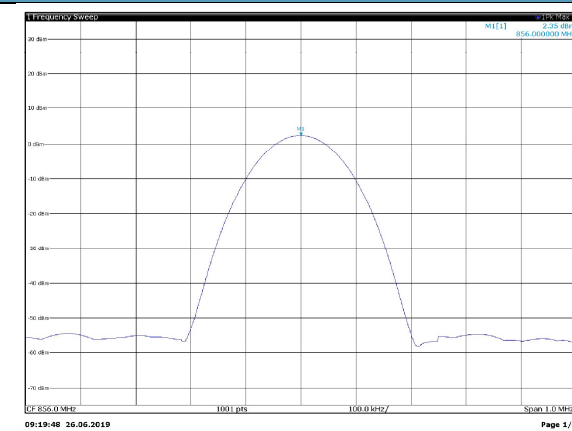
## Special notes

Modulation used: CW

## Test data

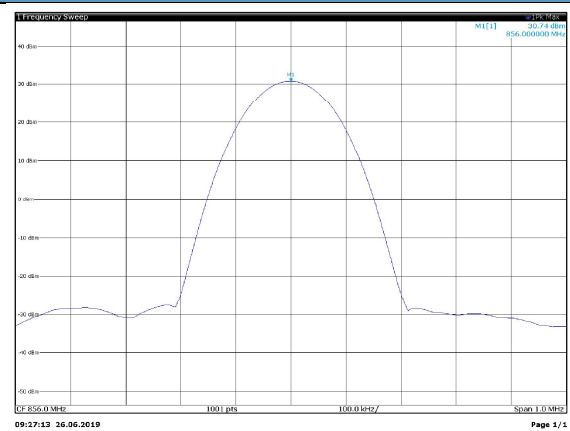
$$G_{\text{max antenna gain (dBi)}} = 39.14 - 30.74 = 8.40 \text{ dBi}$$

## Test data



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Input



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Output

Output power with input at AGC threshold with CW signal at 856 MHz

$$\text{Gain (dB)} = \text{output power (dBm)} - \text{input power (dBm)} = 28.39$$