

**EMC EQUIPMENT LIST**

Device	Manufacturer	Model	SN	Calibrati on Date	Cal Due Date
EMI Test Receiver R & S ESU 40 firmware v 4.43 SP 3 BIOS v5.1-24-3	Rohde & Schwarz	ESU 40	100320	08/28/18	08/28/20
Software: Field Strength Program	Timco	N/A	Version 4.10.7.0	N/A	N/A
Coaxial Cable - Chamber 3 cable set (backup)	Micro-Coax	Chamber 3 cable set (backup)	KMKM-0244-02 KMKM-0670-01 KFKF-0197-00	02/27/19	02/27/21
CHAMBER	Panashield	3M	N/A	03/15/19	03/15/21
Antenna: Active Loop	ETS-Lindgren	6502	00062529	12/11/17	12/11/20
Antenna: Biconical 1057	Eaton	94455-1	1057	12/13/17	12/13/20
Antenna: Log-Periodic 1243	Electro-Metrics	96005	1243	04/20/18	04/20/21
Ant: Double-Ridged Horn/ETS Horn 1	ETS-Lindgren	3117	00035923	02/25/20	02/25/23
Noise Source 10 MHz – 18 GHz	Agilent	346B	MY44421884	n/a	n/a
Splitter 1-1000MHz	Mini-Circuits	ZFSC-4-1- BNC+	U115700825	11/19/17	11/19/20

## **ANNEX I – MANUFACTURER-PROVIDED INFORMATION**

**Note:** The accuracy and precision of the following information provided by the manufacturer of the equipment under test has not been verified using test methods, cannot be verified, or is not necessary to verify.

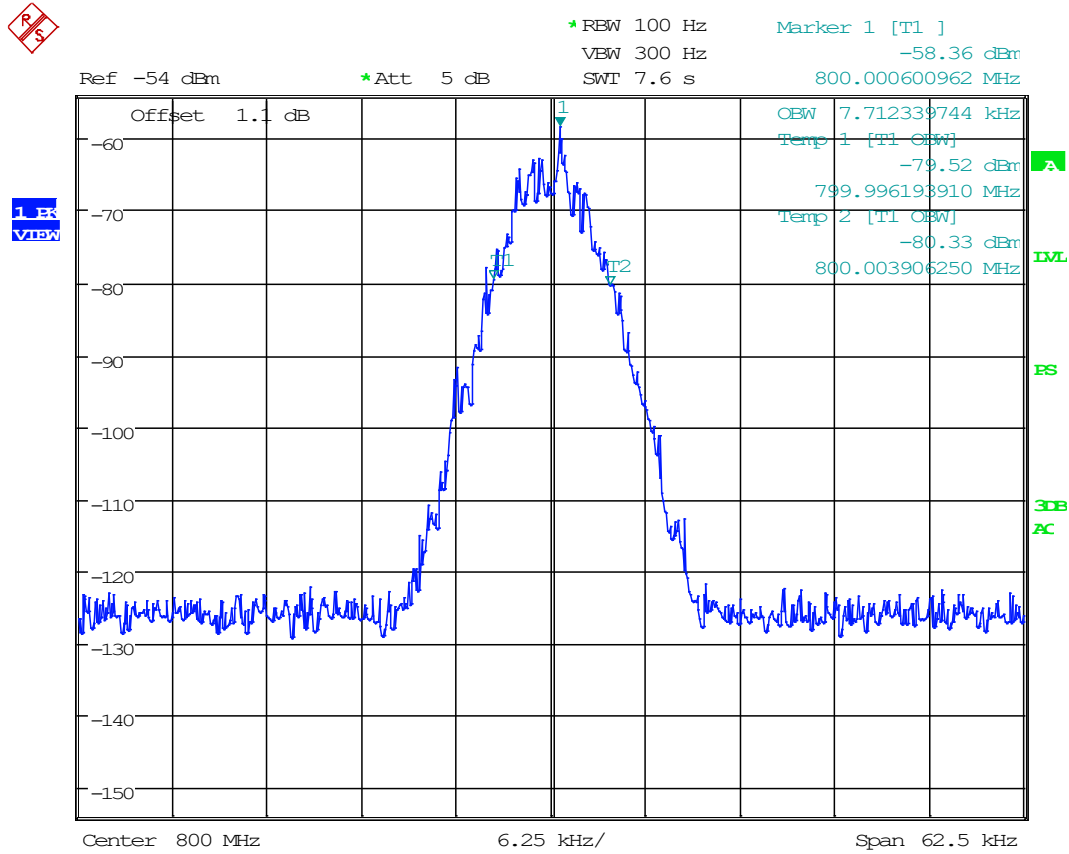
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N/A

**ANNEX II – MEASUREMENT DATA**

**KDB 935210 4.1 INPUT SIGNALS**

**8K10F1E/F1D (P25 Phase I C4FM Voice, Data)**

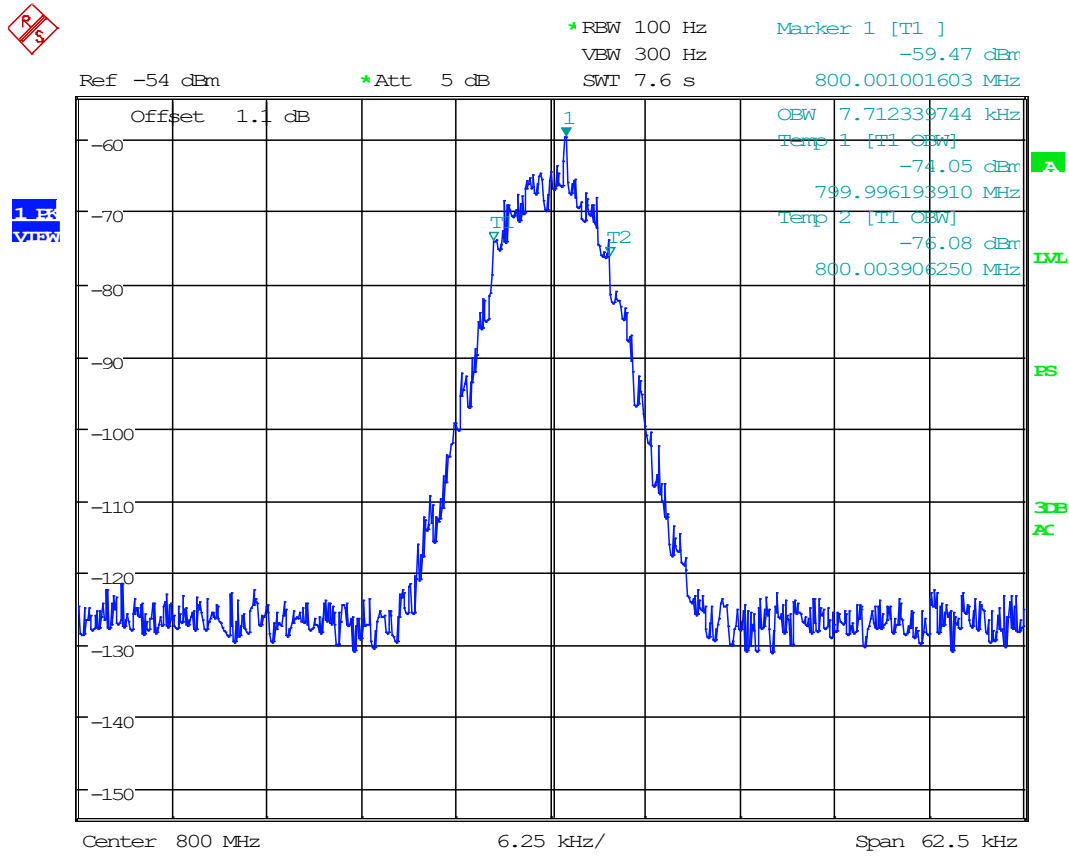


Date: 30.JAN.2019 14:28:58

**Occupied Bandwidth: 7.71 kHz**

**KDB 935210 4.1 INPUT SIGNALS**

**8K10F1W (P25 Phase II H-CPM Voice & Data)**



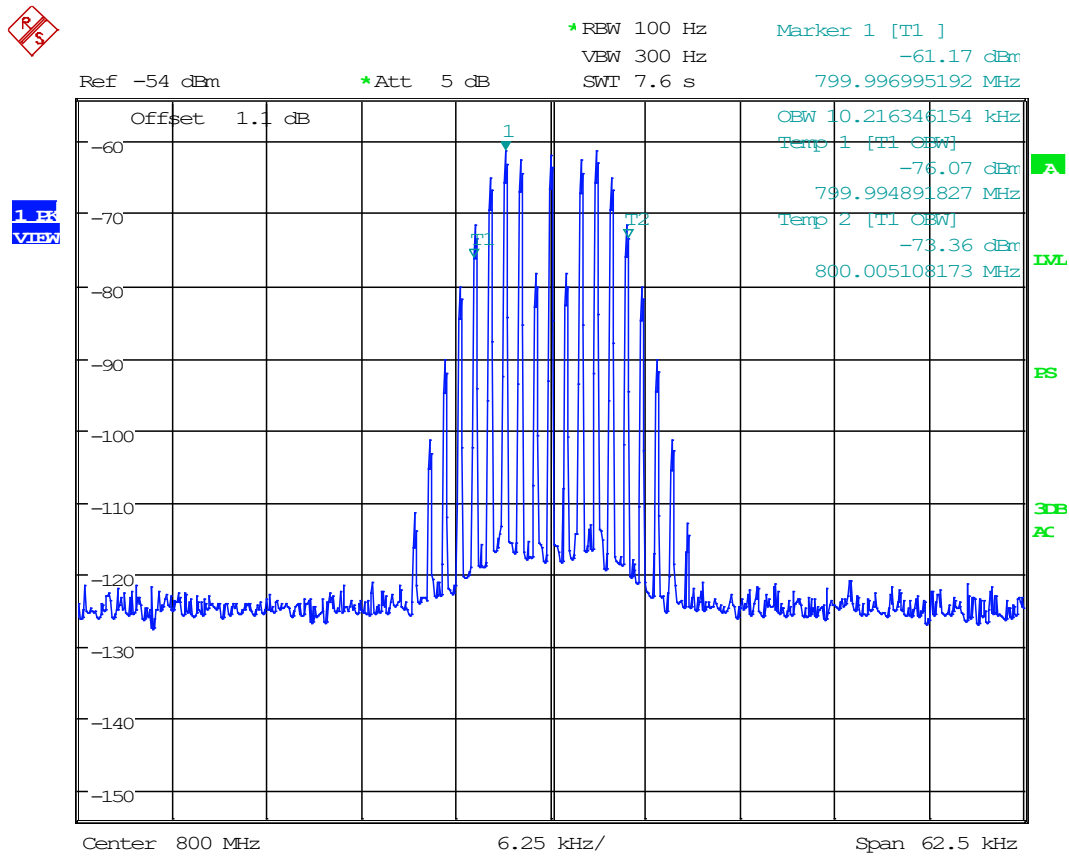
Date: 30.JAN.2019 14:30:47

**Occupied Bandwidth: 7.71 kHz**



**KDB 935210 4.1 INPUT SIGNALS**

**16K0F3E (Wideband Analog FM Voice)**



Date: 30.JAN.2019 14:23:14

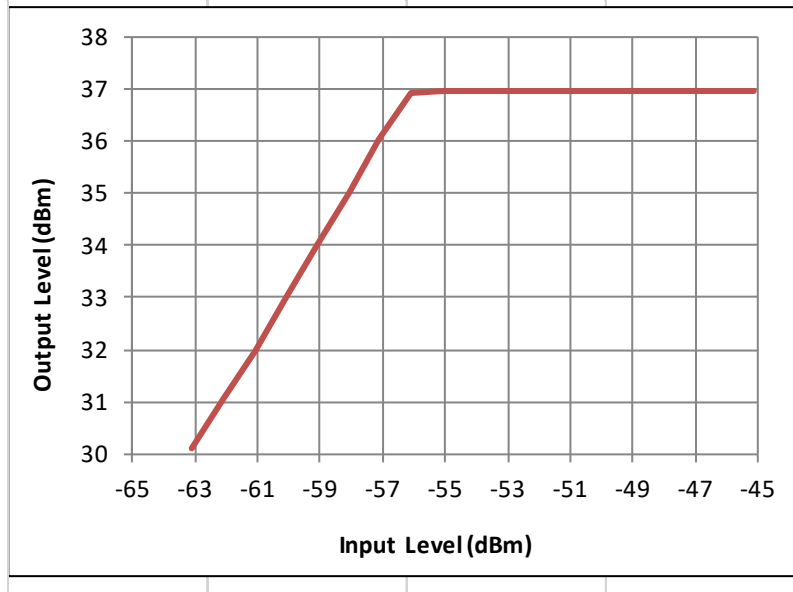
**Occupied Bandwidth: 10.22 kHz**

**KDB 935210 4.2 AGC THRESHOLD**

Test Engineer: FR  
 Test Date: AUG 3 2020

**700 MHz Band, Downlink**

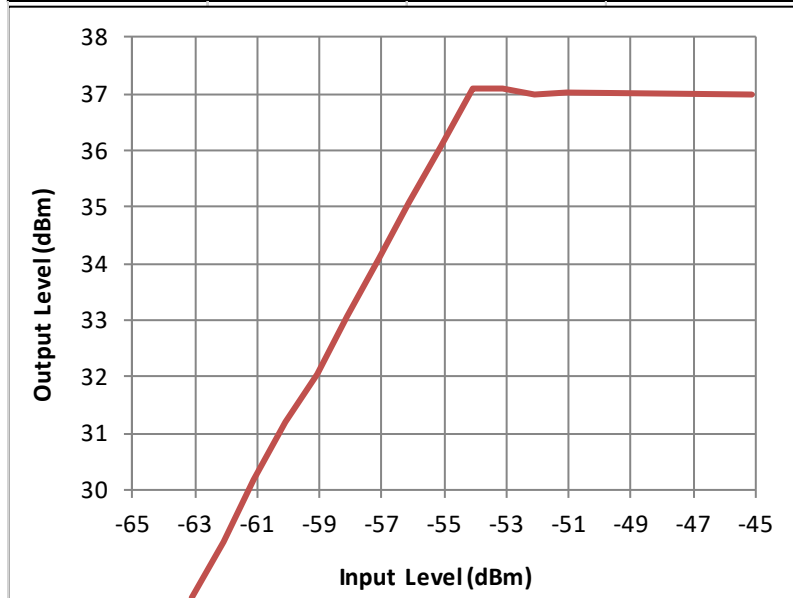
INPUT (dBm)	CORRECTED INPUT (dBm)	CORRECTED OUTPUT (dBm)	GAIN (dB)
-57	-63.1	30.1	93.2
-56	-62.1	31.08	93.2
-55	-61.1	31.99	93.1
-54	-60.1	32.97	93.1
-53	-59.1	34.02	93.1
-52	-58.1	34.99	93.1
-51	-57.1	36.05	93.2
-50	-56.1	36.92	93.0
-49	-55.1	36.97	92.1
-48	-54.1	36.96	91.1
-47	-53.1	36.97	90.1
-39	-45.1	36.97	82.1



**AGC Level**

**700 MHz Band, Uplink**

INPUT (dBm)	CORRECTED INPUT (dBm)	CORRECTED OUTPUT (dBm)	GAIN (dB)
-57	-63.1	28.08	91.2
-56	-62.1	29.08	91.2
-55	-61.1	30.18	91.3
-54	-60.1	31.18	91.3
-53	-59.1	32.05	91.2
-52	-58.1	33.07	91.2
-51	-57.1	34.08	91.2
-50	-56.1	35.09	91.2
-49	-55.1	36.07	91.2
-48	-54.1	37.08	91.2
-47	-53.1	37.09	90.2
-46	-52.1	37	89.1
-45	-51.1	37.01	88.1
-39	-45.1	37	82.1

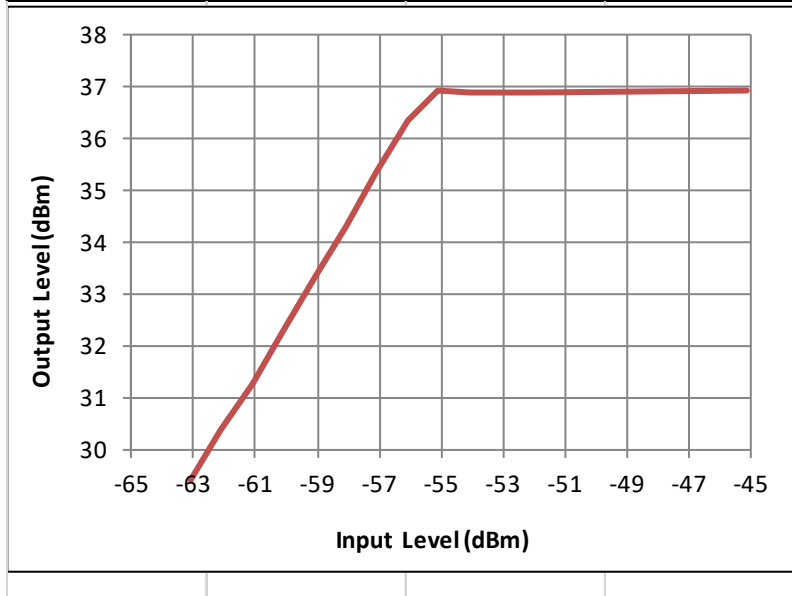




**AGC Level**

**800 MHz Band, Uplink**

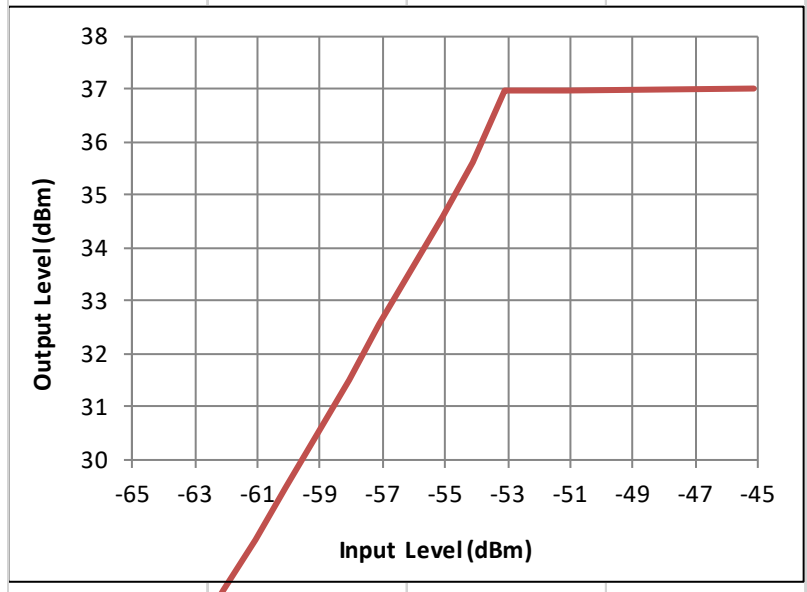
INPUT (dBm)	CORRECTED INPUT (dBm)	CORRECTED OUTPUT (dBm)	GAIN (dB)
-57	-63.1	29.4	92.5
-56	-62.1	30.39	92.5
-55	-61.1	31.28	92.4
-54	-60.1	32.27	92.4
-53	-59.1	33.31	92.4
-52	-58.1	34.33	92.4
-51	-57.1	35.34	92.4
-50	-56.1	36.36	92.5
-49	-55.1	36.92	92.0
-48	-54.1	36.9	91.0
-47	-53.1	36.9	90.0
-46	-52.1	36.9	89.0
-39	-45.1	36.94	82.0



**AGC Level**

**800 MHz Band, Downlink**

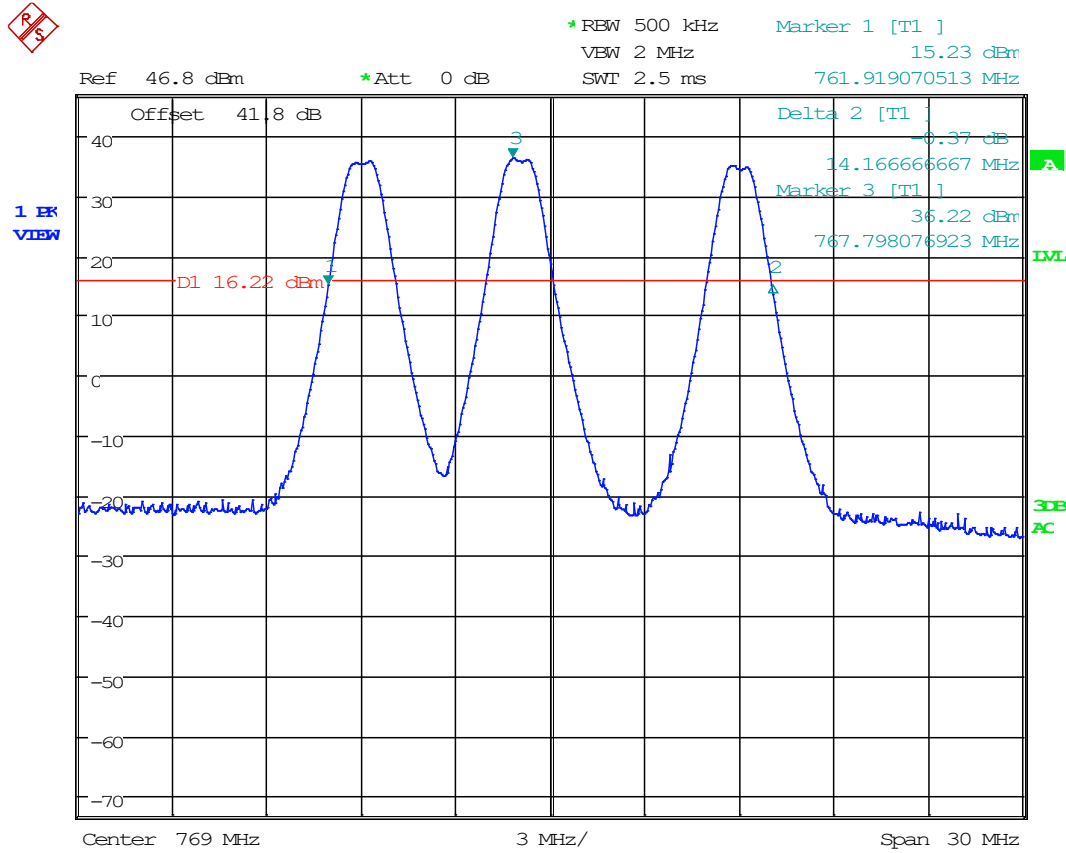
INPUT (dBm)	CORRECTED INPUT (dBm)	CORRECTED OUTPUT (dBm)	GAIN (dB)
-57	-63.1	26.53	89.6
-56	-62.1	27.53	89.6
-55	-61.1	28.48	89.6
-54	-60.1	29.48	89.6
-53	-59.1	30.5	89.6
-52	-58.1	31.52	89.6
-51	-57.1	32.55	89.7
-50	-56.1	33.57	89.7
-49	-55.1	34.6	89.7
-48	-54.1	35.6	89.7
-47	-53.1	36.99	90.1
-46	-52.1	36.98	89.1
-45	-51.1	36.99	88.1
-39	-45.1	37	82.1



**KDB 935210 4.3 OUT OF BAND REJECTION**

Test Engineer: FR  
 Test Date: JUL 30 2020

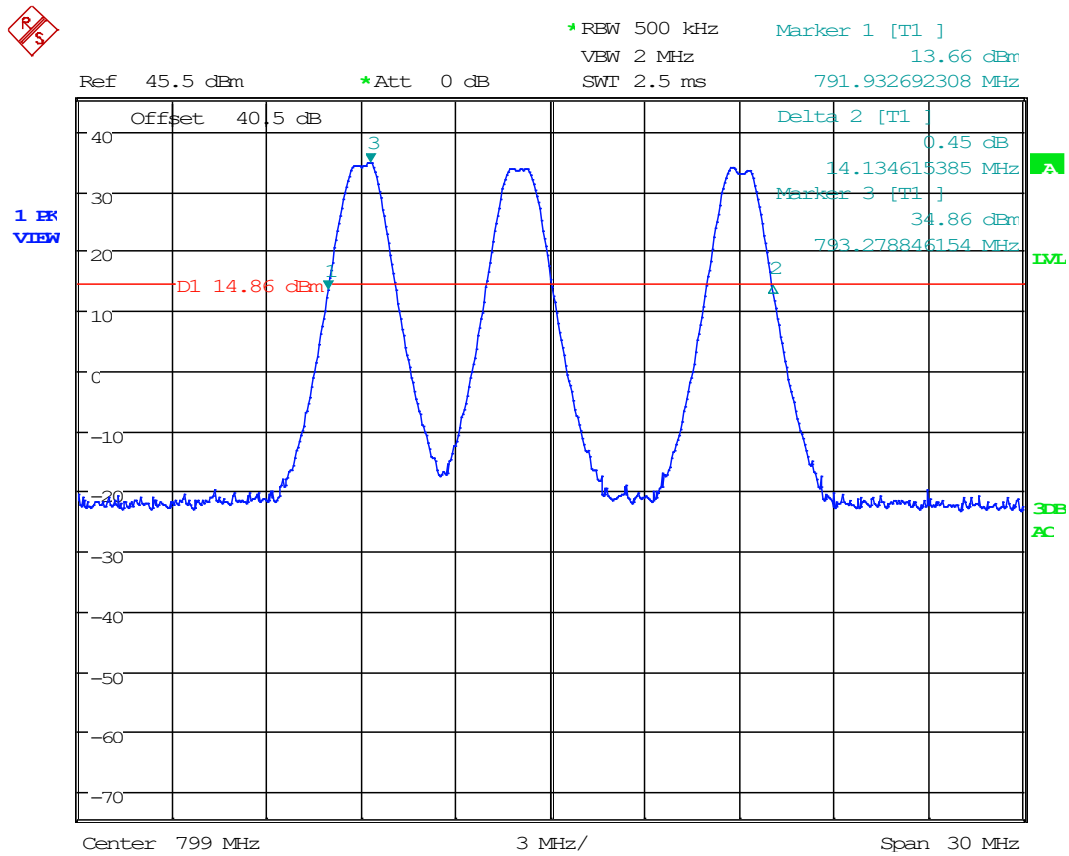
**700 MHz Band, Downlink**



Date: 30.JUL.2020 14:25:11

### Out of Band Rejection

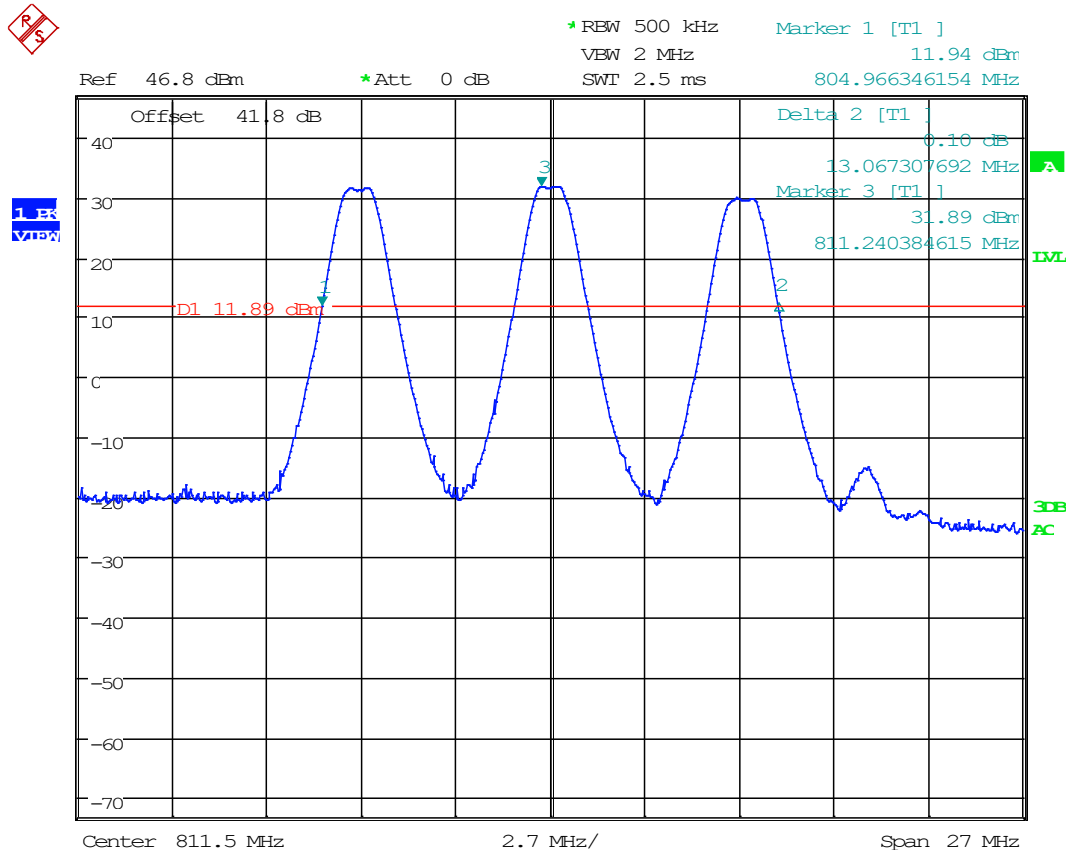
### 700 MHz Band, Uplink



Date: 30.JUL.2020 11:26:32

## Out of Band Rejection

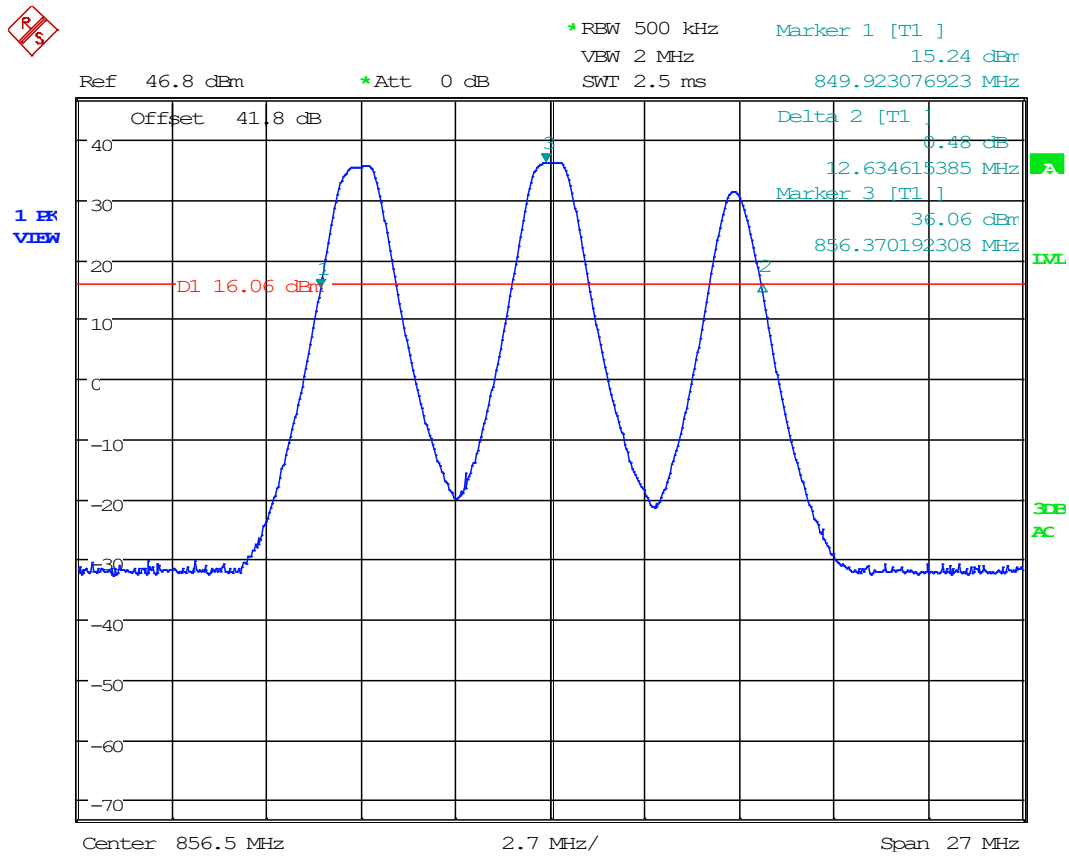
### 800 MHz Band, Uplink



Date: 29.JUL.2020 19:32:04

## Out of Band Rejection

### 800 MHz Band, Downlink



Date: 31.JUL.2020 13:49:15

## 2.1046 RF POWER OUTPUT

### KDB 935210 4.5 RF POWER OUTPUT & GAIN

Test Engineer: FR  
 Test Date: AUG 3 2020

Frequency	AGC Level	Input (dBm)	Output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Gain (dB)	Output ERP (W)
768.0125	AGC	-56.10	36.92	0.00	0.00	93.0	4.92
768.0125	AGC +3	-53.10	36.97	0.00	0.00	90.1	4.98
768.0125	Saturation	-45.10	36.97	0.00	0.00	82.1	4.98
798.0125	AGC	-54.1	37.08	0.00	0.09	91.2	5.00
798.0125	AGC +3	-51.1	37.01	0.00	0.02	88.1	5.00
798.0125	Saturation	-45.10	37	0.00	0.01	82.1	5.00
811.5	AGC	-57.04	36.92	0.00	0.00	94.0	4.92
811.5	AGC +3	-54.04	36.9	0.00	0.00	90.9	4.90
811.5	Saturation	-47.04	36.94	0.00	0.00	84.0	4.94
856.50	AGC	-54.1	36.98	0.00	0.00	91.1	4.99
856.50	AGC +3	-51.1	36.99	0.00	0.00	88.1	5.00
856.50	Saturation	-45.10	37	0.00	0.01	82.1	5.00

**Rated Power Output = 36.99.00 dBm (5 W)**

**Max Gain = 94 dB**

**KDB 935210 4.6 NOISE FIGURE**

Test Engineer: FR  
 Test Date: AUG 3 2020

**700 MHz Band, Downlink**

FCC KDB 935210 S. 4.6, ISED RSS-131 S. 6.4 - NOISE FIGURE	
Measurement Freq. (MHz)	<b>768.0125</b>
Noise Source ENR (dB)	15.0684
Noise Source $T_s^{OFF}, T_O$ (K)	290
Noise Source $T_s^{ON}$ (K)	9606.0841
Noise Source Cal $N_2^{off}$ (dB)	<b>-128</b>
Noise Source Cal $N_2^{off}$ (pW)	0.00016
Noise Source Cal $N_2^{on}$ (dB)	<b>-121.68</b>
Noise Source Cal $N_2^{on}$ (pW)	0.00068
Calibration Ratio $Y_2$	4.2855
Calibration $T_2$	2545.5276
Noise + EUT $N_{12}^{off}$ (dB)	<b>-37.79</b>
Noise + EUT $N_{12}^{off}$ (pW)	166341.27
Noise + EUT $N_{12}^{on}$ (dB)	<b>-26.01</b>
Noise + EUT $N_{12}^{on}$ (pW)	2506109.25
Noise + EUT Ratio $Y_{12}$	15.0661
Noise + EUT $T_{12}$	372.3089
Gain (Ratio)	4493381356.9433
Gain (dB)	96.5257
2nd Stage Correction $T_1$	372.308922035344
Noise Factor F	2.28382
Noise Figure (dB)	<b>3.59</b>
Limit (dB)	9.00
Margin (dB)	5.41



## Noise Figure

### 700 MHz Band, Uplink

FCC KDB 935210 S. 4.6, ISED RSS-131 S. 6.4 - NOISE FIGURE	
Measurement Freq. (MHz)	<b>798.0125</b>
Noise Source ENR (dB)	15.0647
Noise Source $T_s^{OFF}, T_O$ (K)	290
Noise Source $T_s^{ON}$ (K)	9598.2220
Noise Source Cal $N_2^{off}$ (dB)	<b>-127.1</b>
Noise Source Cal $N_2^{off}$ (pW)	0.00019
Noise Source Cal $N_2^{on}$ (dB)	<b>-122.36</b>
Noise Source Cal $N_2^{on}$ (pW)	0.00058
Calibration Ratio $Y_2$	2.9785
Calibration $T_2$	4414.6473
Noise + EUT $N_{12}^{off}$ (dB)	<b>-37.83</b>
Noise + EUT $N_{12}^{off}$ (pW)	164816.24
Noise + EUT $N_{12}^{on}$ (dB)	<b>-23.45</b>
Noise + EUT $N_{12}^{on}$ (pW)	4518559.44
Noise + EUT Ratio $Y_{12}$	27.4157
Noise + EUT $T_{12}$	62.3741
Gain (Ratio)	11285560899.2676
Gain (dB)	100.5252
2nd Stage Correction $T_1$	62.374054780740
Noise Factor F	1.21508
Noise Figure (dB)	<b>0.85</b>
Limit (dB)	9.00
Margin (dB)	8.15

## Noise Figure

### 800 MHz Band, Uplink

FCC KDB 935210 S. 4.6, ISED RSS-131 S. 6.4 - NOISE FIGURE	
Measurement Freq. (MHz)	<b>811.5</b>
Noise Source ENR (dB)	15.0630
Noise Source $T_s^{OFF}, T_O$ (K)	290
Noise Source $T_s^{ON}$ (K)	9594.6895
Noise Source Cal $N_2^{off}$ (dB)	<b>-122.58</b>
Noise Source Cal $N_2^{off}$ (pW)	0.00055
Noise Source Cal $N_2^{on}$ (dB)	<b>-117.94</b>
Noise Source Cal $N_2^{on}$ (pW)	0.00161
Calibration Ratio $Y_2$	2.9107
Calibration $T_2$	4579.7368
Noise + EUT $N_{12}^{off}$ (dB)	<b>-35.54</b>
Noise + EUT $N_{12}^{off}$ (pW)	279254.38
Noise + EUT $N_{12}^{on}$ (dB)	<b>-24.75</b>
Noise + EUT $N_{12}^{on}$ (pW)	3349654.39
Noise + EUT Ratio $Y_{12}$	11.9950
Noise + EUT $T_{12}$	556.2661
Gain (Ratio)	2910707493.6920
Gain (dB)	94.6400
2nd Stage Correction $T_1$	556.266067690941
Noise Factor F	2.91816
Noise Figure (dB)	<b>4.65</b>
Limit (dB)	9.00
Margin (dB)	4.35

## Noise Figure

### 800 MHz Band, Downlink

FCC KDB 935210 S. 4.6, ISED RSS-131 S. 6.4 - NOISE FIGURE	
Measurement Freq. (MHz)	<b>856.5</b>
Noise Source ENR (dB)	15.0575
Noise Source $T_s^{OFF}, T_O$ (K)	290
Noise Source $T_s^{ON}$ (K)	9582.9133
Noise Source Cal $N_2^{off}$ (dB)	<b>-126.58</b>
Noise Source Cal $N_2^{off}$ (pW)	0.00022
Noise Source Cal $N_2^{on}$ (dB)	<b>-119.29</b>
Noise Source Cal $N_2^{on}$ (pW)	0.00118
Calibration Ratio $Y_2$	5.3580
Calibration $T_2$	1842.3967
Noise + EUT $N_{12}^{off}$ (dB)	<b>-39.51</b>
Noise + EUT $N_{12}^{off}$ (pW)	111943.79
Noise + EUT $N_{12}^{on}$ (dB)	<b>-27.78</b>
Noise + EUT $N_{12}^{on}$ (pW)	1667247.21
Noise + EUT Ratio $Y_{12}$	14.8936
Noise + EUT $T_{12}$	378.8624
Gain (Ratio)	1623795124.9128
Gain (dB)	92.1053
2nd Stage Correction $T_1$	378.862361583713
Noise Factor F	2.30642
Noise Figure (dB)	<b>3.63</b>
Limit (dB)	9.00
Margin (dB)	5.37



**2.1047 AUDIO FREQUENCY RESPONSE**

**2.1047 LOW PASS FILTER RESPONSE**

Test Engineer: \_\_\_\_\_  
Test Date: \_\_\_\_\_

**N/A.** Device does not accept audio input.



**2.1047 MODULATION LIMITING**

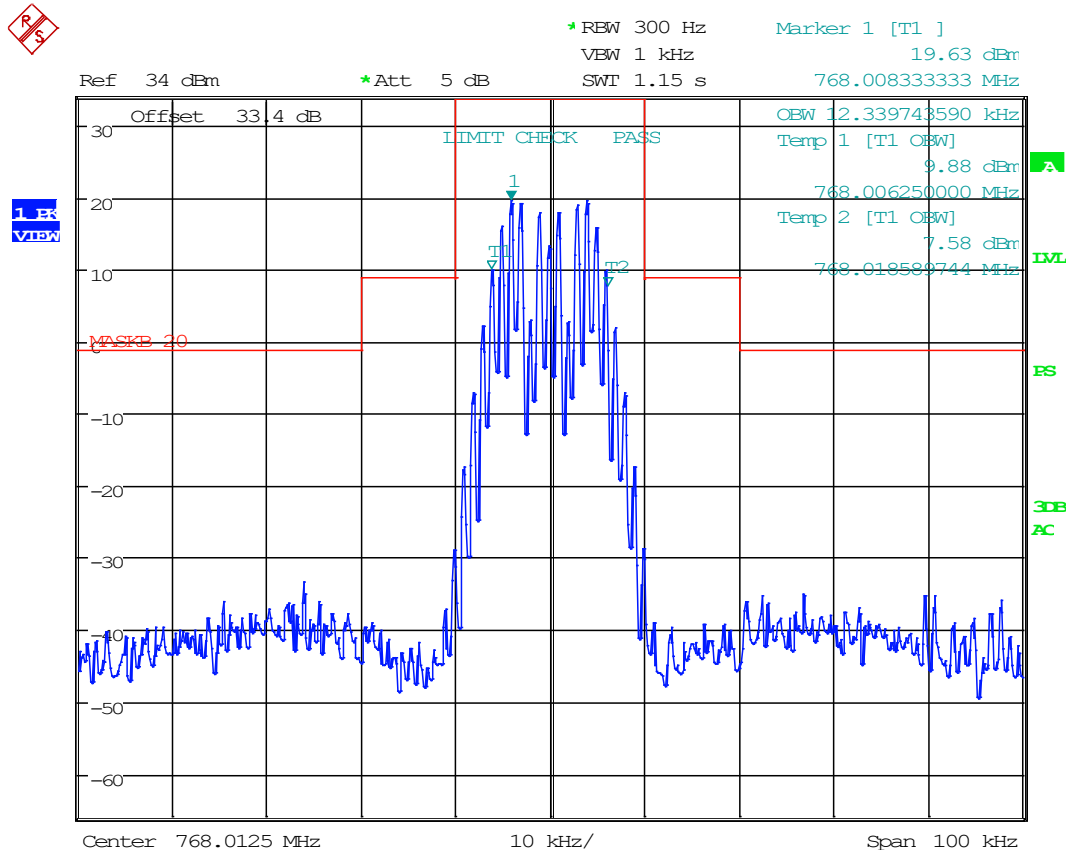
Test Engineer: \_\_\_\_\_  
Test Date: \_\_\_\_\_

**N/A.** Device does not have means to limit modulation.





**700 MHz Band, Downlink, 25k FM, AGC**

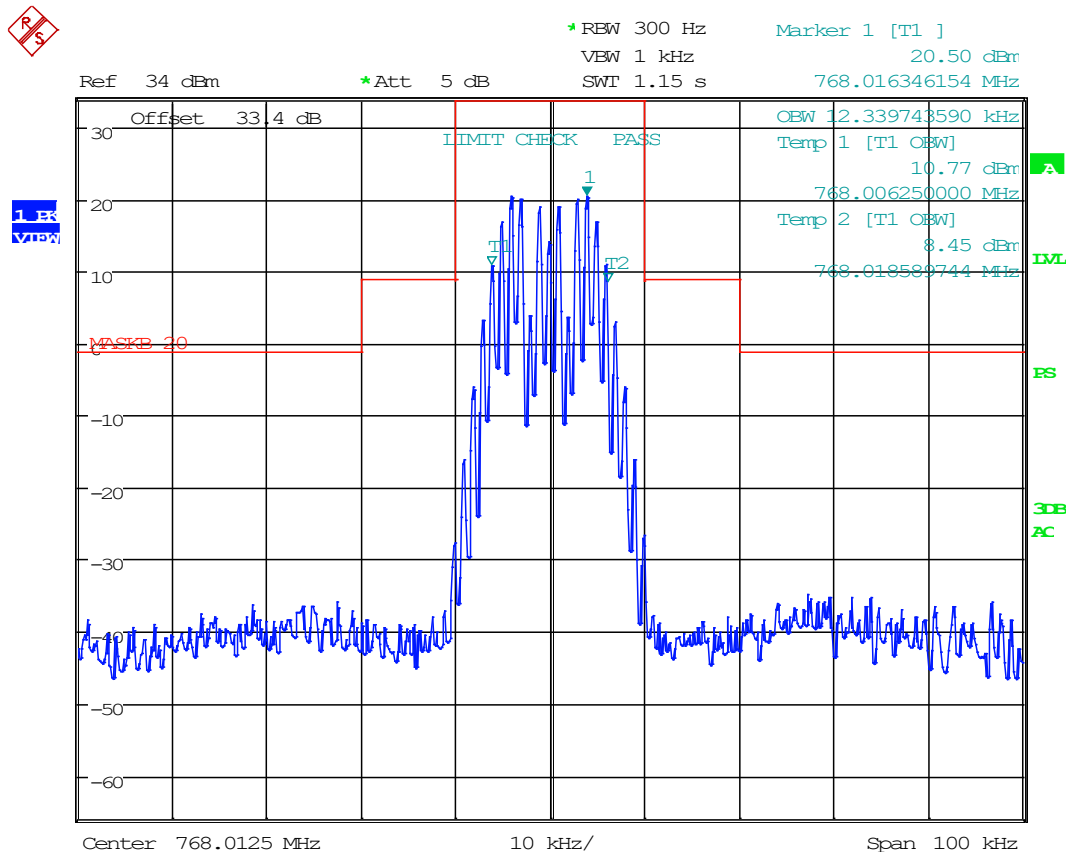


Date: 30.JUL.2020 14:41:18



**EMISSION MASK & IVO**

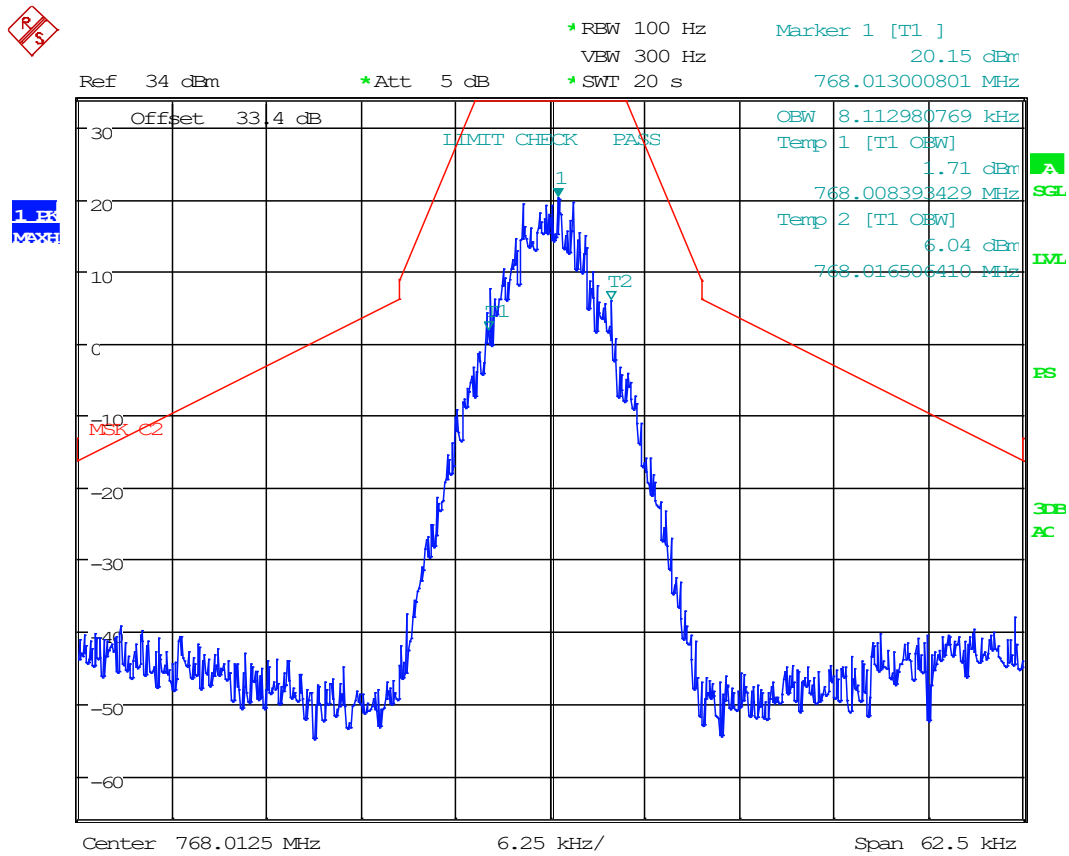
**700 MHz Band, Downlink, 25k FM, AGC +3 dB**



Date: 30.JUL.2020 14:40:49

### EMISSION MASK & IVO

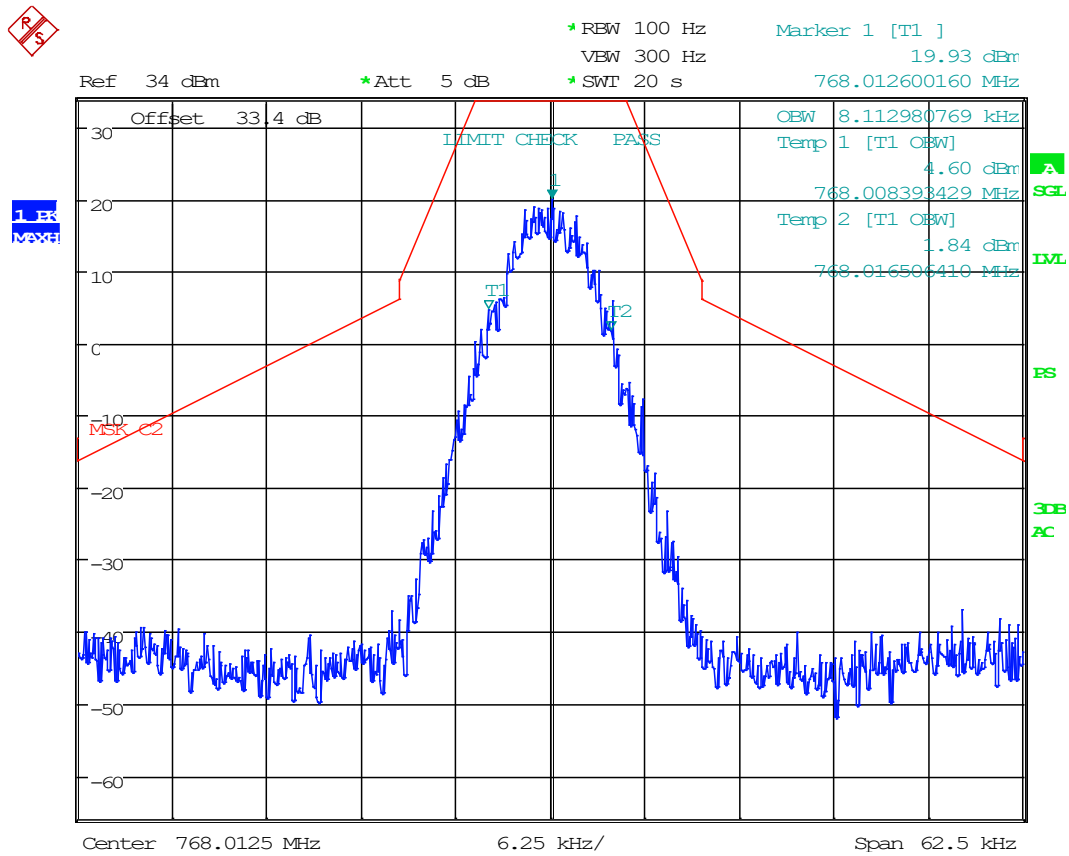
### 700 MHz Band, Downlink, C4FM, AGC



Date: 30.JUL.2020 14:33:32

**EMISSION MASK & IVO**

**700 MHz Band, Downlink, C4FM, AGC +3 dB**

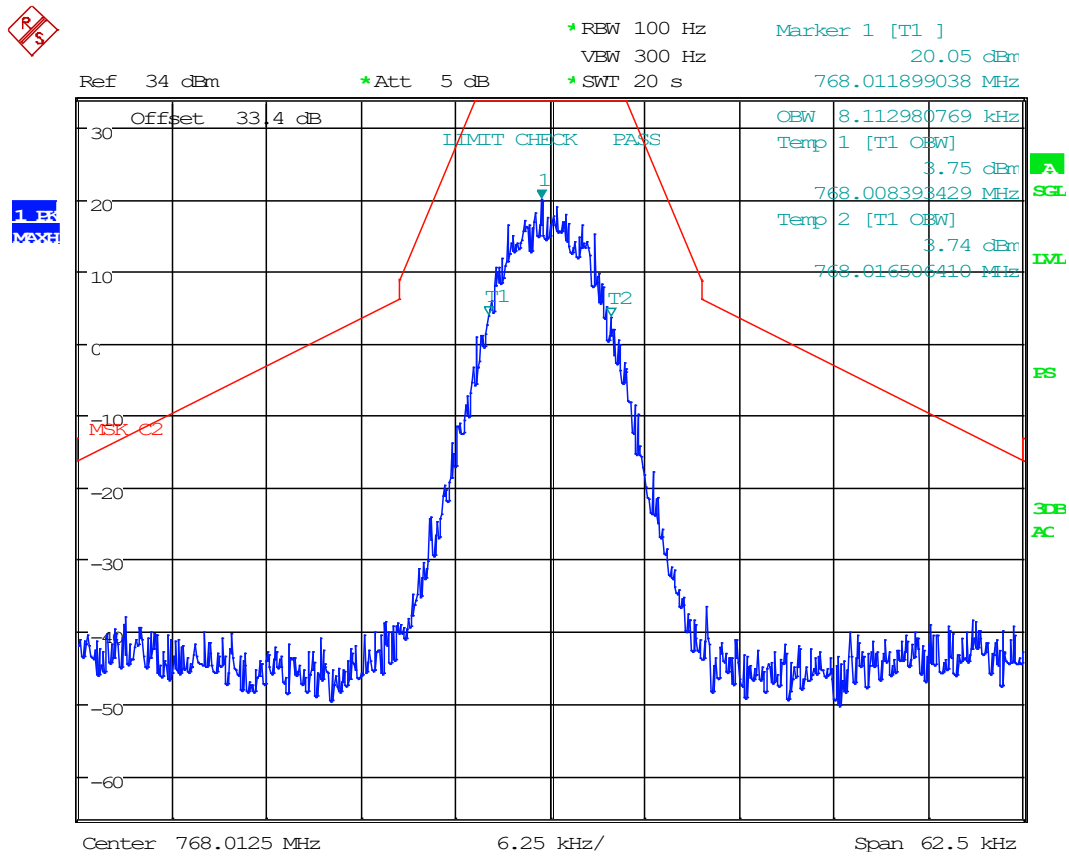


Date: 30.JUL.2020 14:34:25



**EMISSION MASK & IVO**

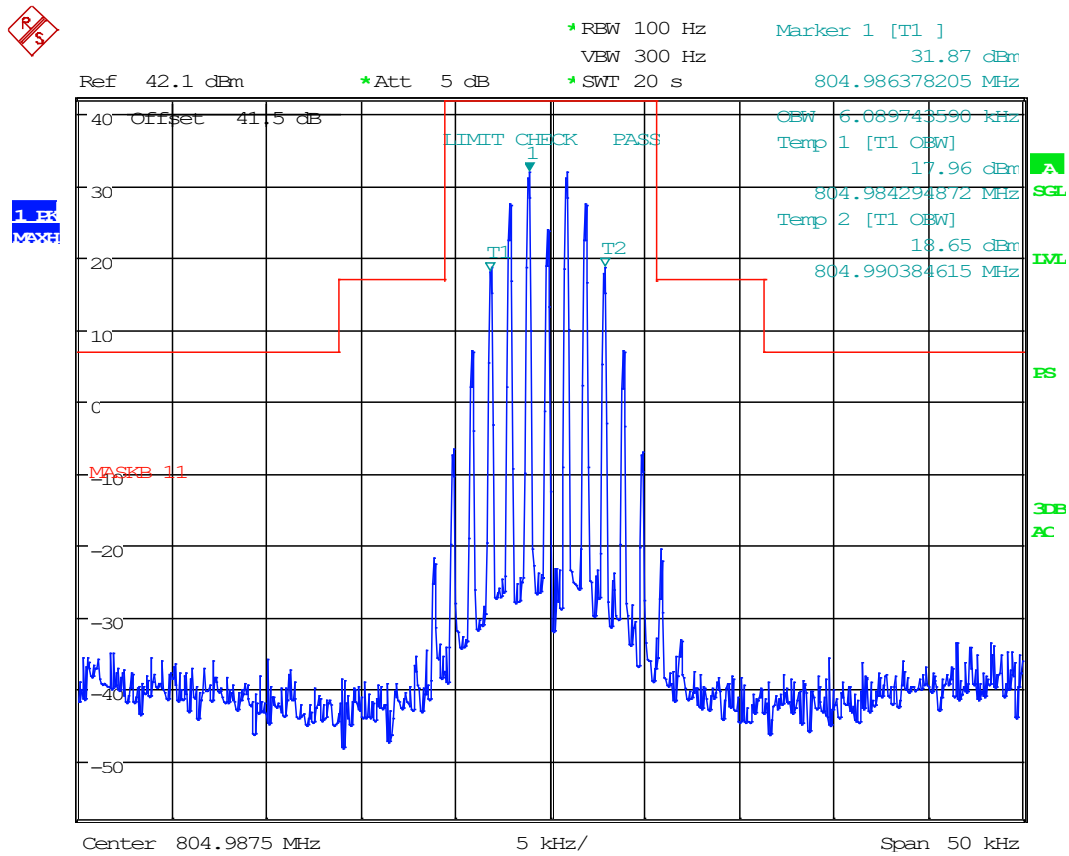
**700 MHz Band, Downlink, H-CPM, AGC +3 DB**



Date: 30.JUL.2020 14:35:04

**EMISSION MASK & IVO**

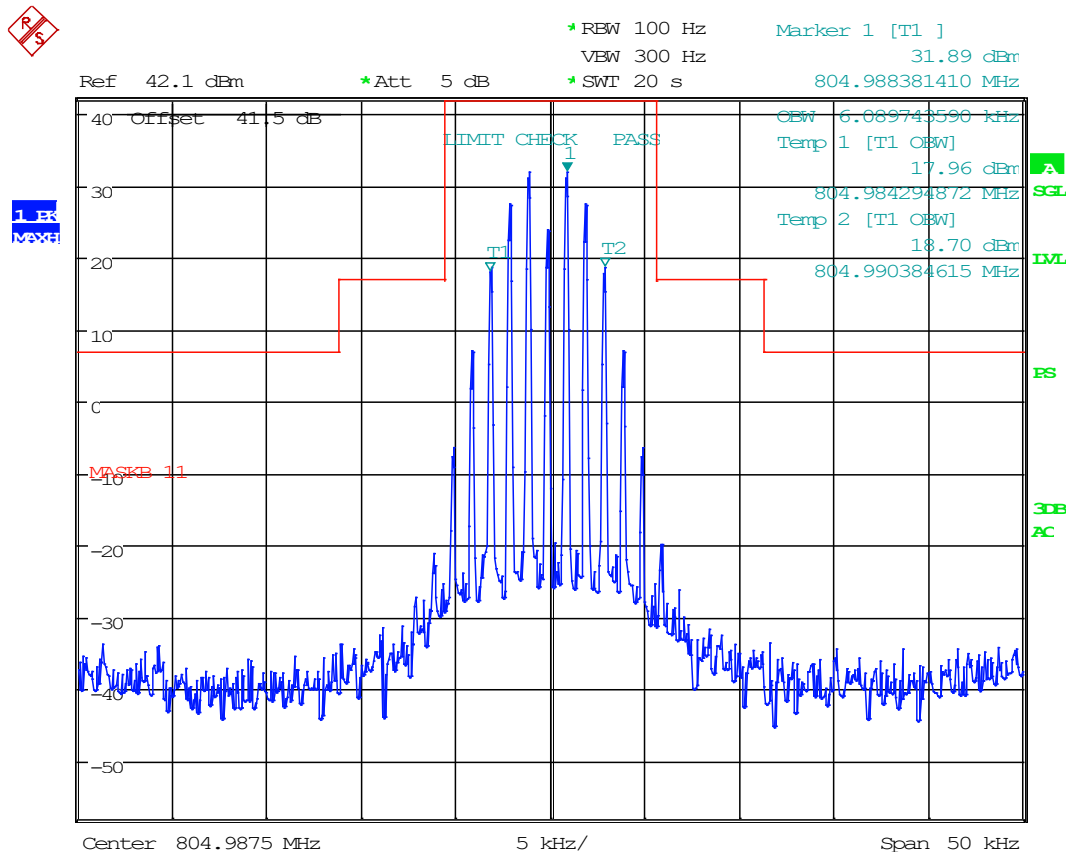
**700 MHz Band, Uplink, 12.5k FM, AGC**



Date: 30.JUL.2020 12:25:14

### EMISSION MASK & IVO

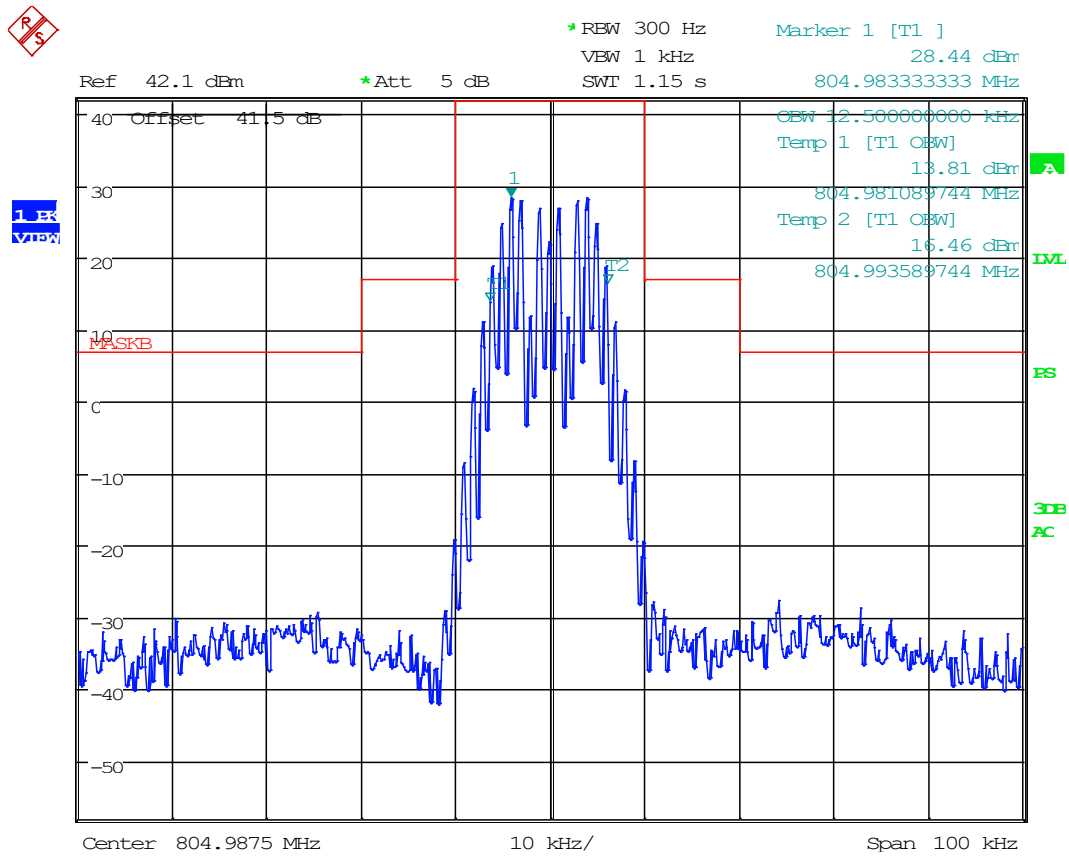
#### 700 MHz Band, Uplink, 12.5k FM, AGC +3 dB



Date: 30.JUL.2020 12:25:50

**EMISSION MASK & IVO**

**700 MHz Band, Uplink, 25k FM, AGC**

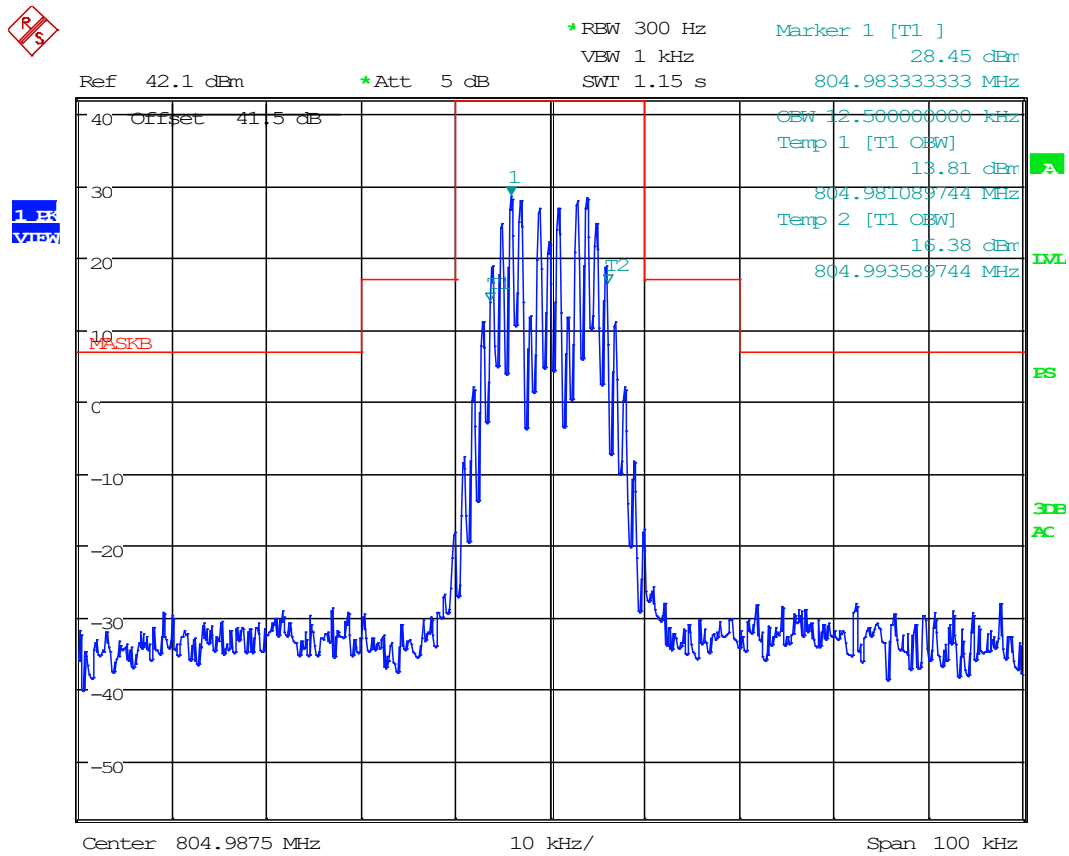


Date: 30.JUL.2020 12:27:15



**EMISSION MASK & IVO**

**700 MHz Band, Uplink, 25k FM, AGC +3 dB**

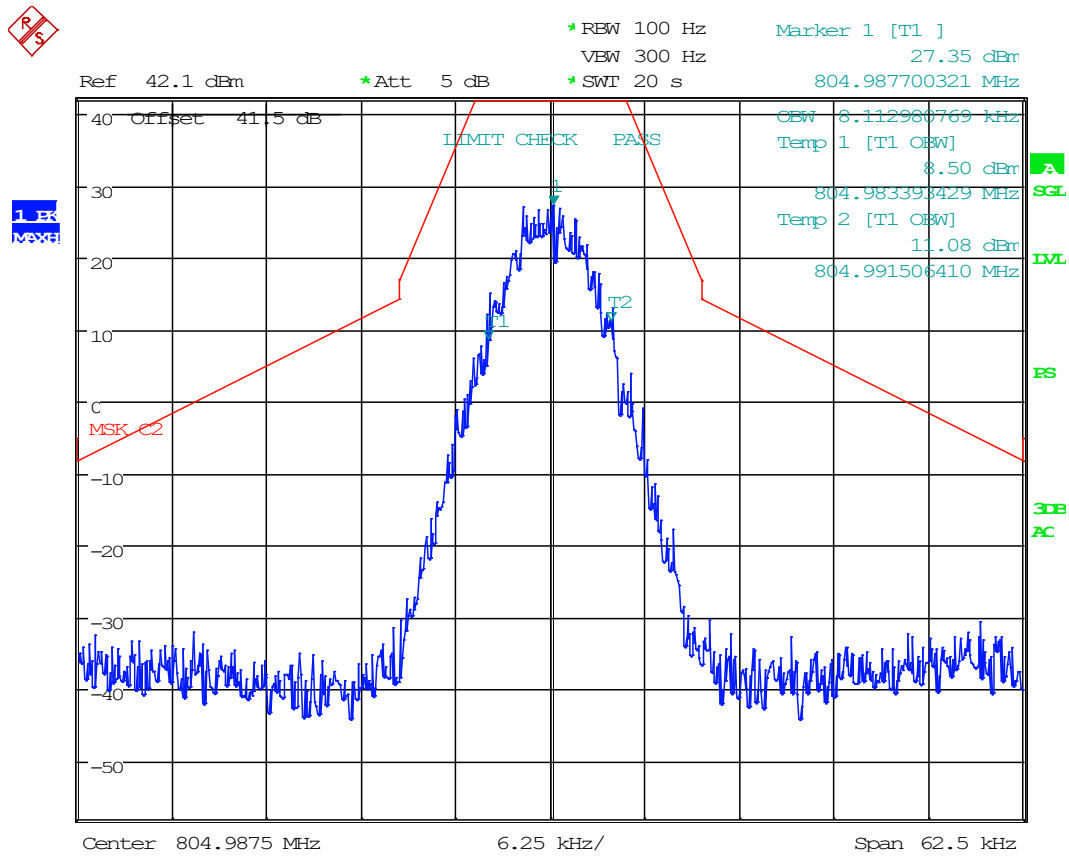


Date: 30.JUL.2020 12:26:55



### EMISSION MASK & IVO

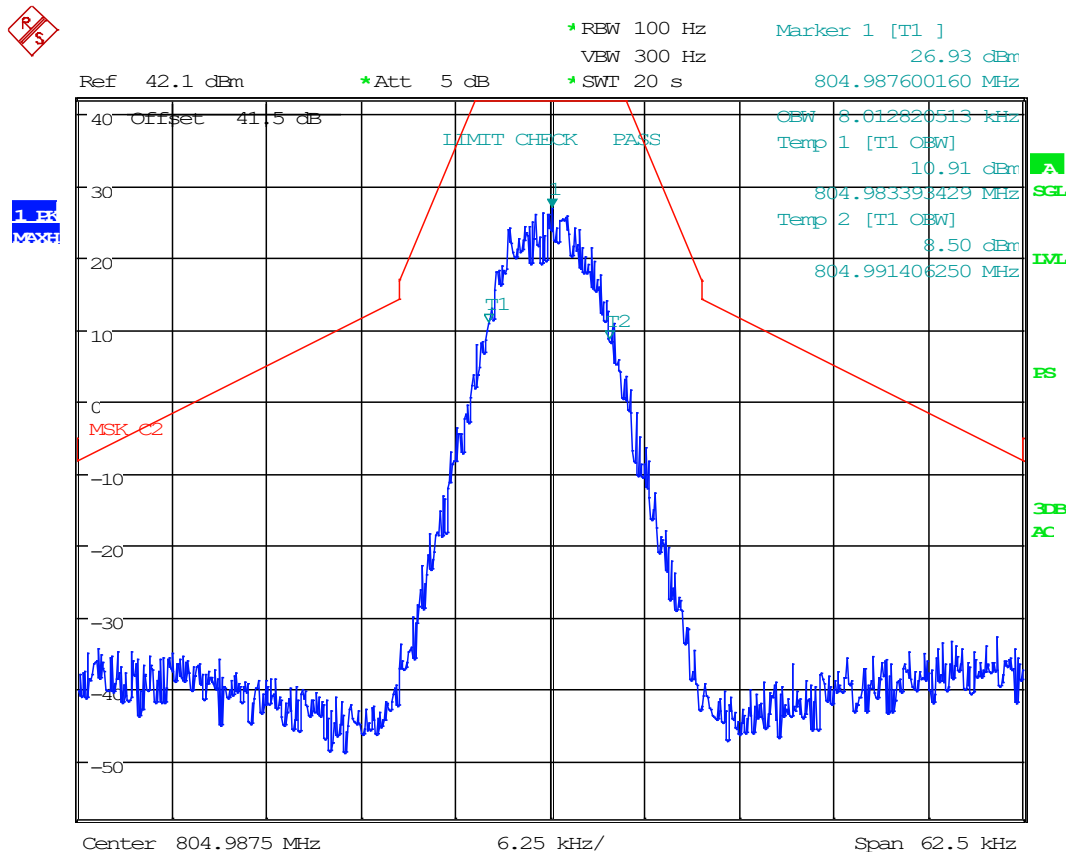
### 700 MHz Band, Uplink, C4FM, AGC +3 dB



Date: 30.JUL.2020 12:14:38

### EMISSION MASK & IVO

### 700 MHz Band, Uplink, H-CPM, AGC

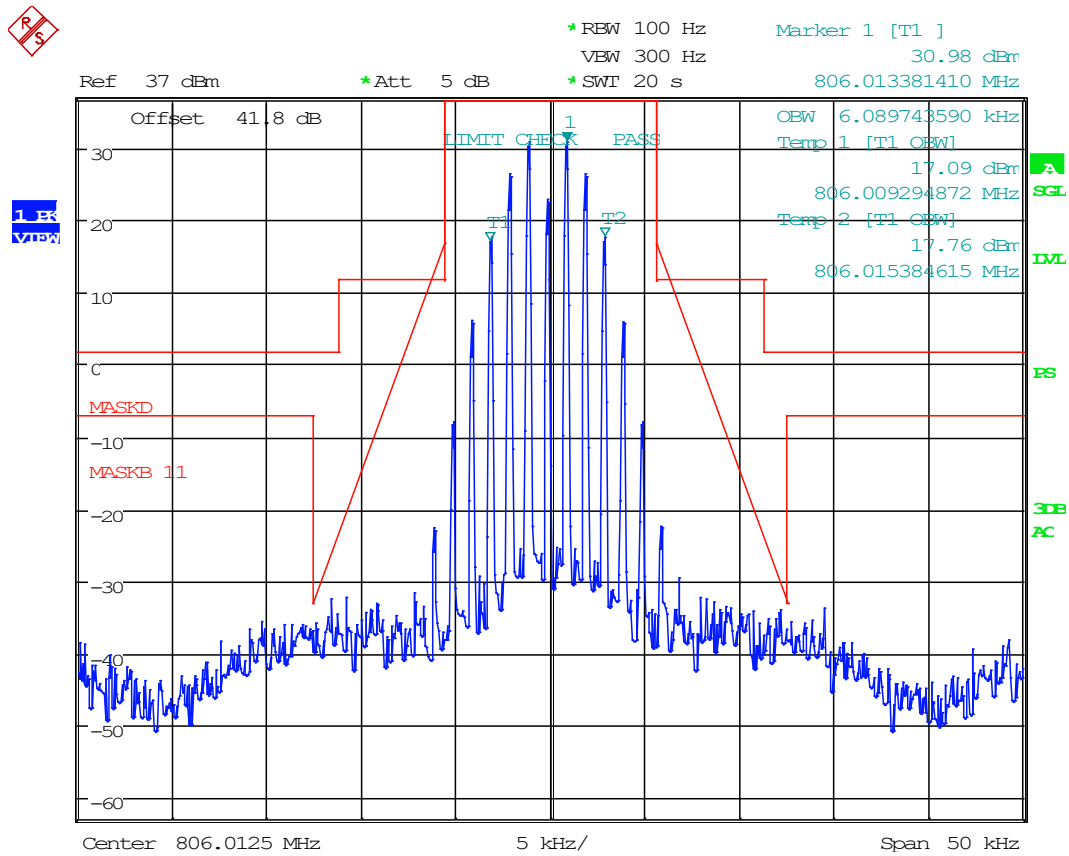


Date: 30.JUL.2020 12:15:38



### EMISSION MASK & IVO

### 800 MHz Band, Uplink, 12.5k FM, AGC

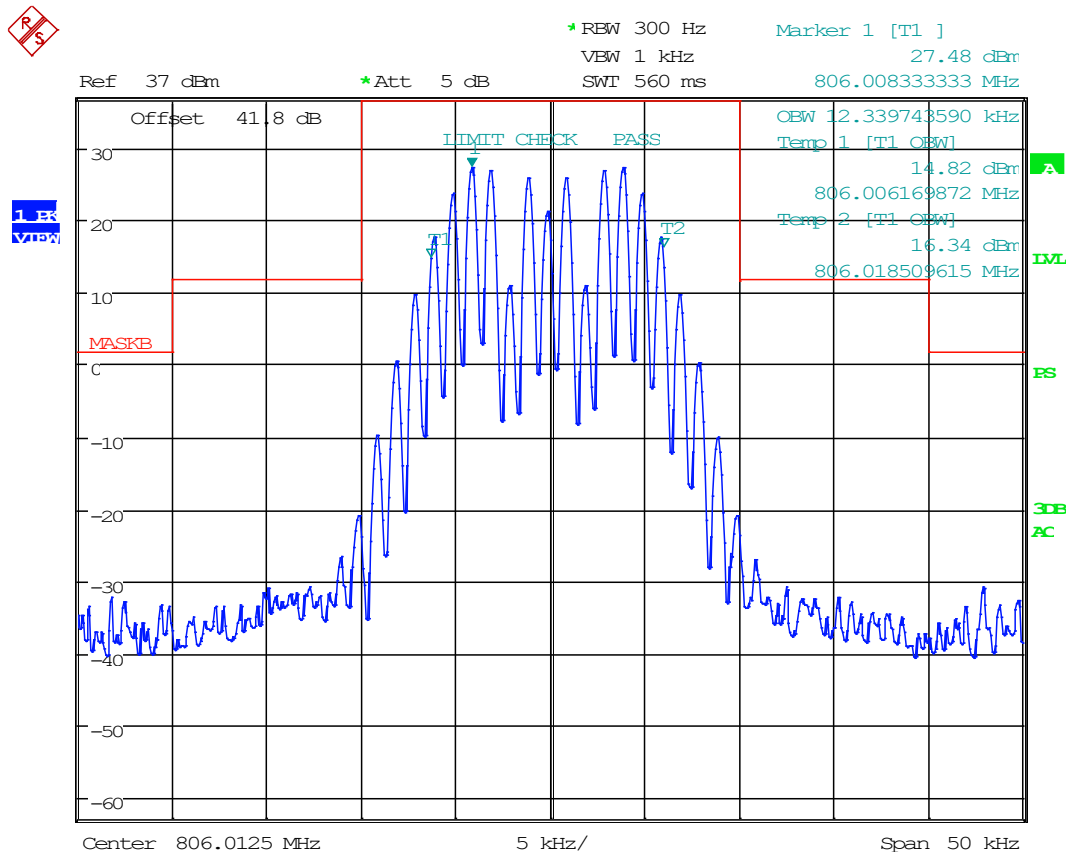


Date: 29.JUL.2020 18:23:33



### EMISSION MASK & IVO

### 800 MHz Band, Uplink, 25k FM, AGC



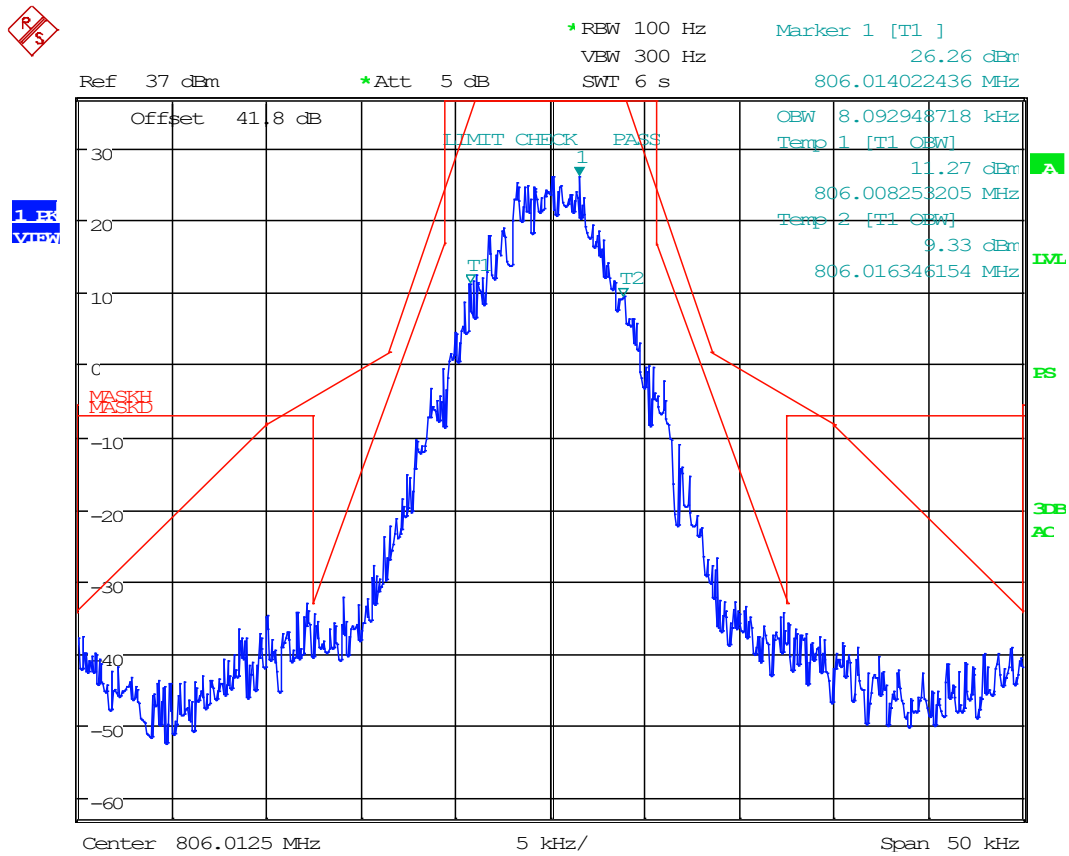
Date: 29.JUL.2020 18:25:24





**EMISSION MASK & IVO**

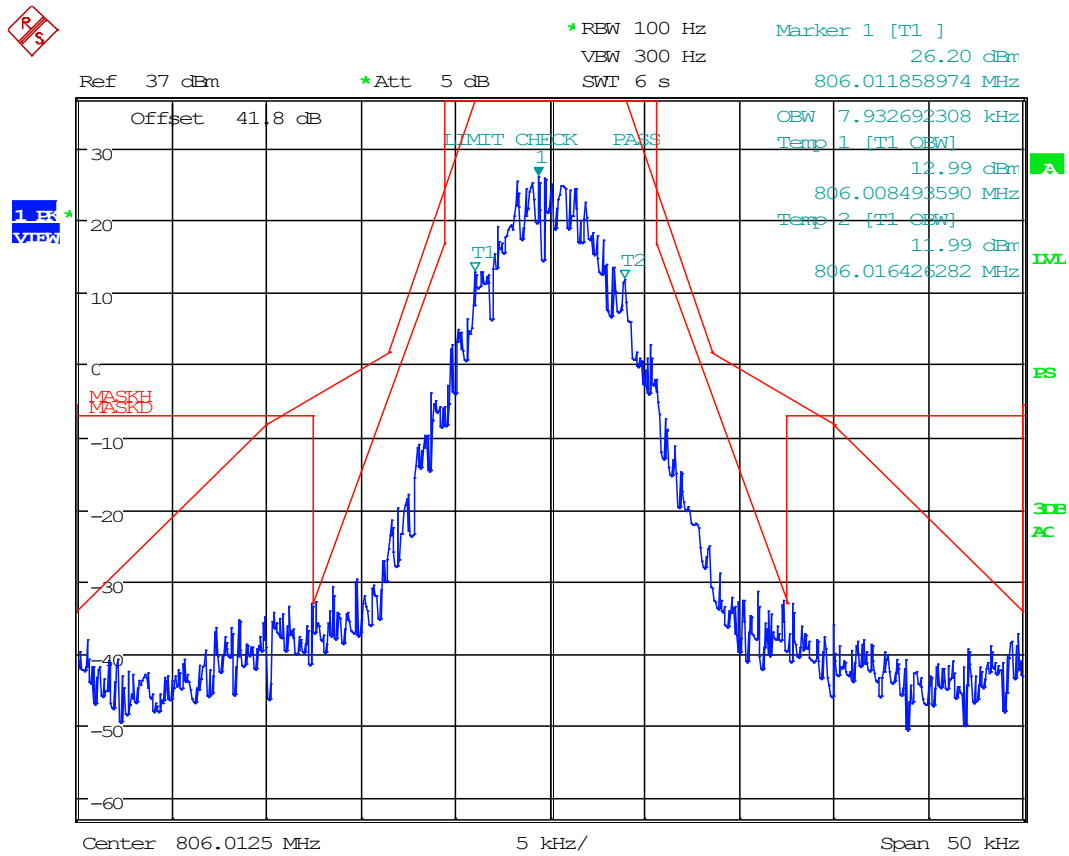
**800 MHz Band, Uplink, C4FM, AGC**



Date: 29.JUL.2020 18:15:35

### EMISSION MASK & IVO

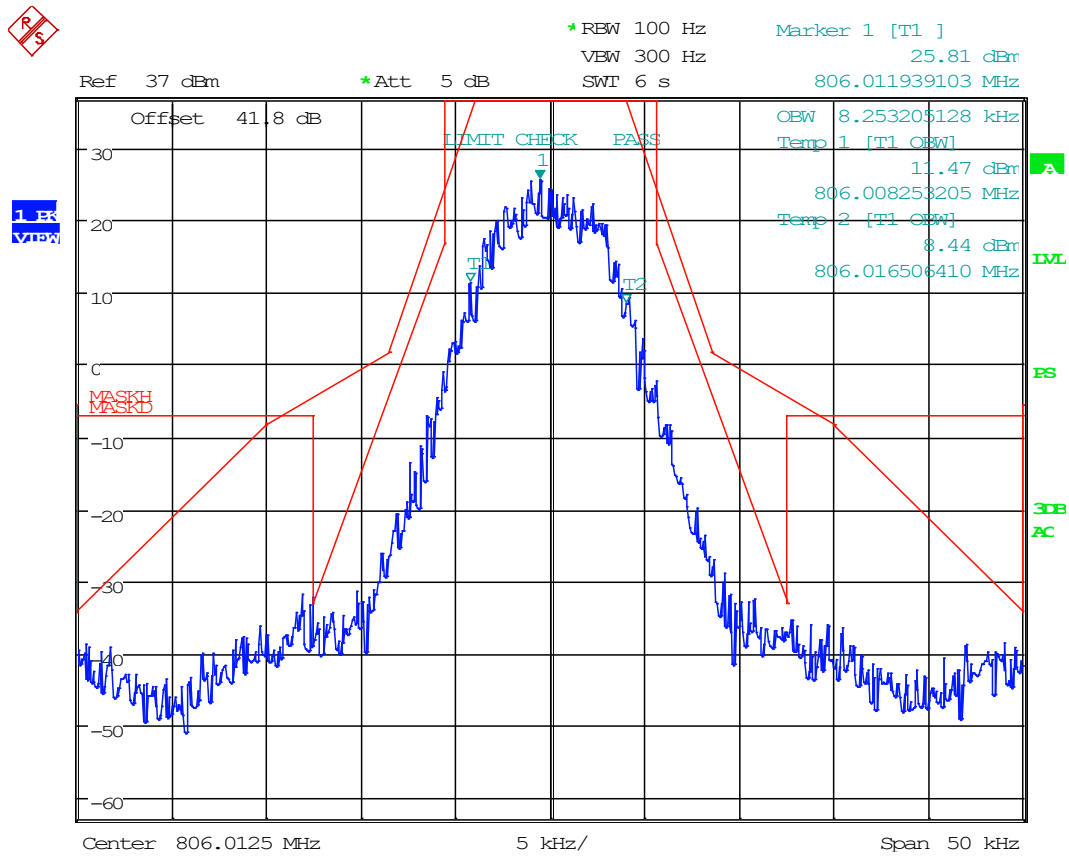
#### 800 MHz Band, Uplink, C4FM, AGC +3 dB



Date: 29.JUL.2020 18:12:36

### EMISSION MASK & IVO

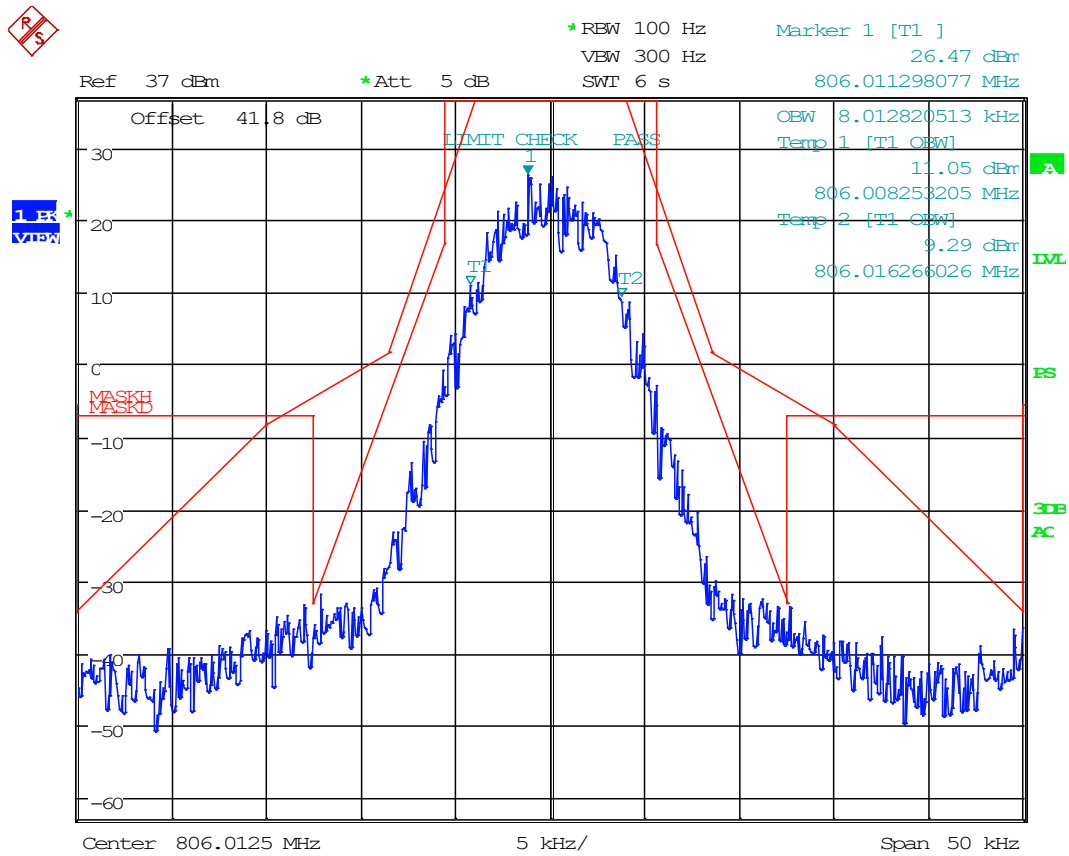
### 800 MHz Band, Uplink, H-CPM, AGC



Date: 29.JUL.2020 18:16:17

### EMISSION MASK & IVO

### 800 MHz Band, Uplink, H-CPM, AGC +3 DB

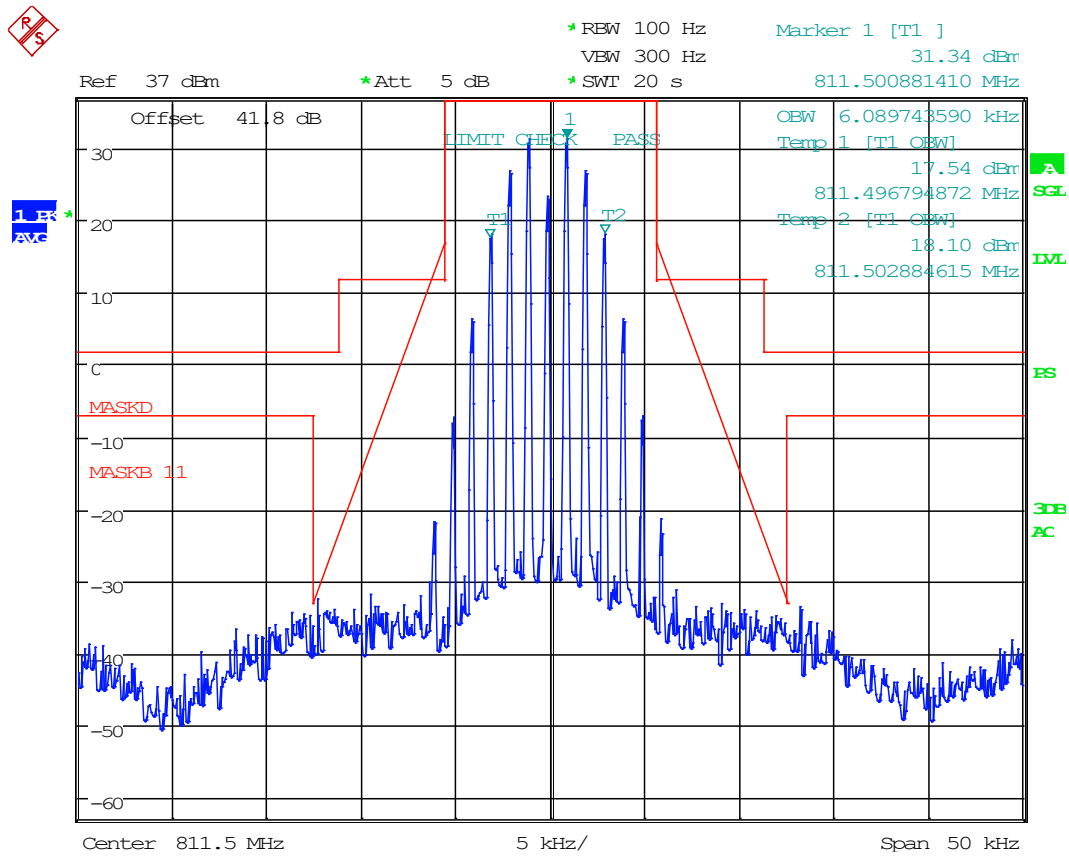


Date: 29.JUL.2020 18:17:28



### EMISSION MASK & IVO

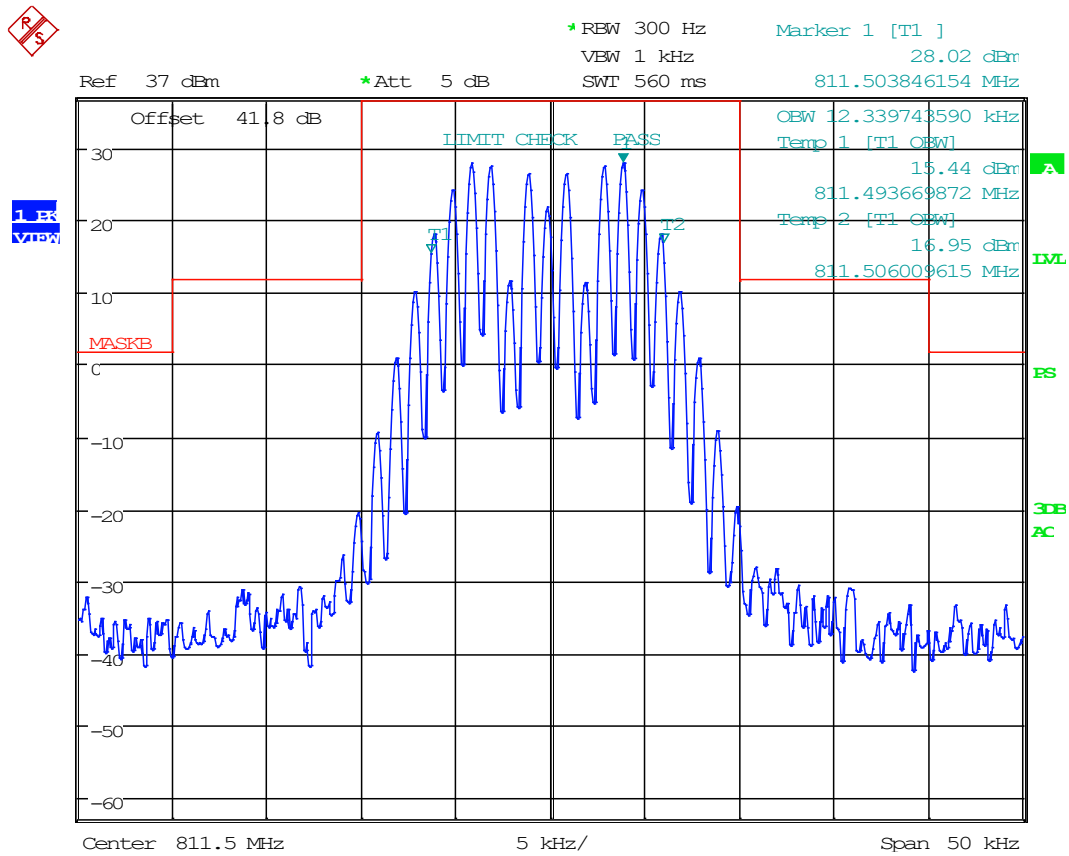
#### 800 MHz Band, Uplink, 12.5k FM, AGC +3 dB



Date: 29.JUL.2020 18:41:21

**EMISSION MASK & IVO**

**800 MHz Band, Uplink, 25k FM, AGC**

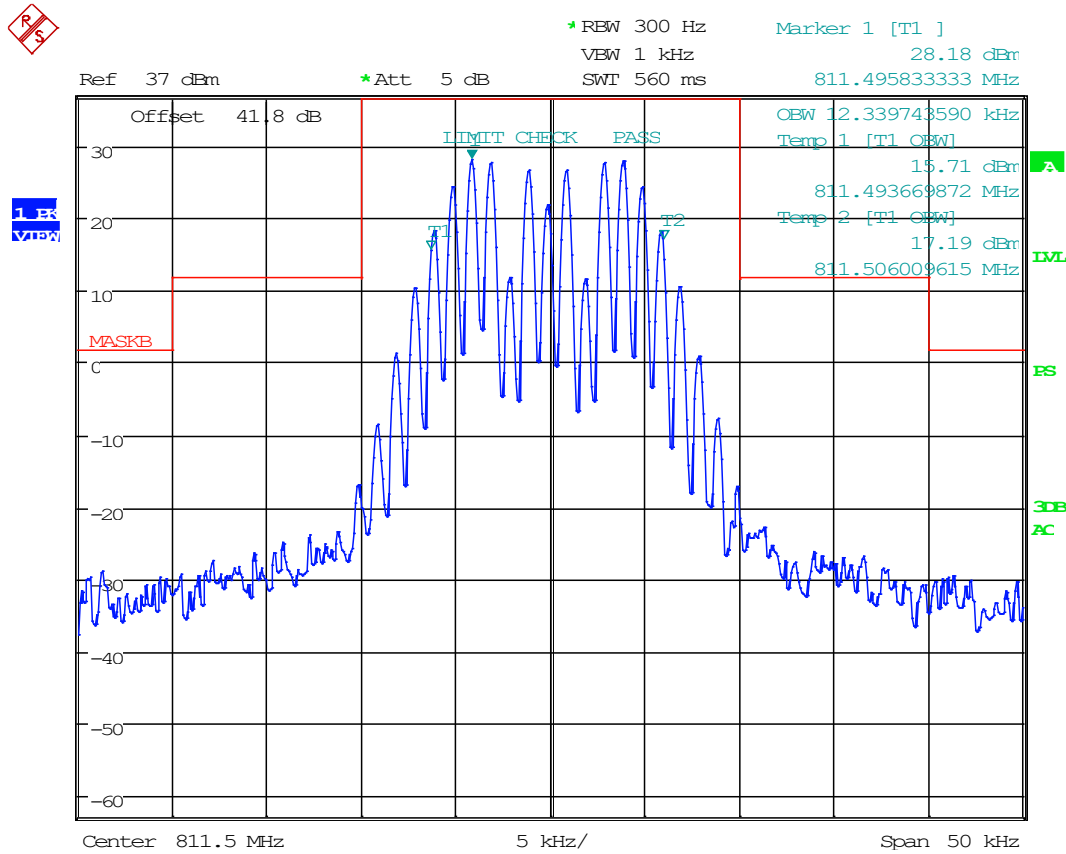


Date: 29.JUL.2020 18:29:08



### EMISSION MASK & IVO

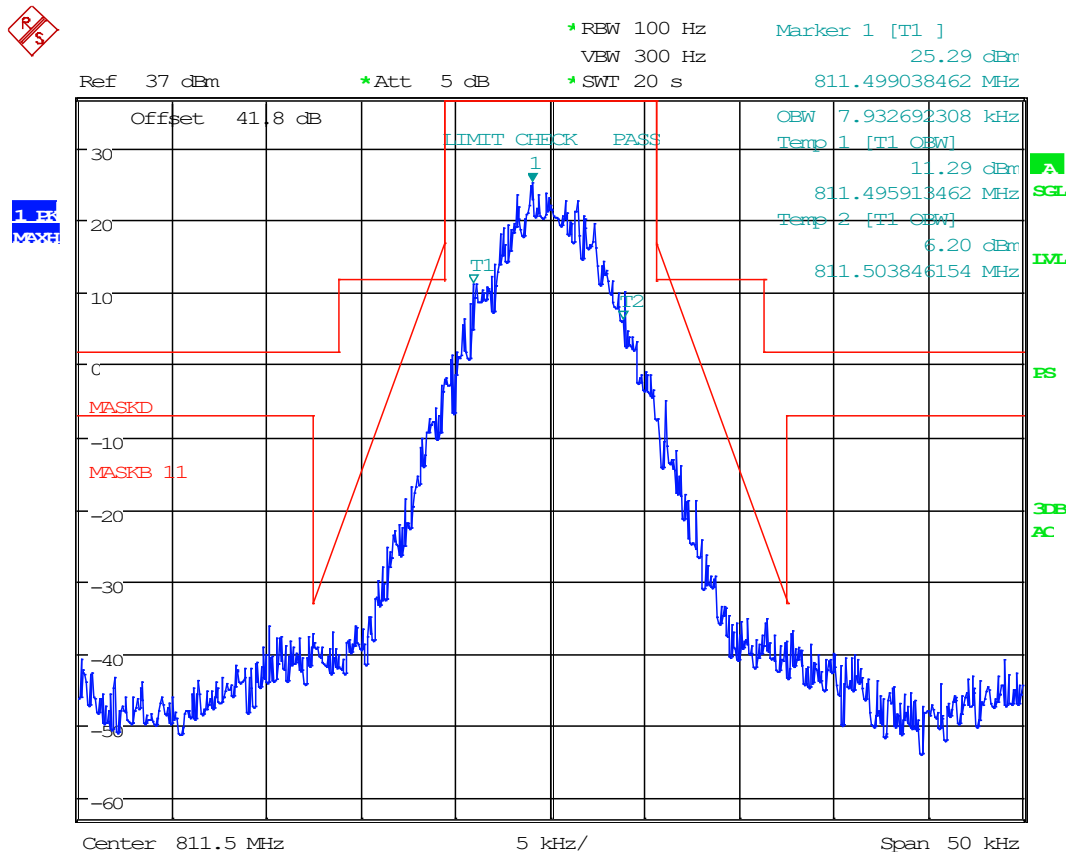
#### 800 MHz Band, Uplink, 25k FM, AGC +3 dB



Date: 29.JUL.2020 18:28:41

### EMISSION MASK & IVO

### 800 MHz Band, Uplink, C4FM, AGC



Date: 29.JUL.2020 18:35:54

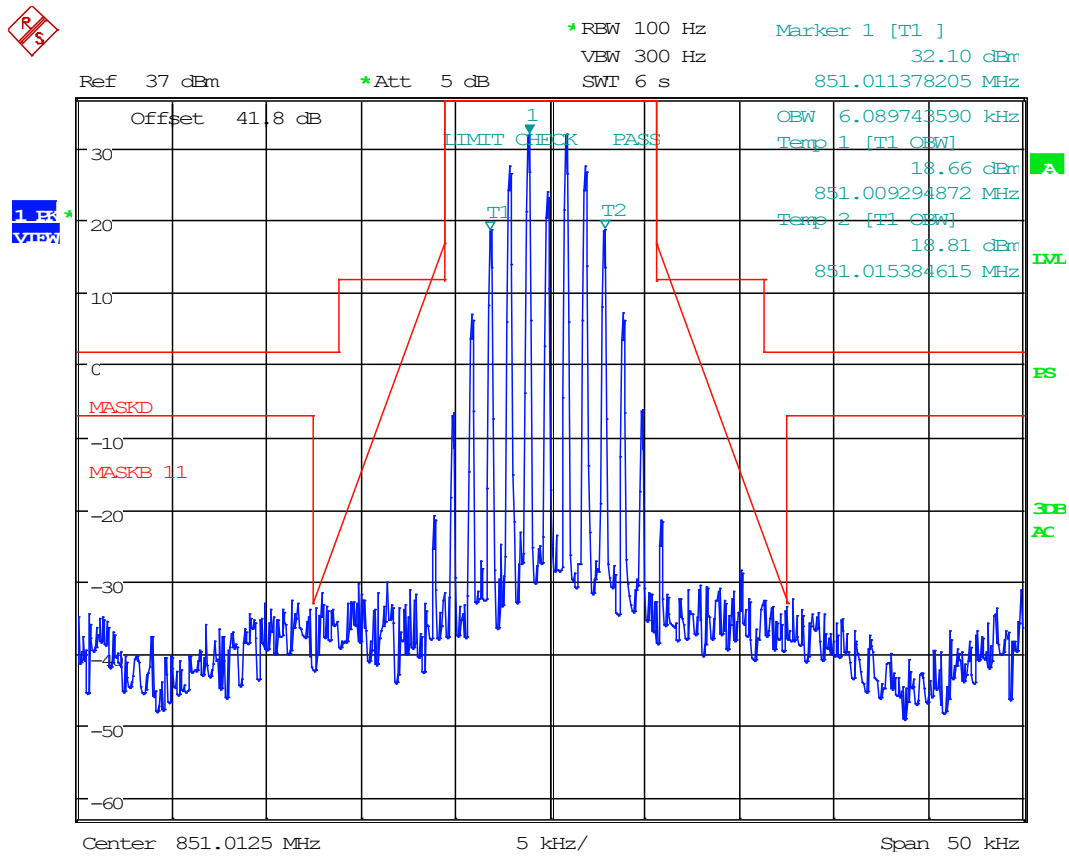






### EMISSION MASK & IVO

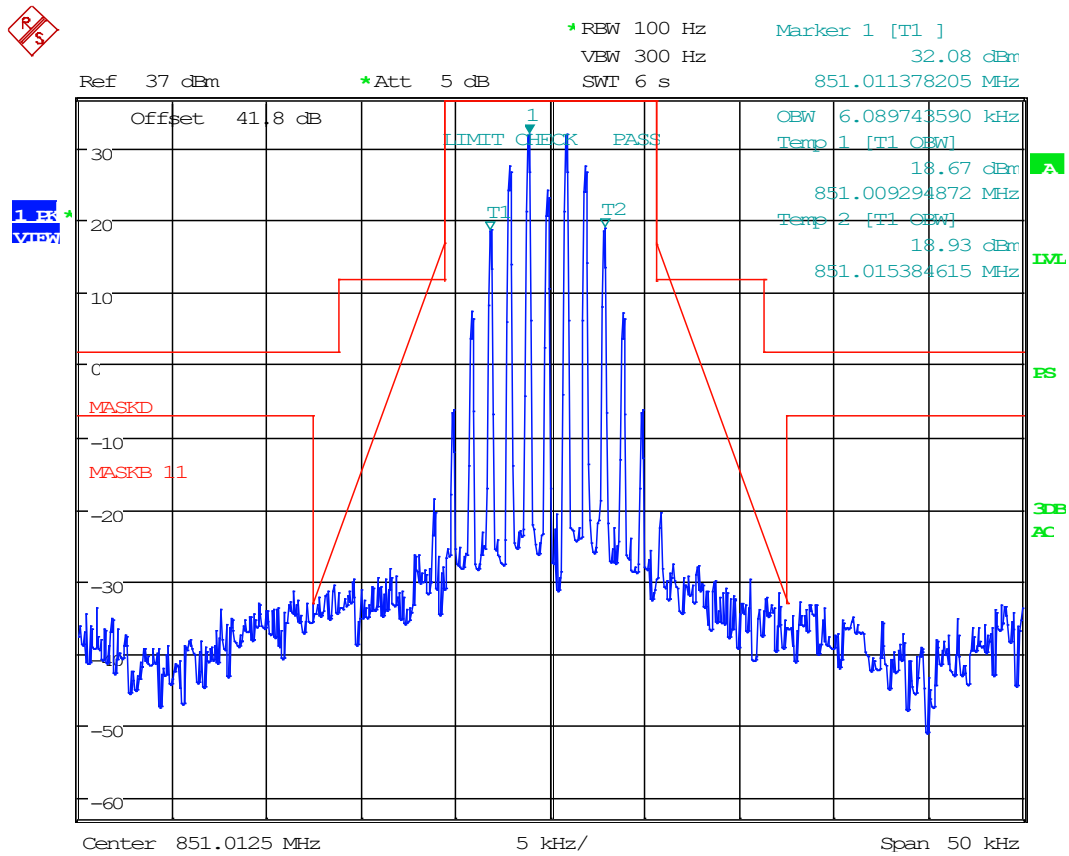
### 800 MHz Band, Downlink, 12.5k FM, AGC



Date: 29.JUL.2020 15:26:56

### EMISSION MASK & IVO

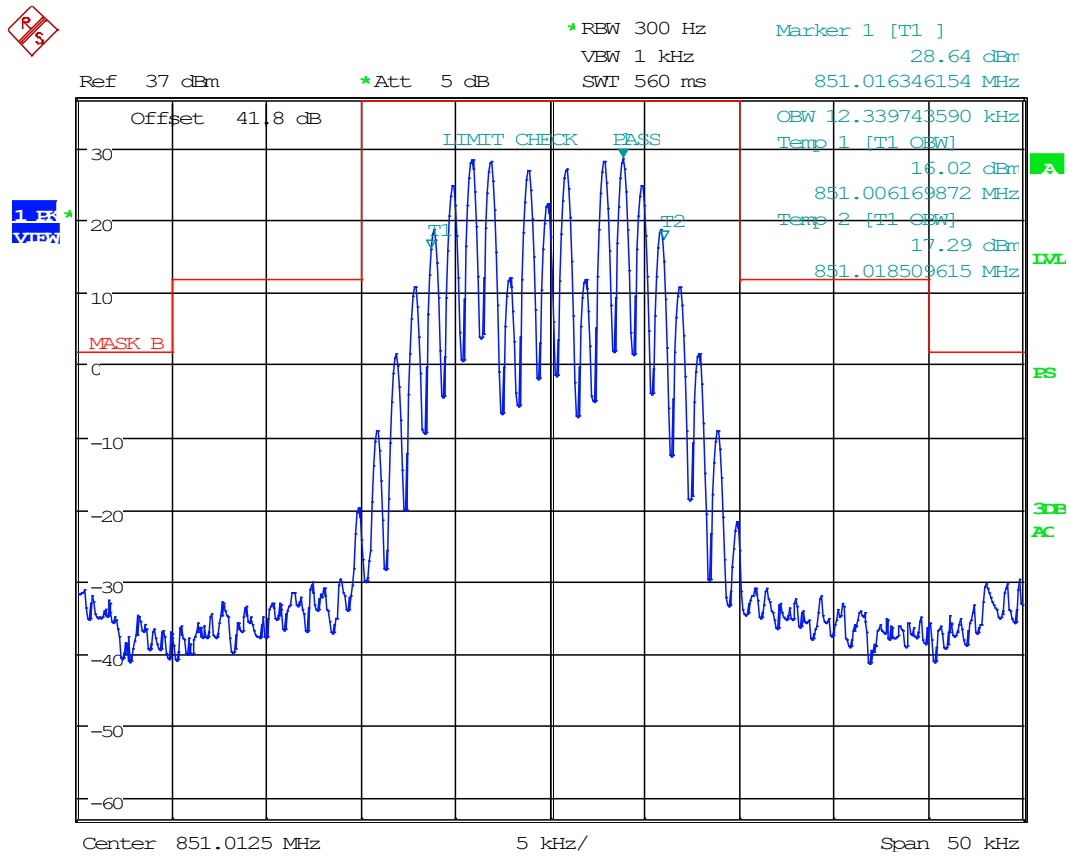
#### 800 MHz Band, Downlink, 12.5k FM, AGC +3 dB



Date: 29.JUL.2020 15:27:49

**EMISSION MASK & IVO**

**800 MHz Band, Downlink, 25k FM, AGC**

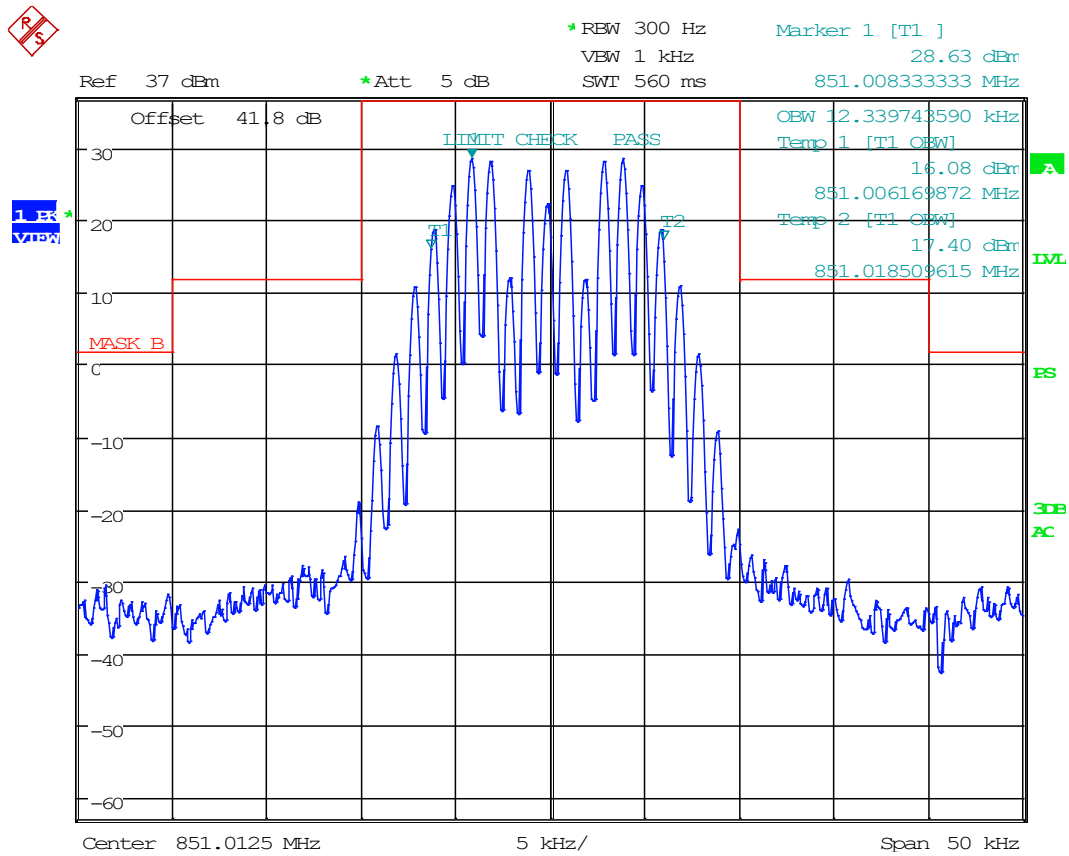


Date: 29.JUL.2020 15:31:04



**EMISSION MASK & IVO**

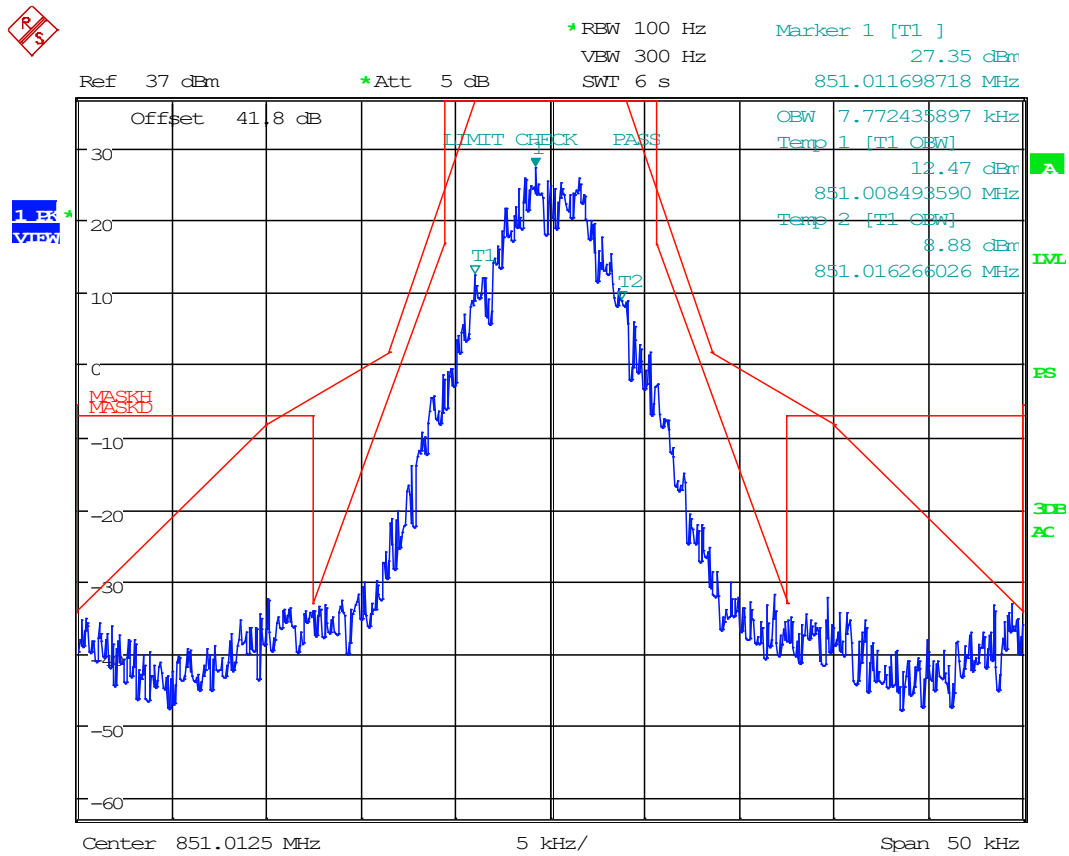
**800 MHz Band, Downlink, 25k FM, AGC +3 dB**



Date: 29.JUL.2020 15:30:05

### EMISSION MASK & IVO

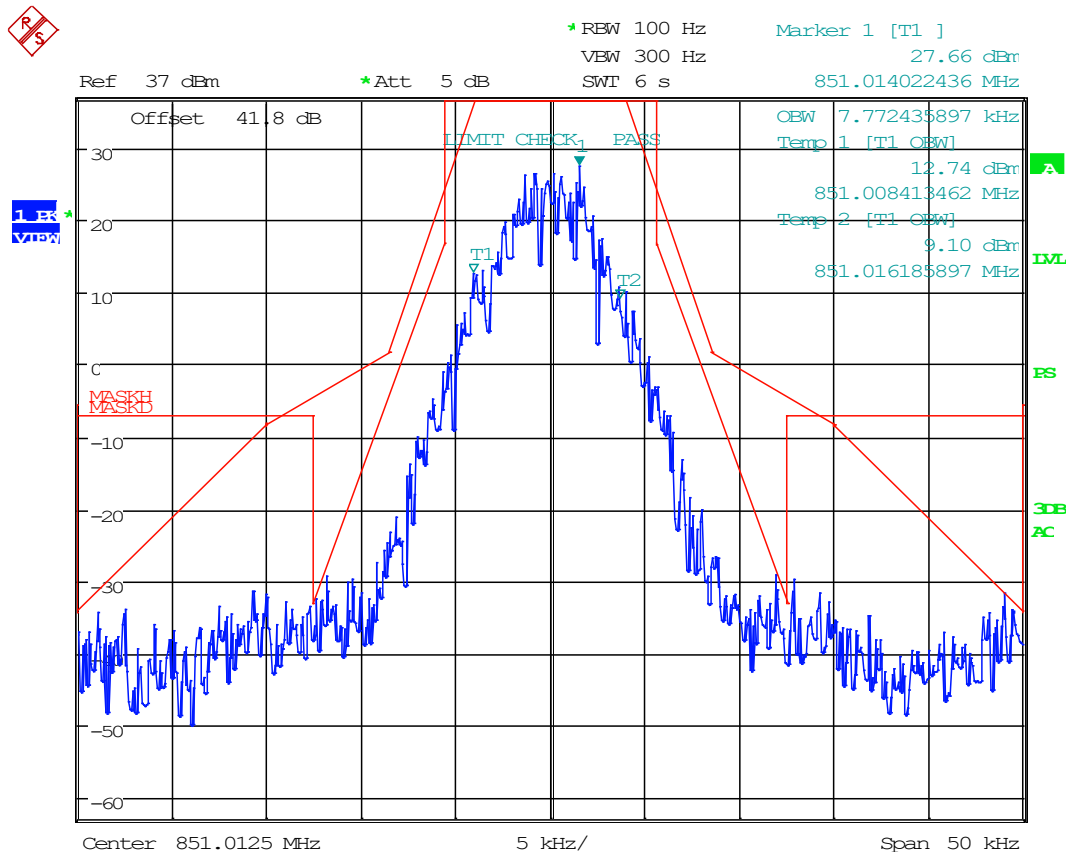
### 800 MHz Band, Downlink, C4FM, AGC



Date: 29.JUL.2020 15:15:53

### EMISSION MASK & IVO

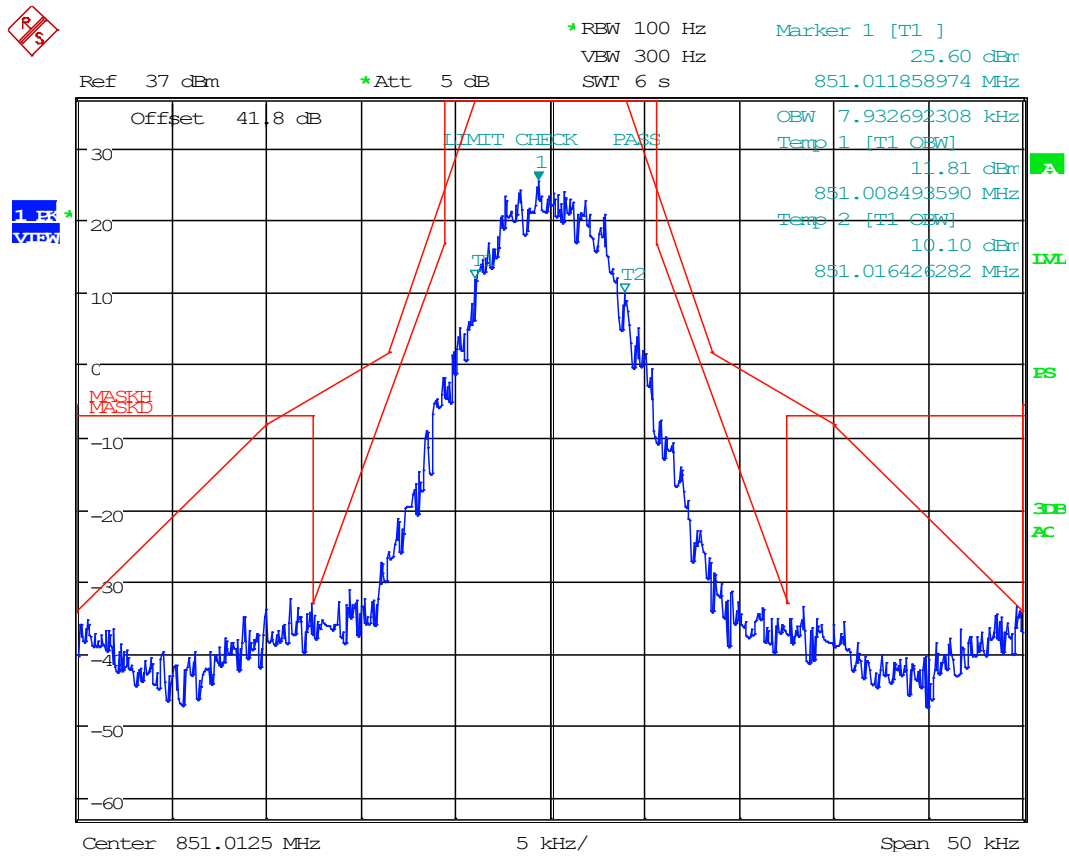
#### 800 MHz Band, Downlink, C4FM, AGC +3 dB



Date: 29.JUL.2020 15:19:15

**EMISSION MASK & IVO**

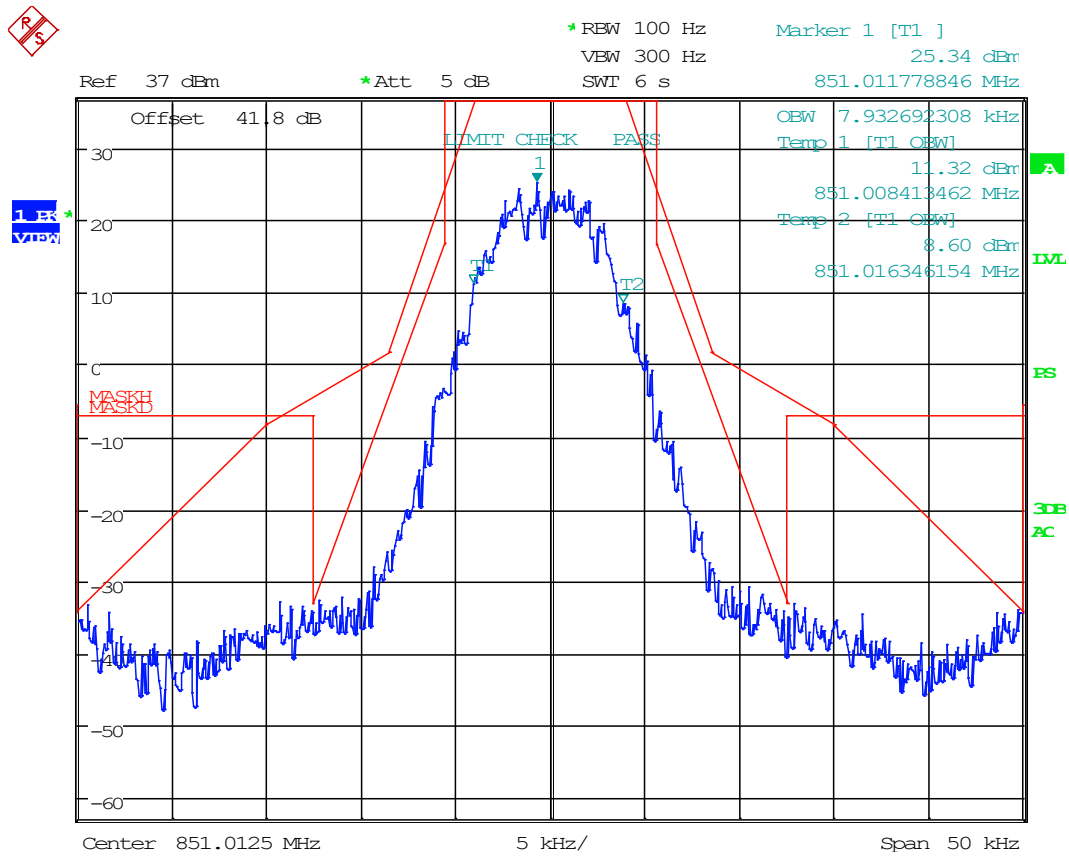
**800 MHz Band, Downlink, H-CPM, AGC**



Date: 29.JUL.2020 15:21:59

**EMISSION MASK & IVO**

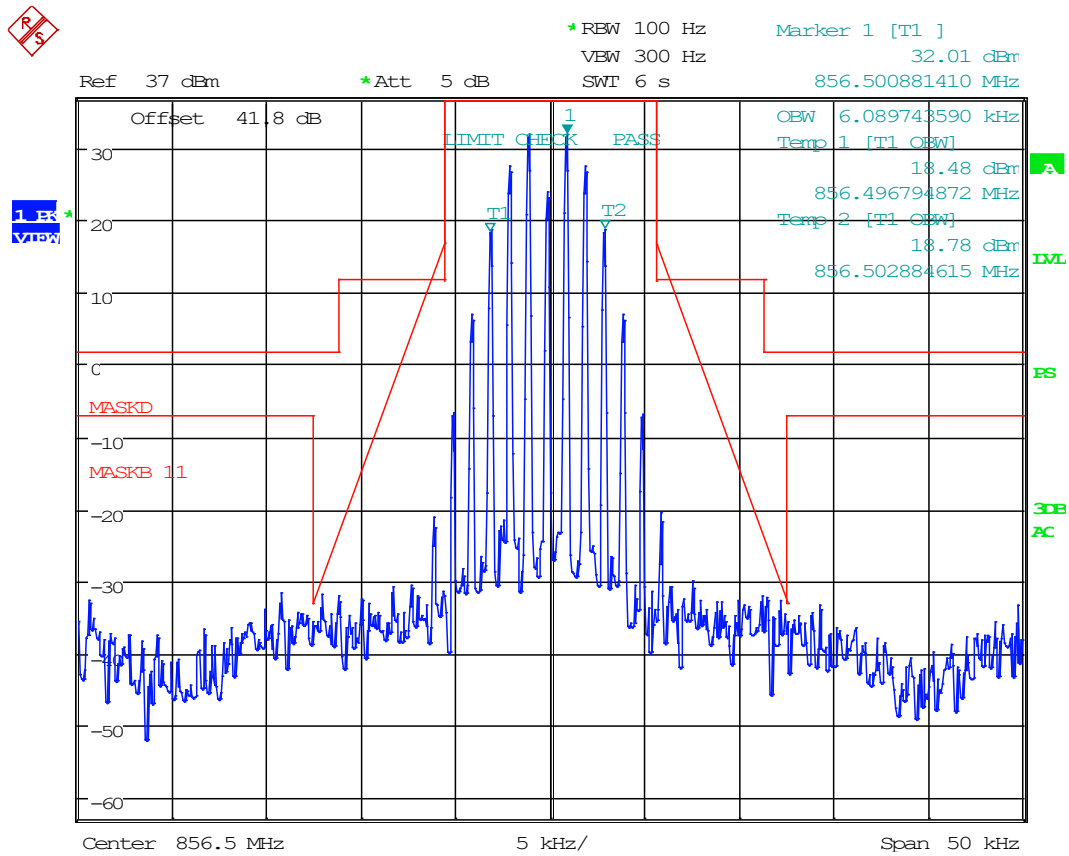
**800 MHz Band, Downlink, H-CPM, AGC +3 DB**



Date: 29.JUL.2020 15:20:41

### EMISSION MASK & IVO

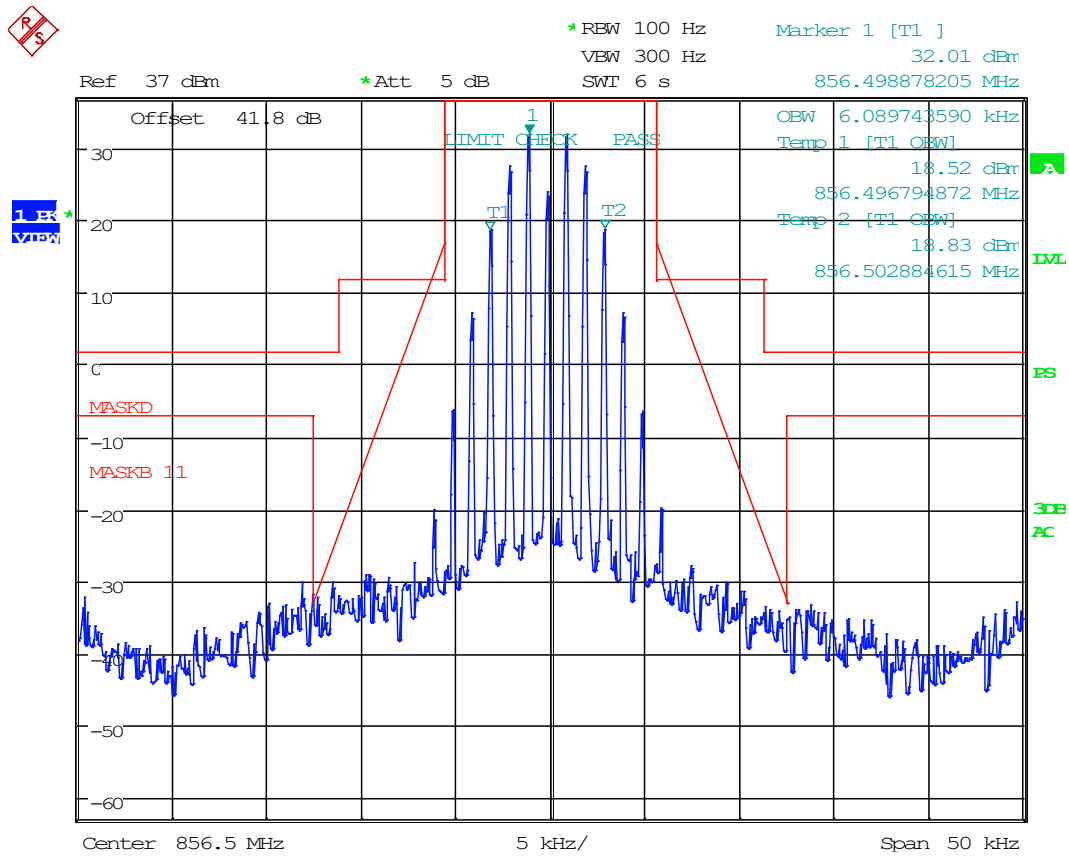
### 800 MHz Band, Downlink, 12.5k FM, AGC



Date: 29.JUL.2020 15:36:10

### EMISSION MASK & IVO

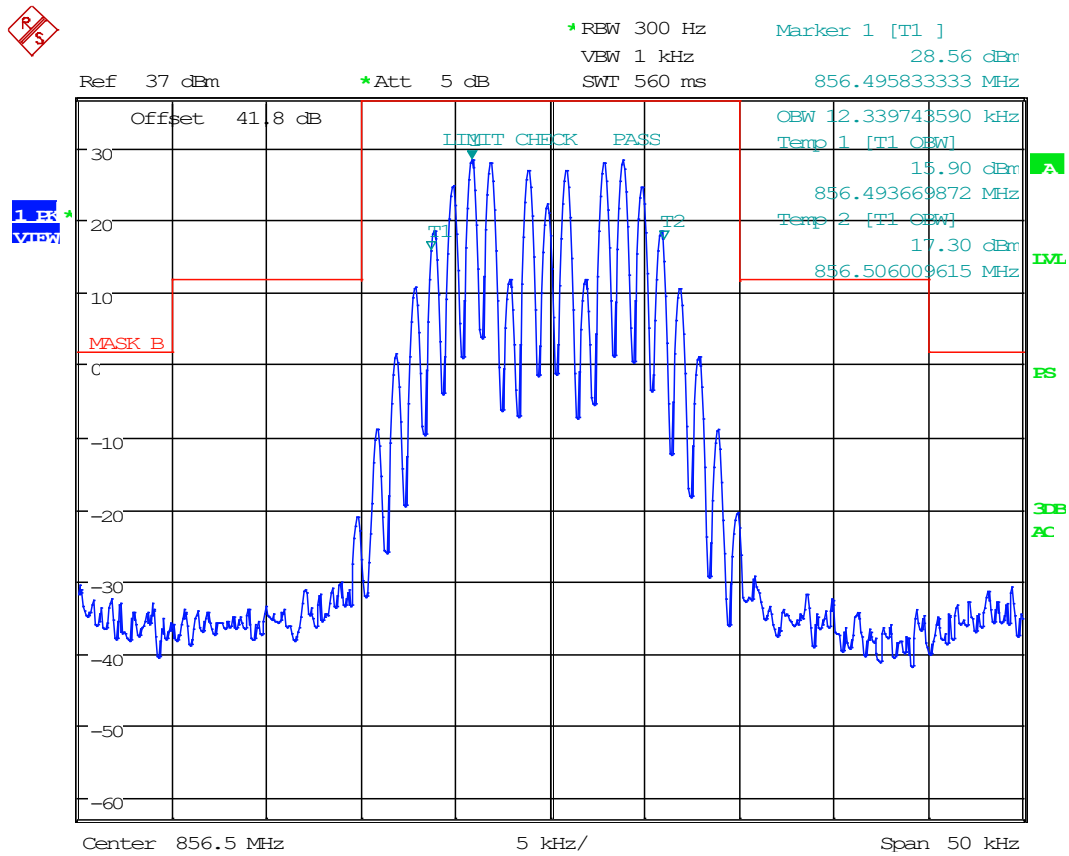
#### 800 MHz Band, Downlink, 12.5k FM, AGC +3 dB



Date: 29.JUL.2020 15:36:57

### EMISSION MASK & IVO

### 800 MHz Band, Downlink, 25k FM, AGC



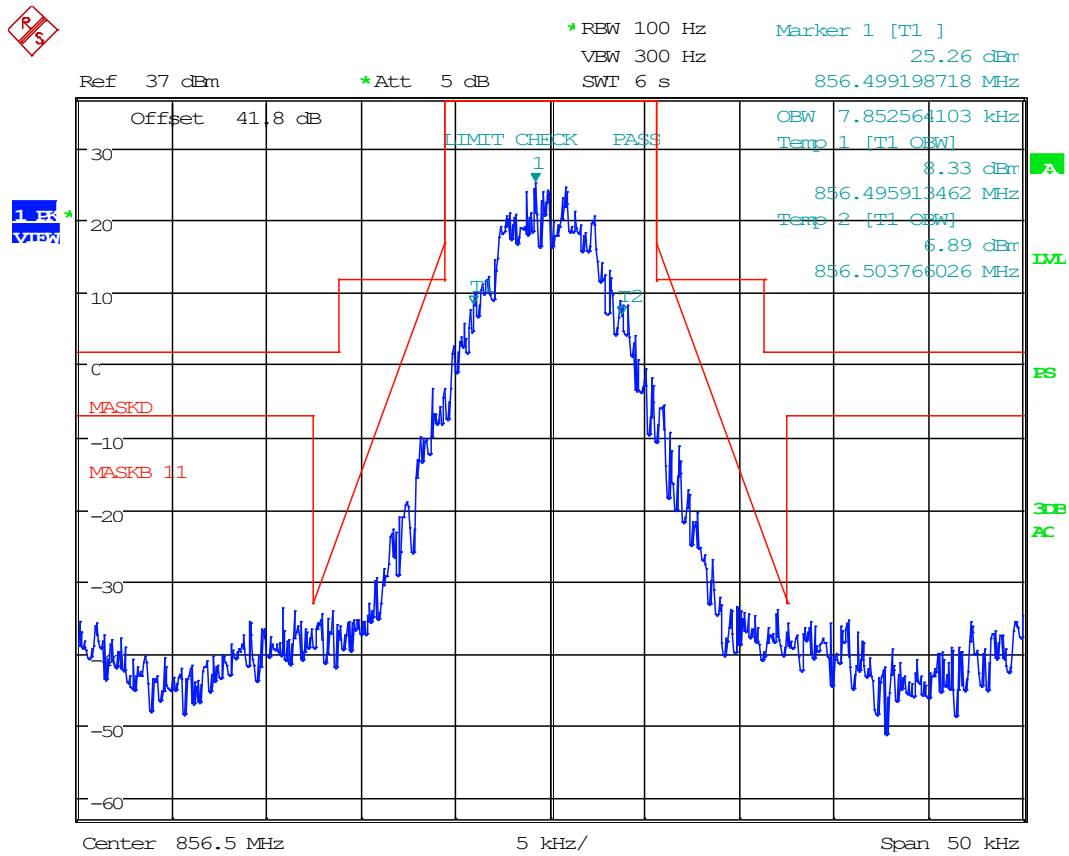
Date: 29.JUL.2020 15:32:01





### EMISSION MASK & IVO

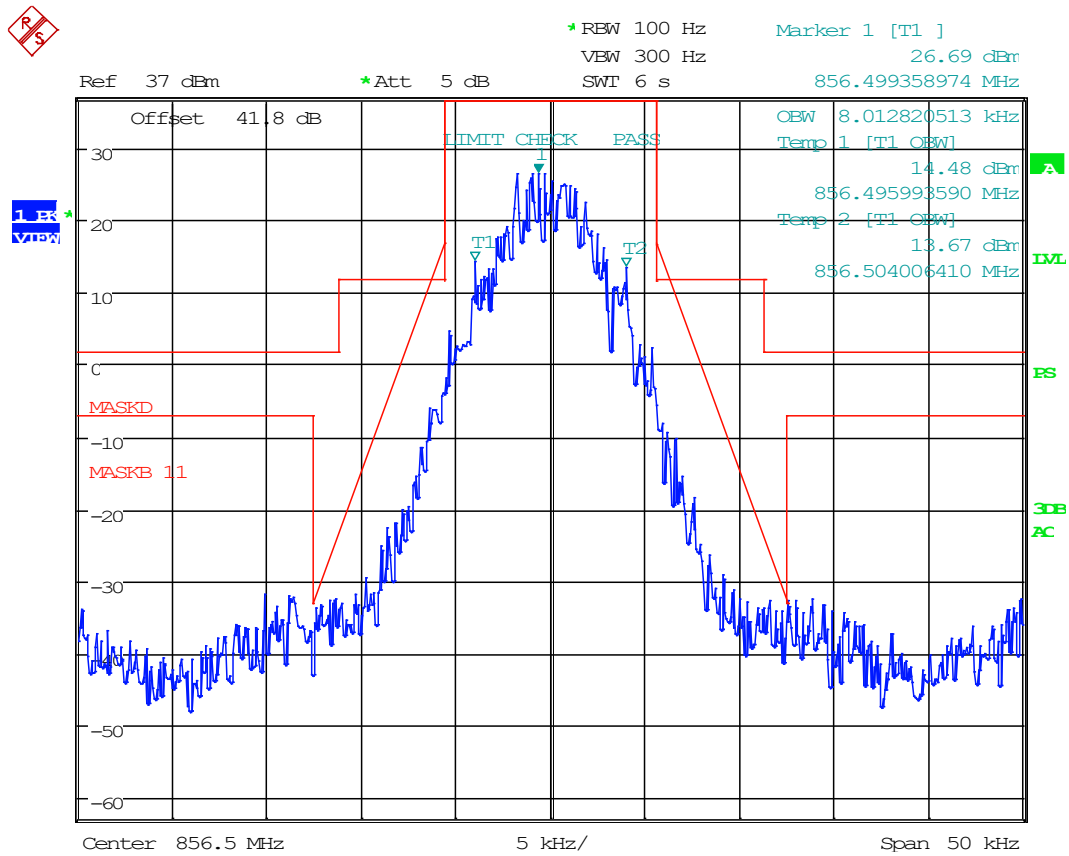
### 800 MHz Band, Downlink, C4FM, AGC



Date: 29.JUL.2020 15:41:57

### EMISSION MASK & IVO

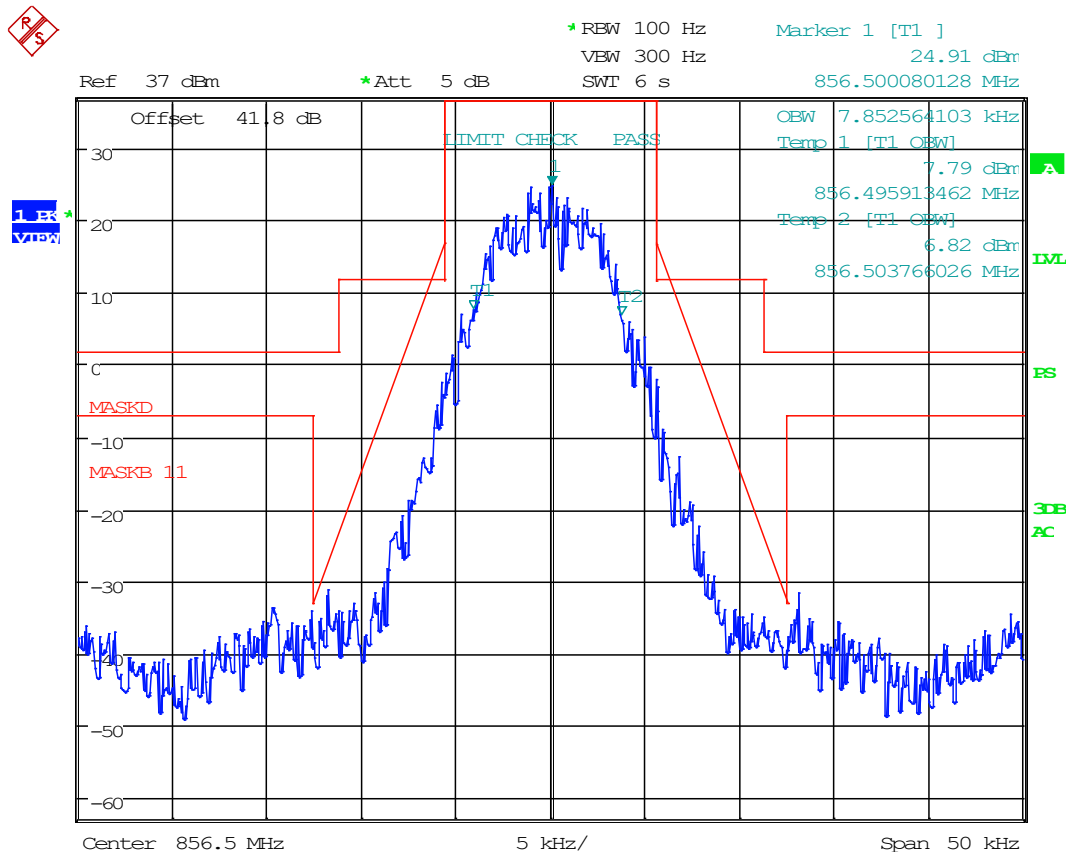
### 800 MHz Band, Downlink, C4FM, AGC +3 dB



Date: 29.JUL.2020 15:37:46

### EMISSION MASK & IVO

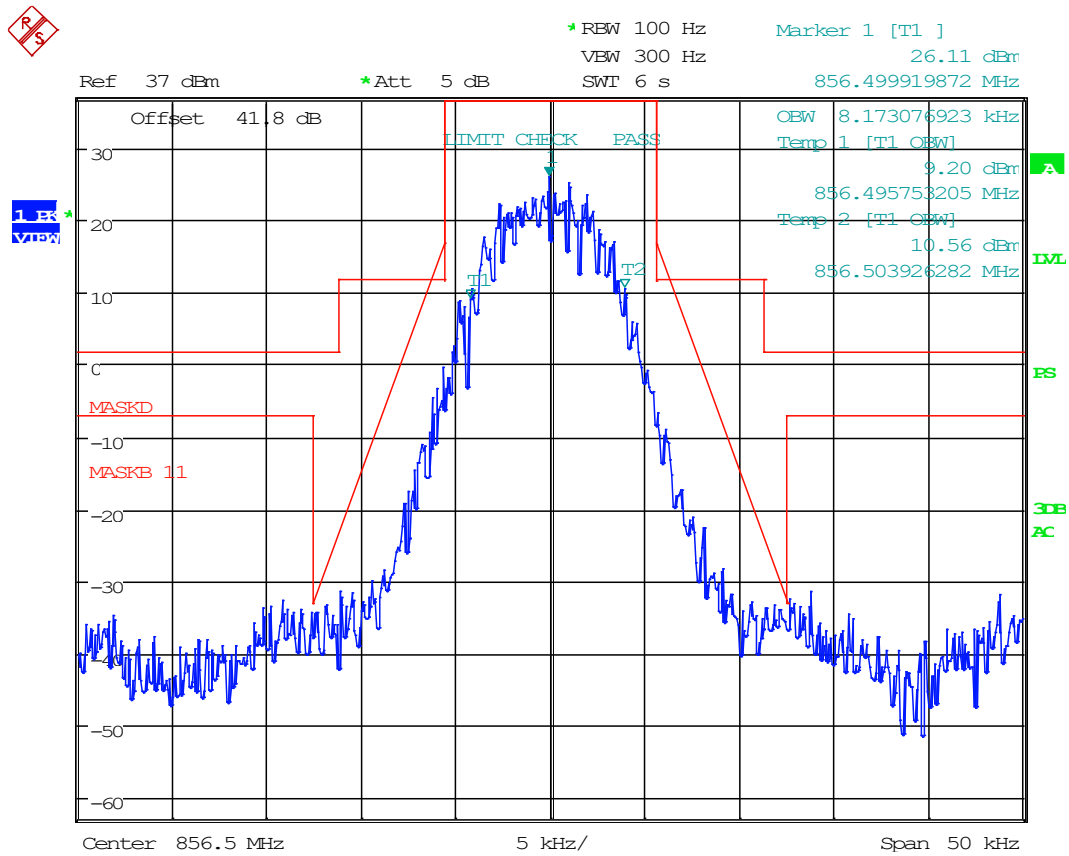
### 800 MHz Band, Downlink, H-CPM, AGC



Date: 29.JUL.2020 15:43:25

### EMISSION MASK & IVO

### 800 MHz Band, Downlink, H-CPM, AGC +3 DB

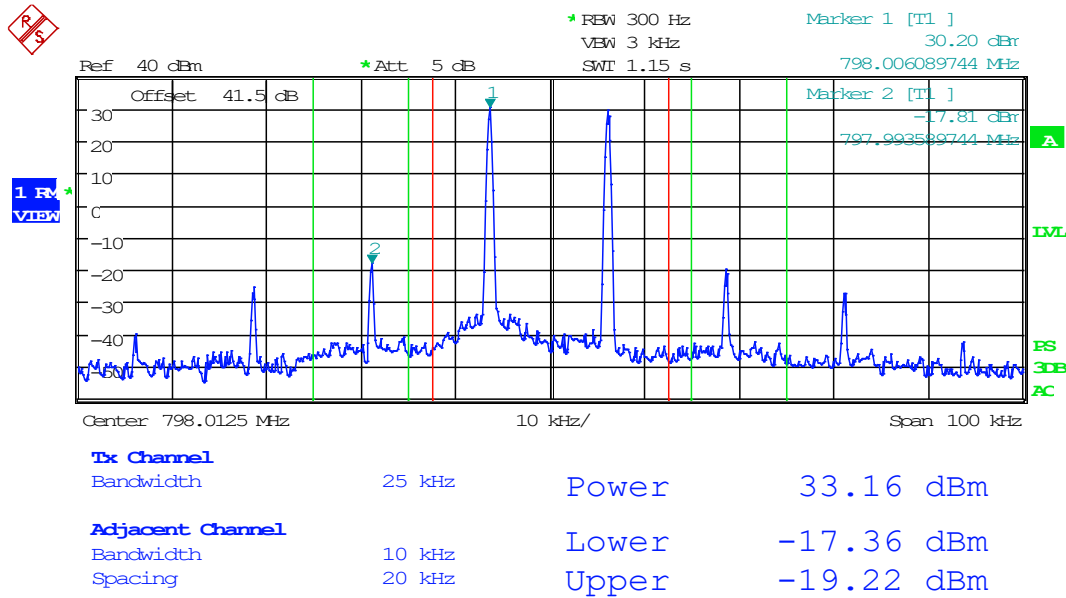


Date: 29.JUL.2020 15:44:19

**KDB 935210 4.7.2 INTERMODULATION**

Test Engineer: FR  
 Test Date: JUL 30, 2020

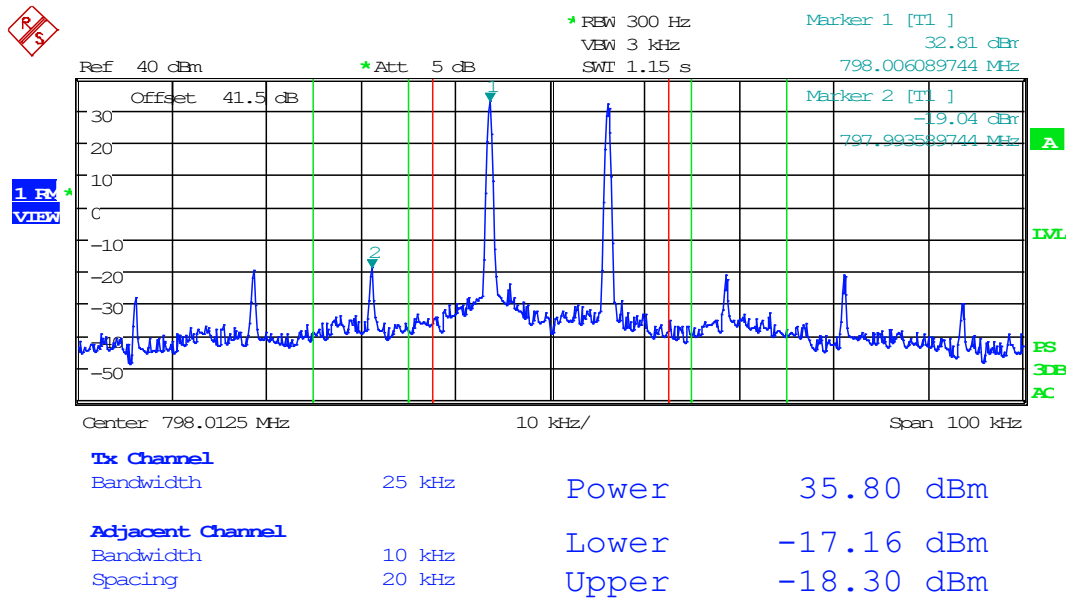
**700 MHz Band, 12.5k, At AGC**



Date: 30.JUL.2020 13:39:10

## INTERMODULATION

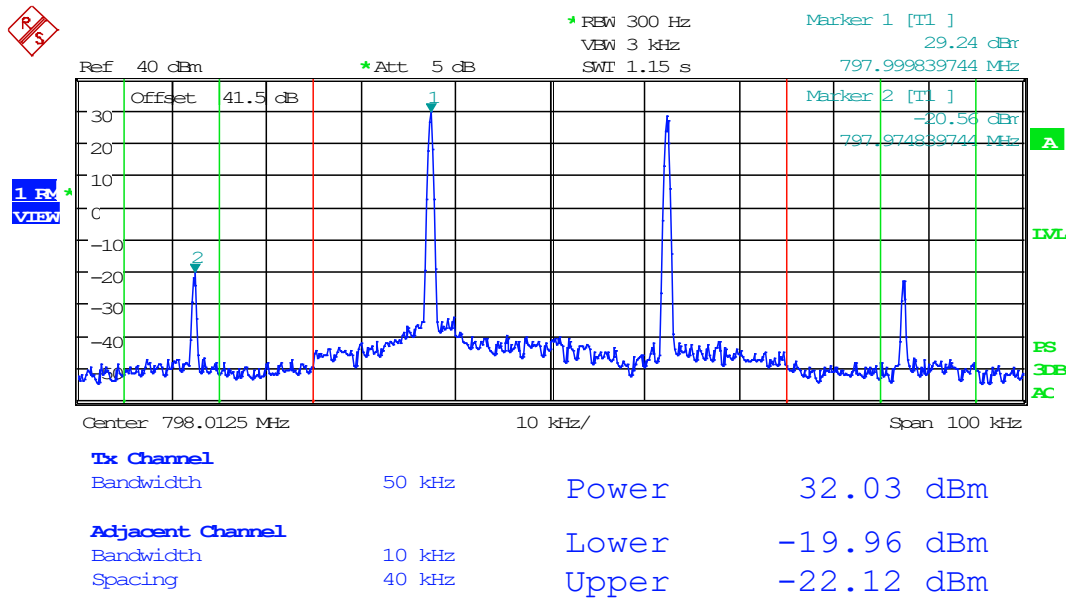
### 700 MHz Band, 12.5k, At AGC +3 dB



Date: 30.JUL.2020 13:39:58

## INTERMODULATION

### 700 MHz Band, 25K, At AGC

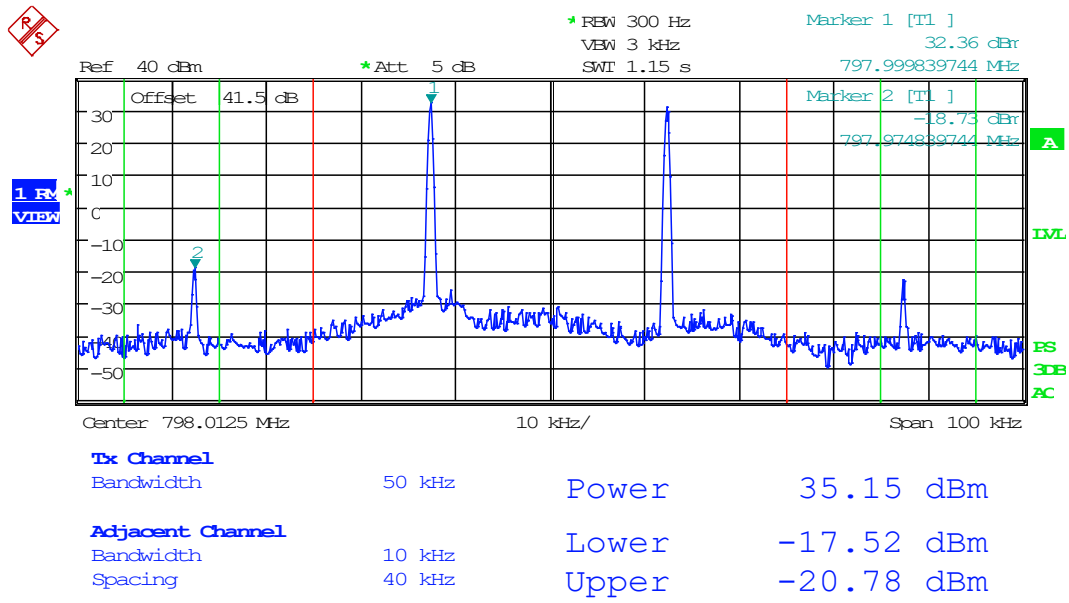


Date: 30.JUL.2020 13:41:57



### INTERMODULATION

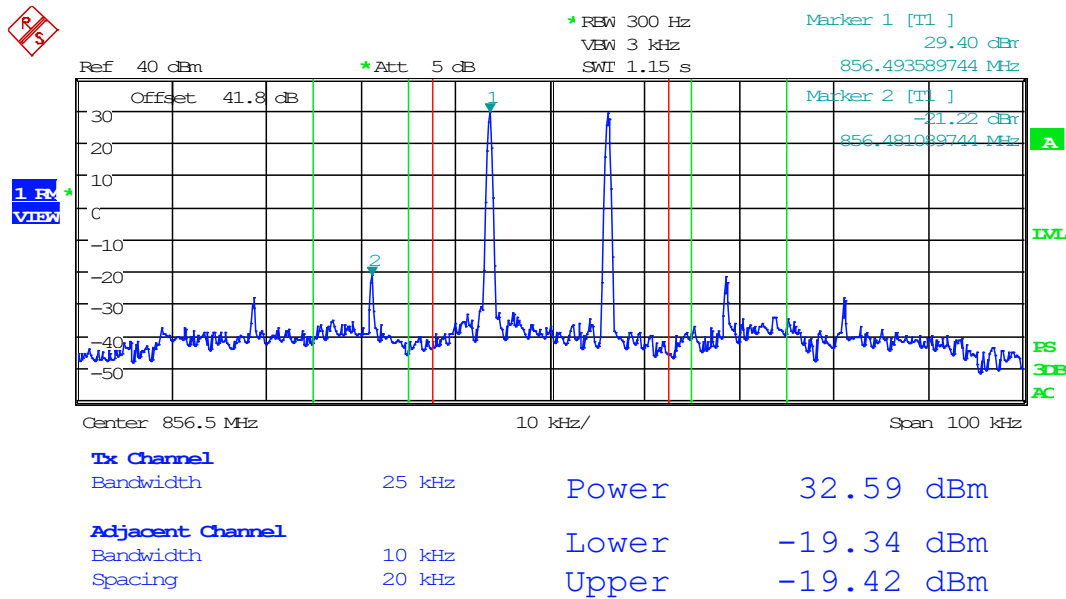
#### 700 MHz Band, 25K, At AGC +3 dB



Date: 30.JUL.2020 13:41:10

## INTERMODULATION

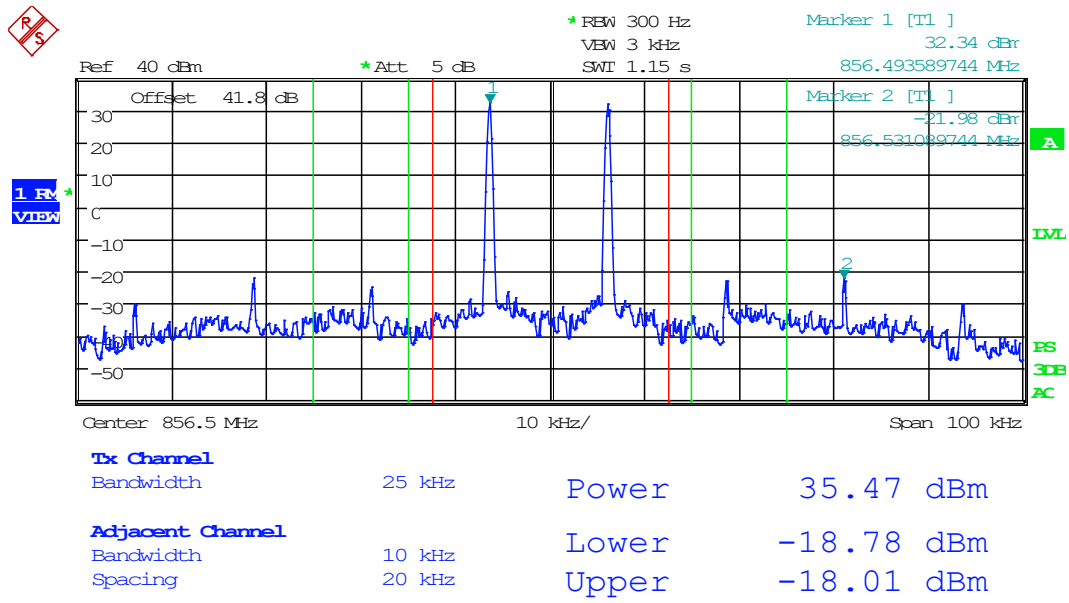
### 800 MHz Band, 12.5k, At AGC



Date: 29.JUL.2020 15:59:40

### INTERMODULATION

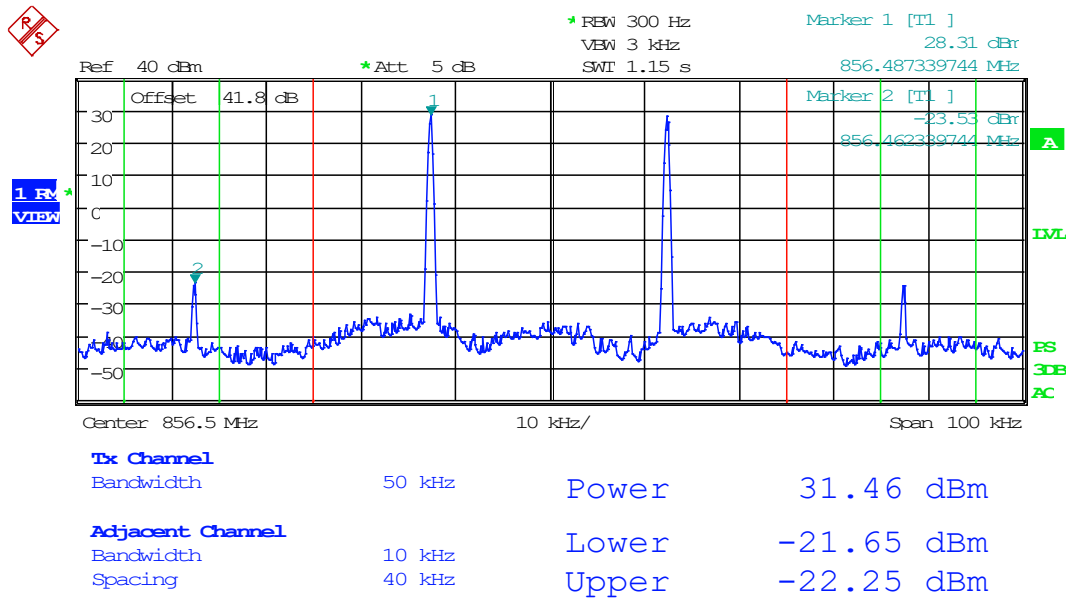
#### 800 MHz Band, 12.5k, At AGC +3 dB



Date: 29.JUL.2020 16:02:36

## INTERMODULATION

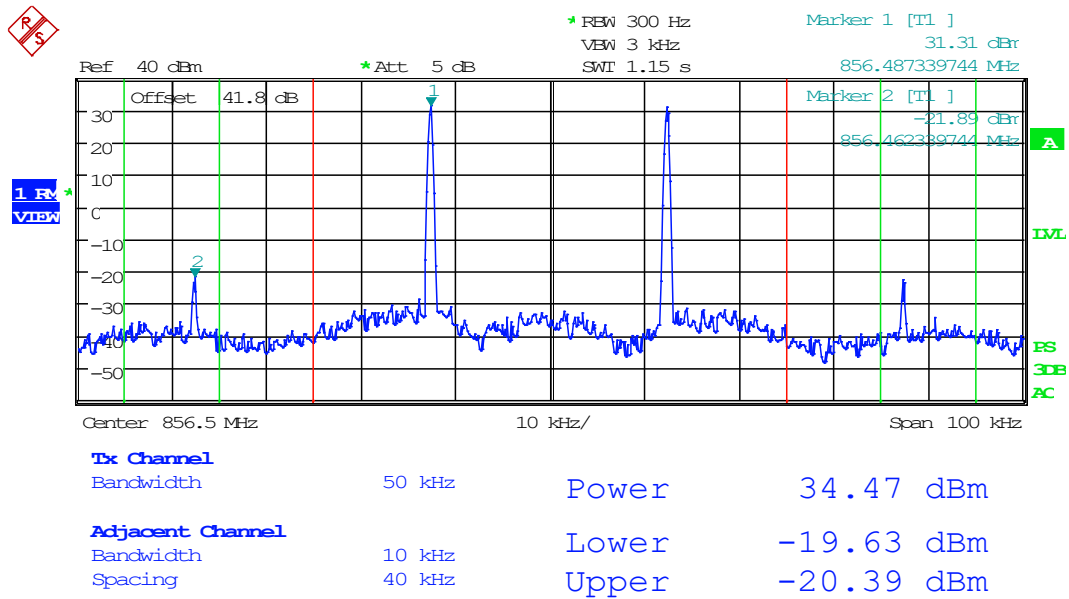
### 800 MHz Band, 25K, At AGC



Date: 29.JUL.2020 16:04:34

## INTERMODULATION

### 800 MHz Band, 25K, At AGC +3 dB



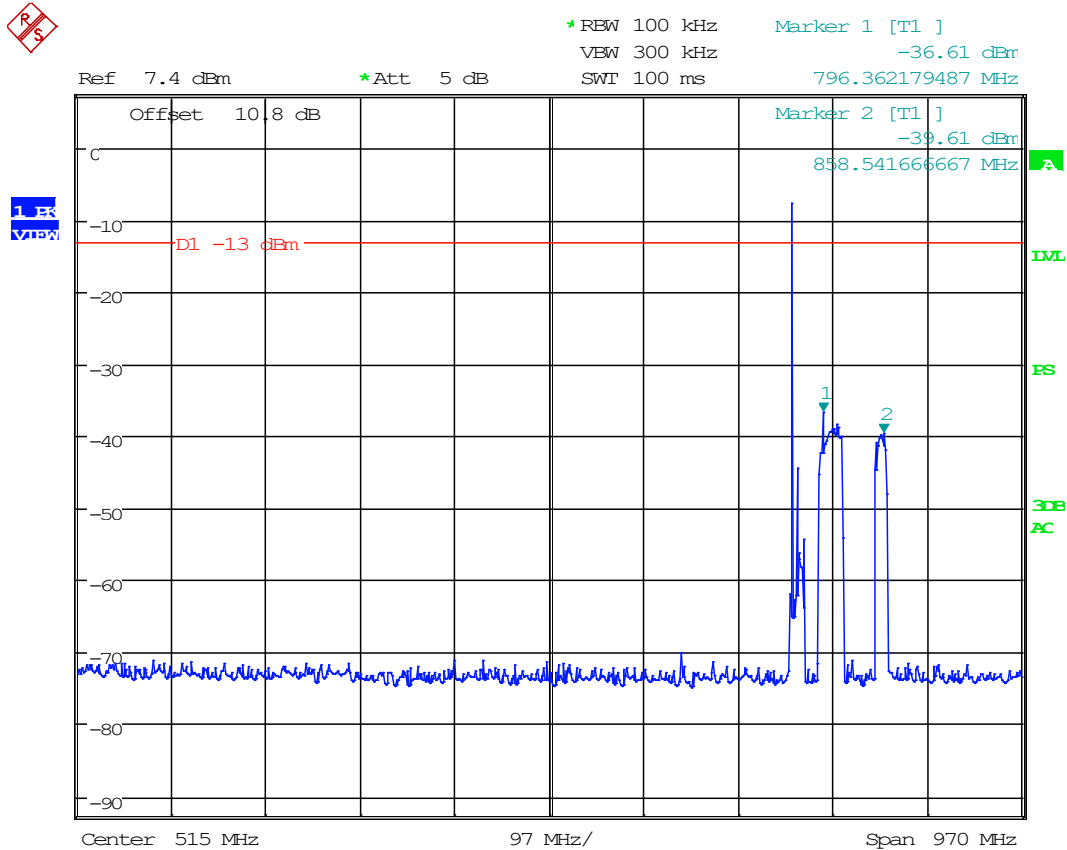
Date: 29.JUL.2020 16:05:03

**2.1051 CONDUCTED SPURIOUS EMISSIONS**

**KDB 935210 4.7.3 CONDUCTED SPURIOUS EMISSIONS**

Test Engineer: FR  
 Test Date: JUL 31 2020

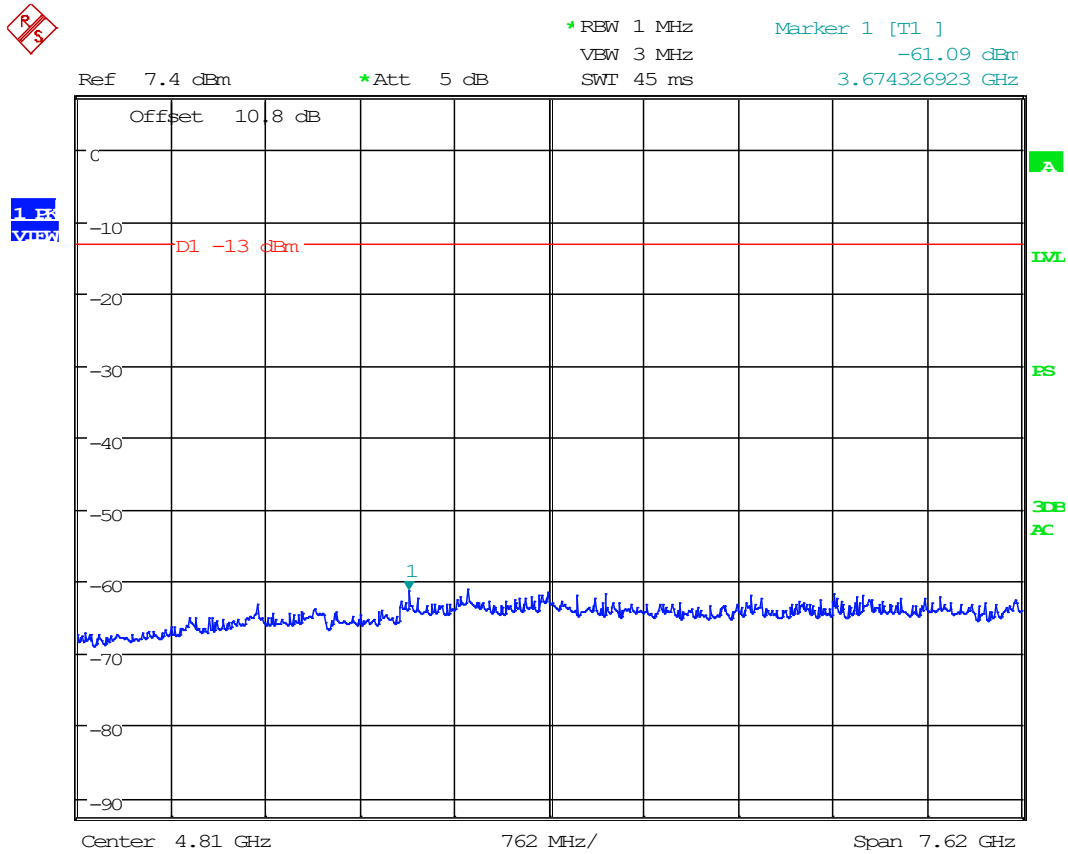
**763.0125 MHz, Downlink, Below 1 GHz**



Date: 30.JUL.2020 17:13:09

### Conducted Spurious Emissions

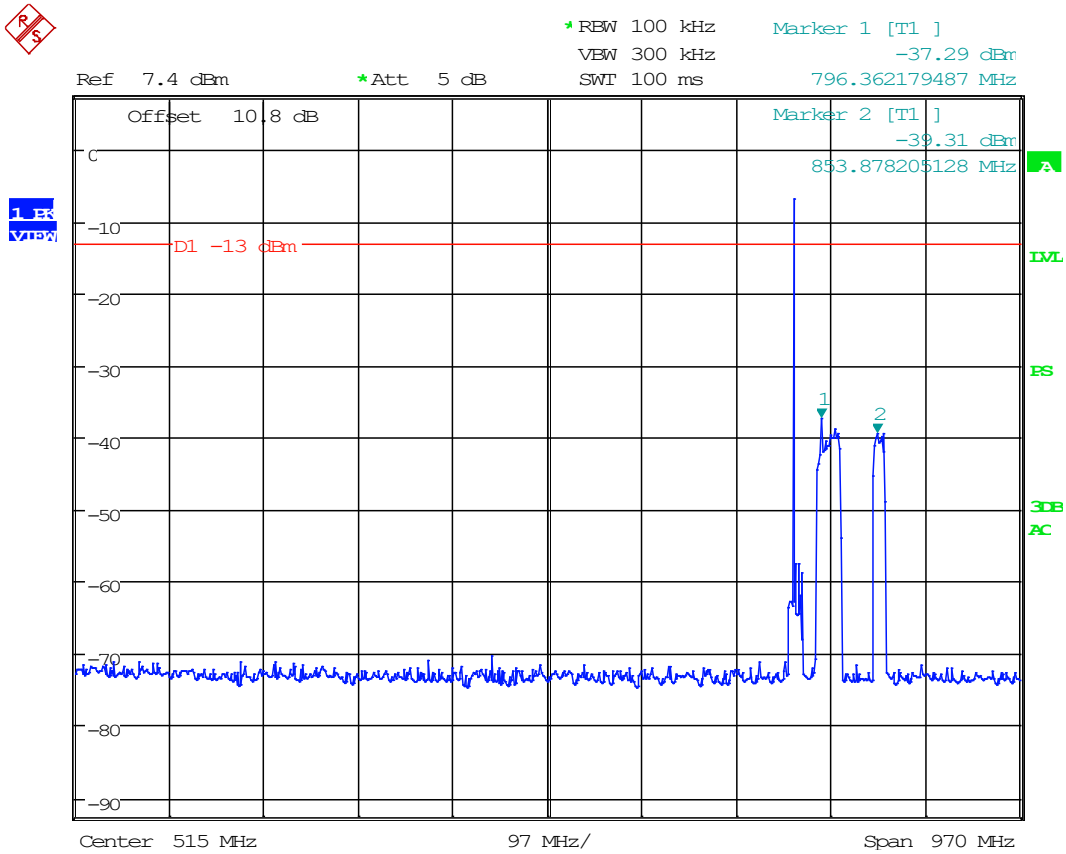
### 763.0125 MHz, Downlink, Above 1 GHz



Date: 30.JUL.2020 18:36:35

### Conducted Spurious Emissions

#### 768.0125 MHz, Downlink, Below 1 GHz

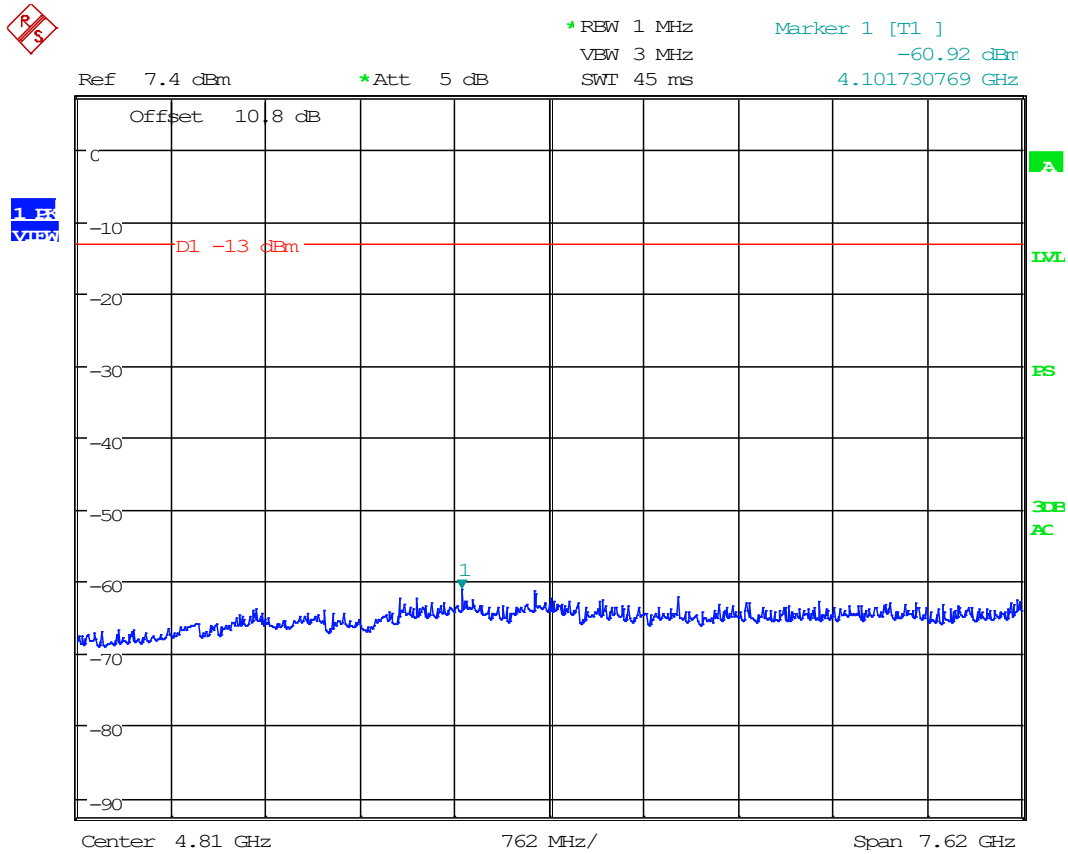


Date: 30.JUL.2020 17:03:27



### Conducted Spurious Emissions

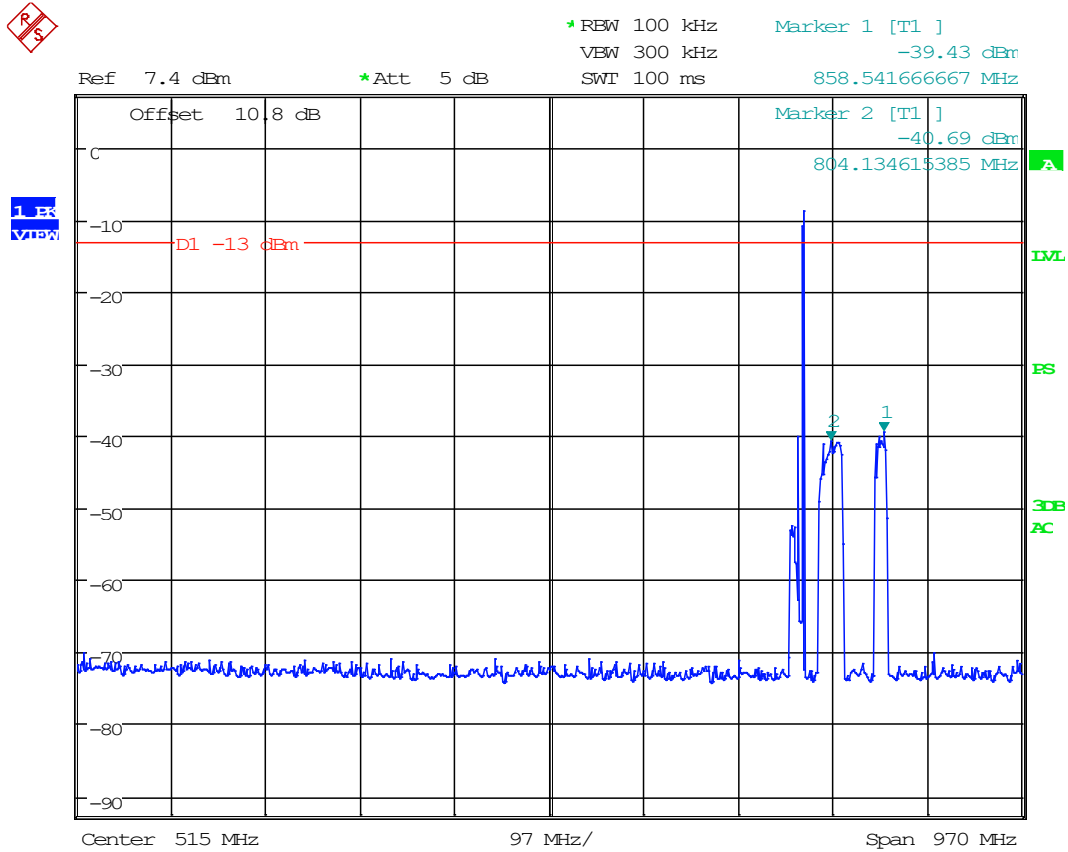
### 768.0125 MHz, Downlink, Above 1 GHz



Date: 30.JUL.2020 18:35:49

### Conducted Spurious Emissions

#### 774.9875 MHz, Downlink, Below 1 GHz



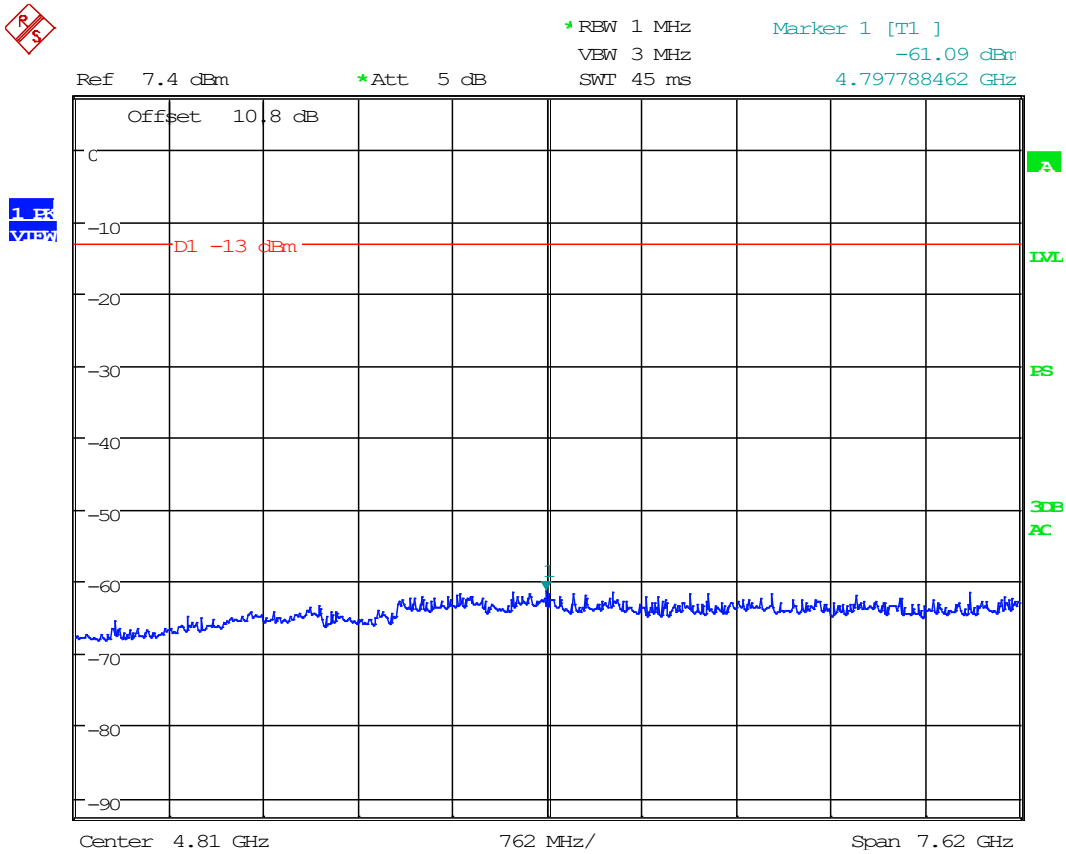
Date: 30.JUL.2020 17:19:46





### Conducted Spurious Emissions

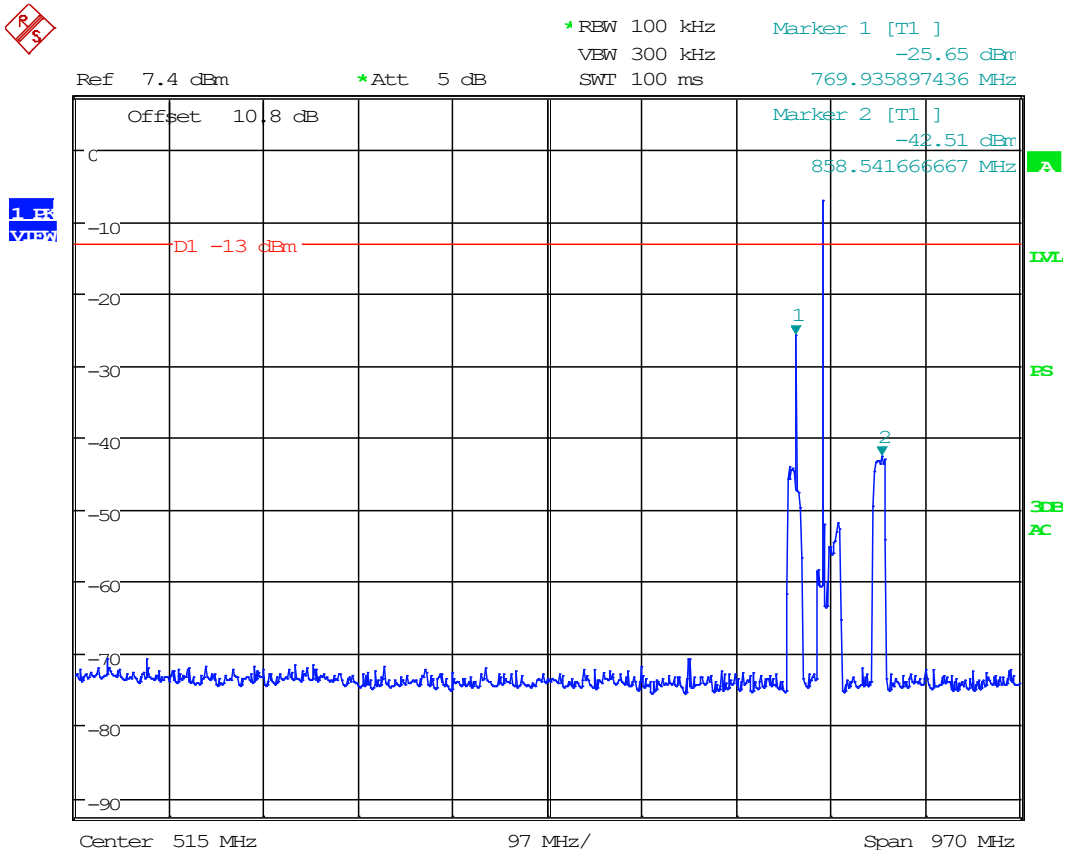
### 793.0125 MHz, Uplink, Above 1 GHz



Date: 30.JUL.2020 18:33:59

### Conducted Spurious Emissions

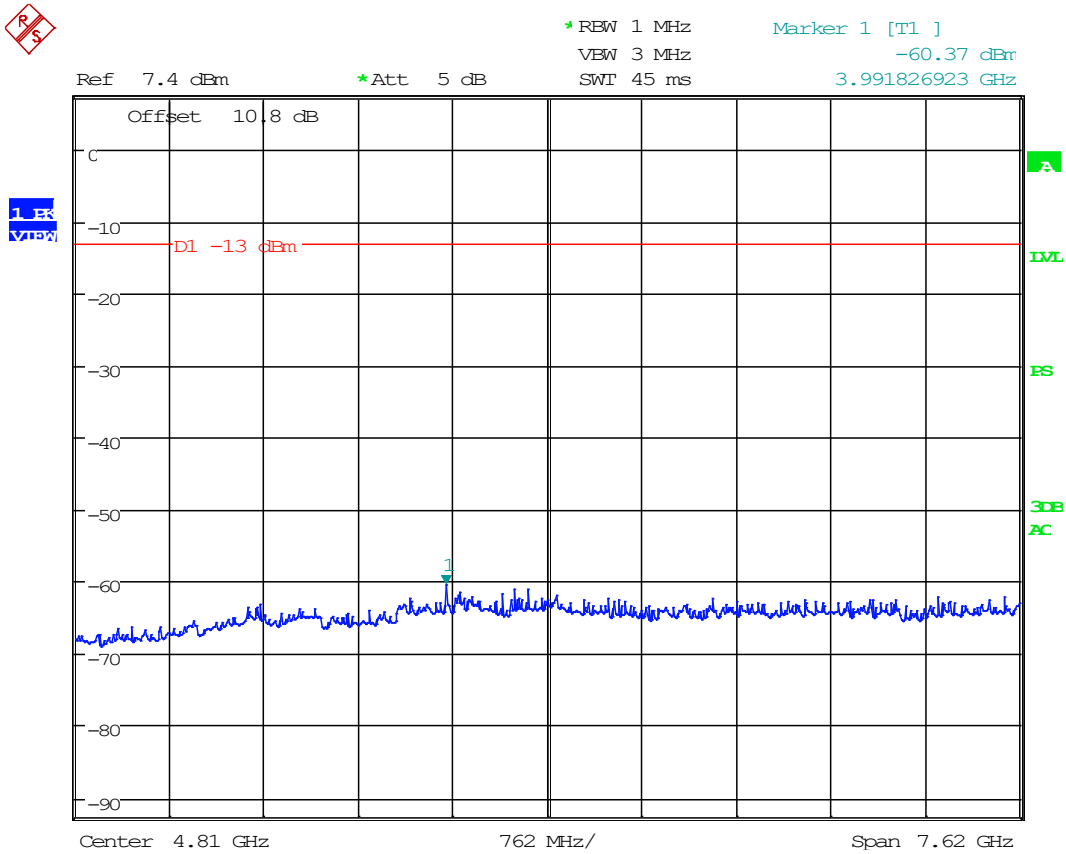
### 798.0125 MHz, Uplink, Below 1 GHz



Date: 30.JUL.2020 17:47:10

### Conducted Spurious Emissions

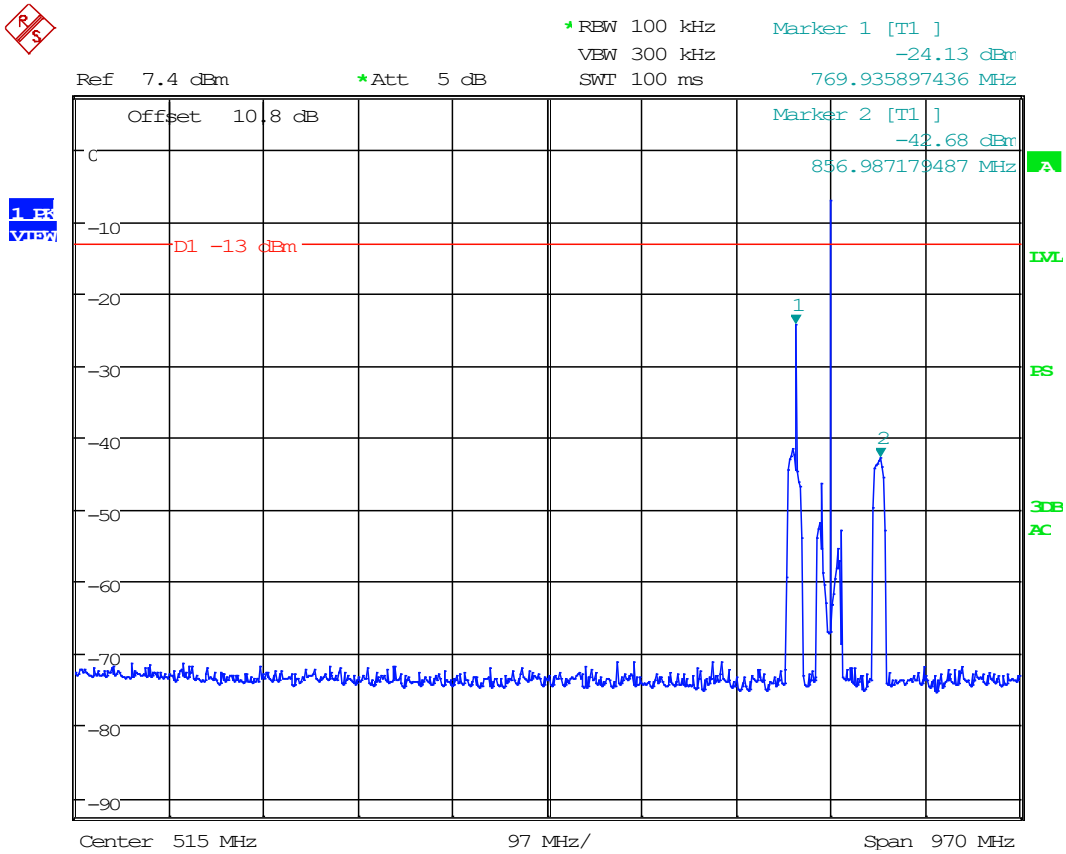
### 798.0125 MHz, Uplink, Above 1 GHz



Date: 30.JUL.2020 18:32:56

### Conducted Spurious Emissions

#### 804.9875 MHz, Uplink, Below 1 GHz

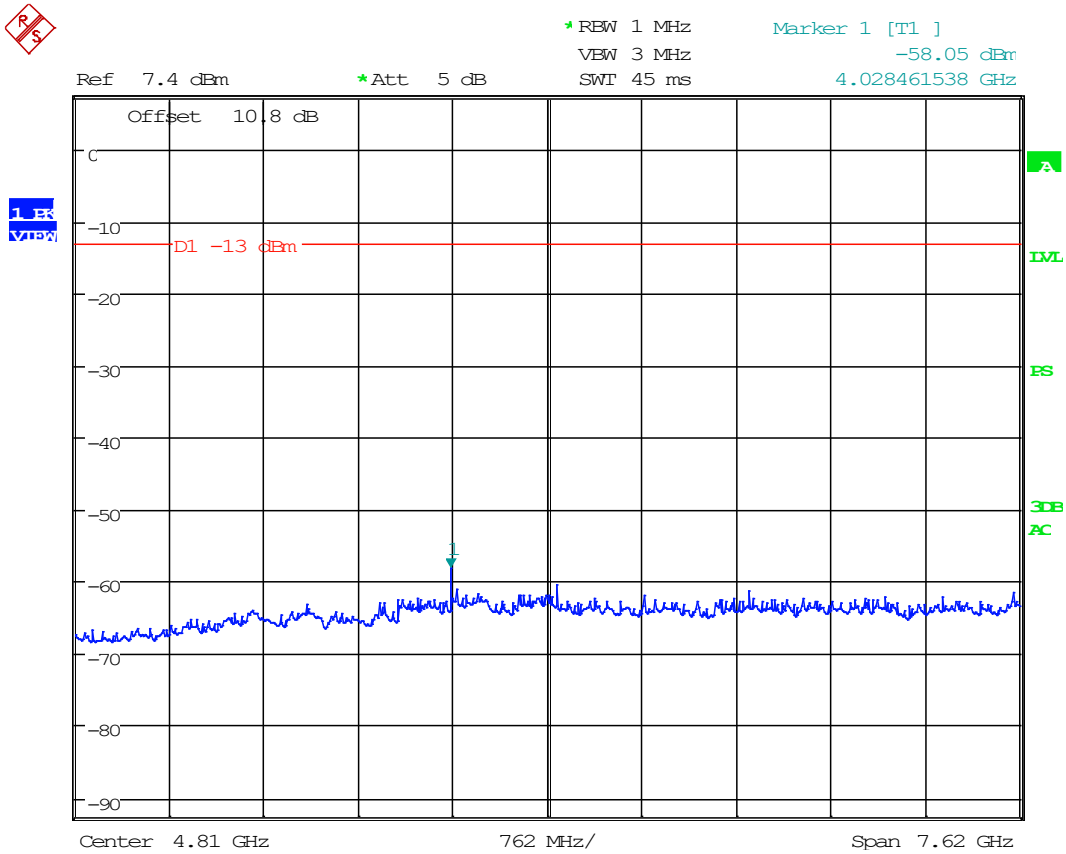


Date: 30.JUL.2020 17:50:54



### Conducted Spurious Emissions

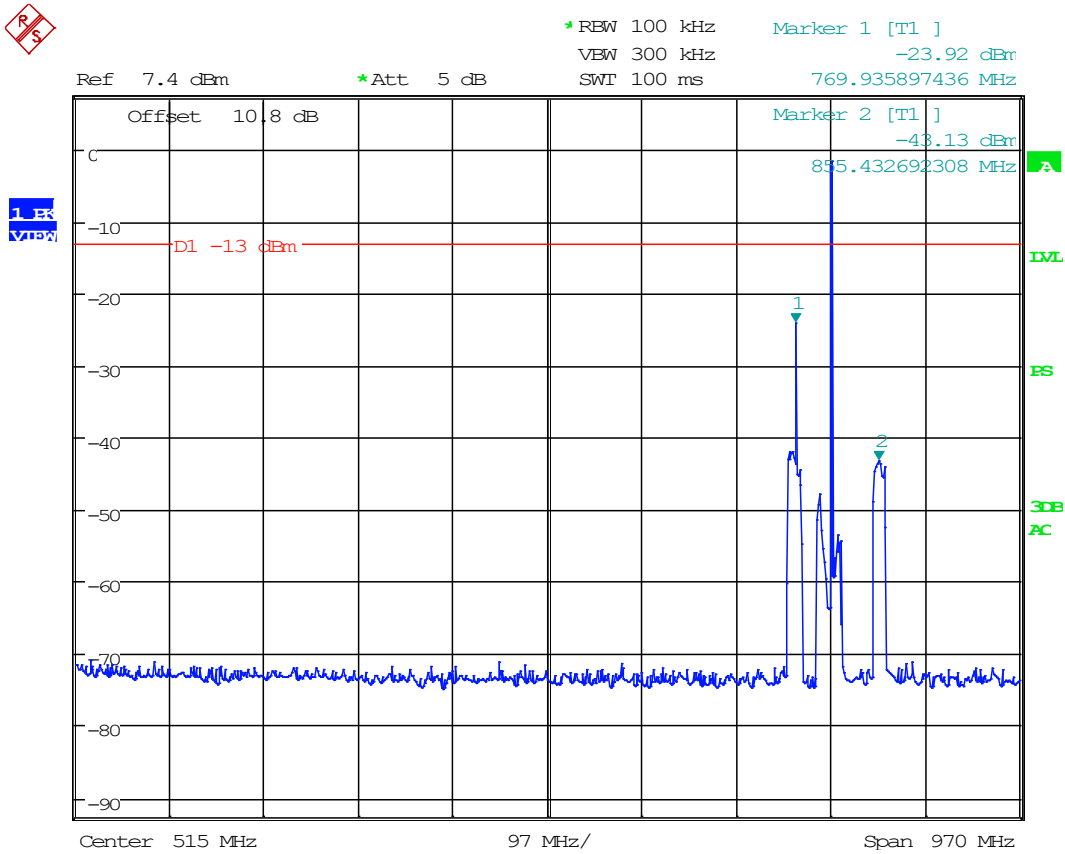
### 804.9875 MHz, Uplink, Above 1 GHz



Date: 30.JUL.2020 18:31:25

### Conducted Spurious Emissions

#### 806.0125 MHz, Uplink, Below 1 GHz

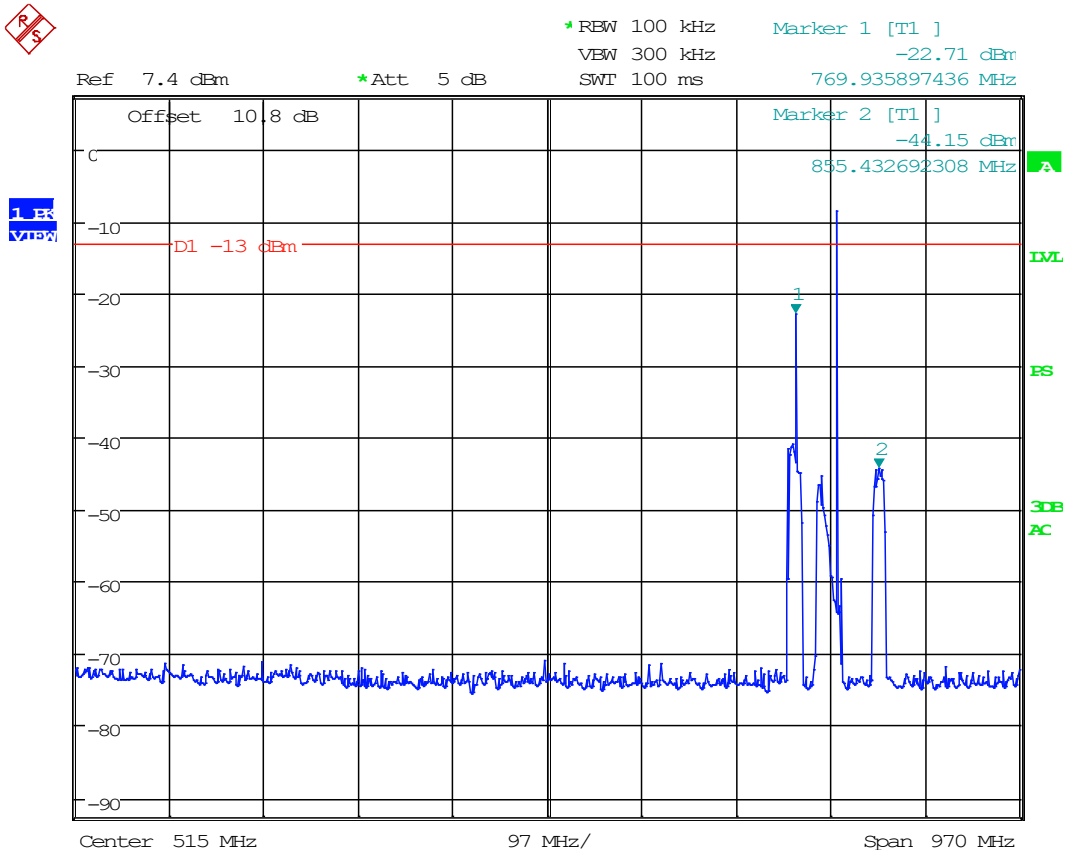


Date: 30.JUL.2020 18:17:40



### Conducted Spurious Emissions

#### 811.5 MHz, Uplink, Below 1 GHz



Date: 30.JUL.2020 18:22:59





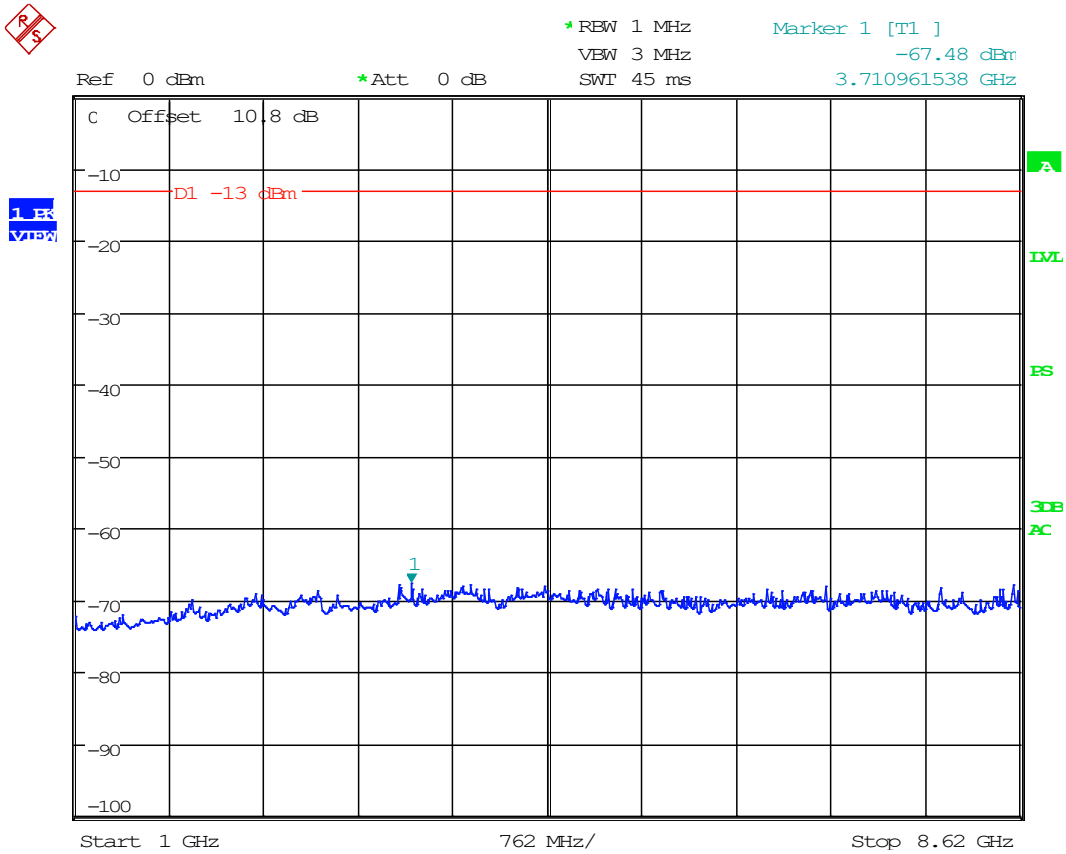






### Conducted Spurious Emissions

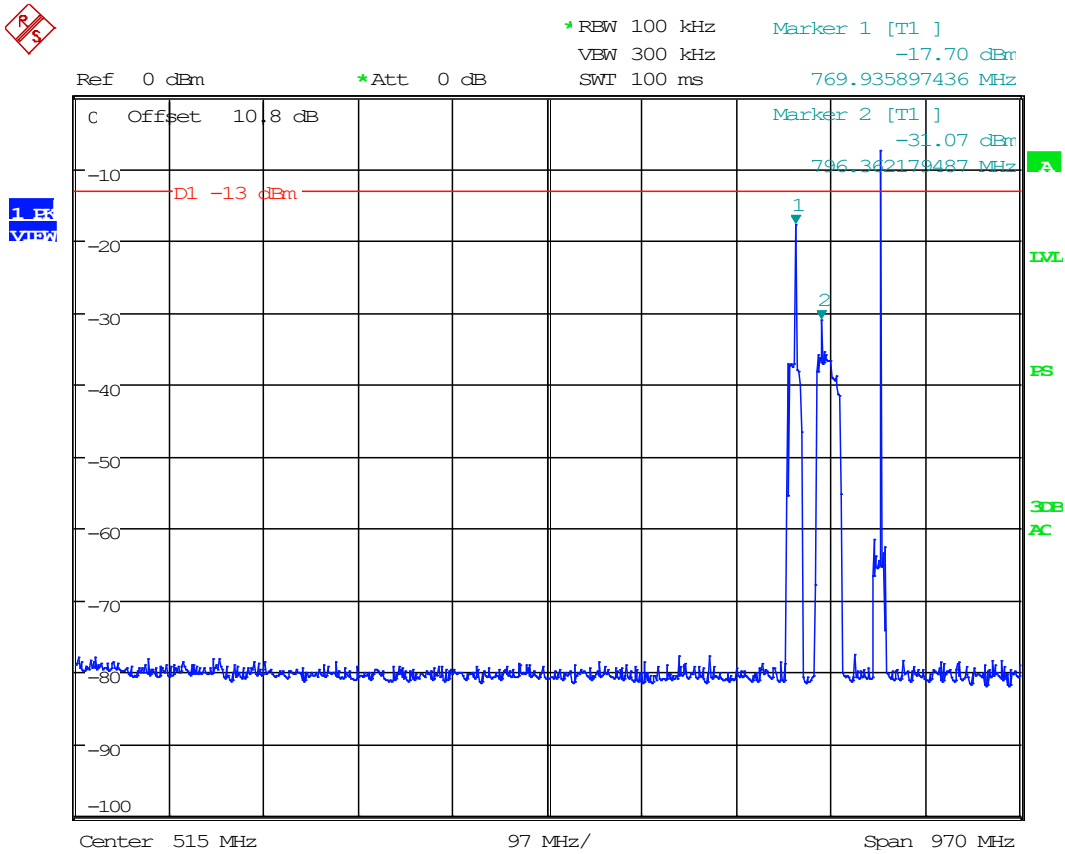
#### 851.0125 MHz, Downlink, Above 1 GHz



Date: 31.JUL.2020 10:47:34

### Conducted Spurious Emissions

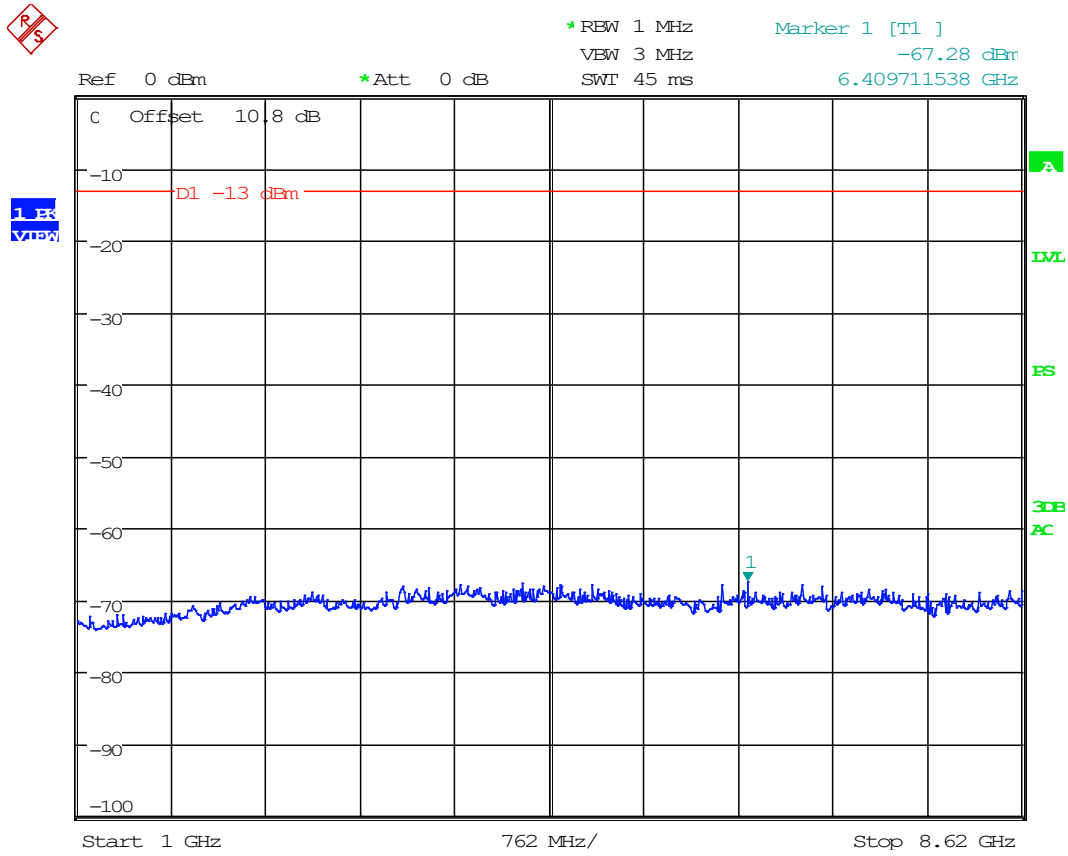
### 856.5 MHz, Downlink, Below 1 GHz



Date: 31.JUL.2020 10:58:28

### Conducted Spurious Emissions

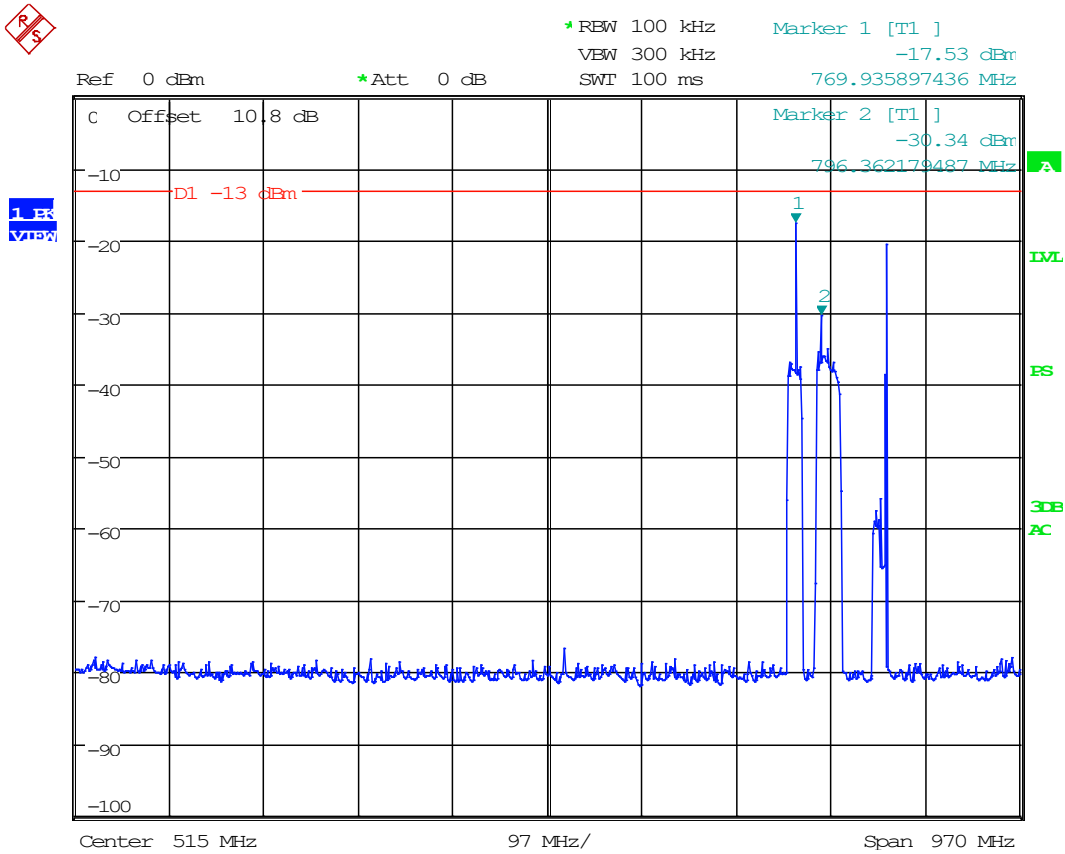
#### 856.5 MHz, Downlink, Above 1 GHz



Date: 31.JUL.2020 10:59:12

### Conducted Spurious Emissions

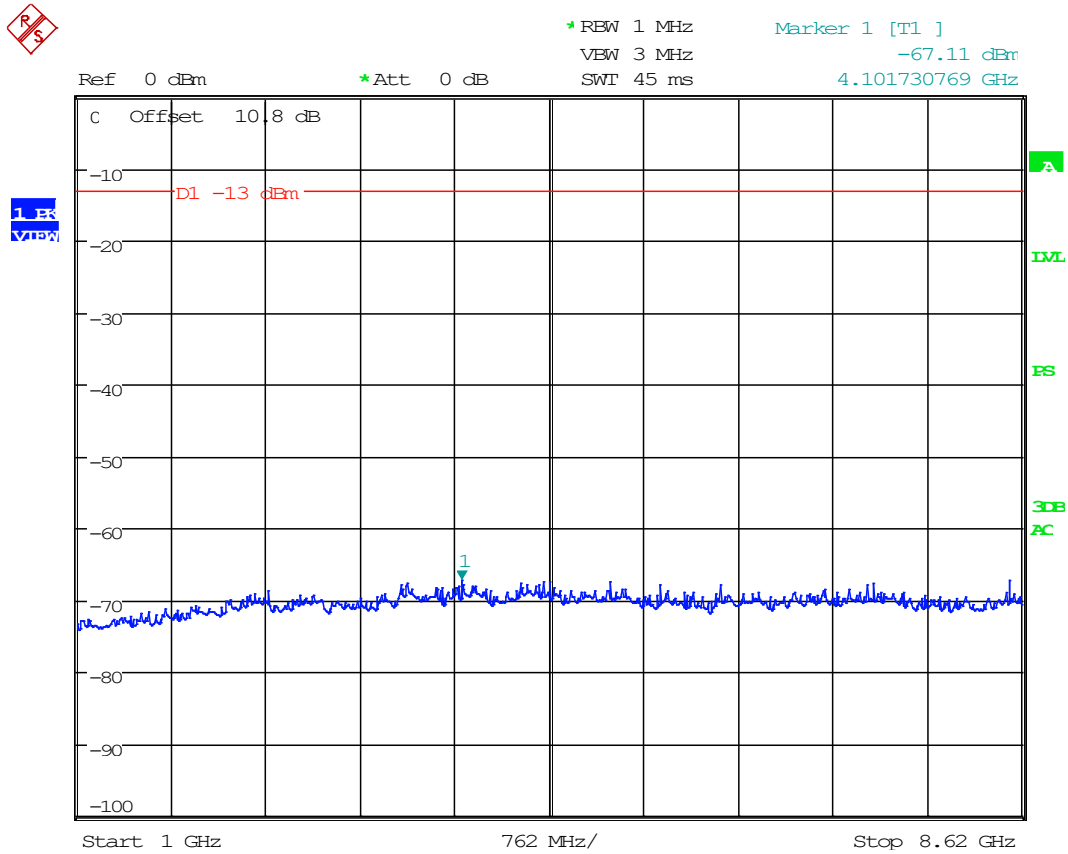
### 861.9875 MHz, Downlink, Below 1 GHz



Date: 31.JUL.2020 11:03:17

### Conducted Spurious Emissions

### 861.9875 MHz, Downlink, Above 1 GHz



Date: 31.JUL.2020 11:03:55

## 2.1053 FIELD STRENGTH OF SPURIOUS EMISSIONS

### KDB 935210 4.9 FIELD STRENGTH OF SPURIOUS EMISSIONS

Test Engineer: FR, TR  
 Test Date: AUG 3 2020

**Note:** For all measurements greater than 20 dB below limits, the 6 highest emissions were shown.

#### 763.0125 MHz, Downlink

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBm)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dB $\mu$ V/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dBm)
763.01	3052.05	PK	20.19	H	6.41	32.64	3.00	59.23	-38.14	-13.00	25.14
763.01	3052.05	PK	19.70	V	6.41	32.64	3.00	58.74	-38.63	-13.00	25.63
763.01	3815.06	PK	17.17	V	6.38	33.16	3.00	56.71	-40.66	-13.00	27.66
763.01	3815.06	PK	16.90	H	6.38	33.16	3.00	56.44	-40.93	-13.00	27.93
763.01	2289.04	PK	17.54	H	5.48	31.46	3.00	54.47	-42.90	-13.00	29.90
763.01	2289.04	PK	17.20	V	5.48	31.46	3.00	54.13	-43.24	-13.00	30.24

#### 768.0125 MHz, Downlink

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBm)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dB $\mu$ V/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dBm)
768.01	4608.08	PK	11.20	V	7.55	34.03	3.00	52.79	-44.59	-13.00	31.59
768.01	4608.08	PK	10.53	H	7.55	34.03	3.00	52.12	-45.26	-13.00	32.26
768.01	3072.05	PK	11.98	V	6.43	32.69	3.00	51.10	-46.28	-13.00	33.28
768.01	3072.05	PK	11.97	H	6.43	32.69	3.00	51.09	-46.29	-13.00	33.29
768.01	3840.06	PK	11.03	H	6.53	33.19	3.00	50.75	-46.63	-13.00	33.63
768.01	3840.06	PK	10.74	V	6.53	33.19	3.00	50.46	-46.92	-13.00	33.92

#### 774.9875 MHz, Downlink

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBm)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dB $\mu$ V/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dBm)
774.99	3099.95	PK	13.11	V	6.45	32.76	3.00	52.32	-45.05	-13.00	32.05
774.99	4649.93	PK	10.54	H	7.45	33.90	3.00	51.89	-45.49	-13.00	32.49
774.99	3874.94	PK	11.88	V	6.73	33.22	3.00	51.83	-45.55	-13.00	32.55
774.99	4649.93	PK	10.10	V	7.45	33.90	3.00	51.45	-45.93	-13.00	32.93
774.99	3099.95	PK	11.74	H	6.45	32.76	3.00	50.95	-46.42	-13.00	33.42
774.99	3874.94	PK	10.82	H	6.73	33.22	3.00	50.77	-46.61	-13.00	33.61

## Conducted Spurious Emissions

### 793.0125 MHz, Uplink

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBm)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dB $\mu$ V/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dBm)
793.01	4758.08	PK	12.22	V	6.96	33.91	3.00	53.09	-44.29	-13.00	31.29
793.01	3965.06	PK	11.76	V	7.26	33.38	3.00	52.40	-44.97	-13.00	31.97
793.01	3965.06	PK	11.33	H	7.26	33.38	3.00	51.97	-45.40	-13.00	32.40
793.01	3172.05	PK	12.64	H	6.58	32.73	3.00	51.95	-45.43	-13.00	32.43
793.01	3172.05	PK	12.49	V	6.58	32.73	3.00	51.80	-45.58	-13.00	32.58
793.01	4758.08	PK	9.53	H	6.96	33.91	3.00	50.40	-46.98	-13.00	33.98

### 798.0125 MHz, Uplink

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBm)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dB $\mu$ V/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dBm)
798.01	3192.05	PK	13.22	V	6.62	32.69	3.00	52.53	-44.85	-13.00	31.85
798.01	3990.06	PK	11.11	V	7.26	33.39	3.00	51.77	-45.61	-13.00	32.61
798.01	4788.08	PK	10.61	H	7.05	33.93	3.00	51.58	-45.79	-13.00	32.79
798.01	4788.08	PK	10.43	V	7.05	33.93	3.00	51.40	-45.97	-13.00	32.97
798.01	3192.05	PK	11.67	H	6.62	32.69	3.00	50.98	-46.40	-13.00	33.40
798.01	3990.06	PK	10.32	H	7.26	33.39	3.00	50.98	-46.40	-13.00	33.40

### 804.9875 MHz, Uplink

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBm)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dB $\mu$ V/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dBm)
804.99	4829.93	PK	11.57	H	7.17	33.94	3.00	52.68	-44.70	-13.00	31.70
804.99	4829.93	PK	10.73	V	7.17	33.94	3.00	51.84	-45.54	-13.00	32.54
804.99	4024.94	PK	10.94	H	7.23	33.39	3.00	51.55	-45.82	-13.00	32.82
804.99	3219.95	PK	11.96	V	6.63	32.68	3.00	51.27	-46.11	-13.00	33.11
804.99	3219.95	PK	11.64	H	6.63	32.68	3.00	50.95	-46.43	-13.00	33.43
804.99	4024.94	PK	9.57	V	7.23	33.39	3.00	50.18	-47.19	-13.00	34.19

## Conducted Spurious Emissions

### 806.0125 MHz, Uplink

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBm)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dB $\mu$ V/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dBm)
*806.01	3224.05	PK	12.98	H	6.64	32.68	3.00	52.29	-45.08	-13.00	32.08
806.01	4836.08	PK	10.71	H	7.18	33.94	3.00	51.84	-45.54	-13.00	32.54
806.01	4836.08	PK	10.70	V	7.18	33.94	3.00	51.83	-45.55	-13.00	32.55
806.01	4030.06	PK	10.83	V	7.22	33.39	3.00	51.43	-45.94	-13.00	32.94
806.01	3224.05	PK	11.75	V	6.64	32.68	3.00	51.06	-46.31	-13.00	33.31
806.01	4030.06	PK	10.39	H	7.22	33.39	3.00	50.99	-46.38	-13.00	33.38

### 811.5 MHz, Uplink

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBm)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dB $\mu$ V/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dBm)
*811.50	4869.00	PK	10.99	V	7.27	33.93	3.00	52.20	-45.18	-13.00	32.18
811.50	4869.00	PK	10.58	H	7.27	33.93	3.00	51.79	-45.59	-13.00	32.59
811.50	3246.00	PK	11.85	V	6.65	32.68	3.00	51.18	-46.20	-13.00	33.20
811.50	3246.00	PK	11.61	H	6.65	32.68	3.00	50.94	-46.44	-13.00	33.44
811.50	4057.50	PK	10.25	H	7.18	33.38	3.00	50.81	-46.57	-13.00	33.57
811.50	4057.50	PK	10.14	V	7.18	33.38	3.00	50.70	-46.68	-13.00	33.68

### 816.9875 MHz, Uplink

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBm)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dB $\mu$ V/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dBm)
*816.99	4901.93	PK	12.29	V	7.51	33.92	3.00	53.71	-43.67	-13.00	30.67
816.99	4901.93	PK	11.73	H	7.51	33.92	3.00	53.15	-44.23	-13.00	31.23
816.99	3267.95	PK	12.23	V	6.67	32.66	3.00	51.56	-45.82	-13.00	32.82
816.99	4084.94	PK	10.95	H	7.14	33.39	3.00	51.48	-45.90	-13.00	32.90
816.99	4084.94	PK	10.63	V	7.14	33.39	3.00	51.16	-46.22	-13.00	33.22
816.99	3267.95	PK	11.43	H	6.67	32.66	3.00	50.76	-46.62	-13.00	33.62



## Conducted Spurious Emissions

### 851.0125 MHz, Downlink

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBm)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dB $\mu$ V/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dBm)
851.01	2553.04	PK	13.17	H	5.70	32.60	3.00	51.46	-45.91	-13.00	32.91
851.01	3404.05	PK	11.62	H	6.80	32.65	3.00	51.06	-46.31	-13.00	33.31
851.01	4255.06	PK	10.02	H	7.22	33.35	3.00	50.59	-46.79	-13.00	33.79
851.01	3404.05	PK	11.13	V	6.80	32.65	3.00	50.57	-46.80	-13.00	33.80
851.01	4255.06	PK	9.76	V	7.22	33.35	3.00	50.33	-47.05	-13.00	34.05
851.01	335.90	PK	34.35	H	2.11	13.70	3.00	50.16	-47.22	-13.00	34.22

### 856.5 MHz, Downlink

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBm)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dB $\mu$ V/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dBm)
856.50	3426.00	PK	13.18	H	6.85	32.62	3.00	52.65	-44.73	-13.00	31.73
856.50	3426.00	PK	12.86	V	6.85	32.62	3.00	52.33	-45.05	-13.00	32.05
856.50	4282.50	PK	10.19	V	7.38	33.42	3.00	50.98	-46.39	-13.00	33.39
856.50	4282.50	PK	9.95	H	7.38	33.42	3.00	50.74	-46.63	-13.00	33.63
856.50	335.90	PK	34.22	V	2.11	13.70	3.00	50.03	-47.35	-13.00	34.35
856.50	2569.50	PK	10.90	H	5.73	32.53	3.00	49.16	-48.22	-13.00	35.22

### 861.9875 MHz, Downlink

Tuned Frequency (MHz)	Emission Frequency (MHz)	Detector	Meter Reading (dBm)	Antenna Polarity	Coax Loss (dB)	Antenna Correction Factor (dB/m)	Distance (m)	Field Strength (dB $\mu$ V/m)	ERP (dBm)	Spurious Limit (dBm)	Margin (dBm)
* 861.99	4309.94	PK	11.60	H	7.54	33.48	3.00	52.62	-44.76	-13.00	31.76
861.99	3447.95	PK	12.19	H	6.88	32.60	3.00	51.67	-45.71	-13.00	32.71
861.99	4309.94	PK	10.56	V	7.54	33.48	3.00	51.58	-45.80	-13.00	32.80
861.99	3447.95	PK	11.99	V	6.88	32.60	3.00	51.47	-45.91	-13.00	32.91
861.99	2585.96	PK	12.45	V	5.76	32.46	3.00	50.67	-46.70	-13.00	33.70
861.99	2585.96	PK	12.01	H	5.76	32.46	3.00	50.23	-47.14	-13.00	34.14

**2.1055 FREQUENCY STABILITY**

**KDB 935210 4.8 FREQUENCY STABILITY**

**90.213 FREQUENCY STABILITY**

Test Engineer: \_\_\_\_\_  
Test Date: \_\_\_\_\_

**N/A.** Device does not use a frequency determining element and is exempt.

**N/A.** There is no Transient Frequency Response compliance requirement for devices which operate in the 700 and 800 MHz bands.

**END OF TEST REPORT**