

FCC PART 22, 74, 80 and 90

TEST REPORT

For

Hytera Communications Corporation Limited

Hytera Tower, Hi-Tech Industrial Park North, 9108# Beihuan Road, Nanshan District, Shenzhen, 518057
China

FCC ID: YAMHP7XXVHFS

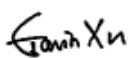
Report Type: Original Report	Product Type: Digital Portable Radio
Report Number: DG2210727-31336E-00C	
Report Date: 2021-08-18	
Reviewed By:	Gavin Xu RF Engineer 
Prepared By:	Bay Area Compliance Laboratories Corp. (Dongguan) No.12, Pulong East 1 st Road, Tangxia Town, Dongguan, Guangdong, China Tel: +86-769-86858888 Fax: +86-769-86858891 www.baclcorp.com.cn

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product Name:		Digital Portable Radio
Test Model:		HP782 VHF
Multiple Model:		HP785 VHF, HP786 VHF, HP788 VHF, HP702 VHF, HP705 VHF, HP706 VHF, HP708 VHF, HDP782 VHF, HDP785 VHF, HDP786 VHF, HDP788 VHF, HDP702 VHF, HDP705 VHF, HDP706 VHF, HDP708 VHF
Model Difference:		Refer to the DOS letter
Rated Input Voltage:		DC 7.7V from battery or DC 12V charging from charger base
Serial Number:		HP782 VHF: DG2210727-31336E-RF-S1 HP702 VHF: DG2210727-31336E-RF-S2
Adapter Information	Model:	HKA01212010-XQ
	Input:	AC 100-240V 50/60Hz 0.5A
	Output:	DC 12.0V 1.0A 12.0W
EUT Received Date:		2021.7.27
EUT Received Status:		Good

Technical Specification

Operation Frequency Range (MHz):	136-174
Rated RF Output Power (Conducted) (W):	High power level: 5 Low power level: 1
Modulation Type:	FM, 4FSK
Channel Spacing (kHz):	12.5/25

Objective

This test report is prepared on behalf of **Hytera Communications Corporation Limited** in accordance with Part 2, and Part 22,74,80 and 90 of the Federal Communication Commissions rules.

Test Methodology

All tests and measurements indicated in this document were performed in accordance with:

the Code of federal Regulations Title 47, Part 2, Part 22, Part 74, Part 80 and Part 90

ANSI C63.26-2015, American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

TIA-603-E-2016, Land Mobile FM or PM Communications Equipment Measurement and Performance Standards

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Dongguan). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±0.61dB
Unwanted Emissions, radiated	30MHz ~ 1GHz: 5.85 dB 1G~26.5GHz: 5.23 dB
Unwanted Emissions, conducted	±1.5 dB
Temperature	±1°C
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%

Note: Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 897218, the FCC Designation No. : CN1220.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0022.

Declarations

BACL is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “▲”. Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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This report may contain data that are not covered by the accreditation scope and shall be marked with an asterisk “★”.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in a test mode which has been done in the factory.

Equipment Modifications

No modification was made to the EUT.

EUT Exercise Software

No software was tested in test.

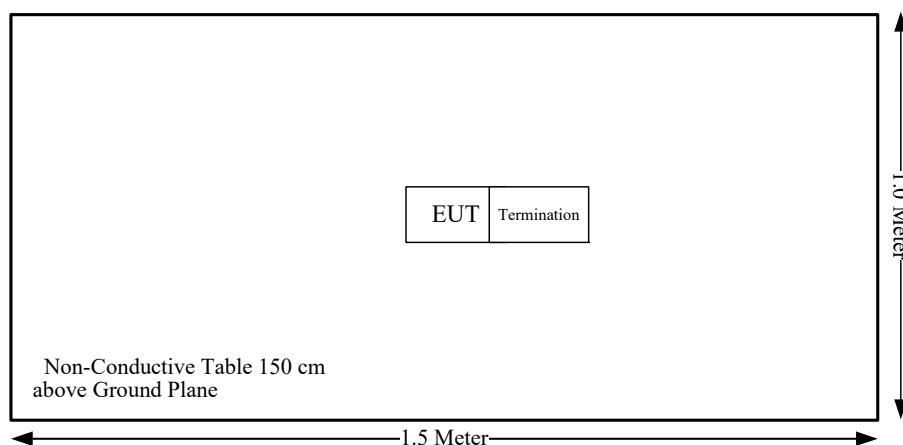
Local Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Wenschel	Terminations	1440	MD477

Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length(m)	From	To
/	/	/	/	/	/

Block Diagram of Test Setup



Test Equipment List

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated emissions below 1GHz					
Sunol Sciences	Antenna	JB3	A060611-2	2020-08-25	2023-08-25
R&S	EMI Test Receiver	ESCI	100224	2020-09-12	2021-09-12
Unknown	Coaxial Cable	C-NJNJ-50	C-1000-01	2020-09-05	2021-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-02	2020-09-05	2021-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0530-01	2020-09-24	2021-09-24
Sonoma	Amplifier	310N	185914	2020-10-13	2021-10-13
EMCO	Adjustable Dipole Antenna	3121C	9109-753	N/A	N/A
Unknown	Coaxial Cable	C-NJNJ-50	C-0200-02	2020-09-05	2021-09-05
Agilent	Signal Generator	E8247C	MY43321350	2021-04-25	2022-04-24
Mini-Circuits	High Pass Filter	BHP-300+	15542	2020/9/5	2021/9/5
Radiated emissions above 1GHz					
TDK RF	Horn Antenna	HRN-0118	130 084	2018-10-12	2021-10-12
R&S	Spectrum Analyzer	FSP 38	100478	2020-09-07	2021-09-07
HUBER+SUHNER	Coaxial Cable	SUCOFLEX 126EA	MY369/26/26EA	2020-09-25	2021-09-25
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2020-09-05	2021-09-05
Quinstar	Amplifier	QLW-18405536-JO	15964001001	2020-09-27	2021-09-27
ETS-Lindgren	Horn Antenna	3115	000 527 35	2018-10-12	2021-10-12
Unknown	Coaxial Cable	C-NJNJ-50	C-0200-02	2020-09-05	2021-09-05
Agilent	Signal Generator	E8247C	MY43321350	2021-04-25	2022-04-24
Mini-Circuits	High Pass Filter	BHP-300+	15542	2020/9/5	2021/9/5
RF Conducted Test					
R&S	EMI Test Receiver	ESR3	102453	2020-09-12	2021-09-12
Rohde & Schwarz	Signal Analyzer	FSIQ26	831929/005	2021-07-22	2022-07-21
yzjingcheng	Coaxial Cable	KTRFBU-141-50	41005011	2020-09-05	2021-09-05
Unknown	Coaxial Cable	C-SJ00-0010	C0010/01	Each time	N/A
E-Microwave	Blocking Control	EMDCB-00036	0E01201047	2020-09-06	2021-09-06
Weinschel	Coaxial Attenuators	53-20-34	LN749	2020-09-06	2021-09-06
HP	RF Communications Test Set	8920A	3438A05201	2020-09-07	2021-09-07
Mini-Circuits	High Pass Filter	BHP-300+	15542	2020/9/5	2021/9/5

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Environmental Conditions

Test Item:	RF Conducted	Radiation Below 1GHz	Radiation Above 1GHz
Temperature:	26.5℃	28.1℃	28.7℃
Relative Humidity:	49%	48%	35%
ATM Pressure:	99.9 kPa	99.5 kPa	99.5 kPa
Tester:	Levi shi	Johnson Huang	Jeremy Liang
Test Date:	2021.08.09	2021.08.02	2021.08.02

SUMMARY OF TEST RESULTS

S/N	FCC Rules	Description of Test	Results
1	§1.1310 and §2.1093	RF Exposure	Compliance*
2	§2.1046; § 22.727; §80.215; §74.461; §90.205	RF Output Power	Compliance
3	§2.1047	Modulation Characteristic	Compliance
4	§2.1049;§22.357;§ 22.731; §74.462;§80.205; §80.207 §90.209; §90.210	Occupied Bandwidth & Emission Mask	Compliance
5	§2.1051; §22.861; §74.462; §80.211;§90.210	Spurious Emission at Antenna Terminal	Compliance
6	§2.1053;§22.861; §74.462;§80.211;§90.210	Spurious Radiated Emissions	Compliance
7	§2.1055; § 22.355; §74.464; §80.209; §90.213	Frequency Stability	Compliance
8	§90.214	Transient Frequency Behavior	Compliance

Note:

Compliance*: Please refer to the SAR report: DG2210727-31336E-20A.

2 - RF OUTPUT POWER

Applicable Standard

FCC §2.1046, § 22.727, §74.461, §80.215 and §90.205

Test Procedure

Conducted RF Output Power:

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

Spectrum Analyzer Setting:

R B/W	Video B/W
100 kHz	300 kHz

Test Data

Test Mode: Transmitting

Test Result: Compliance. Please refer to following table and plots.

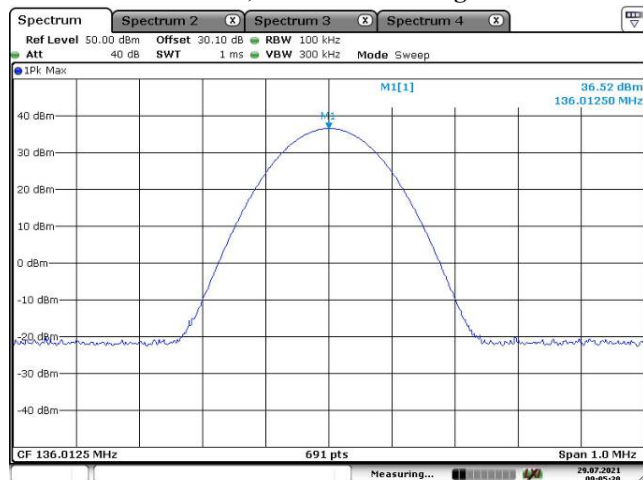
Channel Separation	Test Modulation	Test Channel	Test Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)		Note
				High Power Level	Low Power Level	High Power Level	Low Power Level	
12.5kHz	FM	Low	136.0125	36.52	29.74	37.78	30.79	FCC
		Middle	155.7525	36.81	30.43	37.78	30.79	Part 90
		High	173.9875	36.89	30.59	37.78	30.79	Part 90
		Additional	150.8125	36.97	30.75	37.78	30.79	Part 22
		Additional	161.1	36.56	30.15	37.78	30.79	Part 74
	4FSK	Low	136.0125	36.51	29.73	37.78	30.79	FCC
		Middle	155.7525	36.79	30.42	37.78	30.79	Part 90
		High	173.9875	36.90	30.58	37.78	30.79	Part 90
		Additional	150.8125	36.98	30.75	37.78	30.79	Part 22
		Additional	161.1	36.53	30.16	37.78	30.79	Part 74
25kHz	FM	Additional	150.8125	36.96	30.75	37.78	30.79	Part 22
		Additional	161.1	36.52	30.15	37.78	30.79	Part 74
		Additional	154.0125	36.85	30.55	37.78	30.79	Part 80

Note: The high rated power level is 5W(37dBm), and low rated power level is 1 W(30dBm).

The output power shall not exceed by more than 20 percent the manufacturer's rated output power for the particular transmitter specifically listed on the authorization.

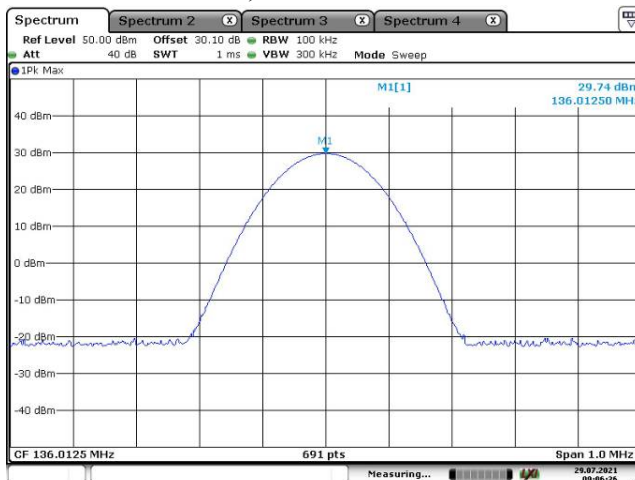
FM, 12.5kHz:

Low Channel, 136.0125 MHz High Power



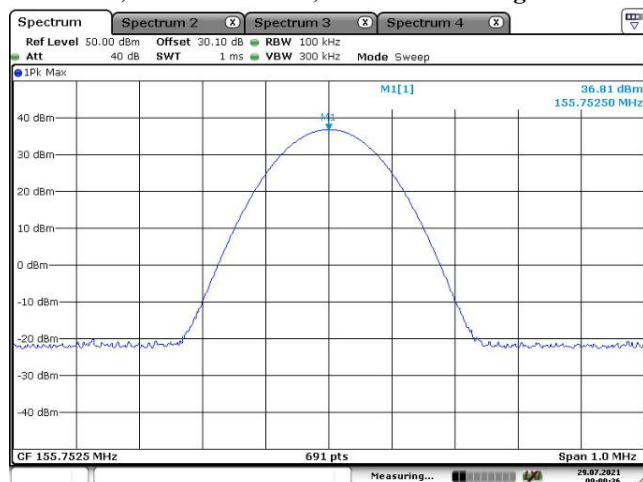
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Low Channel, 136.0125 MHz Low Power



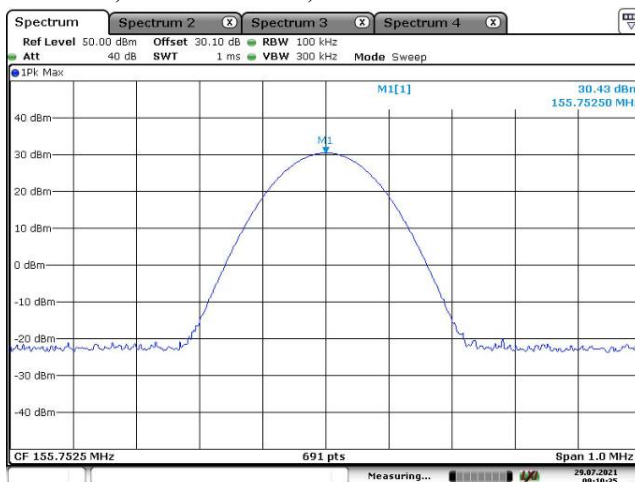
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Part 90, Middle Channel, 155.7525 MHz High Power



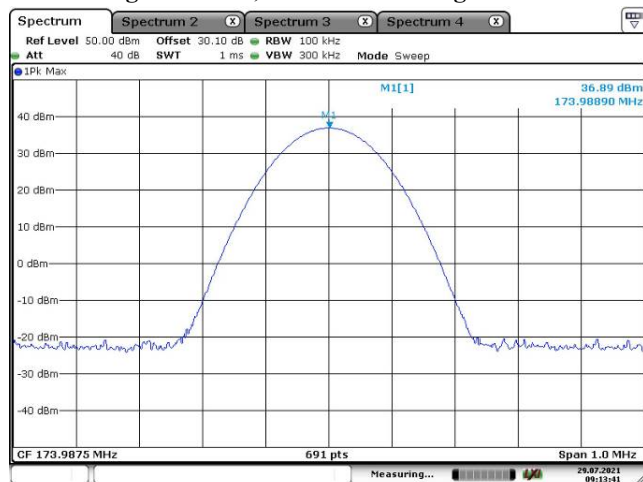
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Part 90, Middle Channel, 155.7525 MHz Low Power



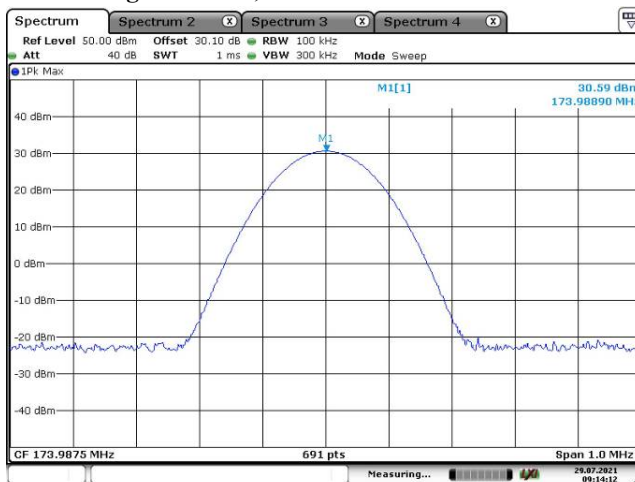
Date: 29.JUL.2021 09:10:35

High Channel, 173.9875 MHz High Power

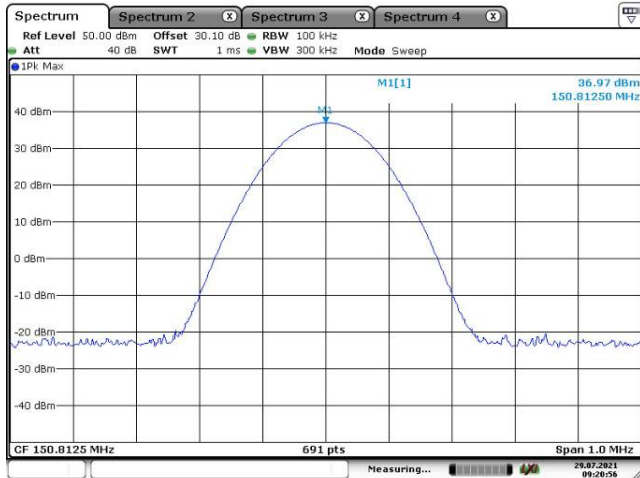


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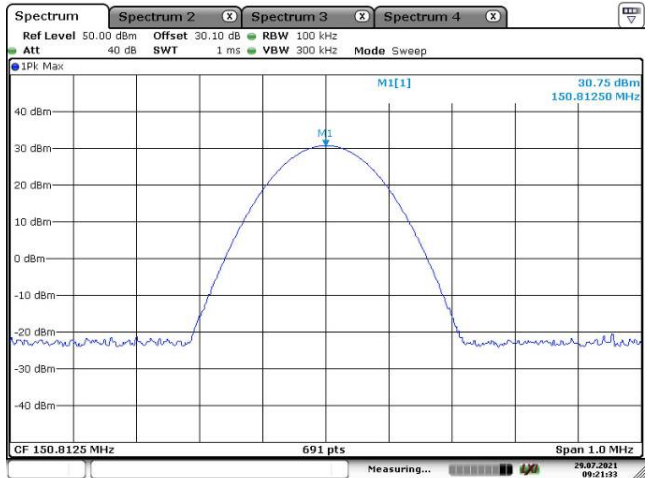
High Channel, 173.9875 MHz Low Power



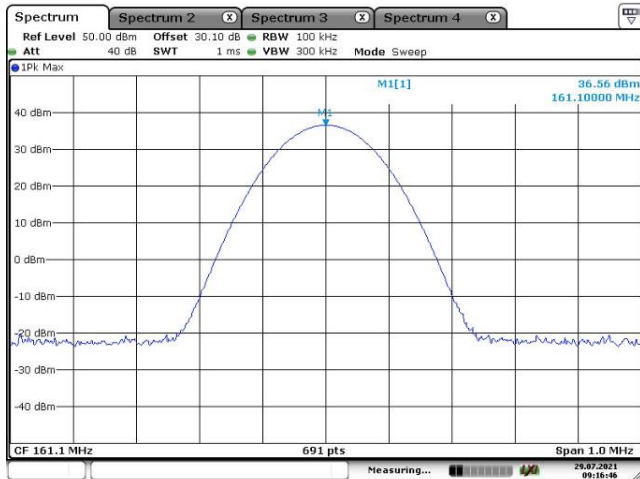
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Part 22, Additional Channel, 150.8125 MHz High Power

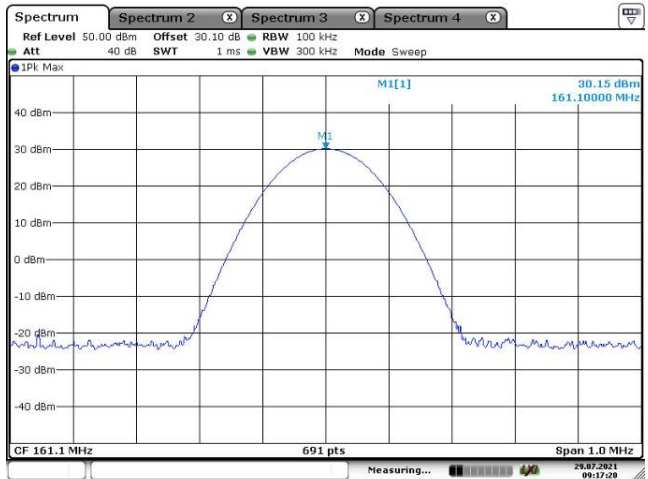
Date: 29.JUL.2021 09:20:56

Part 22, Additional Channel, 150.8125 MHz Low Power

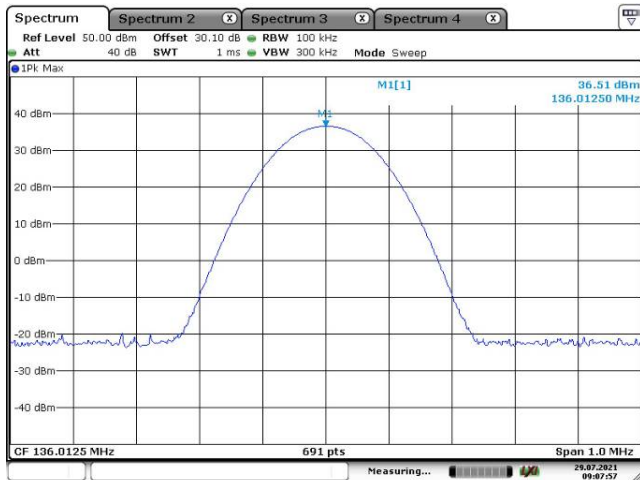
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Part 74, Additional Channel, 161.1 MHz High Power

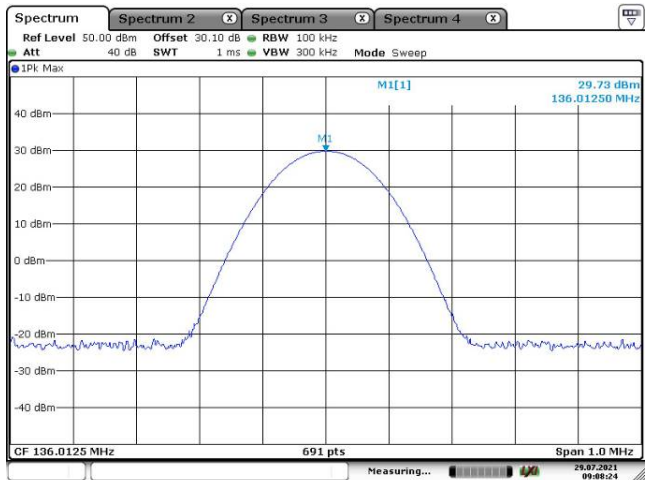
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Part 74, Additional Channel, 161.1 MHz Low Power

Date: 29.JUL.2021 09:17:20

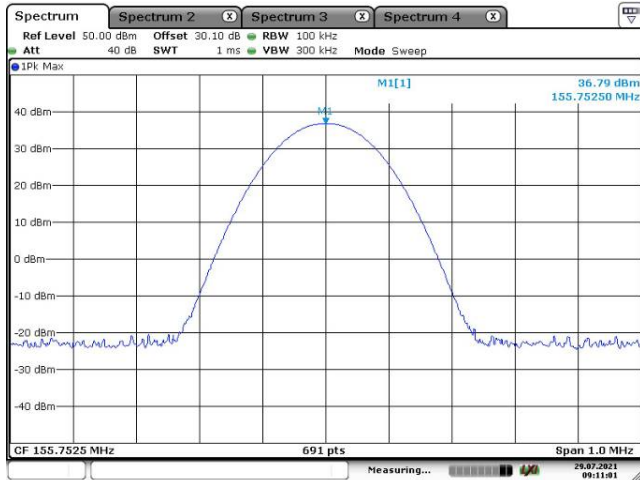
4FSK, 12.5kHz:**Low Channel, 136.0125 MHz High Power**

Date: 29.JUL.2021 09:07:57

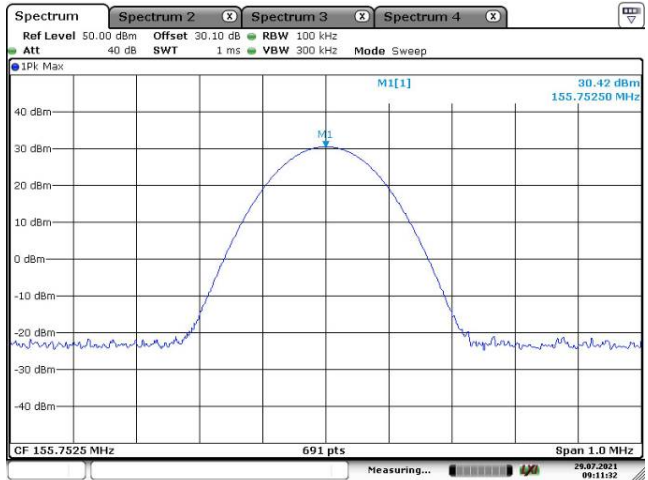
Low Channel, 136.0125 MHz Low Power

Date: 29.JUL.2021 09:08:24

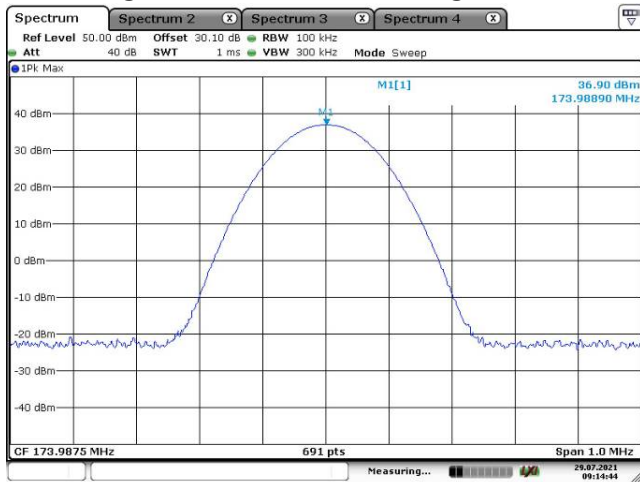
Part 90, Middle Channel, 155.7525 MHz High Power



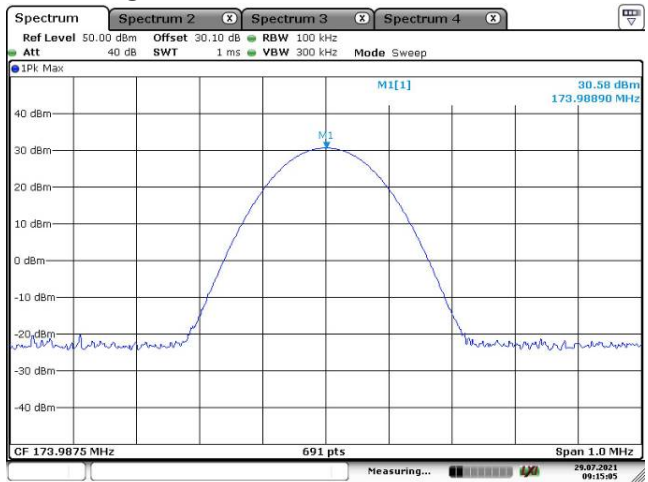
Part 90, Middle Channel, 155.7525 MHz Low Power



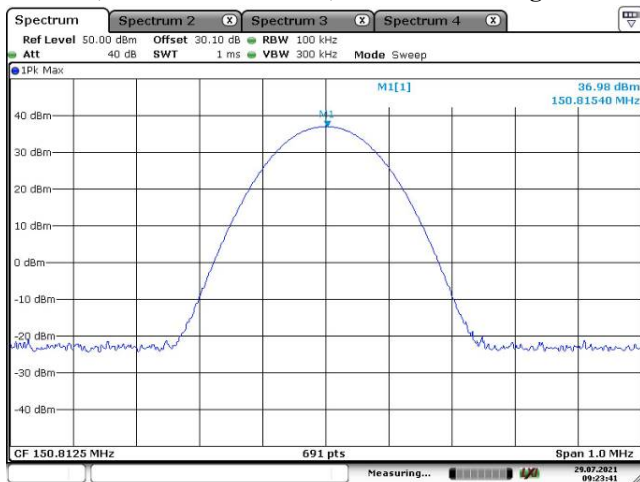
High Channel, 173.9875 MHz High Power



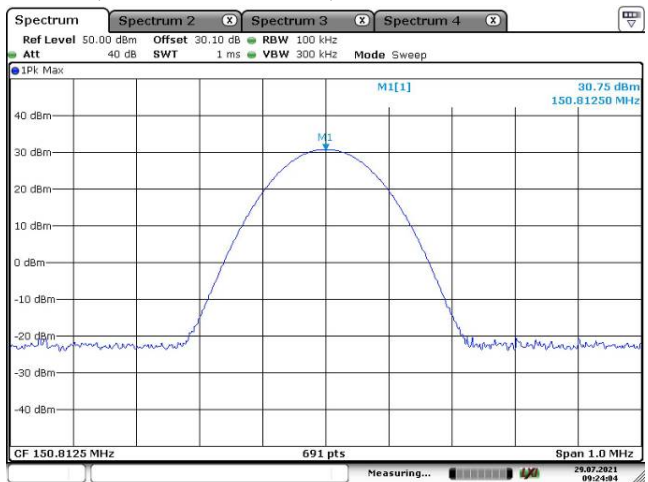
High Channel, 173.9875 MHz Low Power

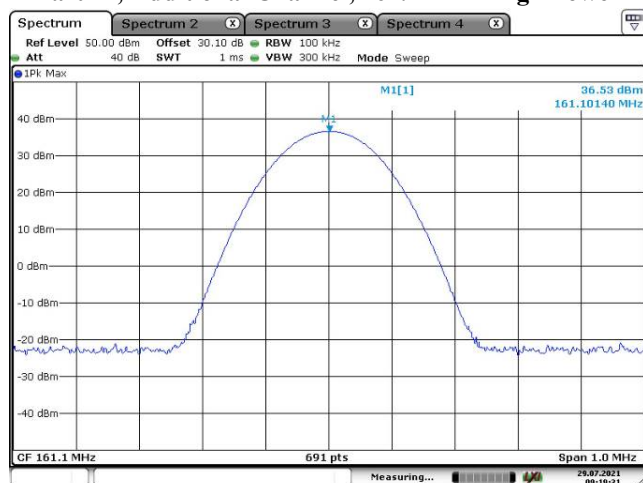


Part 22, Additional Channel, 150.8125 MHz High Power

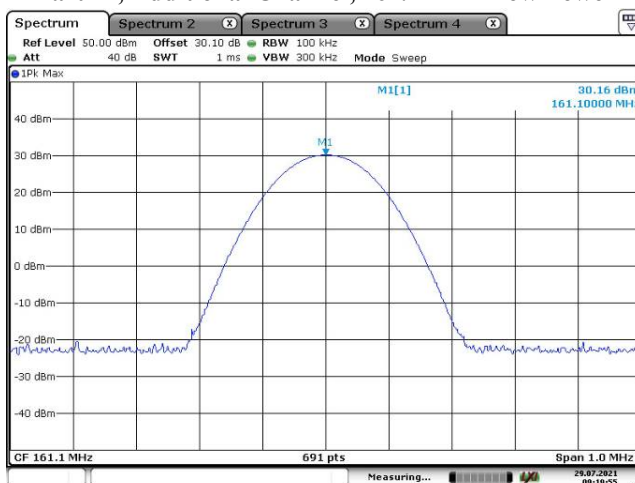


Part 22, Additional Channel, 150.8125 MHz Low Power

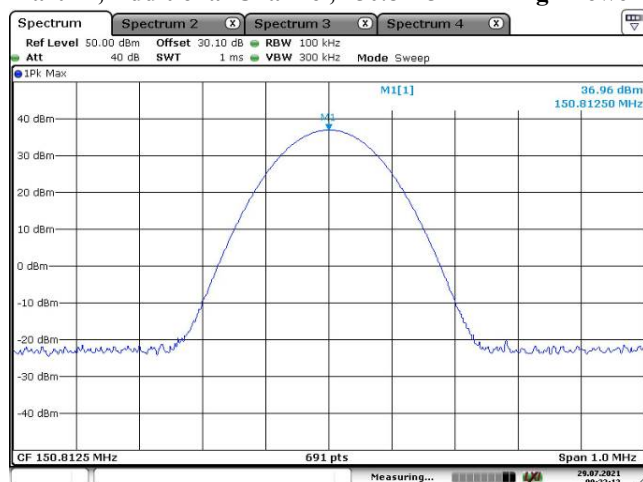


Part 74, Additional Channel, 161.1 MHz High Power

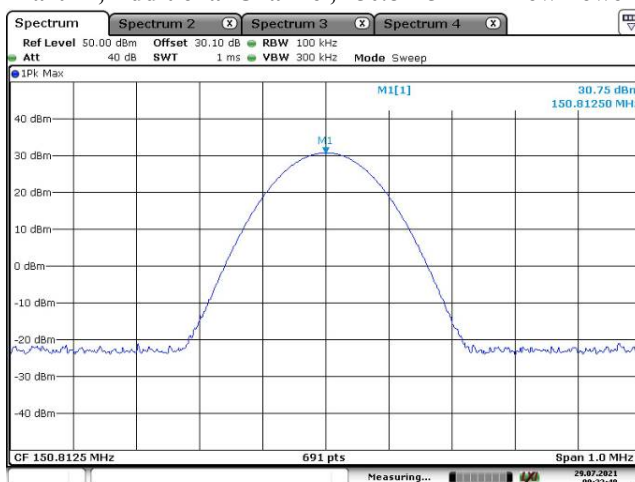
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Part 74, Additional Channel, 161.1 MHz Low Power

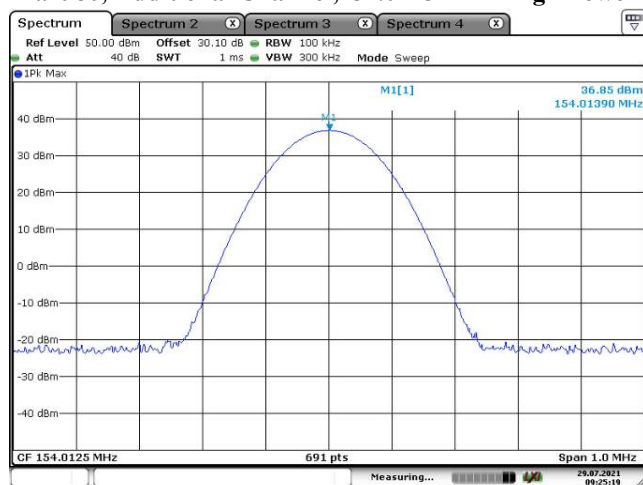
Date: 29.JUL.2021 09:19:55

FM, 25kHz:**Part 22, Additional Channel, 150.8125 MHz High Power**

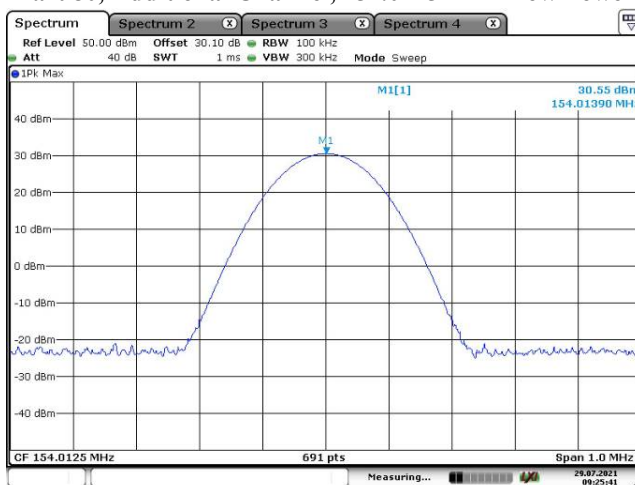
Date: 29.JUL.2021 09:22:13

Part 22, Additional Channel, 150.8125 MHz Low Power

Date: 29.JUL.2021 09:22:50

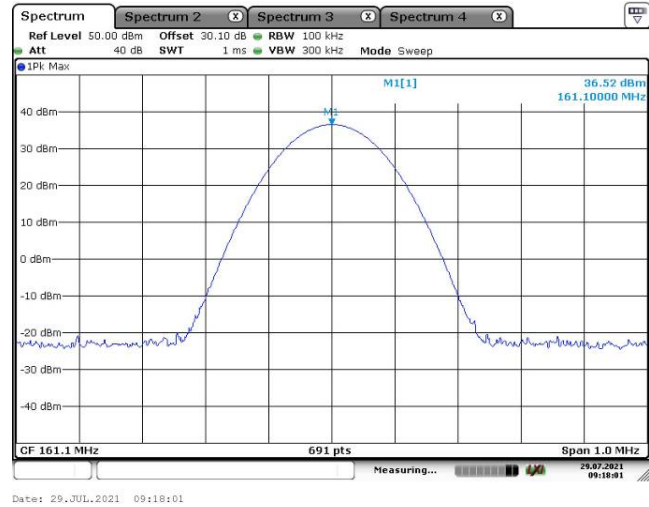
Part 80, Additional Channel, 154.0125 MHz High Power

Date: 29.JUL.2021 09:25:20

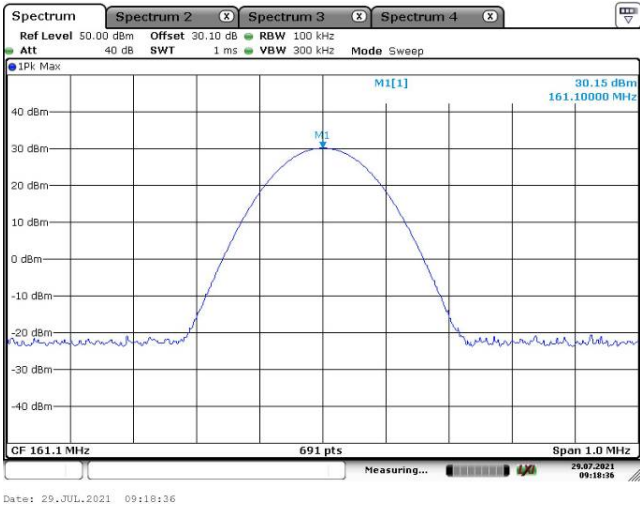
Part 80, Additional Channel, 154.0125 MHz Low Power

Date: 29.JUL.2021 09:25:41

Part 74, Additional Channel, 161.1 MHz High Power



Part 74, Additional Channel, 161.1 MHz Low Power



3 - MODULATION CHARACTERISTIC

Applicable Standard

FCC §2.1047

- (a) Equipment which utilizes voice modulated communication shall show the frequency response of the audio modulating circuit over a range of 100 to 5000 Hz. for equipment which is required to have a low pass filter, the frequency response of the filter, or all of the circuitry installed between the modulation limited and the modulated stage shall be supplied.
- (b) Equipment which employs modulation limiting, a curve showing the percentage of modulation versus the modulation input voltage shall be supplied.

Test Procedure

Test Method: TIA-603-E 2.2.3

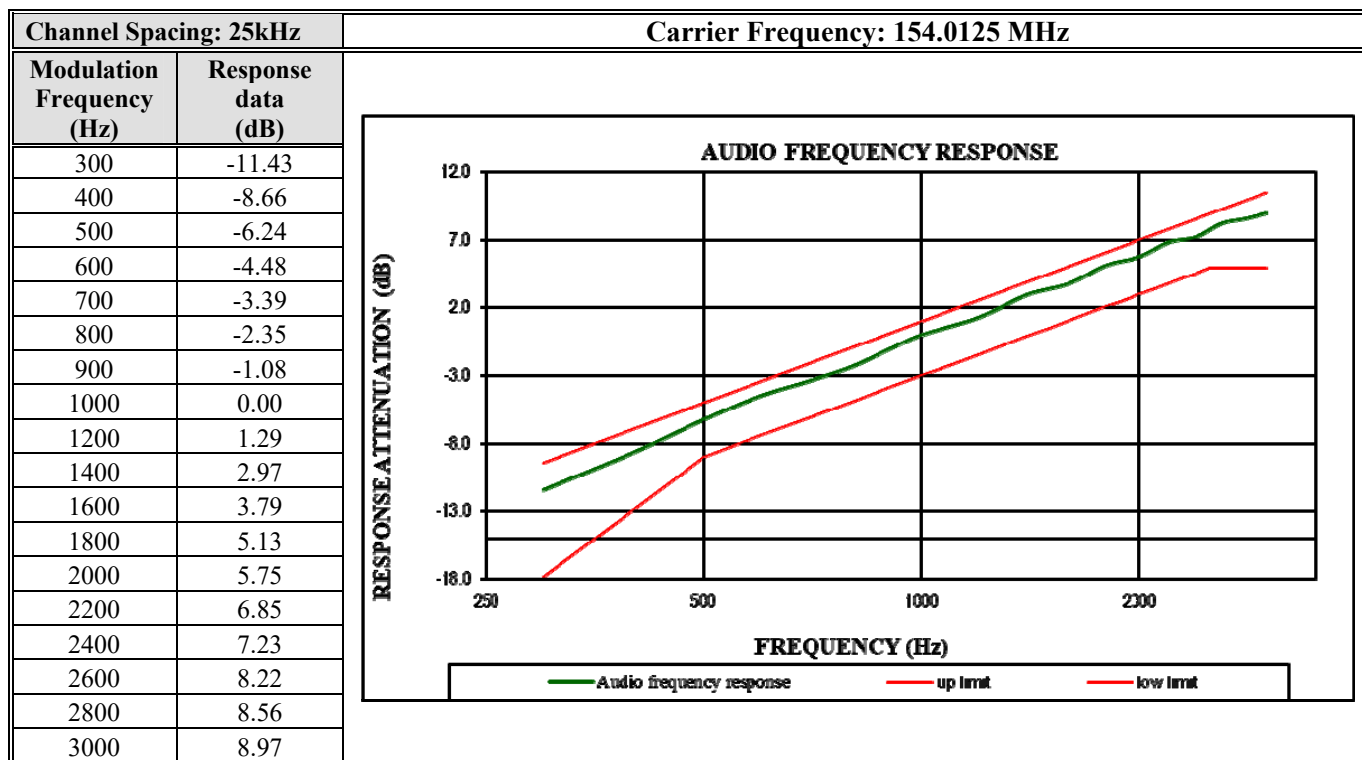
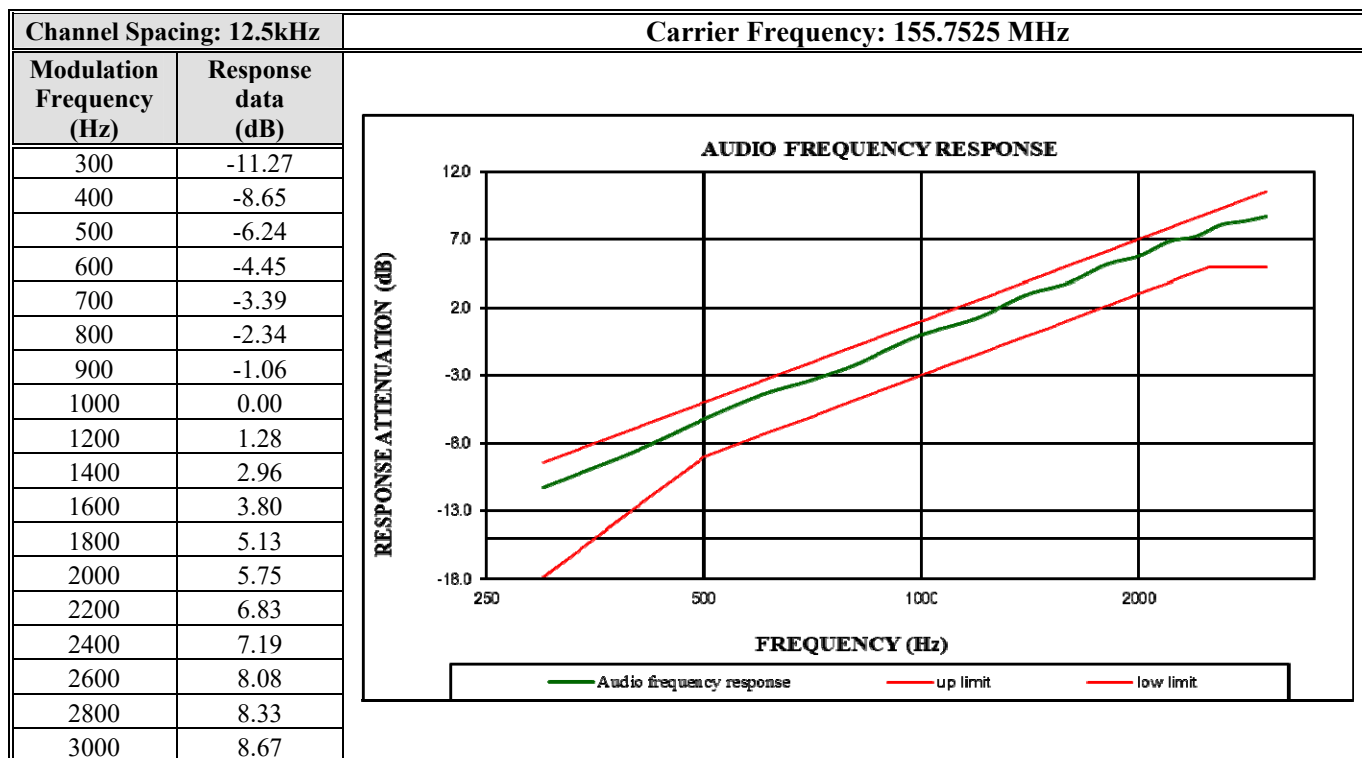
Test Data

Test Mode: Transmitting

Test Result: Compliance.

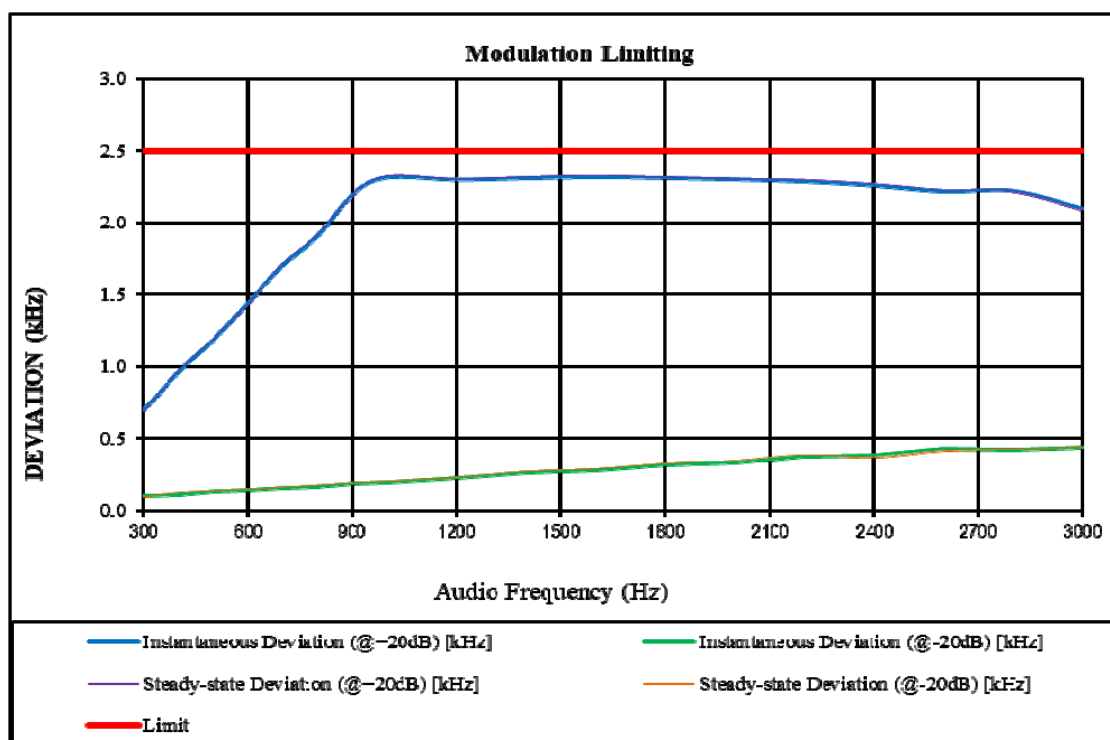
Please refer to the following tables and plots.

Audio Frequency Response – High Power

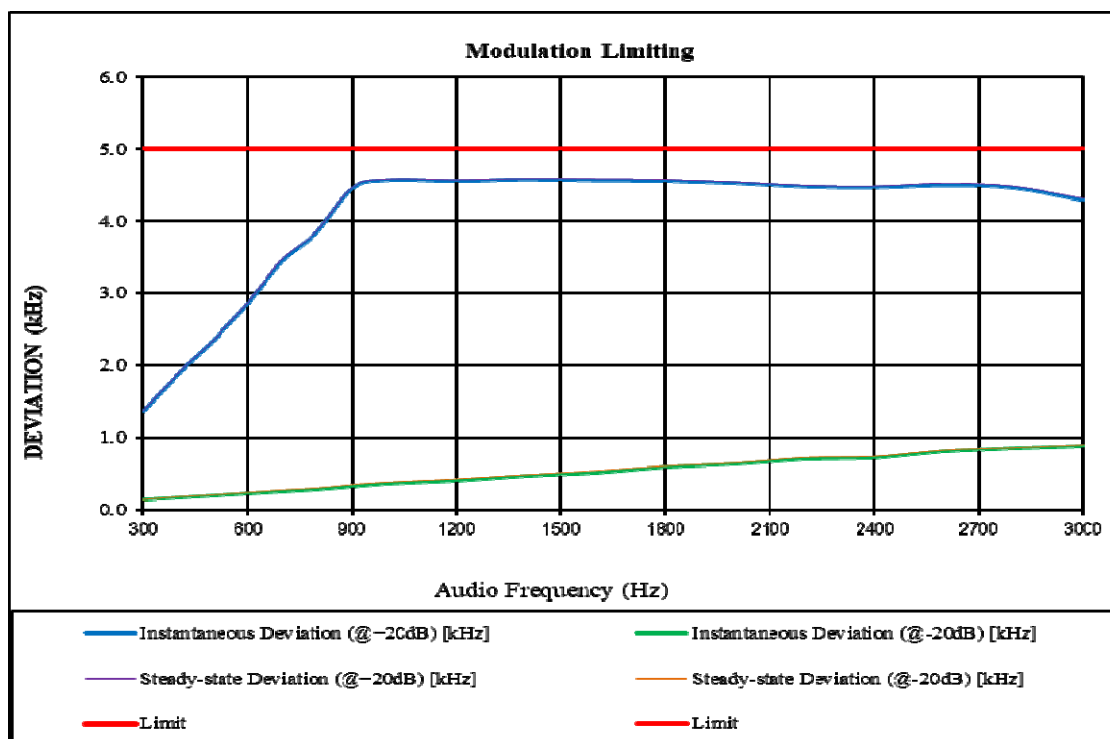


Modulation Limiting – High Power

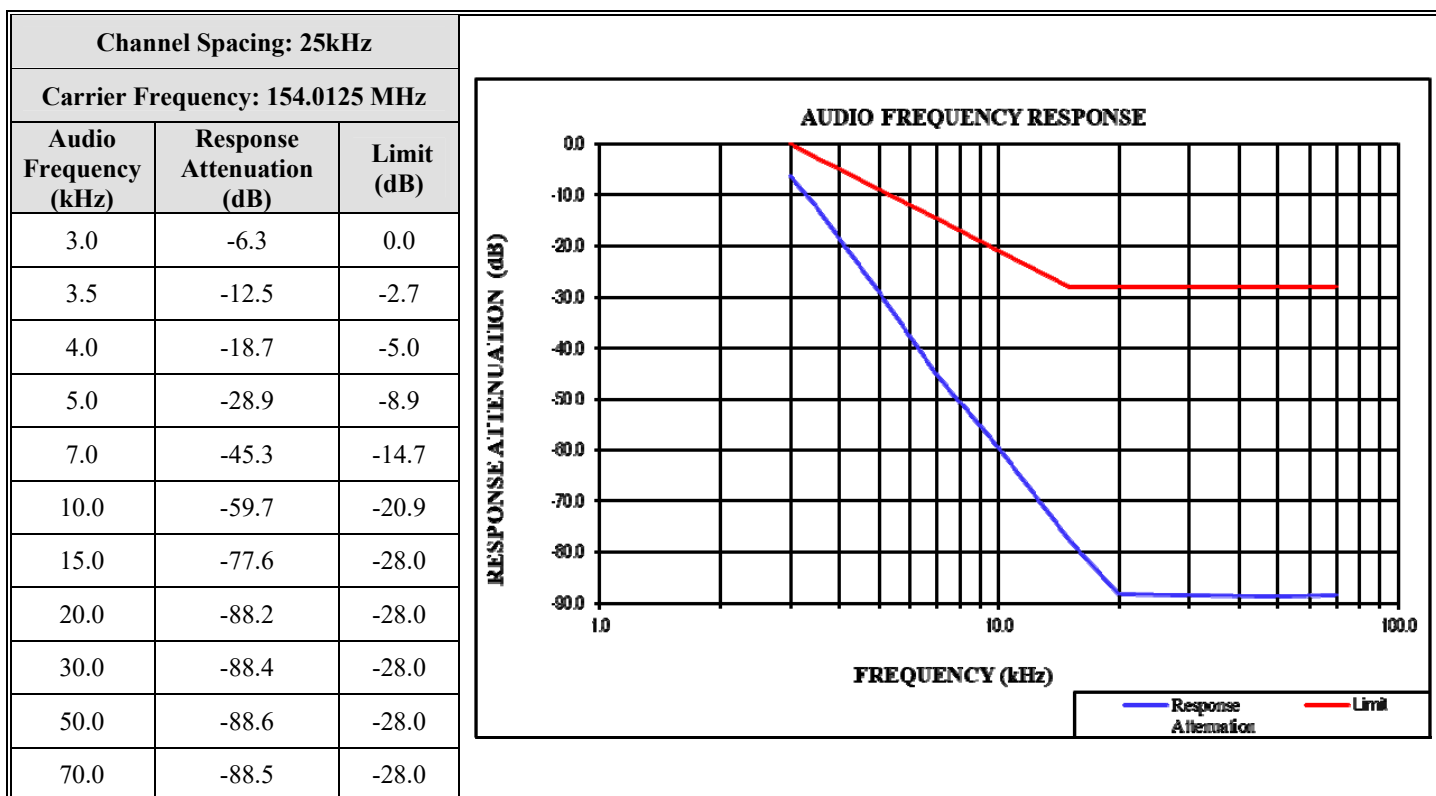
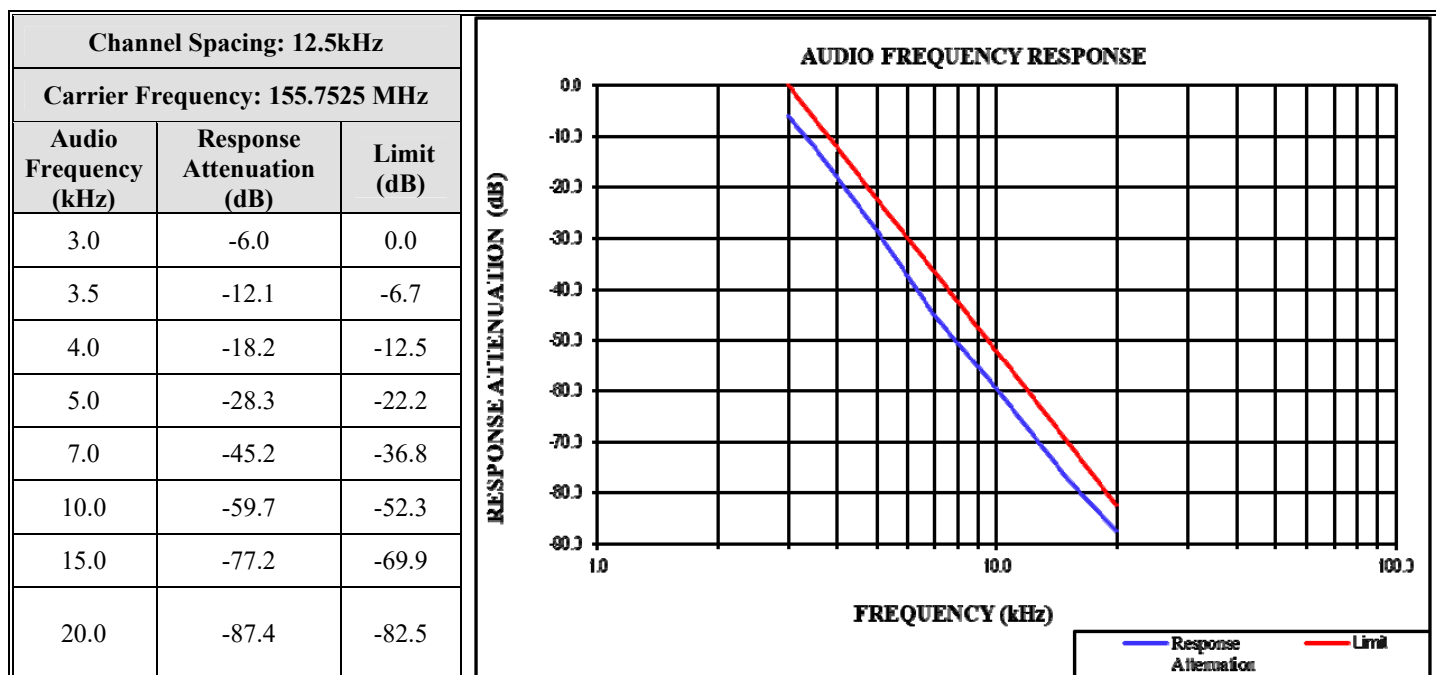
Channel Spacing: 12.5kHz		Carrier Frequency: 155.7525 MHz			
Audio Frequency (Hz)	Instantaneous		Steady-state		Limit [kHz]
	Deviation (@+20dB) [kHz]	Deviation (@-20dB) [kHz]	Deviation (@+20dB) [kHz]	Deviation (@-20dB) [kHz]	
300	0.693	0.098	0.684	0.089	2.5
400	0.958	0.110	0.963	0.123	2.5
500	1.184	0.129	1.186	0.132	2.5
600	1.436	0.137	1.425	0.143	2.5
700	1.703	0.151	1.713	0.156	2.5
800	1.902	0.165	1.913	0.173	2.5
900	2.191	0.183	2.184	0.186	2.5
1000	2.312	0.193	2.323	0.198	2.5
1200	2.297	0.219	2.299	0.223	2.5
1400	2.307	0.259	2.316	0.268	2.5
1600	2.315	0.279	2.326	0.286	2.5
1800	2.309	0.313	2.312	0.323	2.5
2000	2.299	0.333	2.301	0.346	2.5
2200	2.284	0.374	2.296	0.386	2.5
2400	2.256	0.384	2.268	0.367	2.5
2600	2.215	0.425	2.226	0.413	2.5
2800	2.220	0.418	2.214	0.423	2.5
3000	2.098	0.440	2.084	0.436	2.5



Channel Spacing: 25kHz		Carrier Frequency: 154.0125 MHz			
Audio Frequency (Hz)	Instantaneous		Steady-state		Limit [kHz]
	Deviation (@+20dB) [kHz]	Deviation (@-20dB) [kHz]	Deviation (@+20dB) [kHz]	Deviation (@-20dB) [kHz]	
300	1.359	0.142	1.368	0.135	5
400	1.874	0.163	1.884	0.173	5
500	2.338	0.193	2.342	0.198	5
600	2.856	0.225	2.869	0.231	5
700	3.447	0.255	3.468	0.268	5
800	3.851	0.281	3.862	0.294	5
900	4.452	0.324	4.463	0.342	5
1000	4.568	0.361	4.576	0.376	5
1200	4.556	0.402	4.568	0.423	5
1400	4.577	0.465	4.583	0.478	5
1600	4.564	0.516	4.582	0.536	5
1800	4.557	0.595	4.573	0.602	5
2000	4.529	0.631	4.538	0.645	5
2200	4.480	0.706	4.492	0.721	5
2400	4.467	0.719	4.482	0.736	5
2600	4.496	0.808	4.521	0.821	5
2800	4.463	0.849	4.482	0.853	5
3000	4.289	0.874	4.312	0.892	5



Audio Frequency Low Pass Filter Response – High Power



4 – OCCUPIED BANDWIDTH & EMISSION MASK

Applicable Standard

FCC §2.1049, §22.357, § 22.731, §74.462, §80.205, §80.207, §90.209 and §90.210

Test Procedure

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

The resolution bandwidth of the spectrum analyzer was set at 100 Hz or 300 Hz and the spectrum was recorded in the frequency band ± 50 kHz from the carrier frequency.

Test Data

Test Mode: Transmitting

Test Result: Compliance. Please refer to following table and plots.

Test Mode	Test Channel	Test Frequency (MHz)	High Power Level		Low Power Level		Note
			99% Occupied Bandwidth (kHz)	26dB Emission Bandwidth (kHz)	99% Occupied Bandwidth (kHz)	26dB Emission Bandwidth (kHz)	
FM 12.5kHz	Low	136.0125	9.986	10.275	9.986	10.347	FCC
	Middle	155.7525	9.913	10.275	9.913	10.347	Part 90
	High	173.9875	9.986	10.275	9.986	10.275	Part 90
	Additional	150.8125	9.913	10.275	9.913	10.347	Part 22
	Additional	161.1	9.913	10.347	9.986	10.347	Part 74
4FSK 12.5kHz	Low	136.0125	7.019	9.262	7.091	9.479	FCC
	Middle	155.7525	7.308	9.551	7.236	9.841	Part 90
	High	173.9875	7.742	9.551	7.308	9.262	Part 90
	Additional	150.8125	7.525	9.768	7.308	9.696	Part 22
	Additional	161.1	7.381	9.768	7.381	9.262	Part 74
FM 25kHz	Additional	150.8125	14.906	15.920	14.906	15.920	Part 22
	Additional	154.0125	14.906	15.770	15.051	15.920	Part 74
	Additional	161.1	14.906	15.920	14.906	15.920	Part 80

Note: Emission bandwidth was based on calculation method instead of measurement.

Emission Designator: Per CFR 47 §2.201& §2.202, $BW = 2M + 2D$

For FM Mode (Channel Spacing: 12.5 kHz)

Emission Designator: 11K0F3E

In this case, the maximum modulating frequency is 3.0 kHz with a 2.5 kHz deviation.

$$BW = 2(M+D) = 2*(3.0 \text{ kHz} + 2.5 \text{ kHz}) = 11 \text{ kHz} = 11K0$$

F3E portion of the designator represents an FM voice transmission

Therefore, the entire designator for 12.5 kHz channel spacing FM mode is 11K0F3E.

For FM Mode (Channel Spacing: 25 kHz)

Emission Designator: 16K0F3E

In this case, the maximum modulating frequency is 3.0 kHz with a 5.0 kHz deviation.

$$BW = 2(M+D) = 2*(3.0 \text{ kHz} + 5.0 \text{ kHz}) = 16 \text{ kHz} = 16K0$$

F3E portion of the designator represents an FM voice transmission

Therefore, the entire designator for 25 kHz channel spacing FM mode is 16K0F3E.

For Digital Mode (Channel Spacing: 12.5 kHz)

Emission Designator: 7K60F1D and 7K60F1E

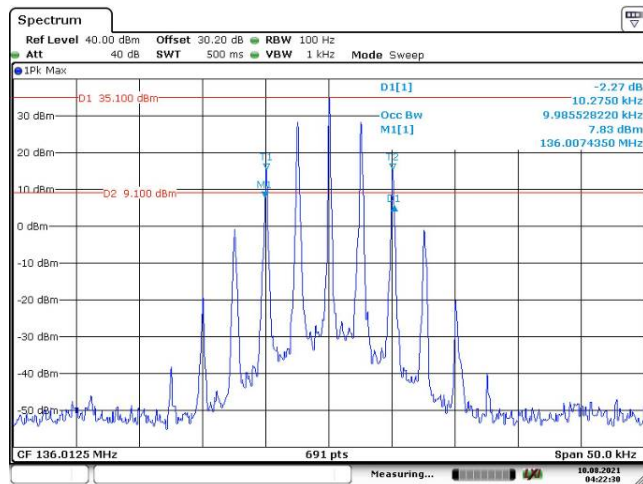
The 99% energy rule (title 47CFR 2.1049) was used for digital mode. It basically states that 99% of the modulation energy falls within X kHz, in this case, 7.60 kHz. The emission mask was obtained from 47CFR 90.210(d).

F1D and F1E portion of the designator indicates digital information.

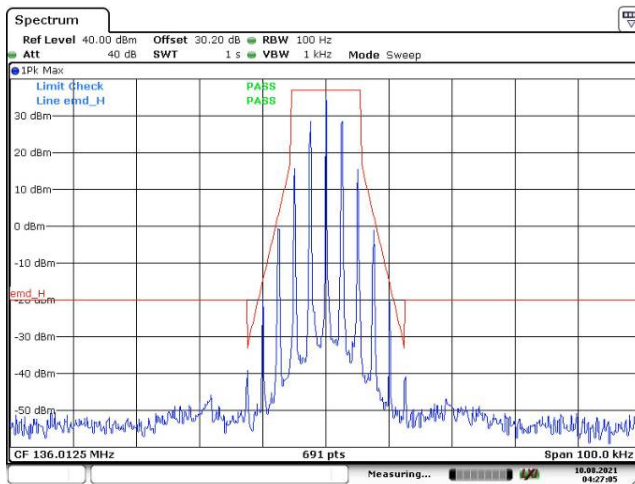
Therefore, the entire designator for 12.5 kHz channel spacing digital mode is 7K60F1D and 7K60F1E.

4FSK, 12.5kHz, High Power:

Low Channel

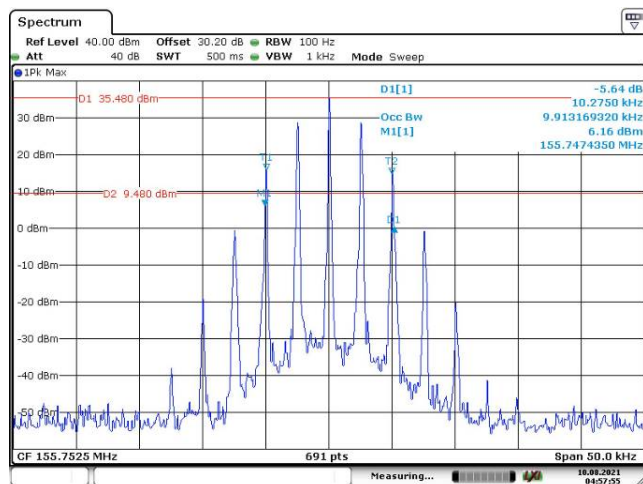


Date: 10.AUG.2021 04:22:30

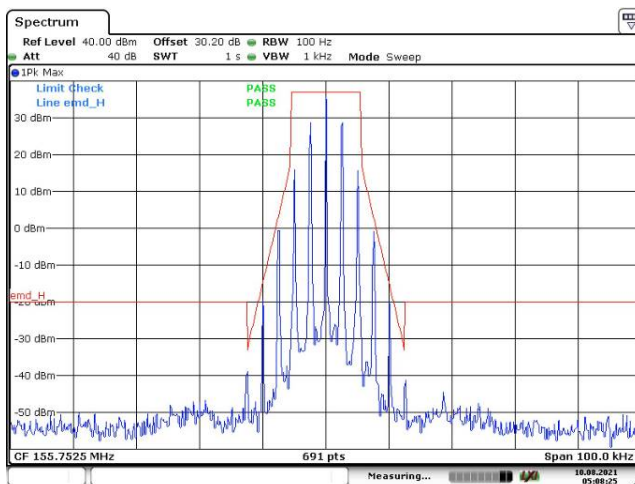


Date: 10.AUG.2021 04:27:05

Middle Channel

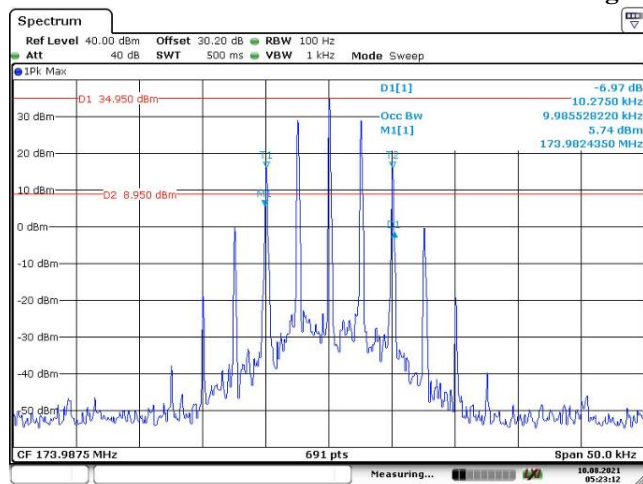


Date: 10.AUG.2021 04:57:55

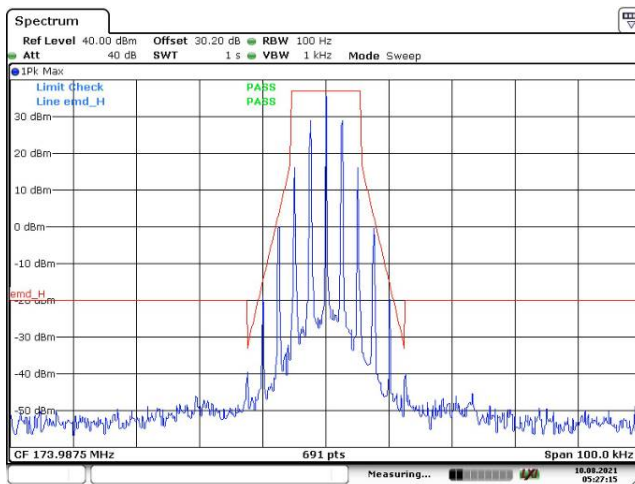


Date: 10.AUG.2021 05:08:26

High Channel

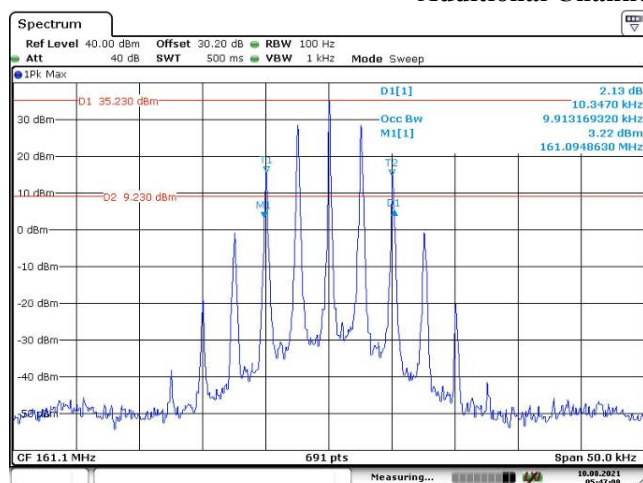


Date: 10.AUG.2021 05:23:12

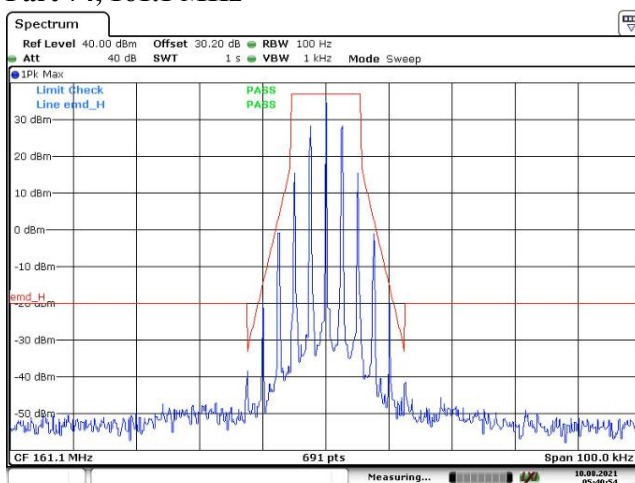


Date: 10.AUG.2021 05:27:16

Additional Channel Part 74, 161.1 MHz

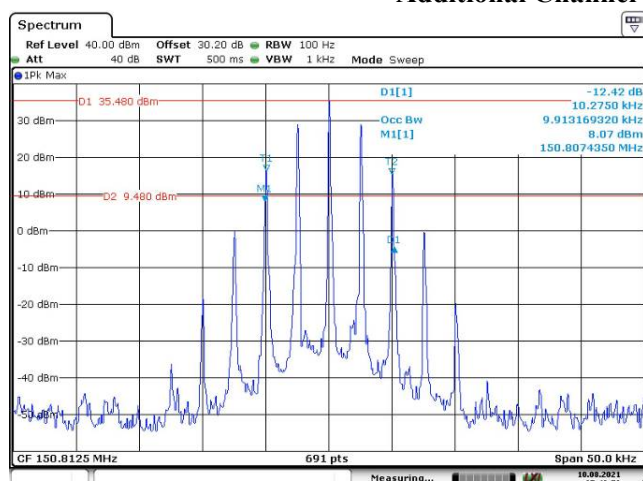


Date: 10.AUG.2021 05:47:10

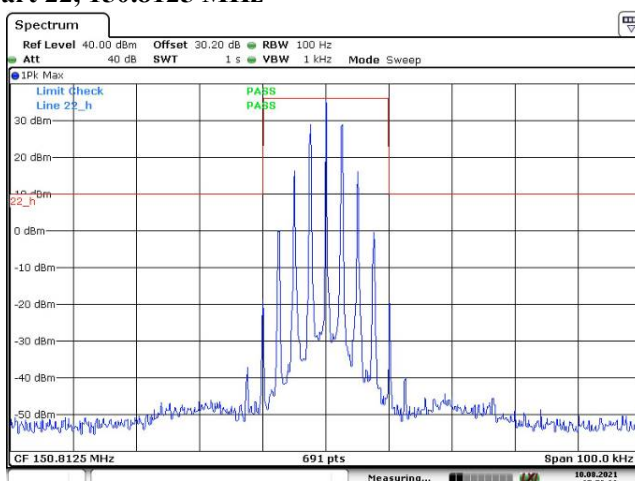


Date: 10.AUG.2021 05:40:54

Additional Channel Part 22, 150.8125 MHz



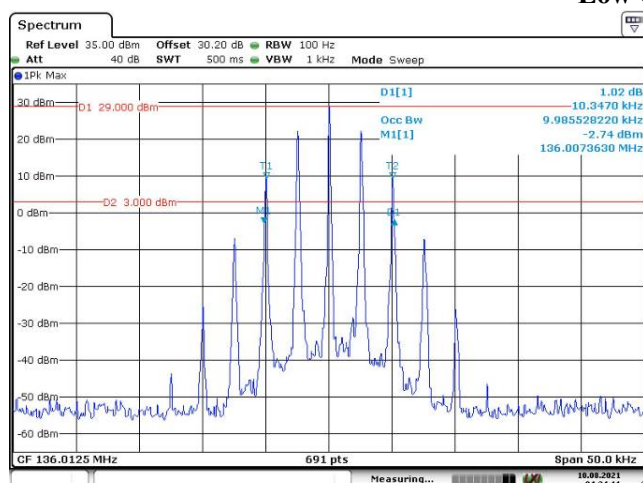
Date: 10.AUG.2021 07:48:50



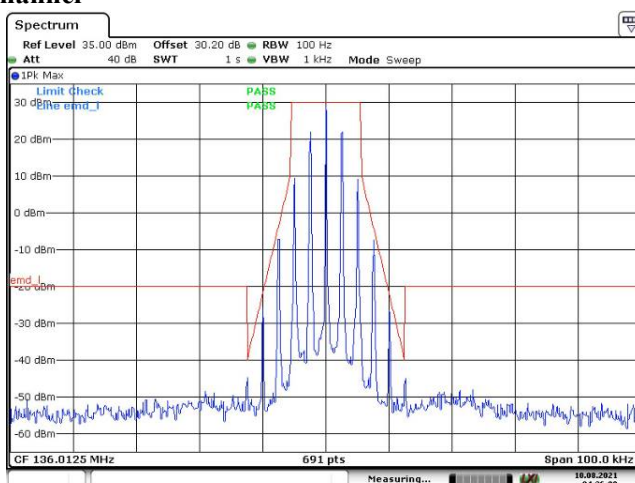
Date: 10.AUG.2021 07:56:32

4FSK, 12.5kHz, Low Power:

Low Channel

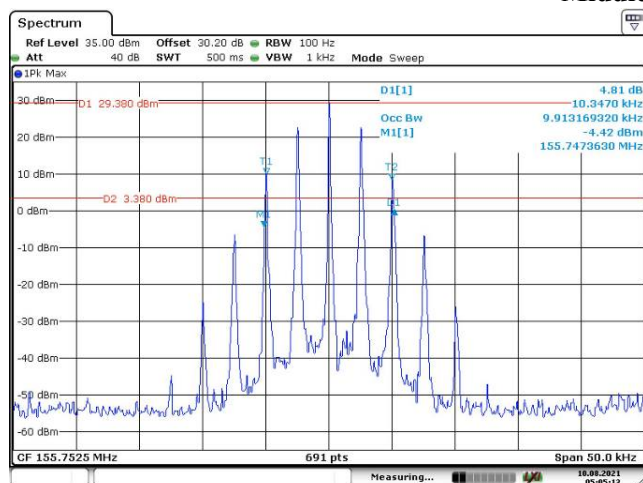


Date: 10.AUG.2021 04:24:11

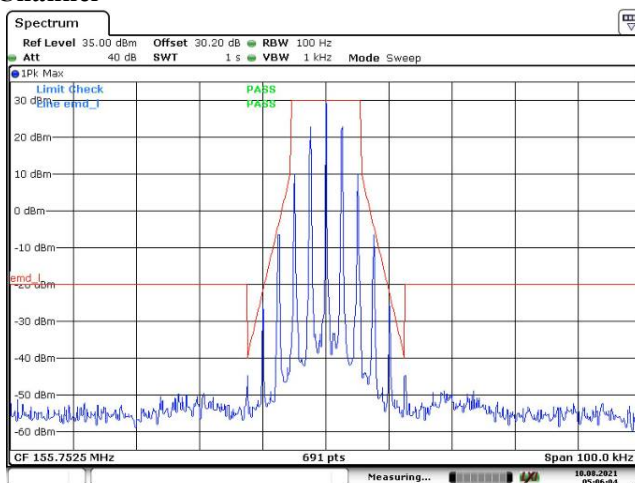


Date: 10.AUG.2021 04:26:09

Middle Channel

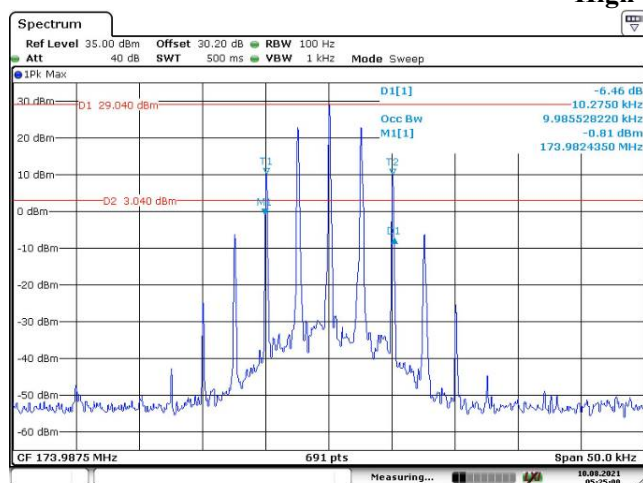


Date: 10.AUG.2021 05:05:13

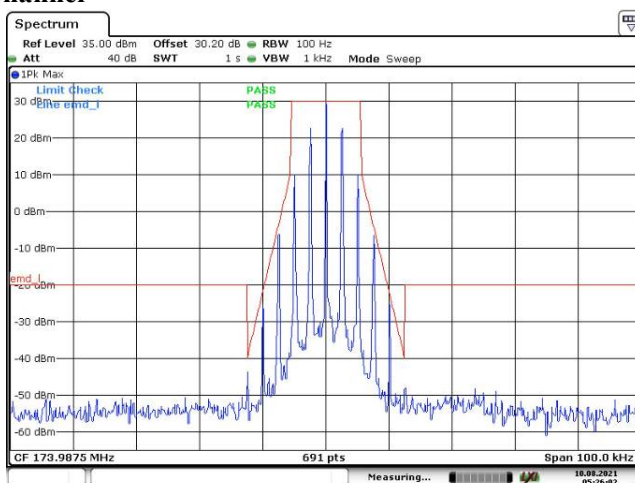


Date: 10.AUG.2021 05:06:04

High Channel

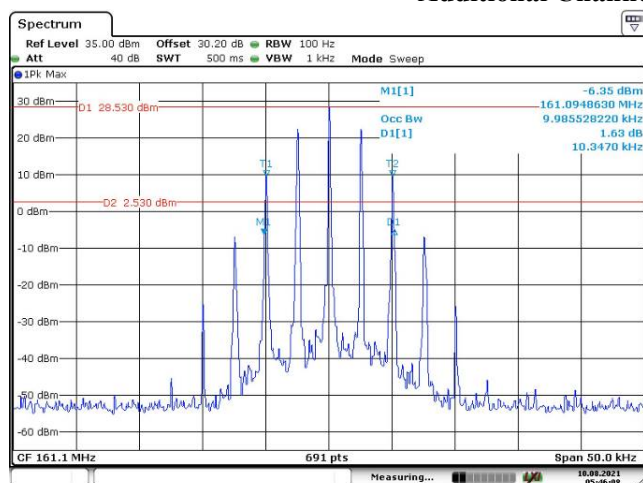


Date: 10.AUG.2021 05:25:01

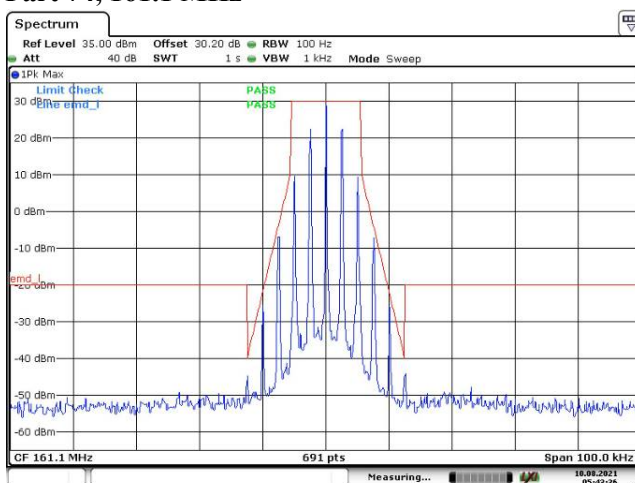


Date: 10.AUG.2021 05:26:03

Additional Channel Part 74, 161.1 MHz

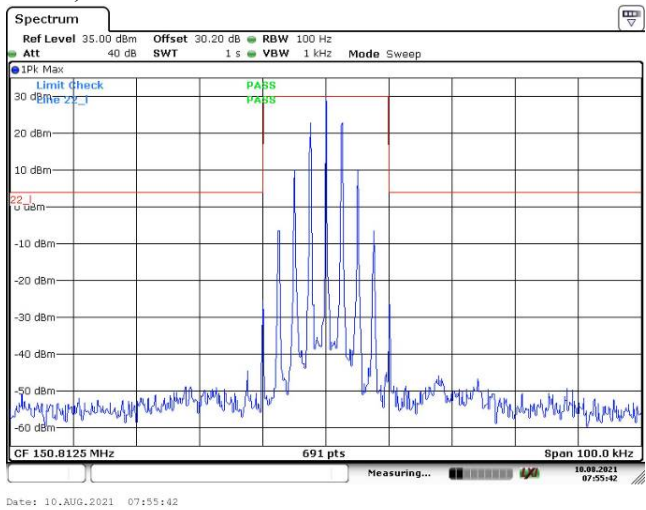
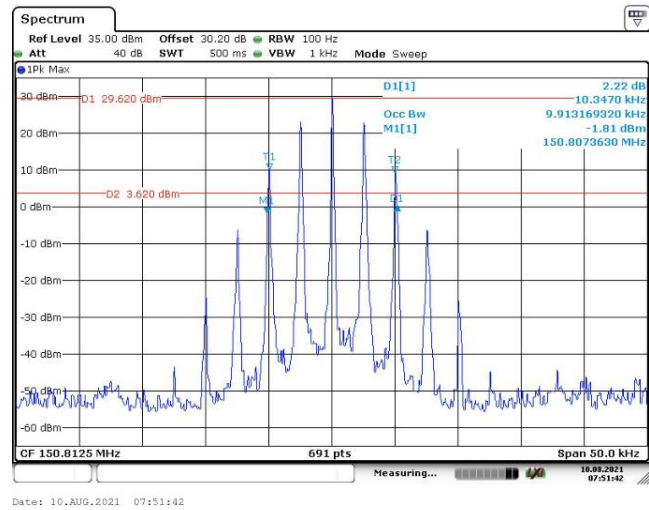


Date: 10.AUG.2021 05:46:09



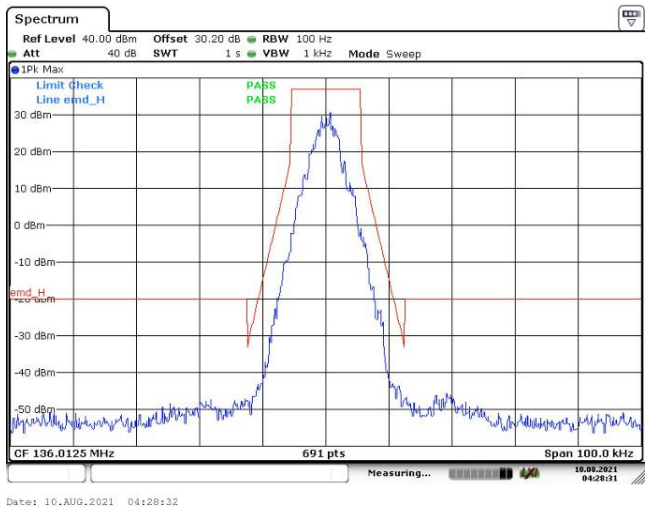
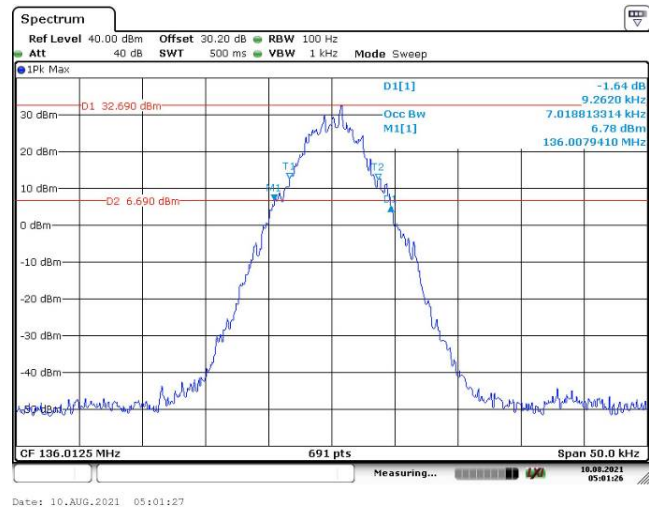
Date: 10.AUG.2021 05:43:37

Additional Channel Part 22, 150.8125 MHz

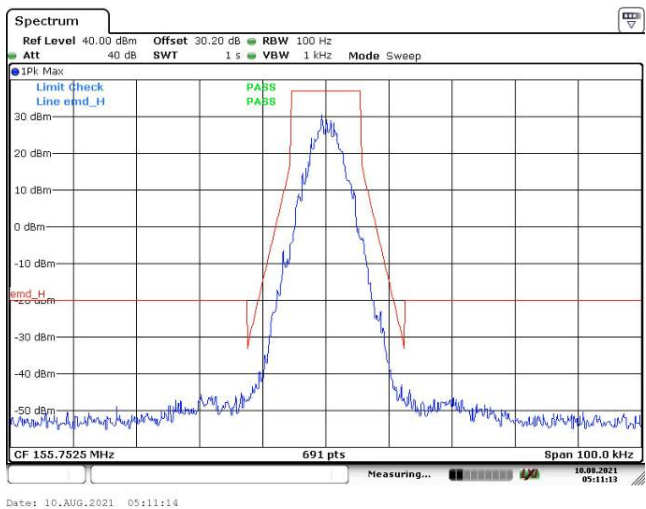
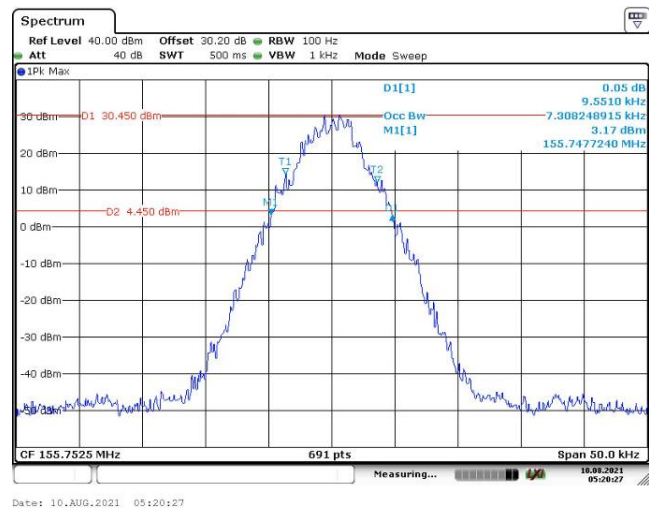


FM, 12.5kHz, High Power:

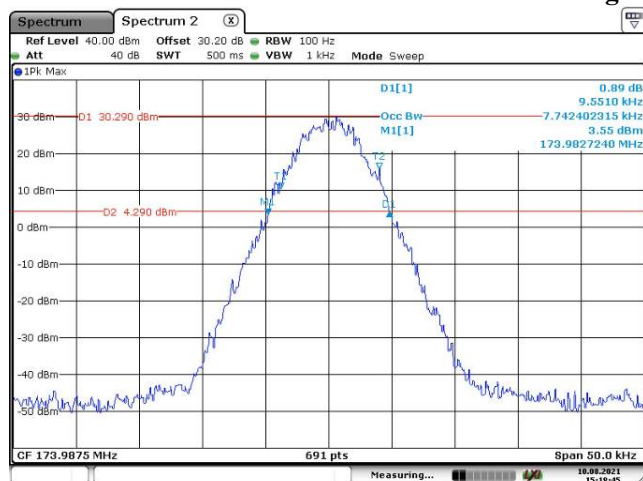
Low Channel



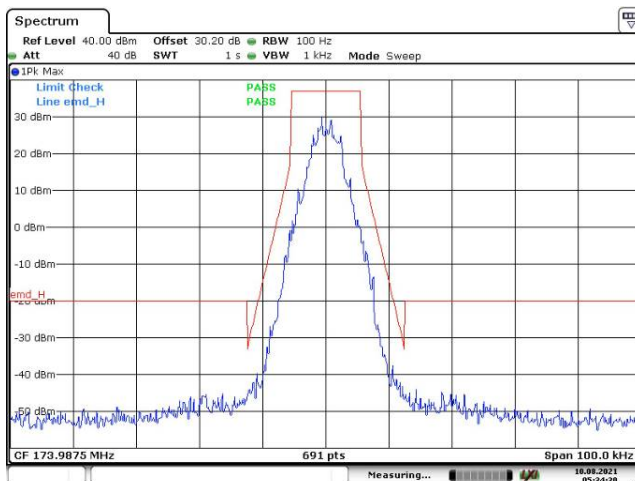
Middle Channel



High Channel

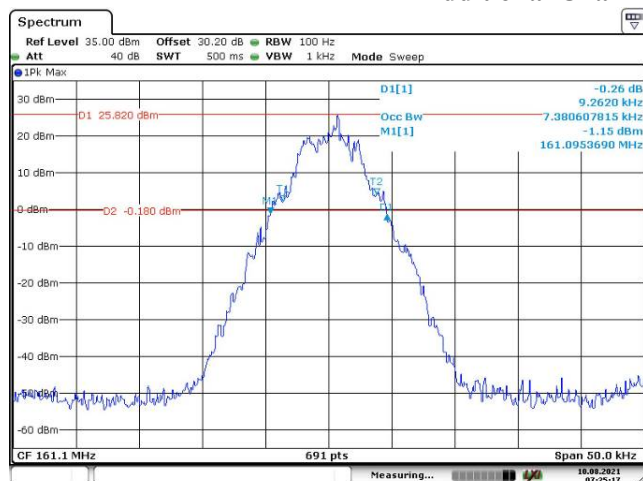


Date: 10.AUG.2021 15:18:46

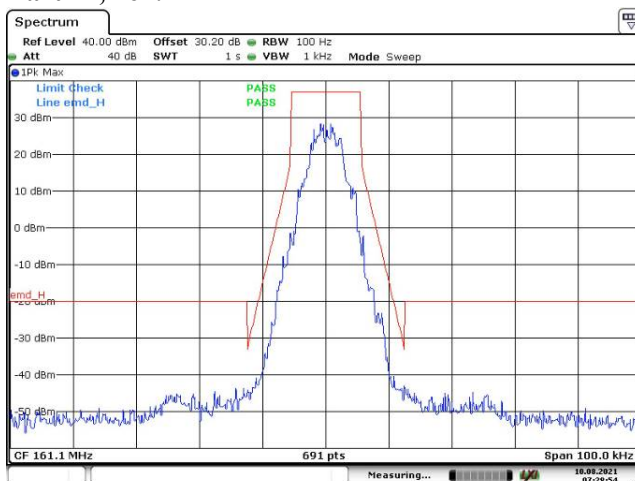


Date: 10.AUG.2021 05:34:30

Additional Channel Part 74, 161.1MHz

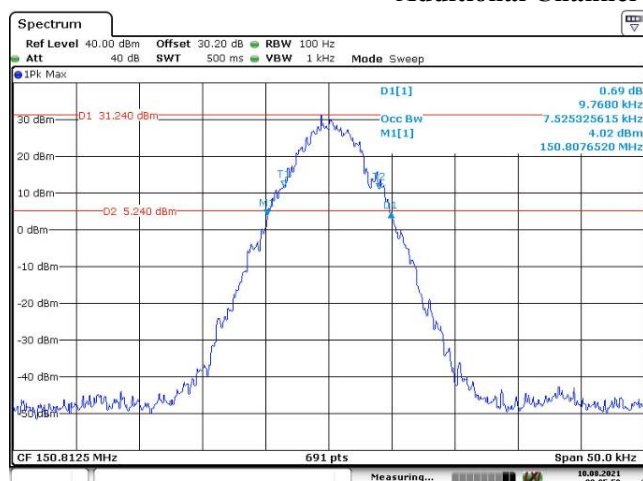


Date: 10.AUG.2021 07:25:18

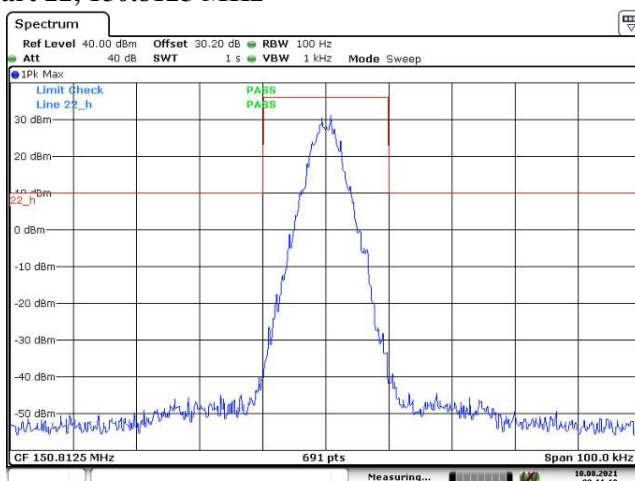


Date: 10.AUG.2021 07:28:54

Additional Channel Part 22, 150.8125 MHz



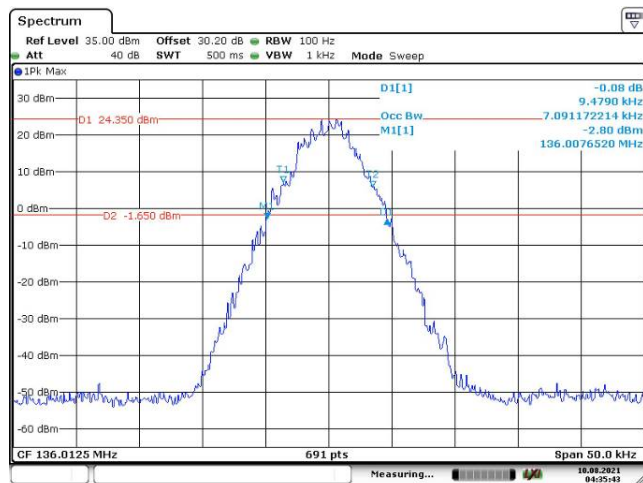
Date: 10.AUG.2021 08:05:58



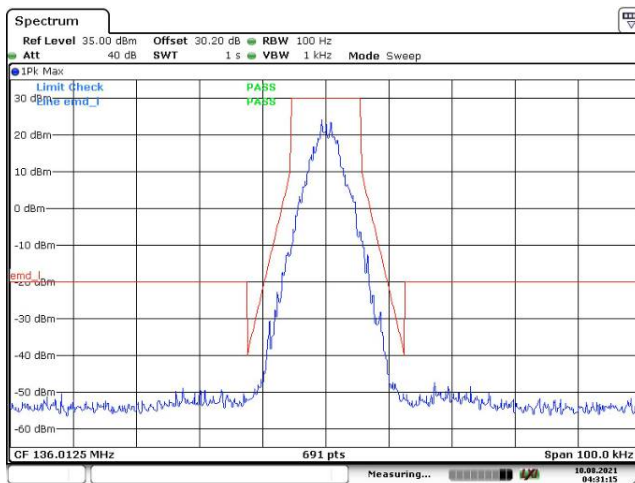
Date: 10.AUG.2021 08:11:18

FM, 12.5kHz, Low Power:

Low Channel

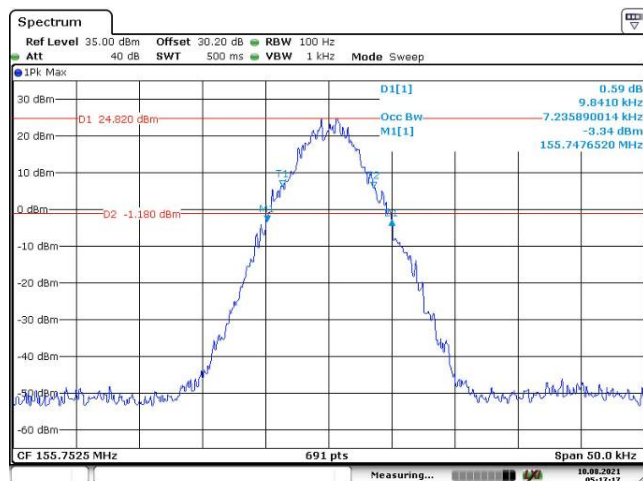


Date: 10.AUG.2021 04:35:44

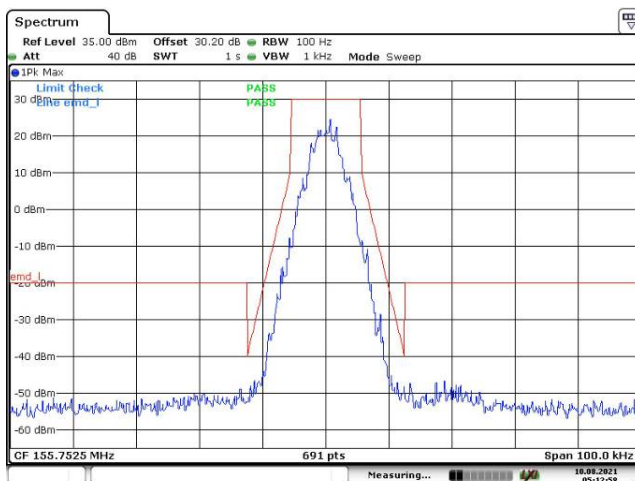


Date: 10.AUG.2021 04:31:15

Middle Channel

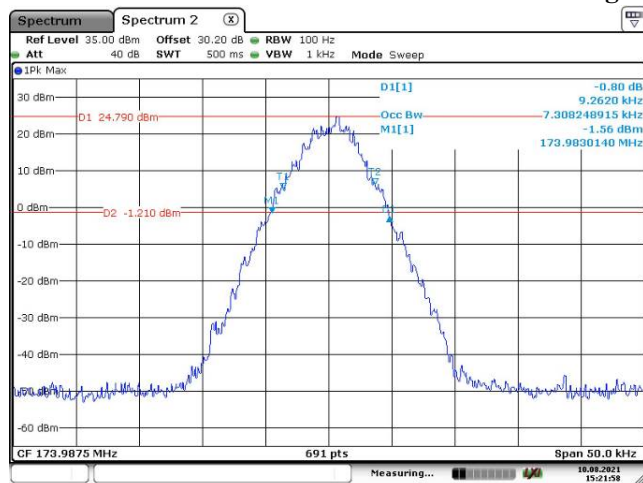


Date: 10.AUG.2021 05:17:18

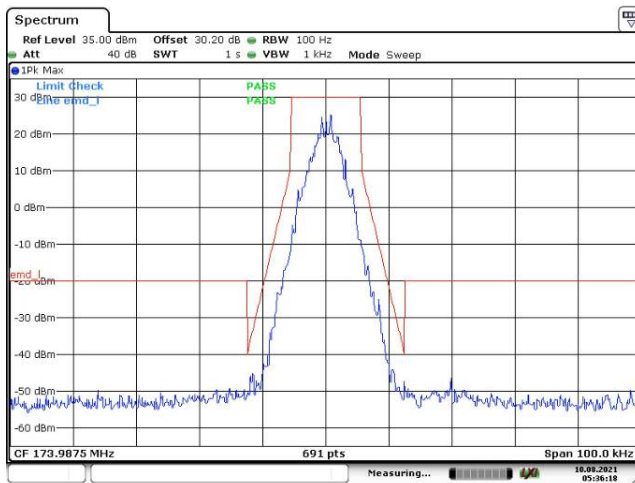


Date: 10.AUG.2021 05:12:58

High Channel

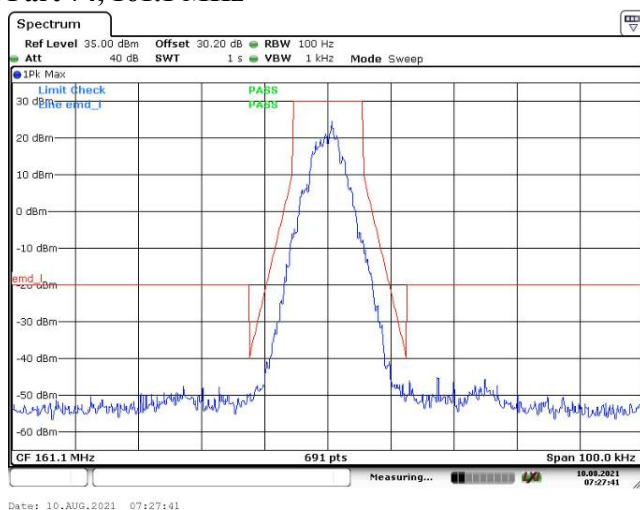
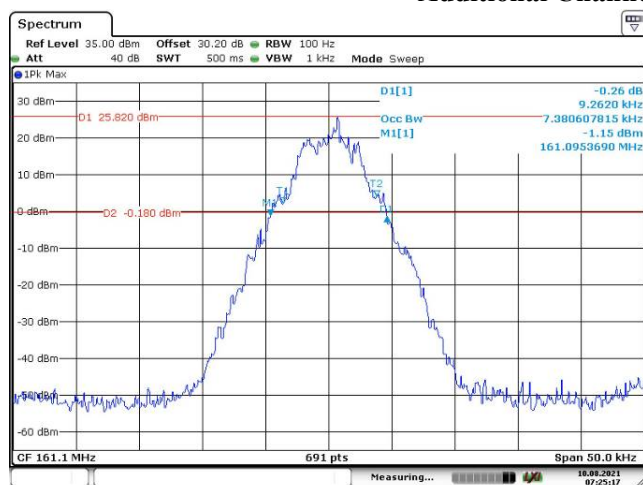


Date: 10.AUG.2021 15:21:58

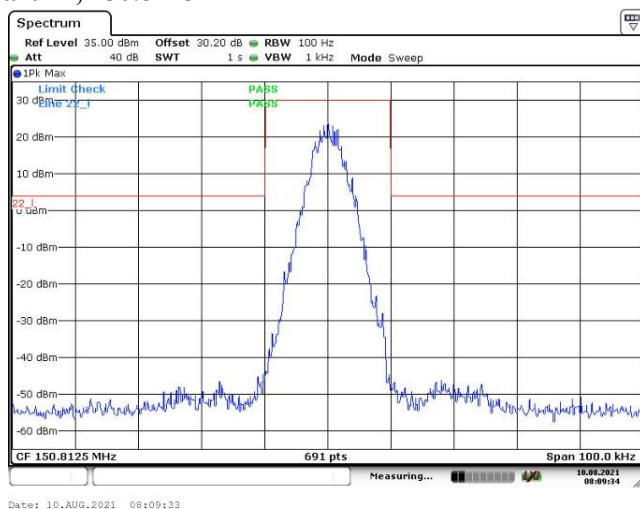
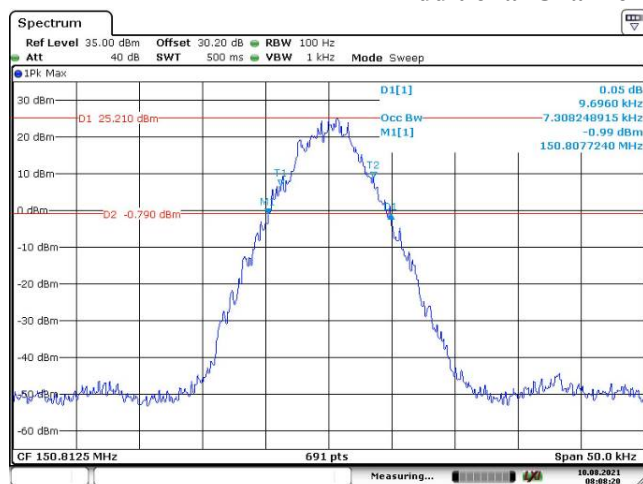


Date: 10.AUG.2021 05:36:19

Additional Channel Part 74, 161.1 MHz

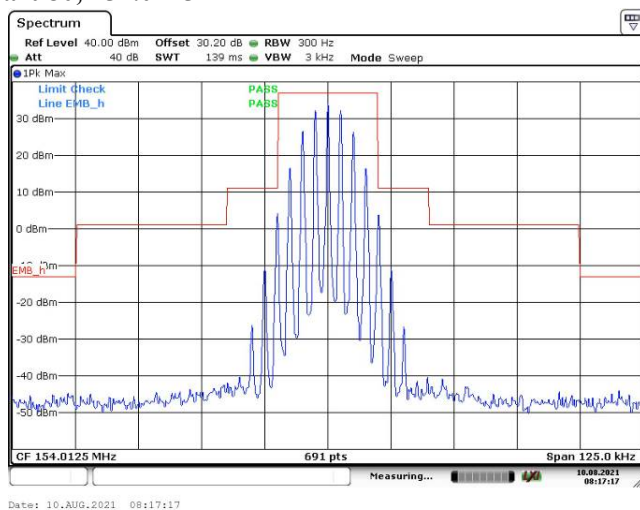
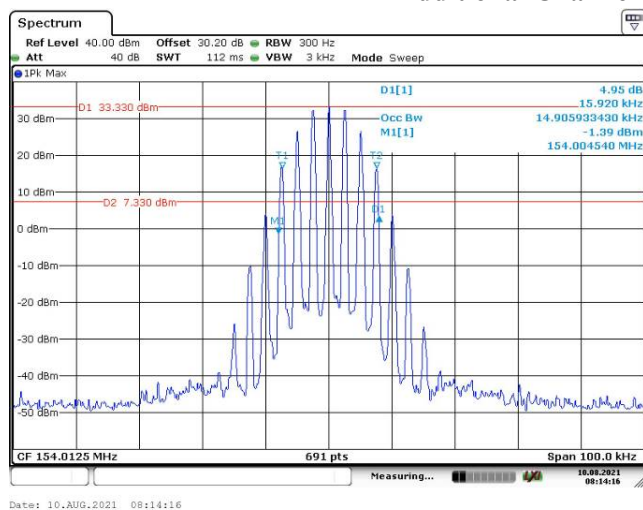


Additional Channel Part 22, 150.8125 MHz

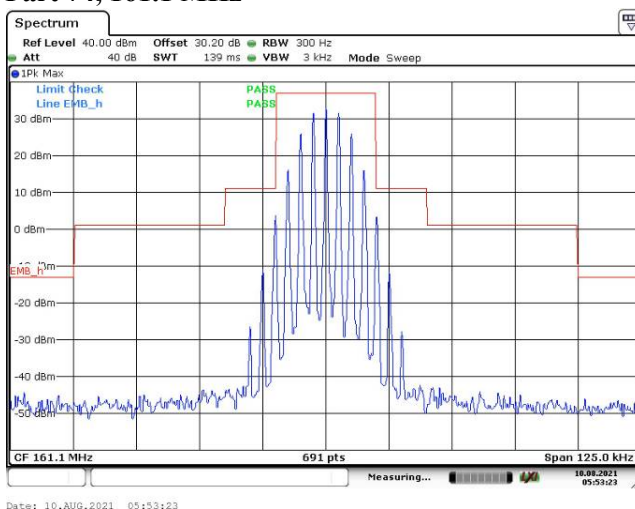
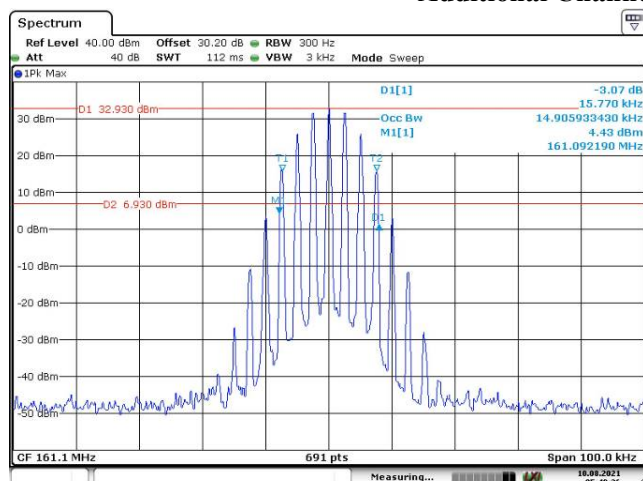


FM, 25 kHz, High Power:

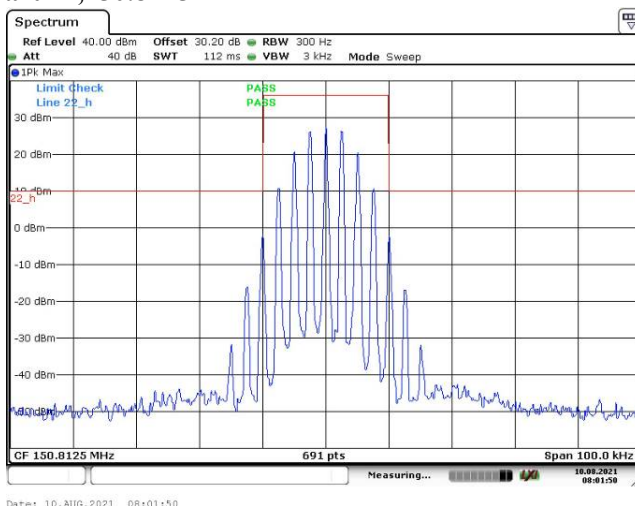
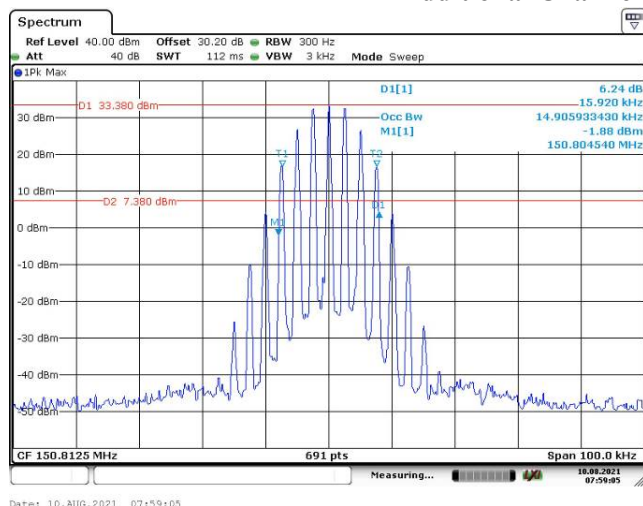
Additional Channel Part 80, 154.0125 MHz



Additional Channel Part 74, 161.1 MHz

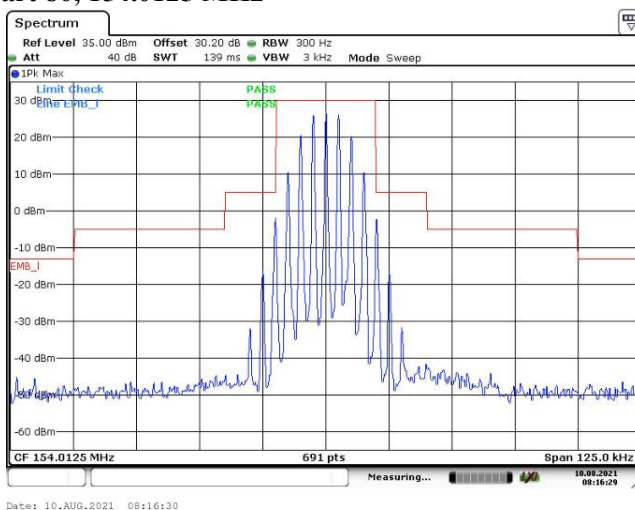
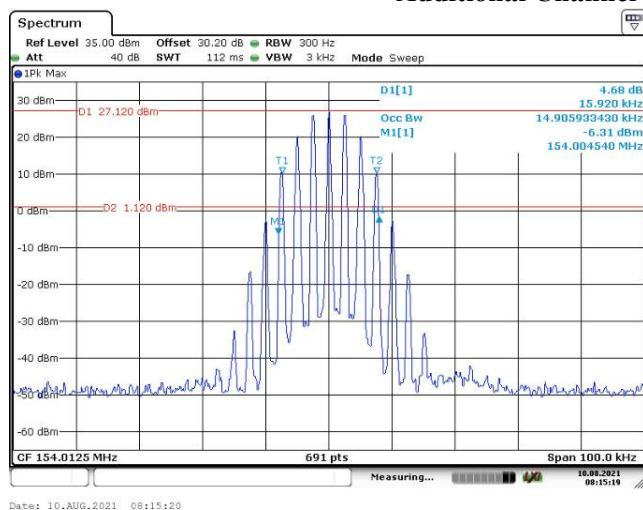


Additional Channel Part 22, 150.8125 MHz

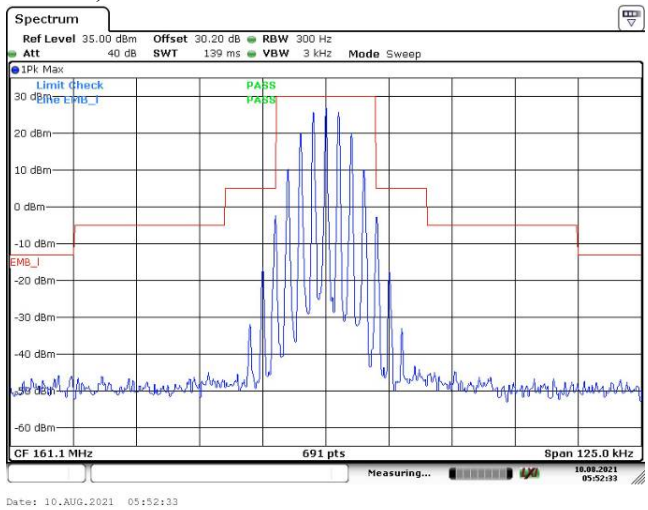
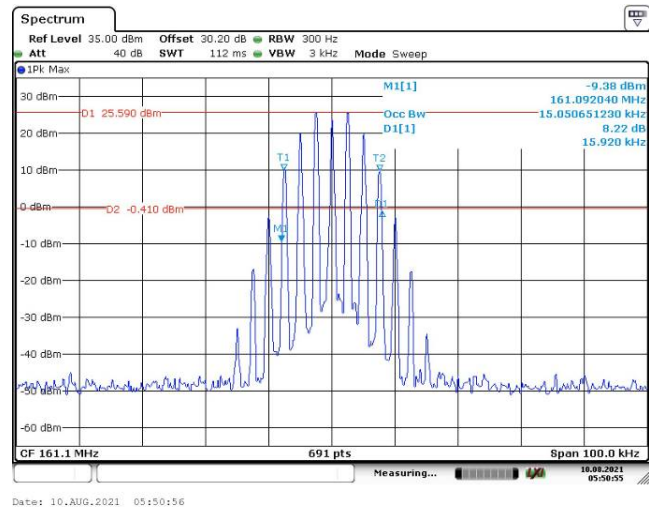


FM, 25 kHz, Low Power:

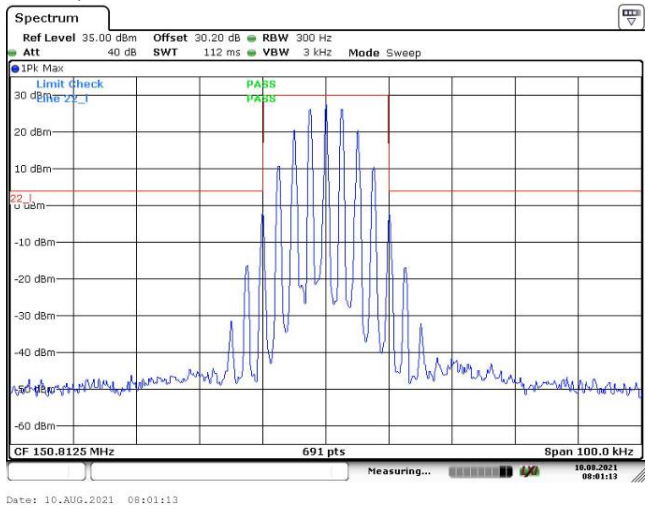
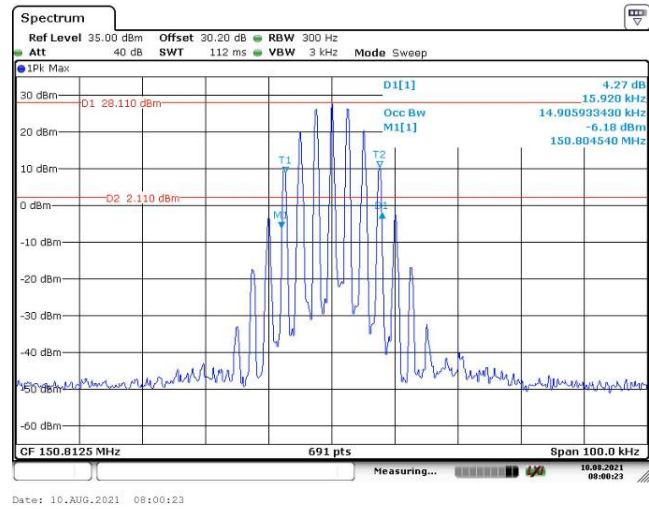
Additional Channel Part 80, 154.0125 MHz



Additional Channel Part 74, 161.1 MHz



Additional Channel Part 22,150.8125 MHz



5 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Applicable Standard

FCC §2.1051, §22.861, §74.462, §80.211, and §90.210

Test Procedure

The RF output of the EUT was connected to a spectrum analyzer through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 100kHz for below 1GHz, and 1MHz for above 1GHz. Sufficient scans were taken to show any out of band emissions up to 10th harmonic.

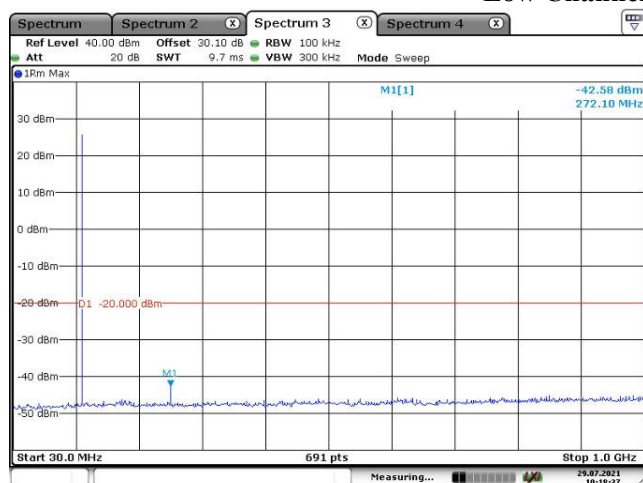
Test Data

Test Mode: Transmitting

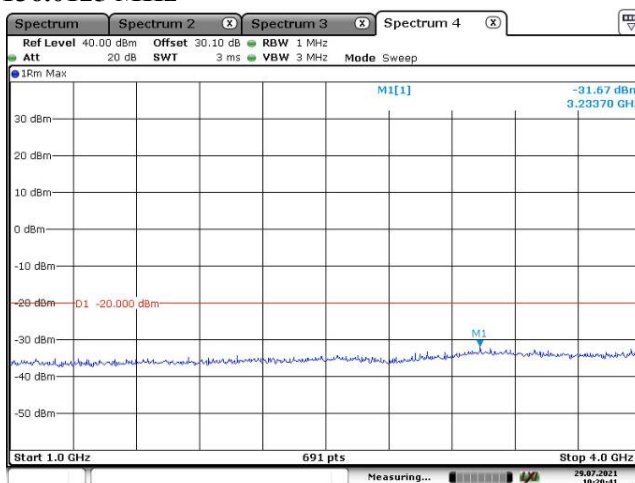
Test Result: Compliance. Test performed at high power level with Band Rejector Filter, *please refer to the following table.*

FM, 12.5kHz:

Low Channel, 136.0125 MHz

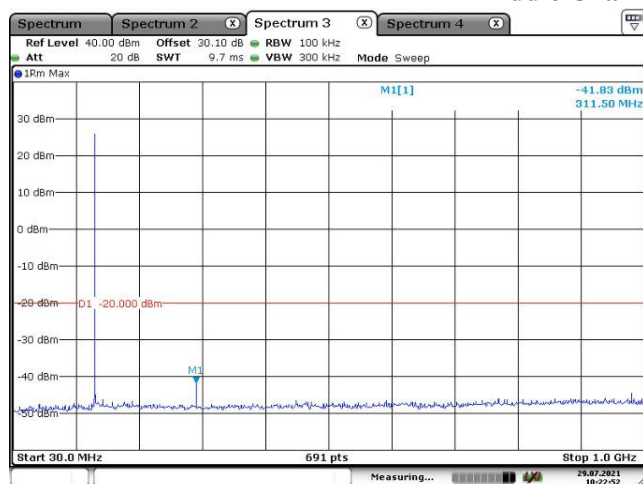


Date: 29.JUL.2021 10:18:37

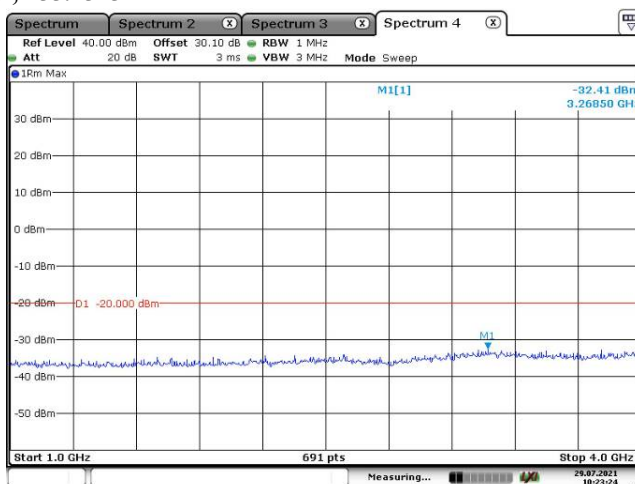


Date: 29.JUL.2021 10:20:41

Middle Channel, 155.7525 MHz

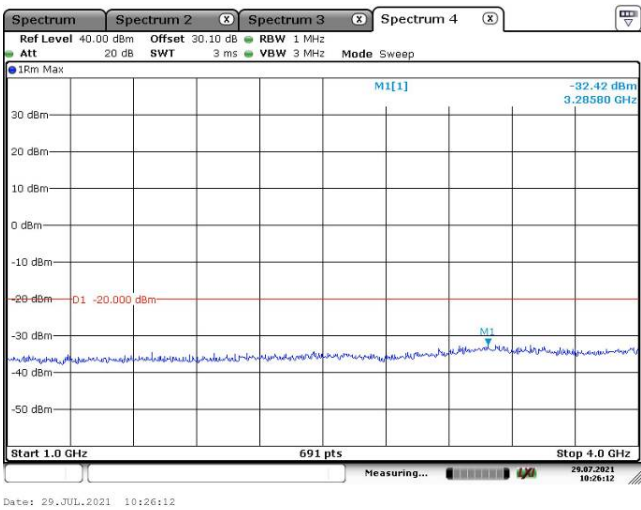
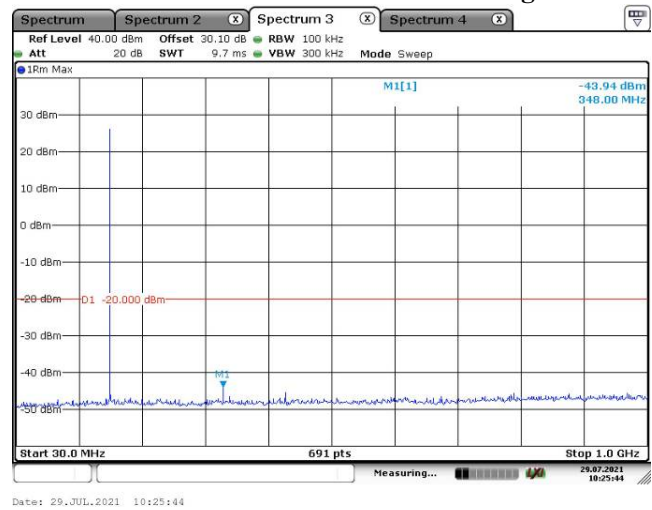


Date: 29.JUL.2021 10:22:52



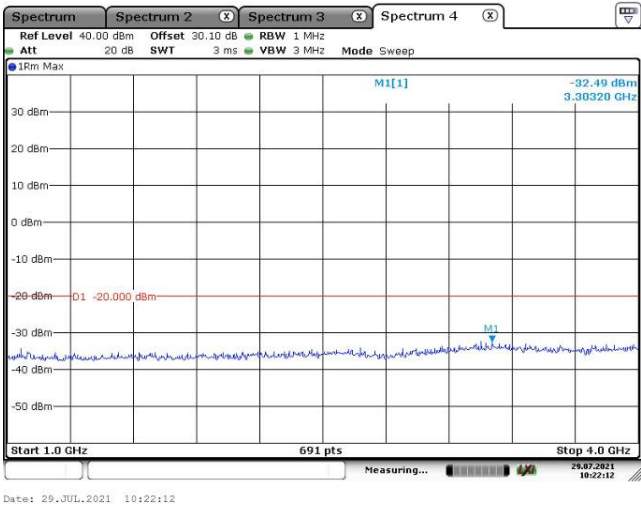
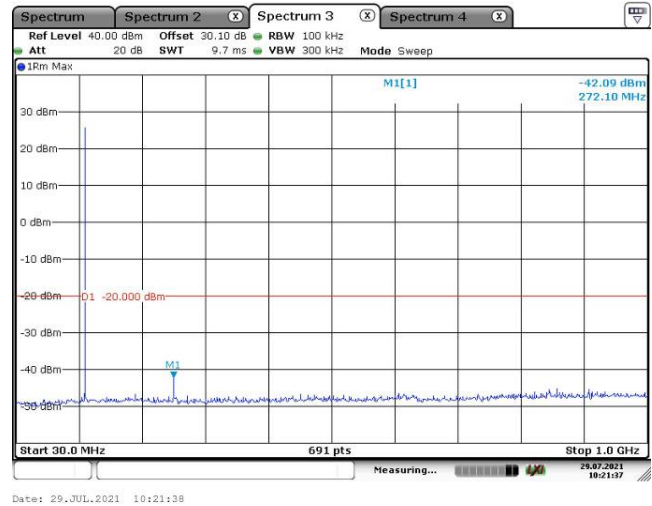
Date: 29.JUL.2021 10:23:24

High Channel, 173.9875 MHz



4FSK, 12.5kHz:

Low Channel, 136.0125 MHz



Middle Channel, 155.7525 MHz

