

RSS-119, ISSUE 12 MAY 2015
RSS-GEN, ISSUE 5 MARCH 2019 AMENDMENT 1
MEASUREMENT AND TEST REPORT

For

Hytera Communications Corporation Limited

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

IC:8913A-HM78XU2

Report Type: Original Report	Product Name: DIGITAL MOBILE RADIO
Report Number: RDG201022008-08A	
Report Date: 2020-12-03	
Reviewed By:	Ivan Cao Assistant Manager 
Test Laboratory:	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

TABLE OF CONTENTS

GENERAL INFORMATION.....	4
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	4
OBJECTIVE	4
RELATED SUBMITTAL(S)/GRANT(S).....	4
TEST METHODOLOGY	4
MEASUREMENT UNCERTAINTY	5
TEST FACILITY	5
DECLARATIONS.....	5
SYSTEM TEST CONFIGURATION.....	6
JUSTIFICATION	6
EUT EXERCISE SOFTWARE	6
SPECIAL ACCESSORIES	6
EQUIPMENT MODIFICATIONS	6
SUPPORT EQUIPMENT LIST AND DETAILS	6
SUPPORT CABLE LIST AND DETAILS	6
BLOCK DIAGRAM OF TEST SETUP	7
SUMMARY OF TEST RESULTS.....	8
TEST EQUIPMENT LIST	9
RSS-119 §5.1 - INTERFACE IMPEDANCE	10
RSS-119 §5.2- TYPES OF MODULATION.....	11
APPLICABLE STANDARD	11
TEST DATA	11
RSS-119 §5.3-TRANSMITTER FREQUENCY STABILITY	18
APPLICABLE STANDARD	18
TEST PROCEDURE	18
TEST DATA	18
RSS-119 §5.4- TRANSMITTER OUTPUT POWER	20
APPLICABLE STANDARD	20
TEST PROCEDURE	20
TEST DATA	20
RSS-119 §5.5&§5.8 – OCCUPIED BANDWIDTH & EMISSION MASK.....	24
APPLICABLE STANDARD	24
TEST PROCEDURE	24
TEST DATA	24
RSS-119 §5.8- TRANSMITTER UNWANTED EMISSIONS (RADIATED)	32
APPLICABLE STANDARD	32
TEST PROCEDURE	32
TEST DATA	32
RSS-119 §5.8 – TRANSMITTER UNWANTED EMISSIONS (CONDUCTED)	38
APPLICABLE STANDARD	38
TEST PROCEDURE	38
TEST DATA	38
RSS-119 §5.9 - TRANSIENT FREQUENCY BEHAVIOR	42
APPLICABLE STANDARD	42

TEST DATA	42
-----------------	----

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

EUT Name:	DIGITAL MOBILE RADIO
EUT Model:	HM782 U2
Modulation Type:	FM, 4FSK
Channel Spacing:	12.5 kHz/25kHz
Frequency Range:	450-470 MHz
Antenna GainΔ :	1dBi
Rated Input Voltage:	DC 10.8~15.6V
Serial Number:	RDG2001022008-RF-S1
EUT Received Date:	2020.10.23
EUT Received Status:	Good

Objective

This report is prepared on behalf of **Hytera Communications Corporation Limited** in accordance with RSS-119 Issue 12, May 2015 and RSS-Gen, March 2019 Amendment 1.

Related Submittal(s)/Grant(s)

RSS-247 submissions with IC: 8913A-HM78XU2

Test Methodology

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

RSS-119, Issue 12, May 2015. Radio Transmitters and Receivers Operating in the Land Mobile and Fixed Services in the Frequency Range 27.41-960 MHz.

RSS-Gen, March 2019 Amendment 1, General Requirements for Compliance of Radio Apparatus

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

Measurement Uncertainty

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±0.61dB
Unwanted Emissions, conducted	±2.47dB
All emissions, radiated	±3.62dB
Temperature	±1 °C
Humidity	±5%
DC and low frequency voltages	±0.4%
Time	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.

This report cannot be reproduced except in full, without prior written approval of the Company.

This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

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

SYSTEM TEST CONFIGURATION

Justification

The system was configured for testing in test mode.

EUT Exercise Software

No exercise software was used.

Special Accessories Antenna

Manufacturer	Antenna Type	Model No.	Antenna Gain (dBi)	Antenna Cable Loss (dB)
Hytera	Monopole Antenna	TQC-400FG-W	1.0 dBi	2.0

Equipment Modifications

No modification was made to the EUT tested.

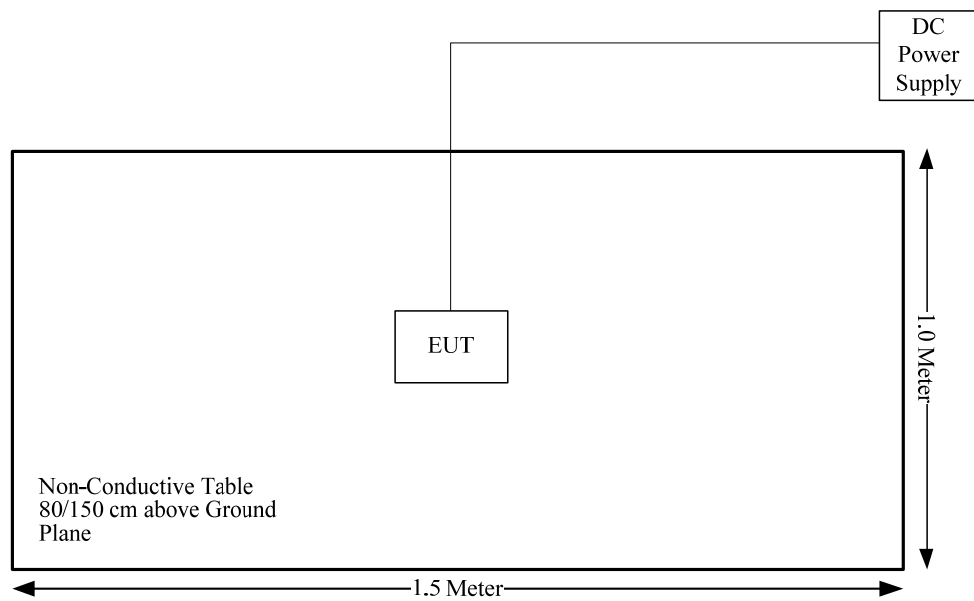
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Pro instrument	DC Power Supply	pps3300	3300012
WEINSCHTEL Corp	Load	50oml	50oml Load

Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
DC Cable	No	No	1.0	Adapter	Charger Base

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

RSS-119 & RSS-Gen Rules	Description Of Test	Result
RSS-119 § 5.1	Interface Impedance	Compliance
RSS-119 § 5.2	Type of Modulation	Compliance
RSS-119 § 5.3	Transmitter Frequency stability	Compliance
RSS-119 § 5.4	Transmitter output power	Compliance
RSS-119 § 5.5	Occupied Bandwidth	Compliance
RSS-119 § 5.8	Unwanted Emissions (Radiated)	Compliance
RSS-119 § 5.8	Unwanted Emissions (Conducted)	Compliance
RSS-119 § 5.9	Transient Frequency Behavior	Compliance

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated emissions below 1GHz					
Sunol Sciences	Antenna	JB3	A060611-1	2017-11-10	2020-11-10
R&S	EMI Test Receiver	ESR3	102453	2020-09-12	2021-09-12
Unknown	Coaxial Cable	C-NJNJ-50	C-0075-01	2020-09-05	2021-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-01	2020-09-05	2021-09-05
Unknown	Coaxial Cable	C-NJNJ-50	C-1400-01	2020-05-06	2021-05-06
HP	Amplifier	8447D	2727A05902	2020-09-05	2021-09-05
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	2019-12-10	2020-12-10
Ouli	Band Rejector Filter	400-520M	087	2020-01-23	2021-01-23
Radiated emissions above 1GHz					
TDK RF	Horn Antenna	HRN-0118	130 084	2018-10-12	2021-10-12
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-01 1304	2017-12-06	2020-12-05
R&S	Spectrum Analyzer	FSP 38	100478	2020-07-07	2021-07-07
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
Unknown	Coaxial Cable	C-NJNJ-50	C-0200-02	2020-09-05	2021-09-05
Agilent	Signal Generator	E8247C	MY43321350	2019-12-10	2020-12-10
RF Conducted Test					
R&S	Spectrum Analyzer	FSU 26	200256	2020-07-07	2021-07-07
Rohde & Schwarz	Signal Analyzer	FSIQ26	831929/005	2020-09-12	2021-09-12
Unknown	Coaxial Cable	C-SJ00-0010	C0010/02	Each time	N/A
Weinschel	Coaxial Attenuators	53-20-34	LN749	Each time	N/A
HP	RF Communications Test Set	8920A	3438A05201	2020-07-07	2021-07-07
ESPEC	Constant temperature and humidity Tester	ESX-4CA	018 463	2020-03-26	2021-03-26
UNI-T	Multimeter	UT39A	M130199938	2019-07-23	2021-07-23
Ouli	Band Rejector Filter	400-520M	087	2020-01-23	2021-01-23

* **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).

RSS-119 §5.1 - INTERFACE IMPEDANCE

According to According to RSS-119, Issue 12 §5.1, the preferred impedance is 600 ohms resistive for audio frequencies, and 50 ohms for radio frequencies. This product has complied with this requirement

RSS-119 §5.2- TYPES OF MODULATION

Applicable Standard

According to RSS-119, Issue 12 §5.2

Test Data

Environmental Conditions

Temperature:	25.5°C
Relative Humidity:	42 %
ATM Pressure:	100.9 kPa
Tester:	James Chen
Test Date:	2020-11-24

Test Mode: Transmitting

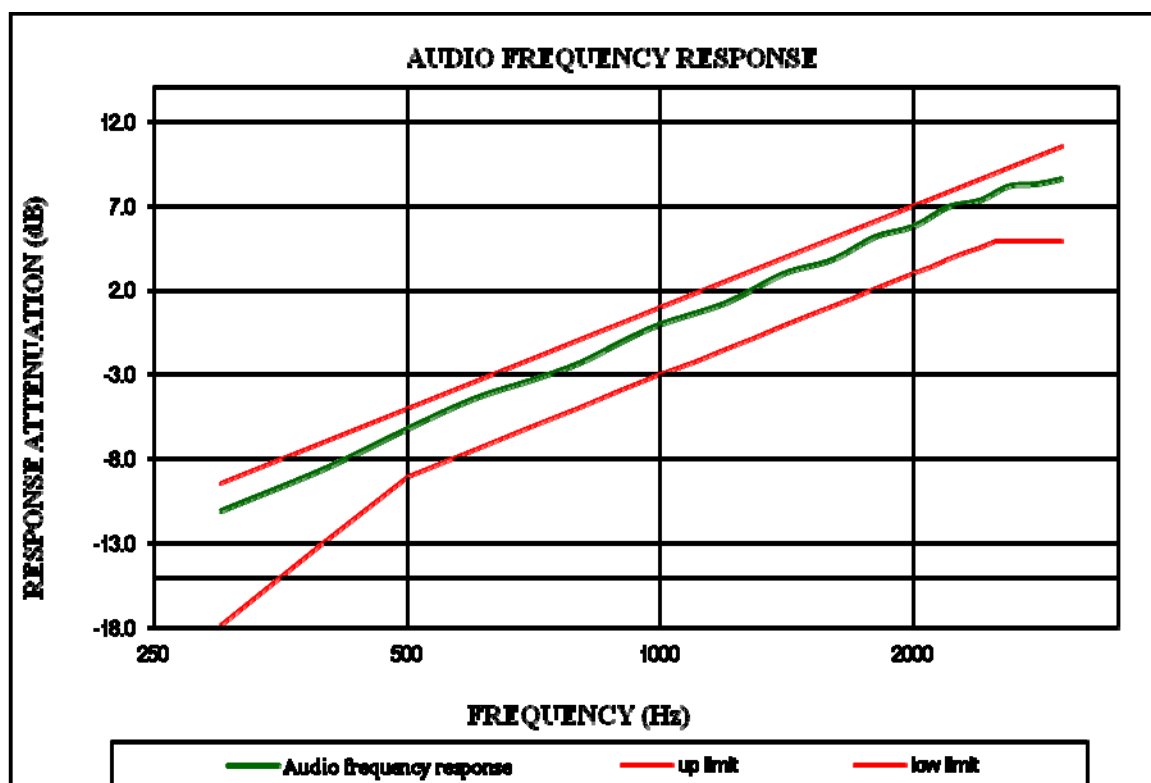
Test Result: Compliance. *Please refer to following table and plots.*

Audio Frequency Response – High Power

12.5kHz:

Carrier Frequency: 460MHz

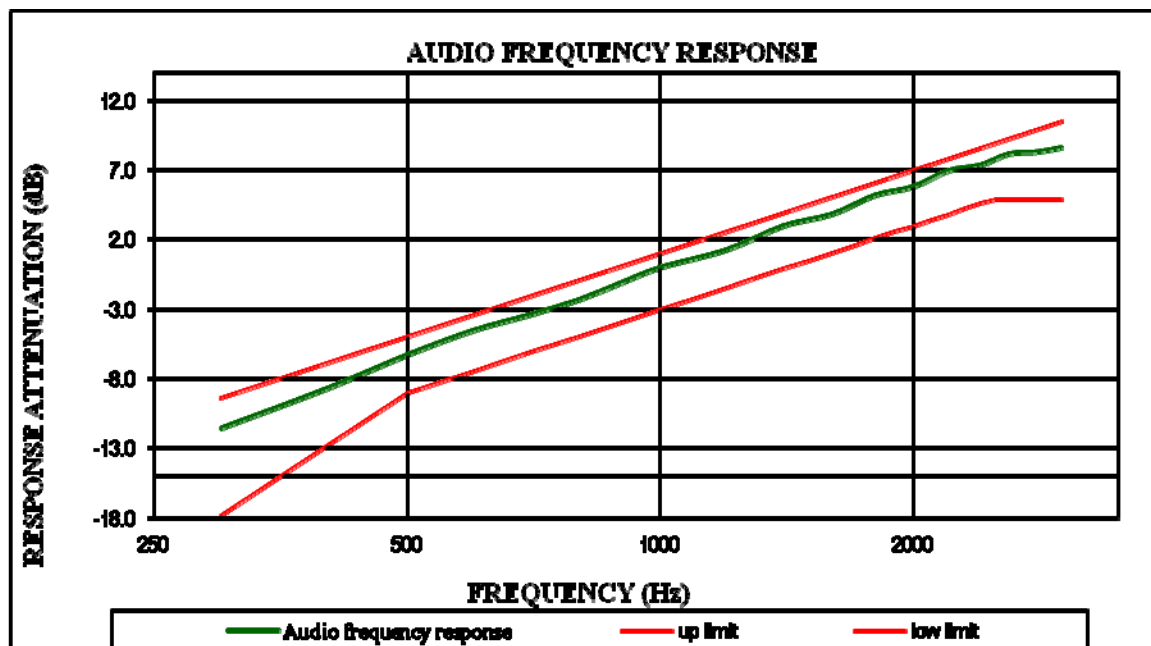
Modulation Frequency (Hz)	Response data (dB)
300	-11.07
400	-8.52
500	-6.19
600	-4.41
700	-3.34
800	-2.31
900	-1.03
1000	0.00
1200	1.30
1400	2.99
1600	3.82
1800	5.18
2000	5.80
2200	6.95
2400	7.34
2600	8.20
2800	8.31
3000	8.61



25 kHz:

Carrier Frequency: 460MHz

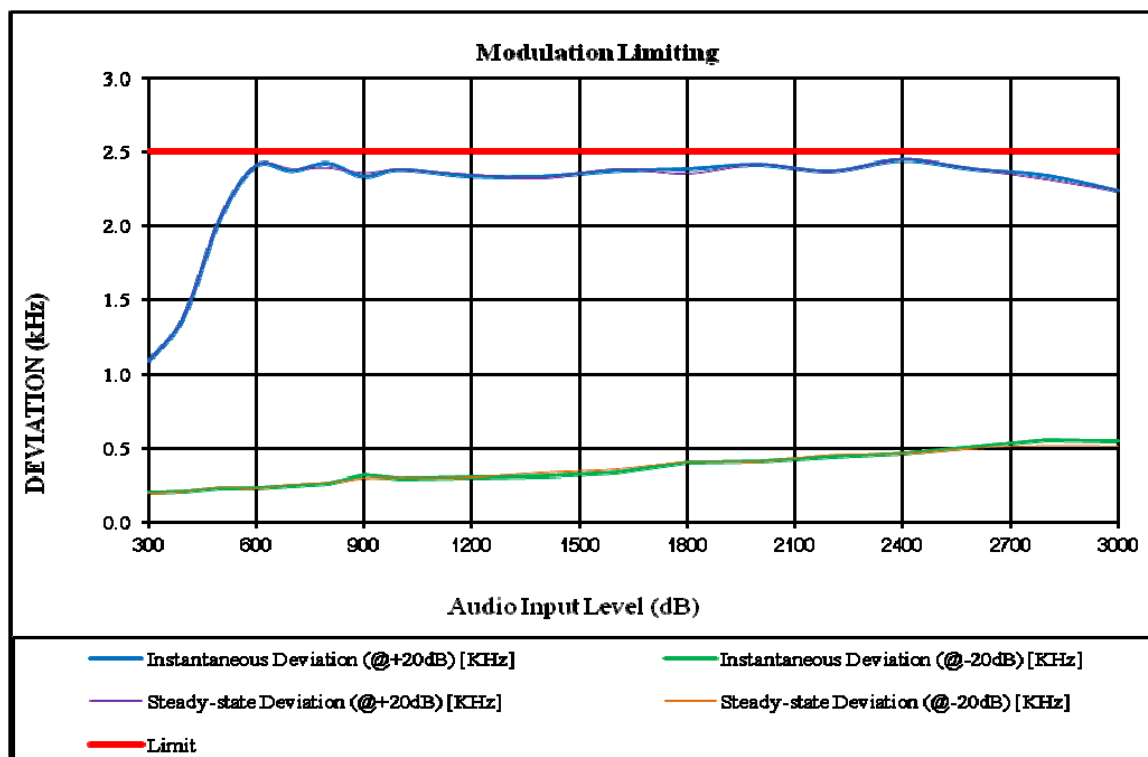
Modulation Frequency (Hz)	Response data (dB)
300	-11.56
400	-8.72
500	-6.27
600	-4.51
700	-3.39
800	-2.32
900	-1.07
1000	0.00
1200	1.29
1400	2.99
1600	3.83
1800	5.19
2000	5.81
2200	6.96
2400	7.35
2600	8.17
2800	8.30
3000	8.61



MODULATION LIMITING – High Power**12.5kHz**

Carrier Frequency: 460MHz

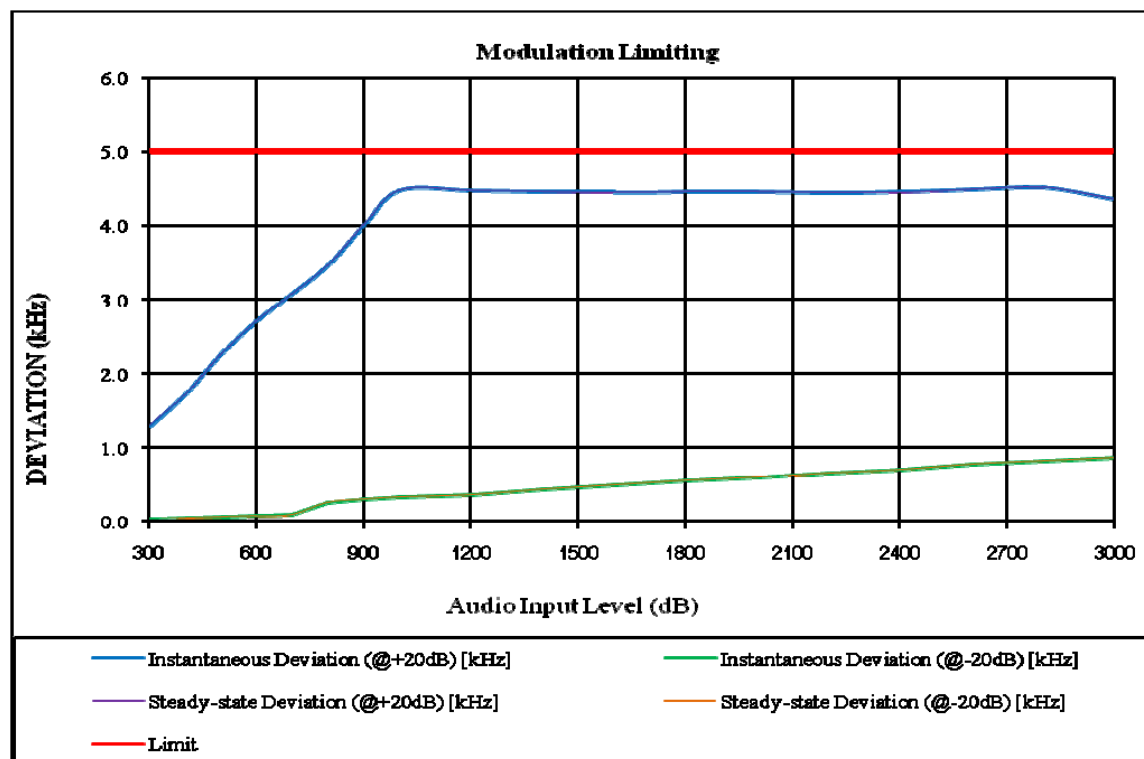
Audio Frequency (Hz)	Instantaneous		Steady-state		Limit [KHz]
	Deviation (@+20dB) [KHz]	Deviation (@-20dB) [KHz]	Deviation (@+20dB) [KHz]	Deviation (@-20dB) [KHz]	
300	1.083	0.205	1.074	0.193	2.5
400	1.392	0.214	1.396	0.208	2.5
500	2.051	0.235	2.051	0.235	2.5
600	2.412	0.234	2.405	0.228	2.5
700	2.378	0.246	2.387	0.256	2.5
800	2.427	0.263	2.395	0.267	2.5
900	2.338	0.317	2.359	0.297	2.5
1000	2.386	0.299	2.378	0.299	2.5
1200	2.342	0.302	2.348	0.302	2.5
1400	2.340	0.311	2.324	0.336	2.5
1600	2.379	0.336	2.386	0.357	2.5
1800	2.391	0.405	2.355	0.405	2.5
2000	2.420	0.409	2.416	0.409	2.5
2200	2.376	0.438	2.366	0.456	2.5
2400	2.449	0.467	2.444	0.464	2.5
2600	2.389	0.513	2.385	0.503	2.5
2800	2.346	0.554	2.316	0.519	2.5
3000	2.241	0.548	2.235	0.516	2.5



25kHz:

Carrier Frequency: 460MHz

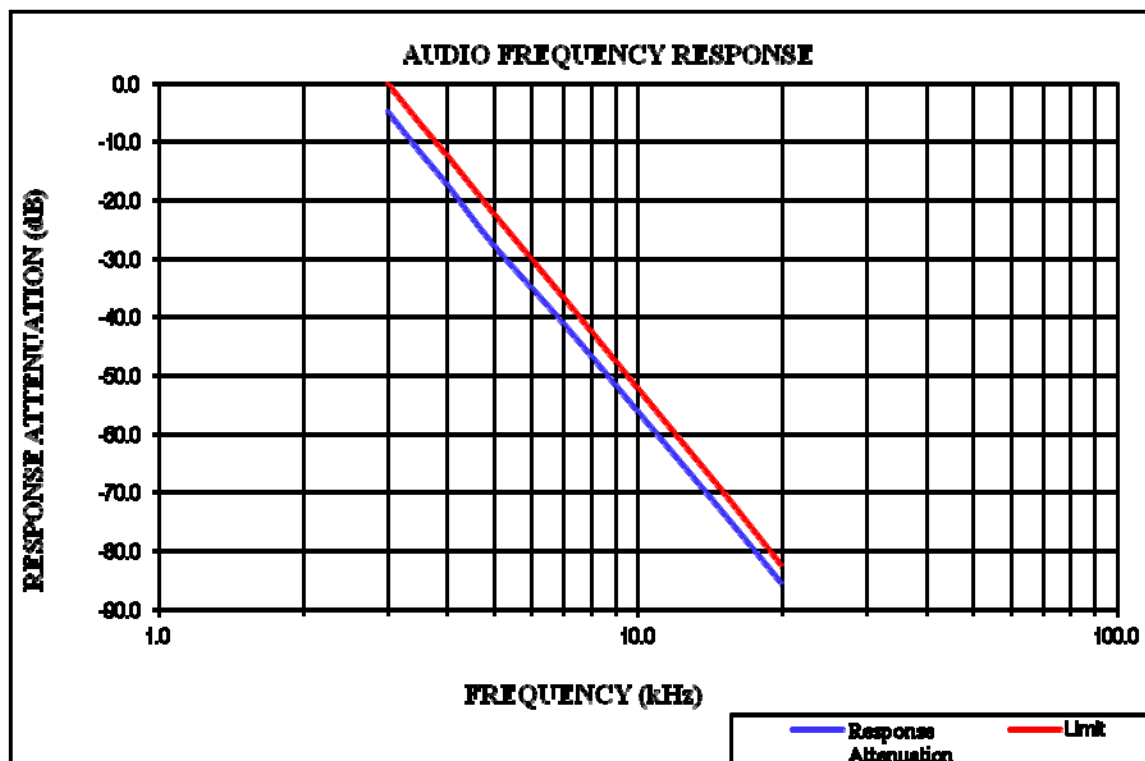
Audio Frequency (Hz)	Instantaneous		Steady-state		Limit [KHz]
	Deviation (@+20dB) [KHz]	Deviation (@-20dB) [KHz]	Deviation (@+20dB) [KHz]	Deviation (@-20dB) [KHz]	
300	1.301	0.051	1.303	0.050	5
400	1.726	0.057	1.724	0.058	5
500	2.268	0.074	2.267	0.077	5
600	2.707	0.083	2.708	0.083	5
700	3.078	0.104	3.074	0.104	5
800	3.463	0.268	3.462	0.268	5
900	3.995	0.305	3.998	0.303	5
1000	4.476	0.335	4.477	0.333	5
1200	4.478	0.362	4.478	0.366	5
1400	4.467	0.437	4.466	0.437	5
1600	4.453	0.497	4.453	0.495	5
1800	4.456	0.557	4.456	0.556	5
2000	4.464	0.608	4.463	0.608	5
2200	4.447	0.666	4.447	0.665	5
2400	4.456	0.707	4.452	0.705	5
2600	4.484	0.785	4.486	0.784	5
2800	4.514	0.821	4.513	0.819	5
3000	4.363	0.862	4.363	0.862	5



Audio Frequency Low Pass Filter Response – High Power**12.5kHz:**

Carrier Frequency: 460 Hz

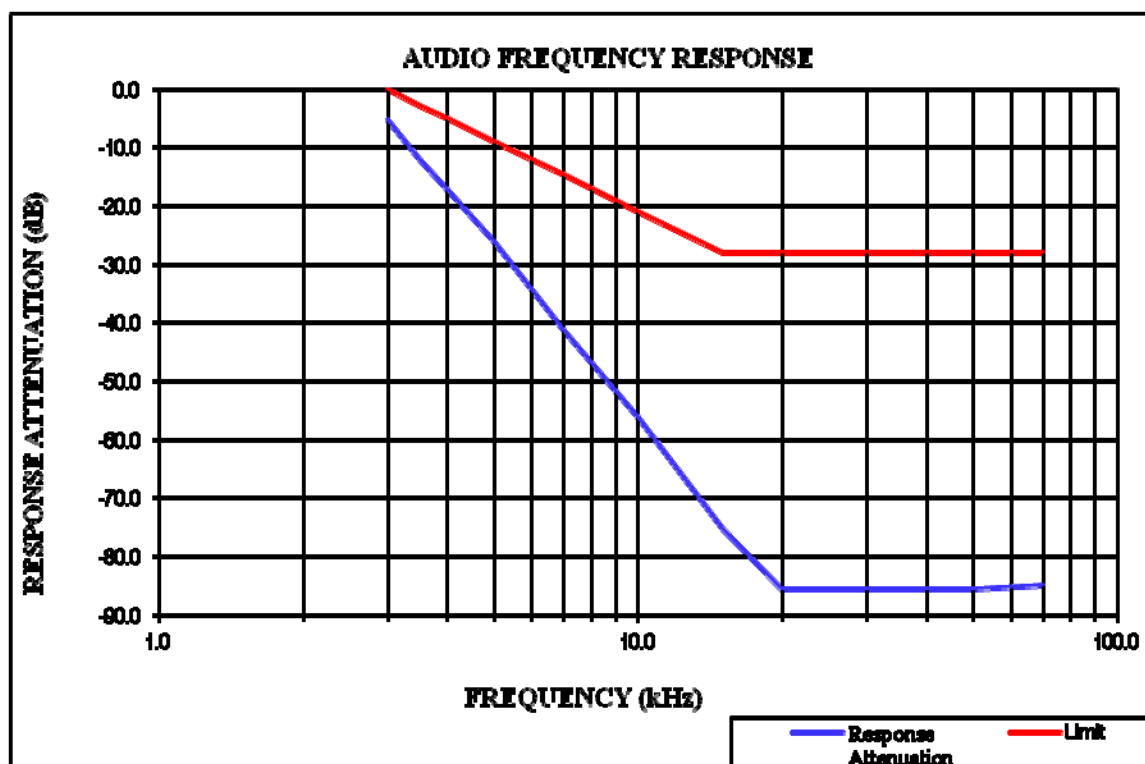
Audio Frequency (kHz)	Response Attenuation (dB)	Limit (dB)
3.0	-4.8	0.0
3.5	-11.7	-6.7
4.0	-17.3	-12.5
5.0	-27.6	-22.2
7.0	-41.0	-36.8
10.0	-56.1	-52.3
15.0	-73.1	-69.9
20.0	-85.5	-82.5



25kHz:

Carrier Frequency: 460MHz

Audio Frequency (kHz)	Response Attenuation (dB)	Limit (dB)
3.0	-5.2	0.0
3.5	-11.9	-2.7
4.0	-17.2	-5.0
5.0	-25.9	-8.9
7.0	-41.3	-14.7
10.0	-56.2	-20.9
15.0	-75.3	-28.0
20.0	-85.6	-28.0
30.0	-85.5	-28.0
50.0	-85.6	-28.0
70.0	-85.0	-28.0



RSS-119 §5.3-TRANSMITTER FREQUENCY STABILITY

Applicable Standard

According to RSS-119, Issue 12 §5.3

Test Procedure

Frequency Stability vs. Temperature: The equipment under test was connected to DC power supply and the RF output was connected to a frequency counter via feed-through attenuators. The EUT was placed inside the temperature chamber. The power leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the counter.

The frequency stability shall be measured with variation of primary supply voltage as follows:

- (1) Vary primary supply voltage from 85 to 115 percent of the nominal value.
- (2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.

Test Data

Environmental Conditions

Temperature:	25.5°C
Relative Humidity:	42 %
ATM Pressure:	100.9 kPa
Tester:	James Chen
Test Date:	2020-11-24

Test Mode: Transmitting

Test Result: Compliance. *Please refer to following table.*

Test Mode: Transmitting

FM, 12.5kHz, $f_c = 460\text{MHz}$, High power				
Temperature	Voltage	Measured	Frequency Error	Limit
$^{\circ}\text{C}$	V_{DC}	MHz	ppm	ppm
-30	13.6	460.000148	0.32	2.5
-20		460.000088	0.19	
-10		460.000048	0.10	
0		460.000238	0.52	
10		460.000358	0.78	
20		460.000088	0.19	
30		460.000298	0.65	
40		460.000268	0.58	
50		460.000048	0.10	
20	10.8	460.000308	0.67	
20	15.6	460.000438	0.95	

4FSK, 12.5kHz, $f_c = 460\text{MHz}$, High power				
Temperature	Voltage	Measured	Frequency Error	Limit
$^{\circ}\text{C}$	V_{DC}	MHz	ppm	ppm
-30	13.6	460.000308	0.67	2.5
-20		459.999938	-0.13	
-10		460.000018	0.04	
0		460.000378	0.82	
10		460.000338	0.74	
20		460.000032	0.07	
30		459.999698	-0.66	
40		459.999728	-0.59	
50		459.999808	-0.42	
20	10.8	460.000178	0.39	
20	15.6	460.000638	1.39	

FM, 25 kHz, $f_c = 460\text{MHz}$, High power				
Temperature	Voltage	Measured	Frequency Error	Limit
$^{\circ}\text{C}$	V_{DC}	MHz	ppm	ppm
-30	13.6	460.000188	0.41	5.0
-20		459.999768	-0.50	
-10		460.000228	0.50	
0		460.000518	1.13	
10		460.000558	1.21	
20		460.000032	0.07	
30		460.000548	1.19	
40		459.999888	-0.24	
50		459.999908	-0.20	
20	10.8	460.000358	0.78	
20	15.6	460.000268	0.58	

RSS-119 §5.4- TRANSMITTER OUTPUT POWER

Applicable Standard

According to RSS-119, Issue 12 §5.4

The output power shall be within ± 1.0 dB of the manufacturer's rated power.

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

Environmental Conditions

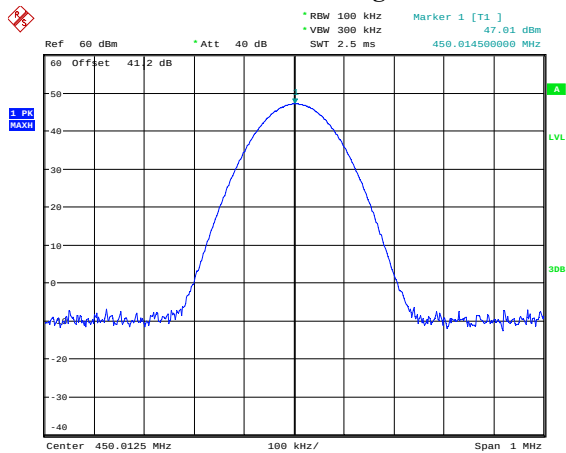
Temperature:	25.5°C
Relative Humidity:	42 %
ATM Pressure:	100.9 kPa
Tester:	James Chen
Test Date:	2020-11-24

Test Mode: Transmitting

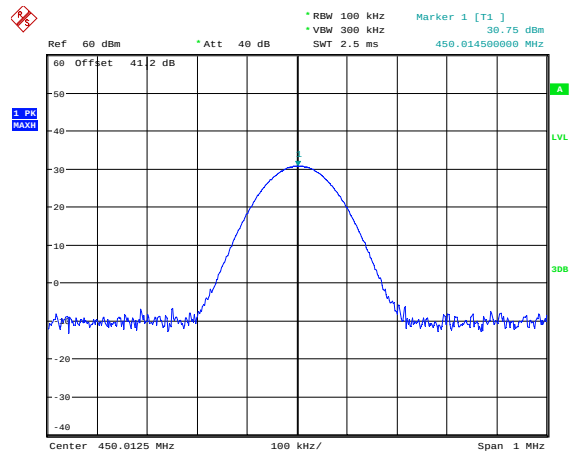
Test Result: Compliance. Please refer to following table and plots.

Test Mode	Test Channel	Test Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	
			High Power Level	Low Power Level	High Power Level	Low Power Level
FM 12.5kHz	Low	450.0125	47.01	30.75	46~48	29~31
	Middle	460.0000	46.92	30.69	46~48	29~31
	High	469.9875	47.07	30.80	46~48	29~31
FM 25kHz	Low	450.0125	47.02	30.69	46~48	29~31
	Middle	460.0000	46.94	30.66	46~48	29~31
	High	469.9875	47.02	30.81	46~48	29~31
4FSK 12.5kHz	Low	450.0125	47.02	30.70	46~48	29~31
	Middle	460.0000	46.96	30.65	46~48	29~31
	High	469.9875	47.07	30.79	46~48	29~31

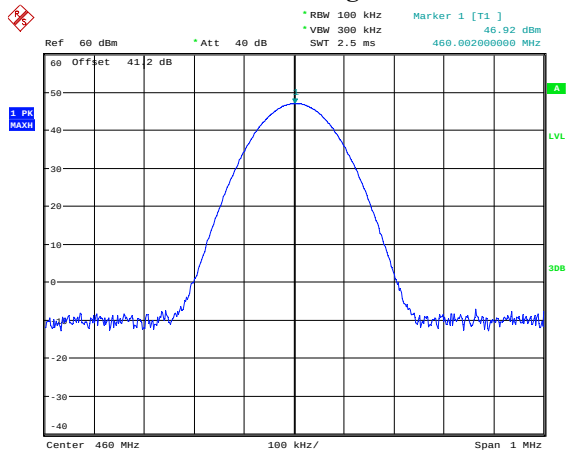
Note: The rated high power is 50W (47dBm) and low power is 1W (30 dBm).
The high power range less than 60W in RSS-119 Table 2.

FM, 12.5kHz:**450.0125 MHz High Power**

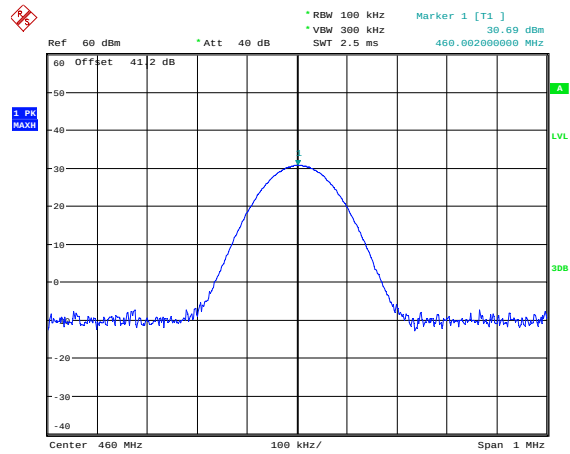
Date: 24.NOV.2020 18:22:04

450.0125 MHz Low Power

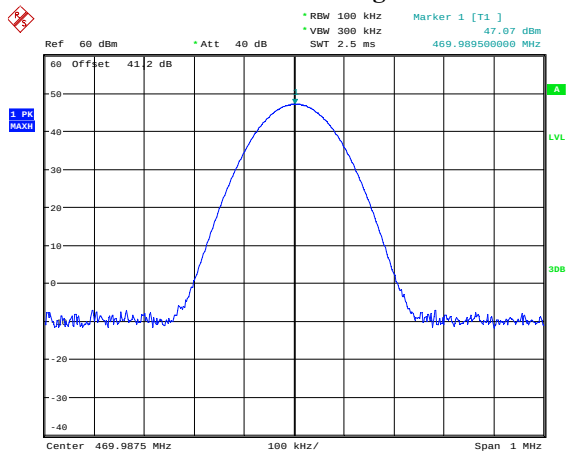
Date: 24.NOV.2020 18:22:36

460 MHz High Power

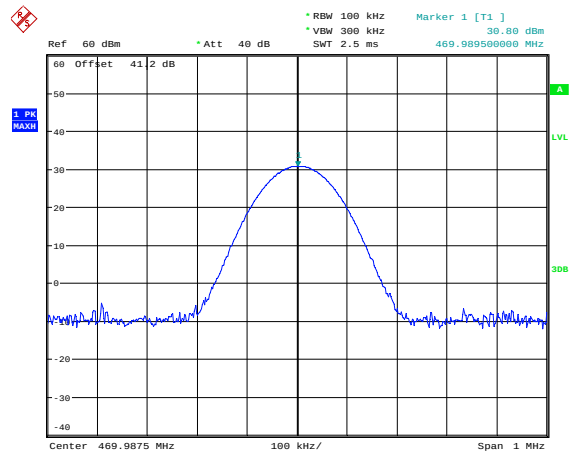
Date: 24.NOV.2020 18:36:37

460 MHz Low Power

Date: 24.NOV.2020 18:37:05

469.9875 MHz High Power

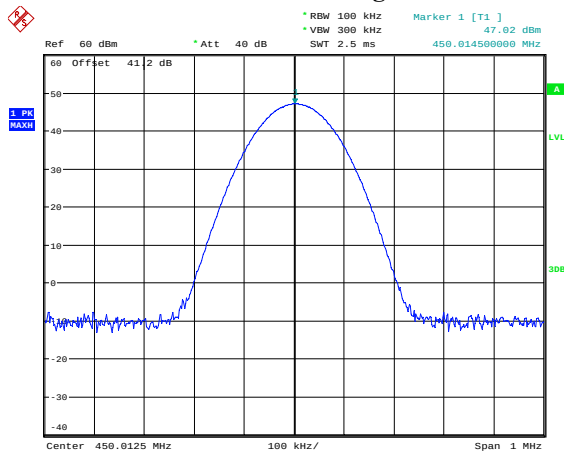
Date: 24.NOV.2020 18:38:57

469.9875 MHz Low Power

Date: 24.NOV.2020 18:39:25

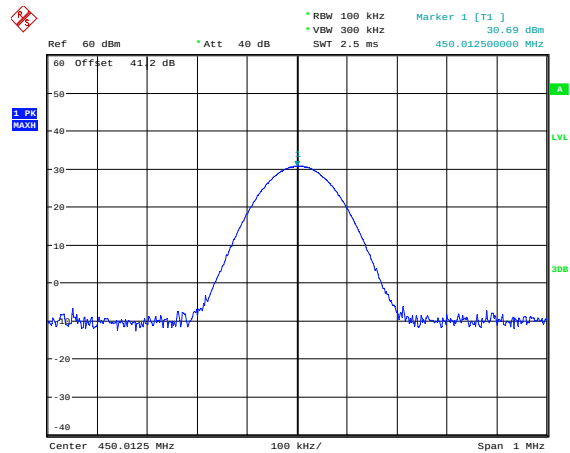
FM, 25kHz:

450.0125 MHz High Power



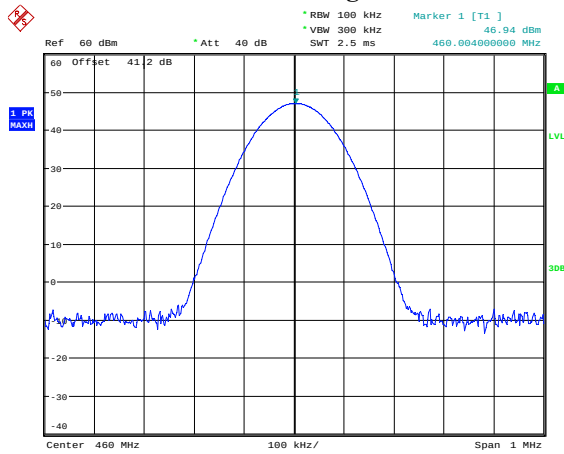
Date: 24.NOV.2020 18:22:55

450.0125 MHz Low Power



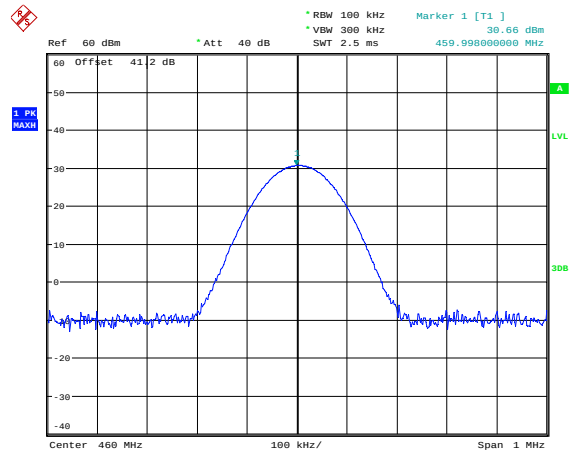
Date: 24.NOV.2020 18:23:15

460 MHz High Power



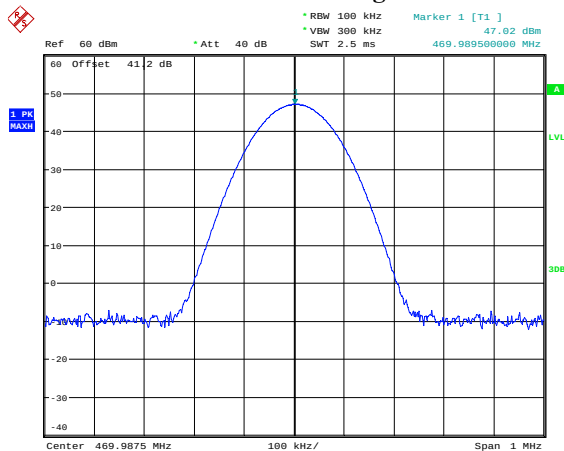
Date: 24.NOV.2020 18:37:28

460 MHz Low Power



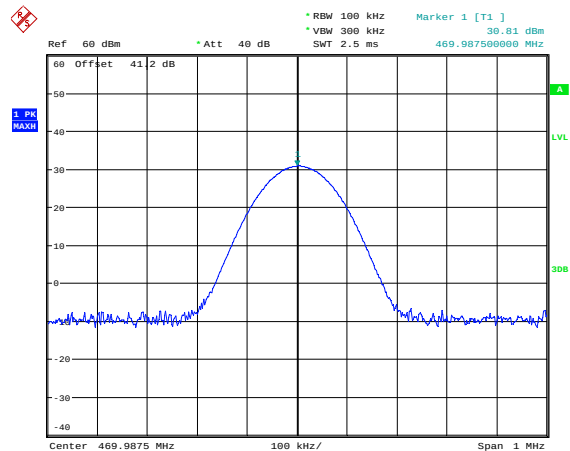
Date: 24.NOV.2020 18:37:52

469.9875 MHz High Power



Date: 24.NOV.2020 18:39:44

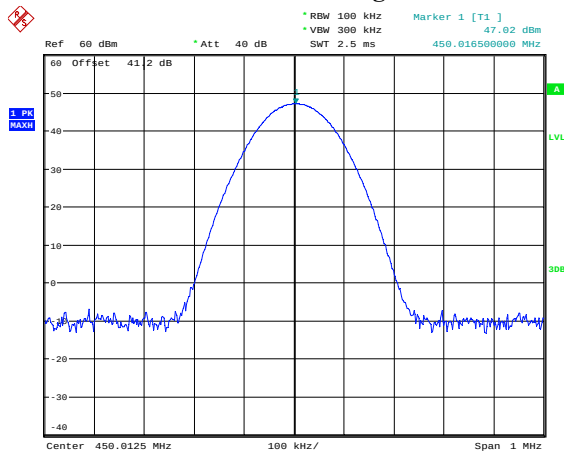
469.9875 MHz Low Power



Date: 24.NOV.2020 18:40:12

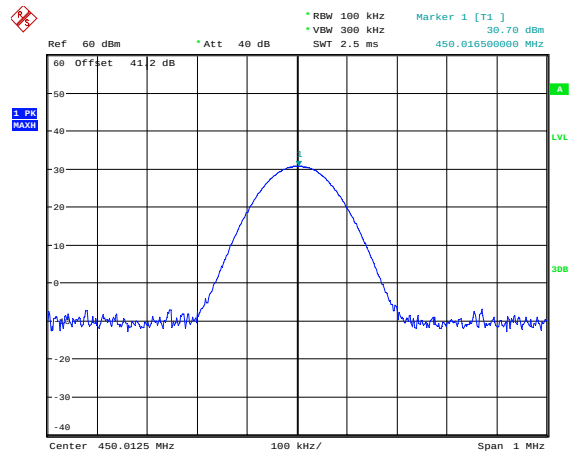
4FSK, 12.5kHz:

450.0125 MHz High Power



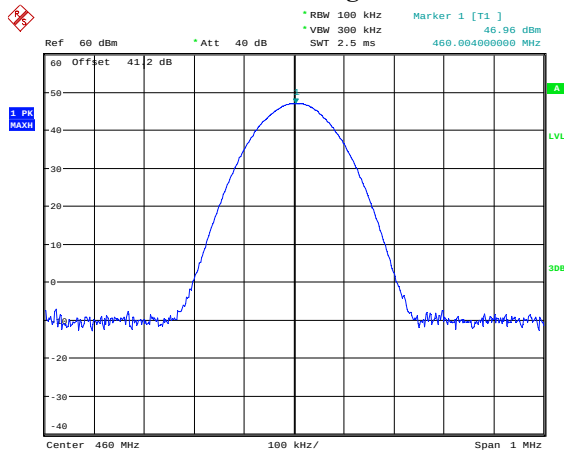
Date: 24.NOV.2020 18:23:32

450.0125 MHz Low Power



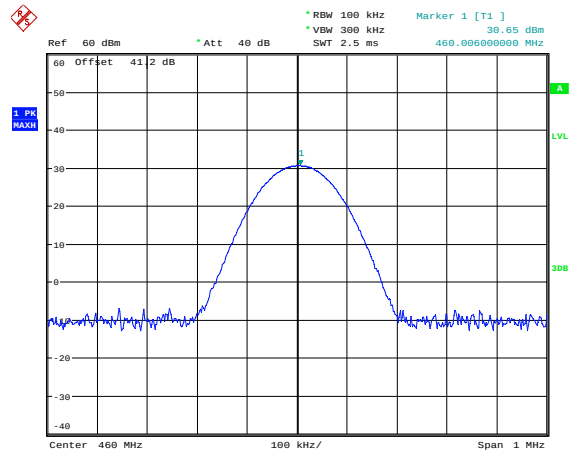
Date: 24.NOV.2020 18:23:44

460 MHz High Power



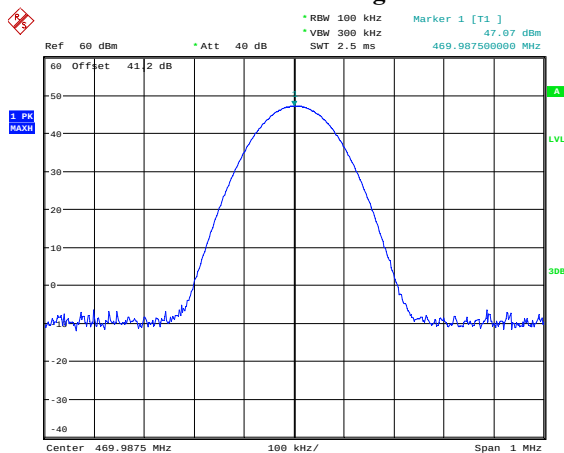
Date: 24.NOV.2020 18:38:08

460 MHz Low Power



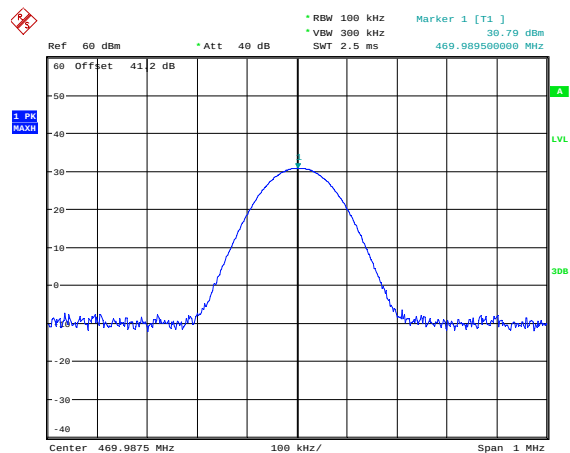
Date: 24.NOV.2020 18:38:10

469.9875 MHz High Power



Date: 24.NOV.2020 18:40:34

469.9875 MHz Low Power



Date: 24.NOV.2020 18:40:45

RSS-119 §5.5&§5.8 – OCCUPIED BANDWIDTH & EMISSION MASK

Applicable Standard

According to RSS 119, Issue 12 §5.5&§5.8

Test Procedure

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

Test Data**Environmental Conditions**

Temperature:	25.5°C
Relative Humidity:	42 %
ATM Pressure:	100.9 kPa
Tester:	James Chen
Test Date:	2020-11-24

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	
			99% Occupied Bandwidth (kHz)	26 dB Bandwidth (kHz)	99% Occupied Bandwidth (kHz)	26 dB Bandwidth (kHz)
FM 12.5kHz	Low	450.0125	9.856	10.337	9.856	10.337
	Middle	460	9.936	10.417	10.016	10.417
	High	469.9875	9.936	10.368	9.936	10.369
FM 25kHz	Low	450.0125	14.904	16.090	14.904	16.090
	Middle	460	14.904	16.026	14.904	16.026
	High	469.9875	14.904	15.929	14.904	15.929
4FSK 12.5kHz	Low	450.0125	7.292	9.215	7.532	8.814
	Middle	460	7.372	9.535	7.372	9.215
	High	469.9875	7.372	9.407	7.372	9.407

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

$$BW = 2M + 2D$$

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

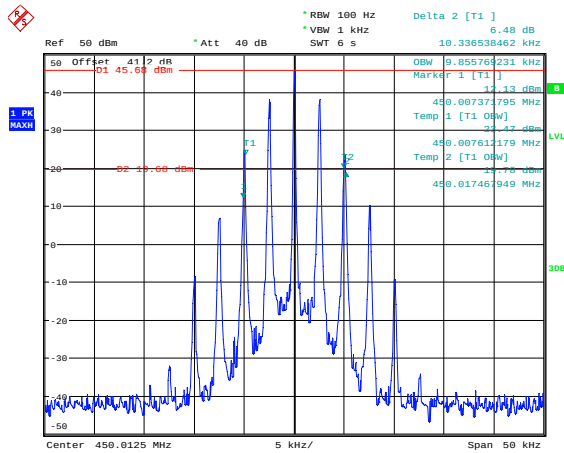
The 99% energy rule was used for digital mode. It basically states that 99% of the modulation energy falls within X kHz, in this case, 7.60 kHz.

F1D and F1E portion of the designator indicates digital information.

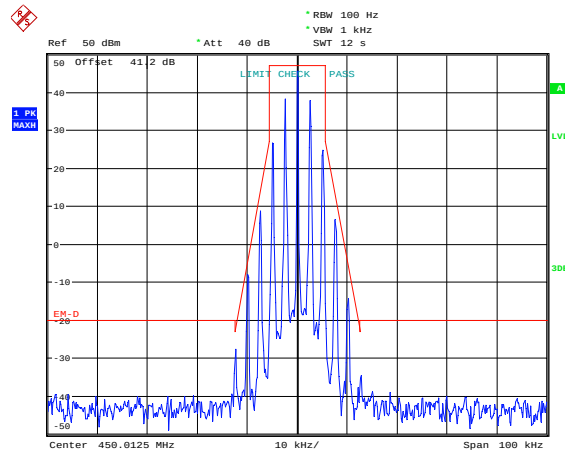
Therefore, the entire designator for 12.5 kHz channel spacing digital mode is 7K60F1D and 7K60F1E.

FM, 12.5kHz:
High Power:

Low Channel, 450.0125MHz

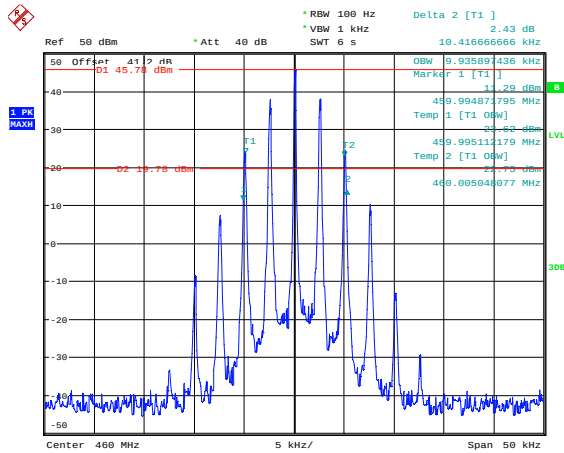


Date: 24.NOV.2020 19:12:08

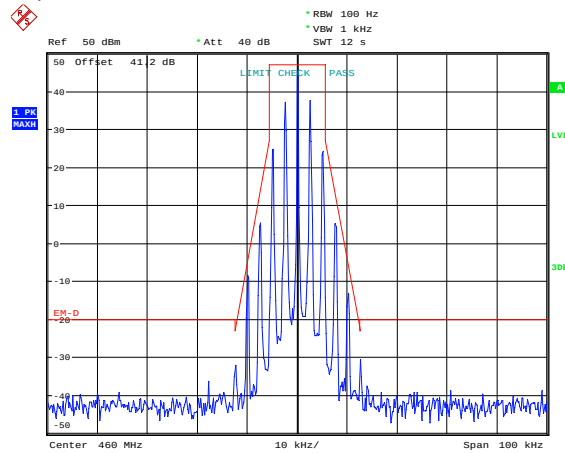


Date: 24.NOV.2020 19:18:53

Middle Channel, 460 MHz

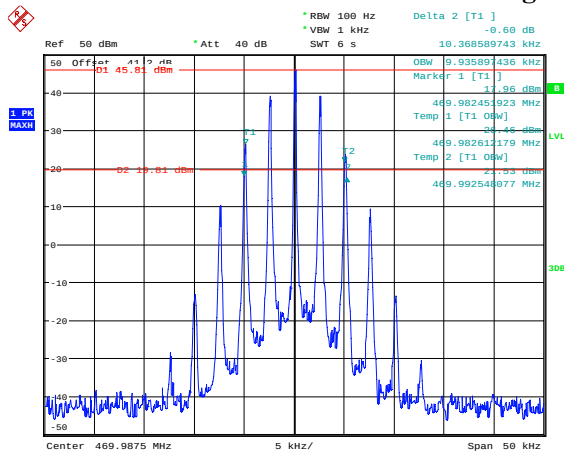


Date: 24.NOV.2020 20:30:18

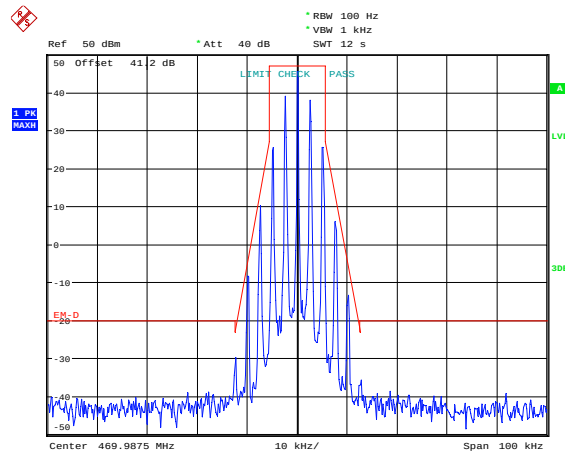


Date: 24.NOV.2020 20:31:22

High Channel, 469.9875 MHz



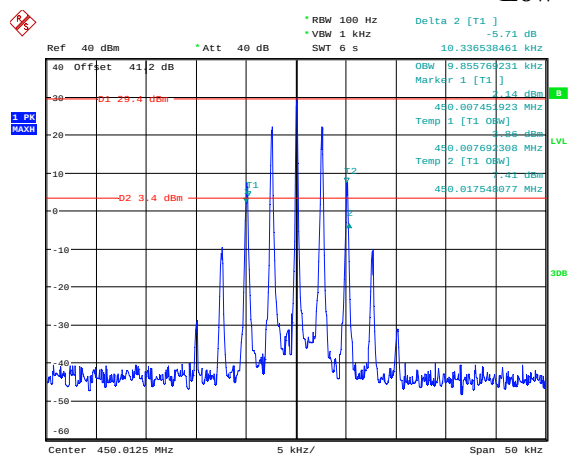
Date: 24.NOV.2020 20:42:52



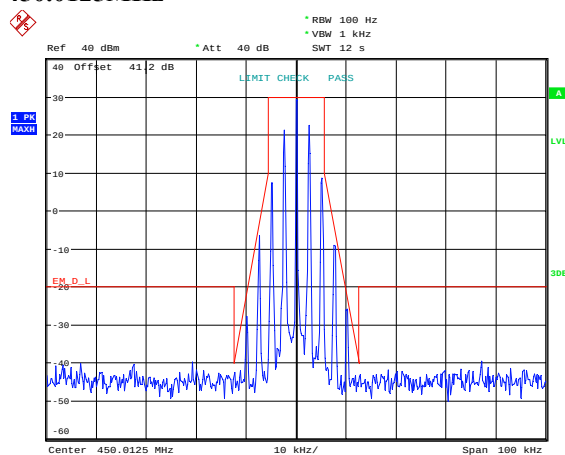
Date: 24.NOV.2020 20:43:41

Low Power:

Low Channel, 450.0125MHz

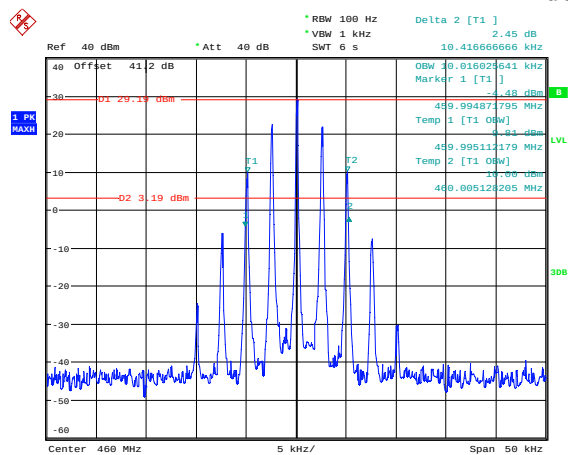


Date: 24.NOV.2020 19:14:46

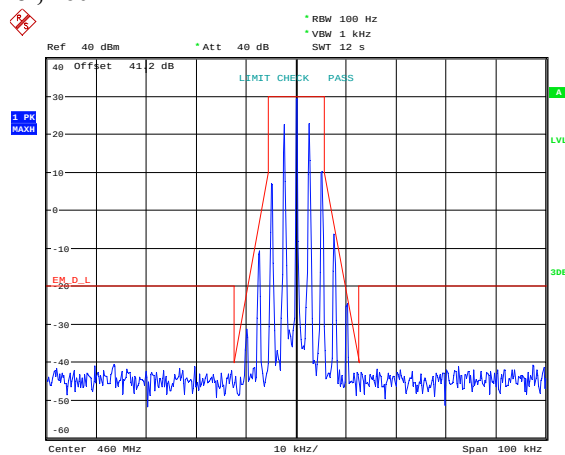


Date: 24.NOV.2020 19:17:49

Middle Channel, 460 MHz

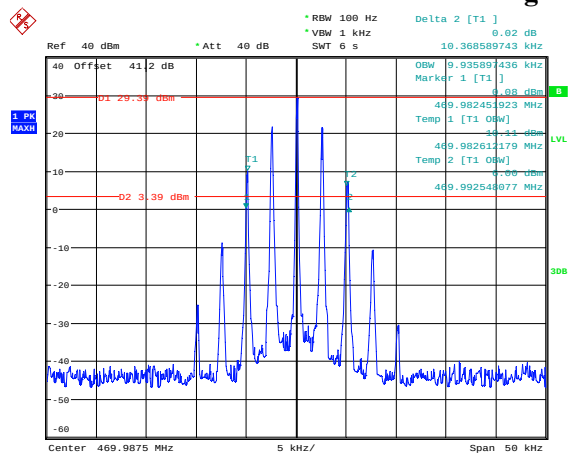


Date: 24.NOV.2020 20:32:31

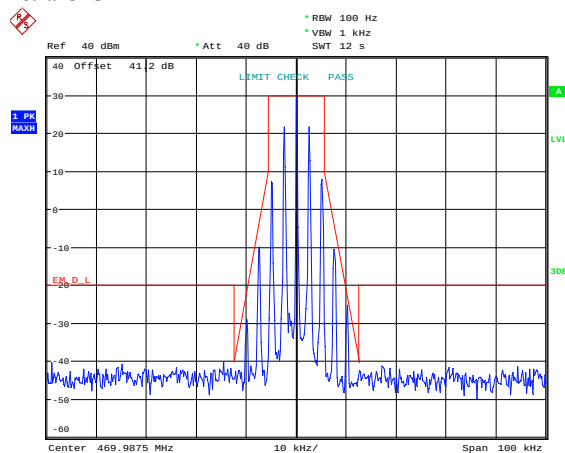


Date: 24.NOV.2020 20:33:36

High Channel, 469.9875 MHz

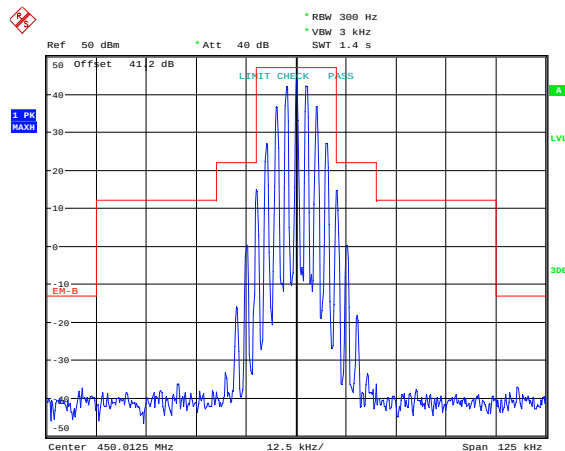


Date: 24.NOV.2020 20:44:49



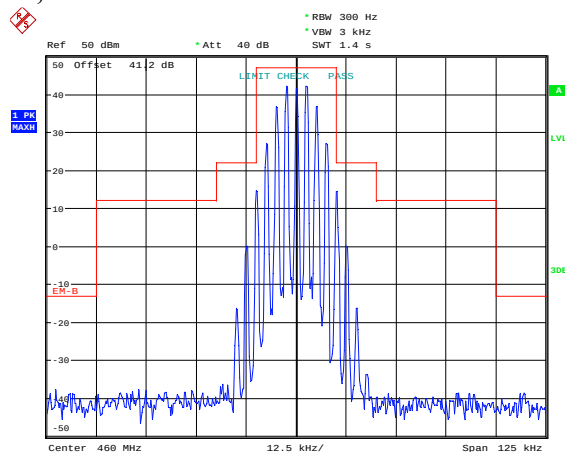
Date: 24.NOV.2020 20:45:34

Low Channel, 450.0125MHz

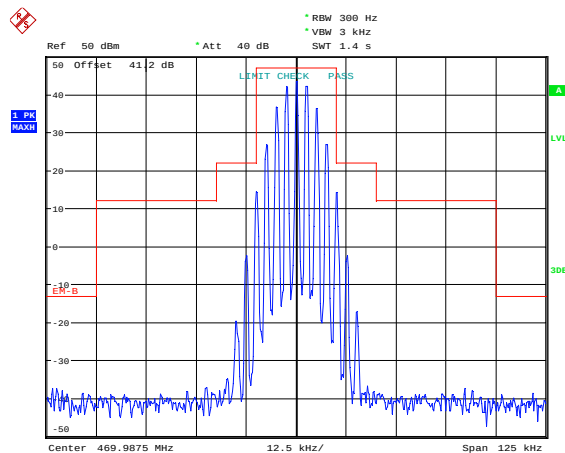


Date: 24.NOV.2020 20:54:29

Middle Channel, 460 MHz



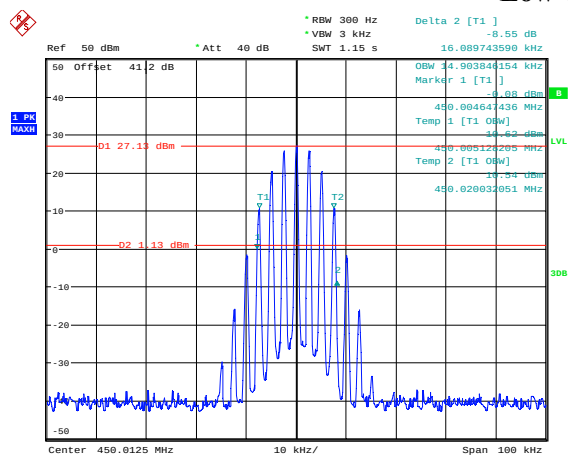
Date: 24.NOV.2020 21:08:38

High Channel, 469.9875 MHz

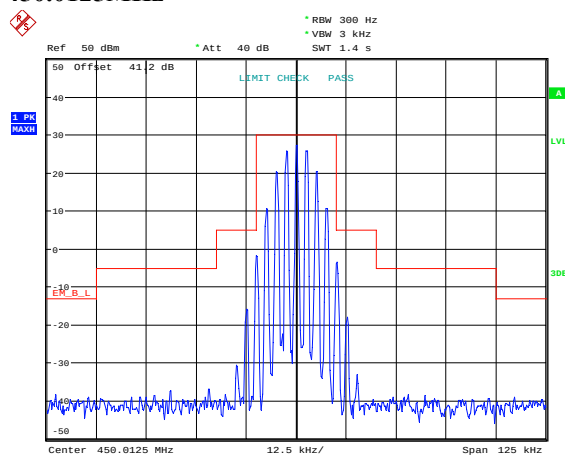
Date: 24.NOV.2020 21:11:24

Low Power:

Low Channel, 450.0125MHz

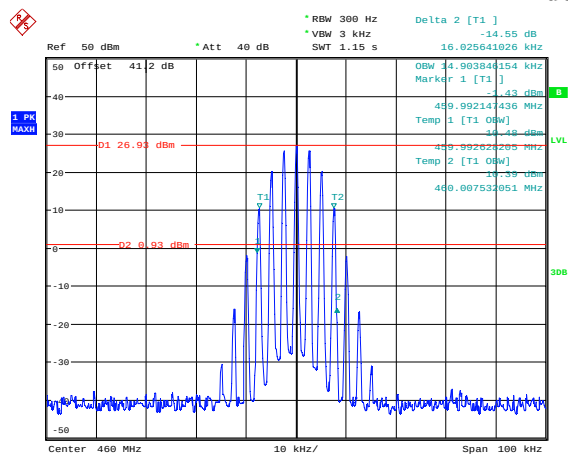


Date: 24.NOV.2020 20:55:27

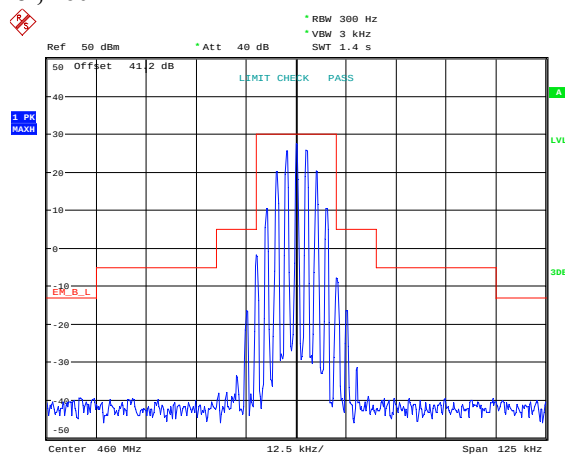


Date: 24.NOV.2020 20:55:58

Middle Channel, 460 MHz

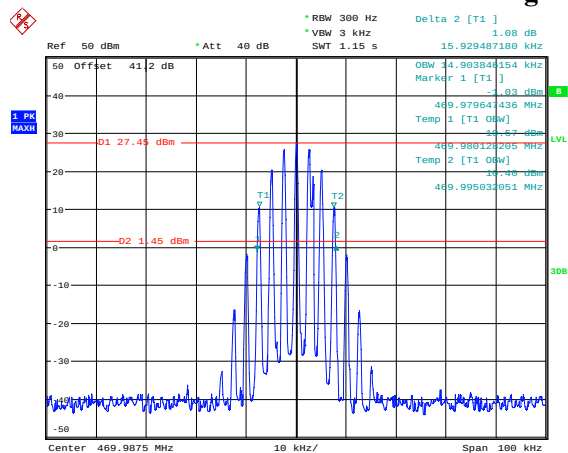


Date: 24.NOV.2020 21:09:21

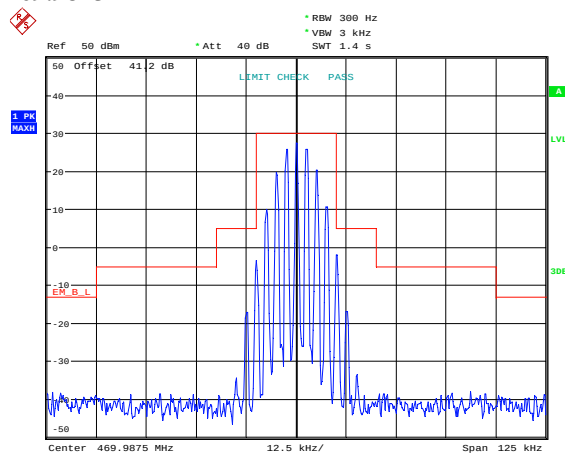


Date: 24.NOV.2020 21:09:50

High Channel, 469.9875 MHz



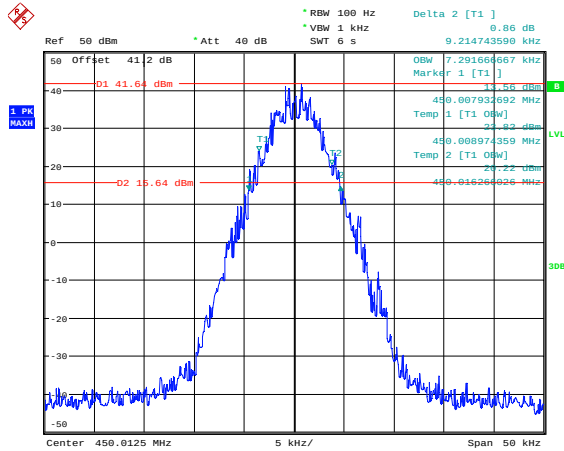
Date: 24.NOV.2020 21:12:01



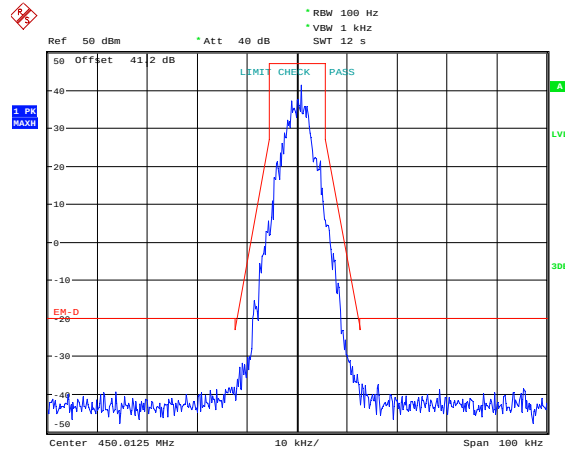
Date: 24.NOV.2020 21:12:28

4FSK, 12.5kHz:
High Power:

Low Channel, 450.0125MHz

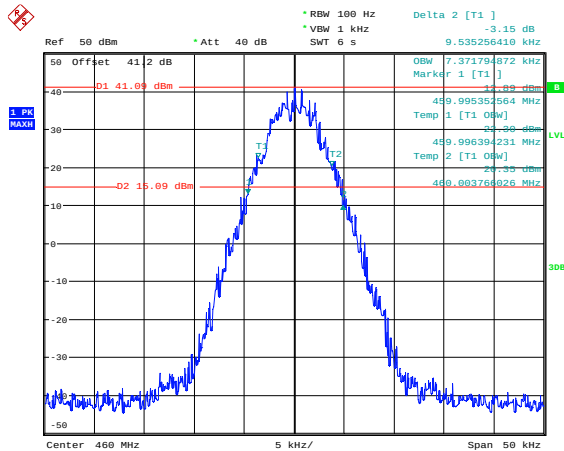


Date: 24.NOV.2020 19:21:08

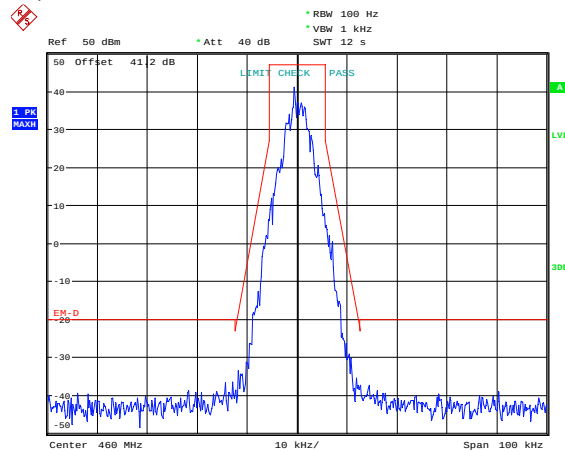


Date: 24.NOV.2020 19:21:56

Middle Channel, 460 MHz

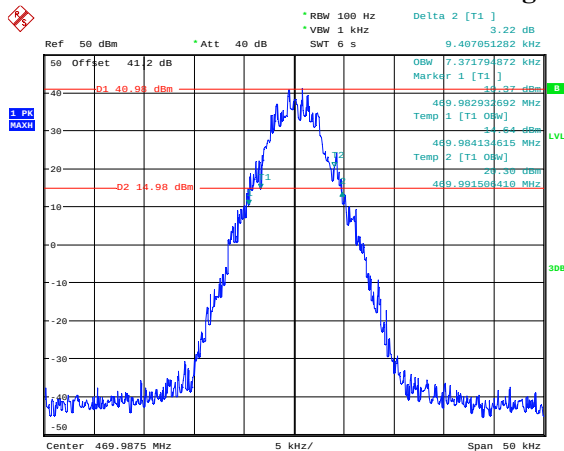


Date: 24.NOV.2020 20:35:33

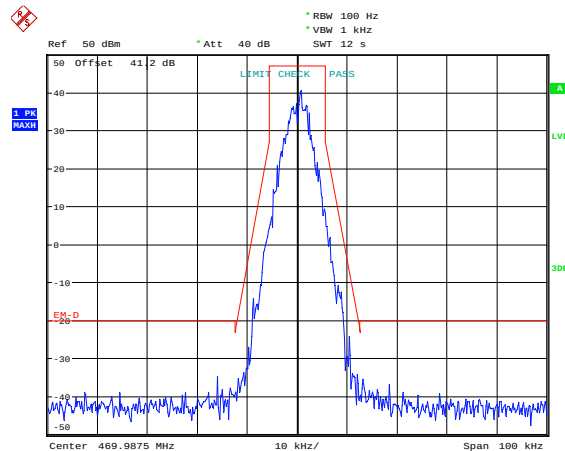


Date: 24.NOV.2020 20:36:26

High Channel, 469.9875 MHz

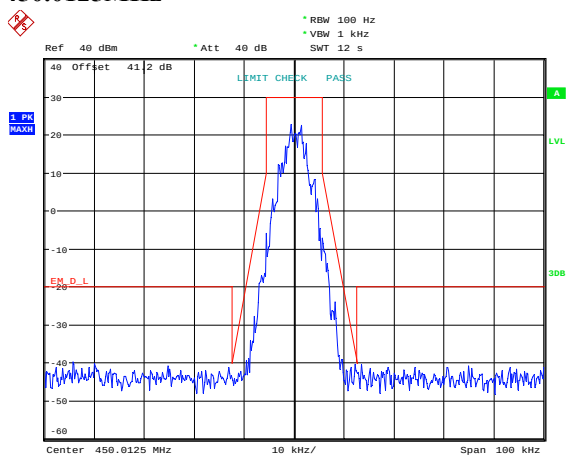


Date: 24.NOV.2020 20:47:19



Date: 24.NOV.2020 20:48:19

Low Channel, 450.0125MHz



Date: 24.NOV.2020 19:24:55

Ref 40 dBm Att 40 dB RBW 100 Hz VSW 1 kHz SWT 12 s

40 Offset 41.2 dB

1 PR
WAVE

EM D.L.

LIMIT CHECK PASS

Center 460 MHz 10 kHz/ Span 100 kHz

Date: 24.NOV.2020 20:38:46

Date: 24.NOV.2020 20:50:50

RSS-119 §5.8- TRANSMITTER UNWANTED EMISSIONS (RADIATED)

Applicable Standard

According to RSS-119, Issue 12 § 5.8

Test Procedure

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.

Test Data

Environmental Conditions

Test Items	Radiation Below 1GHz	Radiation Above 1GHz
Temperature:	25.4℃	27.1℃
Relative Humidity:	39%	42%
ATM Pressure:	101kPa	101.8kPa
Tester:	Jalon Liu	Jalon Liu
Test Date:	2020-11-07	2020-11-09

Test Mode: Transmitting

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

30MHz - 5GHz:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	RSS-119	
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)		Limit (dBm)	Margin (dB)
FM mode, Channel Spacing:12.5 kHz, operation frequency: 450.0125 MHz								
900.03	H	45.75	-51.39	0.00	1.05	-52.44	-20.0	32.44
900.03	V	46.19	-52.96	0.00	1.05	-54.01	-20.0	34.01
1350.04	H	49.40	-53.98	9.37	1.17	-45.78	-20.0	25.78
1350.04	V	44.86	-58.69	9.37	1.17	-50.49	-20.0	30.49
1800.05	H	40.85	-63.40	10.90	1.22	-53.72	-20.0	33.72
1800.05	V	39.12	-65.06	10.90	1.22	-55.38	-20.0	35.38
2250.06	H	38.27	-65.14	11.85	1.19	-54.48	-20.0	34.48
2250.06	V	38.15	-65.95	11.85	1.19	-55.29	-20.0	35.29
2700.08	H	38.39	-64.02	12.28	1.34	-53.08	-20.0	33.08
2700.08	V	38.31	-64.91	12.28	1.34	-53.97	-20.0	33.97
3150.09	H	39.34	-62.22	12.34	1.53	-51.41	-20.0	31.41
3150.09	V	39.07	-61.96	12.34	1.53	-51.15	-20.0	31.15
3600.10	H	37.73	-62.90	12.22	1.58	-52.26	-20.0	32.26
3600.10	V	37.52	-62.08	12.22	1.58	-51.44	-20.0	31.44
4050.11	H	36.68	-62.74	12.41	1.46	-51.79	-20.0	31.79
4050.11	V	36.43	-63.75	12.41	1.46	-52.80	-20.0	32.80
4500.13	H	36.62	-61.45	13.40	1.54	-49.59	-20.0	29.59
4500.13	V	36.22	-62.21	13.40	1.54	-50.35	-20.0	30.35
FM mode, Channel Spacing:25 kHz, operation frequency: 450.0125MHz								
900.03	H	49.51	-47.63	0.00	1.05	-48.68	-13.0	35.68
900.03	V	47.67	-51.48	0.00	1.05	-52.53	-13.0	39.53
1350.04	H	47.08	-56.30	9.37	1.17	-48.10	-13.0	35.1
1350.04	V	46.72	-56.83	9.37	1.17	-48.63	-13.0	35.63
1800.05	H	38.14	-66.11	10.90	1.22	-56.43	-13.0	43.43
1800.05	V	38.55	-65.63	10.90	1.22	-55.95	-13.0	42.95
2250.06	H	38.02	-65.39	11.85	1.19	-54.73	-13.0	41.73
2250.06	V	37.89	-66.21	11.85	1.19	-55.55	-13.0	42.55
2700.08	H	38.01	-64.40	12.28	1.34	-53.46	-13.0	40.46
2700.08	V	37.98	-65.24	12.28	1.34	-54.30	-13.0	41.3
3150.09	H	39.02	-62.54	12.34	1.53	-51.73	-13.0	38.73
3150.09	V	38.81	-62.22	12.34	1.53	-51.41	-13.0	38.41
3600.10	H	37.36	-63.27	12.22	1.58	-52.63	-13.0	39.63
3600.10	V	37.13	-62.47	12.22	1.58	-51.83	-13.0	38.83
4050.11	H	36.52	-62.90	12.41	1.46	-51.95	-13.0	38.95
4050.11	V	36.09	-64.09	12.41	1.46	-53.14	-13.0	40.14
4500.13	H	36.24	-61.83	13.40	1.54	-49.97	-13.0	36.97
4500.13	V	35.80	-62.63	13.40	1.54	-50.77	-13.0	37.77

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	RSS-119	
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)		Limit (dBm)	Margin (dB)
4FSK mode, Channel Spacing:12.5 kHz, operation frequency: 450.0125MHz								
900.03	H	46.52	-50.62	0.00	1.05	-51.67	-20.0	31.67
900.03	V	46.31	-52.84	0.00	1.05	-53.89	-20.0	33.89
1350.04	H	46.76	-56.62	9.37	1.17	-48.42	-20.0	28.42
1350.04	V	45.53	-58.02	9.37	1.17	-49.82	-20.0	29.82
1800.05	H	39.84	-64.41	10.90	1.22	-54.73	-20.0	34.73
1800.05	V	44.51	-59.67	10.90	1.22	-49.99	-20.0	29.99
2250.06	H	38.81	-64.60	11.85	1.19	-53.94	-20.0	33.94
2250.06	V	38.50	-65.60	11.85	1.19	-54.94	-20.0	34.94
2700.08	H	38.77	-63.64	12.28	1.34	-52.70	-20.0	32.70
2700.08	V	38.47	-64.75	12.28	1.34	-53.81	-20.0	33.81
3150.09	H	39.66	-61.90	12.34	1.53	-51.09	-20.0	31.09
3150.09	V	39.22	-61.81	12.34	1.53	-51.00	-20.0	31.00
3600.10	H	37.77	-62.86	12.22	1.58	-52.22	-20.0	32.22
3600.10	V	37.81	-61.79	12.22	1.58	-51.15	-20.0	31.15
4050.11	H	37.07	-62.35	12.41	1.46	-51.40	-20.0	31.40
4050.11	V	37.41	-62.77	12.41	1.46	-51.82	-20.0	31.82
4500.13	H	36.67	-61.40	13.40	1.54	-49.54	-20.0	29.54
4500.13	V	37.25	-61.18	13.40	1.54	-49.32	-20.0	29.32
FM mode, Channel Spacing:12.5 kHz, operation frequency: 460 MHz								
920.00	H	45.23	-51.08	0.00	0.99	-52.07	-20.0	32.07
920.00	V	46.82	-51.36	0.00	0.99	-52.35	-20.0	32.35
1380.00	H	50.92	-52.69	9.50	1.20	-44.39	-20.0	24.39
1380.00	V	51.49	-52.24	9.50	1.20	-43.94	-20.0	23.94
1840.00	H	39.67	-64.54	11.02	1.20	-54.72	-20.0	34.72
1840.00	V	38.62	-65.52	11.02	1.20	-55.70	-20.0	35.70
2300.00	H	38.45	-64.84	11.92	1.20	-54.12	-20.0	34.12
2300.00	V	38.21	-65.91	11.92	1.20	-55.19	-20.0	35.19
2760.00	H	38.51	-63.79	12.30	1.38	-52.87	-20.0	32.87
2760.00	V	38.13	-64.79	12.30	1.38	-53.87	-20.0	33.87
3220.00	H	39.26	-62.17	12.31	1.55	-51.41	-20.0	31.41
3220.00	V	39.03	-61.67	12.31	1.55	-50.91	-20.0	30.91
3680.00	H	37.40	-63.02	12.24	1.55	-52.33	-20.0	32.33
3680.00	V	37.45	-62.30	12.24	1.55	-51.61	-20.0	31.61
4140.00	H	36.78	-62.37	12.61	1.48	-51.24	-20.0	31.24
4140.00	V	37.14	-62.69	12.61	1.48	-51.56	-20.0	31.56
4600.00	H	36.28	-61.46	13.32	1.52	-49.66	-20.0	29.66
4600.00	V	36.86	-61.10	13.32	1.52	-49.30	-20.0	29.30

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	RSS-119	
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)		Limit (dBm)	Margin (dB)
FM mode, Channel Spacing:25 kHz, operation frequency: 460MHz								
920.00	H	45.63	-50.68	0.00	0.99	-51.67	-13.0	38.67
920.00	V	46.86	-51.32	0.00	0.99	-52.31	-13.0	39.31
1380.00	H	51.02	-52.59	9.50	1.20	-44.29	-13.0	31.29
1380.00	V	51.79	-51.94	9.50	1.20	-43.64	-13.0	30.64
1840.00	H	39.13	-65.08	11.02	1.20	-55.26	-13.0	42.26
1840.00	V	38.52	-65.62	11.02	1.20	-55.80	-13.0	42.8
2300.00	H	38.25	-65.04	11.92	1.20	-54.32	-13.0	41.32
2300.00	V	37.77	-66.35	11.92	1.20	-55.63	-13.0	42.63
2760.00	H	38.32	-63.98	12.30	1.38	-53.06	-13.0	40.06
2760.00	V	37.95	-64.97	12.30	1.38	-54.05	-13.0	41.05
3220.00	H	39.11	-62.32	12.31	1.55	-51.56	-13.0	38.56
3220.00	V	38.82	-61.88	12.31	1.55	-51.12	-13.0	38.12
3680.00	H	37.23	-63.19	12.24	1.55	-52.50	-13.0	39.5
3680.00	V	37.09	-62.66	12.24	1.55	-51.97	-13.0	38.97
4140.00	H	36.37	-62.78	12.61	1.48	-51.65	-13.0	38.65
4140.00	V	36.75	-63.08	12.61	1.48	-51.95	-13.0	38.95
4600.00	H	35.97	-61.77	13.32	1.52	-49.97	-13.0	36.97
4600.00	V	36.61	-61.35	13.32	1.52	-49.55	-13.0	36.55
4FSK mode, Channel Spacing:12.5 kHz, operation frequency: 460MHz								
920.00	H	45.14	-51.17	0.00	0.99	-52.16	-20.0	32.16
920.00	V	47.33	-50.85	0.00	0.99	-51.84	-20.0	31.84
1380.00	H	51.50	-52.11	9.50	1.20	-43.81	-20.0	23.81
1380.00	V	49.90	-53.83	9.50	1.20	-45.53	-20.0	25.53
1840.00	H	40.22	-63.99	11.02	1.20	-54.17	-20.0	34.17
1840.00	V	41.71	-62.43	11.02	1.20	-52.61	-20.0	32.61
2300.00	H	37.84	-65.45	11.92	1.20	-54.73	-20.0	34.73
2300.00	V	37.56	-66.56	11.92	1.20	-55.84	-20.0	35.84
2760.00	H	37.98	-64.32	12.30	1.38	-53.40	-20.0	33.40
2760.00	V	37.54	-65.38	12.30	1.38	-54.46	-20.0	34.46
3220.00	H	38.90	-62.53	12.31	1.55	-51.77	-20.0	31.77
3220.00	V	38.62	-62.08	12.31	1.55	-51.32	-20.0	31.32
3680.00	H	36.80	-63.62	12.24	1.55	-52.93	-20.0	32.93
3680.00	V	36.93	-62.82	12.24	1.55	-52.13	-20.0	32.13
4140.00	H	36.15	-63.00	12.61	1.48	-51.87	-20.0	31.87
4140.00	V	36.41	-63.42	12.61	1.48	-52.29	-20.0	32.29
4600.00	H	35.60	-62.14	13.32	1.52	-50.34	-20.0	30.34
4600.00	V	36.32	-61.64	13.32	1.52	-49.84	-20.0	29.84

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	RSS-119	
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)		Limit (dBm)	Margin (dB)
FM mode, Channel Spacing:12.5 kHz, operation frequency: 469.9875 MHz								
939.98	H	46.68	-48.80	0.00	0.93	-49.73	-20.0	29.73
939.98	V	47.87	-49.33	0.00	0.93	-50.26	-20.0	30.26
1409.96	H	55.44	-48.41	9.62	1.24	-40.03	-20.0	20.03
1409.96	V	58.22	-45.70	9.62	1.24	-37.32	-20.0	17.32
1879.95	H	38.45	-65.71	11.14	1.18	-55.75	-20.0	35.75
1879.95	V	40.04	-64.06	11.14	1.18	-54.10	-20.0	34.10
2349.94	H	37.69	-65.48	11.99	1.21	-54.70	-20.0	34.70
2349.94	V	37.22	-66.92	11.99	1.21	-56.14	-20.0	36.14
2819.93	H	37.67	-64.51	12.33	1.41	-53.59	-20.0	33.59
2819.93	V	37.25	-65.37	12.33	1.41	-54.45	-20.0	34.45
3289.91	H	38.45	-62.84	12.28	1.56	-52.12	-20.0	32.12
3289.91	V	38.18	-62.20	12.28	1.56	-51.48	-20.0	31.48
3759.90	H	36.48	-63.73	12.25	1.53	-53.01	-20.0	33.01
3759.90	V	36.69	-63.22	12.25	1.53	-52.50	-20.0	32.50
4229.89	H	35.69	-63.19	12.81	1.49	-51.87	-20.0	31.87
4229.89	V	35.95	-63.53	12.81	1.49	-52.21	-20.0	32.21
4699.88	H	36.18	-61.23	13.24	1.50	-49.49	-20.0	29.49
4699.88	V	36.02	-61.47	13.24	1.50	-49.73	-20.0	29.73
FM mode, Channel Spacing:25 kHz, operation frequency: 469.9875Hz								
939.98	H	46.33	-49.15	0.00	0.93	-50.08	-13.0	37.08
939.98	V	48.13	-49.07	0.00	0.93	-50.00	-13.0	37
1409.96	H	56.63	-47.22	9.62	1.24	-38.84	-13.0	25.84
1409.96	V	56.63	-47.29	9.62	1.24	-38.91	-13.0	25.91
1879.95	H	38.72	-65.44	11.14	1.18	-55.48	-13.0	42.48
1879.95	V	40.52	-63.58	11.14	1.18	-53.62	-13.0	40.62
2349.94	H	37.35	-65.82	11.99	1.21	-55.04	-13.0	42.04
2349.94	V	37.05	-67.09	11.99	1.21	-56.31	-13.0	43.31
2819.93	H	37.33	-64.85	12.33	1.41	-53.93	-13.0	40.93
2819.93	V	37.03	-65.59	12.33	1.41	-54.67	-13.0	41.67
3289.91	H	38.19	-63.10	12.28	1.56	-52.38	-13.0	39.38
3289.91	V	37.78	-62.60	12.28	1.56	-51.88	-13.0	38.88
3759.90	H	36.15	-64.06	12.25	1.53	-53.34	-13.0	40.34
3759.90	V	36.51	-63.40	12.25	1.53	-52.68	-13.0	39.68
4229.89	H	36.43	-62.45	12.81	1.49	-51.13	-13.0	38.13
4229.89	V	35.75	-63.73	12.81	1.49	-52.41	-13.0	39.41
4699.88	H	36.03	-61.38	13.24	1.50	-49.64	-13.0	36.64
4699.88	V	35.83	-61.66	13.24	1.50	-49.92	-13.0	36.92

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	RSS-119	
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)		Limit (dBm)	Margin (dB)
4FSK mode, Channel Spacing:12.5 kHz, operation frequency: 469.9875MHz								
939.98	H	45.83	-49.65	0.00	0.93	-50.58	-20.0	30.58
939.98	V	48.86	-48.34	0.00	0.93	-49.27	-20.0	29.27
1409.96	H	54.25	-49.60	9.62	1.24	-41.22	-20.0	21.22
1409.96	V	55.05	-48.87	9.62	1.24	-40.49	-20.0	20.49
1879.95	H	40.13	-64.03	11.14	1.18	-54.07	-20.0	34.07
1879.95	V	39.40	-64.70	11.14	1.18	-54.74	-20.0	34.74
2349.94	H	36.91	-66.26	11.99	1.21	-55.48	-20.0	35.48
2349.94	V	36.65	-67.49	11.99	1.21	-56.71	-20.0	36.71
2819.93	H	36.93	-65.25	12.33	1.41	-54.33	-20.0	34.33
2819.93	V	36.69	-65.93	12.33	1.41	-55.01	-20.0	35.01
3289.91	H	37.87	-63.42	12.28	1.56	-52.70	-20.0	32.70
3289.91	V	37.34	-63.04	12.28	1.56	-52.32	-20.0	32.32
3759.90	H	35.79	-64.42	12.25	1.53	-53.70	-20.0	33.70
3759.90	V	36.33	-63.58	12.25	1.53	-52.86	-20.0	32.86
4229.89	H	36.25	-62.63	12.81	1.49	-51.31	-20.0	31.31
4229.89	V	36.59	-62.89	12.81	1.49	-51.57	-20.0	31.57
4699.88	H	36.34	-61.07	13.24	1.50	-49.33	-20.0	29.33
4699.88	V	36.62	-60.87	13.24	1.50	-49.13	-20.0	29.13

Note 1:The unit of antenna gain is dBd for frequency below 1GHz and is dBi for frequency above 1GHz.

Note 2:

Absolute Level = Substituted Level - Cable loss + Antenna Gain

Margin = Limit- Absolute Level

RSS-119 §5.8 – TRANSMITTER UNWANTED EMISSIONS (CONDUCTED)

Applicable Standard

According to RSS-119, Issue 12 §5.8

Test Procedure

The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. Sufficient scans were taken to show any out of band emissions up to 10th harmonic.

Test Data**Environmental Conditions**

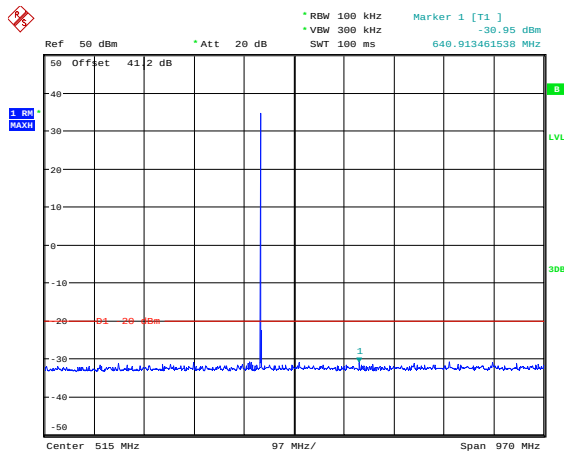
Temperature:	25.5°C
Relative Humidity:	42 %
ATM Pressure:	100.9 kPa
Tester:	James Chen
Test Date:	2020-11-24

Test Mode: Transmitting

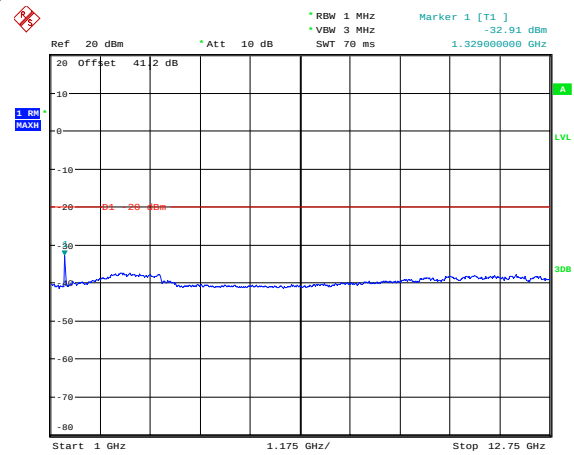
Test Result: Compliance. *Test performed at high power level with Band reject filter, please refer to the following plots.*

FM,12.5kHz:

Low Channel, 450.0125MHz

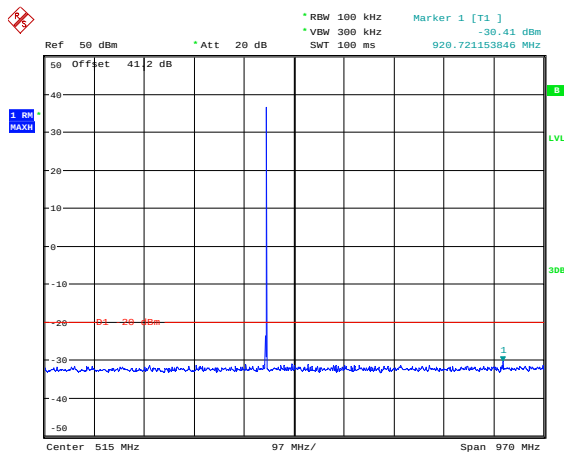


Date: 24.NOV.2020 21:47:09

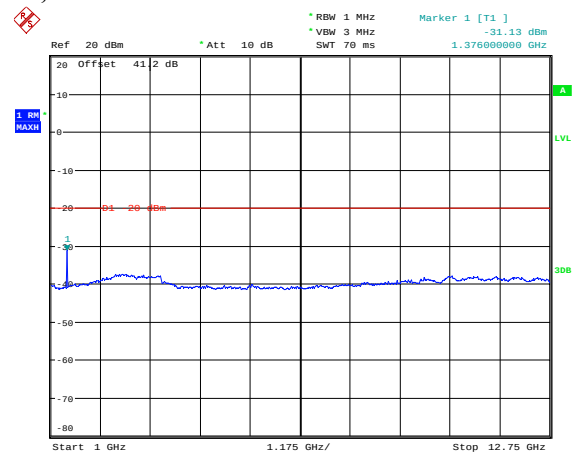


Date: 24.NOV.2020 21:47:20

Middle Channel, 460 MHz

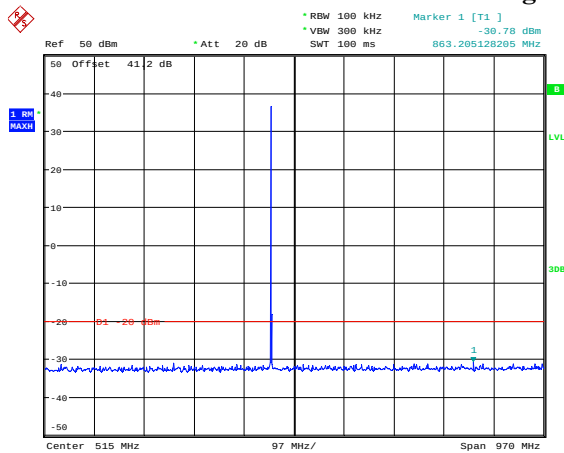


Date: 24.NOV.2020 22:04:30

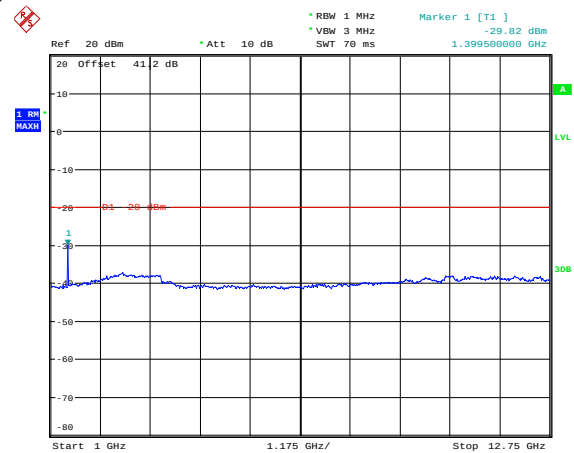


Date: 24.NOV.2020 22:04:40

High Channel, 469.9875 MHz



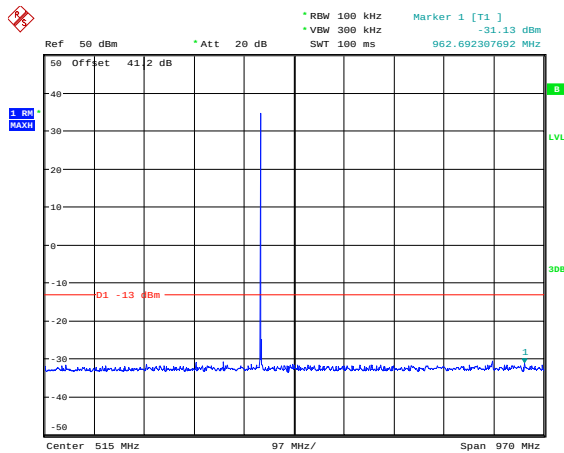
Date: 24.NOV.2020 22:13:53



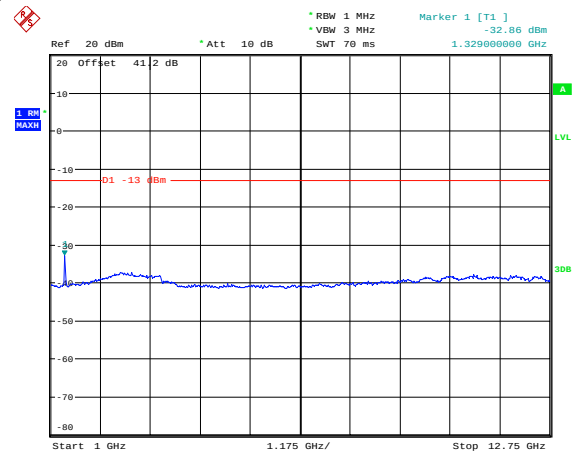
Date: 24.NOV.2020 22:14:06

FM,25kHz:

Low Channel, 450.0125MHz

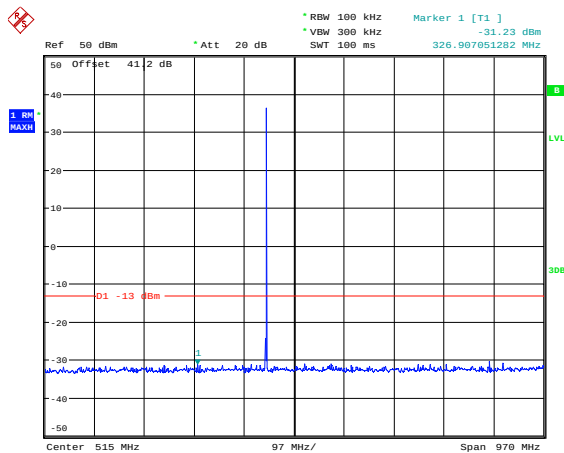


Date: 24.NOV.2020 22:02:35

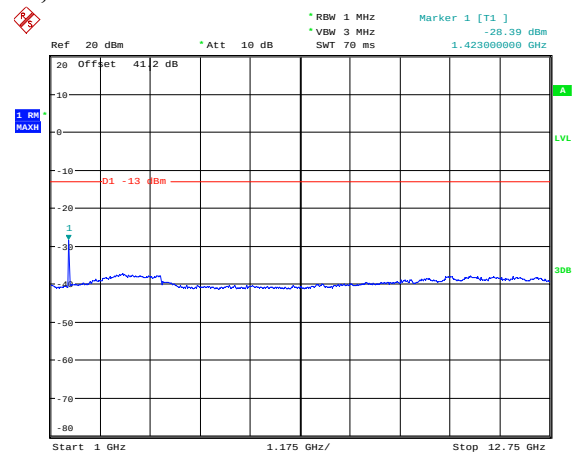


Date: 24.NOV.2020 22:02:46

Middle Channel, 460 MHz

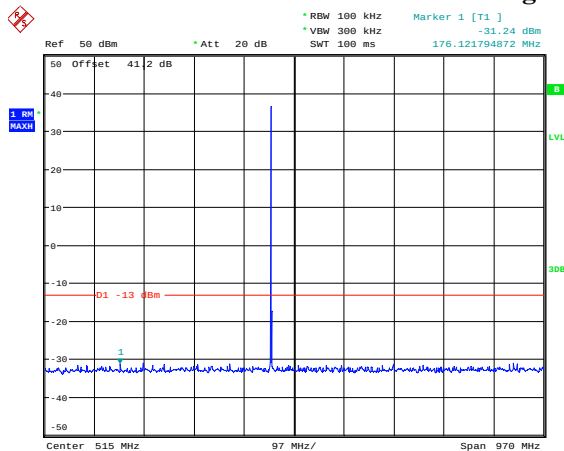


Date: 24.NOV.2020 22:11:33

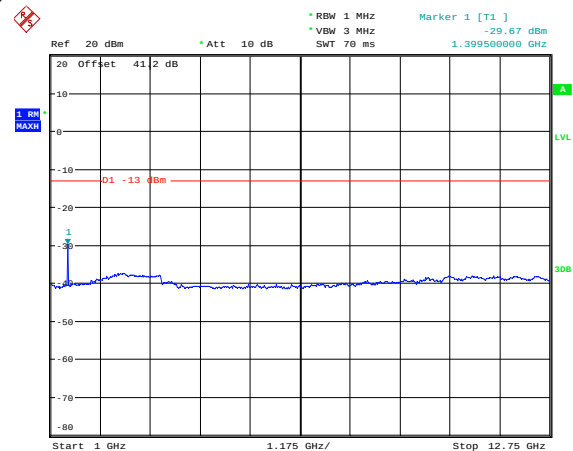


Date: 24.NOV.2020 22:12:49

High Channel, 469.9875 MHz



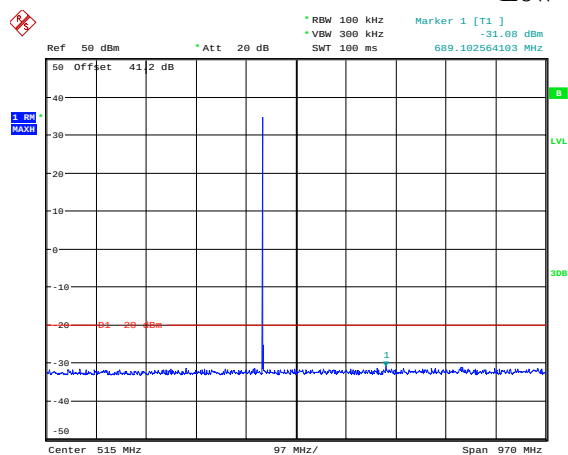
Date: 24.NOV.2020 22:16:48



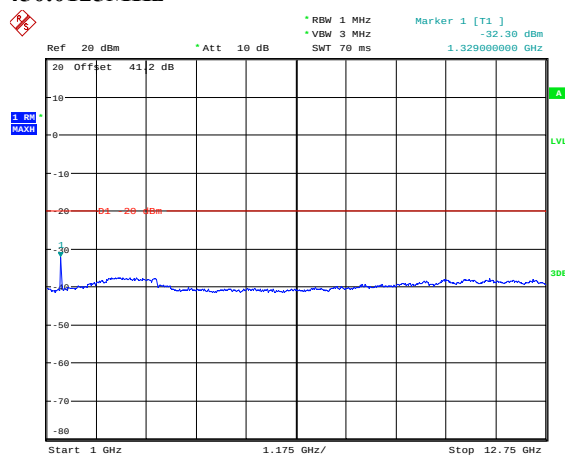
Date: 24.NOV.2020 22:17:01

4FSK,12.5kHz:

Low Channel, 450.0125MHz

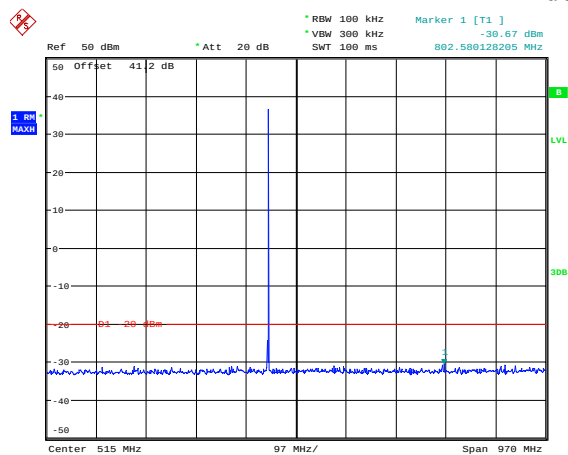


Date: 24.NOV.2020 21:44:16

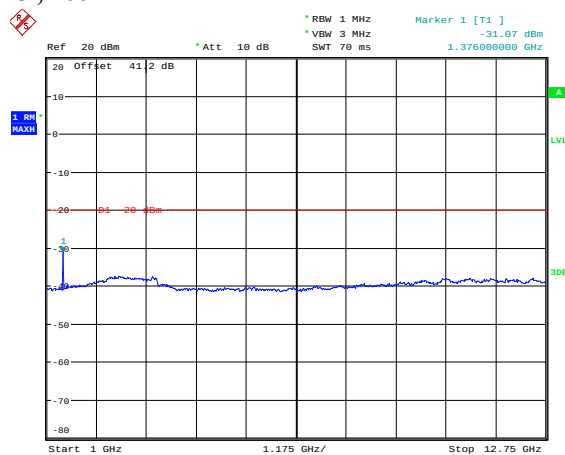


Date: 24.NOV.2020 21:44:29

Middle Channel, 460 MHz

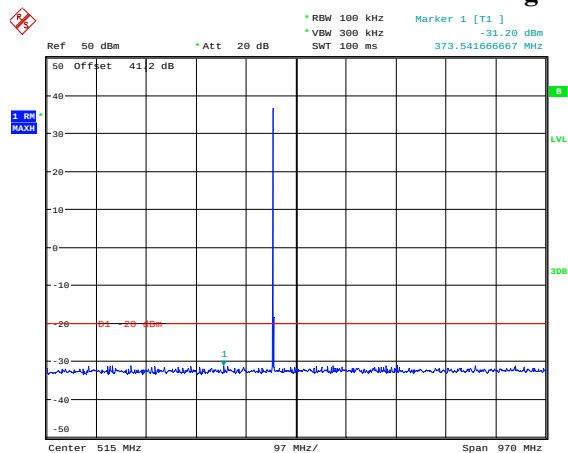


Date: 24.NOV.2020 21:45:08

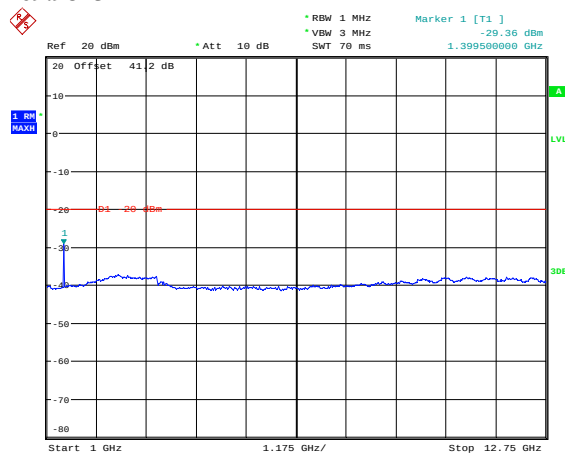


Date: 24.NOV.2020 21:45:23

High Channel, 469.9875 MHz



Date: 24.NOV.2020 21:46:04



Date: 24.NOV.2020 21:46:31

RSS-119 §5.9 - TRANSIENT FREQUENCY BEHAVIOR

Applicable Standard

According to RSS-119, Issue 12§5.9

Test Data

Environmental Conditions

Temperature:	26~26.7°C
Relative Humidity:	46~49 %
ATM Pressure:	101.3~101.4kPa
Tester:	James Chen
Test Date:	2020-11-19~2020-11-23

Test Mode: Transmitting

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

Channel Spacing (kHz)	Transient Period (ms)	Transient Frequency	Result
12.5	<10(t ₁)	±12.5 kHz	Pass
	<25(t ₂)	±6.25 kHz	
	<10(t ₃)	±12.5 kHz	
25	<10(t ₁)	±25 kHz	Pass
	<25(t ₂)	±12.5 kHz	
	<10(t ₃)	±25 kHz	

Ref Lvl 60 dBm

CP 460 MHz Real Time OFF

DEMOD BW: 30 kHz AF-Signal

FM [Hz]

ON1

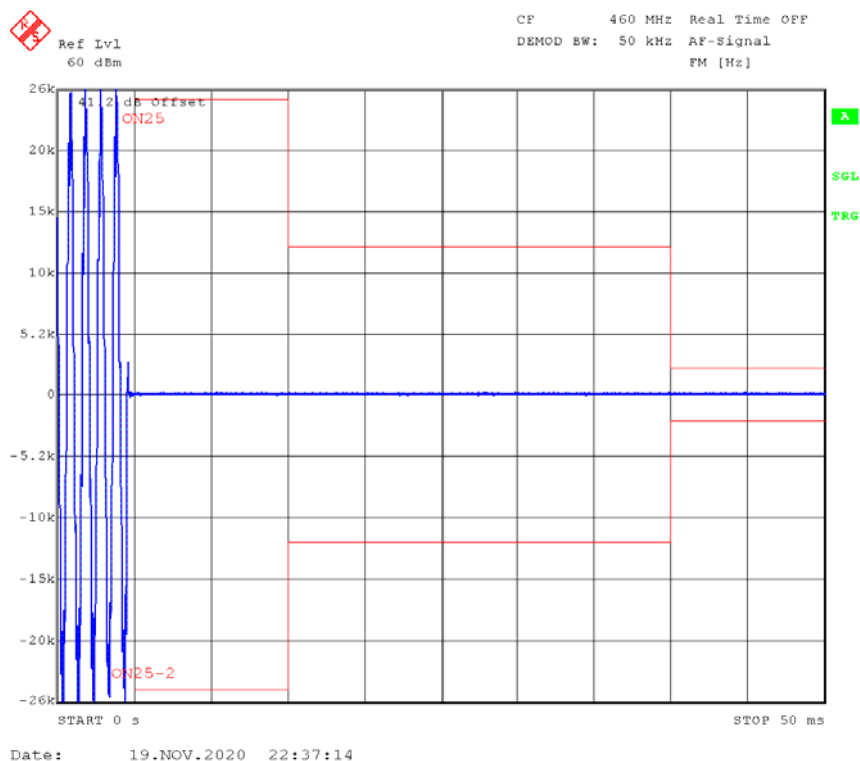
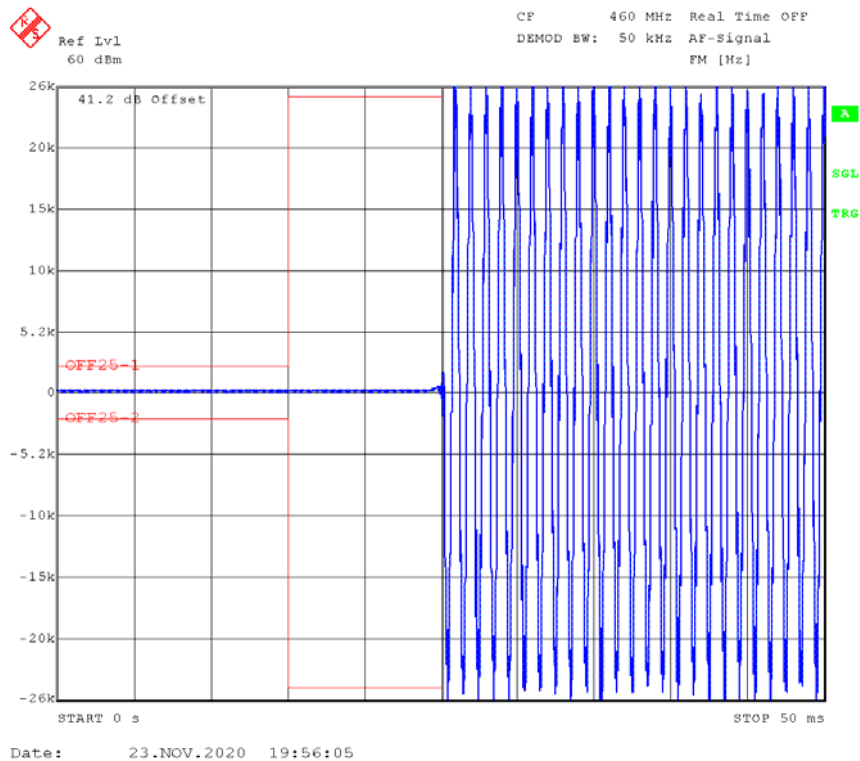
ON2

START 0 s

STOP 100 ms

Date: 19.NOV.2020 22:22:28

Date: 23.NOV.2020 19:39:32

Turn on – 460 MHz, FM 25 kHz(High Power)**Turn off – 460 MHz, FM 25 kHz(High Power)********* END OF REPORT *******