

FCC Test Report

Product Name	ARRI Transceiver Module
Model No.	EMIP400,EMIP400s
FCC ID.	Y7N-EMIP400

Applicant	Arnold & Richter Cine Technik GmbH & Co. Betriebs KG
Address	Türkenstrasse 89, 80799 Munich, Germany

Date of Receipt	Jan. 24, 2018
Issued Date	Jan. 25, 2018
Report No.	1810330R-RFUSP24V00
Report Version	V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

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Test Report

Issued Date: Jan. 25, 2018

Report No.: 1810330R-RFUSP24V00



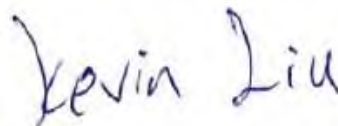
Product Name	ARRI Transceiver Module
Applicant	Arnold & Richter Cine Technik GmbH & Co. Betriebs KG
Address	Türkenstrasse 89, 80799 Munich, Germany
Manufacturer	Arnold & Richter Cine Technik GmbH & Co. Betriebs KG
Model No.	EMIP400, EMIP400s
FCC ID.	Y7N-EMIP400
EUT Rated Voltage	DC 3.3V by fixture
EUT Test Voltage	DC 3.3V by fixture
Trade Name	ARRI
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2016 ANSI C63.4: 2014, ANSI C63.10: 2013 KDB 558074 D01 DTS Meas Guidance v04
Test Result	Complied

Documented By :



(Senior Adm. Specialist / Joanne Lin)

Tested By :



(Engineer / Kevin Liu)

Approved By :



(Director / Vincent Lin)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	ARRI Transceiver Module
Trade Name	ARRI
Model No.	EMIP400,EMIP400s
FCC ID.	Y7N-EMIP400
Frequency Range	OQPSK: 2405-2475MHz 2GFSK: 2410-2475MHz
Channel Number	OQPSK: 15 2GFSK: 14
Type of Modulation	OQPSK 、2GFSK
Antenna Type	Dipole Antenna & Inverted Antenna
Channel Control	Auto
Antenna Gain	Refer to the table “Antenna List”

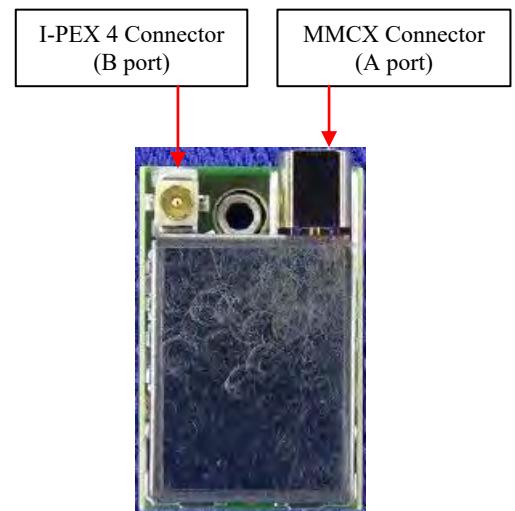
Antenna List

No.	Manufacturer	Part No.	Type	Peak Gain	Remark
1	HFB	N/A	Inverted	2dBi for 2.4 GHz	MMCX Connector
2	Proant AB	333	Dipole	2dBi for 2.4 GHz	SMA Connector
3	NEARSON	S131AM	Dipole	2dBi for 2.4 GHz	SMA Connector
4	Radiall/Larsen	R380500125	Dipole	2dBi for 2.4 GHz	SMA Connector
5	Wanshih	SJ1WFI0006A	Dipole	2dBi for 2.4 GHz	SMA Connector

Note:

1. The antenna of EUT is conforming to FCC 15.203.
2. "  "is the main test antenna for each port.

Manufacturer	RF Port A	RF Port B
HFB	●	
Proant AB	●	●
NEARSON	●	●
Radiall/Larsen	●	●
Wanshih	●	●



Center Frequency of Each Channel for OQPSK:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 11:	2405 MHz	Channel 12:	2410 MHz	Channel 13:	2415 MHz	Channel 14:	2420 MHz
Channel 15:	2425 MHz	Channel 16:	2430 MHz	Channel 17:	2435 MHz	Channel 18:	2440 MHz
Channel 19:	2445 MHz	Channel 20:	2450 MHz	Channel 21:	2455 MHz	Channel 22:	2460 MHz
Channel 23:	2465 MHz	Channel 24:	2470 MHz	Channel 25:	2475 MHz		

Center Frequency of Each Channel for 2GFSK:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 12:	2410 MHz	Channel 13:	2415 MHz	Channel 14:	2420 MHz	Channel 15:	2425 MHz
Channel 16:	2430 MHz	Channel 17:	2435 MHz	Channel 18:	2440 MHz	Channel 19:	2445 MHz
Channel 20:	2450 MHz	Channel 21:	2455 MHz	Channel 22:	2460 MHz	Channel 23:	2465 MHz
Channel 24:	2470 MHz	Channel 25:	2475 MHz				

Note:

1. The EUT is a ARRI Transceiver Module with a built-in 2.4GHz wireless transceiver.
2. These tests were conducted on a sample for the purpose of demonstrating compliance of 2.4GHz transmitter with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
3. EMIP400, EMIP400s differ only in the way the host is connected in baseband and how the modules are mounted to the host.
4. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

Test Mode	Mode 1: Transmit (OQPSK)
	Mode 2: Transmit (2GFSK)

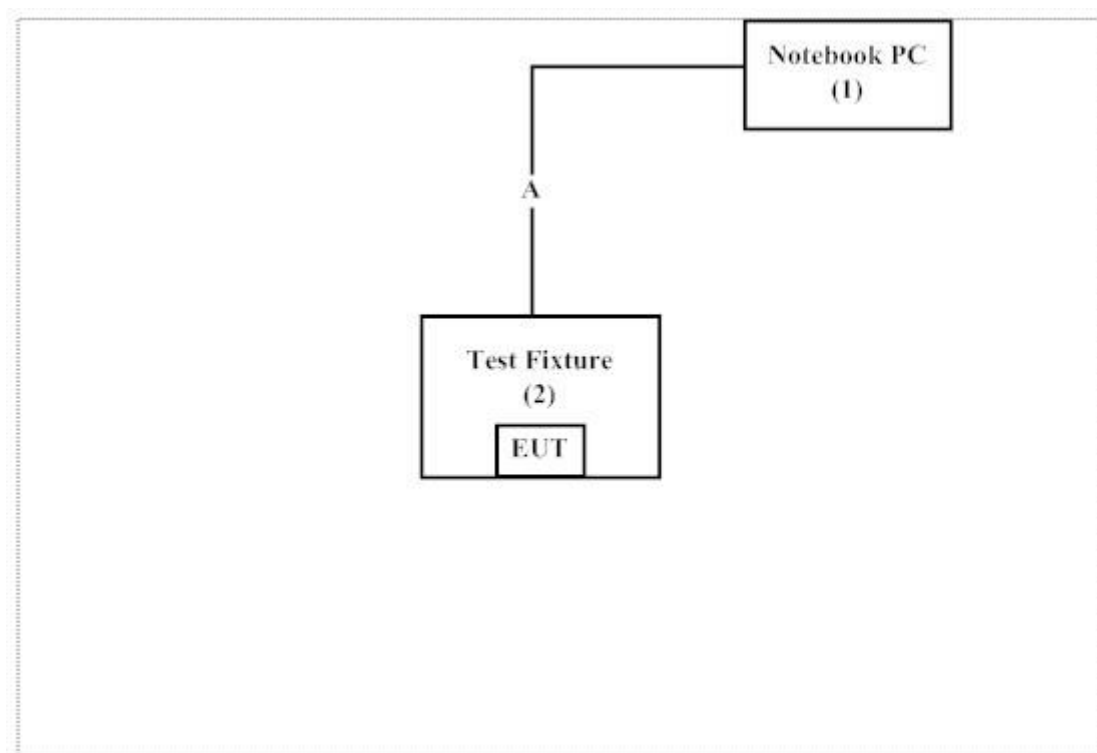
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	Power Cord
1 Notebook PC	DELL	P62G	229FJC2	N/A
2 Test Fixture	EMV	N/A	N/A	N/A

Signal Cable Type	Signal cable Description
A Mini USB Cable	Shielded, 1.8m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.4.
- (2) Execute software “PuTTY V0.63” on the Notebook PC.
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Press “OK” to start the continuous Transmit.
- (5) Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site:

<http://www.dekra.com.tw/english/about/certificates.aspx?bval=5>

The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site: http://www.dekra.com.tw/index_en.aspx

Site Description: Accredited by TAF
Accredited Number: 3023

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TEL: 886-2-2602-7968 / FAX : 866-2-2602-3286
E-Mail : info.tw@dekra.com

FCC Accreditation Number: TW3023

1.7. List of Test Equipment

For Conduction measurements /ASR1

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	EMI Test Receiver	R&S	ESR7	161601	2017.01.06	2018.01.05
X	Two-Line V-Network	R&S	ENV216	101306	2017.02.16	2018.02.15
X	Two-Line V-Network	R&S	ENV216	101307	2017.03.17	2018.03.16
X	Coaxial Cable	Quietek	RG400_BNC	RF001	2017.05.24	2018.05.23

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : QuieTek EMI 2.0 V2.1.113

For Conducted measurements /ASR4

	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Spectrum Analyzer	R&S	FSV30	103464	2017.01.09	2018.01.08
X	Power Meter	Anritsu	ML2496A	1548003	2017.12.11	2018.12.10
X	Power Sensor	Anritsu	MA2411B	1531024	2017.12.11	2018.12.10
X	Power Sensor	Anritsu	MA2411B	1531025	2017.12.11	2018.12.10
	Bluetooth Tester	R&S	CBT	101238	2017.01.03	2018.01.02

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : QuieTek Conduction Test System V8.0.110

For Radiated measurements /ACB1

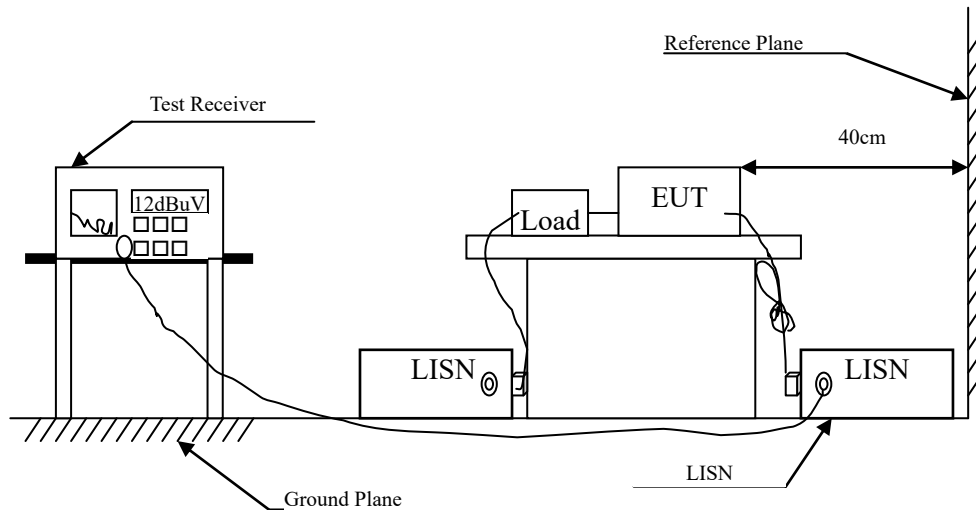
	Equipment	Manufacturer	Model No.	Serial No.	Cali. Data	Due. Data
X	Loop Antenna	TESEQ	HLA6121	37133	2016.03.18	2018.03.17
X	Bi-Log Antenna	SCHWARZBECK	VULB9168	9168-674	2017.02.13	2018.02.12
X	Horn Antenna	ETS-Lindgren	3117	00203800	2017.11.10	2018.11.09
X	Horn Antenna	Com-Power	AH-840	101087	2017.05.24	2018.05.23
X	Pre-Amplifier	EMCI	EMC001330	980316	2017.05.16	2018.05.15
X	Pre-Amplifier	EMCI	EMC051835SE	980311	2017.05.17	2018.05.16
X	Pre-Amplifier	EMCI	EMC05820SE	980310	2017.05.17	2018.05.16
X	Pre-Amplifier	EMCI	EMC184045SE	980314	2017.05.17	2018.05.16
X	Filter	MICRO TRONICS	BRM50702	G251	2017.08.30	2018.08.29
	Filter	MICRO TRONICS	BRM50716	G188	2017.08.30	2018.08.29
X	EMI Test Receiver	R&S	ESR7	101602	2017.12.11	2018.12.10
X	Spectrum Analyzer	R&S	FSV40	101148	2017.01.24	2018.01.23
X	Coaxial Cable	SUHNER	SUCOFLEX 106	RF002	2017.05.25	2018.05.24
X	Mircoflex Cable	HUBER SUHNER	SUCOFLEX 102	MY3381/2	2017.08.11	2018.08.10

Note:

1. All equipments are calibrated every one year.
2. The test instruments marked with "X" are used to measure the final test results.
3. Test Software version : QuieTek EMI 2.0 V2.1.113

2. Conducted Emission

2.1. Test Setup



2.2. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit		
Frequency MHz	Limits	
	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

2.3. Test Procedure

The EUT and Peripherals are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

The EUT was setup to ANSI C63.4, 2014; tested to DTS test procedure of FCC KDB-558074 for compliance to FCC 47CFR Subpart C requirements.

2.4. Uncertainty

$\pm 2.35\text{dB}$

2.5. Test Result of Conducted Emission

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Date : 2017/12/02
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400)(2440MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV	Margin dB	Limit dBμV
LINE 1					
Quasi-Peak					
0.188	9.680	39.303	48.983	-15.931	64.914
0.440	9.696	28.860	38.556	-19.158	57.714
0.573	9.702	25.424	35.126	-20.874	56.000
1.133	9.720	14.085	23.805	-32.195	56.000
3.626	9.796	25.743	35.539	-20.461	56.000
10.275	9.941	26.375	36.316	-23.684	60.000
Average					
0.188	9.680	26.726	36.406	-18.508	54.914
0.440	9.696	15.210	24.906	-22.808	47.714
0.573	9.702	11.055	20.757	-25.243	46.000
1.133	9.720	2.471	12.191	-33.809	46.000
3.626	9.796	13.931	23.727	-22.273	46.000
10.275	9.941	20.500	30.441	-19.559	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Date : 2017/12/02
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V	dB	dB μ V
LINE 2					
Quasi-Peak					
0.179	10.007	33.397	43.404	-21.767	65.171
0.314	9.959	26.759	36.718	-24.596	61.314
0.647	9.955	14.829	24.784	-31.216	56.000
3.660	9.880	24.383	34.263	-21.737	56.000
10.372	9.974	23.233	33.207	-26.793	60.000
24.513	10.198	6.943	17.141	-42.859	60.000
Average					
0.179	10.007	19.194	29.201	-25.970	55.171
0.314	9.959	16.301	26.260	-25.054	51.314
0.647	9.955	7.185	17.140	-28.860	46.000
3.660	9.880	13.051	22.931	-23.069	46.000
10.372	9.974	17.290	27.264	-22.736	50.000
24.513	10.198	1.763	11.961	-38.039	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Date : 2017/12/02
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dB μ V	dB μ V	dB	dB μ V
LINE 1					
Quasi-Peak					
0.184	9.680	41.947	51.627	-13.402	65.029
0.249	9.683	34.114	43.797	-19.374	63.171
0.564	9.700	24.743	34.443	-21.557	56.000
0.872	9.710	13.722	23.432	-32.568	56.000
3.660	9.797	23.797	33.594	-22.406	56.000
10.435	9.942	25.654	35.596	-24.404	60.000
Average					
0.184	9.680	27.899	37.579	-17.450	55.029
0.249	9.683	22.161	31.844	-21.327	53.171
0.564	9.700	11.001	20.701	-25.299	46.000
0.872	9.710	1.525	11.235	-34.765	46.000
3.660	9.797	13.889	23.686	-22.314	46.000
10.435	9.942	19.895	29.837	-20.163	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Date : 2017/12/02
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V	dB	dB μ V
LINE 2					
Quasi-Peak					
0.186	10.019	40.425	50.444	-14.527	64.971
0.395	9.972	22.150	32.122	-26.878	59.000
0.881	9.901	12.092	21.994	-34.006	56.000
1.525	9.879	16.136	26.015	-29.985	56.000
3.741	9.878	25.192	35.070	-20.930	56.000
10.266	9.973	23.004	32.977	-27.023	60.000
Average					
0.186	10.019	27.348	37.367	-17.604	54.971
0.395	9.972	8.800	18.773	-30.227	49.000
0.881	9.901	0.420	10.321	-35.679	46.000
1.525	9.879	6.245	16.125	-29.875	46.000
3.741	9.878	13.326	23.204	-22.796	46.000
10.266	9.973	16.887	26.860	-23.140	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dB μ V	dB μ V	dB	dB μ V
LINE 1					
Quasi-Peak					
0.152	9.616	37.410	47.026	-18.917	65.943
0.258	9.684	23.241	32.925	-29.989	62.914
0.478	9.698	29.221	38.920	-17.709	56.629
3.442	9.795	21.629	31.424	-24.576	56.000
9.803	9.929	20.057	29.986	-30.014	60.000
24.326	10.100	11.780	21.880	-38.120	60.000
Average					
0.152	9.616	20.794	30.411	-25.532	55.943
0.258	9.684	14.551	24.235	-28.679	52.914
0.478	9.698	18.880	28.578	-18.051	46.629
3.442	9.795	10.279	20.074	-25.926	46.000
9.803	9.929	15.630	25.559	-24.441	50.000
24.326	10.100	13.118	23.218	-26.782	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V	dB	dB μ V
LINE 2					
Quasi-Peak					
0.159	9.928	37.229	47.157	-18.586	65.743
0.274	9.952	22.833	32.785	-29.672	62.457
0.483	9.987	29.543	39.530	-16.956	56.486
3.604	9.881	23.548	33.429	-22.571	56.000
9.722	9.958	19.729	29.688	-30.312	60.000
24.326	10.197	11.846	22.043	-37.957	60.000
Average					
0.159	9.928	21.540	31.469	-24.274	55.743
0.274	9.952	13.393	23.345	-29.112	52.457
0.483	9.987	19.596	29.583	-16.903	46.486
3.604	9.881	10.739	20.620	-25.380	46.000
9.722	9.958	15.228	25.186	-24.814	50.000
24.326	10.197	13.013	23.210	-26.790	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dB μ V	dB μ V	dB	dB μ V
LINE 1					
Quasi-Peak					
0.150	9.611	36.638	46.249	-19.751	66.000
0.260	9.684	23.007	32.691	-30.166	62.857
0.483	9.699	29.445	39.144	-17.342	56.486
3.561	9.796	23.874	33.669	-22.331	56.000
9.609	9.927	19.859	29.786	-30.214	60.000
24.326	10.100	11.784	21.884	-38.116	60.000
Average					
0.150	9.611	20.305	29.916	-26.084	56.000
0.260	9.684	14.285	23.969	-28.888	52.857
0.483	9.699	19.570	29.269	-17.217	46.486
3.561	9.796	11.225	21.021	-24.979	46.000
9.609	9.927	15.017	24.945	-25.055	50.000
24.326	10.100	12.990	23.090	-26.910	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V	dB	dB μ V
LINE 2					
Quasi-Peak					
0.152	10.709	37.204	47.913	-18.030	65.943
0.222	9.944	26.762	36.706	-27.237	63.943
0.463	9.984	26.733	36.716	-20.341	57.057
3.514	9.883	21.076	30.959	-25.041	56.000
9.823	9.959	19.834	29.793	-30.207	60.000
24.326	10.197	11.812	22.009	-37.991	60.000
Average					
0.152	10.709	20.677	31.386	-24.557	55.943
0.222	9.944	13.177	23.121	-30.822	53.943
0.463	9.984	16.606	26.590	-20.467	47.057
3.514	9.883	10.825	20.708	-25.292	46.000
9.823	9.959	15.101	25.060	-24.940	50.000
24.326	10.197	12.979	23.176	-26.824	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Date : 2017/12/02
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400S) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dB μ V	dB μ V	dB	dB μ V
LINE 1					
Quasi-Peak					
0.175	9.668	38.141	47.809	-17.477	65.286
0.368	9.691	27.614	37.305	-22.466	59.771
0.978	9.720	13.627	23.347	-32.653	56.000
1.759	9.740	14.390	24.130	-31.870	56.000
3.595	9.796	25.174	34.970	-21.030	56.000
10.068	9.936	26.478	36.414	-23.586	60.000
Average					
0.175	9.668	21.270	30.938	-24.348	55.286
0.368	9.691	16.208	25.899	-23.872	49.771
0.978	9.720	1.765	11.485	-34.515	46.000
1.759	9.740	4.093	13.833	-32.167	46.000
3.595	9.796	13.275	23.071	-22.929	46.000
10.068	9.936	21.010	30.946	-19.054	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Date : 2017/12/02
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400S) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V	dB	dB μ V
LINE 2					
Quasi-Peak					
0.170	9.973	38.709	48.681	-16.748	65.429
0.463	9.984	25.414	35.398	-21.659	57.057
0.683	9.951	13.321	23.272	-32.728	56.000
3.752	9.878	25.411	35.289	-20.711	56.000
10.230	9.972	23.322	33.294	-26.706	60.000
17.637	10.111	12.119	22.230	-37.770	60.000
Average					
0.170	9.973	23.188	33.160	-22.269	55.429
0.463	9.984	12.207	22.191	-24.866	47.057
0.683	9.951	7.107	17.058	-28.942	46.000
3.752	9.878	13.694	23.572	-22.428	46.000
10.230	9.972	17.394	27.366	-22.634	50.000
17.637	10.111	6.704	16.815	-33.185	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Date : 2017/12/02
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400S) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dB μ V	dB μ V	dB	dB μ V
LINE 1					
Quasi-Peak					
0.166	9.647	39.497	49.144	-16.399	65.543
0.359	9.690	17.686	27.377	-32.652	60.029
0.481	9.698	19.290	28.989	-27.554	56.543
0.859	9.710	13.554	23.264	-32.736	56.000
3.687	9.797	24.041	33.838	-22.162	56.000
10.190	9.941	26.255	36.196	-23.804	60.000
Average					
0.166	9.647	28.196	37.843	-17.700	55.543
0.359	9.690	1.709	11.399	-38.630	50.029
0.481	9.698	7.041	16.739	-29.804	46.543
0.859	9.710	4.264	13.974	-32.026	46.000
3.687	9.797	14.079	23.876	-22.124	46.000
10.190	9.941	20.771	30.712	-19.288	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Date : 2017/12/02
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400S) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dB μ V	dB μ V	dB	dB μ V
LINE 2					
Quasi-Peak					
0.159	9.928	40.224	50.152	-15.591	65.743
0.485	9.987	25.760	35.747	-20.682	56.429
0.913	9.899	12.929	22.828	-33.172	56.000
3.822	9.878	23.988	33.866	-22.134	56.000
9.996	9.960	22.359	32.319	-27.681	60.000
18.042	10.115	11.398	21.513	-38.487	60.000
Average					
0.159	9.928	27.100	37.029	-18.714	55.743
0.485	9.987	13.483	23.471	-22.958	46.429
0.913	9.899	0.420	10.319	-35.681	46.000
3.822	9.878	12.465	22.343	-23.657	46.000
9.996	9.960	16.142	26.102	-23.898	50.000
18.042	10.115	5.687	15.802	-34.198	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400S) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dB μ V	dB μ V	dB	dB μ V
LINE 1					
Quasi-Peak					
0.152	9.616	41.973	51.589	-14.354	65.943
0.467	9.698	23.311	33.009	-23.934	56.943
0.704	9.710	10.495	20.205	-35.795	56.000
3.392	9.791	19.326	29.118	-26.882	56.000
9.832	9.929	16.311	26.240	-33.760	60.000
24.576	10.100	11.095	21.195	-38.805	60.000
Average					
0.152	9.616	28.735	38.351	-17.592	55.943
0.467	9.698	7.414	17.111	-29.832	46.943
0.704	9.710	-3.353	6.357	-39.643	46.000
3.392	9.791	6.107	15.898	-30.102	46.000
9.832	9.929	11.929	21.858	-28.142	50.000
24.576	10.100	7.220	17.320	-32.680	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400S) (2440MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV	Margin dB	Limit dBμV
LINE 2					
Quasi-Peak					
0.152	10.709	40.629	51.338	-14.605	65.943
0.469	9.985	32.241	42.226	-14.660	56.886
0.706	9.946	12.334	22.280	-33.720	56.000
3.478	9.884	25.309	35.193	-20.807	56.000
9.685	9.958	24.619	34.577	-25.423	60.000
24.576	10.198	14.598	24.796	-35.204	60.000
Average					
0.152	10.709	24.184	34.893	-21.050	55.943
0.469	9.985	20.014	29.999	-16.887	46.886
0.706	9.946	3.047	12.993	-33.007	46.000
3.478	9.884	13.744	23.629	-22.371	46.000
9.685	9.958	19.280	29.238	-20.762	50.000
24.576	10.198	13.182	23.380	-26.620	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400S) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dB μ V	dB μ V	dB	dB μ V
LINE 1					
Quasi-Peak					
0.150	9.611	39.232	48.843	-17.157	66.000
0.465	9.697	33.099	42.797	-14.203	57.000
0.704	9.710	15.105	24.815	-31.185	56.000
3.473	9.795	23.876	33.671	-22.329	56.000
9.744	9.928	24.336	34.264	-25.736	60.000
24.576	10.100	11.363	21.463	-38.537	60.000
Average					
0.150	9.611	20.122	29.733	-26.267	56.000
0.465	9.697	24.559	34.257	-12.743	47.000
0.704	9.710	5.601	15.311	-30.689	46.000
3.473	9.795	13.189	22.984	-23.016	46.000
9.744	9.928	18.831	28.759	-21.241	50.000
24.576	10.100	13.372	23.472	-26.528	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : ARRI Transceiver Module
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400S) (2440MHz)

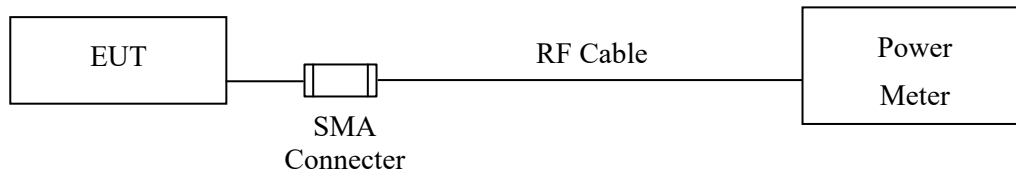
Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V	dB	dB μ V
LINE 2					
Quasi-Peak					
0.150	10.977	38.089	49.066	-16.934	66.000
0.463	9.984	31.219	41.202	-15.855	57.057
0.708	9.946	17.242	27.188	-28.812	56.000
3.561	9.882	24.764	34.646	-21.354	56.000
9.595	9.958	24.078	34.036	-25.964	60.000
24.576	10.198	13.189	23.387	-36.613	60.000
Average					
0.150	10.977	23.474	34.451	-21.549	56.000
0.463	9.984	18.657	28.641	-18.416	47.057
0.708	9.946	4.626	14.572	-31.428	46.000
3.561	9.882	13.560	23.443	-22.557	46.000
9.595	9.958	18.799	28.757	-21.243	50.000
24.576	10.198	11.156	21.354	-28.646	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

3. Peak Power Output

3.1. Test Setup



3.2. Limit

The maximum peak power shall be less 1 Watt.

3.3. Test Procedure

Tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements. The maximum peak conducted output power using KDB 558074 section 9.1.3 PKPM1 Peak power meter method.

3.4. Uncertainty

± 0.86 dB

3.5. Test Result of Peak Power Output

Product : ARRI Transceiver Module
Test Item : Peak Power Output
Test Mode : Mode 1: Transmit (OQPSK) (EMIP400)
Test Date : 2017/12/05

Port A

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
11	2405.00	18.90	1 Watt= 30 dBm	Pass
18	2445.00	19.00	1 Watt= 30 dBm	Pass
25	2475.00	18.92	1 Watt= 30 dBm	Pass

Port B

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
11	2405.00	18.60	1 Watt= 30 dBm	Pass
18	2445.00	18.92	1 Watt= 30 dBm	Pass
25	2475.00	18.51	1 Watt= 30 dBm	Pass

Product : ARRI Transceiver Module
Test Item : Peak Power Output
Test Mode : Mode 2: Transmit (2GFSK) (EMIP400)
Test Date : 2017/12/20

Port A

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
12	2410.00	14.41	1 Watt= 30 dBm	Pass
18	2440.00	13.77	1 Watt= 30 dBm	Pass
25	2475.00	16.03	1 Watt= 30 dBm	Pass

Port B

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
12	2410.00	14.56	1 Watt= 30 dBm	Pass
18	2440.00	14.61	1 Watt= 30 dBm	Pass
25	2475.00	14.86	1 Watt= 30 dBm	Pass

Product : ARRI Transceiver Module
Test Item : Peak Power Output
Test Mode : Mode 1: Transmit (OQPSK) (EMIP400S)
Test Date : 2017/12/05

Port A

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
11	2405.00	18.96	1 Watt= 30 dBm	Pass
18	2445.00	18.94	1 Watt= 30 dBm	Pass
25	2475.00	19.02	1 Watt= 30 dBm	Pass

Port B

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
11	2405.00	18.53	1 Watt= 30 dBm	Pass
18	2445.00	18.64	1 Watt= 30 dBm	Pass
25	2475.00	18.53	1 Watt= 30 dBm	Pass

Product : ARRI Transceiver Module
Test Item : Peak Power Output
Test Mode : Mode 2: Transmit (2GFSK) (EMIP400S)
Test Date : 2017/12/20

Port A

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
12	2410.00	13.92	1 Watt= 30 dBm	Pass
18	2440.00	14.15	1 Watt= 30 dBm	Pass
25	2475.00	15.14	1 Watt= 30 dBm	Pass

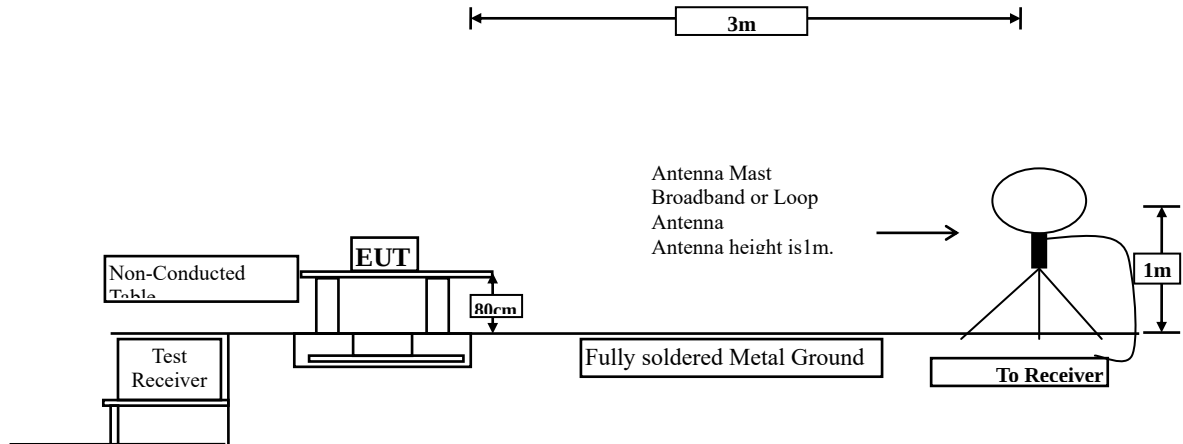
Port B

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit	Result
12	2410.00	14.90	1 Watt= 30 dBm	Pass
18	2440.00	14.23	1 Watt= 30 dBm	Pass
25	2475.00	14.88	1 Watt= 30 dBm	Pass

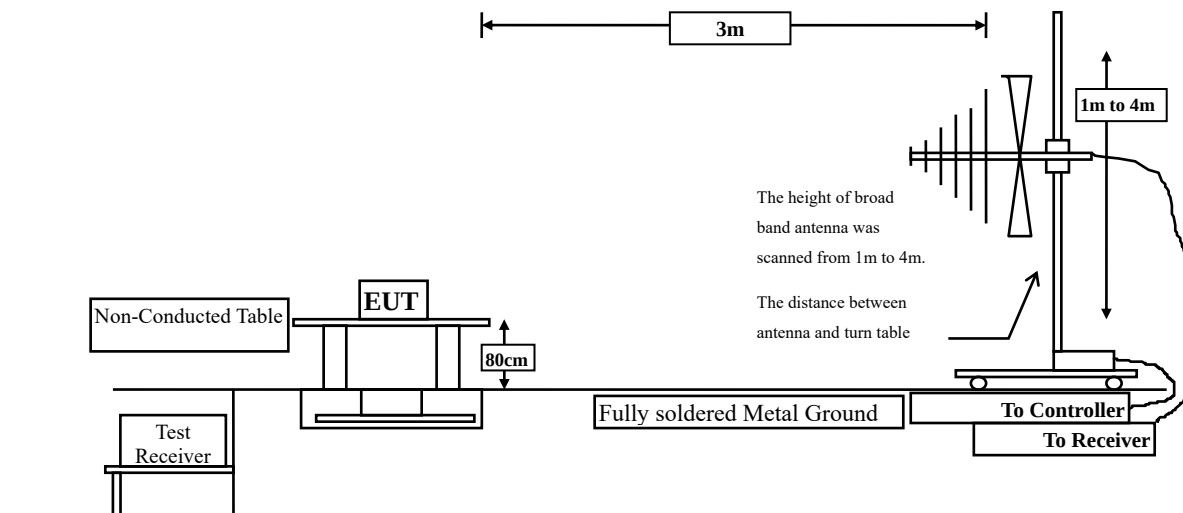
4. Radiated Emission

4.1. Test Setup

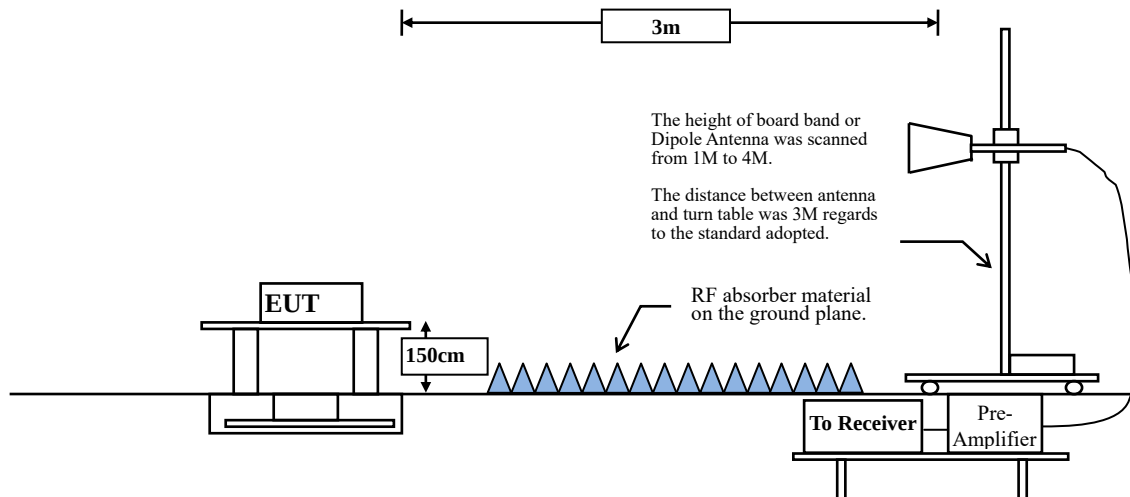
Radiated Emission Under 30MHz



Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.2. Limits

➤ General Radiated Emission Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	Field strength (microvolts/meter)	Measurement distance (meter)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

- Remarks:
1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
 2. In the Above Table, the tighter limit applies at the band edges.
 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

4.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Measuring the frequency range below 1GHz, the EUT is placed on a turn table which is 0.8 meter above ground, when measuring the frequency range above 1GHz, the EUT is placed on a turn table which is 1.5 meter above ground.

The turn table is rotated 360 degrees to determine the position of the maximum emission level.

The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10: 2013 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.

The measurement frequency range from 9kHz - 10th Harmonic of fundamental was investigated.

4.4. Uncertainty

Horizontal polarization :

30-300MHz: $\pm 4.08\text{dB}$; 300M-1GHz: $\pm 3.86\text{dB}$; 1-18GHz: $\pm 3.77\text{dB}$; 18-40GHz: $\pm 3.98\text{dB}$

Vertical polarization :

30-300MHz: $\pm 4.81\text{dB}$; 300M-1GHz: $\pm 3.87\text{dB}$; 1-18GHz: $\pm 3.83\text{dB}$; 18-40GHz: $\pm 3.98\text{dB}$

4.5. Test Result of Radiated Emission

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400) (2405MHz)

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V /m	Margin dB	Peak Limit dB μ V /m
Horizontal					
Peak Detector:					
4810.000	-2.870	48.150	45.280	-28.720	74.000
7215.000	0.383	61.990	62.373	-11.627	74.000
9620.000	2.361	58.220	60.581	-13.419	74.000
Average Detector					
7215.000	0.383	50.020	50.403	-3.597	54.000
9620.000	2.361	45.940	48.301	-5.699	54.000
Vertical					
Peak Detector:					
4810.000	-2.870	48.660	45.790	-28.210	74.000
7215.000	0.383	60.330	60.713	-13.287	74.000
9620.000	2.361	56.410	58.771	-15.229	74.000
Average Detector					
7215.000	0.383	48.990	49.373	-4.627	54.000
9620.000	2.361	44.570	46.931	-7.069	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400) (2440MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV /m	Margin dB	Peak Limit dBμV /m
Horizontal					
Peak Detector:					
4880.000	-2.817	53.250	50.432	-23.568	74.000
7320.000	0.464	63.630	64.094	-9.906	74.000
9760.000	2.608	61.890	64.497	-9.503	74.000
Average Detector					
7320.000	0.464	51.940	52.404	-1.596	54.000
9760.000	2.608	47.750	50.357	-3.643	54.000
Vertical					
Peak Detector:					
4880.000	-2.817	51.070	48.252	-25.748	74.000
7320.000	0.464	62.250	62.714	-11.286	74.000
9760.000	2.608	60.570	63.177	-10.823	74.000
Average Detector					
7320.000	0.464	50.680	51.144	-2.856	54.000
9760.000	2.608	48.520	51.127	-2.873	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400) (2475MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV /m	Margin dB	Peak Limit dBμV /m
Horizontal					
Peak Detector:					
4950.000	-2.788	51.850	49.062	-24.938	74.000
7425.000	0.496	55.080	55.576	-18.424	74.000
9900.000	2.870	50.710	53.580	-20.420	74.000
Average Detector					
7425.000	0.496	43.440	43.936	-10.064	54.000
Vertical					
Peak Detector:					
4950.000	-2.788	50.710	47.922	-26.078	74.000
7425.000	0.496	55.720	56.216	-17.784	74.000
9900.000	2.870	50.270	53.140	-20.860	74.000
Average Detector					
7425.000	0.496	43.810	44.306	-9.694	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400) (2405MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V /m	dB	dB μ V /m
Horizontal					
Peak Detector:					
4810.000	-2.870	57.420	54.550	-19.450	74.000
7215.000	0.383	57.770	58.153	-15.847	74.000
9620.000	2.361	54.880	57.241	-16.759	74.000
Average Detector:					
4810.000	-2.870	46.320	43.450	-10.550	54.000
7215.000	0.383	46.330	46.713	-7.287	54.000
9620.000	2.361	43.220	45.581	-8.419	54.000
Vertical					
Peak Detector:					
4810.000	-2.870	55.480	52.610	-21.390	74.000
7215.000	0.383	56.430	56.813	-17.187	74.000
9620.000	2.361	53.030	55.391	-18.609	74.000
Average Detector:					
7215.000	0.383	45.060	45.443	-8.557	54.000
9620.000	2.361	41.210	43.571	-10.429	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400) (2440MHz)

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V /m	Margin dB	Peak Limit dB μ V /m
Horizontal					
Peak Detector:					
4880.000	-2.817	55.410	52.592	-21.408	74.000
7320.000	0.464	58.730	59.194	-14.806	74.000
9760.000	2.608	51.250	53.857	-20.143	74.000
Average Detector					
7320.000	0.464	47.220	47.684	-6.316	54.000
Vertical					
Peak Detector:					
4880.000	-2.817	53.210	50.392	-23.608	74.000
7320.000	0.464	57.340	57.804	-16.196	74.000
9760.000	2.608	52.930	55.537	-18.463	74.000
Average Detector					
7320.000	0.464	45.420	45.884	-8.116	54.000
9760.000	2.608	41.190	43.797	-10.203	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400) (2475MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV /m	Margin dB	Peak Limit dBμV /m
Horizontal					
Peak Detector:					
4950.000	-2.788	55.840	53.052	-20.948	74.000
7425.000	0.496	55.740	56.236	-17.764	74.000
9900.000	2.870	49.320	52.190	-21.810	74.000
Average Detector					
4950.000	-2.788	44.570	41.782	-12.218	54.000
7425.000	0.496	44.430	44.926	-9.074	54.000
Vertical					
Peak Detector:					
4950.000	-2.788	57.940	55.152	-18.848	74.000
7425.000	0.496	54.390	54.886	-19.114	74.000
9900.000	2.870	49.860	52.730	-21.270	74.000
Average Detector					
4950.000	-2.788	47.410	44.622	-9.378	54.000
7425.000	0.496	42.480	42.976	-11.024	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400) (2410MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV /m	Margin dB	Peak Limit dBμV /m
Horizontal					
Peak Detector:					
4820.000	-2.870	48.240	45.370	-28.630	74.000
7230.000	0.383	52.140	52.523	-21.477	74.000
9640.000	2.361	50.110	52.471	-21.529	74.000
Average Detector					
--					54.000
Vertical					
Peak Detector:					
4820.000	-2.870	48.620	45.750	-28.250	74.000
7230.000	0.383	52.130	52.513	-21.487	74.000
9640.000	2.361	49.850	52.211	-21.789	74.000
Average Detector					
--					54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400) (2440MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV /m	Margin dB	Peak Limit dBμV /m
Horizontal					
Peak Detector:					
4880.000	-2.817	53.120	50.302	-23.698	74.000
7320.000	0.464	52.380	52.844	-21.156	74.000
9760.000	2.608	50.160	52.767	-21.233	74.000
Average Detector					
--					54.000
Vertical					
Peak Detector:					
4880.000	-2.817	51.020	48.202	-25.798	74.000
7320.000	0.464	51.180	51.644	-22.356	74.000
9760.000	2.608	50.230	52.837	-21.163	74.000
Average Detector					
--					54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400) (2475MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV /m	Margin dB	Peak Limit dBμV /m
Horizontal					
Peak Detector:					
4950.000	-2.788	51.720	48.932	-25.068	74.000
7425.000	0.496	52.390	52.886	-21.114	74.000
9900.000	2.870	50.170	53.040	-20.960	74.000
Average Detector					
--					54.000
Vertical					
Peak Detector:					
4950.000	-2.788	50.470	47.682	-26.318	74.000
7425.000	0.496	52.380	52.876	-21.124	74.000
9900.000	2.870	50.360	53.230	-20.770	74.000
Average Detector					
--					54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400) (2410MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V /m	dB	dB μ V /m
Horizontal					
Peak Detector:					
4820.000	-2.870	51.380	48.510	-25.490	74.000
7230.000	0.383	52.380	52.763	-21.237	74.000
9640.000	2.361	50.320	52.681	-21.319	74.000
Average Detector:					
--					54.000
Vertical					
Peak Detector:					
4820.000	-2.870	51.320	48.450	-25.550	74.000
7230.000	0.383	53.280	53.663	-20.337	74.000
9640.000	2.361	51.480	53.841	-20.159	74.000
Average Detector:					
--					54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400) (2440MHz)

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V /m	Margin dB	Peak Limit dB μ V /m
Horizontal					
Peak Detector:					
4880.000	-2.817	51.280	48.462	-25.538	74.000
7320.000	0.464	53.210	53.674	-20.326	74.000
9760.000	2.608	51.220	53.827	-20.173	74.000
Average Detector					
--					54.000
Vertical					
Peak Detector:					
4880.000	-2.817	52.140	49.322	-24.678	74.000
7320.000	0.464	52.390	52.854	-21.146	74.000
9760.000	2.608	50.390	52.997	-21.003	74.000
Average Detector					
--					54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400) (2475MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV /m	Margin dB	Peak Limit dBμV /m
Horizontal					
Peak Detector:					
4950.000	-2.788	52.380	49.592	-24.408	74.000
7425.000	0.496	51.390	51.886	-22.114	74.000
9900.000	2.870	49.520	52.390	-21.610	74.000
Average Detector					
--					54.000
Vertical					
Peak Detector:					
4950.000	-2.788	56.480	53.692	-20.308	74.000
7425.000	0.496	52.350	52.846	-21.154	74.000
9900.000	2.870	50.270	53.140	-20.860	74.000
Average Detector					
--					54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : General Radiated Emission Data
 Test Date : 2017/12/06
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V /m	dB	dB μ V /m
Horizontal					
143.870	-10.829	35.431	24.602	-18.898	43.500
425.029	-6.757	36.678	29.921	-16.079	46.000
541.710	-4.442	35.418	30.975	-15.025	46.000
680.884	-2.027	34.659	32.632	-13.368	46.000
779.290	-0.564	34.944	34.380	-11.620	46.000
919.870	1.133	35.608	36.741	-9.259	46.000
Vertical					
381.449	-7.862	37.512	29.650	-16.350	46.000
454.551	-6.090	37.150	31.060	-14.940	46.000
649.957	-2.629	34.818	32.189	-13.811	46.000
768.043	-0.678	34.848	34.170	-11.830	46.000
888.942	0.798	34.592	35.389	-10.611	46.000
955.014	1.508	35.991	37.500	-8.500	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : ARRI Transceiver Module
 Test Item : General Radiated Emission Data
 Test Date : 2017/11/30
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V /m	dB	dB μ V /m
Horizontal					
142.464	-10.883	37.065	26.183	-17.317	43.500
297.101	-9.965	40.384	30.419	-15.581	46.000
451.739	-6.138	35.613	29.474	-16.526	46.000
607.783	-3.001	34.934	31.932	-14.068	46.000
762.420	-0.743	34.132	33.389	-12.611	46.000
939.551	1.327	34.137	35.463	-10.537	46.000
Vertical					
142.464	-10.883	34.472	23.590	-19.910	43.500
340.681	-8.975	35.197	26.221	-19.779	46.000
519.217	-4.908	29.031	24.123	-21.877	46.000
635.899	-2.758	32.339	29.581	-16.419	46.000
789.130	-0.452	28.455	28.003	-17.997	46.000
962.043	1.626	27.783	29.409	-24.591	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : ARRI Transceiver Module
 Test Item : General Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V /m	dB	dB μ V /m
Horizontal					
146.681	-10.722	27.695	16.973	-26.527	43.500
330.841	-9.197	26.698	17.501	-28.499	46.000
479.855	-5.656	27.271	21.614	-24.386	46.000
600.754	-3.062	25.868	22.806	-23.194	46.000
749.768	-0.883	27.813	26.930	-19.070	46.000
884.725	0.748	26.665	27.413	-18.587	46.000
Vertical					
157.928	-10.463	26.799	16.336	-27.164	43.500
299.913	-9.902	27.256	17.354	-28.646	46.000
470.014	-5.824	27.809	21.986	-24.014	46.000
612.000	-2.965	26.042	23.077	-22.923	46.000
761.014	-0.760	26.321	25.561	-20.439	46.000
903.000	0.956	26.363	27.319	-18.681	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : ARRI Transceiver Module
 Test Item : General Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400) (2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V /m	dB	dB μ V /m
Horizontal					
166.362	-10.704	26.791	16.087	-27.413	43.500
336.464	-9.071	27.791	18.720	-27.280	46.000
492.507	-5.431	26.069	20.637	-25.363	46.000
620.435	-2.883	26.503	23.620	-22.380	46.000
734.304	-1.116	27.049	25.933	-20.067	46.000
890.348	0.814	26.176	26.990	-19.010	46.000
Vertical					
159.333	-10.440	26.524	16.084	-27.416	43.500
294.290	-10.028	27.582	17.554	-28.446	46.000
429.246	-6.660	27.374	20.714	-25.286	46.000
557.174	-4.095	26.109	22.015	-23.985	46.000
713.217	-1.445	26.709	25.264	-20.736	46.000
869.261	0.561	26.349	26.911	-19.089	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400S)(2405MHz)

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V /m	Margin dB	Peak Limit dB μ V /m
Horizontal					
Peak Detector:					
4810.000	-2.870	49.330	46.460	-27.540	74.000
7215.000	0.383	54.010	54.393	-19.607	74.000
9620.000	2.361	49.930	52.291	-21.709	74.000
Average Detector					
7215.000	0.383	42.360	42.743	-11.257	54.000
Vertical					
Peak Detector:					
4810.000	-2.870	51.300	48.430	-25.570	74.000
7215.000	0.383	55.670	56.053	-17.947	74.000
9620.000	2.361	52.790	55.151	-18.849	74.000
Average Detector					
7215.000	0.383	44.140	44.523	-9.477	54.000
9620.000	2.361	41.110	43.471	-10.529	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400S)(2440MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV /m	Margin dB	Peak Limit dBμV /m
Horizontal					
Peak Detector:					
4880.000	-2.817	48.800	45.982	-28.018	74.000
7320.000	0.464	55.900	56.364	-17.636	74.000
9760.000	2.608	50.570	53.177	-20.823	74.000
Average Detector					
7320.000	0.464	44.540	45.004	-8.996	54.000
Vertical					
Peak Detector:					
4880.000	-2.817	51.020	48.202	-25.798	74.000
7320.000	0.464	54.150	54.614	-19.386	74.000
9760.000	2.608	52.920	55.527	-18.473	74.000
Average Detector					
7320.000	0.464	42.730	43.194	-10.806	54.000
9760.000	2.608	42.180	44.787	-9.213	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400S)(2475MHz)

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V /m	Margin dB	Peak Limit dB μ V /m
Horizontal					
Peak Detector:					
4950.000	-2.788	49.720	46.932	-27.068	74.000
7425.000	0.496	57.590	58.086	-15.914	74.000
9900.000	2.870	48.820	51.690	-22.310	74.000
Average Detector					
7425.000	0.496	45.420	45.916	-8.084	54.000
Vertical					
Peak Detector:					
4950.000	-2.788	49.380	46.592	-27.408	74.000
7425.000	0.496	53.010	53.506	-20.494	74.000
9900.000	2.870	51.050	53.920	-20.080	74.000
Average Detector					
7425.000	0.496	40.520	41.016	-12.984	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400S)(2405MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V /m	dB	dB μ V /m
Horizontal					
Peak Detector:					
4810.000	-2.870	51.320	48.450	-25.550	74.000
7215.000	0.383	56.240	56.623	-17.377	74.000
9620.000	2.361	48.730	51.091	-22.909	74.000
Average Detector:					
7215.000	0.383	45.420	45.803	-8.197	54.000
Vertical					
Peak Detector:					
4810.000	-2.870	50.480	47.610	-26.390	74.000
7215.000	0.383	58.350	58.733	-15.267	74.000
9620.000	2.361	50.020	52.381	-21.619	74.000
Average Detector:					
7215.000	0.383	47.080	47.463	-6.537	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400S)(2440MHz)

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V /m	Margin dB	Peak Limit dB μ V /m
Horizontal					
Peak Detector:					
4880.000	-2.817	52.890	50.072	-23.928	74.000
7320.000	0.464	61.110	61.574	-12.426	74.000
9760.000	2.608	56.900	59.507	-14.493	74.000
Average Detector					
7320.000	0.464	49.620	50.084	-3.916	54.000
9760.000	2.608	45.250	47.857	-6.143	54.000
Vertical					
Peak Detector:					
4880.000	-2.817	50.180	47.362	-26.638	74.000
7320.000	0.464	58.110	58.574	-15.426	74.000
9760.000	2.608	59.570	62.177	-11.823	74.000
Average Detector					
7320.000	0.464	46.340	46.804	-7.196	54.000
9760.000	2.608	46.920	49.527	-4.473	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) B Port(EMIP400S)(2475MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV /m	Margin dB	Peak Limit dBμV /m
Horizontal					
Peak Detector:					
4950.000	-2.788	48.650	45.862	-28.138	74.000
7425.000	0.496	55.700	56.196	-17.804	74.000
9900.000	2.870	48.260	51.130	-22.870	74.000
Average Detector					
7425.000	0.496	44.300	44.796	-9.204	54.000
Vertical					
Peak Detector:					
4950.000	-2.788	49.650	46.862	-27.138	74.000
7425.000	0.496	51.590	52.086	-21.914	74.000
9900.000	2.870	50.580	53.450	-20.550	74.000
Average Detector					
--					54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400S)(2410MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV /m	Margin dB	Peak Limit dBμV /m
Horizontal					
Peak Detector:					
4820.000	-2.867	49.280	46.413	-27.587	74.000
7230.000	0.382	53.290	53.672	-20.328	74.000
9640.000	2.373	49.660	52.034	-21.966	74.000
Average Detector					
--					54.000
Vertical					
Peak Detector:					
4820.000	-2.867	51.380	48.513	-25.487	74.000
7230.000	0.382	52.960	53.342	-20.658	74.000
9620.000	2.361	50.480	52.841	-21.159	74.000
Average Detector					
--					54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400S)(2440MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV /m	Margin dB	Peak Limit dBμV /m
Horizontal					
Peak Detector:					
4880.000	-2.817	48.120	45.302	-28.698	74.000
7320.000	0.464	52.850	53.314	-20.686	74.000
9760.000	2.608	50.520	53.127	-20.873	74.000
Average Detector					
--					54.000
Vertical					
Peak Detector:					
4880.000	-2.817	51.050	48.232	-25.768	74.000
7320.000	0.464	52.530	52.994	-21.006	74.000
9760.000	2.608	49.380	51.987	-22.013	74.000
Average Detector					
--					54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400S)(2475MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV /m	Margin dB	Peak Limit dBμV /m
Horizontal					
Peak Detector:					
4950.000	-2.788	46.380	43.592	-30.408	74.000
7425.000	0.496	52.320	52.816	-21.184	74.000
9900.000	2.870	48.920	51.790	-22.210	74.000
Average Detector					
--					54.000
Vertical					
Peak Detector:					
4950.000	-2.788	49.280	46.492	-27.508	74.000
7425.000	0.496	53.020	53.516	-20.484	74.000
9900.000	2.870	51.010	53.880	-20.120	74.000
Average Detector					
--					54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400S)(2410MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V /m	dB	dB μ V /m
Horizontal					
Peak Detector:					
4820.000	-2.867	51.280	48.413	-25.587	74.000
7230.000	0.382	51.320	51.702	-22.298	74.000
9640.000	2.373	48.930	51.304	-22.696	74.000
Average Detector:					
--					54.000
Vertical					
Peak Detector:					
4820.000	-2.867	50.380	47.513	-26.487	74.000
7230.000	0.382	52.030	52.412	-21.588	74.000
9640.000	2.373	50.090	52.464	-21.536	74.000
Average Detector:					
--					54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400S)(2440MHz)

Frequency MHz	Correct Factor dB	Reading Level dB μ V	Measurement Level dB μ V /m	Margin dB	Peak Limit dB μ V /m
Horizontal					
Peak Detector:					
4880.000	-2.817	52.230	49.412	-24.588	74.000
7320.000	0.464	51.820	52.284	-21.716	74.000
9760.000	2.608	49.830	52.437	-21.563	74.000
Average Detector					
--					54.000
Vertical					
Peak Detector:					
4880.000	-2.817	50.120	47.302	-26.698	74.000
7320.000	0.464	52.120	52.584	-21.416	74.000
9760.000	2.608	49.960	52.567	-21.433	74.000
Average Detector					
--					54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : Harmonic Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400S)(2475MHz)

Frequency MHz	Correct Factor dB	Reading Level dBμV	Measurement Level dBμV /m	Margin dB	Peak Limit dBμV /m
Horizontal					
Peak Detector:					
4950.000	-2.788	48.720	45.932	-28.068	74.000
7425.000	0.496	52.750	53.246	-20.754	74.000
9900.000	2.870	48.320	51.190	-22.810	74.000
Average Detector					
--					54.000
Vertical					
Peak Detector:					
4950.000	-2.788	49.720	46.932	-27.068	74.000
7425.000	0.496	51.480	51.976	-22.024	74.000
9900.000	2.870	50.120	52.990	-21.010	74.000
Average Detector					
--					54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : ARRI Transceiver Module
 Test Item : General Radiated Emission Data
 Test Date : 2017/12/06
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400S)(2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V /m	dB	dB μ V /m
Horizontal					
149.493	-10.620	33.916	23.295	-20.205	43.500
297.101	-9.965	37.551	27.586	-18.414	46.000
448.928	-6.195	32.067	25.871	-20.129	46.000
603.565	-3.036	29.890	26.853	-19.147	46.000
768.043	-0.678	30.972	30.294	-15.706	46.000
936.739	1.295	27.847	29.142	-16.858	46.000
Vertical					
142.464	-10.883	35.469	24.587	-18.913	43.500
270.391	-10.853	33.400	22.548	-23.452	46.000
367.391	-8.271	36.138	27.867	-18.133	46.000
538.899	-4.498	33.872	29.373	-16.627	46.000
707.594	-1.533	32.466	30.933	-15.067	46.000
852.391	0.346	28.081	28.427	-17.573	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : ARRI Transceiver Module
 Test Item : General Radiated Emission Data
 Test Date : 2017/11/30
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400S)(2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V /m	dB	dB μ V /m
Horizontal					
444.710	-6.303	35.594	29.291	-16.709	46.000
548.739	-4.291	35.472	31.181	-14.819	46.000
673.855	-2.166	34.768	32.601	-13.399	46.000
787.725	-0.469	35.376	34.908	-11.092	46.000
832.710	0.090	37.516	37.606	-8.394	46.000
940.957	1.341	35.459	36.800	-9.200	46.000
Vertical					
499.536	-5.312	35.776	30.464	-15.536	46.000
621.841	-2.871	34.562	31.691	-14.309	46.000
683.696	-1.974	34.147	32.172	-13.828	46.000
782.101	-0.533	34.965	34.432	-11.568	46.000
813.029	-0.170	34.805	34.636	-11.364	46.000
919.870	1.133	35.140	36.273	-9.727	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : ARRI Transceiver Module
 Test Item : General Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400S)(2440MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V /m	dB	dB μ V /m
Horizontal					
153.710	-10.542	29.789	19.247	-24.253	43.500
351.928	-8.702	30.510	21.808	-24.192	46.000
515.000	-4.996	29.543	24.547	-21.453	46.000
664.014	-2.360	30.293	27.933	-18.067	46.000
806.000	-0.253	29.299	29.046	-16.954	46.000
919.870	1.133	29.359	30.492	-15.508	46.000
Vertical					
153.710	-10.542	29.789	19.247	-24.253	43.500
288.667	-10.154	29.775	19.621	-26.379	46.000
451.739	-6.138	29.679	23.540	-22.460	46.000
586.696	-3.387	29.832	26.445	-19.555	46.000
770.855	-0.656	29.379	28.722	-17.278	46.000
898.783	0.917	29.724	30.641	-15.359	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

Product : ARRI Transceiver Module
 Test Item : General Radiated Emission Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400S)(2440MHz)

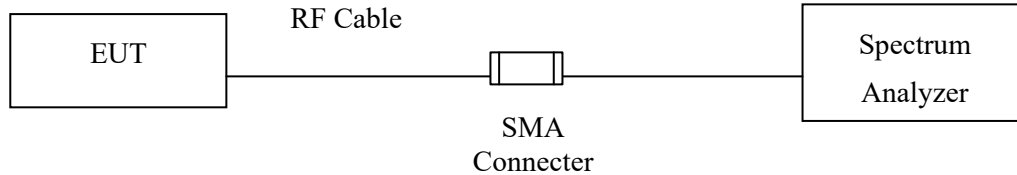
Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dB μ V	dB μ V /m	dB	dB μ V /m
Horizontal					
160.739	-10.462	29.526	19.065	-24.435	43.500
309.754	-9.681	30.060	20.379	-25.621	46.000
451.739	-6.138	29.679	23.540	-22.460	46.000
586.696	-3.387	29.832	26.445	-19.555	46.000
728.681	-1.202	29.928	28.726	-17.274	46.000
884.725	0.748	30.610	31.358	-14.642	46.000
Vertical					
142.464	-10.883	30.154	19.272	-24.228	43.500
277.420	-10.484	30.351	19.868	-26.132	46.000
426.435	-6.725	30.104	23.379	-22.621	46.000
575.449	-3.656	30.033	26.376	-19.624	46.000
731.493	-1.159	29.650	28.491	-17.509	46.000
873.478	0.614	30.617	31.230	-14.770	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.
8. No emission found between lowest internal used/generated frequency to 30MHz.

5. RF Antenna Conducted Test

5.1. Test Setup



5.2. Limits

According to FCC Section 15.247(d). In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

5.3. Test Procedure

The EUT was tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Set VBW > RBW, scan up through 10th harmonic.

5.4. Uncertainty

±1.23dB

5.5. Test Result of RF Antenna Conducted Test

Product : ARRI Transceiver Module
Test Item : RF Antenna Conducted Test
Test Mode : Mode 1: Transmit (OQPSK) (EMIP400)
Test Date : 2017/11/30

A Port

Figure Channel 11:

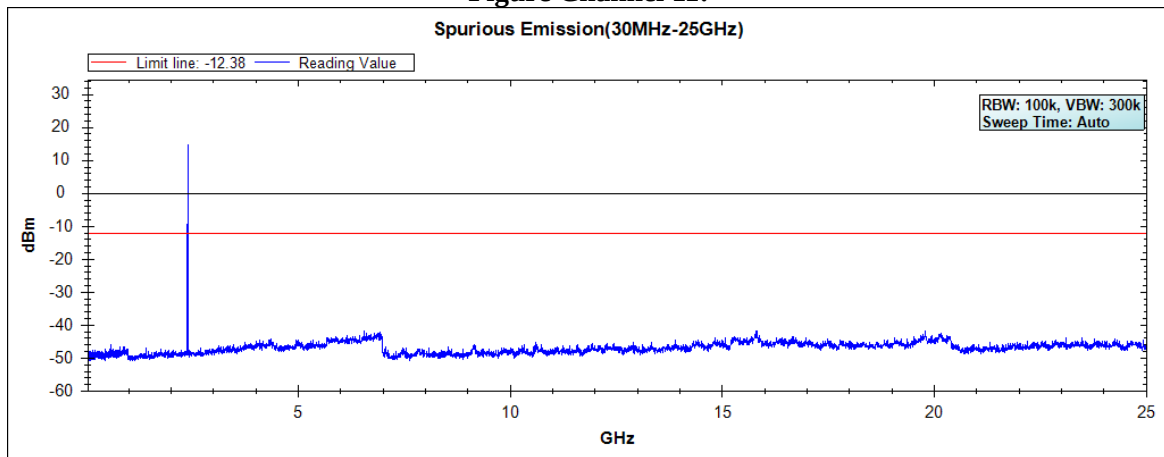


Figure Channel 18:

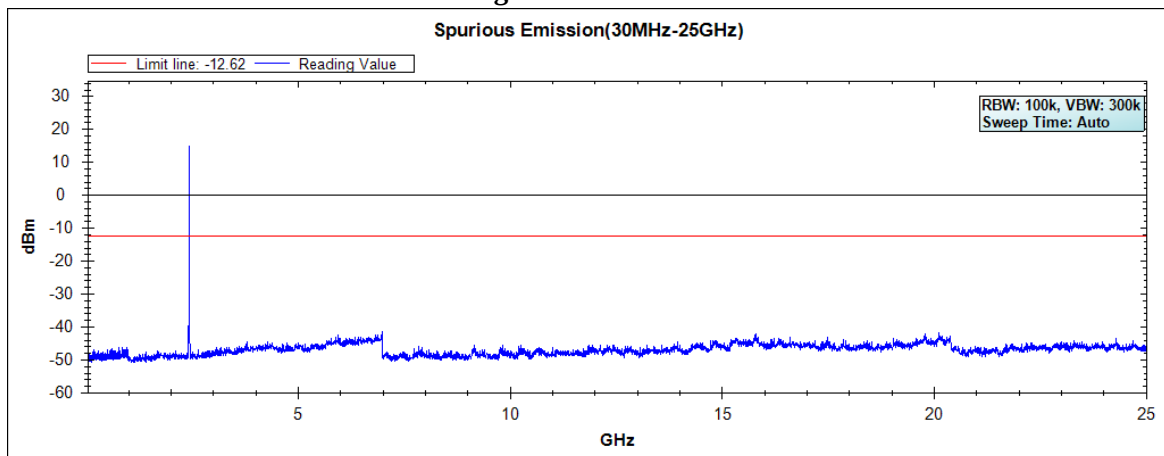
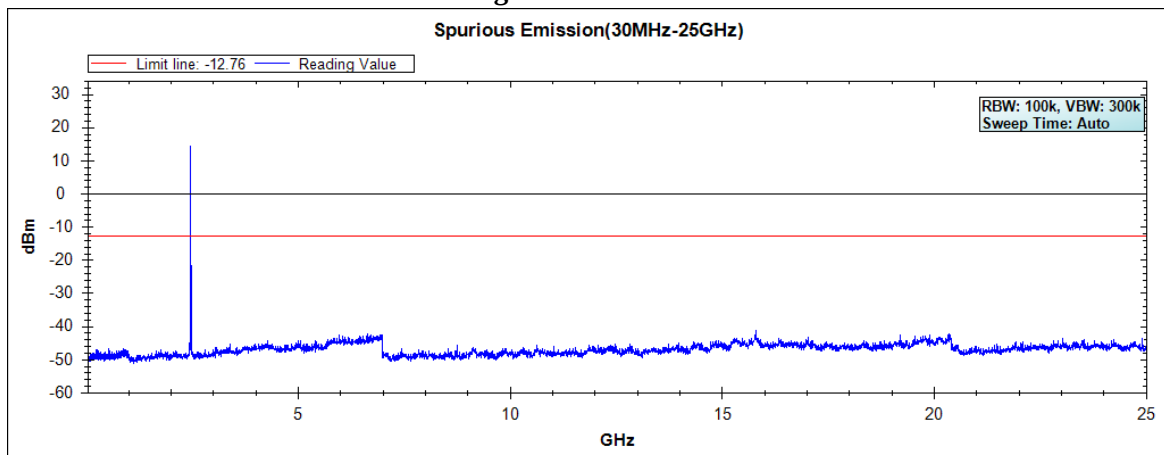


Figure Channel 25:



Note: The above test pattern is synthesized by multiple of the frequency range.

Product : ARRI Transceiver Module
Test Item : RF Antenna Conducted Test
Test Mode : Mode 1: Transmit (OQPSK) (EMIP400)
Test Date : 2017/11/30

B Port

Figure Channel 11:

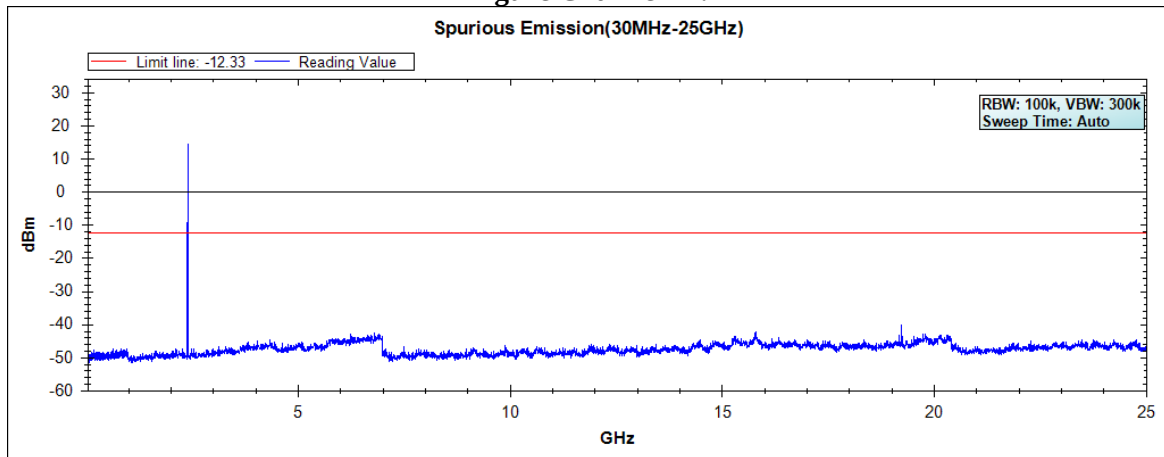


Figure Channel 18:

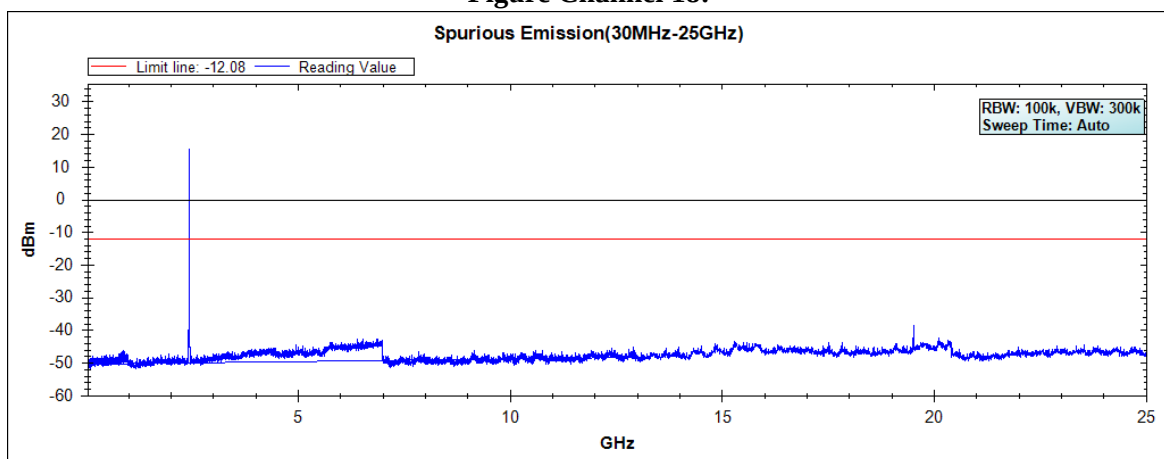
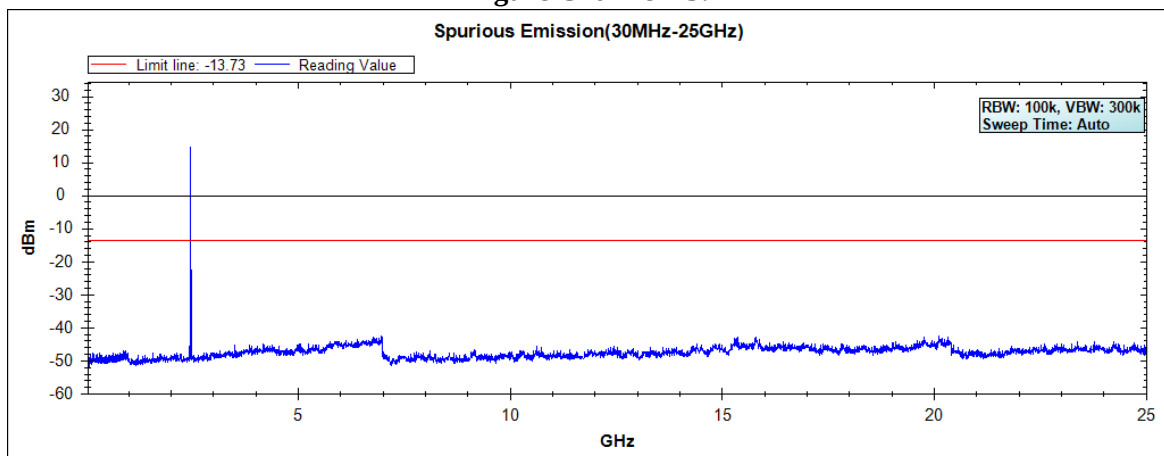


Figure Channel 25:



Note: The above test pattern is synthesized by multiple of the frequency range.

Product : ARRI Transceiver Module
Test Item : RF Antenna Conducted Test
Test Mode : Mode 2: Transmit (2GFSK) (EMIP400)
Test Date : 2017/12/19

A Port

Figure Channel 12:

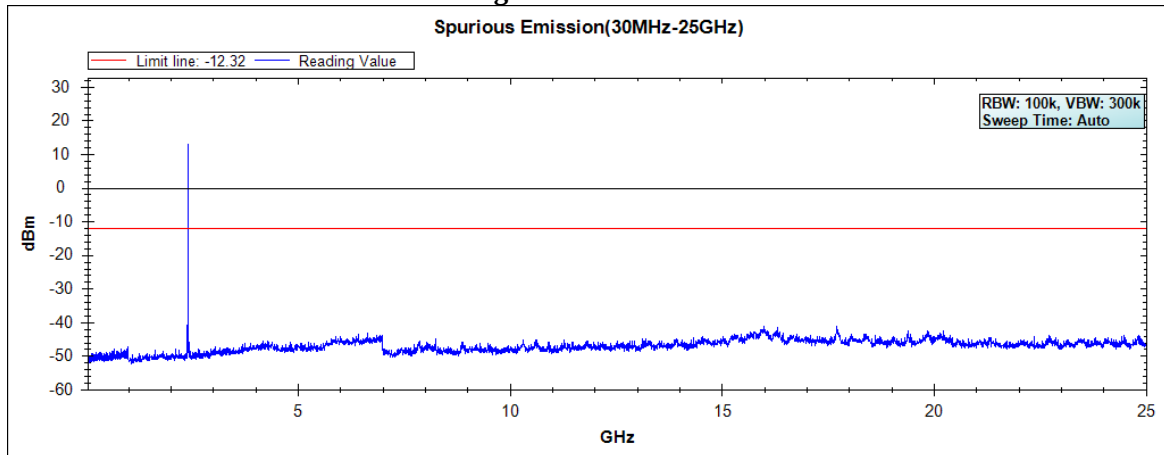


Figure Channel 18:

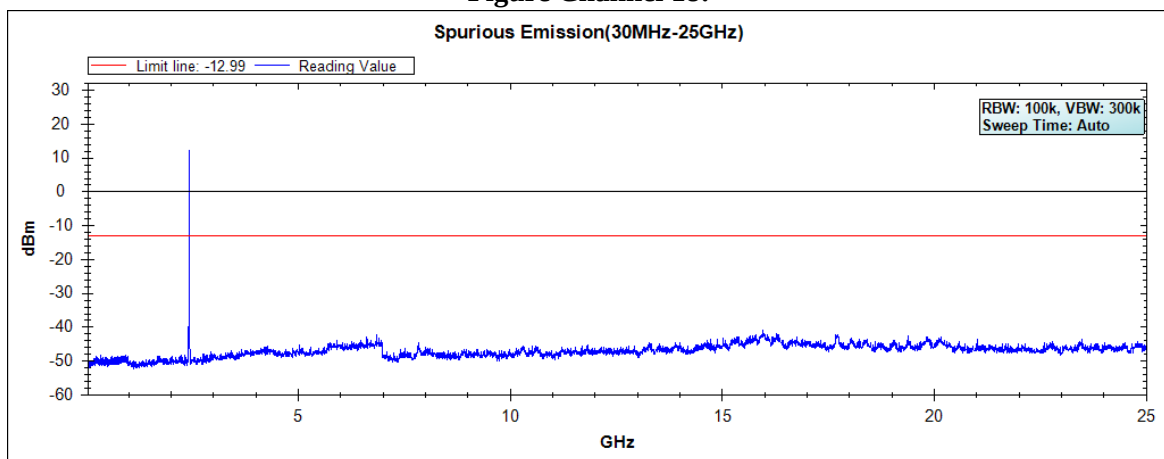
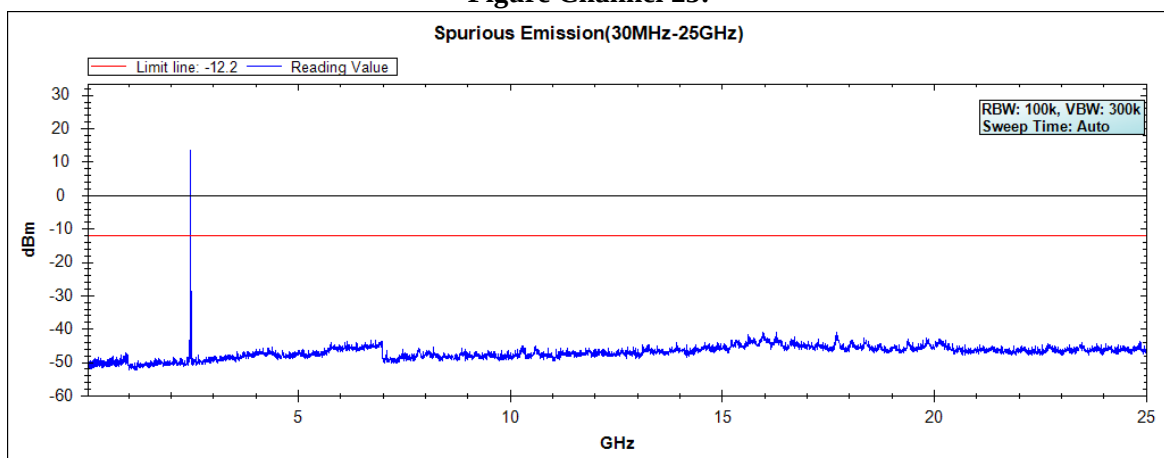


Figure Channel 25:



Note: The above test pattern is synthesized by multiple of the frequency range.

Product : ARRI Transceiver Module
Test Item : RF Antenna Conducted Test
Test Mode : Mode 2: Transmit (2GFSK) (EMIP400)
Test Date : 2017/12/19

B Port

Figure Channel 12:

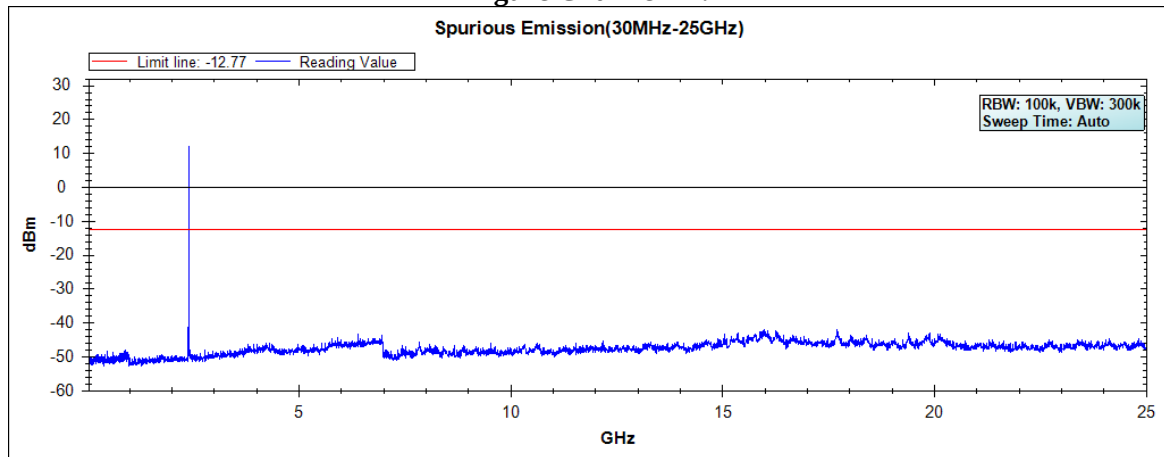


Figure Channel 18:

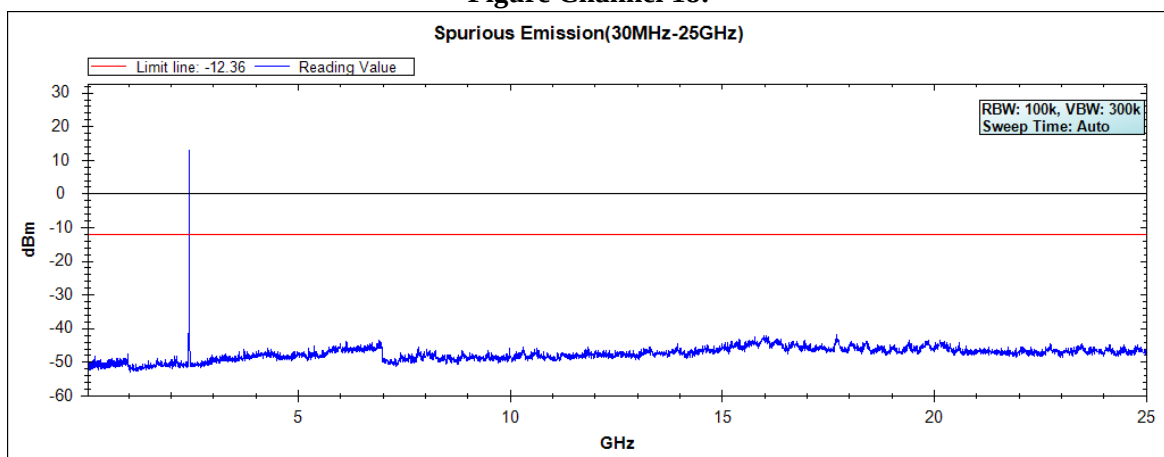
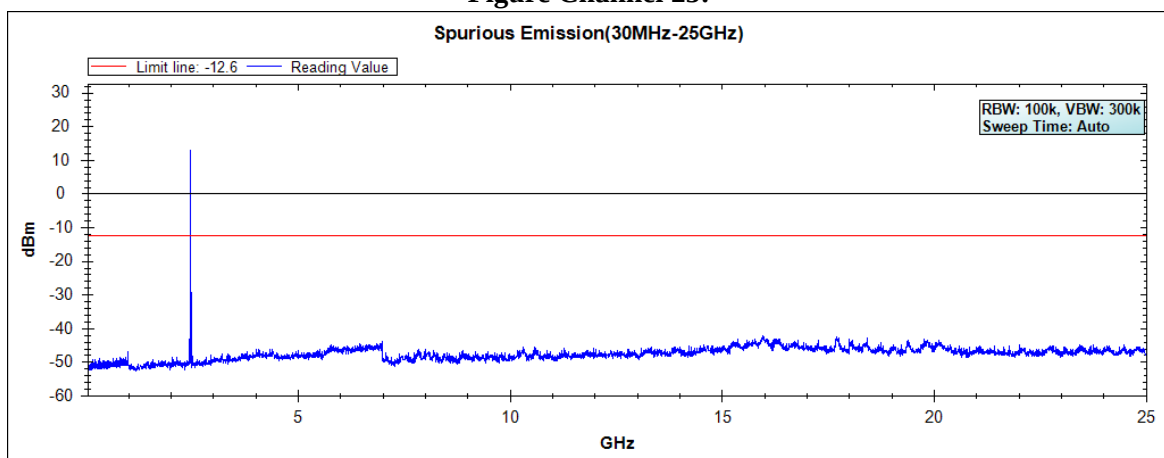


Figure Channel 25:



Note: The above test pattern is synthesized by multiple of the frequency range.

Product : ARRI Transceiver Module
Test Item : RF Antenna Conducted Test
Test Mode : Mode 1: Transmit (OQPSK) (EMIP400S)
Test Date : 2017/11/30

A Port

Figure Channel 11:

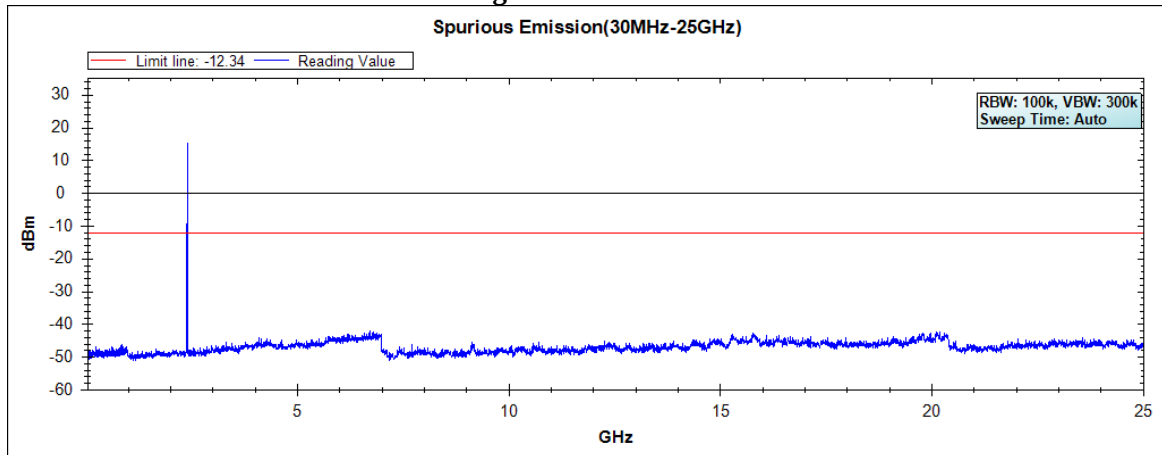


Figure Channel 18:

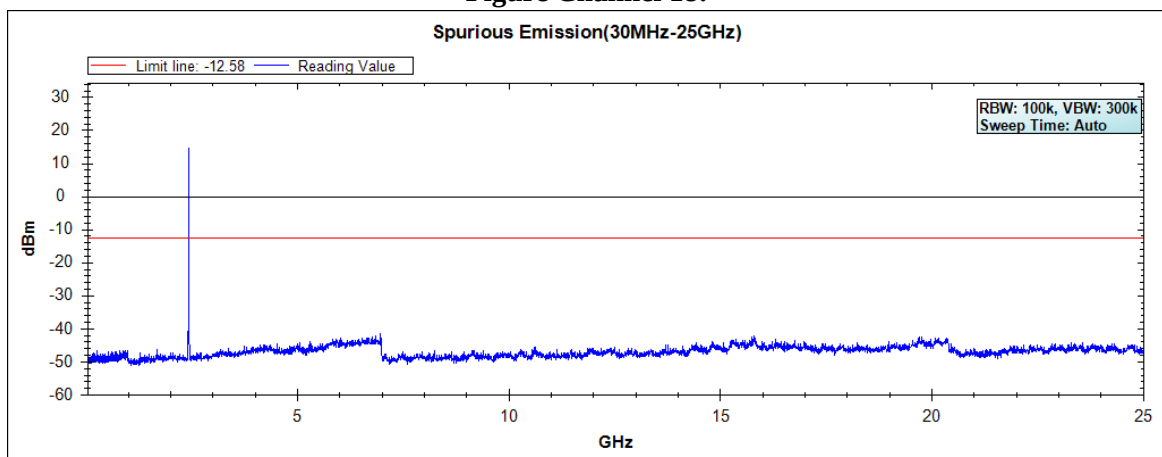
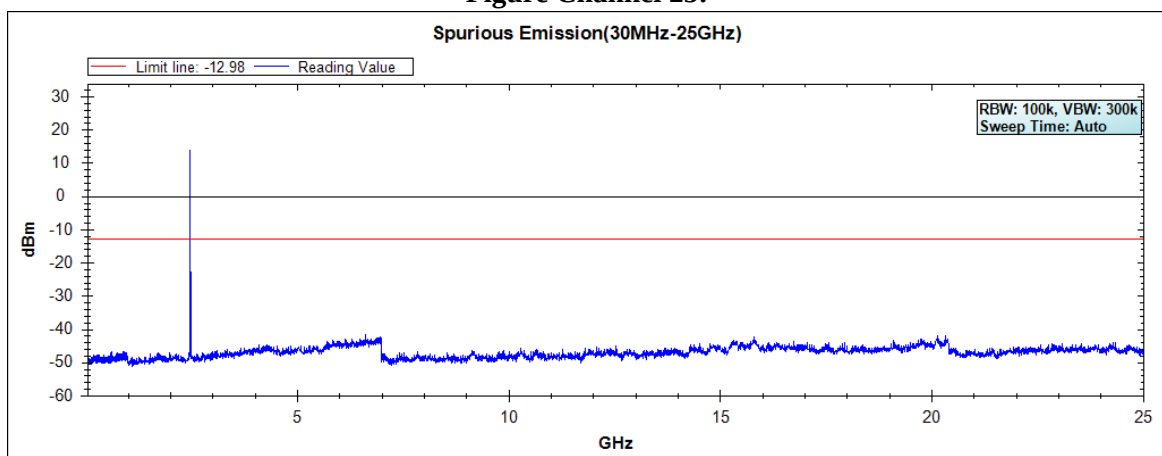


Figure Channel 25:



Note: The above test pattern is synthesized by multiple of the frequency range.

Product : ARRI Transceiver Module
Test Item : RF Antenna Conducted Test
Test Mode : Mode 1: Transmit (OQPSK) (EMIP400S)
Test Date : 2017/11/30

B Port

Figure Channel 11:

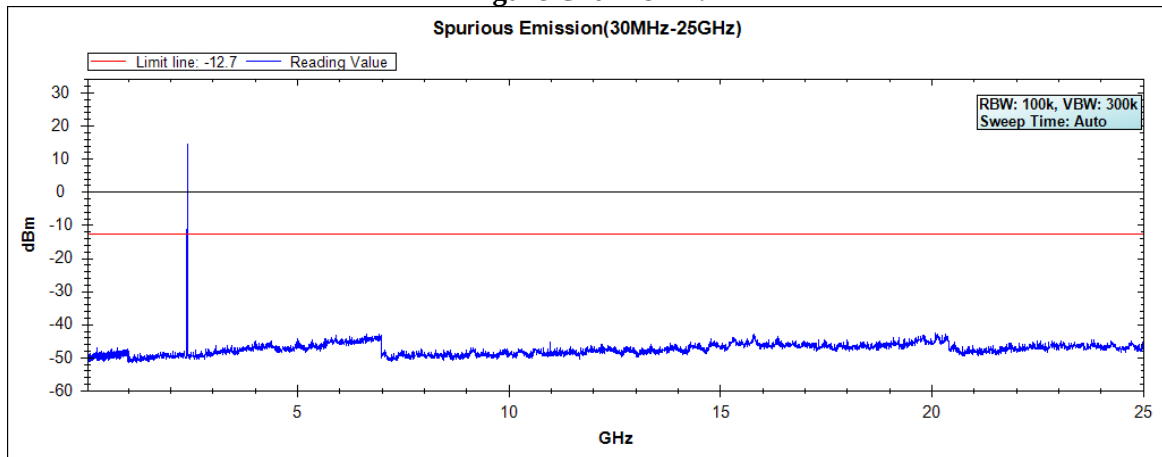


Figure Channel 18:

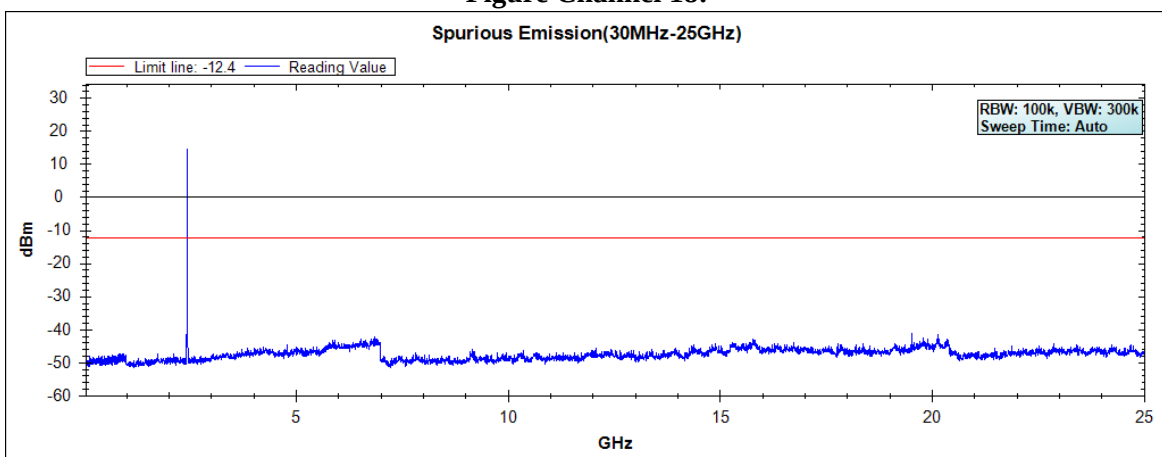
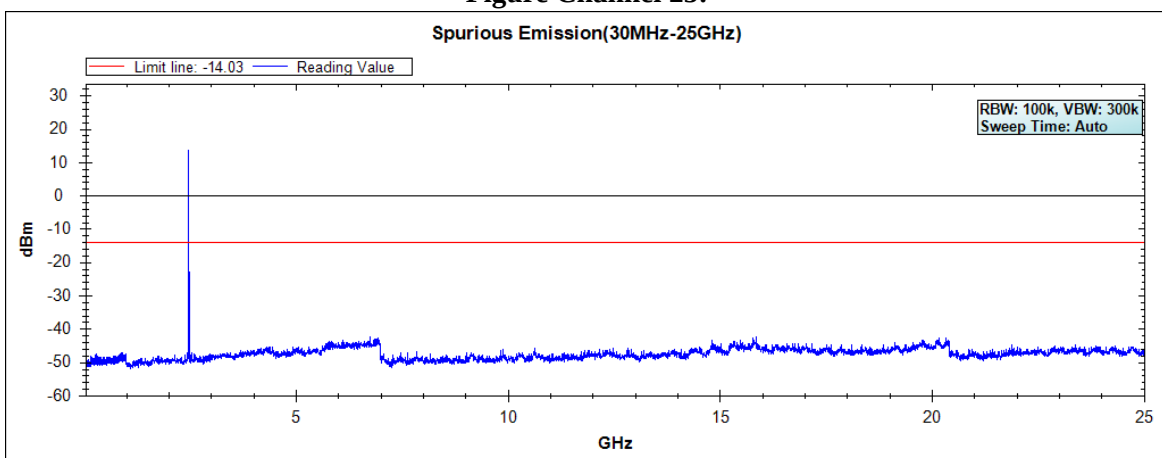


Figure Channel 25:



Note: The above test pattern is synthesized by multiple of the frequency range.

Product : ARRI Transceiver Module
Test Item : RF Antenna Conducted Test
Test Mode : Mode 2: Transmit (2GFSK) (EMIP400S)
Test Date : 2017/12/19

A Port

Figure Channel 12:

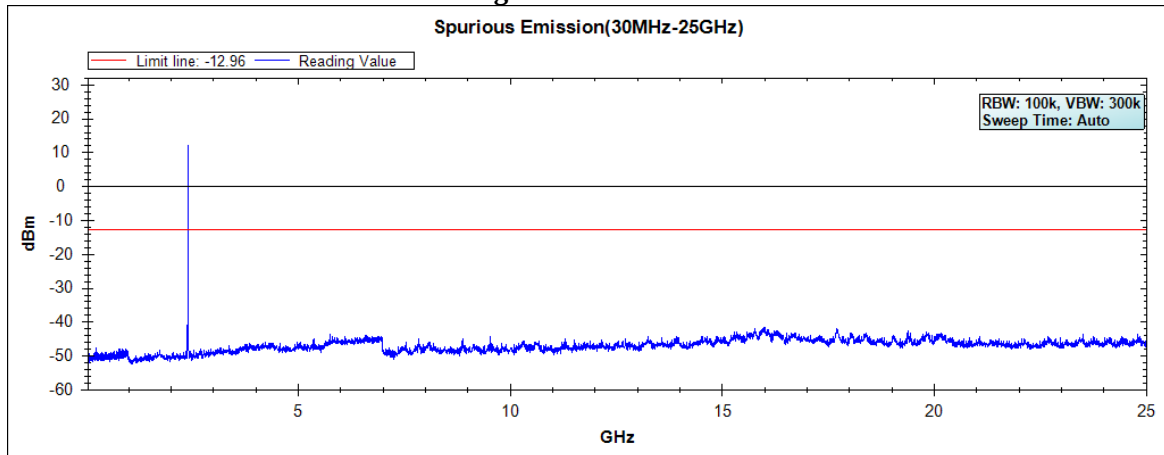


Figure Channel 18:

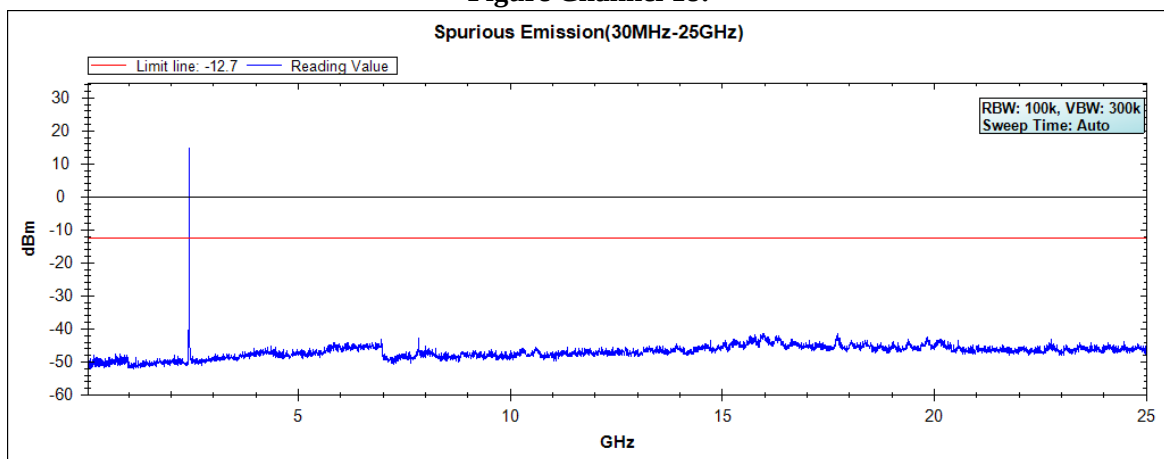
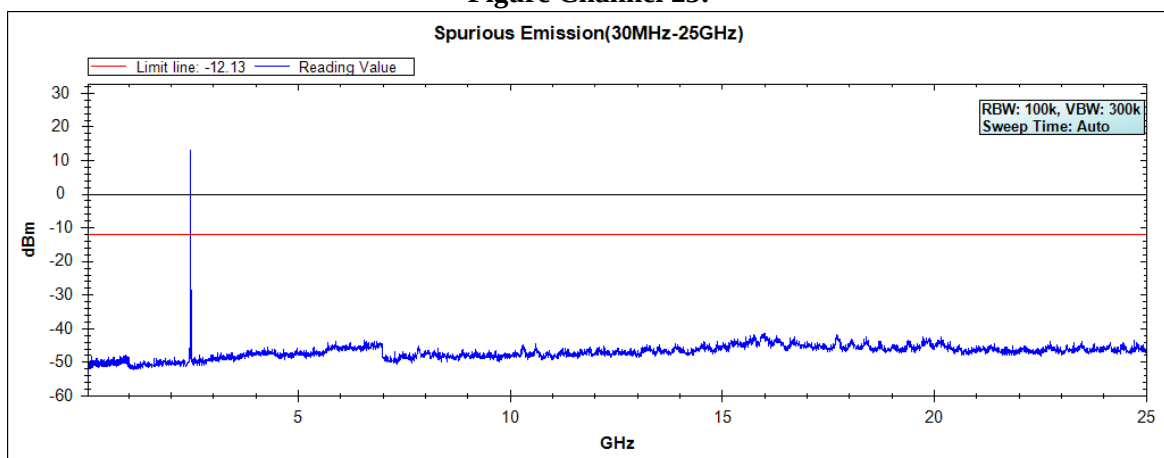
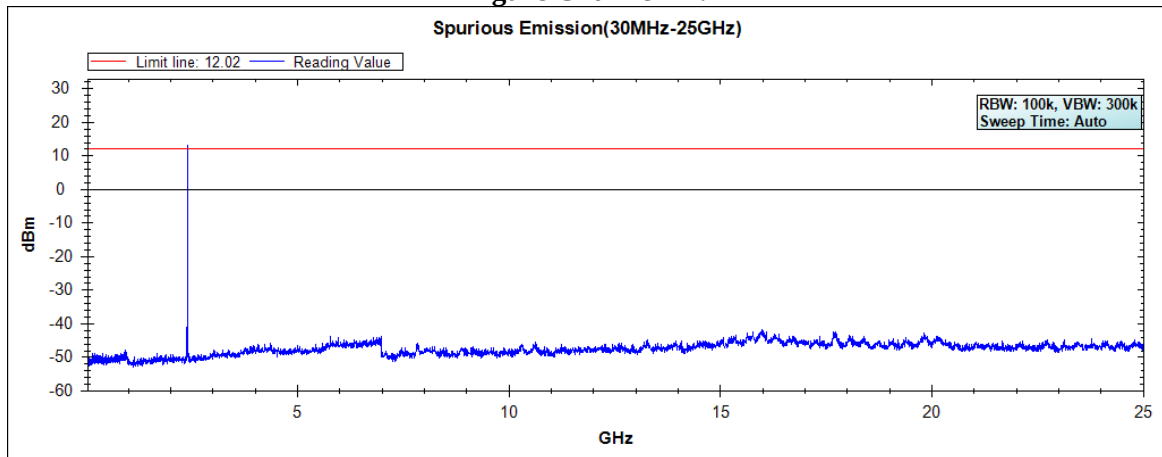
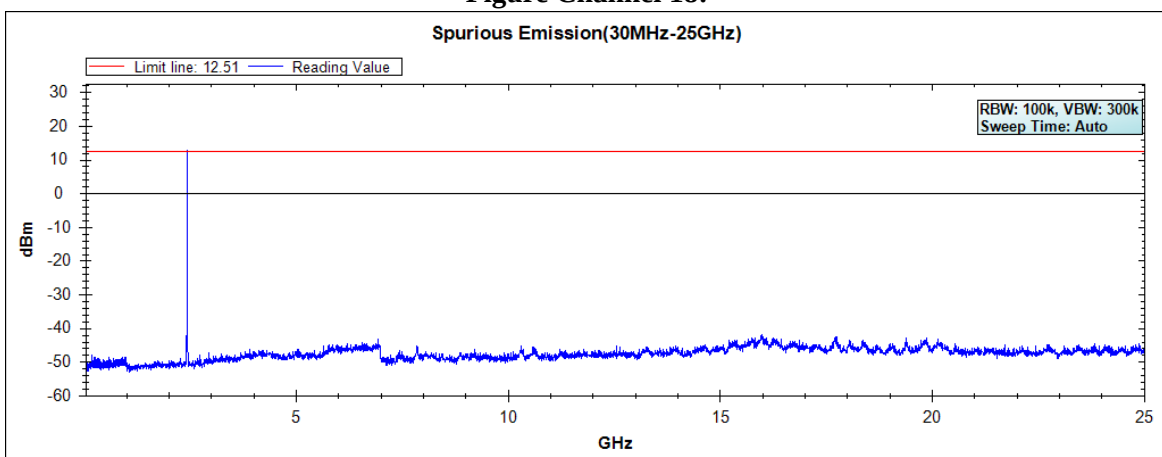
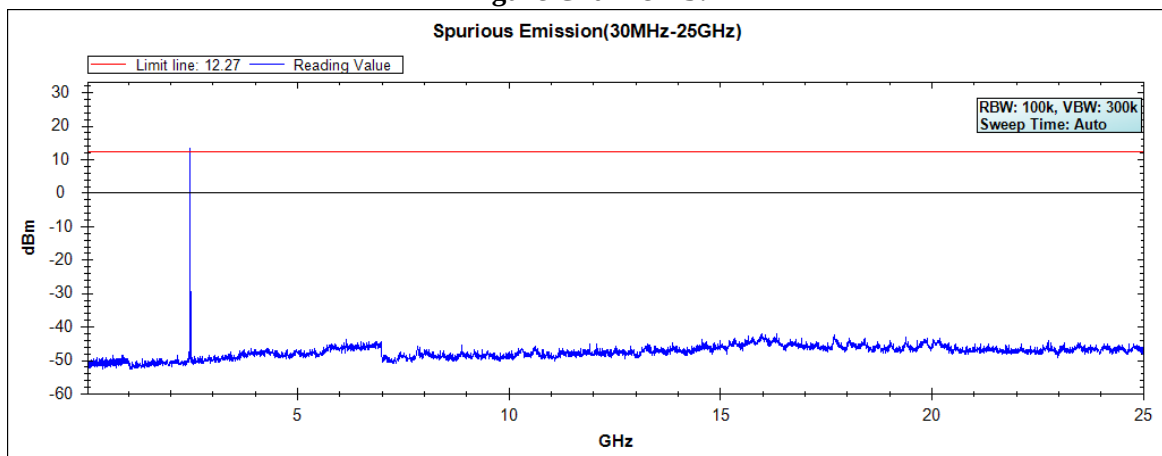


Figure Channel 25:



Note: The above test pattern is synthesized by multiple of the frequency range.

Product : ARRI Transceiver Module
Test Item : RF Antenna Conducted Test
Test Mode : Mode 2: Transmit (2GFSK) (EMIP400S)
Test Date : 2017/12/19

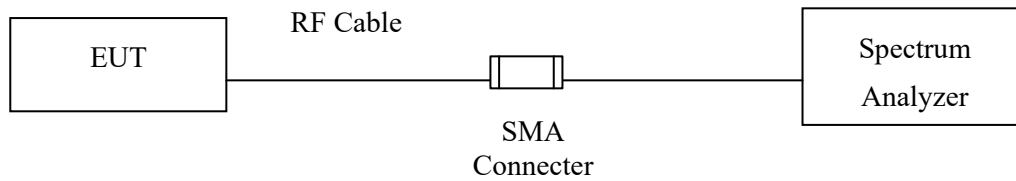
B Port**Figure Channel 12:****Figure Channel 18:****Figure Channel 25:**

Note: The above test pattern is synthesized by multiple of the frequency range.

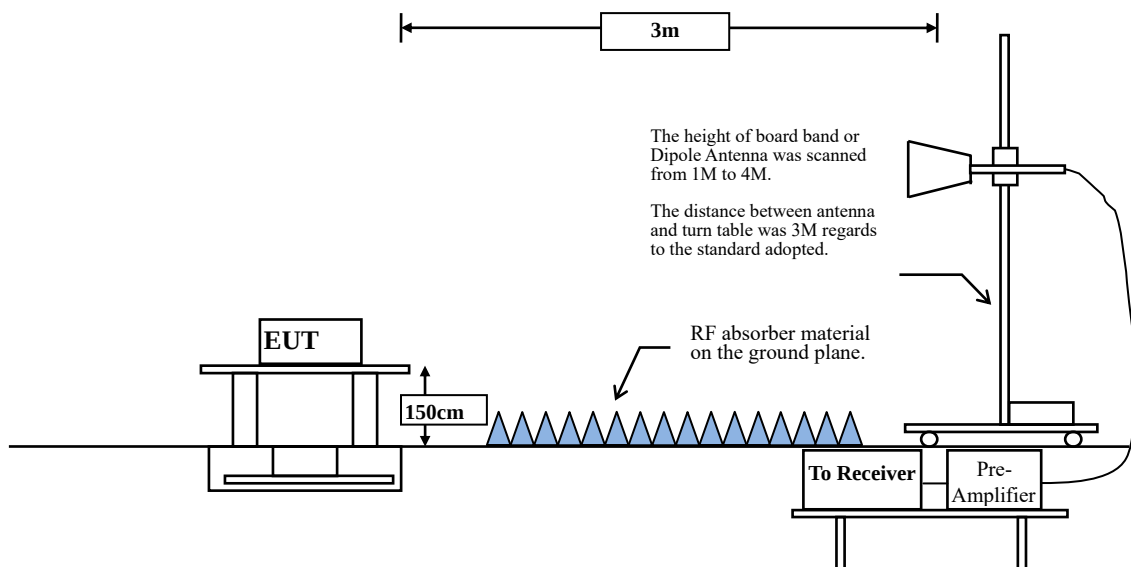
6. Band Edge

6.1. Test Setup

RF Conducted Measurement



RF Radiated Measurement:



6.2. Limit

According to FCC Section 15.247(d). In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

6.3. Test Procedure

The EUT was setup according to ANSI C63.10, 2013 and tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.

6.4. Uncertainty

Conducted: $\pm 1.23\text{dB}$

Radiated:

Horizontal polarization : 1-18GHz: $\pm 3.77\text{dB}$

Vertical polarization : 1-18GHz : $\pm 3.83\text{dB}$

6.5. Test Result of Band Edge

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400) (2405MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV /m)	Peak Limit (dBμV /m)	Average Limit (dBμV /m)	Result
11 (Peak)	2383.043	12.129	37.665	49.793	74.00	54.00	Pass
11 (Peak)	2390.000	12.148	37.467	49.615	74.00	54.00	Pass
11 (Peak)	2400.000	12.176	51.301	63.477	--	--	--
11 (Peak)	2405.507	12.190	93.215	105.404	--	--	--
11 (Average)	2390.000	12.148	23.727	35.875	74.00	54.00	Pass
11 (Average)	2400.000	12.176	37.613	49.789	--	--	--
11 (Average)	2405.072	12.188	90.739	102.927	--	--	--

Figure Channel 11: Horizontal (Peak)

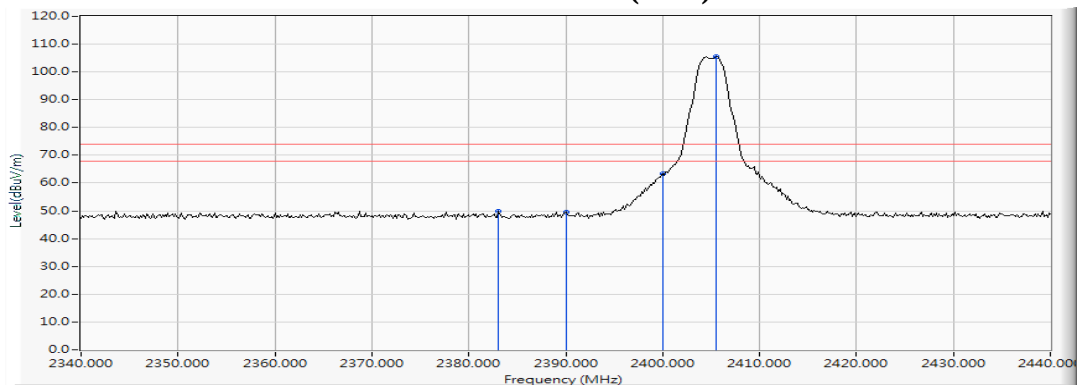
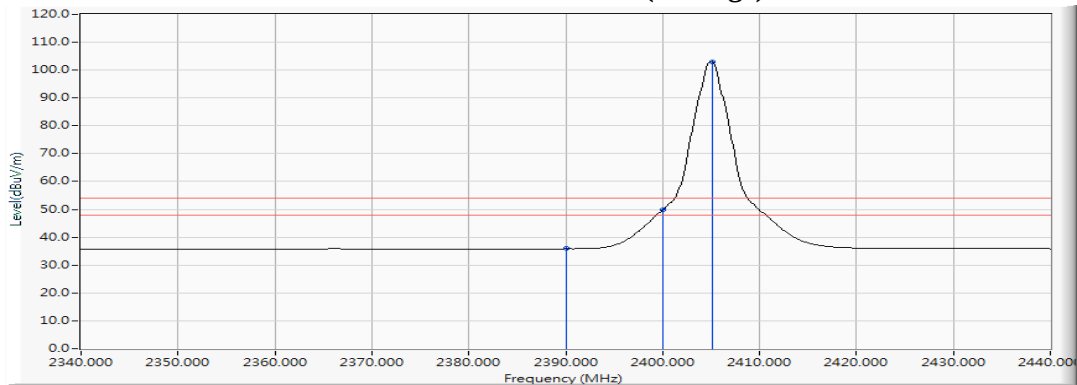


Figure Channel 11: Horizontal (Average)



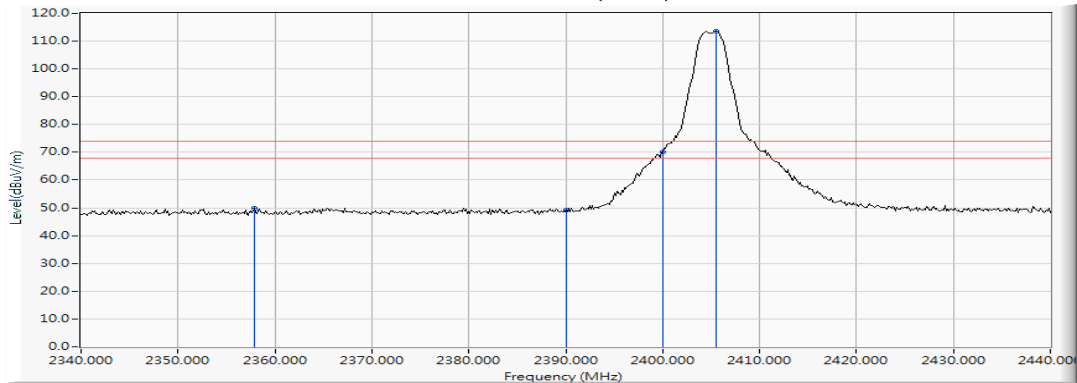
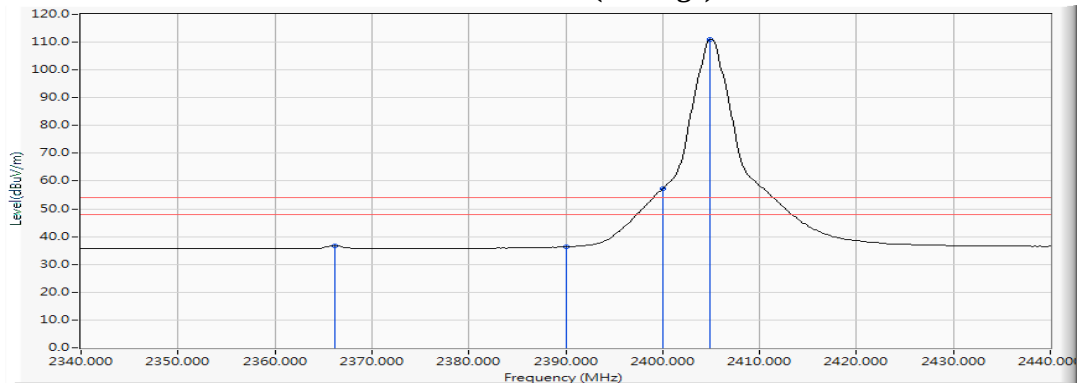
Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400) (2405MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2357.826	12.057	37.764	49.821	74.00	54.00	Pass
11 (Peak)	2390.000	12.148	37.062	49.210	74.00	54.00	Pass
11 (Peak)	2400.000	12.176	57.940	70.116	--	--	--
11 (Peak)	2405.507	12.190	101.390	113.579	--	--	--
11 (Average)	2366.232	12.080	24.736	36.816	74.00	54.00	Pass
11 (Average)	2390.000	12.148	24.184	36.332	74.00	54.00	Pass
11 (Average)	2400.000	12.176	45.001	57.177	--	--	--
11 (Average)	2404.928	12.188	98.836	111.024	--	--	--

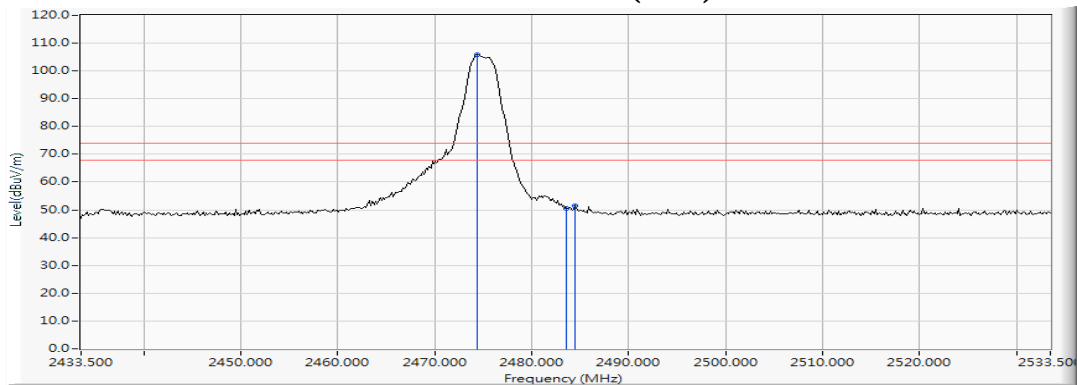
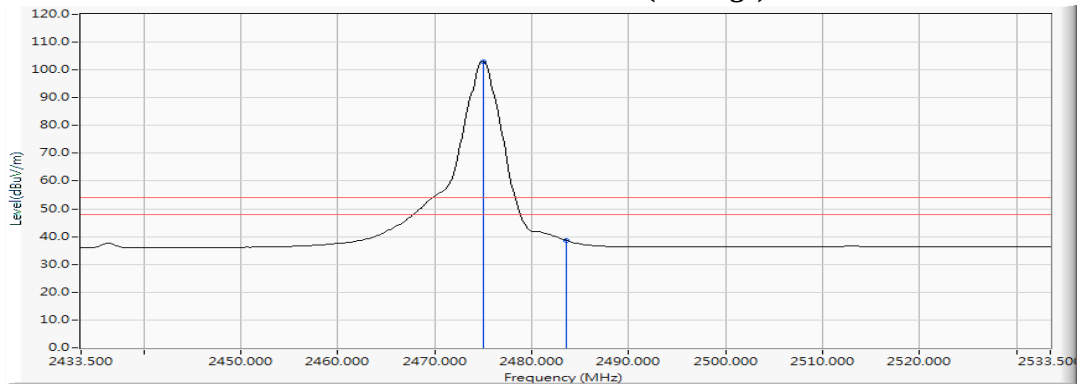
Figure Channel 11:
Vertical (Peak)

Figure Channel 11:
Vertical (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400) (2475MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV /m)	Peak Limit (dBμV /m)	Average Limit (dBμV /m)	Result
25 (Peak)	2474.370	12.377	93.478	105.855	--	--	--
25 (Peak)	2483.500	12.403	38.231	50.634	74.00	54.00	Pass
25 (Peak)	2484.514	12.405	39.147	51.552	74.00	54.00	Pass
25 (Average)	2474.949	12.378	90.582	102.961	--	--	--
25 (Average)	2483.500	12.403	26.225	38.628	74.00	54.00	Pass

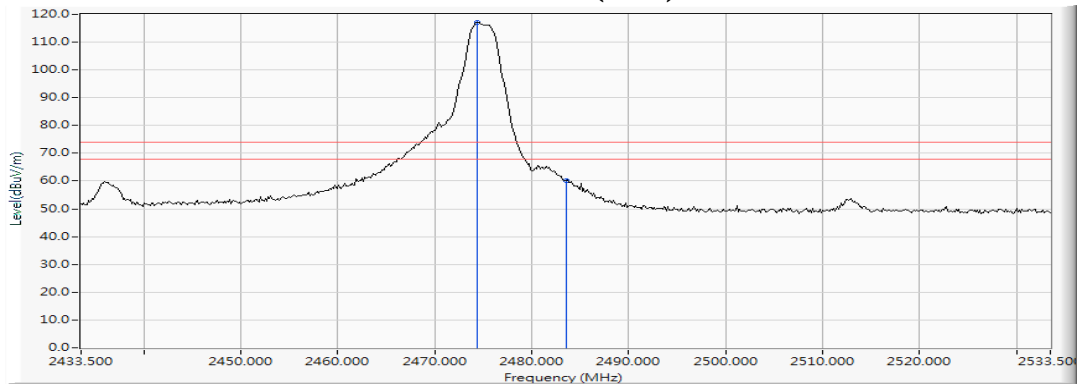
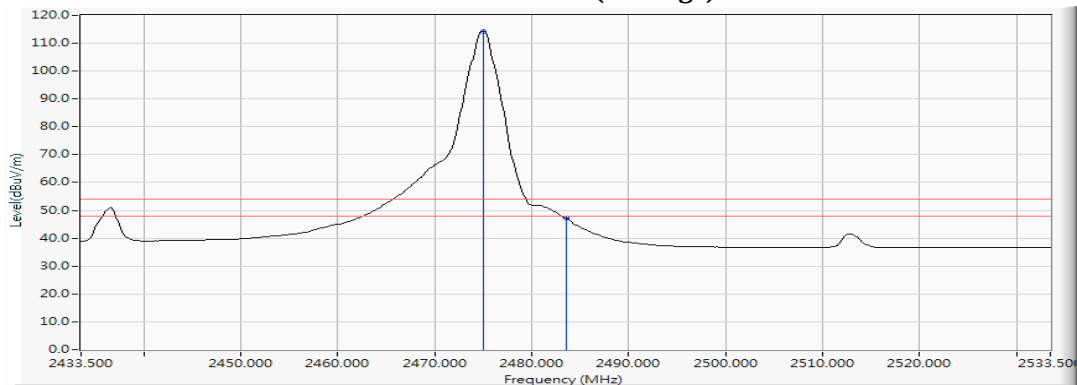
Figure Channel 25: Horizontal (Peak)

Figure Channel 25: Horizontal (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400) (2475MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
25 (Peak)	2474.370	12.377	104.886	117.263	--	--	--
25 (Peak)	2483.500	12.403	47.718	60.121	74.00	54.00	Pass
25 (Average)	2474.949	12.378	101.931	114.310	--	--	--
25 (Average)	2483.500	12.403	34.757	47.160	74.00	54.00	Pass

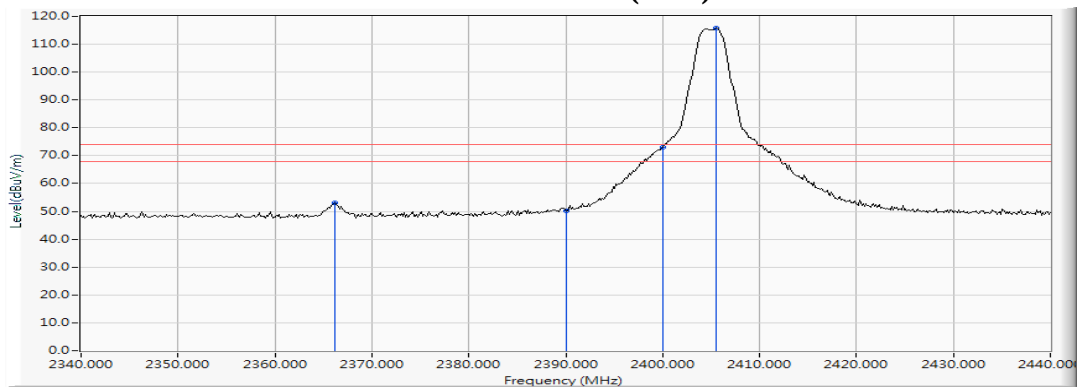
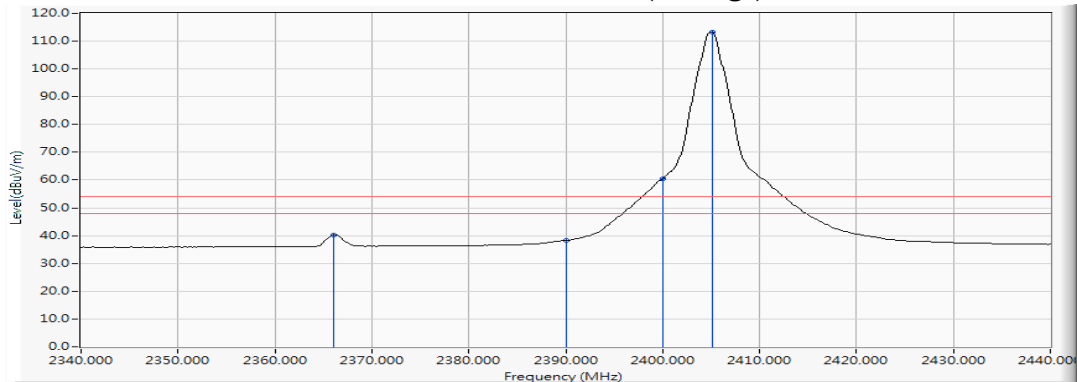
Figure Channel 25: Vertical (Peak)

Figure Channel 25: Vertical (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400) (2405MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
11 (Peak)	2366.232	12.080	40.961	53.041	74.00	54.00	Pass
11 (Peak)	2390.000	12.148	38.081	50.229	74.00	54.00	Pass
11 (Peak)	2400.000	12.176	60.997	73.173	--	--	--
11 (Peak)	2405.507	12.190	103.492	115.681	--	--	--
11 (Average)	2366.087	12.080	28.094	40.174	74.00	54.00	Pass
11 (Average)	2390.000	12.148	26.110	38.258	74.00	54.00	Pass
11 (Average)	2400.000	12.176	48.343	60.519	--	--	--
11 (Average)	2405.072	12.188	100.986	113.174	--	--	--

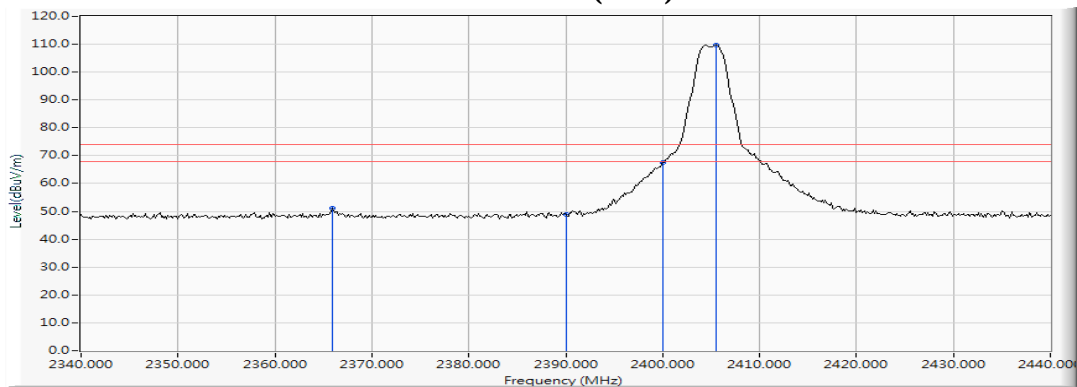
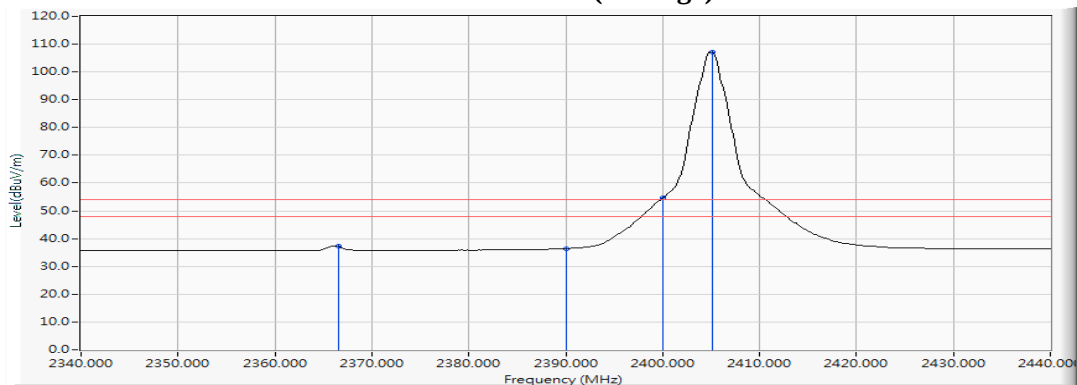
Figure Channel 11:
Horizontal (Peak)

Figure Channel 11:
Horizontal (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400) (2405MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
11 (Peak)	2365.942	12.079	39.035	51.114	74.00	54.00	Pass
11 (Peak)	2390.000	12.148	36.835	48.983	74.00	54.00	Pass
11 (Peak)	2400.000	12.176	55.302	67.478	--	--	--
11 (Peak)	2405.507	12.190	97.546	109.735	--	--	--
11 (Average)	2366.522	12.080	25.183	37.264	74.00	54.00	Pass
11 (Average)	2390.000	12.148	24.304	36.452	74.00	54.00	Pass
11 (Average)	2400.000	12.176	42.406	54.582	--	--	--
11 (Average)	2405.072	12.188	95.033	107.221	--	--	--

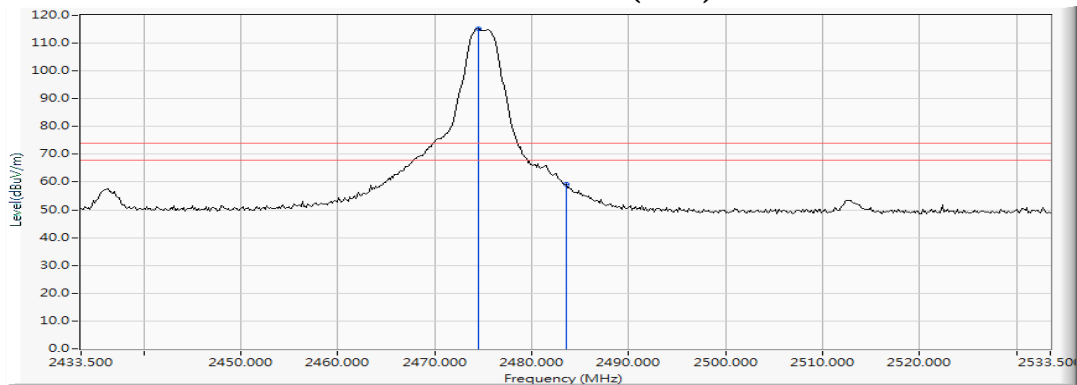
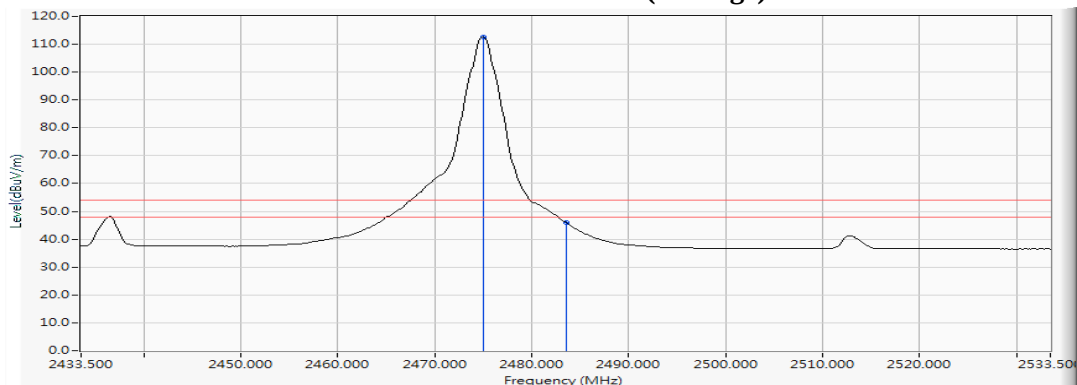
Figure Channel 11: Vertical (Peak)

Figure Channel 11: Vertical (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400) (2475MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
25 (Peak)	2474.514	12.378	102.878	115.255	--	--	--
25 (Peak)	2483.500	12.403	46.896	59.299	74.00	54.00	Pass
25 (Average)	2474.949	12.378	100.099	112.478	--	--	--
25 (Average)	2483.500	12.403	33.652	46.055	74.00	54.00	Pass

Figure Channel 25: Horizontal (Peak)

Figure Channel 25: Horizontal (Average)


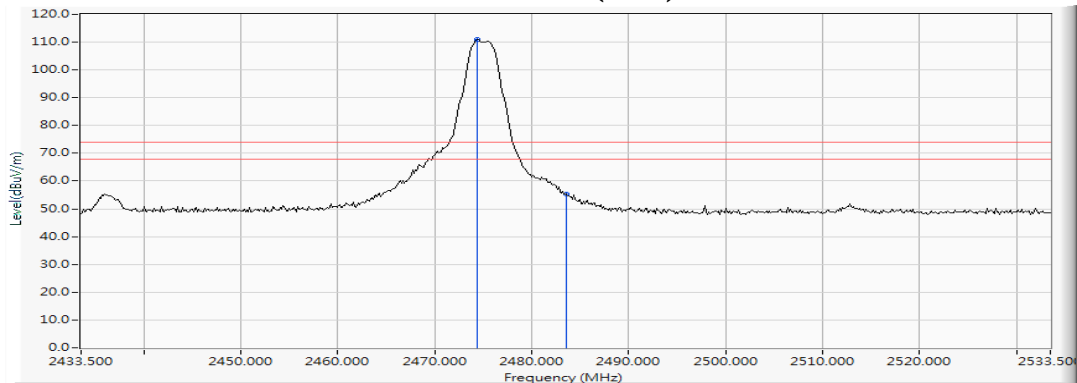
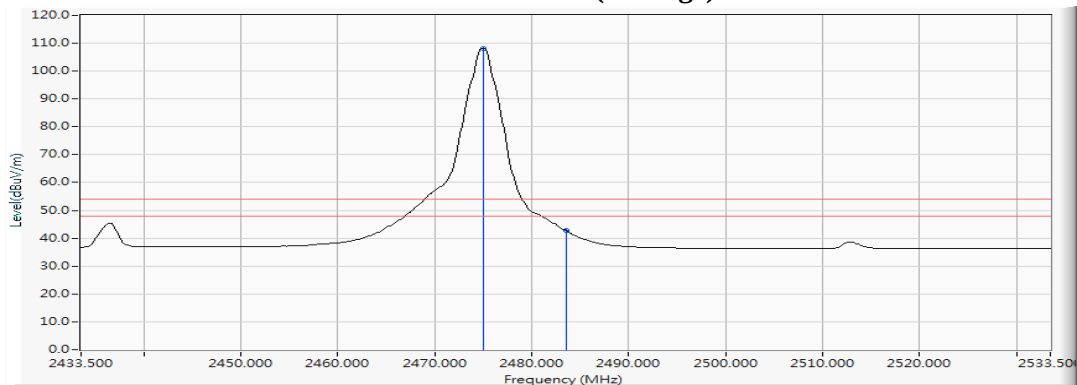
Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400) (2475MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
25 (Peak)	2474.370	12.377	98.466	110.843	--	--	--
25 (Peak)	2483.500	12.403	42.772	55.175	74.00	54.00	Pass
25 (Average)	2474.949	12.378	95.748	108.127	--	--	--
25 (Average)	2483.500	12.403	30.304	42.707	74.00	54.00	Pass

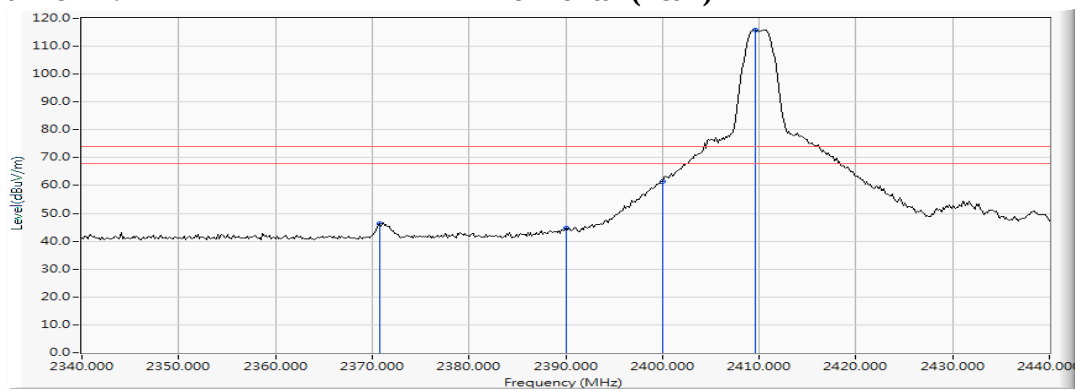
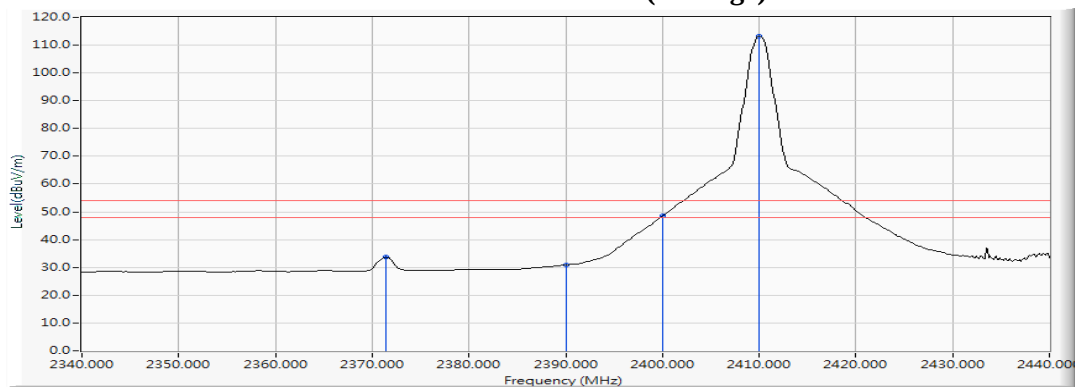
Figure Channel 25: Vertical (Peak)

Figure Channel 25: Vertical (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400) (2410MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
12 (Peak)	2370.725	12.093	34.333	46.426	74.00	54.00	Pass
12 (Peak)	2390.000	12.148	32.715	44.863	74.00	54.00	Pass
12 (Peak)	2400.000	12.176	49.347	61.523	--	--	--
12 (Peak)	2409.565	12.198	103.563	115.761	--	--	--
12 (Average)	2371.449	12.095	21.541	33.636	74.00	54.00	Pass
12 (Average)	2390.000	12.148	18.746	30.894	74.00	54.00	Pass
12 (Average)	2400.000	12.176	36.301	48.477	--	--	--
12 (Average)	2410.000	12.199	101.193	113.392	--	--	--

Figure Channel 12: Horizontal (Peak)

Figure Channel 12: Horizontal (Average)


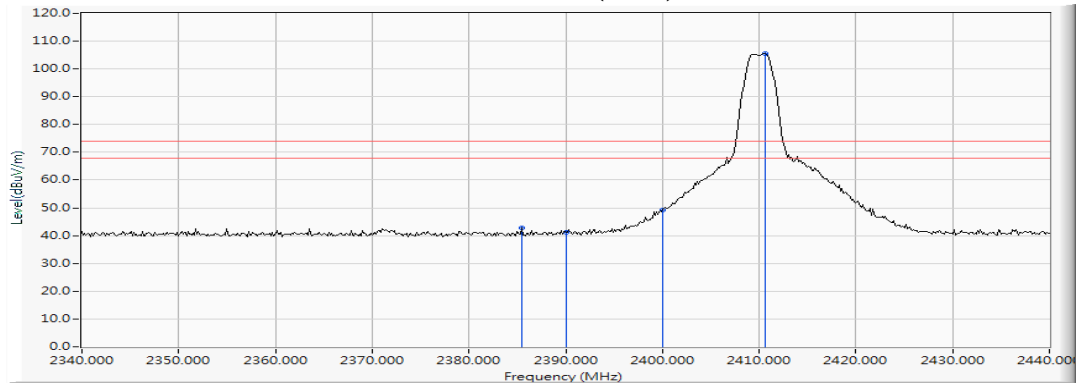
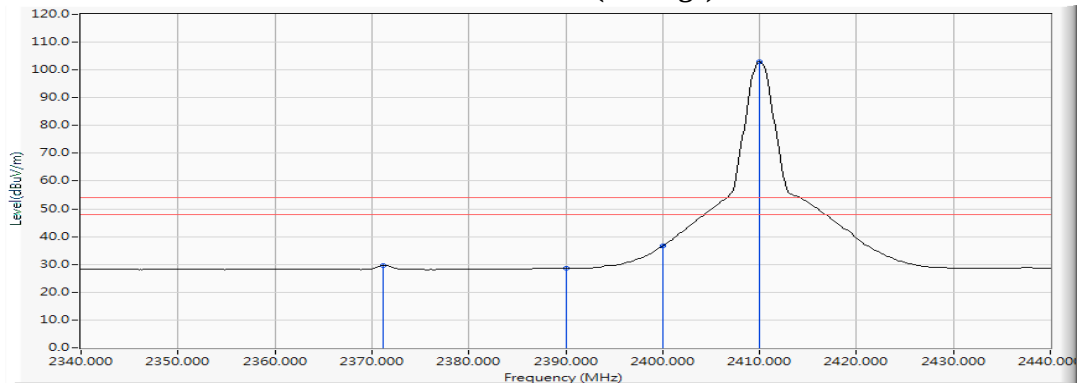
Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400) (2410MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV /m)	Peak Limit (dBμV /m)	Average Limit (dBμV /m)	Result
12 (Peak)	2385.507	12.136	30.758	42.893	74.00	54.00	Pass
12 (Peak)	2390.000	12.148	28.877	41.025	74.00	54.00	Pass
12 (Peak)	2400.000	12.176	36.929	49.105	--	--	--
12 (Peak)	2410.580	12.200	93.217	105.417	--	--	--
12 (Average)	2371.159	12.095	17.565	29.659	74.00	54.00	Pass
12 (Average)	2390.000	12.148	16.402	28.550	74.00	54.00	Pass
12 (Average)	2400.000	12.176	24.433	36.609	--	--	--
12 (Average)	2410.000	12.199	90.738	102.937	--	--	--

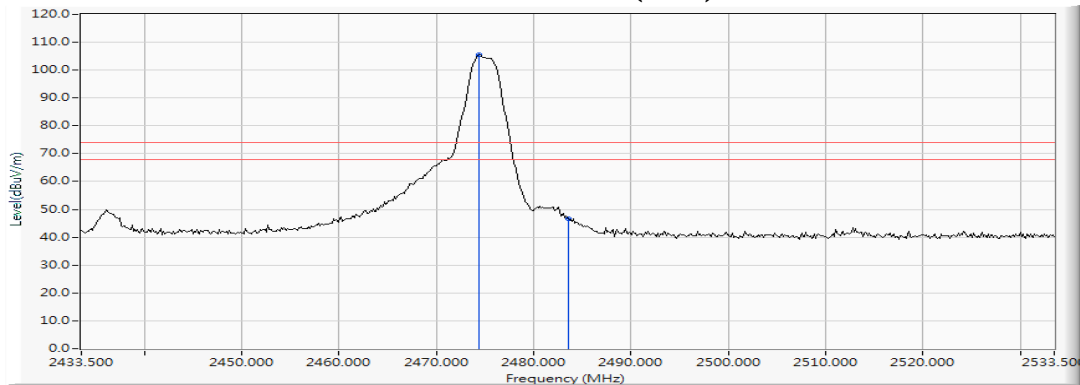
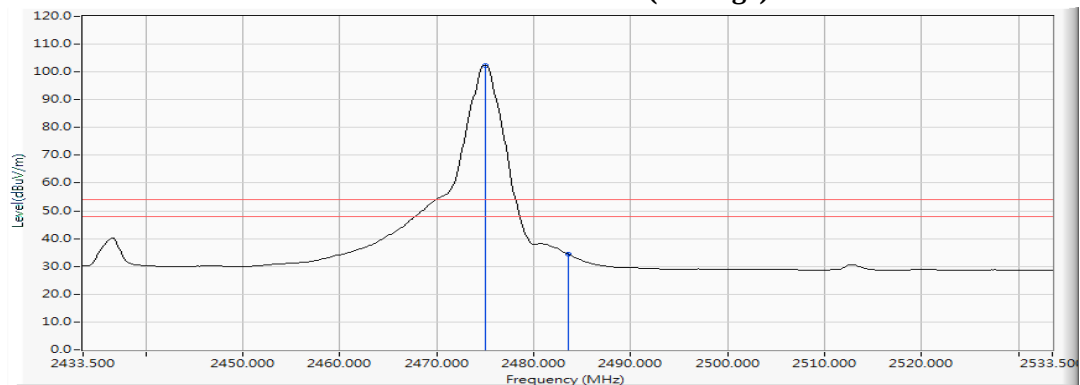
Figure Channel 12: Vertical (Peak)**Figure Channel 12: Vertical (Average)****Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400) (2475MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV /m)	Peak Limit (dBμV /m)	Average Limit (dBμV /m)	Result
25 (Peak)	2474.370	12.377	93.017	105.394	--	--	--
25 (Peak)	2483.500	12.403	34.324	46.727	74.00	54.00	Pass
25 (Average)	2474.949	12.378	90.007	102.386	--	--	--
25 (Average)	2483.500	12.403	22.111	34.514	74.00	54.00	Pass

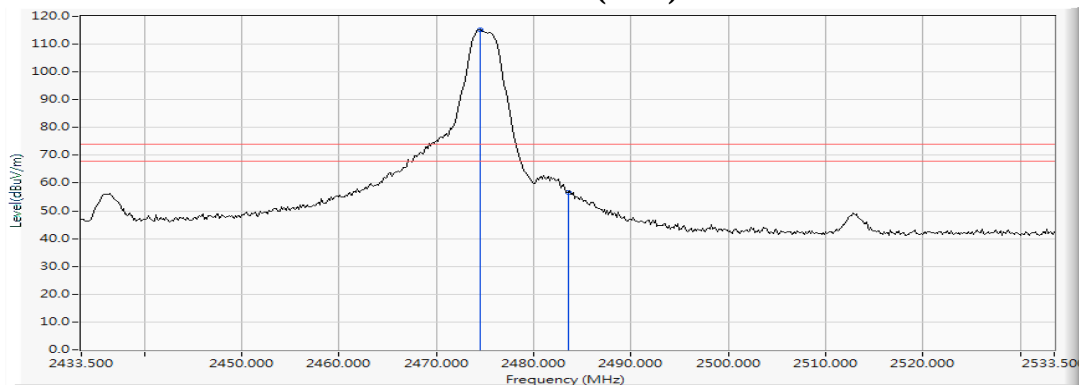
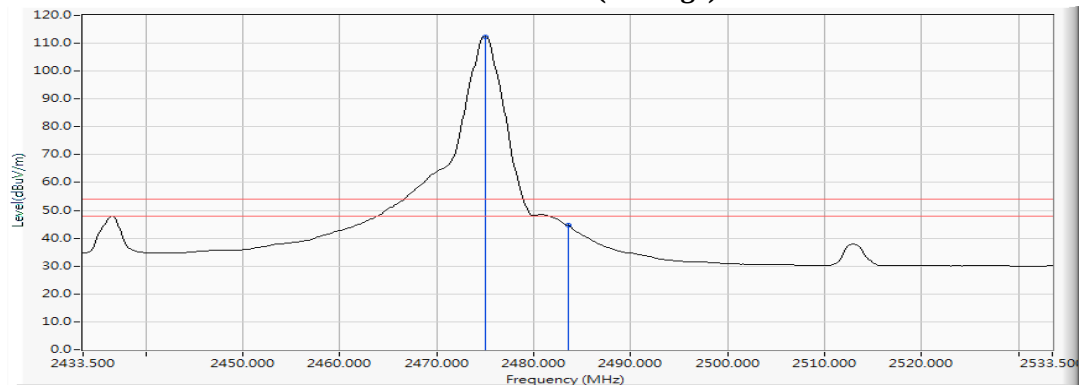
Figure Channel 25:**Horizontal (Peak)****Figure Channel 25:****Horizontal (Average)****Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400) (2475MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
25 (Peak)	2474.514	12.378	102.856	115.233	--	--	--
25 (Peak)	2483.500	12.403	44.375	56.778	74.00	54.00	Pass
25 (Average)	2474.949	12.378	99.907	112.286	--	--	--
25 (Average)	2483.500	12.403	32.240	44.643	74.00	54.00	Pass

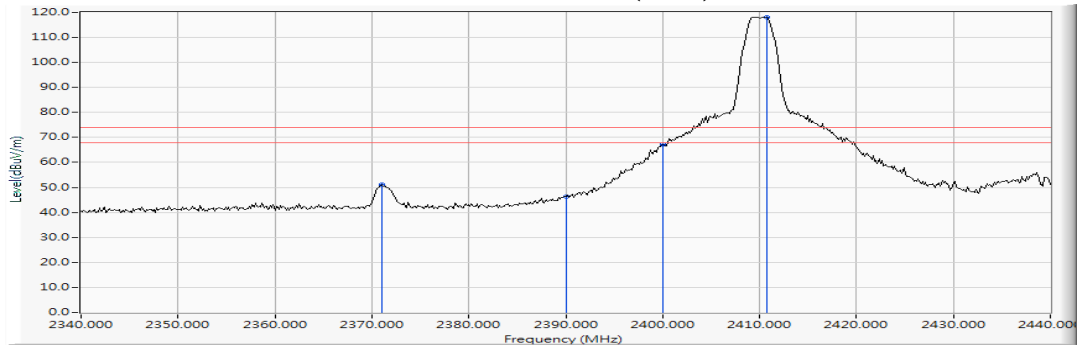
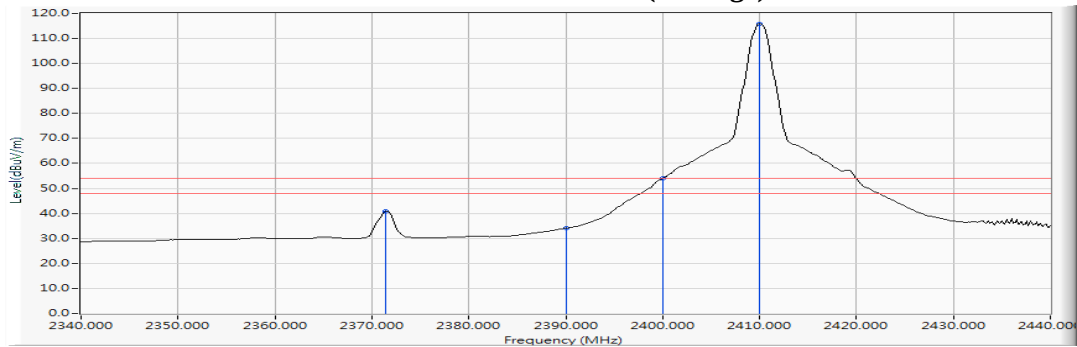
Figure Channel 25: Vertical (Peak)

Figure Channel 25: Vertical (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400) (2410MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV /m)	Peak Limit (dBμV /m)	Average Limit (dBμV /m)	Result
12 (Peak)	2371.014	12.094	39.012	51.106	74.00	54.00	Pass
12 (Peak)	2390.000	12.148	34.205	46.353	74.00	54.00	Pass
12 (Peak)	2400.000	12.176	55.131	67.307	--	--	--
12 (Peak)	2410.725	12.201	105.807	118.008	--	--	--
12 (Average)	2371.449	12.095	28.622	40.717	74.00	54.00	Pass
12 (Average)	2390.000	12.148	21.989	34.137	74.00	54.00	Pass
12 (Average)	2400.000	12.176	41.935	54.111	--	--	--
12 (Average)	2410.000	12.199	103.718	115.917	--	--	--

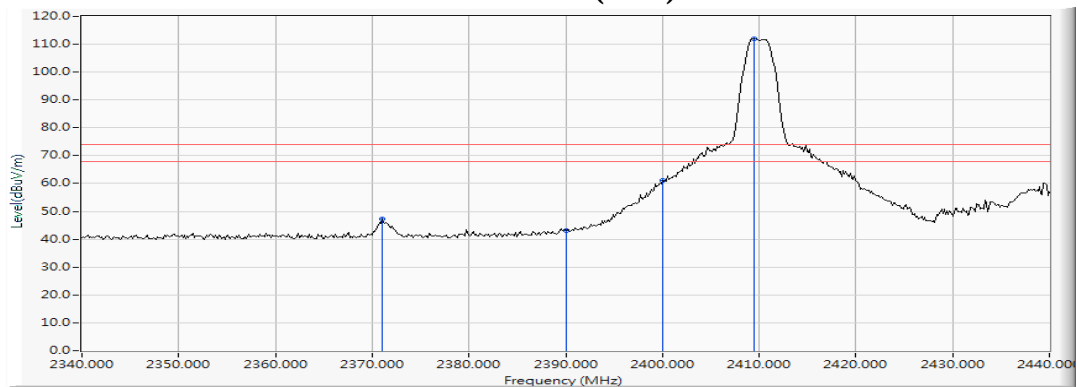
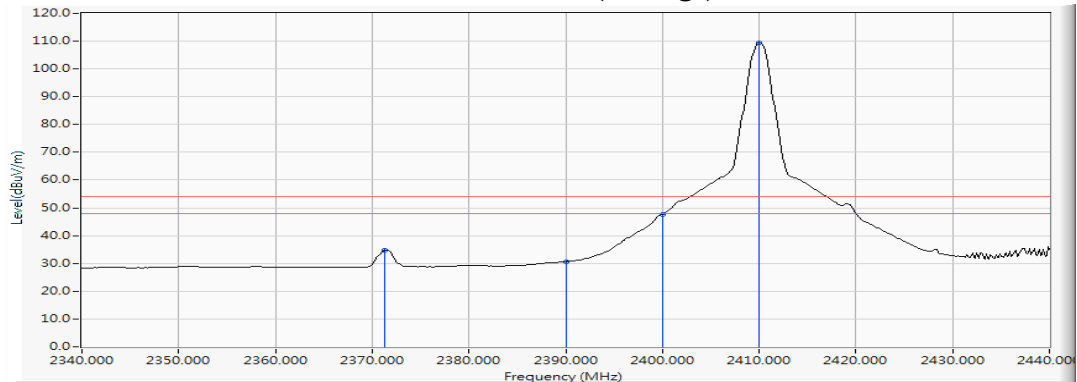
Figure Channel 12:
Horizontal (Peak)

Figure Channel 12:
Horizontal (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400) (2410MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
12 (Peak)	2371.014	12.094	35.184	47.278	74.00	54.00	Pass
12 (Peak)	2390.000	12.148	30.870	43.018	74.00	54.00	Pass
12 (Peak)	2400.000	12.176	48.967	61.143	--	--	--
12 (Peak)	2409.420	12.198	99.770	111.968	--	--	--
12 (Average)	2371.304	12.095	22.530	34.625	74.00	54.00	Pass
12 (Average)	2390.000	12.148	18.548	30.696	74.00	54.00	Pass
12 (Average)	2400.000	12.176	35.598	47.774	--	--	--
12 (Average)	2410.000	12.199	97.308	109.507	--	--	--

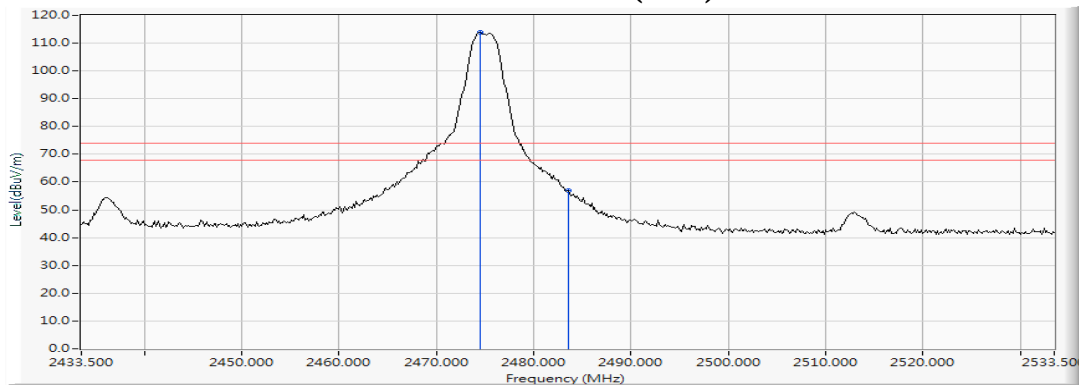
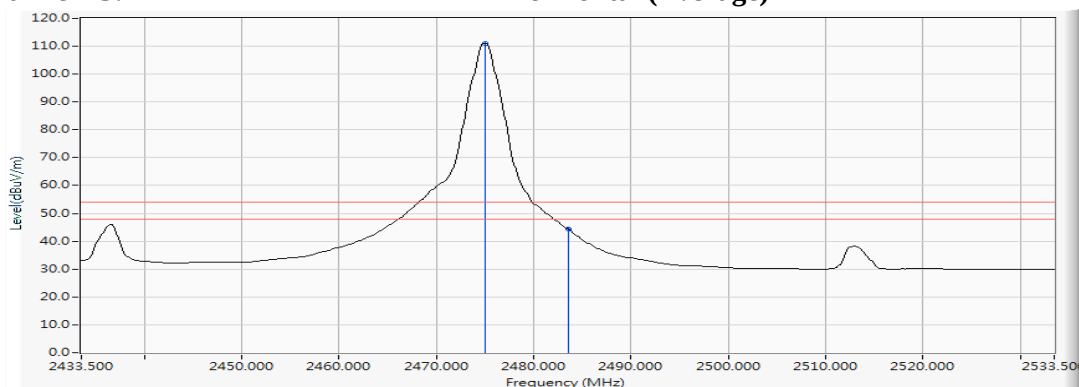
Figure Channel 12:
Vertical (Peak)

Figure Channel 12:
Vertical (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400) (2475MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
25 (Peak)	2474.514	12.378	101.361	113.738	--	--	--
25 (Peak)	2483.500	12.403	44.466	56.869	74.00	54.00	Pass
25 (Average)	2474.949	12.378	98.743	111.122	--	--	--
25 (Average)	2483.500	12.403	31.953	44.356	74.00	54.00	Pass

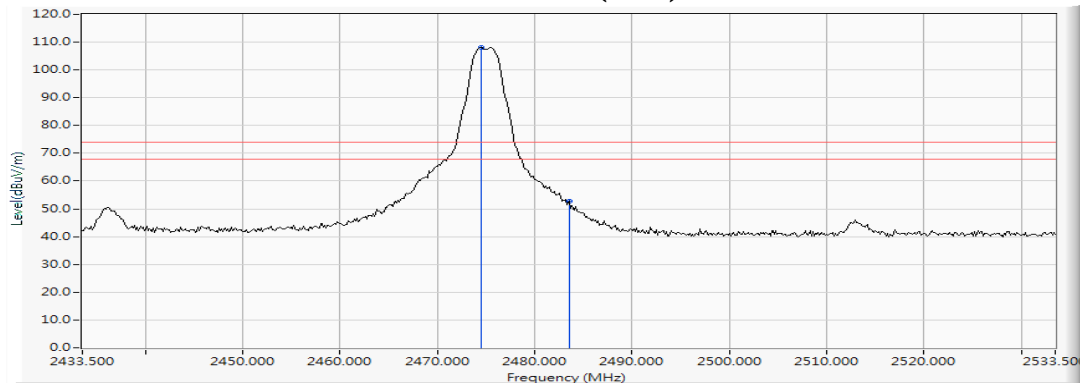
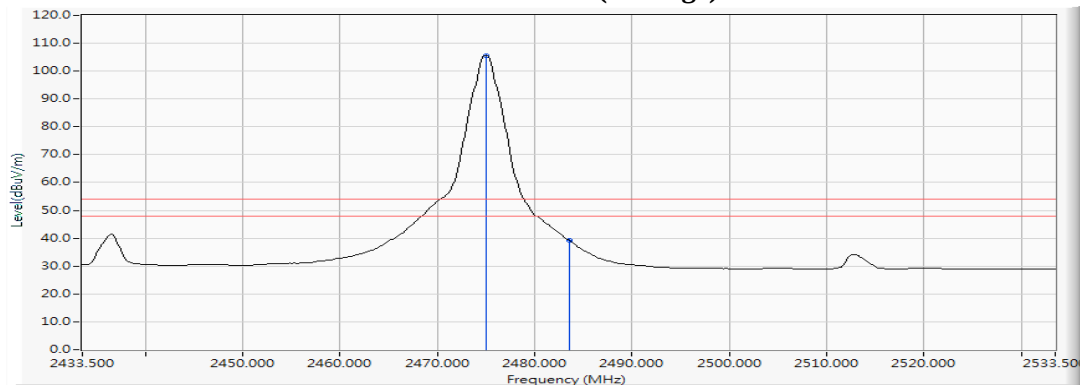
Figure Channel 25: Horizontal (Peak)

Figure Channel 25: Horizontal (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400) (2475MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
25 (Peak)	2474.514	12.378	95.724	108.101	--	--	--
25 (Peak)	2483.500	12.403	40.341	52.744	74.00	54.00	Pass
25 (Average)	2474.949	12.378	93.244	105.623	--	--	--
25 (Average)	2483.500	12.403	27.002	39.405	74.00	54.00	Pass

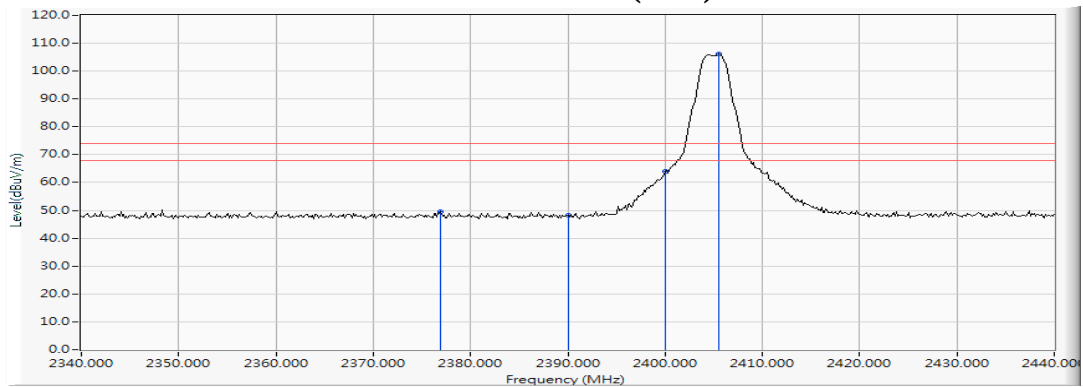
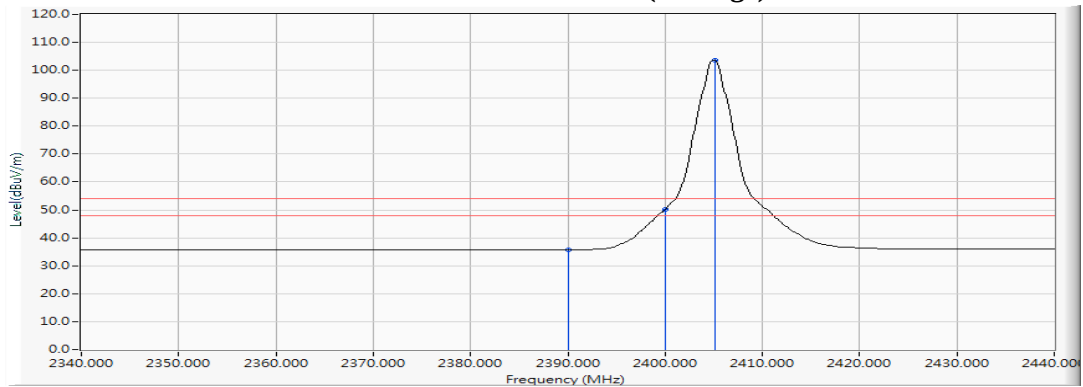
Figure Channel 25: Vertical (Peak)

Figure Channel 25: Vertical (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400S)(2405MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2376.957	12.110	37.425	49.535	74.00	54.00	Pass
11 (Peak)	2390.000	12.148	36.014	48.162	74.00	54.00	Pass
11 (Peak)	2400.000	12.176	51.868	64.044	--	--	--
11 (Peak)	2405.507	12.190	93.975	106.164	--	--	--
11 (Average)	2390.000	12.148	23.625	35.773	74.00	54.00	Pass
11 (Average)	2400.000	12.176	38.081	50.257	--	--	--
11 (Average)	2405.072	12.188	91.446	103.634	--	--	--

Figure Channel 11: Horizontal (Peak)

Figure Channel 11: Horizontal (Average)


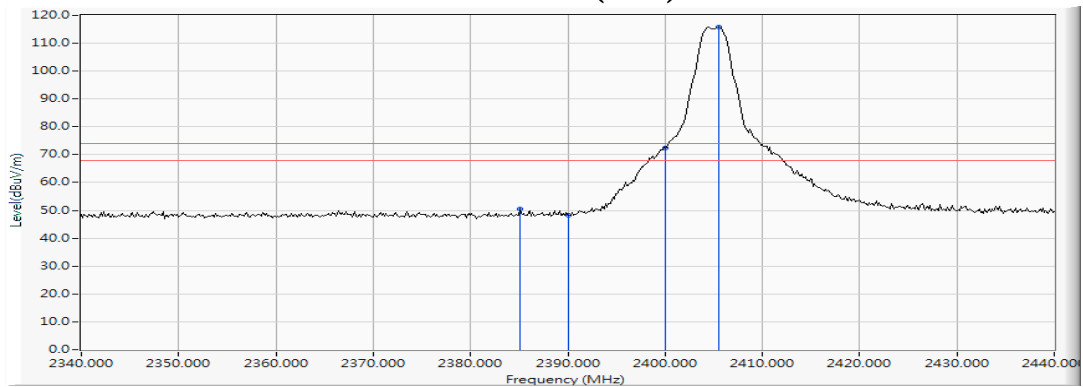
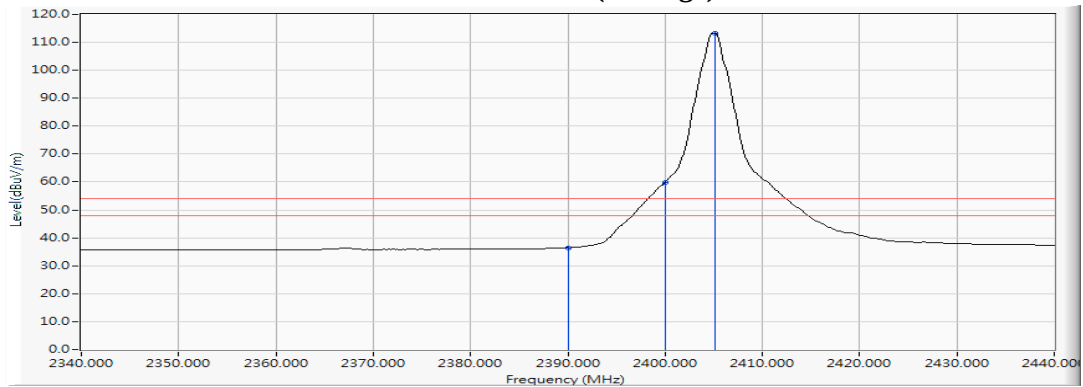
Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400S)(2405MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
11 (Peak)	2385.072	12.134	38.232	50.366	74.00	54.00	Pass
11 (Peak)	2390.000	12.148	35.962	48.110	74.00	54.00	Pass
11 (Peak)	2400.000	12.176	60.268	72.444	--	--	--
11 (Peak)	2405.507	12.190	103.689	115.878	--	--	--
11 (Average)	2390.000	12.148	24.361	36.509	74.00	54.00	Pass
11 (Average)	2400.000	12.176	47.670	59.846	--	--	--
11 (Average)	2405.072	12.188	101.182	113.370	--	--	--

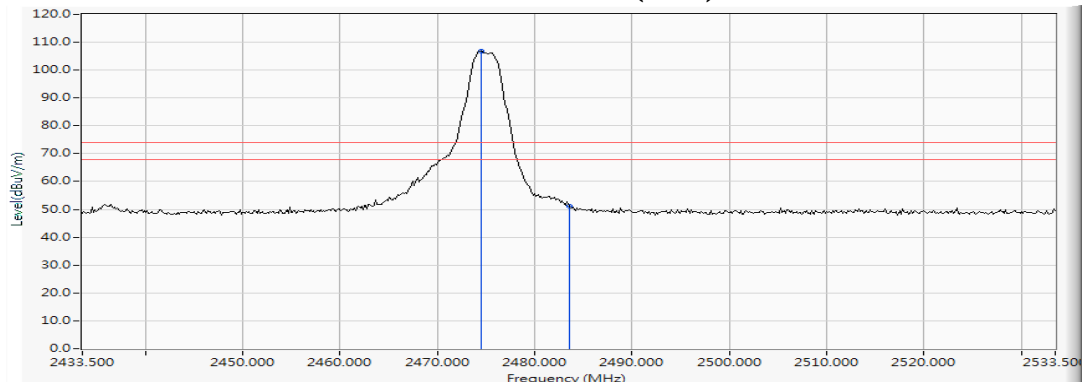
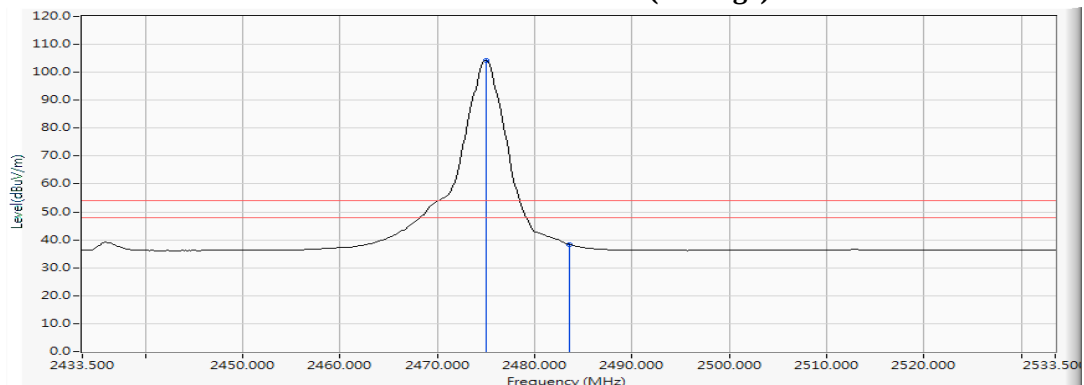
Figure Channel 11: Vertical (Peak)**Figure Channel 11: Vertical (Average)****Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400S)(2475MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV /m)	Peak Limit (dBμV /m)	Average Limit (dBμV /m)	Result
25 (Peak)	2474.514	12.378	94.494	106.871	--	--	--
25 (Peak)	2483.500	12.403	38.717	51.120	74.00	54.00	Pass
25 (Average)	2474.949	12.378	91.715	104.094	--	--	--
25 (Average)	2483.500	12.403	26.028	38.431	74.00	54.00	Pass

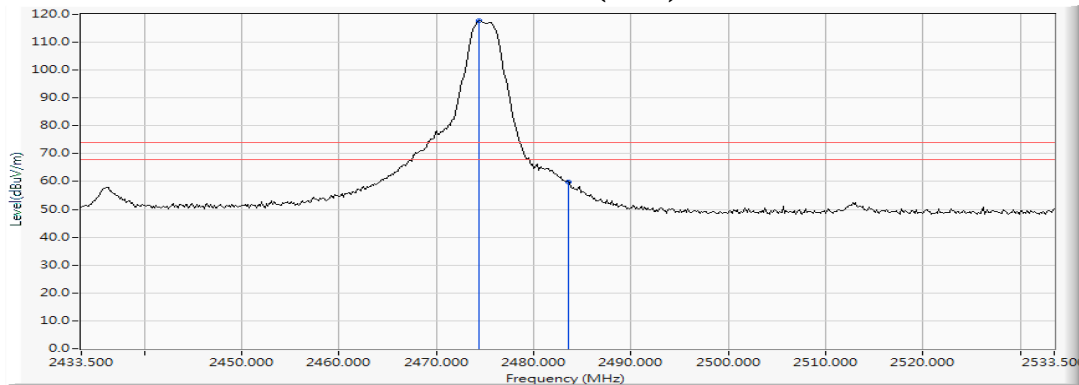
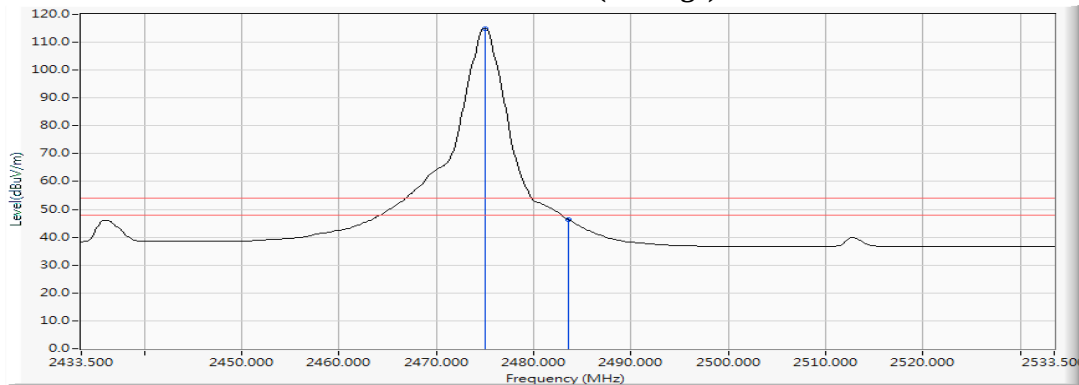
Figure Channel 25:
Horizontal (Peak)

Figure Channel 25:
Horizontal (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) A Port (EMIP400S)(2475MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
25 (Peak)	2474.370	12.377	105.304	117.681	--	--	--
25 (Peak)	2483.500	12.403	47.596	59.999	74.00	54.00	Pass
25 (Average)	2474.949	12.378	102.586	114.965	--	--	--
25 (Average)	2483.500	12.403	34.028	46.431	74.00	54.00	Pass

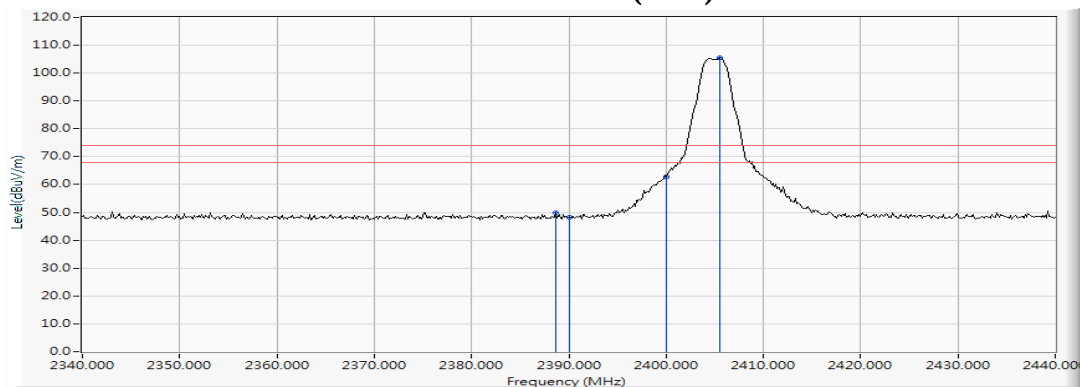
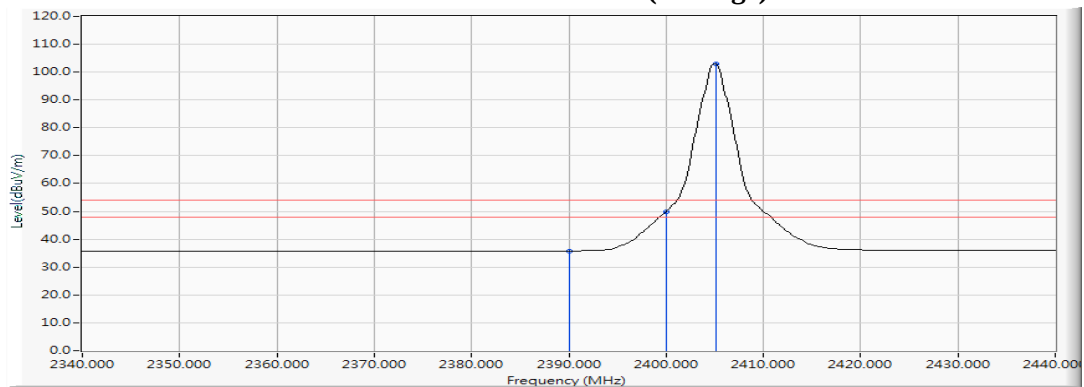
Figure Channel 25: Vertical (Peak)

Figure Channel 25: Vertical (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400S)(2405MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
11 (Peak)	2388.696	12.145	37.623	49.767	74.00	54.00	Pass
11 (Peak)	2390.000	12.148	36.107	48.255	74.00	54.00	Pass
11 (Peak)	2400.000	12.176	50.683	62.859	--	--	--
11 (Peak)	2405.507	12.190	93.200	105.389	--	--	--
11 (Average)	2390.000	12.148	23.675	35.823	74.00	54.00	Pass
11 (Average)	2400.000	12.176	37.746	49.922	--	--	--
11 (Average)	2405.072	12.188	90.761	102.949	--	--	--

Figure Channel 11: Horizontal (Peak)

Figure Channel 11: Horizontal (Average)


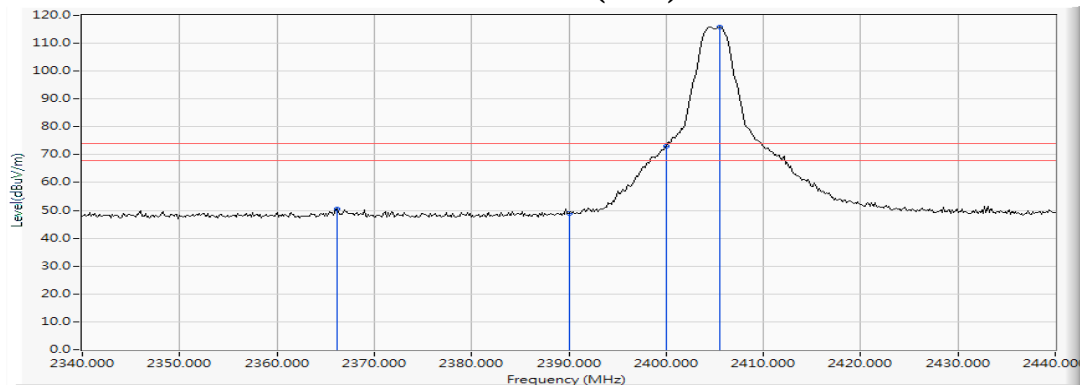
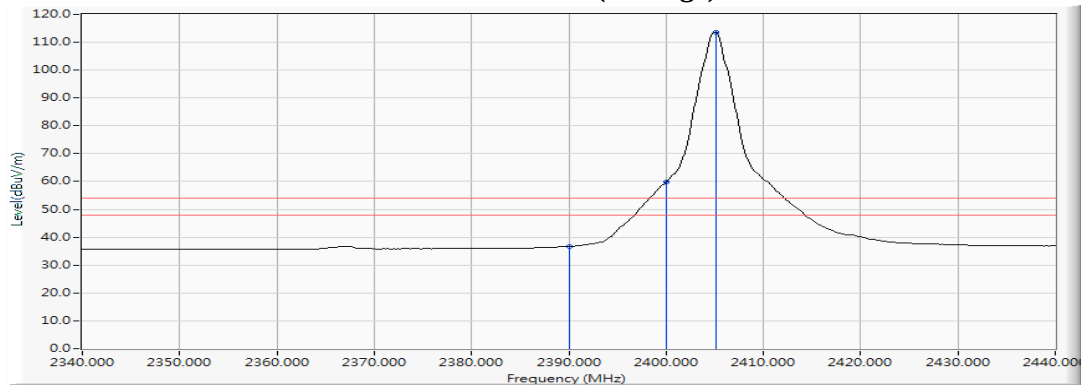
Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400S)(2405MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
11 (Peak)	2366.232	12.080	38.297	50.377	74.00	54.00	Pass
11 (Peak)	2390.000	12.148	36.805	48.953	74.00	54.00	Pass
11 (Peak)	2400.000	12.176	60.720	72.896	--	--	--
11 (Peak)	2405.507	12.190	103.733	115.922	--	--	--
11 (Average)	2390.000	12.148	24.639	36.787	74.00	54.00	Pass
11 (Average)	2400.000	12.176	47.548	59.724	--	--	--
11 (Average)	2405.072	12.188	101.237	113.425	--	--	--

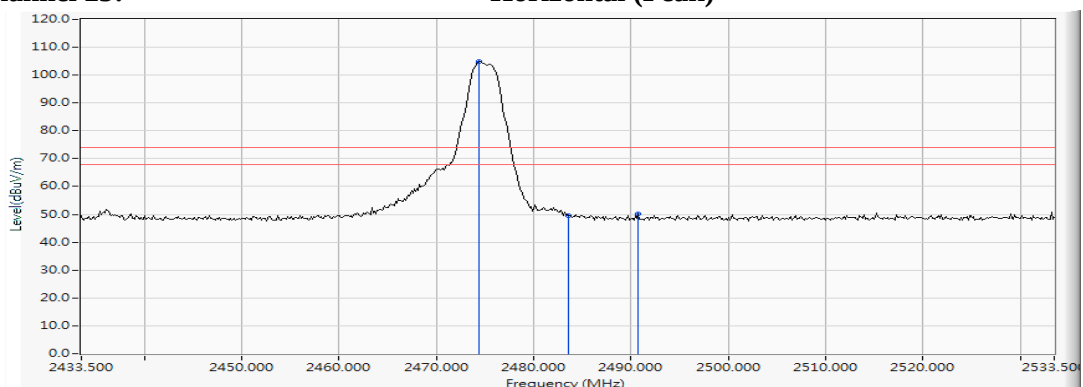
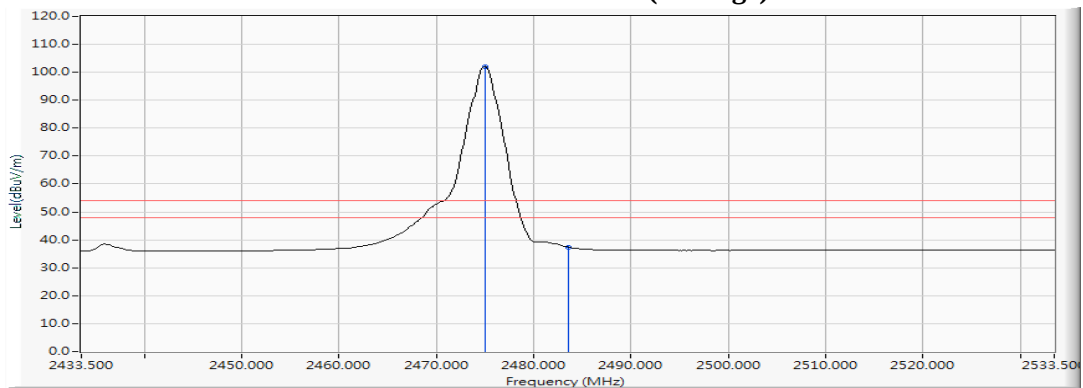
Figure Channel 11: Vertical (Peak)

Figure Channel 11: Vertical (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400S)(2475MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV /m)	Peak Limit (dBμV /m)	Average Limit (dBμV /m)	Result
25 (Peak)	2474.370	12.377	92.421	104.798	--	--	--
25 (Peak)	2483.500	12.403	37.231	49.634	74.00	54.00	Pass
25 (Peak)	2490.746	12.423	37.834	50.257	74.00	54.00	Pass
25 (Average)	2474.949	12.378	89.548	101.927	--	--	--
25 (Average)	2483.500	12.403	25.027	37.430	74.00	54.00	Pass

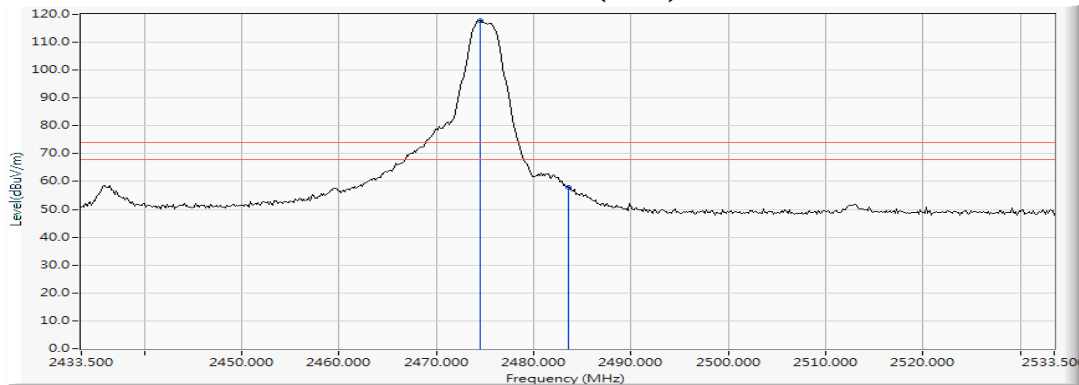
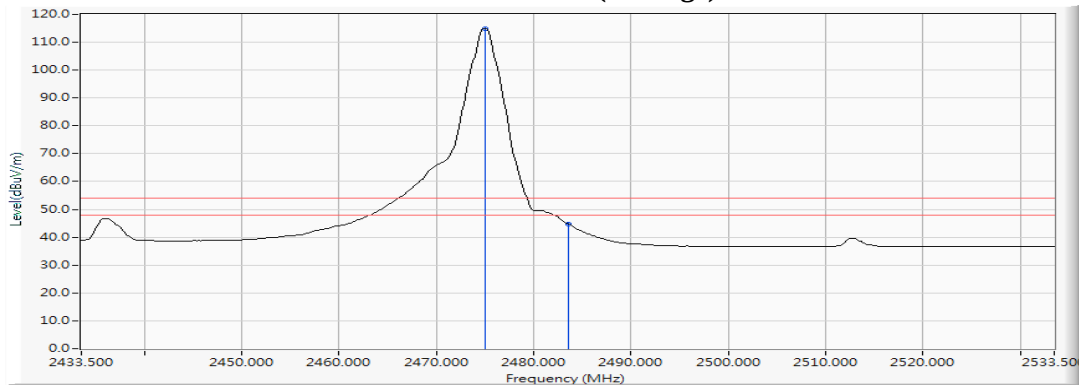
Figure Channel 25: Horizontal (Peak)

Figure Channel 25: Horizontal (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/11/29
 Test Mode : Mode 1: Transmit (OQPSK) B Port (EMIP400S)(2475MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
25 (Peak)	2474.514	12.378	105.411	117.788	--	--	--
25 (Peak)	2483.500	12.403	45.510	57.913	74.00	54.00	Pass
25 (Average)	2474.949	12.378	102.506	114.885	--	--	--
25 (Average)	2483.500	12.403	32.440	44.843	74.00	54.00	Pass

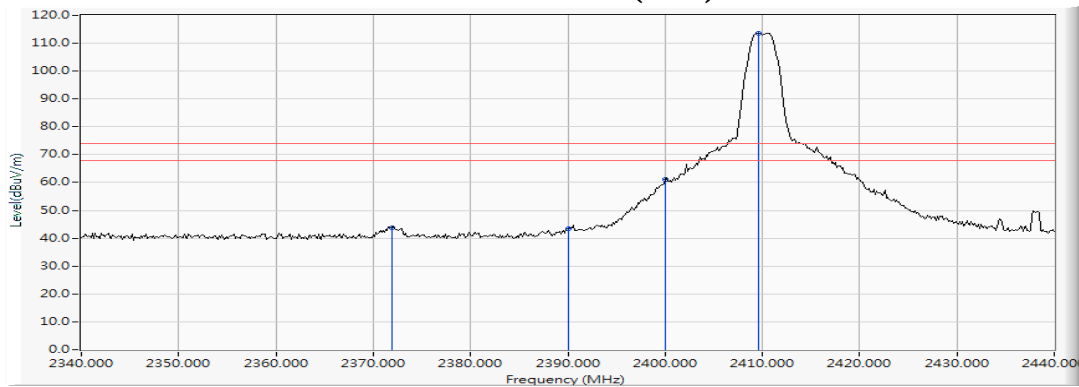
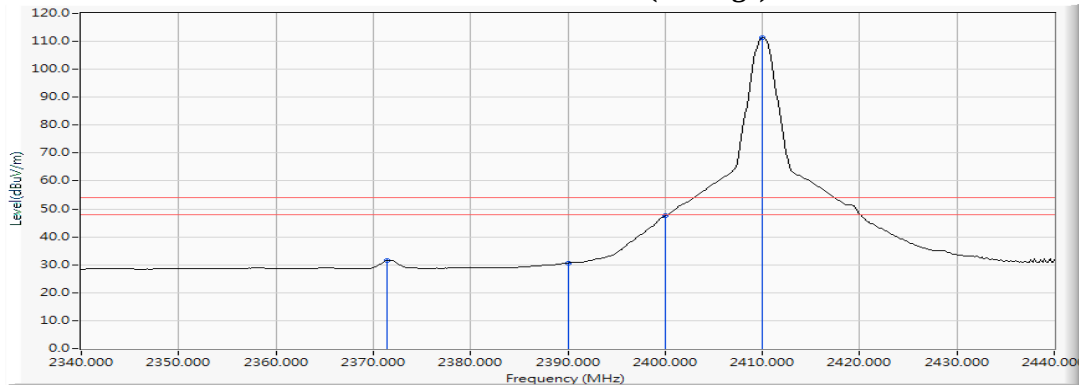
Figure Channel 25: Vertical (Peak)**Figure Channel 25: Vertical (Average)****Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400S)(2410MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV /m)	Peak Limit (dBμV /m)	Average Limit (dBμV /m)	Result
12 (Peak)	2371.884	12.096	31.742	43.838	74.00	54.00	Pass
12 (Peak)	2390.000	12.148	31.255	43.403	74.00	54.00	Pass
12 (Peak)	2400.000	12.176	49.081	61.257	--	--	--
12 (Peak)	2409.565	12.198	101.436	113.634	--	--	--
12 (Average)	2371.449	12.095	19.379	31.474	74.00	54.00	Pass
12 (Average)	2390.000	12.148	18.542	30.690	74.00	54.00	Pass
12 (Average)	2400.000	12.176	35.389	47.565	--	--	--
12 (Average)	2410.000	12.199	99.068	111.267	--	--	--

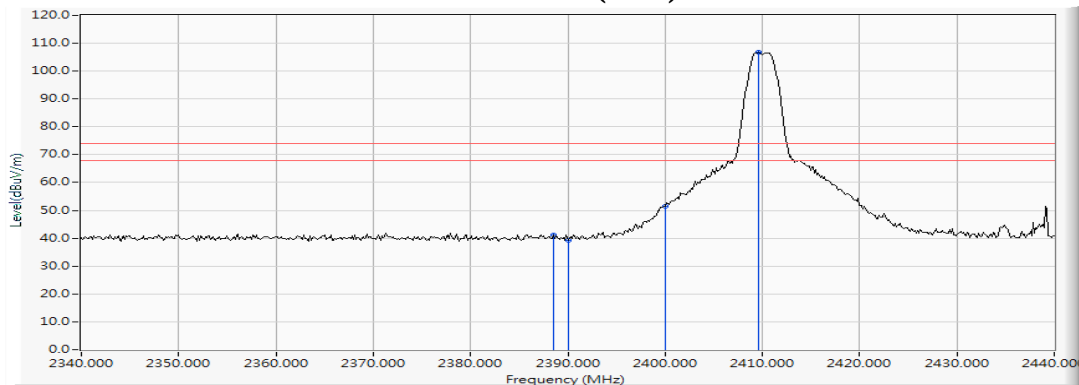
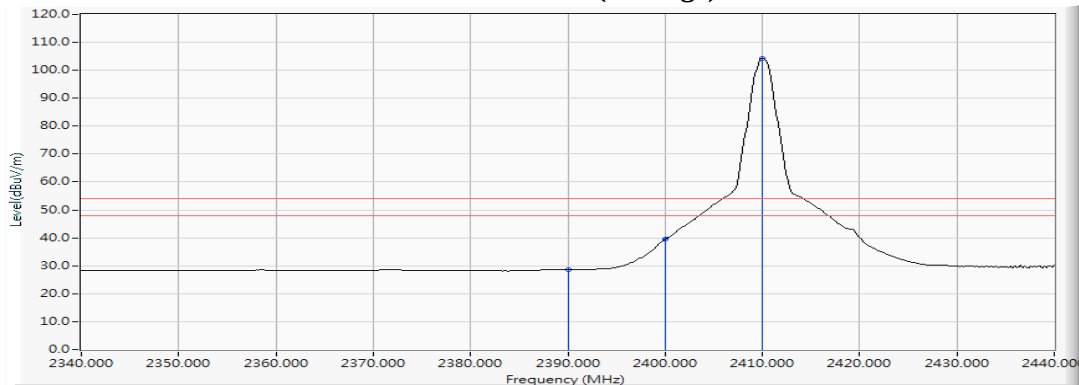
Figure Channel 12: Horizontal (Peak)

Figure Channel 12: Horizontal (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400S)(2410MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
12 (Peak)	2388.551	12.144	29.034	41.178	74.00	54.00	Pass
12 (Peak)	2390.000	12.148	27.194	39.342	74.00	54.00	Pass
12 (Peak)	2400.000	12.176	39.272	51.448	--	--	--
12 (Peak)	2409.565	12.198	94.451	106.649	--	--	--
12 (Average)	2390.000	12.148	16.377	28.525	74.00	54.00	Pass
12 (Average)	2400.000	12.176	27.267	39.443	--	--	--
12 (Average)	2410.000	12.199	92.072	104.271	--	--	--

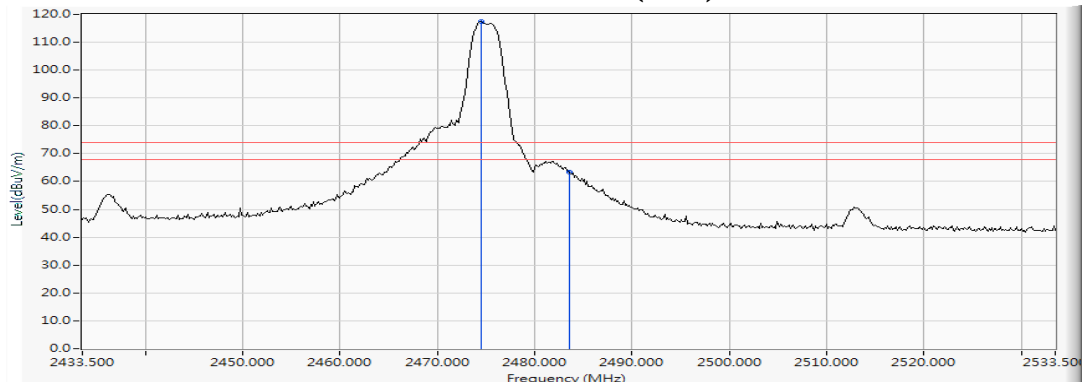
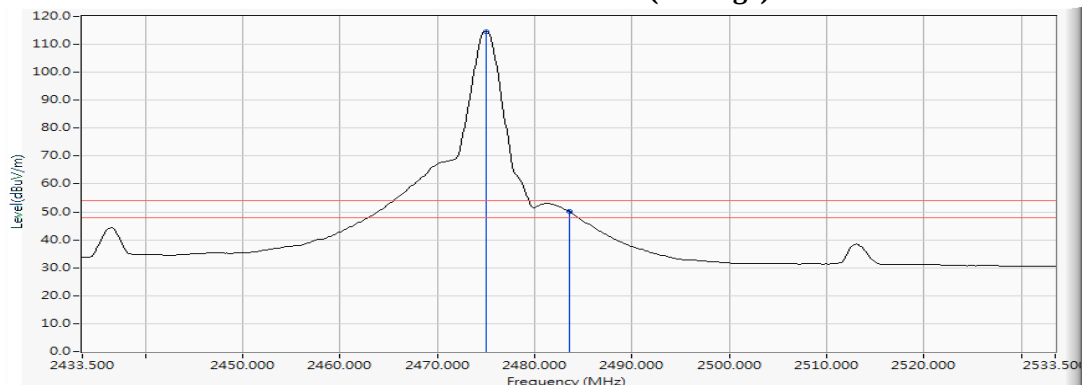
Figure Channel 12: Vertical (Peak)**Figure Channel 12: Vertical (Average)****Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400S)(2475MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
25 (Peak)	2474.514	12.378	104.952	117.329	--	--	--
25 (Peak)	2483.500	12.403	50.945	63.348	74.00	54.00	Pass
25 (Average)	2474.949	12.378	102.303	114.682	--	--	--
25 (Average)	2483.500	12.403	37.700	50.103	74.00	54.00	Pass

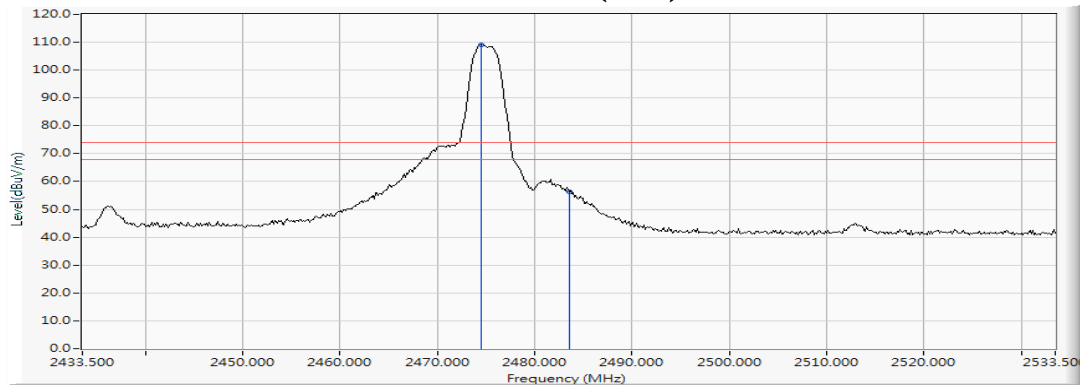
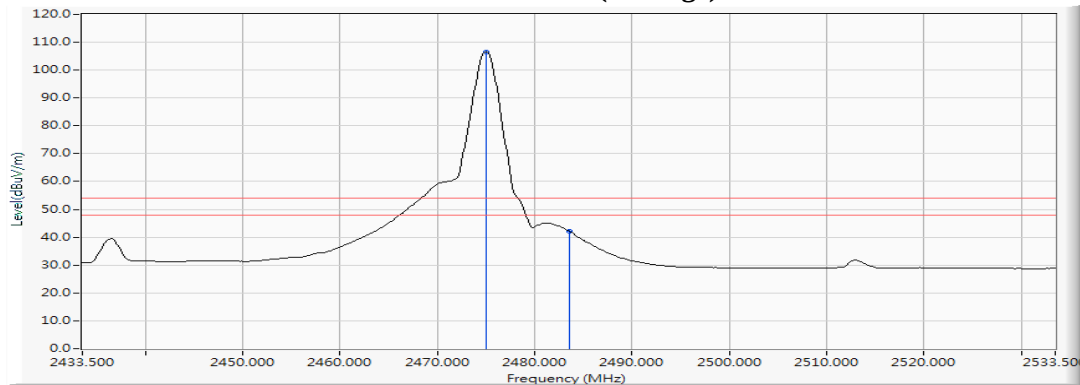
Figure Channel 25:**Horizontal (Peak)****Figure Channel 25:****Horizontal (Average)****Note:**

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) A Port (EMIP400S)(2475MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
25 (Peak)	2474.514	12.378	96.704	109.081	--	--	--
25 (Peak)	2483.500	12.403	43.804	56.207	74.00	54.00	Pass
25 (Average)	2474.949	12.378	94.050	106.429	--	--	--
25 (Average)	2483.500	12.403	29.810	42.213	74.00	54.00	Pass

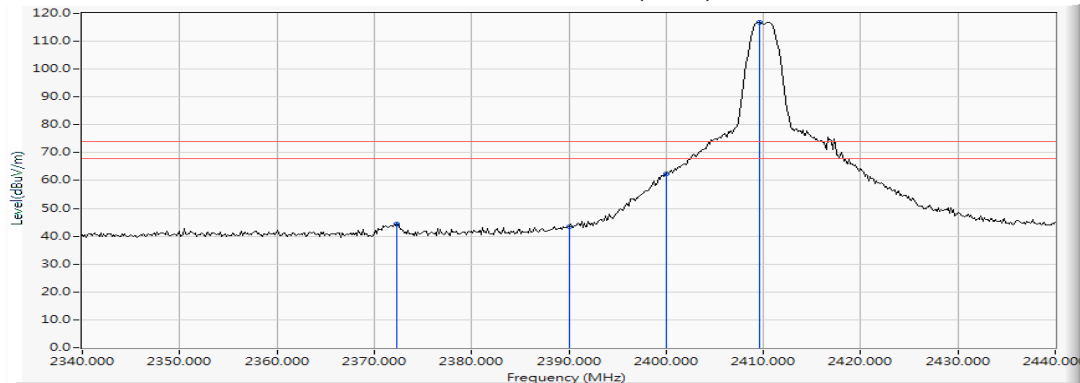
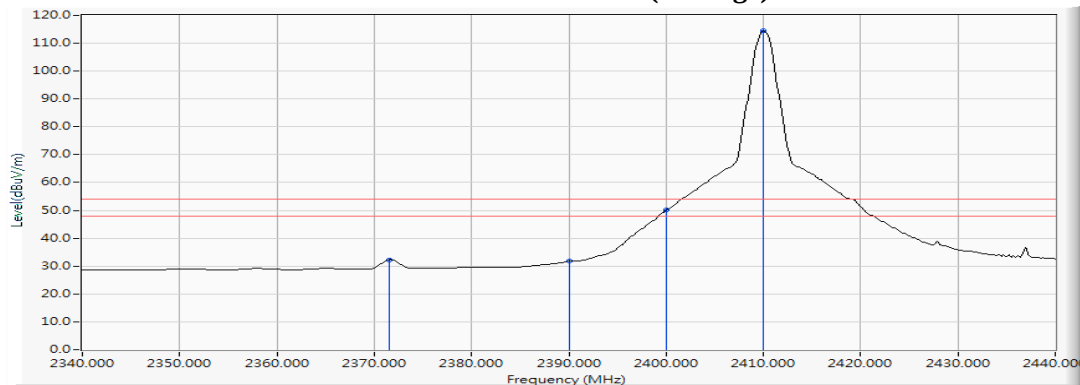
Figure Channel 25: Vertical (Peak)

Figure Channel 25: Vertical (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400S)(2410MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV/m)	Peak Limit (dBμV/m)	Average Limit (dBμV/m)	Result
12 (Peak)	2372.319	12.097	32.404	44.501	74.00	54.00	Pass
12 (Peak)	2390.000	12.148	31.386	43.534	74.00	54.00	Pass
12 (Peak)	2400.000	12.176	50.170	62.346	--	--	--
12 (Peak)	2409.565	12.198	104.533	116.731	--	--	--
12 (Average)	2371.594	12.095	20.233	32.328	74.00	54.00	Pass
12 (Average)	2390.000	12.148	19.598	31.746	74.00	54.00	Pass
12 (Average)	2400.000	12.176	37.876	50.052	--	--	--
12 (Average)	2410.000	12.199	102.183	114.382	--	--	--

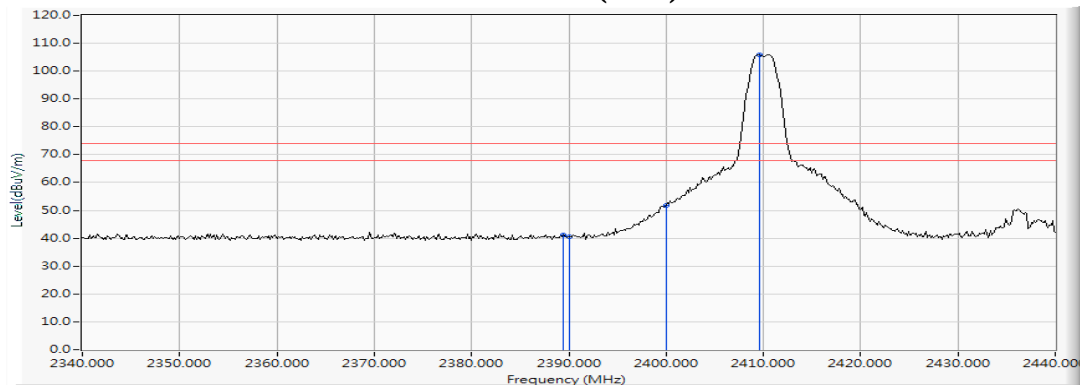
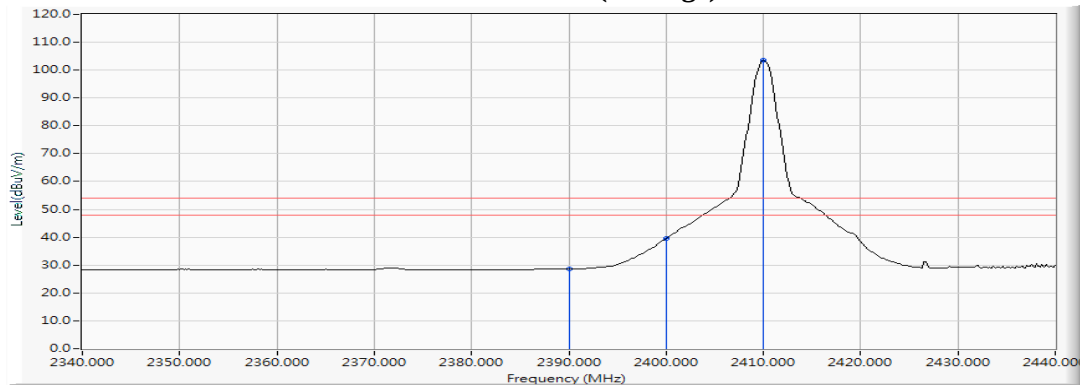
Figure Channel 12:
Horizontal (Peak)

Figure Channel 12:
Horizontal (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400S)(2410MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
12 (Peak)	2389.420	12.147	29.171	41.317	74.00	54.00	Pass
12 (Peak)	2390.000	12.148	28.316	40.464	74.00	54.00	Pass
12 (Peak)	2400.000	12.176	39.486	51.662	--	--	--
12 (Peak)	2409.565	12.198	93.603	105.801	--	--	--
12 (Average)	2390.000	12.148	16.529	28.677	74.00	54.00	Pass
12 (Average)	2400.000	12.176	27.542	39.718	--	--	--
12 (Average)	2410.000	12.199	91.237	103.436	--	--	--

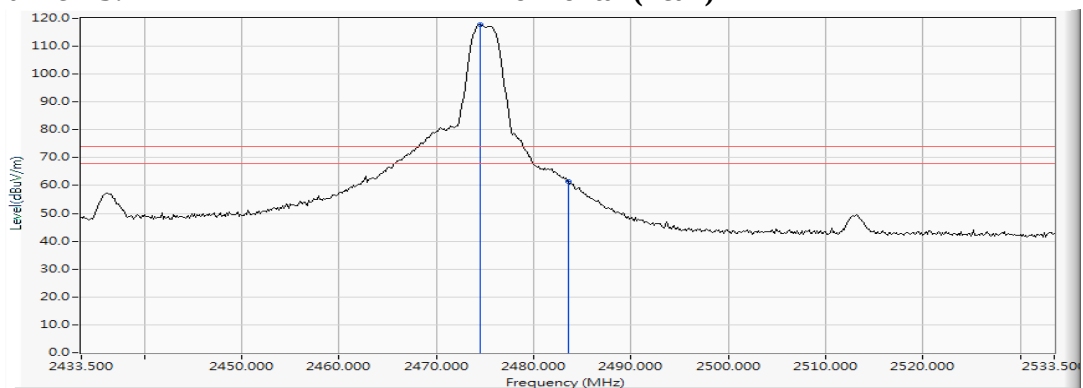
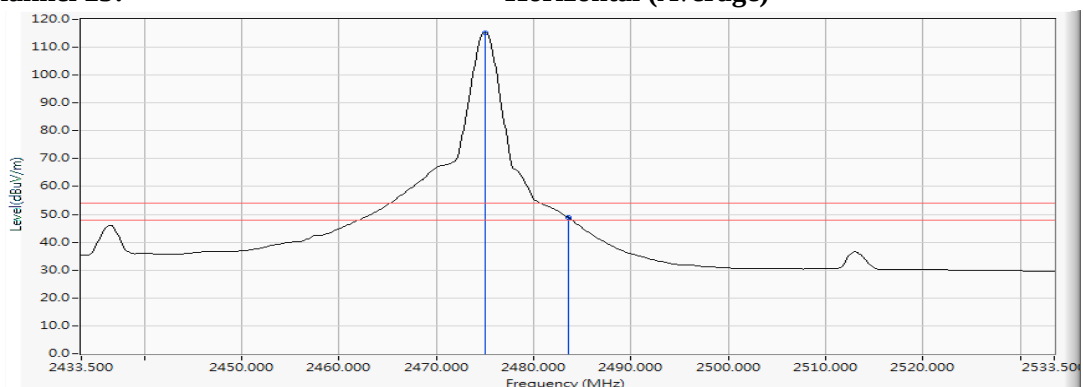
Figure Channel 12: Vertical (Peak)

Figure Channel 12: Vertical (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400S)(2475MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBμV)	Emission Level (dBμV /m)	Peak Limit (dBμV /m)	Average Limit (dBμV /m)	Result
25 (Peak)	2474.514	12.378	105.263	117.640	--	--	--
25 (Peak)	2483.500	12.403	49.111	61.514	74.00	54.00	Pass
25 (Average)	2474.949	12.378	102.742	115.121	--	--	--
25 (Average)	2483.500	12.403	36.527	48.930	74.00	54.00	Pass

Figure Channel 25: Horizontal (Peak)

Figure Channel 25: Horizontal (Average)


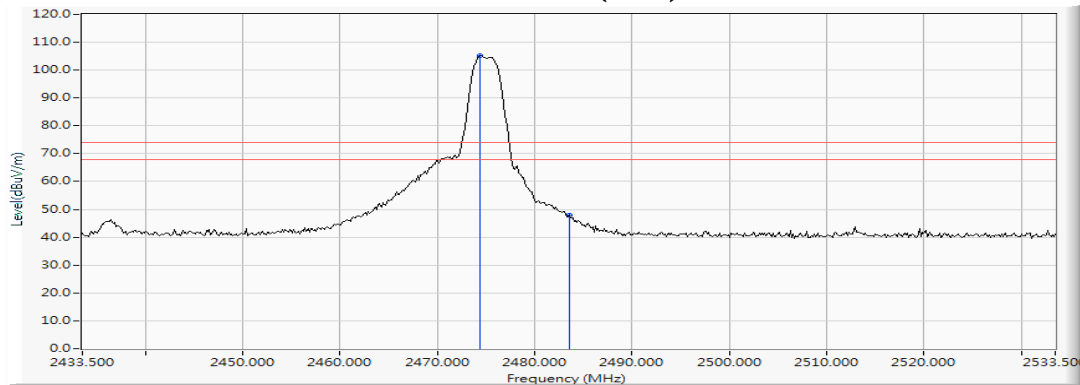
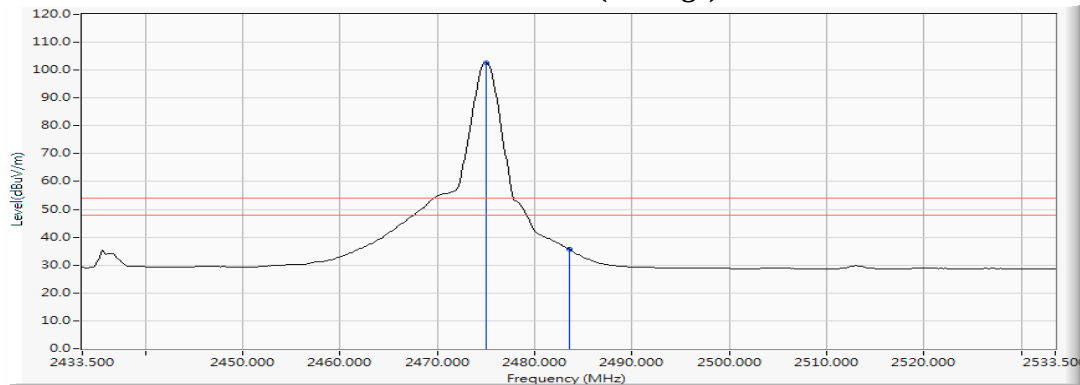
Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

Product : ARRI Transceiver Module
 Test Item : Band Edge Data
 Test Date : 2017/12/20
 Test Mode : Mode 2: Transmit (2GFSK) B Port (EMIP400S)(2475MHz)

RF Radiated Measurement (Vertical):

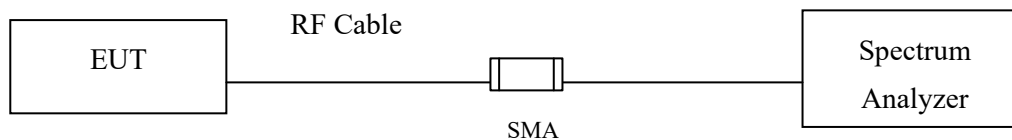
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dB μ V)	Emission Level (dB μ V /m)	Peak Limit (dB μ V /m)	Average Limit (dB μ V /m)	Result
25 (Peak)	2474.370	12.377	92.728	105.105	--	--	--
25 (Peak)	2483.500	12.403	35.455	47.858	74.00	54.00	Pass
25 (Average)	2474.949	12.378	90.127	102.506	--	--	--
25 (Average)	2483.500	12.403	23.219	35.622	74.00	54.00	Pass

Figure Channel 25: Vertical (Peak)

Figure Channel 25: Vertical (Average)

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.

7. 6dB Bandwidth

7.1. Test Setup



7.2. Limits

The minimum bandwidth shall be at least 500 kHz.

7.3. Test Procedure

The EUT was setup according to ANSI C63.10 2013; tested according to DTS test procedure of KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 1-5% of the emission bandwidth, $VBW \geq 3 * RBW$

7.4. Uncertainty

$\pm 279.2 \text{ Hz}$

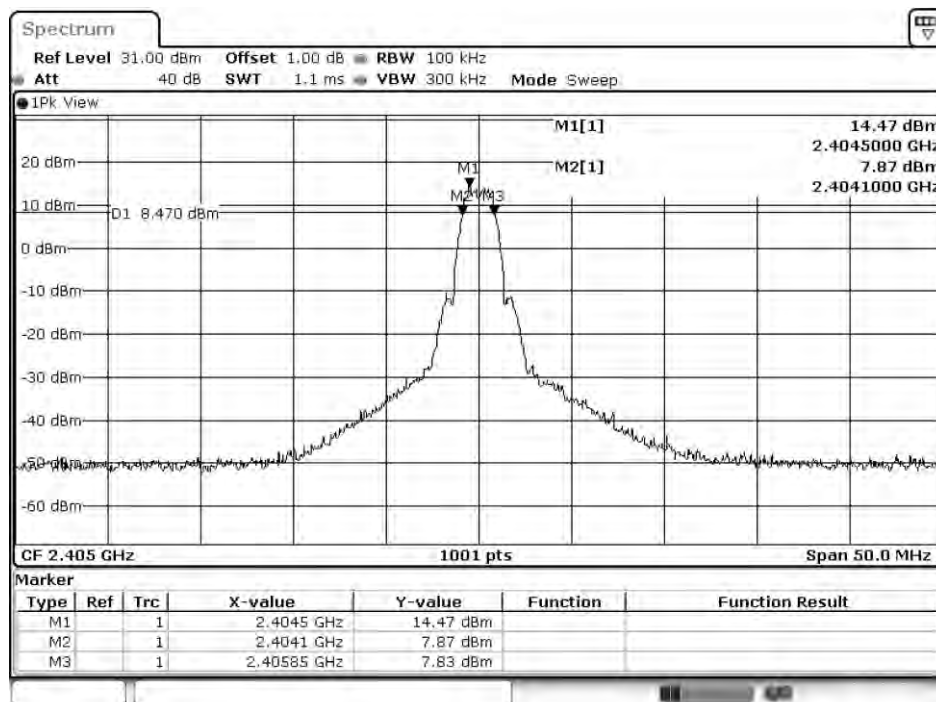
7.5. Test Result of 6dB Bandwidth

Product : ARRI Transceiver Module
 Test Item : 6dB Bandwidth Data
 Test Mode : Mode 1: Transmit (OQPSK) (EMIP400)
 Test Date : 2017/11/30

A Port

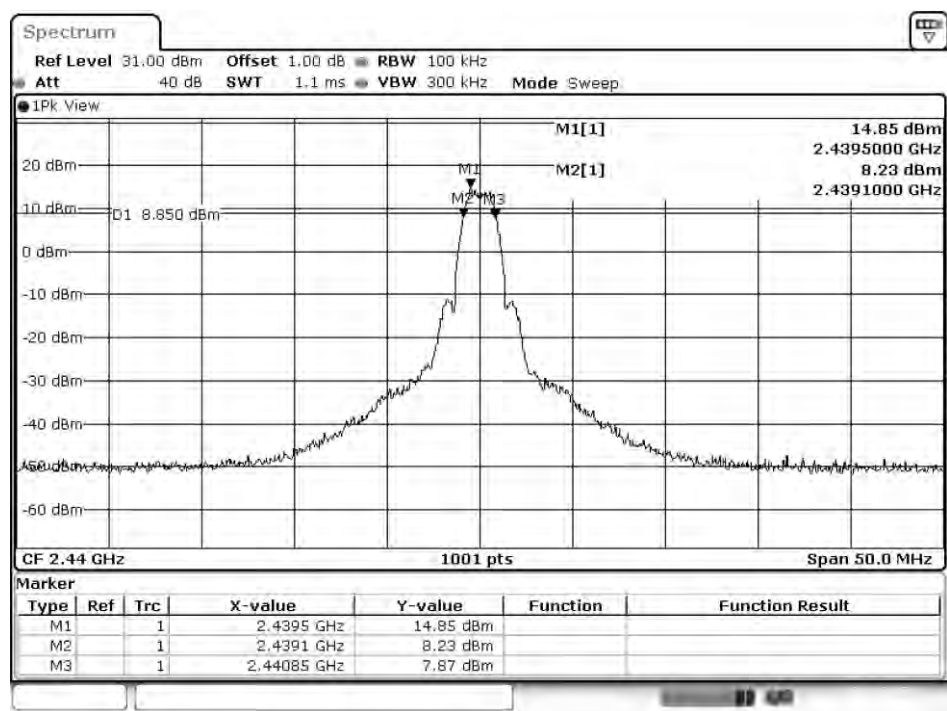
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2405	1750	>500	Pass
18	2440	1750	>500	Pass
25	2475	1800	>500	Pass

Figure Channel 11:



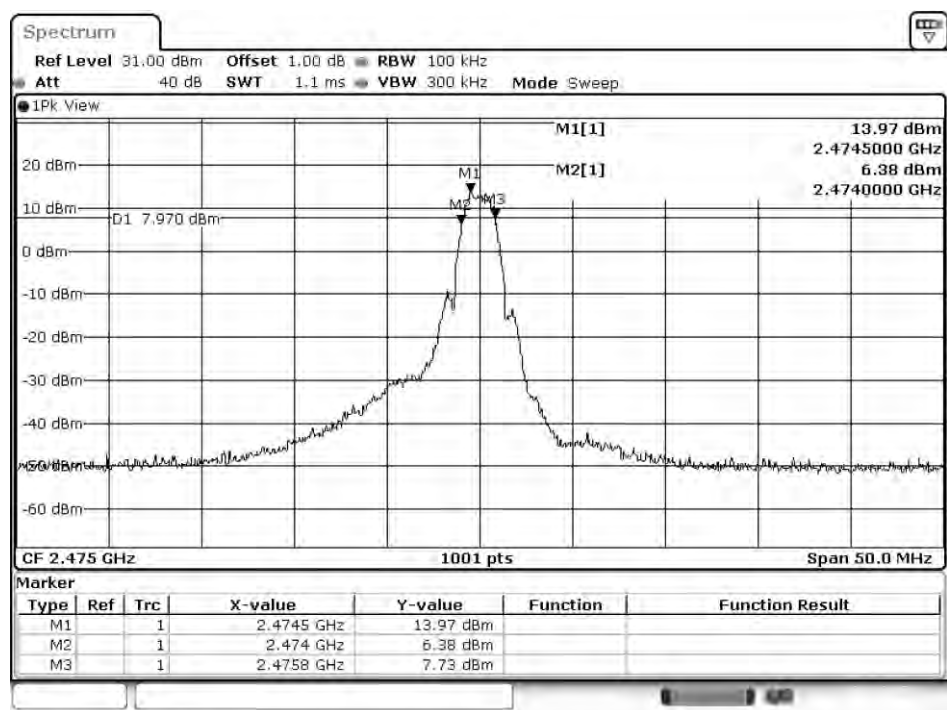
Date: 30.NOV.2017 09:54:09

Figure Channel 18:



Date: 30.NOV.2017 09:57:14

Figure Channel 25:

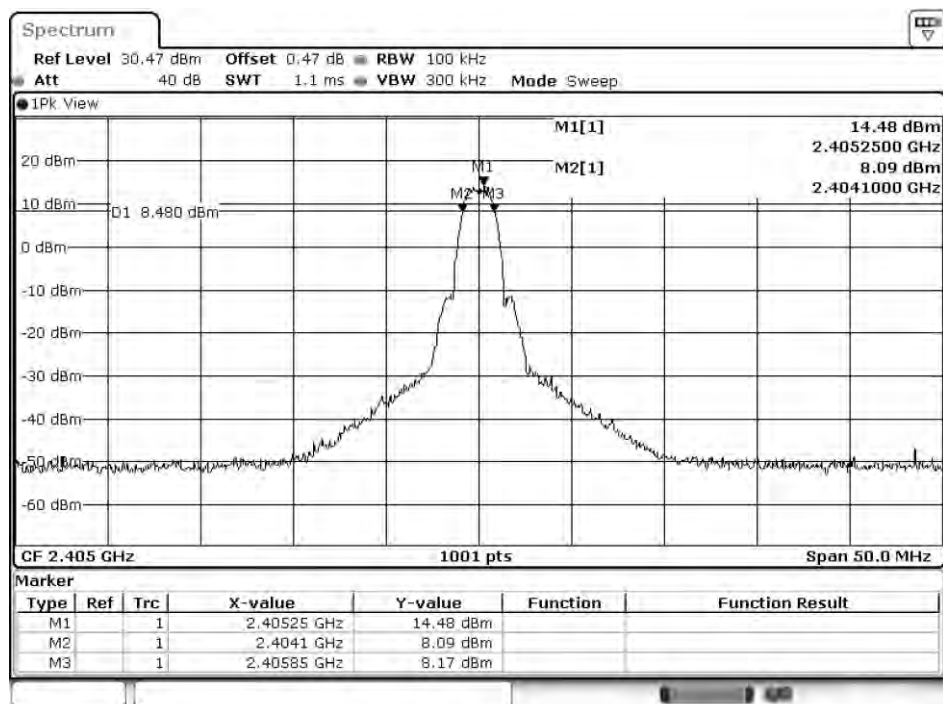


Date: 30.NOV.2017 09:59:56

Product : ARRI Transceiver Module
 Test Item : 6dB Bandwidth Data
 Test Mode : Mode 1: Transmit (OQPSK) (EMIP400)
 Test Date : 2017/11/30

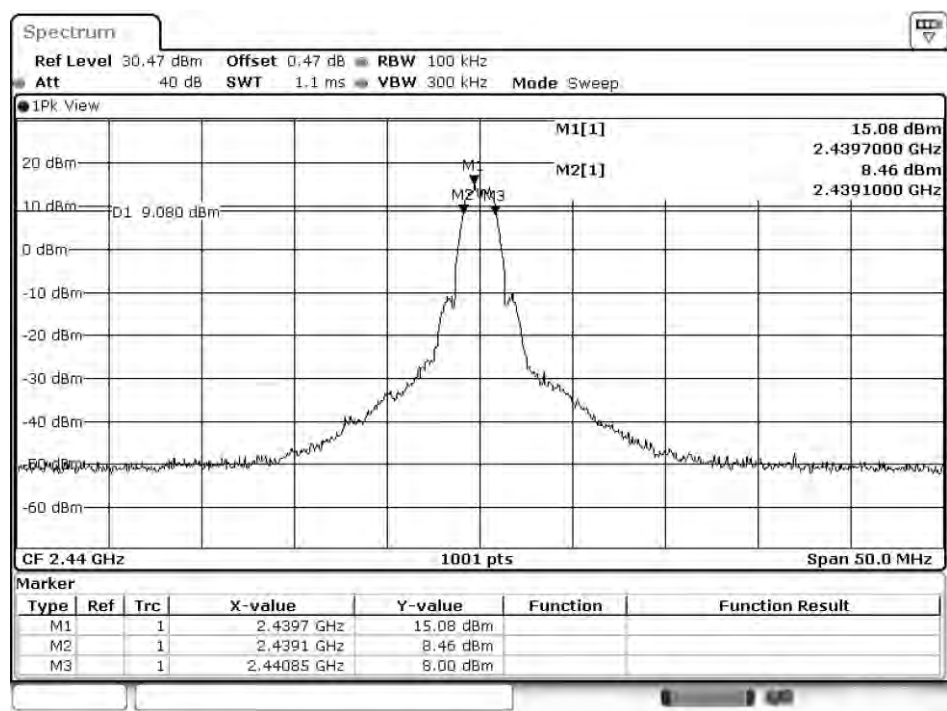
B Port

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2405	1750	>500	Pass
18	2440	1750	>500	Pass
25	2475	1800	>500	Pass

Figure Channel 11:

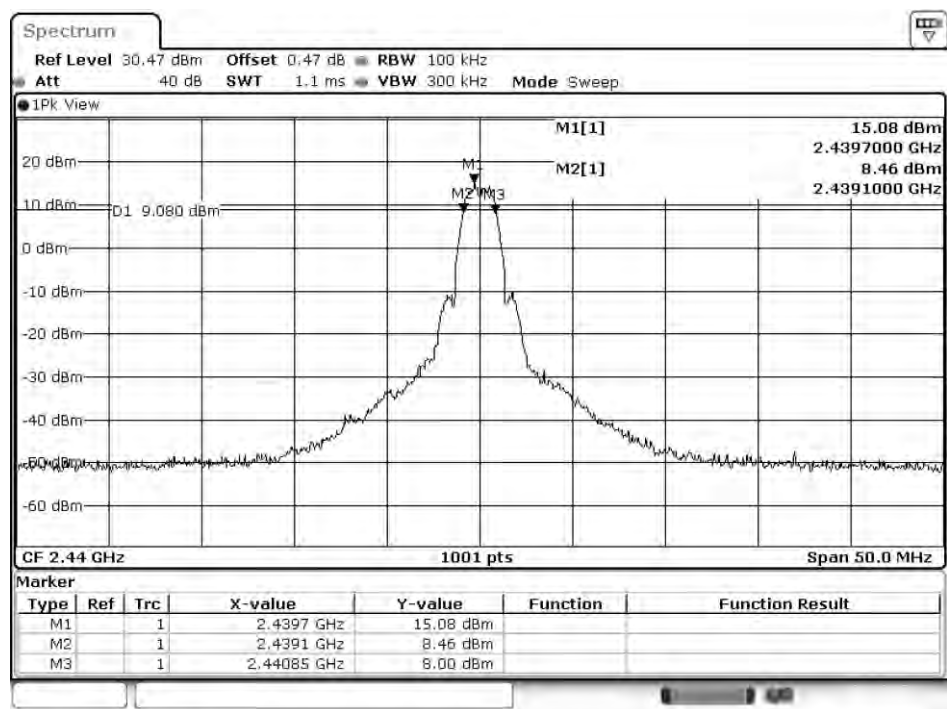
Date: 30.NOV.2017 13:38:49

Figure Channel 18:



Date: 30.NOV.2017 13:40:27

Figure Channel 25:

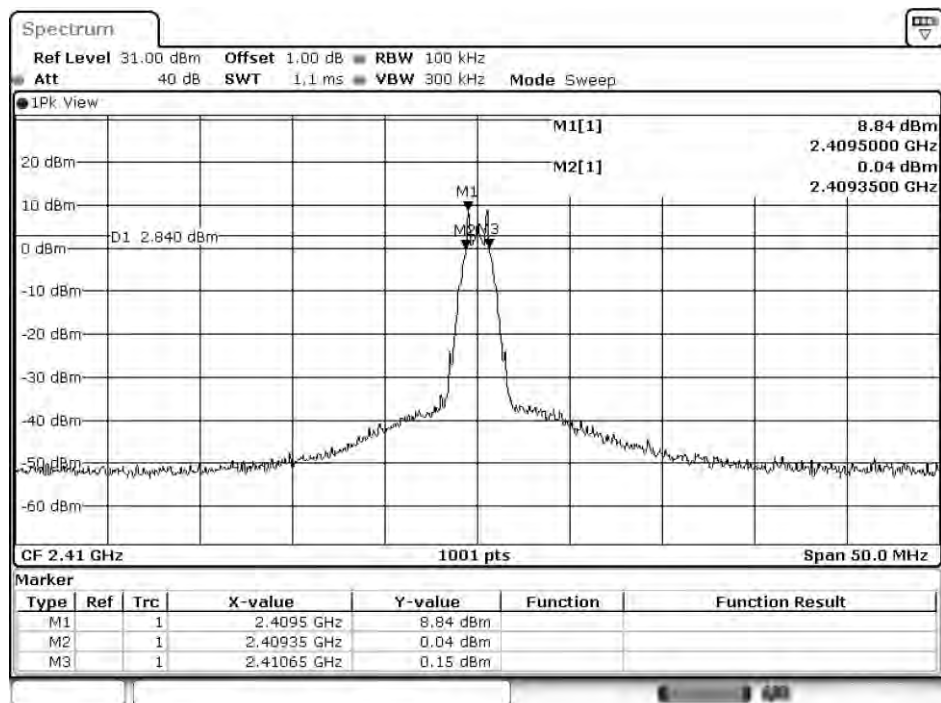


Date: 30.NOV.2017 13:40:27

Product : ARRI Transceiver Module
 Test Item : 6dB Bandwidth Data
 Test Mode : Mode 2: Transmit (2GFSK) (EMIP400)
 Test Date : 2017/12/19

A Port

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
12	2410	1300	>500	Pass
18	2440	1250	>500	Pass
25	2475	1250	>500	Pass

Figure Channel 12:

Date: 19 DEC 2017 14:56:03

Figure Channel 18:

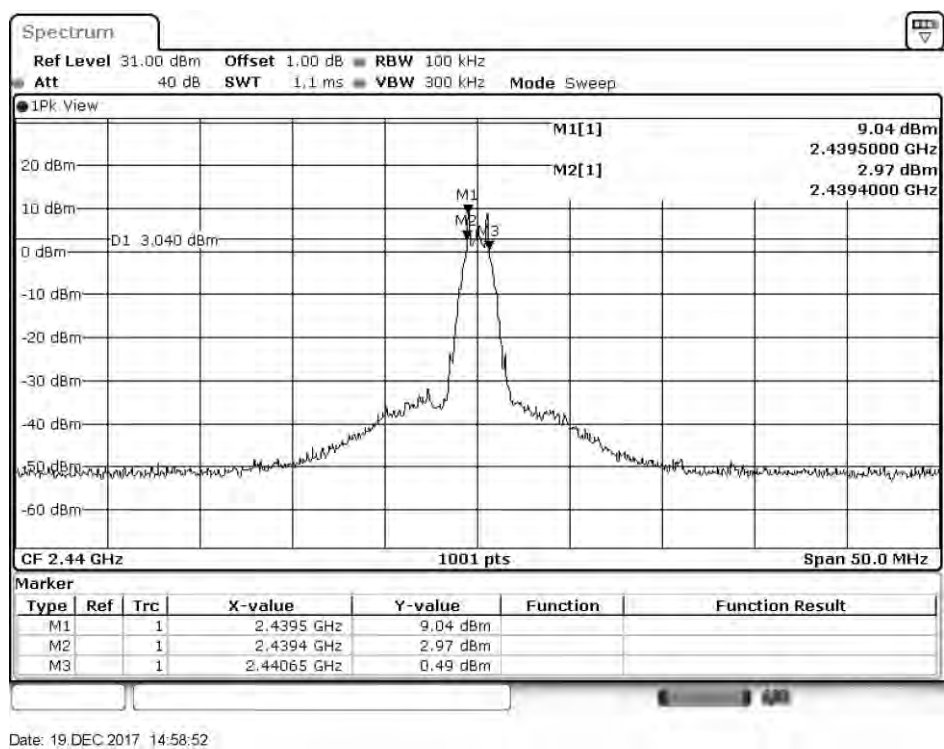
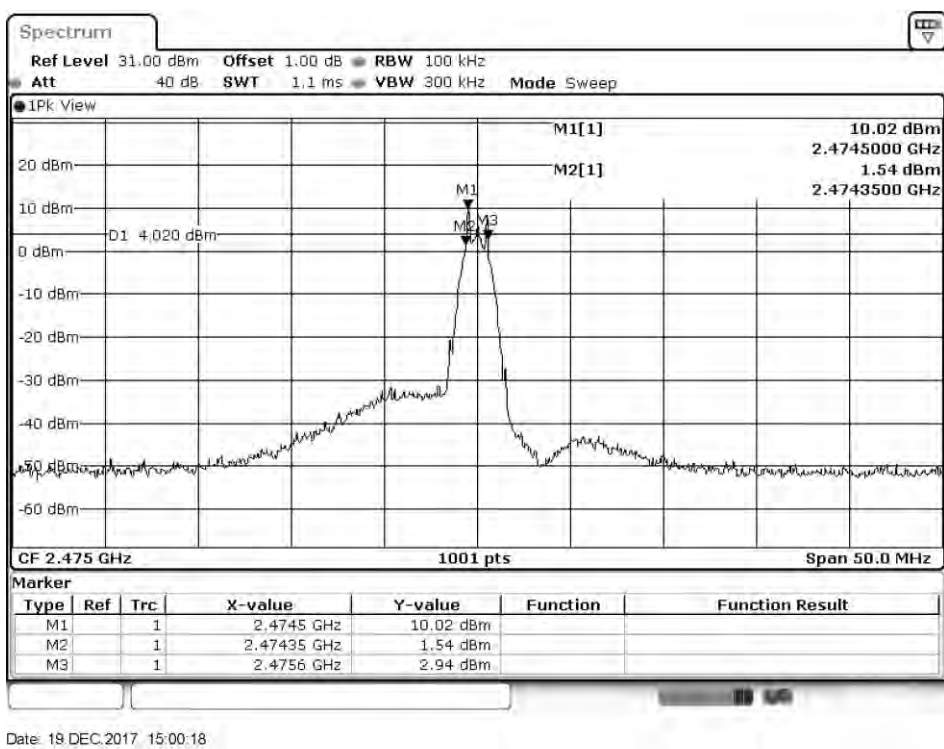


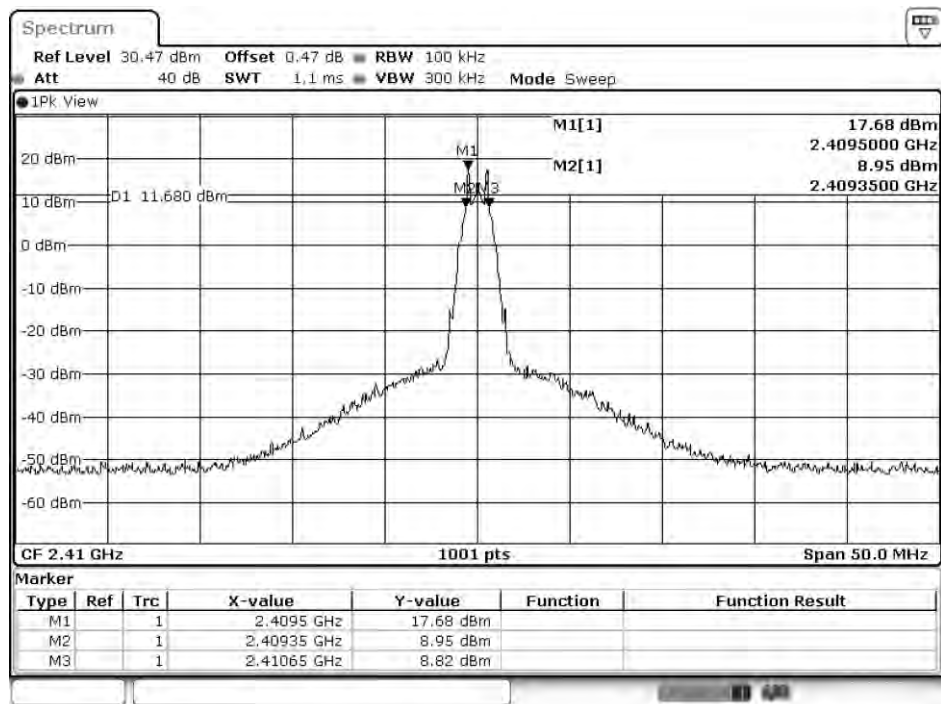
Figure Channel 25:



Product : ARRI Transceiver Module
 Test Item : 6dB Bandwidth Data
 Test Mode : Mode 2: Transmit (2GFSK) (EMIP400)
 Test Date : 2017/12/19

B Port

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
12	2410	1300	>500	Pass
18	2440	1300	>500	Pass
25	2475	1250	>500	Pass

Figure Channel 12:

Date: 19 DEC 2017 15:29:53

Figure Channel 18:

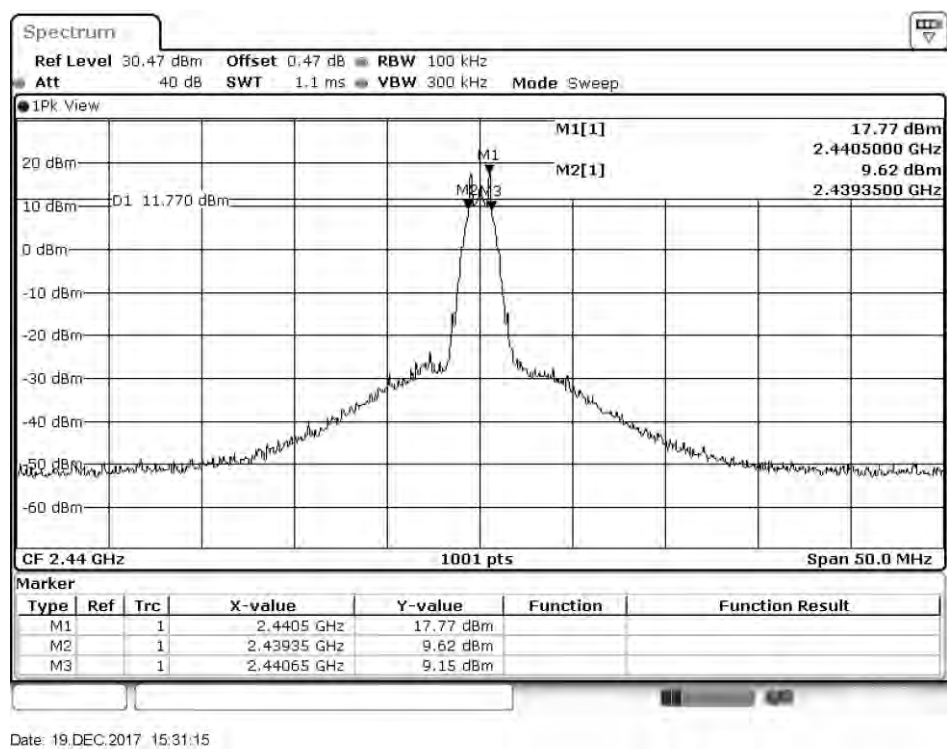
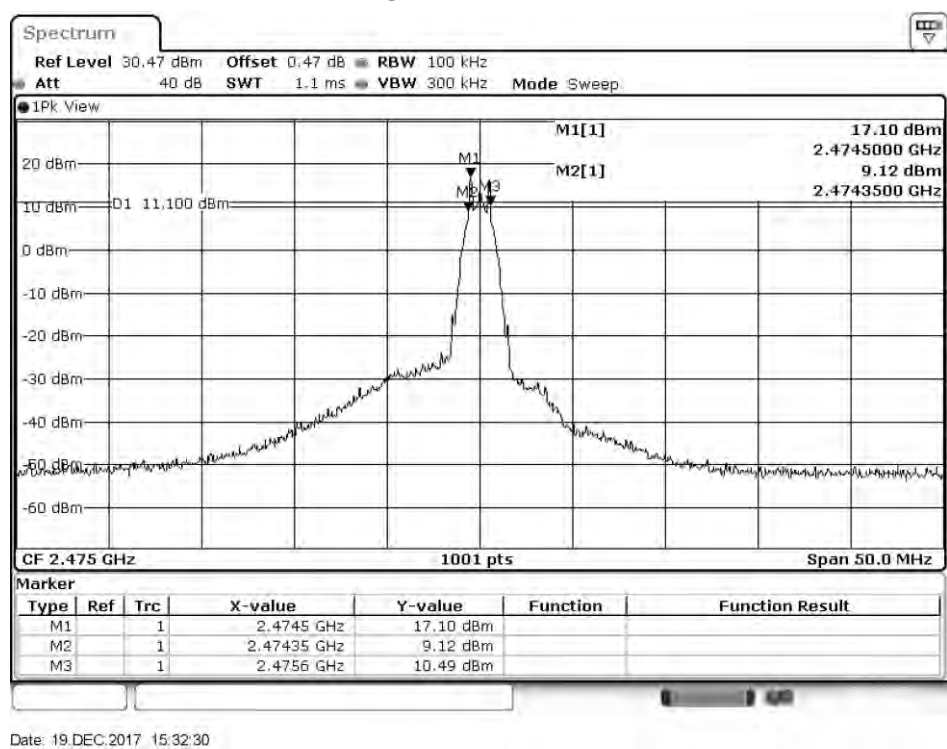


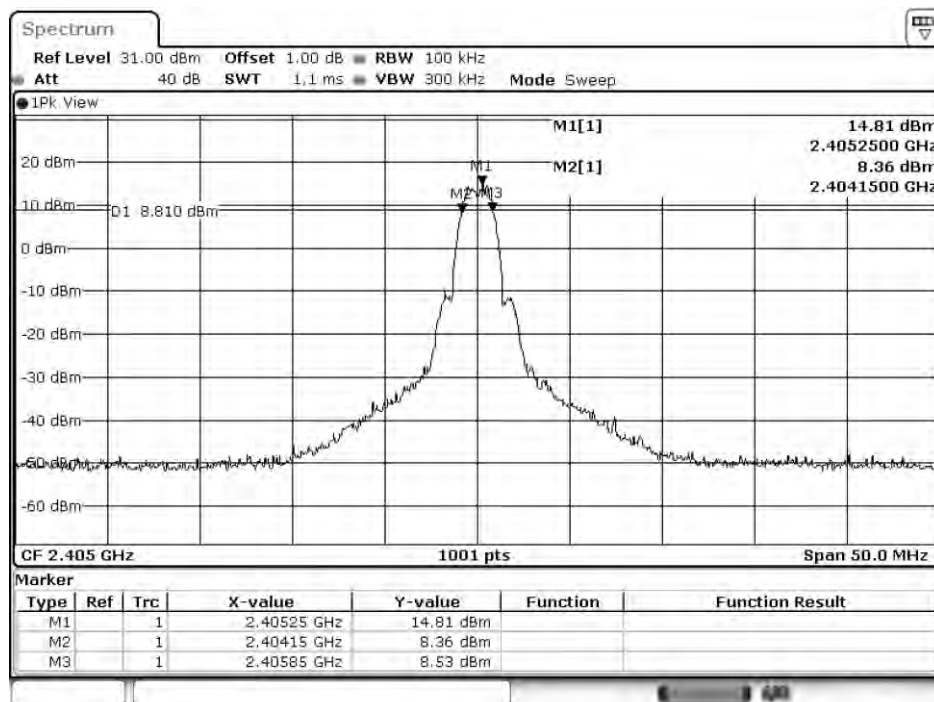
Figure Channel 25:



Product : ARRI Transceiver Module
 Test Item : 6dB Bandwidth Data
 Test Mode : Mode 1: Transmit (OQPSK) (EMIP400S)
 Test Date : 2017/11/30

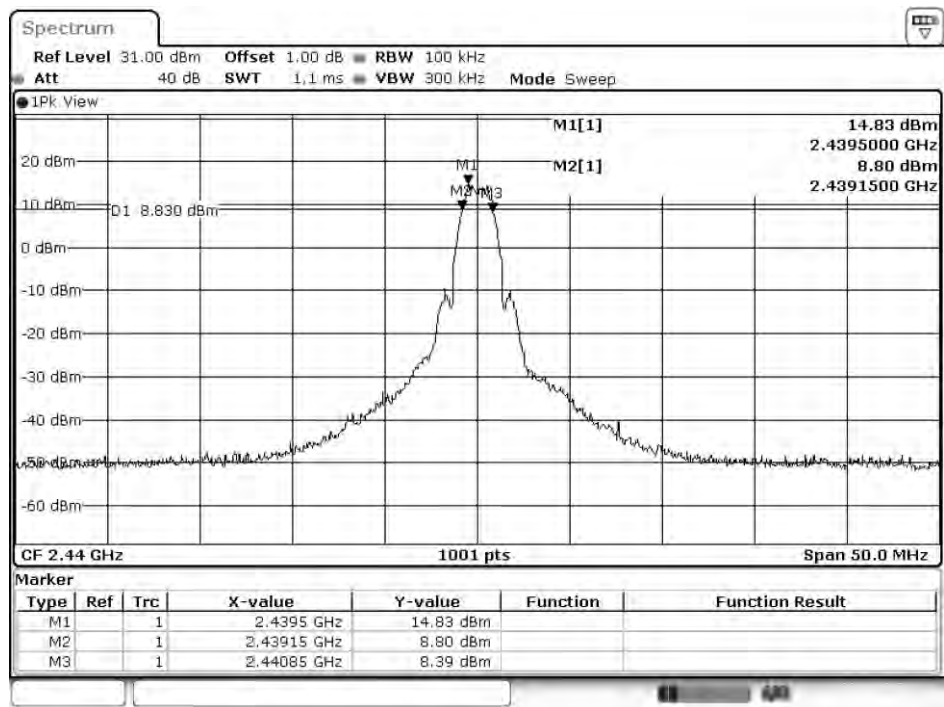
A Port

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2405	1700	>500	Pass
18	2440	1700	>500	Pass
25	2475	1650	>500	Pass

Figure Channel 11:

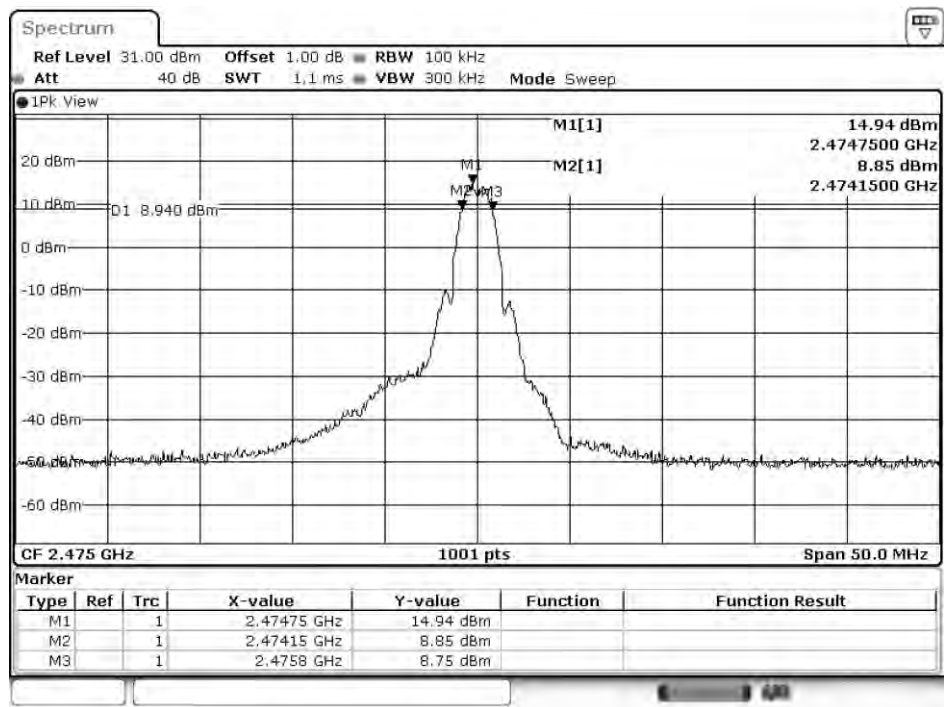
Date: 30.NOV.2017 13:58:57

Figure Channel 18:



Date: 30.NOV.2017 14:00:41

Figure Channel 25:

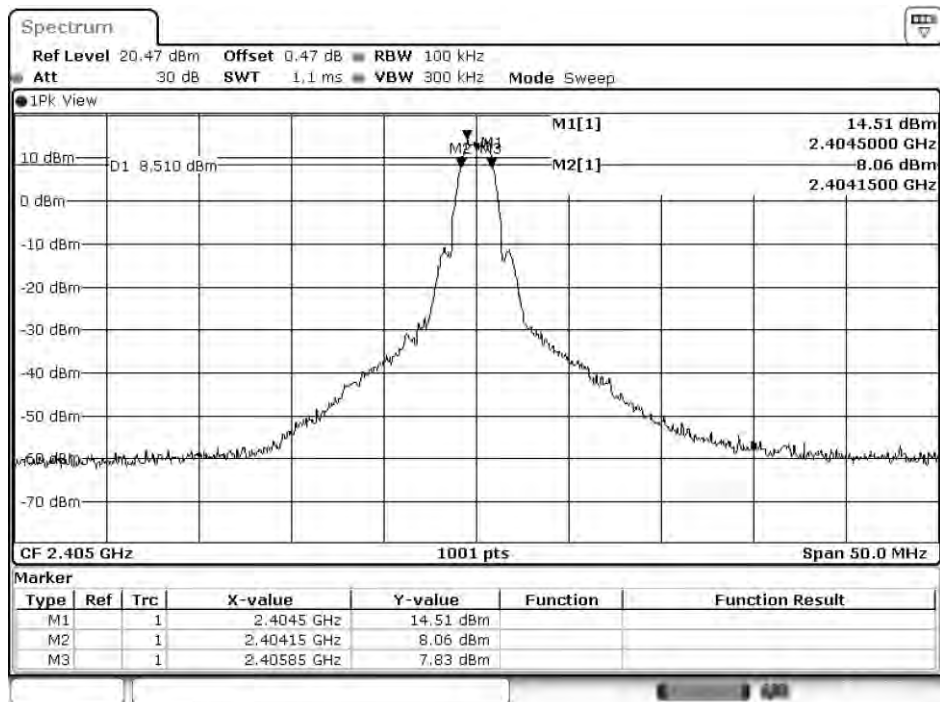


Date: 30.NOV.2017 14:02:18

Product : ARRI Transceiver Module
 Test Item : 6dB Bandwidth Data
 Test Mode : Mode 1: Transmit (OQPSK) (EMIP400S)
 Test Date : 2017/11/30

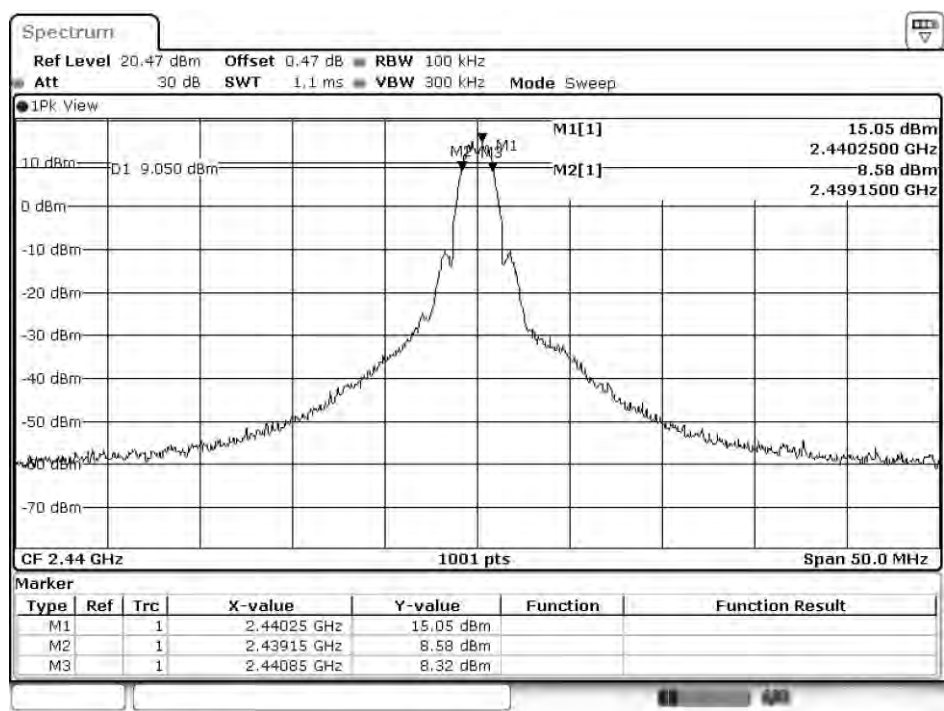
B Port

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2405	1700	>500	Pass
18	2440	1700	>500	Pass
25	2475	1800	>500	Pass

Figure Channel 11:

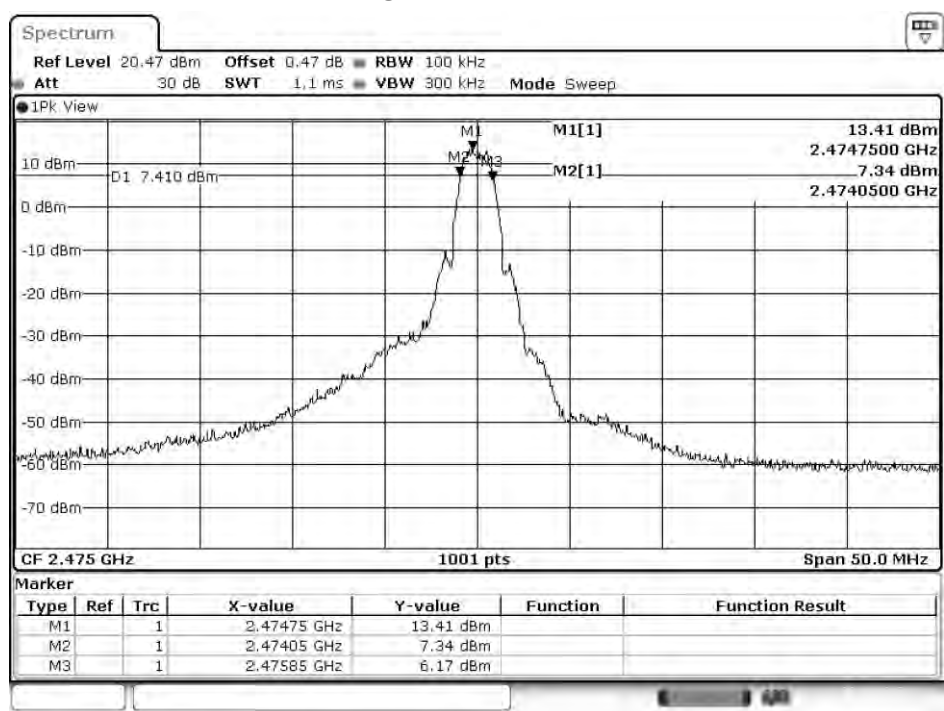
Date: 30.NOV.2017 13:49:17

Figure Channel 18:



Date: 30.NOV.2017 13:50:43

Figure Channel 25:

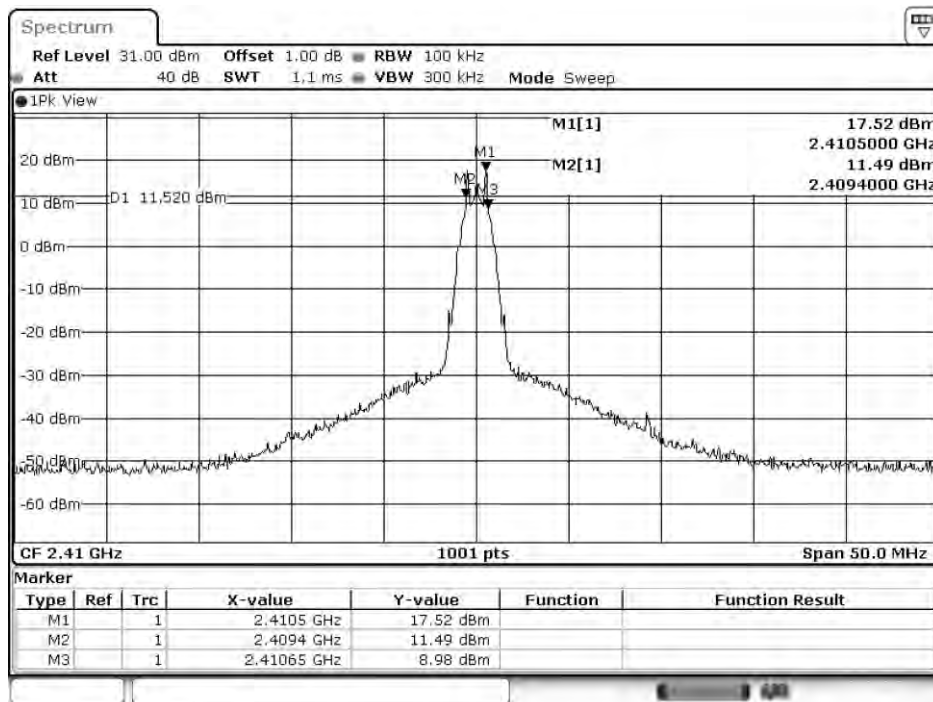


Date: 30.NOV.2017 13:52:38

Product : ARRI Transceiver Module
 Test Item : 6dB Bandwidth Data
 Test Mode : Mode 2: Transmit (2GFSK) (EMIP400S)
 Test Date : 2017/12/19

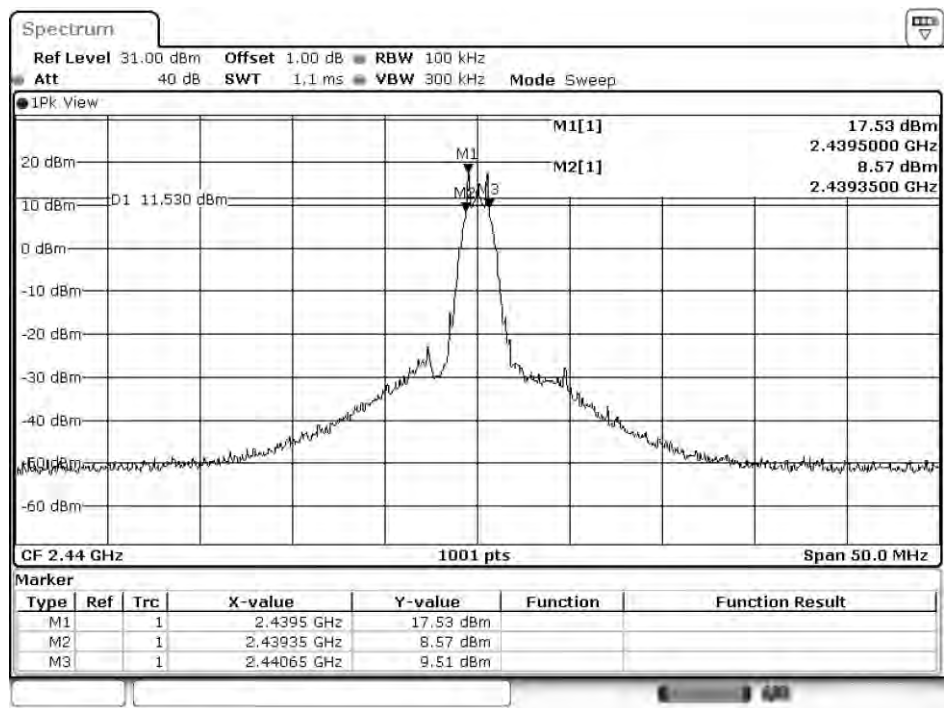
A Port

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
12	2410	1250	>500	Pass
18	2440	1300	>500	Pass
25	2475	1300	>500	Pass

Figure Channel 12:

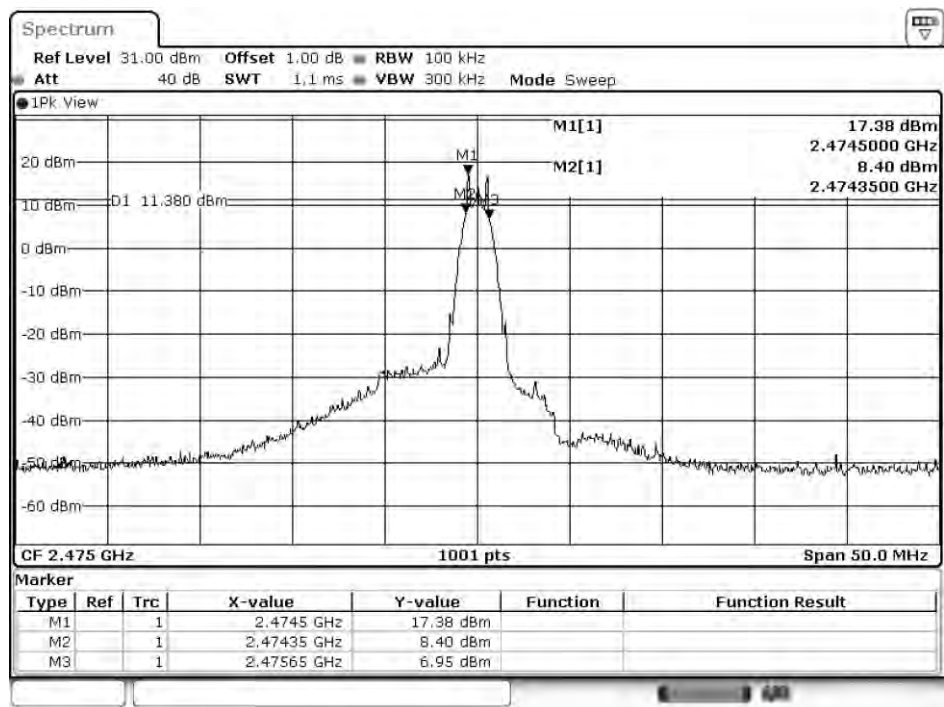
Date: 19 DEC 2017 16:34:48

Figure Channel 18:



Date: 19.DEC 2017 16:36:13

Figure Channel 25:

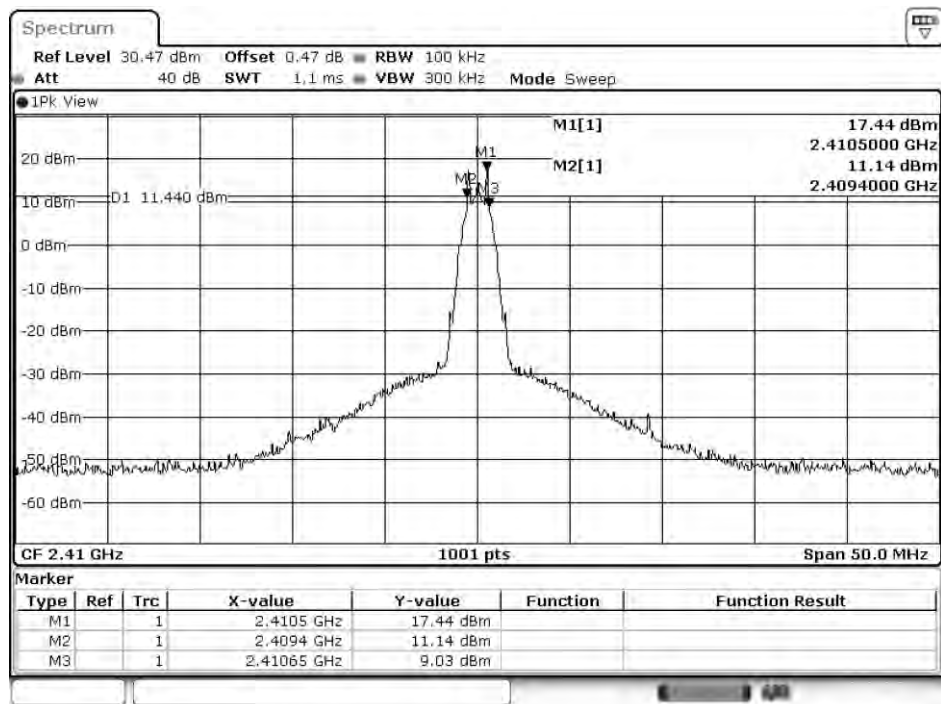


Date: 19.DEC 2017 16:37:40

Product : ARRI Transceiver Module
 Test Item : 6dB Bandwidth Data
 Test Mode : Mode 2: Transmit (2GFSK) (EMIP400S)
 Test Date : 2017/12/19

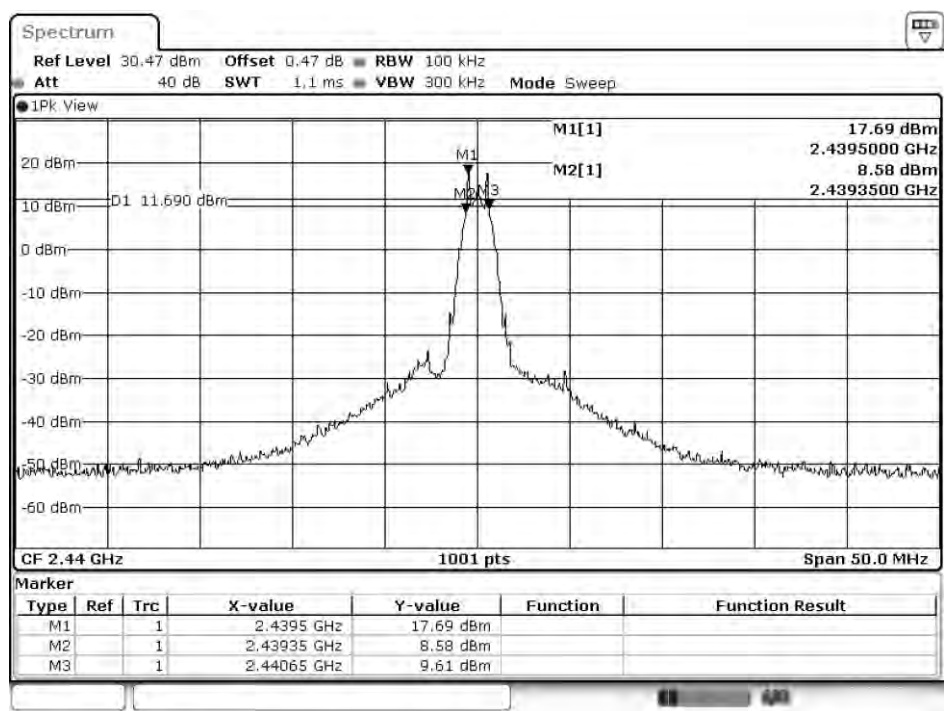
B Port

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
12	2410	1250	>500	Pass
18	2440	1300	>500	Pass
25	2475	1300	>500	Pass

Figure Channel 12:

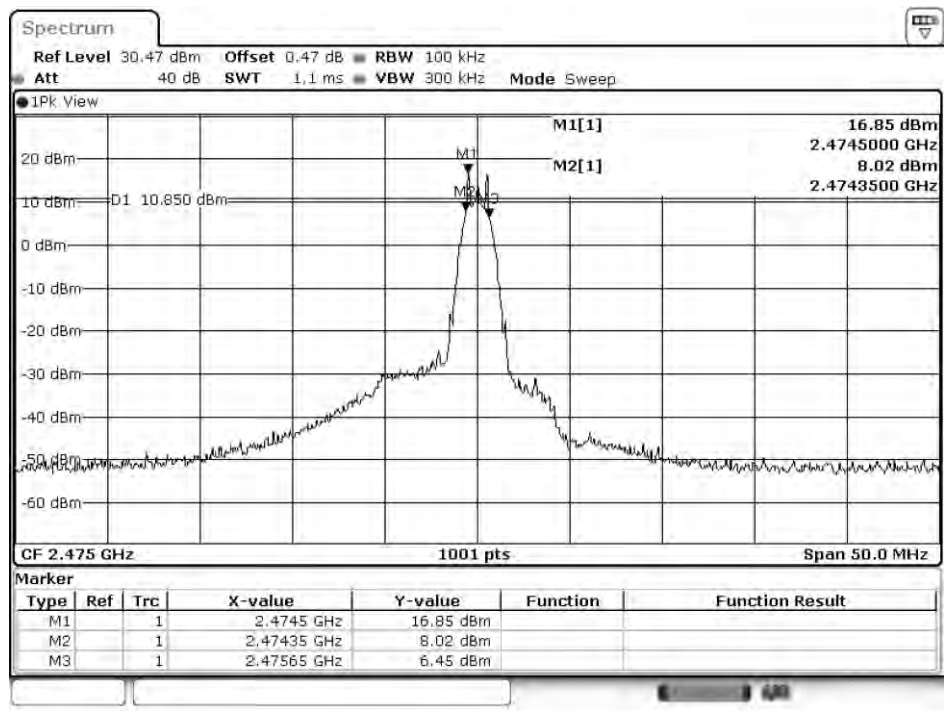
Date: 19 DEC 2017 16:00:04

Figure Channel 18:



Date: 19_DEC 2017 16:01:26

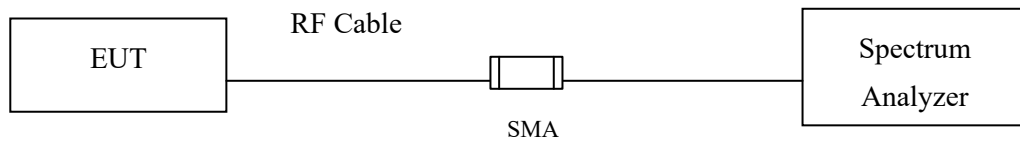
Figure Channel 25:



Date: 19_DEC 2017 16:02:56

8. Power Density

8.1. Test Setup



8.2. Limits

The transmitted power density averaged over any 1 second interval shall not be greater +8dBm in any 3kHz bandwidth.

8.3. Test Procedure

The EUT was setup according to ANSI C63.10: 2013, the maximum power spectral density using KDB 558074 section 10.2 PKPSD (peak PSD) method.

8.4. Uncertainty

$\pm 1.23\text{dB}$

8.5. Test Result of Power Density

Product : ARRI Transceiver Module
 Test Item : Power Density Data
 Test Mode : Mode 1: Transmit (OQPSK) (EMIP400)
 Test Date : 2017/11/30

A Port

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
11	2405	7.620	≤ 8 dBm	Pass
18	2440	7.380	≤ 8 dBm	Pass
25	2475	7.240	≤ 8 dBm	Pass

Figure Channel 11:

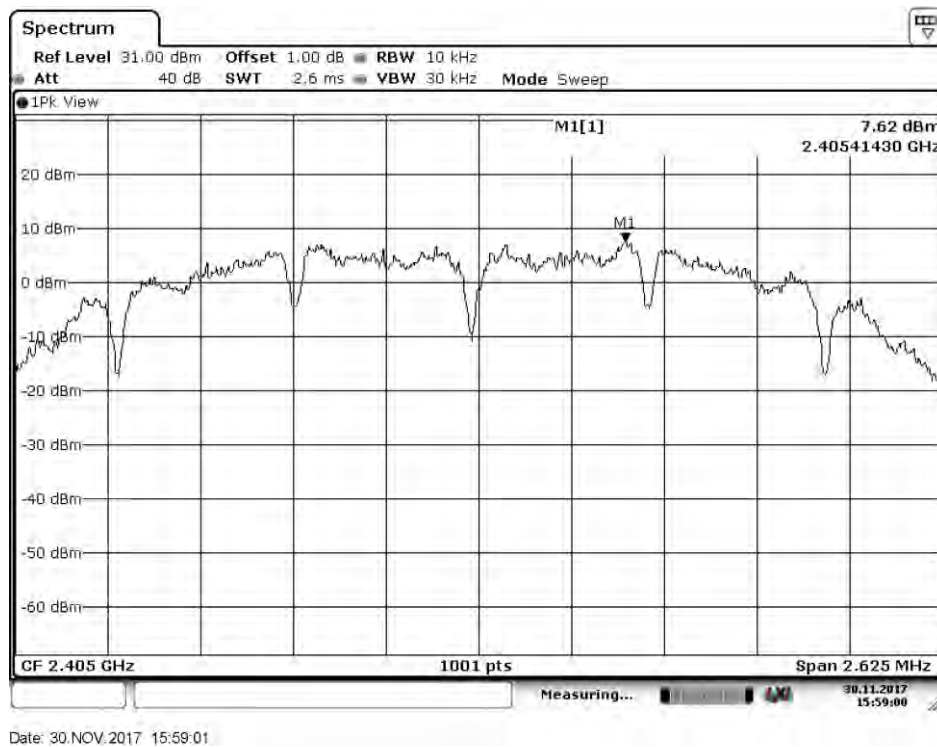
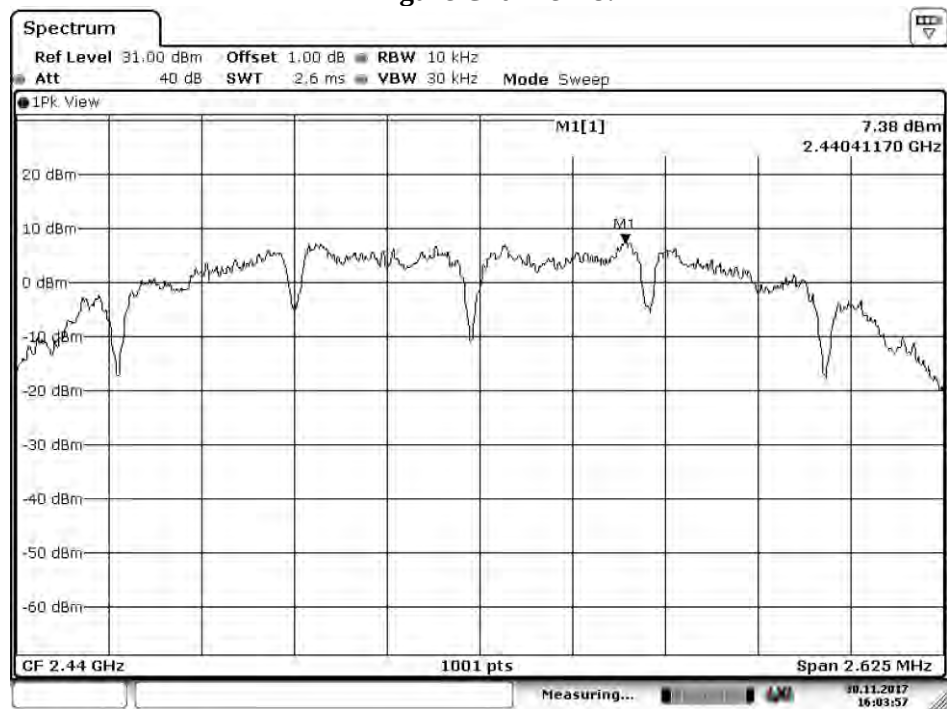
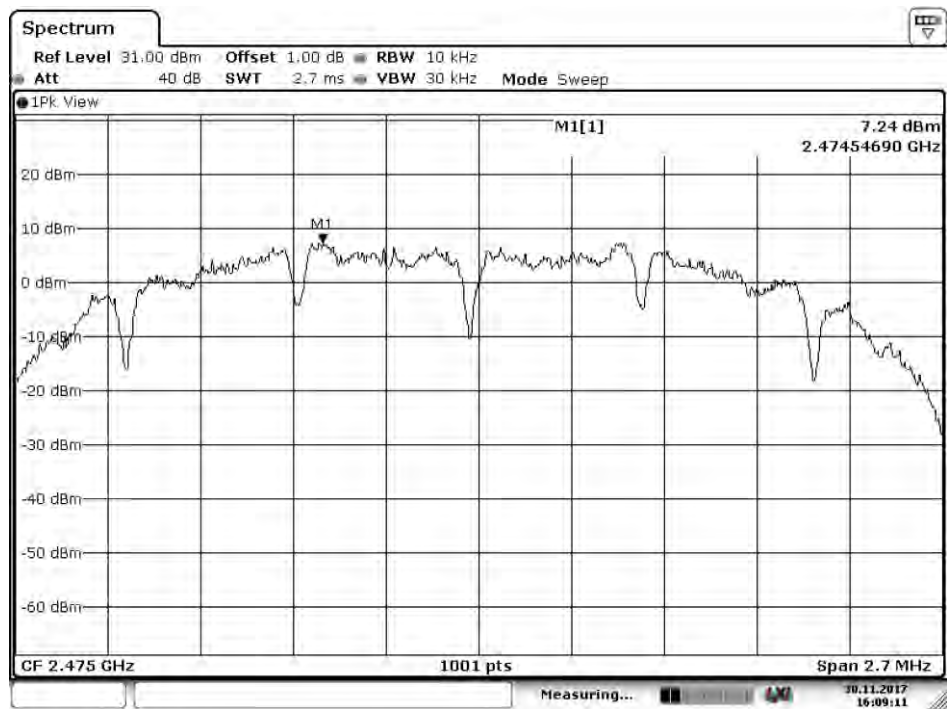


Figure Channel 18:



Date: 30.NOV.2017 16:03:58

Figure Channel 25:

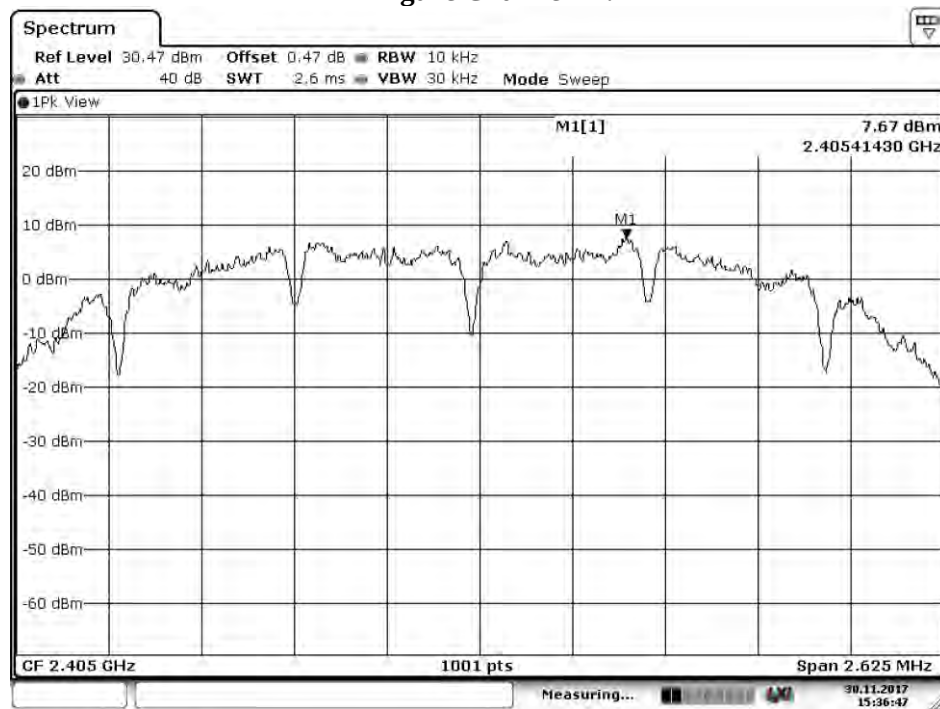


Date: 30.NOV.2017 16:09:11

Product : ARRI Transceiver Module
 Test Item : Power Density Data
 Test Mode : Mode 1: Transmit (OQPSK) (EMIP400)
 Test Date : 2017/11/30

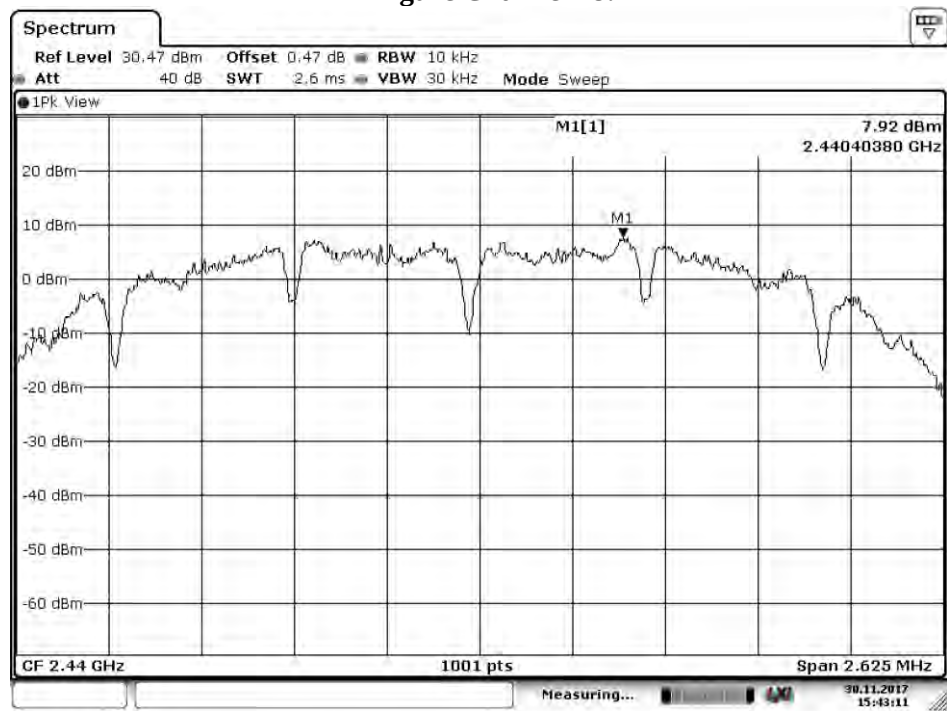
B Port

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11	2405	7.670	$\leq 8\text{dBm}$	Pass
18	2440	7.920	$\leq 8\text{dBm}$	Pass
25	2475	6.270	$\leq 8\text{dBm}$	Pass

Figure Channel 11:

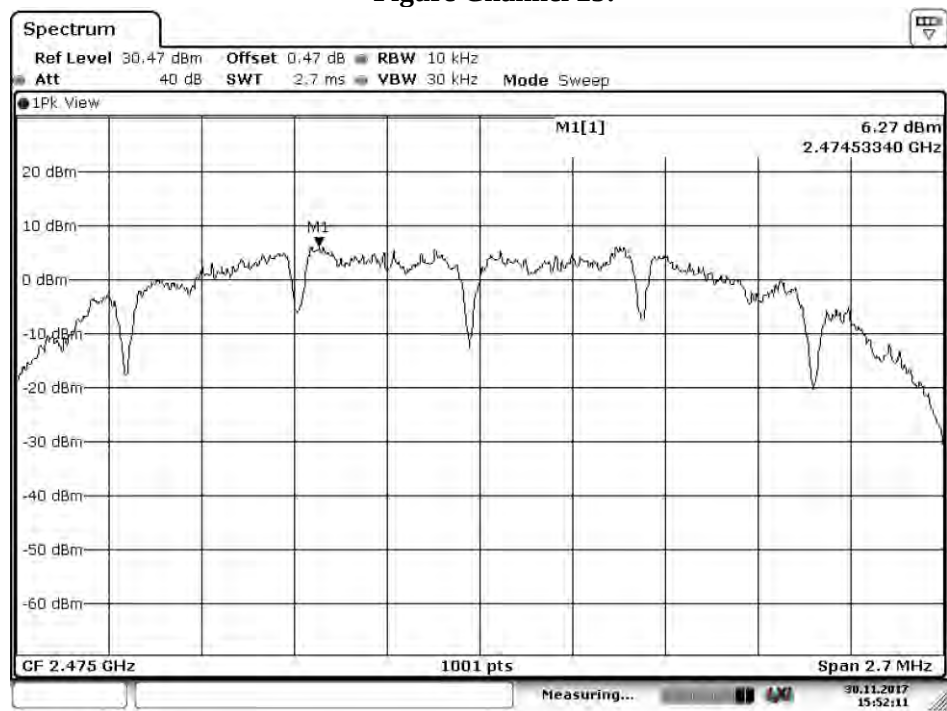
Date: 30.NOV.2017 15:36:47

Figure Channel 18:



Date: 30.NOV.2017 15:43:11

Figure Channel 25:

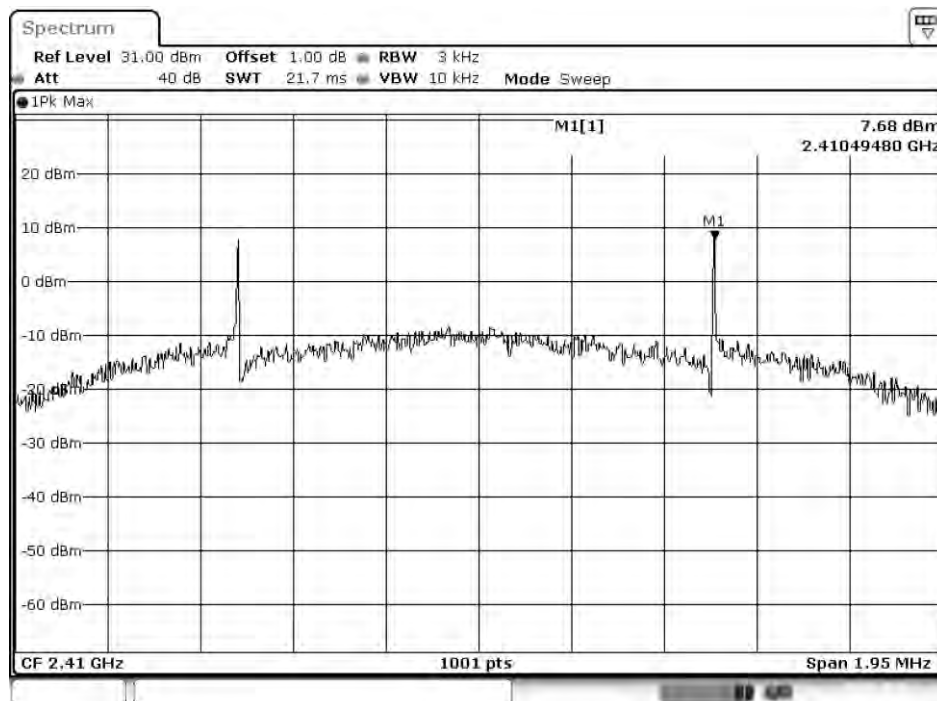


Date: 30.NOV.2017 15:52:11

Product : ARRI Transceiver Module
 Test Item : Power Density Data
 Test Mode : Mode 2: Transmit (2GFSK) (EMIP400)
 Test Date : 2017/12/19

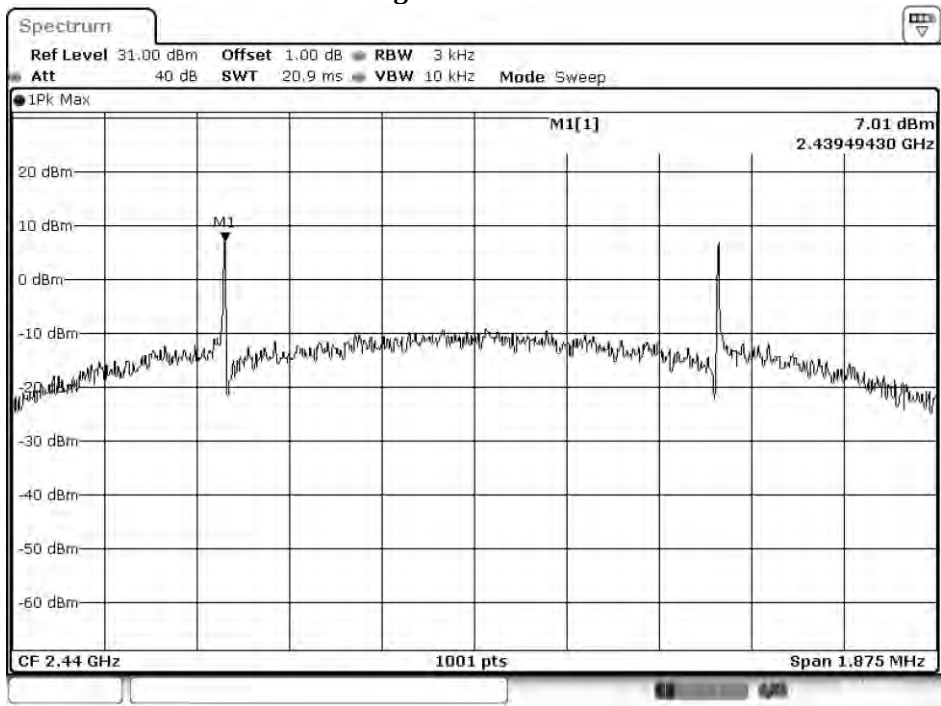
A Port

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
12	2410	7.680	≤ 8 dBm	Pass
18	2440	7.010	≤ 8 dBm	Pass
25	2475	7.800	≤ 8 dBm	Pass

Figure Channel 12:

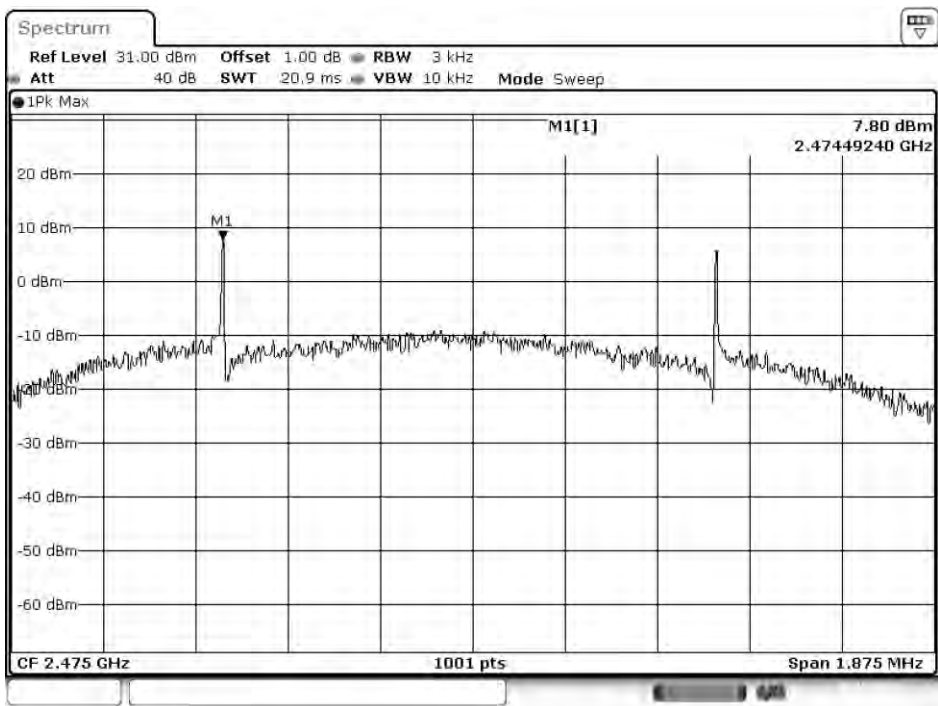
Date: 19 DEC 2017 15:11:14

Figure Channel 18:



Date: 19.DEC.2017 15:10:10

Figure Channel 25:

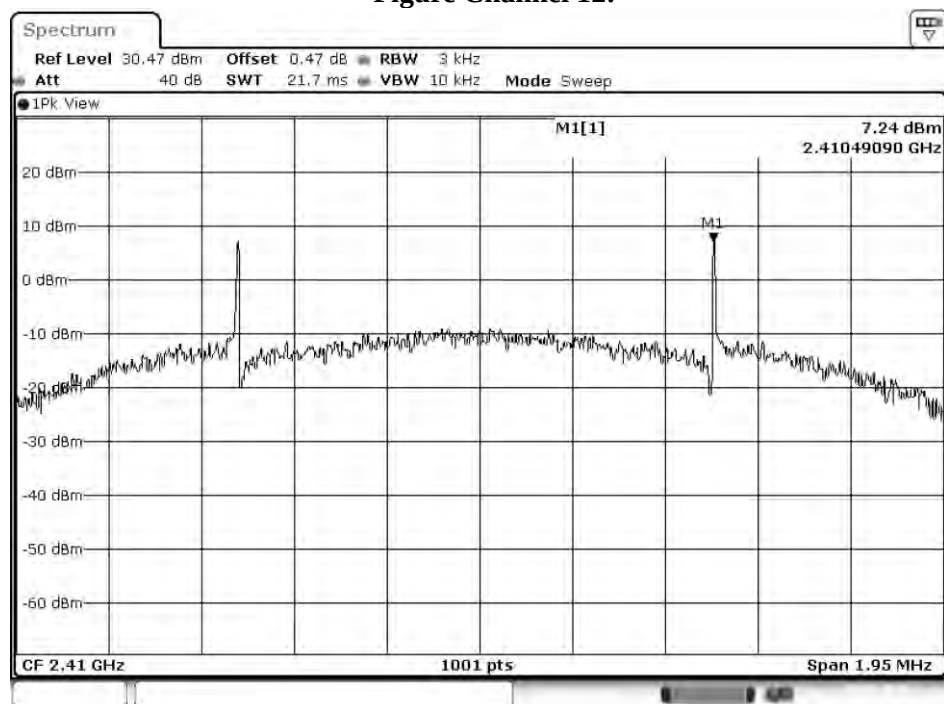


Date: 19.DEC.2017 15:05:50

Product : ARRI Transceiver Module
 Test Item : Power Density Data
 Test Mode : Mode 2: Transmit (2GFSK) (EMIP400)
 Test Date : 2017/12/19

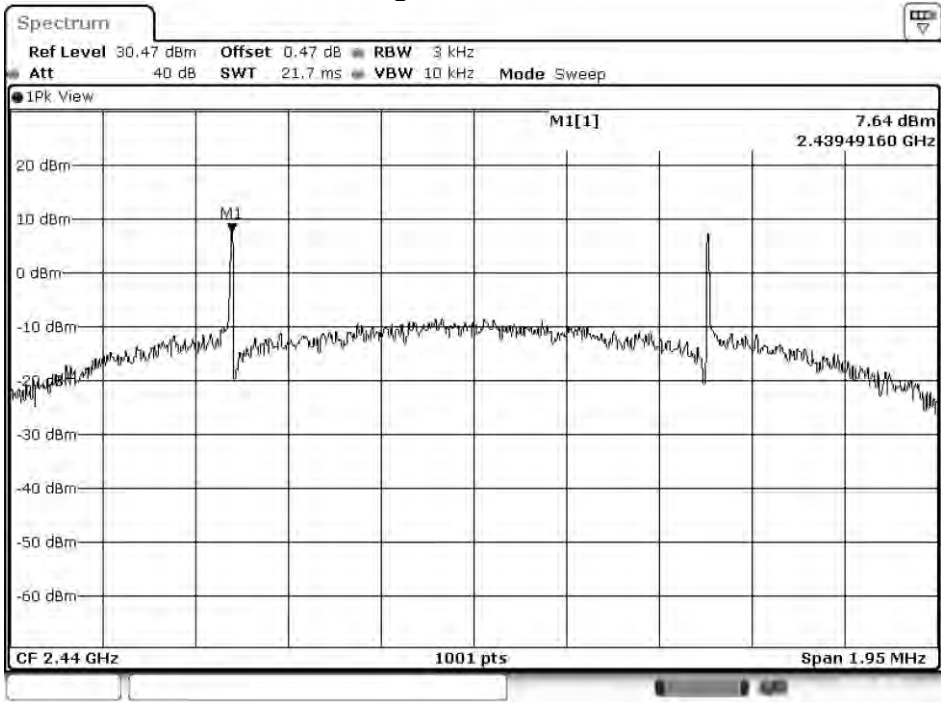
B Port

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
12	2410	7.240	$\leq 8\text{dBm}$	Pass
18	2440	7.640	$\leq 8\text{dBm}$	Pass
25	2475	7.400	$\leq 8\text{dBm}$	Pass

Figure Channel 12:

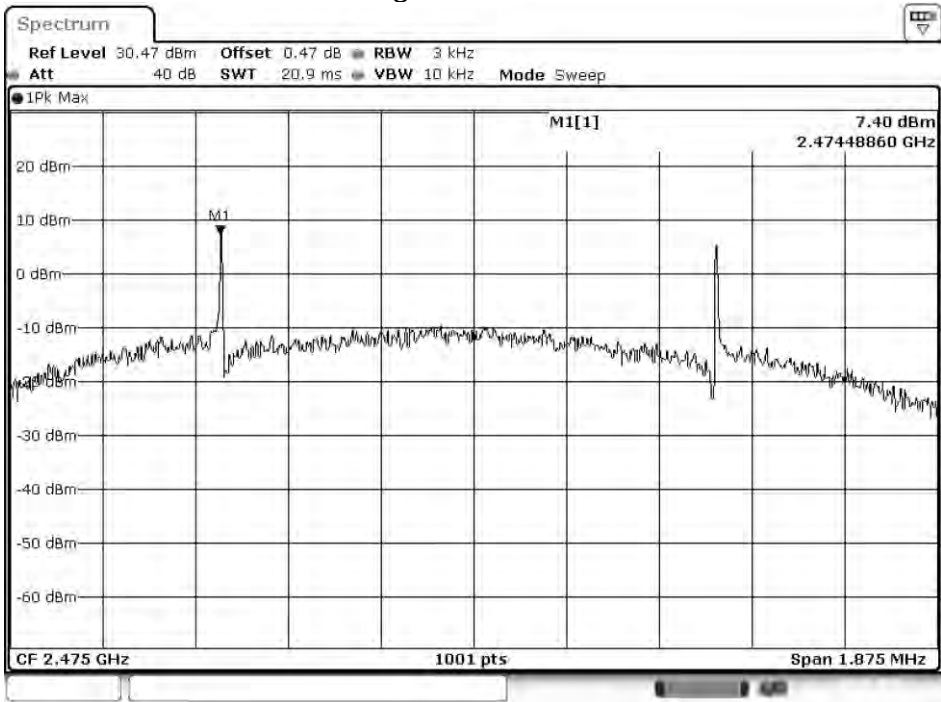
Date: 19,DEC.2017 15:37:54

Figure Channel 18:



Date: 19,DEC.2017 15:37:06

Figure Channel 25:

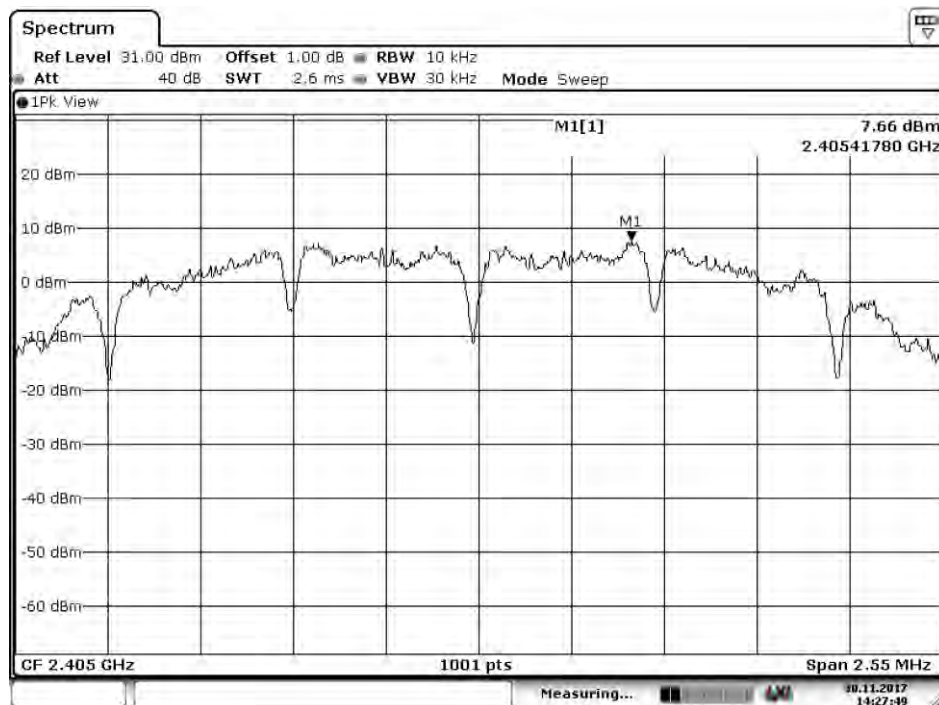


Date: 19,DEC.2017 15:35:28

Product : ARRI Transceiver Module
 Test Item : Power Density Data
 Test Mode : Mode 1: Transmit (OQPSK) (EMIP400S)
 Test Date : 2017/11/30

A Port

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
11	2405	7.660	$\leq 8\text{dBm}$	Pass
18	2440	7.420	$\leq 8\text{dBm}$	Pass
25	2475	7.020	$\leq 8\text{dBm}$	Pass

Figure Channel 11:

Date: 30.NOV.2017 14:27:49

Figure Channel 18:

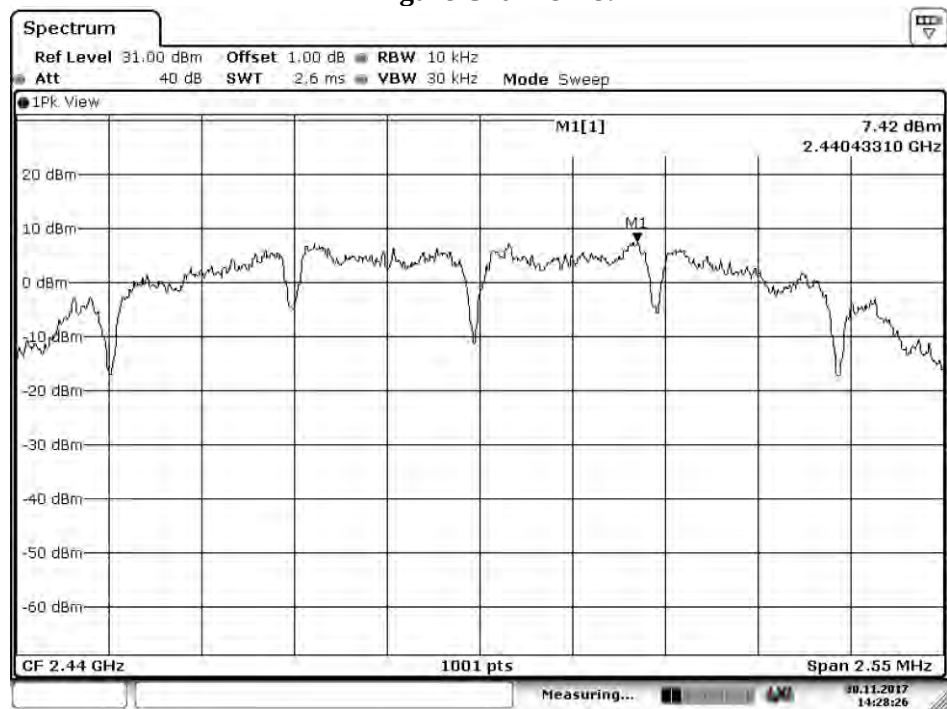
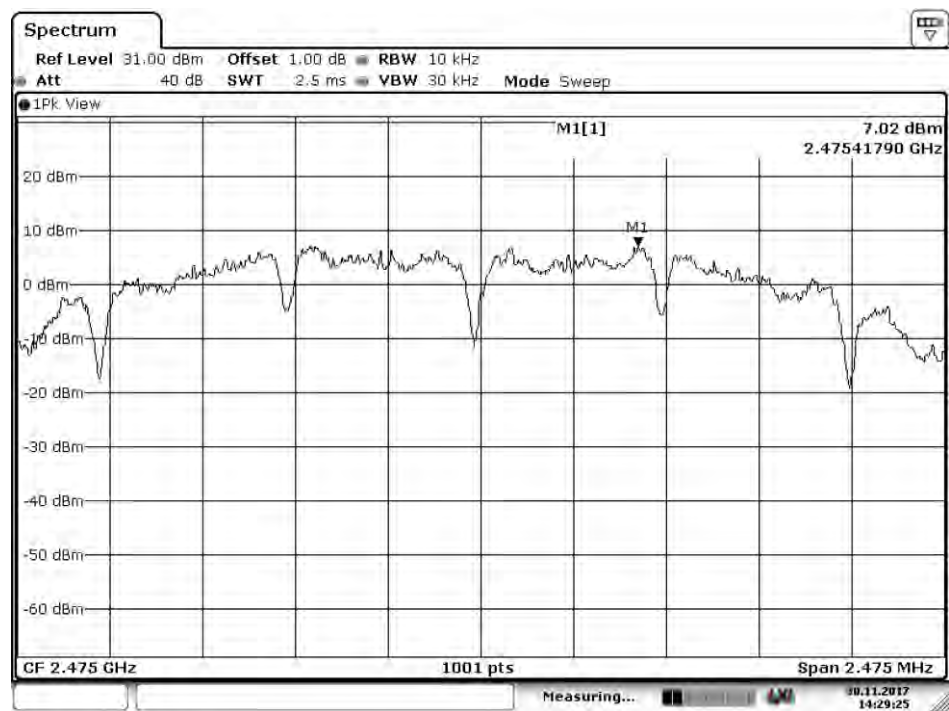


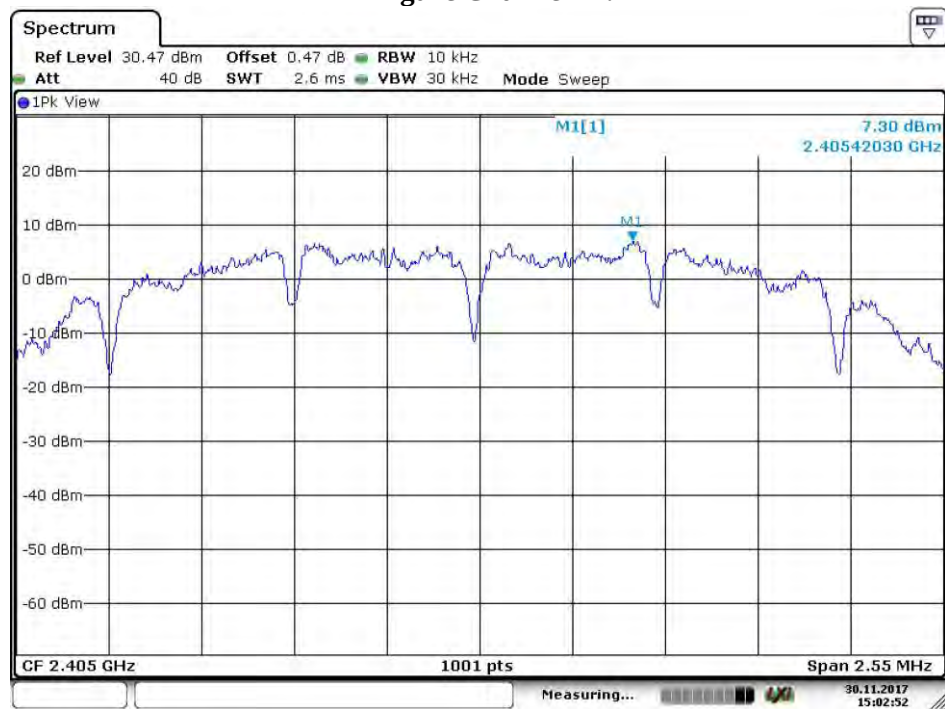
Figure Channel 25:



Product : ARRI Transceiver Module
 Test Item : Power Density Data
 Test Mode : Mode 1: Transmit (OQPSK) (EMIP400S)
 Test Date : 2017/11/30

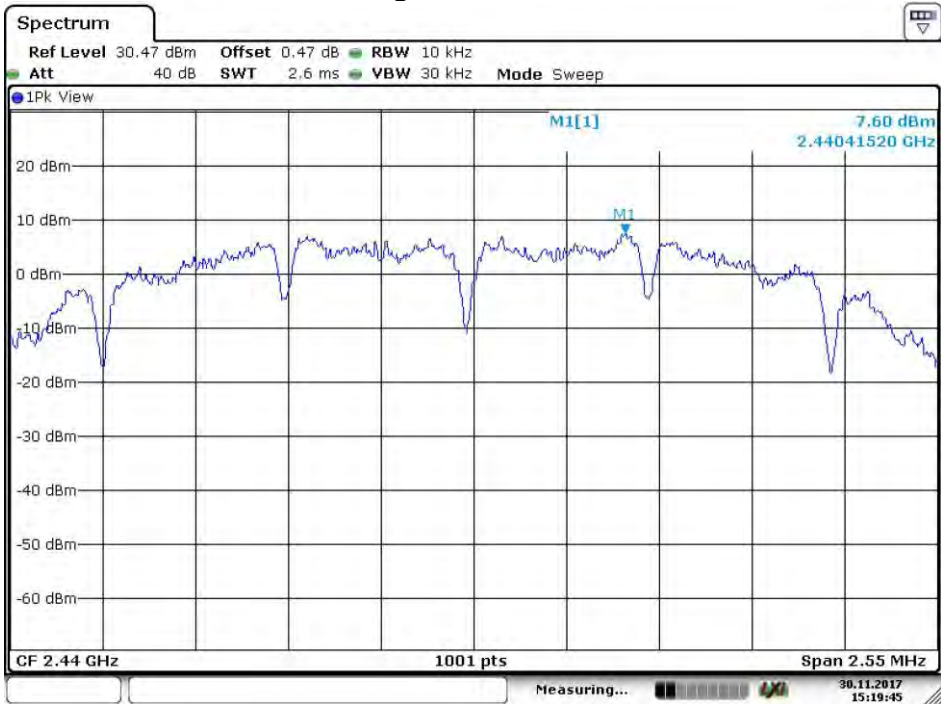
B Port

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11	2405	7.300	$\leq 8\text{dBm}$	Pass
18	2440	7.600	$\leq 8\text{dBm}$	Pass
25	2475	5.970	$\leq 8\text{dBm}$	Pass

Figure Channel 11:

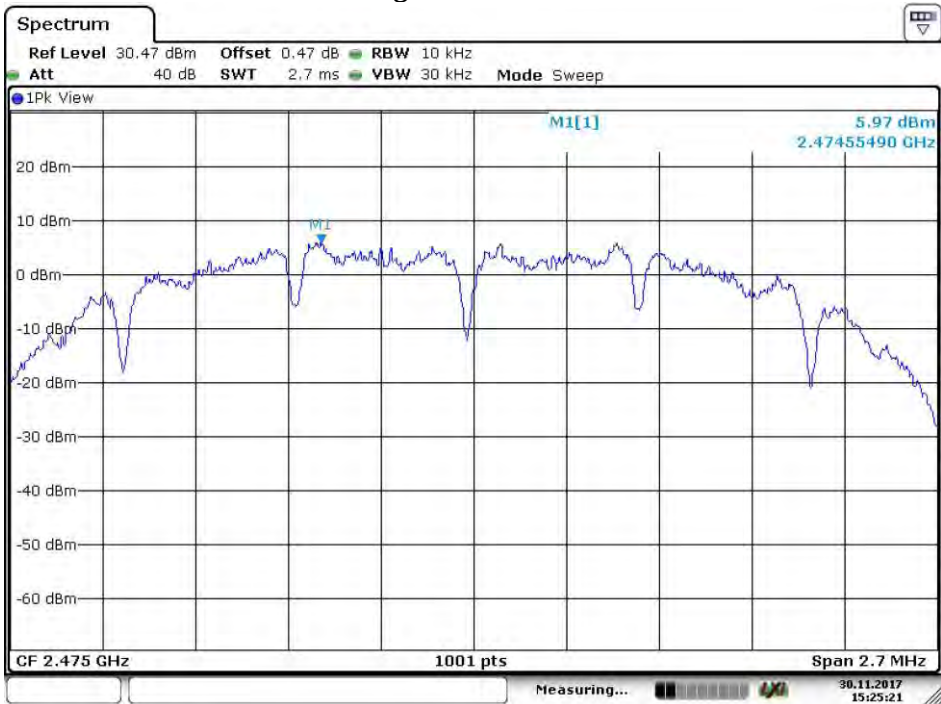
Date: 30.NOV.2017 15:02:52

Figure Channel 18:



Date: 30.NOV.2017 15:19:45

Figure Channel 25:

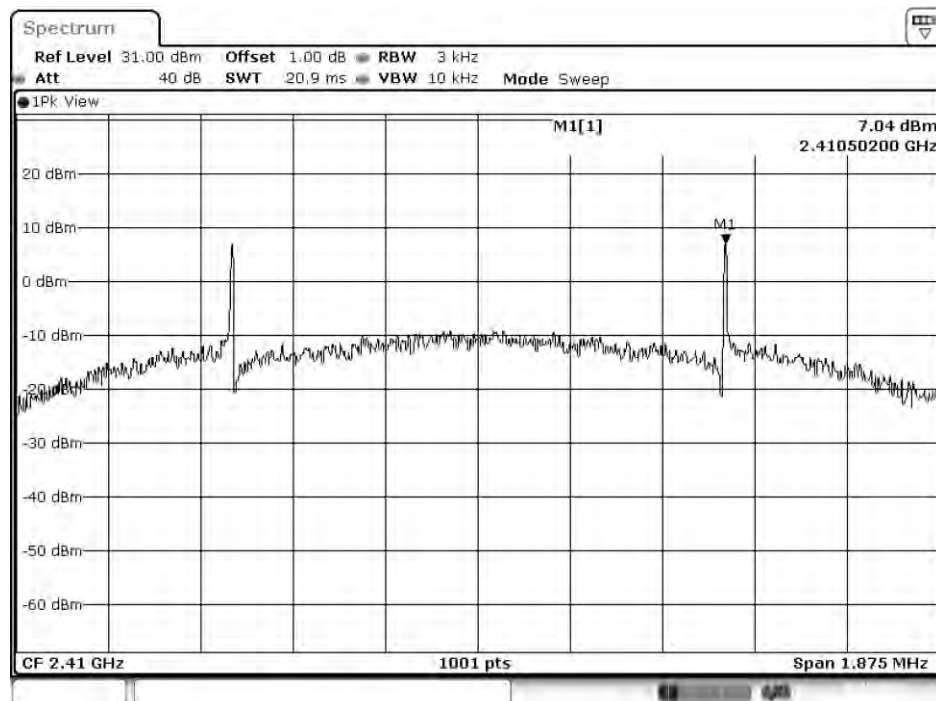


Date: 30.NOV.2017 15:25:22

Product : ARRI Transceiver Module
 Test Item : Power Density Data
 Test Mode : Mode 2: Transmit (2GFSK) (EMIP400S)
 Test Date : 2017/12/19

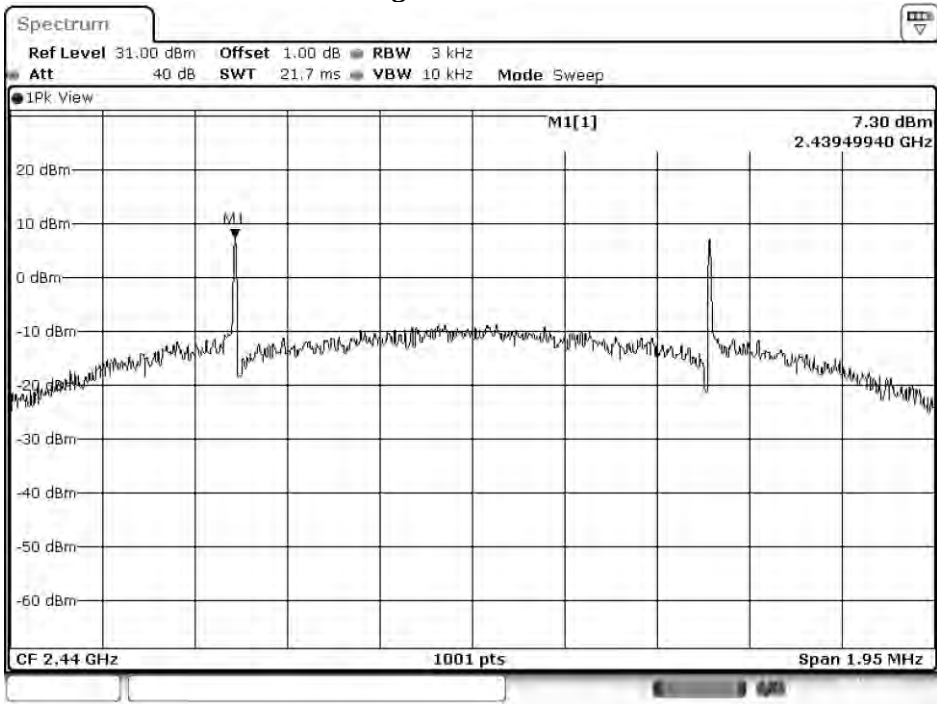
A Port

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
12	2410	7.040	$\leq 8\text{dBm}$	Pass
18	2440	7.300	$\leq 8\text{dBm}$	Pass
25	2475	7.870	$\leq 8\text{dBm}$	Pass

Figure Channel 12:

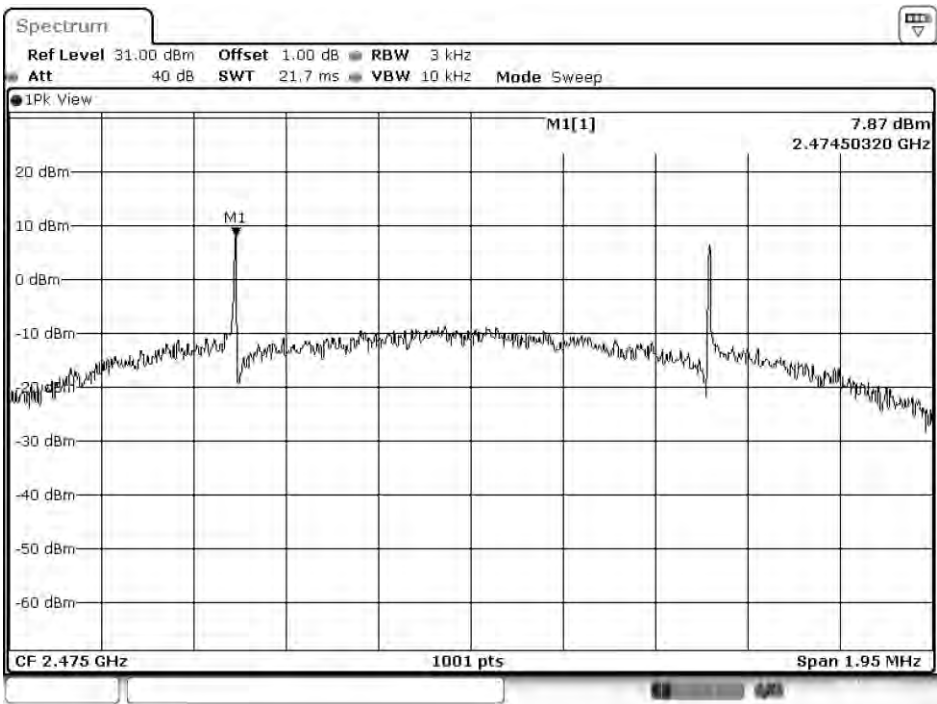
Date: 19 DEC 2017 16:43:57

Figure Channel 18:



Date: 19.DEC.2017 16:42:48

Figure Channel 25:

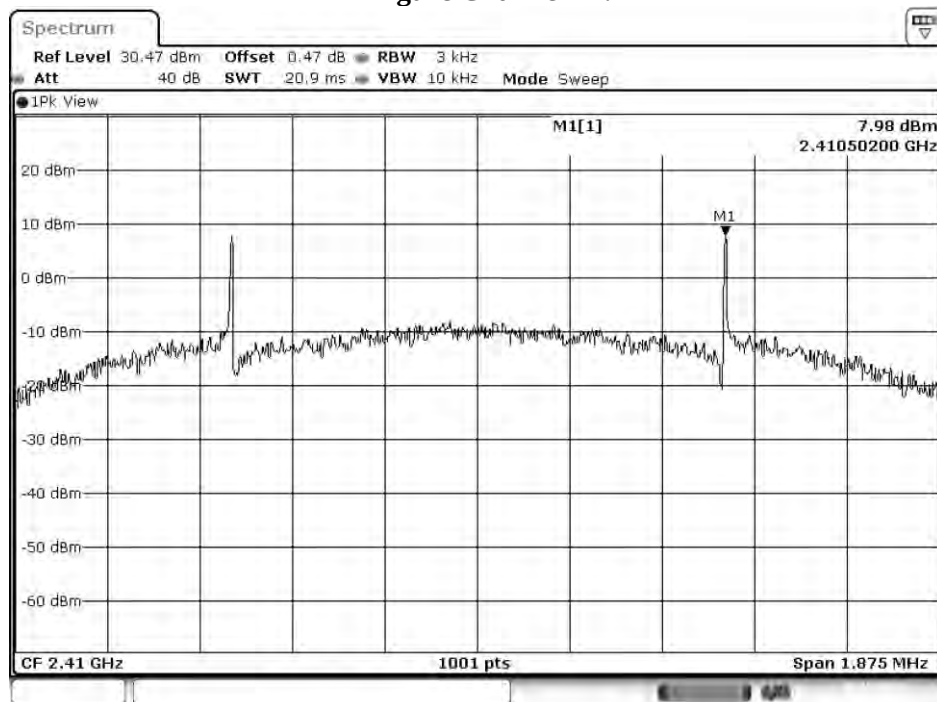


Date: 19.DEC.2017 16:41:17

Product : ARRI Transceiver Module
 Test Item : Power Density Data
 Test Mode : Mode 2: Transmit (2GFSK) (EMIP400S)
 Test Date : 2017/12/19

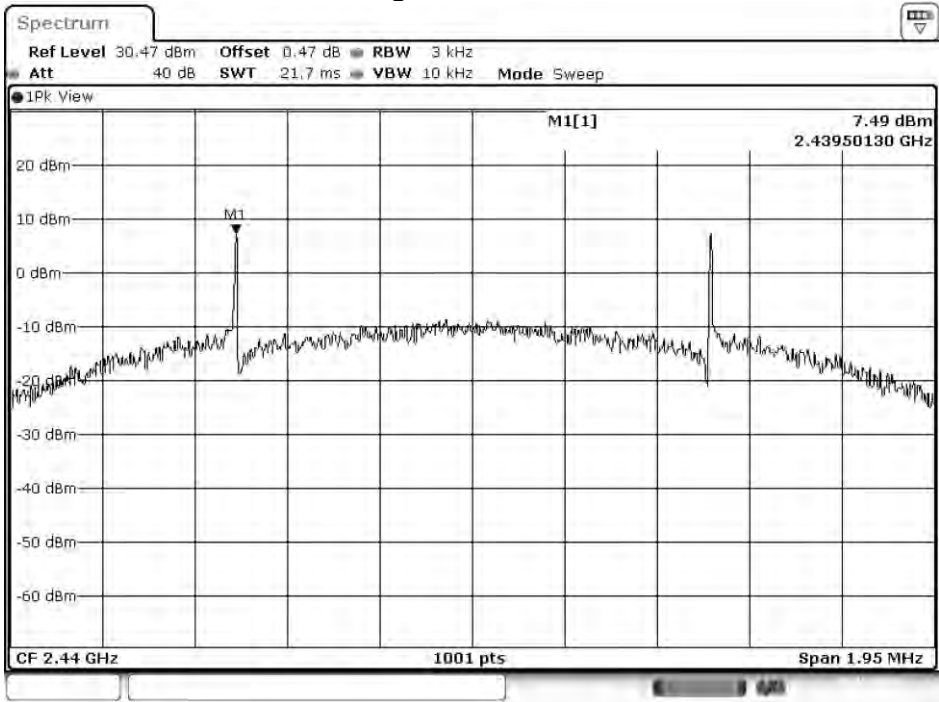
B Port

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
12	2410	7.980	$\leq 8\text{dBm}$	Pass
18	2440	7.490	$\leq 8\text{dBm}$	Pass
25	2475	7.730	$\leq 8\text{dBm}$	Pass

Figure Channel 12:

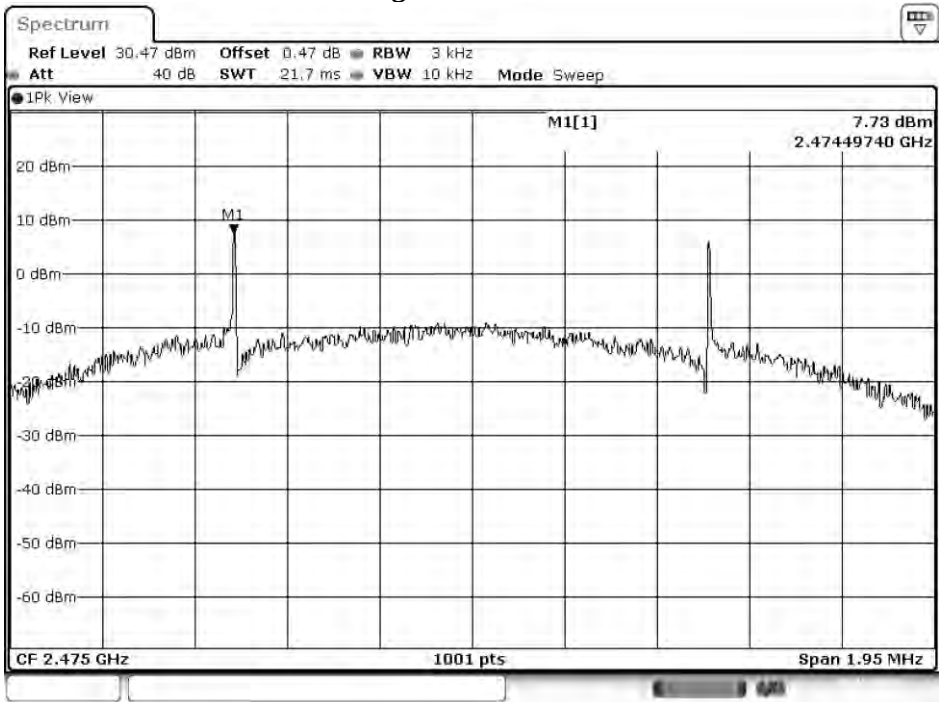
Date: 19.DEC.2017 16:10:16

Figure Channel 18:



Date: 19.DEC.2017 16:11:17

Figure Channel 25:



Date: 19.DEC.2017 16:06:06

9. EMI Reduction Method During Compliance Testing

No modification was made during testing.