MOTOROLA SOLUTIONS

ACCREDITED

TESTING CERT # 2786.01

MOTOROLA PENANG ADV. COMM. LABORATORY
Motorola Solutions Malaysia Sdn Bhd
Innoplex Plot 2A, Medan Bayan Lepas,
Mukim 12 S.W.D, 11900 Bayan Lepas,
Penang, Malaysia.

FCC TEST REPORT
Report Revision : Rev.B

Date/s Tested	:	6-APR-2017 – 21-APR-2017
Report Issue Date	:	06-JUN-2017
Manufacturer/Location	:	Motorola Solutions Malaysia Sdn Bhd
Requestor	:	LAM KWAI THEEM
Product Type	:	Mobile
Model Number	:	AAR11SDGANQ1AN (IC Model: SLR 1000-UHF)
Frequency Band	:	400-527 MHz`
Low / Max RF Output Power	:	1 Watts / 11 Watts
Applicant Name	:	Motorola Solutions Malaysia Sdn Bhd
Applicant Address	:	Innoplex Plot 2A, Medan Bayan Lepas, Mukim 12 S.W.D, 11900 Bayan Lepas, Penang, Malaysia
FCC Registrations	:	772092
IC Registrations	:	109AK

The equipment was tested accordance to the requirement listed below:

(LMR)
FCC 47 CFR Part 22, 74, 80, 90
RSS-119

PASS

Prepared By:

Song Zhi Wei
Test Personnel

Approved By:

Goh Aik Hong
Responsible Engineer

Table of Contents

Report Revision History

Revision History	Description	Date	Originator
Rev. A	Initial Report	04-MAY-2017	Song Zhi Wei
Rev. B	Add notes to Transient Frequency Behavior and removed digital data.	06-JUN-2017	Song Zhi Wei

1.0 General Information

EUT Description:

Technologies	Land Mobile Radio (LMR)
Modulation Type	Analog, 4FSK

General Description of Applied Standards
The EUT is a RF Product. According to the specifications of the manufacturer, the EUT is to comply with the requirements of the following standards:

ANSI/TIA/-603-D
ANSI C63.4.2014
TIA-102 CCAA-A
TIA-102 CAAB-D
TIA-102 CAAA-D
ANSI C63.26-2015

2.0 Summary of Test Results

FCC General Rules Part (47CFR)	IC General Rules Part	Test Item	Result
2.1046,22.565,74.461, 74.534,80.215	RSS-Gen, RSS-119 (4.1,5.4)	RF Power Output	Pass
2.1055, 90.213, 22.355, 74.464, 74.561	RSS-Gen, RSS-119(5.3)	Frequency Stability	Pass
2.1047	-	Audio Frequency Response	Pass
-	-	Audio Low Pass Filter Response	NA
2.1047	-	Modulation limiting	Pass
2.1049,22.359,74.462,74.535,80.211(c),(f), 90.210	RSS-Gen, RSS-119 (5.5)	Occupied Bandwidth	Pass
Part 22.359(a),(b)	-	Band Edge Conducted Spurious Emission	Pass
90.214	-	Transient Frequency Behavior	Pass
-	-	Adjacent Channel Power	NA
2.1051, 22.359, 74.462(c), 80.211(c), 90.543	RSS-Gen, RSS-119 (4.2,5.8)	Conducted Spurious Emissions	Pass
2.1053, 22.359, 74.462(c), 80.211(c), 90.541, 90.545	RSS-Gen, RSS-119 (4.2, 5.8)	Radiated Spurious Emission	Pass
-	-	GNSS (EIRP for 1559 – 1610MHz)	NA
-	-	Effective Radiated Power (ERP)	NA
-	-	AC Power Line Conducted Spurious Emission	NA

NA → **Not Applicable**

3.0 Measurement Uncertainty

Measurement	Frequency	Expended Uncertainty (k=1.96) (±)
AC Power Line Conducted Spurious Emission	150KHz ~ 30MHz	3.43
Radiated Emissions up to 1 GHz	30MHz ~ 200MHz	5.01
	200MHz ~ 1000MHz	5.01
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	5.01
	18GHz ~ 25GHz	5.01

4.0 Equipment List

Analog ATE # 1 : (SW Version: Analog ATE_Rev 2.4.2 and FCC_FreqStability 1.0.3)

Description	Model	Serial Number	Calibration Date	Calibration Due Date
AUDIO ANALYZER	8903B	3011A10475	29/Sep/16	13/May/17
CHAMBER	SH-641	92014678	4/Apr/17	3/Apr/18
DSA	36570A	MY42506781	25/Sep/16	15/May/17
MODULATION ANALYZER	8901B	3216A03889	9/Sep/16	13/May/17
POWER METER	E4416A	GB41293855	9/0/16	22/May/17
POWER SENSOR	E4412A	MY41502652	2/Oct/16	21/May/17
POWER SUPPLY	6031A	3325A02771	25/Sep/16	19/May/17
RF TRANSCEIVER CONTROLLER	AX2007AI	NA	CNR	CNR
SIGNAL GENERATOR	2042	203002/745	8/Sep/16	14/May/17
SIGNAL GENERATOR	2042	203002/747	9/Sep/16	14/May/17
SIGNAL GENERATOR	E4425B	US39260201	7/Sep/16	14/May/17
TRANSCEIVER INTERFACE	8954A	2234A00398	7/Sep/16	12/May/17
ATTENUATOR/SWITCH DRIVER	11713A	2508A10141	-	-

FCC Transient ATE #1: (SW Version: FCC Transient ATE_R 1.0.3)

Description	Model	Serial Number	Calibration Date	Calibration Due Date
AUDIO ANALYZER	8903B	2836A05866	29/Mar/17	29/Mar/18
AUDIO ANALYZER	8903B	3011A08952	19/Sep/16	13/May/17
MODULATION ANALYZER	8901B	3019A02766	26/Apr/17	13/May/17
POWER METER	E4416A	GB41293866	22/Apr/16	2/May/17
POWER SENSOR	E4412A	MY41498918	21/Jun/16	21/Jun/17
PSA	E4440A	MY46185415	13/Oct/26	22/May/17
POWER SUPPLY	6032A	2723A02219	110/13//16	19/May/17
OSCILLOSCOPE	MSO8064A	MY48240107	16/Mar/16	26/May/17
SIGNAL GENERATOR	8657A	3323A05725	24/Jun/16	13/May/17
ATTENUATOR/11dB	8494G	MY52300223	16/Jun/16	16/Jun/17
ATTENUATOR/110dB	8496G	MY52300176	15/Jun/16	15/Jun/17
SWITCH CONTROL UNIT	3488A	2719A36210	CNR	CNR

Conducted Spurious Emission ATE # 1: (SW Version: Conducted Spur ATE_rev 1.22.06)

Description	Model	Serial Number	Calibration Date	Calibration Due Date
SWITCH CONTROL UNIT	3488A	2719A32735	CNR	CNR
SPECTRUM ANALYZER	E4445A	MY4618732	16-Feb-17	19-Feb-19
POWER SUPPLY	6032A	MY41002067	11-Aug-16	11-Aug-17
HIGH PASS FILTER SWITCH BOX	CS	CS001	7-Apr-17	7-Apr-18
MICROWAVE GENERATOR	SMP02	830682/015	18-Oct-16	18-Oct-17
MODULATION ANALYZER	8901B	3438A05278	2-Mar-16	12-May-17

Radiated Emission Station: (SW Version: EMC_FCC_IC_BT_RE_V 1.5.1)

EMC Chamber 1

DESCRIPTION	MODEL	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
DRG HORN FREQ.	SAS-571	566	4-Sep-16	4-Sep-17
DRG HORN FREQ.	SAS-571	719	28-Apr-15	28-Apr-17
POWER SUPPLY	6674A	3126A00133	12-Nov-15	12-Nov-17
MICROWAVE SIGNAL GENERATOR	SMP04	100103	25-Jun-16	25-Jun-17
EMI TEST RECEIVER	ESIB26	100336	19-Oct-16	19-Oct-17
SIGNAL ANALYZER	FSV40	101103	25-Jun-16	25-Jun-17
5m Semi-anechoic Chamber	S800-HX	J2308	29-Jul-16	29-Jul-17
BILOG ANTENNA	CBL6112B	2950	21-Jan-17	21-Jan-18
BILOG ANTENNA	CBL6112D	25516	23-Apr-16	23-Apr-17
BROAD-BAND HORN ANTENNA	BBHA9170	BBHA9170255	14-Oct-16	14-Oct-17
DATA LOGGER	TM320	12249289	27-Apr-16	27-Apr-17
SYSTEM CONTROLLER	SC104V	050806-1	No Cal. Req'd	No Cal. Req'd
TURNTABLE FLUSH MOUNT 2M	FM2011	NA	No Cal. Req'd	No Cal. Req'd
ANTENNA POSITIONING TOWER	TLT2	NA	No Cal. Req'd	No Cal. Req'd
18 - 40GHz PREAMPLIFIER	BBV9721	9721-007	No Cal. Req'd	No Cal. Req'd
LOOP ANTENNA	6502	208416	24-Jun-16	24-Jun-17
PREAMPLIFIER	PAM-0118P	361	No Cal. Req'd	No Cal. Req'd
Test Software	Version			
EMC_FCC_IC_Bluetooth_RE_Test	EMC_FCC_RE_v1.5.1			

`CNR → Calibration Not Required

5.0 Test Condition

5.1. Transmitter Test Conditions

Test Item, (Channel Spacing)	Temperature (°C)	Voltage Supply (V)	Power (W)	Modulation	Test Frequency (MHz)
RF Output Power	25°C	Nominal	Low / Max	Analog	406.1125, 450.65, 459.125, 467.775, 482.0125, 511.9875, 526.9875
Frequency Stability	-30°C ~ 60°C	80% ~ 120% of Nominal Volt	Max	Analog	459.125, 467.775
Audio Frequency Response (12.5kHz / 25kHz)	25°C	Nominal	Max	Analog	467.775, 511.9875
Audio Low Pass Filter Response (12.5kHz / 25kHz)	25°C	Nominal	Max	Analog	NA
Modulation limiting (12.5kHz / 25kHz)	25°C	Nominal	Max	Analog	467.775, 511.9875
Occupied Bandwidth (12.5kHz / 20kHz / 25kHz)	25°C	Nominal	Max	Analog, Digital	406.1125, 450.65, 459.125, 467.775, 511.9875,526.9875
Band Edge Conducted Spurious Emission (12.5kHz / 20kHz / 25kHz)	25°C	Nominal	Max	Analog, Digital	459.025, 459.65, 473.0125,479.2875
Transient Frequency Behavior *(UHF & VHF Band)* (12.5kHz / 25kHz)	25°C	Nominal	Max	Analog	459.125, 467.775
Adjacent Channel Power *(700MHz Band)* (12.5kHz / 25kHz)	25°C	Nominal	Max	Analog, Digital	NA
Conducted Spurious Emissions (12.5kHz / 20kHz / 25kHz)	25°C	Nominal	Low / Max	Analog, Digital	406.1125, 450.65, 459.125, 467.775, 482.0125, 511.9875, 526.9875
Radiated Spurious Emission (12.5kHz / 25kHz)	25°C	Nominal	Low / Max	Analog, Digital	406.1125, 450.65, 459.125, 467.775, 482.0125, 511.9875, 526.9875
GNSS *(700MHz Band)* (EIRP for 1559-1610MHz) (12.5kHz / 25kHz)	25°C	Nominal	Max	Analog	NA
Effective Radiated Power (ERP) *(700MHz & 900MHz Band)* (12.5kHz / 25kHz)	25°C	Nominal	Max	Analog	NA
AC Power Line Conducted Spurious Emissions* (12.5kHz)	25°C	Nominal	Max	Analog	NA

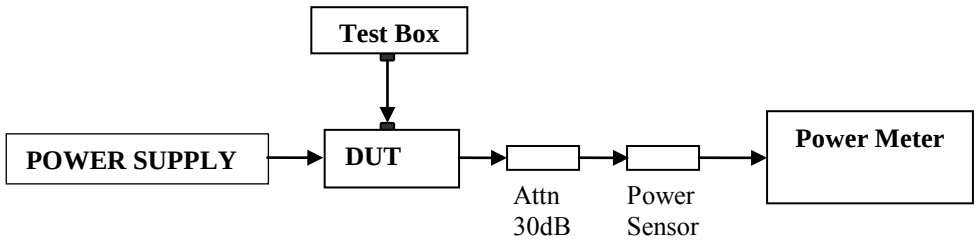
*** – ONLY tested if portables can be operated during charging OR mobiles can be used in desktop operation connected to a power supply**

NA → Not Applicable

6.0 Transmitter Test Parameters

6.1. RF Output Power

6.1.1. Test Setup



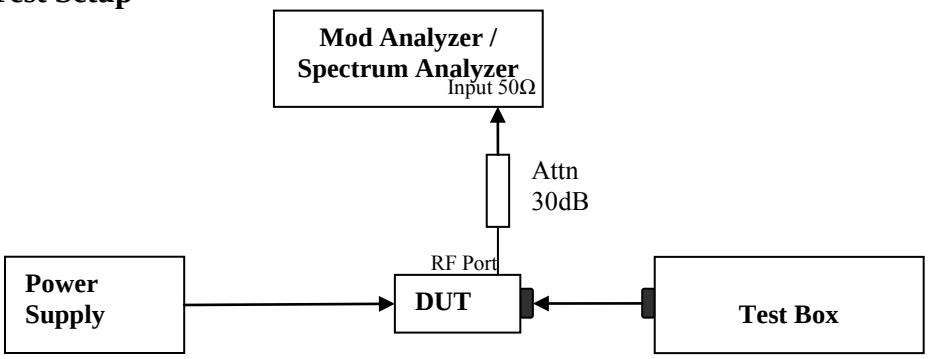
1) The DUT transmitter connected to Power Meter using the 30 dB attenuator and power sensor with above setup.
2) Path loss for the measurement included.
3) All the measurement was done at low, mid, high frequency for each band.
4) Record the power into the test report.

6.1.2. Test Result

Temperature	25°C			
Voltage (V)	13.6			
Frequency (MHz)	Low Power (W)	Current (A)	Max Power (W)	Current (A)
406.11250	1.01	1.25	10.90	2.74
450.65000	1.03	1.24	10.80	2.80
459.12500	1.03	1.24	10.80	2.79
467.77500	1.02	1.23	10.90	2.78
482.01250	1.03	1.21	10.80	2.78
511.98750	1.05	1.21	10.90	2.70
526.98750	0.99	1.21	10.80	2.78

6.2. Frequency Stability

6.2.1. Test Setup

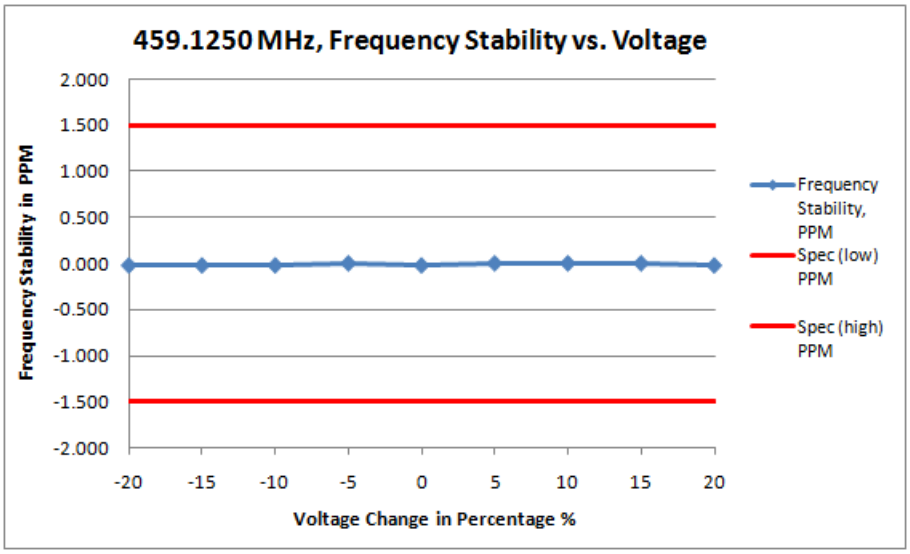


1) The DUT transmitter output port was connected to Modulation Analyzer.
2) Path loss for the measurement included.
3) Transmit the DUT and record the freq in MCF_{MHz}.
4) Test in 2 conditions: Different Temperature & Supply Voltage input.
    - Temperature: Vary voltage per test condition in Clause 5.1
    - Supply Voltage: Vary temperature per test condition in Clause 5.1
5) Calculate the ppm frequency error by the following:

$$ppm\ error = \left(\frac{MCF_{MHz}}{ACF_{MHz}} - 1\right) * 10^6$$

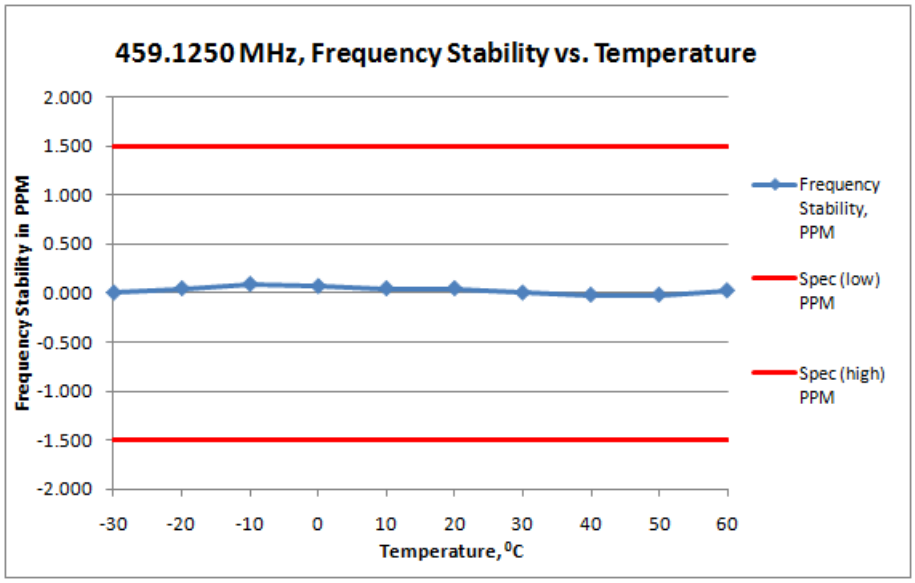
Where: MCF_{MHz} is the Measured Carrier Frequency in MHz
ACF_{MHz} is the Assigned Carrier Frequency in MHz

6.2.2. Test Result

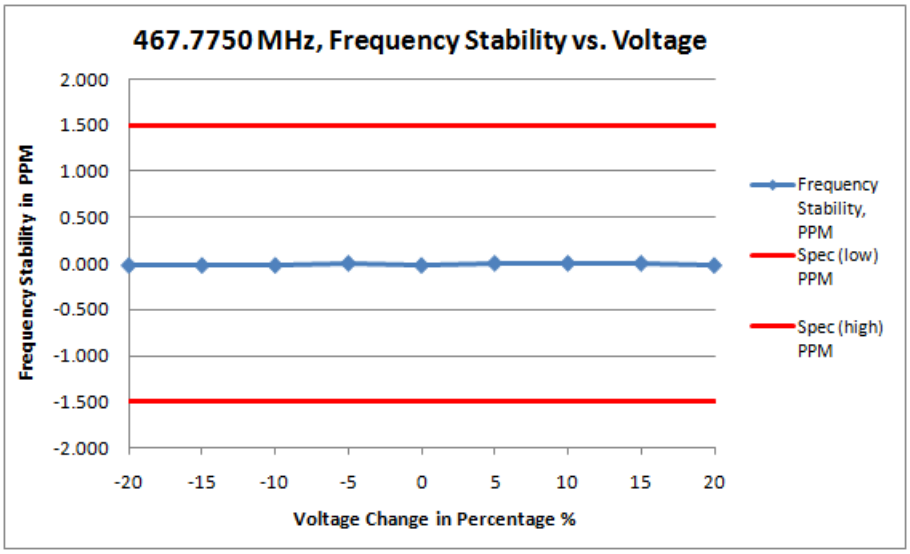


(i) Frequency Stability VS Voltage

Frequency / Channel Spacing	459.1250 MHz / 12.5 kHz				
Temperature, °C	25				
Voltage %	Voltage, V	Frequency, MHz	Frequency Stability, PPM	Spec (low) PPM	Spec (high) PPM
-20	10.880	459.124990	-0.022	-1.500	1.500
-15	11.560	459.124990	-0.022	-1.500	1.500
-10	12.240	459.124990	-0.022	-1.500	1.500
-5	12.920	459.125000	0.000	-1.500	1.500
0	13.600	459.124990	-0.022	-1.500	1.500
5	14.280	459.125000	0.000	-1.500	1.500
10	14.960	459.125000	0.000	-1.500	1.500
15	15.640	459.125000	0.000	-1.500	1.500
20	16.320	459.124990	-0.022	-1.500	1.500

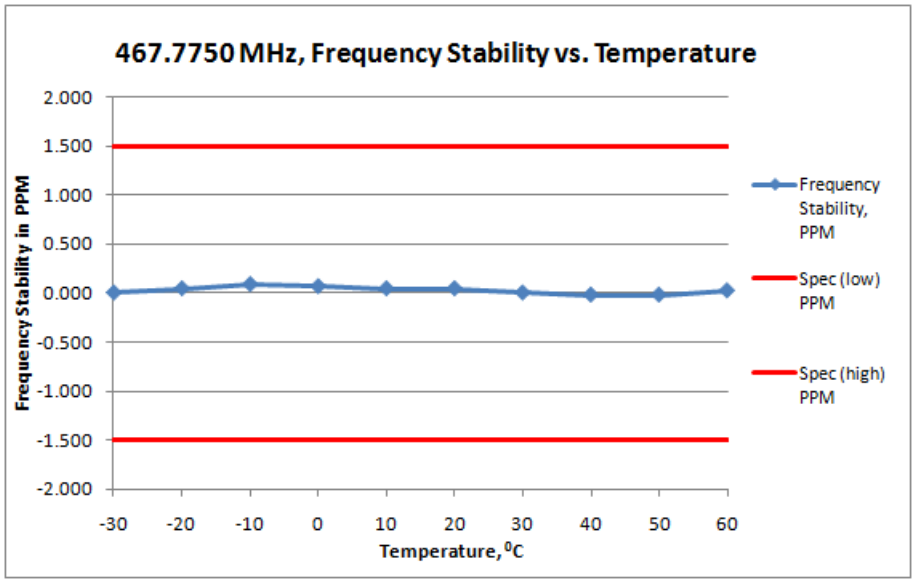


Frequency / Channel Spacing	459.125 MHz / 12.5kHz			
Voltage, V	13.6			
Temperature, °C	Frequency, MHz	Frequency Stability, PPM	Spec (low) PPM	Spec (high) PPM
-30	459.125000	0.000	-1.500	1.500
-20	459.125020	0.044	-1.500	1.500
-10	459.125040	0.087	-1.500	1.500
0	459.125030	0.065	-1.500	1.500
10	459.125020	0.044	-1.500	1.500
20	459.125020	0.044	-1.500	1.500
30	459.125000	0.000	-1.500	1.500
40	459.124990	-0.022	-1.500	1.500
50	459.124990	-0.022	-1.500	1.500
60	459.125010	0.022	-1.500	1.500



(i) Frequency Stability VS Voltage

Frequency / Channel Spacing	467.7750 MHz / 12.5 kHz				
Temperature, °C	25				
Voltage %	Voltage, V	Frequency, MHz	Frequency Stability, PPM	Spec (low) PPM	Spec (high) PPM
-20	10.880	467.774990	-0.021	-1.500	1.500
-15	11.560	467.774990	-0.021	-1.500	1.500
-10	12.240	467.774990	-0.021	-1.500	1.500
-5	12.920	467.775000	0.000	-1.500	1.500
0	13.600	467.774990	-0.021	-1.500	1.500
5	14.280	467.775000	0.000	-1.500	1.500
10	14.960	467.775000	0.000	-1.500	1.500
15	15.640	467.775000	0.000	-1.500	1.500
20	16.320	467.774990	-0.021	-1.500	1.500



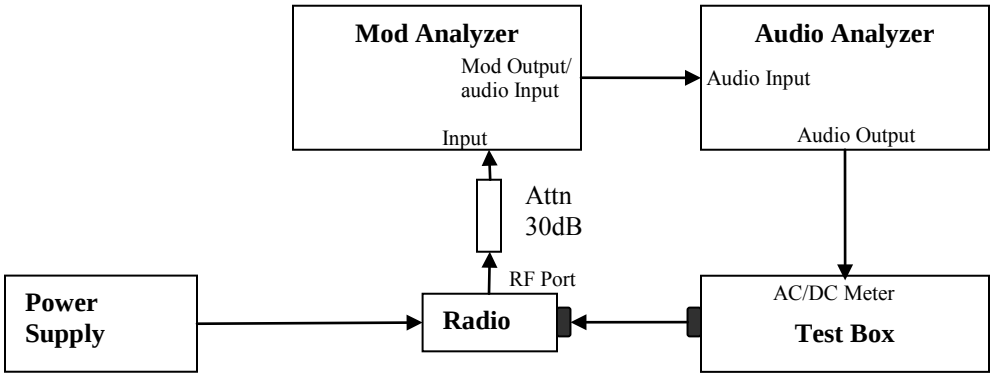
Frequency / Channel Spacing	467.775 MHz / 12.5kHz			
Voltage, V	13.6			
Temperature, °C	Frequency, MHz	Frequency Stability, PPM	Spec (low) PPM	Spec (high) PPM
-30	467.775000	0.000	-1.500	1.500
-20	467.775020	0.043	-1.500	1.500
-10	467.775040	0.086	-1.500	1.500
0	467.775030	0.064	-1.500	1.500
10	467.775020	0.043	-1.500	1.500
20	467.775020	0.043	-1.500	1.500
30	467.775000	0.000	-1.500	1.500
40	467.774990	-0.021	-1.500	1.500
50	467.774990	-0.021	-1.500	1.500
60	467.775010	0.021	-1.500	1.500

6.2.3. Test Limit

As per manufacturer declared spec +/- 1.5 ppm.

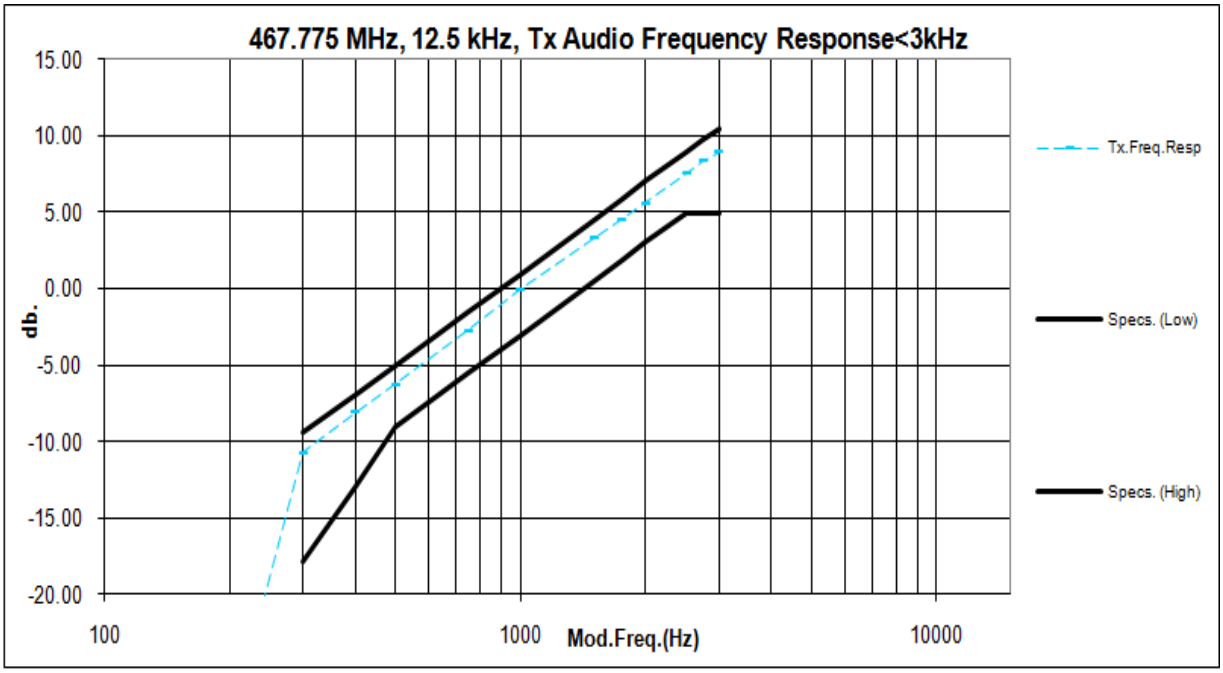
6.3. Audio Frequency Response

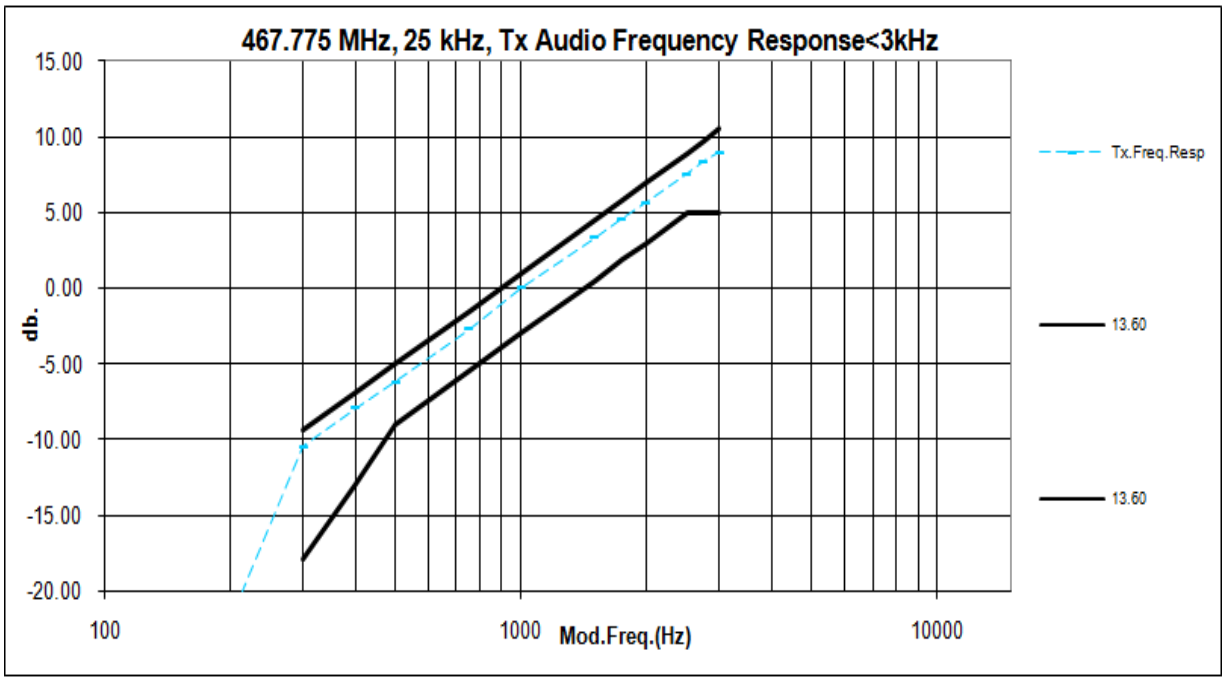
6.3.1. Test Setup

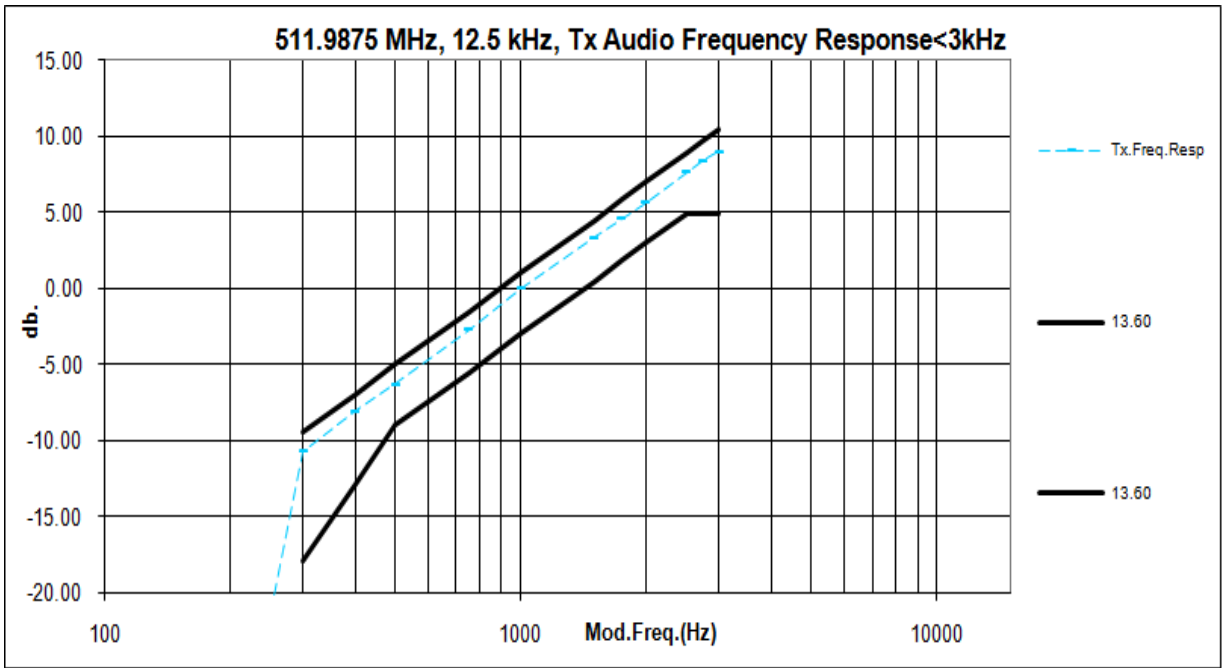


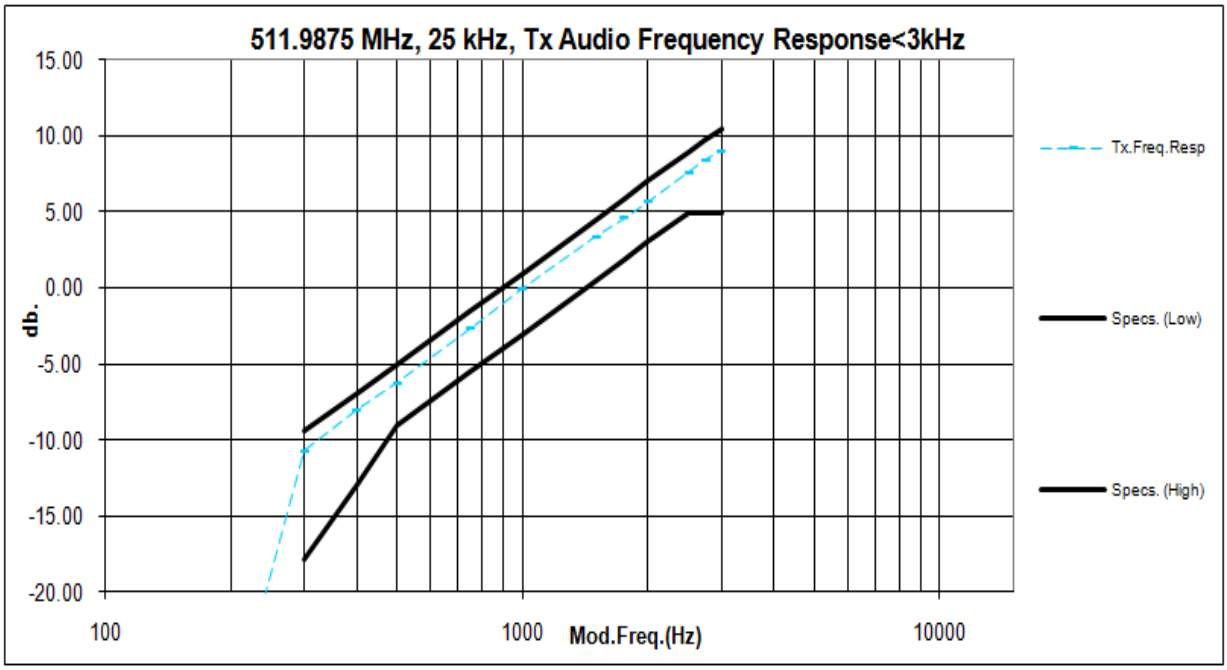
1) The DUT transmitter output port was connected to Modulation Analyzer.
2) Path loss for the measurement included.
3) Set the audio bandwidth filter to 15 kHz and 50 kHz.
4) Transmit the radio and set the audio analyzer to 1 kHz audio frequency and 20% of the maximum deviation.
5) On audio analyzer, set the rated level as reference to zero.
6) Vary the audio frequency from 300 Hz to 3 kHz. Record the change in dB on the audio analyzer.

6.3.2. Test Result

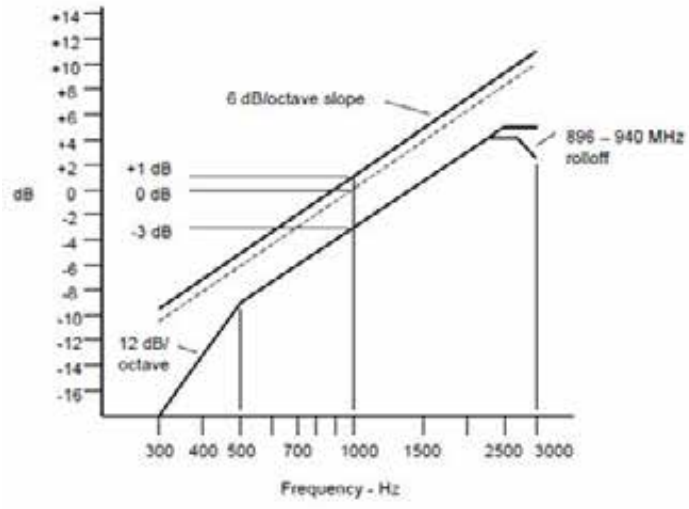





511.9875 MHz, 12.5 kHz, Tx Audio Frequency Response<3kHz
15.00
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
db.
100
1000
10000
Mod.Freq.(Hz)
Tx.Freq.Resp
13.60
13.60


511.9875 MHz, 25 kHz, Tx Audio Frequency Response<3kHz
15.00
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
db.
100
1000
10000
Mod.Freq.(Hz)
Tx.Freq.Resp
Specs. (Low)
Specs. (High)

6.3.3. Test Limit

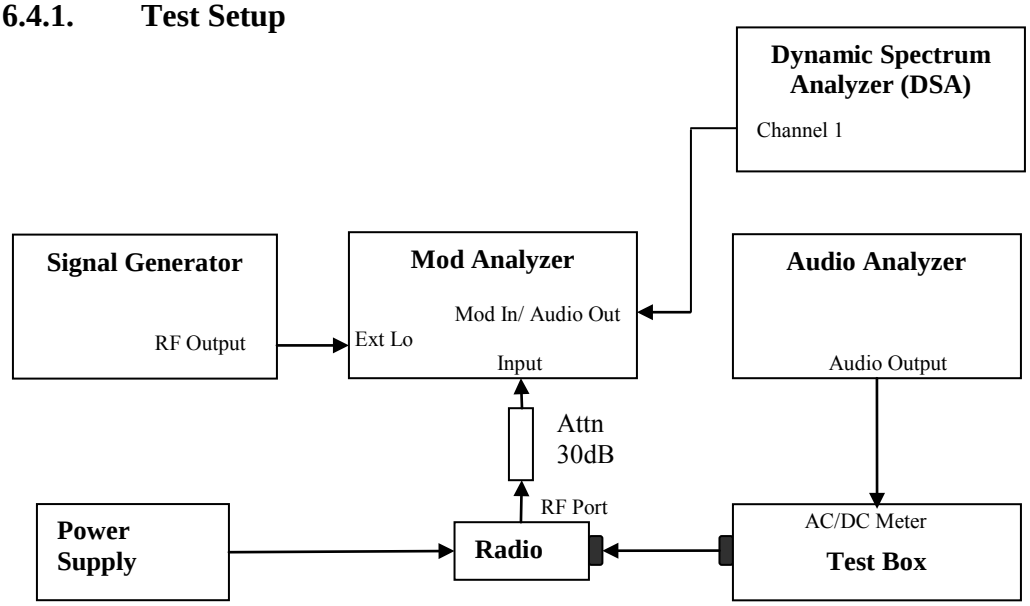


Note:

- *There are additional 6 dB per octave attenuation is allowed from 2.5KHz to 3KHz in equipment 25MHz to 869MHz radio.*
- *Additional 6 dB per octave attenuation is allowed from 2.3KHz to 2.7KHz & additional 12 dB per octave attenuation is allowed from 2.7KHz to 3KHz in equipment 896MHz to 940MHz radio.*

6.4. Audio Low Pass Filter Response

6.4.1. Test Setup

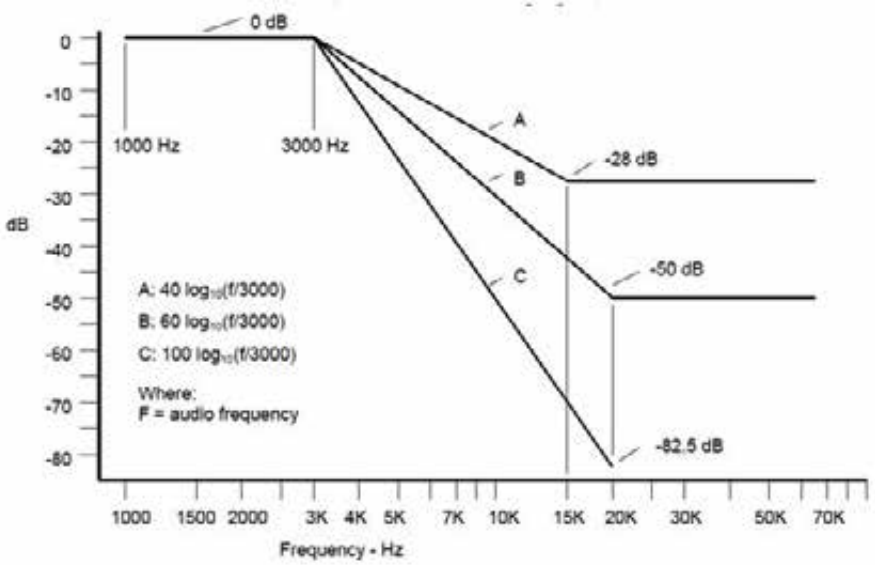


1) The DUT transmitter output port was connected to Modulation Analyzer.
2) Path loss for the measurement included.
3) Press 23.1SPCL on modulation analyzer to enable the external LO from Sigen.
4) Set the Sigen frequency to Fc + 1.5 MHz, RF output level to 0dBm without modulation.
5) Transmit the radio and set the audio analyzer to 1 kHz audio frequency and 60% of the maximum deviation.
6) Up the amplitude by 20dB.
7) On DSA, get the reference point to 0dB.
8) Vary the frequency on audio analyzer from 3 kHz to 20 kHz, record the audio tone from DSA.

6.4.2. Test Result

Not Applicable

6.4.3. Test Limit



For audio frequencies above 3000 Hz, the audio response of the post limiter low-pass filter shall meet or exceed the following requirements:

a) For equipment operating on 20, 25 or 30 kHz channel bandwidth in the 25 MHz to 174 MHz range:

At frequencies from 3000 Hz through 15,000 Hz the attenuation shall be greater than the attenuation at 1000 Hz by at least: $40 \log_{10}(f / 3000)$ dB

where: f is the audio frequency in Hz.

At frequencies above 15,000 Hz, the attenuation shall be greater than the attenuation at 1000 Hz, by at least: 28 dB.

b) For equipment operating with 25 kHz bandwidth channels between 406 and 512 MHz through 896 MHz, and between 929 MHz through 930 MHz:

At frequencies from 3000 Hz through 20,000 Hz, the attenuation shall be greater than the attenuation at 1000 Hz by at least: $60 \log_{10}(f / 3000)$ dB

where: f is the audio frequency in Hz.

At frequencies above 20,000 Hz the attenuation shall be greater than the attenuation at 1000 Hz by at least: 50 dB.

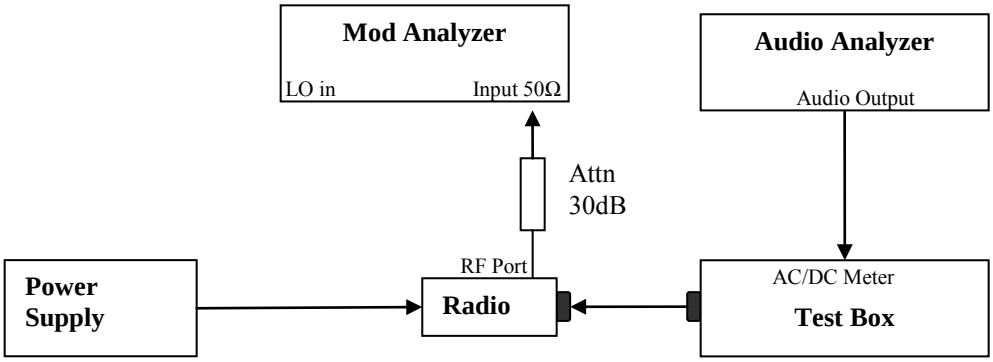
c) For equipment operating on channels between 896 MHz through 901 MHz, between 935 MHz through 940 MHz, and 12.5 or 15 kHz spaced channels in the frequency range 138-174 MHz and 406-512 MHz.

At frequencies from 3000 Hz through 20,000 Hz the attenuation shall be greater than the attenuation at 1000 Hz by at least: $100 \log_{10}(f / 3000)$ dB

where: f is the audio frequency in Hz.

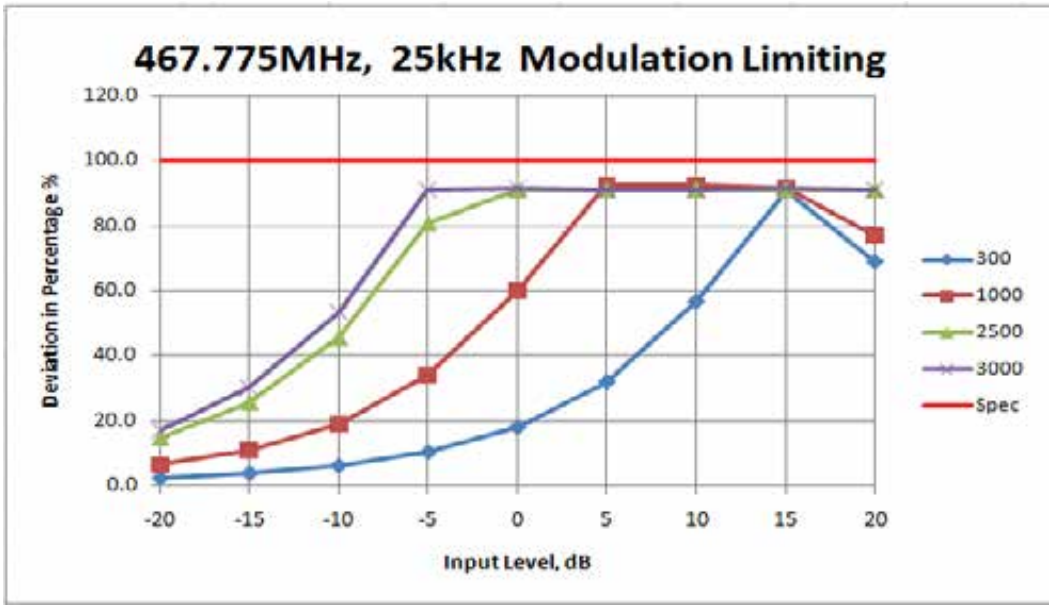
6.5. Modulation Limiting

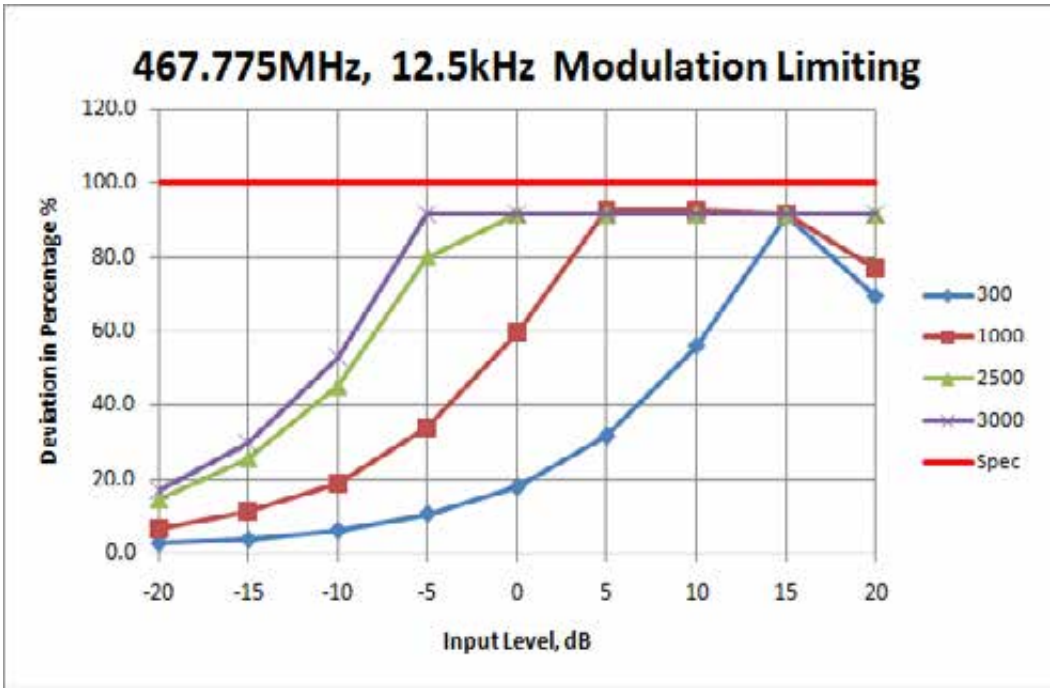
6.5.1. Test Setup

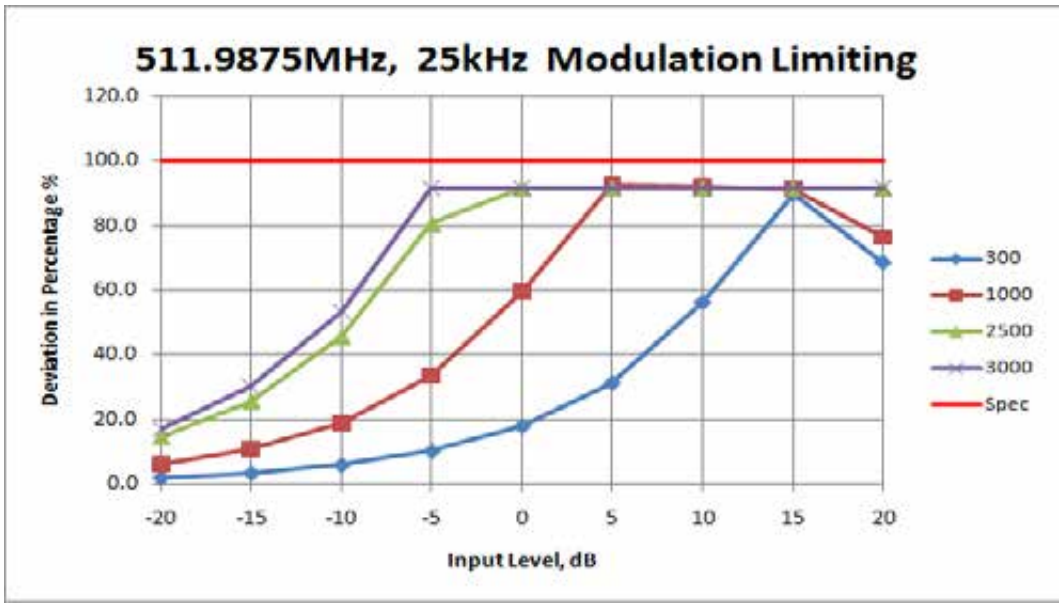


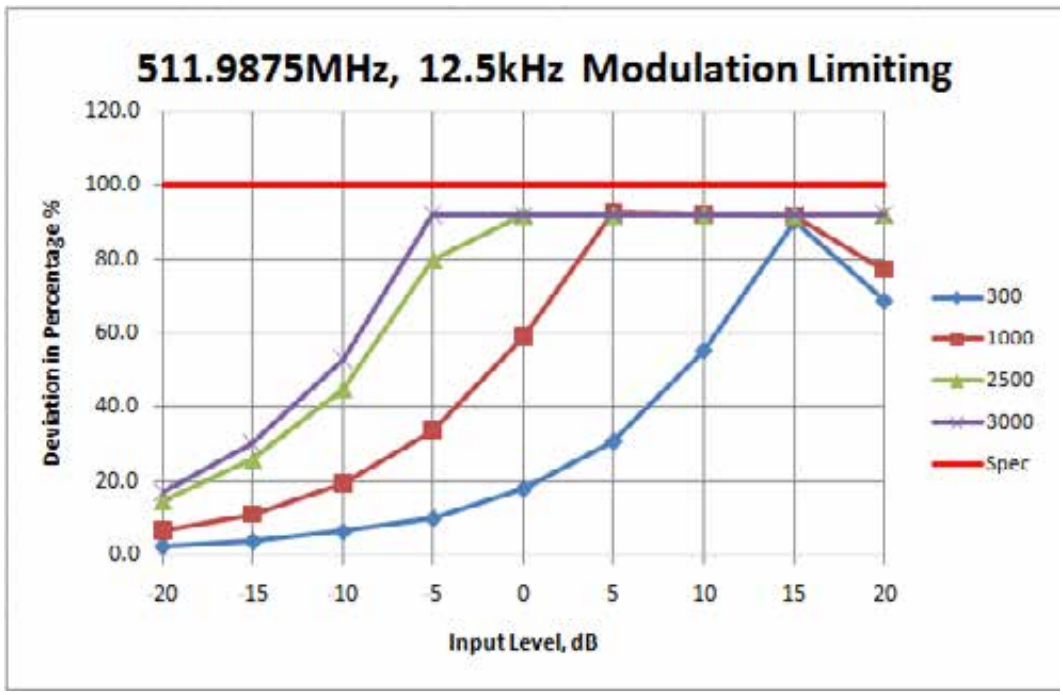
1) The DUT transmitter output port was connected to Modulation Analyzer.
2) Path loss for the measurement included.
3) Set the audio bandwidth filter to 15 kHz.
4) Transmit the radio and set the audio analyzer to 1 kHz audio frequency and 60% of the maximum deviation.
5) Record the frequency deviation as 0dB input level at 1kHz audio frequency.
6) Repeat the step and record the frequency deviation from -20 dB to 20dB by 5 dB increments and different audio freq 300 Hz, 2.5 kHz and 3 kHz.

6.5.2. Test Result









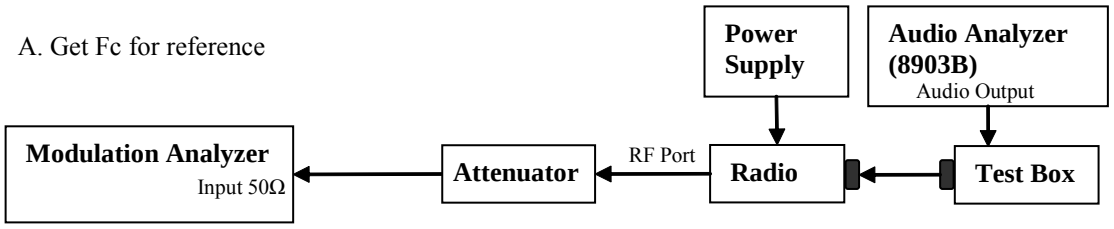
6.5.3. Test Limit

Modulation shall not exceed 100 percent if amplitude modulation is employed.

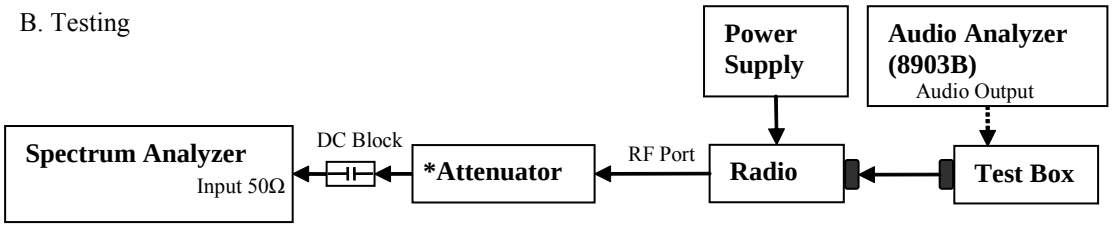
6.6. Occupied Bandwidth

6.6.1. Test Setup (Analog)

A. Get Fc for reference



B. Testing

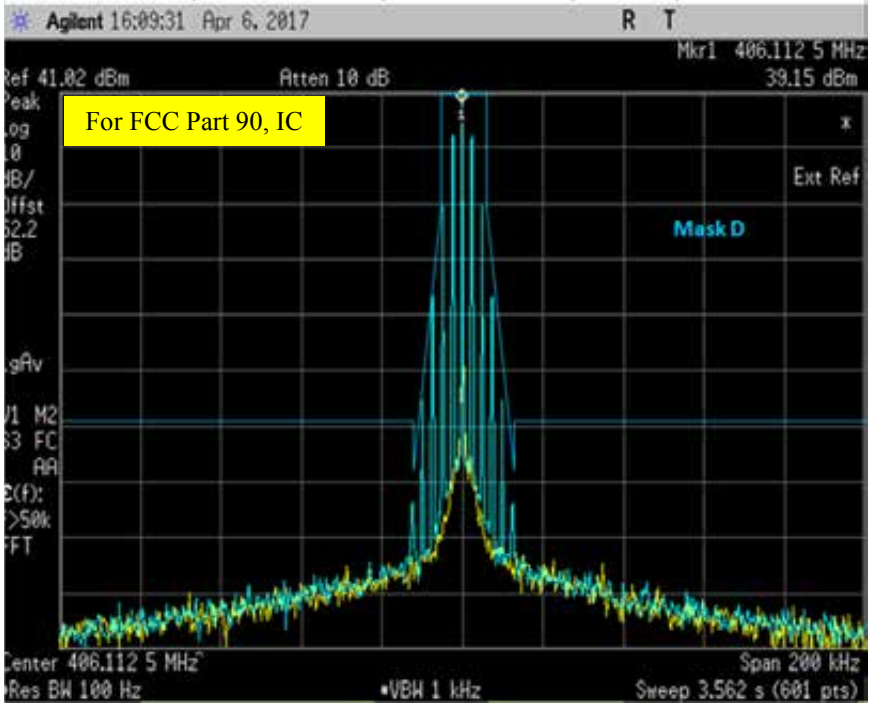


1) The DUT transmitter output port was connected to Modulation Analyzer.
2) Set the audio bandwidth filter to 15 kHz low pass filter and 50 kHz high pass filter.
3) Transmit the radio and set the audio analyzer to 2.5 kHz audio frequency and 50% of the rated deviation. Up the amplitude by 16 dB. Dekey the DUT.
4) Path loss for the measurement included.
5) Select the Occupied Bandwidth measurement for 99% Bandwidth Measurement.
6) Key in the Fc and Resolution Bandwidth (1 ~ 5 % of emission designator).
7) Transmit the DUT and record the occupied Bandwidth frequency.
8) Preset the spectrum analyzer for sideband spectrum measurement.
9) Set the span to 100 KHz and Resolution Bandwidth (according to FCC/ ISED standard).
10) Save the screen shot as modulated signal
11) Remove the audio tone from audio analyzer to capture unmodulated signal.

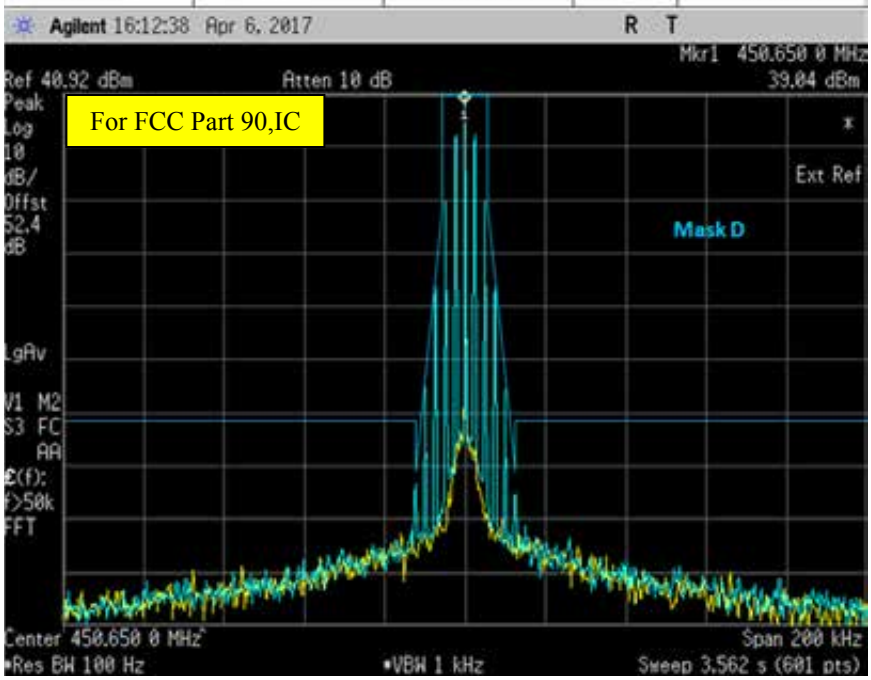
* Only HPF added for Mask 80.211 measurement with attenuator.

6.6.2. Test Result (Analog)

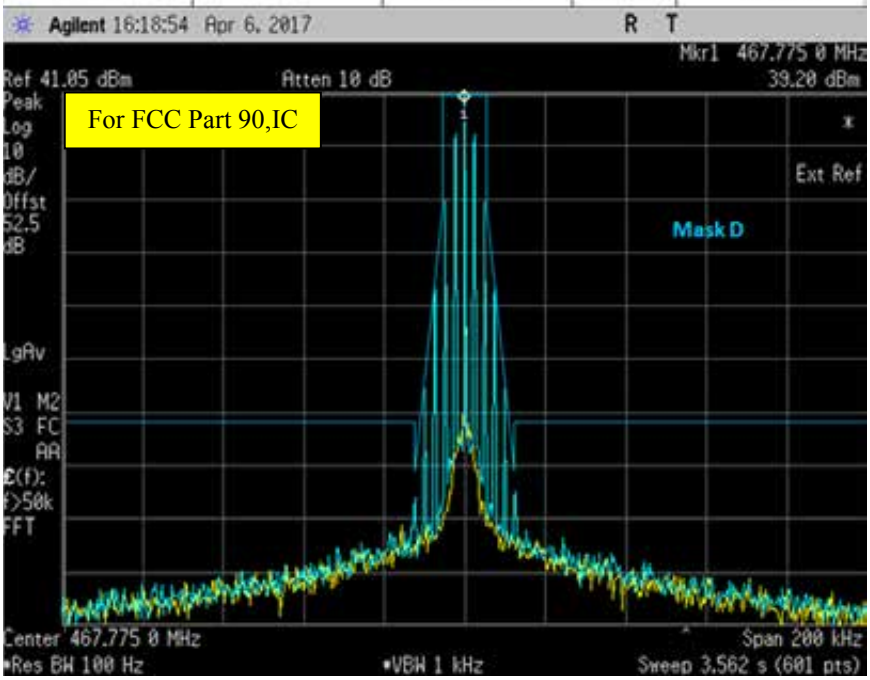
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
406.1125	12.5	Analog Voice	9.9652	11K0F3E



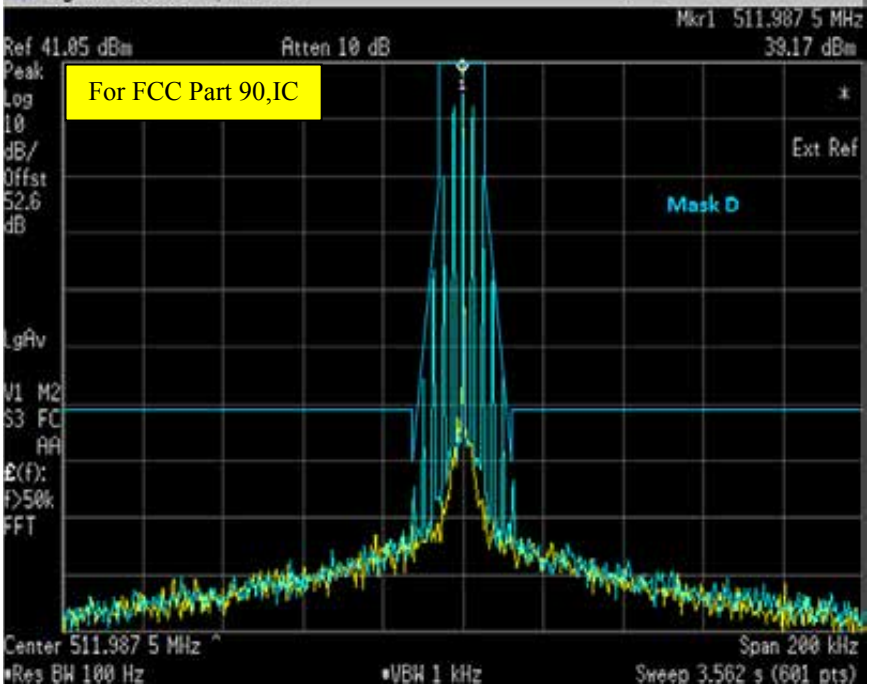
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
450.6500	12.5	Analog Voice	9.9632	11K0F3E



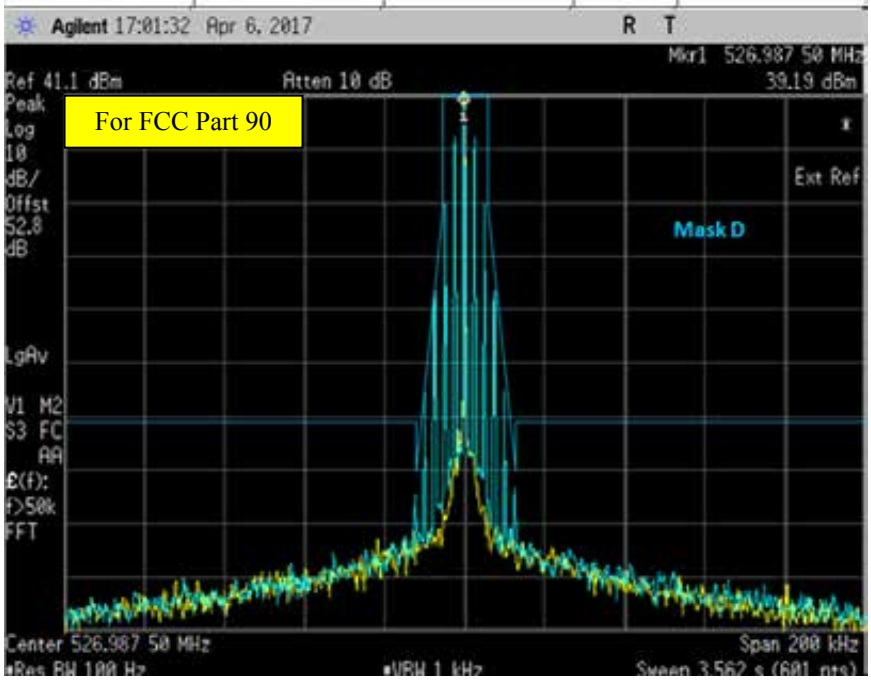
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
467.7750	12.5	Analog Voice	9.9552	11K0F3E



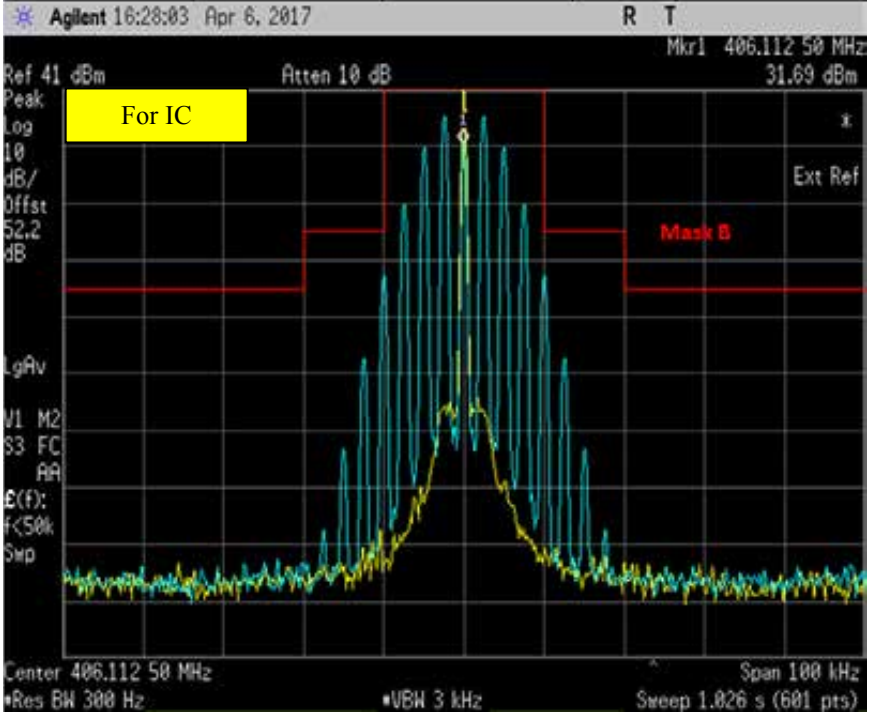
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
511.9875	12.5	Analog Voice	9.9703	11K0F3E



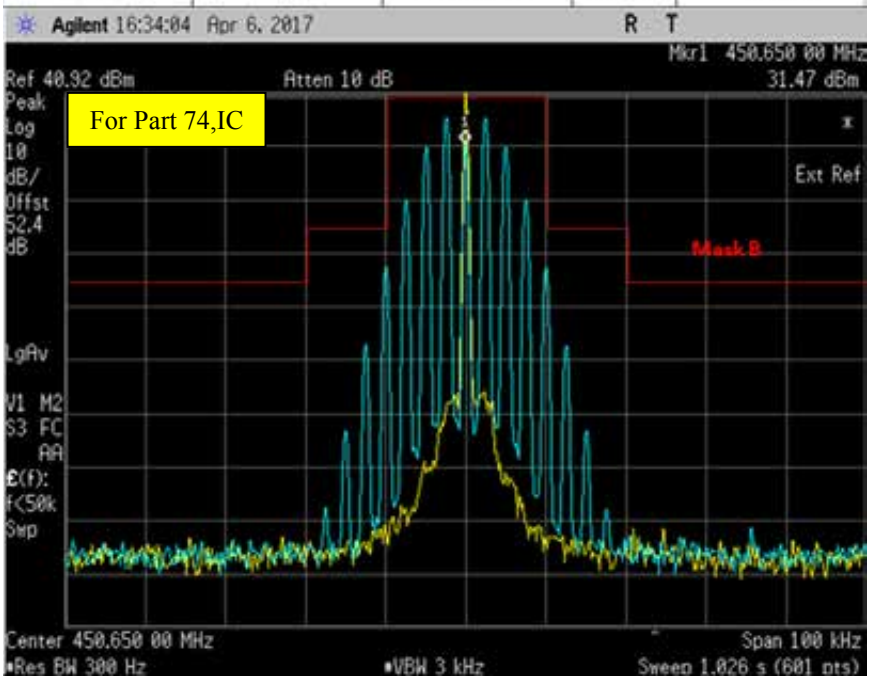
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
526.9875	12.5	Analog Voice	9.9762	11K0F3E



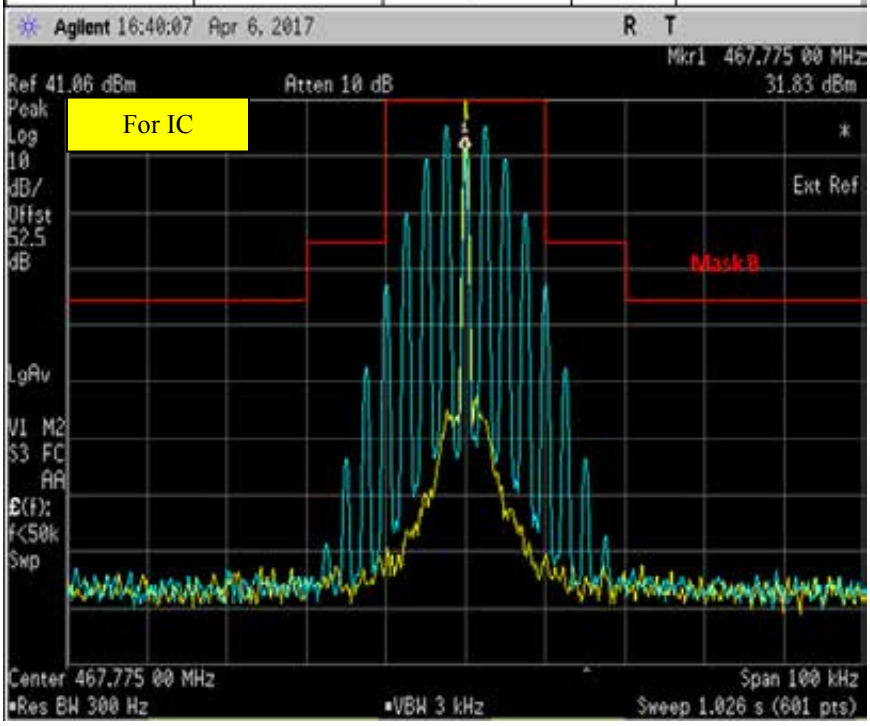
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
406.1125	25	Analog Voice	14.997	16K0F3E



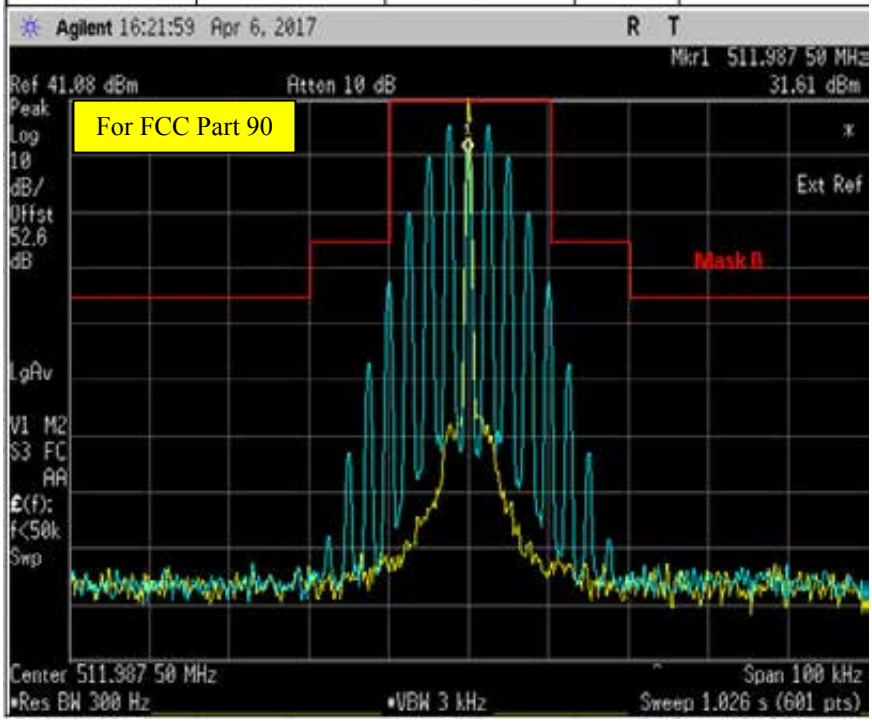
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
450.6500	25	Analog Voice	15.0145	16K0F3E



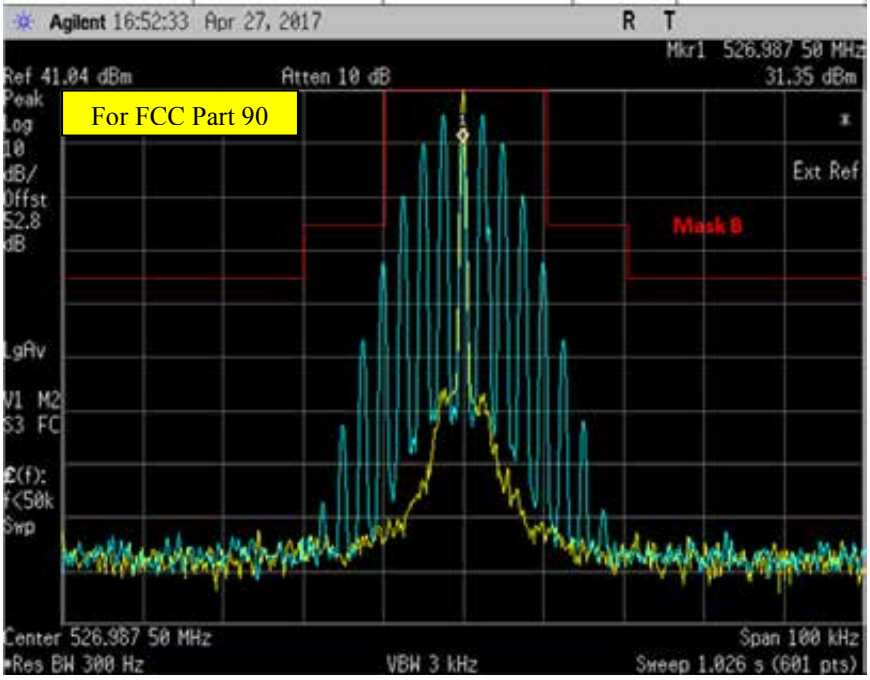
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
467.7750	25	Analog Voice	14.9999	16K0F3E



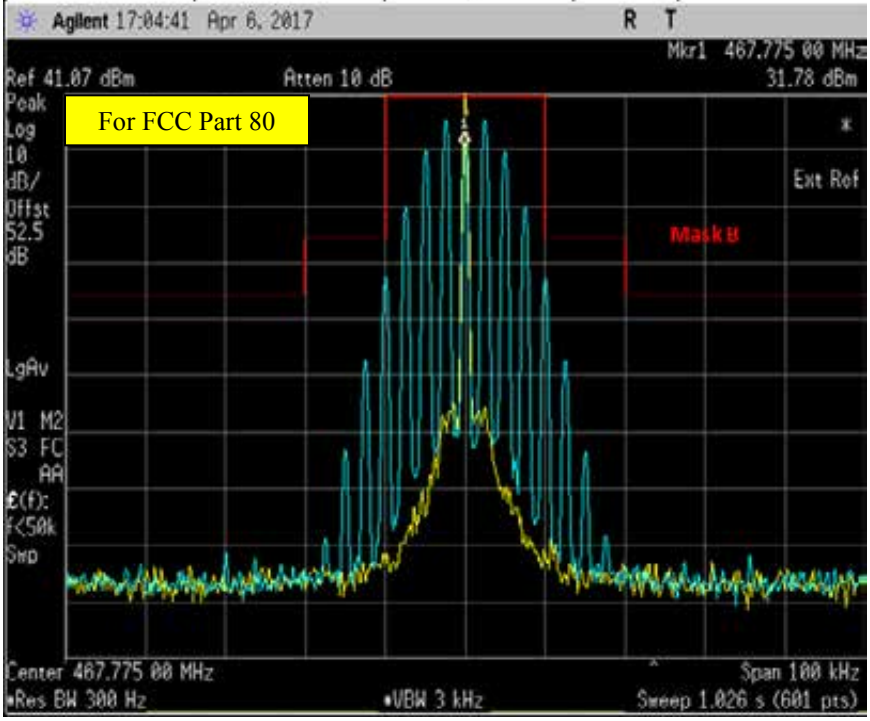
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
511.9875	25	Analog Voice	15.0065	16K0F3E



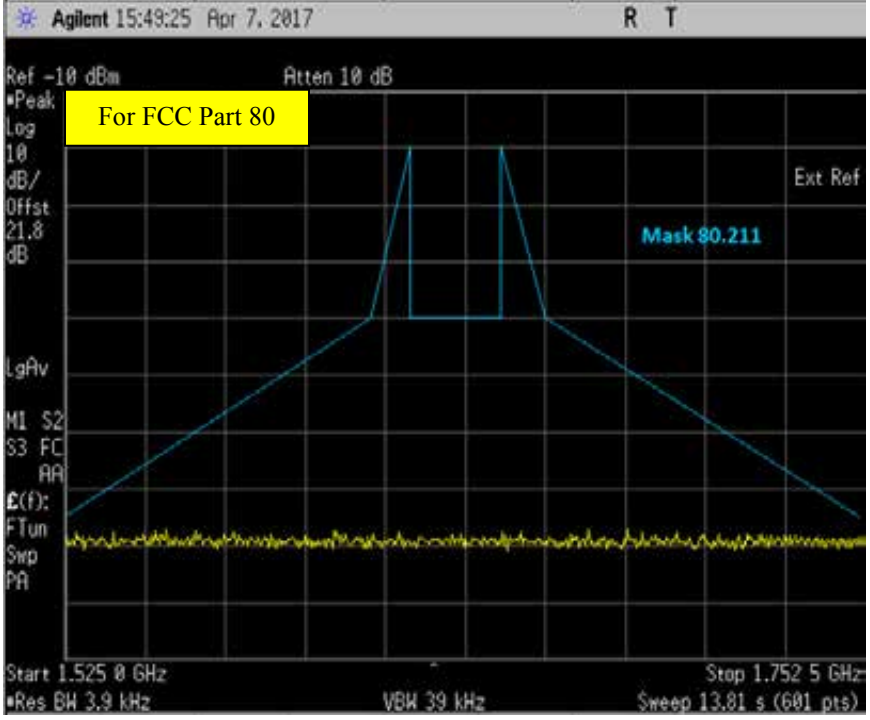
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
526.9875	25	Analog Voice	15.0235	16K0F3E



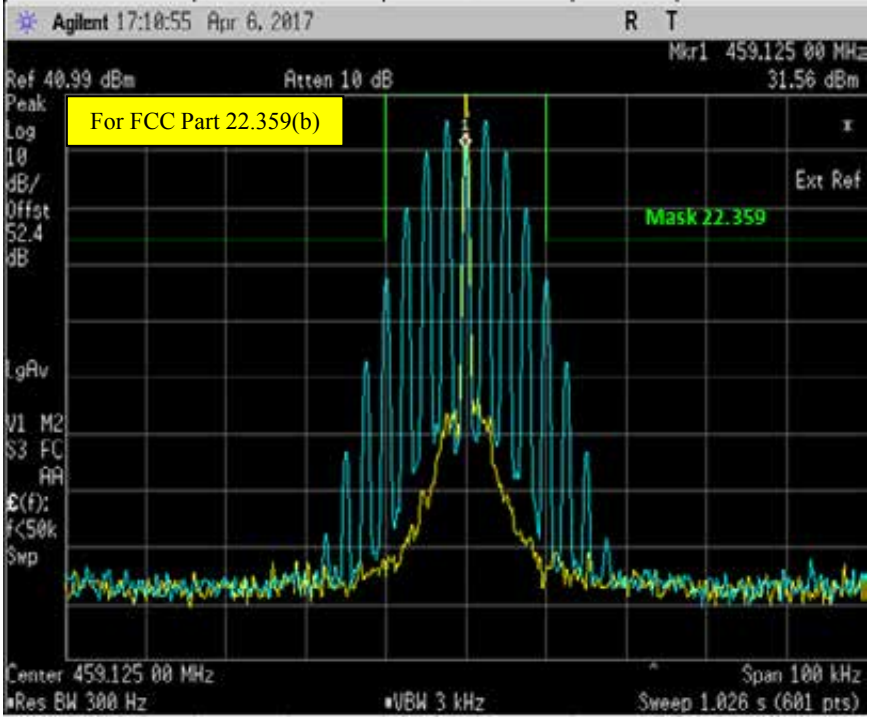
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
467.7750	25	Analog Voice	14.9939	16K0F3E



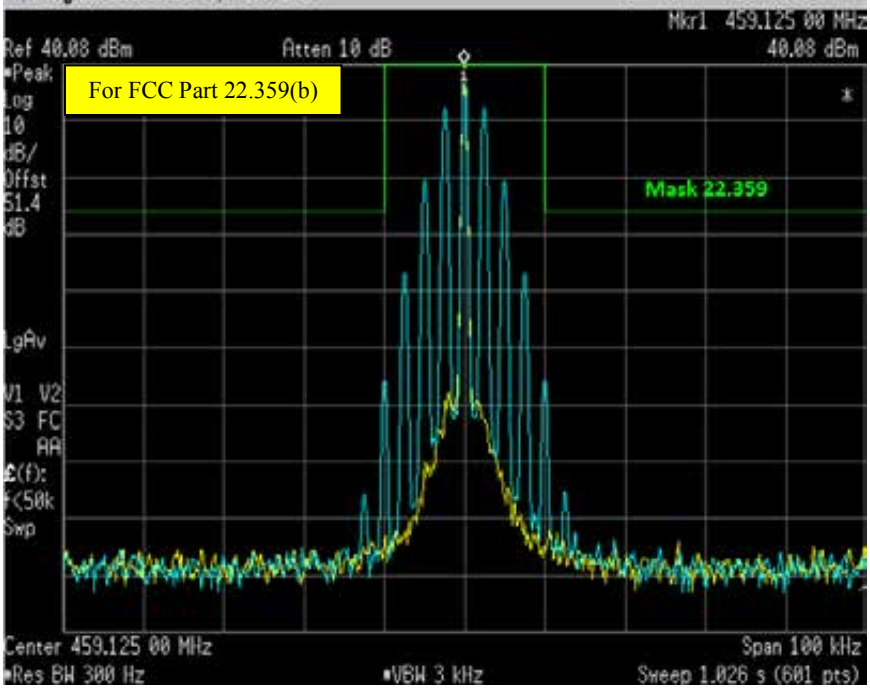
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
467.7750	25	Analog Voice	NA	16KF0F3E



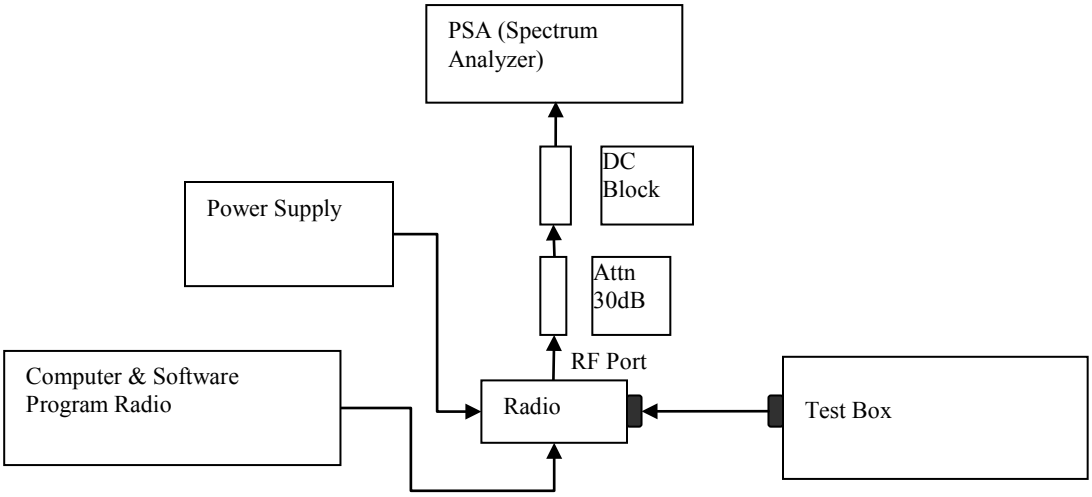
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
459.1250	25	Analog Voice	15.0035	16K0F3E



Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
459.1250	12.5	Analog Voice	9.9626	11K0F3E



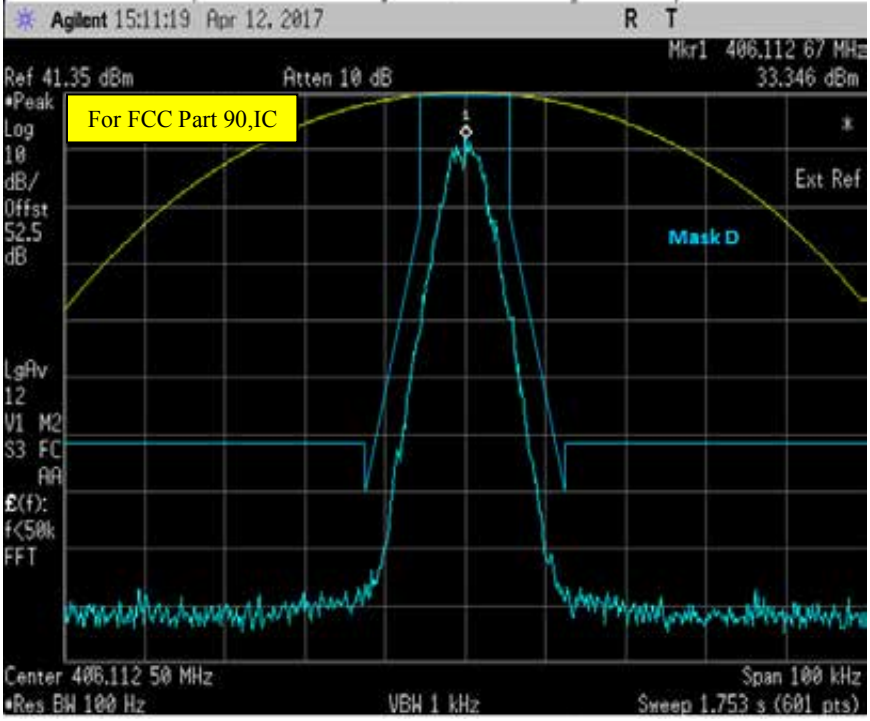
6.6.3. Test Setup (Digital)



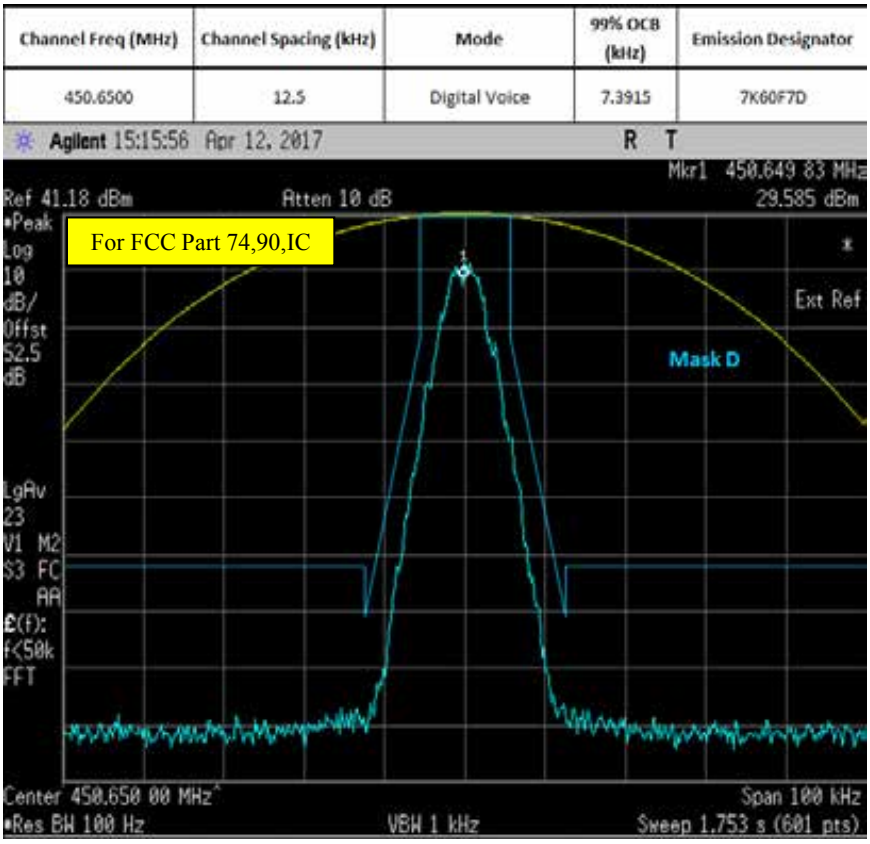
1) Program and set radio to operate in desire test frequency and digital mode with modulation. (4FSK, C4FM, CQPSK or other digital modulation form).
2) Path loss for the measurement included.
3) Select the Occupied Bandwidth measurement for 99% Bandwidth Measurement.
4) Key in the Fc and RBW (1 ~ 5 % of emission designator).
5) Transmit the DUT and record the occupied Bandwidth frequency.
6) Preset the spectrum analyzer for modulation emission spectrum measurement.
7) Set the span to 100 KHz and Resolution Bandwidth (according to FCC/ ISED standard).
8) Capture the screen shot as modulated signal.

6.6.4. Test Result (Digital)

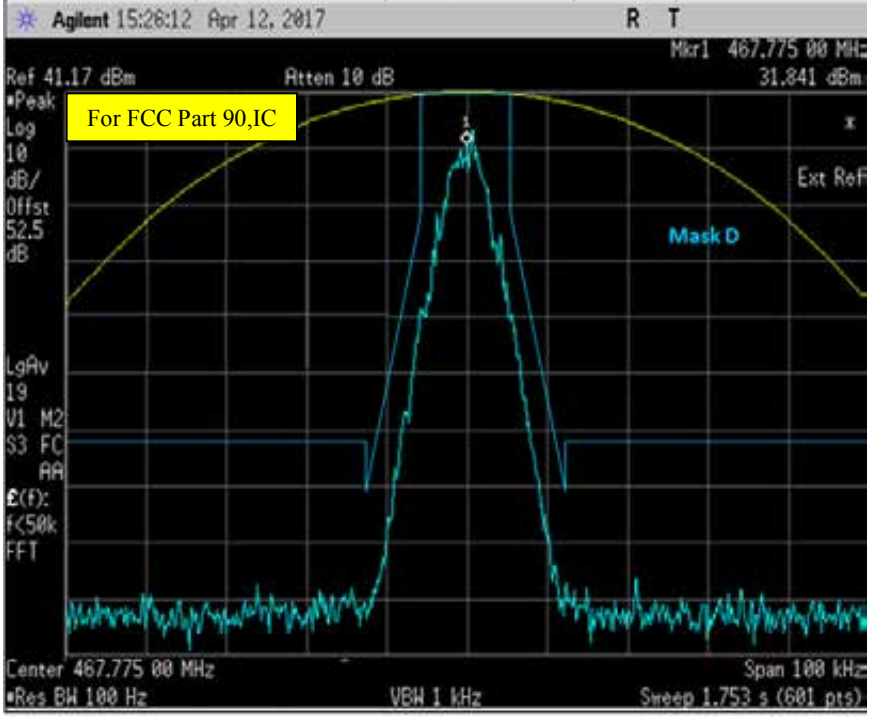
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
406.1125	12.5	Digital Voice	7.3502	7K60F7D



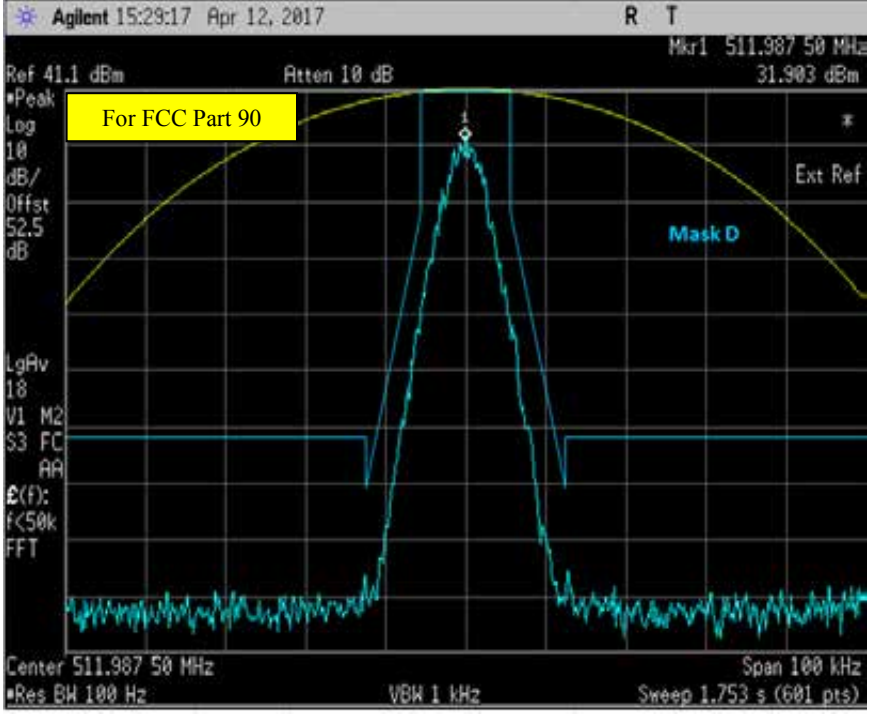
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
450.6500	12.5	Digital Voice	7.3915	7K60F7D



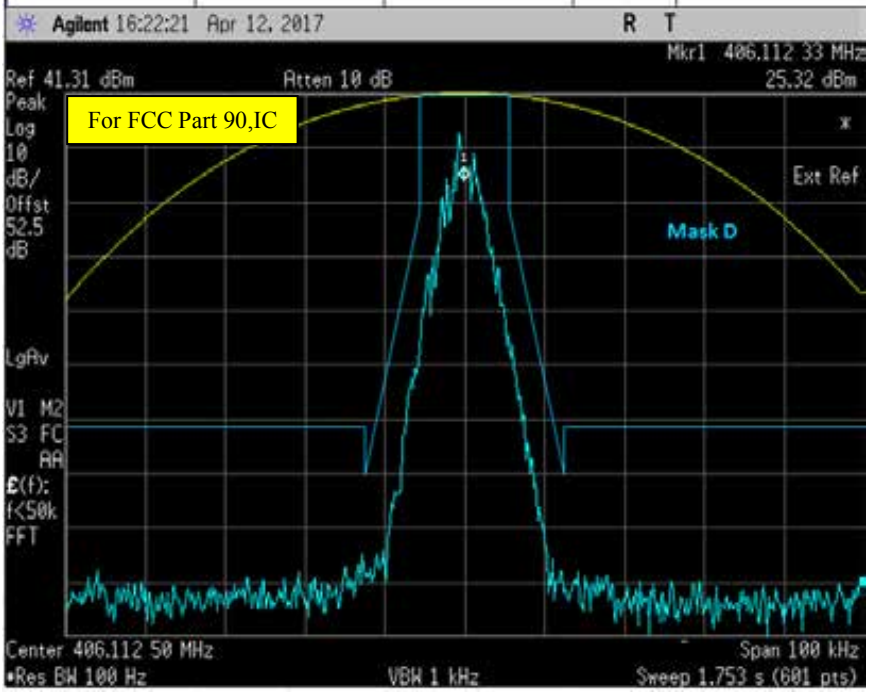
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
467.7750	12.5	Digital Voice	7.5719	7K60F7D



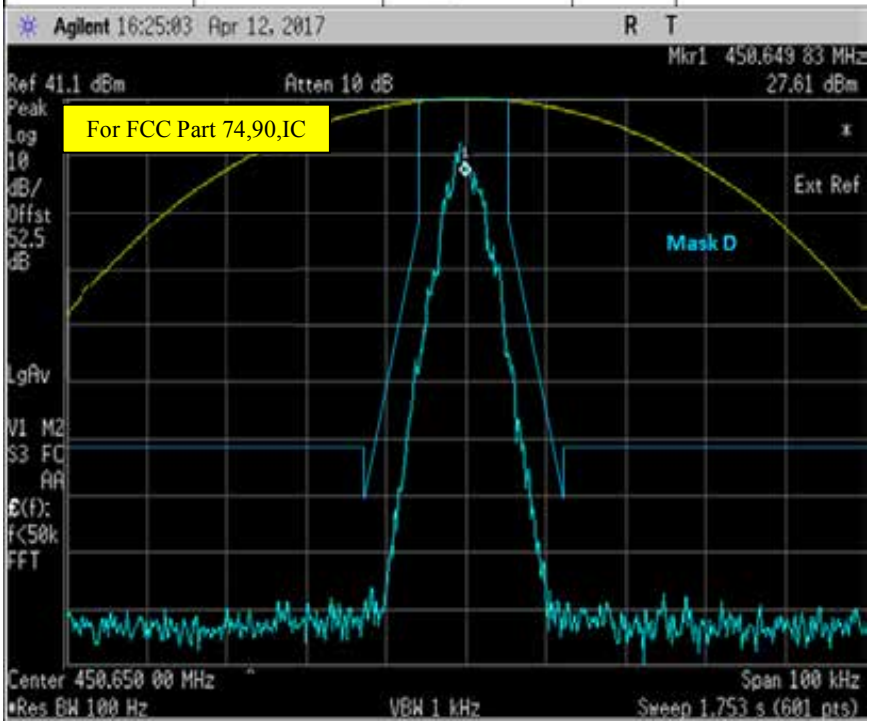
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
511.9875	12.5	Digital Voice	7.4025	7K60F7D



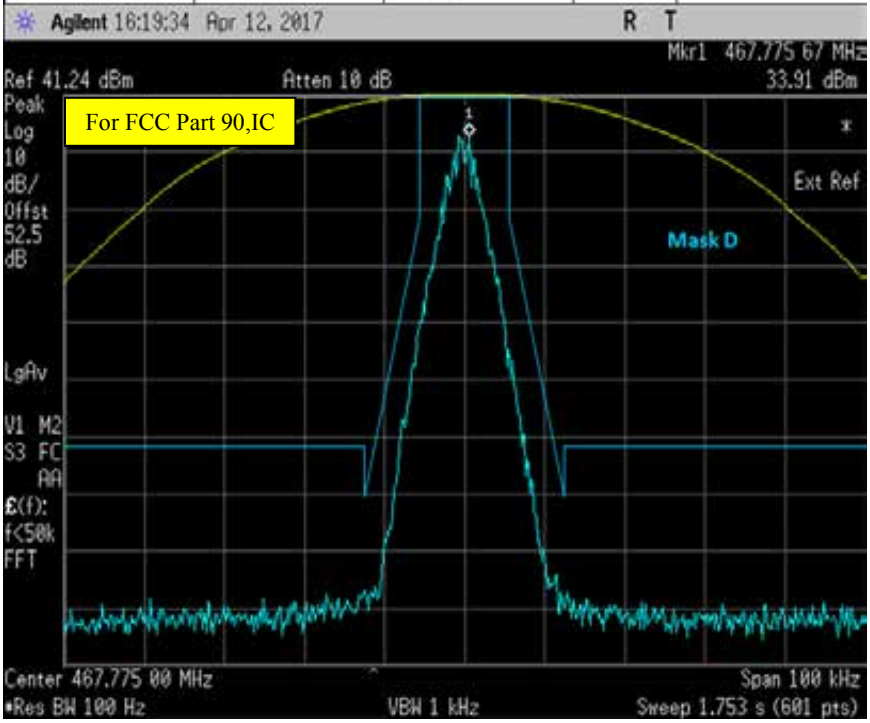
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
406.1125	12.5	Digital Voice	7.3502	7K60F7E



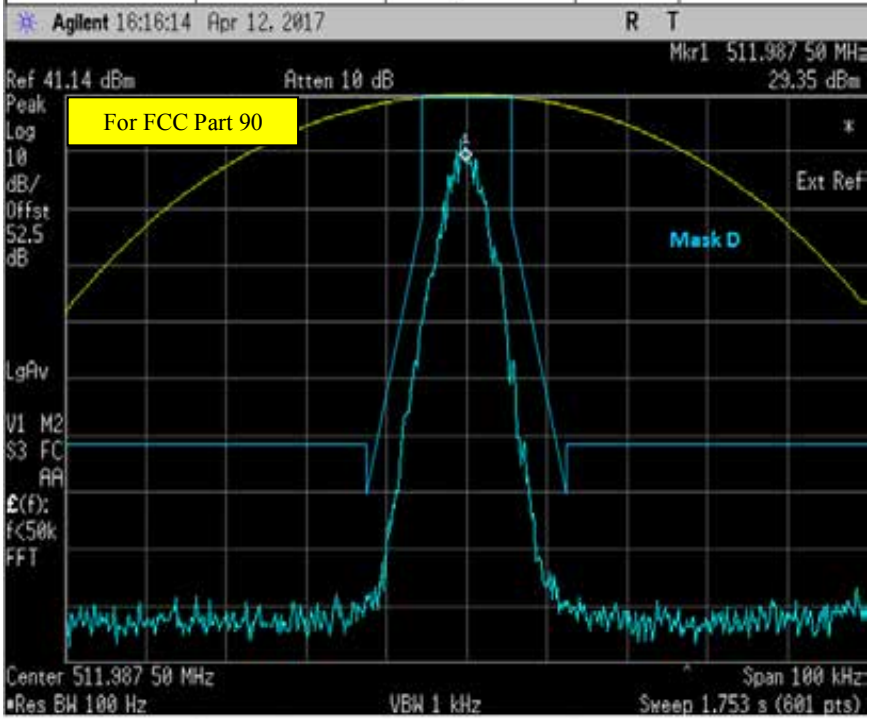
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
450.6500	12.5	Digital Voice	7.3915	7K60F7E



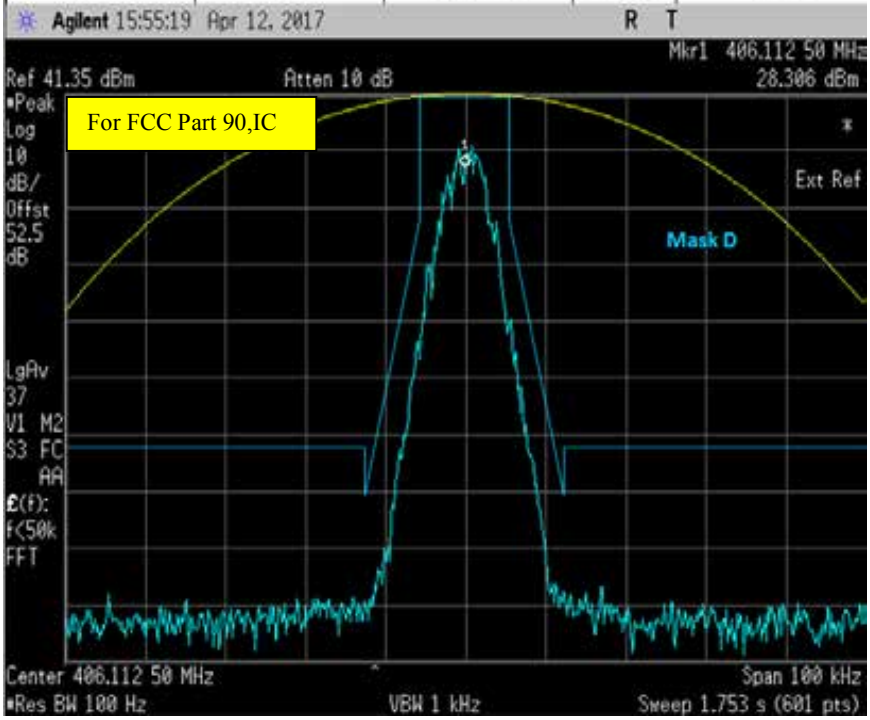
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
467.7750	12.5	Digital Voice	7.5719	7K60F7E



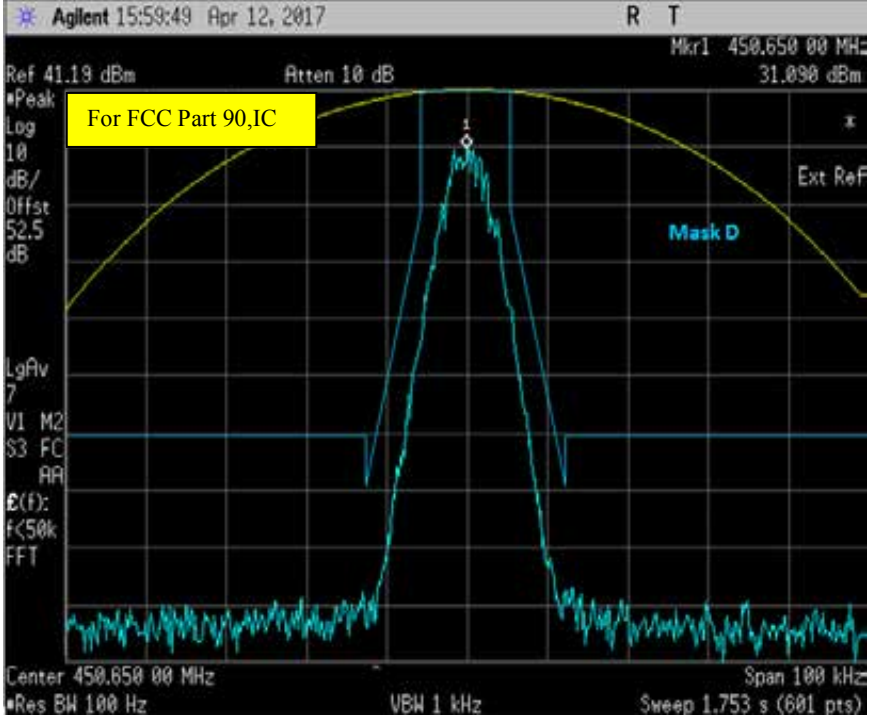
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
511.9875	12.5	Digital Voice	7.4025	7K60F7E



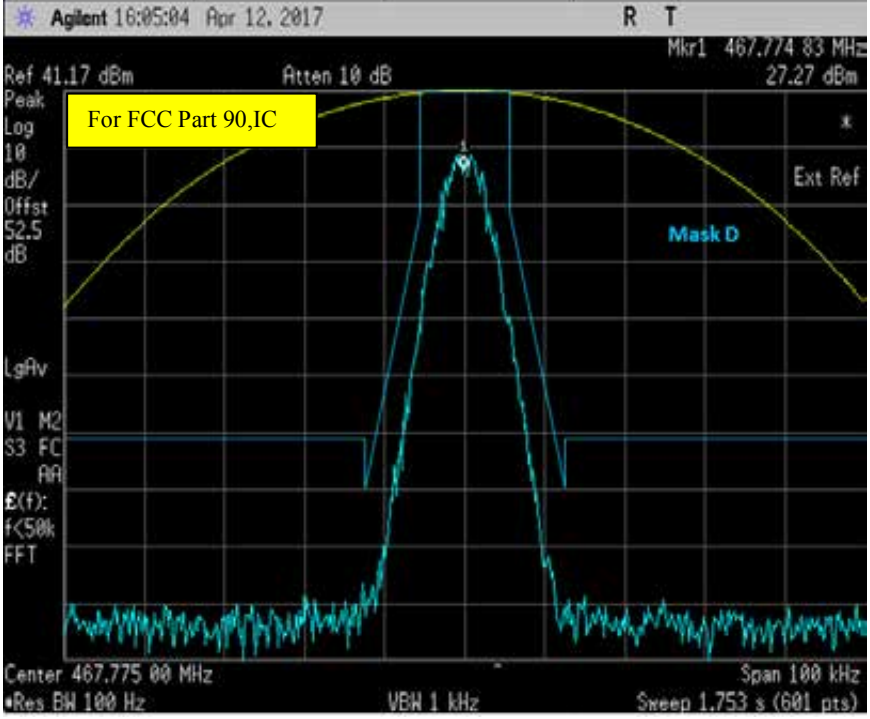
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
406.1125	12.5	Digital Voice	7.3502	7K60FXW



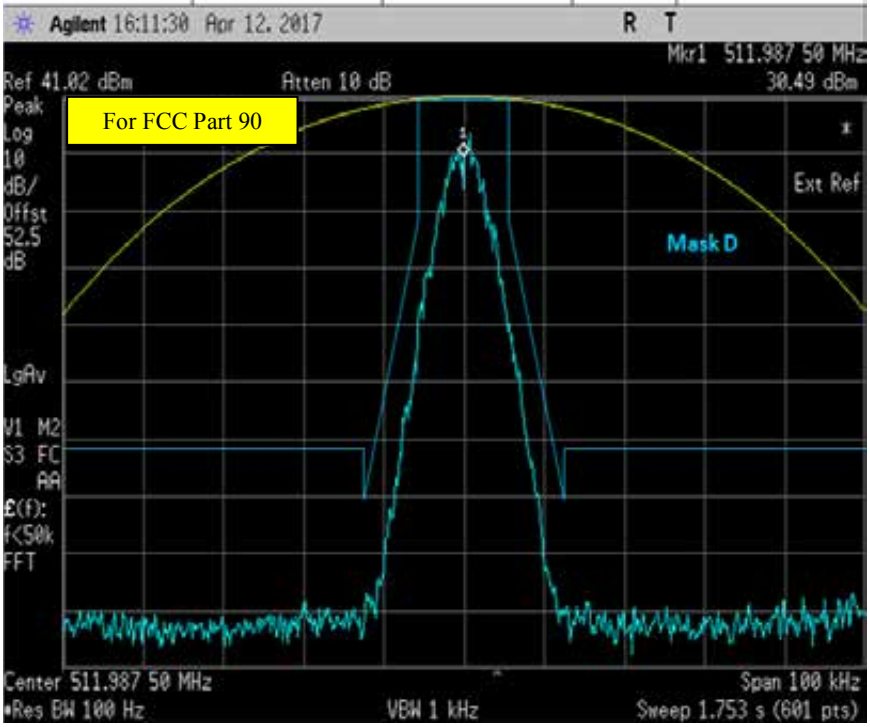
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
450.6500	12.5	Digital Voice	7.3915	7K60FXW



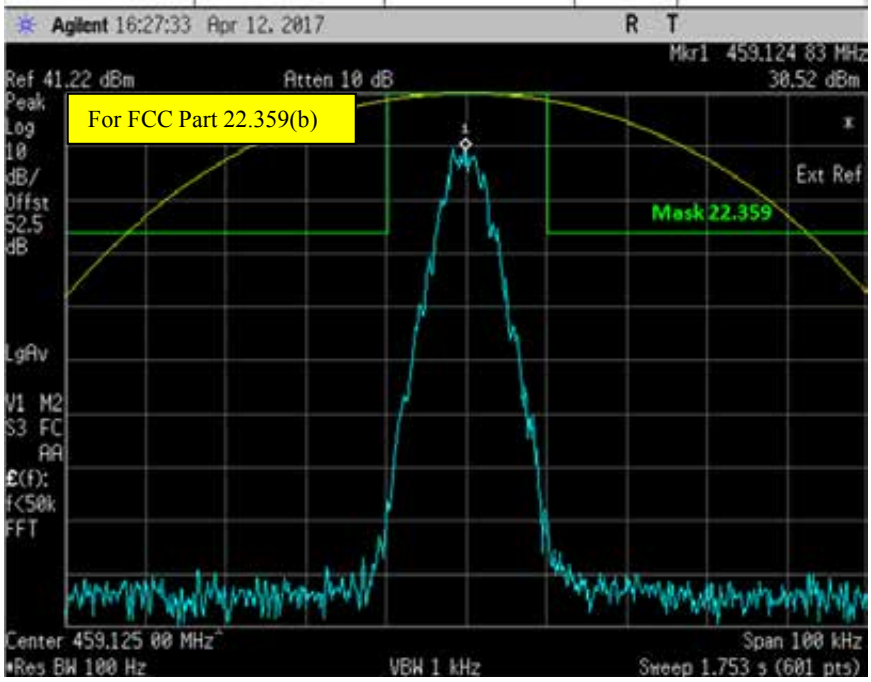
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
467.7750	12.5	Digital Voice	7.5719	7K60F1W



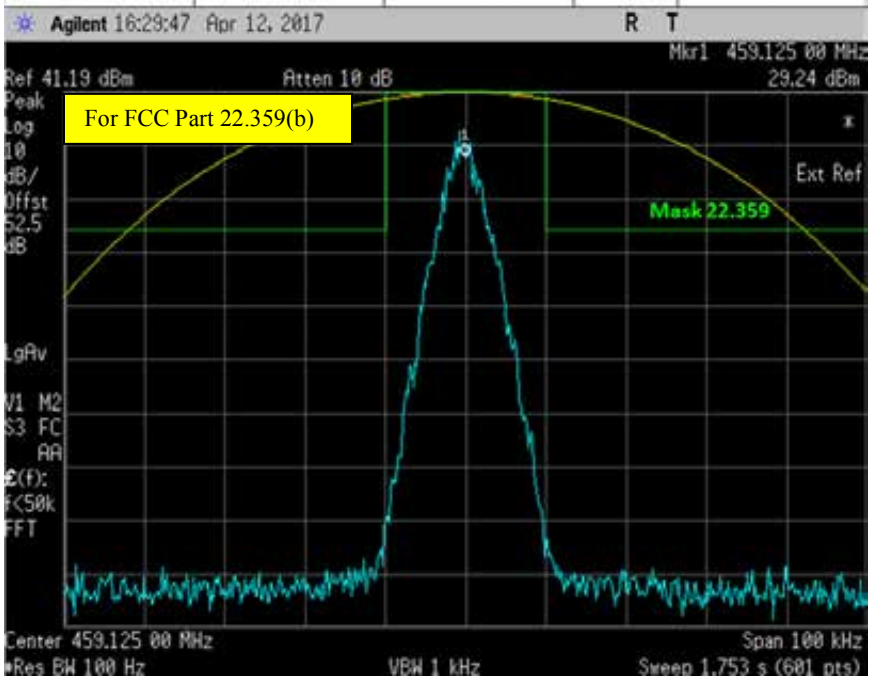
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
511.9875	12.5	Digital Voice	7.4025	7K60FXW



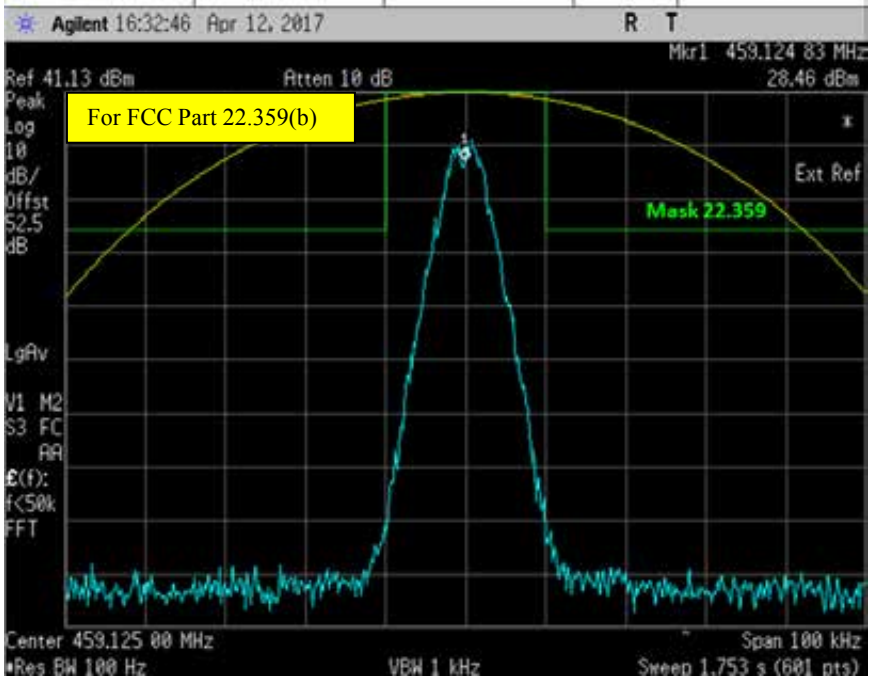
Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
459.1250	12.5	Digital Voice	7.5735	7K60F7D



Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
459.1250	12.5	Digital Voice	7.395	7K60F7E



Channel Freq (MHz)	Channel Spacing (kHz)	Mode	99% OCB (kHz)	Emission Designator
459.1250	12.5	Digital Voice	7.5735	7K60FXW

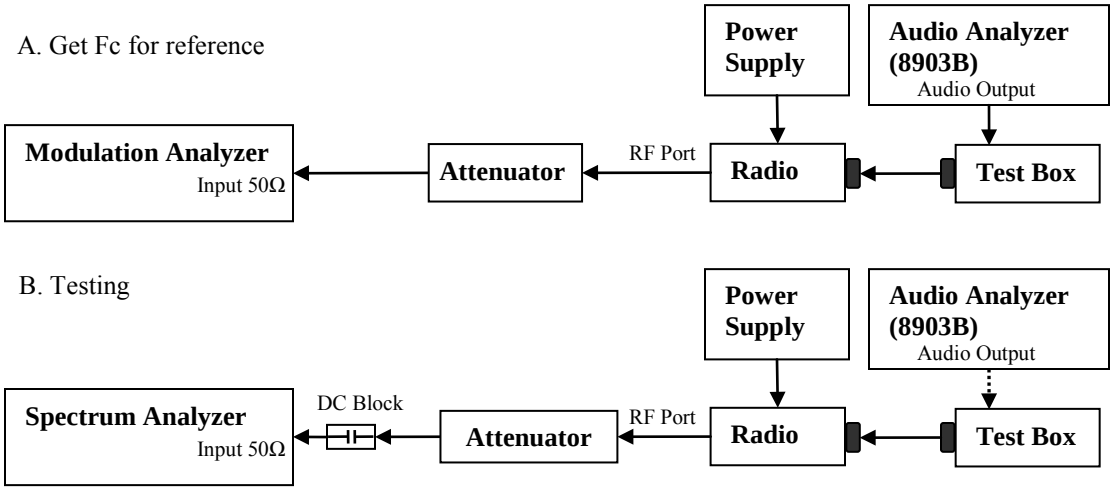


6.6.5. Test Limit

The 99% occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

6.7. Band Edge Conducted Spurious Emission (Part 22)

6.7.1. Test Setup (Analog)



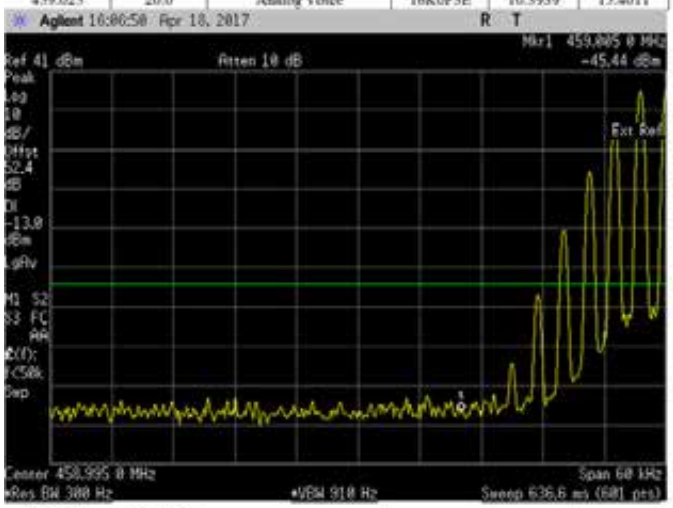
1) The DUT transmitter output port was connected to Modulation Analyzer.
2) Set the audio bandwidth filter to 15 kHz low pass filter and 50 kHz high pass filter.
3) Path loss for the measurement included.
4) Select the Occupied Bandwidth measurement for 99% and 26dB Emissions Bandwidth Measurement.
5) Key in the Fc and RBW= 100Hz.
6) Transmit the DUT and record the occupied Bandwidth frequencies.
7) Preset the spectrum analyzer for band edge measurement.
8) The band edges of lowest and highest channels were measured.
9) The center frequency of spectrum is the band edge frequency, span is 60 kHz and RBW is at least 1% of Emission Bandwidth.
10) Save the screen shot as modulated signal.
11) Remove the audio tone from audio analyzer to capture unmodulated signal.

**Note:
• Results for Analog Modulation Voice (F3E) with 12.5kHz and 25kHz would be the same. Therefore only measurements with 25kHz channel spacing is reported.

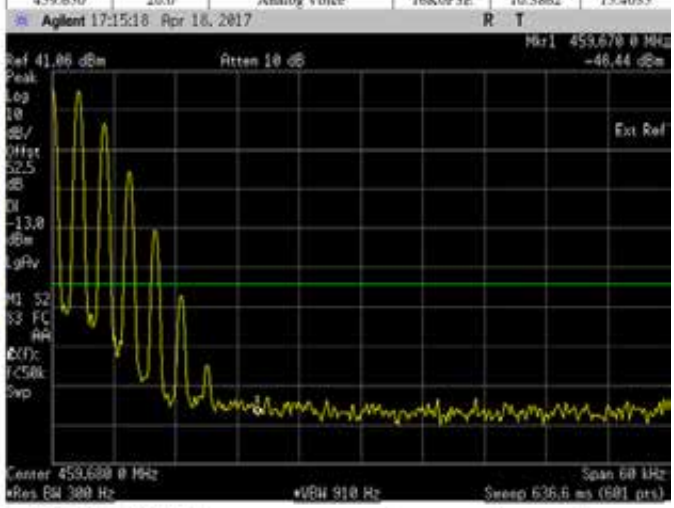
6.7.2. Test Result (Analog)

Max Power

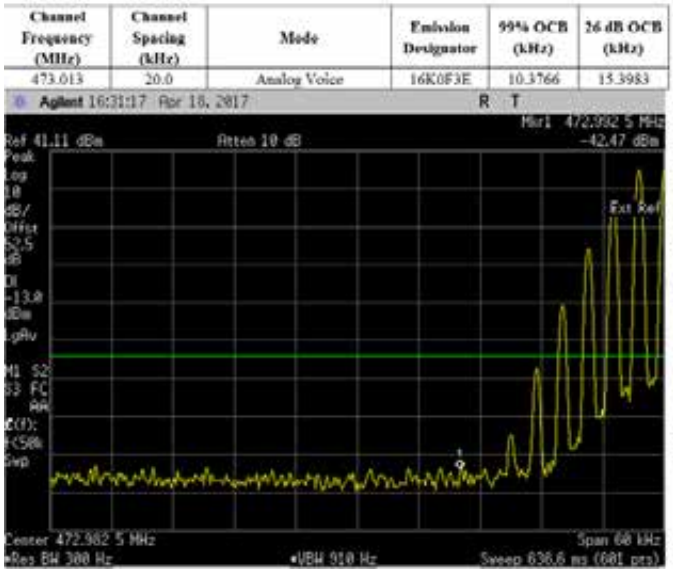
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
459.025	20.0	Analog Voice	16K0F3E	10.3939	15.4011



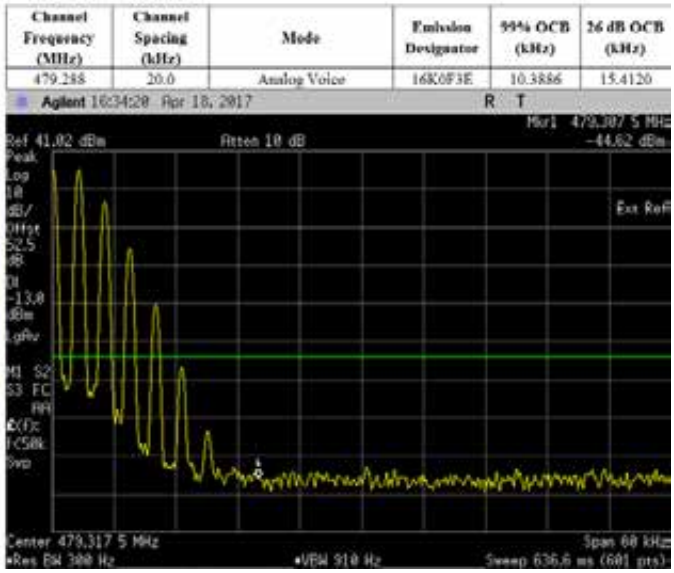
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
459.650	20.0	Analog Voice	16K0F3E	10.3862	15.4035



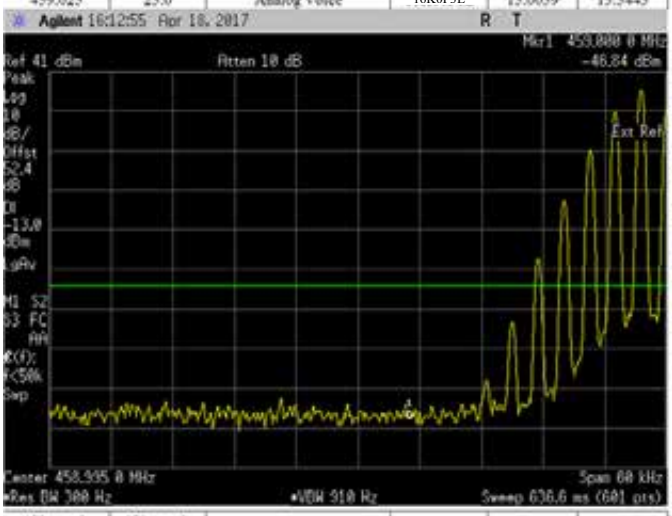
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
473.013	20.0	Analog Voice	16K0F3E	10.3766	15.3983



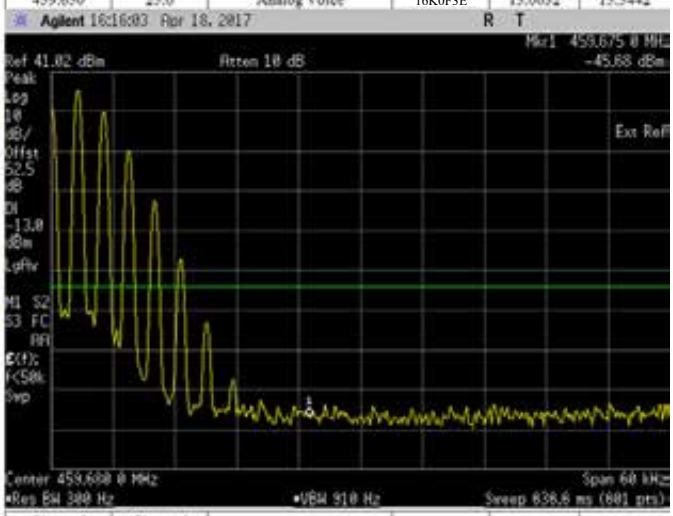
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
479.288	20.0	Analog Voice	16K0F3E	10.3886	15.4120



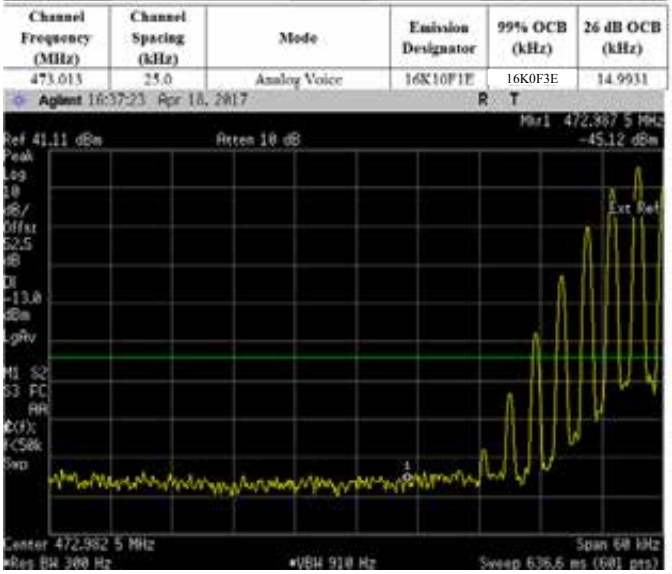
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
459.025	25.0	Analog Voice	16K0F3E	15.0059	15.5445



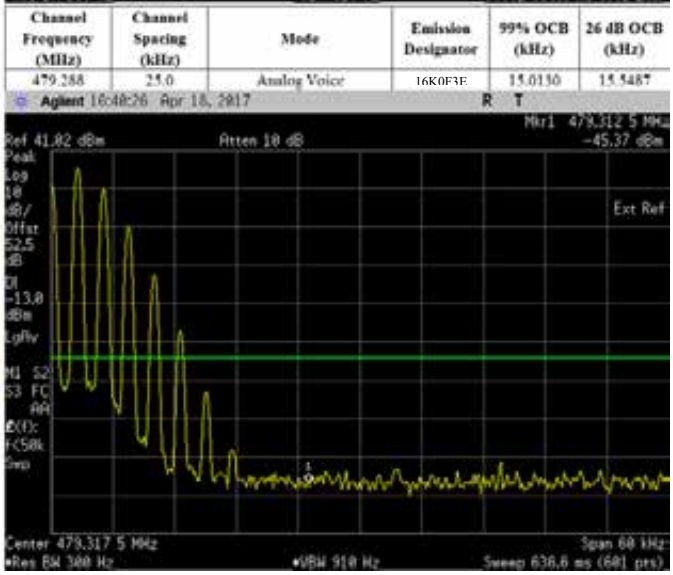
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
459.650	25.0	Analog Voice	16K0F3E	15.0032	15.5442



Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
473.013	25.0	Analog Voice	16K10F1E	16K0F3E	14.9931

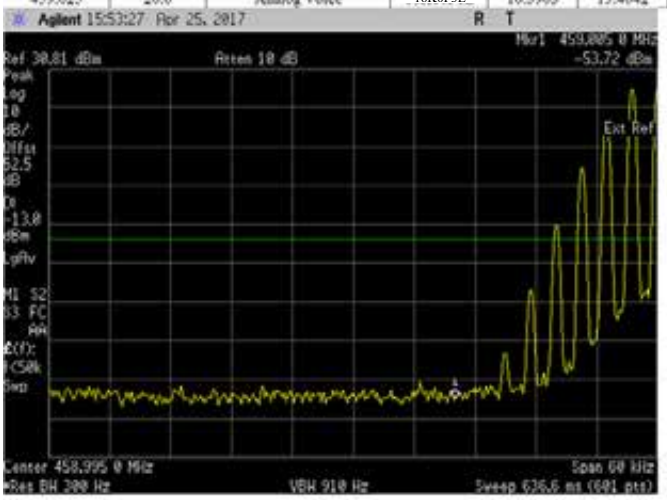


Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
479.288	25.0	Analog Voice	16K0F3E	15.0130	15.5487

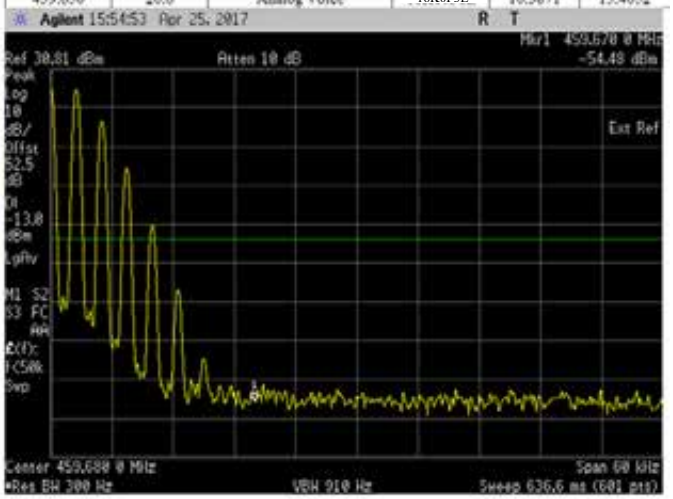


Low Power

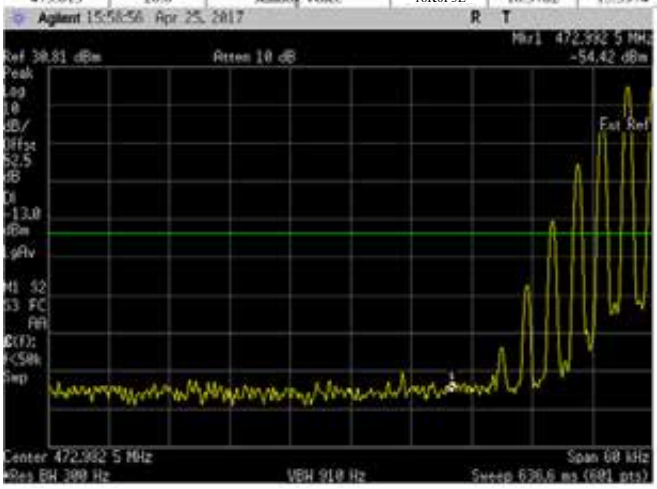
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
459.025	20.0	Analog Voice	16K0F3E	10.3903	15.4042



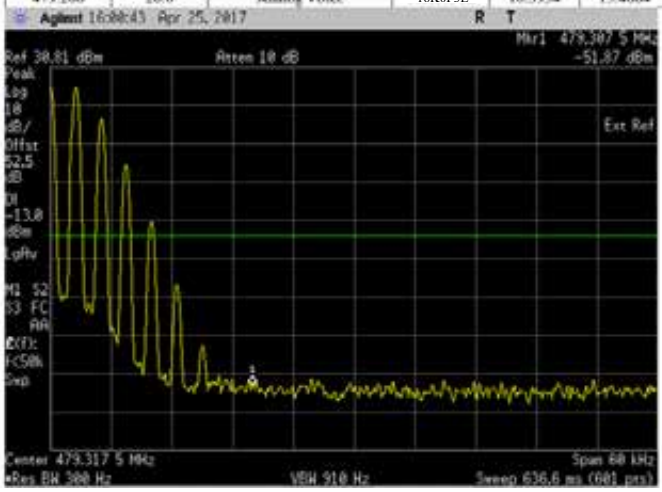
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
459.650	20.0	Analog Voice	16K0F3E	10.3871	15.4052



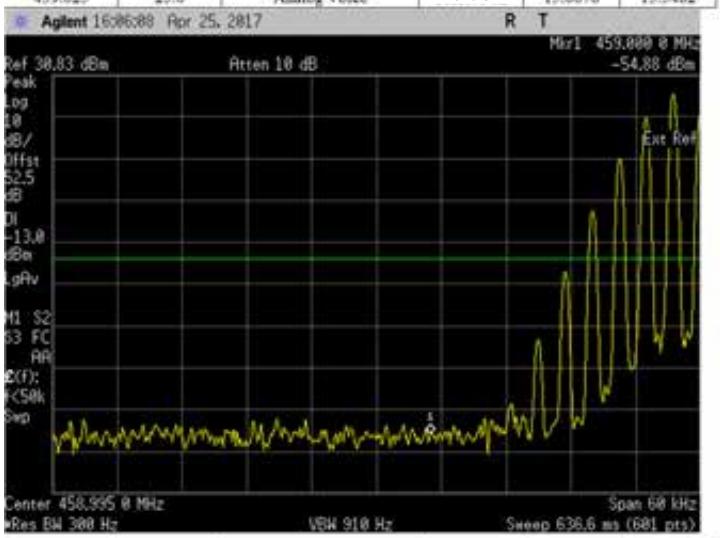
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
473.013	20.0	Analog Voice	16K0F3E	10.3782	15.3974



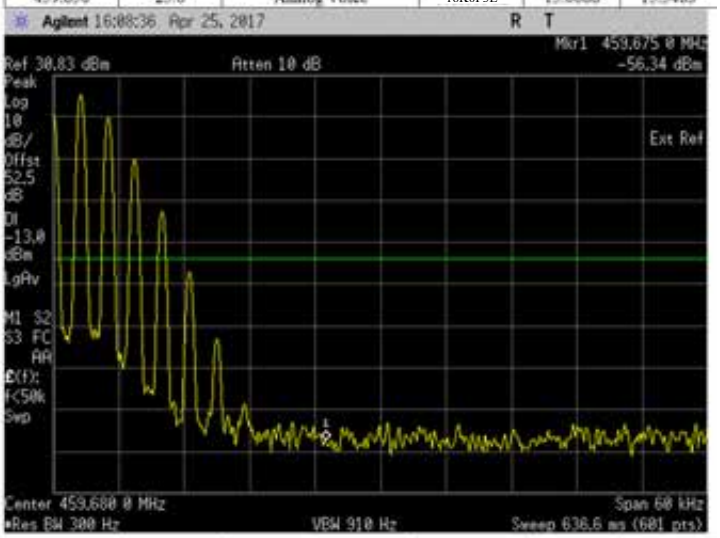
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
479.288	20.0	Analog Voice	16K0F3E	10.3934	15.4084



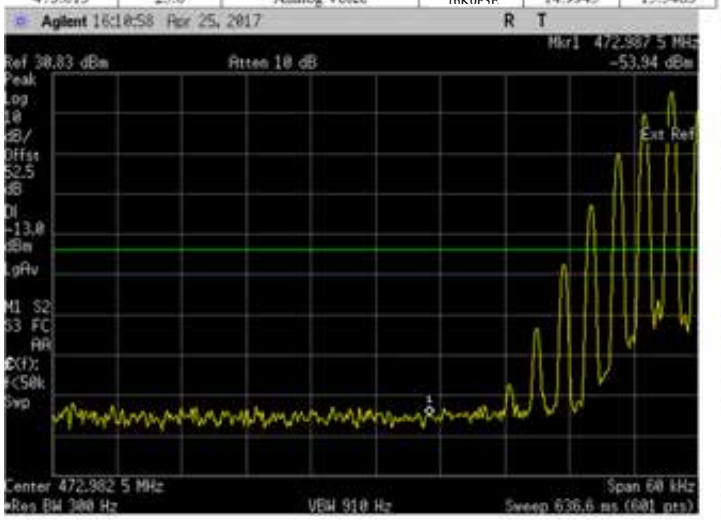
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
459.025	25.0	Analog Voice	16K0F3E	15.0076	15.5482



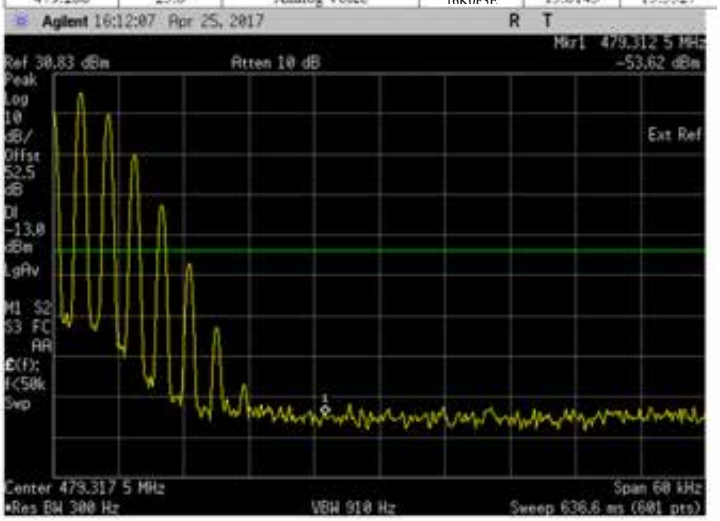
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
459.650	25.0	Analog Voice	16K0F3E	15.0066	15.5483



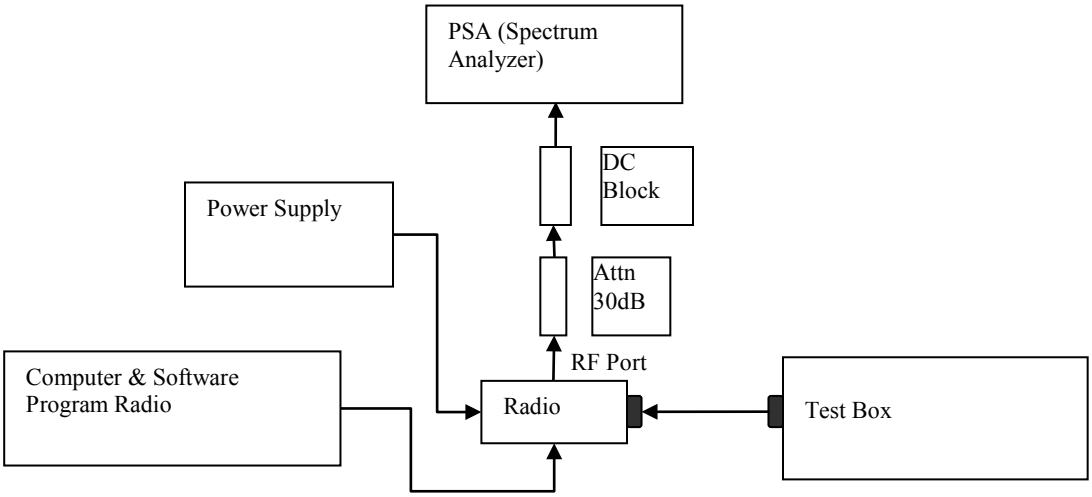
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
473.013	25.0	Analog Voice	16K0F3E	14.9945	15.5463



Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
479.288	25.0	Analog Voice	16K0F3E	15.0145	15.5527



6.7.3. Test Setup (Digital)



1) Program and set radio to operate in desire test frequency and digital mode with modulation. (4FSK**, C4FM or other digital modulation form).
2) Path loss for the measurement included.
3) Select the Occupied Bandwidth measurement for 99% and 26dB Emissions Bandwidth Measurement.
4) Key in the Fc and RBW= 100Hz.
5) Transmit radio record the occupied Bandwidth frequencies.
6) Preset the spectrum analyzer for band edge measurement.
7) The band edges of lowest and highest channels were measured.
8) The center frequency of spectrum is the band edge frequency, span is 60 kHz and RBW is at least 1% of Emission Bandwidth.
9) Save the screen shot.

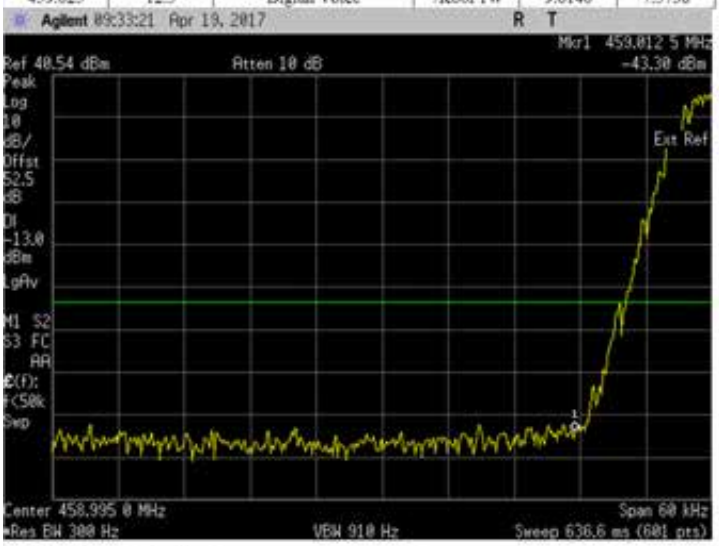
**Note:

- For Digital Modulation for 12.5 kHz Voice (F1E) and 12.5 kHz Data (F1D) would be the same. Therefore only measurements with F1E modulation shown below.

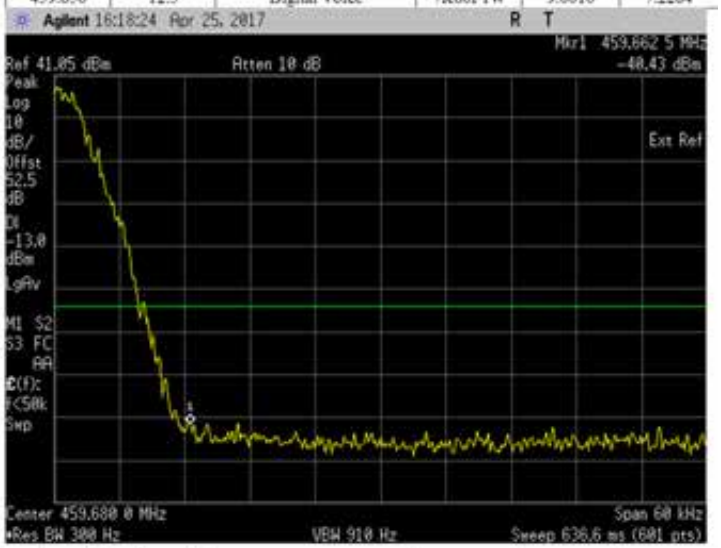
6.7.4. Test Result (Digital)

Max Power

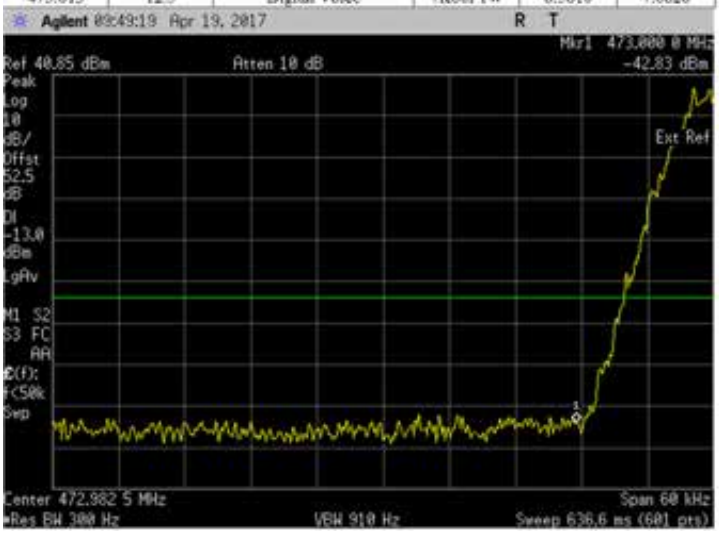
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
459.025	12.5	Digital Voice	7K60F1W	9.6140	7.5738



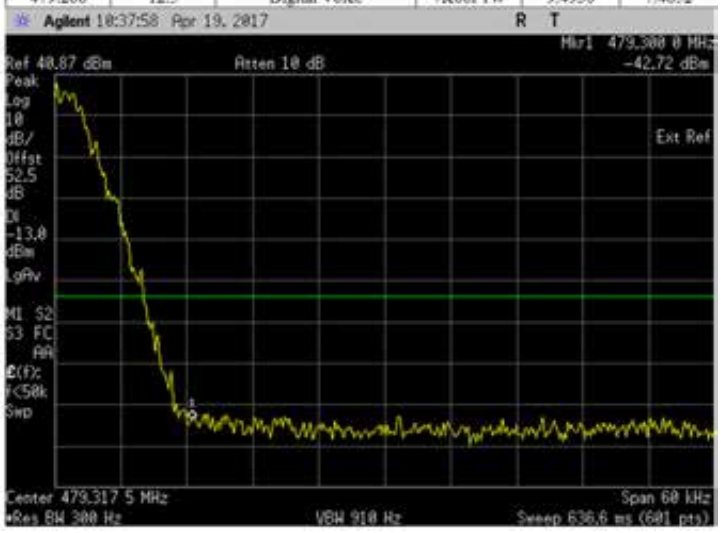
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
459.650	12.5	Digital Voice	7K60F1W	9.0010	7.2284



Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
473.013	12.5	Digital Voice	7K60F1W	8.5610	7.0826

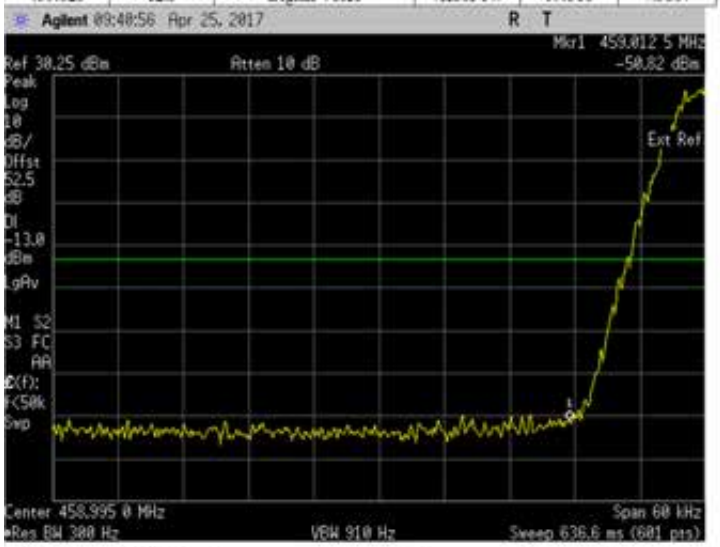


Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
479.288	12.5	Digital Voice	7K60F1W	9.4930	7.4652

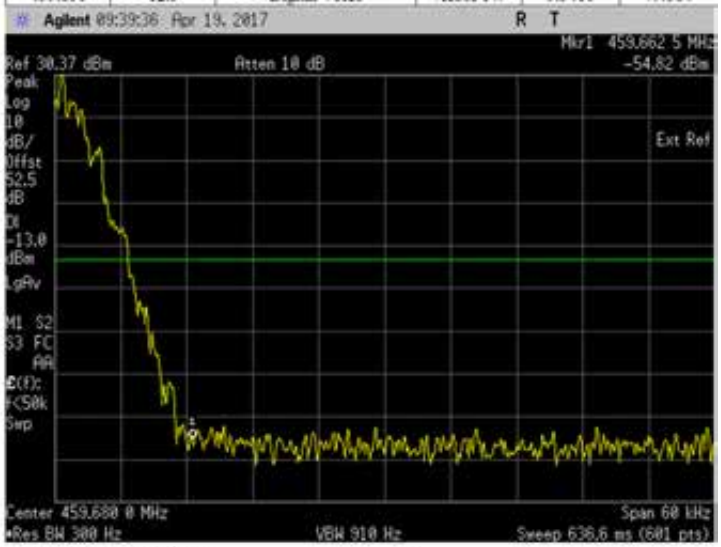


Low Power

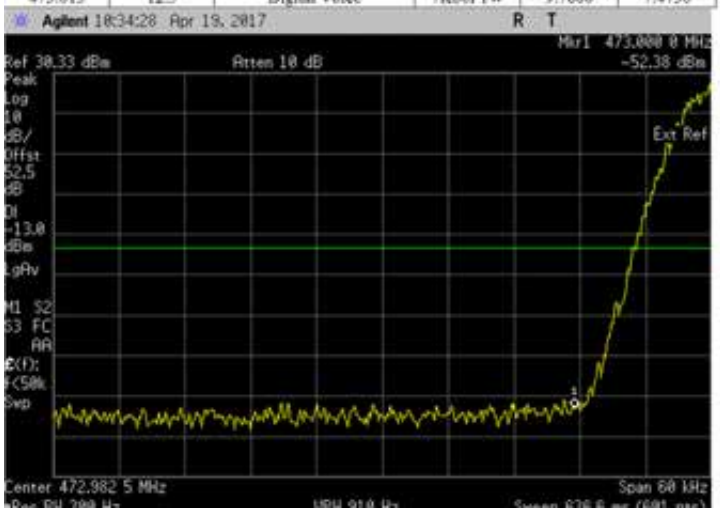
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
459.025	12.5	Digital Voice	7K60F1W	9.4310	7.5607



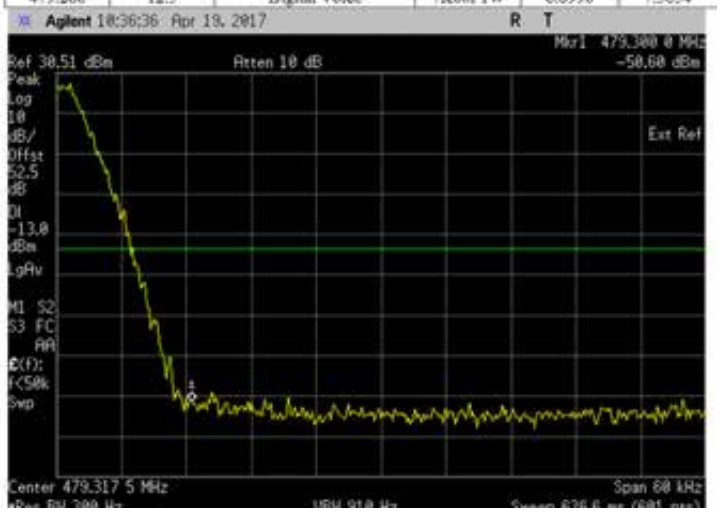
Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
459.650	12.5	Digital Voice	7K60F1W	9.5410	7.4564



Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
473.013	12.5	Digital Voice	7K60F1W	9.7800	7.4730



Channel Frequency (MHz)	Channel Spacing (kHz)	Mode	Emission Designator	99% OCB (kHz)	26 dB OCB (kHz)
479.288	12.5	Digital Voice	7K60F1W	8.8990	7.5654

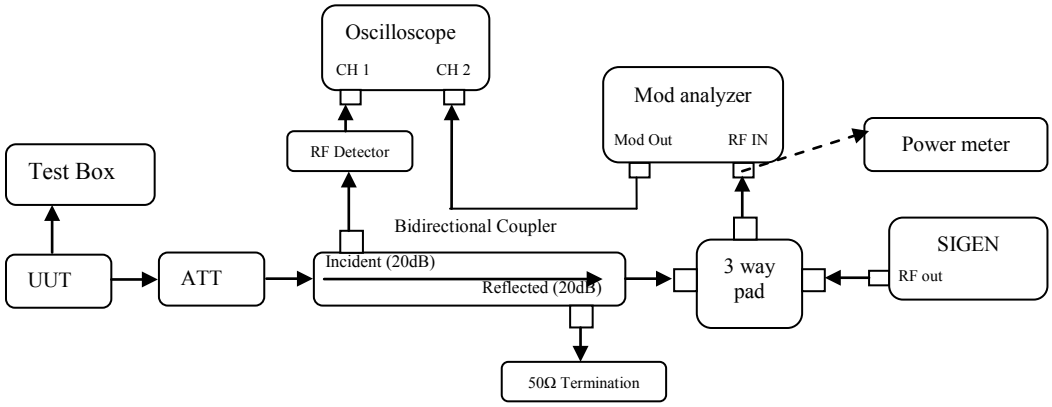


6.7.5. Test Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

6.8. Transient Frequency Behavior

6.8.1. Test Setup

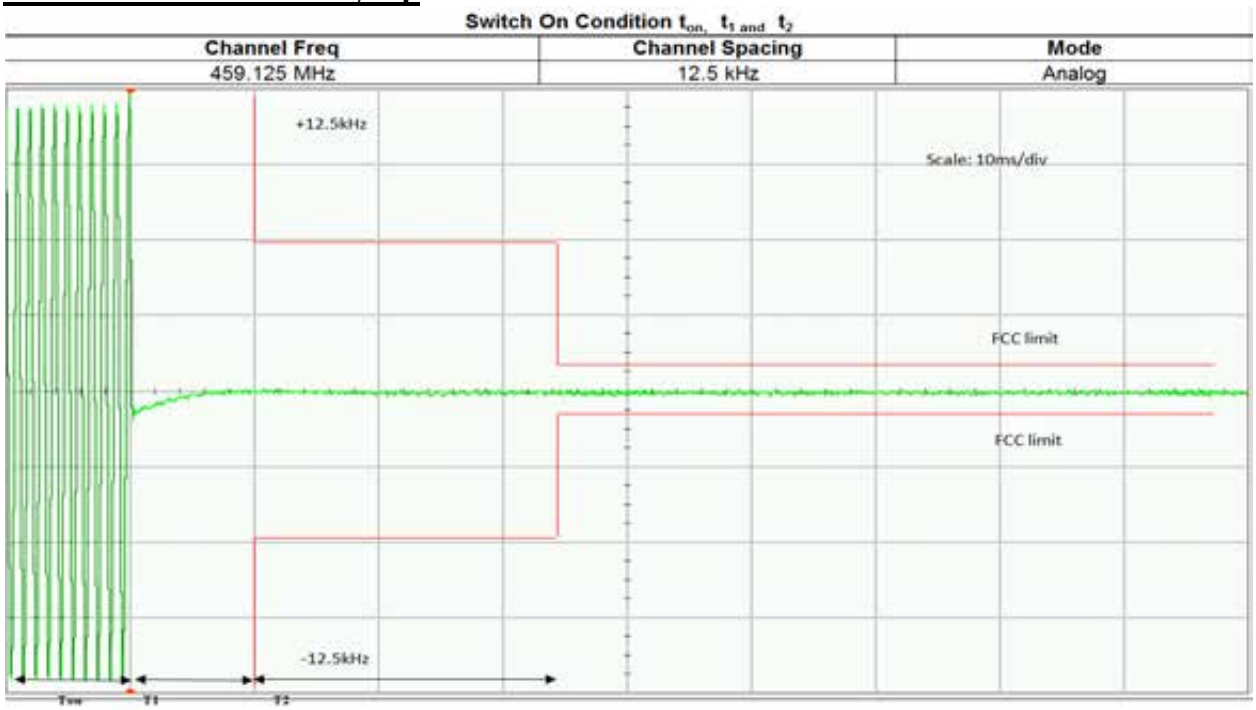


1) Connect the setup as figure above.
2) Path loss for the measurement included.
3) Set on Sigen with the assigned center frequency, internal 1 kHz FM tone.
   FM Deviation: Analog 25kHz Channel Spacing = 25 kHz
   Analog 12.5 kHz Channel Spacing = 12.5 kHz
4) Turn on 50 kHz high pass filter and 15 kHz low pass filter on modulation analyzer.
5) Supply sufficient attenuation ATT to provide the output power of ≤ -11dBm into power meter when UUT is keying up.
6) Note the power level on power meter and dekey the UUT.
7) Adjust the amplitude of the signal generator to the level power meter, maintained the amplitude throughout the rest of the measurement.
8) Connect the output to modulation analyzer.
9) Set the horizontal sweep rate on the storage oscilloscope to 10 milliseconds per division and adjust the display to continuously view the 1000 Hz. Adjust the vertical amplitude control of the oscilloscope to display the 1000 Hz at □4 divisions vertically centered on the display.
10) Reduce 30dB attenuation and transmit the radio to get the trigger line.
11) Capture the screen shot for key-up (rising edge) and de-key (falling edge) mode.

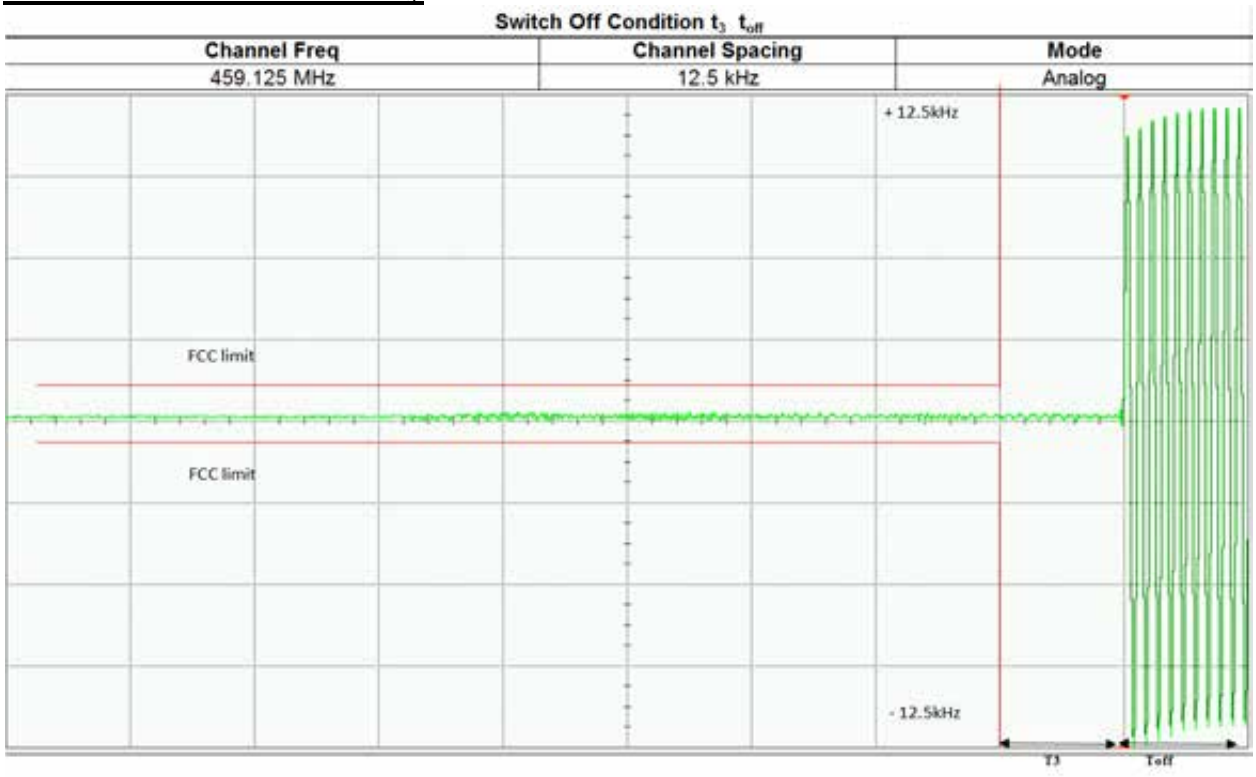
****Note: Test is based on the stability of the transmitter in a transient environment and therefore not analogue/digital dependent. An unmodulated carrier is needed for this test and can only be produced in analogue mode.**

6.8.2. Test Result

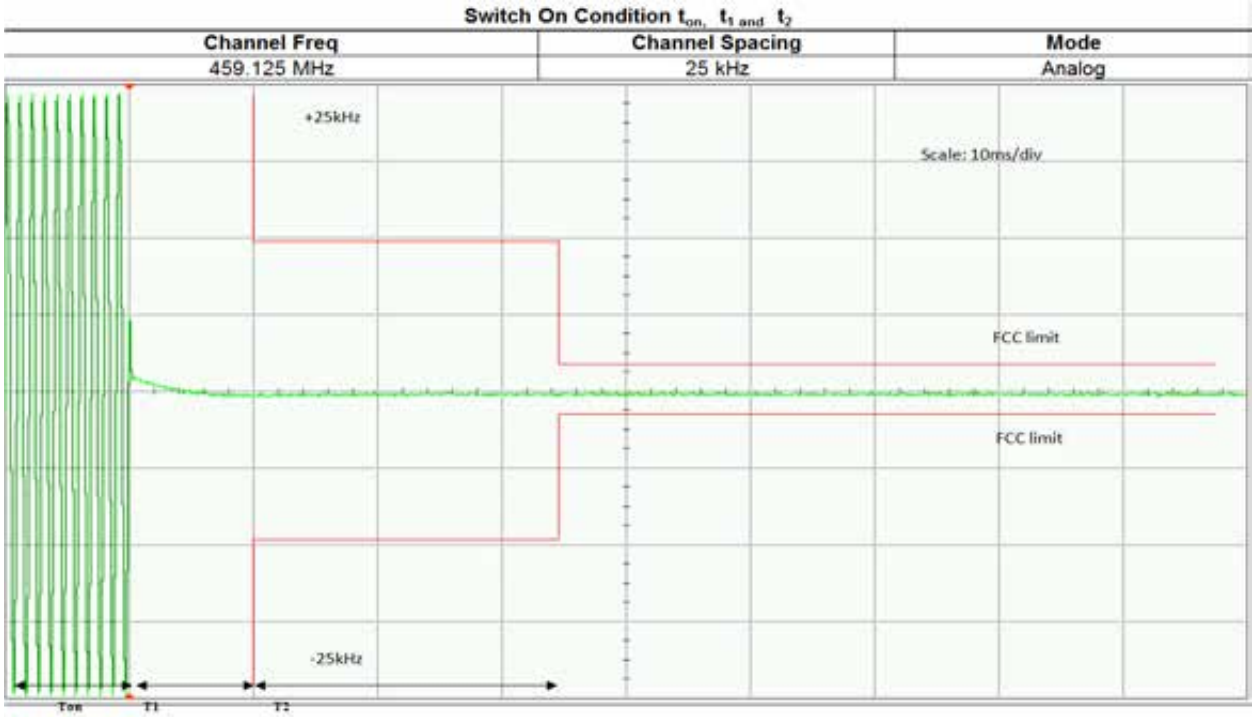
459.125MHz 12.5kHz Key-Up



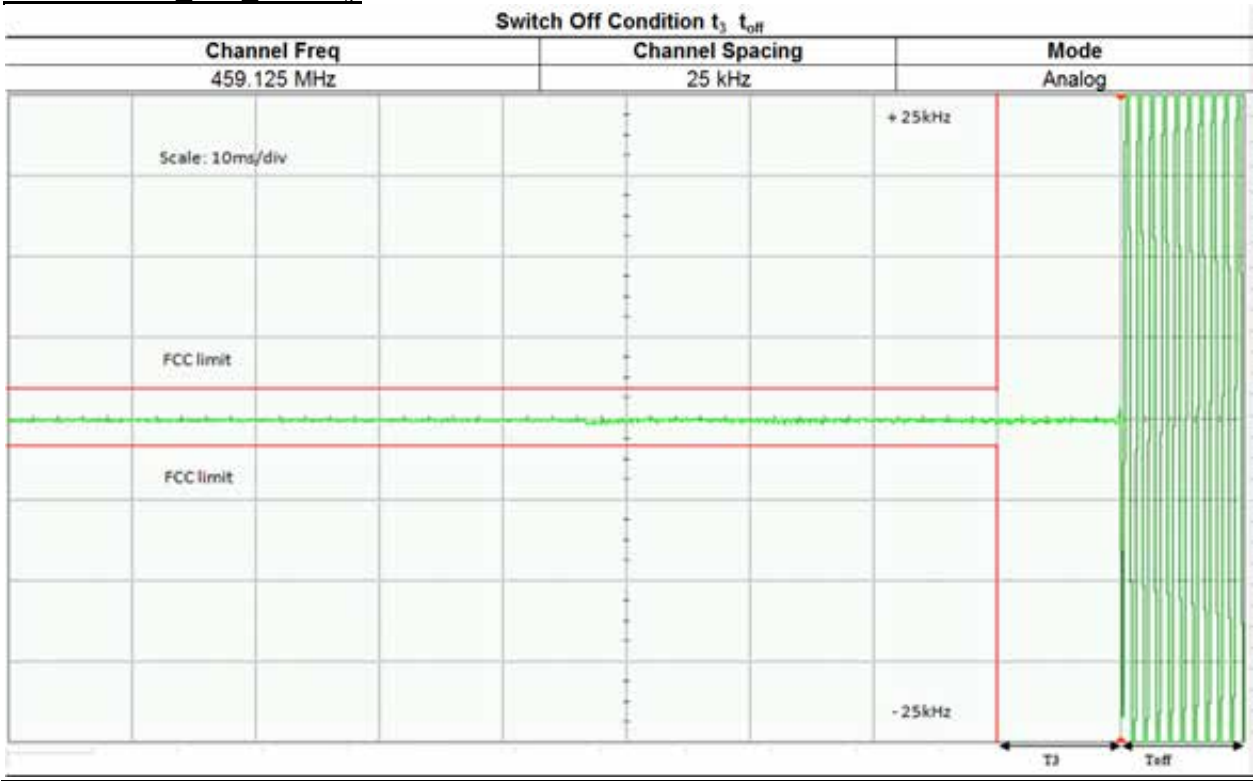
459.125MHz 12.5KHz De-Key



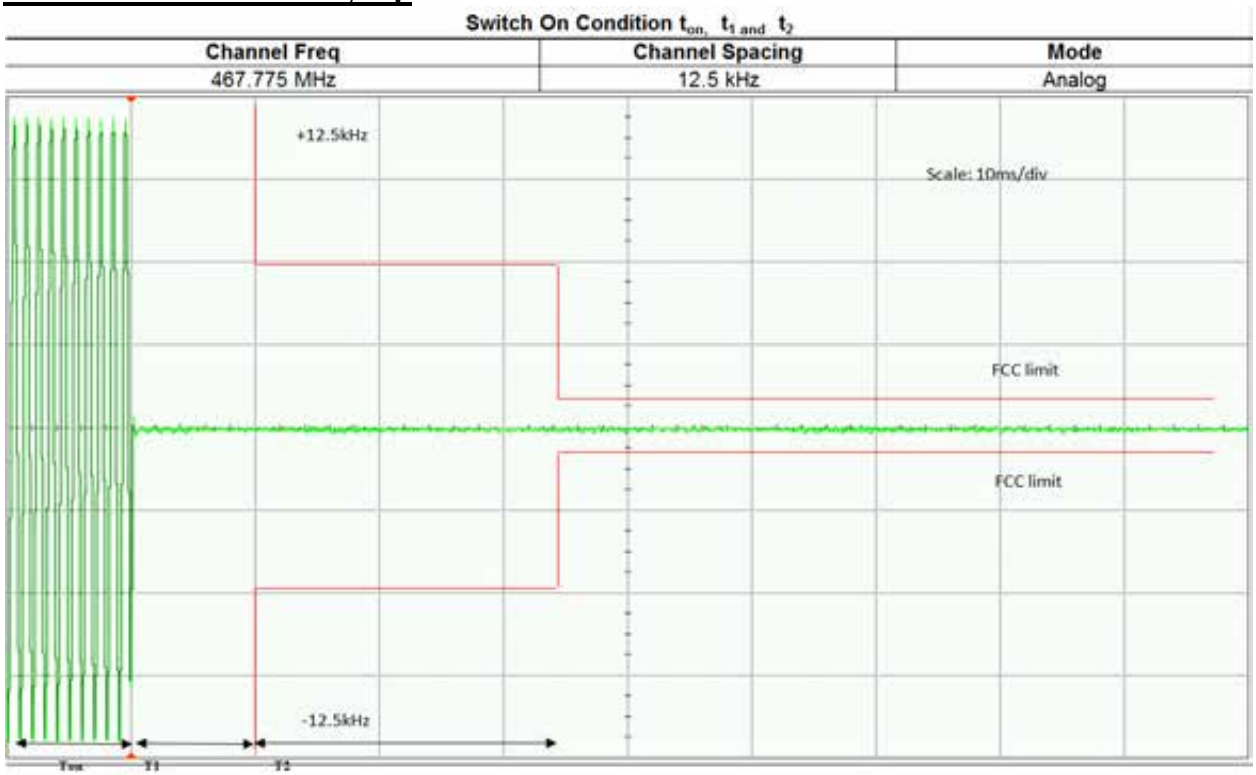
459.125MHz_25k_Key-Up



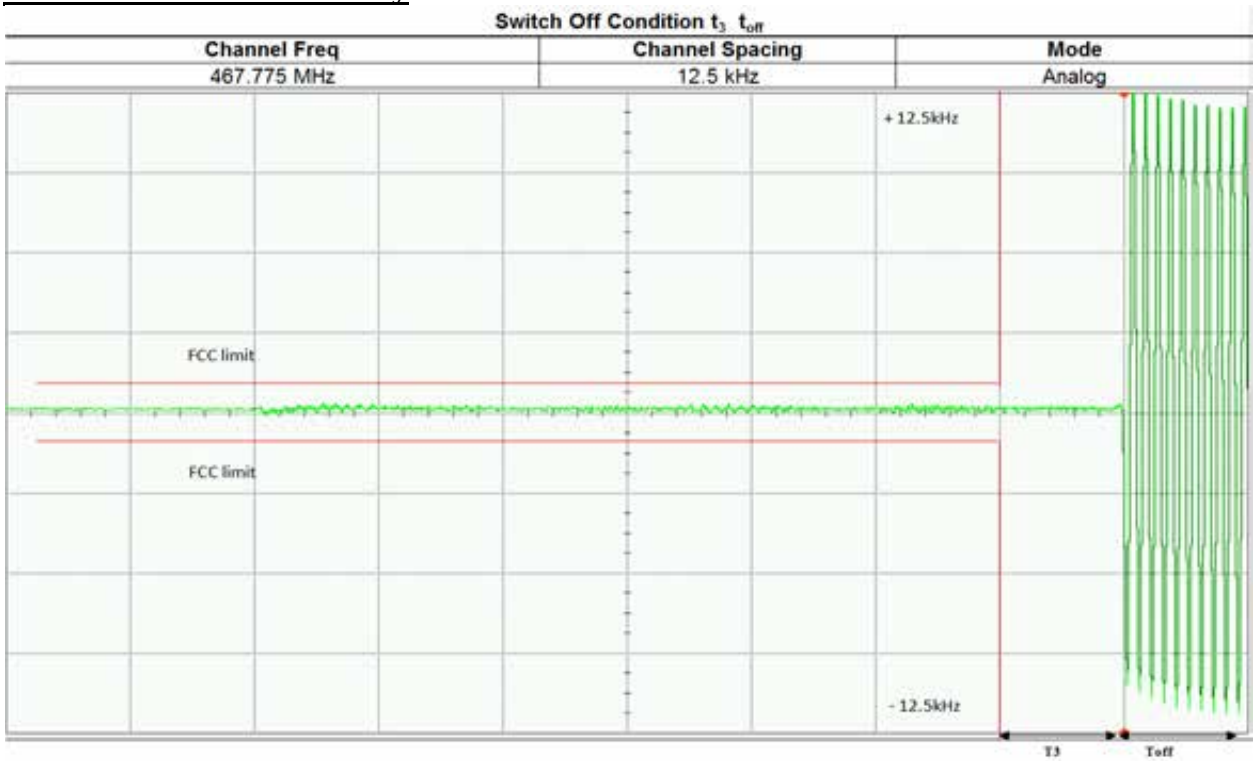
459.125MHz_25k_De-Key



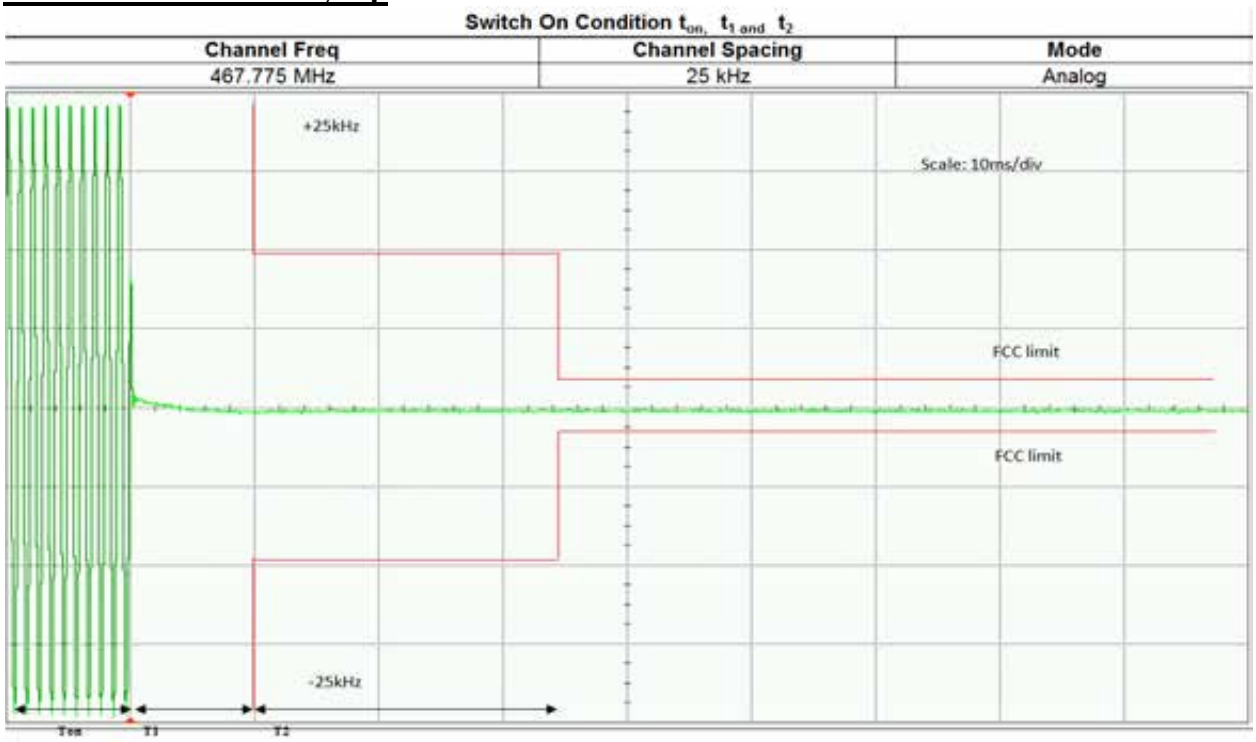
467.775MHz 12.5kHz Key-Up



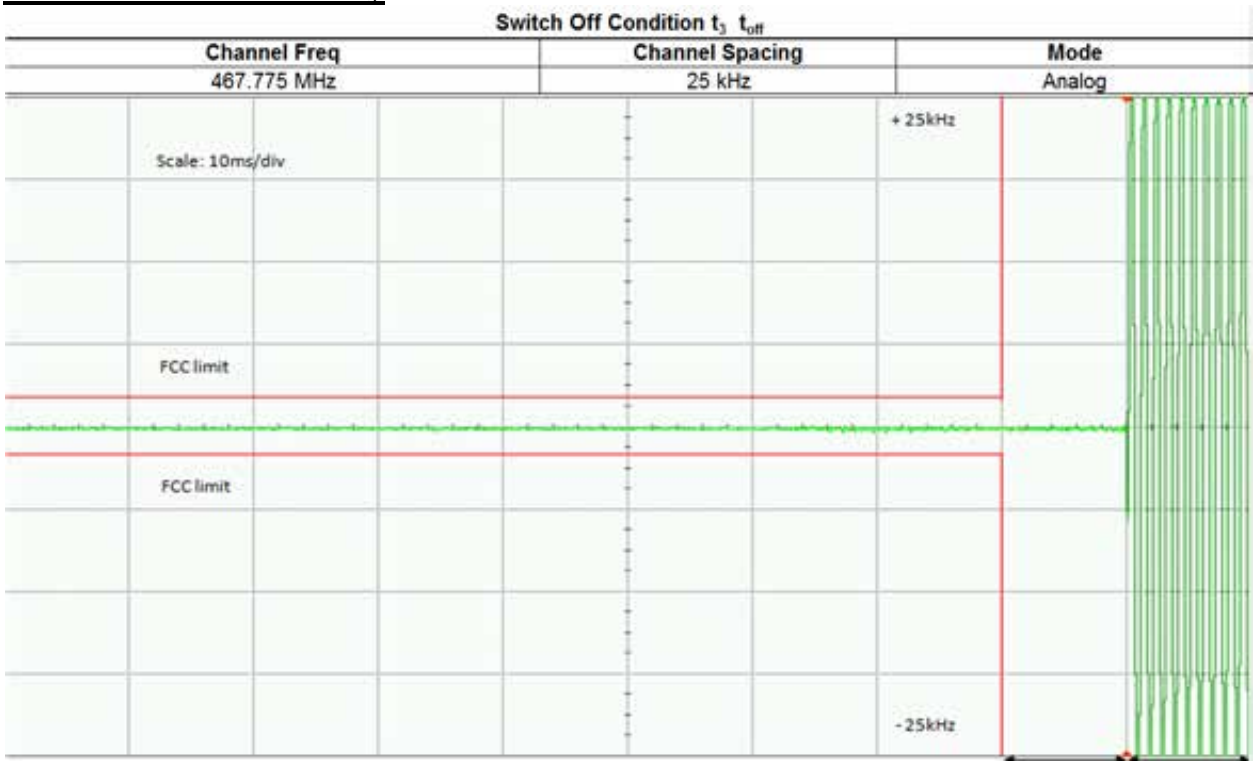
467.775MHz 12.5kHz De-Key



467.775MHz 25kHz Key-Up



467.775MHz 25kHz De-Key



6.8.3. Test Limit

Transmitters designed to operate in the 150-174 MHz and 421-512 MHz frequency bands must maintain transient frequencies within the maximum frequency difference limits during the time intervals indicated:

Time intervals[1] [2]	Maximum frequency difference[3]	All equipment	
		150 to 174 MHz	421 to 512 MHz
Transient Frequency Behavior for Equipment Designed to Operate on 25 kHz Channels			
t_1[4]	±25.0 kHz	5.0 ms	10.0 ms
t_2	±12.5 kHz	20.0 ms	25.0 ms
t_3[4]	±25.0 kHz	5.0 ms	10.0 ms
Transient Frequency Behavior for Equipment Designed to Operate on 12.5 kHz Channels			
t_1[4]	±12.5 kHz	5.0 ms	10.0 ms
t_2	±6.25 kHz	20.0 ms	25.0 ms
t_3[4]	±12.5 kHz	5.0 ms	10.0 ms
Transient Frequency Behavior for Equipment Designed to Operate on 6.25 kHz Channels			
t_1[4]	±6.25 kHz	5.0 ms	10.0 ms
t_2	±3.125 kHz	20.0 ms	25.0 ms
t_3[4]	±6.25 kHz	5.0 ms	10.0 ms

[1] t_{on} is the instant when a 1 kHz test signal is completely suppressed, including any capture time due to phasing.
t_1 is the time period immediately following t_{on}.
t_2 is the time period immediately following t_1.
t_3 is the time period from the instant when the transmitter is turned off until t_{off}.
t_{off} is the instant when the 1 kHz test signal starts to rise.

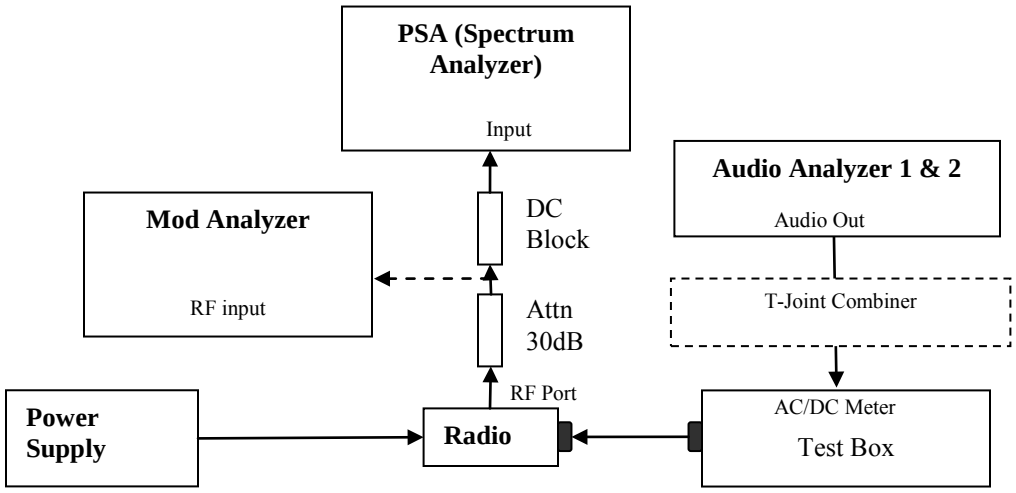
[2] During the time from the end of t_2 to the beginning of t_3, the frequency difference must not exceed the limits specified in §90.213.

[3] Difference between the actual transmitter frequency and the assigned transmitter frequency.

[4] If the transmitter carrier output power rating is 6 watts or less, the frequency difference during this time period may exceed the maximum frequency difference for this time period.

6.9. Adjacent Channel Power

6.9.1. Test Setup (Analog)

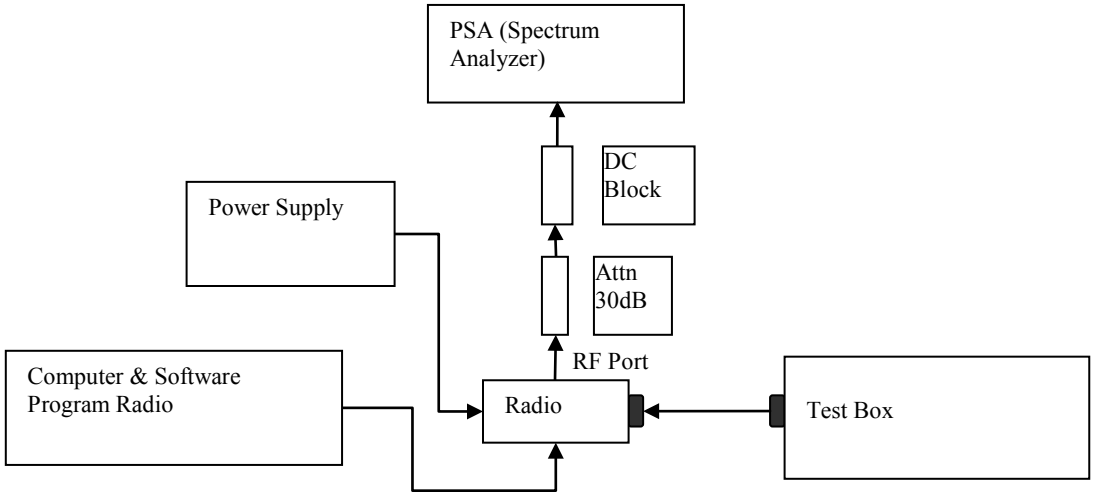


1) The DUT transmitter output port was connected to modulation analyzer.
2) Path loss for the measurement included.
3) Transmit the radio and turn on 1st audio analyzer with audio frequency 650Hz, 50% rated deviation, and record the amplitude value as AmpT1.
4) Turn off Audio analyzer 1 and turn on audio analyzer 2, set the audio frequency to 2.2 kHz and 50% deviation. Record the amplitude as AmpT2.
5) Turn both audio analyzers ON and up 10dB amplitude level.
6) Connect the output to PSA and set to assigned center frequency.
7) Set Span, RBW and VBW as shown in FCC rules part 90.543.
8) Transmit the radio and record the ACP value in dBc.

6.9.2. Test Result

Not Applicable

6.9.3. Test Setup (Digital)



1) Program and set radio to operate in desire test frequency and digital mode with modulation. (4FSK, C4FM, CQPSK or other digital modulation form).
2) Path loss for the measurement included.
3) Prepare setup as per picture.
4) Turn on the ACP Measurement – Press Measure, ACP.
5) Set Span, RBW and VBW as shown in FCC rules part 90.543.
6) Transmit the radio and record the ACP value in dBc.

6.9.4. Test Result

Not Applicable

6.9.5. Test Limit

12.5 kHz Mobile Transmitter ACP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACP relative (dBc)
9.375	6.25	-40
15.625	6.25	-60
21.875	6.25	-60
37.50	25.00	-60
62.50	25.00	-65
87.50	25.00	-65
150.00	100	-65
250.00	100	-65
350.00	100	-65
>400 to 12 MHz	30 (s)	-75
12 MHz to paired receive band	30 (s)	-75
In the paired receive band	30 (s)	-100

25 kHz Mobile Transmitter ACP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACP relative (dBc)
15.625	6.25	-40
21.875	6.25	-60
37.50	25	-60
62.50	25	-65
87.50	25	-65
150.00	100	-65
250.00	100	-65
350.00	100	-65
>400 kHz to 12 MHz	30 (s)	-75
12 MHz to paired receive band	30 (s)	-75
In the paired receive band	30 (s)	-100

12.5 kHz Base Transmitter ACP Requirements

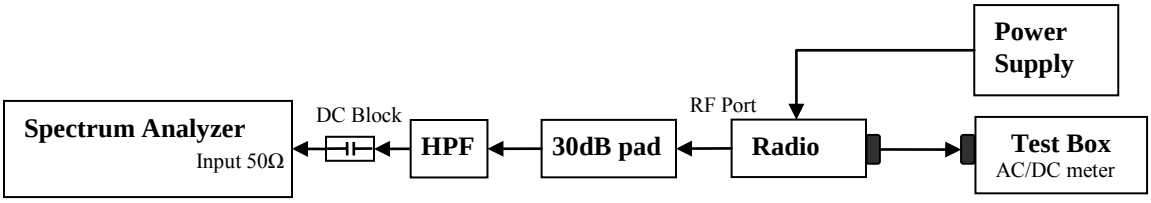
Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACP (dBc)
9.375	6.25	-40
15.625	6.25	-60
21.875	6.25	-60
37.5	25	-60
62.5	25	-65
87.5	25	-65
150	100	-65
250	100	-65
350.00	100	-65
>400 kHz to 12 MHz	30 (s)	-80
12 MHz to paired receive band	30 (s)	-80
In the paired receive band	30 (s)	[1]-85

25 kHz Base Transmitter ACP Requirements

Offset from center frequency (kHz)	Measurement bandwidth (kHz)	Maximum ACP (dBc)
15.625	6.25	-40
21.875	6.25	-60
37.5	25	-60
62.5	25	-65
87.5	25	-65
150	100	-65
250	100	-65
350	100.00	-65
>400 kHz to 12 MHz	30 (s)	-80
12 MHz to paired receive band	30 (s)	-80
In the paired receive band	30 (s)	[1]-85

6.10. Conducted Spurious Emission

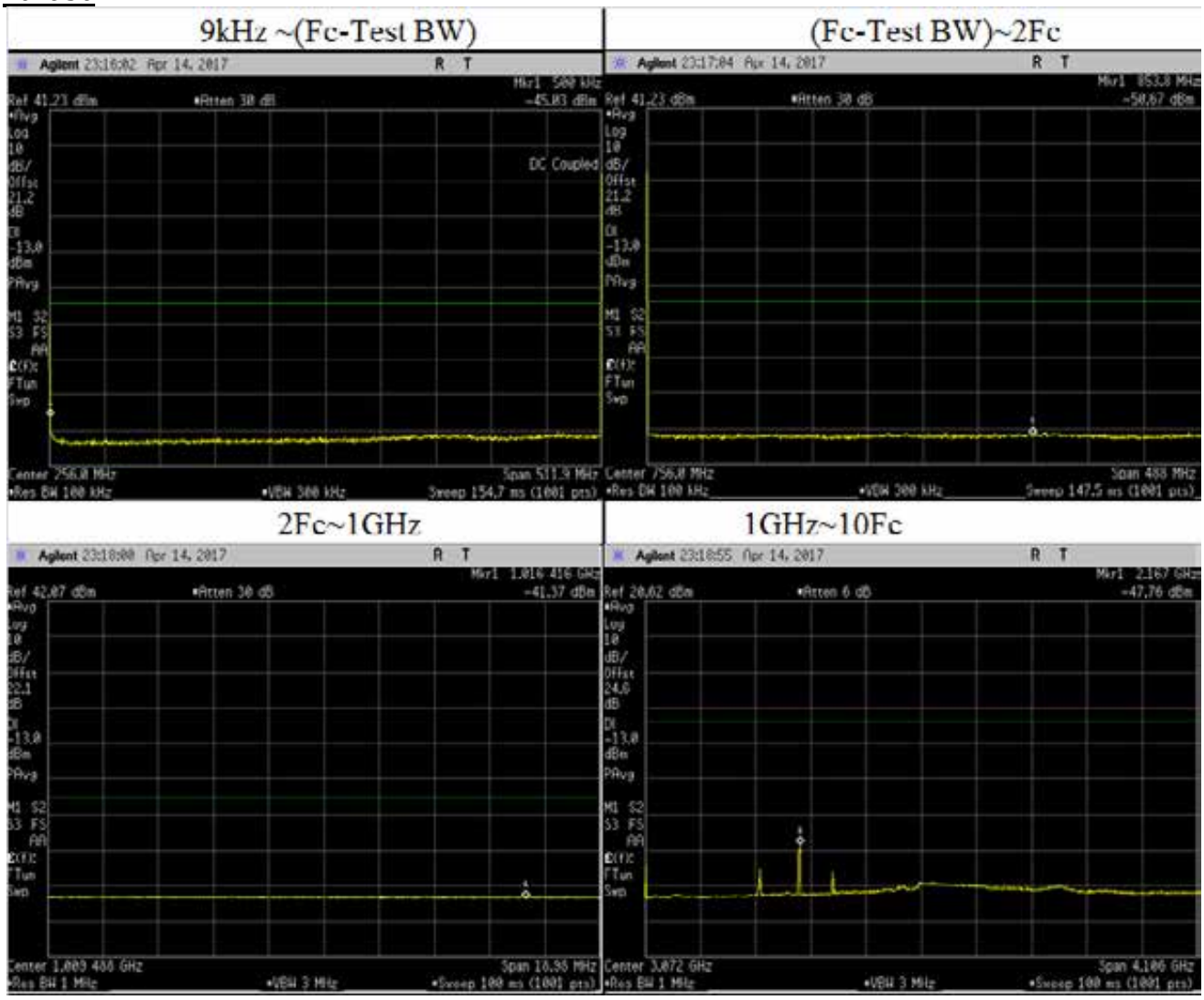
6.10.1. Test Setup



1) The DUT transmitter output port was connected to Spectrum Analyzer with above setup.
2) Program and set radio to operate in desire test frequency and mode. (Analog / digital modulation form).
3) Adjust the PSA RBW = 100kHz for spur emission below 1GHz, and 1MHz for spur emission above 1GHz.
4) Set the Ref offset from the pathloss offset calibration file.
5) Adjust the center frequency of the spectrum analyzer for incremental coverage of the range from:
   (a) The lowest radio frequency to Fc – Test BW
   (b) Fc + Test BW to Freq < 2Fc.
6) Record the levels of spurious emissions and dekey the UUT.
7) Turn On HPF path and Key up the UUT.
8) Adjust the PSA Freq for incremental coverage of range from 2Fc to 10Fc.
9) The levels recorded are the absolute levels of conducted spurious emissions in dBm.

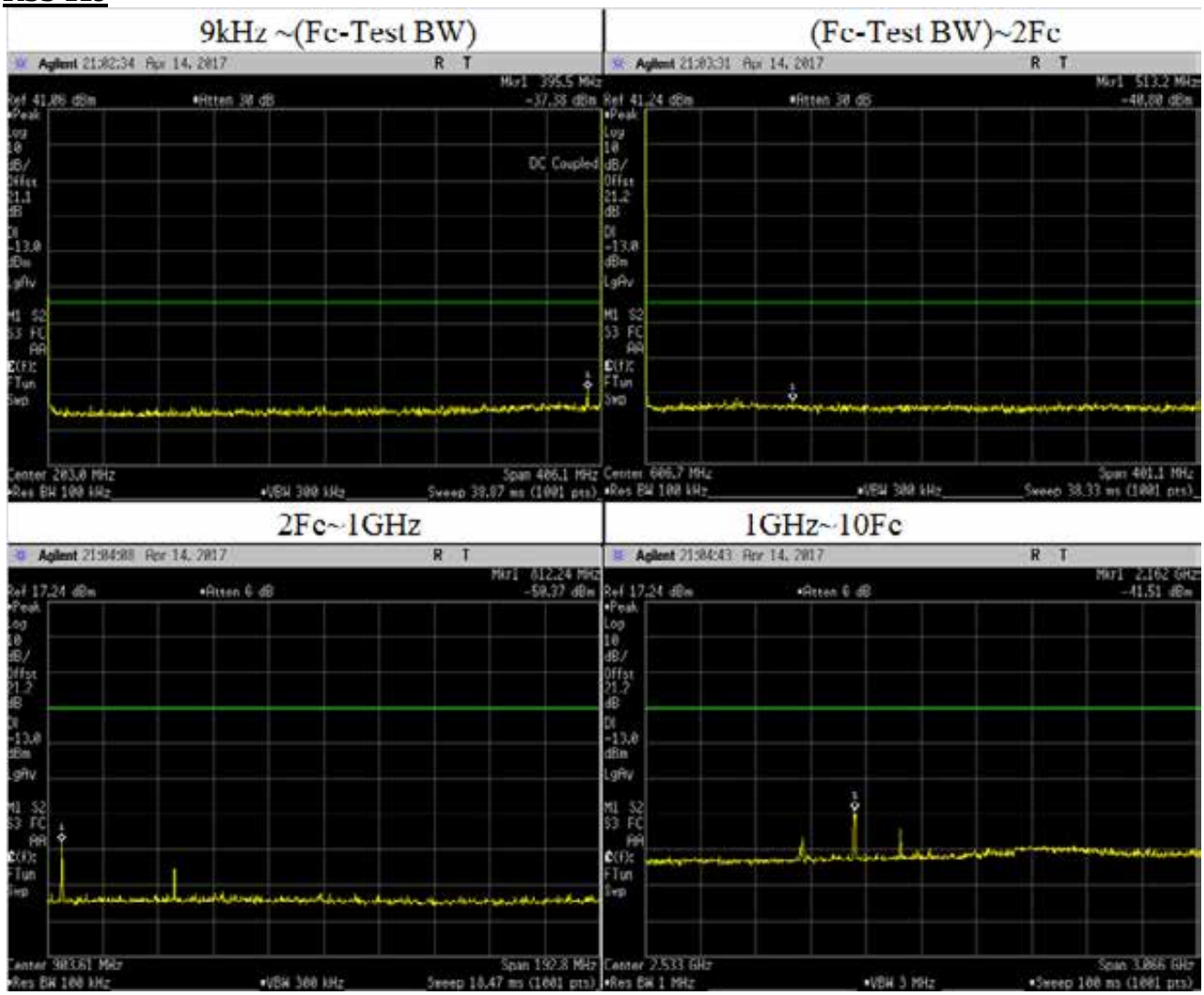
6.10.2. Test Result (Analog)

<u>Analog:</u> 406.1125 MHz, 25.0 kHz Channel Spacing, Max Power (Not for IC Review)
<u>Part 90</u>



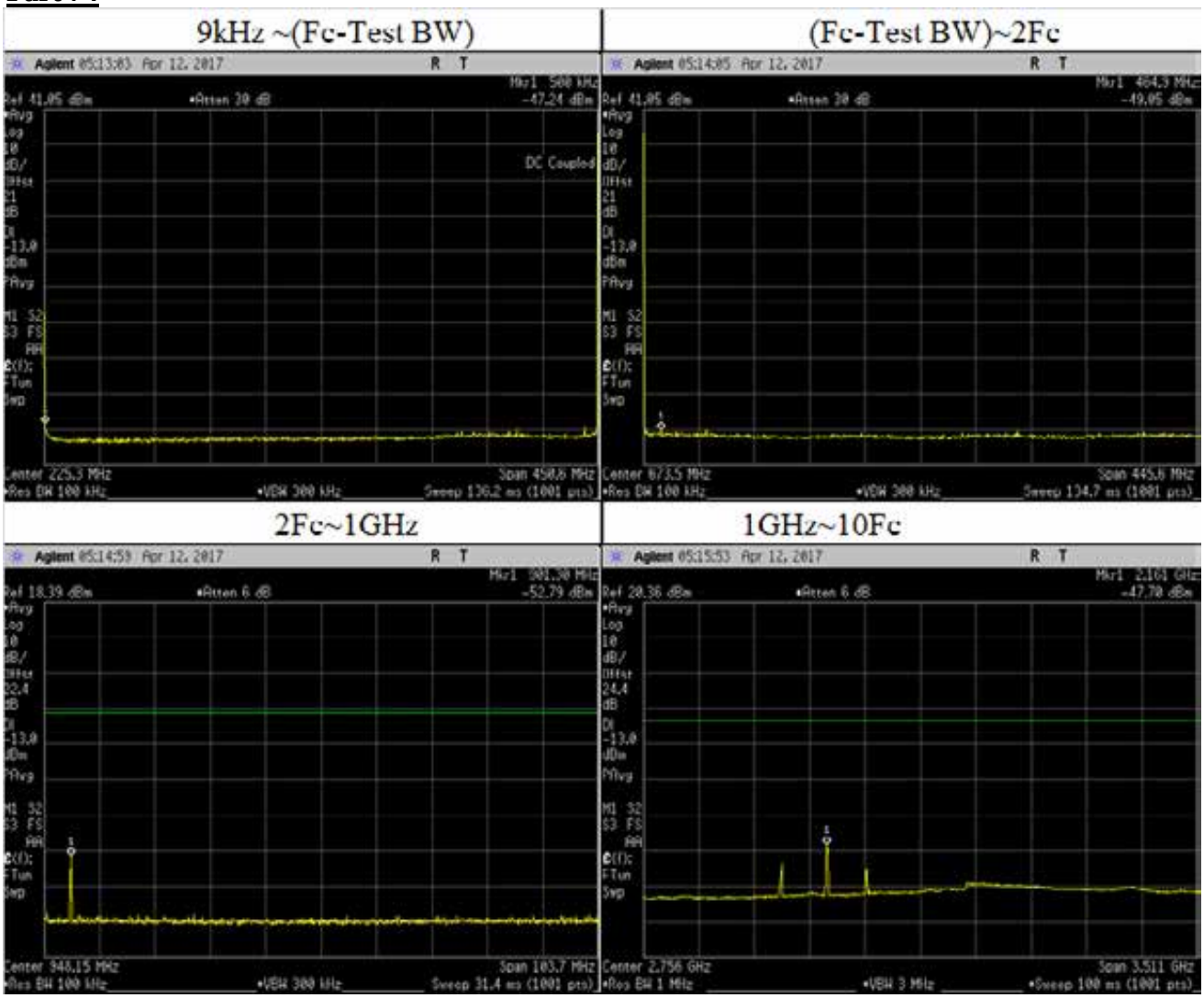
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.41 395.11 1.23 360.22 354.95	-45.23 -46.18 -49.93 -49.17 -49.43	-13	Pass
(Fc-Test BW)~2Fc	463.86 471.47 475.48 483.89 688.23	-49.20 -49.22 -49.46 -49.60 -49.60	-13	Pass
2Fc~1GHz	812.04 908.14 824.17 929.32 864.61 812.23	-63.16 -63.94 -70.27 -70.35 -70.44 -52.98	-13	Pass
1GHz~10Fc	2160.90 2167.03 2412.07 1876.04 2405.95 1218.34 1624.45 2030.56 2436.68 2842.79 3248.90 3655.01 4061.12	-46.32 -46.95 -53.51 -53.81 -54.49 -61.63 -62.28 -61.75 -61.27 -60.56 -59.18 -60.23 -59.80	-13	Pass

Analog: 406.1125 MHz, 25.0 kHz Channel Spacing, Max Power (Not for FCC Review)
RSS 119



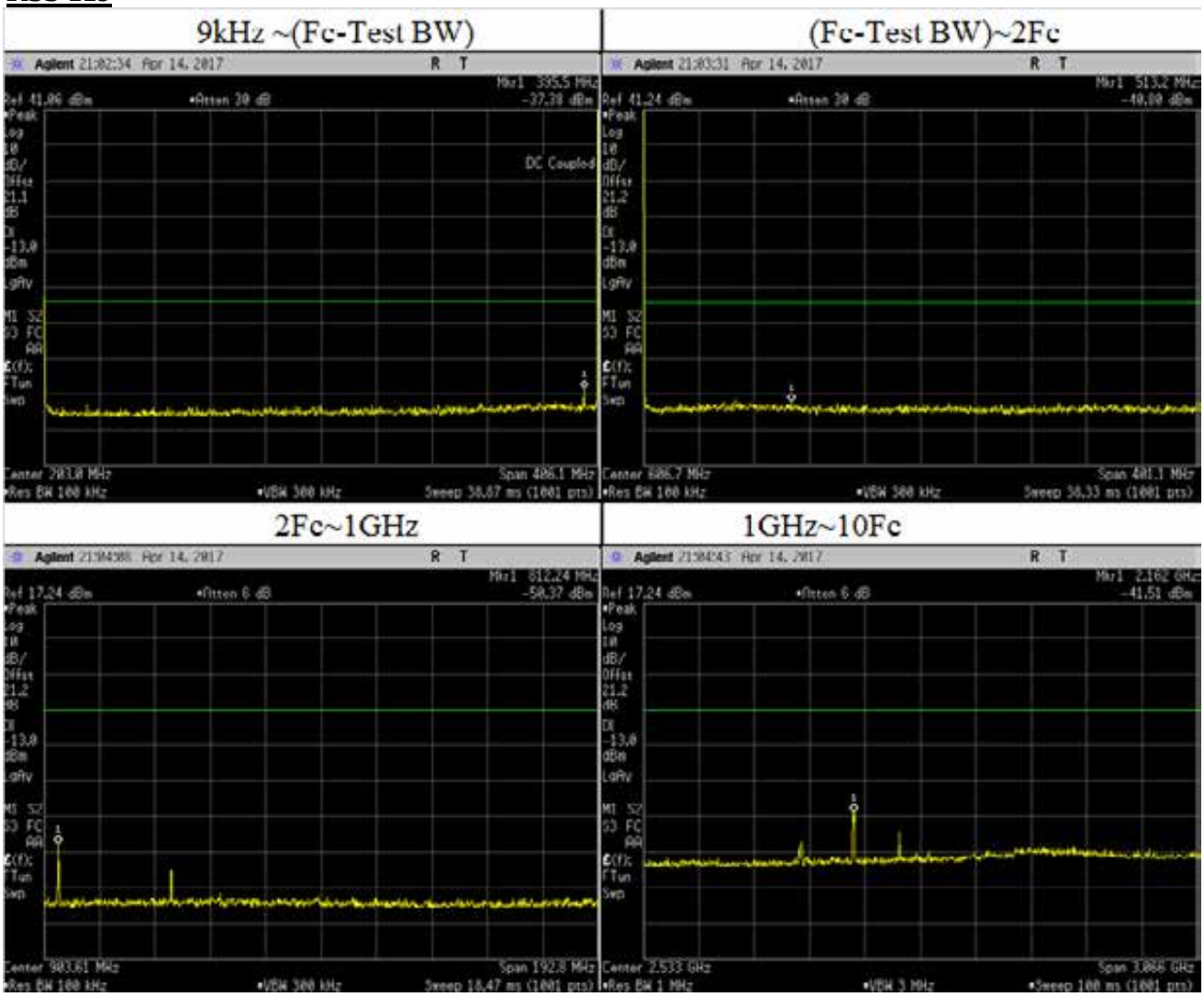
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	395.50	-37.38	-13	Pass
(Fc-Test BW)~2Fc	513.20	-40.80	-13	Pass
2Fc~1GHz	812.24	-50.37	-13	Pass
1GHz~10Fc	2162.00	-41.51	-13	Pass

Analog: 450.65 MHz, 25.0 kHz Channel Spacing, Max Power (Not for IC Review)
Part 74



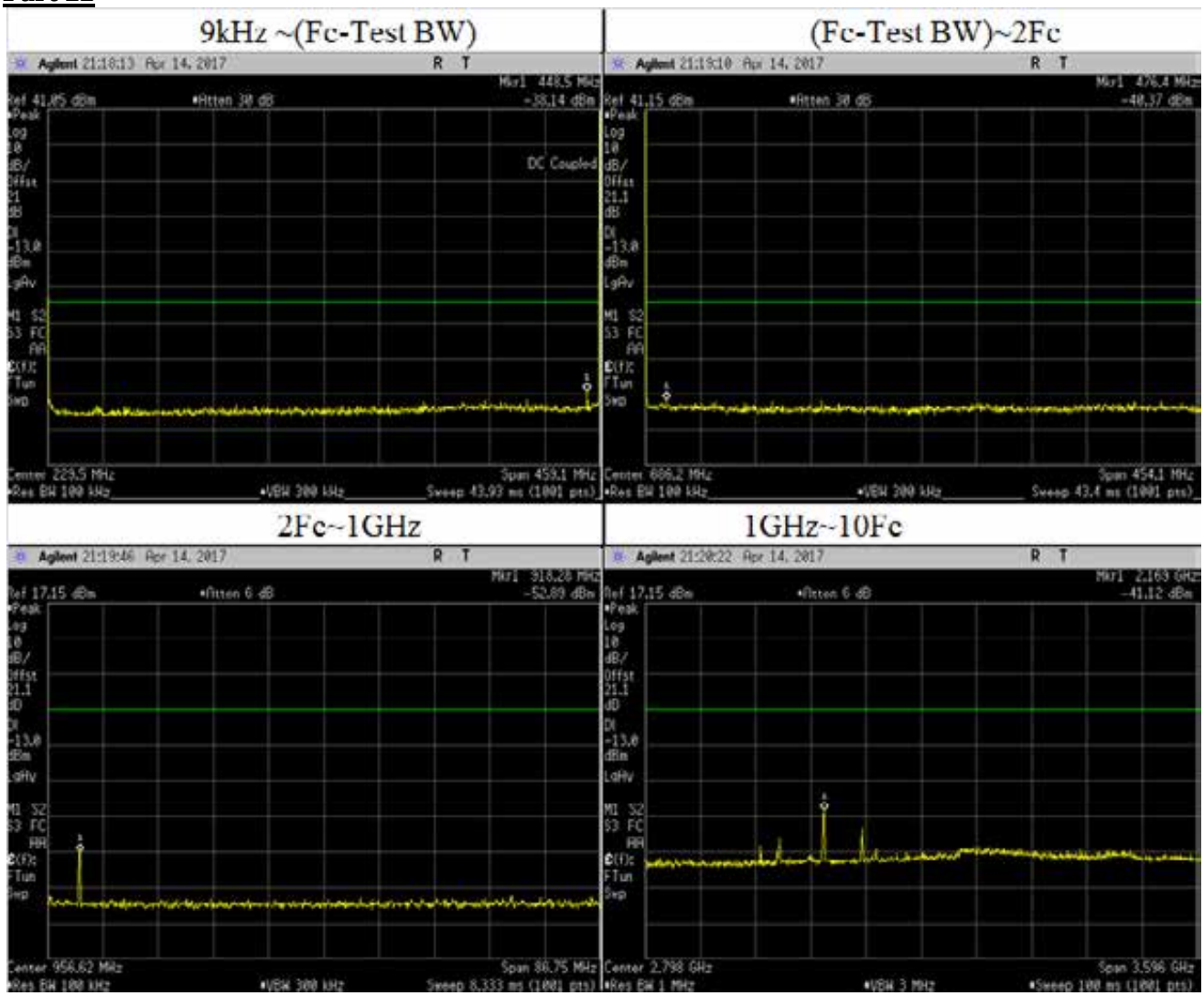
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.41 395.11 360.63 372.80 366.31	-46.85 -48.69 -48.91 -49.66 -49.68	-13	Pass
(Fc-Test BW)~2Fc	467.46 463.46 475.08 740.72 493.11	-49.25 -49.55 -49.56 -49.62 -49.73	-13	Pass
2Fc~1GHz	812.04 840.16 985.94 884.07 868.08 812.23	-64.03 -70.17 -70.60 -70.64 -70.78 -53.11	-13	Pass
1GHz~10Fc	2160.90 2167.03 2167.03 2418.20 1869.91 1218.34 1624.45 2030.56 2436.68 2842.79 3248.90 3655.01 4061.12	-47.43 -48.02 -52.29 -53.76 -57.58 -61.95 -62.65 -61.91 -61.73 -60.86 -59.26 -60.49 -60.01	-13	Pass

Analog: 450.65 MHz, 25.0 kHz Channel Spacing, Max Power (Not for FCC Review)
RSS 119



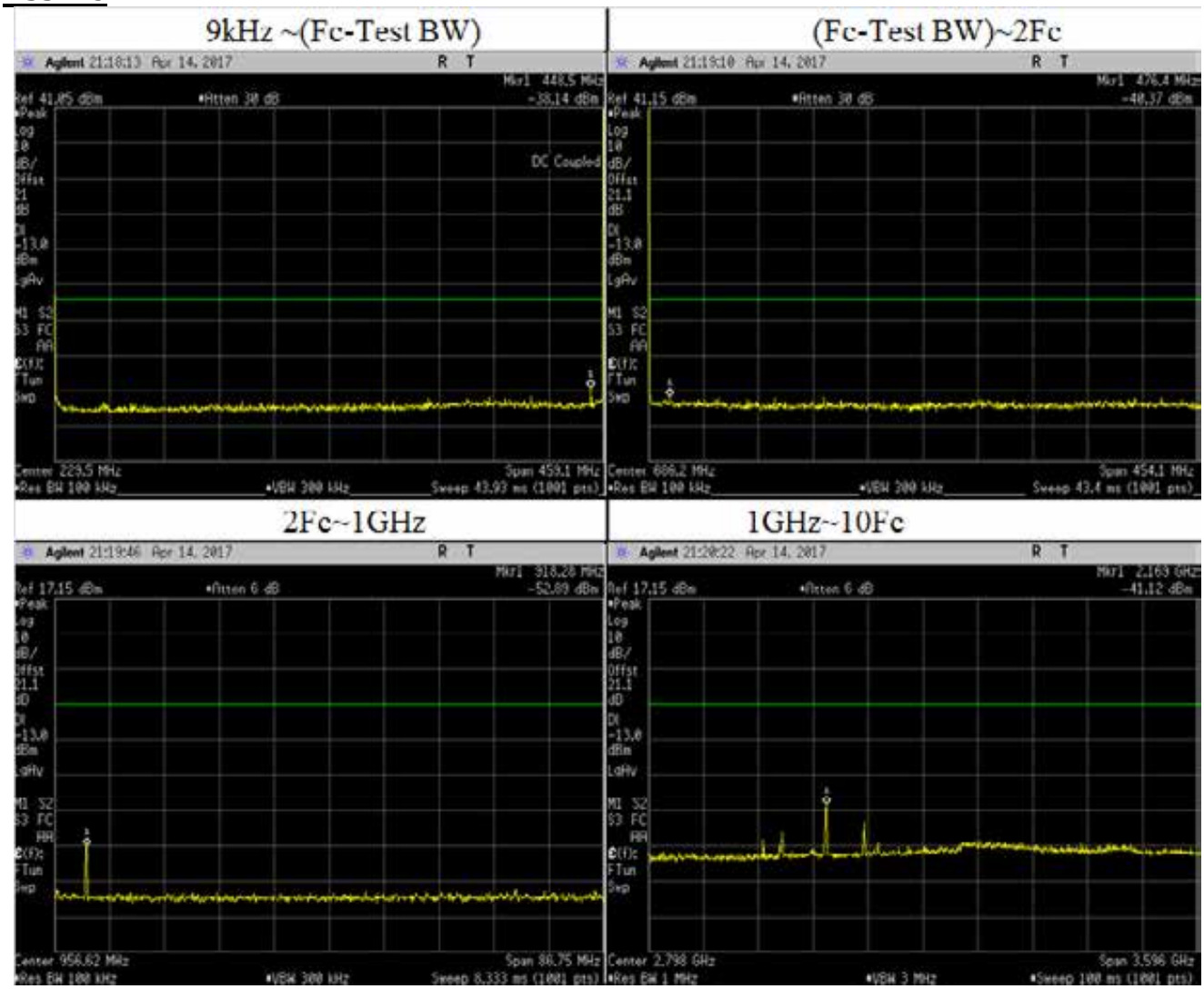
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	439.80	-37.96	-13	Pass
(Fc-Test BW)~2Fc	812.50	-41.04	-13	Pass
2Fc~1GHz	901.28	-51.92	-13	Pass
1GHz~10Fc	2162.00	-40.61	-13	Pass

Analog: 459.125 MHz, 25.0 kHz Channel Spacing, Max Power (Not for IC Review)
Part 22



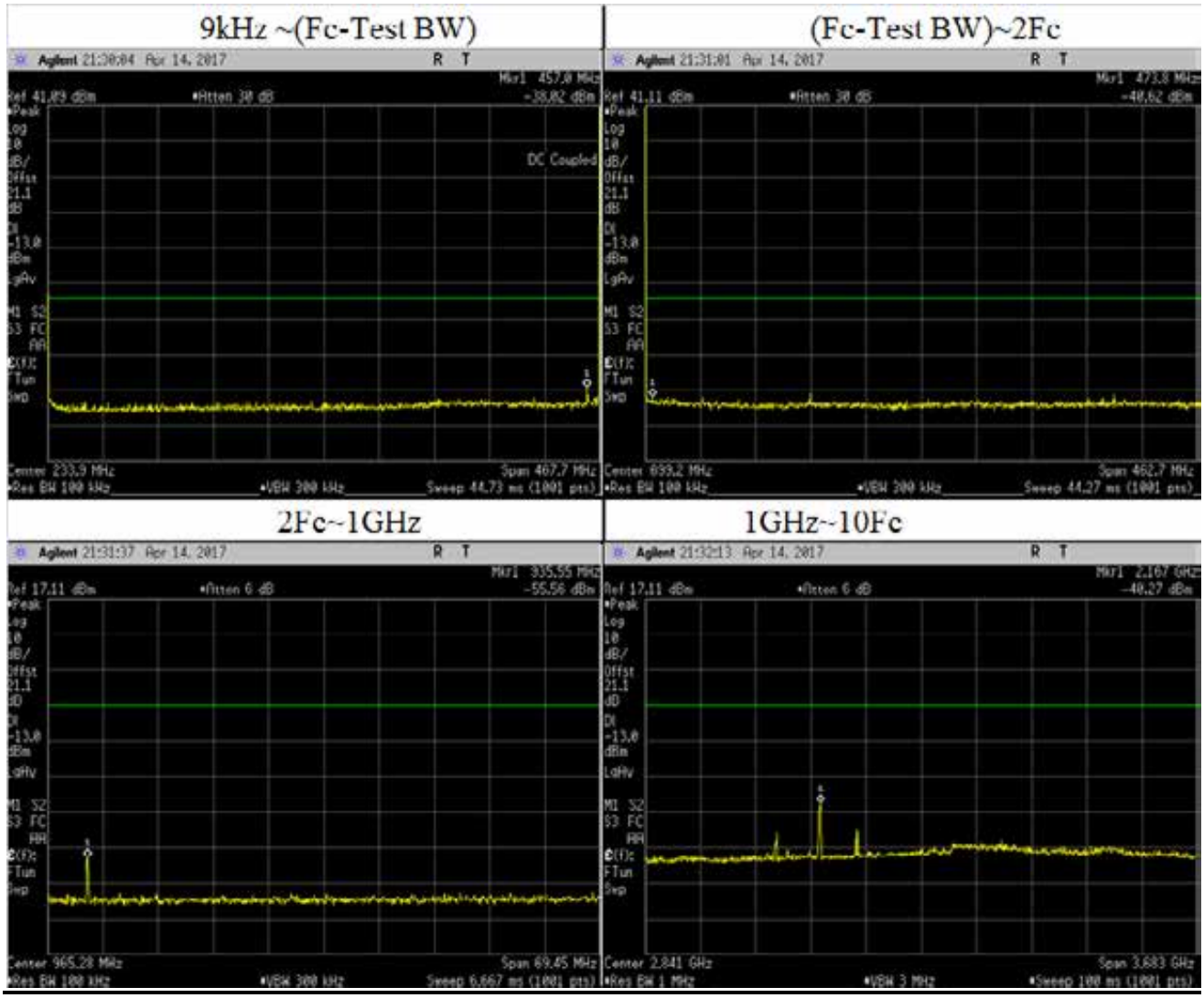
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	448.5 454.9181 393.3987 307.547 358.5071	-38.14 -41.589 -41.623 -41.653 -41.665	-13	Pass
(Fc-Test BW)~2Fc	540.888 495.9321 483.2173 854.217 828.3333	-40.664 -41.036 -41.051 -41.096 -41.136	-13	Pass
2Fc~1GHz	918.36325 918.103 988.97775 968.85175 989.0645 977.787	-56.791 -62.313 -64.983 -65.099 -65.103 -65.545	-13	Pass
1GHz~10Fc	2168.7 2161.508 2165.104 2157.912 2413.228 2402.44 1877.424 2409.632 3348.188 4096.156 1873.828 3171.984 3283.46	-41.712 -43.069 -44.731 -46.801 -47.077 -50.401 -50.51 -50.96 -52.813 -52.966 -53.06 -53.091 -53.17	-13	Pass

<u>Analog:</u> 459.125 MHz, 25.0 kHz Channel Spacing, Max Power (Not for FCC Review)
<u>RSS 119</u>



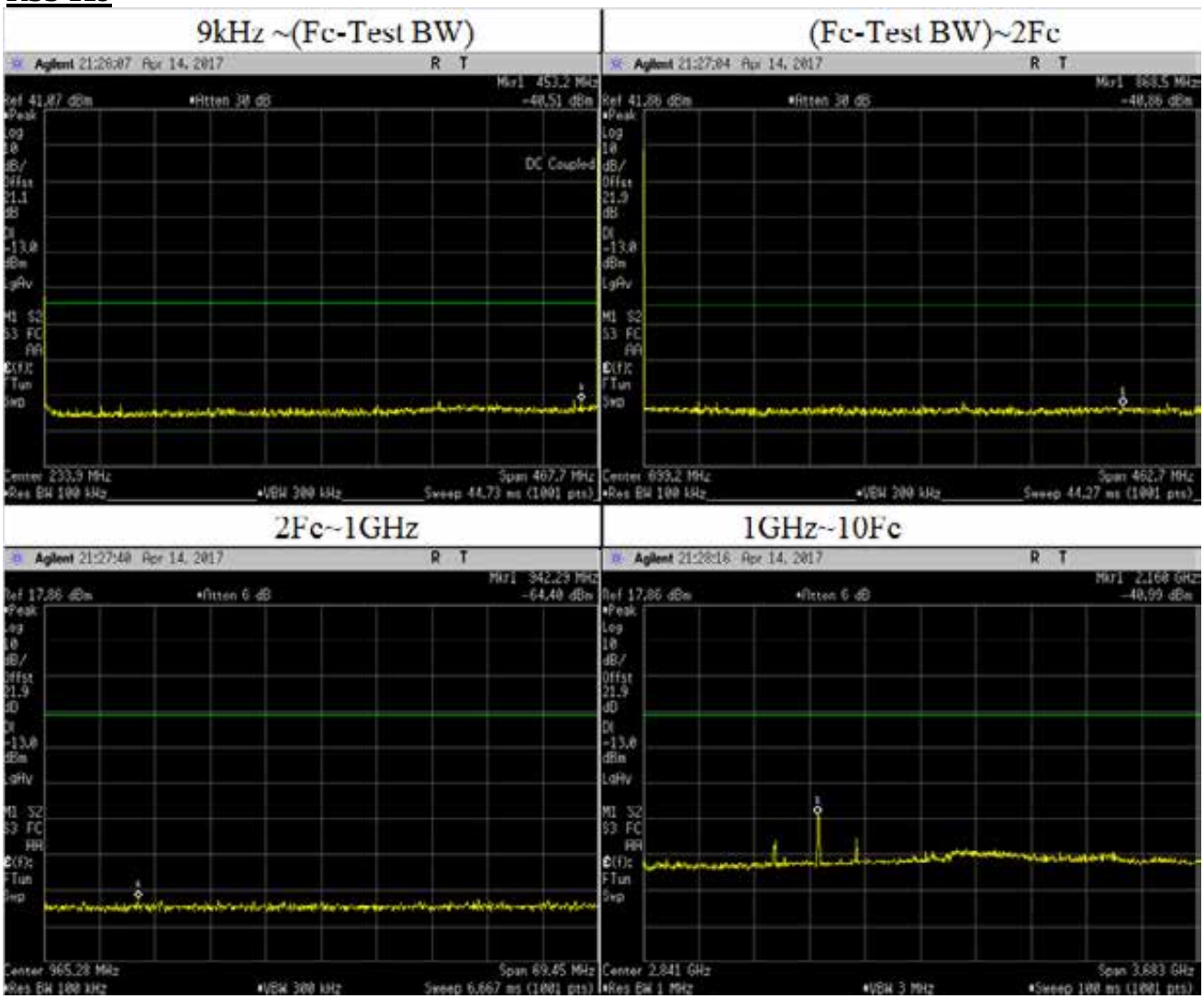
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	448.50	-38.14	-13	Pass
(Fc-Test BW)~2Fc	476.40	-40.37	-13	Pass
2Fc~1GHz	918.28	-52.89	-13	Pass
1GHz~10Fc	2169.00	-41.12	-13	Pass

Analog: 467.775 MHz, 25.0 kHz Channel Spacing, Max Power (Not for IC Review)
Part 80



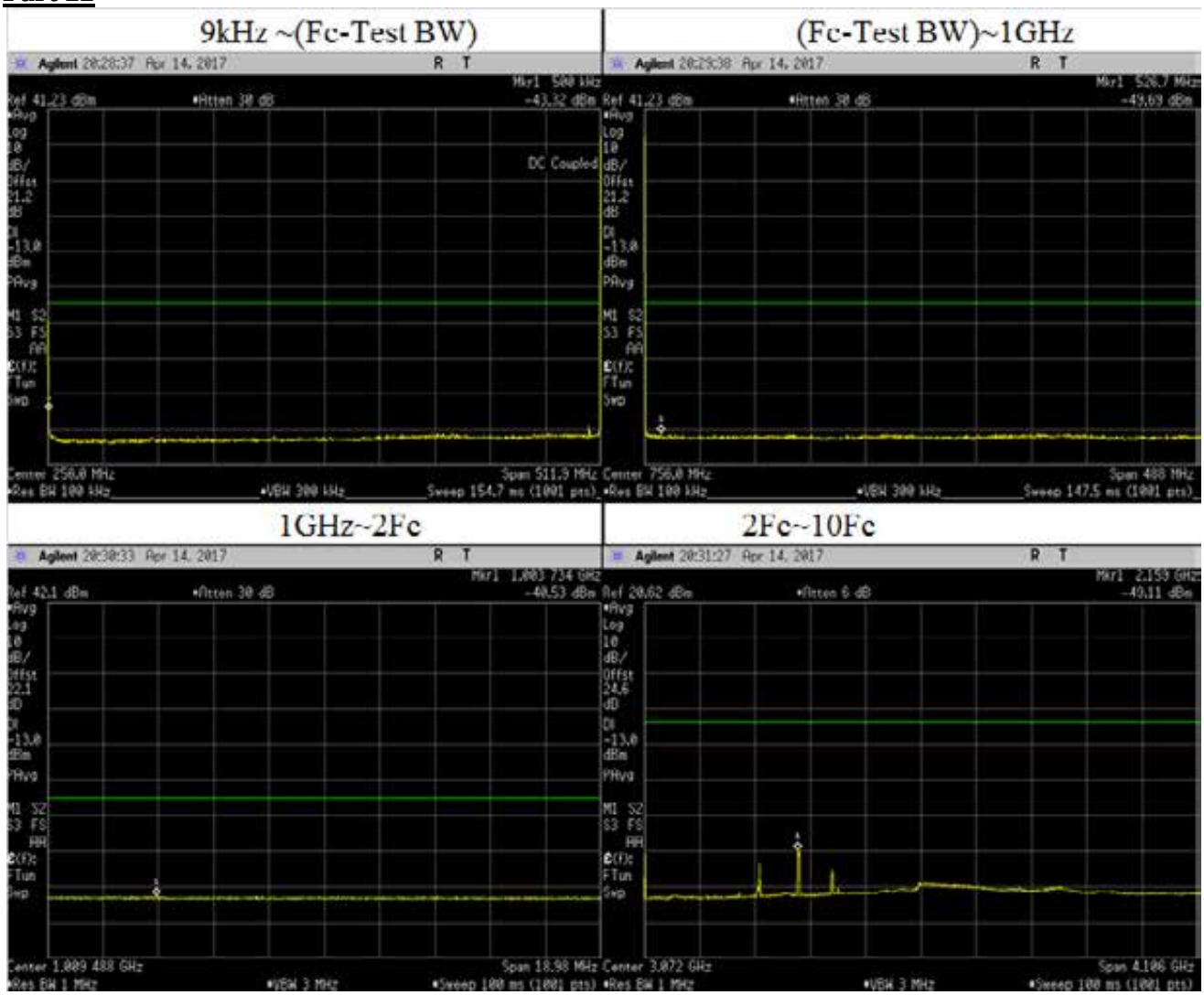
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	466.8146 0.9854 370.0007 350.825 1.4531	-40.518 -40.593 -40.634 -40.858 -41.018	-13	Pass
(Fc-Test BW)~2Fc	503.0152 568.2559 880.5784 745.9327 610.3616	-40.422 -40.43 -40.755 -40.765 -40.779	-13	Pass
2Fc~1GHz	935.48595 935.62485 935.4165 935.6943 962.502 1000.005	-56.009 -56.273 -63.048 -63.519 -63.94 -64.655	-13	Pass
1GHz~10Fc	2159.645 2163.328 2155.962 2167.011 2170.694 3154.055 1876.054 3095.127 3054.614 3124.591 3249.813 3246.13 3338.205	-41.406 -41.657 -43.74 -44.004 -48.404 -51.639 -51.741 -51.92 -52.432 -52.443 -52.916 -52.93 -53.112	-13	Pass

<u>Analog:</u> 467.775 MHz, 25.0 kHz Channel Spacing, Max Power (Not for FCC Review)
RSS 119



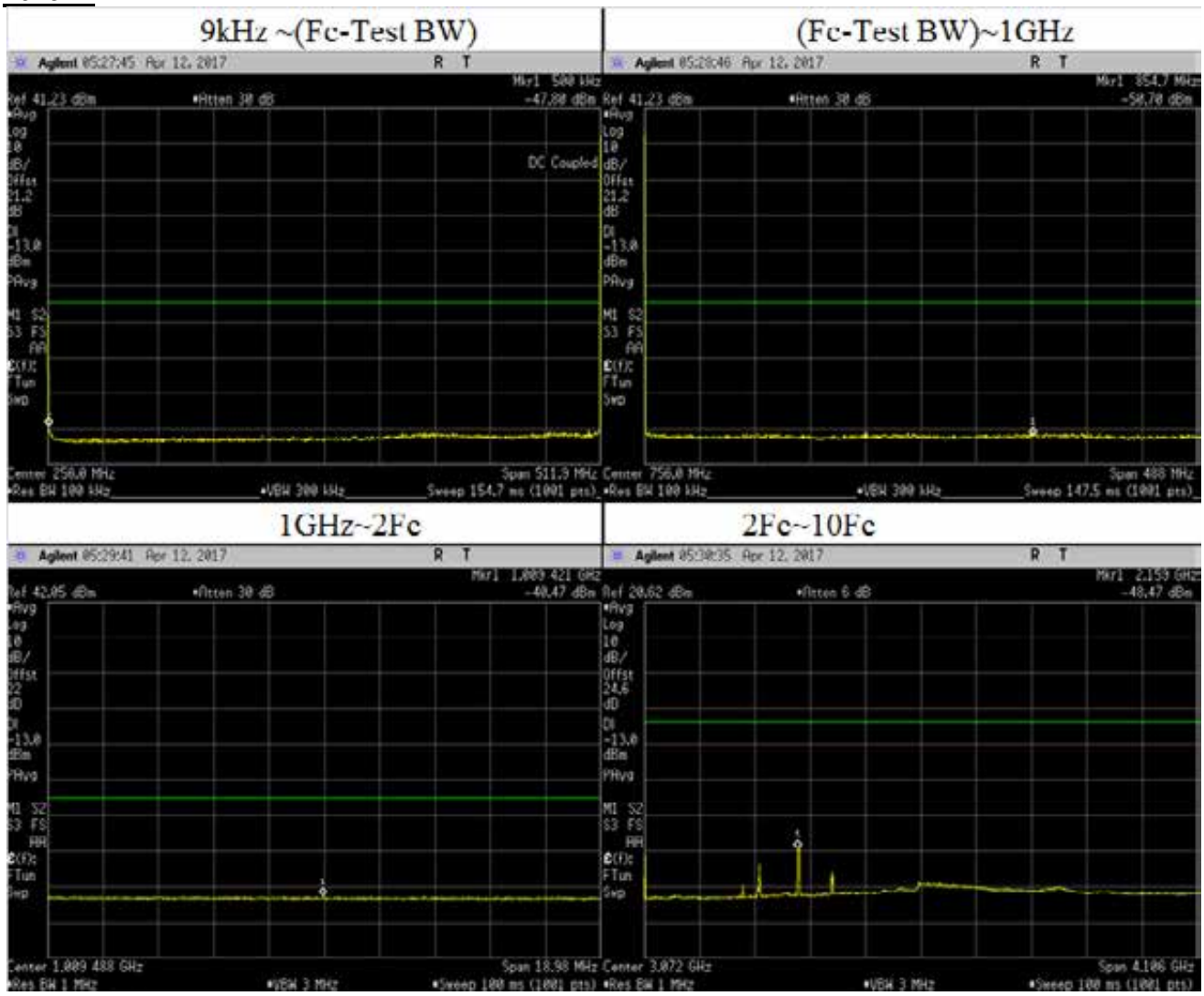
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	453.20	-40.52	-13	Pass
(Fc-Test BW)~2Fc	868.50	-40.86	-13	Pass
2Fc~1GHz	942.29	-64.40	-13	Pass
1GHz~10Fc	2160.00	-40.99	-13	Pass

Analog: 511.9875 MHz, 25.0 kHz Channel Spacing, Max Power (Not for IC Review)
Part 22



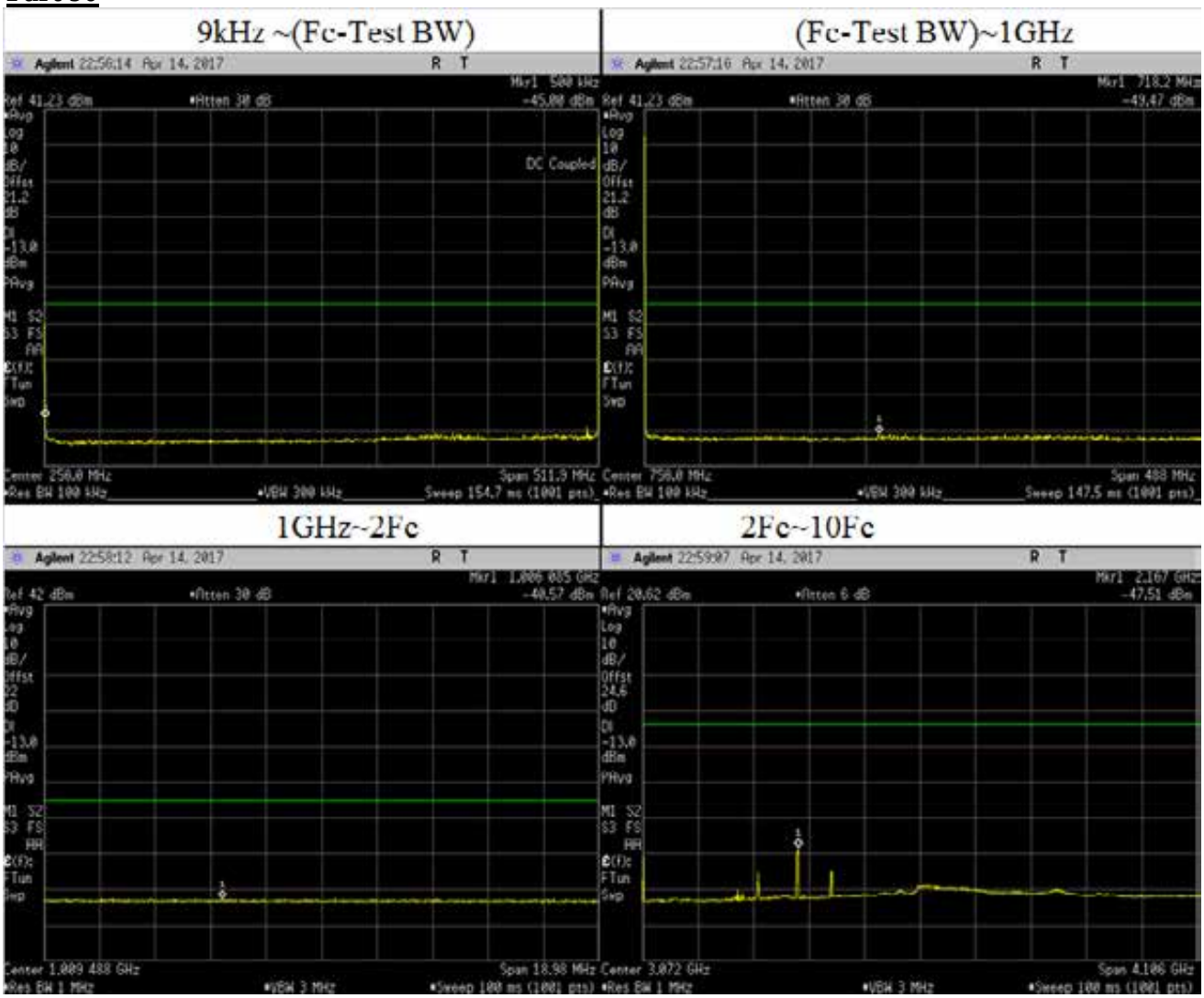
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.52 500.69 2.05 373.85 450.57	-43.32 -47.44 -49.51 -49.74 -49.79	-13	Pass
(Fc-Test BW)~1GHz	526.66 859.12 861.56 876.67 827.92	-49.69 -49.73 -49.78 -49.86 -49.92	-13	Pass
1GHz~2Fc	1003.73 1001.25 1013.38 1002.12 1002.45	-40.53 -40.54 -40.56 -40.57 -40.58	-13	Pass
2Fc~10Fc	2159.27 2167.48 1876.25 2413.59 3061.67 1023.98 1535.96 2047.95 2559.94 3071.93 3583.91 4095.90 4607.89 5119.87	-49.11 -49.26 -52.90 -54.91 -58.38 -52.89 -62.34 -61.55 -60.96 -58.55 -60.00 -59.54 -61.34 -61.15	-13	Pass

Analog: 511.9875 MHz, 25 kHz Channel Spacing, Max Power (Not for IC Review)
Part 74



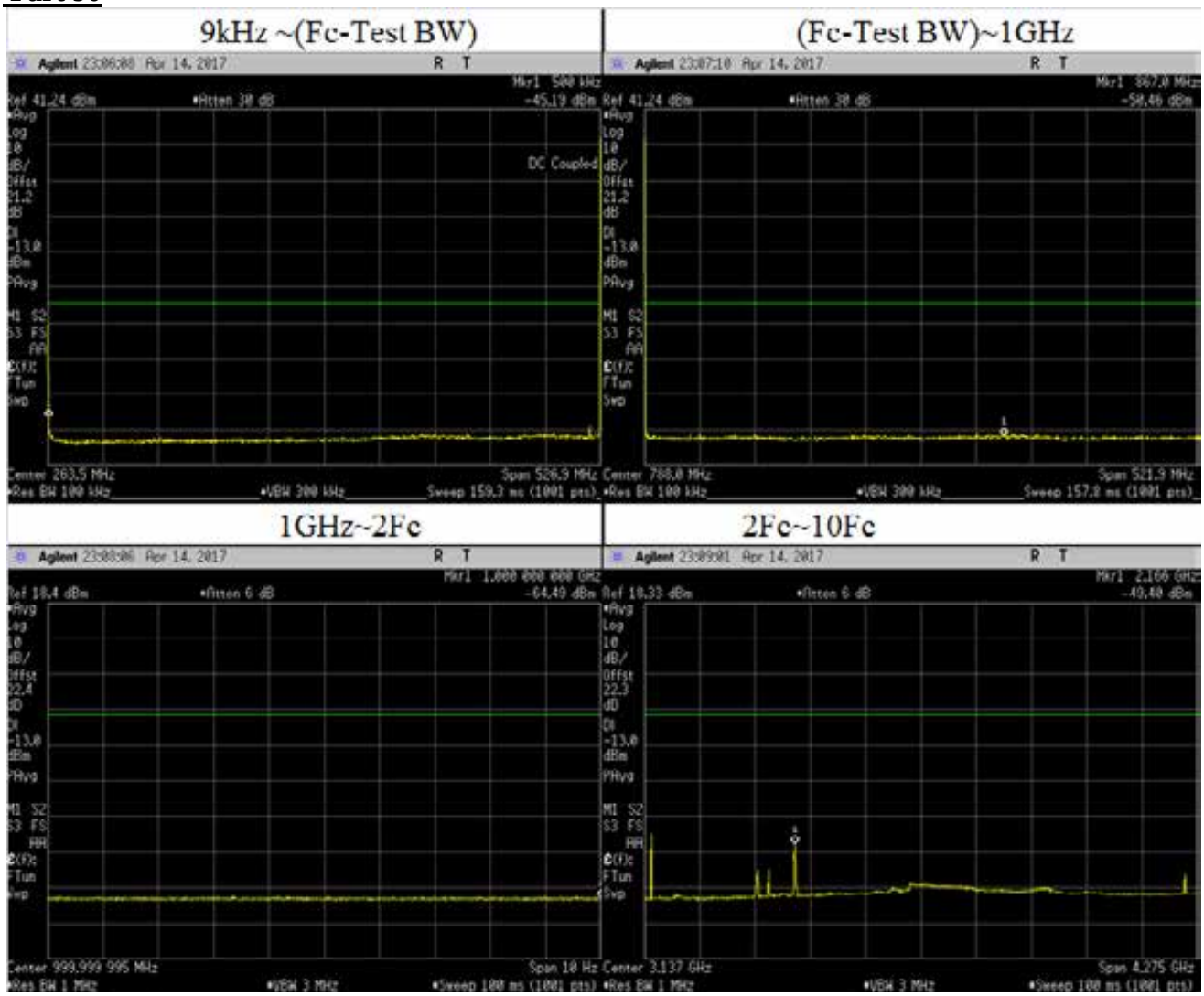
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.52 500.69 464.89 2.05 328.34	-47.8 -49.22 -49.39 -49.46 -49.57	-13	Pass
(Fc-Test BW)~1GHz	854.73 516.91 706.54 708 912.74	-49.29 -49.58 -49.66 -49.7 -49.77	-13	Pass
1GHz~2Fc	1009.42 1000.97 1006.48 1000.8 1000.06	-40.47 -40.56 -40.59 -40.59 -40.64	-13	Pass
2Fc~10Fc	2159.27 2167.48 1876.25 2409.48 2417.69 1023.98 1535.96 2047.95 2559.94 3071.93 3583.91 4095.9 4607.89 5119.87	-48.47 -48.86 -53.02 -55.35 -56.28 -52.95 -62.22 -61.62 -61.11 -58.71 -59.94 -59.63 -61.31 -61.19	-13	Pass

Analog: 511.9875 MHz, 25 kHz Channel Spacing, Max Power (Not for IC Review)
Part 90



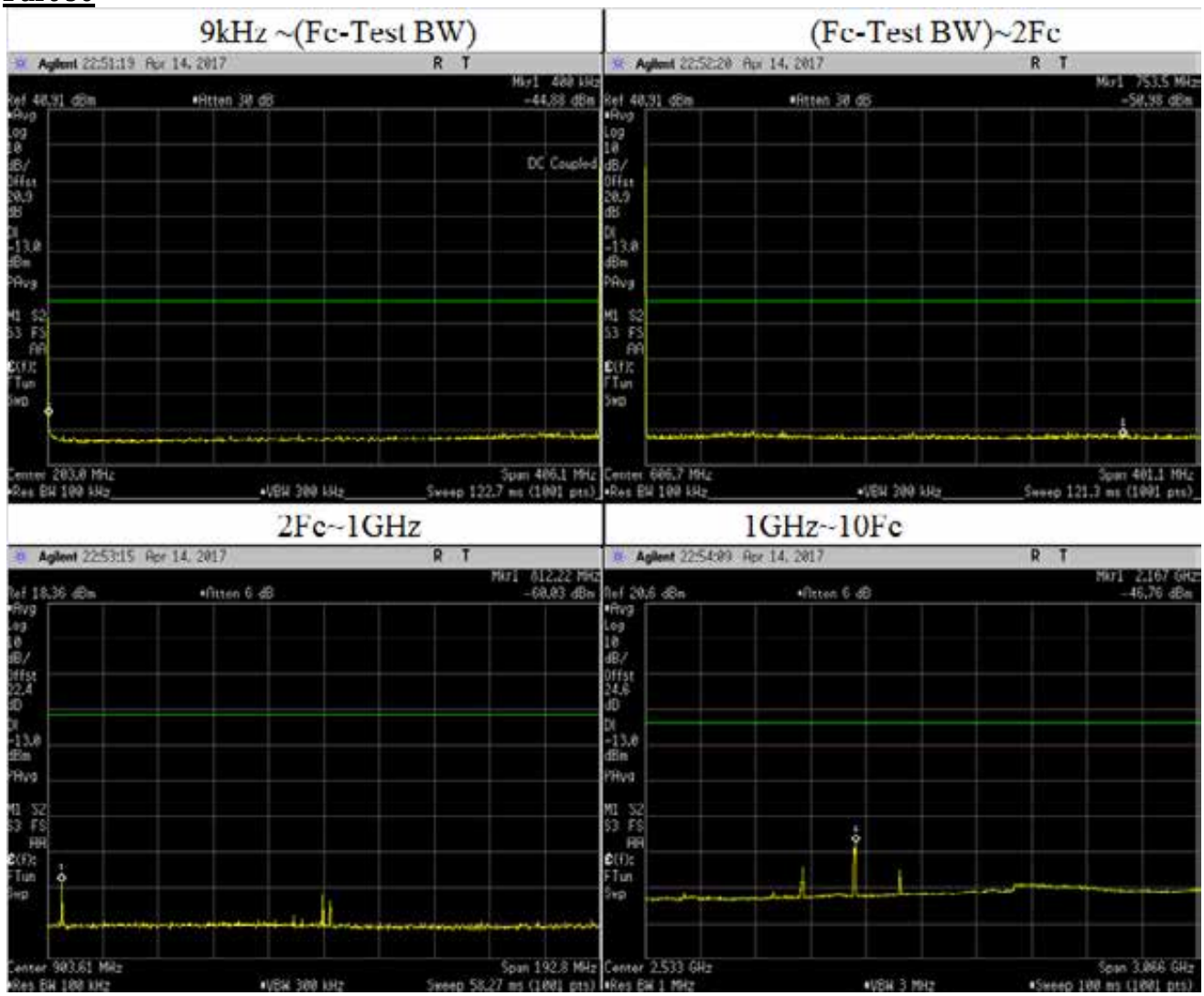
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.52 500.69 507.85 376.41 361.07	-45 -47.6 -49.41 -49.42 -49.45	-13	Pass
(Fc-Test BW)~1GHz	718.24 828.9 741.15 520.32 727.5	-49.47 -49.59 -49.59 -49.68 -49.74	-13	Pass
1GHz~2Fc	1006.08 1003.66 1002.35 1009.93 1004.34	-40.57 -40.57 -40.6 -40.62 -40.67	-13	Pass
2Fc~10Fc	2167.48 2413.59 1876.25 1868.05 3114.99 1023.98 1535.96 2047.95 2559.94 3071.93 3583.91 4095.9 4607.89 5119.87	-47.51 -54.04 -54.75 -57.08 -58.24 -52.91 -62.39 -61.35 -61.06 -58.7 -60.17 -59.63 -61.26 -61.02	-13	Pass

Analong: 526.9875 MHz, 25 kHz Channel Spacing, Max Power (Not for IC Review)
Part 90



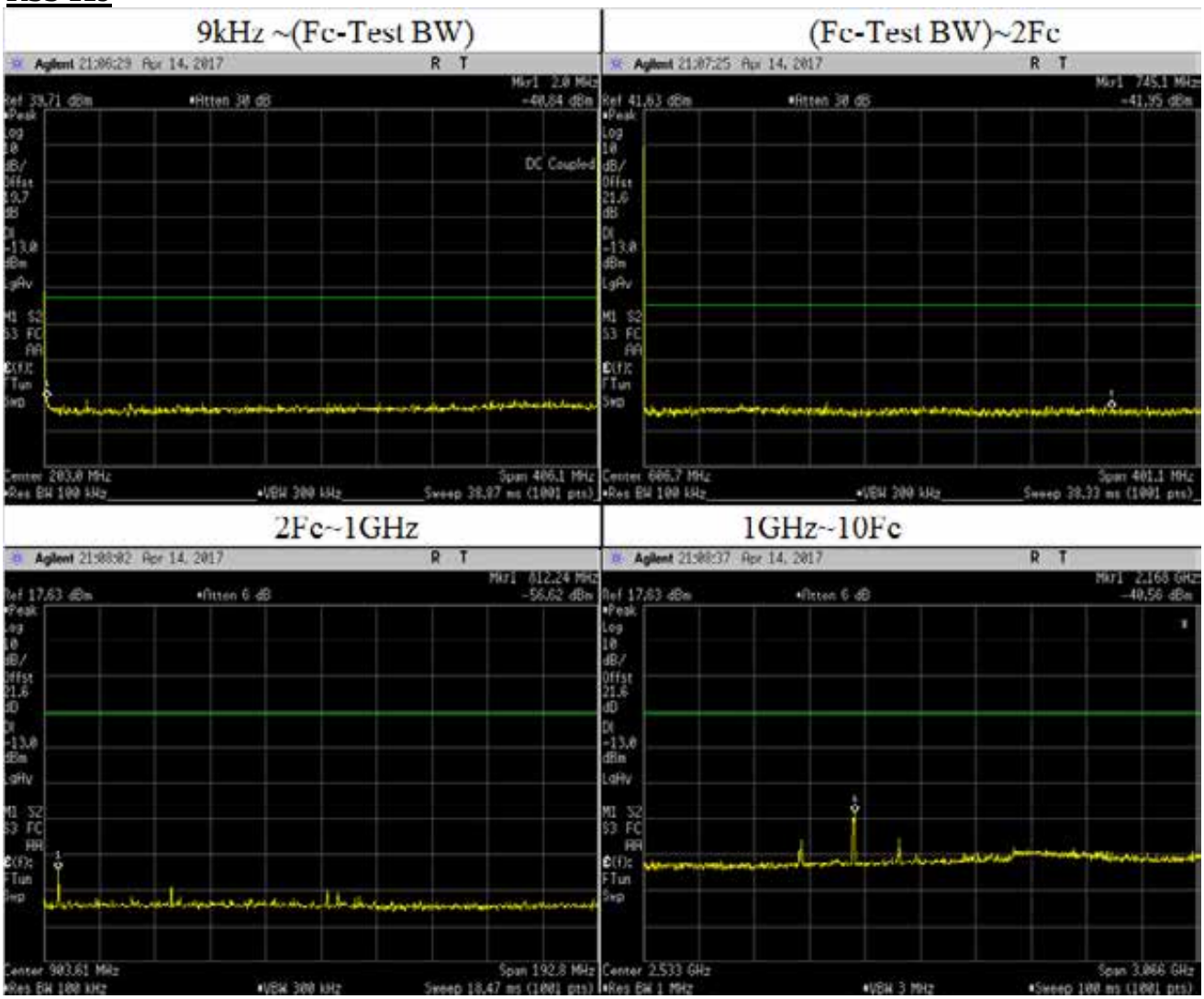
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.54 515.88 1.59 369.02 482.19	-45.19 -47.64 -49.22 -49.6 -49.71	-13	Pass
(Fc-Test BW)~1GHz	867 873.26 840.41 631.32 569.79	-49.19 -49.6 -49.65 -49.76 -49.89	-13	Pass
1GHz~2Fc	1000 1000 1000 1000 1000	-64.09 -64.09 -64.11 -64.13 -64.15	-13	Pass
2Fc~10Fc	2165.87 1051.25 1875.47 1960.89 5176.65 1053.97 1580.96 2107.95 2634.94 3161.93 3688.91 4215.9 4742.89 5269.87	-49.4 -54.98 -56.58 -56.69 -57.79 -49.61 -64.51 -63.76 -63.32 -60.84 -62.45 -62.97 -63.54 -62.85	-13	Pass

Analog: 406.1125 MHz, 25 kHz Channel Spacing, Low Power (Not for IC Review)
Part 90



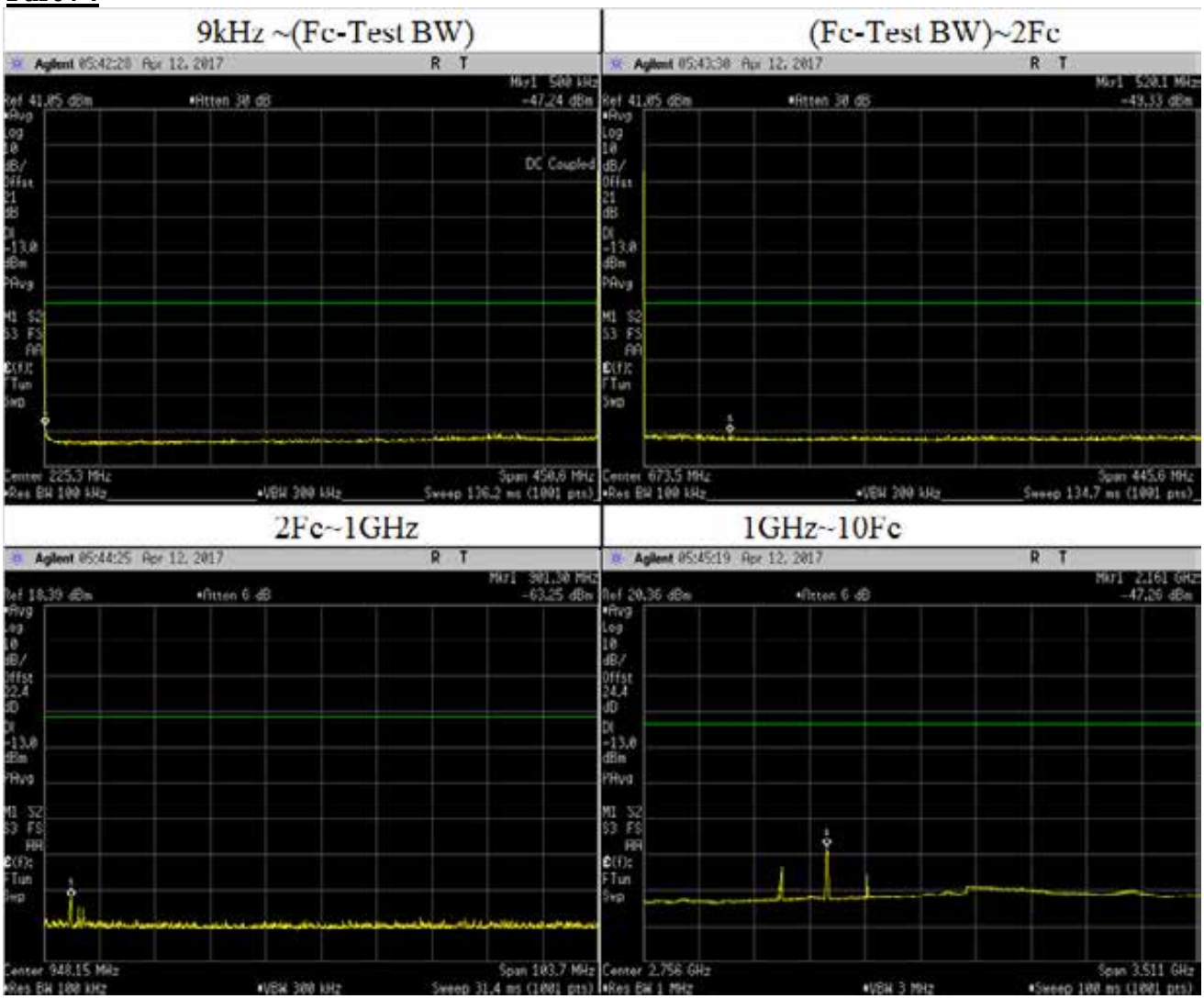
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.41 385.37 361.04 334.26 375.23	-44.88 -49.43 -49.66 -49.7 -49.79	-13	Pass
(Fc-Test BW)~2Fc	753.54 505.93 484.29 600.48 483.49	-49.4 -49.4 -49.66 -49.69 -49.71	-13	Pass
2Fc~1GHz	903.13 905.63 893.12 812.04 895.81 812.23	-63.62 -65.11 -69.67 -69.71 -70.46 -60.39	-13	Pass
1GHz~10Fc	2167.03 2160.9 1876.04 2412.07 1866.85 1218.34 1624.45 2030.56 2436.68 2842.79 3248.9 3655.01 4061.12	-46.77 -47.83 -53.43 -54.34 -57.7 -61.18 -62.34 -61.78 -61.12 -60.66 -59.07 -60.2 -59.69	-13	Pass

Analog: 406.1125 MHz, 25 kHz Channel Spacing, Low Power (Not for FCC Review)
RSS 119



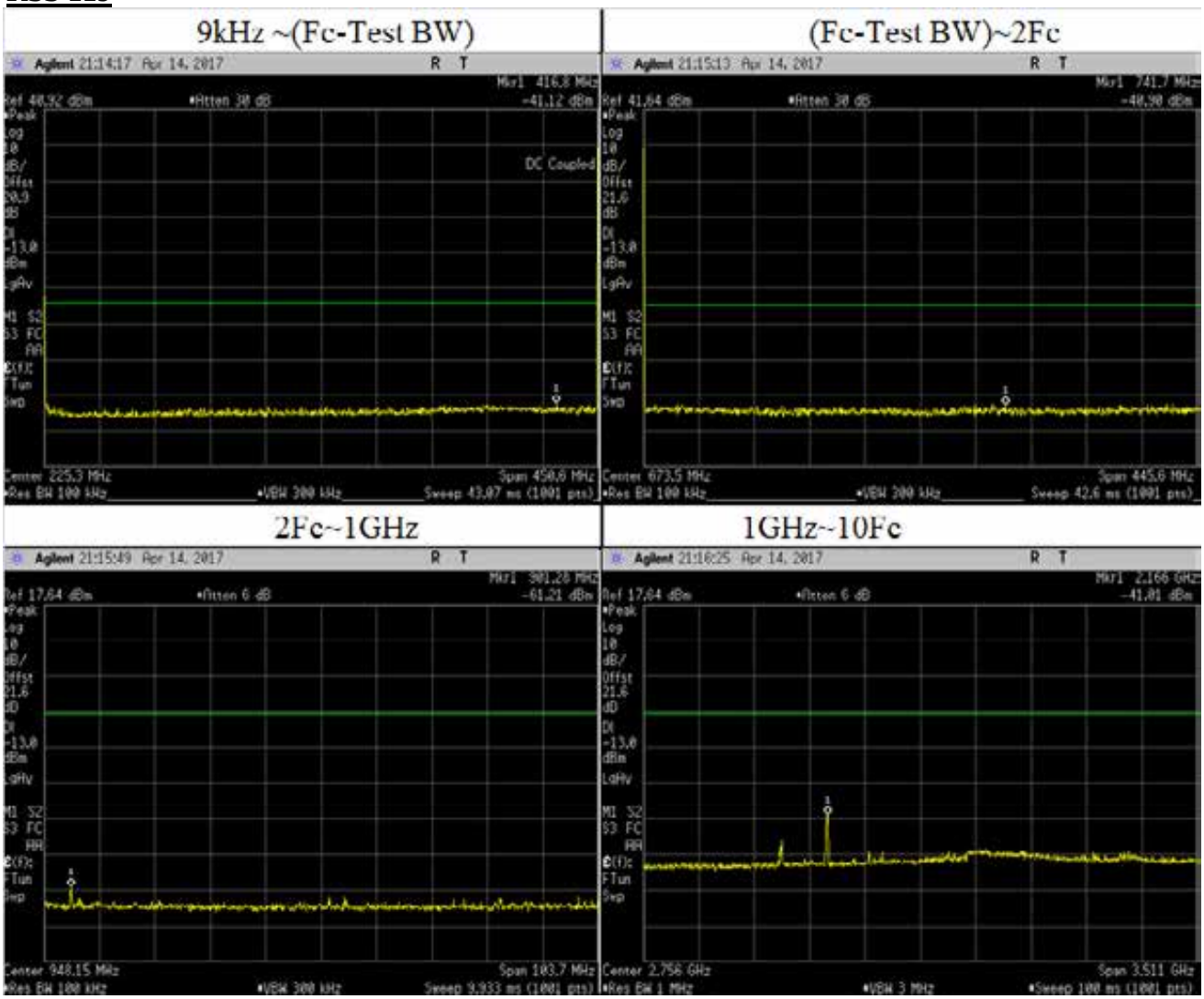
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	2	-40.84	-13	Pass
(Fc-Test BW)~2Fc	745.1	-41.95	-13	Pass
2Fc~1GHz	812.24	-56.62	-13	Pass
1GHz~10Fc	2168	-40.56	-13	Pass

Analog: 450.65 MHz, 25 kHz Channel Spacing, Low Power (Not for IC Review)
Part 74



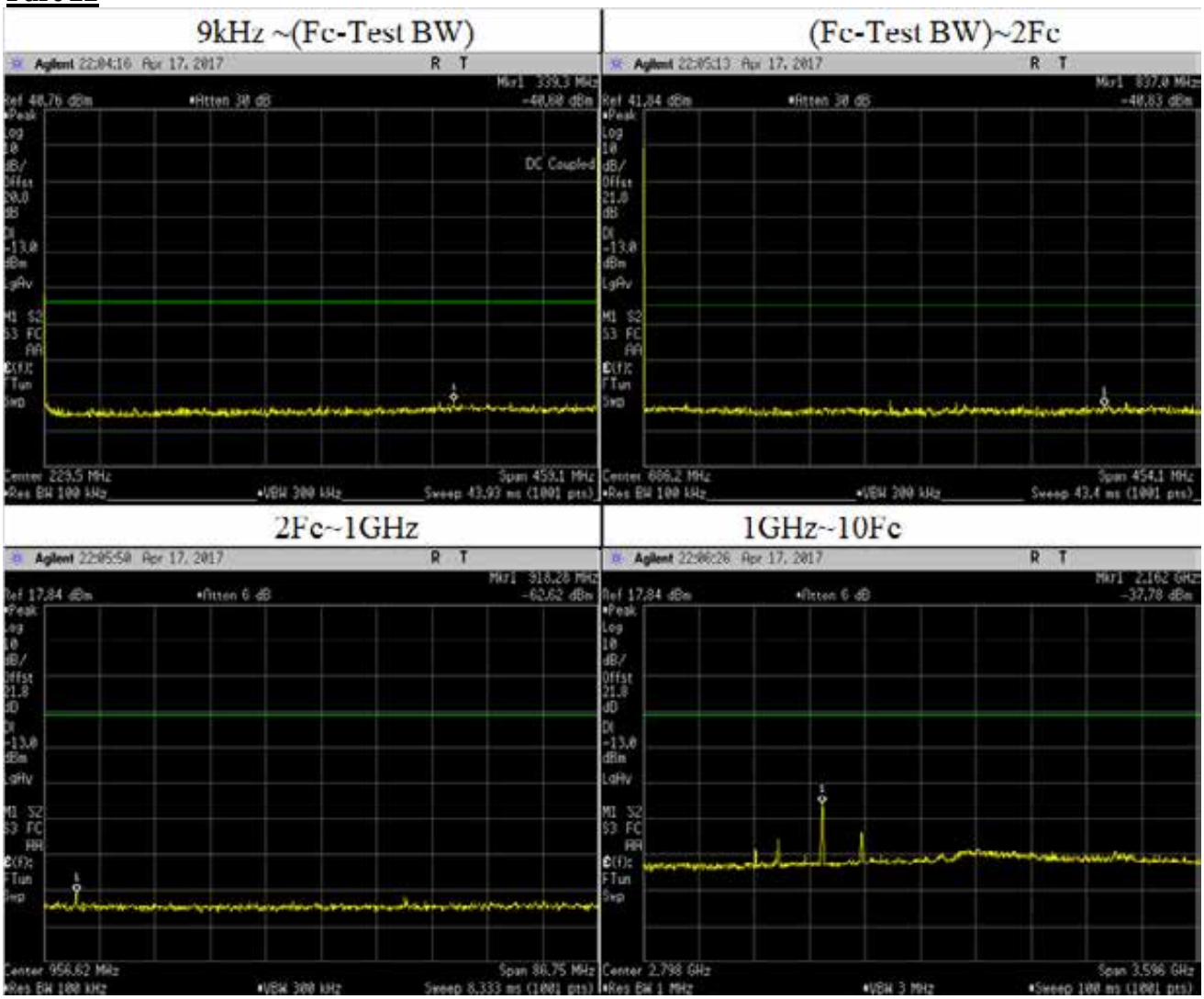
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.46 370.47 365.97 384.43 361.92	-47.24 -49.6 -49.66 -49.67 -49.76	-13	Pass
(Fc-Test BW)~2Fc	520.14 468.06 479.64 484.09 502.34	-49.33 -49.55 -49.65 -49.7 -49.78	-13	Pass
2Fc~1GHz	901.17 902.72 903.66 966.64 896.71 901.3	-64.94 -66.41 -66.81 -69.19 -69.51 -64.81	-13	Pass
1GHz~10Fc	2161.15 2168.16 1877 2417.23 1869.98 1351.95 1802.6 2253.25 2703.9 3154.55 3605.2 4055.85 4506.5	-47.26 -49.54 -53.12 -55.3 -56.28 -62.66 -62.3 -62.11 -61.43 -59.06 -60.39 -60.15 -60.97	-13	Pass

Analog: 450.65 MHz, 25 kHz Channel Spacing, Low Power (Not for FCC Review)
RSS 119



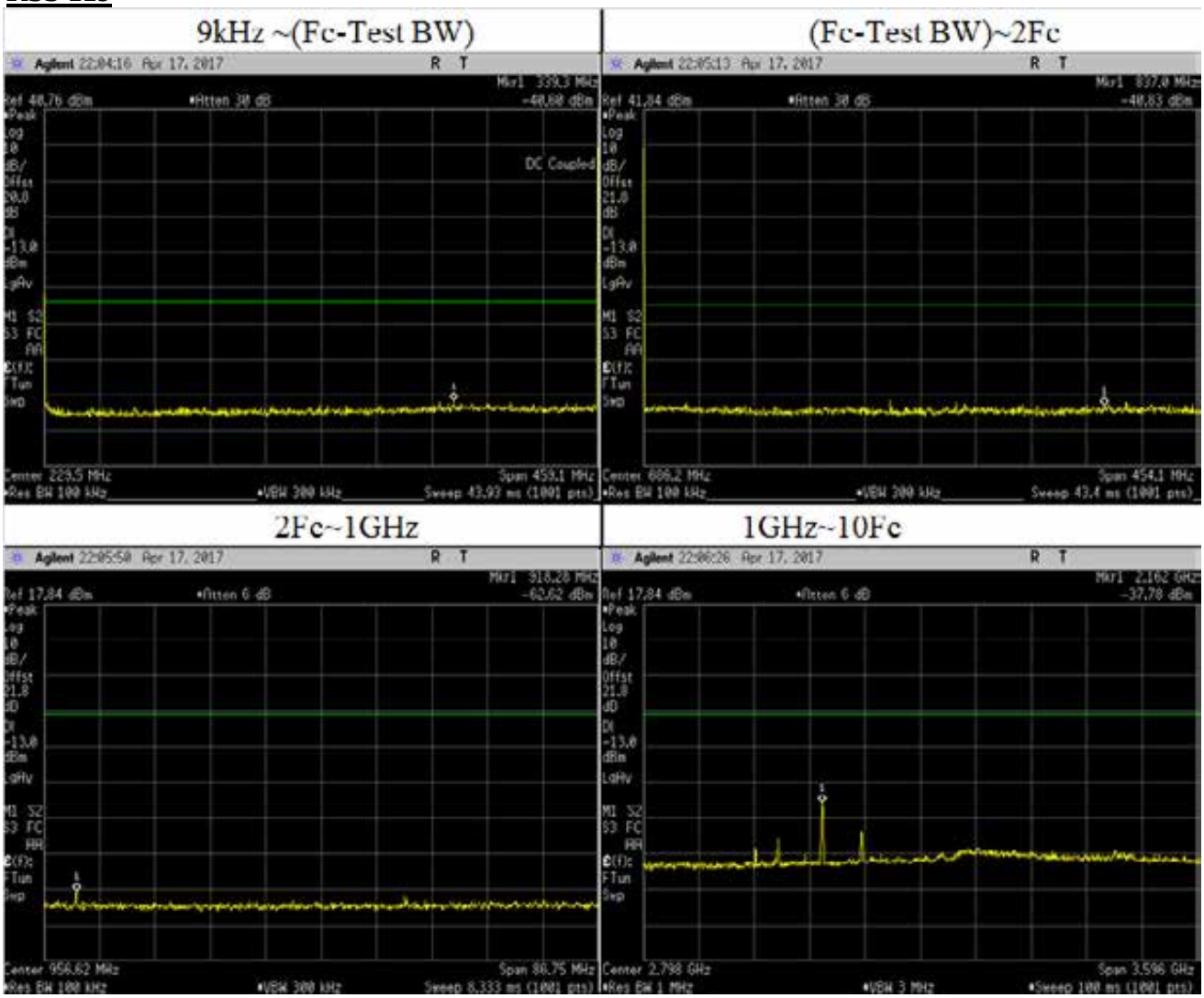
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	416.8	-41.12	-13	Pass
(Fc-Test BW)~2Fc	741.7	-40.9	-13	Pass
2Fc~1GHz	901.28	-61.2	-13	Pass
1GHz~10Fc	2166	-41.01	-13	Pass

Analog: 459.125 MHz, 25 kHz Channel Spacing, Low Power (Not for IC Review)
Part 22



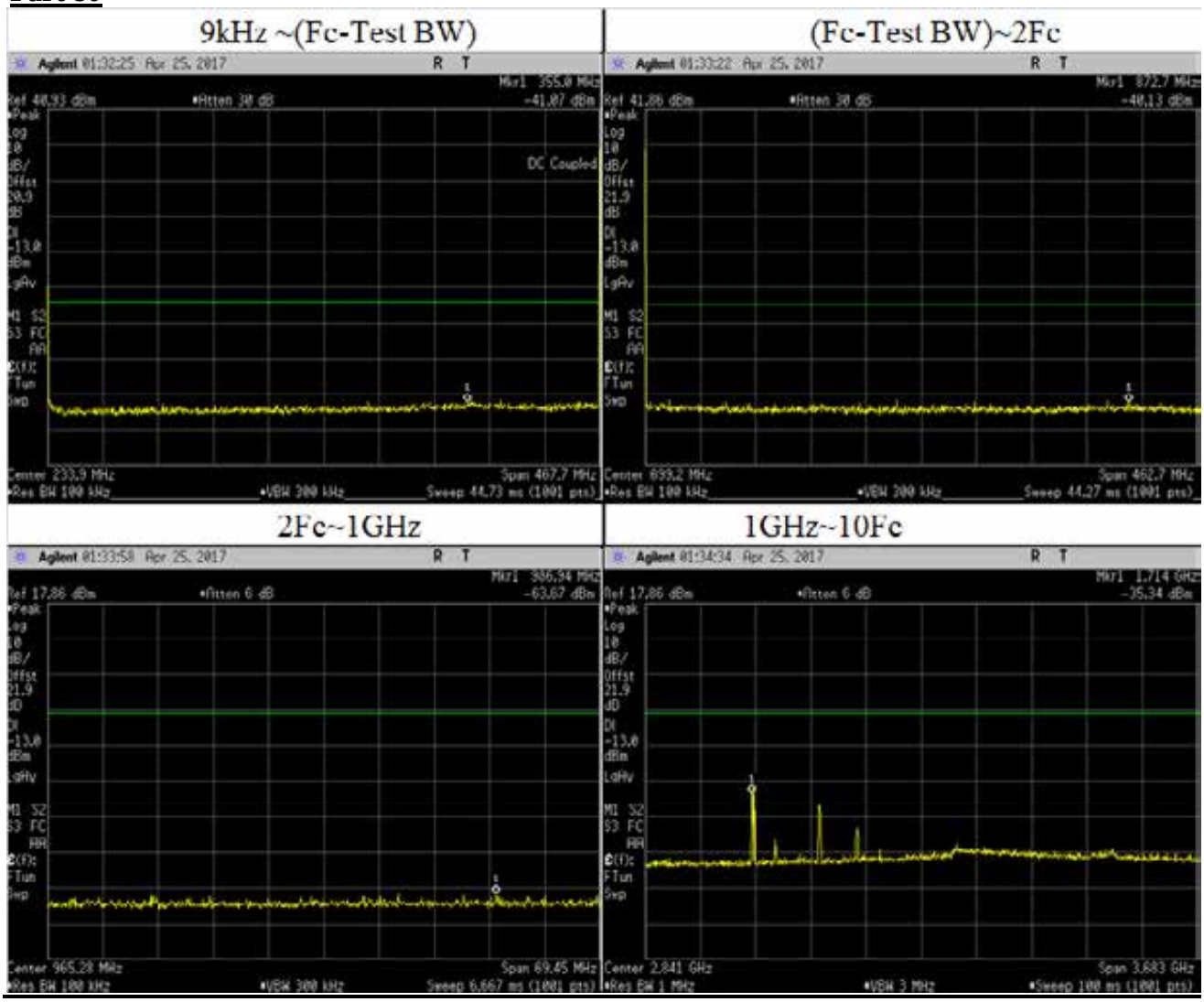
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.8682 155.5849 434.7177 347.4887 308.9243	-40.142 -40.83 -40.974 -40.996 -41.165	-13	Pass
(Fc-Test BW)~2Fc	888.2745 540.888 495.9321 483.2173 854.217	-40.657 -40.664 -41.036 -41.051 -41.096	-13	Pass
2Fc~1GHz	918.2765 918.18975 921.3995 981.7775 918.36325 981.86425	-63.197 -63.352 -64.31 -65.189 -65.322 -65.403	-13	Pass
1GHz~10Fc	2162 2154.316 1877.424 3085.68 3340.996 3265.48 3563.948 3096.468 3337.4 3053.316 1870.232 3067.7 4081.772	-37.78 -47.68 -50.034 -51.909 -51.972 -52.098 -52.452 -52.487 -52.508 -52.724 -52.769 -52.783 -52.827	-13	Pass

Analog: 459.125 MHz, 25 kHz Channel Spacing, Low Power (Not for FCC Review)
RSS 119



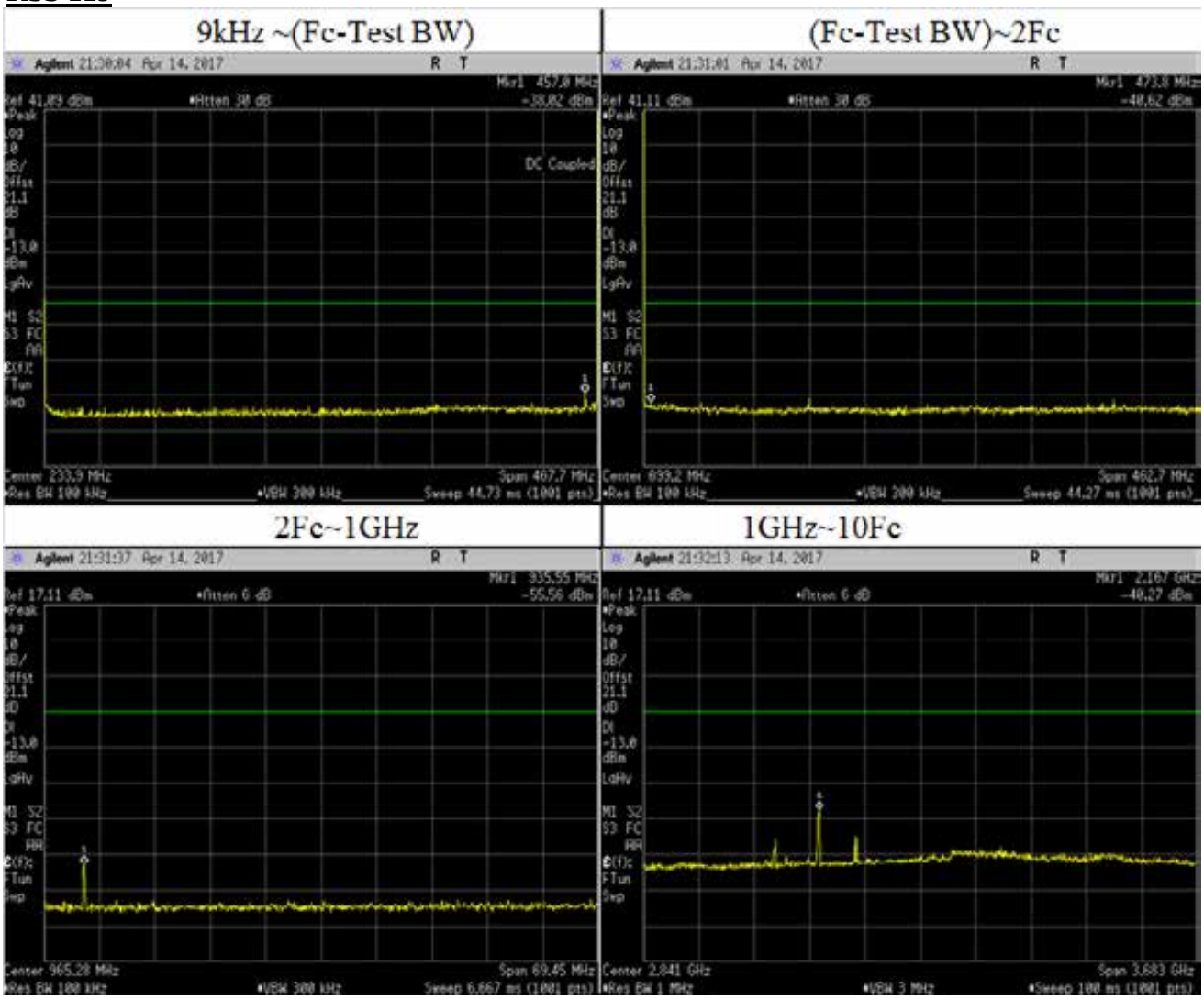
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	339.3	-40.6	-13	Pass
(Fc-Test BW)~2Fc	837	-40.83	-13	Pass
2Fc~1GHz	918.28	-62.62	-13	Pass
1GHz~10Fc	2162	-37.87	-13	Pass

Analog: 467.775 MHz, 25 kHz Channel Spacing, Low Power (Not for IC Review)
Part 80



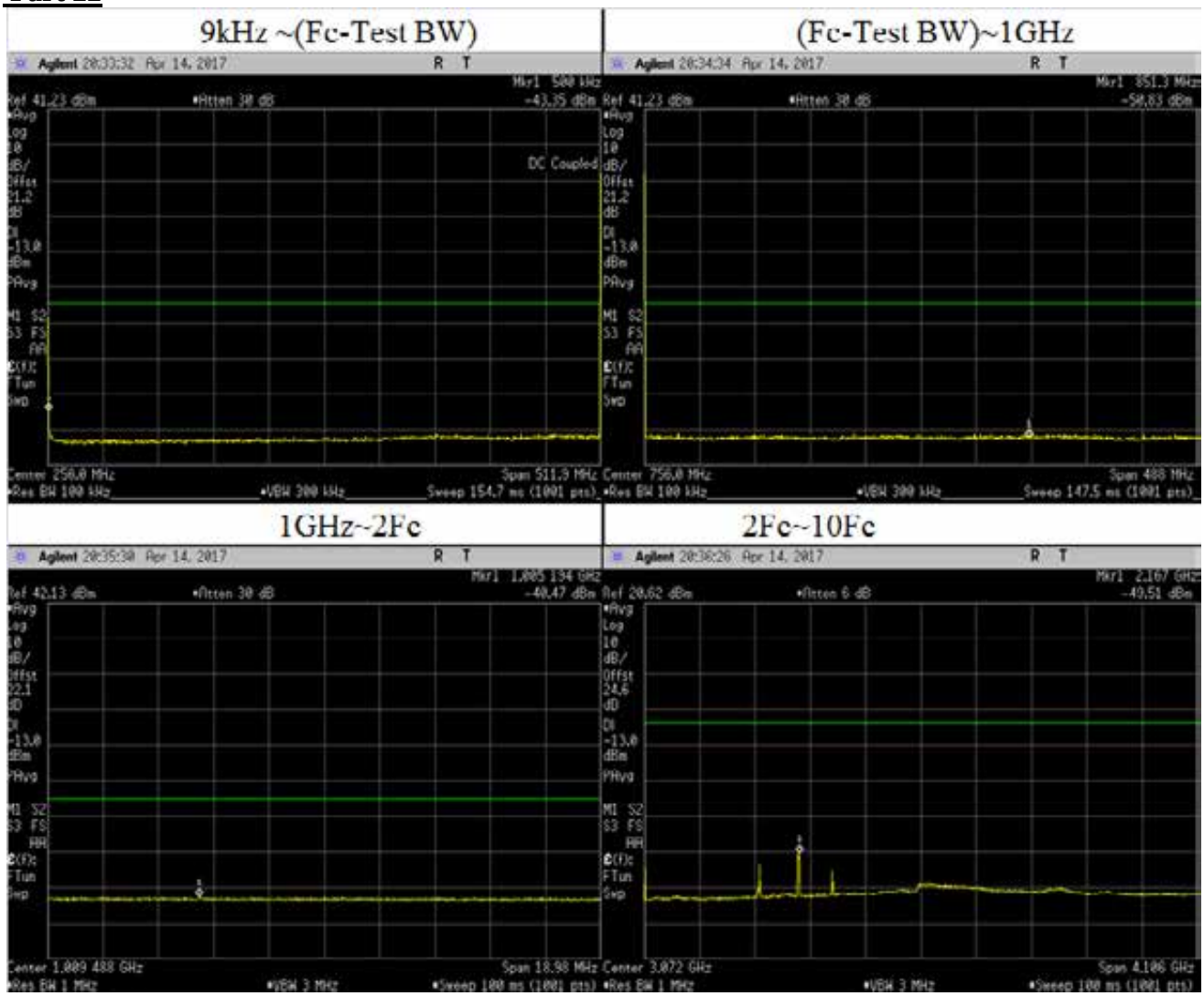
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	353.1635 352.6958 172.1636 411.626 361.1144	-41.076 -41.118 -41.174 -41.201 -41.272	-13	Pass
(Fc-Test BW)~2Fc	864.3839 738.9922 809.3226 585.8385 832.9203	-40.419 -40.629 -40.682 -40.728 -40.918	-13	Pass
2Fc~1GHz	990.51885 940.3065 990.4494 965.10015 962.9472 963.01665	-64.675 -64.679 -64.814 -65.013 -65.182 -65.239	-13	Pass
1GHz~10Fc	1714 2159.645 2170.694 1876.054 1868.688 3069.346 3312.424 1872.371 3551.819 3157.738 3054.614 3176.153 3305.058	-35.34 -40.509 -46.062 -49.097 -49.553 -50.137 -50.519 -50.989 -51.35 -51.631 -51.689 -51.698 -51.857	-13	Pass

Analog: 467.775 MHz, 25 kHz Channel Spacing, Low Power (Not for FCC Review)
RSS 119



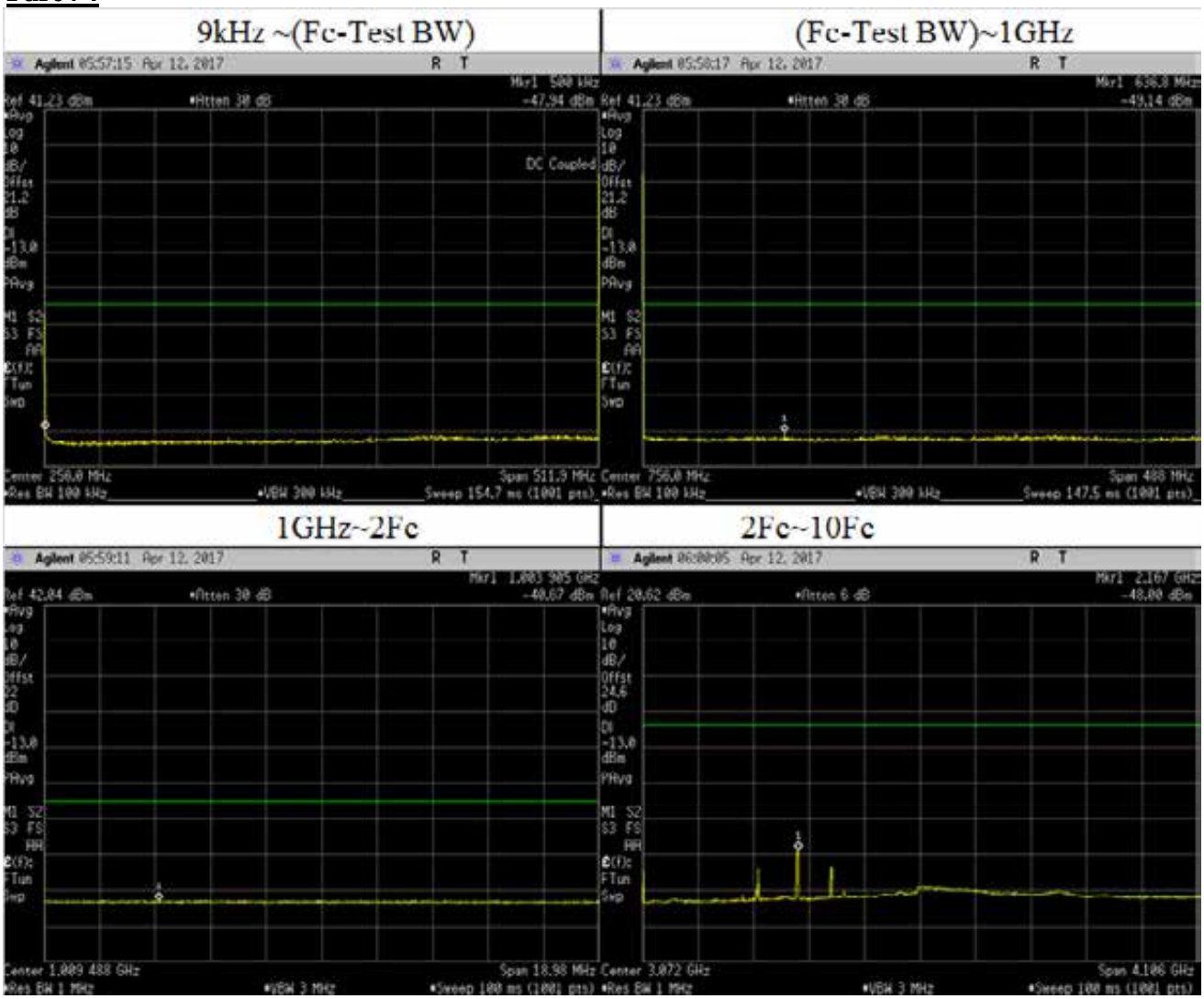
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	453.20	-40.52	-13	Pass
(Fc-Test BW)~2Fc	868.50	-40.86	-13	Pass
2Fc~1GHz	942.29	-64.40	-13	Pass
1GHz~10Fc	2160.00	-40.99	-13	Pass

Analog: 511.9875 MHz, 25 kHz Channel Spacing, Low Power (Not for IC Review)
Part 22



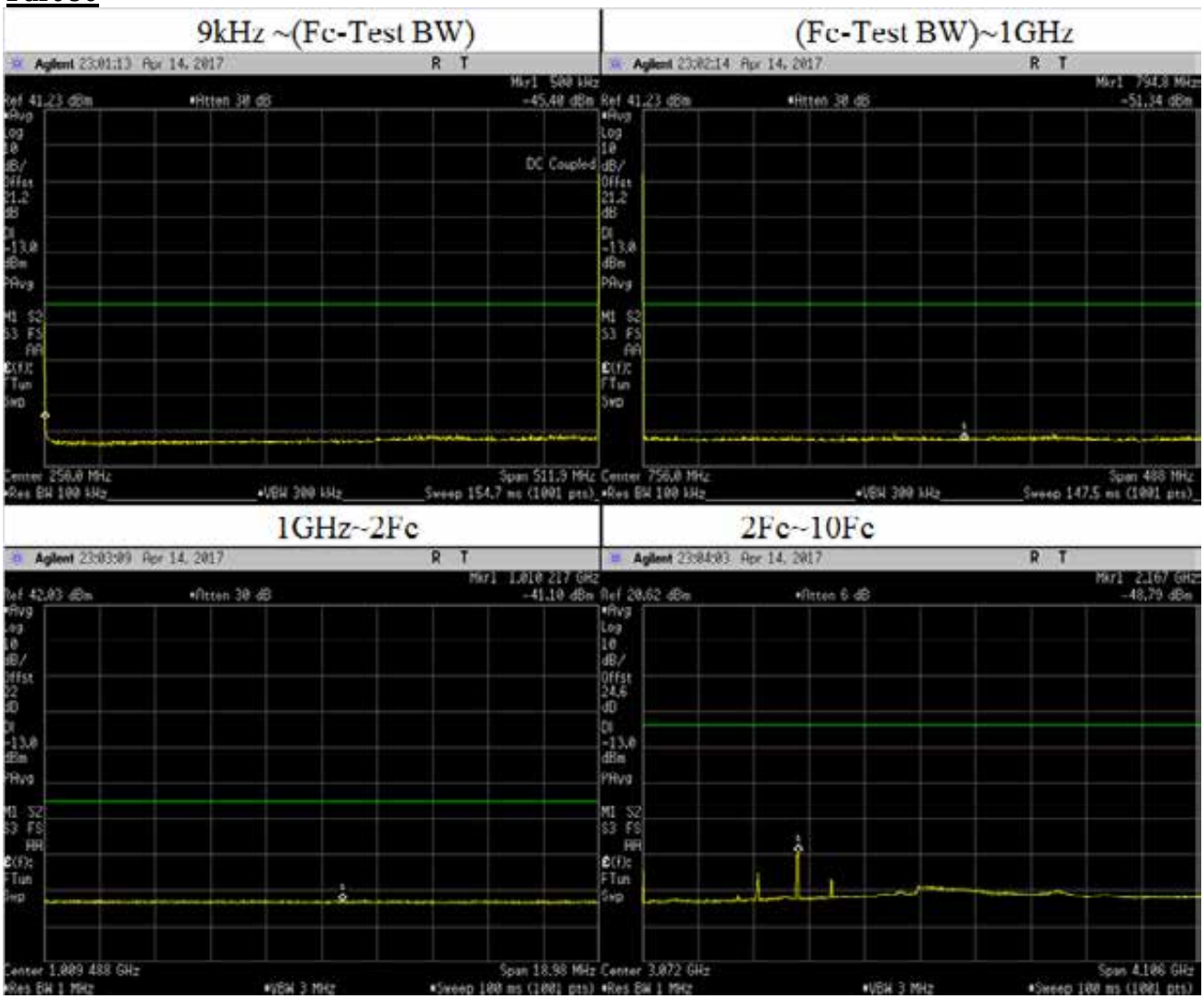
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.52 437.27 484.32 489.44 359.02	-43.35 -49.76 -49.77 -49.82 -49.86	-13	Pass
(Fc-Test BW)~1GHz	851.32 696.3 541.29 892.27 752.85	-49.39 -49.72 -49.73 -49.77 -49.87	-13	Pass
1GHz~2Fc	1005.19 1001.16 1016.91 1000.11 1006.18	-40.48 -40.53 -40.56 -40.56 -40.58	-13	Pass
2Fc~10Fc	2167.48 2159.27 1876.25 2413.59 3127.3 1023.98 1535.96 2047.95 2559.94 3071.93 3583.91 4095.9 4607.89 5119.87	-49.51 -49.94 -52.96 -54.89 -58.34 -55.76 -62.45 -61.41 -61.22 -58.67 -59.86 -59.46 -61.07 -61.02	-13	Pass

Analog: 511.9875 MHz, 25 kHz Channel Spacing, Low Power (Not for IC Review)
Part 74



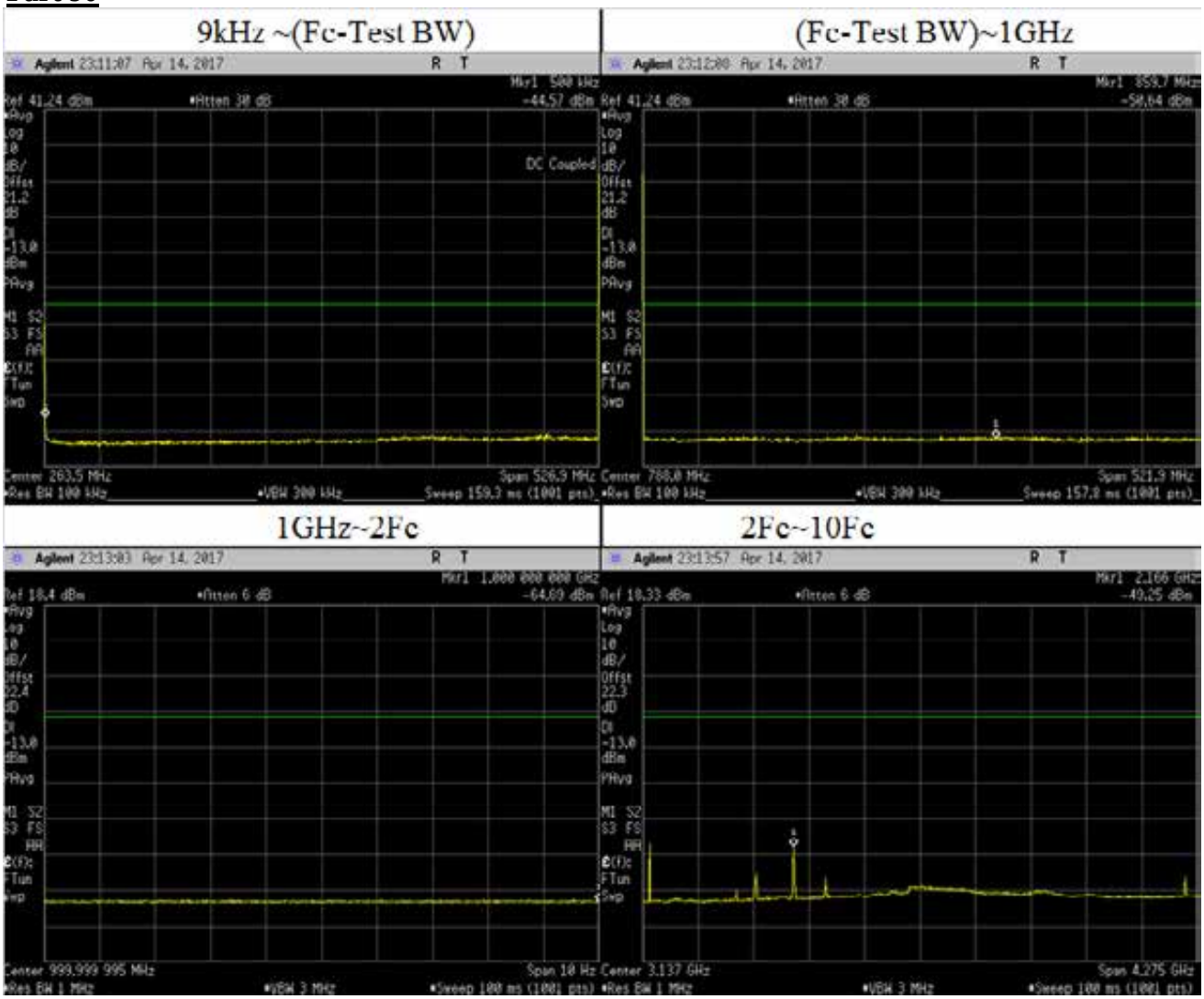
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.52 491.99 461.31 456.7 480.74	-47.94 -49.8 -49.81 -49.82 -49.84	-13	Pass
(Fc-Test BW)~1GHz	636.83 840.11 718.24 725.06 910.3	-49.14 -49.39 -49.58 -49.82 -49.9	-13	Pass
1GHz~2Fc	1003.9 1006.62 1006.26 1003.94 1001.36	-40.67 -40.73 -40.73 -40.73 -40.74	-13	Pass
2Fc~10Fc	2167.48 2159.27 2413.59 1876.25 1868.05 1023.98 1535.96 2047.95 2559.94 3071.93 3583.91 4095.9 4607.89 5119.87	-48 -49.06 -52.94 -53.22 -57.52 -55.7 -62.53 -61.48 -61.2 -58.67 -59.94 -59.36 -61.36 -61.26	-13	Pass

Analog: 511.9875 MHz, 25 kHz Channel Spacing, Low Power (Not for IC Review)
Part 90



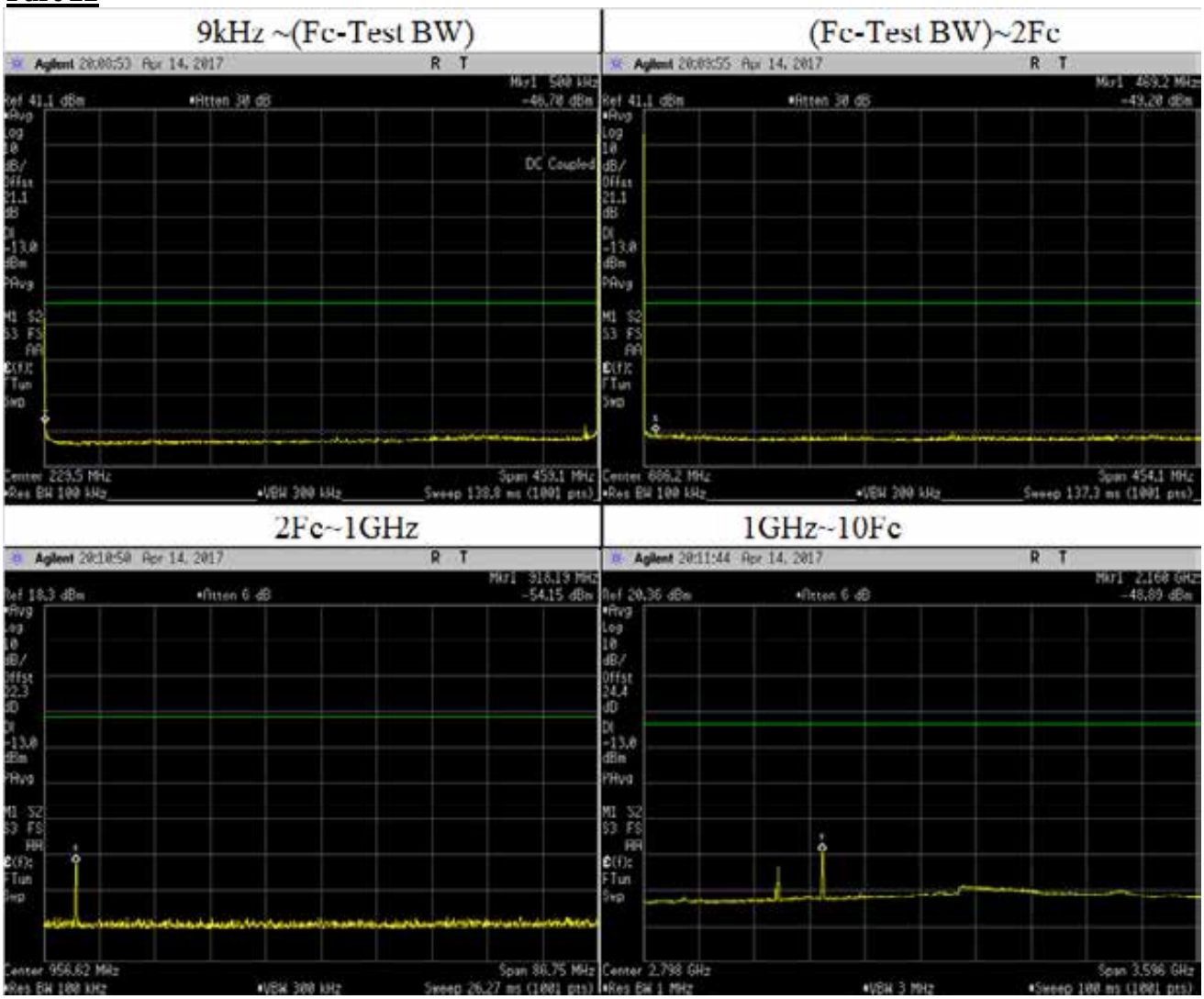
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.52 346.75 448.52 475.63 380.5	-45.4 -49.53 -49.58 -49.68 -49.7	-13	Pass
(Fc-Test BW)~1GHz	794.77 733.35 872.77 875.21 643.17	-49.39 -49.46 -49.46 -49.68 -49.78	-13	Pass
1GHz~2Fc	1010.22 1014.73 1007.13 1000.89 1000	-40.55 -40.65 -40.67 -40.7 -40.71	-13	Pass
2Fc~10Fc	2167.48 2159.27 1876.25 2413.59 1868.05 1023.98 1535.96 2047.95 2559.94 3071.93 3583.91 4095.9 4607.89 5119.87	-48.79 -49.49 -54.53 -56.19 -56.52 -55.73 -62.52 -61.45 -61.21 -58.68 -59.91 -59.53 -61.24 -60.85	-13	Pass

Analog: 526.9875 MHz, 25 kHz Channel Spacing, Low Power (Not for IC Review)
Part 90



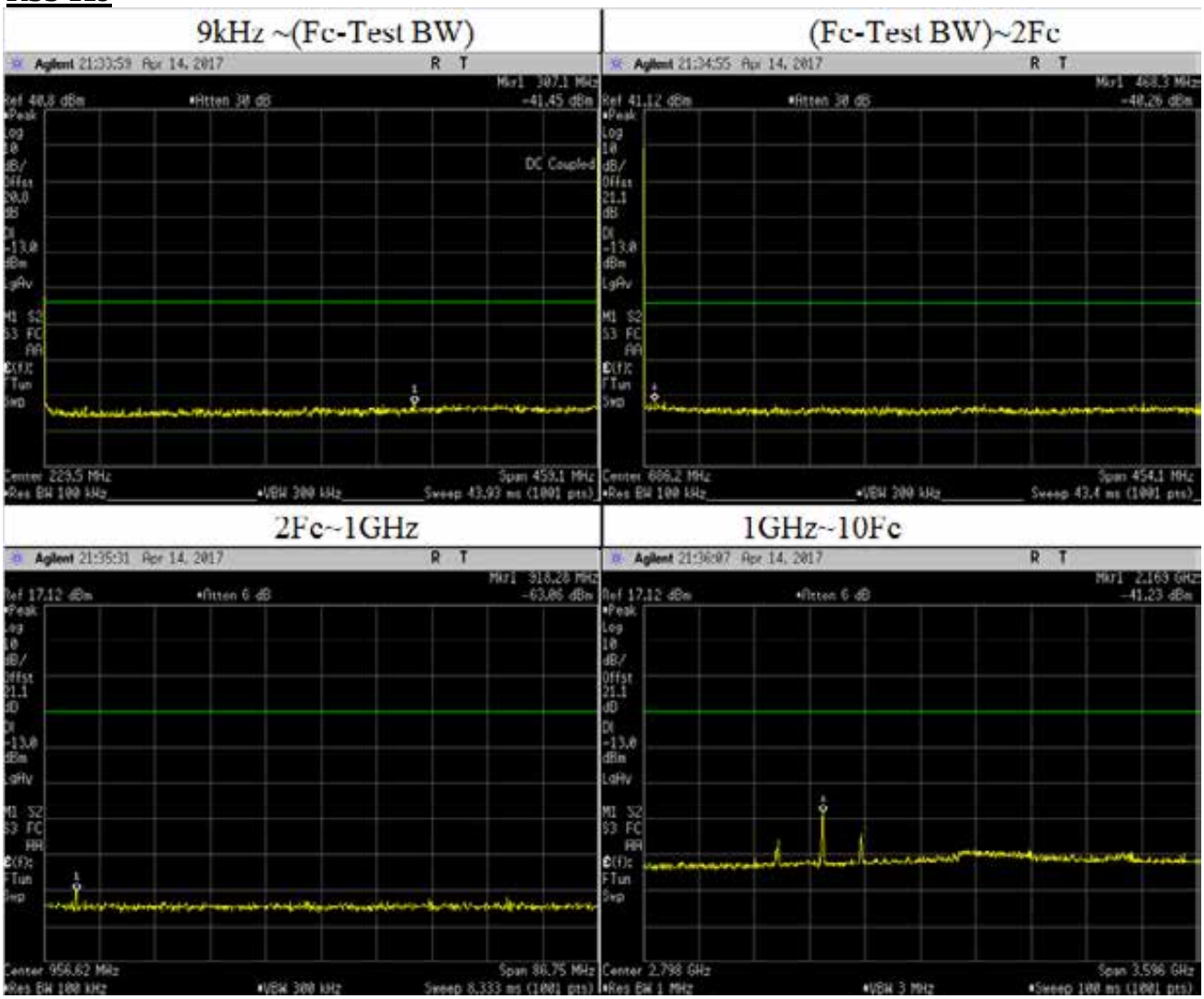
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.54 477.46 471.14 475.88 469.56	-44.57 -49.28 -49.73 -49.74 -49.8	-13	Pass
(Fc-Test BW)~1GHz	859.7 1001.53 807.56 728.83 867.52	-49.64 -49.92 -49.96 -49.98 -50.05	-13	Pass
1GHz~2Fc	1000 1000 1000 1000 1000	-64.08 -64.14 -64.18 -64.18 -64.21	-13	Pass
2Fc~10Fc	2165.87 1051.25 1875.47 5176.65 2409.3 1053.97 1580.96 2107.95 2634.94 3161.93 3688.91 4215.9 4742.89 5269.87	-49.25 -56.53 -57.15 -57.87 -58.19 -51.35 -64.53 -63.74 -63.34 -60.86 -62.47 -62.72 -63.49 -63.25	-13	Pass

Analog: 459.125 MHz, 20 kHz Channel Spacing, High Power (Not for IC Review)
Part 22



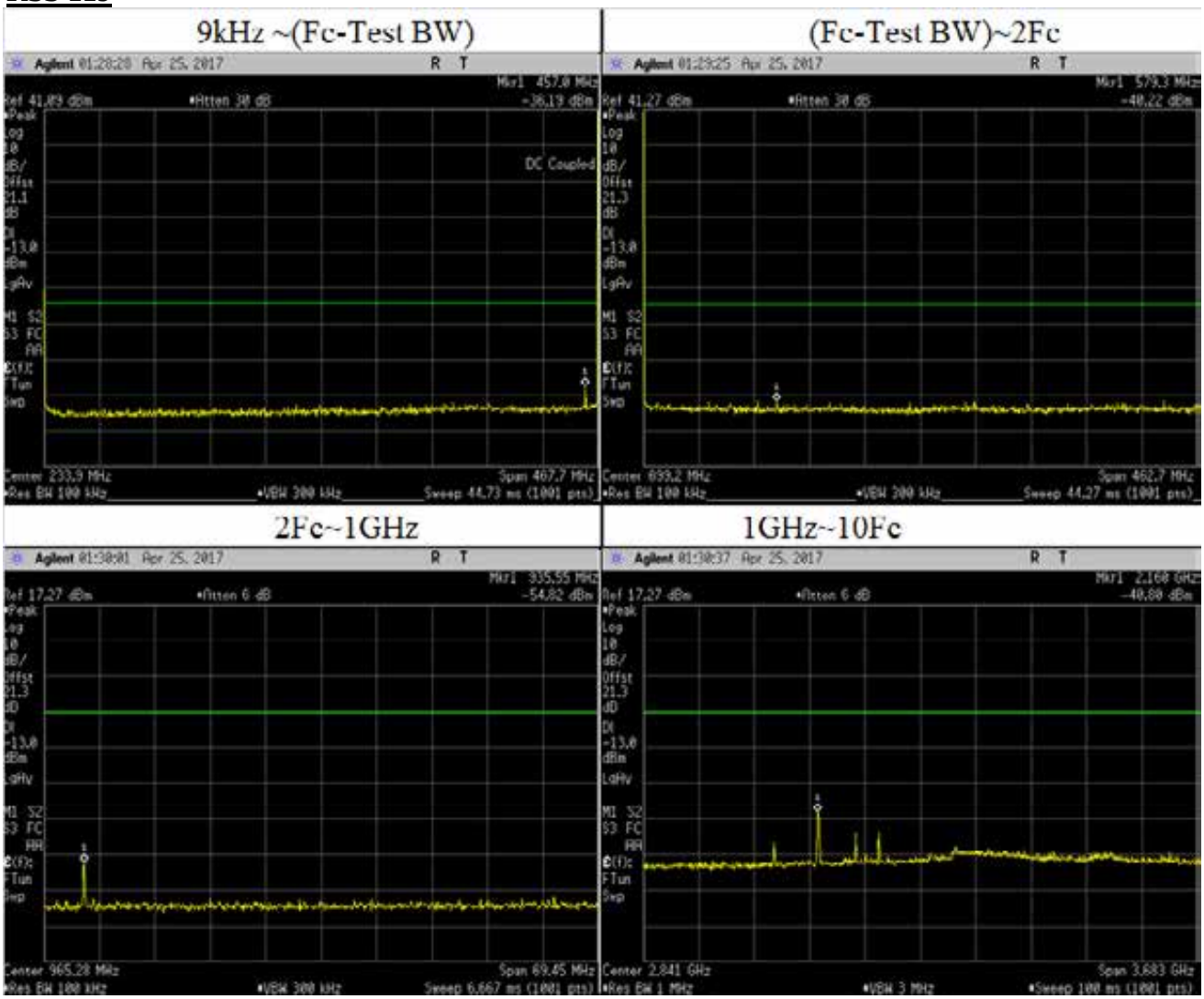
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.47 448.07 449.9 2.76 374.23	-46.7 -47.27 -49.61 -49.78 -49.81	-13	Pass
(Fc-Test BW)~2Fc	469.15 462.35 712.3 624.29 465.07	-49.2 -49.2 -49.25 -49.4 -49.57	-13	Pass
2Fc~1GHz	918.19 976.25 994.97 995.15 926.25 918.25	-54.15 -68.93 -69.08 -69.23 -69.28 -54.69	-13	Pass
1GHz~10Fc	2160.43 2167.61 1876.61 1869.42 3080.15 1377.37 1836.5 2295.62 2754.75 3213.87 3673 4132.12 4591.25	-48.89 -49.49 -53.05 -57.09 -58.5 -62.25 -62.44 -62.07 -61.1 -59.16 -60.12 -60.16 -61.65	-13	Pass

Analog: 459.125 MHz, 20 kHz Channel Spacing, High Power (Not for FCC Review)
RSS 119



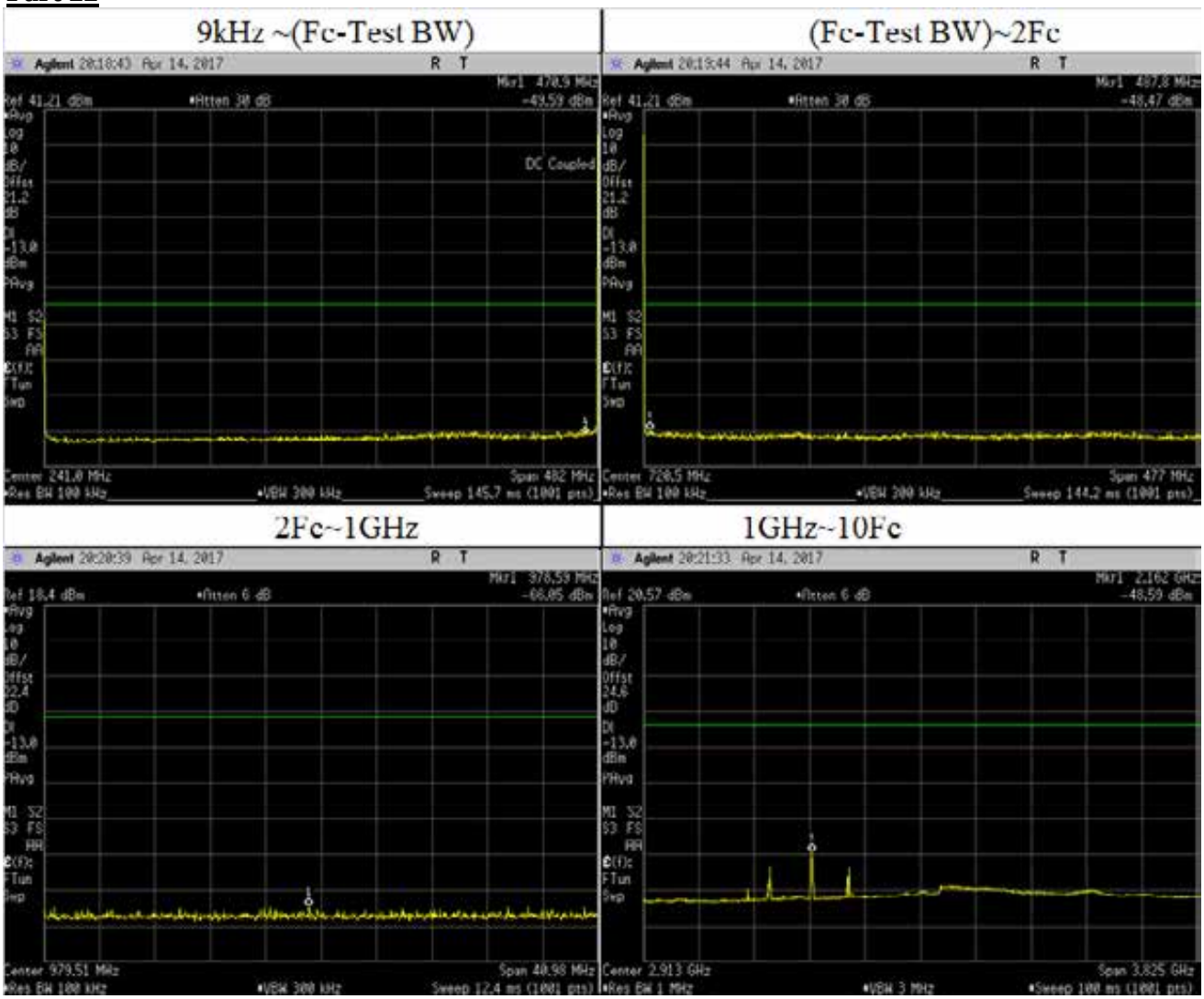
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	307.1	-41.45	-13	Pass
(Fc-Test BW)~2Fc	468.3	-40.26	-13	Pass
2Fc~1GHz	918.28	-63.06	-13	Pass
1GHz~10Fc	2169	-41.23	-13	Pass

Analog: 467.775 MHz, 20 kHz Channel Spacing, High Power (Not for FCC Review)
RSS 119



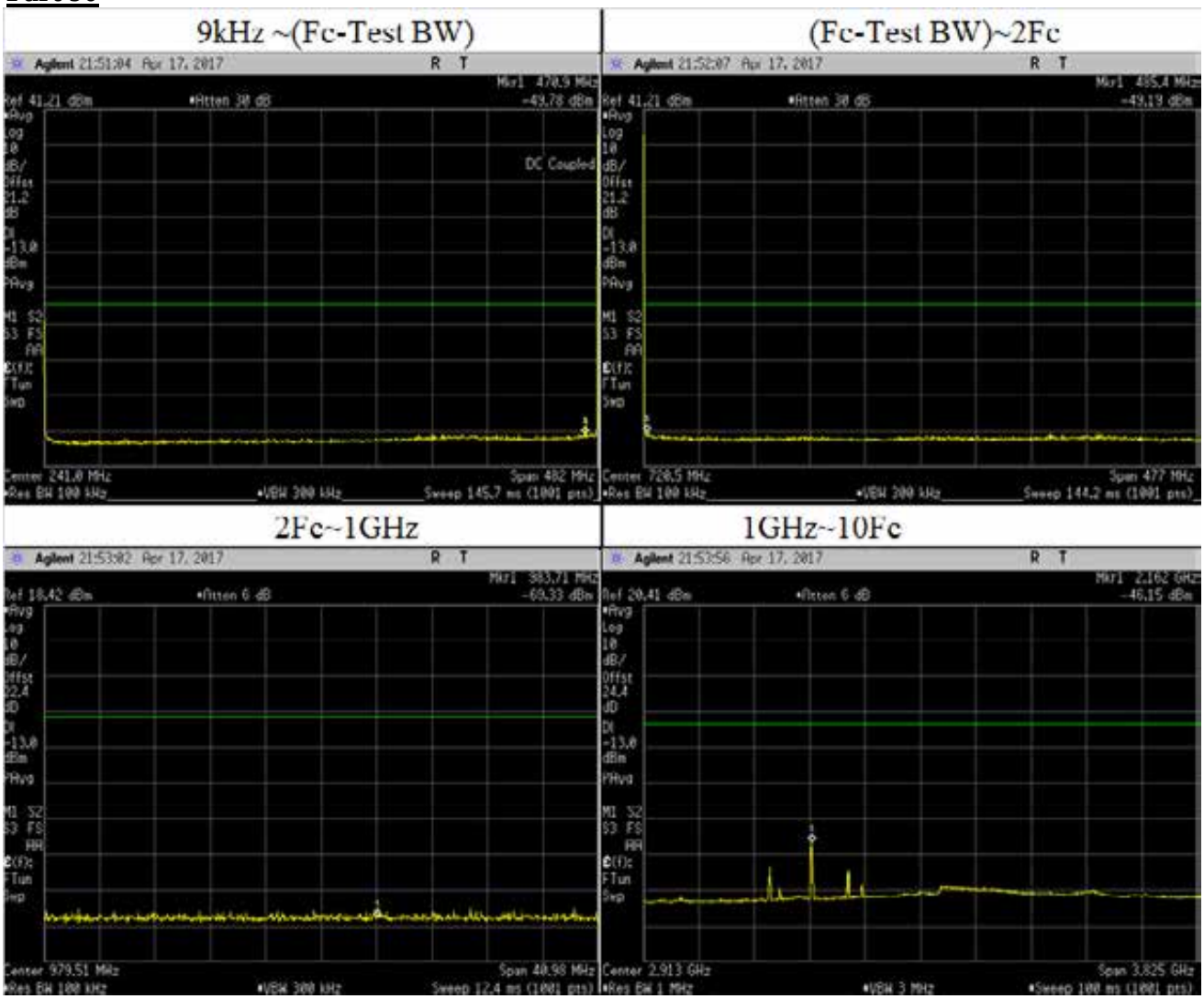
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	457.00	-36.19	-13	Pass
(Fc-Test BW)~2Fc	579.30	-40.22	-13	Pass
2Fc~1GHz	935.55	-54.82	-13	Pass
1GHz~10Fc	2160.00	-40.8	-13	Pass

Analog: 482.0125 MHz, 20 kHz Channel Spacing, High Power (Not for IC Review)
Part 22



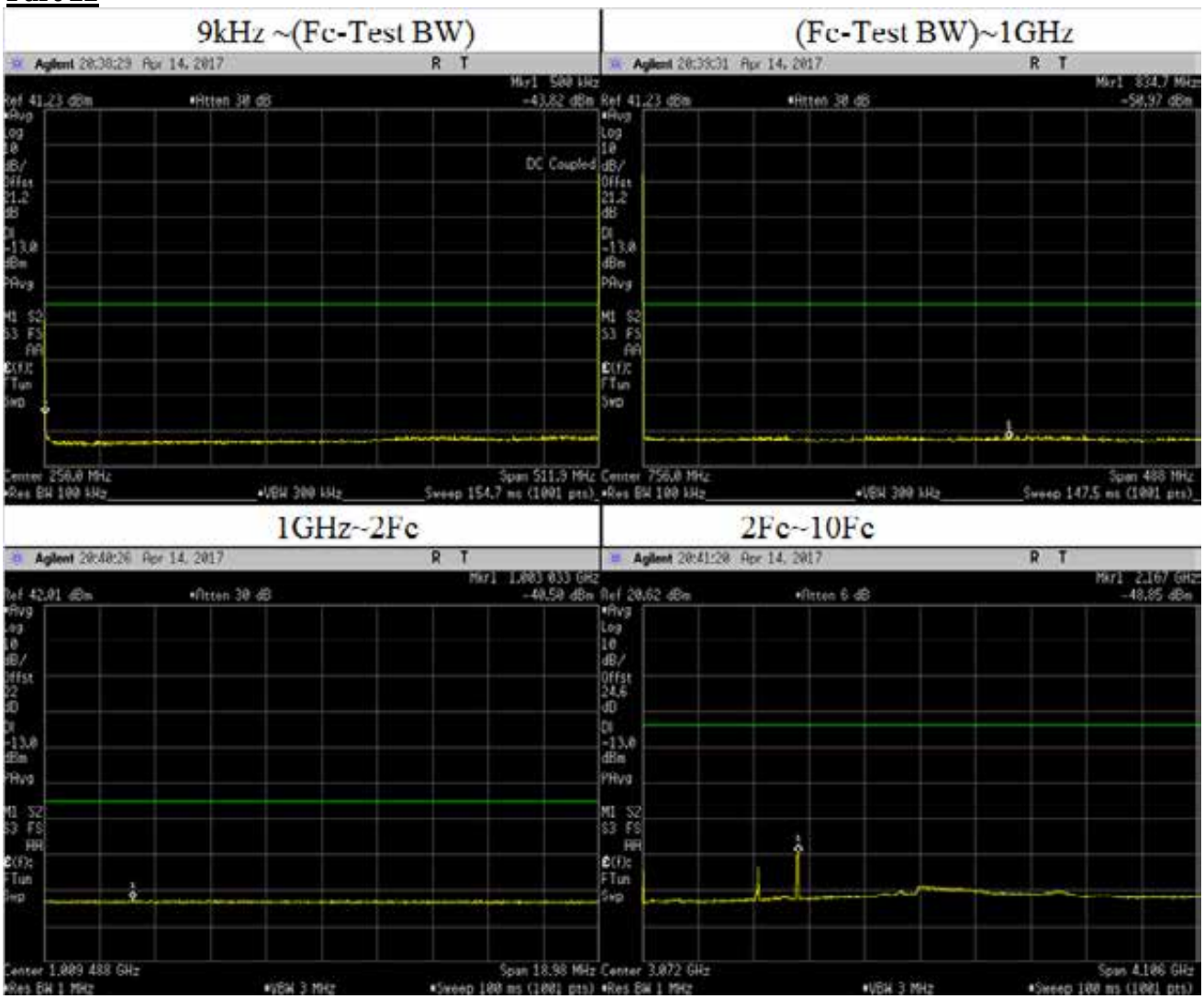
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	470.89 0.49 477.15 456.44 374.59	-46.62 -46.94 -48.75 -48.76 -49.02	-13	Pass
(Fc-Test BW)~2Fc	487.78 904.23 488.73 878.98 882.79	-48.47 -48.94 -48.95 -48.99 -49.04	-13	Pass
2Fc~1GHz	978.59 993.29 994.8 959.76 998.94 964.02	-66.05 -66.38 -66.39 -66.41 -66.45 -67.51	-13	Pass
1GHz~10Fc	2161.68 1875.08 2417.7 2406.24 1859.79 1446.04 1928.05 2410.06 2892.07 3374.09 3856.1 4338.11 4820.12	-48.59 -52.79 -53.18 -56.05 -57.82 -62.31 -61.81 -55.55 -60.3 -59.04 -60.33 -60.74 -61.13	-13	Pass

Analog: 482.0125 MHz, 20 kHz Channel Spacing, High Power (Not for IC Review)
Part 90



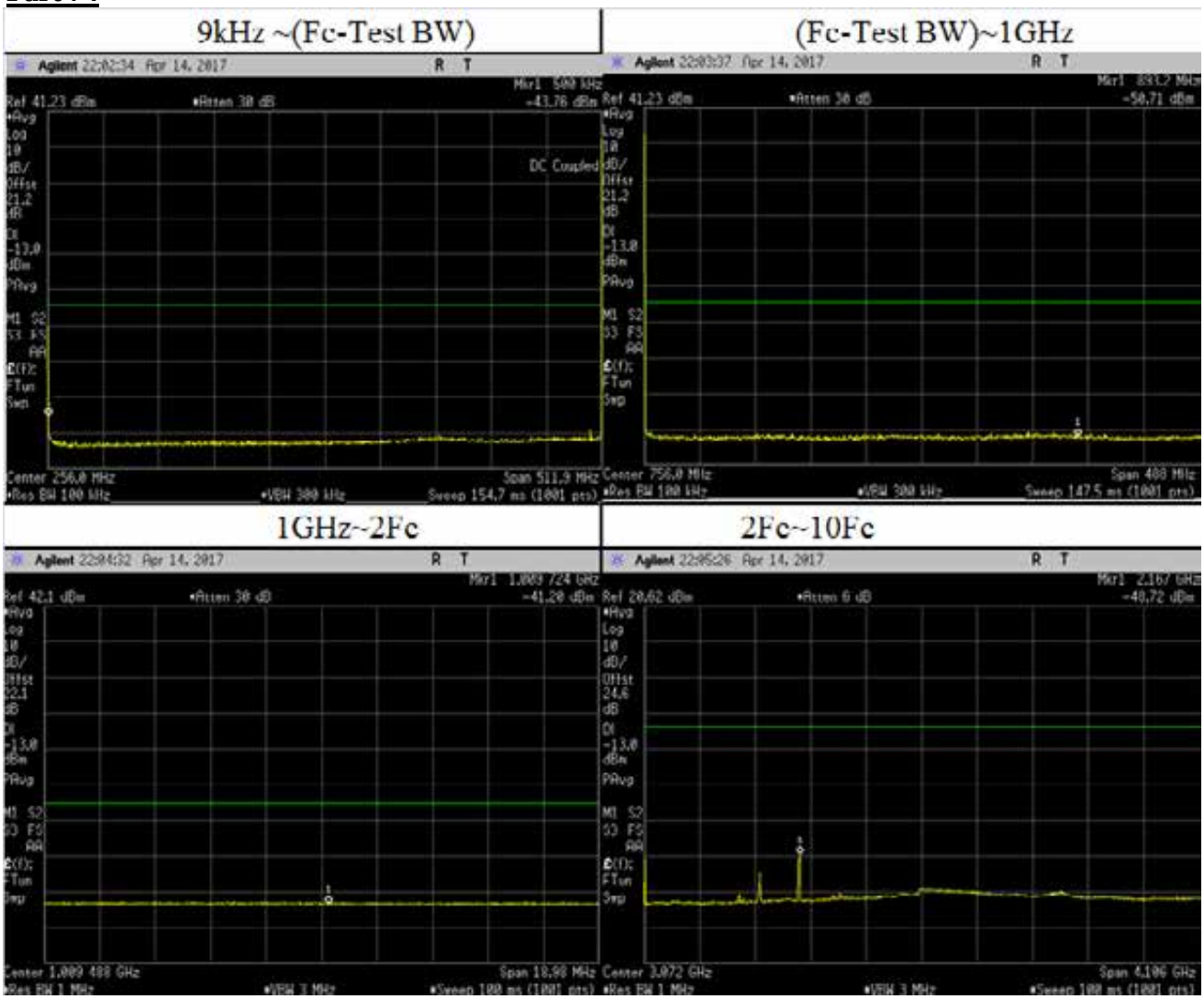
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	470.89 0.49 477.15 475.22 346.67	-45.13 -48.34 -49.39 -49.51 -49.7	-13	Pass
(Fc-Test BW)~2Fc	485.4 874.21 871.83 486.83 832.28	-49.19 -49.33 -49.38 -49.42 -49.46	-13	Pass
2Fc~1GHz	983.71 998.16 990.5 983.46 961.6 964.02	-66.72 -66.77 -66.79 -66.94 -66.95 -68.95	-13	Pass
1GHz~10Fc	2161.68 1875.08 2417.7 2406.24 2509.41 1446.04 1928.05 2410.06 2892.07 3374.09 3856.1 4338.11 4820.12	-46.15 -53.02 -54.37 -56.01 -58.23 -62.41 -62.12 -53.88 -60.56 -59.4 -60.41 -61.22 -61.48	-13	Pass

Analog: 511.9875 MHz, 20 kHz Channel Spacing, High Power (Not for IC Review)
Part 22



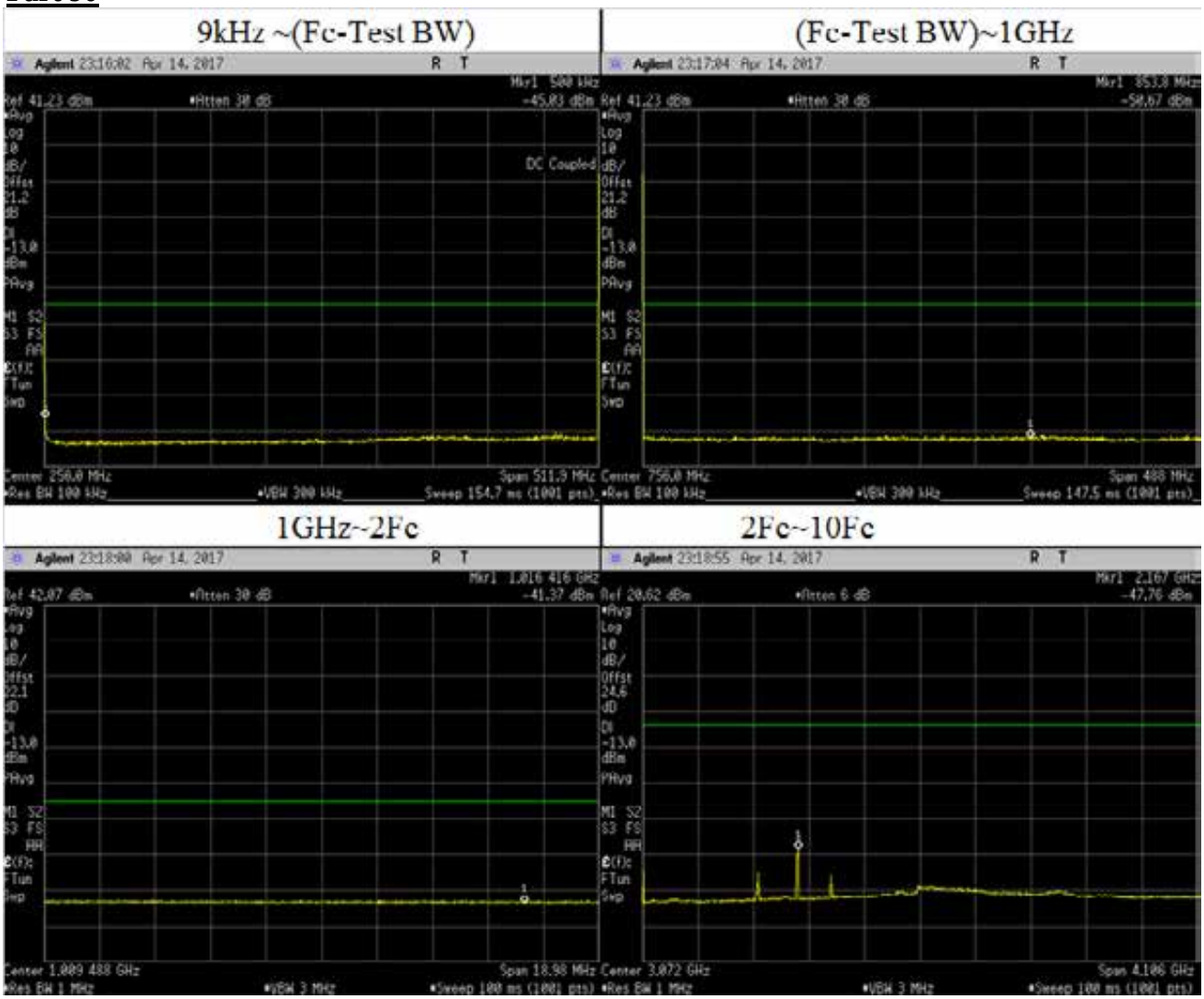
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.52 500.69 2.05 373.85 450.57	-43.32 -47.44 -49.51 -49.74 -49.79	-13	Pass
(Fc-Test BW)~1GHz	526.66 859.12 861.56 876.67 827.92	-49.69 -49.73 -49.78 -49.86 -49.92	-13	Pass
1GHz~2Fc	1003.73 1001.25 1013.38 1002.12 1002.45	-40.53 -40.54 -40.56 -40.57 -40.58	-13	Pass
2Fc~10Fc	2159.27 2167.48 1876.25 2413.59 3061.67 1023.98 1535.96 2047.95 2559.94 3071.93 3583.91 4095.9 4607.89 5119.87	-49.11 -49.26 -52.9 -54.91 -58.38 -52.89 -62.34 -61.55 -60.96 -58.55 -60 -59.54 -61.34 -61.15	-13	Pass

Analog: 511.9875 MHz, 20 kHz Channel Spacing, High Power (Not for IC Review)
Part 74



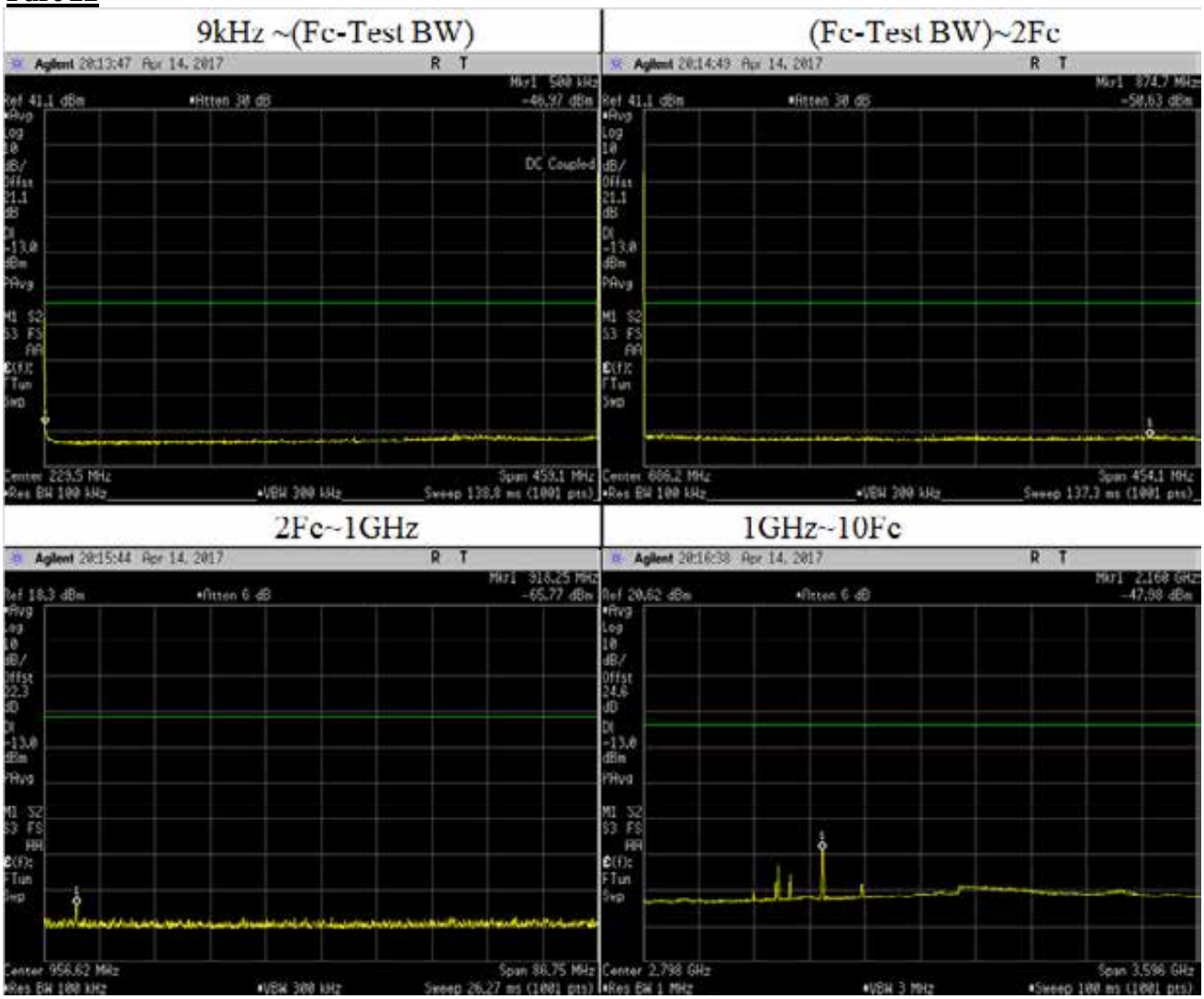
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.52 500.69 361.07 445.96 357.49	-43.77 -47.55 -49.45 -49.56 -49.56	-13	Pass
(Fc-Test BW)~1GHz	893.24 872.28 517.4 849.86 904.45	-49.04 -49.31 -49.34 -49.45 -49.51	-13	Pass
1GHz~2Fc	1009.72 1015.37 1012.78 1001.99 1006.5	-40.46 -40.57 -40.65 -40.65 -40.66	-13	Pass
2Fc~10Fc	2167.48 1876.25 1868.05 3065.77 3266.76 1023.98 1535.96 2047.95 2559.94 3071.93 3583.91 4095.9 4607.89 5119.87	-48.72 -54.12 -56.98 -58.37 -58.41 -52.96 -62.22 -61.6 -61.07 -58.61 -60.17 -59.65 -61.15 -61.2	-13	Pass

Analog: 511.9875 MHz, 20 kHz Channel Spacing, High Power (Not for IC Review)
Part 90



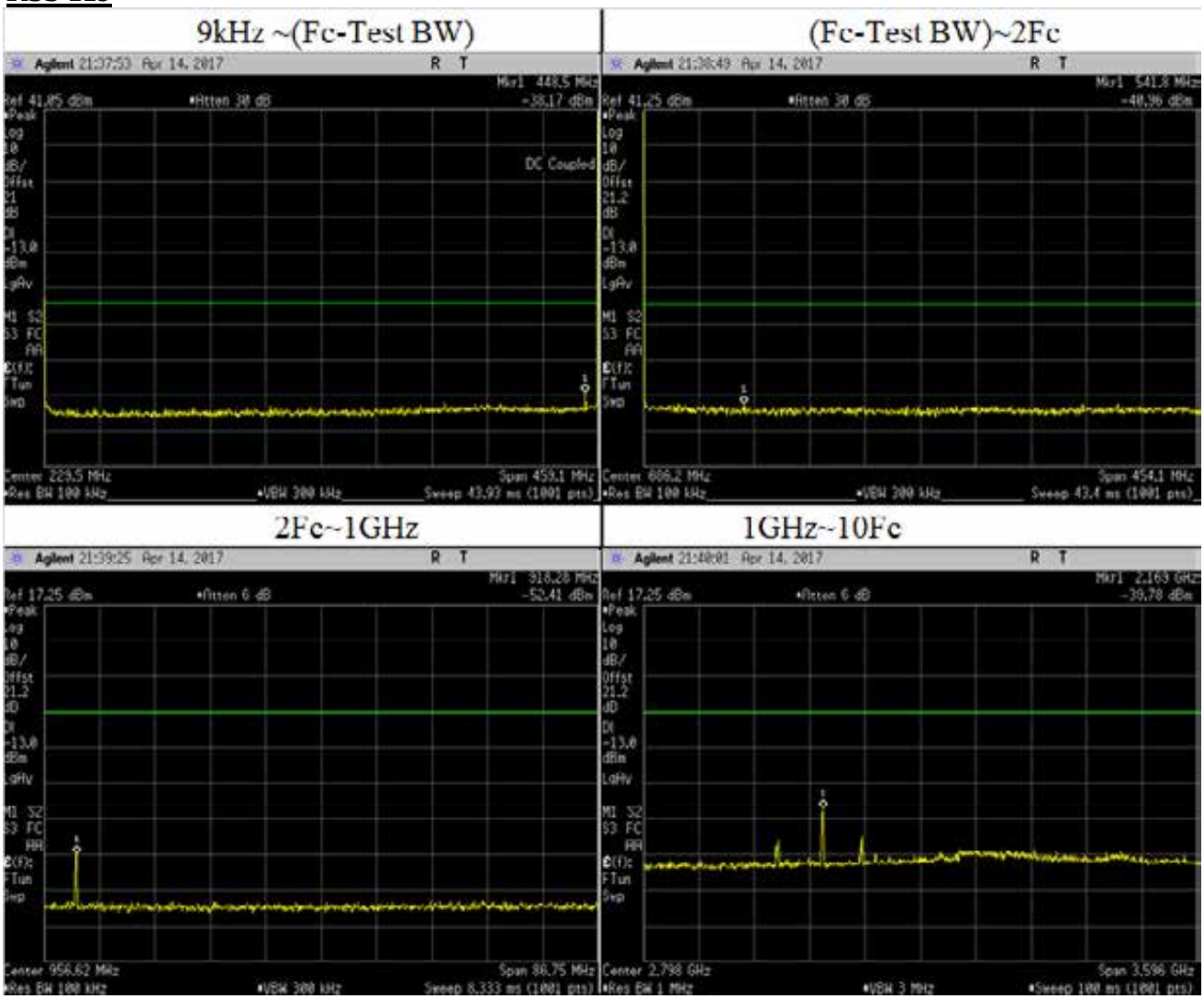
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.52 500.69 475.63 344.7 507.33	-45.03 -47.58 -49.14 -49.43 -49.45	-13	Pass
(Fc-Test BW)~1GHz	517.4 544.7 515.94 519.35 744.08	-49.24 -49.49 -49.6 -49.72 -49.74	-13	Pass
1GHz~2Fc	1000.02 1011.18 1007.79 1011.85 1018.35	-40.36 -40.65 -40.65 -40.67 -40.71	-13	Pass
2Fc~10Fc	2167.48 2413.59 1876.25 1868.05 3078.08 1023.98 1535.96 2047.95 2559.94 3071.93 3583.91 4095.9 4607.89 5119.87	-48.57 -52.97 -54.87 -57.74 -58.37 -52.92 -62.18 -61.49 -61.15 -58.67 -59.97 -59.62 -61.32 -61.14	-13	Pass

Analog: 459.125 MHz, 20 kHz Channel Spacing, Low Power (Not for IC Review)
Part 22



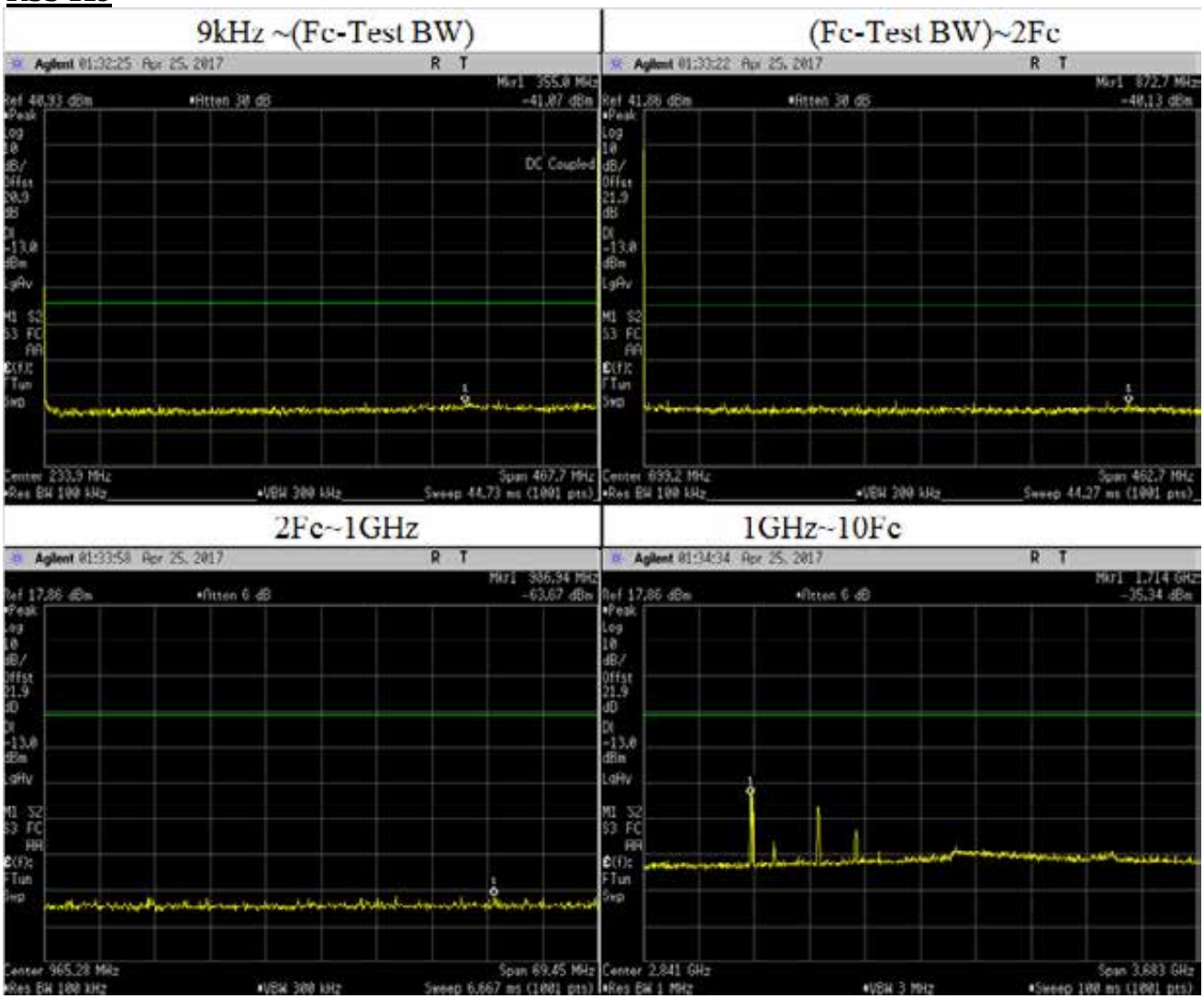
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.47 1.38 339.84 356.81 341.67	-46.97 -49.12 -49.5 -49.74 -49.77	-13	Pass
(Fc-Test BW)~2Fc	874.69 474.14 465.53 886.49 696.42	-49.57 -49.62 -49.68 -49.71 -49.82	-13	Pass
2Fc~1GHz	918.19 944.36 987.09 976.86 983.27 918.25	-66.36 -68.95 -68.97 -69.03 -69.29 -65.95	-13	Pass
1GHz~10Fc	2160.43 2167.61 1876.61 1952.05 1858.65 1377.37 1836.5 2295.62 2754.75 3213.87 3673 4132.12 4591.25	-47.98 -48.43 -52.59 -55.04 -57.12 -62.19 -62.11 -61.67 -60.64 -58.61 -60.21 -59.99 -61.1	-13	Pass

Analog: 459.125 MHz, 20 kHz Channel Spacing, Low Power (Not for FCC Review)
RSS 119



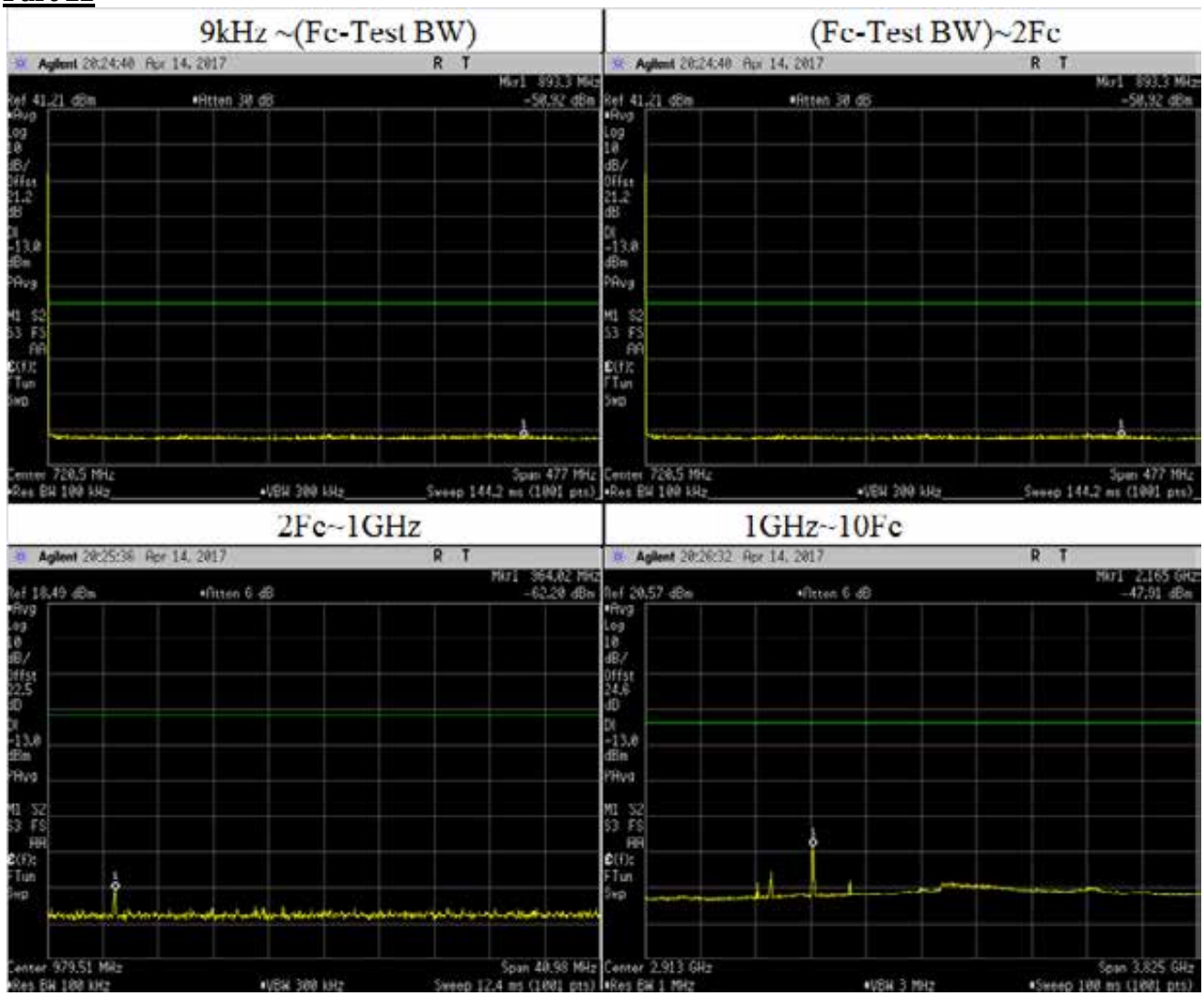
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	448.5	-38.17	-13	Pass
(Fc-Test BW)~2Fc	541.8	-40.96	-13	Pass
2Fc~1GHz	918.28	-52.41	-13	Pass
1GHz~10Fc	2169	-39.78	-13	Pass

Analog: 467.775 MHz, 20 kHz Channel Spacing, Low Power (Not for FCC Review)
RSS 119



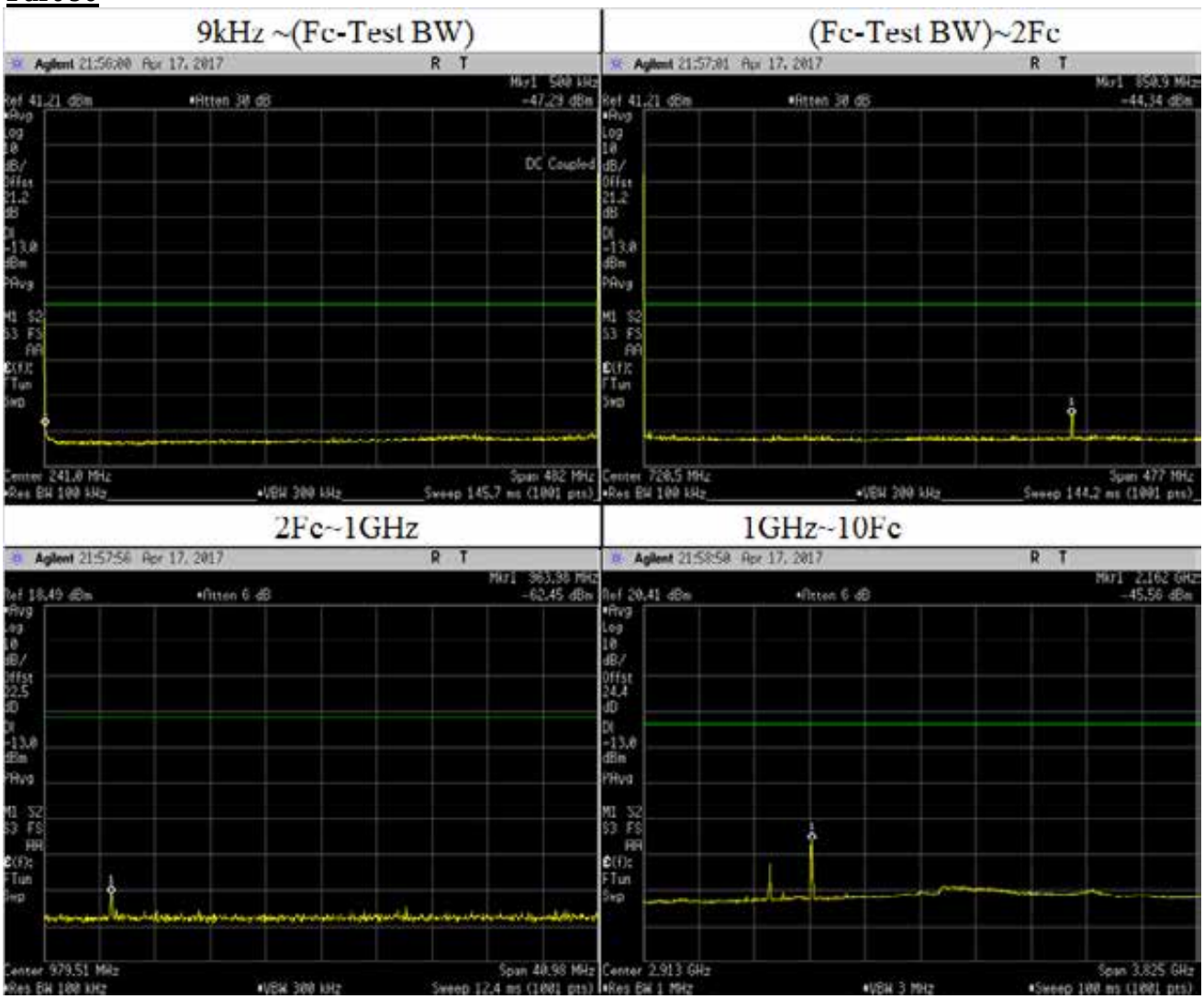
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	355.00	-41.07	-13	Pass
(Fc-Test BW)~2Fc	872.70	-40.13	-13	Pass
2Fc~1GHz	986.94	-63.67	-13	Pass
1GHz~10Fc	1714.00	-35.34	-13	Pass

Analog: 482.0125 MHz, 20 kHz Channel Spacing, Low Power (Not for IC Review)
Part 22



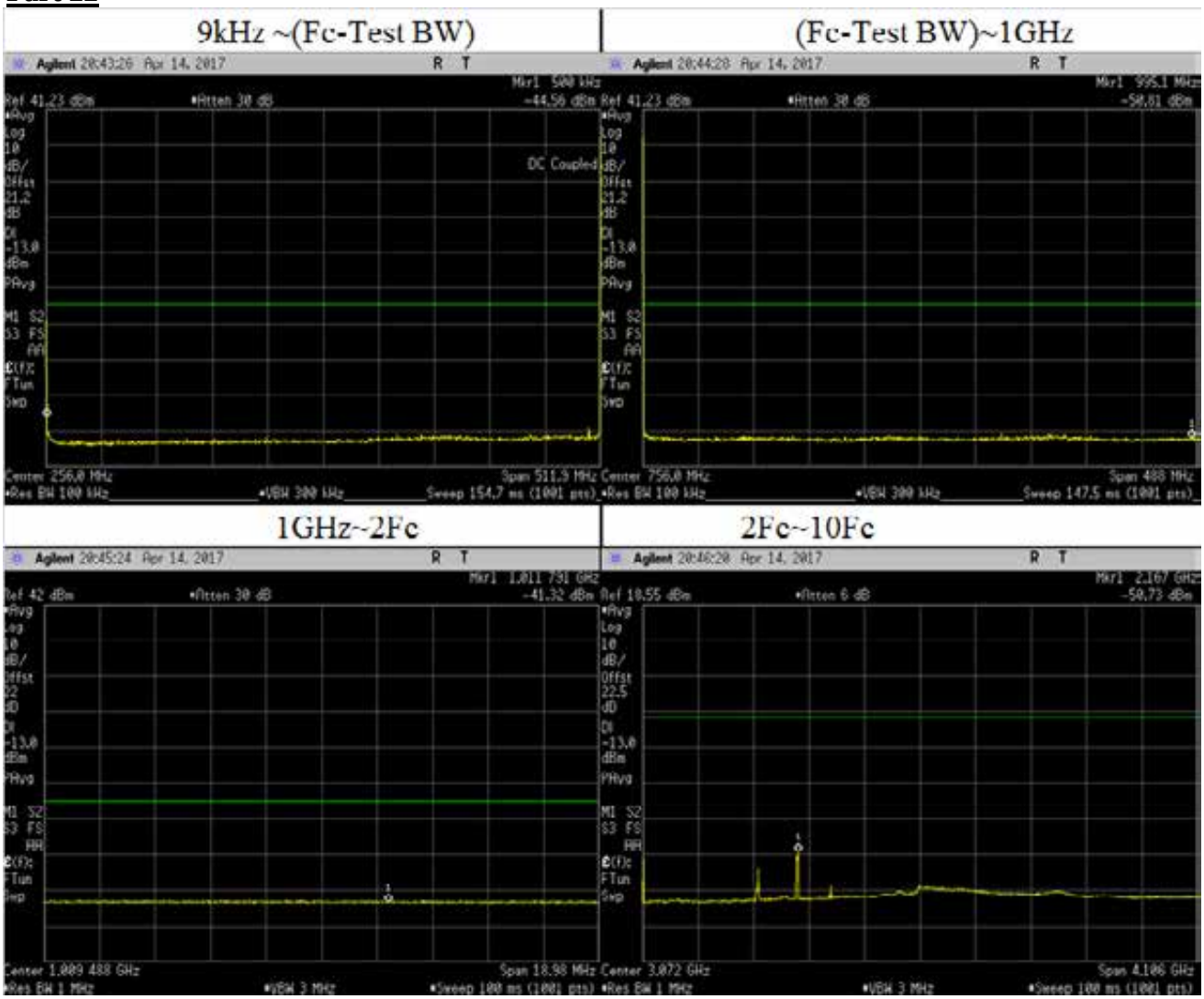
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.49 463.19 477.63 386.63 349.56	-39.51 -49 -49.28 -49.36 -49.36	-13	Pass
(Fc-Test BW)~2Fc	893.27 863.25 850.39 725.07 871.83	-49.65 -49.65 -49.78 -49.81 -49.81	-13	Pass
2Fc~1GHz	963.98 976.42 974.46 974.99 965.04 964.02	-62.84 -66.84 -66.95 -67.27 -67.29 -62.64	-13	Pass
1GHz~10Fc	2165.5 1875.08 2417.7 1779.55 3063.5 1446.04 1928.05 2410.06 2892.07 3374.09 3856.1 4338.11 4820.12	-47.91 -55.19 -57.21 -58.23 -58.31 -62.53 -61.99 -61.41 -60.56 -59.15 -60.43 -60.92 -61.27	-13	Pass

Analog: 482.0125 MHz, 20 kHz Channel Spacing, Low Power (Not for IC Review)
Part 90



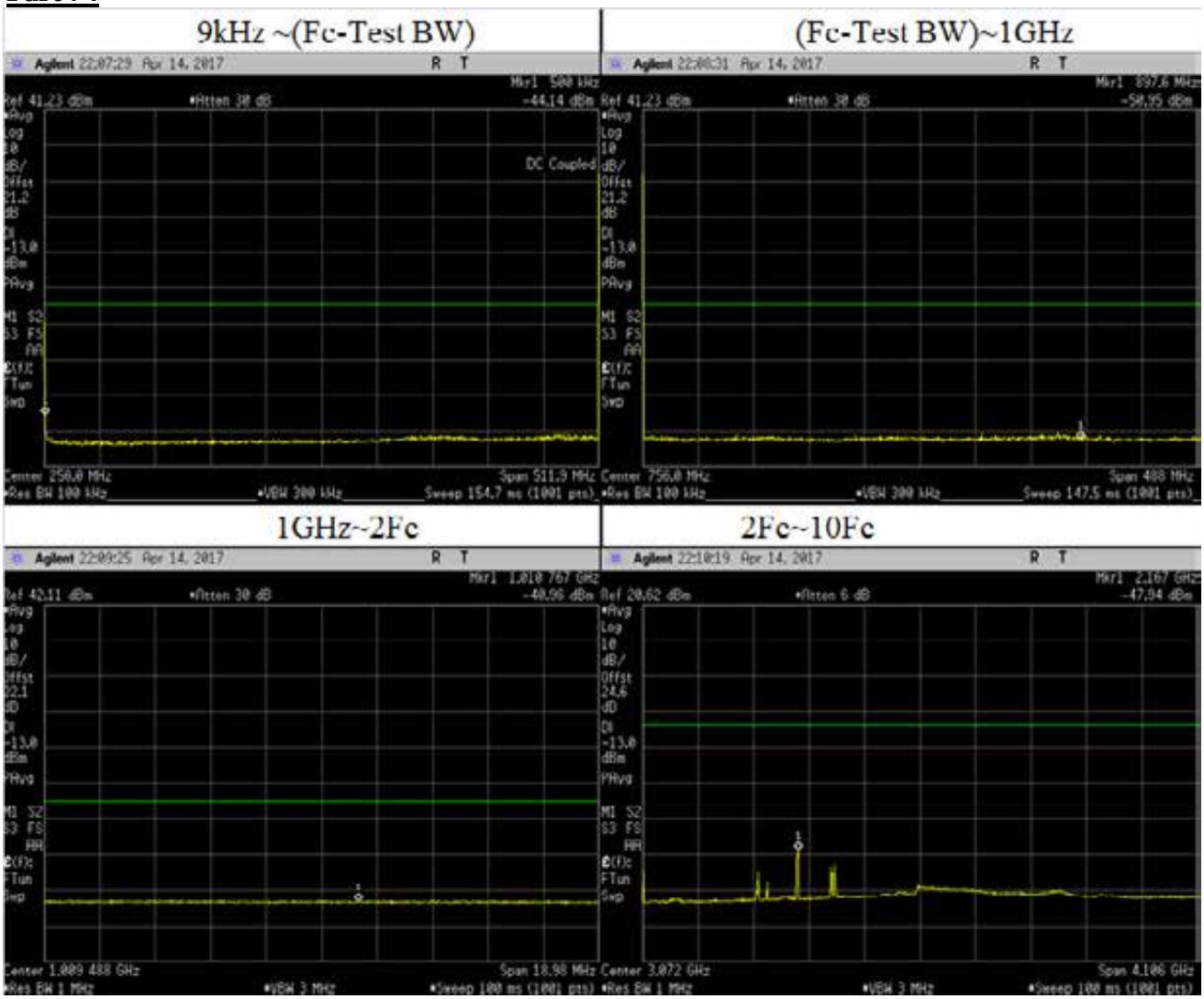
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.49 374.59 475.7 464.63 456.44	-47.29 -49.47 -49.49 -49.62 -49.64	-13	Pass
(Fc-Test BW)~2Fc	850.86 487.78 486.83 870.4 620.72	-43.37 -49.01 -49.5 -49.53 -49.67	-13	Pass
2Fc~1GHz	963.98 985.8 964.35 985.14 996.81 964.02	-62.45 -66.29 -66.83 -67.13 -67.13 -63.08	-13	Pass
1GHz~10Fc	2161.68 1875.08 3074.97 3212.53 3052.04 1446.04 1928.05 2410.06 2892.07 3374.09 3856.1 4338.11 4820.12	-45.56 -52.49 -58.44 -58.67 -58.68 -62.69 -62.09 -61.49 -60.46 -59.41 -60.61 -61.25 -61.42	-13	Pass

Analog: 511.9875 MHz, 20 kHz Channel Spacing, Low Power (Not for IC Review)
Part 22



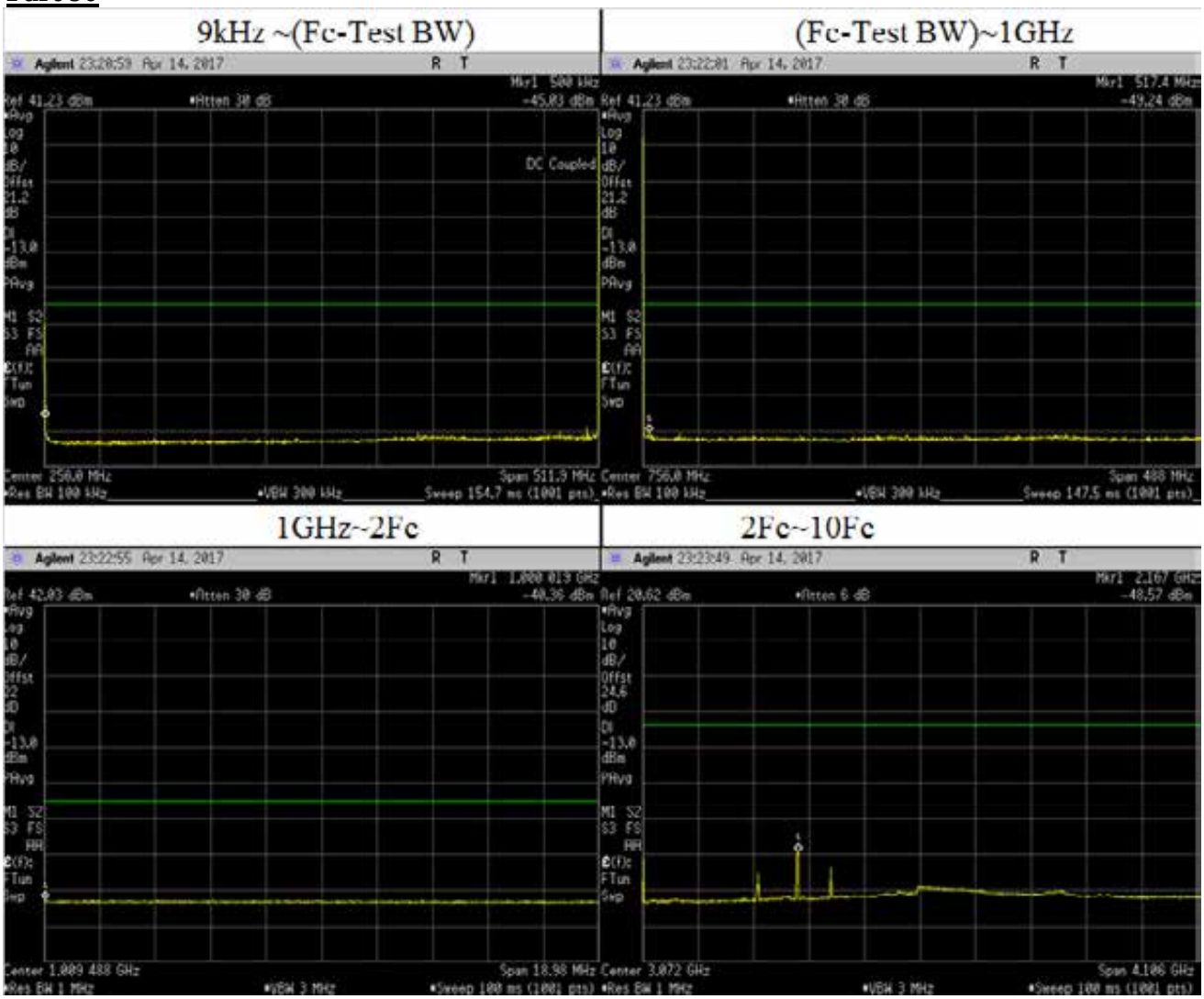
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.52 378.46 368.74 505.29 333.96	-43.82 -49.63 -49.82 -49.87 -49.91	-13	Pass
(Fc-Test BW)~1GHz	834.75 899.58 708.98 711.9 631.47	-49.08 -49.73 -49.8 -49.85 -49.86	-13	Pass
1GHz~2Fc	1003.03 1004.63 1009.86 1006.1 1005.06	-40.5 -40.74 -40.77 -40.77 -40.78	-13	Pass
2Fc~10Fc	2167.48 2159.27 1876.25 3098.59 3061.67 1023.98 1535.96 2047.95 2559.94 3071.93 3583.91 4095.9 4607.89 5119.87	-48.85 -49.85 -52.98 -58.36 -58.39 -55.79 -62.54 -61.56 -61.01 -58.71 -60.11 -59.71 -61.15 -61.08	-13	Pass

Analog: 511.9875 MHz, 20 kHz Channel Spacing, Low Power (Not for IC Review)
Part 74



Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.52 479.72 471.02 474.6 483.81	-57.14 -62.25 -62.42 -62.47 -62.49	-13	Pass
(Fc-Test BW)~1GHz	897.63 876.67 863.02 809.88 883.49	-62 -62.08 -62.29 -62.4 -62.54	-13	Pass
1GHz~2Fc	1010.77 1006.1 1000.38 1010.03 1003.77	-53.37 -53.53 -53.54 -53.56 -53.57	-13	Pass
2Fc~10Fc	2167.48 2438.2 2413.59 1876.25 1868.05 1023.98 1535.96 2047.95 2559.94 3071.93 3583.91 4095.9 4607.89 5119.87	-60.94 -65.4 -66.12 -67.17 -69.66 -68.77 -75.25 -74.53 -74.09 -71.62 -73.12 -72.61 -74.3 -73.98	-13	Pass

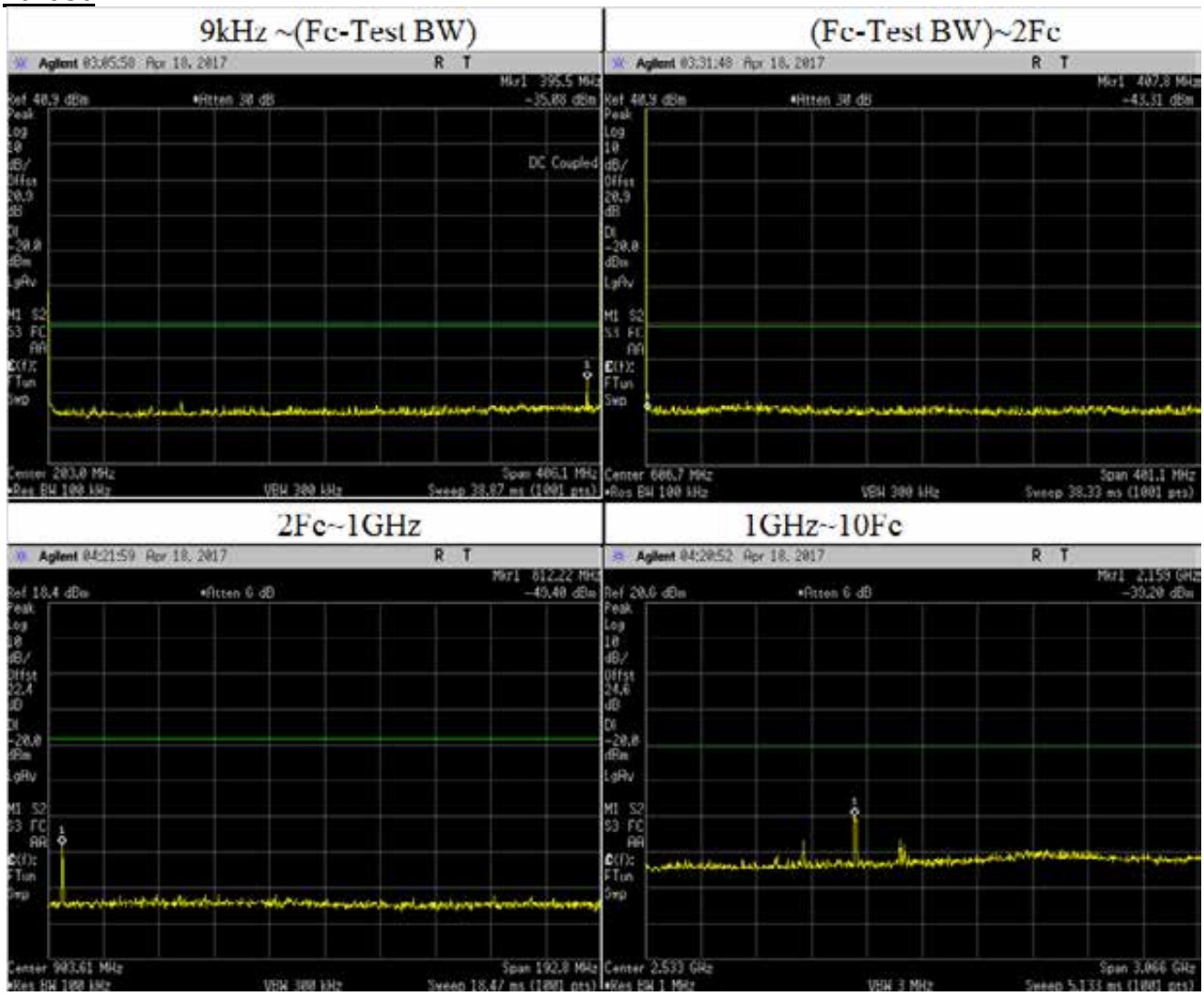
Analog: 511.9875 MHz, 20 kHz Channel Spacing, Low Power (Not for IC Review)
Part 90



Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.52 471.02 1.54 476.14 363.12	-45.03 -49.16 -49.29 -49.32 -49.77	-13	Pass
(Fc-Test BW)~1GHz	853.76 864.48 776.25 990.25 516.91	-49.31 -49.6 -49.66 -49.73 -49.76	-13	Pass
1GHz~2Fc	1016.42 1000.3 1002.5 1014.25 1011.45	-40.59 -40.63 -40.69 -40.7 -40.71	-13	Pass
2Fc~10Fc	2167.48 1876.25 2413.59 1868.05 3053.47 1023.98 1535.96 2047.95 2559.94 3071.93 3583.91 4095.9 4607.89 5119.87	-47.76 -54.63 -55.35 -57.12 -58.2 -55.75 -62.25 -61.58 -61.23 -58.7 -60.05 -59.48 -61.16 -61.1	-13	Pass

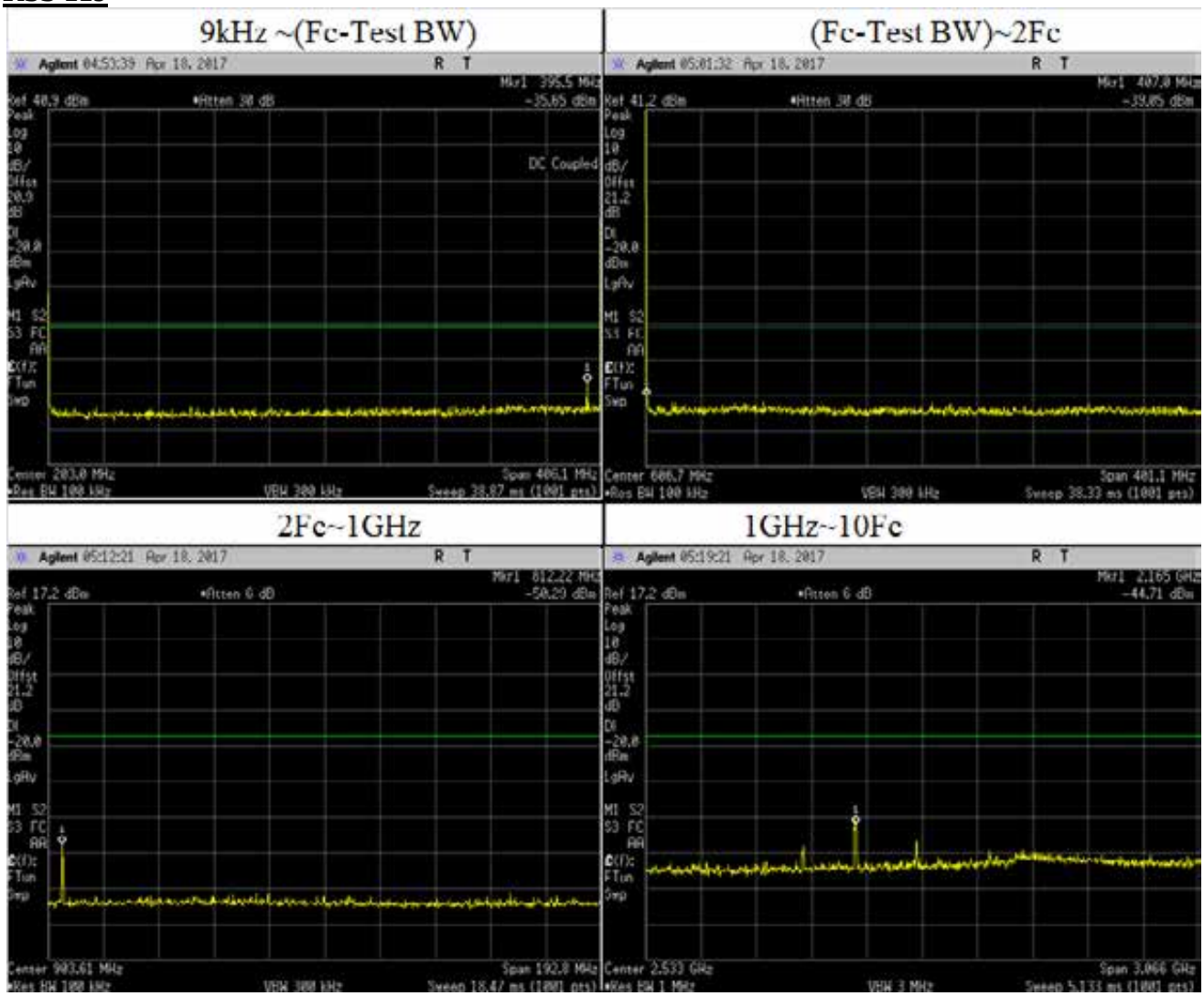
6.10.3. Test Result (Digital)

4FSK: 406.1125 MHz, 12.5 kHz Channel Spacing, Max Power (Not for IC Review)
Part 90



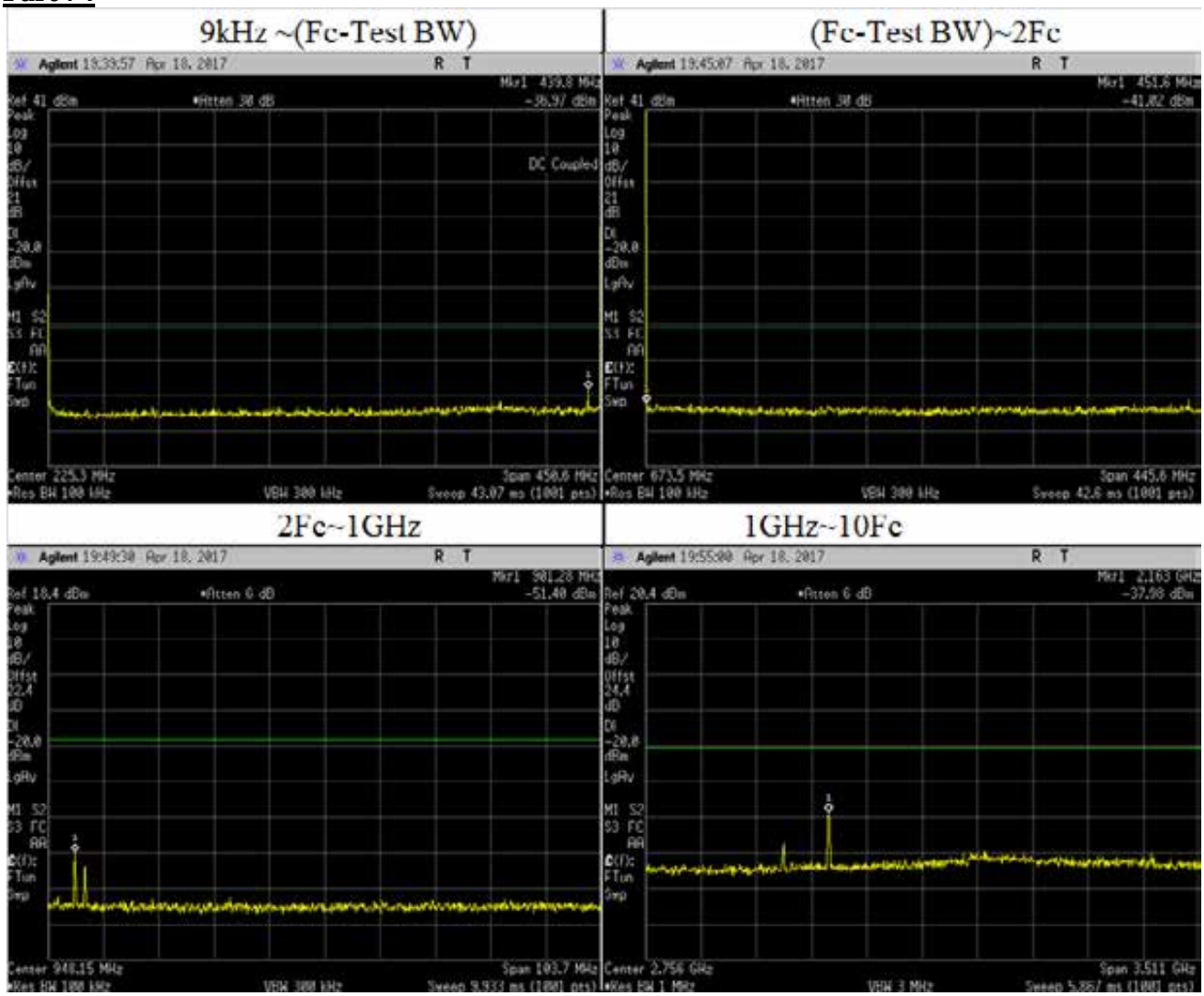
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	395.4914 405.2378 363.4095 382.4962 0.7622	-35.734 -40.439 -41.237 -41.501 -41.63	-20	Pass
(Fc-Test BW)~2Fc	719.4091 774.3598 637.9858 638.3869 466.7161	-41.109 -41.943 -42.05 -42.098 -42.112	-20	Pass
2Fc~1GHz	812.2228 812.4156 812.03 866.5924 866.3996 853.0964	-49.405 -56.41 -57.544 -63.67 -63.737 -63.906	-20	Pass
1GHz~10Fc	2155.882 2158.948 2162.014 2168.146 2165.08 2171.212 2413.426 1876.876 2410.36 2434.888 2419.558 3112.474 3219.784	-38.751 -39.199 -39.363 -40.314 -40.776 -45.437 -45.968 -46.708 -46.844 -47.357 -48.39 -48.782 -48.799	-20	Pass

4FSK: 406.1125 MHz, 12.5 kHz Channel Spacing, Max Power (Not for FCC Review)
RSS 119



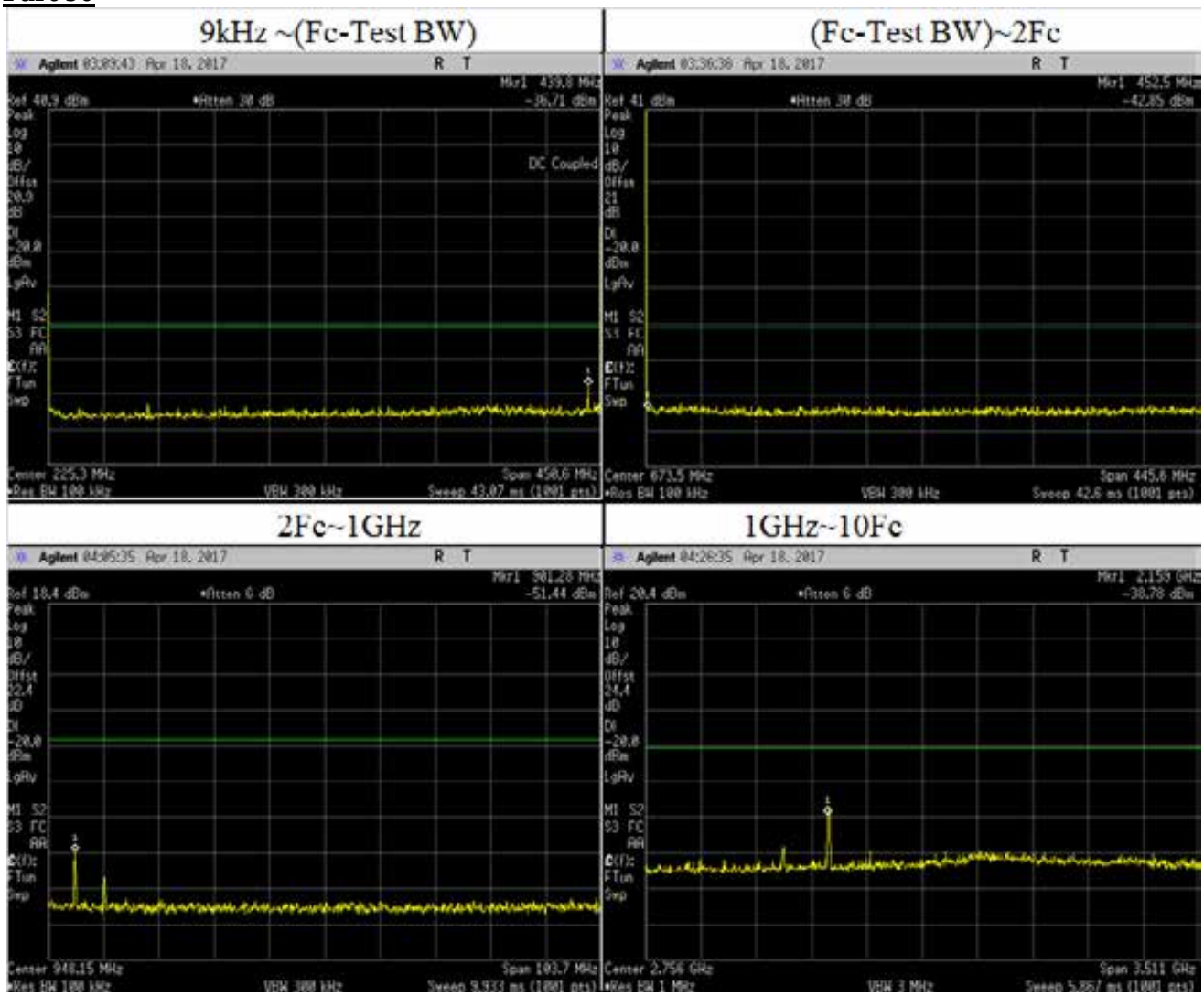
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	395.5	-35.65	-20	Pass
(Fc-Test BW)~2Fc	407	-39.05	-20	Pass
2Fc~1GHz	812.22	-50.29	-20	Pass
1GHz~10Fc	2165	-44.71	-20	Pass

4FSK: 450.65 MHz, 12.5 kHz Channel Spacing, Max Power (Not for IC Review)
Part 74



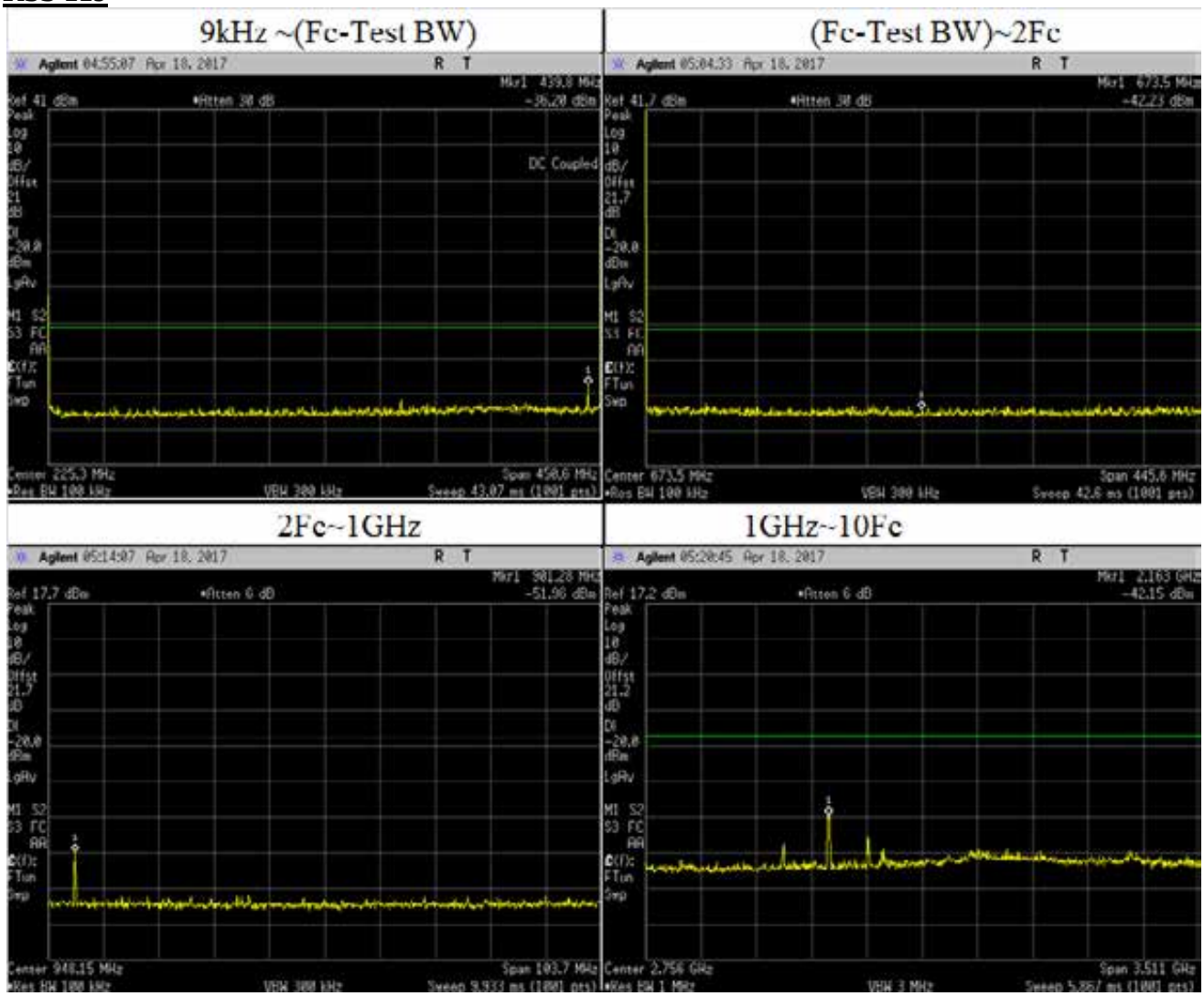
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	439.7856 367.6896 449.6988 1.3518 0.4506	-36.965 -40.339 -40.493 -40.531 -40.983	-20	Pass
(Fc-Test BW)~2Fc	887.8336 451.5912 844.6104 487.2392 873.5744	-40.307 -41.018 -41.24 -41.245 -41.289	-20	Pass
2Fc~1GHz	901.2776 901.3813 998.7556 898.1666 949.6018 998.5482	-51.395 -51.936 -63.634 -63.727 -63.847 -63.918	-20	Pass
1GHz~10Fc	2162.641 2159.13 2166.152 2169.663 2155.619 1878.25 1874.739 3152.743 3419.579 3240.518 3054.435 4213.065 3567.041	-37.934 -38.531 -39.883 -40.397 -42.116 -46.687 -48.343 -49.086 -49.434 -49.473 -49.55 -49.607 -49.64	-20	Pass

4FSK: 450.65 MHz, 12.5 kHz Channel Spacing, Max Power (Not for IC Review)
Part 90



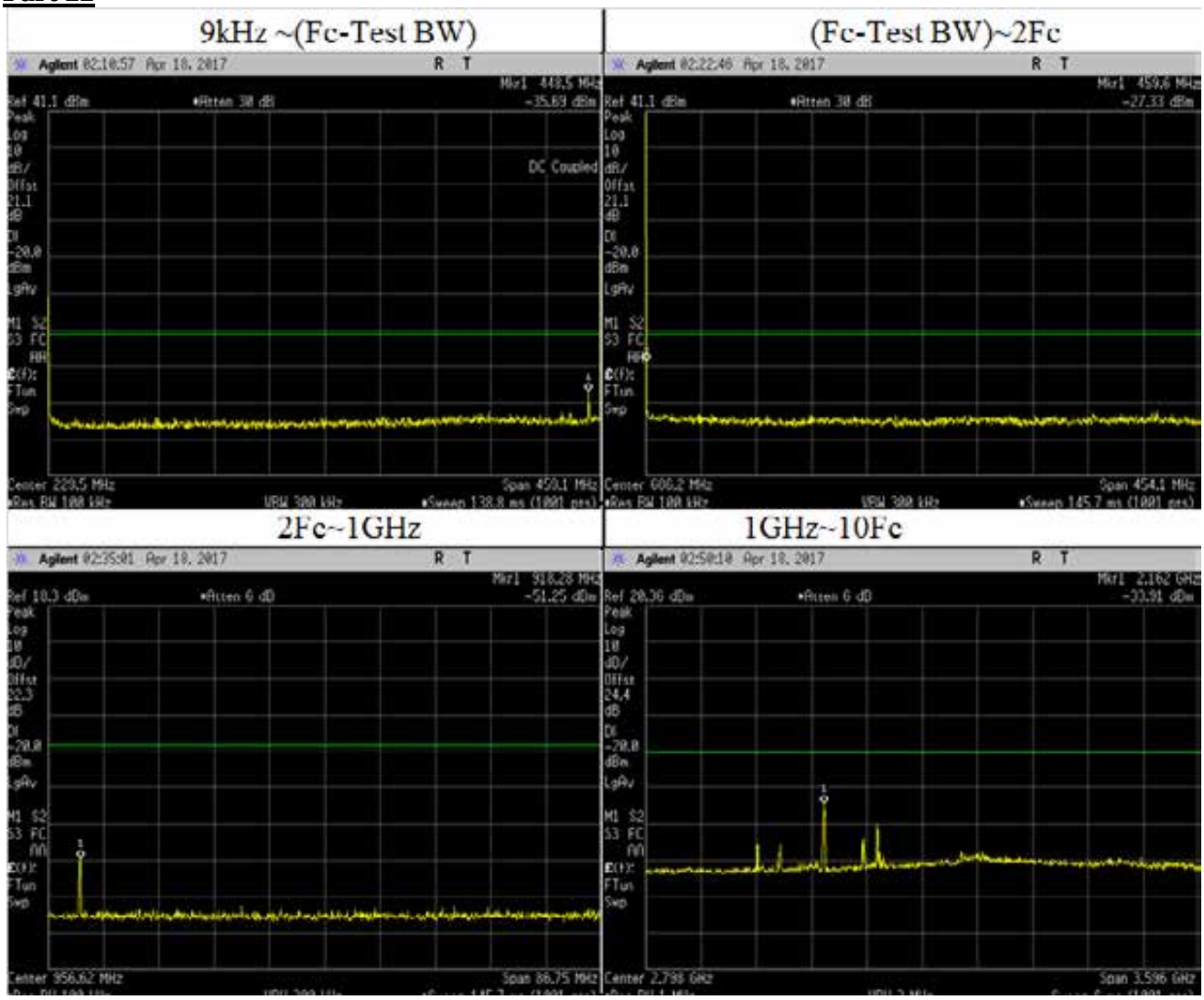
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	439.7856 352.8198 449.6988 440.2362 222.1458	-36.229 -40.808 -41.036 -41.037 -41.145	-20	Pass
(Fc-Test BW)~2Fc	468.9696 877.5848 837.0352 797.8224 711.8216	-40.311 -40.418 -40.485 -40.659 -40.714	-20	Pass
2Fc~1GHz	5010.032 901.1739 906.7737 906.8774 906.9811 906.67	-53.403 -55.804 -58.246 -58.253 -60.553 -62.46	-20	Pass
1GHz~10Fc	2162.641 2159.13 2155.619 2166.152 2169.663 1878.25 1874.739 1871.228 3117.633 2425.966 3131.677 3300.205 2906.973	-38.105 -38.886 -38.929 -40.056 -41.167 -47.796 -48.053 -48.524 -48.93 -49.035 -49.294 -49.303 -49.425	-20	Pass

4FSK: 450.65 MHz, 12.5 kHz Channel Spacing, Max Power (Not for FCC Review)
RSS 119



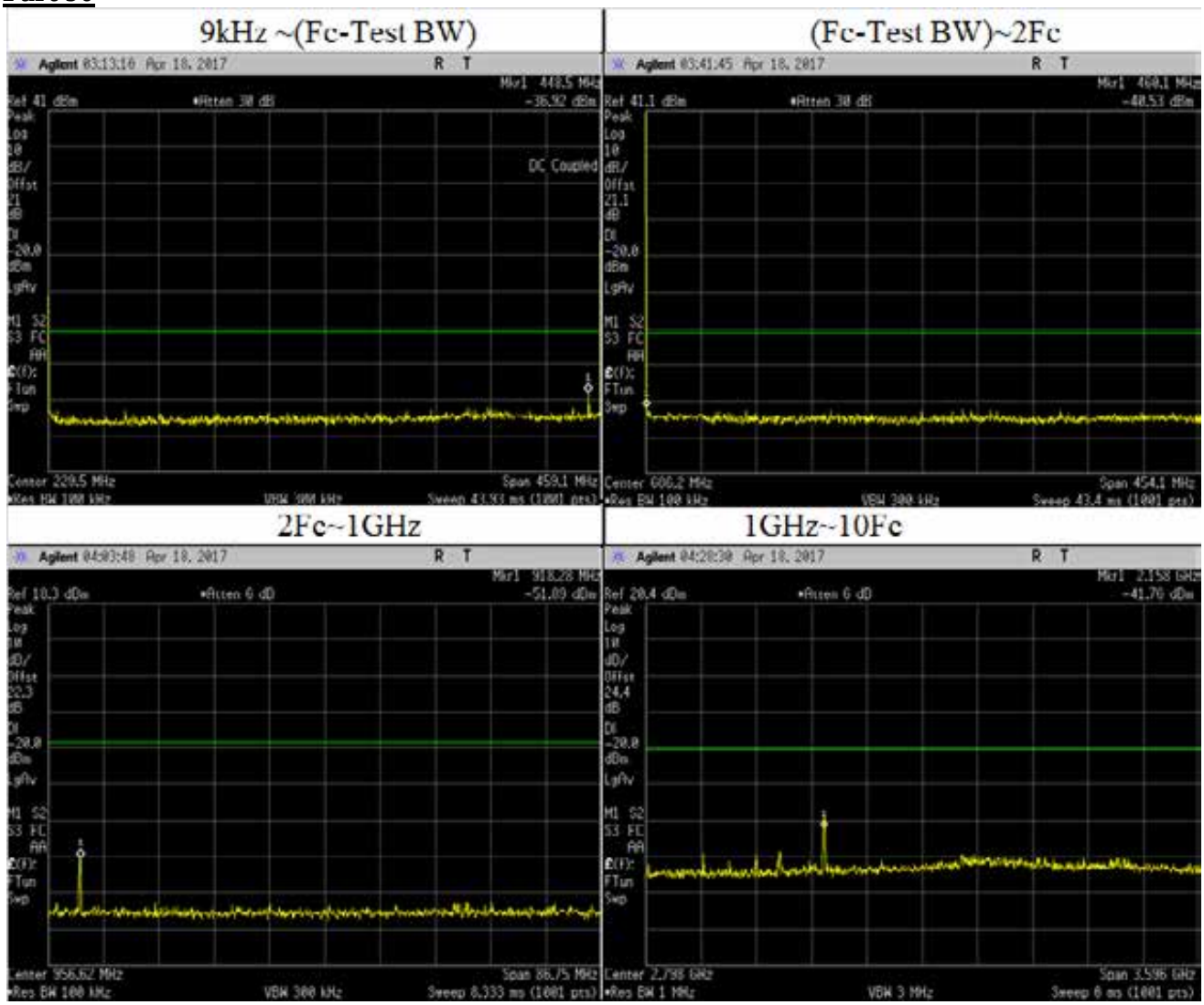
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	493.8	-36.20	-20	Pass
(Fc-Test BW)~2Fc	673.5	-42.23	-20	Pass
2Fc~1GHz	901.28	-51.96	-20	Pass
1GHz~10Fc	2163	-42.15	-20	Pass

4FSK: 459.125 MHz, 12.5 kHz Channel Spacing, Max Power (Not for IC Review)
Part 22



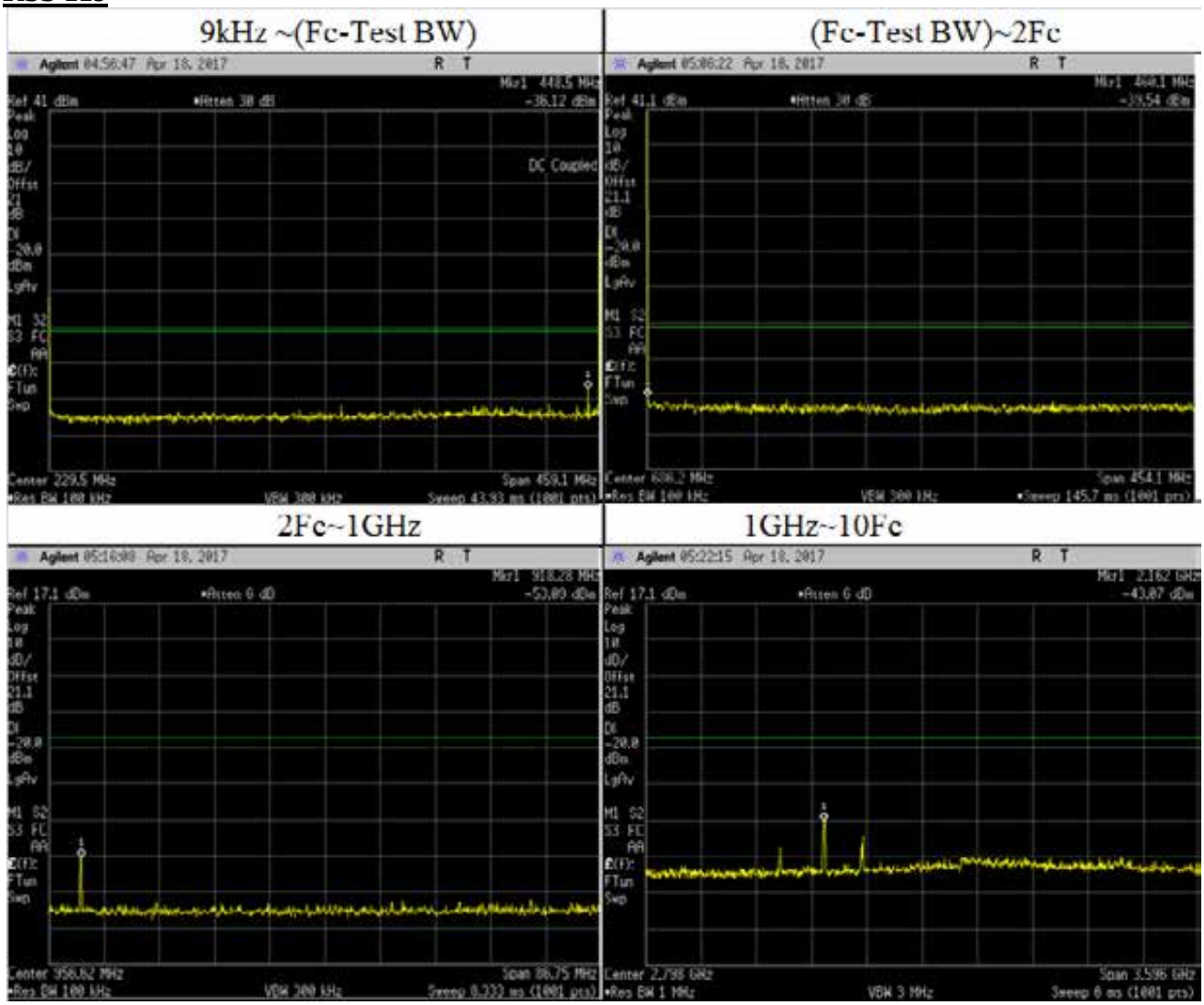
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	439.7856 0.4506 287.4828 388.8678 449.6988	-36.204 -40.048 -40.359 -41.294 -41.323	-20	Pass
(Fc-Test BW)~2Fc	827.4251 826.971 828.7874 827.8792 826.5169	-33.629 -33.983 -33.993 -34.496 -35.274	-20	Pass
2Fc~1GHz	918.2765 918.18975 918.36325 918.103 969.2855 943.6075	-51.25 -51.995 -56.616 -61.685 -64.326 -64.427	-20	Pass
1GHz~10Fc	2161.508 2157.912 2165.104 2168.7 2154.316 2506.724 2510.32 2420.42 2503.128 2409.632 1729.988 1726.392 1877.424	-33.914 -35.918 -37.836 -38.39 -39.031 -39.769 -42.823 -43.536 -43.876 -44.318 -45.35 -45.455 -45.554	-20	Pass

4FSK: 459.125 MHz, 12.5 kHz Channel Spacing, Max Power (Not for IC Review)
Part 90



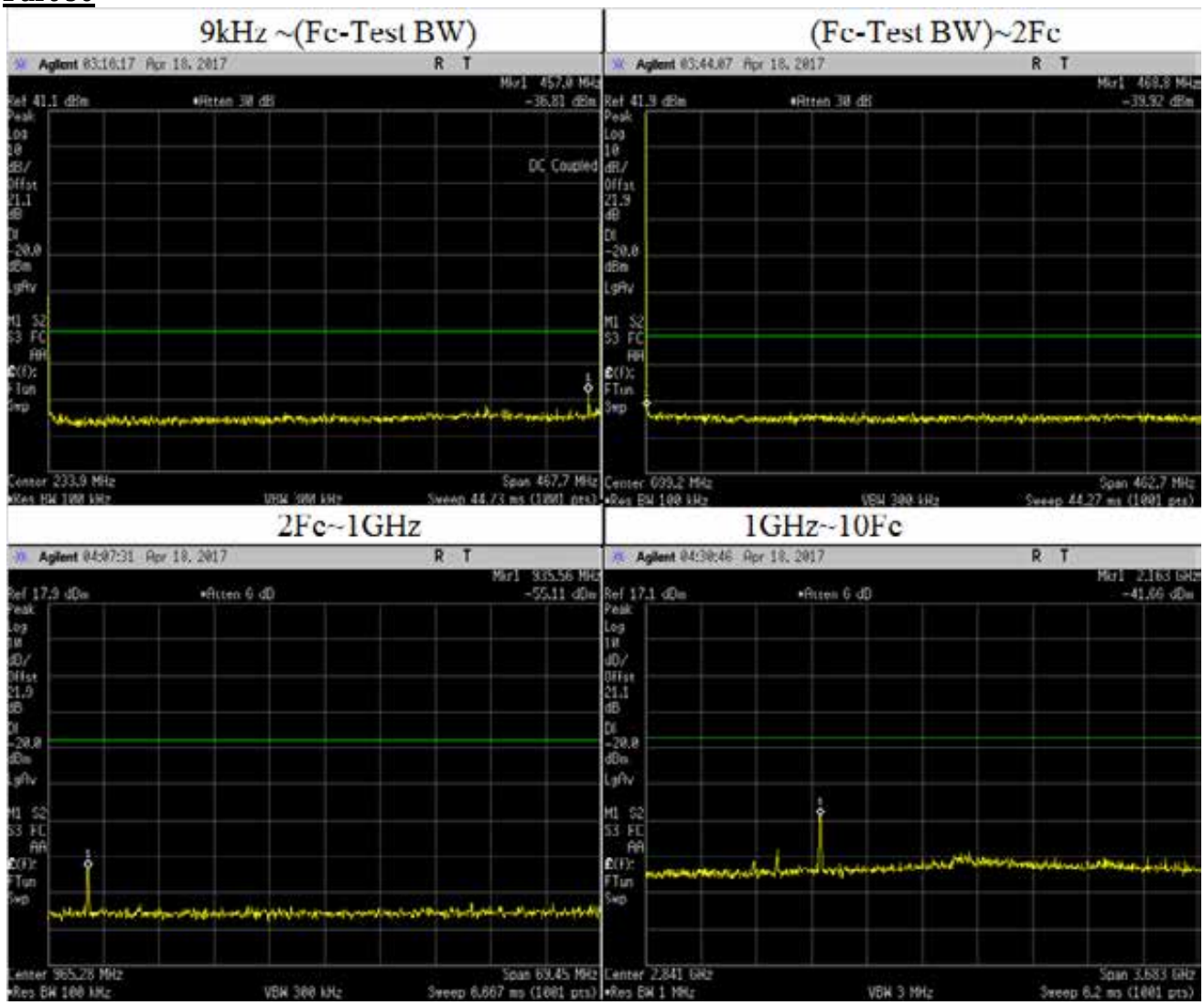
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	448.4907 0.4091 1.3273 458.1318 455.3772	-37.194 -37.44 -40.412 -40.962 -41.011	-20	Pass
(Fc-Test BW)~2Fc	460.0582 719.3493 493.6616 461.8746 610.8194	-40.527 -41.045 -41.174 -41.293 -41.328	-20	Pass
2Fc~1GHz	918.2765 918.103 914.98 996.09125 926.431 982.8185	-51.886 -60.827 -63.848 -64.313 -64.444 -64.459	-20	Pass
1GHz~10Fc	2165.104 2161.508 2157.912 2154.316 2168.7 1877.424 1870.232 1719.2 1377.58 3060.508 3136.024 3056.912 3189.964	-40.941 -41 -41.763 -42.827 -43.038 -48.212 -48.528 -48.694 -48.832 -49.02 -49.043 -49.157 -49.531	-20	Pass

4FSK: 459.125 MHz, 12.5 kHz Channel Spacing, Max Power (Not for FCC Review)
RSS 119



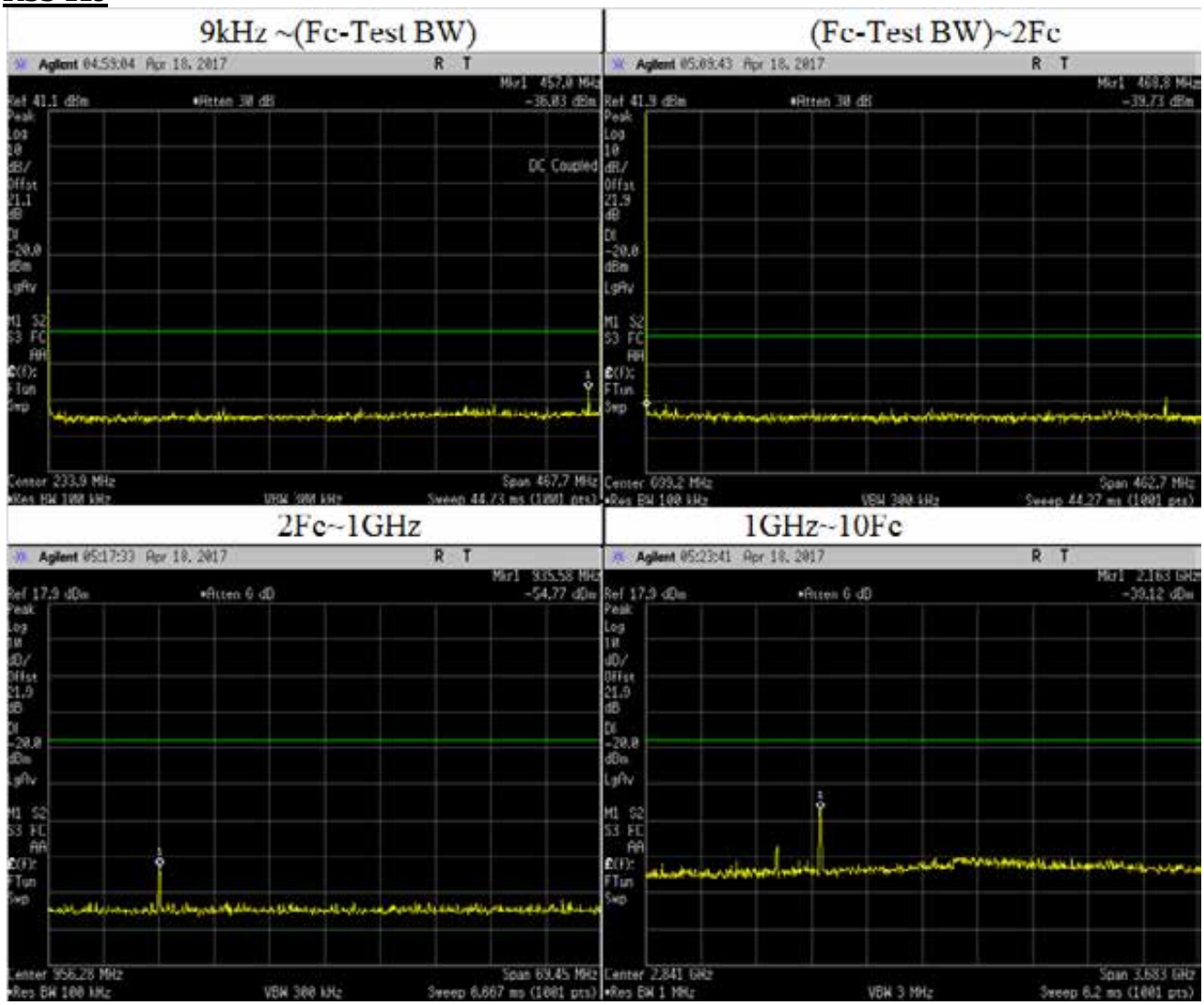
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	448.5	-36.12	-20	Pass
(Fc-Test BW)~2Fc	460.1	-39.54	-20	Pass
2Fc~1GHz	918.28	-53.09	-20	Pass
1GHz~10Fc	2162	-43.07	-20	Pass

4FSK: 467.775 MHz, 12.5 kHz Channel Spacing, Max Power (Not for IC Review)
Part 90



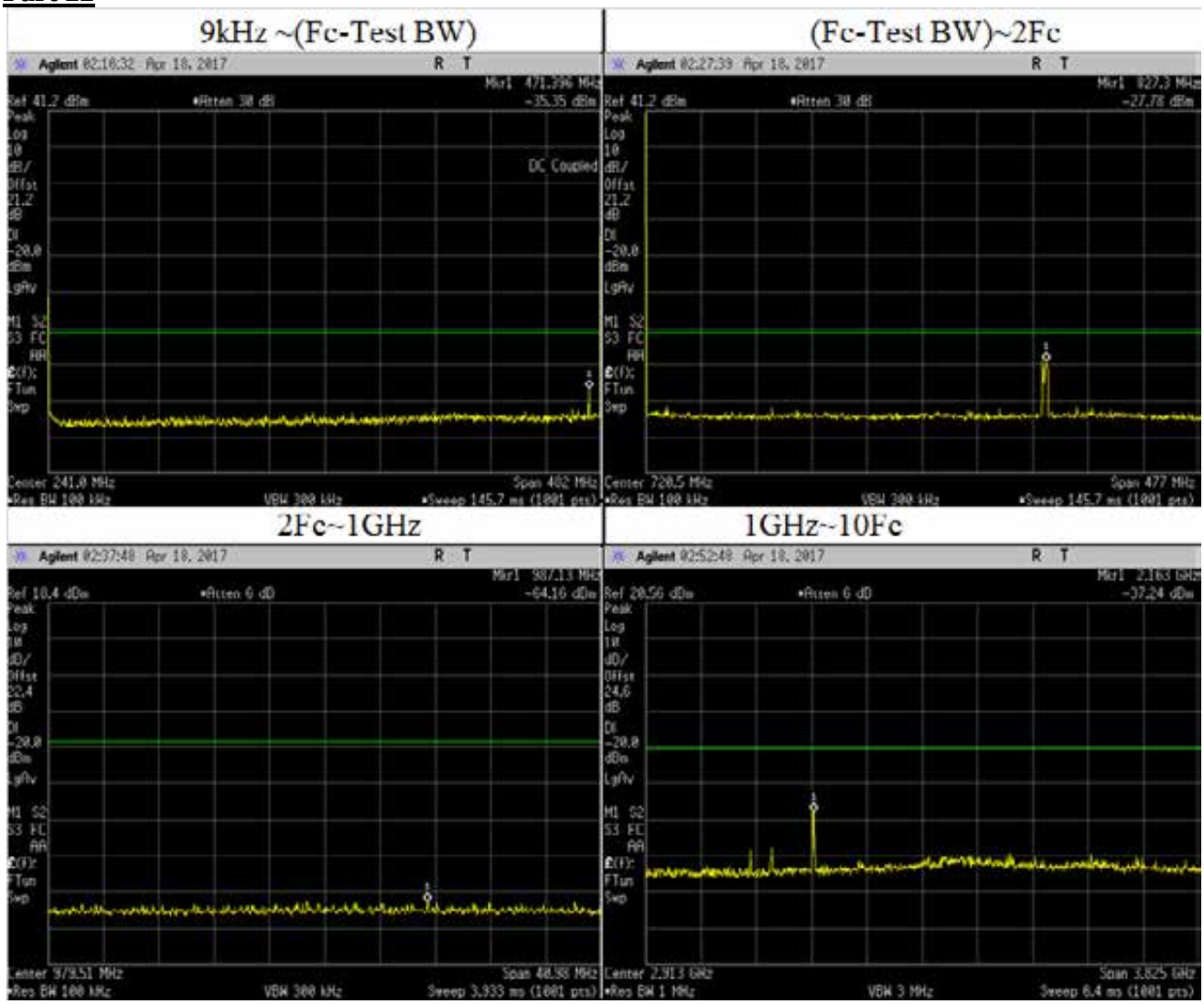
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	456.9929 0.5177 466.8146 0.9854 370.0007	-36.807 -38.839 -40.518 -40.593 -40.634	-20	Pass
(Fc-Test BW)~2Fc	495.612 468.7754 469.2381 469.7008 695.9611	-39.873 -39.923 -39.954 -40.024 -40.223	-20	Pass
2Fc~1GHz	935.5554 935.48595 935.62485 935.4165 935.6943 962.502	-55.11 -56.009 -56.273 -63.048 -63.519 -63.94	-20	Pass
1GHz~10Fc	2159.645 2163.328 2155.962 2167.011 2170.694 3154.055 1876.054 3095.127 3054.614 3124.591 3249.813 3246.13 3338.205	-41.406 -41.657 -43.74 -44.004 -48.404 -51.639 -51.741 -51.92 -52.432 -52.443 -52.916 -52.93 -53.112	-20	Pass

4FSK: 467.775 MHz, 12.5 kHz Channel Spacing, Max Power (Not for FCC Review)
RSS 119



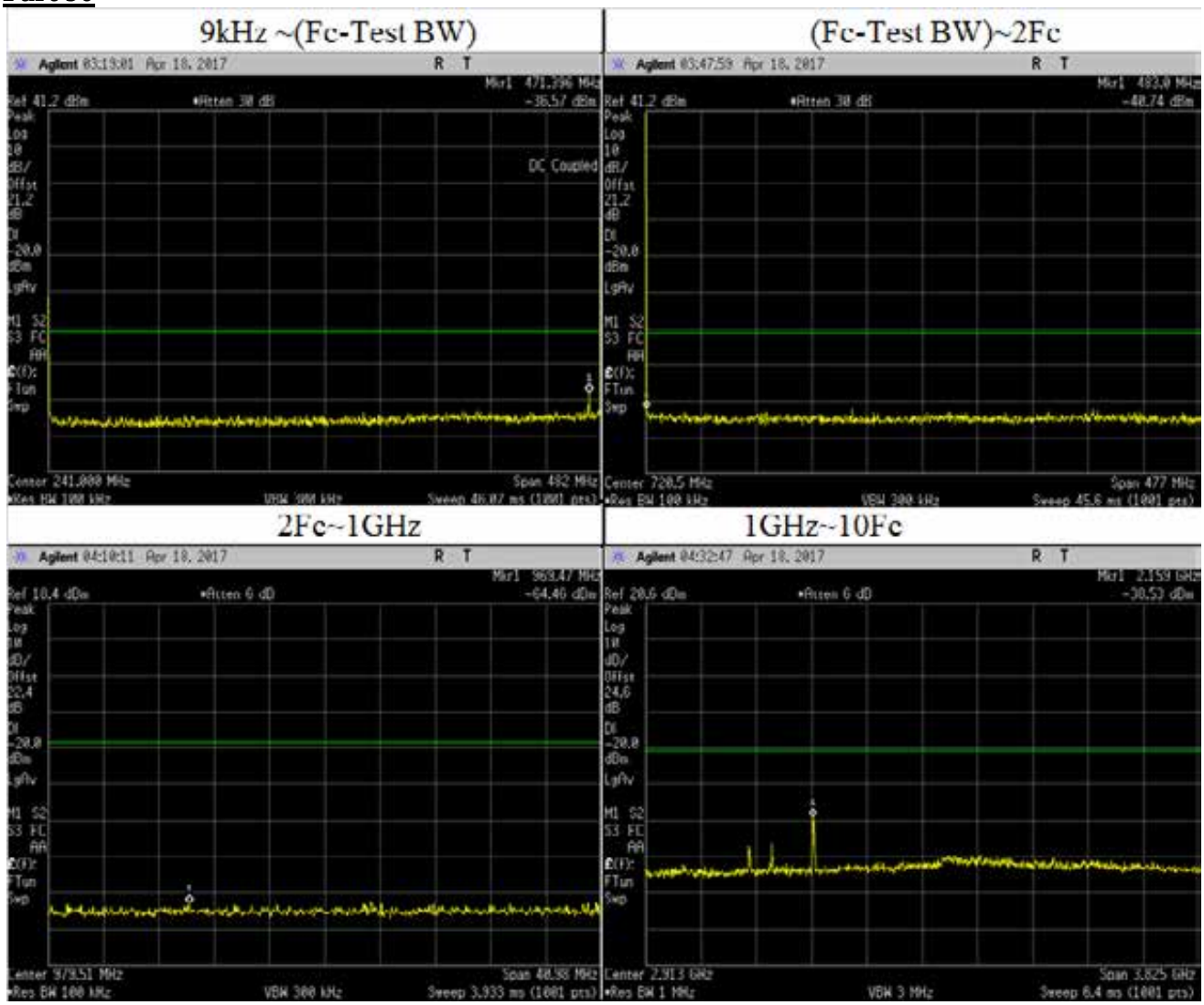
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	457	-36.03	-20	Pass
(Fc-Test BW)~2Fc	468.8	-39.73	-20	Pass
2Fc~1GHz	935.58	-54.77	-20	Pass
1GHz~10Fc	-39.12	2163	-20	Pass

4FSK: 482.0125 MHz, 12.5 kHz Channel Spacing, Max Power (Not for IC Review)
Part 22



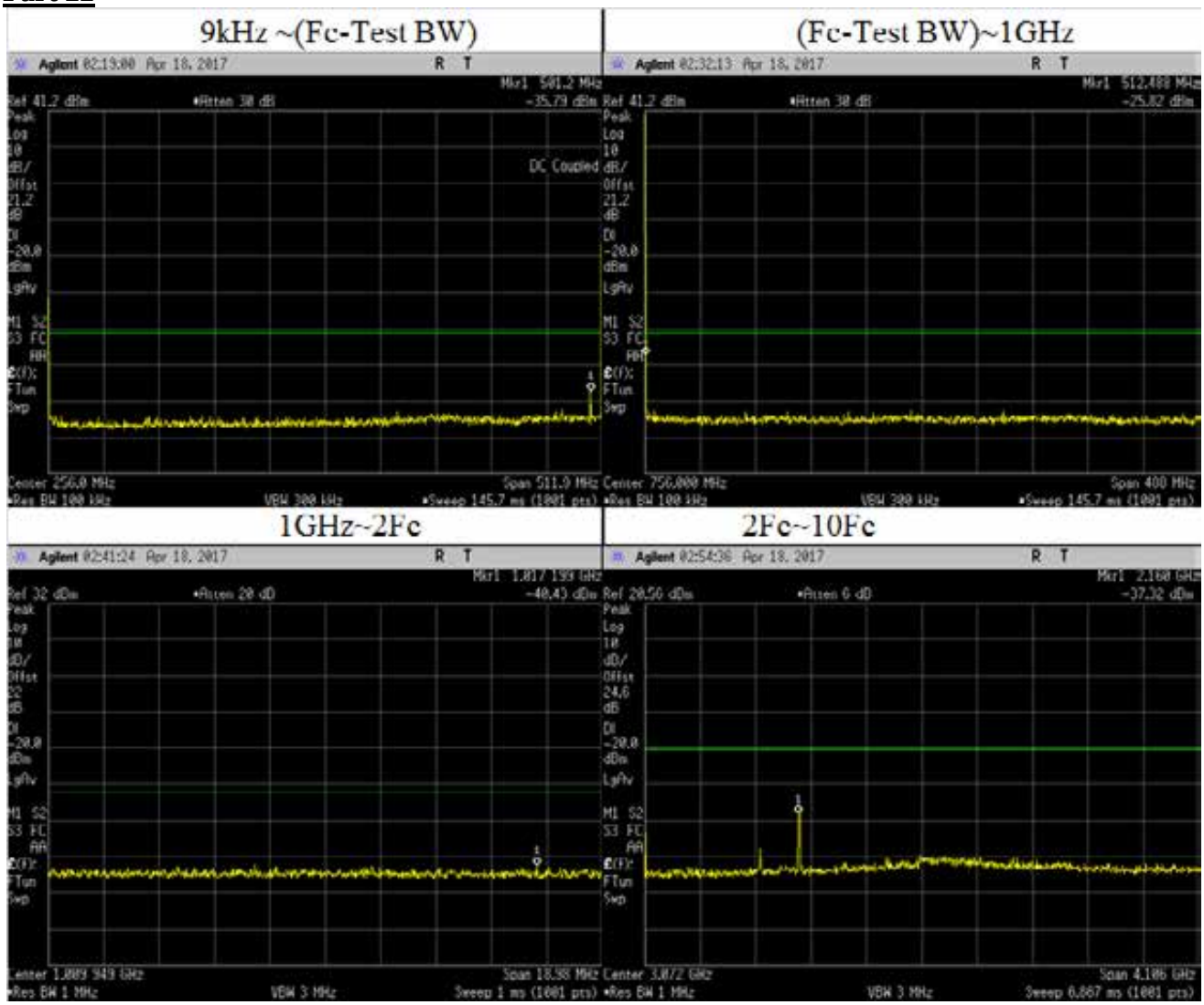
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	471.396 481.036 0.482 456.936 461.756	-35.349 -39.911 -40.761 -41.1 -41.305	-20	Pass
(Fc-Test BW)~2Fc	824.486 500.603 854.06 572.153 591.233	-27.598 -40.427 -40.456 -40.503 -40.764	-20	Pass
2Fc~1GHz	993.15634 967.99462 978.19864 987.13228 987.17326 986.8864	-63.87 -64.046 -64.12 -64.163 -64.24 -64.29	-20	Pass
1GHz~10Fc	2163.3 2155.65 2167.125 2170.95 1876.425 1727.25 1868.775 3085.125 3261.075 3069.825 3517.35 3486.75 3192.225	-36.634 -40.337 -41.521 -45.145 -47.329 -47.765 -48.005 -48.426 -48.519 -48.574 -48.677 -48.727 -48.751	-20	Pass

4FSK: 482.0125 MHz, 12.5 kHz Channel Spacing, Max Power (Not for IC Review)
Part 90



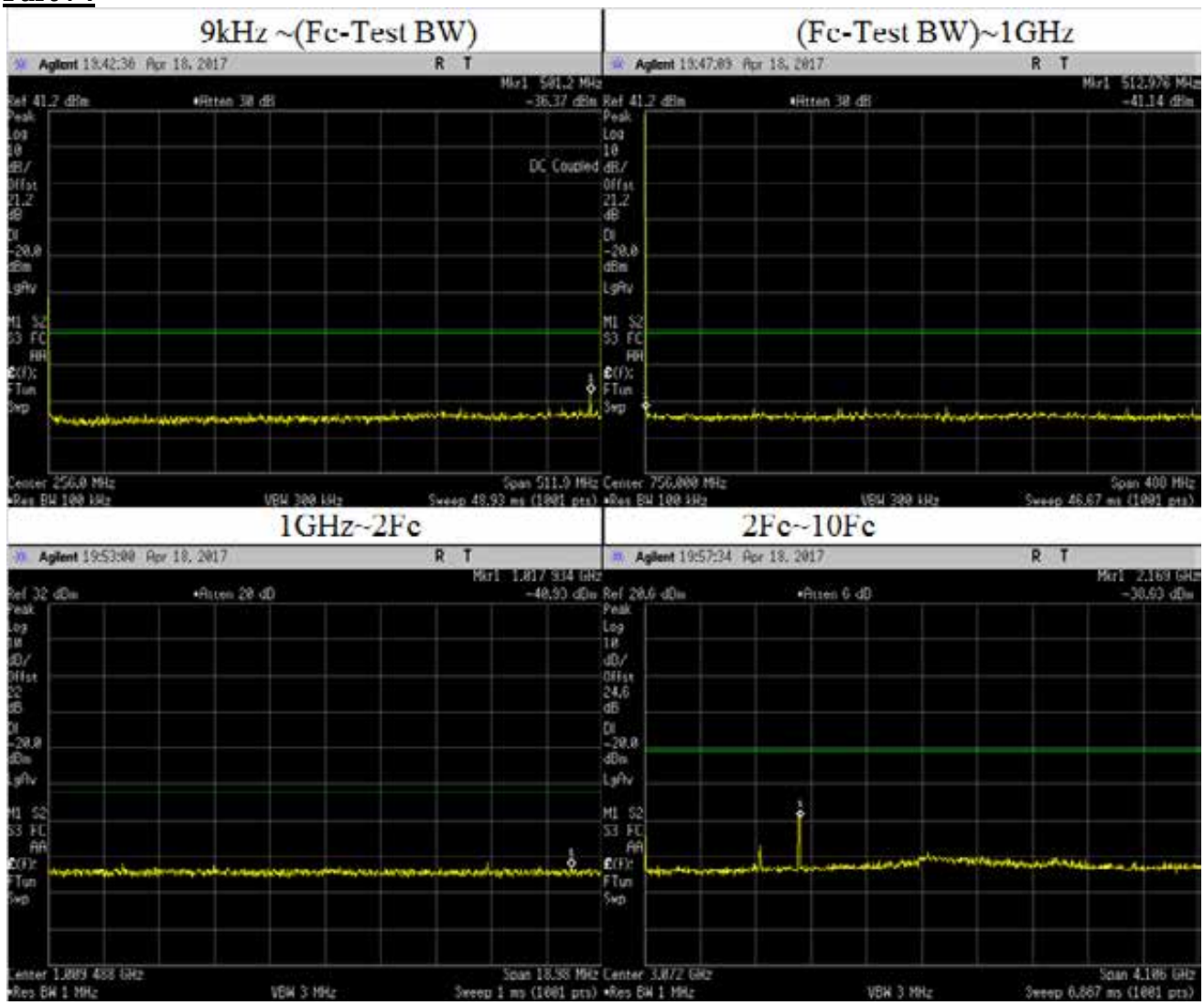
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	471.396 0.964 0.482 390.42 374.514	-36.333 -40.49 -40.581 -40.616 -40.857	-20	Pass
(Fc-Test BW)~2Fc	482.954 659.921 867.893 871.709 487.724	-40.738 -40.948 -41.064 -41.356 -41.48	-20	Pass
2Fc~1GHz	982.95232 999.63118 999.5902 969.4699 993.2383 982.33762	-63.918 -64.418 -64.432 -64.461 -64.522 -64.636	-20	Pass
1GHz~10Fc	2159.475 2155.65 2163.3 2167.125 2170.95 1876.425 1715.775 1719.6 3314.625 1723.425 3310.8 3257.25 3134.85	-38.526 -40.052 -40.351 -41.272 -44.239 -45.813 -46.48 -48.25 -48.937 -48.966 -49.037 -49.088 -49.093	-20	Pass

4FSK: 511.9875 MHz, 12.5 kHz Channel Spacing, Max Power (Not for IC Review)
Part 22



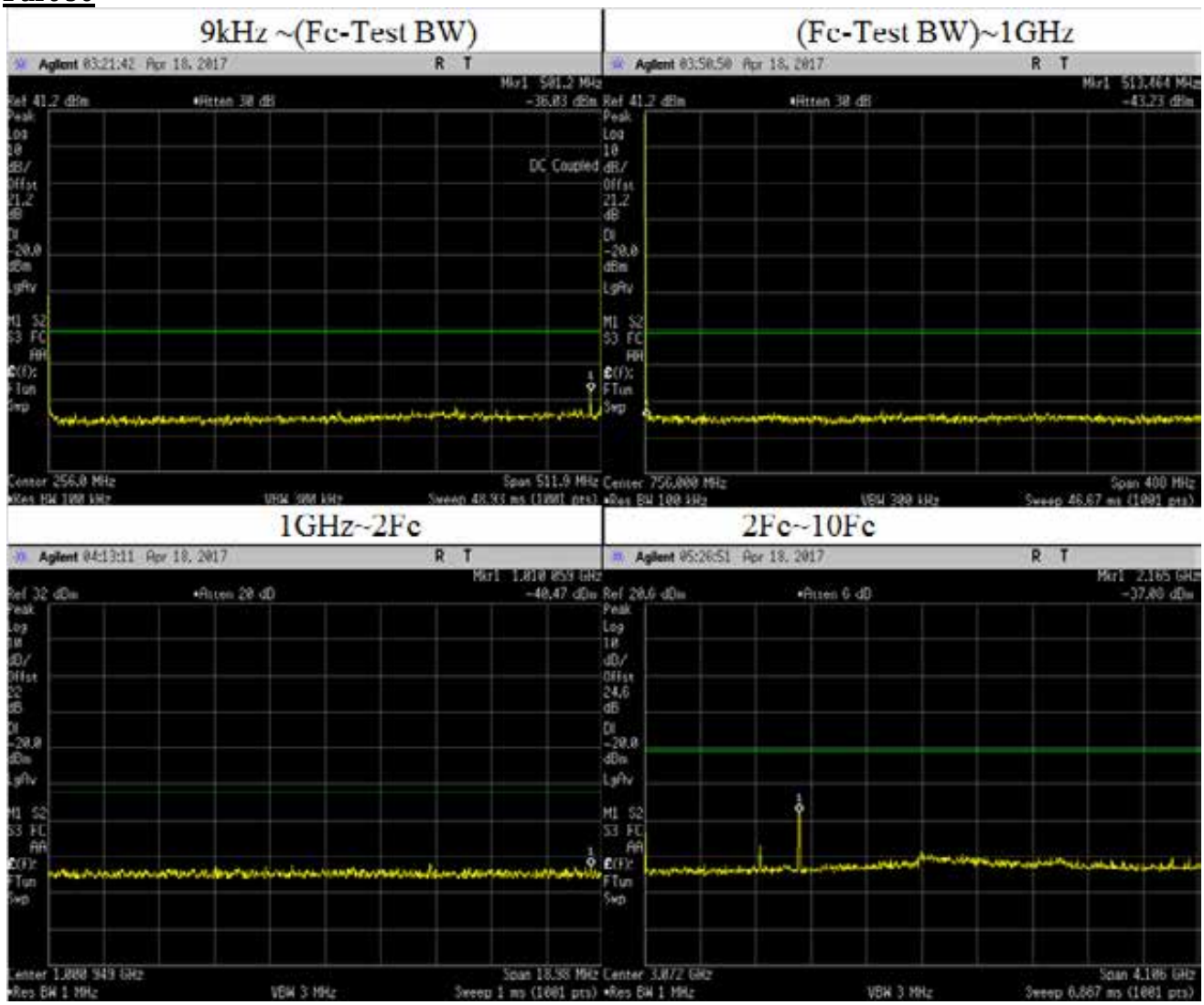
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	501.2001 0.5619 510.9262 366.5704 358.8919	-35.964 -41.125 -41.8 -41.885 -41.942	-20	Pass
(Fc-Test BW)~1GHz	512.976 870.68 630.096 746.24 513.464	-40.494 -40.591 -41.107 -41.33 -41.376	-20	Pass
1GHz~2Fc	1012.0366 1012.01762 1010.21452 1010.2335 1007.53834 1004.38766	-39.271 -39.327 -39.843 -40.12 -40.187 -40.389	-20	Pass
2Fc~10Fc	2164.574 2160.468 2168.68 2156.362 1023.106 1877.154 3486.706 3051.47 3166.438 3084.318 3240.346 3445.646 3104.848	-36.433 -36.49 -36.825 -38.079 -42.846 -46.875 -48.921 -49.005 -49.019 -49.069 -49.213 -49.239 -49.24	-20	Pass

4FSK: 511.9875 MHz, 12.5 kHz Channel Spacing, Max Power (Not for IC Review)
Part 74



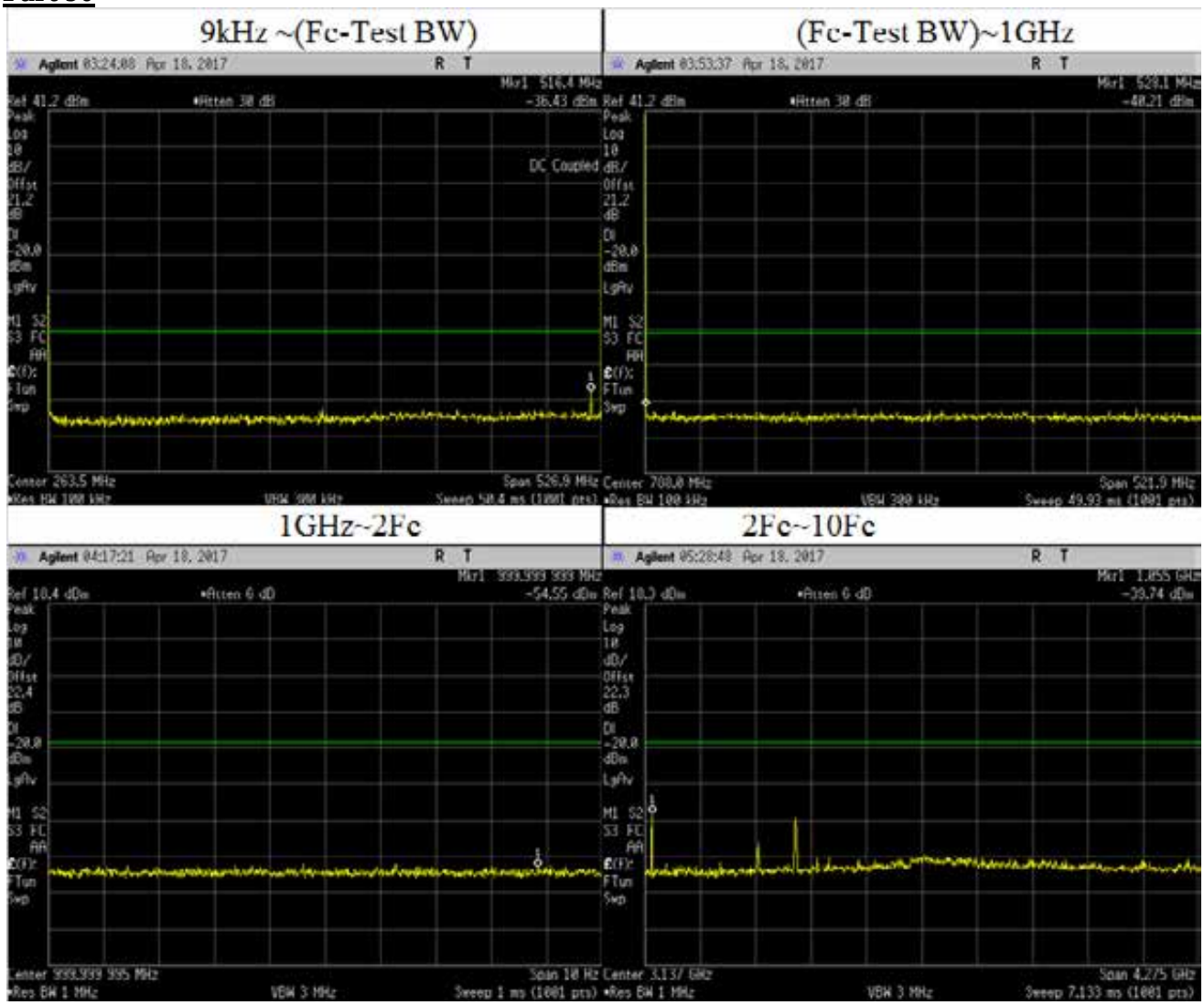
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	501.2001 0.5619 474.5813 498.6406 463.3195	-36.365 -39.415 -40.889 -40.925 -40.996	-20	Pass
(Fc-Test BW)~1GHz	777.472 682.312 685.24 607.648 512.976	-40.426 -40.749 -40.851 -41.128 -41.139	-20	Pass
1GHz~2Fc	1015.06812 1009.98148 1016.83326 1009.50698 1015.63752 1002.3705	-39.786 -40.554 -40.573 -40.641 -40.726 -40.762	-20	Pass
2Fc~10Fc	2156.362 2160.468 2168.68 1023.106 1877.154 3117.166 3150.014 3199.286 3519.554 3055.576 1873.048 3158.226 3367.632	-38.246 -38.612 -38.628 -43.237 -46.212 -48.179 -49.025 -49.118 -49.151 -49.18 -49.214 -49.28 -49.379	-20	Pass

4FSK: 511.9875 MHz, 12.5 kHz Channel Spacing, Max Power (Not for IC Review)
Part 90



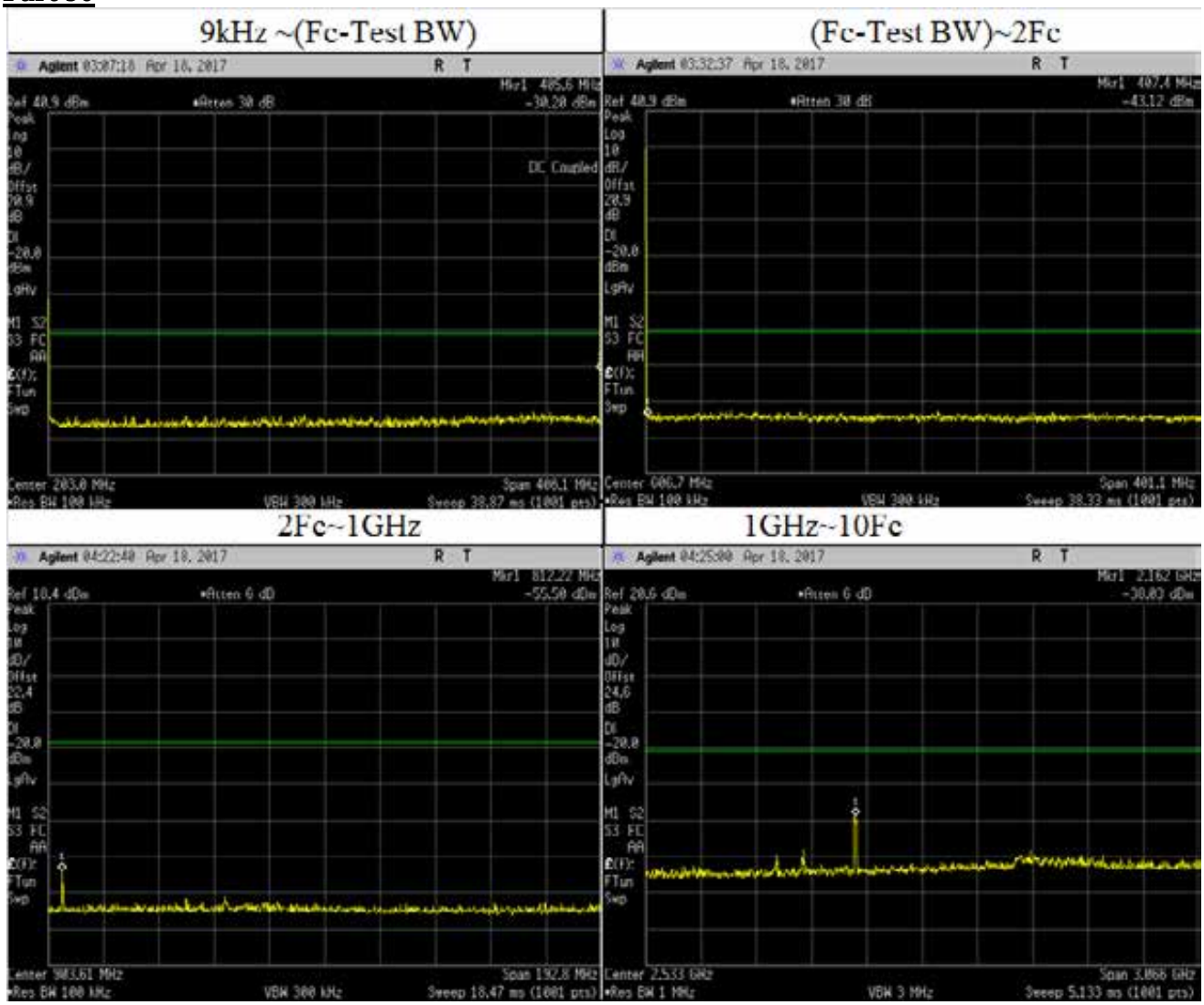
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	501.2001 362.4752 510.9262 487.8907 1.0738	-36.624 -40.495 -41.136 -41.415 -41.429	-20	Pass
(Fc-Test BW)~1GHz	512.976 990.728 516.88 907.28 907.768	-41.641 -42.308 -42.367 -42.382 -42.393	-20	Pass
1GHz~2Fc	999.81 1010.0592 1001.87882 997.19076 1009.52776 1003.45416	-40.323 -40.475 -40.57 -40.605 -40.678 -40.78	-20	Pass
2Fc~10Fc	2165 3137.696 3076.106 3371.738 3117.166 1868.942 3051.47 3059.682 3203.392 4932.018 3170.544 3080.212 3104.848	-37.08 -48.499 -48.599 -48.644 -48.76 -48.969 -49.232 -49.381 -49.531 -49.573 -49.664 -49.701 -49.741	-20	Pass

4FSK: 526.9875 MHz, 12.5 kHz Channel Spacing, Max Power (Not for IC Review)
Part 90



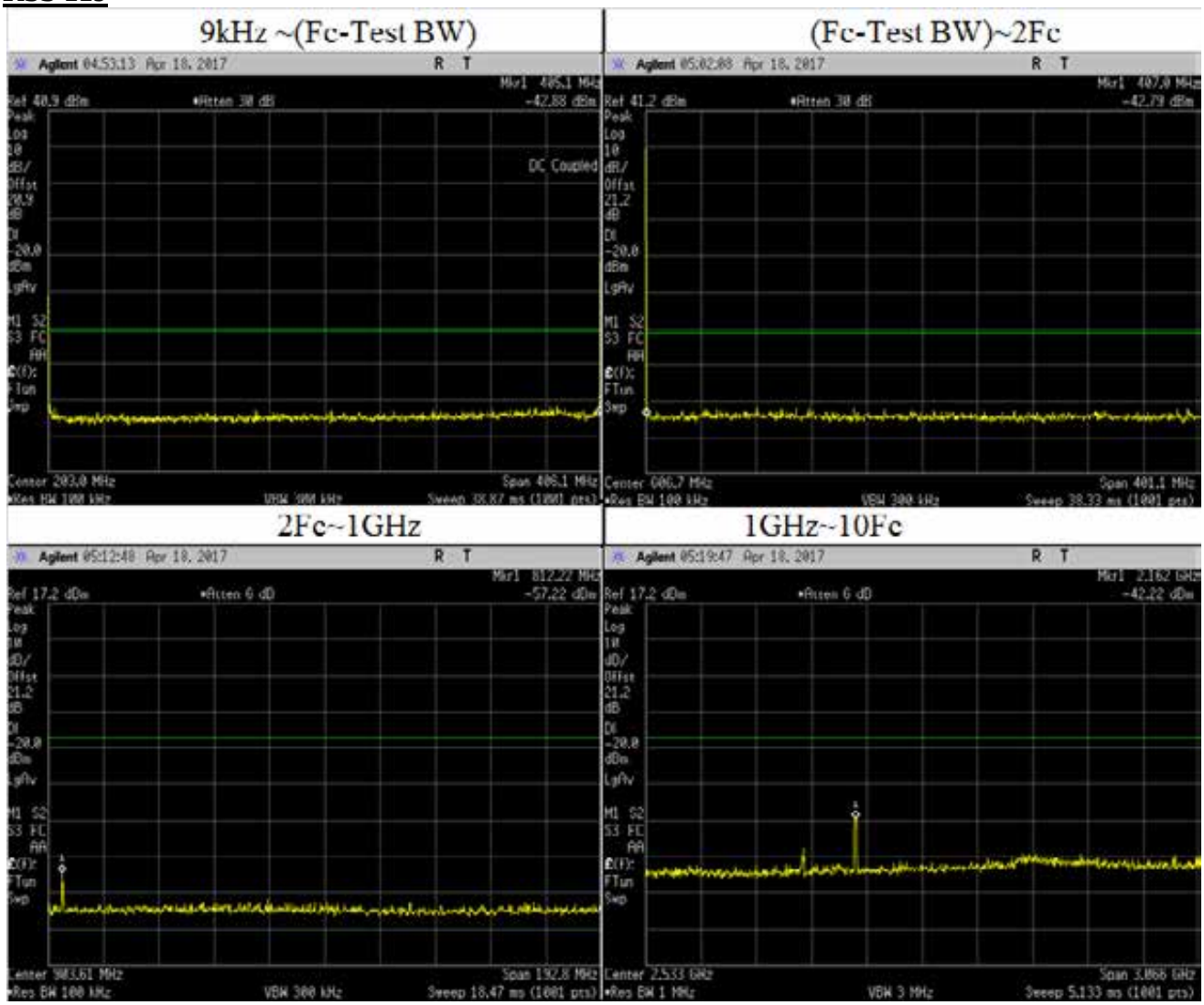
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	516.412 361.5034 496.3898 362.0303 260.8655	-36.429 -40.477 -40.654 -41.065 -41.211	-20	Pass
(Fc-Test BW)~1GHz	528.0938 725.372 964.4022 749.9013 535.9223	-40.213 -41.091 -41.248 -41.388 -41.472	-20	Pass
1GHz~2Fc	999.9999988 999.9999954 999.9999999 999.9999968 999.9999968 999.9999907	-54.547 -54.561 -54.586 -54.649 -54.693 -54.702	-20	Pass
2Fc~10Fc	1055.075 2162.3 2158.025 2170.85 2166.575 1050.8 1875.875 2153.75 1871.6 3162.65 3115.625 3427.7 3350.75	-39.737 -41.001 -43.133 -43.54 -43.614 -47.625 -47.684 -48.465 -50.952 -51.091 -51.856 -51.997 -52.206	-20	Pass

4FSK: 406.1125 MHz, 12.5 kHz Channel Spacing, Low Power (Not for IC Review)
Part 90



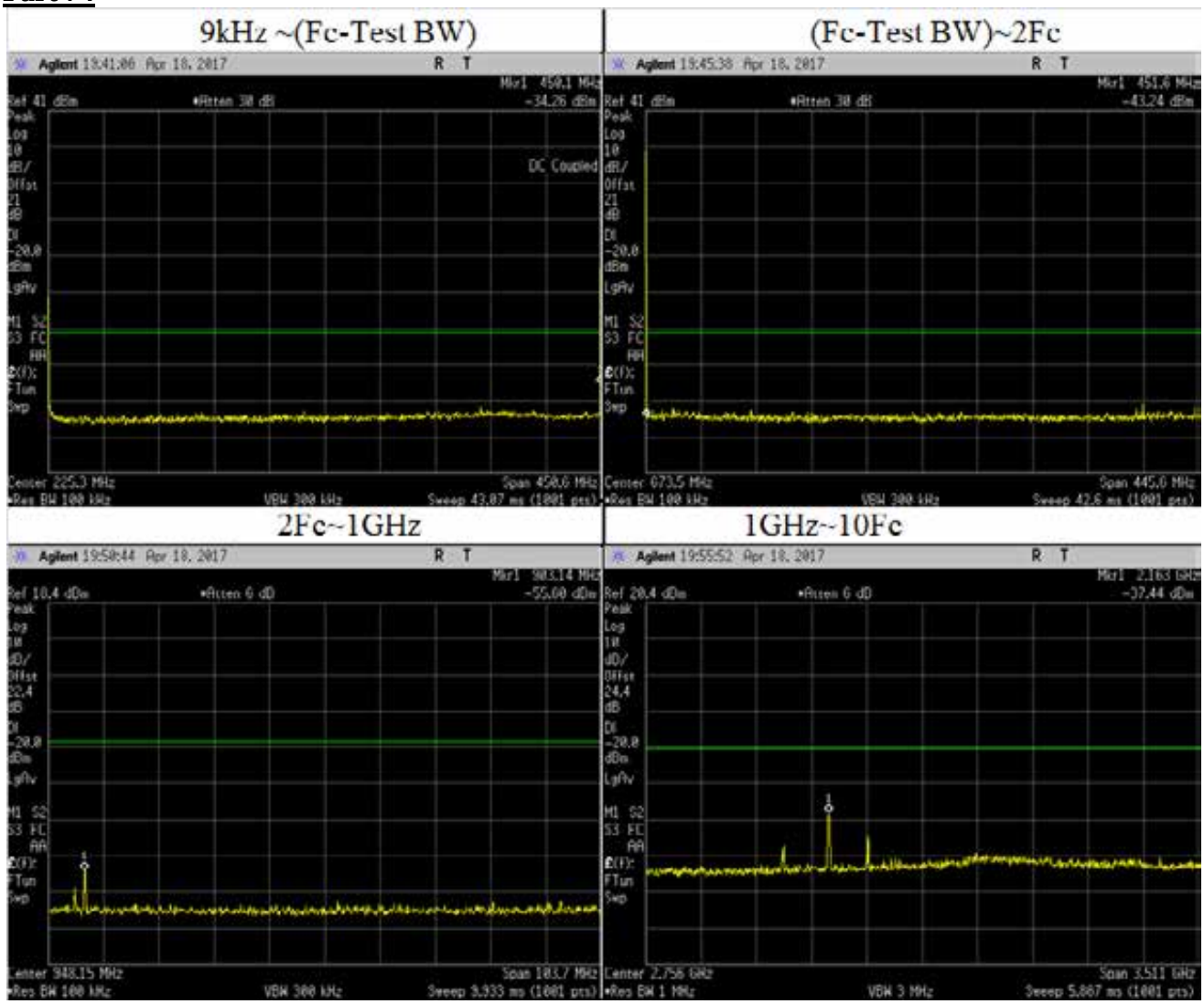
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	358.1302 4.4171 326.0483 393.0548 151.8314	-41.366 -41.386 -41.819 -41.846 -41.933	-20	Pass
(Fc-Test BW)~2Fc	415.7764 503.6173 788.3983 453.0787 688.1233	-42.006 -42.008 -42.051 -42.088 -42.097	-20	Pass
2Fc~1GHz	812.2228 812.4156 812.03 887.222 980.3444 962.7996	-55.502 -62.568 -63.274 -63.813 -64.002 -64.297	-20	Pass
1GHz~10Fc	2155.882 2158.948 2168.146 2165.08 2171.212 1876.876 3130.87 1870.744 1717.444 3060.352 3152.332 1726.642 3081.814	-38.584 -38.6 -39.291 -39.863 -45.876 -47.397 -47.835 -48.678 -48.684 -48.821 -48.894 -48.938 -48.966	-20	Pass

4FSK: 406.1125 MHz, 12.5 kHz Channel Spacing, Low Power (Not for FCC Review)
RSS 119



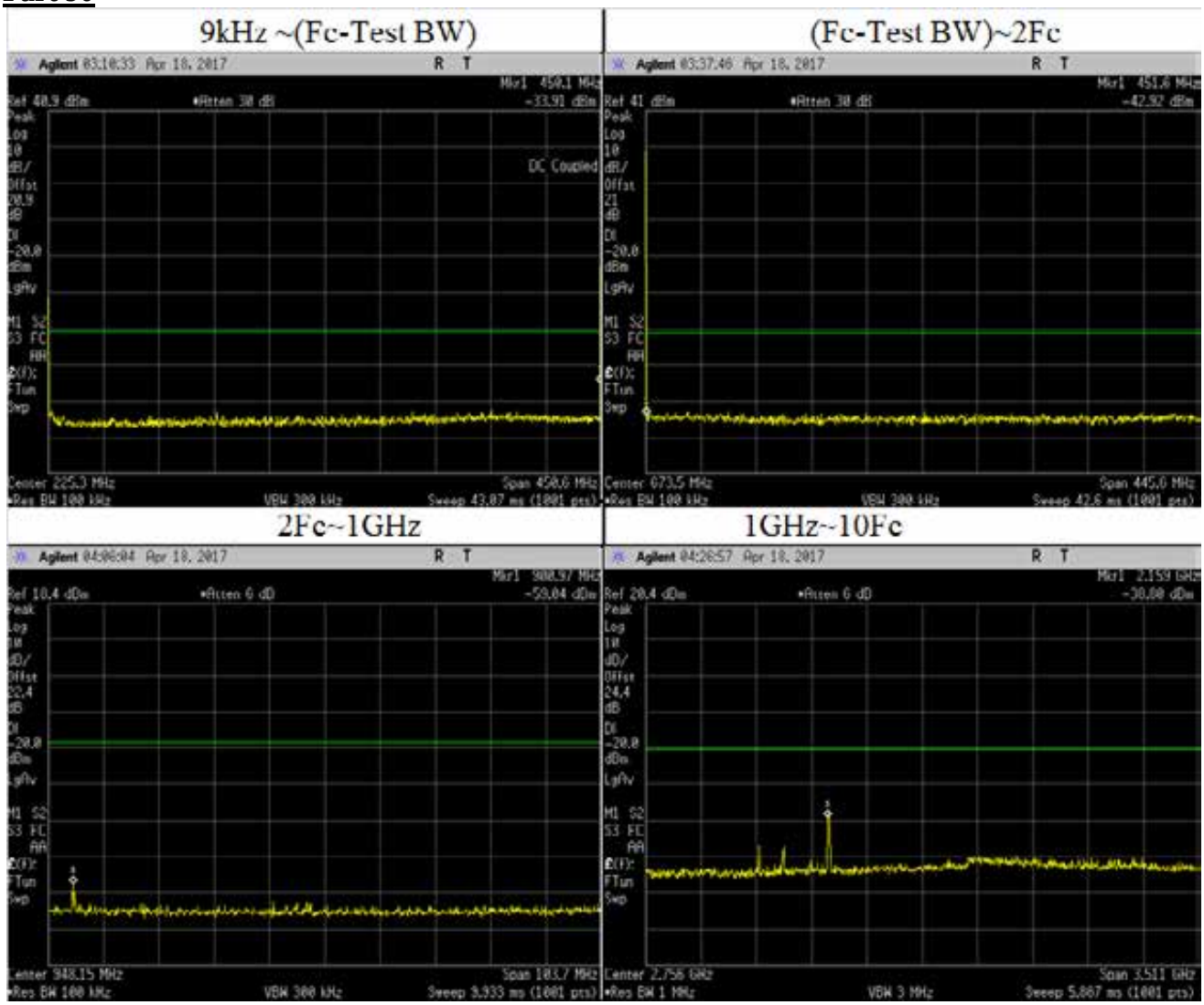
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	405.1	-42.8	-20	Pass
(Fc-Test BW)~2Fc	407	-42.79	-20	Pass
2Fc~1GHz	812.22	-57.22	-20	Pass
1GHz~10Fc	2162	-42.22	-20	Pass

4FSK: 450.65 MHz, 12.5 kHz Channel Spacing, Low Power (Not for IC Review)
Part 74



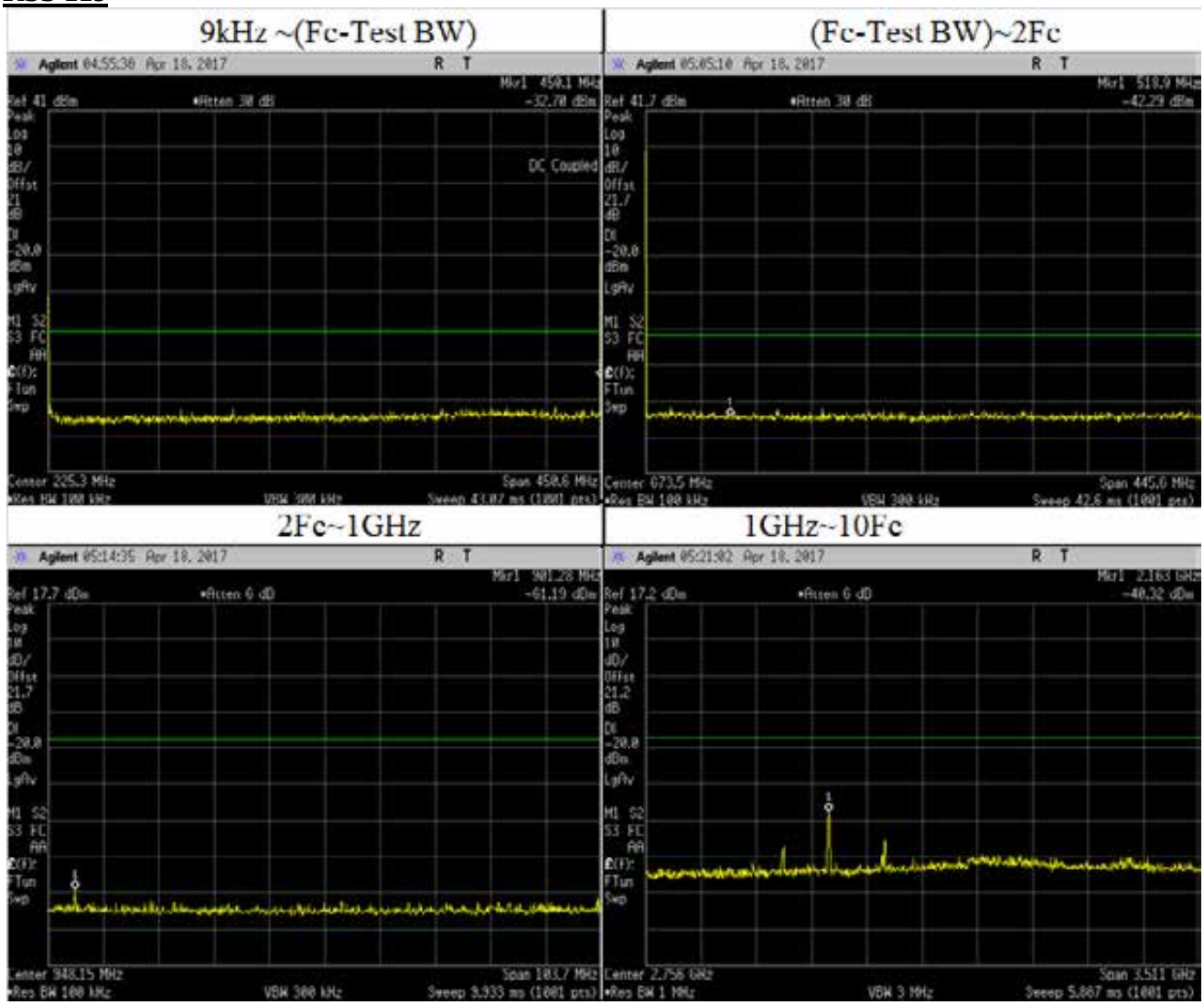
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.4506 351.9186 0.9012 332.9934 318.1236	-40.857 -41.302 -41.328 -41.683 -41.705	-20	Pass
(Fc-Test BW)~2Fc	472.5344 893.1808 473.8712 452.4824 456.4928	-41.054 -41.061 -41.288 -41.436 -41.528	-20	Pass
2Fc~1GHz	903.2479 903.3516 901.2776 901.3813 950.5351 901.1739	-55.568 -57.495 -60.289 -61.747 -63.957 -64.448	-20	Pass
1GHz~10Fc	2162.641 2159.13 2166.152 2169.663 2155.619 1878.25 1874.739 1867.717 3100.078 3166.787 3229.985 3307.227 3152.743	-37.444 -39.079 -39.856 -40.889 -41.794 -46.97 -48.238 -48.977 -49.044 -49.081 -49.285 -49.453 -49.472	-20	Pass

4FSK: 450.65 MHz, 12.5 kHz Channel Spacing, Low Power (Not for IC Review)
Part 90



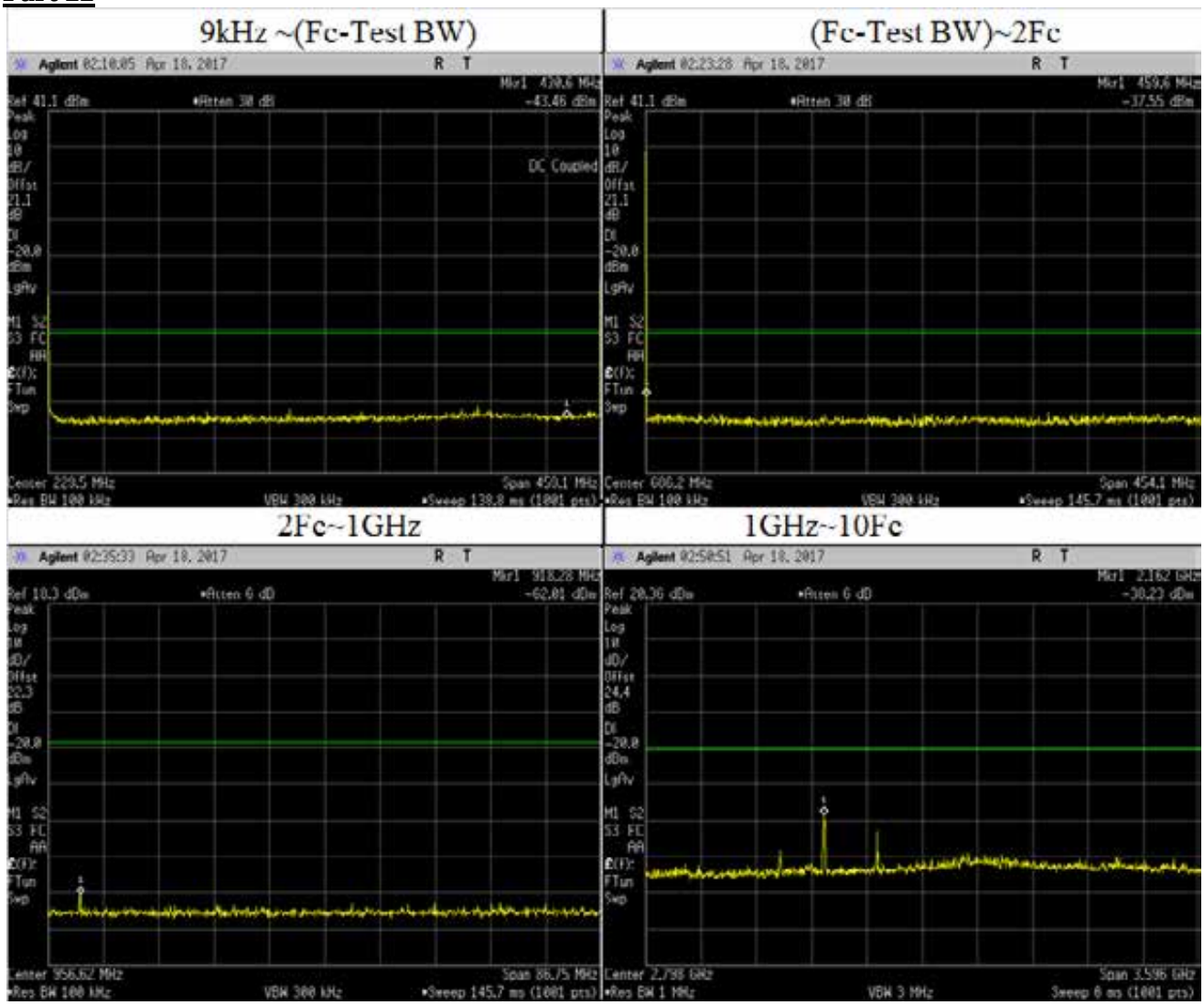
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.4506 0.9012 1.3518 377.6028 264.9528	-39.658 -41.243 -41.265 -41.599 -41.688	-20	Pass
(Fc-Test BW)~2Fc	485.0112 556.3072 836.5896 528.2344 460.5032	-41.949 -41.989 -42.012 -42.016 -42.103	-20	Pass
2Fc~1GHz	900.9665 901.0702 901.2776 901.3813 900.8628 938.5059	-59.039 -61.415 -61.42 -61.565 -63.183 -63.97	-20	Pass
1GHz~10Fc	2159.13 2166.152 2155.619 2169.663 1720.255 1878.25 3356.381 3352.87 1867.717 1874.739 3331.804 3286.161 3089.545	-38.797 -41.307 -42.107 -42.206 -46.412 -47.746 -49.401 -49.465 -49.716 -49.74 -49.743 -49.828 -49.962	-20	Pass

4FSK: 450.65 MHz, 12.5 kHz Channel Spacing, Low Power (Not for FCC Review)
RSS 119



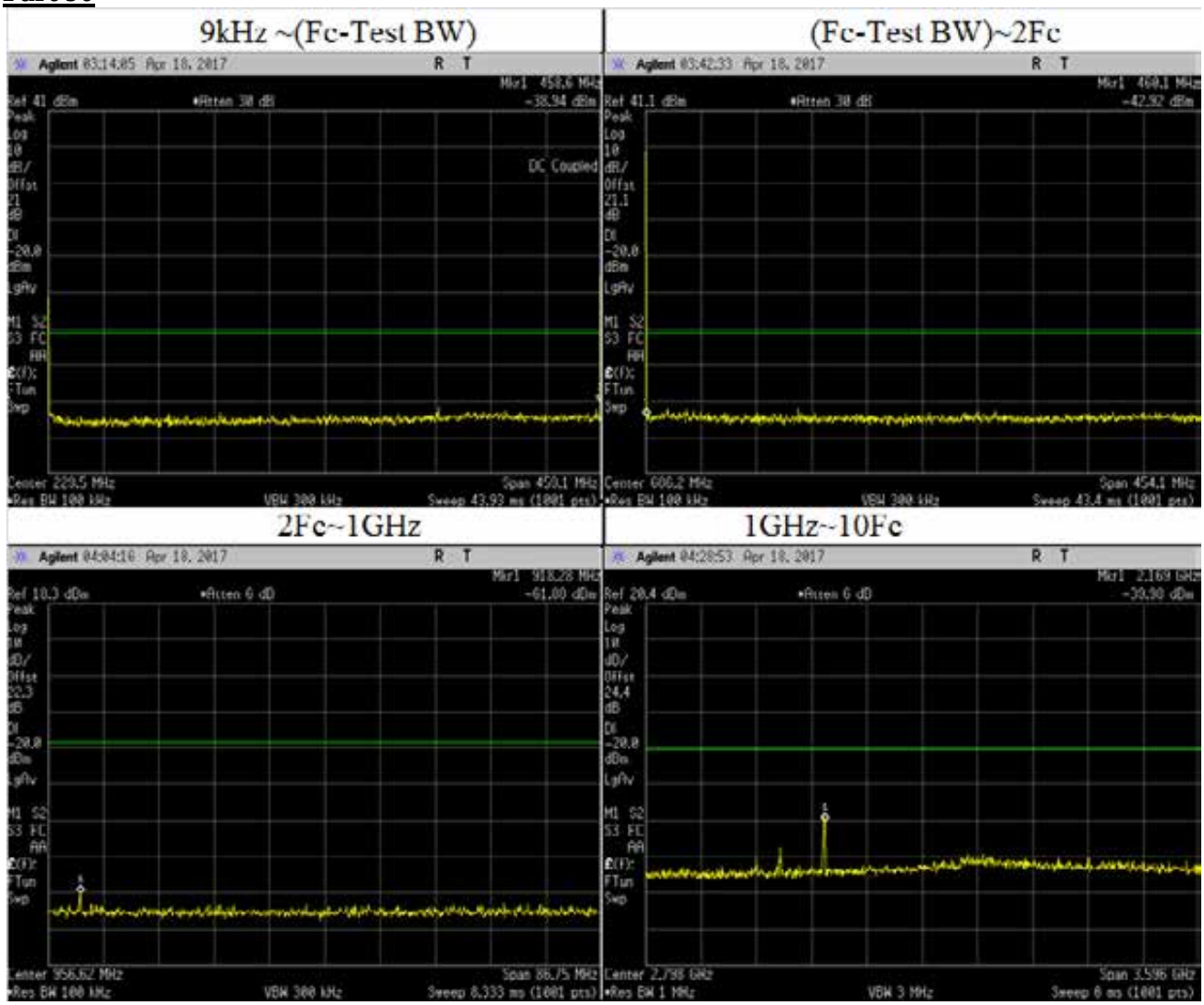
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	1.351	-40.73	-20	Pass
(Fc-Test BW)~2Fc	518.9	-42.29	-20	Pass
2Fc~1GHz	901.28	-61.19	-20	Pass
1GHz~10Fc	2163	-40.32	-20	Pass

4FSK: 459.125 MHz, 12.5 kHz Channel Spacing, Low Power (Not for IC Review)
Part 22



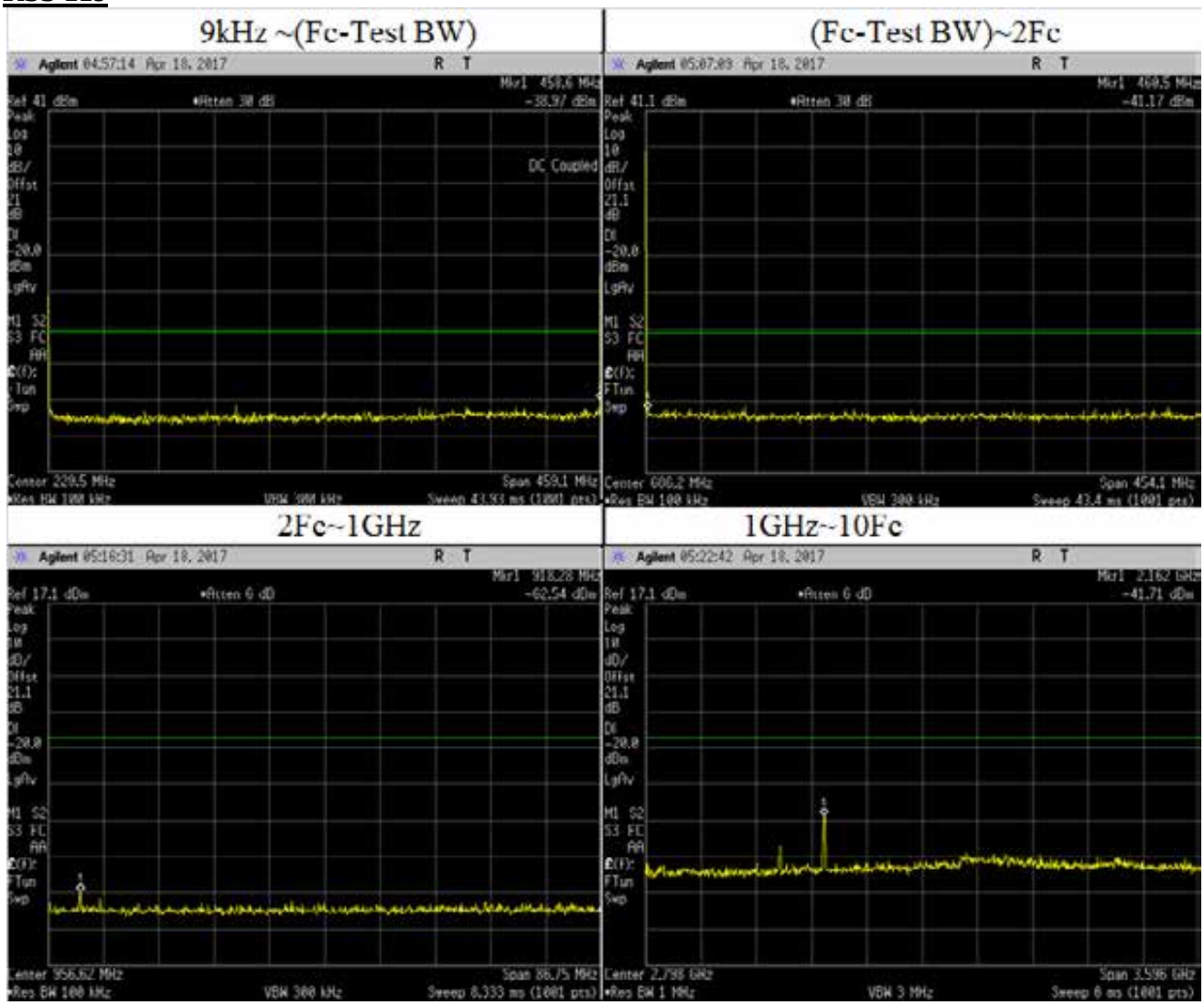
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	183.5 430.6 406.5 230.25 421.12	-43.0 -43.46 -43.54 -44.34 -44.41	-20	Pass
(Fc-Test BW)~2Fc	459.6041 910.9795 748.4117 745.233 584.9357	-36.034 -41.174 -41.721 -41.815 -41.891	-20	Pass
2Fc~1GHz	918.2765 918.18975 927.819 984.11975 983.8595 937.27475	-62.012 -62.357 -63.823 -64.417 -64.506 -64.614	-20	Pass
1GHz~10Fc	2165.104 2157.912 2154.316 2168.7 2506.724 1877.424 3100.064 3060.508 2409.632 2503.128 3150.408 3207.944 3312.228	-38.941 -39.008 -39.416 -41.693 -42.435 -47.932 -48.622 -48.721 -48.742 -48.83 -48.877 -49.01 -49.1	-20	Pass

4FSK: 459.125 MHz, 12.5 kHz Channel Spacing, Low Power (Not for IC Review)
Part 90



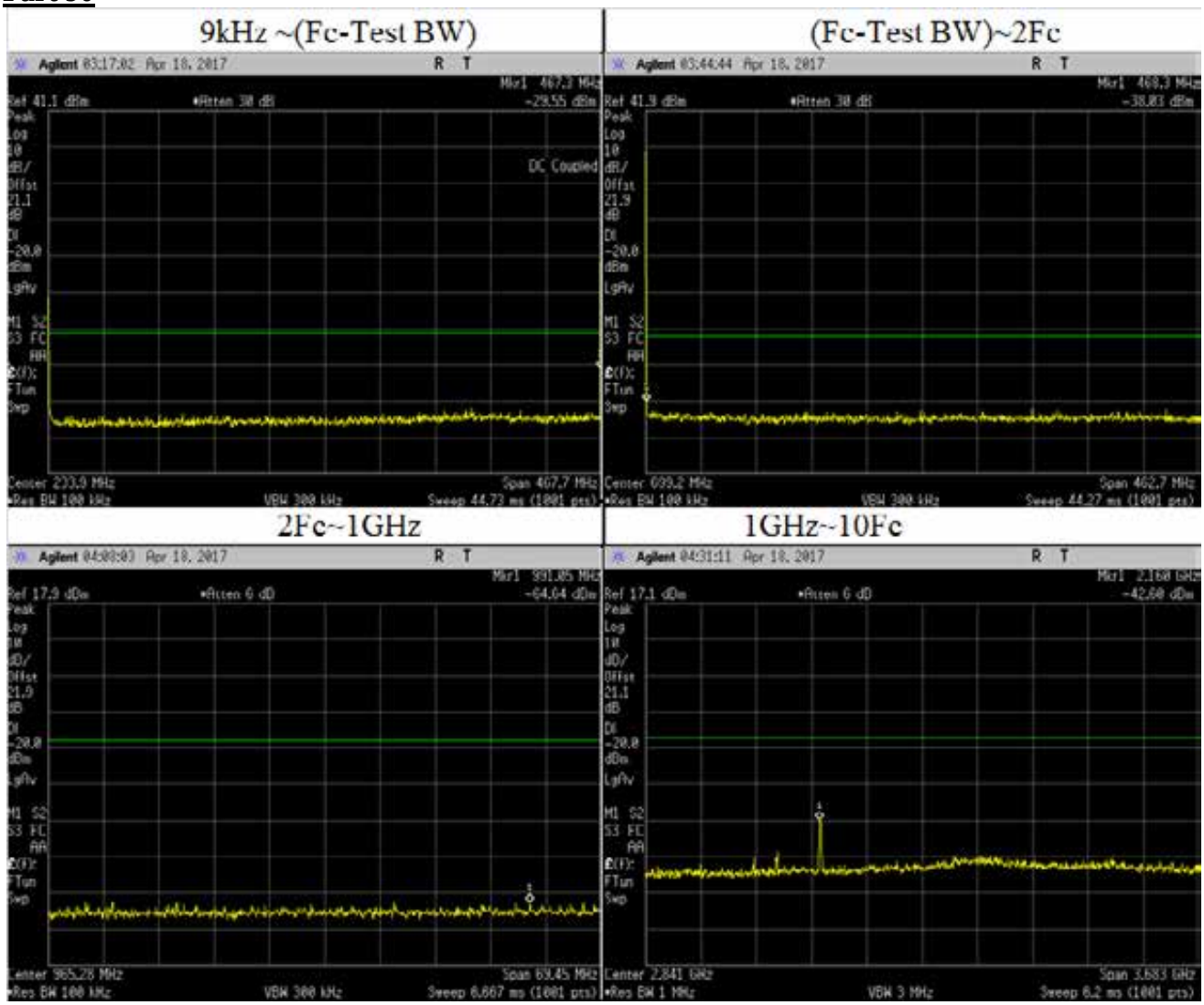
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.4091 458.5909 324.0746 455.3772 379.6257	-37.17 -38.937 -40.733 -41.324 -41.573	-20	Pass
(Fc-Test BW)~2Fc	881.0089 481.855 692.1033 473.2271 551.7864	-42.012 -42.015 -42.038 -42.05 -42.061	-20	Pass
2Fc~1GHz	918.2765 918.18975 987.3295 920.0115 920.09825 990.36575	-61.879 -62.405 -64.956 -65.016 -65.017 -65.103	-20	Pass
1GHz~10Fc	2161.508 2168.7 2157.912 2165.104 2154.316 1877.424 3193.56 3125.236 3121.64 3251.096 3686.212 3225.924 1719.2	-41.08 -42.488 -43.195 -44.26 -45.081 -47.096 -48.876 -49.553 -49.576 -49.696 -49.924 -50.088 -50.09	-20	Pass

4FSK: 459.125 MHz, 12.5 kHz Channel Spacing, Low Power (Not for FCC Review)
RSS 119



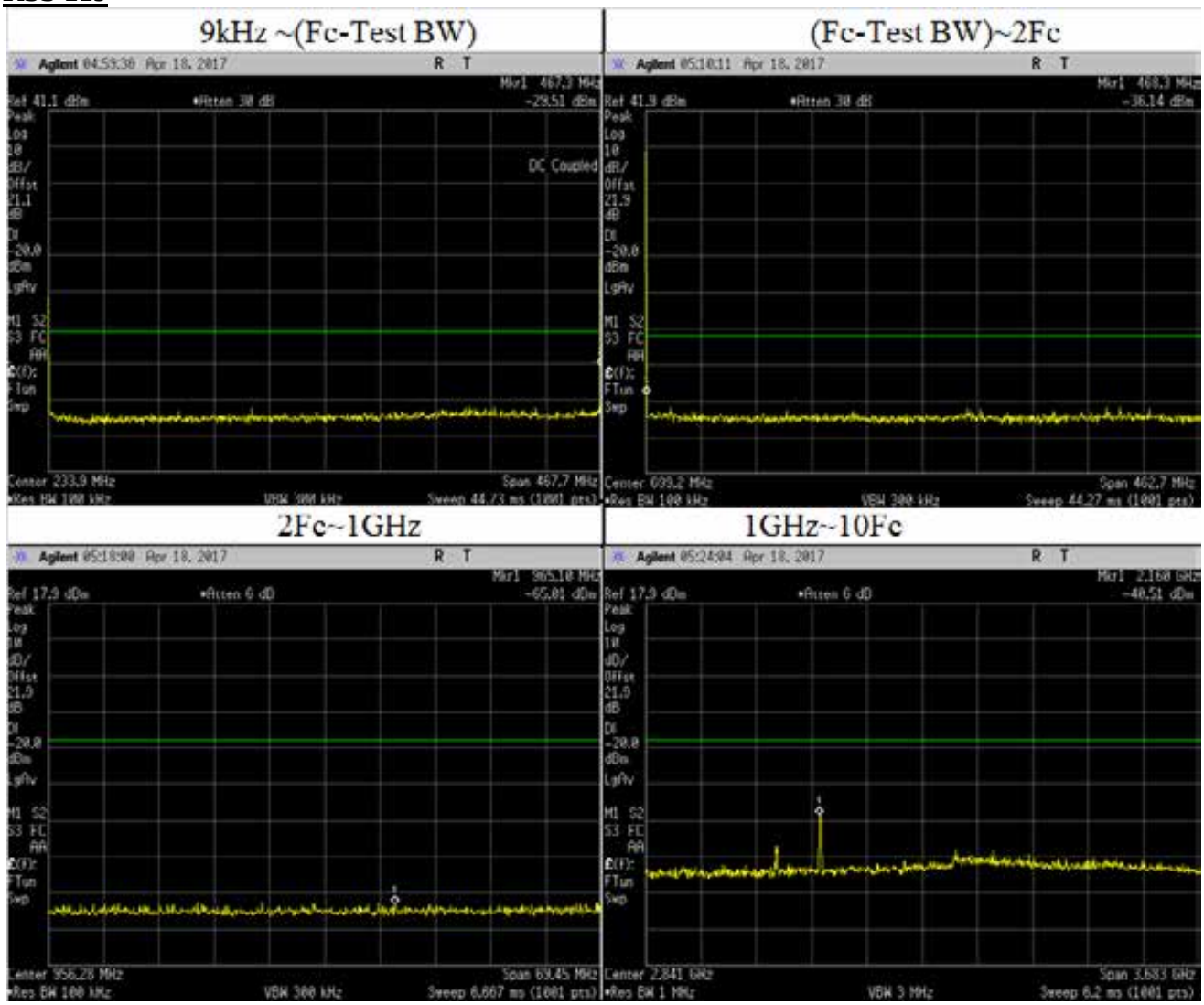
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	458.6	-38.7	-20	Pass
(Fc-Test BW)~2Fc	460.5	-41.17	-20	Pass
2Fc~1GHz	918.28	-62.54	-20	Pass
1GHz~10Fc	2162	-41.71	-20	Pass

4FSK: 467.775 MHz, 12.5 kHz Channel Spacing, Low Power (Not for IC Review)
Part 90



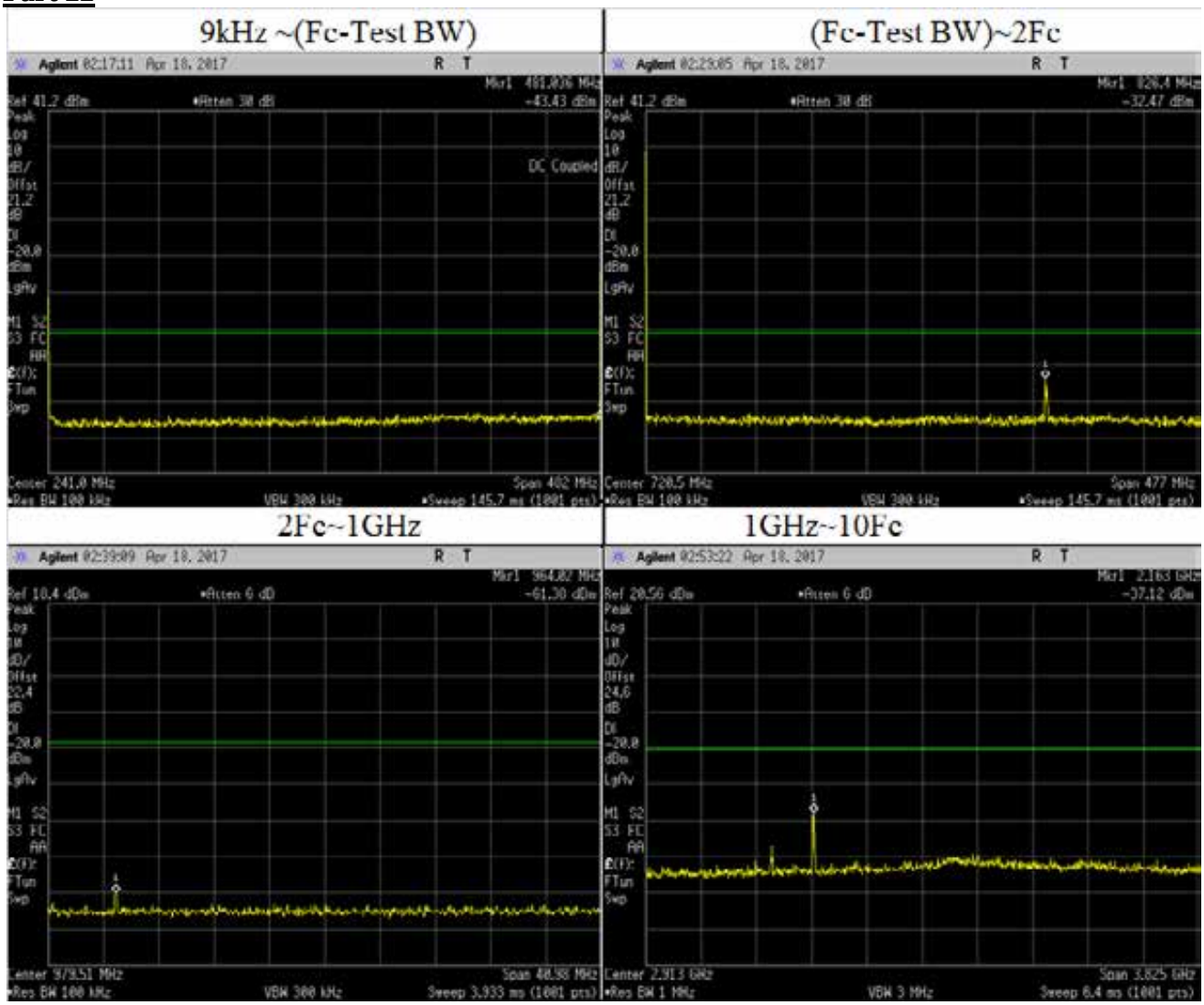
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	467.2823 0.5177 0.9854 383.0963 357.3728	-29.547 -39.654 -40.686 -40.767 -40.926	-20	Pass
(Fc-Test BW)~2Fc	468.3127 590.9282 880.5784 771.8439 509.0303	-37.849 -40.076 -40.517 -40.66 -40.8	-20	Pass
2Fc~1GHz	991.04595 938.68065 935.20815 997.7826 938.6112 935.2776	-64.643 -64.689 -64.734 -64.819 -64.823 -65.095	-20	Pass
1GHz~10Fc	2163.328 2167.011 2155.962 2170.694 1876.054 3227.715 3242.447 3054.614 3330.839 3294.009 4107.952 3128.274 3058.297	-42.878 -43.528 -46.107 -49.338 -51.443 -52.488 -52.512 -52.553 -52.559 -52.675 -52.856 -53.037 -53.123	-20	Pass

4FSK: 467.775 MHz, 12.5 kHz Channel Spacing, Low Power (Not for FCC Review)
RSS 119



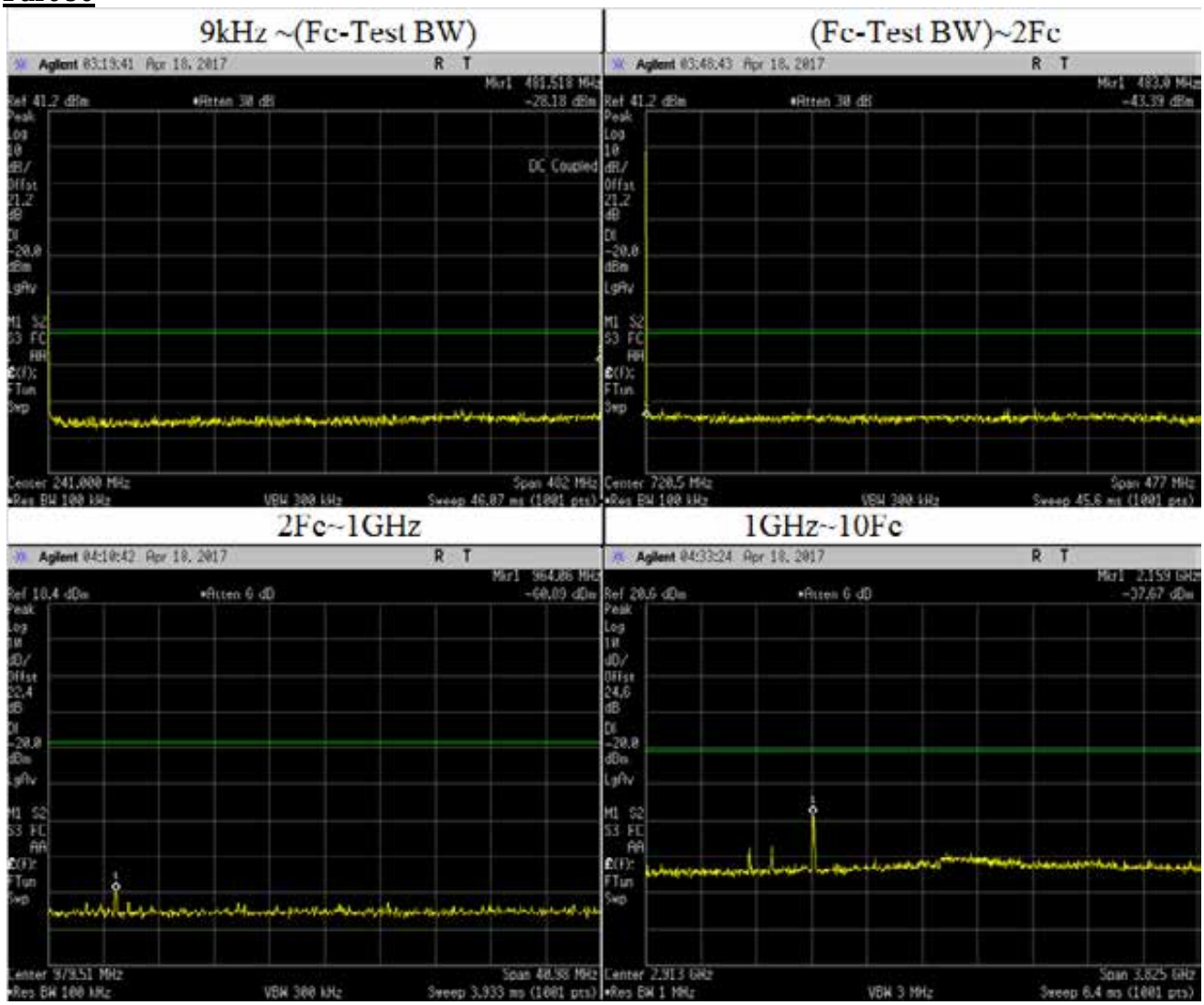
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	467.3	-29.51	-20	Pass
(Fc-Test BW)~2Fc	468.3	-36.14	-20	Pass
2Fc~1GHz	965.1	-65.01	-20	Pass
1GHz~10Fc	2160	-40.51	-20	Pass

4FSK: 482.0125 MHz, 12.5 kHz Channel Spacing, Low Power (Not for IC Review)
Part 22



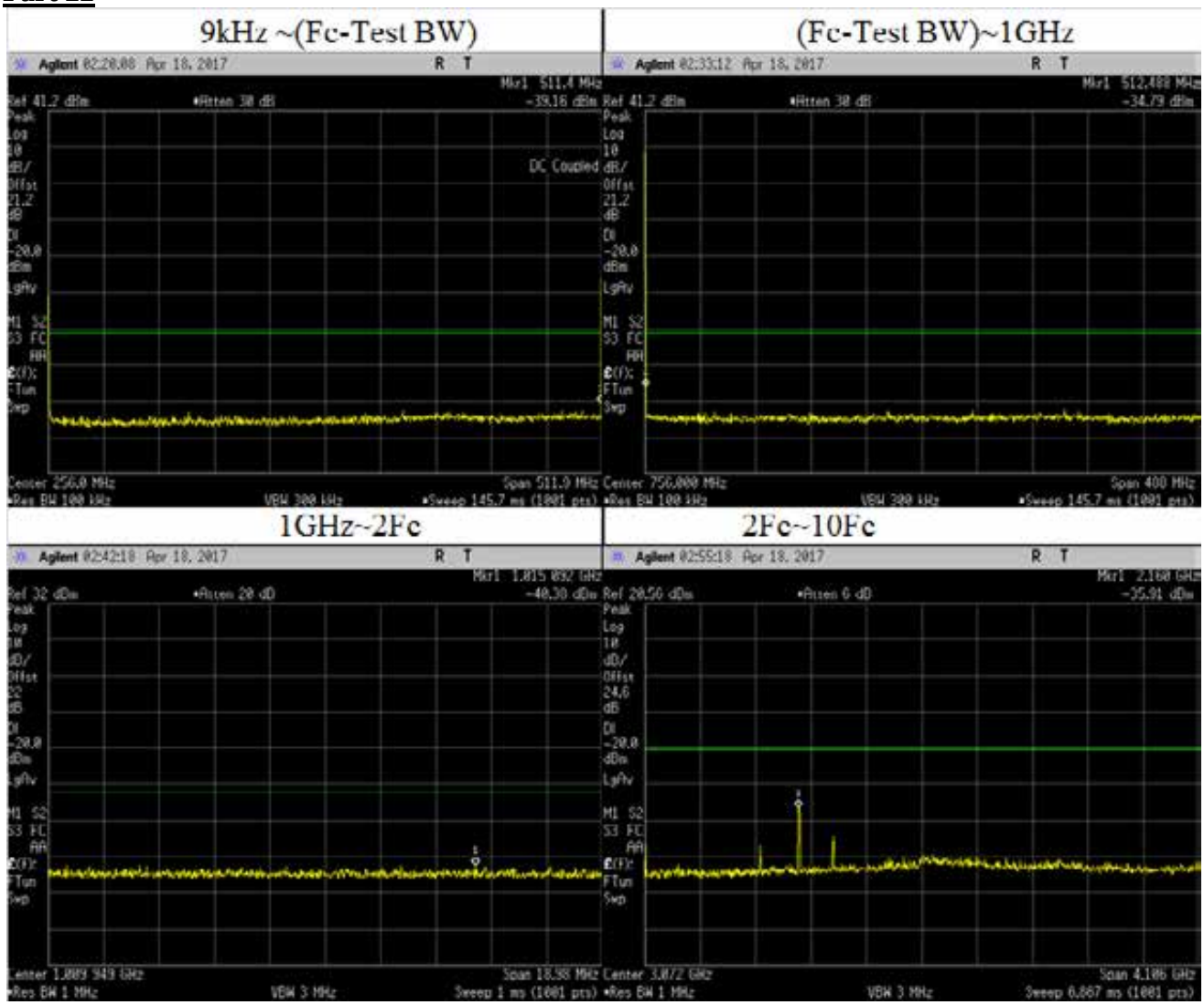
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	481.036 431.39 438.138 361.5 378.852	-43.277 -43.281 -43.282 -43.283 -43.284	-20	Pass
(Fc-Test BW)~2Fc	826.394 740.534 777.74 944.69 958.523	-32.475 -43.381 -43.381 -43.381 -43.381	-20	Pass
2Fc~1GHz	964.01956 964.06054 963.97858 963.9376 964.10152 984.30466	-61.327 -61.352 -61.454 -62.351 -63.025 -64.302	-20	Pass
1GHz~10Fc	2163.3 3234.3 3999.3 3077.475 3800.4 3073.65 3058.35 4125.525 3219 3291.675 3104.25 3486.75 4121.7	-37.121 -49.983 -49.99 -49.991 -50.005 -50.018 -50.026 -50.029 -50.037 -50.04 -50.048 -50.108 -50.124	-20	Pass

4FSK: 482.0125 MHz, 12.5 kHz Channel Spacing, Low Power (Not for IC Review)
Part 90



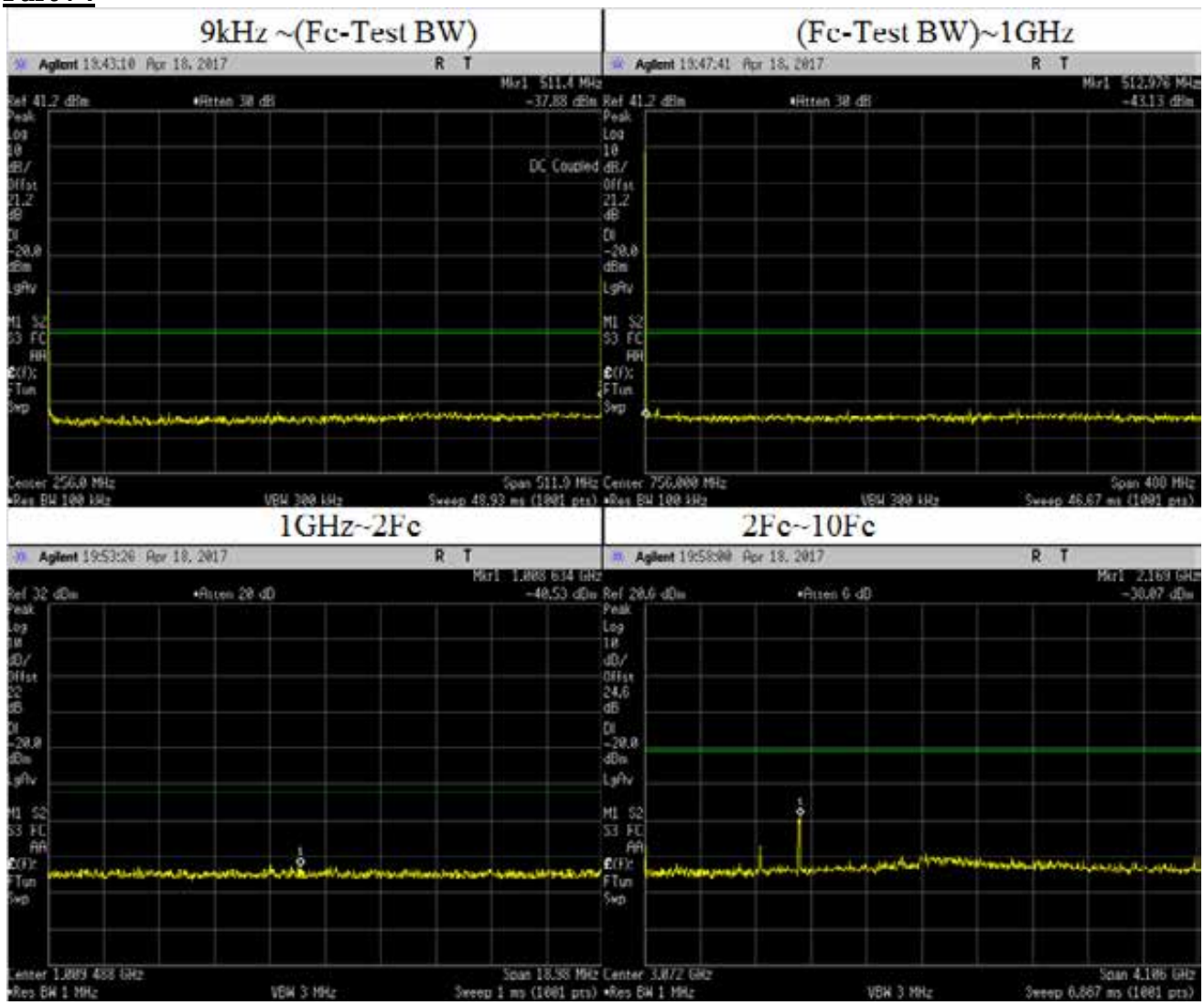
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	481.518 0.482 0.964 360.536 465.612	-28.178 -39.824 -40.81 -41.081 -41.105	-20	Pass
(Fc-Test BW)~2Fc	810.653 848.813 839.273 854.537 602.681	-43.214 -43.216 -43.218 -43.222 -43.224	-20	Pass
2Fc~1GHz	964.06054 964.10152 964.9621 984.2227 965.00308 984.18172	-60.89 -63.506 -63.996 -64.206 -64.421 -64.521	-20	Pass
1GHz~10Fc	2159.475 3249.6 3085.125 3111.9 3104.25 3352.875 1723.425 3150.15 3203.7 3173.1 3180.75 3444.675 3062.175	-37.668 -48.342 -48.39 -49.042 -49.119 -49.256 -49.283 -49.299 -49.358 -49.381 -49.41 -49.46 -49.521	-20	Pass

4FSK: 511.9875 MHz, 12.5 kHz Channel Spacing, Low Power (Not for IC Review)
Part 22



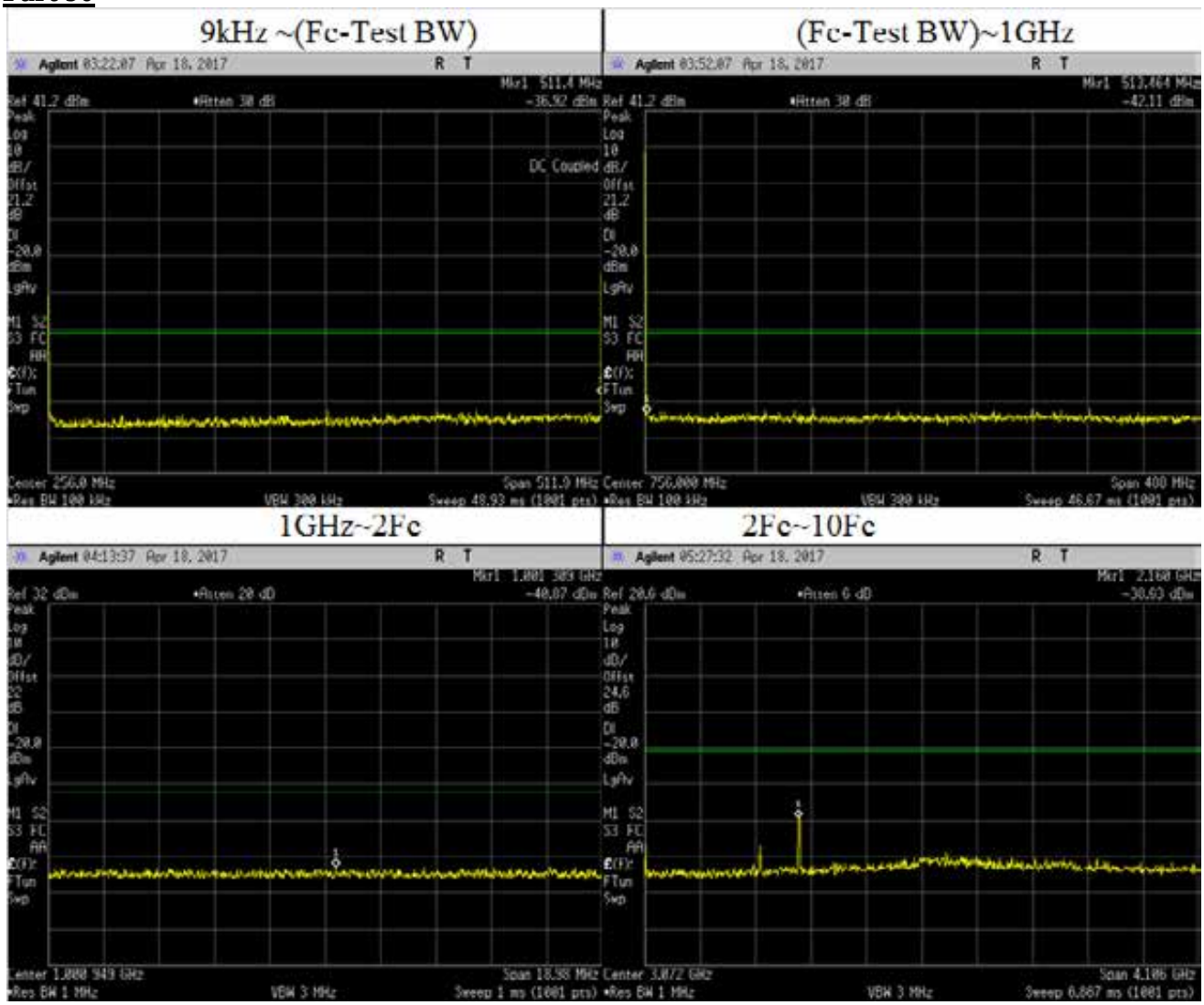
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	511.4381 1.0738 378.3441 490.9621 493.5216	-39.162 -40.803 -41.187 -41.196 -41.222	-20	Pass
(Fc-Test BW)~1GHz	512.488 881.904 800.896 894.592 726.232	-34.792 -41.1 -41.39 -41.52 -41.566	-20	Pass
1GHz~2Fc	1004.2548 1004.27378 1017.27508 1012.54906 1015.90852 1013.2703	-40.138 -40.149 -40.211 -40.263 -40.294 -40.351	-20	Pass
2Fc~10Fc	2164.574 2419.146 1023.106 1877.154 2415.04 2410.934 2406.828 3080.212 3154.12 3084.318 3117.166 3425.116 3351.208	-35.891 -43.668 -45.943 -46.173 -46.552 -47.859 -48.325 -48.836 -49.009 -49.128 -49.215 -49.297 -49.303	-20	Pass

4FSK: 511.9875 MHz, 12.5 kHz Channel Spacing, Low Power (Not for IC Review)
Part 74



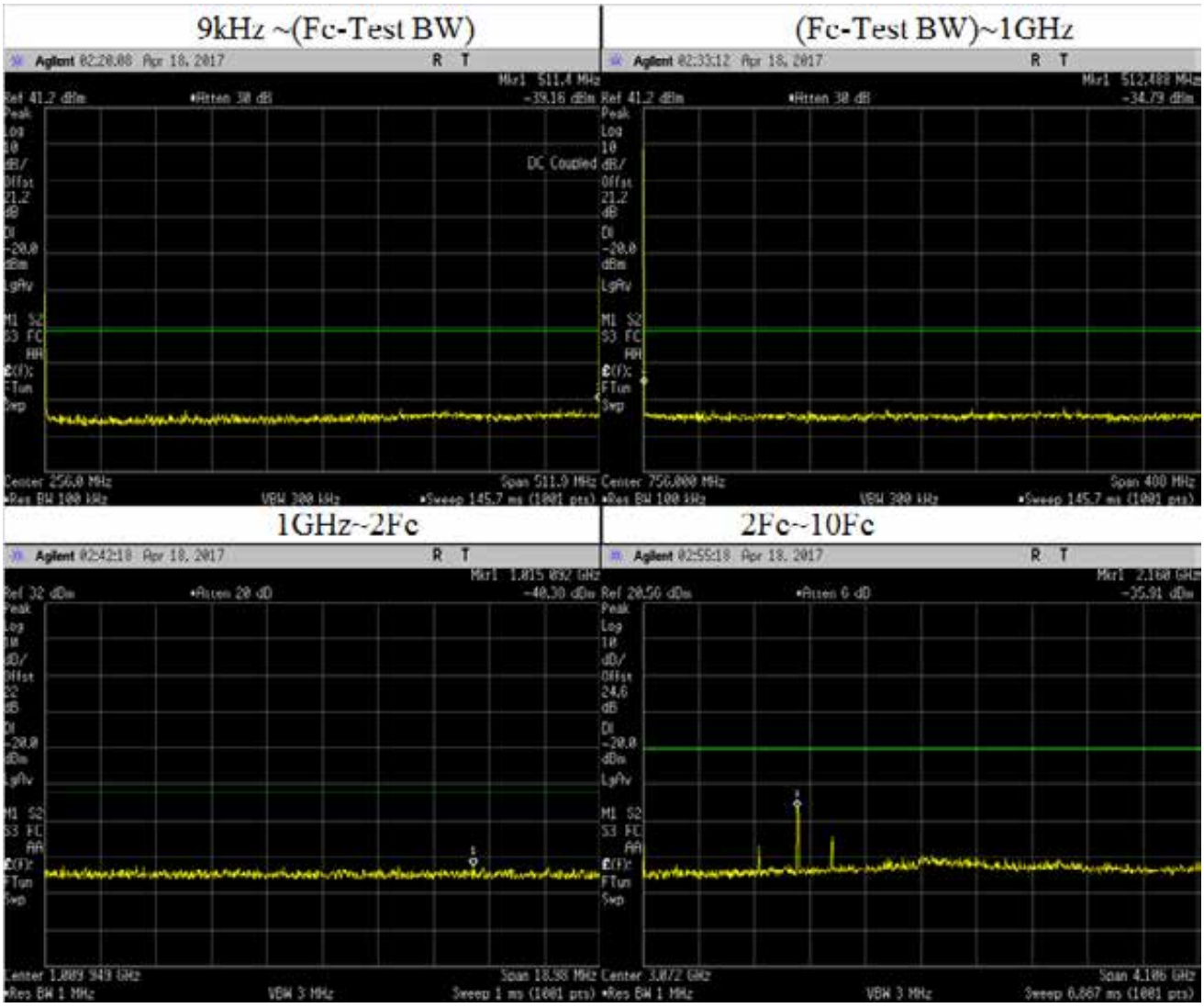
Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	511.4381 0.5619 212.4885 371.6894 483.7955	-37.884 -39.054 -41.517 -41.55 -41.586	-20	Pass
(Fc-Test BW)~1GHz	694.512 999.512 695.976 809.68 726.232	-42.999 -43.002 -43.005 -43.006 -43.008	-20	Pass
1GHz~2Fc	1008.6339 1008.33022 1009.8676 1008.3492 1011.04436 1012.56276	-40.526 -40.575 -40.622 -41.054 -41.055 -41.081	-20	Pass
2Fc~10Fc	2168.68 1877.154 1023.106 2924.184 1868.942 3737.172 3191.074 3199.286 3248.558 3154.12 3400.48 2932.396 3129.484	-38.067 -46.537 -46.909 -49.005 -49.037 -49.249 -49.424 -49.632 -49.651 -49.708 -49.736 -49.77 -49.778	-20	Pass

4FSK: 511.9875 MHz, 12.5 kHz Channel Spacing, Low Power (Not for IC Review)
Part 90



Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	511.4381 0.5619 1.5857 391.1416 363.499	-36.924 -40.274 -40.883 -40.949 -41.157	-20	Pass
(Fc-Test BW)~1GHz	853.112 617.408 819.44 878.488 735.016	-41.109 -41.25 -41.349 -41.399 -41.433	-20	Pass
1GHz~2Fc	1009.52776 1004.34622 1001.30942 1006.47198 1008.65468 1006.7377	-40.78 -40.838 -40.872 -40.914 -40.931 -40.944	-20	Pass
2Fc~10Fc	2160.468 1023.106 1877.154 1868.942 3568.826 3741.278 1873.048 3375.844 3236.24 3219.816 3080.212 3178.756 3088.424	-39.362 -46.019 -46.128 -49.196 -49.371 -49.38 -49.489 -49.621 -49.671 -49.784 -49.814 -49.953 -50.012	-20	Pass

4FSK: 526.9875 MHz, 12.5 kHz Channel Spacing, Low Power (Not for IC Review)
Part 90



Frequency Range	Highest Spur Freq (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Remark
9kHz ~(Fc-Test BW)	0.5769 473.7331 401.5478 364.1379 365.1917	-40.279 -40.774 -41.043 -41.138 -41.205	-20	Pass
(Fc-Test BW)~1GHz	685.1857 527.5719 565.6706 777.0401 840.19	-40.772 -41.451 -41.516 -41.536 -41.578	-20	Pass
1GHz~2Fc	1010.21104 1010.19206 1010.11614 1010.1541 1010.09716 1010.41982	-41.936 -41.947 -42.54 -42.675 -42.735 -42.77	-20	Pass
2Fc~10Fc	2360 2170.85 2153.75 1875.875 1050.8 1871.6 3201.125 3380.675 3171.2 3124.175 3149.825 1867.325 3047.225	-35.91 -43.775 -47.281 -49.043 -49.762 -49.976 -50.527 -50.604 -50.708 -50.904 -51.318 -51.463 -51.542	-20	Pass

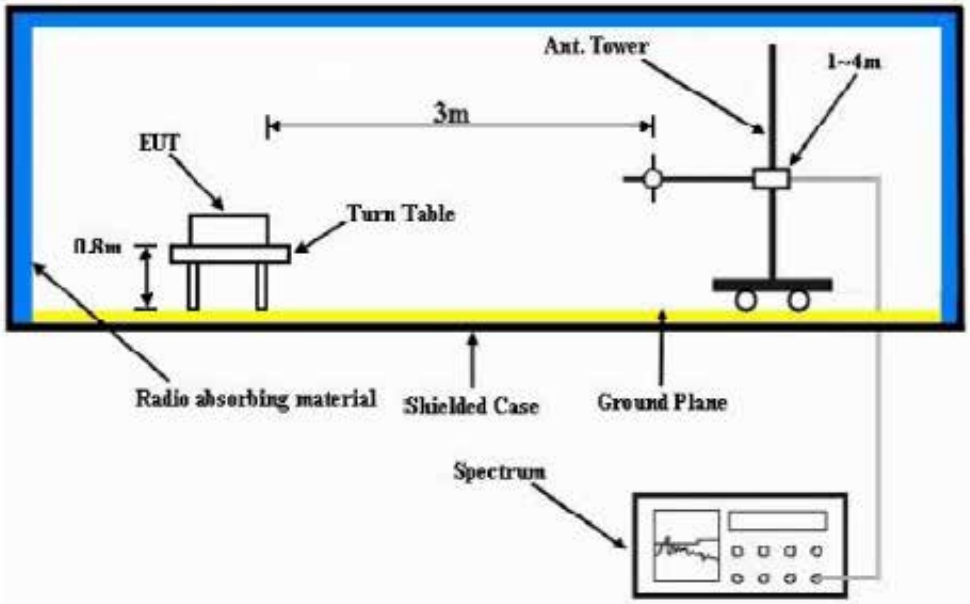
6.10.4. Test Limit

Table below summarized the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least

Channel Spacing	Part 22	Part 24D	Part 74	Part 80	Part 90
12.5kHz	43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)	Not Applicable	50 + log10(P) (-20 dBm)
25kHz		Not Applicable		43 + log10(P) (-13 dBm)	Not Applicable

6.11. Radiated Spurious Emission

6.11.1. Test Setup



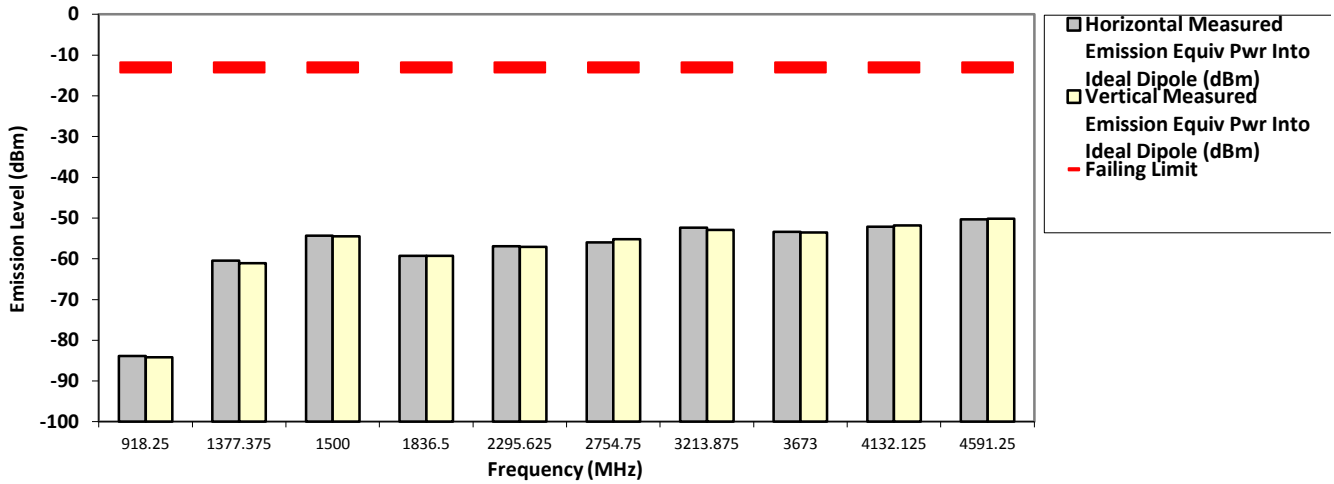
1) The spectrum setting for scanning Radiated Emission below 1 GHz is RBW = 100 kHz, VBW = 300 kHz and above 1 GHz is RBW = 1 MHz, VBW = 3 MHz. Detector mode is positive peak.
2) In the semi-anechoic chamber, setup as illustrated above the EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
3) The substitution antenna is substituted for EUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum radiation power. Record the power level of maximum radiation power from spectrum. So, the measured substitution value = Ref level of S.G + TX cables loss – Substituted Antenna Gain.
4) Final Radiated Spurious Emission = "Read Value" + Measured substitution value.

6.11.2. Test Result (Analog)

SAC Transmitter Radiated Emission:
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**
Battery Part No: NA **Accy Part No: NA**
Test Mode: TX Analog
459.125000 MHz **20 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-13.0000	-83.8515 **	-84.2059 **
1377.3750	-13.0000	-60.4190 **	-61.1068 **
1500.0000	-13.0000	-54.3400 *	-54.4800 *
1836.5000	-13.0000	-59.3023 **	-59.2841 **
2295.6250	-13.0000	-56.9354 **	-57.0592 **
2754.7500	-13.0000	-55.9554 **	-55.1700 **
3213.8750	-13.0000	-52.3799 **	-52.9282 **
3673.0000	-13.0000	-53.3614 **	-53.5011 **
4132.1250	-13.0000	-52.0926 **	-51.7949 **
4591.2500	-13.0000	-50.3162 **	-50.1851 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.
Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**
FCC Registration: 772092 **Industry Canada: 109AK**
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**
Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks: Passed Results | **Marginal Results** | **Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

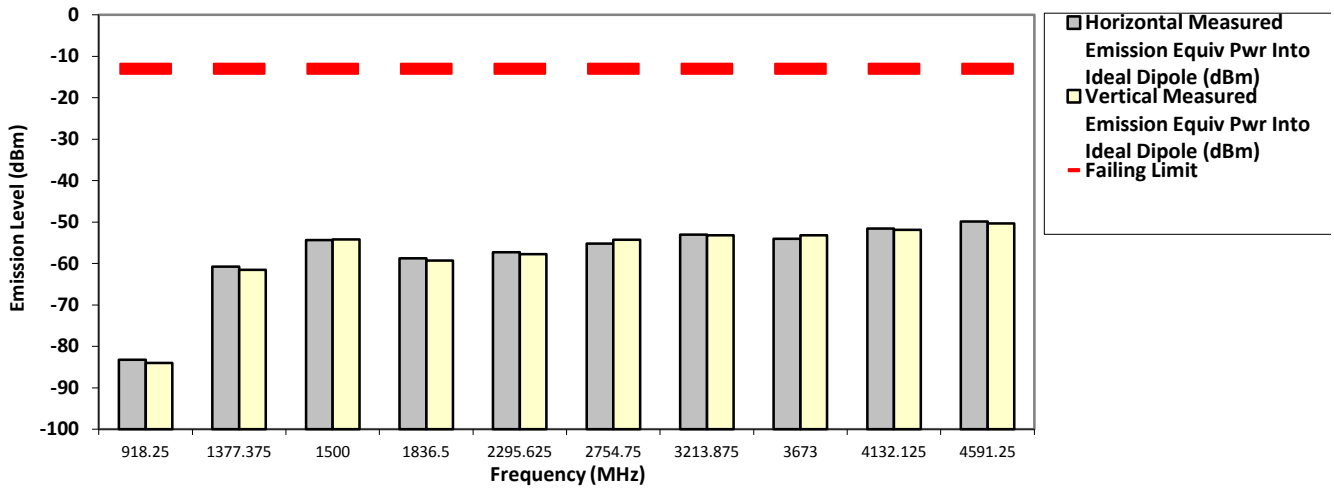
Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

459.125000 MHz **20 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-13.0000	-83.1974 **	-84.0072 **
1377.3750	-13.0000	-60.7396 **	-61.5314 **
1500.0000	-13.0000	-54.3500 *	-54.1600 *
1836.5000	-13.0000	-58.7603 **	-59.2611 **
2295.6250	-13.0000	-57.2875 **	-57.7212 **
2754.7500	-13.0000	-55.1826 **	-54.3059 **
3213.8750	-13.0000	-53.0462 **	-53.2048 **
3673.0000	-13.0000	-54.0365 **	-53.2235 **
4132.1250	-13.0000	-51.5322 **	-51.8846 **
4591.2500	-13.0000	-49.8738 **	-50.3258 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

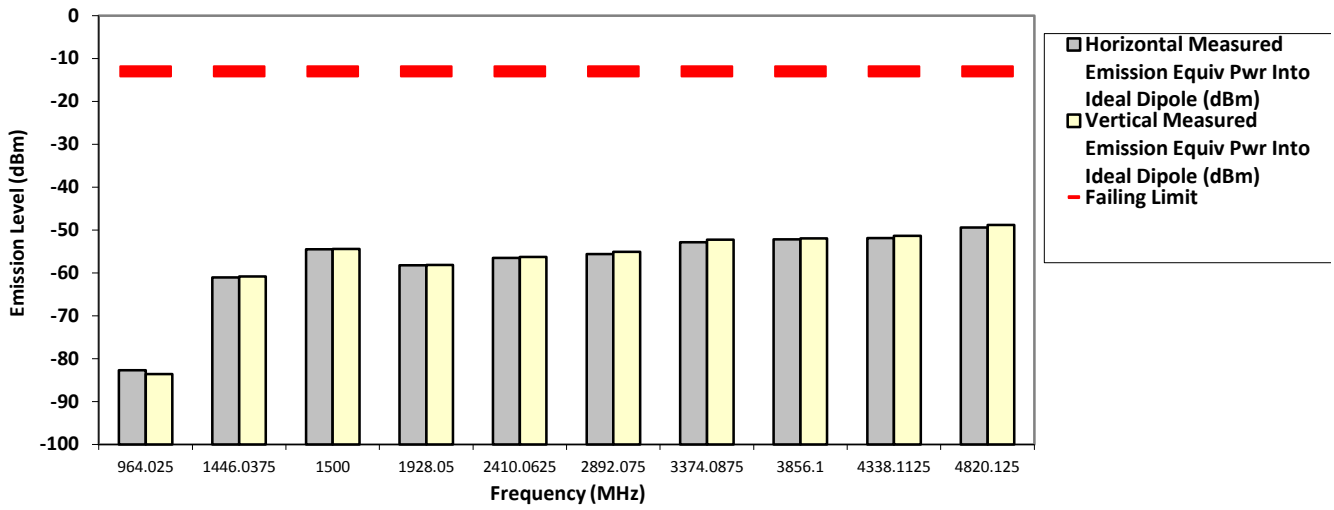
Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

482.012500 MHz **20 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
964.0250	-13.0000	-82.7266 **	-83.6027 **
1446.0375	-13.0000	-61.0856 **	-60.8645 **
1500.0000	-13.0000	-54.5300 *	-54.4600 *
1928.0500	-13.0000	-58.2460 **	-58.1435 **
2410.0625	-13.0000	-56.5165 **	-56.2786 **
2892.0750	-13.0000	-55.6637 **	-55.0766 **
3374.0875	-13.0000	-52.8468 **	-52.2614 **
3856.1000	-13.0000	-52.2189 **	-51.9413 **
4338.1125	-13.0000	-51.8988 **	-51.3752 **
4820.1250	-13.0000	-49.4145 **	-48.8357 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

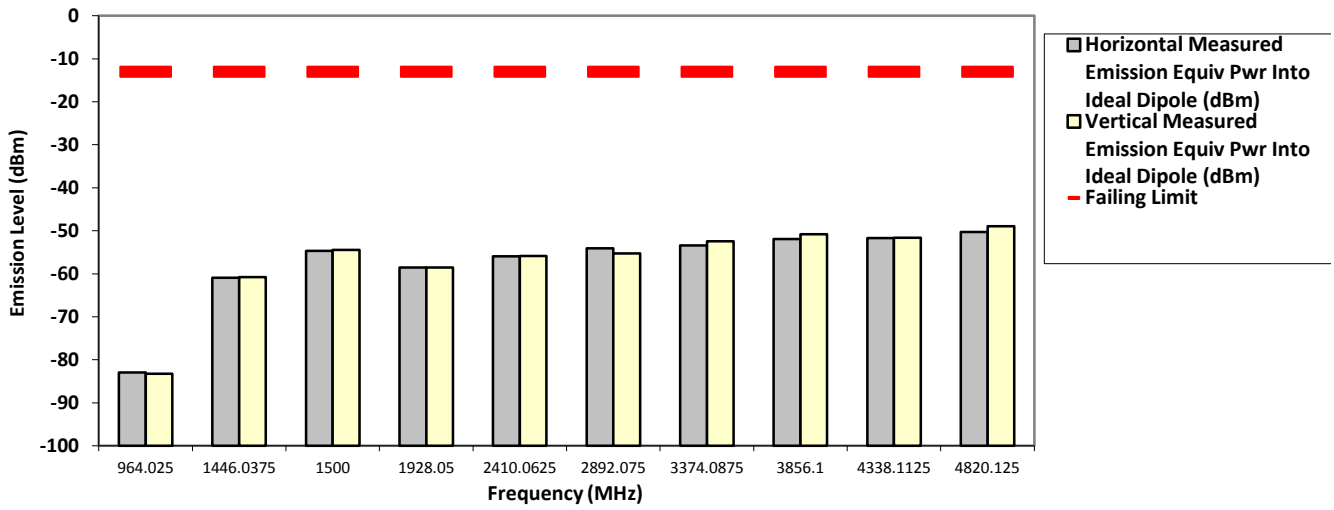
Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

482.012500 MHz **20 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
964.0250	-13.0000	-82.9241 **	-83.2234 **
1446.0375	-13.0000	-60.9264 **	-60.7563 **
1500.0000	-13.0000	-54.6500 *	-54.4500 *
1928.0500	-13.0000	-58.5483 **	-58.5855 **
2410.0625	-13.0000	-55.9686 **	-55.8419 **
2892.0750	-13.0000	-54.0715 **	-55.2539 **
3374.0875	-13.0000	-53.4365 **	-52.4477 **
3856.1000	-13.0000	-51.9261 **	-50.8009 **
4338.1125	-13.0000	-51.7231 **	-51.6231 **
4820.1250	-13.0000	-50.2941 **	-48.9819 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

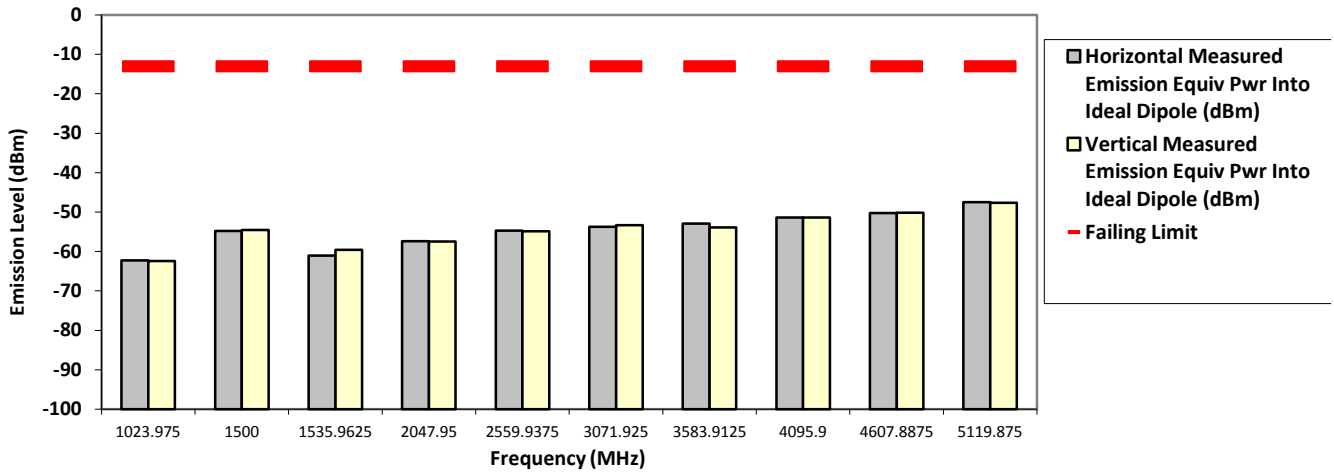
Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

511.987500 MHz **20 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1023.9750	-13.0000	-62.2883 **	-62.4147 **
1500.0000	-13.0000	-54.8200 *	-54.5400 *
1535.9625	-13.0000	-60.9983 **	-59.5373 **
2047.9500	-13.0000	-57.3839 **	-57.5053 **
2559.9375	-13.0000	-54.7296 **	-54.8576 **
3071.9250	-13.0000	-53.7175 **	-53.3462 **
3583.9125	-13.0000	-52.9410 **	-53.9004 **
4095.9000	-13.0000	-51.4013 **	-51.3738 **
4607.8875	-13.0000	-50.2515 **	-50.1737 **
5119.8750	-13.0000	-47.4853 **	-47.6324 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

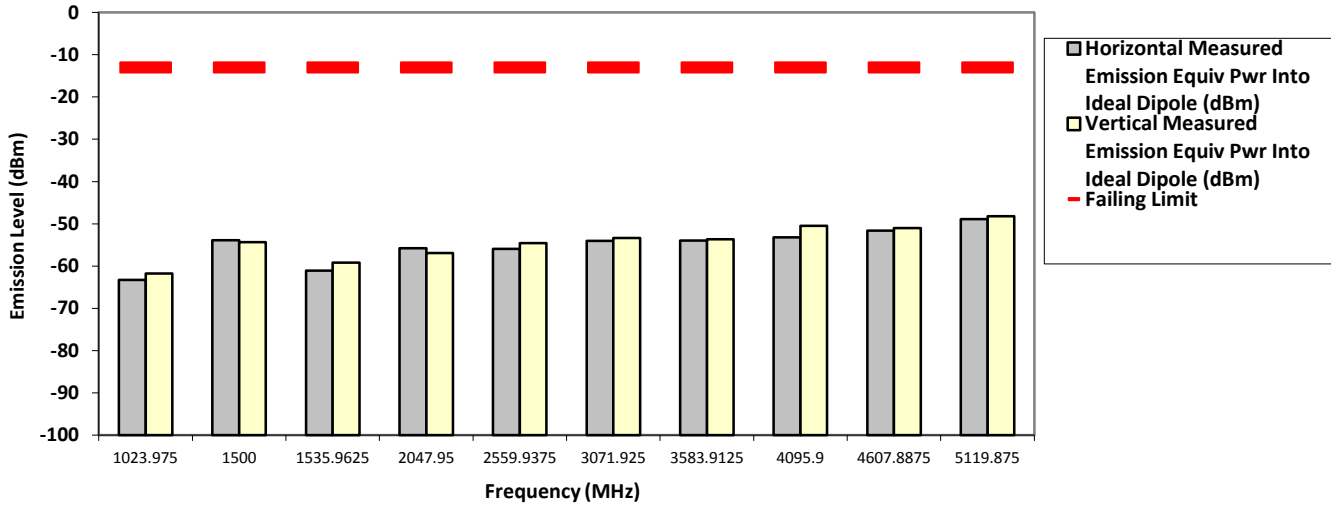
Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

511.987500 MHz **20 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1023.9750	-13.0000	-63.2716 **	-61.7465 **
1500.0000	-13.0000	-53.9200 *	-54.3300 *
1535.9625	-13.0000	-61.0703 **	-59.1822 **
2047.9500	-13.0000	-55.7853 **	-56.8800 **
2559.9375	-13.0000	-55.9381 **	-54.5712 **
3071.9250	-13.0000	-54.0163 **	-53.3627 **
3583.9125	-13.0000	-53.9327 **	-53.6698 **
4095.9000	-13.0000	-53.2131 **	-50.4906 **
4607.8875	-13.0000	-51.5839 **	-51.0322 **
5119.8750	-13.0000	-48.9013 **	-48.2311 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks: Passed Results | **Marginal Results** | **Failed Results**

SAC Transmitter Radiated Emission:

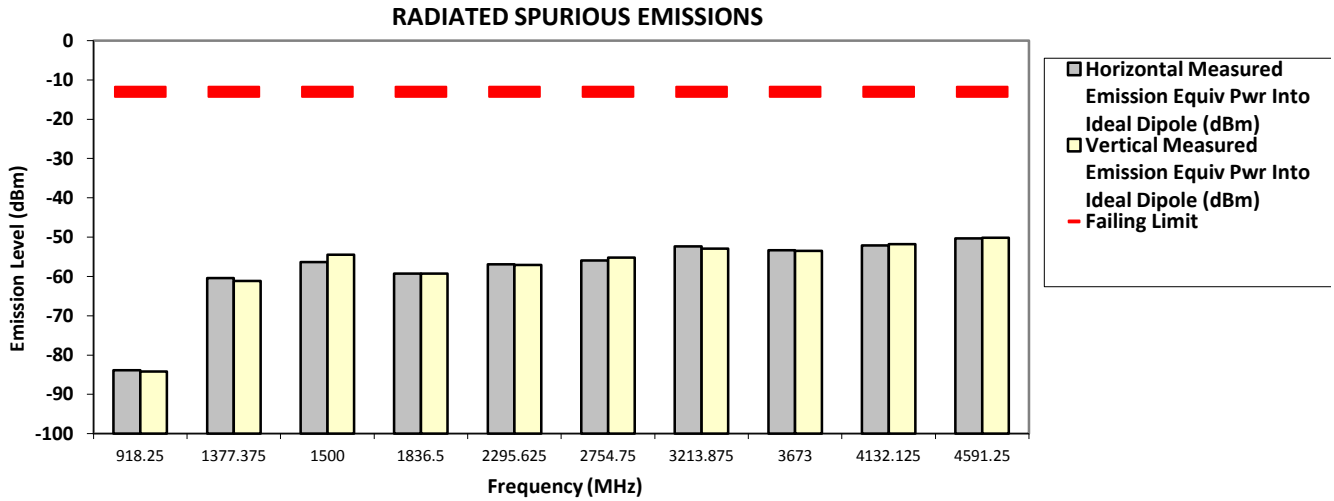
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

459.125000 MHz **20 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-13.0000	-83.8515 **	-84.2059 **
1377.3750	-13.0000	-60.4190 **	-61.1068 **
1500.0000	-13.0000	-56.3400 *	-54.4600 *
1836.5000	-13.0000	-59.3023 **	-59.2841 **
2295.6250	-13.0000	-56.9354 **	-57.0592 **
2754.7500	-13.0000	-55.9554 **	-55.1700 **
3213.8750	-13.0000	-52.3799 **	-52.9282 **
3673.0000	-13.0000	-53.3614 **	-53.5011 **
4132.1250	-13.0000	-52.0926 **	-51.7949 **
4591.2500	-13.0000	-50.3162 **	-50.1851 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

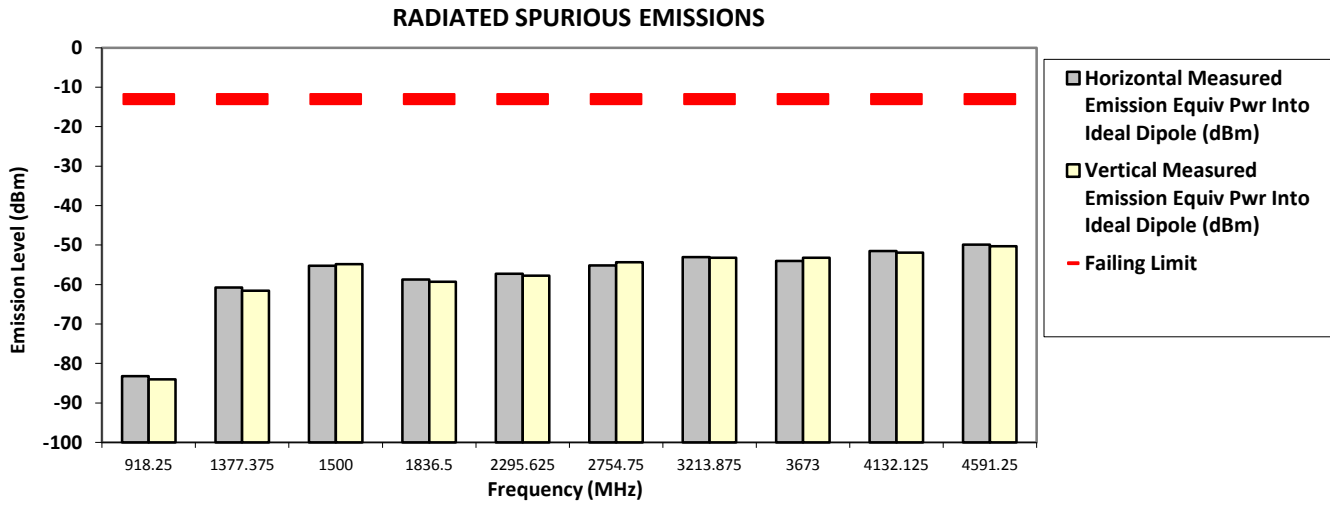
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

459.125000 MHz **20 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-13.0000	-83.1974 **	-84.0072 **
1377.3750	-13.0000	-60.7396 **	-61.5314 **
1500.0000	-13.0000	-55.2500 *	-54.8600 *
1836.5000	-13.0000	-58.7603 **	-59.2611 **
2295.6250	-13.0000	-57.2875 **	-57.7212 **
2754.7500	-13.0000	-55.1826 **	-54.3059 **
3213.8750	-13.0000	-53.0462 **	-53.2048 **
3673.0000	-13.0000	-54.0365 **	-53.2235 **
4132.1250	-13.0000	-51.5322 **	-51.8846 **
4591.2500	-13.0000	-49.8738 **	-50.3258 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

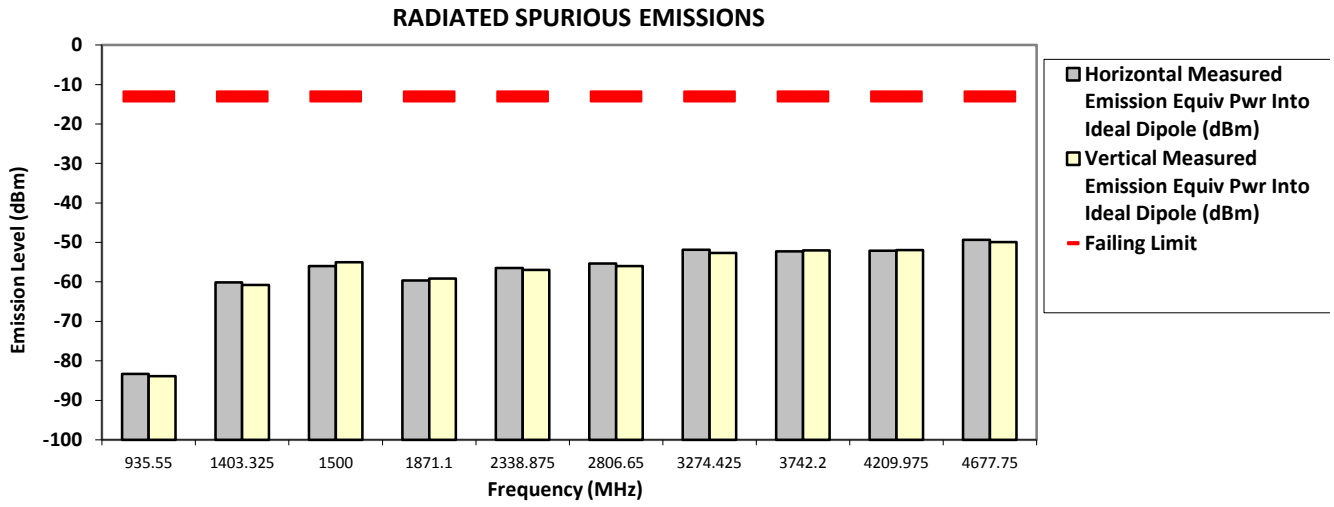
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

467.775000 MHz **20 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
935.5500	-13.0000	-83.3163 **	-83.8401 **
1403.3250	-13.0000	-60.0951 **	-60.7804 **
1500.0000	-13.0000	-55.9700 *	-54.9900 *
1871.1000	-13.0000	-59.6424 **	-59.1815 **
2338.8750	-13.0000	-56.4485 **	-56.9458 **
2806.6500	-13.0000	-55.3726 **	-55.9808 **
3274.4250	-13.0000	-51.8785 **	-52.6740 **
3742.2000	-13.0000	-52.3001 **	-52.0319 **
4209.9750	-13.0000	-52.1103 **	-51.9423 **
4677.7500	-13.0000	-49.3445 **	-49.8750 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

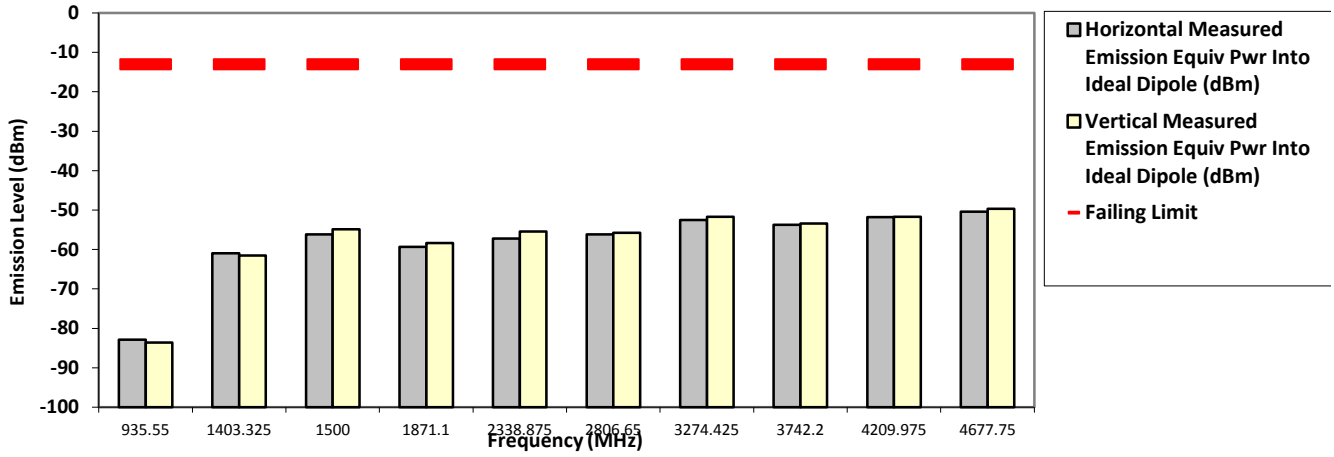
Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

467.775000 MHz **20 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
935.5500	-13.0000	-82.8497 **	-83.5784 **
1403.3250	-13.0000	-60.9355 **	-61.5114 **
1500.0000	-13.0000	-56.2000 *	-54.8300 *
1871.1000	-13.0000	-59.3667 **	-58.3641 **
2338.8750	-13.0000	-57.1867 **	-55.4152 **
2806.6500	-13.0000	-56.1861 **	-55.7824 **
3274.4250	-13.0000	-52.4897 **	-51.7042 **
3742.2000	-13.0000	-53.7018 **	-53.3702 **
4209.9750	-13.0000	-51.7885 **	-51.7243 **
4677.7500	-13.0000	-50.3663 **	-49.6844 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

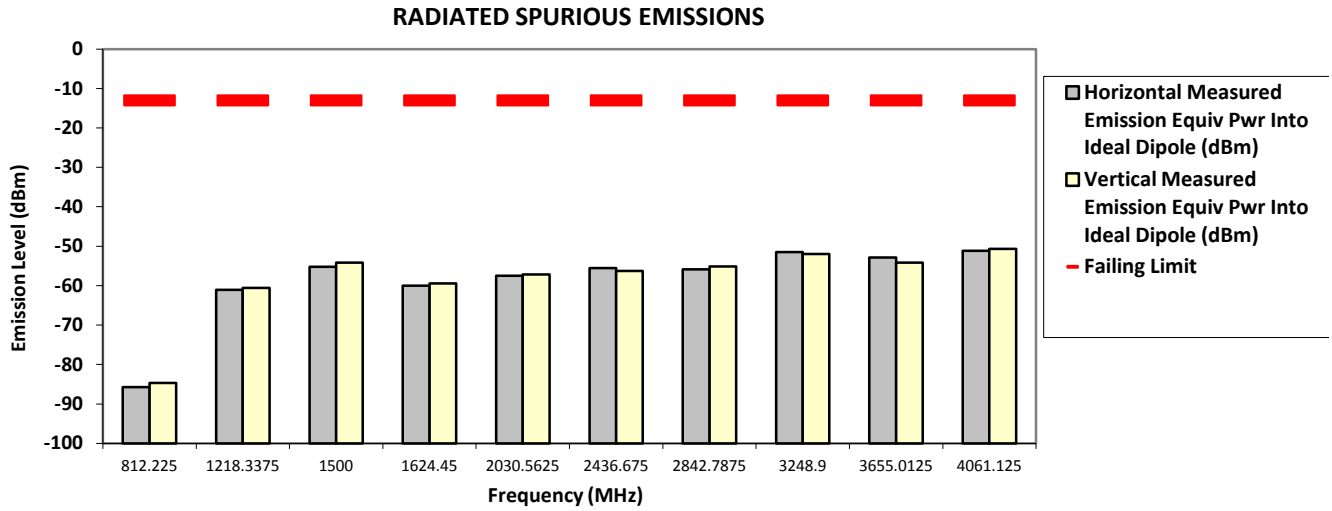
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

406.112500 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
812.2250	-13.0000	-85.7529 **	-84.6591 **
1218.3375	-13.0000	-61.0503 **	-60.6021 **
1500.0000	-13.0000	-55.2300 *	-54.1300 *
1624.4500	-13.0000	-60.0132 **	-59.4681 **
2030.5625	-13.0000	-57.4806 **	-57.1295 **
2436.6750	-13.0000	-55.5776 **	-56.2539 **
2842.7875	-13.0000	-55.8472 **	-55.1032 **
3248.9000	-13.0000	-51.5148 **	-51.9480 **
3655.0125	-13.0000	-52.8291 **	-54.1768 **
4061.1250	-13.0000	-51.1524 **	-50.6500 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

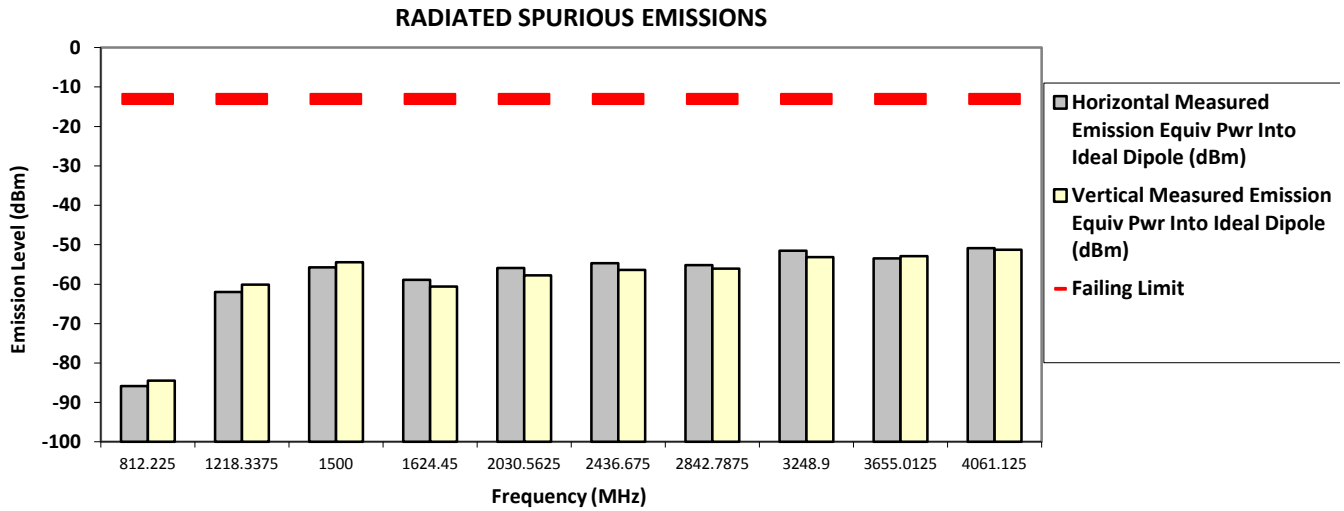
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

406.112500 MHz **25 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
812.2250	-13.0000	-85.8614 **	-84.4569 **
1218.3375	-13.0000	-61.9707 **	-60.1333 **
1500.0000	-13.0000	-55.7700 *	-54.4200 *
1624.4500	-13.0000	-58.9214 **	-60.5654 **
2030.5625	-13.0000	-55.8618 **	-57.7872 **
2436.6750	-13.0000	-54.6722 **	-56.3793 **
2842.7875	-13.0000	-55.1322 **	-56.0678 **
3248.9000	-13.0000	-51.5222 **	-53.1417 **
3655.0125	-13.0000	-53.4314 **	-52.8793 **
4061.1250	-13.0000	-50.8529 **	-51.3115 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

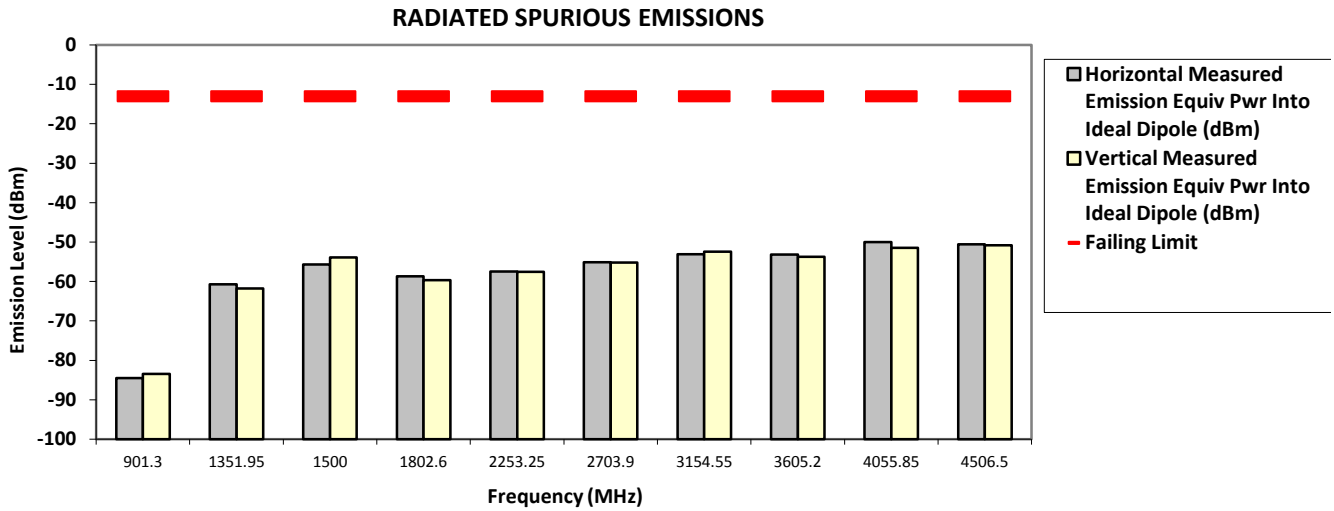
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

450.650000 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
901.3000	-13.0000	-84.4964 **	-83.4262 **
1351.9500	-13.0000	-60.7410 **	-61.7960 **
1500.0000	-13.0000	-55.6600 *	-53.9200 *
1802.6000	-13.0000	-58.7209 **	-59.6842 **
2253.2500	-13.0000	-57.5016 **	-57.5844 **
2703.9000	-13.0000	-55.0771 **	-55.2184 **
3154.5500	-13.0000	-53.1168 **	-52.4020 **
3605.2000	-13.0000	-53.1613 **	-53.7316 **
4055.8500	-13.0000	-50.0358 **	-51.4741 **
4506.5000	-13.0000	-50.5965 **	-50.8342 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

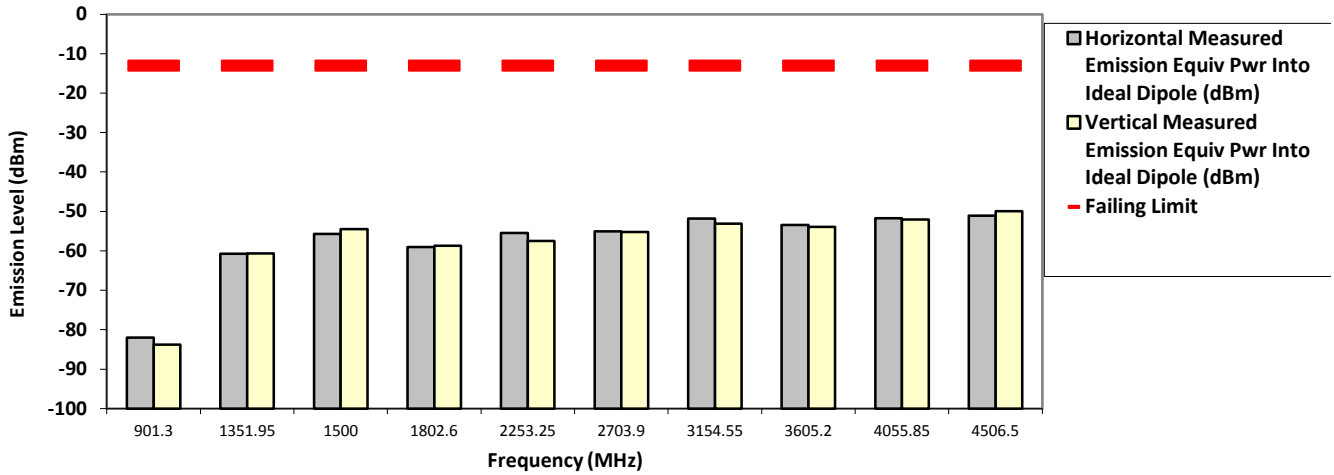
Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

450.650000 MHz **25 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
901.3000	-13.0000	-82.0424 **	-83.7860 **
1351.9500	-13.0000	-60.7182 **	-60.6858 **
1500.0000	-13.0000	-55.6700 *	-54.5200 *
1802.6000	-13.0000	-59.0766 **	-58.7421 **
2253.2500	-13.0000	-55.5001 **	-57.4562 **
2703.9000	-13.0000	-55.0690 **	-55.2067 **
3154.5500	-13.0000	-51.8500 **	-53.1457 **
3605.2000	-13.0000	-53.4243 **	-53.8954 **
4055.8500	-13.0000	-51.7065 **	-52.0748 **
4506.5000	-13.0000	-51.0961 **	-49.9232 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

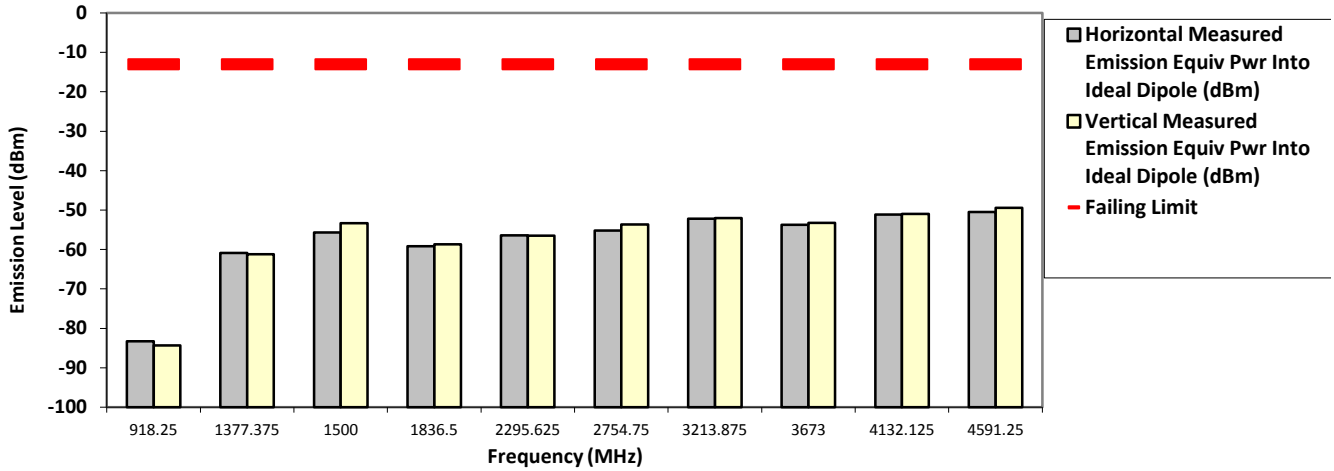
Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

459.125000 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-13.0000	-83.2913 **	-84.3220 **
1377.3750	-13.0000	-60.9107 **	-61.2093 **
1500.0000	-13.0000	-55.6900 *	-53.3200 *
1836.5000	-13.0000	-59.2027 **	-58.6687 **
2295.6250	-13.0000	-56.3825 **	-56.4776 **
2754.7500	-13.0000	-55.1928 **	-53.6463 **
3213.8750	-13.0000	-52.2114 **	-51.9911 **
3673.0000	-13.0000	-53.7694 **	-53.2224 **
4132.1250	-13.0000	-51.1087 **	-50.9481 **
4591.2500	-13.0000	-50.4716 **	-49.4720 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

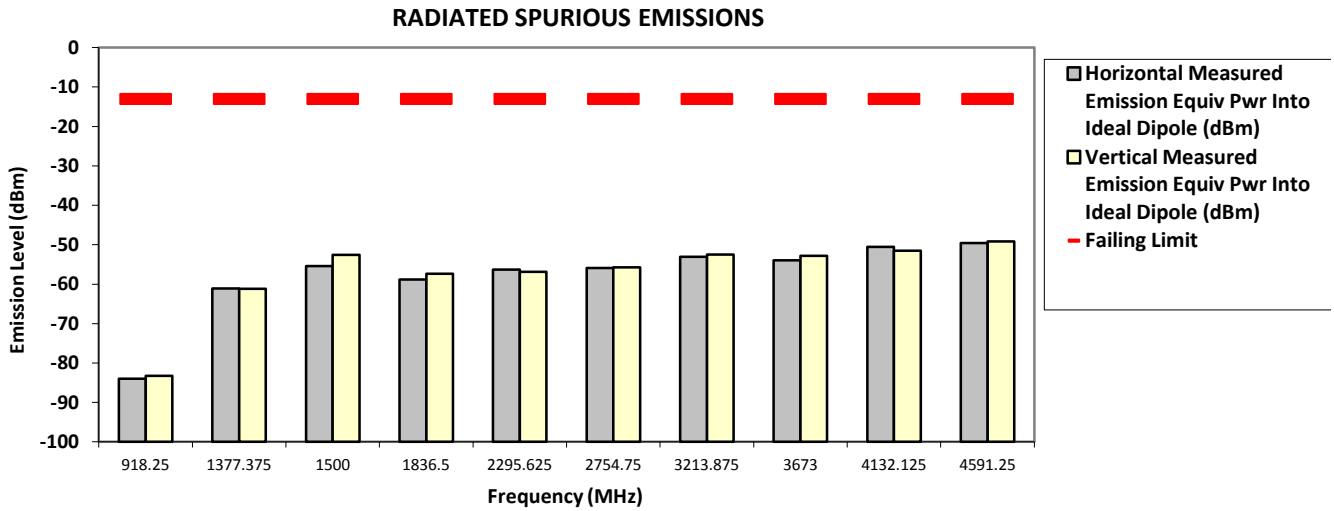
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

459.125000 MHz **25 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-13.0000	-83.9579 **	-83.2850 **
1377.3750	-13.0000	-61.0987 **	-61.2135 **
1500.0000	-13.0000	-55.4100 *	-52.5400 *
1836.5000	-13.0000	-58.8350 **	-57.3681 **
2295.6250	-13.0000	-56.2825 **	-56.9062 **
2754.7500	-13.0000	-55.8932 **	-55.7740 **
3213.8750	-13.0000	-53.0667 **	-52.4876 **
3673.0000	-13.0000	-53.9817 **	-52.8108 **
4132.1250	-13.0000	-50.5123 **	-51.4996 **
4591.2500	-13.0000	-49.6009 **	-49.1723 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

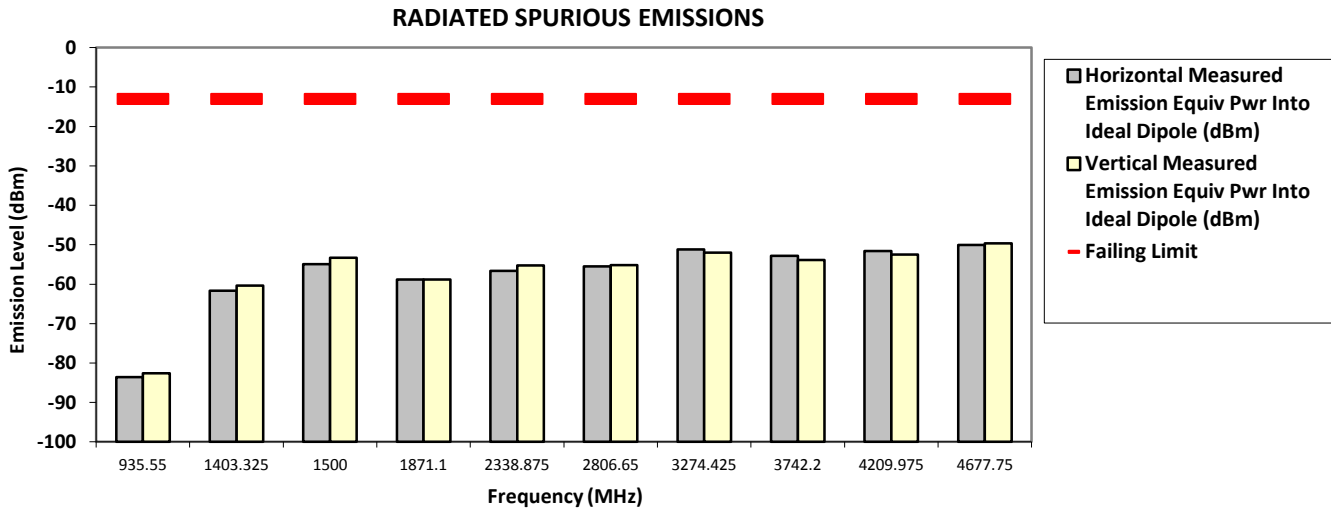
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

467.775000 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
935.5500	-13.0000	-83.5867 **	-82.5745 **
1403.3250	-13.0000	-61.6666 **	-60.3364 **
1500.0000	-13.0000	-54.9600 *	-53.2800 *
1871.1000	-13.0000	-58.8084 **	-58.7846 **
2338.8750	-13.0000	-56.6359 **	-55.2413 **
2806.6500	-13.0000	-55.4551 **	-55.1768 **
3274.4250	-13.0000	-51.1582 **	-51.9651 **
3742.2000	-13.0000	-52.8207 **	-53.8698 **
4209.9750	-13.0000	-51.5703 **	-52.5085 **
4677.7500	-13.0000	-50.0355 **	-49.6410 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

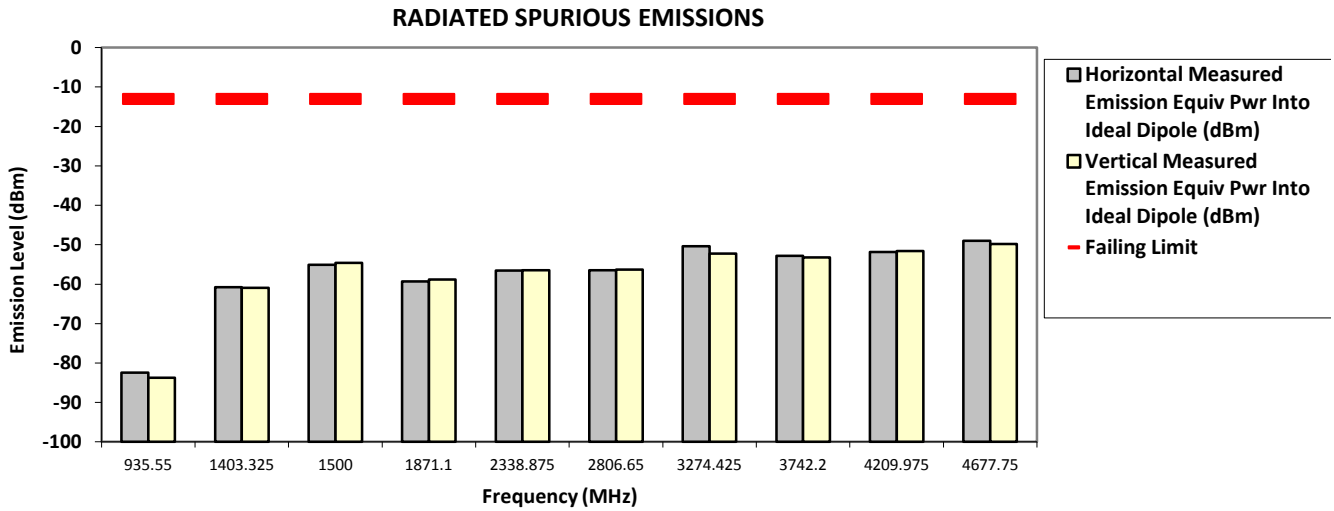
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

467.775000 MHz **25 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
935.5500	-13.0000	-82.4343 **	-83.7604 **
1403.3250	-13.0000	-60.7572 **	-60.9420 **
1500.0000	-13.0000	-55.0700 *	-54.5700 *
1871.1000	-13.0000	-59.3124 **	-58.8380 **
2338.8750	-13.0000	-56.5573 **	-56.4642 **
2806.6500	-13.0000	-56.4830 **	-56.2976 **
3274.4250	-13.0000	-50.3413 **	-52.2502 **
3742.2000	-13.0000	-52.8370 **	-53.2466 **
4209.9750	-13.0000	-51.8617 **	-51.6184 **
4677.7500	-13.0000	-48.9746 **	-49.8330 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

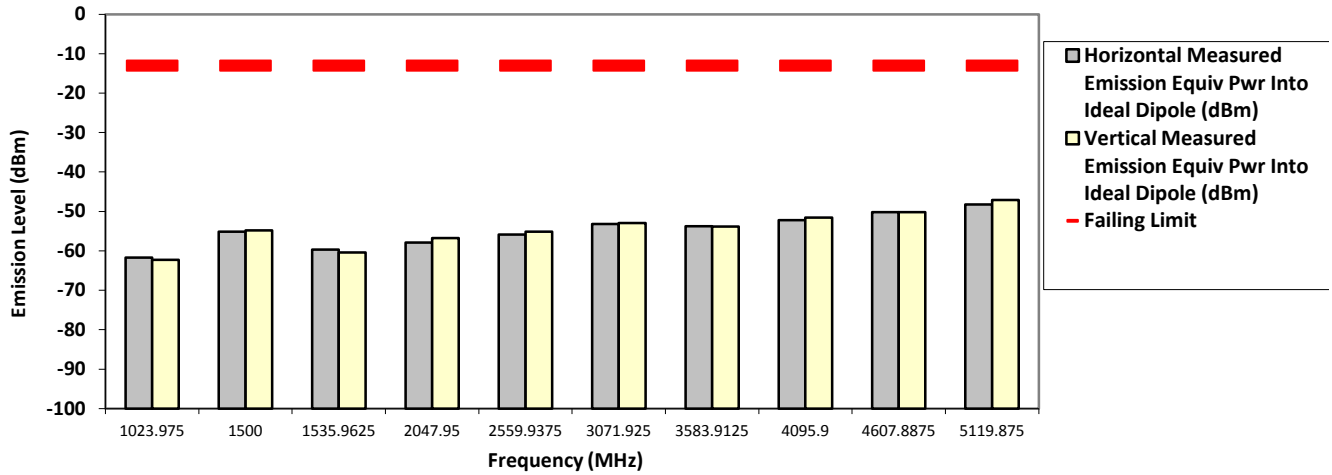
Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

511.987500 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1023.9750	-13.0000	-61.6973 **	-62.2711 **
1500.0000	-13.0000	-55.1400 *	-54.7900 *
1535.9625	-13.0000	-59.6940 **	-60.3780 **
2047.9500	-13.0000	-57.9184 **	-56.7467 **
2559.9375	-13.0000	-55.8456 **	-55.1730 **
3071.9250	-13.0000	-53.1719 **	-52.9535 **
3583.9125	-13.0000	-53.7381 **	-53.8175 **
4095.9000	-13.0000	-52.2400 **	-51.5480 **
4607.8875	-13.0000	-50.2130 **	-50.2148 **
5119.8750	-13.0000	-48.2336 **	-47.1462 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

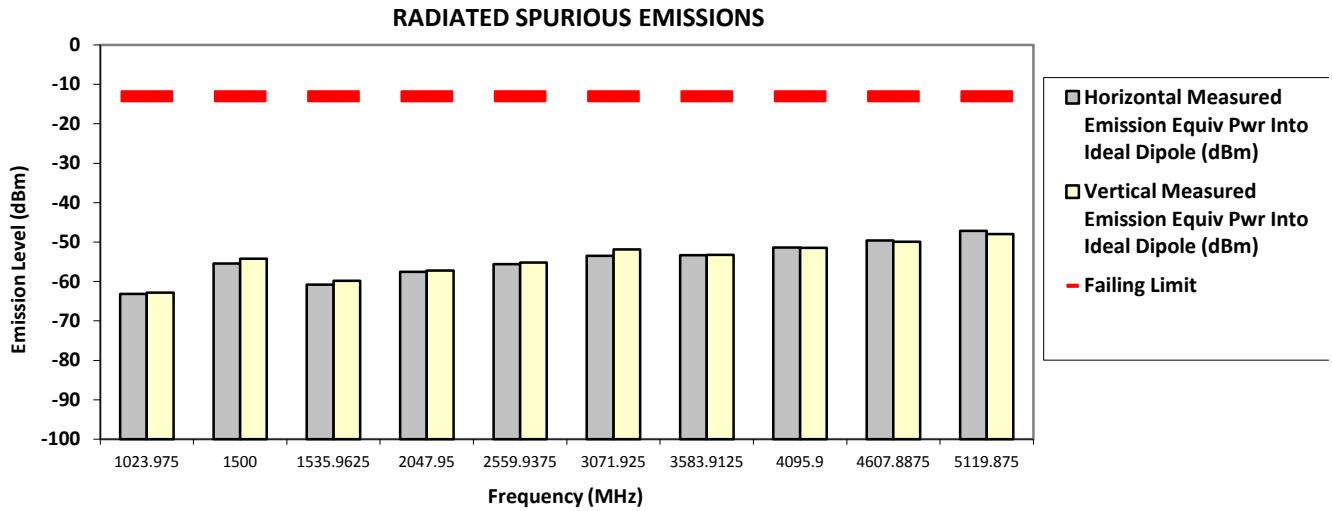
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

511.987500 MHz **25 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1023.9750	-13.0000	-63.1375 **	-62.8580 **
1500.0000	-13.0000	-55.4100 *	-54.2100 *
1535.9625	-13.0000	-60.8022 **	-59.8563 **
2047.9500	-13.0000	-57.5722 **	-57.2035 **
2559.9375	-13.0000	-55.6019 **	-55.2046 **
3071.9250	-13.0000	-53.4875 **	-51.8282 **
3583.9125	-13.0000	-53.2884 **	-53.2545 **
4095.9000	-13.0000	-51.3719 **	-51.4247 **
4607.8875	-13.0000	-49.5802 **	-49.8796 **
5119.8750	-13.0000	-47.1311 **	-47.9928 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

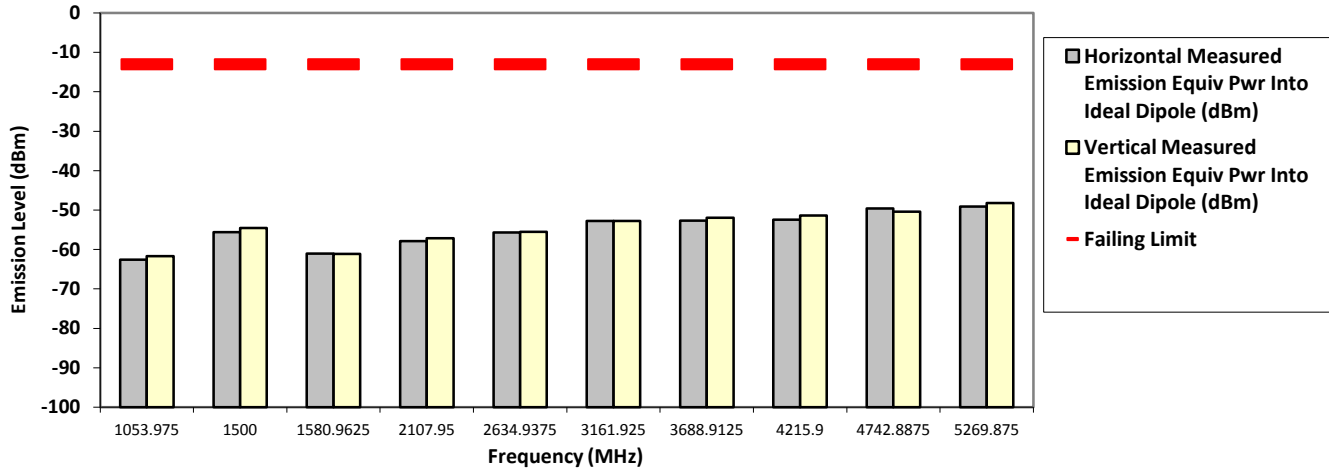
Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

526.987500 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1053.9750	-13.0000	-62.5950 **	-61.6983 **
1500.0000	-13.0000	-55.6200 *	-54.5200 *
1580.9625	-13.0000	-61.0596 **	-61.1159 **
2107.9500	-13.0000	-57.8575 **	-57.1140 **
2634.9375	-13.0000	-55.6717 **	-55.5203 **
3161.9250	-13.0000	-52.7358 **	-52.7274 **
3688.9125	-13.0000	-52.6664 **	-51.9464 **
4215.9000	-13.0000	-52.4430 **	-51.3694 **
4742.8875	-13.0000	-49.6303 **	-50.4256 **
5269.8750	-13.0000	-49.0975 **	-48.2407 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

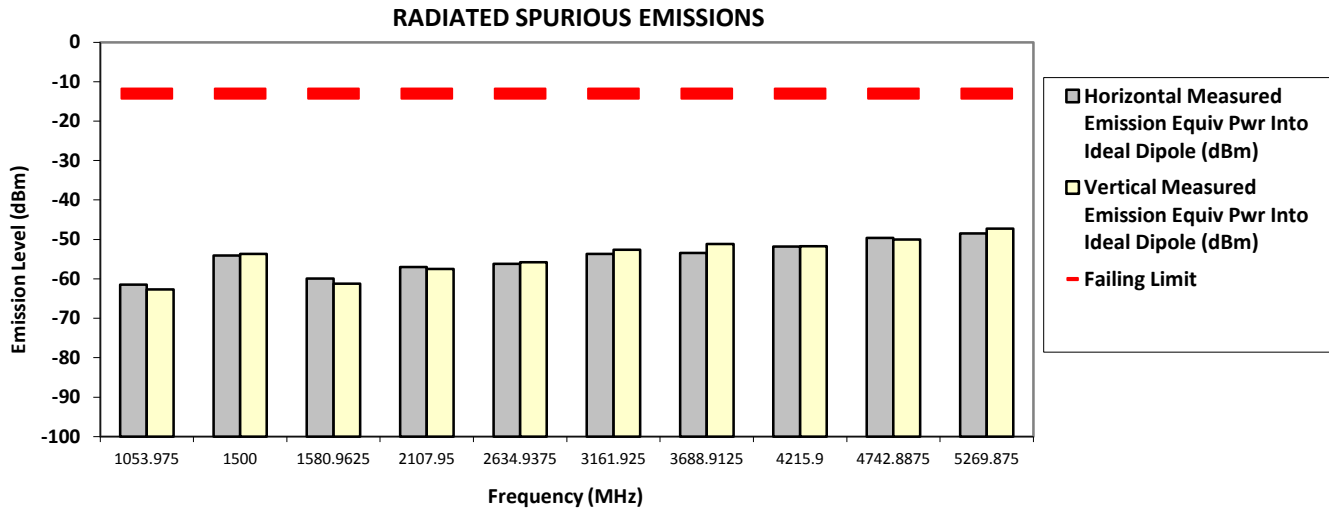
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

526.987500 MHz **25 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1053.9750	-13.0000	-61.4713 **	-62.7063 **
1500.0000	-13.0000	-54.0800 *	-53.6800 *
1580.9625	-13.0000	-59.9342 **	-61.2532 **
2107.9500	-13.0000	-56.9702 **	-57.5122 **
2634.9375	-13.0000	-56.2271 **	-55.7723 **
3161.9250	-13.0000	-53.6542 **	-52.6381 **
3688.9125	-13.0000	-53.4037 **	-51.1905 **
4215.9000	-13.0000	-51.8165 **	-51.7006 **
4742.8875	-13.0000	-49.6030 **	-50.0345 **
5269.8750	-13.0000	-48.4772 **	-47.3027 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Thu, Mar 16, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

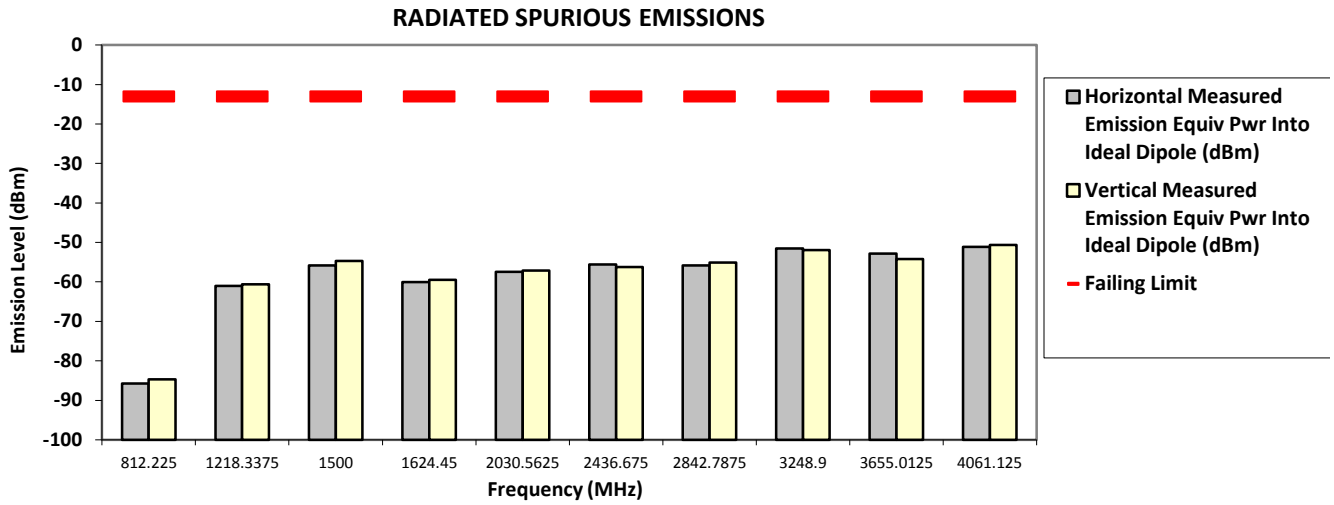
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

406.112500 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
812.2250	-13.0000	-85.7529 **	-84.6591 **
1218.3375	-13.0000	-61.0503 **	-60.6021 **
1500.0000	-13.0000	-55.8200 *	-54.6900 *
1624.4500	-13.0000	-60.0132 **	-59.4681 **
2030.5625	-13.0000	-57.4806 **	-57.1295 **
2436.6750	-13.0000	-55.5776 **	-56.2539 **
2842.7875	-13.0000	-55.8472 **	-55.1032 **
3248.9000	-13.0000	-51.5148 **	-51.9480 **
3655.0125	-13.0000	-52.8291 **	-54.1768 **
4061.1250	-13.0000	-51.1524 **	-50.6500 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

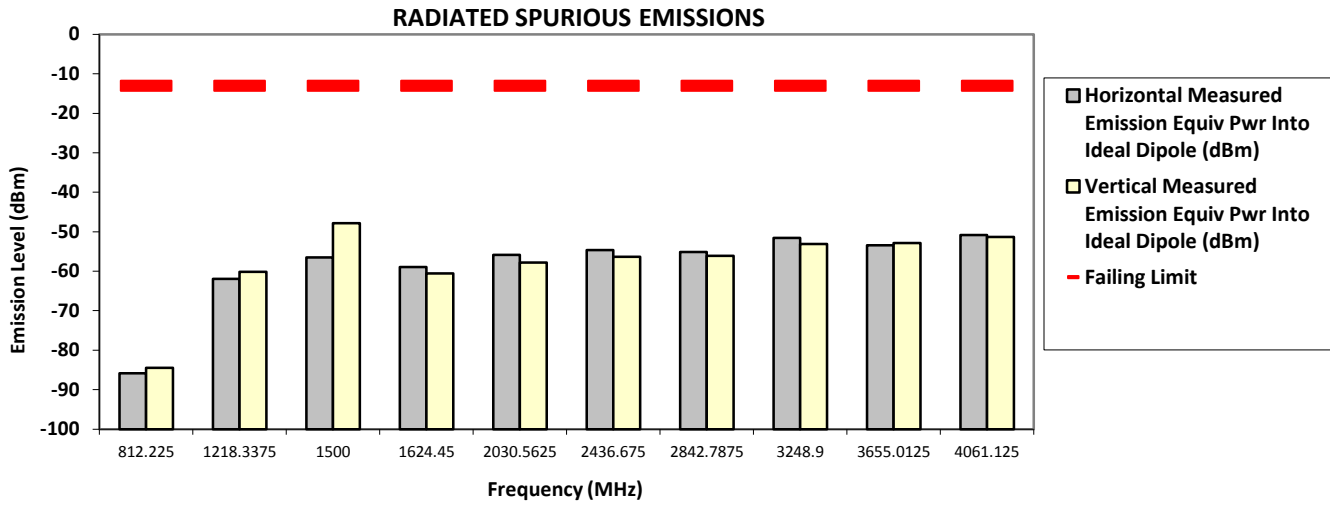
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

406.112500 MHz **25 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
812.2250	-13.0000	-85.8614 **	-84.4569 **
1218.3375	-13.0000	-61.9707 **	-60.1333 **
1500.0000	-13.0000	-56.4700 *	-47.8700 *
1624.4500	-13.0000	-58.9214 **	-60.5654 **
2030.5625	-13.0000	-55.8618 **	-57.7872 **
2436.6750	-13.0000	-54.6722 **	-56.3793 **
2842.7875	-13.0000	-55.1322 **	-56.0678 **
3248.9000	-13.0000	-51.5222 **	-53.1417 **
3655.0125	-13.0000	-53.4314 **	-52.8793 **
4061.1250	-13.0000	-50.8529 **	-51.3115 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

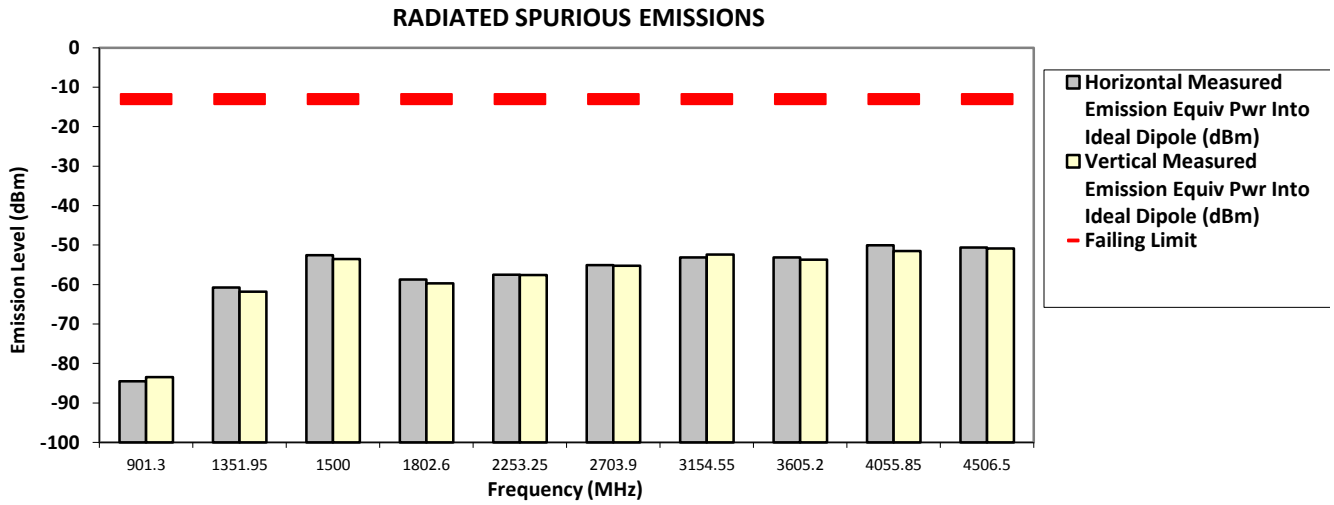
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

450.650000 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
901.3000	-13.0000	-84.4964 **	-83.4262 **
1351.9500	-13.0000	-60.7410 **	-61.7960 **
1500.0000	-13.0000	-52.5600 *	-53.5700 *
1802.6000	-13.0000	-58.7209 **	-59.6842 **
2253.2500	-13.0000	-57.5016 **	-57.5844 **
2703.9000	-13.0000	-55.0771 **	-55.2184 **
3154.5500	-13.0000	-53.1168 **	-52.4020 **
3605.2000	-13.0000	-53.1613 **	-53.7316 **
4055.8500	-13.0000	-50.0358 **	-51.4741 **
4506.5000	-13.0000	-50.5965 **	-50.8342 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

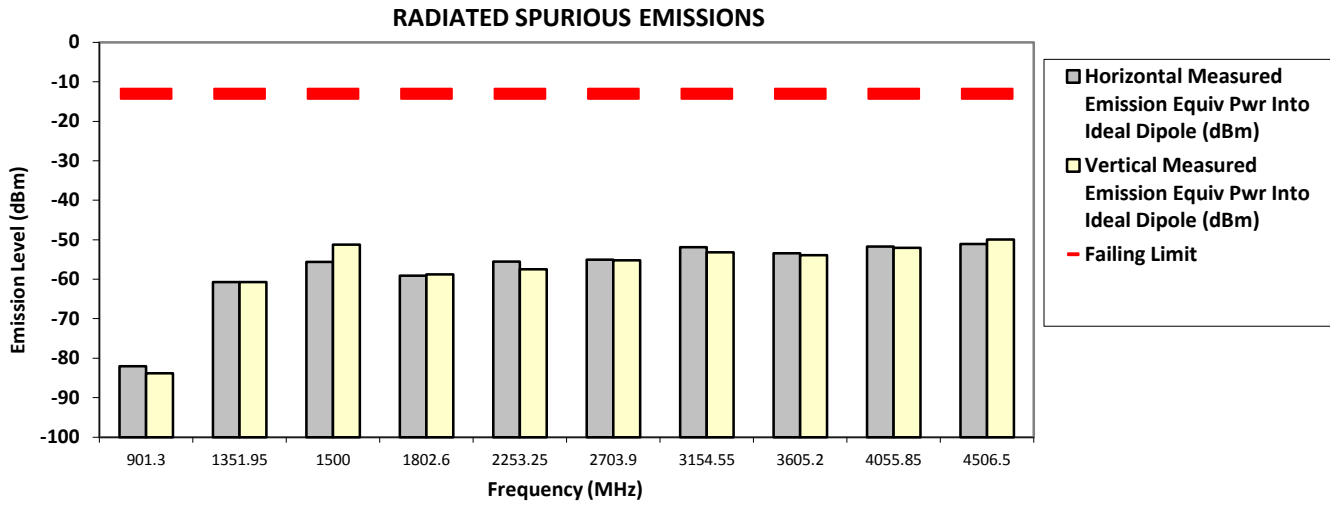
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

450.650000 MHz **25 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
901.3000	-13.0000	-82.0424 **	-83.7860 **
1351.9500	-13.0000	-60.7182 **	-60.6858 **
1500.0000	-13.0000	-55.5800 *	-51.2100 *
1802.6000	-13.0000	-59.0766 **	-58.7421 **
2253.2500	-13.0000	-55.5001 **	-57.4562 **
2703.9000	-13.0000	-55.0690 **	-55.2067 **
3154.5500	-13.0000	-51.8500 **	-53.1457 **
3605.2000	-13.0000	-53.4243 **	-53.8954 **
4055.8500	-13.0000	-51.7065 **	-52.0748 **
4506.5000	-13.0000	-51.0961 **	-49.9232 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

SAC Transmitter Radiated Emission:

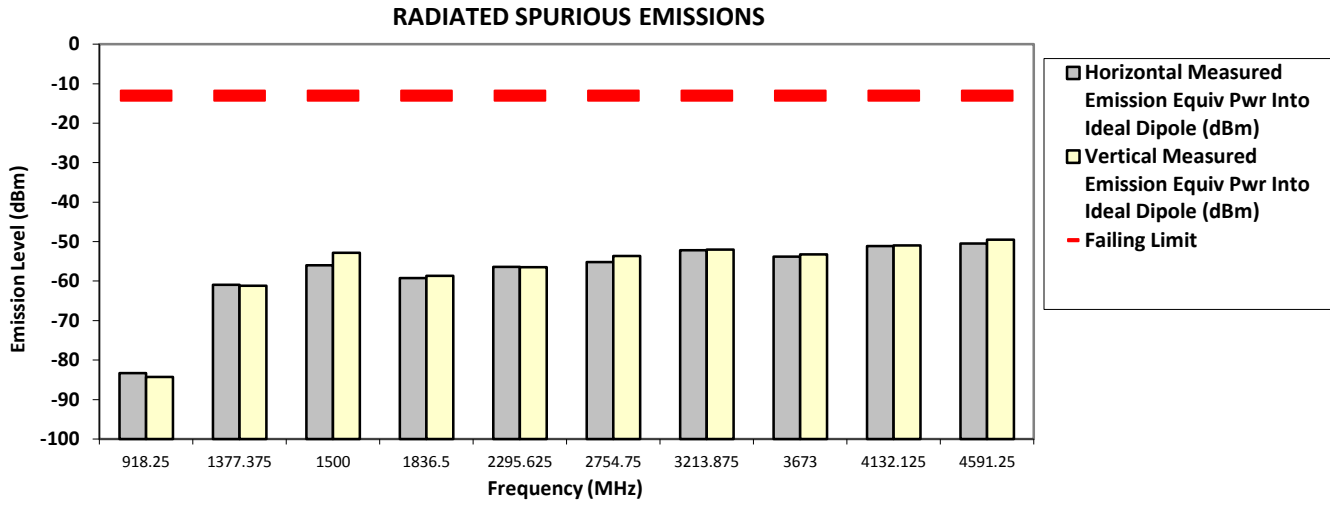
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

459.125000 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-13.0000	-83.2913 **	-84.3220 **
1377.3750	-13.0000	-60.9107 **	-61.2093 **
1500.0000	-13.0000	-55.9600 *	-52.8000 *
1836.5000	-13.0000	-59.2027 **	-58.6687 **
2295.6250	-13.0000	-56.3825 **	-56.4776 **
2754.7500	-13.0000	-55.1928 **	-53.6463 **
3213.8750	-13.0000	-52.2114 **	-51.9911 **
3673.0000	-13.0000	-53.7694 **	-53.2224 **
4132.1250	-13.0000	-51.1087 **	-50.9481 **
4591.2500	-13.0000	-50.4716 **	-49.4720 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

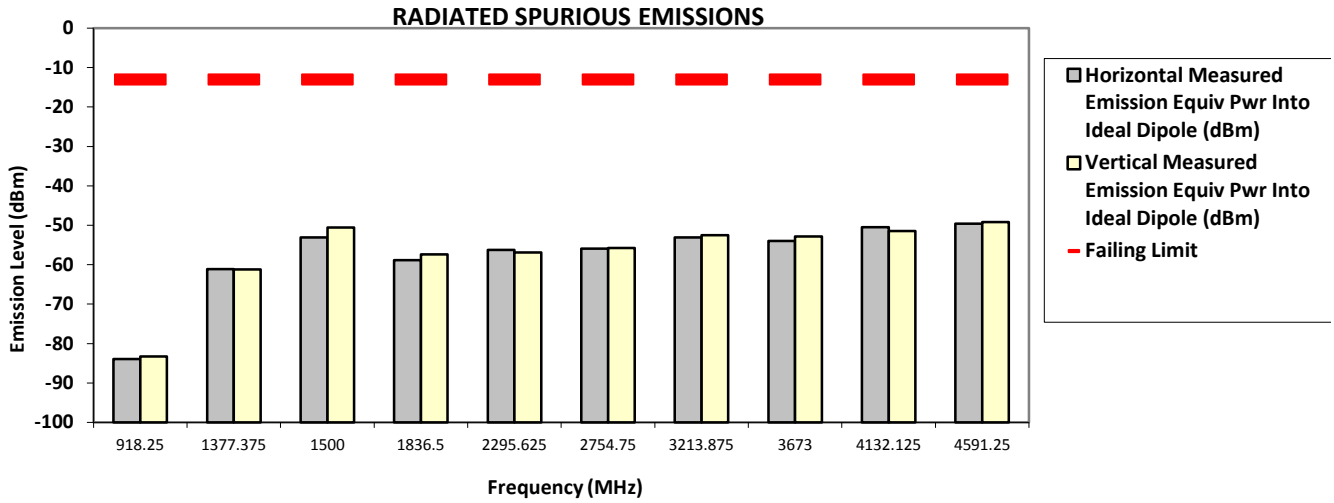
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

459.125000 MHz **25 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-13.0000	-83.9579 **	-83.2850 **
1377.3750	-13.0000	-61.0987 **	-61.2135 **
1500.0000	-13.0000	-53.1200 *	-50.5400 *
1836.5000	-13.0000	-58.8350 **	-57.3681 **
2295.6250	-13.0000	-56.2825 **	-56.9062 **
2754.7500	-13.0000	-55.8932 **	-55.7740 **
3213.8750	-13.0000	-53.0667 **	-52.4876 **
3673.0000	-13.0000	-53.9817 **	-52.8108 **
4132.1250	-13.0000	-50.5123 **	-51.4996 **
4591.2500	-13.0000	-49.6009 **	-49.1723 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

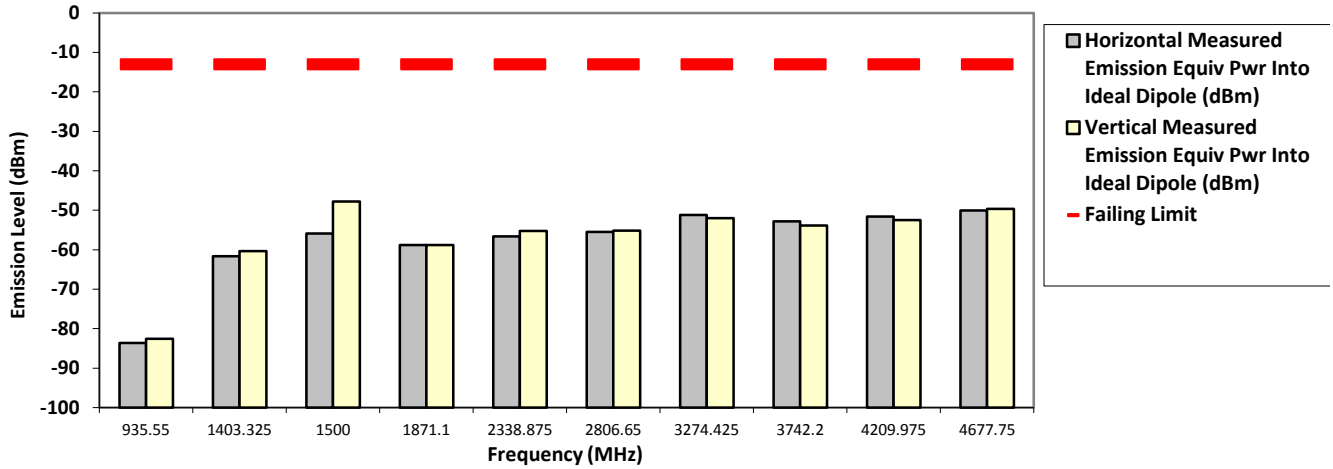
Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

467.775000 MHz **25 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
935.5500	-13.0000	-83.5867 **	-82.5745 **
1403.3250	-13.0000	-61.6666 **	-60.3364 **
1500.0000	-13.0000	-55.8600 *	-47.8000 *
1871.1000	-13.0000	-58.8084 **	-58.7846 **
2338.8750	-13.0000	-56.6359 **	-55.2413 **
2806.6500	-13.0000	-55.4551 **	-55.1768 **
3274.4250	-13.0000	-51.1582 **	-51.9651 **
3742.2000	-13.0000	-52.8207 **	-53.8698 **
4209.9750	-13.0000	-51.5703 **	-52.5085 **
4677.7500	-13.0000	-50.0355 **	-49.6410 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

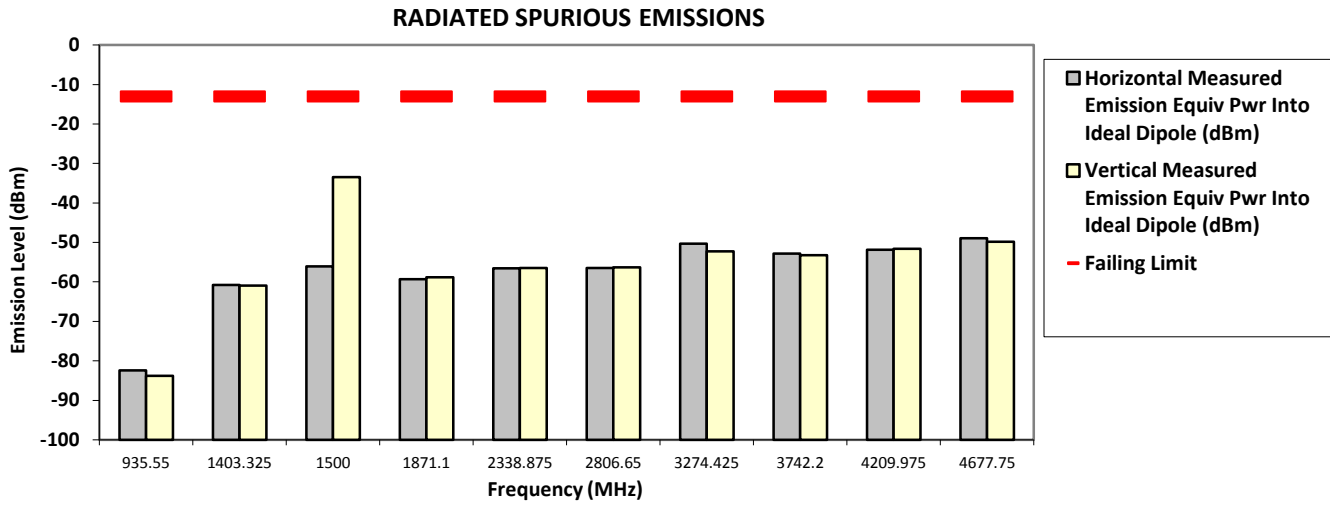
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Analog

467.775000 MHz **25 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
935.5500	-13.0000	-82.4343 **	-83.7604 **
1403.3250	-13.0000	-60.7572 **	-60.9420 **
1500.0000	-13.0000	-56.0900 *	-33.4800 *
1871.1000	-13.0000	-59.3124 **	-58.8380 **
2338.8750	-13.0000	-56.5573 **	-56.4642 **
2806.6500	-13.0000	-56.4830 **	-56.2976 **
3274.4250	-13.0000	-50.3413 **	-52.2502 **
3742.2000	-13.0000	-52.8370 **	-53.2466 **
4209.9750	-13.0000	-51.8617 **	-51.6184 **
4677.7500	-13.0000	-48.9746 **	-49.8330 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	Marginal Results	Failed Results

6.11.3. Test Result (Digital)

SAC Transmitter Radiated Emission:

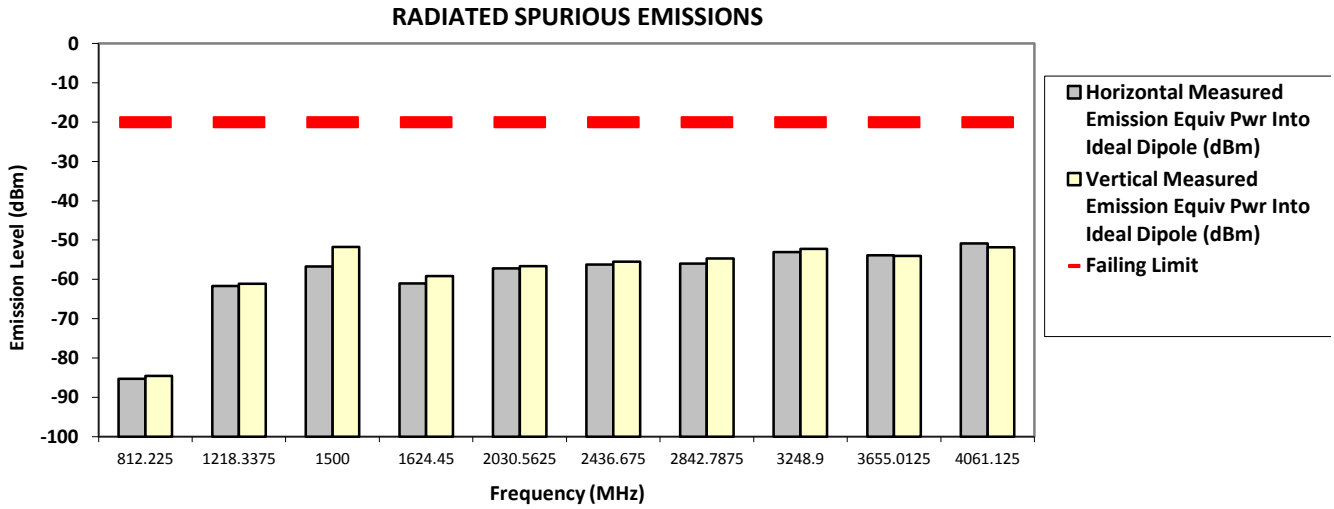
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Digital

406.112500 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
812.2250	-20.0000	-85.3008 **	-84.6029 **
1218.3375	-20.0000	-61.6852 **	-61.1194 **
1500.0000	-20.0000	-56.6900 *	-51.7400 *
1624.4500	-20.0000	-61.0357 **	-59.1450 **
2030.5625	-20.0000	-57.2338 **	-56.6134 **
2436.6750	-20.0000	-56.2066 **	-55.5111 **
2842.7875	-20.0000	-56.0062 **	-54.6741 **
3248.9000	-20.0000	-53.0208 **	-52.2333 **
3655.0125	-20.0000	-53.8918 **	-54.0308 **
4061.1250	-20.0000	-50.8527 **	-51.8643 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sat, Mar 18, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

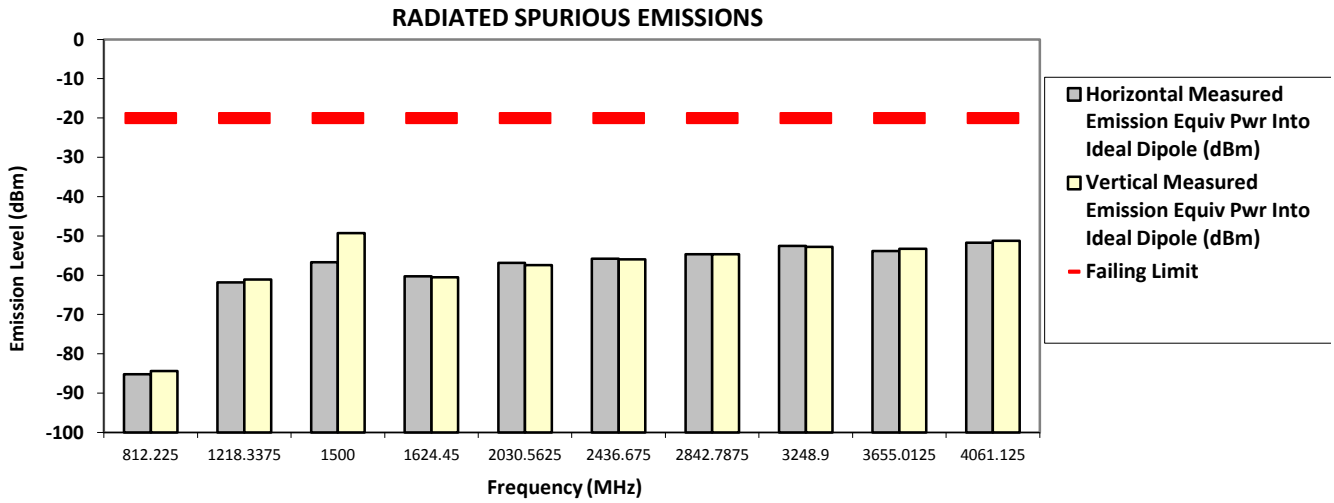
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Digital

406.112500 MHz **12.5 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
812.2250	-20.0000	-85.1923 **	-84.3552 **
1218.3375	-20.0000	-61.7901 **	-61.0656 **
1500.0000	-20.0000	-56.7300 *	-49.2500 *
1624.4500	-20.0000	-60.2972 **	-60.5555 **
2030.5625	-20.0000	-56.8426 **	-57.4592 **
2436.6750	-20.0000	-55.7731 **	-55.9759 **
2842.7875	-20.0000	-54.6555 **	-54.6348 **
3248.9000	-20.0000	-52.5251 **	-52.7650 **
3655.0125	-20.0000	-53.8583 **	-53.2732 **
4061.1250	-20.0000	-51.7602 **	-51.2485 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sat, Mar 18, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

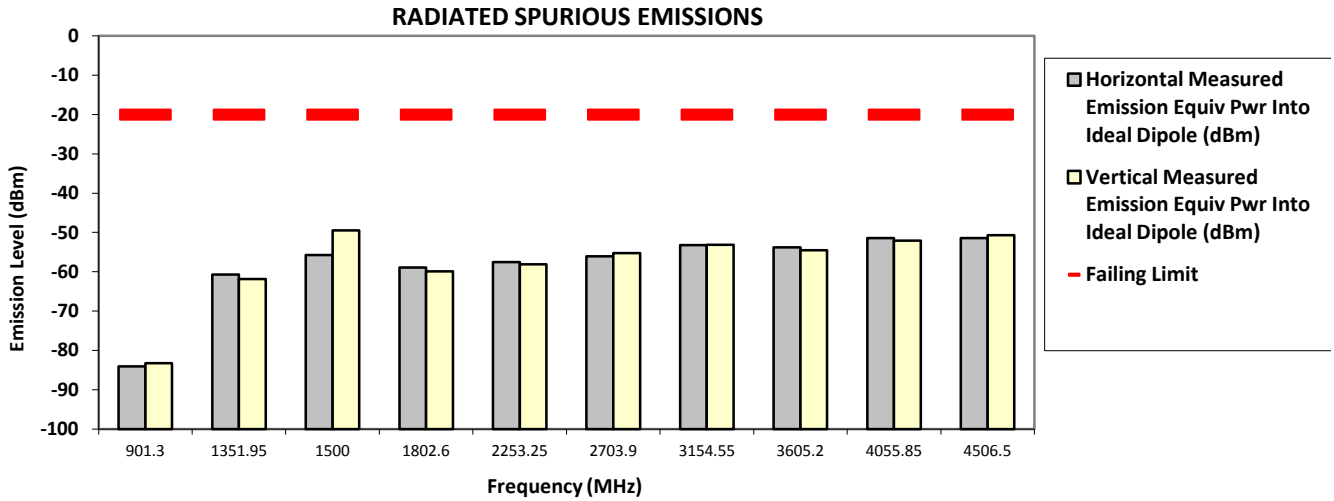
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Digital

450.650000 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
901.3000	-20.0000	-84.0384 **	-83.2262 **
1351.9500	-20.0000	-60.7030 **	-61.8332 **
1500.0000	-20.0000	-55.7600 *	-49.4500 *
1802.6000	-20.0000	-58.9211 **	-59.8613 **
2253.2500	-20.0000	-57.5464 **	-58.0710 **
2703.9000	-20.0000	-56.0519 **	-55.2931 **
3154.5500	-20.0000	-53.1888 **	-53.1305 **
3605.2000	-20.0000	-53.8051 **	-54.5462 **
4055.8500	-20.0000	-51.4531 **	-52.1003 **
4506.5000	-20.0000	-51.3955 **	-50.7099 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sat, Mar 18, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

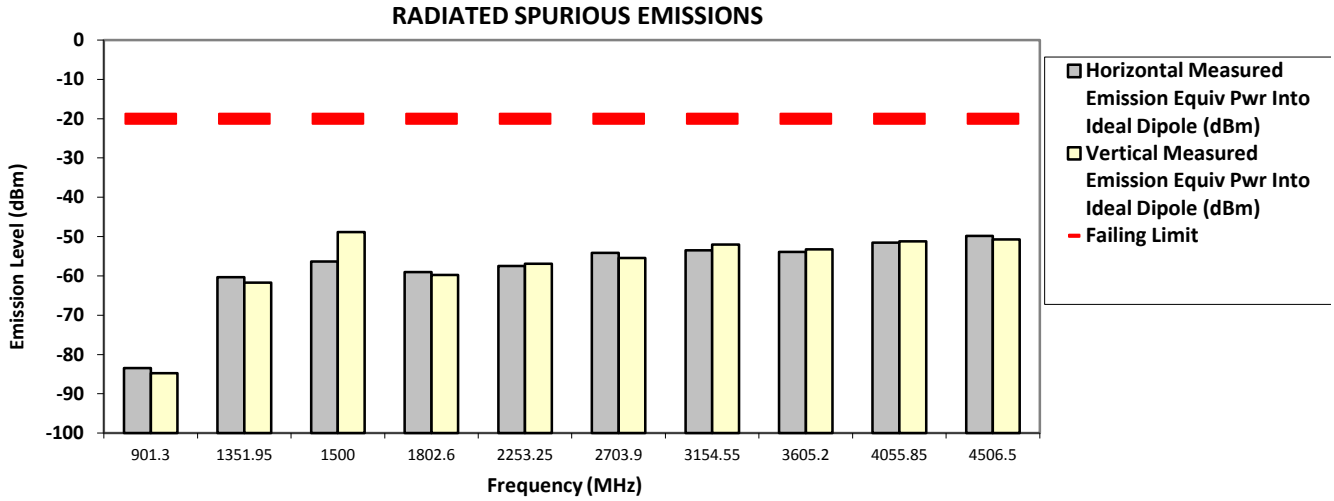
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Digital

450.650000 MHz **12.5 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
901.3000	-20.0000	-83.4721 **	-84.7283 **
1351.9500	-20.0000	-60.3457 **	-61.6836 **
1500.0000	-20.0000	-56.3200 *	-48.8800 *
1802.6000	-20.0000	-59.0530 **	-59.7310 **
2253.2500	-20.0000	-57.5183 **	-56.9035 **
2703.9000	-20.0000	-54.1376 **	-55.4654 **
3154.5500	-20.0000	-53.4583 **	-51.9881 **
3605.2000	-20.0000	-53.8838 **	-53.2562 **
4055.8500	-20.0000	-51.5605 **	-51.2115 **
4506.5000	-20.0000	-49.8107 **	-50.7570 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sat, Mar 18, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

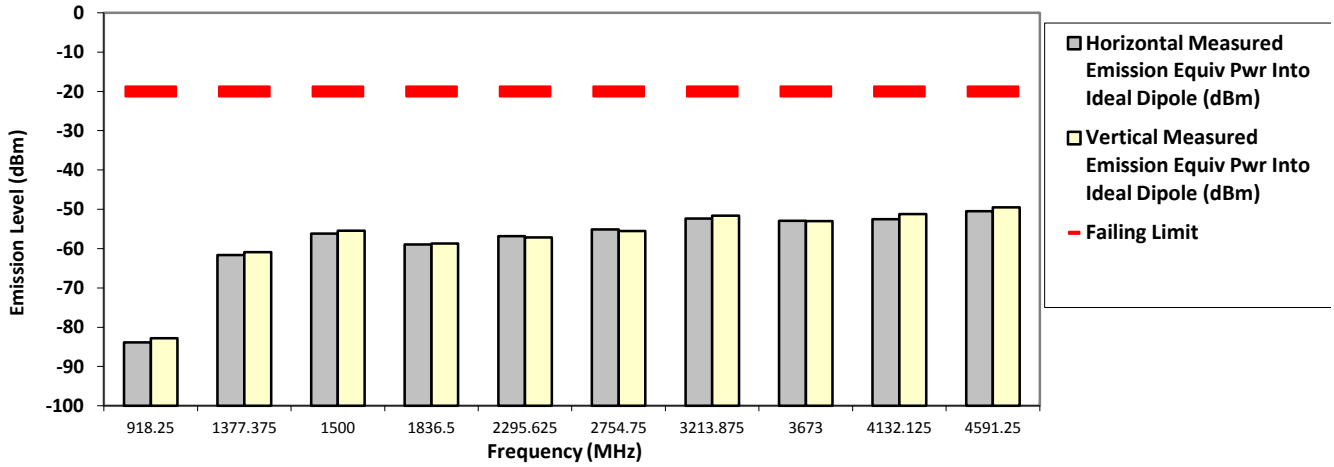
Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Digital

459.125000 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-20.0000	-83.8868 **	-82.8169 **
1377.3750	-20.0000	-61.6336 **	-60.8941 **
1500.0000	-20.0000	-56.1500 *	-55.4800 *
1836.5000	-20.0000	-58.9500 **	-58.6869 **
2295.6250	-20.0000	-56.8627 **	-57.1879 **
2754.7500	-20.0000	-55.0992 **	-55.5063 **
3213.8750	-20.0000	-52.3890 **	-51.6547 **
3673.0000	-20.0000	-52.9138 **	-53.0233 **
4132.1250	-20.0000	-52.4989 **	-51.2125 **
4591.2500	-20.0000	-50.5171 **	-49.5293 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

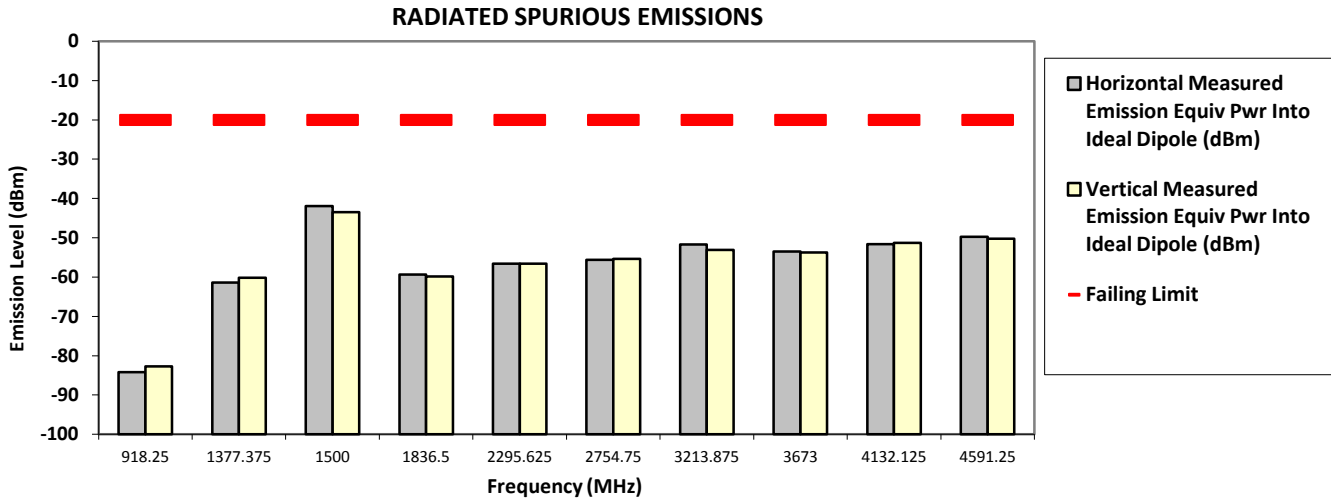
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Digital

459.125000 MHz **12.5 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-20.0000	-84.2164 **	-82.6942 **
1377.3750	-20.0000	-61.3942 **	-60.1945 **
1500.0000	-20.0000	-41.9100 *	-43.4800 *
1836.5000	-20.0000	-59.3248 **	-59.8446 **
2295.6250	-20.0000	-56.5993 **	-56.6204 **
2754.7500	-20.0000	-55.5835 **	-55.3483 **
3213.8750	-20.0000	-51.6675 **	-53.1171 **
3673.0000	-20.0000	-53.4914 **	-53.7266 **
4132.1250	-20.0000	-51.5886 **	-51.3327 **
4591.2500	-20.0000	-49.7749 **	-50.2272 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

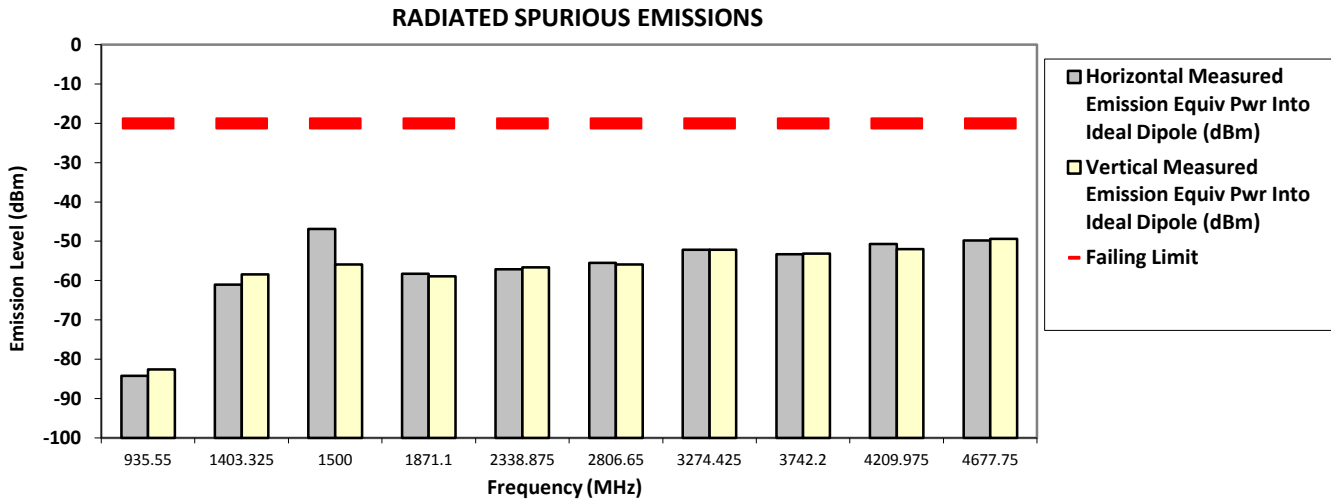
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Digital

467.775000 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
935.5500	-20.0000	-84.2249 **	-82.5818 **
1403.3250	-20.0000	-61.0298 **	-58.4286 **
1500.0000	-20.0000	-46.9100 *	-55.8800 *
1871.1000	-20.0000	-58.2561 **	-58.8980 **
2338.8750	-20.0000	-57.1678 **	-56.6692 **
2806.6500	-20.0000	-55.5298 **	-55.8869 **
3274.4250	-20.0000	-52.1628 **	-52.1391 **
3742.2000	-20.0000	-53.3227 **	-53.1602 **
4209.9750	-20.0000	-50.7168 **	-52.0384 **
4677.7500	-20.0000	-49.8363 **	-49.3588 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

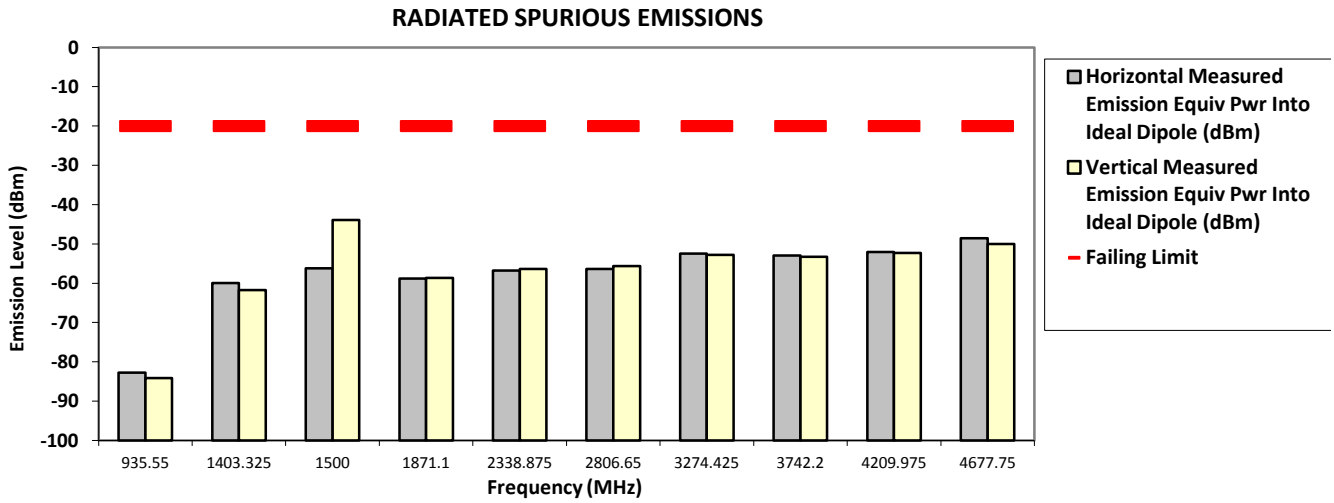
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Digital

467.775000 MHz **12.5 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
935.5500	-20.0000	-82.7170 **	-84.1170 **
1403.3250	-20.0000	-59.9417 **	-61.7419 **
1500.0000	-20.0000	-56.2400 *	-43.9500 *
1871.1000	-20.0000	-58.8012 **	-58.6346 **
2338.8750	-20.0000	-56.7978 **	-56.3499 **
2806.6500	-20.0000	-56.3595 **	-55.6231 **
3274.4250	-20.0000	-52.4535 **	-52.8278 **
3742.2000	-20.0000	-52.9403 **	-53.2597 **
4209.9750	-20.0000	-52.0675 **	-52.2707 **
4677.7500	-20.0000	-48.5506 **	-50.0427 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

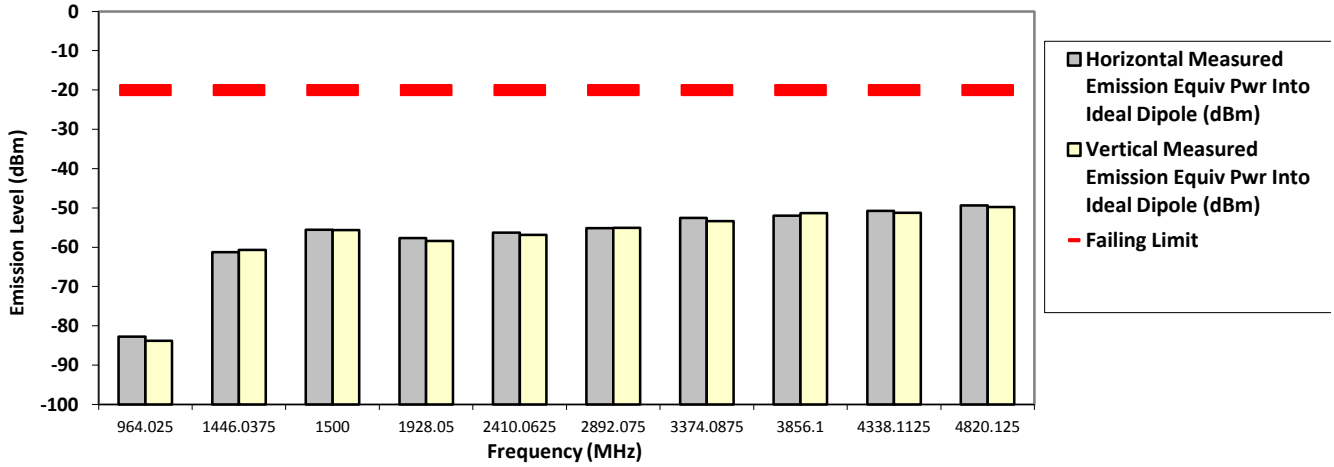
Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Digital

482.012500 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
964.0250	-20.0000	-82.7436 **	-83.7762 **
1446.0375	-20.0000	-61.2290 **	-60.7203 **
1500.0000	-20.0000	-55.5800 *	-55.6200 *
1928.0500	-20.0000	-57.6801 **	-58.3784 **
2410.0625	-20.0000	-56.2579 **	-56.8428 **
2892.0750	-20.0000	-55.1240 **	-55.0780 **
3374.0875	-20.0000	-52.5696 **	-53.3173 **
3856.1000	-20.0000	-52.0084 **	-51.3365 **
4338.1125	-20.0000	-50.7466 **	-51.2294 **
4820.1250	-20.0000	-49.3620 **	-49.7354 **

RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sat, Mar 18, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

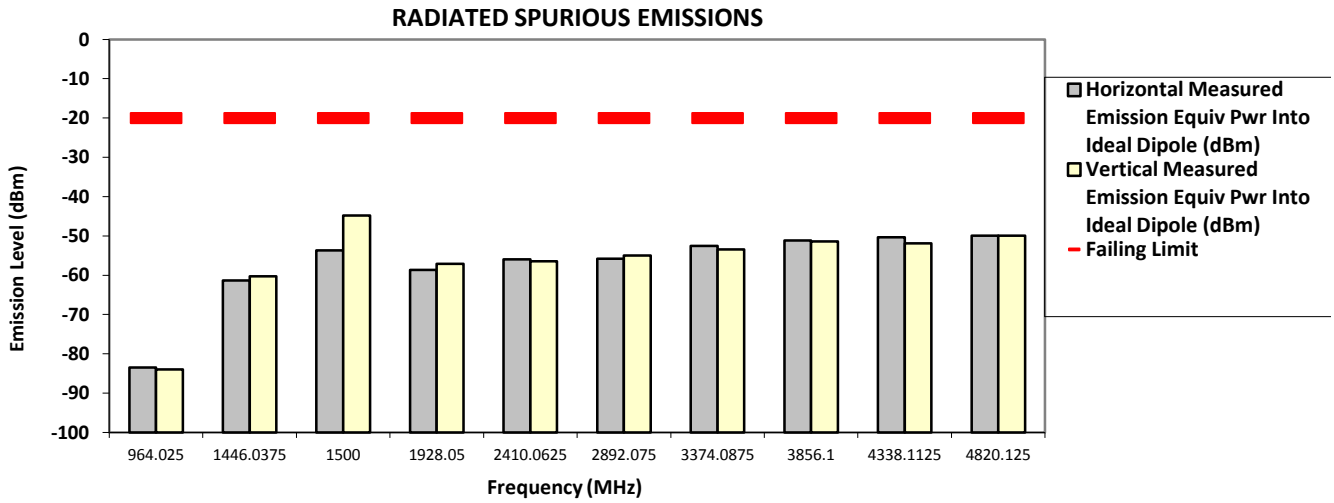
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Digital

482.012500 MHz **12.5 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
964.0250	-20.0000	-83.5164 **	-83.9285 **
1446.0375	-20.0000	-61.3628 **	-60.2917 **
1500.0000	-20.0000	-53.6800 *	-44.8300 *
1928.0500	-20.0000	-58.6091 **	-57.0883 **
2410.0625	-20.0000	-55.9296 **	-56.4201 **
2892.0750	-20.0000	-55.8002 **	-54.9569 **
3374.0875	-20.0000	-52.5523 **	-53.4067 **
3856.1000	-20.0000	-51.1538 **	-51.3664 **
4338.1125	-20.0000	-50.3393 **	-51.8567 **
4820.1250	-20.0000	-49.9119 **	-49.9596 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Fri, Mar 17, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

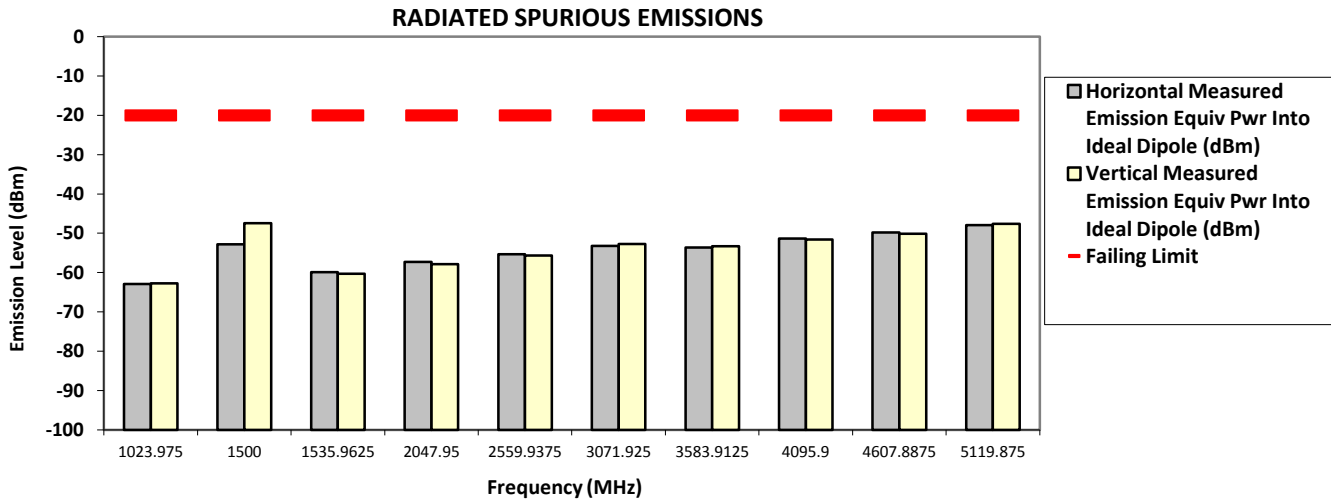
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Digital

511.987500 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1023.9750	-20.0000	-62.9001 **	-62.7427 **
1500.0000	-20.0000	-52.8100 *	-47.4600 *
1535.9625	-20.0000	-59.8785 **	-60.3393 **
2047.9500	-20.0000	-57.3216 **	-57.8277 **
2559.9375	-20.0000	-55.3211 **	-55.6252 **
3071.9250	-20.0000	-53.2126 **	-52.6967 **
3583.9125	-20.0000	-53.6354 **	-53.3378 **
4095.9000	-20.0000	-51.3190 **	-51.6258 **
4607.8875	-20.0000	-49.7792 **	-50.0983 **
5119.8750	-20.0000	-47.9087 **	-47.5646 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

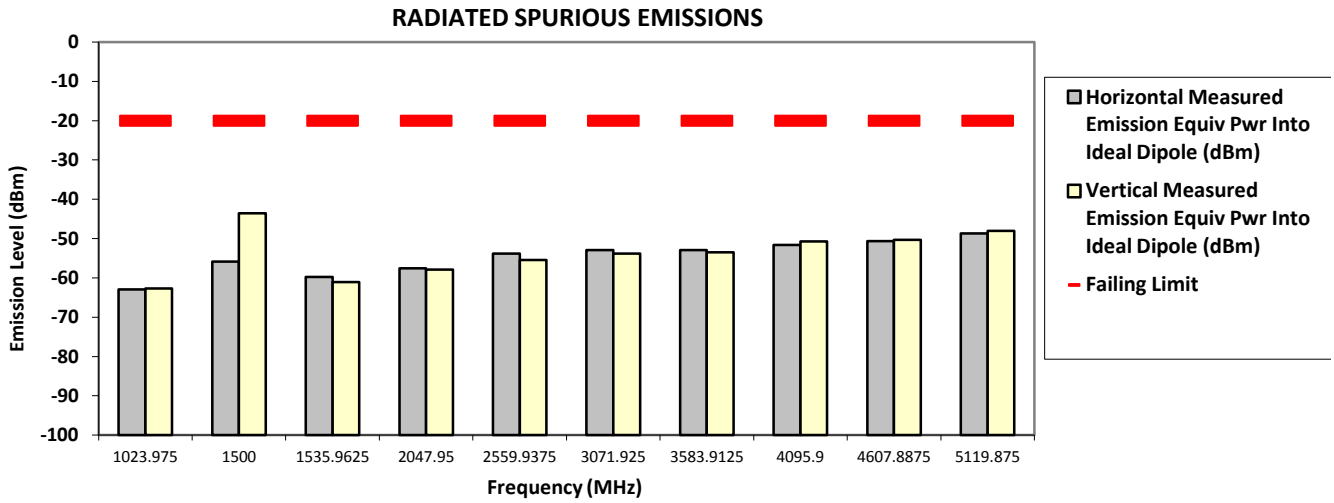
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Digital

511.987500 MHz **12.5 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1023.9750	-20.0000	-62.9770 **	-62.6851 **
1500.0000	-20.0000	-55.8300 *	-43.6000 *
1535.9625	-20.0000	-59.7499 **	-61.0475 **
2047.9500	-20.0000	-57.5500 **	-57.9015 **
2559.9375	-20.0000	-53.8150 **	-55.4421 **
3071.9250	-20.0000	-52.9261 **	-53.8397 **
3583.9125	-20.0000	-52.9594 **	-53.4910 **
4095.9000	-20.0000	-51.5985 **	-50.7094 **
4607.8875	-20.0000	-50.6518 **	-50.3040 **
5119.8750	-20.0000	-48.6840 **	-48.0550 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

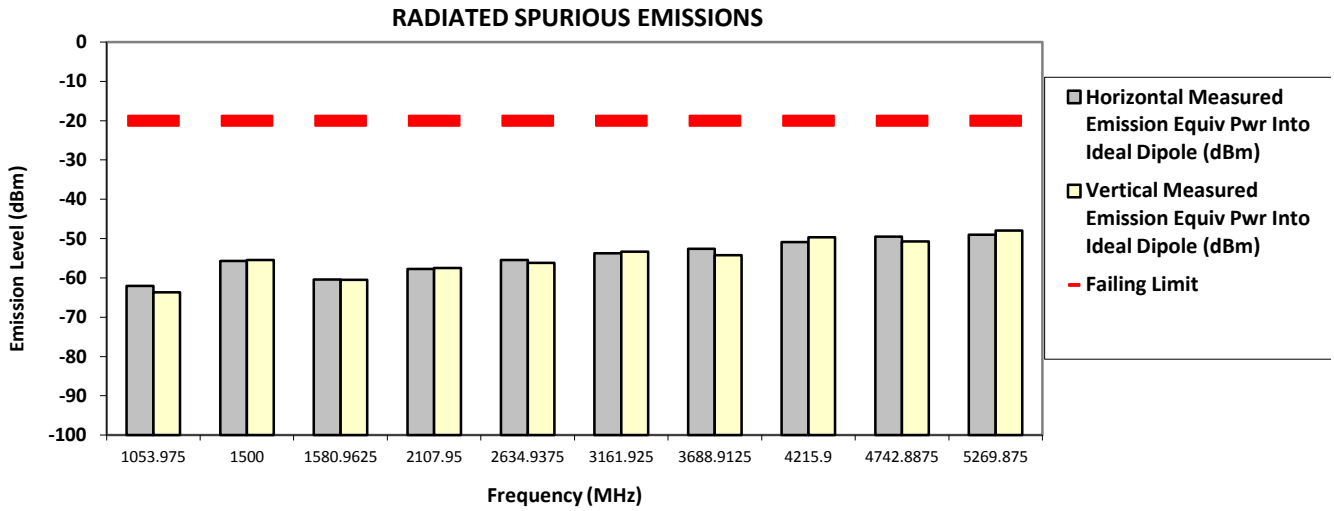
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Digital

526.987500 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1053.9750	-20.0000	-62.0360 **	-63.7032 **
1500.0000	-20.0000	-55.6700 *	-55.4300 *
1580.9625	-20.0000	-60.3953 **	-60.5230 **
2107.9500	-20.0000	-57.7428 **	-57.5170 **
2634.9375	-20.0000	-55.4325 **	-56.1823 **
3161.9250	-20.0000	-53.7005 **	-53.2992 **
3688.9125	-20.0000	-52.5762 **	-54.1962 **
4215.9000	-20.0000	-50.9281 **	-49.6798 **
4742.8875	-20.0000	-49.4962 **	-50.6999 **
5269.8750	-20.0000	-49.0117 **	-47.9931 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:

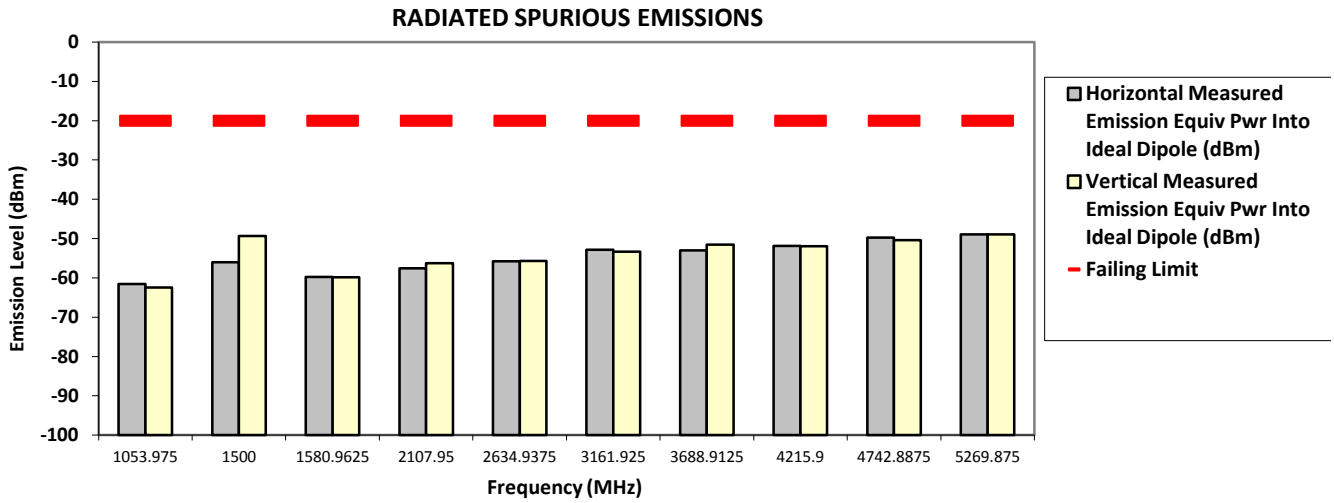
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**

Battery Part No: NA **Accy Part No: NA**

Test Mode: TX Digital

526.987500 MHz **12.5 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
1053.9750	-20.0000	-61.5787 **	-62.4156 **
1500.0000	-20.0000	-55.9900 *	-49.3300 *
1580.9625	-20.0000	-59.7618 **	-59.8286 **
2107.9500	-20.0000	-57.5241 **	-56.2368 **
2634.9375	-20.0000	-55.8016 **	-55.7274 **
3161.9250	-20.0000	-52.8225 **	-53.3524 **
3688.9125	-20.0000	-52.9729 **	-51.5710 **
4215.9000	-20.0000	-51.8264 **	-51.9097 **
4742.8875	-20.0000	-49.7388 **	-50.4330 **
5269.8750	-20.0000	-48.9070 **	-48.9458 **



The data presented here was taken using the substitution method as found in the TIA/EIA-603D document.

Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**

FCC Registration: 772092 **Industry Canada: 109AK**

Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.

***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**

Temp(Deg): 23.7 Hum(%RH): 72.8

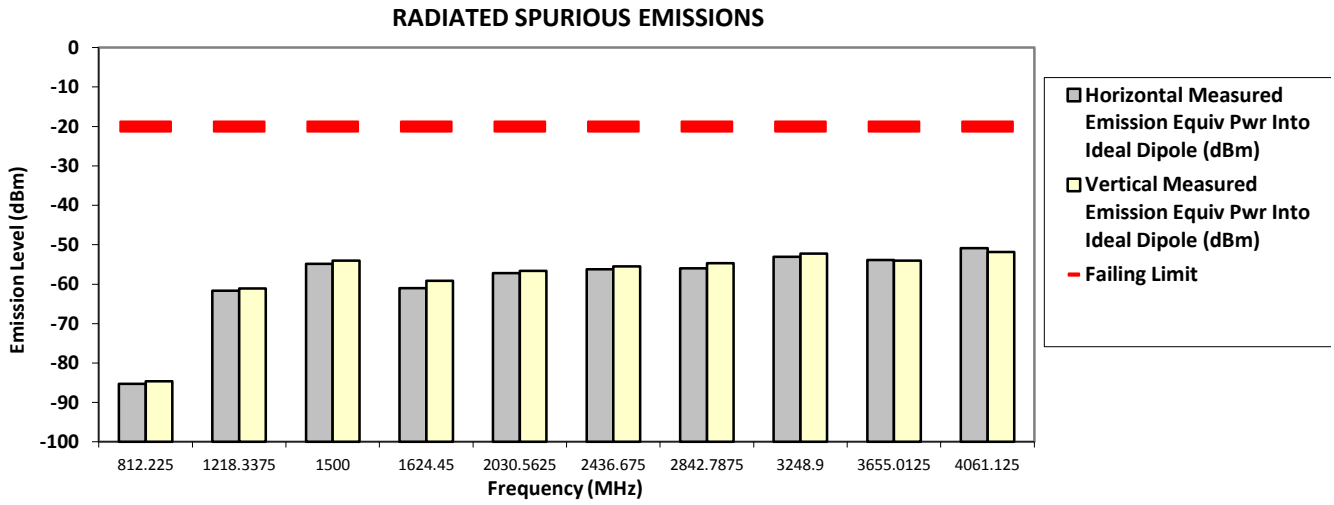
System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**
Battery Part No: NA **Accy Part No: NA**
Test Mode: TX Digital
406.112500 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
812.2250	-20.0000	-85.3008 **	-84.6029 **
1218.3375	-20.0000	-61.6852 **	-61.1194 **
1500.0000	-20.0000	-54.8800 *	-54.0200 *
1624.4500	-20.0000	-61.0357 **	-59.1450 **
2030.5625	-20.0000	-57.2338 **	-56.6134 **
2436.6750	-20.0000	-56.2066 **	-55.5111 **
2842.7875	-20.0000	-56.0062 **	-54.6741 **
3248.9000	-20.0000	-53.0208 **	-52.2333 **
3655.0125	-20.0000	-53.8918 **	-54.0308 **
4061.1250	-20.0000	-50.8527 **	-51.8643 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**
FCC Registration: 772092 **Industry Canada: 109AK**
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**
Temp(Deg): 23.7 Hum(%RH): 72.8

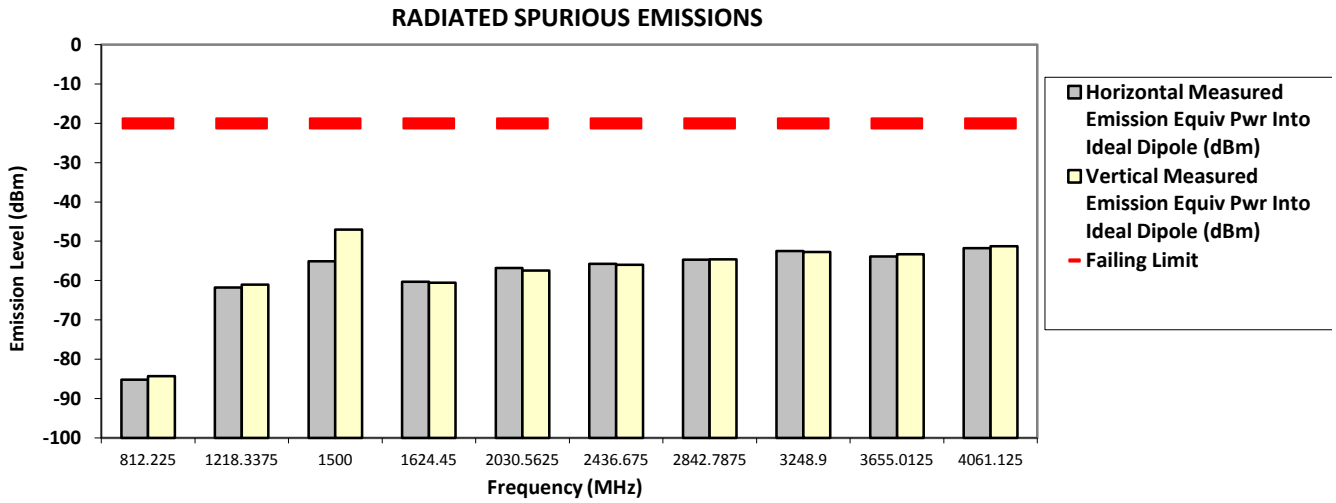
System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**
Battery Part No: NA **Accy Part No: NA**
Test Mode: TX Digital
406.112500 MHz **12.5 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
812.2250	-20.0000	-85.1923 **	-84.3552 **
1218.3375	-20.0000	-61.7901 **	-61.0656 **
1500.0000	-20.0000	-55.1100 *	-47.0600 *
1624.4500	-20.0000	-60.2972 **	-60.5555 **
2030.5625	-20.0000	-56.8426 **	-57.4592 **
2436.6750	-20.0000	-55.7731 **	-55.9759 **
2842.7875	-20.0000	-54.6555 **	-54.6348 **
3248.9000	-20.0000	-52.5251 **	-52.7650 **
3655.0125	-20.0000	-53.8583 **	-53.2732 **
4061.1250	-20.0000	-51.7602 **	-51.2485 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**
FCC Registration: 772092 **Industry Canada: 109AK**
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**
Temp(Deg): 23.7 Hum(%RH): 72.8

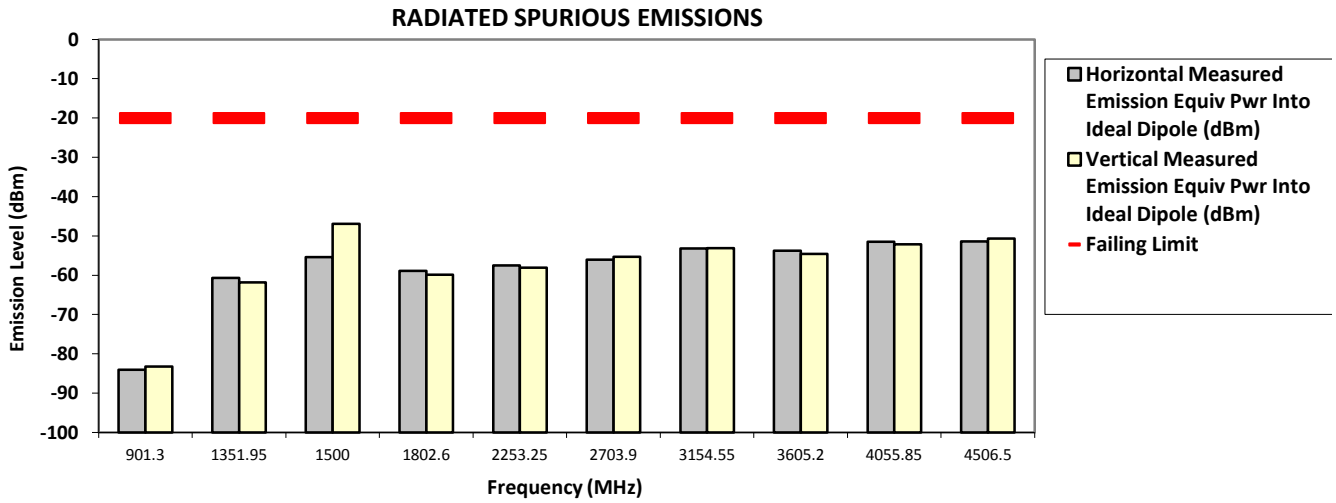
System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**
Battery Part No: NA **Accy Part No: NA**
Test Mode: TX Digital
450.650000 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
901.3000	-20.0000	-84.0384 **	-83.2262 **
1351.9500	-20.0000	-60.7030 **	-61.8332 **
1500.0000	-20.0000	-55.4300 *	-46.9000 *
1802.6000	-20.0000	-58.9211 **	-59.8613 **
2253.2500	-20.0000	-57.5464 **	-58.0710 **
2703.9000	-20.0000	-56.0519 **	-55.2931 **
3154.5500	-20.0000	-53.1888 **	-53.1305 **
3605.2000	-20.0000	-53.8051 **	-54.5462 **
4055.8500	-20.0000	-51.4531 **	-52.1003 **
4506.5000	-20.0000	-51.3955 **	-50.7099 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**
FCC Registration: 772092 **Industry Canada: 109AK**
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**
Temp(Deg): 23.7 Hum(%RH): 72.8

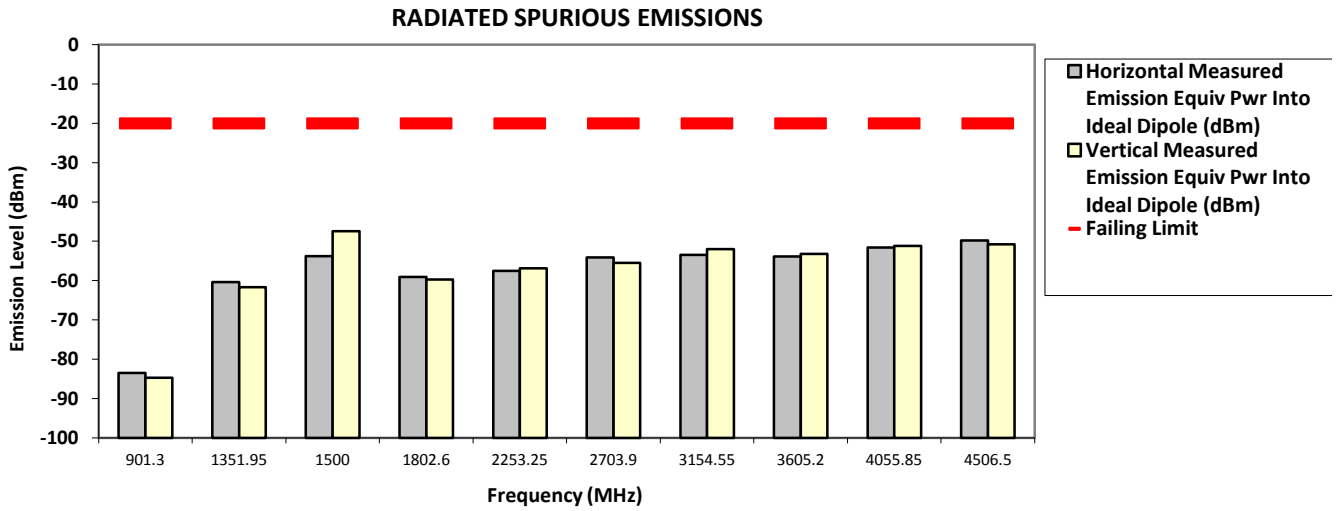
System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**
Battery Part No: NA **Accy Part No: NA**
Test Mode: TX Digital
450.650000 MHz **12.5 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
901.3000	-20.0000	-83.4721 **	-84.7283 **
1351.9500	-20.0000	-60.3457 **	-61.6836 **
1500.0000	-20.0000	-53.8100 *	-47.4200 *
1802.6000	-20.0000	-59.0530 **	-59.7310 **
2253.2500	-20.0000	-57.5183 **	-56.9035 **
2703.9000	-20.0000	-54.1376 **	-55.4654 **
3154.5500	-20.0000	-53.4583 **	-51.9881 **
3605.2000	-20.0000	-53.8838 **	-53.2562 **
4055.8500	-20.0000	-51.5605 **	-51.2115 **
4506.5000	-20.0000	-49.8107 **	-50.7570 **



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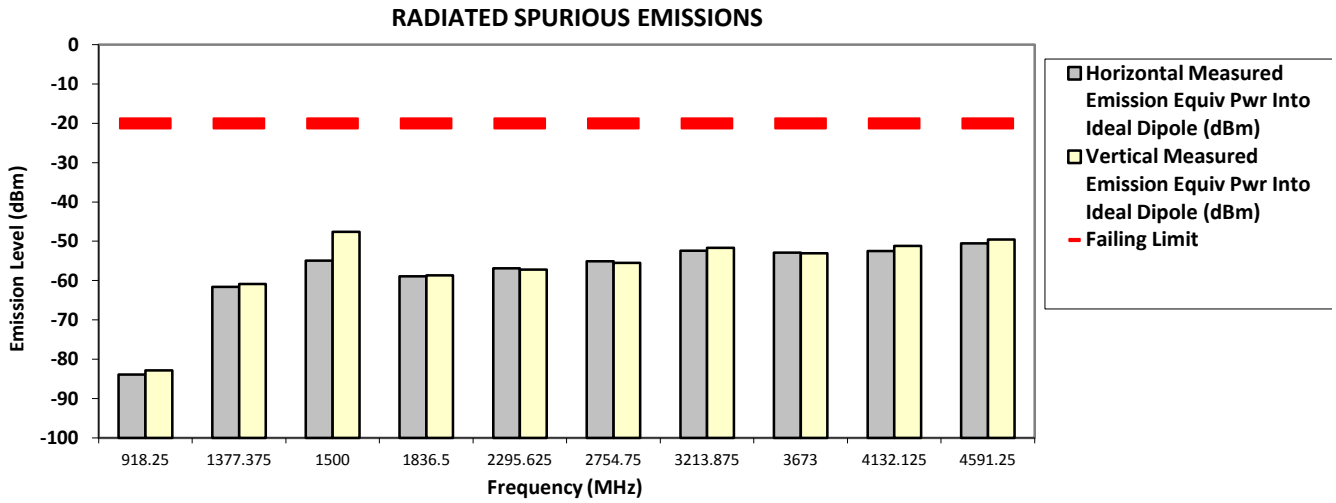
Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**
FCC Registration: 772092 **Industry Canada: 109AK**
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**
Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks: Passed Results | **Marginal Results** | **Failed Results**

SAC Transmitter Radiated Emission:
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**
Battery Part No: NA **Accy Part No: NA**
Test Mode: TX Digital
459.125000 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-20.0000	-83.8868 **	-82.8169 **
1377.3750	-20.0000	-61.6336 **	-60.8941 **
1500.0000	-20.0000	-54.9700 *	-47.6100 *
1836.5000	-20.0000	-58.9500 **	-58.6869 **
2295.6250	-20.0000	-56.8627 **	-57.1879 **
2754.7500	-20.0000	-55.0992 **	-55.5063 **
3213.8750	-20.0000	-52.3890 **	-51.6547 **
3673.0000	-20.0000	-52.9138 **	-53.0233 **
4132.1250	-20.0000	-52.4989 **	-51.2125 **
4591.2500	-20.0000	-50.5171 **	-49.5293 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**
FCC Registration: 772092 **Industry Canada: 109AK**
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**
Temp(Deg): 23.7 Hum(%RH): 72.8

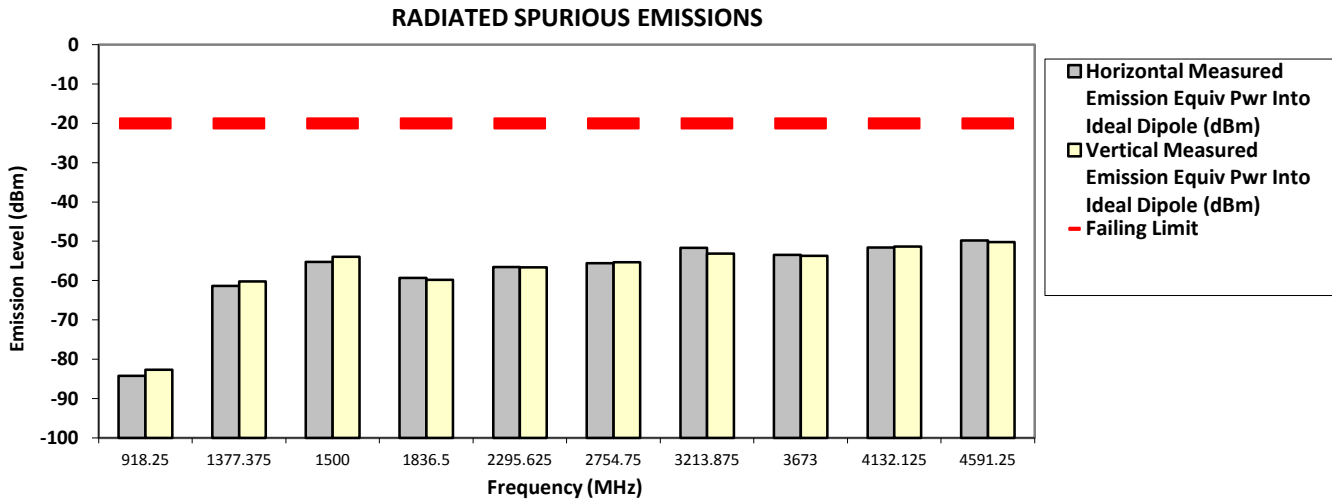
System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**
Battery Part No: NA **Accy Part No: NA**
Test Mode: TX Digital
459.125000 MHz **12.5 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
918.2500	-20.0000	-84.2164 **	-82.6942 **
1377.3750	-20.0000	-61.3942 **	-60.1945 **
1500.0000	-20.0000	-55.2900 *	-53.9500 *
1836.5000	-20.0000	-59.3248 **	-59.8446 **
2295.6250	-20.0000	-56.5993 **	-56.6204 **
2754.7500	-20.0000	-55.5835 **	-55.3483 **
3213.8750	-20.0000	-51.6675 **	-53.1171 **
3673.0000	-20.0000	-53.4914 **	-53.7266 **
4132.1250	-20.0000	-51.5886 **	-51.3327 **
4591.2500	-20.0000	-49.7749 **	-50.2272 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**
FCC Registration: 772092 **Industry Canada: 109AK**
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**
Temp(Deg): 23.7 Hum(%RH): 72.8

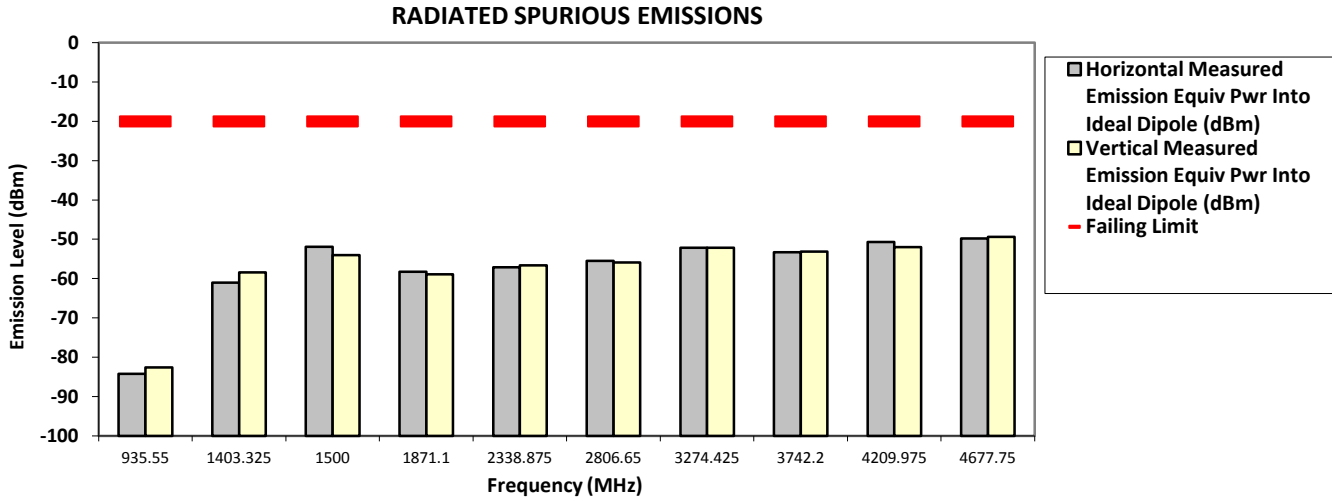
System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**
Battery Part No: NA **Accy Part No: NA**
Test Mode: TX Digital
467.775000 MHz **12.5 kHz** **1.000 Watt(s) /Low Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
935.5500	-20.0000	-84.2249 **	-82.5818 **
1403.3250	-20.0000	-61.0298 **	-58.4286 **
1500.0000	-20.0000	-51.9100 *	-54.0200 *
1871.1000	-20.0000	-58.2561 **	-58.8980 **
2338.8750	-20.0000	-57.1678 **	-56.6692 **
2806.6500	-20.0000	-55.5298 **	-55.8869 **
3274.4250	-20.0000	-52.1628 **	-52.1391 **
3742.2000	-20.0000	-53.3227 **	-53.1602 **
4209.9750	-20.0000	-50.7168 **	-52.0384 **
4677.7500	-20.0000	-49.8363 **	-49.3588 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**
FCC Registration: 772092 **Industry Canada: 109AK**
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**
Temp(Deg): 23.7 Hum(%RH): 72.8

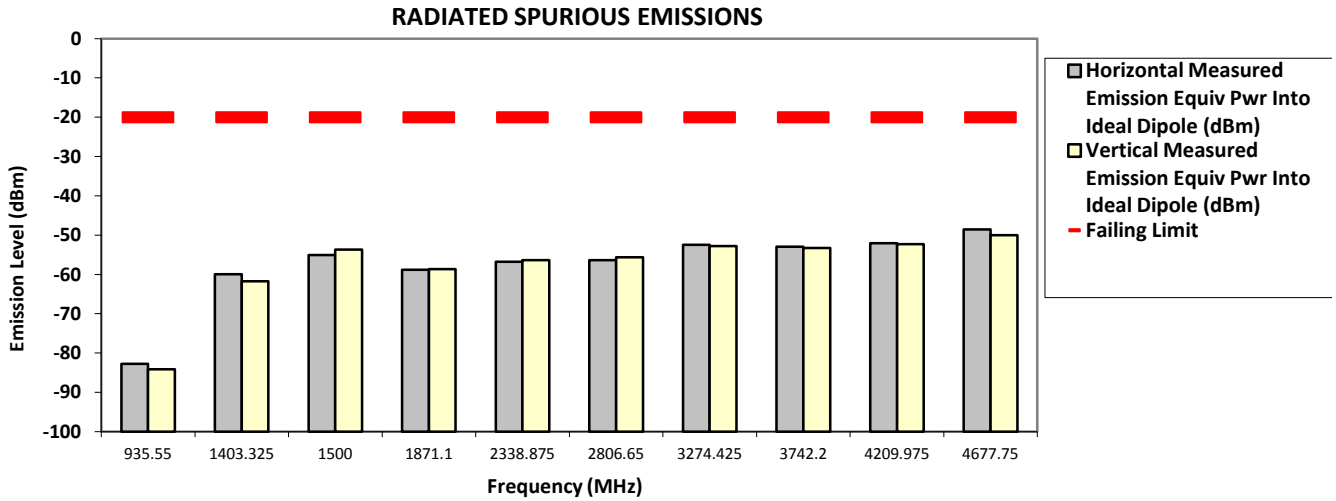
System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

SAC Transmitter Radiated Emission:
Model Number: AAR11SDGANQ1AN **S/N: 521ITC0149** **SR:07047-EMC-00004**
Battery Part No: NA **Accy Part No: NA**
Test Mode: TX Digital
467.775000 MHz **12.5 kHz** **11.000 Watt(s) /Max Power**

Frequency (MHz)	Limit	Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm)
935.5500	-20.0000	-82.7170 **	-84.1170 **
1403.3250	-20.0000	-59.9417 **	-61.7419 **
1500.0000	-20.0000	-55.1000 *	-53.7200 *
1871.1000	-20.0000	-58.8012 **	-58.6346 **
2338.8750	-20.0000	-56.7978 **	-56.3499 **
2806.6500	-20.0000	-56.3595 **	-55.6231 **
3274.4250	-20.0000	-52.4535 **	-52.8278 **
3742.2000	-20.0000	-52.9403 **	-53.2597 **
4209.9750	-20.0000	-52.0675 **	-52.2707 **
4677.7500	-20.0000	-48.5506 **	-50.0427 **



The data presented here was taken using the substitution method as found in the ANSI C63.26 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin&Qawiman **Sun, Mar 19, 2017**
FCC Registration: 772092 **Industry Canada: 109AK**
Remarks: ** Indicates the spurious emission could not be detected due to noise limitations or ambient.
***Pursuant to CFR 47 Part 2.1057 (c), emissions attenuated more than 20 dB below the permissible limit are not reported**
Temp(Deg): 23.7 Hum(%RH): 72.8

System MU: 5.01 dB

Remarks:

Passed Results	**Marginal Results**	**Failed Results**

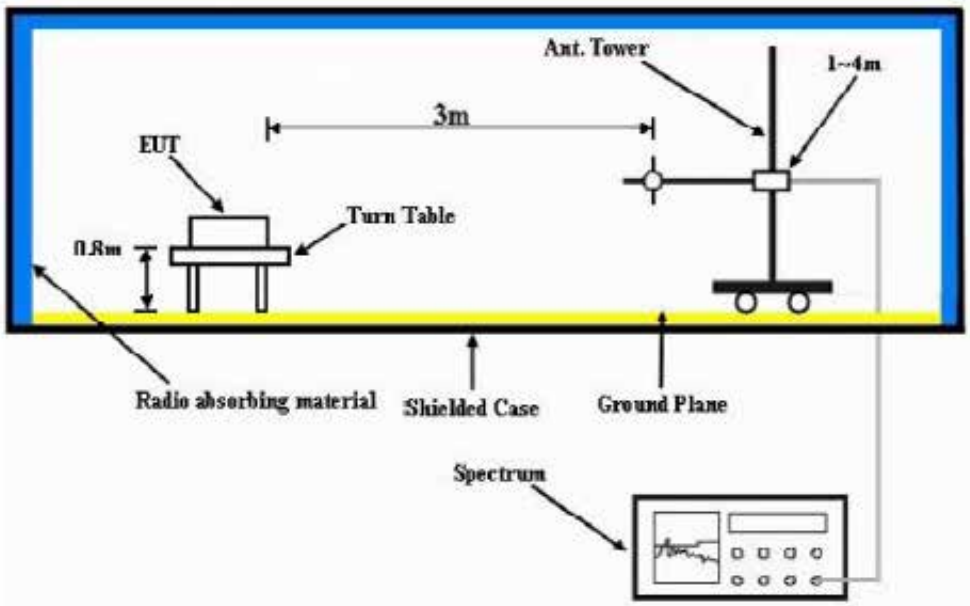
6.11.4. Test Limit

Table below summarized the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least

Channel Spacing	Part 22	Part 24D	Part 74	Part 80	Part 90
12.5kHz	43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)	43 + log10(P) (-13 dBm)	Not Applicable	50 + log10(P) (-20 dBm)
25kHz		Not Applicable		43 + log10(P) (-13 dBm)	Not Applicable

6.12. Effective Radiated Power (ERP) / GNSS (EIRP for 1559 - 1610MHz)

6.12.1. Test Setup



1) The spectrum setting for Equivalent Isotropically Radiated Power (EIRP) is RBW = 100 kHz, VBW = 300 kHz. Detector Mode is RMS.
2) In the semi-anechoic chamber, setup as illustrated above the EUT placed on the 0.8m height of Turn Table, rotated the table 45 degree each interval to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power for each degree interval. The "Read Value" is the spectrum reading of maximum power value.
3) The substitution antenna is substituted for EUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum radiation power. Record the power level of maximum radiation power from spectrum. So, the Measured substitution value = Ref level of S.G + TX cables loss – Substituted Antenna Gain.
4) EIRP = "Read Value" + Measured substitution value + 2.15.

6.12.2. Test Result

Max power of transmitter = 11W

Highest gain of any antenna = 4dBi (1.85 dBd)

Therefore highest ERP assuming no losses = 11W (40.41dBm) + gain (1.85dBd)
= 16.83W (42.26dBm)

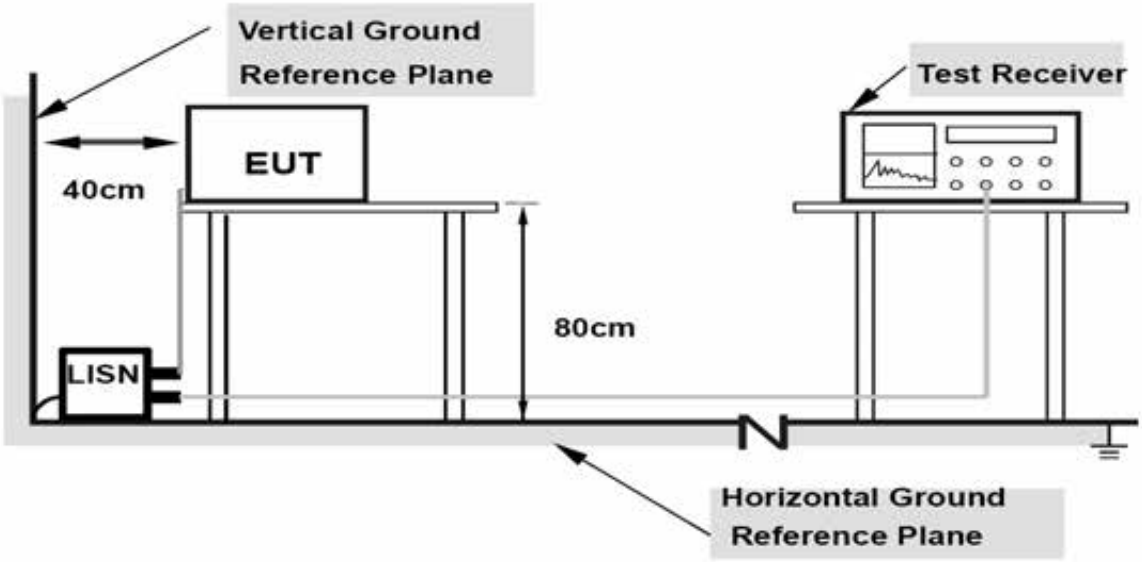
6.12.3. Test Limit

The maximum output power of the transmitter for mobile stations is 100 watts (20 dBW). Power is given in terms of effective radiated power (ERP).

For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559-1610 MHz shall be limited to −70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and −80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

6.13. AC Power Line Conducted Spur Emissions

6.13.1. Test Setup



1) Tests were conducted for both Receive and Transmit Mode of the EUT.
2) The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm / 50 µH of coupling impedance for the measuring instrument.
3) Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
4) The frequency range from 150 kHz to 30 MHz was measured.

6.13.2. Test Result

Not Applicable

6.13.3. Test Limit

For AC Power Line Conducted Test Limit can be Class A or B depends on product classification.

Limits for conducted disturbance at the mains ports of class A ITE

Frequency range MHz	Limits dB(µV)	
	Quasi-peak	Average
0,15 to 0,50	79	66
0,50 to 30	73	60
NOTE The lower limit shall apply at the transition frequency.		

Limits for conducted disturbance at the mains ports of class B ITE

Frequency range MHz	Limits dB(µV)	
	Quasi-peak	Average
0,15 to 0,50	66 to 56	56 to 46
0,50 to 5	56	46
5 to 30	60	50
NOTE 1 The lower limit shall apply at the transition frequencies. NOTE 2 The limit decreases linearly with the logarithm of the frequency in the range 0,15 MHz to 0,50 MHz.		