

 MOTOROLA SOLUTIONS	 CERTIFICATE 2518.08  ACCREDITED  ilac-MRA  STANDARDS MALAYSIA ACCREDITED SAMM 825																																
MOTOROLA PENANG ADV. COMM. LABORATORY Motorola Solutions Malaysia SDN BHD, Plot 2A, Medan Bayan Lepas, Mukim 12 S.W.D, 11900 Bayan Lepas, Penang, Malaysia.	FCC/ISED TEST REPORT Report Revision : Rev.A																																
<table><tr><td>Date/s Tested</td><td>: 06-JUN-2024 - 14-JUN-2024</td></tr><tr><td>Report Issue Date</td><td>: 26-JUN-2024</td></tr><tr><td>Manufacturer</td><td>: Motorola Solutions Malaysia SDN BHD</td></tr><tr><td>Manufacturer Address</td><td>: Plot 2A, Medan Bayan Lepas, Mukim 12 SWD, 11900 Bayan Lepas, Penang, Malaysia</td></tr><tr><td>Requestor</td><td>: NG SZE KEAT</td></tr><tr><td>Product Type</td><td>: Portable</td></tr><tr><td>Product Marketing Name (PMN)</td><td>: MTP8550Ex</td></tr><tr><td>Model Version Identification Number (HVIN)</td><td>: AZH17PCH6TZ5AN</td></tr><tr><td>Frequency Band</td><td>: 350-470MHz</td></tr><tr><td>Max RF Output Power</td><td>: 1.5 Watts</td></tr><tr><td>Applicant Name</td><td>: Motorola Solutions Inc</td></tr><tr><td>Applicant Address</td><td>: Plot 2A, Medan Bayan Lepas, Mukim 12 SWD, 11900 Bayan Lepas, Penang, Malaysia</td></tr><tr><td>ISED Registrations</td><td>: MY0001</td></tr><tr><td>FCC Registrations</td><td>: 461337</td></tr><tr><td>Firmware Version Identification Number (FVIN)</td><td>: D36.100.10035</td></tr></table> The equipment was tested accordance to the requirement listed below: <table><tr><td>(LMR) FCC 47 CFR Part 90 ISED RSS-119 Issue 12</td><td>PASS</td></tr></table>		Date/s Tested	: 06-JUN-2024 - 14-JUN-2024	Report Issue Date	: 26-JUN-2024	Manufacturer	: Motorola Solutions Malaysia SDN BHD	Manufacturer Address	: Plot 2A, Medan Bayan Lepas, Mukim 12 SWD, 11900 Bayan Lepas, Penang, Malaysia	Requestor	: NG SZE KEAT	Product Type	: Portable	Product Marketing Name (PMN)	: MTP8550Ex	Model Version Identification Number (HVIN)	: AZH17PCH6TZ5AN	Frequency Band	: 350-470MHz	Max RF Output Power	: 1.5 Watts	Applicant Name	: Motorola Solutions Inc	Applicant Address	: Plot 2A, Medan Bayan Lepas, Mukim 12 SWD, 11900 Bayan Lepas, Penang, Malaysia	ISED Registrations	: MY0001	FCC Registrations	: 461337	Firmware Version Identification Number (FVIN)	: D36.100.10035	(LMR) FCC 47 CFR Part 90 ISED RSS-119 Issue 12	PASS
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Prepared By:  _____ Farah Nur Arina Test Personnel	Approved Signatory: _____ Maheshvaran A/L Rajagopal Responsible Engineer																																

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Report Revision History

Revision History	Description	Date	Originator
Rev. A	Initial Report	26-Jun-2024	Farah

1.0 General Information

EUT Description:

Technologies	Land Mobile Radio (LMR)
Modulation Type	π / 4DQPSK

The EUT contains following accessory devices and data cable:

Item	Brand	Model or P/N
BATTERY PACK,BATT IMPRES LIION IECEX/ATEX IP66/67 1250T	MOTOROLA	NNTN8570CC

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 C63.26-2015

No modifications were done to the UUT to facilitate the tests in this report.

Deviation from standard

Not applicable as no deviation from standard test method

Antenna gain disclaimer

Antenna gain information is provided by customer. The validity of the results is dependent upon this information. The lab will not be held accountable in the event the supplied information affects compliance.

Test configuration of EUT

All relevant configurations involving radio models and accessories (including chargers, batteries, and antennas) were assessed. Only worst case configurations will be included in this report.

2.0 Summary of Test Results

FCC General Rules Part (47CFR)	ISED General Rules Part	Test Item	Result	Remarks	Serial number tested
Part 90	RSS-119	RF Power Output	Pass		123TAH2685
Part 90	RSS-119	Frequency Stability	Pass		123TAH2685
-	RSS-119	Occupied Bandwidth	NA		
Part 90	RSS-119	Transient Frequency Behavior	NA		
Part 90	-	Adjacent Channel Power	NA		
Part 90	RSS-119	Conducted Spurious Emissions	Pass	Worst case: -50.750 dBm	123TAH2685
Part 90	RSS-119	Radiated Spurious Emission	Pass	Worst case Emission: -50.1905 dBm (Noise Floor, Margin: 37.1905 dB)	123TAH2677
-	-	Effective Radiated Power (ERP)	NA		

NA → Not Applicable

3.0 Measurement Uncertainty

Measurement	Frequency	Expended Uncertainty (k=1.96) (±)
AC Power Line Conducted Spurious Emission	150KHz ~ 30MHz	3.48 dB
Radiated Emissions up to 1 GHz dB μ V/m (Field Strength)	30MHz ~ 1000MHz	5.88 dB
Radiated Emissions above 1 GHz dB μ V/m (Field Strength)	1GHz ~ 18GHz	5.84 dB
	18GHz ~ 40GHz	6.02 dB
Radiated Emissions dBm (ERP/EiRP)	30MHz ~ 18GHz	4.03 dB
Conducted Spurious Emissions	9kHz ~ 12.75GHz	2.82 dB
Frequency Stability	9kHz ~ 12.75GHz	0.0085 ppm
Occupied Bandwidth	9kHz ~ 12.75GHz	2.82 dB
Transient Frequency Behavior	9kHz ~ 12.75GHz	5.4 ms
Adjacent Channel Power	9kHz ~ 12.75GHz	2.82 dB

4.0 Equipment List

FCC Analog ATE#1: (SW version: 2.5.0 & TetraCom)

DESCRIPTION	MODEL	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
CHAMBER	SH-641	92009188	04-Mar-24	04-Mar-25
POWER SUPPLY	6032A	3232A08410	20-Jun-23	20-Jun-24
AUDIO ANALYZER	U8903B	MY61070005	21-Jun-23	21-Jun-24
POWER METER	E4416A	GB41293240	03-Mar-24	03-Mar-25
POWER SENSOR	E4412A	MY50260020	22-Nov-23	22-Nov-24
CXA SIGNAL ANALYZER	N9000B	MY60251600	04-Aug-23	04-Aug-24
RELAY MATRIX	290/8014	838735/001	Not Required	Not Required
POWER SUPPLY	6652A	MY40001436	07-Dec-23	07-Dec-24
DIGITAL RADIO TEST SET	3901	298001412	01-Mar-24	01-Mar-25
N to N RF Cable # 1	M17/128-RG400	NA	NA	NA
BNC to N RF Cable # 1	RG 58	NA	NA	NA
BNC to BNC RF Cable # 1	RG 58	NA	NA	NA
BNC to BNC RF Cable # 2	RG 58	NA	NA	NA
BNC to BNC RF Cable # 3	RG 58	NA	NA	NA
BNC to BNC RF Cable # 4	RG 58	NA	NA	NA
BNC to BNC RF Cable # 5	RG 58	NA	NA	NA
BNC to BNC RF Cable # 6	RG 58	NA	NA	NA
BNC to BNC RF Cable # 7	RG 58	NA	NA	NA
N to SMA RF Cable # 1	RG 58	NA	NA	NA
N to SMA RF Cable # 2	RG 58	NA	NA	NA
N to SMA RF Cable # 3	RG 58	NA	NA	NA
Aeroflex Attenuator 30dB	49-30-34-LIM	NA	NA	NA

FCC Transient ATE #1: (SW version: FCC Transient ATE_R1.2.1)

Not Applicable

FCC CONDUCTED SPUR EMISSION ATE # 1 (SW version: Conducted Spur ATE_rev 1.23.05 & TetraCom)

DESCRIPTION	MODEL	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
SWITCH CONTROL UNIT	3488A	2719A32735	Not Required	Not Required
INTERFACE BOX - FILTER	NA	CS001	Not Required	Not Required
POWER SUPPLY	6031A	3506A03271	04-Oct-23	04-Oct-24
SPECTRUM ANALYZER	E4440A	MY46186938	20-Oct-23	20-Oct-24

RADIATED EMISSION (CHAMBER 1)

DESCRIPTION	MODEL	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE
DRG HORN FREQ.	SAS-571	1143	08-Mar-23	08-Mar-25
DRG HORN FREQ.	SAS-571	720	18-Apr-23	18-Apr-25
DC Power Supply	NR973A	MY54180189	30-Aug-23	30-Aug-24
SIGNAL GENERATOR	SMB 100A	182511	04-Sep-21	04-Sep-24
EMI TEST RECEIVER	ESW44	101731	11-Aug-23	11-Aug-24
5m SEMI-ANECHOIC CHAMBER	S800-HX	J2308	Not Required	Not Required
BILOG ANTENNA	CBL6112B	2950	14-Dec-23	14-Dec-24
BILOG ANTENNA	CBL6112B	2964	25-Sep-23	25-Sep-24
DATA LOGGER THERMOHYGROMETER	SDL500	A.016800	21-Jun-23	21-Jun-24
SYSTEM CONTROLLER	SC104V	050806-1	Not Required	Not Required
TURNTABLE FLUSH MOUNT 2M	FM2011	NA	Not Required	Not Required
ANTENNA POSITIONING TOWER	TLT2	NA	Not Required	Not Required
BROAD-BAND HORN ANTENNA	BBHA9170	BBHA9170143	28-Aug-2023	28-Aug-2024
PREAMPLIFIER 18-40GHz	Miteq Hi Gain Sucoflex	002	No Cal. Req'd	No Cal. Req'd
PREAMPLIFIER	PAM-0118P	269	28-Jun-23	28-Jun-24
LOOP ANTENNA	6502	00208416	26-Oct-23	26-Oct-24
TEST SOFTWARE	EMC_FCC_IC_BLUETOOTH_RE_TEST			
VERSION	EMC_FCC_RE_v1.6.5			

5.0 Test Condition

5.1. Transmitter Test Conditions

Test Item, (Channel Spacing)	Power (W)	Modulation	Test Frequency (MHz)	Tested By	Environmental conditions
RF Output Power	Max Mode1&2	π / 4DQPSK	350.0125, 406.200, 450.025, 459.125, 467.775, 469.9875	Farah	23.4°C, 50%RH
Frequency Stability	Max Mode2	π / 4DQPSK	418.0125, 460.000	Farah	25.1°C, 54.3%RH, 60.3°C, 50%RH, -30.1°C, 51.2%RH
Occupied Bandwidth (12.5kHz / 20kHz / 25kHz)	Max Mode2	π / 4DQPSK	NA		23.4°C, 50%RH
Transient Frequency Behavior (UHF & VHF Band) (12.5kHz / 25kHz)	Max Mode2	π / 4DQPSK	NA		23.4°C, 50%RH
Adjacent Channel Power (700MHz Band) (12.5kHz / 25kHz)	Max Mode1&2	π / 4DQPSK	NA		23.4°C, 50%RH
Conducted Spurious Emissions- (12.5kHz / 25kHz)	Max Mode1&2	π / 4DQPSK	406.125, 418.0125, 429.975, 450.025, 460.025, 469.9875	Farah	23.4°C, 50%RH
Radiated Spurious Emission (12.5kHz / 25kHz)	Max Mode1	π / 4DQPSK	406.125, 418.0125, 429.975, 450.025, 460.025, 469.9875	Nazrin & Fuad	23.4°C, 50%RH
Effective Radiated Power (ERP) (12.5kHz / 25kHz)	Max	NA	NA	NA	NA

NA → Not Applicable

Mode1: TXNDC test mode is transmit at max power (3W), duty cycle 100% which is the worst case mode.

Mode2: MSPD test mode is transmit at max power 2.51W, duty cycle 62.5%.

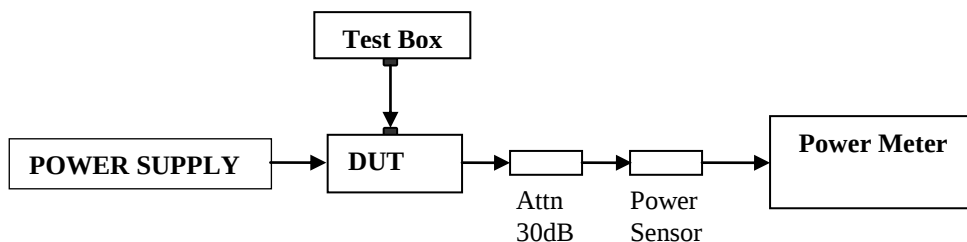
Mode3: SSPD test mode is transmit at max power 3W, duty cycle 22%.

*SSPD test mode is not cover in the testing as the testing is conducted in the worst case condition.

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

MSPD

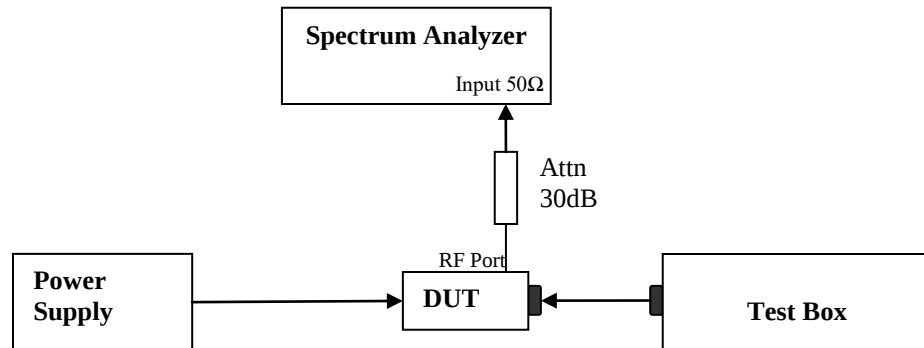
Temperature	25°C				Remarks
Voltage (V)	7.5V				
Frequency (MHz)	Low Power (W)	Current (A)	Max Power (W)	Current (A)	
350.01250	0.98	1.13	1.47	1.29	Not for FCC review
406.20000	1.00	1.06	1.47	1.35	Not for FCC review
450.02500	1.07	1.10	1.50	1.29	
459.12500	1.00	1.13	1.49	1.29	
467.77500	1.00	1.15	1.48	1.34	
469.98750	1.00	1.16	1.44	1.33	

TXNDC

Temperature	25°C				Remarks
Voltage (V)	7.5V				
Frequency (MHz)	Low Power (W)	Current (A)	Max Power (W)	Current (A)	
350.01250	1.00	1.10	1.46	1.32	Not for FCC review
406.20000	1.00	1.13	1.50	1.36	Not for FCC review
450.02500	1.00	1.12	1.50	1.27	
459.12500	1.00	1.14	1.50	1.32	
467.77500	1.00	1.15	1.50	1.33	
469.98750	1.00	1.14	1.50	1.36	

6.2. Frequency Stability

6.2.1. Test Setup



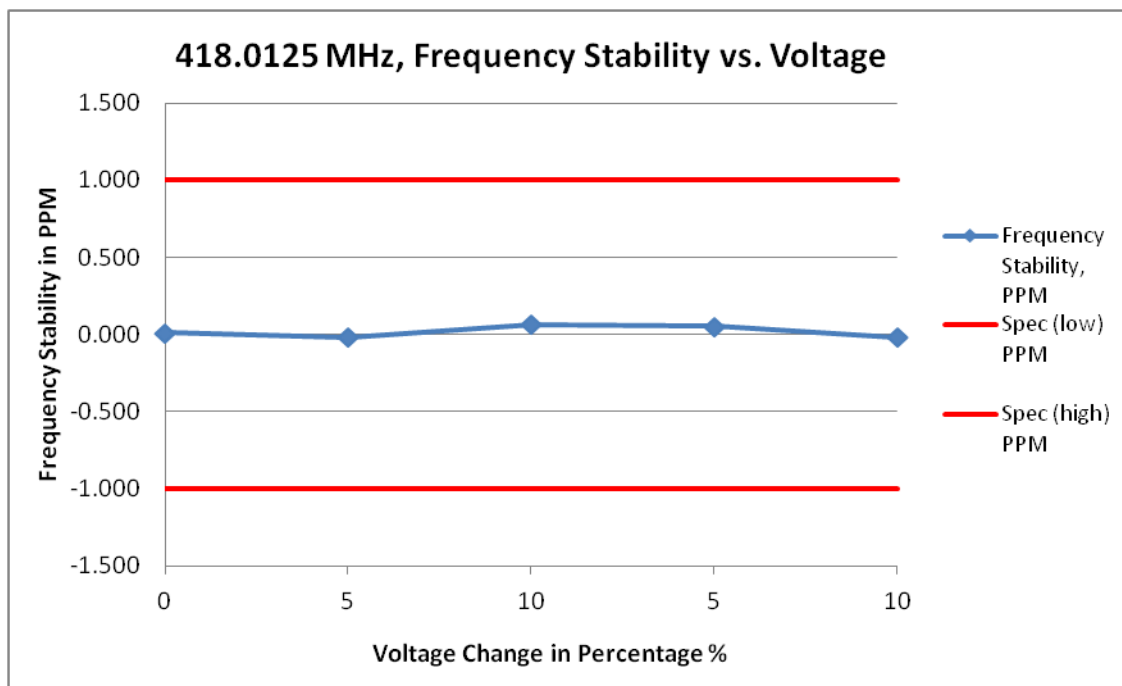
- 1) The DUT transmitter output port was connected to Modulation / Spectrum Analyzer.
- 2) Path loss for the measurement included.
- 3) Transmit the DUT and record the freq in MCF_{MHz} .
- 4) Test in 2 conditions:
 - Temperature: The frequency of the transmitter was measured from -30°C to 50°C.
 - Supply Voltage:
 - Mobile: The frequency of the transmitter was measured from 85% to 115% of the nominal operating input voltage.
 - Portable: The frequency of the transmitter was measured from nominal $\pm x\%$ as specified by the manufacturer
- 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

6.2.1. Test Result

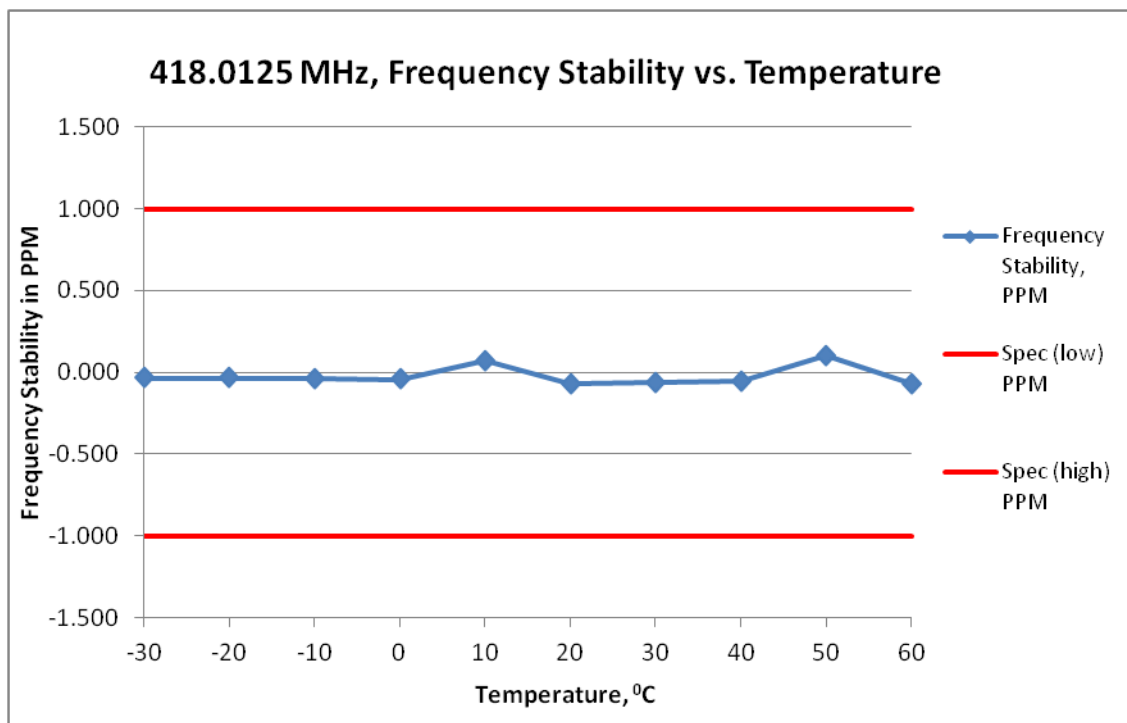
Not for FCC Review



(i) Frequency Stability VS Voltage

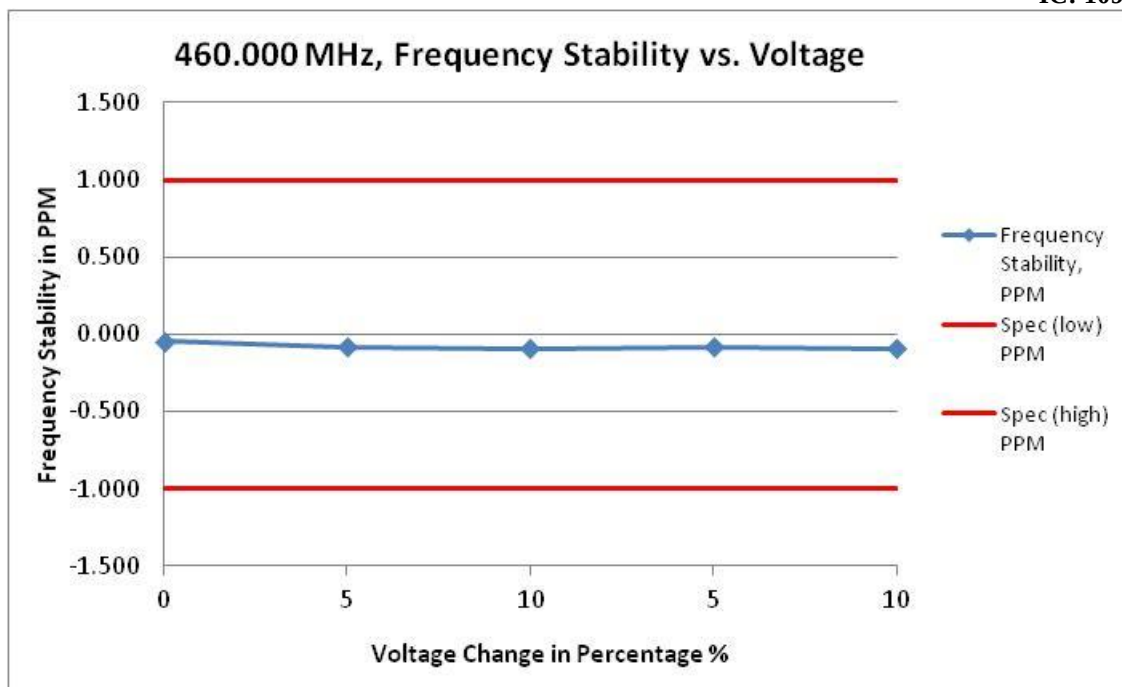
Frequency / Channel Spacing	418.0125 MHz / 25.0 kHz			
Temperature, °C	25			
Voltage %	Voltage, V	Frequency Stability, PPM	Spec (low) PPM	Spec (high) PPM
-10	6.840	-0.025	-1.000	1.000
-5	7.220	0.022	-1.000	1.000
0	7.600	0.012	-1.000	1.000
5	7.980	-0.018	-1.000	1.000
10	8.360	0.068	-1.000	1.000

Not for FCC Review



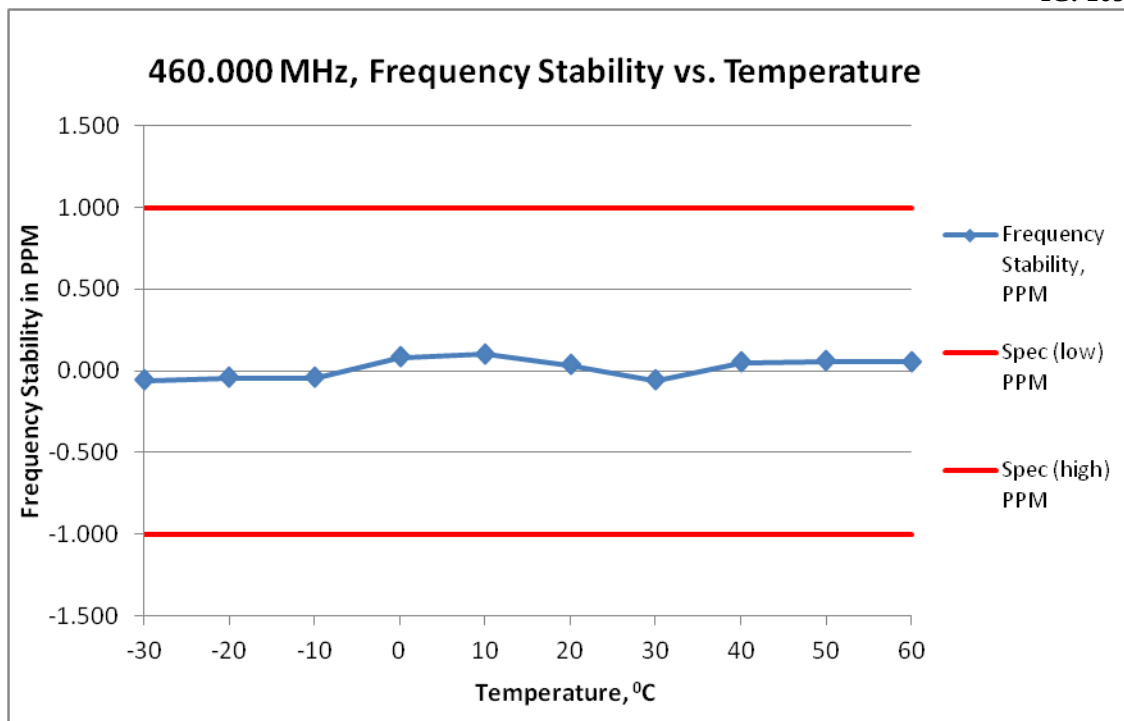
(ii) Frequency Stability VS temperature

Frequency / Channel Spacing		418.0125 MHz / 25.0 kHz	
Voltage, V		7.6	
Temperature, °C	Frequency Stability, PPM	Spec (low) PPM	Spec (high) PPM
-30	-0.035	-1.000	1.000
-20	-0.037	-1.000	1.000
-10	-0.041	-1.000	1.000
0	-0.044	-1.000	1.000
10	0.068	-1.000	1.000
20	-0.073	-1.000	1.000
30	-0.065	-1.000	1.000
40	-0.056	-1.000	1.000
50	0.102	-1.000	1.000
60	-0.071	-1.000	1.000



(i) Frequency Stability VS Voltage

Frequency / Channel Spacing	460.000 MHz / 25.0 kHz			
Temperature, °C	25			
Voltage %	Voltage, V	Frequency Stability, PPM	Spec (low) PPM	Spec (high) PPM
-10	6.840	-0.056	-1.000	1.000
-5	7.220	-0.059	-1.000	1.000
0	7.600	-0.046	-1.000	1.000
5	7.980	-0.083	-1.000	1.000
10	8.360	-0.090	-1.000	1.000



(ii) Frequency Stability VS temperature

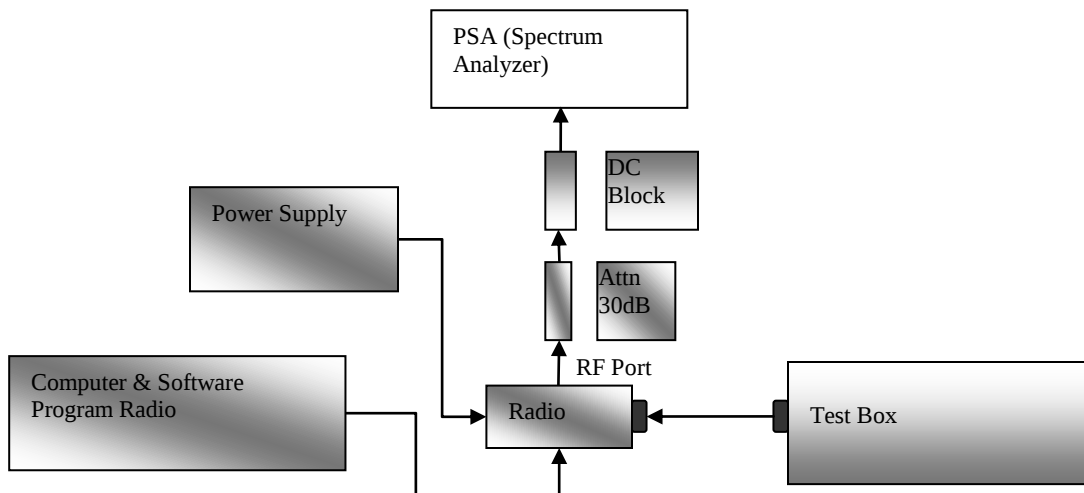
Frequency / Channel Spacing		460.000 MHz / 25.0 kHz	
Voltage, V		7.6	
Temperature, °C	Frequency Stability, PPM	Spec (low) PPM	Spec (high) PPM
-30	-0.059	-1.000	1.000
-20	-0.044	-1.000	1.000
-10	-0.042	-1.000	1.000
0	0.080	-1.000	1.000
10	0.100	-1.000	1.000
20	0.036	-1.000	1.000
30	-0.060	-1.000	1.000
40	0.050	-1.000	1.000
50	0.058	-1.000	1.000
60	0.056	-1.000	1.000

6.2.2. Test Limit

As per manufacturer declared spec +/- 1.0ppm

6.3. Occupied Bandwidth

6.3.1. 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% Emissions Bandwidth Measurement.
- 4) Key in the Fc and Resolution Bandwidth (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 and Resolution Bandwidth (according to FCC/ ISED standard).
- 8) Capture the screen shot as modulated signal.

* 99% Bandwidth measurement is computed by the spectrum analyzer and is consistent with the C63.26 5.4.4 method.

*Note1 (For C4FM, FSK):

- For Digital Modulation, 12.5 kHz Data F1D & FXD would be the same. Therefore only measurements with F1D modulation shown below.
- For Digital Modulation, 12.5 kHz Data F1E & FXE would be the same. Therefore only measurements with F1E modulation shown below.

*Note2 (For $\pi/4$ DQPSK, QAM):

- For Digital Modulation, 25 kHz Data D1D, D1E & D1W would be the same. Therefore only measurements with D1W modulation shown below.

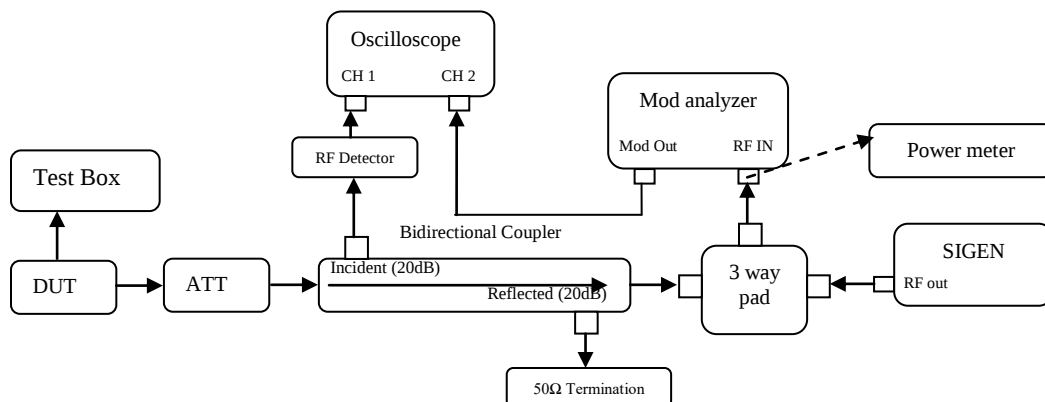
6.3.2. Test Result (Digital)
Not Applicable

6.3.3. 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.

6.4. Transient Frequency Behavior

6.4.1. Test Setup



- 1) Connect the setup as figure above.
- 2) Path loss for the measurement included.
- 3) Set on Siggen 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
C4FM = 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 $\leq -11\text{dBm}$ into power meter when DUT is keying up.
- 6) Note the power level on power meter and dekey the DUT.
- 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) Reduce 30dB attenuation and transmit the radio to get the trigger line.
- 10) Capture the screen shot for key-up (rising edge) and de-key (falling edge) mode.

6.4.2. Test Result Not Applicable

6.4.3. 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_{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.

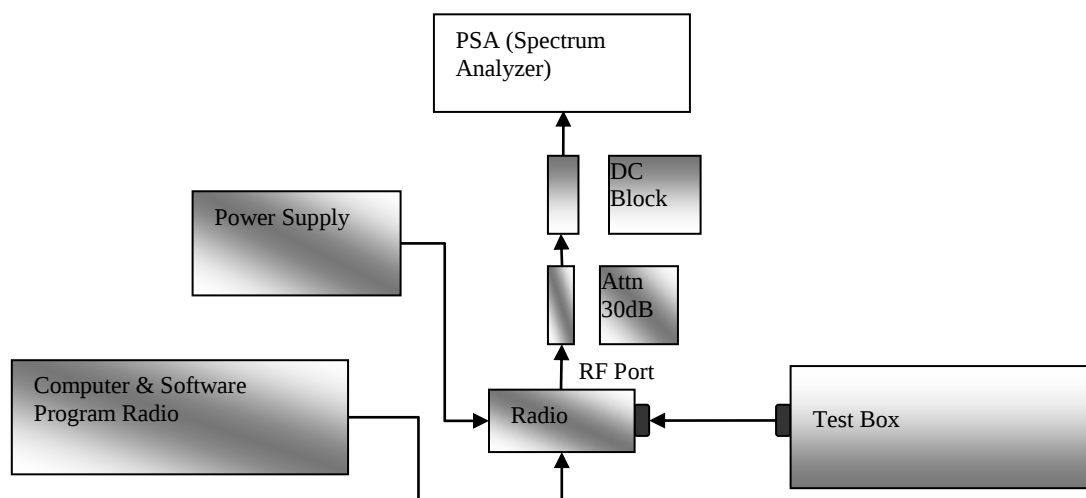
² During the time from the end of t_2 to the beginning of t_3 , the frequency difference must not exceed the limits specified in §90.213.

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.

6.5. Adjacent Channel Power

6.5.1. 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) Prepare setup as per picture.
- 3) Turn on the ACP Measurement – Press Measure, ACP.
- 4) Set Span, Resolution Bandwidth and Video Bandwidth as per rules part.
- 5) Transmit the radio and record the Adjacent Channel Power value in dBc.

6.5.2. Test Result **Not Applicable**

6.5.3. Test Limit

Maximum adjacent power levels for frequencies in the 450–470 MHz band:

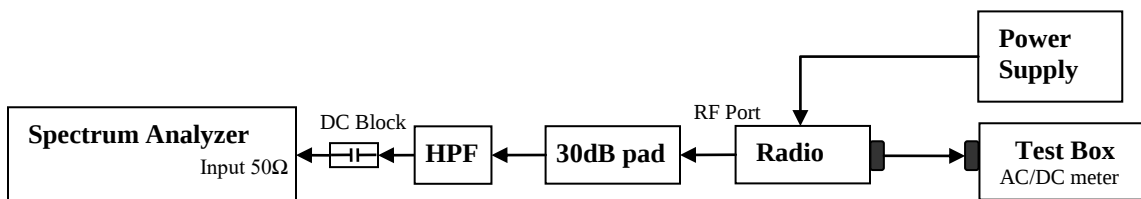
Frequency offset (kHz)	Maximum ACP (dBc) for devices 1 watt and less	Maximum ACP (dBc) for devices above 1 watt
25	–55	–60
50	–70	–70
75	–70	–70

Maximum adjacent power levels for frequencies in the 809–824/854–869 MHz band:

Frequency offset (kHz)	Maximum ACP (dBc) for devices less than 15 watts	Maximum ACP (dBc) for devices 15 watts and above
25	–55	–55
50	–65	–65
75	–65	–70

6.6. Conducted Spurious Emission

6.6.1. Test Setup

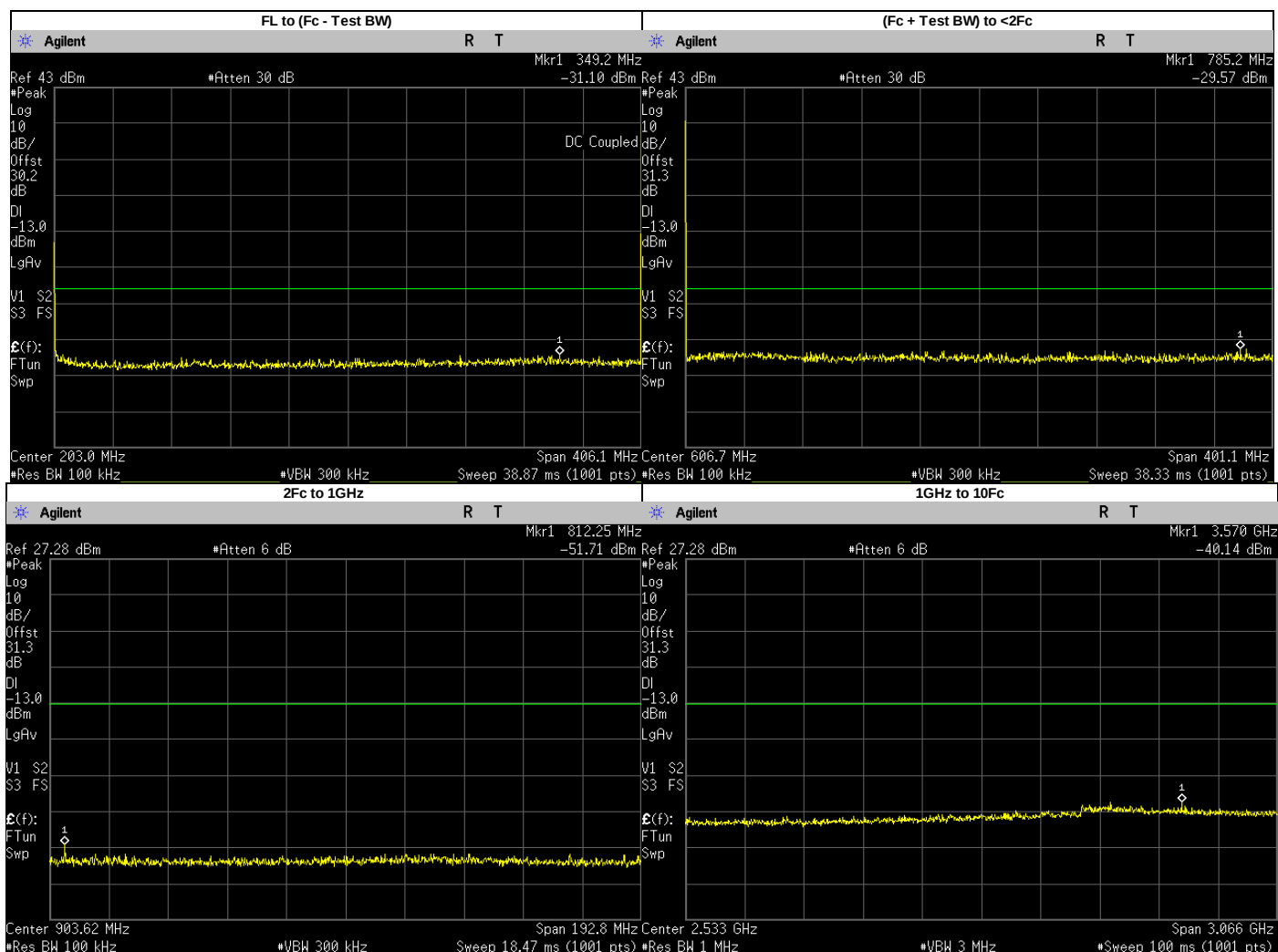


- 1) The DUT transmitter output port was connected to Spectrum Analyzer with above setup.
- 2) Program and set radio to operate in desire test frequency and mode. (Analog / digital modulation form).
- 3) Path loss for the measurement included.
- 4) Set the PSA Resolution Bandwidth as per rules part.
- 5) Set the Ref offset from the pathloss offset calibration file.
- 6) Adjust the center frequency of the spectrum analyzer for incremental coverage of the range from:
 - a. 9 KHz to F_c – Test Bandwidth
 - b. F_c + Test Bandwidth to $2F_c$ – 5MHz.
- 7) Key up the DUT, Peak Search the highest Spur and record the levels of spurious emissions
- 8) Dekey the DUT.
- 9) Turn On High Pass Filter path and Key up the DUT.
- 10) Adjust the PSA Freq for incremental coverage of range from $2F_c$ to $10F_c$
- 11) Key up the DUT and record the highest spur levels of spurious emissions.

6.6.2. Test Result (Digital)

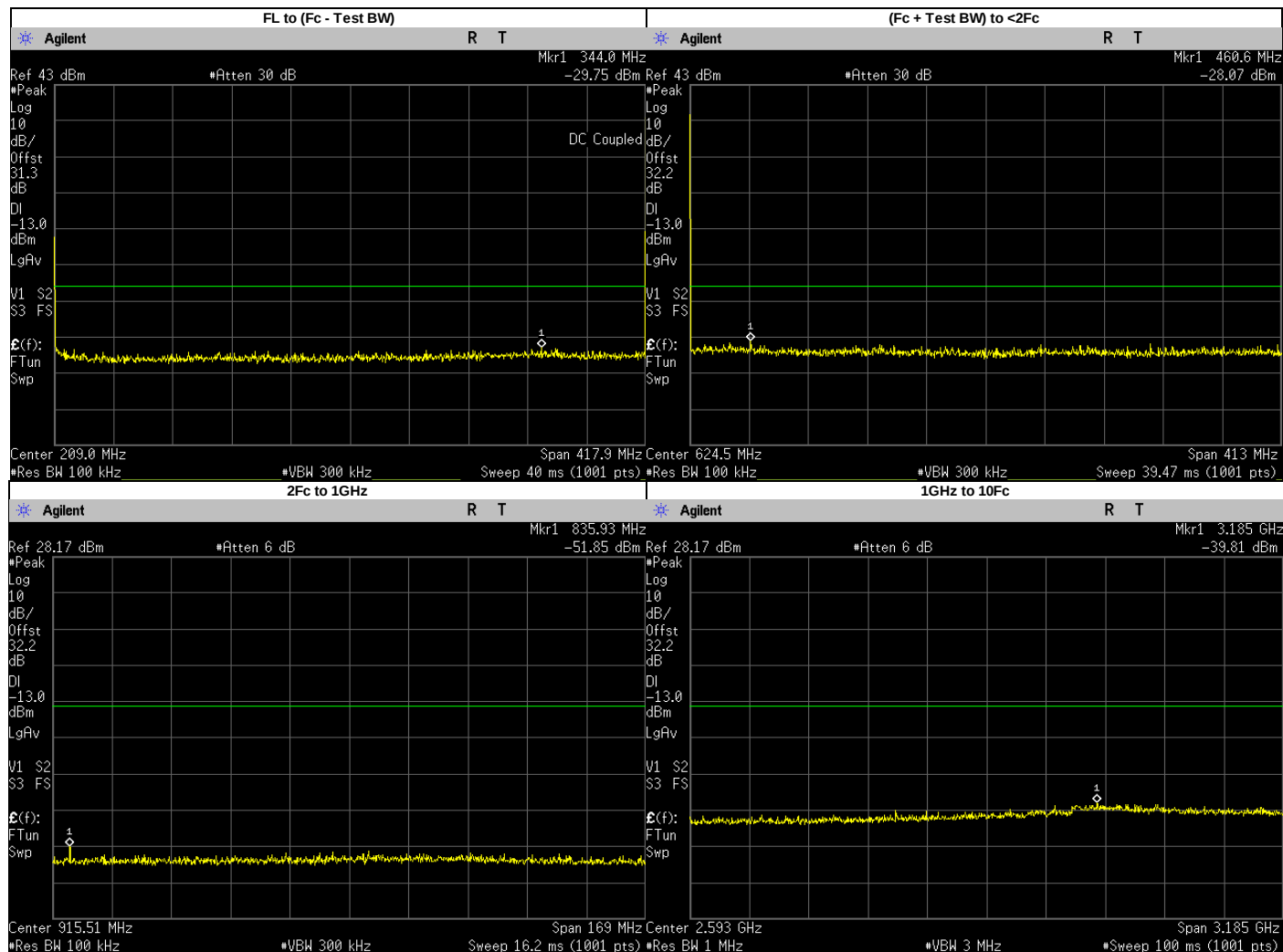
PI/4DQPSK (MSPD) : 406.1250. MHz, 25 kHz Channel Spacing, Max. Power

Not for FCC Review



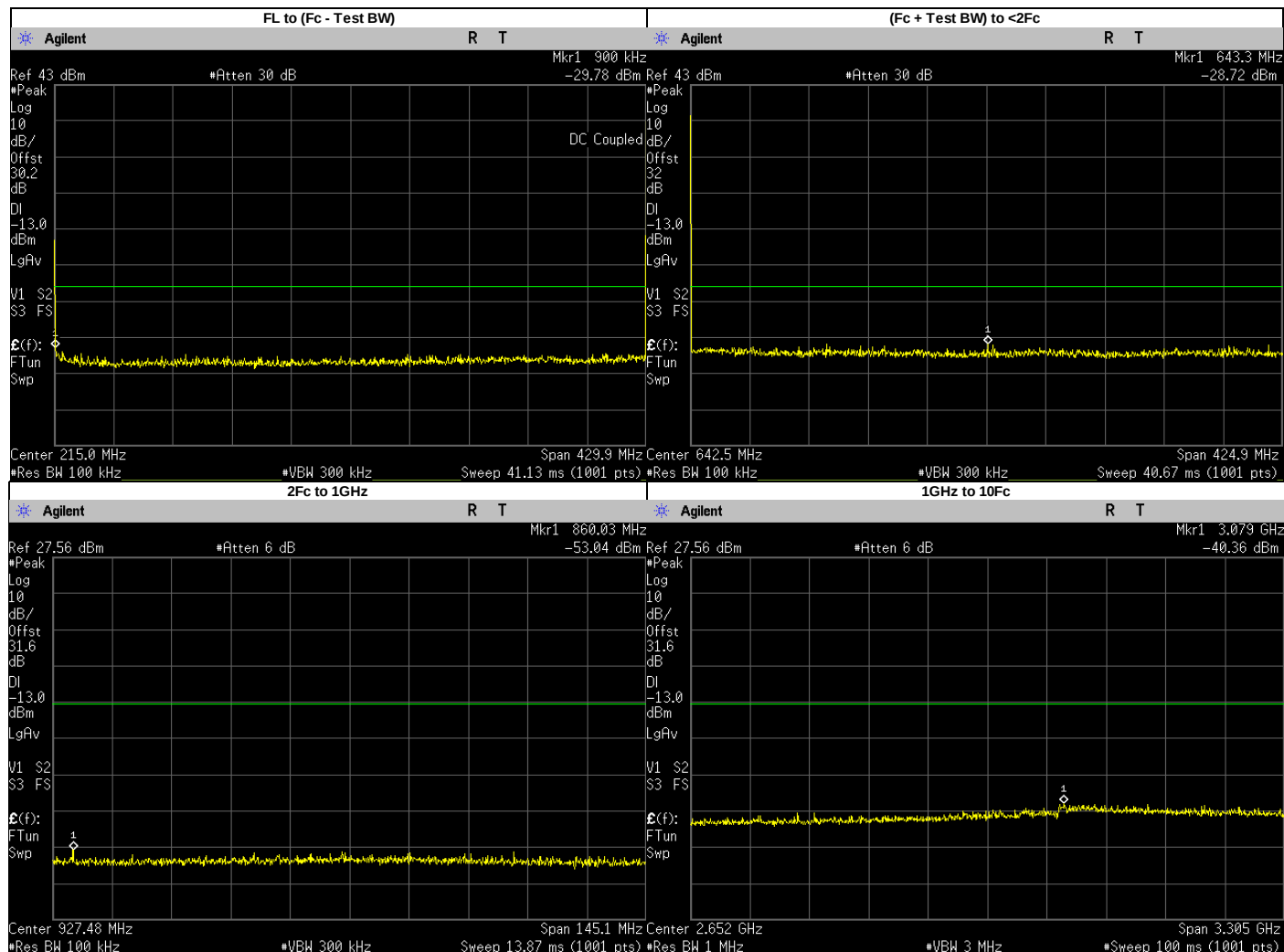
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	349.2000	-31.1040	-13	PASS
(Fc + Test BW) to <2Fc	785.1912	-29.5700	-13	PASS
2Fc to 1GHz	812.2500	-51.7100	-13	PASS
1GHz to 10Fc	3569.5170	-40.1400	-13	PASS
	1218.3750	-45.8292	-13	PASS
	1624.5000	-45.7954	-13	PASS
	2030.6250	-44.7020	-13	PASS
	2436.7500	-45.2621	-13	PASS
	2842.8750	-43.3132	-13	PASS
	3249.0000	-42.3015	-13	PASS
	3655.1250	-42.4947	-13	PASS
	4061.2500	-43.3942	-13	PASS

PI/4DQPSK (MSPD) : 418.0125. MHz, 25 kHz Channel Spacing, Max. Power
Not for FCC Review



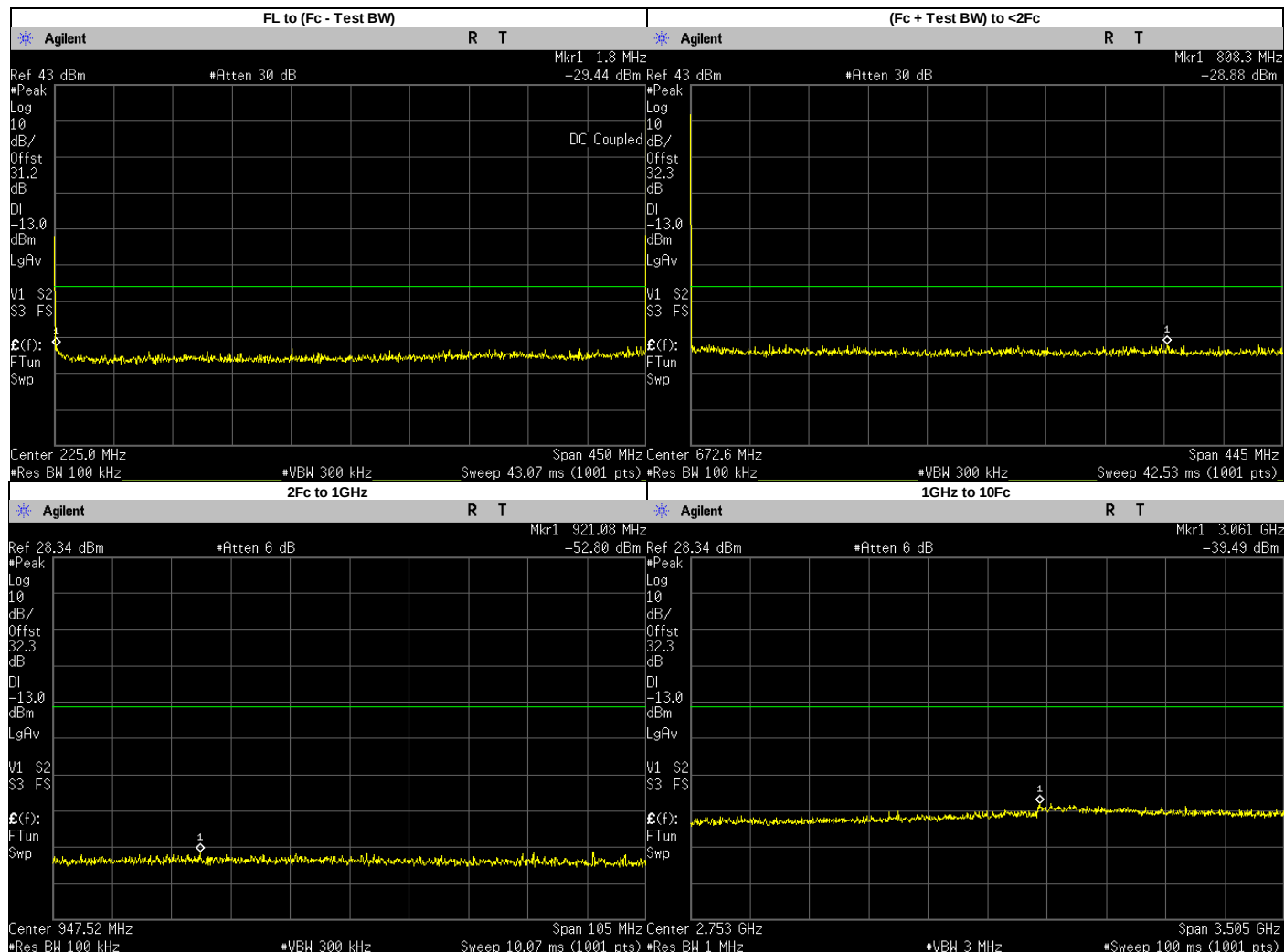
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	344.0000	-29.7490	-13	PASS
(Fc + Test BW) to <2Fc	460.6027	-28.0700	-13	PASS
2Fc to 1GHz	835.9253	-51.8500	-13	PASS
	836.0250	-51.8563	-13	PASS
1GHz to 10Fc	3184.9960	-39.8100	-13	PASS
	1254.0370	-45.0708	-13	PASS
	1672.0500	-44.1019	-13	PASS
	2090.0620	-44.4814	-13	PASS
	2508.0750	-43.6202	-13	PASS
	2926.0880	-42.8738	-13	PASS
	3344.1000	-41.3124	-13	PASS
	3762.1130	-41.1165	-13	PASS
	4180.1250	-42.9369	-13	PASS

PI/4DQPSK (MSPD) : 429.9750. MHz, 25 kHz Channel Spacing, Max. Power



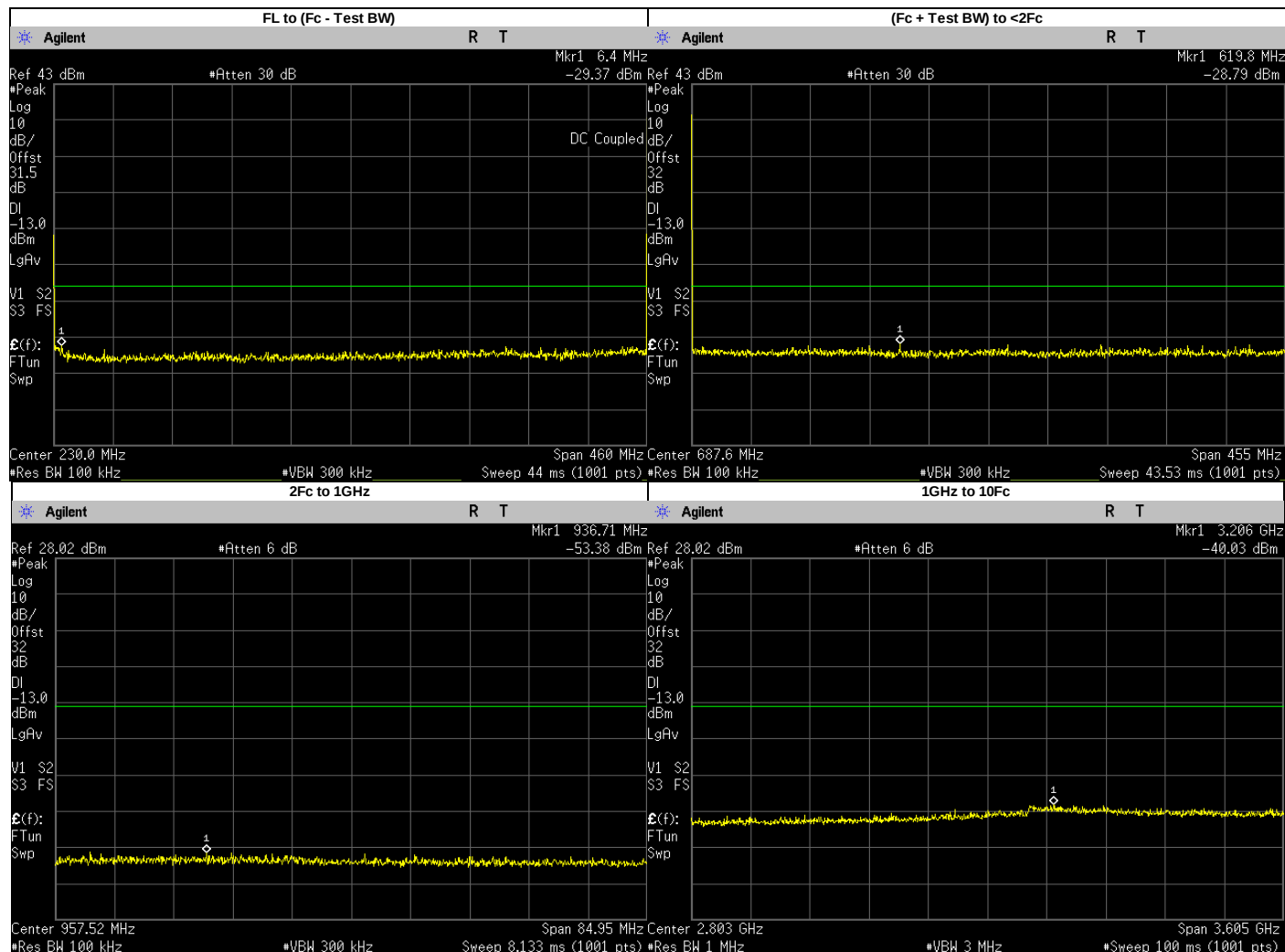
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	0.9000	-29.7790	-13	PASS
(Fc + Test BW) to <2Fc	643.3000	-28.7200	-13	PASS
2Fc to 1GHz	860.0267	-53.0400	-13	PASS
	859.9500	-53.0485	-13	PASS
1GHz to 10Fc	3078.6880	-40.3600	-13	PASS
	1289.9250	-44.7084	-13	PASS
	1719.9000	-44.6609	-13	PASS
	2149.8750	-44.8278	-13	PASS
	2579.8500	-43.7111	-13	PASS
	3009.8250	-43.4735	-13	PASS
	3439.8000	-42.2096	-13	PASS
	3869.7750	-42.8675	-13	PASS
	4299.7500	-43.7908	-13	PASS

PI/4DQPSK (MSPD) : 450.0250. MHz, 25 kHz Channel Spacing, Max. Power



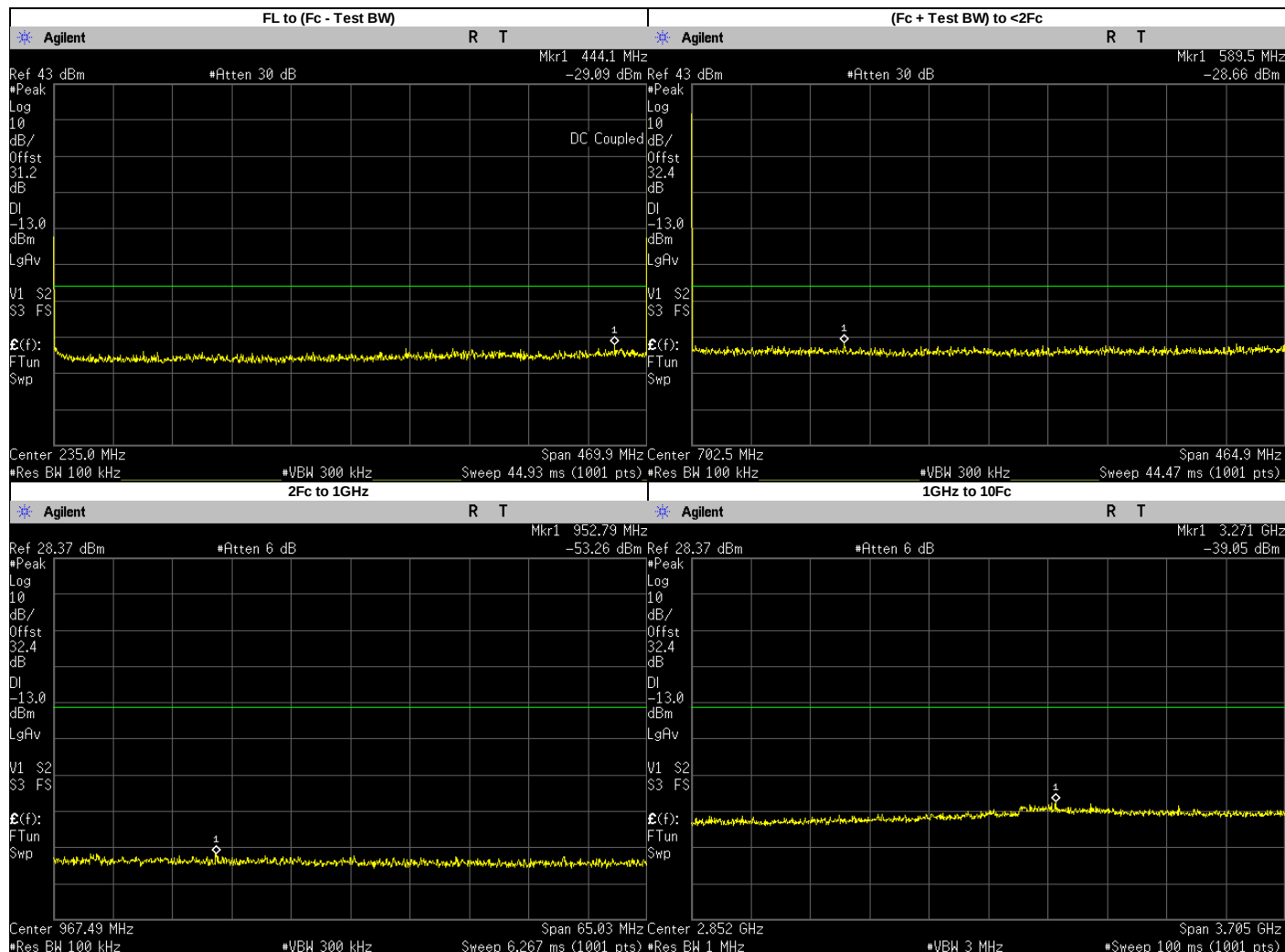
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	1.8000	-29.4420	-13	PASS
(Fc + Test BW) to <2Fc	808.2812	-28.8800	-13	PASS
2Fc to 1GHz	921.0776	-52.8000	-13	PASS
	900.0500	-53.9602	-13	PASS
1GHz to 10Fc	3061.0870	-39.4900	-13	PASS
	1350.0750	-44.6865	-13	PASS
	1800.1000	-43.9732	-13	PASS
	2250.1250	-44.3957	-13	PASS
	2700.1500	-41.9664	-13	PASS
	3150.1750	-41.0765	-13	PASS
	3600.2000	-41.3855	-13	PASS
	4050.2250	-42.3256	-13	PASS
	4500.2500	-41.9191	-13	PASS

PI/4DQPSK (MSPD) : 460.0250. MHz, 25 kHz Channel Spacing, Max. Power



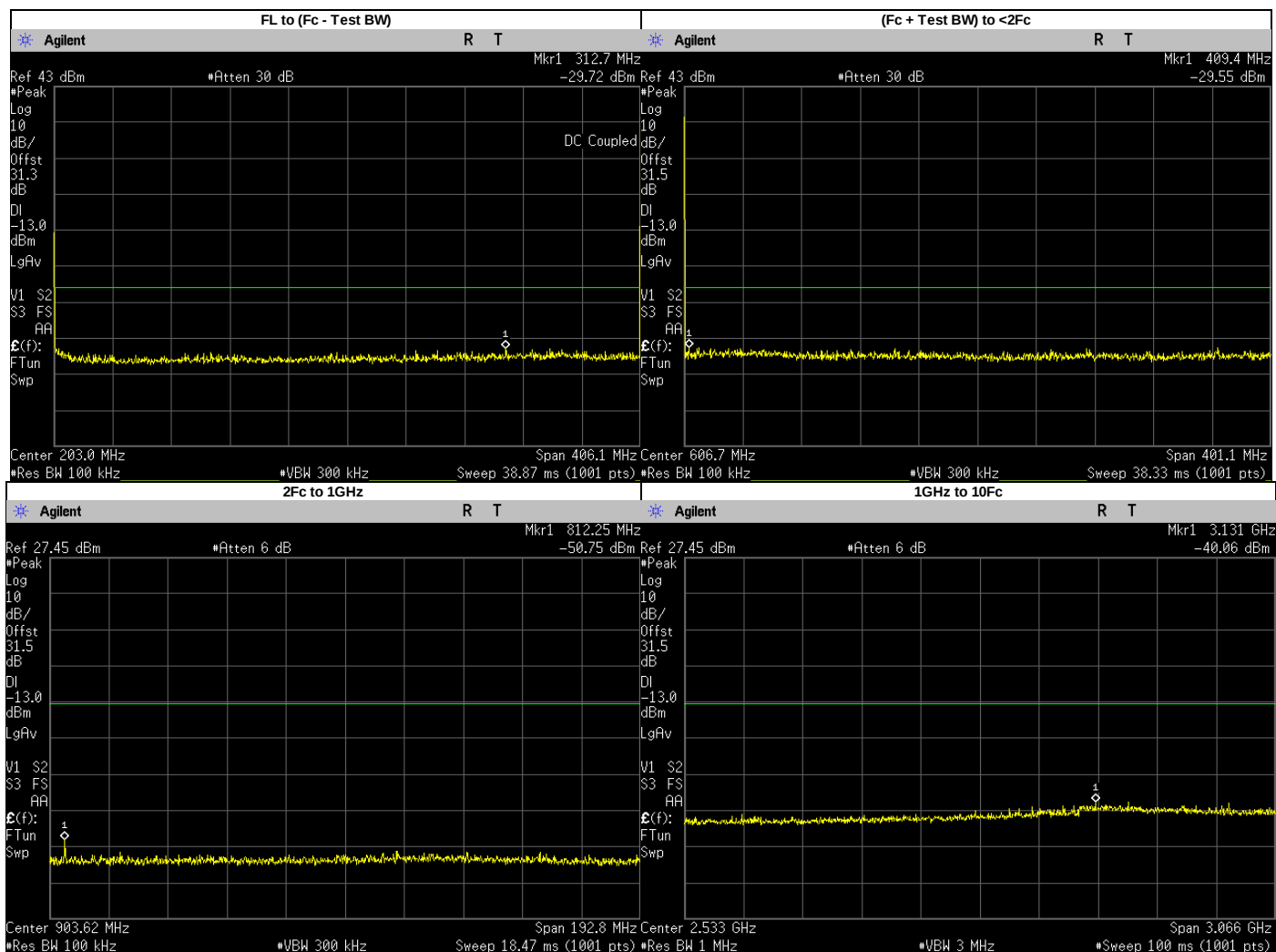
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	6.4000	-29.3680	-13	PASS
(Fc + Test BW) to <2Fc	619.7756	-28.7900	-13	PASS
2Fc to 1GHz	936.7123	-53.3800	-13	PASS
	920.0500	-53.5457	-13	PASS
1GHz to 10Fc	3206.4130	-40.0300	-13	PASS
	1380.0750	-44.8410	-13	PASS
	1840.1000	-44.2700	-13	PASS
	2300.1250	-44.1651	-13	PASS
	2760.1500	-43.7652	-13	PASS
	3220.1750	-41.2667	-13	PASS
	3680.2000	-42.3898	-13	PASS
	4140.2250	-42.8675	-13	PASS
	4600.2500	-42.1116	-13	PASS

PI/4DQPSK (MSPD) : 469.9875. MHz, 25 kHz Channel Spacing, Max. Power



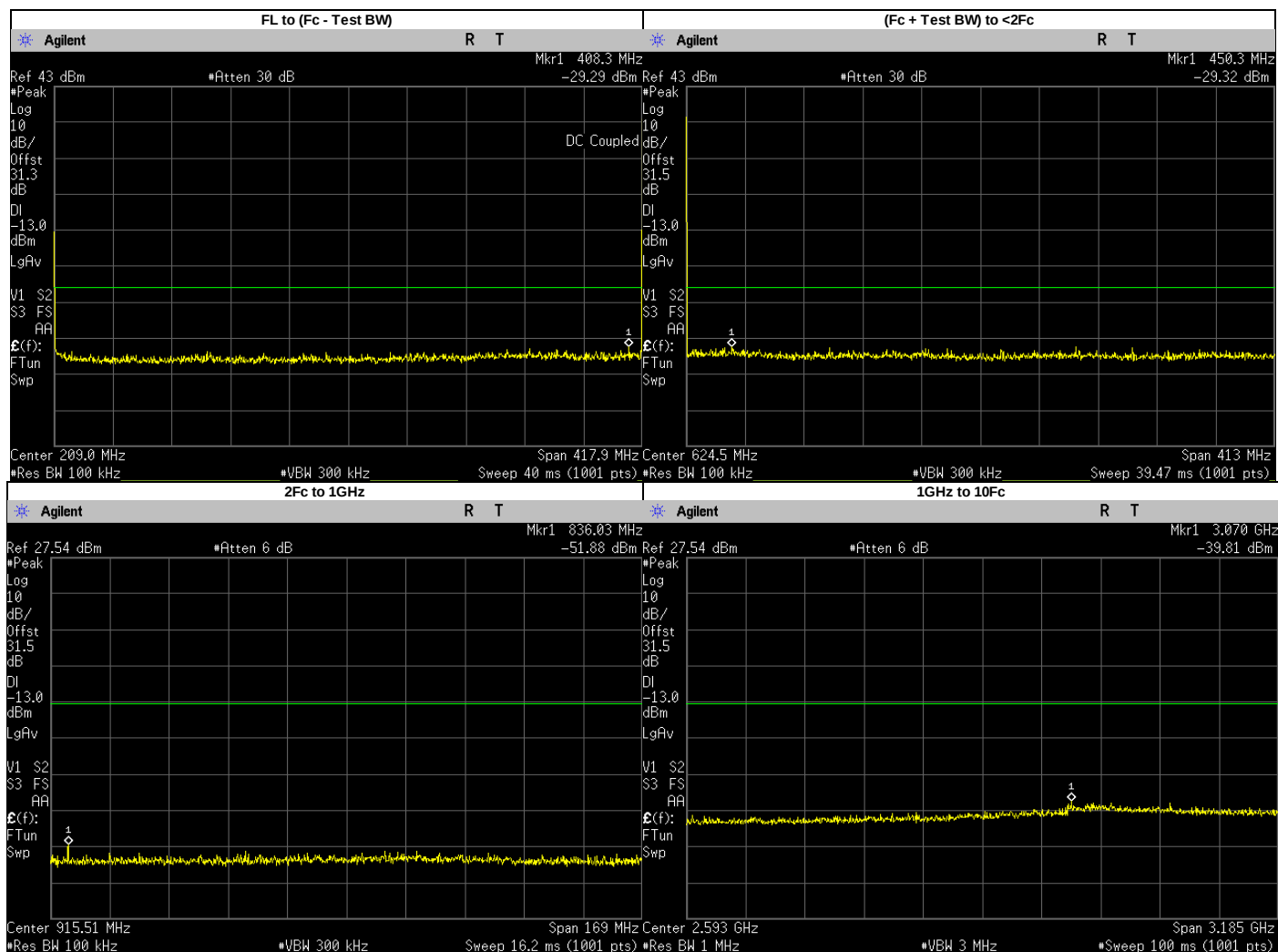
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	444.1000	-29.0870	-13	PASS
(Fc + Test BW) to <2Fc	589.5315	-28.6600	-13	PASS
2Fc to 1GHz	952.7918	-53.2600	-13	PASS
	939.9750	-54.0988	-13	PASS
1GHz to 10Fc	3271.0880	-39.0500	-13	PASS
	1409.9630	-44.8097	-13	PASS
	1879.9500	-44.4628	-13	PASS
	2349.9370	-43.8989	-13	PASS
	2819.9250	-42.3493	-13	PASS
	3289.9120	-41.2146	-13	PASS
	3759.9000	-42.3234	-13	PASS
	4229.8870	-42.6842	-13	PASS
	4699.8750	-42.4326	-13	PASS

PI/4DQPSK (TXNDC) : 406.1250. MHz, 25 kHz Channel Spacing, Max. Power
Not for FCC Review



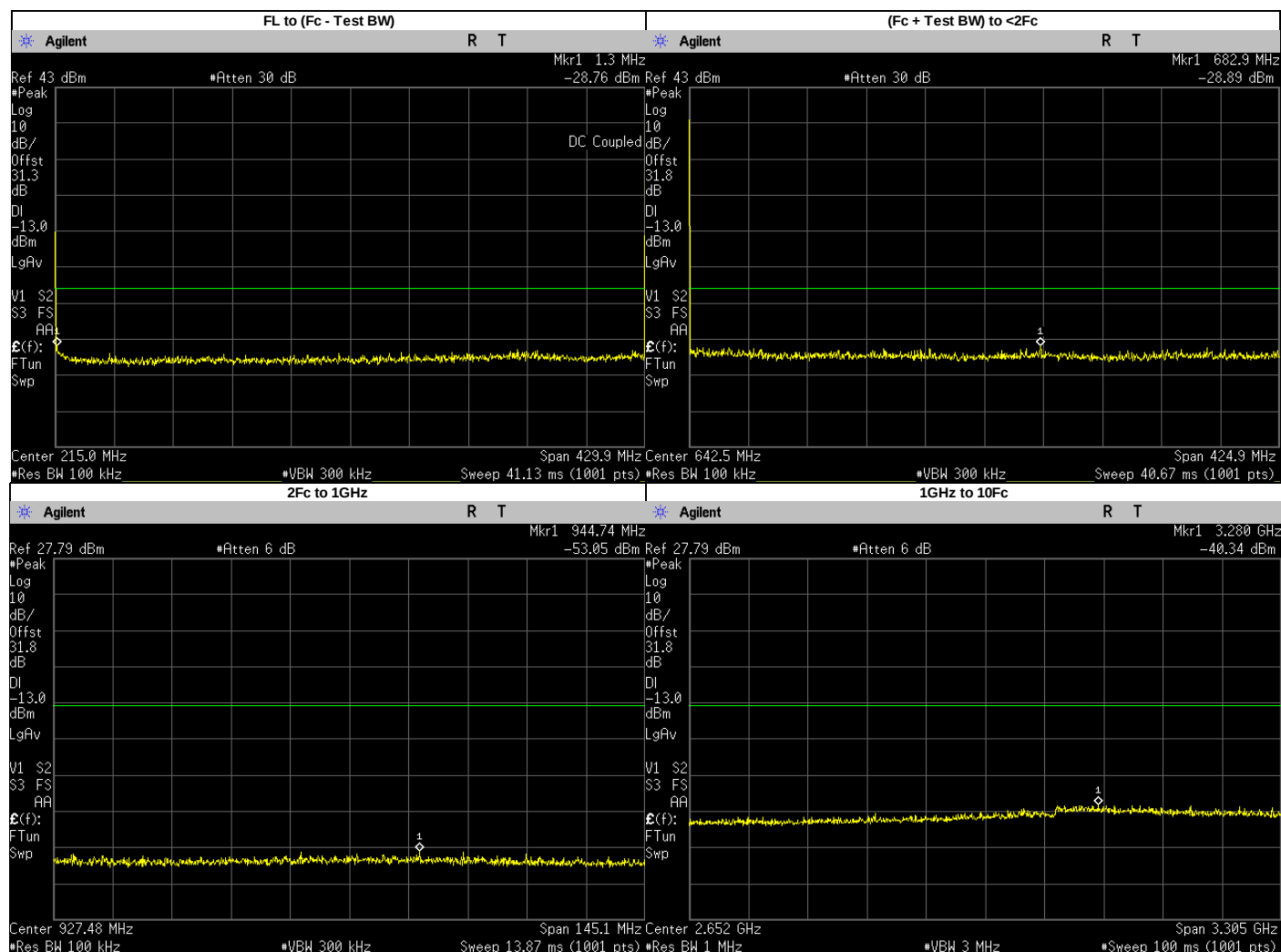
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	312.7000	-29.7220	-13	PASS
(Fc + Test BW) to <2Fc	409.3892	-29.5500	-13	PASS
2Fc to 1GHz	812.2500	-50.7500	-13	PASS
1GHz to 10Fc	3131.0440	-40.0600	-13	PASS
	1218.3750	-45.3940	-13	PASS
	1624.5000	-45.4269	-13	PASS
	2030.6250	-44.2067	-13	PASS
	2436.7500	-44.2844	-13	PASS
	2842.8750	-42.1505	-13	PASS
	3249.0000	-42.2202	-13	PASS
	3655.1250	-42.3125	-13	PASS
	4061.2500	-42.7447	-13	PASS

PI/4DQPSK (TXNDC) : 418.0125. MHz, 25 kHz Channel Spacing, Max. Power
Not for FCC Review



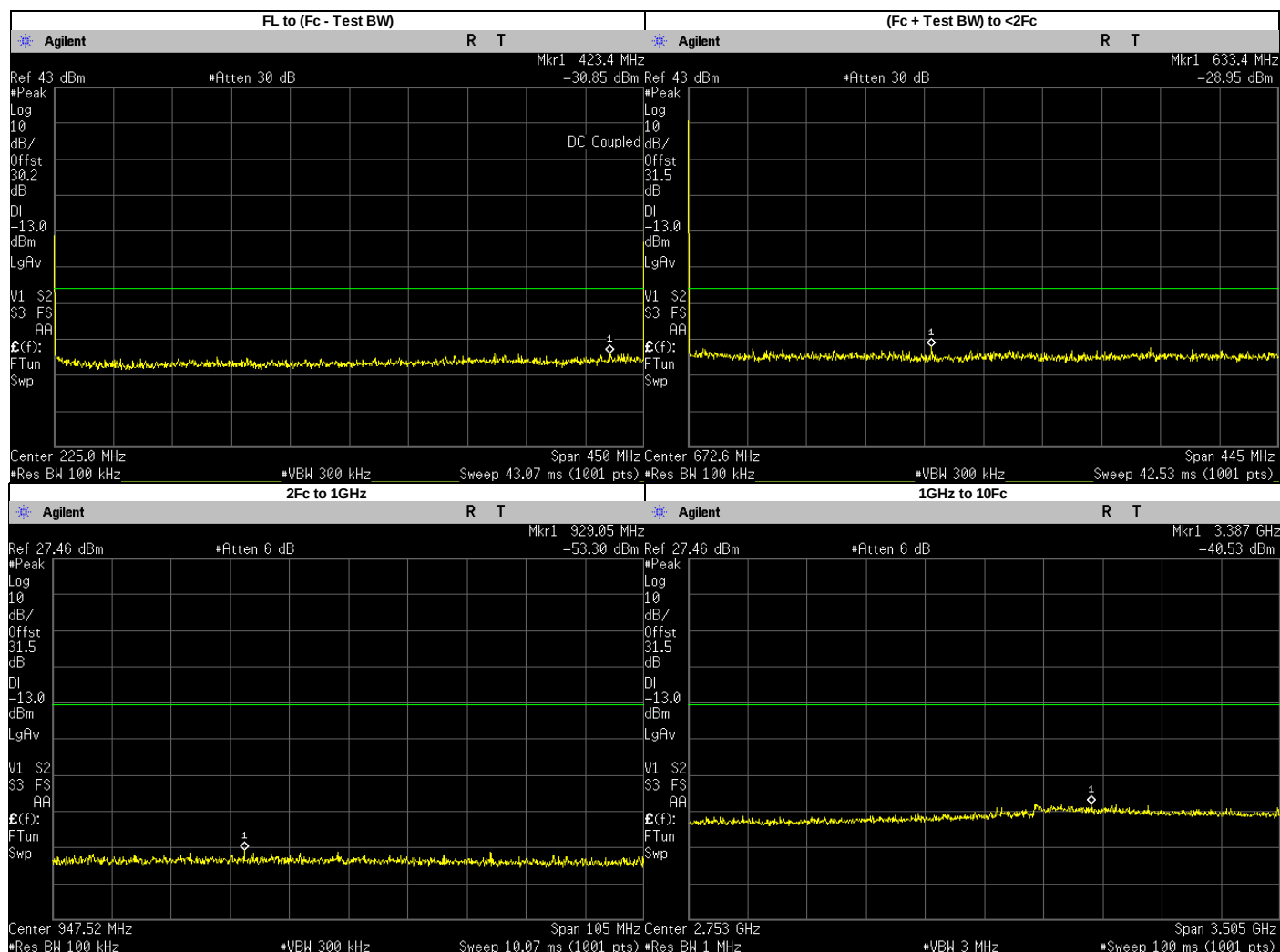
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	408.3000	-29.2890	-13	PASS
(Fc + Test BW) to <2Fc	450.2788	-29.3200	-13	PASS
2Fc to 1GHz	836.0250	-51.8800	-13	PASS
1GHz to 10Fc	3070.3310	-39.8100	-13	PASS
	1254.0370	-44.9638	-13	PASS
	1672.0500	-45.8967	-13	PASS
	2090.0620	-44.7546	-13	PASS
	2508.0750	-44.0054	-13	PASS
	2926.0880	-43.6611	-13	PASS
	3344.1000	-42.5657	-13	PASS
	3762.1130	-42.7182	-13	PASS
	4180.1250	-42.9038	-13	PASS

PI/4DQPSK (TXNDC) : 429.9750. MHz, 25 kHz Channel Spacing, Max. Power



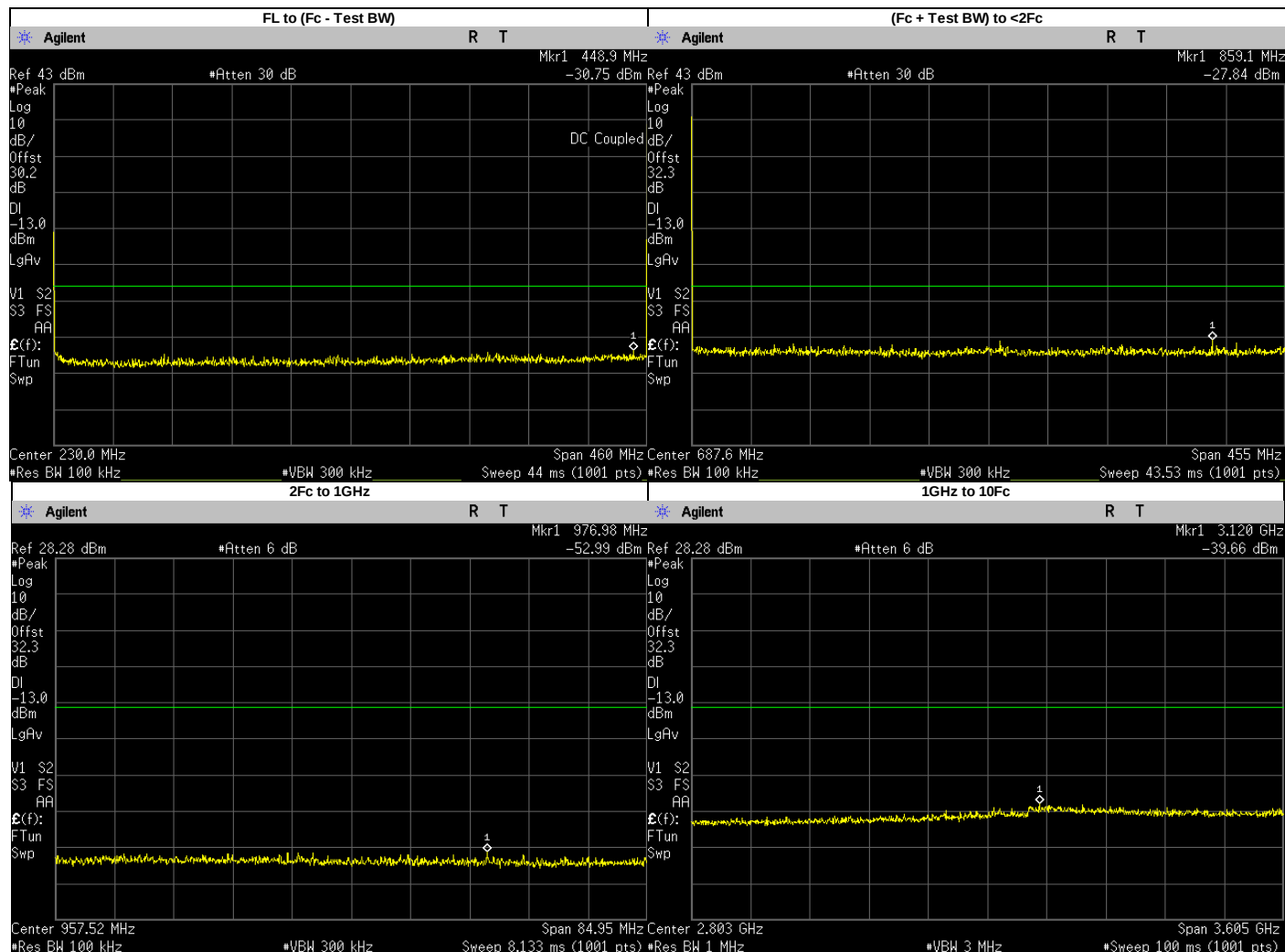
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	1.3000	-28.7640	-13	PASS
(Fc + Test BW) to <2Fc	682.8577	-28.8900	-13	PASS
2Fc to 1GHz	944.7360	-53.0500	-13	PASS
	859.9500	-54.2607	-13	PASS
1GHz to 10Fc	3280.2780	-40.3400	-13	PASS
	1289.9250	-45.3362	-13	PASS
	1719.9000	-45.0866	-13	PASS
	2149.8750	-44.7142	-13	PASS
	2579.8500	-43.6405	-13	PASS
	3009.8250	-43.3537	-13	PASS
	3439.8000	-42.1901	-13	PASS
	3869.7750	-42.1543	-13	PASS
	4299.7500	-43.0289	-13	PASS

PI/4DQPSK (TXNDC) : 450.0250. MHz, 25 kHz Channel Spacing, Max. Power



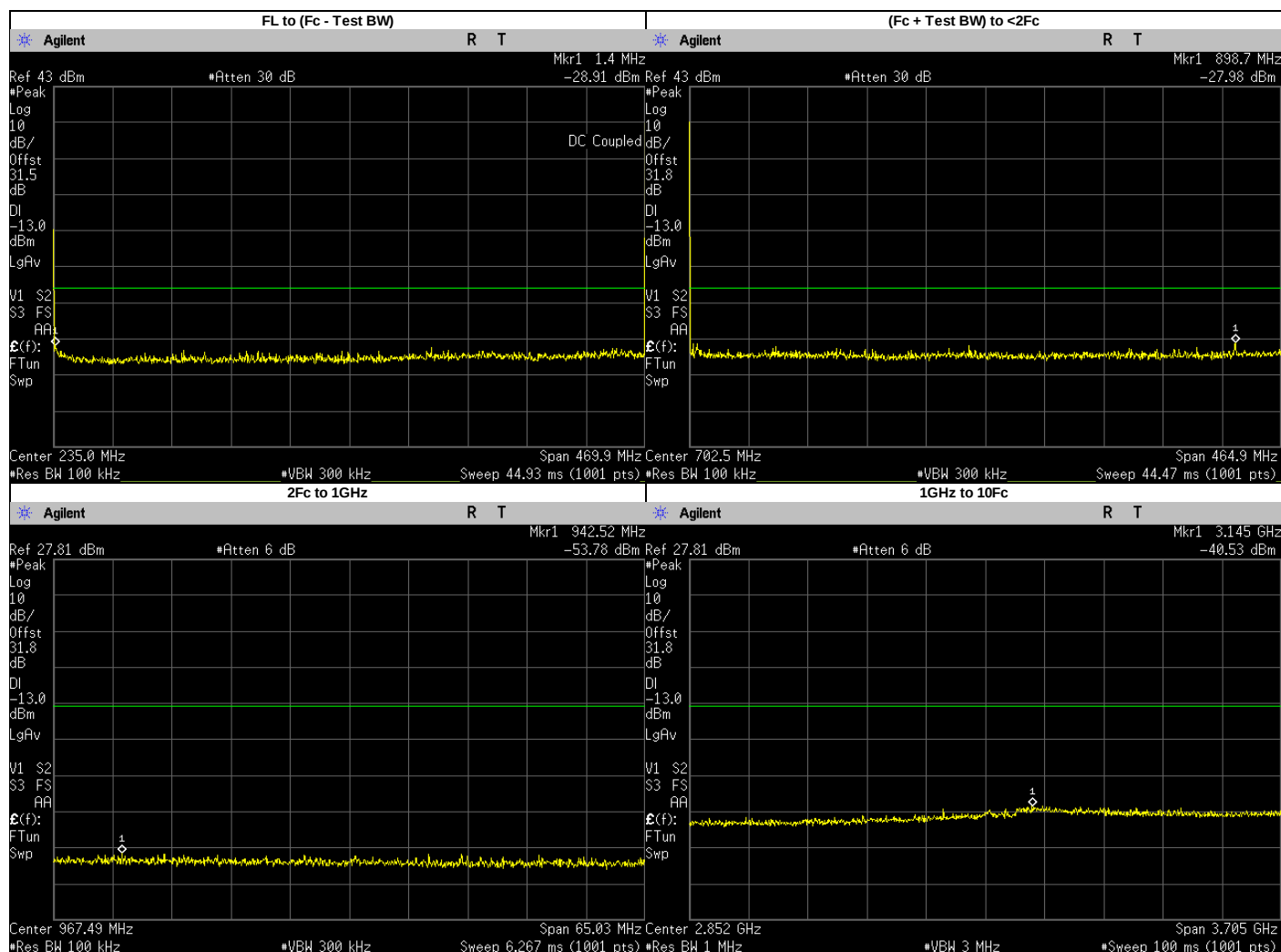
Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	423.4000	-30.8490	-13	PASS
(Fc + Test BW) to <2Fc	633.4087	-28.9500	-13	PASS
2Fc to 1GHz	929.0538	-53.3000	-13	PASS
	900.0500	-54.9634	-13	PASS
1GHz to 10Fc	3387.0750	-40.5300	-13	PASS
	1350.0750	-45.0618	-13	PASS
	1800.1000	-45.6266	-13	PASS
	2250.1250	-44.5882	-13	PASS
	2700.1500	-43.9693	-13	PASS
	3150.1750	-41.2336	-13	PASS
	3600.2000	-41.8249	-13	PASS
	4050.2250	-43.2022	-13	PASS
	4500.2500	-43.5005	-13	PASS

PI/4DQPSK (TXNDC) : 460.0250. MHz, 25 kHz Channel Spacing, Max. Power



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	448.9000	-30.7460	-13	PASS
(Fc + Test BW) to <2Fc	859.0889	-27.8400	-13	PASS
2Fc to 1GHz	976.9786	-52.9900	-13	PASS
	920.0500	-54.8235	-13	PASS
1GHz to 10Fc	3119.8870	-39.6600	-13	PASS
	1380.0750	-44.6146	-13	PASS
	1840.1000	-43.5870	-13	PASS
	2300.1250	-43.6560	-13	PASS
	2760.1500	-43.5655	-13	PASS
	3220.1750	-41.3150	-13	PASS
	3680.2000	-41.5449	-13	PASS
	4140.2250	-41.4430	-13	PASS
	4600.2500	-42.4830	-13	PASS

PI/4DQPSK (TXNDC) : 469.9875. MHz, 25 kHz Channel Spacing, Max. Power



Frequency Range	Highest Spur Frequency (MHz)	Spurious Level (dBm)	Failing Limit (dBm)	Results
FL to (Fc - Test BW)	1.4000	-28.9090	-13	PASS
(Fc + Test BW) to <2Fc	898.7104	-27.9800	-13	PASS
2Fc to 1GHz	942.5179	-53.7800	-13	PASS
	939.9750	-54.6112	-13	PASS
1GHz to 10Fc	3145.1230	-40.5300	-13	PASS
	1409.9630	-45.2816	-13	PASS
	1879.9500	-44.9923	-13	PASS
	2349.9370	-44.2277	-13	PASS
	2819.9250	-43.4813	-13	PASS
	3289.9120	-41.0757	-13	PASS
	3759.9000	-41.7127	-13	PASS
	4229.8870	-42.9426	-13	PASS
	4699.8750	-42.6294	-13	PASS

6.6.3. Test Limit

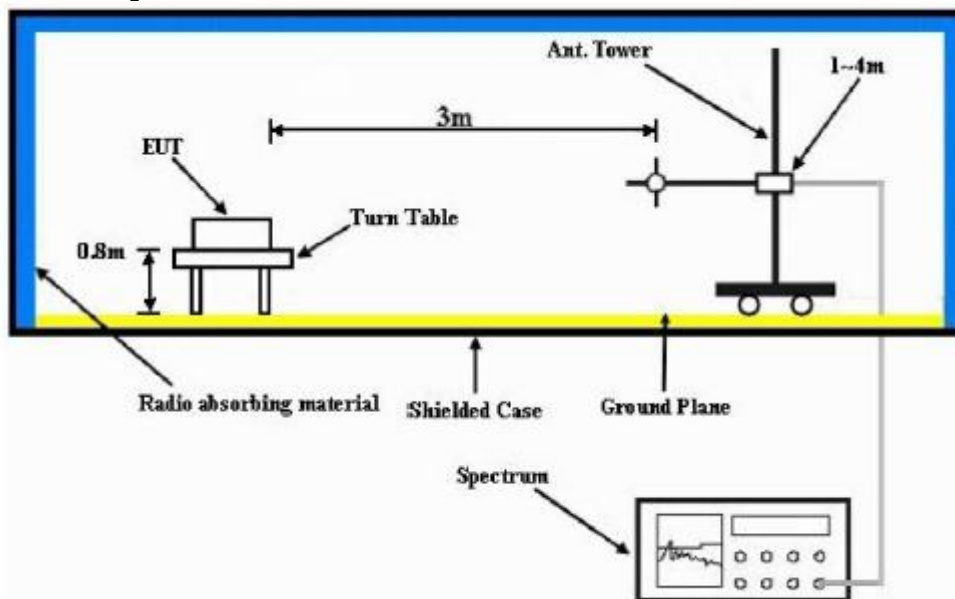
Table below summarized the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least

Channel Spacing	Part 22	Part 24D	Part 74	Part 80	Part 90 (UHF, VHF, 800, 900)	Part 90 (700)
12.5kHz	$43 + \log_{10}(P)$ (-13 dBm)	$43 + \log_{10}(P)$ (-13 dBm)	$43 + \log_{10}(P)$ (-13 dBm)	Not Applicable	$50 + \log_{10}(P)$ (-20 dBm)	$43 + \log_{10}(P)$ (-13 dBm)
25kHz		Not Applicable		$43 + \log_{10}(P)$ (-13 dBm)	$43 + \log_{10}(P)$ (-13 dBm)	$43 + \log_{10}(P)$ (-13 dBm)

Channel Spacing	RSS 134	RSS 182	RSS 119 (UHF, VHF, 800, 900)	RSS 119 (700)
12.5kHz	$43 + \log_{10}(P)$ (-13 dBm)	Not Applicable	$50 + \log_{10}(P)$ (-20 dBm)	$43 + \log_{10}(P)$ (-13 dBm)
25kHz	Not Applicable	$43 + \log_{10}(P)$ (-13 dBm)	$43 + \log_{10}(P)$ (-13 dBm)	$43 + \log_{10}(P)$ (-13 dBm)

6.7. Radiated Spurious Emission

6.7.1. Test Setup



- 1) The Resolution Bandwidth for scanning Radiated Emission below 1 GHz is 100 kHz with Video Bandwidth = 300 kHz and Resolution Bandwidth for above 1 GHz is 1 MHz with Video Bandwidth = 3 MHz. Detector mode is positive peak.
- 2) In the semi- anechoic chamber, setup as illustrated above the DUT placed on the 0.8m height (for $F_c < 1\text{GHz}$) or 1.5m height (for $F_c > 1\text{GHz}$) 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 DUT 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.

6.7.2. Test Result (Analog) **Not Applicable.**

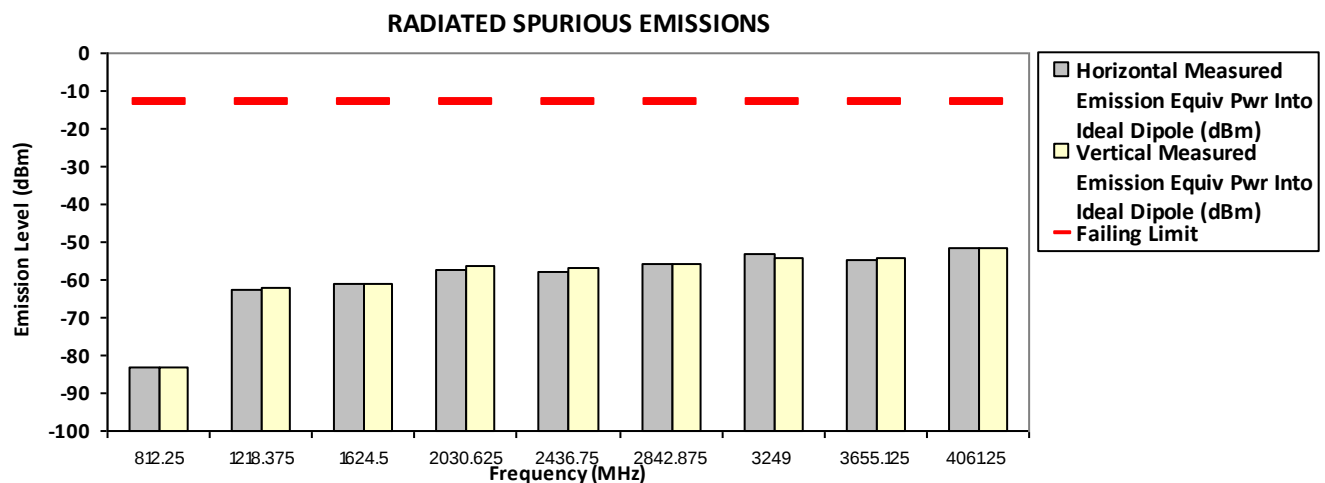
6.7.3. Test Result (Digital)

Not for FCC Review

SAC Transmitter Radiated Emission:

Model Number: AZH17PCH6TZ5AN S/N: 123TAH2677 SR: 0870P00-EMC-00002
 Battery Part No: NNTN8570CC Accy Part No: NA
 Test Mode: TX Digital
 406.125000 MHz 25 kHz 1.500 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)
812.2500	-13.0000	-83.2951 **	-83.2633 **
1218.3750	-13.0000	-62.7931 **	-62.0641 **
1624.5000	-13.0000	-61.0373 **	-61.2442 **
2030.6250	-13.0000	-57.2138 **	-56.4528 **
2436.7500	-13.0000	-57.7519 **	-56.7671 **
2842.8750	-13.0000	-55.9349 **	-55.9983 **
3249.0000	-13.0000	-53.0702 **	-54.1430 **
3655.1250	-13.0000	-54.5571 **	-54.3185 **
4061.2500	-13.0000	-51.7741 **	-51.4943 **



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
 Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad Tue, 11 Jun, 2024

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): 21.5 Hum(%RH): 74.6

System MU: 4.03 dB

Remarks: Passed Results Marginal Results Failed Results

Not for FCC Review

SAC Transmitter Radiated Emission:

Model Number: AZH17PCH6TZ5AN

S/N: 123TAH2677

SR: 0870P00-EMC-00002

Battery Part No: NNTN8570CC

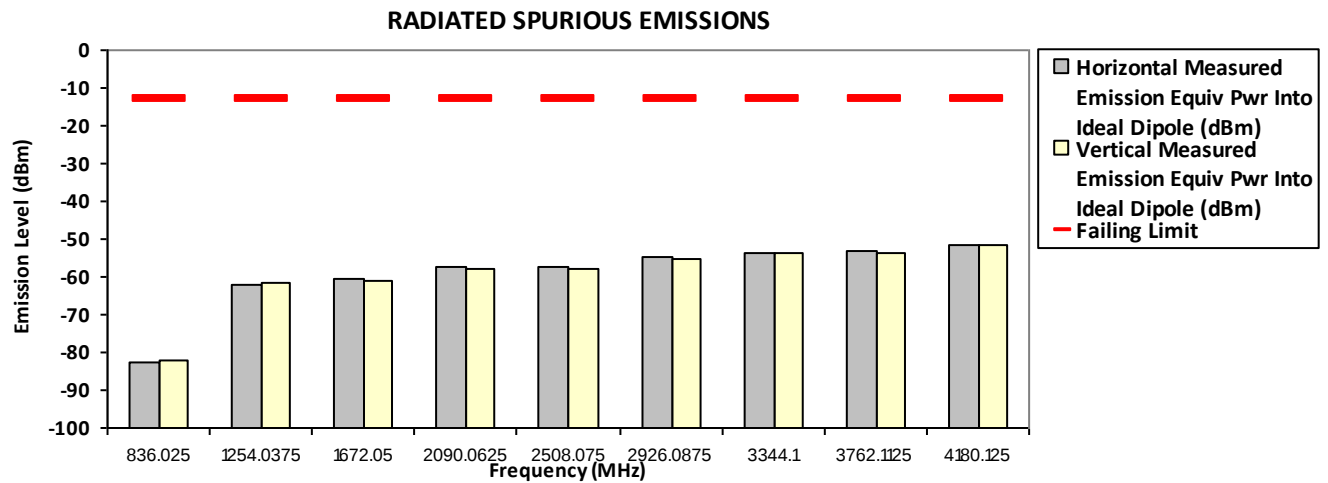
Accy Part No: NA

Test Mode: TX Digital
 25 kHz

418.012500 MHz

1.500 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)
836.0250	-13.0000	-82.5212 **	-81.9801 **
1254.0375	-13.0000	-62.2597 **	-61.7342 **
1672.0500	-13.0000	-60.7687 **	-60.8028 **
2090.0625	-13.0000	-57.5119 **	-57.8942 **
2508.0750	-13.0000	-57.2578 **	-57.7690 **
2926.0875	-13.0000	-54.6344 **	-55.4591 **
3344.1000	-13.0000	-53.7683 **	-53.8109 **
3762.1125	-13.0000	-53.3326 **	-53.6865 **
4180.1250	-13.0000	-51.7612 **	-51.5515 **



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
 Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad
 Tue, 11 Jun, 2024

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): 21.5 Hum(%RH): 74.6

System MU: 4.03 dB

Remarks:

Passed Results

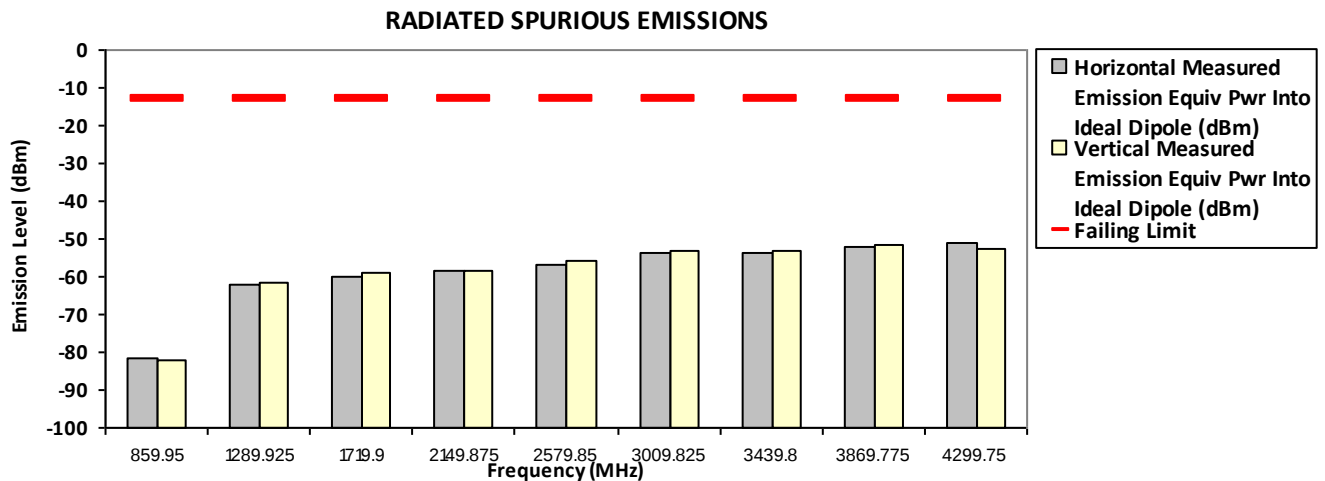
Marginal Results

Failed Results

SAC Transmitter Radiated Emission:

Model Number: AZH17PCH6TZ5AN S/N: 123TAH2677 SR: 0870P00-EMC-00002
Battery Part No: NNTN8570CC Accy Part No: NA
Test Mode: TX Digital
429.975000 MHz 25 kHz 1.500 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)
859.9500	-13.0000	-81.8099 **	-82.1856 **
1289.9250	-13.0000	-62.2815 **	-61.8259 **
1719.9000	-13.0000	-59.9253 **	-58.9367 **
2149.8750	-13.0000	-58.3282 **	-58.3906 **
2579.8500	-13.0000	-56.9347 **	-56.0035 **
3009.8250	-13.0000	-53.6310 **	-53.4163 **
3439.8000	-13.0000	-53.6838 **	-53.3517 **
3869.7750	-13.0000	-52.2011 **	-51.3757 **
4299.7500	-13.0000	-50.8671 **	-52.5248 **



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad Tue, 11 Jun, 2024

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): 21.5 Hum(%RH): 74.6

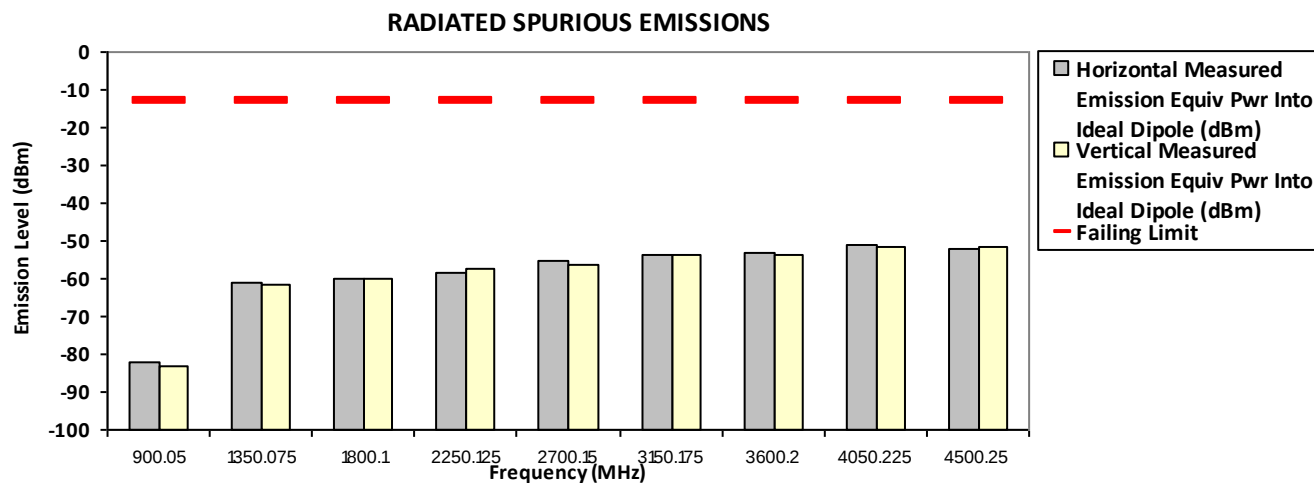
System MU: 4.03 dB

Remarks: Passed Results Marginal Results Failed Results

SAC Transmitter Radiated Emission:

Model Number: AZH17PCH6TZ5AN S/N: 123TAH2677 SR: 0870P00-EMC-00002
Battery Part No: NNTN8570CC Accy Part No: NA
Test Mode: TX Digital
450.025000 MHz 25 kHz 1.500 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)
900.0500	-13.0000	-82.1087 **	-82.9244 **
1350.0750	-13.0000	-60.8491 **	-61.7046 **
1800.1000	-13.0000	-60.1272 **	-60.0992 **
2250.1250	-13.0000	-58.1880 **	-57.2629 **
2700.1500	-13.0000	-55.4959 **	-56.0947 **
3150.1750	-13.0000	-53.6372 **	-53.7035 **
3600.2000	-13.0000	-53.0969 **	-53.8028 **
4050.2250	-13.0000	-50.8376 **	-51.8305 **
4500.2500	-13.0000	-52.0027 **	-51.4901 **



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad Tue, 11 Jun, 2024

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): 21.5 Hum(%RH): 74.6

System MU: 4.03 dB

Remarks:

Passed Results

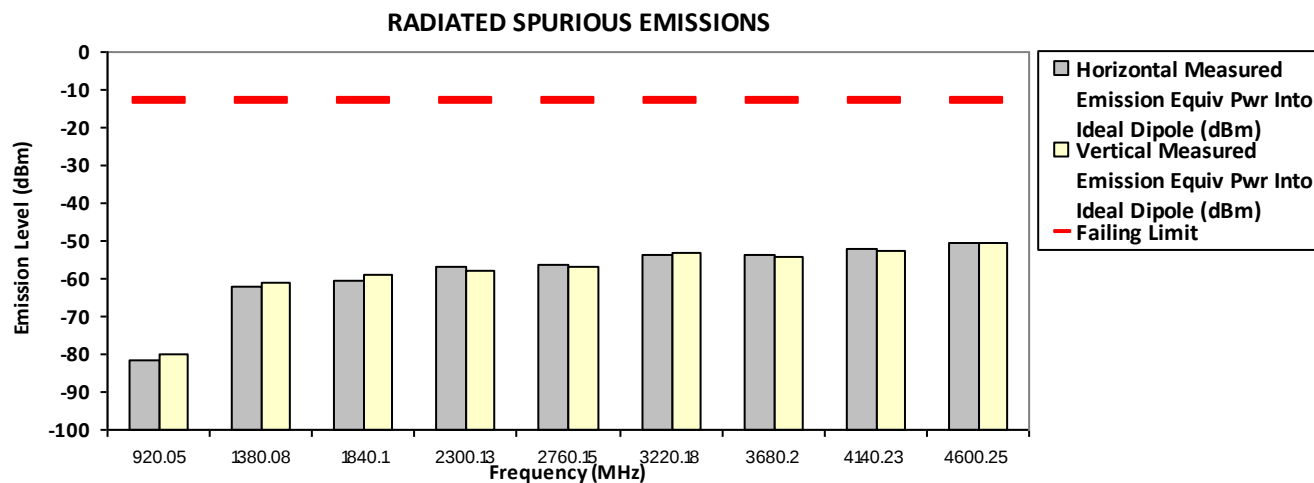
Marginal Results

Failed Results

SAC Transmitter Radiated Emission:

Model Number: AZH17PCH6TZ5AN S/N: 123TAH2677 SR: 0870P00-EMC-00002
Battery Part No: NNTN8570CC Accy Part No: NA
Test Mode: TX Digital
460.025000 MHz 25 kHz 1.500 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)
920.0500	-13.0000	-81.5850 **	-80.0588 **
1380.0750	-13.0000	-61.8734 **	-61.1611 **
1840.1000	-13.0000	-60.2644 **	-59.0074 **
2300.1250	-13.0000	-57.0875 **	-57.9043 **
2760.1500	-13.0000	-56.3067 **	-56.6196 **
3220.1750	-13.0000	-53.7016 **	-53.2550 **
3680.2000	-13.0000	-53.8585 **	-54.1138 **
4140.2250	-13.0000	-52.3558 **	-52.5307 **
4600.2500	-13.0000	-50.6806 **	-50.6521 **



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad Tue, 11 Jun, 2024

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): 21.5 Hum(%RH): 74.6

System MU: 4.03 dB

Remarks:

Passed Results

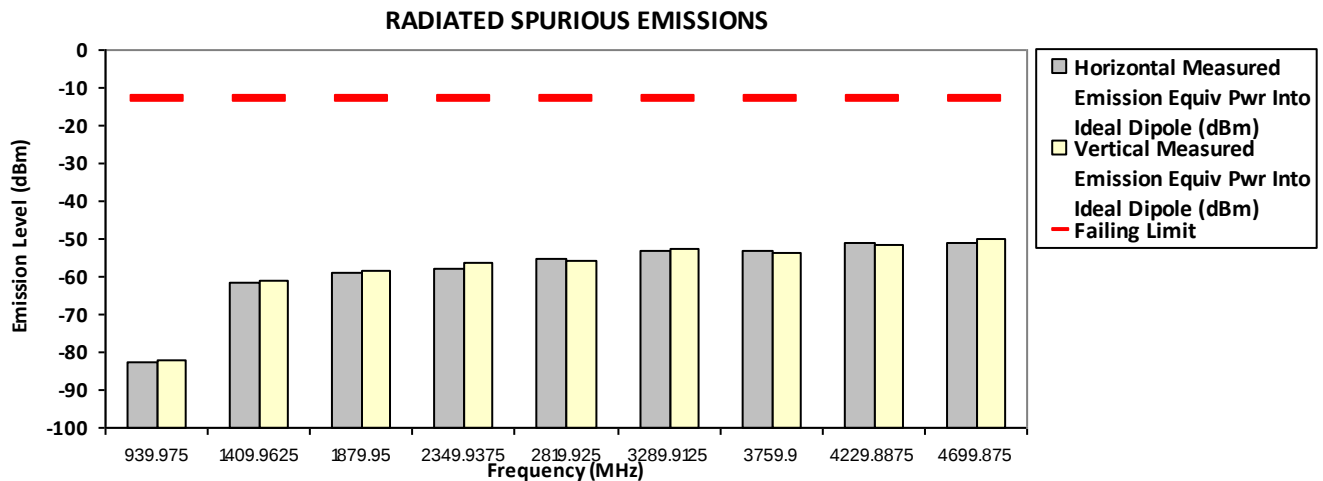
Marginal Results

Failed Results

SAC Transmitter Radiated Emission:

Model Number: AZH17PCH6TZ5AN S/N: 123TAH2677 SR: 0870P00-EMC-00002
 Battery Part No: NNTN8570CC Accy Part No: NA
 Test Mode: TX Digital
 469.987500 MHz 25 kHz 1.500 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)
939.9750	-13.0000	-82.4449 **	-82.2450 **
1409.9625	-13.0000	-61.6296 **	-61.2957 **
1879.9500	-13.0000	-59.1154 **	-58.2420 **
2349.9375	-13.0000	-57.9811 **	-56.3503 **
2819.9250	-13.0000	-55.0463 **	-55.9981 **
3289.9125	-13.0000	-52.9305 **	-52.8329 **
3759.9000	-13.0000	-53.3737 **	-53.6267 **
4229.8875	-13.0000	-51.1080 **	-51.7044 **
4699.8750	-13.0000	-50.9027 **	-50.1905 **



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.
 Motorola Penang EMC Lab - Test Performed by: Nazrin & Fuad Tue, 11 Jun, 2024

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): 21.5 Hum(%RH): 74.6

System MU: 4.03 dB

Remarks: Passed Results Marginal Results Failed Results

6.7.4. Test Limit

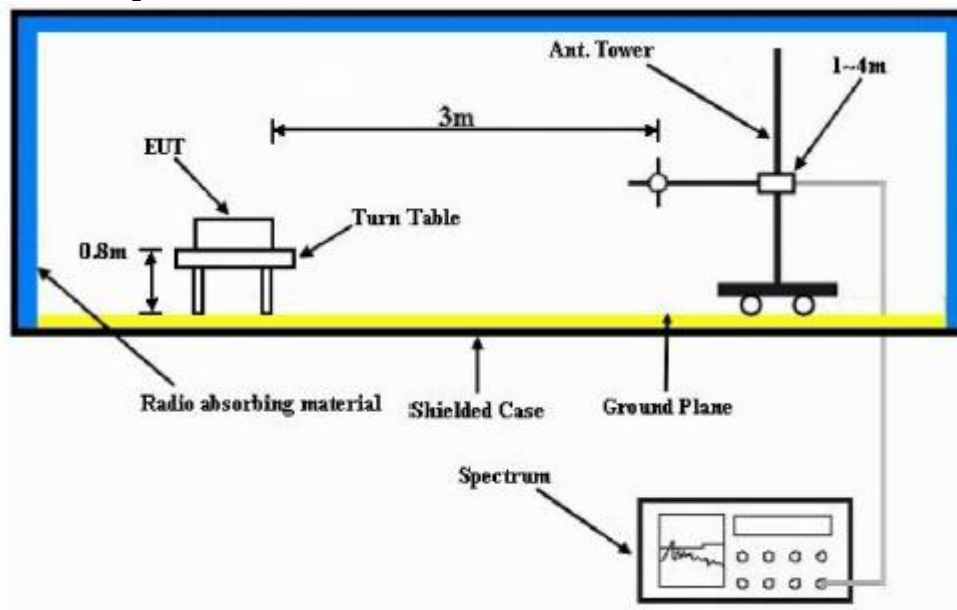
Table below summarized the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least

Channel Spacing	Part 22	Part 24D	Part 74	Part 80	Part 90 (UHF, VHF, 800, 900)	Part 90 (700)
12.5kHz	43 + log ₁₀ (P) (-13 dBm)	43 + log ₁₀ (P) (-13 dBm)	43 + log ₁₀ (P) (-13 dBm)	Not Applicable	50 + log ₁₀ (P) (-20 dBm)	43 + log ₁₀ (P) (-13 dBm)
25kHz		Not Applicable		43 + log ₁₀ (P) (-13 dBm)	43 + log ₁₀ (P) (-13 dBm)	43 + log ₁₀ (P) (-13 dBm)

Channel Spacing	RSS 134	RSS 182	RSS 119 (UHF, VHF, 800, 900)	RSS 119 (700)
12.5kHz	43 + log ₁₀ (P) (-13 dBm)	Not Applicable	50 + log ₁₀ (P) (-20 dBm)	43 + log ₁₀ (P) (-13 dBm)
25kHz	Not Applicable	43 + log ₁₀ (P) (-13 dBm)	43 + log ₁₀ (P) (-13 dBm)	43 + log ₁₀ (P) (-13 dBm)

6.8. Effective Radiated Power (ERP)

6.8.1. Test Setup



- 1) The Resolution Bandwidth for Equivalent Radiated Power (ERP) below 1 GHz is 100 kHz with Video Bandwidth = 300 kHz and Resolution Bandwidth for EIRP above 1 GHz is 1 MHz with Video Bandwidth = 3 MHz. Detector Mode is RMS.
- 2) In the semi-anechoic chamber, setup as illustrated above the DUT placed on the 0.8m height (for $F_c < 1\text{GHz}$) or 1.5m (for $F_c > 1\text{GHz}$) 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 DUT 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.

6.8.2. Test Result Not Applicable.

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

~ End of Test Report ~