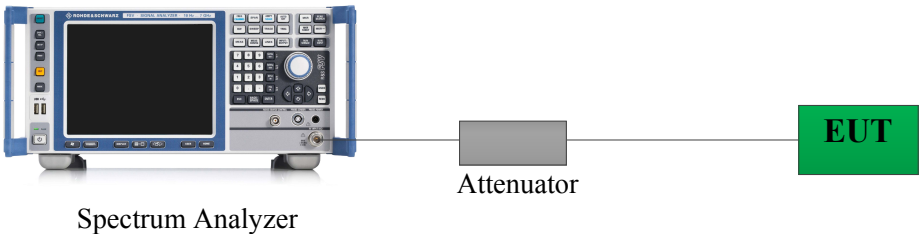
4.6.2 Block Diagram of Test Setup



Note: The Insertion loss of the RF cable, Attenuators was offset into the Spectrum Analyzer.

4.6.3 Test Procedure

According to ANSI C63.26-2015 Section 5.7.4:

a) Set the spectrum analyzer start frequency to the lowest frequency generated by the EUT, without going below 9 kHz, and the stop frequency to the lower frequency covered by the measurements previously performed in 5.7.3. As an alternative, the stop frequency can be set to the value specified in 5.1.1, depending on the EUT operating range, if the resulting plot can clearly demonstrate compliance for all frequencies not addressed by the out-of-band emissions measurements performed as per 5.7.3.

b) When using an average power (rms) detector, ensure that the number of points in the sweep ≥ 2 × (span / RBW). This may require that the measurement range defined by the start and stop frequencies be subdivided, depending on the spectrum analyzer capabilities. This requirement does not apply to peak-detected power measurements. When average power is specified by the applicable regulation, a peak-detector can be utilized for preliminary measurements to accommodate wider frequency spans. Any emissions found in the preliminary measurement to exceed the applicable limit(s) shall be further examined using a power averaging (rms) detector with the minimum number of measurement points as defined above.

c) The sweep time should be set to auto-couple for performing peak-detector measurements. For measurements that use a power averaging (rms) detector, the sweep time shall be set as described for out-of-band emissions measurements in item d) of 5.7.3.

d) Identify and measure the highest spurious emission levels in each frequency range. It is not necessary to re-measure the out-of-band emissions as a part of this test. Record the frequencies and amplitudes corresponding to the measured emissions and capture the data plots.

e) Repeat step b) through step d) for the upper spurious emission frequency range if not already captured by a wide span measurement performed as per the alternative provided in step a). The upper frequency for this measurement is defined in 5.1.1 as a function of the EUT operating range.

f) Compare the results with the corresponding limit in the applicable regulation.

g) The test report shall include the data plots of the measuring instrument display and the measured data.

4.6.4 Test Data And Result

Serial Number:	2TXQ-2	Test Date:	2024/11/29
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jojo Zhou	Test Result:	Pass

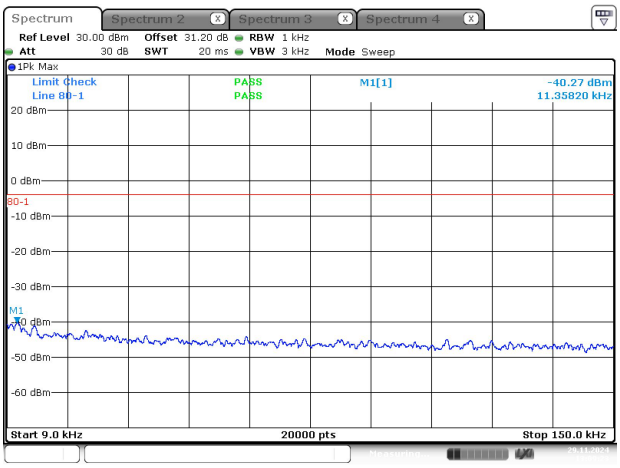
Environmental Conditions:					
Temperature: (℃)	23.1	Relative Humidity: (%)	31	ATM Pressure: (kPa)	102.3

Test Equipment List and Details:

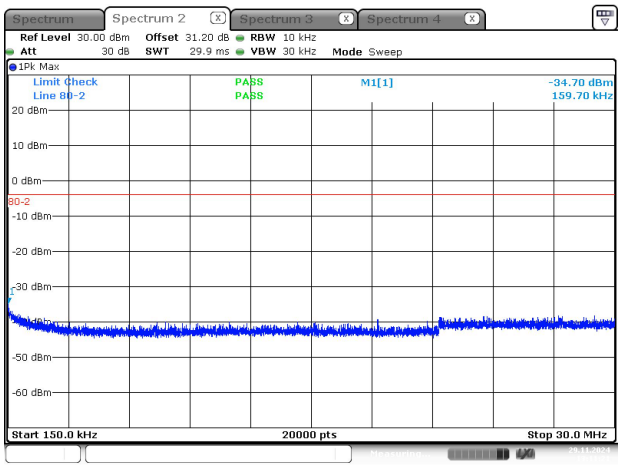
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101947	2024/9/5	2025/9/4
Unknown	Coaxial Cable	C-NJNJ-50	C-0200-03	2024/8/23	2025/8/22
Huaxiang	Coaxial Attenuator	DTS250-30	11022109	2024/6/7	2025/6/6
HP	RF Communications Test Set	8920A	3438A05201	2024/10/17	2025/10/16

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

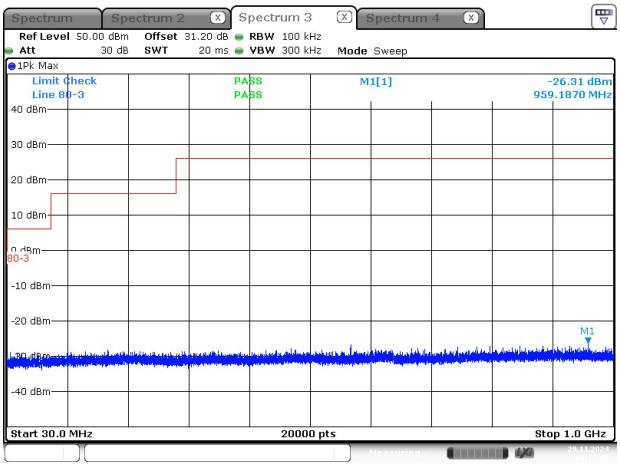
Test Data:



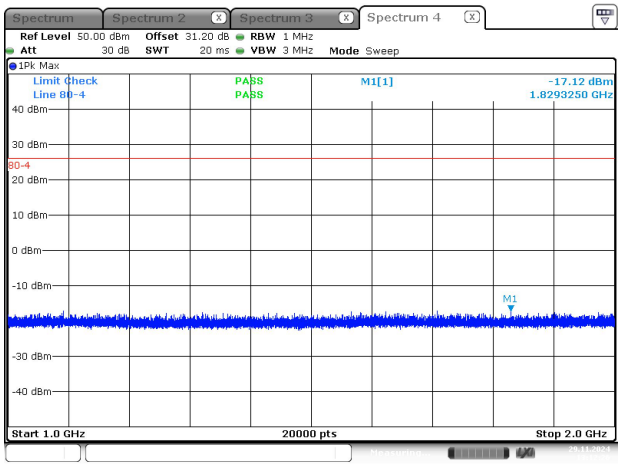
ProjectNo.:2402Z38638E-RF Tester:Jojo Zhou
Date: 29.NOV.2024 13:09:23



ProjectNo.:2402Z38638E-RF Tester:Jojo Zhou
Date: 29.NOV.2024 13:11:21



ProjectNo.:2402Z38638E-RF Tester:Jojo Zhou
Date: 29.NOV.2024 13:12:06



ProjectNo.:2402Z38638E-RF Tester:Jojo Zhou
Date: 29.NOV.2024 13:12:27

4.7 Transmitter Unwanted Emissions(Radiated)

4.7.1 Applicable Standard

FCC §80.211 Emission limitations

(f) The mean power when using emissions other than those in paragraphs (a), (b), (c) and (d) of this section:
(1) On any frequency removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: At least 25 dB;
(2) On any frequency removed from the assigned frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: At least 35 dB; and
(3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least 43 plus 10log10 (mean power in watts) dB.

4.7.2 Test setup:

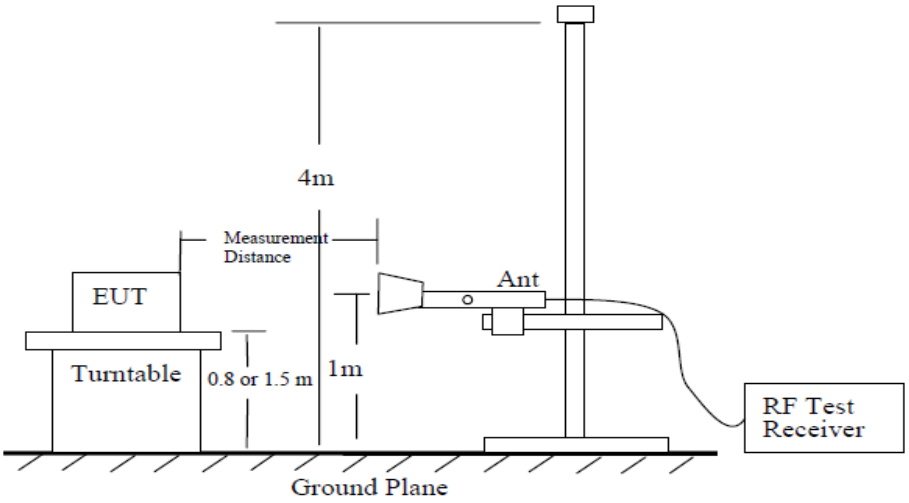


Figure 6—Test site-up for radiated ERP and/or EIRP measurements

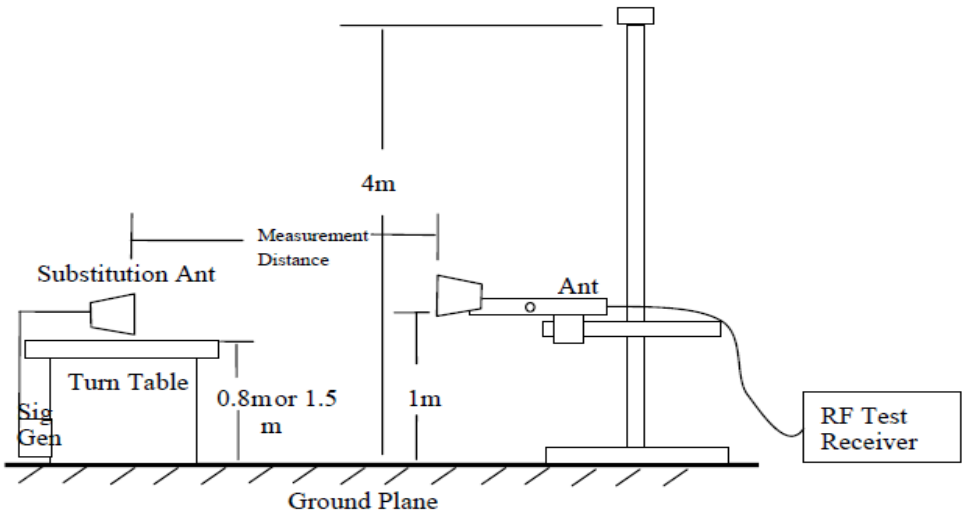


Figure 7—Substitution method set-up for radiated emission

4.7.3 Test Procedure:

a) Place the EUT in the center of the turntable. The EUT shall be configured to transmit into the standard non-radiating load (for measuring radiated spurious emissions), connected with cables of minimal length unless specified otherwise. If the EUT uses an adjustable antenna, the antenna shall be positioned to the length that produces the worst case emission at the fundamental operating frequency.

b) Each emission under consideration shall be evaluated:

1) Raise and lower the measurement antenna in accordance 5.5.2, as necessary to enable detection of the maximum emission amplitude relative to measurement antenna height.

2) Rotate the EUT through 360° to determine the maximum emission level relative to the axial position.

3) Return the turntable to the azimuth where the highest emission amplitude level was observed.

4) Vary the measurement antenna height again through 1 m to 4 m again to find the height associated with the maximum emission amplitude.

5) Record the measured emission amplitude level and frequency using the appropriate RBW.

c) Repeat step b) for each emission frequency with the measurement antenna oriented in both the horizontal and vertical polarizations to determine the orientation that gives the maximum emissions amplitude.

d) Set-up the substitution measurement with the reference point of the substitution antenna located as near as possible to where the center of the EUT radiating element was located during the initial EUT measurement.

e) Maintain the previous measurement instrument settings and test set-up, with the exception that the EUT is removed and replaced by the substitution antenna.

f) Connect a signal generator to the substitution antenna; locate the signal generator so as to minimize any potential influences on the measurement results. Set the signal generator to the frequency where emissions are detected, and set an output power level such that the radiated signal can be detected by the measurement instrument, with sufficient dynamic range relative to the noise floor.

g) For each emission that was detected and measured in the initial test [i.e., in step b) and step c)]:

1) Vary the measurement antenna height between 1 m to 4 m to maximize the received (measured) signal amplitude.

2) Adjust the signal generator output power level until the amplitude detected by the measurement instrument equals the amplitude level of the emission previously measured directly in step b) and step c).

3) Record the output power level of the signal generator when equivalence is achieved in step 2).

h) Repeat step e) through step g) with the measurement antenna oriented in the opposite polarization.

i) Calculate the emission power in dBm referenced to a half-wave dipole using the following equation:

Pe = Ps(dBm) − cable loss (dB) + antenna gain (dBd)

where

Pe = equivalent emission power in dBm
Ps = source (signal generator) power in dBm

NOTE—dBd refers to the measured antenna gain in decibels relative to a half-wave dipole.

j) Correct the antenna gain of the substitution antenna if necessary to reference the emission power to a half-wave dipole. When using measurement antennas with the gain specified in dBi, the equivalent dipole-referenced gain can be determined from: gain (dBd) = gain (dBi) − 2.15 dB. If necessary, the antenna gain can be calculated from calibrated antenna factor information

k) Provide the complete measurement results as a part of the test report.

4.7.4 Test Data And Result

Serial Number:	2TXQ-2, 2TXQ-3	Test Date:	2024/12/5~2024/12/11
Test Site:	Chamber10m, Chamber B	Test Mode:	Transmitting
Tester:	Leesin Xiang, Nat Zhou	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	23.4~23.8	Relative Humidity: (%)	53~54	ATM Pressure: (kPa)	101.8

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Hybrid Antenna	JB3	A060611-1	2023/9/6	2026/9/5
Narda	Coaxial Attenuator	779-6dB	04269	2023/9/6	2026/9/5
Unknown	Coaxial Cable	C-NJNJ-50	C-1000-01	2024/7/1	2025/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-04	2024/7/1	2025/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0530-01	2024/7/1	2025/6/30
Sonoma	Amplifier	310N	185914	2024/8/26	2025/8/25
R&S	EMI Test Receiver	ESCI	100224	2024/8/26	2025/8/25
EMCO	Adjustable Dipole Antenna	3121C	9109-753	N/A	N/A
Micro-Coax	Coaxial Cable	UFA210B	99G1448	2024/9/5	2025/9/4
Agilent	Signal Generator	E8247C	MY43321350	2024/9/5	2025/9/4
Feierte	Band Rejection Filter	BSF-136-174MHz-N	F-08-EM530	2024/11/2	2025/11/1
ETS-Lindgren	Horn Antenna	3115	000 527 35	2023/9/7	2026/9/6
AH	Horn Antenna	SAS-571	1177	2023/2/22	2026/2/21
Xinhang Macrowave	Coaxial Cable	XH750A-N/J-SMA/J-10M	20231117004 #0001	2024/11/17	2025/11/16
AH	Preamplifier	PAM-0118P	469	2024/4/15	2025/4/14
R&S	Spectrum Analyzer	FSV40	101944	2024/9/6	2025/9/5

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

Test Data:

Please refer to the below table.
Only the high power level channel was tested.

Model:RS-509MG

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBμV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Test Frequency: 156.05MHz								
312.10	H	70.12	-38.30	0.00	0.32	-38.62	-13.00	25.62
312.10	V	63.52	-43.12	0.00	0.32	-43.44	-13.00	30.44
468.15	H	61.30	-44.55	0.00	0.36	-44.91	-13.00	31.91
468.15	V	61.27	-41.90	0.00	0.36	-42.26	-13.00	29.26
624.20	H	57.19	-44.87	0.00	0.36	-45.23	-13.00	32.23
624.20	V	61.62	-37.79	0.00	0.36	-38.15	-13.00	25.15
780.25	H	57.91	-41.09	0.00	0.47	-41.56	-13.00	28.56
780.25	V	54.67	-41.23	0.00	0.47	-41.70	-13.00	28.70
936.30	H	49.47	-44.84	0.00	0.51	-45.35	-13.00	32.35
936.30	V	47.05	-44.13	0.00	0.51	-44.64	-13.00	31.64
1092.35	H	61.17	-63.65	7.44	1.00	-57.21	-13.00	44.21
1092.35	V	66.35	-58.88	7.44	1.00	-52.44	-13.00	39.44
1248.40	H	58.41	-65.80	7.78	1.14	-59.16	-13.00	46.16
1248.40	V	57.17	-68.05	7.78	1.14	-61.41	-13.00	48.41
1404.45	H	62.61	-61.67	9.02	1.21	-53.86	-13.00	40.86
1404.45	V	62.12	-62.74	9.02	1.21	-54.93	-13.00	41.93
1560.50	H	59.93	-66.05	9.86	0.94	-57.13	-13.00	44.13
1560.50	V	63.39	-62.99	9.86	0.94	-54.07	-13.00	41.07
Test Frequency: 156.8MHz								
313.60	H	71.96	-36.44	0.00	0.32	-36.76	-13.00	23.76
313.60	V	66.77	-39.83	0.00	0.32	-40.15	-13.00	27.15
470.40	H	62.06	-43.76	0.00	0.36	-44.12	-13.00	31.12
470.40	V	61.99	-41.15	0.00	0.36	-41.51	-13.00	28.51
627.20	H	50.19	-51.82	0.00	0.37	-52.19	-13.00	39.19
627.20	V	50.37	-48.97	0.00	0.37	-49.34	-13.00	36.34
784.00	H	60.68	-38.23	0.00	0.47	-38.70	-13.00	25.70
784.00	V	57.68	-38.14	0.00	0.47	-38.61	-13.00	25.61
940.80	H	40.50	-53.66	0.00	0.51	-54.17	-13.00	41.17
940.80	V	38.34	-52.71	0.00	0.51	-53.22	-13.00	40.22
1097.60	H	63.28	-61.47	7.41	1.01	-55.07	-13.00	42.07
1097.60	V	68.03	-57.12	7.41	1.01	-50.72	-13.00	37.72
1254.40	H	57.01	-67.25	7.84	1.14	-60.55	-13.00	47.55
1254.40	V	57.03	-68.22	7.84	1.14	-61.52	-13.00	48.52
1411.20	H	54.88	-69.53	9.06	1.22	-61.69	-13.00	48.69
1411.20	V	57.92	-67.04	9.06	1.22	-59.20	-13.00	46.20
1568.00	H	55.11	-70.85	9.91	0.89	-61.83	-13.00	48.83
1568.00	V	60.57	-65.83	9.91	0.89	-56.81	-13.00	43.81

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Test Frequency: 157.425MHz								
314.85	H	72.15	-36.22	0.00	0.32	-36.54	-13.00	23.54
314.85	V	66.48	-40.09	0.00	0.32	-40.41	-13.00	27.41
472.28	H	62.09	-43.70	0.00	0.36	-44.06	-13.00	31.06
472.28	V	63.01	-40.10	0.00	0.36	-40.46	-13.00	27.46
629.70	H	50.55	-51.43	0.00	0.37	-51.80	-13.00	38.80
629.70	V	58.59	-40.68	0.00	0.37	-41.05	-13.00	28.05
787.13	H	60.37	-38.47	0.00	0.48	-38.95	-13.00	25.95
787.13	V	54.94	-40.82	0.00	0.48	-41.30	-13.00	28.30
944.55	H	44.83	-49.19	0.00	0.51	-49.70	-13.00	36.70
944.55	V	45.52	-45.42	0.00	0.51	-45.93	-13.00	32.93
1101.98	H	63.73	-60.96	7.40	1.02	-54.58	-13.00	41.58
1101.98	V	68.75	-56.36	7.40	1.02	-49.98	-13.00	36.98
1259.40	H	58.38	-65.92	7.89	1.15	-59.18	-13.00	46.18
1259.40	V	60.00	-65.28	7.89	1.15	-58.54	-13.00	45.54
1416.83	H	60.46	-64.06	9.08	1.23	-56.21	-13.00	43.21
1416.83	V	62.54	-62.50	9.08	1.23	-54.65	-13.00	41.65
1574.25	H	56.38	-69.56	9.95	0.85	-60.46	-13.00	47.46
1574.25	V	58.67	-67.75	9.95	0.85	-58.65	-13.00	45.65

DSC B1300:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Test Frequency: 156.525MHz								
313.05	H	67.88	-40.53	0.00	0.32	-40.85	-13.00	27.85
313.05	V	60.50	-46.12	0.00	0.32	-46.44	-13.00	33.44
469.58	H	62.94	-42.89	0.00	0.36	-43.25	-13.00	30.25
469.58	V	62.35	-40.80	0.00	0.36	-41.16	-13.00	28.16
626.10	H	62.31	-39.72	0.00	0.37	-40.09	-13.00	27.09
626.10	V	66.58	-32.78	0.00	0.37	-33.15	-13.00	20.15
782.63	H	59.12	-39.82	0.00	0.47	-40.29	-13.00	27.29
782.63	V	53.35	-42.50	0.00	0.47	-42.97	-13.00	29.97
939.15	H	53.42	-40.79	0.00	0.51	-41.30	-13.00	28.30
939.15	V	50.81	-40.29	0.00	0.51	-40.80	-13.00	27.80
1096.55	H	51.11	-73.65	7.42	1.01	-67.24	-13.00	54.24
1096.55	V	51.25	-73.92	7.42	1.01	-67.51	-13.00	54.51
1253.20	H	49.02	-75.23	7.83	1.14	-68.54	-13.00	55.54
1253.20	V	50.00	-75.25	7.83	1.14	-68.56	-13.00	55.56
1409.85	H	63.83	-60.56	9.05	1.21	-52.72	-13.00	39.72
1409.85	V	64.47	-60.47	9.05	1.21	-52.63	-13.00	39.63
1566.50	H	52.22	-73.74	9.90	0.90	-64.74	-13.00	51.74
1566.50	V	53.19	-73.21	9.90	0.90	-64.21	-13.00	51.21

DSC Y2100:

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Test Frequency: 156.525MHz								
313.05	H	69.15	-39.26	0.00	0.32	-39.58	-13.00	26.58
313.05	V	61.22	-45.40	0.00	0.32	-45.72	-13.00	32.72
469.58	H	62.58	-43.25	0.00	0.36	-43.61	-13.00	30.61
469.58	V	62.39	-40.76	0.00	0.36	-41.12	-13.00	28.12
626.10	H	60.36	-41.67	0.00	0.37	-42.04	-13.00	29.04
626.10	V	65.82	-33.54	0.00	0.37	-33.91	-13.00	20.91
782.63	H	57.84	-41.10	0.00	0.47	-41.57	-13.00	28.57
782.63	V	53.10	-42.75	0.00	0.47	-43.22	-13.00	30.22
939.15	H	52.00	-42.21	0.00	0.51	-42.72	-13.00	29.72
939.15	V	50.37	-40.73	0.00	0.51	-41.24	-13.00	28.24
1094.63	H	51.41	-73.38	7.43	1.00	-66.95	-13.00	53.95
1094.63	V	52.05	-73.15	7.43	1.00	-66.72	-13.00	53.72
1251.00	H	50.01	-74.22	7.81	1.14	-67.55	-13.00	54.55
1251.00	V	48.38	-76.85	7.81	1.14	-70.18	-13.00	57.18
1407.38	H	64.05	-60.29	9.04	1.21	-52.46	-13.00	39.46
1407.38	V	63.76	-61.14	9.04	1.21	-53.31	-13.00	40.31
1563.75	H	53.65	-72.32	9.88	0.92	-63.36	-13.00	50.36
1563.75	V	55.82	-70.57	9.88	0.92	-61.61	-13.00	48.61

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Test Frequency: 156.375MHz								
312.75	H	64.63	-43.78	0.00	0.32	-44.10	-13.00	31.10
312.75	V	61.41	-45.22	0.00	0.32	-45.54	-13.00	32.54
469.13	H	62.52	-43.32	0.00	0.36	-43.68	-13.00	30.68
469.13	V	57.34	-45.82	0.00	0.36	-46.18	-13.00	33.18
625.50	H	48.25	-53.79	0.00	0.37	-54.16	-13.00	41.16
625.50	V	52.19	-47.19	0.00	0.37	-47.56	-13.00	34.56
781.88	H	47.79	-51.17	0.00	0.47	-51.64	-13.00	38.64
781.88	V	4.41	-91.46	0.00	0.47	-91.93	-13.00	78.93
938.25	H	39.92	-54.33	0.00	0.51	-54.84	-13.00	41.84
938.25	V	38.14	-52.98	0.00	0.51	-53.49	-13.00	40.49
1098.13	H	50.93	-73.81	7.41	1.01	-67.41	-13.00	54.41
1098.13	V	52.28	-72.86	7.41	1.01	-66.46	-13.00	53.46
1255.00	H	50.07	-74.20	7.85	1.15	-67.50	-13.00	54.50
1255.00	V	49.60	-75.66	7.85	1.15	-68.96	-13.00	55.96
1411.88	H	63.43	-61.00	9.06	1.22	-53.16	-13.00	40.16
1411.88	V	64.25	-60.72	9.06	1.22	-52.88	-13.00	39.88
1568.75	H	54.55	-71.41	9.91	0.89	-62.39	-13.00	49.39
1568.75	V	57.18	-69.22	9.91	0.89	-60.20	-13.00	47.20

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Test Frequency: 156.575MHz								
313.15	H	65.15	-43.26	0.00	0.32	-43.58	-13.00	30.58
313.15	V	61.85	-44.76	0.00	0.32	-45.08	-13.00	32.08
469.73	H	62.31	-43.52	0.00	0.36	-43.88	-13.00	30.88
469.73	V	57.35	-45.80	0.00	0.36	-46.16	-13.00	33.16
626.30	H	47.92	-54.11	0.00	0.37	-54.48	-13.00	41.48
626.30	V	51.05	-48.31	0.00	0.37	-48.68	-13.00	35.68
782.88	H	47.84	-51.10	0.00	0.47	-51.57	-13.00	38.57
782.88	V	41.07	-54.78	0.00	0.47	-55.25	-13.00	42.25
939.45	H	38.99	-55.21	0.00	0.51	-55.72	-13.00	42.72
939.45	V	37.85	-53.24	0.00	0.51	-53.75	-13.00	40.75
1095.68	H	50.48	-74.29	7.42	1.01	-67.88	-13.00	54.88
1095.68	V	53.27	-71.91	7.42	1.01	-65.50	-13.00	52.50
1252.20	H	50.30	-73.94	7.82	1.14	-67.26	-13.00	54.26
1252.20	V	49.57	-75.67	7.82	1.14	-68.99	-13.00	55.99
1408.73	H	62.97	-61.40	9.04	1.21	-53.57	-13.00	40.57
1408.73	V	63.68	-61.24	9.04	1.21	-53.41	-13.00	40.41
1565.25	H	55.56	-70.41	9.89	0.91	-61.43	-13.00	48.43
1565.25	V	58.16	-68.23	9.89	0.91	-59.25	-13.00	46.25

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Test Frequency: 156.875MHz								
313.75	H	65.80	-42.59	0.00	0.32	-42.91	-13.00	29.91
313.75	V	60.60	-46.00	0.00	0.32	-46.32	-13.00	33.32
470.63	H	61.89	-43.93	0.00	0.36	-44.29	-13.00	31.29
470.63	V	55.24	-47.89	0.00	0.36	-48.25	-13.00	35.25
627.50	H	47.55	-54.46	0.00	0.37	-54.83	-13.00	41.83
627.50	V	49.32	-50.01	0.00	0.37	-50.38	-13.00	37.38
784.38	H	47.52	-51.38	0.00	0.47	-51.85	-13.00	38.85
784.38	V	39.76	-56.06	0.00	0.47	-56.53	-13.00	43.53
941.25	H	37.84	-56.30	0.00	0.51	-56.81	-13.00	43.81
941.25	V	36.89	-54.15	0.00	0.51	-54.66	-13.00	41.66
1095.68	H	50.52	-74.25	7.42	1.01	-67.84	-13.00	54.84
1095.68	V	52.99	-72.19	7.42	1.01	-65.78	-13.00	52.78
1252.20	H	49.66	-74.58	7.82	1.14	-67.90	-13.00	54.90
1252.20	V	49.29	-75.95	7.82	1.14	-69.27	-13.00	56.27
1408.73	H	63.23	-61.14	9.04	1.21	-53.31	-13.00	40.31
1408.73	V	63.62	-61.30	9.04	1.21	-53.47	-13.00	40.47
1565.25	H	55.34	-70.63	9.89	0.91	-61.65	-13.00	48.65
1565.25	V	57.92	-68.47	9.89	0.91	-59.49	-13.00	46.49

Model:RS-509M

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Test Frequency: 156.05MHz								
312.10	H	79.03	-29.39	0.00	0.32	-29.71	-13.00	16.71
312.10	V	69.85	-36.79	0.00	0.32	-37.11	-13.00	24.11
468.15	H	60.12	-45.73	0.00	0.36	-46.09	-13.00	33.09
468.15	V	58.04	-45.13	0.00	0.36	-45.49	-13.00	32.49
624.20	H	55.41	-46.65	0.00	0.36	-47.01	-13.00	34.01
624.20	V	57.99	-41.42	0.00	0.36	-41.78	-13.00	28.78
780.25	H	60.26	-38.74	0.00	0.47	-39.21	-13.00	26.21
780.25	V	53.89	-42.01	0.00	0.47	-42.48	-13.00	29.48
936.30	H	54.07	-40.24	0.00	0.51	-40.75	-13.00	27.75
936.30	V	53.75	-37.43	0.00	0.51	-37.94	-13.00	24.94
Test Frequency: 156.8MHz								
313.60	H	81.12	-27.28	0.00	0.32	-27.60	-13.00	14.60
313.60	V	71.97	-34.63	0.00	0.32	-34.95	-13.00	21.95
470.40	H	60.23	-45.59	0.00	0.36	-45.95	-13.00	32.95
470.40	V	51.76	-51.38	0.00	0.36	-51.74	-13.00	38.74
627.20	H	51.78	-50.23	0.00	0.37	-50.60	-13.00	37.60
627.20	V	51.22	-48.12	0.00	0.37	-48.49	-13.00	35.49
784.00	H	57.12	-41.79	0.00	0.47	-42.26	-13.00	29.26
784.00	V	43.57	-52.25	0.00	0.47	-52.72	-13.00	39.72
940.80	H	51.84	-42.32	0.00	0.51	-42.83	-13.00	29.83
940.80	V	51.24	-39.81	0.00	0.51	-40.32	-13.00	27.32
Test Frequency: 157.425MHz								
314.85	H	81.84	-26.53	0.00	0.32	-26.85	-13.00	13.85
314.85	V	70.19	-36.38	0.00	0.32	-36.70	-13.00	23.70
472.28	H	61.53	-44.26	0.00	0.36	-44.62	-13.00	31.62
472.28	V	55.65	-47.46	0.00	0.36	-47.82	-13.00	34.82
629.70	H	51.12	-50.86	0.00	0.37	-51.23	-13.00	38.23
629.70	V	55.13	-44.14	0.00	0.37	-44.51	-13.00	31.51
787.13	H	55.72	-43.12	0.00	0.48	-43.60	-13.00	30.60
787.13	V	45.96	-49.80	0.00	0.48	-50.28	-13.00	37.28
944.55	H	53.15	-40.87	0.00	0.51	-41.38	-13.00	28.38
944.55	V	52.71	-38.23	0.00	0.51	-38.74	-13.00	25.74

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
DSC B1300, Test Frequency: 156.525MHz								
313.05	H	79.18	-29.23	0.00	0.32	-29.55	-13.00	16.55
313.05	V	71.05	-35.57	0.00	0.32	-35.89	-13.00	22.89
469.58	H	60.57	-45.26	0.00	0.36	-45.62	-13.00	32.62
469.58	V	52.75	-50.40	0.00	0.36	-50.76	-13.00	37.76
626.10	H	48.14	-53.89	0.00	0.37	-54.26	-13.00	41.26
626.10	V	46.37	-52.99	0.00	0.37	-53.36	-13.00	40.36
782.63	H	44.93	-54.01	0.00	0.47	-54.48	-13.00	41.48
782.63	V	38.86	-56.99	0.00	0.47	-57.46	-13.00	44.46
939.15	H	42.07	-52.14	0.00	0.51	-52.65	-13.00	39.65
939.15	V	41.01	-50.09	0.00	0.51	-50.60	-13.00	37.60
DSC Y2100,Test Frequency: 156.525MHz								
313.05	H	79.36	-29.05	0.00	0.32	-29.37	-13.00	16.37
313.05	V	71.15	-35.47	0.00	0.32	-35.79	-13.00	22.79
469.58	H	60.75	-45.08	0.00	0.36	-45.44	-13.00	32.44
469.58	V	53.08	-50.07	0.00	0.36	-50.43	-13.00	37.43
626.10	H	48.57	-53.46	0.00	0.37	-53.83	-13.00	40.83
626.10	V	45.92	-53.44	0.00	0.37	-53.81	-13.00	40.81
782.63	H	42.28	-56.66	0.00	0.47	-57.13	-13.00	44.13
782.63	V	38.30	-57.55	0.00	0.47	-58.02	-13.00	45.02
939.15	H	42.23	-51.98	0.00	0.51	-52.49	-13.00	39.49
939.15	V	41.81	-49.29	0.00	0.51	-49.80	-13.00	36.80

Frequency (MHz)	Polar (H/V)	Receiver Reading (dBµV)	Substituted Method			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Antenna Gain (dBd/dBi)	Cable Loss (dB)			
Test Frequency: 156.375MHz								
312.75	H	79.24	-29.17	0.00	0.32	-29.49	-13.00	16.49
312.75	V	71.03	-35.60	0.00	0.32	-35.92	-13.00	22.92
469.13	H	61.55	-44.29	0.00	0.36	-44.65	-13.00	31.65
469.13	V	54.32	-48.84	0.00	0.36	-49.20	-13.00	36.20
625.50	H	48.66	-53.38	0.00	0.37	-53.75	-13.00	40.75
625.50	V	46.32	-53.06	0.00	0.37	-53.43	-13.00	40.43
781.88	H	45.46	-53.50	0.00	0.47	-53.97	-13.00	40.97
781.88	V	38.49	-57.38	0.00	0.47	-57.85	-13.00	44.85
938.25	H	42.86	-51.39	0.00	0.51	-51.90	-13.00	38.90
938.25	V	42.47	-48.65	0.00	0.51	-49.16	-13.00	36.16
Test Frequency: 156.575MHz								
313.15	H	79.42	-28.99	0.00	0.32	-29.31	-13.00	16.31
313.15	V	71.37	-35.24	0.00	0.32	-35.56	-13.00	22.56
469.73	H	61.06	-44.77	0.00	0.36	-45.13	-13.00	32.13
469.73	V	54.99	-48.16	0.00	0.36	-48.52	-13.00	35.52
626.30	H	47.20	-54.83	0.00	0.37	-55.20	-13.00	42.20
626.30	V	45.78	-53.58	0.00	0.37	-53.95	-13.00	40.95
782.88	H	43.88	-55.06	0.00	0.47	-55.53	-13.00	42.53
782.88	V	37.64	-58.21	0.00	0.47	-58.68	-13.00	45.68
939.45	H	41.34	-52.86	0.00	0.51	-53.37	-13.00	40.37
939.45	V	41.61	-49.48	0.00	0.51	-49.99	-13.00	36.99
Test Frequency: 156.875MHz								
313.75	H	79.78	-28.61	0.00	0.32	-28.93	-13.00	15.93
313.75	V	71.68	-34.92	0.00	0.32	-35.24	-13.00	22.24
470.63	H	60.73	-45.09	0.00	0.36	-45.45	-13.00	32.45
470.63	V	54.85	-48.28	0.00	0.36	-48.64	-13.00	35.64
627.50	H	45.95	-56.06	0.00	0.37	-56.43	-13.00	43.43
627.50	V	43.27	-56.06	0.00	0.37	-56.43	-13.00	43.43
784.38	H	42.80	-56.10	0.00	0.47	-56.57	-13.00	43.57
784.38	V	37.07	-58.75	0.00	0.47	-59.22	-13.00	46.22
941.25	H	40.80	-53.34	0.00	0.51	-53.85	-13.00	40.85
941.25	V	41.16	-49.88	0.00	0.51	-50.39	-13.00	37.39

Note 1:The unit of antenna gain is dBd for frequency below 1GHz and is dBi for frequency above 1GHz.
Note 2:
Absolute Level = Substituted Level - Cable loss + Antenna Gain
Margin = Limit- Absolute Level

EXHIBIT A-EUT PHOTOGRAPHS

Please refer to the attachment 2402Z38638E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2402Z38638E-RF-INP EUT INTERNAL PHOTOGRAPHS

EXHIBIT B-TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2402Z38638E-RF-00A-TSP TEST SETUP PHOTOGRAPHS.

EXHIBIT C - RF EXPOSURE EVALUATION

Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm^2)**	**Averaging Time (minutes)**
0.3- 3.0	614	1.63	(100)*	6
3.0 - 30	1842/f	4.89/f	($900/f^2$)*	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	f/300	6
1500-100,000	/	/	5	6

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Procedure

Prediction of power density at the distance of the applicable MPE limit
$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm^2);
P = power input to the antenna (in appropriate units, e.g., mW);
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

Calculated Result

Operation Mode	**Frequency (MHz)**	**Antenna Gain**		**Conducted output power including Tune-up Tolerance▲**		**Evaluation Distance (cm)**	**Power Density (mW/cm^2)**	**MPE Limit (mW/cm^2)**
		(dBi)	**(numeric)**	**(dBm)**	**(mW)**			
VHF	156.05-157.425	0	1.00	43.8	23988.33	35.00	0.781	1.0

The Conducted output power including Tune-up Tolerance provided by manufacturer.
VHF maximum operation duty cycle is 50%.

Result: The device meet FCC MPE at 35 cm distance.

******* END OF REPORT *******