

Spurious Emissions (Tx Conducted)

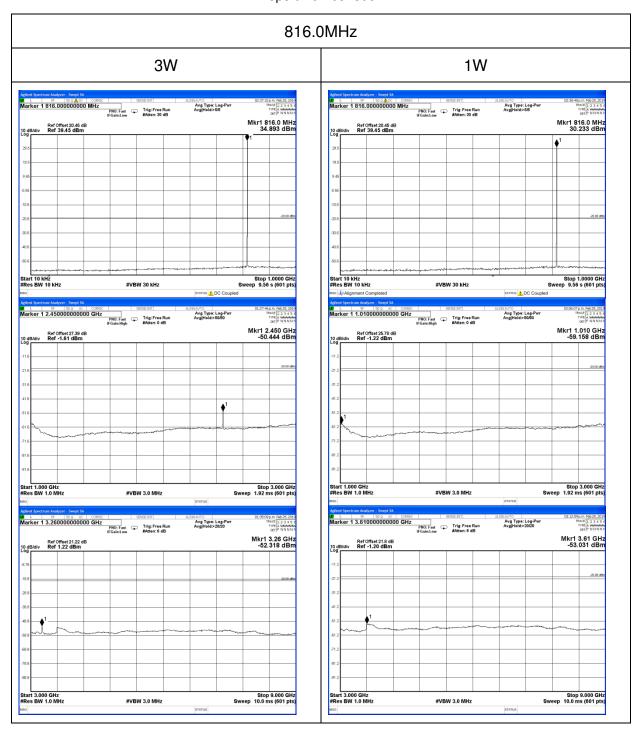
SPECIFICATION: FCC CFR 2.1051 RSS-119 5.8

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

12.5 kHz Channel Spacing	816.0 MHz @ 1 W	Emission Mask D
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Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
Measurement Uncertainty:	≤12.75 GHz ± 3.0 dB	
No emissions were detected at a level greater than 20 dB below the limit.		

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IC: 737A-TPDK5C Issue Date: 4 March 2019



Spurious Emissions (Tx Conducted)

SPECIFICATION: FCC CFR 2.1051 RSS-119 5.8

12.5 kHz Channel Spacing	852.0 MHz @ 3 W	Emission Mask D
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Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

12.5 kHz Channel Spacing	852.0 MHz @ 1 W	Emission Mask D
Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
Measurement Uncertainty: ≤12.75 GHz ± 3.0 dB		
No emissions were detected at a level greater than 20 dB below the limit.		



Spurious Emissions (Tx Conducted)

SPECIFICATION: FCC CFR 2.1051 RSS-119 5.8

12.5 kHz Channel Spacing 869.0 MHz @ 3 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~

12.5 kHz Channel Spacing	869.0 MHz @ 1 W	Emission Mask D
Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
Measurement Uncertainty: ≤12.75 GHz ± 3.0 dB		
No emissions were detected at a level greater than 20 dB below the limit.		



Spurious Emissions (Tx Conducted)

SPECIFICATION: FCC CFR 2.1051 RSS-119 5.8

LIMITS: FCC 47 CFR 90.210 RSS-119 5.8

Carrier Output Power	Emission Mask D 12.5 kHz Channel Spacing 50 + 10 Log ₁₀ (Pw _{atts})	
3 W	-20 dBm	-55 dBc
1 W	-20 dBm	-50 dBc

TRANSMITTER SPURIOUS EMISSIONS (RADIATED)

SPECIFICATION: FCC 47 CFR 2.1053

GUIDE: TIA/EIA-603D 2.2.12

MEASUREMENT PROCEDURE:

Initial Scan:

- 1. The EUT is placed in the S-Line TEM cell and emissions are measured from 30 MHz to 800 MHz. Any emission within 20 dB of the limit is then re-tested on the OATS.
- 2. The EUT is placed in the reverberation chamber and emissions are measured from 800 MHz to the upper frequency required. Any emission within 20 dB of the limit is then re-tested on the OATS.
- 3. The harmonics emissions up to the 6th harmonic of the fundamental frequency are measured on the OATS

OATS Measurement:

- 1. The EUT is placed on a wooden turntable at a distance of three metres from the test antenna. The output terminal is connected to an RF dummy load.
- 2. The test antenna is raised from 1 m to 4 m to obtain a maximum reading; the turntable is then rotated through 360° to obtain the maximum response of each spurious emission. Valid emissions are determined by switching the EUT on and off.
- 3. The EUT is then replaced by a signal generator and substitution antenna to make measurements by the substitution method.

MEASUREMENT RESULTS:

See the tables on the following pages

LIMIT CLAUSE: FCC 47 CFR 90.210

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Spurious Emissions (Tx Radiated) - Continued

SPECIFICATION: FCC CFR 2.1053

12.5 kHz Channel Spacing	762.1 MHz @ 3 W	Emission Mask D
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Emission Frequency (MHz)	Level (dBm)	Level (dBc)
1524.2	-28.0	-62.8
2286.3	-35.3	-70.1

12.5 kHz Channel Spacing 762.1 MHz @ 1 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
1524.2	-31.9	-61.9
2286.3	-39.4	-69.4
Measurement Uncertainty	± 4.6 dB	
No other emissions were detected at a level greater than 20 dB below the limit.		

12.5 kHz Channel Spacing 774.9 MHz @ 3 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
1549.8	-32.5	-67.3
2324.7	-34.8	-69.6

12.5 kHz Channel Spacing 774.9 MHz @ 1 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
1549.8	-34.5	-64.5
2324.7	-38.5	-68.5
Measurement Uncertainty	± 4.6 dB	
No other emissions were detected at a level greater than 20 dB below the limit.		

12.5 kHz Channel Spacing 788.1 MHz @ 3 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
1576.2	-37.9	-72.7
2364.3	-35.7	-70.5

12.5 kHz Channel Spacing 788.1 MHz @ 1 W Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
1576.2	-39.0	-69.0
2364.3	-39.0	-69.0
Measurement Uncertainty ± 4.6 dB		
No other emissions were detected at a level greater than 20 dB below the limit.		

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Spurious Emissions (Tx Radiated) - Continued

12.5 kHz Channel Spacing	804.9 MHz @ 3 W	Emission Mask D
Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
12.5 kHz Channel Spacing	804.9 MHz @ 1 W	Emission Mask D
Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
Measurement Uncertainty	± 4.6	6 dB
No emissions were	detected at a level greater than 20	dB below the limit.
12.5 kHz Channel Spacing	806.1 MHz @ 3 W	Emission Mask D
Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
12.5 kHz Channel Spacing	806.1 MHz @ 1 W	Emission Mask D
Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
Measurement Uncertainty	± 4.6 dB	
No emissions were	re detected at a level greater than 20 dB below the limit.	
12.5 kHz Channel Spacing	816.0 MHz @ 3 W	Emission Mask D
Emission Frequency (MHz)	Level (dBm)	Level (dBc)
2448.0	-38.0	-72.7
12.5 kHz Channel Spacing	816.0 MHz @ 1 W	Emission Mask D
Emission Frequency (MHz)	Level (dBm)	Level (dBc)
1632	-38.7	-68.7
Measurement Uncertainty	urement Uncertainty ± 4.6 dB	
No other emissions were detected at a level greater than 20 dB below the limit.		

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Spurious Emissions (Tx Radiated) - Continued

12.5 kHz Channel Spacing

852.0 MHz @ 3 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
1704.0	-39.3	-74.1
2556.0	-26.0	-60.7

12.5 kHz Channel Spacing

852.0 MHz @ 1 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
~	~	~
Measurement Uncertainty	± 4.6 dB	
No other emissions were detected at a level greater than 20 dB below the limit.		

12.5 kHz Channel Spacing

869.0 MHz @ 3 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
2607.0	-30.2	-65.0

12.5 kHz Channel Spacing

869.0 MHz @ 1 W

Emission Mask D

Emission Frequency (MHz)	Level (dBm)	Level (dBc)
2607.0	-37.1	-67.1
Measurement Uncertainty	± 4.6 dB	
No other emissions were detected at a level greater than 20 dB below the limit.		

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Spurious Emissions (Tx Radiated) - Continued

LIMITS: FCC CFR 2.1053

Carrier Output Power		n Mask D Innel Spacing Ig ₁₀ (Pw _{atts})
3 W	-20 dBm	-55 dBc
1 W	-20 dBm	-50 dBc

Open Area Test Site Results:

12.5 kHz Channel Spacing

816.0 MHz @ 3 W

Emission Mask D

Harmonics Emission Frequency (MHz)	Level (dBm)	Level (dBc)
1632.0	-44.6	-79.4
2448.0	-38.0	-72.7
3264.0	-53.8	-88.5
4080.0	-61.9	-96.7
4896.0	-61.2	-96.0
5712.0	-43.7	-78.5
Measurement Uncertainty	± 4.6 dB	

Sample Calculation	Measurement						
	Reference		Substi	Res	ult		
Emission Frequency (MHz)	Reference Level (dBm)	Sig-gen Level	Cable and Attenuator Gain	Antenna Gain (dBd)	Path and Boresight corrections	dBm	nW
2448.0	-82.33	-22.05	-23.55	7.69	-0.05	-37.96	159.86
		Α	В	С	D	E	=

Result (E) = A+B+C+D

Photo: OATS Setup



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TRANSMITTER RADIATED EMISSIONS IN THE GNSS BAND

SPECIFICATION: FCC CFR 90.543

GUIDE: TIA/EIA-603D 2.2.12

MEASUREMENT PROCEDURE:

- 1. Refer Annex A for equipment set up.
- 2. Spurious emissions were measured in the GNSS band. (1559 1610 MHz)
- 3. The EUT was placed on a wooden turntable at a distance of three metres from the test antenna.
- 4. The test antenna was raised from 1m to 4m to obtain a maximum reading; the turntable was then rotated through 360° to obtain the maximum response of each spurious emission.
- 5. Valid emissions were determined by switching the EUT on and off.
- 6. The EUT was replaced by a signal generator and substitution antenna to make measurements by the substitution method.
- 7. The test was performed with two different representative antennae connected to the EUT, at low and high output power settings.

788.1 MHz 3 W

Frequency	Antenna fitted	Antenna Polarity	Level dBW / MHz EIRP
1576.2 MHz	½ wave	Vertical	-84.11
1370.2 WITZ	72 wave	Horizontal	-80.21
1576.2 MHz	½ wave	Vertical	-76.51
1376.2 WHZ	74 wave	Horizontal	-78.31

788.1 MHz 1 W

Frequency	Antenna fitted	Antenna Polarity	Level dBW / MHz EIRP
1576.2 MHz	½ wave	Vertical	-77.11
1370.2 WITZ	72 wave	Horizontal	-75.01
1576.2 MHz	½ wave	Vertical	-85.61
13/0.2 IVID2	74 wave	Horizontal	-85.81

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Transmitter Radiated Emissions in the GNSS Band - Continued

804.9 MHz 3 W

Frequency	Antenna fitted Antenna Polarity		Level dBW / MHz EIRP
1609.8 MHz	½ wave	Vertical	-73.15
1609.8 MH2	72 wave	Horizontal	-75.95
1609.8 MHz	1/, wove	Vertical	-77.55
1609.6 WIHZ	1/4 wave	Horizontal	-84.15

804.9 MHz 1 W

10 10 WHZ							
Frequency	Antenna fitted	Antenna Polarity	Level dBW / MHz EIRP				
1609.8 MHz	½ wave	Vertical	-74.35				
1609.6 WIHZ	72 wave	Horizontal	-74.25				
1600 9 MHz	1/, wove	Vertical	-78.15				
1609.8 MHz	¹ / ₄ wave	Horizontal	-84.55				

LIMIT CLAUSE FCC 47 CFR 90.543 (f)	-70 dBW / MHz EIRP
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(f) For operations in the 763-775 MHz and 793-805 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. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

TRANSMITTER CONDUCTED EMISSIONS IN THE GNSS BAND

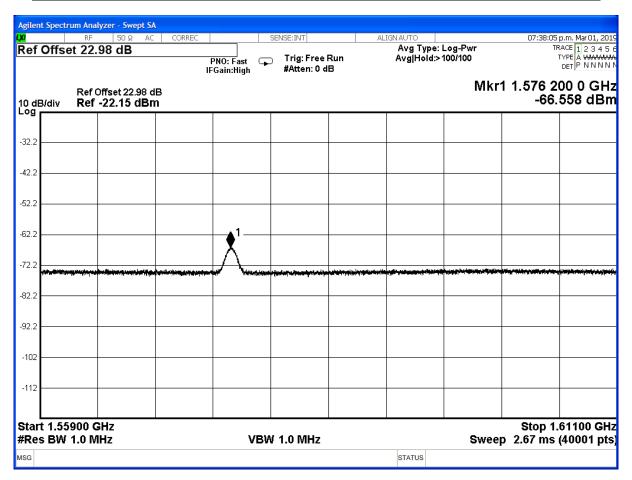
SPECIFICATION: RSS-119 5.8

MEASUREMENT PROCEDURE:

- 1. Refer Annex A for equipment set up.
- 2. Spurious emissions were measured in the GNSS band. (1559 1610 MHz)
- 3. The EUT was connected via an attenuator to a spectrum analyser.
- 4. Allowance was made for a theoretical dipole with a gain of 2.15dBm isotropic.
- 5. The emission at the frequency of the second harmonic was measured.

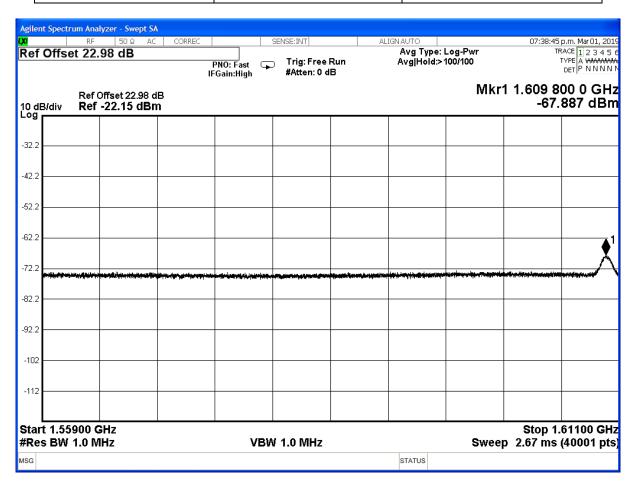
788.1 MHz 3 W

Frequency	Level dBm / MHz EIRP	Level dBW / MHz EIRP
1576.2 MHz	-66.56	-96.56



Transmitter Conducted Emissions in the GNSS Band - Continued

804.9 MHz 3 W						
	Frequency	Level dBm / MHz EIRP	Level dBW / MHz EIRP			
	1609.8 MHz	-67.89	-97.89			



LIMIT CLAUSE RSS-119 5.8.9.2	-70 dBW / MHz EIRP
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TRANSMITTER FREQUENCY STABILITY - TEMPERATURE

SPECIFICATION: FCC 47 CFR 2.1055 (a) (1) RSS-119 5.3

GUIDE: TIA/EIA-603D 2.2.2

MEASUREMENT PROCEDURE:

1. Refer Annex A for equipment set up.

- 2. The EUT was tested for frequency error from -30° C to +50° C in 10° C increments
- 3. The frequency error was recorded in parts per million (ppm).

MEASUREMENT RESULTS:

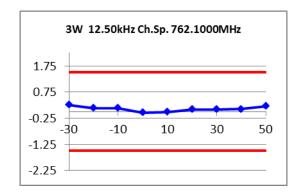
See the plots on the following pages for 12.5 kHz channel spacing.

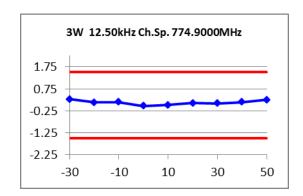
	Error (ppm)							
Temperature (°C)	762.1 MHz	774.9 MHz	788.1 MHz	804.9 MHz	806.1 MHz	816.0 MHz	852.0 MHz	869.0 MHz
-30	0.26	0.27	0.27	0.24	0.20	0.21	0.19	0.15
-20	0.14	0.13	0.16	0.16	0.16	0.18	0.18	0.16
-10	0.13	0.14	0.11	0.07	0.06	0.04	0.04	0.00
0	-0.04	-0.03	-0.02	-0.02	-0.01	0.01	0.02	0.03
10	-0.01	0.02	0.05	0.06	0.07	0.08	0.09	0.09
20	0.08	0.10	0.13	0.10	0.11	0.11	0.10	0.10
30	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.11
40	0.10	0.14	0.16	0.17	0.19	0.22	0.22	0.24
50	0.21	0.24	0.29	0.30	0.32	0.34	0.35	0.33
Measurement Uncertainty					±	7 x 10 ⁻⁸		

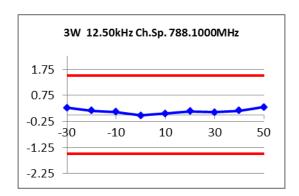
LIMIT: FCC 47 CFR 90.213 RSS-119 5.3

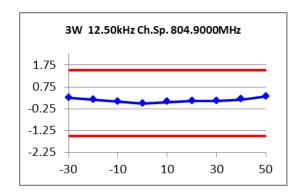
Channel Spacing (kHz)	Frequency Error (ppm)
12.5	1.5

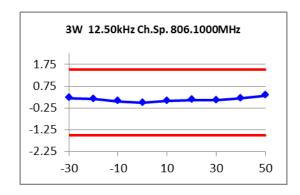
Transmitter Frequency Stability - Temperature

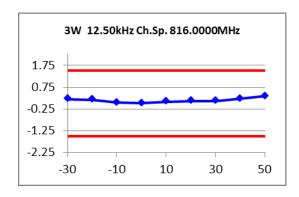


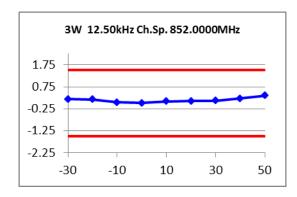


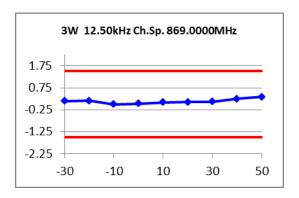












TRANSMITTER FREQUENCY STABILITY - VOLTAGE

SPECIFICATION: FCC 47 CFR 2.1055 (d) (1) RSS-119 5.3

GUIDE: TIA/EIA-603D 2.2.2

MEASUREMENT PROCEDURE:

- 1. Refer Annex A for equipment set up.
- 2. The EUT was tested for frequency error at an input voltage to the radio of nominal battery voltage and battery end point .
- 3. The frequency error was recorded in parts per million (ppm).

MEASUREMENT RESULTS:

	FREQUENCY ERRO	R (ppm) for 12.5 kHz
	7.5 V _{DC}	6.375 V _{DC}
762.1 MHz	-0.03	-0.02
774.9 MHz	-0.05	-0.05
788.1 MHz	0.05	0.05
804.9 MHz	0.03	0.03
806.1 MHz	0.00	0.01
816.0 MHz	0.05	0.07
852.0 MHz	0.05	0.07
869.0 MHz	0.04	0.04
Measuremen	± 7 x 10 ⁻⁸	

LIMIT CLAUSES:	FCC 47 CFR 9	90.213 RSS-119 5.3	
Channel Spacing	g (kHz)	Frequency Error (ppm)	
12.5		1.5	

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RECEIVER SPURIOUS EMISSIONS (CONDUCTED)

SPECIFICATION: RSS-119 5.11

GUIDE: TIA/EIA-603D 2.1.2

MEASUREMENT PROCEDURE:

- 1. Refer Annex A for Equipment set up diagram.
- 2. The frequency range examined was from 30 MHz to 3 times highest tunable frequency.
- 3. Spurious emissions which were attenuated more than 20 dB below the limit were not recorded.
- 4. Spurious emissions which were attenuated more than 20 dB below the limit were not recorded.

769.1 MHz Receive/762.1 MHz Transmit standby					
Emission Frequency (MHz) Level (nW) Level (dBm)					
814.2	0.04 -73.6				
Measurement Uncertainty ≤12.75 GHz ± 3.0 dB					
No other emissions were detected within 20 dB of Limit.					

769.1 MHz Receive/774.9 MHz Transmit standby					
Emission Frequency (MHz) Level (nW) Level (dBm)					
814.2	0.04 -73.8				
Measurement Uncertainty ≤12.75 GHz ± 3.0 dB					
No other emissions were detected within 20 dB of Limit.					

769.1 MHz Receive/788.1 MHz Transmit standby					
Emission Frequency (MHz) Level (nW) Level (dBm)					
814.2	0.04 -74.0				
Measurement Uncertainty ≤12.75 GHz ± 3.0 dB					
No other emissions were detected within 20 dB of Limit.					

852.5 MHz Receive/804.9 MHz Transmit standby					
Emission Frequency (MHz) Level (nW) Level (dBm)					
807.4	0.03 -75.2				
Measurement Uncertainty ≤12.75 GHz ± 3.0 dB					
No other emissions were detected within 20 dB of Limit.					

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Receiver Spurious Emissions (Conducted) - Continued

852.5 MHz Receive/806.1 MHz Transmit standby					
Emission Frequency (MHz) Level (nW) Level (dBm)					
807.4	0.03 -75.2				
Measurement Uncertainty ≤12.75 GHz ± 3.0 dB					
No other emissions were detected within 20 dB of Limit.					

852.5 MHz Receive/816.0 MHz Transmit standby					
Emission Frequency (MHz) Level (nW) Level (dBm)					
807.4	0.03 -75.6				
Measurement Uncertainty ≤12.75 GHz ± 3.0 dB					
No other emissions were detected within 20 dB of Limit.					

852.5 MHz Receive/852.0 MHz Transmit standby					
Emission Frequency (MHz) Level (nW) Level (dBm)					
807.4	0.03 -75.0				
Measurement Uncertainty ≤12.75 GHz ± 3.0 dB					
No other emissions were detected within 20 dB of Limit.					

868.9 MHz Receive/869.0 MHz Transmit standby					
Emission Frequency (MHz) Level (nW) Level (dBm)					
823.8	0.02 -76.4				
Measurement Uncertainty ≤12.75 GHz ± 3.0 dB					
No other emissions were detected within 20 dB of Limit.					

LIMIT CLAUSE: RSS-Gen 6(b)

LIMIT	30 → 1000 MHz	2 nW	- 57 dBm
LIIVII I	> 1000 MHz	5 nW	- 53 dBm

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TEST EQUIPMENT LIST

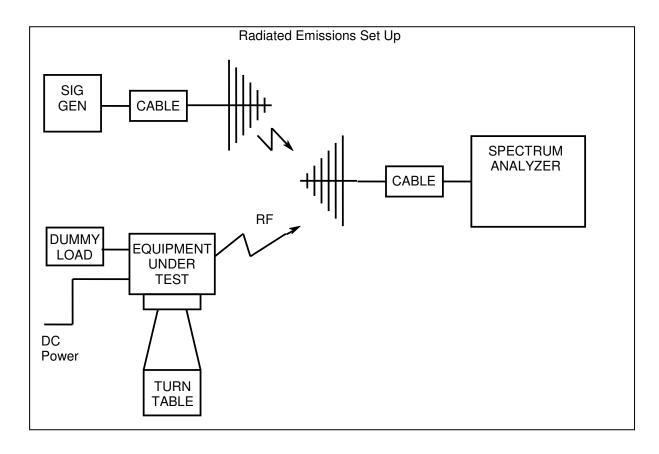
Equipment Type	Information	Manufacture r	Model No	Serial No#	Tait ID	Cal Due
Antenna	18GHz DRG	Emco	DRG3115	2084	E3076	
Antenna	18GHz DRG	Emco	DRG3115	9512-4638	E3560	15-May-20
Antenna	Reverb - 1-18GHz DRG	Schwarzbeck	BBHA 9120 D	9120D-885	E4857	
Antenna	Reverb - 1-18GHz DRG	Schwarzbeck	BBHA 9120 D	9120D-884	E4858	
Audio Analyser	TREVA1	Hewlett Packard	HP8903A	2437A04625	E4986	4-Oct-19
Coax Cable	OATS Turntable Cable 1	Intelcom	RG214	OATS1	E4621	15-Nov-19
Coax Cable	OATS Tower Cable	Intelcom	RG214	OATS2	E4622	14-Nov-19
Coax Cable	2m Black	Suhner	RG214HF/Nm/ Nm/2000	TeltestBlack2	E4623	17-Oct-19
Coax Cable	2m Black	Suhner	RG214HF/Nm/ Nm/2000	TeltestBlack3	E4624	17-Oct-19
Coax Cable	Reverb - 4.5m Multiflex 141	TeltestBlue6	MF 141	TeltestBlue6	E4843	18-Oct-19
Coax Cable	Reverb - 2m Multiflex 141	TeltestBlue5	MF 141	TeltestBlue5	E4844	18-Oct-19
Coax Cable	Reverb - 2m Multiflex 141	TeltestBlue4	MF 141	TeltestBlue4	E4845	18-Oct-19
Coax Cable	Reverb - 1m Multiflex 141	TeltestBlue3	MF 141	TeltestBlue3	E4846	18-Oct-19
Coax Cable	Reverb - 1m Multiflex 141	TeltestBlue2	MF 141	TeltestBlue2	E4847	18-Oct-19
Coax Cable	Reverb - 1m Multiflex 141	TeltestBlue1	MF 141	TeltestBlue1	E4848	18-Oct-19
Coax Cable	OATS Turntable Cable 2	Intelcom	RG215	OATS3	E4995	14-Nov-19
Coax Cable	2.5m Blue	Suhner	Sucoflex 104A	33449/4PEA	E4997	19-Oct-19
Coax Cable	2m Black	Suhner	RG214HF/Nm/ Nm/2000	TeltestBlack7	E5004	17-Oct-19
Coax Cable	3m Blue	Suhner	Sucoflex 126EA	503429/126EA	E5015	19-Oct-19
Environ. Chamber	Upright	Contherm	5400 RHSLT.M	1416	E4051	7-Aug-23
Environ. Chamber	Upright	Contherm	5400 RHSLT.M	1416	E4051	23-Apr-19
Filter High Pass/ Notch	550 to 885MHz	Tait		N/A	E3785	25-Sep-19
Modulation Analyser	TREVA1	Hewlett Packard	HP8901B (Opt 002)	2441A00393	E3073	4-Oct-19
Multimeter		Fluke	77	35069359	E3237	25-Oct-19
OATS	Controller	Electrometric s	EM-4700	119	E4445	
OATS	Turntable	Electrometric s	EM-4704A	105	E4446	
OATS	Antenna Tower	Electrometric s	EM-4720-2	112	E4447	
OATS	FCC Listing Registration			837095		8-May-19
Power Meter	TREVA1 Power Head for HP8901	Hewlett Packard	HP11722A	3111A05573	E7054	28-Sep-19
Power Supply	TREVA1	Agilent	HP6032A	MY41000319	E4045	24-Sep-20
RF Amplifier	+21.7 dB 1GHz	Tait	ZFL-1000LN	E3660	E3360	17-Apr-19
RF Amplifier	0.8 - 2 GHz	Ophir	5803012A	1006	E4448	
RF Amplifier	Pre-amplifier	Agilent	87405C	MY47010688	E4941	2-Oct-19
RF Attenuator	30dB 250W	Weinschel	45-30-34	JW663	E3386	17-Oct-19
RF Attenuator	10dB 50W	Weinschel	24-10-34	AZ0401	E3388	17-Oct-19
RF Attenuator	20dB 50W	Weinschel	24-20-44	AW1266	E3562	17-Oct-19

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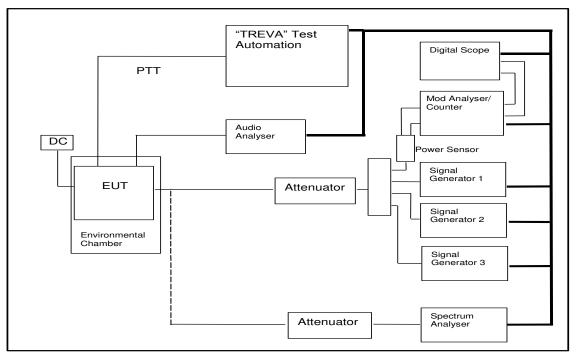
RF Attenuator	20dB 25W	Weinschel	33-20-33	BD5871	E3673	18-Oct-19
RF Attenuator	10dB 50W	Weinschel	24-10-34	BC3293	E4364	17-Oct-19
RF Attenuator	TREVA1 3dB	Weinschel	Model 1	BL9958	E4081	17-Oct-19
RF Attenuator	TREVA 1 20dB 150W	Weinschel	40-20-23	MF817	E4082	17-Oct-19
RF Attenuator	3dB 0.5W	Weinschel	Model 3	CH6863	E5013	17-Oct-19
RF Chamber	S-LINE TEM CELL	Rohde & Schwarz	1089.9296.02	338232/003	E3636	12-Sep-20
RF Chamber	Reverb - Stirrer controller for reverb chamber	Teseq	Stirrer Controller	29765.1	E4854	
RF Chamber	Reverb - 0.5 - 18GHz Reverberation Chamber	Teseq	RVC XS	29765	E4855	
RF Combiner	TREVA1	Minicircuits	ZFSC-4-1	-	E4083	
RF Load	50W	Weinschel	F1426	BF0487	E3675	18-Oct-19
Signal Generator	Analog 4GHz	Agilent	E4422B	GB40050320	E3788	27-Sep-19
Signal Generator	Digital 4GHz	Agilent	E4437B	US39260389	E4764	30-Sep-19
Signal Generator	TREVA1 Analog 3.2GHz	Agilent	E8663D	MY50420224	E4908	2-Oct-20
Spectrum Analyser	26.5GHz	Agilent	PXA N9030A	MY49432161	E4907	27-Oct-20
Temp & Humidity datalogger		Hobo	U21-011	10134276	E4981	22-Apr-19
TREVA 1		Teltest	-	1	-	2-May-19
Testware	Frequency Vs Temperature		April 2018	-	-	
Testware	Occupied Bandwidth		March 2018	-	-	
Testware	Radiated Emissions		April 2018	-	-	
Testware	Reverb Emissions		June 2018	-	-	
Testware	Sideband Spectrum		February 2017	-	-	
Testware	S-Line Radiated Emissions		April 2018	-	-	
Testware	TREVA		7 February 2019	-	-	

^{*} NOTE: Items without calibration dates are calibrated immediately before use, or set using calibrated instruments.

ANNEX A - TEST SETUP DETAILS



All other testing is performed using the **T**eltest **R**adio **EVA**luation system (TREVA), which is configured as shown below. The Spectrum Analyser is connected to the EUT via the attenuator network for Conducted Emissions testing, and Occupied Bandwidth.



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