

RF Exposure Compliance Requirement

Test Requirement: FCC part 2.1091; RSS-102
 Limit: FCC part 1.1310; RSS-102 Clause 4-Table4.4

Results: PASS

Systems operation under the provision of this section shall be operated in a manner that ensures the public is not exposed to radio frequency energy levels in excess of the Commission's guideline,

The EUT is considered as a mobile device according to OET Bulletin 65, Edition 01-01, therefore distance to human body of min.

Frequency Band:	156.050MHz-157.425MHz
Device Category:	<input type="checkbox"/> Portable (< 20cm separation) <input checked="" type="checkbox"/> Fixed (>20cm separation) <input type="checkbox"/> Others :
Exposure Classification:	<input type="checkbox"/> Occupational/ Controlled exposure <input checked="" type="checkbox"/> General Population / Uncontrolled exposure
Max. Output Power	43.74dBm
Antenna Gain	0dBi
Evaluation Applied:	<input checked="" type="checkbox"/> MPE Evaluation <input type="checkbox"/> SAR Evaluation

For FCC:
 MPE calculation:

The radiated (ERP) =23659mW

The power density at X cm from the antenna: $= ERP / 4\pi R^2$
 $= 0.2mW / cm^2$

Safely distance R=97.11cm

Limits for General Population/Uncontrolled Exposure [OET Bulletin 65, Edition 01-01]:

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

For IC:
MPE calculation:

The radiated (ERP) =23659mW

The power density at X cm from the antenna: $= \text{ERP} / 4\pi R^2$
 $= 10W / \text{m}^2$

Safely distance R=0.4340m

RSS-102 RF Field Strength Limits for Controlled Use Devices (Controlled Environment)

4.4 RF Field Strength Limits for Controlled Use Devices (Controlled Environment)

Frequency Range (MHz)	Electric Field (V/m rms)	Magnetic Field (A/m rms)	Power Density (W/m ²)	Averaging Time (minutes)
0.003-1	600	4.9	-	6
1-10	600/ <i>f</i>	4.9/ <i>f</i>	-	6
10-30	60	4.9/ <i>f</i>	-	6
30-300	60	0.163	10*	6
300-1500	3.54 <i>f</i> ^{0.5}	0.0094 <i>f</i> ^{0.5}	<i>f</i> /30	6
1500-15000	137	0.364	50	6
15000-150000	137	0.364	50	616000/ <i>f</i> ^{1.2}
150000-300000	0.354 <i>f</i> ^{0.5}	9.4 x 10 ⁻⁴ <i>f</i> ^{0.5}	3.33 x 10 ⁻⁴ <i>f</i>	616000/ <i>f</i> ^{1.2}

Note: *f* is frequency in MHz.

*Power density limit is applicable at frequencies greater than 100 MHz.