

RF Exposure Compliance Requirement

Test Requirement: FCC part 2.1091; RSS-102
Limit FCC part 1.1310; RSS-102 Clause 4.2

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

MPE calculation:

The radiated (ERP) =23659mW

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

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

RSS-102 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	$600/f$	$4.9/f$	-	6
10-30	60	$4.9/f$	-	6
30-300	60	0.163	10 [*]	6
300-1500	$3.54 f^{0.5}$	$0.0094 f^{0.5}$	$f/30$	6
1500-15000	137	0.364	50	6
15000-150000	137	0.364	50	$616000/f^{1.2}$
150000-300000	$0.354 f^{0.5}$	$9.4 \times 10^{-4} f^{0.5}$	$3.33 \times 10^{-4} f$	$616000/f^{1.2}$

Note: f is frequency in MHz.

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

