Statement for RF Exposure

JOB No.	**:**	**32GE0048-HO-01**
Applicant	**:**	**FUJITSU TEN LIMITED**
Type of Equipment	**:**	**Radio Detection and Ranging Device for Vehicle**
Model No.	**:**	**FT0041A**
Test standard	**:**	**FCC Part 15 Subpart C: 2012** **Section 15.253(f)** **RSS-Gen Issue 3: 2010 +A1: January 2012** **RSS-210 Issue 8: December 2010**
Test result	**:**	**Complied**

[FCC rule]
§1.1310 Radiofrequency radiation exposure limits.
The criteria listed in table 1 shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of §2.1093 of this chapter.

Table 1—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
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
(B) Limits for General Population/Uncontrolled Exposure				
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

f = frequency in MHz
* = Plane-wave equivalent power density
Note 1 to Table 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.
Note 2 to Table 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

[IC rule]
RSS-102
§4 Exposure Limits
For the purpose of this standard, Industry Canada has adopted the SAR and RF field strength limits established in Health Canada's RF exposure guideline, Safety Code 6.

§4.2 RF Field Strength Limits for Devices Used by the General Public (Uncontrolled 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	280	2.19	-	6
1-10	$280/f$	$2.19/f$	-	6
10-30	28	$2.19/f$	-	6
30-300	28	0.073	2*	6
300-1500	$1.585f^{0.5}$	$0.0042f^{0.5}$	$f/150$	6
1500-15000	61.4	0.163	10	6
15000-150000	61.4	0.163	10	$616000/f^{1.2}$
150000-300000	$0.158\ f^{0.5}$	$4.21 \times 10^{-4} f^{0.5}$	$6.67 \times 10^{-5} f$	$616000/f^{1.2}$

Note: f is frequency in MHz.
* Power density limit is applicable at frequencies greater than 100 MHz.

[Results]

Mode	Peak EIRP		Duty Factor	Average EIRP (Peak with Duty Factor)	
	[dBm]	[mW]	[dB]	[dBm]	[mW]
In motion	31.62	1451.7	-6.44	25.18	329.5
Not in motion	25.23	333.3	-6.44	18.79	75.7

Separation Distance [cm]	FCC Power Density [mW/cm2]	FCC Limit [mW/cm2]	IC Power Density [W/m2]	IC Limit [W/m2]
20	0.066	1	0.656	10
20	0.015	1	0.151	10

Calculating formula:

Average EIRP = Peak EIRP + Duty Factor
Power Density = Average EIRP / (4 * Pi * Separation Sistance ^ 2)

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