

Statement for RF Exposure

Customer	DENSO CORPORATION
Description of EUT	Millimeter Wave Radar Sensor
Model Number of EUT	DNMWR018RAM
FCC ID	HYQDNMWR018RAM
Test standard	FCC Part 95 Subpart M
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/cm²)	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.

[Results]

<Mode 1>

Mode	Average EIRP [mW]	Separation Distance [cm]	Power Density	
			Result [mW/cm ²]	Limit [mW/cm ²]
Average Power	334.2	20	0.07	1

Calculating formula:

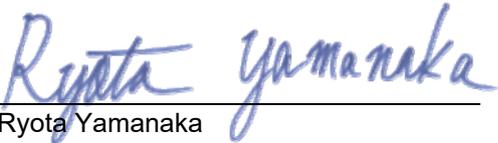
$$\text{Power Density} = \text{Average EIRP} / (4 * \text{Pi} * \text{Separation Distance} ^ 2)$$

<Mode 2>

Mode	Average EIRP [mW]	Separation Distance [cm]	Power Density	
			Result [mW/cm ²]	Limit [mW/cm ²]
Average Power	82.4	20	0.02	1

Calculating formula:

$$\text{Power Density} = \text{Average EIRP} / (4 * \text{Pi} * \text{Separation Distance} ^ 2)$$


Ryota Yamanaka

Engineer