

Produkte
Products
RF Exposure Statement: 50031017 002

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Client: New Japan Radio Co., Ltd.
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Test item: K-Band Doppler Sensor Module (Movement Sensor)

Identification: NJR4269F3V1, NJR4269F3V2

FCC Requirement

According to the FCC 2.1093, portable equipment must comply with the following applicable limit for maximum permissible exposure (MPE) specified in FCC 1.1310:

Equipment Use	Frequency Range	Power Density [mW/cm ²]	Average Time [min]
General Population / Uncontrolled Exposure	1.5 – 100GHz	1.0	30

Note: According to the FCC 2.1093 (d), this evaluation was conducted at **5cm distance**.

Measurement Result

The maximum measured transmitter power is given in the following table:

Measured E-Field Strength [dBuV/m]	Meas. Distance [m]	Evaluated Distance [cm]	Distance Correction Factor [dB]	Calculated E-Field Strength E (at 5cm)		Calculated Power Density S [mW/cm ²]
				[dBuV/m]	[V/m]	
109.5	3	5	35.6	145.1	18.0	0.086

Note:

Distance Correction Factor = $20 \times \log_{10} (3 / 0.05) = 35.6$ dB

The power density S in mW/cm² is calculated according to the next formula:

$$S = E^2 / 3770, \text{ Where } E = \text{electric field strength in V/m}$$

Conclusion

The EUT is categorized as portable device specified by the customer.

SAR evaluation is NOT required since the transmitter frequency is higher than 6GHz (i.e. 24.125GHz as nominal). Therefore, this evaluation was performed by the calculations.

As a result, Calculated Power Density S is below the FCC thresholds at 5cm distance.

For details, refer to the test report 50031017 001, especially section 5.2 Radiated measurement.