

# TAIYO YUDEN

TAIYO YUDEN CO., LTD.

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August 6, 2019

Atten: Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554  
Phone: 888-CALL-FCC (225-5322)

## **Re: RF Exposure Technical Brief for FCC**

To Whom It May Concern:

We, TAIYO YUDEN CO., LTD., hereby declare that the following device complies with MPE limits set forth in FCC Part 1, section 1.1310, Table 1 “(B) Limits for General Population/Uncontrolled Exposure.”

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Applicant: TAIYO YUDEN CO., LTD.

Product Description: CPU Embedded Wireless LAN Module

Model Name: WYSACVLAY

FCC ID: RYYWYSACVLAY

FRN Number: 0008738361

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### 1. Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
1,500-100,000	<b>1.0</b>	30

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## 2. RF Exposure Calculations

$$S = (P * G) / (4 * \pi * r^2)$$

Where

P = 28.25 mW (Maximum average output power in mW)

G = 0.51 (Numerical Antenna gain which is equal to -2.90 dBi)

r = 20.0 cm (Distance in cm)

The power density of this model can be calculated as follows:

$$S = (28.25 * 0.51) / (4 * \pi * 20^2) = \mathbf{0.00288 \text{ mW/cm}^2}$$

## 3. Conclusions

$$\mathbf{0.00288 \text{ mW/cm}^2 < 1.0 \text{ mW/cm}^2}$$

As the power density,  $0.00288 \text{ mW/cm}^2$ , is lower than the MPE limit,  $1.0 \text{ mW/cm}^2$ , we conclude that this device is satisfied with the MPE limits.

Sincerely,



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Masaki Naganuma

Deputy manager