FCC MPE TEST REPORT

Project Number	**: EA1807C-005**
Test Report Number	**: TR-W1810-017**
Type of Equipment	**: Folletto OP**
Model Name	**: FOLLETTO 2.0**
FCC ID	**: 2AQ2L-DYALP001M10**
Multiple Model Name	**: N/A**
Applicant	**: Daeyoung Information System CO.,LTD.**
Address	**: 1F, 149 Jukdong-ro, Yuseong-gu, Daejeon, 34127, South Korea**
Manufacturer	**: Daeyoung Information System CO.,LTD.**
Address	**: 1F, 149 Jukdong-ro, Yuseong-gu, Daejeon, 34127, South Korea**
Regulation	**: FCC Part 15 Subpart C Section 15.247**
Total page of Report	**: 6 Pages**
Date of Receipt	**: 2018-06-25**
Date of Issue	**: 2018-10-26**
Test Result	**: PASS**

This test report only contains the result of a single test of the sample supplied for the examination.
It is not a generally valid assessment of the features of the respective products of the mass-production.

Prepared by Song, In-young / Senior Engineer _____ (Signature) 2018-10-26 (Date)

Reviewed by Choi, Yeong-min / Technical Manager _____ (Signature) 2018-10-26 (Date)

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Release Control Record

Issue Report No.	Issued Date	Details/Revisions
TR-W1810-017	2018-10-26	Initial Release
-	-	-

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1. EUT (Equipment Under Test)

1.1 General Description

The Daeyoung Information System CO.,LTD., Model FOLLETTO 2.0 (referred to as the EUT in this report) is a Folletto OP. The EUT is a device for transferring print images and/or text to an printer through wireless communication.

1.2 RF Output Power

Operating Mode	Channel	Frequency (MHz)	Data rate (Mbps)	Output Power (dBm)
802.11b	Low	2 412	1	12.65
	Middle	2 437	1	13.05
	High	2 462	1	13.35
802.11g	Low	2 412	6	11.94
	Middle	2 437	6	14.37
	High	2 462	6	12.77
802.11n HT20	Low	2 412	6.5	10.84
	Middle	2 437	6.5	14.24
	High	2 462	6.5	11.65
802.11n HT40	Low	2 422	65	9.67
	Middle	2 437	65	12.75
	High	2 452	65	10.21

2. TEST RESULT

2.1 WLAN

According to FCC KDB 447498 D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] x [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,

where,

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

The result is rounded to two decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

For the present device, the conducted output power is 14.37 dBm at Middle Channel of 802.11g.

So, max. power of channel, including tune-up tolerance = 27.35 mW

min. test separation distance is considered 50 mm, because the device is a Tablet PC, but shall be installed into a Folletto Printer only,

f(GHz) = 2.437

(max. power of channel, including tune-up tolerance, mW)/ (min. test separation distance, mm)] X [√f(GHz)]

= (27.35 / 50) x (√2.437) = 0.85 ≤ 3.00

Hence the SAR Exclusion Threshold condition is satisfied and the SAR evaluation for general population exposure conditions is not required.

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2.2 MPE Calculation

MPE Calculation formula: $S= (P \times G) / (4 \times \pi \times R^2)$

where;

S = power density in mW/cm^2

P = output power to antenna in mW

G = gain of antenna in linear scale

$\pi \approx 3.1416$

R = distance between observation point and center of the radiator in cm

$(27.35 \times 1.56) / (4 \times 3.1416 \times 20^2) = 0.008\ 5\ mW/cm^2$

Requirement 1 mW/cm^2 satisfied. (FCC Part 1.1310 Table 1 Limits for maximum permissible exposure)