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Report No.: 2109RSU053-U3 Report Version: V02 Issue Date: 03-09-2022

RF Exposure Evaluation Declaration

FCC ID: 2A3Q6M300

Application: RecycleSmart Solutions Inc.

Product: Pello Smart Sensor

Model No.: DDW-M300

Brand Name: Recycle Smart

Test Procedure(s): KDB 447498 D01v06

Test Date: October 20 ~ November 27, 2021

Approved By:

Sunny Sun

Robin Wu

Reviewed By:

Sunny Sun

ACCREDITED

TESTING LABORATORY
CERTIFICATE #3628.01

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.





Revision History

Report No.	Version	Description	Issue Date	Note
2109RSU053-U3	Rev. 01	Initial Report	01-07-2022	Invalid
2109RSU053-U3	Rev. 02	Removed the PCS1900 Band	03-09-2022	Valid





1. GENERAL INFORMATION

1.1. Applicant

RecycleSmart Solutions Inc.

310-10851 Shellbridge Way, Richmond BC Canada V6X 2W8

1.2. Manufacturer

RecycleSmart Solutions Inc.

310-10851 Shellbridge Way, Richmond BC Canada V6X 2W8

1.3. Testing Facility

\boxtimes	Test Site - MRT Suzhou Laboratory							
	Laboratory Location (Suzhou - Wuzhong)							
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China							
	Laboratory Location (Suzhou - SIP)							
	4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China							
	Laboratory Accred	ditations						
	A2LA: 3628.01		CNAS	S: L10551				
	FCC: CN1166		ISED:	CN0001				
	VCCI:	□R-20025	□G-20034	□C-20020	□T-20020			
	VCC1.	□R-20141	□G-20134	□C-20103	□T-20104			
	Test Site - MRT Sh	nenzhen Laborator	ry					
	Laboratory Locati	on (Shenzhen)						
	1G, Building A, Jun	xiangda Building, Z	'hongshanyuan Roac	l West, Nanshan Dis	trict, Shenzhen, China			
	Laboratory Accreditations							
	A2LA: 3628.02	PLA: 3628.02 CNAS: L10551						
	FCC: CN1284 ISED: CN0105							
	Test Site - MRT Taiwan Laboratory							
	Laboratory Location (Taiwan)							
	No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)							
	Laboratory Accred	ditations						
	TAF: L3261-19072	5						
	FCC: 291082, TW3	3261	ISED:	TW3261				

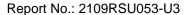


1.4. Product Information

Product Name	Pello Smart Sensor
Model No.	DDW-M300
Brand Name	Recycle Smart
Operating Temperature	-40 ~ 85 °C
Power Type	Power by Batter, 3.6Vdc
GSM Band	GSM 850
E-UTRA Band:	Band 2, 4, 5, 12, 13, 25, 26, 66
Integrated Modular Information	
Model No.	BG95-M3
Brand Name	Quectel
FCC ID	XMR201910BG95M3

Remark:

- 1. The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification;
- 2. This device is based on Quectel "BG95-M3" module, FCC ID "XMR201910BG95M3" to verify radiated spurious emission.





2. RF Exposure Evaluation

2.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm²)	Average Time (Minutes)		
(A) Limits for Occupational/ Control Exposures						
300-1500			f/300	6		
1500-100,000			5	6		
(B) Limits for General Population/ Uncontrolled Exposures						
300-1500			f/1500	6		
1500-100,000			1	30		

f= Frequency in MHz

Calculation Formula: $Pd = (Pout*G)/(4*pi*r^2)$

Where

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

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

Pd is the limit of MPE, 1mW/cm². If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.



2.2. Test Result of RF Exposure Evaluation

Product	LTE Module
Test Item	RF Exposure Evaluation

Test Mode	Frequency	Maximum	Antenna	ERP	Power Density	Limit
	Band (MHz)	Conducted	Gain	(EIRP)	at 20cm	(mW/
		Power (dBm)	(dBi)	(dBm)	(mW/cm ²)	cm²)
GSM850	824 ~ 849	25.97	3.65	27.47	0.1111	0.5493
LTE B2	1850 ~ 1910	22.00	6.00	28.00	0.1255	1.0000
LTE B4	1710 ~ 1755	22.00	5.76	27.76	0.1188	1.0000
LTE B5	824 ~ 849	22.00	3.65	23.50	0.0445	0.5493
LTE B12	699 ~ 716	22.00	4.31	24.16	0.0518	0.4660
LTE B13	777 ~ 787	22.00	4.31	24.16	0.0518	0.5180
LTE B25	1850 ~ 1915	22.00	6.00	28.00	0.1255	1.0000
LTE B26	814 ~ 849	22.00	3.65	25.65	0.0731	05427
LTE B66	1710 ~ 1780	22.00	5.76	27.76	0.1188	1.0000



Appendix	Δ _	FUT	Photo	araph
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Refer to "2109RSU053-UE" file.

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