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Report No.: 2110RSU017-U2 Report Version: V01 Issue Date: 03-14-2022

RF Exposure Evaluation Declaration

FCC ID: YIY-ASMB0876

Applicant: Industrea Mining Technology Pty Ltd

Product: MINI RF UHF MODULE SILABS

Model No.: ASMB0876

Trading Name: T/A Digital Mining Technology

FCC Rule Part(s): FCC Part 2 (Section 2.1091)

Test Date: October 27 ~ November 30, 2021

Approved By:

Sunny Sun

Approved By:

Robin Wu

Robin Wu

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.

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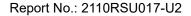
Revision History

Report No.	Version	Description	Issue Date	Note Valid	
2110RSU017-U2	Rev. 01	Initial Report	03-14-2022		



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1. General Information

1.1. Applicant

Industrea Mining Technology Pty Ltd

T/A Digital Mining Technology

3 Co-Wyn Close, Fountaindale, NSW 2258, Australia

1.2. Manufacturer

Industrea Mining Technology Pty Ltd

T/A Digital Mining Technology

3 Co-Wyn Close, Fountaindale, NSW 2258, Australia

1.3. Test Facility

	Laboratory Location (Suzhou - Wuzhong)						
	D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China						
	Laboratory Location (Suzhou - SIP)						
	4b Building, Lian	do U Valley, No.200) Xingpu Rd., Sheng	pu Town, Suzhou In	dustrial Park, China		
	Laboratory Acc	reditations					
	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 Shenzhen Laboratory						
	Laboratory Loc	ation (Shenzhen)					
	1G, Building A, J	unxiangda Building	, Zhongshanyuan Ro	oad West, Nanshan	District, Shenzhen,		
	China						
	Laboratory Accreditations						
	A2LA: 3628.02		CNAS	: L10551			
	FCC: CN1284		ISED:	CN0105			
	Test Site - MRT	Taiwan Laborator	у				
	Laboratory Loca	ation (Taiwan)					
	No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)						
	Laboratory Acc	reditations					
	TAF: L3261-1907						
	FCC: 291082, TW3261 ISED: TW3261						



1.4. Product Information

Product	MINI RF UHF MODULE SILABS	
Model No.	ASMB0876	
SRD Frequency Range	902 ~ 928MHz for FCC & IC	
	915 ~ 928MHz for Australia	
Operating Temp.	-40 ~ 75°C	
Rated Input	3.3Vdc	
Extreme Voltage	6.0 ~ 18.0Vdc	
Test Fixture Normal Voltage	12Vdc	

Remark:

The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.

1.5. Radio Specification

Frequency Range	902 ~ 928MHz
Channel Number	25
Modulation	4GFSK
Antenna Type	External antenna
Maximum Antenna Gain	8 dBi

1.6. Applied Standards

KDB 447498 D01v06





2. RF Exposure Evaluation

2.1. Test Limit

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	Electric Field	Magnetic Field	Power Density	Average Time			
(MHz)	Strength (V/m)	Strength (A/m) (mW/cm²)		(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/150		6			
1500-100,000)-100,000		1				

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.





2.1.1. Test Result

Product	MINI RF UHF MODULE SILABS
Test Item	RF Exposure Evaluation

Frequency Band	Conducted	Max. Antenna	Max.	Compliance	Power	Limit
(MHz)	Power	Gain	EIRP	Distance	Density	(mW/cm ²)
	(dBm)	(dBi)	(dBm)	(cm)	(mW/cm ²)	
902 ~ 928	20.64	8.0	28.64	20	0.15	0.60

Note: EIRP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi)

CONCLUSION:

So the compliance distance is 20cm for device installed without any other radio equipment.