

# RF Exposure Evaluation Report

Product Name: Motorized Cellular Shade with Dual Motor

Model No. : DMCS1-A, DMCS1-B

FCC ID : Q3V-DMCS1

Applicant: NIEN MADE ENTERPRISE CO., LTD.

Address: 23F.-1, No. 98, Shizheng N. 7th Rd., Xitun Dist.,

Taichung City 407, Taiwan (R.O.C.)

Date of Receipt : May 06, 2022

Date of Declaration: Aug. 12, 2022

Report No. : 2250103R-RFUSMPEV02-A

Report Version : V1.0





The test results relate only to the samples tested.

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

This report must not be used to claim product endorsement by TAF or any agency of the government.

The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.



Issued Date: Aug. 12, 2022

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Applicant	NIEN MADE ENTERPRISE CO., LTD.				
Address	23F1, No. 98, Shizheng N. 7th Rd., Xitun Dist., Taichung City 407,				
	Taiwan (R.O.C.)	Taiwan (R.O.C.)			
Manufacturer	NIEN MADE ENTERPI	IIEN MADE ENTERPRISE CO., LTD.			
Model No.	DMCS1-A, DMCS1-B	DMCS1-A, DMCS1-B			
FCC ID	Q3V-DMCS1	Q3V-DMCS1			
	NORMAN · BLINDS.COM · AMERICAN BLINDS · VENETA · ACADIA				
Trade Name	LIVING				
Applicable Standard		☐ Minimum test separation distance ≥ 20 cm			
	KDB 447498 D01 v06	For low power devices			
Test Result	Complied				
Documented By	:	Gente Chang			
	( Senior Project Specialist / Genie Chang )				
Tested By	:	San Chen			
	( Senior Engineer / Alan Chen )				
Approved By	:	Tim Lung			
	( Manager / Tim Sung )				



## **Revision History**

Report No.	Version	Description	<b>Issued Date</b>
2250103R-RFUSMPEV02-A	V1.0	Initial issue of report.	Aug. 12, 2022



### 1. GENERAL INFORMATION

## 1.1. EUT Description

Product Name	Motorized Cellular Shade with Dual Motor		
Trade Name	NORMAN · BLINDS.COM · AMERICAN BLINDS · VENETA · ACADIA LIVING		
Model No.	DMCS1-A, DMCS1-B		
FCC ID	Q3V-DMCS1		

Note: For more detailed information please refer to report No.: 2250103R-RFUSOTHV06-A



## 2. Test Facility

**USA** : FCC Registration Number: TW0033

Canada: CAB Identifier Number: TW3023 / Company Number: 26930

Site Description : Accredited by TAF

Accredited Number: 3023

Test Laboratory : DEKRA Testing and Certification Co., Ltd

Address : No. 5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan Performed Location : No. 26, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan, R.O.C.

Phone number : +886-3-275-7255 Fax number : +886-3-327-8031 Email address : info.tw@dekra.com

Website : <a href="http://www.dekra.com.tw">http://www.dekra.com.tw</a>



#### 3. RF Exposure Evaluation

### 3.1. Standard Applicable

According to KDB 447498 D01 (7.1), A minimum test separation distance  $\geq$  20 cm is required between the antenna and radiating structures of the device and nearby persons to apply mobile device exposure limits.

#### 3.2. 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	Electric Field	Magnetic Field	Power Density Average Tim	
(MHz)	Strength (V/m)	Strength (A/m)	$(mW/cm^2)$	(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

Friis Formula

Friis transmission formula:  $Pd = (Pout*G)/(4*pi*r^2)$ 

Where

 $Pd = power density in mW/cm^2$ 

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

Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in a host device is  $\leq 1.0$ 



## 3.3. Test Result of RF Exposure Evaluation

Product : Motorized Cellular Shade with Dual Motor

Test Item : RF Exposure Evaluation

Band	Frequency (MHz)	Peak E.I.R.P Power (dBuV/3m)	Peak E.I.R.P Power (dBm)	Peak E.I.R.P Power (mW)	Power Density at $R = 20 \text{ cm (mW/cm2)}$	Limit (mW/cm2)
2.4GHz	2459	102.45	7.22	5.272	0.0001	1

Note: The conducted output power is refer to report No.: 2250103R-RFUSOTHV06-A from the DEKRA.

Results	PASS