

1.0 Reference and Address			
Report Number	104527642LAX-002	Original Issued: 31-Mar-2022	Revised: None
Standard(s)	Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction [UL 61730-1:2017 Ed.1] Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing [UL 61730-2:2017 Ed.1] Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction [CSA C22.2#61730-1:2019 Ed.2] Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing [CSA C22.2#61730-2:2019 Ed.2] Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction [IEC 61730-1:2016 Ed.2] Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing [IEC 61730-2:2016 Ed.2]		
Applicant	Gcat Group Inc.	Manufacturer 1	Gcat Group Inc.
Address	41 Racine Road Toronto, ON M9W 2Z4	Address	41 Racine Road Toronto, ON M9W 2Z4
Country	Canada	Country	Canada
Contact	Danial Hadizadeh Hadi Khatibzadehazad	Contact	Danial Hadizadeh Hadi Khatibzadehazad
Phone	1 416 497 7120 1 416 875 8095	Phone	1 416 497 7120 1 416 875 8095
FAX	NA	FAX	NA
Email	daniel.h@mitrex.com hadi.k@mitrex.com	Email	daniel.h@mitrex.com hadi.k@mitrex.com

2.0 Product Description	
Product	Photovoltaic Module
Brand name	Mitrex
Description	The product covered by this report are flat-plate photovoltaic modules which convert elements of the electromagnetic spectrum to DC electrical power. The basic construction of the laminate consists of laminated assembly of individual solar cells and interconnecting ribbons encapsulated within an insulating material. This encapsulated assembly is pressed between a rigid transparent top surface, referred to as the superstrate, and an insulating back surface, referred to as the substrate. The laminated assembly is supported by a aluminum honeycomb structure. Modules are intended to be installed in accordance with the NEC and CEC.
Models	M300-GR01F612, M305-GR01H612, M235-GR01H523.
Model Similarity	<p>All models of modules are similar in construction but differ in output voltage, power, current ratings, cell number and module dimension. The generic model nomenclature is Mxxx-yyzzAbcc:</p> <p>M: Denotes Mitrex xxx: Denotes the power in Watts yy: Denotes the superstrate pattern [GR = Granite] zz: Denotes pattern number on related category A: Denotes type of cell, F for full cell and H for half cell b: Denotes number of strings (cell columns) cc: Denotes number of cells per string</p>
Ratings	See illustration 2a
Other Ratings	

3.0 Product Photographs

Photo 1 - Overall Front



01

7.0 Illustrations



Illustration 2a - Electrical Ratings

Model Name	Pmax [W]	Imax [A]	Vmax [V]	Isc [A]	Voc [V]	MSV [V]	Fuse Rating [A]
M300-GR01F612	300	7.17	41.9	7.49	47	1000	20

Model Name	Pmax [W]	Imax [A]	Vmax [V]	Isc [A]	Voc [V]	MSV [V]	Fuse Rating [A]
M305-GR01H612	305	7.19	42.4	7.49	47.1	1000	20

Model Name	Pmax [W]	Imax [A]	Vmax [V]	Isc [A]	Voc [V]	MSV [V]	Fuse Rating [A]
M235-GR01H523	235	3.42	68.8	3.54	75.1	1000	20

8.0 Test Summary			
Evaluation Period	06-30-2021 to 03-31-2022		Project No. G104527642
Sample Rec. Date	30-Jun-2021	Condition	Production
Sample ID.	MID2106161125		
Test Location	8431 Murphy Drive Middleton, WI 53562		
Test Procedure	Testing Lab		
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.			
Test Description		UL/CSA 61730-2:2017 Ed.1	
Fire Test		MST 23	

8.1 Signatures			
A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of the standards indicated in Section 1.0.			
Completed by:	Abhinav Prakash	Reviewed by:	Samantha Doshi
Title:	Sr. Project Engineer	Title:	Reviewer
Signature:		Signature:	

9.0 Correlation Page For Multiple Listings	
The following products, which are identical to those identified in this report except for model number and Listee name, are authorized to bear the ETL label under provisions of the Intertek Multiple Listing Program.	
BASIC LISTEE	Gcat Group Inc.
Address	41 Racine Road Toronto, ON M9W 2Z4
Country	Canada
Product	Photovoltaic Module

MULTIPLE LISTEE 1	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	
MULTIPLE LISTEE 1 MODELS	
BASIC LISTEE MODELS	

MULTIPLE LISTEE 2	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	
MULTIPLE LISTEE 2 MODELS	
BASIC LISTEE MODELS	

MULTIPLE LISTEE 3	None
Address	
Country	
Brand Name	
ASSOCIATED MANUFACTURER	
Address	
Country	
MULTIPLE LISTEE 3 MODELS	
BASIC LISTEE MODELS	