

# Descriptive Report and Test Results

MASTER CONTRACT: 304313 REPORT: 80186617 PROJECT: 80186617

Edition 1: April 16, 2024; Project 80186617 - Shanghai Prepared By: Sean Jiang Authorized By: Sean Jiang

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# **PRODUCTS**

CLASS 5311 10 - POWER SUPPLIES - Photovoltaic Modules and Panels CLASS 5311 90 - POWER SUPPLIES - Photovoltaic Modules and Panels - Certified to U.S. Standards

Photovoltaic modules with Fire Performance (USA) Type 29, maximum system voltage of 1500 V dc, model series: SKY xxx-BHDG24-USA (xxx=680-725 in steps of 5), Fuse rating 30A.

Note:

- 1. All electrical data are shown as relative to standard test conditions (STC) (1 000 W/m2, ( $25 \pm 2$ ) °C, AM 1.5 according to IEC 60904-3).
- 2. Manufacturer's stated tolerance is  $\pm 3\%$  for Voc, Isc and Pmax.
- 3. The operating ambient temperature of these devices may exceed 40°C at full load for all wire sizes if it is determined suitable in the field use application.

	Open Circuit Voltage at STC (V dc)	Short Circuit Current at STC (A dc)	Rated Voltage at STC (V dc)	Rated Current at STC (A dc)	Rated Maximum Power at STC (Watts)
	SKY xxx-BI	HDG24-USA (xxx=	680-725 in steps o	of 5)	•
SKY 680-BHDG24-USA	48.91	16.98	42.44	16.05	680
SKY 685-BHDG24-USA	48.97	17.06	42.63	16.09	685
SKY 690-BHDG24-USA	49.04	17.14	42.82	16.14	690
SKY 695-BHDG24-USA	49.10	17.22	43.02	16.18	695
SKY 700-BHDG24-USA	49.17	17.31	43.21	16.23	700
SKY 705-BHDG24-USA	49.24	17.39	43.40	16.27	705
SKY 710-BHDG24-USA	49.30	17.47	43.53	16.34	710
SKY 715-BHDG24-USA	50.59	17.61	42.54	16.81	715
SKY 720-BHDG24-USA	50.74	17.67	42.68	16.87	720
SKY 725-BHDG24-USA	50.88	17.73	42.83	16.93	725

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#### **APPLICABLE REQUIREMENTS**

CSA C22.2 No. 61730-1:19 Photovoltaic (PV) module safety qualification — Part 1: Requirements for construction, 2019-12.

CSA C22.2 No. 61730-2:19 Photovoltaic (PV) module safety qualification — Part 2: Requirements for testing, 2019-12.

UL 61730-1 2nd: Photovoltaic (PV) Module Safety Qualification – Part 1: Requirements for Construction, 2022-10-28.

UL 61730-2 2nd: Photovoltaic (PV) Module Safety Qualification – Part 2: Requirements for Testing, 2022-10-28, reprint 2023-10-10.

#### MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Nameplate adhesive label material approval information:

Label: Manufacturer: SEAPRI

Manufacturer: SEAPRINTING CHANGZHOU CO., LTD Type: 72826T

1. The following markings appear on the enclosure by silk-screening, permanent ink stamping, on adhesive labels that appear on the CSA List of Accepted Adhesive Nameplates, or by other permanent method:

Each PV module shall include the following clear and indelible markings:

- a) Submittor's name and/or CSA Master Contract number "304313".
- b) Model designation.
- c) Class of protection against electrical shock,
- d) Complete electrical ratings at STC:
  - Open-circuit voltage (include tolerence)
  - Maximum system voltage
  - Short-circuit current (include tolerence)
  - Maximum power (include tolerence)
  - Maximum power voltage
  - Maximum Power current
- e) Date code or date-traceable serial number;
- f) The CSA Monogram with the "C/US" indicators;

g) PV module classification: Class II, as indicated

- h) For Class II PV modules, the (IEC 60417-6042: Caution, risk of electric shock) symbol shall be applied, the caution mark:
- i) Maximum over-current protection rating.
- j)

Module Serial Number Coding System:

#### SKY-BHDG24-USAG2024120200069

- SKY: Denotes the SKYCELL
- BHDG: Denotes the Bifacial Half Cell Dual Glass
- 24: Denotes 2024 Year
- USA: Denotes Country
- G: Denotes the Manufacturer(Stands for Golden)
- 20241202: Denotes the date code
- 00069: the sequence number 00001 to 99999
- 2. All electrical data shall be shown as relative to standard test conditions (STC) (1 000 W/m2, ( $25 \pm 2$ ) °C, AM 1.5 according to IEC 60904-3).
- 3. Polarity of terminals or leads, PV connectors shall be clearly marked indicating the terminal polarity. A module or panel may be identified with one of the following marking statements:

"+" and "-" or "POS" and "NEG" or "POSITIVE" and "NEGATIVE" or "PLUS" and "MINUS

 PV connectors or wiring shall be marked in accordance to IEC 62852 with "Do not disconnect under load". Symbol or warning notice shall be imprinted or labelled close to connector.



Figure A.2 - Symbol "DO NOT DISCONNECT UNDER LOAD" (IEC 60417-6070)

- A wiring terminal or bonding location of a PV module intended to accommodate a field installed bonding conductor for equipotential bonding shall be identified with the appropriate symbol IEC 60417-5017 <sup>⊥</sup>/<sub>=</sub>. Each grounding point is identified with ground symbol located adjacent to terminal.
- 6. The panel is marked relative to the maximum electrical rating of an acceptable series fuse 30A (for protection against overcurrent).
- 7. Module Fire Performance of UL61730:2022 for USA: (Type 29)

- 8. "System Fire Class Rating: See Installation Instructions for Installation Requirements to Achieve a Specified System Fire Class Rating with this Product", this statement should be marked on the label.
- 9. Installation and Assembly Instructions:

The panel is supplied with installation instructions describing the methods of electrical and mechanical installation and the electrical ratings of the panel. When the fire rating is dependent on a specific mounting structure, specific spacings, or specific means of attachment to the roof or structure, details of the specific parameter or parameters shall be included in the instructions.

- a) The electrical installation instructions include a detailed description of the wiring method to be used in accordance with the National Electrical Code. This description includes:
  - i) The size, type, and temperature rating of the conductors to be used,
  - ii) The type of over current protection to be used,
  - iii) The minimum and maximum cable diameters when the wiring method is cable.
- b) The mechanical installation instructions for roof mounting include:
  - i) A statement indicating the minimum mechanical means to be used for securement of the module or panel to the roof,
  - ii) A statement that the assembly is to be mounted over a fire resistant roof covering rated for the application
- c) The electrical ratings include following statement or the equivalent: "The electrical characteristics are within ±3 percent of the rated values of Isc, Voc, and Pmax under standard test conditions (irradiance of 1000 W/m2, AM 1.5 spectrum, and a cell temperature of 25°C (77°F))."
- d) The recommended maximum series/ parallel module configurations shall be applied to either the module or placed into the instruction and installation manual.
- e) The installation instructions include the temperature coefficient for voltage at open-circuit, maximum power and short-circuit current.
- f) The installation instructions include a statement advising that artificially concentrated sunlight shall not be directed on the module or panel.
- g) PV modules provided with terminals for field wiring rated only for use with copper wire shall be marked, at or adjacent to the terminals, with the statement "Use copper wire only", "Cu only", or the equivalent.
- h) PV modules provided with terminals for field wiring rated only for use with a different specific wiring material shall be marked with a similar statement referring to the rated material.
- i) PV modules provided with terminals for field wiring rated for use with all types of wiring material do not need to be marked.
- j) A module employing a nonmetallic junction box having a threaded or unthreaded opening shall be marked "for use with nonmetallic conduit systems only" or the equivalent.
- k) The following or equivalent statement shall be included:
   "Under normal conditions, a photovoltaic module is likely to experience conditions that produce more current and/or voltage than reported at standard test conditions. Accordingly, the values of Isc and Voc marked on this module should be multiplied by a factor of 1.25 when determining component voltage ratings, conductor ampacities, fuse sizes, and size of controls connected to the PV output."

- 1) Refer to Section 690-8 of the National Electrical Code for an additional multiplying factor of 125 percent (80 percent derating) which may be applicable.
- m) Details for wiring in accordance with the NEC, and that the grounding method of the frame of array shall comply with the NEC, Article 250.
- n) Installation Instructions shall specify that the modules have been evaluated by CSA for a maximum positive design loading of 3600Pa (75.2 lbs/ft<sup>2</sup>) and negative design loading of 1600Pa (33.4 lbs/ft<sup>2</sup>) with safety factor 1.5.

# **ALTERATIONS**

Markings as described above are provided.

# FACTORY TESTS

#### 1. General

This section provides information on how to verify that the production PV modules continue to meet the minimum safety requirements of this standard.

#### 2. Module output power Test

The electrical output power shall be verified on the final wiring configuration on a 100% basis. Results from I-V curve measurements shall also be used to verify that the current and voltage rating falls within the specification. All production values of Isc and Voc shall be covered by the tolerances of the product qualified under IEC 61730. Possible stabilization effects shall be considered if changes of Isc and Voc are expected during operation in sunlight. This test will also verify that bypass diodes are not shorted.

#### 3. Wet insulation-resistance Test

This test verifies that the insulation properties of outer surfaces of the production PV modules meet the electrical safety requirements of this standard. For modules with a metal frame surrounding the edges of the module, either this test or the test in DVA.7 shall be performed with a sampling rate of 100%. For modules without a metal frame surrounding the edges of the module, this test shall be performed with a sampling rate of 100%.

Each module shall withstand the requirements of Clause 10.14 (MST 17).

Exception No. 1: Test voltage, test duration and water temperature of Clause 10.14 (MST 17) shall be changed for Production Line Tests as described below.

Exception No. 2: Terminal boxes and pigtail-leads or other connectors don't need to be wetted.

The test voltage VTEST is calculated by multiplying the maximum system voltage VSYS by a factor Y.

$$V_{\text{TEST}} = V_{\text{SYS}} \times Y$$

Y = 1 is used for a minimum test duration of 1 min. Y = 1.2 is used for a minimum test duration of 5 s. Ramp-up time for test voltage is chosen such that no time induced breakdown will occur. During the test no breakdown of test voltage shall occur.

The temperature range of the water is 20  $^{\circ}$  C to 30  $^{\circ}$  C. The leakage current shall be corrected to 25  $^{\circ}$  C using a demonstrated correction factor for the PV module, to be determined for each PV module type.

For PV modules with cemented joints V<sub>TEST</sub> shall be increased by a factor of 1.35.

Note: An example for  $V_{SYS} = 1500$  V for cemented joints for test duration of 5 s is  $V_{TEST} = 1500$  V  $\times 1.2 \times 1.35 = 2430$  V

# 4. Visual inspection

Visual inspection shall be performed on a 100% basis aiming to verify that clearance distances (distances of live parts to PV module edges) are within the product specification.

Special care shall be taken if cemented joints are used for insulation. PV modules utilizing cemented joints shall be inspected along all edges and areas with cemented joints on a 100% basis aimed to verifying the cemented joint spacing visual inspection criteria as defined in 10.2.3 c) are met.

#### 5. Bypass diodes Test

Verification that bypass diodes are working properly shall be performed on 100 % sampling rate.

Three alternative test methods can be applied:

a) Perform successive additional I-V measurements in conjunction with maximum power determination with one cell of each string in the interconnection circuit completely shaded. The bypass diode belonging to this string is working properly, if the characteristic bend in the I-V curve is observed.

b) A conductivity test can be performed with the PV module terminals connected in reverse polarity to a current source. The current flow and voltage drop across the PV module terminals can be used as indicator that the diodes are working properly.

c) The I-V characteristics of all diodes can be verified just before their assembly. If the bypass diodes are in the junction box this could be done through measurement at the corresponding terminals of the junction box. A precondition for the latter method is an appropriate plan to mitigate possible influence of electrostatic discharges on the diodes in production.

NOTE: Bypass diode verification procedures might be MQT 18.2 from IEC 61215-2 and IEC TS 62916.

#### 6. Continuity test of equipotential bonding

PV modules provided with a connection for equipotential bonding are subjected to a continuity test for equipotential bonding (MST 13). At a sampling rate of 1 PV module per framing station per working shift demonstrate the electrical continuity between the grounding connection and all accessible conductive partsi. Any appropriate indication device is able to be employed (current supply in conjunction with current and voltage measurement).

PV modules that have no frames or equipotential bonding locations identified shall be exempt from this requirement.

#### 7. Insulation Test

This test verifies that the insulation properties of the production PV modules meet the electrical safety requirements of this standard. For modules with a metal frame surrounding the edges of the module, either this test or the test in DVA.3 shall be performed with a sampling rate of 100%. For modules without a metal frame surrounding the edges of the module, the test in DVA.3 shall be performed with a sampling rate of 100%.

Each module (100%) shall withstand for 1 second without electrical breakdown as a routine production line test, the application of a dc test potential of  $1.2 \times (2 \times V_{SYS} + 1000V)$  where  $V_{SYS}$  is the maximum rated system voltage. The voltage shall be applied between the active circuit of the module and ithe accessible metal frame surrounding the edges of the module. The test is to be conducted when the module is complete and ready for packing, or when it is complete except for covers or other parts that may interfere with the performance of the test. The test equipment is to include a means of indicating the test voltage that is being applied to the product under test and a means of effectively indicating unacceptable performance. A leakage current of greater than 50  $\mu$ A represents a failure. Alternatively the test of DVA.3 shall be complied with.

Exception No. 1: A module with a system voltage rating of 30 V or less need not be tested.

Exception No. 2: A module with no exposed conductive parts need not be tested.

WARNING: The factory test(s) specified may present a hazard of injury to personnel and/or property and should only be performed by persons knowledgeable of such hazards and under conditions designed to minimize the possibility of injury.

# SPECIAL INSTRUCTIONS FOR FIELD SERVICES

1. Component descriptions marked with either the "(INT)" or "(INT\*)" identifiers may be substituted with other components providing the requirements specified under the notes in the "Description" are complied with.

# COMPONENT SPECIAL PICKUP

1. Component descriptions marked with the identifier "(CT)" are subject to annual pickup and Conformity Testing.

# **DESCRIPTION**

#### Notes:

- 1. Component Substitution
  - a) Critical components (those identified by mfr name, cat no), which are NOT identified with either "INT" or "INT\*" are not eligible for substitution without evaluation and report updating
  - b) The term "INT" means a "Certified" and/or "Listed" (or a "Recognized" and/or "Accepted") component may be replaced by one "Certified" and/or "Listed" by another certification organization accredited by the appropriate accreditation body or scheme requirements to the correct standard, for the same application; providing the applicable country identifiers are included and requirements in item "d" below are complied with.
  - c) The Term "(INT\*)" means a "Recognized" and/or "Accepted" component may be replaced by a component that is CSA Certified. The applicable country identifiers shall be included, the requirements in item "d" below as well as any "conditions of suitability" for the component (as recorded in this descriptive report) shall be complied with;
  - d) Components which have been substituted, must be of an equivalent rating, configuration (size, orientation, mounting) and the applicable minimum creepage and clearance distances are to be maintained from live parts to bonded metal parts and secondary parts.
  - e) Substitution of a "Certified" and/or "Listed" component with a component that is "Recognized" or "Accepted" is not permitted without evaluation and report updating.
  - f) Substitution of a "Recognized" and/or "Accepted" component by one that is not CSA Certified is not permitted without a proper evaluation as well as a report update because the Conditions of Acceptance of the original component may be different than the Conditions of Acceptance of the substitute component.

# **INTRODUCTION**

<u>Spacing</u>: All spacing between primary terminals and ground, and between other bare live parts and ground, were based on pollution degree 1, material group II, conform to Tables 3 and 4 of UL Std. 61730-1.

ModelMeasured Spacings, mmModelTopBottomLeftRightBHDG24121213.513.5

Spacings from the cells to the laminate edges were measured as follows:

<u>Dimensions</u>: All specified dimensions are approximate, based on the evaluation on pollution degree 1 the spacings can be reduced to 10.4mm (for 1500Vdc system).

<u>General</u>: The Photovoltaic (PV) Module converts power in the visible portion of the electromagnetic spectrum to DC electrical potential. 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 frame which is used for mounting the modules.

	Weight of	Tatal Number	Total Number of	Total Number	Temperatu	re Coefficien	t for cells
Model	module (Kg)		Total Number of Parallel Circuits		(% chai	nge/deg. K (C	) rise)
	module (Kg)	of Cells	Faranei Circuits	of Sumgs	Voc	Isc	Pmax
BHDG24	38.5	132	2	3	-0.223	0.030	-0.243

Circuit and cell layout:

Model Series	Numbe r of cells per module	Number of cells per diode	Number of diodes	Cell interconnection circuit	Cells Dimension (mm)
BHDG24	132	44	3		210x105

# **CONSTRUCTION**

1. Overall Dimensions:

2384×1303×35 mm (BHDG24 series)

- 2. a) Superstrate: Manufactured by FLAT GLASS GROUP CO., LTD, type "AR Coated Tempered Glass", with thickness 2.0 mm.
- 3. a) Cells: type JYC-210-18BB, made by GOLDEN SOLAR, 210 x 105 mm,  $130 \pm 13 \mu m$  thickness, Heterojunction Solar Cells, 18 busbar.
- 4. Interconnection between Cells provided as follows:
  - a. 18 bus strips in parallel, Sn43Pb43Bi14 composition solder, each 0.28 mm diameter. Manufacturer 1: Xi'an Telison New Materials Co., Ltd.
- 5. Cross Connectors (Inter-string connection):
  - a. Sn60Pb40 composition solder, each 7 or 8 x 0.35 or 0.30 mm. Manufacturer 1: Xi'an Telison New Materials Co., Ltd.
- 6. Encapsulation:
  - a) Polyolefin Elastomer/Ethylene Vinyl Acetate (POE/EVA), UL recognized (E333414), Manufacturer "Cybrid Technologies Inc.", type "Cybright T22H" thickness: 0.5 mm for cell above and cell bottom, CTI 600 (evaluated by TUV Rheinland report No.: 15043899 065).
- 7. Substrate:
  - a) Manufactured by FLAT GLASS GROUP CO., LTD, type "Tempered Glass", with mesh-grid, thickness 2.0 mm.

#### 8. Junction Box:

a. TUV Rheinland certified (No. R 50530435 0001-0005). Jiangsu Holysun Electronics Technology Co., Ltd., type S4xy series, maximum system voltage 1500Vdc, maximum current 30 A with enclosure material RTI: 110°C. (UL recognized: E508247)

- a) Connecting Cable: TUV Rheinland certified (R 50413335), type 62930 IEC 131 1 x 4.0mm<sup>2</sup>, HALOGEN FREE LOW SMOKE, manufactured by changshu JHOSIN Electronics Technology Co., Ltd., UL listed: (E496190), type PV wire, 12AWG, 90°C WET OR DRY 1000V/2000V SUN RES -40°C, 6.40±0.2mm.
- b) Connectors: TUV Rheinland certified (R 50488696), type C2xyz, manufactured by Jiangsu Holysun Electronics Technology Co., Ltd, rated 1500Vdc, 30A max with 12 AWG PV cable. (UL listed with file: E508412).
- c) Bypass Diode: three provided. Type GFT5050CT, manufactured by Jiangsu Holysun Electronics Technology Co., Ltd, rated 50 V, 50 A, Tj=200°C.
- d) Potting of Junction box material: UL recognized. Manufacturer: Hangzhou Zhijiang Silicone Chemicals Co., Ltd (E335227), Type: JS-1184A/B, White, Rating: V-0, RTI (Elec) 105 °C, thickness 3.0mm.
- e) Junction box adhesive: UL recognized. Manufacturer: Hangzhou Zhijiang Silicone Chemicals Co., Ltd (E335227), Type: JS-606, White, Rating: V-0, RTI (Elec) 105 °C, thickness 3.0mm.
- 9. Frame: Silver. Extruded anodized aluminum, type 6005-T6, 1.6 mm nominal wall thickness, composed of two end and two side pieces, 35 mm in height. The frame is either pre-crimped or assembled together with four aluminum corner brackets, overall dimensions 40 x 40 mm by press fit. See Att2 page 3~5 for detail information.
  - a) Dimensions as follows:

Model / Series	Overall Dimensions [mm]	Note
BHDG24	2384×1303×35	Framed

b) Mounting Holes:

Mounting methods as specified in Attachment 3.

Model / Series	Rail	Size [mm]	Number provided
DUDC24	Side	9 x 14 / 7 x 10	4 for each side / 2 for each side
BHDG24	End	-	-

c) Grounding Holes:

Grounding methods as specified in Attachment 3 - Installation Manual.

Model / Series	Rail	Ground hole Size (mm)	Number provided	Thickness of frame at hole position. (mm)
BHDG24	Side	-	-	-
DIID(J24	End	Ø4.2	2	1.4

Manufacturer 1: JiangYin Yuansheng Aluminium Co., Ltd.

- 10. Frame Adhesive: UL recognized. Manufacturer: Hangzhou Zhijiang Silicone Chemicals Co., Ltd (E335227), Type: JS-606, White, Rating: V-0, RTI (Elec) 105 °C, thickness 3.0mm.
- 11. Grounding:

See described in the installation manual.

Model	Parts	Size	Number provided
	Bolts	M3.5	1
	Spring washer	M3.5	2
All	Cup washer	M3.5	1
All	Flat washer	M3.5	2
	Star washer	M4	1
	Nut	M4	1

- 12. Flux: type SF105, made by Asahi Solder.
- 13. Position Tape: type HC-UV-1, made by SUZHOU FUQI QUAN ELECTRONIC TECHNOLOGY CO., LTD.

# **TESTED COMBINATION OF MATERIALS**

1. The following combinations of the Superstrates and the Encapsulations are approved.

	6(a)	-	-	-
2(a)	Х	-	-	-

2. The following combinations of the Cells and the Encapsulations are approved.

	6(a)	-	-	-
3(a)	Х	-	-	-

3. The following combinations of the Substrates and the Encapsulations are approved.

	6(a)	-	-	-
7(a)	Х	-	-	-

#### 4. The following combinations of the Substrates and the Junction Box Adhesives are approved.

	7(a)	-	-	-
JS-606	Х	-	-	-

# TEST HISTORY

Edition 1: Project 80186617

Original certificate.

The representative models of photovoltaic modules were found to comply with the following requirements of CSA-C22.2 No. 61730-2:19 & UL 61730-2:2022.

The tests were conducted at Changzhou HuaYang Inspection and Testing Technology Co., Ltd. under APT program. The Clauses are referred to CSA-C22.2 No. 61730-2:19 & UL 61730-2:2022, respectively. Detailed test results are being kept on Documentum at CSA Group.

Clause	Test name as in CSA-C22.2 No. 61730- 2:19 & UL 61730-2:2022	Models Tested	Results	Comments
10.2 / 10.2	Visual inspection MST 01	SKY 705-BHDG24-USA	Pass	
10.3 / 10.3	Performance at STC MST 02	SKY 705-BHDG24-USA	Pass	
10.4 / 10.4	Maximum power determination MST 03	SKY 705-BHDG24-USA	Pass	
10.5 / N/A	Insulation thickness test MST 04	SKY 705-BHDG24-USA	Pass	
10.6 / 10.6	Durability of markings MST 05	SKY 705-BHDG24-USA	Pass	
10.7 / 10.7	Sharp edge test MST 06	SKY 705-BHDG24-USA	Pass	
10.8 / 10.8	Bypass diode functionality test MST 07	SKY 705-BHDG24-USA	Pass	
10.9 / 10.9	Accessibility test MST 11	SKY 705-BHDG24-USA	Pass	
10.10 / 10.10	Cut susceptibility test MST 12	SKY 705-BHDG24-USA	Pass	
10.11 / 10.11	Ground continuity test MST 13 / Continuity test of equipotential bonding MST 13	SKY 705-BHDG24-USA	Pass	
10.12 / 10.12	Impulse voltage test MST 14	SKY 705-BHDG24-USA	Pass	
10.13 / 10.13	Dielectric withstand test MST 16 / Insulation test MST 16	SKY 705-BHDG24-USA	Pass	
10.14 / 10.14	Wet leakage current test MST 17	SKY 705-BHDG24-USA	Pass	
10.15 / 10.15	Temperature test MST 21	SKY 705-BHDG24-USA	Pass	
10.16 / 10.16	Hot-spot endurance test MST 22	SKY 705-BHDG24-USA	Pass	
10.17 / 10.17	Fire test MST 23	SKY 705-BHDG24-USA	Pass	
10.18 / N/A	Ignitability test MST 24	SKY 705-BHDG24-USA	Pass	
10.19 / 10.19	Bypass diode thermal test MST 25	SKY 705-BHDG24-USA	Pass	
10.20 / 10.20	Reverse current overload test MST 26	SKY 705-BHDG24-USA	Pass	
10.21 / 10.21	Module breakage test MST 32	SKY 705-BHDG24-USA	Pass	
10.22 / 10.22	Screw connections test MST 33	N/A	N/A	No such parts
10.23 / 10.23	Mechanical load test / Static mechanical load test MST 34	SKY 705-BHDG24-USA	Pass	
10.24 / 10.24	Peel test MST 35	N/A	N/A	No cemented joint
10.25 / 10.25	Lap shear strength test MST 36	N/A	N/A	No cemented joint
10.26 / 10.26	Materials creep test MST 37	SKY 705-BHDG24-USA	Pass	
10.27 / 10.27	Robustness of terminations test MST 42	SKY 705-BHDG24-USA	Pass	

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10.28 / 10.28	Thermal cycling test MST 51	SKY 705-BHDG24-USA	Pass	
10.29 / 10.29	Humidity freeze test MST 52	SKY 705-BHDG24-USA	Pass	
10.30 / 10.30	Damp heat test MST 53	SKY 705-BHDG24-USA	Pass	
10.31 / 10.31	UV preconditioning test / UV test MST 54	SKY 705-BHDG24-USA	Pass	
10.32 / 10.32	Cold conditioning MST 55	SKY 705-BHDG24-USA	Pass	
10.33 / 10.33	Dry heat conditioning MST 56	SKY 705-BHDG24-USA	Pass	

Construction Review:

Construction review performed with satisfactory results.

---End of Report---