## 3M

# Renewable Energy Division 3M<sup>TM</sup> IR 900 Window Film

### **Customer Product Specification**

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Revision: 0001

9/28/2016

#### 1. Product Identification

1.1 **Product Description:** 3M<sup>TM</sup> IR900 WINDOW FILM

60"x 100 Ft

1.2 3M **Stock Number:** 70-0066-6150-1

#### 2. Product Properties

| Property            | Test Method | Unit      | Min   | Target | Max   |
|---------------------|-------------|-----------|-------|--------|-------|
| Visible Light       | 3M Test     | %         | 87.00 | 90.00  | 93.00 |
| Transmission(VLT)   |             |           |       |        |       |
| Thickness           | 3M Test     | mils      | 1.92  | 2.06   | 2.20  |
| Haze                | 3M Test     | %         | NA    | 2.60   | 4.00  |
| UV Transmission     | 3M Test     | %         | 0     | <.5    | <.5   |
| Taber Abrasion      | 3M Test     | %         | NA    | 2.0    | 5.5   |
| Ambient curl        | 3M Test     | Unit less | -1    | 0      | 9     |
| High humidity curl  | 3M Test     | Unit less | -6    | 0      | 6     |
| Adhesion to glass   | 3M Test     | Oz/in     | 50    | 60     | 120   |
| Liner release       | 3M Test     | g/in      | 3     | 7      | 10    |
| Crosshatch adhesion | 3M Test     | %         | 0     | 0      | 0     |
| Visual appearance   | 3M Test     | Pass/Fail | NA    | Pass   | NA    |

#### 3. Rolls Characteristics:

| Property              | Test Method | Units     | LSL | Target | USL    |
|-----------------------|-------------|-----------|-----|--------|--------|
| Length                | NA          | Feet      | -0  | 100    | +3     |
| Width                 | NA          | inches    | -0  | 60     | +5/64" |
| Black-line<br>Marks * | NA          | Each/Roll | 0   | 0      | 2      |
| Film splices          | NA          | Each/Roll | 0   | 0      | 0      |

"\*" - "Black-line marks" = are made when a visual defect is found to be out of specification for size and a cross-web line is drawn to mark that defect. Four feet of extra film are added at the end, for each mark in the roll.

- Maximum of two marks per roll are allowed.
- No marks are allowed within 12 ft of either end of the roll.
- Marks must be at least 15 feet apart.

70-0066-6150-1  $3M^{TM}$  IR900 Window Film

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#### 4. Visual appearance defects

| Property Description | Test<br>Method | UOM       | Min | Target | Max |
|----------------------|----------------|-----------|-----|--------|-----|
| Point Defects >1/32" | 3M Test        | No.       | 0   | 0      | 5   |
| Bulk Distortion      | 3M Test        | Level 3-5 | NA  | Pass   | NA  |
| Linear Distortion    | 3M Test        | Level 3-5 | NA  | Pass   | NA  |

#### 5. Application

5.1 IR900 is designed to be installed on glass surfaces. If exposed to direct sunlight, the adhesive should face the sunlight. IR900 is not recommended for plastic substrates including acrylic.

#### 6. Packaging

- 6.1 **General Description:** Roll protectively wrapped and suspended on end boards in a cardboard box placed on a pallet.
- **6.2 Core Dimension** 
  - 6.2.1 Material: Plastic
  - 6.2.2 Inner diameter: 7.6 cm (3 inches)

#### 7. Product Label

- 7.1 **General Description:** Film will have descriptive labeling on packing including but not limited to; product description, length, width, thickness and lot number.
  - 7.1.1 **Units:** International System of Units (Primary)

| 3M Company                  | Customer Product Specification     |
|-----------------------------|------------------------------------|
| Renewable Energy Division   | 3M <sup>TM</sup> IR900 Window Film |
|                             |                                    |
| 3M Center, Building 235-1S- | 3M Stock Number: 70-0066-6150-1    |
| 67                          |                                    |
| St. Paul, MN 55144-1000     | Revision 1.0.0                     |
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#### 8. Shelf life / Storage Conditions

8.1 **Shelf life:** 2 years from the date of manufacture

8.2 **Storage conditions:** Store under normal conditions (< 40°C / 104°F) in the original, unopened package.

#### 9. Legal Statement

**Product Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

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