

# ENVIRONMENTAL TEST REPORT

## CUSTOMER



Baran Advanced  
Technologies (1986) Ltd

## UNIT NAME

Tempered Black Glass,  
Un-Tempered Black Glass





## DOCUMENT INFO

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## CUSTOMER DETAILS

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# DOCUMENT CONTROL



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## 1 // DOCUMENT HISTORY

The following table records information regarding released editions of this document and briefly describes their purpose and changes made to them.

Rev	Release Date	Author	Description of Changes
00	May 3, 2023	Ofir Tal, Technical Writer	<b>Purpose:</b> Release

## 2 // DOCUMENT APPROVALS

Author	May 3, 2023	Approved By	May 3, 2023
			
<i>Ofir Tal, Technical Writer</i>		<i>Dov Carmeli, COO</i>	

## 3 // OPEN ISSUES

No.	Subject/Section	Description
1.	N.A	N.A

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# 1. INTRODUCTION

## 1.1 // PURPOSE

The purpose of this document is to present the environmental tests that were performed for **Tempered Black Glass, Un-Tempered Black Glass** at Carmel laboratory as per the applicable documents.

## 1.2 // GLOSSARY

Term	Description
N.A	Not Applicable
N.C	Not Controlled
PSD	Power Spectral Density
TBD	To Be Defined
RH	Relative Humidity
UUT	Unit Under Test
NCR	No Calibration Required

## 1.3 // LABORATORY ENVIRONMENTAL CONDITIONS

Temperature	+25±10°C	Humidity	50±30%RH	Air Pressure	1010±10 mbar
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## 1.4 // APPLICABLE DOCUMENTS

This section contains a list of resources (e.g., documents, files) referenced by or related to this document.

**Main Document** Customer Requirements

### // Test-Specific Sources

Test	Document
Solar Radiation	MIL STD 810G ch-1 Method 505.6 Procedure II, A1

## 1.5 // TEST INSTRUMENTATION

Test	Name	S/N	Calibration Due Date
Solar Radiation	Solar Radiation Chamber Model Yishai Tech.	001	26 December, 2023
Solar Radiation	Phyranometer-Model: CMP6	224879	21 January, 2024

## 1.6 // SAMPLE OVERVIEW



Figure 1.1 - Sample Overview

## 1.7 // EXECUTIVE SUMMARY

The following table summarizes the tests that have been performed in Carmel Environmental Test Laboratories.

Baran Advanced Technologies (1986) Ltd performed the visual and functional tests and holds the sole responsibility for the results.

Test Name	Verdict
Solar Radiation	N.A



### Statement of Compliance with Test Requirements

We, Carmel Environmental Test Laboratories, declare under our sole responsibility that the Tempered Black Glass, Un-Tempered Black Glass was tested to comply with the requirements of the applicable environmental test specification.

## 1.8 // LABORATORY ACCREDITATION

Carmel Environmental Test Laboratories Ltd. Is an accredited Laboratory by the American Association for Laboratory Accreditation – A2LA (see accreditation herein).

A2LA logo in the front page is applicable only to the tests under the scope of Carmel Environmental Test Laboratories accreditations.

Carmel Environmental Test Laboratories has A2LA accreditation to ISO/IEC 17025:2017 for test types as listed in the following link:

<http://www.a2la.org/scopepdf/2881-01.pdf>



The image shows a formal accreditation certificate from A2LA (American Association for Laboratory Accreditation) for Carmel-Environmental Tests Ltd. The certificate is framed by a decorative orange and blue border on the left and right sides. At the top center, the logos for ILAC-MRA and A2LA are displayed. Below the logos, the text reads "Accredited Laboratory" in a large, bold, blue font. Underneath, it states "A2LA has accredited" in a smaller font, followed by "CARMEL-ENVIRONMENTAL TESTS LTD." in a bold, blue font. The location "Petach Tikva, ISRAEL" is listed below the company name. The scope of accreditation is "Mechanical Testing" for technical competence in the field of. A paragraph of text explains that the laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017, General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017). On the left side, there is a gold-colored circular seal with the text "American Association for Laboratory Accreditation", "CORPORATE SEAL 1978", and "A2LA". On the right side, the date "Presented this 25<sup>th</sup> day of October 2022." is followed by a signature and the name "Mr. Trace McInturff, Vice President, Accreditation Services For the Accreditation Council". Below the signature, the certificate number "Certificate Number 2881.01" and the validity date "Valid to March 31, 2024" are provided. At the bottom, a note states "For the types of tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation."

**ilac-MRA** **A2LA**

**Accredited Laboratory**

A2LA has accredited

**CARMEL-ENVIRONMENTAL TESTS LTD.**

Petach Tikva, ISRAEL

for technical competence in the field of

**Mechanical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

Presented this 25<sup>th</sup> day of October 2022.

Mr. Trace McInturff, Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 2881.01  
Valid to March 31, 2024

For the types of tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.

## 2. SOLAR RADIATION TEST

### 2.1 // UNIT UNDER TEST OVERVIEW

Test Dates	20/04/2023 to 30/04/2023
Customer	Baran Advanced Technologies (1986) Ltd
Customer Rep.	Mr. Eytan Sapir
Unit Name	Tempered Black Glass, Un-Tempered Black Glass
Item Manufacturer	Baran Advanced Technologies (1986) Ltd
Number of Units	4




#### UUT:

1.	Tempered Glass, Black background with Bright Image and text (From manufacture A)
2.	Un-Tempered Glass, Black background with Bright Image and text (From manufacture A)
3.	Un-Tempered Glass, Black background with Bright Image and text (From manufacture B)
4.	Un-Tempered Glass, only Black background (From manufacture C)

### 2.2 // TEST DESCRIPTION

#### 2.2.1 // TEST PROCEDURE

##### // General Setup

 Max. Temperature	+49°C
 Max. Intensity	1120 W/m <sup>2</sup>
 No. of Cycles	10

##### // Cycle Description

Exposure Duration	Max Exposure Intensity
20 hours	1120 W/m <sup>2</sup>
4 hours	0 W/m <sup>2</sup>



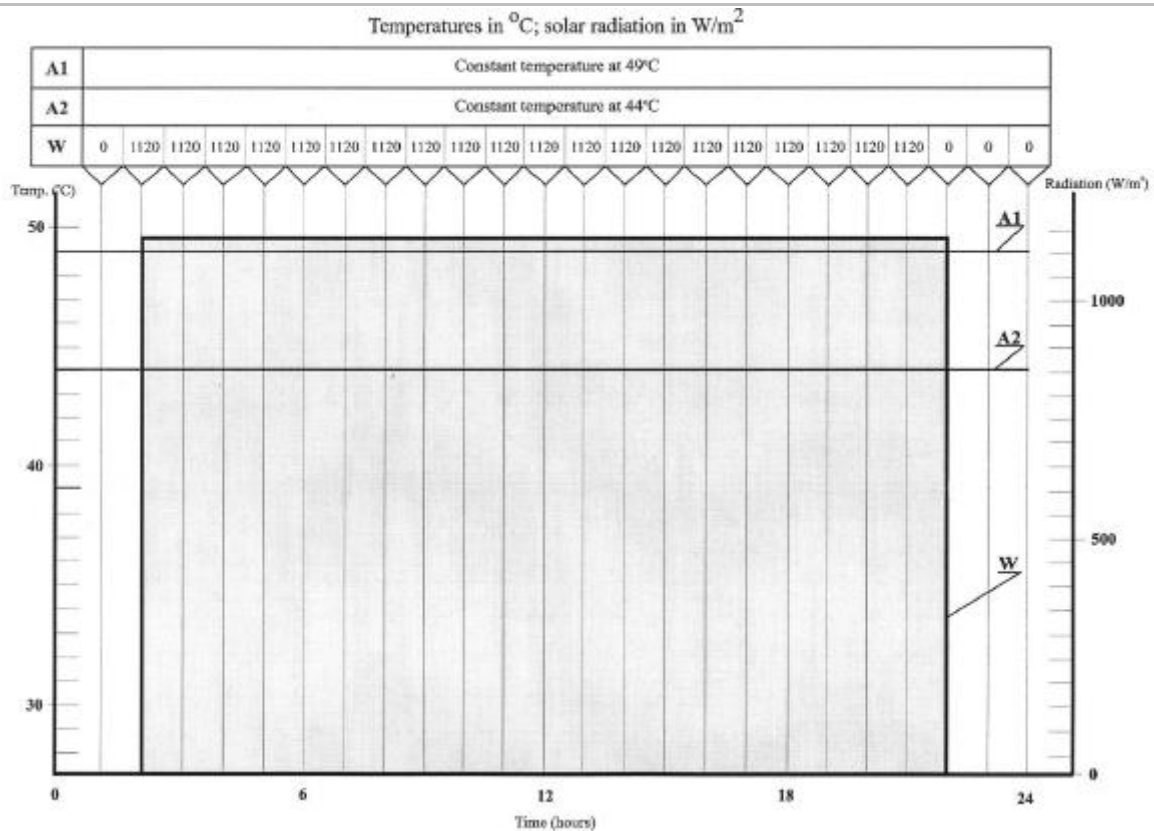


Figure 2.1 – Solar Radiation Test Profile, Procedure II Steady State

## 2.2.2 // EXCLUSIONS FROM THE TEST METHOD

Not Applicable.

## 2.3 // TEST RESULTS

The customer is responsible to conduct a visual & functional inspection in order to determine the quality of the test item at the end of the test.

## 2.4 // TEST PICTURES



Figure 2.2 - UUT Inside Solar Radiation Chamber

### UUT after Test



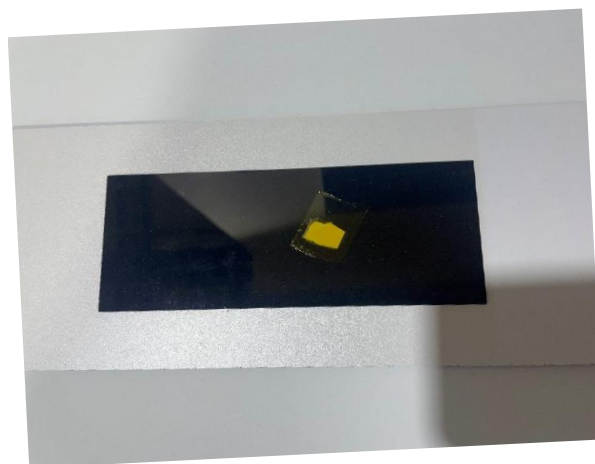
Figure 2.3 - UUT After Solar Radiation Test



**Figure 2.4 - UUT After Solar Radiation Test**



**Figure 2.5 - UUT After Solar Radiation Test**



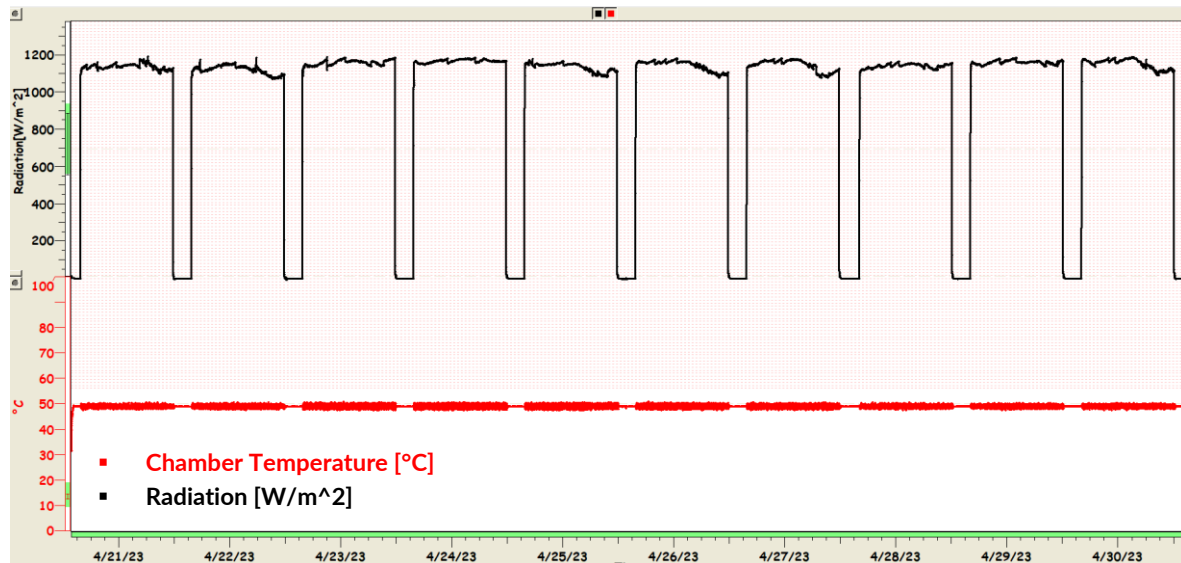
**Figure 2.6 - UUT After Solar Radiation Test**



## 2.5 // TEST GRAPHS

**Customer:** Baran Advanced Technologies (1986) Ltd  
**Test Type:** Solar Radiation  
**Performed by:** Yaniv Yehiel  
**Date:** 20-30.04.2023

**UUT:** Tempered Black Glass, Un-Tempered Black Glass  
**P/N:** N/A



**Performed By:** Yaniv Yehiel

**Signature:** *Yaniv Yehiel*

# End of Report