SECTION A			
Date EUT Arrived:	25/03/2024	**Company Name and Address:**	Beka Associates Ltd Old Charlton Road Hitchin SG5 2DA
Date Testing Started:	16/04/2024		
Date Testing Completed:	17/04/2024		
Customer Purchase Order No.:	032166		

SECTION B	
Description of Equipment Under Test (EUT):	**Identity/Serial Numbers:**
Operator Display	EUT BA3102

SECTION C		
Tests performed in order unless otherwise specified:		**Using the parameters and methodology of:**
IP6X Dust Ingress Test	UKAS	BS EN 60529:1992+A2:2013
IPX6 Water Ingress Test	UKAS	BS EN 60529:1992+A2:2013

SECTION D

Executive Summary:

The Equipment Under Test (EUT) was subjected to the test(s) identified in Section C; details are contained in this report.

IP6X Dust Ingress Test – No dust ingress noted inside the enclosure upon inspection of EUT.

IPX6 Water Ingress Test – No water ingress noted inside the enclosure upon inspection of EUT.

Note: Throughout test, torque on the BA3102 to test enclosure clamps was checked to be greater than 22cN.m

SECTION E

Distribution: 1. PARC File 2. Oliver Lebreton	**Test Engineer:**	Ben Manley	Digitally signed by B Manley Date: 2024.05.03 08:06:02 +01'00'
EUT Disposal: EUT returned to customer via courier	**Approved By:**	Richard Tabor, Managing Director	Digitally signed by Richard Tabor Date: 2024.05.03 09:13:43 +01'00'

1. Initial Inspection (Not UKAS Accredited)

Prior to testing, the EUT was subjected to a visual inspection of the external surfaces. No obvious damage was noted. The results provided in this report apply to the EUT tested as received from the customer, unless otherwise stated.

2. Test Procedure

2.1. IP6X Dust Ingress Test

2.1.1. Test Definition

Using the parameters and methodology of BS EN 60529:1992+A2:2013:

- Initial inspection by use of a 1 mm probe,
- Vacuum drawn, pressure: <20 mbar,
- Test duration: 8 hours,
- Visual inspection performed following dust exposure,
- Dust Type: 60529 TALC.

2.1.2. Test Equipment Used

Table 1 – Test Equipment

Test Equipment	PARC ID	Calibration Due Date
Dust Chamber	2	26/10/2024
Dust Chamber Pressure Gauge	2.1	30/10/2024
1 mm Probe	417	07/12/2025
Force Gauge	1102	16/11/2024
Torque Screwdriver	1306	27/07/2024
Room Logger	770	05/02/2025

2.1.3. Test Photos

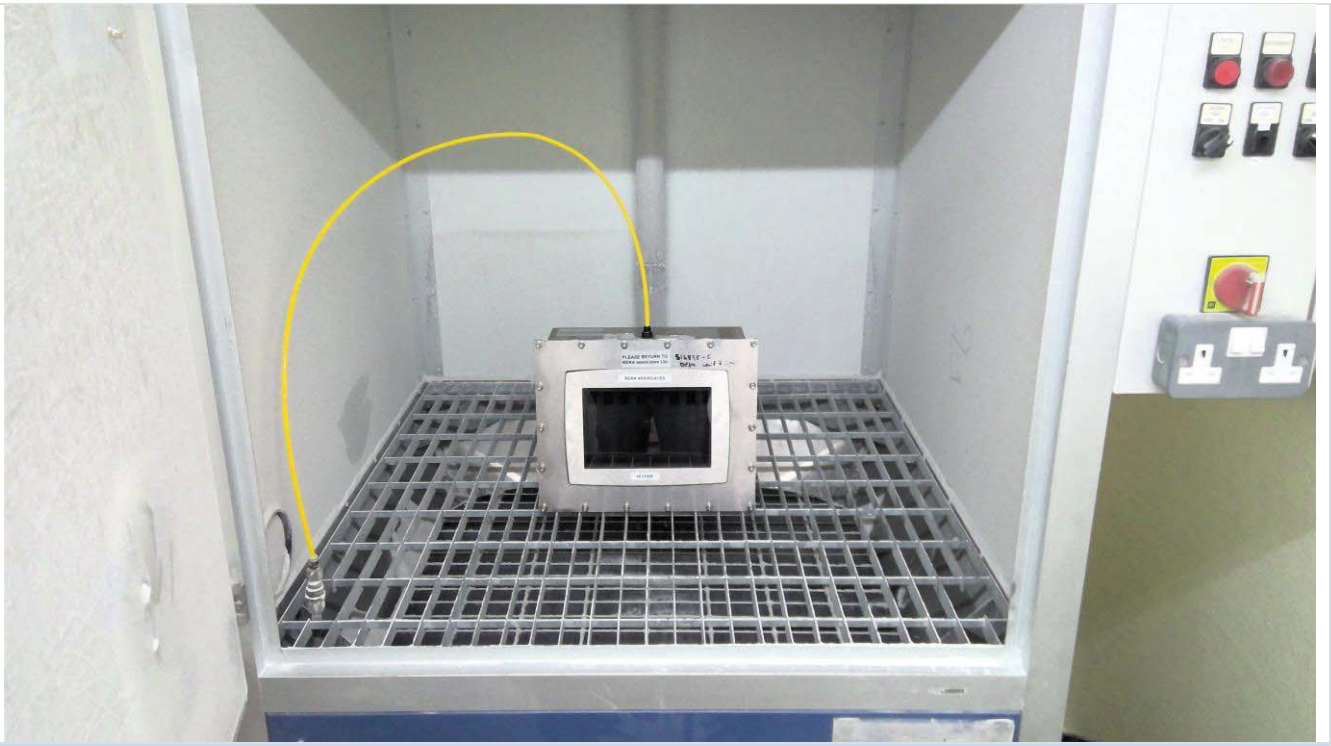

Figure 1 – EUT Set-Up in Dust Chamber

2.1.4. Test Plots & Results

Figure 2 – Typical internal Inspection of EUT

Figure 3 – Typical internal Inspection of EUT

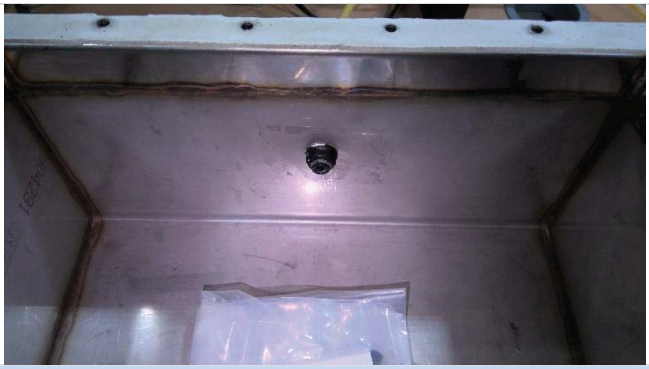

Figure 4 – Typical internal Inspection of EUT

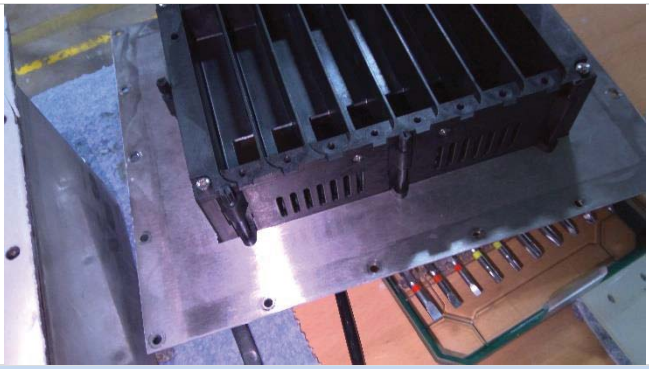

Figure 5 – Typical internal Inspection of EUT

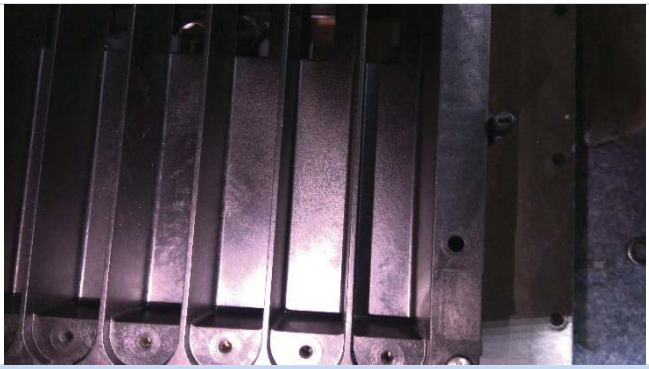

Figure 6 – Typical internal Inspection of EUT

Figure 7 – Typical internal Inspection of EUT

Upon completion of the test, a visual inspection was carried out (not UKAS accredited). No obvious changes in the condition of the EUT were noted, and the EUT completed the test in the condition as received from the customer.

On test completion, EUT was brushed free of external dust and removed from the dust area for inspection. No obvious signs of dust ingress noted.

2.2. IPX6 Water Ingress

2.2.1. Test Definition

Using the parameters and methodology of BS EN 60529:1992+A2:2013:

- Flow Rate: 100 l/min
- Nozzle Diameter: 12.5 mm
- Faces Sprayed: 1
- Duration: 3 minutes split proportionally between all identified faces (1 face)
- Distance between EUT and nozzle: 2.5 to 3 m
- Temperature differential between EUT & water: less than 5 °C
- Orientation of EUT during test: Transparent screen facing jetting water

2.2.2. Test Equipment Used

Table 2 – Test Equipment

Test Equipment	PARC ID	Calibration Due Date
IPX6 Supply Rig	1095	20/04/2024
IPX6 Control Rig	963	Monitored by Calibrated Equipment
IPX6 Nozzle	1093	Monitored by Calibrated Equipment
Water Core Verification Template	1249	N/A
Digital Timer	1258	15/02/2025
Verified Steel Rule	738	Visually Checked Before Use
Digital Thermometer	59	12/10/2024
Thermocouple	1156	05/06/2024
Room Logger	771	05/02/2025

2.2.3. Test Photos

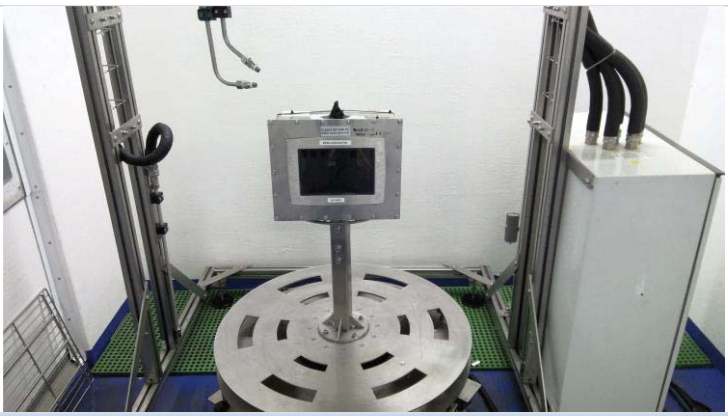

Figure 8 – EUT Set-Up in Wet Area

2.2.4. Test Plots & Results

Figure 9 – Typical internal Inspection of EUT

Figure 10 – Typical internal Inspection of EUT

Figure 11 – Typical internal Inspection of EUT

Figure 12 – Typical internal Inspection of EUT

Figure 13 – Typical internal Inspection of EUT

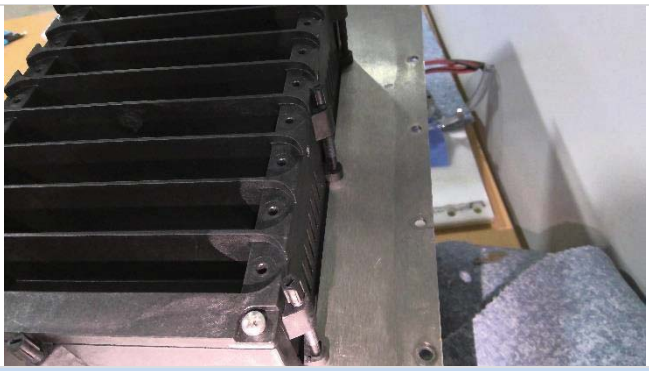

Figure 14 – Typical internal Inspection of EUT

Upon completion of the test, a visual inspection was carried out (not UKAS accredited). No obvious changes in the condition of the EUT were noted, and the EUT completed the test in the condition as received from the customer.

On test completion, EUT was dabbed free of external water and removed from the wet area for inspection. No water ingress noted.

3. Report Summary

The Equipment Under Test (EUT) was subjected to the test(s) detailed in this report.

IP6X Dust Ingress Test – No dust ingress noted inside the enclosure upon inspection of EUT.

IPX6 Water Ingress Test – No water ingress noted inside the enclosure upon inspection of EUT.

Note: Throughout test, torque on the BA3102 to test enclosure clamps was checked to be 2.5N.

End of Test Report

Report & Issue Number	Date of Re-issue	Paragraph Number	Details of Change	Reason for Change	Initials	
					Test Engineer	Authorised Signatory
4E13399 Issue 2	01/05/2024	Section D	Torque settings added as 22cN.m	Customer Request	BM	RT