



# CREST

Centre for Research in Engineering Surface Technology



Focas Institute, TU Dublin Kevin St. Dublin 8, Ireland

[www.tudublin.ie/crest](http://www.tudublin.ie/crest)



## GAIN MEASUREMENTS PERFORMANCE CERTIFICATE

**Product name:** Smart Black Projector Screen Paint

**Product Code:** SSK-PROBLACK

|   |        |
|---|--------|
| Gain Value @ 90°                              | 0.20   |
| Gain Value @ 120°                             | 0.15   |
| Gain Value @ 140°                             | 0.09   |
| Reflectivity - LRV (CIE Y, D65 @ 8° Observer) | 14%    |
| Max Viewing Angle °                           | 97°    |
| VOC   | 36 g/L |

**Test Date:** July 2022

**Test Method:** The test surfaces were all coated/mounted on solid boards. The boards were then placed in the vertical position and a test frame was placed touching the base of the sample surfaces. The test frame was built with a movable arm anchored to meet the test surface. A Newport photodetector (Model 884), wired to a Newport Powermeter (Model 843-R) was placed 300mm along the movable arm. A NEC VT650 projector (160W NSH lamp) was fixed 2.0m from the test surfaces and used to project a white image onto the test surface. The image size was fixed at 200 mm x 200 m on the incident surface. The photodetector was moved through an arc using the movable arm at increments of 10° and power readings were recorded for each surface.

**Tested by:** Centre for Research in Engineering Surface Technology (CREST), TU Dublin

**Certified by:** Brendan Duffy, Centre Manager

**Signature:**

Surface Coatings, Corrosion Control, Surface Analysis, Failure Investigation, Specification, Type Approval, Inspection, Fundamental and Applied Industrial Research.