

Artificial Weathering Testing Report

ISO 4892-2 Weathering & Grey Scale Assessment



Client: Mighton
Mark fortune
Date: 04/10/2019
Report Number: IMP03772-LR
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SUMMARY

Four samples of external use components were submitted by Mighton for artificial weathering in accordance with ISO 4892-2 and subsequently followed by Grey Scale assessment in accordance with ISO 105-A02. Grey scale measurements are out with the laboratories scope of accreditation.

This testing was performed under purchase order reference 0000008920.

1. MATERIALS

Four samples were submitted for testing and Table 1 below details the unique id given the material along with details supplied with the material.

Material Description	Client ID	Supplier/Customer	MT/GM/ Reference
NA	1	Competitor 1	3870-A
NA	2	Competitor 2	3870-B
NA	3	Competitor 3	3870-C
NA	MIGHTON	Mighton Products Ltd	3870-D

2. OBSERVATIONS, DEVIATIONS and WAIVERS

Notes contained in relevant documents are an integral part of a test, and shall be included by the client in discussions, correspondence and presentation of test results to a third party. This Test Report represents only one part of the test documentation. Interim reports and other test documentation may have been submitted prior to this date. Test results reported are pertinent only to the items tested and are not relevant to other specimens of the same type, or in the same lot, which are not being tested. Test Reports, and/or other pertinent test documentation, shall not be reproduced, except in full, without the written approval of Impact Solutions and so certified by the client.

3. TEST PARAMETERS

The following test parameters and durations were applied for the artificial weathering exposure.

Equipment Type	Q-SUN XE3
Cycle	1hr 42mins light - 18mins light & spray
Filters	Daylight Q
Sample Mounting Method	2.5"x5.5" sample holder
Interference	340nm
Light Source	Xenon Arc
Irradiance	0.51w/m ²
Black Panel Sensor Type	Insulated black panel
Water Quality	0mg/l Si
Black Panel Dark	NA
Black Panel Light	65°C ±3
Relative Humidity Dark	NA
Relative Humidity Light	60% ±5
Total Irradiance	2020kjs
Duration	1100hrs

The exposure period for testing was from 11/01/19 to 02/10/19.

The parameters as tested fall within the accredited parameters of the laboratory as per their flexible scope of accreditation.

4. VISUAL MEASUREMENTS

Grey Scale evaluations according to ISO 105-A02:1993; Grey Scale for assessing change in colour.

Client ID	MT/GM/ Reference	Grey Scale	Comments	Additional comments	Test time(hours)
1	3870-A	2	Br	Turned white	1100
2	3870-B	3	D,Y	-	1100
3	3870-C	4	Br	Rough texture	1100
MIGHTON	3870-D	4/5	Br	-	1100

VISUAL LEGEND				
ISO			VISUAL COLOUR	
5	None		BL	Bluer
4-5	Very Slight		G	Greener
4	Slight		R	Redder
3-4			Y	Yellower
3	Moderate		W	Weaker
2-3			Str	Stronger
2	Pronounced		D	Duller
1-2	Severe		Br	Brighter
1	Very Severe			