TEST REPORT

Daylight Reflectance

Ref: Test Result/TR_Color-111
Established: 01-Mar-2016
Updated: 20-Jul-2016

Background:

% Daylight Reflectance = % Diffuse Reflectance + % Specular Reflectance
Daylight Reflectance: Specular reflectance included (SCI) is the measurement of the total or daylight reflectance from a surface that including the diffuse and specular reflectance
Diffuse Reflectance: Specular reflectance excluded (SCE) is the measurement of reflectance made with Specular reflectance excluded from the measurement.

Definition:

Specular Reflection is the mirror-liked reflection of a beam of light from a surface, in which the beam from a single incoming direction is reflected into a single outgoing direction
Diffused Reflection refer to the single light beam falls onto a rough surface, the ray of light will be reflected in different directions.

Objective:

To measure the daylight reflectance value of color.

Method:

The method of measurement is with reference to ASTM E903-12: Standard Test Method for Solar Absorptance, Reflectance and Transmittance of Materials.
Instrument used is the X-rite Color Eye CE 7000A spectrophotometer with the following parameters:
1. Measurement Geometry Angle: 8 degree
2. Integrating sphere size: 6” (15.2 cm) integrating sphere
3. Wavelength: 360-750nm
4. Illuminant: D65

**Disclaimer: Daylight reflectance is measured using Color Card.*

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S/N	Color	Name	% Daylight reflectance	% Diffuse reflectance	% Specular reflectance
1	RFG 01	MARMALADE	31.47	30.70	0.78
2	RFG 02	CORAL	25.5	24.81	0.69
3	RFG 03	OCEAN EMERALD	9.48	8.83	0.65
4	RFG 04	MONOCHROME	12.76	11.89	0.87
5	RFG 05	MAYFAIR RED	21.31	20.68	0.63
6	RFG 06	MIDNIGHT PUCHSIA	10.02	9.22	0.80
7	RFG 07	SAPPHIRE INK	10.32	9.5	0.82
8	RFG 08	GALAXY	6.94	6.11	0.83