



TEST REPORT

Daylight Reflectance

Ref: Test Result/TR_Color-018
Established: 12-Aug-2014
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.*



TEST REPORT

S/N	Color	Name	% Daylight reflectance	% Diffuse reflectance	% Specular reflectance
1	9001	SKY BLUE	57.67	54.92	2.75
2	9002	CANARY	46.80	43.98	2.82
3	9003	SUNSET	53.55	50.76	2.79
4	9004	VERMILLION	23.01	19.81	3.19
5	9005	EVENING HAZE	55.41	52.42	2.99
6	9006	PEARL GREY	34.47	31.40	3.07
7	9007	CRYSTAL MINT	19.05	16.49	2.57
8	9008	BLUE MARINES	18.83	15.69	3.13
9	9009	INNOCENCE	66.64	62.89	3.75
10	9010	BARLEY	57.94	54.99	2.95
11	9012	CANDELABRA	54.65	51.97	2.69
12	9013	ORANGE	30.15	27.19	2.96
13	9014	INTERNATIONAL ORANGE	25.74	22.70	3.04
14	9015	PEARL WHITE	55.33	51.70	3.63
15	9016	LILAC SWISH	62.36	59.24	3.13
16	9017	PRIMROSE	54.19	51.19	3.00
17	9019	FLIGHT	70.39	67.37	3.02
18	9022	LILY WHITE	65.06	61.14	3.92
19	9023	SHADOW	53.80	50.77	3.03
20	9024	ASH GREY	50.05	46.54	3.51
21	9025	PAPIER GREY	15.54	12.27	3.27
22	9028	TURF GREEN	7.37	4.03	3.34
23	9029	BRIGHT BLUE	11.74	8.52	3.22
24	9030	OFF WHITE	54.49	51.49	3.01
25	9031	SOFT BLUE	57.15	53.94	3.21
26	9037	CALM GREEN	42.56	39.82	2.75
27	9038	HONEY GLOW	29.00	26.24	2.75
28	9039	ABSINTHE	24.43	21.53	2.90
29	9040	TOFFEE	15.66	12.49	3.17
30	9041	GRASS GREEN	10.49	7.44	3.05
31	9042	MAHOGANY	9.60	6.58	3.03
32	9043	LAVENDER GREY	28.19	25.20	2.99
33	9044	CONGO BROWN	8.43	5.01	3.41
34	9045	S/MATT BLACK	5.36	5.22	0.14
35	9046	AUTUMN BROWN	17.55	14.62	2.93
36	9048	EMERALD	10.04	6.74	3.30



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37	9049	ROSE	67.89	65.01	2.88
38	9050	MINT GREEN	32.63	30.04	2.58
39	9051	BLACK	4.34	0.42	3.92
40	9052	WHITE	77.89	74.14	3.74
41	9053	FRESH ORANGE	39.46	36.56	2.90
42	9054	BRIGHT BROWN	15.17	12.18	2.98
43	9055	LIGHT APRICOT	55.38	52.70	2.68
44	9056	TROPICAL PUNCH	42.47	39.55	2.92
45	9058	BLUE BEAUTY	32.16	29.22	2.93
46	9059	LOTUS TINT	60.31	57.43	2.88
47	9060	LIGHT PURPLE	64.95	61.75	3.20
48	9061	PURPLE DAWN	43.83	40.79	3.04
49	9062	LEGEND BLUE	22.86	20.21	2.65
50	9063	MAYAN YELLOW	46.51	43.36	3.15
51	9064	PINK LUSTRE	53.63	50.31	3.33
52	9066	TANGY GLOW	54.08	51.40	2.68
53	9067	MATT WHITE	75.09	74.89	0.20
54	9068	ROSE WHITE	67.81	64.42	3.39
55	9069	LILY WHITE	73.84	70.09	3.75
56	9070	APPLE WHITE	73.99	70.73	3.27
57	9071	BARLEY WHITE	69.28	65.66	3.62
58	9072	DUTCHESS PINK	44.32	41.50	2.82
59	9073	PEACEFUL	73.28	70.47	2.82
60	9074	SOFT FERN	62.90	60.11	2.78
61	9075	MIRAGE	38.47	35.85	2.62
62	9076	VIOLET SEQUIN	26.37	23.44	2.93