



## TEST REPORT

### Daylight Reflectance

Ref: Test Result/TR\_Color-015  
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	3101	BLUEBELL WHITE	63.51	62.39	1.12
2	3102	APPLE WHITE	72.73	71.49	1.24
3	3103	ORCHID WHITE	71.26	70.29	0.97
4	3104	ROSE WHITE	72.49	70.63	1.86
5	3105	BARLEY WHITE	71.65	69.97	1.68
6	3106	LILY WHITE	74.67	73.52	1.15
7	3109	DIVINITY	74.38	73.19	1.18
8	3111	VANILLA	70.75	69.65	1.10
9	3113	FRESH APRICOT	66.37	65.06	1.31
10	3116	PINK FROST	71.58	70.53	1.06
11	3122	PINE TREE	65.50	64.48	1.01
12	3127	MEADOW SWEET	55.29	54.38	0.91
13	3131	BLUE CHIFFON	60.83	59.68	1.15
14	3132	BLUE HARMONY	42.35	41.59	0.75
15	3133	COSMIC NAVY	11.94	11.29	0.65
16	3134	WHITE	79.67	77.73	1.94
17	3135	BLACK	4.61	3.76	0.85
18	3136	MORNING SUN	68.36	67.22	1.14
19	3138	PEACEFUL	71.78	69.98	1.80
20	3141	TANGERINE	47.29	45.78	1.51
21	3142	EARTH YELLOW	61.55	60.15	1.40
22	3145	LILAC FROST	73.64	71.80	1.84
23	3146	SOFT VIOLET	68.25	66.31	1.95
24	3147	CRYSTAL BLUE	72.64	70.75	1.89
25	3148	NEW BLUE	69.24	67.28	1.97
26	3149	LETTUCE	60.01	58.37	1.65
27	3150	GOLDEN STRAW	59.23	57.70	1.53
28	3153	APPLE GREEN	72.77	70.87	1.90
29	3154	GREEN TEA	36.92	35.73	1.20
30	3156	LILAC WHITE	73.55	71.59	1.95
31	3157	SAIL WHITE	77.56	75.55	2.01
32	3158	WHITE ICE	70.58	69.41	1.17
33	3159	ROYAL PINK	73.12	71.85	1.27
34	3160	MOCHA DELIGHT	23.62	23.06	0.56
35	3161	CLAMSHELL	36.16	35.56	0.60
36	3162	CHAMPAGNE	40.96	40.33	0.63



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S/N	Color	Name	% Daylight reflectance	% Diffuse reflectance	% Specular reflectance
37	3163	BISQUE	49.86	49.04	0.82
38	3164	SUNGOD	45.39	44.50	0.89
39	3165	SCARLET	30.52	29.82	0.70
40	3166	GLORY	32.39	31.63	0.76
41	3167	RASPBERRY SORBET	47.07	46.47	0.60
42	3168	RED EARTH	14.72	14.25	0.47
43	3169	SUNSHINE	55.88	54.55	1.33
44	3172	STOVE WHITE	76.05	74.27	1.78
45	3173	SNEAKER WHITE	75.94	74.08	1.86
46	3174	HOLLYHOCK	22.22	21.56	0.66
47	3175	JEWEL BLUE	41.32	40.15	1.17
48	3176	LAVENDER SILK	28.52	27.71	0.81
49	3177	BRIGHT STEEL	45.12	44.06	1.07
50	3178	CADMIUM YELLOW	45.69	44.32	1.37
51	3179	SPRING YELLOW	65.41	63.97	1.44