

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P831894

Luminaire Tested: S123RDIP-S1000D805U940-4F0-1E-UDD-G

Issue Date: 05/03/2024

Test Information

Test Method: LM-79-2019
Report Number: P831894
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-905-2, G3-1807-864-5)
Test Lab: INNOVATION CENTER
Issue Date: 05/03/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-S1000D805U940-4F0-1E-UDD-G
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT, GRAZE OPTIC
UPLIGHT 805 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: -

Summary

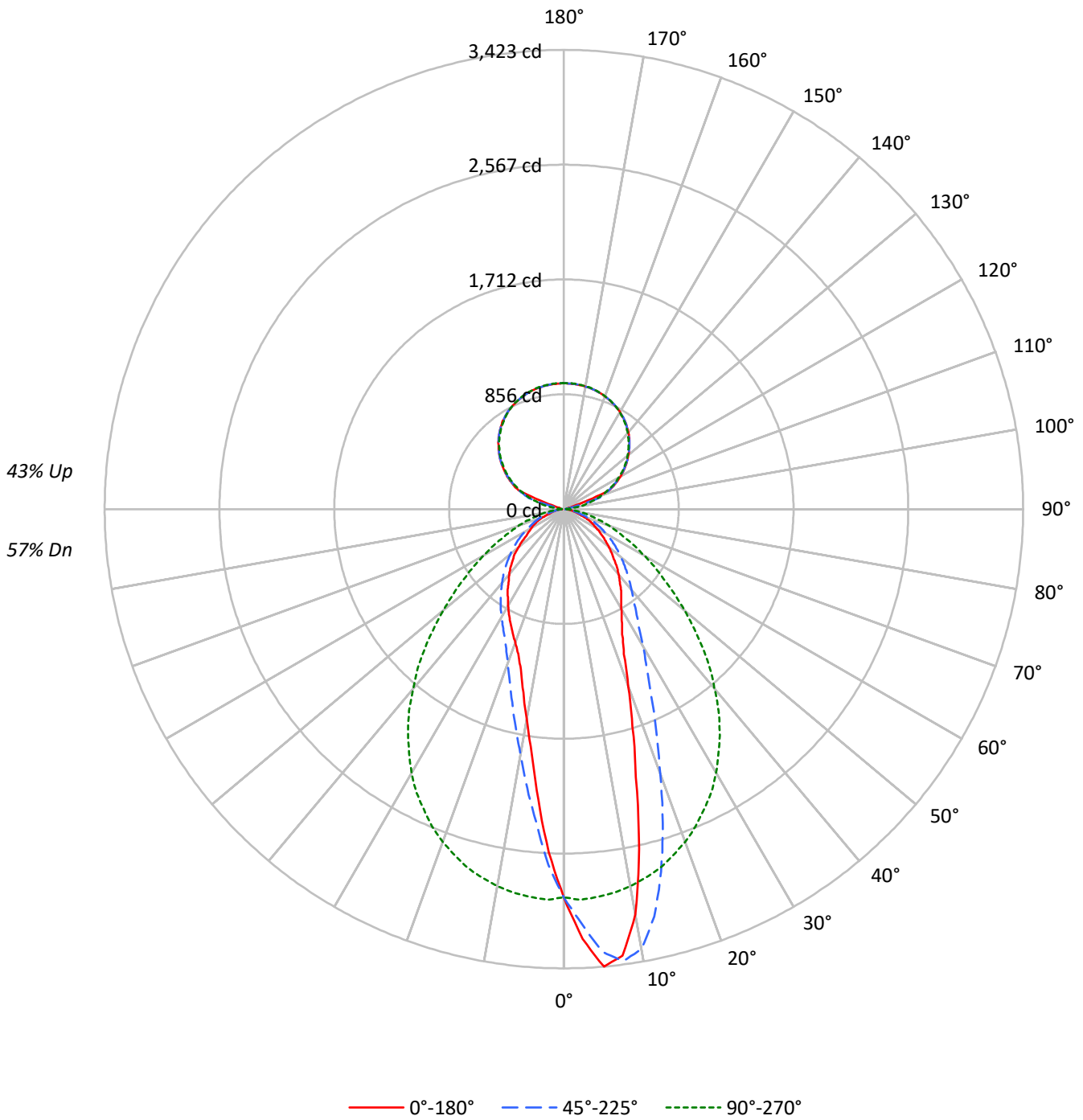
Lumens per Lamp: N/A
Luminaire Lumens: 6698.9 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 1.17 / 0.8
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 55.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	109	109	109	109	101	101	101	101	87	87	87	75	75	75	63	63	63	57		
1	100	96	93	89	93	90	87	84	78	76	74	67	65	64	57	56	55	50		
2	92	85	79	75	86	80	75	71	70	66	63	60	57	55	51	49	48	44		
3	85	76	69	64	79	71	65	60	62	58	54	54	51	48	46	44	42	38		
4	78	68	60	55	73	64	57	52	56	51	47	49	45	42	42	39	37	34		
5	72	61	54	48	67	58	51	46	51	45	41	45	40	37	39	36	33	30		
6	67	56	48	42	62	52	45	40	46	41	37	41	37	33	36	32	30	27		
7	62	51	43	38	58	48	41	36	43	37	33	38	33	30	33	30	27	25		
8	58	46	39	34	54	44	37	33	39	34	30	35	30	27	31	27	25	22		
9	54	43	36	31	51	41	34	30	36	31	27	32	28	25	29	25	23	21		
10	51	40	33	28	48	38	31	27	34	29	25	30	26	23	27	23	21	19		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	31146	31146	31146	31146	31146
5°	36983	35804	31342	25337	23523
10°	33507	36366	31186	20300	17415
15°	23071	31181	30857	16592	13776
20°	16049	24007	30237	13991	12109
25°	12231	18296	29337	12435	11159
30°	10647	14628	28209	11545	10337
35°	9775	12339	26612	10796	9587
40°	8918	11019	24522	10061	8901
45°	8054	10077	22267	9363	8217
50°	7311	9297	19609	8683	7371
55°	6613	8539	17055	8015	6322
60°	5924	7765	14813	7279	5976
65°	5468	6890	12753	6543	5652
70°	4444	5954	11125	5917	4592
75°	3897	4737	9424	4907	4047
80°	3527	4011	7724	4116	3825
85°	3223	3520	5866	3742	3520

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 80°
 Vertical Angle: 45°
 Luminance: 23496 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.7	3.9
10°-20°	610.3	9.1
20°-30°	700.2	10.5
30°-40°	690.2	10.3
40°-50°	608.7	9.1
50°-60°	468.3	7.0
60°-70°	307.9	4.6
70°-80°	149.5	2.2
80°-90°	39.6	0.6
90°-100°	33.1	0.5
100°-110°	159.9	2.4
110°-120°	392.0	5.9
120°-130°	497.7	7.4
130°-140°	531.7	7.9
140°-150°	497.2	7.4
150°-160°	401.0	6.0
160°-170°	258.8	3.9
170°-180°	89.2	1.3
0°-30°	1574.3	23.5
0°-40°	2264.5	33.8
0°-60°	3341.4	49.9
0°-90°	3838.4	57.3
90°-120°	585.0	8.7
90°-150°	2111.5	31.5
90°-180°	2860.0	42.7
0°-180°	6698.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2894	2894	2894	2894	2894	
5°	3423	3314	2901	2345	2177	313
15°	2070	2798	2769	1489	1236	584
25°	1030	1540	2470	1047	940	486
35°	744	939	2025	822	730	464
45°	529	662	1463	615	540	411
55°	352	455	909	427	337	316
65°	215	270	501	257	222	210
75°	94	114	227	118	97	101
85°	26	28	48	30	28	28
90°	21	17	1	17	21	11
95°	26	22	42	22	26	22
105°	31	153	208	153	31	64
115°	410	400	390	400	410	386
125°	560	558	549	558	560	501
135°	691	691	684	691	691	533
145°	797	795	789	795	797	498
155°	868	869	869	869	868	400
165°	915	914	917	914	915	258
175°	935	936	938	936	935	89
180°	938	938	938	938	938	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6
2.5°	3206.8	3196.7	3186.7	3183.7	3180.7	3171.2	3161.7	3140.4	3119.0	3097.1	3075.1
5°	3422.8	3423.9	3425.1	3422.2	3419.2	3406.7	3394.3	3368.2	3342.1	3313.6	3285.1
7.5°	3356.3	3375.3	3394.3	3397.8	3401.4	3410.9	3420.4	3414.4	3408.5	3397.8	3387.2
10°	3065.6	3064.5	3063.3	3084.6	3106.0	3169.5	3232.9	3265.6	3298.2	3327.2	3356.3
12.5°	2591.1	2592.9	2594.6	2664.6	2734.6	2794.6	2854.5	2937.5	3020.6	3110.1	3199.7
15°	2070.3	2099.3	2128.4	2190.7	2253.0	2343.1	2433.3	2544.8	2656.3	2798.1	2939.9
17.5°	1700.1	1712.6	1725.0	1784.9	1844.8	1930.3	2015.7	2142.0	2268.4	2451.1	2633.8
20°	1401.1	1412.4	1423.7	1467.0	1510.3	1592.1	1674.0	1794.4	1914.8	2095.8	2276.7
22.5°	1169.8	1191.7	1213.7	1242.7	1271.8	1331.1	1390.5	1513.2	1636.0	1800.9	1965.9
25°	1029.8	1039.9	1050.0	1074.9	1099.8	1156.7	1213.7	1295.0	1376.2	1540.5	1704.9
27.5°	934.9	937.8	940.8	959.2	977.6	1014.4	1051.1	1126.5	1201.8	1337.1	1472.3
30°	856.6	861.9	867.3	881.5	895.7	922.4	949.1	1002.5	1055.9	1176.9	1297.9
32.5°	796.1	799.0	802.0	813.9	825.7	845.3	864.9	907.0	949.1	1041.7	1134.2
35°	743.9	744.5	745.1	754.0	762.9	781.8	800.8	835.8	870.8	939.0	1007.2
37.5°	684.6	688.7	692.9	699.4	705.9	722.5	739.1	767.6	796.1	852.4	908.8
40°	634.7	638.3	641.8	649.6	657.3	670.3	683.4	709.5	735.6	784.2	832.8
42.5°	584.9	587.3	589.6	597.4	605.1	621.1	637.1	657.9	678.6	719.0	759.3
45°	529.1	535.1	541.0	549.3	557.6	571.2	584.9	606.2	627.6	662.0	696.4
47.5°	482.9	485.8	488.8	495.9	503.0	519.6	536.3	555.2	574.2	606.2	638.3
50°	436.6	437.8	439.0	445.5	452.0	466.8	481.7	503.6	525.6	555.2	584.9
52.5°	392.7	395.7	398.6	405.2	411.7	421.8	431.8	454.4	476.9	506.0	535.1
55°	352.4	354.1	355.9	360.7	365.4	377.3	389.1	408.7	428.3	455.0	481.7
57.5°	314.4	316.8	319.1	322.7	326.3	336.9	347.6	364.8	382.0	408.7	435.4
60°	275.2	278.2	281.2	285.3	289.5	297.8	306.1	321.5	336.9	360.7	384.4
62.5°	246.8	247.4	248.0	251.5	255.1	261.0	266.9	279.4	291.9	315.6	339.3
65°	214.7	216.5	218.3	220.1	221.9	226.6	231.3	242.0	252.7	270.5	288.3
67.5°	181.5	183.3	185.1	188.0	191.0	195.2	199.3	206.4	213.6	230.2	246.8
70°	141.2	141.2	141.2	145.9	150.7	157.8	164.9	170.2	175.6	189.2	202.9
72.5°	115.1	115.7	116.3	116.9	117.5	121.6	125.8	134.7	143.6	151.9	160.2
75°	93.7	94.3	94.9	95.5	96.1	97.3	98.5	101.4	104.4	113.9	123.4
77.5°	74.7	75.3	75.9	76.5	77.1	78.3	79.5	80.7	81.9	85.4	89.0
80°	56.9	57.5	58.1	58.7	59.3	59.9	60.5	61.7	62.9	64.7	66.4
82.5°	41.5	41.5	41.5	41.5	41.5	42.7	43.9	43.9	43.9	45.1	46.3
85°	26.1	26.1	26.1	26.7	27.3	27.3	27.3	27.9	28.5	28.5	28.5
87.5°	11.9	11.3	10.7	11.3	11.9	11.9	11.9	12.5	13.1	13.1	13.1
90°	20.9	20.6	20.3	20.0	19.7	19.2	18.6	18.0	17.4	16.7	14.7
92.5°	23.7	23.5	23.4	23.2	23.1	22.5	21.4	20.3	19.2	18.1	16.7
95°	26.5	26.5	26.5	26.5	26.5	25.9	24.9	23.8	22.7	21.6	19.9
97.5°	28.6	28.4	28.3	28.1	28.0	27.3	26.0	24.8	23.5	22.3	30.2
100°	29.3	29.1	29.0	28.8	28.7	28.0	26.7	25.5	24.2	23.0	47.2
102.5°	30.0	29.7	29.4	29.0	28.7	31.1	36.3	41.4	46.5	51.6	78.5
105°	30.7	30.4	30.1	29.7	29.4	43.0	70.4	97.8	125.3	152.7	166.6
107.5°	72.5	92.8	113.1	133.4	153.7	175.8	199.6	223.5	247.3	271.2	268.9
110°	191.7	213.9	236.0	258.2	280.3	294.0	299.1	304.2	309.3	314.4	312.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	363.2	363.5	363.8	364.1	364.4	363.9	362.5	361.1	359.7	358.3	356.6
115°	409.9	409.3	408.7	408.1	407.4	406.4	404.8	403.3	401.7	400.2	398.8
117.5°	447.6	447.4	447.3	447.1	446.9	446.2	445.0	443.8	442.5	441.3	440.5
120°	486.6	486.6	486.6	486.6	486.6	486.0	484.7	483.5	482.3	481.0	480.6
122.5°	524.9	524.8	524.6	524.5	524.3	523.9	523.1	522.3	521.5	520.8	520.1
125°	560.5	560.2	559.9	559.6	559.3	558.9	558.6	558.3	558.0	557.7	557.1
127.5°	595.4	595.7	596.0	596.3	596.6	596.5	596.0	595.6	595.1	594.7	593.9
130°	628.8	629.1	629.4	629.7	630.1	629.9	629.3	628.7	628.0	627.4	626.8
132.5°	659.5	660.0	660.4	660.9	661.3	661.3	660.7	660.0	659.4	658.8	658.3
135°	690.9	691.3	691.8	692.3	692.7	692.7	692.3	691.8	691.3	690.9	690.2
137.5°	720.8	721.1	721.5	721.8	722.1	721.8	721.1	720.3	719.5	718.7	718.4
140°	747.3	747.6	747.9	748.3	748.6	748.4	747.8	747.2	746.6	745.9	745.5
142.5°	771.7	772.2	772.7	773.1	773.6	773.6	773.1	772.7	772.2	771.7	771.3
145°	796.8	796.8	796.8	796.8	796.8	796.7	796.4	796.0	795.7	795.4	795.1
147.5°	814.9	815.7	816.5	817.3	818.0	818.3	818.0	817.7	817.4	817.0	816.7
150°	835.9	836.3	836.8	837.3	837.7	837.8	837.5	837.2	836.9	836.6	836.3
152.5°	852.6	853.4	854.1	854.9	855.7	855.8	855.2	854.5	853.9	853.3	853.1
155°	867.9	868.9	869.8	870.7	871.7	871.7	871.0	870.2	869.4	868.6	868.5
157.5°	881.2	882.4	883.7	884.9	886.1	886.3	885.4	884.4	883.5	882.6	882.7
160°	893.7	894.8	895.9	897.0	898.1	898.1	897.2	896.3	895.4	894.4	894.6
162.5°	905.6	906.5	907.4	908.4	909.3	909.2	908.1	907.0	906.0	904.9	905.0
165°	914.6	915.7	916.8	917.9	919.0	918.9	917.7	916.4	915.2	913.9	914.1
167.5°	921.6	922.9	924.1	925.3	926.6	926.6	925.3	924.1	922.9	921.6	921.6
170°	927.9	929.1	930.4	931.6	932.8	932.8	931.6	930.4	929.1	927.9	927.9
172.5°	931.4	932.8	934.2	935.6	936.9	937.0	935.8	934.5	933.3	932.1	931.9
175°	934.9	936.1	937.3	938.6	939.8	939.9	938.8	937.7	936.6	935.6	935.4
177.5°	935.6	937.1	938.7	940.2	941.8	941.9	940.7	939.4	938.2	936.9	936.8
180°	938.3	938.3	938.3	938.3	938.3	938.3	938.3	938.3	938.3	938.3	938.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6
2.5°	3072.2	3069.2	3040.7	3012.3	2984.4	2956.5	2935.7	2915.0	2880.0	2845.0	2823.0
5°	3262.6	3240.0	3195.0	3149.9	3082.3	3014.6	2957.7	2900.7	2828.4	2756.0	2695.5
7.5°	3368.8	3350.4	3295.8	3241.2	3151.7	3062.1	2973.1	2884.1	2777.4	2670.6	2579.2
10°	3371.7	3387.2	3342.1	3297.0	3196.1	3095.3	2974.3	2853.3	2709.7	2566.2	2448.1
12.5°	3266.1	3332.6	3323.1	3313.6	3211.0	3108.4	2961.2	2814.1	2638.0	2461.8	2314.1
15°	3068.6	3197.3	3235.3	3273.3	3188.4	3103.6	2936.3	2769.0	2562.0	2355.0	2185.3
17.5°	2814.1	2994.5	3094.7	3195.0	3133.3	3071.6	2888.3	2705.0	2471.9	2238.7	2054.2
20°	2512.8	2748.9	2906.1	3063.3	3040.7	3018.2	2829.0	2639.7	2388.2	2136.7	1936.8
22.5°	2215.0	2464.1	2681.3	2898.4	2921.5	2944.6	2753.6	2562.6	2287.4	2012.1	1808.7
25°	1958.1	2211.4	2470.1	2728.7	2780.9	2833.1	2651.6	2470.1	2184.7	1899.4	1697.1
27.5°	1713.2	1954.0	2238.7	2523.5	2618.4	2713.3	2547.2	2381.1	2083.9	1786.7	1585.0
30°	1513.2	1728.6	2019.2	2309.9	2442.2	2574.5	2422.0	2269.6	1974.8	1679.9	1482.4
32.5°	1327.0	1519.8	1811.6	2103.5	2257.1	2410.8	2279.1	2147.4	1863.8	1580.3	1385.1
35°	1179.9	1352.5	1624.8	1897.0	2069.1	2241.1	2133.1	2025.2	1748.2	1471.1	1286.6
37.5°	1053.5	1198.3	1453.9	1709.6	1892.3	2075.0	1984.8	1894.7	1634.3	1373.8	1199.4
40°	949.1	1065.4	1303.3	1541.1	1720.3	1899.4	1822.3	1745.2	1512.1	1278.9	1115.8
42.5°	859.5	959.8	1173.3	1386.9	1551.2	1715.5	1664.5	1613.5	1402.3	1191.1	1039.9
45°	780.6	864.9	1052.9	1241.0	1392.2	1543.5	1503.2	1462.8	1280.7	1098.6	959.8
47.5°	710.7	783.0	950.9	1118.8	1254.6	1390.5	1353.1	1315.7	1165.0	1014.4	888.0
50°	646.6	708.3	848.3	988.3	1110.5	1232.7	1201.8	1171.0	1046.4	921.8	812.7
52.5°	586.1	637.1	762.9	888.6	987.1	1085.6	1061.8	1038.1	942.0	845.9	746.8
55°	528.5	575.4	681.6	787.8	872.0	956.2	932.5	908.8	834.0	759.3	672.1
57.5°	476.3	517.3	603.3	689.3	756.3	823.4	812.1	800.8	738.5	676.2	604.5
60°	421.2	457.9	532.1	606.2	660.2	714.2	701.2	688.1	643.6	599.1	537.4
62.5°	371.9	404.6	463.9	523.2	567.1	611.0	601.5	592.0	558.2	524.4	473.4
65°	320.3	352.4	400.4	448.5	482.9	517.3	509.0	500.7	475.2	449.6	408.7
67.5°	273.5	300.2	341.7	383.2	406.3	429.5	424.7	420.0	400.4	380.8	348.8
70°	226.0	249.1	283.5	318.0	334.0	350.0	351.8	353.5	335.7	318.0	294.2
72.5°	178.6	196.9	229.0	261.0	273.5	285.9	285.3	284.7	274.1	263.4	242.0
75°	137.0	150.7	175.6	200.5	211.2	221.9	224.2	226.6	216.5	206.4	194.6
77.5°	98.5	108.0	126.9	145.9	157.8	169.7	170.8	172.0	167.3	162.5	151.3
80°	69.4	72.4	84.2	96.1	108.6	121.0	122.8	124.6	119.8	115.1	108.0
82.5°	48.0	49.8	54.0	58.1	68.2	78.3	80.7	83.0	80.7	78.3	70.6
85°	29.1	29.7	31.4	33.2	38.0	42.7	45.1	47.5	46.3	45.1	40.9
87.5°	13.1	13.1	13.6	14.2	15.4	16.6	19.6	22.5	20.8	19.0	17.2
90°	12.7	10.7	8.7	6.9	5.3	3.8	2.2	0.7	2.2	3.8	5.3
92.5°	15.3	13.9	12.5	12.3	13.2	14.2	15.1	16.0	15.1	14.2	13.2
95°	18.2	16.5	14.8	17.1	23.5	29.8	36.2	42.5	36.2	29.8	23.5
97.5°	38.1	46.0	53.9	60.0	64.4	68.7	73.0	77.4	73.0	68.7	64.4
100°	71.3	95.5	119.7	130.2	127.1	124.0	120.9	117.8	120.9	124.0	127.1
102.5°	105.5	132.5	159.4	171.9	169.9	167.9	165.8	163.8	165.8	167.9	169.9
105°	180.6	194.5	208.4	214.6	212.9	211.2	209.5	207.7	209.5	211.2	212.9
107.5°	266.5	264.2	261.9	260.0	258.6	257.2	255.8	254.5	255.8	257.2	258.6
110°	311.0	309.3	307.6	306.1	304.9	303.6	302.4	301.2	302.4	303.6	304.9



TEST NUMBER: P831894

CATALOG NUMBER: S123RDIP-S1000D805U940-4F0-1E-UDD-G

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	354.9	353.2	351.5	350.1	349.0	347.9	346.9	345.8	346.9	347.9	349.0
115°	397.4	396.0	394.6	393.4	392.5	391.6	390.6	389.7	390.6	391.6	392.5
117.5°	439.7	439.0	438.2	437.3	436.2	435.1	434.0	432.9	434.0	435.1	436.2
120°	480.1	479.6	479.2	478.2	476.8	475.4	474.1	472.7	474.1	475.4	476.8
122.5°	519.5	518.9	518.3	517.4	516.3	515.3	514.2	513.1	514.2	515.3	516.3
125°	556.5	555.8	555.2	554.3	553.1	551.8	550.6	549.3	550.6	551.8	553.1
127.5°	593.1	592.3	591.6	590.6	589.3	588.1	586.8	585.6	586.8	588.1	589.3
130°	626.2	625.6	624.9	624.0	622.8	621.5	620.3	619.1	620.3	621.5	622.8
132.5°	657.9	657.4	656.9	656.1	654.8	653.6	652.4	651.1	652.4	653.6	654.8
135°	689.6	689.0	688.4	687.6	686.7	685.7	684.8	683.9	684.8	685.7	686.7
137.5°	718.1	717.8	717.5	716.7	715.5	714.3	713.0	711.8	713.0	714.3	715.5
140°	745.0	744.5	744.1	743.4	742.4	741.5	740.6	739.7	740.6	741.5	742.4
142.5°	770.8	770.3	769.9	769.2	768.2	767.3	766.4	765.5	766.4	767.3	768.2
145°	794.8	794.5	794.2	793.5	792.4	791.3	790.2	789.2	790.2	791.3	792.4
147.5°	816.4	816.1	815.8	815.3	814.5	813.7	812.9	812.2	812.9	813.7	814.5
150°	835.9	835.6	835.3	834.9	834.5	834.0	833.5	833.1	833.5	834.0	834.5
152.5°	853.0	852.8	852.7	852.5	852.4	852.2	852.1	851.9	852.1	852.2	852.4
155°	868.3	868.2	868.0	868.1	868.4	868.7	869.0	869.3	869.0	868.7	868.4
157.5°	882.9	883.0	883.2	883.3	883.3	883.3	883.3	883.3	883.3	883.3	883.3
160°	894.7	894.9	895.0	895.2	895.4	895.5	895.7	895.8	895.7	895.5	895.4
162.5°	905.2	905.3	905.5	905.8	906.3	906.7	907.2	907.7	907.2	906.7	906.3
165°	914.3	914.4	914.6	914.9	915.3	915.8	916.3	916.7	916.3	915.8	915.3
167.5°	921.6	921.6	921.6	921.9	922.5	923.2	923.8	924.4	923.8	923.2	922.5
170°	927.9	927.9	927.9	928.2	928.8	929.4	930.1	930.7	930.1	929.4	928.8
172.5°	931.8	931.6	931.4	931.8	932.5	933.3	934.1	934.9	934.1	933.3	932.5
175°	935.2	935.1	934.9	935.2	936.0	936.8	937.6	938.3	937.6	936.8	936.0
177.5°	936.6	936.5	936.3	936.6	937.4	938.2	939.0	939.7	939.0	938.2	937.4
180°	938.3	938.3	938.3	938.3	938.3	938.3	938.3	938.3	938.3	938.3	938.3



TEST NUMBER: P831894

CATALOG NUMBER: S123RDIP-S1000D805U940-4F0-1E-UDD-G

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6	2893.6
2.5°	2801.1	2767.3	2733.5	2709.1	2684.8	2654.6	2624.3	2623.1	2621.9	2599.4	2576.9
5°	2635.0	2576.3	2517.5	2460.0	2402.5	2344.9	2287.4	2274.3	2261.3	2241.7	2222.1
7.5°	2487.9	2394.1	2300.4	2226.9	2153.3	2095.8	2038.2	1999.1	1959.9	1929.7	1899.4
10°	2330.1	2213.8	2097.5	2008.6	1919.6	1857.3	1795.0	1749.9	1704.9	1683.5	1662.1
12.5°	2166.4	2040.0	1913.7	1826.5	1739.3	1664.5	1589.8	1548.8	1507.9	1478.2	1448.6
15°	2015.7	1879.8	1744.0	1651.5	1558.9	1488.9	1418.9	1378.0	1337.1	1307.4	1277.7
17.5°	1869.8	1732.7	1595.7	1502.0	1408.3	1344.8	1281.3	1241.6	1201.8	1183.4	1165.0
20°	1736.9	1598.7	1460.5	1372.1	1283.7	1221.4	1159.1	1137.8	1116.4	1099.2	1082.0
22.5°	1605.2	1472.3	1339.4	1254.6	1169.8	1124.7	1079.6	1062.4	1045.2	1032.2	1019.1
25°	1494.9	1362.6	1230.3	1156.1	1082.0	1047.0	1012.0	1000.7	989.5	976.4	963.4
27.5°	1383.3	1257.6	1131.8	1072.5	1013.2	984.7	956.2	942.0	927.8	917.1	906.4
30°	1284.9	1168.6	1052.3	1003.1	953.9	928.9	904.0	888.6	873.2	863.1	853.0
32.5°	1190.0	1086.7	983.5	941.4	899.3	875.0	850.6	835.8	821.0	809.1	797.3
35°	1102.2	1012.6	923.0	884.5	845.9	821.6	797.3	782.4	767.6	755.7	743.9
37.5°	1025.0	943.8	862.5	826.3	790.1	768.8	747.4	732.0	716.6	704.1	691.7
40°	952.7	880.9	809.1	774.1	739.1	716.0	692.9	679.2	665.6	654.3	643.0
42.5°	888.6	822.8	756.9	722.5	688.1	666.2	644.2	628.2	612.2	605.7	599.1
45°	821.0	762.9	704.7	671.5	638.3	615.1	592.0	578.4	564.7	558.8	552.9
47.5°	761.7	707.7	653.7	621.1	588.5	567.7	546.9	536.3	525.6	517.3	509.0
50°	703.5	651.3	599.1	567.7	536.3	518.5	500.7	487.6	474.6	468.6	462.7
52.5°	647.8	600.3	552.9	520.8	488.8	471.6	454.4	443.1	431.8	419.4	406.9
55°	584.9	543.4	501.8	473.4	444.9	427.1	409.3	396.3	383.2	370.2	357.1
57.5°	532.7	491.8	450.8	425.3	399.8	382.6	365.4	351.2	336.9	326.3	315.6
60°	475.7	440.2	404.6	379.6	354.7	338.1	321.5	307.9	294.2	288.9	283.5
62.5°	422.4	389.1	355.9	334.0	312.0	296.0	280.0	271.1	262.2	258.6	255.1
65°	367.8	339.3	310.8	290.7	270.5	256.9	243.2	239.1	234.9	231.9	229.0
67.5°	316.8	292.4	268.1	250.3	232.5	223.0	213.6	208.8	204.1	200.5	196.9
70°	270.5	249.1	227.8	212.4	196.9	188.0	179.1	175.0	170.8	164.3	157.8
72.5°	220.7	204.1	187.5	175.6	163.7	156.0	148.3	140.0	131.7	125.8	119.8
75°	182.7	166.1	149.5	138.2	126.9	118.0	109.1	106.2	103.2	101.4	99.7
77.5°	140.0	125.8	111.5	102.6	93.7	89.6	85.4	83.6	81.9	81.3	80.7
80°	100.8	89.0	77.1	72.4	67.6	66.4	65.3	64.1	62.9	62.3	61.7
82.5°	62.9	56.9	51.0	49.8	48.6	48.0	47.5	46.9	46.3	45.7	45.1
85°	36.8	34.4	32.0	31.4	30.8	30.3	29.7	29.7	29.7	29.7	29.7
87.5°	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	14.8	14.2
90°	6.9	8.7	10.7	12.7	14.7	16.7	17.4	18.0	18.6	19.2	19.7
92.5°	12.3	12.5	13.9	15.3	16.7	18.1	19.2	20.3	21.4	22.5	23.1
95°	17.1	14.8	16.5	18.2	19.9	21.6	22.7	23.8	24.9	25.9	26.5
97.5°	60.0	53.9	46.0	38.1	30.2	22.3	23.5	24.8	26.0	27.3	28.0
100°	130.2	119.7	95.5	71.3	47.2	23.0	24.2	25.5	26.7	28.0	28.7
102.5°	171.9	159.4	132.5	105.5	78.5	51.6	46.5	41.4	36.3	31.1	28.7
105°	214.6	208.4	194.5	180.6	166.6	152.7	125.3	97.8	70.4	43.0	29.4
107.5°	260.0	261.9	264.2	266.5	268.9	271.2	247.3	223.5	199.6	175.8	153.7
110°	306.1	307.6	309.3	311.0	312.7	314.4	309.3	304.2	299.1	294.0	280.3



TEST NUMBER: P831894

CATALOG NUMBER: S123RDIP-S1000D805U940-4F0-1E-UDD-G

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	350.1	351.5	353.2	354.9	356.6	358.3	359.7	361.1	362.5	363.9	364.4
115°	393.4	394.6	396.0	397.4	398.8	400.2	401.7	403.3	404.8	406.4	407.4
117.5°	437.3	438.2	439.0	439.7	440.5	441.3	442.5	443.8	445.0	446.2	446.9
120°	478.2	479.2	479.6	480.1	480.6	481.0	482.3	483.5	484.7	486.0	486.6
122.5°	517.4	518.3	518.9	519.5	520.1	520.8	521.5	522.3	523.1	523.9	524.3
125°	554.3	555.2	555.8	556.5	557.1	557.7	558.0	558.3	558.6	558.9	559.3
127.5°	590.6	591.6	592.3	593.1	593.9	594.7	595.1	595.6	596.0	596.5	596.6
130°	624.0	624.9	625.6	626.2	626.8	627.4	628.0	628.7	629.3	629.9	630.1
132.5°	656.1	656.9	657.4	657.9	658.3	658.8	659.4	660.0	660.7	661.3	661.3
135°	687.6	688.4	689.0	689.6	690.2	690.9	691.3	691.8	692.3	692.7	692.7
137.5°	716.7	717.5	717.8	718.1	718.4	718.7	719.5	720.3	721.1	721.8	722.1
140°	743.4	744.1	744.5	745.0	745.5	745.9	746.6	747.2	747.8	748.4	748.6
142.5°	769.2	769.9	770.3	770.8	771.3	771.7	772.2	772.7	773.1	773.6	773.6
145°	793.5	794.2	794.5	794.8	795.1	795.4	795.7	796.0	796.4	796.7	796.8
147.5°	815.3	815.8	816.1	816.4	816.7	817.0	817.4	817.7	818.0	818.3	818.0
150°	834.9	835.3	835.6	835.9	836.3	836.6	836.9	837.2	837.5	837.8	837.7
152.5°	852.5	852.7	852.8	853.0	853.1	853.3	853.9	854.5	855.2	855.8	855.7
155°	868.1	868.0	868.2	868.3	868.5	868.6	869.4	870.2	871.0	871.7	871.7
157.5°	883.3	883.2	883.0	882.9	882.7	882.6	883.5	884.4	885.4	886.3	886.1
160°	895.2	895.0	894.9	894.7	894.6	894.4	895.4	896.3	897.2	898.1	898.1
162.5°	905.8	905.5	905.3	905.2	905.0	904.9	906.0	907.0	908.1	909.2	909.3
165°	914.9	914.6	914.4	914.3	914.1	913.9	915.2	916.4	917.7	918.9	919.0
167.5°	921.9	921.6	921.6	921.6	921.6	921.6	922.9	924.1	925.3	926.6	926.6
170°	928.2	927.9	927.9	927.9	927.9	927.9	929.1	930.4	931.6	932.8	932.8
172.5°	931.8	931.4	931.6	931.8	931.9	932.1	933.3	934.5	935.8	937.0	936.9
175°	935.2	934.9	935.1	935.2	935.4	935.6	936.6	937.7	938.8	939.9	939.8
177.5°	936.6	936.3	936.5	936.6	936.8	936.9	938.2	939.4	940.7	941.9	941.8
180°	938.3	938.3	938.3	938.3	938.3	938.3	938.3	938.3	938.3	938.3	938.3



TEST NUMBER: P831894

CATALOG NUMBER: S123RDIP-S1000D805U940-4F0-1E-UDD-G

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2893.6	2893.6	2893.6	2893.6
2.5°	2570.9	2565.0	2562.6	2560.2
5°	2203.7	2185.3	2181.2	2177.0
7.5°	1891.7	1884.0	1858.5	1833.0
10°	1638.4	1614.7	1604.0	1593.3
12.5°	1426.6	1404.7	1401.1	1397.6
15°	1262.3	1246.9	1241.6	1236.2
17.5°	1154.4	1143.7	1137.2	1130.6
20°	1074.3	1066.6	1061.8	1057.1
22.5°	1013.2	1007.2	1003.7	1000.1
25°	954.5	945.6	942.6	939.6
27.5°	898.7	891.0	888.0	885.1
30°	846.5	840.0	835.8	831.7
32.5°	789.5	781.8	779.5	777.1
35°	739.1	734.4	732.0	729.6
37.5°	685.7	679.8	676.2	672.7
40°	640.1	637.1	635.3	633.5
42.5°	593.8	588.5	587.9	587.3
45°	547.5	542.2	541.0	539.8
47.5°	504.2	499.5	498.9	498.3
50°	456.2	449.6	444.9	440.2
52.5°	401.0	395.1	390.9	386.8
55°	350.6	344.1	340.5	336.9
57.5°	312.6	309.6	307.9	306.1
60°	281.8	280.0	278.8	277.6
62.5°	253.3	251.5	251.5	251.5
65°	227.2	225.4	223.6	221.9
67.5°	193.4	189.8	189.2	188.6
70°	152.5	147.1	146.5	145.9
72.5°	119.2	118.6	117.5	116.3
75°	98.5	97.3	97.3	97.3
77.5°	79.5	78.3	78.3	78.3
80°	61.1	60.5	61.1	61.7
82.5°	45.1	45.1	44.5	43.9
85°	29.1	28.5	28.5	28.5
87.5°	14.2	14.2	14.2	14.2
90°	20.0	20.3	20.6	20.9
92.5°	23.2	23.4	23.5	23.7
95°	26.5	26.5	26.5	26.5
97.5°	28.1	28.3	28.4	28.6
100°	28.8	29.0	29.1	29.3
102.5°	29.0	29.4	29.7	30.0
105°	29.7	30.1	30.4	30.7
107.5°	133.4	113.1	92.8	72.5
110°	258.2	236.0	213.9	191.7



TEST NUMBER: P831894

CATALOG NUMBER: S123RDIP-S1000D805U940-4F0-1E-UDD-G

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
112.5°	364.1	363.8	363.5	363.2
115°	408.1	408.7	409.3	409.9
117.5°	447.1	447.3	447.4	447.6
120°	486.6	486.6	486.6	486.6
122.5°	524.5	524.6	524.8	524.9
125°	559.6	559.9	560.2	560.5
127.5°	596.3	596.0	595.7	595.4
130°	629.7	629.4	629.1	628.8
132.5°	660.9	660.4	660.0	659.5
135°	692.3	691.8	691.3	690.9
137.5°	721.8	721.5	721.1	720.8
140°	748.3	747.9	747.6	747.3
142.5°	773.1	772.7	772.2	771.7
145°	796.8	796.8	796.8	796.8
147.5°	817.3	816.5	815.7	814.9
150°	837.3	836.8	836.3	835.9
152.5°	854.9	854.1	853.4	852.6
155°	870.7	869.8	868.9	867.9
157.5°	884.9	883.7	882.4	881.2
160°	897.0	895.9	894.8	893.7
162.5°	908.4	907.4	906.5	905.6
165°	917.9	916.8	915.7	914.6
167.5°	925.3	924.1	922.9	921.6
170°	931.6	930.4	929.1	927.9
172.5°	935.6	934.2	932.8	931.4
175°	938.6	937.3	936.1	934.9
177.5°	940.2	938.7	937.1	935.6
180°	938.3	938.3	938.3	938.3



TEST NUMBER: P831894

CATALOG NUMBER: S123RDIP-S1000D805U940-4F0-1E-UDD-G

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	13.35	14.22	14.26	15.14	16.30	18.02	18.88	18.92	19.80	20.97
	3H	14.58	15.35	15.49	16.28	17.47	19.52	20.29	20.44	21.22	22.41
	4H	14.96	15.69	15.89	16.62	17.82	20.01	20.74	20.94	21.67	22.87
	6H	15.24	15.92	16.19	16.85	18.07	20.33	21.00	21.27	21.93	23.15
	8H	15.33	15.97	16.28	16.92	18.14	20.41	21.04	21.36	22.00	23.21
	12H	15.39	15.99	16.34	16.94	18.18	20.44	21.05	21.39	21.99	23.23
4H	2H	14.08	14.81	15.02	15.74	16.94	18.02	18.75	18.95	19.68	20.88
	3H	15.45	16.06	16.40	17.02	18.24	19.68	20.29	20.62	21.25	22.46
	4H	15.91	16.46	16.87	17.42	18.66	20.29	20.84	21.24	21.79	23.04
	6H	16.28	16.75	17.25	17.73	18.98	20.73	21.20	21.70	22.18	23.42
	8H	16.41	16.85	17.38	17.82	19.08	20.86	21.30	21.83	22.27	23.53
	12H	16.48	16.88	17.47	17.87	19.13	20.92	21.32	21.91	22.31	23.57
8H	4H	16.23	16.67	17.20	17.64	18.90	20.26	20.70	21.23	21.67	22.93
	6H	16.69	17.06	17.69	18.07	19.32	20.75	21.12	21.75	22.13	23.39
	8H	16.89	17.21	17.89	18.21	19.48	20.94	21.26	21.94	22.26	23.54
	12H	17.03	17.31	18.03	18.30	19.62	21.06	21.34	22.06	22.34	23.66
12H	4H	16.24	16.64	17.23	17.63	18.89	20.21	20.61	21.20	21.60	22.86
	6H	16.75	17.07	17.75	18.08	19.35	20.73	21.05	21.73	22.05	23.32
	8H	16.97	17.25	17.98	18.25	19.57	20.92	21.21	21.93	22.20	23.52