

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: P831895

Luminaire Tested: S123RDIP-S1000D805U940-4F0-1E-UDD-G1

Issue Date: 05/03/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P831895  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-905-2, G3-1807-864-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 05/03/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDIP-S1000D805U940-4F0-1E-UDD-G1  
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT, GRAZE OPTIC  
UPLIGHT 805 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: -

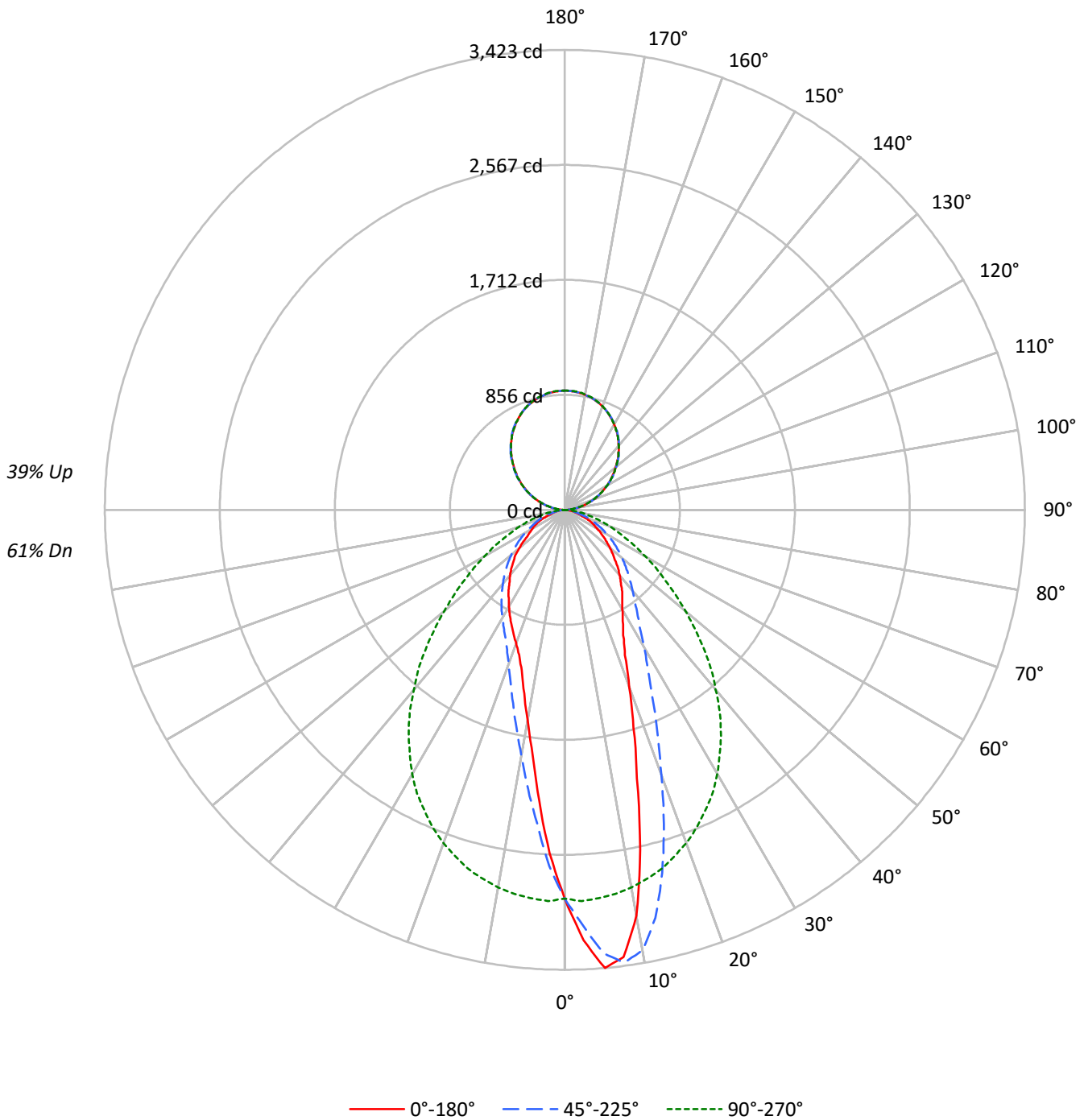
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6297.5 lumens  
Efficiency: N/A  
Efficacy: 113.1 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: Semi-Direct  
  
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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66	61		
1	101	97	94	90	95	91	88	85	80	78	75	70	68	66	60	59	58	53		
2	93	86	80	76	87	81	76	72	71	67	64	62	60	57	54	52	50	46		
3	86	77	70	64	80	72	66	61	64	59	55	56	53	50	49	46	44	41		
4	79	69	61	56	74	65	58	53	58	52	48	51	47	44	45	42	39	36		
5	73	62	54	49	68	59	52	47	52	47	43	46	42	39	41	38	35	32		
6	68	56	49	43	63	53	46	41	48	42	38	42	38	35	38	34	31	29		
7	63	51	44	38	59	49	42	37	44	38	34	39	35	31	35	31	29	26		
8	59	47	40	35	55	45	38	33	40	35	31	36	32	28	32	29	26	24		
9	55	43	36	31	52	41	35	30	37	32	28	34	29	26	30	27	24	22		
10	52	40	33	29	49	38	32	28	35	30	26	31	27	24	28	25	22	20		

**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	4.2
10°-20°	610.3	9.7
20°-30°	700.2	11.1
30°-40°	690.2	11.0
40°-50°	608.7	9.7
50°-60°	468.3	7.4
60°-70°	307.9	4.9
70°-80°	149.5	2.4
80°-90°	39.6	0.6
90°-100°	57.1	0.9
100°-110°	172.9	2.7
110°-120°	294.4	4.7
120°-130°	387.3	6.1
130°-140°	435.3	6.9
140°-150°	428.0	6.8
150°-160°	360.3	5.7
160°-170°	239.9	3.8
170°-180°	84.0	1.3
0°-30°	1574.3	25.0
0°-40°	2264.5	36.0
0°-60°	3341.4	53.1
0°-90°	3838.4	61.0
90°-120°	524.4	8.3
90°-150°	1774.9	28.2
90°-180°	2459.0	39.0
0°-180°	6297.5	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°	54	52	41	52	54	55
105°	166	164	157	164	166	176
115°	297	297	296	297	297	294
125°	429	434	434	434	429	383
135°	562	566	563	566	562	432
145°	682	686	682	686	682	426
155°	780	782	782	782	780	359
165°	848	849	851	849	848	239
175°	882	883	885	883	882	84
180°	888	888	888	888	888	



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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°	30.0	30.3	30.6	30.9	31.2	31.1	30.7	30.2	29.7	29.3	28.4
95°	54.4	54.4	54.4	54.4	54.4	54.1	53.5	52.8	52.2	51.6	50.4
97.5°	78.1	78.2	78.4	78.5	78.7	78.4	77.6	76.8	76.1	75.3	74.4
100°	106.0	105.7	105.4	105.0	104.7	104.3	103.9	103.4	102.9	102.5	101.7
102.5°	134.6	134.7	134.9	135.0	135.2	135.0	134.6	134.1	133.6	133.2	132.1
105°	165.9	165.6	165.3	165.0	164.7	164.5	164.5	164.5	164.5	164.5	163.1
107.5°	198.0	198.2	198.3	198.5	198.6	198.5	198.0	197.5	197.1	196.6	196.0
110°	230.8	231.1	231.4	231.7	232.0	231.9	231.2	230.6	230.0	229.4	229.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	265.6	265.6	265.6	265.6	265.6	265.2	264.5	263.7	262.9	262.1	262.1
115°	297.0	297.2	297.3	297.5	297.6	297.6	297.5	297.3	297.2	297.0	297.3
117.5°	329.1	329.5	330.0	330.5	330.9	331.2	331.2	331.2	331.2	331.2	331.5
120°	363.2	363.5	363.8	364.2	364.5	364.7	364.9	365.0	365.2	365.3	366.1
122.5°	396.0	396.5	396.9	397.4	397.9	398.3	398.8	399.3	399.7	400.2	400.5
125°	428.8	429.4	430.0	430.6	431.2	431.9	432.5	433.1	433.7	434.3	434.7
127.5°	461.5	462.2	462.8	463.4	464.0	464.8	465.7	466.6	467.6	468.5	468.8
130°	493.6	494.7	495.8	496.9	497.9	498.8	499.4	500.0	500.7	501.3	501.7
132.5°	527.1	527.8	528.6	529.4	530.2	530.9	531.7	532.5	533.3	534.0	534.3
135°	561.9	562.2	562.5	562.9	563.2	563.6	564.2	564.9	565.5	566.1	566.3
137.5°	592.6	593.1	593.5	594.0	594.5	595.1	595.9	596.6	597.4	598.2	597.7
140°	622.6	623.7	624.7	625.8	626.9	627.5	627.7	627.8	628.0	628.2	628.0
142.5°	653.3	654.0	654.8	655.6	656.4	656.8	657.0	657.1	657.3	657.4	657.1
145°	682.5	683.2	683.8	684.4	685.0	685.4	685.6	685.7	685.9	686.0	685.6
147.5°	709.0	710.0	710.9	711.8	712.7	713.2	713.2	713.2	713.2	713.2	712.7
150°	734.1	735.1	736.0	736.9	737.8	738.3	738.3	738.3	738.3	738.3	738.0
152.5°	758.5	759.3	760.1	760.9	761.6	761.9	761.5	761.2	760.9	760.6	760.5
155°	780.1	781.2	782.3	783.4	784.5	784.7	784.1	783.5	782.9	782.2	782.1
157.5°	800.4	801.3	802.2	803.1	804.1	804.2	803.6	803.0	802.4	801.8	801.6
160°	819.9	820.5	821.1	821.7	822.4	822.3	821.5	820.7	820.0	819.2	819.2
162.5°	834.5	835.6	836.7	837.8	838.9	839.0	838.2	837.5	836.7	835.9	835.8
165°	848.5	849.5	850.6	851.7	852.8	852.9	852.0	851.0	850.1	849.2	849.2
167.5°	861.0	861.9	862.9	863.8	864.7	864.7	863.8	862.9	861.9	861.0	860.9
170°	870.1	871.2	872.2	873.3	874.4	874.4	873.3	872.2	871.2	870.1	870.1
172.5°	877.0	878.1	879.2	880.3	881.4	881.5	880.5	879.6	878.7	877.7	877.7
175°	881.9	883.0	884.1	885.2	886.3	886.3	885.4	884.5	883.6	882.6	882.6
177.5°	884.7	885.8	886.9	888.0	889.1	889.1	888.2	887.3	886.3	885.4	885.4
180°	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5



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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°	27.4	26.5	25.6	24.6	23.7	22.8	21.8	20.9	21.8	22.8	23.7
95°	49.1	47.9	46.6	45.5	44.4	43.3	42.2	41.1	42.2	43.3	44.4
97.5°	73.4	72.5	71.6	70.7	70.0	69.2	68.4	67.6	68.4	69.2	70.0
100°	100.9	100.2	99.4	98.5	97.6	96.7	95.7	94.8	95.7	96.7	97.6
102.5°	131.0	129.9	128.8	128.0	127.6	127.1	126.7	126.2	126.7	127.1	127.6
105°	161.7	160.4	159.0	158.1	157.8	157.5	157.2	156.9	157.2	157.5	157.8
107.5°	195.4	194.7	194.1	193.7	193.6	193.4	193.3	193.1	193.3	193.4	193.6
110°	228.8	228.4	228.1	227.8	227.5	227.2	226.9	226.6	226.9	227.2	227.5





TEST NUMBER: P831895

CATALOG NUMBER: S123RDIP-S1000D805U940-4F0-1E-UDD-G1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	262.1	262.1	262.1	262.1	261.9	261.8	261.6	261.4	261.6	261.8	261.9
115°	297.6	297.9	298.2	298.2	297.7	297.2	296.8	296.3	296.8	297.2	297.7
117.5°	331.8	332.1	332.4	332.5	332.3	332.2	332.0	331.9	332.0	332.2	332.3
120°	366.9	367.6	368.4	368.3	367.4	366.5	365.6	364.6	365.6	366.5	367.4
122.5°	400.8	401.1	401.4	401.3	400.6	400.0	399.4	398.8	399.4	400.0	400.6
125°	435.0	435.3	435.6	435.5	435.0	434.6	434.1	433.6	434.1	434.6	435.0
127.5°	469.1	469.4	469.7	469.4	468.5	467.6	466.6	465.7	466.6	467.6	468.5
130°	502.2	502.7	503.1	502.7	501.5	500.3	499.0	497.8	499.0	500.3	501.5
132.5°	534.7	535.0	535.3	534.8	533.6	532.3	531.1	529.9	531.1	532.3	533.6
135°	566.4	566.6	566.7	566.3	565.4	564.5	563.6	562.6	563.6	564.5	565.4
137.5°	597.2	596.8	596.3	595.7	594.9	594.1	593.4	592.6	593.4	594.1	594.9
140°	627.8	627.7	627.5	627.1	626.3	625.5	624.7	624.0	624.7	625.5	626.3
142.5°	656.8	656.5	656.2	655.7	654.9	654.1	653.3	652.6	653.3	654.1	654.9
145°	685.1	684.6	684.2	683.8	683.5	683.2	682.8	682.5	682.8	683.2	683.5
147.5°	712.3	711.8	711.4	710.8	710.2	709.6	709.0	708.3	709.0	709.6	710.2
150°	737.7	737.4	737.1	736.8	736.5	736.1	735.8	735.5	735.8	736.1	736.5
152.5°	760.3	760.2	760.0	759.7	759.2	758.8	758.3	757.8	758.3	758.8	759.2
155°	781.9	781.8	781.6	781.5	781.5	781.5	781.5	781.5	781.5	781.5	781.5
157.5°	801.4	801.3	801.1	801.1	801.3	801.4	801.6	801.8	801.6	801.4	801.3
160°	819.2	819.2	819.2	819.3	819.6	820.0	820.3	820.6	820.3	820.0	819.6
162.5°	835.6	835.5	835.3	835.5	835.9	836.4	836.8	837.3	836.8	836.4	835.9
165°	849.2	849.2	849.2	849.4	849.9	850.3	850.8	851.3	850.8	850.3	849.9
167.5°	860.7	860.5	860.4	860.6	861.2	861.9	862.5	863.1	862.5	861.9	861.2
170°	870.1	870.1	870.1	870.4	871.0	871.6	872.2	872.9	872.2	871.6	871.0
172.5°	877.7	877.7	877.7	878.1	878.7	879.3	879.9	880.5	879.9	879.3	878.7
175°	882.6	882.6	882.6	882.9	883.6	884.2	884.8	885.4	884.8	884.2	883.6
177.5°	885.4	885.4	885.4	885.7	886.3	887.0	887.6	888.2	887.6	887.0	886.3
180°	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5



TEST NUMBER: P831895

CATALOG NUMBER: S123RDIP-S1000D805U940-4F0-1E-UDD-G1

**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°	24.6	25.6	26.5	27.4	28.4	29.3	29.7	30.2	30.7	31.1	31.2
95°	45.5	46.6	47.9	49.1	50.4	51.6	52.2	52.8	53.5	54.1	54.4
97.5°	70.7	71.6	72.5	73.4	74.4	75.3	76.1	76.8	77.6	78.4	78.7
100°	98.5	99.4	100.2	100.9	101.7	102.5	102.9	103.4	103.9	104.3	104.7
102.5°	128.0	128.8	129.9	131.0	132.1	133.2	133.6	134.1	134.6	135.0	135.2
105°	158.1	159.0	160.4	161.7	163.1	164.5	164.5	164.5	164.5	164.5	164.7
107.5°	193.7	194.1	194.7	195.4	196.0	196.6	197.1	197.5	198.0	198.5	198.6
110°	227.8	228.1	228.4	228.8	229.1	229.4	230.0	230.6	231.2	231.9	232.0



TEST NUMBER: P831895

CATALOG NUMBER: S123RDIP-S1000D805U940-4F0-1E-UDD-G1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	262.1	262.1	262.1	262.1	262.1	262.1	262.9	263.7	264.5	265.2	265.6
115°	298.2	298.2	297.9	297.6	297.3	297.0	297.2	297.3	297.5	297.6	297.6
117.5°	332.5	332.4	332.1	331.8	331.5	331.2	331.2	331.2	331.2	331.2	330.9
120°	368.3	368.4	367.6	366.9	366.1	365.3	365.2	365.0	364.9	364.7	364.5
122.5°	401.3	401.4	401.1	400.8	400.5	400.2	399.7	399.3	398.8	398.3	397.9
125°	435.5	435.6	435.3	435.0	434.7	434.3	433.7	433.1	432.5	431.9	431.2
127.5°	469.4	469.7	469.4	469.1	468.8	468.5	467.6	466.6	465.7	464.8	464.0
130°	502.7	503.1	502.7	502.2	501.7	501.3	500.7	500.0	499.4	498.8	497.9
132.5°	534.8	535.3	535.0	534.7	534.3	534.0	533.3	532.5	531.7	530.9	530.2
135°	566.3	566.7	566.6	566.4	566.3	566.1	565.5	564.9	564.2	563.6	563.2
137.5°	595.7	596.3	596.8	597.2	597.7	598.2	597.4	596.6	595.9	595.1	594.5
140°	627.1	627.5	627.7	627.8	628.0	628.2	628.0	627.8	627.7	627.5	626.9
142.5°	655.7	656.2	656.5	656.8	657.1	657.4	657.3	657.1	657.0	656.8	656.4
145°	683.8	684.2	684.6	685.1	685.6	686.0	685.9	685.7	685.6	685.4	685.0
147.5°	710.8	711.4	711.8	712.3	712.7	713.2	713.2	713.2	713.2	713.2	712.7
150°	736.8	737.1	737.4	737.7	738.0	738.3	738.3	738.3	738.3	738.3	737.8
152.5°	759.7	760.0	760.2	760.3	760.5	760.6	760.9	761.2	761.5	761.9	761.6
155°	781.5	781.6	781.8	781.9	782.1	782.2	782.9	783.5	784.1	784.7	784.5
157.5°	801.1	801.1	801.3	801.4	801.6	801.8	802.4	803.0	803.6	804.2	804.1
160°	819.3	819.2	819.2	819.2	819.2	819.2	820.0	820.7	821.5	822.3	822.4
162.5°	835.5	835.3	835.5	835.6	835.8	835.9	836.7	837.5	838.2	839.0	838.9
165°	849.4	849.2	849.2	849.2	849.2	849.2	850.1	851.0	852.0	852.9	852.8
167.5°	860.6	860.4	860.5	860.7	860.9	861.0	861.9	862.9	863.8	864.7	864.7
170°	870.4	870.1	870.1	870.1	870.1	870.1	871.2	872.2	873.3	874.4	874.4
172.5°	878.1	877.7	877.7	877.7	877.7	877.7	878.7	879.6	880.5	881.5	881.4
175°	882.9	882.6	882.6	882.6	882.6	882.6	883.6	884.5	885.4	886.3	886.3
177.5°	885.7	885.4	885.4	885.4	885.4	885.4	886.3	887.3	888.2	889.1	889.1
180°	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5



TEST NUMBER: P831895

CATALOG NUMBER: S123RDIP-S1000D805U940-4F0-1E-UDD-G1

**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°	30.9	30.6	30.3	30.0
95°	54.4	54.4	54.4	54.4
97.5°	78.5	78.4	78.2	78.1
100°	105.0	105.4	105.7	106.0
102.5°	135.0	134.9	134.7	134.6
105°	165.0	165.3	165.6	165.9
107.5°	198.5	198.3	198.2	198.0
110°	231.7	231.4	231.1	230.8



TEST NUMBER: P831895

CATALOG NUMBER: S123RDIP-S1000D805U940-4F0-1E-UDD-G1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
112.5°	265.6	265.6	265.6	265.6
115°	297.5	297.3	297.2	297.0
117.5°	330.5	330.0	329.5	329.1
120°	364.2	363.8	363.5	363.2
122.5°	397.4	396.9	396.5	396.0
125°	430.6	430.0	429.4	428.8
127.5°	463.4	462.8	462.2	461.5
130°	496.9	495.8	494.7	493.6
132.5°	529.4	528.6	527.8	527.1
135°	562.9	562.5	562.2	561.9
137.5°	594.0	593.5	593.1	592.6
140°	625.8	624.7	623.7	622.6
142.5°	655.6	654.8	654.0	653.3
145°	684.4	683.8	683.2	682.5
147.5°	711.8	710.9	710.0	709.0
150°	736.9	736.0	735.1	734.1
152.5°	760.9	760.1	759.3	758.5
155°	783.4	782.3	781.2	780.1
157.5°	803.1	802.2	801.3	800.4
160°	821.7	821.1	820.5	819.9
162.5°	837.8	836.7	835.6	834.5
165°	851.7	850.6	849.5	848.5
167.5°	863.8	862.9	861.9	861.0
170°	873.3	872.2	871.2	870.1
172.5°	880.3	879.2	878.1	877.0
175°	885.2	884.1	883.0	881.9
177.5°	888.0	886.9	885.8	884.7
180°	887.5	887.5	887.5	887.5



TEST NUMBER: P831895

CATALOG NUMBER: S123RDIP-S1000D805U940-4F0-1E-UDD-G1

**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	13.67	14.57	14.54	15.45	16.56	18.33	19.23	19.20	20.11	21.22
	3H	14.89	15.70	15.78	16.59	17.72	19.83	20.64	20.72	21.53	22.67
	4H	15.28	16.04	16.18	16.93	18.08	20.33	21.09	21.23	21.98	23.13
	6H	15.56	16.26	16.47	17.16	18.32	20.64	21.34	21.55	22.24	23.40
	8H	15.65	16.31	16.57	17.23	18.39	20.72	21.39	21.64	22.31	23.47
	12H	15.70	16.34	16.63	17.25	18.43	20.76	21.39	21.68	22.30	23.49
4H	2H	14.40	15.16	15.30	16.05	17.20	18.33	19.09	19.24	19.99	21.14
	3H	15.77	16.40	16.69	17.33	18.49	20.00	20.63	20.91	21.56	22.72
	4H	16.23	16.80	17.15	17.73	18.92	20.61	21.18	21.53	22.10	23.29
	6H	16.60	17.09	17.54	18.04	19.23	21.05	21.54	21.99	22.49	23.68
	8H	16.73	17.19	17.67	18.13	19.33	21.18	21.64	22.12	22.58	23.78
	12H	16.81	17.22	17.76	18.18	19.39	21.25	21.66	22.20	22.62	23.83
8H	4H	16.55	17.01	17.49	17.95	19.15	20.58	21.04	21.52	21.98	23.18
	6H	17.02	17.39	17.98	18.38	19.58	21.08	21.46	22.04	22.44	23.64
	8H	17.21	17.54	18.18	18.52	19.74	21.26	21.60	22.24	22.57	23.79
	12H	17.35	17.64	18.33	18.61	19.88	21.38	21.68	22.36	22.64	23.91
12H	4H	16.56	16.98	17.52	17.94	19.14	20.53	20.94	21.49	21.90	23.11
	6H	17.07	17.41	18.05	18.38	19.60	21.05	21.39	22.03	22.36	23.58
	8H	17.30	17.59	18.27	18.56	19.82	21.25	21.54	22.22	22.51	23.78