

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: P831872

Luminaire Tested: S123RDIP-S1000D585U950-4F0-1E-UDD-G4

Issue Date: 05/03/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P831872  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-905-2, G3-1807-864-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 05/03/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDIP-S1000D585U950-4F0-1E-UDD-G4  
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT, GRAZE OPTIC  
UPLIGHT 585 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: -

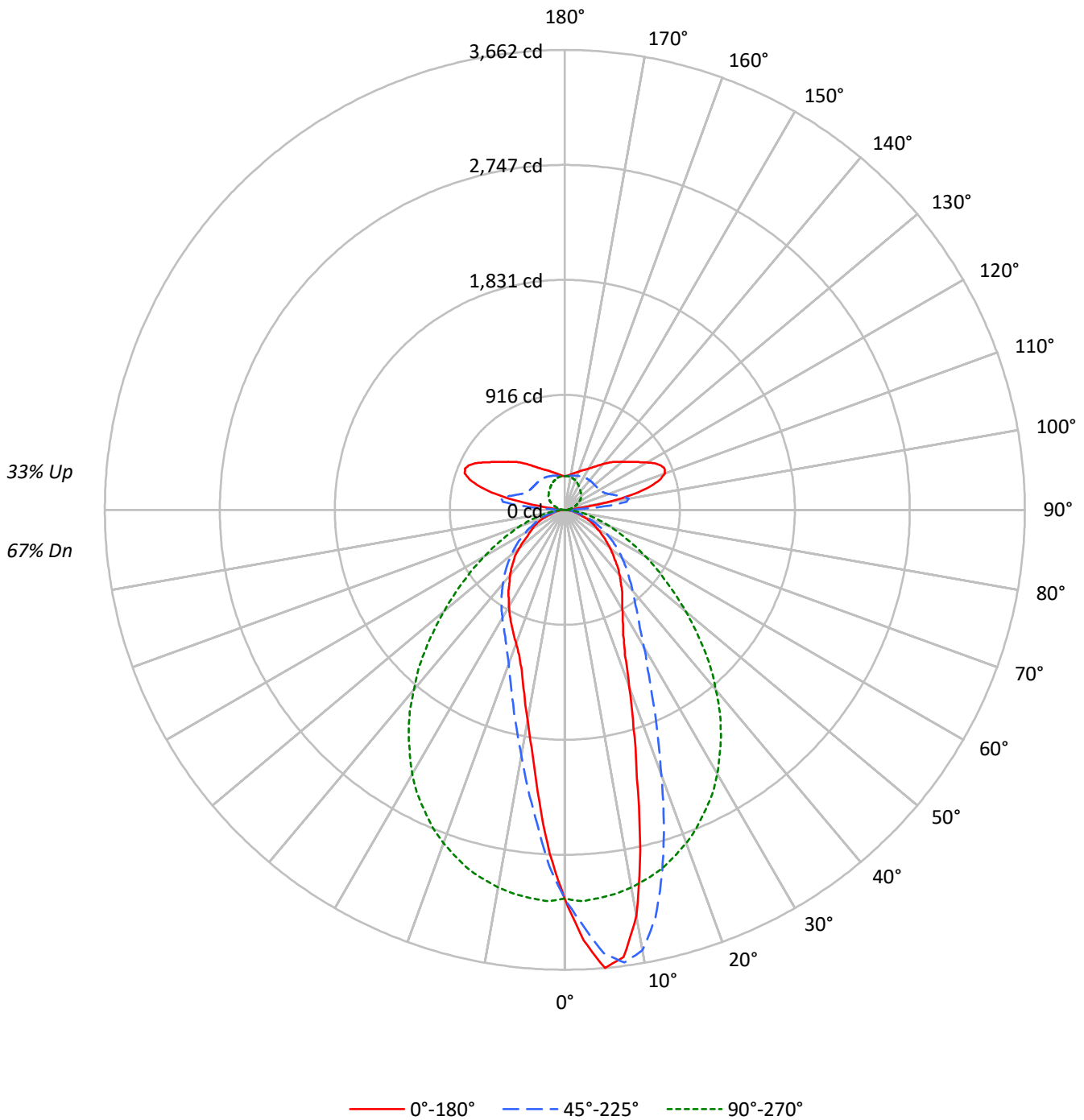
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6128.0 lumens  
Efficiency: N/A  
Efficacy: 121.8 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): 50.3  
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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CATALOG NUMBER: S123RDIP-S1000D585U950-4F0-1E-UDD-G4

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67				
1	103	99	95	92	97	93	90	87	83	81	79	74	72	70	65	64	63	59				
2	94	87	82	77	89	83	78	73	74	70	67	66	63	61	59	56	55	51				
3	87	78	71	66	82	74	68	63	67	62	58	60	56	53	53	50	48	45				
4	80	70	63	57	76	67	60	55	60	55	50	54	50	46	48	45	42	39				
5	74	63	56	50	70	60	53	48	55	49	45	49	45	41	44	41	38	35				
6	69	57	50	44	65	55	48	43	50	44	40	45	41	37	41	37	34	32				
7	64	53	45	40	61	50	43	38	46	40	36	42	37	33	38	34	31	29				
8	60	48	41	36	57	46	39	35	42	37	33	39	34	30	35	31	28	26				
9	56	45	37	32	53	43	36	32	39	34	30	36	31	28	33	29	26	24				
10	53	41	34	30	50	40	33	29	37	31	27	34	29	26	31	27	24	22				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°	135°	180°
0°	33322	33322	33322	33322	33322
5°	39566	38305	33532	27107	25166
10°	35848	38907	33365	21718	18631
15°	24682	33360	33013	17751	14739
20°	17171	25684	32349	14968	12954
25°	13085	19574	31385	13303	11940
30°	11390	15649	30179	12352	11059
35°	10457	13201	28470	11550	10257
40°	9542	11789	26235	10763	9524
45°	8617	10782	23823	10018	8791
50°	7822	9947	20979	9289	7886
55°	7075	9135	18246	8574	6765
60°	6340	8308	15849	7787	6394
65°	5850	7371	13642	6999	6046
70°	4752	6370	11903	6332	4913
75°	4171	5065	10081	5253	4329
80°	3775	4289	8263	4407	4091
85°	3446	3767	6274	4001	3767

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 80°  
 Vertical Angle: 45°  
 Luminance: 25137 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	282.2	4.6
10°-20°	652.9	10.7
20°-30°	749.2	12.2
30°-40°	738.4	12.0
40°-50°	651.2	10.6
50°-60°	501.0	8.2
60°-70°	329.4	5.4
70°-80°	160.0	2.6
80°-90°	41.8	0.7
90°-100°	145.9	2.4
100°-110°	427.0	7.0
110°-120°	417.0	6.8
120°-130°	332.1	5.4
130°-140°	262.0	4.3
140°-150°	195.5	3.2
150°-160°	136.3	2.2
160°-170°	80.1	1.3
170°-180°	26.0	0.4
0°-30°	1684.3	27.5
0°-40°	2422.7	39.5
0°-60°	3574.9	58.3
0°-90°	4106.0	67.0
90°-120°	989.9	16.2
90°-150°	1779.6	29.0
90°-180°	2022.0	33.0
0°-180°	6128.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3096	3096	3096	3096	3096	
5°	3662	3545	3103	2509	2329	335
15°	2215	2994	2962	1593	1323	625
25°	1102	1648	2643	1120	1005	520
35°	796	1005	2167	879	781	496
45°	566	708	1565	658	578	439
55°	377	487	972	457	360	338
65°	230	289	536	275	237	225
75°	100	122	242	126	104	108
85°	28	30	51	32	30	30
90°	16	14	1	14	16	10
95°	63	323	18	323	63	103
105°	692	438	63	438	692	691
115°	842	335	112	335	842	821
125°	664	312	155	312	664	601
135°	538	308	182	308	538	417
145°	421	304	207	304	421	267
155°	349	294	236	294	349	163
165°	304	282	257	282	304	87
175°	274	270	268	270	274	27
180°	269	269	269	269	269	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7
2.5°	3430.8	3420.0	3409.3	3406.1	3402.9	3392.8	3382.6	3359.8	3336.9	3313.4	3289.9
5°	3661.8	3663.1	3664.4	3661.2	3658.0	3644.7	3631.4	3603.5	3575.5	3545.1	3514.6
7.5°	3590.8	3611.1	3631.4	3635.2	3639.0	3649.2	3659.3	3653.0	3646.6	3635.2	3623.8
10°	3279.8	3278.5	3277.3	3300.1	3322.9	3390.9	3458.8	3493.7	3528.6	3559.7	3590.8
12.5°	2772.1	2774.0	2775.9	2850.8	2925.7	2989.8	3053.9	3142.7	3231.6	3327.4	3423.2
15°	2214.9	2246.0	2277.1	2343.7	2410.3	2506.8	2603.3	2722.6	2841.9	2993.6	3145.3
17.5°	1818.9	1832.2	1845.5	1909.6	1973.7	2065.1	2156.5	2291.7	2426.8	2622.3	2817.8
20°	1499.0	1511.1	1523.1	1569.5	1615.8	1703.4	1790.9	1919.8	2048.6	2242.2	2435.7
22.5°	1251.5	1275.0	1298.5	1329.6	1360.7	1424.1	1487.6	1619.0	1750.3	1926.8	2103.2
25°	1101.7	1112.5	1123.3	1150.0	1176.6	1237.5	1298.5	1385.4	1472.4	1648.1	1823.9
27.5°	1000.2	1003.4	1006.5	1026.2	1045.9	1085.2	1124.6	1205.2	1285.8	1430.5	1575.2
30°	916.4	922.1	927.8	943.1	958.3	986.9	1015.4	1072.5	1129.7	1259.1	1388.6
32.5°	851.7	854.9	858.0	870.7	883.4	904.4	925.3	970.4	1015.4	1114.4	1213.4
35°	795.8	796.5	797.1	806.6	816.1	836.4	856.8	894.2	931.6	1004.6	1077.6
37.5°	732.4	736.8	741.3	748.2	755.2	773.0	790.8	821.2	851.7	912.0	972.3
40°	679.1	682.9	686.7	694.9	703.2	717.1	731.1	759.0	786.9	839.0	891.0
42.5°	625.8	628.3	630.8	639.1	647.3	664.5	681.6	703.8	726.0	769.2	812.3
45°	566.1	572.4	578.8	587.7	596.6	611.2	625.8	648.6	671.4	708.3	745.1
47.5°	516.6	519.8	522.9	530.6	538.2	555.9	573.7	594.0	614.3	648.6	682.9
50°	467.1	468.4	469.6	476.6	483.6	499.5	515.3	538.8	562.3	594.0	625.8
52.5°	420.1	423.3	426.5	433.5	440.4	451.2	462.0	486.1	510.2	541.3	572.4
55°	377.0	378.9	380.8	385.9	390.9	403.6	416.3	437.3	458.2	486.8	515.3
57.5°	336.4	338.9	341.4	345.2	349.0	360.5	371.9	390.3	408.7	437.3	465.8
60°	294.5	297.6	300.8	305.3	309.7	318.6	327.5	344.0	360.5	385.9	411.2
62.5°	264.0	264.6	265.3	269.1	272.9	279.2	285.6	298.9	312.2	337.6	363.0
65°	229.7	231.6	233.5	235.4	237.4	242.4	247.5	258.9	270.4	289.4	308.4
67.5°	194.2	196.1	198.0	201.2	204.4	208.8	213.2	220.9	228.5	246.2	264.0
70°	151.0	151.0	151.0	156.1	161.2	168.8	176.4	182.1	187.9	202.4	217.0
72.5°	123.1	123.8	124.4	125.0	125.7	130.1	134.5	144.1	153.6	162.5	171.4
75°	100.3	100.9	101.5	102.2	102.8	104.1	105.3	108.5	111.7	121.8	132.0
77.5°	80.0	80.6	81.2	81.9	82.5	83.8	85.0	86.3	87.6	91.4	95.2
80°	60.9	61.6	62.2	62.8	63.5	64.1	64.7	66.0	67.3	69.2	71.1
82.5°	44.4	44.4	44.4	44.4	44.4	45.7	47.0	47.0	47.0	48.2	49.5
85°	27.9	27.9	27.9	28.6	29.2	29.2	29.2	29.8	30.5	30.5	30.5
87.5°	12.7	12.1	11.4	12.1	12.7	12.7	12.7	13.3	14.0	14.0	14.0
90°	15.8	16.3	15.8	15.2	15.8	14.7	14.1	13.6	13.1	13.6	12.0
92.5°	28.8	29.9	29.4	31.6	32.6	36.5	41.9	53.9	75.6	101.2	112.1
95°	63.1	65.3	69.1	74.0	84.3	103.9	132.8	195.9	261.7	322.7	287.3
97.5°	129.5	135.5	148.5	169.2	205.7	267.7	339.5	450.0	513.1	496.3	370.6
100°	341.2	340.6	361.9	401.6	456.5	533.8	597.5	641.5	622.5	515.3	348.2
102.5°	540.3	556.1	573.0	602.4	642.1	684.0	714.5	705.2	627.9	479.9	315.6
105°	692.1	694.9	712.3	733.0	758.0	772.1	761.8	707.4	593.7	437.5	290.0
107.5°	791.2	797.2	804.2	814.0	817.3	802.6	760.2	674.7	544.7	399.9	271.5
110°	847.8	848.9	849.9	845.6	830.4	792.3	723.7	623.6	499.0	368.9	261.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	859.2	858.6	853.2	837.4	806.4	754.7	675.8	573.0	459.3	348.2	256.3
115°	841.8	839.1	828.2	804.2	763.4	704.1	624.1	529.4	428.8	334.6	255.7
117.5°	803.7	799.9	783.6	756.9	714.5	653.0	579.5	495.7	408.6	325.4	256.3
120°	753.6	750.4	737.3	706.8	663.8	608.9	543.6	470.1	393.4	319.4	258.5
122.5°	706.8	702.5	687.8	661.1	624.1	574.1	514.8	450.0	380.9	315.6	262.3
125°	663.8	660.0	646.4	622.5	587.7	544.1	491.9	432.6	370.6	312.3	266.1
127.5°	626.8	623.6	611.1	590.4	558.8	518.6	470.7	416.8	360.8	310.7	270.4
130°	596.4	592.0	580.6	561.0	532.2	495.2	451.1	402.1	353.1	309.1	274.8
132.5°	566.4	563.7	553.9	534.3	507.7	472.9	432.6	388.5	346.1	308.5	278.1
135°	538.2	534.3	524.5	508.2	481.6	450.5	415.2	376.5	340.1	308.0	281.3
137.5°	508.2	505.0	496.8	479.9	457.1	429.3	397.8	365.1	334.6	306.9	283.5
140°	476.7	477.2	468.5	453.3	432.6	409.2	383.1	355.3	329.7	306.3	285.7
142.5°	447.3	447.8	440.2	427.1	410.3	390.7	368.9	346.1	325.4	305.3	287.3
145°	420.6	419.5	415.2	403.7	390.1	374.4	357.0	339.0	321.6	304.2	287.8
147.5°	397.8	397.2	392.9	384.7	373.8	362.4	347.7	333.0	317.8	302.5	287.8
150°	378.2	378.2	374.9	368.9	360.8	350.4	339.0	326.5	314.0	300.4	287.8
152.5°	361.9	361.9	360.2	354.8	348.8	340.6	330.8	320.5	309.6	297.6	286.2
155°	348.8	348.2	347.2	342.8	337.9	331.4	323.2	314.5	305.3	294.4	285.1
157.5°	336.3	336.3	335.2	331.9	327.6	322.1	315.6	308.0	300.4	291.7	283.5
160°	324.3	324.8	324.8	321.6	317.8	314.0	308.5	302.5	295.5	288.4	282.4
162.5°	313.4	314.0	314.0	311.2	309.1	305.8	300.9	296.0	290.6	285.1	280.2
165°	304.2	304.2	304.7	302.5	300.4	297.6	293.8	290.6	286.2	281.9	278.1
167.5°	294.9	294.9	295.5	293.8	292.7	290.6	288.4	285.7	281.9	278.6	275.9
170°	286.8	286.8	287.3	286.2	285.7	284.6	282.4	280.8	278.1	275.3	273.7
172.5°	279.1	279.7	280.8	279.7	279.7	279.1	277.5	276.4	274.2	272.6	272.1
175°	273.7	274.2	274.8	274.2	274.2	274.2	273.2	272.6	271.5	270.4	270.4
177.5°	269.9	269.9	271.0	270.4	271.0	271.0	270.4	269.9	269.3	268.8	269.3
180°	268.8	268.8	268.8	268.8	268.8	268.8	268.8	268.8	268.8	268.8	268.8

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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7
2.5°	3286.8	3283.6	3253.1	3222.7	3192.8	3163.0	3140.8	3118.6	3081.2	3043.7	3020.2
5°	3490.5	3466.4	3418.1	3369.9	3297.6	3225.2	3164.3	3103.4	3025.9	2948.5	2883.8
7.5°	3604.1	3584.4	3526.0	3467.6	3371.8	3276.0	3180.8	3085.6	2971.4	2857.1	2759.4
10°	3607.3	3623.8	3575.5	3527.3	3419.4	3311.5	3182.1	3052.6	2899.0	2745.4	2619.1
12.5°	3494.3	3565.4	3555.2	3545.1	3435.3	3325.5	3168.1	3010.7	2822.2	2633.7	2475.7
15°	3283.0	3420.7	3461.3	3501.9	3411.2	3320.4	3141.4	2962.5	2741.0	2519.5	2338.0
17.5°	3010.7	3203.6	3310.9	3418.1	3352.1	3286.1	3090.0	2893.9	2644.5	2395.1	2197.7
20°	2688.3	2940.9	3109.1	3277.3	3253.1	3229.0	3026.6	2824.1	2555.0	2286.0	2072.1
22.5°	2369.7	2636.3	2868.6	3100.8	3125.6	3150.3	2946.0	2741.6	2447.2	2152.7	1935.0
25°	2094.9	2365.9	2642.6	2919.3	2975.2	3031.0	2836.8	2642.6	2337.4	2032.1	1815.7
27.5°	1832.8	2090.5	2395.1	2699.7	2801.3	2902.8	2725.1	2547.4	2229.5	1911.5	1695.7
30°	1619.0	1849.3	2160.3	2471.3	2612.8	2754.3	2591.2	2428.1	2112.7	1797.3	1586.0
32.5°	1419.7	1625.9	1938.2	2250.4	2414.8	2579.2	2438.3	2297.4	1994.0	1690.7	1481.9
35°	1262.3	1447.0	1738.3	2029.6	2213.6	2397.7	2282.1	2166.6	1870.3	1573.9	1376.5
37.5°	1127.1	1282.0	1555.5	1829.0	2024.5	2220.0	2123.5	2027.0	1748.4	1469.8	1283.2
40°	1015.4	1139.8	1394.3	1648.8	1840.4	2032.1	1949.6	1867.1	1617.7	1368.3	1193.7
42.5°	919.6	1026.8	1255.3	1483.8	1659.6	1835.4	1780.8	1726.2	1500.3	1274.3	1112.5
45°	835.2	925.3	1126.5	1327.7	1489.5	1651.3	1608.2	1565.0	1370.2	1175.3	1026.8
47.5°	760.3	837.7	1017.3	1196.9	1342.3	1487.6	1447.6	1407.6	1246.4	1085.2	950.0
50°	691.8	757.8	907.5	1057.3	1188.0	1318.8	1285.8	1252.8	1119.5	986.2	869.4
52.5°	627.0	681.6	816.1	950.7	1056.0	1161.4	1136.0	1110.6	1007.8	905.0	799.0
55°	565.5	615.6	729.2	842.8	932.9	1023.0	997.6	972.3	892.3	812.3	719.0
57.5°	509.6	553.4	645.4	737.4	809.2	880.9	868.8	856.8	790.1	723.5	646.7
60°	450.6	489.9	569.3	648.6	706.3	764.1	750.1	736.2	688.6	641.0	575.0
62.5°	397.9	432.8	496.3	559.7	606.7	653.7	643.5	633.4	597.2	561.0	506.4
65°	342.7	377.0	428.4	479.8	516.6	553.4	544.5	535.6	508.3	481.1	437.3
67.5°	292.6	321.1	365.5	410.0	434.7	459.5	454.4	449.3	428.4	407.4	373.2
70°	241.8	266.5	303.4	340.2	357.3	374.4	376.3	378.2	359.2	340.2	314.8
72.5°	191.0	210.7	245.0	279.2	292.6	305.9	305.3	304.6	293.2	281.8	258.9
75°	146.6	161.2	187.9	214.5	225.9	237.4	239.9	242.4	231.6	220.9	208.2
77.5°	105.3	115.5	135.8	156.1	168.8	181.5	182.8	184.0	179.0	173.9	161.8
80°	74.3	77.4	90.1	102.8	116.1	129.5	131.4	133.3	128.2	123.1	115.5
82.5°	51.4	53.3	57.8	62.2	73.0	83.8	86.3	88.8	86.3	83.8	75.5
85°	31.1	31.7	33.6	35.5	40.6	45.7	48.2	50.8	49.5	48.2	43.8
87.5°	14.0	14.0	14.6	15.2	16.5	17.8	20.9	24.1	22.2	20.3	18.4
90°	10.3	8.7	7.1	6.0	4.9	3.3	2.2	1.1	2.2	3.3	4.9
92.5°	83.8	55.0	37.5	27.8	22.3	17.4	12.0	8.2	12.0	17.4	22.3
95°	198.1	117.0	70.7	49.5	35.4	26.1	20.1	18.5	20.1	26.1	35.4
97.5°	220.4	126.2	80.5	57.1	43.0	34.8	29.9	29.4	29.9	34.8	43.0
100°	205.1	124.6	86.5	65.3	52.2	44.6	40.8	40.3	40.8	44.6	52.2
102.5°	192.1	126.8	93.6	74.5	63.1	56.0	52.8	51.7	52.8	56.0	63.1
105°	187.2	131.1	101.8	84.9	74.5	68.0	64.8	63.1	64.8	68.0	74.5
107.5°	186.1	138.2	112.1	96.3	86.5	80.0	76.7	75.1	76.7	80.0	86.5
110°	188.8	147.5	123.0	107.7	98.5	92.5	89.8	88.2	89.8	92.5	98.5





TEST NUMBER: P831872

CATALOG NUMBER: S123RDIP-S1000D585U950-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	194.3	156.7	134.4	119.7	110.5	104.5	101.8	100.1	101.8	104.5	110.5
115°	200.2	167.1	146.4	131.7	122.4	117.0	113.7	111.5	113.7	117.0	122.4
117.5°	207.9	177.9	157.3	143.7	133.3	128.4	125.7	123.0	125.7	128.4	133.3
120°	216.6	188.3	168.7	155.1	144.7	139.3	136.6	134.9	136.6	139.3	144.7
122.5°	224.7	199.2	180.1	165.4	155.6	149.6	146.9	145.3	146.9	149.6	155.6
125°	233.4	209.5	190.4	175.8	165.4	159.4	156.2	155.1	156.2	159.4	165.4
127.5°	240.5	218.7	200.2	185.6	174.1	168.1	164.3	162.7	164.3	168.1	174.1
130°	247.6	226.9	208.9	194.3	182.8	176.3	171.4	169.8	171.4	176.3	182.8
132.5°	254.1	234.0	216.6	202.4	191.0	182.8	177.4	175.2	177.4	182.8	191.0
135°	259.6	241.1	224.2	209.5	198.1	189.9	183.9	181.7	183.9	189.9	198.1
137.5°	263.9	245.9	229.6	216.0	204.6	195.9	189.9	187.7	189.9	195.9	204.6
140°	267.2	250.8	235.1	221.5	210.6	201.9	196.4	193.7	196.4	201.9	210.6
142.5°	270.4	254.7	239.4	226.9	216.0	208.4	202.4	200.2	202.4	208.4	216.0
145°	272.6	257.9	243.8	231.3	222.0	213.8	208.9	207.3	208.9	213.8	222.0
147.5°	274.2	260.6	247.6	236.7	227.4	220.4	215.5	214.4	215.5	220.4	227.4
150°	274.8	263.4	250.8	241.1	233.4	226.4	222.0	221.5	222.0	226.4	233.4
152.5°	275.9	265.0	254.7	245.4	238.9	232.9	228.5	228.5	228.5	232.9	238.9
155°	275.9	267.2	257.9	250.3	244.3	238.9	235.6	235.6	235.6	238.9	244.3
157.5°	276.4	268.3	260.6	254.7	249.2	244.3	241.6	241.1	241.6	244.3	249.2
160°	276.4	269.9	263.4	257.9	254.1	249.8	247.6	247.6	247.6	249.8	254.1
162.5°	275.9	270.4	265.0	260.6	257.4	254.1	252.5	252.5	252.5	254.1	257.4
165°	274.8	271.0	266.6	262.8	260.6	257.9	256.8	257.4	256.8	257.9	260.6
167.5°	274.2	271.0	267.7	265.0	263.4	261.2	260.6	261.2	260.6	261.2	263.4
170°	272.6	270.4	267.7	266.6	265.5	263.9	263.4	264.5	263.4	263.9	265.5
172.5°	272.1	270.4	268.3	267.7	267.2	266.1	266.1	266.6	266.1	266.1	267.2
175°	271.0	269.9	268.8	268.3	268.3	267.2	267.7	268.3	267.7	267.2	268.3
177.5°	270.4	269.3	268.8	268.8	268.8	268.3	268.8	269.3	268.8	268.3	268.8
180°	268.8	268.8	268.8	268.8	268.8	268.8	268.8	268.8	268.8	268.8	268.8



TEST NUMBER: P831872

CATALOG NUMBER: S123RDIP-S1000D585U950-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7	3095.7
2.5°	2996.7	2960.6	2924.4	2898.4	2872.4	2840.0	2807.6	2806.4	2805.1	2781.0	2756.9
5°	2819.0	2756.2	2693.4	2631.8	2570.3	2508.7	2447.2	2433.2	2419.2	2398.3	2377.3
7.5°	2661.7	2561.4	2461.1	2382.4	2303.7	2242.2	2180.6	2138.7	2096.8	2064.5	2032.1
10°	2492.8	2368.5	2244.1	2148.9	2053.7	1987.0	1920.4	1872.2	1823.9	1801.1	1778.2
12.5°	2317.7	2182.5	2047.3	1954.0	1860.7	1780.8	1700.8	1657.0	1613.2	1581.5	1549.8
15°	2156.5	2011.2	1865.8	1766.8	1667.8	1592.9	1518.0	1474.3	1430.5	1398.7	1367.0
17.5°	2000.4	1853.8	1707.2	1606.9	1506.6	1438.7	1370.8	1328.3	1285.8	1266.1	1246.4
20°	1858.2	1710.3	1562.5	1467.9	1373.4	1306.7	1240.1	1217.2	1194.4	1176.0	1157.6
22.5°	1717.3	1575.2	1433.0	1342.3	1251.5	1203.3	1155.0	1136.6	1118.2	1104.3	1090.3
25°	1599.3	1457.8	1316.2	1236.9	1157.6	1120.1	1082.7	1070.6	1058.6	1044.6	1030.6
27.5°	1480.0	1345.4	1210.9	1147.4	1084.0	1053.5	1023.0	1007.8	992.6	981.1	969.7
30°	1374.6	1250.2	1125.8	1073.2	1020.5	993.8	967.2	950.7	934.2	923.4	912.6
32.5°	1273.1	1162.7	1052.2	1007.2	962.1	936.1	910.1	894.2	878.3	865.6	852.9
35°	1179.2	1083.3	987.5	946.2	905.0	879.0	852.9	837.1	821.2	808.5	795.8
37.5°	1096.6	1009.7	922.8	884.0	845.3	822.5	799.6	783.1	766.6	753.3	740.0
40°	1019.2	942.4	865.6	828.2	790.8	766.0	741.3	726.7	712.1	700.0	687.9
42.5°	950.7	880.2	809.8	773.0	736.2	712.7	689.2	672.1	654.9	648.0	641.0
45°	878.3	816.1	753.9	718.4	682.9	658.1	633.4	618.8	604.2	597.8	591.5
47.5°	814.9	757.1	699.4	664.5	629.6	607.3	585.1	573.7	562.3	553.4	544.5
50°	752.7	696.8	641.0	607.3	573.7	554.7	535.6	521.7	507.7	501.4	495.0
52.5°	693.0	642.3	591.5	557.2	522.9	504.5	486.1	474.1	462.0	448.7	435.4
55°	625.8	581.3	536.9	506.4	476.0	456.9	437.9	423.9	410.0	396.0	382.1
57.5°	569.9	526.1	482.3	455.0	427.7	409.3	390.9	375.7	360.5	349.0	337.6
60°	509.0	470.9	432.8	406.2	379.5	361.7	344.0	329.4	314.8	309.1	303.4
62.5°	451.9	416.3	380.8	357.3	333.8	316.7	299.5	290.0	280.5	276.7	272.9
65°	393.5	363.0	332.5	311.0	289.4	274.8	260.2	255.8	251.3	248.1	245.0
67.5°	338.9	312.9	286.9	267.8	248.8	238.6	228.5	223.4	218.3	214.5	210.7
70°	289.4	266.5	243.7	227.2	210.7	201.2	191.7	187.2	182.8	175.8	168.8
72.5°	236.1	218.3	200.5	187.9	175.2	166.9	158.7	149.8	140.9	134.5	128.2
75°	195.5	177.7	159.9	147.9	135.8	126.3	116.8	113.6	110.4	108.5	106.6
77.5°	149.8	134.5	119.3	109.8	100.3	95.8	91.4	89.5	87.6	86.9	86.3
80°	107.9	95.2	82.5	77.4	72.3	71.1	69.8	68.5	67.3	66.6	66.0
82.5°	67.3	60.9	54.6	53.3	52.0	51.4	50.8	50.1	49.5	48.9	48.2
85°	39.3	36.8	34.3	33.6	33.0	32.4	31.7	31.7	31.7	31.7	31.7
87.5°	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	15.9	15.2
90°	6.0	7.1	8.7	10.3	12.0	13.6	13.1	13.6	14.1	14.7	15.8
92.5°	27.8	37.5	55.0	83.8	112.1	101.2	75.6	53.9	41.9	36.5	32.6
95°	49.5	70.7	117.0	198.1	287.3	322.7	261.7	195.9	132.8	103.9	84.3
97.5°	57.1	80.5	126.2	220.4	370.6	496.3	513.1	450.0	339.5	267.7	205.7
100°	65.3	86.5	124.6	205.1	348.2	515.3	622.5	641.5	597.5	533.8	456.5
102.5°	74.5	93.6	126.8	192.1	315.6	479.9	627.9	705.2	714.5	684.0	642.1
105°	84.9	101.8	131.1	187.2	290.0	437.5	593.7	707.4	761.8	772.1	758.0
107.5°	96.3	112.1	138.2	186.1	271.5	399.9	544.7	674.7	760.2	802.6	817.3
110°	107.7	123.0	147.5	188.8	261.7	368.9	499.0	623.6	723.7	792.3	830.4



TEST NUMBER: P831872

CATALOG NUMBER: S123RDIP-S1000D585U950-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	119.7	134.4	156.7	194.3	256.3	348.2	459.3	573.0	675.8	754.7	806.4
115°	131.7	146.4	167.1	200.2	255.7	334.6	428.8	529.4	624.1	704.1	763.4
117.5°	143.7	157.3	177.9	207.9	256.3	325.4	408.6	495.7	579.5	653.0	714.5
120°	155.1	168.7	188.3	216.6	258.5	319.4	393.4	470.1	543.6	608.9	663.8
122.5°	165.4	180.1	199.2	224.7	262.3	315.6	380.9	450.0	514.8	574.1	624.1
125°	175.8	190.4	209.5	233.4	266.1	312.3	370.6	432.6	491.9	544.1	587.7
127.5°	185.6	200.2	218.7	240.5	270.4	310.7	360.8	416.8	470.7	518.6	558.8
130°	194.3	208.9	226.9	247.6	274.8	309.1	353.1	402.1	451.1	495.2	532.2
132.5°	202.4	216.6	234.0	254.1	278.1	308.5	346.1	388.5	432.6	472.9	507.7
135°	209.5	224.2	241.1	259.6	281.3	308.0	340.1	376.5	415.2	450.5	481.6
137.5°	216.0	229.6	245.9	263.9	283.5	306.9	334.6	365.1	397.8	429.3	457.1
140°	221.5	235.1	250.8	267.2	285.7	306.3	329.7	355.3	383.1	409.2	432.6
142.5°	226.9	239.4	254.7	270.4	287.3	305.3	325.4	346.1	368.9	390.7	410.3
145°	231.3	243.8	257.9	272.6	287.8	304.2	321.6	339.0	357.0	374.4	390.1
147.5°	236.7	247.6	260.6	274.2	287.8	302.5	317.8	333.0	347.7	362.4	373.8
150°	241.1	250.8	263.4	274.8	287.8	300.4	314.0	326.5	339.0	350.4	360.8
152.5°	245.4	254.7	265.0	275.9	286.2	297.6	309.6	320.5	330.8	340.6	348.8
155°	250.3	257.9	267.2	275.9	285.1	294.4	305.3	314.5	323.2	331.4	337.9
157.5°	254.7	260.6	268.3	276.4	283.5	291.7	300.4	308.0	315.6	322.1	327.6
160°	257.9	263.4	269.9	276.4	282.4	288.4	295.5	302.5	308.5	314.0	317.8
162.5°	260.6	265.0	270.4	275.9	280.2	285.1	290.6	296.0	300.9	305.8	309.1
165°	262.8	266.6	271.0	274.8	278.1	281.9	286.2	290.6	293.8	297.6	300.4
167.5°	265.0	267.7	271.0	274.2	275.9	278.6	281.9	285.7	288.4	290.6	292.7
170°	266.6	267.7	270.4	272.6	273.7	275.3	278.1	280.8	282.4	284.6	285.7
172.5°	267.7	268.3	270.4	272.1	272.1	272.6	274.2	276.4	277.5	279.1	279.7
175°	268.3	268.8	269.9	271.0	270.4	270.4	271.5	272.6	273.2	274.2	274.2
177.5°	268.8	268.8	269.3	270.4	269.3	268.8	269.3	269.9	270.4	271.0	271.0
180°	268.8	268.8	268.8	268.8	268.8	268.8	268.8	268.8	268.8	268.8	268.8



TEST NUMBER: P831872

CATALOG NUMBER: S123RDIP-S1000D585U950-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3095.7	3095.7	3095.7	3095.7
2.5°	2750.5	2744.2	2741.6	2739.1
5°	2357.7	2338.0	2333.6	2329.1
7.5°	2023.9	2015.6	1988.3	1961.0
10°	1752.9	1727.5	1716.1	1704.6
12.5°	1526.3	1502.8	1499.0	1495.2
15°	1350.5	1334.0	1328.3	1322.6
17.5°	1235.0	1223.6	1216.6	1209.6
20°	1149.3	1141.1	1136.0	1130.9
22.5°	1084.0	1077.6	1073.8	1070.0
25°	1021.1	1011.6	1008.4	1005.3
27.5°	961.5	953.2	950.0	946.9
30°	905.6	898.6	894.2	889.8
32.5°	844.7	836.4	833.9	831.4
35°	790.8	785.7	783.1	780.6
37.5°	733.6	727.3	723.5	719.7
40°	684.8	681.6	679.7	677.8
42.5°	635.3	629.6	628.9	628.3
45°	585.8	580.1	578.8	577.5
47.5°	539.4	534.4	533.7	533.1
50°	488.0	481.1	476.0	470.9
52.5°	429.0	422.7	418.2	413.8
55°	375.1	368.1	364.3	360.5
57.5°	334.5	331.3	329.4	327.5
60°	301.5	299.5	298.3	297.0
62.5°	271.0	269.1	269.1	269.1
65°	243.1	241.2	239.3	237.4
67.5°	206.9	203.1	202.4	201.8
70°	163.1	157.4	156.8	156.1
72.5°	127.6	126.9	125.7	124.4
75°	105.3	104.1	104.1	104.1
77.5°	85.0	83.8	83.8	83.8
80°	65.4	64.7	65.4	66.0
82.5°	48.2	48.2	47.6	47.0
85°	31.1	30.5	30.5	30.5
87.5°	15.2	15.2	15.2	15.2
90°	15.2	15.8	16.3	15.8
92.5°	31.6	29.4	29.9	28.8
95°	74.0	69.1	65.3	63.1
97.5°	169.2	148.5	135.5	129.5
100°	401.6	361.9	340.6	341.2
102.5°	602.4	573.0	556.1	540.3
105°	733.0	712.3	694.9	692.1
107.5°	814.0	804.2	797.2	791.2
110°	845.6	849.9	848.9	847.8



TEST NUMBER: P831872

CATALOG NUMBER: S123RDIP-S1000D585U950-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
112.5°	837.4	853.2	858.6	859.2
115°	804.2	828.2	839.1	841.8
117.5°	756.9	783.6	799.9	803.7
120°	706.8	737.3	750.4	753.6
122.5°	661.1	687.8	702.5	706.8
125°	622.5	646.4	660.0	663.8
127.5°	590.4	611.1	623.6	626.8
130°	561.0	580.6	592.0	596.4
132.5°	534.3	553.9	563.7	566.4
135°	508.2	524.5	534.3	538.2
137.5°	479.9	496.8	505.0	508.2
140°	453.3	468.5	477.2	476.7
142.5°	427.1	440.2	447.8	447.3
145°	403.7	415.2	419.5	420.6
147.5°	384.7	392.9	397.2	397.8
150°	368.9	374.9	378.2	378.2
152.5°	354.8	360.2	361.9	361.9
155°	342.8	347.2	348.2	348.8
157.5°	331.9	335.2	336.3	336.3
160°	321.6	324.8	324.8	324.3
162.5°	311.2	314.0	314.0	313.4
165°	302.5	304.7	304.2	304.2
167.5°	293.8	295.5	294.9	294.9
170°	286.2	287.3	286.8	286.8
172.5°	279.7	280.8	279.7	279.1
175°	274.2	274.8	274.2	273.7
177.5°	270.4	271.0	269.9	269.9
180°	268.8	268.8	268.8	268.8



TEST NUMBER: P831872

CATALOG NUMBER: S123RDIP-S1000D585U950-4F0-1E-UDD-G4

**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	14.40	15.36	15.21	16.18	17.19	19.06	20.02	19.87	20.84	21.85
	3H	15.63	16.49	16.45	17.32	18.36	20.57	21.43	21.39	22.26	23.30
	4H	16.02	16.82	16.86	17.66	18.71	21.07	21.87	21.91	22.71	23.76
	6H	16.30	17.05	17.16	17.89	18.96	21.38	22.13	22.24	22.97	24.04
	8H	16.40	17.10	17.25	17.96	19.03	21.47	22.17	22.33	23.04	24.10
	12H	16.45	17.12	17.31	17.98	19.07	21.50	22.17	22.37	23.03	24.12
4H	2H	15.14	15.94	15.98	16.78	17.83	19.07	19.88	19.92	20.72	21.77
	3H	16.52	17.19	17.37	18.06	19.12	20.74	21.41	21.60	22.28	23.35
	4H	16.98	17.58	17.84	18.45	19.55	21.35	21.96	22.22	22.83	23.92
	6H	17.35	17.87	18.23	18.77	19.87	21.80	22.32	22.68	23.21	24.31
	8H	17.48	17.97	18.36	18.85	19.96	21.93	22.42	22.82	23.31	24.42
	12H	17.56	18.00	18.46	18.91	20.02	22.00	22.44	22.90	23.34	24.46
8H	4H	17.30	17.79	18.18	18.68	19.79	21.33	21.82	22.21	22.71	23.81
	6H	17.77	18.17	18.68	19.10	20.21	21.83	22.23	22.74	23.16	24.27
	8H	17.96	18.32	18.88	19.24	20.37	22.02	22.37	22.94	23.30	24.42
	12H	18.11	18.42	19.03	19.33	20.51	22.14	22.45	23.06	23.36	24.54
12H	4H	17.32	17.75	18.22	18.66	19.78	21.28	21.72	22.19	22.63	23.74
	6H	17.83	18.18	18.75	19.11	20.23	21.80	22.16	22.73	23.08	24.21
	8H	18.05	18.36	18.97	19.28	20.46	22.00	22.32	22.93	23.23	24.41