

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: P832358

Luminaire Tested: S123RDIP-S775D1195U950-4F0-1E-UDD-G4

Issue Date: 05/03/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P832358  
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-S775D1195U950-4F0-1E-UDD-G4  
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 775 LUMENS PER FOOT, GRAZE OPTIC  
UPLIGHT 1195 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: -

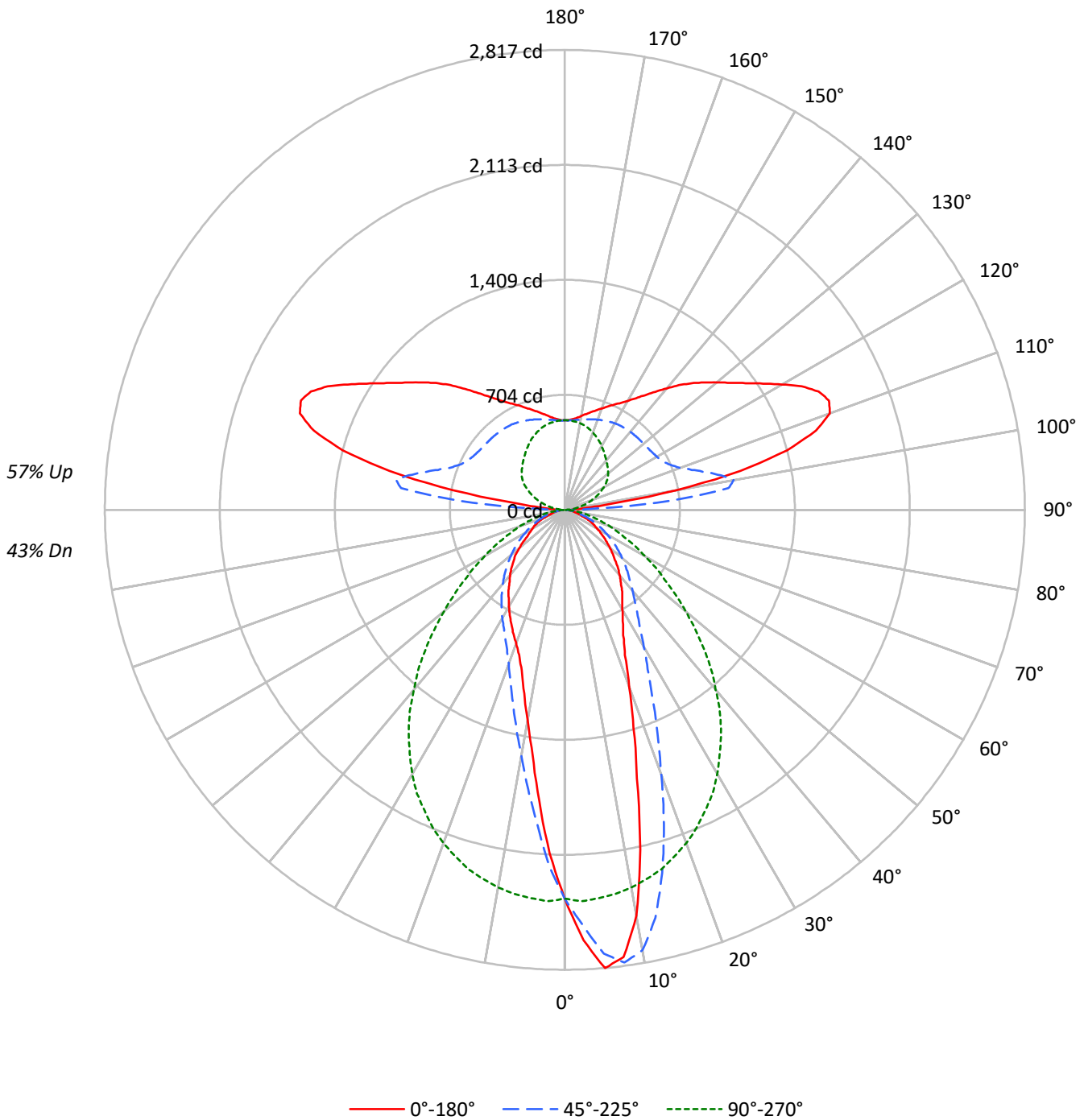
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7279.4 lumens  
Efficiency: N/A  
Efficacy: 127.9 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): 56.9  
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					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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	43				
1	97	93	89	86	89	85	82	79	71	69	67	58	56	55	45	44	44	38				
2	89	82	76	72	81	75	71	66	63	59	56	51	49	47	41	39	38	33				
3	82	73	66	61	75	67	61	56	56	52	48	46	43	41	37	35	33	29				
4	75	65	58	52	69	60	54	49	50	46	42	42	38	36	33	31	29	26				
5	69	58	51	45	63	54	47	42	46	41	37	38	34	31	31	28	26	23				
6	64	53	45	40	59	49	42	37	41	36	33	35	31	28	28	26	23	21				
7	59	48	40	35	54	44	38	33	38	33	29	32	28	25	26	23	21	19				
8	55	44	36	31	51	41	34	30	35	30	26	29	26	23	24	21	19	17				
9	52	40	33	28	48	37	31	27	32	27	24	27	23	21	23	20	18	16				
10	48	37	30	26	45	35	28	24	30	25	22	25	22	19	21	18	16	15				

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

	0°	45°	90°	135°	180°
0°	25635	25635	25635	25635	25635
5°	30439	29469	25797	20854	19360
10°	27578	29932	25668	16709	14334
15°	18989	25664	25397	13657	11339
20°	13210	19759	24888	11515	9966
25°	10067	15060	24145	10234	9185
30°	8763	12040	23218	9503	8508
35°	8046	10156	21904	8885	7891
40°	7340	9070	20183	8280	7326
45°	6629	8295	18328	7707	6763
50°	6017	7653	16139	7145	6067
55°	5442	7028	14037	6596	5204
60°	4876	6389	12193	5991	4919
65°	4500	5670	10496	5384	4651
70°	3657	4900	9158	4872	3780
75°	3206	3897	7756	4042	3331
80°	2907	3298	6354	3391	3149
85°	2655	2890	4829	3075	2890

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 80°  
 Vertical Angle: 45°  
 Luminance: 19339 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	217.1	3.0
10°-20°	502.3	6.9
20°-30°	576.3	7.9
30°-40°	568.1	7.8
40°-50°	501.0	6.9
50°-60°	385.4	5.3
60°-70°	253.4	3.5
70°-80°	123.1	1.7
80°-90°	34.1	0.5
90°-100°	297.1	4.1
100°-110°	869.9	11.9
110°-120°	849.5	11.7
120°-130°	676.5	9.3
130°-140°	533.8	7.3
140°-150°	398.2	5.5
150°-160°	277.6	3.8
160°-170°	163.1	2.2
170°-180°	53.0	0.7
0°-30°	1295.8	17.8
0°-40°	1863.8	25.6
0°-60°	2750.2	37.8
0°-90°	3160.7	43.4
90°-120°	2016.5	27.7
90°-150°	3625.0	49.8
90°-180°	4119.0	56.6
0°-180°	7279.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2382	2382	2382	2382	2382	
5°	2817	2727	2388	1930	1792	257
15°	1704	2303	2279	1226	1018	481
25°	848	1268	2033	862	773	400
35°	612	773	1667	676	600	382
45°	436	545	1204	506	444	338
55°	290	374	748	352	277	260
65°	177	223	412	211	183	173
75°	77	94	186	97	80	83
85°	22	23	39	25	23	23
90°	32	28	2	28	32	18
95°	129	657	38	657	129	209
105°	1410	891	129	891	1410	1407
115°	1715	682	227	682	1715	1672
125°	1352	636	316	636	1352	1224
135°	1096	627	370	627	1096	850
145°	857	620	422	620	857	544
155°	710	600	480	600	710	331
165°	620	574	524	574	620	177
175°	558	551	546	551	558	54
180°	548	548	548	548	548	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6
2.5°	2639.4	2631.1	2622.8	2620.4	2617.9	2610.1	2602.3	2584.7	2567.2	2549.1	2531.0
5°	2817.1	2818.1	2819.1	2816.7	2814.2	2804.0	2793.7	2772.2	2750.7	2727.3	2703.9
7.5°	2762.5	2778.1	2793.7	2796.6	2799.6	2807.4	2815.2	2810.3	2805.4	2796.6	2787.9
10°	2523.2	2522.2	2521.3	2538.8	2556.4	2608.7	2660.9	2687.8	2714.6	2738.5	2762.5
12.5°	2132.6	2134.1	2135.6	2193.2	2250.8	2300.1	2349.4	2417.8	2486.1	2559.8	2633.6
15°	1704.0	1727.9	1751.8	1803.1	1854.3	1928.5	2002.8	2094.5	2186.3	2303.0	2419.7
17.5°	1399.3	1409.5	1419.8	1469.1	1518.4	1588.7	1659.0	1763.0	1867.0	2017.4	2167.8
20°	1153.2	1162.5	1171.8	1207.4	1243.1	1310.4	1377.8	1476.9	1576.0	1725.0	1873.9
22.5°	962.8	980.9	998.9	1022.9	1046.8	1095.6	1144.4	1245.5	1346.6	1482.3	1618.0
25°	847.6	855.9	864.2	884.7	905.2	952.1	998.9	1065.8	1132.7	1268.0	1403.2
27.5°	769.5	771.9	774.3	789.5	804.6	834.9	865.2	927.2	989.2	1100.5	1211.8
30°	705.0	709.4	713.8	725.5	737.2	759.2	781.2	825.1	869.1	968.7	1068.3
32.5°	655.2	657.7	660.1	669.9	679.6	695.7	711.9	746.5	781.2	857.3	933.5
35°	612.3	612.7	613.2	620.6	627.9	643.5	659.1	687.9	716.7	772.9	829.0
37.5°	563.4	566.8	570.3	575.6	581.0	594.7	608.3	631.8	655.2	701.6	748.0
40°	522.4	525.3	528.3	534.6	541.0	551.7	562.5	583.9	605.4	645.5	685.5
42.5°	481.4	483.4	485.3	491.7	498.0	511.2	524.4	541.5	558.5	591.7	624.9
45°	435.5	440.4	445.3	452.1	458.9	470.2	481.4	499.0	516.6	544.9	573.2
47.5°	397.4	399.9	402.3	408.2	414.0	427.7	441.4	457.0	472.6	499.0	525.3
50°	359.3	360.3	361.3	366.7	372.0	384.2	396.5	414.5	432.6	457.0	481.4
52.5°	323.2	325.7	328.1	333.5	338.8	347.1	355.4	374.0	392.5	416.5	440.4
55°	290.0	291.5	292.9	296.8	300.8	310.5	320.3	336.4	352.5	374.5	396.5
57.5°	258.8	260.7	262.7	265.6	268.5	277.3	286.1	300.3	314.4	336.4	358.4
60°	226.5	229.0	231.4	234.8	238.3	245.1	251.9	264.6	277.3	296.8	316.4
62.5°	203.1	203.6	204.1	207.0	209.9	214.8	219.7	230.0	240.2	259.7	279.3
65°	176.7	178.2	179.7	181.1	182.6	186.5	190.4	199.2	208.0	222.6	237.3
67.5°	149.4	150.9	152.3	154.8	157.2	160.6	164.0	169.9	175.8	189.4	203.1
70°	116.2	116.2	116.2	120.1	124.0	129.9	135.7	140.1	144.5	155.7	167.0
72.5°	94.7	95.2	95.7	96.2	96.7	100.1	103.5	110.8	118.2	125.0	131.8
75°	77.1	77.6	78.1	78.6	79.1	80.1	81.0	83.5	85.9	93.7	101.6
77.5°	61.5	62.0	62.5	63.0	63.5	64.4	65.4	66.4	67.4	70.3	73.2
80°	46.9	47.4	47.8	48.3	48.8	49.3	49.8	50.8	51.8	53.2	54.7
82.5°	34.2	34.2	34.2	34.2	34.2	35.2	36.1	36.1	36.1	37.1	38.1
85°	21.5	21.5	21.5	22.0	22.5	22.5	22.5	22.9	23.4	23.4	23.4
87.5°	9.8	9.3	8.8	9.3	9.8	9.8	9.8	10.3	10.7	10.7	10.7
90°	32.1	33.3	32.1	31.0	32.1	29.9	28.8	27.7	26.6	27.7	24.4
92.5°	58.7	61.0	59.9	64.3	66.5	74.3	85.3	109.7	154.1	206.2	228.3
95°	128.6	133.0	140.8	150.7	171.8	211.7	270.5	399.0	533.1	657.3	585.2
97.5°	263.8	276.0	302.6	344.7	419.0	545.3	691.6	916.6	1045.2	1010.9	754.8
100°	695.0	693.9	737.1	818.0	929.9	1087.3	1217.0	1306.8	1268.0	1049.7	709.4
102.5°	1100.6	1132.8	1167.1	1227.0	1307.9	1393.3	1455.3	1436.5	1279.1	977.6	642.9
105°	1409.9	1415.4	1450.9	1493.0	1544.0	1572.8	1551.8	1440.9	1209.3	891.2	590.8
107.5°	1611.6	1623.8	1638.2	1658.2	1664.8	1634.9	1548.4	1374.4	1109.5	814.7	553.1
110°	1726.9	1729.1	1731.3	1722.5	1691.4	1613.8	1474.2	1270.2	1016.4	751.5	533.1

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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1750.2	1749.1	1738.0	1705.8	1642.7	1537.4	1376.6	1167.1	935.5	709.4	522.1
115°	1714.7	1709.2	1687.0	1638.2	1555.1	1434.3	1271.3	1078.5	873.4	681.7	520.9
117.5°	1637.1	1629.4	1596.1	1541.8	1455.3	1330.1	1180.4	1009.8	832.4	662.8	522.1
120°	1535.1	1528.5	1501.9	1439.8	1352.3	1240.3	1107.3	957.7	801.4	650.6	526.5
122.5°	1439.8	1430.9	1401.0	1346.7	1271.3	1169.4	1048.5	916.6	775.9	642.9	534.3
125°	1352.3	1344.5	1316.8	1268.0	1197.1	1108.4	1002.0	881.2	754.8	636.2	542.0
127.5°	1276.9	1270.2	1244.7	1202.6	1138.3	1056.3	958.8	849.0	734.9	632.9	550.9
130°	1214.8	1205.9	1182.7	1142.8	1084.0	1008.6	918.9	819.1	719.4	629.6	559.7
132.5°	1153.8	1148.3	1128.4	1088.5	1034.1	963.2	881.2	791.4	704.9	628.5	566.4
135°	1096.2	1088.5	1068.5	1035.2	980.9	917.8	845.7	767.0	692.8	627.4	573.0
137.5°	1035.2	1028.6	1012.0	977.6	931.1	874.5	810.2	743.7	681.7	625.1	577.5
140°	971.0	972.1	954.3	923.3	881.2	833.5	780.3	723.8	671.7	624.0	581.9
142.5°	911.1	912.2	896.7	870.1	835.7	795.8	751.5	704.9	662.8	621.8	585.2
145°	856.8	854.6	845.7	822.4	794.7	762.6	727.1	690.5	655.1	619.6	586.3
147.5°	810.2	809.1	800.3	783.6	761.5	738.2	708.3	678.3	647.3	616.3	586.3
150°	770.3	770.3	763.7	751.5	734.9	713.8	690.5	665.0	639.5	611.8	586.3
152.5°	737.1	737.1	733.8	722.7	710.5	693.9	673.9	652.8	630.7	606.3	583.0
155°	710.5	709.4	707.2	698.3	688.3	675.0	658.4	640.7	621.8	599.6	580.8
157.5°	685.0	685.0	682.8	676.1	667.3	656.2	642.9	627.4	611.8	594.1	577.5
160°	660.6	661.7	661.7	655.1	647.3	639.5	628.5	616.3	601.9	587.5	575.3
162.5°	638.4	639.5	639.5	634.0	629.6	622.9	612.9	603.0	591.9	580.8	570.8
165°	619.6	619.6	620.7	616.3	611.8	606.3	598.5	591.9	583.0	574.2	566.4
167.5°	600.8	600.8	601.9	598.5	596.3	591.9	587.5	581.9	574.2	567.5	562.0
170°	584.1	584.1	585.2	583.0	581.9	579.7	575.3	571.9	566.4	560.9	557.5
172.5°	568.6	569.7	571.9	569.7	569.7	568.6	565.3	563.1	558.6	555.3	554.2
175°	557.5	558.6	559.7	558.6	558.6	558.6	556.4	555.3	553.1	550.9	550.9
177.5°	549.8	549.8	552.0	550.9	552.0	552.0	550.9	549.8	548.7	547.6	548.7
180°	547.6	547.6	547.6	547.6	547.6	547.6	547.6	547.6	547.6	547.6	547.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6
2.5°	2528.6	2526.2	2502.7	2479.3	2456.3	2433.4	2416.3	2399.2	2370.4	2341.6	2323.5
5°	2685.3	2666.8	2629.7	2592.6	2536.9	2481.2	2434.4	2387.5	2327.9	2268.4	2218.6
7.5°	2772.7	2757.6	2712.7	2667.7	2594.0	2520.3	2447.1	2373.8	2285.9	2198.1	2122.9
10°	2775.2	2787.9	2750.7	2713.6	2630.6	2547.6	2448.0	2348.4	2230.3	2112.1	2015.0
12.5°	2688.2	2742.9	2735.1	2727.3	2642.8	2558.4	2437.3	2316.2	2171.2	2026.2	1904.6
15°	2525.7	2631.6	2662.9	2694.1	2624.3	2554.5	2416.8	2279.1	2108.7	1938.3	1798.7
17.5°	2316.2	2464.6	2547.1	2629.7	2578.9	2528.1	2377.2	2226.4	2034.5	1842.6	1690.8
20°	2068.2	2262.5	2391.9	2521.3	2502.7	2484.2	2328.4	2172.7	1965.7	1758.6	1594.1
22.5°	1823.1	2028.1	2206.8	2385.5	2404.6	2423.6	2266.4	2109.2	1882.7	1656.1	1488.6
25°	1611.7	1820.2	2033.0	2245.9	2288.9	2331.8	2182.4	2033.0	1798.2	1563.3	1396.9
27.5°	1410.0	1608.3	1842.6	2077.0	2155.1	2233.2	2096.5	1959.8	1715.2	1470.6	1304.6
30°	1245.5	1422.7	1662.0	1901.2	2010.1	2119.0	1993.5	1868.0	1625.4	1382.7	1220.1
32.5°	1092.2	1250.9	1491.1	1731.3	1857.8	1984.2	1875.8	1767.4	1534.1	1300.7	1140.0
35°	971.1	1113.2	1337.3	1561.4	1703.0	1844.6	1755.7	1666.9	1438.8	1210.8	1059.0
37.5°	867.1	986.2	1196.7	1407.1	1557.5	1707.9	1633.7	1559.4	1345.1	1130.8	987.2
40°	781.2	876.9	1072.7	1268.4	1415.9	1563.3	1499.9	1436.4	1244.5	1052.6	918.4
42.5°	707.5	790.0	965.7	1141.5	1276.7	1412.0	1370.0	1328.0	1154.2	980.4	855.9
45°	642.5	711.9	866.6	1021.4	1145.9	1270.4	1237.2	1204.0	1054.1	904.2	790.0
47.5°	584.9	644.5	782.6	920.8	1032.6	1144.4	1113.7	1082.9	958.9	834.9	730.9
50°	532.2	583.0	698.2	813.4	914.0	1014.6	989.2	963.8	861.3	758.7	668.9
52.5°	482.4	524.4	627.9	731.4	812.4	893.5	873.9	854.4	775.3	696.2	614.7
55°	435.0	473.6	561.0	648.4	717.7	787.0	767.5	748.0	686.5	624.9	553.2
57.5°	392.1	425.7	496.5	567.3	622.5	677.7	668.4	659.1	607.9	556.6	497.5
60°	346.7	376.9	438.0	499.0	543.4	587.8	577.1	566.4	529.7	493.1	442.3
62.5°	306.1	333.0	381.8	430.6	466.8	502.9	495.1	487.3	459.4	431.6	389.6
65°	263.6	290.0	329.6	369.1	397.4	425.7	418.9	412.1	391.1	370.1	336.4
67.5°	225.1	247.0	281.2	315.4	334.4	353.5	349.6	345.7	329.6	313.5	287.1
70°	186.0	205.1	233.4	261.7	274.9	288.1	289.5	291.0	276.3	261.7	242.2
72.5°	147.0	162.1	188.5	214.8	225.1	235.3	234.8	234.4	225.6	216.8	199.2
75°	112.8	124.0	144.5	165.0	173.8	182.6	184.6	186.5	178.2	169.9	160.1
77.5°	81.0	88.9	104.5	120.1	129.9	139.6	140.6	141.6	137.7	133.8	124.5
80°	57.1	59.6	69.3	79.1	89.3	99.6	101.1	102.5	98.6	94.7	88.9
82.5°	39.5	41.0	44.4	47.8	56.1	64.4	66.4	68.4	66.4	64.4	58.1
85°	23.9	24.4	25.9	27.3	31.2	35.2	37.1	39.1	38.1	37.1	33.7
87.5°	10.7	10.7	11.2	11.7	12.7	13.7	16.1	18.6	17.1	15.6	14.2
90°	21.1	17.7	14.4	12.2	10.0	6.7	4.4	2.2	4.4	6.7	10.0
92.5°	170.7	111.9	76.5	56.5	45.4	35.5	24.4	16.6	24.4	35.5	45.4
95°	403.5	238.3	144.1	100.9	72.0	53.2	41.0	37.7	41.0	53.2	72.0
97.5°	448.9	257.1	164.0	116.4	87.6	70.9	61.0	59.9	61.0	70.9	87.6
100°	417.9	253.8	176.2	133.0	106.4	90.9	83.1	82.0	83.1	90.9	106.4
102.5°	391.3	258.3	190.6	151.9	128.6	114.2	107.5	105.3	107.5	114.2	128.6
105°	381.3	267.1	207.3	172.9	151.9	138.6	131.9	128.6	131.9	138.6	151.9
107.5°	379.1	281.5	228.3	196.2	176.2	162.9	156.3	153.0	156.3	162.9	176.2
110°	384.6	300.4	250.5	219.5	200.6	188.4	182.9	179.6	182.9	188.4	200.6





TEST NUMBER: P832358

CATALOG NUMBER: S123RDIP-S775D1195U950-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	395.7	319.2	273.8	243.8	225.0	212.8	207.3	203.9	207.3	212.8	225.0
115°	407.9	340.3	298.2	268.2	249.4	238.3	231.7	227.2	231.7	238.3	249.4
117.5°	423.4	362.4	320.3	292.6	271.6	261.6	256.0	250.5	256.0	261.6	271.6
120°	441.1	383.5	343.6	315.9	294.8	283.8	278.2	274.9	278.2	283.8	294.8
122.5°	457.8	405.7	366.9	337.0	317.0	304.8	299.3	295.9	299.3	304.8	317.0
125°	475.5	426.7	387.9	358.0	337.0	324.8	318.1	315.9	318.1	324.8	337.0
127.5°	489.9	445.6	407.9	378.0	354.7	342.5	334.7	331.4	334.7	342.5	354.7
130°	504.3	462.2	425.6	395.7	372.4	359.1	349.1	345.8	349.1	359.1	372.4
132.5°	517.6	476.6	441.1	412.3	389.0	372.4	361.3	356.9	361.3	372.4	389.0
135°	528.7	491.0	456.7	426.7	403.5	386.8	374.6	370.2	374.6	386.8	403.5
137.5°	537.6	501.0	467.7	440.0	416.8	399.0	386.8	382.4	386.8	399.0	416.8
140°	544.2	511.0	478.8	451.1	429.0	411.2	400.1	394.6	400.1	411.2	429.0
142.5°	550.9	518.7	487.7	462.2	440.0	424.5	412.3	407.9	412.3	424.5	440.0
145°	555.3	525.4	496.6	471.1	452.2	435.6	425.6	422.3	425.6	435.6	452.2
147.5°	558.6	530.9	504.3	482.2	463.3	448.9	438.9	436.7	438.9	448.9	463.3
150°	559.7	536.5	511.0	491.0	475.5	461.1	452.2	451.1	452.2	461.1	475.5
152.5°	562.0	539.8	518.7	499.9	486.6	474.4	465.5	465.5	465.5	474.4	486.6
155°	562.0	544.2	525.4	509.9	497.7	486.6	479.9	479.9	479.9	486.6	497.7
157.5°	563.1	546.4	530.9	518.7	507.6	497.7	492.1	491.0	492.1	497.7	507.6
160°	563.1	549.8	536.5	525.4	517.6	508.8	504.3	504.3	504.3	508.8	517.6
162.5°	562.0	550.9	539.8	530.9	524.3	517.6	514.3	514.3	514.3	517.6	524.3
165°	559.7	552.0	543.1	535.4	530.9	525.4	523.2	524.3	523.2	525.4	530.9
167.5°	558.6	552.0	545.3	539.8	536.5	532.0	530.9	532.0	530.9	532.0	536.5
170°	555.3	550.9	545.3	543.1	540.9	537.6	536.5	538.7	536.5	537.6	540.9
172.5°	554.2	550.9	546.4	545.3	544.2	542.0	542.0	543.1	542.0	542.0	544.2
175°	552.0	549.8	547.6	546.4	546.4	544.2	545.3	546.4	545.3	544.2	546.4
177.5°	550.9	548.7	547.6	547.6	547.6	546.4	547.6	548.7	547.6	546.4	547.6
180°	547.6	547.6	547.6	547.6	547.6	547.6	547.6	547.6	547.6	547.6	547.6



TEST NUMBER: P832358

CATALOG NUMBER: S123RDIP-S775D1195U950-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6	2381.6
2.5°	2305.5	2277.6	2249.8	2229.8	2209.8	2184.9	2160.0	2159.0	2158.0	2139.5	2120.9
5°	2168.8	2120.4	2072.1	2024.7	1977.4	1930.0	1882.7	1871.9	1861.2	1845.1	1828.9
7.5°	2047.7	1970.5	1893.4	1832.9	1772.3	1725.0	1677.6	1645.4	1613.1	1588.2	1563.3
10°	1917.8	1822.1	1726.4	1653.2	1579.9	1528.7	1477.4	1440.3	1403.2	1385.6	1368.0
12.5°	1783.1	1679.1	1575.1	1503.3	1431.5	1370.0	1308.5	1274.8	1241.1	1216.7	1192.3
15°	1659.0	1547.2	1435.4	1359.3	1283.1	1225.5	1167.9	1134.2	1100.5	1076.1	1051.7
17.5°	1538.9	1426.1	1313.4	1236.2	1159.1	1106.8	1054.6	1021.9	989.2	974.0	958.9
20°	1429.6	1315.8	1202.0	1129.3	1056.6	1005.3	954.0	936.4	918.9	904.7	890.5
22.5°	1321.2	1211.8	1102.4	1032.6	962.8	925.7	888.6	874.4	860.3	849.5	838.8
25°	1230.4	1121.5	1012.6	951.6	890.5	861.7	832.9	823.7	814.4	803.6	792.9
27.5°	1138.6	1035.1	931.6	882.7	833.9	810.5	787.0	775.3	763.6	754.8	746.0
30°	1057.5	961.8	866.1	825.6	785.1	764.6	744.1	731.4	718.7	710.4	702.1
32.5°	979.4	894.5	809.5	774.8	740.2	720.2	700.1	687.9	675.7	666.0	656.2
35°	907.1	833.4	759.7	728.0	696.2	676.2	656.2	644.0	631.8	622.0	612.3
37.5°	843.7	776.8	709.9	680.1	650.3	632.8	615.2	602.5	589.8	579.5	569.3
40°	784.1	725.0	666.0	637.2	608.3	589.3	570.3	559.0	547.8	538.5	529.3
42.5°	731.4	677.2	623.0	594.7	566.4	548.3	530.2	517.0	503.9	498.5	493.1
45°	675.7	627.9	580.0	552.7	525.3	506.3	487.3	476.0	464.8	459.9	455.0
47.5°	626.9	582.5	538.0	511.2	484.3	467.2	450.2	441.4	432.6	425.7	418.9
50°	579.1	536.1	493.1	467.2	441.4	426.7	412.1	401.3	390.6	385.7	380.8
52.5°	533.2	494.1	455.0	428.7	402.3	388.2	374.0	364.7	355.4	345.2	334.9
55°	481.4	447.2	413.1	389.6	366.2	351.5	336.9	326.1	315.4	304.7	293.9
57.5°	438.4	404.8	371.1	350.1	329.1	314.9	300.8	289.0	277.3	268.5	259.7
60°	391.6	362.3	333.0	312.5	292.0	278.3	264.6	253.4	242.2	237.8	233.4
62.5°	347.6	320.3	292.9	274.9	256.8	243.6	230.4	223.1	215.8	212.9	209.9
65°	302.7	279.3	255.8	239.2	222.6	211.4	200.2	196.8	193.3	190.9	188.5
67.5°	260.7	240.7	220.7	206.0	191.4	183.6	175.8	171.9	168.0	165.0	162.1
70°	222.6	205.1	187.5	174.8	162.1	154.8	147.4	144.0	140.6	135.2	129.9
72.5°	181.6	168.0	154.3	144.5	134.8	128.4	122.1	115.2	108.4	103.5	98.6
75°	150.4	136.7	123.0	113.8	104.5	97.2	89.8	87.4	85.0	83.5	82.0
77.5°	115.2	103.5	91.8	84.5	77.1	73.7	70.3	68.8	67.4	66.9	66.4
80°	83.0	73.2	63.5	59.6	55.7	54.7	53.7	52.7	51.8	51.3	50.8
82.5°	51.8	46.9	42.0	41.0	40.0	39.5	39.1	38.6	38.1	37.6	37.1
85°	30.3	28.3	26.4	25.9	25.4	24.9	24.4	24.4	24.4	24.4	24.4
87.5°	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.2	11.7
90°	12.2	14.4	17.7	21.1	24.4	27.7	26.6	27.7	28.8	29.9	32.1
92.5°	56.5	76.5	111.9	170.7	228.3	206.2	154.1	109.7	85.3	74.3	66.5
95°	100.9	144.1	238.3	403.5	585.2	657.3	533.1	399.0	270.5	211.7	171.8
97.5°	116.4	164.0	257.1	448.9	754.8	1010.9	1045.2	916.6	691.6	545.3	419.0
100°	133.0	176.2	253.8	417.9	709.4	1049.7	1268.0	1306.8	1217.0	1087.3	929.9
102.5°	151.9	190.6	258.3	391.3	642.9	977.6	1279.1	1436.5	1455.3	1393.3	1307.9
105°	172.9	207.3	267.1	381.3	590.8	891.2	1209.3	1440.9	1551.8	1572.8	1544.0
107.5°	196.2	228.3	281.5	379.1	553.1	814.7	1109.5	1374.4	1548.4	1634.9	1664.8
110°	219.5	250.5	300.4	384.6	533.1	751.5	1016.4	1270.2	1474.2	1613.8	1691.4



TEST NUMBER: P832358

CATALOG NUMBER: S123RDIP-S775D1195U950-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	243.8	273.8	319.2	395.7	522.1	709.4	935.5	1167.1	1376.6	1537.4	1642.7
115°	268.2	298.2	340.3	407.9	520.9	681.7	873.4	1078.5	1271.3	1434.3	1555.1
117.5°	292.6	320.3	362.4	423.4	522.1	662.8	832.4	1009.8	1180.4	1330.1	1455.3
120°	315.9	343.6	383.5	441.1	526.5	650.6	801.4	957.7	1107.3	1240.3	1352.3
122.5°	337.0	366.9	405.7	457.8	534.3	642.9	775.9	916.6	1048.5	1169.4	1271.3
125°	358.0	387.9	426.7	475.5	542.0	636.2	754.8	881.2	1002.0	1108.4	1197.1
127.5°	378.0	407.9	445.6	489.9	550.9	632.9	734.9	849.0	958.8	1056.3	1138.3
130°	395.7	425.6	462.2	504.3	559.7	629.6	719.4	819.1	918.9	1008.6	1084.0
132.5°	412.3	441.1	476.6	517.6	566.4	628.5	704.9	791.4	881.2	963.2	1034.1
135°	426.7	456.7	491.0	528.7	573.0	627.4	692.8	767.0	845.7	917.8	980.9
137.5°	440.0	467.7	501.0	537.6	577.5	625.1	681.7	743.7	810.2	874.5	931.1
140°	451.1	478.8	511.0	544.2	581.9	624.0	671.7	723.8	780.3	833.5	881.2
142.5°	462.2	487.7	518.7	550.9	585.2	621.8	662.8	704.9	751.5	795.8	835.7
145°	471.1	496.6	525.4	555.3	586.3	619.6	655.1	690.5	727.1	762.6	794.7
147.5°	482.2	504.3	530.9	558.6	586.3	616.3	647.3	678.3	708.3	738.2	761.5
150°	491.0	511.0	536.5	559.7	586.3	611.8	639.5	665.0	690.5	713.8	734.9
152.5°	499.9	518.7	539.8	562.0	583.0	606.3	630.7	652.8	673.9	693.9	710.5
155°	509.9	525.4	544.2	562.0	580.8	599.6	621.8	640.7	658.4	675.0	688.3
157.5°	518.7	530.9	546.4	563.1	577.5	594.1	611.8	627.4	642.9	656.2	667.3
160°	525.4	536.5	549.8	563.1	575.3	587.5	601.9	616.3	628.5	639.5	647.3
162.5°	530.9	539.8	550.9	562.0	570.8	580.8	591.9	603.0	612.9	622.9	629.6
165°	535.4	543.1	552.0	559.7	566.4	574.2	583.0	591.9	598.5	606.3	611.8
167.5°	539.8	545.3	552.0	558.6	562.0	567.5	574.2	581.9	587.5	591.9	596.3
170°	543.1	545.3	550.9	555.3	557.5	560.9	566.4	571.9	575.3	579.7	581.9
172.5°	545.3	546.4	550.9	554.2	554.2	555.3	558.6	563.1	565.3	568.6	569.7
175°	546.4	547.6	549.8	552.0	550.9	550.9	553.1	555.3	556.4	558.6	558.6
177.5°	547.6	547.6	548.7	550.9	548.7	547.6	548.7	549.8	550.9	552.0	552.0
180°	547.6	547.6	547.6	547.6	547.6	547.6	547.6	547.6	547.6	547.6	547.6

TEST NUMBER: P832358

CATALOG NUMBER: S123RDIP-S775D1195U950-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2381.6	2381.6	2381.6	2381.6
2.5°	2116.0	2111.1	2109.2	2107.2
5°	1813.8	1798.7	1795.3	1791.8
7.5°	1557.0	1550.7	1529.7	1508.7
10°	1348.5	1329.0	1320.2	1311.4
12.5°	1174.2	1156.2	1153.2	1150.3
15°	1039.0	1026.3	1021.9	1017.5
17.5°	950.1	941.3	936.0	930.6
20°	884.2	877.9	873.9	870.0
22.5°	833.9	829.0	826.1	823.2
25°	785.6	778.3	775.8	773.4
27.5°	739.7	733.3	730.9	728.5
30°	696.7	691.3	687.9	684.5
32.5°	649.8	643.5	641.5	639.6
35°	608.3	604.4	602.5	600.5
37.5°	564.4	559.5	556.6	553.7
40°	526.8	524.4	522.9	521.4
42.5°	488.7	484.3	483.8	483.4
45°	450.6	446.3	445.3	444.3
47.5°	415.0	411.1	410.6	410.1
50°	375.5	370.1	366.2	362.3
52.5°	330.1	325.2	321.8	318.3
55°	288.5	283.2	280.2	277.3
57.5°	257.3	254.9	253.4	251.9
60°	231.9	230.4	229.5	228.5
62.5°	208.5	207.0	207.0	207.0
65°	187.0	185.5	184.1	182.6
67.5°	159.2	156.2	155.7	155.3
70°	125.5	121.1	120.6	120.1
72.5°	98.1	97.6	96.7	95.7
75°	81.0	80.1	80.1	80.1
77.5°	65.4	64.4	64.4	64.4
80°	50.3	49.8	50.3	50.8
82.5°	37.1	37.1	36.6	36.1
85°	23.9	23.4	23.4	23.4
87.5°	11.7	11.7	11.7	11.7
90°	31.0	32.1	33.3	32.1
92.5°	64.3	59.9	61.0	58.7
95°	150.7	140.8	133.0	128.6
97.5°	344.7	302.6	276.0	263.8
100°	818.0	737.1	693.9	695.0
102.5°	1227.0	1167.1	1132.8	1100.6
105°	1493.0	1450.9	1415.4	1409.9
107.5°	1658.2	1638.2	1623.8	1611.6
110°	1722.5	1731.3	1729.1	1726.9



TEST NUMBER: P832358

CATALOG NUMBER: S123RDIP-S775D1195U950-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
112.5°	1705.8	1738.0	1749.1	1750.2
115°	1638.2	1687.0	1709.2	1714.7
117.5°	1541.8	1596.1	1629.4	1637.1
120°	1439.8	1501.9	1528.5	1535.1
122.5°	1346.7	1401.0	1430.9	1439.8
125°	1268.0	1316.8	1344.5	1352.3
127.5°	1202.6	1244.7	1270.2	1276.9
130°	1142.8	1182.7	1205.9	1214.8
132.5°	1088.5	1128.4	1148.3	1153.8
135°	1035.2	1068.5	1088.5	1096.2
137.5°	977.6	1012.0	1028.6	1035.2
140°	923.3	954.3	972.1	971.0
142.5°	870.1	896.7	912.2	911.1
145°	822.4	845.7	854.6	856.8
147.5°	783.6	800.3	809.1	810.2
150°	751.5	763.7	770.3	770.3
152.5°	722.7	733.8	737.1	737.1
155°	698.3	707.2	709.4	710.5
157.5°	676.1	682.8	685.0	685.0
160°	655.1	661.7	661.7	660.6
162.5°	634.0	639.5	639.5	638.4
165°	616.3	620.7	619.6	619.6
167.5°	598.5	601.9	600.8	600.8
170°	583.0	585.2	584.1	584.1
172.5°	569.7	571.9	569.7	568.6
175°	558.6	559.7	558.6	557.5
177.5°	550.9	552.0	549.8	549.8
180°	547.6	547.6	547.6	547.6



TEST NUMBER: P832358

CATALOG NUMBER: S123RDIP-S775D1195U950-4F0-1E-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	11.36	12.12	12.39	13.15	14.51	16.03	16.79	17.05	17.81	19.18
	3H	12.58	13.26	13.61	14.29	15.68	17.52	18.20	18.56	19.23	20.62
	4H	12.96	13.60	14.00	14.64	16.03	18.01	18.65	19.05	19.69	21.08
	6H	13.24	13.83	14.29	14.87	16.27	18.32	18.91	19.37	19.95	21.35
	8H	13.32	13.88	14.38	14.94	16.34	18.39	18.96	19.45	20.01	21.41
	12H	13.37	13.91	14.43	14.95	16.38	18.42	18.96	19.49	20.01	21.43
4H	2H	12.08	12.72	13.13	13.76	15.15	16.01	16.66	17.07	17.69	19.09
	3H	13.44	13.98	14.50	15.04	16.45	17.67	18.20	18.73	19.26	20.67
	4H	13.89	14.38	14.96	15.44	16.87	18.27	18.76	19.34	19.81	21.24
	6H	14.26	14.68	15.33	15.75	17.18	18.71	19.12	19.78	20.20	21.63
	8H	14.38	14.77	15.46	15.84	17.28	18.84	19.23	19.91	20.30	21.73
	12H	14.46	14.81	15.55	15.89	17.34	18.89	19.25	19.98	20.33	21.77
8H	4H	14.20	14.59	15.28	15.66	17.10	18.23	18.62	19.31	19.69	21.13
	6H	14.66	14.99	15.76	16.10	17.53	18.73	19.05	19.82	20.16	21.60
	8H	14.86	15.14	15.96	16.24	17.69	18.91	19.20	20.02	20.29	21.75
	12H	15.00	15.24	16.10	16.33	17.83	19.03	19.27	20.13	20.36	21.86
12H	4H	14.21	14.56	15.30	15.65	17.09	18.18	18.53	19.27	19.62	21.06
	6H	14.72	15.01	15.83	16.10	17.56	18.70	18.98	19.80	20.08	21.53
	8H	14.94	15.19	16.04	16.28	17.77	18.89	19.14	20.00	20.23	21.73