

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: P832331

Luminaire Tested: S123RDIP-S775D1025U950-4F0-1E-UDD-G4

Issue Date: 05/03/2024

Test Information

Test Method: LM-79-2019
Report Number: P832331
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-S775D1025U950-4F0-1E-UDD-G4
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 775 LUMENS PER FOOT, GRAZE OPTIC
UPLIGHT 1025 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: -

Summary

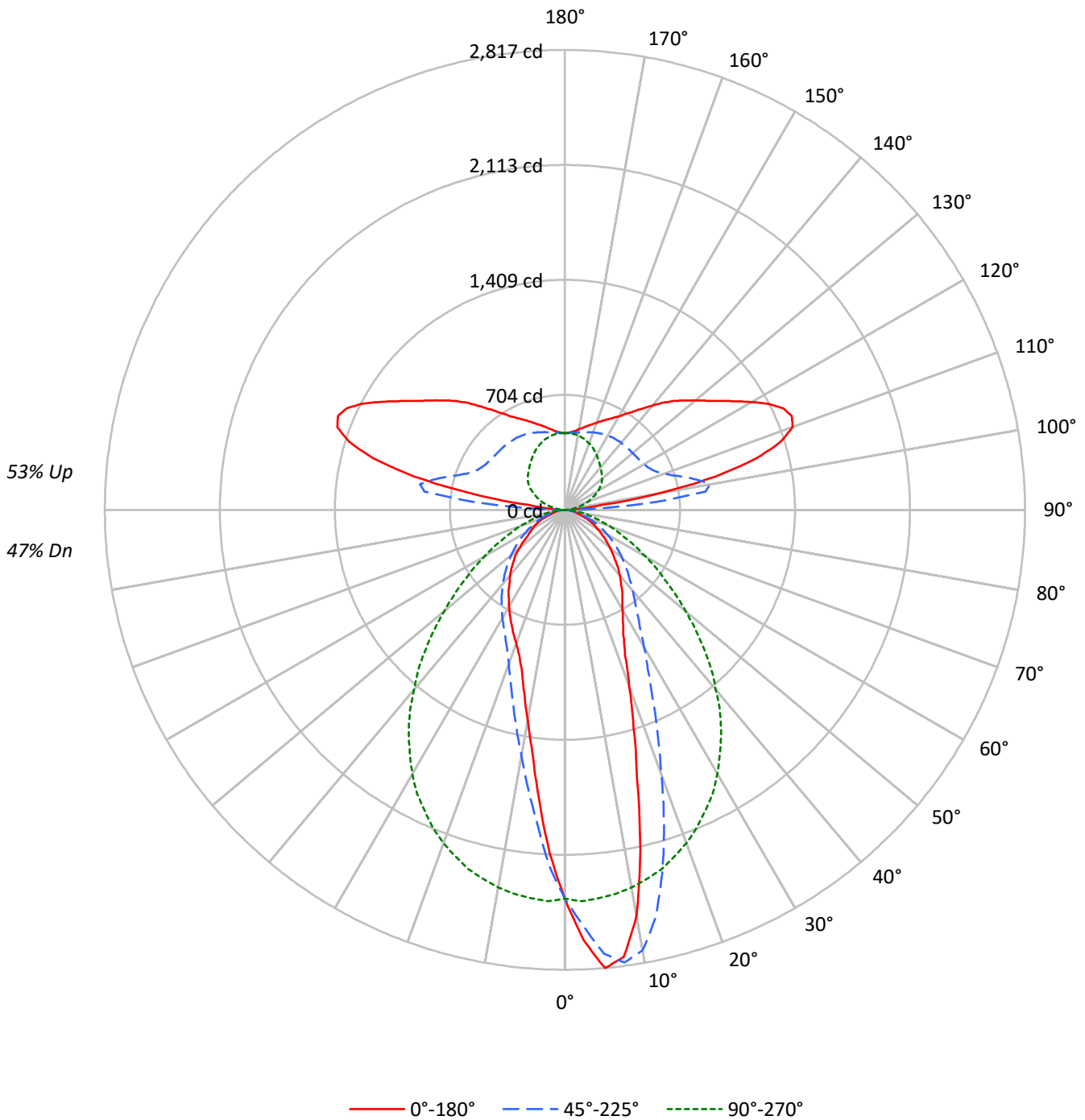
Lumens per Lamp: N/A
Luminaire Lumens: 6698.8 lumens
Efficiency: N/A
Efficacy: 129.3 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 1.17 / 0.8
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.8
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	98	98	98	98	82	82	82	67	67	67	54	54	54	47				47
1	98	94	90	87	90	87	83	81	73	71	69	60	59	57	48	47	47				41	
2	90	83	77	72	82	77	72	67	65	61	58	54	51	49	44	42	40				36	
3	82	74	67	61	76	68	62	57	58	53	50	48	45	43	39	37	35				31	
4	76	66	58	53	70	61	55	50	52	47	43	44	40	37	36	33	31				28	
5	70	59	51	46	64	55	48	43	47	42	38	40	36	33	33	30	28				25	
6	65	53	46	40	60	50	43	38	43	38	34	36	32	29	30	27	25				22	
7	60	49	41	36	55	45	39	34	39	34	30	33	29	26	28	25	23				20	
8	56	44	37	32	52	42	35	30	36	31	27	31	27	24	26	23	21				19	
9	52	41	34	29	48	38	32	27	33	28	25	29	25	22	24	21	19				17	
10	49	38	31	26	45	35	29	25	31	26	23	27	23	20	23	20	18				16	

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	3.2
10°-20°	502.3	7.5
20°-30°	576.3	8.6
30°-40°	568.1	8.5
40°-50°	501.0	7.5
50°-60°	385.4	5.8
60°-70°	253.4	3.8
70°-80°	123.1	1.8
80°-90°	33.6	0.5
90°-100°	255.3	3.8
100°-110°	747.4	11.2
110°-120°	729.8	10.9
120°-130°	581.2	8.7
130°-140°	458.6	6.8
140°-150°	342.1	5.1
150°-160°	238.5	3.6
160°-170°	140.1	2.1
170°-180°	45.6	0.7
0°-30°	1295.8	19.3
0°-40°	1863.8	27.8
0°-60°	2750.2	41.1
0°-90°	3160.3	47.2
90°-120°	1732.4	25.9
90°-150°	3114.3	46.5
90°-180°	3539.0	52.8
0°-180°	6698.8	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°	28	24	2	24	28	16
95°	110	565	32	565	110	180
105°	1211	766	110	766	1211	1208
115°	1473	586	195	586	1473	1437
125°	1162	547	271	547	1162	1051
135°	942	539	318	539	942	730
145°	736	532	363	532	736	467
155°	610	515	412	515	610	284
165°	532	493	450	493	532	152
175°	479	473	470	473	479	46
180°	470	470	470	470	470	



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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°	27.6	28.6	27.6	26.7	27.6	25.7	24.8	23.8	22.9	23.8	20.9
92.5°	50.5	52.4	51.4	55.2	57.1	63.8	73.3	94.3	132.4	177.1	196.2
95°	110.5	114.3	120.9	129.5	147.6	181.9	232.4	342.8	458.0	564.7	502.8
97.5°	226.6	237.1	260.0	296.2	360.0	468.5	594.2	787.5	898.0	868.5	648.5
100°	597.1	596.1	633.3	702.8	798.9	934.2	1045.6	1122.7	1089.4	901.8	609.4
102.5°	945.6	973.2	1002.7	1054.2	1123.7	1197.0	1250.3	1234.1	1098.9	839.9	552.3
105°	1211.3	1216.0	1246.5	1282.7	1326.5	1351.3	1333.2	1237.9	1038.9	765.6	507.6
107.5°	1384.6	1395.1	1407.4	1424.6	1430.3	1404.6	1330.3	1180.8	953.2	699.9	475.2
110°	1483.6	1485.5	1487.4	1479.8	1453.2	1386.5	1266.5	1091.3	873.2	645.6	458.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1503.6	1502.7	1493.1	1465.5	1411.3	1320.8	1182.7	1002.7	803.7	609.4	448.5
115°	1473.2	1468.4	1449.3	1407.4	1336.0	1232.2	1092.2	926.6	750.4	585.6	447.6
117.5°	1406.5	1399.8	1371.3	1324.6	1250.3	1142.7	1014.2	867.5	715.1	569.5	448.5
120°	1318.9	1313.2	1290.3	1237.0	1161.8	1065.6	951.3	822.8	688.5	559.0	452.3
122.5°	1237.0	1229.4	1203.7	1157.0	1092.2	1004.6	900.8	787.5	666.6	552.3	459.0
125°	1161.8	1155.1	1131.3	1089.4	1028.4	952.3	860.8	757.0	648.5	546.6	465.7
127.5°	1097.0	1091.3	1069.4	1033.2	978.0	907.5	823.7	729.4	631.4	543.7	473.3
130°	1043.7	1036.1	1016.1	981.8	931.3	866.6	789.4	703.7	618.0	540.9	480.9
132.5°	991.3	986.5	969.4	935.1	888.5	827.5	757.0	679.9	605.6	539.9	486.6
135°	941.8	935.1	918.0	889.4	842.8	788.5	726.6	659.0	595.2	539.0	492.3
137.5°	889.4	883.7	869.4	839.9	799.9	751.3	696.1	639.0	585.6	537.1	496.1
140°	834.2	835.1	819.9	793.2	757.0	716.1	670.4	621.8	577.1	536.1	499.9
142.5°	782.8	783.7	770.4	747.5	718.0	683.7	645.6	605.6	569.5	534.2	502.8
145°	736.1	734.2	726.6	706.6	682.8	655.2	624.7	593.3	562.8	532.3	503.7
147.5°	696.1	695.2	687.5	673.2	654.2	634.2	608.5	582.8	556.1	529.5	503.7
150°	661.8	661.8	656.1	645.6	631.4	613.3	593.3	571.4	549.5	525.6	503.7
152.5°	633.3	633.3	630.4	620.9	610.4	596.1	579.0	560.9	541.8	520.9	500.9
155°	610.4	609.4	607.5	599.9	591.4	579.9	565.6	550.4	534.2	515.2	499.0
157.5°	588.5	588.5	586.6	580.9	573.3	563.7	552.3	539.0	525.6	510.4	496.1
160°	567.5	568.5	568.5	562.8	556.1	549.5	539.9	529.5	517.1	504.7	494.2
162.5°	548.5	549.5	549.5	544.7	540.9	535.2	526.6	518.0	508.5	499.0	490.4
165°	532.3	532.3	533.3	529.5	525.6	520.9	514.2	508.5	500.9	493.3	486.6
167.5°	516.1	516.1	517.1	514.2	512.3	508.5	504.7	499.9	493.3	487.6	482.8
170°	501.8	501.8	502.8	500.9	499.9	498.0	494.2	491.4	486.6	481.8	479.0
172.5°	488.5	489.5	491.4	489.5	489.5	488.5	485.7	483.7	479.9	477.1	476.1
175°	479.0	479.9	480.9	479.9	479.9	479.9	478.0	477.1	475.2	473.3	473.3
177.5°	472.3	472.3	474.2	473.3	474.2	474.2	473.3	472.3	471.4	470.4	471.4
180°	470.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4



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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°	18.1	15.2	12.4	10.5	8.6	5.7	3.8	1.9	3.8	5.7	8.6
92.5°	146.6	96.2	65.7	48.6	39.0	30.5	20.9	14.3	20.9	30.5	39.0
95°	346.6	204.7	123.8	86.7	61.9	45.7	35.2	32.4	35.2	45.7	61.9
97.5°	385.7	220.9	140.9	100.0	75.2	60.9	52.4	51.4	52.4	60.9	75.2
100°	359.0	218.1	151.4	114.3	91.4	78.1	71.4	70.5	71.4	78.1	91.4
102.5°	336.1	221.9	163.8	130.5	110.5	98.1	92.4	90.5	92.4	98.1	110.5
105°	327.6	229.5	178.1	148.6	130.5	119.0	113.3	110.5	113.3	119.0	130.5
107.5°	325.7	241.9	196.2	168.6	151.4	140.0	134.3	131.4	134.3	140.0	151.4
110°	330.4	258.1	215.2	188.5	172.4	161.9	157.1	154.3	157.1	161.9	172.4



TEST NUMBER: P832331

CATALOG NUMBER: S123RDIP-S775D1025U950-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	340.0	274.3	235.2	209.5	193.3	182.8	178.1	175.2	178.1	182.8	193.3
115°	350.4	292.3	256.2	230.4	214.3	204.7	199.0	195.2	199.0	204.7	214.3
117.5°	363.8	311.4	275.2	251.4	233.3	224.7	220.0	215.2	220.0	224.7	233.3
120°	379.0	329.5	295.2	271.4	253.3	243.8	239.0	236.2	239.0	243.8	253.3
122.5°	393.3	348.5	315.2	289.5	272.3	261.9	257.1	254.3	257.1	261.9	272.3
125°	408.5	366.6	333.3	307.6	289.5	279.0	273.3	271.4	273.3	279.0	289.5
127.5°	420.9	382.8	350.4	324.7	304.7	294.2	287.6	284.7	287.6	294.2	304.7
130°	433.3	397.1	365.7	340.0	320.0	308.5	300.0	297.1	300.0	308.5	320.0
132.5°	444.7	409.5	379.0	354.2	334.2	320.0	310.4	306.6	310.4	320.0	334.2
135°	454.2	421.9	392.3	366.6	346.6	332.3	321.9	318.1	321.9	332.3	346.6
137.5°	461.8	430.4	401.9	378.0	358.1	342.8	332.3	328.5	332.3	342.8	358.1
140°	467.6	439.0	411.4	387.6	368.5	353.3	343.8	339.0	343.8	353.3	368.5
142.5°	473.3	445.7	419.0	397.1	378.0	364.7	354.2	350.4	354.2	364.7	378.0
145°	477.1	451.4	426.6	404.7	388.5	374.2	365.7	362.8	365.7	374.2	388.5
147.5°	479.9	456.1	433.3	414.2	398.0	385.7	377.1	375.2	377.1	385.7	398.0
150°	480.9	460.9	439.0	421.9	408.5	396.1	388.5	387.6	388.5	396.1	408.5
152.5°	482.8	463.8	445.7	429.5	418.0	407.6	400.0	400.0	400.0	407.6	418.0
155°	482.8	467.6	451.4	438.0	427.6	418.0	412.3	412.3	412.3	418.0	427.6
157.5°	483.7	469.5	456.1	445.7	436.1	427.6	422.8	421.9	422.8	427.6	436.1
160°	483.7	472.3	460.9	451.4	444.7	437.1	433.3	433.3	433.3	437.1	444.7
162.5°	482.8	473.3	463.8	456.1	450.4	444.7	441.8	441.8	441.8	444.7	450.4
165°	480.9	474.2	466.6	459.9	456.1	451.4	449.5	450.4	449.5	451.4	456.1
167.5°	479.9	474.2	468.5	463.8	460.9	457.1	456.1	457.1	456.1	457.1	460.9
170°	477.1	473.3	468.5	466.6	464.7	461.8	460.9	462.8	460.9	461.8	464.7
172.5°	476.1	473.3	469.5	468.5	467.6	465.7	465.7	466.6	465.7	465.7	467.6
175°	474.2	472.3	470.4	469.5	469.5	467.6	468.5	469.5	468.5	467.6	469.5
177.5°	473.3	471.4	470.4	470.4	470.4	469.5	470.4	471.4	470.4	469.5	470.4
180°	470.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4



TEST NUMBER: P832331

CATALOG NUMBER: S123RDIP-S775D1025U950-4F0-1E-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°	10.5	12.4	15.2	18.1	20.9	23.8	22.9	23.8	24.8	25.7	27.6
92.5°	48.6	65.7	96.2	146.6	196.2	177.1	132.4	94.3	73.3	63.8	57.1
95°	86.7	123.8	204.7	346.6	502.8	564.7	458.0	342.8	232.4	181.9	147.6
97.5°	100.0	140.9	220.9	385.7	648.5	868.5	898.0	787.5	594.2	468.5	360.0
100°	114.3	151.4	218.1	359.0	609.4	901.8	1089.4	1122.7	1045.6	934.2	798.9
102.5°	130.5	163.8	221.9	336.1	552.3	839.9	1098.9	1234.1	1250.3	1197.0	1123.7
105°	148.6	178.1	229.5	327.6	507.6	765.6	1038.9	1237.9	1333.2	1351.3	1326.5
107.5°	168.6	196.2	241.9	325.7	475.2	699.9	953.2	1180.8	1330.3	1404.6	1430.3
110°	188.5	215.2	258.1	330.4	458.0	645.6	873.2	1091.3	1266.5	1386.5	1453.2



TEST NUMBER: P832331

CATALOG NUMBER: S123RDIP-S775D1025U950-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	209.5	235.2	274.3	340.0	448.5	609.4	803.7	1002.7	1182.7	1320.8	1411.3
115°	230.4	256.2	292.3	350.4	447.6	585.6	750.4	926.6	1092.2	1232.2	1336.0
117.5°	251.4	275.2	311.4	363.8	448.5	569.5	715.1	867.5	1014.2	1142.7	1250.3
120°	271.4	295.2	329.5	379.0	452.3	559.0	688.5	822.8	951.3	1065.6	1161.8
122.5°	289.5	315.2	348.5	393.3	459.0	552.3	666.6	787.5	900.8	1004.6	1092.2
125°	307.6	333.3	366.6	408.5	465.7	546.6	648.5	757.0	860.8	952.3	1028.4
127.5°	324.7	350.4	382.8	420.9	473.3	543.7	631.4	729.4	823.7	907.5	978.0
130°	340.0	365.7	397.1	433.3	480.9	540.9	618.0	703.7	789.4	866.6	931.3
132.5°	354.2	379.0	409.5	444.7	486.6	539.9	605.6	679.9	757.0	827.5	888.5
135°	366.6	392.3	421.9	454.2	492.3	539.0	595.2	659.0	726.6	788.5	842.8
137.5°	378.0	401.9	430.4	461.8	496.1	537.1	585.6	639.0	696.1	751.3	799.9
140°	387.6	411.4	439.0	467.6	499.9	536.1	577.1	621.8	670.4	716.1	757.0
142.5°	397.1	419.0	445.7	473.3	502.8	534.2	569.5	605.6	645.6	683.7	718.0
145°	404.7	426.6	451.4	477.1	503.7	532.3	562.8	593.3	624.7	655.2	682.8
147.5°	414.2	433.3	456.1	479.9	503.7	529.5	556.1	582.8	608.5	634.2	654.2
150°	421.9	439.0	460.9	480.9	503.7	525.6	549.5	571.4	593.3	613.3	631.4
152.5°	429.5	445.7	463.8	482.8	500.9	520.9	541.8	560.9	579.0	596.1	610.4
155°	438.0	451.4	467.6	482.8	499.0	515.2	534.2	550.4	565.6	579.9	591.4
157.5°	445.7	456.1	469.5	483.7	496.1	510.4	525.6	539.0	552.3	563.7	573.3
160°	451.4	460.9	472.3	483.7	494.2	504.7	517.1	529.5	539.9	549.5	556.1
162.5°	456.1	463.8	473.3	482.8	490.4	499.0	508.5	518.0	526.6	535.2	540.9
165°	459.9	466.6	474.2	480.9	486.6	493.3	500.9	508.5	514.2	520.9	525.6
167.5°	463.8	468.5	474.2	479.9	482.8	487.6	493.3	499.9	504.7	508.5	512.3
170°	466.6	468.5	473.3	477.1	479.0	481.8	486.6	491.4	494.2	498.0	499.9
172.5°	468.5	469.5	473.3	476.1	476.1	477.1	479.9	483.7	485.7	488.5	489.5
175°	469.5	470.4	472.3	474.2	473.3	473.3	475.2	477.1	478.0	479.9	479.9
177.5°	470.4	470.4	471.4	473.3	471.4	470.4	471.4	472.3	473.3	474.2	474.2
180°	470.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4	470.4



TEST NUMBER: P832331

CATALOG NUMBER: S123RDIP-S775D1025U950-4F0-1E-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°	26.7	27.6	28.6	27.6
92.5°	55.2	51.4	52.4	50.5
95°	129.5	120.9	114.3	110.5
97.5°	296.2	260.0	237.1	226.6
100°	702.8	633.3	596.1	597.1
102.5°	1054.2	1002.7	973.2	945.6
105°	1282.7	1246.5	1216.0	1211.3
107.5°	1424.6	1407.4	1395.1	1384.6
110°	1479.8	1487.4	1485.5	1483.6



TEST NUMBER: P832331

CATALOG NUMBER: S123RDIP-S775D1025U950-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
112.5°	1465.5	1493.1	1502.7	1503.6
115°	1407.4	1449.3	1468.4	1473.2
117.5°	1324.6	1371.3	1399.8	1406.5
120°	1237.0	1290.3	1313.2	1318.9
122.5°	1157.0	1203.7	1229.4	1237.0
125°	1089.4	1131.3	1155.1	1161.8
127.5°	1033.2	1069.4	1091.3	1097.0
130°	981.8	1016.1	1036.1	1043.7
132.5°	935.1	969.4	986.5	991.3
135°	889.4	918.0	935.1	941.8
137.5°	839.9	869.4	883.7	889.4
140°	793.2	819.9	835.1	834.2
142.5°	747.5	770.4	783.7	782.8
145°	706.6	726.6	734.2	736.1
147.5°	673.2	687.5	695.2	696.1
150°	645.6	656.1	661.8	661.8
152.5°	620.9	630.4	633.3	633.3
155°	599.9	607.5	609.4	610.4
157.5°	580.9	586.6	588.5	588.5
160°	562.8	568.5	568.5	567.5
162.5°	544.7	549.5	549.5	548.5
165°	529.5	533.3	532.3	532.3
167.5°	514.2	517.1	516.1	516.1
170°	500.9	502.8	501.8	501.8
172.5°	489.5	491.4	489.5	488.5
175°	479.9	480.9	479.9	479.0
177.5°	473.3	474.2	472.3	472.3
180°	470.4	470.4	470.4	470.4



TEST NUMBER: P832331

CATALOG NUMBER: S123RDIP-S775D1025U950-4F0-1E-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	11.74	12.53	12.74	13.53	14.84	16.41	17.19	17.40	18.19	19.51
	3H	12.96	13.66	13.96	14.67	16.01	17.90	18.61	18.91	19.61	20.95
	4H	13.34	14.01	14.36	15.01	16.36	18.39	19.06	19.41	20.07	21.41
	6H	13.62	14.23	14.65	15.25	16.60	18.70	19.31	19.73	20.33	21.68
	8H	13.71	14.29	14.74	15.32	16.67	18.78	19.36	19.81	20.39	21.74
	12H	13.76	14.31	14.79	15.33	16.71	18.81	19.36	19.85	20.38	21.76
4H	2H	12.46	13.13	13.48	14.13	15.48	16.40	17.06	17.42	18.07	19.42
	3H	13.83	14.38	14.86	15.42	16.77	18.05	18.60	19.08	19.64	21.00
	4H	14.28	14.79	15.32	15.81	17.20	18.66	19.16	19.69	20.19	21.57
	6H	14.65	15.08	15.69	16.13	17.51	19.09	19.53	20.14	20.58	21.96
	8H	14.77	15.17	15.82	16.22	17.61	19.22	19.63	20.27	20.67	22.06
	12H	14.84	15.21	15.91	16.27	17.66	19.28	19.65	20.35	20.71	22.10
8H	4H	14.59	15.00	15.64	16.04	17.43	18.62	19.03	19.67	20.07	21.46
	6H	15.05	15.39	16.12	16.47	17.86	19.12	19.45	20.19	20.54	21.93
	8H	15.25	15.54	16.32	16.61	18.02	19.30	19.59	20.38	20.67	22.07
	12H	15.39	15.64	16.47	16.71	18.16	19.42	19.67	20.50	20.74	22.19
12H	4H	14.60	14.96	15.67	16.02	17.42	18.57	18.93	19.63	19.99	21.39
	6H	15.11	15.40	16.19	16.48	17.88	19.09	19.38	20.17	20.45	21.86
	8H	15.33	15.59	16.41	16.65	18.10	19.28	19.54	20.36	20.60	22.06