

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: P832346

Luminaire Tested: S123RDIP-S775D1195U927-4F0-1E-UDD-G4

Issue Date: 05/03/2024

Test Information

Test Method: LM-79-2019
Report Number: P832346
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-S775D1195U927-4F0-1E-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

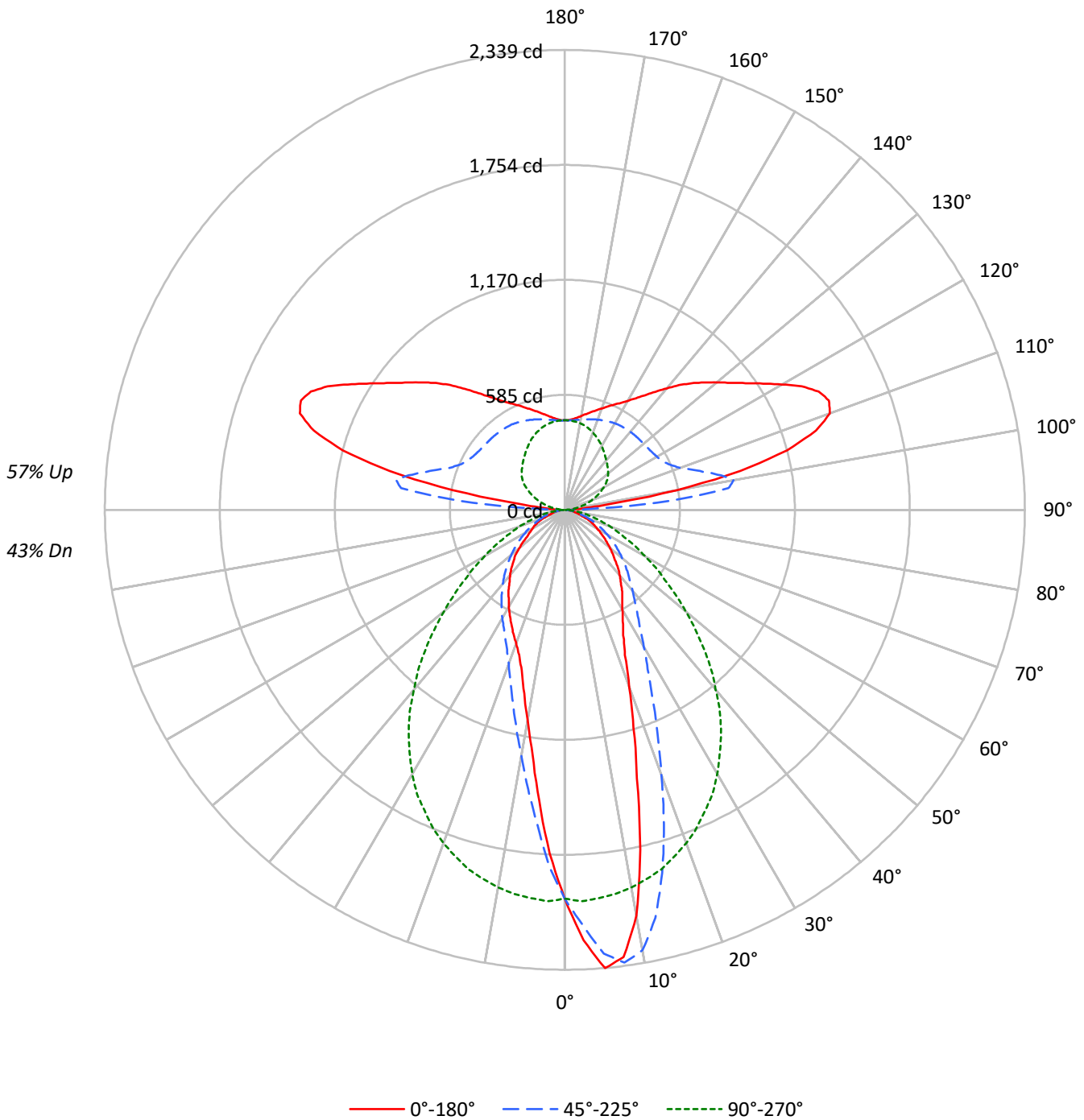
Lumens per Lamp: N/A
Luminaire Lumens: 6044.7 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 1.17 / 0.8
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

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°	21288	21288	21288	21288	21288
5°	25276	24470	21421	17316	16077
10°	22900	24855	21315	13874	11903
15°	15767	21311	21089	11340	9415
20°	10969	16408	20665	9562	8276
25°	8359	12505	20050	8499	7627
30°	7276	9998	19280	7891	7065
35°	6681	8433	18188	7378	6553
40°	6095	7531	16760	6875	6084
45°	5504	6888	15219	6400	5616
50°	4997	6355	13402	5933	5037
55°	4519	5836	11656	5478	4322
60°	4049	5307	10125	4975	4084
65°	3739	4709	8716	4470	3861
70°	3037	4069	7604	4044	3138
75°	2666	3236	6442	3356	2766
80°	2411	2740	5275	2814	2616
85°	2198	2408	4001	2556	2408

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 80°
 Vertical Angle: 45°
 Luminance: 16058 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.3	3.0
10°-20°	417.1	6.9
20°-30°	478.6	7.9
30°-40°	471.7	7.8
40°-50°	416.0	6.9
50°-60°	320.0	5.3
60°-70°	210.4	3.5
70°-80°	102.2	1.7
80°-90°	28.3	0.5
90°-100°	246.7	4.1
100°-110°	722.3	11.9
110°-120°	705.4	11.7
120°-130°	561.8	9.3
130°-140°	443.2	7.3
140°-150°	330.6	5.5
150°-160°	230.5	3.8
160°-170°	135.4	2.2
170°-180°	44.1	0.7
0°-30°	1076.0	17.8
0°-40°	1547.7	25.6
0°-60°	2283.7	37.8
0°-90°	2624.6	43.4
90°-120°	1674.5	27.7
90°-150°	3010.1	49.8
90°-180°	3420.0	56.6
0°-180°	6044.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1978	1978	1978	1978	1978	
5°	2339	2265	1982	1603	1488	214
15°	1415	1912	1892	1018	845	399
25°	704	1053	1688	716	642	332
35°	508	642	1384	562	499	317
45°	362	452	1000	420	369	281
55°	241	311	621	292	230	216
65°	147	185	342	176	152	144
75°	64	78	155	81	66	69
85°	18	20	32	21	20	19
90°	27	23	2	23	27	15
95°	107	546	31	546	107	174
105°	1171	740	107	740	1171	1168
115°	1424	566	189	566	1424	1388
125°	1123	528	262	528	1123	1016
135°	910	521	307	521	910	706
145°	712	514	351	514	712	452
155°	590	498	398	498	590	275
165°	514	477	435	477	514	147
175°	463	457	454	457	463	45
180°	455	455	455	455	455	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7
2.5°	2191.7	2184.8	2177.9	2175.9	2173.9	2167.4	2160.9	2146.3	2131.7	2116.7	2101.7
5°	2339.3	2340.1	2340.9	2338.9	2336.9	2328.4	2319.8	2302.0	2284.2	2264.7	2245.2
7.5°	2293.9	2306.9	2319.8	2322.3	2324.7	2331.2	2337.7	2333.6	2329.6	2322.3	2315.0
10°	2095.2	2094.4	2093.6	2108.2	2122.8	2166.2	2209.6	2231.9	2254.2	2274.0	2293.9
12.5°	1770.9	1772.1	1773.3	1821.2	1869.0	1910.0	1950.9	2007.7	2064.4	2125.6	2186.9
15°	1414.9	1434.8	1454.7	1497.2	1539.8	1601.4	1663.0	1739.3	1815.5	1912.4	2009.3
17.5°	1161.9	1170.5	1179.0	1219.9	1260.9	1319.2	1377.6	1464.0	1550.3	1675.2	1800.1
20°	957.6	965.3	973.0	1002.6	1032.2	1088.2	1144.1	1226.4	1308.7	1432.4	1556.0
22.5°	799.5	814.5	829.5	849.4	869.2	909.8	950.3	1034.2	1118.2	1230.9	1343.6
25°	703.8	710.7	717.6	734.6	751.7	790.6	829.5	885.0	940.6	1052.9	1165.2
27.5°	638.9	641.0	643.0	655.6	668.1	693.3	718.4	769.9	821.4	913.8	1006.3
30°	585.4	589.1	592.7	602.5	612.2	630.4	648.7	685.2	721.7	804.4	887.1
32.5°	544.1	546.1	548.1	556.2	564.4	577.7	591.1	619.9	648.7	711.9	775.2
35°	508.4	508.8	509.2	515.3	521.4	534.3	547.3	571.2	595.2	641.8	688.4
37.5°	467.9	470.7	473.5	478.0	482.5	493.8	505.2	524.6	544.1	582.6	621.1
40°	433.8	436.2	438.7	443.9	449.2	458.1	467.0	484.9	502.7	536.0	569.2
42.5°	399.7	401.4	403.0	408.3	413.5	424.5	435.4	449.6	463.8	491.4	518.9
45°	361.6	365.7	369.7	375.4	381.1	390.4	399.7	414.3	428.9	452.5	476.0
47.5°	330.0	332.0	334.1	338.9	343.8	355.2	366.5	379.5	392.5	414.3	436.2
50°	298.4	299.2	300.0	304.5	308.9	319.1	329.2	344.2	359.2	379.5	399.7
52.5°	268.4	270.4	272.4	276.9	281.4	288.3	295.1	310.6	326.0	345.8	365.7
55°	240.8	242.0	243.3	246.5	249.7	257.8	266.0	279.3	292.7	311.0	329.2
57.5°	214.9	216.5	218.1	220.6	223.0	230.3	237.6	249.3	261.1	279.3	297.6
60°	188.1	190.1	192.2	195.0	197.8	203.5	209.2	219.7	230.3	246.5	262.7
62.5°	168.7	169.1	169.5	171.9	174.3	178.4	182.4	191.0	199.5	215.7	231.9
65°	146.8	148.0	149.2	150.4	151.6	154.9	158.1	165.4	172.7	184.9	197.0
67.5°	124.1	125.3	126.5	128.5	130.5	133.4	136.2	141.1	146.0	157.3	168.7
70°	96.5	96.5	96.5	99.7	103.0	107.8	112.7	116.4	120.0	129.3	138.7
72.5°	78.7	79.1	79.5	79.9	80.3	83.1	85.9	92.0	98.1	103.8	109.5
75°	64.1	64.5	64.9	65.3	65.7	66.5	67.3	69.3	71.4	77.8	84.3
77.5°	51.1	51.5	51.9	52.3	52.7	53.5	54.3	55.1	55.9	58.4	60.8
80°	38.9	39.3	39.7	40.1	40.5	40.9	41.4	42.2	43.0	44.2	45.4
82.5°	28.4	28.4	28.4	28.4	28.4	29.2	30.0	30.0	30.0	30.8	31.6
85°	17.8	17.8	17.8	18.2	18.6	18.6	18.6	19.1	19.5	19.5	19.5
87.5°	8.1	7.7	7.3	7.7	8.1	8.1	8.1	8.5	8.9	8.9	8.9
90°	26.7	27.6	26.7	25.8	26.7	24.9	23.9	23.0	22.1	23.0	20.2
92.5°	48.8	50.6	49.7	53.4	55.2	61.7	70.9	91.1	127.9	171.2	189.6
95°	106.8	110.4	116.9	125.2	142.7	175.8	224.6	331.3	442.7	545.8	486.0
97.5°	219.1	229.2	251.3	286.2	347.9	452.8	574.3	761.2	867.9	839.4	626.8
100°	577.1	576.2	612.1	679.3	772.2	902.9	1010.6	1085.1	1052.9	871.6	589.1
102.5°	914.0	940.6	969.2	1018.9	1086.1	1156.9	1208.5	1192.8	1062.1	811.8	533.8
105°	1170.7	1175.3	1204.8	1239.8	1282.1	1306.0	1288.6	1196.5	1004.1	740.0	490.6
107.5°	1338.3	1348.4	1360.3	1376.9	1382.4	1357.6	1285.8	1141.3	921.3	676.5	459.3
110°	1434.0	1435.8	1437.7	1430.3	1404.5	1340.1	1224.1	1054.8	844.0	624.0	442.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1453.3	1452.4	1443.2	1416.5	1364.0	1276.6	1143.1	969.2	776.8	589.1	433.5
115°	1423.8	1419.2	1400.8	1360.3	1291.3	1191.0	1055.7	895.5	725.3	566.0	432.6
117.5°	1359.4	1353.0	1325.4	1280.3	1208.5	1104.5	980.2	838.5	691.2	550.4	433.5
120°	1274.7	1269.2	1247.1	1195.6	1122.9	1029.9	919.5	795.2	665.4	540.3	437.2
122.5°	1195.6	1188.2	1163.4	1118.3	1055.7	971.0	870.7	761.2	644.3	533.8	443.6
125°	1122.9	1116.4	1093.4	1052.9	994.0	920.4	832.0	731.7	626.8	528.3	450.1
127.5°	1060.3	1054.8	1033.6	998.6	945.2	877.1	796.1	705.0	610.2	525.5	457.4
130°	1008.8	1001.4	982.1	948.9	900.1	837.6	763.0	680.2	597.3	522.8	464.8
132.5°	958.1	953.5	937.0	903.8	858.7	799.8	731.7	657.2	585.4	521.9	470.3
135°	910.3	903.8	887.3	859.6	814.5	762.1	702.3	636.9	575.2	520.9	475.8
137.5°	859.6	854.1	840.3	811.8	773.1	726.2	672.8	617.6	566.0	519.1	479.5
140°	806.3	807.2	792.5	766.7	731.7	692.1	648.0	601.0	557.8	518.2	483.2
142.5°	756.6	757.5	744.6	722.5	694.0	660.8	624.0	585.4	550.4	516.3	486.0
145°	711.5	709.6	702.3	682.9	659.9	633.2	603.8	573.4	544.0	514.5	486.9
147.5°	672.8	671.9	664.5	650.7	632.3	613.0	588.1	563.3	537.5	511.7	486.9
150°	639.7	639.7	634.2	624.0	610.2	592.7	573.4	552.2	531.1	508.1	486.9
152.5°	612.1	612.1	609.3	600.1	590.0	576.2	559.6	542.1	523.7	503.5	484.1
155°	590.0	589.1	587.2	579.8	571.6	560.5	546.7	532.0	516.3	497.9	482.3
157.5°	568.8	568.8	567.0	561.4	554.1	544.9	533.8	520.9	508.1	493.3	479.5
160°	548.6	549.5	549.5	544.0	537.5	531.1	521.9	511.7	499.8	487.8	477.7
162.5°	530.1	531.1	531.1	526.5	522.8	517.3	509.0	500.7	491.5	482.3	474.0
165°	514.5	514.5	515.4	511.7	508.1	503.5	497.0	491.5	484.1	476.8	470.3
167.5°	498.9	498.9	499.8	497.0	495.2	491.5	487.8	483.2	476.8	471.2	466.6
170°	485.0	485.0	486.0	484.1	483.2	481.4	477.7	474.9	470.3	465.7	463.0
172.5°	472.2	473.1	474.9	473.1	473.1	472.2	469.4	467.6	463.9	461.1	460.2
175°	463.0	463.9	464.8	463.9	463.9	463.9	462.0	461.1	459.3	457.4	457.4
177.5°	456.5	456.5	458.4	457.4	458.4	458.4	457.4	456.5	455.6	454.7	455.6
180°	454.7	454.7	454.7	454.7	454.7	454.7	454.7	454.7	454.7	454.7	454.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7
2.5°	2099.7	2097.7	2078.2	2058.7	2039.7	2020.6	2006.4	1992.3	1968.3	1944.4	1929.4
5°	2229.8	2214.4	2183.6	2152.8	2106.6	2060.4	2021.4	1982.5	1933.1	1883.6	1842.2
7.5°	2302.4	2289.8	2252.5	2215.2	2154.0	2092.8	2032.0	1971.2	1898.2	1825.2	1762.8
10°	2304.4	2315.0	2284.2	2253.3	2184.4	2115.5	2032.8	1950.1	1852.0	1753.9	1673.2
12.5°	2232.3	2277.7	2271.2	2264.7	2194.6	2124.4	2023.9	1923.3	1802.9	1682.5	1581.6
15°	2097.3	2185.2	2211.2	2237.1	2179.2	2121.2	2006.8	1892.5	1751.0	1609.5	1493.6
17.5°	1923.3	2046.6	2115.1	2183.6	2141.4	2099.3	1974.0	1848.7	1689.4	1530.1	1404.0
20°	1717.4	1878.7	1986.2	2093.6	2078.2	2062.8	1933.5	1804.1	1632.2	1460.3	1323.7
22.5°	1513.9	1684.1	1832.5	1980.9	1996.7	2012.5	1882.0	1751.4	1563.3	1375.2	1236.1
25°	1338.3	1511.4	1688.2	1865.0	1900.6	1936.3	1812.2	1688.2	1493.2	1298.2	1159.9
27.5°	1170.9	1335.5	1530.1	1724.7	1789.5	1854.4	1740.9	1627.4	1424.3	1221.1	1083.3
30°	1034.2	1181.4	1380.1	1578.7	1669.1	1759.5	1655.3	1551.2	1349.7	1148.2	1013.2
32.5°	906.9	1038.7	1238.2	1437.6	1542.6	1647.6	1557.6	1467.6	1273.8	1080.0	946.7
35°	806.4	924.4	1110.5	1296.5	1414.1	1531.7	1457.9	1384.1	1194.8	1005.5	879.4
37.5°	720.0	819.0	993.7	1168.4	1293.3	1418.2	1356.5	1294.9	1116.9	939.0	819.8
40°	648.7	728.1	890.7	1053.3	1175.7	1298.2	1245.5	1192.8	1033.4	874.1	762.6
42.5°	587.5	656.0	801.9	947.9	1060.2	1172.5	1137.6	1102.8	958.4	814.1	710.7
45°	533.5	591.1	719.6	848.1	951.5	1054.9	1027.3	999.8	875.3	750.8	656.0
47.5°	485.7	535.2	649.9	764.6	857.5	950.3	924.8	899.2	796.3	693.3	606.9
50°	441.9	484.1	579.8	675.4	759.0	842.5	821.4	800.3	715.2	630.0	555.4
52.5°	400.6	435.4	521.4	607.3	674.6	741.9	725.7	709.5	643.8	578.1	510.4
55°	361.2	393.3	465.8	538.4	596.0	653.5	637.3	621.1	570.0	518.9	459.3
57.5°	325.6	353.5	412.3	471.1	516.9	562.7	555.0	547.3	504.8	462.2	413.1
60°	287.9	313.0	363.7	414.3	451.2	488.1	479.2	470.3	439.9	409.5	367.3
62.5°	254.2	276.5	317.0	357.6	387.6	417.6	411.1	404.6	381.5	358.4	323.5
65°	218.9	240.8	273.7	306.5	330.0	353.5	347.9	342.2	324.7	307.3	279.3
67.5°	186.9	205.1	233.5	261.9	277.7	293.5	290.3	287.0	273.7	260.3	238.4
70°	154.5	170.3	193.8	217.3	228.3	239.2	240.4	241.6	229.5	217.3	201.1
72.5°	122.0	134.6	156.5	178.4	186.9	195.4	195.0	194.6	187.3	180.0	165.4
75°	93.7	103.0	120.0	137.0	144.3	151.6	153.3	154.9	148.0	141.1	133.0
77.5°	67.3	73.8	86.8	99.7	107.8	116.0	116.8	117.6	114.3	111.1	103.4
80°	47.4	49.5	57.6	65.7	74.2	82.7	83.9	85.1	81.9	78.7	73.8
82.5°	32.8	34.1	36.9	39.7	46.6	53.5	55.1	56.8	55.1	53.5	48.2
85°	19.9	20.3	21.5	22.7	25.9	29.2	30.8	32.4	31.6	30.8	28.0
87.5°	8.9	8.9	9.3	9.7	10.5	11.4	13.4	15.4	14.2	13.0	11.8
90°	17.5	14.7	12.0	10.1	8.3	5.5	3.7	1.8	3.7	5.5	8.3
92.5°	141.7	93.0	63.5	46.9	37.7	29.5	20.2	13.8	20.2	29.5	37.7
95°	335.0	197.9	119.7	83.8	59.8	44.2	34.1	31.3	34.1	44.2	59.8
97.5°	372.8	213.5	136.2	96.6	72.7	58.9	50.6	49.7	50.6	58.9	72.7
100°	347.0	210.8	146.3	110.4	88.4	75.5	69.0	68.1	69.0	75.5	88.4
102.5°	324.9	214.5	158.3	126.1	106.8	94.8	89.3	87.4	89.3	94.8	106.8
105°	316.6	221.8	172.1	143.6	126.1	115.0	109.5	106.8	109.5	115.0	126.1
107.5°	314.8	233.8	189.6	162.9	146.3	135.3	129.8	127.0	129.8	135.3	146.3
110°	319.4	249.4	208.0	182.2	166.6	156.5	151.9	149.1	151.9	156.5	166.6



TEST NUMBER: P832346

CATALOG NUMBER: S123RDIP-S775D1195U927-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	328.6	265.1	227.3	202.5	186.8	176.7	172.1	169.4	172.1	176.7	186.8
115°	338.7	282.6	247.6	222.7	207.1	197.9	192.4	188.7	192.4	197.9	207.1
117.5°	351.6	301.0	266.0	243.0	225.5	217.2	212.6	208.0	212.6	217.2	225.5
120°	366.3	318.5	285.3	262.3	244.8	235.6	231.0	228.3	231.0	235.6	244.8
122.5°	380.1	336.9	304.7	279.8	263.2	253.1	248.5	245.7	248.5	253.1	263.2
125°	394.8	354.4	322.1	297.3	279.8	269.7	264.2	262.3	264.2	269.7	279.8
127.5°	406.8	370.0	338.7	313.9	294.5	284.4	278.0	275.2	278.0	284.4	294.5
130°	418.8	383.8	353.4	328.6	309.3	298.2	289.9	287.2	289.9	298.2	309.3
132.5°	429.8	395.8	366.3	342.4	323.1	309.3	300.0	296.4	300.0	309.3	323.1
135°	439.0	407.7	379.2	354.4	335.0	321.2	311.1	307.4	311.1	321.2	335.0
137.5°	446.4	416.0	388.4	365.4	346.1	331.3	321.2	317.5	321.2	331.3	346.1
140°	451.9	424.3	397.6	374.6	356.2	341.5	332.3	327.7	332.3	341.5	356.2
142.5°	457.4	430.7	405.0	383.8	365.4	352.5	342.4	338.7	342.4	352.5	365.4
145°	461.1	436.3	412.3	391.2	375.5	361.7	353.4	350.7	353.4	361.7	375.5
147.5°	463.9	440.9	418.8	400.4	384.7	372.8	364.5	362.6	364.5	372.8	384.7
150°	464.8	445.5	424.3	407.7	394.8	382.9	375.5	374.6	375.5	382.9	394.8
152.5°	466.6	448.2	430.7	415.1	404.1	393.9	386.6	386.6	386.6	393.9	404.1
155°	466.6	451.9	436.3	423.4	413.3	404.1	398.5	398.5	398.5	404.1	413.3
157.5°	467.6	453.8	440.9	430.7	421.5	413.3	408.7	407.7	408.7	413.3	421.5
160°	467.6	456.5	445.5	436.3	429.8	422.5	418.8	418.8	418.8	422.5	429.8
162.5°	466.6	457.4	448.2	440.9	435.3	429.8	427.1	427.1	427.1	429.8	435.3
165°	464.8	458.4	451.0	444.6	440.9	436.3	434.4	435.3	434.4	436.3	440.9
167.5°	463.9	458.4	452.8	448.2	445.5	441.8	440.9	441.8	440.9	441.8	445.5
170°	461.1	457.4	452.8	451.0	449.2	446.4	445.5	447.3	445.5	446.4	449.2
172.5°	460.2	457.4	453.8	452.8	451.9	450.1	450.1	451.0	450.1	450.1	451.9
175°	458.4	456.5	454.7	453.8	453.8	451.9	452.8	453.8	452.8	451.9	453.8
177.5°	457.4	455.6	454.7	454.7	454.7	453.8	454.7	455.6	454.7	453.8	454.7
180°	454.7	454.7	454.7	454.7	454.7	454.7	454.7	454.7	454.7	454.7	454.7



TEST NUMBER: P832346

CATALOG NUMBER: S123RDIP-S775D1195U927-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7	1977.7
2.5°	1914.4	1891.3	1868.2	1851.6	1834.9	1814.3	1793.6	1792.8	1792.0	1776.6	1761.2
5°	1800.9	1760.8	1720.6	1681.3	1642.0	1602.6	1563.3	1554.4	1545.5	1532.1	1518.7
7.5°	1700.3	1636.3	1572.2	1522.0	1471.7	1432.4	1393.0	1366.3	1339.5	1318.8	1298.2
10°	1592.5	1513.0	1433.6	1372.8	1312.0	1269.4	1226.8	1196.0	1165.2	1150.6	1136.0
12.5°	1480.6	1394.3	1307.9	1248.3	1188.7	1137.6	1086.5	1058.6	1030.6	1010.3	990.0
15°	1377.6	1284.8	1191.9	1128.7	1065.5	1017.6	969.8	941.8	913.8	893.6	873.3
17.5°	1277.9	1184.2	1090.6	1026.5	962.5	919.1	875.7	848.6	821.4	808.8	796.3
20°	1187.1	1092.6	998.2	937.7	877.3	834.8	792.2	777.6	763.0	751.3	739.5
22.5°	1097.1	1006.3	915.4	857.5	799.5	768.7	737.9	726.1	714.4	705.4	696.5
25°	1021.7	931.3	840.8	790.2	739.5	715.6	691.7	684.0	676.2	667.3	658.4
27.5°	945.4	859.5	773.5	733.0	692.5	673.0	653.5	643.8	634.1	626.8	619.5
30°	878.1	798.7	719.2	685.6	651.9	634.9	617.9	607.3	596.8	589.9	583.0
32.5°	813.3	742.7	672.2	643.4	614.6	598.0	581.4	571.2	561.1	553.0	544.9
35°	753.3	692.1	630.8	604.5	578.1	561.5	544.9	534.8	524.6	516.5	508.4
37.5°	700.6	645.0	589.5	564.8	540.0	525.4	510.8	500.3	489.8	481.2	472.7
40°	651.1	602.1	553.0	529.1	505.2	489.3	473.5	464.2	454.9	447.2	439.5
42.5°	607.3	562.3	517.3	493.8	470.3	455.3	440.3	429.3	418.4	413.9	409.5
45°	561.1	521.4	481.6	458.9	436.2	420.4	404.6	395.3	386.0	381.9	377.9
47.5°	520.6	483.7	446.8	424.5	402.2	388.0	373.8	366.5	359.2	353.5	347.9
50°	480.8	445.2	409.5	388.0	366.5	354.3	342.2	333.3	324.3	320.3	316.2
52.5°	442.7	410.3	377.9	356.0	334.1	322.3	310.6	302.9	295.1	286.6	278.1
55°	399.7	371.4	343.0	323.5	304.1	291.9	279.7	270.8	261.9	253.0	244.1
57.5°	364.1	336.1	308.1	290.7	273.3	261.5	249.7	240.0	230.3	223.0	215.7
60°	325.2	300.8	276.5	259.5	242.4	231.1	219.7	210.4	201.1	197.4	193.8
62.5°	288.7	266.0	243.3	228.3	213.3	202.3	191.4	185.3	179.2	176.8	174.3
65°	251.4	231.9	212.4	198.7	184.9	175.5	166.2	163.4	160.5	158.5	156.5
67.5°	216.5	199.9	183.3	171.1	158.9	152.4	146.0	142.7	139.5	137.0	134.6
70°	184.9	170.3	155.7	145.1	134.6	128.5	122.4	119.6	116.8	112.3	107.8
72.5°	150.8	139.5	128.1	120.0	111.9	106.6	101.4	95.7	90.0	85.9	81.9
75°	124.9	113.5	102.2	94.5	86.8	80.7	74.6	72.6	70.5	69.3	68.1
77.5°	95.7	85.9	76.2	70.1	64.1	61.2	58.4	57.2	55.9	55.5	55.1
80°	68.9	60.8	52.7	49.5	46.2	45.4	44.6	43.8	43.0	42.6	42.2
82.5°	43.0	38.9	34.9	34.1	33.2	32.8	32.4	32.0	31.6	31.2	30.8
85°	25.1	23.5	21.9	21.5	21.1	20.7	20.3	20.3	20.3	20.3	20.3
87.5°	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.1	9.7
90°	10.1	12.0	14.7	17.5	20.2	23.0	22.1	23.0	23.9	24.9	26.7
92.5°	46.9	63.5	93.0	141.7	189.6	171.2	127.9	91.1	70.9	61.7	55.2
95°	83.8	119.7	197.9	335.0	486.0	545.8	442.7	331.3	224.6	175.8	142.7
97.5°	96.6	136.2	213.5	372.8	626.8	839.4	867.9	761.2	574.3	452.8	347.9
100°	110.4	146.3	210.8	347.0	589.1	871.6	1052.9	1085.1	1010.6	902.9	772.2
102.5°	126.1	158.3	214.5	324.9	533.8	811.8	1062.1	1192.8	1208.5	1156.9	1086.1
105°	143.6	172.1	221.8	316.6	490.6	740.0	1004.1	1196.5	1288.6	1306.0	1282.1
107.5°	162.9	189.6	233.8	314.8	459.3	676.5	921.3	1141.3	1285.8	1357.6	1382.4
110°	182.2	208.0	249.4	319.4	442.7	624.0	844.0	1054.8	1224.1	1340.1	1404.5



TEST NUMBER: P832346

CATALOG NUMBER: S123RDIP-S775D1195U927-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	202.5	227.3	265.1	328.6	433.5	589.1	776.8	969.2	1143.1	1276.6	1364.0
115°	222.7	247.6	282.6	338.7	432.6	566.0	725.3	895.5	1055.7	1191.0	1291.3
117.5°	243.0	266.0	301.0	351.6	433.5	550.4	691.2	838.5	980.2	1104.5	1208.5
120°	262.3	285.3	318.5	366.3	437.2	540.3	665.4	795.2	919.5	1029.9	1122.9
122.5°	279.8	304.7	336.9	380.1	443.6	533.8	644.3	761.2	870.7	971.0	1055.7
125°	297.3	322.1	354.4	394.8	450.1	528.3	626.8	731.7	832.0	920.4	994.0
127.5°	313.9	338.7	370.0	406.8	457.4	525.5	610.2	705.0	796.1	877.1	945.2
130°	328.6	353.4	383.8	418.8	464.8	522.8	597.3	680.2	763.0	837.6	900.1
132.5°	342.4	366.3	395.8	429.8	470.3	521.9	585.4	657.2	731.7	799.8	858.7
135°	354.4	379.2	407.7	439.0	475.8	520.9	575.2	636.9	702.3	762.1	814.5
137.5°	365.4	388.4	416.0	446.4	479.5	519.1	566.0	617.6	672.8	726.2	773.1
140°	374.6	397.6	424.3	451.9	483.2	518.2	557.8	601.0	648.0	692.1	731.7
142.5°	383.8	405.0	430.7	457.4	486.0	516.3	550.4	585.4	624.0	660.8	694.0
145°	391.2	412.3	436.3	461.1	486.9	514.5	544.0	573.4	603.8	633.2	659.9
147.5°	400.4	418.8	440.9	463.9	486.9	511.7	537.5	563.3	588.1	613.0	632.3
150°	407.7	424.3	445.5	464.8	486.9	508.1	531.1	552.2	573.4	592.7	610.2
152.5°	415.1	430.7	448.2	466.6	484.1	503.5	523.7	542.1	559.6	576.2	590.0
155°	423.4	436.3	451.9	466.6	482.3	497.9	516.3	532.0	546.7	560.5	571.6
157.5°	430.7	440.9	453.8	467.6	479.5	493.3	508.1	520.9	533.8	544.9	554.1
160°	436.3	445.5	456.5	467.6	477.7	487.8	499.8	511.7	521.9	531.1	537.5
162.5°	440.9	448.2	457.4	466.6	474.0	482.3	491.5	500.7	509.0	517.3	522.8
165°	444.6	451.0	458.4	464.8	470.3	476.8	484.1	491.5	497.0	503.5	508.1
167.5°	448.2	452.8	458.4	463.9	466.6	471.2	476.8	483.2	487.8	491.5	495.2
170°	451.0	452.8	457.4	461.1	463.0	465.7	470.3	474.9	477.7	481.4	483.2
172.5°	452.8	453.8	457.4	460.2	460.2	461.1	463.9	467.6	469.4	472.2	473.1
175°	453.8	454.7	456.5	458.4	457.4	457.4	459.3	461.1	462.0	463.9	463.9
177.5°	454.7	454.7	455.6	457.4	455.6	454.7	455.6	456.5	457.4	458.4	458.4
180°	454.7	454.7	454.7	454.7	454.7	454.7	454.7	454.7	454.7	454.7	454.7



TEST NUMBER: P832346

CATALOG NUMBER: S123RDIP-S775D1195U927-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1977.7	1977.7	1977.7	1977.7
2.5°	1757.1	1753.1	1751.4	1749.8
5°	1506.2	1493.6	1490.7	1487.9
7.5°	1292.9	1287.6	1270.2	1252.8
10°	1119.8	1103.6	1096.3	1089.0
12.5°	975.0	960.0	957.6	955.2
15°	862.7	852.2	848.6	844.9
17.5°	789.0	781.7	777.2	772.7
20°	734.2	729.0	725.7	722.5
22.5°	692.5	688.4	686.0	683.5
25°	652.3	646.2	644.2	642.2
27.5°	614.2	608.9	606.9	604.9
30°	578.5	574.1	571.2	568.4
32.5°	539.6	534.3	532.7	531.1
35°	505.2	501.9	500.3	498.7
37.5°	468.7	464.6	462.2	459.8
40°	437.5	435.4	434.2	433.0
42.5°	405.8	402.2	401.8	401.4
45°	374.2	370.6	369.7	368.9
47.5°	344.6	341.4	341.0	340.6
50°	311.8	307.3	304.1	300.8
52.5°	274.1	270.0	267.2	264.3
55°	239.6	235.1	232.7	230.3
57.5°	213.7	211.6	210.4	209.2
60°	192.6	191.4	190.5	189.7
62.5°	173.1	171.9	171.9	171.9
65°	155.3	154.1	152.8	151.6
67.5°	132.2	129.7	129.3	128.9
70°	104.2	100.5	100.1	99.7
72.5°	81.5	81.1	80.3	79.5
75°	67.3	66.5	66.5	66.5
77.5°	54.3	53.5	53.5	53.5
80°	41.8	41.4	41.8	42.2
82.5°	30.8	30.8	30.4	30.0
85°	19.9	19.5	19.5	19.5
87.5°	9.7	9.7	9.7	9.7
90°	25.8	26.7	27.6	26.7
92.5°	53.4	49.7	50.6	48.8
95°	125.2	116.9	110.4	106.8
97.5°	286.2	251.3	229.2	219.1
100°	679.3	612.1	576.2	577.1
102.5°	1018.9	969.2	940.6	914.0
105°	1239.8	1204.8	1175.3	1170.7
107.5°	1376.9	1360.3	1348.4	1338.3
110°	1430.3	1437.7	1435.8	1434.0



TEST NUMBER: P832346

CATALOG NUMBER: S123RDIP-S775D1195U927-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
112.5°	1416.5	1443.2	1452.4	1453.3
115°	1360.3	1400.8	1419.2	1423.8
117.5°	1280.3	1325.4	1353.0	1359.4
120°	1195.6	1247.1	1269.2	1274.7
122.5°	1118.3	1163.4	1188.2	1195.6
125°	1052.9	1093.4	1116.4	1122.9
127.5°	998.6	1033.6	1054.8	1060.3
130°	948.9	982.1	1001.4	1008.8
132.5°	903.8	937.0	953.5	958.1
135°	859.6	887.3	903.8	910.3
137.5°	811.8	840.3	854.1	859.6
140°	766.7	792.5	807.2	806.3
142.5°	722.5	744.6	757.5	756.6
145°	682.9	702.3	709.6	711.5
147.5°	650.7	664.5	671.9	672.8
150°	624.0	634.2	639.7	639.7
152.5°	600.1	609.3	612.1	612.1
155°	579.8	587.2	589.1	590.0
157.5°	561.4	567.0	568.8	568.8
160°	544.0	549.5	549.5	548.6
162.5°	526.5	531.1	531.1	530.1
165°	511.7	515.4	514.5	514.5
167.5°	497.0	499.8	498.9	498.9
170°	484.1	486.0	485.0	485.0
172.5°	473.1	474.9	473.1	472.2
175°	463.9	464.8	463.9	463.0
177.5°	457.4	458.4	456.5	456.5
180°	454.7	454.7	454.7	454.7



TEST NUMBER: P832346

CATALOG NUMBER: S123RDIP-S775D1195U927-4F0-1E-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	10.72	11.48	11.74	12.50	13.87	15.38	16.14	16.40	17.17	18.53
	3H	11.93	12.61	12.97	13.65	15.03	16.88	17.56	17.91	18.59	19.98
	4H	12.31	12.96	13.36	13.99	15.39	17.36	18.01	18.41	19.04	20.44
	6H	12.59	13.18	13.65	14.22	15.63	17.67	18.26	18.73	19.30	20.71
	8H	12.68	13.24	13.74	14.29	15.69	17.75	18.31	18.81	19.37	20.77
	12H	12.73	13.26	13.79	14.31	15.73	17.78	18.31	18.84	19.36	20.78
4H	2H	11.43	12.08	12.48	13.11	14.51	15.37	16.01	16.42	17.05	18.44
	3H	12.80	13.33	13.85	14.39	15.80	17.02	17.56	18.08	18.62	20.03
	4H	13.25	13.74	14.31	14.79	16.22	17.63	18.11	18.69	19.17	20.60
	6H	13.61	14.03	14.69	15.11	16.53	18.06	18.48	19.13	19.56	20.98
	8H	13.74	14.13	14.81	15.20	16.64	18.19	18.58	19.26	19.65	21.09
	12H	13.81	14.16	14.90	15.25	16.69	18.25	18.60	19.34	19.69	21.13
8H	4H	13.56	13.95	14.63	15.02	16.46	17.59	17.98	18.66	19.05	20.49
	6H	14.02	14.34	15.12	15.45	16.89	18.08	18.40	19.18	19.52	20.95
	8H	14.21	14.50	15.32	15.59	17.05	18.27	18.55	19.37	19.64	21.10
	12H	14.35	14.60	15.46	15.69	17.18	18.38	18.63	19.49	19.72	21.21
12H	4H	13.57	13.92	14.66	15.00	16.45	17.54	17.89	18.63	18.97	20.42
	6H	14.08	14.36	15.18	15.46	16.91	18.06	18.34	19.16	19.43	20.89
	8H	14.29	14.54	15.40	15.63	17.13	18.25	18.49	19.35	19.58	21.08