

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: P832354

Luminaire Tested: S123RDIP-S775D1195U940-4F0-1E-UDD-G1

Issue Date: 05/03/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P832354  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-905-2, G3-1807-864-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 05/03/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDIP-S775D1195U940-4F0-1E-UDD-G1  
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 775 LUMENS PER FOOT, GRAZE OPTIC  
UPLIGHT 1195 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: -

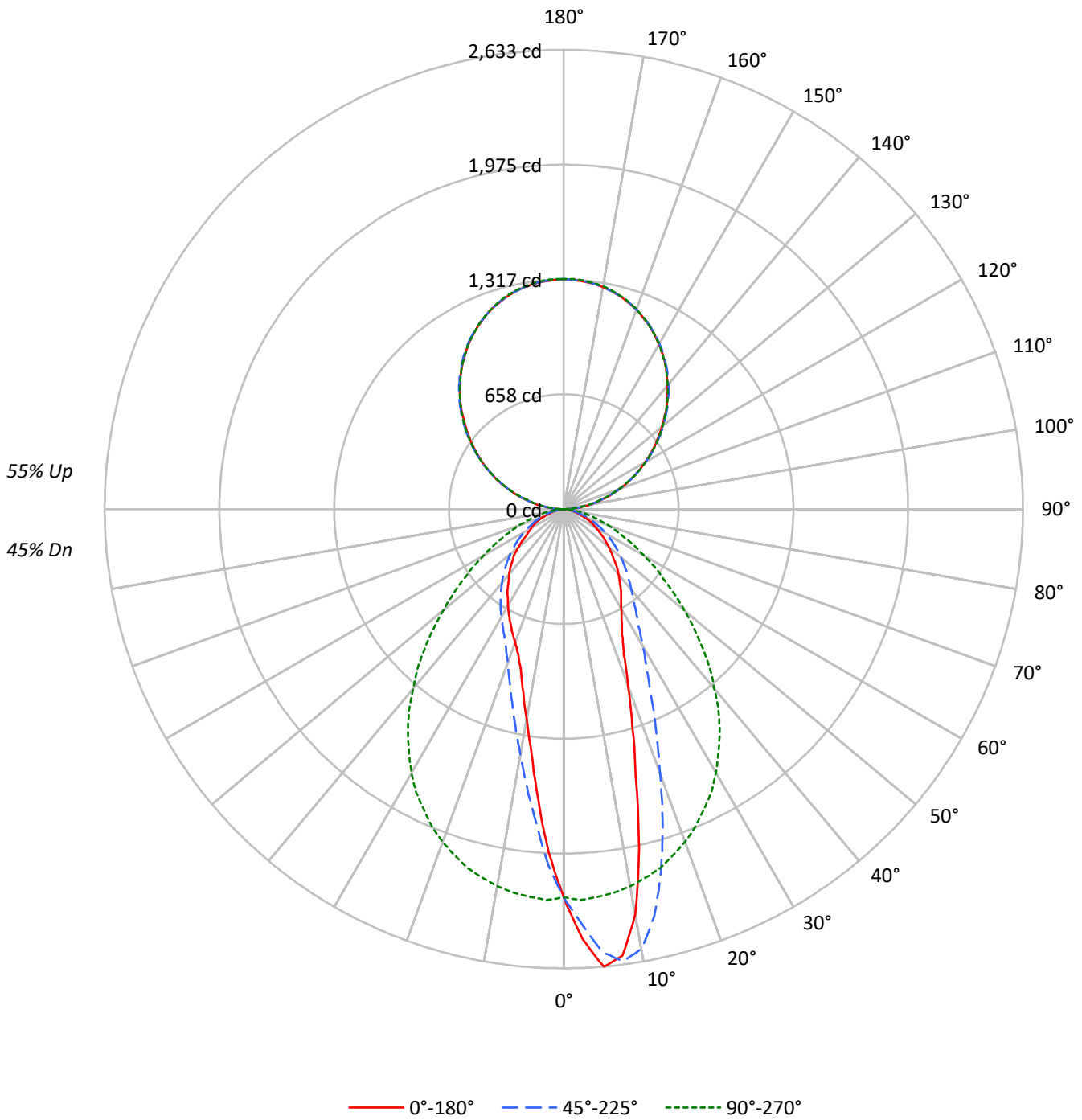
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6608.7 lumens  
Efficiency: N/A  
Efficacy: 116.1 lumens/watt  
Spacing Criteria (0/90/45): 0.55 / 1.17 / 0.8  
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')  
CIE Type: 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	65	65	65	51	51	51	45				45
1	97	93	90	86	89	86	83	80	71	69	67	58	57	56	46	45	45	39				39
2	89	82	77	72	82	76	71	67	64	60	57	52	50	48	42	40	39	34				34
3	82	73	66	61	75	67	61	57	57	52	49	47	44	41	38	36	34	30				30
4	75	65	58	52	69	60	54	49	51	46	42	42	39	36	34	32	30	26				26
5	69	59	51	45	64	54	48	43	46	41	37	38	35	32	31	29	27	23				23
6	64	53	45	40	59	49	42	37	42	37	33	35	31	28	29	26	24	21				21
7	60	48	41	35	55	45	38	33	38	33	29	32	28	26	27	24	22	19				19
8	56	44	37	32	51	41	34	30	35	30	26	30	26	23	25	22	20	18				18
9	52	40	33	28	48	38	31	27	33	28	24	28	24	21	23	20	18	16				16
10	49	37	30	26	45	35	29	24	30	25	22	26	22	19	22	19	17	15				15

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

	0°	45°	90°	135°	180°
0°	23962	23962	23962	23962	23962
5°	28452	27544	24113	19492	18096
10°	25778	27977	23992	15618	13398
15°	17748	23989	23739	12765	10599
20°	12347	18468	23262	10763	9315
25°	9409	14076	22569	9567	8586
30°	8191	11253	21701	8883	7952
35°	7520	9493	20473	8306	7376
40°	6861	8477	18865	7739	6849
45°	6197	7753	17131	7203	6322
50°	5625	7154	15086	6680	5670
55°	5088	6568	13120	6167	4864
60°	4560	5974	11397	5599	4598
65°	4208	5300	9811	5033	4348
70°	3418	4582	8560	4554	3534
75°	2999	3643	7249	3776	3111
80°	2715	3081	5938	3168	2944
85°	2482	2705	4508	2878	2705

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 80°  
 Vertical Angle: 45°  
 Luminance: 18077 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.9	3.1
10°-20°	469.5	7.1
20°-30°	538.7	8.2
30°-40°	531.0	8.0
40°-50°	468.3	7.1
50°-60°	360.2	5.5
60°-70°	236.8	3.6
70°-80°	115.0	1.7
80°-90°	31.8	0.5
90°-100°	84.9	1.3
100°-110°	257.0	3.9
110°-120°	437.5	6.6
120°-130°	575.5	8.7
130°-140°	646.9	9.8
140°-150°	636.0	9.6
150°-160°	535.4	8.1
160°-170°	356.4	5.4
170°-180°	124.8	1.9
0°-30°	1211.1	18.3
0°-40°	1742.1	26.4
0°-60°	2570.6	38.9
0°-90°	2954.3	44.7
90°-120°	779.3	11.8
90°-150°	2637.7	39.9
90°-180°	3654.0	55.3
0°-180°	6608.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2226	2226	2226	2226	2226	
5°	2633	2549	2232	1804	1675	241
15°	1593	2153	2130	1146	951	450
25°	792	1185	1900	806	723	374
35°	572	722	1558	632	561	357
45°	407	509	1125	473	415	316
55°	271	350	699	329	259	243
65°	165	208	385	198	171	162
75°	72	88	174	91	75	78
85°	20	22	36	23	22	21
90°	31	25	1	25	31	16
95°	81	77	61	77	81	81
105°	247	244	233	244	247	261
115°	441	441	440	441	441	437
125°	637	646	644	646	637	570
135°	835	841	836	841	835	642
145°	1014	1020	1014	1020	1014	634
155°	1159	1162	1161	1162	1159	534
165°	1261	1262	1265	1262	1261	356
175°	1311	1312	1316	1312	1311	125
180°	1319	1319	1319	1319	1319	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1
2.5°	2467.1	2459.3	2451.6	2449.3	2447.0	2439.7	2432.4	2416.0	2399.5	2382.7	2365.8
5°	2633.2	2634.1	2635.0	2632.7	2630.5	2620.9	2611.3	2591.2	2571.1	2549.2	2527.3
7.5°	2582.1	2596.7	2611.3	2614.0	2616.8	2624.1	2631.4	2626.8	2622.3	2614.0	2605.8
10°	2358.5	2357.6	2356.6	2373.1	2389.5	2438.3	2487.2	2512.3	2537.4	2559.7	2582.1
12.5°	1993.4	1994.8	1996.1	2050.0	2103.8	2149.9	2196.0	2259.9	2323.8	2392.7	2461.6
15°	1592.7	1615.1	1637.4	1685.3	1733.3	1802.6	1872.0	1957.8	2043.6	2152.7	2261.7
17.5°	1307.9	1317.5	1327.1	1373.2	1419.3	1485.0	1550.7	1647.9	1745.1	1885.7	2026.2
20°	1077.9	1086.6	1095.3	1128.6	1161.9	1224.9	1287.9	1380.5	1473.1	1612.3	1751.5
22.5°	899.9	916.8	933.7	956.1	978.4	1024.1	1069.7	1164.2	1258.6	1385.5	1512.4
25°	792.2	800.0	807.8	826.9	846.1	889.9	933.7	996.2	1058.8	1185.2	1311.6
27.5°	719.2	721.5	723.8	737.9	752.1	780.4	808.7	866.6	924.6	1028.6	1132.7
30°	659.0	663.1	667.2	678.2	689.1	709.6	730.2	771.3	812.3	905.4	998.5
32.5°	612.4	614.7	617.0	626.1	635.3	650.3	665.4	697.8	730.2	801.4	872.6
35°	572.3	572.7	573.2	580.0	586.9	601.5	616.1	643.0	669.9	722.4	774.9
37.5°	526.6	529.8	533.0	538.0	543.1	555.8	568.6	590.5	612.4	655.8	699.1
40°	488.3	491.0	493.8	499.7	505.6	515.7	525.7	545.8	565.9	603.3	640.7
42.5°	450.0	451.8	453.6	459.6	465.5	477.8	490.1	506.1	522.1	553.1	584.1
45°	407.1	411.6	416.2	422.6	429.0	439.5	450.0	466.4	482.8	509.3	535.8
47.5°	371.5	373.8	376.0	381.5	387.0	399.8	412.6	427.2	441.8	466.4	491.0
50°	335.9	336.8	337.7	342.7	347.7	359.2	370.6	387.5	404.3	427.2	450.0
52.5°	302.1	304.4	306.7	311.7	316.7	324.5	332.2	349.6	366.9	389.3	411.6
55°	271.1	272.4	273.8	277.5	281.1	290.2	299.4	314.4	329.5	350.0	370.6
57.5°	241.9	243.7	245.5	248.3	251.0	259.2	267.4	280.7	293.9	314.4	335.0
60°	211.8	214.0	216.3	219.5	222.7	229.1	235.5	247.3	259.2	277.5	295.7
62.5°	189.8	190.3	190.8	193.5	196.2	200.8	205.4	214.9	224.5	242.8	261.0
65°	165.2	166.6	167.9	169.3	170.7	174.3	178.0	186.2	194.4	208.1	221.8
67.5°	139.6	141.0	142.4	144.7	146.9	150.1	153.3	158.8	164.3	177.1	189.8
70°	108.6	108.6	108.6	112.3	115.9	121.4	126.9	131.0	135.1	145.6	156.1
72.5°	88.5	89.0	89.4	89.9	90.4	93.6	96.7	103.6	110.4	116.8	123.2
75°	72.1	72.6	73.0	73.5	73.9	74.8	75.8	78.0	80.3	87.6	94.9
77.5°	57.5	58.0	58.4	58.9	59.3	60.2	61.2	62.1	63.0	65.7	68.5
80°	43.8	44.3	44.7	45.2	45.6	46.1	46.5	47.5	48.4	49.7	51.1
82.5°	31.9	31.9	31.9	31.9	31.9	32.9	33.8	33.8	33.8	34.7	35.6
85°	20.1	20.1	20.1	20.5	21.0	21.0	21.0	21.4	21.9	21.9	21.9
87.5°	9.1	8.7	8.2	8.7	9.1	9.1	9.1	9.6	10.0	10.0	10.0
90°	31.1	30.6	30.2	29.7	29.2	28.5	27.6	26.7	25.8	24.9	21.9
92.5°	44.6	45.0	45.5	45.9	46.4	46.3	45.6	44.9	44.2	43.5	42.1
95°	80.8	80.8	80.8	80.8	80.8	80.4	79.4	78.5	77.6	76.7	74.8
97.5°	116.0	116.3	116.5	116.7	117.0	116.5	115.3	114.2	113.0	111.9	110.5
100°	157.5	157.0	156.6	156.1	155.6	155.1	154.4	153.7	153.0	152.3	151.1
102.5°	200.0	200.2	200.4	200.7	200.9	200.7	200.0	199.3	198.6	197.9	196.3
105°	246.6	246.1	245.7	245.2	244.7	244.5	244.5	244.5	244.5	244.5	242.4
107.5°	294.2	294.5	294.7	294.9	295.2	294.9	294.2	293.6	292.9	292.2	291.2
110°	342.9	343.4	343.9	344.3	344.8	344.5	343.6	342.7	341.8	340.9	340.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	394.7	394.7	394.7	394.7	394.7	394.2	393.0	391.9	390.7	389.6	389.6
115°	441.4	441.6	441.8	442.1	442.3	442.3	442.1	441.8	441.6	441.4	441.8
117.5°	489.0	489.7	490.4	491.1	491.8	492.1	492.1	492.1	492.1	492.1	492.6
120°	539.8	540.2	540.7	541.2	541.6	542.0	542.2	542.4	542.7	542.9	544.0
122.5°	588.5	589.2	589.9	590.6	591.2	591.9	592.6	593.3	594.0	594.7	595.2
125°	637.2	638.1	639.0	639.9	640.9	641.8	642.7	643.6	644.5	645.5	645.9
127.5°	685.9	686.8	687.7	688.6	689.6	690.7	692.1	693.5	694.9	696.2	696.7
130°	733.5	735.1	736.8	738.4	740.0	741.2	742.2	743.1	744.0	744.9	745.6
132.5°	783.3	784.4	785.6	786.7	787.9	789.0	790.2	791.3	792.5	793.6	794.1
135°	835.1	835.5	836.0	836.4	836.9	837.6	838.5	839.4	840.4	841.3	841.5
137.5°	880.7	881.3	882.0	882.7	883.4	884.3	885.5	886.6	887.8	888.9	888.3
140°	925.2	926.8	928.4	930.0	931.6	932.6	932.8	933.0	933.3	933.5	933.3
142.5°	970.8	971.9	973.1	974.2	975.4	976.1	976.3	976.5	976.8	977.0	976.5
145°	1014.3	1015.2	1016.1	1017.1	1018.0	1018.6	1018.8	1019.0	1019.3	1019.5	1018.8
147.5°	1053.7	1055.1	1056.4	1057.8	1059.2	1059.9	1059.9	1059.9	1059.9	1059.9	1059.2
150°	1091.0	1092.4	1093.7	1095.1	1096.5	1097.2	1097.2	1097.2	1097.2	1097.2	1096.7
152.5°	1127.2	1128.4	1129.5	1130.7	1131.8	1132.2	1131.7	1131.3	1130.8	1130.3	1130.1
155°	1159.4	1161.0	1162.6	1164.2	1165.8	1166.1	1165.2	1164.3	1163.4	1162.5	1162.2
157.5°	1189.4	1190.8	1192.2	1193.5	1194.9	1195.2	1194.2	1193.3	1192.4	1191.5	1191.2
160°	1218.4	1219.3	1220.3	1221.2	1222.1	1222.0	1220.8	1219.7	1218.5	1217.4	1217.4
162.5°	1240.2	1241.8	1243.4	1245.0	1246.6	1246.8	1245.7	1244.5	1243.4	1242.2	1242.0
165°	1260.9	1262.5	1264.1	1265.7	1267.3	1267.4	1266.1	1264.7	1263.3	1261.9	1261.9
167.5°	1279.5	1280.9	1282.3	1283.7	1285.1	1285.1	1283.7	1282.3	1280.9	1279.5	1279.3
170°	1293.0	1294.6	1296.2	1297.8	1299.5	1299.5	1297.8	1296.2	1294.6	1293.0	1293.0
172.5°	1303.4	1305.0	1306.6	1308.2	1309.8	1309.9	1308.5	1307.2	1305.8	1304.4	1304.4
175°	1310.6	1312.2	1313.8	1315.5	1317.1	1317.2	1315.8	1314.4	1313.0	1311.7	1311.7
177.5°	1314.8	1316.4	1318.0	1319.6	1321.2	1321.3	1319.9	1318.6	1317.2	1315.8	1315.8
180°	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1
2.5°	2363.5	2361.2	2339.3	2317.4	2296.0	2274.5	2258.5	2242.6	2215.6	2188.7	2171.8
5°	2510.0	2492.6	2458.0	2423.3	2371.3	2319.2	2275.4	2231.6	2175.9	2120.3	2073.7
7.5°	2591.7	2577.5	2535.5	2493.6	2424.6	2355.7	2287.3	2218.8	2136.7	2054.5	1984.3
10°	2594.0	2605.8	2571.1	2536.5	2458.9	2381.3	2288.2	2195.1	2084.7	1974.2	1883.4
12.5°	2512.7	2563.8	2556.5	2549.2	2470.3	2391.3	2278.2	2165.0	2029.4	1893.9	1780.3
15°	2360.8	2459.8	2489.0	2518.2	2452.9	2387.7	2259.0	2130.3	1971.0	1811.8	1681.2
17.5°	2165.0	2303.7	2380.8	2458.0	2410.5	2363.0	2222.0	2081.0	1901.7	1722.3	1580.4
20°	1933.1	2114.8	2235.7	2356.6	2339.3	2322.0	2176.4	2030.8	1837.3	1643.8	1490.0
22.5°	1704.1	1895.7	2062.8	2229.8	2247.6	2265.4	2118.4	1971.5	1759.7	1548.0	1391.4
25°	1506.4	1701.3	1900.3	2099.3	2139.4	2179.6	2039.9	1900.3	1680.8	1461.3	1305.6
27.5°	1318.0	1503.3	1722.3	1941.4	2014.4	2087.4	1959.6	1831.8	1603.2	1374.6	1219.4
30°	1164.2	1329.8	1553.5	1777.1	1878.8	1980.6	1863.3	1746.0	1519.2	1292.4	1140.4
32.5°	1020.9	1169.2	1393.7	1618.3	1736.5	1854.7	1753.3	1652.0	1433.9	1215.7	1065.6
35°	907.7	1040.5	1250.0	1459.4	1591.8	1724.1	1641.1	1558.0	1344.9	1131.8	989.8
37.5°	810.5	921.8	1118.5	1315.2	1455.8	1596.4	1527.0	1457.6	1257.3	1056.9	922.8
40°	730.2	819.6	1002.6	1185.6	1323.4	1461.3	1401.9	1342.6	1163.3	983.9	858.4
42.5°	661.3	738.4	902.7	1067.0	1193.4	1319.8	1280.5	1241.3	1078.8	916.4	800.0
45°	600.6	665.4	810.0	954.7	1071.1	1187.5	1156.4	1125.4	985.3	845.2	738.4
47.5°	546.7	602.4	731.5	860.7	965.2	1069.7	1041.0	1012.2	896.3	780.4	683.2
50°	497.4	544.9	652.6	760.3	854.3	948.3	924.6	900.9	805.0	709.2	625.2
52.5°	450.9	490.1	586.9	683.6	759.4	835.1	816.9	798.6	724.7	650.8	574.6
55°	406.6	442.7	524.4	606.0	670.9	735.7	717.4	699.1	641.6	584.1	517.1
57.5°	366.5	397.9	464.1	530.3	581.9	633.4	624.8	616.1	568.2	520.3	465.0
60°	324.0	352.3	409.4	466.4	507.9	549.5	539.4	529.4	495.2	460.9	413.5
62.5°	286.1	311.2	356.9	402.5	436.3	470.1	462.8	455.4	429.4	403.4	364.2
65°	246.4	271.1	308.0	345.0	371.5	397.9	391.6	385.2	365.5	345.9	314.4
67.5°	210.4	230.9	262.9	294.8	312.6	330.4	326.8	323.1	308.0	293.0	268.3
70°	173.9	191.7	218.1	244.6	256.9	269.3	270.6	272.0	258.3	244.6	226.4
72.5°	137.4	151.5	176.2	200.8	210.4	220.0	219.5	219.1	210.8	202.6	186.2
75°	105.4	115.9	135.1	154.3	162.5	170.7	172.5	174.3	166.6	158.8	149.7
77.5°	75.8	83.1	97.7	112.3	121.4	130.5	131.4	132.3	128.7	125.0	116.4
80°	53.4	55.7	64.8	73.9	83.5	93.1	94.5	95.8	92.2	88.5	83.1
82.5°	37.0	38.3	41.5	44.7	52.5	60.2	62.1	63.9	62.1	60.2	54.3
85°	22.4	22.8	24.2	25.6	29.2	32.9	34.7	36.5	35.6	34.7	31.5
87.5°	10.0	10.0	10.5	11.0	11.9	12.8	15.1	17.3	16.0	14.6	13.2
90°	18.9	15.9	12.9	10.2	7.9	5.6	3.3	1.0	3.3	5.6	7.9
92.5°	40.8	39.4	38.0	36.6	35.2	33.8	32.5	31.1	32.5	33.8	35.2
95°	73.0	71.1	69.3	67.6	66.0	64.4	62.7	61.1	62.7	64.4	66.0
97.5°	109.1	107.8	106.4	105.1	104.0	102.8	101.6	100.5	101.6	102.8	104.0
100°	150.0	148.8	147.7	146.4	145.0	143.7	142.3	140.9	142.3	143.7	145.0
102.5°	194.7	193.1	191.4	190.3	189.6	188.9	188.2	187.5	188.2	188.9	189.6
105°	240.4	238.3	236.2	235.0	234.5	234.0	233.6	233.1	233.6	234.0	234.5
107.5°	290.3	289.4	288.5	287.9	287.7	287.4	287.2	287.0	287.2	287.4	287.7
110°	339.9	339.5	339.0	338.6	338.1	337.6	337.2	336.7	337.2	337.6	338.1





TEST NUMBER: P832354

CATALOG NUMBER: S123RDIP-S775D1195U940-4F0-1E-UDD-G1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	389.6	389.6	389.6	389.4	389.2	389.0	388.8	388.5	388.8	389.0	389.2
115°	442.3	442.7	443.2	443.1	442.4	441.7	441.0	440.3	441.0	441.7	442.4
117.5°	493.1	493.5	494.0	494.1	493.9	493.6	493.4	493.2	493.4	493.6	493.9
120°	545.2	546.3	547.5	547.4	546.0	544.6	543.2	541.9	543.2	544.6	546.0
122.5°	595.6	596.1	596.5	596.3	595.4	594.5	593.5	592.6	593.5	594.5	595.4
125°	646.4	646.8	647.3	647.2	646.5	645.8	645.1	644.4	645.1	645.8	646.5
127.5°	697.2	697.6	698.1	697.6	696.2	694.9	693.5	692.1	693.5	694.9	696.2
130°	746.3	747.0	747.7	747.1	745.3	743.4	741.6	739.7	741.6	743.4	745.3
132.5°	794.5	795.0	795.5	794.8	792.9	791.1	789.2	787.4	789.2	791.1	792.9
135°	841.7	842.0	842.2	841.6	840.2	838.9	837.5	836.1	837.5	838.9	840.2
137.5°	887.6	886.9	886.2	885.3	884.1	883.0	881.8	880.7	881.8	883.0	884.1
140°	933.0	932.8	932.6	931.9	930.7	929.6	928.4	927.3	928.4	929.6	930.7
142.5°	976.1	975.6	975.2	974.4	973.2	972.1	970.9	969.8	970.9	972.1	973.2
145°	1018.1	1017.4	1016.7	1016.1	1015.7	1015.2	1014.8	1014.3	1014.8	1015.2	1015.7
147.5°	1058.5	1057.8	1057.1	1056.3	1055.4	1054.5	1053.6	1052.6	1053.6	1054.5	1055.4
150°	1096.3	1095.8	1095.3	1094.9	1094.4	1094.0	1093.5	1093.0	1093.5	1094.0	1094.4
152.5°	1129.9	1129.7	1129.4	1129.0	1128.3	1127.6	1126.9	1126.2	1126.9	1127.6	1128.3
155°	1162.0	1161.8	1161.5	1161.4	1161.4	1161.4	1161.4	1161.4	1161.4	1161.4	1161.4
157.5°	1191.0	1190.8	1190.6	1190.6	1190.8	1191.0	1191.2	1191.5	1191.2	1191.0	1190.8
160°	1217.4	1217.4	1217.4	1217.6	1218.1	1218.5	1219.0	1219.4	1219.0	1218.5	1218.1
162.5°	1241.8	1241.5	1241.3	1241.5	1242.2	1242.9	1243.6	1244.3	1243.6	1242.9	1242.2
165°	1261.9	1261.9	1261.9	1262.3	1263.0	1263.7	1264.3	1265.0	1264.3	1263.7	1263.0
167.5°	1279.1	1278.8	1278.6	1279.0	1279.9	1280.8	1281.7	1282.6	1281.7	1280.8	1279.9
170°	1293.0	1293.0	1293.0	1293.5	1294.4	1295.3	1296.2	1297.1	1296.2	1295.3	1294.4
172.5°	1304.4	1304.4	1304.4	1304.9	1305.8	1306.7	1307.6	1308.5	1307.6	1306.7	1305.8
175°	1311.7	1311.7	1311.7	1312.1	1313.0	1314.0	1314.9	1315.8	1314.9	1314.0	1313.0
177.5°	1315.8	1315.8	1315.8	1316.3	1317.2	1318.1	1319.0	1319.9	1319.0	1318.1	1317.2
180°	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9



TEST NUMBER: P832354

CATALOG NUMBER: S123RDIP-S775D1195U940-4F0-1E-UDD-G1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1	2226.1
2.5°	2154.9	2128.9	2102.9	2084.2	2065.5	2042.2	2018.9	2018.0	2017.1	1999.8	1982.4
5°	2027.2	1982.0	1936.8	1892.5	1848.3	1804.0	1759.7	1749.7	1739.6	1724.6	1709.5
7.5°	1914.0	1841.9	1769.8	1713.2	1656.6	1612.3	1568.1	1537.9	1507.8	1484.5	1461.3
10°	1792.6	1703.1	1613.7	1545.2	1476.8	1428.9	1380.9	1346.3	1311.6	1295.2	1278.7
12.5°	1666.6	1569.4	1472.2	1405.1	1338.1	1280.5	1223.0	1191.6	1160.1	1137.3	1114.4
15°	1550.7	1446.2	1341.7	1270.5	1199.3	1145.5	1091.6	1060.1	1028.6	1005.8	983.0
17.5°	1438.5	1333.0	1227.6	1155.5	1083.4	1034.6	985.7	955.2	924.6	910.4	896.3
20°	1336.2	1229.9	1123.6	1055.6	987.6	939.6	891.7	875.3	858.9	845.6	832.4
22.5°	1234.9	1132.7	1030.5	965.2	899.9	865.3	830.6	817.3	804.1	794.1	784.0
25°	1150.0	1048.3	946.5	889.4	832.4	805.5	778.6	769.9	761.2	751.2	741.1
27.5°	1064.2	967.5	870.7	825.1	779.5	757.6	735.7	724.7	713.7	705.5	697.3
30°	988.5	899.0	809.6	771.7	733.8	714.7	695.5	683.6	671.8	664.0	656.2
32.5°	915.5	836.1	756.6	724.2	691.8	673.1	654.4	643.0	631.6	622.5	613.3
35°	847.9	779.0	710.1	680.4	650.8	632.1	613.3	601.9	590.5	581.4	572.3
37.5°	788.6	726.1	663.5	635.7	607.9	591.4	575.0	563.1	551.3	541.7	532.1
40°	732.9	677.7	622.5	595.6	568.6	550.8	533.0	522.5	512.0	503.4	494.7
42.5°	683.6	633.0	582.3	555.8	529.4	512.5	495.6	483.3	471.0	465.9	460.9
45°	631.6	586.9	542.2	516.6	491.0	473.2	455.4	445.0	434.5	429.9	425.3
47.5°	586.0	544.4	502.9	477.8	452.7	436.7	420.8	412.6	404.3	397.9	391.6
50°	541.2	501.1	460.9	436.7	412.6	398.9	385.2	375.1	365.1	360.5	356.0
52.5°	498.3	461.8	425.3	400.7	376.0	362.8	349.6	340.9	332.2	322.6	313.1
55°	450.0	418.0	386.1	364.2	342.3	328.6	314.9	304.8	294.8	284.8	274.7
57.5°	409.8	378.3	346.8	327.2	307.6	294.4	281.1	270.2	259.2	251.0	242.8
60°	366.0	338.6	311.2	292.1	272.9	260.1	247.3	236.9	226.4	222.2	218.1
62.5°	324.9	299.4	273.8	256.9	240.0	227.7	215.4	208.6	201.7	199.0	196.2
65°	282.9	261.0	239.1	223.6	208.1	197.6	187.1	183.9	180.7	178.4	176.2
67.5°	243.7	225.0	206.3	192.6	178.9	171.6	164.3	160.6	157.0	154.3	151.5
70°	208.1	191.7	175.2	163.4	151.5	144.7	137.8	134.6	131.4	126.4	121.4
72.5°	169.8	157.0	144.2	135.1	126.0	120.0	114.1	107.7	101.3	96.7	92.2
75°	140.6	127.8	115.0	106.3	97.7	90.8	84.0	81.7	79.4	78.0	76.7
77.5°	107.7	96.7	85.8	79.0	72.1	68.9	65.7	64.3	63.0	62.5	62.1
80°	77.6	68.5	59.3	55.7	52.0	51.1	50.2	49.3	48.4	47.9	47.5
82.5°	48.4	43.8	39.2	38.3	37.4	37.0	36.5	36.1	35.6	35.1	34.7
85°	28.3	26.5	24.6	24.2	23.7	23.3	22.8	22.8	22.8	22.8	22.8
87.5°	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.4	11.0
90°	10.2	12.9	15.9	18.9	21.9	24.9	25.8	26.7	27.6	28.5	29.2
92.5°	36.6	38.0	39.4	40.8	42.1	43.5	44.2	44.9	45.6	46.3	46.4
95°	67.6	69.3	71.1	73.0	74.8	76.7	77.6	78.5	79.4	80.4	80.8
97.5°	105.1	106.4	107.8	109.1	110.5	111.9	113.0	114.2	115.3	116.5	117.0
100°	146.4	147.7	148.8	150.0	151.1	152.3	153.0	153.7	154.4	155.1	155.6
102.5°	190.3	191.4	193.1	194.7	196.3	197.9	198.6	199.3	200.0	200.7	200.9
105°	235.0	236.2	238.3	240.4	242.4	244.5	244.5	244.5	244.5	244.5	244.7
107.5°	287.9	288.5	289.4	290.3	291.2	292.2	292.9	293.6	294.2	294.9	295.2
110°	338.6	339.0	339.5	339.9	340.4	340.9	341.8	342.7	343.6	344.5	344.8



TEST NUMBER: P832354

CATALOG NUMBER: S123RDIP-S775D1195U940-4F0-1E-UDD-G1

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	389.4	389.6	389.6	389.6	389.6	389.6	390.7	391.9	393.0	394.2	394.7
115°	443.1	443.2	442.7	442.3	441.8	441.4	441.6	441.8	442.1	442.3	442.3
117.5°	494.1	494.0	493.5	493.1	492.6	492.1	492.1	492.1	492.1	492.1	491.8
120°	547.4	547.5	546.3	545.2	544.0	542.9	542.7	542.4	542.2	542.0	541.6
122.5°	596.3	596.5	596.1	595.6	595.2	594.7	594.0	593.3	592.6	591.9	591.2
125°	647.2	647.3	646.8	646.4	645.9	645.5	644.5	643.6	642.7	641.8	640.9
127.5°	697.6	698.1	697.6	697.2	696.7	696.2	694.9	693.5	692.1	690.7	689.6
130°	747.1	747.7	747.0	746.3	745.6	744.9	744.0	743.1	742.2	741.2	740.0
132.5°	794.8	795.5	795.0	794.5	794.1	793.6	792.5	791.3	790.2	789.0	787.9
135°	841.6	842.2	842.0	841.7	841.5	841.3	840.4	839.4	838.5	837.6	836.9
137.5°	885.3	886.2	886.9	887.6	888.3	888.9	887.8	886.6	885.5	884.3	883.4
140°	931.9	932.6	932.8	933.0	933.3	933.5	933.3	933.0	932.8	932.6	931.6
142.5°	974.4	975.2	975.6	976.1	976.5	977.0	976.8	976.5	976.3	976.1	975.4
145°	1016.1	1016.7	1017.4	1018.1	1018.8	1019.5	1019.3	1019.0	1018.8	1018.6	1018.0
147.5°	1056.3	1057.1	1057.8	1058.5	1059.2	1059.9	1059.9	1059.9	1059.9	1059.9	1059.2
150°	1094.9	1095.3	1095.8	1096.3	1096.7	1097.2	1097.2	1097.2	1097.2	1097.2	1096.5
152.5°	1129.0	1129.4	1129.7	1129.9	1130.1	1130.3	1130.8	1131.3	1131.7	1132.2	1131.8
155°	1161.4	1161.5	1161.8	1162.0	1162.2	1162.5	1163.4	1164.3	1165.2	1166.1	1165.8
157.5°	1190.6	1190.6	1190.8	1191.0	1191.2	1191.5	1192.4	1193.3	1194.2	1195.2	1194.9
160°	1217.6	1217.4	1217.4	1217.4	1217.4	1217.4	1218.5	1219.7	1220.8	1222.0	1222.1
162.5°	1241.5	1241.3	1241.5	1241.8	1242.0	1242.2	1243.4	1244.5	1245.7	1246.8	1246.6
165°	1262.3	1261.9	1261.9	1261.9	1261.9	1261.9	1263.3	1264.7	1266.1	1267.4	1267.3
167.5°	1279.0	1278.6	1278.8	1279.1	1279.3	1279.5	1280.9	1282.3	1283.7	1285.1	1285.1
170°	1293.5	1293.0	1293.0	1293.0	1293.0	1293.0	1294.6	1296.2	1297.8	1299.5	1299.5
172.5°	1304.9	1304.4	1304.4	1304.4	1304.4	1304.4	1305.8	1307.2	1308.5	1309.9	1309.8
175°	1312.1	1311.7	1311.7	1311.7	1311.7	1311.7	1313.0	1314.4	1315.8	1317.2	1317.1
177.5°	1316.3	1315.8	1315.8	1315.8	1315.8	1315.8	1317.2	1318.6	1319.9	1321.3	1321.2
180°	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9	1318.9



TEST NUMBER: P832354

CATALOG NUMBER: S123RDIP-S775D1195U940-4F0-1E-UDD-G1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2226.1	2226.1	2226.1	2226.1
2.5°	1977.9	1973.3	1971.5	1969.7
5°	1695.4	1681.2	1678.0	1674.8
7.5°	1455.3	1449.4	1429.8	1410.2
10°	1260.5	1242.2	1234.0	1225.8
12.5°	1097.5	1080.7	1077.9	1075.2
15°	971.1	959.3	955.2	951.1
17.5°	888.1	879.9	874.8	869.8
20°	826.5	820.5	816.9	813.2
22.5°	779.5	774.9	772.2	769.4
25°	734.3	727.4	725.2	722.9
27.5°	691.4	685.5	683.2	680.9
30°	651.2	646.2	643.0	639.8
32.5°	607.4	601.5	599.7	597.8
35°	568.6	565.0	563.1	561.3
37.5°	527.6	523.0	520.3	517.5
40°	492.4	490.1	488.8	487.4
42.5°	456.8	452.7	452.3	451.8
45°	421.2	417.1	416.2	415.3
47.5°	387.9	384.3	383.8	383.3
50°	350.9	345.9	342.3	338.6
52.5°	308.5	303.9	300.7	297.5
55°	269.7	264.7	262.0	259.2
57.5°	240.5	238.2	236.9	235.5
60°	216.8	215.4	214.5	213.6
62.5°	194.9	193.5	193.5	193.5
65°	174.8	173.4	172.0	170.7
67.5°	148.8	146.0	145.6	145.1
70°	117.3	113.2	112.7	112.3
72.5°	91.7	91.3	90.4	89.4
75°	75.8	74.8	74.8	74.8
77.5°	61.2	60.2	60.2	60.2
80°	47.0	46.5	47.0	47.5
82.5°	34.7	34.7	34.2	33.8
85°	22.4	21.9	21.9	21.9
87.5°	11.0	11.0	11.0	11.0
90°	29.7	30.2	30.6	31.1
92.5°	45.9	45.5	45.0	44.6
95°	80.8	80.8	80.8	80.8
97.5°	116.7	116.5	116.3	116.0
100°	156.1	156.6	157.0	157.5
102.5°	200.7	200.4	200.2	200.0
105°	245.2	245.7	246.1	246.6
107.5°	294.9	294.7	294.5	294.2
110°	344.3	343.9	343.4	342.9



TEST NUMBER: P832354

CATALOG NUMBER: S123RDIP-S775D1195U940-4F0-1E-UDD-G1

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
112.5°	394.7	394.7	394.7	394.7
115°	442.1	441.8	441.6	441.4
117.5°	491.1	490.4	489.7	489.0
120°	541.2	540.7	540.2	539.8
122.5°	590.6	589.9	589.2	588.5
125°	639.9	639.0	638.1	637.2
127.5°	688.6	687.7	686.8	685.9
130°	738.4	736.8	735.1	733.5
132.5°	786.7	785.6	784.4	783.3
135°	836.4	836.0	835.5	835.1
137.5°	882.7	882.0	881.3	880.7
140°	930.0	928.4	926.8	925.2
142.5°	974.2	973.1	971.9	970.8
145°	1017.1	1016.1	1015.2	1014.3
147.5°	1057.8	1056.4	1055.1	1053.7
150°	1095.1	1093.7	1092.4	1091.0
152.5°	1130.7	1129.5	1128.4	1127.2
155°	1164.2	1162.6	1161.0	1159.4
157.5°	1193.5	1192.2	1190.8	1189.4
160°	1221.2	1220.3	1219.3	1218.4
162.5°	1245.0	1243.4	1241.8	1240.2
165°	1265.7	1264.1	1262.5	1260.9
167.5°	1283.7	1282.3	1280.9	1279.5
170°	1297.8	1296.2	1294.6	1293.0
172.5°	1308.2	1306.6	1305.0	1303.4
175°	1315.5	1313.8	1312.2	1310.6
177.5°	1319.6	1318.0	1316.4	1314.8
180°	1318.9	1318.9	1318.9	1318.9



TEST NUMBER: P832354

CATALOG NUMBER: S123RDIP-S775D1195U940-4F0-1E-UDD-G1

**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	11.26	12.03	12.27	13.05	14.39	15.93	16.70	16.94	17.71	19.06
	3H	12.48	13.17	13.50	14.19	15.56	17.42	18.11	18.44	19.13	20.50
	4H	12.86	13.51	13.89	14.53	15.91	17.91	18.56	18.94	19.58	20.96
	6H	13.14	13.73	14.18	14.77	16.15	18.22	18.81	19.26	19.84	21.23
	8H	13.22	13.79	14.27	14.84	16.22	18.29	18.86	19.34	19.91	21.29
	12H	13.27	13.81	14.33	14.85	16.26	18.32	18.86	19.38	19.90	21.31
4H	2H	11.98	12.63	13.02	13.65	15.03	15.91	16.56	16.96	17.59	18.97
	3H	13.34	13.88	14.39	14.94	16.33	17.57	18.11	18.62	19.16	20.55
	4H	13.80	14.29	14.85	15.34	16.75	18.17	18.67	19.23	19.71	21.12
	6H	14.16	14.58	15.22	15.65	17.06	18.61	19.03	19.67	20.10	21.51
	8H	14.28	14.68	15.35	15.74	17.16	18.74	19.13	19.80	20.19	21.62
	12H	14.36	14.71	15.44	15.79	17.22	18.79	19.15	19.88	20.23	21.65
8H	4H	14.11	14.50	15.17	15.56	16.98	18.13	18.53	19.20	19.59	21.01
	6H	14.57	14.89	15.65	16.00	17.42	18.63	18.95	19.72	20.06	21.48
	8H	14.76	15.05	15.85	16.13	17.57	18.81	19.10	19.91	20.19	21.63
	12H	14.90	15.15	15.99	16.23	17.71	18.93	19.18	20.02	20.26	21.74
12H	4H	14.11	14.47	15.20	15.55	16.97	18.08	18.44	19.16	19.51	20.94
	6H	14.63	14.91	15.72	16.00	17.44	18.60	18.89	19.70	19.98	21.42
	8H	14.84	15.09	15.94	16.17	17.65	18.79	19.04	19.89	20.13	21.61