

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: P832355

Luminaire Tested: S123RDIP-S775D1195U940-4F0-1E-UDD-G4

Issue Date: 05/03/2024

Test Information

Test Method: LM-79-2019
Report Number: P832355
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-S775D1195U940-4F0-1E-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: -

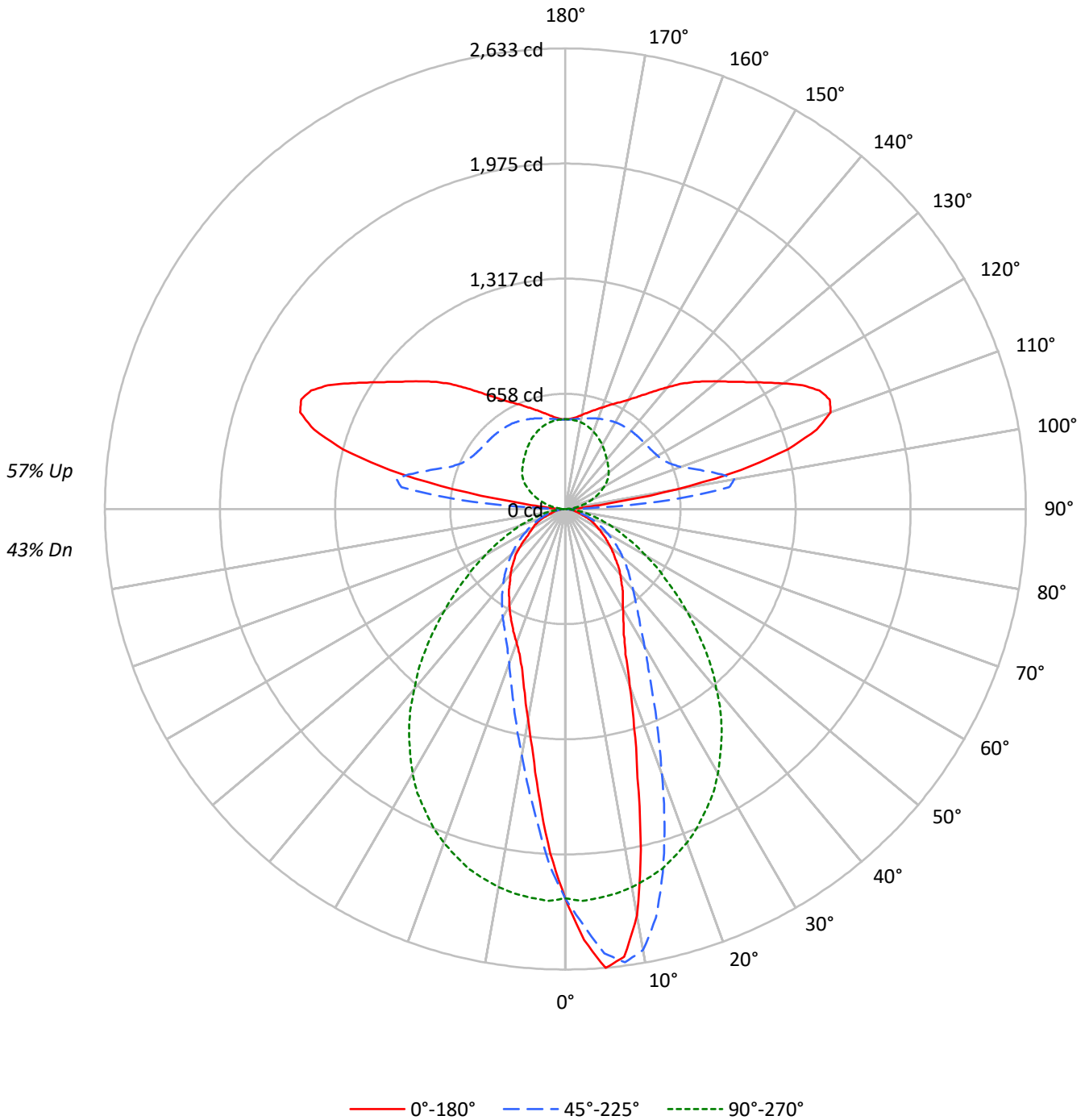
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6804.2 lumens
Efficiency: N/A
Efficacy: 119.6 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°	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	3.0
10°-20°	469.5	6.9
20°-30°	538.7	7.9
30°-40°	531.0	7.8
40°-50°	468.3	6.9
50°-60°	360.2	5.3
60°-70°	236.8	3.5
70°-80°	115.0	1.7
80°-90°	31.8	0.5
90°-100°	277.7	4.1
100°-110°	813.1	11.9
110°-120°	794.0	11.7
120°-130°	632.3	9.3
130°-140°	498.9	7.3
140°-150°	372.2	5.5
150°-160°	259.5	3.8
160°-170°	152.4	2.2
170°-180°	49.6	0.7
0°-30°	1211.1	17.8
0°-40°	1742.1	25.6
0°-60°	2570.6	37.8
0°-90°	2954.3	43.4
90°-120°	1884.8	27.7
90°-150°	3388.3	49.8
90°-180°	3850.0	56.6
0°-180°	6804.2	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°	30	26	2	26	30	17
95°	120	614	35	614	120	195
105°	1318	833	120	833	1318	1315
115°	1603	637	212	637	1603	1563
125°	1264	595	295	595	1264	1144
135°	1025	586	346	586	1025	795
145°	801	579	395	579	801	509
155°	664	560	449	560	664	309
165°	579	537	490	537	579	165
175°	521	515	511	515	521	51
180°	512	512	512	512	512	



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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°	30.0	31.1	30.0	29.0	30.0	28.0	26.9	25.9	24.9	25.9	22.8
92.5°	54.9	57.0	55.9	60.1	62.2	69.4	79.8	102.6	144.0	192.7	213.4
95°	120.2	124.3	131.6	140.9	160.6	197.9	252.8	373.0	498.3	614.4	547.0
97.5°	246.6	258.0	282.8	322.2	391.6	509.7	646.5	856.8	977.0	944.9	705.5
100°	649.6	648.6	689.0	764.6	869.2	1016.3	1137.6	1221.5	1185.2	981.1	663.1
102.5°	1028.8	1058.8	1090.9	1146.9	1222.5	1302.3	1360.3	1342.7	1195.6	913.8	600.9
105°	1317.8	1323.0	1356.2	1395.5	1443.2	1470.1	1450.4	1346.8	1130.3	833.0	552.2
107.5°	1506.4	1517.8	1531.3	1549.9	1556.1	1528.1	1447.3	1284.7	1037.1	761.5	517.0
110°	1614.1	1616.2	1618.3	1610.0	1581.0	1508.5	1377.9	1187.3	950.0	702.4	498.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1635.9	1634.9	1624.5	1594.5	1535.4	1437.0	1286.8	1090.9	874.4	663.1	488.0
115°	1602.7	1597.6	1576.8	1531.3	1453.6	1340.6	1188.3	1008.1	816.4	637.2	486.9
117.5°	1530.2	1523.0	1491.9	1441.1	1360.3	1243.2	1103.4	943.8	778.1	619.5	488.0
120°	1434.9	1428.7	1403.8	1345.8	1264.0	1159.3	1035.0	895.1	749.1	608.2	492.1
122.5°	1345.8	1337.5	1309.5	1258.8	1188.3	1093.0	980.1	856.8	725.2	600.9	499.4
125°	1264.0	1256.7	1230.8	1185.2	1118.9	1036.0	936.6	823.6	705.5	594.7	506.6
127.5°	1193.5	1187.3	1163.5	1124.1	1064.0	987.3	896.2	793.6	686.9	591.6	514.9
130°	1135.5	1127.2	1105.4	1068.1	1013.2	942.8	858.9	765.6	672.4	588.5	523.2
132.5°	1078.5	1073.3	1054.7	1017.4	966.6	900.3	823.6	739.7	658.9	587.4	529.4
135°	1024.6	1017.4	998.7	967.7	916.9	857.8	790.5	716.9	647.5	586.4	535.6
137.5°	967.7	961.4	945.9	913.8	870.3	817.4	757.3	695.2	637.2	584.3	539.8
140°	907.6	908.6	892.0	863.0	823.6	779.1	729.4	676.5	627.8	583.3	543.9
142.5°	851.6	852.7	838.1	813.3	781.2	743.9	702.4	658.9	619.5	581.2	547.0
145°	800.9	798.8	790.5	768.7	742.8	712.8	679.6	645.4	612.3	579.1	548.1
147.5°	757.3	756.3	748.0	732.5	711.8	690.0	662.0	634.1	605.0	576.0	548.1
150°	720.0	720.0	713.8	702.4	686.9	667.2	645.4	621.6	597.8	571.9	548.1
152.5°	689.0	689.0	685.9	675.5	664.1	648.6	629.9	610.2	589.5	566.7	545.0
155°	664.1	663.1	661.0	652.7	643.4	630.9	615.4	598.8	581.2	560.5	542.9
157.5°	640.3	640.3	638.2	632.0	623.7	613.3	600.9	586.4	571.9	555.3	539.8
160°	617.5	618.5	618.5	612.3	605.0	597.8	587.4	576.0	562.6	549.1	537.7
162.5°	596.8	597.8	597.8	592.6	588.5	582.2	572.9	563.6	553.2	542.9	533.6
165°	579.1	579.1	580.2	576.0	571.9	566.7	559.5	553.2	545.0	536.7	529.4
167.5°	561.5	561.5	562.6	559.5	557.4	553.2	549.1	543.9	536.7	530.4	525.3
170°	546.0	546.0	547.0	545.0	543.9	541.8	537.7	534.6	529.4	524.2	521.1
172.5°	531.5	532.5	534.6	532.5	532.5	531.5	528.4	526.3	522.2	519.1	518.0
175°	521.1	522.2	523.2	522.2	522.2	522.2	520.1	519.1	517.0	514.9	514.9
177.5°	513.9	513.9	515.9	514.9	515.9	515.9	514.9	513.9	512.8	511.8	512.8
180°	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8



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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°	19.7	16.6	13.5	11.4	9.3	6.2	4.1	2.1	4.1	6.2	9.3
92.5°	159.5	104.6	71.5	52.8	42.5	33.2	22.8	15.5	22.8	33.2	42.5
95°	377.1	222.7	134.7	94.3	67.3	49.7	38.3	35.2	38.3	49.7	67.3
97.5°	419.6	240.4	153.3	108.8	81.8	66.3	57.0	55.9	57.0	66.3	81.8
100°	390.6	237.3	164.7	124.3	99.5	85.0	77.7	76.7	77.7	85.0	99.5
102.5°	365.7	241.4	178.2	141.9	120.2	106.7	100.5	98.4	100.5	106.7	120.2
105°	356.4	249.7	193.7	161.6	141.9	129.5	123.3	120.2	123.3	129.5	141.9
107.5°	354.3	263.2	213.4	183.4	164.7	152.3	146.1	143.0	146.1	152.3	164.7
110°	359.5	280.8	234.1	205.1	187.5	176.1	170.9	167.8	170.9	176.1	187.5



TEST NUMBER: P832355

CATALOG NUMBER: S123RDIP-S775D1195U940-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	369.9	298.4	255.9	227.9	210.3	198.9	193.7	190.6	193.7	198.9	210.3
115°	381.3	318.1	278.7	250.7	233.1	222.7	216.5	212.4	216.5	222.7	233.1
117.5°	395.8	338.8	299.4	273.5	253.8	244.5	239.3	234.1	239.3	244.5	253.8
120°	412.3	358.5	321.2	295.3	275.6	265.2	260.0	256.9	260.0	265.2	275.6
122.5°	427.9	379.2	342.9	315.0	296.3	284.9	279.7	276.6	279.7	284.9	296.3
125°	444.5	398.9	362.6	334.6	315.0	303.6	297.3	295.3	297.3	303.6	315.0
127.5°	457.9	416.5	381.3	353.3	331.5	320.1	312.9	309.8	312.9	320.1	331.5
130°	471.4	432.0	397.8	369.9	348.1	335.7	326.3	323.2	326.3	335.7	348.1
132.5°	483.8	445.5	412.3	385.4	363.6	348.1	337.7	333.6	337.7	348.1	363.6
135°	494.2	459.0	426.8	398.9	377.1	361.6	350.2	346.0	350.2	361.6	377.1
137.5°	502.5	468.3	437.2	411.3	389.5	373.0	361.6	357.4	361.6	373.0	389.5
140°	508.7	477.6	447.6	421.7	400.9	384.4	374.0	368.8	374.0	384.4	400.9
142.5°	514.9	484.9	455.9	432.0	411.3	396.8	385.4	381.3	385.4	396.8	411.3
145°	519.1	491.1	464.1	440.3	422.7	407.2	397.8	394.7	397.8	407.2	422.7
147.5°	522.2	496.3	471.4	450.7	433.1	419.6	410.3	408.2	410.3	419.6	433.1
150°	523.2	501.4	477.6	459.0	444.5	431.0	422.7	421.7	422.7	431.0	444.5
152.5°	525.3	504.5	484.9	467.3	454.8	443.4	435.1	435.1	435.1	443.4	454.8
155°	525.3	508.7	491.1	476.6	465.2	454.8	448.6	448.6	448.6	454.8	465.2
157.5°	526.3	510.8	496.3	484.9	474.5	465.2	460.0	459.0	460.0	465.2	474.5
160°	526.3	513.9	501.4	491.1	483.8	475.5	471.4	471.4	471.4	475.5	483.8
162.5°	525.3	514.9	504.5	496.3	490.0	483.8	480.7	480.7	480.7	483.8	490.0
165°	523.2	515.9	507.7	500.4	496.3	491.1	489.0	490.0	489.0	491.1	496.3
167.5°	522.2	515.9	509.7	504.5	501.4	497.3	496.3	497.3	496.3	497.3	501.4
170°	519.1	514.9	509.7	507.7	505.6	502.5	501.4	503.5	501.4	502.5	505.6
172.5°	518.0	514.9	510.8	509.7	508.7	506.6	506.6	507.7	506.6	506.6	508.7
175°	515.9	513.9	511.8	510.8	510.8	508.7	509.7	510.8	509.7	508.7	510.8
177.5°	514.9	512.8	511.8	511.8	511.8	510.8	511.8	512.8	511.8	510.8	511.8
180°	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8



TEST NUMBER: P832355

CATALOG NUMBER: S123RDIP-S775D1195U940-4F0-1E-UDD-G4

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°	11.4	13.5	16.6	19.7	22.8	25.9	24.9	25.9	26.9	28.0	30.0
92.5°	52.8	71.5	104.6	159.5	213.4	192.7	144.0	102.6	79.8	69.4	62.2
95°	94.3	134.7	222.7	377.1	547.0	614.4	498.3	373.0	252.8	197.9	160.6
97.5°	108.8	153.3	240.4	419.6	705.5	944.9	977.0	856.8	646.5	509.7	391.6
100°	124.3	164.7	237.3	390.6	663.1	981.1	1185.2	1221.5	1137.6	1016.3	869.2
102.5°	141.9	178.2	241.4	365.7	600.9	913.8	1195.6	1342.7	1360.3	1302.3	1222.5
105°	161.6	193.7	249.7	356.4	552.2	833.0	1130.3	1346.8	1450.4	1470.1	1443.2
107.5°	183.4	213.4	263.2	354.3	517.0	761.5	1037.1	1284.7	1447.3	1528.1	1556.1
110°	205.1	234.1	280.8	359.5	498.3	702.4	950.0	1187.3	1377.9	1508.5	1581.0



TEST NUMBER: P832355

CATALOG NUMBER: S123RDIP-S775D1195U940-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	227.9	255.9	298.4	369.9	488.0	663.1	874.4	1090.9	1286.8	1437.0	1535.4
115°	250.7	278.7	318.1	381.3	486.9	637.2	816.4	1008.1	1188.3	1340.6	1453.6
117.5°	273.5	299.4	338.8	395.8	488.0	619.5	778.1	943.8	1103.4	1243.2	1360.3
120°	295.3	321.2	358.5	412.3	492.1	608.2	749.1	895.1	1035.0	1159.3	1264.0
122.5°	315.0	342.9	379.2	427.9	499.4	600.9	725.2	856.8	980.1	1093.0	1188.3
125°	334.6	362.6	398.9	444.5	506.6	594.7	705.5	823.6	936.6	1036.0	1118.9
127.5°	353.3	381.3	416.5	457.9	514.9	591.6	686.9	793.6	896.2	987.3	1064.0
130°	369.9	397.8	432.0	471.4	523.2	588.5	672.4	765.6	858.9	942.8	1013.2
132.5°	385.4	412.3	445.5	483.8	529.4	587.4	658.9	739.7	823.6	900.3	966.6
135°	398.9	426.8	459.0	494.2	535.6	586.4	647.5	716.9	790.5	857.8	916.9
137.5°	411.3	437.2	468.3	502.5	539.8	584.3	637.2	695.2	757.3	817.4	870.3
140°	421.7	447.6	477.6	508.7	543.9	583.3	627.8	676.5	729.4	779.1	823.6
142.5°	432.0	455.9	484.9	514.9	547.0	581.2	619.5	658.9	702.4	743.9	781.2
145°	440.3	464.1	491.1	519.1	548.1	579.1	612.3	645.4	679.6	712.8	742.8
147.5°	450.7	471.4	496.3	522.2	548.1	576.0	605.0	634.1	662.0	690.0	711.8
150°	459.0	477.6	501.4	523.2	548.1	571.9	597.8	621.6	645.4	667.2	686.9
152.5°	467.3	484.9	504.5	525.3	545.0	566.7	589.5	610.2	629.9	648.6	664.1
155°	476.6	491.1	508.7	525.3	542.9	560.5	581.2	598.8	615.4	630.9	643.4
157.5°	484.9	496.3	510.8	526.3	539.8	555.3	571.9	586.4	600.9	613.3	623.7
160°	491.1	501.4	513.9	526.3	537.7	549.1	562.6	576.0	587.4	597.8	605.0
162.5°	496.3	504.5	514.9	525.3	533.6	542.9	553.2	563.6	572.9	582.2	588.5
165°	500.4	507.7	515.9	523.2	529.4	536.7	545.0	553.2	559.5	566.7	571.9
167.5°	504.5	509.7	515.9	522.2	525.3	530.4	536.7	543.9	549.1	553.2	557.4
170°	507.7	509.7	514.9	519.1	521.1	524.2	529.4	534.6	537.7	541.8	543.9
172.5°	509.7	510.8	514.9	518.0	518.0	519.1	522.2	526.3	528.4	531.5	532.5
175°	510.8	511.8	513.9	515.9	514.9	514.9	517.0	519.1	520.1	522.2	522.2
177.5°	511.8	511.8	512.8	514.9	512.8	511.8	512.8	513.9	514.9	515.9	515.9
180°	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8



TEST NUMBER: P832355

CATALOG NUMBER: S123RDIP-S775D1195U940-4F0-1E-UDD-G4

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°	29.0	30.0	31.1	30.0
92.5°	60.1	55.9	57.0	54.9
95°	140.9	131.6	124.3	120.2
97.5°	322.2	282.8	258.0	246.6
100°	764.6	689.0	648.6	649.6
102.5°	1146.9	1090.9	1058.8	1028.8
105°	1395.5	1356.2	1323.0	1317.8
107.5°	1549.9	1531.3	1517.8	1506.4
110°	1610.0	1618.3	1616.2	1614.1



TEST NUMBER: P832355

CATALOG NUMBER: S123RDIP-S775D1195U940-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
112.5°	1594.5	1624.5	1634.9	1635.9
115°	1531.3	1576.8	1597.6	1602.7
117.5°	1441.1	1491.9	1523.0	1530.2
120°	1345.8	1403.8	1428.7	1434.9
122.5°	1258.8	1309.5	1337.5	1345.8
125°	1185.2	1230.8	1256.7	1264.0
127.5°	1124.1	1163.5	1187.3	1193.5
130°	1068.1	1105.4	1127.2	1135.5
132.5°	1017.4	1054.7	1073.3	1078.5
135°	967.7	998.7	1017.4	1024.6
137.5°	913.8	945.9	961.4	967.7
140°	863.0	892.0	908.6	907.6
142.5°	813.3	838.1	852.7	851.6
145°	768.7	790.5	798.8	800.9
147.5°	732.5	748.0	756.3	757.3
150°	702.4	713.8	720.0	720.0
152.5°	675.5	685.9	689.0	689.0
155°	652.7	661.0	663.1	664.1
157.5°	632.0	638.2	640.3	640.3
160°	612.3	618.5	618.5	617.5
162.5°	592.6	597.8	597.8	596.8
165°	576.0	580.2	579.1	579.1
167.5°	559.5	562.6	561.5	561.5
170°	545.0	547.0	546.0	546.0
172.5°	532.5	534.6	532.5	531.5
175°	522.2	523.2	522.2	521.1
177.5°	514.9	515.9	513.9	513.9
180°	511.8	511.8	511.8	511.8



TEST NUMBER: P832355

CATALOG NUMBER: S123RDIP-S775D1195U940-4F0-1E-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	11.13	11.89	12.15	12.91	14.28	15.79	16.55	16.82	17.58	18.94
	3H	12.35	13.03	13.38	14.06	15.44	17.29	17.97	18.32	19.00	20.39
	4H	12.73	13.37	13.77	14.40	15.80	17.77	18.42	18.82	19.45	20.85
	6H	13.00	13.59	14.06	14.63	16.04	18.08	18.67	19.14	19.71	21.12
	8H	13.09	13.65	14.15	14.71	16.11	18.16	18.72	19.22	19.78	21.18
	12H	13.14	13.67	14.20	14.72	16.14	18.19	18.72	19.25	19.77	21.20
4H	2H	11.84	12.49	12.90	13.52	14.92	15.78	16.42	16.83	17.46	18.85
	3H	13.21	13.74	14.27	14.81	16.21	17.43	17.97	18.49	19.03	20.44
	4H	13.66	14.15	14.73	15.20	16.63	18.04	18.53	19.10	19.58	21.01
	6H	14.03	14.44	15.10	15.52	16.95	18.47	18.89	19.54	19.97	21.39
	8H	14.15	14.54	15.22	15.61	17.05	18.60	18.99	19.67	20.06	21.50
	12H	14.22	14.58	15.31	15.66	17.10	18.66	19.01	19.75	20.10	21.54
8H	4H	13.97	14.36	15.04	15.43	16.87	18.00	18.39	19.07	19.46	20.90
	6H	14.43	14.75	15.53	15.87	17.30	18.49	18.82	19.59	19.93	21.36
	8H	14.62	14.91	15.73	16.00	17.46	18.68	18.96	19.78	20.06	21.51
	12H	14.76	15.01	15.87	16.10	17.60	18.79	19.04	19.90	20.13	21.63
12H	4H	13.98	14.33	15.07	15.42	16.86	17.95	18.30	19.04	19.38	20.83
	6H	14.49	14.77	15.59	15.87	17.32	18.47	18.75	19.57	19.84	21.30
	8H	14.71	14.95	15.81	16.04	17.54	18.66	18.91	19.76	20.00	21.49