

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: P832334

Luminaire Tested: S123RDIP-S775D1195U830-4F0-1E-UDD-G4

Issue Date: 05/03/2024

Test Information

Test Method: LM-79-2019
Report Number: P832334
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-S775D1195U830-4F0-1E-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

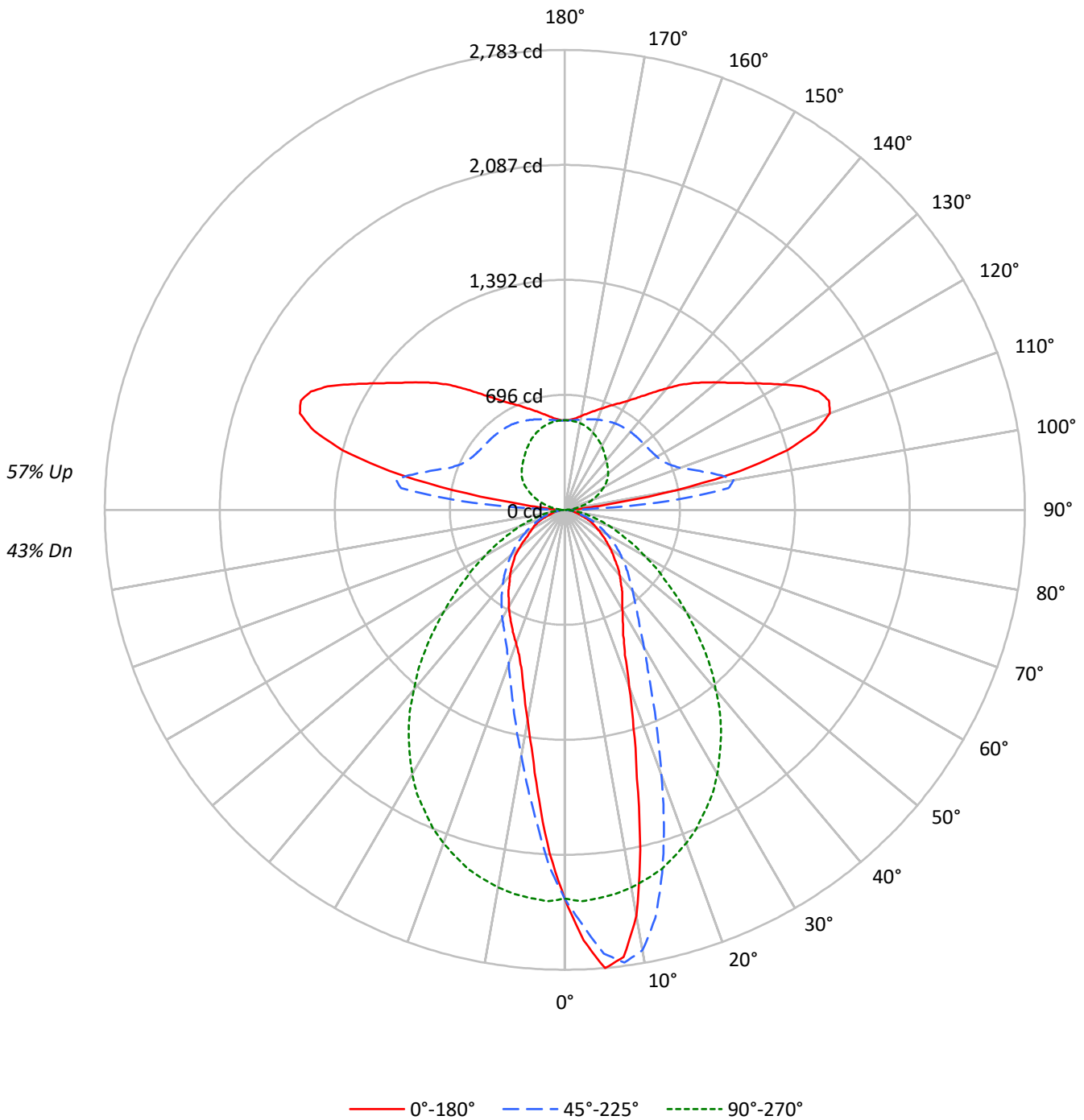
Lumens per Lamp: N/A
Luminaire Lumens: 7192.0 lumens
Efficiency: N/A
Efficacy: 126.4 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 1.17 / 0.8
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

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°	25327	25327	25327	25327	25327
5°	30074	29115	25487	20603	19128
10°	27247	29572	25360	16508	14162
15°	18760	25356	25092	13493	11203
20°	13052	19521	24589	11377	9846
25°	9946	14878	23855	10112	9075
30°	8658	11895	22939	9389	8406
35°	7949	10034	21639	8779	7796
40°	7252	8961	19942	8181	7239
45°	6550	8194	18107	7614	6683
50°	5945	7561	15945	7060	5993
55°	5377	6944	13868	6518	5142
60°	4818	6314	12047	5920	4861
65°	4447	5603	10369	5321	4595
70°	3613	4843	9048	4812	3736
75°	3169	3851	7665	3993	3290
80°	2870	3261	6279	3347	3112
85°	2618	2865	4767	3038	2865

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 80°
 Vertical Angle: 45°
 Luminance: 19106 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.5	3.0
10°-20°	496.3	6.9
20°-30°	569.4	7.9
30°-40°	561.3	7.8
40°-50°	495.0	6.9
50°-60°	380.8	5.3
60°-70°	250.3	3.5
70°-80°	121.6	1.7
80°-90°	33.6	0.5
90°-100°	293.6	4.1
100°-110°	859.4	11.9
110°-120°	839.3	11.7
120°-130°	668.4	9.3
130°-140°	527.4	7.3
140°-150°	393.4	5.5
150°-160°	274.3	3.8
160°-170°	161.1	2.2
170°-180°	52.4	0.7
0°-30°	1280.2	17.8
0°-40°	1841.5	25.6
0°-60°	2717.2	37.8
0°-90°	3122.8	43.4
90°-120°	1992.3	27.7
90°-150°	3581.4	49.8
90°-180°	4069.0	56.6
0°-180°	7192.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2353	2353	2353	2353	2353	
5°	2783	2695	2359	1907	1770	254
15°	1684	2275	2252	1211	1005	475
25°	837	1253	2009	851	764	395
35°	605	764	1647	668	593	377
45°	430	538	1190	500	439	334
55°	286	370	739	347	274	257
65°	175	220	407	209	180	171
75°	76	93	184	96	79	82
85°	21	23	39	25	23	23
90°	32	27	2	27	32	18
95°	127	649	37	649	127	206
105°	1393	880	127	880	1393	1390
115°	1694	674	224	674	1694	1652
125°	1336	629	312	629	1336	1209
135°	1083	620	366	620	1083	840
145°	846	612	417	612	846	538
155°	702	592	474	592	702	327
165°	612	567	518	567	612	175
175°	551	544	540	544	551	53
180°	541	541	541	541	541	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0
2.5°	2607.7	2599.5	2591.3	2588.9	2586.5	2578.8	2571.1	2553.7	2536.3	2518.5	2500.6
5°	2783.3	2784.3	2785.2	2782.8	2780.4	2770.3	2760.2	2738.9	2717.7	2694.6	2671.4
7.5°	2729.3	2744.7	2760.2	2763.1	2765.9	2773.7	2781.4	2776.6	2771.7	2763.1	2754.4
10°	2492.9	2492.0	2491.0	2508.4	2525.7	2577.3	2628.9	2655.5	2682.0	2705.6	2729.3
12.5°	2107.0	2108.5	2109.9	2166.8	2223.8	2272.5	2321.2	2388.7	2456.3	2529.1	2601.9
15°	1683.5	1707.1	1730.8	1781.4	1832.1	1905.4	1978.7	2069.4	2160.1	2275.4	2390.7
17.5°	1382.5	1392.6	1402.7	1451.5	1500.2	1569.7	1639.1	1741.9	1844.6	1993.2	2141.8
20°	1139.4	1148.5	1157.7	1192.9	1228.1	1294.7	1361.3	1459.2	1557.1	1704.2	1851.4
22.5°	951.2	969.1	986.9	1010.6	1034.2	1082.5	1130.7	1230.5	1330.4	1464.5	1598.6
25°	837.4	845.6	853.8	874.1	894.3	940.6	986.9	1053.0	1119.1	1252.7	1386.3
27.5°	760.2	762.6	765.0	780.0	795.0	824.9	854.8	916.0	977.3	1087.3	1197.3
30°	696.6	700.9	705.2	716.8	728.4	750.1	771.8	815.2	858.6	957.0	1055.4
32.5°	647.3	649.8	652.2	661.8	671.5	687.4	703.3	737.6	771.8	847.1	922.3
35°	604.9	605.4	605.9	613.1	620.3	635.8	651.2	679.7	708.1	763.6	819.1
37.5°	556.7	560.0	563.4	568.7	574.0	587.5	601.0	624.2	647.3	693.2	739.0
40°	516.1	519.0	521.9	528.2	534.5	545.1	555.7	576.9	598.1	637.7	677.3
42.5°	475.6	477.6	479.5	485.8	492.0	505.0	518.1	535.0	551.8	584.6	617.4
45°	430.3	435.1	439.9	446.7	453.4	464.5	475.6	493.0	510.4	538.3	566.3
47.5°	392.7	395.1	397.5	403.3	409.1	422.6	436.1	451.5	466.9	493.0	519.0
50°	355.0	356.0	357.0	362.3	367.6	379.6	391.7	409.5	427.4	451.5	475.6
52.5°	319.3	321.7	324.2	329.5	334.8	343.0	351.2	369.5	387.8	411.5	435.1
55°	286.5	288.0	289.4	293.3	297.1	306.8	316.4	332.4	348.3	370.0	391.7
57.5°	255.7	257.6	259.5	262.4	265.3	274.0	282.7	296.7	310.7	332.4	354.1
60°	223.8	226.2	228.6	232.0	235.4	242.2	248.9	261.4	274.0	293.3	312.6
62.5°	200.7	201.2	201.6	204.5	207.4	212.2	217.1	227.2	237.3	256.6	275.9
65°	174.6	176.1	177.5	179.0	180.4	184.3	188.1	196.8	205.5	220.0	234.4
67.5°	147.6	149.1	150.5	152.9	155.3	158.7	162.1	167.9	173.7	187.2	200.7
70°	114.8	114.8	114.8	118.7	122.5	128.3	134.1	138.4	142.8	153.9	165.0
72.5°	93.6	94.1	94.5	95.0	95.5	98.9	102.3	109.5	116.7	123.5	130.2
75°	76.2	76.7	77.2	77.7	78.1	79.1	80.1	82.5	84.9	92.6	100.3
77.5°	60.8	61.3	61.7	62.2	62.7	63.7	64.6	65.6	66.6	69.5	72.4
80°	46.3	46.8	47.3	47.8	48.2	48.7	49.2	50.2	51.1	52.6	54.0
82.5°	33.8	33.8	33.8	33.8	33.8	34.7	35.7	35.7	35.7	36.7	37.6
85°	21.2	21.2	21.2	21.7	22.2	22.2	22.2	22.7	23.2	23.2	23.2
87.5°	9.6	9.2	8.7	9.2	9.6	9.6	9.6	10.1	10.6	10.6	10.6
90°	31.8	32.9	31.8	30.7	31.8	29.6	28.5	27.4	26.3	27.4	24.1
92.5°	58.0	60.2	59.1	63.5	65.7	73.4	84.3	108.4	152.2	203.7	225.6
95°	127.0	131.4	139.1	148.9	169.7	209.2	267.2	394.2	526.7	649.4	578.2
97.5°	260.6	272.7	299.0	340.6	413.9	538.8	683.3	905.6	1032.7	998.7	745.8
100°	686.6	685.5	728.2	808.2	918.8	1074.3	1202.4	1291.1	1252.8	1037.1	700.9
102.5°	1087.4	1119.2	1153.1	1212.3	1292.2	1376.5	1437.9	1419.2	1263.7	965.9	635.2
105°	1393.0	1398.4	1433.5	1475.1	1525.5	1553.9	1533.1	1423.6	1194.7	880.5	583.7
107.5°	1592.3	1604.3	1618.5	1638.3	1644.8	1615.3	1529.8	1357.9	1096.2	804.9	546.5
110°	1706.2	1708.3	1710.5	1701.8	1671.1	1594.5	1456.5	1255.0	1004.2	742.5	526.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	1729.1	1728.1	1717.1	1685.3	1622.9	1518.9	1360.1	1153.1	924.3	700.9	515.8
115°	1694.1	1688.6	1666.7	1618.5	1536.4	1417.0	1256.1	1065.5	862.9	673.5	514.7
117.5°	1617.4	1609.8	1576.9	1523.3	1437.9	1314.1	1166.3	997.6	822.4	654.9	515.8
120°	1516.7	1510.1	1483.8	1422.5	1336.0	1225.4	1094.0	946.2	791.8	642.8	520.2
122.5°	1422.5	1413.8	1384.2	1330.5	1256.1	1155.3	1036.0	905.6	766.6	635.2	527.8
125°	1336.0	1328.3	1301.0	1252.8	1182.7	1095.1	990.0	870.6	745.8	628.6	535.5
127.5°	1261.5	1255.0	1229.8	1188.2	1124.7	1043.6	947.3	838.8	726.0	625.3	544.3
130°	1200.2	1191.5	1168.5	1129.0	1071.0	996.5	907.8	809.3	710.7	622.0	553.0
132.5°	1140.0	1134.5	1114.8	1075.4	1021.7	951.6	870.6	781.9	696.5	620.9	559.6
135°	1083.0	1075.4	1055.7	1022.8	969.2	906.7	835.6	757.8	684.4	619.8	566.2
137.5°	1022.8	1016.2	999.8	965.9	919.9	864.0	800.5	734.8	673.5	617.6	570.5
140°	959.3	960.4	942.9	912.2	870.6	823.5	770.9	715.1	663.6	616.5	574.9
142.5°	900.2	901.3	885.9	859.6	825.7	786.3	742.5	696.5	654.9	614.3	578.2
145°	846.5	844.3	835.6	812.6	785.2	753.4	718.4	682.2	647.2	612.2	579.3
147.5°	800.5	799.4	790.7	774.2	752.3	729.3	699.8	670.2	639.5	608.9	579.3
150°	761.1	761.1	754.5	742.5	726.0	705.2	682.2	657.1	631.9	604.5	579.3
152.5°	728.2	728.2	724.9	714.0	702.0	685.5	665.8	645.0	623.1	599.0	576.0
155°	702.0	700.9	698.7	689.9	680.1	666.9	650.5	633.0	614.3	592.4	573.8
157.5°	676.8	676.8	674.6	668.0	659.2	648.3	635.2	619.8	604.5	587.0	570.5
160°	652.7	653.8	653.8	647.2	639.5	631.9	620.9	608.9	594.6	580.4	568.4
162.5°	630.8	631.9	631.9	626.4	622.0	615.4	605.6	595.7	584.8	573.8	564.0
165°	612.2	612.2	613.3	608.9	604.5	599.0	591.3	584.8	576.0	567.3	559.6
167.5°	593.5	593.5	594.6	591.3	589.2	584.8	580.4	574.9	567.3	560.7	555.2
170°	577.1	577.1	578.2	576.0	574.9	572.7	568.4	565.1	559.6	554.1	550.8
172.5°	561.8	562.9	565.1	562.9	562.9	561.8	558.5	556.3	551.9	548.6	547.5
175°	550.8	551.9	553.0	551.9	551.9	551.9	549.7	548.6	546.5	544.3	544.3
177.5°	543.2	543.2	545.4	544.3	545.4	545.4	544.3	543.2	542.1	541.0	542.1
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0
2.5°	2498.2	2495.8	2472.7	2449.5	2426.8	2404.2	2387.3	2370.4	2341.9	2313.5	2295.6
5°	2653.1	2634.7	2598.1	2561.4	2506.4	2451.4	2405.1	2358.8	2300.0	2241.1	2191.9
7.5°	2739.4	2724.5	2680.1	2635.7	2562.9	2490.0	2417.7	2345.3	2258.5	2171.7	2097.4
10°	2741.8	2754.4	2717.7	2681.0	2599.0	2517.0	2418.6	2320.2	2203.5	2086.8	1990.8
12.5°	2656.0	2710.0	2702.3	2694.6	2611.1	2527.7	2408.0	2288.4	2145.1	2001.9	1881.7
15°	2495.3	2600.0	2630.9	2661.8	2592.8	2523.8	2387.8	2251.7	2083.4	1915.0	1777.1
17.5°	2288.4	2435.0	2516.6	2598.1	2547.9	2497.7	2348.7	2199.6	2010.1	1820.5	1670.5
20°	2043.3	2235.3	2363.2	2491.0	2472.7	2454.3	2300.5	2146.6	1942.0	1737.5	1575.0
22.5°	1801.2	2003.8	2180.3	2356.9	2375.7	2394.5	2239.2	2083.9	1860.0	1636.2	1470.8
25°	1592.3	1798.3	2008.6	2218.9	2261.4	2303.8	2156.2	2008.6	1776.6	1544.6	1380.1
27.5°	1393.1	1588.9	1820.5	2052.0	2129.2	2206.4	2071.3	1936.3	1694.6	1452.9	1288.9
30°	1230.5	1405.6	1642.0	1878.4	1985.9	2093.5	1969.5	1845.6	1605.8	1366.1	1205.5
32.5°	1079.1	1235.8	1473.2	1710.5	1835.4	1960.4	1853.3	1746.2	1515.6	1285.1	1126.3
35°	959.4	1099.8	1321.2	1542.6	1682.5	1822.4	1734.6	1646.8	1421.6	1196.3	1046.3
37.5°	856.7	974.4	1182.3	1390.2	1538.8	1687.4	1614.0	1540.7	1328.9	1117.2	975.4
40°	771.8	866.3	1059.8	1253.2	1398.9	1544.6	1481.9	1419.2	1229.6	1040.0	907.3
42.5°	699.0	780.5	954.1	1127.8	1261.4	1395.0	1353.5	1312.1	1140.3	968.6	845.6
45°	634.8	703.3	856.2	1009.1	1132.1	1255.1	1222.3	1189.5	1041.5	893.4	780.5
47.5°	577.9	636.7	773.2	909.8	1020.2	1130.7	1100.3	1069.9	947.4	824.9	722.1
50°	525.8	576.0	689.8	803.6	903.0	1002.4	977.3	952.2	850.9	749.6	660.9
52.5°	476.6	518.1	620.3	722.6	802.7	882.7	863.5	844.2	766.0	687.9	607.3
55°	429.8	467.9	554.3	640.6	709.1	777.6	758.3	739.0	678.2	617.4	546.5
57.5°	387.3	420.6	490.6	560.5	615.0	669.5	660.4	651.2	600.6	549.9	491.5
60°	342.5	372.4	432.7	493.0	536.9	580.8	570.2	559.6	523.4	487.2	437.0
62.5°	302.4	329.0	377.2	425.5	461.2	496.8	489.1	481.4	453.9	426.4	384.9
65°	260.5	286.5	325.6	364.7	392.7	420.6	413.9	407.1	386.4	365.6	332.4
67.5°	222.4	244.1	277.8	311.6	330.4	349.2	345.4	341.5	325.6	309.7	283.6
70°	183.8	202.6	230.6	258.6	271.6	284.6	286.0	287.5	273.0	258.6	239.3
72.5°	145.2	160.1	186.2	212.2	222.4	232.5	232.0	231.5	222.9	214.2	196.8
75°	111.4	122.5	142.8	163.0	171.7	180.4	182.3	184.3	176.1	167.9	158.2
77.5°	80.1	87.8	103.2	118.7	128.3	138.0	138.9	139.9	136.0	132.2	123.0
80°	56.4	58.8	68.5	78.1	88.3	98.4	99.9	101.3	97.4	93.6	87.8
82.5°	39.1	40.5	43.9	47.3	55.5	63.7	65.6	67.5	65.6	63.7	57.4
85°	23.6	24.1	25.6	27.0	30.9	34.7	36.7	38.6	37.6	36.7	33.3
87.5°	10.6	10.6	11.1	11.6	12.5	13.5	15.9	18.3	16.9	15.4	14.0
90°	20.8	17.5	14.2	12.0	9.9	6.6	4.4	2.2	4.4	6.6	9.9
92.5°	168.6	110.6	75.6	55.8	44.9	35.0	24.1	16.4	24.1	35.0	44.9
95°	398.6	235.4	142.4	99.7	71.2	52.6	40.5	37.2	40.5	52.6	71.2
97.5°	443.5	254.1	162.1	115.0	86.5	70.1	60.2	59.1	60.2	70.1	86.5
100°	412.8	250.8	174.1	131.4	105.1	89.8	82.1	81.0	82.1	89.8	105.1
102.5°	386.6	255.2	188.4	150.0	127.0	112.8	106.2	104.0	106.2	112.8	127.0
105°	376.7	263.9	204.8	170.8	150.0	136.9	130.3	127.0	130.3	136.9	150.0
107.5°	374.5	278.2	225.6	193.8	174.1	161.0	154.4	151.1	154.4	161.0	174.1
110°	380.0	296.8	247.5	216.8	198.2	186.2	180.7	177.4	180.7	186.2	198.2



TEST NUMBER: P832334

CATALOG NUMBER: S123RDIP-S775D1195U830-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	390.9	315.4	270.5	240.9	222.3	210.3	204.8	201.5	204.8	210.3	222.3
115°	403.0	336.2	294.6	265.0	246.4	235.4	228.9	224.5	228.9	235.4	246.4
117.5°	418.3	358.1	316.5	289.1	268.3	258.4	253.0	247.5	253.0	258.4	268.3
120°	435.8	378.9	339.5	312.1	291.3	280.3	274.9	271.6	274.9	280.3	291.3
122.5°	452.3	400.8	362.5	332.9	313.2	301.1	295.7	292.4	295.7	301.1	313.2
125°	469.8	421.6	383.3	353.7	332.9	320.9	314.3	312.1	314.3	320.9	332.9
127.5°	484.0	440.2	403.0	373.4	350.4	338.4	330.7	327.4	330.7	338.4	350.4
130°	498.3	456.7	420.5	390.9	368.0	354.8	345.0	341.7	345.0	354.8	368.0
132.5°	511.4	470.9	435.8	407.4	384.4	368.0	357.0	352.6	357.0	368.0	384.4
135°	522.4	485.1	451.2	421.6	398.6	382.2	370.1	365.8	370.1	382.2	398.6
137.5°	531.1	495.0	462.1	434.8	411.8	394.2	382.2	377.8	382.2	394.2	411.8
140°	537.7	504.8	473.1	445.7	423.8	406.3	395.3	389.9	395.3	406.3	423.8
142.5°	544.3	512.5	481.8	456.7	434.8	419.4	407.4	403.0	407.4	419.4	434.8
145°	548.6	519.1	490.6	465.4	446.8	430.4	420.5	417.2	420.5	430.4	446.8
147.5°	551.9	524.5	498.3	476.4	457.7	443.5	433.7	431.5	433.7	443.5	457.7
150°	553.0	530.0	504.8	485.1	469.8	455.6	446.8	445.7	446.8	455.6	469.8
152.5°	555.2	533.3	512.5	493.9	480.7	468.7	459.9	459.9	459.9	468.7	480.7
155°	555.2	537.7	519.1	503.7	491.7	480.7	474.2	474.2	474.2	480.7	491.7
157.5°	556.3	539.9	524.5	512.5	501.6	491.7	486.2	485.1	486.2	491.7	501.6
160°	556.3	543.2	530.0	519.1	511.4	502.6	498.3	498.3	498.3	502.6	511.4
162.5°	555.2	544.3	533.3	524.5	518.0	511.4	508.1	508.1	508.1	511.4	518.0
165°	553.0	545.4	536.6	528.9	524.5	519.1	516.9	518.0	516.9	519.1	524.5
167.5°	551.9	545.4	538.8	533.3	530.0	525.6	524.5	525.6	524.5	525.6	530.0
170°	548.6	544.3	538.8	536.6	534.4	531.1	530.0	532.2	530.0	531.1	534.4
172.5°	547.5	544.3	539.9	538.8	537.7	535.5	535.5	536.6	535.5	535.5	537.7
175°	545.4	543.2	541.0	539.9	539.9	537.7	538.8	539.9	538.8	537.7	539.9
177.5°	544.3	542.1	541.0	541.0	541.0	539.9	541.0	542.1	541.0	539.9	541.0
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P832334

CATALOG NUMBER: S123RDIP-S775D1195U830-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0	2353.0
2.5°	2277.8	2250.3	2222.8	2203.0	2183.2	2158.6	2134.0	2133.1	2132.1	2113.8	2095.4
5°	2142.7	2095.0	2047.2	2000.4	1953.6	1906.8	1860.0	1849.4	1838.8	1822.9	1807.0
7.5°	2023.1	1946.9	1870.7	1810.8	1751.0	1704.2	1657.4	1625.6	1593.8	1569.2	1544.6
10°	1894.8	1800.2	1705.7	1633.3	1561.0	1510.3	1459.7	1423.0	1386.3	1369.0	1351.6
12.5°	1761.6	1658.9	1556.1	1485.2	1414.3	1353.5	1292.8	1259.5	1226.2	1202.1	1178.0
15°	1639.1	1528.7	1418.2	1342.9	1267.7	1210.8	1153.8	1120.6	1087.3	1063.2	1039.0
17.5°	1520.4	1409.0	1297.6	1221.4	1145.2	1093.5	1041.9	1009.6	977.3	962.3	947.4
20°	1412.4	1300.0	1187.6	1115.7	1043.9	993.2	942.6	925.2	907.8	893.8	879.9
22.5°	1305.3	1197.3	1089.2	1020.2	951.2	914.6	877.9	863.9	849.9	839.3	828.7
25°	1215.6	1108.0	1000.4	940.2	879.9	851.4	822.9	813.8	804.6	794.0	783.4
27.5°	1124.9	1022.6	920.4	872.1	823.9	800.7	777.6	766.0	754.4	745.8	737.1
30°	1044.8	950.3	855.7	815.7	775.7	755.4	735.1	722.6	710.1	701.9	693.7
32.5°	967.6	883.7	799.8	765.5	731.3	711.5	691.7	679.7	667.6	658.0	648.3
35°	896.3	823.4	750.6	719.2	687.9	668.1	648.3	636.3	624.2	614.5	604.9
37.5°	833.5	767.5	701.4	671.9	642.5	625.2	607.8	595.3	582.7	572.6	562.5
40°	774.7	716.3	658.0	629.5	601.0	582.2	563.4	552.3	541.2	532.1	522.9
42.5°	722.6	669.1	615.5	587.5	559.6	541.7	523.9	510.8	497.8	492.5	487.2
45°	667.6	620.3	573.1	546.0	519.0	500.2	481.4	470.3	459.2	454.4	449.6
47.5°	619.4	575.5	531.6	505.0	478.5	461.6	444.8	436.1	427.4	420.6	413.9
50°	572.1	529.6	487.2	461.6	436.1	421.6	407.1	396.5	385.9	381.1	376.3
52.5°	526.8	488.2	449.6	423.5	397.5	383.5	369.5	360.3	351.2	341.0	330.9
55°	475.6	441.9	408.1	384.9	361.8	347.3	332.8	322.2	311.6	301.0	290.4
57.5°	433.2	399.9	366.6	345.9	325.1	311.1	297.1	285.6	274.0	265.3	256.6
60°	386.9	357.9	329.0	308.7	288.5	275.0	261.4	250.4	239.3	234.9	230.6
62.5°	343.5	316.4	289.4	271.6	253.7	240.7	227.7	220.4	213.2	210.3	207.4
65°	299.1	275.9	252.8	236.4	220.0	208.9	197.8	194.4	191.0	188.6	186.2
67.5°	257.6	237.8	218.0	203.6	189.1	181.4	173.7	169.8	165.9	163.0	160.1
70°	220.0	202.6	185.2	172.7	160.1	152.9	145.7	142.3	138.9	133.6	128.3
72.5°	179.4	165.9	152.4	142.8	133.1	126.9	120.6	113.8	107.1	102.3	97.4
75°	148.6	135.1	121.6	112.4	103.2	96.0	88.8	86.3	83.9	82.5	81.0
77.5°	113.8	102.3	90.7	83.5	76.2	72.8	69.5	68.0	66.6	66.1	65.6
80°	82.0	72.4	62.7	58.8	55.0	54.0	53.1	52.1	51.1	50.6	50.2
82.5°	51.1	46.3	41.5	40.5	39.6	39.1	38.6	38.1	37.6	37.1	36.7
85°	29.9	28.0	26.0	25.6	25.1	24.6	24.1	24.1	24.1	24.1	24.1
87.5°	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.1	11.6
90°	12.0	14.2	17.5	20.8	24.1	27.4	26.3	27.4	28.5	29.6	31.8
92.5°	55.8	75.6	110.6	168.6	225.6	203.7	152.2	108.4	84.3	73.4	65.7
95°	99.7	142.4	235.4	398.6	578.2	649.4	526.7	394.2	267.2	209.2	169.7
97.5°	115.0	162.1	254.1	443.5	745.8	998.7	1032.7	905.6	683.3	538.8	413.9
100°	131.4	174.1	250.8	412.8	700.9	1037.1	1252.8	1291.1	1202.4	1074.3	918.8
102.5°	150.0	188.4	255.2	386.6	635.2	965.9	1263.7	1419.2	1437.9	1376.5	1292.2
105°	170.8	204.8	263.9	376.7	583.7	880.5	1194.7	1423.6	1533.1	1553.9	1525.5
107.5°	193.8	225.6	278.2	374.5	546.5	804.9	1096.2	1357.9	1529.8	1615.3	1644.8
110°	216.8	247.5	296.8	380.0	526.7	742.5	1004.2	1255.0	1456.5	1594.5	1671.1



TEST NUMBER: P832334

CATALOG NUMBER: S123RDIP-S775D1195U830-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	240.9	270.5	315.4	390.9	515.8	700.9	924.3	1153.1	1360.1	1518.9	1622.9
115°	265.0	294.6	336.2	403.0	514.7	673.5	862.9	1065.5	1256.1	1417.0	1536.4
117.5°	289.1	316.5	358.1	418.3	515.8	654.9	822.4	997.6	1166.3	1314.1	1437.9
120°	312.1	339.5	378.9	435.8	520.2	642.8	791.8	946.2	1094.0	1225.4	1336.0
122.5°	332.9	362.5	400.8	452.3	527.8	635.2	766.6	905.6	1036.0	1155.3	1256.1
125°	353.7	383.3	421.6	469.8	535.5	628.6	745.8	870.6	990.0	1095.1	1182.7
127.5°	373.4	403.0	440.2	484.0	544.3	625.3	726.0	838.8	947.3	1043.6	1124.7
130°	390.9	420.5	456.7	498.3	553.0	622.0	710.7	809.3	907.8	996.5	1071.0
132.5°	407.4	435.8	470.9	511.4	559.6	620.9	696.5	781.9	870.6	951.6	1021.7
135°	421.6	451.2	485.1	522.4	566.2	619.8	684.4	757.8	835.6	906.7	969.2
137.5°	434.8	462.1	495.0	531.1	570.5	617.6	673.5	734.8	800.5	864.0	919.9
140°	445.7	473.1	504.8	537.7	574.9	616.5	663.6	715.1	770.9	823.5	870.6
142.5°	456.7	481.8	512.5	544.3	578.2	614.3	654.9	696.5	742.5	786.3	825.7
145°	465.4	490.6	519.1	548.6	579.3	612.2	647.2	682.2	718.4	753.4	785.2
147.5°	476.4	498.3	524.5	551.9	579.3	608.9	639.5	670.2	699.8	729.3	752.3
150°	485.1	504.8	530.0	553.0	579.3	604.5	631.9	657.1	682.2	705.2	726.0
152.5°	493.9	512.5	533.3	555.2	576.0	599.0	623.1	645.0	665.8	685.5	702.0
155°	503.7	519.1	537.7	555.2	573.8	592.4	614.3	633.0	650.5	666.9	680.1
157.5°	512.5	524.5	539.9	556.3	570.5	587.0	604.5	619.8	635.2	648.3	659.2
160°	519.1	530.0	543.2	556.3	568.4	580.4	594.6	608.9	620.9	631.9	639.5
162.5°	524.5	533.3	544.3	555.2	564.0	573.8	584.8	595.7	605.6	615.4	622.0
165°	528.9	536.6	545.4	553.0	559.6	567.3	576.0	584.8	591.3	599.0	604.5
167.5°	533.3	538.8	545.4	551.9	555.2	560.7	567.3	574.9	580.4	584.8	589.2
170°	536.6	538.8	544.3	548.6	550.8	554.1	559.6	565.1	568.4	572.7	574.9
172.5°	538.8	539.9	544.3	547.5	547.5	548.6	551.9	556.3	558.5	561.8	562.9
175°	539.9	541.0	543.2	545.4	544.3	544.3	546.5	548.6	549.7	551.9	551.9
177.5°	541.0	541.0	542.1	544.3	542.1	541.0	542.1	543.2	544.3	545.4	545.4
180°	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0	541.0



TEST NUMBER: P832334

CATALOG NUMBER: S123RDIP-S775D1195U830-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2353.0	2353.0	2353.0	2353.0
2.5°	2090.6	2085.8	2083.9	2081.9
5°	1792.0	1777.1	1773.7	1770.3
7.5°	1538.3	1532.0	1511.3	1490.5
10°	1332.3	1313.0	1304.3	1295.7
12.5°	1160.1	1142.3	1139.4	1136.5
15°	1026.5	1014.0	1009.6	1005.3
17.5°	938.7	930.0	924.7	919.4
20°	873.6	867.3	863.5	859.6
22.5°	823.9	819.1	816.2	813.3
25°	776.1	768.9	766.5	764.1
27.5°	730.8	724.5	722.1	719.7
30°	688.4	683.0	679.7	676.3
32.5°	642.0	635.8	633.8	631.9
35°	601.0	597.2	595.3	593.3
37.5°	557.6	552.8	549.9	547.0
40°	520.5	518.1	516.6	515.2
42.5°	482.9	478.5	478.0	477.6
45°	445.2	440.9	439.9	439.0
47.5°	410.0	406.2	405.7	405.2
50°	370.9	365.6	361.8	357.9
52.5°	326.1	321.3	317.9	314.5
55°	285.1	279.8	276.9	274.0
57.5°	254.2	251.8	250.4	248.9
60°	229.1	227.7	226.7	225.8
62.5°	206.0	204.5	204.5	204.5
65°	184.8	183.3	181.9	180.4
67.5°	157.3	154.4	153.9	153.4
70°	124.0	119.6	119.1	118.7
72.5°	97.0	96.5	95.5	94.5
75°	80.1	79.1	79.1	79.1
77.5°	64.6	63.7	63.7	63.7
80°	49.7	49.2	49.7	50.2
82.5°	36.7	36.7	36.2	35.7
85°	23.6	23.2	23.2	23.2
87.5°	11.6	11.6	11.6	11.6
90°	30.7	31.8	32.9	31.8
92.5°	63.5	59.1	60.2	58.0
95°	148.9	139.1	131.4	127.0
97.5°	340.6	299.0	272.7	260.6
100°	808.2	728.2	685.5	686.6
102.5°	1212.3	1153.1	1119.2	1087.4
105°	1475.1	1433.5	1398.4	1393.0
107.5°	1638.3	1618.5	1604.3	1592.3
110°	1701.8	1710.5	1708.3	1706.2



TEST NUMBER: P832334

CATALOG NUMBER: S123RDIP-S775D1195U830-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
112.5°	1685.3	1717.1	1728.1	1729.1
115°	1618.5	1666.7	1688.6	1694.1
117.5°	1523.3	1576.9	1609.8	1617.4
120°	1422.5	1483.8	1510.1	1516.7
122.5°	1330.5	1384.2	1413.8	1422.5
125°	1252.8	1301.0	1328.3	1336.0
127.5°	1188.2	1229.8	1255.0	1261.5
130°	1129.0	1168.5	1191.5	1200.2
132.5°	1075.4	1114.8	1134.5	1140.0
135°	1022.8	1055.7	1075.4	1083.0
137.5°	965.9	999.8	1016.2	1022.8
140°	912.2	942.9	960.4	959.3
142.5°	859.6	885.9	901.3	900.2
145°	812.6	835.6	844.3	846.5
147.5°	774.2	790.7	799.4	800.5
150°	742.5	754.5	761.1	761.1
152.5°	714.0	724.9	728.2	728.2
155°	689.9	698.7	700.9	702.0
157.5°	668.0	674.6	676.8	676.8
160°	647.2	653.8	653.8	652.7
162.5°	626.4	631.9	631.9	630.8
165°	608.9	613.3	612.2	612.2
167.5°	591.3	594.6	593.5	593.5
170°	576.0	578.2	577.1	577.1
172.5°	562.9	565.1	562.9	561.8
175°	551.9	553.0	551.9	550.8
177.5°	544.3	545.4	543.2	543.2
180°	541.0	541.0	541.0	541.0



TEST NUMBER: P832334

CATALOG NUMBER: S123RDIP-S775D1195U830-4F0-1E-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	11.32	12.08	12.34	13.11	14.47	15.99	16.75	17.01	17.77	19.14
	3H	12.54	13.22	13.57	14.25	15.64	17.48	18.16	18.51	19.19	20.58
	4H	12.92	13.56	13.96	14.60	15.99	17.97	18.61	19.01	19.65	21.04
	6H	13.20	13.79	14.25	14.83	16.23	18.28	18.87	19.33	19.91	21.31
	8H	13.28	13.84	14.34	14.90	16.30	18.35	18.91	19.41	19.97	21.37
	12H	13.33	13.86	14.39	14.91	16.34	18.38	18.92	19.45	19.96	21.39
4H	2H	12.04	12.68	13.09	13.72	15.11	15.97	16.62	17.02	17.65	19.05
	3H	13.40	13.93	14.46	15.00	16.40	17.63	18.16	18.68	19.22	20.63
	4H	13.85	14.34	14.92	15.40	16.83	18.23	18.72	19.29	19.77	21.20
	6H	14.22	14.64	15.29	15.71	17.14	18.66	19.08	19.74	20.16	21.58
	8H	14.34	14.73	15.42	15.80	17.24	18.79	19.18	19.87	20.25	21.69
	12H	14.42	14.77	15.51	15.85	17.30	18.85	19.21	19.94	20.29	21.73
8H	4H	14.16	14.55	15.24	15.62	17.06	18.19	18.58	19.27	19.65	21.09
	6H	14.62	14.95	15.72	16.06	17.49	18.69	19.01	19.78	20.12	21.56
	8H	14.82	15.10	15.92	16.20	17.65	18.87	19.15	19.97	20.25	21.70
	12H	14.96	15.20	16.06	16.29	17.79	18.99	19.23	20.09	20.32	21.82
12H	4H	14.17	14.52	15.26	15.61	17.05	18.14	18.49	19.23	19.58	21.02
	6H	14.68	14.97	15.79	16.06	17.52	18.66	18.94	19.76	20.04	21.49
	8H	14.90	15.15	16.00	16.24	17.73	18.85	19.10	19.96	20.19	21.68