

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: P832373

Luminaire Tested: S123RDIP-S775D365U927-4F0-1E-UDD-G4

Issue Date: 05/03/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P832373  
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-S775D365U927-4F0-1E-UDD-G4  
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 775 LUMENS PER FOOT, GRAZE OPTIC  
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: -

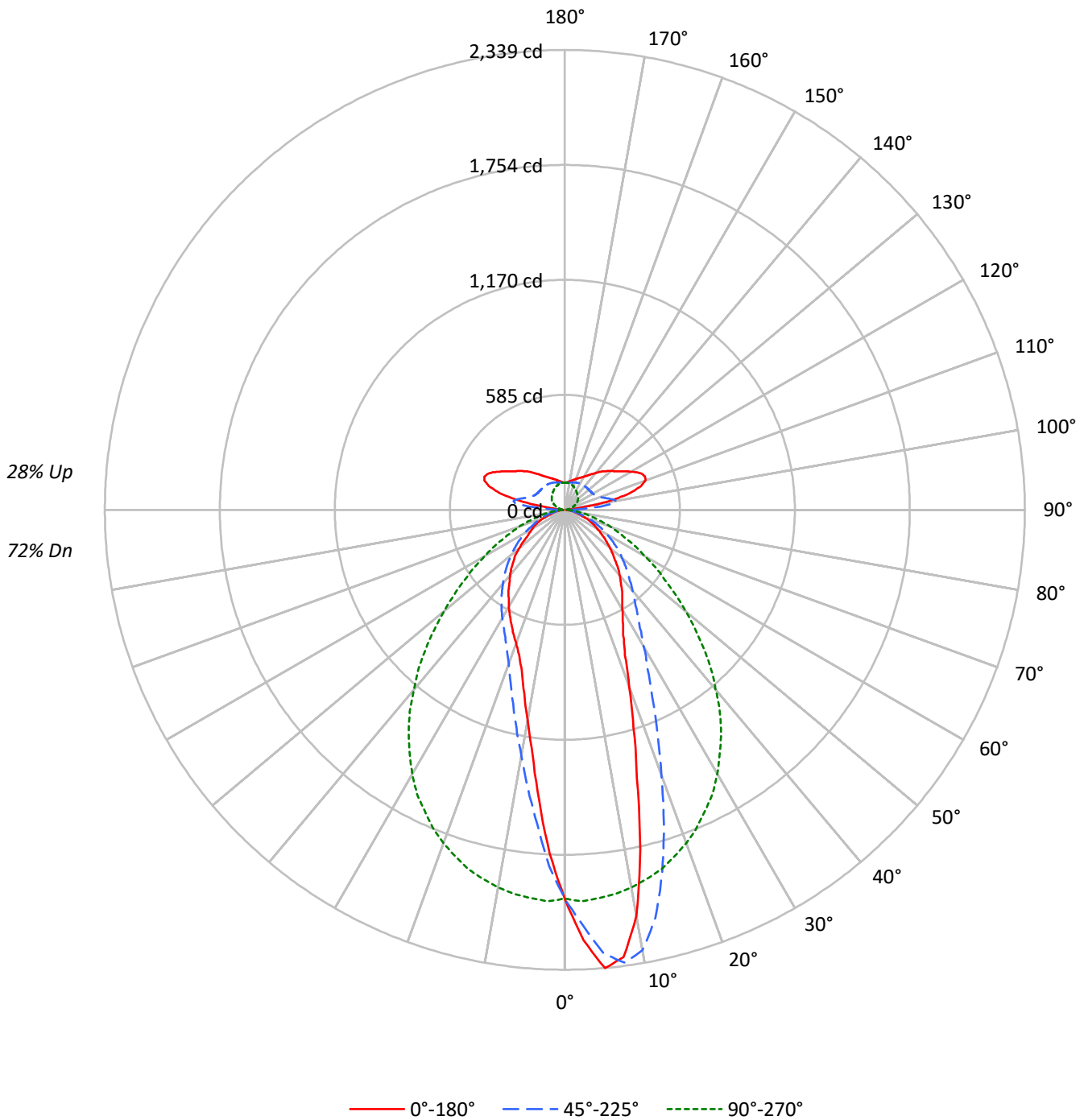
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3663.1 lumens  
Efficiency: N/A  
Efficacy: 102.0 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: Semi-Direct  
  
Input Watts (W): 35.9  
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																		
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	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	72	72	72	72	72	72	72	72	72	72	72	72																
1	104	100	96	93	98	95	92	89	85	83	81	77	75	73	69	68	66	66	63	63	63	63	63	63	63	63	63	63	63	63																
2	95	89	83	78	90	84	79	75	76	72	69	69	66	63	62	60	58	58	54	54	54	54	54	54	54	54	54	54	54	54																
3	88	79	72	67	83	75	69	64	69	64	60	62	58	55	56	53	51	51	48	48	48	48	48	48	48	48	48	48	48	48																
4	81	71	63	58	77	68	61	56	62	56	52	56	52	48	51	48	45	45	42	42	42	42	42	42	42	42	42	42	42	42																
5	75	64	56	51	71	61	54	49	56	51	46	51	47	43	47	43	40	40	38	38	38	38	38	38	38	38	38	38	38	38																
6	70	58	51	45	66	56	49	44	51	46	41	47	42	39	43	39	36	36	34	34	34	34	34	34	34	34	34	34	34	34																
7	65	53	46	40	62	51	44	39	47	41	37	44	39	35	40	36	33	33	31	31	31	31	31	31	31	31	31	31	31	31																
8	61	49	42	37	58	47	40	36	44	38	34	40	36	32	37	33	30	30	28	28	28	28	28	28	28	28	28	28	28	28																
9	57	45	38	33	55	44	37	32	41	35	31	38	33	29	35	31	28	28	26	26	26	26	26	26	26	26	26	26	26	26																
10	54	42	35	31	51	41	34	30	38	32	28	35	30	27	33	29	26	26	24	24	24	24	24	24	24	24	24	24	24	24																

**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	4.9
10°-20°	417.1	11.4
20°-30°	478.6	13.1
30°-40°	471.7	12.9
40°-50°	416.0	11.4
50°-60°	320.0	8.7
60°-70°	210.4	5.7
70°-80°	102.2	2.8
80°-90°	26.5	0.7
90°-100°	75.1	2.0
100°-110°	219.7	6.0
110°-120°	214.5	5.9
120°-130°	170.9	4.7
130°-140°	134.8	3.7
140°-150°	100.6	2.7
150°-160°	70.1	1.9
160°-170°	41.2	1.1
170°-180°	13.4	0.4
0°-30°	1076.0	29.4
0°-40°	1547.7	42.3
0°-60°	2283.7	62.3
0°-90°	2622.8	71.6
90°-120°	509.3	13.9
90°-150°	915.5	25.0
90°-180°	1040.0	28.4
0°-180°	3663.1	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°	8	7	1	7	8	5
95°	32	166	10	166	32	53
105°	356	225	32	225	356	355
115°	433	172	57	172	433	422
125°	342	161	80	161	342	309
135°	277	158	94	158	277	215
145°	216	156	107	156	216	137
155°	179	151	121	151	179	84
165°	156	145	132	145	156	45
175°	141	139	138	139	141	14
180°	138	138	138	138	138	



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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°	8.1	8.4	8.1	7.8	8.1	7.6	7.3	7.0	6.7	7.0	6.2
92.5°	14.8	15.4	15.1	16.2	16.8	18.8	21.6	27.7	38.9	52.1	57.7
95°	32.5	33.6	35.6	38.1	43.4	53.5	68.3	100.8	134.7	166.0	147.8
97.5°	66.6	69.7	76.4	87.1	105.8	137.7	174.7	231.5	264.0	255.3	190.6
100°	175.5	175.2	186.2	206.6	234.9	274.6	307.4	330.1	320.3	265.1	179.2
102.5°	278.0	286.1	294.8	309.9	330.3	351.9	367.6	362.8	323.1	246.9	162.4
105°	356.1	357.5	366.4	377.1	390.0	397.2	391.9	363.9	305.4	225.1	149.2
107.5°	407.0	410.1	413.8	418.8	420.5	412.9	391.1	347.1	280.2	205.8	139.7
110°	436.1	436.7	437.3	435.0	427.2	407.6	372.3	320.8	256.7	189.8	134.7

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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	442.0	441.7	438.9	430.8	414.9	388.3	347.7	294.8	236.3	179.2	131.9
115°	433.1	431.7	426.1	413.8	392.8	362.2	321.1	272.4	220.6	172.2	131.6
117.5°	413.5	411.5	403.1	389.4	367.6	335.9	298.1	255.0	210.2	167.4	131.9
120°	387.7	386.0	379.3	363.6	341.5	313.3	279.7	241.9	202.4	164.3	133.0
122.5°	363.6	361.4	353.8	340.1	321.1	295.3	264.8	231.5	196.0	162.4	134.9
125°	341.5	339.6	332.6	320.3	302.3	279.9	253.1	222.6	190.6	160.7	136.9
127.5°	322.5	320.8	314.4	303.7	287.5	266.8	242.1	214.4	185.6	159.8	139.1
130°	306.8	304.6	298.7	288.6	273.8	254.7	232.1	206.9	181.7	159.0	141.4
132.5°	291.4	290.0	285.0	274.9	261.2	243.3	222.6	199.9	178.0	158.7	143.1
135°	276.9	274.9	269.9	261.5	247.7	231.8	213.6	193.7	175.0	158.4	144.7
137.5°	261.5	259.8	255.6	246.9	235.2	220.9	204.6	187.8	172.2	157.9	145.8
140°	245.2	245.5	241.0	233.2	222.6	210.5	197.1	182.8	169.6	157.6	147.0
142.5°	230.1	230.4	226.5	219.8	211.1	201.0	189.8	178.0	167.4	157.0	147.8
145°	216.4	215.8	213.6	207.7	200.7	192.6	183.6	174.4	165.4	156.5	148.1
147.5°	204.6	204.4	202.1	197.9	192.3	186.4	178.9	171.3	163.5	155.6	148.1
150°	194.6	194.6	192.9	189.8	185.6	180.3	174.4	168.0	161.5	154.5	148.1
152.5°	186.2	186.2	185.3	182.5	179.4	175.2	170.2	164.9	159.3	153.1	147.2
155°	179.4	179.2	178.6	176.4	173.8	170.5	166.3	161.8	157.0	151.4	146.7
157.5°	173.0	173.0	172.4	170.8	168.5	165.7	162.4	158.4	154.5	150.0	145.8
160°	166.8	167.1	167.1	165.4	163.5	161.5	158.7	155.6	152.0	148.4	145.3
162.5°	161.2	161.5	161.5	160.1	159.0	157.3	154.8	152.3	149.5	146.7	144.2
165°	156.5	156.5	156.8	155.6	154.5	153.1	151.2	149.5	147.2	145.0	143.1
167.5°	151.7	151.7	152.0	151.2	150.6	149.5	148.4	147.0	145.0	143.3	141.9
170°	147.5	147.5	147.8	147.2	147.0	146.4	145.3	144.4	143.1	141.7	140.8
172.5°	143.6	143.9	144.4	143.9	143.9	143.6	142.8	142.2	141.1	140.3	140.0
175°	140.8	141.1	141.4	141.1	141.1	141.1	140.5	140.3	139.7	139.1	139.1
177.5°	138.9	138.9	139.4	139.1	139.4	139.4	139.1	138.9	138.6	138.3	138.6
180°	138.3	138.3	138.3	138.3	138.3	138.3	138.3	138.3	138.3	138.3	138.3



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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°	5.3	4.5	3.6	3.1	2.5	1.7	1.1	0.6	1.1	1.7	2.5
92.5°	43.1	28.3	19.3	14.3	11.5	9.0	6.2	4.2	6.2	9.0	11.5
95°	101.9	60.2	36.4	25.5	18.2	13.4	10.4	9.5	10.4	13.4	18.2
97.5°	113.4	64.9	41.4	29.4	22.1	17.9	15.4	15.1	15.4	17.9	22.1
100°	105.5	64.1	44.5	33.6	26.9	23.0	21.0	20.7	21.0	23.0	26.9
102.5°	98.8	65.2	48.1	38.4	32.5	28.8	27.2	26.6	27.2	28.8	32.5
105°	96.3	67.5	52.3	43.7	38.4	35.0	33.3	32.5	33.3	35.0	38.4
107.5°	95.7	71.1	57.7	49.5	44.5	41.2	39.5	38.6	39.5	41.2	44.5
110°	97.1	75.9	63.3	55.4	50.7	47.6	46.2	45.4	46.2	47.6	50.7





TEST NUMBER: P832373

CATALOG NUMBER: S123RDIP-S775D365U927-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	99.9	80.6	69.1	61.6	56.8	53.7	52.3	51.5	52.3	53.7	56.8
115°	103.0	85.9	75.3	67.7	63.0	60.2	58.5	57.4	58.5	60.2	63.0
117.5°	106.9	91.5	80.9	73.9	68.6	66.1	64.7	63.3	64.7	66.1	68.6
120°	111.4	96.9	86.8	79.8	74.5	71.7	70.3	69.4	70.3	71.7	74.5
122.5°	115.6	102.5	92.7	85.1	80.1	77.0	75.6	74.7	75.6	77.0	80.1
125°	120.1	107.8	98.0	90.4	85.1	82.0	80.3	79.8	80.3	82.0	85.1
127.5°	123.7	112.5	103.0	95.5	89.6	86.5	84.5	83.7	84.5	86.5	89.6
130°	127.4	116.7	107.5	99.9	94.1	90.7	88.2	87.3	88.2	90.7	94.1
132.5°	130.7	120.4	111.4	104.1	98.3	94.1	91.3	90.1	91.3	94.1	98.3
135°	133.5	124.0	115.3	107.8	101.9	97.7	94.6	93.5	94.6	97.7	101.9
137.5°	135.8	126.5	118.1	111.1	105.3	100.8	97.7	96.6	97.7	100.8	105.3
140°	137.5	129.1	120.9	113.9	108.3	103.9	101.1	99.7	101.1	103.9	108.3
142.5°	139.1	131.0	123.2	116.7	111.1	107.2	104.1	103.0	104.1	107.2	111.1
145°	140.3	132.7	125.4	119.0	114.2	110.0	107.5	106.7	107.5	110.0	114.2
147.5°	141.1	134.1	127.4	121.8	117.0	113.4	110.9	110.3	110.9	113.4	117.0
150°	141.4	135.5	129.1	124.0	120.1	116.5	114.2	113.9	114.2	116.5	120.1
152.5°	141.9	136.3	131.0	126.3	122.9	119.8	117.6	117.6	117.6	119.8	122.9
155°	141.9	137.5	132.7	128.8	125.7	122.9	121.2	121.2	121.2	122.9	125.7
157.5°	142.2	138.0	134.1	131.0	128.2	125.7	124.3	124.0	124.3	125.7	128.2
160°	142.2	138.9	135.5	132.7	130.7	128.5	127.4	127.4	127.4	128.5	130.7
162.5°	141.9	139.1	136.3	134.1	132.4	130.7	129.9	129.9	129.9	130.7	132.4
165°	141.4	139.4	137.2	135.2	134.1	132.7	132.1	132.4	132.1	132.7	134.1
167.5°	141.1	139.4	137.7	136.3	135.5	134.4	134.1	134.4	134.1	134.4	135.5
170°	140.3	139.1	137.7	137.2	136.6	135.8	135.5	136.1	135.5	135.8	136.6
172.5°	140.0	139.1	138.0	137.7	137.5	136.9	136.9	137.2	136.9	136.9	137.5
175°	139.4	138.9	138.3	138.0	138.0	137.5	137.7	138.0	137.7	137.5	138.0
177.5°	139.1	138.6	138.3	138.3	138.3	138.0	138.3	138.6	138.3	138.0	138.3
180°	138.3	138.3	138.3	138.3	138.3	138.3	138.3	138.3	138.3	138.3	138.3



TEST NUMBER: P832373

CATALOG NUMBER: S123RDIP-S775D365U927-4F0-1E-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°	3.1	3.6	4.5	5.3	6.2	7.0	6.7	7.0	7.3	7.6	8.1
92.5°	14.3	19.3	28.3	43.1	57.7	52.1	38.9	27.7	21.6	18.8	16.8
95°	25.5	36.4	60.2	101.9	147.8	166.0	134.7	100.8	68.3	53.5	43.4
97.5°	29.4	41.4	64.9	113.4	190.6	255.3	264.0	231.5	174.7	137.7	105.8
100°	33.6	44.5	64.1	105.5	179.2	265.1	320.3	330.1	307.4	274.6	234.9
102.5°	38.4	48.1	65.2	98.8	162.4	246.9	323.1	362.8	367.6	351.9	330.3
105°	43.7	52.3	67.5	96.3	149.2	225.1	305.4	363.9	391.9	397.2	390.0
107.5°	49.5	57.7	71.1	95.7	139.7	205.8	280.2	347.1	391.1	412.9	420.5
110°	55.4	63.3	75.9	97.1	134.7	189.8	256.7	320.8	372.3	407.6	427.2



TEST NUMBER: P832373

CATALOG NUMBER: S123RDIP-S775D365U927-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	61.6	69.1	80.6	99.9	131.9	179.2	236.3	294.8	347.7	388.3	414.9
115°	67.7	75.3	85.9	103.0	131.6	172.2	220.6	272.4	321.1	362.2	392.8
117.5°	73.9	80.9	91.5	106.9	131.9	167.4	210.2	255.0	298.1	335.9	367.6
120°	79.8	86.8	96.9	111.4	133.0	164.3	202.4	241.9	279.7	313.3	341.5
122.5°	85.1	92.7	102.5	115.6	134.9	162.4	196.0	231.5	264.8	295.3	321.1
125°	90.4	98.0	107.8	120.1	136.9	160.7	190.6	222.6	253.1	279.9	302.3
127.5°	95.5	103.0	112.5	123.7	139.1	159.8	185.6	214.4	242.1	266.8	287.5
130°	99.9	107.5	116.7	127.4	141.4	159.0	181.7	206.9	232.1	254.7	273.8
132.5°	104.1	111.4	120.4	130.7	143.1	158.7	178.0	199.9	222.6	243.3	261.2
135°	107.8	115.3	124.0	133.5	144.7	158.4	175.0	193.7	213.6	231.8	247.7
137.5°	111.1	118.1	126.5	135.8	145.8	157.9	172.2	187.8	204.6	220.9	235.2
140°	113.9	120.9	129.1	137.5	147.0	157.6	169.6	182.8	197.1	210.5	222.6
142.5°	116.7	123.2	131.0	139.1	147.8	157.0	167.4	178.0	189.8	201.0	211.1
145°	119.0	125.4	132.7	140.3	148.1	156.5	165.4	174.4	183.6	192.6	200.7
147.5°	121.8	127.4	134.1	141.1	148.1	155.6	163.5	171.3	178.9	186.4	192.3
150°	124.0	129.1	135.5	141.4	148.1	154.5	161.5	168.0	174.4	180.3	185.6
152.5°	126.3	131.0	136.3	141.9	147.2	153.1	159.3	164.9	170.2	175.2	179.4
155°	128.8	132.7	137.5	141.9	146.7	151.4	157.0	161.8	166.3	170.5	173.8
157.5°	131.0	134.1	138.0	142.2	145.8	150.0	154.5	158.4	162.4	165.7	168.5
160°	132.7	135.5	138.9	142.2	145.3	148.4	152.0	155.6	158.7	161.5	163.5
162.5°	134.1	136.3	139.1	141.9	144.2	146.7	149.5	152.3	154.8	157.3	159.0
165°	135.2	137.2	139.4	141.4	143.1	145.0	147.2	149.5	151.2	153.1	154.5
167.5°	136.3	137.7	139.4	141.1	141.9	143.3	145.0	147.0	148.4	149.5	150.6
170°	137.2	137.7	139.1	140.3	140.8	141.7	143.1	144.4	145.3	146.4	147.0
172.5°	137.7	138.0	139.1	140.0	140.0	140.3	141.1	142.2	142.8	143.6	143.9
175°	138.0	138.3	138.9	139.4	139.1	139.1	139.7	140.3	140.5	141.1	141.1
177.5°	138.3	138.3	138.6	139.1	138.6	138.3	138.6	138.9	139.1	139.4	139.4
180°	138.3	138.3	138.3	138.3	138.3	138.3	138.3	138.3	138.3	138.3	138.3



TEST NUMBER: P832373

CATALOG NUMBER: S123RDIP-S775D365U927-4F0-1E-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°	7.8	8.1	8.4	8.1
92.5°	16.2	15.1	15.4	14.8
95°	38.1	35.6	33.6	32.5
97.5°	87.1	76.4	69.7	66.6
100°	206.6	186.2	175.2	175.5
102.5°	309.9	294.8	286.1	278.0
105°	377.1	366.4	357.5	356.1
107.5°	418.8	413.8	410.1	407.0
110°	435.0	437.3	436.7	436.1



TEST NUMBER: P832373

CATALOG NUMBER: S123RDIP-S775D365U927-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
112.5°	430.8	438.9	441.7	442.0
115°	413.8	426.1	431.7	433.1
117.5°	389.4	403.1	411.5	413.5
120°	363.6	379.3	386.0	387.7
122.5°	340.1	353.8	361.4	363.6
125°	320.3	332.6	339.6	341.5
127.5°	303.7	314.4	320.8	322.5
130°	288.6	298.7	304.6	306.8
132.5°	274.9	285.0	290.0	291.4
135°	261.5	269.9	274.9	276.9
137.5°	246.9	255.6	259.8	261.5
140°	233.2	241.0	245.5	245.2
142.5°	219.8	226.5	230.4	230.1
145°	207.7	213.6	215.8	216.4
147.5°	197.9	202.1	204.4	204.6
150°	189.8	192.9	194.6	194.6
152.5°	182.5	185.3	186.2	186.2
155°	176.4	178.6	179.2	179.4
157.5°	170.8	172.4	173.0	173.0
160°	165.4	167.1	167.1	166.8
162.5°	160.1	161.5	161.5	161.2
165°	155.6	156.8	156.5	156.5
167.5°	151.2	152.0	151.7	151.7
170°	147.2	147.8	147.5	147.5
172.5°	143.9	144.4	143.9	143.6
175°	141.1	141.4	141.1	140.8
177.5°	139.1	139.4	138.9	138.9
180°	138.3	138.3	138.3	138.3



TEST NUMBER: P832373

CATALOG NUMBER: S123RDIP-S775D365U927-4F0-1E-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	13.21	14.21	13.97	14.98	15.91	17.87	18.88	18.63	19.65	20.58
	3H	14.44	15.34	15.21	16.12	17.08	19.38	20.28	20.16	21.06	22.03
	4H	14.83	15.68	15.62	16.47	17.44	19.88	20.73	20.67	21.52	22.49
	6H	15.12	15.90	15.92	16.70	17.68	20.20	20.98	21.00	21.78	22.76
	8H	15.21	15.95	16.02	16.77	17.76	20.28	21.02	21.10	21.84	22.83
	12H	15.27	15.97	16.09	16.78	17.80	20.32	21.03	21.14	21.84	22.85
4H	2H	13.95	14.80	14.74	15.59	16.56	17.89	18.73	18.68	19.52	20.50
	3H	15.33	16.04	16.14	16.86	17.85	19.56	20.26	20.36	21.09	22.08
	4H	15.80	16.43	16.62	17.26	18.28	20.17	20.81	20.99	21.63	22.65
	6H	16.17	16.72	17.01	17.57	18.59	20.62	21.17	21.46	22.02	23.04
	8H	16.30	16.81	17.14	17.66	18.69	20.75	21.27	21.59	22.11	23.14
	12H	16.38	16.84	17.24	17.71	18.75	20.82	21.28	21.68	22.15	23.19
8H	4H	16.12	16.63	16.96	17.48	18.51	20.15	20.66	20.99	21.51	22.54
	6H	16.59	17.01	17.46	17.90	18.94	20.65	21.08	21.52	21.96	23.00
	8H	16.78	17.16	17.66	18.04	19.09	20.84	21.21	21.72	22.10	23.15
	12H	16.93	17.26	17.81	18.13	19.24	20.96	21.29	21.84	22.16	23.27
12H	4H	16.14	16.60	17.00	17.47	18.50	20.11	20.57	20.97	21.43	22.47
	6H	16.65	17.02	17.53	17.91	18.96	20.63	21.00	21.51	21.88	22.94
	8H	16.88	17.21	17.76	18.08	19.19	20.83	21.16	21.71	22.03	23.14