

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: P832449

Luminaire Tested: S123RDP-S1165D830-4F0-1E-UDD-G

Issue Date: 05/03/2024

Tested By:

Approved By:



NVLAP Lab Code: 200050-0

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Test Information

Test Method: LM-79-2019
 Report Number: P832449
 Test Lab: INNOVATION CENTER
 Issue Date: 05/03/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: NEO-RAY
 Catalog Number: S123RDP-S1165D830-4F0-1E-UDD-G
 Description: DEFINE 3 DIRECT PENDANT LED LUMINAIRE
 DOWNLIGHT 1165 LUMENS PER FOOT, GRAZE OPTIC

Light Source: -
 Ballast/Driver: -

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 4683.5 lumens
 Efficiency: N/A
 Efficacy: 111.0 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: Direct

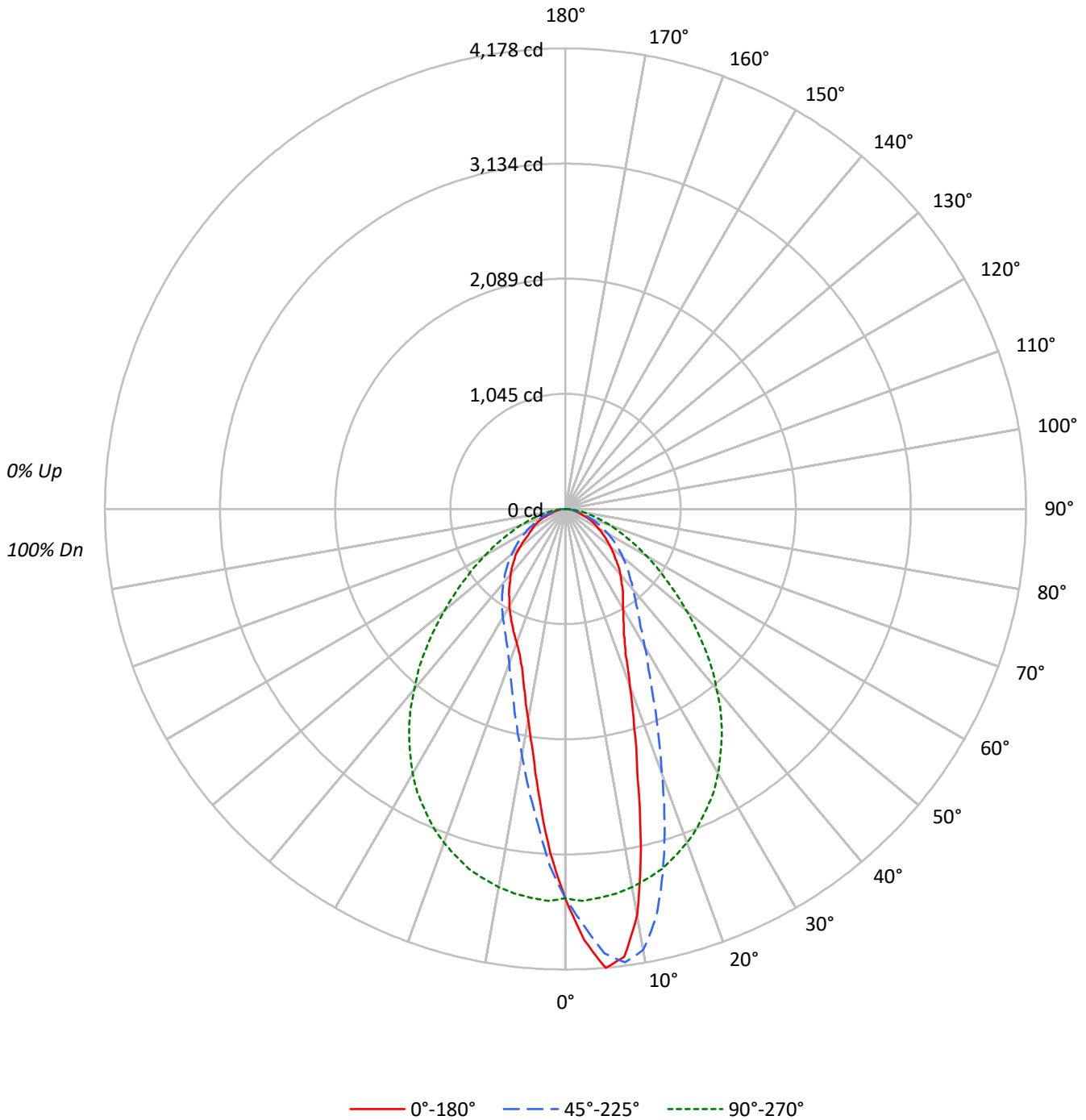
Input Watts (W): 42.2
 Input Voltage (V): 120
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 24 FT

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	P3	10/30/2015	4/30/2016
Power Meter	IN0214	1/12/2016	1/12/2017
AC Power Source	IN0062	1/12/2016	1/12/2017
DC Power Supply	--	--	--
Room Thermometer	IN0145	1/13/2016	1/13/2017

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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	69	67				
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59				
5	82	70	62	56	80	69	62	56	67	61	56	65	60	55	63	58	54	53				
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47				
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43				
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	51	45	41	39				
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36				
10	60	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	38022	38022	38022	38022	38022
5°	45148	43707	38262	30930	28717
10°	40904	44395	38071	24782	21260
15°	28163	38066	37670	20255	16817
20°	19593	29306	36913	17079	14781
25°	14930	22335	35813	15180	13624
30°	12997	17857	34436	14095	12619
35°	11933	15063	32487	13180	11704
40°	10887	13451	29936	12282	10867
45°	9832	12303	27184	11432	10032
50°	8925	11350	23938	10598	8997
55°	8071	10423	20819	9785	7719
60°	7233	9479	18083	8887	7296
65°	6676	8410	15567	7987	6897
70°	5423	7270	13583	7226	5605
75°	4758	5781	11503	5993	4941
80°	4308	4891	9428	5027	4668
85°	3940	4298	7151	4557	4298

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 80°
 Vertical Angle: 45°
 Luminance: 28684 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.0	6.9
10°-20°	745.0	15.9
20°-30°	854.8	18.3
30°-40°	842.6	18.0
40°-50°	743.0	15.9
50°-60°	571.6	12.2
60°-70°	375.8	8.0
70°-80°	182.5	3.9
80°-90°	46.0	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1921.9	41.0
0°-40°	2764.4	59.0
0°-60°	4079.1	87.1
0°-90°	4683.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4683.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3532	3532	3532	3532	3532	
5°	4178	4045	3541	2863	2658	382
15°	2527	3416	3380	1818	1509	713
25°	1257	1881	3015	1278	1147	594
35°	908	1146	2472	1003	891	566
45°	646	808	1786	751	659	501
55°	430	555	1109	521	411	386
65°	262	330	611	314	271	257
75°	114	139	277	144	119	123
85°	32	35	58	37	35	36
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4
2.5°	3914.8	3902.5	3890.2	3886.6	3882.9	3871.3	3859.8	3833.7	3807.6	3780.8	3754.0
5°	4178.4	4179.8	4181.3	4177.7	4174.0	4158.8	4143.6	4111.8	4079.9	4045.1	4010.4
7.5°	4097.3	4120.5	4143.6	4148.0	4152.3	4163.9	4175.5	4168.2	4161.0	4148.0	4134.9
10°	3742.4	3741.0	3739.5	3765.6	3791.7	3869.2	3946.7	3986.5	4026.3	4061.8	4097.3
12.5°	3163.1	3165.3	3167.5	3252.9	3338.4	3411.5	3484.6	3586.0	3687.4	3796.8	3906.1
15°	2527.3	2562.8	2598.3	2674.3	2750.3	2860.4	2970.5	3106.6	3242.8	3415.9	3588.9
17.5°	2075.4	2090.6	2105.8	2179.0	2252.1	2356.4	2460.7	2614.9	2769.2	2992.2	3215.3
20°	1710.5	1724.2	1738.0	1790.8	1843.7	1943.6	2043.6	2190.6	2337.6	2558.4	2779.3
22.5°	1428.0	1454.8	1481.6	1517.1	1552.6	1625.0	1697.4	1847.3	1997.2	2198.5	2399.9
25°	1257.1	1269.4	1281.8	1312.2	1342.6	1412.1	1481.6	1580.8	1680.0	1880.6	2081.2
27.5°	1141.3	1144.9	1148.5	1171.0	1193.4	1238.3	1283.2	1375.2	1467.1	1632.3	1797.4
30°	1045.7	1052.2	1058.7	1076.1	1093.5	1126.1	1158.7	1223.8	1289.0	1436.7	1584.5
32.5°	971.8	975.4	979.1	993.5	1008.0	1031.9	1055.8	1107.2	1158.7	1271.6	1384.6
35°	908.1	908.8	909.5	920.4	931.3	954.4	977.6	1020.3	1063.1	1146.3	1229.6
37.5°	835.7	840.7	845.8	853.8	861.7	882.0	902.3	937.1	971.8	1040.6	1109.4
40°	774.8	779.2	783.5	793.0	802.4	818.3	834.2	866.1	898.0	957.3	1016.7
42.5°	714.0	716.9	719.8	729.2	738.6	758.2	777.7	803.1	828.4	877.7	926.9
45°	645.9	653.2	660.4	670.6	680.7	697.4	714.0	740.1	766.2	808.2	850.2
47.5°	589.5	593.1	596.7	605.4	614.1	634.4	654.6	677.8	701.0	740.1	779.2
50°	533.0	534.4	535.9	543.8	551.8	569.9	588.0	614.8	641.6	677.8	714.0
52.5°	479.4	483.0	486.6	494.6	502.6	514.9	527.2	554.7	582.2	617.7	653.2
55°	430.1	432.3	434.5	440.3	446.1	460.6	475.0	498.9	522.8	555.4	588.0
57.5°	383.8	386.7	389.6	393.9	398.3	411.3	424.4	445.4	466.4	498.9	531.5
60°	336.0	339.6	343.3	348.3	353.4	363.5	373.7	392.5	411.3	440.3	469.3
62.5°	301.2	302.0	302.7	307.0	311.4	318.6	325.9	341.1	356.3	385.3	414.2
65°	262.1	264.3	266.5	268.7	270.8	276.6	282.4	295.5	308.5	330.2	351.9
67.5°	221.6	223.8	225.9	229.6	233.2	238.2	243.3	252.0	260.7	281.0	301.2
70°	172.3	172.3	172.3	178.1	183.9	192.6	201.3	207.8	214.4	231.0	247.7
72.5°	140.5	141.2	141.9	142.7	143.4	148.5	153.5	164.4	175.2	185.4	195.5
75°	114.4	115.1	115.9	116.6	117.3	118.8	120.2	123.8	127.5	139.0	150.6
77.5°	91.2	92.0	92.7	93.4	94.1	95.6	97.0	98.5	99.9	104.3	108.6
80°	69.5	70.2	71.0	71.7	72.4	73.1	73.9	75.3	76.8	78.9	81.1
82.5°	50.7	50.7	50.7	50.7	50.7	52.1	53.6	53.6	53.6	55.0	56.5
85°	31.9	31.9	31.9	32.6	33.3	33.3	33.3	34.0	34.8	34.8	34.8
87.5°	14.5	13.8	13.0	13.8	14.5	14.5	14.5	15.2	15.9	15.9	15.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4
2.5°	3750.4	3746.8	3712.0	3677.3	3643.2	3609.2	3583.9	3558.5	3515.8	3473.1	3446.3
5°	3982.9	3955.3	3900.3	3845.3	3762.7	3680.2	3610.6	3541.1	3452.8	3364.4	3290.6
7.5°	4112.5	4090.0	4023.4	3956.8	3847.4	3738.1	3629.5	3520.9	3390.5	3260.2	3148.6
10°	4116.1	4134.9	4079.9	4024.9	3901.8	3778.7	3630.9	3483.2	3308.0	3132.7	2988.6
12.5°	3987.2	4068.3	4056.7	4045.1	3919.9	3794.6	3615.0	3435.4	3220.3	3005.3	2824.9
15°	3746.1	3903.2	3949.6	3995.9	3892.3	3788.8	3584.6	3380.4	3127.6	2874.9	2667.8
17.5°	3435.4	3655.5	3777.9	3900.3	3825.0	3749.7	3525.9	3302.2	3017.6	2733.0	2507.8
20°	3067.5	3355.7	3547.6	3739.5	3712.0	3684.5	3453.5	3222.5	2915.5	2608.4	2364.4
22.5°	2704.0	3008.1	3273.2	3538.2	3566.5	3594.7	3361.5	3128.4	2792.4	2456.3	2208.0
25°	2390.4	2699.7	3015.4	3331.1	3394.8	3458.6	3237.0	3015.4	2667.1	2318.8	2071.8
27.5°	2091.4	2385.4	2733.0	3080.6	3196.4	3312.3	3109.5	2906.8	2544.0	2181.2	1934.9
30°	1847.3	2110.2	2465.0	2819.9	2981.4	3142.8	2956.7	2770.6	2410.7	2050.8	1809.7
32.5°	1619.9	1855.3	2211.6	2567.9	2755.4	2943.0	2782.2	2621.4	2275.3	1929.2	1690.9
35°	1440.3	1651.1	1983.5	2315.9	2525.9	2735.9	2604.1	2472.3	2134.1	1795.9	1570.7
37.5°	1286.1	1462.8	1774.9	2087.0	2310.1	2533.1	2423.0	2313.0	1995.1	1677.1	1464.2
40°	1158.7	1300.6	1591.0	1881.4	2100.1	2318.8	2224.6	2130.5	1845.9	1561.3	1362.1
42.5°	1049.3	1171.7	1432.4	1693.1	1893.7	2094.3	2032.0	1969.7	1711.9	1454.1	1269.4
45°	953.0	1055.8	1285.4	1514.9	1699.6	1884.3	1835.0	1785.8	1563.5	1341.1	1171.7
47.5°	867.5	955.9	1160.8	1365.8	1531.6	1697.4	1651.8	1606.2	1422.2	1238.3	1084.1
50°	789.3	864.6	1035.5	1206.4	1355.6	1504.8	1467.1	1429.5	1277.4	1125.3	992.1
52.5°	715.5	777.7	931.3	1084.8	1205.0	1325.2	1296.2	1267.3	1150.0	1032.6	911.7
55°	645.2	702.4	832.1	961.7	1064.5	1167.3	1138.4	1109.4	1018.2	926.9	820.5
57.5°	581.5	631.5	736.5	841.5	923.3	1005.1	991.4	977.6	901.6	825.5	737.9
60°	514.2	559.0	649.6	740.1	806.0	871.9	856.0	840.0	785.7	731.4	656.1
62.5°	454.0	493.9	566.3	638.7	692.3	745.9	734.3	722.7	681.4	640.2	577.9
65°	391.0	430.1	488.8	547.5	589.5	631.5	621.3	611.2	580.1	548.9	498.9
67.5°	333.8	366.4	417.1	467.8	496.0	524.3	518.5	512.7	488.8	464.9	425.8
70°	275.9	304.1	346.1	388.1	407.7	427.3	429.4	431.6	409.9	388.1	359.2
72.5°	218.0	240.4	279.5	318.6	333.8	349.0	348.3	347.6	334.6	321.5	295.5
75°	167.3	183.9	214.4	244.8	257.8	270.8	273.7	276.6	264.3	252.0	237.5
77.5°	120.2	131.8	155.0	178.1	192.6	207.1	208.6	210.0	204.2	198.4	184.7
80°	84.7	88.3	102.8	117.3	132.5	147.7	149.9	152.1	146.3	140.5	131.8
82.5°	58.7	60.8	65.9	71.0	83.3	95.6	98.5	101.4	98.5	95.6	86.2
85°	35.5	36.2	38.4	40.6	46.3	52.1	55.0	57.9	56.5	55.0	50.0
87.5°	15.9	15.9	16.7	17.4	18.8	20.3	23.9	27.5	25.3	23.2	21.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4	3532.4
2.5°	3419.5	3378.2	3336.9	3307.2	3277.5	3240.6	3203.7	3202.2	3200.8	3173.3	3145.7
5°	3216.7	3145.0	3073.3	3003.1	2932.8	2862.6	2792.4	2776.4	2760.5	2736.6	2712.7
7.5°	3037.1	2922.7	2808.3	2718.5	2628.7	2558.4	2488.2	2440.4	2392.6	2355.7	2318.8
10°	2844.5	2702.6	2560.6	2452.0	2343.4	2267.3	2191.3	2136.3	2081.2	2055.2	2029.1
12.5°	2644.6	2490.4	2336.1	2229.7	2123.2	2032.0	1940.7	1890.8	1840.8	1804.6	1768.4
15°	2460.7	2294.9	2129.0	2016.1	1903.1	1817.6	1732.2	1682.2	1632.3	1596.0	1559.8
17.5°	2282.5	2115.3	1948.0	1833.6	1719.1	1641.7	1564.2	1515.7	1467.1	1444.7	1422.2
20°	2120.3	1951.6	1782.9	1675.0	1567.1	1491.0	1415.0	1388.9	1362.9	1341.9	1320.9
22.5°	1959.6	1797.4	1635.1	1531.6	1428.0	1373.0	1318.0	1297.0	1276.0	1260.0	1244.1
25°	1824.9	1663.4	1501.9	1411.4	1320.9	1278.1	1235.4	1221.7	1207.9	1192.0	1176.0
27.5°	1688.7	1535.2	1381.7	1309.3	1236.9	1202.1	1167.3	1150.0	1132.6	1119.5	1106.5
30°	1568.5	1426.6	1284.7	1224.6	1164.4	1134.0	1103.6	1084.8	1066.0	1053.6	1041.3
32.5°	1452.7	1326.7	1200.7	1149.2	1097.8	1068.1	1038.4	1020.3	1002.2	987.8	973.3
35°	1345.5	1236.1	1126.8	1079.7	1032.6	1003.0	973.3	955.2	937.1	922.6	908.1
37.5°	1251.3	1152.1	1052.9	1008.8	964.6	938.5	912.4	893.6	874.8	859.6	844.4
40°	1163.0	1075.4	987.8	945.0	902.3	874.1	845.8	829.2	812.5	798.7	785.0
42.5°	1084.8	1004.4	924.0	882.0	840.0	813.2	786.4	766.9	747.3	739.4	731.4
45°	1002.2	931.3	860.3	819.7	779.2	751.0	722.7	706.1	689.4	682.2	674.9
47.5°	929.8	863.9	798.0	758.2	718.4	693.0	667.7	654.6	641.6	631.5	621.3
50°	858.9	795.1	731.4	693.0	654.6	632.9	611.2	595.3	579.3	572.1	564.8
52.5°	790.8	732.8	674.9	635.8	596.7	575.7	554.7	540.9	527.2	512.0	496.8
55°	714.0	663.3	612.6	577.9	543.1	521.4	499.7	483.7	467.8	451.9	435.9
57.5°	650.3	600.3	550.4	519.2	488.1	467.1	446.1	428.7	411.3	398.3	385.3
60°	580.8	537.3	493.9	463.5	433.0	412.8	392.5	375.8	359.2	352.7	346.1
62.5°	515.6	475.0	434.5	407.7	380.9	361.4	341.8	330.9	320.1	315.7	311.4
65°	449.0	414.2	379.5	354.8	330.2	313.6	296.9	291.8	286.8	283.1	279.5
67.5°	386.7	357.0	327.3	305.6	283.9	272.3	260.7	254.9	249.1	244.8	240.4
70°	330.2	304.1	278.1	259.2	240.4	229.6	218.7	213.6	208.6	200.6	192.6
72.5°	269.4	249.1	228.8	214.4	199.9	190.5	181.0	170.9	160.8	153.5	146.3
75°	223.0	202.8	182.5	168.7	155.0	144.1	133.2	129.6	126.0	123.8	121.7
77.5°	170.9	153.5	136.1	125.3	114.4	109.3	104.3	102.1	99.9	99.2	98.5
80°	123.1	108.6	94.1	88.3	82.6	81.1	79.7	78.2	76.8	76.0	75.3
82.5°	76.8	69.5	62.3	60.8	59.4	58.7	57.9	57.2	56.5	55.8	55.0
85°	44.9	42.0	39.1	38.4	37.7	36.9	36.2	36.2	36.2	36.2	36.2
87.5°	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.1	17.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3532.4	3532.4	3532.4	3532.4
2.5°	3138.5	3131.3	3128.4	3125.5
5°	2690.2	2667.8	2662.7	2657.7
7.5°	2309.3	2299.9	2268.8	2237.6
10°	2000.1	1971.2	1958.1	1945.1
12.5°	1741.6	1714.8	1710.5	1706.1
15°	1541.0	1522.2	1515.7	1509.1
17.5°	1409.2	1396.2	1388.2	1380.2
20°	1311.4	1302.0	1296.2	1290.4
22.5°	1236.9	1229.6	1225.3	1220.9
25°	1165.2	1154.3	1150.7	1147.1
27.5°	1097.1	1087.7	1084.1	1080.4
30°	1033.4	1025.4	1020.3	1015.3
32.5°	963.9	954.4	951.5	948.6
35°	902.3	896.5	893.6	890.7
37.5°	837.1	829.9	825.5	821.2
40°	781.4	777.7	775.6	773.4
42.5°	724.9	718.4	717.6	716.9
45°	668.4	661.9	660.4	659.0
47.5°	615.5	609.7	609.0	608.3
50°	556.9	548.9	543.1	537.3
52.5°	489.5	482.3	477.2	472.2
55°	428.0	420.0	415.7	411.3
57.5°	381.6	378.0	375.8	373.7
60°	344.0	341.8	340.4	338.9
62.5°	309.2	307.0	307.0	307.0
65°	277.4	275.2	273.0	270.8
67.5°	236.1	231.7	231.0	230.3
70°	186.1	179.6	178.9	178.1
72.5°	145.6	144.8	143.4	141.9
75°	120.2	118.8	118.8	118.8
77.5°	97.0	95.6	95.6	95.6
80°	74.6	73.9	74.6	75.3
82.5°	55.0	55.0	54.3	53.6
85°	35.5	34.8	34.8	34.8
87.5°	17.4	17.4	17.4	17.4
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P832449

CATALOG NUMBER: S123RDP-S1165D830-4F0-1E-UDD-G

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	17.35	18.80	17.71	19.11	19.43	22.01	23.47	22.37	23.78	24.09
	3H	18.61	19.91	18.99	20.24	20.60	23.55	24.85	23.93	25.18	25.55
	4H	19.02	20.24	19.42	20.59	20.97	24.07	25.29	24.47	25.64	26.02
	6H	19.33	20.45	19.74	20.82	21.21	24.41	25.53	24.82	25.90	26.29
	8H	19.43	20.50	19.86	20.89	21.29	24.50	25.57	24.93	25.96	26.37
	12H	19.50	20.52	19.93	20.91	21.34	24.55	25.58	24.98	25.96	26.39
4H	2H	18.14	19.36	18.54	19.71	20.09	22.07	23.29	22.47	23.64	24.02
	3H	19.56	20.57	19.97	20.97	21.37	23.78	24.79	24.19	25.19	25.60
	4H	20.03	20.94	20.47	21.36	21.80	24.41	25.32	24.84	25.73	26.17
	6H	20.43	21.22	20.89	21.66	22.13	24.88	25.67	25.34	26.11	26.57
	8H	20.57	21.30	21.03	21.75	22.22	25.02	25.76	25.49	26.20	26.67
	12H	20.67	21.33	21.15	21.81	22.28	25.11	25.76	25.59	26.24	26.72
8H	4H	20.39	21.12	20.85	21.57	22.04	24.42	25.15	24.88	25.60	26.07
	6H	20.87	21.48	21.37	21.97	22.45	24.93	25.54	25.43	26.03	26.51
	8H	21.07	21.61	21.58	22.12	22.61	25.12	25.66	25.64	26.17	26.66
	12H	21.23	21.71	21.74	22.20	22.77	25.26	25.74	25.78	26.23	26.80
12H	4H	20.43	21.08	20.91	21.56	22.03	24.40	25.05	24.88	25.53	26.00
	6H	20.93	21.47	21.45	21.99	22.48	24.91	25.45	25.43	25.96	26.45
	8H	21.18	21.66	21.69	22.15	22.72	25.13	25.61	25.64	26.10	26.67