

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P644401

Luminaire Tested: CRQ4DIP-SR4F0-75D125U835-FLLFLL-1DUDD-WW

Issue Date: 2/20/2023



Test Information

Test Method: LM-79-2019
Report Number: P644401
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2206-689-28, G2-2206-689-14)
Test Lab: INNOVATION CENTER
Issue Date: 2/20/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: CRQ4DIP-SR4F0-75D125U835-FLLFLL-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - CURVED FROSTED LENS - 750 LUMENS PER FOOT
UPLIGHT - CURVED FROSTED LENS - 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

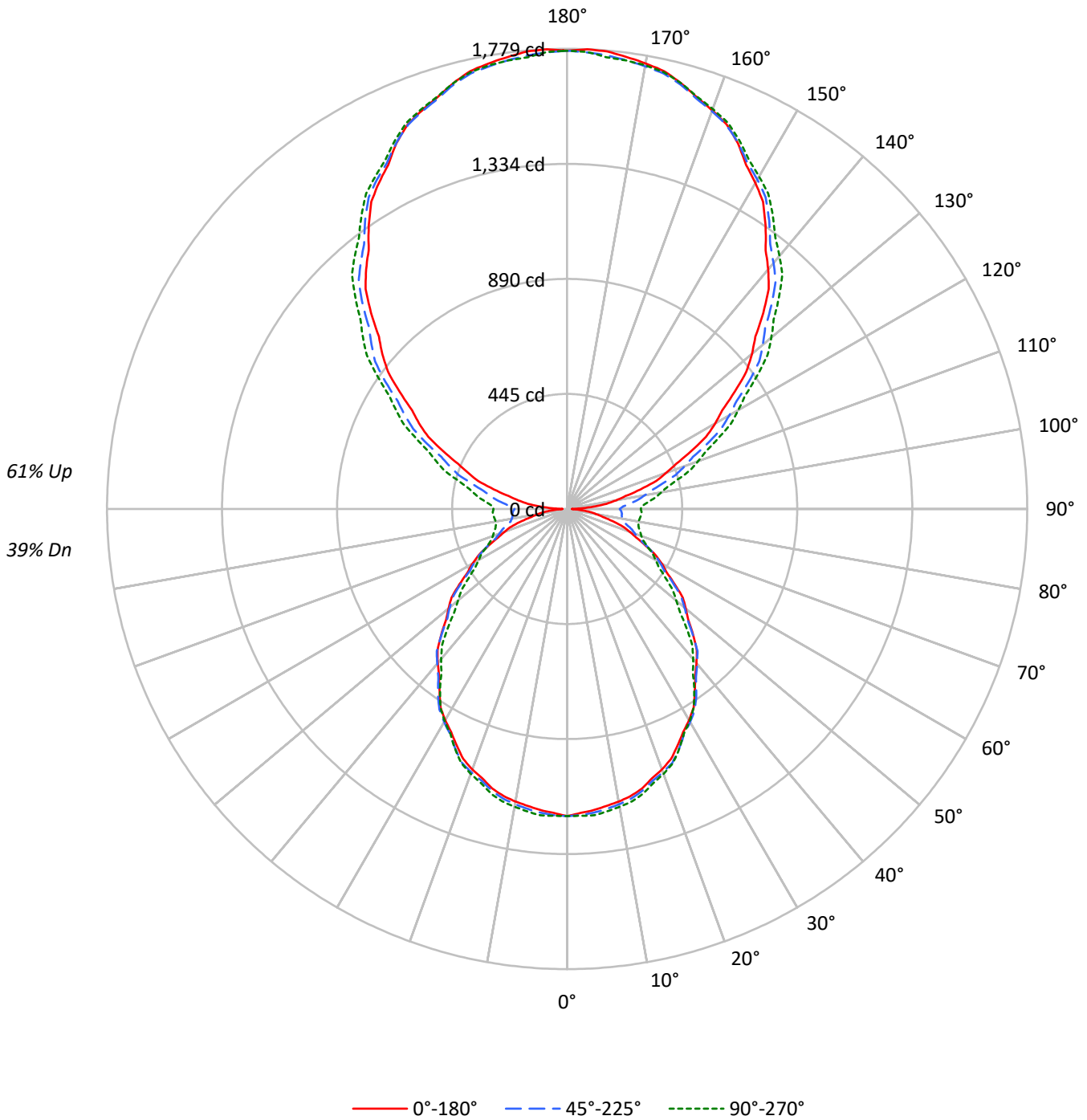
Lumens per Lamp: N/A
Luminaire Lumens: 8292.5 lumens
Efficiency: N/A
Efficacy: 138.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.33')
CIE Type: Semi-Indirect

Input Watts (W): 60
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	90	86	82	86	82	78	75	66	64	62	52	51	49	39	38	37
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	34	33	31
3	78	69	61	56	71	63	56	51	51	46	43	40	37	34	30	28	26
4	72	61	53	47	65	55	49	43	45	40	36	36	32	29	27	25	23
5	66	54	46	40	59	49	42	37	41	35	31	32	28	25	25	22	20
6	60	48	40	35	55	44	37	32	36	31	27	29	25	22	22	20	17
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	20	18	16
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	19	16	14
9	48	36	29	24	44	33	27	22	28	22	19	22	18	16	17	15	13
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19168	19168	19168
5°	18806	16924	16400
10°	18559	15082	14167
15°	18288	13507	12392
20°	17869	12118	10838
25°	17311	10802	9444
30°	16763	9583	8197
35°	16020	8450	7036
40°	15328	7367	5965
45°	14526	6334	4978
50°	13678	5401	4083
55°	12782	4535	3388
60°	11925	3758	2850
65°	10871	3115	2464
70°	9857	2605	2220
75°	8617	2295	2115
80°	7198	2158	2115
85°	5247	2208	2228

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14526 cd/sqm



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CATALOG NUMBER: CRQ4DIP-SR4F0-75D125U835-FLLFLL-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	1.4
10°-20°	318.3	3.8
20°-30°	470.0	5.7
30°-40°	541.2	6.5
40°-50°	525.3	6.3
50°-60°	444.6	5.4
60°-70°	340.8	4.1
70°-80°	252.9	3.0
80°-90°	208.8	2.5
90°-100°	247.9	3.0
100°-110°	399.1	4.8
110°-120°	588.8	7.1
120°-130°	761.8	9.2
130°-140°	861.8	10.4
140°-150°	851.5	10.3
150°-160°	720.3	8.7
160°-170°	479.6	5.8
170°-180°	167.7	2.0
0°-30°	900.4	10.9
0°-40°	1441.6	17.4
0°-60°	2411.5	29.1
0°-90°	3214.0	38.8
90°-120°	1235.9	14.9
90°-150°	3711.0	44.8
90°-180°	5079.0	61.2
0°-180°	8292.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1187	1187	1187	1187	1187	
5°	1169	1190	1179	1181	1189	111
15°	1118	1138	1127	1130	1139	315
25°	1010	1030	1023	1018	1024	465
35°	860	879	871	857	857	539
45°	689	701	686	664	654	531
55°	508	522	500	472	464	456
65°	335	348	339	340	341	334
75°	181	196	239	276	287	194
85°	55	111	213	270	287	59
90°	18	96	203	265	285	16
95°	101	138	244	303	316	102
105°	293	309	383	435	444	313
115°	529	552	598	634	643	525
125°	791	819	857	888	895	709
135°	1072	1096	1117	1146	1158	826
145°	1337	1354	1362	1371	1386	835
155°	1561	1570	1563	1565	1574	717
165°	1704	1711	1698	1693	1704	480
175°	1775	1783	1760	1753	1753	168
180°	1772	1772	1772	1772	1772	

TEST NUMBER: P644401

CATALOG NUMBER: CRQ4DIP-SR4F0-75D125U835-FLLFLL-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1187.2	<i>1187.2</i>	1187.2	1187.2	1187.2
2.5°	1176.5	<i>1193.5</i>	1184.7	1185.9	1187.2
5°	1168.8	<i>1190.1</i>	1178.8	1180.7	1188.9
7.5°	1158.0	<i>1179.2</i>	1169.6	1170.0	1179.5
10°	1148.6	<i>1168.3</i>	1158.9	1160.6	1168.8
12.5°	1136.6	<i>1157.9</i>	1146.7	1149.8	1158.0
15°	1118.5	<i>1138.5</i>	1127.0	1130.4	1138.6
17.5°	1091.6	<i>1111.2</i>	1100.9	1101.9	1110.1
20°	1071.5	<i>1089.7</i>	1083.4	1081.7	1089.9
22.5°	1047.4	<i>1066.9</i>	1062.0	1056.3	1065.8
25°	1009.5	<i>1029.5</i>	1022.9	1018.0	1024.5
27.5°	971.9	<i>990.6</i>	980.5	973.3	978.3
30°	942.4	<i>960.8</i>	951.2	942.5	947.4
32.5°	910.2	<i>930.1</i>	919.0	908.9	911.2
35°	860.2	<i>878.9</i>	870.9	856.9	856.9
37.5°	812.9	<i>828.8</i>	817.8	801.8	798.2
40°	778.1	<i>795.2</i>	781.6	762.8	757.9
42.5°	741.8	<i>759.0</i>	745.6	723.9	716.3
45°	689.2	<i>701.3</i>	686.0	663.8	654.0
47.5°	634.9	<i>648.7</i>	628.4	603.4	591.6
50°	598.6	<i>612.3</i>	592.5	563.1	550.0
52.5°	563.8	<i>576.3</i>	554.8	524.4	514.1
55°	508.1	<i>522.0</i>	500.1	471.6	464.2
57.5°	456.1	<i>469.7</i>	446.7	428.6	421.2
60°	422.6	<i>434.8</i>	413.3	399.9	394.0
62.5°	385.0	<i>398.7</i>	380.1	375.3	372.3
65°	335.4	<i>348.0</i>	339.1	340.1	341.1
67.5°	288.8	<i>299.8</i>	300.6	314.1	319.0
70°	256.6	<i>267.6</i>	278.5	299.0	305.4
72.5°	227.0	<i>238.2</i>	262.2	288.3	295.9
75°	181.1	<i>195.8</i>	239.0	275.6	287.0
77.5°	140.9	<i>158.1</i>	223.7	268.4	281.9
80°	114.0	<i>139.8</i>	217.1	265.9	280.8
82.5°	89.9	<i>124.1</i>	213.0	267.7	282.6
85°	55.3	<i>110.9</i>	212.6	270.4	287.0
87.5°	27.8	<i>101.8</i>	209.3	269.3	288.0
90°	18.2	<i>95.7</i>	203.3	264.6	284.6
92.5°	49.1	<i>107.7</i>	216.6	276.3	291.8
95°	101.4	<i>138.4</i>	244.0	303.0	315.7
97.5°	153.6	<i>179.1</i>	277.9	333.0	345.3
100°	191.3	<i>211.0</i>	304.1	357.8	368.5
102.5°	232.0	<i>247.4</i>	334.8	385.6	397.9
105°	293.2	<i>309.1</i>	382.6	434.7	443.5
107.5°	361.2	<i>378.1</i>	440.6	489.9	499.3
110°	406.5	<i>427.7</i>	482.9	527.9	538.7

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CATALOG NUMBER: CRQ4DIP-SR4F0-75D125U835-FLLFLL-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	456.1	477.3	526.5	568.8	579.7
115°	528.9	551.8	597.6	633.6	642.7
117.5°	605.1	629.2	671.0	704.9	713.7
120°	660.9	683.4	723.8	756.2	763.5
122.5°	710.6	736.2	776.5	808.8	816.2
125°	790.9	818.9	857.3	887.8	895.2
127.5°	873.5	900.5	935.9	966.8	976.4
130°	932.4	956.3	987.1	1019.5	1030.6
132.5°	986.8	1010.7	1038.4	1070.7	1083.2
135°	1071.9	1095.8	1117.1	1145.6	1158.4
137.5°	1153.5	1176.7	1193.0	1215.6	1231.8
140°	1209.2	1229.4	1241.2	1262.2	1276.9
142.5°	1260.4	1280.6	1289.3	1307.3	1322.0
145°	1337.1	1353.6	1361.5	1371.3	1386.0
147.5°	1408.9	1425.1	1428.5	1437.0	1446.2
150°	1455.6	1470.3	1470.6	1474.6	1483.8
152.5°	1499.2	1512.4	1508.2	1510.7	1521.4
155°	1560.9	1570.1	1562.8	1564.8	1574.0
157.5°	1609.8	1619.0	1607.5	1611.1	1618.4
160°	1639.9	1649.0	1636.1	1638.1	1645.5
162.5°	1668.4	1674.7	1663.2	1660.8	1671.1
165°	1703.8	1711.1	1698.2	1692.8	1703.8
167.5°	1733.9	1741.2	1724.1	1718.3	1729.4
170°	1748.9	1756.3	1737.6	1730.4	1741.4
172.5°	1762.5	1769.8	1749.7	1740.8	1748.9
175°	1775.3	1782.6	1760.2	1752.7	1752.7
177.5°	1779.0	1783.4	1767.0	1759.7	1768.5
180°	1771.5	1771.5	1771.5	1771.5	1771.5

(END OF REPORT)