

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: P644299

Luminaire Tested: CRQ4DIP-SR4F0-125D50U935-FLLFLL-1DUDD-WW

Issue Date: 2/20/2023



Test Information

Test Method: LM-79-2019
Report Number: P644299
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-SR4F0-125D50U935-FLLFLL-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - CURVED FROSTED LENS - 1250 LUMENS PER FOOT
UPLIGHT - CURVED FROSTED LENS - 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

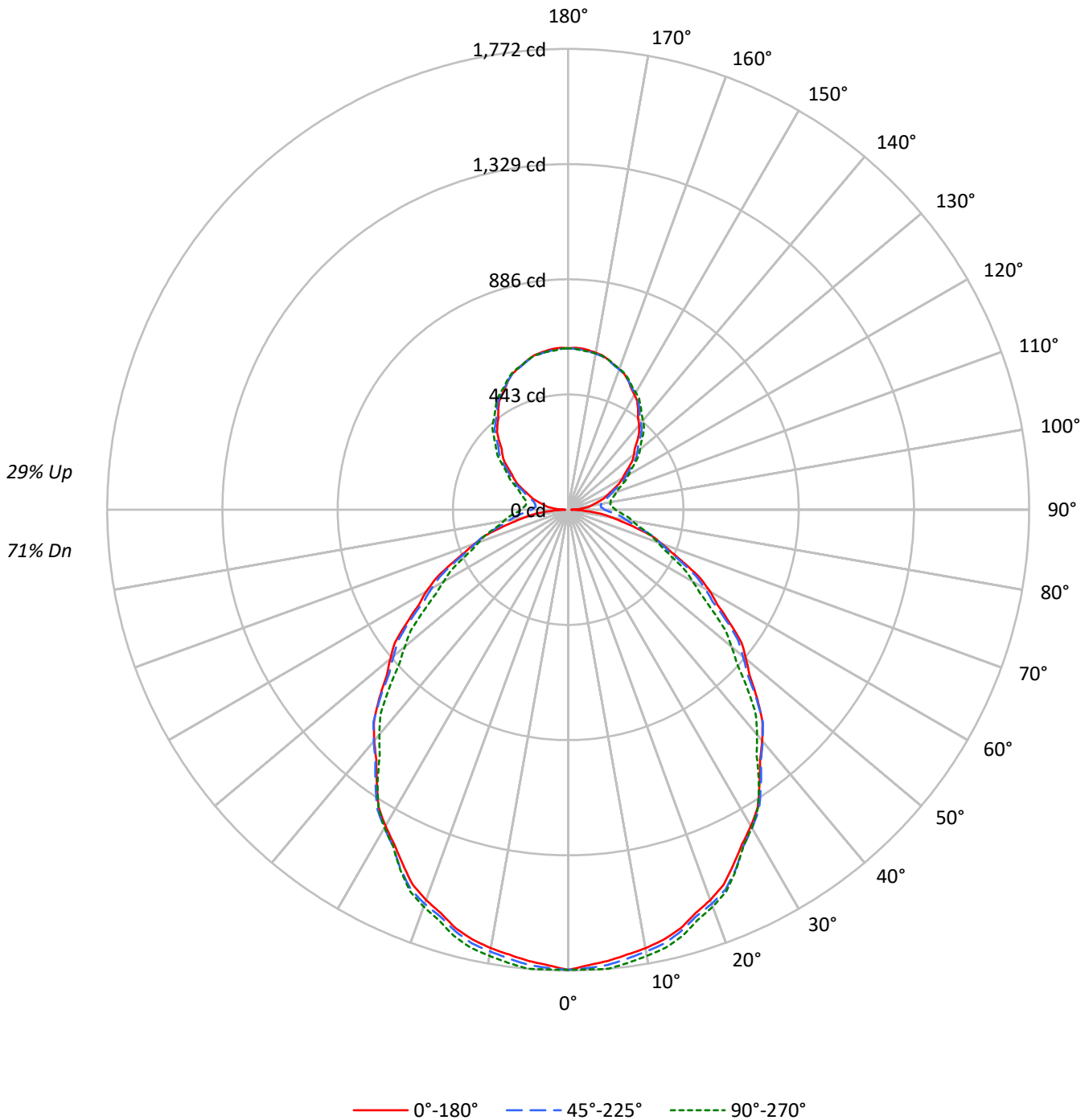
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6394.7 lumens
Efficiency: N/A
Efficacy: 117.1 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-Direct

Input Watts (W): 54.6
Input Voltage (V): 120
Input Current (A_{in}): 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	0
RCR																		
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71
1	102	97	93	89	96	92	88	85	83	80	77	74	72	70	66	64	63	59
2	93	85	78	73	88	81	75	70	73	68	64	65	61	58	58	55	53	49
3	85	75	67	61	80	71	64	59	64	58	54	58	53	49	52	48	45	42
4	78	66	58	52	73	63	56	50	57	51	46	51	47	43	46	42	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34	31
6	66	53	45	39	62	51	43	38	46	40	35	42	37	33	38	34	30	28
7	61	48	40	34	58	46	39	33	42	36	31	38	33	29	35	30	27	25
8	57	44	36	31	54	42	35	30	39	32	28	35	30	26	32	28	24	22
9	53	40	33	27	50	39	32	27	36	29	25	32	27	23	30	25	22	20
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	27	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28568	28568	28568
5°	28028	25224	24441
10°	27660	22450	21113
15°	27254	20104	18468
20°	26630	18037	16152
25°	25798	16099	14075
30°	24983	14239	12217
35°	23876	12531	10486
40°	22843	10959	8890
45°	21648	9420	7418
50°	20386	7991	6085
55°	19048	6720	4941
60°	17772	5523	3999
65°	16200	4445	3238
70°	14689	3541	2654
75°	12843	2823	2221
80°	10727	2257	1893
85°	7828	1865	1656

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 21648 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.0	2.6
10°-20°	474.0	7.4
20°-30°	699.8	10.9
30°-40°	804.8	12.6
40°-50°	780.9	12.2
50°-60°	655.4	10.2
60°-70°	479.3	7.5
70°-80°	308.5	4.8
80°-90°	180.0	2.8
90°-100°	129.1	2.0
100°-110°	155.2	2.4
110°-120°	211.6	3.3
120°-130°	269.1	4.2
130°-140°	302.3	4.7
140°-150°	298.4	4.7
150°-160°	252.4	3.9
160°-170°	168.0	2.6
170°-180°	58.8	0.9
0°-30°	1340.8	21.0
0°-40°	2145.7	33.6
0°-60°	3581.9	56.0
0°-90°	4549.8	71.1
90°-120°	496.0	7.8
90°-150°	1365.7	21.4
90°-180°	1845.0	28.9
0°-180°	6394.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1769	1769	1769	1769	1769	
5°	1742	1774	1757	1760	1772	165
15°	1667	1693	1678	1685	1697	469
25°	1504	1530	1524	1517	1527	693
35°	1282	1304	1292	1277	1277	803
45°	1027	1039	1020	989	975	792
55°	757	770	741	696	677	679
65°	500	506	484	457	448	497
75°	270	275	294	301	301	289
85°	82	115	180	208	213	87
90°	12	71	140	173	182	13
95°	55	66	126	160	166	52
105°	122	116	144	170	176	130
115°	199	199	213	226	229	197
125°	285	291	302	311	314	255
135°	376	384	391	401	406	290
145°	468	474	477	480	486	293
155°	547	550	548	548	552	251
165°	597	600	595	593	597	168
175°	622	625	617	614	614	59
180°	621	621	621	621	621	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1769.4	1769.4	1769.4	1769.4	1769.4
2.5°	1753.4	1778.8	1763.9	1767.4	1769.4
5°	1741.9	1773.6	1756.9	1759.6	1771.9
7.5°	1725.9	1755.7	1741.0	1743.7	1757.9
10°	1711.9	1741.2	1725.0	1729.6	1741.9
12.5°	1693.9	1722.3	1708.5	1713.7	1725.9
15°	1666.9	1692.6	1677.5	1684.7	1696.9
17.5°	1626.9	1653.9	1638.6	1642.2	1654.4
20°	1596.9	1622.0	1612.6	1612.2	1624.4
22.5°	1560.9	1588.0	1580.6	1574.2	1588.4
25°	1504.4	1530.2	1524.4	1517.2	1526.9
27.5°	1448.5	1468.9	1458.8	1450.6	1458.0
30°	1404.5	1427.8	1413.3	1404.7	1412.0
32.5°	1356.5	1380.3	1365.3	1354.6	1358.0
35°	1282.0	1303.5	1291.5	1277.0	1277.0
37.5°	1211.6	1226.8	1216.7	1194.9	1189.6
40°	1159.6	1176.8	1162.7	1136.9	1129.6
42.5°	1105.6	1122.8	1107.3	1078.8	1067.6
45°	1027.1	1038.8	1020.3	989.3	974.6
47.5°	946.2	958.9	933.6	899.3	881.7
50°	892.2	906.3	876.7	839.2	819.7
52.5°	840.2	850.9	822.1	779.9	762.8
55°	757.2	769.6	741.0	696.3	676.9
57.5°	679.8	691.6	658.9	619.3	603.7
60°	629.8	639.7	607.4	568.0	552.8
62.5°	573.8	584.2	554.5	522.7	508.6
65°	499.8	506.1	483.9	457.3	448.3
67.5°	430.3	434.2	418.4	403.1	397.3
70°	382.4	386.2	378.6	370.3	365.1
72.5°	338.4	340.8	342.3	340.6	337.3
75°	269.9	275.1	294.0	301.0	301.3
77.5°	209.9	213.0	252.3	267.2	270.0
80°	169.9	179.0	227.1	248.0	251.3
82.5°	134.0	148.9	207.3	231.8	235.1
85°	82.5	115.0	179.6	207.5	213.3
87.5°	38.4	87.2	155.9	186.9	193.8
90°	12.1	71.0	140.0	173.0	181.9
92.5°	29.1	66.4	132.5	164.9	173.7
95°	54.6	65.7	125.6	159.7	166.0
97.5°	76.8	74.1	126.4	156.9	163.4
100°	90.0	83.8	129.5	158.0	165.4
102.5°	102.7	95.0	134.1	161.5	168.1
105°	121.9	116.2	143.6	169.6	176.4
107.5°	143.4	138.5	159.7	182.4	187.6
110°	157.7	155.8	173.0	192.7	198.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	175.1	173.2	188.3	203.9	209.6
115°	198.7	199.2	213.2	225.8	229.0
117.5°	223.1	226.3	238.6	248.5	251.6
120°	241.2	245.3	255.5	265.0	267.5
122.5°	258.5	262.3	274.0	283.4	286.0
125°	284.8	290.8	302.3	311.1	313.7
127.5°	311.4	319.4	329.9	338.8	342.1
130°	330.5	338.9	347.8	357.2	361.1
132.5°	346.6	354.9	364.2	375.2	379.6
135°	375.6	384.0	391.4	401.4	405.9
137.5°	404.2	412.3	418.0	425.9	431.6
140°	423.7	430.8	434.9	442.3	447.4
142.5°	441.6	448.7	451.8	458.1	463.2
145°	468.5	474.3	477.1	480.5	485.6
147.5°	493.7	499.4	500.5	503.5	506.7
150°	510.0	515.2	515.3	516.7	519.9
152.5°	525.3	530.0	528.5	529.4	533.1
155°	546.9	550.1	547.6	548.3	551.5
157.5°	564.1	567.3	563.3	564.5	567.1
160°	574.6	577.8	573.3	574.0	576.6
162.5°	584.6	586.8	582.8	581.9	585.5
165°	597.0	599.6	595.0	593.1	597.0
167.5°	607.6	610.1	604.1	602.1	606.0
170°	612.8	615.4	608.9	606.3	610.2
172.5°	617.6	620.1	613.1	610.0	612.8
175°	622.0	624.6	616.8	614.1	614.1
177.5°	623.4	624.9	619.1	616.6	619.7
180°	620.7	620.7	620.7	620.7	620.7

(END OF REPORT)