

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: P644784

Luminaire Tested: OMN4DIP-SR4F0-125D50U830-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644784
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-20)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-125D50U830-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

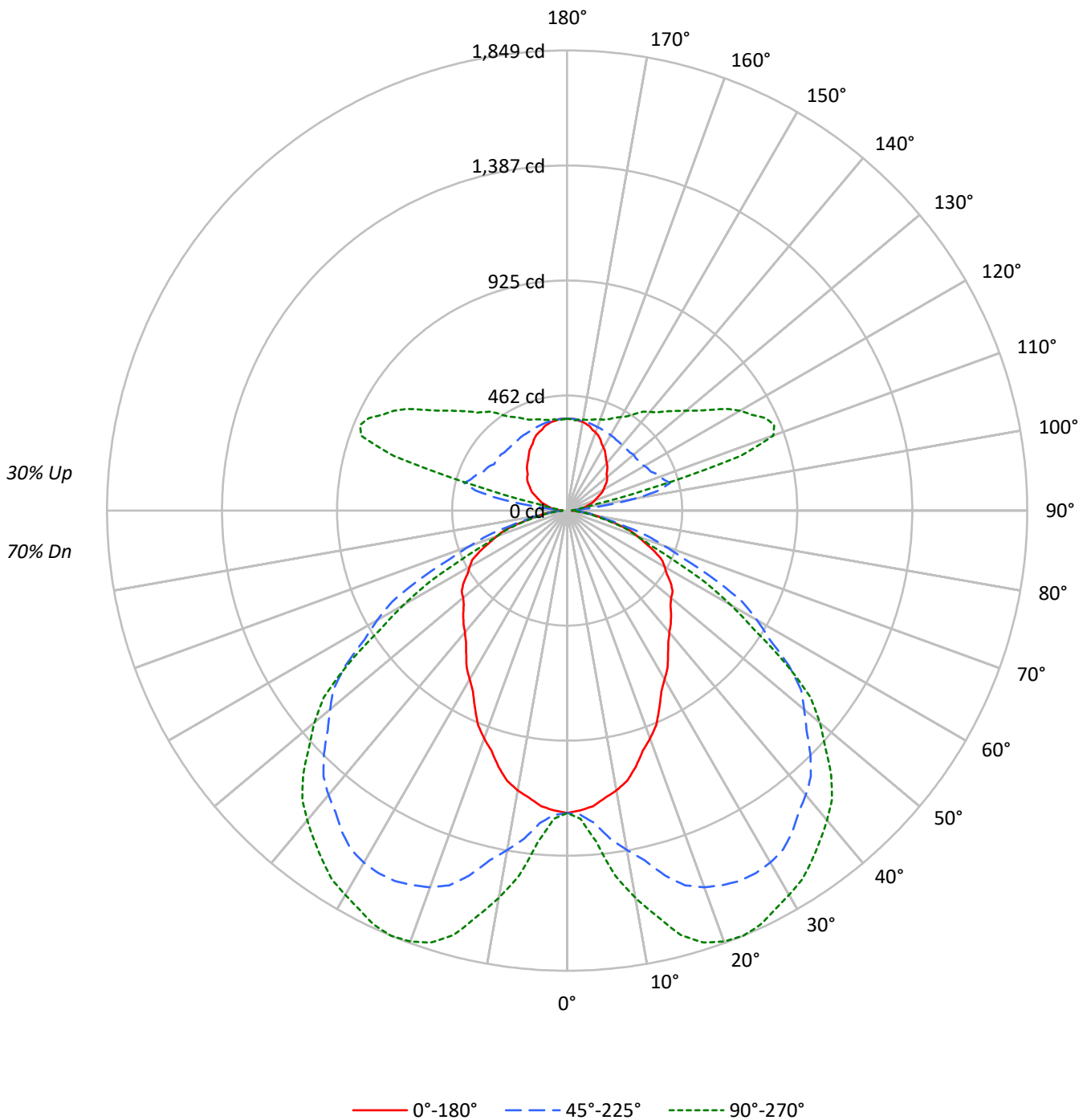
Lumens per Lamp: N/A
Luminaire Lumens: 6681.5 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 54.6
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	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	74	74	74	70	
1	102	98	94	90	97	93	89	86	83	80	78	74	72	70	66	64	63	63	63	63	59	
2	93	86	79	74	88	81	76	71	73	68	65	65	62	59	58	55	53	53	53	53	49	
3	85	75	68	61	80	71	64	59	64	59	54	57	53	50	51	48	45	45	45	45	42	
4	78	66	58	52	73	63	56	50	57	51	46	51	46	42	46	42	39	39	39	39	36	
5	71	59	51	44	67	56	48	43	51	44	40	46	40	36	41	37	33	33	33	33	31	
6	66	53	44	38	62	50	43	37	46	39	34	41	36	32	37	33	29	29	29	29	27	
7	61	48	39	34	57	45	38	32	41	35	30	37	32	28	34	29	26	26	26	26	23	
8	56	43	35	30	53	41	34	29	38	31	27	34	29	25	31	26	23	23	23	23	21	
9	52	39	32	26	49	38	30	25	34	28	24	31	26	22	28	24	21	21	21	21	18	
10	49	36	29	24	46	35	28	23	32	26	21	29	24	20	26	22	19	19	19	19	17	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19617	19617	19617
5°	19326	20425	21616
10°	18715	22699	25896
15°	17805	25362	29519
20°	16749	27673	31654
25°	15604	29247	32719
30°	14592	30449	33240
35°	13923	31077	33805
40°	13460	31445	34244
45°	13483	31549	34260
50°	13697	31230	33287
55°	14317	30621	30224
60°	14599	28468	24545
65°	14789	24936	18029
70°	14139	19610	14006
75°	12689	14629	11809
80°	10767	11557	9456
85°	10467	9429	7855

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 34260 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.6	1.9
10°-20°	414.1	6.2
20°-30°	688.0	10.3
30°-40°	867.9	13.0
40°-50°	927.7	13.9
50°-60°	818.8	12.3
60°-70°	525.5	7.9
70°-80°	233.0	3.5
80°-90°	61.2	0.9
90°-100°	61.2	0.9
100°-110°	333.3	5.0
110°-120°	446.4	6.7
120°-130°	362.0	5.4
130°-140°	287.7	4.3
140°-150°	226.4	3.4
150°-160°	165.6	2.5
160°-170°	102.8	1.5
170°-180°	35.1	0.5
0°-30°	1226.7	18.4
0°-40°	2094.5	31.3
0°-60°	3841.1	57.5
0°-90°	4660.9	69.8
90°-120°	841.0	12.6
90°-150°	1717.1	25.7
90°-180°	2021.0	30.2
0°-180°	6681.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1215	1215	1215	1215	1215	
5°	1192	1228	1260	1303	1334	112
15°	1065	1228	1517	1700	1766	298
25°	876	1188	1642	1795	1837	403
35°	706	1085	1577	1679	1715	444
45°	590	928	1382	1467	1500	456
55°	509	730	1088	1093	1074	451
65°	387	489	653	530	472	379
75°	203	226	234	200	189	217
85°	56	48	51	45	42	60
90°	20	22	22	24	18	14
95°	50	54	33	29	31	44
105°	92	128	428	539	355	98
115°	142	166	370	755	879	141
125°	192	217	350	599	705	171
135°	227	252	343	491	564	176
145°	269	292	346	428	473	169
155°	316	327	353	388	406	145
165°	350	355	362	371	378	98
175°	369	371	369	366	364	35
180°	369	369	369	369	369	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1215.0	1215.0	1215.0	1215.0	1215.0
2.5°	1206.0	1223.6	1224.0	1231.0	1239.9
5°	1192.4	1228.3	1260.2	1303.3	1333.7
7.5°	1164.1	1228.2	1330.3	1430.3	1480.0
10°	1141.5	1229.9	1384.5	1518.7	1579.5
12.5°	1112.1	1229.3	1438.8	1600.3	1669.9
15°	1065.2	1228.2	1517.3	1699.7	1766.0
17.5°	1011.0	1223.2	1578.9	1761.7	1819.7
20°	974.8	1218.0	1610.6	1784.3	1842.3
22.5°	934.1	1206.0	1628.7	1795.5	1849.1
25°	875.9	1188.1	1641.7	1795.2	1836.6
27.5°	818.9	1162.5	1642.2	1772.4	1807.8
30°	782.7	1141.8	1633.2	1749.8	1782.9
32.5°	751.0	1119.0	1615.1	1722.7	1758.1
35°	706.4	1084.9	1576.7	1679.2	1715.1
37.5°	668.0	1045.9	1528.1	1627.9	1669.9
40°	638.6	1014.3	1491.9	1591.6	1624.7
42.5°	616.0	980.7	1449.0	1546.2	1575.0
45°	590.5	927.6	1381.7	1467.2	1500.4
47.5°	563.4	872.9	1304.3	1385.0	1406.6
50°	545.3	832.7	1243.3	1316.9	1325.2
52.5°	534.0	790.4	1184.5	1230.9	1232.5
55°	508.6	729.6	1087.8	1093.1	1073.7
57.5°	474.7	658.7	965.2	937.6	891.2
60°	452.1	609.6	881.6	826.4	760.1
62.5°	429.5	562.7	793.4	704.1	626.7
65°	387.1	489.3	652.7	529.9	471.9
67.5°	337.9	408.7	512.6	396.4	357.7
70°	299.5	354.8	415.4	324.3	296.7
72.5°	263.3	300.9	336.2	268.1	253.7
75°	203.4	225.5	234.5	200.4	189.3
77.5°	149.8	150.9	162.8	141.2	135.6
80°	115.8	110.3	124.3	107.2	101.7
82.5°	88.7	81.0	90.4	77.9	74.6
85°	56.5	48.2	50.9	45.1	42.4
87.5°	33.3	27.2	26.9	25.1	21.7
90°	19.8	22.0	21.6	23.8	18.3
92.5°	32.1	27.8	24.9	26.7	23.0
95°	49.6	54.5	32.7	29.4	31.2
97.5°	60.6	85.5	147.1	45.8	37.6
100°	69.5	99.8	282.2	86.2	56.2
102.5°	78.4	112.7	378.7	216.0	117.0
105°	91.7	127.5	428.4	539.2	354.9
107.5°	107.8	131.9	409.4	783.4	731.2
110°	116.7	141.2	398.2	823.1	881.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	127.8	152.3	387.1	799.9	900.1
115°	141.7	166.2	370.4	755.0	879.2
117.5°	158.3	182.9	366.2	706.3	834.2
120°	169.1	194.0	358.8	669.3	802.7
122.5°	178.3	202.9	347.2	637.5	760.0
125°	191.7	216.7	349.5	599.1	705.2
127.5°	202.4	230.0	347.1	554.0	659.3
130°	209.8	237.0	349.0	522.0	624.1
132.5°	214.6	241.8	344.5	508.6	592.5
135°	227.3	252.3	343.3	491.1	563.7
137.5°	238.9	265.7	343.3	471.9	534.0
140°	248.2	273.2	343.3	460.6	517.3
142.5°	257.5	280.6	345.2	447.6	500.6
145°	269.1	291.8	345.7	427.9	473.3
147.5°	283.0	303.0	348.4	413.7	448.7
150°	292.3	310.5	350.3	404.3	433.8
152.5°	301.6	317.9	350.3	396.8	420.8
155°	315.5	326.8	352.6	387.8	406.0
157.5°	326.6	337.5	355.4	382.2	395.3
160°	334.1	343.1	357.3	378.4	389.7
162.5°	339.6	348.7	359.1	376.5	384.2
165°	350.3	354.8	361.9	371.3	378.1
167.5°	356.3	360.4	364.2	369.0	373.0
170°	361.9	364.2	364.2	368.9	371.2
172.5°	363.8	367.8	366.1	367.1	369.3
175°	368.9	371.1	368.9	366.5	364.2
177.5°	368.9	370.7	368.9	368.8	367.0
180°	368.9	368.9	368.9	368.9	368.9

(END OF REPORT)