

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: P644788

Luminaire Tested: OMN4DIP-SR4F0-125D50U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644788
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-SR4F0-125D50U835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

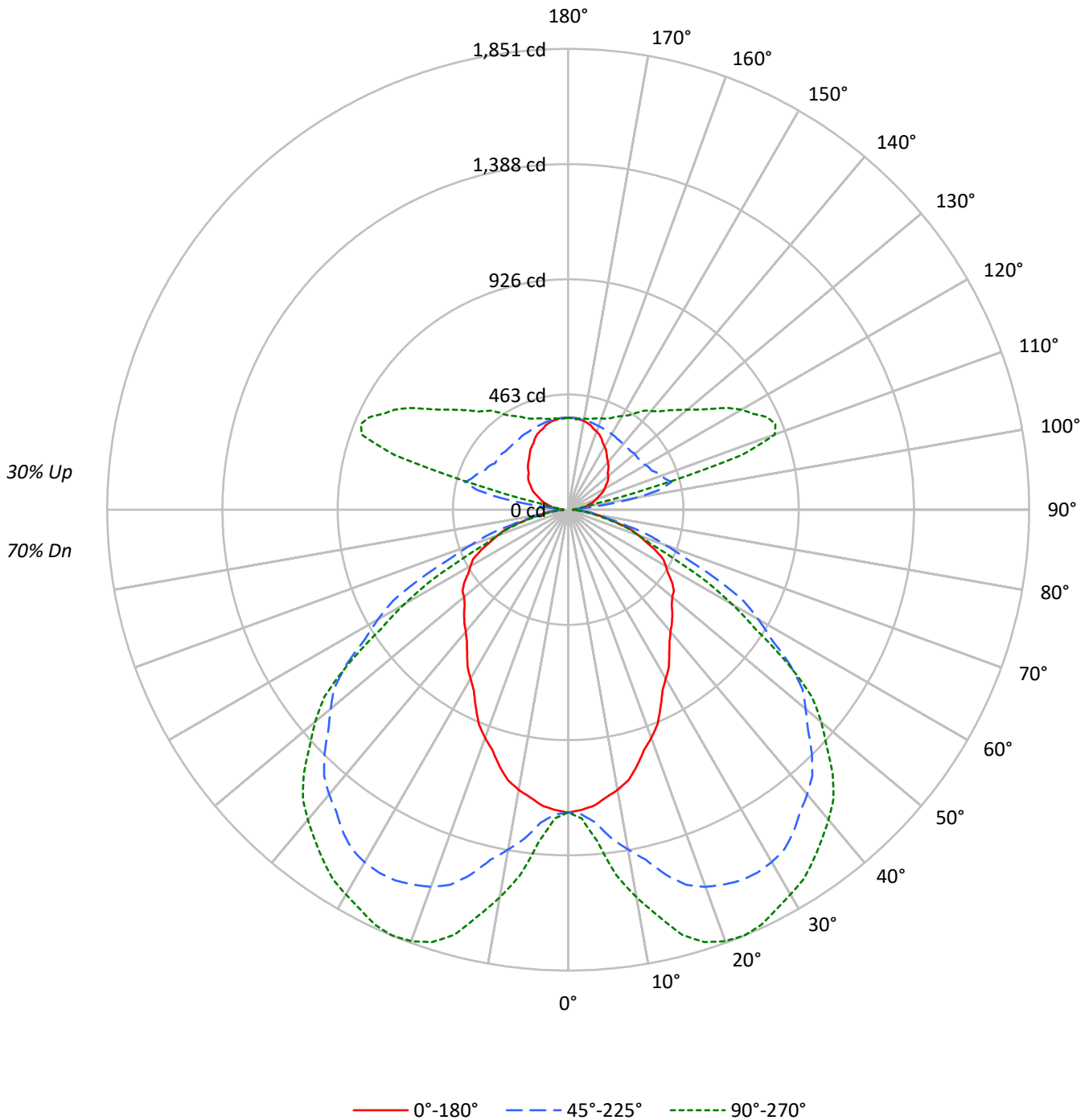
Lumens per Lamp: N/A
Luminaire Lumens: 6687.6 lumens
Efficiency: N/A
Efficacy: 122.5 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	19635	19635	19635
5°	19344	20443	21635
10°	18733	22720	25919
15°	17822	25386	29546
20°	16765	27697	31682
25°	15618	29272	32749
30°	14605	30477	33271
35°	13935	31105	33837
40°	13472	31474	34275
45°	13497	31579	34289
50°	13710	31257	33317
55°	14331	30649	30252
60°	14612	28494	24568
65°	14804	24959	18044
70°	14153	19624	14021
75°	12701	14641	11822
80°	10786	11567	9465
85°	10485	9429	7855

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 34289 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.7	1.9
10°-20°	414.5	6.2
20°-30°	688.6	10.3
30°-40°	868.7	13.0
40°-50°	928.6	13.9
50°-60°	819.6	12.3
60°-70°	526.0	7.9
70°-80°	233.3	3.5
80°-90°	61.3	0.9
90°-100°	61.3	0.9
100°-110°	333.6	5.0
110°-120°	446.8	6.7
120°-130°	362.3	5.4
130°-140°	288.0	4.3
140°-150°	226.6	3.4
150°-160°	165.7	2.5
160°-170°	102.9	1.5
170°-180°	35.1	0.5
0°-30°	1227.8	18.4
0°-40°	2096.4	31.3
0°-60°	3844.6	57.5
0°-90°	4665.1	69.8
90°-120°	841.8	12.6
90°-150°	1718.7	25.7
90°-180°	2022.0	30.2
0°-180°	6687.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1216	1216	1216	1216	1216	
5°	1194	1229	1261	1304	1335	112
15°	1066	1229	1519	1701	1768	299
25°	877	1189	1643	1797	1838	403
35°	707	1086	1578	1681	1717	444
45°	591	928	1383	1469	1502	457
55°	509	730	1089	1094	1075	452
65°	388	490	653	530	472	379
75°	204	226	235	200	190	217
85°	57	48	51	45	42	60
90°	20	22	22	24	18	14
95°	50	54	33	29	31	44
105°	92	128	429	540	355	98
115°	142	166	371	756	880	141
125°	192	217	350	600	706	171
135°	228	252	344	492	564	176
145°	269	292	346	428	474	169
155°	316	327	353	388	406	145
165°	351	355	362	372	378	98
175°	369	372	369	367	365	35
180°	369	369	369	369	369	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1216.1	1216.1	1216.1	1216.1	1216.1
2.5°	1207.0	1224.7	1225.1	1232.1	1241.0
5°	1193.5	1229.4	1261.3	1304.5	1334.9
7.5°	1165.2	1229.3	1331.5	1431.6	1481.4
10°	1142.6	1231.1	1385.8	1520.1	1580.9
12.5°	1113.2	1230.4	1440.1	1601.7	1671.4
15°	1066.2	1229.4	1518.7	1701.2	1767.6
17.5°	1011.9	1224.3	1580.4	1763.2	1821.3
20°	975.7	1219.0	1612.0	1785.9	1843.9
22.5°	935.0	1207.1	1630.1	1797.1	1850.7
25°	876.7	1189.2	1643.1	1796.8	1838.3
27.5°	819.6	1163.6	1643.7	1774.0	1809.4
30°	783.4	1142.9	1634.7	1751.4	1784.6
32.5°	751.7	1120.1	1616.6	1724.3	1759.7
35°	707.0	1085.9	1578.1	1680.7	1716.7
37.5°	668.6	1046.9	1529.5	1629.4	1671.4
40°	639.2	1015.2	1493.3	1593.0	1626.2
42.5°	616.5	981.5	1450.3	1547.6	1576.4
45°	591.1	928.4	1383.0	1468.6	1501.7
47.5°	563.9	873.6	1305.5	1386.3	1407.8
50°	545.8	833.4	1244.4	1318.1	1326.4
52.5°	534.5	791.1	1185.6	1232.0	1233.6
55°	509.1	730.3	1088.8	1094.0	1074.7
57.5°	475.1	659.3	966.1	938.4	892.0
60°	452.5	610.1	882.4	827.1	760.8
62.5°	429.9	563.2	794.1	704.7	627.3
65°	387.5	489.8	653.3	530.4	472.3
67.5°	338.2	409.0	513.0	396.8	358.0
70°	299.8	355.1	415.7	324.6	297.0
72.5°	263.6	301.2	336.5	268.3	254.0
75°	203.6	225.7	234.7	200.5	189.5
77.5°	149.9	151.0	162.9	141.3	135.8
80°	116.0	110.4	124.4	107.3	101.8
82.5°	88.8	81.1	90.5	78.0	74.7
85°	56.6	48.3	50.9	45.2	42.4
87.5°	33.4	27.2	26.9	25.1	21.8
90°	19.8	22.1	21.6	23.8	18.3
92.5°	32.2	27.8	24.9	26.8	23.0
95°	49.7	54.5	32.7	29.4	31.2
97.5°	60.7	85.5	147.3	45.9	37.7
100°	69.6	99.9	282.5	86.2	56.2
102.5°	78.5	112.8	379.1	216.2	117.1
105°	91.8	127.6	428.8	539.7	355.3
107.5°	107.9	132.0	409.7	784.1	731.9
110°	116.8	141.3	398.6	823.8	882.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	128.0	152.4	387.4	800.6	900.9
115°	141.8	166.3	370.7	755.7	880.0
117.5°	158.5	183.0	366.5	707.0	835.0
120°	169.2	194.2	359.1	669.9	803.4
122.5°	178.5	203.1	347.6	638.1	760.7
125°	191.9	216.9	349.8	599.7	705.9
127.5°	202.6	230.2	347.5	554.5	659.9
130°	210.0	237.2	349.3	522.4	624.6
132.5°	214.8	242.0	344.8	509.0	593.0
135°	227.6	252.5	343.7	491.6	564.2
137.5°	239.2	266.0	343.7	472.3	534.5
140°	248.5	273.4	343.7	461.0	517.8
142.5°	257.7	280.9	345.5	448.0	501.1
145°	269.4	292.1	346.0	428.3	473.7
147.5°	283.3	303.3	348.8	414.1	449.1
150°	292.6	310.7	350.6	404.7	434.2
152.5°	301.9	318.2	350.6	397.1	421.2
155°	315.8	327.1	352.9	388.2	406.3
157.5°	326.9	337.8	355.7	382.5	395.7
160°	334.4	343.4	357.6	378.7	390.1
162.5°	339.9	349.0	359.4	376.8	384.5
165°	350.6	355.2	362.2	371.7	378.5
167.5°	356.7	360.7	364.6	369.3	373.4
170°	362.2	364.5	364.6	369.2	371.5
172.5°	364.1	368.2	366.4	367.4	369.7
175°	369.2	371.5	369.2	366.8	364.6
177.5°	369.2	371.0	369.2	369.2	367.3
180°	369.2	369.2	369.2	369.2	369.2

(END OF REPORT)