

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: P644818

Luminaire Tested: OMN4DIP-SR4F0-125D75U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644818
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-SR4F0-125D75U835-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

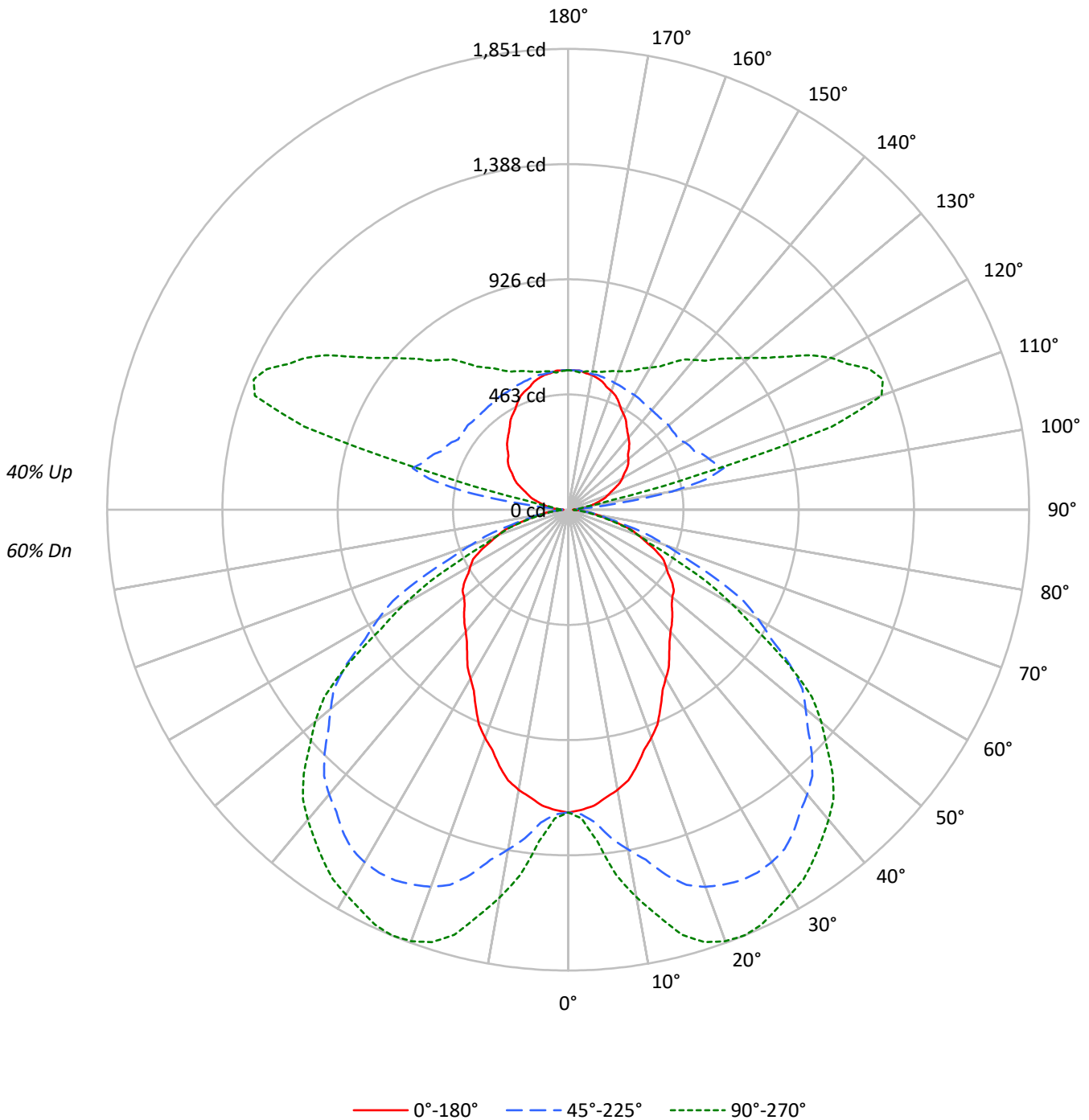
Lumens per Lamp: N/A
Luminaire Lumens: 7714.4 lumens
Efficiency: N/A
Efficacy: 126.9 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 60.8
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	0
RCR																				
0	110	110	110	110	102	102	102	102	89	89	89		77	77	77		66	66	66	60
1	100	96	92	89	94	90	86	83	78	76	74		68	66	64		58	57	56	51
2	91	84	78	72	85	79	73	68	69	65	61		60	57	54		51	49	47	43
3	83	74	66	60	77	69	62	57	61	55	51		53	49	45		45	42	40	36
4	76	65	57	51	71	61	54	48	54	48	43		47	42	39		40	37	34	31
5	70	58	49	43	65	54	47	41	48	42	37		42	37	33		36	32	30	27
6	64	52	43	37	60	49	41	36	43	37	32		38	33	29		33	29	26	23
7	59	47	38	33	55	44	36	31	39	33	28		34	29	26		30	26	23	20
8	55	42	34	29	51	40	33	28	35	29	25		31	26	23		27	23	20	18
9	51	38	31	26	48	36	29	24	32	26	22		29	24	20		25	21	18	16
10	48	35	28	23	44	33	26	22	30	24	20		26	22	18		23	19	16	14

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	1.6
10°-20°	414.5	5.4
20°-30°	688.6	8.9
30°-40°	868.7	11.3
40°-50°	928.6	12.0
50°-60°	819.6	10.6
60°-70°	526.0	6.8
70°-80°	233.3	3.0
80°-90°	61.7	0.8
90°-100°	84.8	1.1
100°-110°	501.1	6.5
110°-120°	674.1	8.7
120°-130°	547.3	7.1
130°-140°	436.7	5.7
140°-150°	343.9	4.5
150°-160°	251.5	3.3
160°-170°	156.2	2.0
170°-180°	53.3	0.7
0°-30°	1227.8	15.9
0°-40°	2096.4	27.2
0°-60°	3844.6	49.8
0°-90°	4665.5	60.5
90°-120°	1260.0	16.3
90°-150°	2588.0	33.5
90°-180°	3049.0	39.5
0°-180°	7714.4	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	23	24	27	22	15
95°	59	72	42	40	44	55
105°	129	185	646	818	539	137
115°	208	246	558	1145	1336	207
125°	287	325	526	909	1071	255
135°	345	383	522	746	856	266
145°	409	443	525	650	719	257
155°	479	496	536	589	617	220
165°	532	539	550	564	574	149
175°	560	564	560	557	553	53
180°	560	560	560	560	560	



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CATALOG NUMBER: OMN4DIP-SR4F0-125D75U835-CLBOOB-1DUDD-WW

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	27.4	27.4	25.8	22.5
90°	19.8	23.2	24.0	27.4	21.9
92.5°	35.0	31.9	30.2	34.2	31.5
95°	59.3	72.4	42.3	40.3	44.4
97.5°	77.8	119.8	217.9	66.7	55.7
100°	92.4	142.7	424.3	128.0	83.9
102.5°	107.1	162.3	570.9	326.3	177.5
105°	129.0	184.8	646.3	817.5	539.1
107.5°	153.8	193.0	617.4	1188.6	1110.7
110°	168.5	207.1	600.5	1248.8	1339.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	185.4	224.0	583.6	1213.6	1367.2
115°	207.9	246.5	558.2	1145.3	1335.5
117.5°	233.5	271.9	551.8	1071.5	1267.1
120°	250.9	288.8	540.6	1015.3	1219.2
122.5°	265.0	303.5	524.2	967.0	1154.4
125°	286.9	324.8	526.5	908.6	1071.2
127.5°	304.5	345.3	524.4	840.4	1001.5
130°	315.7	357.1	527.2	792.8	947.9
132.5°	325.3	366.7	522.6	772.5	900.0
135°	345.3	383.2	521.5	746.0	856.3
137.5°	362.9	403.6	521.5	716.8	811.2
140°	377.0	414.9	521.5	699.7	785.8
142.5°	391.1	426.3	524.3	679.8	760.4
145°	408.8	443.2	525.0	649.9	718.8
147.5°	429.9	460.2	529.3	628.4	681.5
150°	444.0	471.6	532.1	614.2	658.9
152.5°	458.1	482.9	532.1	602.7	639.2
155°	479.2	496.5	535.6	589.1	616.7
157.5°	496.1	512.7	539.8	580.5	600.4
160°	507.4	521.2	542.7	574.8	592.0
162.5°	515.9	529.7	545.5	571.8	583.5
165°	532.1	539.0	549.7	564.0	574.4
167.5°	541.2	547.5	553.2	560.4	566.6
170°	549.7	553.2	553.2	560.4	563.8
172.5°	552.5	558.7	556.0	557.5	561.0
175°	560.3	563.7	560.3	556.7	553.2
177.5°	560.3	563.0	560.3	560.2	557.5
180°	560.3	560.3	560.3	560.3	560.3

(END OF REPORT)