

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: P644732

Luminaire Tested: OMN4DIP-SR4F0-125D150U840-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644732
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-SR4F0-125D150U840-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

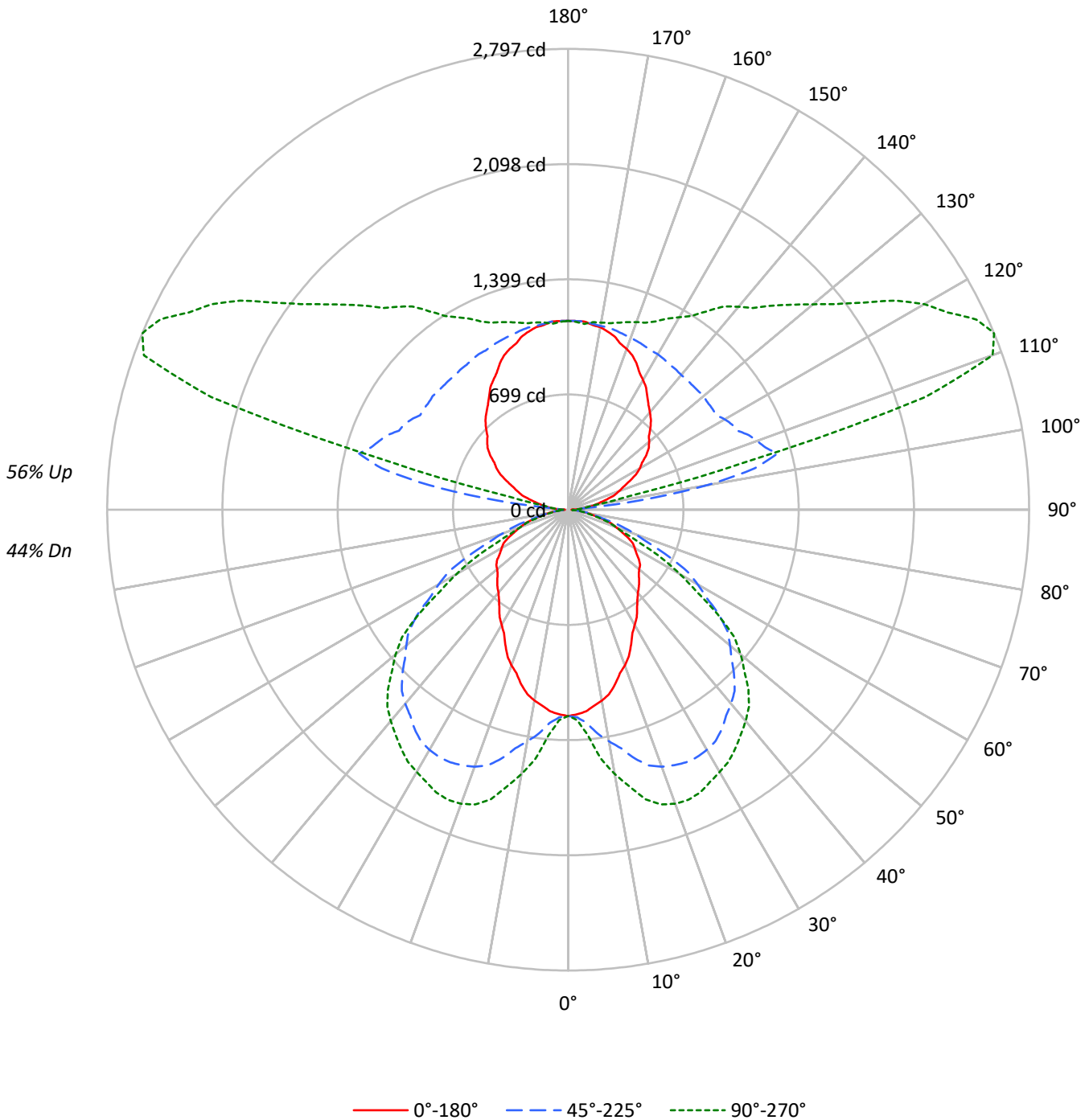
Lumens per Lamp: N/A
Luminaire Lumens: 11003.8 lumens
Efficiency: N/A
Efficacy: 124.2 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 88.6
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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	44				
1	96	92	88	85	88	85	81	78	70	68	66	57	55	54	45	44	43	37				
2	88	81	74	69	80	74	69	64	61	58	54	50	47	45	39	37	36	31				
3	80	71	63	58	73	65	59	54	54	49	46	44	41	38	35	32	30	26				
4	73	62	55	49	67	57	50	45	48	43	39	39	35	32	31	28	26	22				
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23	19				
6	62	49	41	36	56	46	38	33	38	33	29	31	27	24	25	22	20	17				
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17	15				
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	21	18	15	13				
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12				
10	46	33	26	21	42	31	25	20	26	21	18	22	18	15	18	15	12	10				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20221	20221	20221
5°	19921	21052	22280
10°	19290	23397	26693
15°	18354	26143	30427
20°	17265	28524	32627
25°	16085	30145	33726
30°	15040	31385	34263
35°	14351	32031	34846
40°	13873	32412	35297
45°	13899	32520	35312
50°	14119	32189	34309
55°	14756	31564	31153
60°	15048	29343	25297
65°	15244	25704	18583
70°	14573	20209	14436
75°	13082	15078	12171
80°	11102	11911	9744
85°	10782	9707	8096

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 35312 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.4	1.2
10°-20°	426.8	3.9
20°-30°	709.1	6.4
30°-40°	894.5	8.1
40°-50°	956.3	8.7
50°-60°	844.0	7.7
60°-70°	541.7	4.9
70°-80°	240.2	2.2
80°-90°	64.8	0.6
90°-100°	157.3	1.4
100°-110°	1014.8	9.2
110°-120°	1371.4	12.5
120°-130°	1114.8	10.1
130°-140°	893.0	8.1
140°-150°	703.6	6.4
150°-160°	514.5	4.7
160°-170°	319.6	2.9
170°-180°	109.0	1.0
0°-30°	1264.4	11.5
0°-40°	2158.9	19.6
0°-60°	3959.2	36.0
0°-90°	4805.9	43.7
90°-120°	2543.4	23.1
90°-150°	5254.9	47.8
90°-180°	6198.0	56.3
0°-180°	11003.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1252	1252	1252	1252	1252	
5°	1229	1266	1299	1343	1375	115
15°	1098	1266	1564	1752	1820	308
25°	903	1225	1692	1850	1893	415
35°	728	1118	1625	1731	1768	457
45°	609	956	1424	1512	1546	470
55°	524	752	1121	1127	1107	465
65°	399	504	673	546	486	390
75°	210	232	242	206	195	224
85°	58	50	52	46	44	62
90°	20	27	32	39	33	16
95°	90	128	72	74	85	88
105°	244	361	1314	1670	1103	258
115°	411	493	1133	2340	2732	409
125°	578	656	1068	1856	2192	514
135°	706	784	1067	1526	1752	544
145°	836	907	1074	1330	1471	525
155°	980	1016	1096	1205	1262	450
165°	1089	1103	1125	1154	1175	306
175°	1146	1153	1146	1139	1132	108
180°	1146	1146	1146	1146	1146	

TEST NUMBER: P644732

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1252.4	1252.4	1252.4	1252.4	1252.4
2.5°	1243.0	1261.3	1261.7	1268.9	1278.0
5°	1229.1	1266.1	1298.9	1343.3	1374.7
7.5°	1199.9	1266.0	1371.2	1474.3	1525.5
10°	1176.6	1267.8	1427.1	1565.4	1628.1
12.5°	1146.3	1267.1	1483.0	1649.5	1721.3
15°	1098.0	1266.0	1564.0	1751.9	1820.3
17.5°	1042.1	1260.8	1627.5	1815.8	1875.6
20°	1004.8	1255.4	1660.1	1839.1	1898.9
22.5°	962.9	1243.1	1678.7	1850.7	1905.9
25°	902.9	1224.6	1692.1	1850.4	1893.1
27.5°	844.0	1198.3	1692.7	1826.9	1863.4
30°	806.7	1177.0	1683.4	1803.6	1837.8
32.5°	774.1	1153.4	1664.8	1775.7	1812.1
35°	728.1	1118.2	1625.1	1730.8	1767.9
37.5°	688.5	1078.1	1575.0	1678.0	1721.3
40°	658.2	1045.5	1537.8	1640.5	1674.7
42.5°	634.9	1010.8	1493.5	1593.8	1623.4
45°	608.7	956.1	1424.2	1512.3	1546.5
47.5°	580.7	899.7	1344.4	1427.6	1449.8
50°	562.1	858.3	1281.5	1357.4	1365.9
52.5°	550.5	814.7	1220.9	1268.7	1270.4
55°	524.2	752.1	1121.3	1126.7	1106.7
57.5°	489.3	678.9	994.9	966.4	918.6
60°	466.0	628.3	908.7	851.8	783.4
62.5°	442.7	580.0	817.8	725.7	646.0
65°	399.0	504.4	672.8	546.2	486.4
67.5°	348.3	421.2	528.3	408.6	368.7
70°	308.7	365.7	428.1	334.3	305.8
72.5°	271.4	310.2	346.6	276.3	261.5
75°	209.7	232.5	241.7	206.5	195.1
77.5°	154.4	155.5	167.8	145.5	139.8
80°	119.4	113.7	128.1	110.5	104.8
82.5°	91.5	83.5	93.2	80.3	76.9
85°	58.2	49.7	52.4	46.5	43.7
87.5°	34.4	28.9	29.7	28.7	25.3
90°	20.4	27.4	31.9	39.0	33.3
92.5°	44.7	44.9	46.9	57.5	57.5
95°	89.7	127.7	72.2	73.9	85.1
97.5°	130.9	225.3	435.0	130.8	111.1
100°	163.2	274.5	859.4	256.2	168.7
102.5°	195.5	314.7	1159.3	664.2	362.5
105°	243.9	360.9	1313.6	1669.8	1103.0
107.5°	295.2	380.3	1254.5	2428.9	2272.4
110°	327.5	409.2	1219.9	2552.1	2739.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	362.1	443.8	1185.3	2480.0	2797.2
115°	411.1	492.8	1133.4	2340.4	2732.3
117.5°	463.8	544.7	1120.4	2189.3	2592.5
120°	501.9	579.4	1097.3	2074.3	2494.4
122.5°	530.7	611.6	1066.2	1975.5	2361.8
125°	578.3	655.8	1068.5	1856.1	2191.6
127.5°	617.2	698.4	1067.0	1717.0	2048.9
130°	640.2	724.8	1072.8	1622.1	1939.3
132.5°	664.4	749.0	1068.1	1580.4	1841.3
135°	706.5	784.1	1067.0	1526.3	1751.9
137.5°	742.6	825.7	1067.0	1466.4	1659.6
140°	771.4	848.9	1067.0	1431.5	1607.7
142.5°	800.2	872.1	1072.7	1390.8	1555.8
145°	836.3	906.8	1074.2	1329.7	1470.7
147.5°	879.5	941.6	1082.8	1285.7	1394.3
150°	908.4	964.8	1088.6	1256.5	1348.1
152.5°	937.2	988.0	1088.6	1233.1	1307.8
155°	980.5	1015.7	1095.8	1205.2	1261.6
157.5°	1015.1	1048.9	1104.5	1187.6	1228.5
160°	1038.1	1066.3	1110.2	1175.9	1211.2
162.5°	1055.4	1083.6	1116.0	1169.9	1193.9
165°	1088.6	1102.7	1124.7	1154.0	1175.1
167.5°	1107.4	1120.0	1131.9	1146.6	1159.3
170°	1124.7	1131.7	1131.9	1146.4	1153.5
172.5°	1130.4	1143.1	1137.6	1140.7	1147.7
175°	1146.3	1153.3	1146.3	1138.9	1131.9
177.5°	1146.3	1151.9	1146.3	1146.2	1140.5
180°	1146.3	1146.3	1146.3	1146.3	1146.3

(END OF REPORT)