

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: P644702

Luminaire Tested: OMN4DIP-SR4F0-125D125U840-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644702
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-SR4F0-125D125U840-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

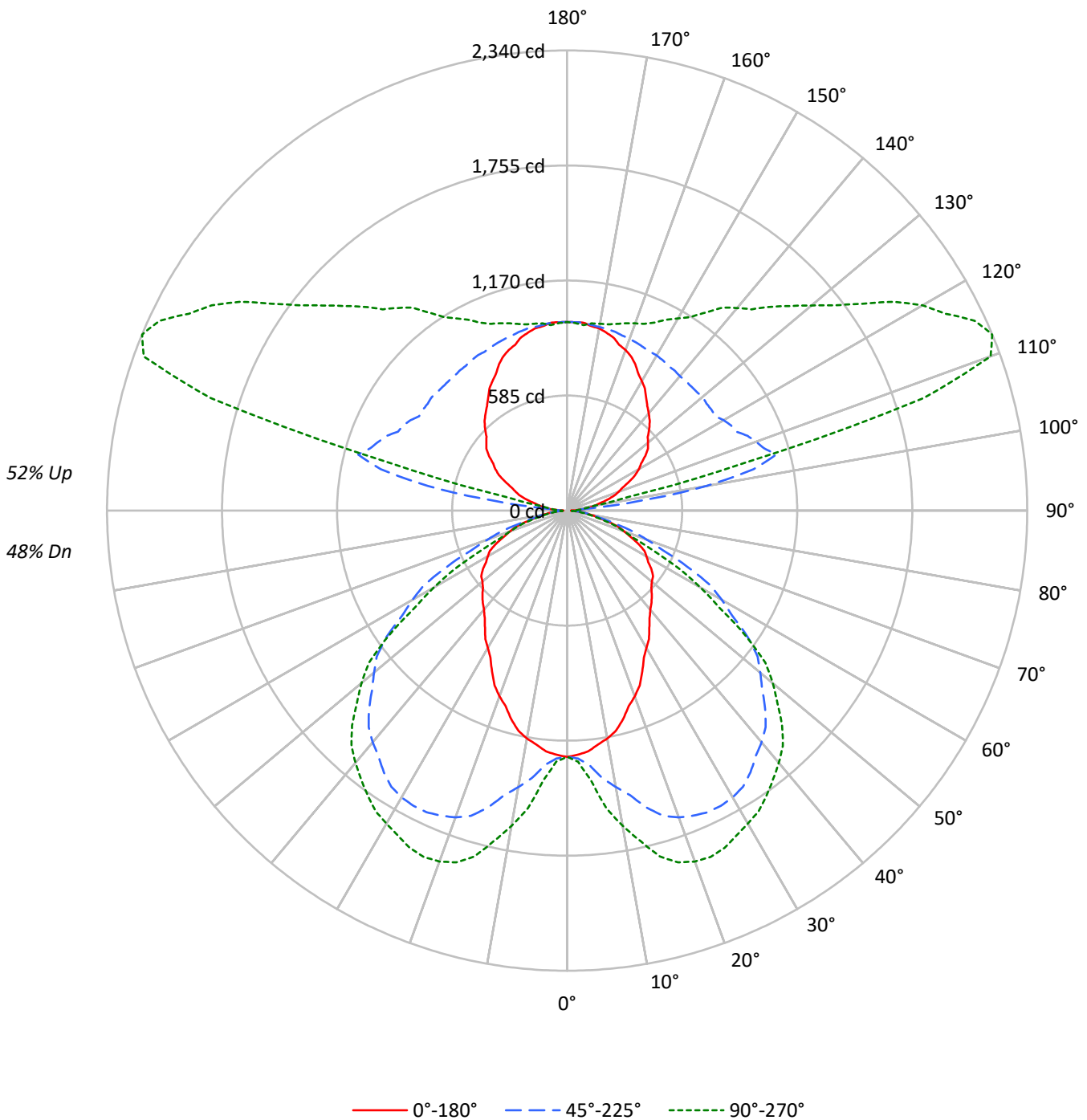
Lumens per Lamp: N/A
Luminaire Lumens: 9996.4 lumens
Efficiency: N/A
Efficacy: 127.8 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78.2
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										
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	50	30	10	0														
RCR																																						
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48	48	48	48	48														
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41	40	39	38	37	36	35														
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	41	39	34	33	32	31	30	29	28														
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	37	35	33	29	28	27	26	25	24	23														
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	31	28	24	23	22	21	20	19	18														
5	68	56	48	42	62	52	45	39	44	38	34	37	32	29	30	27	24	21	20	19	18	17	16	15														
6	62	50	42	36	57	46	39	34	39	34	30	33	29	25	27	24	21	18	17	16	15	14	13	12														
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	24	21	19	16	15	14	13	12	11	10														
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17	14	13	12	11	10	9	8														
9	49	37	30	24	45	35	28	23	30	24	20	25	21	18	21	17	15	12	11	10	9	8	7	6														
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	10	9	8	7	6	5	4														

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	1.3
10°-20°	426.8	4.3
20°-30°	709.1	7.1
30°-40°	894.5	8.9
40°-50°	956.3	9.6
50°-60°	844.0	8.4
60°-70°	541.7	5.4
70°-80°	240.2	2.4
80°-90°	64.4	0.6
90°-100°	134.3	1.3
100°-110°	850.5	8.5
110°-120°	1148.4	11.5
120°-130°	933.3	9.3
130°-140°	747.1	7.5
140°-150°	588.6	5.9
150°-160°	430.4	4.3
160°-170°	267.3	2.7
170°-180°	91.2	0.9
0°-30°	1264.4	12.6
0°-40°	2158.9	21.6
0°-60°	3959.2	39.6
0°-90°	4805.5	48.1
90°-120°	2133.2	21.3
90°-150°	4402.1	44.0
90°-180°	5191.0	51.9
0°-180°	9996.4	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	26	30	35	30	16
95°	80	110	63	63	72	78
105°	207	305	1100	1397	923	220
115°	346	414	950	1958	2286	344
125°	485	550	895	1553	1833	431
135°	591	656	892	1277	1465	455
145°	700	758	898	1112	1230	439
155°	820	850	917	1008	1055	376
165°	911	922	941	965	983	256
175°	959	965	959	953	947	91
180°	959	959	959	959	959	

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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	28.7	29.2	28.0	24.6
90°	20.4	26.3	29.5	35.4	29.7
92.5°	41.8	40.9	41.7	50.2	49.2
95°	80.3	110.2	62.8	63.2	72.2
97.5°	114.2	191.7	365.6	110.4	93.4
100°	140.8	232.5	720.3	215.2	141.6
102.5°	167.4	266.1	971.2	556.2	303.3
105°	207.3	304.7	1100.2	1397.2	922.6
107.5°	250.2	320.5	1050.8	2032.1	1900.7
110°	276.8	344.7	1021.8	2135.1	2291.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	305.7	373.6	992.9	2074.9	2339.7
115°	346.2	414.1	949.5	1958.1	2285.5
117.5°	390.3	457.6	938.6	1831.7	2168.5
120°	421.7	486.6	919.3	1735.5	2086.5
122.5°	445.8	513.1	892.9	1652.9	1975.5
125°	485.1	550.0	895.2	1553.0	1833.2
127.5°	517.2	585.5	893.5	1436.6	1713.8
130°	536.5	607.2	898.3	1356.8	1622.1
132.5°	555.9	626.7	893.6	1322.0	1540.1
135°	591.0	655.8	892.5	1276.7	1465.4
137.5°	621.1	690.7	892.5	1226.6	1388.2
140°	645.2	710.1	892.5	1197.3	1344.7
142.5°	669.4	729.5	897.3	1163.4	1301.3
145°	699.5	758.5	898.5	1112.2	1230.2
147.5°	735.7	787.6	905.7	1075.5	1166.3
150°	759.8	807.0	910.6	1051.0	1127.7
152.5°	783.9	826.4	910.6	1031.4	1093.9
155°	820.1	849.6	916.6	1008.1	1055.3
157.5°	849.1	877.4	923.8	993.4	1027.6
160°	868.4	891.9	928.7	983.6	1013.1
162.5°	882.8	906.4	933.5	978.6	998.6
165°	910.6	922.4	940.7	965.2	982.9
167.5°	926.2	936.9	946.8	959.1	969.7
170°	940.7	946.6	946.8	958.9	964.8
172.5°	945.5	956.2	951.6	954.1	960.0
175°	958.8	964.7	958.8	952.6	946.8
177.5°	958.8	963.5	958.8	958.7	954.0
180°	958.8	958.8	958.8	958.8	958.8

(END OF REPORT)