

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: P644822

Luminaire Tested: OMN4DIP-SR4F0-125D75U840-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644822
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-SR4F0-125D75U840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

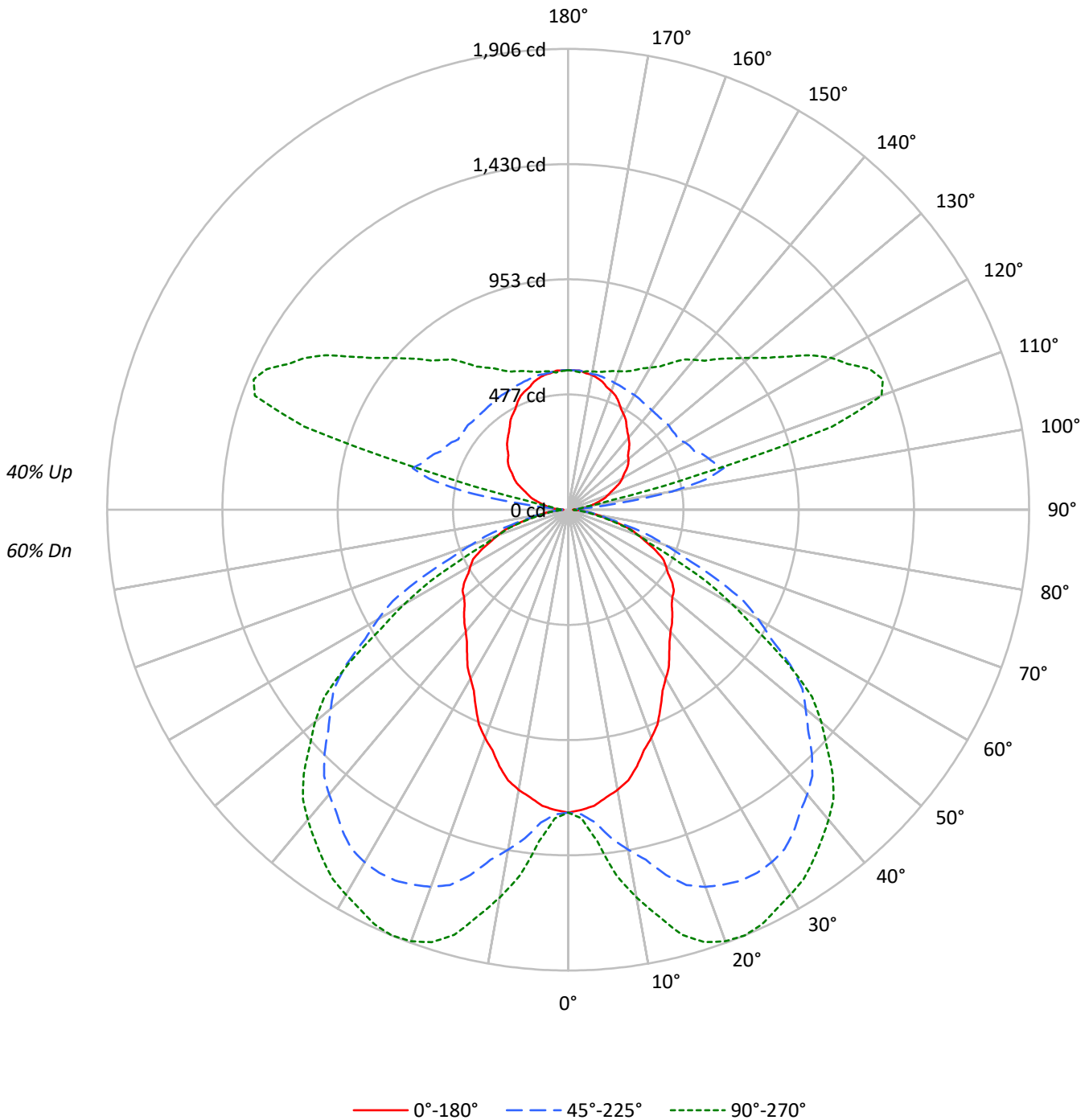
Lumens per Lamp: N/A
Luminaire Lumens: 7944.4 lumens
Efficiency: N/A
Efficacy: 130.7 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	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	1.6
10°-20°	426.8	5.4
20°-30°	709.1	8.9
30°-40°	894.5	11.3
40°-50°	956.3	12.0
50°-60°	844.0	10.6
60°-70°	541.7	6.8
70°-80°	240.2	3.0
80°-90°	63.5	0.8
90°-100°	87.3	1.1
100°-110°	516.0	6.5
110°-120°	694.2	8.7
120°-130°	563.6	7.1
130°-140°	449.8	5.7
140°-150°	354.2	4.5
150°-160°	259.0	3.3
160°-170°	160.9	2.0
170°-180°	54.9	0.7
0°-30°	1264.4	15.9
0°-40°	2158.9	27.2
0°-60°	3959.2	49.8
0°-90°	4804.6	60.5
90°-120°	1297.5	16.3
90°-150°	2665.1	33.5
90°-180°	3140.0	39.5
0°-180°	7944.4	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	24	25	28	22	15
95°	61	74	44	42	46	56
105°	133	190	666	842	555	141
115°	214	254	575	1180	1375	213
125°	295	334	542	936	1103	263
135°	356	395	537	768	882	274
145°	421	456	541	669	740	264
155°	494	511	552	607	635	227
165°	548	555	566	581	592	154
175°	577	580	577	573	570	55
180°	577	577	577	577	577	

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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	28.2	28.2	26.6	23.1
90°	20.4	23.9	24.7	28.2	22.5
92.5°	36.1	32.8	31.1	35.2	32.4
95°	61.1	74.5	43.6	41.5	45.7
97.5°	80.1	123.3	224.4	68.7	57.3
100°	95.2	146.9	436.9	131.8	86.4
102.5°	110.2	167.1	587.9	336.0	182.7
105°	132.9	190.4	665.6	841.9	555.2
107.5°	158.4	198.7	635.8	1224.0	1143.8
110°	173.5	213.2	618.4	1286.0	1378.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	190.9	230.7	601.0	1249.7	1408.0
115°	214.1	253.9	574.8	1179.5	1375.3
117.5°	240.4	280.0	568.3	1103.4	1304.9
120°	258.4	297.4	556.7	1045.5	1255.6
122.5°	272.9	312.5	539.8	995.8	1188.8
125°	295.4	334.4	542.2	935.7	1103.2
127.5°	313.5	355.6	540.0	865.4	1031.3
130°	325.2	367.7	542.9	816.5	976.2
132.5°	335.0	377.6	538.2	795.5	926.8
135°	355.6	394.7	537.1	768.3	881.8
137.5°	373.8	415.6	537.1	738.1	835.4
140°	388.3	427.3	537.1	720.5	809.2
142.5°	402.8	439.0	540.0	700.1	783.1
145°	420.9	456.4	540.7	669.3	740.3
147.5°	442.7	473.9	545.0	647.2	701.8
150°	457.2	485.6	548.0	632.5	678.6
152.5°	471.7	497.3	548.0	620.7	658.3
155°	493.5	511.3	551.6	606.7	635.0
157.5°	510.9	528.0	555.9	597.8	618.3
160°	522.5	536.7	558.8	591.9	609.6
162.5°	531.3	545.5	561.7	588.9	600.9
165°	548.0	555.0	566.1	580.9	591.5
167.5°	557.4	563.8	569.7	577.1	583.5
170°	566.1	569.6	569.7	577.1	580.6
172.5°	569.0	575.4	572.6	574.2	577.7
175°	577.0	580.5	577.0	573.3	569.7
177.5°	577.0	579.8	577.0	576.9	574.1
180°	577.0	577.0	577.0	577.0	577.0

(END OF REPORT)