

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: P644792

Luminaire Tested: OMN4DIP-SR4F0-125D50U840-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644792
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-SR4F0-125D50U840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

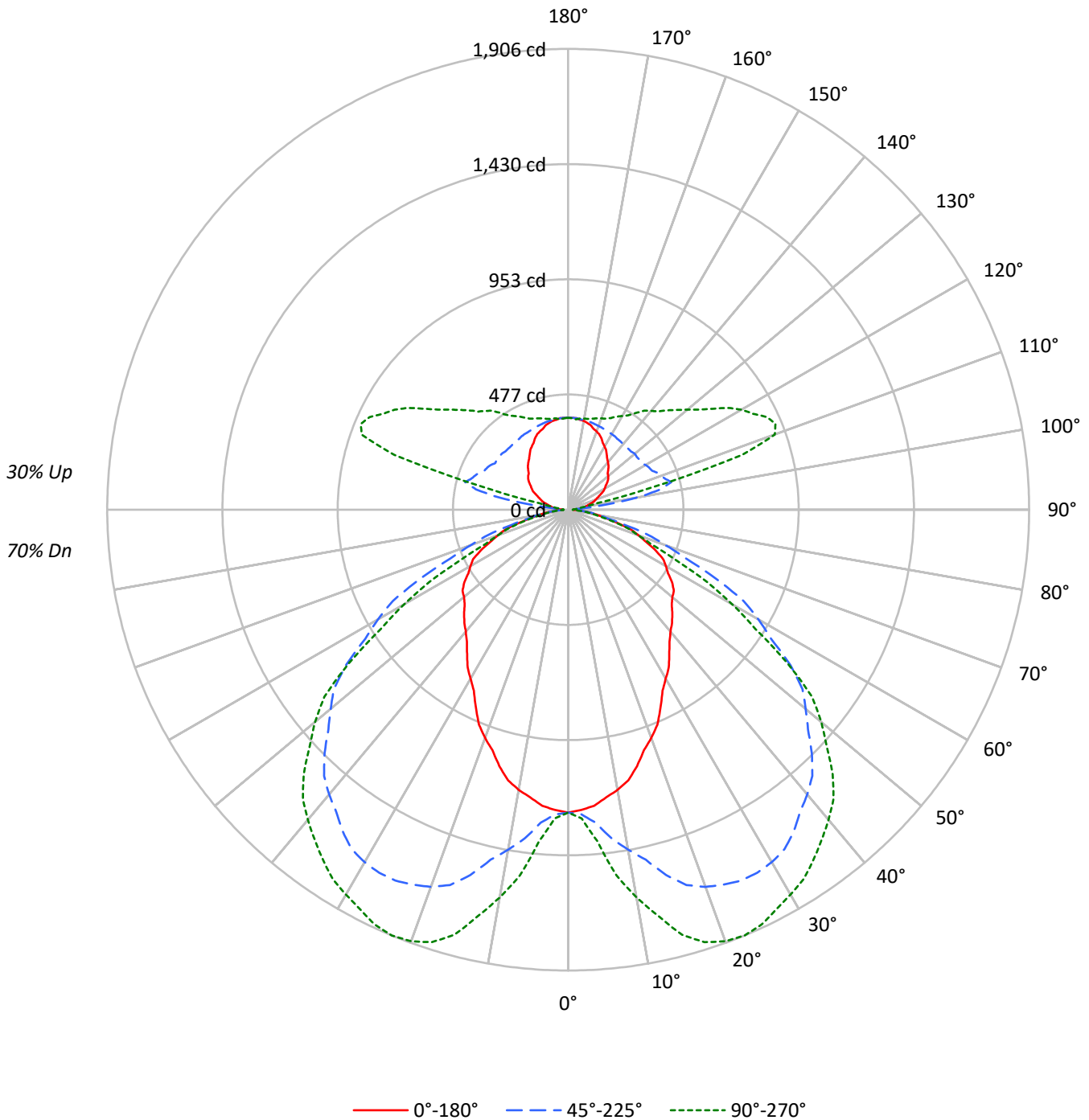
Lumens per Lamp: N/A
Luminaire Lumens: 6886.9 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	0
RCR																		
0	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	70
1	102	98	94	90	97	93	89	86	83	80	78	74	72	70	66	64	63	59
2	93	86	79	74	88	81	76	71	73	68	65	65	62	59	58	55	53	49
3	85	75	68	61	80	71	64	59	64	59	54	57	53	50	51	48	45	42
4	78	66	58	52	73	63	56	50	57	51	46	51	46	42	46	42	39	36
5	71	59	51	44	67	56	48	43	51	44	40	46	40	36	41	37	33	31
6	66	53	44	38	62	50	43	37	46	39	34	41	36	32	37	33	29	27
7	61	48	39	34	57	45	38	32	41	35	30	37	32	28	34	29	26	23
8	56	43	35	30	53	41	34	29	38	31	27	34	29	25	31	26	23	21
9	52	39	32	26	49	38	30	25	34	28	24	31	26	22	28	24	21	18
10	49	36	29	24	46	35	28	23	32	26	21	29	24	20	26	22	19	17

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	1.9
10°-20°	426.8	6.2
20°-30°	709.1	10.3
30°-40°	894.5	13.0
40°-50°	956.3	13.9
50°-60°	844.0	12.3
60°-70°	541.7	7.9
70°-80°	240.2	3.5
80°-90°	63.1	0.9
90°-100°	63.1	0.9
100°-110°	343.6	5.0
110°-120°	460.2	6.7
120°-130°	373.1	5.4
130°-140°	296.6	4.3
140°-150°	233.4	3.4
150°-160°	170.7	2.5
160°-170°	106.0	1.5
170°-180°	36.1	0.5
0°-30°	1264.4	18.4
0°-40°	2158.9	31.3
0°-60°	3959.2	57.5
0°-90°	4804.2	69.8
90°-120°	866.9	12.6
90°-150°	1770.0	25.7
90°-180°	2083.0	30.2
0°-180°	6886.9	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	23	22	24	19	15
95°	51	56	34	30	32	45
105°	94	131	442	556	366	101
115°	146	171	382	778	906	146
125°	198	223	360	618	727	176
135°	234	260	354	506	581	181
145°	277	301	356	441	488	174
155°	325	337	364	400	418	149
165°	361	366	373	383	390	101
175°	380	382	380	378	375	36
180°	380	380	380	380	380	



TEST NUMBER: P644792

CATALOG NUMBER: OMN4DIP-SR4F0-125D50U840-CLBOOB-1DUDD-WW

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	28.0	27.8	25.8	22.4
90°	20.4	22.7	22.3	24.5	18.8
92.5°	33.1	28.6	25.7	27.6	23.7
95°	51.2	56.1	33.7	30.3	32.1
97.5°	62.5	88.1	151.7	47.2	38.8
100°	71.6	102.8	290.9	88.8	57.9
102.5°	80.8	116.1	390.4	222.6	120.6
105°	94.5	131.4	441.5	555.7	365.9
107.5°	111.1	136.0	421.9	807.5	753.7
110°	120.3	145.5	410.5	848.4	908.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	131.8	157.0	399.0	824.5	927.8
115°	146.1	171.3	381.8	778.2	906.3
117.5°	163.2	188.5	377.5	728.1	859.9
120°	174.3	200.0	369.8	689.9	827.4
122.5°	183.8	209.1	357.9	657.1	783.4
125°	197.6	223.4	360.2	617.5	726.9
127.5°	208.6	237.1	357.8	571.0	679.6
130°	216.3	244.3	359.7	538.0	643.2
132.5°	221.2	249.2	355.1	524.2	610.7
135°	234.3	260.1	353.9	506.2	581.1
137.5°	246.3	273.9	353.9	486.4	550.5
140°	255.9	281.6	353.9	474.8	533.2
142.5°	265.4	289.3	355.8	461.3	516.0
145°	277.4	300.8	356.3	441.0	487.8
147.5°	291.7	312.3	359.2	426.5	462.5
150°	301.3	320.0	361.1	416.8	447.2
152.5°	310.9	327.7	361.1	409.0	433.8
155°	325.2	336.9	363.5	399.8	418.5
157.5°	336.7	347.9	366.3	393.9	407.5
160°	344.3	353.7	368.2	390.0	401.7
162.5°	350.1	359.4	370.2	388.0	396.0
165°	361.1	365.7	373.0	382.8	389.8
167.5°	367.3	371.5	375.4	380.3	384.5
170°	373.0	375.4	375.4	380.3	382.6
172.5°	374.9	379.1	377.3	378.3	380.7
175°	380.2	382.5	380.2	377.8	375.4
177.5°	380.2	382.1	380.2	380.2	378.3
180°	380.2	380.2	380.2	380.2	380.2

(END OF REPORT)