

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: P644754

Luminaire Tested: OMN4DIP-SR4F0-125D25U830-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644754
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-SR4F0-125D25U830-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

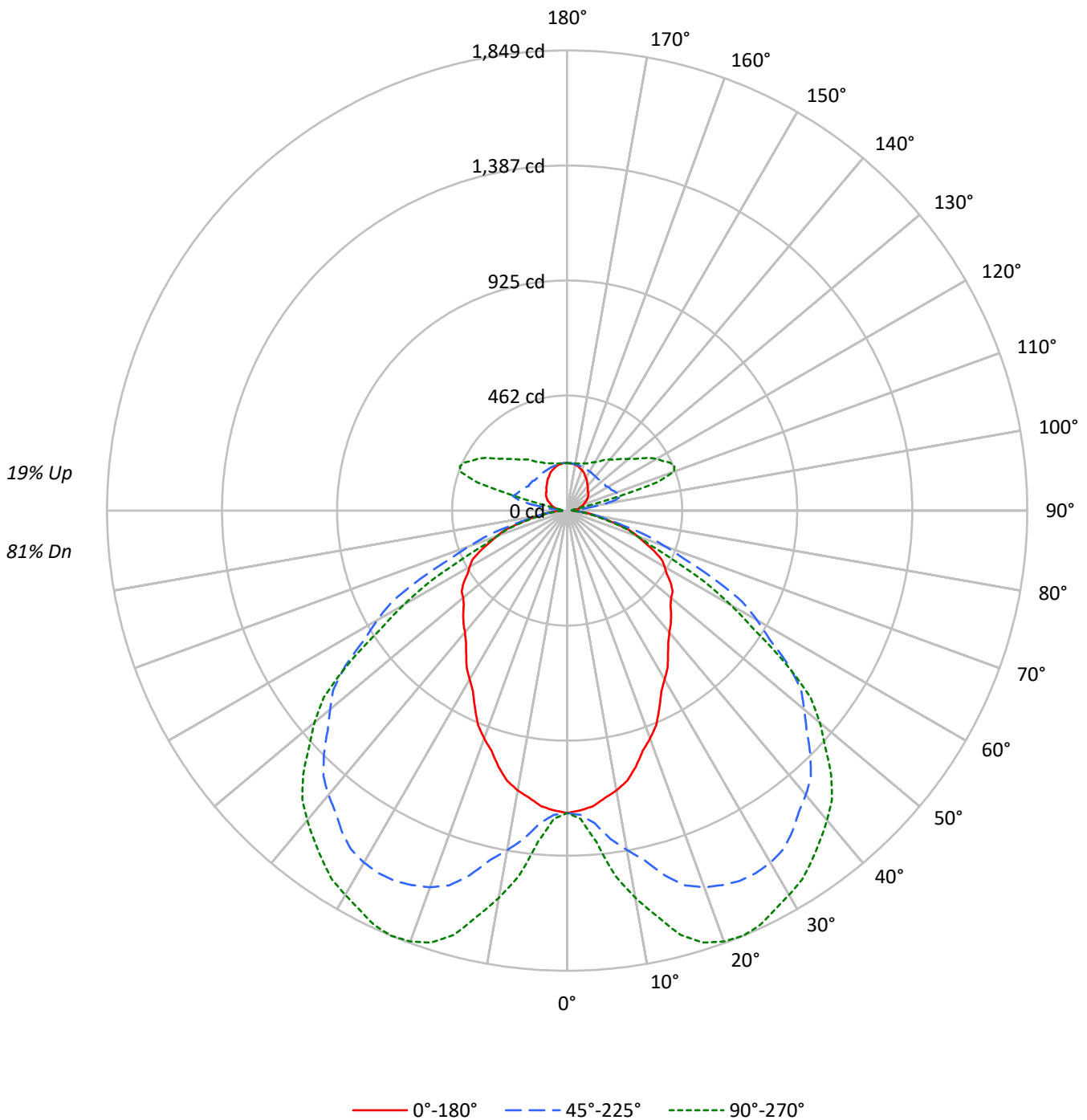
Lumens per Lamp: N/A
Luminaire Lumens: 5726.4 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 48.3
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

TEST NUMBER: P644754

CATALOG NUMBER: OMN4DIP-SR4F0-125D25U830-CLBOOB-1DUDD-WW

Luminous Intensity Polar Plot





TEST NUMBER: P644754

CATALOG NUMBER: OMN4DIP-SR4F0-125D25U830-CLBOOB-1DUDD-WW

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	115	115	115	115	110	110	110	110	101	101	101	93	93	93	85	85	85	81				
1	105	101	97	93	100	96	93	90	89	86	84	82	80	78	75	74	72	69				
2	96	88	81	76	91	84	79	74	78	73	69	72	68	65	66	63	61	58				
3	87	77	69	63	83	74	67	61	69	63	58	63	59	55	59	55	52	49				
4	80	68	60	53	76	66	58	52	61	54	49	56	51	47	52	48	44	41				
5	73	61	52	46	70	59	51	45	54	48	42	50	45	40	47	42	38	36				
6	67	54	46	40	64	53	44	39	49	42	37	45	40	35	42	37	33	31				
7	62	49	41	35	59	47	40	34	44	37	32	41	35	31	38	33	29	27				
8	58	45	36	31	55	43	35	30	40	34	29	38	32	27	35	30	26	24				
9	54	41	33	27	51	39	32	27	37	30	26	35	29	25	32	27	24	22				
10	50	37	30	25	48	36	29	24	34	28	23	32	26	22	30	25	21	19				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19617	19617	19617
5°	19326	20425	21616
10°	18715	22699	25896
15°	17805	25362	29519
20°	16749	27673	31654
25°	15604	29247	32719
30°	14592	30449	33240
35°	13923	31077	33805
40°	13460	31445	34244
45°	13483	31549	34260
50°	13697	31230	33287
55°	14317	30621	30224
60°	14599	28468	24545
65°	14789	24936	18029
70°	14139	19610	14006
75°	12689	14629	11809
80°	10767	11557	9456
85°	10467	9429	7855

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 34260 cd/sqm



TEST NUMBER: P644754

CATALOG NUMBER: OMN4DIP-SR4F0-125D25U830-CLBOOB-1DUDD-WW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.6	2.2
10°-20°	414.1	7.2
20°-30°	688.0	12.0
30°-40°	867.9	15.2
40°-50°	927.7	16.2
50°-60°	818.8	14.3
60°-70°	525.5	9.2
70°-80°	233.0	4.1
80°-90°	60.8	1.1
90°-100°	39.4	0.7
100°-110°	177.6	3.1
110°-120°	235.0	4.1
120°-130°	190.0	3.3
130°-140°	149.3	2.6
140°-150°	117.3	2.0
150°-160°	85.8	1.5
160°-170°	53.3	0.9
170°-180°	18.2	0.3
0°-30°	1226.7	21.4
0°-40°	2094.5	36.6
0°-60°	3841.1	67.1
0°-90°	4660.5	81.4
90°-120°	452.0	7.9
90°-150°	908.6	15.9
90°-180°	1066.0	18.6
0°-180°	5726.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1215	1215	1215	1215	1215	
5°	1192	1228	1260	1303	1334	112
15°	1065	1228	1517	1700	1766	298
25°	876	1188	1642	1795	1837	403
35°	706	1085	1577	1679	1715	444
45°	590	928	1382	1467	1500	456
55°	509	730	1088	1093	1074	451
65°	387	489	653	530	472	379
75°	203	226	234	200	189	217
85°	56	48	51	45	42	60
90°	20	21	19	20	15	14
95°	41	38	24	19	19	34
105°	57	74	226	281	184	61
115°	80	92	196	392	456	80
125°	103	116	185	312	365	92
135°	118	131	178	254	292	91
145°	139	151	179	222	245	88
155°	164	169	183	201	210	75
165°	182	184	188	192	196	51
175°	191	192	191	190	189	18
180°	191	191	191	191	191	

TEST NUMBER: P644754

CATALOG NUMBER: OMN4DIP-SR4F0-125D25U830-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1215.0	1215.0	1215.0	1215.0	1215.0
2.5°	1206.0	1223.6	1224.0	1231.0	1239.9
5°	1192.4	1228.3	1260.2	1303.3	1333.7
7.5°	1164.1	1228.2	1330.3	1430.3	1480.0
10°	1141.5	1229.9	1384.5	1518.7	1579.5
12.5°	1112.1	1229.3	1438.8	1600.3	1669.9
15°	1065.2	1228.2	1517.3	1699.7	1766.0
17.5°	1011.0	1223.2	1578.9	1761.7	1819.7
20°	974.8	1218.0	1610.6	1784.3	1842.3
22.5°	934.1	1206.0	1628.7	1795.5	1849.1
25°	875.9	1188.1	1641.7	1795.2	1836.6
27.5°	818.9	1162.5	1642.2	1772.4	1807.8
30°	782.7	1141.8	1633.2	1749.8	1782.9
32.5°	751.0	1119.0	1615.1	1722.7	1758.1
35°	706.4	1084.9	1576.7	1679.2	1715.1
37.5°	668.0	1045.9	1528.1	1627.9	1669.9
40°	638.6	1014.3	1491.9	1591.6	1624.7
42.5°	616.0	980.7	1449.0	1546.2	1575.0
45°	590.5	927.6	1381.7	1467.2	1500.4
47.5°	563.4	872.9	1304.3	1385.0	1406.6
50°	545.3	832.7	1243.3	1316.9	1325.2
52.5°	534.0	790.4	1184.5	1230.9	1232.5
55°	508.6	729.6	1087.8	1093.1	1073.7
57.5°	474.7	658.7	965.2	937.6	891.2
60°	452.1	609.6	881.6	826.4	760.1
62.5°	429.5	562.7	793.4	704.1	626.7
65°	387.1	489.3	652.7	529.9	471.9
67.5°	337.9	408.7	512.6	396.4	357.7
70°	299.5	354.8	415.4	324.3	296.7
72.5°	263.3	300.9	336.2	268.1	253.7
75°	203.4	225.5	234.5	200.4	189.3
77.5°	149.8	150.9	162.8	141.2	135.6
80°	115.8	110.3	124.3	107.2	101.7
82.5°	88.7	81.0	90.4	77.9	74.6
85°	56.5	48.2	50.9	45.1	42.4
87.5°	33.3	26.9	26.5	24.4	21.1
90°	19.8	21.0	19.4	20.4	14.9
92.5°	29.4	24.0	20.0	19.8	15.2
95°	40.7	37.9	23.7	19.3	18.9
97.5°	44.8	53.6	81.4	26.4	20.9
100°	48.3	60.0	150.3	47.3	30.5
102.5°	51.8	66.6	200.3	113.5	60.9
105°	57.0	74.3	226.1	280.7	183.9
107.5°	65.1	75.2	216.2	407.3	378.9
110°	68.6	80.0	210.4	427.8	456.8



TEST NUMBER: P644754

CATALOG NUMBER: OMN4DIP-SR4F0-125D25U830-CLBOOB-1DUDD-WW

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	74.4	85.8	204.7	415.8	466.4
115°	80.2	91.6	196.0	392.5	455.6
117.5°	88.6	100.2	193.8	367.3	432.3
120°	93.0	106.0	190.0	348.2	415.9
122.5°	97.9	109.5	182.9	331.7	393.8
125°	103.4	116.4	185.2	311.8	365.4
127.5°	107.6	123.0	182.6	288.1	341.6
130°	111.4	125.5	183.6	270.5	323.4
132.5°	111.7	125.8	179.0	263.5	307.0
135°	117.8	130.7	177.9	254.5	292.1
137.5°	123.8	137.7	177.9	244.5	276.7
140°	128.6	141.6	177.9	238.7	268.1
142.5°	133.4	145.4	178.9	231.9	259.4
145°	139.4	151.2	179.1	221.7	245.2
147.5°	146.7	157.0	180.6	214.4	232.5
150°	151.5	160.9	181.5	209.5	224.8
152.5°	156.3	164.7	181.5	205.6	218.1
155°	163.5	169.4	182.7	201.0	210.4
157.5°	169.3	174.9	184.2	198.0	204.8
160°	173.1	177.8	185.1	196.1	201.9
162.5°	176.0	180.7	186.1	195.1	199.1
165°	181.5	183.9	187.5	192.4	195.9
167.5°	184.6	186.8	188.7	191.2	193.3
170°	187.5	188.7	188.7	191.2	192.3
172.5°	188.5	190.6	189.7	190.2	191.4
175°	191.1	192.3	191.1	189.9	188.7
177.5°	191.1	192.1	191.1	191.1	190.2
180°	191.1	191.1	191.1	191.1	191.1

(END OF REPORT)