

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: P644758

Luminaire Tested: OMN4DIP-SR4F0-125D25U835-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644758
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-SR4F0-125D25U835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

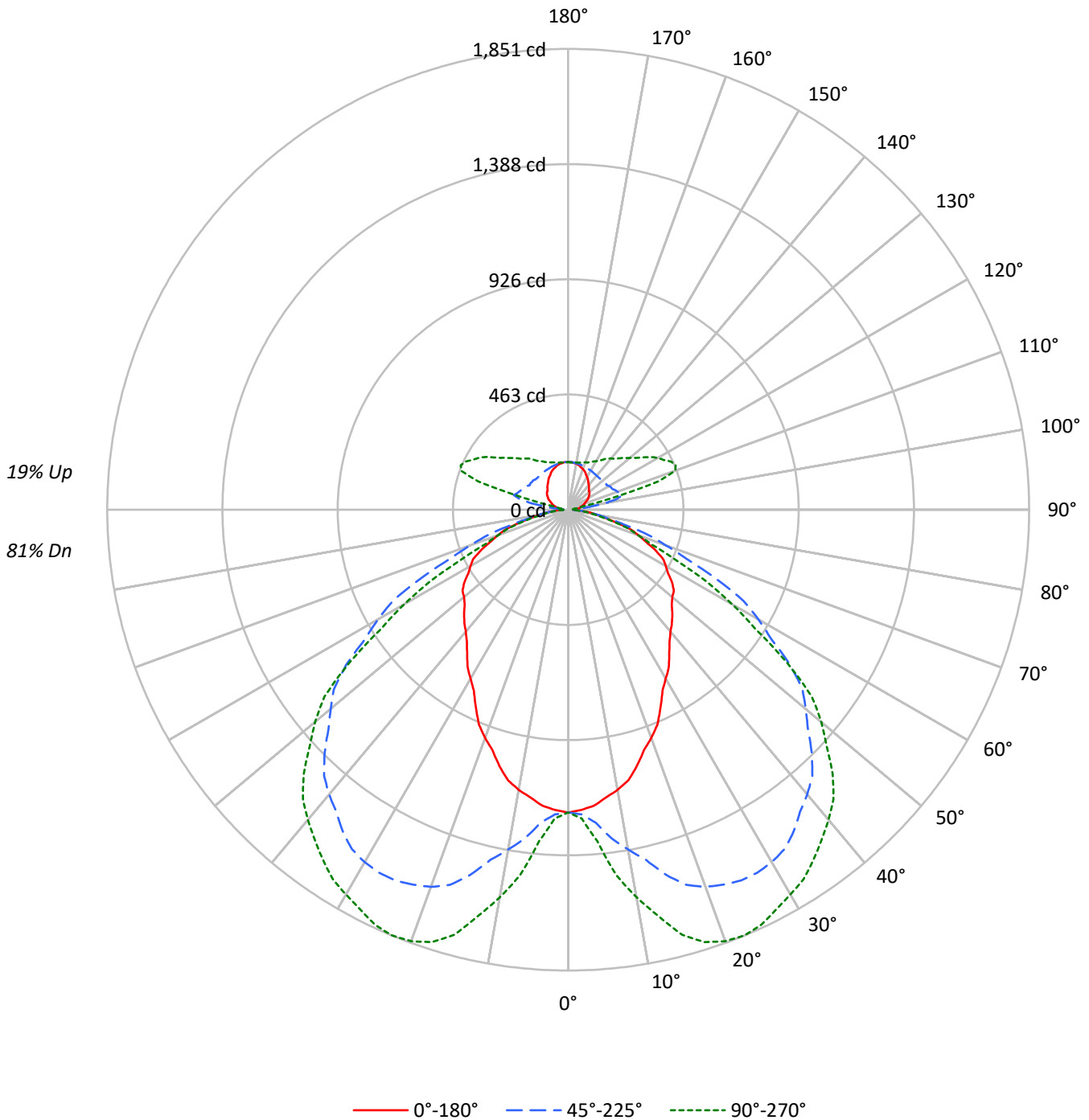
Lumens per Lamp: N/A
Luminaire Lumens: 5731.6 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 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

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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	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°	19635	19635	19635
5°	19344	20443	21635
10°	18733	22720	25919
15°	17822	25386	29546
20°	16765	27697	31682
25°	15618	29272	32749
30°	14605	30477	33271
35°	13935	31105	33837
40°	13472	31474	34275
45°	13497	31579	34289
50°	13710	31257	33317
55°	14331	30649	30252
60°	14612	28494	24568
65°	14804	24959	18044
70°	14153	19624	14021
75°	12701	14641	11822
80°	10786	11567	9465
85°	10485	9429	7855

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 34289 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.7	2.2
10°-20°	414.5	7.2
20°-30°	688.6	12.0
30°-40°	868.7	15.2
40°-50°	928.6	16.2
50°-60°	819.6	14.3
60°-70°	526.0	9.2
70°-80°	233.3	4.1
80°-90°	60.9	1.1
90°-100°	39.4	0.7
100°-110°	177.8	3.1
110°-120°	235.3	4.1
120°-130°	190.1	3.3
130°-140°	149.5	2.6
140°-150°	117.4	2.0
150°-160°	85.9	1.5
160°-170°	53.3	0.9
170°-180°	18.2	0.3
0°-30°	1227.8	21.4
0°-40°	2096.4	36.6
0°-60°	3844.6	67.1
0°-90°	4664.7	81.4
90°-120°	452.5	7.9
90°-150°	909.5	15.9
90°-180°	1067.0	18.6
0°-180°	5731.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1216	1216	1216	1216	1216	
5°	1194	1229	1261	1304	1335	112
15°	1066	1229	1519	1701	1768	299
25°	877	1189	1643	1797	1838	403
35°	707	1086	1578	1681	1717	444
45°	591	928	1383	1469	1502	457
55°	509	730	1089	1094	1075	452
65°	388	490	653	530	472	379
75°	204	226	235	200	190	217
85°	57	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	393	456	80
125°	104	116	185	312	366	92
135°	118	131	178	255	292	92
145°	140	151	179	222	245	88
155°	164	170	183	201	211	75
165°	182	184	188	193	196	51
175°	191	192	191	190	189	18
180°	191	191	191	191	191	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1216.1	1216.1	1216.1	1216.1	1216.1
2.5°	1207.0	1224.7	1225.1	1232.1	1241.0
5°	1193.5	1229.4	1261.3	1304.5	1334.9
7.5°	1165.2	1229.3	1331.5	1431.6	1481.4
10°	1142.6	1231.1	1385.8	1520.1	1580.9
12.5°	1113.2	1230.4	1440.1	1601.7	1671.4
15°	1066.2	1229.4	1518.7	1701.2	1767.6
17.5°	1011.9	1224.3	1580.4	1763.2	1821.3
20°	975.7	1219.0	1612.0	1785.9	1843.9
22.5°	935.0	1207.1	1630.1	1797.1	1850.7
25°	876.7	1189.2	1643.1	1796.8	1838.3
27.5°	819.6	1163.6	1643.7	1774.0	1809.4
30°	783.4	1142.9	1634.7	1751.4	1784.6
32.5°	751.7	1120.1	1616.6	1724.3	1759.7
35°	707.0	1085.9	1578.1	1680.7	1716.7
37.5°	668.6	1046.9	1529.5	1629.4	1671.4
40°	639.2	1015.2	1493.3	1593.0	1626.2
42.5°	616.5	981.5	1450.3	1547.6	1576.4
45°	591.1	928.4	1383.0	1468.6	1501.7
47.5°	563.9	873.6	1305.5	1386.3	1407.8
50°	545.8	833.4	1244.4	1318.1	1326.4
52.5°	534.5	791.1	1185.6	1232.0	1233.6
55°	509.1	730.3	1088.8	1094.0	1074.7
57.5°	475.1	659.3	966.1	938.4	892.0
60°	452.5	610.1	882.4	827.1	760.8
62.5°	429.9	563.2	794.1	704.7	627.3
65°	387.5	489.8	653.3	530.4	472.3
67.5°	338.2	409.0	513.0	396.8	358.0
70°	299.8	355.1	415.7	324.6	297.0
72.5°	263.6	301.2	336.5	268.3	254.0
75°	203.6	225.7	234.7	200.5	189.5
77.5°	149.9	151.0	162.9	141.3	135.8
80°	116.0	110.4	124.4	107.3	101.8
82.5°	88.8	81.1	90.5	78.0	74.7
85°	56.6	48.3	50.9	45.2	42.4
87.5°	33.4	27.0	26.5	24.4	21.1
90°	19.8	21.0	19.4	20.5	14.9
92.5°	29.5	24.0	20.0	19.8	15.2
95°	40.7	37.9	23.8	19.3	18.9
97.5°	44.8	53.7	81.5	26.5	20.9
100°	48.3	60.0	150.5	47.4	30.5
102.5°	51.8	66.7	200.5	113.6	61.0
105°	57.1	74.3	226.3	281.0	184.1
107.5°	65.2	75.3	216.4	407.6	379.2
110°	68.7	80.1	210.6	428.2	457.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	74.5	85.8	204.8	416.2	466.8
115°	80.3	91.7	196.2	392.9	456.0
117.5°	88.7	100.3	194.0	367.7	432.7
120°	93.1	106.1	190.2	348.5	416.3
122.5°	97.9	109.6	183.1	332.0	394.2
125°	103.5	116.5	185.4	312.1	365.8
127.5°	107.7	123.1	182.8	288.4	341.9
130°	111.5	125.7	183.7	270.7	323.7
132.5°	111.8	125.9	179.2	263.8	307.3
135°	117.9	130.9	178.1	254.7	292.4
137.5°	123.9	137.8	178.1	244.7	277.0
140°	128.7	141.7	178.1	238.9	268.3
142.5°	133.6	145.6	179.0	232.1	259.6
145°	139.6	151.3	179.3	221.9	245.4
147.5°	146.8	157.1	180.7	214.6	232.7
150°	151.6	161.0	181.7	209.7	225.0
152.5°	156.4	164.9	181.7	205.8	218.3
155°	163.6	169.5	182.9	201.1	210.6
157.5°	169.4	175.1	184.3	198.2	205.0
160°	173.3	178.0	185.3	196.2	202.1
162.5°	176.1	180.8	186.3	195.2	199.2
165°	181.7	184.0	187.7	192.6	196.1
167.5°	184.8	186.9	188.9	191.4	193.5
170°	187.7	188.9	188.9	191.3	192.5
172.5°	188.7	190.8	189.9	190.4	191.5
175°	191.3	192.5	191.3	190.1	188.9
177.5°	191.3	192.2	191.3	191.3	190.3
180°	191.3	191.3	191.3	191.3	191.3

(END OF REPORT)