

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: P644773

Luminaire Tested: OMN4DIP-SR4F0-125D25U935-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



**Test Information**

Test Method: LM-79-2019  
Report Number: P644773  
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-SR4F0-125D25U935-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, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

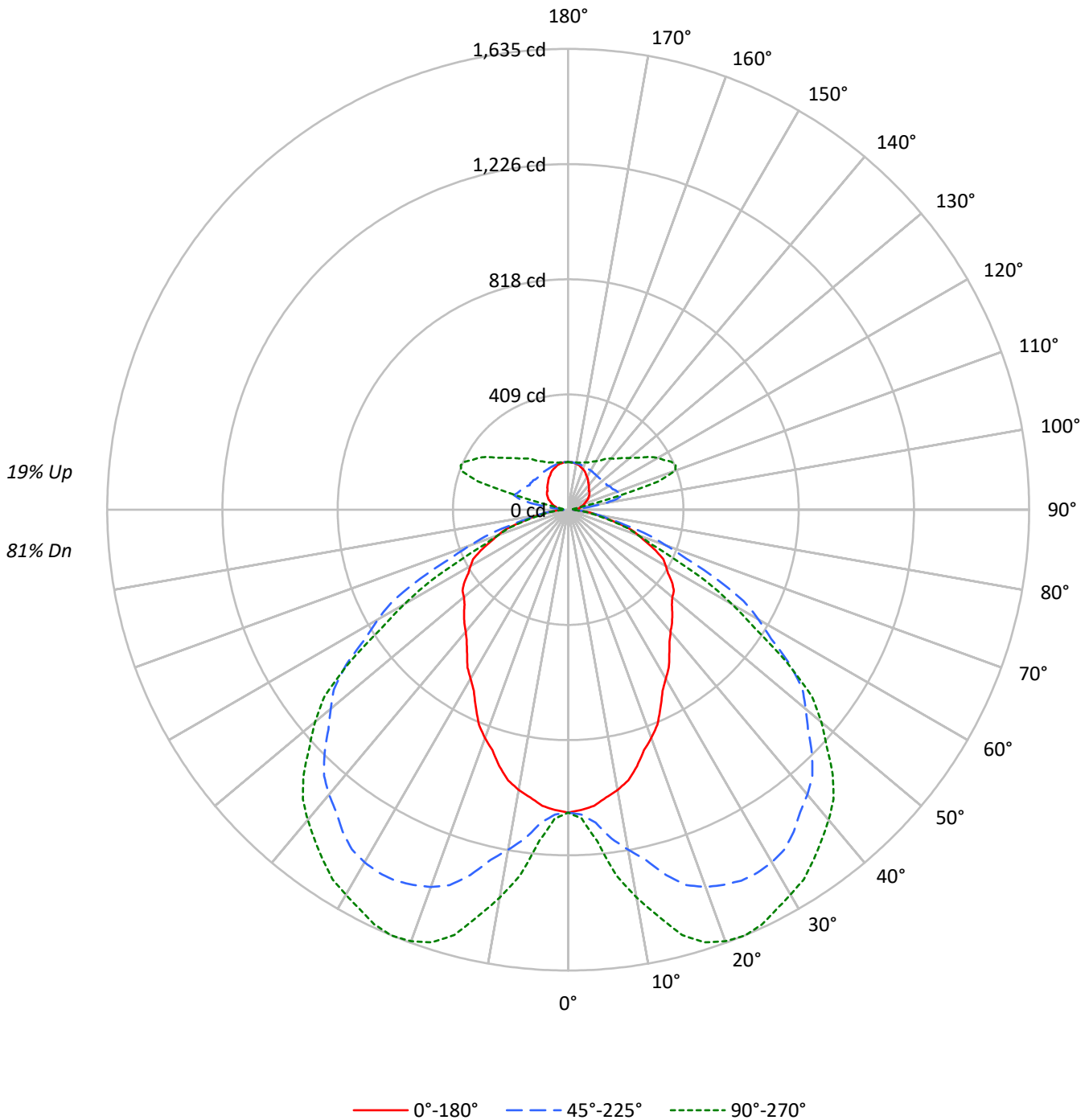
Lumens per Lamp: N/A  
Luminaire Lumens: 5064.7 lumens  
Efficiency: N/A  
Efficacy: 104.9 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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	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°	17350	17350	17350
5°	17092	18065	19118
10°	16552	20077	22904
15°	15749	22432	26108
20°	14814	24476	27996
25°	13801	25867	28939
30°	12905	26931	29399
35°	12315	27486	29899
40°	11904	27811	30288
45°	11926	27905	30300
50°	12115	27620	29441
55°	12662	27083	26733
60°	12913	25178	21710
65°	13081	22055	15943
70°	12505	17344	12387
75°	11223	12938	10443
80°	9530	10228	8368
85°	9263	8336	6947

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 30300 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.2	2.2
10°-20°	366.3	7.2
20°-30°	608.5	12.0
30°-40°	767.6	15.2
40°-50°	820.5	16.2
50°-60°	724.2	14.3
60°-70°	464.8	9.2
70°-80°	206.1	4.1
80°-90°	53.8	1.1
90°-100°	34.8	0.7
100°-110°	157.1	3.1
110°-120°	207.9	4.1
120°-130°	168.0	3.3
130°-140°	132.1	2.6
140°-150°	103.8	2.0
150°-160°	75.9	1.5
160°-170°	47.1	0.9
170°-180°	16.1	0.3
0°-30°	1084.9	21.4
0°-40°	1852.5	36.6
0°-60°	3397.3	67.1
0°-90°	4122.0	81.4
90°-120°	399.8	7.9
90°-150°	803.7	15.9
90°-180°	943.0	18.6
0°-180°	5064.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1075	1075	1075	1075	1075	
5°	1055	1086	1115	1153	1180	99
15°	942	1086	1342	1503	1562	264
25°	775	1051	1452	1588	1624	356
35°	625	960	1394	1485	1517	392
45°	522	820	1222	1298	1327	404
55°	450	645	962	967	950	399
65°	342	433	577	469	417	335
75°	180	200	207	177	167	192
85°	50	43	45	40	38	53
90°	18	18	17	18	13	12
95°	36	34	21	17	17	30
105°	50	66	200	248	163	54
115°	71	81	173	347	403	71
125°	92	103	164	276	323	81
135°	104	116	157	225	258	81
145°	123	134	158	196	217	77
155°	145	150	162	178	186	66
165°	160	163	166	170	173	45
175°	169	170	169	168	167	16
180°	169	169	169	169	169	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1074.6	1074.6	1074.6	1074.6	1074.6
2.5°	1066.6	1082.3	1082.6	1088.8	1096.6
5°	1054.6	1086.4	1114.6	1152.7	1179.6
7.5°	1029.6	1086.3	1176.6	1265.0	1309.0
10°	1009.6	1087.8	1224.6	1343.2	1397.0
12.5°	983.6	1087.2	1272.5	1415.4	1477.0
15°	942.2	1086.3	1342.0	1503.3	1561.9
17.5°	894.2	1081.8	1396.5	1558.1	1609.4
20°	862.2	1077.2	1424.5	1578.1	1629.4
22.5°	826.2	1066.6	1440.5	1588.0	1635.4
25°	774.7	1050.8	1452.0	1587.8	1624.4
27.5°	724.2	1028.2	1452.5	1567.6	1598.9
30°	692.2	1009.9	1444.5	1547.6	1576.9
32.5°	664.3	989.7	1428.5	1523.7	1554.9
35°	624.8	959.5	1394.5	1485.2	1516.9
37.5°	590.8	925.1	1351.5	1439.8	1477.0
40°	564.8	897.1	1319.5	1407.7	1437.0
42.5°	544.8	867.4	1281.5	1367.6	1393.0
45°	522.3	820.4	1222.1	1297.7	1327.0
47.5°	498.3	772.0	1153.6	1225.0	1244.0
50°	482.3	736.5	1099.6	1164.7	1172.1
52.5°	472.3	699.1	1047.6	1088.6	1090.1
55°	449.8	645.3	962.1	966.8	949.7
57.5°	419.8	582.6	853.7	829.3	788.2
60°	399.9	539.1	779.7	730.9	672.3
62.5°	379.9	497.6	701.7	622.7	554.3
65°	342.4	432.8	577.3	468.7	417.3
67.5°	298.9	361.4	453.3	350.6	316.4
70°	264.9	313.8	367.4	286.8	262.4
72.5°	232.9	266.1	297.4	237.1	224.4
75°	179.9	199.5	207.4	177.2	167.4
77.5°	132.5	133.4	143.9	124.8	120.0
80°	102.5	97.6	110.0	94.9	90.0
82.5°	78.5	71.6	80.0	68.9	66.0
85°	50.0	42.7	45.0	39.9	37.5
87.5°	29.5	23.8	23.4	21.6	18.6
90°	17.5	18.5	17.1	18.1	13.2
92.5°	26.0	21.2	17.7	17.5	13.4
95°	36.0	33.5	21.0	17.1	16.7
97.5°	39.6	47.4	72.0	23.4	18.4
100°	42.7	53.0	133.0	41.9	27.0
102.5°	45.8	58.9	177.2	100.4	53.9
105°	50.5	65.7	199.9	248.3	162.7
107.5°	57.6	66.5	191.2	360.2	335.1
110°	60.7	70.7	186.1	378.4	404.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	65.8	75.8	181.0	367.8	412.5
115°	71.0	81.0	173.4	347.2	402.9
117.5°	78.3	88.7	171.4	324.9	382.3
120°	82.3	93.7	168.0	307.9	367.9
122.5°	86.5	96.9	161.8	293.4	348.3
125°	91.5	102.9	163.8	275.8	323.2
127.5°	95.2	108.8	161.5	254.8	302.2
130°	98.6	111.0	162.3	239.2	286.0
132.5°	98.8	111.3	158.4	233.1	271.5
135°	104.2	115.6	157.4	225.1	258.4
137.5°	109.5	121.8	157.4	216.3	244.7
140°	113.8	125.2	157.4	211.1	237.1
142.5°	118.0	128.6	158.2	205.1	229.4
145°	123.3	133.7	158.4	196.1	216.9
147.5°	129.7	138.9	159.7	189.6	205.6
150°	134.0	142.3	160.5	185.3	198.8
152.5°	138.2	145.7	160.5	181.8	192.9
155°	144.6	149.8	161.6	177.7	186.1
157.5°	149.7	154.7	162.9	175.1	181.2
160°	153.1	157.3	163.7	173.4	178.6
162.5°	155.7	159.8	164.6	172.5	176.1
165°	160.5	162.6	165.9	170.2	173.3
167.5°	163.3	165.2	166.9	169.1	171.0
170°	165.9	166.9	166.9	169.1	170.1
172.5°	166.7	168.6	167.8	168.2	169.3
175°	169.0	170.1	169.0	168.0	166.9
177.5°	169.0	169.9	169.0	169.0	168.2
180°	169.0	169.0	169.0	169.0	169.0

(END OF REPORT)