

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: P644803

Luminaire Tested: OMN4DIP-SR4F0-125D50U935-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644803
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-SR4F0-125D50U935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

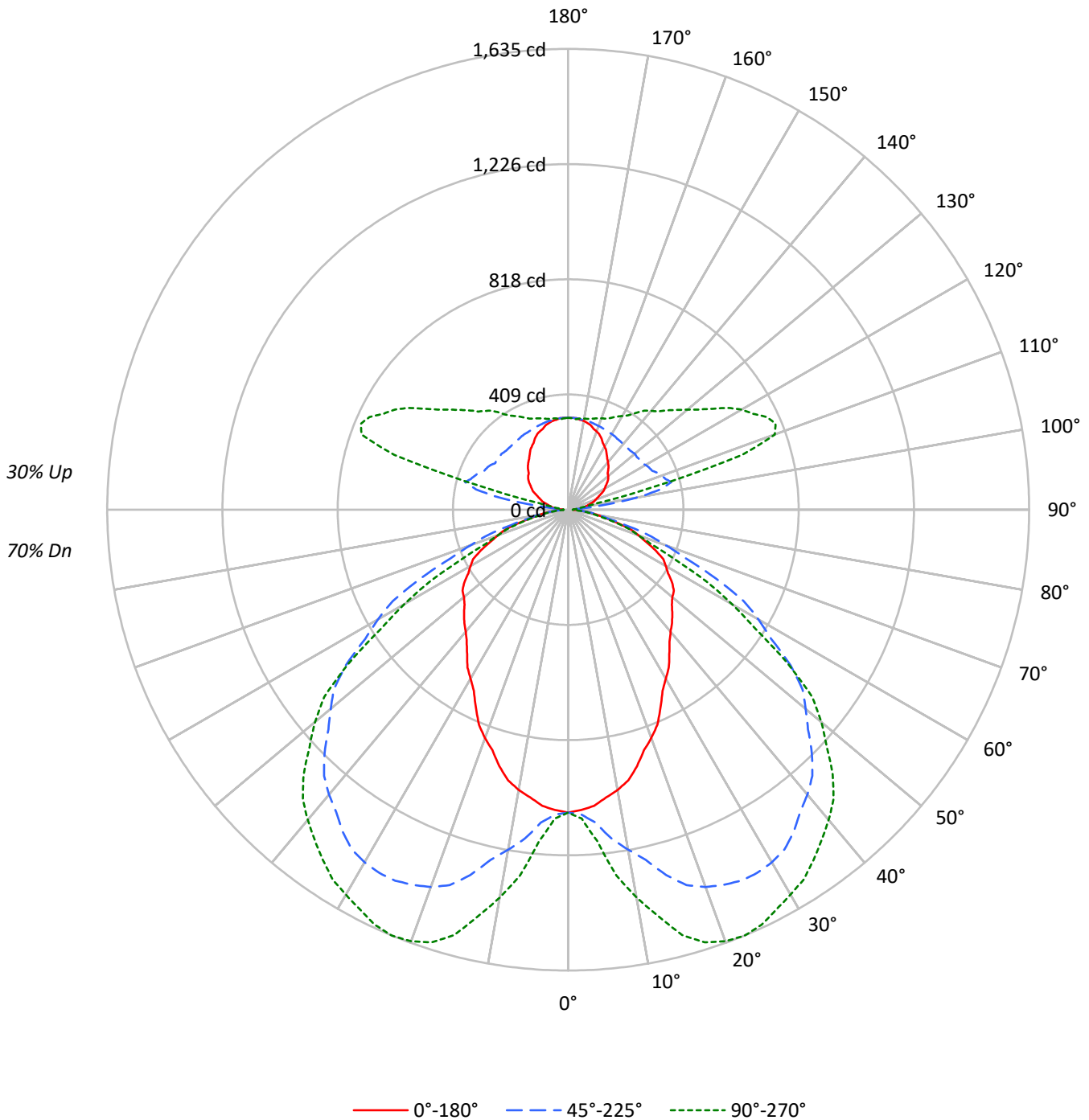
Lumens per Lamp: N/A
Luminaire Lumens: 5909.5 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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

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	1.9
10°-20°	366.3	6.2
20°-30°	608.5	10.3
30°-40°	767.6	13.0
40°-50°	820.5	13.9
50°-60°	724.2	12.3
60°-70°	464.8	7.9
70°-80°	206.1	3.5
80°-90°	54.2	0.9
90°-100°	54.2	0.9
100°-110°	294.8	5.0
110°-120°	394.9	6.7
120°-130°	320.2	5.4
130°-140°	254.5	4.3
140°-150°	200.3	3.4
150°-160°	146.4	2.5
160°-170°	90.9	1.5
170°-180°	31.0	0.5
0°-30°	1084.9	18.4
0°-40°	1852.5	31.3
0°-60°	3397.3	57.5
0°-90°	4122.3	69.8
90°-120°	743.8	12.6
90°-150°	1518.7	25.7
90°-180°	1787.0	30.2
0°-180°	5909.5	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	20	19	21	16	13
95°	44	48	29	26	28	39
105°	81	113	379	477	314	87
115°	125	147	328	668	778	125
125°	170	192	309	530	624	151
135°	201	223	304	434	499	155
145°	238	258	306	378	419	149
155°	279	289	312	343	359	128
165°	310	314	320	328	334	87
175°	326	328	326	324	322	31
180°	326	326	326	326	326	



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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	24.0	23.8	22.2	19.2
90°	17.5	19.5	19.1	21.0	16.2
92.5°	28.4	24.6	22.0	23.6	20.4
95°	43.9	48.2	28.9	26.0	27.6
97.5°	53.6	75.6	130.1	40.5	33.3
100°	61.5	88.3	249.6	76.2	49.7
102.5°	69.3	99.7	335.0	191.0	103.5
105°	81.1	112.8	378.9	476.9	313.9
107.5°	95.4	116.7	362.1	692.9	646.7
110°	103.2	124.9	352.2	728.0	779.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	113.1	134.7	342.4	707.5	796.1
115°	125.3	147.0	327.6	667.7	777.6
117.5°	140.0	161.7	323.9	624.7	737.8
120°	149.5	171.6	317.3	592.0	709.9
122.5°	157.7	179.4	307.1	563.9	672.2
125°	169.6	191.7	309.1	529.9	623.8
127.5°	179.0	203.4	307.0	490.0	583.1
130°	185.6	209.6	308.7	461.7	551.9
132.5°	189.8	213.8	304.7	449.8	524.0
135°	201.1	223.1	303.7	434.4	498.6
137.5°	211.3	235.0	303.7	417.4	472.3
140°	219.5	241.6	303.7	407.4	457.6
142.5°	227.8	248.2	305.3	395.8	442.8
145°	238.0	258.1	305.7	378.4	418.6
147.5°	250.3	268.0	308.2	365.9	396.8
150°	258.5	274.6	309.8	357.6	383.7
152.5°	266.7	281.2	309.8	350.9	372.2
155°	279.0	289.1	311.9	343.0	359.1
157.5°	288.9	298.5	314.3	338.0	349.6
160°	295.5	303.5	316.0	334.7	344.7
162.5°	300.4	308.4	317.6	333.0	339.8
165°	309.8	313.8	320.1	328.4	334.4
167.5°	315.2	318.8	322.1	326.3	329.9
170°	320.1	322.1	322.1	326.3	328.3
172.5°	321.7	325.3	323.8	324.6	326.7
175°	326.2	328.2	326.2	324.1	322.1
177.5°	326.2	327.8	326.2	326.2	324.6
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)