

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P645043

Luminaire Tested: OMN4DIP-SR4F0-75D100U935-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645043
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-SR4F0-75D100U935-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

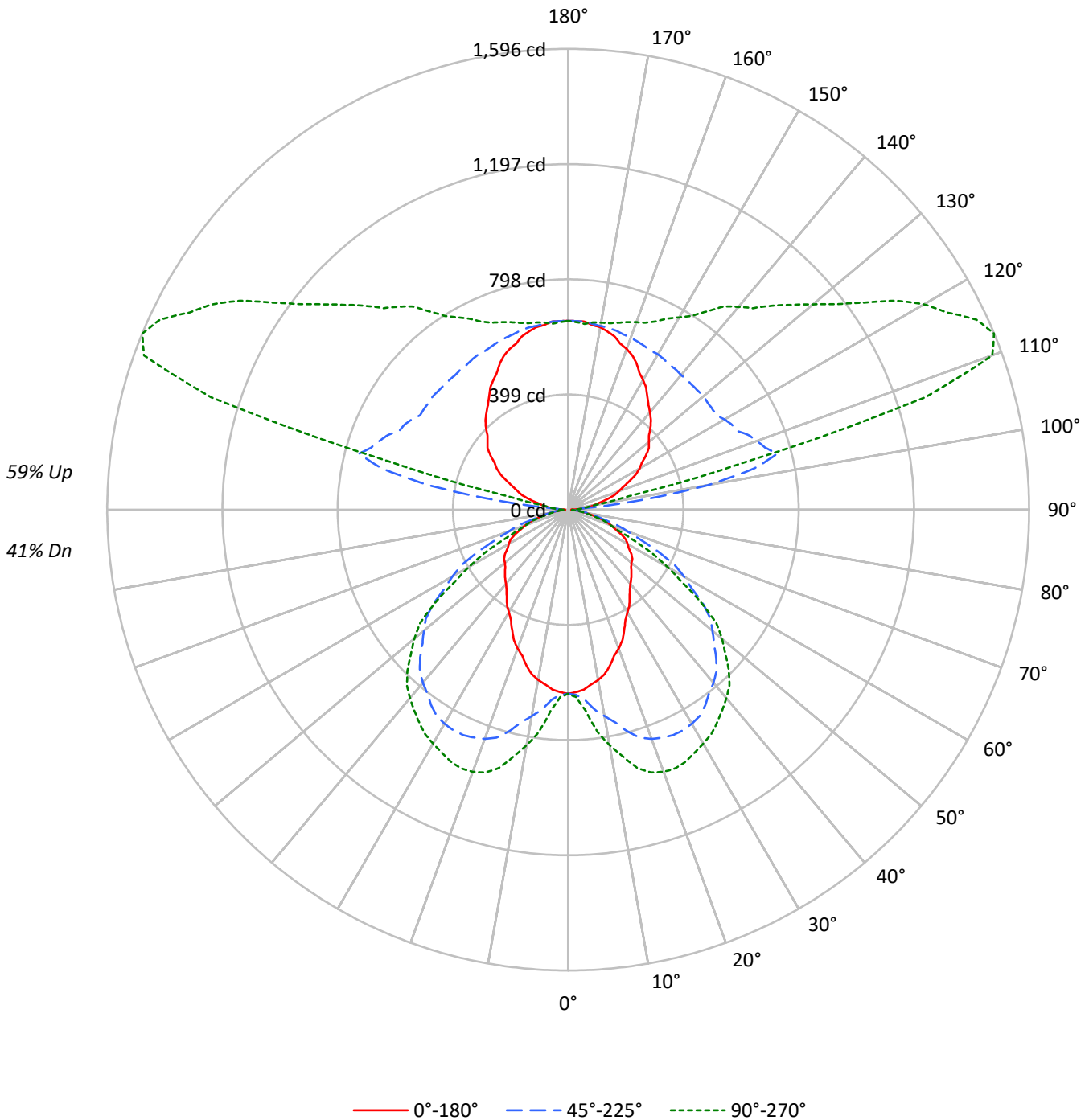
Lumens per Lamp: N/A
Luminaire Lumens: 5978.4 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50.8
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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41
1	96	92	88	84	87	84	80	78	69	66	64	55	53	52	42	41	41	35
2	87	80	74	69	79	73	68	64	60	56	53	48	46	43	37	36	34	29
3	79	70	63	57	72	64	58	53	53	48	45	43	39	37	33	31	29	24
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	66	55	47	41	60	50	43	38	42	36	32	34	30	27	26	24	21	18
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	24	21	19	16
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	19	16	14
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	20	17	15	12
9	48	36	29	24	44	33	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	14	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10288	10288	10288
5°	10135	10712	11336
10°	9814	11904	13580
15°	9337	13300	15480
20°	8783	14512	16600
25°	8182	15337	17158
30°	7651	15968	17432
35°	7301	16297	17728
40°	7059	16491	17958
45°	7072	16545	17966
50°	7184	16377	17455
55°	7507	16059	15851
60°	7656	14928	12871
65°	7755	13077	9456
70°	7416	10282	7345
75°	6656	7673	6195
80°	5653	6062	4956
85°	5483	4946	4113

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 17966 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	1.1
10°-20°	217.2	3.6
20°-30°	360.8	6.0
30°-40°	455.1	7.6
40°-50°	486.5	8.1
50°-60°	429.4	7.2
60°-70°	275.6	4.6
70°-80°	122.2	2.0
80°-90°	33.2	0.6
90°-100°	88.7	1.5
100°-110°	578.2	9.7
110°-120°	781.8	13.1
120°-130°	635.6	10.6
130°-140°	509.4	8.5
140°-150°	401.4	6.7
150°-160°	293.5	4.9
160°-170°	182.3	3.0
170°-180°	62.2	1.0
0°-30°	643.3	10.8
0°-40°	1098.4	18.4
0°-60°	2014.3	33.7
0°-90°	2445.3	40.9
90°-120°	1448.8	24.2
90°-150°	2995.1	50.1
90°-180°	3533.0	59.1
0°-180°	5978.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	637	637	637	637	637	
5°	625	644	661	683	699	59
15°	559	644	796	891	926	156
25°	459	623	861	941	963	211
35°	370	569	827	881	899	233
45°	310	486	725	769	787	239
55°	267	383	570	573	563	237
65°	203	257	342	278	248	199
75°	107	118	123	105	99	114
85°	30	25	27	24	22	31
90°	10	14	17	21	18	9
95°	49	72	40	42	48	49
105°	138	205	749	952	629	146
115°	234	280	646	1335	1559	232
125°	329	374	609	1059	1250	293
135°	403	447	609	871	999	310
145°	477	517	613	758	839	300
155°	559	579	625	688	720	257
165°	621	629	642	658	670	174
175°	654	658	654	650	646	62
180°	654	654	654	654	654	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	637.2	637.2	637.2	637.2	637.2
2.5°	632.4	641.7	641.9	645.6	650.2
5°	625.3	644.1	660.9	683.4	699.4
7.5°	610.5	644.1	697.6	750.1	776.1
10°	598.6	645.0	726.1	796.4	828.3
12.5°	583.2	644.6	754.5	839.2	875.7
15°	558.6	644.1	795.7	891.3	926.1
17.5°	530.2	641.4	828.0	923.8	954.2
20°	511.2	638.7	844.6	935.7	966.1
22.5°	489.9	632.4	854.1	941.5	969.7
25°	459.3	623.1	860.9	941.4	963.1
27.5°	429.4	609.6	861.2	929.5	948.0
30°	410.4	598.8	856.5	917.6	935.0
32.5°	393.8	586.8	847.0	903.4	921.9
35°	370.4	568.9	826.8	880.6	899.4
37.5°	350.3	548.5	801.3	853.7	875.7
40°	334.9	531.9	782.4	834.6	852.0
42.5°	323.0	514.3	759.8	810.9	825.9
45°	309.7	486.4	724.6	769.4	786.8
47.5°	295.5	457.7	684.0	726.3	737.6
50°	286.0	436.7	652.0	690.6	694.9
52.5°	280.1	414.5	621.1	645.5	646.3
55°	266.7	382.6	570.5	573.2	563.1
57.5°	248.9	345.4	506.2	491.7	467.3
60°	237.1	319.7	462.3	433.4	398.6
62.5°	225.2	295.1	416.1	369.2	328.7
65°	203.0	256.6	342.3	277.9	247.5
67.5°	177.2	214.3	268.8	207.9	187.6
70°	157.1	186.0	217.8	170.1	155.6
72.5°	138.1	157.8	176.3	140.6	133.1
75°	106.7	118.3	123.0	105.1	99.3
77.5°	78.5	79.1	85.3	74.0	71.1
80°	60.8	57.9	65.2	56.2	53.3
82.5°	46.5	42.5	47.4	40.9	39.1
85°	29.6	25.3	26.7	23.7	22.2
87.5°	17.5	14.8	15.3	14.9	13.1
90°	10.4	14.4	17.1	21.2	18.3
92.5°	23.8	24.3	25.8	32.0	32.3
95°	49.2	71.6	40.3	41.6	48.2
97.5°	72.9	127.3	247.4	74.3	63.2
100°	91.5	155.5	489.7	145.8	96.1
102.5°	110.0	178.4	660.8	378.7	206.7
105°	137.9	204.8	748.8	952.4	629.2
107.5°	167.2	216.0	715.1	1385.4	1296.3
110°	185.7	232.5	695.4	1455.6	1562.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	205.5	252.3	675.6	1414.6	1595.7
115°	233.6	280.4	646.0	1334.9	1558.7
117.5°	263.7	310.0	638.6	1248.7	1478.9
120°	285.6	329.8	625.4	1183.1	1422.9
122.5°	302.0	348.3	607.8	1126.8	1347.3
125°	329.3	373.6	609.0	1058.6	1250.2
127.5°	351.7	397.9	608.3	979.3	1168.8
130°	364.9	413.1	611.6	925.3	1106.3
132.5°	378.9	427.2	609.3	901.6	1050.3
135°	403.0	447.3	608.7	870.7	999.3
137.5°	423.6	471.0	608.7	836.5	946.7
140°	440.0	484.3	608.7	816.6	917.1
142.5°	456.5	497.5	611.9	793.4	887.5
145°	477.1	517.3	612.8	758.5	839.0
147.5°	501.7	537.1	617.7	733.4	795.4
150°	518.2	550.4	621.0	716.8	769.0
152.5°	534.6	563.6	621.0	703.4	746.0
155°	559.3	579.4	625.1	687.5	719.7
157.5°	579.0	598.3	630.0	677.5	700.8
160°	592.2	608.3	633.3	670.8	690.9
162.5°	602.1	618.2	636.6	667.4	681.0
165°	621.0	629.0	641.6	658.3	670.3
167.5°	631.7	638.9	645.7	654.1	661.3
170°	641.6	645.6	645.7	654.0	658.0
172.5°	644.8	652.1	649.0	650.7	654.7
175°	653.9	657.9	653.9	649.7	645.7
177.5°	653.9	657.1	653.9	653.8	650.6
180°	653.9	653.9	653.9	653.9	653.9

(END OF REPORT)