

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: P644895

Luminaire Tested: OMN4DIP-SR4F0-50D125U935-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644895
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-19)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-50D125U935-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

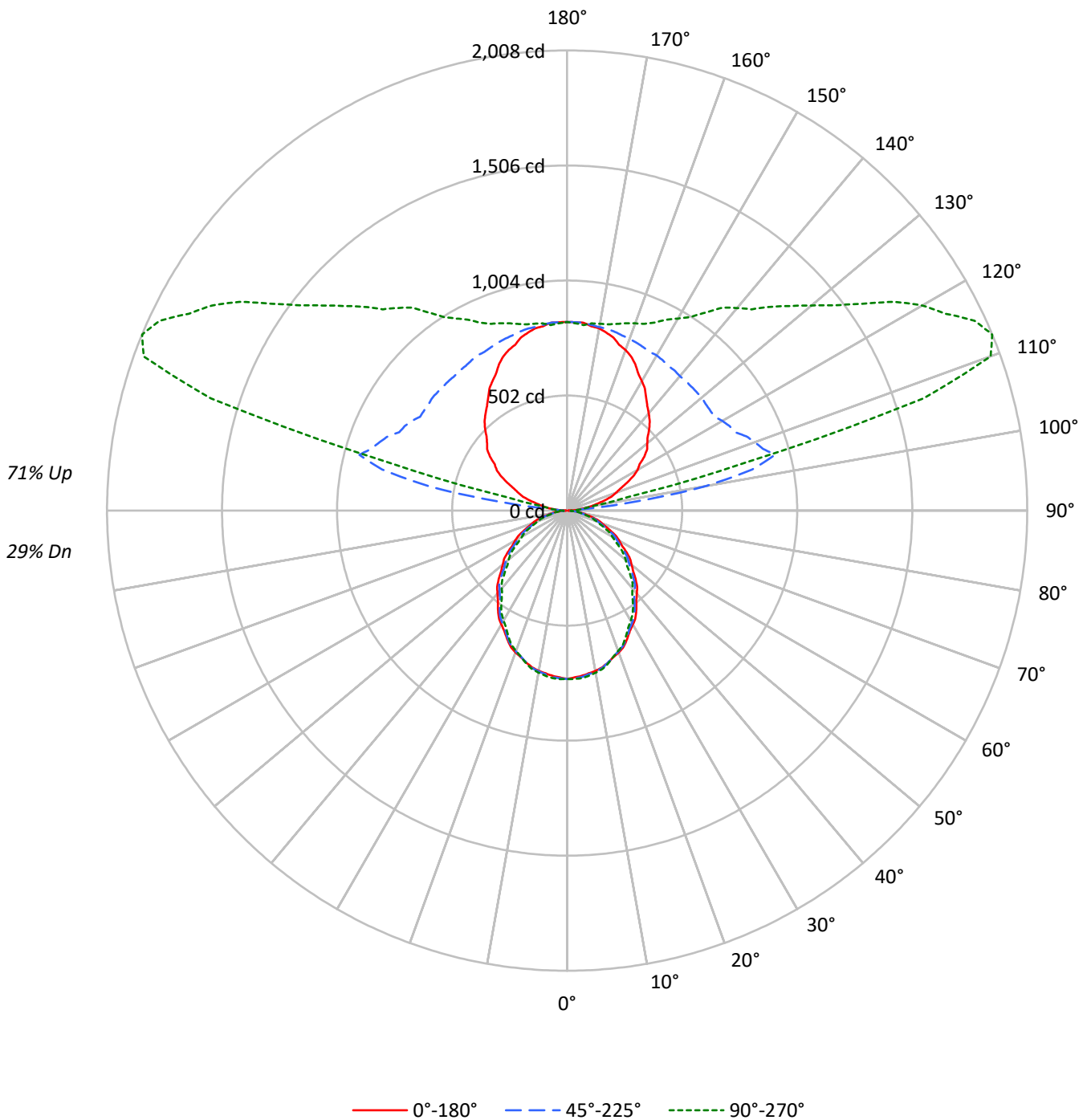
Lumens per Lamp: N/A
Luminaire Lumens: 6214.2 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 52.5
Input Voltage (V): 120
Input Current (A_{in}): 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	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29
1	93	89	85	82	83	80	77	74	63	60	59	47	46	44	32	32	31	24
2	85	78	72	67	76	70	65	61	55	51	49	41	39	37	29	27	26	20
3	77	68	61	56	69	61	55	51	48	44	41	36	34	31	25	24	22	17
4	71	60	53	47	63	54	48	43	43	38	35	32	29	27	23	21	19	15
5	65	54	46	40	58	48	42	37	38	34	30	29	26	23	20	18	17	13
6	60	48	40	35	53	43	37	32	34	30	26	26	23	20	19	16	15	11
7	55	43	36	30	49	39	32	28	31	26	23	24	20	18	17	15	13	10
8	51	39	32	27	46	35	29	24	28	24	20	22	18	16	16	13	12	9
9	47	36	28	24	42	32	26	22	26	21	18	20	17	14	14	12	11	8
10	44	33	26	21	40	30	23	19	24	19	16	18	15	13	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11867	11867	11867
5°	11734	11815	11896
10°	11640	11690	11772
15°	11483	11483	11550
20°	11323	11237	11203
25°	11027	10938	10796
30°	10701	10552	10347
35°	10368	10111	9875
40°	9969	9674	9337
45°	9636	9270	8814
50°	9218	8817	8364
55°	8867	8417	7910
60°	8460	8008	7330
65°	8023	7450	6877
70°	7600	6892	6420
75°	7112	6301	5989
80°	6509	5765	5486
85°	6113	5372	5002

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9636 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	1.1
10°-20°	194.0	3.1
20°-30°	282.1	4.5
30°-40°	320.9	5.2
40°-50°	312.9	5.0
50°-60°	267.1	4.3
60°-70°	194.1	3.1
70°-80°	109.8	1.8
80°-90°	35.6	0.6
90°-100°	105.4	1.7
100°-110°	723.2	11.6
110°-120°	980.0	15.8
120°-130°	797.3	12.8
130°-140°	640.7	10.3
140°-150°	505.0	8.1
150°-160°	369.3	5.9
160°-170°	229.4	3.7
170°-180°	78.2	1.3
0°-30°	545.3	8.8
0°-40°	866.2	13.9
0°-60°	1446.2	23.3
0°-90°	1785.7	28.7
90°-120°	1808.7	29.1
90°-150°	3751.7	60.4
90°-180°	4429.0	71.3
0°-180°	6214.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	735	735	735	735	735	
5°	724	735	729	728	734	69
15°	687	696	687	686	691	194
25°	619	625	614	603	606	285
35°	526	528	513	501	501	328
45°	422	420	406	392	386	325
55°	315	314	299	285	281	281
65°	210	208	195	183	180	208
75°	114	110	101	97	96	121
85°	33	29	29	28	27	35
90°	4	10	16	20	20	6
95°	49	81	44	50	59	52
105°	165	250	939	1197	792	175
115°	288	347	808	1678	1961	286
125°	411	466	762	1330	1573	365
135°	507	563	766	1096	1257	390
145°	600	651	771	954	1056	377
155°	704	729	786	865	906	323
165°	781	792	807	828	843	219
175°	823	828	823	817	812	78
180°	823	823	823	823	823	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	735.0	735.0	735.0	735.0	735.0
2.5°	728.6	738.0	732.6	732.7	735.8
5°	724.0	734.8	729.0	728.1	734.0
7.5°	716.4	727.0	720.2	719.2	726.8
10°	710.0	719.8	713.0	711.2	718.0
12.5°	701.2	711.0	704.2	701.6	708.4
15°	687.0	695.8	687.0	686.1	691.0
17.5°	671.0	678.6	668.4	665.1	668.8
20°	659.0	665.8	654.0	649.1	652.0
22.5°	643.8	650.6	638.0	630.7	634.4
25°	619.0	624.9	614.0	603.1	606.0
27.5°	592.4	596.9	586.0	574.8	575.8
30°	574.0	576.9	566.0	554.0	555.0
32.5°	554.8	557.0	545.2	532.4	532.6
35°	526.0	528.0	513.0	501.0	501.0
37.5°	495.4	496.6	480.6	467.6	466.2
40°	473.0	475.0	459.0	445.9	443.0
42.5°	452.2	452.6	438.2	425.1	421.4
45°	422.0	420.0	406.0	391.9	386.0
47.5°	389.4	389.4	373.4	359.3	353.8
50°	367.0	367.0	351.0	336.9	333.0
52.5°	346.2	345.4	330.2	316.1	310.6
55°	315.0	314.0	299.0	284.9	281.0
57.5°	282.0	282.0	268.0	252.9	248.6
60°	262.0	262.0	248.0	232.9	227.0
62.5°	240.4	239.6	225.6	212.1	208.6
65°	210.0	208.0	195.0	182.9	180.0
67.5°	181.0	179.0	165.2	155.6	153.6
70°	161.0	159.0	146.0	138.0	136.0
72.5°	141.8	139.1	127.6	121.2	119.2
75°	114.0	110.1	101.0	97.0	96.0
77.5°	87.6	81.0	77.2	74.4	73.4
80°	70.0	64.1	62.0	60.0	59.0
82.5°	54.8	48.9	48.4	47.2	46.2
85°	33.0	29.1	29.0	28.0	27.0
87.5°	14.4	13.3	14.5	15.3	15.3
90°	4.0	10.0	16.3	20.5	20.5
92.5°	19.6	22.5	27.2	36.4	39.6
95°	49.4	80.9	44.4	49.8	58.9
97.5°	80.5	151.4	307.1	91.5	78.6
100°	105.3	188.4	612.6	180.7	120.0
102.5°	129.4	216.5	827.8	475.3	260.0
105°	165.4	249.5	938.6	1197.4	791.7
107.5°	202.5	265.5	896.1	1742.2	1631.0
110°	226.5	286.2	871.3	1830.6	1966.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	251.3	311.1	846.5	1779.0	2007.7
115°	287.6	347.3	808.2	1677.8	1961.1
117.5°	325.9	384.6	798.9	1569.3	1860.7
120°	354.9	409.5	782.3	1486.8	1790.3
122.5°	374.8	434.3	761.6	1415.9	1695.1
125°	410.8	466.4	761.6	1330.2	1573.0
127.5°	439.8	497.2	762.7	1230.8	1470.6
130°	456.3	517.1	766.8	1164.2	1391.9
132.5°	476.2	537.0	766.0	1134.3	1321.5
135°	507.1	562.7	765.8	1095.5	1257.4
137.5°	533.0	592.7	765.8	1052.5	1191.1
140°	553.7	609.3	765.8	1027.4	1153.9
142.5°	574.4	626.0	770.0	998.2	1116.6
145°	600.2	650.8	771.0	954.4	1055.6
147.5°	631.3	675.8	777.2	922.8	1000.7
150°	652.0	692.5	781.3	901.8	967.6
152.5°	672.7	709.1	781.3	885.0	938.6
155°	703.7	729.0	786.5	865.0	905.5
157.5°	728.6	752.8	792.7	852.4	881.7
160°	745.1	765.4	796.9	844.0	869.3
162.5°	757.5	777.8	801.0	839.7	856.9
165°	781.3	791.5	807.2	828.3	843.4
167.5°	794.8	803.9	812.4	822.9	832.0
170°	807.2	812.3	812.4	822.8	827.9
172.5°	811.3	820.5	816.5	818.7	823.8
175°	822.7	827.8	822.7	817.4	812.4
177.5°	822.7	826.8	822.7	822.6	818.6
180°	822.7	822.7	822.7	822.7	822.7

(END OF REPORT)