

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: P644854

Luminaire Tested: OMN4DIP-SR4F0-50D100U840-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644854
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-SR4F0-50D100U840-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

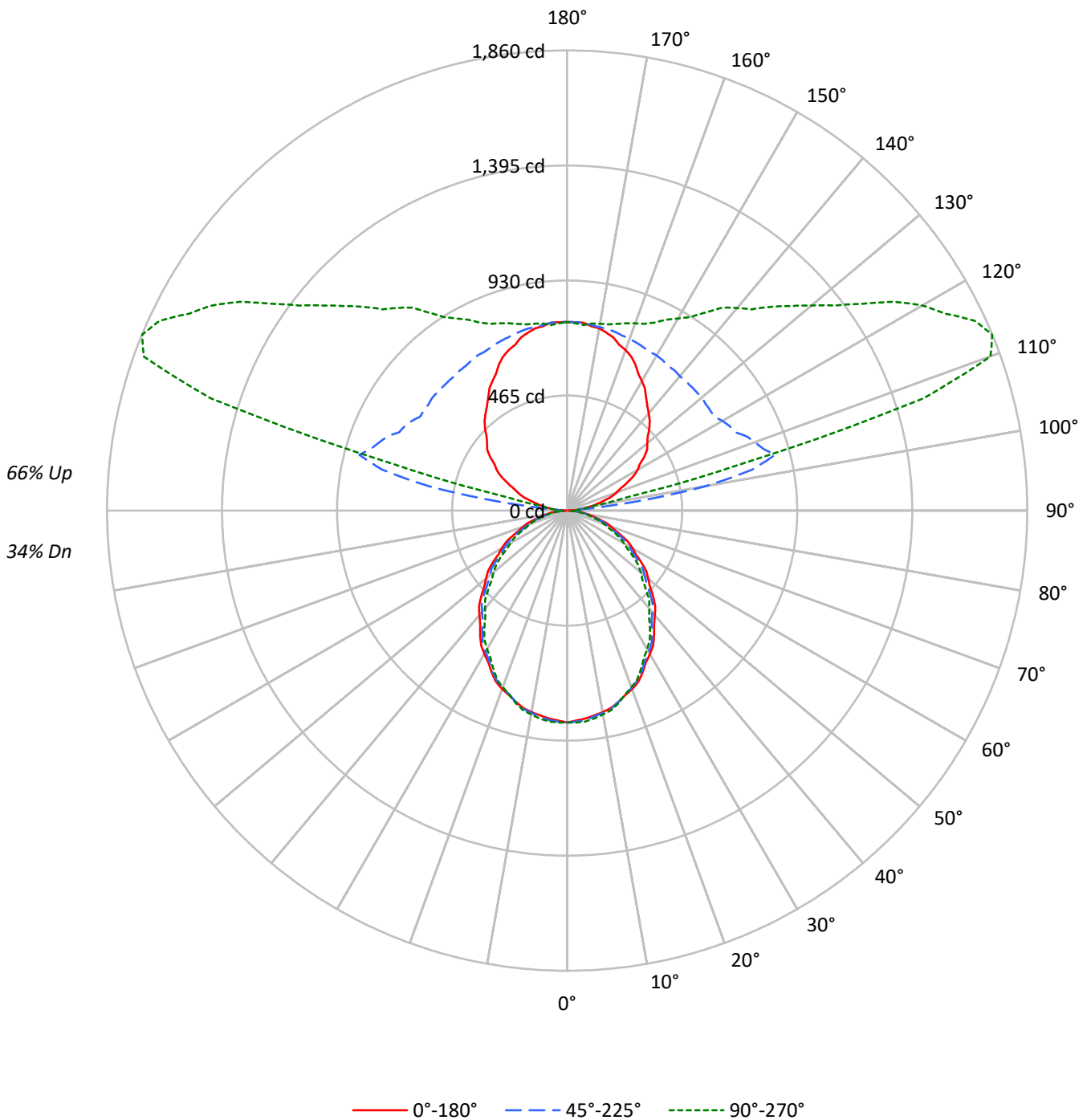
Lumens per Lamp: N/A
Luminaire Lumens: 6184.6 lumens
Efficiency: N/A
Efficacy: 142.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 43.3
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	94	90	86	83	85	81	78	75	65	63	61	50	49	47	36	35	35	28
2	86	79	73	68	77	71	66	62	57	53	50	44	42	40	32	31	29	24
3	78	69	62	56	70	63	57	52	50	46	42	39	36	34	28	27	25	20
4	72	61	53	48	64	55	49	44	45	40	36	35	31	29	25	23	22	18
5	66	54	47	41	59	49	43	37	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	18	17	13
7	56	44	36	31	50	40	33	28	33	27	24	26	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13831	13831	13831
5°	13676	13770	13864
10°	13565	13623	13719
15°	13382	13382	13461
20°	13196	13096	13055
25°	12852	12748	12581
30°	12471	12297	12059
35°	12082	11785	11509
40°	11618	11274	10882
45°	11230	10805	10271
50°	10743	10276	9748
55°	10334	9810	9219
60°	9859	9332	8541
65°	9349	8684	8015
70°	8856	8030	7482
75°	8291	7342	6981
80°	7587	6722	6397
85°	7132	6262	5835

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11230 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.6	1.3
10°-20°	226.1	3.7
20°-30°	328.8	5.3
30°-40°	374.0	6.0
40°-50°	364.6	5.9
50°-60°	311.3	5.0
60°-70°	226.2	3.7
70°-80°	127.9	2.1
80°-90°	41.1	0.7
90°-100°	98.7	1.6
100°-110°	670.4	10.8
110°-120°	908.1	14.7
120°-130°	738.7	11.9
130°-140°	593.4	9.6
140°-150°	467.8	7.6
150°-160°	342.0	5.5
160°-170°	212.4	3.4
170°-180°	72.4	1.2
0°-30°	635.5	10.3
0°-40°	1009.5	16.3
0°-60°	1685.4	27.3
0°-90°	2080.6	33.6
90°-120°	1677.2	27.1
90°-150°	3477.1	56.2
90°-180°	4104.0	66.4
0°-180°	6184.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	857	857	857	857	857	
5°	844	856	850	849	855	80
15°	801	811	801	800	805	226
25°	721	728	716	703	706	332
35°	613	615	598	584	584	383
45°	492	490	473	457	450	378
55°	367	366	348	332	328	328
65°	245	242	227	213	210	243
75°	133	128	118	113	112	141
85°	38	34	34	33	32	41
90°	5	10	17	20	20	6
95°	48	76	42	47	55	50
105°	154	232	870	1109	733	163
115°	267	322	749	1554	1816	266
125°	381	432	706	1232	1457	338
135°	470	521	709	1015	1165	362
145°	556	603	714	884	978	349
155°	652	675	728	801	839	299
165°	724	733	748	767	781	203
175°	762	767	762	757	752	72
180°	762	762	762	762	762	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	856.6	856.6	856.6	856.6	856.6
2.5°	849.1	860.1	853.8	853.9	857.5
5°	843.8	856.3	849.6	848.6	855.4
7.5°	834.9	847.2	839.3	838.1	847.0
10°	827.4	838.8	830.9	828.8	836.8
12.5°	817.2	828.6	820.7	817.6	825.6
15°	800.6	810.9	800.6	799.6	805.3
17.5°	782.0	790.9	779.0	775.1	779.4
20°	768.0	776.0	762.2	756.4	759.8
22.5°	750.3	758.3	743.5	735.0	739.3
25°	721.4	728.2	715.6	702.8	706.2
27.5°	690.4	695.6	682.9	669.9	671.0
30°	668.9	672.4	659.6	645.7	646.8
32.5°	646.6	649.1	635.4	620.5	620.7
35°	613.0	615.3	597.9	583.9	583.9
37.5°	577.3	578.7	560.1	544.9	543.3
40°	551.2	553.5	534.9	519.7	516.3
42.5°	527.0	527.5	510.7	495.4	491.1
45°	491.8	489.5	473.2	456.7	449.8
47.5°	453.8	453.8	435.2	418.7	412.3
50°	427.7	427.7	409.1	392.6	388.1
52.5°	403.5	402.6	384.8	368.4	362.0
55°	367.1	366.0	348.5	332.0	327.5
57.5°	328.6	328.6	312.3	294.7	289.7
60°	305.3	305.3	289.0	271.4	264.5
62.5°	280.2	279.3	262.9	247.2	243.1
65°	244.7	242.5	227.3	213.2	209.8
67.5°	210.9	208.7	192.5	181.3	179.0
70°	187.6	185.4	170.1	160.8	158.5
72.5°	165.3	162.1	148.7	141.2	138.9
75°	132.9	128.3	117.7	113.0	111.9
77.5°	102.1	94.3	90.0	86.7	85.5
80°	81.6	74.7	72.3	69.9	68.8
82.5°	63.9	57.0	56.4	55.0	53.8
85°	38.5	33.9	33.8	32.6	31.5
87.5°	16.8	15.2	16.4	17.1	17.1
90°	4.7	10.5	16.6	20.2	20.2
92.5°	19.9	22.1	26.2	34.7	37.5
95°	47.7	75.9	41.8	46.8	55.1
97.5°	76.2	141.2	285.1	85.2	73.1
100°	99.2	175.5	567.9	167.6	111.4
102.5°	121.3	201.3	767.3	440.4	240.8
105°	154.4	231.8	869.8	1109.3	733.3
107.5°	188.7	246.6	830.5	1614.0	1510.7
110°	210.8	265.8	807.5	1695.9	1821.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	233.8	288.9	784.5	1648.0	1859.6
115°	267.1	322.2	748.8	1554.0	1816.5
117.5°	302.6	356.7	740.2	1453.6	1723.5
120°	329.4	379.8	724.9	1377.1	1658.3
122.5°	347.6	402.7	705.7	1311.4	1570.1
125°	381.0	432.5	705.7	1232.1	1457.0
127.5°	407.6	461.0	706.7	1140.0	1362.1
130°	422.9	479.2	710.5	1078.4	1289.3
132.5°	441.2	497.4	709.6	1050.7	1224.1
135°	469.7	521.2	709.3	1014.7	1164.6
137.5°	493.7	549.0	709.3	974.9	1103.3
140°	512.8	564.4	709.3	951.6	1068.8
142.5°	532.0	579.8	713.2	924.6	1034.3
145°	556.0	602.8	714.1	884.0	977.7
147.5°	584.7	626.0	719.9	854.8	926.9
150°	603.9	641.4	723.7	835.3	896.2
152.5°	623.1	656.8	723.7	819.7	869.4
155°	651.8	675.2	728.5	801.2	838.7
157.5°	674.8	697.3	734.3	789.5	816.7
160°	690.2	708.9	738.1	781.8	805.2
162.5°	701.7	720.4	741.9	777.7	793.7
165°	723.7	733.1	747.7	767.2	781.2
167.5°	736.2	744.6	752.5	762.2	770.7
170°	747.7	752.4	752.5	762.2	766.8
172.5°	751.5	759.9	756.3	758.3	763.0
175°	762.1	766.7	762.1	757.2	752.5
177.5°	762.1	765.8	762.1	762.0	758.2
180°	762.1	762.1	762.1	762.1	762.1

(END OF REPORT)