

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: P644966

Luminaire Tested: OMN4DIP-SR4F0-50D50U830-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644966
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-SR4F0-50D50U830-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

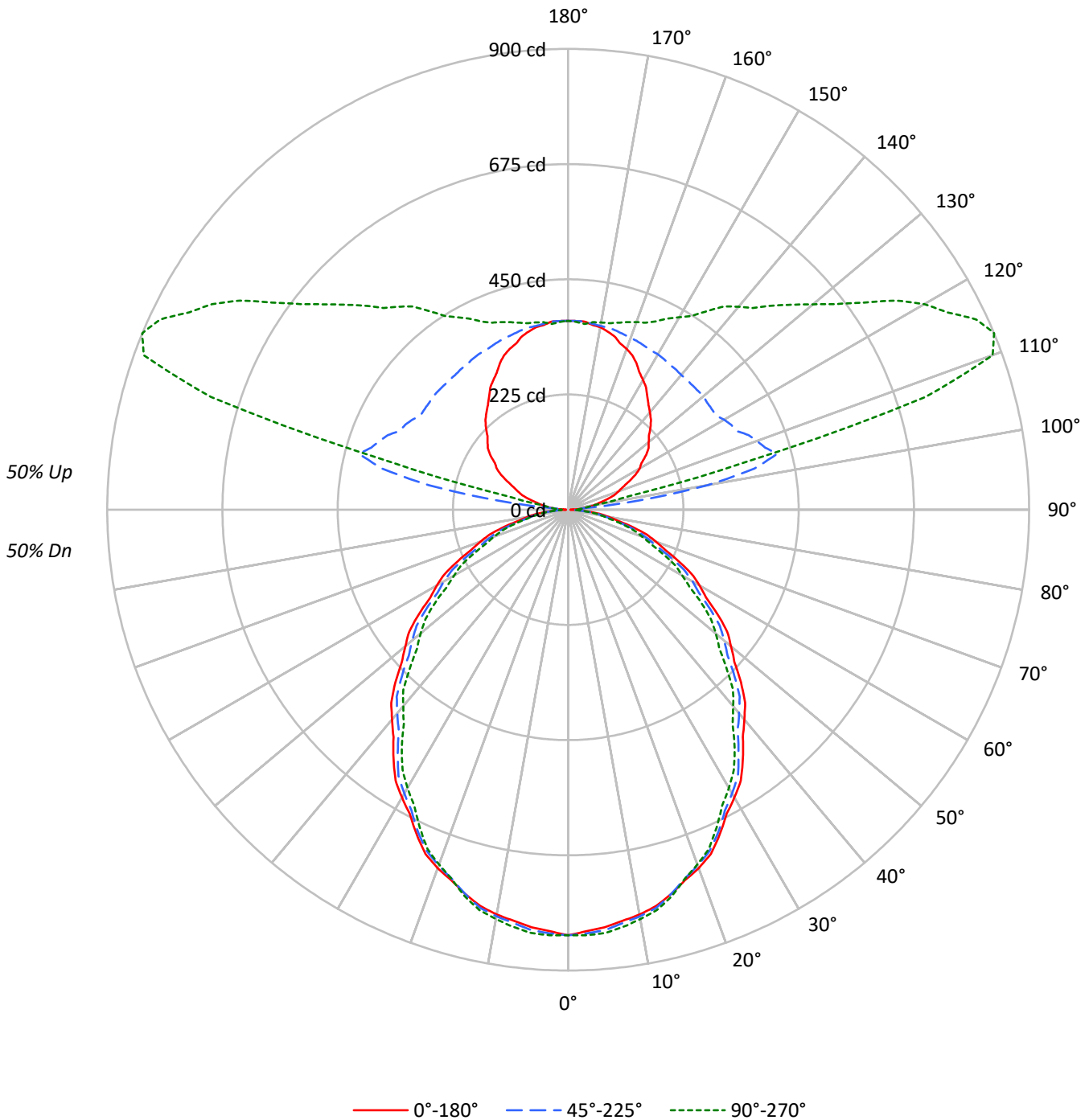
Lumens per Lamp: N/A
Luminaire Lumens: 4009.3 lumens
Efficiency: N/A
Efficacy: 138.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.9
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	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50				
1	98	94	90	86	90	87	83	80	73	71	69	61	59	58	50	49	48	42				
2	89	82	76	71	82	76	70	66	64	60	57	54	51	49	44	42	40	36				
3	81	72	65	59	75	67	60	55	57	52	48	48	44	41	39	37	34	30				
4	75	64	56	50	69	59	52	47	51	45	41	43	39	35	35	32	30	26				
5	69	57	49	43	63	53	46	40	45	40	36	38	34	31	32	29	26	23				
6	63	51	43	37	58	48	40	35	41	35	31	35	30	27	29	26	23	20				
7	58	46	38	33	54	43	36	31	37	31	27	32	27	24	26	23	21	18				
8	54	42	34	29	50	39	32	27	34	28	24	29	25	21	24	21	18	16				
9	51	38	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17	15				
10	47	35	28	23	44	33	26	22	29	23	20	25	20	17	21	18	15	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13417	13417	13417
5°	13267	13358	13451
10°	13162	13218	13309
15°	12985	12985	13060
20°	12802	12704	12667
25°	12469	12367	12207
30°	12100	11930	11699
35°	11722	11432	11166
40°	11272	10939	10557
45°	10894	10481	9965
50°	10422	9970	9457
55°	10027	9517	8943
60°	9565	9055	8289
65°	9070	8424	7775
70°	8592	7794	7260
75°	8041	7124	6769
80°	7355	6518	6202
85°	6910	6076	5650

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10894 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.2	1.9
10°-20°	219.4	5.5
20°-30°	319.0	8.0
30°-40°	362.8	9.0
40°-50°	353.8	8.8
50°-60°	302.0	7.5
60°-70°	219.4	5.5
70°-80°	124.1	3.1
80°-90°	39.0	1.0
90°-100°	50.2	1.3
100°-110°	325.8	8.1
110°-120°	440.4	11.0
120°-130°	358.0	8.9
130°-140°	287.3	7.2
140°-150°	226.4	5.6
150°-160°	165.6	4.1
160°-170°	102.8	2.6
170°-180°	35.1	0.9
0°-30°	616.5	15.4
0°-40°	979.3	24.4
0°-60°	1635.1	40.8
0°-90°	2017.6	50.3
90°-120°	816.4	20.4
90°-150°	1688.2	42.1
90°-180°	1992.0	49.7
0°-180°	4009.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	831	831	831	831	831	
5°	819	831	824	823	830	78
15°	777	787	777	776	781	219
25°	700	706	694	682	685	322
35°	595	597	580	566	566	371
45°	477	475	459	443	436	367
55°	356	355	338	322	318	318
65°	237	235	220	207	204	236
75°	129	124	114	110	108	137
85°	37	33	33	32	30	40
90°	4	8	11	13	13	5
95°	28	39	22	24	28	28
105°	78	114	422	538	355	82
115°	131	157	363	752	879	130
125°	186	210	342	596	705	165
135°	227	252	343	491	564	175
145°	269	292	346	428	473	169
155°	316	327	353	388	406	145
165°	350	355	362	371	378	98
175°	369	371	369	366	364	35
180°	369	369	369	369	369	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	831.0	831.0	831.0	831.0	<i>831.0</i>
2.5°	823.8	834.4	828.3	828.4	<i>831.9</i>
5°	818.6	830.7	824.2	823.3	<i>829.9</i>
7.5°	810.0	821.9	814.3	813.1	<i>821.8</i>
10°	802.8	813.8	806.2	804.1	<i>811.8</i>
12.5°	792.8	803.9	796.2	793.2	<i>800.9</i>
15°	776.8	786.7	776.8	775.7	<i>781.3</i>
17.5°	758.7	767.3	755.7	752.0	<i>756.2</i>
20°	745.1	752.8	739.4	733.9	<i>737.2</i>
22.5°	727.9	735.6	721.4	713.1	<i>717.3</i>
25°	699.9	706.5	694.2	681.9	<i>685.2</i>
27.5°	669.8	674.9	662.6	649.9	<i>651.0</i>
30°	649.0	652.3	639.9	626.4	<i>627.5</i>
32.5°	627.3	629.7	616.4	602.0	<i>602.2</i>
35°	594.7	596.9	580.0	566.5	<i>566.5</i>
37.5°	560.1	561.4	543.4	528.7	<i>527.1</i>
40°	534.8	537.0	519.0	504.2	<i>500.9</i>
42.5°	511.3	511.7	495.4	480.7	<i>476.5</i>
45°	477.1	474.9	459.0	443.1	<i>436.4</i>
47.5°	440.3	440.3	422.2	406.2	<i>400.0</i>
50°	414.9	414.9	396.9	380.9	<i>376.5</i>
52.5°	391.4	390.5	373.3	357.4	<i>351.2</i>
55°	356.2	355.0	338.1	322.1	<i>317.7</i>
57.5°	318.8	318.8	303.0	285.9	<i>281.1</i>
60°	296.2	296.2	280.4	263.3	<i>256.7</i>
62.5°	271.8	270.9	255.1	239.8	<i>235.9</i>
65°	237.4	235.2	220.5	206.8	<i>203.5</i>
67.5°	204.6	202.4	186.8	175.9	<i>173.7</i>
70°	182.0	179.8	165.1	156.0	<i>153.8</i>
72.5°	160.3	157.2	144.3	137.0	<i>134.8</i>
75°	128.9	124.5	114.2	109.6	<i>108.5</i>
77.5°	99.0	91.5	87.3	84.1	<i>83.0</i>
80°	79.1	72.5	70.1	67.8	<i>66.7</i>
82.5°	62.0	55.3	54.7	53.3	<i>52.2</i>
85°	37.3	32.9	32.8	31.6	<i>30.5</i>
87.5°	16.3	14.3	14.9	15.2	<i>15.2</i>
90°	4.5	7.9	11.4	12.6	<i>12.6</i>
92.5°	13.7	13.5	15.2	19.2	<i>20.1</i>
95°	27.6	39.1	22.0	24.3	<i>27.8</i>
97.5°	40.9	70.7	139.6	42.3	<i>35.9</i>
100°	52.0	87.2	276.0	81.7	<i>54.5</i>
102.5°	62.2	99.3	372.5	213.7	<i>116.7</i>
105°	77.6	113.9	422.2	537.5	<i>354.9</i>
107.5°	94.0	121.1	403.1	781.8	<i>731.2</i>
110°	104.3	130.4	392.0	821.4	<i>881.6</i>



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	115.4	141.5	380.9	798.2	900.1
115°	131.0	157.1	363.0	752.2	879.2
117.5°	148.2	173.8	358.9	703.6	834.2
120°	161.1	185.0	351.4	666.6	802.7
122.5°	169.5	196.1	342.2	634.8	760.0
125°	185.5	210.5	342.2	596.4	705.2
127.5°	197.9	224.1	342.6	551.8	659.3
130°	205.3	232.5	344.5	522.0	624.1
132.5°	213.7	240.9	343.6	508.6	592.5
135°	227.3	252.3	343.3	491.1	563.7
137.5°	238.9	265.7	343.3	471.9	534.0
140°	248.2	273.2	343.3	460.6	517.3
142.5°	257.5	280.6	345.2	447.6	500.6
145°	269.1	291.8	345.7	427.9	473.3
147.5°	283.0	303.0	348.4	413.7	448.7
150°	292.3	310.5	350.3	404.3	433.8
152.5°	301.6	317.9	350.3	396.8	420.8
155°	315.5	326.8	352.6	387.8	406.0
157.5°	326.6	337.5	355.4	382.2	395.3
160°	334.1	343.1	357.3	378.4	389.7
162.5°	339.6	348.7	359.1	376.5	384.2
165°	350.3	354.8	361.9	371.3	378.1
167.5°	356.3	360.4	364.2	369.0	373.0
170°	361.9	364.2	364.2	368.9	371.2
172.5°	363.8	367.8	366.1	367.1	369.3
175°	368.9	371.1	368.9	366.5	364.2
177.5°	368.9	370.7	368.9	368.8	367.0
180°	368.9	368.9	368.9	368.9	368.9

(END OF REPORT)