

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: P644974

Luminaire Tested: OMN4DIP-SR4F0-50D50U840-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644974
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-SR4F0-50D50U840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

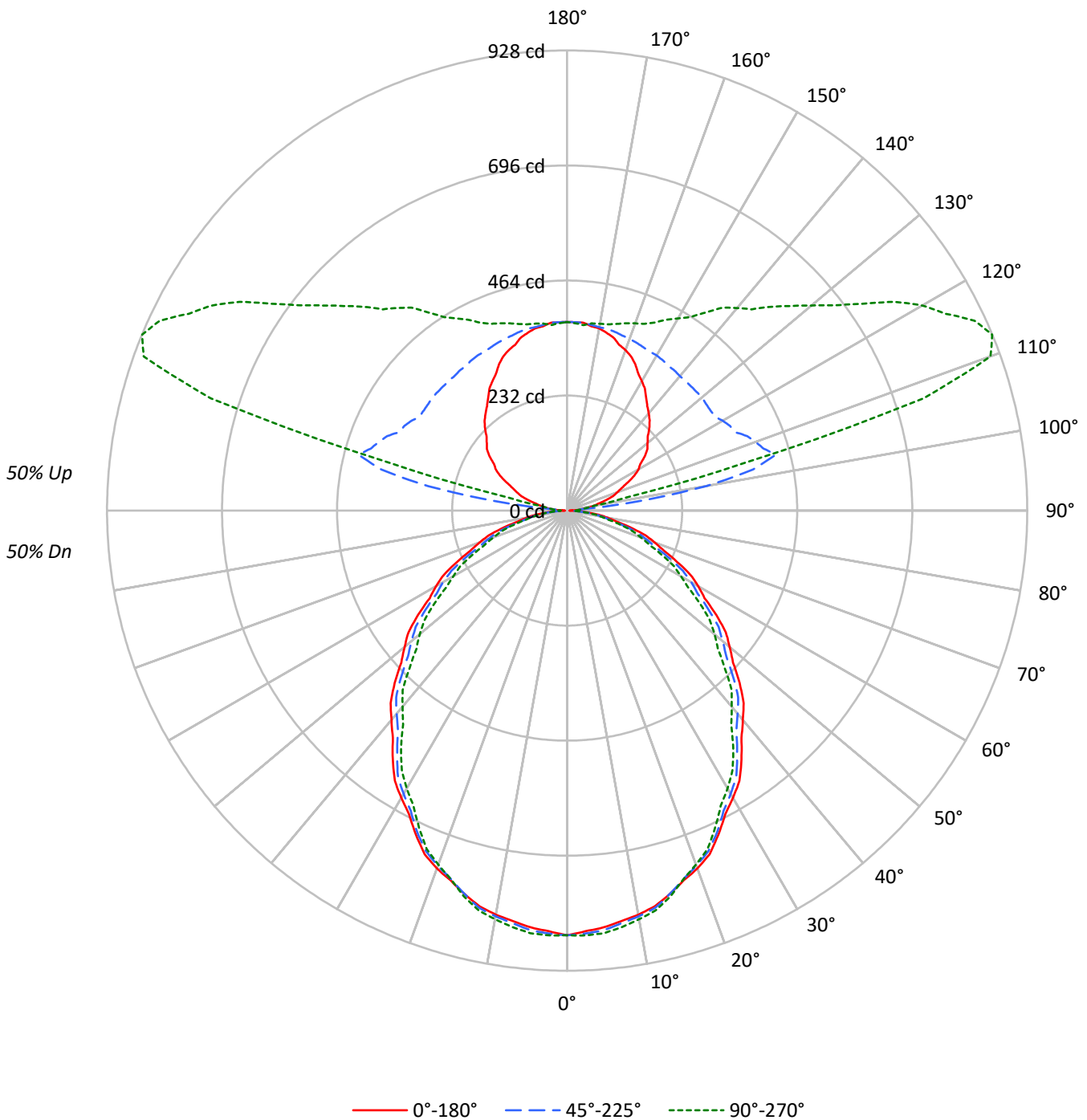
Lumens per Lamp: N/A
Luminaire Lumens: 4132.6 lumens
Efficiency: N/A
Efficacy: 143.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.9
Input Voltage (V): 120
Input Current (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	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°	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	1.9
10°-20°	226.1	5.5
20°-30°	328.8	8.0
30°-40°	374.0	9.0
40°-50°	364.6	8.8
50°-60°	311.3	7.5
60°-70°	226.2	5.5
70°-80°	127.9	3.1
80°-90°	40.2	1.0
90°-100°	51.7	1.3
100°-110°	335.9	8.1
110°-120°	453.9	11.0
120°-130°	369.1	8.9
130°-140°	296.1	7.2
140°-150°	233.4	5.6
150°-160°	170.7	4.1
160°-170°	106.0	2.6
170°-180°	36.1	0.9
0°-30°	635.5	15.4
0°-40°	1009.5	24.4
0°-60°	1685.4	40.8
0°-90°	2079.7	50.3
90°-120°	841.5	20.4
90°-150°	1740.1	42.1
90°-180°	2053.0	49.7
0°-180°	4132.6	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	8	12	13	13	6
95°	28	40	23	25	29	28
105°	80	117	435	554	366	85
115°	135	162	374	775	906	134
125°	191	217	353	615	727	170
135°	234	260	354	506	581	180
145°	277	301	356	441	488	174
155°	325	337	364	400	418	149
165°	361	366	373	383	390	101
175°	380	382	380	378	375	36
180°	380	380	380	380	380	

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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	14.7	15.4	15.7	15.7
90°	4.7	8.1	11.8	13.0	13.0
92.5°	14.1	14.0	15.6	19.7	20.7
95°	28.5	40.3	22.6	25.1	28.6
97.5°	42.1	72.8	143.9	43.6	37.0
100°	53.6	89.9	284.5	84.2	56.2
102.5°	64.1	102.3	384.0	220.3	120.3
105°	80.0	117.4	435.1	554.0	365.9
107.5°	96.9	124.8	415.5	805.8	753.7
110°	107.5	134.4	404.1	846.7	908.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	119.0	145.9	392.6	822.8	927.8
115°	135.0	161.9	374.2	775.3	906.3
117.5°	152.7	179.2	369.9	725.2	859.9
120°	166.1	190.7	362.2	687.1	827.4
122.5°	174.7	202.1	352.7	654.3	783.4
125°	191.2	217.0	352.7	614.7	726.9
127.5°	203.9	231.0	353.2	568.8	679.6
130°	211.6	239.6	355.1	538.0	643.2
132.5°	220.2	248.3	354.1	524.2	610.7
135°	234.3	260.1	353.9	506.2	581.1
137.5°	246.3	273.9	353.9	486.4	550.5
140°	255.9	281.6	353.9	474.8	533.2
142.5°	265.4	289.3	355.8	461.3	516.0
145°	277.4	300.8	356.3	441.0	487.8
147.5°	291.7	312.3	359.2	426.5	462.5
150°	301.3	320.0	361.1	416.8	447.2
152.5°	310.9	327.7	361.1	409.0	433.8
155°	325.2	336.9	363.5	399.8	418.5
157.5°	336.7	347.9	366.3	393.9	407.5
160°	344.3	353.7	368.2	390.0	401.7
162.5°	350.1	359.4	370.2	388.0	396.0
165°	361.1	365.7	373.0	382.8	389.8
167.5°	367.3	371.5	375.4	380.3	384.5
170°	373.0	375.4	375.4	380.3	382.6
172.5°	374.9	379.1	377.3	378.3	380.7
175°	380.2	382.5	380.2	377.8	375.4
177.5°	380.2	382.1	380.2	380.2	378.3
180°	380.2	380.2	380.2	380.2	380.2

(END OF REPORT)