

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: P644944

Luminaire Tested: OMN4DIP-SR4F0-50D25U840-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644944
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-SR4F0-50D25U840-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

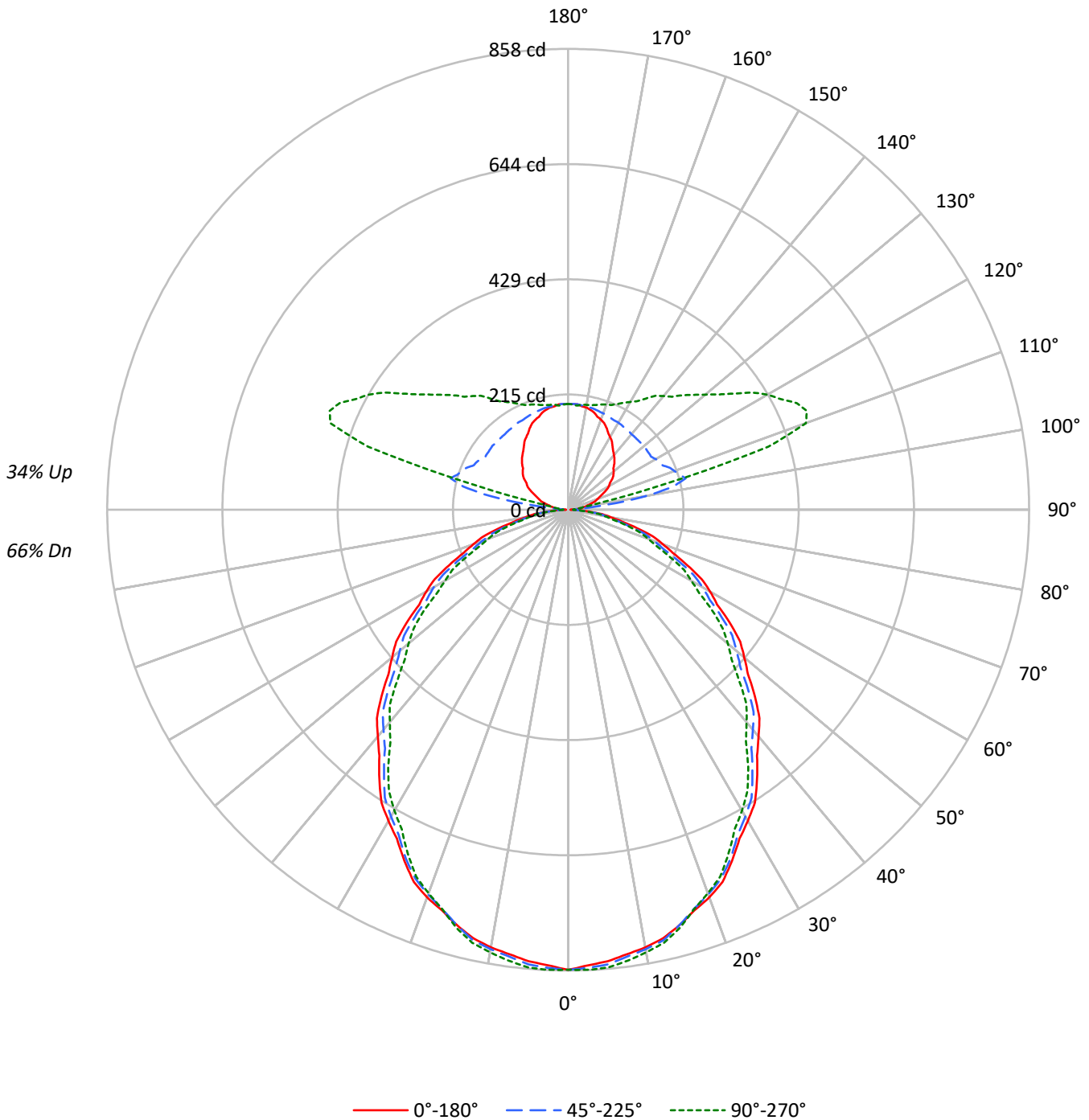
Lumens per Lamp: N/A
Luminaire Lumens: 3148.1 lumens
Efficiency: N/A
Efficacy: 139.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 22.6
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66				
1	101	97	93	89	95	91	88	85	81	78	76	72	70	68	63	61	60	56				
2	93	85	79	73	87	80	75	70	71	67	63	63	60	57	55	53	51	47				
3	85	75	67	61	79	71	64	59	63	58	53	56	52	48	49	46	43	40				
4	77	66	58	52	73	63	56	50	56	50	46	50	45	42	44	41	38	34				
5	71	59	51	45	67	56	49	43	50	44	40	45	40	36	40	36	33	30				
6	66	53	45	39	62	51	43	38	46	39	35	41	36	32	36	32	29	26				
7	61	48	40	35	57	46	39	33	41	35	31	37	32	28	33	29	26	23				
8	57	44	36	31	53	42	35	30	38	32	27	34	29	25	31	26	23	21				
9	53	40	33	28	50	38	31	27	35	29	25	31	26	23	28	24	21	19				
10	49	37	30	25	47	35	29	24	32	26	22	29	24	21	26	22	19	17				

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	2.6
10°-20°	226.1	7.2
20°-30°	328.8	10.4
30°-40°	374.0	11.9
40°-50°	364.6	11.6
50°-60°	311.3	9.9
60°-70°	226.2	7.2
70°-80°	127.9	4.1
80°-90°	39.8	1.3
90°-100°	29.2	0.9
100°-110°	175.4	5.6
110°-120°	236.0	7.5
120°-130°	191.7	6.1
130°-140°	153.5	4.9
140°-150°	120.9	3.8
150°-160°	88.4	2.8
160°-170°	54.9	1.7
170°-180°	18.7	0.6
0°-30°	635.5	20.2
0°-40°	1009.5	32.1
0°-60°	1685.4	53.5
0°-90°	2079.3	66.0
90°-120°	440.6	14.0
90°-150°	906.7	28.8
90°-180°	1069.0	34.0
0°-180°	3148.1	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	7	10	10	10	5
95°	19	23	13	15	16	18
105°	44	63	227	288	190	47
115°	72	85	194	402	470	72
125°	100	114	183	318	377	89
135°	121	135	183	262	301	94
145°	144	156	185	228	253	90
155°	168	175	188	207	217	77
165°	187	190	193	198	202	53
175°	197	198	197	196	194	19
180°	197	197	197	197	197	



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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	14.5	14.9	15.0	15.0
90°	4.7	7.0	9.5	9.5	9.5
92.5°	11.4	10.1	10.6	12.6	12.6
95°	19.2	23.2	13.4	14.7	16.0
97.5°	25.8	40.0	76.1	23.6	19.8
100°	31.7	48.9	148.5	44.2	29.7
102.5°	36.7	54.9	200.1	114.7	62.4
105°	44.2	62.6	226.6	287.6	189.6
107.5°	52.9	66.4	216.4	418.1	390.5
110°	57.9	71.3	210.5	439.3	470.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	63.9	77.3	204.5	426.9	480.7
115°	71.6	85.0	194.5	401.8	469.6
117.5°	80.8	94.0	192.2	375.8	445.6
120°	87.8	99.9	188.3	356.0	428.7
122.5°	91.8	105.8	183.3	339.0	405.9
125°	100.2	113.5	183.3	318.5	376.7
127.5°	106.2	120.7	183.6	294.7	352.1
130°	110.2	124.7	184.5	278.8	333.3
132.5°	114.2	128.8	183.6	271.6	316.4
135°	121.4	134.8	183.4	262.3	301.1
137.5°	127.6	141.9	183.4	252.0	285.2
140°	132.6	145.9	183.4	246.0	276.3
142.5°	137.5	149.9	184.4	239.0	267.4
145°	143.7	155.8	184.6	228.5	252.8
147.5°	151.2	161.8	186.1	221.0	239.6
150°	156.1	165.8	187.1	216.0	231.7
152.5°	161.1	169.8	187.1	211.9	224.8
155°	168.5	174.6	188.3	207.1	216.8
157.5°	174.5	180.3	189.8	204.1	211.1
160°	178.4	183.3	190.8	202.1	208.2
162.5°	181.4	186.2	191.8	201.1	205.2
165°	187.1	189.5	193.3	198.3	202.0
167.5°	190.3	192.5	194.5	197.1	199.2
170°	193.3	194.5	194.5	197.0	198.2
172.5°	194.3	196.5	195.5	196.0	197.3
175°	197.0	198.2	197.0	195.7	194.5
177.5°	197.0	198.0	197.0	197.0	196.0
180°	197.0	197.0	197.0	197.0	197.0

(END OF REPORT)