

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: P644887

Luminaire Tested: OMN4DIP-SR4F0-50D125U930-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644887
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-20)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-50D125U930-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

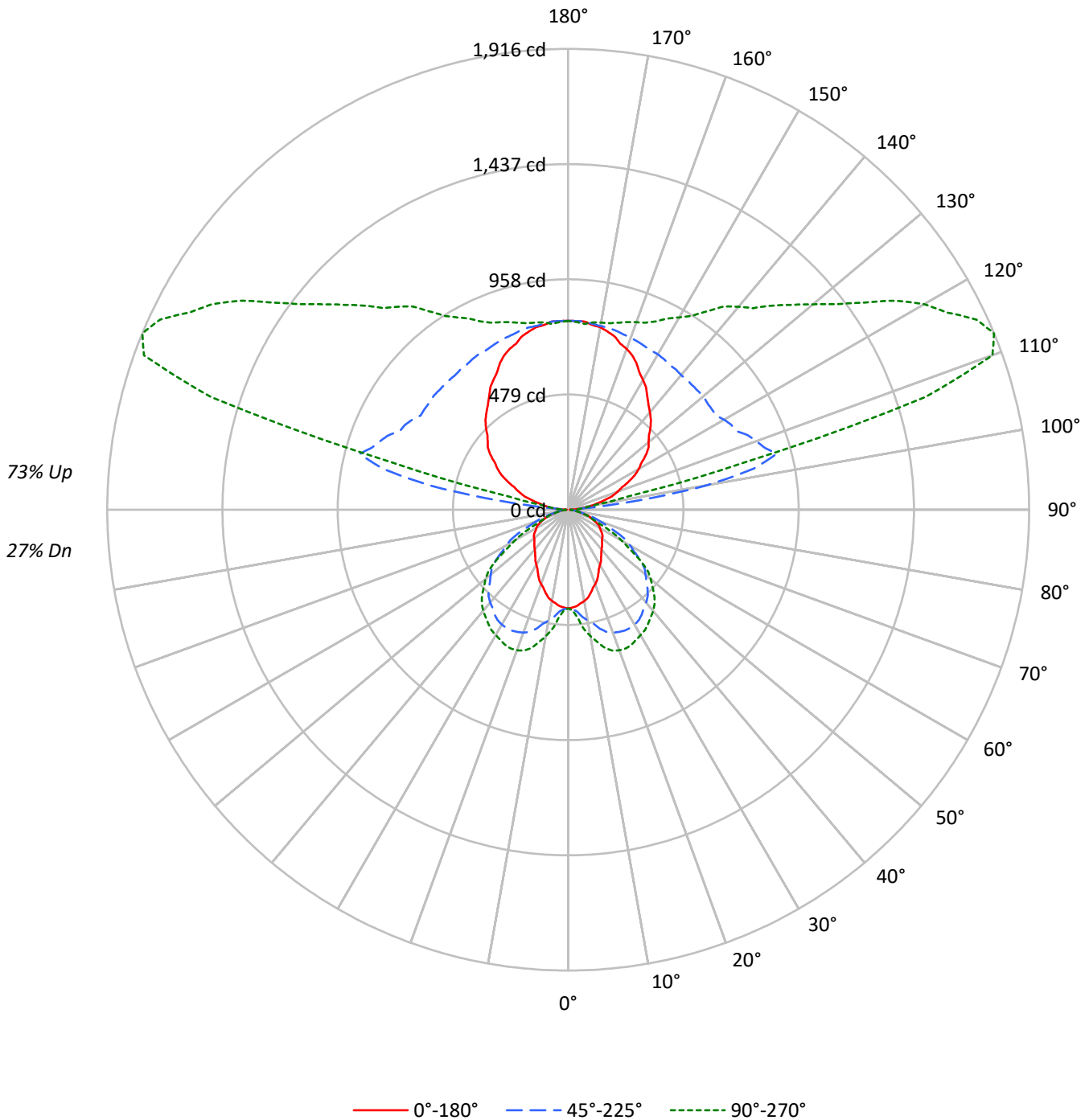
Lumens per Lamp: N/A
Luminaire Lumens: 5805.8 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 52.5
Input Voltage (V): 120
Input Current (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									
RC	80									70									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0										
RCR																																					
0	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35	27																			
1	93	89	85	81	83	79	76	73	62	60	58	46	45	43	31	30	30	23																			
2	84	77	71	66	75	69	64	60	54	51	48	40	38	36	27	26	25	19																			
3	77	68	61	55	68	61	55	50	48	43	40	35	33	30	24	23	21	16																			
4	70	60	52	46	62	54	47	42	42	38	34	31	28	26	21	20	18	14																			
5	64	53	45	39	57	48	41	36	38	33	29	28	25	22	19	17	16	12																			
6	59	47	40	34	52	43	36	31	34	29	25	25	22	19	17	15	14	10																			
7	54	43	35	29	48	38	32	27	30	25	22	23	19	17	16	14	12	9																			
8	50	38	31	26	45	35	28	24	27	23	19	21	17	15	14	12	11	8																			
9	47	35	28	23	42	31	25	21	25	20	17	19	16	13	13	11	10	7																			
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	9	6																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6625	6625	6625
5°	6527	6898	7300
10°	6320	7666	8745
15°	6013	8565	9969
20°	5656	9345	10689
25°	5270	9877	11049
30°	4928	10282	11225
35°	4703	10494	11416
40°	4546	10619	11565
45°	4553	10654	11570
50°	4627	10547	11241
55°	4836	10342	10207
60°	4931	9613	8289
65°	4993	8420	6090
70°	4773	6623	4730
75°	4286	4941	3986
80°	3636	3905	3199
85°	3538	3186	2649

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11570 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.1	0.7
10°-20°	139.8	2.4
20°-30°	232.3	4.0
30°-40°	293.1	5.0
40°-50°	313.3	5.4
50°-60°	276.5	4.8
60°-70°	177.5	3.1
70°-80°	78.7	1.4
80°-90°	22.2	0.4
90°-100°	101.9	1.8
100°-110°	691.2	11.9
110°-120°	936.4	16.1
120°-130°	761.7	13.1
130°-140°	611.4	10.5
140°-150°	481.9	8.3
150°-160°	352.4	6.1
160°-170°	218.9	3.8
170°-180°	74.6	1.3
0°-30°	414.2	7.1
0°-40°	707.3	12.2
0°-60°	1297.2	22.3
0°-90°	1575.5	27.1
90°-120°	1729.5	29.8
90°-150°	3584.5	61.7
90°-180°	4230.0	72.9
0°-180°	5805.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	410	410	410	410	410	
5°	403	415	426	440	450	38
15°	360	415	512	574	596	101
25°	296	401	554	606	620	136
35°	239	366	532	567	579	150
45°	199	313	467	496	507	154
55°	172	246	367	369	363	152
65°	131	165	220	179	159	128
75°	69	76	79	68	64	73
85°	19	16	17	15	14	20
90°	7	12	16	20	19	6
95°	50	80	44	48	56	52
105°	160	241	896	1143	755	169
115°	276	333	773	1602	1871	275
125°	393	446	729	1270	1501	349
135°	484	537	731	1045	1200	373
145°	573	621	736	911	1007	360
155°	672	696	750	825	864	308
165°	746	755	770	790	805	209
175°	785	790	785	780	775	74
180°	785	785	785	785	785	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	410.3	410.3	410.3	410.3	410.3
2.5°	407.3	413.2	413.4	415.7	418.7
5°	402.7	414.8	425.6	440.1	450.4
7.5°	393.1	414.8	449.2	483.0	499.8
10°	385.5	415.4	467.6	512.9	533.4
12.5°	375.6	415.1	485.9	540.4	563.9
15°	359.7	414.8	512.4	574.0	596.4
17.5°	341.4	413.1	533.2	594.9	614.5
20°	329.2	411.3	543.9	602.6	622.1
22.5°	315.5	407.3	550.0	606.3	624.4
25°	295.8	401.2	554.4	606.2	620.2
27.5°	276.5	392.6	554.6	598.6	610.5
30°	264.3	385.6	551.5	590.9	602.1
32.5°	253.6	377.9	545.4	581.8	593.7
35°	238.6	366.4	532.4	567.1	579.2
37.5°	225.6	353.2	516.0	549.8	563.9
40°	215.7	342.5	503.8	537.5	548.7
42.5°	208.0	331.2	489.3	522.2	531.9
45°	199.4	313.3	466.6	495.5	506.7
47.5°	190.3	294.8	440.5	467.7	475.0
50°	184.2	281.2	419.9	444.7	447.5
52.5°	180.3	266.9	400.0	415.7	416.2
55°	171.8	246.4	367.4	369.1	362.6
57.5°	160.3	222.4	326.0	316.6	301.0
60°	152.7	205.9	297.7	279.1	256.7
62.5°	145.0	190.0	267.9	237.8	211.6
65°	130.7	165.2	220.4	178.9	159.4
67.5°	114.1	138.0	173.1	133.9	120.8
70°	101.1	119.8	140.3	109.5	100.2
72.5°	88.9	101.6	113.6	90.5	85.7
75°	68.7	76.2	79.2	67.7	63.9
77.5°	50.6	50.9	55.0	47.7	45.8
80°	39.1	37.3	42.0	36.2	34.4
82.5°	30.0	27.3	30.5	26.3	25.2
85°	19.1	16.3	17.2	15.2	14.3
87.5°	11.3	10.0	10.8	11.0	9.8
90°	6.7	11.5	15.6	20.5	18.6
92.5°	20.8	23.4	26.7	34.9	36.9
95°	50.0	80.1	44.3	47.5	56.2
97.5°	79.5	147.1	293.9	87.5	75.0
100°	102.4	181.7	585.5	173.4	114.5
102.5°	125.3	209.2	790.9	453.7	248.1
105°	159.7	240.9	896.5	1142.6	755.4
107.5°	195.1	255.2	856.1	1662.5	1556.3
110°	218.0	275.0	832.4	1746.8	1876.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	241.7	298.7	808.7	1697.5	1915.7
115°	276.3	333.3	773.1	1601.9	1871.3
117.5°	312.7	368.9	764.2	1498.4	1775.5
120°	339.6	392.7	748.4	1419.6	1708.4
122.5°	359.3	415.5	727.9	1352.0	1617.5
125°	392.9	446.0	728.7	1270.2	1501.0
127.5°	420.6	475.4	728.7	1175.1	1403.2
130°	436.4	494.3	732.7	1110.9	1328.2
132.5°	454.6	512.6	731.1	1082.4	1261.0
135°	483.9	537.0	730.7	1045.3	1199.8
137.5°	508.6	565.5	730.7	1004.3	1136.6
140°	528.3	581.4	730.7	980.4	1101.1
142.5°	548.1	597.3	734.7	952.5	1065.5
145°	572.7	621.0	735.7	910.7	1007.2
147.5°	602.4	644.9	741.6	880.6	954.9
150°	622.1	660.7	745.6	860.5	923.3
152.5°	641.9	676.6	745.6	844.5	895.7
155°	671.5	695.6	750.5	825.4	864.1
157.5°	695.2	718.4	756.4	813.3	841.3
160°	711.0	730.3	760.4	805.4	829.5
162.5°	722.8	742.2	764.3	801.2	817.6
165°	745.6	755.2	770.2	790.3	804.8
167.5°	758.4	767.1	775.2	785.3	793.9
170°	770.2	775.1	775.2	785.2	790.0
172.5°	774.2	782.9	779.1	781.2	786.0
175°	785.1	789.9	785.1	780.0	775.2
177.5°	785.1	788.9	785.1	785.0	781.1
180°	785.1	785.1	785.1	785.1	785.1

(END OF REPORT)