

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: P645067

Luminaire Tested: OMN4DIP-SR4F0-75D125U930-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645067
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-SR4F0-75D125U930-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

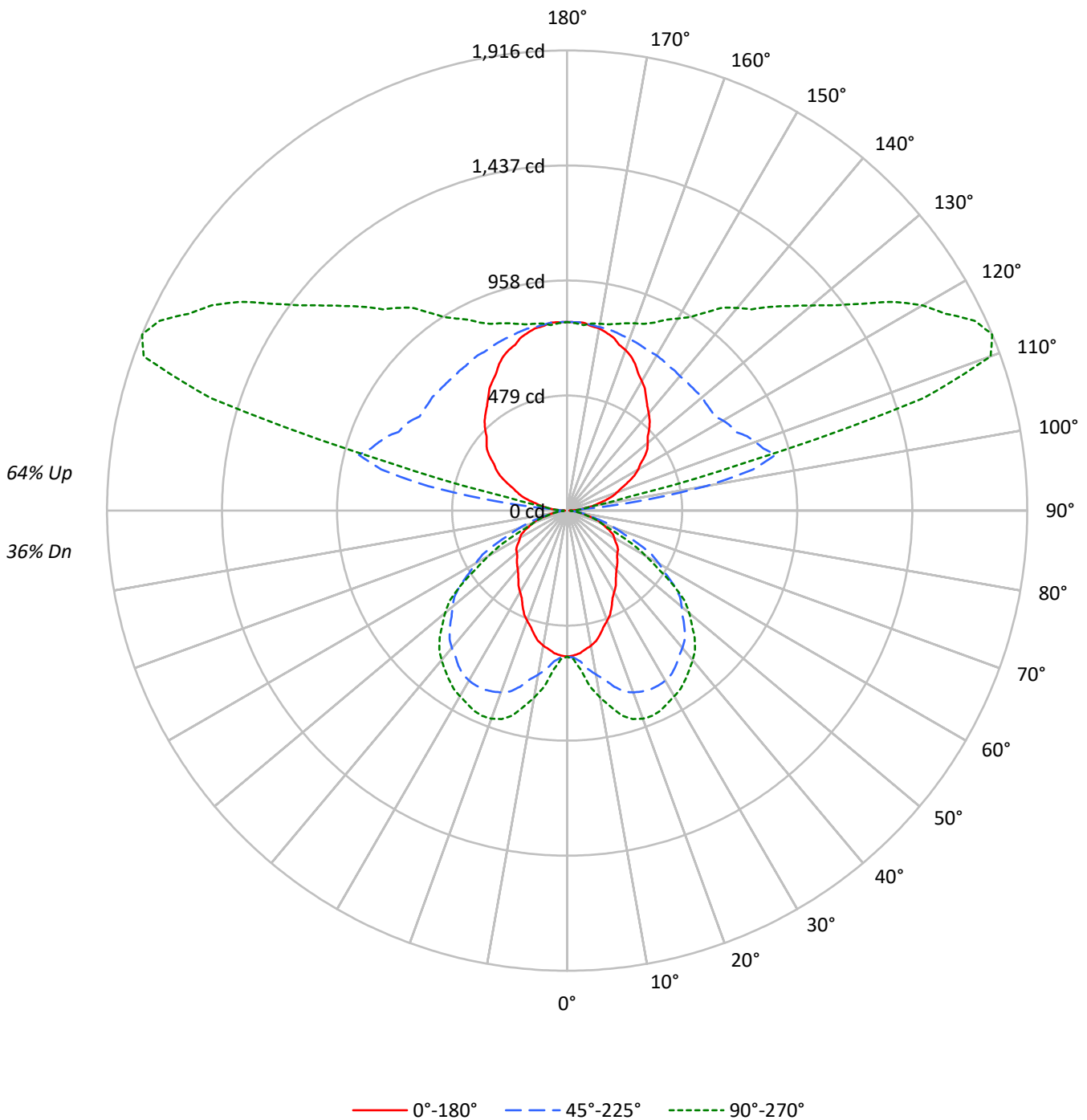
Lumens per Lamp: N/A
Luminaire Lumens: 6570.3 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 60
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	36				
1	95	90	87	83	85	82	79	76	66	64	62	51	50	49	38	37	36	30				
2	86	79	73	68	78	72	67	62	58	54	51	45	43	41	33	32	31	25				
3	78	69	62	56	71	63	57	52	51	46	43	40	37	34	29	28	26	21				
4	72	61	53	47	65	56	49	44	45	40	36	35	32	29	26	24	22	18				
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	23	21	19	16				
6	60	48	40	35	54	44	37	32	36	31	27	28	25	22	21	19	17	14				
7	56	44	36	30	50	40	33	28	32	27	23	26	22	19	19	17	15	12				
8	51	39	32	27	46	36	29	25	29	24	21	23	20	17	18	15	13	11				
9	48	36	28	23	43	33	26	22	27	22	18	21	18	15	16	14	12	9				
10	44	33	26	21	40	30	24	19	25	20	16	20	16	13	15	12	11	8				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9817	9817	9817
5°	9671	10220	10817
10°	9365	11358	12959
15°	8909	12692	14771
20°	8381	13847	15840
25°	7808	14635	16372
30°	7301	15236	16634
35°	6968	15552	16915
40°	6734	15734	17136
45°	6747	15787	17144
50°	6855	15626	16656
55°	7164	15325	15125
60°	7304	14244	12281
65°	7400	12478	9020
70°	7076	9810	7010
75°	6351	7324	5908
80°	5393	5783	4733
85°	5243	4724	3927

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 17144 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.4	0.9
10°-20°	207.2	3.2
20°-30°	344.2	5.2
30°-40°	434.3	6.6
40°-50°	464.2	7.1
50°-60°	409.7	6.2
60°-70°	263.0	4.0
70°-80°	116.6	1.8
80°-90°	32.0	0.5
90°-100°	104.5	1.6
100°-110°	692.9	10.5
110°-120°	937.6	14.3
120°-130°	762.5	11.6
130°-140°	611.5	9.3
140°-150°	481.9	7.3
150°-160°	352.4	5.4
160°-170°	218.9	3.3
170°-180°	74.6	1.1
0°-30°	613.8	9.3
0°-40°	1048.1	16.0
0°-60°	1922.1	29.3
0°-90°	2333.6	35.5
90°-120°	1735.0	26.4
90°-150°	3590.8	54.7
90°-180°	4237.0	64.5
0°-180°	6570.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	608	608	608	608	608	
5°	597	615	631	652	667	56
15°	533	615	759	850	884	149
25°	438	594	822	898	919	202
35°	354	543	789	840	858	222
45°	296	464	691	734	751	228
55°	254	365	544	547	537	226
65°	194	245	327	265	236	190
75°	102	113	117	100	95	109
85°	28	24	26	23	21	30
90°	10	15	18	23	20	8
95°	55	83	47	49	57	56
105°	163	244	898	1143	755	172
115°	279	335	774	1602	1871	277
125°	394	447	730	1271	1501	350
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°	608.0	608.0	608.0	608.0	608.0
2.5°	603.5	612.3	612.5	616.0	620.4
5°	596.7	614.6	630.6	652.2	667.4
7.5°	582.5	614.6	665.7	715.7	740.6
10°	571.2	615.5	692.8	760.0	790.4
12.5°	556.5	615.1	720.0	800.8	835.6
15°	533.0	614.6	759.3	850.5	883.7
17.5°	505.9	612.1	790.1	881.5	910.5
20°	487.8	609.5	805.9	892.8	921.9
22.5°	467.4	603.5	815.0	898.4	925.3
25°	438.3	594.5	821.5	898.3	919.0
27.5°	409.7	581.7	821.8	886.9	904.6
30°	391.6	571.4	817.2	875.6	892.2
32.5°	375.8	560.0	808.2	862.0	879.7
35°	353.5	542.9	789.0	840.3	858.2
37.5°	334.2	523.4	764.6	814.6	835.6
40°	319.5	507.6	746.5	796.4	813.0
42.5°	308.2	490.7	725.0	773.7	788.1
45°	295.5	464.2	691.4	734.2	750.8
47.5°	281.9	436.8	652.7	693.1	703.8
50°	272.9	416.7	622.1	659.0	663.1
52.5°	267.2	395.5	592.7	615.9	616.7
55°	254.5	365.1	544.4	547.0	537.3
57.5°	237.5	329.6	483.0	469.2	445.9
60°	226.2	305.0	441.1	413.5	380.3
62.5°	214.9	281.5	397.0	352.3	313.6
65°	193.7	244.9	326.6	265.2	236.1
67.5°	169.1	204.5	256.5	198.4	179.0
70°	149.9	177.5	207.8	162.3	148.5
72.5°	131.8	150.6	168.3	134.2	127.0
75°	101.8	112.9	117.4	100.3	94.7
77.5°	74.9	75.5	81.4	70.6	67.9
80°	58.0	55.2	62.2	53.7	50.9
82.5°	44.4	40.5	45.2	39.0	37.3
85°	28.3	24.1	25.5	22.6	21.2
87.5°	16.7	14.3	15.0	14.8	13.1
90°	9.9	14.7	18.4	23.2	20.5
92.5°	25.1	26.7	29.1	36.9	38.0
95°	55.1	83.3	46.6	48.9	57.1
97.5°	84.0	150.3	295.7	88.4	75.5
100°	106.5	184.5	586.9	174.3	115.0
102.5°	129.1	212.0	792.3	454.2	248.1
105°	163.0	243.6	897.9	1143.0	755.4
107.5°	198.2	257.5	857.4	1662.9	1556.3
110°	220.8	277.3	833.7	1747.3	1876.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	244.5	301.0	810.0	1697.9	1915.7
115°	278.6	335.2	774.5	1602.3	1871.3
117.5°	314.9	370.7	765.6	1498.8	1775.5
120°	341.4	394.5	749.8	1420.1	1708.4
122.5°	361.2	417.0	728.9	1352.4	1617.5
125°	394.3	447.4	730.0	1270.6	1501.0
127.5°	421.5	476.7	729.6	1175.5	1403.2
130°	437.3	495.3	733.6	1110.9	1328.2
132.5°	454.8	512.7	731.3	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)