

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: P645157

Luminaire Tested: OMN4DIP-SR4F0-75D50U930-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645157
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-SR4F0-75D50U930-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

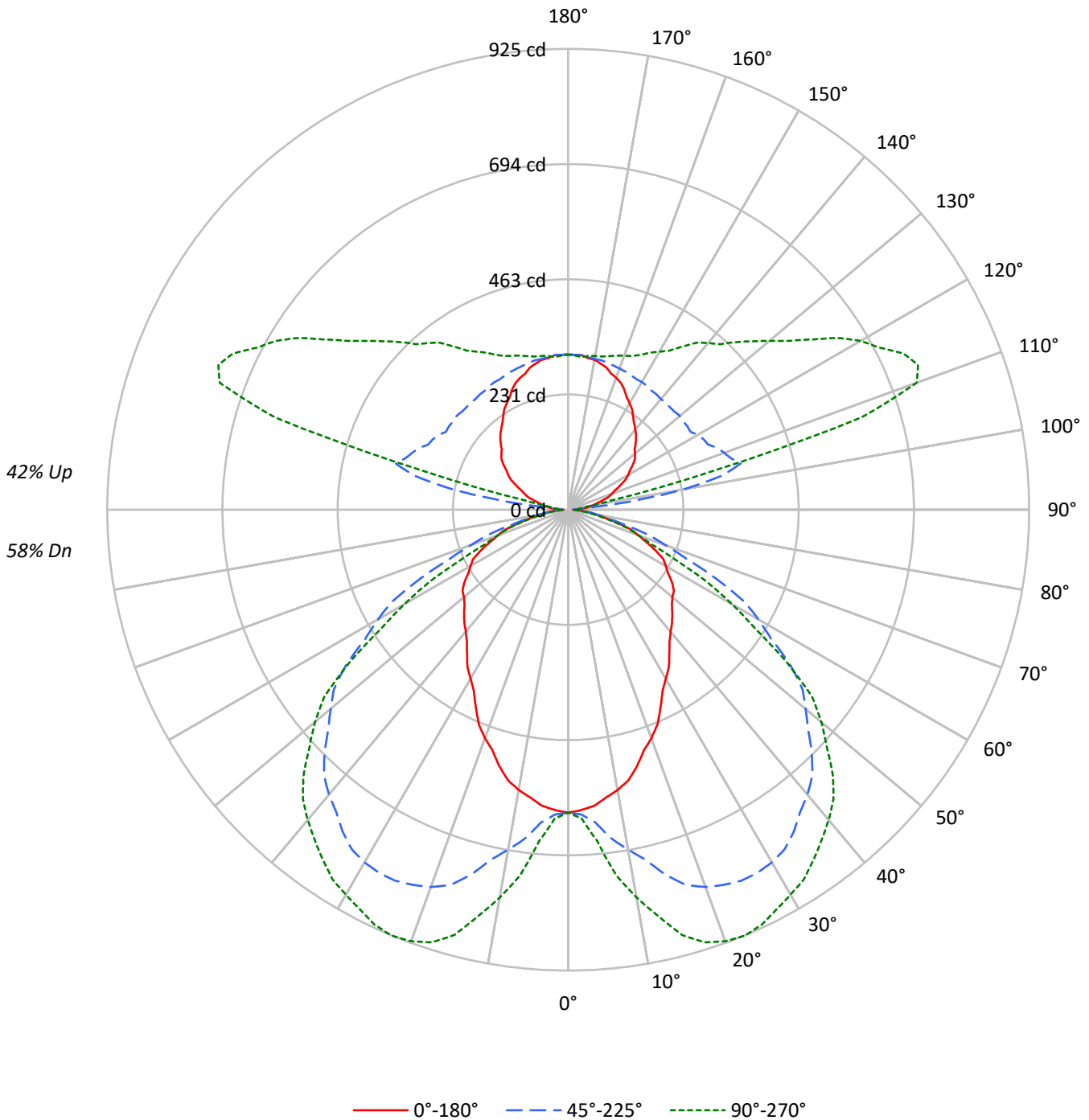
Lumens per Lamp: N/A
Luminaire Lumens: 4024.4 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.4
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	0													
RCR																																					
0	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58																			
1	100	95	91	88	93	89	86	83	77	75	72	66	65	63	56	55	54	49																			
2	91	83	77	72	84	78	72	68	68	64	60	58	55	52	50	47	45	41																			
3	83	73	66	60	77	68	62	57	60	54	50	51	47	44	44	41	38	35																			
4	76	65	57	50	70	60	53	48	53	47	43	46	41	38	39	36	33	30																			
5	69	57	49	43	64	54	46	41	47	41	37	41	36	32	35	31	28	25																			
6	64	51	43	37	59	48	41	35	42	36	32	37	32	28	31	28	25	22																			
7	59	46	38	32	55	43	36	31	38	32	28	33	28	25	29	25	22	19																			
8	55	42	34	29	51	39	32	27	35	29	25	30	26	22	26	22	19	17																			
9	51	38	31	25	47	36	29	24	32	26	22	28	23	20	24	20	17	15																			
10	47	35	28	23	44	33	26	22	29	24	20	26	21	18	22	18	16	14																			

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	1.5
10°-20°	207.2	5.1
20°-30°	344.2	8.6
30°-40°	434.3	10.8
40°-50°	464.2	11.5
50°-60°	409.7	10.2
60°-70°	263.0	6.5
70°-80°	116.6	2.9
80°-90°	30.9	0.8
90°-100°	46.2	1.1
100°-110°	277.8	6.9
110°-120°	374.1	9.3
120°-130°	303.8	7.5
130°-140°	242.6	6.0
140°-150°	191.1	4.7
150°-160°	139.7	3.5
160°-170°	86.8	2.2
170°-180°	29.6	0.7
0°-30°	613.8	15.3
0°-40°	1048.1	26.0
0°-60°	1922.1	47.8
0°-90°	2332.6	58.0
90°-120°	698.2	17.3
90°-150°	1435.7	35.7
90°-180°	1692.0	42.0
0°-180°	4024.4	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	12	12	14	12	7
95°	31	39	23	22	24	29
105°	71	102	359	454	300	75
115°	115	136	310	636	742	114
125°	159	180	292	505	595	141
135°	192	213	290	414	476	148
145°	227	246	292	361	399	143
155°	266	276	298	327	343	122
165°	296	300	305	313	319	83
175°	311	313	311	309	307	29
180°	311	311	311	311	311	



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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	13.7	13.8	13.0	11.4
90°	9.9	11.8	12.4	14.3	11.5
92.5°	18.0	16.6	16.0	18.3	17.1
95°	31.2	39.1	22.7	21.9	24.4
97.5°	41.7	65.5	120.5	36.8	30.8
100°	49.9	78.3	235.3	70.8	46.4
102.5°	58.2	89.2	316.7	181.1	98.6
105°	70.6	101.8	358.6	454.1	299.6
107.5°	84.4	106.4	342.6	660.2	617.1
110°	92.7	114.3	333.2	693.7	744.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	102.1	123.7	323.8	674.1	759.7
115°	114.8	136.3	309.7	636.2	742.0
117.5°	129.0	150.4	306.1	595.2	704.1
120°	138.8	159.8	299.9	563.9	677.4
122.5°	146.6	168.1	290.9	537.1	641.4
125°	158.9	180.0	292.0	504.7	595.2
127.5°	168.9	191.4	291.0	466.8	556.4
130°	175.1	198.1	292.6	440.5	526.7
132.5°	180.7	203.7	290.3	429.2	500.0
135°	191.9	212.9	289.8	414.5	475.8
137.5°	201.7	224.3	289.8	398.2	450.7
140°	209.5	230.6	289.8	388.7	436.6
142.5°	217.3	236.9	291.3	377.7	422.5
145°	227.1	246.3	291.7	361.1	399.4
147.5°	238.9	255.7	294.1	349.2	378.7
150°	246.7	262.0	295.6	341.2	366.1
152.5°	254.5	268.3	295.6	334.9	355.2
155°	266.3	275.8	297.6	327.3	342.6
157.5°	275.7	284.9	299.9	322.5	333.6
160°	281.9	289.6	301.5	319.4	328.9
162.5°	286.6	294.3	303.1	317.7	324.2
165°	295.6	299.5	305.4	313.4	319.1
167.5°	300.7	304.2	307.4	311.4	314.8
170°	305.4	307.3	307.4	311.3	313.3
172.5°	307.0	310.4	309.0	309.8	311.7
175°	311.3	313.2	311.3	309.3	307.4
177.5°	311.3	312.8	311.3	311.3	309.7
180°	311.3	311.3	311.3	311.3	311.3

(END OF REPORT)