

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: P645187

Luminaire Tested: OMN4DIP-SR4F0-75D75U930-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645187
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-SR4F0-75D75U930-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

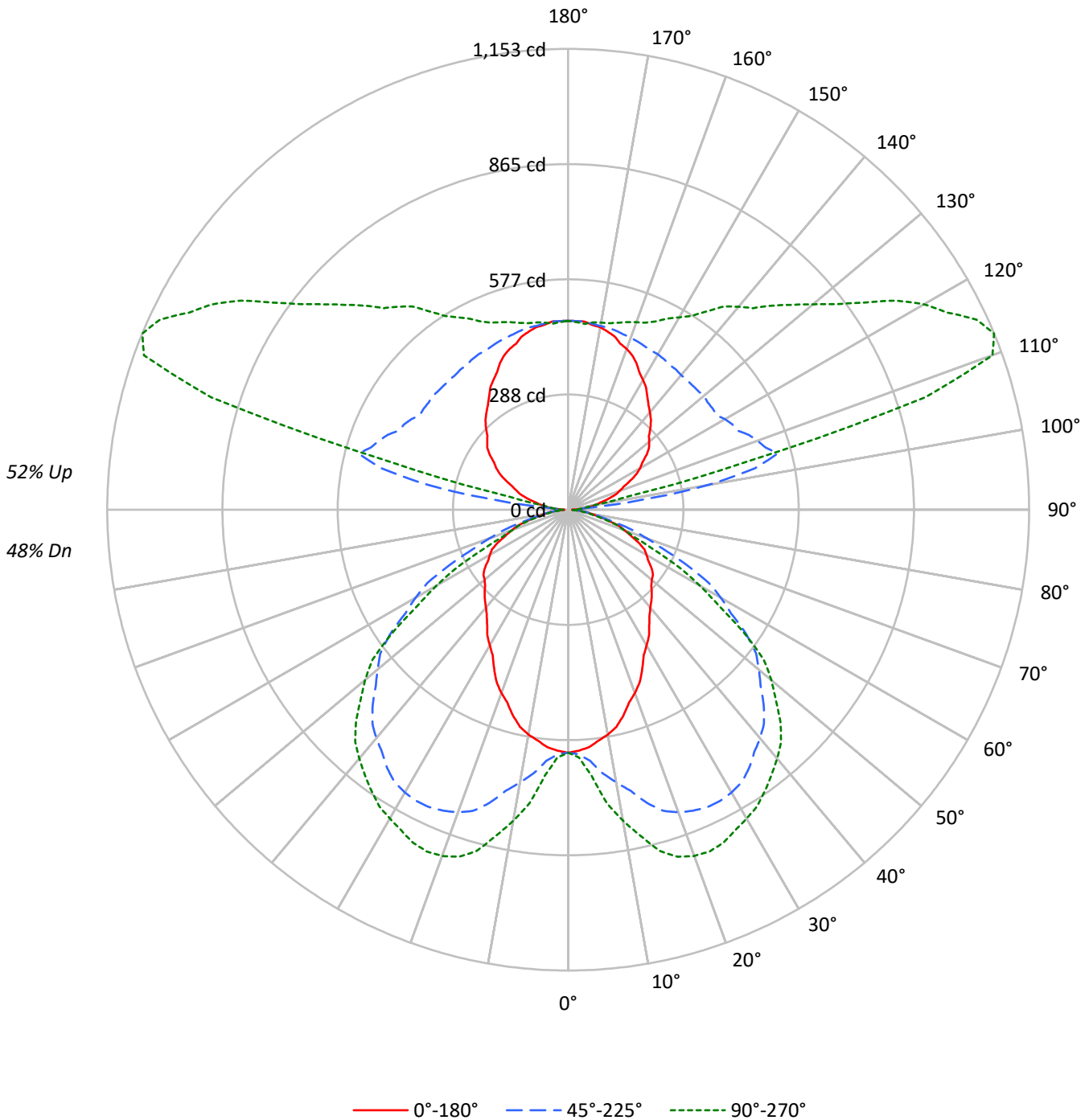
Lumens per Lamp: N/A
Luminaire Lumens: 4890.2 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 42.6
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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48				48
1	97	93	89	86	89	86	83	80	72	70	68	60	58	56	48	47	46				40	
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	39				34	
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	37	35	33				29	
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28				24	
5	68	56	48	42	62	52	45	39	44	38	34	37	32	29	30	27	24				21	
6	62	50	42	36	57	46	39	34	39	34	30	33	29	25	27	24	21				18	
7	57	45	37	31	53	42	35	30	36	30	26	30	25	22	24	21	19				16	
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17				14	
9	49	37	30	24	45	34	28	23	29	24	20	25	21	18	20	17	15				13	
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13				11	

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	1.3
10°-20°	207.2	4.2
20°-30°	344.2	7.0
30°-40°	434.3	8.9
40°-50°	464.2	9.5
50°-60°	409.7	8.4
60°-70°	263.0	5.4
70°-80°	116.6	2.4
80°-90°	31.3	0.6
90°-100°	66.0	1.4
100°-110°	419.0	8.6
110°-120°	565.8	11.6
120°-130°	459.8	9.4
130°-140°	368.1	7.5
140°-150°	290.0	5.9
150°-160°	212.0	4.3
160°-170°	131.7	2.7
170°-180°	44.9	0.9
0°-30°	613.8	12.6
0°-40°	1048.1	21.4
0°-60°	1922.1	39.3
0°-90°	2332.9	47.7
90°-120°	1050.8	21.5
90°-150°	2168.6	44.3
90°-180°	2557.0	52.3
0°-180°	4890.2	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	13	14	17	15	8
95°	39	54	31	31	36	38
105°	102	150	542	688	455	108
115°	170	204	468	965	1126	170
125°	239	271	441	765	903	212
135°	291	323	440	629	722	224
145°	345	374	443	548	606	216
155°	404	419	452	497	520	186
165°	449	454	464	476	484	126
175°	472	475	472	469	466	45
180°	472	472	472	472	472	



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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	13.9	14.2	13.6	12.0
90°	9.9	12.8	14.4	17.3	14.6
92.5°	20.4	20.0	20.4	24.6	24.2
95°	39.3	54.1	30.8	31.1	35.5
97.5°	56.0	94.3	180.1	54.3	46.0
100°	69.2	114.4	354.8	106.0	69.8
102.5°	82.3	131.0	478.4	274.0	149.4
105°	102.0	150.0	542.0	688.4	454.6
107.5°	123.1	157.8	517.7	1001.2	936.5
110°	136.2	169.7	503.4	1052.0	1129.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	150.5	184.0	489.1	1022.3	1152.8
115°	170.5	204.0	467.7	964.8	1126.1
117.5°	192.2	225.4	462.4	902.5	1068.4
120°	207.7	239.7	452.9	855.1	1028.0
122.5°	219.6	252.8	439.9	814.4	973.4
125°	239.0	270.9	441.0	765.2	903.2
127.5°	254.8	288.4	440.2	707.8	844.4
130°	264.3	299.2	442.6	668.5	799.3
132.5°	273.9	308.8	440.3	651.4	758.8
135°	291.2	323.1	439.7	629.0	722.0
137.5°	306.0	340.3	439.7	604.4	684.0
140°	317.9	349.9	439.7	589.9	662.6
142.5°	329.8	359.4	442.1	573.2	641.2
145°	344.7	373.7	442.7	548.0	606.1
147.5°	362.5	388.1	446.3	529.9	574.6
150°	374.4	397.6	448.7	517.8	555.6
152.5°	386.3	407.2	448.7	508.2	539.0
155°	404.1	418.6	451.6	496.7	520.0
157.5°	418.3	432.3	455.2	489.4	506.3
160°	427.9	439.5	457.6	484.6	499.2
162.5°	435.0	446.6	459.9	482.2	492.0
165°	448.7	454.5	463.5	475.6	484.3
167.5°	456.4	461.6	466.5	472.5	477.8
170°	463.5	466.4	466.5	472.5	475.4
172.5°	465.9	471.1	468.9	470.1	473.0
175°	472.4	475.3	472.4	469.4	466.5
177.5°	472.4	474.7	472.4	472.4	470.0
180°	472.4	472.4	472.4	472.4	472.4

(END OF REPORT)