

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: P645163

Luminaire Tested: OMN4DIP-SR4F0-75D50U935-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645163
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-SR4F0-75D50U935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

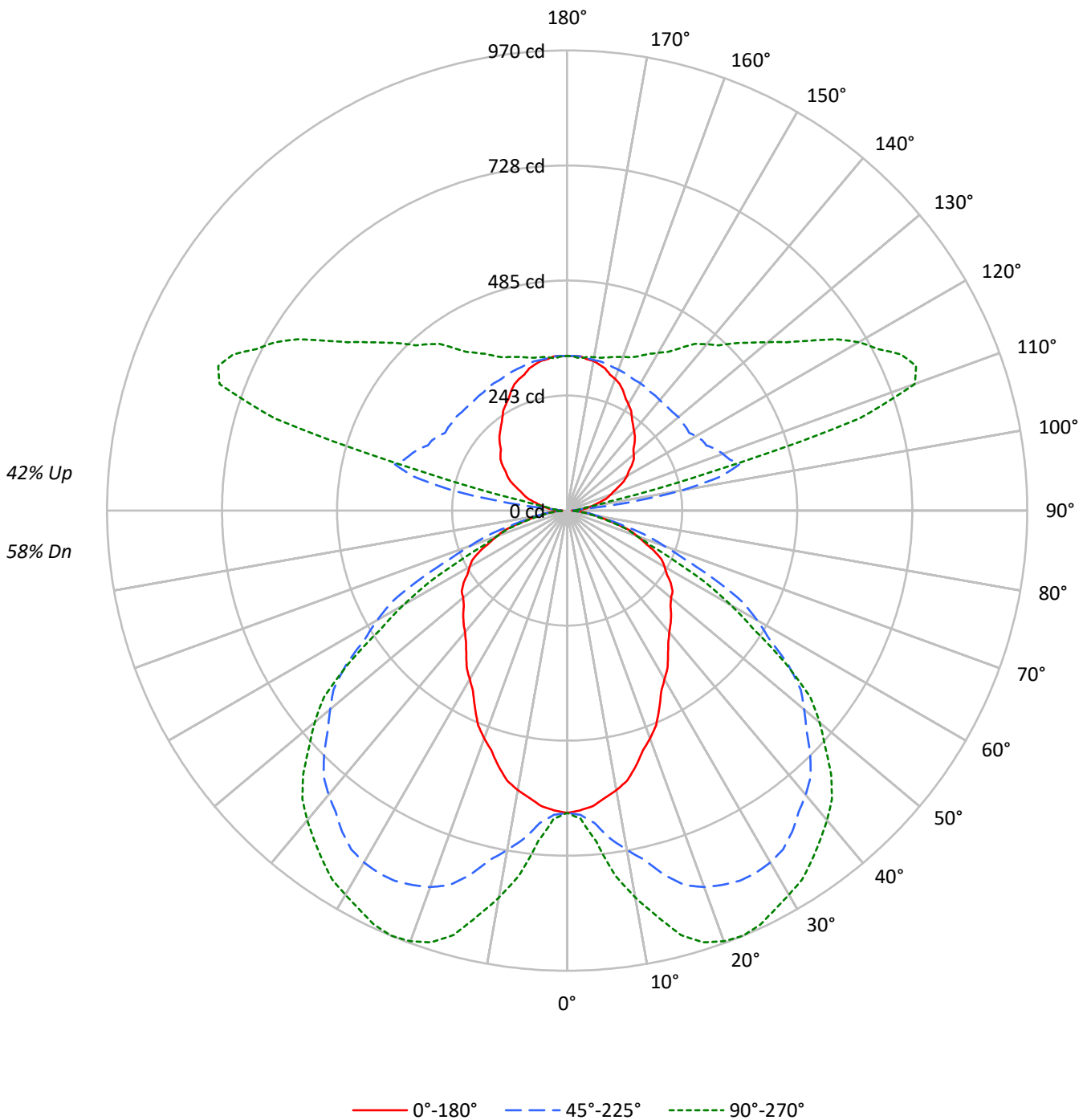
Lumens per Lamp: N/A
Luminaire Lumens: 4217.5 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

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°	10288	10288	10288
5°	10135	10712	11336
10°	9814	11904	13580
15°	9337	13300	15480
20°	8783	14512	16600
25°	8182	15337	17158
30°	7651	15968	17432
35°	7301	16297	17728
40°	7059	16491	17958
45°	7072	16545	17966
50°	7184	16377	17455
55°	7507	16059	15851
60°	7656	14928	12871
65°	7755	13077	9456
70°	7416	10282	7345
75°	6656	7673	6195
80°	5653	6062	4956
85°	5483	4946	4113

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 17966 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	1.5
10°-20°	217.2	5.1
20°-30°	360.8	8.6
30°-40°	455.1	10.8
40°-50°	486.5	11.5
50°-60°	429.4	10.2
60°-70°	275.6	6.5
70°-80°	122.2	2.9
80°-90°	32.4	0.8
90°-100°	48.4	1.1
100°-110°	291.2	6.9
110°-120°	392.1	9.3
120°-130°	318.4	7.5
130°-140°	254.3	6.0
140°-150°	200.3	4.7
150°-160°	146.4	3.5
160°-170°	90.9	2.2
170°-180°	31.0	0.7
0°-30°	643.3	15.3
0°-40°	1098.4	26.0
0°-60°	2014.3	47.8
0°-90°	2444.5	58.0
90°-120°	731.7	17.3
90°-150°	1504.6	35.7
90°-180°	1773.0	42.0
0°-180°	4217.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	637	637	637	637	637	
5°	625	644	661	683	699	59
15°	559	644	796	891	926	156
25°	459	623	861	941	963	211
35°	370	569	827	881	899	233
45°	310	486	725	769	787	239
55°	267	383	570	573	563	237
65°	203	257	342	278	248	199
75°	107	118	123	105	99	114
85°	30	25	27	24	22	31
90°	10	12	13	15	12	8
95°	33	41	24	23	26	30
105°	74	107	376	476	314	79
115°	120	143	324	667	778	120
125°	166	189	306	529	624	148
135°	201	223	304	434	499	155
145°	238	258	306	378	419	149
155°	279	289	312	343	359	128
165°	310	314	320	328	334	87
175°	326	328	326	324	322	31
180°	326	326	326	326	326	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	637.2	637.2	637.2	637.2	637.2
2.5°	632.4	641.7	641.9	645.6	650.2
5°	625.3	644.1	660.9	683.4	699.4
7.5°	610.5	644.1	697.6	750.1	776.1
10°	598.6	645.0	726.1	796.4	828.3
12.5°	583.2	644.6	754.5	839.2	875.7
15°	558.6	644.1	795.7	891.3	926.1
17.5°	530.2	641.4	828.0	923.8	954.2
20°	511.2	638.7	844.6	935.7	966.1
22.5°	489.9	632.4	854.1	941.5	969.7
25°	459.3	623.1	860.9	941.4	963.1
27.5°	429.4	609.6	861.2	929.5	948.0
30°	410.4	598.8	856.5	917.6	935.0
32.5°	393.8	586.8	847.0	903.4	921.9
35°	370.4	568.9	826.8	880.6	899.4
37.5°	350.3	548.5	801.3	853.7	875.7
40°	334.9	531.9	782.4	834.6	852.0
42.5°	323.0	514.3	759.8	810.9	825.9
45°	309.7	486.4	724.6	769.4	786.8
47.5°	295.5	457.7	684.0	726.3	737.6
50°	286.0	436.7	652.0	690.6	694.9
52.5°	280.1	414.5	621.1	645.5	646.3
55°	266.7	382.6	570.5	573.2	563.1
57.5°	248.9	345.4	506.2	491.7	467.3
60°	237.1	319.7	462.3	433.4	398.6
62.5°	225.2	295.1	416.1	369.2	328.7
65°	203.0	256.6	342.3	277.9	247.5
67.5°	177.2	214.3	268.8	207.9	187.6
70°	157.1	186.0	217.8	170.1	155.6
72.5°	138.1	157.8	176.3	140.6	133.1
75°	106.7	118.3	123.0	105.1	99.3
77.5°	78.5	79.1	85.3	74.0	71.1
80°	60.8	57.9	65.2	56.2	53.3
82.5°	46.5	42.5	47.4	40.9	39.1
85°	29.6	25.3	26.7	23.7	22.2
87.5°	17.5	14.4	14.5	13.6	11.9
90°	10.4	12.4	13.0	15.0	12.1
92.5°	18.9	17.4	16.7	19.2	17.9
95°	32.7	41.0	23.8	23.0	25.5
97.5°	43.7	68.6	126.3	38.5	32.3
100°	52.3	82.1	246.6	74.2	48.7
102.5°	61.0	93.5	331.9	189.8	103.3
105°	74.0	106.6	375.8	475.9	313.9
107.5°	88.5	111.5	359.0	691.9	646.7
110°	97.1	119.7	349.2	727.0	779.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.0	129.6	339.3	706.5	796.1
115°	120.3	142.9	324.5	666.7	777.6
117.5°	135.1	157.7	320.8	623.7	737.8
120°	145.5	167.5	314.3	591.0	709.9
122.5°	153.7	176.2	304.9	562.9	672.2
125°	166.5	188.6	306.1	528.9	623.8
127.5°	177.0	200.6	305.0	489.2	583.1
130°	183.5	207.6	306.6	461.7	551.9
132.5°	189.4	213.4	304.3	449.8	524.0
135°	201.1	223.1	303.7	434.4	498.6
137.5°	211.3	235.0	303.7	417.4	472.3
140°	219.5	241.6	303.7	407.4	457.6
142.5°	227.8	248.2	305.3	395.8	442.8
145°	238.0	258.1	305.7	378.4	418.6
147.5°	250.3	268.0	308.2	365.9	396.8
150°	258.5	274.6	309.8	357.6	383.7
152.5°	266.7	281.2	309.8	350.9	372.2
155°	279.0	289.1	311.9	343.0	359.1
157.5°	288.9	298.5	314.3	338.0	349.6
160°	295.5	303.5	316.0	334.7	344.7
162.5°	300.4	308.4	317.6	333.0	339.8
165°	309.8	313.8	320.1	328.4	334.4
167.5°	315.2	318.8	322.1	326.3	329.9
170°	320.1	322.1	322.1	326.3	328.3
172.5°	321.7	325.3	323.8	324.6	326.7
175°	326.2	328.2	326.2	324.1	322.1
177.5°	326.2	327.8	326.2	326.2	324.6
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)