

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: P645133

Luminaire Tested: OMN4DIP-SR4F0-75D25U935-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645133
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-SR4F0-75D25U935-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

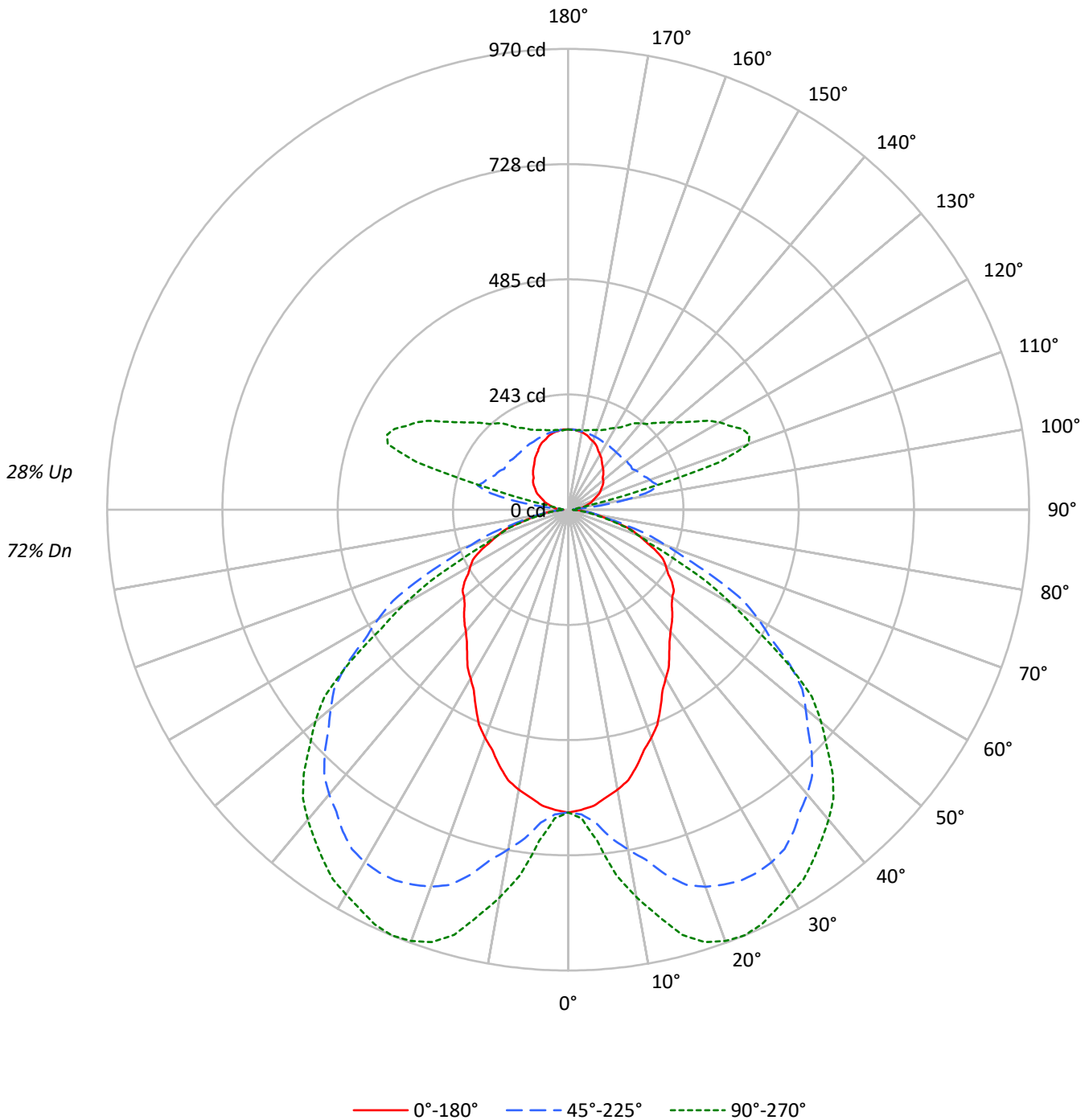
Lumens per Lamp: N/A
Luminaire Lumens: 3372.8 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 30.1
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	0
RCR																		
0	112	112	112	112	107	107	107	107	96	96	96	86	86	86	77	77	77	72
1	103	99	95	91	98	94	90	87	84	82	79	76	74	72	68	67	65	61
2	94	86	80	74	89	82	76	71	74	70	66	67	63	60	60	57	55	51
3	85	76	68	62	81	72	65	60	65	60	55	59	54	51	53	50	47	43
4	78	67	59	52	74	64	56	50	58	52	47	52	47	43	47	43	40	37
5	72	59	51	45	68	57	49	43	52	45	40	47	41	37	42	38	35	32
6	66	53	45	39	62	51	43	37	46	40	35	42	37	33	38	34	30	28
7	61	48	40	34	58	46	38	33	42	35	31	38	33	29	35	30	27	24
8	57	44	35	30	53	42	34	29	38	32	27	35	29	25	32	27	24	21
9	53	40	32	27	50	38	31	26	35	29	24	32	27	23	29	25	21	19
10	49	36	29	24	47	35	28	23	32	26	22	29	24	20	27	22	19	17

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	1.9
10°-20°	217.2	6.4
20°-30°	360.8	10.7
30°-40°	455.1	13.5
40°-50°	486.5	14.4
50°-60°	429.4	12.7
60°-70°	275.6	8.2
70°-80°	122.2	3.6
80°-90°	32.1	1.0
90°-100°	29.1	0.9
100°-110°	153.4	4.5
110°-120°	205.1	6.1
120°-130°	166.2	4.9
130°-140°	131.9	3.9
140°-150°	103.8	3.1
150°-160°	75.9	2.2
160°-170°	47.1	1.4
170°-180°	16.1	0.5
0°-30°	643.3	19.1
0°-40°	1098.4	32.6
0°-60°	2014.3	59.7
0°-90°	2444.2	72.5
90°-120°	387.7	11.5
90°-150°	789.6	23.4
90°-180°	929.0	27.5
0°-180°	3372.8	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	11	11	12	9	8
95°	25	26	16	14	15	22
105°	43	60	197	247	163	46
115°	66	77	170	346	403	66
125°	88	100	161	275	323	79
135°	104	116	157	225	258	81
145°	123	134	158	196	217	77
155°	145	150	162	178	186	66
165°	160	163	166	170	173	45
175°	169	170	169	168	167	16
180°	169	169	169	169	169	



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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	14.2	14.1	13.0	11.3
90°	10.4	11.4	11.0	12.0	9.1
92.5°	16.5	14.0	12.4	13.1	11.0
95°	24.8	26.3	15.9	14.0	14.7
97.5°	29.6	40.4	68.1	21.4	17.4
100°	33.5	46.9	129.9	39.9	25.9
102.5°	37.5	52.8	174.1	99.2	53.7
105°	43.3	59.6	196.9	247.3	162.7
107.5°	50.7	61.4	188.2	359.2	335.1
110°	54.6	65.6	183.1	377.4	404.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	59.7	70.7	178.0	366.8	412.5
115°	65.9	76.9	170.3	346.2	402.9
117.5°	73.5	84.6	168.4	323.9	382.3
120°	78.2	89.7	165.0	306.9	367.9
122.5°	82.5	93.6	159.5	292.4	348.3
125°	88.4	99.9	160.7	274.8	323.2
127.5°	93.1	105.9	159.5	254.0	302.2
130°	96.5	109.0	160.3	239.2	286.0
132.5°	98.4	110.9	157.9	233.1	271.5
135°	104.2	115.6	157.4	225.1	258.4
137.5°	109.5	121.8	157.4	216.3	244.7
140°	113.8	125.2	157.4	211.1	237.1
142.5°	118.0	128.6	158.2	205.1	229.4
145°	123.3	133.7	158.4	196.1	216.9
147.5°	129.7	138.9	159.7	189.6	205.6
150°	134.0	142.3	160.5	185.3	198.8
152.5°	138.2	145.7	160.5	181.8	192.9
155°	144.6	149.8	161.6	177.7	186.1
157.5°	149.7	154.7	162.9	175.1	181.2
160°	153.1	157.3	163.7	173.4	178.6
162.5°	155.7	159.8	164.6	172.5	176.1
165°	160.5	162.6	165.9	170.2	173.3
167.5°	163.3	165.2	166.9	169.1	171.0
170°	165.9	166.9	166.9	169.1	170.1
172.5°	166.7	168.6	167.8	168.2	169.3
175°	169.0	170.1	169.0	168.0	166.9
177.5°	169.0	169.9	169.0	169.0	168.2
180°	169.0	169.0	169.0	169.0	169.0

(END OF REPORT)