

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: P645262

Luminaire Tested: OMN4DP-SR4F0-75D840-FLL-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645262
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2206-689-19)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DP-SR4F0-75D840-FLL-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

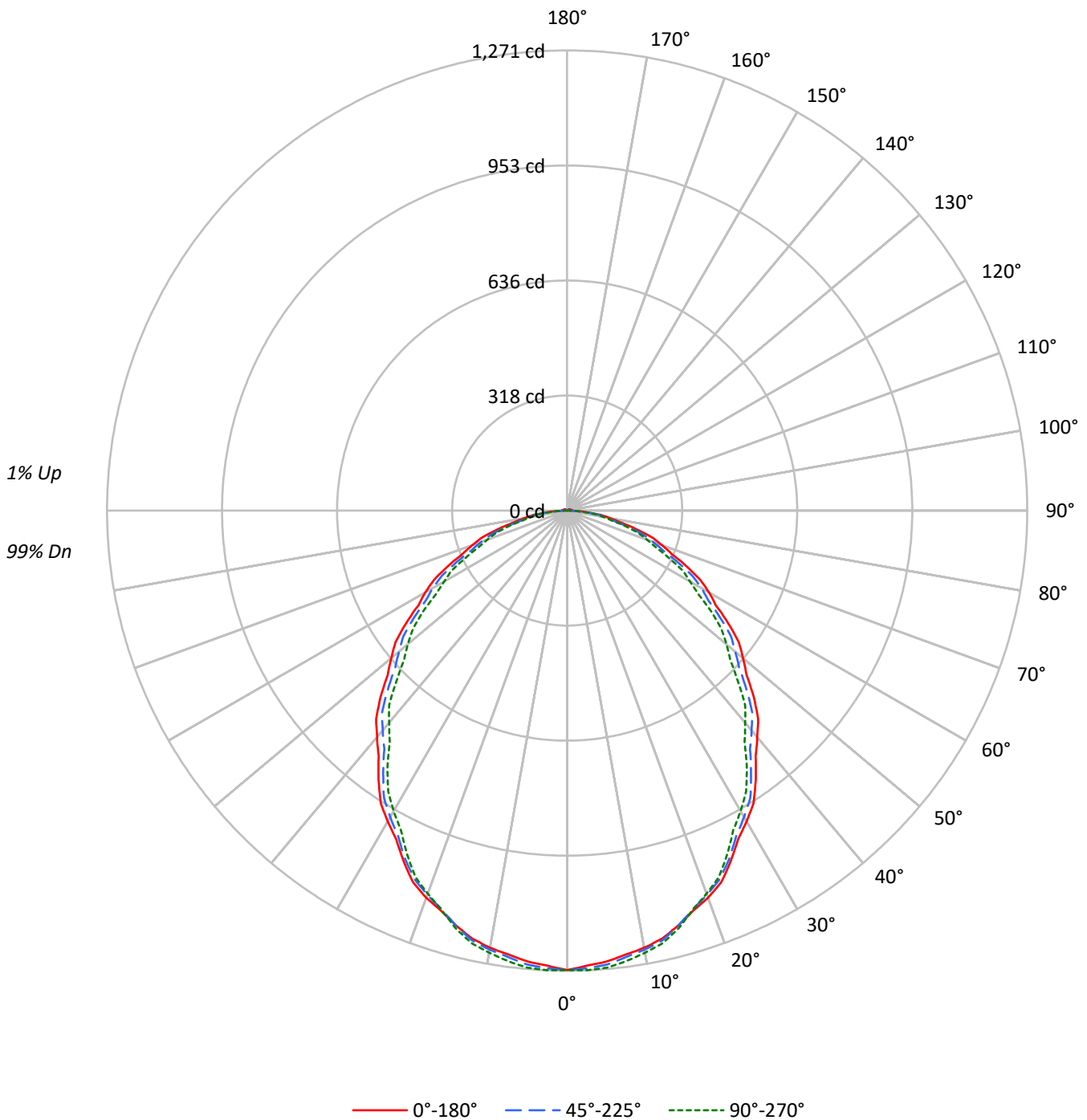
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3095.9 lumens
Efficiency: N/A
Efficacy: 142.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
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									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	50	30	10	0														
RCR																																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	99																				
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84																				
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71																				
3	91	81	73	67	89	79	72	66	76	70	65	73	68	63	71	66	62	60																				
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	63	58	54	52																				
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45																				
6	71	58	50	43	69	57	49	43	55	48	43	54	47	42	52	46	42	40																				
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	35																				
8	62	49	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32																				
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29																				
10	54	41	34	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20492	20492	20492
5°	20263	20404	20543
10°	20102	20185	20328
15°	19829	19829	19945
20°	19553	19405	19345
25°	19042	18889	18643
30°	18480	18222	17868
35°	17903	17461	17051
40°	17216	16706	16124
45°	16639	16009	15221
50°	15918	15224	14443
55°	15313	14534	13658
60°	14609	13831	12658
65°	13853	12863	11874
70°	13124	11901	11084
75°	12283	10880	10343
80°	11241	9958	9475
85°	10559	9281	8633

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16639 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.4	3.9
10°-20°	335.0	10.8
20°-30°	487.2	15.7
30°-40°	554.2	17.9
40°-50°	540.3	17.5
50°-60°	461.2	14.9
60°-70°	335.2	10.8
70°-80°	189.5	6.1
80°-90°	58.4	1.9
90°-100°	7.4	0.2
100°-110°	4.1	0.1
110°-120°	2.5	0.1
120°-130°	1.4	0.0
130°-140°	0.1	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	941.6	30.4
0°-40°	1495.7	48.3
0°-60°	2497.3	80.7
0°-90°	3080.3	99.5
90°-120°	14.0	0.5
90°-150°	15.6	0.5
90°-180°	16.0	0.5
0°-180°	3095.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1269	1269	1269	1269	1269	
5°	1250	1269	1259	1257	1268	119
15°	1186	1202	1186	1185	1193	334
25°	1069	1079	1060	1041	1046	492
35°	908	912	886	865	865	567
45°	729	725	701	677	667	561
55°	544	542	516	492	485	485
65°	363	359	337	316	311	360
75°	197	190	174	168	166	209
85°	57	50	50	48	47	61
90°	7	9	10	9	9	7
95°	14	7	5	5	4	10
105°	9	5	4	2	0	10
115°	5	4	2	0	0	6
125°	4	4	2	0	0	3
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1269.2	1269.2	1269.2	1269.2	1269.2
2.5°	1258.2	1274.4	1265.1	1265.2	1270.6
5°	1250.2	1268.8	1258.9	1257.4	1267.5
7.5°	1237.1	1255.3	1243.7	1241.9	1255.1
10°	1226.1	1242.9	1231.2	1228.0	1239.9
12.5°	1210.9	1227.7	1216.0	1211.5	1223.3
15°	1186.3	1201.5	1186.3	1184.8	1193.2
17.5°	1158.7	1171.9	1154.2	1148.5	1154.9
20°	1138.0	1149.8	1129.4	1120.8	1125.9
22.5°	1111.7	1123.6	1101.7	1089.1	1095.5
25°	1068.9	1079.0	1060.3	1041.4	1046.5
27.5°	1023.0	1030.7	1011.9	992.6	994.3
30°	991.2	996.3	977.4	956.7	958.4
32.5°	958.0	961.8	941.5	919.4	919.7
35°	908.3	911.7	885.9	865.1	865.1
37.5°	855.5	857.5	829.9	807.4	805.1
40°	816.8	820.2	792.6	770.1	765.0
42.5°	780.9	781.6	756.7	734.1	727.7
45°	728.7	725.3	701.1	676.7	666.6
47.5°	672.4	672.4	644.8	620.4	611.0
50°	633.7	633.7	606.1	581.8	575.0
52.5°	597.8	596.5	570.2	545.8	536.4
55°	544.0	542.3	516.3	492.0	485.2
57.5°	487.0	487.0	462.8	436.7	429.3
60°	452.4	452.4	428.3	402.1	392.0
62.5°	415.1	413.8	389.6	366.3	360.2
65°	362.6	359.3	336.7	315.9	310.8
67.5°	312.6	309.2	285.3	268.6	265.2
70°	278.0	274.6	252.1	238.2	234.8
72.5°	244.9	240.1	220.3	209.2	205.8
75°	196.9	190.1	174.4	167.5	165.8
77.5°	151.3	139.8	133.3	128.4	126.7
80°	120.9	110.7	107.1	103.6	101.9
82.5°	94.6	84.5	83.6	81.5	79.8
85°	57.0	50.2	50.1	48.3	46.6
87.5°	24.9	21.2	21.4	21.1	21.1
90°	6.9	8.6	10.4	8.6	8.6
92.5°	12.4	8.7	7.6	7.2	5.9
95°	13.8	7.1	5.2	5.1	3.5
97.5°	12.1	7.0	4.8	3.1	1.7
100°	12.1	7.0	3.5	1.7	1.7
102.5°	10.7	5.6	3.5	1.7	0.3
105°	8.6	5.3	3.5	1.7	0.0
107.5°	8.3	5.2	3.5	1.7	0.0
110°	6.9	5.2	3.5	1.7	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	6.9	5.2	3.5	1.7	0.0
115°	5.2	3.5	1.7	0.0	0.0
117.5°	5.2	3.5	1.7	0.0	0.0
120°	5.2	3.5	1.7	0.0	0.0
122.5°	3.8	3.5	1.7	0.0	0.0
125°	3.5	3.5	1.7	0.0	0.0
127.5°	1.7	3.1	1.7	0.0	0.0
130°	1.7	1.7	1.7	0.0	0.0
132.5°	0.3	0.3	0.3	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)