

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: P645273

Luminaire Tested: OMN4DP-SR4F0-75D940-FLL-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645273
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-SR4F0-75D940-FLL-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

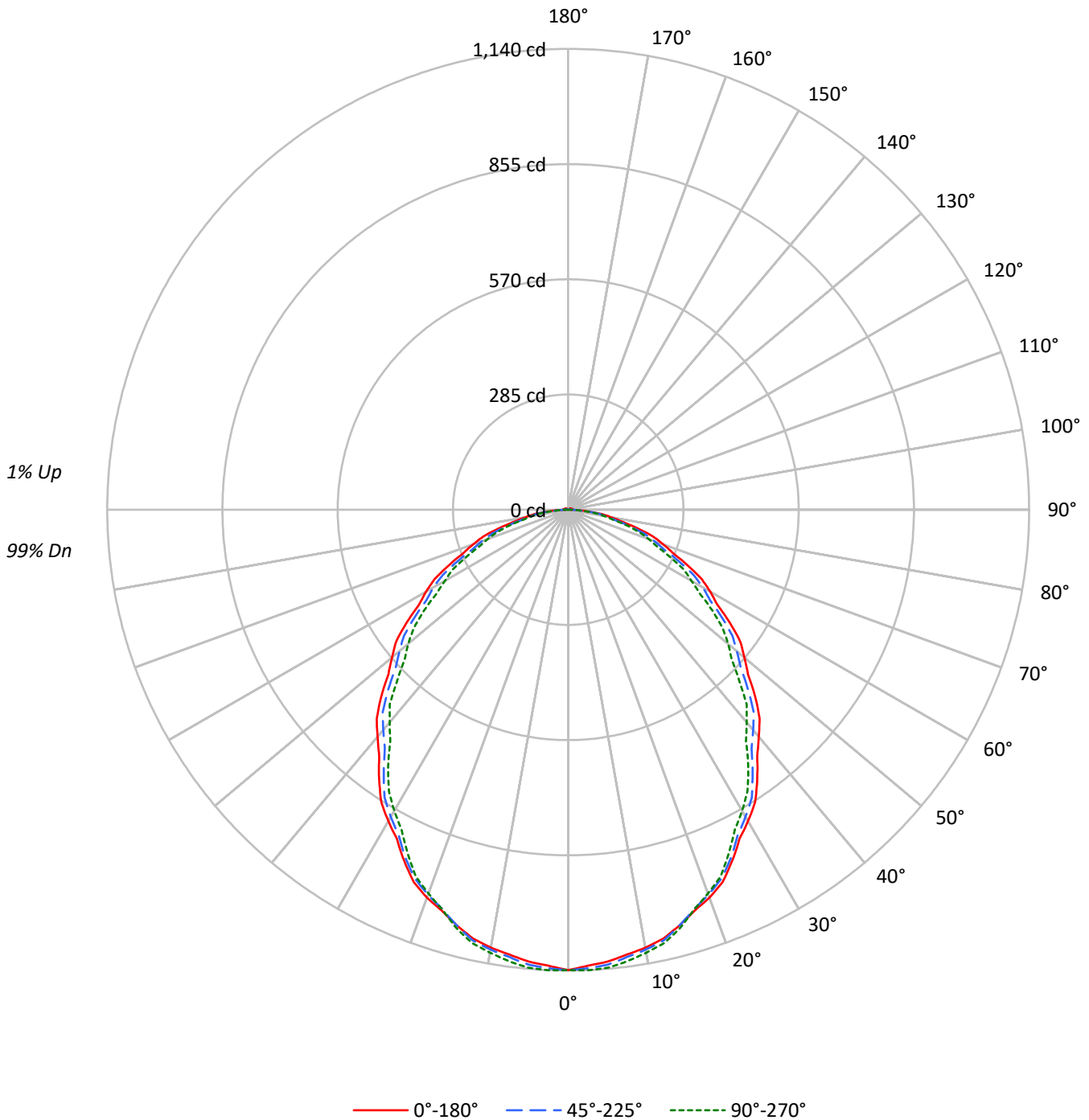
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2778.2 lumens
Efficiency: N/A
Efficacy: 127.4 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 (A_{in}): 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	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°	18390	18390	18390
5°	18185	18310	18436
10°	18039	18115	18243
15°	17795	17795	17899
20°	17546	17414	17361
25°	17090	16951	16730
30°	16583	16352	16035
35°	16066	15670	15303
40°	15449	14992	14469
45°	14933	14367	13659
50°	14285	13662	12961
55°	13743	13044	12259
60°	13110	12410	11360
65°	12432	11545	10655
70°	11778	10683	9951
75°	11023	9763	9283
80°	10088	8935	8498
85°	9466	8318	7744

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14933 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.1	3.9
10°-20°	300.7	10.8
20°-30°	437.2	15.7
30°-40°	497.3	17.9
40°-50°	484.9	17.5
50°-60°	413.9	14.9
60°-70°	300.8	10.8
70°-80°	170.1	6.1
80°-90°	52.4	1.9
90°-100°	6.6	0.2
100°-110°	3.7	0.1
110°-120°	2.2	0.1
120°-130°	1.3	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°	845.0	30.4
0°-40°	1342.3	48.3
0°-60°	2241.1	80.7
0°-90°	2764.3	99.5
90°-120°	12.5	0.4
90°-150°	13.9	0.5
90°-180°	14.0	0.5
0°-180°	2778.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1139	1139	1139	1139	1139	
5°	1122	1139	1130	1128	1138	106
15°	1065	1078	1065	1063	1071	300
25°	959	968	952	935	939	441
35°	815	818	795	776	776	509
45°	654	651	629	607	598	503
55°	488	487	463	442	436	436
65°	325	322	302	284	279	323
75°	177	171	156	150	149	188
85°	51	45	45	43	42	55
90°	6	8	9	8	8	6
95°	12	6	5	5	3	9
105°	8	5	3	2	0	9
115°	5	3	2	0	0	5
125°	3	3	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°	1139.0	1139.0	1139.0	1139.0	1139.0
2.5°	1129.1	1143.7	1135.3	1135.4	1140.3
5°	1122.0	1138.6	1129.7	1128.4	1137.5
7.5°	1110.2	1126.6	1116.1	1114.5	1126.3
10°	1100.3	1115.4	1104.9	1102.1	1112.7
12.5°	1086.6	1101.8	1091.3	1087.2	1097.8
15°	1064.6	1078.3	1064.6	1063.3	1070.8
17.5°	1039.8	1051.7	1035.8	1030.7	1036.4
20°	1021.2	1031.9	1013.5	1005.9	1010.4
22.5°	997.7	1008.3	988.7	977.4	983.1
25°	959.3	968.3	951.5	934.6	939.1
27.5°	918.0	925.0	908.1	890.8	892.3
30°	889.5	894.1	877.1	858.6	860.1
32.5°	859.8	863.1	844.9	825.1	825.4
35°	815.1	818.2	795.0	776.4	776.4
37.5°	767.7	769.5	744.8	724.6	722.5
40°	733.0	736.0	711.3	691.1	686.5
42.5°	700.8	701.4	679.1	658.8	653.0
45°	654.0	650.9	629.2	607.3	598.2
47.5°	603.4	603.4	578.7	556.8	548.3
50°	568.7	568.7	543.9	522.1	516.0
52.5°	536.5	535.3	511.7	489.8	481.3
55°	488.2	486.6	463.4	441.5	435.5
57.5°	437.0	437.0	415.3	391.9	385.3
60°	406.0	406.0	384.3	360.9	351.8
62.5°	372.5	371.3	349.6	328.7	323.3
65°	325.4	322.4	302.2	283.5	278.9
67.5°	280.5	277.5	256.0	241.1	238.0
70°	249.5	246.5	226.3	213.8	210.8
72.5°	219.7	215.5	197.7	187.8	184.7
75°	176.7	170.6	156.5	150.3	148.8
77.5°	135.8	125.4	119.6	115.3	113.7
80°	108.5	99.4	96.1	92.9	91.4
82.5°	84.9	75.8	75.0	73.1	71.6
85°	51.1	45.1	44.9	43.4	41.8
87.5°	22.3	19.0	19.2	18.9	18.9
90°	6.2	7.7	9.3	7.7	7.7
92.5°	11.2	7.8	6.8	6.5	5.3
95°	12.4	6.3	4.6	4.6	3.1
97.5°	10.8	6.3	4.3	2.8	1.5
100°	10.8	6.3	3.1	1.5	1.5
102.5°	9.6	5.1	3.1	1.5	0.3
105°	7.7	4.7	3.1	1.5	0.0
107.5°	7.4	4.7	3.1	1.5	0.0
110°	6.2	4.7	3.1	1.5	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	6.2	4.7	3.1	1.5	0.0
115°	4.6	3.1	1.5	0.0	0.0
117.5°	4.6	3.1	1.5	0.0	0.0
120°	4.6	3.1	1.5	0.0	0.0
122.5°	3.4	3.1	1.5	0.0	0.0
125°	3.1	3.1	1.5	0.0	0.0
127.5°	1.5	2.8	1.5	0.0	0.0
130°	1.5	1.5	1.5	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)