

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P645094

Luminaire Tested: OMN4DIP-SR4F0-75D150U840-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645094
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-19)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-75D150U840-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

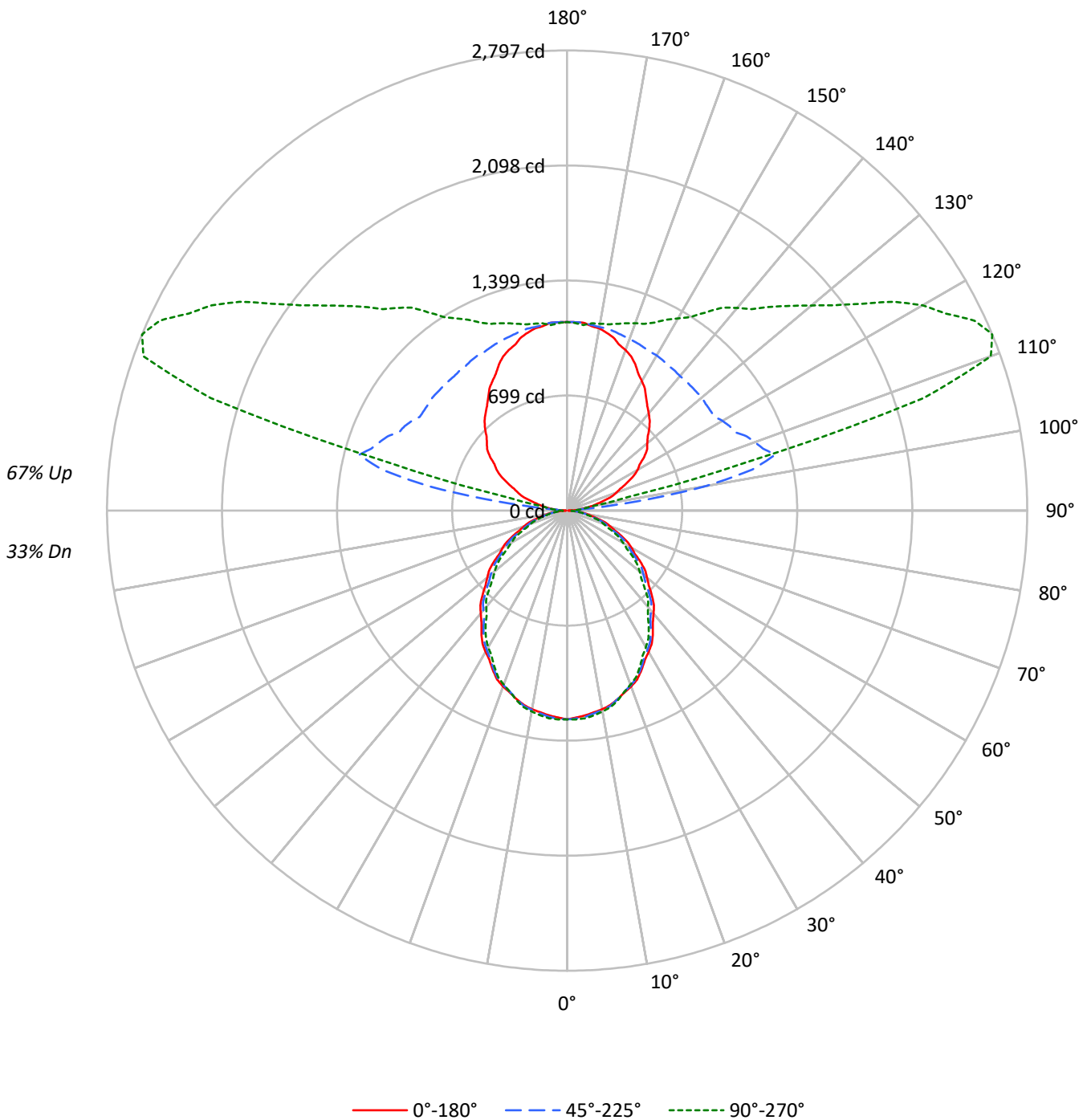
Lumens per Lamp: N/A
Luminaire Lumens: 9256.0 lumens
Efficiency: N/A
Efficacy: 131.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 70.4
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									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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33																				
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28																				
2	86	79	73	68	77	71	66	62	57	53	50	44	42	39	32	30	29	24																				
3	78	69	62	56	70	62	56	52	50	46	42	39	36	33	28	26	25	20																				
4	71	61	53	48	64	55	49	44	45	40	36	35	31	29	25	23	21	17																				
5	66	54	46	41	59	49	43	37	40	35	31	31	28	25	23	21	19	15																				
6	60	49	41	35	54	44	37	32	36	31	27	28	24	22	21	18	16	13																				
7	56	44	36	31	50	40	33	28	32	27	24	25	22	19	19	16	15	12																				
8	52	40	32	27	46	36	30	25	30	25	21	23	20	17	17	15	13	11																				
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10																				
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	12	11	9																				

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	1.3
10°-20°	335.0	3.6
20°-30°	487.2	5.3
30°-40°	554.2	6.0
40°-50°	540.3	5.8
50°-60°	461.2	5.0
60°-70°	335.2	3.6
70°-80°	189.5	2.0
80°-90°	60.9	0.7
90°-100°	148.3	1.6
100°-110°	1008.4	10.9
110°-120°	1365.9	14.8
120°-130°	1111.1	12.0
130°-140°	892.7	9.6
140°-150°	703.6	7.6
150°-160°	514.5	5.6
160°-170°	319.6	3.5
170°-180°	109.0	1.2
0°-30°	941.6	10.2
0°-40°	1495.7	16.2
0°-60°	2497.3	27.0
0°-90°	3082.9	33.3
90°-120°	2522.6	27.3
90°-150°	5230.0	56.5
90°-180°	6173.0	66.7
0°-180°	9256.0	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	16	25	30	30	9
95°	72	114	63	70	83	75
105°	232	349	1308	1669	1103	246
115°	402	485	1126	2338	2732	399
125°	573	650	1062	1853	2192	509
135°	706	784	1067	1526	1752	544
145°	836	907	1074	1330	1471	525
155°	980	1016	1096	1205	1262	450
165°	1089	1103	1125	1154	1175	306
175°	1146	1153	1146	1139	1132	108
180°	1146	1146	1146	1146	1146	



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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	22.6	24.3	25.4	25.4
90°	6.9	15.6	24.8	30.3	30.3
92.5°	29.7	33.1	39.3	52.0	56.3
95°	71.5	114.1	62.9	70.3	82.8
97.5°	114.5	212.3	428.7	128.1	109.9
100°	149.1	263.8	854.2	252.1	167.5
102.5°	182.3	302.7	1154.1	662.5	362.3
105°	232.1	348.6	1308.3	1668.6	1103.0
107.5°	283.7	370.9	1249.2	2427.7	2272.4
110°	316.9	399.8	1214.6	2550.9	2739.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	351.5	434.4	1180.0	2478.9	2797.2
115°	401.7	484.6	1126.4	2337.6	2732.3
117.5°	455.0	536.5	1113.4	2186.4	2592.5
120°	495.4	571.3	1090.3	2071.5	2494.4
122.5°	522.9	605.7	1061.5	1972.7	2361.8
125°	573.0	650.5	1061.5	1853.3	2191.6
127.5°	613.1	693.4	1062.9	1714.8	2048.9
130°	636.1	720.7	1068.7	1622.1	1939.3
132.5°	663.6	748.2	1067.3	1580.4	1841.3
135°	706.5	784.1	1067.0	1526.3	1751.9
137.5°	742.6	825.7	1067.0	1466.4	1659.6
140°	771.4	848.9	1067.0	1431.5	1607.7
142.5°	800.2	872.1	1072.7	1390.8	1555.8
145°	836.3	906.8	1074.2	1329.7	1470.7
147.5°	879.5	941.6	1082.8	1285.7	1394.3
150°	908.4	964.8	1088.6	1256.5	1348.1
152.5°	937.2	988.0	1088.6	1233.1	1307.8
155°	980.5	1015.7	1095.8	1205.2	1261.6
157.5°	1015.1	1048.9	1104.5	1187.6	1228.5
160°	1038.1	1066.3	1110.2	1175.9	1211.2
162.5°	1055.4	1083.6	1116.0	1169.9	1193.9
165°	1088.6	1102.7	1124.7	1154.0	1175.1
167.5°	1107.4	1120.0	1131.9	1146.6	1159.3
170°	1124.7	1131.7	1131.9	1146.4	1153.5
172.5°	1130.4	1143.1	1137.6	1140.7	1147.7
175°	1146.3	1153.3	1146.3	1138.9	1131.9
177.5°	1146.3	1151.9	1146.3	1146.2	1140.5
180°	1146.3	1146.3	1146.3	1146.3	1146.3

(END OF REPORT)