

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: P645184

Luminaire Tested: OMN4DIP-SR4F0-75D75U840-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645184
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-SR4F0-75D75U840-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

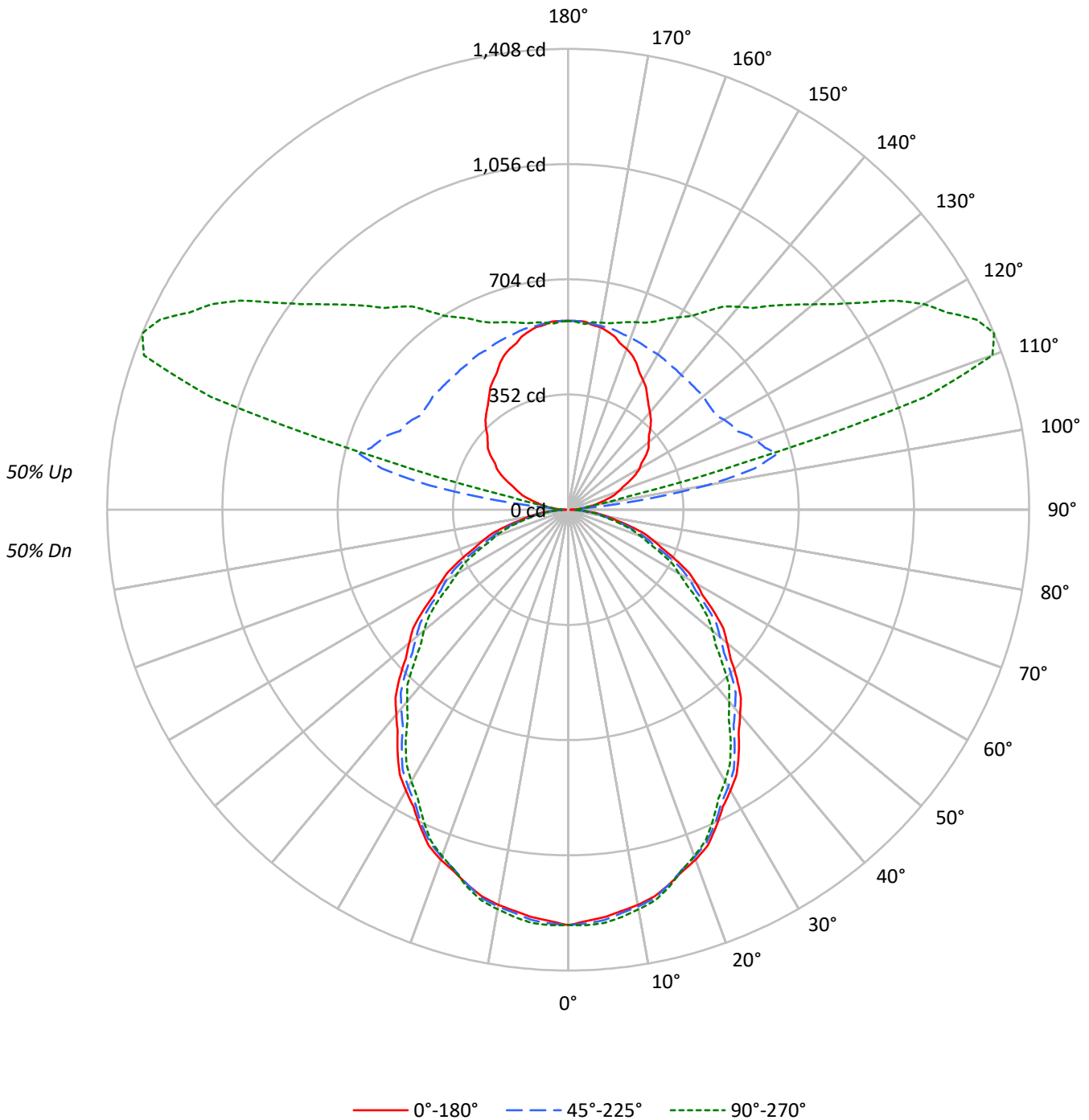
Lumens per Lamp: N/A
Luminaire Lumens: 6196.6 lumens
Efficiency: N/A
Efficacy: 145.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 42.6
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	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	98	93	90	86	90	86	83	80	73	71	68	61	59	58	49	48	47	42				
2	89	82	76	70	82	76	70	66	64	60	57	53	51	48	44	42	40	35				
3	81	72	65	59	75	67	60	55	57	52	48	47	44	41	39	36	34	30				
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	35	32	30	26				
5	68	57	49	43	63	53	46	40	45	40	35	38	34	31	31	28	26	23				
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	28	25	23	20				
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	23	20	18				
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18	16				
9	50	38	31	26	47	36	29	24	31	26	22	26	22	19	22	19	16	14				
10	47	35	28	23	44	33	26	22	29	23	20	24	20	17	21	17	15	13				

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	1.9
10°-20°	335.0	5.4
20°-30°	487.2	7.9
30°-40°	554.2	8.9
40°-50°	540.3	8.7
50°-60°	461.2	7.4
60°-70°	335.2	5.4
70°-80°	189.5	3.1
80°-90°	59.7	1.0
90°-100°	78.3	1.3
100°-110°	509.6	8.2
110°-120°	688.8	11.1
120°-130°	560.0	9.0
130°-140°	449.4	7.3
140°-150°	354.2	5.7
150°-160°	259.0	4.2
160°-170°	160.9	2.6
170°-180°	54.9	0.9
0°-30°	941.6	15.2
0°-40°	1495.7	24.1
0°-60°	2497.3	40.3
0°-90°	3081.6	49.7
90°-120°	1276.7	20.6
90°-150°	2640.3	42.6
90°-180°	3115.0	50.3
0°-180°	6196.6	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	12	18	20	20	8
95°	43	61	34	38	43	43
105°	121	178	660	841	555	128
115°	205	246	568	1177	1375	204
125°	290	329	535	933	1103	258
135°	356	395	537	768	882	274
145°	421	456	541	669	740	264
155°	494	511	552	607	635	227
165°	548	555	566	581	592	154
175°	577	580	577	573	570	55
180°	577	577	577	577	577	

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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	21.9	22.9	23.2	23.2
90°	6.9	12.1	17.6	19.5	19.5
92.5°	21.1	21.0	23.6	29.8	31.3
95°	42.8	60.9	34.2	38.0	43.4
97.5°	63.6	110.4	218.2	66.0	56.2
100°	81.0	136.3	431.7	127.8	85.2
102.5°	97.1	155.2	582.6	334.3	182.5
105°	121.1	178.1	660.3	840.8	555.2
107.5°	146.9	189.3	630.5	1222.8	1143.8
110°	162.9	203.8	613.1	1284.8	1378.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.4	221.3	595.7	1248.6	1408.0
115°	204.8	245.7	567.8	1176.6	1375.3
117.5°	231.6	271.8	561.3	1100.5	1304.9
120°	251.9	289.3	549.7	1042.7	1255.6
122.5°	265.1	306.6	535.2	992.9	1188.8
125°	290.1	329.2	535.2	932.8	1103.2
127.5°	309.4	350.5	535.9	863.1	1031.3
130°	321.1	363.6	538.8	816.5	976.2
132.5°	334.2	376.8	537.4	795.5	926.8
135°	355.6	394.7	537.1	768.3	881.8
137.5°	373.8	415.6	537.1	738.1	835.4
140°	388.3	427.3	537.1	720.5	809.2
142.5°	402.8	439.0	540.0	700.1	783.1
145°	420.9	456.4	540.7	669.3	740.3
147.5°	442.7	473.9	545.0	647.2	701.8
150°	457.2	485.6	548.0	632.5	678.6
152.5°	471.7	497.3	548.0	620.7	658.3
155°	493.5	511.3	551.6	606.7	635.0
157.5°	510.9	528.0	555.9	597.8	618.3
160°	522.5	536.7	558.8	591.9	609.6
162.5°	531.3	545.5	561.7	588.9	600.9
165°	548.0	555.0	566.1	580.9	591.5
167.5°	557.4	563.8	569.7	577.1	583.5
170°	566.1	569.6	569.7	577.1	580.6
172.5°	569.0	575.4	572.6	574.2	577.7
175°	577.0	580.5	577.0	573.3	569.7
177.5°	577.0	579.8	577.0	576.9	574.1
180°	577.0	577.0	577.0	577.0	577.0

(END OF REPORT)