

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: P645064

Luminaire Tested: OMN4DIP-SR4F0-75D125U840-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645064
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-SR4F0-75D125U840-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 750 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

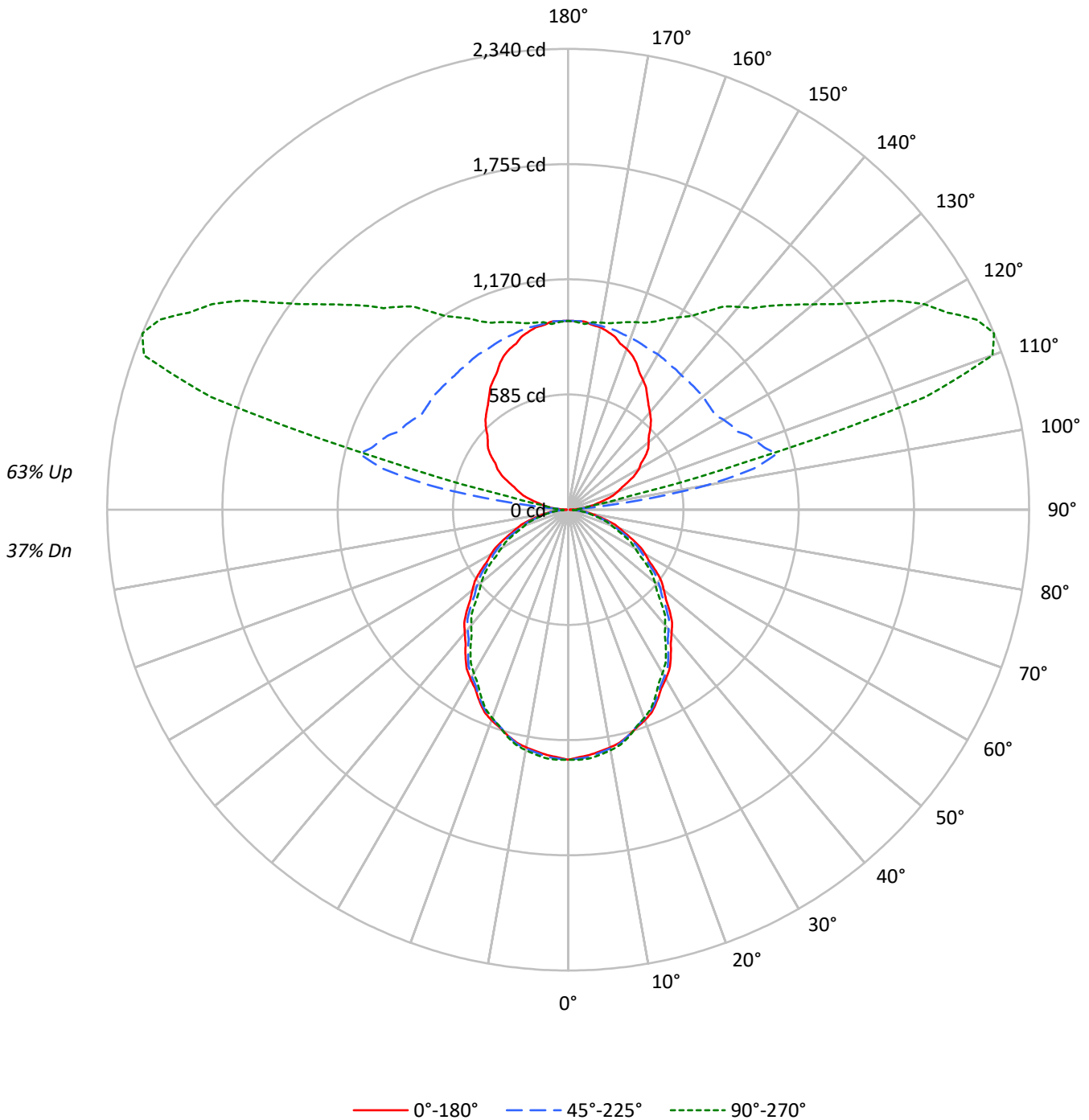
Lumens per Lamp: N/A
Luminaire Lumens: 8248.5 lumens
Efficiency: N/A
Efficacy: 137.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 60
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	104	104	104	104	94	94	94	94	76	76	76		60	60	60		45	45	45	37
1	95	91	87	84	86	82	79	76	67	65	63		53	51	50		39	38	38	32
2	87	79	73	68	78	72	67	63	59	55	52		46	44	42		35	33	32	27
3	79	70	63	57	71	64	57	52	52	47	44		41	38	35		31	29	27	23
4	72	62	54	48	65	56	50	44	46	41	37		36	33	30		28	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32		33	29	26		25	22	20	17
6	61	49	41	36	55	45	38	33	37	32	28		30	26	23		23	20	18	15
7	56	44	37	31	51	41	34	29	34	28	25		27	23	20		21	18	16	13
8	52	40	33	28	47	37	30	26	31	25	22		25	21	18		19	16	14	12
9	49	37	29	24	44	34	27	23	28	23	19		23	19	16		18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18		21	17	15		16	14	12	10

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	1.4
10°-20°	335.0	4.1
20°-30°	487.2	5.9
30°-40°	554.2	6.7
40°-50°	540.3	6.6
50°-60°	461.2	5.6
60°-70°	335.2	4.1
70°-80°	189.5	2.3
80°-90°	60.5	0.7
90°-100°	125.2	1.5
100°-110°	844.1	10.2
110°-120°	1143.0	13.9
120°-130°	929.7	11.3
130°-140°	746.7	9.1
140°-150°	588.6	7.1
150°-160°	430.4	5.2
160°-170°	267.3	3.2
170°-180°	91.2	1.1
0°-30°	941.6	11.4
0°-40°	1495.7	18.1
0°-60°	2497.3	30.3
0°-90°	3082.5	37.4
90°-120°	2112.3	25.6
90°-150°	4377.2	53.1
90°-180°	5166.0	62.6
0°-180°	8248.5	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	14	22	27	27	9
95°	62	97	53	60	70	64
105°	196	292	1095	1396	923	207
115°	337	406	942	1955	2286	335
125°	480	545	888	1550	1833	426
135°	591	656	892	1277	1465	455
145°	700	758	898	1112	1230	439
155°	820	850	917	1008	1055	376
165°	911	922	941	965	983	256
175°	959	965	959	953	947	91
180°	959	959	959	959	959	

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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	22.3	23.8	24.7	24.7
90°	6.9	14.5	22.4	26.7	26.7
92.5°	26.9	29.1	34.1	44.7	48.1
95°	62.1	96.6	53.4	59.7	69.8
97.5°	97.7	178.7	359.4	107.7	92.2
100°	126.7	221.8	715.0	211.2	140.4
102.5°	154.2	254.1	965.9	554.4	303.1
105°	195.6	292.4	1094.9	1396.0	922.6
107.5°	238.6	311.1	1045.5	2031.0	1900.7
110°	266.2	335.3	1016.5	2134.0	2291.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	295.2	364.2	987.6	2073.7	2339.7
115°	336.8	405.9	942.4	1955.3	2285.5
117.5°	381.5	449.4	931.6	1828.9	2168.5
120°	415.2	478.4	912.3	1732.7	2086.5
122.5°	438.0	507.2	888.2	1650.0	1975.5
125°	479.8	544.7	888.2	1550.2	1833.2
127.5°	513.1	580.5	889.4	1434.3	1713.8
130°	532.4	603.1	894.2	1356.8	1622.1
132.5°	555.1	625.9	892.8	1322.0	1540.1
135°	591.0	655.8	892.5	1276.7	1465.4
137.5°	621.1	690.7	892.5	1226.6	1388.2
140°	645.2	710.1	892.5	1197.3	1344.7
142.5°	669.4	729.5	897.3	1163.4	1301.3
145°	699.5	758.5	898.5	1112.2	1230.2
147.5°	735.7	787.6	905.7	1075.5	1166.3
150°	759.8	807.0	910.6	1051.0	1127.7
152.5°	783.9	826.4	910.6	1031.4	1093.9
155°	820.1	849.6	916.6	1008.1	1055.3
157.5°	849.1	877.4	923.8	993.4	1027.6
160°	868.4	891.9	928.7	983.6	1013.1
162.5°	882.8	906.4	933.5	978.6	998.6
165°	910.6	922.4	940.7	965.2	982.9
167.5°	926.2	936.9	946.8	959.1	969.7
170°	940.7	946.6	946.8	958.9	964.8
172.5°	945.5	956.2	951.6	954.1	960.0
175°	958.8	964.7	958.8	952.6	946.8
177.5°	958.8	963.5	958.8	958.7	954.0
180°	958.8	958.8	958.8	958.8	958.8

(END OF REPORT)