

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: P645099

Luminaire Tested: OMN4DIP-SR4F0-75D150U930-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P645099
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-SR4F0-75D150U930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

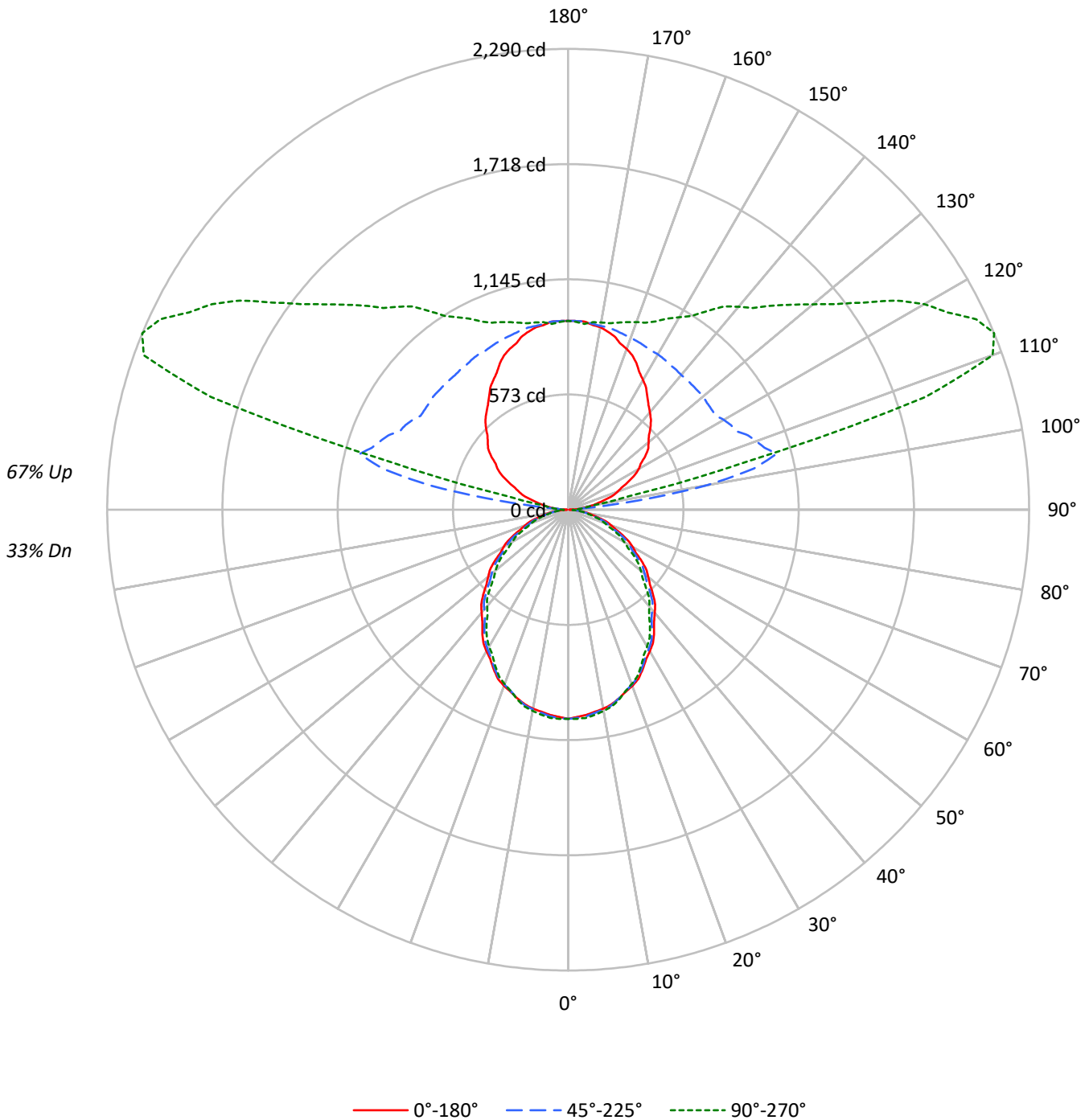
Lumens per Lamp: N/A
Luminaire Lumens: 7578.6 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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				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	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°	16779	16779	16779
5°	16592	16705	16820
10°	16459	16528	16644
15°	16236	16236	16331
20°	16010	15888	15840
25°	15592	15465	15264
30°	15131	14920	14630
35°	14659	14296	13963
40°	14096	13679	13203
45°	13625	13107	12463
50°	13034	12466	11826
55°	12538	11902	11184
60°	11961	11321	10366
65°	11343	10533	9723
70°	10744	9744	9078
75°	10056	8908	8465
80°	9205	8154	7755
85°	8651	7595	7077

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13625 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	1.3
10°-20°	274.3	3.6
20°-30°	398.9	5.3
30°-40°	453.7	6.0
40°-50°	442.4	5.8
50°-60°	377.6	5.0
60°-70°	274.4	3.6
70°-80°	155.2	2.0
80°-90°	49.9	0.7
90°-100°	121.4	1.6
100°-110°	825.6	10.9
110°-120°	1118.4	14.8
120°-130°	909.8	12.0
130°-140°	730.9	9.6
140°-150°	576.1	7.6
150°-160°	421.3	5.6
160°-170°	261.7	3.5
170°-180°	89.2	1.2
0°-30°	771.0	10.2
0°-40°	1224.7	16.2
0°-60°	2044.7	27.0
0°-90°	2524.2	33.3
90°-120°	2065.5	27.3
90°-150°	4282.3	56.5
90°-180°	5054.0	66.7
0°-180°	7578.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1039	1039	1039	1039	1039	
5°	1024	1039	1031	1030	1038	97
15°	971	984	971	970	977	274
25°	875	884	868	853	857	403
35°	744	746	725	708	708	464
45°	597	594	574	554	546	459
55°	445	444	423	403	397	397
65°	297	294	276	259	254	295
75°	161	156	143	137	136	171
85°	47	41	41	40	38	50
90°	6	13	20	25	25	8
95°	58	93	52	58	68	61
105°	190	285	1071	1366	903	201
115°	329	397	922	1914	2237	327
125°	469	533	869	1517	1794	417
135°	578	642	874	1250	1434	445
145°	685	742	880	1089	1204	430
155°	803	832	897	987	1033	369
165°	891	903	921	945	962	250
175°	939	944	939	932	927	89
180°	939	939	939	939	939	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1039.2	1039.2	1039.2	1039.2	1039.2
2.5°	1030.2	1043.4	1035.8	1035.9	1040.3
5°	1023.7	1038.9	1030.7	1029.5	1037.8
7.5°	1012.9	1027.8	1018.3	1016.8	1027.6
10°	1003.9	1017.7	1008.1	1005.5	1015.2
12.5°	991.4	1005.3	995.7	991.9	1001.6
15°	971.3	983.8	971.3	970.1	977.0
17.5°	948.7	959.5	945.1	940.4	945.6
20°	931.8	941.4	924.7	917.7	921.9
22.5°	910.3	919.9	902.1	891.7	897.0
25°	875.2	883.5	868.1	852.7	856.8
27.5°	837.6	844.0	828.5	812.7	814.1
30°	811.6	815.7	800.3	783.3	784.7
32.5°	784.4	787.5	770.9	752.8	753.0
35°	743.7	746.5	725.3	708.4	708.4
37.5°	700.4	702.1	679.5	661.1	659.2
40°	668.8	671.5	649.0	630.5	626.4
42.5°	639.4	639.9	619.6	601.1	595.8
45°	596.7	593.9	574.0	554.1	545.8
47.5°	550.6	550.6	528.0	508.0	500.2
50°	518.9	518.9	496.3	476.4	470.8
52.5°	489.5	488.4	466.9	446.9	439.2
55°	445.4	444.0	422.8	402.8	397.3
57.5°	398.7	398.7	378.9	357.6	351.5
60°	370.4	370.4	350.6	329.3	321.0
62.5°	339.9	338.8	319.0	299.9	294.9
65°	296.9	294.2	275.7	258.6	254.5
67.5°	255.9	253.2	233.6	219.9	217.2
70°	227.6	224.9	206.4	195.1	192.3
72.5°	200.5	196.6	180.4	171.3	168.5
75°	161.2	155.7	142.8	137.1	135.7
77.5°	123.9	114.5	109.2	105.2	103.8
80°	99.0	90.7	87.7	84.8	83.4
82.5°	77.5	69.2	68.4	66.7	65.3
85°	46.7	41.1	41.0	39.6	38.2
87.5°	20.4	18.5	19.9	20.8	20.8
90°	5.7	12.8	20.3	24.8	24.8
92.5°	24.3	27.1	32.2	42.6	46.1
95°	58.5	93.4	51.5	57.6	67.8
97.5°	93.7	173.8	351.0	104.9	90.0
100°	122.1	216.0	699.4	206.4	137.2
102.5°	149.3	247.8	944.9	542.4	296.6
105°	190.1	285.4	1071.2	1366.3	903.1
107.5°	232.3	303.7	1022.8	1987.8	1860.6
110°	259.5	327.4	994.5	2088.6	2243.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	287.8	355.7	966.2	2029.7	2290.3
115°	328.9	396.8	922.3	1914.0	2237.2
117.5°	372.6	439.3	911.6	1790.2	2122.7
120°	405.6	467.7	892.7	1696.1	2042.4
122.5°	428.1	495.9	869.1	1615.2	1933.8
125°	469.2	532.6	869.1	1517.4	1794.5
127.5°	502.0	567.7	870.3	1404.0	1677.6
130°	520.9	590.1	875.0	1328.1	1587.9
132.5°	543.3	612.6	873.9	1294.0	1507.6
135°	578.5	642.0	873.6	1249.7	1434.4
137.5°	608.0	676.1	873.6	1200.7	1358.8
140°	631.6	695.1	873.6	1172.0	1316.3
142.5°	655.2	714.1	878.3	1138.8	1273.8
145°	684.7	742.4	879.5	1088.8	1204.2
147.5°	720.1	770.9	886.6	1052.7	1141.6
150°	743.8	789.9	891.3	1028.8	1103.8
152.5°	767.4	808.9	891.3	1009.6	1070.8
155°	802.8	831.6	897.2	986.8	1033.0
157.5°	831.1	858.8	904.3	972.4	1005.8
160°	850.0	873.1	909.0	962.8	991.7
162.5°	864.2	887.3	913.8	957.9	977.5
165°	891.3	902.9	920.8	944.9	962.2
167.5°	906.7	917.1	926.7	938.8	949.2
170°	920.8	926.6	926.7	938.7	944.5
172.5°	925.6	936.0	931.5	934.0	939.7
175°	938.6	944.3	938.6	932.5	926.7
177.5°	938.6	943.2	938.6	938.5	933.8
180°	938.6	938.6	938.6	938.6	938.6

(END OF REPORT)