

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: P644885

Luminaire Tested: OMN4DIP-SR4F0-50D125U930-BBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644885
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-23)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-50D125U930-BBMOOB-1DUDD-WW
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE
DOWNLIGHT - BLACK BAFFLE WITH MEDIUM OPTIC - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

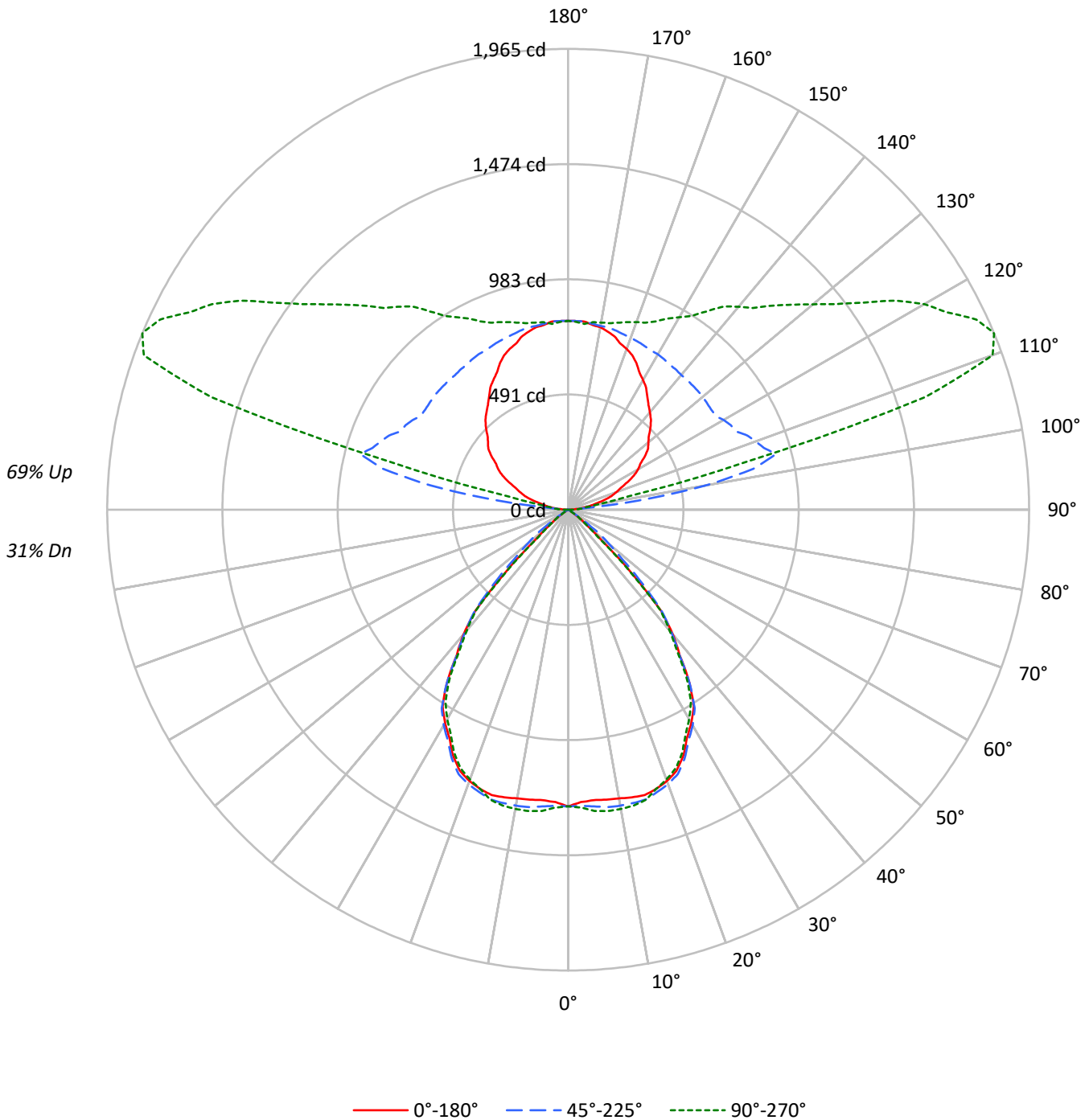
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6270.3 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.18
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 56.4
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	50	30	10	0	
RCR																						
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	39	39	39	31	
1	95	91	88	85	85	82	79	77	65	64	62	50	49	48	36	35	35	36	35	35	29	
2	87	81	76	71	78	73	69	65	59	56	53	46	44	42	33	32	31	33	32	31	26	
3	80	72	66	61	72	66	60	56	53	49	46	41	39	37	31	29	28	31	29	28	24	
4	74	65	58	53	67	59	53	49	48	44	41	38	35	33	28	27	26	28	27	26	21	
5	69	58	51	46	62	53	47	42	44	39	36	35	32	29	26	24	23	26	24	23	20	
6	63	53	45	40	57	48	42	37	40	35	32	32	29	26	24	22	21	24	22	21	18	
7	59	48	41	36	53	44	38	33	36	32	29	29	26	24	22	21	19	22	21	19	16	
8	55	44	37	32	50	40	34	30	33	29	26	27	24	22	21	19	17	21	19	17	15	
9	51	40	33	29	46	37	31	27	31	26	23	25	22	20	19	17	16	19	17	16	14	
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	18	16	15	13	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16336	16336	16336
5°	16117	16462	16718
10°	16394	16808	16989
15°	16847	17097	17123
20°	16922	17113	16827
25°	16534	16716	16350
30°	15653	15829	15373
35°	14229	14229	13933
40°	11704	11586	11336
45°	6998	8224	6673
50°	2261	4584	2122
55°	799	1534	799
60°	52	434	26
65°	31	31	0
70°	38	0	0
75°	0	0	0
80°	0	0	0
85°	148	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 8224 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.7	1.9
10°-20°	360.0	5.7
20°-30°	532.8	8.5
30°-40°	550.7	8.8
40°-50°	320.4	5.1
50°-60°	54.3	0.9
60°-70°	2.1	0.0
70°-80°	0.3	0.0
80°-90°	2.1	0.0
90°-100°	99.0	1.6
100°-110°	705.5	11.3
110°-120°	957.8	15.3
120°-130°	779.6	12.4
130°-140°	627.0	10.0
140°-150°	494.3	7.9
150°-160°	361.4	5.8
160°-170°	224.5	3.6
170°-180°	76.6	1.2
0°-30°	1014.5	16.2
0°-40°	1565.2	25.0
0°-60°	1939.9	30.9
0°-90°	1944.5	31.0
90°-120°	1762.4	28.1
90°-150°	3663.3	58.4
90°-180°	4326.0	69.0
0°-180°	6270.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1265	1265	1265	1265	1265	
5°	1243	1276	1270	1273	1289	119
15°	1260	1304	1278	1272	1280	354
25°	1160	1199	1173	1138	1147	530
35°	902	917	902	880	884	553
45°	383	446	450	435	365	296
55°	36	41	68	38	36	39
65°	1	1	1	0	0	1
75°	0	1	0	0	0	0
85°	1	1	0	0	0	0
90°	0	5	10	15	15	2
95°	40	75	40	46	56	45
105°	157	241	917	1171	775	166
115°	279	338	790	1642	1920	277
125°	400	455	744	1302	1540	356
135°	496	551	750	1072	1231	382
145°	588	637	755	934	1033	369
155°	689	714	770	847	886	316
165°	765	775	790	811	826	215
175°	805	810	805	800	795	76
180°	805	805	805	805	805	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1264.7	1264.7	1264.7	1264.7	1264.7
2.5°	1248.1	1272.8	1263.9	1264.8	1271.0
5°	1243.0	1275.8	1269.6	1273.0	1289.4
7.5°	1246.7	1279.9	1279.1	1280.1	1296.1
10°	1249.9	1284.6	1281.5	1280.8	1295.3
12.5°	1256.2	1294.1	1281.5	1280.0	1292.1
15°	1259.8	1304.2	1278.5	1271.8	1280.5
17.5°	1247.7	1297.1	1262.3	1244.4	1247.9
20°	1231.1	1281.3	1245.0	1218.4	1224.2
22.5°	1205.1	1253.0	1220.5	1187.7	1195.0
25°	1160.1	1198.7	1172.9	1137.6	1147.2
27.5°	1096.1	1126.6	1110.3	1076.1	1082.1
30°	1049.5	1074.6	1061.3	1027.8	1030.7
32.5°	995.8	1017.0	1002.9	974.0	973.9
35°	902.4	916.9	902.4	879.8	883.6
37.5°	780.1	791.2	776.4	762.8	764.7
40°	694.1	702.7	687.1	674.3	672.3
42.5°	586.6	610.8	595.5	578.0	580.7
45°	383.1	445.8	450.2	434.8	365.3
47.5°	193.1	261.7	313.4	237.8	170.4
50°	112.5	154.1	228.1	125.9	105.6
52.5°	73.8	91.4	159.3	79.6	70.1
55°	35.5	41.3	68.1	38.4	35.5
57.5°	12.2	18.8	30.2	19.2	13.6
60°	2.0	7.8	16.8	5.8	1.0
62.5°	1.2	2.3	10.5	1.2	0.2
65°	1.0	1.0	1.0	0.0	0.0
67.5°	1.0	1.0	0.0	0.0	0.0
70°	1.0	1.0	0.0	0.0	0.0
72.5°	1.0	1.0	0.0	0.0	0.0
75°	0.0	1.0	0.0	0.0	0.0
77.5°	0.0	1.0	0.0	0.0	0.0
80°	0.0	1.0	0.0	0.0	0.0
82.5°	0.0	1.0	0.0	0.0	0.0
85°	1.0	1.0	0.0	0.0	0.0
87.5°	0.8	1.8	2.0	3.0	3.0
90°	0.0	5.0	10.1	15.2	15.2
92.5°	12.2	17.1	22.3	31.5	35.5
95°	40.5	75.2	40.5	45.8	55.7
97.5°	71.9	144.2	297.8	87.9	76.0
100°	96.2	180.4	597.6	175.9	116.5
102.5°	120.5	208.7	808.3	464.2	254.2
105°	157.0	241.2	916.7	1171.1	774.9
107.5°	193.5	256.9	875.2	1704.4	1596.4
110°	217.8	277.2	850.9	1790.9	1924.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	242.1	301.5	826.6	1740.3	1965.1
115°	278.6	338.0	790.1	1642.2	1919.5
117.5°	316.0	374.5	781.0	1536.0	1821.3
120°	344.4	398.9	764.8	1455.3	1752.4
122.5°	364.7	423.1	744.5	1385.8	1659.2
125°	400.1	454.6	744.5	1302.0	1539.7
127.5°	429.5	485.0	745.5	1204.7	1439.4
130°	445.7	505.1	749.6	1139.6	1362.4
132.5°	466.0	525.4	749.6	1110.3	1293.5
135°	496.3	550.8	749.6	1072.3	1230.7
137.5°	521.7	580.1	749.6	1030.2	1165.9
140°	541.9	596.4	749.6	1005.6	1129.4
142.5°	562.2	612.7	753.6	977.1	1093.0
145°	587.5	637.0	754.6	934.2	1033.2
147.5°	617.9	661.5	760.7	903.3	979.5
150°	638.2	677.8	764.8	882.7	947.1
152.5°	658.4	694.1	764.8	866.2	918.7
155°	688.8	713.6	769.8	846.7	886.3
157.5°	713.1	736.9	775.9	834.3	863.0
160°	729.3	749.1	780.0	826.1	850.9
162.5°	741.5	761.3	784.0	821.9	838.7
165°	764.8	774.7	790.1	810.7	825.6
167.5°	777.9	786.9	795.2	805.5	814.4
170°	790.1	795.1	795.2	805.4	810.4
172.5°	794.2	803.1	799.2	801.4	806.3
175°	805.3	810.2	805.3	800.1	795.2
177.5°	805.3	809.3	805.3	805.2	801.2
180°	805.3	805.3	805.3	805.3	805.3

(END OF REPORT)