

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: P644962

Luminaire Tested: OMN4DIP-SR4F0-50D25U940-WBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644962
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-27)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-50D25U940-WBMOOB-1DUDD-WW
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE
DOWNLIGHT - WHITE BAFFLE WITH MEDIUM OPTIC - 500 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

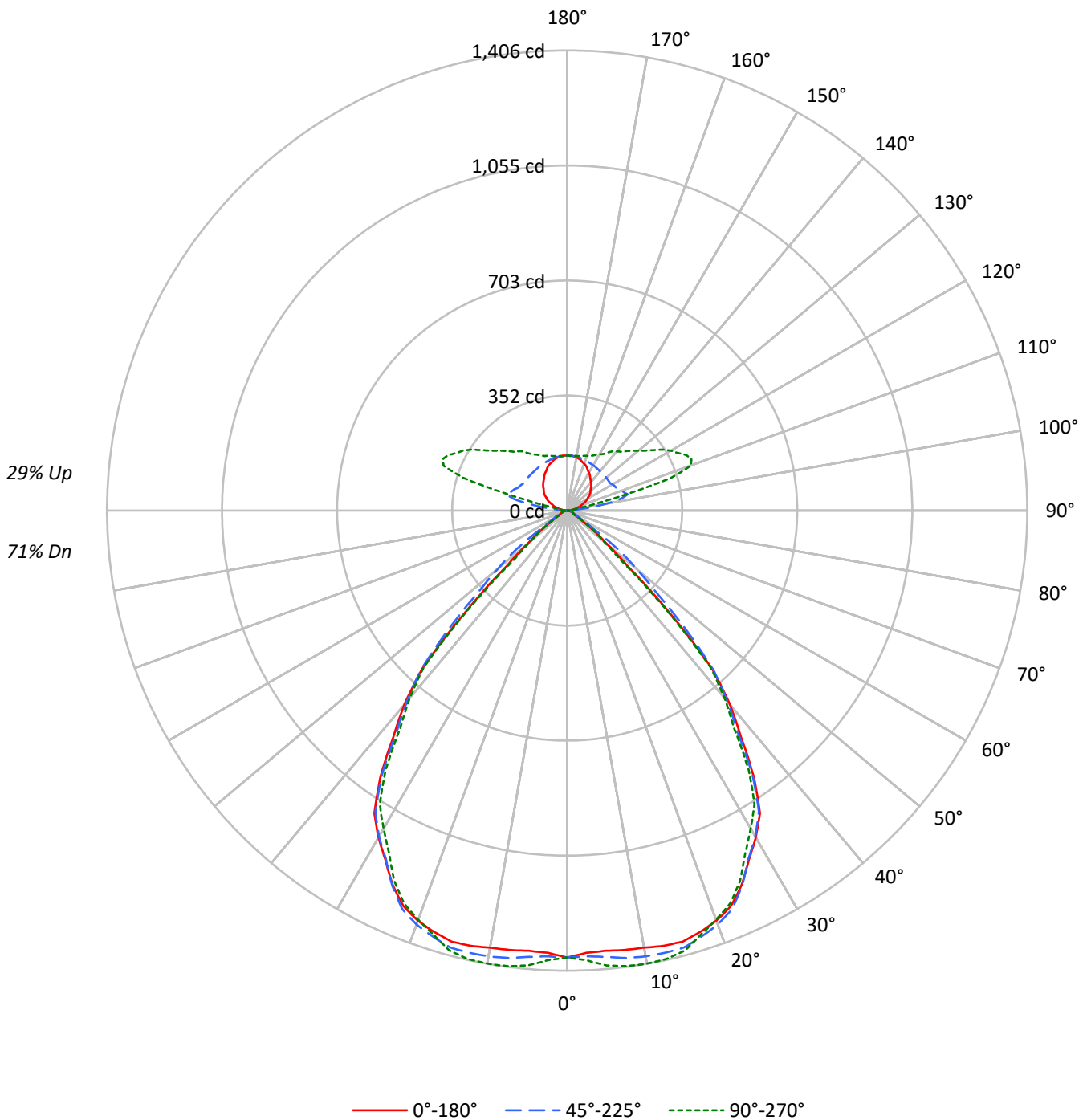
Lumens per Lamp: N/A
Luminaire Lumens: 3100.0 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 26.5
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									
RC	80									70									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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	75	75	75	75	75	75	71													
1	105	101	98	96	99	96	94	91	87	85	83	78	77	76	70	69	68	68	68	68	68	68	68	65													
2	98	92	87	83	93	88	83	79	80	76	73	72	70	67	65	63	62	62	62	62	62	62	62	59													
3	91	83	77	72	86	80	74	70	73	69	65	66	63	60	60	58	56	56	56	56	56	56	56	53													
4	85	76	69	64	81	73	67	62	67	62	58	61	57	54	56	53	51	51	51	51	51	51	51	48													
5	79	69	62	57	75	66	60	55	61	56	52	56	52	49	52	49	46	46	46	46	46	46	46	44													
6	74	63	56	51	70	61	54	50	56	51	47	52	48	44	48	45	42	42	42	42	42	42	42	40													
7	69	58	51	46	66	56	49	45	52	47	43	48	44	40	45	41	38	38	38	38	38	38	38	36													
8	65	54	47	42	62	52	45	41	48	43	39	45	40	37	42	38	35	35	35	35	35	35	35	33													
9	61	49	43	38	58	48	42	37	45	39	36	42	37	34	39	35	32	32	32	32	32	32	32	31													
10	57	46	39	35	55	44	38	34	42	36	33	39	34	31	36	33	30	30	30	30	30	30	30	28													

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17638	17638	17638
5°	17505	17745	18092
10°	17788	18139	18436
15°	18232	18481	18604
20°	18331	18502	18289
25°	17980	18025	17805
30°	17192	17146	16732
35°	15694	15565	15240
40°	13037	12847	12604
45°	8189	9316	7813
50°	3141	5516	2914
55°	1482	2315	1504
60°	718	1168	638
65°	660	691	596
70°	661	661	582
75°	669	669	564
80°	692	610	536
85°	756	608	459

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 9316 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.5	4.2
10°-20°	389.0	12.5
20°-30°	577.9	18.6
30°-40°	604.8	19.5
40°-50°	366.4	11.8
50°-60°	84.5	2.7
60°-70°	23.2	0.7
70°-80°	13.6	0.4
80°-90°	5.1	0.2
90°-100°	20.7	0.7
100°-110°	147.4	4.8
110°-120°	200.2	6.5
120°-130°	162.9	5.3
130°-140°	131.0	4.2
140°-150°	103.3	3.3
150°-160°	75.5	2.4
160°-170°	46.9	1.5
170°-180°	16.0	0.5
0°-30°	1098.4	35.4
0°-40°	1703.3	54.9
0°-60°	2154.2	69.5
0°-90°	2196.1	70.8
90°-120°	368.3	11.9
90°-150°	765.5	24.7
90°-180°	904.0	29.2
0°-180°	3100.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1366	1366	1366	1366	1366	
5°	1350	1381	1369	1374	1395	129
15°	1363	1405	1382	1371	1391	384
25°	1262	1299	1265	1232	1249	578
35°	995	1010	987	964	966	612
45°	448	510	510	492	428	344
55°	66	75	103	71	67	68
65°	22	23	23	20	20	22
75°	13	13	13	12	11	14
85°	5	5	4	4	3	5
90°	0	1	2	3	3	1
95°	8	16	8	10	12	9
105°	33	50	192	245	162	35
115°	58	71	165	343	401	58
125°	84	95	156	272	322	74
135°	104	115	157	224	257	80
145°	123	133	158	195	216	77
155°	144	149	161	177	185	66
165°	160	162	165	169	172	45
175°	168	169	168	167	166	16
180°	168	168	168	168	168	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1365.5	1365.5	1365.5	1365.5	1365.5
2.5°	1352.3	1376.5	1363.0	1364.1	1375.4
5°	1350.1	1381.2	1368.6	1374.2	1395.3
7.5°	1353.8	1386.4	1378.9	1380.8	1404.0
10°	1356.2	1390.4	1383.0	1382.5	1405.6
12.5°	1362.0	1397.8	1383.8	1380.8	1403.1
15°	1363.4	1404.7	1382.0	1371.1	1391.2
17.5°	1350.1	1395.5	1364.9	1342.4	1358.5
20°	1333.6	1379.9	1346.0	1314.5	1330.5
22.5°	1308.1	1353.6	1317.2	1283.2	1300.1
25°	1261.6	1298.8	1264.7	1232.2	1249.3
27.5°	1202.8	1229.0	1199.7	1168.9	1178.6
30°	1152.7	1178.8	1149.6	1117.8	1121.8
32.5°	1096.7	1118.8	1090.3	1061.8	1065.1
35°	995.3	1010.4	987.1	964.5	966.5
37.5°	871.9	874.0	858.2	837.6	838.0
40°	773.2	779.3	761.9	745.5	747.5
42.5°	655.6	679.3	662.4	647.6	648.0
45°	448.3	509.6	510.0	492.1	427.7
47.5°	247.6	318.6	364.2	282.4	213.3
50°	156.3	201.5	274.5	165.1	145.0
52.5°	111.9	132.2	200.5	116.8	106.3
55°	65.8	74.9	102.8	70.9	66.8
57.5°	40.1	47.9	60.0	47.3	40.3
60°	27.8	34.8	45.2	31.7	24.7
62.5°	24.5	26.7	35.4	25.2	23.0
65°	21.6	22.6	22.6	20.5	19.5
67.5°	19.1	20.1	19.1	18.1	17.1
70°	17.5	18.5	17.5	16.4	15.4
72.5°	15.8	16.8	15.8	14.8	13.8
75°	13.4	13.4	13.4	12.3	11.3
77.5°	10.9	10.9	10.7	9.8	8.8
80°	9.3	9.3	8.2	8.2	7.2
82.5°	7.6	7.6	6.6	6.6	5.6
85°	5.1	5.1	4.1	4.1	3.1
87.5°	2.5	2.7	2.1	2.3	1.5
90°	0.0	1.0	2.1	3.2	3.2
92.5°	2.5	3.6	4.7	6.6	7.4
95°	8.5	15.7	8.5	9.6	11.6
97.5°	15.0	30.1	62.2	18.4	15.9
100°	20.1	37.7	124.9	36.8	24.3
102.5°	25.2	43.6	168.9	97.0	53.1
105°	32.8	50.4	191.6	244.7	161.9
107.5°	40.4	53.7	182.9	356.2	333.6
110°	45.5	57.9	177.8	374.3	402.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	50.6	63.0	172.7	363.7	410.7
115°	58.2	70.6	165.1	343.2	401.1
117.5°	66.0	78.3	163.2	321.0	380.6
120°	72.0	83.4	159.8	304.1	366.2
122.5°	76.2	88.4	155.6	289.6	346.7
125°	83.6	95.0	155.6	272.1	321.8
127.5°	89.8	101.3	155.8	251.7	300.8
130°	93.1	105.6	156.6	238.1	284.7
132.5°	97.4	109.8	156.6	232.0	270.3
135°	103.7	115.1	156.6	224.1	257.2
137.5°	109.0	121.2	156.6	215.3	243.6
140°	113.2	124.6	156.6	210.2	236.0
142.5°	117.5	128.0	157.5	204.2	228.4
145°	122.8	133.1	157.7	195.2	215.9
147.5°	129.1	138.2	159.0	188.8	204.7
150°	133.4	141.6	159.8	184.5	197.9
152.5°	137.6	145.0	159.8	181.0	192.0
155°	143.9	149.1	160.9	176.9	185.2
157.5°	149.0	154.0	162.1	174.3	180.4
160°	152.4	156.5	163.0	172.6	177.8
162.5°	155.0	159.1	163.8	171.8	175.3
165°	159.8	161.9	165.1	169.4	172.5
167.5°	162.6	164.4	166.2	168.3	170.2
170°	165.1	166.1	166.2	168.3	169.3
172.5°	166.0	167.8	167.0	167.5	168.5
175°	168.3	169.3	168.3	167.2	166.2
177.5°	168.3	169.1	168.3	168.3	167.4
180°	168.3	168.3	168.3	168.3	168.3

(END OF REPORT)