

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: P644890

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

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644890
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-SR4F0-50D125U930-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 - 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

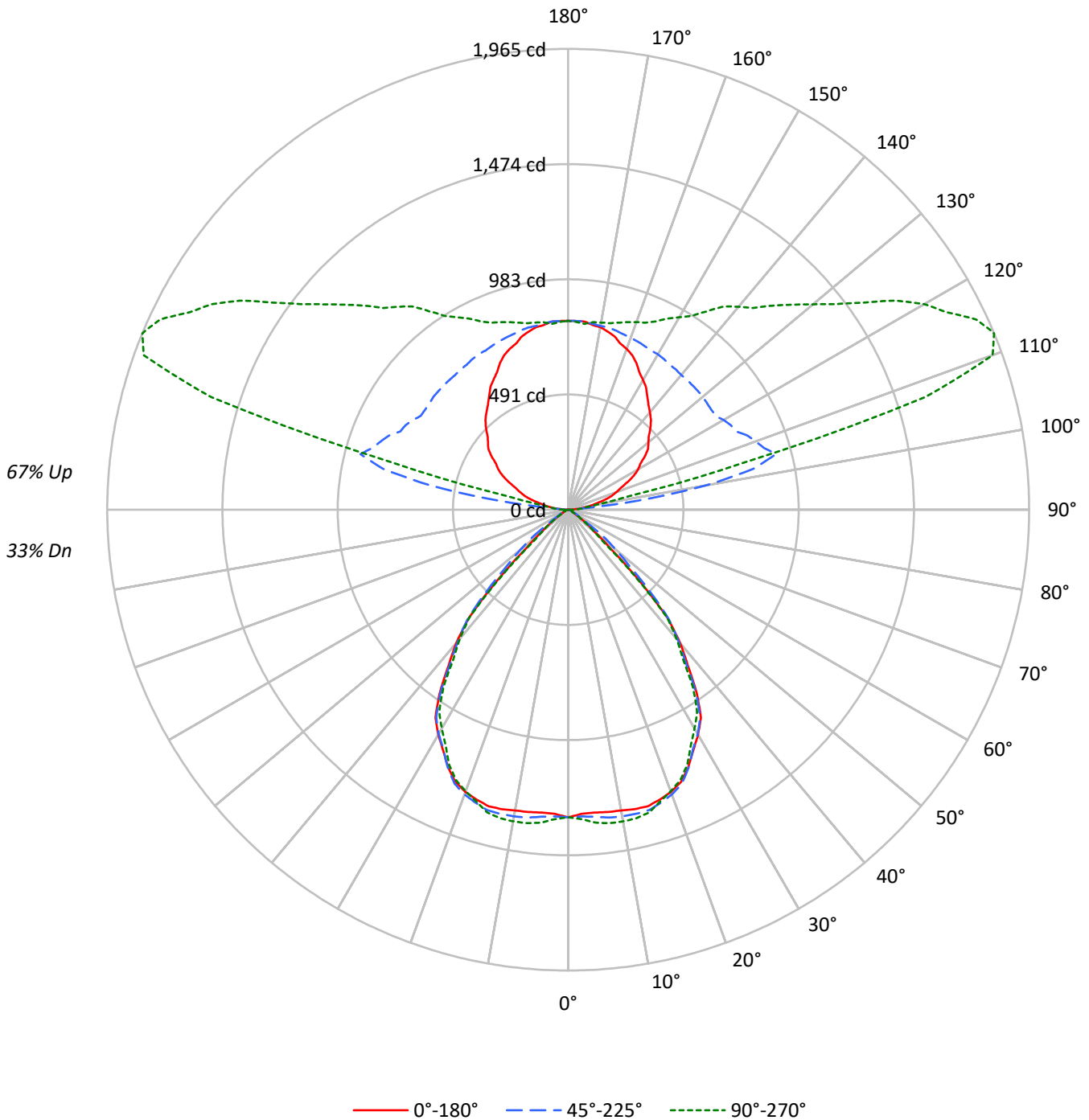
Lumens per Lamp: N/A
Luminaire Lumens: 6435.9 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	95	91	88	85	86	83	80	77	66	64	63	51	50	49	37	37	36	30
2	88	81	76	71	79	74	69	65	59	56	54	46	45	43	34	33	32	27
3	81	72	66	61	73	66	61	56	54	50	47	42	40	38	32	30	29	24
4	74	65	58	53	67	59	53	49	48	44	41	38	36	33	29	28	26	22
5	69	58	51	46	62	53	47	43	44	39	36	35	32	30	27	25	24	20
6	64	53	46	40	58	48	42	38	40	35	32	32	29	27	25	23	21	18
7	59	48	41	36	53	44	38	33	37	32	29	30	26	24	23	21	19	17
8	55	44	37	32	50	40	34	30	34	29	26	27	24	22	21	19	18	15
9	51	40	33	29	46	37	31	27	31	26	23	25	22	20	20	18	16	14
10	48	37	30	26	44	34	28	24	29	24	21	23	20	18	19	16	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16935	16935	16935
5°	16808	17039	17371
10°	17080	17417	17701
15°	17506	17744	17863
20°	17601	17764	17560
25°	17265	17306	17095
30°	16506	16463	16065
35°	15070	14945	14633
40°	12518	12336	12102
45°	7864	8945	7502
50°	3016	5297	2797
55°	1423	2223	1446
60°	690	1121	612
65°	633	663	575
70°	634	634	559
75°	639	639	544
80°	662	588	513
85°	726	578	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 8945 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.3	2.0
10°-20°	373.5	5.8
20°-30°	554.9	8.6
30°-40°	580.8	9.0
40°-50°	351.8	5.5
50°-60°	81.2	1.3
60°-70°	22.3	0.3
70°-80°	13.1	0.2
80°-90°	6.3	0.1
90°-100°	99.0	1.5
100°-110°	705.5	11.0
110°-120°	957.8	14.9
120°-130°	779.6	12.1
130°-140°	627.0	9.7
140°-150°	494.3	7.7
150°-160°	361.4	5.6
160°-170°	224.5	3.5
170°-180°	76.6	1.2
0°-30°	1054.7	16.4
0°-40°	1635.4	25.4
0°-60°	2068.3	32.1
0°-90°	2110.0	32.8
90°-120°	1762.4	27.4
90°-150°	3663.3	56.9
90°-180°	4326.0	67.2
0°-180°	6435.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1311	1311	1311	1311	1311	
5°	1296	1326	1314	1320	1340	124
15°	1309	1349	1327	1316	1336	369
25°	1211	1247	1214	1183	1200	555
35°	956	970	948	926	928	587
45°	430	489	490	472	411	331
55°	63	72	99	68	64	66
65°	21	22	22	20	19	21
75°	13	13	13	12	11	14
85°	5	5	4	4	3	5
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°	1311.1	1311.1	1311.1	1311.1	1311.1
2.5°	1298.5	1321.6	1308.7	1309.8	1320.6
5°	1296.3	1326.2	1314.1	1319.5	1339.7
7.5°	1299.8	1331.1	1323.9	1325.8	1348.0
10°	1302.2	1335.0	1327.9	1327.4	1349.6
12.5°	1307.7	1342.1	1328.7	1325.8	1347.2
15°	1309.1	1348.7	1326.9	1316.5	1335.8
17.5°	1296.3	1339.9	1310.5	1288.9	1304.4
20°	1280.5	1324.9	1292.3	1262.1	1277.5
22.5°	1256.0	1299.6	1264.7	1232.1	1248.3
25°	1211.4	1247.1	1214.3	1183.1	1199.5
27.5°	1154.9	1180.0	1152.0	1122.3	1131.6
30°	1106.7	1131.8	1103.8	1073.3	1077.1
32.5°	1053.0	1074.3	1046.9	1019.5	1022.6
35°	955.7	970.2	947.8	926.1	928.0
37.5°	837.2	839.1	824.0	804.2	804.6
40°	742.4	748.2	731.6	715.8	717.7
42.5°	629.5	652.3	636.0	621.8	622.2
45°	430.5	489.3	489.7	472.5	410.7
47.5°	237.7	305.9	349.7	271.2	204.8
50°	150.1	193.5	263.6	158.5	139.2
52.5°	107.4	126.9	192.5	112.1	102.1
55°	63.2	71.9	98.7	68.0	64.2
57.5°	38.5	46.0	57.7	45.5	38.7
60°	26.7	33.4	43.4	30.5	23.7
62.5°	23.5	25.6	34.0	24.2	22.1
65°	20.7	21.7	21.7	19.7	18.8
67.5°	18.4	19.3	18.4	17.4	16.4
70°	16.8	17.7	16.8	15.8	14.8
72.5°	15.2	16.2	15.2	14.2	13.2
75°	12.8	12.8	12.8	11.8	10.9
77.5°	10.5	10.5	10.3	9.5	8.5
80°	8.9	8.9	7.9	7.9	6.9
82.5°	7.3	7.3	6.3	6.3	5.3
85°	4.9	4.9	3.9	3.9	3.0
87.5°	2.4	3.4	3.6	4.6	3.8
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)