

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: P644896

Luminaire Tested: OMN4DIP-SR4F0-50D125U935-WBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644896
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-SR4F0-50D125U935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

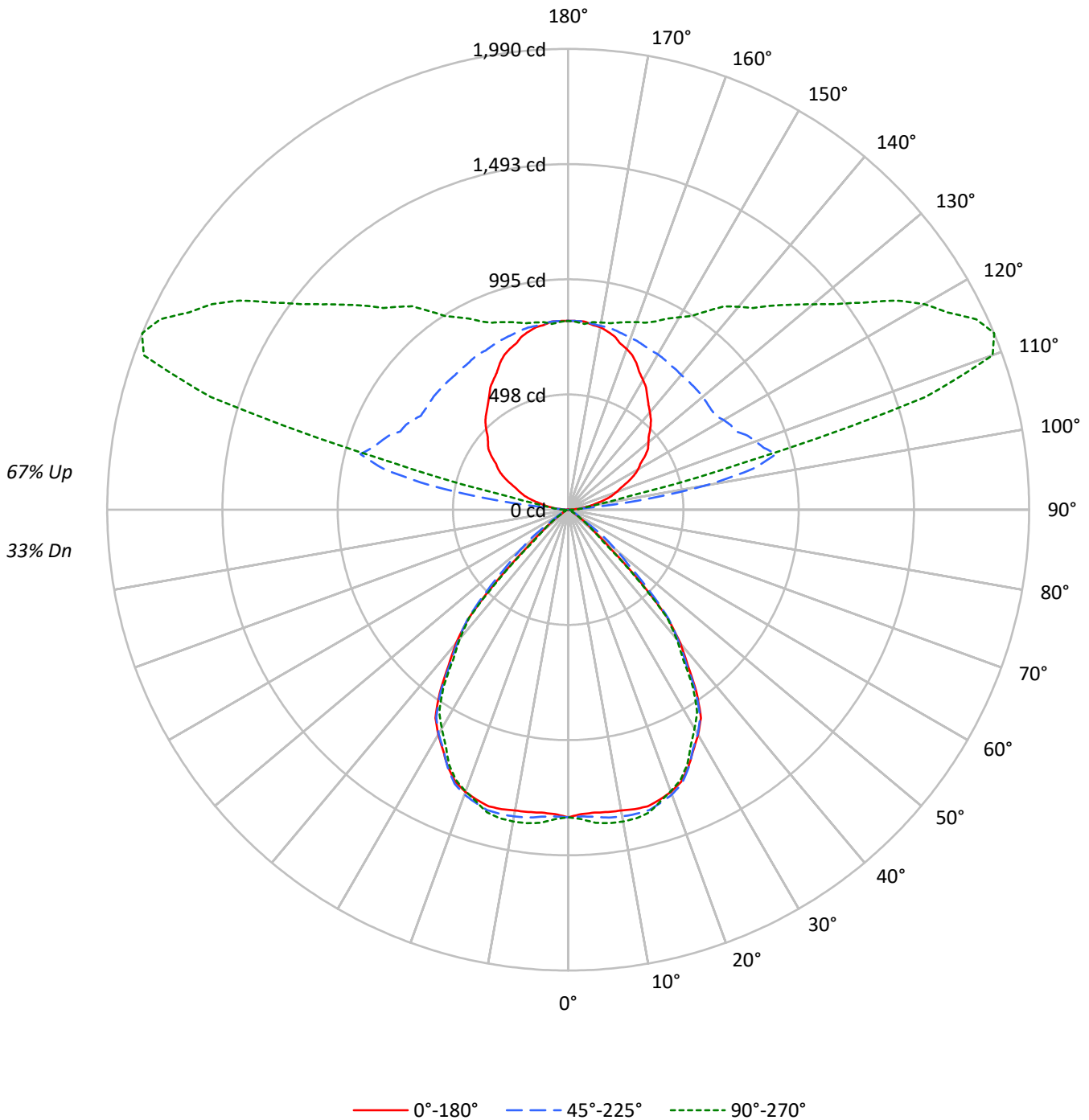
Lumens per Lamp: N/A
Luminaire Lumens: 6518.8 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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	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°	17153	17153	17153
5°	17024	17258	17595
10°	17300	17641	17930
15°	17732	17972	18093
20°	17828	17993	17787
25°	17487	17530	17316
30°	16720	16675	16272
35°	15264	15138	14822
40°	12680	12494	12258
45°	7964	9060	7599
50°	3054	5365	2833
55°	1441	2252	1464
60°	698	1137	620
65°	642	672	581
70°	642	642	566
75°	649	649	549
80°	669	595	521
85°	741	593	445

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 9060 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.9	2.0
10°-20°	378.3	5.8
20°-30°	562.0	8.6
30°-40°	588.2	9.0
40°-50°	356.3	5.5
50°-60°	82.2	1.3
60°-70°	22.6	0.3
70°-80°	13.2	0.2
80°-90°	6.4	0.1
90°-100°	100.3	1.5
100°-110°	714.6	11.0
110°-120°	970.2	14.9
120°-130°	789.6	12.1
130°-140°	635.1	9.7
140°-150°	500.7	7.7
150°-160°	366.1	5.6
160°-170°	227.4	3.5
170°-180°	77.5	1.2
0°-30°	1068.3	16.4
0°-40°	1656.5	25.4
0°-60°	2095.0	32.1
0°-90°	2137.3	32.8
90°-120°	1785.1	27.4
90°-150°	3710.5	56.9
90°-180°	4382.0	67.2
0°-180°	6518.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1328	1328	1328	1328	1328	
5°	1313	1343	1331	1336	1357	126
15°	1326	1366	1344	1333	1353	373
25°	1227	1263	1230	1198	1215	562
35°	968	983	960	938	940	595
45°	436	496	496	479	416	335
55°	64	73	100	69	65	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°	41	76	41	46	56	46
105°	159	244	928	1186	785	168
115°	282	342	800	1663	1944	280
125°	405	460	754	1319	1560	360
135°	503	558	759	1086	1247	387
145°	595	645	764	946	1046	374
155°	698	723	780	858	898	320
165°	775	785	800	821	836	218
175°	816	821	816	810	805	77
180°	816	816	816	816	816	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1328.0	1328.0	1328.0	1328.0	1328.0
2.5°	1315.2	1338.7	1325.6	1326.6	1337.6
5°	1313.0	1343.3	1331.0	1336.5	1357.0
7.5°	1316.6	1348.3	1341.0	1342.9	1365.4
10°	1319.0	1352.2	1345.0	1344.5	1367.0
12.5°	1324.6	1359.4	1345.8	1342.9	1364.6
15°	1326.0	1366.1	1344.0	1333.4	1353.0
17.5°	1313.0	1357.2	1327.4	1305.6	1321.2
20°	1297.0	1342.0	1309.0	1278.4	1294.0
22.5°	1272.2	1316.4	1281.0	1248.0	1264.4
25°	1227.0	1263.2	1230.0	1198.4	1215.0
27.5°	1169.8	1195.2	1166.8	1136.8	1146.2
30°	1121.0	1146.4	1118.0	1087.1	1091.0
32.5°	1066.6	1088.1	1060.4	1032.7	1035.8
35°	968.0	982.7	960.0	938.0	940.0
37.5°	848.0	850.0	834.6	814.6	815.0
40°	752.0	757.9	741.0	725.0	727.0
42.5°	637.6	660.7	644.2	629.8	630.2
45°	436.0	495.6	496.0	478.6	416.0
47.5°	240.8	309.8	354.2	274.7	207.4
50°	152.0	196.0	267.0	160.6	141.0
52.5°	108.8	128.6	195.0	113.6	103.4
55°	64.0	72.8	100.0	68.9	65.0
57.5°	39.0	46.6	58.4	46.0	39.2
60°	27.0	33.8	44.0	30.8	24.0
62.5°	23.8	26.0	34.4	24.6	22.4
65°	21.0	22.0	22.0	20.0	19.0
67.5°	18.6	19.6	18.6	17.6	16.6
70°	17.0	18.0	17.0	16.0	15.0
72.5°	15.4	16.4	15.4	14.4	13.4
75°	13.0	13.0	13.0	12.0	11.0
77.5°	10.6	10.6	10.4	9.6	8.6
80°	9.0	9.0	8.0	8.0	7.0
82.5°	7.4	7.4	6.4	6.4	5.4
85°	5.0	5.0	4.0	4.0	3.0
87.5°	2.4	3.4	3.7	4.7	3.9
90°	0.0	5.0	10.3	15.4	15.4
92.5°	12.3	17.3	22.6	31.9	35.9
95°	41.0	76.2	41.0	46.4	56.4
97.5°	72.8	146.1	301.6	89.0	77.0
100°	97.5	182.7	605.3	178.2	118.0
102.5°	122.1	211.4	818.7	470.2	257.5
105°	159.0	244.3	928.5	1186.2	784.9
107.5°	196.0	260.2	886.5	1726.3	1617.0
110°	220.6	280.8	861.8	1814.0	1949.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	245.2	305.4	837.2	1762.7	1990.4
115°	282.2	342.3	800.3	1663.4	1944.3
117.5°	320.1	379.3	791.0	1555.8	1844.8
120°	348.8	404.0	774.6	1474.0	1775.0
122.5°	369.4	428.5	754.1	1403.7	1680.6
125°	405.3	460.4	754.1	1318.8	1559.5
127.5°	435.0	491.2	755.1	1220.2	1457.9
130°	451.4	511.6	759.2	1154.3	1380.0
132.5°	472.0	532.2	759.2	1124.6	1310.2
135°	502.7	557.9	759.2	1086.1	1246.6
137.5°	528.4	587.6	759.2	1043.5	1180.9
140°	548.9	604.1	759.2	1018.6	1144.0
142.5°	569.4	620.6	763.3	989.7	1107.1
145°	595.1	645.2	764.4	946.2	1046.5
147.5°	625.9	670.0	770.5	914.9	992.1
150°	646.4	686.5	774.6	894.1	959.3
152.5°	666.9	703.0	774.6	877.4	930.6
155°	697.7	722.8	779.8	857.6	897.8
157.5°	722.3	746.4	785.9	845.1	874.2
160°	738.7	758.8	790.0	836.8	861.8
162.5°	751.0	771.1	794.1	832.5	849.5
165°	774.6	784.7	800.3	821.1	836.2
167.5°	788.0	797.0	805.4	815.9	824.9
170°	800.3	805.3	805.4	815.8	820.8
172.5°	804.4	813.4	809.5	811.7	816.7
175°	815.7	820.7	815.7	810.4	805.4
177.5°	815.7	819.7	815.7	815.6	811.6
180°	815.7	815.7	815.7	815.7	815.7

(END OF REPORT)