

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: P644735

Luminaire Tested: OMN4DIP-SR4F0-125D150U930-BBMOOB-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P644735
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-SR4F0-125D150U930-BBMOOB-1DUDD-WW
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE
DOWNLIGHT - BLACK BAFFLE WITH MEDIUM OPTIC - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

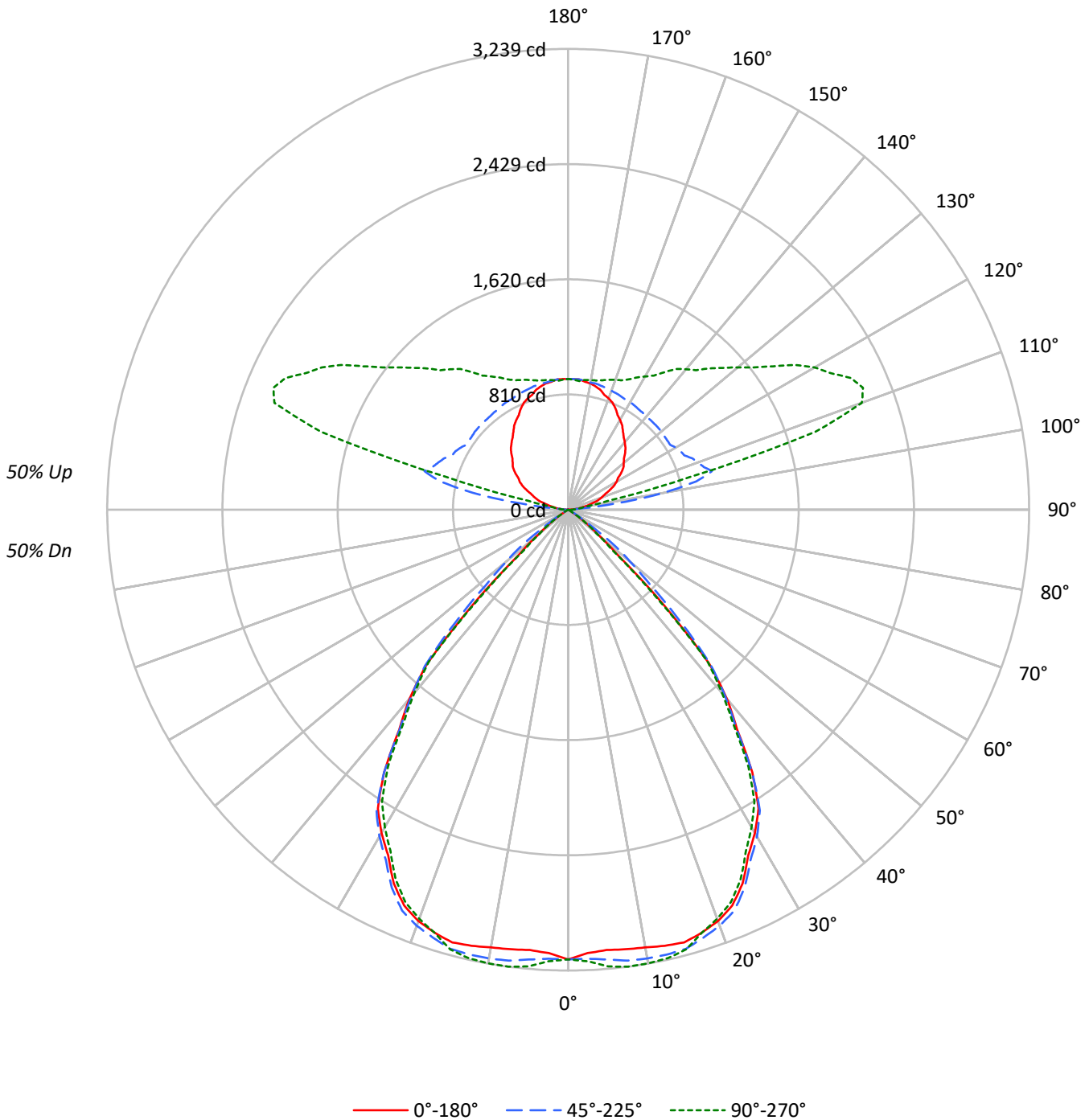
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9792.3 lumens
Efficiency: N/A
Efficacy: 99.8 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: General Diffuse

Input Watts (W): 98.1
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	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	100	96	93	90	92	89	86	84	76	74	72	63	62	61	52	52	51	46				
2	92	86	81	77	85	80	76	72	69	66	63	58	56	54	49	47	46	42				
3	86	78	72	67	79	73	67	63	63	59	56	53	51	49	45	43	42	38				
4	80	70	64	58	74	66	60	55	57	53	49	49	46	43	42	40	38	34				
5	74	64	57	52	68	60	54	49	52	48	44	45	42	39	39	36	34	31				
6	69	58	51	46	64	55	48	44	48	43	40	42	38	35	36	33	31	29				
7	64	53	46	41	59	50	44	39	44	39	36	38	35	32	33	31	29	26				
8	60	49	42	37	56	46	40	35	41	36	32	36	32	29	31	28	26	24				
9	56	45	38	34	52	42	36	32	38	33	29	33	29	27	29	26	24	22				
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22	20				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	40825	40825	40825
5°	40278	41141	41781
10°	40969	42005	42458
15°	42100	42727	42793
20°	42293	42767	42055
25°	41318	41776	40861
30°	39119	39560	38419
35°	35559	35559	34821
40°	29246	28956	28331
45°	17487	20552	16676
50°	5653	11454	5305
55°	2000	3833	2000
60°	127	1082	65
65°	76	76	0
70°	94	0	0
75°	0	0	0
80°	0	0	0
85°	371	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 20552 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.1	3.1
10°-20°	899.8	9.2
20°-30°	1331.5	13.6
30°-40°	1376.3	14.1
40°-50°	800.8	8.2
50°-60°	135.6	1.4
60°-70°	5.4	0.1
70°-80°	0.8	0.0
80°-90°	2.8	0.0
90°-100°	113.0	1.2
100°-110°	805.0	8.2
110°-120°	1092.8	11.2
120°-130°	889.4	9.1
130°-140°	715.4	7.3
140°-150°	564.0	5.8
150°-160°	412.4	4.2
160°-170°	256.1	2.6
170°-180°	87.3	0.9
0°-30°	2535.3	25.9
0°-40°	3911.6	39.9
0°-60°	4848.1	49.5
0°-90°	4857.0	49.6
90°-120°	2010.7	20.5
90°-150°	4179.5	42.7
90°-180°	4935.0	50.4
0°-180°	9792.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3161	3161	3161	3161	3161	
5°	3106	3188	3173	3181	3222	298
15°	3148	3259	3195	3178	3200	886
25°	2899	2996	2931	2843	2867	1324
35°	2255	2291	2255	2199	2208	1382
45°	957	1114	1125	1087	913	740
55°	89	103	170	96	89	98
65°	2	2	2	0	0	3
75°	0	2	0	0	0	1
85°	2	2	0	0	0	1
90°	0	6	12	17	17	2
95°	46	86	46	52	64	52
105°	179	275	1046	1336	884	189
115°	318	386	901	1874	2190	315
125°	456	519	849	1486	1757	406
135°	566	628	855	1223	1404	436
145°	670	727	861	1066	1179	421
155°	786	814	878	966	1011	361
165°	872	884	901	925	942	245
175°	919	924	919	913	907	87
180°	919	919	919	919	919	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3160.6	3160.6	3160.6	3160.6	3160.6
2.5°	3119.2	3181.0	3158.7	3161.0	3176.4
5°	3106.4	3188.4	3173.0	3181.3	3222.3
7.5°	3115.7	3198.7	3196.7	3199.1	3239.1
10°	3123.6	3210.5	3202.6	3200.9	3237.1
12.5°	3139.4	3234.0	3202.6	3198.8	3229.2
15°	3148.3	3259.3	3195.2	3178.4	3200.1
17.5°	3118.2	3241.7	3154.7	3110.0	3118.7
20°	3076.8	3202.2	3111.3	3045.0	3059.5
22.5°	3011.6	3131.3	3050.1	2968.1	2986.5
25°	2899.1	2995.6	2931.2	2842.9	2867.0
27.5°	2739.2	2815.5	2774.8	2689.2	2704.2
30°	2622.8	2685.5	2652.4	2568.7	2575.9
32.5°	2488.5	2541.6	2506.3	2434.3	2433.8
35°	2255.1	2291.3	2255.1	2198.6	2208.3
37.5°	1949.7	1977.2	1940.3	1906.4	1911.2
40°	1734.5	1756.2	1717.3	1685.1	1680.2
42.5°	1466.1	1526.4	1488.3	1444.5	1451.3
45°	957.3	1114.1	1125.1	1086.6	912.9
47.5°	482.6	653.9	783.1	594.3	425.9
50°	281.3	385.0	570.0	314.7	264.0
52.5°	184.6	228.5	398.2	198.8	175.2
55°	88.8	103.3	170.2	96.1	88.8
57.5°	30.6	47.0	75.5	48.0	34.0
60°	4.9	19.4	41.9	14.5	2.5
62.5°	3.0	5.9	26.2	2.9	0.5
65°	2.5	2.5	2.5	0.0	0.0
67.5°	2.5	2.5	0.0	0.0	0.0
70°	2.5	2.5	0.0	0.0	0.0
72.5°	2.5	2.5	0.0	0.0	0.0
75°	0.0	2.4	0.0	0.0	0.0
77.5°	0.0	2.4	0.0	0.0	0.0
80°	0.0	2.4	0.0	0.0	0.0
82.5°	0.0	2.4	0.0	0.0	0.0
85°	2.5	2.5	0.0	0.0	0.0
87.5°	2.0	3.1	2.3	3.5	3.5
90°	0.0	5.7	11.6	17.3	17.3
92.5°	13.9	19.5	25.4	35.9	40.4
95°	46.2	85.8	46.2	52.3	63.6
97.5°	82.1	164.5	339.8	100.2	86.7
100°	109.8	205.8	681.9	200.7	132.9
102.5°	137.5	238.1	922.2	529.6	290.1
105°	179.1	275.2	1045.9	1336.1	884.1
107.5°	220.7	293.1	998.5	1944.5	1821.4
110°	248.5	316.3	970.8	2043.3	2195.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	276.2	344.0	943.0	1985.5	2242.0
115°	317.8	385.6	901.4	1873.6	2190.0
117.5°	360.6	427.2	891.0	1752.5	2077.9
120°	392.9	455.1	872.5	1660.3	1999.3
122.5°	416.0	482.7	849.4	1581.1	1893.0
125°	456.5	518.6	849.4	1485.5	1756.7
127.5°	490.0	553.3	850.6	1374.4	1642.2
130°	508.5	576.3	855.2	1300.2	1554.4
132.5°	531.6	599.4	855.2	1266.8	1475.8
135°	566.3	628.4	855.2	1223.4	1404.2
137.5°	595.2	661.9	855.2	1175.4	1330.2
140°	618.3	680.4	855.2	1147.3	1288.6
142.5°	641.4	699.0	859.8	1114.8	1247.0
145°	670.3	726.8	861.0	1065.8	1178.8
147.5°	705.0	754.7	867.9	1030.5	1117.6
150°	728.1	773.3	872.5	1007.1	1080.6
152.5°	751.2	791.9	872.5	988.3	1048.2
155°	785.9	814.1	878.3	966.0	1011.2
157.5°	813.6	840.7	885.3	951.9	984.7
160°	832.1	854.7	889.9	942.5	970.8
162.5°	846.0	868.6	894.5	937.7	956.9
165°	872.5	883.8	901.4	924.9	941.9
167.5°	887.6	897.7	907.2	919.0	929.2
170°	901.4	907.1	907.2	918.9	924.6
172.5°	906.1	916.2	911.8	914.3	919.9
175°	918.8	924.4	918.8	912.9	907.2
177.5°	918.8	923.3	918.8	918.7	914.2
180°	918.8	918.8	918.8	918.8	918.8

(END OF REPORT)