

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: P644760

Luminaire Tested: OMN4DIP-SR4F0-125D25U835-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644760
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-19)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-125D25U835-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

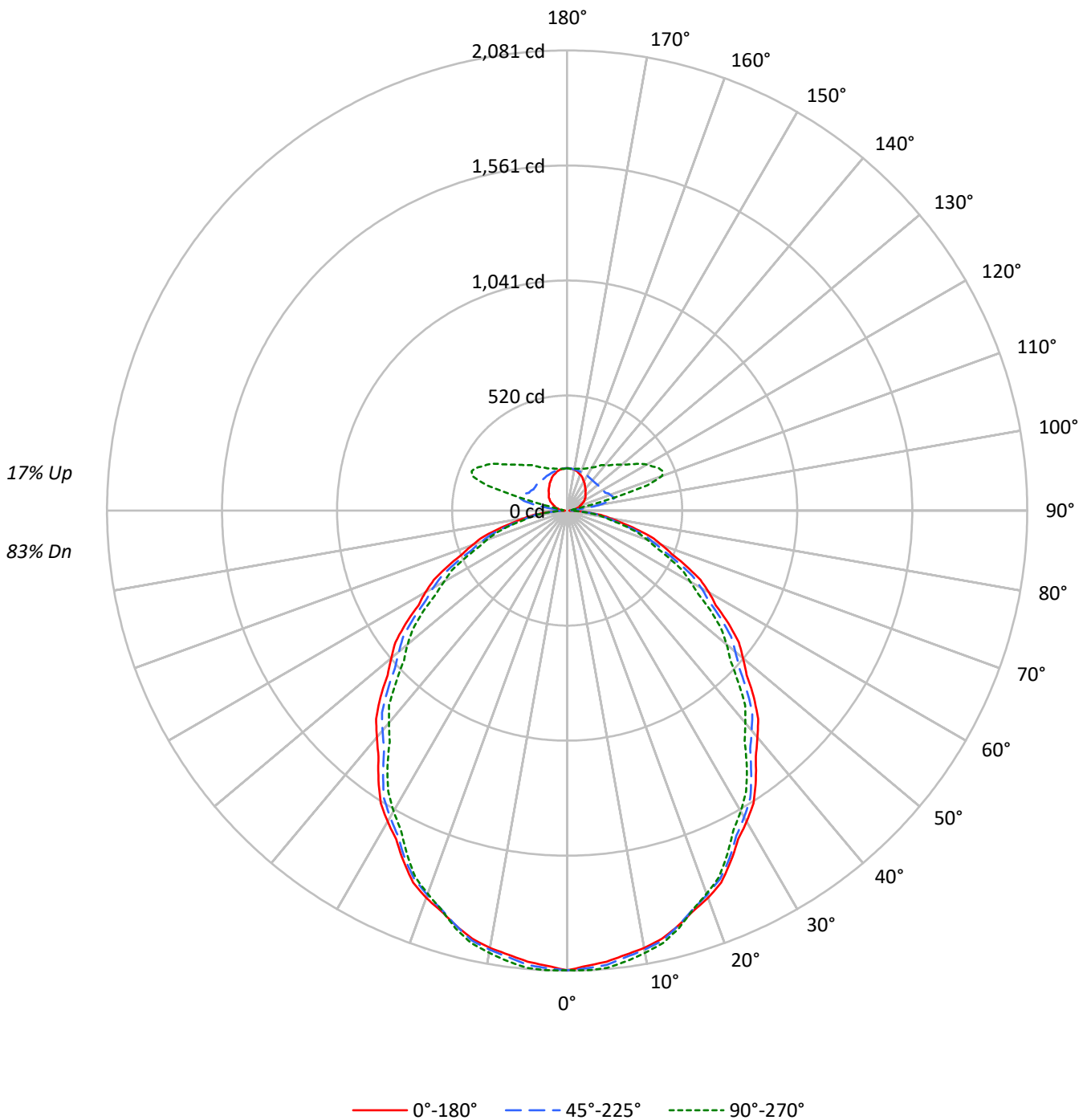
Lumens per Lamp: N/A
Luminaire Lumens: 6098.4 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 48.3
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																		
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	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	115	115	115	115	110	110	110	110	102	102	102	94	94	94	86	86	86	83																												
1	105	101	97	93	101	97	93	90	89	87	84	83	80	78	76	75	73	70																												
2	96	88	82	76	92	85	79	74	79	74	70	73	69	66	67	64	62	59																												
3	88	78	70	64	84	75	68	62	70	64	59	65	60	56	60	56	53	50																												
4	81	69	61	54	77	67	59	53	62	56	51	58	52	48	54	49	46	43																												
5	74	62	53	47	71	60	52	46	56	49	44	52	46	42	49	44	40	38																												
6	69	56	47	41	66	54	46	40	51	44	39	47	41	37	44	39	35	33																												
7	64	51	42	36	61	49	41	36	46	39	34	43	37	33	40	35	32	29																												
8	59	46	38	33	57	45	37	32	42	36	31	40	34	30	37	32	28	26																												
9	55	43	35	29	53	41	34	29	39	32	28	37	31	27	34	29	26	24																												
10	52	39	32	27	50	38	31	26	36	30	25	34	28	24	32	27	24	22																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	33562	33562	33562
5°	33187	33415	33645
10°	32921	33060	33292
15°	32476	32476	32665
20°	32022	31780	31682
25°	31187	30936	30533
30°	30266	29843	29263
35°	29321	28596	27928
40°	28195	27360	26407
45°	27252	26218	24928
50°	26070	24935	23657
55°	25078	23803	22370
60°	23928	22649	20731
65°	22690	21070	19450
70°	21493	19492	18156
75°	20112	17817	16937
80°	18410	16299	15518
85°	17284	15191	14153

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 27252 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.5	3.2
10°-20°	548.7	9.0
20°-30°	797.9	13.1
30°-40°	907.6	14.9
40°-50°	884.9	14.5
50°-60°	755.3	12.4
60°-70°	548.9	9.0
70°-80°	310.4	5.1
80°-90°	96.0	1.6
90°-100°	35.6	0.6
100°-110°	174.3	2.9
110°-120°	231.7	3.8
120°-130°	187.6	3.1
130°-140°	149.2	2.4
140°-150°	117.4	1.9
150°-160°	85.9	1.4
160°-170°	53.3	0.9
170°-180°	18.2	0.3
0°-30°	1542.1	25.3
0°-40°	2449.7	40.2
0°-60°	4089.9	67.1
0°-90°	5045.2	82.7
90°-120°	441.6	7.2
90°-150°	895.8	14.7
90°-180°	1053.0	17.3
0°-180°	6098.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2079	2079	2079	2079	2079	
5°	2048	2078	2062	2059	2076	194
15°	1943	1968	1943	1940	1954	548
25°	1751	1767	1736	1706	1714	805
35°	1488	1493	1451	1417	1417	929
45°	1194	1188	1148	1108	1092	918
55°	891	888	846	806	795	795
65°	594	588	552	517	509	590
75°	322	311	286	274	272	342
85°	93	82	82	79	76	100
90°	11	15	19	18	18	12
95°	32	29	18	19	19	28
105°	51	66	223	281	184	55
115°	75	86	190	390	456	75
125°	101	114	180	309	366	89
135°	118	131	178	255	292	91
145°	140	151	179	222	245	88
155°	164	170	183	201	211	75
165°	182	184	188	193	196	51
175°	191	192	191	190	189	18
180°	191	191	191	191	191	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2078.7	2078.7	2078.7	2078.7	2078.7
2.5°	2060.6	2087.1	2071.9	2072.1	2080.9
5°	2047.6	2078.0	2061.7	2059.3	2075.9
7.5°	2026.1	2055.9	2036.8	2033.9	2055.5
10°	2008.0	2035.6	2016.5	2011.2	2030.6
12.5°	1983.1	2010.7	1991.6	1984.1	2003.5
15°	1942.9	1967.8	1942.9	1940.4	1954.2
17.5°	1897.7	1919.2	1890.3	1881.0	1891.5
20°	1863.7	1883.1	1849.6	1835.6	1843.9
22.5°	1820.8	1840.1	1804.4	1783.7	1794.2
25°	1750.6	1767.2	1736.5	1705.6	1713.9
27.5°	1675.4	1688.1	1657.3	1625.7	1628.4
30°	1623.4	1631.6	1600.7	1566.9	1569.6
32.5°	1569.1	1575.1	1541.9	1505.7	1506.3
35°	1487.6	1493.1	1450.8	1416.9	1416.9
37.5°	1401.1	1404.4	1359.2	1322.3	1318.5
40°	1337.7	1343.2	1298.1	1261.2	1252.9
42.5°	1278.9	1280.0	1239.3	1202.3	1191.8
45°	1193.5	1187.9	1148.2	1108.3	1091.7
47.5°	1101.3	1101.3	1056.0	1016.1	1000.6
50°	1037.9	1037.9	992.7	952.8	941.8
52.5°	979.1	976.9	933.9	893.9	878.4
55°	890.9	888.1	845.6	805.8	794.7
57.5°	797.5	797.5	757.9	715.2	703.1
60°	741.0	741.0	701.4	658.6	642.0
62.5°	679.9	677.7	638.0	599.9	589.9
65°	593.9	588.4	551.5	517.4	509.1
67.5°	511.9	506.4	467.2	439.9	434.4
70°	455.3	449.8	412.9	390.2	384.6
72.5°	401.0	393.3	360.9	342.6	337.1
75°	322.4	311.3	285.6	274.3	271.5
77.5°	247.7	228.9	218.3	210.4	207.6
80°	198.0	181.4	175.3	169.6	166.9
82.5°	155.0	138.4	136.9	133.4	130.7
85°	93.3	82.3	82.0	79.1	76.4
87.5°	40.7	34.9	35.6	35.2	35.2
90°	11.3	15.3	19.4	17.8	17.8
92.5°	23.3	18.3	17.7	19.3	18.0
95°	32.3	29.4	18.1	19.3	18.9
97.5°	36.9	45.8	78.7	25.9	20.9
100°	42.7	54.4	147.6	44.6	30.5
102.5°	46.2	58.8	197.7	113.1	61.0
105°	51.4	65.9	223.4	281.0	184.1
107.5°	59.5	69.6	213.6	407.6	379.2
110°	63.0	74.4	207.8	428.2	457.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	68.8	80.2	202.0	416.2	466.8
115°	74.7	86.0	190.5	390.1	456.0
117.5°	83.6	94.7	188.4	364.9	432.7
120°	90.3	100.5	184.5	345.7	416.3
122.5°	92.8	106.2	179.7	329.2	394.2
125°	100.7	113.6	179.7	309.3	365.8
127.5°	104.9	120.2	179.9	286.2	341.9
130°	108.7	122.8	180.9	270.7	323.7
132.5°	111.3	125.4	178.6	263.8	307.3
135°	117.9	130.9	178.1	254.7	292.4
137.5°	123.9	137.8	178.1	244.7	277.0
140°	128.7	141.7	178.1	238.9	268.3
142.5°	133.6	145.6	179.0	232.1	259.6
145°	139.6	151.3	179.3	221.9	245.4
147.5°	146.8	157.1	180.7	214.6	232.7
150°	151.6	161.0	181.7	209.7	225.0
152.5°	156.4	164.9	181.7	205.8	218.3
155°	163.6	169.5	182.9	201.1	210.6
157.5°	169.4	175.1	184.3	198.2	205.0
160°	173.3	178.0	185.3	196.2	202.1
162.5°	176.1	180.8	186.3	195.2	199.2
165°	181.7	184.0	187.7	192.6	196.1
167.5°	184.8	186.9	188.9	191.4	193.5
170°	187.7	188.9	188.9	191.3	192.5
172.5°	188.7	190.8	189.9	190.4	191.5
175°	191.3	192.5	191.3	190.1	188.9
177.5°	191.3	192.2	191.3	191.3	190.3
180°	191.3	191.3	191.3	191.3	191.3

(END OF REPORT)