

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: P644709

Luminaire Tested: OMN4DIP-SR4F0-125D125U930-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644709
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-SR4F0-125D125U930-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

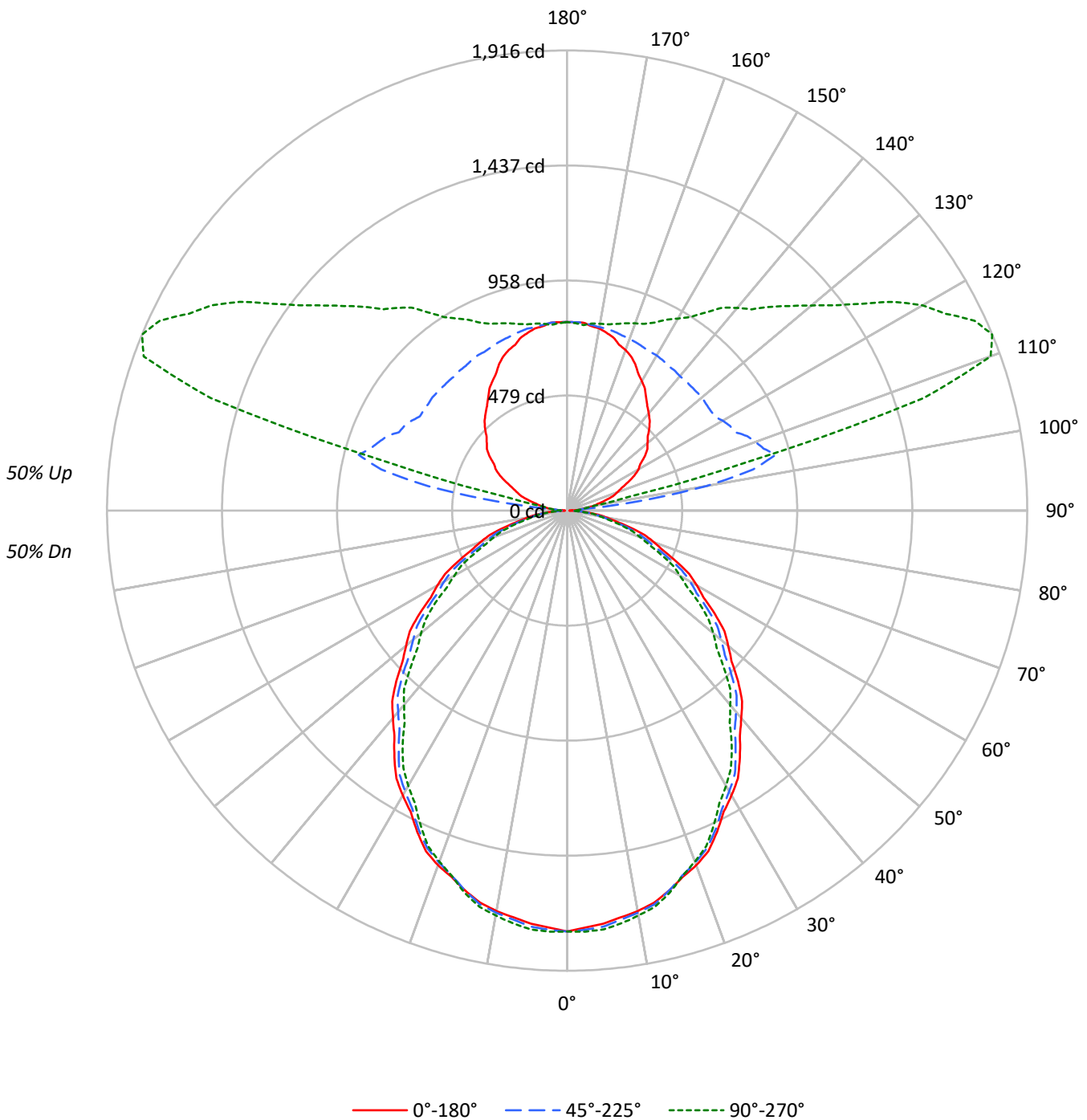
Lumens per Lamp: N/A
Luminaire Lumens: 8494.1 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 78.2
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	98	94	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42				
2	89	82	76	71	82	76	70	66	64	60	57	54	51	48	44	42	40	36				
3	81	72	65	59	75	67	60	55	57	52	48	48	44	41	39	37	34	30				
4	75	64	56	50	69	59	52	47	51	45	41	42	38	35	35	32	30	26				
5	68	57	49	43	63	53	46	40	45	40	35	38	34	31	32	28	26	23				
6	63	51	43	37	58	48	40	35	41	35	31	35	30	27	29	25	23	20				
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	23	20	18				
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18	16				
9	50	38	31	26	47	36	29	24	31	26	22	27	22	19	22	19	17	14				
10	47	35	28	23	44	33	26	22	29	23	20	25	20	17	21	17	15	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28299	28299	28299
5°	27982	28175	28368
10°	27758	27876	28071
15°	27385	27385	27544
20°	27002	26797	26715
25°	26297	26085	25744
30°	25519	25163	24675
35°	24723	24112	23548
40°	23773	23071	22266
45°	22978	22108	21018
50°	21984	21024	19947
55°	21146	20071	18863
60°	20176	19097	17479
65°	19133	17765	16397
70°	18123	16438	15309
75°	16962	15028	14279
80°	15518	13742	13082
85°	14579	12819	11930

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 22978 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.9	1.9
10°-20°	462.7	5.4
20°-30°	672.7	7.9
30°-40°	765.3	9.0
40°-50°	746.1	8.8
50°-60°	636.9	7.5
60°-70°	462.8	5.4
70°-80°	261.7	3.1
80°-90°	82.4	1.0
90°-100°	106.7	1.3
100°-110°	693.5	8.2
110°-120°	937.2	11.0
120°-130°	762.0	9.0
130°-140°	611.5	7.2
140°-150°	481.9	5.7
150°-160°	352.4	4.1
160°-170°	218.9	2.6
170°-180°	74.6	0.9
0°-30°	1300.3	15.3
0°-40°	2065.5	24.3
0°-60°	3448.6	40.6
0°-90°	4255.5	50.1
90°-120°	1737.4	20.5
90°-150°	3592.8	42.3
90°-180°	4239.0	49.9
0°-180°	8494.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1753	1753	1753	1753	1753	
5°	1726	1752	1738	1736	1750	164
15°	1638	1659	1638	1636	1648	462
25°	1476	1490	1464	1438	1445	679
35°	1254	1259	1223	1195	1195	783
45°	1006	1002	968	934	920	774
55°	751	749	713	679	670	670
65°	501	496	465	436	429	497
75°	272	262	241	231	229	289
85°	79	69	69	67	64	84
90°	10	17	24	27	27	11
95°	59	83	47	52	59	59
105°	165	242	898	1144	755	175
115°	279	334	773	1601	1871	278
125°	395	448	728	1269	1501	350
135°	484	537	731	1045	1200	373
145°	573	621	736	911	1007	360
155°	672	696	750	825	864	308
165°	746	755	770	790	805	209
175°	785	790	785	780	775	74
180°	785	785	785	785	785	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1752.7	1752.7	1752.7	1752.7	1752.7
2.5°	1737.5	1759.8	1747.0	1747.2	1754.6
5°	1726.5	1752.1	1738.4	1736.3	1750.3
7.5°	1708.4	1733.6	1717.4	1715.0	1733.2
10°	1693.1	1716.4	1700.3	1695.9	1712.2
12.5°	1672.1	1695.4	1679.3	1673.0	1689.3
15°	1638.3	1659.2	1638.3	1636.1	1647.8
17.5°	1600.1	1618.3	1593.9	1586.0	1594.9
20°	1571.5	1587.8	1559.6	1547.8	1554.8
22.5°	1535.2	1551.6	1521.4	1504.0	1512.8
25°	1476.1	1490.1	1464.2	1438.1	1445.1
27.5°	1412.7	1423.4	1397.4	1370.8	1373.1
30°	1368.8	1375.8	1349.7	1321.2	1323.5
32.5°	1323.0	1328.1	1300.1	1269.6	1270.1
35°	1254.3	1259.0	1223.3	1194.7	1194.7
37.5°	1181.4	1184.2	1146.1	1115.0	1111.7
40°	1127.9	1132.6	1094.6	1063.4	1056.4
42.5°	1078.3	1079.3	1045.0	1013.8	1004.9
45°	1006.3	1001.7	968.2	934.5	920.5
47.5°	928.6	928.6	890.4	856.7	843.7
50°	875.2	875.2	837.0	803.4	794.1
52.5°	825.6	823.7	787.4	753.7	740.7
55°	751.2	748.8	713.0	679.4	670.1
57.5°	672.5	672.5	639.1	603.1	592.8
60°	624.8	624.8	591.4	555.3	541.3
62.5°	573.3	571.4	538.0	505.8	497.4
65°	500.8	496.1	465.0	436.2	429.2
67.5°	431.6	427.0	393.9	370.9	366.3
70°	383.9	379.3	348.2	329.0	324.3
72.5°	338.1	331.6	304.3	288.9	284.3
75°	271.9	262.5	240.9	231.3	228.9
77.5°	208.9	193.0	184.1	177.4	175.0
80°	166.9	152.9	147.8	143.0	140.7
82.5°	130.7	116.7	115.4	112.5	110.2
85°	78.7	69.4	69.2	66.7	64.4
87.5°	34.3	30.2	31.5	32.1	32.1
90°	9.5	16.7	24.2	26.7	26.7
92.5°	29.0	28.7	32.2	40.7	42.7
95°	58.6	83.0	46.7	51.8	59.1
97.5°	86.8	150.3	297.0	89.9	76.4
100°	110.5	185.6	587.4	173.9	115.9
102.5°	132.3	211.2	792.8	454.9	248.3
105°	165.0	242.4	898.5	1144.0	755.4
107.5°	200.1	257.7	858.0	1663.9	1556.3
110°	221.8	277.5	834.3	1748.2	1876.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	245.5	301.2	810.6	1698.9	1915.7
115°	278.7	334.3	772.6	1600.9	1871.3
117.5°	315.3	369.9	763.7	1497.4	1775.5
120°	342.9	393.7	747.9	1418.7	1708.4
122.5°	360.7	417.2	728.2	1351.0	1617.5
125°	394.8	447.9	728.2	1269.3	1501.0
127.5°	421.1	477.0	729.2	1174.4	1403.2
130°	436.9	494.8	733.1	1110.9	1328.2
132.5°	454.7	512.7	731.2	1082.4	1261.0
135°	483.9	537.0	730.7	1045.3	1199.8
137.5°	508.6	565.5	730.7	1004.3	1136.6
140°	528.3	581.4	730.7	980.4	1101.1
142.5°	548.1	597.3	734.7	952.5	1065.5
145°	572.7	621.0	735.7	910.7	1007.2
147.5°	602.4	644.9	741.6	880.6	954.9
150°	622.1	660.7	745.6	860.5	923.3
152.5°	641.9	676.6	745.6	844.5	895.7
155°	671.5	695.6	750.5	825.4	864.1
157.5°	695.2	718.4	756.4	813.3	841.3
160°	711.0	730.3	760.4	805.4	829.5
162.5°	722.8	742.2	764.3	801.2	817.6
165°	745.6	755.2	770.2	790.3	804.8
167.5°	758.4	767.1	775.2	785.3	793.9
170°	770.2	775.1	775.2	785.2	790.0
172.5°	774.2	782.9	779.1	781.2	786.0
175°	785.1	789.9	785.1	780.0	775.2
177.5°	785.1	788.9	785.1	785.0	781.1
180°	785.1	785.1	785.1	785.1	785.1

(END OF REPORT)