

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: P644833

Luminaire Tested: OMN4DIP-SR4F0-125D75U935-CLBOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644833
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2206-689-20)
Test Lab: INNOVATION CENTER
Issue Date: 2/16/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: OMN4DIP-SR4F0-125D75U935-CLBOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - BATWING LENS - 1250 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 750 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

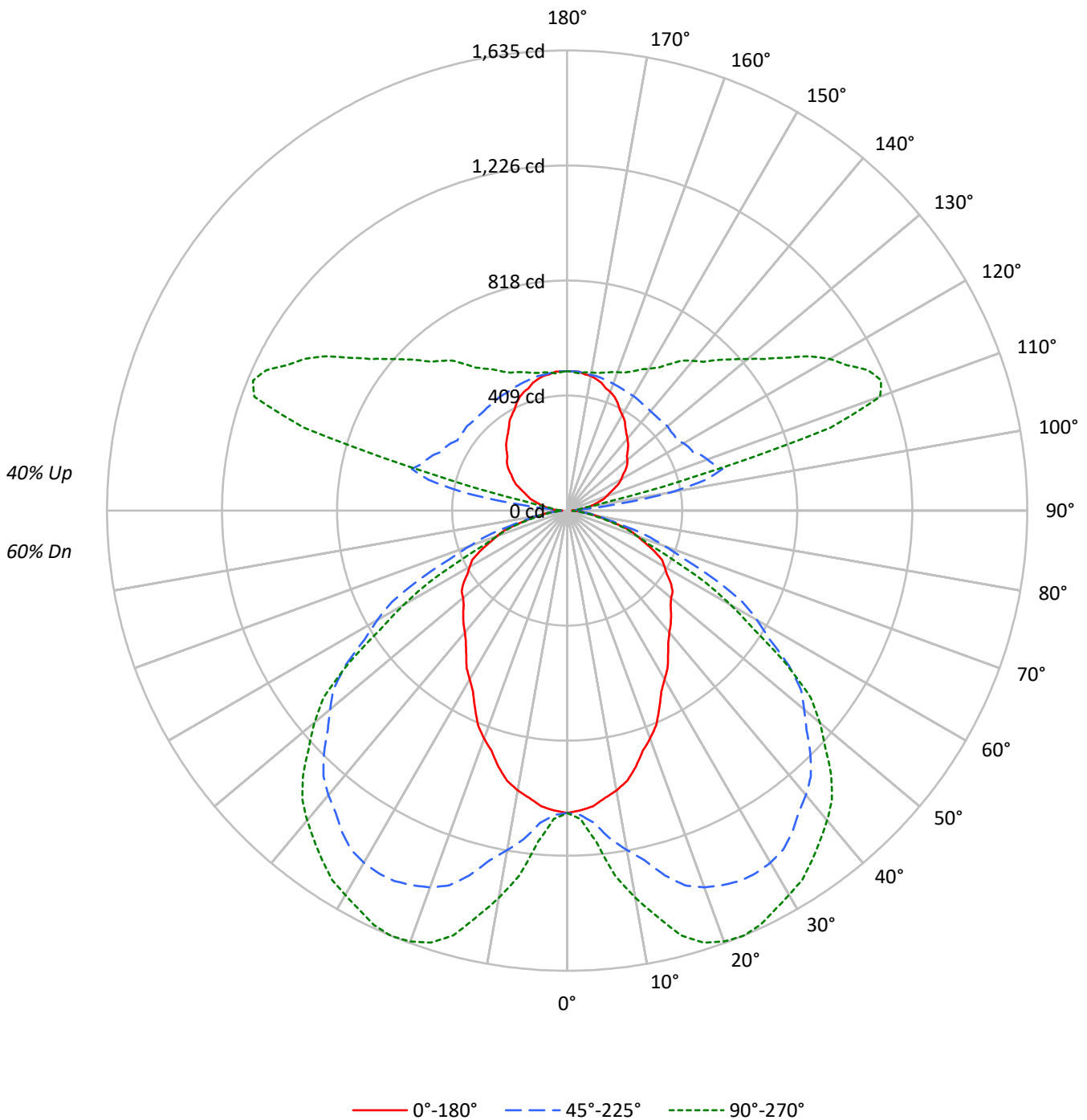
Lumens per Lamp: N/A
Luminaire Lumens: 6816.8 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.87 / 1.75
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 60.8
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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	66	66	66	60	
1	100	96	92	89	94	90	86	83	78	76	74	68	66	64	58	57	56	56	56	56	51	
2	91	84	78	72	85	79	73	68	69	65	61	60	57	54	51	49	47	47	47	47	43	
3	83	74	66	60	77	69	62	57	61	55	51	53	49	45	45	42	40	40	40	40	36	
4	76	65	57	51	71	61	54	48	54	48	43	47	42	39	40	37	34	34	34	34	31	
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	30	30	30	30	27	
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	33	29	26	26	26	26	23	
7	59	47	38	33	55	44	36	31	39	33	28	34	29	26	30	26	23	23	23	23	20	
8	55	42	34	29	51	40	33	28	35	29	25	31	26	23	27	23	20	20	20	20	18	
9	51	38	31	26	48	36	29	24	32	26	22	29	24	20	25	21	18	18	18	18	16	
10	48	35	28	23	44	33	26	22	30	24	20	26	22	18	23	19	16	16	16	16	14	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17350	17350	17350
5°	17092	18065	19118
10°	16552	20077	22904
15°	15749	22432	26108
20°	14814	24476	27996
25°	13801	25867	28939
30°	12905	26931	29399
35°	12315	27486	29899
40°	11904	27811	30288
45°	11926	27905	30300
50°	12115	27620	29441
55°	12662	27083	26733
60°	12913	25178	21710
65°	13081	22055	15943
70°	12505	17344	12387
75°	11223	12938	10443
80°	9530	10228	8368
85°	9263	8336	6947

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 30300 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.2	1.6
10°-20°	366.3	5.4
20°-30°	608.5	8.9
30°-40°	767.6	11.3
40°-50°	820.5	12.0
50°-60°	724.2	10.6
60°-70°	464.8	6.8
70°-80°	206.1	3.0
80°-90°	54.5	0.8
90°-100°	74.9	1.1
100°-110°	442.8	6.5
110°-120°	595.7	8.7
120°-130°	483.6	7.1
130°-140°	385.9	5.7
140°-150°	303.9	4.5
150°-160°	222.2	3.3
160°-170°	138.0	2.0
170°-180°	47.1	0.7
0°-30°	1084.9	15.9
0°-40°	1852.5	27.2
0°-60°	3397.3	49.8
0°-90°	4122.7	60.5
90°-120°	1113.3	16.3
90°-150°	2286.8	33.5
90°-180°	2694.0	39.5
0°-180°	6816.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1075	1075	1075	1075	1075	
5°	1055	1086	1115	1153	1180	99
15°	942	1086	1342	1503	1562	264
25°	775	1051	1452	1588	1624	356
35°	625	960	1394	1485	1517	392
45°	522	820	1222	1298	1327	404
55°	450	645	962	967	950	399
65°	342	433	577	469	417	335
75°	180	200	207	177	167	192
85°	50	43	45	40	38	53
90°	18	20	21	24	19	13
95°	52	64	37	36	39	48
105°	114	163	571	722	476	121
115°	184	218	493	1012	1180	183
125°	254	287	465	803	947	225
135°	305	339	461	659	757	235
145°	361	392	464	574	635	227
155°	424	439	473	521	545	194
165°	470	476	486	498	508	132
175°	495	498	495	492	489	47
180°	495	495	495	495	495	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1074.6	1074.6	1074.6	1074.6	1074.6
2.5°	1066.6	1082.3	1082.6	1088.8	1096.6
5°	1054.6	1086.4	1114.6	1152.7	1179.6
7.5°	1029.6	1086.3	1176.6	1265.0	1309.0
10°	1009.6	1087.8	1224.6	1343.2	1397.0
12.5°	983.6	1087.2	1272.5	1415.4	1477.0
15°	942.2	1086.3	1342.0	1503.3	1561.9
17.5°	894.2	1081.8	1396.5	1558.1	1609.4
20°	862.2	1077.2	1424.5	1578.1	1629.4
22.5°	826.2	1066.6	1440.5	1588.0	1635.4
25°	774.7	1050.8	1452.0	1587.8	1624.4
27.5°	724.2	1028.2	1452.5	1567.6	1598.9
30°	692.2	1009.9	1444.5	1547.6	1576.9
32.5°	664.3	989.7	1428.5	1523.7	1554.9
35°	624.8	959.5	1394.5	1485.2	1516.9
37.5°	590.8	925.1	1351.5	1439.8	1477.0
40°	564.8	897.1	1319.5	1407.7	1437.0
42.5°	544.8	867.4	1281.5	1367.6	1393.0
45°	522.3	820.4	1222.1	1297.7	1327.0
47.5°	498.3	772.0	1153.6	1225.0	1244.0
50°	482.3	736.5	1099.6	1164.7	1172.1
52.5°	472.3	699.1	1047.6	1088.6	1090.1
55°	449.8	645.3	962.1	966.8	949.7
57.5°	419.8	582.6	853.7	829.3	788.2
60°	399.9	539.1	779.7	730.9	672.3
62.5°	379.9	497.6	701.7	622.7	554.3
65°	342.4	432.8	577.3	468.7	417.3
67.5°	298.9	361.4	453.3	350.6	316.4
70°	264.9	313.8	367.4	286.8	262.4
72.5°	232.9	266.1	297.4	237.1	224.4
75°	179.9	199.5	207.4	177.2	167.4
77.5°	132.5	133.4	143.9	124.8	120.0
80°	102.5	97.6	110.0	94.9	90.0
82.5°	78.5	71.6	80.0	68.9	66.0
85°	50.0	42.7	45.0	39.9	37.5
87.5°	29.5	24.2	24.2	22.8	19.9
90°	17.5	20.5	21.2	24.2	19.3
92.5°	31.0	28.1	26.7	30.2	27.8
95°	52.4	63.9	37.4	35.6	39.2
97.5°	68.7	105.8	192.6	59.0	49.2
100°	81.7	126.1	374.9	113.1	74.1
102.5°	94.6	143.4	504.5	288.3	156.8
105°	114.0	163.3	571.1	722.4	476.4
107.5°	135.9	170.5	545.6	1050.3	981.5
110°	148.9	183.0	530.6	1103.5	1183.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.8	197.9	515.7	1072.4	1208.1
115°	183.8	217.8	493.2	1012.1	1180.1
117.5°	206.3	240.3	487.6	946.8	1119.7
120°	221.7	255.2	477.7	897.1	1077.4
122.5°	234.2	268.2	463.2	854.5	1020.1
125°	253.5	287.0	465.2	802.9	946.6
127.5°	269.0	305.1	463.3	742.6	884.9
130°	279.0	315.5	465.8	700.6	837.6
132.5°	287.5	324.0	461.8	682.6	795.3
135°	305.2	338.6	460.8	659.2	756.7
137.5°	320.7	356.6	460.8	633.4	716.8
140°	333.2	366.7	460.8	618.3	694.4
142.5°	345.6	376.7	463.3	600.7	672.0
145°	361.2	391.6	464.0	574.3	635.2
147.5°	379.9	406.7	467.7	555.3	602.2
150°	392.3	416.7	470.2	542.7	582.3
152.5°	404.8	426.7	470.2	532.6	564.8
155°	423.5	438.7	473.3	520.6	544.9
157.5°	438.4	453.0	477.0	512.9	530.6
160°	448.4	460.6	479.5	507.9	523.1
162.5°	455.9	468.0	482.0	505.3	515.6
165°	470.2	476.3	485.8	498.4	507.5
167.5°	478.3	483.8	488.9	495.2	500.7
170°	485.8	488.8	488.9	495.2	498.2
172.5°	488.2	493.7	491.4	492.7	495.7
175°	495.1	498.1	495.1	491.9	488.9
177.5°	495.1	497.5	495.1	495.0	492.6
180°	495.1	495.1	495.1	495.1	495.1

(END OF REPORT)