

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: P644580

Luminaire Tested: OMN4DIP-SR4F0-100D25U835-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644580
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-SR4F0-100D25U835-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

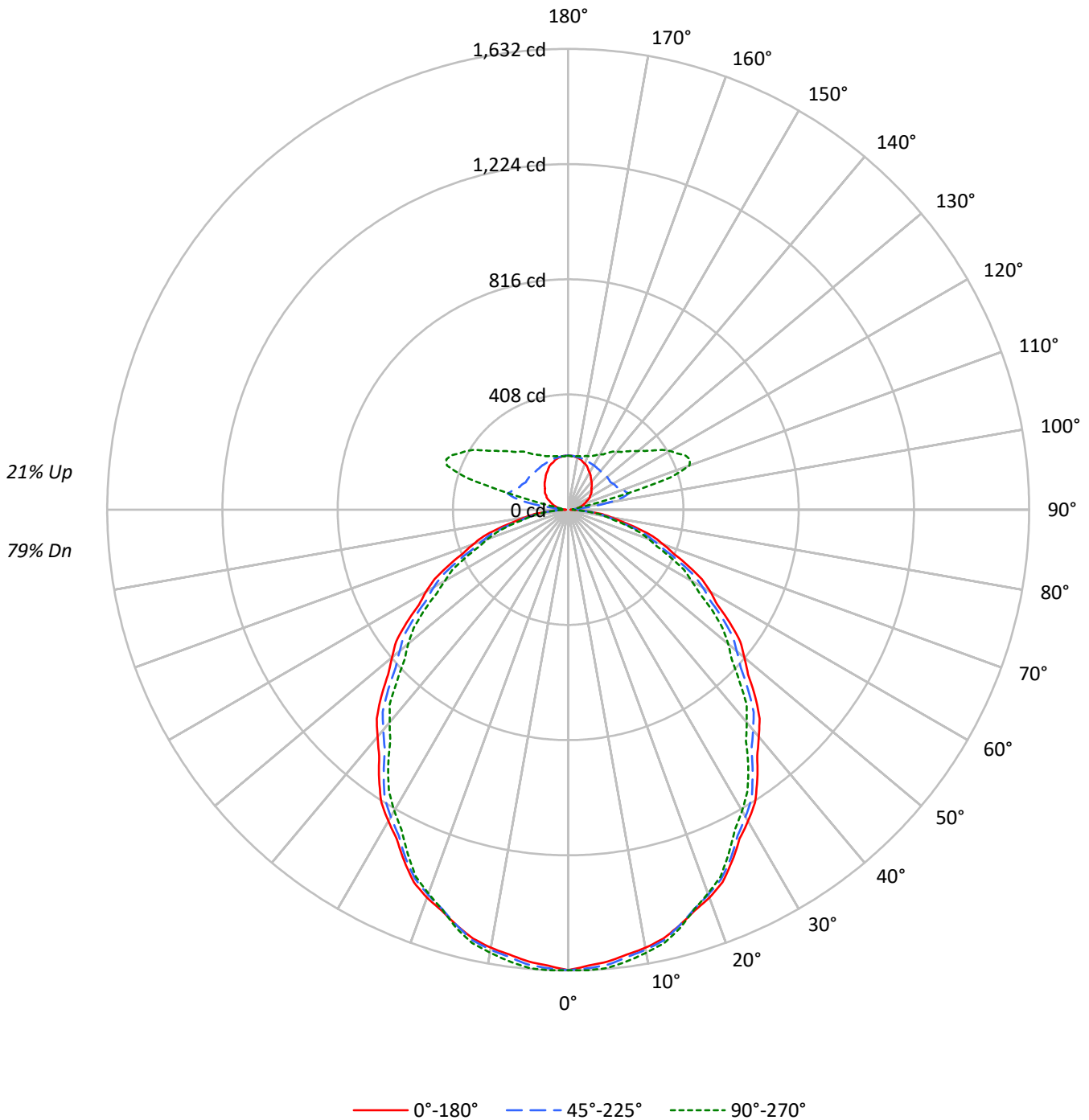
Lumens per Lamp: N/A
Luminaire Lumens: 5005.6 lumens
Efficiency: N/A
Efficacy: 131.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 38.2
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									
RC	80									70									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	0													
RCR																																					
0	114	114	114	114	109	109	109	109	99	99	99	91	91	91	83	83	83	79																			
1	104	100	96	92	100	96	92	89	88	85	82	80	78	76	73	72	70	67																			
2	95	87	81	76	91	84	78	73	77	72	68	71	67	64	65	62	59	56																			
3	87	77	69	63	83	74	67	61	68	62	58	63	58	54	58	54	51	48																			
4	80	69	60	54	76	66	58	52	61	54	50	56	51	47	52	47	44	41																			
5	74	61	53	47	70	59	51	45	55	48	43	50	45	41	47	42	38	36																			
6	68	55	47	41	65	53	45	40	49	43	38	46	40	36	42	38	34	32																			
7	63	50	42	36	60	48	41	35	45	38	34	42	36	32	39	34	30	28																			
8	59	46	38	32	56	44	37	31	41	35	30	38	33	29	36	31	27	25																			
9	55	42	34	29	52	41	33	28	38	32	27	35	30	26	33	28	25	23																			
10	51	39	31	26	49	38	30	26	35	29	25	33	27	24	31	26	23	21																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26329	26329	26329
5°	26034	26214	26394
10°	25825	25935	26117
15°	25478	25478	25626
20°	25122	24931	24854
25°	24465	24268	23952
30°	23743	23411	22956
35°	23002	22432	21908
40°	22118	21463	20714
45°	21379	20569	19555
50°	20451	19560	18558
55°	19674	18674	17548
60°	18771	17767	16262
65°	17799	16527	15255
70°	16862	15290	14242
75°	15777	13980	13288
80°	14440	12794	12171
85°	13561	11912	11097

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 21379 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.4	3.1
10°-20°	430.5	8.6
20°-30°	625.9	12.5
30°-40°	712.0	14.2
40°-50°	694.2	13.9
50°-60°	592.5	11.8
60°-70°	430.6	8.6
70°-80°	243.5	4.9
80°-90°	75.4	1.5
90°-100°	33.0	0.7
100°-110°	172.9	3.5
110°-120°	230.8	4.6
120°-130°	187.1	3.7
130°-140°	149.2	3.0
140°-150°	117.4	2.3
150°-160°	85.9	1.7
160°-170°	53.3	1.1
170°-180°	18.2	0.4
0°-30°	1209.7	24.2
0°-40°	1921.7	38.4
0°-60°	3208.4	64.1
0°-90°	3958.0	79.1
90°-120°	436.6	8.7
90°-150°	890.3	17.8
90°-180°	1048.0	20.9
0°-180°	5005.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1631	1631	1631	1631	1631	
5°	1606	1630	1617	1615	1628	152
15°	1524	1544	1524	1522	1533	430
25°	1373	1386	1362	1338	1344	632
35°	1167	1171	1138	1112	1112	729
45°	936	932	901	869	856	721
55°	699	697	663	632	623	624
65°	466	462	433	406	399	463
75°	253	244	224	215	213	268
85°	73	64	64	62	60	78
90°	9	12	16	15	15	9
95°	27	27	16	18	18	24
105°	48	64	222	280	184	52
115°	73	85	190	390	456	73
125°	100	112	179	309	366	88
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	



TEST NUMBER: P644580

CATALOG NUMBER: OMN4DIP-SR4F0-100D25U835-FLLOOB-1DUDD-WW

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1630.7	1630.7	1630.7	1630.7	1630.7
2.5°	1616.5	1637.3	1625.4	1625.5	1632.5
5°	1606.3	1630.1	1617.4	1615.4	1628.5
7.5°	1589.4	1612.8	1597.8	1595.6	1612.5
10°	1575.2	1596.9	1581.9	1577.8	1593.0
12.5°	1555.7	1577.4	1562.3	1556.5	1571.7
15°	1524.2	1543.7	1524.2	1522.2	1533.1
17.5°	1488.7	1505.6	1482.9	1475.6	1483.8
20°	1462.1	1477.2	1451.0	1440.0	1446.5
22.5°	1428.3	1443.5	1415.5	1399.2	1407.5
25°	1373.3	1386.3	1362.2	1338.0	1344.5
27.5°	1314.3	1324.3	1300.1	1275.3	1277.5
30°	1273.5	1280.0	1255.7	1229.2	1231.3
32.5°	1230.9	1235.7	1209.6	1181.2	1181.6
35°	1167.0	1171.3	1138.1	1111.5	1111.5
37.5°	1099.1	1101.7	1066.3	1037.4	1034.3
40°	1049.4	1053.7	1018.3	989.4	982.8
42.5°	1003.3	1004.1	972.2	943.2	934.9
45°	936.3	931.9	900.8	869.4	856.4
47.5°	863.9	863.9	828.4	797.1	784.9
50°	814.2	814.2	778.7	747.5	738.8
52.5°	768.1	766.3	732.6	701.2	689.1
55°	698.9	696.7	663.4	632.1	623.4
57.5°	625.6	625.6	594.6	561.1	551.5
60°	581.3	581.3	550.2	516.6	503.6
62.5°	533.4	531.6	500.5	470.6	462.8
65°	465.9	461.6	432.6	405.9	399.3
67.5°	401.6	397.2	366.5	345.1	340.8
70°	357.2	352.9	323.9	306.1	301.7
72.5°	314.6	308.5	283.1	268.8	264.5
75°	252.9	244.2	224.1	215.2	213.0
77.5°	194.4	179.6	171.3	165.0	162.8
80°	155.3	142.3	137.6	133.1	130.9
82.5°	121.6	108.6	107.4	104.7	102.5
85°	73.2	64.5	64.3	62.1	59.9
87.5°	31.9	27.4	28.0	27.8	27.8
90°	8.9	12.2	15.7	14.7	14.7
92.5°	18.9	15.3	15.1	16.8	16.0
95°	27.4	26.9	16.3	17.5	17.7
97.5°	32.6	43.3	77.0	24.8	20.3
100°	38.4	51.9	146.4	44.0	29.9
102.5°	42.4	56.8	196.5	112.5	60.8
105°	48.4	64.1	222.2	280.4	184.1
107.5°	56.6	67.8	212.3	407.1	379.2
110°	60.6	72.6	206.6	427.6	457.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	66.4	78.3	200.8	415.6	466.8
115°	72.8	84.8	189.9	390.1	456.0
117.5°	81.7	93.4	187.7	364.9	432.7
120°	88.5	99.2	183.9	345.7	416.3
122.5°	91.5	105.0	179.1	329.2	394.2
125°	99.5	112.4	179.1	309.3	365.8
127.5°	104.2	119.2	179.3	286.2	341.9
130°	108.1	122.2	180.3	270.7	323.7
132.5°	111.1	125.3	178.5	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)