

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: P644535

Luminaire Tested: OMN4DIP-SR4F0-100D125U935-FLLOOB-1DUDD-WW

Issue Date: 2/16/2023



Test Information

Test Method: LM-79-2019
Report Number: P644535
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-SR4F0-100D125U935-FLLOOB-1DUDD-WW
Description: NEO-RAY CIRQUE SUSPENDED LED LUMINAIRE
DOWNLIGHT - FLAT FROSTED LENS - 1000 LUMENS PER FOOT
UPLIGHT - BATWING OPTIC - 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

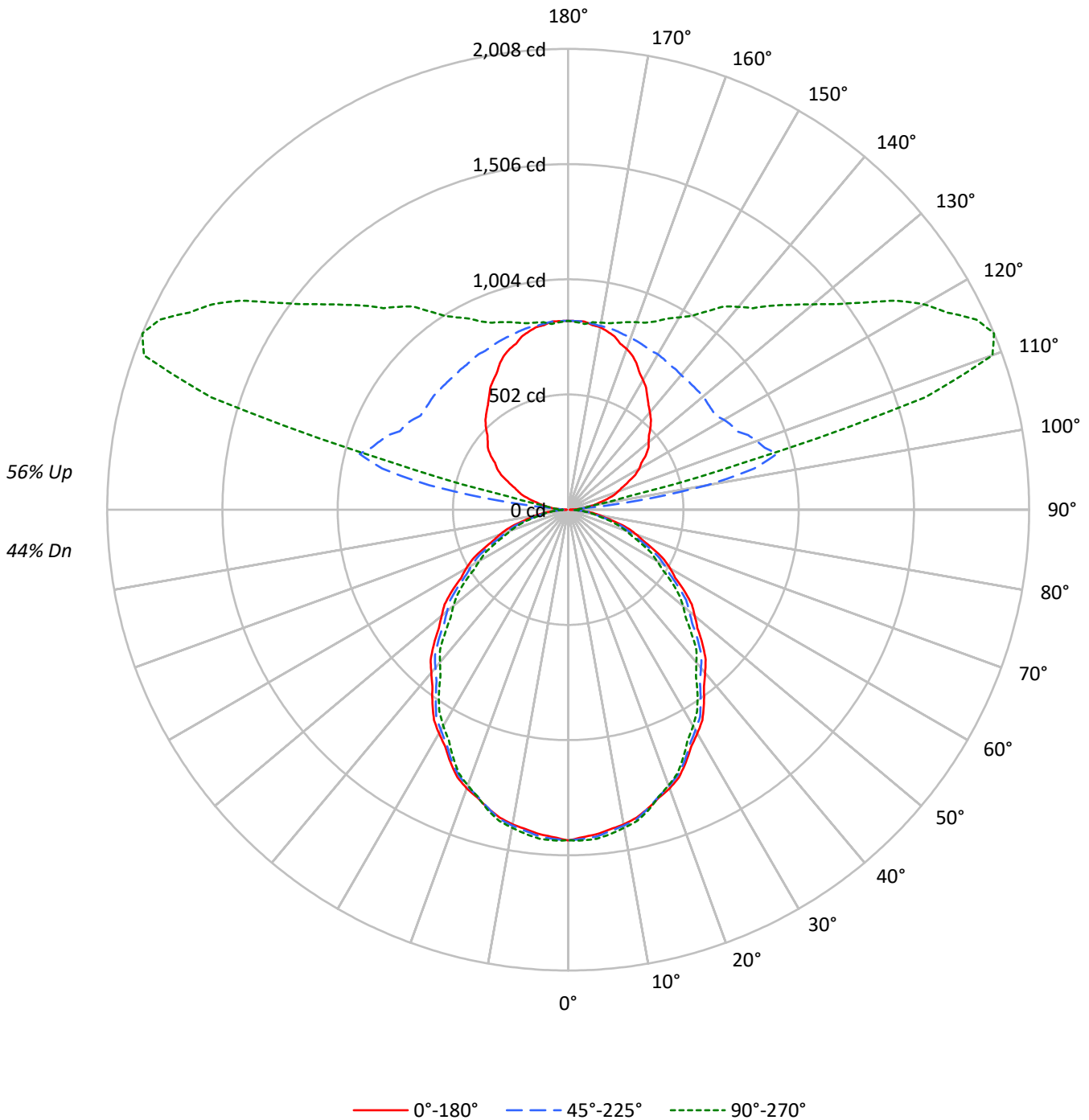
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7936.1 lumens
Efficiency: N/A
Efficacy: 116.5 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): 68.1
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	97	92	88	85	88	85	81	78	70	68	66	57	55	54	45	44	43	37				
2	88	81	75	69	80	74	69	64	62	58	55	50	48	45	40	38	36	31				
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	35	33	31	27				
4	73	63	55	49	67	58	51	46	48	43	39	40	36	33	31	29	27	23				
5	67	56	48	42	61	52	45	39	43	38	34	36	32	29	28	26	23	20				
6	62	50	42	36	57	46	39	34	39	34	30	32	28	25	26	23	21	18				
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	16				
8	53	41	34	28	49	38	31	27	32	27	23	27	23	20	22	19	16	14				
9	50	38	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15	13				
10	46	34	27	23	42	32	26	21	27	22	19	23	19	16	19	16	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23266	23266	23266
5°	23005	23164	23323
10°	22820	22917	23077
15°	22514	22514	22644
20°	22199	22031	21962
25°	21618	21444	21166
30°	20980	20687	20286
35°	20325	19823	19360
40°	19545	18967	18305
45°	18890	18176	17278
50°	18073	17284	16397
55°	17385	16501	15508
60°	16585	15700	14370
65°	15729	14606	13482
70°	14899	13511	12585
75°	13943	12352	11740
80°	12757	11306	10758
85°	11986	10541	9800

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18890 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.5	1.7
10°-20°	380.4	4.8
20°-30°	553.1	7.0
30°-40°	629.1	7.9
40°-50°	613.4	7.7
50°-60°	523.6	6.6
60°-70°	380.5	4.8
70°-80°	215.2	2.7
80°-90°	68.1	0.9
90°-100°	109.5	1.4
100°-110°	725.5	9.1
110°-120°	981.4	12.4
120°-130°	798.1	10.1
130°-140°	640.8	8.1
140°-150°	505.0	6.4
150°-160°	369.3	4.7
160°-170°	229.4	2.9
170°-180°	78.2	1.0
0°-30°	1069.0	13.5
0°-40°	1698.1	21.4
0°-60°	2835.1	35.7
0°-90°	3498.9	44.1
90°-120°	1816.4	22.9
90°-150°	3760.3	47.4
90°-180°	4437.0	55.9
0°-180°	7936.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1441	1441	1441	1441	1441	
5°	1419	1440	1429	1428	1439	135
15°	1347	1364	1347	1345	1355	380
25°	1214	1225	1204	1182	1188	558
35°	1031	1035	1006	982	982	644
45°	827	824	796	768	757	637
55°	618	616	586	559	551	551
65°	412	408	382	359	353	409
75°	224	216	198	190	188	237
85°	65	57	57	55	53	69
90°	8	15	22	25	25	10
95°	57	85	47	53	61	58
105°	170	252	940	1198	792	180
115°	290	349	809	1678	1961	289
125°	413	468	763	1330	1573	366
135°	507	563	766	1096	1257	390
145°	600	651	771	954	1056	377
155°	704	729	786	865	906	323
165°	781	792	807	828	843	219
175°	823	828	823	817	812	78
180°	823	823	823	823	823	



TEST NUMBER: P644535

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1441.0	1441.0	1441.0	1441.0	1441.0
2.5°	1428.4	1446.8	1436.3	1436.4	1442.5
5°	1419.4	1440.5	1429.2	1427.5	1439.0
7.5°	1404.5	1425.2	1411.9	1409.9	1424.9
10°	1391.9	1411.1	1397.8	1394.2	1407.6
12.5°	1374.7	1393.9	1380.6	1375.4	1388.8
15°	1346.9	1364.1	1346.9	1345.1	1354.7
17.5°	1315.5	1330.4	1310.4	1303.9	1311.2
20°	1292.0	1305.4	1282.2	1272.5	1278.2
22.5°	1262.2	1275.6	1250.8	1236.4	1243.7
25°	1213.5	1225.0	1203.7	1182.3	1188.1
27.5°	1161.4	1170.2	1148.8	1126.9	1128.8
30°	1125.3	1131.1	1109.6	1086.2	1088.1
32.5°	1087.7	1091.9	1068.9	1043.8	1044.2
35°	1031.2	1035.0	1005.7	982.2	982.2
37.5°	971.2	973.5	942.2	916.7	914.0
40°	927.3	931.1	899.9	874.2	868.5
42.5°	886.5	887.3	859.1	833.4	826.1
45°	827.3	823.5	796.0	768.2	756.7
47.5°	763.4	763.4	732.0	704.4	693.6
50°	719.5	719.5	688.1	660.5	652.8
52.5°	678.7	677.2	647.4	619.7	608.9
55°	617.6	615.6	586.2	558.6	550.9
57.5°	552.9	552.9	525.4	495.8	487.4
60°	513.6	513.6	486.2	456.5	445.0
62.5°	471.3	469.8	442.3	415.9	409.0
65°	411.7	407.9	382.3	358.6	352.9
67.5°	354.8	351.0	323.9	305.0	301.1
70°	315.6	311.8	286.2	270.5	266.6
72.5°	278.0	272.6	250.2	237.5	233.7
75°	223.5	215.8	198.0	190.1	188.2
77.5°	171.7	158.7	151.3	145.8	143.9
80°	137.2	125.7	121.6	117.6	115.7
82.5°	107.4	95.9	94.9	92.5	90.6
85°	64.7	57.0	56.9	54.9	52.9
87.5°	28.2	25.0	26.4	27.0	27.0
90°	7.8	14.8	22.1	25.3	25.3
92.5°	26.5	27.4	31.4	40.4	42.9
95°	57.1	84.8	47.3	52.6	60.8
97.5°	87.2	155.3	309.7	93.3	79.6
100°	112.0	192.3	614.5	181.7	121.0
102.5°	135.3	219.6	829.8	476.2	260.1
105°	170.2	252.4	940.5	1198.4	791.7
107.5°	207.1	268.4	898.1	1743.2	1631.0
110°	230.3	289.1	873.2	1831.6	1966.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	255.2	314.0	848.4	1779.9	2007.7
115°	290.5	349.3	809.2	1677.8	1961.1
117.5°	328.8	386.5	799.9	1569.3	1860.7
120°	357.7	411.5	783.3	1486.8	1790.3
122.5°	376.9	436.2	762.6	1415.9	1695.1
125°	412.7	468.4	762.6	1330.2	1573.0
127.5°	440.8	498.9	763.6	1230.8	1470.6
130°	457.3	518.0	767.8	1164.2	1391.9
132.5°	476.4	537.2	766.2	1134.3	1321.5
135°	507.1	562.7	765.8	1095.5	1257.4
137.5°	533.0	592.7	765.8	1052.5	1191.1
140°	553.7	609.3	765.8	1027.4	1153.9
142.5°	574.4	626.0	770.0	998.2	1116.6
145°	600.2	650.8	771.0	954.4	1055.6
147.5°	631.3	675.8	777.2	922.8	1000.7
150°	652.0	692.5	781.3	901.8	967.6
152.5°	672.7	709.1	781.3	885.0	938.6
155°	703.7	729.0	786.5	865.0	905.5
157.5°	728.6	752.8	792.7	852.4	881.7
160°	745.1	765.4	796.9	844.0	869.3
162.5°	757.5	777.8	801.0	839.7	856.9
165°	781.3	791.5	807.2	828.3	843.4
167.5°	794.8	803.9	812.4	822.9	832.0
170°	807.2	812.3	812.4	822.8	827.9
172.5°	811.3	820.5	816.5	818.7	823.8
175°	822.7	827.8	822.7	817.4	812.4
177.5°	822.7	826.8	822.7	822.6	818.6
180°	822.7	822.7	822.7	822.7	822.7

(END OF REPORT)