

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: P645266

Luminaire Tested: OMN4DP-SR4F0-75D930-WBM-1DUDD-WW

Issue Date: 9/2/2020



**Test Information**

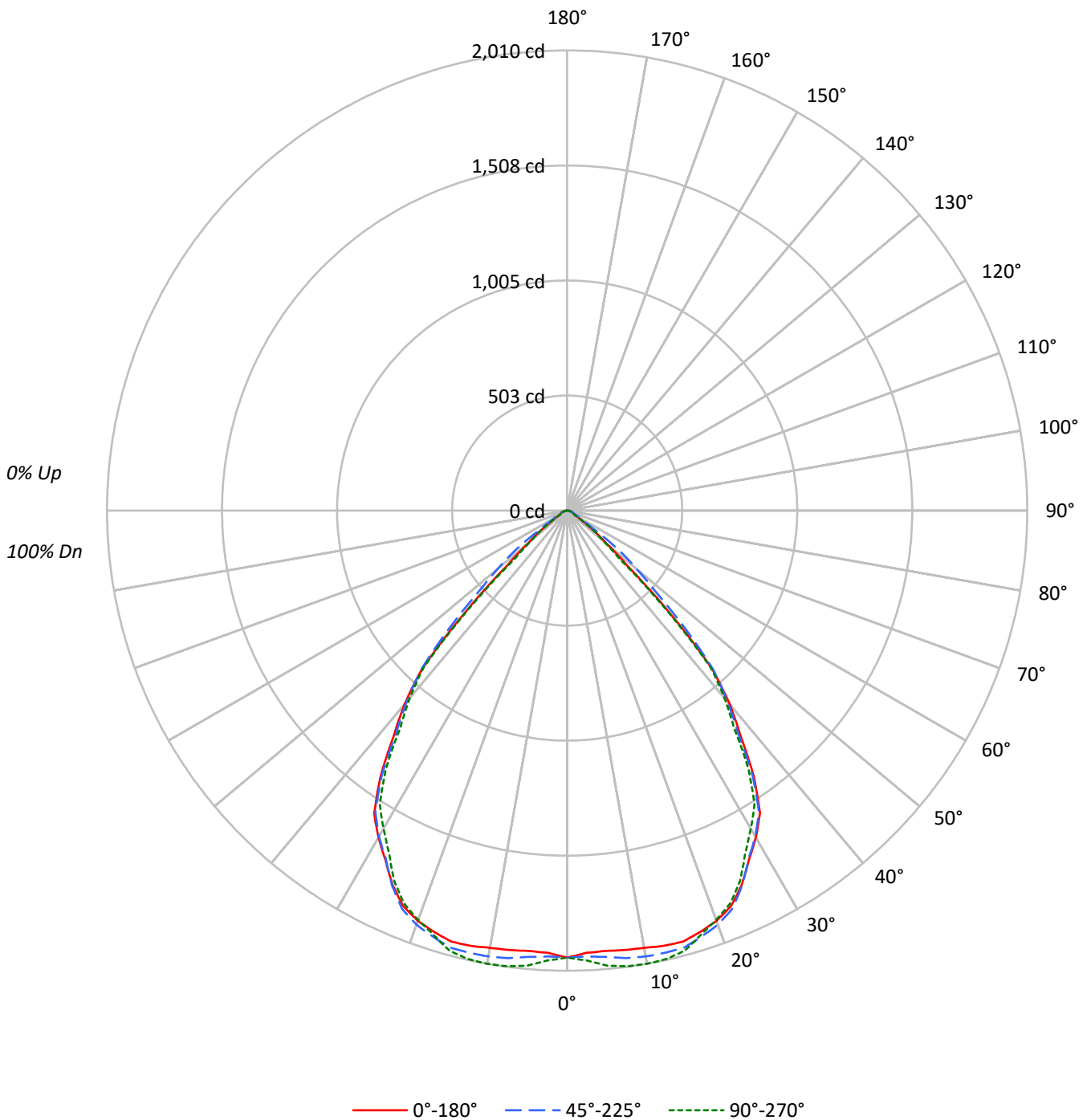
Test Method: LM-79-2019  
Report Number: P645266  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2206-689-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/2/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: OMN4DP-SR4F0-75D930-WBM-1DUDD-WW  
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE  
DOWNLIGHT - WHITE BAFFLE WITH MEDIUM OPTIC - 750 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3139.5 lumens  
Efficiency: N/A  
Efficacy: 112.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19  
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.9  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91				
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	84	83				
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	82	79	77	75				
4	93	84	77	72	91	83	77	72	81	75	71	78	74	70	76	73	69	68				
5	87	77	70	65	85	76	70	65	74	69	64	73	68	64	71	67	63	62				
6	82	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58	56				
7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53	51				
8	72	61	54	49	71	60	54	49	59	53	49	58	53	49	57	52	48	47				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	52	46	42	52	46	42	51	45	41	50	45	41	40				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	25220	25220	25220
5°	25030	25373	25869
10°	25435	25937	26360
15°	26069	26424	26600
20°	26212	26454	26151
25°	25711	25773	25458
30°	24581	24516	23924
35°	22442	22256	21792
40°	18642	18369	18023
45°	11709	13320	11172
50°	4491	7889	4166
55°	2119	3310	2153
60°	1026	1671	912
65°	944	987	853
70°	944	944	835
75°	953	953	808
80°	982	878	766
85°	1097	874	652

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 13320 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.1	6.0
10°-20°	556.2	17.7
20°-30°	826.3	26.3
30°-40°	864.8	27.5
40°-50°	523.8	16.7
50°-60°	120.9	3.9
60°-70°	33.2	1.1
70°-80°	19.4	0.6
80°-90°	6.7	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1570.6	50.0
0°-40°	2435.4	77.6
0°-60°	3080.2	98.1
0°-90°	3139.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3139.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1952	1952	1952	1952	1952	
5°	1930	1975	1957	1965	1995	185
15°	1950	2008	1976	1960	1989	549
25°	1804	1857	1808	1762	1786	826
35°	1423	1445	1411	1379	1382	875
45°	641	729	729	704	612	492
55°	94	107	147	101	96	98
65°	31	32	32	29	28	31
75°	19	19	19	18	16	20
85°	7	7	6	6	4	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1952.5	1952.5	1952.5	1952.5	1952.5
2.5°	1933.6	1968.1	1948.9	1950.5	1966.6
5°	1930.4	1975.0	1956.9	1964.9	1995.1
7.5°	1935.7	1982.3	1971.6	1974.4	2007.4
10°	1939.2	1988.1	1977.5	1976.7	2009.8
12.5°	1947.5	1998.6	1978.6	1974.4	2006.3
15°	1949.5	2008.5	1976.0	1960.5	1989.2
17.5°	1930.4	1995.4	1951.6	1919.5	1942.5
20°	1906.9	1973.0	1924.5	1879.5	1902.5
22.5°	1870.4	1935.4	1883.4	1834.8	1859.0
25°	1804.0	1857.2	1808.4	1761.9	1786.3
27.5°	1719.9	1757.2	1715.5	1671.4	1685.2
30°	1648.1	1685.5	1643.7	1598.3	1604.0
32.5°	1568.1	1599.8	1559.0	1518.3	1522.9
35°	1423.2	1444.7	1411.4	1379.1	1382.0
37.5°	1246.8	1249.6	1227.0	1197.7	1198.2
40°	1105.6	1114.2	1089.4	1066.0	1068.9
42.5°	937.4	971.3	947.1	926.0	926.5
45°	641.0	728.7	729.2	703.6	611.6
47.5°	354.0	455.5	520.8	403.8	304.9
50°	223.5	288.2	392.6	236.1	207.3
52.5°	160.0	189.0	286.7	167.0	152.0
55°	94.1	107.0	147.0	101.3	95.6
57.5°	57.3	68.6	85.9	67.7	57.6
60°	39.7	49.8	64.7	45.3	35.3
62.5°	35.0	38.2	50.6	36.1	32.9
65°	30.9	32.3	32.3	29.4	27.9
67.5°	27.3	28.8	27.3	25.8	24.4
70°	25.0	26.4	25.0	23.5	22.1
72.5°	22.6	24.1	22.6	21.1	19.7
75°	19.1	19.1	19.1	17.6	16.2
77.5°	15.6	15.6	15.3	14.1	12.6
80°	13.2	13.2	11.8	11.7	10.3
82.5°	10.9	10.9	9.4	9.4	7.9
85°	7.4	7.4	5.9	5.8	4.4
87.5°	3.5	3.5	2.4	2.3	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)