

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: P645216

Luminaire Tested: OMN4DP-SR4F0-100D935-WBM-1DUDD-WW

Issue Date: 9/2/2020



**Test Information**

Test Method: LM-79-2019  
Report Number: P645216  
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-SR4F0-100D935-WBM-1DUDD-WW  
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE  
DOWNLIGHT - WHITE BAFFLE WITH MEDIUM OPTIC - 1000 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

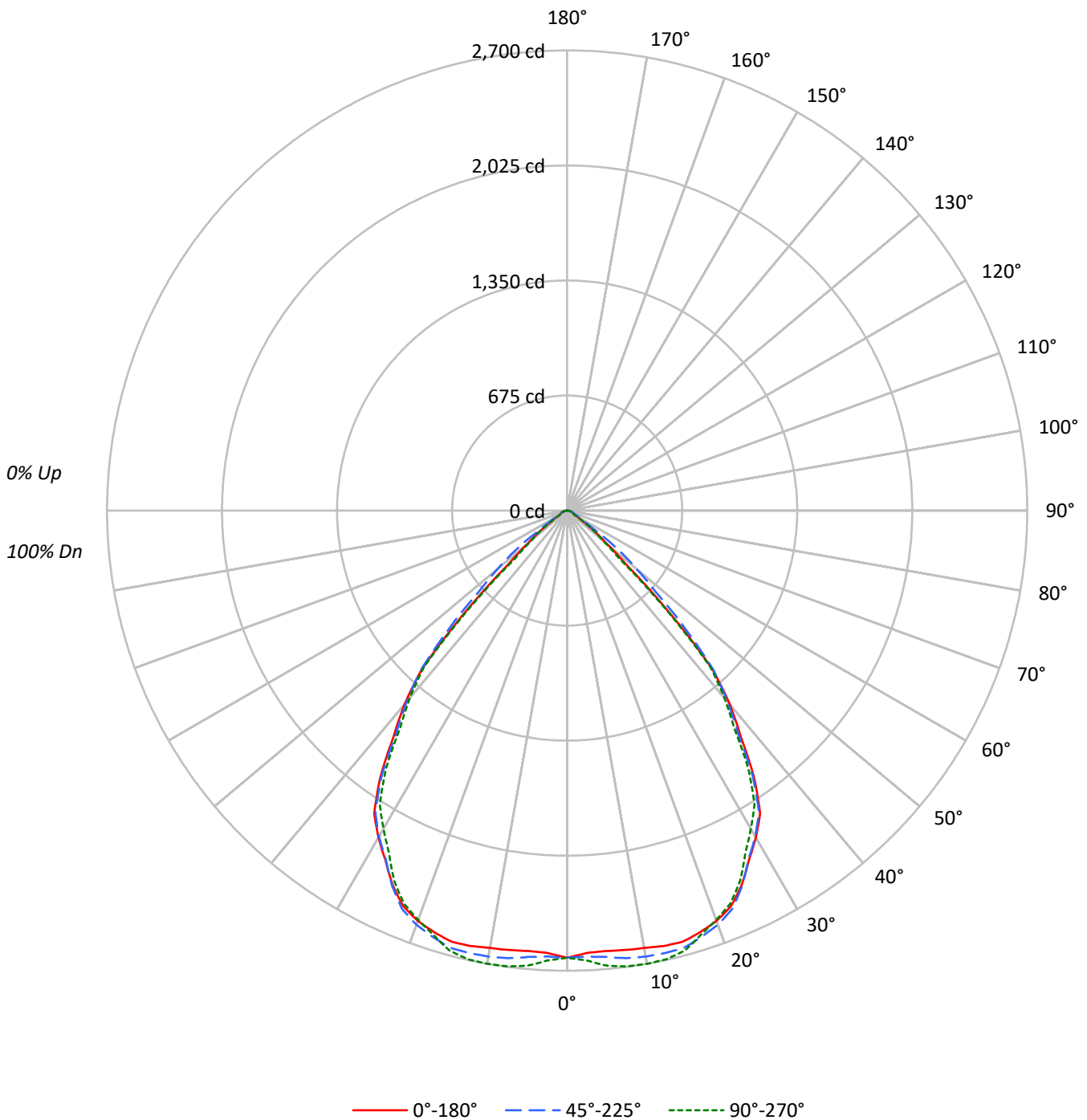
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4218.3 lumens  
Efficiency: N/A  
Efficacy: 110.7 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): 38.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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

TEST NUMBER: P645216

CATALOG NUMBER: OMN4DP-SR4F0-100D935-WBM-1DUDD-WW

### Luminous Intensity Polar Plot





TEST NUMBER: P645216

CATALOG NUMBER: OMN4DP-SR4F0-100D935-WBM-1DUDD-WW

**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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91					91			
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	84	83					83			
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	82	79	77	75					75			
4	93	84	77	72	91	83	77	72	81	75	71	78	74	70	76	73	69	68					68			
5	87	77	70	65	85	76	70	65	74	69	64	73	68	64	71	67	63	62					62			
6	82	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58	56					56			
7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53	51					51			
8	72	61	54	49	71	60	54	49	59	53	49	58	53	49	57	52	48	47					47			
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43					43			
10	64	53	46	42	63	52	46	42	52	46	42	51	45	41	50	45	41	40					40			

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

	0°	45°	90°
0°	33886	33886	33886
5°	33630	34092	34757
10°	34175	34848	35418
15°	35028	35504	35740
20°	35218	35544	35137
25°	34544	34630	34206
30°	33028	32940	32145
35°	30152	29903	29280
40°	25048	24682	24215
45°	15733	17898	15012
50°	6034	10598	5596
55°	2846	4448	2892
60°	1377	2245	1225
65°	1268	1330	1146
70°	1269	1269	1118
75°	1283	1283	1083
80°	1324	1175	1027
85°	1467	1171	874

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 17898 cd/sqm



TEST NUMBER: P645216

CATALOG NUMBER: OMN4DP-SR4F0-100D935-WBM-1DUDD-WW

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	252.7	6.0
10°-20°	747.4	17.7
20°-30°	1110.2	26.3
30°-40°	1162.0	27.5
40°-50°	703.8	16.7
50°-60°	162.4	3.8
60°-70°	44.6	1.1
70°-80°	26.1	0.6
80°-90°	9.0	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°	2110.3	50.0
0°-40°	3272.3	77.6
0°-60°	4138.5	98.1
0°-90°	4218.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4218.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2623	2623	2623	2623	2623	
5°	2594	2654	2629	2640	2681	248
15°	2619	2699	2655	2634	2673	737
25°	2424	2495	2430	2367	2400	1110
35°	1912	1941	1896	1853	1857	1175
45°	861	979	980	945	822	661
55°	126	144	198	136	128	131
65°	42	43	44	40	38	42
75°	26	26	26	24	22	27
85°	10	10	8	8	6	10
90°	0	0	0	0	0	



TEST NUMBER: P645216

CATALOG NUMBER: OMN4DP-SR4F0-100D935-WBM-1DUDD-WW

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2623.4	2623.4	2623.4	2623.4	2623.4
2.5°	2598.1	2644.4	2618.6	2620.7	2642.3
5°	2593.7	2653.6	2629.3	2640.1	2680.6
7.5°	2600.8	2663.4	2649.0	2652.8	2697.2
10°	2605.6	2671.2	2656.9	2656.0	2700.4
12.5°	2616.6	2685.4	2658.5	2652.8	2695.7
15°	2619.4	2698.6	2655.0	2634.1	2672.7
17.5°	2593.7	2681.0	2622.2	2579.0	2609.9
20°	2562.1	2651.0	2585.8	2525.3	2556.2
22.5°	2513.1	2600.4	2530.5	2465.3	2497.7
25°	2423.8	2495.3	2429.8	2367.3	2400.1
27.5°	2310.8	2361.1	2304.9	2245.7	2264.2
30°	2214.4	2264.7	2208.5	2147.5	2155.2
32.5°	2107.0	2149.5	2094.7	2040.0	2046.1
35°	1912.2	1941.2	1896.4	1853.0	1856.9
37.5°	1675.2	1679.0	1648.7	1609.2	1610.0
40°	1485.5	1497.1	1463.8	1432.3	1436.1
42.5°	1259.5	1305.1	1272.6	1244.1	1244.9
45°	861.3	979.1	979.8	945.4	821.8
47.5°	475.7	612.0	699.7	542.6	409.7
50°	300.3	387.2	527.4	317.2	278.5
52.5°	214.9	253.9	385.2	224.3	204.3
55°	126.4	143.8	197.5	136.1	128.4
57.5°	77.0	92.1	115.4	91.0	77.4
60°	53.3	66.9	86.9	60.9	47.4
62.5°	47.0	51.3	68.0	48.5	44.2
65°	41.5	43.4	43.5	39.5	37.5
67.5°	36.7	38.7	36.7	34.7	32.8
70°	33.6	35.5	33.6	31.6	29.6
72.5°	30.4	32.4	30.4	28.4	26.5
75°	25.7	25.7	25.7	23.7	21.7
77.5°	20.9	20.9	20.5	18.9	17.0
80°	17.8	17.8	15.8	15.8	13.8
82.5°	14.6	14.6	12.6	12.6	10.7
85°	9.9	9.9	7.9	7.9	5.9
87.5°	4.7	4.7	3.2	3.1	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)