

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: P645238

Luminaire Tested: OMN4DP-SR4F0-125D940-WBM-1DUDD-WW

Issue Date: 9/2/2020



Test Information

Test Method: LM-79-2019
Report Number: P645238
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-SR4F0-125D940-WBM-1DUDD-WW
Description: NEO-RAY CIRQUE 4-INCH DIAMETER LINEAR LED LUMINAIRE
DOWNLIGHT - WHITE BAFFLE WITH MEDIUM OPTIC - 1250 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

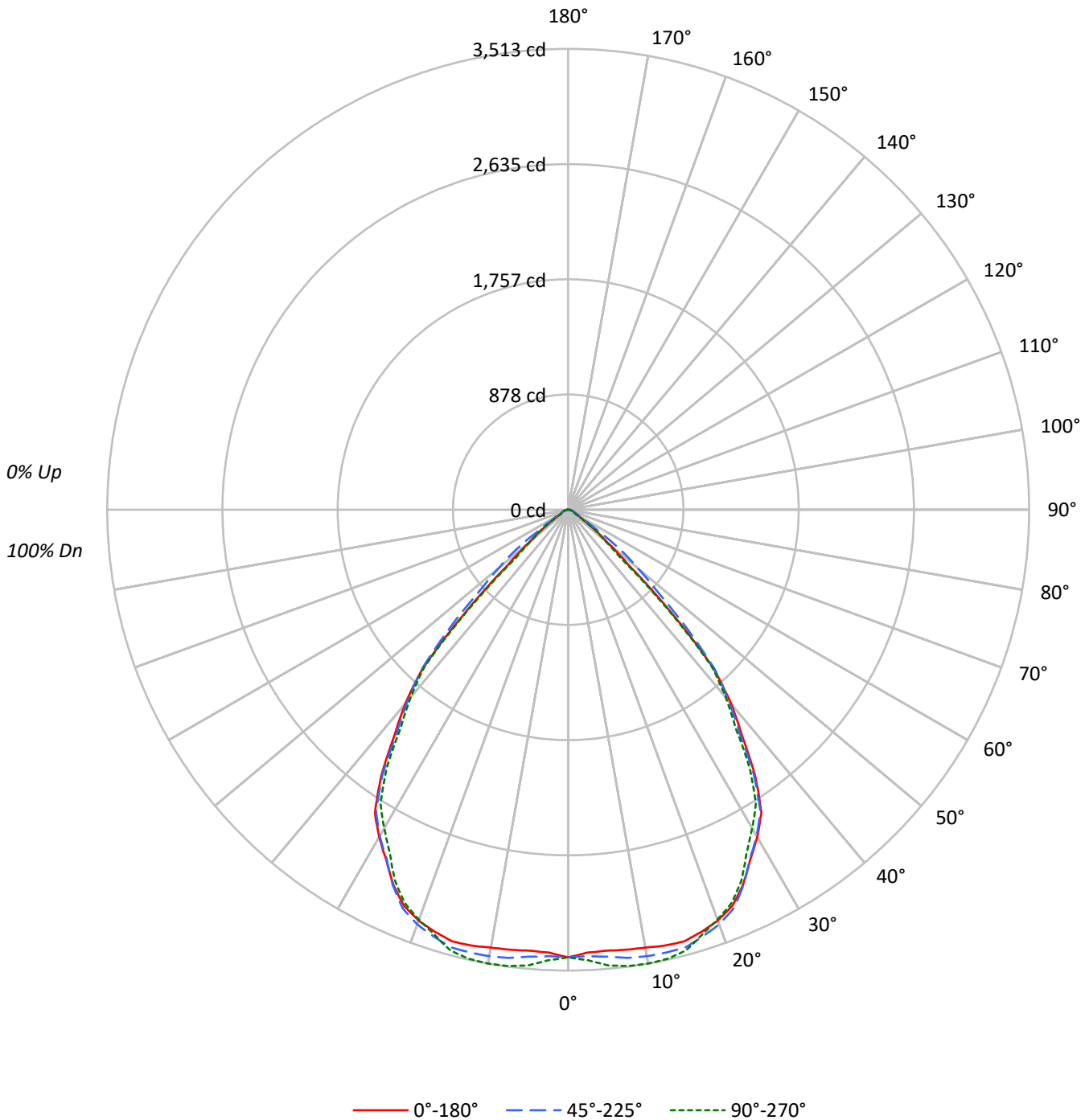
Lumens per Lamp: N/A
Luminaire Lumens: 5487.4 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.21 / 1.19
Luminous Opening: Rectangular (W 0.21' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 49.5
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	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°	44080	44080	44080
5°	43747	44348	45214
10°	44455	45331	46074
15°	45565	46184	46493
20°	45813	46236	45707
25°	44937	45046	44498
30°	42964	42849	41814
35°	39224	38899	38089
40°	32583	32106	31501
45°	20466	23283	19527
50°	7849	13787	7280
55°	3704	5788	3761
60°	1793	2922	1594
65°	1650	1727	1492
70°	1650	1650	1454
75°	1667	1667	1412
80°	1718	1532	1339
85°	1897	1526	1141

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 23283 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.7	6.0
10°-20°	972.2	17.7
20°-30°	1444.2	26.3
30°-40°	1511.6	27.5
40°-50°	915.6	16.7
50°-60°	211.3	3.9
60°-70°	58.1	1.1
70°-80°	34.0	0.6
80°-90°	11.7	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°	2745.1	50.0
0°-40°	4256.7	77.6
0°-60°	5383.6	98.1
0°-90°	5487.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5487.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3413	3413	3413	3413	3413	
5°	3374	3452	3420	3434	3487	323
15°	3407	3510	3454	3426	3477	959
25°	3153	3246	3161	3080	3122	1444
35°	2488	2525	2467	2410	2416	1529
45°	1120	1274	1275	1230	1069	860
55°	164	187	257	177	167	171
65°	54	56	56	51	49	54
75°	33	33	33	31	28	35
85°	13	13	10	10	8	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3412.6	3412.6	3412.6	3412.6	3412.6
2.5°	3379.7	3440.0	3406.4	3409.1	3437.2
5°	3374.0	3451.9	3420.3	3434.3	3487.1
7.5°	3383.3	3464.7	3446.0	3450.9	3508.7
10°	3389.4	3474.9	3456.2	3455.0	3512.8
12.5°	3403.8	3493.3	3458.3	3450.8	3506.6
15°	3407.4	3510.4	3453.7	3426.5	3476.8
17.5°	3374.0	3487.6	3411.0	3354.9	3395.1
20°	3332.9	3448.5	3363.7	3285.0	3325.2
22.5°	3269.2	3382.7	3291.8	3206.9	3249.1
25°	3153.0	3246.0	3160.7	3079.5	3122.2
27.5°	3006.0	3071.4	2998.3	2921.3	2945.4
30°	2880.6	2946.0	2872.9	2793.5	2803.5
32.5°	2740.8	2796.1	2724.9	2653.7	2661.7
35°	2487.5	2525.2	2466.9	2410.5	2415.5
37.5°	2179.1	2184.1	2144.7	2093.3	2094.3
40°	1932.4	1947.5	1904.1	1863.1	1868.2
42.5°	1638.4	1697.7	1655.4	1618.4	1619.4
45°	1120.4	1273.7	1274.6	1229.8	1069.0
47.5°	618.8	796.2	910.2	705.8	533.0
50°	390.6	503.7	686.1	412.6	362.3
52.5°	279.6	330.3	501.1	291.8	265.7
55°	164.5	187.1	257.0	177.1	167.0
57.5°	100.2	119.8	150.1	118.3	100.7
60°	69.4	87.0	113.1	79.3	61.7
62.5°	61.2	66.7	88.4	63.1	57.6
65°	54.0	56.5	56.5	51.3	48.8
67.5°	47.8	50.3	47.8	45.2	42.7
70°	43.7	46.2	43.7	41.1	38.5
72.5°	39.6	42.1	39.6	36.9	34.4
75°	33.4	33.4	33.4	30.8	28.3
77.5°	27.2	27.2	26.7	24.6	22.1
80°	23.1	23.1	20.6	20.5	18.0
82.5°	19.0	19.0	16.4	16.4	13.9
85°	12.8	12.8	10.3	10.2	7.7
87.5°	6.2	6.2	4.1	4.1	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)