

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: P1060292

Luminaire Tested: S124RDR-S1020D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060292
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1020D950-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

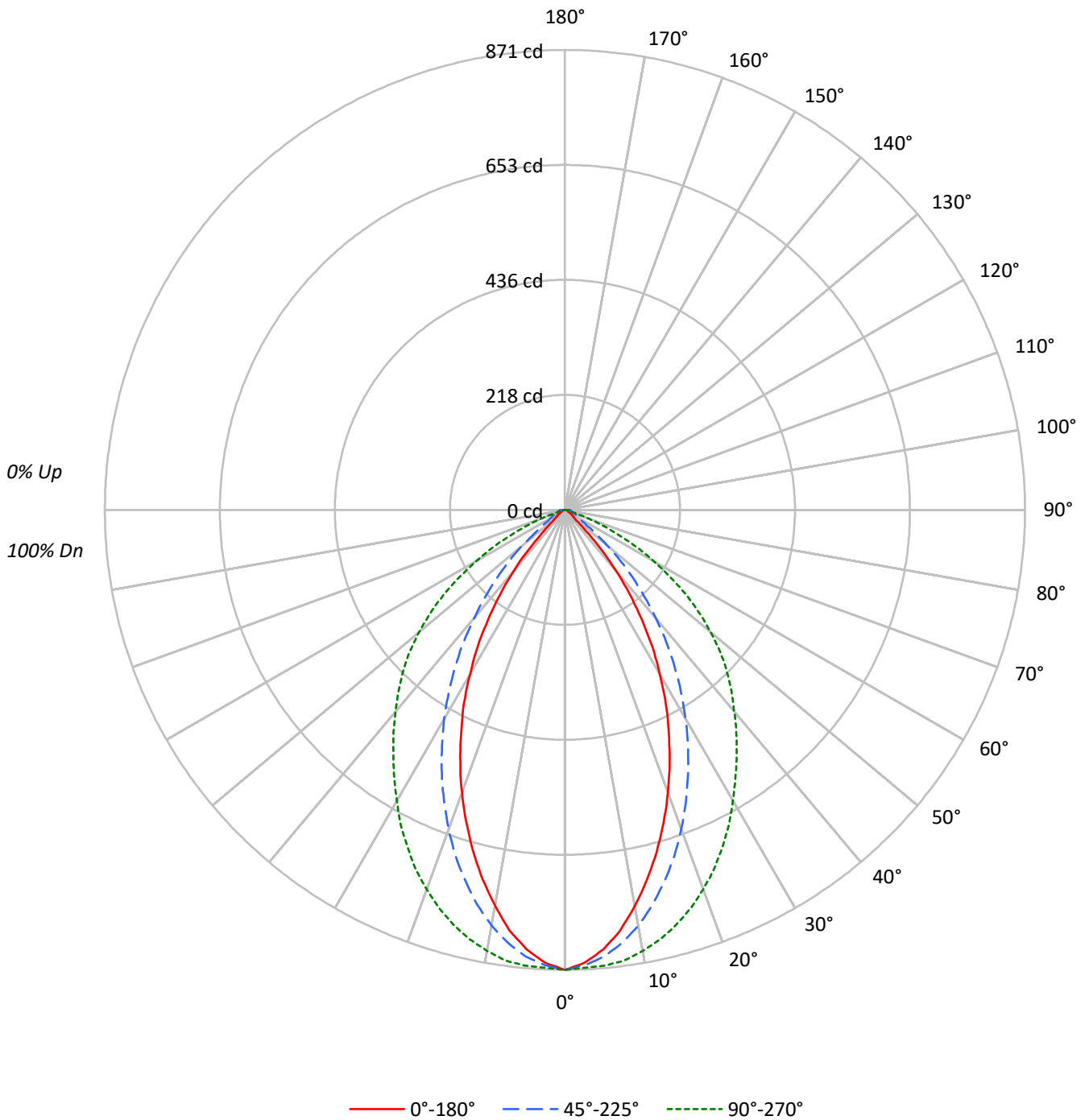
Lumens per Lamp: N/A
Luminaire Lumens: 1093.3 lumens
Efficiency: N/A
Efficacy: 31.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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									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	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	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90																																				
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81																																				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73																																				
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65																																				
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59																																				
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54																																				
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50																																				
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46																																				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42																																				
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39																																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7502	7502	7502
5°	7221	7341	7490
10°	6659	6992	7416
15°	5977	6491	7252
20°	5223	5900	7010
25°	4418	5240	6698
30°	3568	4543	6322
35°	2656	3797	5955
40°	1686	3009	5604
45°	675	2207	5283
50°	293	1407	4823
55°	225	728	4210
60°	158	496	3338
65°	118	493	2280
70°	116	436	1045
75°	153	459	423
80°	228	516	456
85°	454	909	682

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5283 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.7	7.3
10°-20°	205.7	18.8
20°-30°	259.8	23.8
30°-40°	238.6	21.8
40°-50°	162.7	14.9
50°-60°	88.2	8.1
60°-70°	37.4	3.4
70°-80°	12.9	1.2
80°-90°	8.2	0.8
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°	545.2	49.9
0°-40°	783.8	71.7
0°-60°	1034.8	94.6
0°-90°	1093.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1093.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	871	871	871	871	871	
5°	835	848	849	856	866	77
15°	670	692	728	780	814	187
25°	465	495	552	637	705	213
35°	253	286	361	474	566	157
45°	55	89	181	321	434	51
55°	15	16	48	176	280	13
65°	6	7	24	55	112	6
75°	5	13	14	13	13	5
85°	5	9	9	9	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	871.2	871.2	871.2	871.2	871.2
2.5°	858.5	868.8	863.1	865.4	867.7
5°	835.4	848.1	849.2	856.2	866.5
7.5°	803.1	818.1	827.3	844.6	860.8
10°	761.5	780.0	799.6	827.3	848.1
12.5°	717.7	737.3	766.2	805.4	833.1
15°	670.4	692.3	728.1	780.0	813.5
17.5°	620.8	645.0	687.7	748.8	791.5
20°	570.0	596.5	643.8	713.1	765.0
22.5°	518.1	545.8	597.7	676.2	737.3
25°	465.0	495.0	551.5	636.9	705.0
27.5°	414.2	441.9	504.2	597.7	672.7
30°	358.8	390.0	456.9	557.3	635.8
32.5°	308.1	338.1	408.5	515.8	601.2
35°	252.7	286.2	361.2	474.2	566.5
37.5°	200.8	233.1	315.0	435.0	533.1
40°	150.0	183.5	267.7	395.8	498.5
42.5°	100.4	136.2	222.7	355.4	466.2
45°	55.4	88.8	181.2	320.8	433.8
47.5°	28.8	48.5	141.9	286.2	399.2
50°	21.9	26.5	105.0	248.1	360.0
52.5°	18.5	19.6	71.5	210.0	320.8
55°	15.0	16.2	48.5	176.5	280.4
57.5°	11.5	12.7	34.6	144.2	235.4
60°	9.2	10.4	28.8	110.8	193.8
62.5°	6.9	8.1	27.7	81.9	152.3
65°	5.8	6.9	24.2	55.4	111.9
67.5°	4.6	6.9	20.8	35.8	75.0
70°	4.6	9.2	17.3	23.1	41.5
72.5°	4.6	10.4	15.0	15.0	15.0
75°	4.6	12.7	13.8	12.7	12.7
77.5°	4.6	11.5	11.5	11.5	11.5
80°	4.6	10.4	10.4	10.4	9.2
82.5°	4.6	9.2	10.4	10.4	8.1
85°	4.6	9.2	9.2	9.2	6.9
87.5°	3.5	9.2	9.2	9.2	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)