

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: P1060607

Luminaire Tested: S124RDR-S795D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060607
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-S795D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

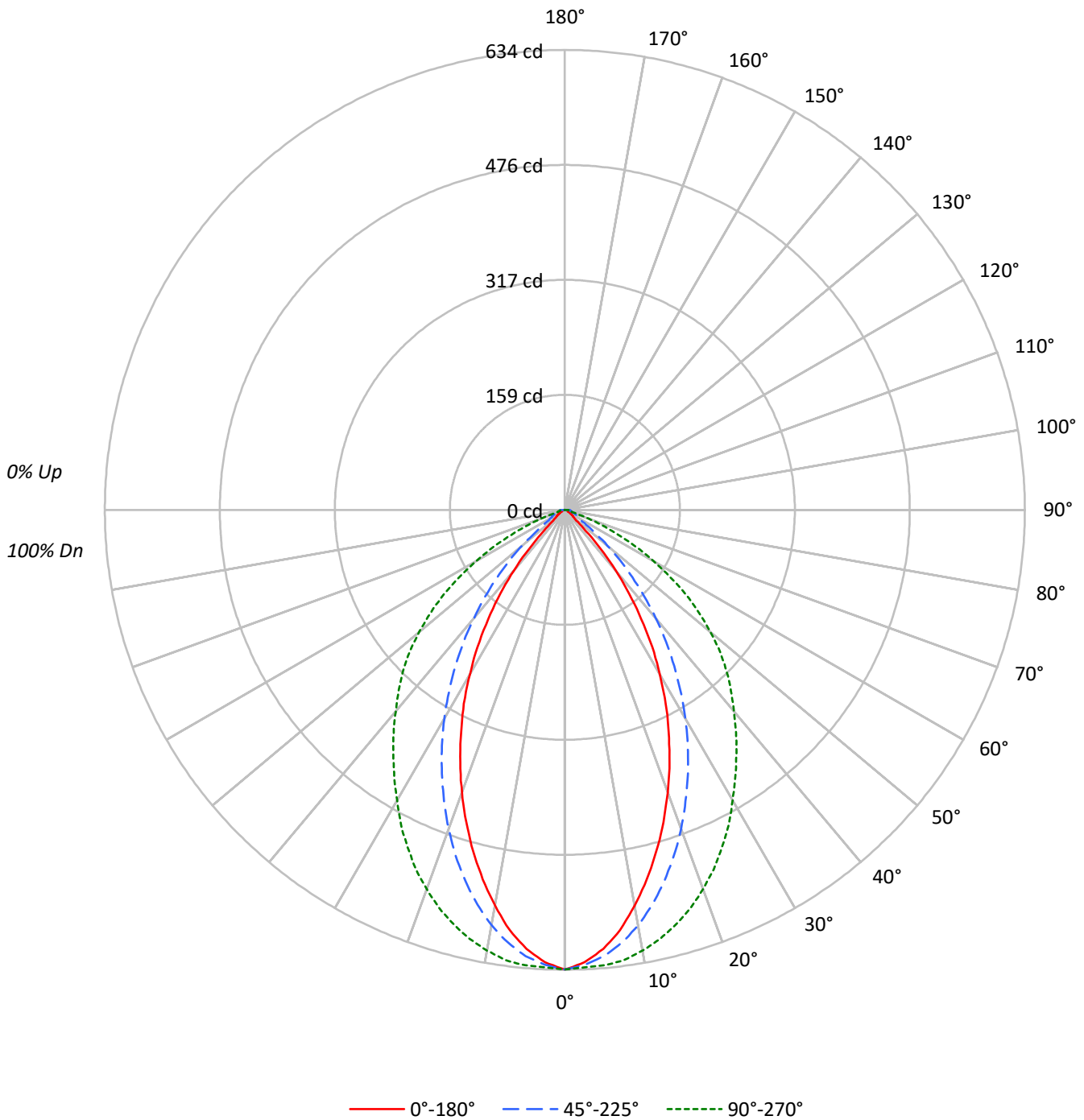
Lumens per Lamp: N/A
Luminaire Lumens: 795.3 lumens
Efficiency: N/A
Efficacy: 30.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	108	105	102	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°	5456	5456	5456
5°	5252	5339	5448
10°	4843	5085	5394
15°	4347	4721	5275
20°	3799	4291	5099
25°	3213	3812	4872
30°	2595	3304	4598
35°	1932	2762	4332
40°	1226	2189	4076
45°	491	1605	3843
50°	213	1023	3509
55°	164	528	3061
60°	115	362	2428
65°	86	359	1659
70°	86	317	760
75°	113	336	306
80°	169	377	332
85°	336	662	494

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3843 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.0	7.3
10°-20°	149.6	18.8
20°-30°	189.0	23.8
30°-40°	173.6	21.8
40°-50°	118.3	14.9
50°-60°	64.2	8.1
60°-70°	27.2	3.4
70°-80°	9.4	1.2
80°-90°	6.0	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°	396.6	49.9
0°-40°	570.1	71.7
0°-60°	752.6	94.6
0°-90°	795.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	795.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	634	634	634	634	634	
5°	608	617	618	623	630	56
15°	488	504	530	567	592	136
25°	338	360	401	463	513	155
35°	184	208	263	345	412	114
45°	40	65	132	233	316	37
55°	11	12	35	128	204	10
65°	4	5	18	40	81	4
75°	3	9	10	9	9	4
85°	3	7	7	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	633.6	633.6	633.6	633.6	633.6
2.5°	624.4	632.0	627.8	629.4	631.1
5°	607.6	616.9	617.7	622.7	630.3
7.5°	584.1	595.0	601.8	614.3	626.1
10°	553.9	567.3	581.6	601.8	616.9
12.5°	522.0	536.3	557.3	585.8	605.9
15°	487.6	503.6	529.6	567.3	591.7
17.5°	451.5	469.1	500.2	544.7	575.7
20°	414.6	433.9	468.3	518.7	556.4
22.5°	376.8	397.0	434.7	491.8	536.3
25°	338.2	360.0	401.2	463.3	512.8
27.5°	301.3	321.4	366.8	434.7	489.3
30°	261.0	283.7	332.3	405.4	462.4
32.5°	224.1	245.9	297.1	375.2	437.3
35°	183.8	208.1	262.7	344.9	412.1
37.5°	146.0	169.5	229.1	316.4	387.7
40°	109.1	133.4	194.7	287.9	362.6
42.5°	73.0	99.0	162.0	258.5	339.1
45°	40.3	64.6	131.8	233.3	315.6
47.5°	21.0	35.2	103.2	208.1	290.4
50°	15.9	19.3	76.4	180.4	261.9
52.5°	13.4	14.3	52.0	152.7	233.3
55°	10.9	11.7	35.2	128.4	203.9
57.5°	8.4	9.2	25.2	104.9	171.2
60°	6.7	7.6	21.0	80.6	141.0
62.5°	5.0	5.9	20.1	59.6	110.8
65°	4.2	5.0	17.6	40.3	81.4
67.5°	3.4	5.0	15.1	26.0	54.6
70°	3.4	6.7	12.6	16.8	30.2
72.5°	3.4	7.6	10.9	10.9	10.9
75°	3.4	9.2	10.1	9.2	9.2
77.5°	3.4	8.4	8.4	8.4	8.4
80°	3.4	7.6	7.6	7.6	6.7
82.5°	3.4	6.7	7.6	7.6	5.9
85°	3.4	6.7	6.7	6.7	5.0
87.5°	2.5	6.7	6.7	6.7	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)