

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: P1060564

Luminaire Tested: S124RDR-S795D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060564
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S795D840-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

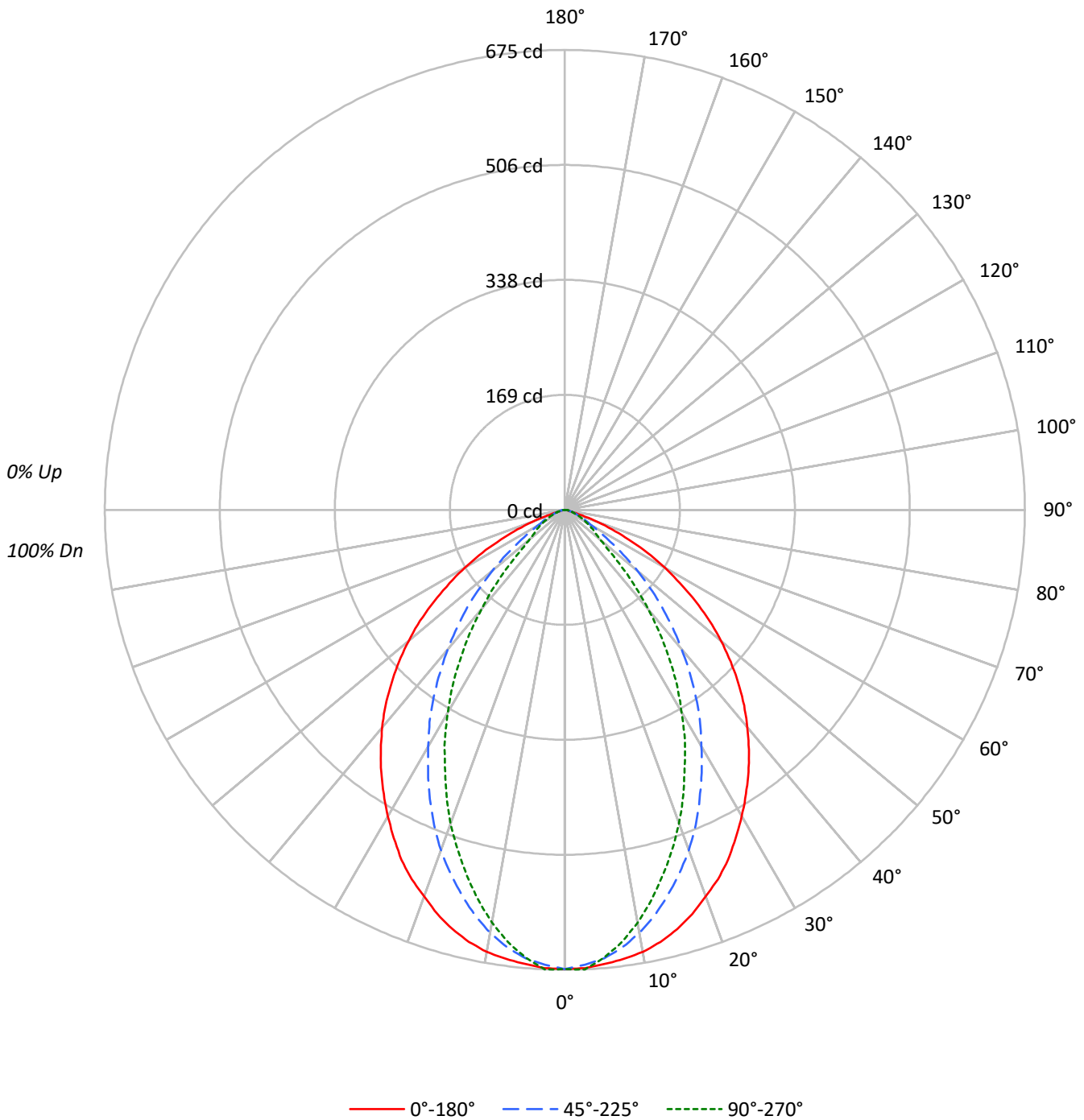
Lumens per Lamp: N/A
Luminaire Lumens: 993.8 lumens
Efficiency: N/A
Efficacy: 38.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	97	98	96	94	95	93	92	90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71				
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				
5	84	74	66	61	82	73	66	60	71	65	60	69	64	59	67	62	59	57				
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47				
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43				
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39				
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5805	5805	5805
5°	5785	5712	5703
10°	5761	5512	5379
15°	5680	5213	4951
20°	5533	4872	4489
25°	5385	4448	3951
30°	5164	3984	3408
35°	4941	3523	2814
40°	4685	2999	2135
45°	4382	2451	1433
50°	4007	1857	891
55°	3521	1227	755
60°	2911	753	622
65°	2109	581	503
70°	1148	431	383
75°	253	316	346
80°	188	233	283
85°	188	188	277

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4382 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.4	6.3
10°-20°	165.9	16.7
20°-30°	219.7	22.1
30°-40°	218.1	21.9
40°-50°	167.8	16.9
50°-60°	100.0	10.1
60°-70°	45.5	4.6
70°-80°	11.8	1.2
80°-90°	2.6	0.3
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°	448.1	45.1
0°-40°	666.2	67.0
0°-60°	934.0	94.0
0°-90°	993.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	993.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	674	674	674	674	674	
5°	669	670	661	661	660	64
15°	637	621	585	565	555	179
25°	567	526	468	429	416	260
35°	470	411	335	284	268	293
45°	360	290	201	140	118	277
55°	234	167	82	51	50	209
65°	104	62	28	25	25	104
75°	8	10	10	10	10	16
85°	2	2	2	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	674.1	674.1	674.1	674.1	674.1
2.5°	673.1	674.1	668.4	673.1	675.0
5°	669.3	670.3	660.8	660.8	659.8
7.5°	664.6	662.7	647.5	641.8	639.9
10°	658.9	652.3	630.4	619.0	615.2
12.5°	649.4	639.0	609.5	593.4	586.7
15°	637.1	620.9	584.8	564.9	555.4
17.5°	621.9	601.9	559.2	533.6	523.1
20°	603.8	577.2	531.7	499.4	489.9
22.5°	586.7	553.5	501.3	464.3	453.8
25°	566.8	526.0	468.1	429.1	415.8
27.5°	543.1	499.4	434.8	395.0	381.7
30°	519.3	470.9	400.7	358.9	342.7
32.5°	494.6	441.5	369.3	321.9	306.7
35°	470.0	411.1	335.1	283.9	267.7
37.5°	443.4	380.7	301.0	247.8	229.8
40°	416.8	351.3	266.8	212.7	189.9
42.5°	389.3	320.9	233.6	176.6	153.8
45°	359.8	289.6	201.3	140.5	117.7
47.5°	330.4	260.1	169.0	105.4	84.5
50°	299.1	228.8	138.6	76.9	66.5
52.5°	267.7	198.4	108.2	59.8	57.0
55°	234.5	167.1	81.7	51.3	50.3
57.5°	200.3	138.6	58.9	44.6	42.7
60°	169.0	112.0	43.7	38.0	36.1
62.5°	136.7	84.5	36.1	31.3	29.4
65°	103.5	61.7	28.5	24.7	24.7
67.5°	75.0	41.8	22.8	19.9	19.0
70°	45.6	25.6	17.1	16.1	15.2
72.5°	22.8	15.2	13.3	12.3	12.3
75°	7.6	9.5	9.5	10.4	10.4
77.5°	5.7	6.6	6.6	7.6	7.6
80°	3.8	4.7	4.7	5.7	5.7
82.5°	2.8	2.8	3.8	3.8	4.7
85°	1.9	1.9	1.9	2.8	2.8
87.5°	0.9	0.9	0.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)