

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: P1060561

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060561
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S795D840-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

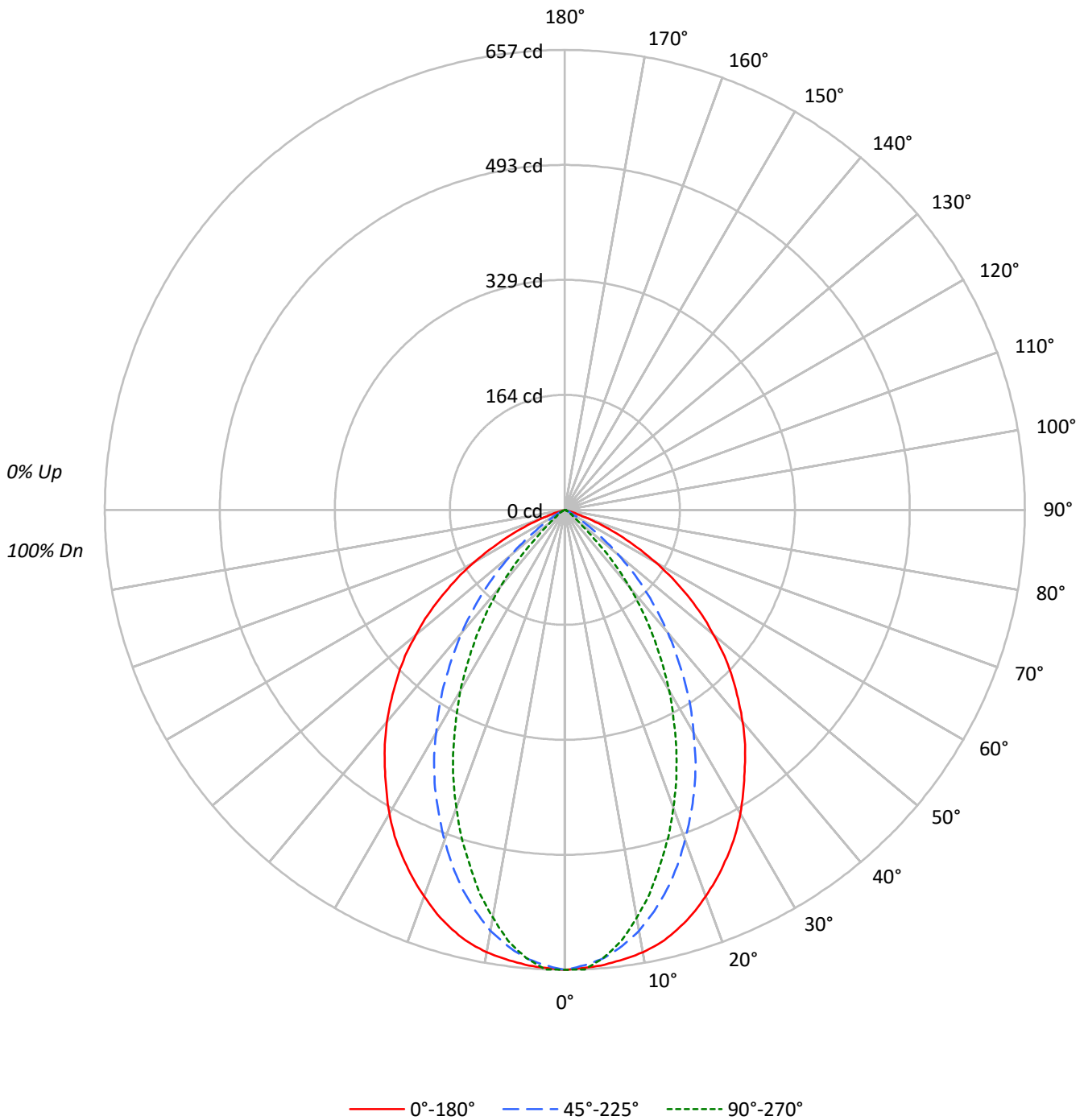
Lumens per Lamp: N/A
Luminaire Lumens: 857.9 lumens
Efficiency: N/A
Efficacy: 33.3 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91				
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66				
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55				
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46				
9	67	56	49	45	66	56	49	44	54	48	44	54	48	44	53	48	44	42				
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5658	5658	5658
5°	5638	5556	5548
10°	5612	5338	5172
15°	5535	5011	4680
20°	5386	4602	4150
25°	5205	4167	3581
30°	4985	3653	2964
35°	4711	3134	2305
40°	4440	2572	1612
45°	4116	1978	798
50°	3714	1336	267
55°	3207	685	185
60°	2568	245	131
65°	1760	134	57
70°	788	70	48
75°	0	30	30
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4116 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.7	7.1
10°-20°	159.0	18.5
20°-30°	205.9	24.0
30°-40°	195.6	22.8
40°-50°	138.5	16.1
50°-60°	71.1	8.3
60°-70°	24.9	2.9
70°-80°	2.1	0.2
80°-90°	0.0	0.0
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°	425.6	49.6
0°-40°	621.2	72.4
0°-60°	830.9	96.9
0°-90°	857.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	857.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	657	657	657	657	657	
5°	652	653	643	643	642	62
15°	621	602	562	536	525	175
25°	548	505	439	392	377	252
35°	448	383	298	240	219	280
45°	338	260	162	93	66	260
55°	214	140	46	13	12	191
65°	86	42	7	4	3	86
75°	0	1	1	1	1	7
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	657.0	657.0	657.0	657.0	657.0
2.5°	655.1	657.0	651.3	656.1	657.0
5°	652.3	653.2	642.8	642.8	641.8
7.5°	647.5	645.6	628.5	621.9	620.9
10°	641.8	635.2	610.5	596.2	591.5
12.5°	633.3	620.9	587.7	566.8	561.1
15°	620.9	601.9	562.1	535.5	525.0
17.5°	605.7	581.1	533.6	501.3	490.9
20°	587.7	556.4	502.2	466.2	452.9
22.5°	568.7	532.6	470.0	429.1	415.9
25°	547.8	505.1	438.6	392.1	376.9
27.5°	526.0	475.7	404.5	356.0	336.1
30°	501.3	446.2	367.4	317.1	298.1
32.5°	474.7	414.0	334.2	280.1	257.3
35°	448.1	382.6	298.1	240.2	219.3
37.5°	422.5	353.2	262.0	201.3	181.3
40°	395.0	320.9	228.8	166.2	143.4
42.5°	366.5	289.6	194.6	130.1	105.4
45°	338.0	260.1	162.4	93.0	65.5
47.5°	309.5	228.8	131.0	58.9	35.1
50°	277.2	198.4	99.7	31.3	19.9
52.5°	246.9	169.9	71.2	18.0	15.2
55°	213.6	140.5	45.6	13.3	12.3
57.5°	182.3	112.0	25.6	10.4	9.5
60°	149.1	86.4	14.2	8.5	7.6
62.5°	115.8	62.7	9.5	5.7	4.7
65°	86.4	41.8	6.6	3.8	2.8
67.5°	57.0	23.7	4.7	1.9	1.9
70°	31.3	11.4	2.8	1.9	1.9
72.5°	11.4	3.8	1.9	0.9	0.9
75°	0.0	0.9	0.9	0.9	0.9
77.5°	0.0	0.0	0.0	0.0	0.9
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)