

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060516

Luminaire Tested: S124RDRP-S575D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060516
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: S124RDRP-S575D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

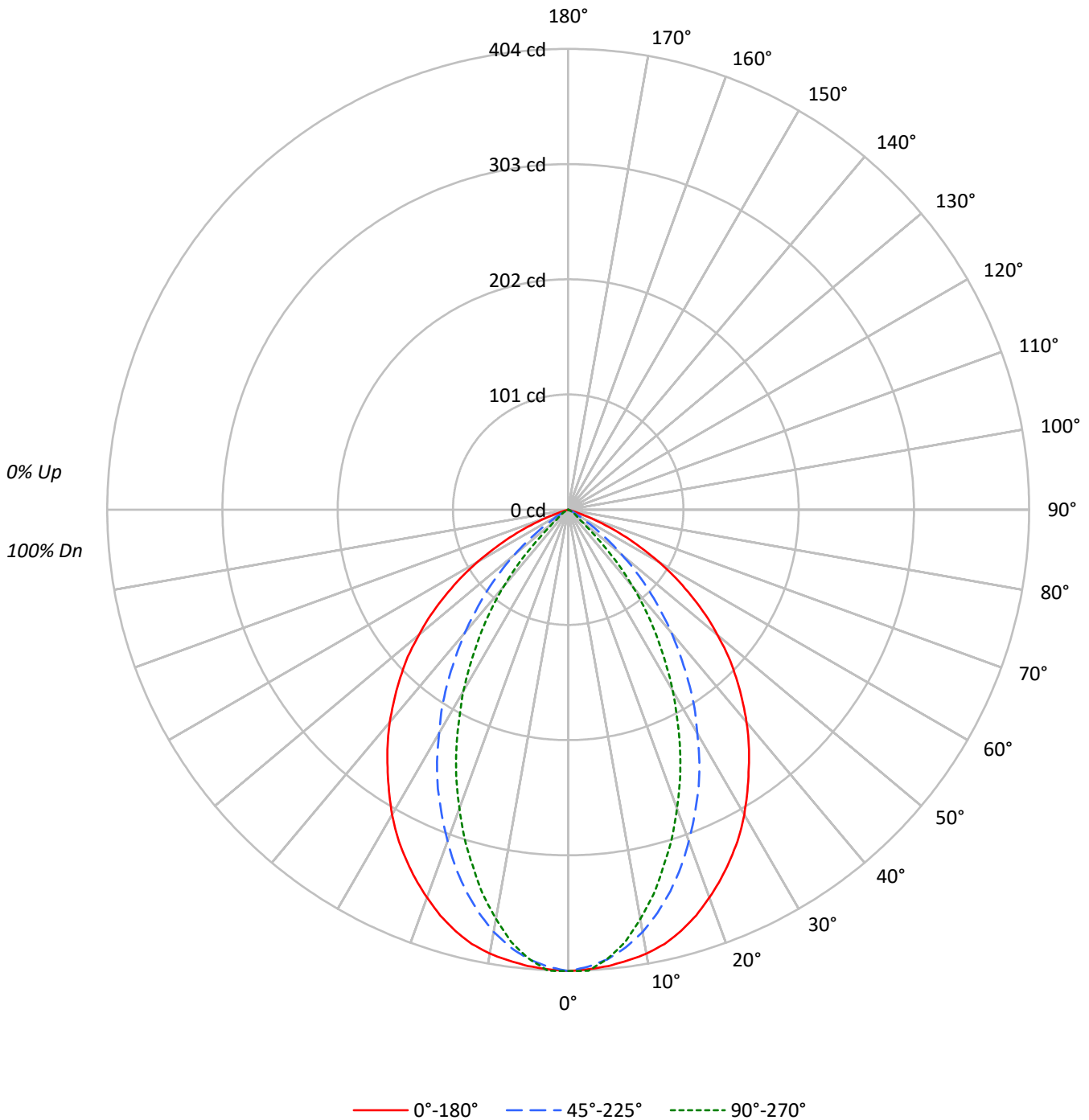
Lumens per Lamp: N/A
Luminaire Lumens: 528.2 lumens
Efficiency: N/A
Efficacy: 26.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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	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	44	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°	3483	3483	3483
5°	3471	3420	3416
10°	3456	3287	3185
15°	3408	3085	2882
20°	3315	2833	2555
25°	3205	2566	2205
30°	3068	2249	1826
35°	2900	1930	1419
40°	2734	1584	993
45°	2534	1218	491
50°	2287	823	165
55°	1974	422	114
60°	1581	152	81
65°	1084	84	37
70°	486	45	30
75°	0	20	20
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2534 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.4	7.1
10°-20°	97.9	18.5
20°-30°	126.8	24.0
30°-40°	120.4	22.8
40°-50°	85.3	16.1
50°-60°	43.8	8.3
60°-70°	15.3	2.9
70°-80°	1.3	0.3
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°	262.0	49.6
0°-40°	382.5	72.4
0°-60°	511.6	96.8
0°-90°	528.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	528.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	404	404	404	404	404	
5°	402	402	396	396	395	38
15°	382	371	346	330	323	107
25°	337	311	270	241	232	155
35°	276	236	184	148	135	173
45°	208	160	100	57	40	160
55°	132	86	28	8	8	118
65°	53	26	4	2	2	53
75°	0	1	1	1	1	4
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°	404.5	404.5	404.5	404.5	404.5
2.5°	403.3	404.5	401.0	403.9	404.5
5°	401.6	402.2	395.7	395.7	395.2
7.5°	398.7	397.5	387.0	382.9	382.3
10°	395.2	391.1	375.9	367.1	364.2
12.5°	389.9	382.3	361.8	349.0	345.5
15°	382.3	370.6	346.1	329.7	323.3
17.5°	372.9	357.7	328.5	308.6	302.2
20°	361.8	342.5	309.2	287.0	278.8
22.5°	350.1	327.9	289.4	264.2	256.0
25°	337.3	311.0	270.1	241.4	232.1
27.5°	323.8	292.9	249.0	219.2	206.9
30°	308.6	274.7	226.2	195.2	183.6
32.5°	292.3	254.9	205.8	172.4	158.4
35°	275.9	235.6	183.6	147.9	135.0
37.5°	260.1	217.5	161.3	123.9	111.7
40°	243.2	197.6	140.9	102.3	88.3
42.5°	225.6	178.3	119.8	80.1	64.9
45°	208.1	160.2	100.0	57.3	40.3
47.5°	190.6	140.9	80.7	36.2	21.6
50°	170.7	122.2	61.4	19.3	12.3
52.5°	152.0	104.6	43.8	11.1	9.4
55°	131.5	86.5	28.1	8.2	7.6
57.5°	112.2	69.0	15.8	6.4	5.8
60°	91.8	53.2	8.8	5.3	4.7
62.5°	71.3	38.6	5.8	3.5	2.9
65°	53.2	25.7	4.1	2.3	1.8
67.5°	35.1	14.6	2.9	1.2	1.2
70°	19.3	7.0	1.8	1.2	1.2
72.5°	7.0	2.3	1.2	0.6	0.6
75°	0.0	0.6	0.6	0.6	0.6
77.5°	0.0	0.0	0.0	0.0	0.6
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

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	12.87	14.12	13.23	14.43	14.75	0.00	0.00	0.00	0.00	0.00
	3H	13.14	14.25	13.52	14.58	14.94	0.00	0.00	0.00	0.00	0.00
	4H	13.07	14.09	13.47	14.44	14.83	0.00	0.00	0.00	0.00	0.00
	6H	12.98	13.92	13.40	14.29	14.68	0.00	0.00	0.00	0.00	0.00
	8H	12.93	13.82	13.37	14.21	14.62	0.00	0.00	0.00	0.00	0.00
	12H	12.89	13.73	13.32	14.12	14.55	0.00	0.00	0.00	0.00	0.00
4H	2H	12.64	13.66	13.04	14.02	14.40	0.00	0.00	0.00	0.00	0.00
	3H	12.92	13.75	13.34	14.16	14.56	0.00	0.00	0.00	0.00	0.00
	4H	12.83	13.56	13.27	13.99	14.43	0.00	0.00	0.00	0.00	0.00
	6H	12.74	13.37	13.21	13.82	14.29	0.00	0.00	0.00	0.00	0.00
	8H	12.68	13.27	13.15	13.72	14.19	0.00	0.00	0.00	0.00	0.00
	12H	12.63	13.15	13.12	13.63	14.11	0.00	0.00	0.00	0.00	0.00
8H	4H	12.68	13.27	13.15	13.72	14.19	0.00	0.00	0.00	0.00	0.00
	6H	12.57	13.05	13.08	13.55	14.03	0.00	0.00	0.00	0.00	0.00
	8H	12.50	12.93	13.03	13.45	13.94	0.00	0.00	0.00	0.00	0.00
	12H	12.46	12.83	12.97	13.33	13.90	0.00	0.00	0.00	0.00	0.00
12H	4H	12.63	13.15	13.12	13.63	14.11	0.00	0.00	0.00	0.00	0.00
	6H	12.50	12.93	13.03	13.45	13.94	0.00	0.00	0.00	0.00	0.00
	8H	12.46	12.83	12.97	13.33	13.90	0.00	0.00	0.00	0.00	0.00