

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: P1060273

Luminaire Tested: S124RDRP-S1020D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060273
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-S1020D935-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

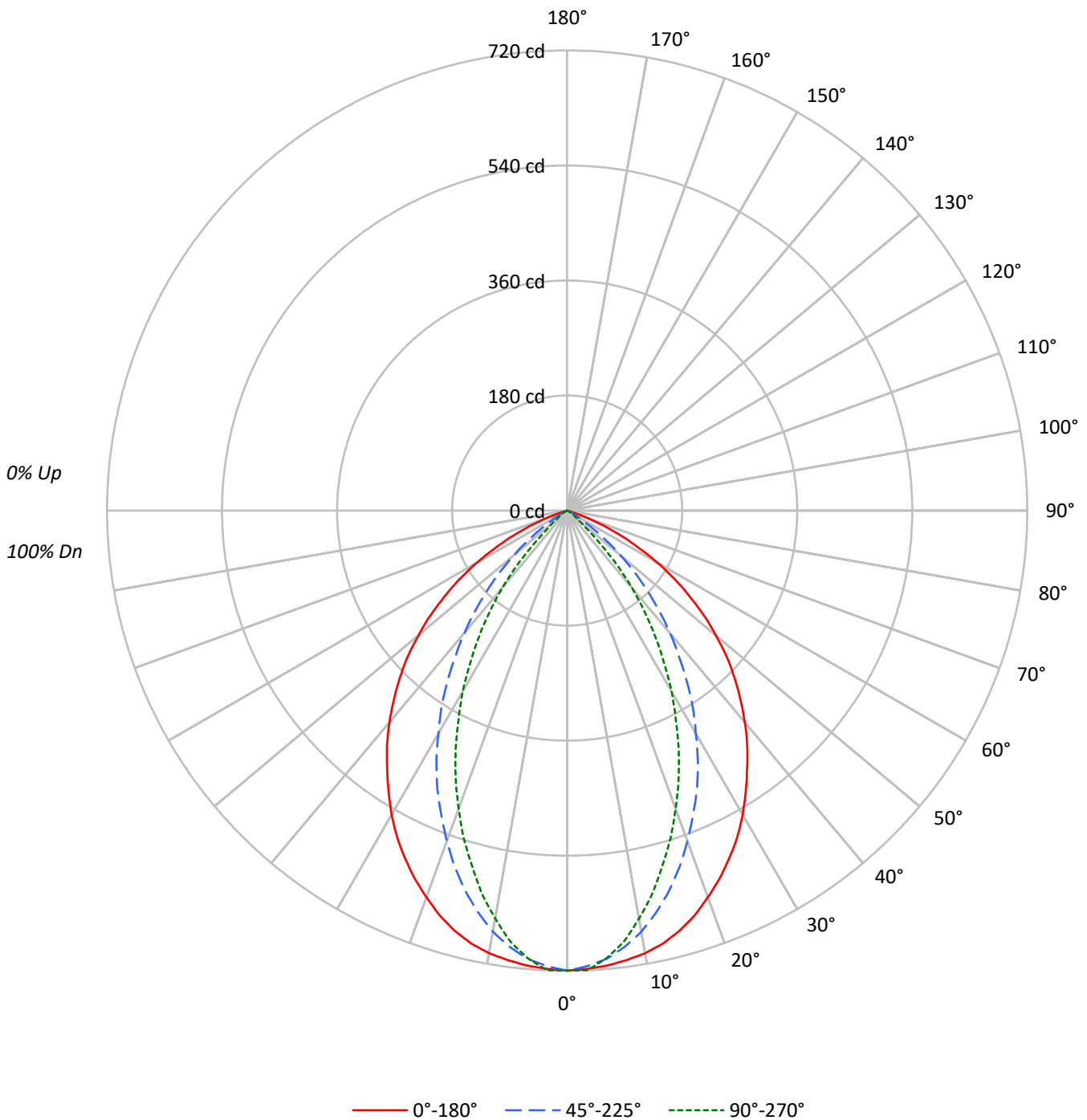
Lumens per Lamp: N/A
Luminaire Lumens: 939.9 lumens
Efficiency: N/A
Efficacy: 26.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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°	6198	6198	6198
5°	6177	6087	6078
10°	6149	5849	5667
15°	6065	5490	5128
20°	5901	5043	4547
25°	5703	4566	3924
30°	5461	4003	3247
35°	5162	3433	2526
40°	4864	2818	1766
45°	4510	2166	874
50°	4069	1463	292
55°	3515	749	203
60°	2812	269	143
65°	1930	149	63
70°	864	78	53
75°	0	33	33
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4510 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.5	7.1
10°-20°	174.2	18.5
20°-30°	225.6	24.0
30°-40°	214.3	22.8
40°-50°	151.8	16.1
50°-60°	77.9	8.3
60°-70°	27.3	2.9
70°-80°	2.3	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°	466.3	49.6
0°-40°	680.6	72.4
0°-60°	910.3	96.8
0°-90°	939.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	939.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	715	716	704	704	703	68
15°	680	660	616	587	575	191
25°	600	553	481	430	413	276
35°	491	419	327	263	240	307
45°	370	285	178	102	72	285
55°	234	154	50	15	14	209
65°	95	46	7	4	3	94
75°	0	1	1	1	1	8
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	719.8	719.8	719.8	719.8	719.8
2.5°	717.8	719.8	713.6	718.8	719.8
5°	714.6	715.7	704.2	704.2	703.2
7.5°	709.4	707.4	688.6	681.3	680.3
10°	703.2	695.9	668.9	653.3	648.1
12.5°	693.8	680.3	643.9	621.0	614.8
15°	680.3	659.5	615.8	586.7	575.2
17.5°	663.7	636.6	584.6	549.2	537.8
20°	643.9	609.6	550.3	510.8	496.2
22.5°	623.1	583.6	514.9	470.2	455.6
25°	600.2	553.4	480.6	429.6	413.0
27.5°	576.3	521.2	443.1	390.1	368.2
30°	549.2	488.9	402.6	347.4	326.6
32.5°	520.1	453.5	366.2	306.9	281.9
35°	491.0	419.2	326.6	263.2	240.3
37.5°	462.9	387.0	287.1	220.5	198.7
40°	432.7	351.6	250.7	182.0	157.1
42.5°	401.5	317.3	213.2	142.5	115.5
45°	370.3	285.0	177.9	101.9	71.8
47.5°	339.1	250.7	143.6	64.5	38.5
50°	303.7	217.4	109.2	34.3	21.8
52.5°	270.5	186.2	78.0	19.8	16.6
55°	234.1	154.0	49.9	14.6	13.5
57.5°	199.7	122.7	28.1	11.4	10.4
60°	163.3	94.7	15.6	9.4	8.3
62.5°	126.9	68.7	10.4	6.2	5.2
65°	94.7	45.8	7.3	4.2	3.1
67.5°	62.4	26.0	5.2	2.1	2.1
70°	34.3	12.5	3.1	2.1	2.1
72.5°	12.5	4.2	2.1	1.0	1.0
75°	0.0	1.0	1.0	1.0	1.0
77.5°	0.0	0.0	0.0	0.0	1.0
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	14.86	16.12	15.23	16.43	16.75	0.00	0.00	0.00	0.00	0.00
	3H	15.14	16.25	15.52	16.58	16.94	0.00	0.00	0.00	0.00	0.00
	4H	15.07	16.09	15.47	16.44	16.83	0.00	0.00	0.00	0.00	0.00
	6H	14.98	15.92	15.40	16.29	16.68	0.00	0.00	0.00	0.00	0.00
	8H	14.93	15.82	15.37	16.21	16.62	0.00	0.00	0.00	0.00	0.00
	12H	14.89	15.73	15.32	16.12	16.55	0.00	0.00	0.00	0.00	0.00
4H	2H	14.64	15.66	15.04	16.01	16.40	0.00	0.00	0.00	0.00	0.00
	3H	14.92	15.75	15.34	16.16	16.56	0.00	0.00	0.00	0.00	0.00
	4H	14.83	15.56	15.27	15.99	16.43	0.00	0.00	0.00	0.00	0.00
	6H	14.74	15.37	15.21	15.82	16.29	0.00	0.00	0.00	0.00	0.00
	8H	14.68	15.27	15.15	15.72	16.19	0.00	0.00	0.00	0.00	0.00
	12H	14.63	15.15	15.12	15.63	16.11	0.00	0.00	0.00	0.00	0.00
8H	4H	14.68	15.27	15.15	15.72	16.19	0.00	0.00	0.00	0.00	0.00
	6H	14.57	15.05	15.08	15.55	16.03	0.00	0.00	0.00	0.00	0.00
	8H	14.50	14.93	15.03	15.45	15.94	0.00	0.00	0.00	0.00	0.00
	12H	14.45	14.83	14.97	15.33	15.90	0.00	0.00	0.00	0.00	0.00
12H	4H	14.63	15.15	15.12	15.63	16.11	0.00	0.00	0.00	0.00	0.00
	6H	14.50	14.93	15.03	15.45	15.94	0.00	0.00	0.00	0.00	0.00
	8H	14.45	14.83	14.97	15.33	15.90	0.00	0.00	0.00	0.00	0.00