

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: P1060498

Luminaire Tested: S124RDRP-S575D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060498
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-S575D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

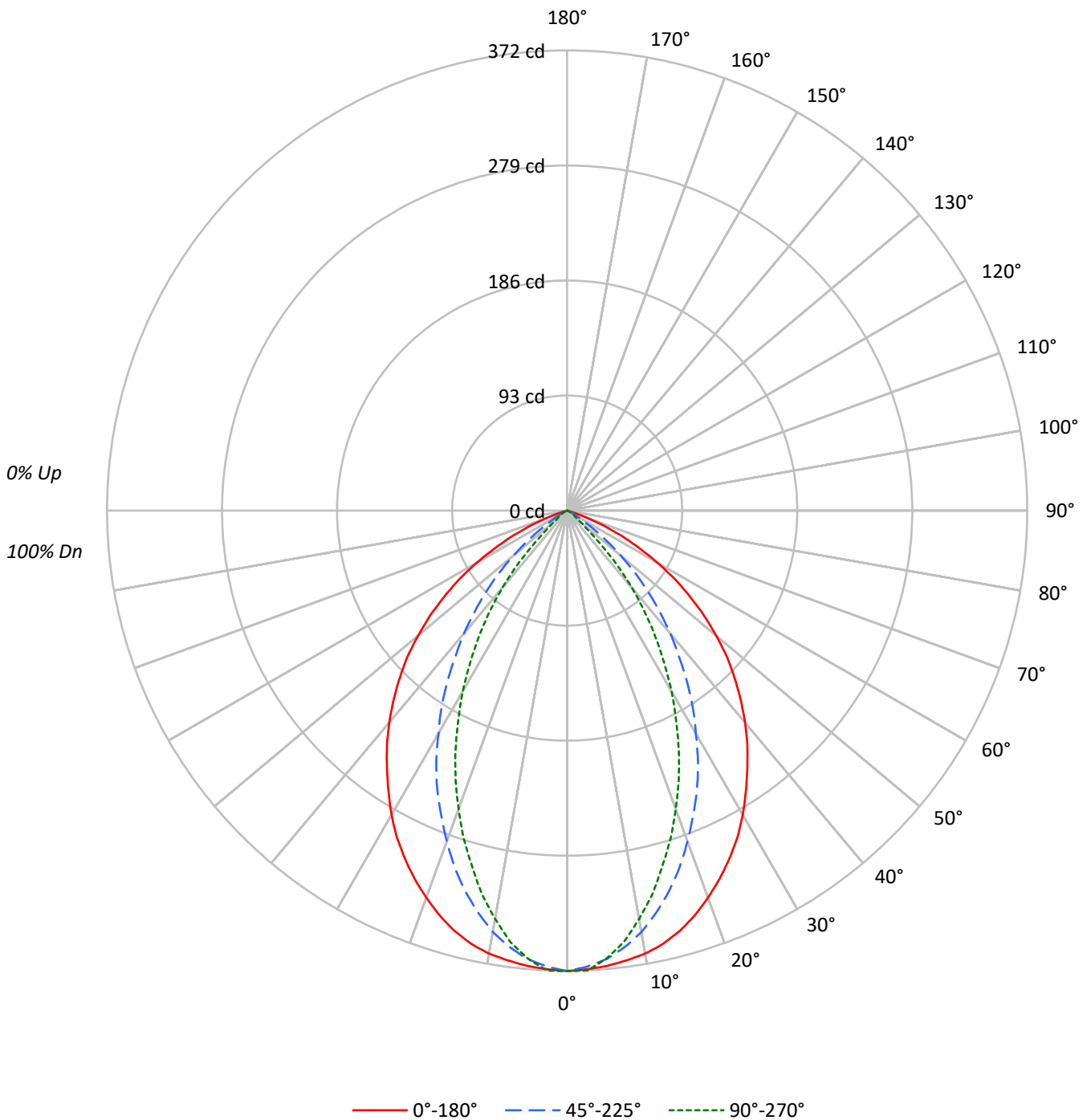
Lumens per Lamp: N/A
Luminaire Lumens: 486.0 lumens
Efficiency: N/A
Efficacy: 24.8 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	3205	3205	3205
5°	3194	3147	3143
10°	3179	3024	2930
15°	3135	2839	2651
20°	3051	2607	2351
25°	2948	2361	2029
30°	2824	2069	1679
35°	2669	1776	1306
40°	2515	1457	913
45°	2332	1120	452
50°	2103	757	151
55°	1817	387	105
60°	1454	140	74
65°	996	77	33
70°	446	40	28
75°	0	17	17
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2332 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.4	7.1
10°-20°	90.1	18.5
20°-30°	116.6	24.0
30°-40°	110.8	22.8
40°-50°	78.5	16.1
50°-60°	40.3	8.3
60°-70°	14.1	2.9
70°-80°	1.2	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°	241.1	49.6
0°-40°	351.9	72.4
0°-60°	470.7	96.8
0°-90°	486.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	486.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	372	372	372	372	372	
5°	370	370	364	364	364	35
15°	352	341	318	303	297	99
25°	310	286	248	222	214	143
35°	254	217	169	136	124	159
45°	192	147	92	53	37	147
55°	121	80	26	8	7	108
65°	49	24	4	2	2	49
75°	0	0	0	0	0	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°	372.2	372.2	372.2	372.2	372.2
2.5°	371.1	372.2	369.0	371.6	372.2
5°	369.5	370.0	364.1	364.1	363.6
7.5°	366.8	365.7	356.0	352.3	351.7
10°	363.6	359.8	345.8	337.8	335.1
12.5°	358.7	351.7	332.9	321.1	317.9
15°	351.7	341.0	318.4	303.3	297.4
17.5°	343.1	329.2	302.3	284.0	278.1
20°	332.9	315.2	284.5	264.1	256.5
22.5°	322.2	301.7	266.2	243.1	235.6
25°	310.3	286.1	248.5	222.1	213.5
27.5°	298.0	269.5	229.1	201.7	190.4
30°	284.0	252.8	208.1	179.6	168.9
32.5°	268.9	234.5	189.3	158.7	145.8
35°	253.9	216.7	168.9	136.1	124.2
37.5°	239.3	200.1	148.4	114.0	102.7
40°	223.7	181.8	129.6	94.1	81.2
42.5°	207.6	164.0	110.3	73.7	59.7
45°	191.5	147.4	92.0	52.7	37.1
47.5°	175.3	129.6	74.2	33.3	19.9
50°	157.0	112.4	56.5	17.7	11.3
52.5°	139.8	96.3	40.3	10.2	8.6
55°	121.0	79.6	25.8	7.5	7.0
57.5°	103.3	63.5	14.5	5.9	5.4
60°	84.4	48.9	8.1	4.8	4.3
62.5°	65.6	35.5	5.4	3.2	2.7
65°	48.9	23.7	3.8	2.2	1.6
67.5°	32.3	13.4	2.7	1.1	1.1
70°	17.7	6.5	1.6	1.1	1.1
72.5°	6.5	2.2	1.1	0.5	0.5
75°	0.0	0.5	0.5	0.5	0.5
77.5°	0.0	0.0	0.0	0.0	0.5
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	12.58	13.83	12.94	14.15	14.46	0.00	0.00	0.00	0.00	0.00
	3H	12.86	13.96	13.24	14.29	14.66	0.00	0.00	0.00	0.00	0.00
	4H	12.78	13.80	13.18	14.16	14.54	0.00	0.00	0.00	0.00	0.00
	6H	12.69	13.63	13.11	14.00	14.40	0.00	0.00	0.00	0.00	0.00
	8H	12.65	13.53	13.08	13.92	14.33	0.00	0.00	0.00	0.00	0.00
	12H	12.60	13.45	13.03	13.83	14.26	0.00	0.00	0.00	0.00	0.00
4H	2H	12.35	13.38	12.76	13.73	14.11	0.00	0.00	0.00	0.00	0.00
	3H	12.63	13.46	13.05	13.87	14.27	0.00	0.00	0.00	0.00	0.00
	4H	12.54	13.28	12.98	13.70	14.14	0.00	0.00	0.00	0.00	0.00
	6H	12.45	13.08	12.92	13.53	14.00	0.00	0.00	0.00	0.00	0.00
	8H	12.39	12.98	12.86	13.43	13.90	0.00	0.00	0.00	0.00	0.00
	12H	12.34	12.86	12.83	13.34	13.82	0.00	0.00	0.00	0.00	0.00
8H	4H	12.39	12.98	12.87	13.43	13.90	0.00	0.00	0.00	0.00	0.00
	6H	12.28	12.76	12.79	13.26	13.74	0.00	0.00	0.00	0.00	0.00
	8H	12.22	12.65	12.74	13.16	13.66	0.00	0.00	0.00	0.00	0.00
	12H	12.17	12.55	12.68	13.04	13.62	0.00	0.00	0.00	0.00	0.00
12H	4H	12.34	12.86	12.83	13.34	13.82	0.00	0.00	0.00	0.00	0.00
	6H	12.22	12.65	12.74	13.16	13.66	0.00	0.00	0.00	0.00	0.00
	8H	12.17	12.55	12.68	13.04	13.62	0.00	0.00	0.00	0.00	0.00