

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: P1060507

Luminaire Tested: S124RDRP-S575D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060507
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-S575D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

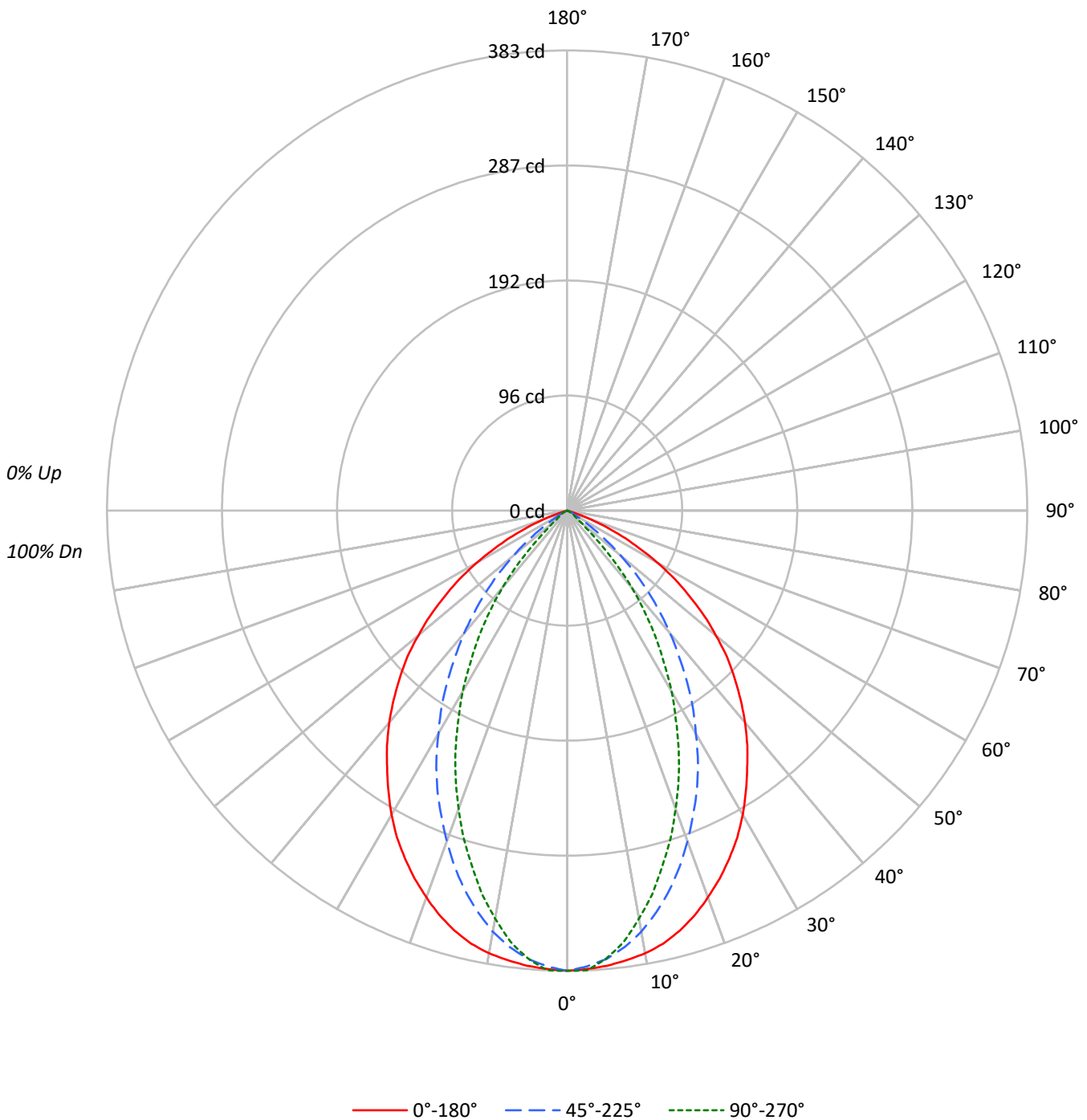
Lumens per Lamp: N/A
Luminaire Lumens: 500.2 lumens
Efficiency: N/A
Efficacy: 25.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	3298	3298	3298
5°	3287	3239	3235
10°	3272	3112	3015
15°	3227	2921	2729
20°	3140	2683	2419
25°	3035	2429	2088
30°	2906	2130	1728
35°	2747	1827	1345
40°	2589	1500	940
45°	2400	1153	465
50°	2165	778	155
55°	1869	399	108
60°	1497	143	76
65°	1027	79	35
70°	461	43	28
75°	0	20	20
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2400 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.4	7.1
10°-20°	92.7	18.5
20°-30°	120.0	24.0
30°-40°	114.0	22.8
40°-50°	80.8	16.1
50°-60°	41.5	8.3
60°-70°	14.5	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°	248.1	49.6
0°-40°	362.2	72.4
0°-60°	484.4	96.8
0°-90°	500.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	500.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	383	383	383	383	383	
5°	380	381	375	375	374	36
15°	362	351	328	312	306	102
25°	319	294	256	229	220	147
35°	261	223	174	140	128	163
45°	197	152	95	54	38	152
55°	124	82	27	8	7	111
65°	50	24	4	2	2	50
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°	383.0	383.0	383.0	383.0	383.0
2.5°	381.9	383.0	379.7	382.5	383.0
5°	380.3	380.8	374.7	374.7	374.2
7.5°	377.5	376.4	366.4	362.6	362.0
10°	374.2	370.3	355.9	347.6	344.8
12.5°	369.2	362.0	342.6	330.5	327.1
15°	362.0	350.9	327.7	312.2	306.1
17.5°	353.2	338.8	311.1	292.3	286.2
20°	342.6	324.4	292.8	271.8	264.0
22.5°	331.6	310.5	274.0	250.2	242.4
25°	319.4	294.5	255.7	228.6	219.8
27.5°	306.7	277.3	235.8	207.6	195.9
30°	292.3	260.2	214.2	184.9	173.8
32.5°	276.8	241.3	194.8	163.3	150.0
35°	261.3	223.1	173.8	140.0	127.9
37.5°	246.3	205.9	152.8	117.3	105.7
40°	230.3	187.1	133.4	96.9	83.6
42.5°	213.7	168.8	113.5	75.8	61.4
45°	197.1	151.7	94.7	54.2	38.2
47.5°	180.5	133.4	76.4	34.3	20.5
50°	161.6	115.7	58.1	18.3	11.6
52.5°	143.9	99.1	41.5	10.5	8.9
55°	124.5	81.9	26.6	7.7	7.2
57.5°	106.3	65.3	14.9	6.1	5.5
60°	86.9	50.4	8.3	5.0	4.4
62.5°	67.5	36.5	5.5	3.3	2.8
65°	50.4	24.4	3.9	2.2	1.7
67.5°	33.2	13.8	2.8	1.1	1.1
70°	18.3	6.6	1.7	1.1	1.1
72.5°	6.6	2.2	1.1	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	12.67	13.93	13.04	14.24	14.56	0.00	0.00	0.00	0.00	0.00
	3H	12.95	14.06	13.33	14.39	14.75	0.00	0.00	0.00	0.00	0.00
	4H	12.87	13.90	13.28	14.25	14.64	0.00	0.00	0.00	0.00	0.00
	6H	12.79	13.73	13.20	14.10	14.49	0.00	0.00	0.00	0.00	0.00
	8H	12.74	13.63	13.17	14.02	14.43	0.00	0.00	0.00	0.00	0.00
	12H	12.70	13.54	13.13	13.93	14.36	0.00	0.00	0.00	0.00	0.00
4H	2H	12.45	13.47	12.85	13.82	14.21	0.00	0.00	0.00	0.00	0.00
	3H	12.73	13.56	13.14	13.96	14.37	0.00	0.00	0.00	0.00	0.00
	4H	12.64	13.37	13.07	13.79	14.24	0.00	0.00	0.00	0.00	0.00
	6H	12.55	13.18	13.02	13.63	14.10	0.00	0.00	0.00	0.00	0.00
	8H	12.49	13.08	12.96	13.53	14.00	0.00	0.00	0.00	0.00	0.00
	12H	12.44	12.95	12.93	13.44	13.91	0.00	0.00	0.00	0.00	0.00
8H	4H	12.49	13.08	12.96	13.53	14.00	0.00	0.00	0.00	0.00	0.00
	6H	12.38	12.86	12.89	13.36	13.84	0.00	0.00	0.00	0.00	0.00
	8H	12.31	12.74	12.84	13.26	13.75	0.00	0.00	0.00	0.00	0.00
	12H	12.26	12.64	12.78	13.14	13.71	0.00	0.00	0.00	0.00	0.00
12H	4H	12.44	12.95	12.93	13.44	13.91	0.00	0.00	0.00	0.00	0.00
	6H	12.31	12.74	12.84	13.26	13.75	0.00	0.00	0.00	0.00	0.00
	8H	12.26	12.64	12.78	13.14	13.71	0.00	0.00	0.00	0.00	0.00