

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: P1060535

Luminaire Tested: S124RDRP-S575D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060535
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D950-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

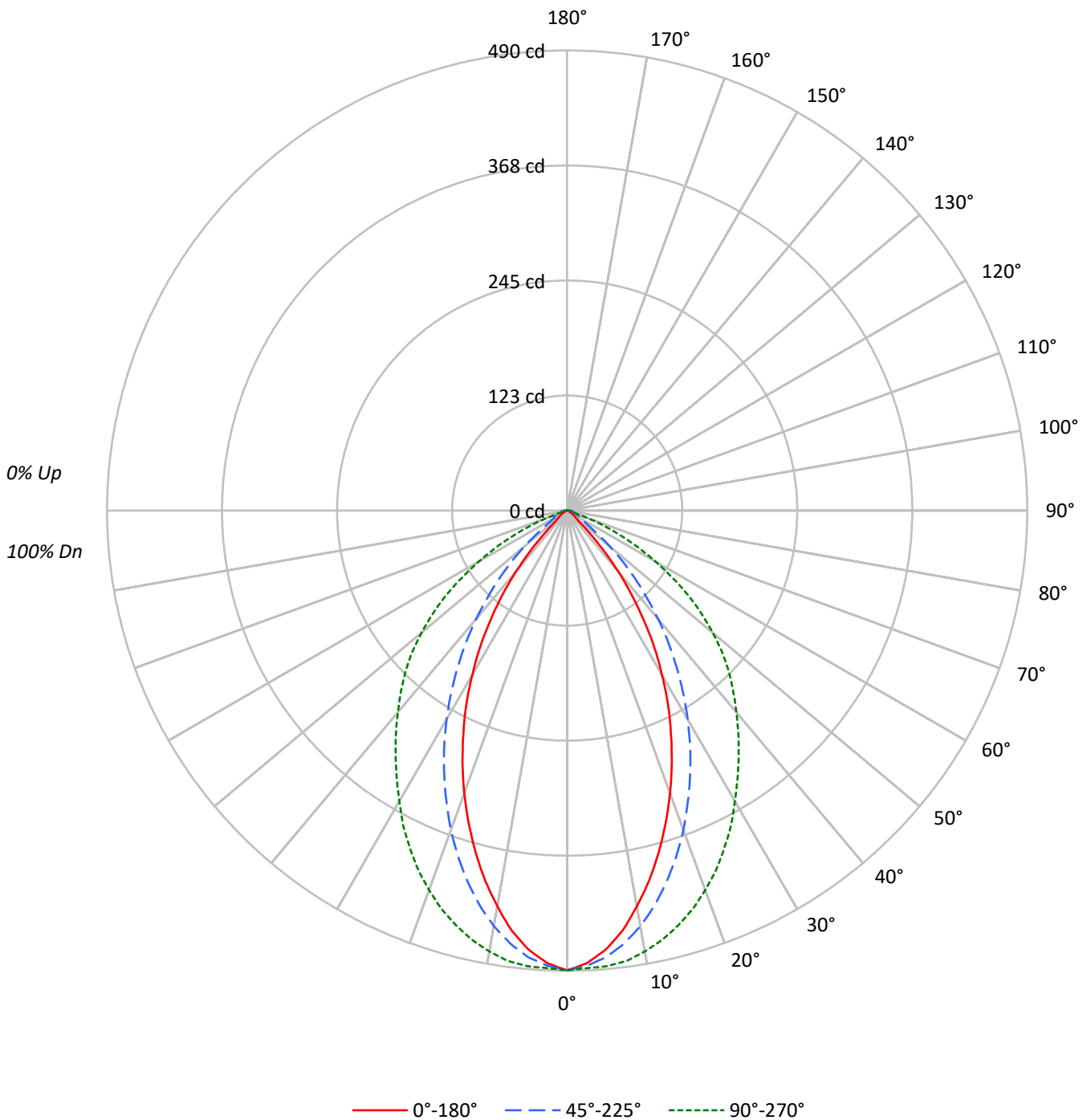
Lumens per Lamp: N/A
Luminaire Lumens: 614.4 lumens
Efficiency: N/A
Efficacy: 31.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4215	4215	4215
5°	4058	4125	4210
10°	3742	3929	4167
15°	3358	3647	4075
20°	2935	3315	3940
25°	2483	2944	3764
30°	2006	2553	3553
35°	1493	2134	3347
40°	948	1691	3149
45°	379	1240	2969
50°	165	790	2710
55°	126	408	2366
60°	90	279	1876
65°	65	277	1282
70°	65	244	587
75°	87	260	236
80°	129	288	258
85°	257	514	385

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2969 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.8	7.3
10°-20°	115.6	18.8
20°-30°	146.0	23.8
30°-40°	134.1	21.8
40°-50°	91.4	14.9
50°-60°	49.6	8.1
60°-70°	21.0	3.4
70°-80°	7.3	1.2
80°-90°	4.6	0.8
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°	306.4	49.9
0°-40°	440.5	71.7
0°-60°	581.5	94.6
0°-90°	614.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	614.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	490	490	490	490	490	
5°	469	477	477	481	487	44
15°	377	389	409	438	457	105
25°	261	278	310	358	396	119
35°	142	161	203	266	318	88
45°	31	50	102	180	244	29
55°	8	9	27	99	158	8
65°	3	4	14	31	63	3
75°	3	7	8	7	7	3
85°	3	5	5	5	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	489.5	489.5	489.5	489.5	489.5
2.5°	482.4	488.2	485.0	486.3	487.6
5°	469.4	476.6	477.2	481.1	487.0
7.5°	451.3	459.7	464.9	474.6	483.7
10°	427.9	438.3	449.3	464.9	476.6
12.5°	403.3	414.3	430.5	452.6	468.1
15°	376.7	389.0	409.1	438.3	457.1
17.5°	348.8	362.5	386.4	420.8	444.8
20°	320.3	335.2	361.8	400.7	429.9
22.5°	291.1	306.7	335.9	380.0	414.3
25°	261.3	278.2	309.9	357.9	396.2
27.5°	232.8	248.3	283.4	335.9	378.0
30°	201.7	219.2	256.8	313.2	357.3
32.5°	173.1	190.0	229.5	289.8	337.8
35°	142.0	160.8	203.0	266.5	318.4
37.5°	112.8	131.0	177.0	244.4	299.6
40°	84.3	103.1	150.4	222.4	280.1
42.5°	56.4	76.5	125.1	199.7	262.0
45°	31.1	49.9	101.8	180.3	243.8
47.5°	16.2	27.2	79.8	160.8	224.3
50°	12.3	14.9	59.0	139.4	202.3
52.5°	10.4	11.0	40.2	118.0	180.3
55°	8.4	9.1	27.2	99.2	157.6
57.5°	6.5	7.1	19.5	81.1	132.3
60°	5.2	5.8	16.2	62.2	108.9
62.5°	3.9	4.5	15.6	46.0	85.6
65°	3.2	3.9	13.6	31.1	62.9
67.5°	2.6	3.9	11.7	20.1	42.1
70°	2.6	5.2	9.7	13.0	23.3
72.5°	2.6	5.8	8.4	8.4	8.4
75°	2.6	7.1	7.8	7.1	7.1
77.5°	2.6	6.5	6.5	6.5	6.5
80°	2.6	5.8	5.8	5.8	5.2
82.5°	2.6	5.2	5.8	5.8	4.5
85°	2.6	5.2	5.2	5.2	3.9
87.5°	1.9	5.2	5.2	5.2	2.6
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	0.00	0.00	0.00	0.00	0.00	13.44	14.72	13.81	15.03	15.35
	3H	0.00	0.00	0.00	0.00	0.00	13.80	14.93	14.18	15.26	15.62
	4H	0.00	0.00	0.00	0.00	0.11	13.76	14.81	14.17	15.16	15.55
	6H	0.00	0.66	0.12	1.04	1.43	13.74	14.70	14.16	15.07	15.47
	8H	0.39	1.30	0.82	1.69	2.09	13.73	14.64	14.16	15.03	15.44
	12H	1.19	2.06	1.63	2.45	2.88	13.73	14.60	14.16	14.98	15.41
4H	2H	0.00	0.18	0.00	0.53	0.91	13.25	14.30	13.65	14.65	15.03
	3H	0.55	1.41	0.96	1.81	2.22	13.64	14.50	14.05	14.90	15.30
	4H	2.00	2.76	2.43	3.18	3.63	13.62	14.38	14.06	14.80	15.25
	6H	3.25	3.90	3.71	4.35	4.82	13.64	14.30	14.10	14.74	15.21
	8H	3.82	4.43	4.29	4.88	5.35	13.65	14.26	14.12	14.71	15.18
	12H	4.50	5.04	4.98	5.52	6.00	13.68	14.23	14.17	14.71	15.18
8H	4H	3.08	3.69	3.55	4.14	4.61	13.52	14.14	13.99	14.58	15.05
	6H	4.69	5.19	5.19	5.69	6.17	13.57	14.07	14.07	14.57	15.05
	8H	5.52	5.97	6.05	6.49	6.98	13.63	14.08	14.15	14.59	15.09
	12H	6.50	6.89	7.01	7.39	7.96	13.74	14.14	14.26	14.64	15.21
12H	4H	3.26	3.81	3.75	4.29	4.76	13.48	14.02	13.97	14.51	14.98
	6H	5.03	5.48	5.55	6.00	6.49	13.54	13.99	14.06	14.51	15.00
	8H	6.05	6.45	6.57	6.95	7.52	13.64	14.04	14.16	14.54	15.11