

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



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060987

Luminaire Tested: S124RDR-H795D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060987
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-H795D927-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

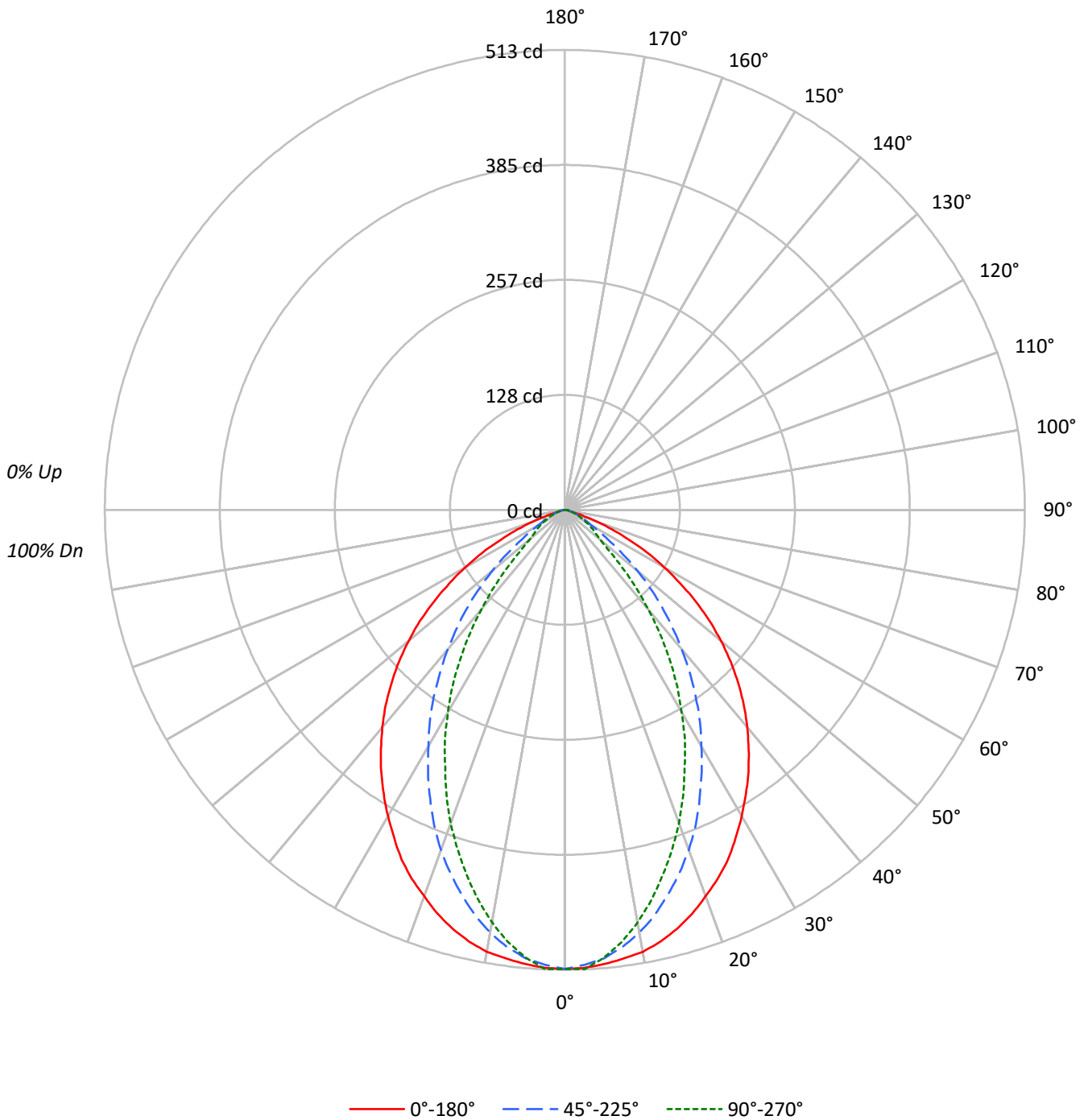
Lumens per Lamp: N/A
Luminaire Lumens: 755.0 lumens
Efficiency: N/A
Efficacy: 32.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): 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	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	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71				
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				
5	84	74	66	61	82	73	66	60	71	65	60	69	64	59	67	62	59	57				
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47				
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43				
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39				
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4410	4410	4410
5°	4395	4339	4332
10°	4376	4187	4086
15°	4314	3961	3761
20°	4203	3701	3410
25°	4091	3379	3001
30°	3923	3027	2589
35°	3753	2676	2138
40°	3559	2279	1621
45°	3328	1862	1089
50°	3044	1411	677
55°	2674	931	573
60°	2211	572	472
65°	1602	440	383
70°	871	327	290
75°	193	240	263
80°	144	179	213
85°	138	138	217

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3328 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	6.3
10°-20°	126.0	16.7
20°-30°	166.9	22.1
30°-40°	165.7	21.9
40°-50°	127.5	16.9
50°-60°	76.0	10.1
60°-70°	34.5	4.6
70°-80°	8.9	1.2
80°-90°	2.0	0.3
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°	340.4	45.1
0°-40°	506.0	67.0
0°-60°	709.5	94.0
0°-90°	755.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	755.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	512	512	512	512	512	
5°	508	509	502	502	501	48
15°	484	472	444	429	422	136
25°	431	400	356	326	316	198
35°	357	312	255	216	203	223
45°	273	220	153	107	89	210
55°	178	127	62	39	38	159
65°	79	47	22	19	19	79
75°	6	7	7	8	8	12
85°	1	1	1	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	512.1	512.1	512.1	512.1	512.1
2.5°	511.3	512.1	507.7	511.3	512.8
5°	508.5	509.2	502.0	502.0	501.2
7.5°	504.8	503.4	491.9	487.5	486.1
10°	500.5	495.5	478.9	470.2	467.3
12.5°	493.3	485.4	463.0	450.8	445.7
15°	483.9	471.7	444.3	429.1	421.9
17.5°	472.4	457.2	424.8	405.3	397.4
20°	458.7	438.5	403.9	379.4	372.1
22.5°	445.7	420.5	380.8	352.7	344.7
25°	430.6	399.6	355.6	326.0	315.9
27.5°	412.5	379.4	330.3	300.0	289.9
30°	394.5	357.7	304.4	272.6	260.4
32.5°	375.8	335.4	280.6	244.5	233.0
35°	357.0	312.3	254.6	215.6	203.4
37.5°	336.8	289.2	228.6	188.2	174.5
40°	316.6	266.8	202.7	161.6	144.2
42.5°	295.7	243.8	177.4	134.1	116.8
45°	273.3	220.0	152.9	106.7	89.4
47.5°	251.0	197.6	128.4	80.1	64.2
50°	227.2	173.8	105.3	58.4	50.5
52.5°	203.4	150.7	82.2	45.4	43.3
55°	178.1	126.9	62.0	38.9	38.2
57.5°	152.2	105.3	44.7	33.9	32.5
60°	128.4	85.1	33.2	28.8	27.4
62.5°	103.9	64.2	27.4	23.8	22.4
65°	78.6	46.9	21.6	18.8	18.8
67.5°	57.0	31.7	17.3	15.1	14.4
70°	34.6	19.5	13.0	12.3	11.5
72.5°	17.3	11.5	10.1	9.4	9.4
75°	5.8	7.2	7.2	7.9	7.9
77.5°	4.3	5.0	5.0	5.8	5.8
80°	2.9	3.6	3.6	4.3	4.3
82.5°	2.2	2.2	2.9	2.9	3.6
85°	1.4	1.4	1.4	2.2	2.2
87.5°	0.7	0.7	0.7	1.4	1.4
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	14.27	15.61	14.64	15.92	16.24	5.82	7.16	6.19	7.47	7.79
	3H	14.78	15.96	15.16	16.29	16.66	6.64	7.82	7.02	8.15	8.51
	4H	14.75	15.85	15.15	16.20	16.58	6.92	8.02	7.32	8.37	8.75
	6H	14.68	15.69	15.10	16.06	16.46	7.09	8.10	7.51	8.47	8.86
	8H	14.65	15.60	15.08	15.99	16.40	7.16	8.11	7.59	8.50	8.91
	12H	14.61	15.52	15.04	15.90	16.33	7.20	8.12	7.64	8.50	8.93
4H	2H	14.12	15.21	14.52	15.57	15.95	6.26	7.36	6.67	7.71	8.10
	3H	14.67	15.56	15.08	15.97	16.37	7.23	8.12	7.64	8.53	8.93
	4H	14.64	15.44	15.07	15.85	16.30	7.59	8.39	8.02	8.81	9.25
	6H	14.59	15.27	15.05	15.72	16.18	7.84	8.53	8.30	8.97	9.44
	8H	14.54	15.18	15.01	15.63	16.10	7.93	8.57	8.40	9.02	9.49
	12H	14.50	15.07	14.99	15.55	16.02	8.01	8.57	8.49	9.06	9.53
8H	4H	14.53	15.17	15.00	15.62	16.09	7.68	8.32	8.15	8.76	9.24
	6H	14.47	14.99	14.97	15.48	15.97	7.99	8.51	8.49	9.01	9.49
	8H	14.42	14.89	14.94	15.40	15.90	8.12	8.59	8.64	9.10	9.60
	12H	14.39	14.80	14.90	15.30	15.87	8.26	8.67	8.77	9.17	9.74
12H	4H	14.49	15.05	14.97	15.53	16.01	7.65	8.22	8.14	8.70	9.17
	6H	14.41	14.88	14.93	15.40	15.89	7.97	8.44	8.49	8.95	9.44
	8H	14.39	14.80	14.90	15.29	15.87	8.14	8.55	8.65	9.05	9.62