

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: P1060544

Luminaire Tested: S124RDRP-S795D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060544
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-S795D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

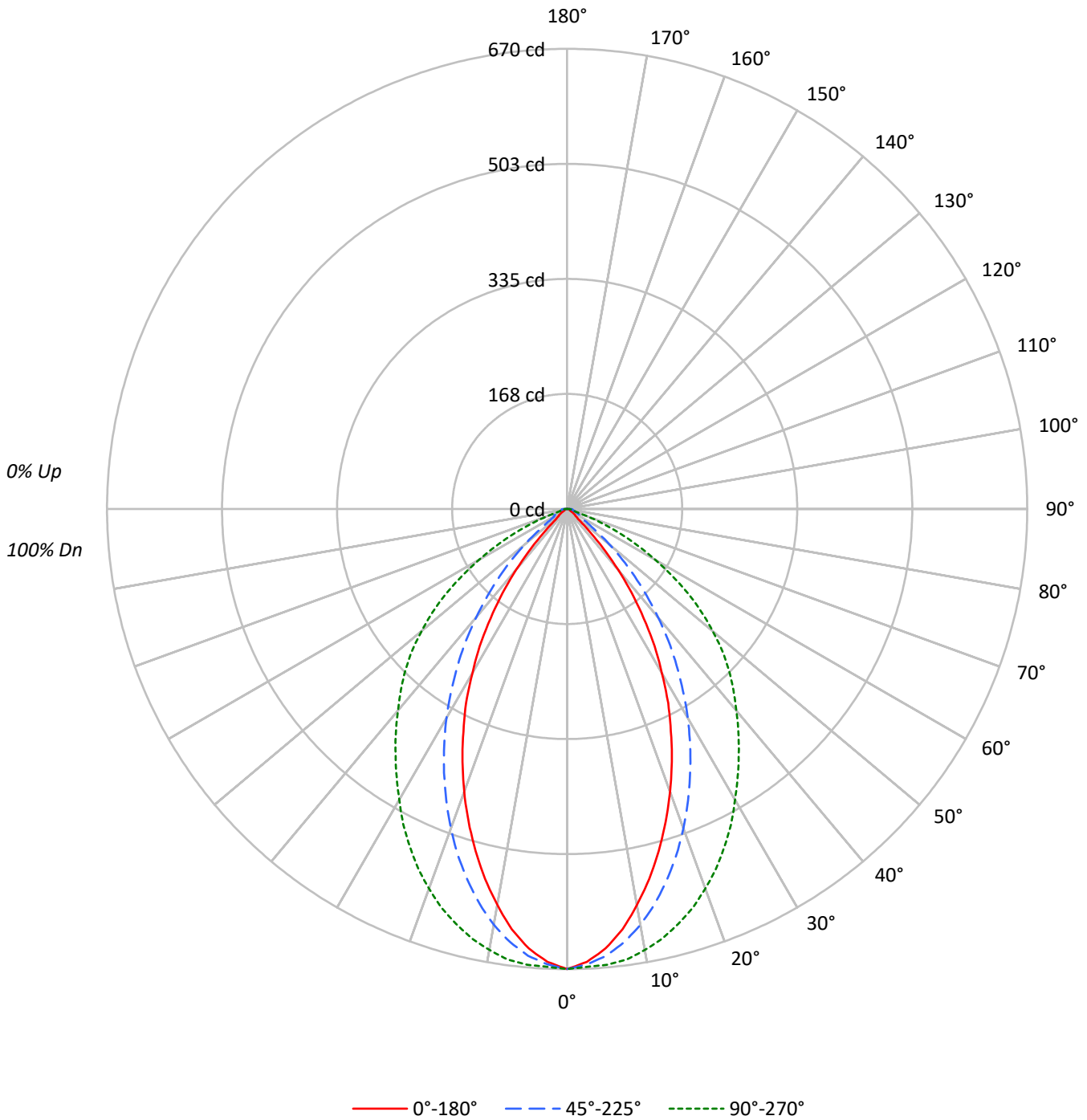
Lumens per Lamp: N/A
Luminaire Lumens: 840.6 lumens
Efficiency: N/A
Efficacy: 32.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	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°	5768	5768	5768
5°	5552	5644	5759
10°	5120	5376	5701
15°	4595	4991	5575
20°	4016	4536	5390
25°	3397	4029	5150
30°	2743	3493	4860
35°	2043	2919	4579
40°	1296	2313	4308
45°	519	1696	4063
50°	226	1081	3708
55°	173	560	3237
60°	122	382	2566
65°	90	379	1752
70°	88	335	803
75°	116	353	326
80°	174	397	352
85°	346	701	524

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4063 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.3	7.3
10°-20°	158.1	18.8
20°-30°	199.7	23.8
30°-40°	183.5	21.8
40°-50°	125.1	14.9
50°-60°	67.8	8.1
60°-70°	28.8	3.4
70°-80°	10.0	1.2
80°-90°	6.3	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°	419.2	49.9
0°-40°	602.6	71.7
0°-60°	795.6	94.6
0°-90°	840.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	840.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	670	670	670	670	670	
5°	642	652	653	658	666	60
15°	515	532	560	600	625	144
25°	358	381	424	490	542	163
35°	194	220	278	365	436	121
45°	43	68	139	247	334	39
55°	12	12	37	136	216	10
65°	4	5	19	43	86	5
75°	4	10	11	10	10	4
85°	4	7	7	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	669.8	669.8	669.8	669.8	669.8
2.5°	660.0	668.0	663.6	665.3	667.1
5°	642.3	652.0	652.9	658.2	666.2
7.5°	617.4	629.0	636.1	649.4	661.8
10°	585.5	599.7	614.8	636.1	652.0
12.5°	551.8	566.9	589.0	619.2	640.5
15°	515.4	532.3	559.8	599.7	625.4
17.5°	477.3	495.9	528.7	575.7	608.6
20°	438.2	458.6	495.0	548.2	588.2
22.5°	398.3	419.6	459.5	519.8	566.9
25°	357.5	380.6	424.0	489.7	542.0
27.5°	318.5	339.8	387.7	459.5	517.2
30°	275.9	299.8	351.3	428.5	488.8
32.5°	236.9	259.9	314.0	396.5	462.2
35°	194.3	220.0	277.7	364.6	435.6
37.5°	154.4	179.2	242.2	334.4	409.8
40°	115.3	141.1	205.8	304.3	383.2
42.5°	77.2	104.7	171.2	273.2	358.4
45°	42.6	68.3	139.3	246.6	333.6
47.5°	22.2	37.3	109.1	220.0	306.9
50°	16.9	20.4	80.7	190.7	276.8
52.5°	14.2	15.1	55.0	161.5	246.6
55°	11.5	12.4	37.3	135.7	215.6
57.5°	8.9	9.8	26.6	110.9	181.0
60°	7.1	8.0	22.2	85.2	149.0
62.5°	5.3	6.2	21.3	63.0	117.1
65°	4.4	5.3	18.6	42.6	86.0
67.5°	3.5	5.3	16.0	27.5	57.7
70°	3.5	7.1	13.3	17.7	31.9
72.5°	3.5	8.0	11.5	11.5	11.5
75°	3.5	9.8	10.6	9.8	9.8
77.5°	3.5	8.9	8.9	8.9	8.9
80°	3.5	8.0	8.0	8.0	7.1
82.5°	3.5	7.1	8.0	8.0	6.2
85°	3.5	7.1	7.1	7.1	5.3
87.5°	2.7	7.1	7.1	7.1	3.5
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	14.53	15.81	14.90	16.12	16.43
	3H	0.00	0.00	0.00	0.00	0.00	14.89	16.01	15.27	16.34	16.71
	4H	0.00	0.47	0.00	0.82	1.21	14.85	15.90	15.26	16.25	16.64
	6H	0.78	1.74	1.19	2.11	2.51	14.83	15.79	15.24	16.16	16.56
	8H	1.45	2.36	1.88	2.75	3.16	14.82	15.73	15.25	16.12	16.52
	12H	2.24	3.11	2.68	3.50	3.93	14.82	15.69	15.25	16.07	16.50
4H	2H	0.23	1.28	0.64	1.63	2.02	14.33	15.38	14.74	15.73	16.12
	3H	1.65	2.50	2.06	2.91	3.31	14.73	15.58	15.14	15.99	16.39
	4H	3.10	3.87	3.54	4.29	4.73	14.71	15.47	15.14	15.89	16.34
	6H	4.34	5.00	4.81	5.45	5.92	14.73	15.39	15.19	15.83	16.30
	8H	4.91	5.52	5.38	5.97	6.44	14.74	15.35	15.21	15.80	16.27
	12H	5.57	6.11	6.06	6.60	7.07	14.77	15.32	15.26	15.80	16.27
8H	4H	4.18	4.79	4.65	5.24	5.71	14.61	15.22	15.08	15.67	16.14
	6H	5.79	6.29	6.29	6.79	7.27	14.66	15.16	15.16	15.66	16.14
	8H	6.62	7.07	7.14	7.58	8.08	14.72	15.17	15.24	15.69	16.18
	12H	7.58	7.98	8.09	8.47	9.04	14.83	15.23	15.35	15.73	16.30
12H	4H	4.37	4.91	4.85	5.39	5.87	14.57	15.11	15.06	15.60	16.07
	6H	6.13	6.59	6.66	7.10	7.60	14.63	15.08	15.15	15.60	16.09
	8H	7.15	7.55	7.67	8.05	8.62	14.73	15.13	15.25	15.63	16.20