

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: P1060545

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060545
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
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-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

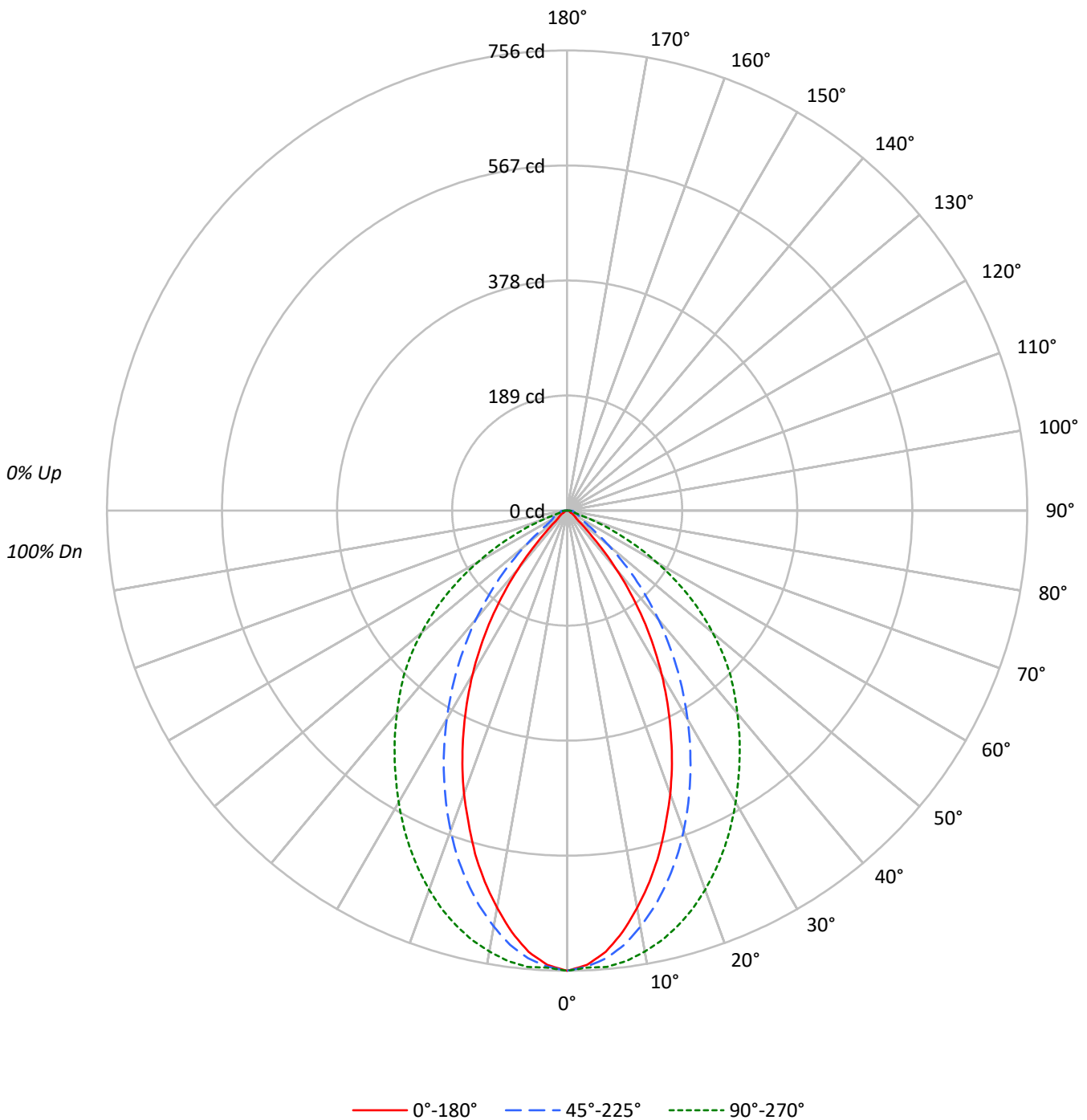
Lumens per Lamp: N/A
Luminaire Lumens: 952.8 lumens
Efficiency: N/A
Efficacy: 36.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6510	6510	6510
5°	6289	6381	6504
10°	5796	6067	6432
15°	5205	5640	6289
20°	4537	5131	6074
25°	3827	4552	5808
30°	3088	3935	5506
35°	2285	3292	5195
40°	1416	2624	4888
45°	561	1913	4603
50°	249	1200	4184
55°	200	626	3663
60°	138	474	2919
65°	90	471	2007
70°	88	425	939
75°	116	413	413
80°	174	486	486
85°	346	968	701

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4603 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.3	7.3
10°-20°	179.0	18.8
20°-30°	225.9	23.7
30°-40°	207.3	21.8
40°-50°	141.2	14.8
50°-60°	76.9	8.1
60°-70°	33.3	3.5
70°-80°	12.1	1.3
80°-90°	7.8	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°	474.2	49.8
0°-40°	681.5	71.5
0°-60°	899.5	94.4
0°-90°	952.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	952.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	756	756	756	756	756	
5°	728	737	738	746	752	67
15°	584	604	633	678	705	162
25°	403	431	479	555	611	184
35°	217	249	313	413	494	134
45°	46	77	157	279	378	43
55°	13	14	42	154	244	12
65°	4	6	23	48	98	5
75°	4	12	12	12	12	4
85°	4	8	10	10	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	756.0	756.0	756.0	756.0	756.0
2.5°	747.1	756.0	749.8	751.5	751.5
5°	727.6	737.3	738.2	746.2	752.4
7.5°	698.3	712.5	719.6	735.6	746.2
10°	662.8	679.7	693.9	721.4	735.6
12.5°	624.7	644.2	665.5	701.8	722.3
15°	583.8	604.2	632.6	677.9	705.4
17.5°	538.6	563.4	598.0	652.2	685.9
20°	495.1	520.0	559.9	621.1	662.8
22.5°	449.9	475.6	520.0	588.3	638.0
25°	402.8	431.2	479.1	555.4	611.3
27.5°	356.7	386.9	437.4	520.8	583.0
30°	310.6	340.7	395.7	485.3	553.7
32.5°	263.5	294.6	354.0	448.1	523.5
35°	217.4	249.3	313.2	412.6	494.2
37.5°	170.4	204.1	272.4	378.0	464.9
40°	126.0	159.7	233.4	343.4	434.8
42.5°	84.3	118.0	193.4	309.7	406.4
45°	46.1	77.2	157.1	278.6	378.0
47.5°	24.8	42.6	121.6	248.4	346.0
50°	18.6	23.1	89.6	216.5	312.3
52.5°	16.0	17.7	62.1	182.8	278.6
55°	13.3	14.2	41.7	153.5	244.0
57.5°	10.6	11.5	31.1	124.2	206.7
60°	8.0	9.8	27.5	95.8	169.5
62.5°	6.2	8.0	25.7	70.1	134.0
65°	4.4	6.2	23.1	47.9	98.5
67.5°	4.4	7.1	19.5	31.1	66.5
70°	3.5	9.8	16.9	20.4	37.3
72.5°	3.5	10.6	14.2	14.2	14.2
75°	3.5	11.5	12.4	12.4	12.4
77.5°	3.5	10.6	11.5	10.6	10.6
80°	3.5	9.8	9.8	9.8	9.8
82.5°	3.5	8.9	9.8	9.8	8.0
85°	3.5	8.0	9.8	9.8	7.1
87.5°	2.7	8.0	8.9	8.9	5.3
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	14.92	16.19	15.28	16.51	16.82
	3H	0.00	0.09	0.00	0.42	0.78	15.29	16.42	15.67	16.75	17.12
	4H	0.17	1.22	0.57	1.57	1.95	15.27	16.32	15.67	16.67	17.06
	6H	1.34	2.31	1.75	2.68	3.07	15.26	16.22	15.67	16.60	16.99
	8H	1.93	2.84	2.36	3.23	3.64	15.26	16.17	15.69	16.56	16.97
	12H	2.59	3.47	3.03	3.85	4.28	15.27	16.15	15.70	16.53	16.96
4H	2H	1.16	2.21	1.56	2.56	2.95	14.73	15.78	15.13	16.13	16.51
	3H	2.75	3.60	3.16	4.01	4.41	15.15	16.01	15.56	16.41	16.81
	4H	4.03	4.80	4.47	5.22	5.66	15.15	15.91	15.58	16.33	16.78
	6H	5.15	5.82	5.62	6.26	6.73	15.19	15.85	15.65	16.29	16.76
	8H	5.66	6.28	6.13	6.73	7.20	15.21	15.83	15.68	16.28	16.75
	12H	6.21	6.75	6.70	7.24	7.71	15.28	15.82	15.77	16.31	16.78
8H	4H	5.11	5.73	5.58	6.18	6.65	15.05	15.67	15.52	16.12	16.59
	6H	6.66	7.17	7.16	7.66	8.14	15.13	15.64	15.64	16.14	16.62
	8H	7.47	7.93	7.99	8.44	8.93	15.22	15.67	15.74	16.19	16.68
	12H	8.30	8.70	8.82	9.20	9.77	15.39	15.79	15.90	16.29	16.86
12H	4H	5.31	5.85	5.79	6.33	6.81	15.02	15.56	15.51	16.05	16.52
	6H	7.02	7.48	7.54	7.99	8.48	15.11	15.56	15.63	16.08	16.57
	8H	8.04	8.44	8.55	8.93	9.50	15.25	15.65	15.76	16.14	16.72