

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: P1060543

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060543
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-S795D830-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, 80 CRI LEDS
Ballast/Driver: -

Summary

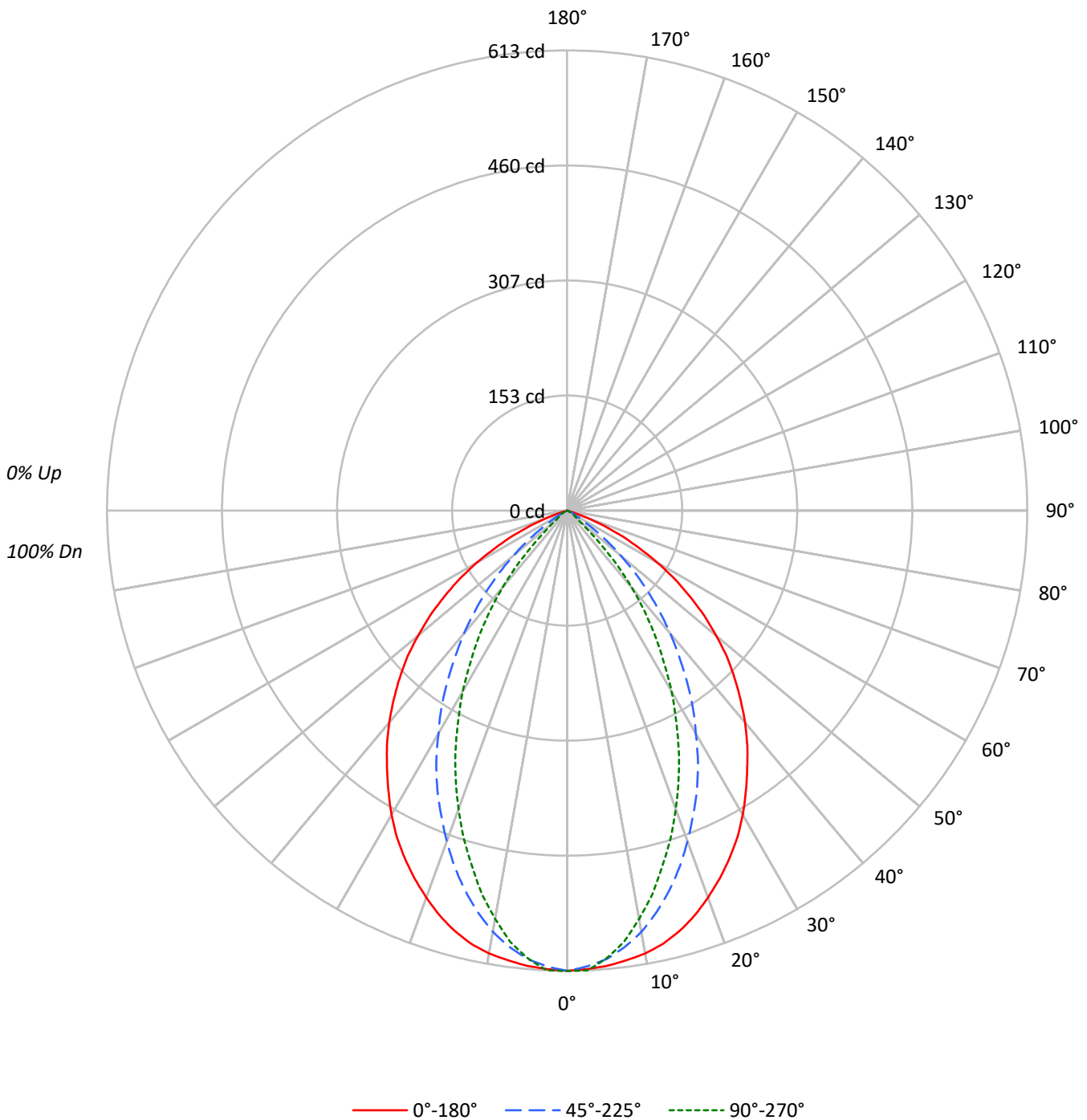
Lumens per Lamp: N/A
Luminaire Lumens: 800.7 lumens
Efficiency: N/A
Efficacy: 31.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	5280	5280	5280
5°	5262	5186	5178
10°	5238	4982	4828
15°	5166	4677	4368
20°	5026	4296	3874
25°	4858	3890	3343
30°	4652	3410	2766
35°	4397	2925	2152
40°	4143	2401	1504
45°	3842	1845	744
50°	3467	1246	249
55°	2994	638	173
60°	2396	229	122
65°	1642	126	55
70°	735	68	45
75°	0	30	30
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3842 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	7.1
10°-20°	148.4	18.5
20°-30°	192.2	24.0
30°-40°	182.6	22.8
40°-50°	129.3	16.1
50°-60°	66.4	8.3
60°-70°	23.2	2.9
70°-80°	2.0	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°	397.2	49.6
0°-40°	579.8	72.4
0°-60°	775.5	96.8
0°-90°	800.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	800.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	613	613	613	613	613	
5°	609	610	600	600	599	58
15°	580	562	525	500	490	163
25°	511	471	409	366	352	235
35°	418	357	278	224	205	262
45°	316	243	152	87	61	243
55°	199	131	42	12	12	178
65°	81	39	6	4	3	80
75°	0	1	1	1	1	7
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	613.2	613.2	613.2	613.2	613.2
2.5°	611.4	613.2	607.9	612.3	613.2
5°	608.8	609.7	599.9	599.9	599.0
7.5°	604.3	602.6	586.6	580.4	579.5
10°	599.0	592.8	569.8	556.5	552.1
12.5°	591.1	579.5	548.5	529.0	523.7
15°	579.5	561.8	524.6	499.8	490.0
17.5°	565.4	542.3	498.0	467.9	458.1
20°	548.5	519.3	468.8	435.1	422.7
22.5°	530.8	497.1	438.6	400.5	388.1
25°	511.3	471.4	409.4	366.0	351.8
27.5°	490.9	444.0	377.5	332.3	313.7
30°	467.9	416.5	342.9	296.0	278.2
32.5°	443.1	386.4	311.9	261.4	240.1
35°	418.3	357.1	278.2	224.2	204.7
37.5°	394.3	329.6	244.6	187.9	169.3
40°	368.6	299.5	213.6	155.1	133.8
42.5°	342.0	270.3	181.7	121.4	98.4
45°	315.5	242.8	151.5	86.8	61.1
47.5°	288.9	213.6	122.3	54.9	32.8
50°	258.8	185.2	93.0	29.2	18.6
52.5°	230.4	158.6	66.5	16.8	14.2
55°	199.4	131.1	42.5	12.4	11.5
57.5°	170.1	104.6	23.9	9.7	8.9
60°	139.1	80.6	13.3	8.0	7.1
62.5°	108.1	58.5	8.9	5.3	4.4
65°	80.6	39.0	6.2	3.5	2.7
67.5°	53.2	22.2	4.4	1.8	1.8
70°	29.2	10.6	2.7	1.8	1.8
72.5°	10.6	3.5	1.8	0.9	0.9
75°	0.0	0.9	0.9	0.9	0.9
77.5°	0.0	0.0	0.0	0.0	0.9
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	14.31	15.57	14.68	15.88	16.20	0.00	0.00	0.00	0.00	0.00
	3H	14.59	15.69	14.97	16.02	16.39	0.00	0.00	0.00	0.00	0.00
	4H	14.51	15.54	14.92	15.89	16.27	0.00	0.00	0.00	0.00	0.00
	6H	14.43	15.36	14.84	15.74	16.13	0.00	0.00	0.00	0.00	0.00
	8H	14.38	15.27	14.81	15.66	16.06	0.00	0.00	0.00	0.00	0.00
	12H	14.33	15.18	14.77	15.56	15.99	0.00	0.00	0.00	0.00	0.00
4H	2H	14.08	15.11	14.49	15.46	15.85	0.00	0.00	0.00	0.00	0.00
	3H	14.37	15.20	14.78	15.60	16.01	0.00	0.00	0.00	0.00	0.00
	4H	14.28	15.01	14.71	15.43	15.88	0.00	0.00	0.00	0.00	0.00
	6H	14.19	14.82	14.65	15.27	15.73	0.00	0.00	0.00	0.00	0.00
	8H	14.13	14.71	14.60	15.16	15.64	0.00	0.00	0.00	0.00	0.00
	12H	14.07	14.59	14.56	15.08	15.55	0.00	0.00	0.00	0.00	0.00
8H	4H	14.13	14.71	14.60	15.16	15.64	0.00	0.00	0.00	0.00	0.00
	6H	14.02	14.49	14.52	14.99	15.48	0.00	0.00	0.00	0.00	0.00
	8H	13.95	14.38	14.48	14.90	15.39	0.00	0.00	0.00	0.00	0.00
	12H	13.90	14.28	14.42	14.77	15.35	0.00	0.00	0.00	0.00	0.00
12H	4H	14.08	14.59	14.56	15.08	15.55	0.00	0.00	0.00	0.00	0.00
	6H	13.95	14.38	14.48	14.90	15.39	0.00	0.00	0.00	0.00	0.00
	8H	13.90	14.28	14.42	14.77	15.35	0.00	0.00	0.00	0.00	0.00