

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: P1060559

Luminaire Tested: S124RDRP-S795D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060559
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S795D835-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

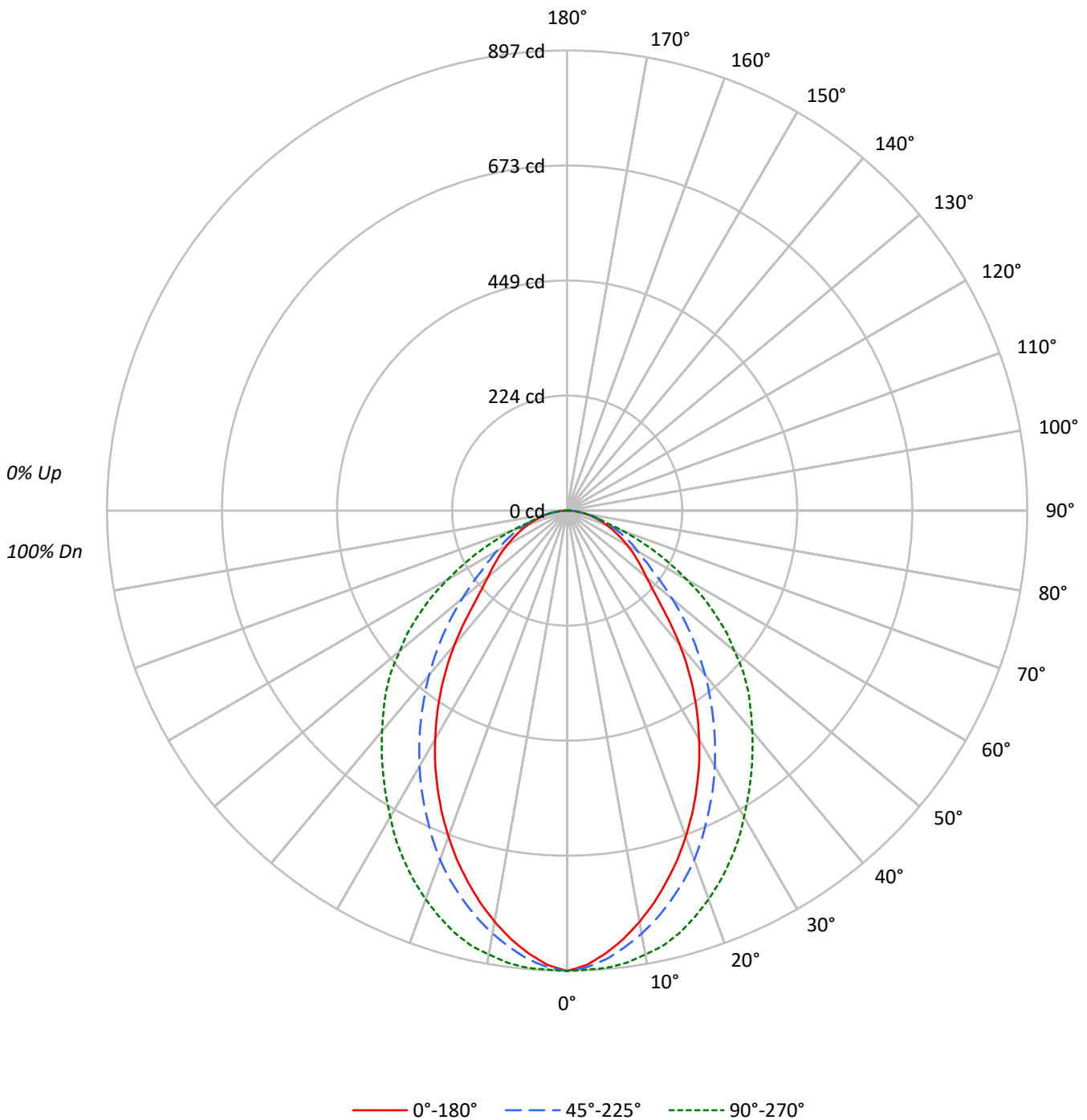
Lumens per Lamp: N/A
Luminaire Lumens: 1633.8 lumens
Efficiency: N/A
Efficacy: 63.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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																		
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	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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87																												
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75																												
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65																												
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57																												
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50																												
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45																												
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41																												
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37																												
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34																												
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7728	7728	7728
5°	7489	7587	7733
10°	7115	7320	7682
15°	6675	7003	7589
20°	6197	6637	7388
25°	5675	6185	7150
30°	5117	5724	6856
35°	4509	5221	6576
40°	3839	4705	6313
45°	3116	4159	6083
50°	2697	3580	5696
55°	2500	3036	5282
60°	2334	2738	4633
65°	2184	2569	3853
70°	2037	2369	2913
75°	1940	2189	2096
80°	1820	2003	1770
85°	1670	1857	1393

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6083 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.9	5.1
10°-20°	222.7	13.6
20°-30°	304.1	18.6
30°-40°	318.6	19.5
40°-50°	275.8	16.9
50°-60°	207.2	12.7
60°-70°	133.6	8.2
70°-80°	68.5	4.2
80°-90°	20.5	1.3
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°	609.7	37.3
0°-40°	928.2	56.8
0°-60°	1411.2	86.4
0°-90°	1633.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1633.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	866	880	878	884	895	81
15°	749	768	786	821	851	210
25°	597	620	651	702	752	274
35°	429	453	497	562	626	267
45°	256	282	342	425	500	202
55°	166	172	202	289	352	150
65°	107	109	126	152	189	107
75°	58	65	66	65	63	62
85°	17	20	19	18	14	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	897.4	897.4	897.4	897.4	897.4
2.5°	886.1	897.4	890.8	892.7	895.5
5°	866.4	879.5	877.7	884.2	894.6
7.5°	841.9	856.0	858.8	873.9	888.9
10°	813.7	829.7	837.2	859.8	878.6
12.5°	782.6	799.6	812.7	841.0	868.2
15°	748.8	767.6	785.5	821.2	851.3
17.5°	714.0	732.8	756.3	795.8	829.7
20°	676.3	697.0	724.3	765.7	806.2
22.5°	637.8	659.4	688.6	733.7	780.8
25°	597.3	619.9	651.0	701.7	752.5
27.5°	556.9	579.5	614.3	667.9	723.4
30°	514.6	538.1	575.7	634.0	689.5
32.5°	472.2	497.6	536.2	598.3	657.5
35°	428.9	453.4	496.7	562.5	625.6
37.5°	385.7	411.1	457.2	527.7	593.6
40°	341.5	367.8	418.6	492.9	561.6
42.5°	297.3	325.5	379.1	457.2	529.6
45°	255.9	282.2	341.5	425.2	499.5
47.5°	224.8	242.7	303.8	394.1	465.6
50°	201.3	210.7	267.2	360.3	425.2
52.5°	183.4	190.0	233.3	323.6	392.3
55°	166.5	172.1	202.2	288.8	351.8
57.5°	151.4	154.3	178.7	254.9	313.2
60°	135.5	138.3	159.0	218.2	269.0
62.5°	121.3	123.2	143.0	183.4	228.6
65°	107.2	109.1	126.1	152.4	189.1
67.5°	94.1	96.9	110.1	124.2	150.5
70°	80.9	86.5	94.1	100.7	115.7
72.5°	69.6	75.3	79.0	80.9	81.8
75°	58.3	64.9	65.8	64.9	63.0
77.5°	47.0	52.7	52.7	50.8	48.9
80°	36.7	41.4	40.4	38.6	35.7
82.5°	27.3	30.1	29.2	27.3	24.5
85°	16.9	19.8	18.8	17.9	14.1
87.5°	8.5	11.3	10.3	9.4	5.6
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	13.54	15.02	13.90	15.33	15.65	17.31	18.79	17.67	19.11	19.42
	3H	15.19	16.52	15.57	16.85	17.21	18.42	19.75	18.80	20.08	20.44
	4H	15.86	17.11	16.26	17.46	17.84	18.71	19.96	19.11	20.31	20.69
	6H	16.37	17.52	16.79	17.89	18.28	18.91	20.06	19.32	20.43	20.82
	8H	16.56	17.65	16.98	18.04	18.44	18.96	20.06	19.39	20.45	20.85
	12H	16.68	17.73	17.11	18.11	18.54	18.99	20.04	19.42	20.42	20.85
4H	2H	14.32	15.57	14.72	15.92	16.29	17.47	18.71	17.87	19.06	19.44
	3H	16.18	17.21	16.59	17.61	18.02	18.78	19.81	19.19	20.21	20.62
	4H	16.99	17.92	17.42	18.34	18.78	19.19	20.12	19.62	20.53	20.97
	6H	17.64	18.44	18.09	18.89	19.35	19.50	20.31	19.96	20.76	21.22
	8H	17.87	18.62	18.33	19.07	19.53	19.60	20.35	20.06	20.80	21.26
	12H	18.04	18.71	18.52	19.19	19.66	19.66	20.33	20.14	20.81	21.28
8H	4H	17.34	18.09	17.80	18.54	19.01	19.32	20.08	19.79	20.52	20.99
	6H	18.13	18.76	18.63	19.25	19.73	19.73	20.36	20.23	20.85	21.33
	8H	18.45	19.01	18.97	19.52	20.01	19.88	20.44	20.40	20.95	21.44
	12H	18.72	19.21	19.23	19.71	20.27	20.01	20.50	20.52	21.00	21.56
12H	4H	17.37	18.04	17.85	18.52	18.99	19.33	20.00	19.81	20.48	20.95
	6H	18.19	18.75	18.71	19.26	19.75	19.76	20.32	20.27	20.83	21.31
	8H	18.58	19.08	19.09	19.57	20.13	19.96	20.45	20.47	20.94	21.51