

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: P1061764

Luminaire Tested: S125RDRP-S850D830-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061764
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D830-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

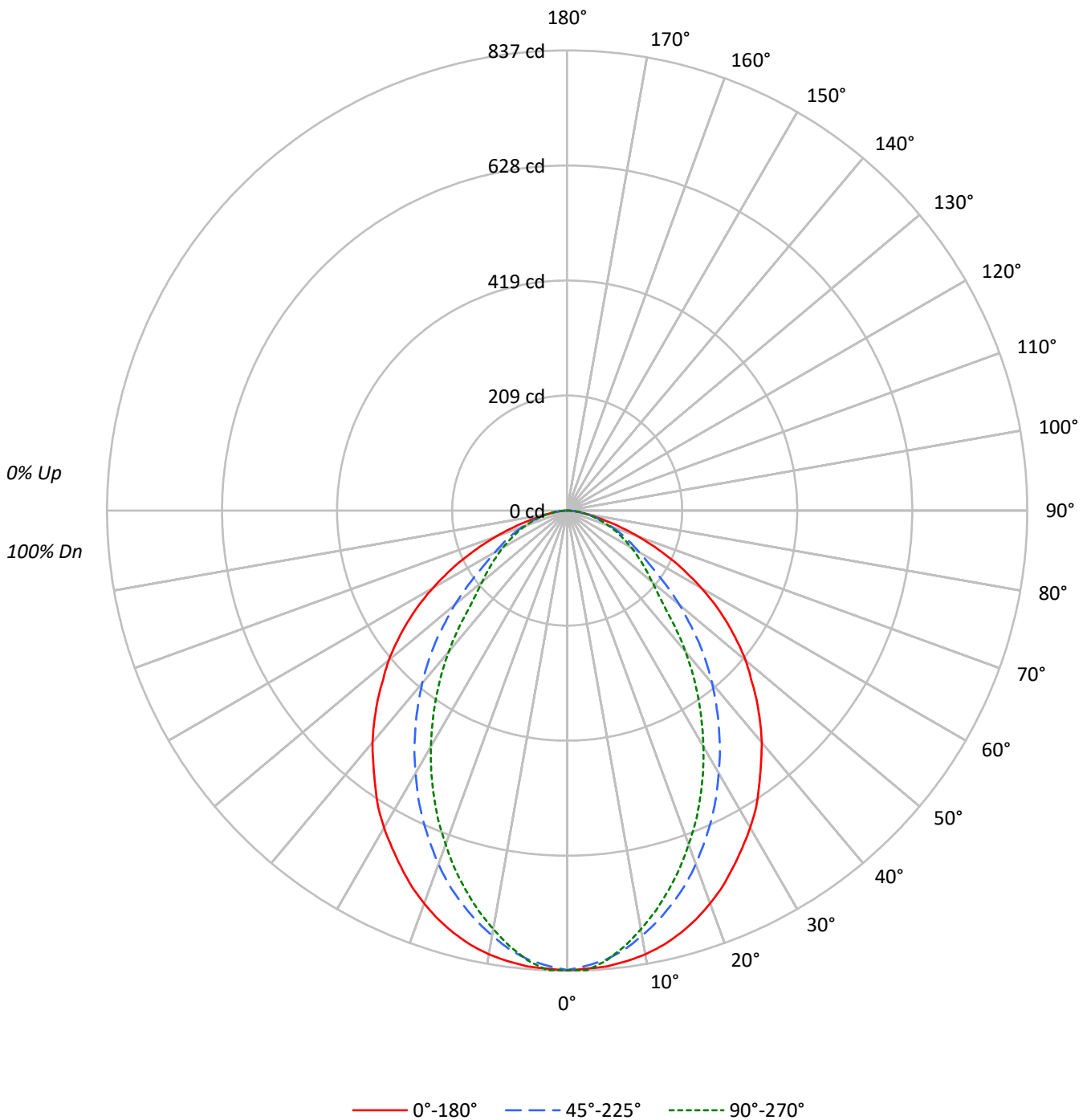
Lumens per Lamp: N/A
Luminaire Lumens: 1583.4 lumens
Efficiency: N/A
Efficacy: 61.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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					100			
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89					87				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77					75				
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67					65				
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59					57				
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52					50				
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47					45				
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42					40				
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38					36				
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35					33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32					30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5755	5755	5755
5°	5752	5664	5676
10°	5729	5488	5406
15°	5673	5273	5091
20°	5572	5014	4735
25°	5433	4716	4358
30°	5296	4380	3939
35°	5119	4043	3494
40°	4952	3687	3010
45°	4746	3296	2465
50°	4540	2858	2158
55°	4260	2386	1994
60°	3886	2088	1862
65°	3400	1908	1730
70°	2758	1717	1608
75°	1979	1570	1498
80°	1368	1404	1404
85°	1003	1217	1288

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4746 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.7	4.9
10°-20°	210.2	13.3
20°-30°	290.5	18.3
30°-40°	309.5	19.5
40°-50°	271.9	17.2
50°-60°	206.1	13.0
60°-70°	133.8	8.5
70°-80°	66.3	4.2
80°-90°	17.4	1.1
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°	578.5	36.5
0°-40°	887.9	56.1
0°-60°	1365.9	86.3
0°-90°	1583.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1583.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	832	830	820	822	821	79
15°	796	778	740	722	714	224
25°	715	676	621	589	574	330
35°	609	553	481	437	416	381
45°	487	419	338	278	253	376
55°	355	285	199	172	166	317
65°	209	155	117	108	106	206
75°	74	65	59	57	56	83
85°	13	14	15	15	16	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	835.9	835.9	835.9	835.9	835.9
2.5°	834.0	835.9	828.6	834.9	836.8
5°	832.2	830.4	819.5	822.2	821.3
7.5°	826.8	823.1	805.0	803.2	799.6
10°	819.5	810.4	785.0	778.7	773.2
12.5°	809.5	795.0	764.2	751.5	745.1
15°	795.9	777.8	739.7	722.4	714.2
17.5°	779.6	754.2	714.2	690.6	681.6
20°	760.5	730.6	684.3	657.1	646.2
22.5°	739.7	704.3	652.5	623.5	611.7
25°	715.2	676.1	620.8	589.0	573.6
27.5°	690.6	647.1	587.2	551.8	535.5
30°	666.1	616.2	550.9	512.8	495.5
32.5°	639.8	584.5	517.3	475.6	455.6
35°	609.0	552.7	481.0	437.4	415.7
37.5°	579.0	519.1	445.6	396.6	375.7
40°	550.9	487.4	410.2	356.7	334.9
42.5°	519.1	453.8	374.8	318.6	294.0
45°	487.4	419.3	338.5	277.7	253.2
47.5°	453.8	386.6	300.4	240.5	224.2
50°	423.8	353.0	266.8	212.4	201.5
52.5°	389.3	320.4	232.3	190.6	183.3
55°	354.9	285.0	198.8	171.5	166.1
57.5°	319.5	253.2	172.4	155.2	149.7
60°	282.2	220.5	151.6	137.9	135.2
62.5°	245.0	187.0	133.4	123.4	119.8
65°	208.7	155.2	117.1	108.0	106.2
67.5°	171.5	126.1	100.7	94.4	93.5
70°	137.0	102.6	85.3	81.7	79.9
72.5°	105.3	81.7	71.7	69.0	68.1
75°	74.4	65.3	59.0	57.2	56.3
77.5°	49.9	49.9	47.2	45.4	46.3
80°	34.5	36.3	35.4	35.4	35.4
82.5°	22.7	24.5	25.4	25.4	25.4
85°	12.7	14.5	15.4	15.4	16.3
87.5°	4.5	5.4	6.4	7.3	7.3
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	16.63	18.12	17.00	18.44	18.75	12.88	14.37	13.24	14.68	14.99
	3H	17.94	19.28	18.32	19.61	19.97	14.46	15.80	14.84	16.12	16.49
	4H	18.31	19.57	18.71	19.92	20.29	15.06	16.31	15.46	16.66	17.04
	6H	18.49	19.65	18.90	20.01	20.40	15.53	16.69	15.95	17.06	17.45
	8H	18.53	19.63	18.95	20.02	20.42	15.69	16.79	16.12	17.18	17.59
	12H	18.54	19.59	18.97	19.97	20.40	15.81	16.86	16.24	17.24	17.67
4H	2H	16.75	18.00	17.15	18.35	18.73	13.54	14.79	13.94	15.14	15.52
	3H	18.23	19.27	18.64	19.67	20.07	15.32	16.36	15.73	16.76	17.16
	4H	18.71	19.64	19.14	20.06	20.50	16.04	16.97	16.47	17.39	17.83
	6H	18.99	19.80	19.45	20.25	20.71	16.63	17.44	17.08	17.88	18.34
	8H	19.06	19.82	19.53	20.26	20.73	16.83	17.59	17.30	18.03	18.50
	12H	19.10	19.78	19.59	20.26	20.73	16.99	17.66	17.47	18.14	18.61
8H	4H	18.79	19.55	19.25	19.99	20.46	16.35	17.11	16.81	17.55	18.02
	6H	19.15	19.78	19.65	20.27	20.75	17.06	17.68	17.55	18.17	18.65
	8H	19.27	19.83	19.79	20.34	20.83	17.33	17.89	17.85	18.40	18.89
	12H	19.36	19.85	19.87	20.34	20.91	17.56	18.06	18.07	18.55	19.12
12H	4H	18.78	19.46	19.27	19.94	20.41	16.37	17.05	16.86	17.53	18.00
	6H	19.16	19.72	19.67	20.23	20.72	17.11	17.67	17.62	18.18	18.67
	8H	19.32	19.81	19.83	20.30	20.87	17.44	17.94	17.95	18.43	19.00