

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: P1175384

Luminaire Tested: S125RDRP-S850D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175384
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)
Test Lab: INNOVATION CENTER
Issue Date: 8/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D835-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

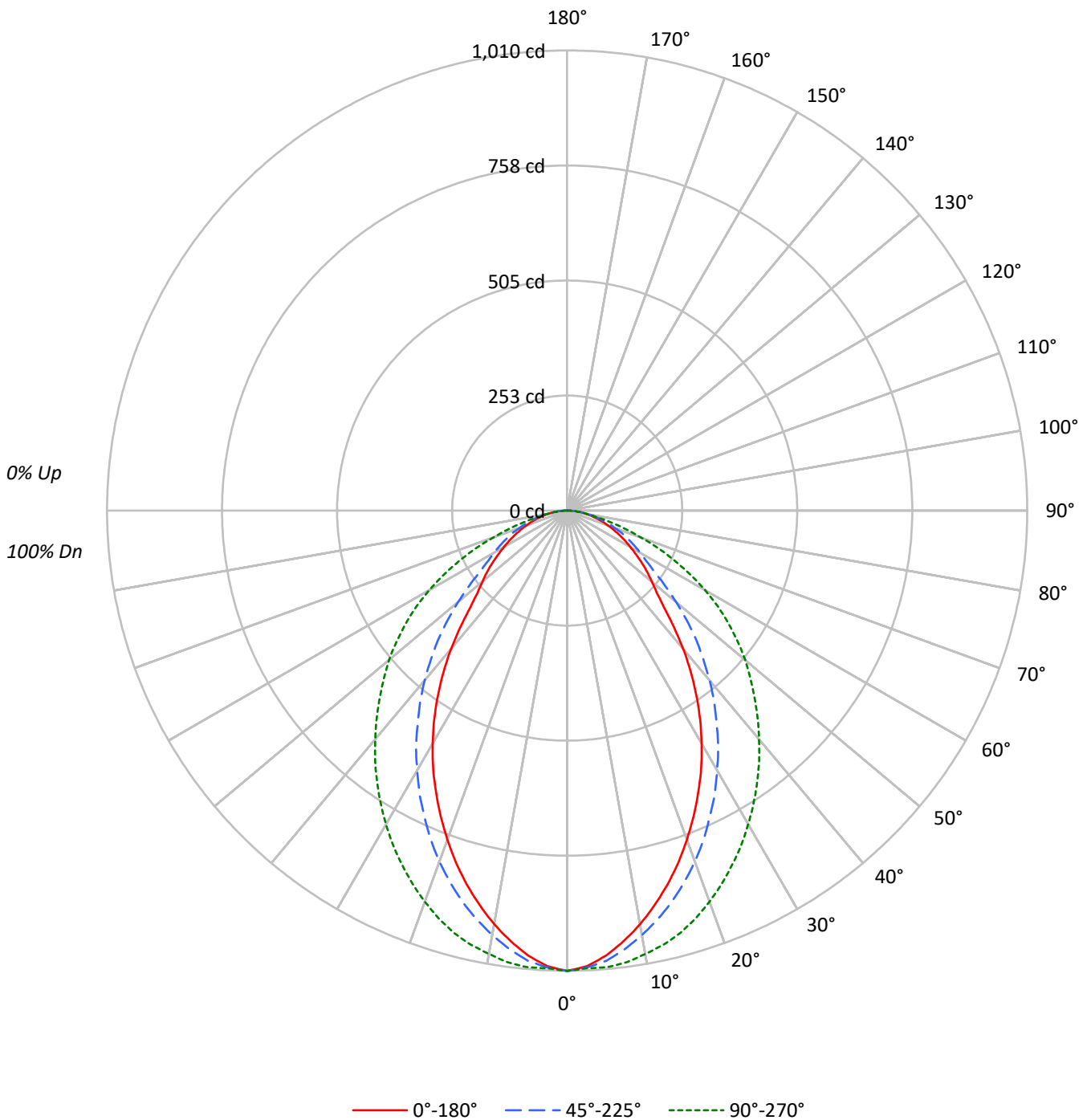
Lumens per Lamp: N/A
Luminaire Lumens: 1903.5 lumens
Efficiency: N/A
Efficacy: 73.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6957	6957	6957
5°	6776	6853	6954
10°	6447	6615	6908
15°	6059	6334	6842
20°	5631	6008	6693
25°	5174	5630	6516
30°	4692	5231	6321
35°	4153	4809	6114
40°	3562	4371	5890
45°	2923	3892	5662
50°	2600	3344	5466
55°	2400	2801	5189
60°	2209	2552	4807
65°	2054	2403	4247
70°	1916	2245	3471
75°	1804	2078	2602
80°	1701	1903	1872
85°	1556	1896	1556

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5662 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.5	4.9
10°-20°	252.1	13.2
20°-30°	346.9	18.2
30°-40°	367.9	19.3
40°-50°	322.0	16.9
50°-60°	247.1	13.0
60°-70°	164.6	8.6
70°-80°	84.4	4.4
80°-90°	25.0	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°	692.5	36.4
0°-40°	1060.4	55.7
0°-60°	1629.5	85.6
0°-90°	1903.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1903.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1010	1010	1010	1010	1010	
5°	980	993	992	998	1006	92
15°	850	870	889	931	960	238
25°	681	704	741	804	858	313
35°	494	517	572	656	727	308
45°	300	325	400	499	582	237
55°	200	204	233	346	432	179
65°	126	127	148	194	261	126
75°	68	72	78	82	98	72
85°	20	22	24	23	20	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1010.4	1010.4	1010.4	1010.4	1010.4
2.5°	1001.0	1011.3	1003.5	1004.4	1005.3
5°	980.4	993.2	991.5	998.4	1006.1
7.5°	952.9	966.7	970.9	988.1	1000.1
10°	922.1	937.5	946.1	971.8	988.1
12.5°	886.9	904.9	918.6	952.1	976.1
15°	850.0	869.7	888.6	930.6	959.8
17.5°	810.6	830.3	855.2	903.2	938.4
20°	768.5	790.0	820.0	871.5	913.5
22.5°	725.6	747.9	782.2	838.9	886.9
25°	681.0	704.2	741.1	803.7	857.7
27.5°	637.3	658.7	701.6	768.5	827.7
30°	590.1	612.4	657.9	731.6	795.1
32.5°	542.9	565.2	617.6	694.8	761.7
35°	494.1	517.2	572.1	656.2	727.4
37.5°	445.2	469.2	530.1	616.7	692.2
40°	396.3	422.0	486.3	577.3	655.3
42.5°	346.5	374.0	441.7	538.7	619.3
45°	300.2	325.1	399.7	499.2	581.5
47.5°	266.8	281.3	355.1	458.9	545.5
50°	242.7	249.6	312.2	420.3	510.3
52.5°	221.3	225.6	270.2	384.3	471.7
55°	199.9	204.1	233.3	346.5	432.3
57.5°	179.3	181.8	205.9	308.8	392.8
60°	160.4	162.1	185.3	271.0	349.1
62.5°	143.2	144.1	165.5	232.4	305.4
65°	126.1	126.9	147.5	193.8	260.7
67.5°	110.6	110.6	130.4	158.7	217.9
70°	95.2	95.2	111.5	128.7	172.4
72.5°	81.5	83.2	94.3	103.8	134.7
75°	67.8	72.0	78.1	82.3	97.8
77.5°	54.9	60.0	62.6	64.3	65.2
80°	42.9	46.3	48.0	48.9	47.2
82.5°	31.7	34.3	35.2	35.2	32.6
85°	19.7	22.3	24.0	23.2	19.7
87.5°	9.4	12.9	13.7	12.0	9.4
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	13.35	14.85	13.72	15.17	15.48	17.38	18.88	17.74	19.19	19.51
	3H	14.94	16.28	15.32	16.61	16.97	18.77	20.11	19.15	20.44	20.80
	4H	15.58	16.84	15.98	17.19	17.57	19.17	20.43	19.57	20.78	21.16
	6H	16.09	17.26	16.51	17.62	18.02	19.38	20.54	19.79	20.91	21.30
	8H	16.27	17.38	16.70	17.77	18.17	19.44	20.54	19.86	20.93	21.34
	12H	16.40	17.46	16.83	17.84	18.27	19.47	20.53	19.90	20.91	21.34
4H	2H	14.12	15.38	14.52	15.73	16.11	17.51	18.77	17.91	19.12	19.50
	3H	15.91	16.95	16.32	17.35	17.75	19.08	20.13	19.49	20.53	20.93
	4H	16.67	17.61	17.11	18.03	18.47	19.59	20.53	20.02	20.95	21.39
	6H	17.31	18.13	17.77	18.57	19.04	19.92	20.73	20.37	21.18	21.64
	8H	17.54	18.31	18.01	18.75	19.22	20.01	20.78	20.48	21.22	21.69
	12H	17.71	18.40	18.20	18.88	19.35	20.09	20.77	20.57	21.25	21.72
8H	4H	17.06	17.82	17.52	18.27	18.73	19.69	20.46	20.15	20.90	21.37
	6H	17.83	18.47	18.33	18.96	19.44	20.11	20.74	20.61	21.23	21.71
	8H	18.15	18.72	18.66	19.23	19.72	20.27	20.84	20.78	21.35	21.83
	12H	18.41	18.91	18.92	19.41	19.97	20.41	20.91	20.92	21.40	21.97
12H	4H	17.10	17.78	17.58	18.26	18.73	19.69	20.37	20.17	20.85	21.32
	6H	17.91	18.48	18.42	18.99	19.48	20.12	20.69	20.63	21.20	21.69
	8H	18.29	18.79	18.80	19.29	19.85	20.33	20.83	20.84	21.32	21.89