

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: P1061814

Luminaire Tested: S125RDRP-S850D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061814
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

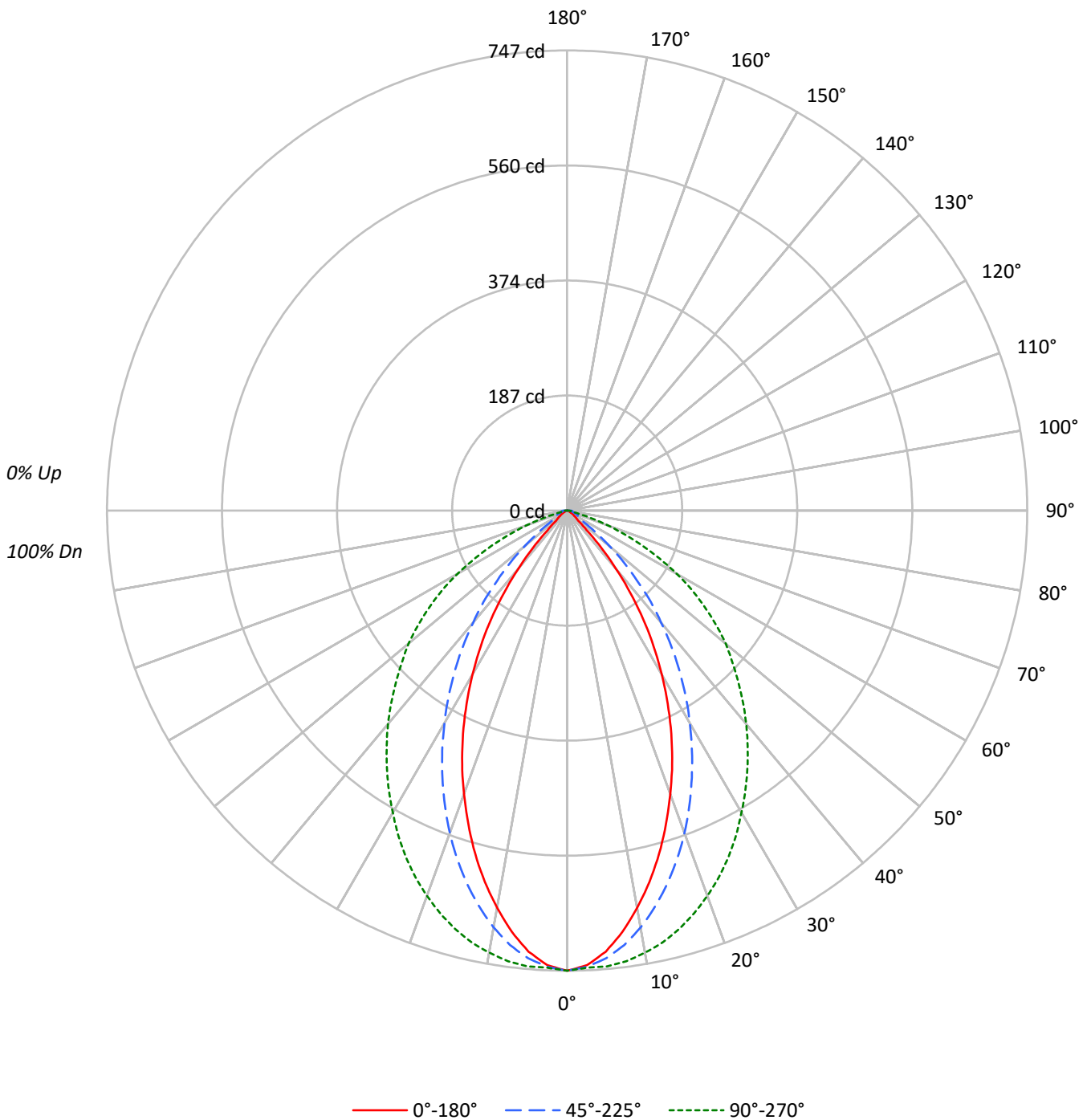
Lumens per Lamp: N/A
Luminaire Lumens: 966.3 lumens
Efficiency: N/A
Efficacy: 37.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5143	5143	5143
5°	4967	5042	5133
10°	4578	4804	5094
15°	4112	4472	5010
20°	3587	4080	4877
25°	3039	3637	4709
30°	2442	3167	4500
35°	1806	2671	4290
40°	1119	2133	4065
45°	436	1560	3822
50°	205	978	3600
55°	149	419	3268
60°	103	297	2834
65°	67	311	2204
70°	66	284	1387
75°	88	287	442
80°	131	329	297
85°	197	656	458

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3822 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.5	7.1
10°-20°	177.5	18.4
20°-30°	226.0	23.4
30°-40°	210.4	21.8
40°-50°	144.8	15.0
50°-60°	82.0	8.5
60°-70°	38.7	4.0
70°-80°	12.1	1.3
80°-90°	6.3	0.7
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°	472.0	48.8
0°-40°	682.4	70.6
0°-60°	909.2	94.1
0°-90°	966.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	966.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	747	747	747	747	747	
5°	719	729	730	736	743	67
15°	577	596	627	675	703	161
25°	400	426	479	559	620	182
35°	215	245	318	427	510	133
45°	45	71	160	290	392	42
55°	12	14	35	167	272	11
65°	4	5	19	60	135	5
75°	3	8	11	12	17	3
85°	2	7	8	8	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	746.9	746.9	746.9	746.9	746.9
2.5°	738.6	746.1	741.1	741.9	742.7
5°	718.7	728.6	729.5	736.1	742.7
7.5°	689.6	702.1	711.2	727.0	737.8
10°	654.8	669.7	687.1	712.9	728.6
12.5°	617.4	634.9	658.9	695.4	717.9
15°	576.8	595.9	627.4	674.7	702.9
17.5°	533.6	555.2	593.4	649.8	685.5
20°	489.6	512.9	556.9	621.6	665.6
22.5°	445.6	469.7	518.7	590.9	644.0
25°	400.0	425.7	478.8	559.3	619.9
27.5°	353.5	380.1	439.0	527.0	594.2
30°	307.1	335.3	398.3	493.8	566.0
32.5°	261.4	289.6	358.5	460.6	538.6
35°	214.9	244.8	317.8	426.6	510.4
37.5°	168.5	200.8	278.0	391.7	481.3
40°	124.5	155.2	237.3	357.7	452.3
42.5°	83.0	112.9	200.8	323.7	422.4
45°	44.8	71.4	160.2	289.6	392.5
47.5°	24.1	38.2	125.3	256.4	363.5
50°	19.1	21.6	91.3	225.7	336.1
52.5°	15.8	17.4	59.8	196.7	304.6
55°	12.4	14.1	34.9	166.8	272.2
57.5°	10.0	11.6	22.4	138.6	240.7
60°	7.5	9.1	21.6	111.2	205.8
62.5°	5.8	6.6	19.9	85.5	169.3
65°	4.1	5.0	19.1	59.8	135.3
67.5°	3.3	4.1	17.4	38.2	101.2
70°	3.3	3.3	14.1	24.9	68.9
72.5°	3.3	5.8	12.4	16.6	41.5
75°	3.3	7.5	10.8	11.6	16.6
77.5°	3.3	8.3	9.1	9.1	9.1
80°	3.3	7.5	8.3	8.3	7.5
82.5°	3.3	6.6	7.5	8.3	6.6
85°	2.5	6.6	8.3	7.5	5.8
87.5°	2.5	6.6	7.5	6.6	4.1
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	14.94	16.23	15.30	16.54	16.85
	3H	0.00	0.00	0.00	0.00	0.00	15.65	16.80	16.03	17.13	17.49
	4H	0.00	0.00	0.00	0.00	0.00	15.68	16.74	16.08	17.09	17.48
	6H	0.00	0.23	0.00	0.60	1.00	15.63	16.60	16.04	16.98	17.37
	8H	0.00	0.82	0.33	1.21	1.61	15.61	16.53	16.04	16.92	17.33
	12H	0.49	1.37	0.92	1.75	2.18	15.59	16.47	16.02	16.85	17.28
4H	2H	0.00	0.51	0.00	0.86	1.24	14.73	15.79	15.13	16.14	16.52
	3H	0.25	1.12	0.66	1.52	1.93	15.48	16.35	15.90	16.75	17.16
	4H	1.26	2.04	1.70	2.46	2.90	15.51	16.29	15.95	16.71	17.15
	6H	2.54	3.21	3.01	3.66	4.12	15.49	16.16	15.95	16.60	17.07
	8H	3.12	3.74	3.59	4.19	4.66	15.47	16.10	15.94	16.54	17.02
	12H	3.68	4.23	4.17	4.71	5.19	15.48	16.03	15.97	16.51	16.99
8H	4H	2.68	3.30	3.15	3.75	4.22	15.39	16.02	15.86	16.46	16.94
	6H	4.24	4.75	4.74	5.25	5.73	15.38	15.89	15.89	16.39	16.87
	8H	5.03	5.49	5.55	6.00	6.49	15.40	15.85	15.92	16.37	16.86
	12H	5.86	6.27	6.38	6.76	7.33	15.46	15.86	15.97	16.35	16.93
12H	4H	2.90	3.45	3.39	3.93	4.41	15.35	15.90	15.84	16.39	16.86
	6H	4.61	5.07	5.14	5.59	6.08	15.34	15.79	15.86	16.31	16.80
	8H	5.60	6.00	6.11	6.50	7.07	15.39	15.79	15.90	16.28	16.86