

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: P1061765

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061765
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
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-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

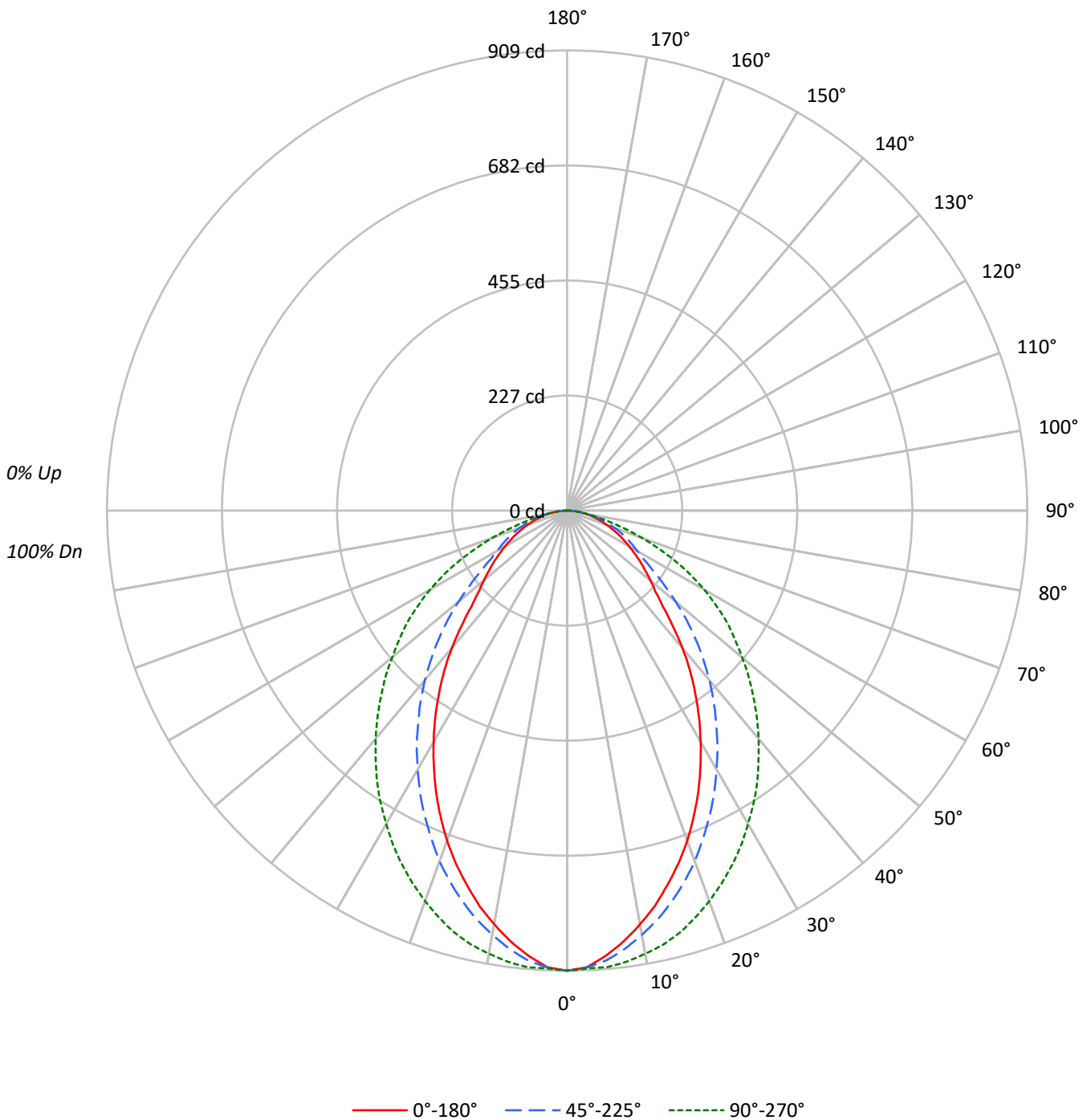
Lumens per Lamp: N/A
Luminaire Lumens: 1703.9 lumens
Efficiency: N/A
Efficacy: 66.0 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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	74	69	77	72	68	74	70	66	64																												
4	86	75	67	61	84	74	67	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	48	59	52	47	58	52	47	56	51	46	44																												
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40																												
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36																												
9	61	48	41	35	59	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°	6258	6258	6258
5°	6100	6162	6257
10°	5802	5948	6215
15°	5456	5695	6149
20°	5083	5402	6014
25°	4656	5057	5863
30°	4194	4692	5681
35°	3709	4312	5503
40°	3183	3925	5289
45°	2599	3493	5066
50°	2305	2996	4834
55°	2114	2485	4632
60°	1950	2201	4314
65°	1820	2115	3847
70°	1699	2011	3144
75°	1570	1883	2320
80°	1475	1764	1693
85°	1367	1722	1438

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5066 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.1	4.9
10°-20°	226.6	13.3
20°-30°	311.4	18.3
30°-40°	330.0	19.4
40°-50°	288.1	16.9
50°-60°	218.8	12.8
60°-70°	146.6	8.6
70°-80°	75.6	4.4
80°-90°	22.7	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°	622.0	36.5
0°-40°	952.1	55.9
0°-60°	1459.0	85.6
0°-90°	1703.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1703.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	909	909	909	909	909	
5°	883	892	892	898	905	83
15°	765	780	799	834	863	215
25°	613	632	666	721	772	281
35°	441	467	513	586	655	275
45°	267	293	359	444	520	211
55°	176	182	207	304	386	158
65°	112	114	130	173	236	111
75°	59	63	71	75	87	63
85°	17	22	22	20	18	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	908.9	908.9	908.9	908.9	908.9
2.5°	902.5	908.9	903.4	903.4	905.3
5°	882.6	891.6	891.6	898.0	905.3
7.5°	858.0	868.0	873.5	888.0	898.9
10°	829.9	840.8	850.8	872.6	888.9
12.5°	799.9	811.7	827.2	855.3	878.0
15°	765.4	780.0	799.0	834.4	862.6
17.5°	730.9	745.5	769.1	810.8	842.6
20°	693.7	709.1	737.3	782.7	820.8
22.5°	653.7	671.0	701.0	752.7	797.2
25°	612.9	632.0	665.6	720.9	771.8
27.5°	570.2	592.9	629.2	688.3	744.5
30°	527.5	550.2	590.2	654.7	714.6
32.5°	484.9	509.4	553.0	621.1	685.5
35°	441.3	466.7	513.0	585.6	654.7
37.5°	398.6	424.0	475.8	551.1	621.1
40°	354.1	380.4	436.7	515.7	588.4
42.5°	308.7	336.9	397.7	479.4	554.8
45°	266.9	293.3	358.7	444.0	520.3
47.5°	236.1	253.3	319.6	407.7	486.7
50°	215.2	224.3	279.7	372.3	451.3
52.5°	194.3	201.6	242.4	336.0	417.7
55°	176.1	181.6	207.0	304.2	385.9
57.5°	158.0	163.4	179.8	272.4	348.7
60°	141.6	146.2	159.8	238.8	313.3
62.5°	126.2	129.8	144.4	207.0	275.1
65°	111.7	114.4	129.8	173.4	236.1
67.5°	97.2	99.9	115.3	141.6	194.3
70°	84.4	85.4	99.9	115.3	156.2
72.5°	71.7	72.6	84.4	93.5	119.9
75°	59.0	62.7	70.8	75.4	87.2
77.5°	48.1	52.7	57.2	59.0	59.0
80°	37.2	42.7	44.5	44.5	42.7
82.5°	27.2	31.8	32.7	30.9	29.1
85°	17.3	21.8	21.8	20.0	18.2
87.5°	8.2	11.8	11.8	10.9	8.2
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	12.98	14.47	13.34	14.79	15.10	16.91	18.40	17.27	18.72	19.03
	3H	14.55	15.89	14.93	16.22	16.58	18.33	19.67	18.71	20.00	20.36
	4H	15.16	16.42	15.56	16.77	17.15	18.74	20.00	19.14	20.35	20.73
	6H	15.66	16.82	16.07	17.19	17.58	18.96	20.12	19.37	20.49	20.88
	8H	15.83	16.94	16.26	17.33	17.73	19.02	20.12	19.44	20.51	20.92
	12H	15.95	17.01	16.38	17.40	17.82	19.05	20.11	19.48	20.49	20.92
4H	2H	13.71	14.97	14.11	15.32	15.70	17.03	18.29	17.43	18.64	19.02
	3H	15.49	16.54	15.90	16.94	17.34	18.64	19.69	19.05	20.09	20.49
	4H	16.23	17.17	16.66	17.59	18.03	19.17	20.11	19.60	20.53	20.96
	6H	16.87	17.68	17.32	18.13	18.59	19.51	20.33	19.97	20.77	21.23
	8H	17.09	17.86	17.56	18.30	18.77	19.61	20.38	20.07	20.82	21.29
	12H	17.27	17.95	17.75	18.43	18.90	19.68	20.37	20.17	20.85	21.32
8H	4H	16.63	17.39	17.09	17.84	18.31	19.28	20.04	19.74	20.48	20.95
	6H	17.42	18.05	17.91	18.54	19.02	19.71	20.35	20.21	20.84	21.32
	8H	17.74	18.31	18.26	18.82	19.31	19.87	20.44	20.39	20.95	21.44
	12H	18.02	18.52	18.53	19.01	19.57	20.01	20.51	20.52	21.00	21.57
12H	4H	16.67	17.36	17.16	17.84	18.31	19.28	19.96	19.76	20.44	20.91
	6H	17.50	18.07	18.01	18.58	19.07	19.73	20.30	20.24	20.81	21.30
	8H	17.90	18.40	18.41	18.89	19.45	19.94	20.44	20.45	20.93	21.50