

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: P1061759

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061759
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D830-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

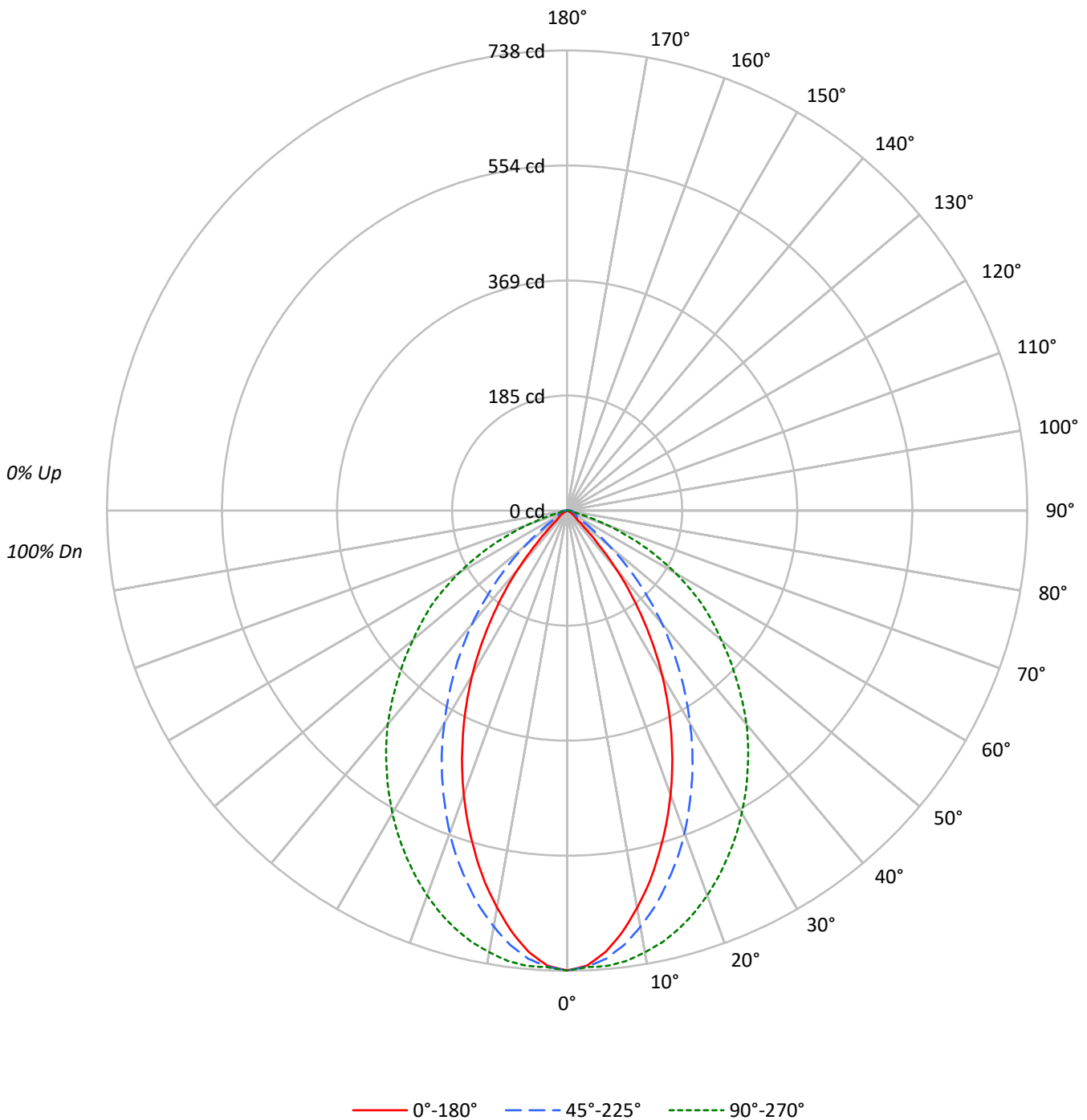
Lumens per Lamp: N/A
Luminaire Lumens: 948.7 lumens
Efficiency: N/A
Efficacy: 36.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65					65			
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59					59			
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54					54			
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49					49			
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42					42			
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5079	5079	5079
5°	4909	4985	5066
10°	4521	4737	5030
15°	4059	4409	4947
20°	3554	4034	4812
25°	3002	3603	4644
30°	2419	3134	4455
35°	1779	2642	4245
40°	1110	2131	4025
45°	416	1557	3741
50°	195	973	3454
55°	142	403	3194
60°	101	212	2764
65°	59	251	2190
70°	54	292	1389
75°	72	290	436
80°	107	361	325
85°	213	577	434

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3741 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.6	7.1
10°-20°	175.1	18.5
20°-30°	223.1	23.5
30°-40°	207.6	21.9
40°-50°	142.2	15.0
50°-60°	78.3	8.3
60°-70°	37.1	3.9
70°-80°	11.7	1.2
80°-90°	6.0	0.6
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°	465.8	49.1
0°-40°	673.4	71.0
0°-60°	894.0	94.2
0°-90°	948.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	948.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	738	738	738	738	738	
5°	710	719	721	727	733	66
15°	570	588	619	665	694	159
25°	395	420	474	550	611	180
35°	212	242	314	418	505	131
45°	43	72	160	283	384	41
55°	12	14	34	158	266	11
65°	4	4	15	58	134	4
75°	3	4	11	12	16	3
85°	3	6	7	6	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	737.6	737.6	737.6	737.6	737.6
2.5°	730.3	737.6	732.1	732.1	733.0
5°	710.3	719.4	721.2	726.7	733.0
7.5°	681.3	693.1	702.2	717.6	728.5
10°	646.7	661.3	677.6	703.1	719.4
12.5°	610.4	625.9	650.4	685.8	708.5
15°	569.5	587.7	618.6	664.9	694.0
17.5°	527.7	547.7	585.9	640.4	676.7
20°	485.1	505.9	550.5	611.3	656.7
22.5°	440.5	463.3	512.3	581.3	634.9
25°	395.1	419.7	474.2	550.5	611.3
27.5°	349.7	375.1	435.1	518.7	586.8
30°	304.3	330.6	394.2	486.0	560.4
32.5°	258.0	287.0	354.3	453.3	533.2
35°	211.6	241.6	314.3	417.8	505.0
37.5°	166.2	197.1	275.2	384.2	476.9
40°	123.5	154.4	237.1	350.6	447.8
42.5°	79.9	112.6	197.1	316.1	416.0
45°	42.7	71.8	159.9	283.4	384.2
47.5°	22.7	38.2	124.4	250.7	354.3
50°	18.2	20.9	90.8	218.0	322.5
52.5°	14.5	16.4	58.1	184.4	294.3
55°	11.8	13.6	33.6	158.1	266.1
57.5°	9.1	10.9	19.1	131.7	233.4
60°	7.3	8.2	15.4	105.4	200.7
62.5°	4.5	6.4	15.4	81.8	168.0
65°	3.6	4.5	15.4	58.1	134.4
67.5°	3.6	3.6	15.4	38.2	100.8
70°	2.7	2.7	14.5	24.5	69.0
72.5°	2.7	2.7	12.7	16.4	40.0
75°	2.7	4.5	10.9	11.8	16.4
77.5°	2.7	7.3	10.0	10.0	9.1
80°	2.7	7.3	9.1	8.2	8.2
82.5°	2.7	7.3	7.3	7.3	6.4
85°	2.7	6.4	7.3	6.4	5.5
87.5°	2.7	6.4	6.4	6.4	3.6
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	0.00	0.00	0.00	0.00	0.00	14.69	15.98	15.06	16.29	16.60
	3H	0.00	0.00	0.00	0.00	0.00	15.48	16.61	15.86	16.94	17.31
	4H	0.00	0.00	0.00	0.00	0.00	15.50	16.56	15.91	16.91	17.30
	6H	0.00	0.00	0.00	0.00	0.10	15.46	16.43	15.88	16.80	17.20
	8H	0.00	0.00	0.00	0.35	0.75	15.44	16.36	15.87	16.75	17.15
	12H	0.00	0.66	0.22	1.04	1.47	15.42	16.30	15.85	16.68	17.11
4H	2H	0.00	0.00	0.00	0.00	0.26	14.47	15.53	14.88	15.88	16.27
	3H	0.00	0.19	0.00	0.60	1.00	15.30	16.16	15.71	16.57	16.97
	4H	0.00	0.69	0.36	1.11	1.55	15.34	16.11	15.77	16.53	16.97
	6H	1.43	2.09	1.89	2.54	3.01	15.32	15.99	15.79	16.43	16.90
	8H	2.17	2.79	2.64	3.24	3.71	15.31	15.93	15.78	16.37	16.85
	12H	2.91	3.46	3.40	3.94	4.42	15.31	15.86	15.80	16.34	16.81
8H	4H	1.97	2.59	2.44	3.04	3.51	15.22	15.84	15.69	16.29	16.76
	6H	3.73	4.23	4.23	4.73	5.21	15.22	15.73	15.73	16.23	16.71
	8H	4.68	5.14	5.21	5.65	6.15	15.23	15.68	15.75	16.20	16.69
	12H	5.62	6.02	6.14	6.52	7.09	15.28	15.68	15.79	16.17	16.75
12H	4H	2.28	2.82	2.76	3.31	3.78	15.18	15.73	15.67	16.21	16.68
	6H	4.19	4.64	4.71	5.16	5.65	15.18	15.63	15.70	16.15	16.64
	8H	5.33	5.73	5.84	6.22	6.80	15.22	15.62	15.73	16.12	16.69