

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: P1061776

Luminaire Tested: S125RDRP-S850D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061776
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D840-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

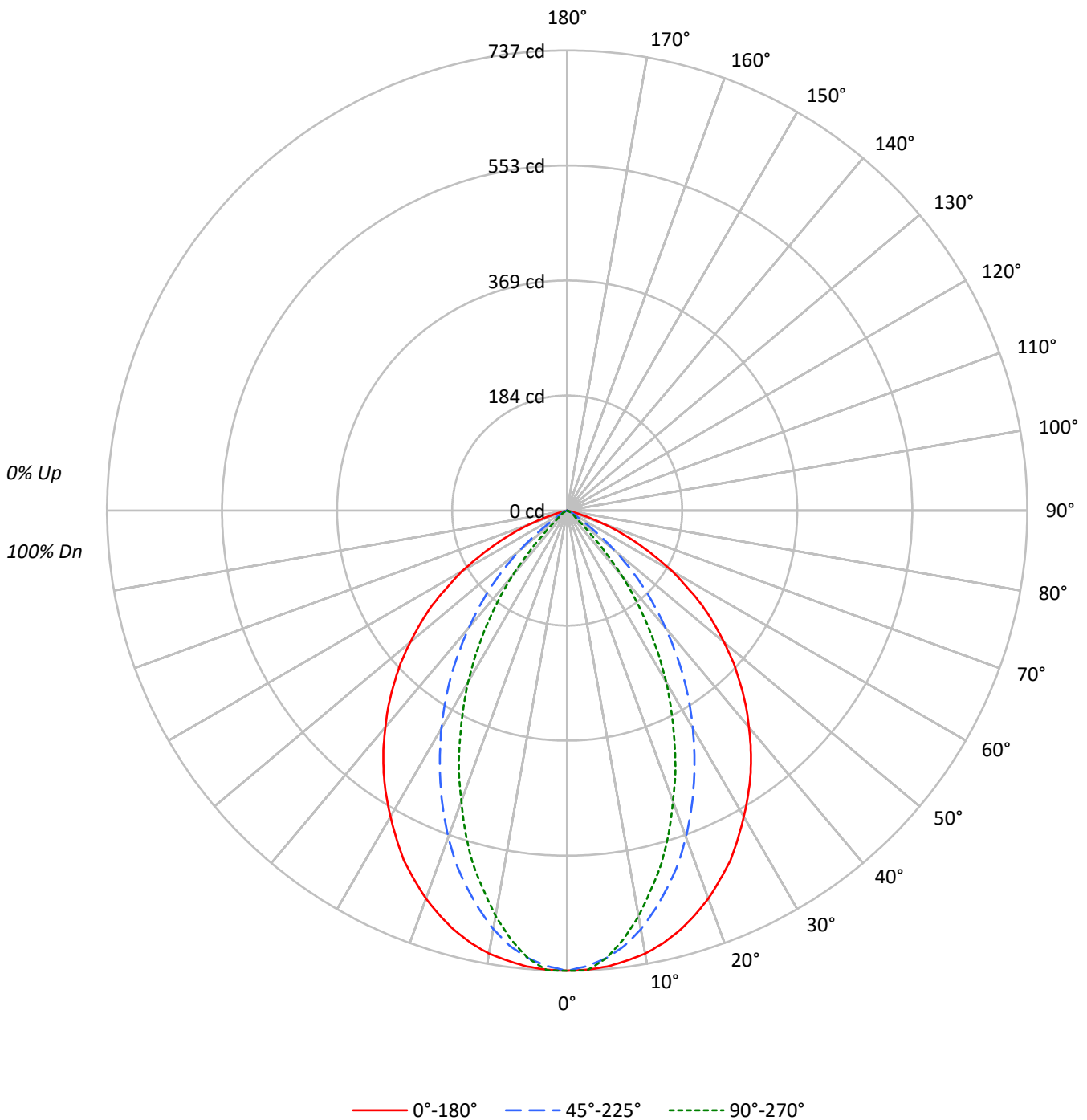
Lumens per Lamp: N/A
Luminaire Lumens: 952.2 lumens
Efficiency: N/A
Efficacy: 36.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5074	5074	5074
5°	5067	4973	4973
10°	5037	4758	4609
15°	4963	4443	4166
20°	4845	4075	3626
25°	4698	3649	3087
30°	4499	3200	2520
35°	4307	2730	1888
40°	4072	2202	1223
45°	3816	1666	531
50°	3510	1063	198
55°	3163	467	140
60°	2678	201	94
65°	2028	127	47
70°	1234	58	20
75°	258	27	27
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3816 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.9	7.1
10°-20°	177.1	18.6
20°-30°	227.4	23.9
30°-40°	214.1	22.5
40°-50°	149.7	15.7
50°-60°	80.0	8.4
60°-70°	31.9	3.3
70°-80°	4.1	0.4
80°-90°	0.0	0.0
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°	472.5	49.6
0°-40°	686.5	72.1
0°-60°	916.1	96.2
0°-90°	952.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	952.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	737	737	737	737	737	
5°	733	731	720	722	720	70
15°	696	674	623	594	584	196
25°	618	564	480	428	406	284
35°	512	431	325	251	225	320
45°	392	294	171	83	54	302
55°	264	161	39	14	12	234
65°	124	50	8	4	3	124
75°	10	3	1	1	1	19
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	737.0	737.0	737.0	737.0	737.0
2.5°	736.1	737.0	730.2	736.1	737.0
5°	733.1	731.2	719.5	721.5	719.5
7.5°	727.3	722.4	703.0	696.2	692.3
10°	720.5	709.8	680.6	666.1	659.2
12.5°	709.8	694.3	653.4	631.0	621.3
15°	696.2	673.8	623.3	594.1	584.4
17.5°	679.7	650.5	592.2	556.2	541.6
20°	661.2	622.3	556.2	513.4	494.9
22.5°	639.8	595.1	519.2	471.6	453.1
25°	618.4	564.0	480.3	427.8	406.4
27.5°	592.2	531.9	441.4	385.0	361.7
30°	565.9	499.8	402.5	341.3	317.0
32.5°	539.6	465.8	363.7	295.6	271.3
35°	512.4	430.7	324.8	250.9	224.6
37.5°	483.3	395.7	283.0	208.1	180.9
40°	453.1	361.7	245.0	166.3	136.1
42.5°	423.9	327.7	207.1	125.4	92.4
45°	391.9	293.6	171.1	82.6	54.5
47.5°	361.7	260.6	134.2	47.6	28.2
50°	327.7	226.6	99.2	25.3	18.5
52.5°	295.6	193.5	66.1	16.5	14.6
55°	263.5	161.4	38.9	13.6	11.7
57.5°	226.6	130.3	21.4	10.7	8.8
60°	194.5	102.1	14.6	7.8	6.8
62.5°	157.5	74.9	10.7	5.8	4.9
65°	124.5	49.6	7.8	3.9	2.9
67.5°	92.4	29.2	4.9	1.9	1.9
70°	61.3	15.6	2.9	1.0	1.0
72.5°	32.1	6.8	1.9	1.0	1.0
75°	9.7	2.9	1.0	1.0	1.0
77.5°	0.0	1.0	0.0	0.0	1.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	14.59	15.85	14.95	16.16	16.48	0.00	0.00	0.00	0.00	0.00
	3H	15.17	16.28	15.55	16.62	16.98	0.00	0.00	0.00	0.00	0.00
	4H	15.14	16.17	15.54	16.52	16.90	0.00	0.00	0.00	0.00	0.00
	6H	15.05	16.00	15.47	16.37	16.76	0.00	0.00	0.00	0.00	0.00
	8H	15.00	15.90	15.44	16.29	16.70	0.00	0.00	0.00	0.00	0.00
	12H	14.96	15.81	15.39	16.19	16.63	0.00	0.00	0.00	0.00	0.00
4H	2H	14.36	15.39	14.76	15.74	16.13	0.00	0.00	0.00	0.00	0.00
	3H	14.95	15.79	15.37	16.19	16.60	0.00	0.00	0.00	0.00	0.00
	4H	14.90	15.64	15.34	16.07	16.51	0.00	0.00	0.00	0.00	0.00
	6H	14.82	15.45	15.28	15.90	16.37	0.00	0.00	0.00	0.00	0.00
	8H	14.76	15.35	15.23	15.80	16.27	0.00	0.00	0.00	0.00	0.00
	12H	14.70	15.23	15.19	15.71	16.19	0.00	0.00	0.00	0.00	0.00
8H	4H	14.76	15.35	15.23	15.80	16.27	0.00	0.00	0.00	0.00	0.00
	6H	14.65	15.13	15.15	15.63	16.11	0.00	0.00	0.00	0.00	0.00
	8H	14.58	15.01	15.11	15.53	16.03	0.00	0.00	0.00	0.00	0.00
	12H	14.53	14.91	15.05	15.41	15.98	0.00	0.00	0.00	0.00	0.00
12H	4H	14.71	15.23	15.19	15.71	16.19	0.00	0.00	0.00	0.00	0.00
	6H	14.58	15.01	15.11	15.53	16.03	0.00	0.00	0.00	0.00	0.00
	8H	14.53	14.91	15.05	15.41	15.98	0.00	0.00	0.00	0.00	0.00