

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: P1061767

Luminaire Tested: S125RDRP-S850D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061767
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-S850D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

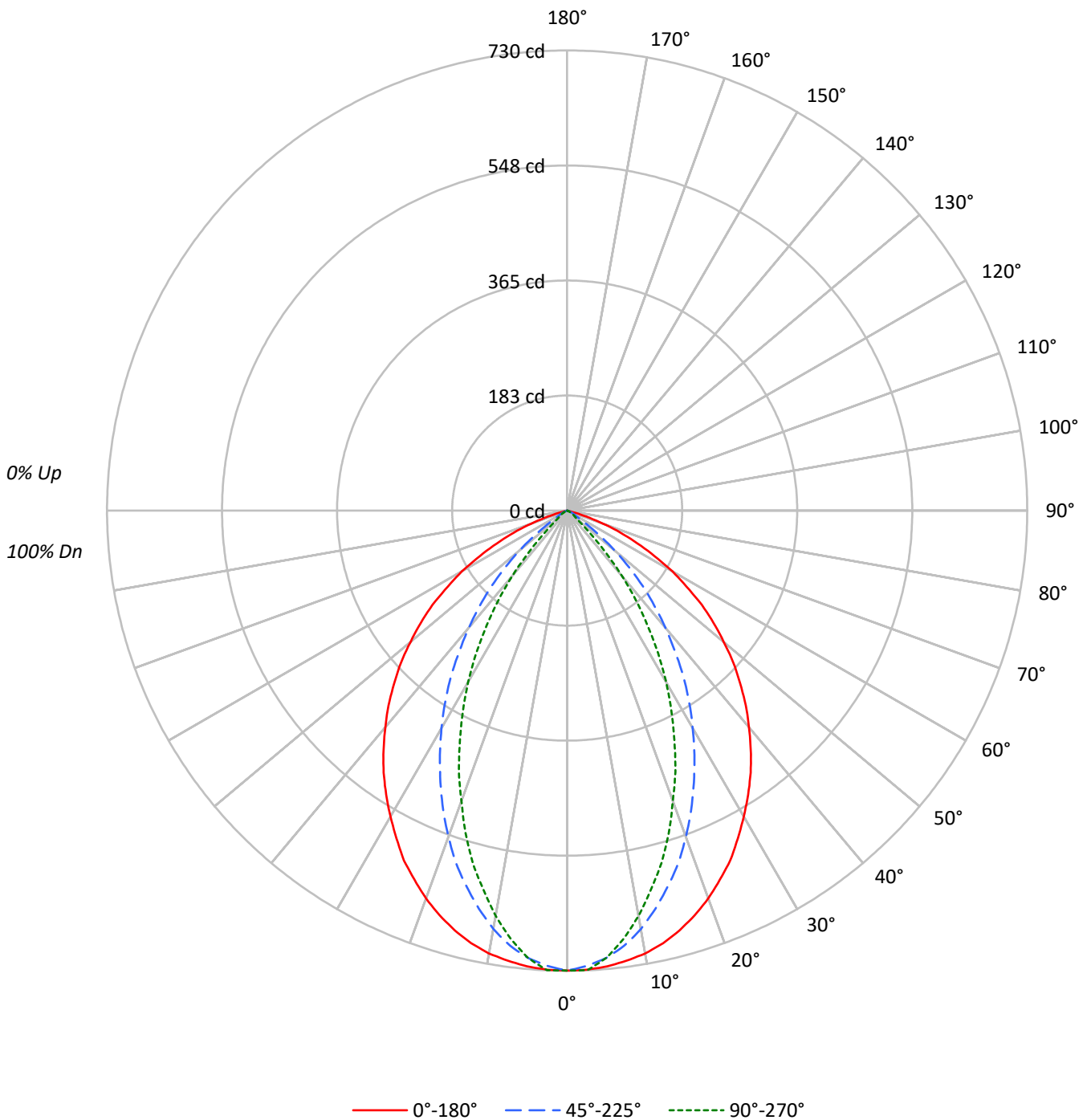
Lumens per Lamp: N/A
Luminaire Lumens: 942.9 lumens
Efficiency: N/A
Efficacy: 36.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	5025	5025	5025
5°	5018	4924	4924
10°	4988	4712	4564
15°	4914	4399	4125
20°	4797	4035	3591
25°	4652	3613	3058
30°	4455	3169	2496
35°	4265	2703	1869
40°	4033	2180	1212
45°	3778	1650	525
50°	3476	1052	196
55°	3132	462	139
60°	2652	198	92
65°	2007	125	47
70°	1222	58	20
75°	255	27	27
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3778 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.3	7.1
10°-20°	175.4	18.6
20°-30°	225.2	23.9
30°-40°	212.0	22.5
40°-50°	148.2	15.7
50°-60°	79.2	8.4
60°-70°	31.6	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°	467.8	49.6
0°-40°	679.8	72.1
0°-60°	907.2	96.2
0°-90°	942.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	942.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	726	724	712	714	712	69
15°	689	667	617	588	579	194
25°	612	558	476	424	402	281
35°	507	426	322	248	222	317
45°	388	291	170	82	54	299
55°	261	160	38	14	12	231
65°	123	49	8	4	3	123
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°	729.8	729.8	729.8	729.8	729.8
2.5°	728.9	729.8	723.1	728.9	729.8
5°	726.0	724.1	712.5	714.4	712.5
7.5°	720.2	715.4	696.1	689.4	685.5
10°	713.5	702.9	674.0	659.5	652.8
12.5°	702.9	687.5	647.0	624.9	615.3
15°	689.4	667.2	617.2	588.3	578.7
17.5°	673.0	644.1	586.4	550.7	536.3
20°	654.7	616.2	550.7	508.4	490.1
22.5°	633.5	589.3	514.2	467.0	448.7
25°	612.4	558.4	475.6	423.7	402.5
27.5°	586.4	526.7	437.1	381.3	358.2
30°	560.4	494.9	398.6	338.0	313.9
32.5°	534.4	461.2	360.1	292.7	268.6
35°	507.4	426.5	321.6	248.4	222.4
37.5°	478.5	391.9	280.2	206.0	179.1
40°	448.7	358.2	242.6	164.6	134.8
42.5°	419.8	324.5	205.1	124.2	91.5
45°	388.0	290.8	169.5	81.8	53.9
47.5°	358.2	258.0	132.9	47.2	27.9
50°	324.5	224.3	98.2	25.0	18.3
52.5°	292.7	191.6	65.5	16.4	14.4
55°	260.9	159.8	38.5	13.5	11.6
57.5°	224.3	129.0	21.2	10.6	8.7
60°	192.6	101.1	14.4	7.7	6.7
62.5°	156.0	74.1	10.6	5.8	4.8
65°	123.2	49.1	7.7	3.9	2.9
67.5°	91.5	28.9	4.8	1.9	1.9
70°	60.7	15.4	2.9	1.0	1.0
72.5°	31.8	6.7	1.9	1.0	1.0
75°	9.6	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	14.55	15.82	14.92	16.13	16.44	0.00	0.00	0.00	0.00	0.00
	3H	15.14	16.25	15.52	16.58	16.95	0.00	0.00	0.00	0.00	0.00
	4H	15.10	16.13	15.50	16.48	16.87	0.00	0.00	0.00	0.00	0.00
	6H	15.02	15.96	15.43	16.33	16.73	0.00	0.00	0.00	0.00	0.00
	8H	14.97	15.86	15.40	16.25	16.66	0.00	0.00	0.00	0.00	0.00
	12H	14.92	15.78	15.36	16.16	16.59	0.00	0.00	0.00	0.00	0.00
4H	2H	14.32	15.36	14.73	15.71	16.09	0.00	0.00	0.00	0.00	0.00
	3H	14.92	15.75	15.33	16.16	16.56	0.00	0.00	0.00	0.00	0.00
	4H	14.87	15.61	15.30	16.03	16.47	0.00	0.00	0.00	0.00	0.00
	6H	14.78	15.42	15.25	15.86	16.33	0.00	0.00	0.00	0.00	0.00
	8H	14.72	15.31	15.19	15.76	16.23	0.00	0.00	0.00	0.00	0.00
	12H	14.67	15.19	15.16	15.68	16.15	0.00	0.00	0.00	0.00	0.00
8H	4H	14.72	15.31	15.19	15.76	16.23	0.00	0.00	0.00	0.00	0.00
	6H	14.61	15.09	15.12	15.59	16.07	0.00	0.00	0.00	0.00	0.00
	8H	14.55	14.98	15.07	15.50	15.99	0.00	0.00	0.00	0.00	0.00
	12H	14.50	14.88	15.01	15.37	15.95	0.00	0.00	0.00	0.00	0.00
12H	4H	14.67	15.19	15.16	15.68	16.15	0.00	0.00	0.00	0.00	0.00
	6H	14.55	14.98	15.07	15.50	15.99	0.00	0.00	0.00	0.00	0.00
	8H	14.50	14.88	15.01	15.37	15.95	0.00	0.00	0.00	0.00	0.00