

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: P1061785

Luminaire Tested: S125RDRP-S850D850-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061785
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-S850D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

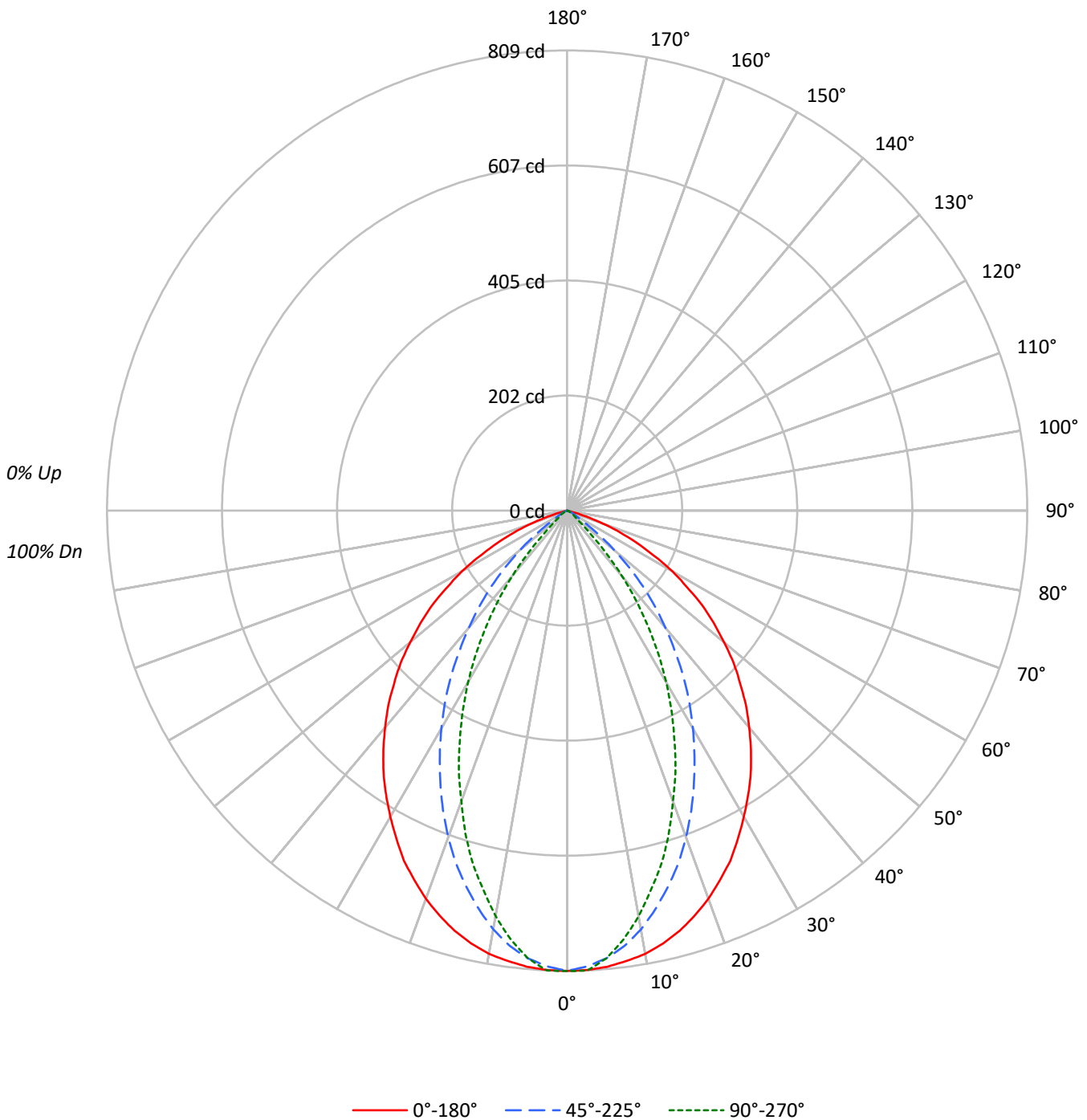
Lumens per Lamp: N/A
Luminaire Lumens: 1045.6 lumens
Efficiency: N/A
Efficacy: 40.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	5573	5573	5573
5°	5564	5461	5461
10°	5532	5226	5062
15°	5449	4879	4574
20°	5320	4475	3982
25°	5159	4007	3391
30°	4941	3515	2768
35°	4730	2997	2074
40°	4472	2419	1344
45°	4190	1830	582
50°	3854	1166	217
55°	3474	513	154
60°	2941	220	103
65°	2227	138	52
70°	1355	64	22
75°	285	29	29
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4190 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.6	7.1
10°-20°	194.5	18.6
20°-30°	249.7	23.9
30°-40°	235.1	22.5
40°-50°	164.4	15.7
50°-60°	87.8	8.4
60°-70°	35.0	3.3
70°-80°	4.5	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°	518.8	49.6
0°-40°	753.9	72.1
0°-60°	1006.1	96.2
0°-90°	1045.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1045.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	809	809	809	809	809	
5°	805	803	790	792	790	76
15°	764	740	684	652	642	215
25°	679	619	528	470	446	312
35°	563	473	357	276	247	351
45°	430	322	188	91	60	332
55°	289	177	43	15	13	257
65°	137	54	8	4	3	136
75°	11	3	1	1	1	21
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°	809.4	809.4	809.4	809.4	809.4
2.5°	808.3	809.4	801.9	808.3	809.4
5°	805.1	803.0	790.2	792.3	790.2
7.5°	798.7	793.4	772.0	764.5	760.3
10°	791.2	779.5	747.5	731.4	724.0
12.5°	779.5	762.4	717.6	693.0	682.3
15°	764.5	740.0	684.5	652.4	641.7
17.5°	746.4	714.4	650.3	610.8	594.8
20°	726.1	683.4	610.8	563.8	543.5
22.5°	702.6	653.5	570.2	517.9	497.6
25°	679.1	619.3	527.5	469.8	446.3
27.5°	650.3	584.1	484.8	422.8	397.2
30°	621.5	548.8	442.1	374.8	348.1
32.5°	592.6	511.5	399.4	324.6	297.9
35°	562.7	473.0	356.6	275.5	246.7
37.5°	530.7	434.6	310.7	228.5	198.6
40°	497.6	397.2	269.1	182.6	149.5
42.5°	465.6	359.8	227.4	137.7	101.4
45°	430.3	322.5	187.9	90.8	59.8
47.5°	397.2	286.2	147.4	52.3	31.0
50°	359.8	248.8	108.9	27.8	20.3
52.5°	324.6	212.5	72.6	18.2	16.0
55°	289.4	177.3	42.7	14.9	12.8
57.5°	248.8	143.1	23.5	11.7	9.6
60°	213.6	112.1	16.0	8.5	7.5
62.5°	173.0	82.2	11.7	6.4	5.3
65°	136.7	54.5	8.5	4.3	3.2
67.5°	101.4	32.0	5.3	2.1	2.1
70°	67.3	17.1	3.2	1.1	1.1
72.5°	35.2	7.5	2.1	1.1	1.1
75°	10.7	3.2	1.1	1.1	1.1
77.5°	0.0	1.1	0.0	0.0	1.1
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	14.91	16.18	15.28	16.49	16.80	0.00	0.00	0.00	0.00	0.00
	3H	15.50	16.61	15.88	16.94	17.31	0.00	0.00	0.00	0.00	0.00
	4H	15.46	16.49	15.86	16.84	17.23	0.00	0.00	0.00	0.00	0.00
	6H	15.38	16.32	15.79	16.69	17.09	0.00	0.00	0.00	0.00	0.00
	8H	15.33	16.22	15.76	16.61	17.02	0.00	0.00	0.00	0.00	0.00
	12H	15.28	16.14	15.72	16.52	16.95	0.00	0.00	0.00	0.00	0.00
4H	2H	14.69	15.72	15.09	16.07	16.45	0.00	0.00	0.00	0.00	0.00
	3H	15.28	16.11	15.69	16.52	16.92	0.00	0.00	0.00	0.00	0.00
	4H	15.23	15.97	15.66	16.39	16.83	0.00	0.00	0.00	0.00	0.00
	6H	15.14	15.78	15.61	16.22	16.69	0.00	0.00	0.00	0.00	0.00
	8H	15.08	15.67	15.55	16.12	16.59	0.00	0.00	0.00	0.00	0.00
	12H	15.03	15.55	15.52	16.04	16.51	0.00	0.00	0.00	0.00	0.00
8H	4H	15.08	15.67	15.55	16.12	16.59	0.00	0.00	0.00	0.00	0.00
	6H	14.97	15.45	15.48	15.95	16.43	0.00	0.00	0.00	0.00	0.00
	8H	14.91	15.34	15.43	15.86	16.35	0.00	0.00	0.00	0.00	0.00
	12H	14.86	15.24	15.37	15.73	16.31	0.00	0.00	0.00	0.00	0.00
12H	4H	15.03	15.55	15.52	16.04	16.51	0.00	0.00	0.00	0.00	0.00
	6H	14.91	15.34	15.43	15.86	16.35	0.00	0.00	0.00	0.00	0.00
	8H	14.86	15.24	15.37	15.73	16.31	0.00	0.00	0.00	0.00	0.00