

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: P1061779

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061779
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D840-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

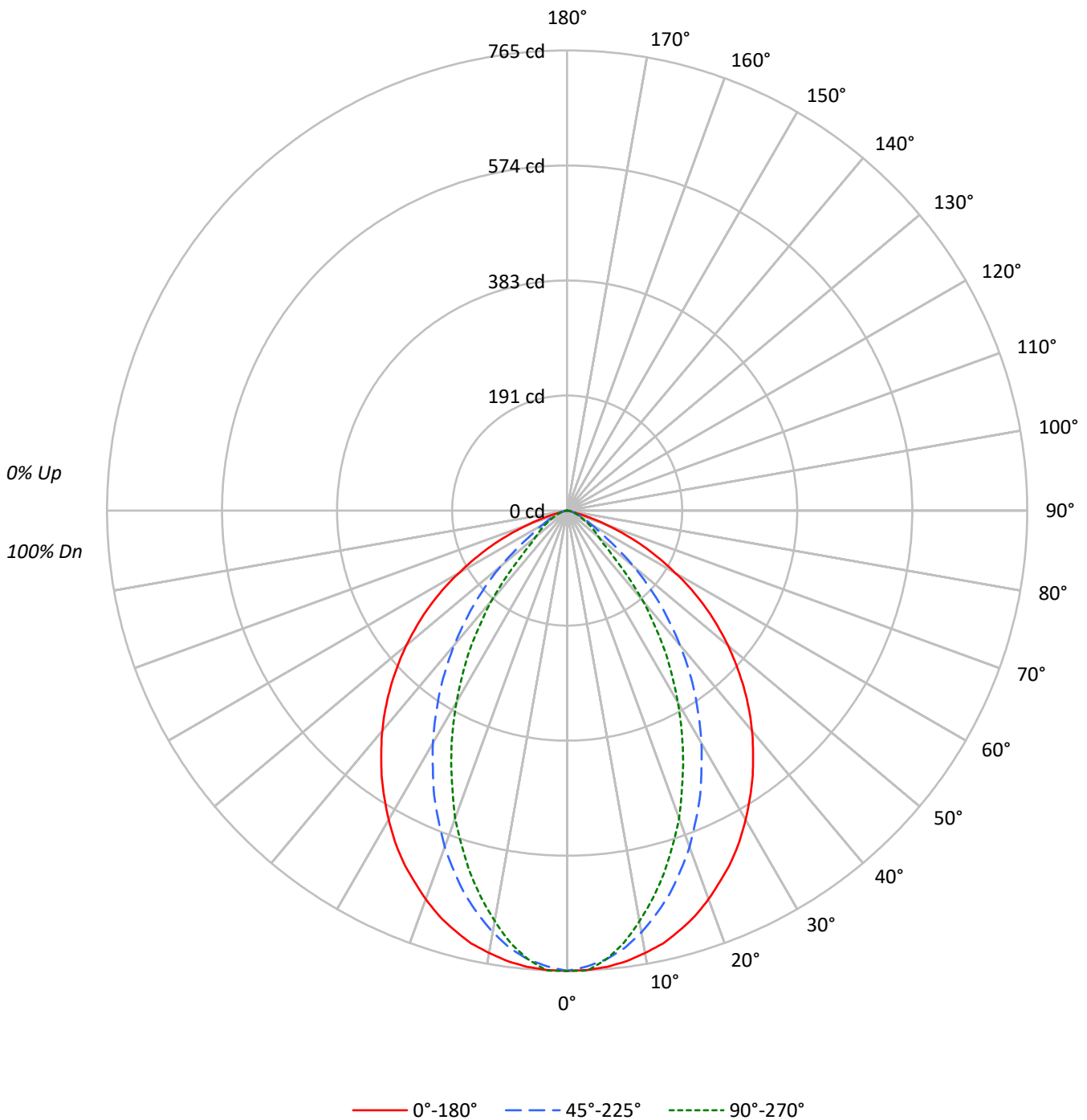
Lumens per Lamp: N/A
Luminaire Lumens: 1106.7 lumens
Efficiency: N/A
Efficacy: 42.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5269	5269	5269
5°	5262	5175	5175
10°	5221	4977	4847
15°	5150	4700	4443
20°	5037	4360	3990
25°	4898	3975	3465
30°	4716	3548	2923
35°	4520	3106	2370
40°	4300	2622	1757
45°	4043	2102	1060
50°	3739	1541	729
55°	3373	946	607
60°	2866	643	482
65°	2266	490	380
70°	1429	352	314
75°	466	258	258
80°	155	194	230
85°	79	150	150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4043 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.8	6.4
10°-20°	186.9	16.9
20°-30°	245.9	22.2
30°-40°	241.6	21.8
40°-50°	182.8	16.5
50°-60°	110.8	10.0
60°-70°	52.3	4.7
70°-80°	13.7	1.2
80°-90°	2.0	0.2
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°	503.6	45.5
0°-40°	745.2	67.3
0°-60°	1038.7	93.9
0°-90°	1106.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1106.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	761	759	749	750	749	72
15°	722	703	659	634	623	203
25°	645	596	523	474	456	296
35°	538	466	370	304	282	336
45°	415	327	216	137	109	320
55°	281	192	79	54	51	250
65°	139	71	30	25	23	137
75°	18	12	10	10	10	27
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	765.3	765.3	765.3	765.3	765.3
2.5°	764.3	764.3	758.5	765.3	765.3
5°	761.4	759.4	748.8	749.7	748.8
7.5°	755.6	751.7	733.2	728.3	724.4
10°	746.8	739.0	711.8	700.1	693.3
12.5°	737.1	723.5	686.5	670.0	659.3
15°	722.5	703.0	659.3	634.0	623.3
17.5°	706.9	678.7	627.2	597.1	583.4
20°	687.5	654.4	595.1	558.2	544.5
22.5°	666.1	627.2	558.2	517.3	498.8
25°	644.7	596.1	523.2	474.5	456.1
27.5°	620.4	565.0	483.3	432.7	412.3
30°	593.2	533.9	446.3	393.8	367.6
32.5°	565.9	501.8	407.4	350.1	323.8
35°	537.7	465.8	369.5	304.4	282.0
37.5°	507.6	431.7	330.6	262.5	236.3
40°	478.4	397.7	291.7	219.8	195.5
42.5°	447.3	363.7	252.8	178.0	150.7
45°	415.2	326.7	215.9	137.1	108.9
47.5°	382.2	293.7	178.9	101.1	81.7
50°	349.1	258.7	143.9	74.9	68.1
52.5°	315.1	224.6	108.9	62.2	59.3
55°	281.0	192.5	78.8	53.5	50.6
57.5°	246.0	157.5	59.3	45.7	42.8
60°	208.1	126.4	46.7	37.9	35.0
62.5°	173.1	99.2	37.9	31.1	29.2
65°	139.1	71.0	30.1	25.3	23.3
67.5°	104.0	47.6	23.3	19.4	19.4
70°	71.0	31.1	17.5	15.6	15.6
72.5°	42.8	18.5	12.6	12.6	12.6
75°	17.5	11.7	9.7	9.7	9.7
77.5°	5.8	6.8	6.8	7.8	7.8
80°	3.9	3.9	4.9	5.8	5.8
82.5°	1.9	2.9	2.9	3.9	3.9
85°	1.0	1.0	1.9	1.9	1.9
87.5°	0.0	0.0	0.0	1.0	1.0
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	15.10	16.43	15.47	16.75	17.06	5.76	7.09	6.12	7.40	7.72
	3H	15.81	16.99	16.19	17.32	17.68	6.54	7.72	6.92	8.05	8.41
	4H	15.82	16.92	16.23	17.27	17.65	6.79	7.88	7.19	8.23	8.62
	6H	15.75	16.76	16.17	17.13	17.52	6.97	7.97	7.38	8.34	8.73
	8H	15.71	16.67	16.14	17.06	17.46	7.01	7.96	7.44	8.35	8.76
	12H	15.67	16.58	16.10	16.96	17.39	7.02	7.93	7.45	8.31	8.74
4H	2H	14.93	16.03	15.34	16.38	16.76	6.24	7.34	6.65	7.69	8.07
	3H	15.68	16.57	16.09	16.97	17.38	7.15	8.04	7.56	8.45	8.85
	4H	15.70	16.49	16.13	16.91	17.35	7.46	8.26	7.90	8.68	9.12
	6H	15.64	16.32	16.10	16.77	17.23	7.72	8.41	8.19	8.85	9.32
	8H	15.58	16.22	16.05	16.67	17.14	7.79	8.43	8.26	8.87	9.34
	12H	15.54	16.10	16.03	16.59	17.06	7.81	8.37	8.30	8.86	9.33
8H	4H	15.58	16.22	16.05	16.66	17.14	7.58	8.21	8.04	8.66	9.13
	6H	15.50	16.02	16.01	16.52	17.00	7.89	8.41	8.40	8.91	9.39
	8H	15.45	15.92	15.97	16.43	16.92	8.00	8.46	8.52	8.98	9.47
	12H	15.41	15.82	15.92	16.32	16.89	8.06	8.47	8.57	8.96	9.54
12H	4H	15.54	16.10	16.02	16.58	17.06	7.55	8.11	8.03	8.59	9.07
	6H	15.45	15.91	15.97	16.43	16.92	7.86	8.33	8.39	8.85	9.34
	8H	15.41	15.82	15.93	16.32	16.89	8.00	8.41	8.52	8.91	9.48