

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: P1061792

Luminaire Tested: S125RDRP-S850D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061792
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D850-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

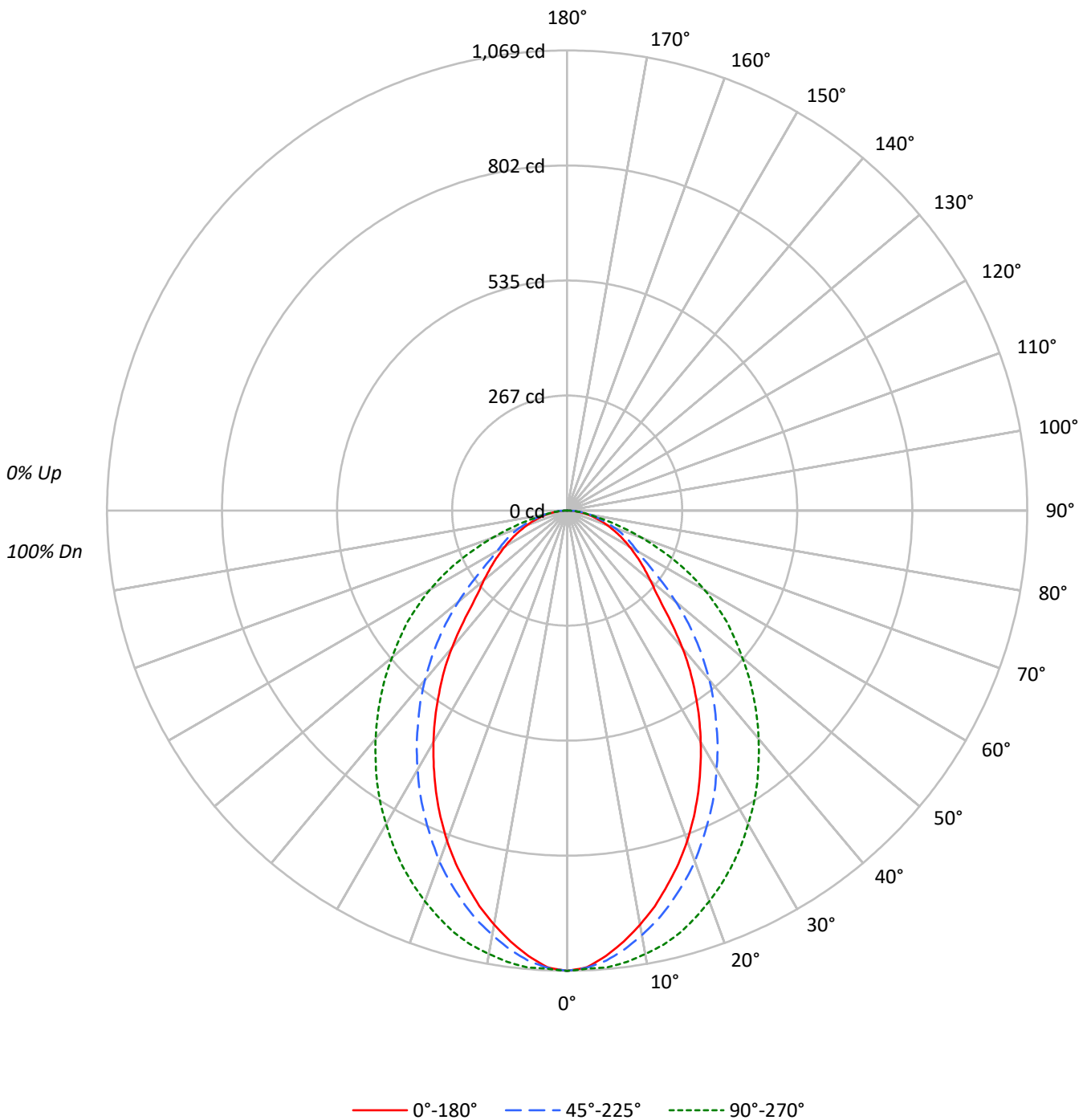
Lumens per Lamp: N/A
Luminaire Lumens: 2004.8 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7363	7363	7363
5°	7177	7251	7361
10°	6827	6998	7312
15°	6420	6701	7234
20°	5980	6356	7077
25°	5478	5949	6899
30°	4935	5521	6685
35°	4364	5073	6475
40°	3745	4619	6222
45°	3058	4109	5961
50°	2712	3524	5688
55°	2488	2924	5450
60°	2296	2589	5076
65°	2141	2489	4526
70°	2001	2365	3700
75°	1846	2216	2729
80°	1737	2074	1990
85°	1604	2022	1691

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5961 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	4.9
10°-20°	266.6	13.3
20°-30°	366.4	18.3
30°-40°	388.3	19.4
40°-50°	338.9	16.9
50°-60°	257.5	12.8
60°-70°	172.5	8.6
70°-80°	88.9	4.4
80°-90°	26.7	1.3
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°	731.9	36.5
0°-40°	1120.2	55.9
0°-60°	1716.6	85.6
0°-90°	2004.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2004.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1069	1069	1069	1069	1069	
5°	1038	1049	1049	1057	1065	97
15°	901	918	940	982	1015	253
25°	721	744	783	848	908	331
35°	519	549	604	689	770	324
45°	314	345	422	522	612	248
55°	207	214	244	358	454	186
65°	131	135	153	204	278	130
75°	69	74	83	89	103	74
85°	20	26	26	24	21	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1069.4	1069.4	1069.4	1069.4	1069.4
2.5°	1061.9	1069.4	1063.0	1063.0	1065.1
5°	1038.4	1049.1	1049.1	1056.6	1065.1
7.5°	1009.6	1021.3	1027.7	1044.8	1057.7
10°	976.5	989.3	1001.0	1026.7	1045.9
12.5°	941.2	955.1	973.3	1006.4	1033.1
15°	900.6	917.7	940.1	981.8	1014.9
17.5°	860.0	877.1	904.9	954.0	991.4
20°	816.2	834.4	867.5	920.9	965.8
22.5°	769.2	789.5	824.8	885.7	938.0
25°	721.1	743.6	783.1	848.3	908.1
27.5°	670.9	697.6	740.4	809.8	876.0
30°	620.7	647.4	694.4	770.3	840.8
32.5°	570.5	599.3	650.6	730.7	806.6
35°	519.2	549.1	603.6	689.1	770.3
37.5°	469.0	498.9	559.8	648.5	730.7
40°	416.7	447.6	513.9	606.8	692.3
42.5°	363.2	396.4	467.9	564.1	652.8
45°	314.1	345.1	422.0	522.4	612.2
47.5°	277.8	298.1	376.1	479.7	572.6
50°	253.2	263.9	329.0	438.0	531.0
52.5°	228.6	237.2	285.2	395.3	491.4
55°	207.3	213.7	243.6	357.9	454.0
57.5°	185.9	192.3	211.5	320.5	410.2
60°	166.7	172.0	188.0	281.0	368.6
62.5°	148.5	152.8	169.9	243.6	323.7
65°	131.4	134.6	152.8	204.1	277.8
67.5°	114.3	117.5	135.7	166.7	228.6
70°	99.4	100.4	117.5	135.7	183.8
72.5°	84.4	85.5	99.4	110.0	141.0
75°	69.4	73.7	83.3	88.7	102.6
77.5°	56.6	62.0	67.3	69.4	69.4
80°	43.8	50.2	52.3	52.3	50.2
82.5°	32.1	37.4	38.5	36.3	34.2
85°	20.3	25.6	25.6	23.5	21.4
87.5°	9.6	13.9	13.9	12.8	9.6
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	13.54	15.04	13.91	15.35	15.67	17.47	18.97	17.84	19.28	19.60
	3H	15.11	16.46	15.49	16.79	17.15	18.89	20.24	19.27	20.56	20.93
	4H	15.73	16.99	16.13	17.34	17.71	19.31	20.57	19.71	20.92	21.29
	6H	16.22	17.39	16.63	17.75	18.14	19.52	20.69	19.94	21.05	21.45
	8H	16.40	17.50	16.82	17.89	18.29	19.58	20.69	20.01	21.08	21.48
	12H	16.52	17.58	16.95	17.96	18.39	19.62	20.68	20.05	21.06	21.49
4H	2H	14.28	15.54	14.68	15.89	16.27	17.60	18.86	18.00	19.20	19.58
	3H	16.06	17.10	16.47	17.50	17.91	19.21	20.25	19.62	20.65	21.05
	4H	16.79	17.74	17.23	18.15	18.59	19.73	20.67	20.17	21.09	21.53
	6H	17.43	18.25	17.89	18.69	19.15	20.08	20.89	20.53	21.34	21.80
	8H	17.66	18.42	18.12	18.87	19.34	20.18	20.94	20.64	21.38	21.85
	12H	17.83	18.52	18.32	18.99	19.47	20.25	20.93	20.73	21.41	21.88
8H	4H	17.20	17.96	17.66	18.40	18.87	19.84	20.61	20.30	21.05	21.52
	6H	17.98	18.61	18.48	19.10	19.58	20.28	20.91	20.78	21.40	21.88
	8H	18.31	18.87	18.82	19.38	19.87	20.44	21.00	20.95	21.51	22.00
	12H	18.58	19.08	19.09	19.57	20.14	20.57	21.07	21.08	21.57	22.13
12H	4H	17.24	17.92	17.72	18.40	18.87	19.84	20.52	20.32	21.00	21.47
	6H	18.06	18.63	18.58	19.14	19.63	20.29	20.86	20.81	21.37	21.86
	8H	18.46	18.96	18.97	19.45	20.02	20.50	21.00	21.01	21.50	22.06