

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: P1175390

Luminaire Tested: S125RDRP-S850D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
Report Number: P1175390
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)
Test Lab: INNOVATION CENTER
Issue Date: 8/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D940-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

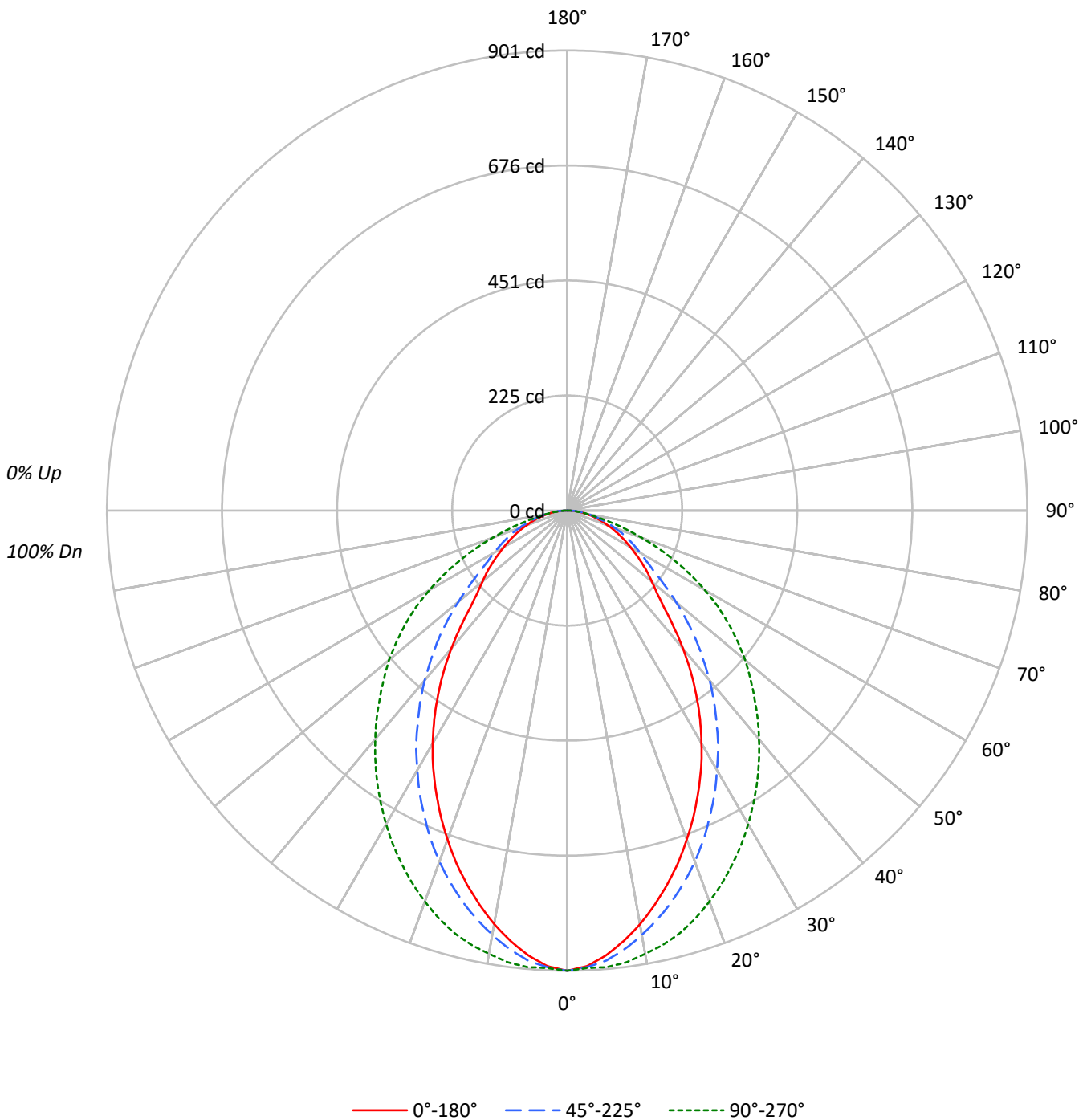
Lumens per Lamp: N/A
Luminaire Lumens: 1697.4 lumens
Efficiency: N/A
Efficacy: 65.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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																		
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	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	73	69	77	72	68	74	70	66	64																												
4	86	75	67	61	84	74	66	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	47	59	52	47	58	51	47	56	51	46	44																												
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40																												
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36																												
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33																												
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6204	6204	6204
5°	6042	6111	6201
10°	5748	5898	6160
15°	5403	5648	6101
20°	5021	5358	5969
25°	4614	5020	5810
30°	4183	4664	5637
35°	3703	4288	5452
40°	3176	3898	5252
45°	2607	3470	5050
50°	2319	2982	4875
55°	2139	2497	4628
60°	1969	2275	4287
65°	1831	2144	3788
70°	1709	2001	3094
75°	1607	1852	2320
80°	1515	1697	1669
85°	1390	1691	1390

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5050 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.4	4.9
10°-20°	224.8	13.2
20°-30°	309.3	18.2
30°-40°	328.1	19.3
40°-50°	287.1	16.9
50°-60°	220.3	13.0
60°-70°	146.8	8.6
70°-80°	75.2	4.4
80°-90°	22.3	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°	617.5	36.4
0°-40°	945.6	55.7
0°-60°	1453.1	85.6
0°-90°	1697.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1697.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	901	901	901	901	901	
5°	874	886	884	890	897	82
15°	758	776	792	830	856	212
25°	607	628	661	717	765	279
35°	441	461	510	585	649	275
45°	268	290	356	445	519	211
55°	178	182	208	309	386	160
65°	112	113	132	173	232	112
75°	60	64	70	73	87	64
85°	18	20	21	21	18	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	901.0	901.0	901.0	901.0	901.0
2.5°	892.6	901.8	894.9	895.6	896.4
5°	874.2	885.7	884.2	890.3	897.2
7.5°	849.7	862.0	865.8	881.1	891.8
10°	822.2	836.0	843.6	866.6	881.1
12.5°	790.8	806.9	819.1	849.0	870.4
15°	758.0	775.6	792.4	829.9	855.9
17.5°	722.8	740.4	762.5	805.4	836.7
20°	685.3	704.4	731.2	777.1	814.6
22.5°	647.1	666.9	697.5	748.0	790.8
25°	607.3	627.9	660.8	716.7	764.8
27.5°	568.3	587.4	625.6	685.3	738.1
30°	526.2	546.1	586.6	652.4	709.0
32.5°	484.1	504.0	550.7	619.5	679.2
35°	440.6	461.2	510.2	585.1	648.6
37.5°	397.0	418.4	472.7	549.9	617.2
40°	353.4	376.3	433.7	514.7	584.3
42.5°	309.0	333.5	393.9	480.3	552.2
45°	267.7	289.9	356.4	445.1	518.6
47.5°	237.9	250.9	316.6	409.2	486.4
50°	216.5	222.6	278.4	374.8	455.1
52.5°	197.3	201.2	240.9	342.7	420.7
55°	178.2	182.0	208.0	309.0	385.5
57.5°	159.9	162.1	183.6	275.3	350.3
60°	143.0	144.6	165.2	241.7	311.3
62.5°	127.7	128.5	147.6	207.3	272.3
65°	112.4	113.2	131.6	172.9	232.5
67.5°	98.7	98.7	116.3	141.5	194.3
70°	84.9	84.9	99.4	114.7	153.7
72.5°	72.7	74.2	84.1	92.5	120.1
75°	60.4	64.2	69.6	73.4	87.2
77.5°	49.0	53.5	55.8	57.4	58.1
80°	38.2	41.3	42.8	43.6	42.1
82.5°	28.3	30.6	31.4	31.4	29.1
85°	17.6	19.9	21.4	20.7	17.6
87.5°	8.4	11.5	12.2	10.7	8.4
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	12.96	14.45	13.32	14.77	15.08	16.98	18.48	17.35	18.79	19.11
	3H	14.54	15.89	14.92	16.22	16.58	18.37	19.71	18.75	20.04	20.40
	4H	15.19	16.45	15.59	16.80	17.17	18.77	20.03	19.17	20.38	20.76
	6H	15.70	16.86	16.11	17.23	17.62	18.98	20.14	19.39	20.51	20.90
	8H	15.88	16.98	16.30	17.37	17.78	19.04	20.15	19.46	20.54	20.94
	12H	16.00	17.06	16.43	17.45	17.87	19.07	20.13	19.50	20.51	20.94
4H	2H	13.73	14.99	14.13	15.33	15.71	17.11	18.37	17.51	18.72	19.10
	3H	15.51	16.55	15.92	16.95	17.36	18.68	19.73	19.09	20.13	20.53
	4H	16.28	17.22	16.71	17.63	18.07	19.19	20.13	19.62	20.55	20.99
	6H	16.92	17.73	17.37	18.18	18.64	19.52	20.34	19.97	20.78	21.24
	8H	17.14	17.91	17.61	18.35	18.82	19.62	20.38	20.08	20.83	21.29
	12H	17.32	18.00	17.80	18.48	18.95	19.69	20.37	20.17	20.85	21.32
8H	4H	16.66	17.42	17.12	17.87	18.34	19.29	20.06	19.75	20.50	20.97
	6H	17.44	18.07	17.93	18.56	19.04	19.71	20.34	20.21	20.83	21.31
	8H	17.75	18.32	18.27	18.83	19.32	19.87	20.44	20.38	20.95	21.44
	12H	18.01	18.52	18.52	19.01	19.57	20.01	20.51	20.52	21.00	21.57
12H	4H	16.70	17.38	17.18	17.86	18.33	19.29	19.97	19.77	20.45	20.92
	6H	17.51	18.08	18.02	18.59	19.08	19.72	20.29	20.24	20.80	21.29
	8H	17.89	18.40	18.40	18.89	19.45	19.93	20.43	20.44	20.93	21.49