

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: P1061782

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061782
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D840-X4F0-XX-UDD-WVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

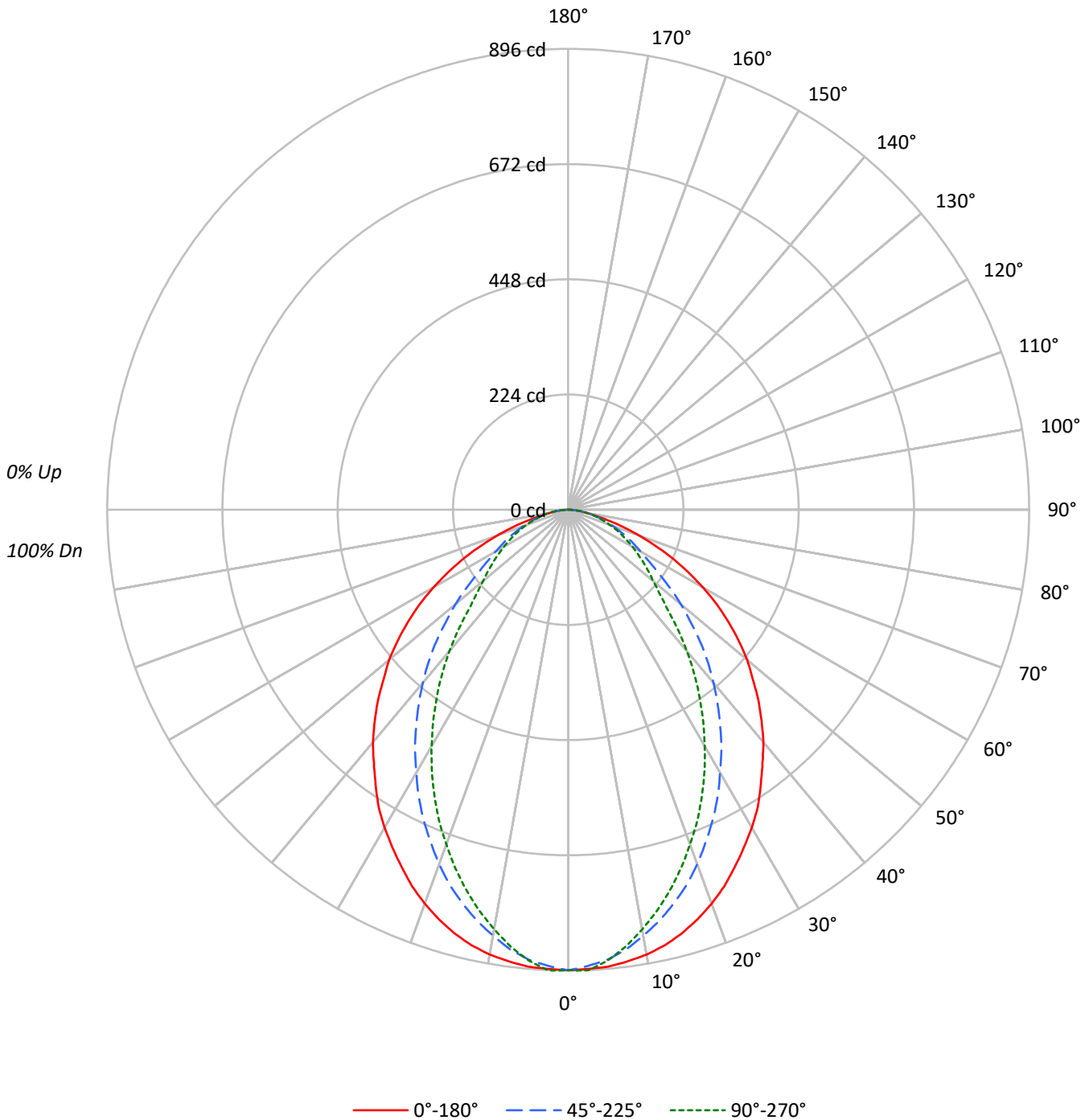
Lumens per Lamp: N/A
Luminaire Lumens: 1696.5 lumens
Efficiency: N/A
Efficacy: 65.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	41	35	60	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°	6166	6166	6166
5°	6163	6069	6082
10°	6139	5881	5792
15°	6079	5649	5455
20°	5971	5372	5073
25°	5821	5053	4668
30°	5674	4692	4221
35°	5484	4332	3743
40°	5305	3950	3225
45°	5085	3532	2642
50°	4864	3062	2313
55°	4564	2557	2136
60°	4164	2236	1995
65°	3643	2043	1854
70°	2955	1840	1723
75°	2120	1681	1604
80°	1467	1503	1503
85°	1074	1303	1382

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5085 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.3	4.9
10°-20°	225.2	13.3
20°-30°	311.3	18.3
30°-40°	331.6	19.5
40°-50°	291.3	17.2
50°-60°	220.9	13.0
60°-70°	143.4	8.5
70°-80°	71.1	4.2
80°-90°	18.6	1.1
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°	619.8	36.5
0°-40°	951.3	56.1
0°-60°	1463.5	86.3
0°-90°	1696.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1696.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	896	896	896	896	896	
5°	892	890	878	881	880	85
15°	853	833	792	774	765	240
25°	766	724	665	631	614	353
35°	652	592	515	469	445	408
45°	522	449	363	298	271	403
55°	380	305	213	184	178	339
65°	224	166	125	116	114	221
75°	80	70	63	61	60	89
85°	14	16	16	16	18	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	895.6	895.6	895.6	895.6	895.6
2.5°	893.6	895.6	887.8	894.6	896.5
5°	891.7	889.7	878.1	881.0	880.0
7.5°	885.8	881.9	862.5	860.6	856.7
10°	878.1	868.3	841.1	834.3	828.5
12.5°	867.4	851.8	818.7	805.1	798.3
15°	852.8	833.3	792.5	774.0	765.3
17.5°	835.3	808.0	765.3	740.0	730.3
20°	814.9	782.8	733.2	704.0	692.3
22.5°	792.5	754.6	699.1	668.0	655.4
25°	766.2	724.4	665.1	631.1	614.5
27.5°	740.0	693.3	629.1	591.2	573.7
30°	713.7	660.2	590.2	549.4	530.9
32.5°	685.5	626.2	554.3	509.5	488.1
35°	652.5	592.2	515.4	468.7	445.3
37.5°	620.4	556.2	477.4	424.9	402.6
40°	590.2	522.2	439.5	382.1	358.8
42.5°	556.2	486.2	401.6	341.3	315.0
45°	522.2	449.2	362.7	297.5	271.3
47.5°	486.2	414.2	321.9	257.7	240.2
50°	454.1	378.3	285.9	227.5	215.9
52.5°	417.1	343.2	248.9	204.2	196.4
55°	380.2	305.3	213.0	183.8	177.9
57.5°	342.3	271.3	184.8	166.3	160.4
60°	302.4	236.3	162.4	147.8	144.9
62.5°	262.5	200.3	142.9	132.2	128.4
65°	223.6	166.3	125.4	115.7	113.8
67.5°	183.8	135.2	107.9	101.1	100.2
70°	146.8	109.9	91.4	87.5	85.6
72.5°	112.8	87.5	76.8	73.9	72.9
75°	79.7	70.0	63.2	61.3	60.3
77.5°	53.5	53.5	50.6	48.6	49.6
80°	37.0	38.9	37.9	37.9	37.9
82.5°	24.3	26.3	27.2	27.2	27.2
85°	13.6	15.6	16.5	16.5	17.5
87.5°	4.9	5.8	6.8	7.8	7.8
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	16.87	18.37	17.24	18.68	18.99	13.12	14.61	13.48	14.92	15.24
	3H	18.18	19.52	18.56	19.85	20.21	14.70	16.04	15.08	16.36	16.73
	4H	18.55	19.81	18.95	20.16	20.54	15.30	16.55	15.70	16.90	17.28
	6H	18.73	19.89	19.14	20.25	20.65	15.77	16.93	16.19	17.30	17.69
	8H	18.77	19.87	19.19	20.26	20.66	15.93	17.03	16.36	17.42	17.82
	12H	18.78	19.83	19.21	20.21	20.64	16.04	17.10	16.47	17.48	17.91
4H	2H	16.99	18.24	17.39	18.59	18.97	13.78	15.03	14.18	15.38	15.76
	3H	18.47	19.51	18.88	19.91	20.31	15.56	16.60	15.97	17.00	17.40
	4H	18.95	19.88	19.38	20.30	20.74	16.28	17.21	16.71	17.63	18.06
	6H	19.23	20.04	19.69	20.49	20.95	16.87	17.68	17.32	18.12	18.58
	8H	19.30	20.06	19.77	20.50	20.97	17.07	17.83	17.53	18.27	18.74
	12H	19.34	20.02	19.83	20.50	20.97	17.22	17.90	17.71	18.38	18.85
8H	4H	19.03	19.79	19.50	20.23	20.70	16.59	17.34	17.05	17.79	18.26
	6H	19.39	20.02	19.89	20.51	20.99	17.29	17.92	17.79	18.41	18.89
	8H	19.51	20.07	20.03	20.58	21.07	17.57	18.13	18.09	18.64	19.13
	12H	19.60	20.09	20.11	20.59	21.15	17.80	18.30	18.31	18.79	19.35
12H	4H	19.02	19.70	19.51	20.18	20.65	16.61	17.29	17.10	17.77	18.24
	6H	19.40	19.96	19.91	20.47	20.96	17.34	17.91	17.86	18.42	18.90
	8H	19.56	20.05	20.07	20.55	21.11	17.68	18.18	18.19	18.67	19.23