

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: P1061826

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061826
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D940-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

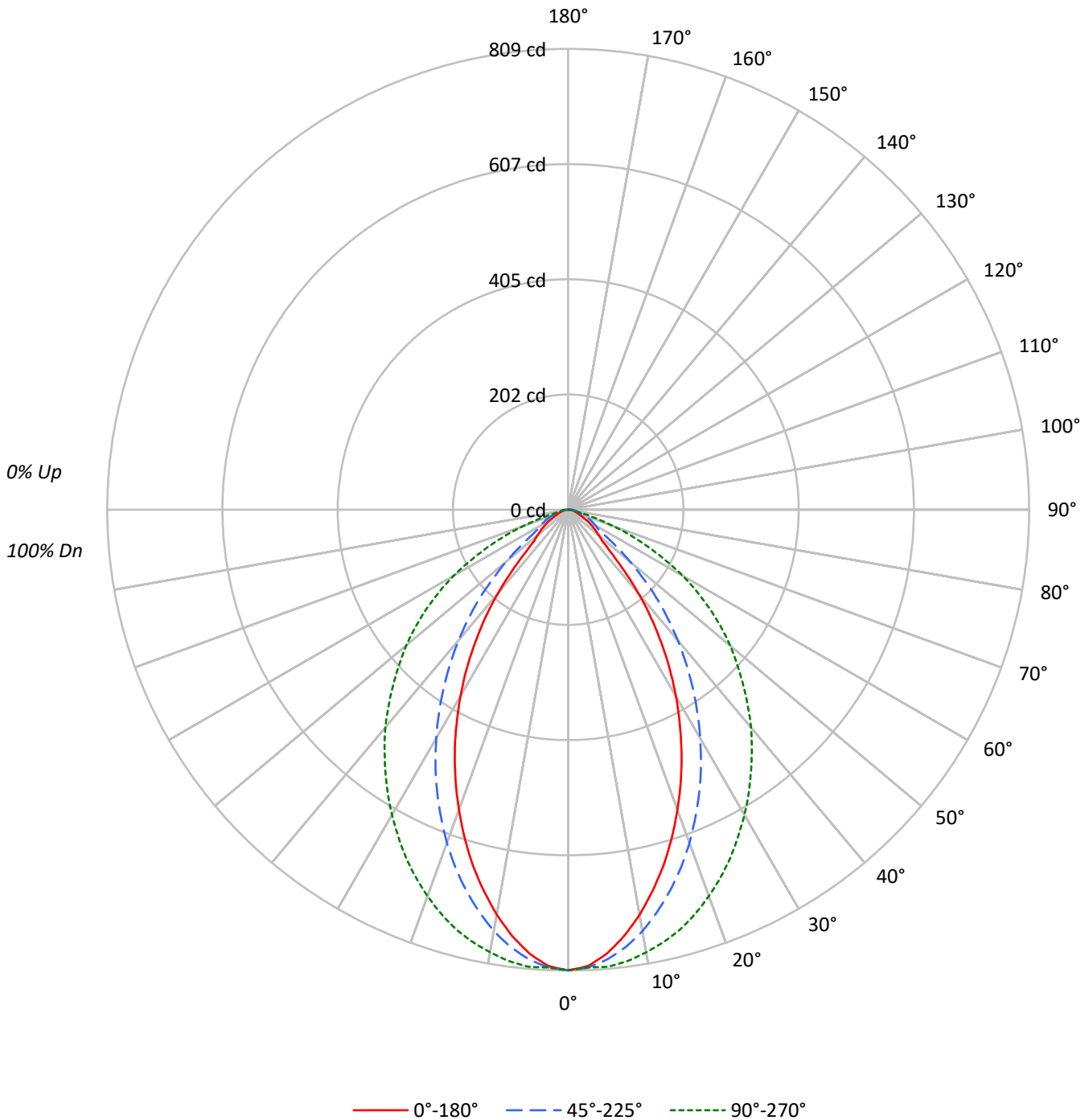
Lumens per Lamp: N/A
Luminaire Lumens: 1171.3 lumens
Efficiency: N/A
Efficacy: 45.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5568	5568	5568
5°	5405	5476	5565
10°	5047	5251	5516
15°	4606	4931	5434
20°	4105	4559	5289
25°	3577	4139	5118
30°	3006	3683	4919
35°	2390	3200	4702
40°	1722	2688	4488
45°	1020	2133	4226
50°	755	1519	3976
55°	640	939	3642
60°	521	757	3207
65°	406	701	2533
70°	346	606	1695
75°	319	527	686
80°	341	543	476
85°	411	814	545

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4226 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.5	6.4
10°-20°	195.7	16.7
20°-30°	255.8	21.8
30°-40°	249.2	21.3
40°-50°	186.9	16.0
50°-60°	117.2	10.0
60°-70°	61.0	5.2
70°-80°	22.1	1.9
80°-90°	8.8	0.7
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°	526.1	44.9
0°-40°	775.3	66.2
0°-60°	1079.5	92.2
0°-90°	1171.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1171.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	809	809	809	809	809	
5°	782	792	792	798	805	73
15°	646	665	692	735	762	180
25°	471	497	545	619	674	215
35°	284	314	381	482	559	177
45°	105	136	219	339	434	88
55°	53	56	78	204	303	48
65°	25	27	43	82	156	26
75°	12	16	20	21	26	13
85°	5	9	10	10	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	808.7	808.7	808.7	808.7	808.7
2.5°	801.8	809.5	804.4	804.4	804.4
5°	782.0	792.3	792.3	798.3	805.2
7.5°	754.5	766.5	774.3	788.9	799.2
10°	721.9	736.5	751.1	775.1	788.9
12.5°	684.9	702.1	722.7	756.2	776.9
15°	646.2	665.1	691.8	734.8	762.3
17.5°	604.1	626.5	658.3	709.8	743.3
20°	560.3	582.6	622.2	680.6	721.9
22.5°	516.5	540.5	583.5	649.7	698.7
25°	470.9	496.7	544.8	618.7	673.7
27.5°	424.5	451.2	504.4	586.9	646.2
30°	378.1	405.6	463.2	552.6	618.7
32.5°	331.7	360.9	421.9	517.3	589.5
35°	284.4	314.5	380.7	482.1	559.4
37.5°	238.9	269.0	339.4	446.0	529.4
40°	191.6	224.3	299.1	409.9	499.3
42.5°	145.2	178.7	258.7	373.8	466.6
45°	104.8	135.8	219.1	338.6	434.0
47.5°	80.8	98.0	178.7	302.5	402.2
50°	70.5	75.6	141.8	269.0	371.2
52.5°	61.0	64.5	106.6	238.0	337.7
55°	53.3	55.9	78.2	204.5	303.4
57.5°	44.7	48.1	61.9	171.9	268.1
60°	37.8	39.5	55.0	141.8	232.9
62.5°	30.9	32.7	49.0	111.7	193.4
65°	24.9	26.6	43.0	82.5	155.5
67.5°	20.6	21.5	36.1	58.4	119.5
70°	17.2	18.0	30.1	40.4	84.2
72.5°	14.6	17.2	24.1	29.2	53.3
75°	12.0	16.3	19.8	20.6	25.8
77.5°	10.3	15.5	16.3	16.3	14.6
80°	8.6	12.9	13.7	12.9	12.0
82.5°	6.9	10.3	11.2	11.2	9.5
85°	5.2	8.6	10.3	9.5	6.9
87.5°	3.4	7.7	8.6	7.7	5.2
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	5.88	7.23	6.25	7.55	7.86	15.50	16.85	15.86	17.16	17.48
	3H	6.74	7.94	7.12	8.27	8.63	16.34	17.54	16.72	17.87	18.23
	4H	7.16	8.28	7.56	8.63	9.01	16.41	17.53	16.81	17.88	18.26
	6H	7.59	8.62	8.00	8.99	9.38	16.39	17.42	16.81	17.79	18.19
	8H	7.77	8.74	8.20	9.14	9.54	16.38	17.36	16.81	17.75	18.15
	12H	7.93	8.87	8.37	9.25	9.68	16.37	17.30	16.80	17.69	18.12
4H	2H	6.85	7.96	7.25	8.32	8.70	15.36	16.48	15.76	16.83	17.21
	3H	7.90	8.81	8.31	9.22	9.62	16.27	17.19	16.68	17.59	17.99
	4H	8.46	9.28	8.89	9.70	10.14	16.37	17.19	16.81	17.61	18.05
	6H	9.06	9.77	9.52	10.21	10.68	16.40	17.11	16.86	17.55	18.02
	8H	9.30	9.96	9.77	10.41	10.88	16.40	17.06	16.87	17.51	17.98
	12H	9.53	10.11	10.01	10.59	11.07	16.41	17.00	16.90	17.48	17.95
8H	4H	8.93	9.59	9.40	10.04	10.51	16.30	16.96	16.77	17.40	17.87
	6H	9.74	10.29	10.25	10.78	11.26	16.35	16.89	16.85	17.39	17.87
	8H	10.12	10.61	10.65	11.13	11.62	16.38	16.87	16.90	17.38	17.88
	12H	10.52	10.95	11.03	11.44	12.01	16.45	16.88	16.96	17.37	17.94
12H	4H	8.98	9.57	9.47	10.05	10.52	16.26	16.85	16.75	17.33	17.80
	6H	9.87	10.35	10.39	10.87	11.36	16.32	16.80	16.84	17.32	17.81
	8H	10.36	10.79	10.87	11.28	11.85	16.39	16.82	16.90	17.31	17.88