

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: P1061823

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061823
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D940-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

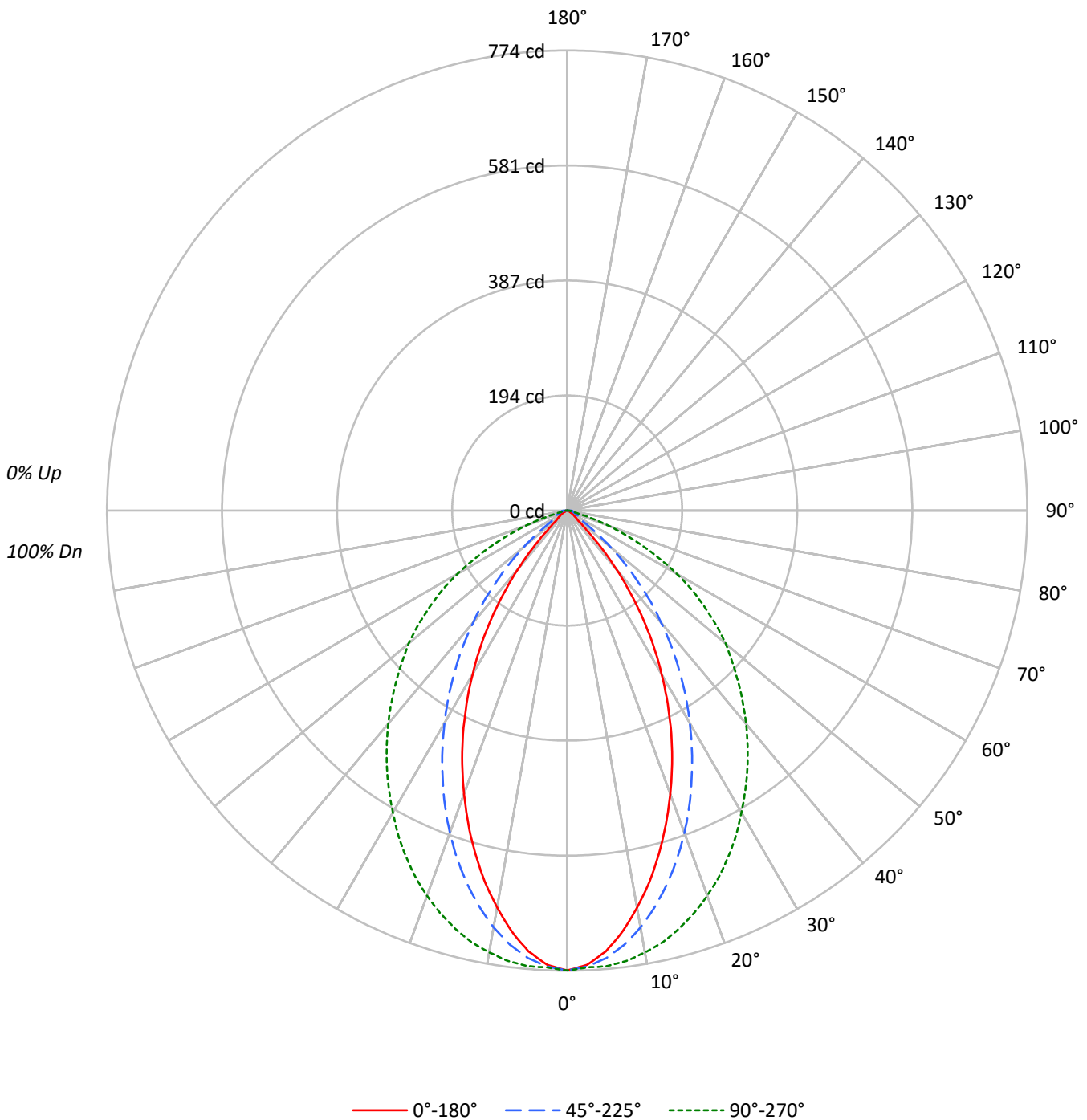
Lumens per Lamp: N/A
Luminaire Lumens: 1000.8 lumens
Efficiency: N/A
Efficacy: 38.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5326	5326	5326
5°	5144	5222	5316
10°	4741	4976	5276
15°	4258	4632	5189
20°	3716	4226	5051
25°	3147	3767	4877
30°	2528	3280	4661
35°	1871	2767	4443
40°	1159	2209	4210
45°	452	1615	3958
50°	212	1012	3729
55°	155	433	3384
60°	106	307	2936
65°	70	323	2282
70°	68	294	1435
75°	90	298	458
80°	135	341	305
85°	205	679	474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3958 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.9	7.1
10°-20°	183.8	18.4
20°-30°	234.1	23.4
30°-40°	217.9	21.8
40°-50°	150.0	15.0
50°-60°	84.9	8.5
60°-70°	40.1	4.0
70°-80°	12.5	1.3
80°-90°	6.5	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°	488.8	48.8
0°-40°	706.7	70.6
0°-60°	941.6	94.1
0°-90°	1000.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1000.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	774	774	774	774	774	
5°	744	755	756	762	769	69
15°	597	617	650	699	728	166
25°	414	441	496	579	642	189
35°	223	254	329	442	529	138
45°	46	74	166	300	406	44
55°	13	15	36	173	282	12
65°	4	5	20	62	140	5
75°	3	8	11	12	17	4
85°	3	7	9	8	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	773.5	773.5	773.5	773.5	773.5
2.5°	764.9	772.7	767.5	768.4	769.2
5°	744.3	754.6	755.5	762.4	769.2
7.5°	714.2	727.1	736.6	752.9	764.1
10°	678.1	693.6	711.7	738.3	754.6
12.5°	639.5	657.5	682.4	720.3	743.5
15°	597.3	617.1	649.8	698.8	728.0
17.5°	552.7	575.0	614.5	673.0	709.9
20°	507.1	531.2	576.7	643.8	689.3
22.5°	461.5	486.5	537.2	612.0	667.0
25°	414.3	440.9	495.9	579.3	642.0
27.5°	366.1	393.6	454.7	545.8	615.4
30°	318.0	347.2	412.6	511.4	586.2
32.5°	270.7	300.0	371.3	477.0	557.8
35°	222.6	253.5	329.2	441.8	528.6
37.5°	174.5	208.0	287.9	405.7	498.5
40°	128.9	160.7	245.8	370.4	468.4
42.5°	85.9	116.9	208.0	335.2	437.5
45°	46.4	73.9	165.9	300.0	406.5
47.5°	24.9	39.5	129.8	265.6	376.5
50°	19.8	22.3	94.5	233.8	348.1
52.5°	16.3	18.0	61.9	203.7	315.4
55°	12.9	14.6	36.1	172.8	281.9
57.5°	10.3	12.0	23.2	143.5	249.3
60°	7.7	9.5	22.3	115.2	213.2
62.5°	6.0	6.9	20.6	88.5	175.3
65°	4.3	5.2	19.8	61.9	140.1
67.5°	3.4	4.3	18.0	39.5	104.9
70°	3.4	3.4	14.6	25.8	71.3
72.5°	3.4	6.0	12.9	17.2	43.0
75°	3.4	7.7	11.2	12.0	17.2
77.5°	3.4	8.6	9.5	9.5	9.5
80°	3.4	7.7	8.6	8.6	7.7
82.5°	3.4	6.9	7.7	8.6	6.9
85°	2.6	6.9	8.6	7.7	6.0
87.5°	2.6	6.9	7.7	6.9	4.3
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	0.00	0.00	0.00	0.00	0.00	15.06	16.35	15.42	16.66	16.97
	3H	0.00	0.00	0.00	0.00	0.00	15.78	16.92	16.16	17.25	17.61
	4H	0.00	0.00	0.00	0.00	0.00	15.80	16.86	16.20	17.21	17.60
	6H	0.00	0.33	0.00	0.70	1.10	15.75	16.73	16.17	17.10	17.49
	8H	0.00	0.92	0.43	1.31	1.72	15.73	16.65	16.16	17.04	17.45
	12H	0.59	1.48	1.03	1.86	2.29	15.71	16.59	16.14	16.98	17.41
4H	2H	0.00	0.63	0.00	0.98	1.36	14.85	15.91	15.25	16.26	16.64
	3H	0.37	1.24	0.78	1.64	2.05	15.60	16.47	16.02	16.88	17.28
	4H	1.37	2.15	1.81	2.57	3.01	15.63	16.41	16.07	16.83	17.27
	6H	2.65	3.31	3.11	3.76	4.23	15.61	16.28	16.07	16.72	17.19
	8H	3.23	3.85	3.70	4.30	4.77	15.60	16.22	16.07	16.67	17.14
	12H	3.79	4.34	4.28	4.83	5.30	15.60	16.15	16.09	16.64	17.11
8H	4H	2.80	3.42	3.27	3.87	4.34	15.52	16.14	15.99	16.59	17.06
	6H	4.35	4.86	4.86	5.36	5.84	15.51	16.01	16.01	16.51	16.99
	8H	5.15	5.60	5.67	6.12	6.61	15.52	15.97	16.04	16.49	16.98
	12H	5.99	6.40	6.51	6.89	7.46	15.58	15.98	16.09	16.48	17.05
12H	4H	3.02	3.57	3.51	4.05	4.53	15.47	16.02	15.96	16.51	16.98
	6H	4.72	5.18	5.25	5.70	6.19	15.46	15.92	15.98	16.43	16.92
	8H	5.72	6.12	6.23	6.61	7.19	15.51	15.91	16.02	16.40	16.98