

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061844

Luminaire Tested: S125RDR-H1090D830-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061844
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: S125RDR-H1090D830-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

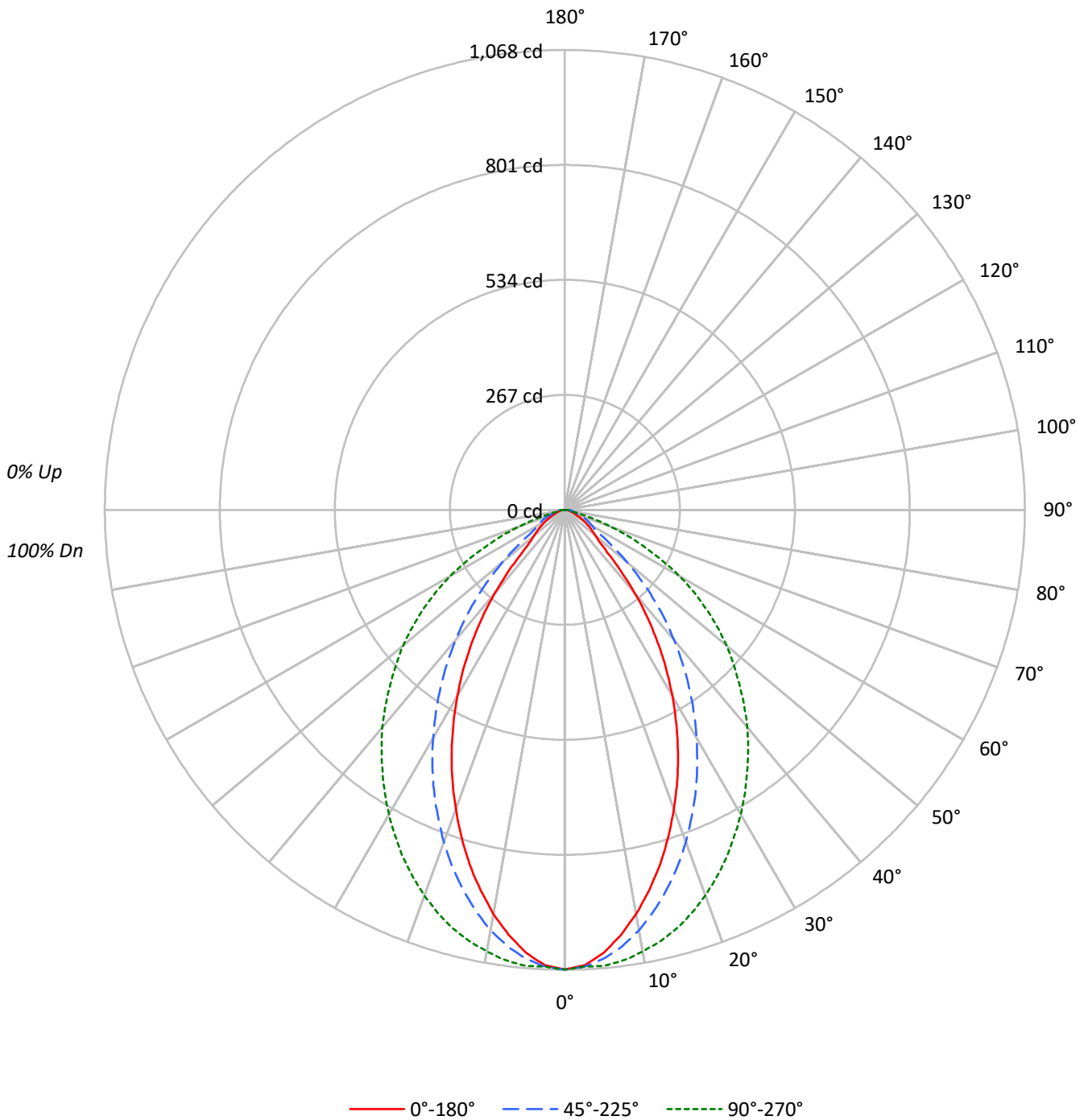
Lumens per Lamp: N/A
Luminaire Lumens: 1546.2 lumens
Efficiency: N/A
Efficacy: 49.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (Ain): 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°	7350	7350	7350
5°	7135	7229	7346
10°	6662	6932	7281
15°	6081	6509	7172
20°	5419	6018	6982
25°	4722	5464	6757
30°	3968	4861	6494
35°	3156	4224	6207
40°	2274	3548	5924
45°	1348	2817	5578
50°	996	2005	5250
55°	844	1239	4806
60°	687	1000	4233
65°	536	924	3345
70°	457	799	2239
75°	423	694	904
80°	448	722	630
85°	537	1074	719

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5578 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.4	6.4
10°-20°	258.4	16.7
20°-30°	337.7	21.8
30°-40°	329.0	21.3
40°-50°	246.8	16.0
50°-60°	154.7	10.0
60°-70°	80.5	5.2
70°-80°	29.1	1.9
80°-90°	11.5	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°	694.5	44.9
0°-40°	1023.5	66.2
0°-60°	1425.0	92.2
0°-90°	1546.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1546.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1068	1068	1068	1068	1068	
5°	1032	1046	1046	1054	1063	96
15°	853	878	913	970	1006	238
25°	622	656	719	817	889	284
35°	376	415	502	636	738	233
45°	138	179	289	447	573	116
55°	70	74	103	270	400	63
65°	33	35	57	109	205	34
75°	16	22	26	27	34	17
85°	7	11	14	12	9	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1067.5	1067.5	1067.5	1067.5	1067.5
2.5°	1058.4	1068.6	1061.8	1061.8	1061.8
5°	1032.3	1045.9	1045.9	1053.8	1062.9
7.5°	996.0	1011.9	1022.1	1041.4	1055.0
10°	952.9	972.2	991.5	1023.2	1041.4
12.5°	904.1	926.8	954.0	998.3	1025.5
15°	853.1	878.0	913.2	969.9	1006.2
17.5°	797.5	827.0	868.9	937.0	981.2
20°	739.6	769.1	821.3	898.4	952.9
22.5°	681.8	713.5	770.2	857.6	922.3
25°	621.6	655.7	719.2	816.8	889.4
27.5°	560.4	595.6	665.9	774.8	853.1
30°	499.1	535.4	611.4	729.4	816.8
32.5°	437.9	476.4	557.0	682.9	778.2
35°	375.5	415.2	502.5	636.4	738.5
37.5°	315.4	355.1	448.1	588.7	698.8
40°	253.0	296.1	394.8	541.1	659.1
42.5°	191.7	236.0	341.5	493.5	616.0
45°	138.4	179.2	289.3	446.9	572.9
47.5°	106.6	129.3	236.0	399.3	530.9
50°	93.0	99.8	187.2	355.1	490.1
52.5°	80.5	85.1	140.7	314.2	445.8
55°	70.3	73.7	103.2	270.0	400.4
57.5°	59.0	63.5	81.7	226.9	353.9
60°	49.9	52.2	72.6	187.2	307.4
62.5°	40.8	43.1	64.7	147.5	255.2
65°	32.9	35.2	56.7	108.9	205.3
67.5°	27.2	28.4	47.6	77.1	157.7
70°	22.7	23.8	39.7	53.3	111.2
72.5°	19.3	22.7	31.8	38.6	70.3
75°	15.9	21.6	26.1	27.2	34.0
77.5°	13.6	20.4	21.6	21.6	19.3
80°	11.3	17.0	18.2	17.0	15.9
82.5°	9.1	13.6	14.7	14.7	12.5
85°	6.8	11.3	13.6	12.5	9.1
87.5°	4.5	10.2	11.3	10.2	6.8
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	6.85	8.20	7.21	8.51	8.83	16.46	17.81	16.83	18.13	18.44
	3H	7.70	8.90	8.08	9.23	9.60	17.30	18.50	17.68	18.83	19.20
	4H	8.13	9.25	8.53	9.60	9.98	17.38	18.50	17.78	18.85	19.23
	6H	8.56	9.58	8.97	9.95	10.35	17.36	18.39	17.77	18.76	19.15
	8H	8.73	9.71	9.16	10.10	10.51	17.35	18.32	17.78	18.71	19.12
	12H	8.90	9.83	9.33	10.21	10.64	17.33	18.27	17.77	18.65	19.08
4H	2H	7.81	8.93	8.21	9.28	9.66	16.32	17.44	16.73	17.79	18.18
	3H	8.86	9.78	9.27	10.18	10.58	17.23	18.15	17.65	18.55	18.96
	4H	9.43	10.25	9.86	10.66	11.11	17.34	18.16	17.77	18.57	19.02
	6H	10.02	10.73	10.49	11.18	11.64	17.36	18.07	17.83	18.52	18.98
	8H	10.26	10.92	10.73	11.37	11.84	17.36	18.03	17.83	18.47	18.94
	12H	10.49	11.07	10.97	11.56	12.03	17.38	17.96	17.86	18.44	18.92
8H	4H	9.90	10.56	10.37	11.01	11.48	17.26	17.92	17.73	18.37	18.84
	6H	10.71	11.25	11.21	11.75	12.23	17.32	17.86	17.82	18.35	18.83
	8H	11.09	11.58	11.61	12.09	12.58	17.35	17.83	17.87	18.35	18.84
	12H	11.48	11.91	11.99	12.40	12.97	17.41	17.84	17.93	18.34	18.91
12H	4H	9.95	10.54	10.44	11.02	11.49	17.23	17.81	17.71	18.30	18.77
	6H	10.83	11.32	11.35	11.83	12.32	17.28	17.77	17.80	18.28	18.77
	8H	11.32	11.75	11.83	12.24	12.81	17.35	17.78	17.87	18.28	18.85