

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: P1061852

Luminaire Tested: S125RDR-H1090D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061852
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1090D835-X4F0-XX-UDD-SVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

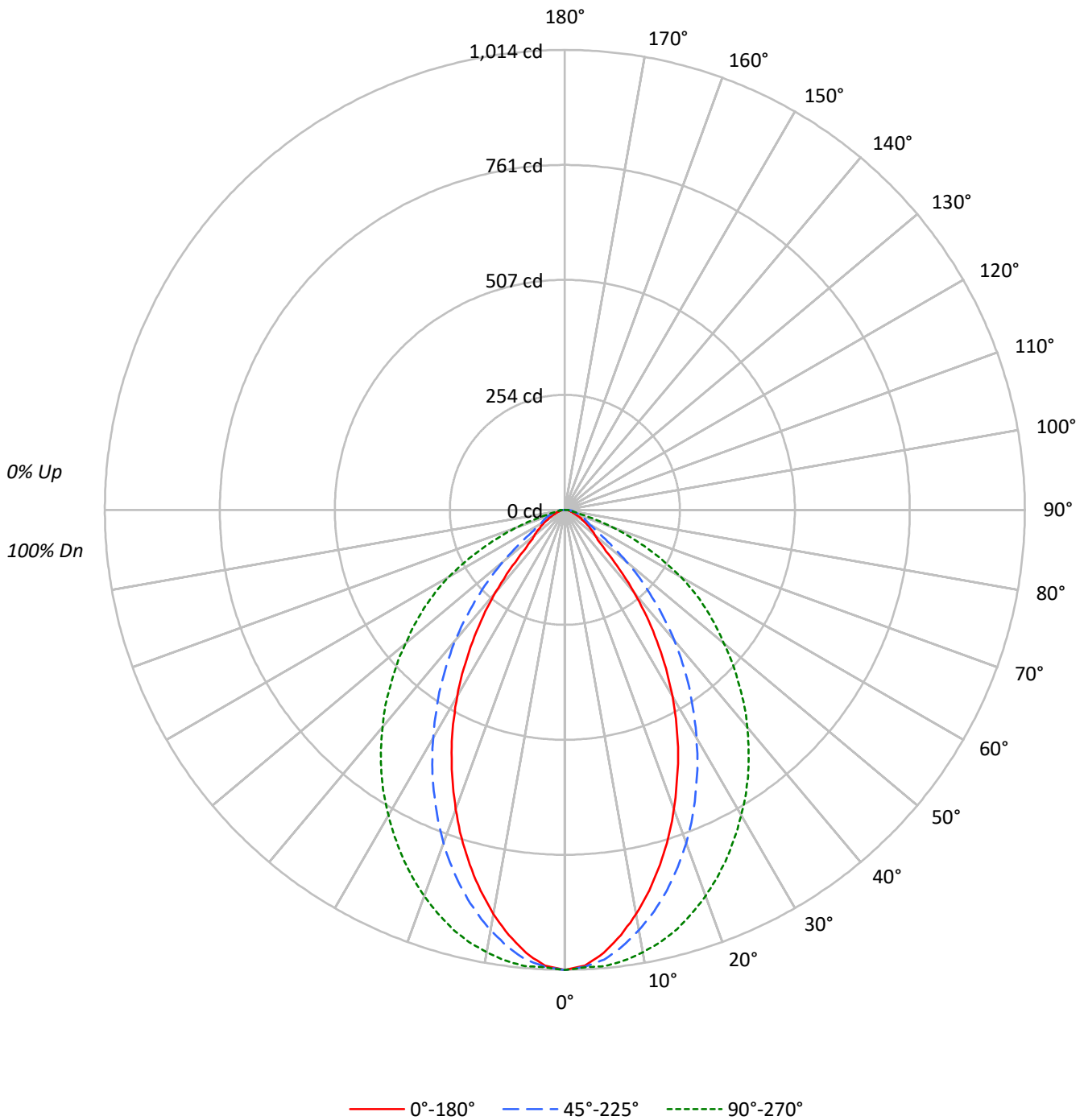
Lumens per Lamp: N/A
Luminaire Lumens: 1464.7 lumens
Efficiency: N/A
Efficacy: 46.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79				79
3	96	88	81	76	94	87	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	63				63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6984	6984	6984
5°	6778	6878	6978
10°	6327	6579	6924
15°	5772	6193	6819
20°	5149	5731	6639
25°	4488	5193	6426
30°	3769	4611	6181
35°	2974	4015	5927
40°	2131	3374	5624
45°	1254	2649	5273
50°	928	1908	4898
55°	780	1156	4551
60°	629	846	4060
65°	490	803	3255
70°	413	751	2204
75°	383	673	960
80°	381	666	619
85°	474	853	664

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5273 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.5	6.4
10°-20°	245.5	16.8
20°-30°	320.9	21.9
30°-40°	312.4	21.3
40°-50°	233.5	15.9
50°-60°	144.8	9.9
60°-70°	76.1	5.2
70°-80°	27.7	1.9
80°-90°	10.4	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°	659.9	45.1
0°-40°	972.3	66.4
0°-60°	1350.5	92.2
0°-90°	1464.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1464.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1014	1014	1014	1014	1014	
5°	981	994	995	1001	1010	91
15°	810	834	869	922	957	226
25°	591	621	684	776	846	270
35°	354	392	478	605	705	220
45°	129	168	272	425	542	108
55°	65	69	96	250	379	58
65°	30	32	49	106	200	31
75°	14	17	25	28	36	16
85°	6	11	11	11	8	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1014.4	1014.4	1014.4	1014.4	1014.4
2.5°	1006.0	1014.4	1008.4	1008.4	1009.6
5°	980.7	994.0	995.2	1001.2	1009.6
7.5°	945.8	961.5	971.1	989.1	1002.4
10°	904.9	923.0	941.0	971.1	990.4
12.5°	859.2	880.8	907.3	948.2	975.9
15°	809.8	833.9	868.8	921.8	956.7
17.5°	758.1	783.4	826.7	890.5	932.6
20°	702.8	730.4	782.2	854.4	906.1
22.5°	646.2	677.5	734.0	815.9	877.2
25°	590.8	620.9	683.5	776.2	845.9
27.5°	533.1	564.4	633.0	735.2	812.3
30°	474.1	507.8	580.0	693.1	777.4
32.5°	415.2	450.0	528.3	649.8	742.5
35°	353.8	392.3	477.7	605.3	705.2
37.5°	296.0	336.9	426.0	559.6	665.4
40°	237.1	279.2	375.4	515.0	625.7
42.5°	179.3	222.6	323.7	469.3	586.0
45°	128.8	168.5	272.0	424.8	541.5
47.5°	98.7	121.5	223.8	379.1	501.8
50°	86.6	93.9	178.1	334.5	457.3
52.5°	75.8	80.6	132.4	291.2	418.8
55°	65.0	68.6	96.3	250.3	379.1
57.5°	55.4	59.0	73.4	213.0	338.1
60°	45.7	49.3	61.4	175.7	294.8
62.5°	38.5	39.7	55.4	140.8	246.7
65°	30.1	32.5	49.3	105.9	199.8
67.5°	25.3	26.5	43.3	75.8	154.0
70°	20.5	21.7	37.3	52.9	109.5
72.5°	18.1	18.1	31.3	38.5	69.8
75°	14.4	16.8	25.3	27.7	36.1
77.5°	12.0	16.8	21.7	20.5	19.3
80°	9.6	15.6	16.8	16.8	15.6
82.5°	8.4	13.2	14.4	13.2	12.0
85°	6.0	10.8	10.8	10.8	8.4
87.5°	4.8	9.6	8.4	8.4	6.0
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	6.54	7.89	6.91	8.21	8.52	16.24	17.59	16.61	17.91	18.22
	3H	7.38	8.58	7.76	8.91	9.28	17.16	18.35	17.54	18.68	19.05
	4H	7.74	8.86	8.14	9.21	9.59	17.25	18.37	17.66	18.72	19.10
	6H	8.11	9.14	8.53	9.51	9.90	17.24	18.27	17.65	18.64	19.03
	8H	8.29	9.27	8.72	9.66	10.06	17.23	18.20	17.66	18.59	19.00
	12H	8.45	9.38	8.89	9.77	10.20	17.21	18.14	17.65	18.53	18.96
4H	2H	7.37	8.49	7.77	8.84	9.22	16.09	17.21	16.50	17.56	17.94
	3H	8.43	9.35	8.84	9.75	10.15	17.08	18.00	17.50	18.40	18.80
	4H	8.88	9.70	9.32	10.12	10.56	17.21	18.03	17.65	18.45	18.89
	6H	9.44	10.14	9.90	10.59	11.06	17.24	17.95	17.71	18.40	18.86
	8H	9.70	10.36	10.16	10.80	11.27	17.24	17.90	17.71	18.35	18.82
	12H	9.94	10.52	10.42	11.00	11.48	17.25	17.84	17.74	18.32	18.79
8H	4H	9.44	10.10	9.91	10.54	11.02	17.14	17.80	17.61	18.24	18.71
	6H	10.21	10.75	10.71	11.25	11.73	17.20	17.74	17.70	18.23	18.71
	8H	10.63	11.11	11.15	11.63	12.12	17.23	17.71	17.75	18.22	18.72
	12H	11.04	11.47	11.56	11.96	12.53	17.28	17.71	17.79	18.20	18.77
12H	4H	9.50	10.08	9.99	10.57	11.04	17.10	17.69	17.59	18.17	18.64
	6H	10.36	10.84	10.88	11.35	11.85	17.16	17.65	17.68	18.16	18.65
	8H	10.88	11.31	11.39	11.80	12.37	17.23	17.66	17.74	18.15	18.72