

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: P1061906

Luminaire Tested: S125RDR-H1090D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061906
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-H1090D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

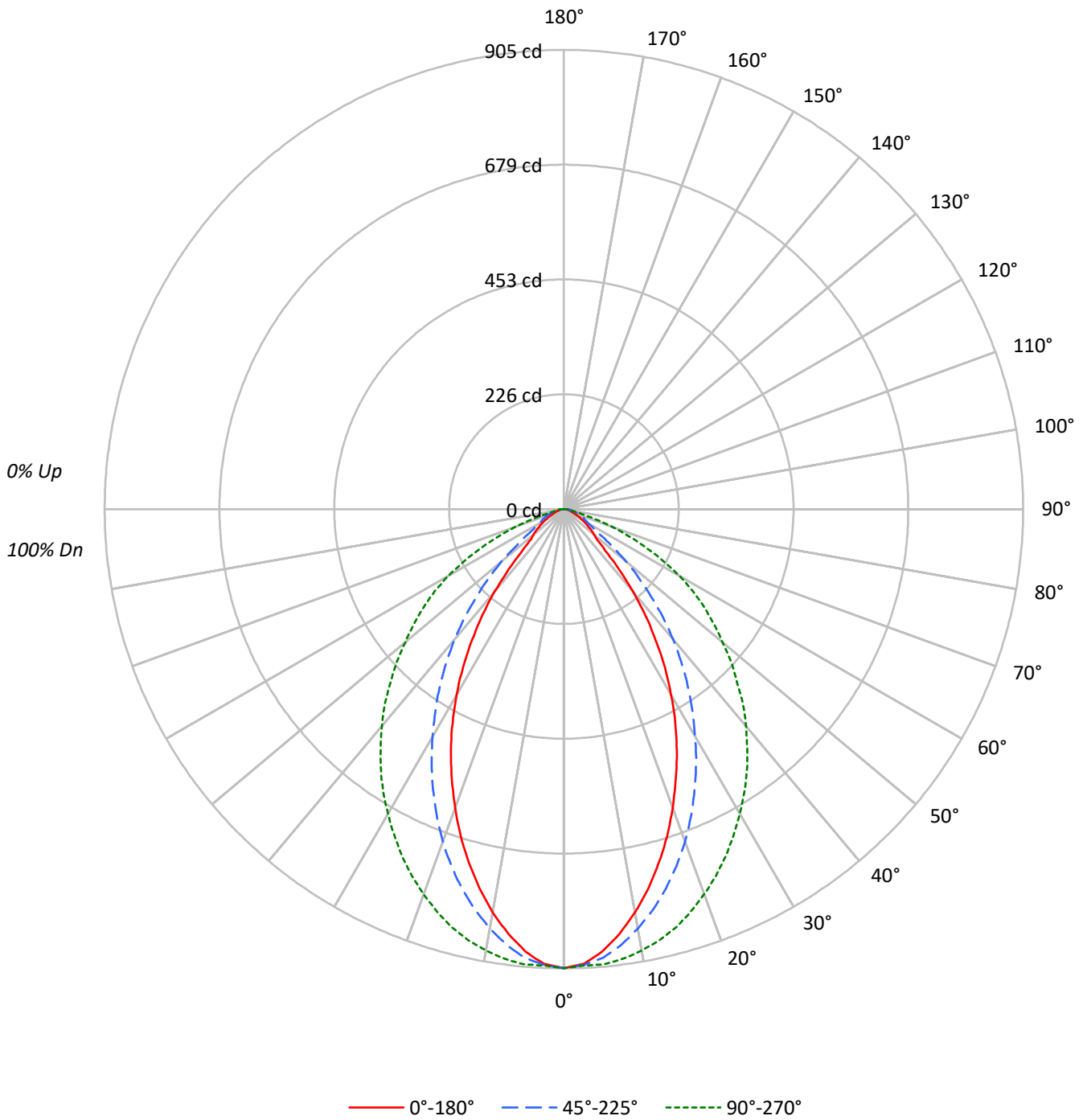
Lumens per Lamp: N/A
Luminaire Lumens: 1306.1 lumens
Efficiency: N/A
Efficacy: 41.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1061906

CATALOG NUMBER: S125RDR-H1090D940-X4F0-XX-UDD-SVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1061906

CATALOG NUMBER: S125RDR-H1090D940-X4F0-XX-UDD-SVL-S

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°	6228	6228	6228
5°	6044	6133	6222
10°	5641	5867	6174
15°	5148	5522	6081
20°	4592	5111	5920
25°	4003	4630	5730
30°	3361	4112	5511
35°	2652	3581	5285
40°	1900	3009	5015
45°	1118	2361	4702
50°	828	1701	4368
55°	695	1030	4057
60°	562	753	3620
65°	437	717	2902
70°	366	670	1965
75°	343	599	857
80°	341	595	551
85°	427	766	592

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4702 cd/sqm



TEST NUMBER: P1061906

CATALOG NUMBER: S125RDR-H1090D940-X4F0-XX-UDD-SVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.3	6.4
10°-20°	219.0	16.8
20°-30°	286.2	21.9
30°-40°	278.5	21.3
40°-50°	208.2	15.9
50°-60°	129.1	9.9
60°-70°	67.8	5.2
70°-80°	24.7	1.9
80°-90°	9.3	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°	588.5	45.1
0°-40°	867.0	66.4
0°-60°	1204.3	92.2
0°-90°	1306.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1306.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	905	905	905	905	905	
5°	874	886	887	893	900	81
15°	722	744	775	822	853	202
25°	527	554	610	692	754	241
35°	316	350	426	540	629	196
45°	115	150	242	379	483	97
55°	58	61	86	223	338	52
65°	27	29	44	94	178	28
75°	13	15	22	25	32	14
85°	5	10	10	10	8	6
90°	0	0	0	0	0	



TEST NUMBER: P1061906

CATALOG NUMBER: S125RDR-H1090D940-X4F0-XX-UDD-SVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	904.6	904.6	904.6	904.6	904.6
2.5°	897.1	904.6	899.2	899.2	900.3
5°	874.5	886.3	887.4	892.8	900.3
7.5°	843.4	857.4	865.9	882.0	893.8
10°	806.9	823.0	839.1	865.9	883.1
12.5°	766.1	785.5	809.1	845.5	870.2
15°	722.2	743.6	774.7	821.9	853.1
17.5°	676.0	698.5	737.2	794.0	831.6
20°	626.7	651.3	697.5	761.9	808.0
22.5°	576.2	604.1	654.5	727.5	782.2
25°	526.9	553.7	609.5	692.1	754.3
27.5°	475.4	503.3	564.4	655.6	724.3
30°	422.8	452.8	517.2	618.1	693.2
32.5°	370.2	401.3	471.1	579.4	662.1
35°	315.5	349.8	426.0	539.7	628.8
37.5°	264.0	300.4	379.9	499.0	593.4
40°	211.4	248.9	334.8	459.3	558.0
42.5°	159.9	198.5	288.6	418.5	522.6
45°	114.8	150.2	242.5	378.8	482.9
47.5°	88.0	108.4	199.6	338.0	447.5
50°	77.3	83.7	158.8	298.3	407.8
52.5°	67.6	71.9	118.0	259.7	373.4
55°	57.9	61.2	85.8	223.2	338.0
57.5°	49.4	52.6	65.5	189.9	301.5
60°	40.8	44.0	54.7	156.7	262.9
62.5°	34.3	35.4	49.4	125.5	220.0
65°	26.8	29.0	44.0	94.4	178.1
67.5°	22.5	23.6	38.6	67.6	137.3
70°	18.2	19.3	33.3	47.2	97.6
72.5°	16.1	16.1	27.9	34.3	62.2
75°	12.9	15.0	22.5	24.7	32.2
77.5°	10.7	15.0	19.3	18.2	17.2
80°	8.6	13.9	15.0	15.0	13.9
82.5°	7.5	11.8	12.9	11.8	10.7
85°	5.4	9.7	9.7	9.7	7.5
87.5°	4.3	8.6	7.5	7.5	5.4
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061906
 CATALOG NUMBER: S125RDR-H1090D940-X4F0-XX-UDD-SVL-S

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	6.14	7.49	6.51	7.81	8.12	15.85	17.20	16.21	17.51	17.82
	3H	6.98	8.18	7.36	8.51	8.87	16.76	17.95	17.14	18.28	18.65
	4H	7.34	8.46	7.74	8.81	9.19	16.85	17.97	17.26	18.32	18.70
	6H	7.71	8.74	8.13	9.11	9.50	16.84	17.87	17.26	18.24	18.63
	8H	7.89	8.87	8.32	9.26	9.66	16.83	17.80	17.26	18.19	18.60
	12H	8.06	8.99	8.49	9.37	9.80	16.81	17.74	17.25	18.13	18.56
4H	2H	6.97	8.09	7.38	8.44	8.82	15.70	16.81	16.10	17.16	17.55
	3H	8.03	8.94	8.44	9.35	9.75	16.68	17.60	17.10	18.00	18.41
	4H	8.48	9.30	8.92	9.72	10.16	16.81	17.63	17.25	18.05	18.49
	6H	9.04	9.75	9.50	10.19	10.66	16.85	17.55	17.31	18.00	18.46
	8H	9.30	9.96	9.77	10.41	10.88	16.85	17.51	17.31	17.95	18.42
	12H	9.54	10.13	10.03	10.61	11.08	16.85	17.44	17.34	17.92	18.39
8H	4H	9.04	9.70	9.51	10.14	10.61	16.74	17.40	17.21	17.84	18.31
	6H	9.81	10.35	10.31	10.85	11.33	16.80	17.34	17.30	17.83	18.31
	8H	10.23	10.71	10.75	11.23	11.72	16.83	17.31	17.35	17.83	18.32
	12H	10.65	11.08	11.16	11.57	12.14	16.88	17.31	17.39	17.80	18.37
12H	4H	9.10	9.68	9.58	10.16	10.64	16.70	17.29	17.19	17.77	18.24
	6H	9.96	10.44	10.48	10.96	11.45	16.76	17.25	17.28	17.76	18.25
	8H	10.49	10.91	11.00	11.41	11.98	16.83	17.26	17.34	17.75	18.32