

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: P1061882

Luminaire Tested: S125RDR-H1090D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061882
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1090D927-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

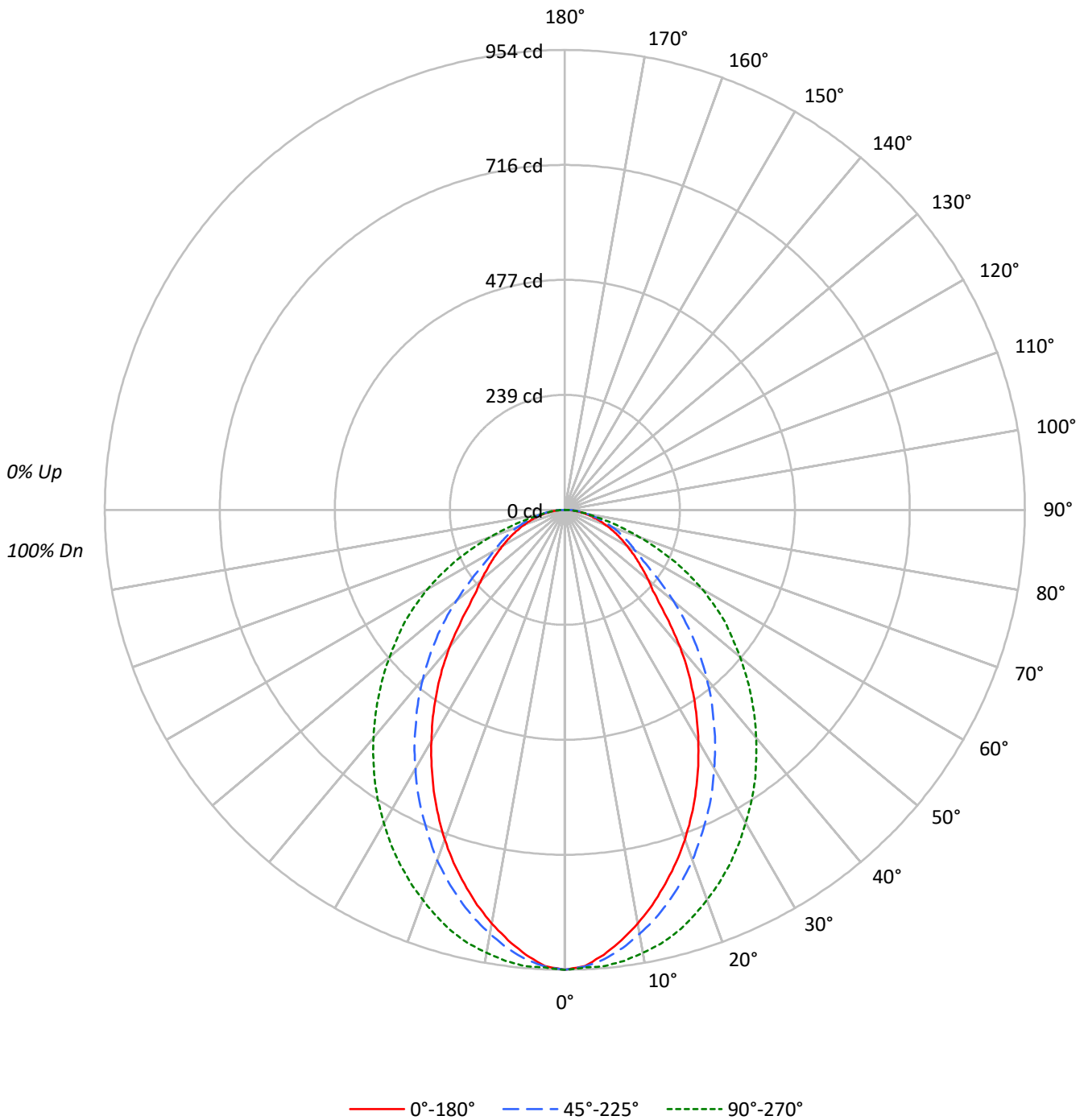
Lumens per Lamp: N/A
Luminaire Lumens: 1788.4 lumens
Efficiency: N/A
Efficacy: 57.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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: P1061882

CATALOG NUMBER: S125RDR-H1090D927-X4F0-XX-UDD-WVL-S

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				
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44				
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36				
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6569	6569	6569
5°	6403	6469	6567
10°	6090	6243	6523
15°	5727	5978	6454
20°	5335	5670	6312
25°	4887	5307	6154
30°	4402	4925	5963
35°	3893	4526	5775
40°	3341	4120	5551
45°	2728	3665	5317
50°	2420	3144	5074
55°	2220	2608	4862
60°	2048	2309	4528
65°	1909	2221	4037
70°	1784	2110	3299
75°	1647	1977	2434
80°	1550	1852	1776
85°	1430	1809	1509

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5317 cd/sqm



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CATALOG NUMBER: S125RDR-H1090D927-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.3	4.9
10°-20°	237.8	13.3
20°-30°	326.8	18.3
30°-40°	346.4	19.4
40°-50°	302.3	16.9
50°-60°	229.7	12.8
60°-70°	153.9	8.6
70°-80°	79.3	4.4
80°-90°	23.8	1.3
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°	652.9	36.5
0°-40°	999.3	55.9
0°-60°	1531.3	85.6
0°-90°	1788.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1788.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	954	954	954	954	954	
5°	926	936	936	943	950	87
15°	803	819	839	876	905	225
25°	643	663	699	757	810	295
35°	463	490	538	615	687	289
45°	280	308	376	466	546	221
55°	185	191	217	319	405	166
65°	117	120	136	182	248	116
75°	62	66	74	79	92	66
85°	18	23	23	21	19	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	954.0	954.0	954.0	954.0	954.0
2.5°	947.3	954.0	948.3	948.3	950.2
5°	926.4	935.9	935.9	942.6	950.2
7.5°	900.6	911.1	916.8	932.1	943.5
10°	871.1	882.5	893.0	915.9	933.0
12.5°	839.6	852.0	868.2	897.8	921.6
15°	803.4	818.7	838.7	875.8	905.4
17.5°	767.2	782.4	807.2	851.1	884.4
20°	728.1	744.3	773.9	821.5	861.5
22.5°	686.2	704.3	735.7	790.1	836.8
25°	643.3	663.3	698.6	756.7	810.1
27.5°	598.5	622.3	660.5	722.4	781.5
30°	553.7	577.5	619.5	687.1	750.0
32.5°	508.9	534.7	580.4	651.9	719.5
35°	463.2	489.9	538.5	614.7	687.1
37.5°	418.4	445.1	499.4	578.5	651.9
40°	371.7	399.3	458.4	541.3	617.6
42.5°	324.0	353.6	417.4	503.2	582.3
45°	280.2	307.8	376.4	466.0	546.1
47.5°	247.8	265.9	335.5	427.9	510.8
50°	225.9	235.4	293.5	390.7	473.7
52.5°	204.0	211.6	254.5	352.6	438.4
55°	184.9	190.6	217.3	319.3	405.0
57.5°	165.8	171.5	188.7	285.9	366.0
60°	148.7	153.4	167.7	250.6	328.8
62.5°	132.5	136.3	151.5	217.3	288.8
65°	117.2	120.1	136.3	182.0	247.8
67.5°	102.0	104.8	121.0	148.7	204.0
70°	88.6	89.6	104.8	121.0	163.9
72.5°	75.3	76.2	88.6	98.2	125.8
75°	61.9	65.8	74.3	79.1	91.5
77.5°	50.5	55.3	60.0	61.9	61.9
80°	39.1	44.8	46.7	46.7	44.8
82.5°	28.6	33.4	34.3	32.4	30.5
85°	18.1	22.9	22.9	21.0	19.1
87.5°	8.6	12.4	12.4	11.4	8.6
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	13.14	14.64	13.51	14.95	15.27	17.07	18.57	17.44	18.88	19.20
	3H	14.72	16.06	15.09	16.39	16.75	18.50	19.84	18.87	20.17	20.53
	4H	15.33	16.59	15.73	16.94	17.32	18.91	20.17	19.31	20.52	20.90
	6H	15.83	16.99	16.24	17.35	17.75	19.13	20.29	19.54	20.66	21.05
	8H	16.00	17.11	16.43	17.50	17.90	19.19	20.29	19.61	20.68	21.08
	12H	16.12	17.18	16.55	17.56	17.99	19.22	20.28	19.65	20.66	21.09
4H	2H	13.88	15.14	14.28	15.49	15.87	17.20	18.46	17.60	18.81	19.19
	3H	15.66	16.71	16.07	17.11	17.51	18.81	19.85	19.22	20.25	20.66
	4H	16.40	17.34	16.83	17.75	18.19	19.34	20.28	19.77	20.69	21.13
	6H	17.03	17.85	17.49	18.29	18.76	19.68	20.50	20.14	20.94	21.40
	8H	17.26	18.03	17.73	18.47	18.94	19.78	20.54	20.24	20.99	21.46
	12H	17.44	18.12	17.92	18.60	19.07	19.85	20.53	20.33	21.01	21.48
8H	4H	16.80	17.56	17.26	18.01	18.47	19.44	20.21	19.91	20.65	21.12
	6H	17.58	18.22	18.08	18.71	19.19	19.88	20.51	20.38	21.01	21.48
	8H	17.91	18.48	18.42	18.99	19.47	20.04	20.61	20.55	21.12	21.61
	12H	18.18	18.69	18.69	19.18	19.74	20.18	20.68	20.69	21.17	21.73
12H	4H	16.84	17.52	17.32	18.00	18.47	19.44	20.13	19.93	20.61	21.08
	6H	17.67	18.24	18.18	18.75	19.23	19.90	20.47	20.41	20.98	21.46
	8H	18.06	18.57	18.57	19.06	19.62	20.11	20.61	20.62	21.10	21.67