

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: P1061741

Luminaire Tested: S125RDRP-S610D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061741
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S610D940-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

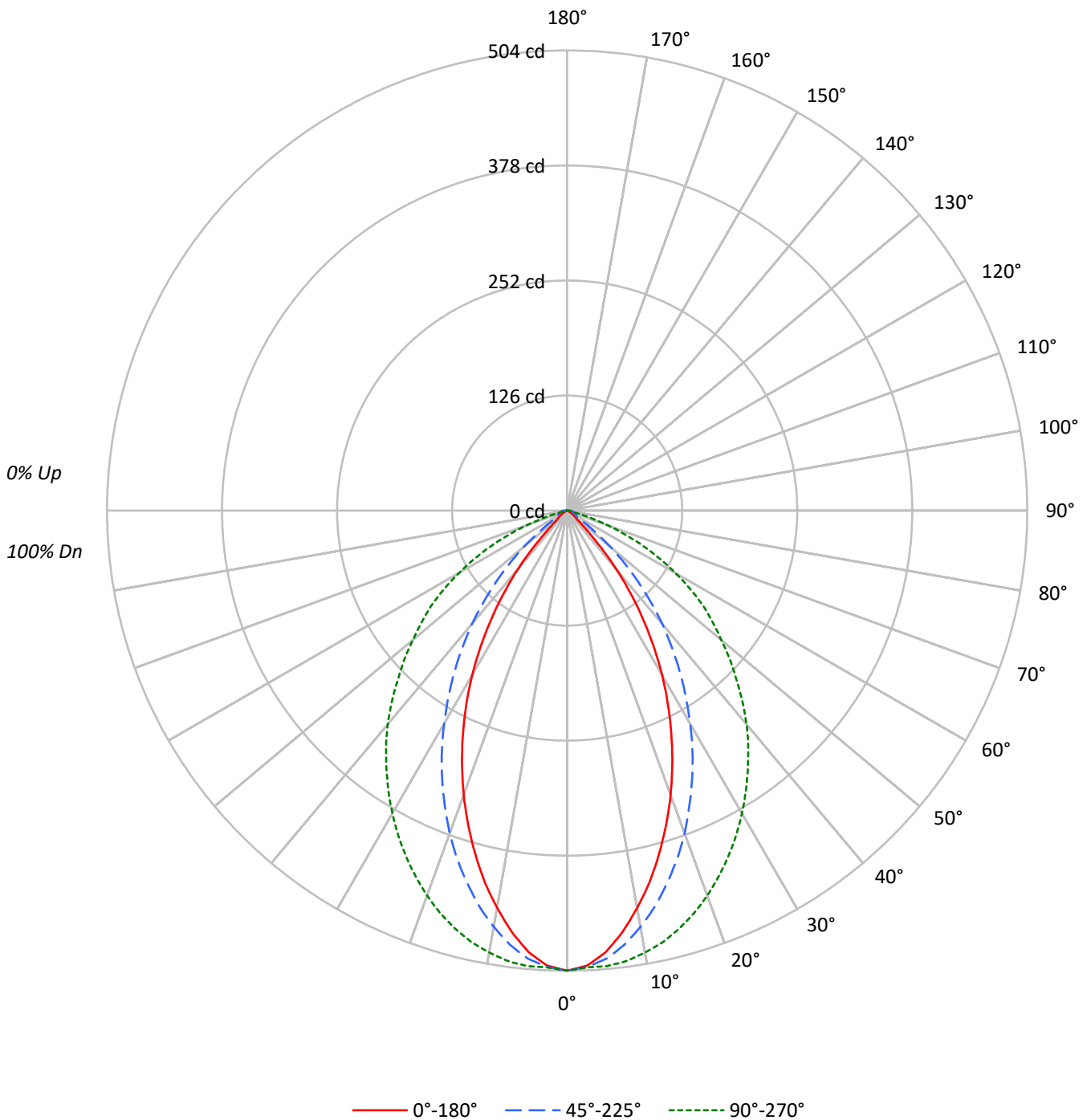
Lumens per Lamp: N/A
Luminaire Lumens: 648.1 lumens
Efficiency: N/A
Efficacy: 33.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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

TEST NUMBER: P1061741

CATALOG NUMBER: S125RDRP-S610D940-X4F0-XX-UDD-BVL-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	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	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	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	68	74	70	67	65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3469	3469	3469
5°	3354	3405	3461
10°	3090	3237	3436
15°	2774	3012	3379
20°	2428	2756	3288
25°	2051	2461	3173
30°	1653	2141	3044
35°	1215	1805	2900
40°	759	1456	2749
45°	284	1063	2556
50°	133	665	2360
55°	97	276	2182
60°	69	145	1888
65°	41	171	1496
70°	38	199	950
75°	51	197	298
80°	75	246	222
85°	150	395	292

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2556 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.2	7.1
10°-20°	119.6	18.5
20°-30°	152.4	23.5
30°-40°	141.8	21.9
40°-50°	97.2	15.0
50°-60°	53.5	8.3
60°-70°	25.3	3.9
70°-80°	8.0	1.2
80°-90°	4.1	0.6
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°	318.2	49.1
0°-40°	460.1	71.0
0°-60°	610.8	94.2
0°-90°	648.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	648.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	504	504	504	504	504	
5°	485	492	493	496	501	45
15°	389	402	423	454	474	108
25°	270	287	324	376	418	123
35°	145	165	215	286	345	90
45°	29	49	109	194	262	28
55°	8	9	23	108	182	7
65°	2	3	10	40	92	3
75°	2	3	7	8	11	2
85°	2	4	5	4	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	503.9	503.9	503.9	503.9	503.9
2.5°	498.9	503.9	500.2	500.2	500.8
5°	485.3	491.5	492.7	496.5	500.8
7.5°	465.4	473.5	479.7	490.3	497.7
10°	441.9	451.8	463.0	480.3	491.5
12.5°	417.0	427.6	444.3	468.5	484.1
15°	389.1	401.5	422.6	454.3	474.1
17.5°	360.6	374.2	400.3	437.5	462.3
20°	331.4	345.7	376.1	417.7	448.7
22.5°	301.0	316.5	350.0	397.2	433.8
25°	270.0	286.7	323.9	376.1	417.7
27.5°	238.9	256.3	297.3	354.4	400.9
30°	207.9	225.9	269.3	332.0	382.9
32.5°	176.2	196.1	242.0	309.7	364.3
35°	144.6	165.1	214.7	285.5	345.0
37.5°	113.6	134.7	188.0	262.5	325.8
40°	84.4	105.5	162.0	239.5	305.9
42.5°	54.6	77.0	134.7	216.0	284.2
45°	29.2	49.0	109.2	193.6	262.5
47.5°	15.5	26.1	85.0	171.3	242.0
50°	12.4	14.3	62.1	148.9	220.3
52.5°	9.9	11.2	39.7	126.0	201.1
55°	8.1	9.3	23.0	108.0	181.8
57.5°	6.2	7.4	13.0	90.0	159.5
60°	5.0	5.6	10.5	72.0	137.1
62.5°	3.1	4.3	10.5	55.9	114.8
65°	2.5	3.1	10.5	39.7	91.8
67.5°	2.5	2.5	10.5	26.1	68.9
70°	1.9	1.9	9.9	16.8	47.2
72.5°	1.9	1.9	8.7	11.2	27.3
75°	1.9	3.1	7.4	8.1	11.2
77.5°	1.9	5.0	6.8	6.8	6.2
80°	1.9	5.0	6.2	5.6	5.6
82.5°	1.9	5.0	5.0	5.0	4.3
85°	1.9	4.3	5.0	4.3	3.7
87.5°	1.9	4.3	4.3	4.3	2.5
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	13.37	14.65	13.73	14.97	15.28
	3H	0.00	0.00	0.00	0.00	0.00	14.16	15.29	14.54	15.62	15.99
	4H	0.00	0.00	0.00	0.00	0.00	14.18	15.24	14.59	15.59	15.98
	6H	0.00	0.00	0.00	0.00	0.00	14.14	15.11	14.55	15.48	15.88
	8H	0.00	0.00	0.00	0.00	0.00	14.12	15.03	14.55	15.43	15.83
	12H	0.00	0.00	0.00	0.00	0.23	14.10	14.97	14.53	15.36	15.79
4H	2H	0.00	0.00	0.00	0.00	0.00	13.15	14.21	13.55	14.56	14.94
	3H	0.00	0.00	0.00	0.00	0.00	13.98	14.84	14.39	15.25	15.65
	4H	0.00	0.00	0.00	0.00	0.25	14.02	14.79	14.45	15.21	15.65
	6H	0.14	0.80	0.60	1.25	1.72	14.00	14.67	14.47	15.11	15.58
	8H	0.89	1.51	1.36	1.96	2.43	13.99	14.61	14.46	15.05	15.52
	12H	1.64	2.19	2.13	2.67	3.14	13.99	14.53	14.47	15.02	15.49
8H	4H	0.65	1.27	1.12	1.72	2.19	13.90	14.52	14.37	14.97	15.44
	6H	2.42	2.93	2.92	3.42	3.90	13.90	14.41	14.41	14.90	15.39
	8H	3.38	3.84	3.91	4.35	4.85	13.91	14.36	14.43	14.88	15.37
	12H	4.31	4.71	4.83	5.21	5.78	13.95	14.35	14.47	14.85	15.42
12H	4H	0.95	1.50	1.44	1.98	2.46	13.86	14.41	14.35	14.89	15.36
	6H	2.88	3.33	3.40	3.85	4.34	13.86	14.31	14.38	14.83	15.32
	8H	4.02	4.42	4.54	4.92	5.49	13.90	14.30	14.41	14.79	15.37