

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: P1061749

Luminaire Tested: S125RDRP-S610D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061749
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S610D950-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

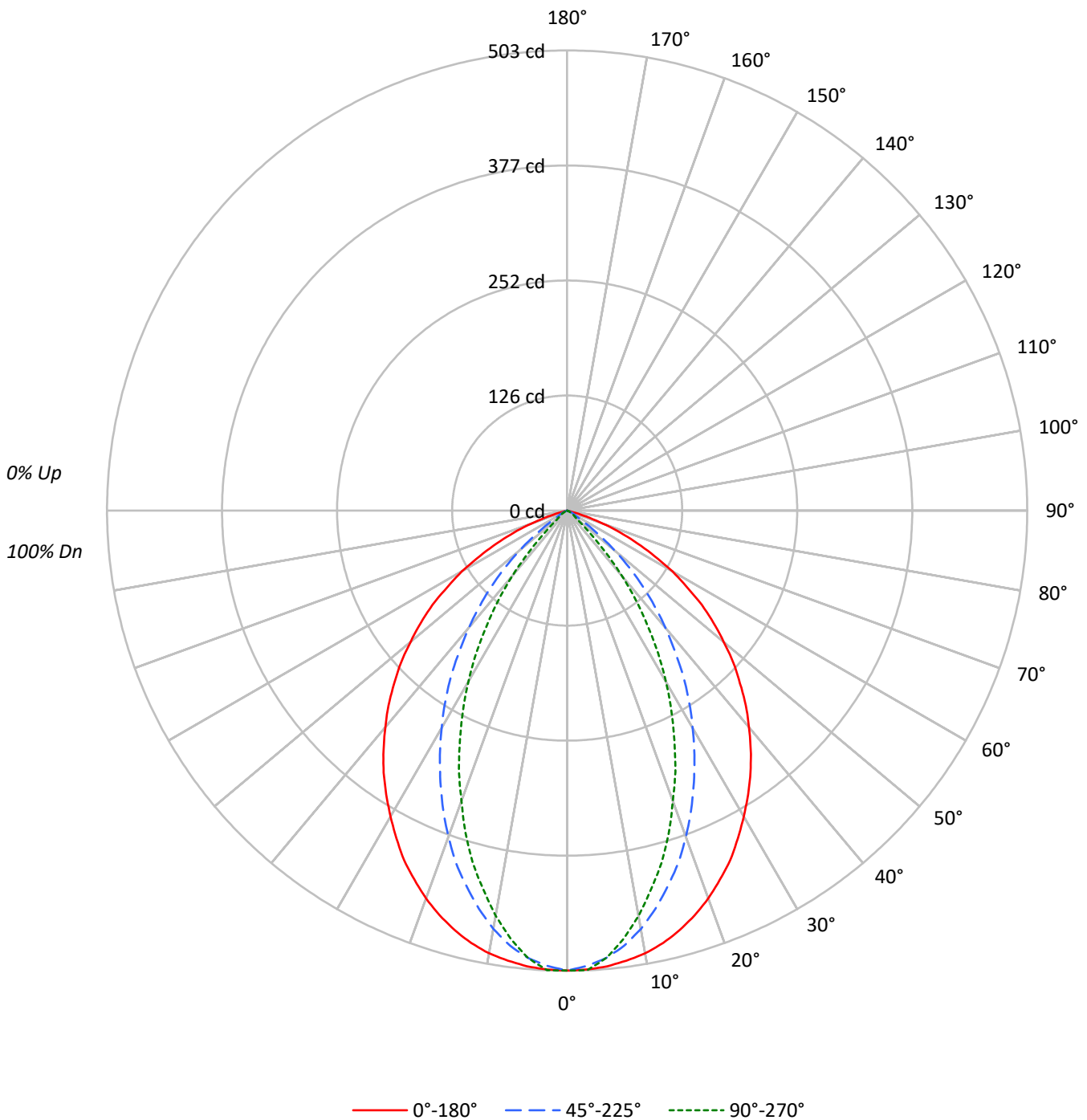
Lumens per Lamp: N/A
Luminaire Lumens: 649.6 lumens
Efficiency: N/A
Efficacy: 33.1 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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: P1061749

CATALOG NUMBER: S125RDRP-S610D950-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1061749

CATALOG NUMBER: S125RDRP-S610D950-X4F0-XX-UDD-BVL-B

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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3462	3462	3462
5°	3456	3393	3393
10°	3436	3246	3144
15°	3385	3031	2842
20°	3305	2780	2474
25°	3205	2490	2107
30°	3070	2183	1719
35°	2939	1863	1288
40°	2778	1503	835
45°	2603	1136	361
50°	2394	725	135
55°	2158	318	96
60°	1827	136	63
65°	1383	86	33
70°	841	40	14
75°	176	19	19
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2603 cd/sqm



TEST NUMBER: P1061749

CATALOG NUMBER: S125RDRP-S610D950-X4F0-XX-UDD-BVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.3	7.1
10°-20°	120.8	18.6
20°-30°	155.1	23.9
30°-40°	146.0	22.5
40°-50°	102.1	15.7
50°-60°	54.5	8.4
60°-70°	21.8	3.3
70°-80°	2.8	0.4
80°-90°	0.0	0.0
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°	322.3	49.6
0°-40°	468.3	72.1
0°-60°	625.0	96.2
0°-90°	649.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	649.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	500	499	491	492	491	47
15°	475	460	425	405	399	134
25°	422	385	328	292	277	194
35°	350	294	222	171	153	218
45°	267	200	117	56	37	206
55°	180	110	26	9	8	159
65°	85	34	5	3	2	84
75°	7	2	1	1	1	13
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P1061749

CATALOG NUMBER: S125RDRP-S610D950-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	502.8	502.8	502.8	502.8	502.8
2.5°	502.1	502.8	498.2	502.1	502.8
5°	500.1	498.8	490.9	492.2	490.9
7.5°	496.2	492.9	479.6	474.9	472.3
10°	491.5	484.2	464.3	454.4	449.7
12.5°	484.2	473.6	445.8	430.5	423.9
15°	474.9	459.7	425.2	405.3	398.7
17.5°	463.7	443.8	404.0	379.4	369.5
20°	451.1	424.5	379.4	350.2	337.6
22.5°	436.5	406.0	354.2	321.7	309.1
25°	421.9	384.7	327.7	291.9	277.3
27.5°	404.0	362.8	301.1	262.7	246.8
30°	386.1	340.9	274.6	232.8	216.2
32.5°	368.1	317.7	248.1	201.7	185.1
35°	349.6	293.9	221.6	171.1	153.2
37.5°	329.7	270.0	193.0	142.0	123.4
40°	309.1	246.8	167.2	113.4	92.9
42.5°	289.2	223.5	141.3	85.6	63.0
45°	267.3	200.3	116.7	56.4	37.1
47.5°	246.8	177.8	91.5	32.5	19.2
50°	223.5	154.6	67.7	17.2	12.6
52.5°	201.7	132.0	45.1	11.3	9.9
55°	179.8	110.1	26.5	9.3	8.0
57.5°	154.6	88.9	14.6	7.3	6.0
60°	132.7	69.6	9.9	5.3	4.6
62.5°	107.5	51.1	7.3	4.0	3.3
65°	84.9	33.8	5.3	2.7	2.0
67.5°	63.0	19.9	3.3	1.3	1.3
70°	41.8	10.6	2.0	0.7	0.7
72.5°	21.9	4.6	1.3	0.7	0.7
75°	6.6	2.0	0.7	0.7	0.7
77.5°	0.0	0.7	0.0	0.0	0.7
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1061749

CATALOG NUMBER: S125RDRP-S610D950-X4F0-XX-UDD-BVL-B

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	13.26	14.52	13.62	14.84	15.15	0.00	0.00	0.00	0.00	0.00
	3H	13.84	14.96	14.22	15.29	15.65	0.00	0.00	0.00	0.00	0.00
	4H	13.81	14.84	14.21	15.19	15.58	0.00	0.00	0.00	0.00	0.00
	6H	13.72	14.67	14.14	15.04	15.43	0.00	0.00	0.00	0.00	0.00
	8H	13.68	14.57	14.11	14.96	15.37	0.00	0.00	0.00	0.00	0.00
	12H	13.63	14.48	14.06	14.87	15.30	0.00	0.00	0.00	0.00	0.00
4H	2H	13.03	14.06	13.44	14.42	14.80	0.00	0.00	0.00	0.00	0.00
	3H	13.62	14.46	14.04	14.86	15.27	0.00	0.00	0.00	0.00	0.00
	4H	13.57	14.32	14.01	14.74	15.18	0.00	0.00	0.00	0.00	0.00
	6H	13.49	14.12	13.95	14.57	15.04	0.00	0.00	0.00	0.00	0.00
	8H	13.43	14.02	13.90	14.47	14.94	0.00	0.00	0.00	0.00	0.00
	12H	13.38	13.90	13.86	14.38	14.86	0.00	0.00	0.00	0.00	0.00
8H	4H	13.43	14.02	13.90	14.47	14.94	0.00	0.00	0.00	0.00	0.00
	6H	13.32	13.80	13.82	14.30	14.78	0.00	0.00	0.00	0.00	0.00
	8H	13.25	13.68	13.78	14.20	14.70	0.00	0.00	0.00	0.00	0.00
	12H	13.20	13.58	13.72	14.08	14.65	0.00	0.00	0.00	0.00	0.00
12H	4H	13.38	13.90	13.86	14.38	14.86	0.00	0.00	0.00	0.00	0.00
	6H	13.25	13.68	13.78	14.20	14.70	0.00	0.00	0.00	0.00	0.00
	8H	13.20	13.58	13.72	14.08	14.65	0.00	0.00	0.00	0.00	0.00