

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: P1061704

Luminaire Tested: S125RDRP-S610D850-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061704
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-S610D850-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, 80 CRI LEDS
Ballast/Driver: -

Summary

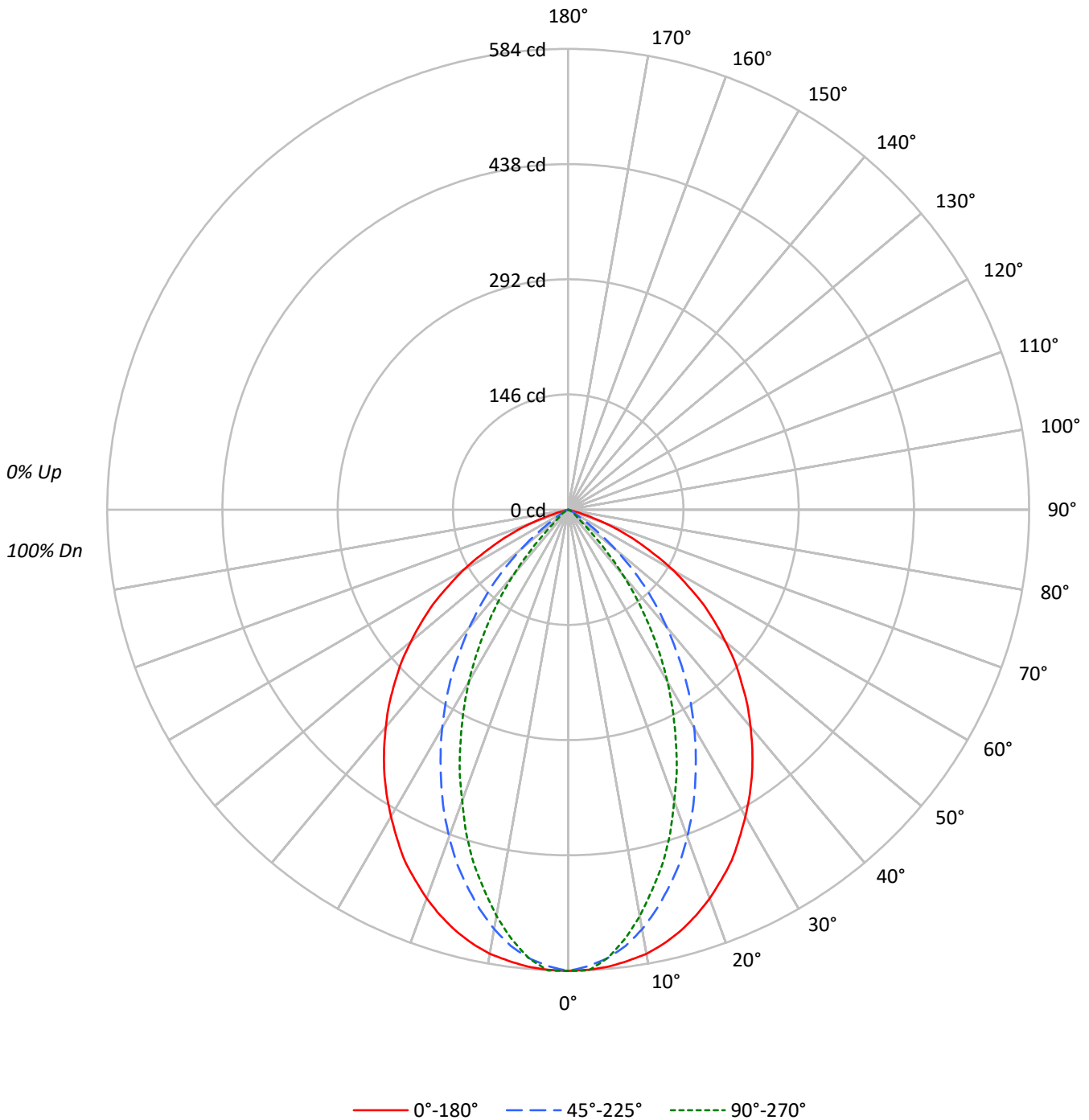
Lumens per Lamp: N/A
Luminaire Lumens: 755.1 lumens
Efficiency: N/A
Efficacy: 38.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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°	4024	4024	4024
5°	4018	3944	3944
10°	3995	3774	3655
15°	3935	3523	3303
20°	3842	3232	2876
25°	3726	2894	2449
30°	3568	2538	1999
35°	3416	2164	1497
40°	3229	1746	971
45°	3026	1321	421
50°	2784	843	157
55°	2509	370	112
60°	2123	160	74
65°	1608	101	37
70°	978	46	16
75°	205	21	21
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3026 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.9	7.1
10°-20°	140.5	18.6
20°-30°	180.3	23.9
30°-40°	169.8	22.5
40°-50°	118.7	15.7
50°-60°	63.4	8.4
60°-70°	25.3	3.3
70°-80°	3.3	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°	374.7	49.6
0°-40°	544.4	72.1
0°-60°	726.5	96.2
0°-90°	755.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	755.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	581	580	571	572	571	55
15°	552	534	494	471	463	155
25°	490	447	381	339	322	225
35°	406	342	258	199	178	254
45°	311	233	136	66	43	240
55°	209	128	31	11	9	185
65°	99	39	6	3	2	98
75°	8	2	1	1	1	15
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	584.5	584.5	584.5	584.5	584.5
2.5°	583.7	584.5	579.1	583.7	584.5
5°	581.4	579.9	570.6	572.2	570.6
7.5°	576.8	572.9	557.5	552.1	549.0
10°	571.4	562.9	539.8	528.2	522.8
12.5°	562.9	550.6	518.2	500.4	492.7
15°	552.1	534.4	494.3	471.1	463.4
17.5°	539.0	515.9	469.6	441.1	429.5
20°	524.3	493.5	441.1	407.1	392.5
22.5°	507.4	471.9	411.8	374.0	359.3
25°	490.4	447.2	380.9	339.3	322.3
27.5°	469.6	421.8	350.1	305.4	286.8
30°	448.8	396.3	319.2	270.7	251.4
32.5°	428.0	369.4	288.4	234.4	215.1
35°	406.4	341.6	257.5	198.9	178.1
37.5°	383.2	313.8	224.4	165.0	143.4
40°	359.3	286.8	194.3	131.9	108.0
42.5°	336.2	259.9	164.2	99.5	73.3
45°	310.8	232.9	135.7	65.5	43.2
47.5°	286.8	206.7	106.4	37.8	22.4
50°	259.9	179.7	78.7	20.0	14.7
52.5°	234.4	153.4	52.4	13.1	11.6
55°	209.0	128.0	30.8	10.8	9.3
57.5°	179.7	103.3	17.0	8.5	6.9
60°	154.2	81.0	11.6	6.2	5.4
62.5°	124.9	59.4	8.5	4.6	3.9
65°	98.7	39.3	6.2	3.1	2.3
67.5°	73.3	23.1	3.9	1.5	1.5
70°	48.6	12.3	2.3	0.8	0.8
72.5°	25.4	5.4	1.5	0.8	0.8
75°	7.7	2.3	0.8	0.8	0.8
77.5°	0.0	0.8	0.0	0.0	0.8
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



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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	13.78	15.04	14.15	15.36	15.67	0.00	0.00	0.00	0.00	0.00
	3H	14.36	15.48	14.75	15.81	16.17	0.00	0.00	0.00	0.00	0.00
	4H	14.33	15.36	14.73	15.71	16.10	0.00	0.00	0.00	0.00	0.00
	6H	14.24	15.19	14.66	15.56	15.95	0.00	0.00	0.00	0.00	0.00
	8H	14.20	15.09	14.63	15.48	15.89	0.00	0.00	0.00	0.00	0.00
	12H	14.15	15.00	14.58	15.39	15.82	0.00	0.00	0.00	0.00	0.00
4H	2H	13.55	14.59	13.96	14.94	15.32	0.00	0.00	0.00	0.00	0.00
	3H	14.15	14.98	14.56	15.39	15.79	0.00	0.00	0.00	0.00	0.00
	4H	14.09	14.84	14.53	15.26	15.70	0.00	0.00	0.00	0.00	0.00
	6H	14.01	14.65	14.47	15.09	15.56	0.00	0.00	0.00	0.00	0.00
	8H	13.95	14.54	14.42	14.99	15.46	0.00	0.00	0.00	0.00	0.00
	12H	13.90	14.42	14.38	14.90	15.38	0.00	0.00	0.00	0.00	0.00
8H	4H	13.95	14.54	14.42	14.99	15.46	0.00	0.00	0.00	0.00	0.00
	6H	13.84	14.32	14.35	14.82	15.30	0.00	0.00	0.00	0.00	0.00
	8H	13.77	14.21	14.30	14.72	15.22	0.00	0.00	0.00	0.00	0.00
	12H	13.73	14.11	14.24	14.60	15.18	0.00	0.00	0.00	0.00	0.00
12H	4H	13.90	14.42	14.38	14.90	15.38	0.00	0.00	0.00	0.00	0.00
	6H	13.77	14.21	14.30	14.72	15.22	0.00	0.00	0.00	0.00	0.00
	8H	13.73	14.11	14.24	14.60	15.18	0.00	0.00	0.00	0.00	0.00