

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: P1061731

Luminaire Tested: S125RDRP-S610D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061731  
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-S610D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

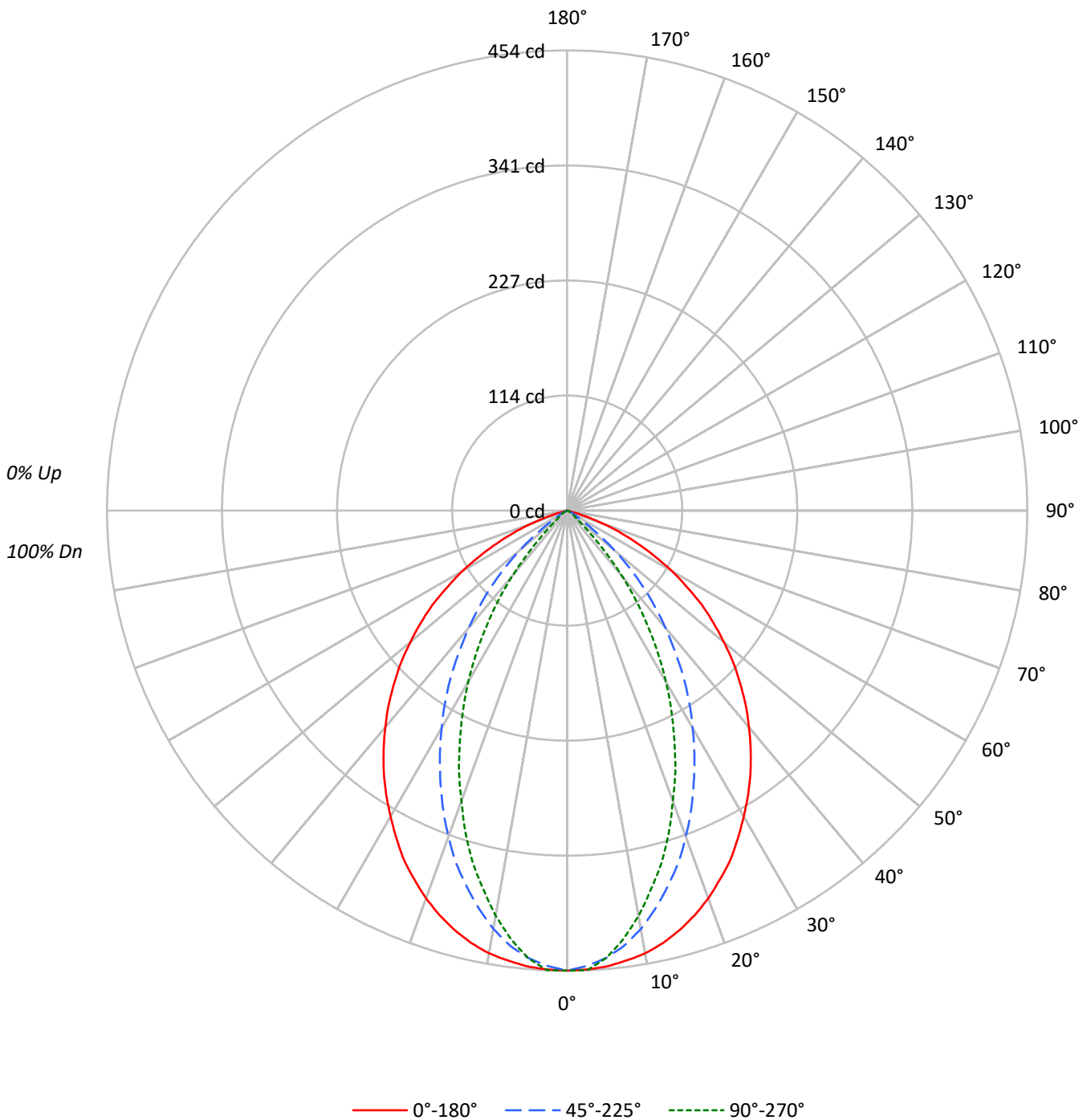
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 586.3 lumens  
Efficiency: N/A  
Efficacy: 29.9 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<sub>in</sub>): 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°	3125	3125	3125
5°	3120	3062	3062
10°	3101	2930	2838
15°	3055	2735	2565
20°	2983	2509	2233
25°	2892	2246	1901
30°	2770	1970	1552
35°	2652	1681	1162
40°	2508	1356	753
45°	2350	1026	326
50°	2161	654	122
55°	1947	287	86
60°	1648	124	58
65°	1248	78	29
70°	759	36	12
75°	160	16	16
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2350 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.8	7.1
10°-20°	109.0	18.6
20°-30°	140.0	23.9
30°-40°	131.8	22.5
40°-50°	92.1	15.7
50°-60°	49.2	8.4
60°-70°	19.6	3.4
70°-80°	2.5	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°	290.9	49.6
0°-40°	422.7	72.1
0°-60°	564.1	96.2
0°-90°	586.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	586.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	454	454	454	454	454	
5°	451	450	443	444	443	43
15°	429	415	384	366	360	121
25°	381	347	296	263	250	175
35°	316	265	200	154	138	197
45°	241	181	105	51	34	186
55°	162	99	24	8	7	144
65°	77	30	5	2	2	76
75°	6	2	1	1	1	12
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°	453.8	453.8	453.8	453.8	453.8
2.5°	453.2	453.8	449.6	453.2	453.8
5°	451.4	450.2	443.0	444.2	443.0
7.5°	447.8	444.8	432.8	428.6	426.2
10°	443.6	437.0	419.1	410.1	405.9
12.5°	437.0	427.4	402.3	388.5	382.5
15°	428.6	414.9	383.7	365.8	359.8
17.5°	418.5	400.5	364.6	342.4	333.5
20°	407.1	383.1	342.4	316.1	304.7
22.5°	393.9	366.4	319.7	290.3	279.0
25°	380.7	347.2	295.7	263.4	250.2
27.5°	364.6	327.5	271.8	237.1	222.7
30°	348.4	307.7	247.8	210.1	195.2
32.5°	332.3	286.8	223.9	182.0	167.0
35°	315.5	265.2	200.0	154.5	138.3
37.5°	297.5	243.7	174.2	128.1	111.4
40°	279.0	222.7	150.9	102.4	83.8
42.5°	261.0	201.7	127.5	77.2	56.9
45°	241.3	180.8	105.4	50.9	33.5
47.5°	222.7	160.4	82.6	29.3	17.4
50°	201.7	139.5	61.1	15.6	11.4
52.5°	182.0	119.1	40.7	10.2	9.0
55°	162.2	99.4	23.9	8.4	7.2
57.5°	139.5	80.2	13.2	6.6	5.4
60°	119.7	62.9	9.0	4.8	4.2
62.5°	97.0	46.1	6.6	3.6	3.0
65°	76.6	30.5	4.8	2.4	1.8
67.5°	56.9	18.0	3.0	1.2	1.2
70°	37.7	9.6	1.8	0.6	0.6
72.5°	19.8	4.2	1.2	0.6	0.6
75°	6.0	1.8	0.6	0.6	0.6
77.5°	0.0	0.6	0.0	0.0	0.6
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	12.90	14.16	13.27	14.48	14.79	0.00	0.00	0.00	0.00	0.00
	3H	13.49	14.60	13.87	14.93	15.29	0.00	0.00	0.00	0.00	0.00
	4H	13.45	14.48	13.85	14.83	15.22	0.00	0.00	0.00	0.00	0.00
	6H	13.36	14.31	13.78	14.68	15.08	0.00	0.00	0.00	0.00	0.00
	8H	13.32	14.21	13.75	14.60	15.01	0.00	0.00	0.00	0.00	0.00
	12H	13.27	14.13	13.71	14.51	14.94	0.00	0.00	0.00	0.00	0.00
4H	2H	12.67	13.71	13.08	14.06	14.44	0.00	0.00	0.00	0.00	0.00
	3H	13.27	14.10	13.68	14.51	14.91	0.00	0.00	0.00	0.00	0.00
	4H	13.22	13.96	13.65	14.38	14.82	0.00	0.00	0.00	0.00	0.00
	6H	13.13	13.77	13.59	14.21	14.68	0.00	0.00	0.00	0.00	0.00
	8H	13.07	13.66	13.54	14.11	14.58	0.00	0.00	0.00	0.00	0.00
	12H	13.02	13.54	13.51	14.02	14.50	0.00	0.00	0.00	0.00	0.00
8H	4H	13.07	13.66	13.54	14.11	14.58	0.00	0.00	0.00	0.00	0.00
	6H	12.96	13.44	13.47	13.94	14.42	0.00	0.00	0.00	0.00	0.00
	8H	12.90	13.33	13.42	13.85	14.34	0.00	0.00	0.00	0.00	0.00
	12H	12.85	13.23	13.36	13.72	14.30	0.00	0.00	0.00	0.00	0.00
12H	4H	13.02	13.54	13.51	14.03	14.50	0.00	0.00	0.00	0.00	0.00
	6H	12.90	13.33	13.42	13.85	14.34	0.00	0.00	0.00	0.00	0.00
	8H	12.85	13.23	13.36	13.72	14.30	0.00	0.00	0.00	0.00	0.00