

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: P1061740

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061740  
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-S610D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

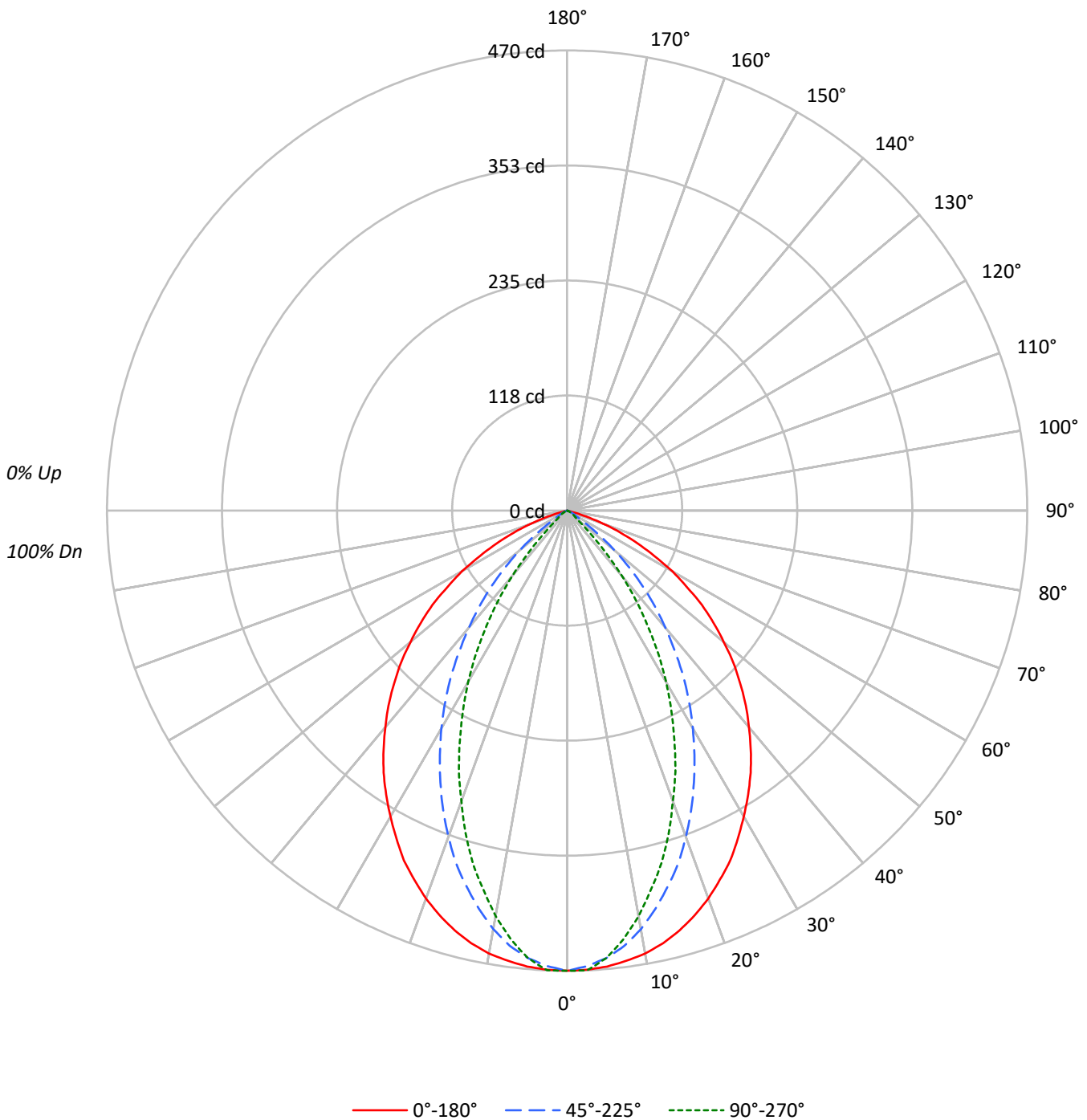
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 607.1 lumens  
Efficiency: N/A  
Efficacy: 31.0 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	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					100			
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54					54			
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50					50			
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39					39			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3236	3236	3236
5°	3231	3171	3171
10°	3212	3034	2939
15°	3164	2833	2656
20°	3089	2598	2312
25°	2996	2327	1969
30°	2869	2041	1607
35°	2746	1741	1204
40°	2597	1404	780
45°	2433	1062	338
50°	2238	677	126
55°	2017	298	89
60°	1708	128	59
65°	1294	81	31
70°	787	38	12
75°	165	16	16
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2433 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.3	7.1
10°-20°	112.9	18.6
20°-30°	145.0	23.9
30°-40°	136.5	22.5
40°-50°	95.4	15.7
50°-60°	51.0	8.4
60°-70°	20.3	3.3
70°-80°	2.6	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°	301.3	49.6
0°-40°	437.8	72.1
0°-60°	584.2	96.2
0°-90°	607.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	607.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	468	466	459	460	459	44
15°	444	430	397	379	373	125
25°	394	360	306	273	259	181
35°	327	275	207	160	143	204
45°	250	187	109	53	35	193
55°	168	103	25	9	7	149
65°	79	32	5	2	2	79
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°	470.0	470.0	470.0	470.0	470.0
2.5°	469.4	470.0	465.6	469.4	470.0
5°	467.5	466.3	458.8	460.1	458.8
7.5°	463.8	460.7	448.3	443.9	441.5
10°	459.4	452.6	434.0	424.7	420.4
12.5°	452.6	442.7	416.6	402.4	396.2
15°	443.9	429.7	397.4	378.8	372.6
17.5°	433.4	414.8	377.6	354.6	345.3
20°	421.6	396.8	354.6	327.4	315.6
22.5°	408.0	379.4	331.1	300.7	288.9
25°	394.3	359.6	306.3	272.8	259.2
27.5°	377.6	339.1	281.5	245.5	230.6
30°	360.8	318.7	256.7	217.6	202.1
32.5°	344.1	297.0	231.9	188.5	173.0
35°	326.7	274.7	207.1	160.0	143.2
37.5°	308.1	252.3	180.4	132.7	115.3
40°	288.9	230.6	156.2	106.0	86.8
42.5°	270.3	208.9	132.1	80.0	58.9
45°	249.9	187.2	109.1	52.7	34.7
47.5°	230.6	166.2	85.6	30.4	18.0
50°	208.9	144.5	63.2	16.1	11.8
52.5°	188.5	123.4	42.2	10.5	9.3
55°	168.0	102.9	24.8	8.7	7.4
57.5°	144.5	83.1	13.6	6.8	5.6
60°	124.0	65.1	9.3	5.0	4.3
62.5°	100.4	47.7	6.8	3.7	3.1
65°	79.4	31.6	5.0	2.5	1.9
67.5°	58.9	18.6	3.1	1.2	1.2
70°	39.1	9.9	1.9	0.6	0.6
72.5°	20.5	4.3	1.2	0.6	0.6
75°	6.2	1.9	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	13.03	14.29	13.39	14.60	14.92	0.00	0.00	0.00	0.00	0.00
	3H	13.61	14.72	13.99	15.05	15.42	0.00	0.00	0.00	0.00	0.00
	4H	13.57	14.61	13.98	14.96	15.34	0.00	0.00	0.00	0.00	0.00
	6H	13.49	14.43	13.90	14.80	15.20	0.00	0.00	0.00	0.00	0.00
	8H	13.44	14.33	13.87	14.73	15.13	0.00	0.00	0.00	0.00	0.00
	12H	13.40	14.25	13.83	14.63	15.06	0.00	0.00	0.00	0.00	0.00
4H	2H	12.80	13.83	13.20	14.18	14.57	0.00	0.00	0.00	0.00	0.00
	3H	13.39	14.23	13.80	14.63	15.03	0.00	0.00	0.00	0.00	0.00
	4H	13.34	14.08	13.78	14.50	14.95	0.00	0.00	0.00	0.00	0.00
	6H	13.25	13.89	13.72	14.34	14.81	0.00	0.00	0.00	0.00	0.00
	8H	13.19	13.79	13.66	14.23	14.71	0.00	0.00	0.00	0.00	0.00
	12H	13.14	13.66	13.63	14.15	14.62	0.00	0.00	0.00	0.00	0.00
8H	4H	13.19	13.79	13.66	14.23	14.71	0.00	0.00	0.00	0.00	0.00
	6H	13.09	13.57	13.59	14.07	14.55	0.00	0.00	0.00	0.00	0.00
	8H	13.02	13.45	13.54	13.97	14.46	0.00	0.00	0.00	0.00	0.00
	12H	12.97	13.35	13.49	13.85	14.42	0.00	0.00	0.00	0.00	0.00
12H	4H	13.14	13.66	13.63	14.15	14.62	0.00	0.00	0.00	0.00	0.00
	6H	13.02	13.45	13.54	13.97	14.46	0.00	0.00	0.00	0.00	0.00
	8H	12.97	13.35	13.49	13.85	14.42	0.00	0.00	0.00	0.00	0.00