

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: P1061742

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061742  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)  
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-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

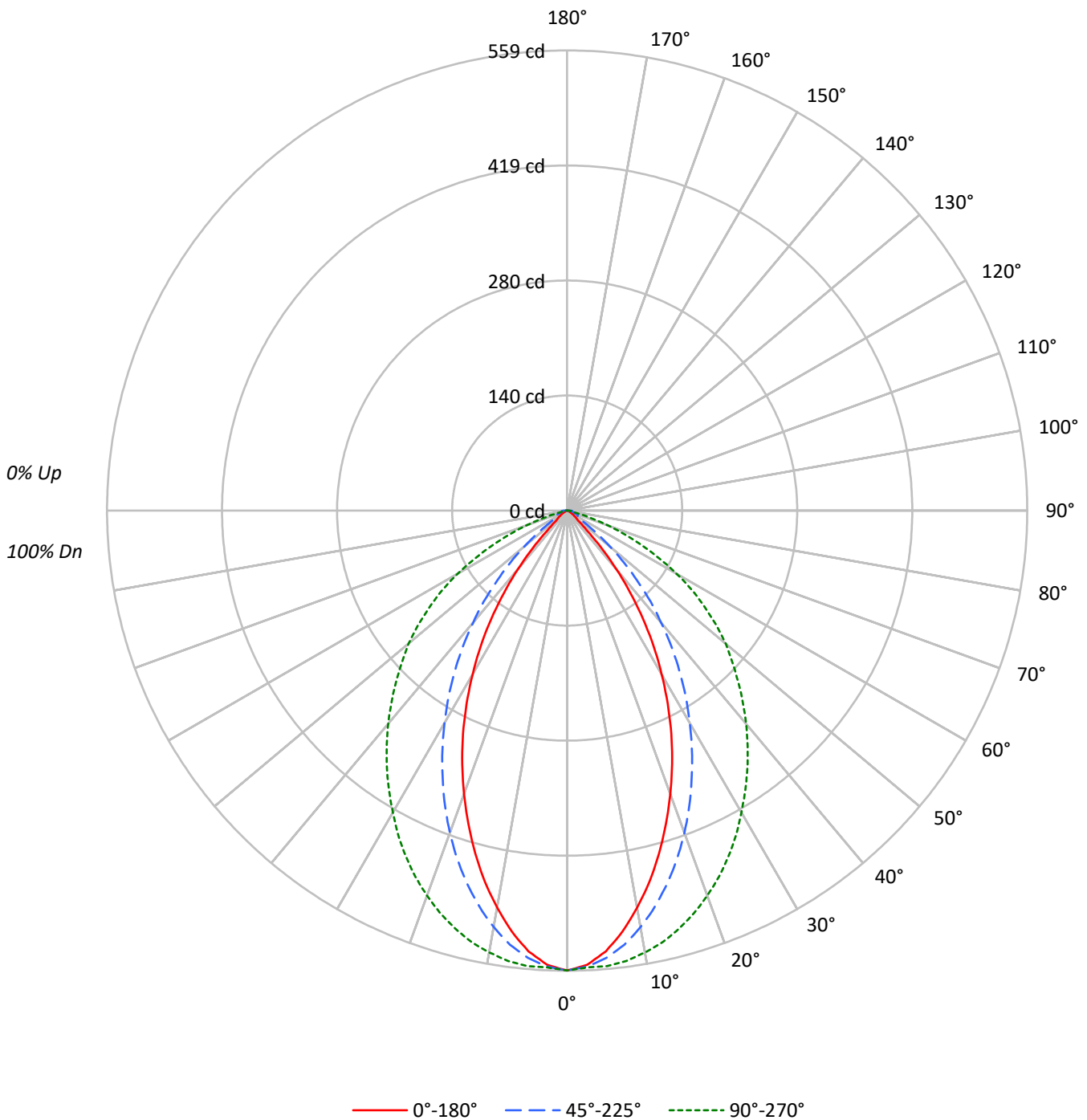
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 722.7 lumens  
Efficiency: N/A  
Efficacy: 36.9 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<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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80					80			
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65					65			
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59					59			
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53					53			
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49					49			
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45					45			
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41					41			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38					38			

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

	0°	45°	90°
0°	3846	3846	3846
5°	3715	3771	3839
10°	3424	3593	3810
15°	3075	3345	3747
20°	2683	3052	3647
25°	2273	2720	3522
30°	1825	2368	3365
35°	1352	1998	3208
40°	837	1595	3041
45°	326	1167	2859
50°	153	732	2693
55°	112	313	2444
60°	77	222	2119
65°	51	233	1649
70°	50	213	1037
75°	67	215	330
80°	99	246	222
85°	150	490	340

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2859 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.2	7.1
10°-20°	132.7	18.4
20°-30°	169.0	23.4
30°-40°	157.4	21.8
40°-50°	108.3	15.0
50°-60°	61.3	8.5
60°-70°	29.0	4.0
70°-80°	9.1	1.3
80°-90°	4.7	0.7
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°	353.0	48.8
0°-40°	510.4	70.6
0°-60°	680.0	94.1
0°-90°	722.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	722.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	559	559	559	559	559	
5°	538	545	546	550	556	50
15°	431	446	469	505	526	120
25°	299	318	358	418	464	136
35°	161	183	238	319	382	99
45°	34	53	120	217	294	32
55°	9	11	26	125	204	9
65°	3	4	14	45	101	3
75°	2	6	8	9	12	3
85°	2	5	6	6	4	2
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	558.6	558.6	558.6	558.6	558.6
2.5°	552.4	558.0	554.3	554.9	555.5
5°	537.5	545.0	545.6	550.5	555.5
7.5°	515.8	525.1	531.9	543.7	551.8
10°	489.7	500.9	513.9	533.2	545.0
12.5°	461.8	474.8	492.8	520.1	536.9
15°	431.4	445.6	469.2	504.6	525.7
17.5°	399.1	415.2	443.8	486.0	512.7
20°	366.2	383.6	416.5	464.9	497.8
22.5°	333.3	351.3	387.9	441.9	481.6
25°	299.2	318.4	358.1	418.3	463.6
27.5°	264.4	284.3	328.3	394.1	444.4
30°	229.6	250.8	297.9	369.3	423.3
32.5°	195.5	216.6	268.1	344.5	402.8
35°	160.8	183.1	237.7	319.0	381.7
37.5°	126.0	150.2	207.9	293.0	360.0
40°	93.1	116.1	177.5	267.5	338.3
42.5°	62.1	84.4	150.2	242.1	315.9
45°	33.5	53.4	119.8	216.6	293.6
47.5°	18.0	28.6	93.7	191.8	271.9
50°	14.3	16.1	68.3	168.8	251.4
52.5°	11.8	13.0	44.7	147.1	227.8
55°	9.3	10.6	26.1	124.8	203.6
57.5°	7.4	8.7	16.8	103.7	180.0
60°	5.6	6.8	16.1	83.2	153.9
62.5°	4.3	5.0	14.9	63.9	126.6
65°	3.1	3.7	14.3	44.7	101.2
67.5°	2.5	3.1	13.0	28.6	75.7
70°	2.5	2.5	10.6	18.6	51.5
72.5°	2.5	4.3	9.3	12.4	31.0
75°	2.5	5.6	8.1	8.7	12.4
77.5°	2.5	6.2	6.8	6.8	6.8
80°	2.5	5.6	6.2	6.2	5.6
82.5°	2.5	5.0	5.6	6.2	5.0
85°	1.9	5.0	6.2	5.6	4.3
87.5°	1.9	5.0	5.6	5.0	3.1
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	13.93	15.22	14.29	15.53	15.85
	3H	0.00	0.00	0.00	0.00	0.00	14.65	15.79	15.03	16.12	16.48
	4H	0.00	0.00	0.00	0.00	0.00	14.67	15.73	15.07	16.08	16.47
	6H	0.00	0.00	0.00	0.00	0.01	14.62	15.60	15.04	15.97	16.36
	8H	0.00	0.00	0.00	0.24	0.64	14.60	15.52	15.03	15.91	16.32
	12H	0.00	0.41	0.00	0.79	1.22	14.58	15.46	15.01	15.85	16.28
4H	2H	0.00	0.00	0.00	0.00	0.24	13.72	14.78	14.12	15.13	15.52
	3H	0.00	0.12	0.00	0.53	0.93	14.47	15.34	14.89	15.75	16.15
	4H	0.27	1.04	0.70	1.46	1.90	14.50	15.28	14.94	15.70	16.14
	6H	1.55	2.21	2.01	2.66	3.13	14.48	15.15	14.94	15.60	16.06
	8H	2.13	2.76	2.60	3.20	3.67	14.47	15.09	14.94	15.54	16.01
	12H	2.70	3.25	3.19	3.74	4.21	14.47	15.02	14.96	15.51	15.98
8H	4H	1.68	2.30	2.15	2.75	3.22	14.39	15.01	14.86	15.46	15.93
	6H	3.24	3.75	3.74	4.25	4.73	14.38	14.88	14.88	15.38	15.86
	8H	4.04	4.50	4.56	5.01	5.51	14.39	14.84	14.91	15.36	15.85
	12H	4.89	5.30	5.41	5.79	6.36	14.45	14.85	14.96	15.35	15.92
12H	4H	1.90	2.45	2.38	2.93	3.40	14.34	14.89	14.83	15.38	15.85
	6H	3.61	4.07	4.13	4.58	5.08	14.33	14.79	14.85	15.30	15.79
	8H	4.61	5.01	5.12	5.51	6.08	14.38	14.78	14.89	15.28	15.85