

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: P1061751

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061751  
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-S610D950-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: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

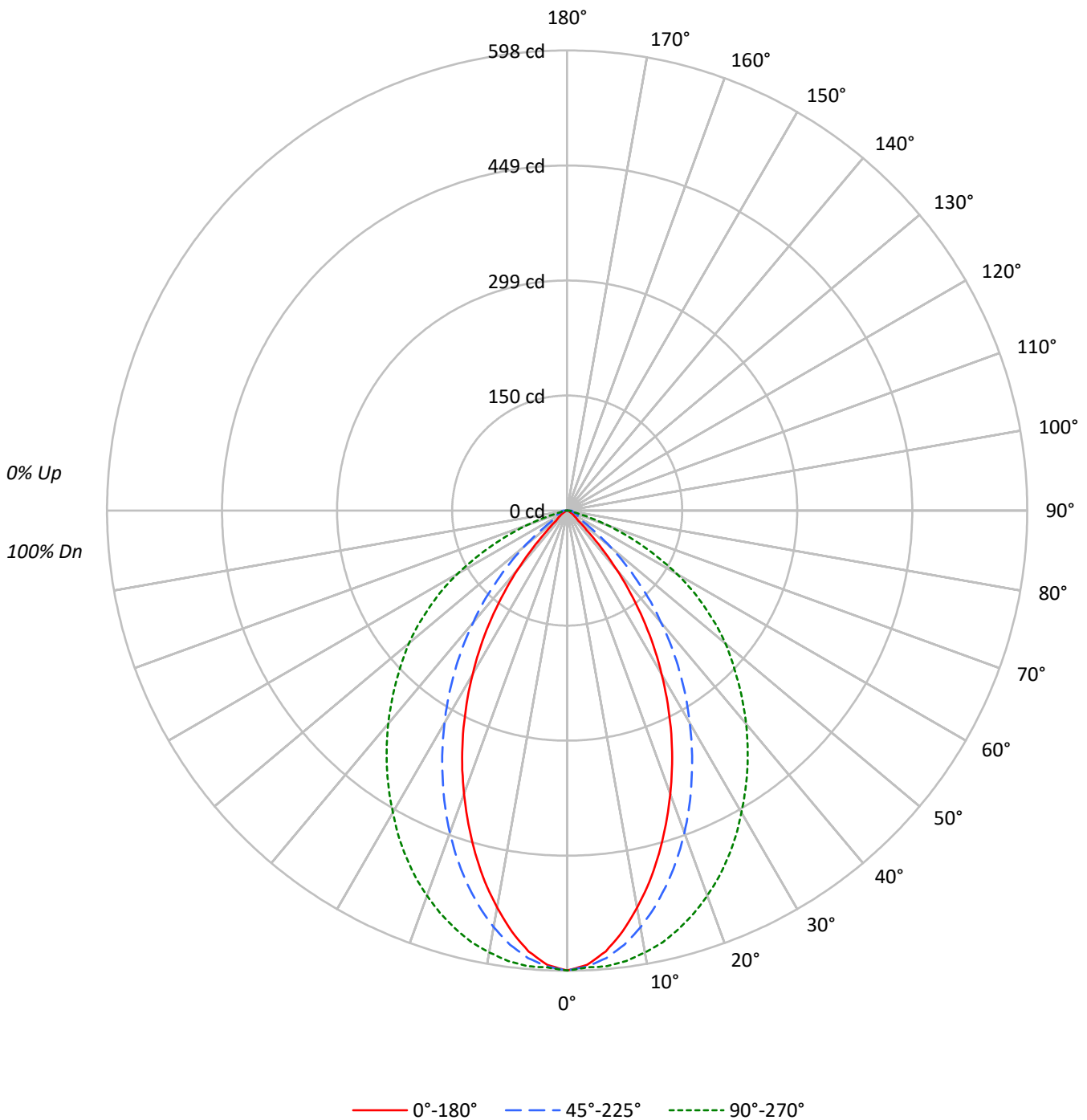
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 773.2 lumens  
Efficiency: N/A  
Efficacy: 39.4 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 (Ain): 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°	4115	4115	4115
5°	3974	4034	4108
10°	3663	3844	4076
15°	3290	3578	4009
20°	2871	3265	3902
25°	2432	2910	3768
30°	1953	2534	3601
35°	1446	2137	3433
40°	895	1707	3253
45°	350	1248	3058
50°	164	782	2880
55°	120	335	2614
60°	83	238	2268
65°	54	249	1763
70°	54	227	1109
75°	72	229	354
80°	107	262	238
85°	158	521	363

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3058 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.8	7.1
10°-20°	142.0	18.4
20°-30°	180.9	23.4
30°-40°	168.3	21.8
40°-50°	115.9	15.0
50°-60°	65.6	8.5
60°-70°	31.0	4.0
70°-80°	9.7	1.3
80°-90°	5.1	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°	377.7	48.8
0°-40°	546.0	70.6
0°-60°	727.5	94.1
0°-90°	773.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	773.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	575	583	584	589	594	53
15°	462	477	502	540	562	129
25°	320	341	383	448	496	146
35°	172	196	254	341	408	106
45°	36	57	128	232	314	34
55°	10	11	28	134	218	9
65°	3	4	15	48	108	4
75°	3	6	9	9	13	3
85°	2	5	7	6	5	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	597.6	597.6	597.6	597.6	597.6
2.5°	591.0	597.0	593.0	593.6	594.3
5°	575.0	583.0	583.7	589.0	594.3
7.5°	551.8	561.8	569.1	581.7	590.3
10°	523.9	535.9	549.8	570.4	583.0
12.5°	494.0	508.0	527.2	556.5	574.4
15°	461.5	476.8	502.0	539.9	562.4
17.5°	427.0	444.2	474.8	519.9	548.5
20°	391.8	410.4	445.6	497.4	532.6
22.5°	356.6	375.8	415.0	472.8	515.3
25°	320.1	340.6	383.1	447.6	496.0
27.5°	282.9	304.1	351.3	421.7	475.4
30°	245.7	268.3	318.7	395.1	452.9
32.5°	209.2	231.7	286.9	368.5	431.0
35°	172.0	195.9	254.3	341.3	408.4
37.5°	134.8	160.7	222.4	313.4	385.1
40°	99.6	124.2	189.9	286.2	361.9
42.5°	66.4	90.3	160.7	259.0	338.0
45°	35.9	57.1	128.2	231.7	314.1
47.5°	19.3	30.5	100.3	205.2	290.8
50°	15.3	17.3	73.0	180.6	268.9
52.5°	12.6	13.9	47.8	157.4	243.7
55°	10.0	11.3	27.9	133.5	217.8
57.5°	8.0	9.3	17.9	110.9	192.6
60°	6.0	7.3	17.3	89.0	164.7
62.5°	4.6	5.3	15.9	68.4	135.5
65°	3.3	4.0	15.3	47.8	108.2
67.5°	2.7	3.3	13.9	30.5	81.0
70°	2.7	2.7	11.3	19.9	55.1
72.5°	2.7	4.6	10.0	13.3	33.2
75°	2.7	6.0	8.6	9.3	13.3
77.5°	2.7	6.6	7.3	7.3	7.3
80°	2.7	6.0	6.6	6.6	6.0
82.5°	2.7	5.3	6.0	6.6	5.3
85°	2.0	5.3	6.6	6.0	4.6
87.5°	2.0	5.3	6.0	5.3	3.3
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	14.16	15.45	14.53	15.76	16.08
	3H	0.00	0.00	0.00	0.00	0.00	14.88	16.02	15.26	16.35	16.72
	4H	0.00	0.00	0.00	0.00	0.00	14.90	15.97	15.31	16.32	16.70
	6H	0.00	0.00	0.00	0.00	0.27	14.85	15.83	15.27	16.20	16.59
	8H	0.00	0.10	0.00	0.49	0.90	14.83	15.75	15.26	16.14	16.55
	12H	0.00	0.65	0.20	1.03	1.47	14.81	15.70	15.25	16.08	16.51
4H	2H	0.00	0.00	0.00	0.09	0.48	13.95	15.01	14.35	15.37	15.75
	3H	0.00	0.36	0.00	0.77	1.17	14.71	15.57	15.12	15.98	16.38
	4H	0.51	1.28	0.94	1.70	2.15	14.74	15.51	15.17	15.93	16.37
	6H	1.79	2.46	2.25	2.90	3.37	14.71	15.38	15.18	15.83	16.30
	8H	2.37	3.00	2.84	3.44	3.92	14.70	15.32	15.17	15.77	16.24
	12H	2.94	3.49	3.42	3.97	4.44	14.71	15.26	15.19	15.74	16.21
8H	4H	1.91	2.54	2.38	2.98	3.45	14.62	15.24	15.09	15.69	16.16
	6H	3.48	3.98	3.98	4.48	4.96	14.61	15.12	15.11	15.61	16.10
	8H	4.27	4.73	4.79	5.24	5.74	14.62	15.08	15.14	15.59	16.09
	12H	5.11	5.51	5.63	6.01	6.58	14.68	15.08	15.20	15.58	16.15
12H	4H	2.13	2.68	2.62	3.16	3.64	14.58	15.13	15.06	15.61	16.08
	6H	3.84	4.30	4.37	4.82	5.31	14.56	15.02	15.08	15.53	16.03
	8H	4.84	5.24	5.35	5.73	6.31	14.61	15.01	15.12	15.51	16.08