

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: P1175377

Luminaire Tested: S125RDRP-S610D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1175377  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/18/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S610D850-X4F0-XX-UDD-WVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

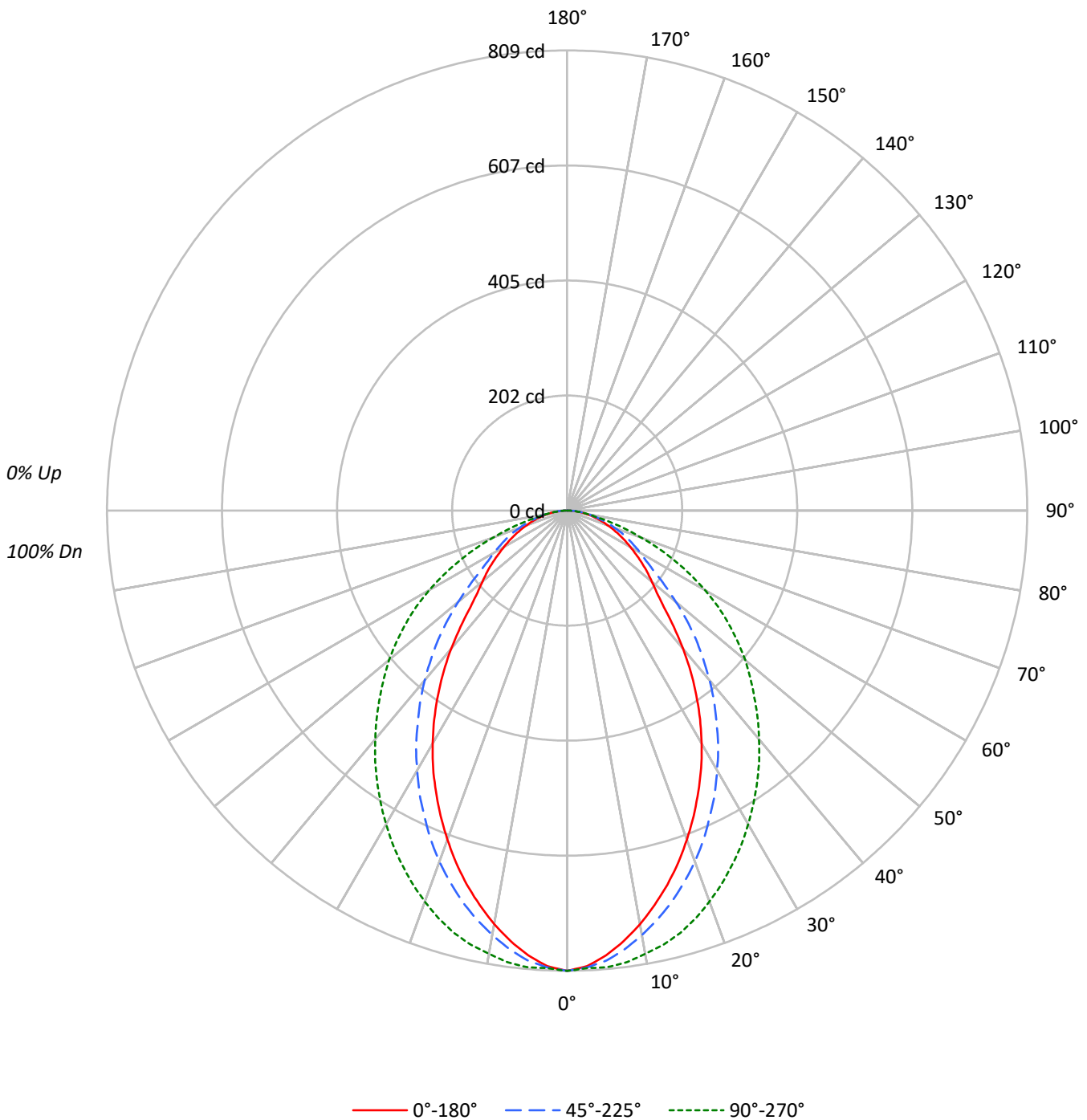
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1524.5 lumens  
Efficiency: N/A  
Efficacy: 77.8 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

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

	0°	45°	90°
0°	5572	5572	5572
5°	5426	5488	5569
10°	5162	5297	5532
15°	4852	5072	5479
20°	4510	4812	5361
25°	4143	4509	5218
30°	3757	4189	5063
35°	3326	3851	4896
40°	2853	3501	4717
45°	2341	3117	4535
50°	2082	2678	4378
55°	1922	2242	4156
60°	1770	2044	3850
65°	1645	1924	3402
70°	1534	1798	2780
75°	1445	1663	2083
80°	1360	1527	1499
85°	1248	1517	1248

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4535 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.9	4.9
10°-20°	201.9	13.2
20°-30°	277.8	18.2
30°-40°	294.6	19.3
40°-50°	257.9	16.9
50°-60°	197.9	13.0
60°-70°	131.8	8.6
70°-80°	67.6	4.4
80°-90°	20.1	1.3
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°	554.6	36.4
0°-40°	849.3	55.7
0°-60°	1305.0	85.6
0°-90°	1524.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1524.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	809	809	809	809	809	
5°	785	795	794	800	806	73
15°	681	696	712	745	769	191
25°	545	564	594	644	687	250
35°	396	414	458	526	582	247
45°	240	260	320	400	466	190
55°	160	164	187	278	346	144
65°	101	102	118	155	209	101
75°	54	58	62	66	78	58
85°	16	18	19	18	16	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	809.2	809.2	809.2	809.2	809.2
2.5°	801.6	809.9	803.7	804.4	805.1
5°	785.1	795.4	794.1	799.6	805.8
7.5°	763.2	774.2	777.6	791.3	800.9
10°	738.4	750.8	757.7	778.3	791.3
12.5°	710.3	724.7	735.7	762.5	781.7
15°	680.7	696.5	711.6	745.3	768.7
17.5°	649.1	664.9	684.9	723.3	751.5
20°	615.5	632.7	656.7	697.9	731.6
22.5°	581.1	599.0	626.5	671.8	710.3
25°	545.4	564.0	593.5	643.6	686.9
27.5°	510.4	527.6	561.9	615.5	662.9
30°	472.6	490.5	526.9	585.9	636.8
32.5°	434.8	452.7	494.6	556.4	610.0
35°	395.7	414.2	458.2	525.5	582.5
37.5°	356.5	375.7	424.5	493.9	554.3
40°	317.4	338.0	389.5	462.3	524.8
42.5°	277.5	299.5	353.8	431.4	496.0
45°	240.4	260.3	320.1	399.8	465.7
47.5°	213.6	225.3	284.4	367.5	436.9
50°	194.4	199.9	250.0	336.6	408.7
52.5°	177.2	180.7	216.4	307.7	377.8
55°	160.1	163.5	186.8	277.5	346.2
57.5°	143.6	145.6	164.9	247.3	314.6
60°	128.5	129.8	148.4	217.1	279.6
62.5°	114.7	115.4	132.6	186.2	244.5
65°	101.0	101.7	118.1	155.2	208.8
67.5°	88.6	88.6	104.4	127.1	174.5
70°	76.2	76.2	89.3	103.0	138.1
72.5°	65.3	66.6	75.6	83.1	107.8
75°	54.3	57.7	62.5	65.9	78.3
77.5°	44.0	48.1	50.1	51.5	52.2
80°	34.3	37.1	38.5	39.2	37.8
82.5°	25.4	27.5	28.2	28.2	26.1
85°	15.8	17.9	19.2	18.5	15.8
87.5°	7.6	10.3	11.0	9.6	7.6
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	12.58	14.08	12.95	14.39	14.71	16.61	18.11	16.97	18.42	18.74
	3H	14.17	15.51	14.55	15.84	16.20	18.00	19.34	18.37	19.67	20.03
	4H	14.81	16.07	15.21	16.42	16.80	18.40	19.66	18.80	20.01	20.39
	6H	15.32	16.49	15.73	16.85	17.25	18.61	19.77	19.02	20.14	20.53
	8H	15.50	16.61	15.93	17.00	17.40	18.66	19.77	19.09	20.16	20.56
	12H	15.63	16.69	16.06	17.07	17.50	18.70	19.76	19.13	20.14	20.57
4H	2H	13.35	14.61	13.75	14.96	15.34	16.74	18.00	17.14	18.35	18.73
	3H	15.13	16.18	15.54	16.58	16.98	18.31	19.35	18.72	19.75	20.16
	4H	15.90	16.84	16.33	17.26	17.70	18.82	19.76	19.25	20.17	20.61
	6H	16.54	17.36	17.00	17.80	18.26	19.14	19.96	19.60	20.41	20.87
	8H	16.77	17.54	17.24	17.98	18.45	19.24	20.01	19.71	20.45	20.92
	12H	16.94	17.63	17.43	18.11	18.58	19.32	20.00	19.80	20.48	20.95
8H	4H	16.29	17.05	16.75	17.50	17.96	18.92	19.68	19.38	20.13	20.59
	6H	17.06	17.70	17.56	18.19	18.66	19.34	19.97	19.83	20.46	20.94
	8H	17.38	17.95	17.89	18.46	18.95	19.50	20.06	20.01	20.57	21.06
	12H	17.64	18.14	18.15	18.64	19.20	19.63	20.14	20.14	20.63	21.19
12H	4H	16.33	17.01	16.81	17.49	17.96	18.92	19.60	19.40	20.08	20.55
	6H	17.14	17.71	17.65	18.22	18.70	19.35	19.92	19.86	20.43	20.92
	8H	17.52	18.02	18.03	18.52	19.08	19.56	20.06	20.07	20.55	21.12