

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: P1061688

Luminaire Tested: S125RDRP-S610D835-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061688  
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-S610D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

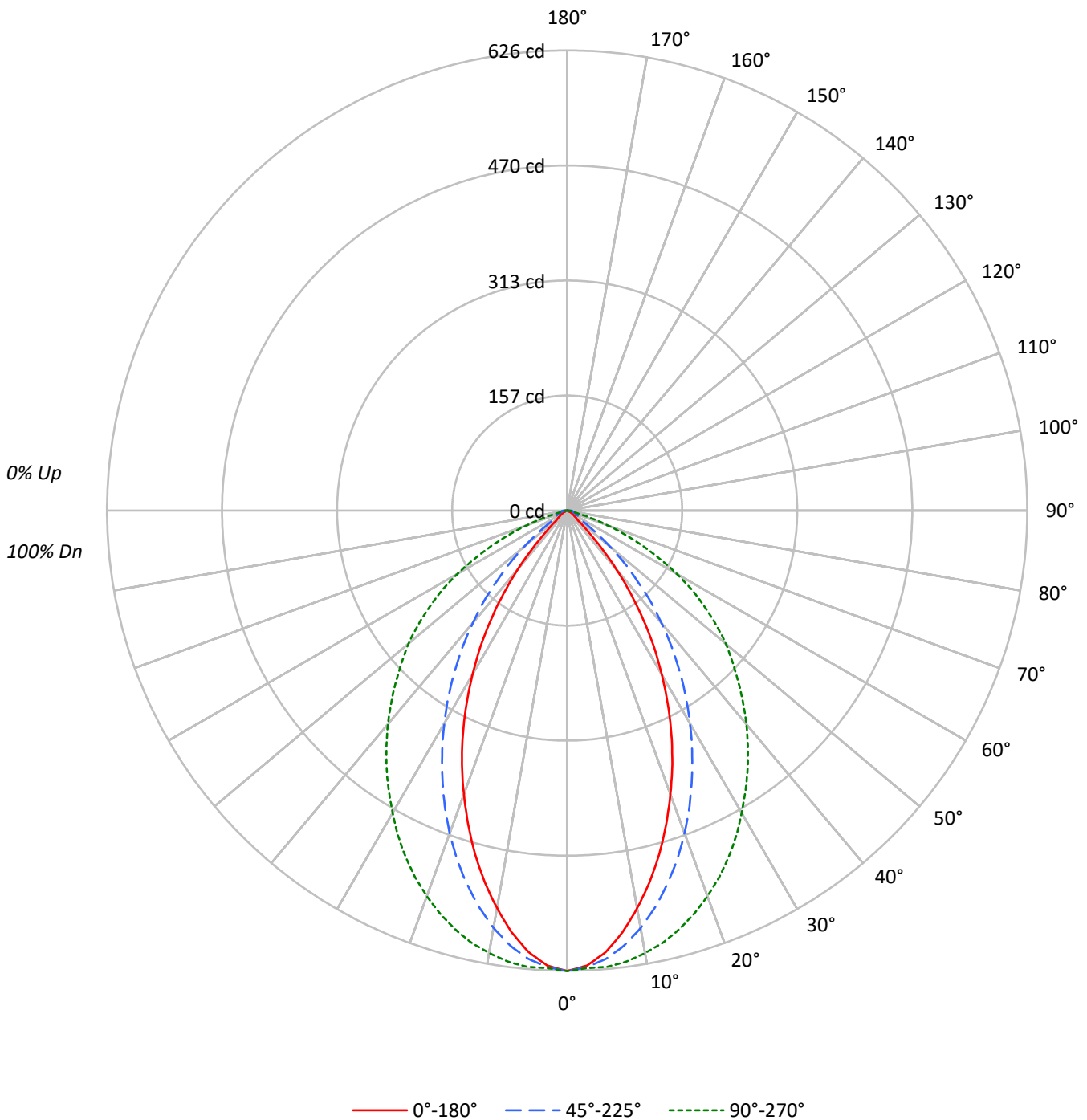
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 810.5 lumens  
Efficiency: N/A  
Efficacy: 41.4 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 (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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

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

	0°	45°	90°
0°	4313	4313	4313
5°	4166	4228	4306
10°	3840	4029	4272
15°	3449	3751	4203
20°	3009	3422	4090
25°	2549	3051	3950
30°	2047	2656	3774
35°	1515	2241	3598
40°	938	1790	3409
45°	366	1308	3205
50°	171	821	3020
55°	125	351	2741
60°	87	249	2377
65°	57	261	1849
70°	56	238	1164
75°	74	239	370
80°	111	278	250
85°	166	553	387

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3205 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.4	7.1
10°-20°	148.9	18.4
20°-30°	189.6	23.4
30°-40°	176.5	21.8
40°-50°	121.5	15.0
50°-60°	68.8	8.5
60°-70°	32.5	4.0
70°-80°	10.2	1.3
80°-90°	5.3	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°	395.9	48.8
0°-40°	572.3	70.6
0°-60°	762.6	94.1
0°-90°	810.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	810.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	626	626	626	626	626	
5°	603	611	612	617	623	56
15°	484	500	526	566	590	135
25°	336	357	402	469	520	153
35°	180	205	267	358	428	111
45°	38	60	134	243	329	35
55°	10	12	29	140	228	10
65°	4	4	16	50	114	4
75°	3	6	9	10	14	3
85°	2	6	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°	626.4	626.4	626.4	626.4	626.4
2.5°	619.5	625.7	621.6	622.3	623.0
5°	602.8	611.1	611.8	617.4	623.0
7.5°	578.4	588.9	596.5	609.7	618.8
10°	549.2	561.7	576.3	597.9	611.1
12.5°	517.9	532.5	552.7	583.3	602.1
15°	483.8	499.8	526.2	565.9	589.6
17.5°	447.6	465.7	497.7	545.0	574.9
20°	410.7	430.2	467.0	521.3	558.2
22.5°	373.8	394.0	435.0	495.6	540.1
25°	335.5	357.1	401.6	469.1	519.9
27.5°	296.5	318.8	368.2	442.0	498.4
30°	257.5	281.2	334.1	414.1	474.7
32.5°	219.3	242.9	300.7	386.3	451.7
35°	180.3	205.3	266.6	357.8	428.1
37.5°	141.3	168.4	233.2	328.5	403.7
40°	104.4	130.2	199.1	300.0	379.3
42.5°	69.6	94.7	168.4	271.5	354.3
45°	37.6	59.9	134.3	242.9	329.2
47.5°	20.2	32.0	105.1	215.1	304.9
50°	16.0	18.1	76.6	189.3	281.9
52.5°	13.2	14.6	50.1	165.0	255.4
55°	10.4	11.8	29.2	139.9	228.3
57.5°	8.4	9.7	18.8	116.2	201.9
60°	6.3	7.7	18.1	93.3	172.6
62.5°	4.9	5.6	16.7	71.7	142.0
65°	3.5	4.2	16.0	50.1	113.5
67.5°	2.8	3.5	14.6	32.0	84.9
70°	2.8	2.8	11.8	20.9	57.8
72.5°	2.8	4.9	10.4	13.9	34.8
75°	2.8	6.3	9.0	9.7	13.9
77.5°	2.8	7.0	7.7	7.7	7.7
80°	2.8	6.3	7.0	7.0	6.3
82.5°	2.8	5.6	6.3	7.0	5.6
85°	2.1	5.6	7.0	6.3	4.9
87.5°	2.1	5.6	6.3	5.6	3.5
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	14.32	15.61	14.69	15.93	16.24
	3H	0.00	0.00	0.00	0.00	0.00	15.04	16.18	15.42	16.51	16.88
	4H	0.00	0.00	0.00	0.00	0.00	15.07	16.13	15.47	16.48	16.86
	6H	0.00	0.00	0.00	0.02	0.41	15.02	15.99	15.43	16.36	16.76
	8H	0.00	0.24	0.00	0.63	1.04	14.99	15.92	15.42	16.31	16.71
	12H	0.00	0.80	0.35	1.18	1.61	14.98	15.86	15.41	16.24	16.67
4H	2H	0.00	0.00	0.00	0.24	0.62	14.11	15.18	14.52	15.53	15.91
	3H	0.00	0.51	0.05	0.91	1.32	14.87	15.74	15.28	16.14	16.55
	4H	0.66	1.43	1.10	1.85	2.30	14.90	15.67	15.33	16.09	16.54
	6H	1.95	2.62	2.41	3.06	3.53	14.88	15.54	15.34	15.99	16.46
	8H	2.53	3.16	3.00	3.60	4.08	14.86	15.49	15.33	15.93	16.40
	12H	3.10	3.65	3.59	4.13	4.61	14.87	15.42	15.36	15.90	16.38
8H	4H	2.07	2.70	2.54	3.14	3.62	14.78	15.40	15.25	15.85	16.32
	6H	3.65	4.16	4.15	4.65	5.14	14.77	15.28	15.28	15.78	16.26
	8H	4.45	4.90	4.97	5.42	5.91	14.78	15.24	15.31	15.76	16.25
	12H	5.29	5.69	5.81	6.19	6.76	14.85	15.25	15.36	15.75	16.32
12H	4H	2.30	2.85	2.78	3.33	3.81	14.74	15.29	15.23	15.77	16.25
	6H	4.02	4.48	4.54	4.99	5.49	14.73	15.18	15.25	15.70	16.19
	8H	5.02	5.42	5.53	5.92	6.49	14.77	15.18	15.29	15.67	16.25