

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: P1056565

Luminaire Tested: S125R3DR-H375D935-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056565  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-H375D935-X4F0-XX-UDD-F-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

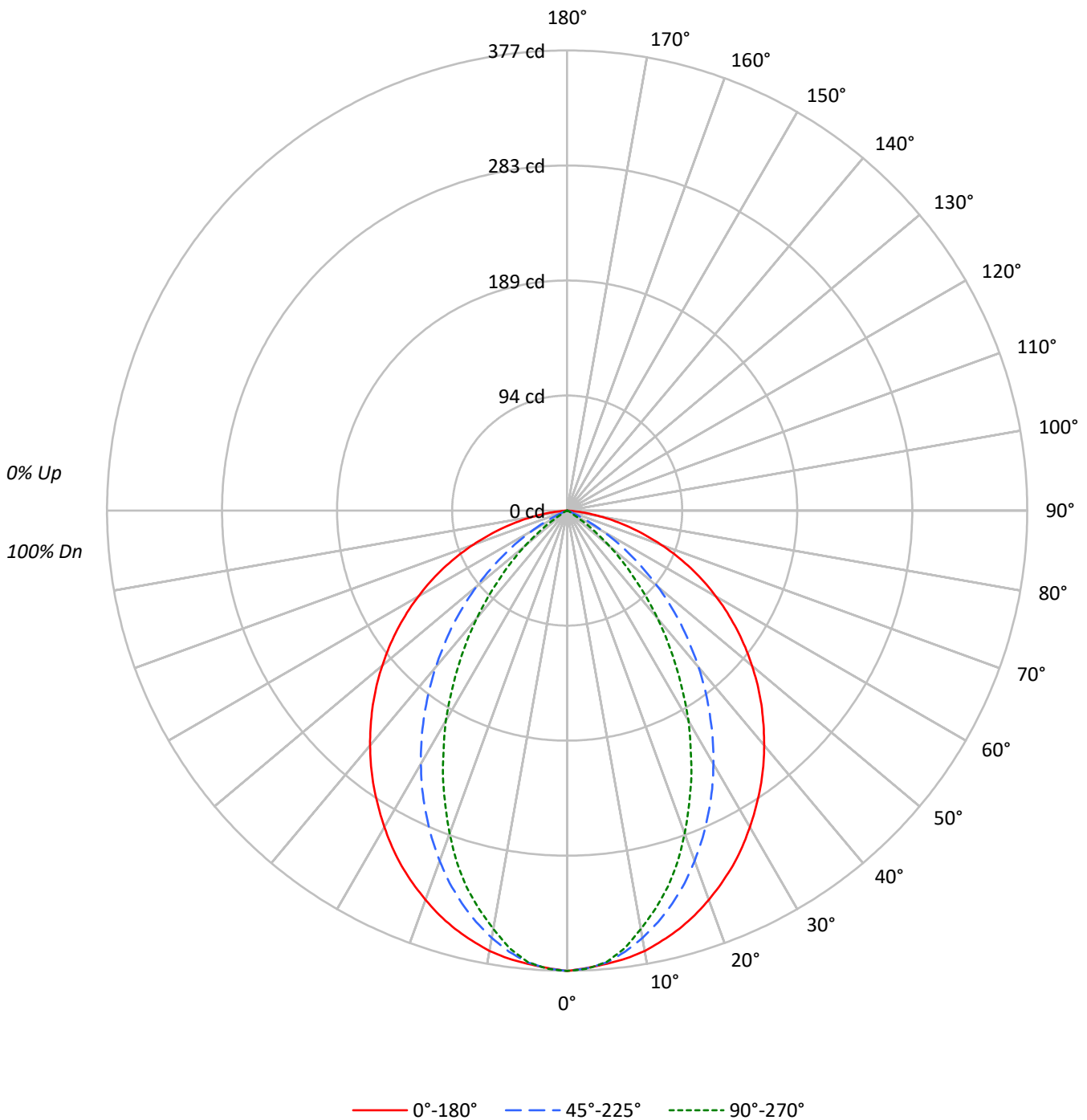
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 611.4 lumens  
Efficiency: N/A  
Efficacy: 52.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07  
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.7  
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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

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

	0°	45°	90°
0°	2667	2667	2667
5°	2645	2637	2634
10°	2630	2552	2498
15°	2597	2438	2334
20°	2553	2298	2118
25°	2505	2135	1878
30°	2444	1956	1624
35°	2384	1758	1342
40°	2318	1546	1062
45°	2250	1320	770
50°	2175	1065	497
55°	2092	779	221
60°	1992	481	64
65°	1870	176	37
70°	1693	62	14
75°	1469	19	11
80°	1128	16	0
85°	519	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2250 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.0	5.7
10°-20°	94.1	15.4
20°-30°	127.3	20.8
30°-40°	130.7	21.4
40°-50°	108.3	17.7
50°-60°	69.5	11.4
60°-70°	33.6	5.5
70°-80°	11.4	1.9
80°-90°	1.5	0.2
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°	256.4	41.9
0°-40°	387.1	63.3
0°-60°	565.0	92.4
0°-90°	611.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	611.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	377	377	377	377	377	
5°	373	376	372	369	371	35
15°	355	350	333	322	319	100
25°	321	305	274	249	241	148
35°	276	250	204	168	156	173
45°	225	188	132	91	77	174
55°	170	124	63	28	18	152
65°	112	62	10	3	2	111
75°	54	12	1	0	0	57
85°	6	0	0	0	0	10
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	377.2	377.2	377.2	377.2	377.2
2.5°	375.0	378.0	375.3	375.0	375.7
5°	372.7	375.7	371.6	369.4	371.2
7.5°	370.1	371.6	364.5	360.8	361.5
10°	366.4	366.0	355.5	349.2	348.0
12.5°	360.8	358.9	345.1	336.1	334.2
15°	354.8	350.3	333.1	321.5	318.9
17.5°	347.7	340.6	320.0	305.1	301.3
20°	339.4	329.7	305.4	287.1	281.5
22.5°	330.5	318.1	290.1	268.4	260.9
25°	321.1	305.4	273.7	249.0	240.8
27.5°	310.7	292.3	257.2	229.2	219.1
30°	299.4	278.5	239.6	209.0	198.9
32.5°	287.9	264.7	222.1	188.8	176.5
35°	276.3	249.7	203.7	168.2	155.5
37.5°	263.9	234.8	185.8	148.8	135.0
40°	251.2	219.4	167.5	128.6	115.1
42.5°	238.1	203.7	149.2	109.5	95.7
45°	225.1	188.0	132.0	91.2	77.0
47.5°	211.6	172.0	114.0	73.3	60.9
50°	197.8	156.3	96.8	57.2	45.2
52.5°	183.9	140.2	79.3	41.5	30.7
55°	169.7	124.5	63.2	27.7	17.9
57.5°	155.5	108.4	48.2	15.3	6.7
60°	140.9	93.1	34.0	5.2	4.5
62.5°	126.7	76.6	21.3	4.1	3.4
65°	111.8	61.7	10.5	3.0	2.2
67.5°	97.2	47.5	4.5	1.9	1.1
70°	81.9	34.4	3.0	1.1	0.7
72.5°	67.7	22.1	1.9	0.7	0.4
75°	53.8	11.6	0.7	0.4	0.4
77.5°	40.4	4.9	0.4	0.4	0.4
80°	27.7	2.2	0.4	0.4	0.0
82.5°	16.4	0.7	0.4	0.4	0.0
85°	6.4	0.0	0.0	0.0	0.0
87.5°	0.4	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	14.47	15.86	14.84	16.17	16.49	0.00	0.71	0.00	1.02	1.34
	3H	16.03	17.25	16.40	17.58	17.95	0.00	0.47	0.00	0.80	1.17
	4H	16.55	17.69	16.95	18.04	18.43	0.00	0.33	0.00	0.68	1.06
	6H	16.89	17.94	17.30	18.31	18.70	0.00	0.16	0.00	0.53	0.93
	8H	16.97	17.97	17.40	18.36	18.76	0.00	0.07	0.00	0.46	0.86
	12H	16.99	17.94	17.42	18.32	18.75	0.00	0.00	0.00	0.37	0.80
4H	2H	14.28	15.42	14.68	15.77	16.16	0.20	1.34	0.60	1.69	2.08
	3H	15.89	16.83	16.31	17.23	17.63	0.15	1.08	0.56	1.48	1.89
	4H	16.42	17.25	16.85	17.67	18.11	0.07	0.90	0.50	1.32	1.76
	6H	16.79	17.51	17.25	17.96	18.42	0.01	0.72	0.47	1.17	1.64
	8H	16.89	17.56	17.36	18.01	18.48	0.00	0.63	0.42	1.07	1.54
	12H	16.92	17.52	17.41	18.00	18.47	0.00	0.51	0.40	0.99	1.46
8H	4H	16.29	16.96	16.76	17.41	17.88	1.10	1.77	1.56	2.21	2.68
	6H	16.64	17.19	17.15	17.69	18.17	1.01	1.56	1.52	2.06	2.54
	8H	16.74	17.23	17.26	17.74	18.24	0.96	1.46	1.48	1.97	2.46
	12H	16.78	17.22	17.29	17.71	18.28	0.92	1.36	1.44	1.85	2.42
12H	4H	16.25	16.84	16.73	17.32	17.79	1.17	1.77	1.66	2.25	2.72
	6H	16.58	17.08	17.10	17.59	18.08	1.08	1.57	1.60	2.09	2.58
	8H	16.70	17.13	17.21	17.63	18.20	1.05	1.48	1.56	1.98	2.55