

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: P1056562

Luminaire Tested: S125R3DR-H375D930-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056562  
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-H375D930-X4F0-XX-UDD-F-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

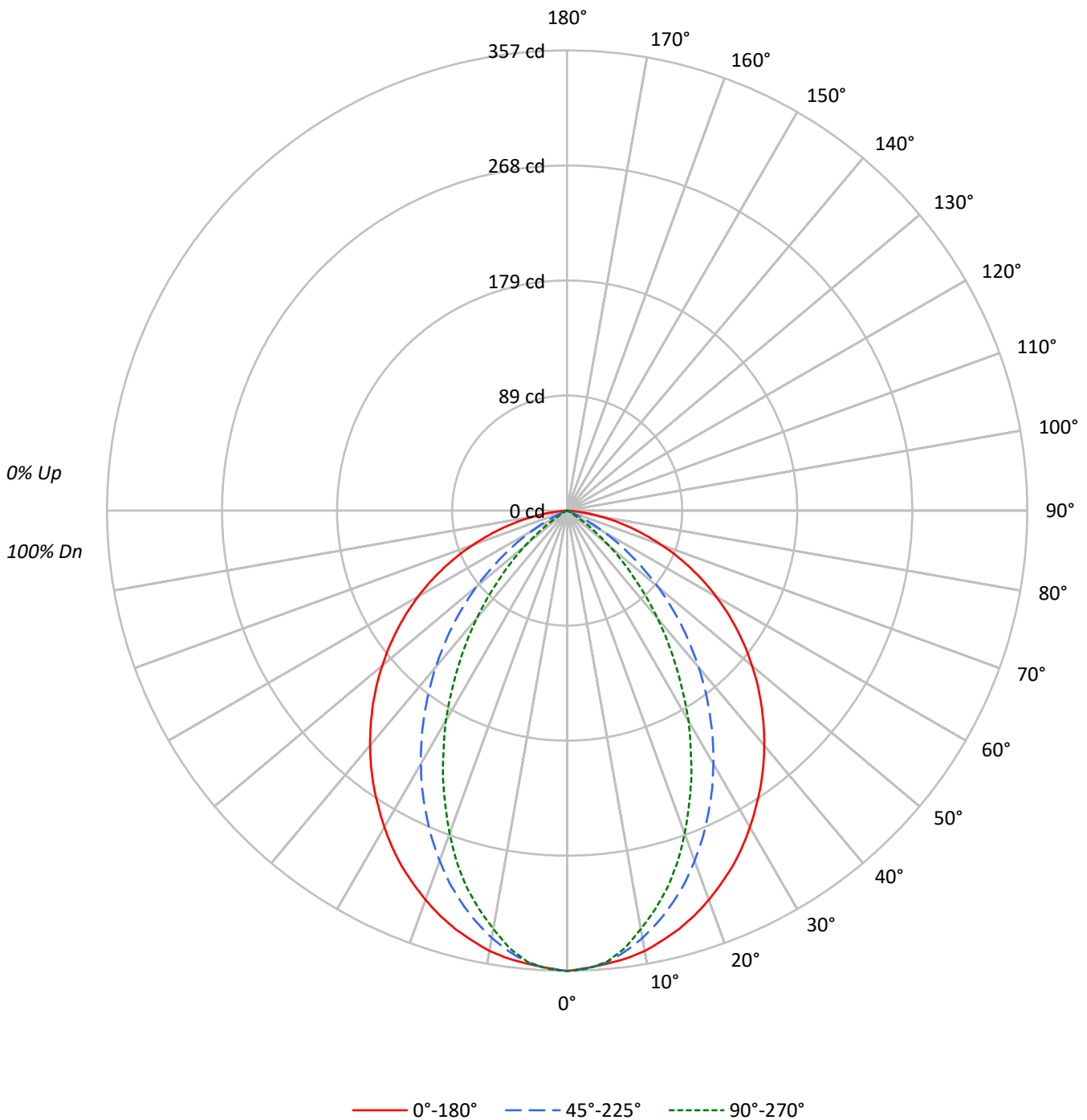
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 579.0 lumens  
Efficiency: N/A  
Efficacy: 49.5 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°	2525	2525	2525
5°	2504	2497	2494
10°	2490	2417	2366
15°	2458	2308	2210
20°	2418	2176	2006
25°	2372	2021	1778
30°	2315	1852	1537
35°	2258	1665	1271
40°	2195	1464	1006
45°	2130	1250	729
50°	2060	1009	471
55°	1981	737	210
60°	1888	455	59
65°	1770	166	35
70°	1602	58	14
75°	1393	19	11
80°	1067	16	0
85°	487	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2130 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	33.2	5.7
10°-20°	89.1	15.4
20°-30°	120.5	20.8
30°-40°	123.8	21.4
40°-50°	102.6	17.7
50°-60°	65.9	11.4
60°-70°	31.8	5.5
70°-80°	10.8	1.9
80°-90°	1.4	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°	242.8	41.9
0°-40°	366.6	63.3
0°-60°	535.0	92.4
0°-90°	579.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	579.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	357	357	357	357	357	
5°	353	356	352	350	352	34
15°	336	332	315	304	302	95
25°	304	289	259	236	228	140
35°	262	236	193	159	147	164
45°	213	178	125	86	73	164
55°	161	118	60	26	17	144
65°	106	58	10	3	2	105
75°	51	11	1	0	0	54
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°	357.2	357.2	357.2	357.2	357.2
2.5°	355.1	357.9	355.4	355.1	355.8
5°	352.9	355.8	351.9	349.7	351.5
7.5°	350.5	351.9	345.1	341.6	342.3
10°	346.9	346.6	336.7	330.6	329.6
12.5°	341.6	339.8	326.7	318.2	316.5
15°	335.9	331.7	315.4	304.4	302.0
17.5°	329.2	322.5	303.0	288.9	285.3
20°	321.4	312.2	289.2	271.9	266.6
22.5°	312.9	301.3	274.7	254.2	247.1
25°	304.1	289.2	259.1	235.8	228.0
27.5°	294.2	276.8	243.5	217.0	207.4
30°	283.6	263.7	226.9	197.9	188.3
32.5°	272.6	250.6	210.3	178.8	167.1
35°	261.6	236.5	192.9	159.3	147.3
37.5°	249.9	222.3	175.9	140.9	127.8
40°	237.9	207.8	158.6	121.8	109.0
42.5°	225.5	192.9	141.2	103.7	90.6
45°	213.1	178.1	125.0	86.4	72.9
47.5°	200.4	162.8	108.0	69.4	57.7
50°	187.3	148.0	91.7	54.2	42.8
52.5°	174.2	132.7	75.0	39.3	29.0
55°	160.7	117.9	59.8	26.2	17.0
57.5°	147.3	102.7	45.7	14.5	6.4
60°	133.5	88.1	32.2	5.0	4.2
62.5°	120.0	72.6	20.2	3.9	3.2
65°	105.8	58.4	9.9	2.8	2.1
67.5°	92.0	45.0	4.2	1.8	1.1
70°	77.5	32.6	2.8	1.1	0.7
72.5°	64.1	20.9	1.8	0.7	0.4
75°	51.0	11.0	0.7	0.4	0.4
77.5°	38.2	4.6	0.4	0.4	0.4
80°	26.2	2.1	0.4	0.4	0.0
82.5°	15.6	0.7	0.4	0.4	0.0
85°	6.0	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	14.29	15.67	14.65	15.99	16.30	0.00	0.53	0.00	0.85	1.16
	3H	15.84	17.07	16.22	17.40	17.76	0.00	0.30	0.00	0.63	0.99
	4H	16.36	17.51	16.76	17.86	18.24	0.00	0.15	0.00	0.50	0.89
	6H	16.70	17.75	17.11	18.12	18.51	0.00	0.00	0.00	0.36	0.76
	8H	16.78	17.78	17.21	18.17	18.57	0.00	0.00	0.00	0.29	0.69
	12H	16.80	17.75	17.23	18.13	18.56	0.00	0.00	0.00	0.20	0.63
4H	2H	14.09	15.24	14.49	15.59	15.97	0.01	1.16	0.41	1.51	1.89
	3H	15.71	16.64	16.12	17.04	17.44	0.00	0.90	0.38	1.30	1.70
	4H	16.23	17.06	16.66	17.48	17.92	0.00	0.72	0.32	1.14	1.58
	6H	16.60	17.32	17.06	17.77	18.23	0.00	0.54	0.29	0.99	1.46
	8H	16.70	17.37	17.17	17.82	18.29	0.00	0.45	0.24	0.89	1.36
	12H	16.74	17.33	17.22	17.81	18.29	0.00	0.33	0.22	0.81	1.28
8H	4H	16.10	16.77	16.57	17.22	17.69	0.91	1.58	1.38	2.03	2.50
	6H	16.46	17.00	16.96	17.50	17.98	0.83	1.38	1.33	1.88	2.36
	8H	16.55	17.04	17.07	17.56	18.05	0.78	1.27	1.30	1.79	2.28
	12H	16.59	17.03	17.11	17.52	18.09	0.74	1.18	1.26	1.67	2.24
12H	4H	16.06	16.65	16.54	17.13	17.61	0.99	1.58	1.48	2.07	2.54
	6H	16.39	16.89	16.91	17.40	17.89	0.90	1.39	1.42	1.90	2.40
	8H	16.51	16.94	17.02	17.44	18.01	0.87	1.30	1.38	1.80	2.37