

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: P1056427

Luminaire Tested: S125R3DR-S375D930-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056427  
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-S375D930-X4F0-XX-UDD-F-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

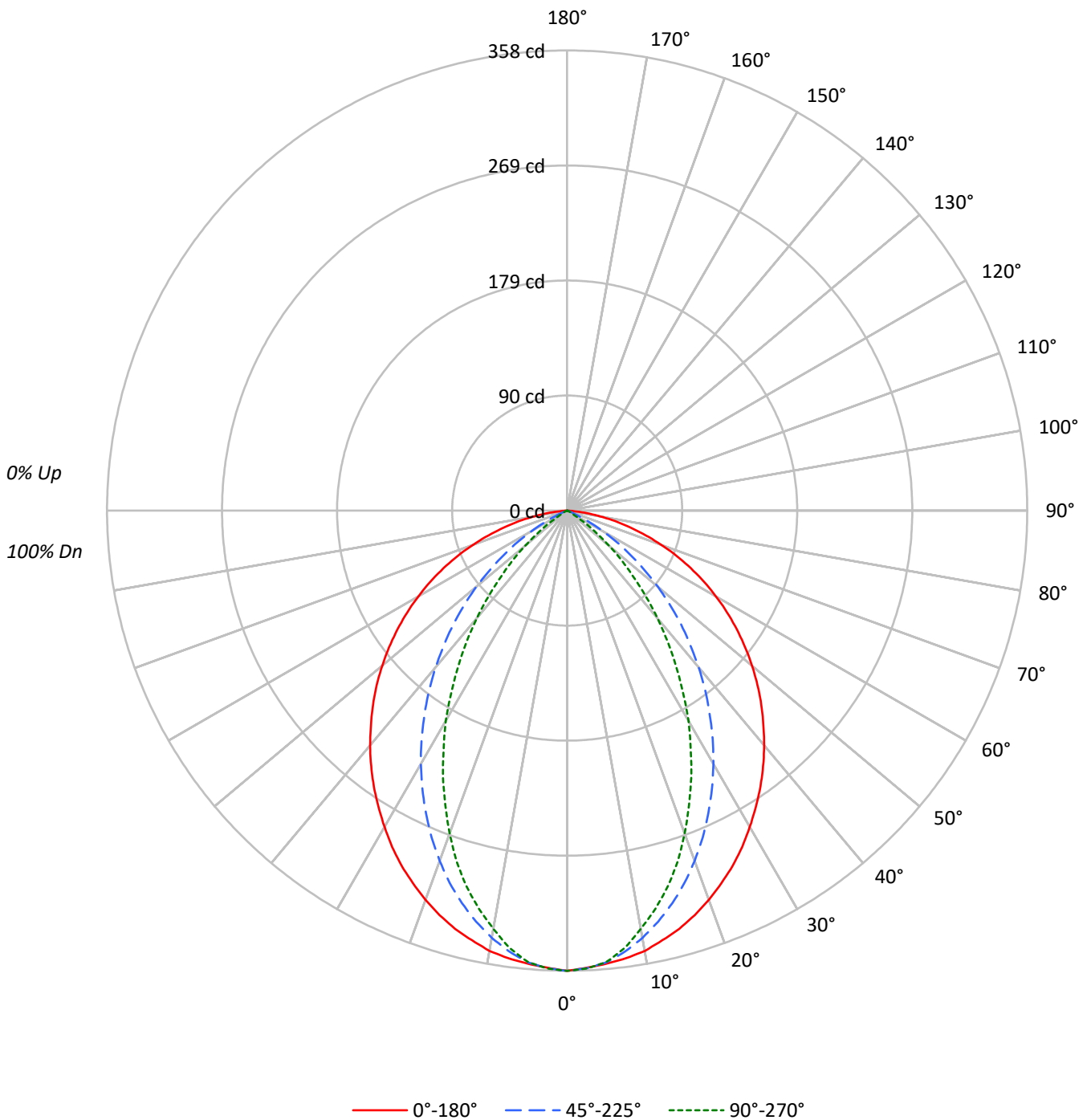
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 580.4 lumens  
Efficiency: N/A  
Efficacy: 46.1 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): 12.6  
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	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°	2532	2532	2532
5°	2511	2503	2501
10°	2497	2423	2372
15°	2465	2314	2215
20°	2424	2181	2010
25°	2377	2026	1782
30°	2320	1857	1541
35°	2263	1669	1274
40°	2201	1467	1009
45°	2135	1253	731
50°	2064	1011	472
55°	1986	740	210
60°	1892	457	61
65°	1775	166	35
70°	1606	58	14
75°	1396	19	11
80°	1071	16	0
85°	487	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2135 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	33.3	5.7
10°-20°	89.3	15.4
20°-30°	120.8	20.8
30°-40°	124.1	21.4
40°-50°	102.8	17.7
50°-60°	66.0	11.4
60°-70°	31.9	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°	243.4	41.9
0°-40°	367.5	63.3
0°-60°	536.3	92.4
0°-90°	580.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	580.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	358	358	358	358	358	
5°	354	357	353	351	352	34
15°	337	332	316	305	303	95
25°	305	290	260	236	228	140
35°	262	237	193	160	148	164
45°	214	178	125	87	73	165
55°	161	118	60	26	17	144
65°	106	59	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°	358.1	358.1	358.1	358.1	358.1
2.5°	355.9	358.8	356.3	355.9	356.6
5°	353.8	356.6	352.7	350.6	352.4
7.5°	351.3	352.7	346.0	342.4	343.2
10°	347.8	347.4	337.5	331.4	330.4
12.5°	342.4	340.7	327.5	319.0	317.3
15°	336.8	332.5	316.2	305.2	302.7
17.5°	330.0	323.3	303.8	289.6	286.0
20°	322.2	313.0	289.9	272.5	267.2
22.5°	313.7	302.0	275.4	254.8	247.7
25°	304.8	289.9	259.8	236.3	228.5
27.5°	294.9	277.5	244.1	217.5	208.0
30°	284.2	264.4	227.5	198.4	188.8
32.5°	273.2	251.2	210.8	179.2	167.5
35°	262.2	237.1	193.4	159.7	147.6
37.5°	250.5	222.9	176.4	141.2	128.1
40°	238.5	208.3	159.0	122.1	109.3
42.5°	226.0	193.4	141.6	104.0	90.8
45°	213.6	178.5	125.3	86.6	73.1
47.5°	200.9	163.2	108.2	69.6	57.8
50°	187.7	148.3	91.9	54.3	42.9
52.5°	174.6	133.1	75.2	39.4	29.1
55°	161.1	118.2	60.0	26.3	17.0
57.5°	147.6	102.9	45.8	14.5	6.4
60°	133.8	88.4	32.3	5.0	4.3
62.5°	120.3	72.7	20.2	3.9	3.2
65°	106.1	58.6	9.9	2.8	2.1
67.5°	92.3	45.1	4.3	1.8	1.1
70°	77.7	32.6	2.8	1.1	0.7
72.5°	64.2	20.9	1.8	0.7	0.4
75°	51.1	11.0	0.7	0.4	0.4
77.5°	38.3	4.6	0.4	0.4	0.4
80°	26.3	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	15.68	14.66	15.99	16.31	0.00	0.53	0.00	0.84	1.15
	3H	15.84	17.07	16.22	17.40	17.77	0.00	0.29	0.00	0.62	0.99
	4H	16.37	17.51	16.77	17.86	18.24	0.00	0.15	0.00	0.50	0.88
	6H	16.71	17.76	17.12	18.13	18.52	0.00	0.00	0.00	0.35	0.75
	8H	16.79	17.78	17.22	18.18	18.58	0.00	0.00	0.00	0.28	0.68
	12H	16.80	17.76	17.24	18.14	18.57	0.00	0.00	0.00	0.19	0.62
4H	2H	14.10	15.24	14.50	15.59	15.97	0.00	1.15	0.41	1.50	1.88
	3H	15.71	16.65	16.12	17.05	17.45	0.00	0.89	0.37	1.29	1.70
	4H	16.23	17.07	16.67	17.49	17.93	0.00	0.71	0.31	1.13	1.57
	6H	16.61	17.33	17.07	17.77	18.24	0.00	0.54	0.28	0.98	1.45
	8H	16.71	17.38	17.18	17.82	18.29	0.00	0.44	0.24	0.88	1.36
	12H	16.74	17.34	17.23	17.82	18.29	0.00	0.32	0.21	0.80	1.27
8H	4H	16.11	16.78	16.57	17.22	17.69	0.90	1.58	1.37	2.02	2.49
	6H	16.46	17.01	16.96	17.51	17.99	0.83	1.37	1.33	1.87	2.35
	8H	16.56	17.05	17.08	17.56	18.05	0.77	1.27	1.29	1.78	2.27
	12H	16.60	17.03	17.11	17.53	18.10	0.73	1.17	1.25	1.66	2.23
12H	4H	16.06	16.66	16.55	17.14	17.61	0.98	1.58	1.47	2.06	2.53
	6H	16.40	16.89	16.92	17.41	17.90	0.89	1.38	1.41	1.90	2.39
	8H	16.51	16.95	17.03	17.44	18.01	0.86	1.29	1.37	1.79	2.36