

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: P1056425

Luminaire Tested: S125R3DR-S375D927-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056425  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-S375D927-X4F0-XX-UDD-F-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

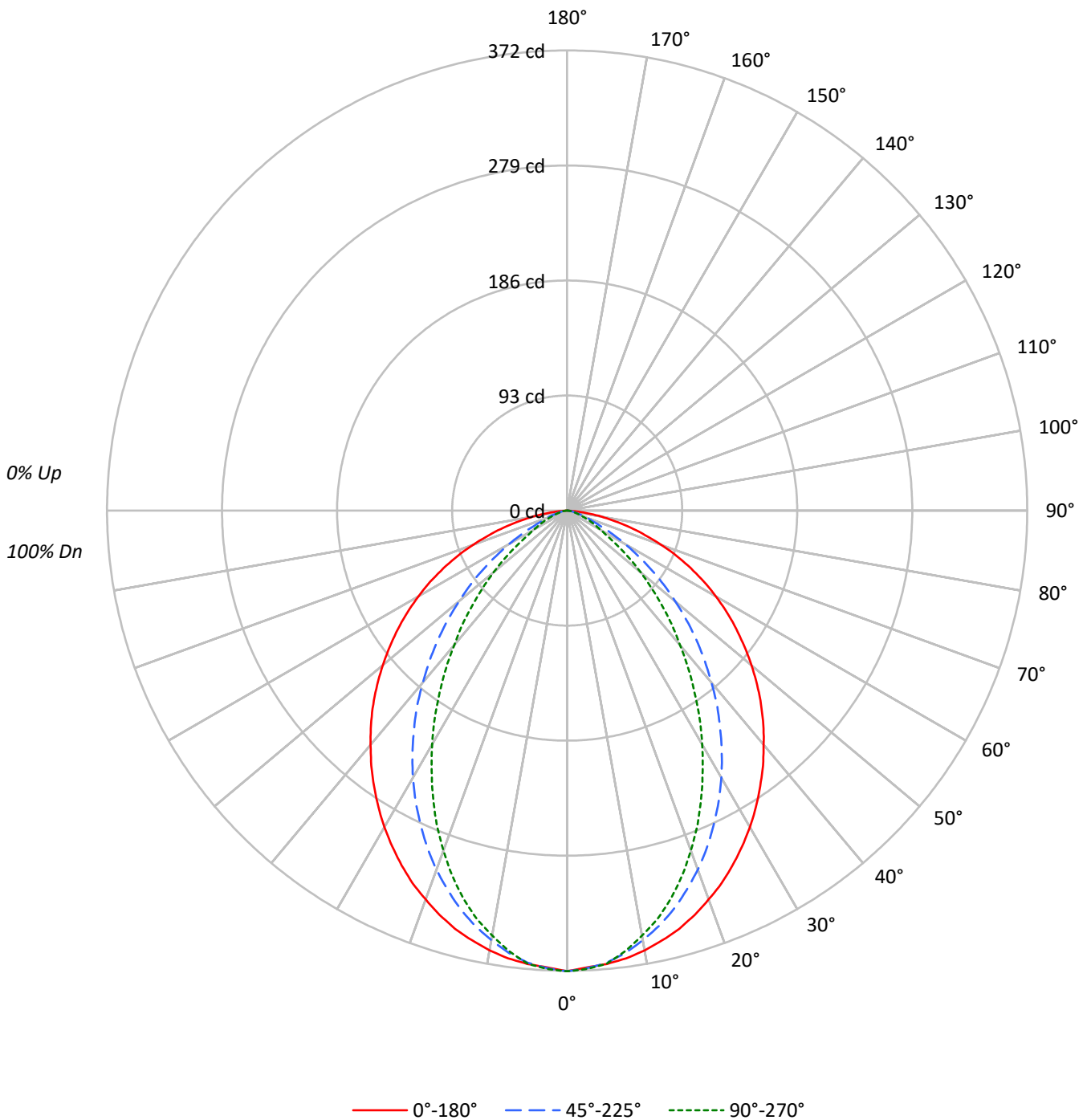
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 673.1 lumens  
Efficiency: N/A  
Efficacy: 53.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77				77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67				67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59				59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47				47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42				42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35				35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				32

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

	0°	45°	90°
0°	2633	2633	2633
5°	2611	2604	2609
10°	2591	2532	2505
15°	2562	2440	2375
20°	2516	2324	2200
25°	2469	2186	2001
30°	2412	2035	1782
35°	2348	1862	1550
40°	2281	1674	1311
45°	2216	1476	1086
50°	2139	1255	853
55°	2057	1021	620
60°	1965	761	444
65°	1845	502	346
70°	1668	349	242
75°	1450	227	188
80°	1136	167	155
85°	584	138	114

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2216 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.7	5.2
10°-20°	94.3	14.0
20°-30°	130.4	19.4
30°-40°	138.1	20.5
40°-50°	120.6	17.9
50°-60°	85.8	12.7
60°-70°	47.7	7.1
70°-80°	18.3	2.7
80°-90°	3.2	0.5
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°	259.4	38.5
0°-40°	397.5	59.1
0°-60°	603.9	89.7
0°-90°	673.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	673.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	372	372	372	372	372	
5°	368	371	367	366	368	35
15°	350	347	333	326	324	99
25°	316	306	280	263	256	146
35°	272	253	216	190	180	170
45°	222	195	148	118	109	171
55°	167	134	83	57	50	149
65°	110	72	30	22	21	109
75°	53	21	8	7	7	56
85°	7	2	2	1	1	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	372.4	372.4	372.4	372.4	372.4
2.5°	369.6	373.4	370.3	370.7	371.0
5°	367.9	370.7	366.9	365.8	367.6
7.5°	365.1	367.2	360.7	358.3	359.3
10°	361.0	361.7	352.7	349.3	348.9
12.5°	355.8	354.8	343.8	338.3	337.9
15°	350.0	346.9	333.4	326.2	324.5
17.5°	342.7	337.9	321.4	312.0	309.3
20°	334.5	327.9	308.9	296.9	292.4
22.5°	326.2	317.2	295.2	280.0	275.2
25°	316.5	305.8	280.3	263.1	256.5
27.5°	306.2	293.4	265.2	245.2	237.2
30°	295.5	280.7	249.3	226.9	218.3
32.5°	284.1	267.2	232.7	208.3	199.3
35°	272.1	253.4	215.8	189.6	179.6
37.5°	260.0	239.3	199.3	171.4	161.0
40°	247.2	224.8	181.4	152.7	142.1
42.5°	234.8	210.0	164.5	135.2	125.5
45°	221.7	195.2	147.6	117.9	108.6
47.5°	208.3	179.6	130.7	101.7	92.4
50°	194.5	164.5	114.1	85.9	77.6
52.5°	180.7	149.3	98.6	70.7	63.4
55°	166.9	133.8	82.8	57.2	50.3
57.5°	153.1	118.6	67.9	44.8	38.6
60°	139.0	103.1	53.8	33.1	31.4
62.5°	124.8	87.9	41.7	27.2	25.9
65°	110.3	72.4	30.0	22.1	20.7
67.5°	95.9	58.3	21.7	16.9	15.9
70°	80.7	44.5	16.9	12.8	11.7
72.5°	66.2	32.1	12.1	9.3	9.0
75°	53.1	20.7	8.3	6.9	6.9
77.5°	40.0	12.4	5.9	5.2	5.2
80°	27.9	7.2	4.1	3.8	3.8
82.5°	16.9	3.8	2.8	2.4	2.4
85°	7.2	2.1	1.7	1.4	1.4
87.5°	1.4	0.7	0.7	0.7	0.7
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	14.52	15.97	14.89	16.28	16.60	7.16	8.60	7.52	8.92	9.23
	3H	16.08	17.37	16.46	17.70	18.06	7.72	9.01	8.10	9.34	9.70
	4H	16.61	17.81	17.01	18.16	18.54	7.85	9.05	8.25	9.40	9.78
	6H	16.94	18.05	17.36	18.42	18.81	7.92	9.02	8.33	9.39	9.78
	8H	17.03	18.08	17.45	18.47	18.87	7.92	8.97	8.35	9.36	9.76
	12H	17.05	18.05	17.48	18.44	18.87	7.91	8.92	8.34	9.30	9.73
4H	2H	14.42	15.62	14.82	15.97	16.35	7.72	8.93	8.13	9.28	9.66
	3H	16.09	17.08	16.50	17.48	17.88	8.40	9.39	8.81	9.79	10.19
	4H	16.64	17.52	17.07	17.94	18.38	8.56	9.44	8.99	9.86	10.30
	6H	17.03	17.79	17.49	18.24	18.70	8.67	9.43	9.13	9.88	10.34
	8H	17.13	17.85	17.60	18.29	18.76	8.68	9.39	9.15	9.84	10.31
	12H	17.18	17.81	17.67	18.30	18.77	8.68	9.32	9.17	9.80	10.27
8H	4H	16.54	17.25	17.01	17.70	18.17	8.83	9.54	9.29	9.99	10.46
	6H	16.93	17.51	17.43	18.01	18.48	8.96	9.55	9.46	10.04	10.52
	8H	17.03	17.56	17.55	18.07	18.56	8.99	9.51	9.51	10.03	10.52
	12H	17.10	17.56	17.61	18.05	18.62	9.01	9.48	9.52	9.97	10.54
12H	4H	16.50	17.14	16.99	17.62	18.09	8.84	9.48	9.33	9.96	10.43
	6H	16.87	17.40	17.39	17.91	18.40	8.97	9.50	9.49	10.01	10.50
	8H	17.00	17.47	17.51	17.96	18.53	9.03	9.50	9.54	9.99	10.56