

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: P1056572

Luminaire Tested: S125R3DR-H375D950-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056572  
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-H375D950-X4F0-XX-UDD-F-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

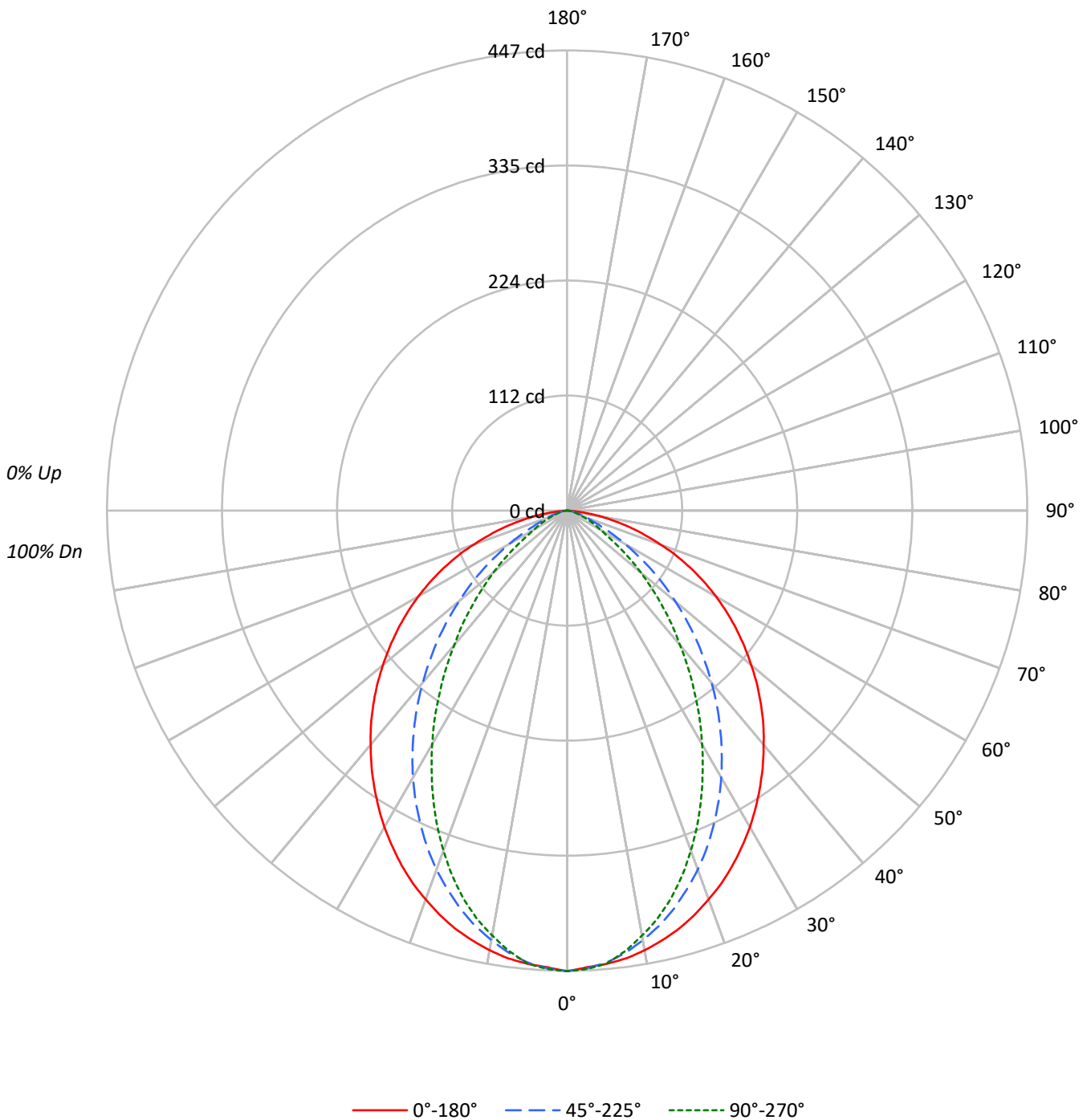
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 808.6 lumens  
Efficiency: N/A  
Efficacy: 69.1 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): 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	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

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

	0°	45°	90°
0°	3163	3163	3163
5°	3137	3127	3134
10°	3113	3041	3009
15°	3077	2931	2853
20°	3023	2792	2643
25°	2966	2627	2404
30°	2898	2445	2140
35°	2820	2238	1862
40°	2741	2011	1575
45°	2662	1773	1305
50°	2569	1508	1025
55°	2471	1225	746
60°	2360	913	533
65°	2218	602	417
70°	2003	420	291
75°	1743	270	227
80°	1368	204	187
85°	706	170	138

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2662 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.7	5.2
10°-20°	113.3	14.0
20°-30°	156.6	19.4
30°-40°	166.0	20.5
40°-50°	144.9	17.9
50°-60°	103.0	12.7
60°-70°	57.3	7.1
70°-80°	22.0	2.7
80°-90°	3.8	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°	311.6	38.5
0°-40°	477.6	59.1
0°-60°	725.4	89.7
0°-90°	808.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	808.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	447	447	447	447	447	
5°	442	445	441	440	442	42
15°	420	417	400	392	390	118
25°	380	367	337	316	308	175
35°	327	304	259	228	216	204
45°	266	234	177	142	130	205
55°	200	161	99	69	60	179
65°	133	87	36	26	25	131
75°	64	25	10	8	8	68
85°	9	2	2	2	2	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	447.4	447.4	447.4	447.4	447.4
2.5°	444.0	448.6	444.9	445.3	445.7
5°	442.0	445.3	440.7	439.5	441.6
7.5°	438.7	441.1	433.3	430.4	431.6
10°	433.7	434.5	423.7	419.6	419.2
12.5°	427.5	426.2	413.0	406.3	405.9
15°	420.4	416.7	400.5	391.9	389.8
17.5°	411.7	405.9	386.1	374.9	371.6
20°	401.8	393.9	371.1	356.6	351.3
22.5°	391.9	381.1	354.6	336.3	330.5
25°	380.3	367.4	336.8	316.0	308.2
27.5°	367.8	352.5	318.5	294.5	285.0
30°	355.0	337.2	299.5	272.6	262.2
32.5°	341.3	321.0	279.6	250.2	239.4
35°	326.8	304.5	259.3	227.8	215.8
37.5°	312.3	287.5	239.4	205.9	193.4
40°	297.0	270.1	217.9	183.5	170.7
42.5°	282.1	252.3	197.6	162.4	150.8
45°	266.3	234.4	177.3	141.7	130.5
47.5°	250.2	215.8	157.0	122.2	111.0
50°	233.6	197.6	137.1	103.1	93.2
52.5°	217.1	179.4	118.5	84.9	76.2
55°	200.5	160.7	99.4	68.8	60.5
57.5°	183.9	142.5	81.6	53.8	46.4
60°	166.9	123.9	64.6	39.8	37.7
62.5°	149.9	105.6	50.1	32.7	31.1
65°	132.6	87.0	36.0	26.5	24.9
67.5°	115.2	70.0	26.1	20.3	19.1
70°	96.9	53.4	20.3	15.3	14.1
72.5°	79.5	38.5	14.5	11.2	10.8
75°	63.8	24.9	9.9	8.3	8.3
77.5°	48.0	14.9	7.0	6.2	6.2
80°	33.6	8.7	5.0	4.6	4.6
82.5°	20.3	4.6	3.3	2.9	2.9
85°	8.7	2.5	2.1	1.7	1.7
87.5°	1.7	0.8	0.8	0.8	0.8
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	15.16	16.61	15.53	16.92	17.24	7.79	9.24	8.16	9.55	9.87
	3H	16.72	18.01	17.10	18.34	18.70	8.36	9.65	8.74	9.98	10.34
	4H	17.24	18.44	17.64	18.79	19.17	8.49	9.69	8.89	10.04	10.42
	6H	17.58	18.69	17.99	19.05	19.45	8.55	9.66	8.96	10.03	10.42
	8H	17.66	18.71	18.09	19.10	19.51	8.56	9.61	8.98	10.00	10.40
	12H	17.69	18.69	18.12	19.07	19.50	8.55	9.55	8.98	9.94	10.36
4H	2H	15.06	16.26	15.46	16.61	16.99	8.36	9.56	8.76	9.91	10.29
	3H	16.72	17.71	17.14	18.11	18.52	9.03	10.02	9.45	10.42	10.82
	4H	17.27	18.16	17.71	18.57	19.02	9.19	10.08	9.63	10.49	10.93
	6H	17.67	18.43	18.13	18.88	19.34	9.30	10.07	9.76	10.51	10.98
	8H	17.77	18.48	18.24	18.93	19.40	9.32	10.03	9.78	10.48	10.94
	12H	17.82	18.45	18.30	18.93	19.41	9.32	9.95	9.80	10.43	10.91
8H	4H	17.18	17.89	17.64	18.34	18.81	9.46	10.17	9.93	10.62	11.09
	6H	17.56	18.15	18.06	18.64	19.12	9.60	10.18	10.10	10.68	11.15
	8H	17.67	18.20	18.19	18.71	19.20	9.62	10.15	10.14	10.66	11.15
	12H	17.74	18.20	18.25	18.69	19.26	9.65	10.11	10.16	10.61	11.17
12H	4H	17.14	17.77	17.63	18.25	18.73	9.48	10.11	9.96	10.59	11.06
	6H	17.51	18.04	18.03	18.55	19.04	9.61	10.13	10.13	10.65	11.14
	8H	17.64	18.10	18.15	18.60	19.16	9.67	10.13	10.18	10.62	11.19