

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: P1056464

Luminaire Tested: S125R3DR-S610D950-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056464  
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-S610D950-X4F0-XX-UDD-F-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

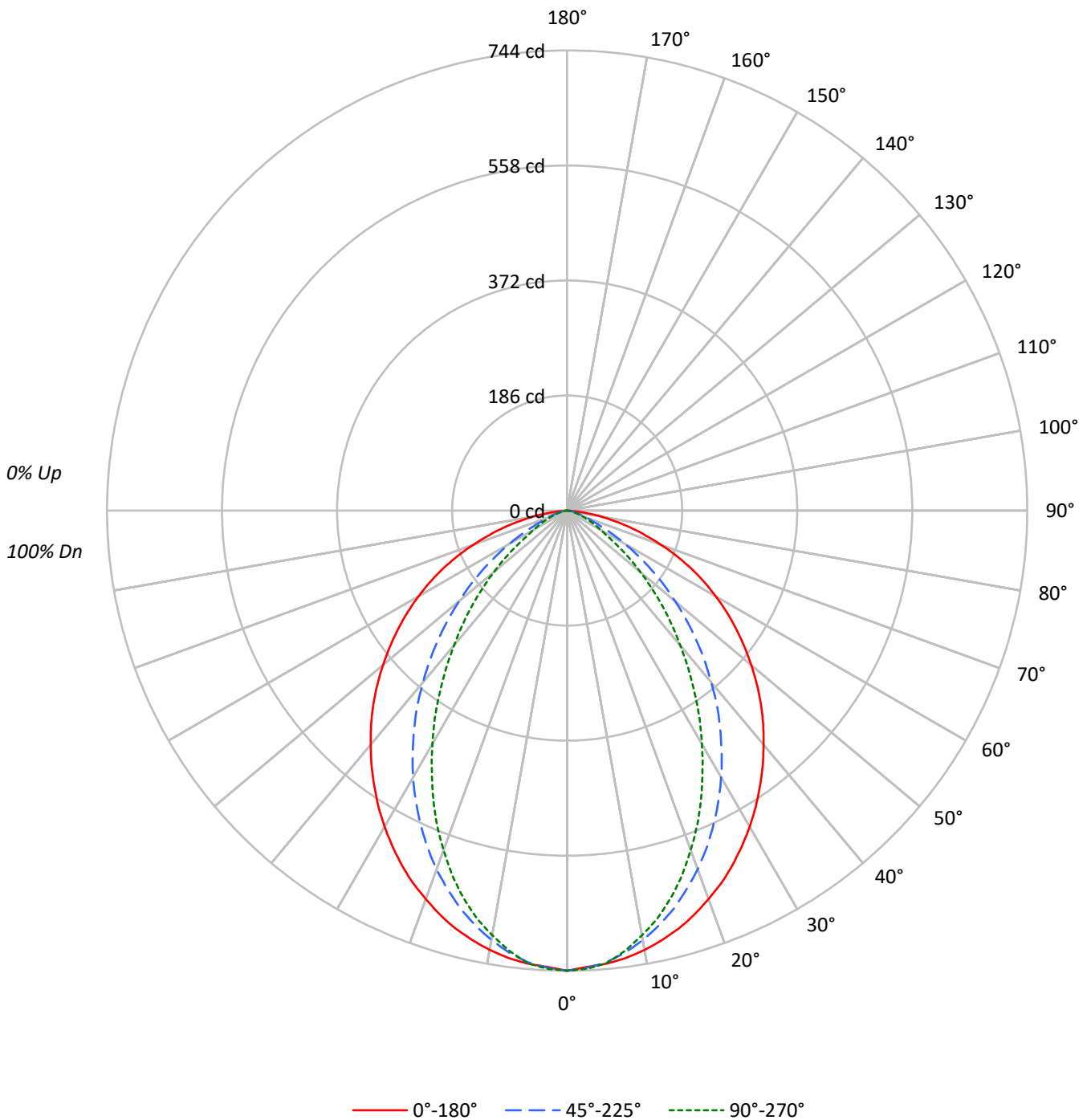
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1344.8 lumens  
Efficiency: N/A  
Efficacy: 70.4 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): 19.1  
Input Voltage (V): 120  
Input Current (Ain): 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°	5260	5260	5260
5°	5217	5202	5212
10°	5178	5059	5005
15°	5118	4876	4745
20°	5028	4644	4395
25°	4933	4369	3998
30°	4819	4066	3560
35°	4691	3722	3097
40°	4559	3344	2619
45°	4429	2948	2169
50°	4274	2508	1705
55°	4109	2037	1240
60°	3925	1520	886
65°	3688	1002	691
70°	3332	699	484
75°	2898	451	377
80°	2272	338	309
85°	1176	276	227

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4429 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.3	5.2
10°-20°	188.4	14.0
20°-30°	260.5	19.4
30°-40°	276.0	20.5
40°-50°	240.9	17.9
50°-60°	171.3	12.7
60°-70°	95.3	7.1
70°-80°	36.6	2.7
80°-90°	6.4	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°	518.2	38.5
0°-40°	794.3	59.1
0°-60°	1206.5	89.7
0°-90°	1344.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1344.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	735	741	733	731	734	70
15°	699	693	666	652	648	197
25°	632	611	560	526	513	291
35°	544	506	431	379	359	340
45°	443	390	295	236	217	341
55°	333	267	165	114	101	298
65°	220	145	60	44	41	218
75°	106	41	16	14	14	112
85°	14	4	3	3	3	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	744.0	744.0	744.0	744.0	744.0
2.5°	738.5	746.1	739.9	740.6	741.3
5°	735.1	740.6	733.0	730.9	734.4
7.5°	729.6	733.7	720.6	715.8	717.9
10°	721.3	722.7	704.8	697.9	697.2
12.5°	711.0	708.9	686.9	675.8	675.1
15°	699.3	693.1	666.2	651.7	648.3
17.5°	684.8	675.1	642.1	623.5	618.0
20°	668.3	655.2	617.3	593.2	584.2
22.5°	651.7	633.8	589.7	559.4	549.8
25°	632.4	611.1	560.1	525.6	512.6
27.5°	611.8	586.3	529.8	489.8	474.0
30°	590.4	560.8	498.1	453.3	436.1
32.5°	567.7	533.9	465.0	416.1	398.2
35°	543.6	506.4	431.3	378.9	358.9
37.5°	519.4	478.1	398.2	342.4	321.7
40°	494.0	449.2	362.4	305.2	283.8
42.5°	469.2	419.6	328.6	270.1	250.8
45°	443.0	389.9	294.9	235.6	217.0
47.5°	416.1	358.9	261.1	203.2	184.6
50°	388.6	328.6	228.0	171.5	155.0
52.5°	361.0	298.3	197.0	141.2	126.8
55°	333.4	267.3	165.3	114.4	100.6
57.5°	305.9	237.0	135.7	89.6	77.2
60°	277.6	206.0	107.5	66.1	62.7
62.5°	249.4	175.7	83.4	54.4	51.7
65°	220.5	144.7	59.9	44.1	41.3
67.5°	191.5	116.4	43.4	33.8	31.7
70°	161.2	88.9	33.8	25.5	23.4
72.5°	132.3	64.1	24.1	18.6	17.9
75°	106.1	41.3	16.5	13.8	13.8
77.5°	79.9	24.8	11.7	10.3	10.3
80°	55.8	14.5	8.3	7.6	7.6
82.5°	33.8	7.6	5.5	4.8	4.8
85°	14.5	4.1	3.4	2.8	2.8
87.5°	2.8	1.4	1.4	1.4	1.4
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	16.93	18.37	17.29	18.69	19.00	9.57	11.01	9.93	11.33	11.64
	3H	18.49	19.78	18.87	20.10	20.47	10.13	11.42	10.51	11.75	12.11
	4H	19.01	20.21	19.41	20.56	20.94	10.26	11.46	10.66	11.81	12.19
	6H	19.35	20.45	19.76	20.82	21.21	10.32	11.43	10.74	11.80	12.19
	8H	19.43	20.48	19.86	20.87	21.27	10.33	11.38	10.76	11.77	12.17
	12H	19.45	20.46	19.89	20.84	21.27	10.32	11.32	10.75	11.71	12.14
4H	2H	16.83	18.03	17.23	18.38	18.76	10.13	11.34	10.53	11.69	12.07
	3H	18.49	19.48	18.90	19.88	20.28	10.81	11.79	11.22	12.20	12.60
	4H	19.04	19.92	19.47	20.34	20.78	10.96	11.85	11.40	12.26	12.71
	6H	19.43	20.20	19.89	20.64	21.11	11.08	11.84	11.54	12.28	12.75
	8H	19.54	20.25	20.01	20.70	21.17	11.09	11.80	11.55	12.25	12.71
	12H	19.59	20.22	20.07	20.70	21.17	11.09	11.72	11.57	12.20	12.68
8H	4H	18.94	19.66	19.41	20.10	20.57	11.23	11.95	11.70	12.39	12.86
	6H	19.33	19.92	19.83	20.41	20.89	11.37	11.95	11.87	12.45	12.92
	8H	19.44	19.96	19.96	20.48	20.97	11.39	11.92	11.91	12.43	12.92
	12H	19.50	19.97	20.02	20.46	21.03	11.42	11.88	11.93	12.37	12.94
12H	4H	18.91	19.54	19.39	20.02	20.49	11.25	11.88	11.73	12.36	12.83
	6H	19.28	19.80	19.80	20.32	20.81	11.38	11.90	11.90	12.42	12.91
	8H	19.41	19.87	19.92	20.36	20.93	11.44	11.90	11.95	12.39	12.96