

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: P1056457

Luminaire Tested: S125R3DR-S610D935-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056457  
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-S610D935-X4F0-XX-UDD-F-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

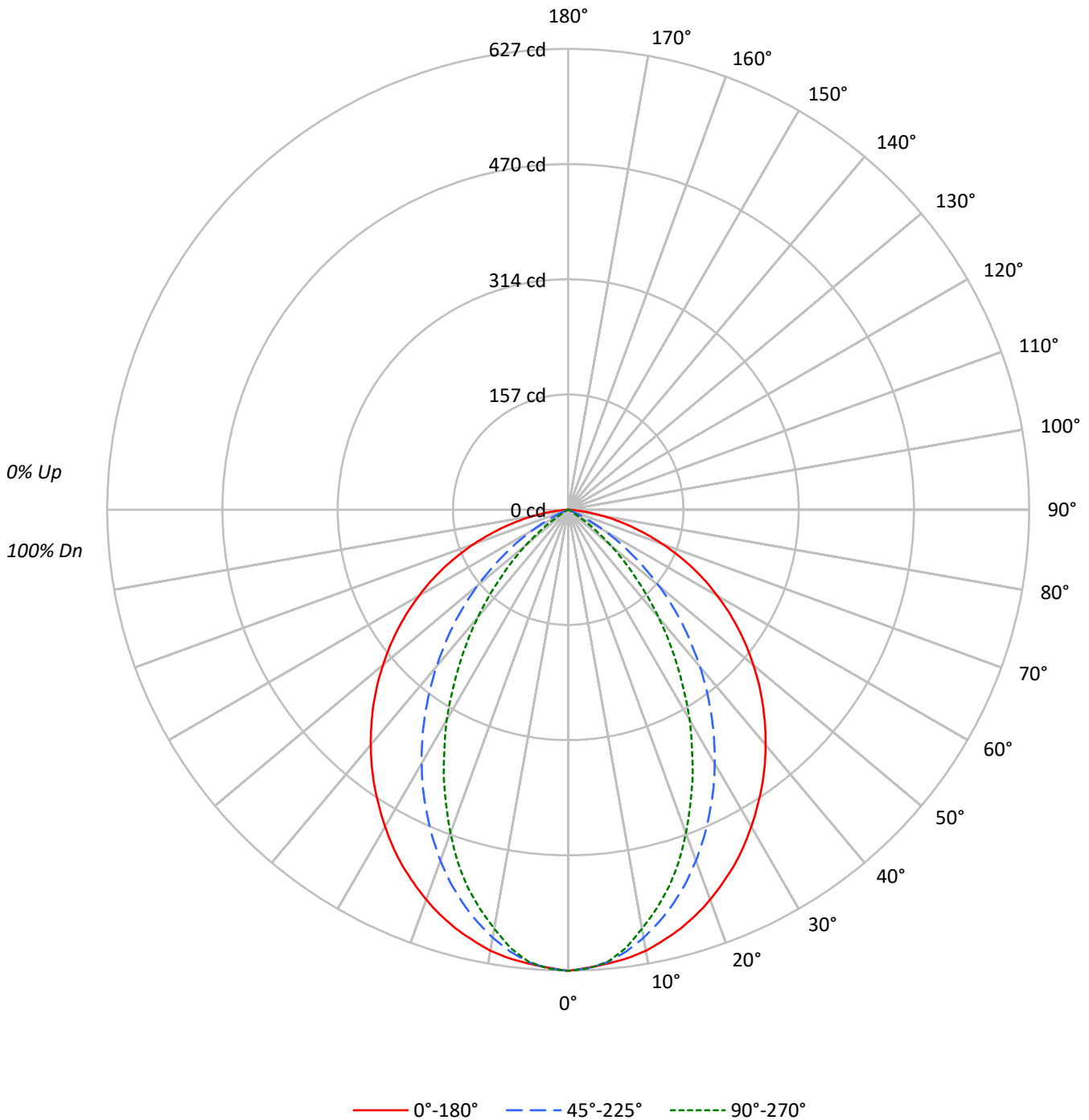
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1016.9 lumens  
Efficiency: N/A  
Efficacy: 53.2 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): 19.1  
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	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	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78					78			
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69					69			
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61					61			
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55					55			
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49					49			
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45					45			
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

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

	0°	45°	90°
0°	4435	4435	4435
5°	4399	4386	4381
10°	4374	4245	4156
15°	4319	4055	3882
20°	4248	3822	3522
25°	4166	3550	3123
30°	4065	3254	2700
35°	3966	2925	2233
40°	3856	2571	1767
45°	3742	2194	1281
50°	3617	1771	827
55°	3479	1295	367
60°	3314	800	106
65°	3110	291	62
70°	2815	103	25
75°	2445	33	16
80°	1873	24	0
85°	860	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3742 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.3	5.7
10°-20°	156.5	15.4
20°-30°	211.7	20.8
30°-40°	217.5	21.4
40°-50°	180.1	17.7
50°-60°	115.7	11.4
60°-70°	55.9	5.5
70°-80°	18.9	1.9
80°-90°	2.4	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°	426.4	41.9
0°-40°	643.9	63.3
0°-60°	939.7	92.4
0°-90°	1016.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1016.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	620	625	618	614	617	59
15°	590	583	554	535	530	166
25°	534	508	455	414	400	246
35°	460	415	339	280	259	287
45°	374	313	220	152	128	289
55°	282	207	105	46	30	252
65°	186	103	17	5	4	184
75°	90	19	1	1	1	95
85°	11	0	0	0	0	17
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	627.4	627.4	627.4	627.4	627.4
2.5°	623.6	628.6	624.3	623.6	624.9
5°	619.9	624.9	618.0	614.3	617.4
7.5°	615.5	618.0	606.2	600.0	601.2
10°	609.3	608.7	591.3	580.7	578.9
12.5°	600.0	596.9	573.9	559.0	555.9
15°	590.1	582.6	554.0	534.7	530.4
17.5°	578.2	566.4	532.2	507.4	501.1
20°	564.6	548.4	508.0	477.5	468.2
22.5°	549.6	529.1	482.5	446.4	434.0
25°	534.1	508.0	455.1	414.1	400.4
27.5°	516.7	486.2	427.8	381.1	364.4
30°	498.0	463.2	398.6	347.6	330.8
32.5°	478.8	440.2	369.3	314.0	293.5
35°	459.5	415.3	338.9	279.8	258.7
37.5°	439.0	390.5	309.0	247.5	224.5
40°	417.8	365.0	278.6	213.9	191.5
42.5°	396.1	338.9	248.1	182.2	159.2
45°	374.3	312.7	219.5	151.7	128.1
47.5°	351.9	286.0	189.6	121.9	101.3
50°	328.9	259.9	161.0	95.1	75.2
52.5°	305.9	233.2	131.8	69.0	51.0
55°	282.3	207.0	105.1	46.0	29.8
57.5°	258.7	180.3	80.2	25.5	11.2
60°	234.4	154.8	56.6	8.7	7.5
62.5°	210.8	127.5	35.4	6.8	5.6
65°	185.9	102.6	17.4	5.0	3.7
67.5°	161.7	79.0	7.5	3.1	1.9
70°	136.2	57.2	5.0	1.9	1.2
72.5°	112.5	36.7	3.1	1.2	0.6
75°	89.5	19.3	1.2	0.6	0.6
77.5°	67.2	8.1	0.6	0.6	0.6
80°	46.0	3.7	0.6	0.6	0.0
82.5°	27.4	1.2	0.6	0.6	0.0
85°	10.6	0.0	0.0	0.0	0.0
87.5°	0.6	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	16.24	17.63	16.61	17.94	18.26	1.11	2.50	1.48	2.81	3.12
	3H	17.79	19.02	18.17	19.35	19.72	1.03	2.26	1.41	2.59	2.95
	4H	18.32	19.46	18.72	19.81	20.19	0.97	2.11	1.37	2.46	2.84
	6H	18.66	19.71	19.07	20.08	20.47	0.90	1.95	1.31	2.32	2.71
	8H	18.74	19.73	19.17	20.13	20.53	0.85	1.85	1.28	2.24	2.65
	12H	18.75	19.71	19.19	20.09	20.52	0.82	1.77	1.25	2.15	2.58
4H	2H	16.05	17.19	16.45	17.54	17.92	1.97	3.12	2.37	3.47	3.85
	3H	17.66	18.60	18.07	19.00	19.40	1.92	2.86	2.33	3.26	3.66
	4H	18.18	19.02	18.62	19.44	19.88	1.84	2.68	2.28	3.10	3.54
	6H	18.56	19.28	19.02	19.72	20.19	1.78	2.50	2.24	2.94	3.41
	8H	18.66	19.33	19.13	19.77	20.24	1.73	2.40	2.20	2.84	3.31
	12H	18.69	19.29	19.18	19.77	20.24	1.68	2.28	2.17	2.76	3.23
8H	4H	18.06	18.73	18.52	19.17	19.64	2.87	3.54	3.33	3.98	4.45
	6H	18.41	18.96	18.91	19.46	19.94	2.78	3.33	3.28	3.83	4.31
	8H	18.51	19.00	19.03	19.51	20.00	2.73	3.22	3.25	3.74	4.23
	12H	18.55	18.98	19.06	19.48	20.05	2.69	3.12	3.20	3.62	4.19
12H	4H	18.01	18.61	18.50	19.09	19.56	2.94	3.54	3.43	4.02	4.49
	6H	18.35	18.84	18.87	19.36	19.85	2.85	3.34	3.37	3.85	4.34
	8H	18.46	18.90	18.98	19.39	19.96	2.81	3.25	3.33	3.74	4.31