

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: P1056459

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

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056459  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)  
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-W  
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

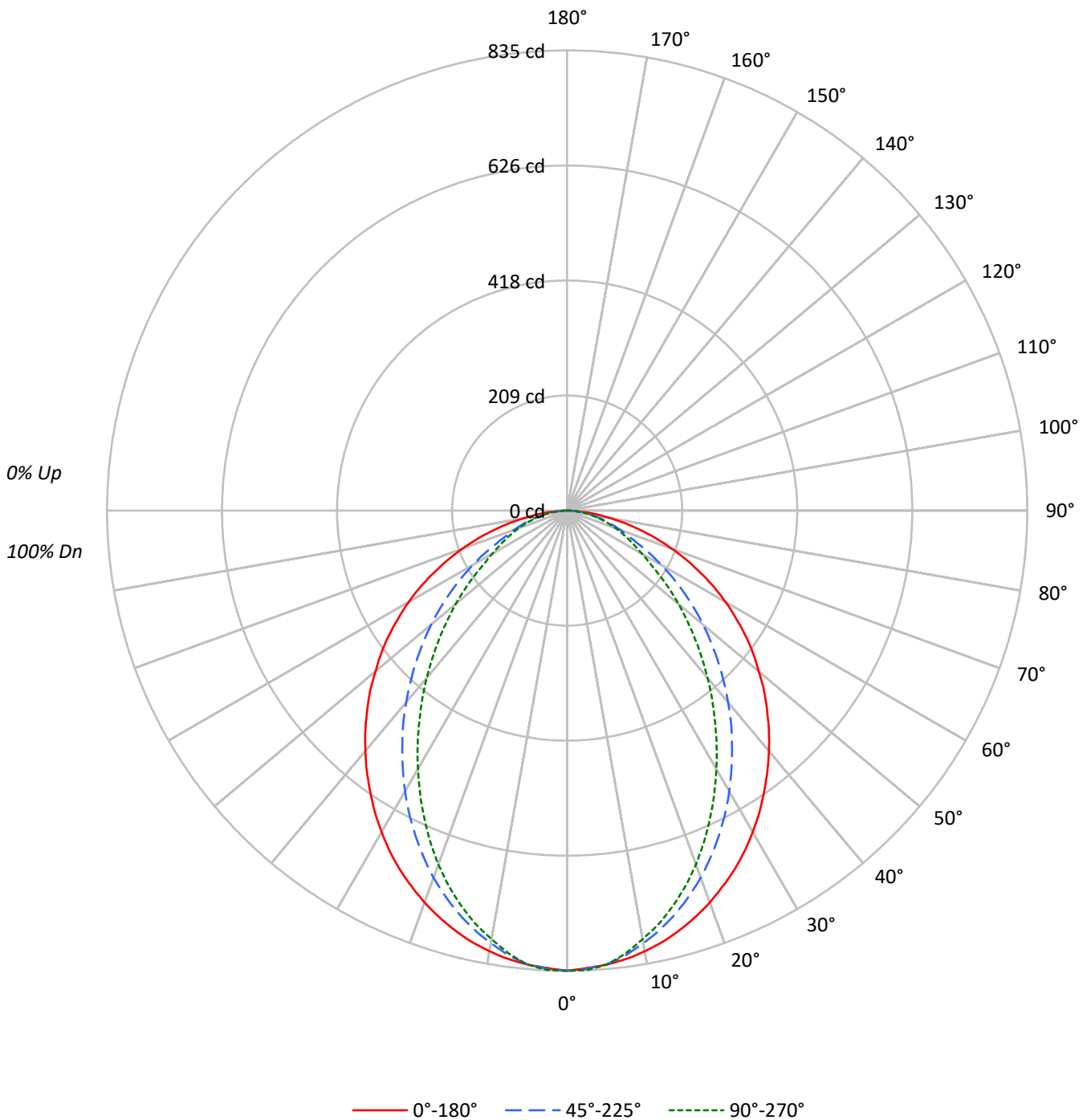
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1769.8 lumens  
Efficiency: N/A  
Efficacy: 92.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28

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

	0°	45°	90°
0°	5903	5903	5903
5°	5868	5864	5868
10°	5829	5722	5668
15°	5770	5547	5433
20°	5693	5332	5140
25°	5607	5078	4792
30°	5497	4801	4421
35°	5377	4502	4035
40°	5256	4194	3655
45°	5129	3873	3276
50°	4992	3542	2899
55°	4866	3180	2522
60°	4694	2795	2216
65°	4461	2372	2059
70°	4190	2121	1928
75°	3788	1953	1816
80°	3289	1771	1698
85°	2571	1565	1565

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5129 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.1	4.4
10°-20°	214.5	12.1
20°-30°	303.0	17.1
30°-40°	333.6	18.8
40°-50°	311.2	17.6
50°-60°	248.4	14.0
60°-70°	167.2	9.4
70°-80°	89.0	5.0
80°-90°	24.7	1.4
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°	595.7	33.7
0°-40°	929.3	52.5
0°-60°	1488.9	84.1
0°-90°	1769.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1769.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	835	835	835	835	835	
5°	827	834	826	824	827	78
15°	788	784	758	745	742	222
25°	719	697	651	622	614	331
35°	623	586	522	481	468	390
45°	513	464	387	340	328	396
55°	395	335	258	217	205	352
65°	267	208	142	126	123	265
75°	139	92	72	67	66	148
85°	32	22	19	20	19	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	835.0	835.0	835.0	835.0	835.0
2.5°	830.7	837.5	831.9	833.2	834.4
5°	826.9	833.8	826.3	823.8	826.9
7.5°	820.7	826.3	813.9	808.3	810.8
10°	812.0	815.8	797.1	789.6	789.6
12.5°	801.5	801.5	779.1	768.5	768.5
15°	788.4	784.0	757.9	744.9	742.4
17.5°	773.5	765.4	734.3	717.5	714.4
20°	756.7	743.6	708.8	687.0	683.3
22.5°	738.0	721.2	680.8	654.1	649.7
25°	718.8	697.0	651.0	622.4	614.3
27.5°	697.0	670.9	620.5	588.2	578.2
30°	673.4	643.5	588.2	552.1	541.6
32.5°	649.1	615.5	555.2	516.7	504.9
35°	623.0	586.3	521.7	480.6	467.6
37.5°	596.9	557.1	488.7	445.8	432.1
40°	569.5	526.0	454.5	410.4	396.1
42.5°	542.2	495.5	420.9	376.2	361.2
45°	513.0	464.5	387.4	340.1	327.7
47.5°	485.0	432.7	354.4	308.4	294.7
50°	453.9	399.8	322.1	276.1	263.6
52.5°	425.3	367.5	289.7	246.8	233.8
55°	394.8	335.1	258.0	217.0	204.6
57.5°	363.1	302.8	227.6	189.0	177.2
60°	332.0	270.5	197.7	162.3	156.7
62.5°	300.3	240.0	169.7	142.4	138.7
65°	266.7	208.3	141.8	125.6	123.1
67.5°	235.0	177.8	119.4	110.1	107.6
70°	202.7	147.4	102.6	94.5	93.3
72.5°	171.0	118.1	86.4	80.8	79.6
75°	138.7	92.0	71.5	67.2	66.5
77.5°	108.8	69.0	56.6	54.7	53.5
80°	80.8	51.6	43.5	42.3	41.7
82.5°	55.3	35.4	31.1	31.1	29.8
85°	31.7	21.8	19.3	19.9	19.3
87.5°	11.8	9.3	8.7	9.3	9.3
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	17.46	19.00	17.82	19.31	19.62	13.84	15.38	14.20	15.69	16.01
	3H	19.24	20.63	19.62	20.95	21.31	15.32	16.70	15.69	17.03	17.39
	4H	19.90	21.19	20.30	21.54	21.92	15.91	17.20	16.31	17.55	17.93
	6H	20.37	21.57	20.78	21.94	22.33	16.37	17.57	16.78	17.94	18.33
	8H	20.53	21.67	20.95	22.06	22.46	16.53	17.67	16.96	18.06	18.46
	12H	20.62	21.72	21.05	22.10	22.53	16.64	17.74	17.07	18.12	18.55
4H	2H	17.59	18.89	17.99	19.24	19.62	14.52	15.81	14.92	16.16	16.54
	3H	19.56	20.64	19.97	21.04	21.44	16.19	17.27	16.60	17.67	18.07
	4H	20.31	21.28	20.74	21.70	22.13	16.90	17.87	17.33	18.29	18.72
	6H	20.90	21.75	21.36	22.19	22.65	17.48	18.33	17.94	18.77	19.23
	8H	21.11	21.90	21.57	22.34	22.81	17.69	18.48	18.15	18.93	19.39
	12H	21.25	21.96	21.74	22.44	22.91	17.85	18.56	18.33	19.04	19.51
8H	4H	20.37	21.16	20.83	21.61	22.07	17.26	18.05	17.72	18.50	18.96
	6H	21.03	21.69	21.53	22.18	22.65	17.96	18.62	18.46	19.11	19.59
	8H	21.28	21.87	21.80	22.38	22.87	18.25	18.84	18.76	19.35	19.83
	12H	21.49	22.01	22.00	22.50	23.07	18.49	19.01	19.00	19.50	20.07
12H	4H	20.36	21.07	20.85	21.55	22.02	17.31	18.02	17.79	18.50	18.97
	6H	21.02	21.61	21.54	22.12	22.61	18.03	18.62	18.55	19.13	19.62
	8H	21.32	21.84	21.83	22.33	22.89	18.38	18.90	18.89	19.39	19.95