

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: P1056448

Luminaire Tested: S125R3DRP-S610D850-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056448  
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: S125R3DRP-S610D850-X4F0-XX-UDD-F-B  
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

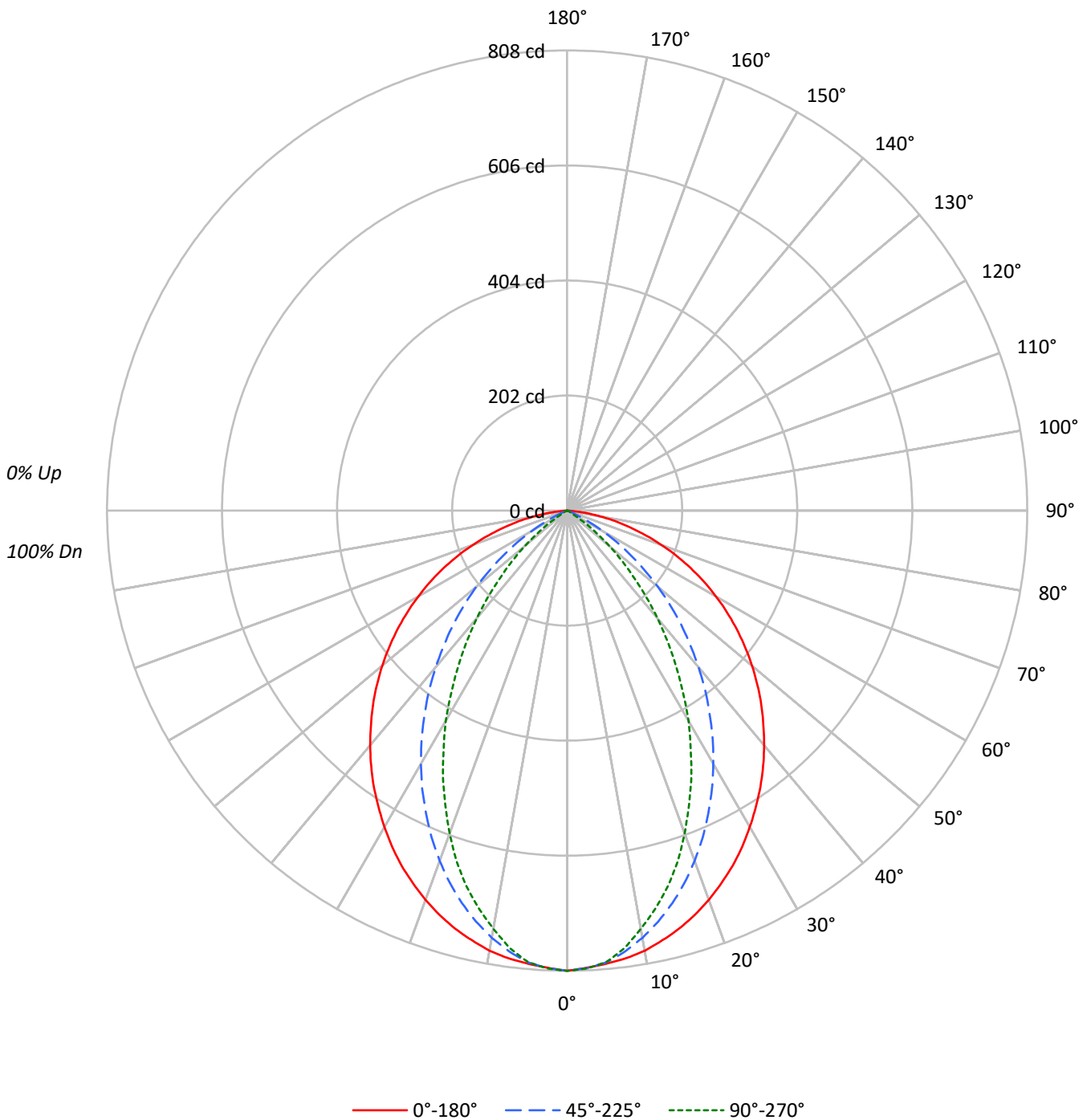
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1309.7 lumens  
Efficiency: N/A  
Efficacy: 68.6 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	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	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89																												
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78																												
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69																												
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61																												
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55																												
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49																												
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45																												
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41																												
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37																												
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34																												

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

	0°	45°	90°
0°	5713	5713	5713
5°	5666	5649	5644
10°	5634	5467	5352
15°	5562	5223	4999
20°	5471	4922	4536
25°	5366	4572	4023
30°	5237	4191	3478
35°	5107	3767	2876
40°	4967	3311	2277
45°	4820	2826	1650
50°	4660	2281	1066
55°	4481	1668	473
60°	4268	1031	136
65°	4006	375	80
70°	3625	132	33
75°	3149	44	22
80°	2414	33	0
85°	1103	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4820 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.1	5.7
10°-20°	201.5	15.4
20°-30°	272.6	20.8
30°-40°	280.1	21.4
40°-50°	232.0	17.7
50°-60°	149.0	11.4
60°-70°	72.0	5.5
70°-80°	24.3	1.9
80°-90°	3.1	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°	549.2	41.9
0°-40°	829.3	63.3
0°-60°	1210.3	92.4
0°-90°	1309.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1309.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	808	808	808	808	808	
5°	798	805	796	791	795	76
15°	760	750	714	689	683	214
25°	688	654	586	533	516	317
35°	592	535	436	360	333	370
45°	482	403	283	195	165	372
55°	364	267	135	59	38	325
65°	240	132	22	6	5	237
75°	115	25	2	1	1	122
85°	14	0	0	0	0	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	808.1	808.1	808.1	808.1	808.1
2.5°	803.3	809.7	804.1	803.3	804.9
5°	798.5	804.9	796.1	791.2	795.3
7.5°	792.8	796.1	780.8	772.8	774.4
10°	784.8	784.0	761.6	748.0	745.6
12.5°	772.8	768.8	739.2	720.0	716.0
15°	760.0	750.4	713.6	688.7	683.1
17.5°	744.8	729.6	685.5	653.5	645.5
20°	727.2	706.4	654.3	615.1	603.0
22.5°	708.0	681.5	621.5	575.0	559.0
25°	687.9	654.3	586.2	533.4	515.8
27.5°	665.5	626.3	551.0	490.9	469.3
30°	641.5	596.6	513.4	447.7	426.1
32.5°	616.7	567.0	475.7	404.4	378.0
35°	591.8	535.0	436.5	360.4	333.2
37.5°	565.4	502.9	398.0	318.7	289.1
40°	538.2	470.1	358.8	275.5	246.7
42.5°	510.1	436.5	319.5	234.7	205.0
45°	482.1	402.8	282.7	195.4	165.0
47.5°	453.3	368.4	244.3	157.0	130.5
50°	423.7	334.8	207.4	122.5	96.9
52.5°	394.0	300.3	169.8	88.9	65.7
55°	363.6	266.7	135.3	59.3	38.4
57.5°	333.2	232.2	103.3	32.8	14.4
60°	301.9	199.4	72.9	11.2	9.6
62.5°	271.5	164.2	45.6	8.8	7.2
65°	239.5	132.1	22.4	6.4	4.8
67.5°	208.2	101.7	9.6	4.0	2.4
70°	175.4	73.7	6.4	2.4	1.6
72.5°	145.0	47.3	4.0	1.6	0.8
75°	115.3	24.8	1.6	0.8	0.8
77.5°	86.5	10.4	0.8	0.8	0.8
80°	59.3	4.8	0.8	0.8	0.0
82.5°	35.2	1.6	0.8	0.8	0.0
85°	13.6	0.0	0.0	0.0	0.0
87.5°	0.8	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	17.12	18.51	17.49	18.82	19.13	1.98	3.37	2.35	3.68	3.99
	3H	18.67	19.90	19.05	20.23	20.59	1.90	3.13	2.28	3.46	3.82
	4H	19.20	20.34	19.60	20.69	21.07	1.84	2.98	2.24	3.33	3.71
	6H	19.53	20.59	19.95	20.96	21.35	1.77	2.82	2.18	3.19	3.58
	8H	19.62	20.61	20.05	21.00	21.41	1.73	2.72	2.15	3.11	3.52
	12H	19.63	20.59	20.06	20.97	21.40	1.69	2.64	2.12	3.02	3.45
4H	2H	16.93	18.07	17.33	18.42	18.80	2.84	3.99	3.25	4.34	4.72
	3H	18.54	19.47	18.95	19.88	20.28	2.79	3.73	3.21	4.13	4.53
	4H	19.06	19.90	19.50	20.31	20.76	2.72	3.55	3.15	3.97	4.41
	6H	19.44	20.16	19.90	20.60	21.07	2.65	3.37	3.11	3.81	4.28
	8H	19.54	20.21	20.00	20.65	21.12	2.60	3.27	3.07	3.72	4.19
	12H	19.57	20.16	20.06	20.65	21.12	2.56	3.15	3.04	3.63	4.11
8H	4H	18.93	19.61	19.40	20.05	20.52	3.74	4.41	4.21	4.86	5.33
	6H	19.29	19.84	19.79	20.33	20.81	3.66	4.21	4.16	4.70	5.18
	8H	19.38	19.88	19.91	20.39	20.88	3.60	4.10	4.12	4.61	5.10
	12H	19.43	19.86	19.94	20.36	20.93	3.56	4.00	4.08	4.49	5.06
12H	4H	18.89	19.49	19.38	19.97	20.44	3.82	4.41	4.30	4.89	5.37
	6H	19.23	19.72	19.75	20.24	20.73	3.72	4.21	4.24	4.73	5.22
	8H	19.34	19.78	19.86	20.27	20.84	3.69	4.12	4.20	4.62	5.19