

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: P1056452

Luminaire Tested: S125R3DR-S610D927-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056452  
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-S610D927-X4F0-XX-UDD-F-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

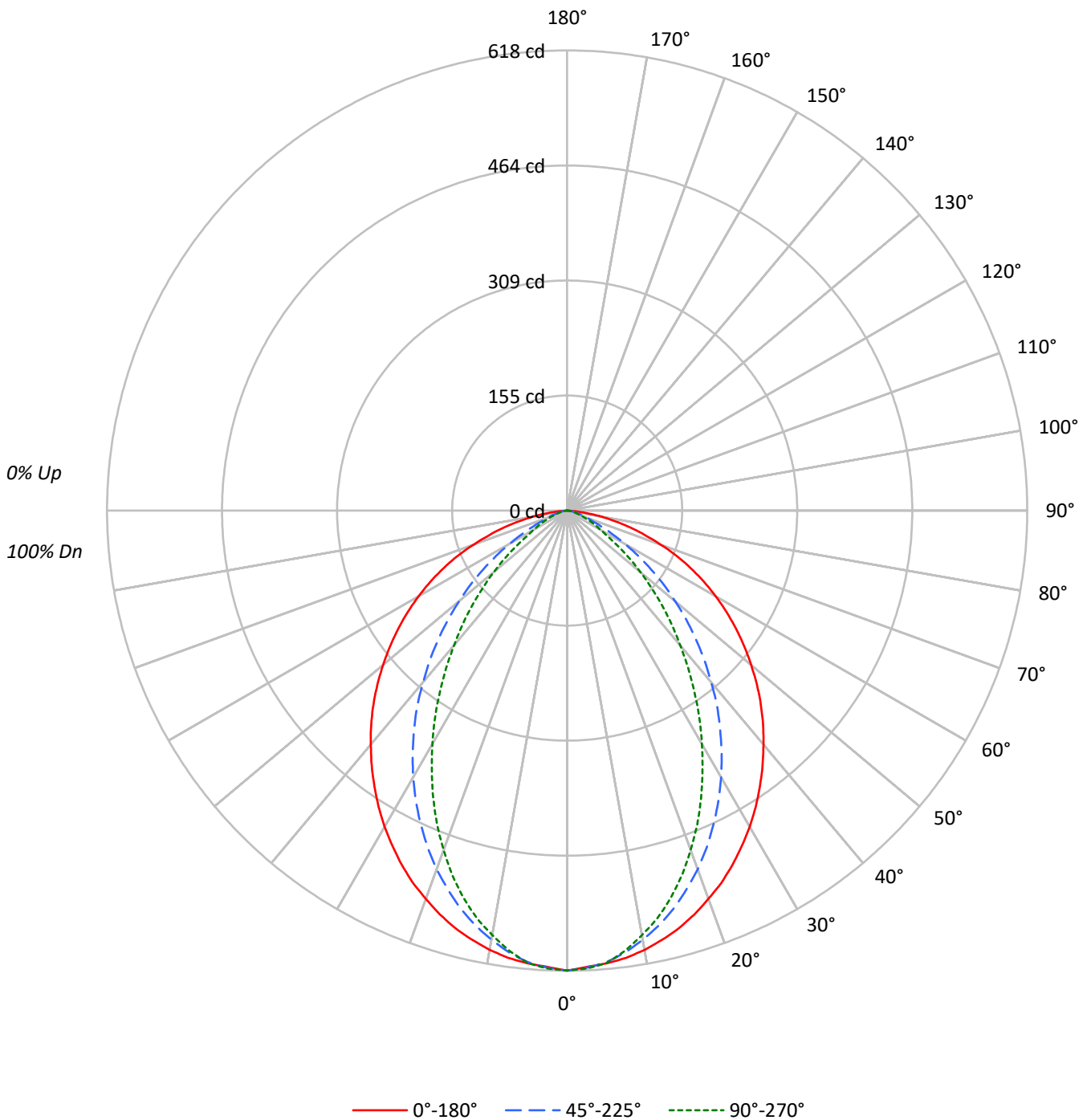
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1116.7 lumens  
Efficiency: N/A  
Efficacy: 58.5 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 (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°	4367	4367	4367
5°	4332	4320	4327
10°	4300	4201	4156
15°	4249	4049	3940
20°	4175	3856	3649
25°	4097	3628	3320
30°	4002	3376	2956
35°	3896	3090	2572
40°	3785	2777	2175
45°	3677	2447	1802
50°	3548	2083	1415
55°	3413	1692	1029
60°	3259	1261	737
65°	3063	833	574
70°	2768	579	403
75°	2406	374	311
80°	1885	281	256
85°	973	235	187

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3677 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.5	5.2
10°-20°	156.5	14.0
20°-30°	216.3	19.4
30°-40°	229.2	20.5
40°-50°	200.0	17.9
50°-60°	142.3	12.7
60°-70°	79.1	7.1
70°-80°	30.4	2.7
80°-90°	5.3	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°	430.3	38.5
0°-40°	659.5	59.1
0°-60°	1001.9	89.7
0°-90°	1116.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1116.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	618	618	618	618	618	
5°	610	615	609	607	610	58
15°	581	576	553	541	538	164
25°	525	507	465	436	426	242
35°	451	420	358	315	298	282
45°	368	324	245	196	180	284
55°	277	222	137	95	84	248
65°	183	120	50	37	34	181
75°	88	34	14	11	11	93
85°	12	3	3	2	2	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	617.8	617.8	617.8	617.8	617.8
2.5°	613.3	619.5	614.4	615.0	615.5
5°	610.4	615.0	608.7	607.0	609.8
7.5°	605.8	609.3	598.4	594.4	596.1
10°	599.0	600.1	585.2	579.5	578.9
12.5°	590.4	588.7	570.4	561.2	560.6
15°	580.6	575.5	553.2	541.2	538.3
17.5°	568.6	560.6	533.2	517.7	513.1
20°	554.9	544.0	512.6	492.6	485.1
22.5°	541.2	526.3	489.7	464.5	456.5
25°	525.2	507.4	465.1	436.5	425.6
27.5°	508.0	486.8	439.9	406.7	393.6
30°	490.3	465.7	413.6	376.4	362.1
32.5°	471.4	443.4	386.1	345.5	330.7
35°	451.4	420.5	358.1	314.6	298.0
37.5°	431.3	397.0	330.7	284.3	267.2
40°	410.2	373.0	300.9	253.4	235.7
42.5°	389.6	348.4	272.9	224.3	208.2
45°	367.8	323.8	244.8	195.6	180.2
47.5°	345.5	298.0	216.8	168.8	153.3
50°	322.6	272.9	189.4	142.4	128.7
52.5°	299.8	247.7	163.6	117.3	105.3
55°	276.9	222.0	137.3	95.0	83.5
57.5°	254.0	196.8	112.7	74.4	64.1
60°	230.5	171.0	89.2	54.9	52.1
62.5°	207.1	145.9	69.2	45.2	42.9
65°	183.1	120.1	49.8	36.6	34.3
67.5°	159.0	96.7	36.0	28.0	26.3
70°	133.9	73.8	28.0	21.2	19.5
72.5°	109.8	53.2	20.0	15.4	14.9
75°	88.1	34.3	13.7	11.4	11.4
77.5°	66.4	20.6	9.7	8.6	8.6
80°	46.3	12.0	6.9	6.3	6.3
82.5°	28.0	6.3	4.6	4.0	4.0
85°	12.0	3.4	2.9	2.3	2.3
87.5°	2.3	1.1	1.1	1.1	1.1
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	16.28	17.73	16.65	18.04	18.36	8.92	10.37	9.29	10.68	11.00
	3H	17.84	19.13	18.22	19.46	19.82	9.49	10.77	9.87	11.10	11.47
	4H	18.36	19.57	18.76	19.92	20.30	9.61	10.81	10.01	11.16	11.54
	6H	18.70	19.81	19.11	20.18	20.57	9.68	10.78	10.09	11.15	11.54
	8H	18.78	19.84	19.21	20.23	20.63	9.68	10.73	10.11	11.12	11.53
	12H	18.81	19.81	19.24	20.20	20.63	9.67	10.68	10.10	11.06	11.49
4H	2H	16.18	17.38	16.58	17.73	18.11	9.49	10.69	9.89	11.04	11.42
	3H	17.85	18.83	18.26	19.24	19.64	10.16	11.15	10.57	11.55	11.95
	4H	18.40	19.28	18.83	19.70	20.14	10.32	11.20	10.75	11.62	12.06
	6H	18.79	19.55	19.25	20.00	20.46	10.43	11.19	10.89	11.64	12.10
	8H	18.89	19.61	19.36	20.05	20.52	10.44	11.15	10.91	11.60	12.07
	12H	18.94	19.57	19.42	20.05	20.53	10.44	11.08	10.93	11.56	12.03
8H	4H	18.30	19.01	18.77	19.46	19.93	10.59	11.30	11.05	11.74	12.21
	6H	18.69	19.27	19.19	19.76	20.24	10.72	11.31	11.22	11.80	12.28
	8H	18.79	19.32	19.31	19.83	20.32	10.75	11.27	11.27	11.79	12.28
	12H	18.86	19.32	19.37	19.81	20.38	10.77	11.23	11.28	11.73	12.30
12H	4H	18.26	18.90	18.75	19.38	19.85	10.60	11.23	11.09	11.72	12.19
	6H	18.63	19.16	19.15	19.67	20.16	10.73	11.26	11.25	11.77	12.26
	8H	18.76	19.22	19.27	19.72	20.29	10.79	11.26	11.30	11.75	12.32