

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: P1056454

Luminaire Tested: S125R3DR-S610D930-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056454
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-S610D930-X4F0-XX-UDD-F-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

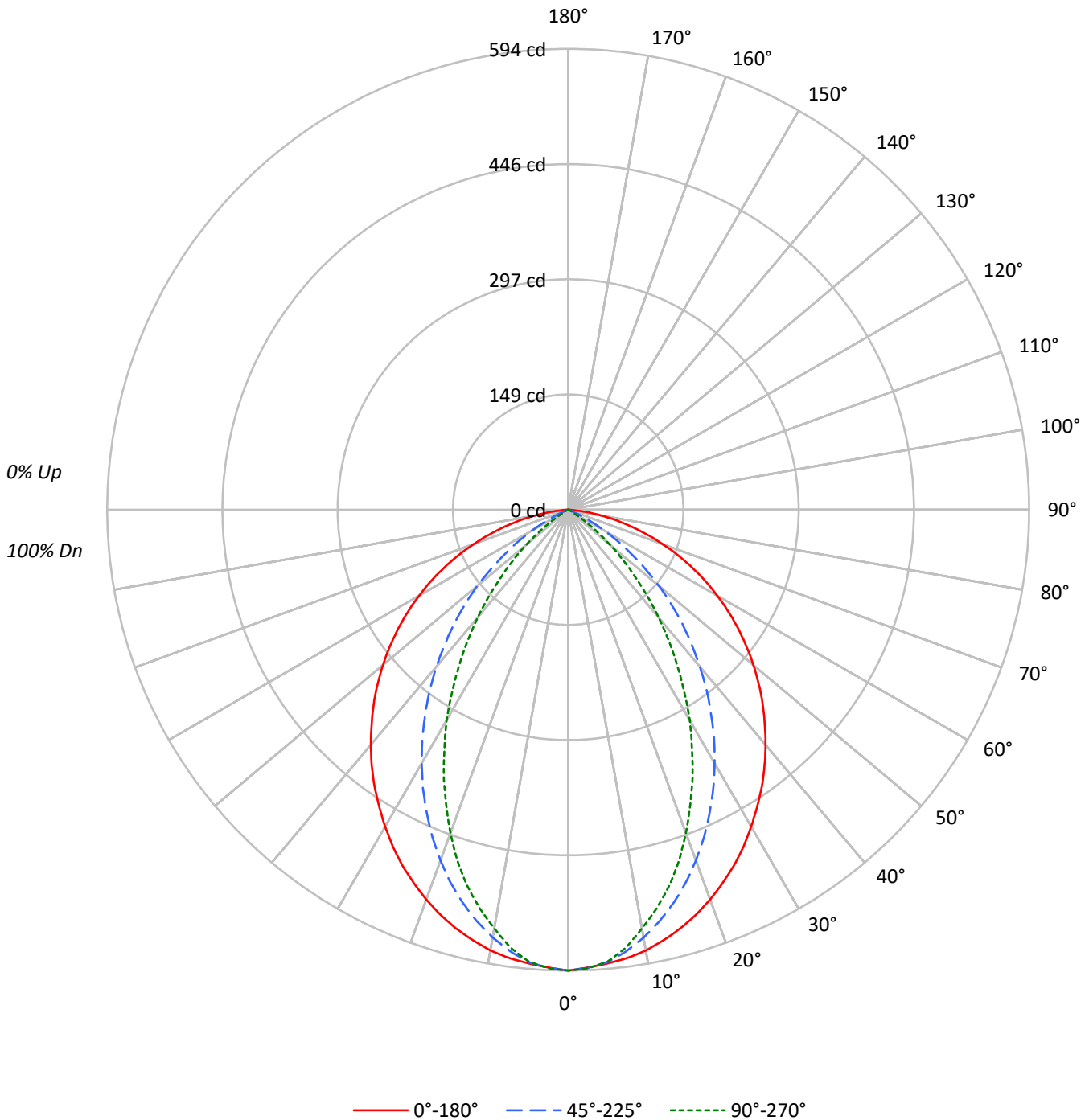
Lumens per Lamp: N/A
Luminaire Lumens: 962.9 lumens
Efficiency: N/A
Efficacy: 50.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
Input Voltage (V): 120
Input Current (A_{in}): 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	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°	4200	4200	4200
5°	4166	4153	4149
10°	4142	4019	3934
15°	4089	3839	3675
20°	4022	3619	3335
25°	3945	3362	2958
30°	3850	3081	2557
35°	3755	2769	2114
40°	3651	2434	1673
45°	3543	2077	1213
50°	3426	1677	783
55°	3294	1226	349
60°	3139	758	100
65°	2944	276	59
70°	2664	97	25
75°	2316	33	16
80°	1775	24	0
85°	811	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3543 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.2	5.7
10°-20°	148.2	15.4
20°-30°	200.4	20.8
30°-40°	205.9	21.4
40°-50°	170.6	17.7
50°-60°	109.5	11.4
60°-70°	52.9	5.5
70°-80°	17.9	1.9
80°-90°	2.3	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°	403.8	41.9
0°-40°	609.7	63.3
0°-60°	889.8	92.4
0°-90°	962.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	962.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	594	594	594	594	594	
5°	587	592	585	582	585	56
15°	559	552	525	506	502	157
25°	506	481	431	392	379	233
35°	435	393	321	265	245	272
45°	354	296	208	144	121	273
55°	267	196	100	44	28	239
65°	176	97	16	5	4	174
75°	85	18	1	1	1	90
85°	10	0	0	0	0	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	594.1	594.1	594.1	594.1	594.1
2.5°	590.5	595.2	591.1	590.5	591.7
5°	587.0	591.7	585.2	581.7	584.6
7.5°	582.9	585.2	574.0	568.2	569.3
10°	577.0	576.4	559.9	549.9	548.1
12.5°	568.2	565.2	543.4	529.3	526.4
15°	558.7	551.7	524.6	506.3	502.2
17.5°	547.5	536.4	504.0	480.4	474.5
20°	534.6	519.3	481.0	452.2	443.3
22.5°	520.5	501.0	456.9	422.7	411.0
25°	505.7	481.0	431.0	392.1	379.2
27.5°	489.3	460.4	405.1	360.9	345.0
30°	471.6	438.6	377.4	329.1	313.2
32.5°	453.3	416.8	349.7	297.3	277.9
35°	435.1	393.3	320.9	264.9	244.9
37.5°	415.7	369.7	292.6	234.3	212.5
40°	395.6	345.6	263.8	202.5	181.3
42.5°	375.0	320.9	234.9	172.5	150.7
45°	354.4	296.1	207.8	143.7	121.3
47.5°	333.2	270.8	179.6	115.4	96.0
50°	311.5	246.1	152.5	90.1	71.2
52.5°	289.7	220.8	124.8	65.4	48.3
55°	267.3	196.1	99.5	43.6	28.3
57.5°	244.9	170.7	76.0	24.1	10.6
60°	222.0	146.6	53.6	8.2	7.1
62.5°	199.6	120.7	33.6	6.5	5.3
65°	176.0	97.1	16.5	4.7	3.5
67.5°	153.1	74.8	7.1	2.9	1.8
70°	128.9	54.2	4.7	1.8	1.2
72.5°	106.6	34.7	2.9	1.2	0.6
75°	84.8	18.3	1.2	0.6	0.6
77.5°	63.6	7.7	0.6	0.6	0.6
80°	43.6	3.5	0.6	0.6	0.0
82.5°	25.9	1.2	0.6	0.6	0.0
85°	10.0	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	16.05	17.44	16.42	17.75	18.07	0.91	2.29	1.27	2.61	2.92
	3H	17.60	18.83	17.98	19.16	19.52	0.83	2.06	1.21	2.39	2.75
	4H	18.13	19.27	18.53	19.62	20.00	0.76	1.91	1.17	2.26	2.64
	6H	18.47	19.52	18.88	19.89	20.28	0.70	1.75	1.11	2.12	2.51
	8H	18.55	19.54	18.98	19.94	20.34	0.65	1.65	1.08	2.04	2.45
	12H	18.56	19.52	19.00	19.90	20.33	0.61	1.57	1.05	1.95	2.38
4H	2H	15.86	17.00	16.26	17.35	17.73	1.78	2.92	2.18	3.27	3.65
	3H	17.47	18.40	17.88	18.81	19.21	1.73	2.66	2.14	3.06	3.47
	4H	17.99	18.83	18.43	19.25	19.69	1.65	2.48	2.08	2.90	3.34
	6H	18.37	19.09	18.83	19.53	20.00	1.58	2.30	2.05	2.75	3.21
	8H	18.47	19.14	18.94	19.59	20.06	1.53	2.20	2.00	2.65	3.12
	12H	18.50	19.10	18.99	19.58	20.05	1.49	2.09	1.98	2.57	3.04
8H	4H	17.87	18.54	18.33	18.98	19.45	2.67	3.34	3.14	3.79	4.26
	6H	18.22	18.77	18.72	19.27	19.75	2.59	3.14	3.09	3.63	4.12
	8H	18.32	18.81	18.84	19.32	19.81	2.54	3.03	3.06	3.55	4.04
	12H	18.36	18.79	18.87	19.29	19.86	2.50	2.93	3.01	3.43	4.00
12H	4H	17.82	18.42	18.31	18.90	19.37	2.75	3.35	3.24	3.83	4.30
	6H	18.16	18.65	18.68	19.17	19.66	2.65	3.15	3.18	3.66	4.15
	8H	18.27	18.71	18.79	19.20	19.77	2.62	3.06	3.14	3.55	4.12