

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: P1056455

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056455
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-S610D930-X4F0-XX-UDD-F-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

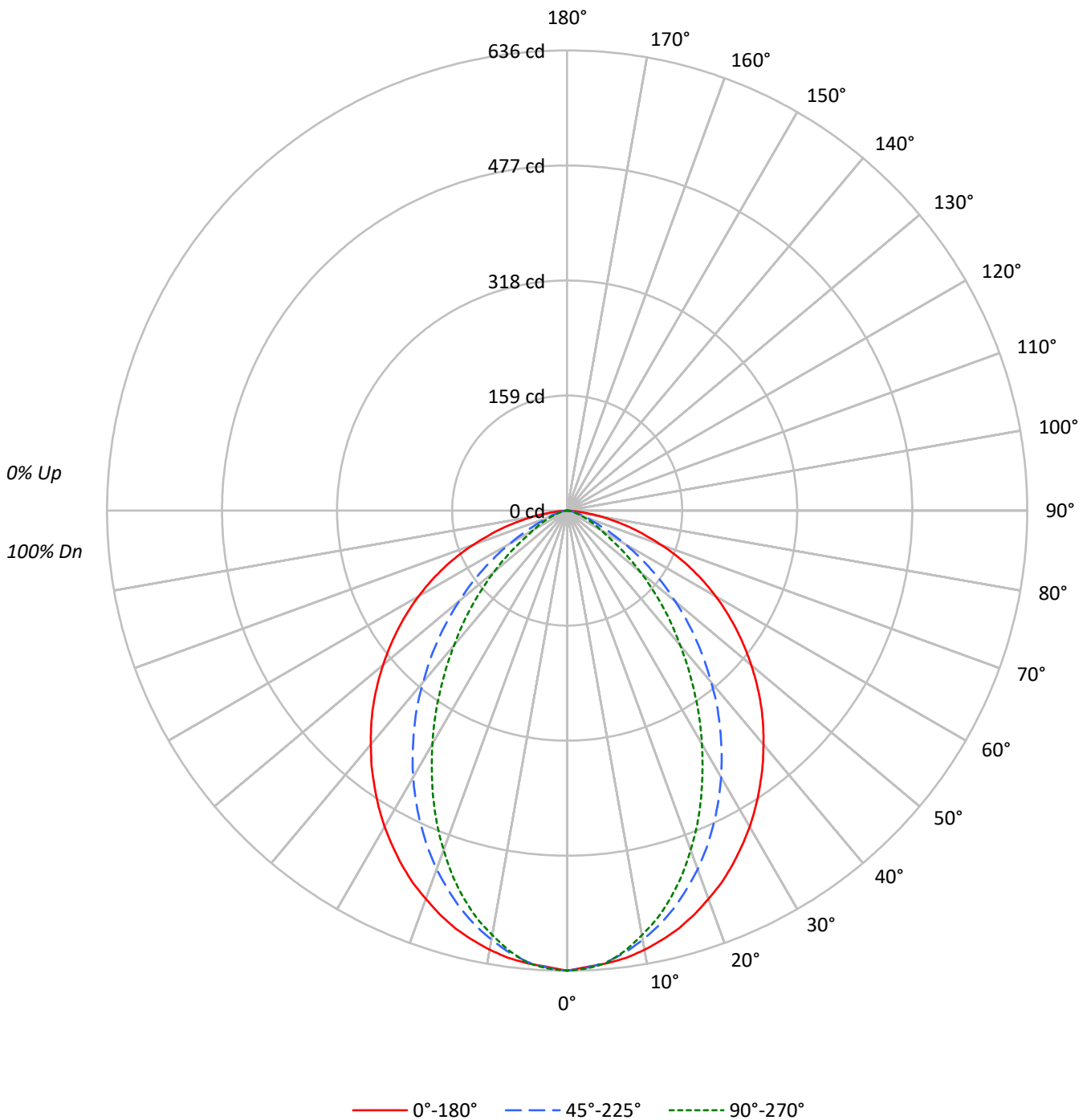
Lumens per Lamp: N/A
Luminaire Lumens: 1149.3 lumens
Efficiency: N/A
Efficacy: 60.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
Input Voltage (V): 120
Input Current (A_{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	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°	4495	4495	4495
5°	4458	4445	4454
10°	4425	4324	4277
15°	4374	4167	4055
20°	4296	3968	3756
25°	4216	3734	3416
30°	4119	3475	3042
35°	4009	3181	2647
40°	3895	2858	2239
45°	3785	2519	1855
50°	3652	2143	1457
55°	3513	1742	1060
60°	3355	1298	758
65°	3151	856	590
70°	2848	595	413
75°	2477	385	322
80°	1942	289	265
85°	1006	235	195

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3785 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.2	5.2
10°-20°	161.0	14.0
20°-30°	222.6	19.4
30°-40°	235.9	20.5
40°-50°	205.9	17.9
50°-60°	146.4	12.7
60°-70°	81.4	7.1
70°-80°	31.3	2.7
80°-90°	5.4	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°	442.9	38.5
0°-40°	678.8	59.1
0°-60°	1031.1	89.7
0°-90°	1149.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1149.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	636	636	636	636	636	
5°	628	633	626	625	628	60
15°	598	592	569	557	554	168
25°	540	522	479	449	438	249
35°	464	433	369	324	307	291
45°	379	333	252	201	186	292
55°	285	228	141	98	86	255
65°	188	124	51	38	35	186
75°	91	35	14	12	12	96
85°	12	4	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°	635.9	635.9	635.9	635.9	635.9
2.5°	631.2	637.6	632.3	632.9	633.5
5°	628.2	632.9	626.4	624.7	627.6
7.5°	623.5	627.0	615.8	611.7	613.5
10°	616.4	617.6	602.3	596.4	595.8
12.5°	607.6	605.8	587.0	577.6	577.0
15°	597.6	592.3	569.3	557.0	554.0
17.5°	585.2	577.0	548.7	532.8	528.1
20°	571.1	559.9	527.5	506.9	499.3
22.5°	557.0	541.7	504.0	478.1	469.8
25°	540.5	522.2	478.7	449.2	438.0
27.5°	522.8	501.0	452.8	418.6	405.1
30°	504.6	479.3	425.7	387.4	372.7
32.5°	485.1	456.3	397.4	355.6	340.3
35°	464.5	432.7	368.6	323.8	306.7
37.5°	443.9	408.6	340.3	292.6	275.0
40°	422.1	383.9	309.7	260.8	242.6
42.5°	400.9	358.6	280.8	230.8	214.3
45°	378.6	333.2	252.0	201.4	185.5
47.5°	355.6	306.7	223.1	173.7	157.8
50°	332.1	280.8	194.9	146.6	132.5
52.5°	308.5	254.9	168.4	120.7	108.3
55°	285.0	228.4	141.3	97.7	86.0
57.5°	261.4	202.5	116.0	76.5	65.9
60°	237.3	176.0	91.8	56.5	53.6
62.5°	213.1	150.1	71.2	46.5	44.2
65°	188.4	123.6	51.2	37.7	35.3
67.5°	163.7	99.5	37.1	28.8	27.1
70°	137.8	76.0	28.8	21.8	20.0
72.5°	113.0	54.8	20.6	15.9	15.3
75°	90.7	35.3	14.1	11.8	11.8
77.5°	68.3	21.2	10.0	8.8	8.8
80°	47.7	12.4	7.1	6.5	6.5
82.5°	28.8	6.5	4.7	4.1	4.1
85°	12.4	3.5	2.9	2.4	2.4
87.5°	2.4	1.2	1.2	1.2	1.2
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	16.38	17.83	16.75	18.14	18.46	9.02	10.46	9.38	10.78	11.09
	3H	17.94	19.23	18.32	19.56	19.92	9.58	10.87	9.96	11.20	11.56
	4H	18.46	19.67	18.86	20.02	20.40	9.71	10.91	10.11	11.26	11.64
	6H	18.80	19.91	19.21	20.28	20.67	9.77	10.88	10.18	11.25	11.64
	8H	18.88	19.94	19.31	20.33	20.73	9.78	10.83	10.20	11.22	11.62
	12H	18.91	19.91	19.34	20.30	20.73	9.77	10.77	10.20	11.15	11.58
4H	2H	16.28	17.48	16.68	17.83	18.21	9.58	10.79	9.98	11.13	11.52
	3H	17.95	18.93	18.36	19.34	19.74	10.26	11.24	10.67	11.64	12.05
	4H	18.50	19.38	18.93	19.80	20.24	10.41	11.30	10.85	11.71	12.16
	6H	18.89	19.65	19.35	20.10	20.56	10.53	11.29	10.99	11.73	12.20
	8H	18.99	19.71	19.46	20.15	20.62	10.54	11.25	11.00	11.70	12.16
	12H	19.04	19.67	19.52	20.15	20.63	10.54	11.17	11.02	11.65	12.13
8H	4H	18.40	19.11	18.87	19.56	20.03	10.68	11.40	11.15	11.84	12.31
	6H	18.79	19.37	19.29	19.86	20.34	10.82	11.40	11.32	11.90	12.38
	8H	18.89	19.42	19.41	19.93	20.42	10.84	11.37	11.36	11.88	12.37
	12H	18.96	19.42	19.47	19.91	20.48	10.87	11.33	11.38	11.82	12.39
12H	4H	18.36	19.00	18.85	19.48	19.95	10.70	11.33	11.18	11.81	12.29
	6H	18.73	19.26	19.25	19.77	20.26	10.83	11.35	11.35	11.87	12.36
	8H	18.86	19.32	19.37	19.82	20.39	10.89	11.35	11.40	11.84	12.41