

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: P1056587

Luminaire Tested: S125R3DR-H610D927-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056587
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-H610D927-X4F0-XX-UDD-F-S
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

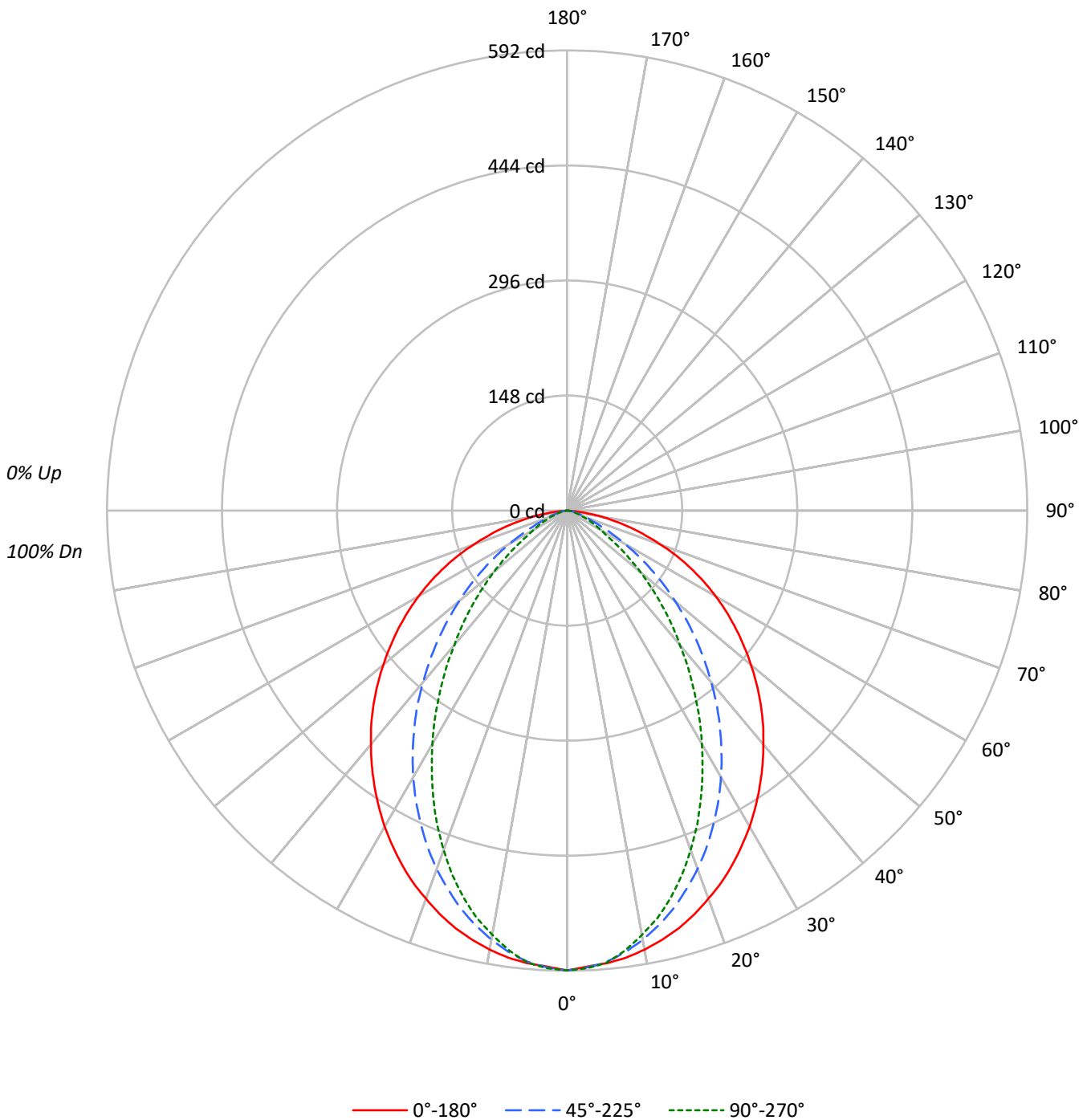
Lumens per Lamp: N/A
Luminaire Lumens: 1069.2 lumens
Efficiency: N/A
Efficacy: 61.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 17.3
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	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					100			
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77					77			
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67					67			
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59					59			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52					52			
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47					47			
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42					42			
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38					38			
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35					35			
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32					32			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4182	4182	4182
5°	4148	4136	4144
10°	4117	4023	3979
15°	4069	3877	3772
20°	3997	3692	3494
25°	3922	3473	3179
30°	3832	3233	2830
35°	3730	2959	2463
40°	3624	2659	2083
45°	3521	2343	1725
50°	3397	1994	1355
55°	3267	1621	986
60°	3120	1207	704
65°	2932	798	550
70°	2650	554	384
75°	2305	358	300
80°	1808	269	244
85°	933	219	178

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3521 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	5.2
10°-20°	149.8	14.0
20°-30°	207.1	19.4
30°-40°	219.5	20.5
40°-50°	191.5	17.9
50°-60°	136.2	12.7
60°-70°	75.8	7.1
70°-80°	29.1	2.7
80°-90°	5.0	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°	412.0	38.5
0°-40°	631.5	59.1
0°-60°	959.3	89.7
0°-90°	1069.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1069.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	592	592	592	592	592	
5°	584	589	583	581	584	55
15°	556	551	530	518	515	157
25°	503	486	445	418	408	231
35°	432	403	343	301	285	270
45°	352	310	234	187	172	271
55°	265	212	132	91	80	237
65°	175	115	48	35	33	173
75°	84	33	13	11	11	89
85°	12	3	3	2	2	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	591.6	591.6	591.6	591.6	591.6
2.5°	587.2	593.2	588.3	588.8	589.4
5°	584.5	588.8	582.8	581.2	583.9
7.5°	580.1	583.4	573.0	569.1	570.8
10°	573.5	574.6	560.4	554.9	554.3
12.5°	565.3	563.6	546.1	537.3	536.8
15°	556.0	551.0	529.7	518.2	515.4
17.5°	544.5	536.8	510.5	495.7	491.3
20°	531.3	520.9	490.8	471.6	464.5
22.5°	518.2	503.9	468.9	444.8	437.1
25°	502.8	485.9	445.3	417.9	407.5
27.5°	486.4	466.1	421.2	389.5	376.9
30°	469.4	445.9	396.0	360.4	346.7
32.5°	451.3	424.5	369.7	330.8	316.6
35°	432.2	402.6	342.9	301.3	285.4
37.5°	413.0	380.1	316.6	272.2	255.8
40°	392.7	357.1	288.1	242.7	225.7
42.5°	373.0	333.6	261.3	214.7	199.4
45°	352.2	310.0	234.4	187.3	172.5
47.5°	330.8	285.4	207.6	161.6	146.8
50°	308.9	261.3	181.3	136.4	123.2
52.5°	287.0	237.2	156.7	112.3	100.8
55°	265.1	212.5	131.5	90.9	80.0
57.5°	243.2	188.4	107.9	71.2	61.3
60°	220.7	163.8	85.4	52.6	49.8
62.5°	198.3	139.7	66.3	43.3	41.1
65°	175.3	115.0	47.7	35.1	32.9
67.5°	152.3	92.6	34.5	26.8	25.2
70°	128.2	70.7	26.8	20.3	18.6
72.5°	105.2	50.9	19.2	14.8	14.2
75°	84.4	32.9	13.1	11.0	11.0
77.5°	63.5	19.7	9.3	8.2	8.2
80°	44.4	11.5	6.6	6.0	6.0
82.5°	26.8	6.0	4.4	3.8	3.8
85°	11.5	3.3	2.7	2.2	2.2
87.5°	2.2	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	16.13	17.58	16.50	17.89	18.20	8.77	10.21	9.13	10.53	10.84
	3H	17.69	18.98	18.07	19.31	19.67	9.33	10.62	9.71	10.95	11.31
	4H	18.21	19.42	18.61	19.77	20.15	9.46	10.66	9.86	11.01	11.39
	6H	18.55	19.66	18.96	20.03	20.42	9.52	10.63	9.94	11.00	11.39
	8H	18.63	19.68	19.06	20.07	20.48	9.53	10.58	9.95	10.97	11.37
	12H	18.66	19.66	19.09	20.04	20.47	9.52	10.52	9.95	10.90	11.33
4H	2H	16.03	17.23	16.43	17.58	17.96	9.34	10.54	9.74	10.89	11.27
	3H	17.70	18.68	18.11	19.08	19.49	10.01	11.00	10.42	11.40	11.80
	4H	18.25	19.13	18.68	19.55	19.99	10.17	11.05	10.60	11.47	11.91
	6H	18.64	19.40	19.10	19.85	20.31	10.28	11.04	10.74	11.49	11.95
	8H	18.74	19.46	19.21	19.90	20.37	10.29	11.00	10.75	11.45	11.92
	12H	18.79	19.42	19.27	19.90	20.38	10.29	10.92	10.77	11.40	11.88
8H	4H	18.15	18.86	18.62	19.31	19.78	10.44	11.15	10.90	11.59	12.06
	6H	18.54	19.12	19.03	19.61	20.09	10.57	11.15	11.07	11.65	12.13
	8H	18.64	19.17	19.16	19.68	20.17	10.60	11.12	11.11	11.63	12.12
	12H	18.71	19.17	19.22	19.66	20.23	10.62	11.08	11.13	11.57	12.14
12H	4H	18.11	18.75	18.60	19.23	19.70	10.45	11.08	10.94	11.56	12.04
	6H	18.48	19.01	19.00	19.52	20.01	10.58	11.11	11.10	11.62	12.11
	8H	18.61	19.07	19.12	19.57	20.14	10.64	11.10	11.15	11.59	12.16