

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061885

Luminaire Tested: S125RDR-H1090D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061885  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1090D930-X4F0-XX-UDD-BVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

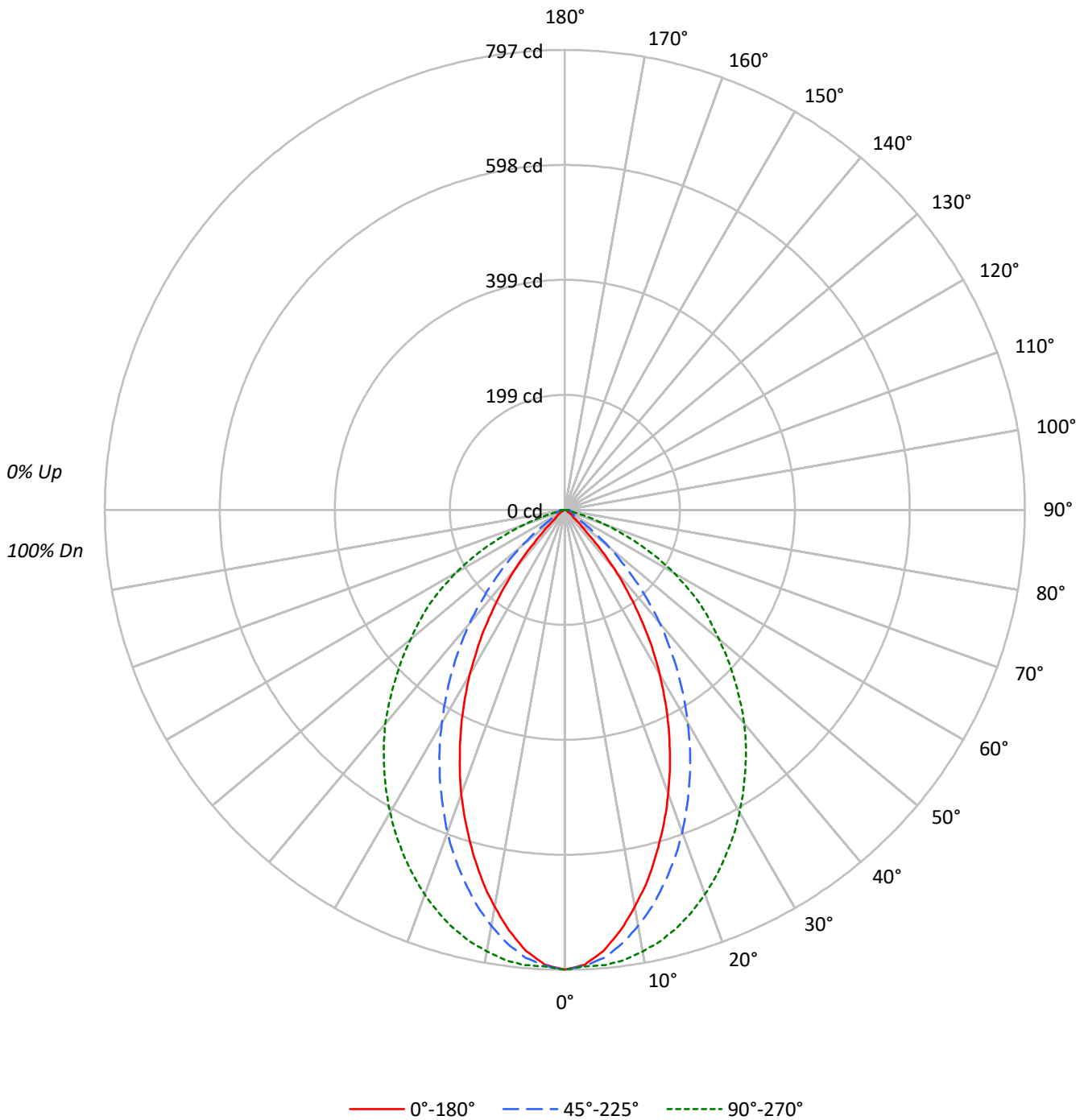
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1024.8 lumens  
Efficiency: N/A  
Efficacy: 32.8 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (Ain): 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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54				
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49				
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45				
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39				

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

	0°	45°	90°
0°	5486	5486	5486
5°	5303	5385	5473
10°	4884	5118	5433
15°	4385	4763	5344
20°	3839	4357	5198
25°	3242	3891	5017
30°	2613	3386	4813
35°	1921	2854	4586
40°	1199	2302	4348
45°	449	1682	4042
50°	210	1051	3731
55°	154	436	3451
60°	107	230	2987
65°	64	272	2366
70°	58	316	1502
75°	77	314	471
80°	115	389	349
85°	229	616	466

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4042 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.1	7.1
10°-20°	189.1	18.5
20°-30°	241.0	23.5
30°-40°	224.3	21.9
40°-50°	153.7	15.0
50°-60°	84.6	8.3
60°-70°	40.1	3.9
70°-80°	12.6	1.2
80°-90°	6.4	0.6
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°	503.2	49.1
0°-40°	727.4	71.0
0°-60°	965.7	94.2
0°-90°	1024.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1024.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	797	797	797	797	797	
5°	767	777	779	785	792	71
15°	615	635	668	718	750	172
25°	427	453	512	595	660	195
35°	229	261	340	451	546	142
45°	46	78	173	306	415	44
55°	13	15	36	171	288	12
65°	4	5	17	63	145	4
75°	3	5	12	13	18	3
85°	3	7	8	7	6	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	796.8	796.8	796.8	796.8	796.8
2.5°	788.9	796.8	790.9	790.9	791.9
5°	767.3	777.1	779.1	785.0	791.9
7.5°	735.9	748.7	758.5	775.2	787.0
10°	698.6	714.3	732.0	759.5	777.1
12.5°	659.4	676.1	702.6	740.8	765.4
15°	615.2	634.9	668.2	718.3	749.7
17.5°	570.1	591.7	632.9	691.8	731.0
20°	524.0	546.6	594.6	660.4	709.4
22.5°	475.9	500.4	553.4	628.0	685.9
25°	426.8	453.3	512.2	594.6	660.4
27.5°	377.8	405.3	470.0	560.3	633.9
30°	328.7	357.2	425.9	525.0	605.4
32.5°	278.7	310.1	382.7	489.6	576.0
35°	228.6	261.0	339.5	451.4	545.6
37.5°	179.6	212.9	297.3	415.1	515.2
40°	133.4	166.8	256.1	378.8	483.8
42.5°	86.3	121.7	212.9	341.5	449.4
45°	46.1	77.5	172.7	306.1	415.1
47.5°	24.5	41.2	134.4	270.8	382.7
50°	19.6	22.6	98.1	235.5	348.3
52.5°	15.7	17.7	62.8	199.2	317.9
55°	12.8	14.7	36.3	170.7	287.5
57.5°	9.8	11.8	20.6	142.3	252.2
60°	7.8	8.8	16.7	113.8	216.9
62.5°	4.9	6.9	16.7	88.3	181.5
65°	3.9	4.9	16.7	62.8	145.2
67.5°	3.9	3.9	16.7	41.2	108.9
70°	2.9	2.9	15.7	26.5	74.6
72.5°	2.9	2.9	13.7	17.7	43.2
75°	2.9	4.9	11.8	12.8	17.7
77.5°	2.9	7.8	10.8	10.8	9.8
80°	2.9	7.8	9.8	8.8	8.8
82.5°	2.9	7.8	7.8	7.8	6.9
85°	2.9	6.9	7.8	6.9	5.9
87.5°	2.9	6.9	6.9	6.9	3.9
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	0.00	0.00	0.00	0.00	0.00	14.96	16.25	15.33	16.56	16.87
	3H	0.00	0.00	0.00	0.00	0.00	15.75	16.88	16.13	17.21	17.58
	4H	0.00	0.00	0.00	0.00	0.00	15.77	16.83	16.18	17.18	17.57
	6H	0.00	0.00	0.00	0.00	0.35	15.73	16.70	16.14	17.07	17.47
	8H	0.00	0.20	0.00	0.59	1.00	15.71	16.63	16.14	17.02	17.42
	12H	0.03	0.90	0.46	1.29	1.72	15.69	16.57	16.12	16.95	17.38
4H	2H	0.00	0.00	0.00	0.16	0.54	14.74	15.80	15.15	16.15	16.54
	3H	0.00	0.47	0.02	0.88	1.28	15.57	16.43	15.98	16.84	17.24
	4H	0.20	0.97	0.64	1.39	1.83	15.61	16.38	16.04	16.80	17.24
	6H	1.68	2.34	2.14	2.79	3.26	15.59	16.26	16.06	16.70	17.17
	8H	2.41	3.03	2.88	3.48	3.95	15.58	16.20	16.05	16.64	17.12
	12H	3.15	3.70	3.64	4.18	4.66	15.58	16.12	16.07	16.61	17.08
8H	4H	2.25	2.87	2.72	3.31	3.78	15.49	16.11	15.96	16.56	17.03
	6H	3.98	4.48	4.48	4.98	5.46	15.49	16.00	16.00	16.50	16.98
	8H	4.92	5.37	5.44	5.89	6.38	15.50	15.95	16.02	16.47	16.96
	12H	5.86	6.26	6.37	6.75	7.32	15.54	15.95	16.06	16.44	17.01
12H	4H	2.55	3.09	3.03	3.58	4.05	15.45	16.00	15.94	16.48	16.95
	6H	4.43	4.89	4.96	5.40	5.90	15.45	15.90	15.97	16.42	16.91
	8H	5.56	5.96	6.07	6.45	7.03	15.49	15.89	16.00	16.38	16.95