

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: P1061907

Luminaire Tested: S125RDR-H1090D940-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061907  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1090D940-X4F0-XX-UDD-SVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

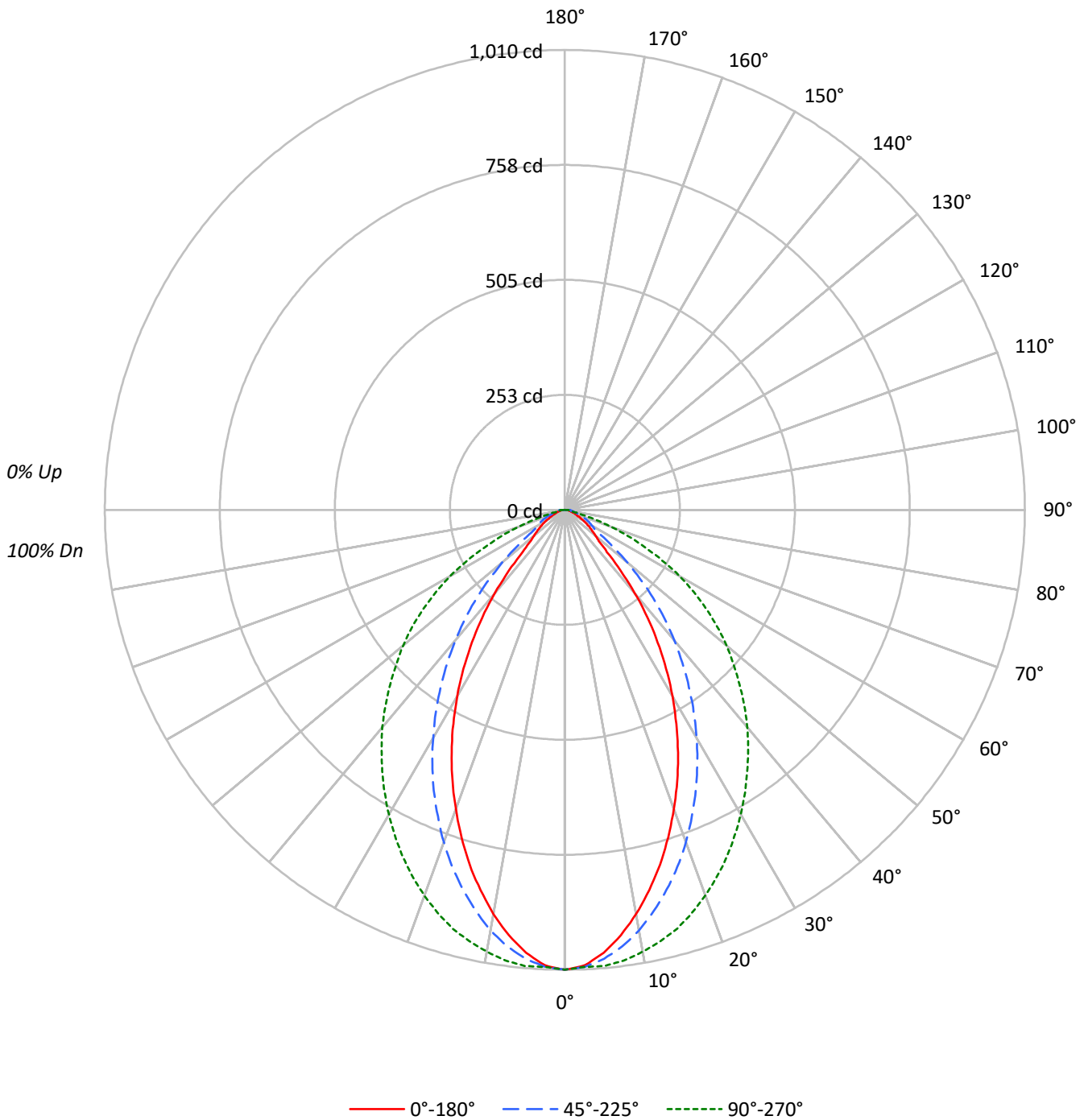
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1462.8 lumens  
Efficiency: N/A  
Efficacy: 46.9 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02  
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				100
1	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

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

	0°	45°	90°
0°	6953	6953	6953
5°	6750	6839	6950
10°	6303	6558	6888
15°	5753	6158	6785
20°	5127	5693	6605
25°	4468	5169	6392
30°	3754	4599	6143
35°	2986	3996	5873
40°	2151	3357	5604
45°	1275	2665	5278
50°	943	1897	4966
55°	798	1173	4547
60°	650	946	4004
65°	507	875	3166
70°	433	757	2118
75°	399	657	857
80°	424	682	595
85°	506	1019	679

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5278 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.1	6.4
10°-20°	244.5	16.7
20°-30°	319.5	21.8
30°-40°	311.3	21.3
40°-50°	233.4	16.0
50°-60°	146.4	10.0
60°-70°	76.2	5.2
70°-80°	27.6	1.9
80°-90°	10.9	0.7
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°	657.1	44.9
0°-40°	968.3	66.2
0°-60°	1348.1	92.2
0°-90°	1462.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1462.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1010	1010	1010	1010	1010	
5°	977	990	990	997	1006	91
15°	807	831	864	918	952	225
25°	588	620	680	773	841	269
35°	355	393	475	602	699	221
45°	131	170	274	423	542	110
55°	66	70	98	255	379	59
65°	31	33	54	103	194	32
75°	15	20	25	26	32	16
85°	6	11	13	12	9	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1009.9	1009.9	1009.9	1009.9	1009.9
2.5°	1001.3	1011.0	1004.5	1004.5	1004.5
5°	976.6	989.5	989.5	997.0	1005.6
7.5°	942.3	957.3	967.0	985.2	998.1
10°	901.5	919.7	938.0	968.0	985.2
12.5°	855.3	876.8	902.6	944.4	970.2
15°	807.1	830.7	863.9	917.6	951.9
17.5°	754.5	782.4	822.1	886.5	928.3
20°	699.7	727.6	777.0	850.0	901.5
22.5°	645.0	675.0	728.7	811.3	872.5
25°	588.1	620.3	680.4	772.7	841.4
27.5°	530.2	563.4	630.0	733.0	807.1
30°	472.2	506.6	578.5	690.1	772.7
32.5°	414.3	450.7	526.9	646.1	736.2
35°	355.2	392.8	475.4	602.1	698.7
37.5°	298.4	335.9	423.9	557.0	661.1
40°	239.3	280.1	373.5	511.9	623.5
42.5°	181.4	223.2	323.0	466.8	582.8
45°	130.9	169.6	273.7	422.8	542.0
47.5°	100.9	122.3	223.2	377.8	502.3
50°	88.0	94.4	177.1	335.9	463.6
52.5°	76.2	80.5	133.1	297.3	421.8
55°	66.5	69.8	97.7	255.4	378.8
57.5°	55.8	60.1	77.3	214.6	334.8
60°	47.2	49.4	68.7	177.1	290.8
62.5°	38.6	40.8	61.2	139.5	241.5
65°	31.1	33.3	53.7	103.0	194.3
67.5°	25.8	26.8	45.1	73.0	149.2
70°	21.5	22.5	37.6	50.4	105.2
72.5°	18.2	21.5	30.0	36.5	66.5
75°	15.0	20.4	24.7	25.8	32.2
77.5°	12.9	19.3	20.4	20.4	18.2
80°	10.7	16.1	17.2	16.1	15.0
82.5°	8.6	12.9	14.0	14.0	11.8
85°	6.4	10.7	12.9	11.8	8.6
87.5°	4.3	9.7	10.7	9.7	6.4
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	6.66	8.01	7.02	8.32	8.64	16.27	17.62	16.63	17.93	18.25
	3H	7.51	8.71	7.89	9.04	9.41	17.11	18.31	17.49	18.64	19.00
	4H	7.94	9.06	8.34	9.41	9.79	17.18	18.30	17.59	18.65	19.04
	6H	8.36	9.39	8.78	9.76	10.16	17.17	18.19	17.58	18.56	18.96
	8H	8.54	9.52	8.97	9.91	10.31	17.15	18.13	17.58	18.52	18.92
	12H	8.70	9.64	9.14	10.02	10.45	17.14	18.07	17.57	18.46	18.89
4H	2H	7.62	8.74	8.02	9.09	9.47	16.13	17.25	16.53	17.60	17.98
	3H	8.67	9.59	9.08	9.99	10.39	17.04	17.96	17.45	18.36	18.76
	4H	9.23	10.05	9.67	10.47	10.91	17.14	17.96	17.58	18.38	18.82
	6H	9.83	10.54	10.29	10.99	11.45	17.17	17.88	17.63	18.32	18.79
	8H	10.07	10.73	10.54	11.18	11.65	17.17	17.83	17.64	18.28	18.75
	12H	10.30	10.88	10.78	11.36	11.84	17.18	17.77	17.67	18.25	18.73
8H	4H	9.71	10.37	10.17	10.81	11.28	17.07	17.73	17.54	18.18	18.65
	6H	10.52	11.06	11.02	11.55	12.04	17.12	17.66	17.62	18.16	18.64
	8H	10.90	11.38	11.42	11.90	12.39	17.16	17.64	17.68	18.16	18.65
	12H	11.29	11.72	11.80	12.21	12.78	17.22	17.65	17.73	18.14	18.71
12H	4H	9.76	10.34	10.24	10.82	11.30	17.03	17.62	17.52	18.10	18.58
	6H	10.64	11.13	11.16	11.64	12.13	17.09	17.58	17.61	18.09	18.58
	8H	11.13	11.56	11.65	12.06	12.63	17.16	17.59	17.67	18.08	18.66