

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: P1061916

Luminaire Tested: S125RDR-H1090D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061916  
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-H1090D950-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: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

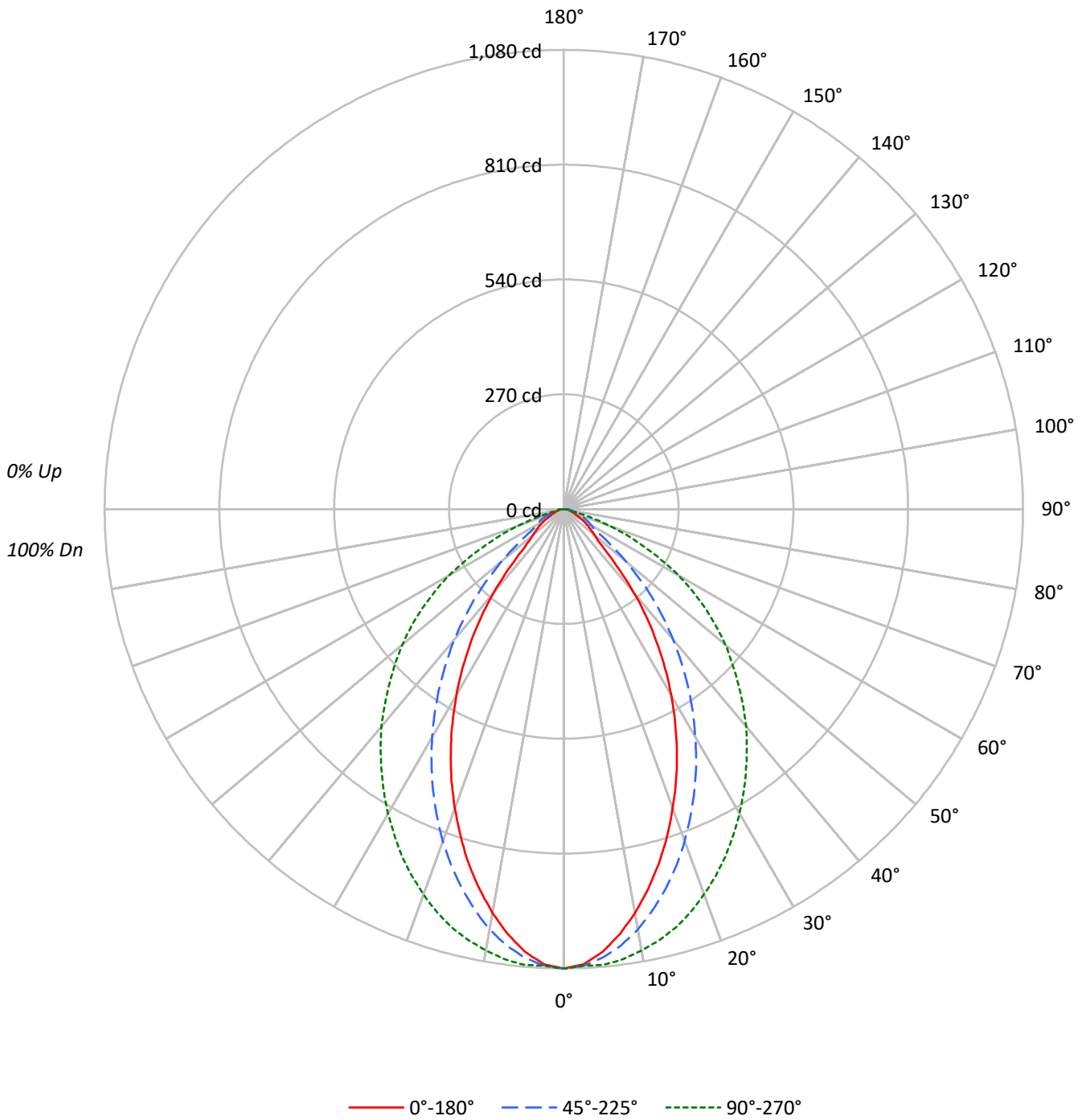
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1565.0 lumens  
Efficiency: N/A  
Efficacy: 50.2 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	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	105	103	100	101	99	97	98	96	94	94	92	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36

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

	0°	45°	90°
0°	7439	7439	7439
5°	7221	7317	7435
10°	6743	7016	7369
15°	6154	6589	7259
20°	5485	6091	7067
25°	4780	5530	6839
30°	4017	4920	6573
35°	3194	4275	6283
40°	2301	3592	5996
45°	1364	2851	5646
50°	1009	2029	5313
55°	855	1254	4865
60°	695	1012	4285
65°	543	935	3385
70°	463	809	2265
75°	428	702	915
80°	456	730	638
85°	545	1090	727

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5646 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.6	6.4
10°-20°	261.5	16.7
20°-30°	341.8	21.8
30°-40°	333.0	21.3
40°-50°	249.8	16.0
50°-60°	156.6	10.0
60°-70°	81.5	5.2
70°-80°	29.5	1.9
80°-90°	11.7	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°	703.0	44.9
0°-40°	1035.9	66.2
0°-60°	1442.3	92.2
0°-90°	1565.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1565.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1080	1080	1080	1080	1080	
5°	1045	1059	1059	1067	1076	97
15°	863	889	924	982	1018	241
25°	629	664	728	827	900	288
35°	380	420	509	644	748	236
45°	140	181	293	452	580	118
55°	71	75	104	273	405	63
65°	33	36	57	110	208	34
75°	16	22	26	28	34	18
85°	7	12	14	13	9	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1080.4	1080.4	1080.4	1080.4	1080.4
2.5°	1071.2	1081.6	1074.7	1074.7	1074.7
5°	1044.8	1058.6	1058.6	1066.7	1075.8
7.5°	1008.1	1024.2	1034.5	1054.0	1067.8
10°	964.5	984.0	1003.5	1035.7	1054.0
12.5°	915.1	938.1	965.6	1010.4	1038.0
15°	863.4	888.7	924.3	981.7	1018.4
17.5°	807.2	837.0	879.5	948.4	993.2
20°	748.6	778.5	831.3	909.4	964.5
22.5°	690.1	722.2	779.6	868.0	933.5
25°	629.2	663.6	727.9	826.7	900.2
27.5°	567.2	602.8	674.0	784.2	863.4
30°	505.2	541.9	618.9	738.3	826.7
32.5°	443.2	482.2	563.8	691.2	787.6
35°	380.0	420.2	508.6	644.1	747.5
37.5°	319.2	359.4	453.5	595.9	707.3
40°	256.0	299.7	399.6	547.7	667.1
42.5°	194.0	238.8	345.6	499.5	623.5
45°	140.1	181.4	292.8	452.4	579.8
47.5°	107.9	130.9	238.8	404.2	537.3
50°	94.2	101.0	189.4	359.4	496.0
52.5°	81.5	86.1	142.4	318.0	451.2
55°	71.2	74.6	104.5	273.3	405.3
57.5°	59.7	64.3	82.7	229.6	358.2
60°	50.5	52.8	73.5	189.4	311.2
62.5°	41.3	43.6	65.4	149.3	258.3
65°	33.3	35.6	57.4	110.2	207.8
67.5°	27.6	28.7	48.2	78.1	159.6
70°	23.0	24.1	40.2	54.0	112.5
72.5°	19.5	23.0	32.1	39.0	71.2
75°	16.1	21.8	26.4	27.6	34.4
77.5°	13.8	20.7	21.8	21.8	19.5
80°	11.5	17.2	18.4	17.2	16.1
82.5°	9.2	13.8	14.9	14.9	12.6
85°	6.9	11.5	13.8	12.6	9.2
87.5°	4.6	10.3	11.5	10.3	6.9
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	6.89	8.24	7.26	8.56	8.87	16.50	17.85	16.87	18.17	18.48
	3H	7.75	8.95	8.13	9.28	9.64	17.34	18.54	17.72	18.87	19.24
	4H	8.17	9.29	8.57	9.64	10.02	17.42	18.54	17.82	18.89	19.27
	6H	8.60	9.63	9.02	10.00	10.39	17.40	18.43	17.81	18.80	19.19
	8H	8.78	9.76	9.21	10.15	10.55	17.39	18.36	17.82	18.75	19.16
	12H	8.94	9.88	9.38	10.26	10.69	17.38	18.31	17.81	18.69	19.12
4H	2H	7.85	8.97	8.25	9.32	9.70	16.37	17.48	16.77	17.83	18.22
	3H	8.91	9.82	9.32	10.23	10.63	17.28	18.19	17.69	18.60	19.00
	4H	9.47	10.29	9.90	10.71	11.15	17.38	18.20	17.81	18.62	19.06
	6H	10.07	10.78	10.53	11.22	11.69	17.40	18.11	17.87	18.56	19.02
	8H	10.31	10.97	10.78	11.42	11.89	17.41	18.07	17.87	18.51	18.98
	12H	10.53	11.12	11.02	11.60	12.08	17.42	18.00	17.90	18.49	18.96
8H	4H	9.94	10.60	10.41	11.05	11.52	17.30	17.96	17.77	18.41	18.88
	6H	10.75	11.29	11.25	11.79	12.27	17.36	17.90	17.86	18.39	18.87
	8H	11.13	11.62	11.65	12.13	12.63	17.39	17.88	17.91	18.39	18.88
	12H	11.53	11.96	12.04	12.45	13.02	17.45	17.88	17.97	18.38	18.95
12H	4H	9.99	10.58	10.48	11.06	11.53	17.27	17.85	17.75	18.34	18.81
	6H	10.88	11.36	11.40	11.88	12.37	17.32	17.81	17.84	18.32	18.82
	8H	11.37	11.79	11.88	12.29	12.86	17.39	17.82	17.91	18.32	18.89