

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: P1062240

Luminaire Tested: S125RDR-H850D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062240  
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-H850D950-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: -

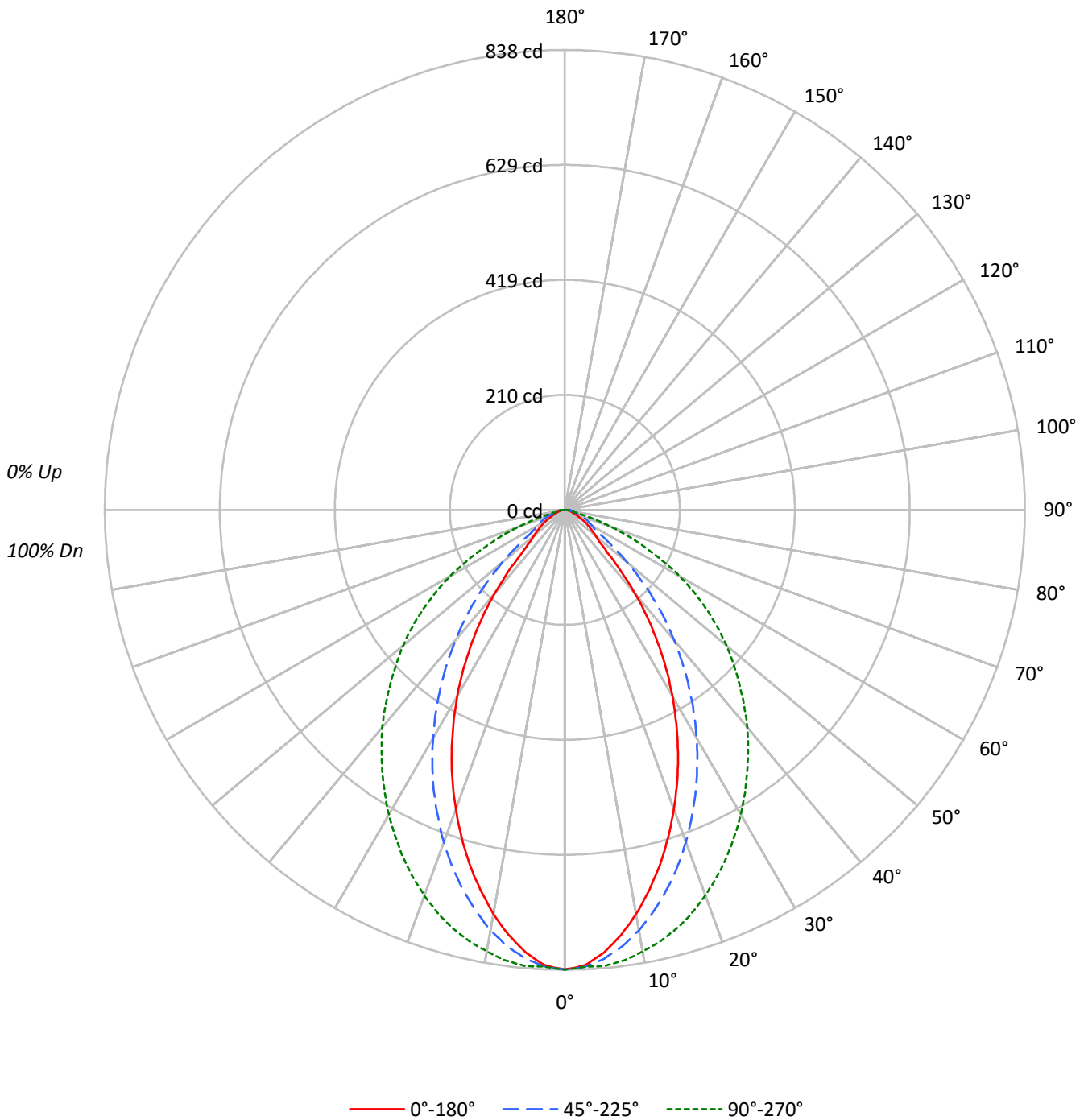
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1213.5 lumens  
Efficiency: N/A  
Efficacy: 51.6 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): 23.5  
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°	5768	5768	5768
5°	5600	5674	5766
10°	5229	5440	5714
15°	4772	5109	5629
20°	4253	4723	5480
25°	3707	4289	5303
30°	3114	3815	5096
35°	2477	3315	4872
40°	1784	2784	4650
45°	1057	2210	4378
50°	782	1574	4120
55°	663	972	3773
60°	540	785	3323
65°	420	725	2625
70°	358	628	1757
75°	333	545	710
80°	353	563	496
85°	419	845	561

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4378 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.2	6.4
10°-20°	202.8	16.7
20°-30°	265.1	21.8
30°-40°	258.2	21.3
40°-50°	193.7	16.0
50°-60°	121.4	10.0
60°-70°	63.2	5.2
70°-80°	22.9	1.9
80°-90°	9.1	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°	545.1	44.9
0°-40°	803.3	66.2
0°-60°	1118.4	92.2
0°-90°	1213.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1213.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	838	838	838	838	838	
5°	810	821	821	827	834	75
15°	670	689	717	761	790	187
25°	488	515	564	641	698	223
35°	295	326	394	500	580	183
45°	109	141	227	351	450	91
55°	55	58	81	212	314	49
65°	26	28	44	86	161	27
75°	12	17	20	21	27	14
85°	5	9	11	10	7	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	837.8	837.8	837.8	837.8	837.8
2.5°	830.7	838.7	833.3	833.3	833.3
5°	810.2	820.9	820.9	827.1	834.2
7.5°	781.7	794.2	802.2	817.3	828.0
10°	747.9	763.0	778.1	803.1	817.3
12.5°	709.6	727.4	748.8	783.5	804.8
15°	669.5	689.1	716.7	761.2	789.7
17.5°	625.9	649.0	682.0	735.4	770.1
20°	580.5	603.6	644.6	705.1	747.9
22.5°	535.1	560.0	604.5	673.1	723.8
25°	487.9	514.6	564.5	641.0	698.0
27.5°	439.8	467.4	522.6	608.1	669.5
30°	391.7	420.2	479.9	572.5	641.0
32.5°	343.7	373.9	437.1	536.0	610.8
35°	294.7	325.9	394.4	499.5	579.6
37.5°	247.5	278.7	351.7	462.1	548.4
40°	198.5	232.4	309.8	424.7	517.3
42.5°	150.5	185.2	268.0	387.3	483.4
45°	108.6	140.7	227.0	350.8	449.6
47.5°	83.7	101.5	185.2	313.4	416.7
50°	73.0	78.3	146.9	278.7	384.6
52.5°	63.2	66.8	110.4	246.6	349.9
55°	55.2	57.9	81.0	211.9	314.3
57.5°	46.3	49.9	64.1	178.1	277.8
60°	39.2	41.0	57.0	146.9	241.3
62.5°	32.1	33.8	50.7	115.7	200.3
65°	25.8	27.6	44.5	85.5	161.1
67.5°	21.4	22.3	37.4	60.5	123.8
70°	17.8	18.7	31.2	41.8	87.3
72.5°	15.1	17.8	24.9	30.3	55.2
75°	12.5	16.9	20.5	21.4	26.7
77.5°	10.7	16.0	16.9	16.9	15.1
80°	8.9	13.4	14.2	13.4	12.5
82.5°	7.1	10.7	11.6	11.6	9.8
85°	5.3	8.9	10.7	9.8	7.1
87.5°	3.6	8.0	8.9	8.0	5.3
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	6.01	7.36	6.38	7.68	7.99	15.62	16.97	15.98	17.28	17.60
	3H	6.87	8.07	7.25	8.40	8.76	16.46	17.66	16.84	17.99	18.35
	4H	7.29	8.41	7.69	8.76	9.14	16.54	17.65	16.94	18.01	18.39
	6H	7.72	8.75	8.14	9.12	9.51	16.52	17.55	16.93	17.92	18.31
	8H	7.90	8.87	8.33	9.26	9.67	16.51	17.48	16.94	17.87	18.28
	12H	8.06	8.99	8.49	9.37	9.80	16.49	17.43	16.93	17.81	18.24
4H	2H	6.97	8.09	7.37	8.44	8.82	15.48	16.60	15.89	16.95	17.34
	3H	8.02	8.94	8.44	9.34	9.75	16.39	17.31	16.81	17.71	18.12
	4H	8.59	9.41	9.02	9.82	10.27	16.50	17.31	16.93	17.73	18.18
	6H	9.19	9.89	9.65	10.34	10.81	16.52	17.23	16.98	17.68	18.14
	8H	9.42	10.09	9.89	10.53	11.00	16.52	17.18	16.99	17.63	18.10
	12H	9.65	10.23	10.13	10.72	11.19	16.54	17.12	17.02	17.60	18.08
8H	4H	9.06	9.72	9.53	10.16	10.63	16.42	17.08	16.89	17.53	18.00
	6H	9.87	10.41	10.37	10.91	11.39	16.47	17.02	16.98	17.51	17.99
	8H	10.25	10.74	10.77	11.25	11.74	16.51	16.99	17.03	17.51	18.00
	12H	10.64	11.07	11.16	11.56	12.14	16.57	17.00	17.09	17.50	18.07
12H	4H	9.11	9.69	9.59	10.18	10.65	16.39	16.97	16.87	17.45	17.93
	6H	9.99	10.48	10.51	10.99	11.49	16.44	16.93	16.96	17.44	17.93
	8H	10.48	10.91	11.00	11.41	11.98	16.51	16.94	17.03	17.44	18.01