

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: P1061836

Luminaire Tested: S125RDRP-S850D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061836  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S850D950-X4F0-XX-UDD-WVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

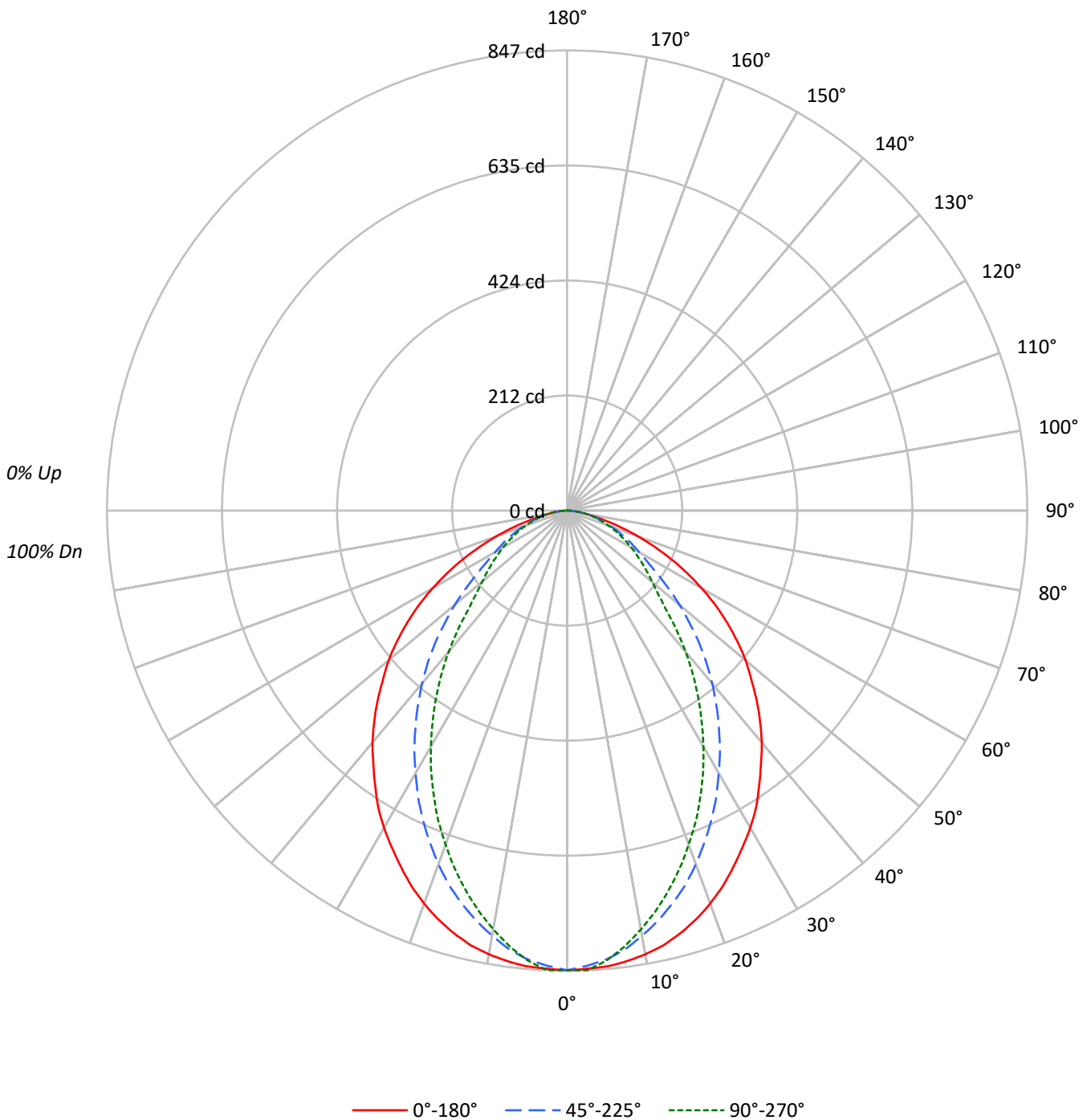
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1602.6 lumens  
Efficiency: N/A  
Efficacy: 62.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89					87				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77					75				
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67					65				
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59					57				
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52					50				
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47					45				
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42					40				
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38					36				
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35					33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32					30				

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

	0°	45°	90°
0°	5825	5825	5825
5°	5822	5733	5746
10°	5799	5555	5472
15°	5742	5336	5153
20°	5640	5075	4792
25°	5499	4773	4410
30°	5360	4433	3987
35°	5181	4092	3536
40°	5012	3732	3047
45°	4803	3336	2496
50°	4595	2893	2184
55°	4312	2415	2018
60°	3934	2112	1885
65°	3442	1931	1751
70°	2792	1737	1627
75°	2003	1588	1516
80°	1384	1419	1419
85°	1019	1232	1303

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4803 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.7	4.9
10°-20°	212.8	13.3
20°-30°	294.1	18.3
30°-40°	313.2	19.5
40°-50°	275.2	17.2
50°-60°	208.6	13.0
60°-70°	135.5	8.5
70°-80°	67.1	4.2
80°-90°	17.6	1.1
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°	585.5	36.5
0°-40°	898.7	56.1
0°-60°	1382.5	86.3
0°-90°	1602.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1602.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	846	846	846	846	846	
5°	842	840	830	832	831	80
15°	806	787	749	731	723	227
25°	724	684	628	596	580	333
35°	616	559	487	443	421	386
45°	493	424	343	281	256	380
55°	359	288	201	174	168	320
65°	211	157	118	109	108	209
75°	75	66	60	58	57	84
85°	13	15	16	16	16	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	846.0	846.0	846.0	846.0	846.0
2.5°	844.2	846.0	838.7	845.1	846.9
5°	842.3	840.5	829.5	832.2	831.3
7.5°	836.8	833.2	814.8	812.9	809.3
10°	829.5	820.3	794.6	788.1	782.6
12.5°	819.4	804.7	773.4	760.6	754.2
15°	805.6	787.2	748.6	731.2	722.9
17.5°	789.1	763.3	722.9	699.0	689.9
20°	769.8	739.5	692.6	665.1	654.0
22.5°	748.6	712.8	660.5	631.1	619.1
25°	723.8	684.3	628.3	596.2	580.5
27.5°	699.0	655.0	594.3	558.5	542.0
30°	674.2	623.7	557.6	519.0	501.5
32.5°	647.6	591.6	523.6	481.3	461.1
35°	616.4	559.4	486.8	442.8	420.7
37.5°	586.1	525.4	451.0	401.4	380.3
40°	557.6	493.3	415.2	361.0	339.0
42.5°	525.4	459.3	379.4	322.4	297.6
45°	493.3	424.4	342.6	281.1	256.3
47.5°	459.3	391.3	304.1	243.4	226.9
50°	429.0	357.3	270.1	214.9	203.9
52.5°	394.1	324.3	235.2	192.9	185.6
55°	359.2	288.4	201.2	173.6	168.1
57.5°	323.3	256.3	174.5	157.1	151.6
60°	285.7	223.2	153.4	139.6	136.9
62.5°	248.0	189.2	135.0	124.9	121.3
65°	211.3	157.1	118.5	109.3	107.5
67.5°	173.6	127.7	102.0	95.5	94.6
70°	138.7	103.8	86.3	82.7	80.8
72.5°	106.6	82.7	72.6	69.8	68.9
75°	75.3	66.1	59.7	57.9	57.0
77.5°	50.5	50.5	47.8	45.9	46.8
80°	34.9	36.7	35.8	35.8	35.8
82.5°	23.0	24.8	25.7	25.7	25.7
85°	12.9	14.7	15.6	15.6	16.5
87.5°	4.6	5.5	6.4	7.3	7.3
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	16.68	18.17	17.04	18.48	18.80	12.92	14.41	13.28	14.72	15.04
	3H	17.99	19.32	18.36	19.65	20.01	14.50	15.84	14.88	16.17	16.53
	4H	18.36	19.61	18.76	19.96	20.34	15.10	16.36	15.50	16.71	17.08
	6H	18.53	19.69	18.94	20.06	20.45	15.57	16.73	15.99	17.10	17.49
	8H	18.57	19.67	19.00	20.06	20.46	15.73	16.83	16.16	17.22	17.63
	12H	18.58	19.63	19.01	20.02	20.45	15.85	16.90	16.28	17.28	17.71
4H	2H	16.79	18.04	17.19	18.39	18.77	13.58	14.83	13.98	15.18	15.56
	3H	18.27	19.31	18.69	19.71	20.11	15.36	16.40	15.77	16.80	17.20
	4H	18.75	19.68	19.18	20.10	20.54	16.08	17.01	16.51	17.43	17.87
	6H	19.04	19.85	19.49	20.29	20.75	16.67	17.48	17.13	17.92	18.38
	8H	19.10	19.86	19.57	20.31	20.77	16.87	17.63	17.34	18.07	18.54
	12H	19.15	19.82	19.63	20.30	20.77	17.03	17.70	17.51	18.18	18.65
8H	4H	18.83	19.59	19.30	20.03	20.50	16.39	17.15	16.85	17.59	18.06
	6H	19.20	19.82	19.69	20.31	20.79	17.10	17.72	17.59	18.21	18.69
	8H	19.31	19.87	19.83	20.38	20.87	17.37	17.93	17.89	18.44	18.93
	12H	19.40	19.89	19.91	20.39	20.95	17.60	18.10	18.11	18.59	19.16
12H	4H	18.83	19.50	19.31	19.98	20.45	16.42	17.09	16.90	17.57	18.04
	6H	19.20	19.76	19.71	20.27	20.76	17.15	17.71	17.66	18.22	18.71
	8H	19.36	19.85	19.87	20.35	20.91	17.48	17.98	17.99	18.47	19.04