

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: P1061836

Luminaire Tested: S125RDR-S850D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
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: S125RDR-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: -

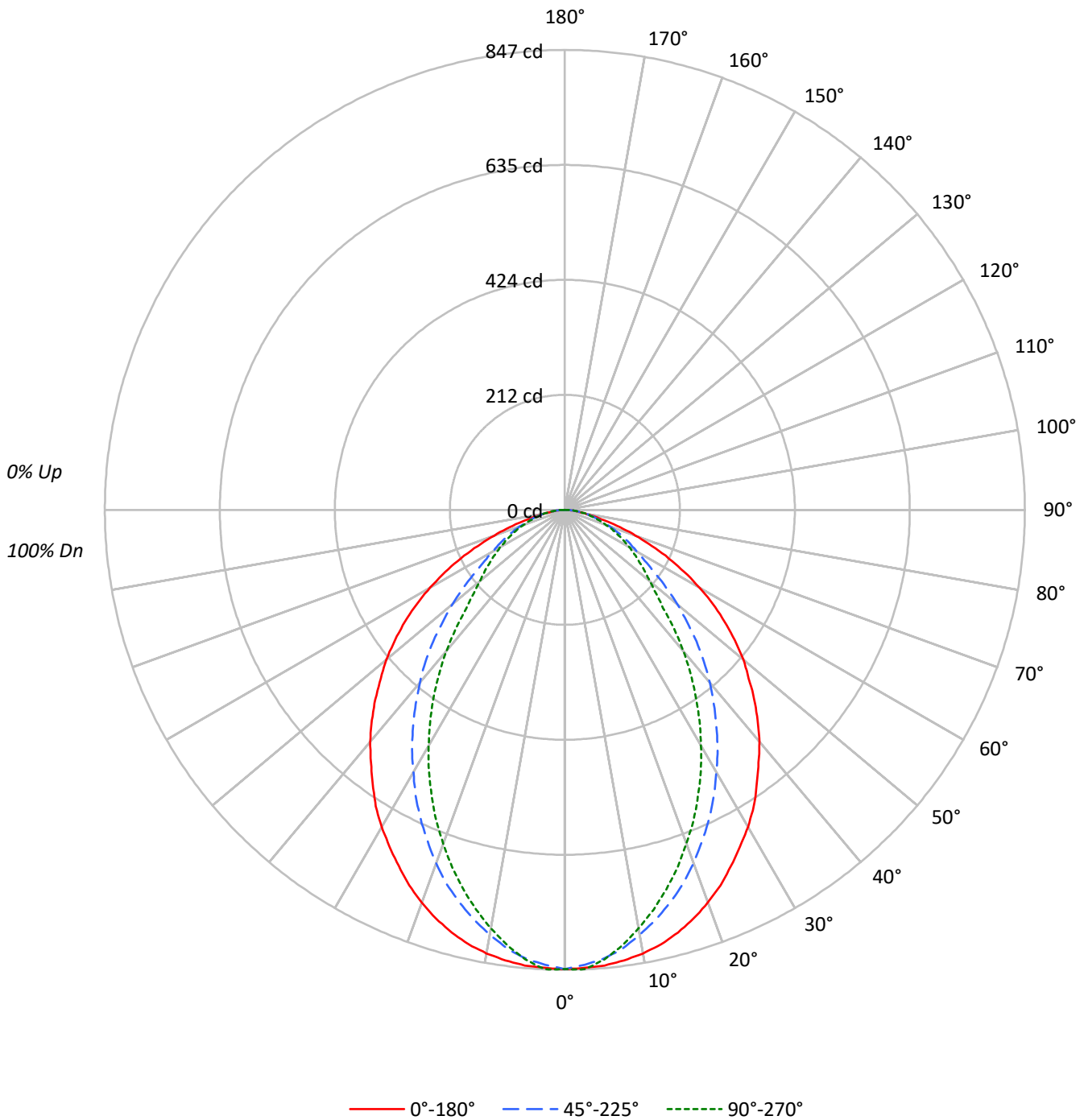
**Summary**

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 (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	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

(END OF REPORT)