

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: P1056492

Luminaire Tested: S125R3DRP-S850D950-X4F0-XX-UDD-F-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1056492  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DRP-S850D950-X4F0-XX-UDD-F-W  
Description: DEFINE 5, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

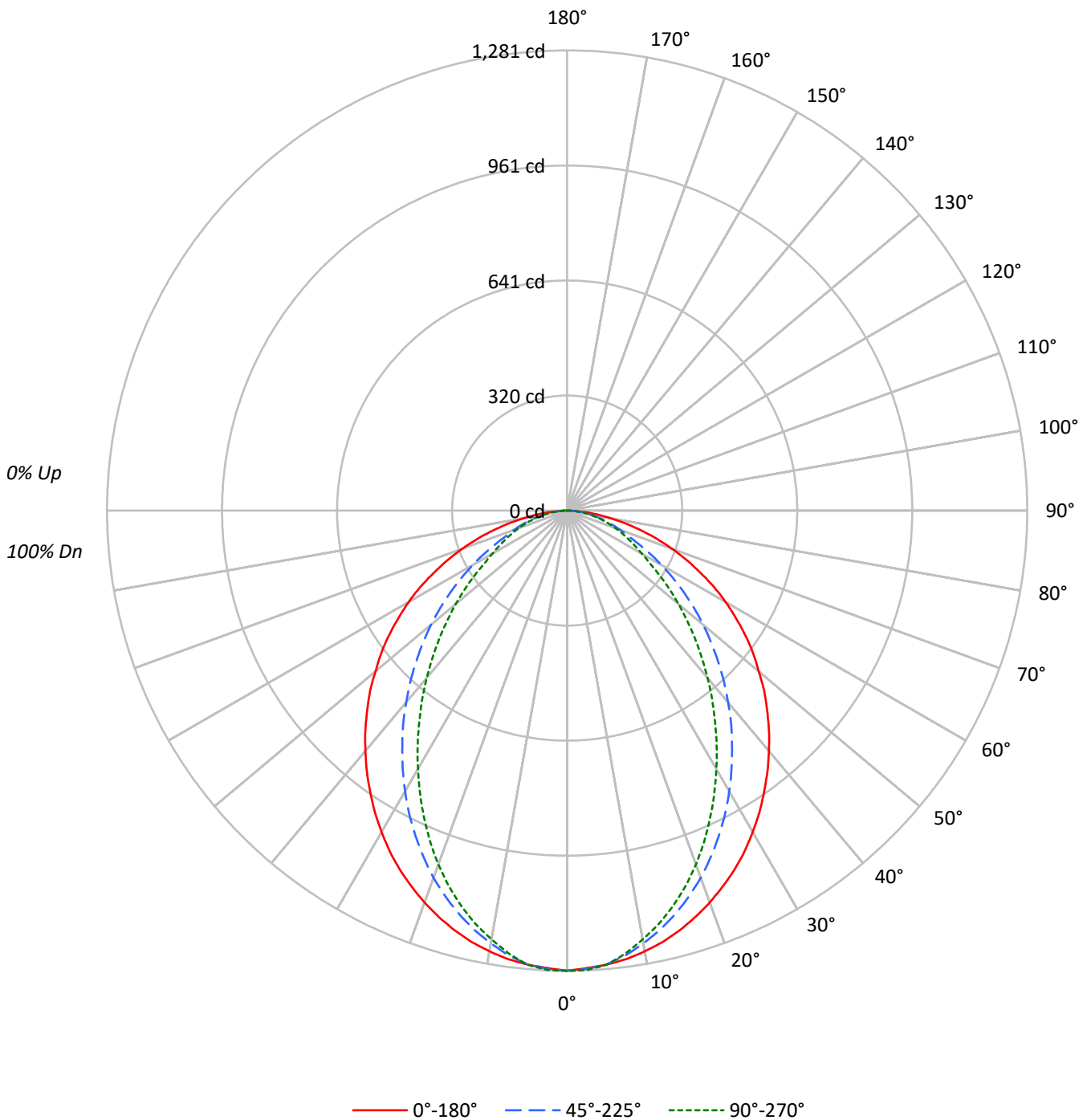
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2715.5 lumens  
Efficiency: N/A  
Efficacy: 102.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.01 / 1.17  
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 26.4  
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

TEST NUMBER: P1056492

CATALOG NUMBER: S125R3DRP-S850D950-X4F0-XX-UDD-F-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1056492

CATALOG NUMBER: S125R3DRP-S850D950-X4F0-XX-UDD-F-W

**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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28

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

	0°	45°	90°
0°	9057	9057	9057
5°	9004	8997	9004
10°	8944	8779	8697
15°	8853	8511	8337
20°	8734	8182	7887
25°	8602	7791	7352
30°	8434	7367	6783
35°	8249	6908	6191
40°	8065	6436	5608
45°	7869	5942	5027
50°	7659	5435	4449
55°	7466	4879	3869
60°	7202	4290	3399
65°	6847	3638	3160
70°	6428	3253	2958
75°	5810	2996	2789
80°	5048	2719	2601
85°	3950	2401	2401

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7869 cd/sqm



TEST NUMBER: P1056492

CATALOG NUMBER: S125R3DRP-S850D950-X4F0-XX-UDD-F-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.9	4.4
10°-20°	329.2	12.1
20°-30°	465.0	17.1
30°-40°	511.9	18.8
40°-50°	477.5	17.6
50°-60°	381.1	14.0
60°-70°	256.5	9.4
70°-80°	136.6	5.0
80°-90°	38.0	1.4
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°	914.0	33.7
0°-40°	1425.8	52.5
0°-60°	2284.4	84.1
0°-90°	2715.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2715.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1281	1281	1281	1281	1281	
5°	1269	1279	1268	1264	1269	120
15°	1210	1203	1163	1143	1139	341
25°	1103	1069	999	955	943	508
35°	956	900	800	737	717	598
45°	787	713	594	522	503	608
55°	606	514	396	333	314	541
65°	409	320	218	193	189	406
75°	213	141	110	103	102	227
85°	49	33	30	30	30	58
90°	0	0	0	0	0	



TEST NUMBER: P1056492

CATALOG NUMBER: S125R3DRP-S850D950-X4F0-XX-UDD-F-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1281.2	1281.2	1281.2	1281.2	1281.2
2.5°	1274.5	1285.0	1276.5	1278.4	1280.3
5°	1268.8	1279.3	1267.9	1264.1	1268.8
7.5°	1259.3	1267.9	1248.8	1240.2	1244.0
10°	1245.9	1251.6	1223.0	1211.6	1211.6
12.5°	1229.7	1229.7	1195.4	1179.1	1179.1
15°	1209.7	1203.0	1162.9	1142.9	1139.1
17.5°	1186.8	1174.4	1126.7	1100.9	1096.1
20°	1161.0	1141.0	1087.6	1054.2	1048.4
22.5°	1132.4	1106.6	1044.6	1003.6	996.9
25°	1102.8	1069.4	998.8	955.0	942.6
27.5°	1069.4	1029.4	952.1	902.5	887.2
30°	1033.2	987.4	902.5	847.2	830.9
32.5°	996.0	944.5	851.9	792.8	774.6
35°	955.9	899.6	800.4	737.4	717.4
37.5°	915.8	854.8	749.8	684.0	663.0
40°	873.9	807.1	697.4	629.6	607.7
42.5°	831.9	760.3	645.9	577.2	554.3
45°	787.1	712.6	594.3	521.8	502.8
47.5°	744.1	664.0	543.8	473.2	452.2
50°	696.4	613.4	494.2	423.6	404.5
52.5°	652.5	563.8	444.6	378.7	358.7
55°	605.8	514.2	395.9	332.9	313.9
57.5°	557.1	464.6	349.2	290.0	271.9
60°	509.4	415.0	303.4	249.0	240.4
62.5°	460.8	368.2	260.4	218.5	212.7
65°	409.3	319.6	217.5	192.7	188.9
67.5°	360.6	272.8	183.2	168.9	165.0
70°	311.0	226.1	157.4	145.0	143.1
72.5°	262.4	181.3	132.6	124.0	122.1
75°	212.7	141.2	109.7	103.0	102.1
77.5°	167.0	105.9	86.8	84.0	82.0
80°	124.0	79.2	66.8	64.9	63.9
82.5°	84.9	54.4	47.7	47.7	45.8
85°	48.7	33.4	29.6	30.5	29.6
87.5°	18.1	14.3	13.4	14.3	14.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1056492  
 CATALOG NUMBER: S125R3DRP-S850D950-X4F0-XX-UDD-F-W

**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	18.94	20.48	19.31	20.80	21.11	15.33	16.87	15.69	17.18	17.49
	3H	20.73	22.11	21.11	22.44	22.80	16.80	18.19	17.18	18.51	18.88
	4H	21.38	22.68	21.78	23.03	23.41	17.39	18.69	17.79	19.04	19.42
	6H	21.86	23.06	22.27	23.43	23.82	17.86	19.06	18.27	19.42	19.81
	8H	22.01	23.16	22.44	23.55	23.95	18.02	19.16	18.44	19.55	19.95
	12H	22.11	23.20	22.54	23.59	24.02	18.13	19.23	18.56	19.61	20.04
4H	2H	19.08	20.38	19.48	20.73	21.10	16.00	17.30	16.40	17.65	18.03
	3H	21.05	22.13	21.46	22.53	22.93	17.68	18.76	18.09	19.16	19.56
	4H	21.79	22.77	22.23	23.18	23.62	18.38	19.36	18.82	19.77	20.21
	6H	22.39	23.24	22.85	23.68	24.14	18.97	19.82	19.43	20.26	20.72
	8H	22.60	23.39	23.06	23.83	24.30	19.18	19.97	19.64	20.41	20.88
	12H	22.74	23.45	23.22	23.93	24.40	19.34	20.05	19.82	20.53	21.00
8H	4H	21.86	22.65	22.32	23.09	23.56	18.75	19.54	19.21	19.98	20.45
	6H	22.52	23.17	23.01	23.66	24.14	19.45	20.11	19.95	20.60	21.07
	8H	22.77	23.36	23.28	23.87	24.36	19.73	20.32	20.25	20.83	21.32
	12H	22.98	23.50	23.49	23.99	24.56	19.98	20.50	20.48	20.99	21.55
12H	4H	21.85	22.56	22.33	23.04	23.51	18.80	19.50	19.28	19.98	20.45
	6H	22.51	23.10	23.02	23.61	24.10	19.52	20.11	20.03	20.62	21.11
	8H	22.81	23.33	23.31	23.82	24.38	19.86	20.39	20.37	20.88	21.44