

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: P1056485

Luminaire Tested: S125R3DR-S850D935-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056485  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-S850D935-X4F0-XX-UDD-FLL-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

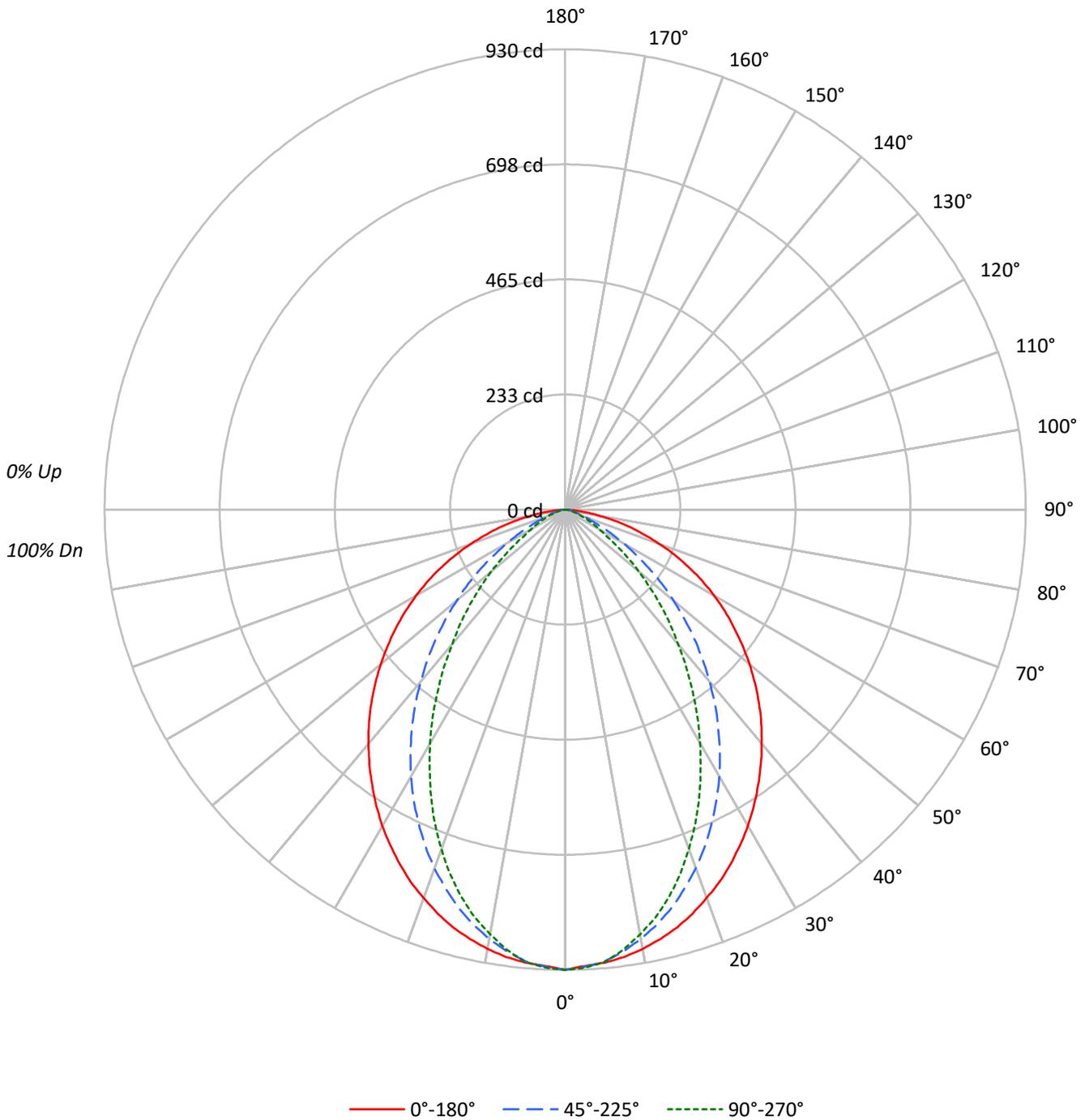
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1680.7 lumens  
Efficiency: N/A  
Efficacy: 63.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
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 (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

TEST NUMBER: P1056485

CATALOG NUMBER: S125R3DR-S850D935-X4F0-XX-UDD-FLL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1056485

CATALOG NUMBER: S125R3DR-S850D935-X4F0-XX-UDD-FLL-S

**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	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	102	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77				77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67				67
4	88	77	70	64	86	76	69	63	74	67	62	71	66	62	69	65	61	59				59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				52
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49	47				47
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	54	48	44	42				42
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	36	35				35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32				32

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

	0°	45°	90°
0°	6574	6574	6574
5°	6519	6501	6513
10°	6471	6323	6255
15°	6396	6094	5930
20°	6283	5804	5493
25°	6165	5460	4997
30°	6023	5081	4449
35°	5862	4652	3871
40°	5697	4180	3273
45°	5535	3684	2711
50°	5341	3134	2130
55°	5136	2546	1549
60°	4906	1899	1108
65°	4608	1253	865
70°	4165	872	606
75°	3622	565	470
80°	2838	419	387
85°	1468	349	276

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5535 cd/sqm



TEST NUMBER: P1056485

CATALOG NUMBER: S125R3DR-S850D935-X4F0-XX-UDD-FLL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.6	5.2
10°-20°	235.5	14.0
20°-30°	325.6	19.4
30°-40°	345.0	20.5
40°-50°	301.1	17.9
50°-60°	214.1	12.7
60°-70°	119.1	7.1
70°-80°	45.8	2.7
80°-90°	7.9	0.5
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°	647.7	38.5
0°-40°	992.6	59.1
0°-60°	1507.9	89.7
0°-90°	1680.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1680.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	919	926	916	914	918	87
15°	874	866	833	814	810	246
25°	790	764	700	657	641	364
35°	679	633	539	474	449	425
45°	554	487	368	294	271	427
55°	417	334	207	143	126	373
65°	276	181	75	55	52	272
75°	133	52	21	17	17	141
85°	18	5	4	3	3	27
90°	0	0	0	0	0	



TEST NUMBER: P1056485

CATALOG NUMBER: S125R3DR-S850D935-X4F0-XX-UDD-FLL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	929.9	929.9	929.9	929.9	929.9
2.5°	923.0	932.5	924.7	925.6	926.4
5°	918.7	925.6	916.1	913.5	917.8
7.5°	911.8	917.0	900.6	894.6	897.2
10°	901.5	903.2	880.8	872.2	871.3
12.5°	888.5	886.0	858.4	844.6	843.8
15°	873.9	866.2	832.6	814.5	810.2
17.5°	855.8	843.8	802.4	779.2	772.3
20°	835.2	818.8	771.5	741.3	730.1
22.5°	814.5	792.1	737.0	699.1	687.1
25°	790.4	763.7	700.0	656.9	640.6
27.5°	764.6	732.7	662.1	612.2	592.4
30°	737.9	700.9	622.5	566.5	545.0
32.5°	709.5	667.3	581.2	520.0	497.7
35°	679.3	632.8	539.0	473.5	448.6
37.5°	649.2	597.5	497.7	427.9	402.1
40°	617.3	561.4	452.9	381.4	354.7
42.5°	586.3	524.3	410.7	337.5	313.4
45°	553.6	487.3	368.5	294.5	271.2
47.5°	520.0	448.6	326.3	254.0	230.7
50°	485.6	410.7	285.0	214.4	193.7
52.5°	451.2	372.8	246.2	176.5	158.4
55°	416.7	334.1	206.6	142.9	125.7
57.5°	382.3	296.2	169.6	111.9	96.4
60°	347.0	257.4	134.3	82.7	78.4
62.5°	311.7	219.6	104.2	68.0	64.6
65°	275.5	180.8	74.9	55.1	51.7
67.5°	239.4	145.5	54.2	42.2	39.6
70°	201.5	111.1	42.2	31.9	29.3
72.5°	165.3	80.1	30.1	23.2	22.4
75°	132.6	51.7	20.7	17.2	17.2
77.5°	99.9	31.0	14.6	12.9	12.9
80°	69.7	18.1	10.3	9.5	9.5
82.5°	42.2	9.5	6.9	6.0	6.0
85°	18.1	5.2	4.3	3.4	3.4
87.5°	3.4	1.7	1.7	1.7	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)