

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: P1061795

Luminaire Tested: S125RDR-S850D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061795
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D927-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

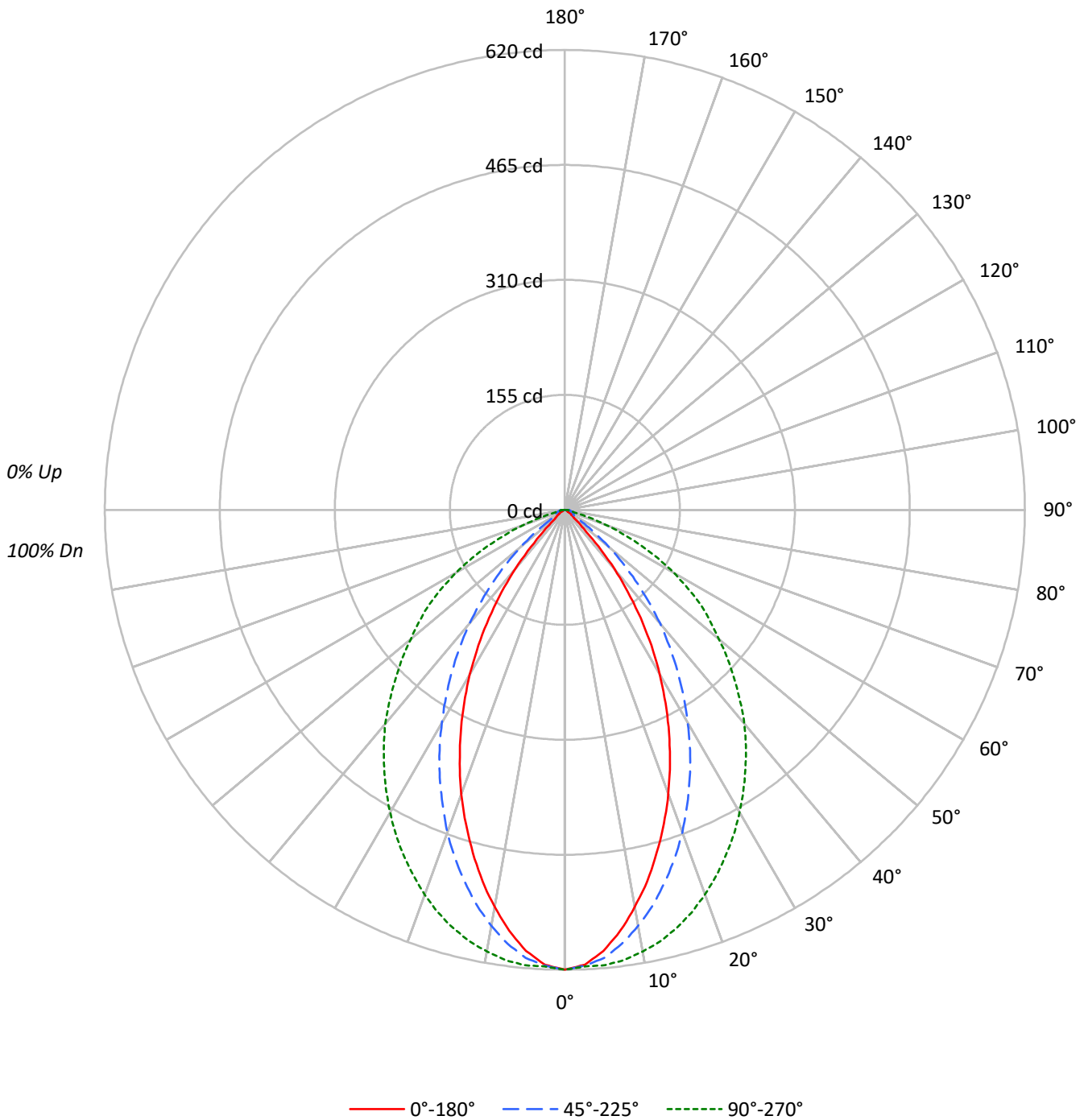
Lumens per Lamp: N/A
Luminaire Lumens: 797.3 lumens
Efficiency: N/A
Efficacy: 30.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54				
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49				
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45				
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4268	4268	4268
5°	4126	4190	4258
10°	3801	3982	4227
15°	3412	3706	4158
20°	2987	3390	4045
25°	2523	3027	3903
30°	2034	2634	3745
35°	1495	2221	3568
40°	933	1791	3383
45°	350	1309	3144
50°	164	817	2903
55°	119	339	2685
60°	84	179	2323
65°	51	212	1841
70°	46	246	1168
75°	61	245	364
80°	91	301	274
85°	182	482	363

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3144 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.8	7.1
10°-20°	147.2	18.5
20°-30°	187.5	23.5
30°-40°	174.5	21.9
40°-50°	119.6	15.0
50°-60°	65.8	8.3
60°-70°	31.2	3.9
70°-80°	9.8	1.2
80°-90°	5.0	0.6
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°	391.5	49.1
0°-40°	566.0	71.0
0°-60°	751.4	94.2
0°-90°	797.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	797.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	597	605	606	611	616	55
15°	479	494	520	559	583	133
25°	332	353	398	463	514	152
35°	178	203	264	351	424	110
45°	36	60	134	238	323	34
55°	10	12	28	133	224	9
65°	3	4	13	49	113	4
75°	2	4	9	10	14	2
85°	2	5	6	5	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	619.9	619.9	619.9	619.9	619.9
2.5°	613.8	619.9	615.3	615.3	616.1
5°	597.0	604.6	606.2	610.8	616.1
7.5°	572.6	582.5	590.1	603.1	612.3
10°	543.6	555.8	569.5	590.9	604.6
12.5°	513.0	526.0	546.6	576.4	595.5
15°	478.7	493.9	519.9	558.8	583.3
17.5°	443.6	460.4	492.4	538.2	568.8
20°	407.7	425.2	462.6	513.8	552.0
22.5°	370.3	389.4	430.6	488.6	533.6
25°	332.1	352.7	398.5	462.6	513.8
27.5°	293.9	315.3	365.7	435.9	493.2
30°	255.8	277.9	331.3	408.4	471.0
32.5°	216.8	241.2	297.7	381.0	448.1
35°	177.9	203.1	264.2	351.2	424.5
37.5°	139.7	165.7	231.3	322.9	400.8
40°	103.8	129.8	199.3	294.7	376.4
42.5°	67.2	94.7	165.7	265.7	349.7
45°	35.9	60.3	134.4	238.2	322.9
47.5°	19.1	32.1	104.6	210.7	297.7
50°	15.3	17.6	76.3	183.2	271.0
52.5°	12.2	13.7	48.9	155.0	247.4
55°	9.9	11.5	28.2	132.8	223.7
57.5°	7.6	9.2	16.0	110.7	196.2
60°	6.1	6.9	13.0	88.6	168.7
62.5°	3.8	5.3	13.0	68.7	141.2
65°	3.1	3.8	13.0	48.9	113.0
67.5°	3.1	3.1	13.0	32.1	84.7
70°	2.3	2.3	12.2	20.6	58.0
72.5°	2.3	2.3	10.7	13.7	33.6
75°	2.3	3.8	9.2	9.9	13.7
77.5°	2.3	6.1	8.4	8.4	7.6
80°	2.3	6.1	7.6	6.9	6.9
82.5°	2.3	6.1	6.1	6.1	5.3
85°	2.3	5.3	6.1	5.3	4.6
87.5°	2.3	5.3	5.3	5.3	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)