

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: P1061799

Luminaire Tested: S125RDR-S850D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061799
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D927-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

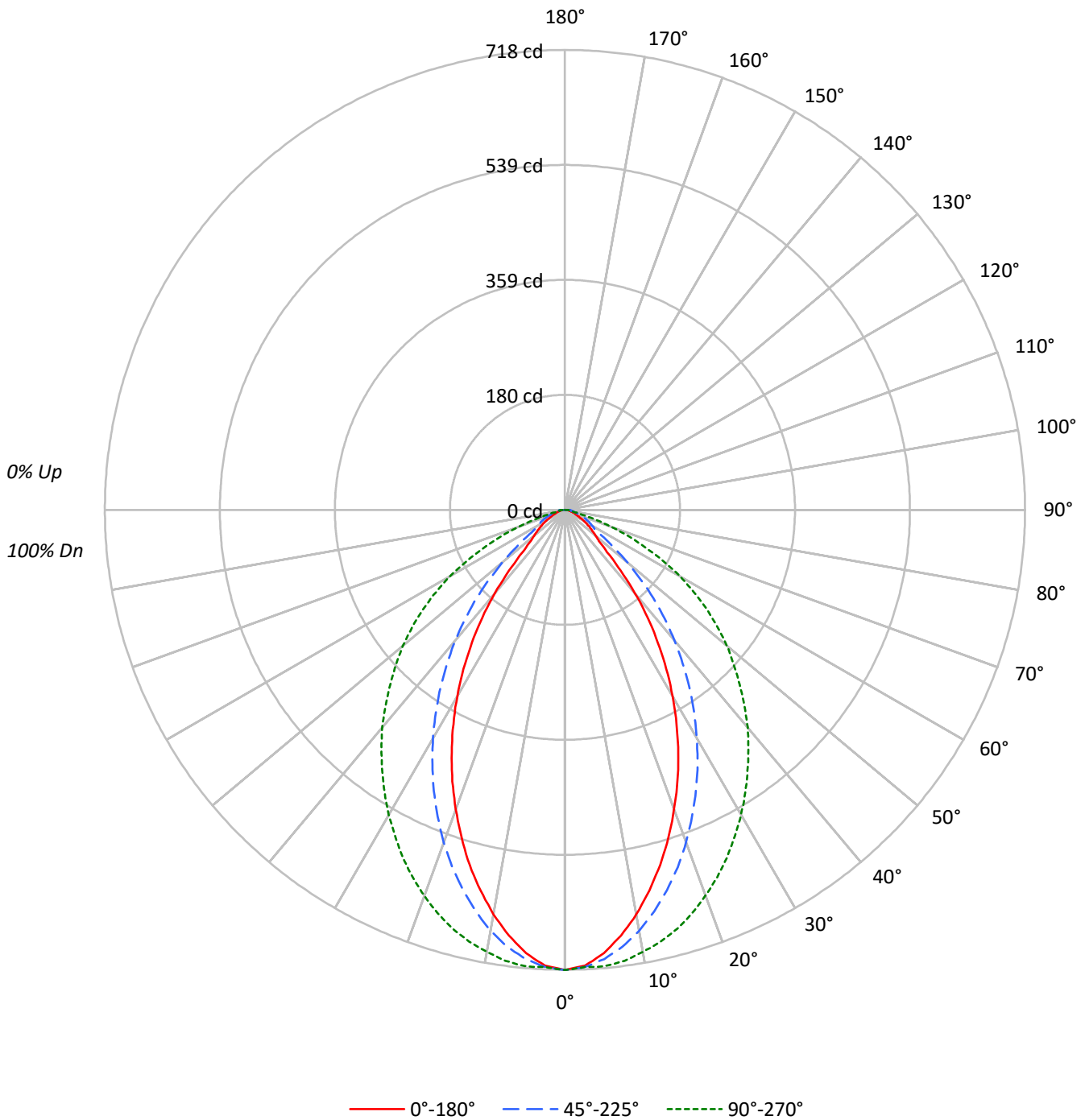
Lumens per Lamp: N/A
Luminaire Lumens: 1040.6 lumens
Efficiency: N/A
Efficacy: 40.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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				100
1	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56				56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4946	4946	4946
5°	4801	4865	4944
10°	4484	4665	4900
15°	4092	4381	4827
20°	3647	4050	4699
25°	3179	3677	4547
30°	2671	3272	4370
35°	2124	2843	4177
40°	1530	2388	3987
45°	907	1896	3754
50°	671	1350	3533
55°	568	834	3235
60°	463	673	2849
65°	360	622	2252
70°	308	538	1506
75°	285	468	609
80°	301	484	424
85°	363	727	482

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3754 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.2	6.4
10°-20°	173.9	16.7
20°-30°	227.3	21.8
30°-40°	221.4	21.3
40°-50°	166.1	16.0
50°-60°	104.1	10.0
60°-70°	54.2	5.2
70°-80°	19.6	1.9
80°-90°	7.8	0.7
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°	467.4	44.9
0°-40°	688.8	66.2
0°-60°	959.0	92.2
0°-90°	1040.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1040.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	695	704	704	709	715	65
15°	574	591	615	653	677	160
25°	418	441	484	550	598	191
35°	253	279	338	428	497	157
45°	93	121	195	301	386	78
55°	47	50	70	182	270	42
65°	22	24	38	73	138	23
75°	11	14	18	18	23	12
85°	5	8	9	8	6	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	718.4	718.4	718.4	718.4	718.4
2.5°	712.3	719.2	714.6	714.6	714.6
5°	694.7	703.9	703.9	709.2	715.3
7.5°	670.3	681.0	687.9	700.8	710.0
10°	641.3	654.3	667.2	688.6	700.8
12.5°	608.5	623.7	642.1	671.8	690.2
15°	574.1	590.9	614.6	652.7	677.2
17.5°	536.7	556.5	584.8	630.6	660.4
20°	497.8	517.6	552.7	604.6	641.3
22.5°	458.8	480.2	518.4	577.2	620.7
25°	418.4	441.3	484.0	549.7	598.5
27.5°	377.1	400.8	448.1	521.4	574.1
30°	335.9	360.3	411.5	490.9	549.7
32.5°	294.7	320.6	374.9	459.6	523.7
35°	252.7	279.4	338.2	428.3	497.0
37.5°	212.2	239.0	301.6	396.2	470.3
40°	170.2	199.3	265.7	364.2	443.6
42.5°	129.0	158.8	229.8	332.1	414.5
45°	93.1	120.6	194.7	300.8	385.5
47.5°	71.8	87.0	158.8	268.7	357.3
50°	62.6	67.2	126.0	239.0	329.8
52.5°	54.2	57.3	94.7	211.5	300.0
55°	47.3	49.6	69.5	181.7	269.5
57.5°	39.7	42.8	55.0	152.7	238.2
60°	33.6	35.1	48.9	126.0	206.9
62.5°	27.5	29.0	43.5	99.2	171.8
65°	22.1	23.7	38.2	73.3	138.2
67.5°	18.3	19.1	32.1	51.9	106.1
70°	15.3	16.0	26.7	35.9	74.8
72.5°	13.0	15.3	21.4	26.0	47.3
75°	10.7	14.5	17.6	18.3	22.9
77.5°	9.2	13.7	14.5	14.5	13.0
80°	7.6	11.5	12.2	11.5	10.7
82.5°	6.1	9.2	9.9	9.9	8.4
85°	4.6	7.6	9.2	8.4	6.1
87.5°	3.1	6.9	7.6	6.9	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)