

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: P1061790

Luminaire Tested: S125RDR-S850D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061790
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-S850D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

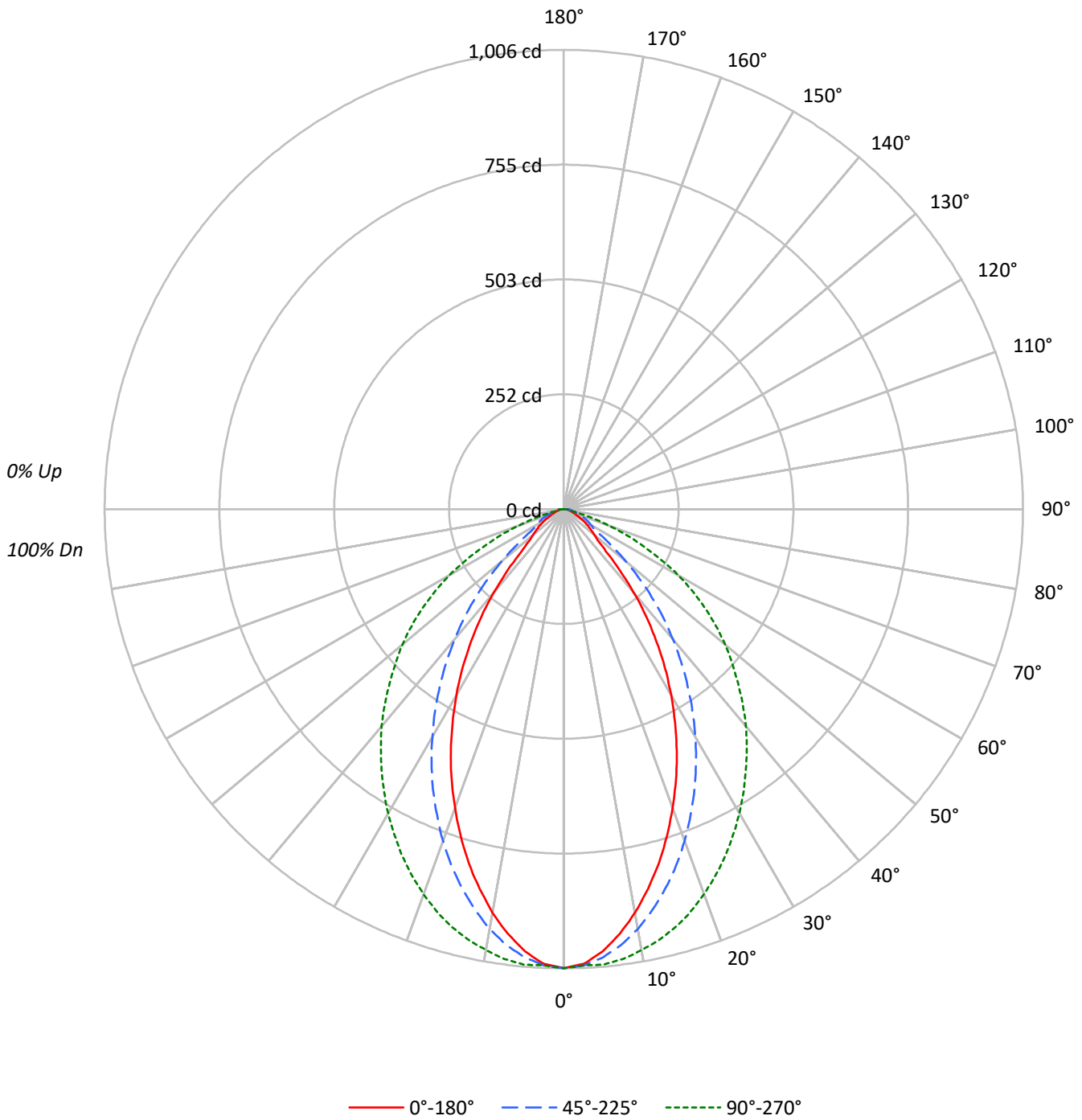
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1456.8 lumens
Efficiency: N/A
Efficacy: 56.5 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									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	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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89																												
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79																												
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																												
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62																												
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56																												
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51																												
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46																												
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42																												
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39																												
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6924	6924	6924
5°	6722	6811	6921
10°	6277	6531	6859
15°	5729	6133	6757
20°	5106	5670	6578
25°	4450	5148	6366
30°	3739	4580	6118
35°	2974	3980	5848
40°	2142	3343	5582
45°	1270	2653	5255
50°	938	1888	4946
55°	796	1168	4529
60°	647	942	3988
65°	505	870	3151
70°	431	753	2108
75°	399	654	854
80°	424	678	595
85°	506	1011	679

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5255 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.7	6.4
10°-20°	243.4	16.7
20°-30°	318.2	21.8
30°-40°	310.0	21.3
40°-50°	232.5	16.0
50°-60°	145.8	10.0
60°-70°	75.9	5.2
70°-80°	27.5	1.9
80°-90°	10.9	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°	654.3	44.9
0°-40°	964.3	66.2
0°-60°	1342.6	92.2
0°-90°	1456.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1456.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	973	985	985	993	1001	90
15°	804	827	860	914	948	224
25°	586	618	678	770	838	268
35°	354	391	474	600	696	220
45°	130	169	272	421	540	110
55°	66	70	97	254	377	59
65°	31	33	53	103	193	32
75°	15	20	25	26	32	16
85°	6	11	13	12	9	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1005.7	1005.7	1005.7	1005.7	1005.7
2.5°	997.2	1006.8	1000.4	1000.4	1000.4
5°	972.6	985.4	985.4	992.9	1001.4
7.5°	938.4	953.3	963.0	981.1	994.0
10°	897.8	915.9	934.1	964.0	981.1
12.5°	851.8	873.2	898.8	940.5	966.2
15°	803.7	827.2	860.4	913.8	948.0
17.5°	751.3	779.1	818.7	882.8	924.5
20°	696.8	724.6	773.8	846.5	897.8
22.5°	642.3	672.3	725.7	808.0	868.9
25°	585.7	617.7	677.6	769.5	837.9
27.5°	528.0	561.1	627.4	730.0	803.7
30°	470.3	504.5	576.1	687.2	769.5
32.5°	412.5	448.9	524.8	643.4	733.2
35°	353.8	391.2	473.5	599.6	695.8
37.5°	297.1	334.5	422.2	554.7	658.4
40°	238.3	278.9	371.9	509.8	621.0
42.5°	180.6	222.3	321.7	464.9	580.3
45°	130.4	168.9	272.5	421.1	539.7
47.5°	100.5	121.8	222.3	376.2	500.2
50°	87.6	94.1	176.3	334.5	461.7
52.5°	75.9	80.2	132.5	296.0	420.0
55°	66.3	69.5	97.3	254.4	377.3
57.5°	55.6	59.9	77.0	213.8	333.5
60°	47.0	49.2	68.4	176.3	289.6
62.5°	38.5	40.6	60.9	138.9	240.5
65°	31.0	33.1	53.4	102.6	193.4
67.5°	25.7	26.7	44.9	72.7	148.6
70°	21.4	22.4	37.4	50.2	104.7
72.5°	18.2	21.4	29.9	36.3	66.3
75°	15.0	20.3	24.6	25.7	32.1
77.5°	12.8	19.2	20.3	20.3	18.2
80°	10.7	16.0	17.1	16.0	15.0
82.5°	8.6	12.8	13.9	13.9	11.8
85°	6.4	10.7	12.8	11.8	8.6
87.5°	4.3	9.6	10.7	9.6	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)