

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: P1061822

Luminaire Tested: S125RDR-S850D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061822
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-S850D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

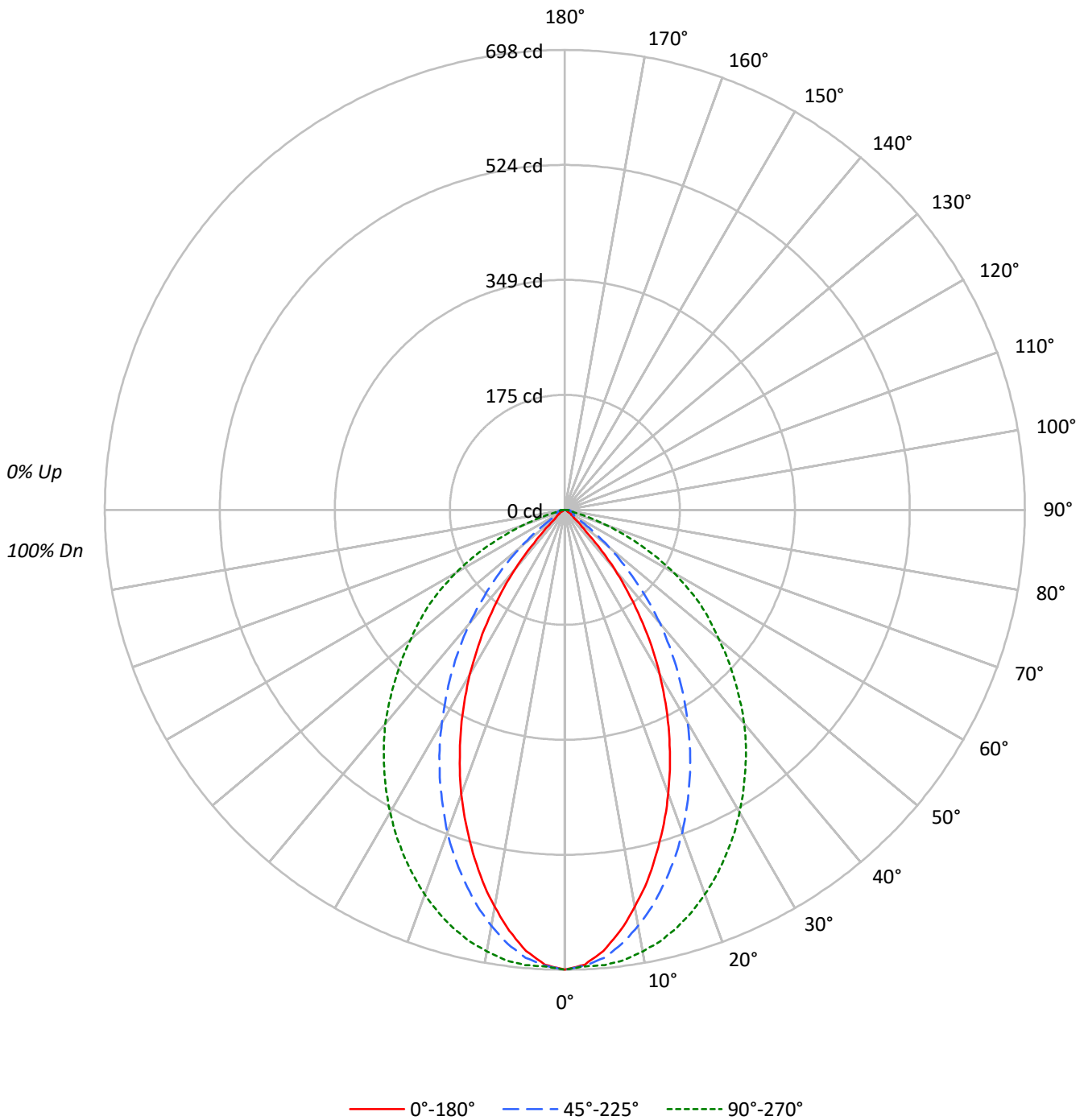
Lumens per Lamp: N/A
Luminaire Lumens: 897.5 lumens
Efficiency: N/A
Efficacy: 34.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1061822

CATALOG NUMBER: S125RDR-S850D940-X4F0-XX-UDD-BVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1061822

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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	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°	4805	4805	4805
5°	4645	4716	4793
10°	4278	4482	4758
15°	3841	4171	4680
20°	3362	3816	4552
25°	2840	3408	4393
30°	2289	2965	4215
35°	1683	2499	4016
40°	1051	2016	3808
45°	393	1472	3539
50°	184	920	3268
55°	134	382	3023
60°	95	201	2615
65°	55	238	2072
70°	52	276	1315
75°	69	274	412
80°	103	341	305
85°	205	545	411

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3539 cd/sqm



TEST NUMBER: P1061822

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.0	7.1
10°-20°	165.7	18.5
20°-30°	211.0	23.5
30°-40°	196.4	21.9
40°-50°	134.6	15.0
50°-60°	74.1	8.3
60°-70°	35.1	3.9
70°-80°	11.0	1.2
80°-90°	5.7	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°	440.7	49.1
0°-40°	637.1	71.0
0°-60°	845.7	94.2
0°-90°	897.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	897.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	698	698	698	698	698	
5°	672	681	682	688	694	62
15°	539	556	585	629	656	150
25°	374	397	449	521	578	171
35°	200	229	297	395	478	124
45°	40	68	151	268	364	39
55°	11	13	32	150	252	10
65°	3	4	15	55	127	4
75°	3	4	10	11	16	3
85°	3	6	7	6	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	697.8	697.8	697.8	697.8	697.8
2.5°	690.9	697.8	692.6	692.6	693.5
5°	672.0	680.6	682.3	687.5	693.5
7.5°	644.5	655.7	664.3	678.9	689.2
10°	611.9	625.6	641.1	665.1	680.6
12.5°	577.5	592.1	615.3	648.8	670.3
15°	538.8	556.0	585.2	629.1	656.5
17.5°	499.3	518.2	554.3	605.8	640.2
20°	458.9	478.7	520.8	578.3	621.3
22.5°	416.8	438.3	484.7	550.0	600.7
25°	373.8	397.0	448.6	520.8	578.3
27.5°	330.9	354.9	411.6	490.7	555.1
30°	287.9	312.8	373.0	459.8	530.2
32.5°	244.1	271.6	335.1	428.8	504.4
35°	200.2	228.6	297.3	395.3	477.8
37.5°	157.3	186.5	260.4	363.5	451.2
40°	116.9	146.1	224.3	331.7	423.7
42.5°	75.6	106.6	186.5	299.1	393.6
45°	40.4	67.9	151.2	268.1	363.5
47.5°	21.5	36.1	117.7	237.2	335.1
50°	17.2	19.8	85.9	206.2	305.1
52.5°	13.7	15.5	55.0	174.4	278.4
55°	11.2	12.9	31.8	149.5	251.8
57.5°	8.6	10.3	18.0	124.6	220.9
60°	6.9	7.7	14.6	99.7	189.9
62.5°	4.3	6.0	14.6	77.3	159.0
65°	3.4	4.3	14.6	55.0	127.2
67.5°	3.4	3.4	14.6	36.1	95.4
70°	2.6	2.6	13.7	23.2	65.3
72.5°	2.6	2.6	12.0	15.5	37.8
75°	2.6	4.3	10.3	11.2	15.5
77.5°	2.6	6.9	9.5	9.5	8.6
80°	2.6	6.9	8.6	7.7	7.7
82.5°	2.6	6.9	6.9	6.9	6.0
85°	2.6	6.0	6.9	6.0	5.2
87.5°	2.6	6.0	6.0	6.0	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)