

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: P1061819

Luminaire Tested: S125RDR-S850D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061819
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D935-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

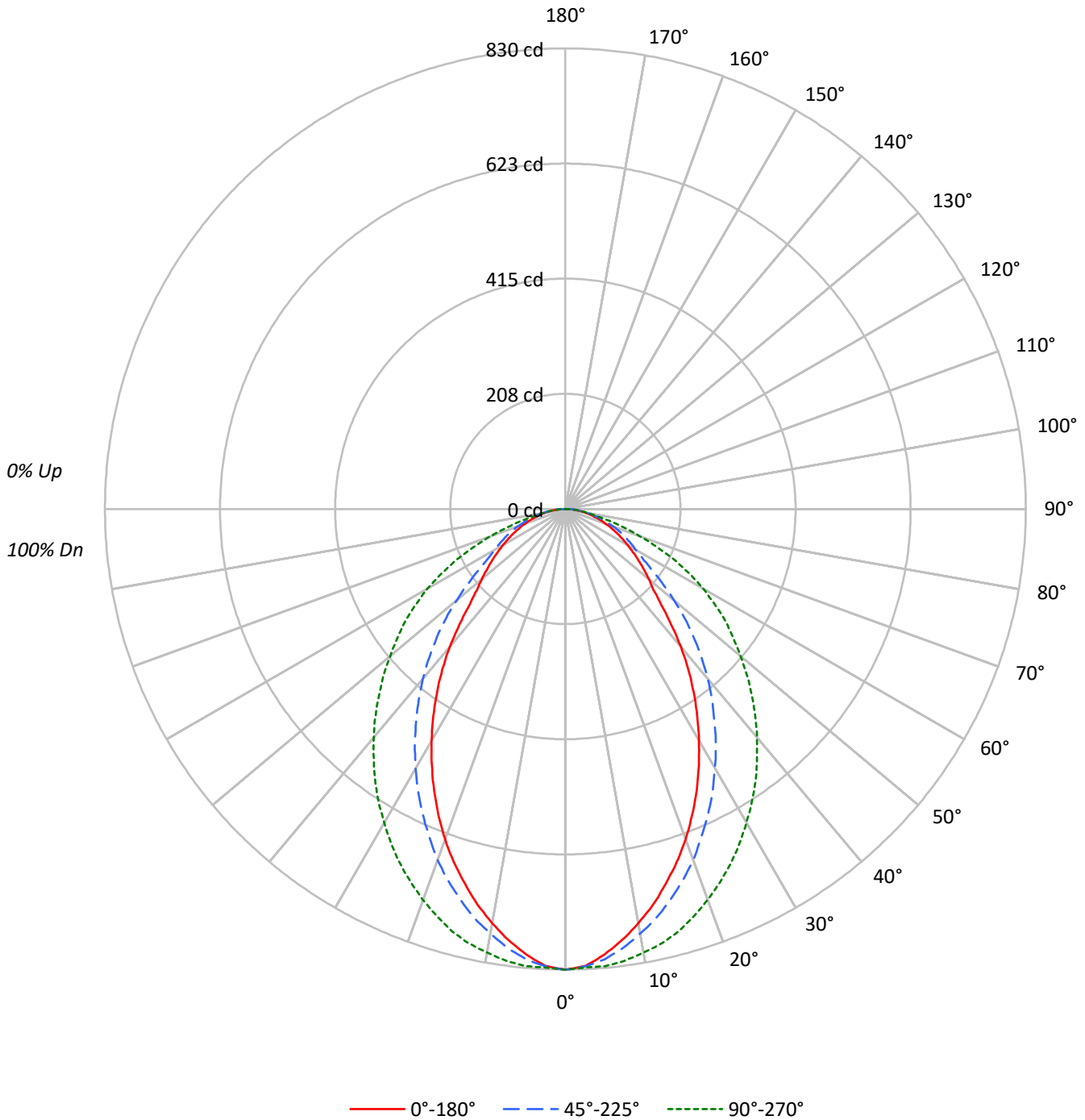
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1556.4 lumens
Efficiency: N/A
Efficacy: 60.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
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: P1061819
CATALOG NUMBER: S125RDR-S850D935-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1061819

CATALOG NUMBER: S125RDR-S850D935-X4F0-XX-UDD-WVL-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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56				56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50
6	74	62	54	48	72	61	53	48	59	52	47	58	52	47	56	51	46	44				44
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				40
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36				36
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5717	5717	5717
5°	5572	5629	5715
10°	5300	5434	5677
15°	4984	5203	5617
20°	4643	4935	5494
25°	4254	4619	5356
30°	3831	4286	5190
35°	3388	3939	5026
40°	2908	3586	4831
45°	2375	3190	4628
50°	2106	2737	4415
55°	1931	2270	4231
60°	1782	2010	3941
65°	1662	1932	3514
70°	1552	1836	2873
75°	1434	1721	2118
80°	1348	1610	1546
85°	1248	1572	1311

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4628 cd/sqm



TEST NUMBER: P1061819

CATALOG NUMBER: S125RDR-S850D935-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.8	4.9
10°-20°	207.0	13.3
20°-30°	284.4	18.3
30°-40°	301.4	19.4
40°-50°	263.1	16.9
50°-60°	199.9	12.8
60°-70°	133.9	8.6
70°-80°	69.0	4.4
80°-90°	20.7	1.3
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°	568.2	36.5
0°-40°	869.7	55.9
0°-60°	1332.7	85.6
0°-90°	1556.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1556.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	830	830	830	830	830	
5°	806	814	814	820	827	75
15°	699	712	730	762	788	196
25°	560	577	608	659	705	257
35°	403	426	469	535	598	251
45°	244	268	328	406	475	193
55°	161	166	189	278	352	144
65°	102	104	119	158	216	101
75°	54	57	65	69	80	58
85°	16	20	20	18	17	18
90°	0	0	0	0	0	



TEST NUMBER: P1061819

CATALOG NUMBER: S125RDR-S850D935-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	830.3	830.3	830.3	830.3	830.3
2.5°	824.5	830.3	825.3	825.3	826.9
5°	806.2	814.5	814.5	820.3	826.9
7.5°	783.8	792.9	797.9	811.2	821.1
10°	758.1	768.1	777.2	797.1	812.0
12.5°	730.7	741.5	755.6	781.3	802.1
15°	699.2	712.5	729.9	762.2	788.0
17.5°	667.7	681.0	702.5	740.7	769.7
20°	633.7	647.8	673.5	715.0	749.8
22.5°	597.2	612.9	640.3	687.6	728.2
25°	559.9	577.3	608.0	658.6	705.0
27.5°	520.9	541.6	574.8	628.7	680.1
30°	481.9	502.6	539.1	598.0	652.8
32.5°	442.9	465.3	505.1	567.3	626.2
35°	403.1	426.3	468.6	535.0	598.0
37.5°	364.1	387.3	434.6	503.5	567.3
40°	323.5	347.5	399.0	471.1	537.5
42.5°	282.0	307.7	363.3	437.9	506.8
45°	243.9	267.9	327.6	405.6	475.3
47.5°	215.7	231.4	292.0	372.4	444.6
50°	196.6	204.9	255.5	340.1	412.2
52.5°	177.5	184.1	221.5	306.9	381.5
55°	160.9	165.9	189.1	277.9	352.5
57.5°	144.3	149.3	164.2	248.8	318.5
60°	129.4	133.5	146.0	218.1	286.2
62.5°	115.3	118.6	131.9	189.1	251.3
65°	102.0	104.5	118.6	158.4	215.7
67.5°	88.7	91.2	105.3	129.4	177.5
70°	77.1	78.0	91.2	105.3	142.7
72.5°	65.5	66.4	77.1	85.4	109.5
75°	53.9	57.2	64.7	68.8	79.6
77.5°	44.0	48.1	52.3	53.9	53.9
80°	34.0	39.0	40.6	40.6	39.0
82.5°	24.9	29.0	29.9	28.2	26.5
85°	15.8	19.9	19.9	18.2	16.6
87.5°	7.5	10.8	10.8	10.0	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)