

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: P1061765

Luminaire Tested: S125RDR-S850D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061765
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-S850D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

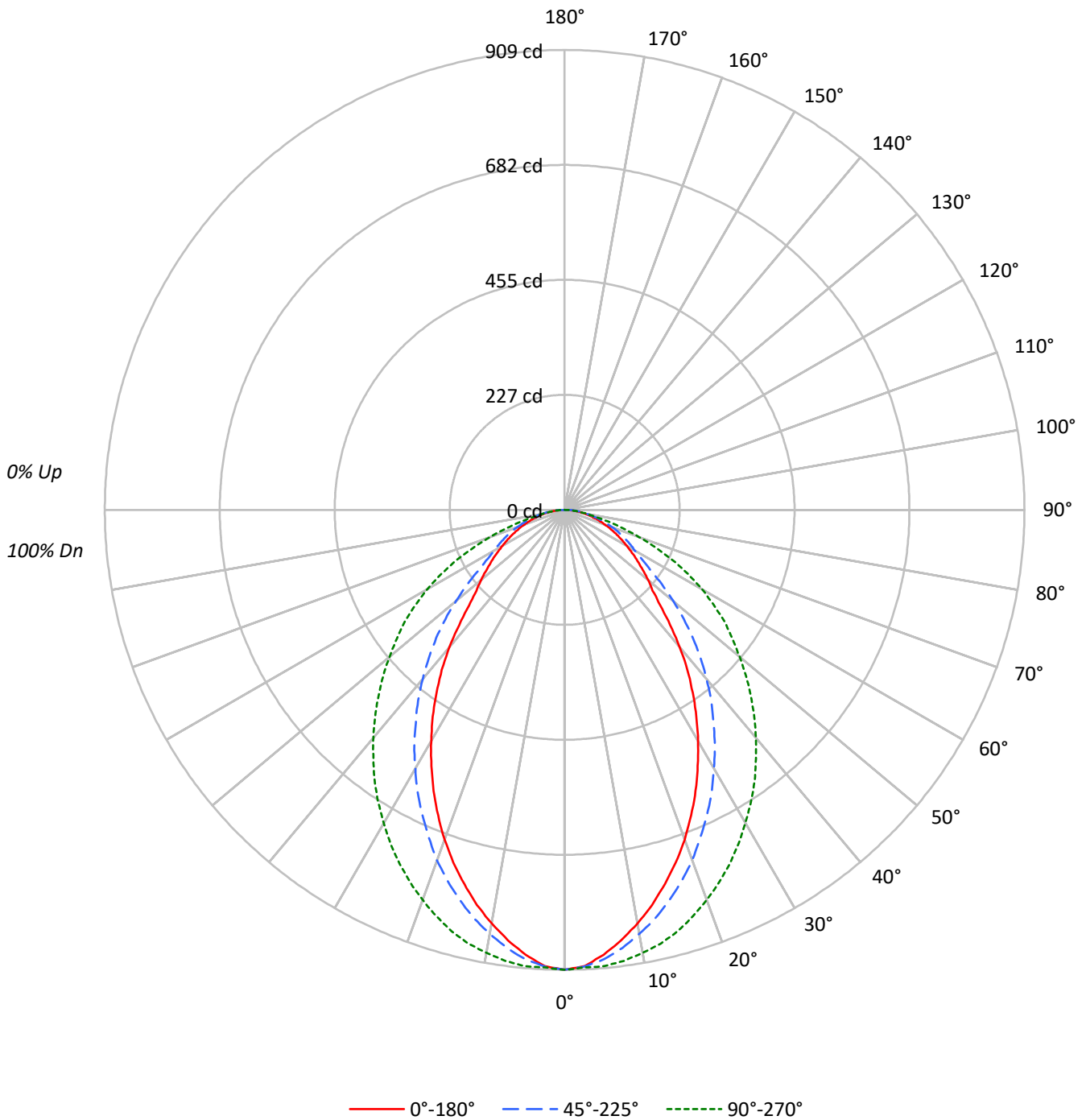
Lumens per Lamp: N/A
Luminaire Lumens: 1703.9 lumens
Efficiency: N/A
Efficacy: 66.0 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6258	6258	6258
5°	6100	6162	6257
10°	5802	5948	6215
15°	5456	5695	6149
20°	5083	5402	6014
25°	4656	5057	5863
30°	4194	4692	5681
35°	3709	4312	5503
40°	3183	3925	5289
45°	2599	3493	5066
50°	2305	2996	4834
55°	2114	2485	4632
60°	1950	2201	4314
65°	1820	2115	3847
70°	1699	2011	3144
75°	1570	1883	2320
80°	1475	1764	1693
85°	1367	1722	1438

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5066 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.1	4.9
10°-20°	226.6	13.3
20°-30°	311.4	18.3
30°-40°	330.0	19.4
40°-50°	288.1	16.9
50°-60°	218.8	12.8
60°-70°	146.6	8.6
70°-80°	75.6	4.4
80°-90°	22.7	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°	622.0	36.5
0°-40°	952.1	55.9
0°-60°	1459.0	85.6
0°-90°	1703.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1703.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	909	909	909	909	909	
5°	883	892	892	898	905	83
15°	765	780	799	834	863	215
25°	613	632	666	721	772	281
35°	441	467	513	586	655	275
45°	267	293	359	444	520	211
55°	176	182	207	304	386	158
65°	112	114	130	173	236	111
75°	59	63	71	75	87	63
85°	17	22	22	20	18	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	908.9	908.9	908.9	908.9	908.9
2.5°	902.5	908.9	903.4	903.4	905.3
5°	882.6	891.6	891.6	898.0	905.3
7.5°	858.0	868.0	873.5	888.0	898.9
10°	829.9	840.8	850.8	872.6	888.9
12.5°	799.9	811.7	827.2	855.3	878.0
15°	765.4	780.0	799.0	834.4	862.6
17.5°	730.9	745.5	769.1	810.8	842.6
20°	693.7	709.1	737.3	782.7	820.8
22.5°	653.7	671.0	701.0	752.7	797.2
25°	612.9	632.0	665.6	720.9	771.8
27.5°	570.2	592.9	629.2	688.3	744.5
30°	527.5	550.2	590.2	654.7	714.6
32.5°	484.9	509.4	553.0	621.1	685.5
35°	441.3	466.7	513.0	585.6	654.7
37.5°	398.6	424.0	475.8	551.1	621.1
40°	354.1	380.4	436.7	515.7	588.4
42.5°	308.7	336.9	397.7	479.4	554.8
45°	266.9	293.3	358.7	444.0	520.3
47.5°	236.1	253.3	319.6	407.7	486.7
50°	215.2	224.3	279.7	372.3	451.3
52.5°	194.3	201.6	242.4	336.0	417.7
55°	176.1	181.6	207.0	304.2	385.9
57.5°	158.0	163.4	179.8	272.4	348.7
60°	141.6	146.2	159.8	238.8	313.3
62.5°	126.2	129.8	144.4	207.0	275.1
65°	111.7	114.4	129.8	173.4	236.1
67.5°	97.2	99.9	115.3	141.6	194.3
70°	84.4	85.4	99.9	115.3	156.2
72.5°	71.7	72.6	84.4	93.5	119.9
75°	59.0	62.7	70.8	75.4	87.2
77.5°	48.1	52.7	57.2	59.0	59.0
80°	37.2	42.7	44.5	44.5	42.7
82.5°	27.2	31.8	32.7	30.9	29.1
85°	17.3	21.8	21.8	20.0	18.2
87.5°	8.2	11.8	11.8	10.9	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)