

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: P1061759

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061759
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-S850D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

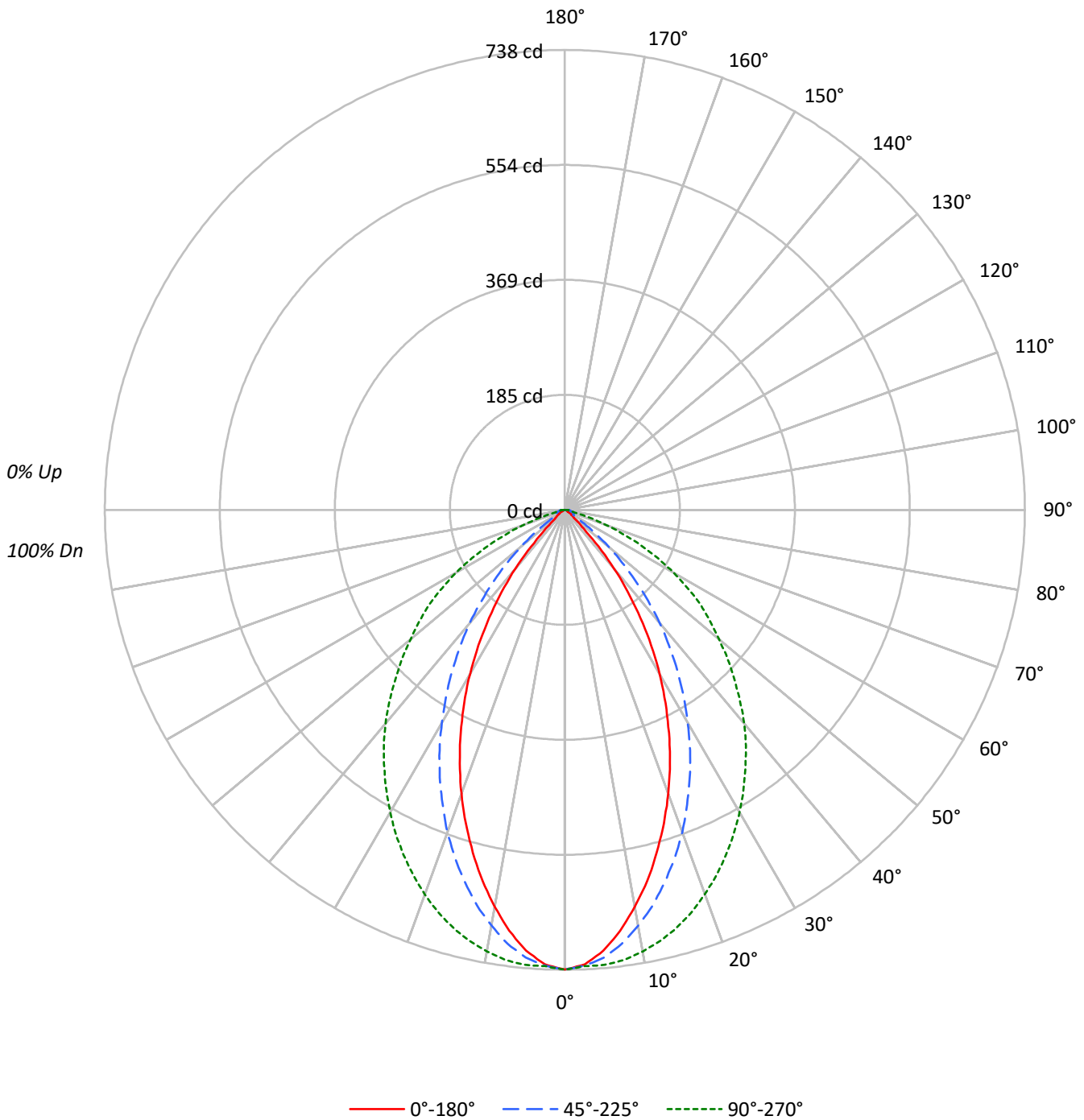
Lumens per Lamp: N/A
Luminaire Lumens: 948.7 lumens
Efficiency: N/A
Efficacy: 36.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				81
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54				54
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49				49
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45				45
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42				42
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5079	5079	5079
5°	4909	4985	5066
10°	4521	4737	5030
15°	4059	4409	4947
20°	3554	4034	4812
25°	3002	3603	4644
30°	2419	3134	4455
35°	1779	2642	4245
40°	1110	2131	4025
45°	416	1557	3741
50°	195	973	3454
55°	142	403	3194
60°	101	212	2764
65°	59	251	2190
70°	54	292	1389
75°	72	290	436
80°	107	361	325
85°	213	577	434

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3741 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.6	7.1
10°-20°	175.1	18.5
20°-30°	223.1	23.5
30°-40°	207.6	21.9
40°-50°	142.2	15.0
50°-60°	78.3	8.3
60°-70°	37.1	3.9
70°-80°	11.7	1.2
80°-90°	6.0	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°	465.8	49.1
0°-40°	673.4	71.0
0°-60°	894.0	94.2
0°-90°	948.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	948.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	738	738	738	738	738	
5°	710	719	721	727	733	66
15°	570	588	619	665	694	159
25°	395	420	474	550	611	180
35°	212	242	314	418	505	131
45°	43	72	160	283	384	41
55°	12	14	34	158	266	11
65°	4	4	15	58	134	4
75°	3	4	11	12	16	3
85°	3	6	7	6	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	737.6	737.6	737.6	737.6	737.6
2.5°	730.3	737.6	732.1	732.1	733.0
5°	710.3	719.4	721.2	726.7	733.0
7.5°	681.3	693.1	702.2	717.6	728.5
10°	646.7	661.3	677.6	703.1	719.4
12.5°	610.4	625.9	650.4	685.8	708.5
15°	569.5	587.7	618.6	664.9	694.0
17.5°	527.7	547.7	585.9	640.4	676.7
20°	485.1	505.9	550.5	611.3	656.7
22.5°	440.5	463.3	512.3	581.3	634.9
25°	395.1	419.7	474.2	550.5	611.3
27.5°	349.7	375.1	435.1	518.7	586.8
30°	304.3	330.6	394.2	486.0	560.4
32.5°	258.0	287.0	354.3	453.3	533.2
35°	211.6	241.6	314.3	417.8	505.0
37.5°	166.2	197.1	275.2	384.2	476.9
40°	123.5	154.4	237.1	350.6	447.8
42.5°	79.9	112.6	197.1	316.1	416.0
45°	42.7	71.8	159.9	283.4	384.2
47.5°	22.7	38.2	124.4	250.7	354.3
50°	18.2	20.9	90.8	218.0	322.5
52.5°	14.5	16.4	58.1	184.4	294.3
55°	11.8	13.6	33.6	158.1	266.1
57.5°	9.1	10.9	19.1	131.7	233.4
60°	7.3	8.2	15.4	105.4	200.7
62.5°	4.5	6.4	15.4	81.8	168.0
65°	3.6	4.5	15.4	58.1	134.4
67.5°	3.6	3.6	15.4	38.2	100.8
70°	2.7	2.7	14.5	24.5	69.0
72.5°	2.7	2.7	12.7	16.4	40.0
75°	2.7	4.5	10.9	11.8	16.4
77.5°	2.7	7.3	10.0	10.0	9.1
80°	2.7	7.3	9.1	8.2	8.2
82.5°	2.7	7.3	7.3	7.3	6.4
85°	2.7	6.4	7.3	6.4	5.5
87.5°	2.7	6.4	6.4	6.4	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)