

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: P1061803

Luminaire Tested: S125RDR-S850D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061803
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D930-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

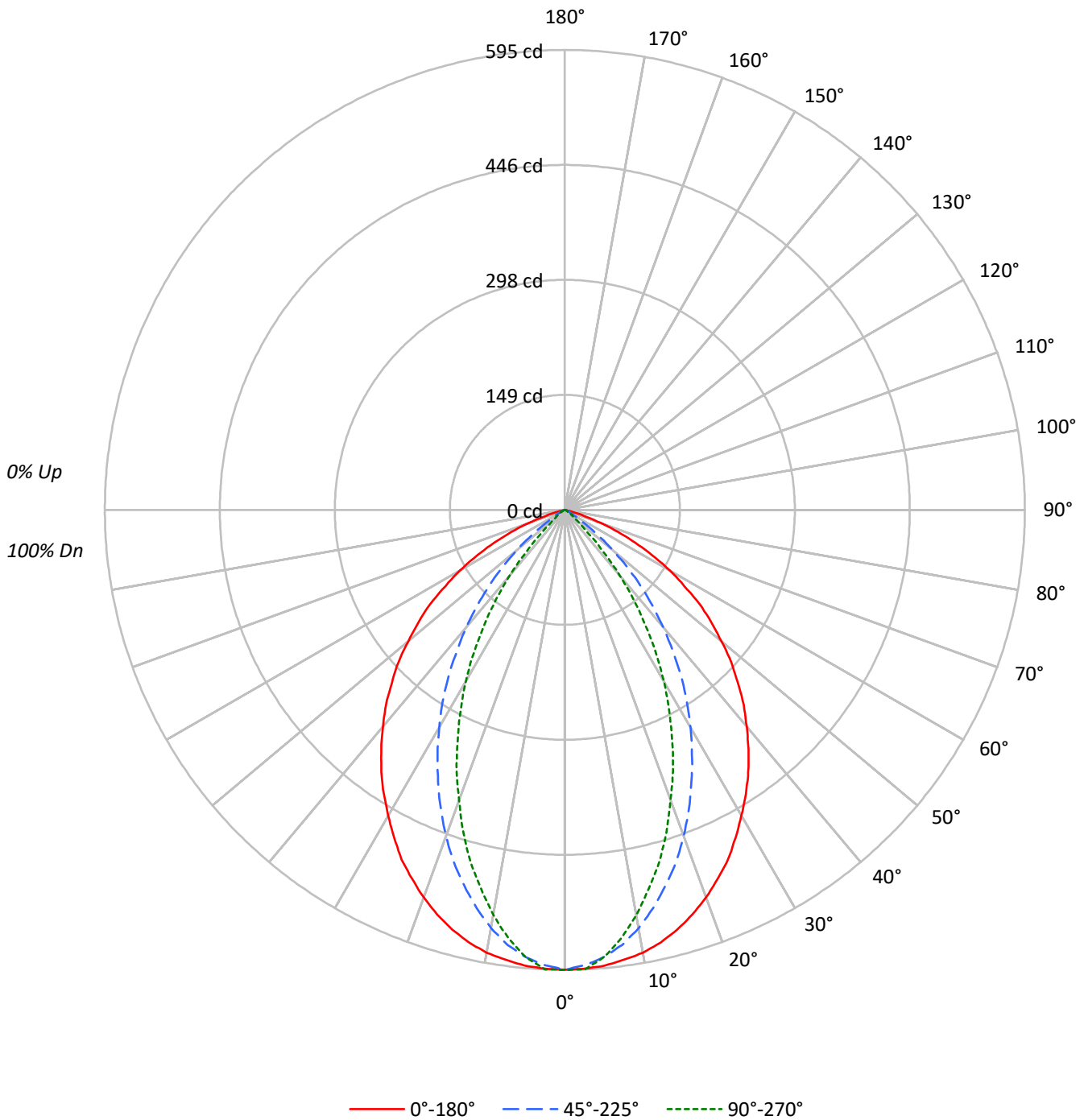
Lumens per Lamp: N/A
Luminaire Lumens: 768.7 lumens
Efficiency: N/A
Efficacy: 29.8 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91				91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82				82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73				73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66				66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60				60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54				54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4097	4097	4097
5°	4091	4015	4015
10°	4067	3842	3721
15°	4007	3587	3363
20°	3911	3290	2928
25°	3793	2946	2493
30°	3633	2584	2035
35°	3477	2204	1524
40°	3288	1778	988
45°	3081	1346	428
50°	2833	858	160
55°	2553	377	113
60°	2162	162	76
65°	1637	103	39
70°	996	48	16
75°	210	21	21
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3081 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.8	7.1
10°-20°	143.0	18.6
20°-30°	183.6	23.9
30°-40°	172.8	22.5
40°-50°	120.8	15.7
50°-60°	64.5	8.4
60°-70°	25.7	3.3
70°-80°	3.4	0.4
80°-90°	0.0	0.0
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°	381.4	49.6
0°-40°	554.2	72.1
0°-60°	739.6	96.2
0°-90°	768.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	768.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	595	595	595	595	595	
5°	592	590	581	582	581	56
15°	562	544	503	480	472	158
25°	499	455	388	345	328	229
35°	414	348	262	202	181	258
45°	316	237	138	67	44	244
55°	213	130	31	11	9	189
65°	100	40	6	3	2	100
75°	8	2	1	1	1	15
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	595.0	595.0	595.0	595.0	595.0
2.5°	594.2	595.0	589.5	594.2	595.0
5°	591.9	590.3	580.9	582.5	580.9
7.5°	587.2	583.3	567.6	562.1	558.9
10°	581.7	573.1	549.5	537.7	532.2
12.5°	573.1	560.5	527.5	509.5	501.6
15°	562.1	544.0	503.2	479.6	471.8
17.5°	548.7	525.2	478.1	449.0	437.2
20°	533.8	502.4	449.0	414.5	399.6
22.5°	516.5	480.4	419.2	380.7	365.8
25°	499.3	455.3	387.8	345.4	328.1
27.5°	478.1	429.4	356.4	310.9	292.0
30°	456.9	403.5	325.0	275.5	255.9
32.5°	435.7	376.0	293.6	238.6	219.0
35°	413.7	347.8	262.2	202.5	181.3
37.5°	390.1	319.5	228.4	168.0	146.0
40°	365.8	292.0	197.8	134.2	109.9
42.5°	342.3	264.5	167.2	101.3	74.6
45°	316.4	237.1	138.2	66.7	44.0
47.5°	292.0	210.4	108.3	38.5	22.8
50°	264.5	182.9	80.1	20.4	14.9
52.5°	238.6	156.2	53.4	13.3	11.8
55°	212.7	130.3	31.4	11.0	9.4
57.5°	182.9	105.2	17.3	8.6	7.1
60°	157.0	82.4	11.8	6.3	5.5
62.5°	127.2	60.4	8.6	4.7	3.9
65°	100.5	40.0	6.3	3.1	2.4
67.5°	74.6	23.6	3.9	1.6	1.6
70°	49.5	12.6	2.4	0.8	0.8
72.5°	25.9	5.5	1.6	0.8	0.8
75°	7.9	2.4	0.8	0.8	0.8
77.5°	0.0	0.8	0.0	0.0	0.8
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)