

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: P1061761

Luminaire Tested: S125RDR-S850D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061761
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

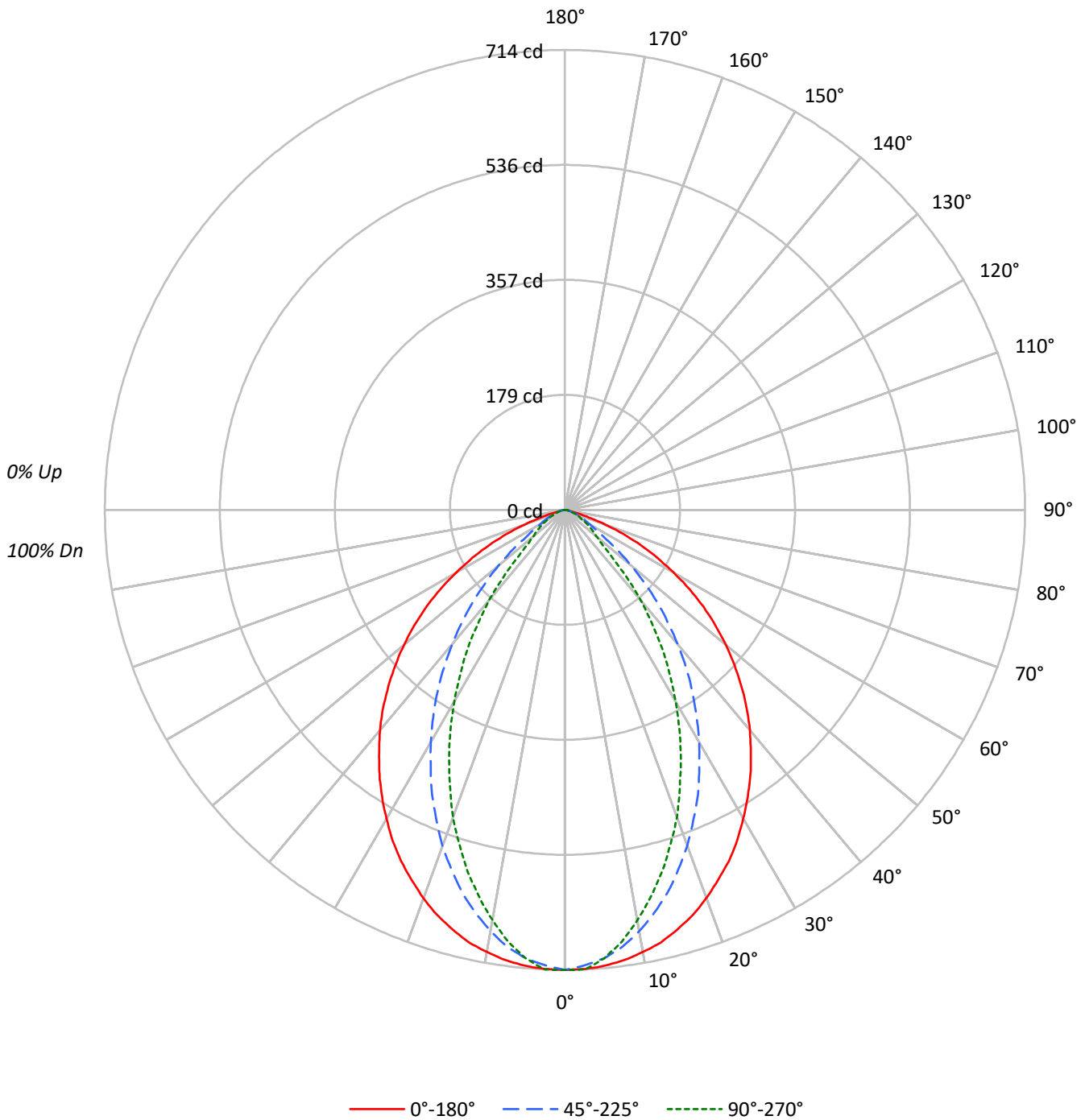
Lumens per Lamp: N/A
Luminaire Lumens: 1033.0 lumens
Efficiency: N/A
Efficacy: 40.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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				
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57				
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52				
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47				
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43				
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4918	4918	4918
5°	4911	4830	4830
10°	4873	4644	4524
15°	4806	4386	4147
20°	4702	4069	3724
25°	4571	3710	3234
30°	4401	3312	2728
35°	4219	2899	2212
40°	4013	2447	1639
45°	3773	1962	989
50°	3490	1439	680
55°	3149	882	567
60°	2674	600	450
65°	2115	458	355
70°	1335	328	292
75°	434	242	242
80°	143	178	214
85°	71	142	142

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3773 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.1	6.4
10°-20°	174.5	16.9
20°-30°	229.5	22.2
30°-40°	225.5	21.8
40°-50°	170.6	16.5
50°-60°	103.4	10.0
60°-70°	48.8	4.7
70°-80°	12.7	1.2
80°-90°	1.9	0.2
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°	470.0	45.5
0°-40°	695.5	67.3
0°-60°	969.5	93.9
0°-90°	1033.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1033.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	714	714	714	714	714	
5°	711	709	699	700	699	67
15°	674	656	615	592	582	190
25°	602	556	488	443	426	277
35°	502	435	345	284	263	313
45°	388	305	202	128	102	298
55°	262	180	74	50	47	233
65°	130	66	28	24	22	128
75°	16	11	9	9	9	25
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	714.3	714.3	714.3	714.3	714.3
2.5°	713.4	713.4	707.9	714.3	714.3
5°	710.6	708.8	698.8	699.7	698.8
7.5°	705.2	701.6	684.3	679.8	676.1
10°	697.0	689.8	664.3	653.5	647.1
12.5°	687.9	675.2	640.8	625.3	615.3
15°	674.3	656.2	615.3	591.7	581.8
17.5°	659.8	633.5	585.4	557.3	544.5
20°	641.7	610.8	555.4	521.0	508.2
22.5°	621.7	585.4	521.0	482.8	465.6
25°	601.7	556.3	488.3	442.9	425.7
27.5°	579.0	527.3	451.1	403.9	384.8
30°	553.6	498.3	416.6	367.6	343.1
32.5°	528.2	468.3	380.3	326.7	302.2
35°	501.9	434.7	344.9	284.1	263.2
37.5°	473.8	403.0	308.6	245.0	220.5
40°	446.5	371.2	272.3	205.1	182.4
42.5°	417.5	339.4	236.0	166.1	140.7
45°	387.5	304.9	201.5	128.0	101.6
47.5°	356.7	274.1	167.0	94.4	76.2
50°	325.8	241.4	134.3	69.9	63.5
52.5°	294.1	209.7	101.6	58.1	55.4
55°	262.3	179.7	73.5	49.9	47.2
57.5°	229.6	147.0	55.4	42.7	39.9
60°	194.2	118.0	43.6	35.4	32.7
62.5°	161.5	92.6	35.4	29.0	27.2
65°	129.8	66.3	28.1	23.6	21.8
67.5°	97.1	44.5	21.8	18.2	18.2
70°	66.3	29.0	16.3	14.5	14.5
72.5°	39.9	17.2	11.8	11.8	11.8
75°	16.3	10.9	9.1	9.1	9.1
77.5°	5.4	6.4	6.4	7.3	7.3
80°	3.6	3.6	4.5	5.4	5.4
82.5°	1.8	2.7	2.7	3.6	3.6
85°	0.9	0.9	1.8	1.8	1.8
87.5°	0.0	0.0	0.0	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)