

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: P1061814

Luminaire Tested: S125RDR-S850D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061814
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

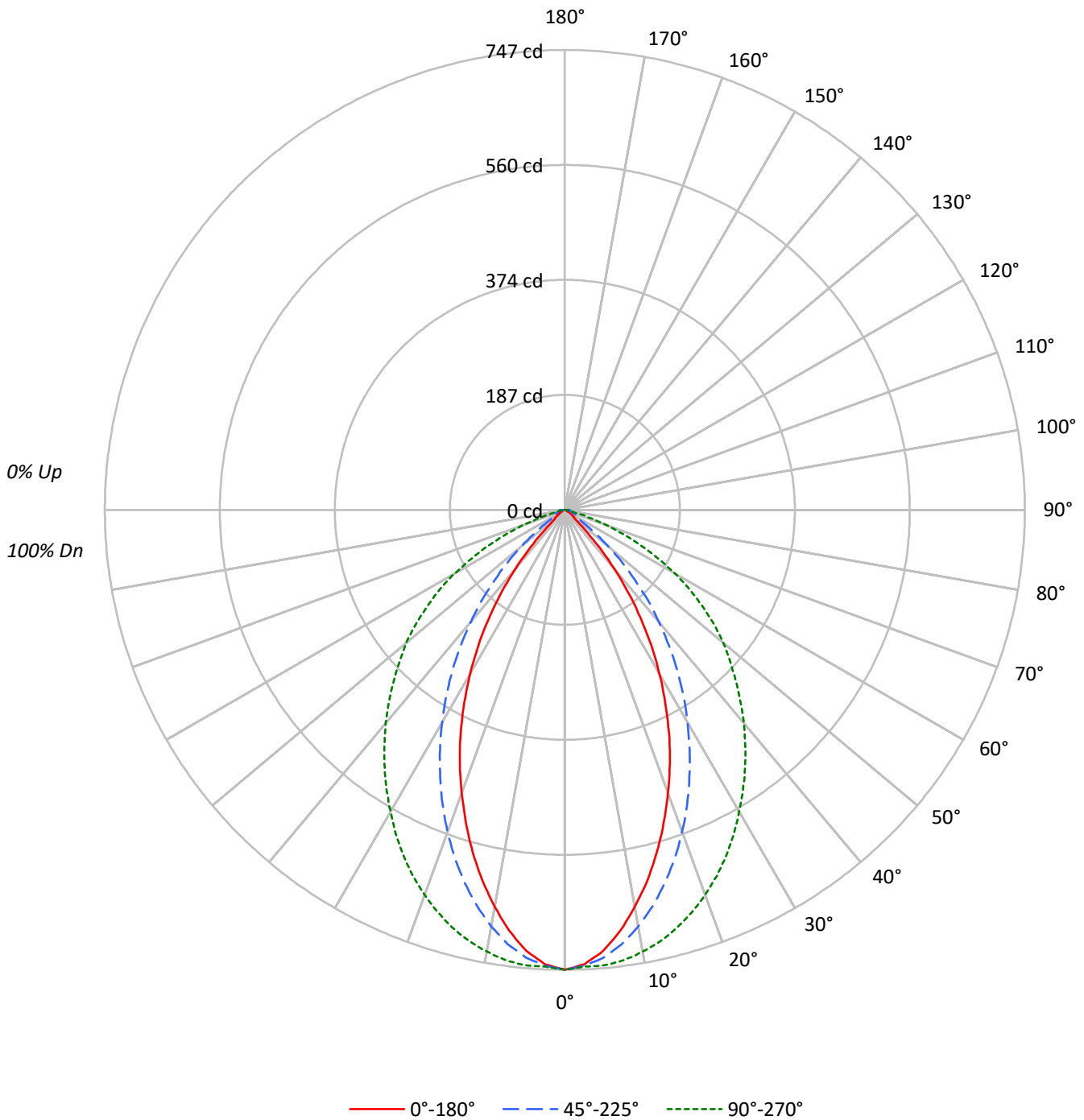
Lumens per Lamp: N/A
Luminaire Lumens: 966.3 lumens
Efficiency: N/A
Efficacy: 37.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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				
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65				
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59				
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53				
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45				
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41				
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5143	5143	5143
5°	4967	5042	5133
10°	4578	4804	5094
15°	4112	4472	5010
20°	3587	4080	4877
25°	3039	3637	4709
30°	2442	3167	4500
35°	1806	2671	4290
40°	1119	2133	4065
45°	436	1560	3822
50°	205	978	3600
55°	149	419	3268
60°	103	297	2834
65°	67	311	2204
70°	66	284	1387
75°	88	287	442
80°	131	329	297
85°	197	656	458

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3822 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.5	7.1
10°-20°	177.5	18.4
20°-30°	226.0	23.4
30°-40°	210.4	21.8
40°-50°	144.8	15.0
50°-60°	82.0	8.5
60°-70°	38.7	4.0
70°-80°	12.1	1.3
80°-90°	6.3	0.7
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°	472.0	48.8
0°-40°	682.4	70.6
0°-60°	909.2	94.1
0°-90°	966.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	966.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	747	747	747	747	747	
5°	719	729	730	736	743	67
15°	577	596	627	675	703	161
25°	400	426	479	559	620	182
35°	215	245	318	427	510	133
45°	45	71	160	290	392	42
55°	12	14	35	167	272	11
65°	4	5	19	60	135	5
75°	3	8	11	12	17	3
85°	2	7	8	8	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	746.9	746.9	746.9	746.9	746.9
2.5°	738.6	746.1	741.1	741.9	742.7
5°	718.7	728.6	729.5	736.1	742.7
7.5°	689.6	702.1	711.2	727.0	737.8
10°	654.8	669.7	687.1	712.9	728.6
12.5°	617.4	634.9	658.9	695.4	717.9
15°	576.8	595.9	627.4	674.7	702.9
17.5°	533.6	555.2	593.4	649.8	685.5
20°	489.6	512.9	556.9	621.6	665.6
22.5°	445.6	469.7	518.7	590.9	644.0
25°	400.0	425.7	478.8	559.3	619.9
27.5°	353.5	380.1	439.0	527.0	594.2
30°	307.1	335.3	398.3	493.8	566.0
32.5°	261.4	289.6	358.5	460.6	538.6
35°	214.9	244.8	317.8	426.6	510.4
37.5°	168.5	200.8	278.0	391.7	481.3
40°	124.5	155.2	237.3	357.7	452.3
42.5°	83.0	112.9	200.8	323.7	422.4
45°	44.8	71.4	160.2	289.6	392.5
47.5°	24.1	38.2	125.3	256.4	363.5
50°	19.1	21.6	91.3	225.7	336.1
52.5°	15.8	17.4	59.8	196.7	304.6
55°	12.4	14.1	34.9	166.8	272.2
57.5°	10.0	11.6	22.4	138.6	240.7
60°	7.5	9.1	21.6	111.2	205.8
62.5°	5.8	6.6	19.9	85.5	169.3
65°	4.1	5.0	19.1	59.8	135.3
67.5°	3.3	4.1	17.4	38.2	101.2
70°	3.3	3.3	14.1	24.9	68.9
72.5°	3.3	5.8	12.4	16.6	41.5
75°	3.3	7.5	10.8	11.6	16.6
77.5°	3.3	8.3	9.1	9.1	9.1
80°	3.3	7.5	8.3	8.3	7.5
82.5°	3.3	6.6	7.5	8.3	6.6
85°	2.5	6.6	8.3	7.5	5.8
87.5°	2.5	6.6	7.5	6.6	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)