

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: P1061764

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061764
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
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-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

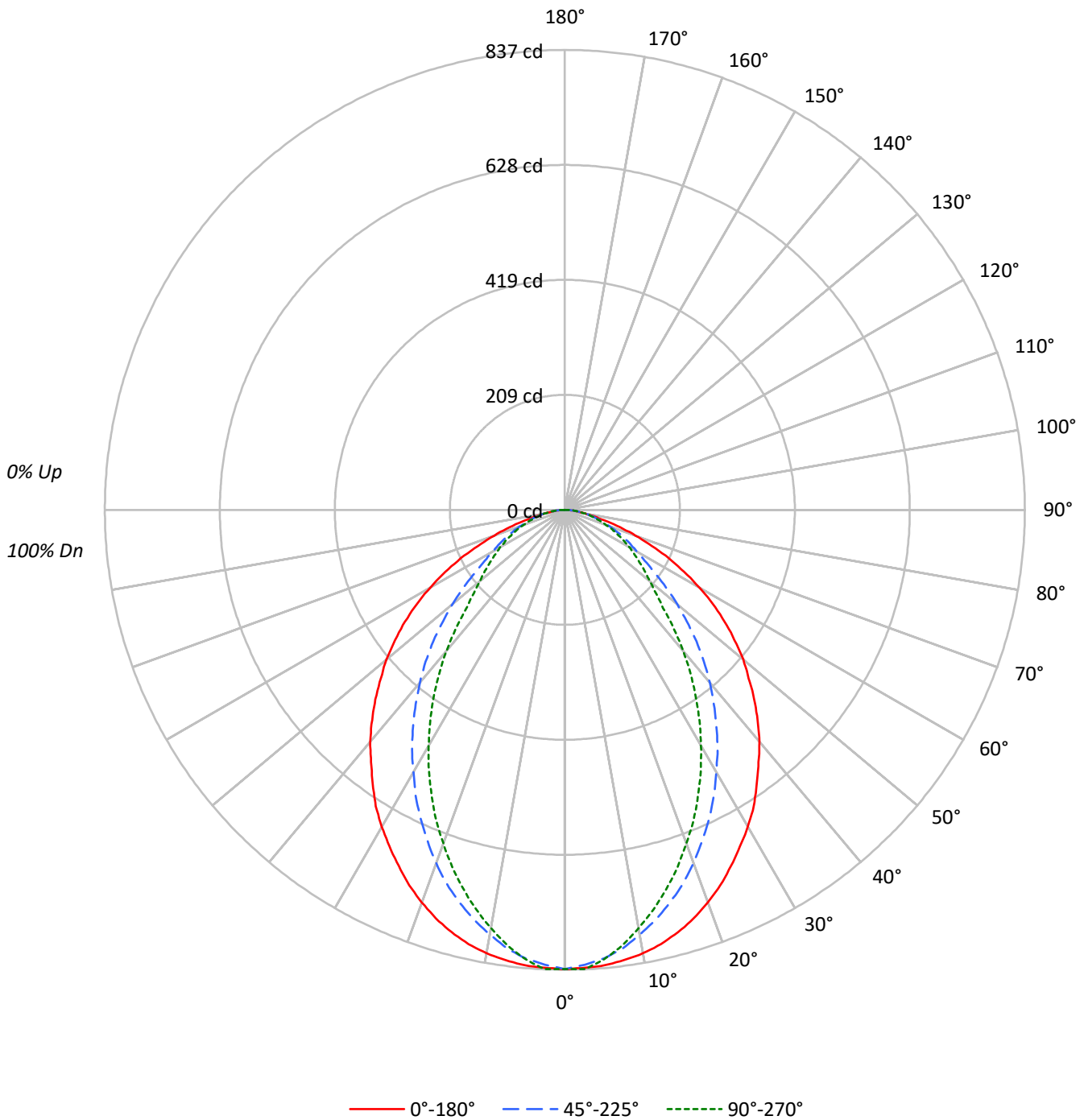
Lumens per Lamp: N/A
Luminaire Lumens: 1583.4 lumens
Efficiency: N/A
Efficacy: 61.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36
9	61	48	41	35	60	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°	5755	5755	5755
5°	5752	5664	5676
10°	5729	5488	5406
15°	5673	5273	5091
20°	5572	5014	4735
25°	5433	4716	4358
30°	5296	4380	3939
35°	5119	4043	3494
40°	4952	3687	3010
45°	4746	3296	2465
50°	4540	2858	2158
55°	4260	2386	1994
60°	3886	2088	1862
65°	3400	1908	1730
70°	2758	1717	1608
75°	1979	1570	1498
80°	1368	1404	1404
85°	1003	1217	1288

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4746 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.7	4.9
10°-20°	210.2	13.3
20°-30°	290.5	18.3
30°-40°	309.5	19.5
40°-50°	271.9	17.2
50°-60°	206.1	13.0
60°-70°	133.8	8.5
70°-80°	66.3	4.2
80°-90°	17.4	1.1
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°	578.5	36.5
0°-40°	887.9	56.1
0°-60°	1365.9	86.3
0°-90°	1583.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1583.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	832	830	820	822	821	79
15°	796	778	740	722	714	224
25°	715	676	621	589	574	330
35°	609	553	481	437	416	381
45°	487	419	338	278	253	376
55°	355	285	199	172	166	317
65°	209	155	117	108	106	206
75°	74	65	59	57	56	83
85°	13	14	15	15	16	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	835.9	835.9	835.9	835.9	835.9
2.5°	834.0	835.9	828.6	834.9	836.8
5°	832.2	830.4	819.5	822.2	821.3
7.5°	826.8	823.1	805.0	803.2	799.6
10°	819.5	810.4	785.0	778.7	773.2
12.5°	809.5	795.0	764.2	751.5	745.1
15°	795.9	777.8	739.7	722.4	714.2
17.5°	779.6	754.2	714.2	690.6	681.6
20°	760.5	730.6	684.3	657.1	646.2
22.5°	739.7	704.3	652.5	623.5	611.7
25°	715.2	676.1	620.8	589.0	573.6
27.5°	690.6	647.1	587.2	551.8	535.5
30°	666.1	616.2	550.9	512.8	495.5
32.5°	639.8	584.5	517.3	475.6	455.6
35°	609.0	552.7	481.0	437.4	415.7
37.5°	579.0	519.1	445.6	396.6	375.7
40°	550.9	487.4	410.2	356.7	334.9
42.5°	519.1	453.8	374.8	318.6	294.0
45°	487.4	419.3	338.5	277.7	253.2
47.5°	453.8	386.6	300.4	240.5	224.2
50°	423.8	353.0	266.8	212.4	201.5
52.5°	389.3	320.4	232.3	190.6	183.3
55°	354.9	285.0	198.8	171.5	166.1
57.5°	319.5	253.2	172.4	155.2	149.7
60°	282.2	220.5	151.6	137.9	135.2
62.5°	245.0	187.0	133.4	123.4	119.8
65°	208.7	155.2	117.1	108.0	106.2
67.5°	171.5	126.1	100.7	94.4	93.5
70°	137.0	102.6	85.3	81.7	79.9
72.5°	105.3	81.7	71.7	69.0	68.1
75°	74.4	65.3	59.0	57.2	56.3
77.5°	49.9	49.9	47.2	45.4	46.3
80°	34.5	36.3	35.4	35.4	35.4
82.5°	22.7	24.5	25.4	25.4	25.4
85°	12.7	14.5	15.4	15.4	16.3
87.5°	4.5	5.4	6.4	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)