

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: P1061767

Luminaire Tested: S125RDR-S850D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061767
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-S850D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

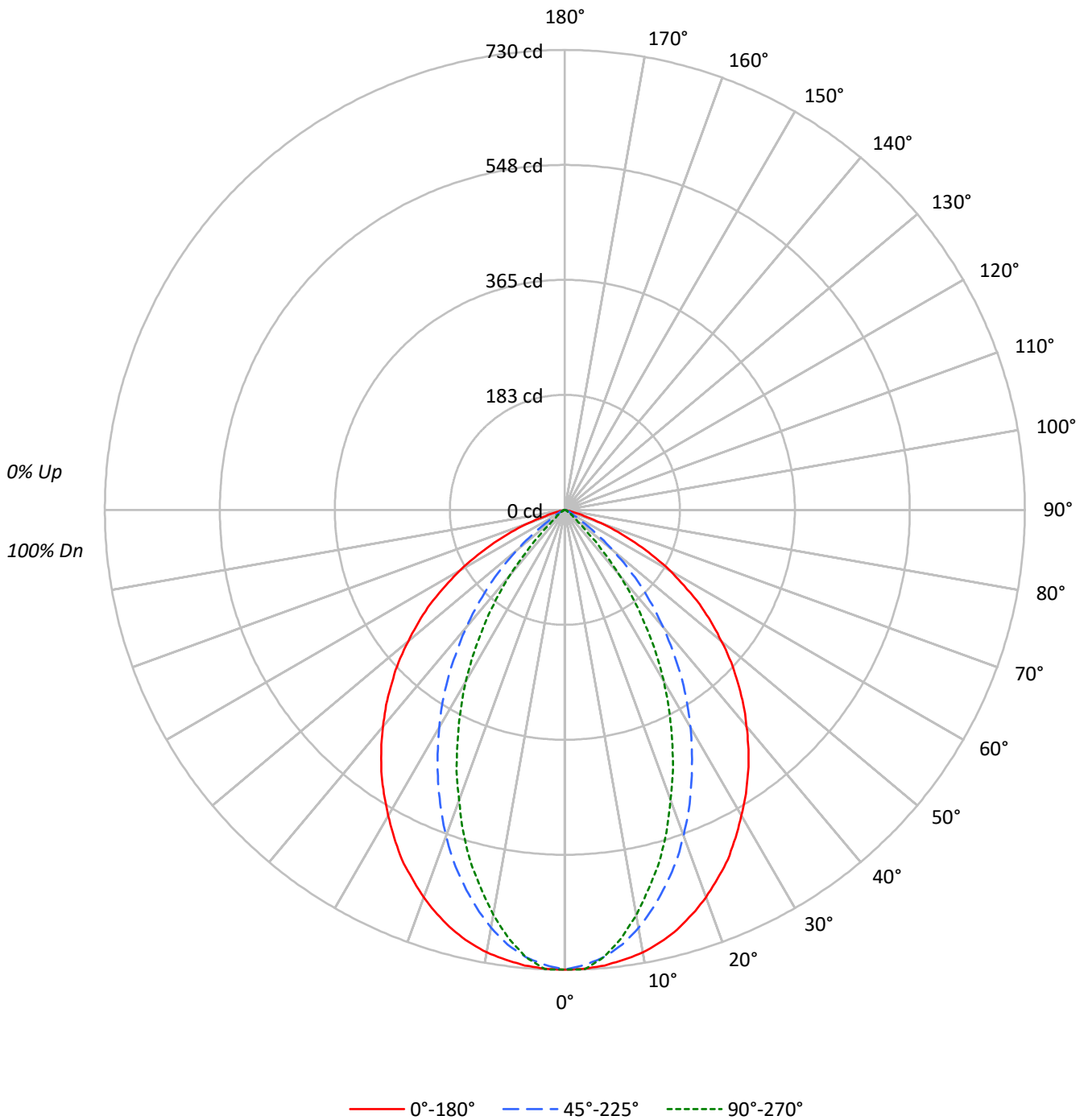
Lumens per Lamp: N/A
Luminaire Lumens: 942.9 lumens
Efficiency: N/A
Efficacy: 36.5 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5025	5025	5025
5°	5018	4924	4924
10°	4988	4712	4564
15°	4914	4399	4125
20°	4797	4035	3591
25°	4652	3613	3058
30°	4455	3169	2496
35°	4265	2703	1869
40°	4033	2180	1212
45°	3778	1650	525
50°	3476	1052	196
55°	3132	462	139
60°	2652	198	92
65°	2007	125	47
70°	1222	58	20
75°	255	27	27
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3778 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.3	7.1
10°-20°	175.4	18.6
20°-30°	225.2	23.9
30°-40°	212.0	22.5
40°-50°	148.2	15.7
50°-60°	79.2	8.4
60°-70°	31.6	3.3
70°-80°	4.1	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°	467.8	49.6
0°-40°	679.8	72.1
0°-60°	907.2	96.2
0°-90°	942.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	942.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	726	724	712	714	712	69
15°	689	667	617	588	579	194
25°	612	558	476	424	402	281
35°	507	426	322	248	222	317
45°	388	291	170	82	54	299
55°	261	160	38	14	12	231
65°	123	49	8	4	3	123
75°	10	3	1	1	1	19
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°	729.8	729.8	729.8	729.8	729.8
2.5°	728.9	729.8	723.1	728.9	729.8
5°	726.0	724.1	712.5	714.4	712.5
7.5°	720.2	715.4	696.1	689.4	685.5
10°	713.5	702.9	674.0	659.5	652.8
12.5°	702.9	687.5	647.0	624.9	615.3
15°	689.4	667.2	617.2	588.3	578.7
17.5°	673.0	644.1	586.4	550.7	536.3
20°	654.7	616.2	550.7	508.4	490.1
22.5°	633.5	589.3	514.2	467.0	448.7
25°	612.4	558.4	475.6	423.7	402.5
27.5°	586.4	526.7	437.1	381.3	358.2
30°	560.4	494.9	398.6	338.0	313.9
32.5°	534.4	461.2	360.1	292.7	268.6
35°	507.4	426.5	321.6	248.4	222.4
37.5°	478.5	391.9	280.2	206.0	179.1
40°	448.7	358.2	242.6	164.6	134.8
42.5°	419.8	324.5	205.1	124.2	91.5
45°	388.0	290.8	169.5	81.8	53.9
47.5°	358.2	258.0	132.9	47.2	27.9
50°	324.5	224.3	98.2	25.0	18.3
52.5°	292.7	191.6	65.5	16.4	14.4
55°	260.9	159.8	38.5	13.5	11.6
57.5°	224.3	129.0	21.2	10.6	8.7
60°	192.6	101.1	14.4	7.7	6.7
62.5°	156.0	74.1	10.6	5.8	4.8
65°	123.2	49.1	7.7	3.9	2.9
67.5°	91.5	28.9	4.8	1.9	1.9
70°	60.7	15.4	2.9	1.0	1.0
72.5°	31.8	6.7	1.9	1.0	1.0
75°	9.6	2.9	1.0	1.0	1.0
77.5°	0.0	1.0	0.0	0.0	1.0
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)