

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: P1061794

Luminaire Tested: S125RDR-S850D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061794
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-S850D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

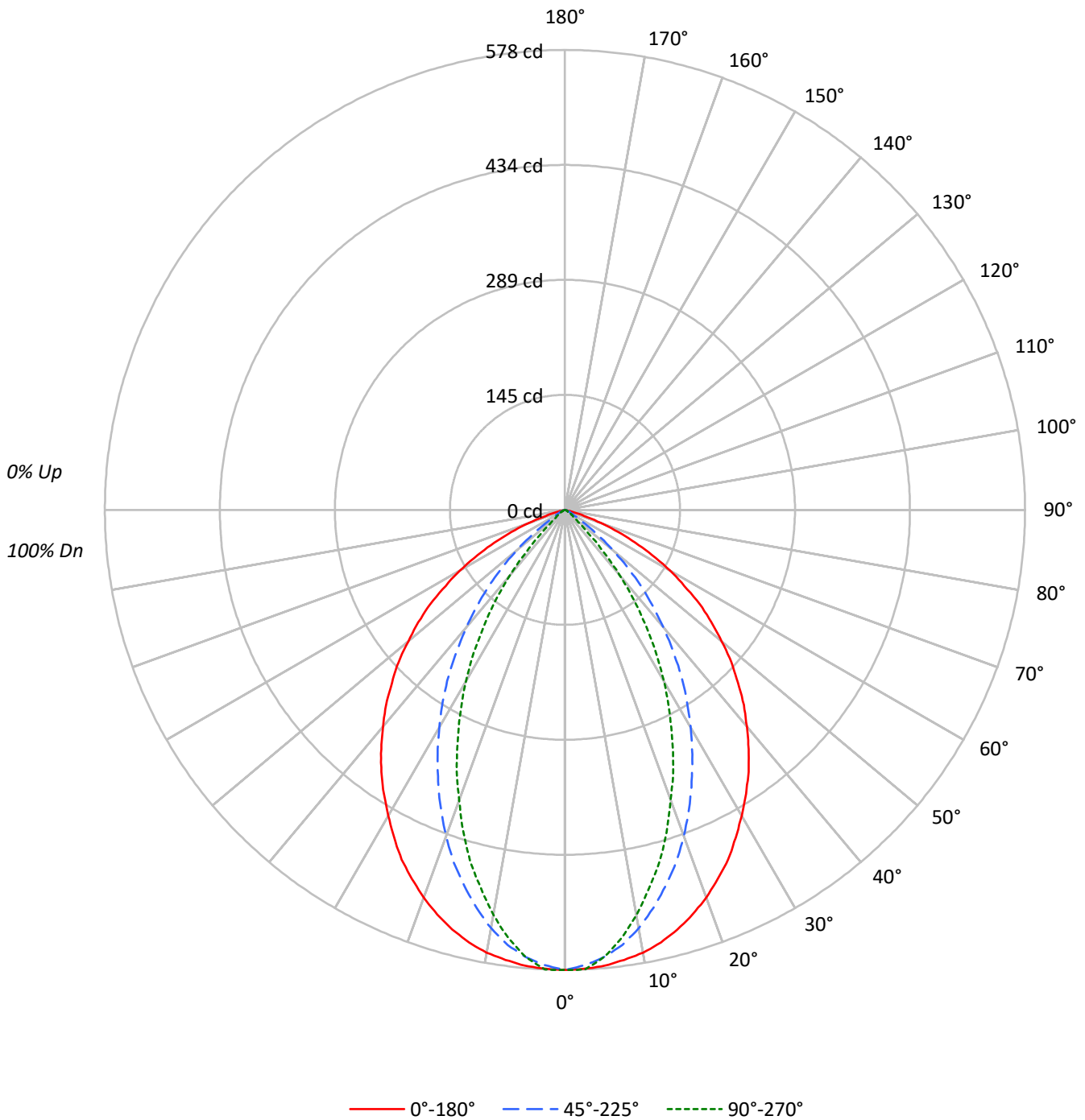
Lumens per Lamp: N/A
Luminaire Lumens: 746.9 lumens
Efficiency: N/A
Efficacy: 29.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	3981	3981	3981
5°	3975	3901	3901
10°	3952	3733	3615
15°	3893	3485	3268
20°	3801	3197	2844
25°	3685	2863	2422
30°	3529	2511	1977
35°	3379	2142	1481
40°	3194	1728	960
45°	2993	1307	416
50°	2753	833	155
55°	2481	366	110
60°	2100	157	73
65°	1590	99	37
70°	968	46	16
75°	202	21	21
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2993 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.3	7.1
10°-20°	138.9	18.6
20°-30°	178.4	23.9
30°-40°	167.9	22.5
40°-50°	117.4	15.7
50°-60°	62.7	8.4
60°-70°	25.0	3.3
70°-80°	3.3	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°	370.6	49.6
0°-40°	538.5	72.1
0°-60°	718.7	96.2
0°-90°	746.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	746.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	578	578	578	578	578	
5°	575	574	564	566	564	55
15°	546	529	489	466	458	154
25°	485	442	377	336	319	223
35°	402	338	255	197	176	251
45°	307	230	134	65	43	237
55°	207	127	30	11	9	183
65°	98	39	6	3	2	97
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°	578.2	578.2	578.2	578.2	578.2
2.5°	577.4	578.2	572.8	577.4	578.2
5°	575.1	573.6	564.4	566.0	564.4
7.5°	570.5	566.7	551.5	546.1	543.1
10°	565.2	556.8	533.9	522.5	517.1
12.5°	556.8	544.6	512.6	495.0	487.4
15°	546.1	528.6	488.9	466.0	458.4
17.5°	533.2	510.3	464.5	436.3	424.8
20°	518.7	488.2	436.3	402.7	388.2
22.5°	501.9	466.8	407.3	369.9	355.4
25°	485.1	442.4	376.8	335.6	318.8
27.5°	464.5	417.2	346.3	302.0	283.7
30°	443.9	392.1	315.8	267.7	248.7
32.5°	423.3	365.4	285.3	231.9	212.8
35°	402.0	337.9	254.8	196.8	176.2
37.5°	379.1	310.4	222.0	163.2	141.9
40°	355.4	283.7	192.2	130.4	106.8
42.5°	332.6	257.0	162.5	98.4	72.5
45°	307.4	230.3	134.2	64.8	42.7
47.5°	283.7	204.4	105.3	37.4	22.1
50°	257.0	177.7	77.8	19.8	14.5
52.5°	231.9	151.8	51.9	13.0	11.4
55°	206.7	126.6	30.5	10.7	9.2
57.5°	177.7	102.2	16.8	8.4	6.9
60°	152.5	80.1	11.4	6.1	5.3
62.5°	123.6	58.7	8.4	4.6	3.8
65°	97.6	38.9	6.1	3.1	2.3
67.5°	72.5	22.9	3.8	1.5	1.5
70°	48.1	12.2	2.3	0.8	0.8
72.5°	25.2	5.3	1.5	0.8	0.8
75°	7.6	2.3	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)