

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: P1061800

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061800
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-S850D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

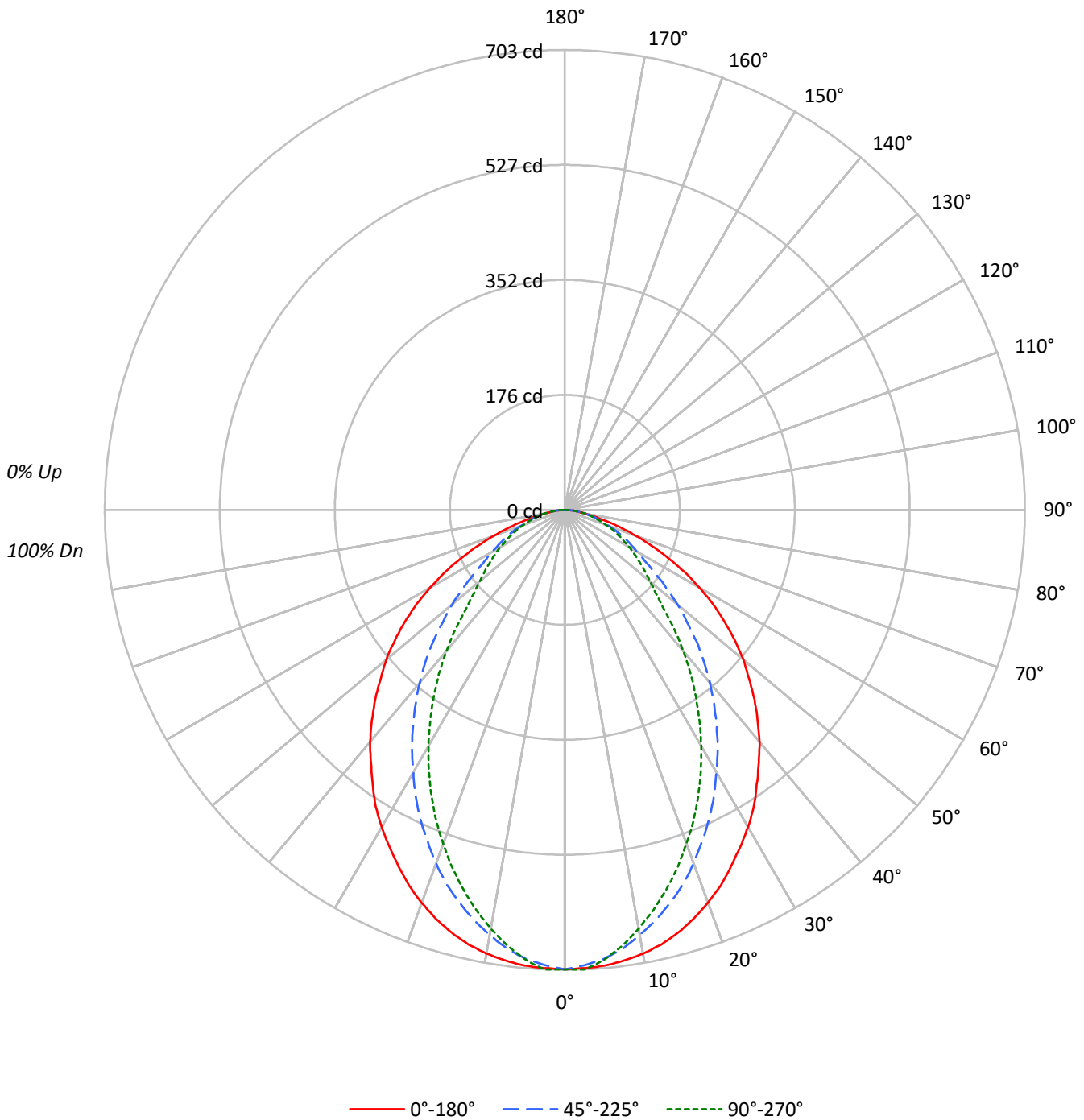
Lumens per Lamp: N/A
Luminaire Lumens: 1330.8 lumens
Efficiency: N/A
Efficacy: 51.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87				87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75				75
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				65
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57				57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50				50
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45				45
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40				40
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36				36
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33				33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30				30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4837	4837	4837
5°	4835	4761	4771
10°	4816	4613	4544
15°	4769	4432	4279
20°	4683	4214	3979
25°	4567	3963	3663
30°	4451	3681	3311
35°	4302	3398	2936
40°	4161	3099	2530
45°	3988	2770	2072
50°	3815	2403	1813
55°	3580	2005	1676
60°	3266	1754	1566
65°	2858	1603	1453
70°	2319	1443	1351
75°	1663	1319	1258
80°	1150	1178	1178
85°	845	1027	1082

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3988 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	4.9
10°-20°	176.7	13.3
20°-30°	244.2	18.3
30°-40°	260.1	19.5
40°-50°	228.5	17.2
50°-60°	173.3	13.0
60°-70°	112.5	8.5
70°-80°	55.7	4.2
80°-90°	14.6	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°	486.2	36.5
0°-40°	746.3	56.1
0°-60°	1148.0	86.3
0°-90°	1330.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1330.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	702	702	702	702	702	
5°	700	698	689	691	690	66
15°	669	654	622	607	600	188
25°	601	568	522	495	482	277
35°	512	464	404	368	349	320
45°	410	352	284	233	213	316
55°	298	240	167	144	140	266
65°	175	130	98	91	89	173
75°	62	55	50	48	47	70
85°	11	12	13	13	14	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	702.5	702.5	702.5	702.5	702.5
2.5°	701.0	702.5	696.4	701.8	703.3
5°	699.5	697.9	688.8	691.1	690.3
7.5°	694.9	691.8	676.6	675.1	672.0
10°	688.8	681.2	659.8	654.5	649.9
12.5°	680.4	668.2	642.3	631.6	626.2
15°	669.0	653.7	621.7	607.2	600.3
17.5°	655.2	633.9	600.3	580.5	572.8
20°	639.2	614.0	575.1	552.2	543.1
22.5°	621.7	591.9	548.4	524.0	514.1
25°	601.1	568.3	521.7	495.0	482.1
27.5°	580.5	543.9	493.5	463.8	450.0
30°	559.9	517.9	463.0	431.0	416.5
32.5°	537.8	491.2	434.8	399.7	382.9
35°	511.8	464.5	404.3	367.7	349.3
37.5°	486.6	436.3	374.5	333.3	315.8
40°	463.0	409.6	344.8	299.8	281.5
42.5°	436.3	381.4	315.0	267.7	247.1
45°	409.6	352.4	284.5	233.4	212.8
47.5°	381.4	324.9	252.5	202.1	188.4
50°	356.2	296.7	224.3	178.5	169.3
52.5°	327.2	269.3	195.3	160.2	154.1
55°	298.2	239.5	167.0	144.2	139.6
57.5°	268.5	212.8	144.9	130.4	125.9
60°	237.2	185.4	127.4	115.9	113.7
62.5°	205.9	157.1	112.1	103.7	100.7
65°	175.4	130.4	98.4	90.8	89.2
67.5°	144.2	106.0	84.7	79.3	78.6
70°	115.2	86.2	71.7	68.6	67.1
72.5°	88.5	68.6	60.3	58.0	57.2
75°	62.5	54.9	49.6	48.1	47.3
77.5°	42.0	42.0	39.7	38.1	38.9
80°	29.0	30.5	29.7	29.7	29.7
82.5°	19.1	20.6	21.4	21.4	21.4
85°	10.7	12.2	13.0	13.0	13.7
87.5°	3.8	4.6	5.3	6.1	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)