

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: P1061812

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061812
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-S850D935-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, 90 CRI LEDS
Ballast/Driver: -

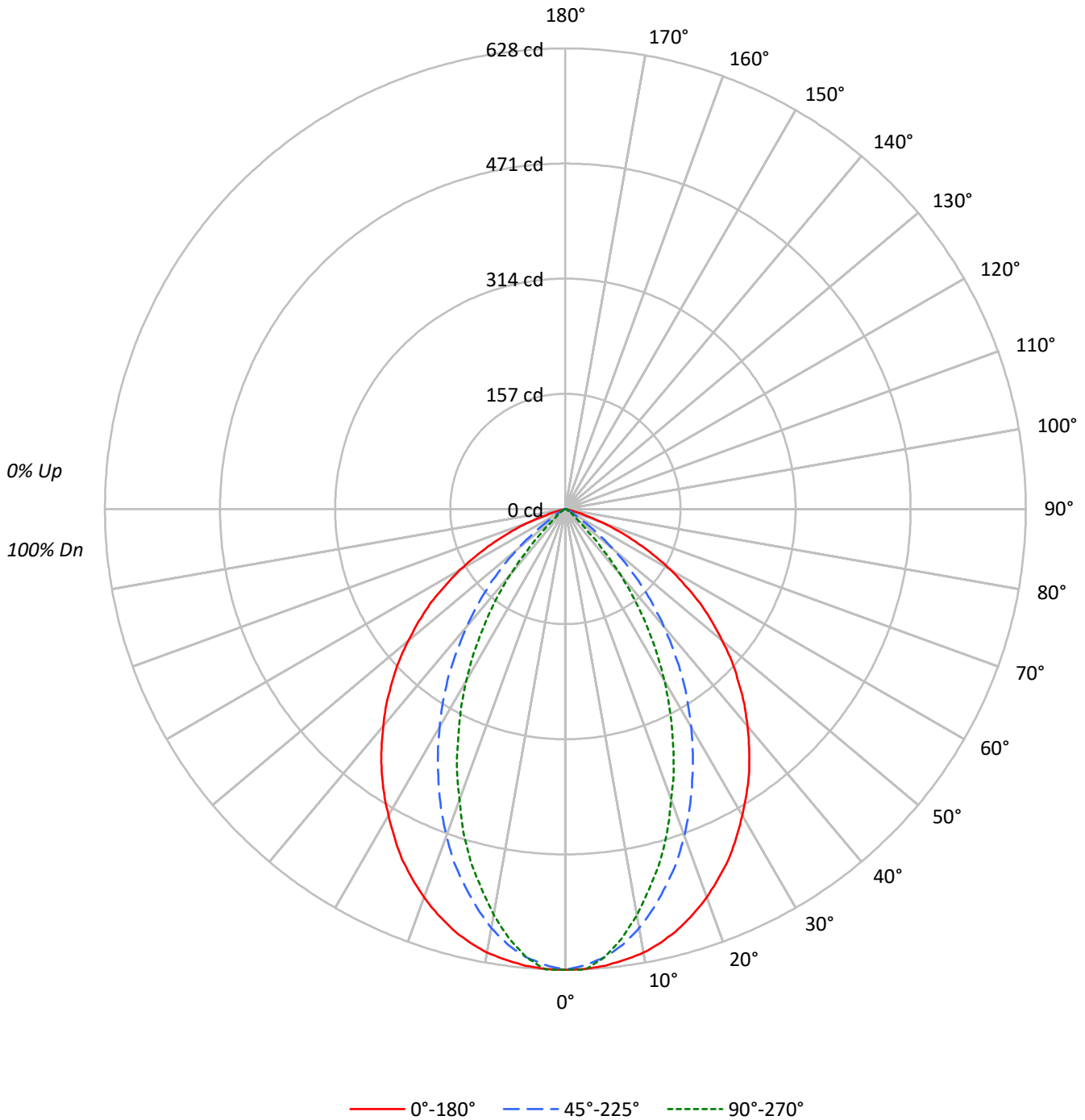
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 811.8 lumens
Efficiency: N/A
Efficacy: 31.5 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°	4327	4327	4327
5°	4320	4240	4240
10°	4295	4057	3930
15°	4231	3788	3551
20°	4130	3475	3092
25°	4005	3111	2632
30°	3836	2729	2149
35°	3672	2327	1610
40°	3472	1878	1044
45°	3253	1421	452
50°	2993	906	169
55°	2697	399	119
60°	2283	171	80
65°	1729	108	41
70°	1051	50	16
75°	221	21	21
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3253 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.9	7.1
10°-20°	151.0	18.6
20°-30°	193.9	23.9
30°-40°	182.5	22.5
40°-50°	127.6	15.7
50°-60°	68.2	8.4
60°-70°	27.2	3.3
70°-80°	3.5	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°	402.8	49.6
0°-40°	585.3	72.1
0°-60°	781.1	96.2
0°-90°	811.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	811.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	628	628	628	628	628	
5°	625	623	614	615	614	59
15°	594	574	531	506	498	167
25°	527	481	410	365	346	242
35°	437	367	277	214	192	273
45°	334	250	146	70	46	258
55°	225	138	33	12	10	199
65°	106	42	7	3	2	106
75°	8	2	1	1	1	16
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°	628.4	628.4	628.4	628.4	628.4
2.5°	627.6	628.4	622.6	627.6	628.4
5°	625.1	623.4	613.5	615.1	613.5
7.5°	620.1	616.0	599.4	593.6	590.3
10°	614.3	605.2	580.3	567.9	562.1
12.5°	605.2	591.9	557.1	538.0	529.7
15°	593.6	574.5	531.4	506.5	498.2
17.5°	579.5	554.6	504.9	474.2	461.8
20°	563.7	530.6	474.2	437.7	422.0
22.5°	545.5	507.4	442.7	402.1	386.3
25°	527.2	480.8	409.5	364.8	346.5
27.5°	504.9	453.5	376.4	328.3	308.4
30°	482.5	426.1	343.2	291.0	270.3
32.5°	460.1	397.1	310.0	252.0	231.3
35°	436.9	367.2	276.9	213.9	191.5
37.5°	412.0	337.4	241.2	177.4	154.2
40°	386.3	308.4	208.9	141.8	116.1
42.5°	361.4	279.4	176.6	106.9	78.8
45°	334.1	250.4	145.9	70.5	46.4
47.5°	308.4	222.2	114.4	40.6	24.0
50°	279.4	193.2	84.6	21.6	15.8
52.5°	252.0	165.0	56.4	14.1	12.4
55°	224.7	137.6	33.2	11.6	9.9
57.5°	193.2	111.1	18.2	9.1	7.5
60°	165.8	87.0	12.4	6.6	5.8
62.5°	134.3	63.8	9.1	5.0	4.1
65°	106.1	42.3	6.6	3.3	2.5
67.5°	78.8	24.9	4.1	1.7	1.7
70°	52.2	13.3	2.5	0.8	0.8
72.5°	27.4	5.8	1.7	0.8	0.8
75°	8.3	2.5	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)