

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: P1057982

Luminaire Tested: S122RDR-S485D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057982
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D850-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

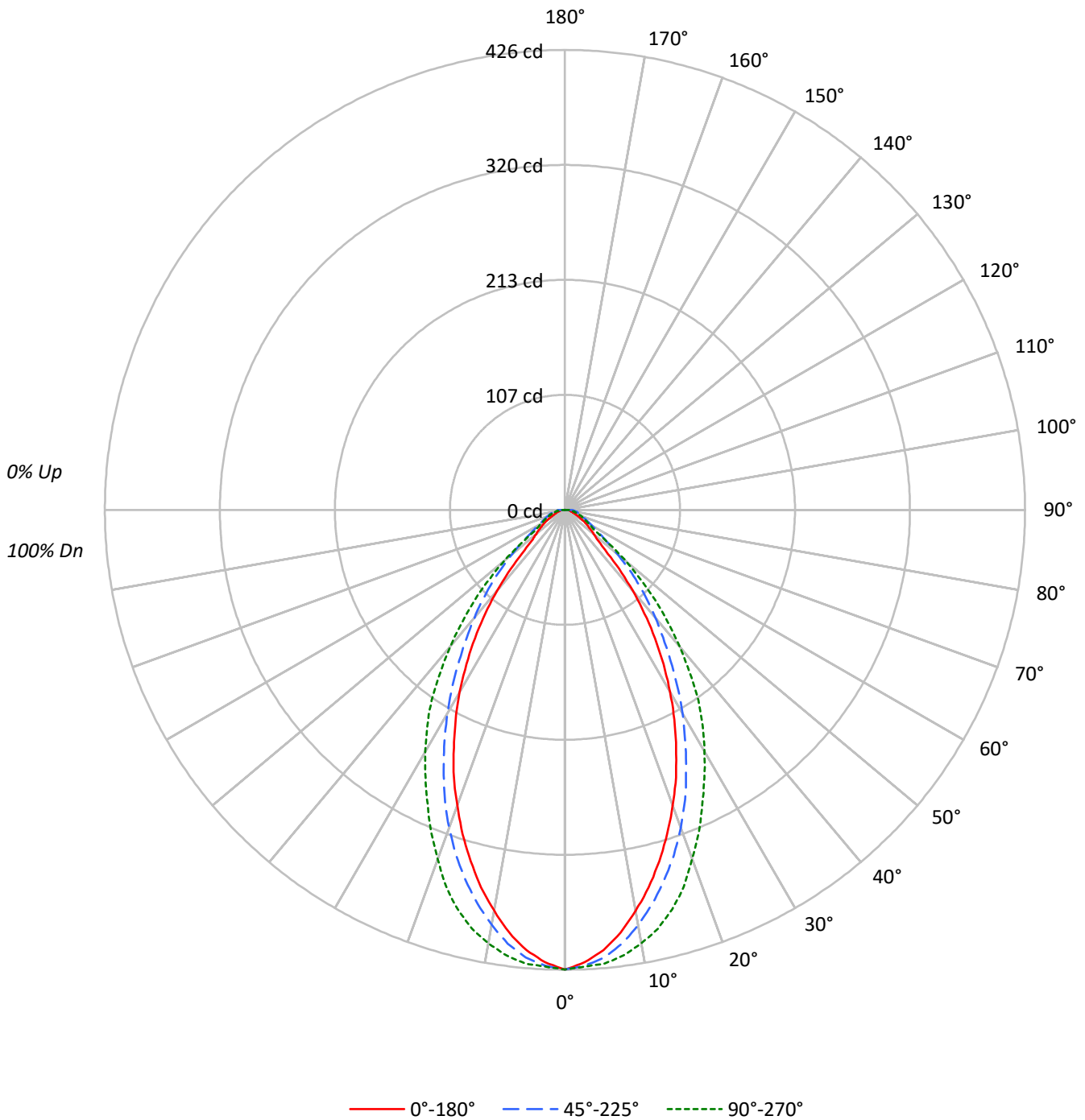
Lumens per Lamp: N/A
Luminaire Lumens: 513.6 lumens
Efficiency: N/A
Efficacy: 26.2 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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

TEST NUMBER: P1057982

CATALOG NUMBER: S122RDR-S485D850-X4F0-XX-UDD-SVL-S

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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	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	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7857	7857	7857
5°	7581	7711	7813
10°	7066	7315	7639
15°	6438	6784	7322
20°	5722	6154	6757
25°	4958	5406	6126
30°	4151	4636	5506
35°	3273	3841	4848
40°	2346	3141	3975
45°	1373	2479	3074
50°	993	1803	2076
55°	833	1290	1087
60°	668	1044	926
65°	550	926	856
70°	464	890	804
75°	449	955	784
80°	499	1169	839
85°	826	1821	1164

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3074 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	7.6
10°-20°	99.9	19.5
20°-30°	122.8	23.9
30°-40°	108.6	21.1
40°-50°	69.3	13.5
50°-60°	33.8	6.6
60°-70°	20.2	3.9
70°-80°	12.9	2.5
80°-90°	7.1	1.4
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°	261.8	51.0
0°-40°	370.4	72.1
0°-60°	473.5	92.2
0°-90°	513.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	513.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	426	426	426	426	426	
5°	409	418	416	418	422	38
15°	337	346	355	371	383	94
25°	244	252	266	282	301	111
35°	145	153	170	194	215	90
45°	53	68	95	107	118	44
55°	26	35	40	38	34	23
65°	13	24	21	20	20	13
75°	6	14	13	12	11	7
85°	4	8	9	8	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	425.8	425.8	425.8	425.8	425.8
2.5°	419.5	427.3	422.6	422.6	423.4
5°	409.3	417.9	416.3	417.9	421.8
7.5°	395.1	403.8	405.3	411.6	416.3
10°	377.1	385.7	390.4	400.6	407.7
12.5°	358.2	366.8	373.9	387.3	397.5
15°	337.0	346.4	355.1	370.8	383.3
17.5°	315.0	324.4	335.4	351.1	366.1
20°	291.4	300.1	313.4	328.3	344.1
22.5°	268.6	276.5	290.6	304.8	323.6
25°	243.5	252.2	265.5	282.0	300.9
27.5°	219.2	227.8	241.2	260.0	279.6
30°	194.8	202.7	217.6	237.2	258.4
32.5°	169.7	177.5	194.0	215.2	237.2
35°	145.3	153.2	170.5	194.0	215.2
37.5°	121.0	129.6	149.2	171.2	189.3
40°	97.4	107.6	130.4	149.2	165.0
42.5°	73.8	88.0	112.3	128.0	140.6
45°	52.6	67.6	95.0	106.8	117.8
47.5°	40.1	51.8	78.6	87.2	94.3
50°	34.6	42.4	62.8	69.1	72.3
52.5°	29.8	37.7	50.3	52.6	51.1
55°	25.9	34.6	40.1	37.7	33.8
57.5°	22.0	32.2	33.0	28.3	29.1
60°	18.1	29.1	28.3	24.4	25.1
62.5°	14.9	26.7	24.4	22.0	22.0
65°	12.6	23.6	21.2	19.6	19.6
67.5°	10.2	21.2	18.9	17.3	17.3
70°	8.6	18.9	16.5	14.9	14.9
72.5°	7.9	16.5	14.9	13.4	13.4
75°	6.3	14.1	13.4	11.8	11.0
77.5°	5.5	11.8	11.8	11.0	9.4
80°	4.7	10.2	11.0	9.4	7.9
82.5°	4.7	9.4	9.4	8.6	6.3
85°	3.9	7.9	8.6	7.9	5.5
87.5°	2.4	7.1	7.1	6.3	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)