

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: P1058012

Luminaire Tested: S122RDR-S485D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058012
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D935-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

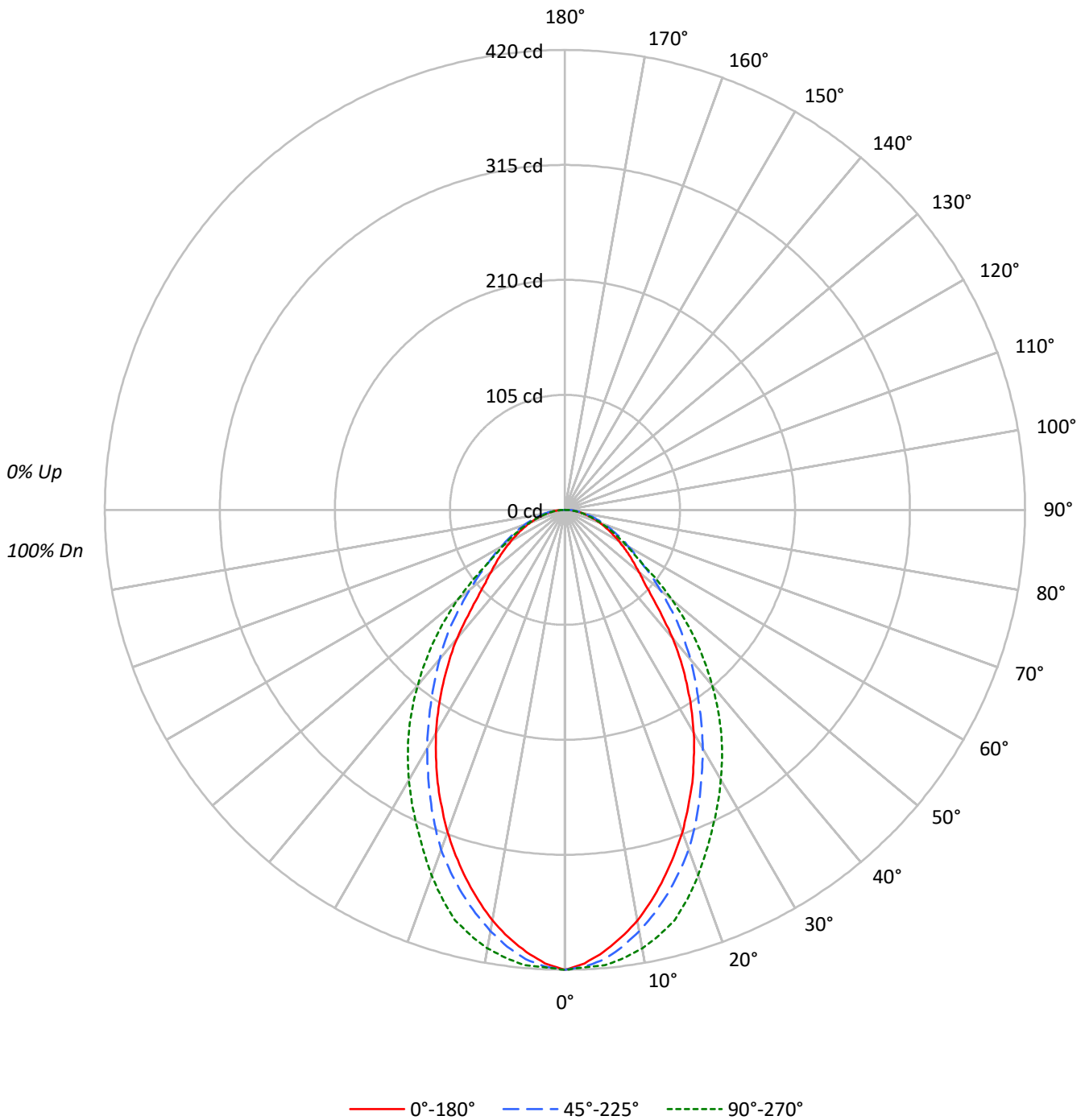
Lumens per Lamp: N/A
Luminaire Lumens: 683.9 lumens
Efficiency: N/A
Efficacy: 34.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1058012

CATALOG NUMBER: S122RDR-S485D935-X4F0-XX-UDD-WVL-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	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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47				
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43				
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7750	7750	7750
5°	7507	7631	7733
10°	7139	7321	7619
15°	6661	6929	7406
20°	6152	6488	6979
25°	5597	5919	6503
30°	5014	5363	6066
35°	4366	4791	5602
40°	3685	4288	5037
45°	2928	3786	4405
50°	2520	3255	3657
55°	2294	2786	2805
60°	2093	2473	2384
65°	1917	2236	2105
70°	1775	2072	1872
75°	1654	1953	1654
80°	1551	1881	1488
85°	1546	1927	1291

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4405 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.8	5.7
10°-20°	102.5	15.0
20°-30°	134.9	19.7
30°-40°	135.6	19.8
40°-50°	109.9	16.1
50°-60°	75.7	11.1
60°-70°	49.6	7.2
70°-80°	27.6	4.0
80°-90°	9.3	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°	276.1	40.4
0°-40°	411.7	60.2
0°-60°	597.4	87.4
0°-90°	683.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	683.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	405	413	412	414	418	38
15°	349	357	363	376	388	98
25°	275	282	291	304	319	126
35°	194	203	213	232	249	121
45°	112	125	145	158	169	89
55°	71	79	87	88	87	64
65°	44	52	51	49	48	44
75°	23	29	27	24	23	25
85°	7	10	9	8	6	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	420.0	420.0	420.0	420.0	420.0
2.5°	414.5	421.8	417.5	417.5	418.1
5°	405.3	413.3	412.0	413.9	417.5
7.5°	393.8	402.3	402.3	407.8	412.7
10°	381.0	389.5	390.7	399.2	406.6
12.5°	365.1	373.6	377.3	388.3	398.0
15°	348.7	357.2	362.7	376.1	387.7
17.5°	331.0	339.5	346.8	360.8	372.4
20°	313.3	321.2	330.4	342.6	355.4
22.5°	293.8	302.3	310.9	322.4	337.1
25°	274.9	282.2	290.7	303.5	319.4
27.5°	254.8	262.7	270.6	285.9	302.3
30°	235.3	243.2	251.7	267.6	284.7
32.5°	214.6	223.1	231.6	249.3	267.0
35°	193.8	203.0	212.7	231.6	248.7
37.5°	173.7	183.5	195.0	214.6	229.2
40°	153.0	163.4	178.0	195.0	209.1
42.5°	131.0	143.8	161.5	176.2	189.0
45°	112.2	125.0	145.1	157.9	168.8
47.5°	98.1	108.5	128.0	139.0	148.1
50°	87.8	95.7	113.4	121.3	127.4
52.5°	79.2	87.2	99.4	104.8	106.7
55°	71.3	79.2	86.6	88.4	87.2
57.5°	63.4	71.9	76.2	74.4	74.4
60°	56.7	65.8	67.0	64.6	64.6
62.5°	50.0	59.1	59.1	56.1	56.1
65°	43.9	52.4	51.2	48.8	48.2
67.5°	38.4	46.3	44.5	42.1	41.4
70°	32.9	40.2	38.4	35.4	34.7
72.5°	28.0	34.7	32.3	29.9	28.6
75°	23.2	28.6	27.4	24.4	23.2
77.5°	18.9	23.2	21.9	19.5	18.3
80°	14.6	18.3	17.7	15.2	14.0
82.5°	11.0	14.0	13.4	11.6	9.8
85°	7.3	9.8	9.1	7.9	6.1
87.5°	3.7	6.7	6.1	5.5	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)