

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: P1058003

Luminaire Tested: S122RDR-S485D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058003
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-S485D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

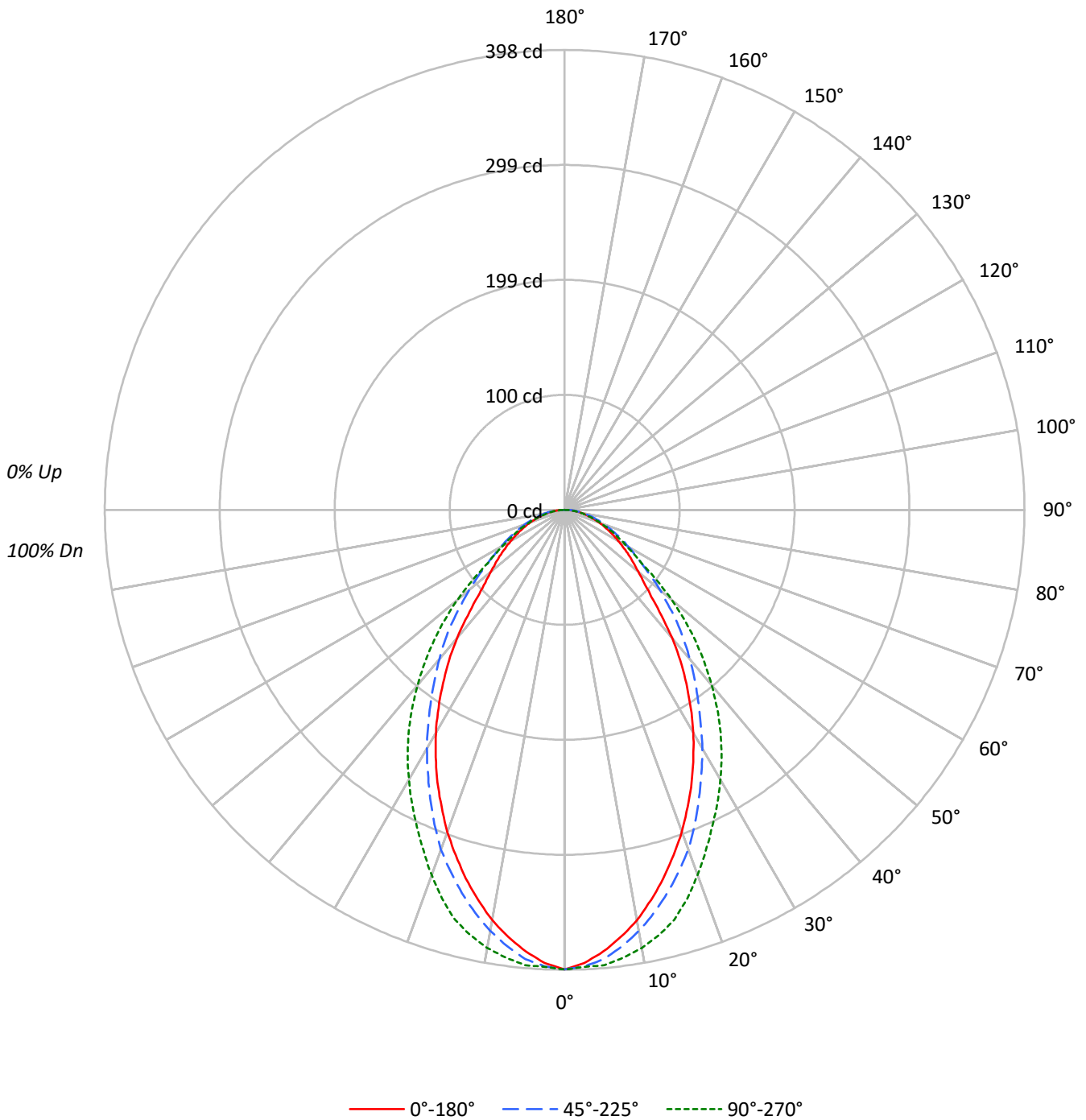
Lumens per Lamp: N/A
Luminaire Lumens: 647.6 lumens
Efficiency: N/A
Efficacy: 33.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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				
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°	7339	7339	7339
5°	7109	7228	7324
10°	6758	6933	7214
15°	6306	6560	7013
20°	5826	6142	6608
25°	5300	5605	6157
30°	4747	5080	5742
35°	4134	4537	5305
40°	3490	4059	4769
45°	2771	3586	4173
50°	2386	3083	3462
55°	2172	2638	2654
60°	1982	2343	2259
65°	1816	2118	1991
70°	1683	1964	1775
75°	1561	1854	1561
80°	1477	1775	1413
85°	1461	1842	1228

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4173 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.7	5.7
10°-20°	97.0	15.0
20°-30°	127.7	19.7
30°-40°	128.4	19.8
40°-50°	104.1	16.1
50°-60°	71.7	11.1
60°-70°	46.9	7.2
70°-80°	26.1	4.0
80°-90°	8.8	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°	261.5	40.4
0°-40°	389.9	60.2
0°-60°	565.6	87.3
0°-90°	647.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	647.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	384	391	390	392	395	36
15°	330	338	343	356	367	92
25°	260	267	275	287	302	119
35°	184	192	201	219	236	114
45°	106	118	137	150	160	84
55°	68	75	82	84	82	61
65°	42	50	48	46	46	41
75°	22	27	26	23	22	23
85°	7	9	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°	397.7	397.7	397.7	397.7	397.7
2.5°	392.5	399.4	395.4	395.4	395.9
5°	383.8	391.3	390.2	391.9	395.4
7.5°	372.9	380.9	380.9	386.1	390.7
10°	360.7	368.8	370.0	378.1	385.0
12.5°	345.7	353.8	357.3	367.7	376.9
15°	330.1	338.2	343.4	356.1	367.1
17.5°	313.4	321.5	328.4	341.7	352.7
20°	296.7	304.2	312.8	324.4	336.5
22.5°	278.2	286.3	294.4	305.3	319.2
25°	260.3	267.2	275.3	287.4	302.4
27.5°	241.3	248.8	256.3	270.7	286.3
30°	222.8	230.3	238.4	253.4	269.5
32.5°	203.2	211.2	219.3	236.1	252.8
35°	183.5	192.2	201.4	219.3	235.5
37.5°	164.5	173.7	184.7	203.2	217.0
40°	144.9	154.7	168.5	184.7	198.0
42.5°	124.1	136.2	153.0	166.8	178.9
45°	106.2	118.3	137.4	149.5	159.9
47.5°	92.9	102.7	121.2	131.6	140.3
50°	83.1	90.6	107.4	114.9	120.6
52.5°	75.0	82.5	94.1	99.3	101.0
55°	67.5	75.0	82.0	83.7	82.5
57.5°	60.0	68.1	72.1	70.4	70.4
60°	53.7	62.3	63.5	61.2	61.2
62.5°	47.3	56.0	56.0	53.1	53.1
65°	41.6	49.6	48.5	46.2	45.6
67.5°	36.4	43.9	42.1	39.8	39.2
70°	31.2	38.1	36.4	33.5	32.9
72.5°	26.6	32.9	30.6	28.3	27.1
75°	21.9	27.1	26.0	23.1	21.9
77.5°	17.9	21.9	20.8	18.5	17.3
80°	13.9	17.3	16.7	14.4	13.3
82.5°	10.4	13.3	12.7	11.0	9.2
85°	6.9	9.2	8.7	7.5	5.8
87.5°	3.5	6.3	5.8	5.2	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)