

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: P1057996

Luminaire Tested: S122RDR-S485D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057996
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D930-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

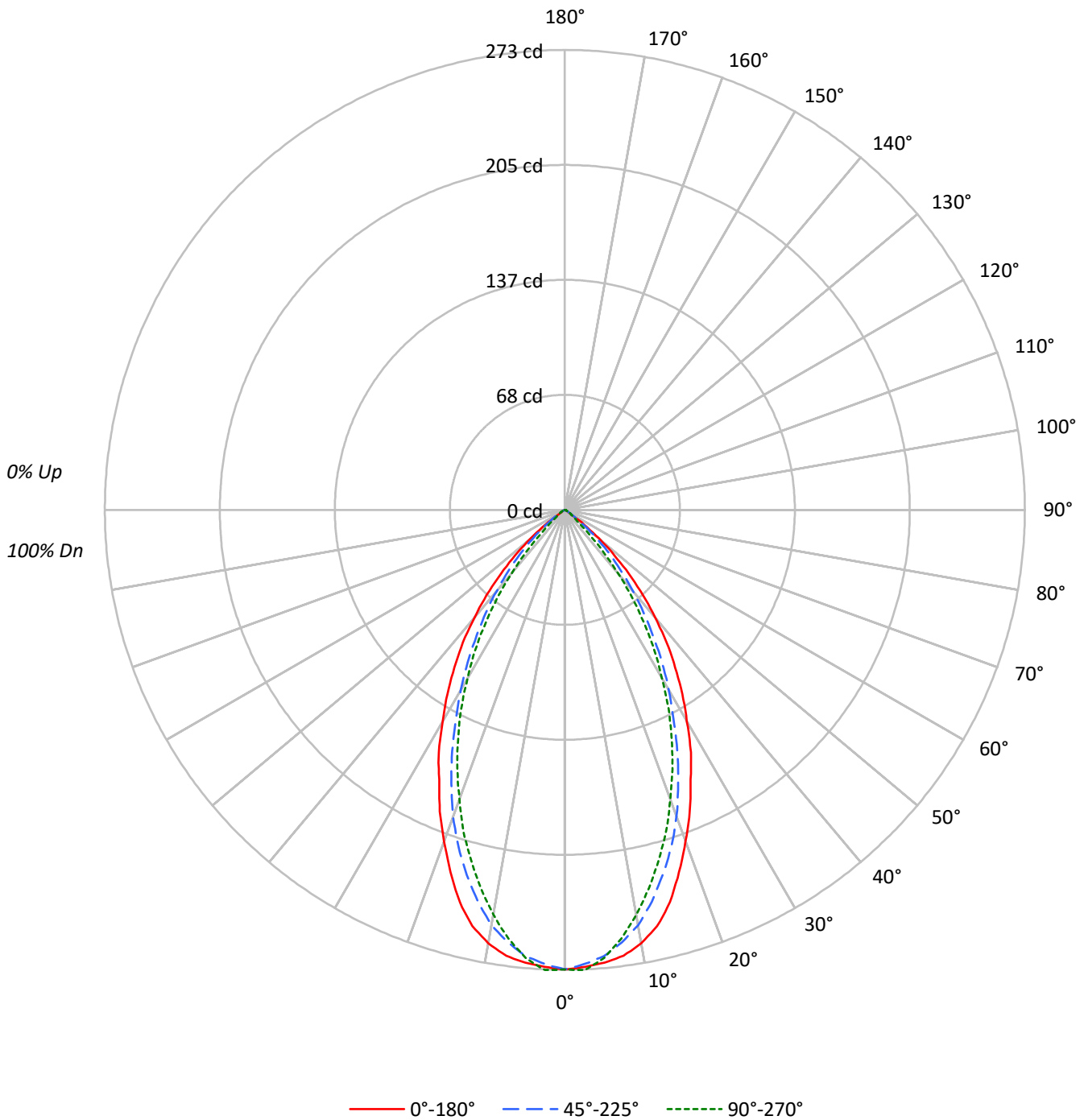
Lumens per Lamp: N/A
Luminaire Lumens: 256.6 lumens
Efficiency: N/A
Efficacy: 13.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86
3	101	95	89	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5034	5034	5034
5°	4999	4925	4946
10°	4896	4690	4572
15°	4606	4287	4109
20°	4112	3806	3590
25°	3594	3217	3054
30°	3085	2629	2457
35°	2573	2052	1845
40°	2002	1515	1180
45°	1399	1007	511
50°	761	531	181
55°	113	187	129
60°	22	44	85
65°	0	26	52
70°	0	0	32
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1399 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.1	9.8
10°-20°	63.2	24.6
20°-30°	73.6	28.7
30°-40°	59.0	23.0
40°-50°	29.3	11.4
50°-60°	5.8	2.3
60°-70°	0.5	0.2
70°-80°	0.0	0.0
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°	161.9	63.1
0°-40°	220.9	86.1
0°-60°	256.0	99.8
0°-90°	256.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	256.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	273	273	273	273	273	
5°	270	270	266	266	267	26
15°	241	236	224	219	215	67
25°	176	168	158	155	150	81
35°	114	103	91	87	82	71
45°	54	47	39	26	20	41
55°	4	7	6	4	4	7
65°	0	0	1	1	1	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	272.8	272.8	272.8	272.8	272.8
2.5°	271.6	272.8	269.9	272.8	273.4
5°	269.9	269.9	265.9	266.5	267.0
7.5°	267.0	265.9	259.0	257.8	256.7
10°	261.3	259.0	250.3	245.7	244.0
12.5°	253.2	249.7	238.2	233.0	230.1
15°	241.1	236.5	224.4	218.6	215.1
17.5°	225.5	221.5	209.9	203.6	200.1
20°	209.4	203.6	193.8	187.4	182.8
22.5°	193.8	186.3	175.9	171.3	166.7
25°	176.5	167.8	158.0	154.6	150.0
27.5°	162.1	151.1	139.6	137.3	133.2
30°	144.8	134.4	123.4	120.0	115.3
32.5°	129.8	118.2	107.3	103.2	99.2
35°	114.2	102.7	91.1	87.1	81.9
37.5°	99.2	88.2	76.7	70.4	65.7
40°	83.1	73.8	62.9	54.8	49.0
42.5°	68.6	60.6	50.2	39.8	34.0
45°	53.6	47.3	38.6	26.0	19.6
47.5°	39.8	35.2	28.3	15.0	10.4
50°	26.5	24.8	18.5	7.5	6.3
52.5°	14.4	15.6	11.0	4.6	5.2
55°	3.5	6.9	5.8	3.5	4.0
57.5°	0.6	1.2	2.9	2.9	2.9
60°	0.6	0.6	1.2	1.7	2.3
62.5°	0.6	0.0	0.6	1.2	1.7
65°	0.0	0.0	0.6	0.6	1.2
67.5°	0.0	0.0	0.0	0.6	0.6
70°	0.0	0.0	0.0	0.6	0.6
72.5°	0.0	0.0	0.0	0.0	0.6
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
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)