

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: P1057989

Luminaire Tested: S122RDR-S485D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057989
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D927-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

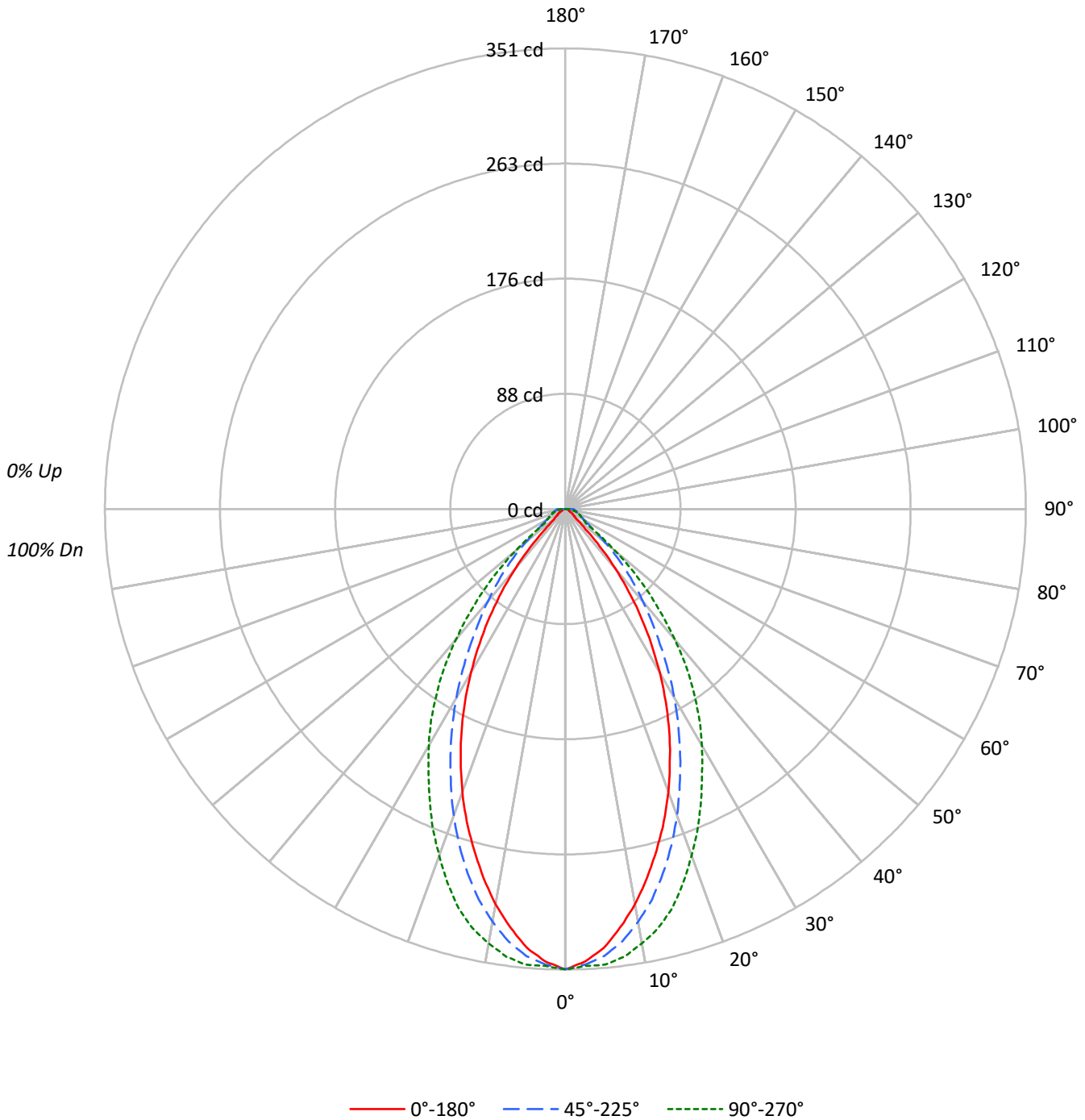
Lumens per Lamp: N/A
Luminaire Lumens: 381.8 lumens
Efficiency: N/A
Efficacy: 19.5 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1057989

CATALOG NUMBER: S122RDR-S485D927-X4F0-XX-UDD-BVL-W

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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74				
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67				
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56				
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45				
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6473	6473	6473
5°	6218	6331	6457
10°	5732	5985	6299
15°	5137	5490	6016
20°	4509	4884	5522
25°	3818	4217	4982
30°	3062	3541	4436
35°	2264	2832	3843
40°	1419	2219	3124
45°	556	1670	2315
50°	273	1128	1418
55°	216	740	631
60°	166	602	579
65°	122	563	563
70°	151	577	577
75°	157	642	599
80°	234	839	659
85°	466	1419	953

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 2623 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.0	8.4
10°-20°	81.0	21.2
20°-30°	96.9	25.4
30°-40°	81.6	21.4
40°-50°	46.4	12.2
50°-60°	18.3	4.8
60°-70°	11.5	3.0
70°-80°	8.6	2.2
80°-90°	5.5	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°	210.0	55.0
0°-40°	291.5	76.3
0°-60°	356.3	93.3
0°-90°	381.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	381.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	351	351	351	351	351	
5°	336	343	342	346	349	31
15°	269	278	287	304	315	75
25°	188	196	207	228	245	85
35°	100	110	126	153	171	62
45°	21	38	64	80	89	20
55°	7	15	23	24	20	6
65°	3	13	13	12	13	3
75°	2	9	9	8	8	2
85°	2	6	7	6	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	350.8	350.8	350.8	350.8	350.8
2.5°	345.2	351.4	347.5	348.0	348.6
5°	335.7	343.0	341.8	345.8	348.6
7.5°	321.6	329.5	332.3	339.0	344.1
10°	305.9	314.9	319.4	330.1	336.2
12.5°	288.0	298.1	304.8	318.3	327.2
15°	268.9	278.4	287.4	304.2	314.9
17.5°	249.8	259.3	268.9	287.4	298.6
20°	229.6	238.6	248.7	268.3	281.2
22.5°	208.2	217.8	227.9	248.1	263.8
25°	187.5	195.9	207.1	228.5	244.7
27.5°	165.6	174.0	186.4	208.2	225.7
30°	143.7	152.1	166.2	188.6	208.2
32.5°	121.8	130.8	145.9	170.6	190.3
35°	100.5	109.5	125.7	152.7	170.6
37.5°	79.7	89.8	107.8	134.2	151.0
40°	58.9	70.7	92.1	115.6	129.7
42.5°	39.3	53.9	77.5	97.1	108.9
45°	21.3	37.6	64.0	80.3	88.7
47.5°	11.8	24.1	51.1	64.0	69.0
50°	9.5	16.8	39.3	48.8	49.4
52.5°	7.9	15.2	29.2	34.8	32.0
55°	6.7	14.6	23.0	23.6	19.6
57.5°	5.6	14.0	19.1	16.8	16.8
60°	4.5	14.0	16.3	15.2	15.7
62.5°	3.4	14.0	14.6	13.5	14.0
65°	2.8	12.9	12.9	12.3	12.9
67.5°	2.8	11.8	11.8	11.2	11.8
70°	2.8	11.2	10.7	10.7	10.7
72.5°	2.2	10.1	10.1	9.5	9.5
75°	2.2	9.0	9.0	8.4	8.4
77.5°	2.2	8.4	8.4	7.9	7.3
80°	2.2	7.3	7.9	7.3	6.2
82.5°	2.2	6.7	7.3	6.7	5.1
85°	2.2	6.2	6.7	6.2	4.5
87.5°	1.7	6.2	6.2	5.1	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)