

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: P1058025

Luminaire Tested: S122RDR-S485D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058025
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-S485D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

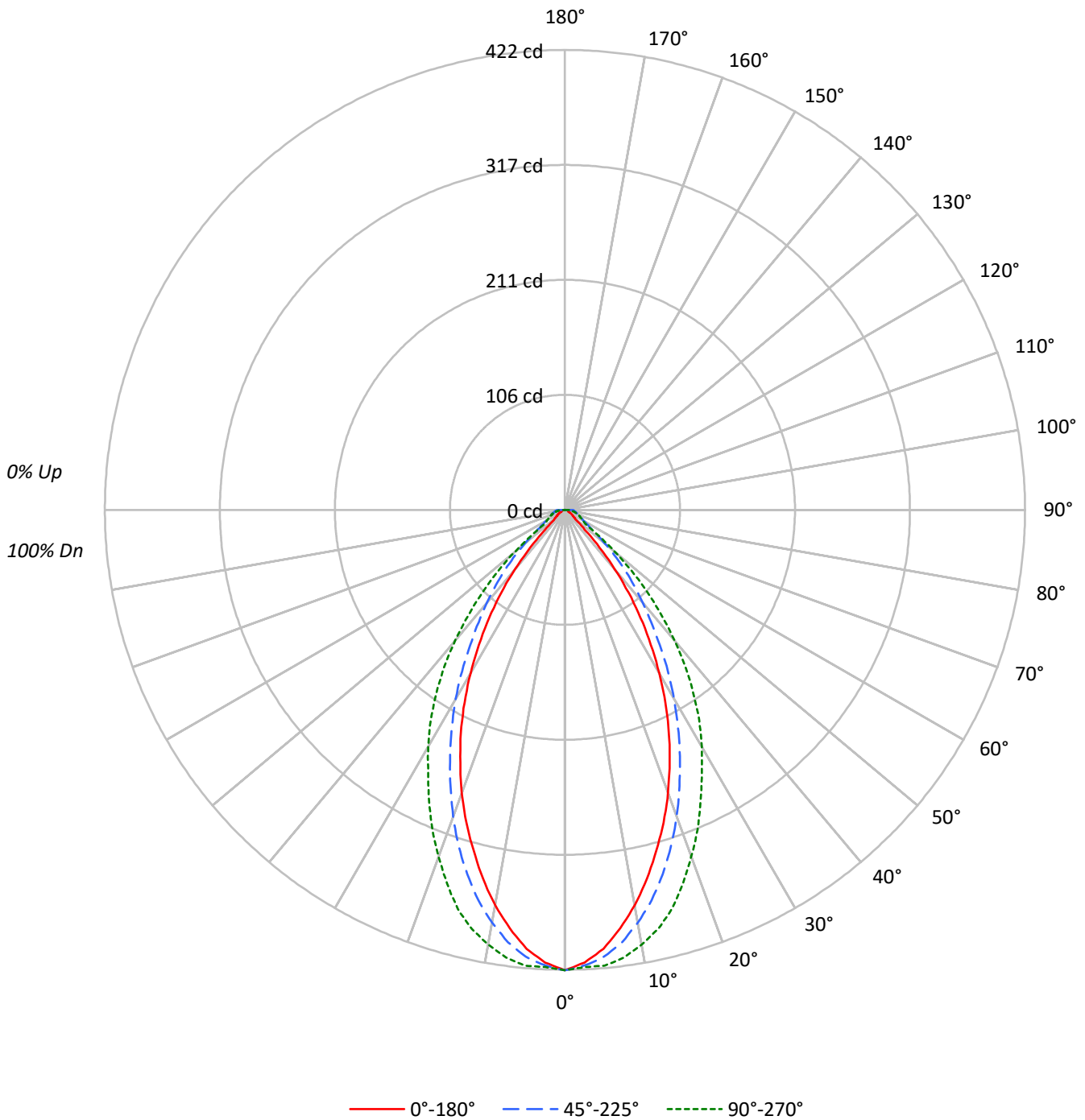
Lumens per Lamp: N/A
Luminaire Lumens: 459.9 lumens
Efficiency: N/A
Efficacy: 23.5 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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°	7796	7796	7796
5°	7487	7626	7776
10°	6903	7206	7587
15°	6186	6612	7244
20°	5430	5881	6651
25°	4597	5078	6000
30°	3688	4264	5344
35°	2726	3410	4629
40°	1710	2671	3763
45°	671	2012	2787
50°	330	1358	1708
55°	261	891	762
60°	199	723	698
65°	148	677	677
70°	183	691	691
75°	192	770	720
80°	287	1010	786
85°	572	1715	1143

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 3130 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.6	8.4
10°-20°	97.6	21.2
20°-30°	116.7	25.4
30°-40°	98.2	21.4
40°-50°	55.9	12.2
50°-60°	22.1	4.8
60°-70°	13.9	3.0
70°-80°	10.3	2.2
80°-90°	6.6	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°	252.8	55.0
0°-40°	351.1	76.3
0°-60°	429.1	93.3
0°-90°	459.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	459.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	422	422	422	422	422	
5°	404	413	412	416	420	37
15°	324	335	346	366	379	90
25°	226	236	249	275	295	103
35°	121	132	151	184	206	75
45°	26	45	77	97	107	24
55°	8	18	28	28	24	7
65°	3	16	16	15	16	4
75°	3	11	11	10	10	3
85°	3	7	8	7	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	422.5	422.5	422.5	422.5	422.5
2.5°	415.7	423.2	418.4	419.1	419.8
5°	404.2	413.0	411.7	416.4	419.8
7.5°	387.3	396.8	400.2	408.3	414.4
10°	368.4	379.2	384.6	397.5	404.9
12.5°	346.8	358.9	367.1	383.3	394.1
15°	323.8	335.3	346.1	366.4	379.2
17.5°	300.8	312.3	323.8	346.1	359.6
20°	276.5	287.3	299.5	323.1	338.7
22.5°	250.8	262.3	274.4	298.8	317.7
25°	225.8	235.9	249.4	275.1	294.7
27.5°	199.4	209.6	224.4	250.8	271.7
30°	173.1	183.2	200.1	227.1	250.8
32.5°	146.7	157.5	175.8	205.5	229.2
35°	121.0	131.8	151.4	183.9	205.5
37.5°	96.0	108.2	129.8	161.6	181.8
40°	71.0	85.2	110.9	139.3	156.2
42.5°	47.3	64.9	93.3	116.9	131.1
45°	25.7	45.3	77.1	96.7	106.8
47.5°	14.2	29.1	61.5	77.1	83.1
50°	11.5	20.3	47.3	58.8	59.5
52.5°	9.5	18.3	35.2	41.9	38.5
55°	8.1	17.6	27.7	28.4	23.7
57.5°	6.8	16.9	23.0	20.3	20.3
60°	5.4	16.9	19.6	18.3	18.9
62.5°	4.1	16.9	17.6	16.2	16.9
65°	3.4	15.5	15.5	14.9	15.5
67.5°	3.4	14.2	14.2	13.5	14.2
70°	3.4	13.5	12.8	12.8	12.8
72.5°	2.7	12.2	12.2	11.5	11.5
75°	2.7	10.8	10.8	10.1	10.1
77.5°	2.7	10.1	10.1	9.5	8.8
80°	2.7	8.8	9.5	8.8	7.4
82.5°	2.7	8.1	8.8	8.1	6.1
85°	2.7	7.4	8.1	7.4	5.4
87.5°	2.0	7.4	7.4	6.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)