

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: P1057980

Luminaire Tested: S122RDR-S485D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057980  
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-S485D850-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, 80 CRI LEDS  
Ballast/Driver: -

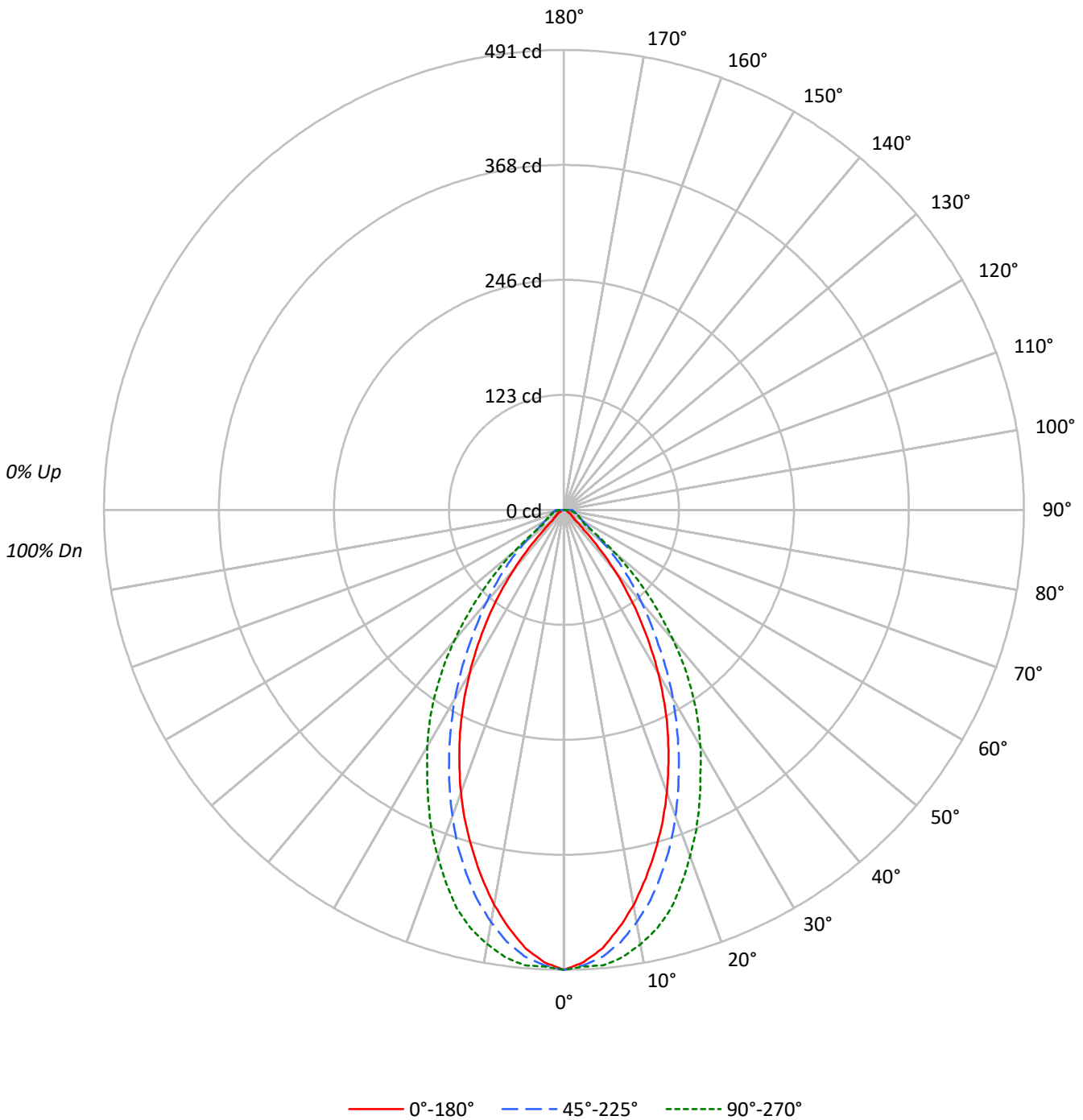
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 534.5 lumens  
Efficiency: N/A  
Efficacy: 27.3 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			100	
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90			90	
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81			81	
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74			74	
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67			67	
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61			61	
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56			56	
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52			52	
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48			48	
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45			45	
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42			42	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9062	9062	9062
5°	8704	8865	9039
10°	8025	8377	8820
15°	7191	7685	8421
20°	6311	6836	7731
25°	5345	5904	6975
30°	4287	4956	6211
35°	3169	3965	5382
40°	1987	3105	4372
45°	780	2338	3241
50°	385	1579	1987
55°	302	1036	885
60°	233	841	812
65°	170	790	790
70°	210	804	804
75°	221	898	841
80°	329	1169	914
85°	656	1990	1334

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 87.5°  
 Luminance: 3638 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.9	8.4
10°-20°	113.4	21.2
20°-30°	135.7	25.4
30°-40°	114.2	21.4
40°-50°	65.0	12.2
50°-60°	25.6	4.8
60°-70°	16.1	3.0
70°-80°	12.0	2.2
80°-90°	7.6	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°	293.9	55.0
0°-40°	408.1	76.4
0°-60°	498.8	93.3
0°-90°	534.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	534.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	491	491	491	491	491	
5°	470	480	479	484	488	44
15°	376	390	402	426	441	105
25°	262	274	290	320	343	120
35°	141	153	176	214	239	87
45°	30	53	90	112	124	28
55°	9	20	32	33	28	8
65°	4	18	18	17	18	4
75°	3	13	13	12	12	3
85°	3	9	9	9	6	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	491.1	491.1	491.1	491.1	491.1
2.5°	483.3	491.9	486.4	487.2	488.0
5°	469.9	480.1	478.6	484.1	488.0
7.5°	450.3	461.3	465.2	474.6	481.7
10°	428.3	440.8	447.1	462.1	470.7
12.5°	403.1	417.3	426.7	445.6	458.1
15°	376.4	389.8	402.3	425.9	440.8
17.5°	349.7	363.0	376.4	402.3	418.0
20°	321.4	334.0	348.1	375.6	393.7
22.5°	291.5	304.9	319.0	347.3	369.3
25°	262.5	274.2	290.0	319.8	342.6
27.5°	231.8	243.6	260.9	291.5	315.9
30°	201.2	213.0	232.6	264.0	291.5
32.5°	170.5	183.1	204.3	238.9	266.4
35°	140.7	153.2	176.0	213.7	238.9
37.5°	111.6	125.7	150.9	187.8	211.4
40°	82.5	99.0	128.9	161.9	181.5
42.5°	55.0	75.4	108.4	135.9	152.4
45°	29.9	52.6	89.6	112.4	124.2
47.5°	16.5	33.8	71.5	89.6	96.7
50°	13.4	23.6	55.0	68.4	69.2
52.5°	11.0	21.2	40.9	48.7	44.8
55°	9.4	20.4	32.2	33.0	27.5
57.5°	7.9	19.6	26.7	23.6	23.6
60°	6.3	19.6	22.8	21.2	22.0
62.5°	4.7	19.6	20.4	18.9	19.6
65°	3.9	18.1	18.1	17.3	18.1
67.5°	3.9	16.5	16.5	15.7	16.5
70°	3.9	15.7	14.9	14.9	14.9
72.5°	3.1	14.1	14.1	13.4	13.4
75°	3.1	12.6	12.6	11.8	11.8
77.5°	3.1	11.8	11.8	11.0	10.2
80°	3.1	10.2	11.0	10.2	8.6
82.5°	3.1	9.4	10.2	9.4	7.1
85°	3.1	8.6	9.4	8.6	6.3
87.5°	2.4	8.6	8.6	7.1	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)