

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: P1057984

Luminaire Tested: S122RDR-S485D850-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057984  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S485D850-X4F0-XX-UDD-WVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

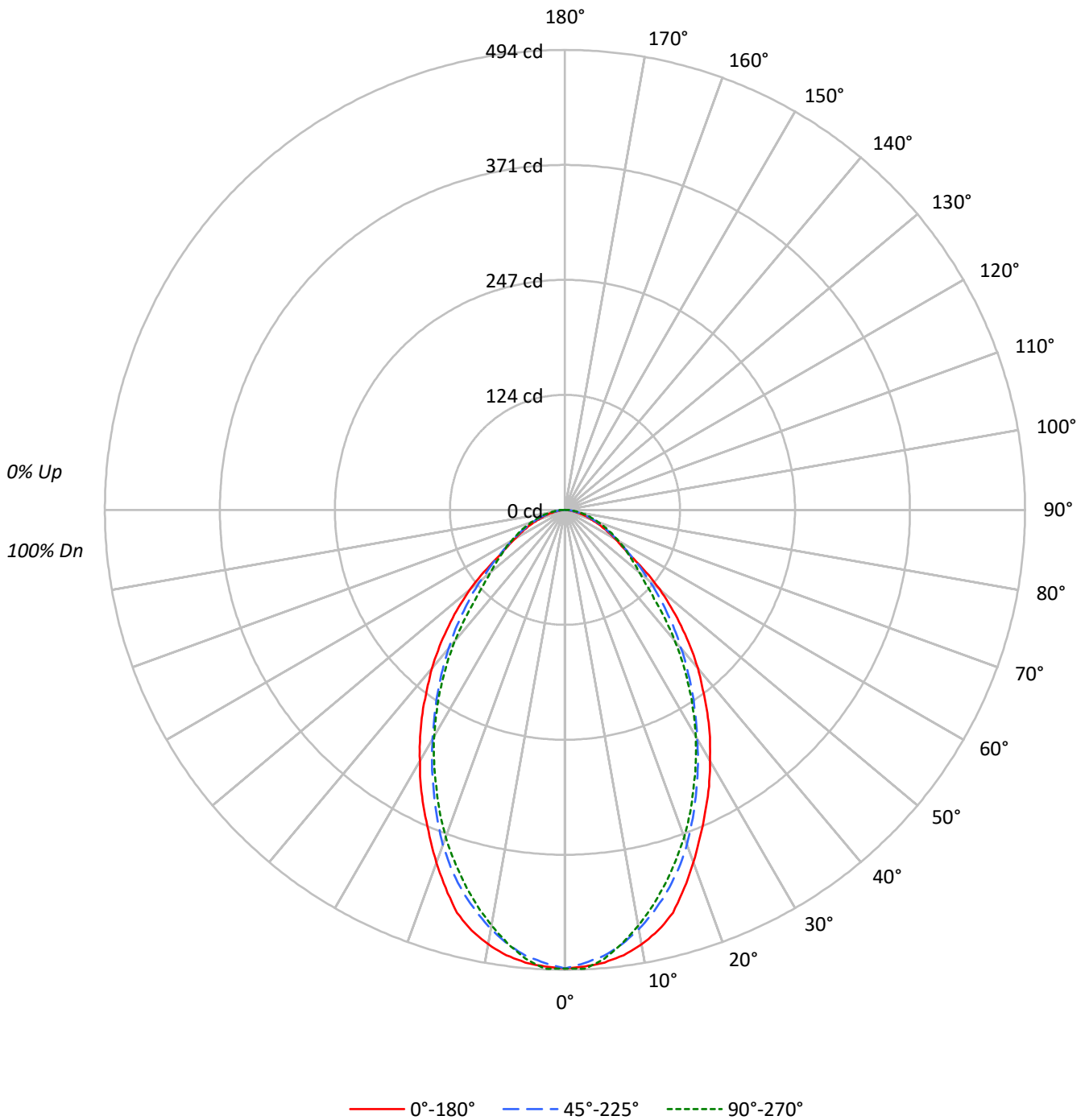
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 748.3 lumens  
Efficiency: N/A  
Efficacy: 38.2 lumens/watt  
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02  
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

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

	0°	45°	90°
0°	9092	9092	9092
5°	9039	8908	8967
10°	8880	8570	8497
15°	8558	8107	7943
20°	7919	7519	7348
25°	7269	6788	6662
30°	6637	6051	5985
35°	6008	5355	5231
40°	5348	4668	4423
45°	4606	4014	3541
50°	3807	3379	2974
55°	2751	2802	2677
60°	2288	2403	2432
65°	1952	2091	2227
70°	1608	1861	2034
75°	1340	1568	1847
80°	999	1254	1668
85°	339	656	1503

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4606 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.5	6.1
10°-20°	119.9	16.0
20°-30°	155.2	20.7
30°-40°	152.2	20.3
40°-50°	119.9	16.0
50°-60°	78.6	10.5
60°-70°	47.8	6.4
70°-80°	23.9	3.2
80°-90°	5.1	0.7
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°	320.7	42.9
0°-40°	472.9	63.2
0°-60°	671.4	89.7
0°-90°	748.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	748.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	493	493	493	493	493	
5°	488	488	481	484	484	46
15°	448	442	424	419	416	125
25°	357	345	333	332	327	164
35°	267	252	238	237	232	166
45°	176	166	154	143	136	136
55°	86	90	87	84	83	81
65°	45	46	48	50	51	44
75°	19	20	22	25	26	20
85°	2	2	3	6	7	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	492.7	492.7	492.7	492.7	492.7
2.5°	491.1	491.9	487.2	491.9	493.5
5°	488.0	488.0	480.9	484.1	484.1
7.5°	482.5	481.7	470.7	470.7	469.9
10°	473.9	470.7	457.4	455.0	453.5
12.5°	462.9	457.4	441.7	437.8	435.4
15°	448.0	441.7	424.4	418.9	415.8
17.5°	426.0	419.7	404.8	398.5	395.4
20°	403.3	393.8	382.9	377.4	374.2
22.5°	379.7	368.7	358.5	354.6	351.5
25°	357.0	345.2	333.4	331.9	327.2
27.5°	335.0	320.9	309.1	308.3	304.4
30°	311.5	296.6	284.0	284.8	280.9
32.5°	289.5	275.4	260.5	261.3	256.5
35°	266.7	251.8	237.7	236.9	232.2
37.5°	243.2	229.1	215.7	212.6	207.9
40°	222.0	207.9	193.8	188.3	183.6
42.5°	199.3	186.7	174.2	165.5	159.3
45°	176.5	165.5	153.8	142.8	135.7
47.5°	154.6	145.9	135.7	122.4	117.7
50°	132.6	126.3	117.7	105.9	103.6
52.5°	109.8	107.5	102.0	94.1	93.4
55°	85.5	90.2	87.1	83.9	83.2
57.5°	72.2	73.0	75.3	74.5	74.5
60°	62.0	62.0	65.1	65.9	65.9
62.5°	52.6	53.3	56.5	58.1	58.1
65°	44.7	45.5	47.9	50.2	51.0
67.5°	36.9	38.4	40.8	43.1	43.9
70°	29.8	31.4	34.5	36.9	37.7
72.5°	24.3	25.1	28.2	30.6	31.4
75°	18.8	19.6	22.0	25.1	25.9
77.5°	13.3	14.9	17.3	19.6	21.2
80°	9.4	10.2	11.8	14.9	15.7
82.5°	5.5	6.3	7.8	10.2	11.0
85°	1.6	2.4	3.1	5.5	7.1
87.5°	0.0	0.0	0.0	1.6	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)