

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: P1057995

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057995  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55 )  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S485D927-X4F0-XX-UDD-WVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

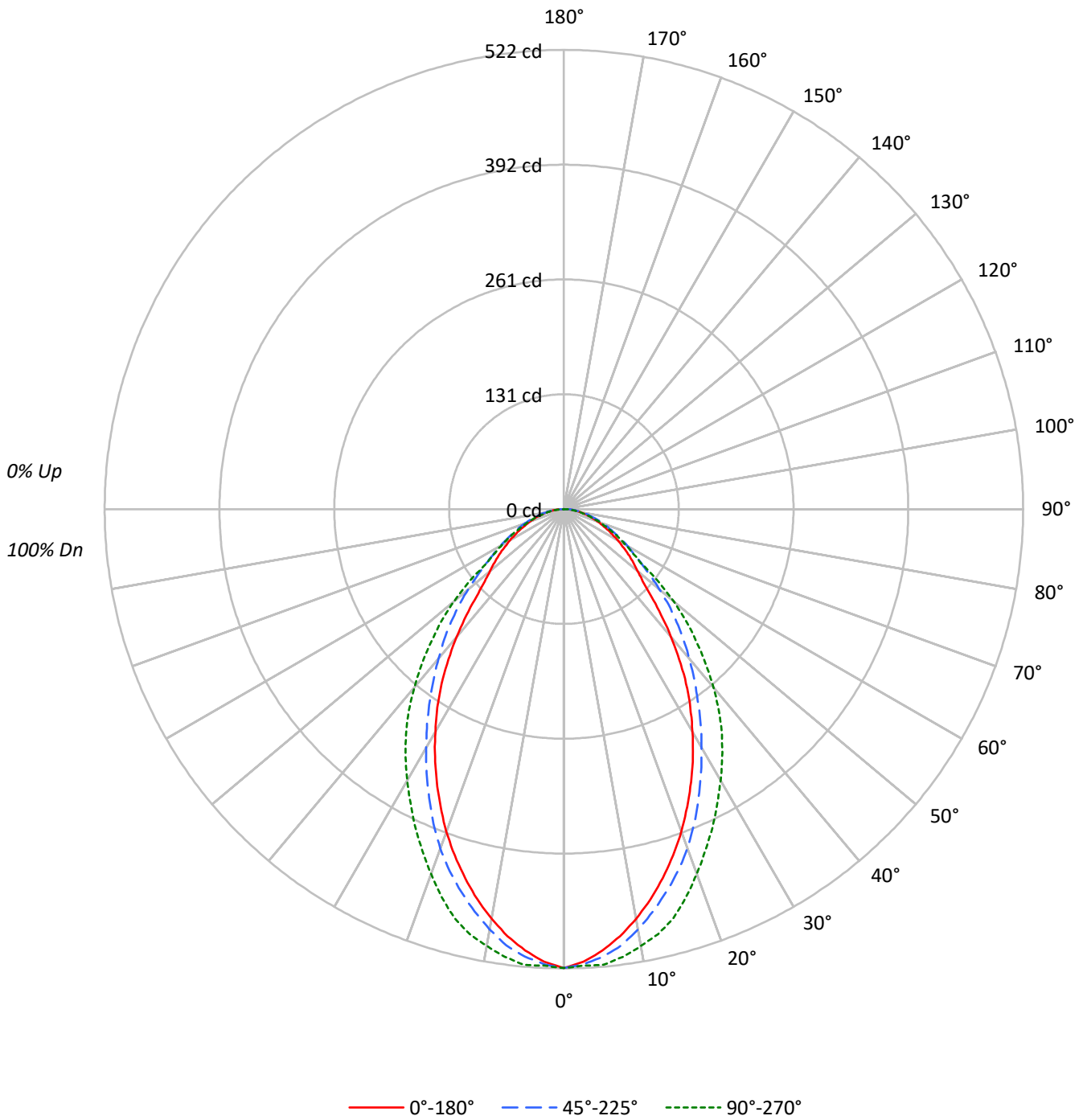
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 850.3 lumens  
Efficiency: N/A  
Efficacy: 43.4 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87				87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67				67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59				59
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52				52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47				47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43				43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				36
10	59	47	40	35	58	46	39	35	46	39	35	45	39	35	44	38	34	33				33

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

	0°	45°	90°
0°	9625	9625	9625
5°	9328	9454	9630
10°	8859	9089	9447
15°	8293	8604	9193
20°	7664	8061	8668
25°	6965	7376	8130
30°	6226	6669	7587
35°	5458	5976	7051
40°	4567	5335	6364
45°	3659	4729	5561
50°	3141	4074	4668
55°	2870	3465	3446
60°	2609	3063	3000
65°	2375	2742	2620
70°	2180	2514	2331
75°	2039	2317	2039
80°	1902	2147	1785
85°	1905	2265	1546

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5561 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.1	5.7
10°-20°	127.5	15.0
20°-30°	168.1	19.8
30°-40°	169.3	19.9
40°-50°	137.8	16.2
50°-60°	94.0	11.0
60°-70°	61.0	7.2
70°-80°	33.6	3.9
80°-90°	11.0	1.3
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°	343.8	40.4
0°-40°	513.1	60.3
0°-60°	744.8	87.6
0°-90°	850.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	850.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	522	522	522	522	522	
5°	504	513	510	515	520	47
15°	434	445	450	469	481	122
25°	342	353	362	379	399	157
35°	242	255	265	288	313	150
45°	140	158	181	197	213	110
55°	89	98	108	108	107	80
65°	54	64	63	59	60	54
75°	29	35	32	29	29	30
85°	9	12	11	8	7	10
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	521.6	521.6	521.6	521.6	521.6
2.5°	514.9	523.3	517.7	518.2	519.3
5°	503.6	513.2	510.4	514.9	519.9
7.5°	489.6	499.2	500.3	507.0	513.2
10°	472.8	483.4	485.1	495.2	504.2
12.5°	454.3	466.1	468.3	482.9	494.7
15°	434.1	445.3	450.4	468.9	481.2
17.5°	412.8	423.4	431.3	448.1	462.1
20°	390.3	400.4	410.5	425.7	441.4
22.5°	366.2	377.4	387.0	402.1	420.1
25°	342.1	353.3	362.3	378.6	399.3
27.5°	317.4	328.7	337.6	355.0	377.4
30°	292.2	304.0	313.0	332.6	356.1
32.5°	267.5	279.3	289.4	310.1	334.8
35°	242.3	254.6	265.3	288.3	313.0
37.5°	215.4	229.4	242.8	265.8	290.0
40°	189.6	205.3	221.5	242.8	264.2
42.5°	163.8	181.2	201.3	219.3	238.9
45°	140.2	157.6	181.2	196.9	213.1
47.5°	121.7	136.3	161.5	174.4	189.0
50°	109.4	119.5	141.9	152.0	162.6
52.5°	99.3	107.7	123.4	130.1	135.7
55°	89.2	98.1	107.7	108.2	107.1
57.5°	79.1	89.2	94.2	90.3	92.5
60°	70.7	80.8	83.0	79.1	81.3
62.5°	61.7	72.9	72.9	69.0	70.1
65°	54.4	64.5	62.8	59.4	60.0
67.5°	47.1	57.2	54.4	51.0	51.0
70°	40.4	49.9	46.6	43.2	43.2
72.5°	34.2	42.1	39.8	35.9	35.3
75°	28.6	35.3	32.5	29.2	28.6
77.5°	23.0	28.6	26.4	23.6	22.4
80°	17.9	23.0	20.2	17.9	16.8
82.5°	13.5	17.4	15.1	12.9	11.8
85°	9.0	11.8	10.7	8.4	7.3
87.5°	4.5	7.9	6.7	5.6	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)