

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 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: S122RDRP-S485D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
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: S122RDRP-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: -

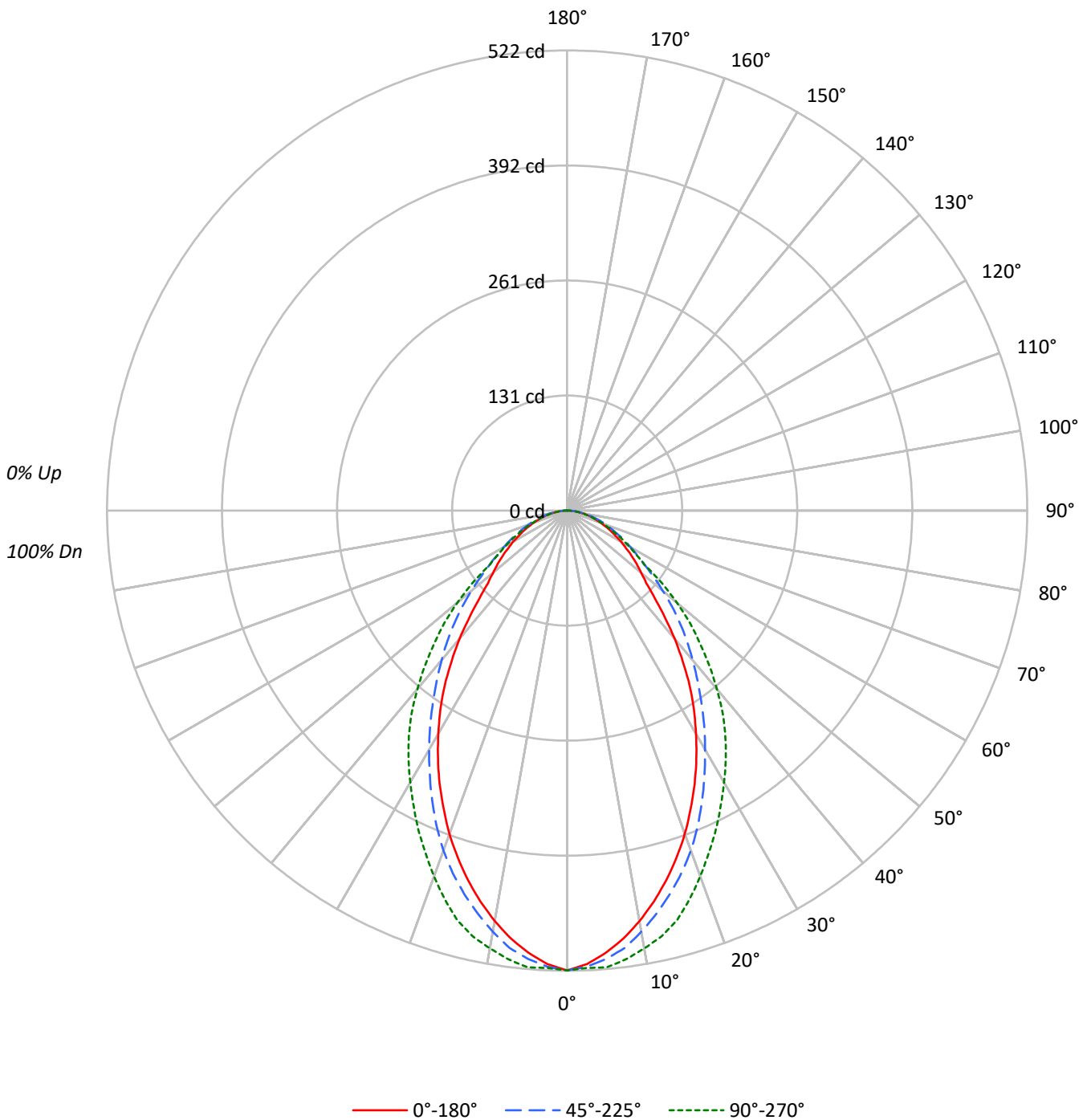
**Summary**

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



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.59	16.03	14.95	16.34	16.65	14.83	16.27	15.20	16.58	16.90
	3H	16.12	17.40	16.49	17.73	18.09	16.19	17.48	16.57	17.81	18.17
	4H	16.68	17.88	17.08	18.23	18.61	16.67	17.88	17.07	18.23	18.61
	6H	17.10	18.21	17.51	18.58	18.97	17.02	18.13	17.43	18.50	18.89
	8H	17.25	18.31	17.68	18.70	19.10	17.13	18.18	17.56	18.57	18.98
	12H	17.37	18.38	17.80	18.76	19.19	17.20	18.21	17.63	18.59	19.02
4H	2H	15.16	16.36	15.56	16.71	17.09	15.36	16.56	15.76	16.91	17.29
	3H	16.96	17.96	17.37	18.36	18.76	16.93	17.93	17.34	18.33	18.73
	4H	17.70	18.60	18.14	19.02	19.46	17.53	18.42	17.96	18.84	19.28
	6H	18.29	19.07	18.75	19.51	19.98	17.99	18.77	18.45	19.22	19.68
	8H	18.50	19.23	18.97	19.67	20.14	18.14	18.87	18.61	19.32	19.79
	12H	18.67	19.32	19.15	19.80	20.27	18.25	18.90	18.74	19.38	19.85
8H	4H	17.97	18.70	18.43	19.14	19.61	17.82	18.55	18.28	18.99	19.46
	6H	18.72	19.33	19.22	19.82	20.30	18.41	19.01	18.90	19.50	19.98
	8H	19.05	19.59	19.57	20.10	20.59	18.63	19.17	19.14	19.68	20.17
	12H	19.33	19.81	19.84	20.30	20.87	18.81	19.29	19.32	19.78	20.35
12H	4H	17.98	18.63	18.47	19.11	19.58	17.85	18.50	18.33	18.98	19.45
	6H	18.77	19.31	19.29	19.82	20.31	18.47	19.01	18.99	19.53	20.02
	8H	19.17	19.64	19.68	20.14	20.70	18.76	19.24	19.27	19.73	20.30