

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: P1058013

Luminaire Tested: S122RDRP-S485D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058013  
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-S485D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

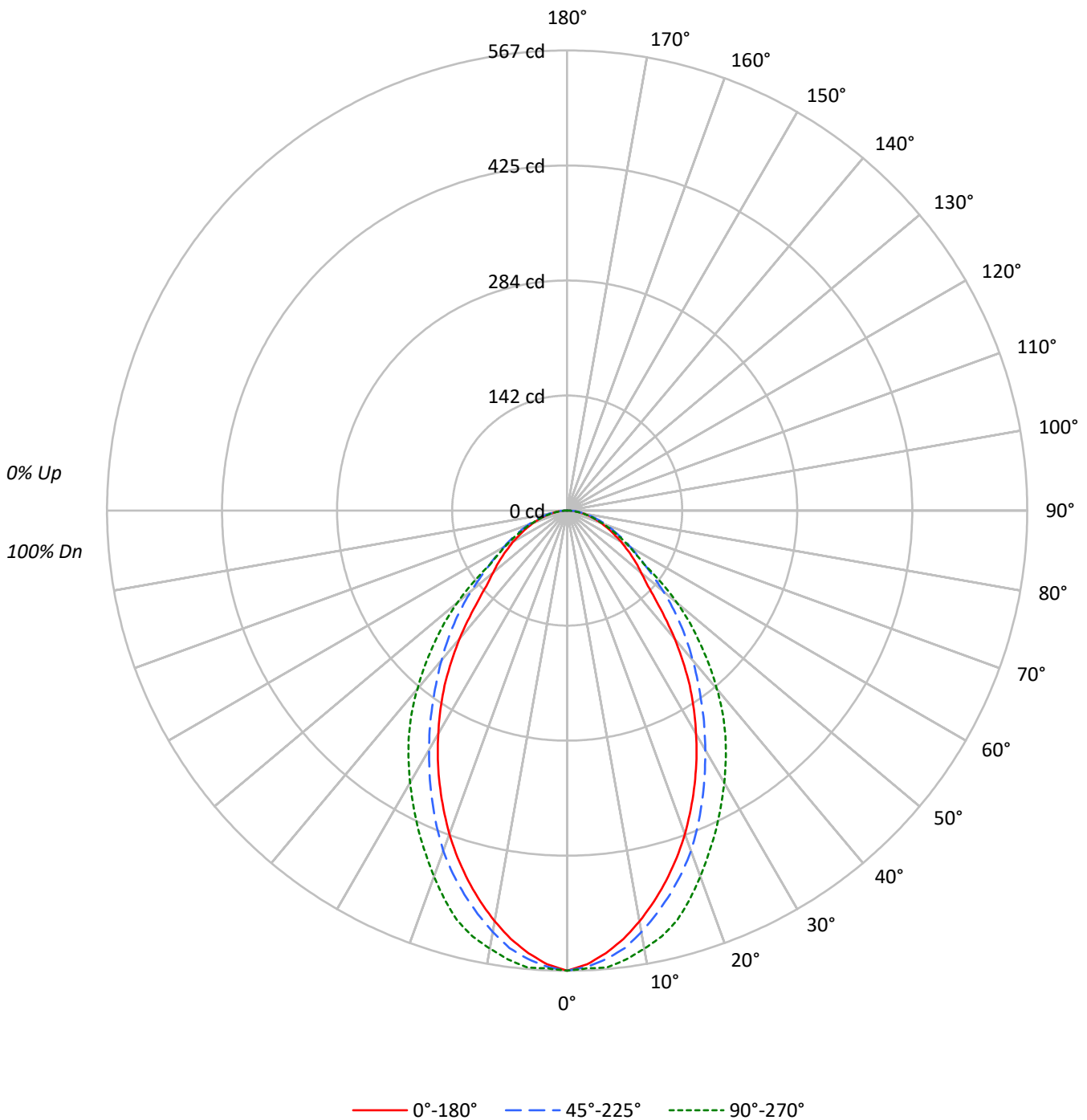
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 924.2 lumens  
Efficiency: N/A  
Efficacy: 47.2 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	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	100	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	40	35	46	39	35	45	39	35	44	38	34	33

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

	0°	45°	90°
0°	10461	10461	10461
5°	10139	10275	10467
10°	9629	9880	10268
15°	9013	9351	9991
20°	8332	8762	9420
25°	7570	8018	8836
30°	6767	7247	8248
35°	5931	6494	7661
40°	4962	5800	6916
45°	3977	5138	6044
50°	3413	4427	5075
55°	3117	3764	3745
60°	2834	3329	3262
65°	2580	2982	2847
70°	2368	2730	2530
75°	2217	2524	2217
80°	2072	2327	1945
85°	2075	2456	1673

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6044 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.3	5.7
10°-20°	138.5	15.0
20°-30°	182.7	19.8
30°-40°	184.0	19.9
40°-50°	149.8	16.2
50°-60°	102.1	11.0
60°-70°	66.3	7.2
70°-80°	36.5	3.9
80°-90°	11.9	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°	373.6	40.4
0°-40°	557.6	60.3
0°-60°	809.5	87.6
0°-90°	924.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	924.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	567	567	567	567	567	
5°	547	558	555	560	565	51
15°	472	484	490	510	523	132
25°	372	384	394	412	434	170
35°	263	277	288	313	340	164
45°	152	171	197	214	232	120
55°	97	107	117	118	116	87
65°	59	70	68	65	65	59
75°	31	38	35	32	31	33
85°	10	13	12	9	8	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	566.9	566.9	566.9	566.9	566.9
2.5°	559.6	568.7	562.6	563.2	564.5
5°	547.4	557.8	554.7	559.6	565.1
7.5°	532.2	542.5	543.7	551.0	557.8
10°	513.9	525.4	527.3	538.2	548.0
12.5°	493.7	506.5	509.0	524.8	537.6
15°	471.8	484.0	489.5	509.6	523.0
17.5°	448.6	460.2	468.8	487.0	502.3
20°	424.3	435.2	446.2	462.7	479.7
22.5°	398.0	410.2	420.6	437.1	456.6
25°	371.8	384.0	393.8	411.5	434.0
27.5°	345.0	357.2	367.0	385.9	410.2
30°	317.6	330.4	340.1	361.5	387.1
32.5°	290.8	303.6	314.5	337.1	363.9
35°	263.3	276.7	288.3	313.3	340.1
37.5°	234.1	249.3	263.9	288.9	315.1
40°	206.0	223.1	240.8	263.9	287.1
42.5°	178.0	196.9	218.8	238.3	259.7
45°	152.4	171.3	196.9	214.0	231.6
47.5°	132.3	148.1	175.6	189.6	205.4
50°	118.9	129.8	154.2	165.2	176.8
52.5°	107.9	117.0	134.1	141.4	147.5
55°	96.9	106.7	117.0	117.6	116.4
57.5°	85.9	96.9	102.4	98.1	100.6
60°	76.8	87.8	90.2	85.9	88.4
62.5°	67.1	79.2	79.2	75.0	76.2
65°	59.1	70.1	68.3	64.6	65.2
67.5°	51.2	62.2	59.1	55.5	55.5
70°	43.9	54.3	50.6	46.9	46.9
72.5°	37.2	45.7	43.3	39.0	38.4
75°	31.1	38.4	35.4	31.7	31.1
77.5°	25.0	31.1	28.6	25.6	24.4
80°	19.5	25.0	21.9	19.5	18.3
82.5°	14.6	18.9	16.5	14.0	12.8
85°	9.8	12.8	11.6	9.1	7.9
87.5°	4.9	8.5	7.3	6.1	4.9
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	14.87	16.31	15.24	16.63	16.94	15.12	16.56	15.49	16.87	17.19
	3H	16.40	17.69	16.78	18.02	18.38	16.48	17.77	16.86	18.10	18.46
	4H	16.97	18.17	17.37	18.52	18.90	16.96	18.17	17.36	18.52	18.90
	6H	17.39	18.50	17.80	18.87	19.26	17.31	18.42	17.72	18.79	19.18
	8H	17.54	18.60	17.97	18.99	19.39	17.42	18.47	17.85	18.87	19.27
	12H	17.66	18.67	18.09	19.05	19.48	17.49	18.50	17.92	18.88	19.31
4H	2H	15.45	16.65	15.85	17.00	17.38	15.64	16.85	16.05	17.20	17.58
	3H	17.25	18.25	17.66	18.65	19.05	17.22	18.22	17.63	18.62	19.02
	4H	17.99	18.89	18.43	19.31	19.75	17.81	18.71	18.25	19.13	19.57
	6H	18.58	19.36	19.04	19.80	20.27	18.28	19.06	18.74	19.51	19.97
	8H	18.79	19.52	19.26	19.96	20.43	18.43	19.16	18.90	19.61	20.08
	12H	18.96	19.61	19.44	20.09	20.56	18.54	19.19	19.03	19.67	20.14
8H	4H	18.26	18.99	18.72	19.43	19.90	18.10	18.83	18.57	19.28	19.75
	6H	19.01	19.62	19.51	20.11	20.59	18.70	19.30	19.19	19.79	20.27
	8H	19.34	19.88	19.86	20.39	20.88	18.92	19.46	19.43	19.97	20.46
	12H	19.62	20.10	20.13	20.59	21.16	19.10	19.58	19.61	20.07	20.64
12H	4H	18.27	18.92	18.76	19.40	19.87	18.14	18.79	18.62	19.27	19.74
	6H	19.06	19.60	19.58	20.11	20.60	18.76	19.30	19.28	19.82	20.30
	8H	19.46	19.93	19.97	20.43	20.99	19.05	19.53	19.56	20.02	20.59