

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: P1058030

Luminaire Tested: S122RDRP-S485D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058030
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S485D950-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

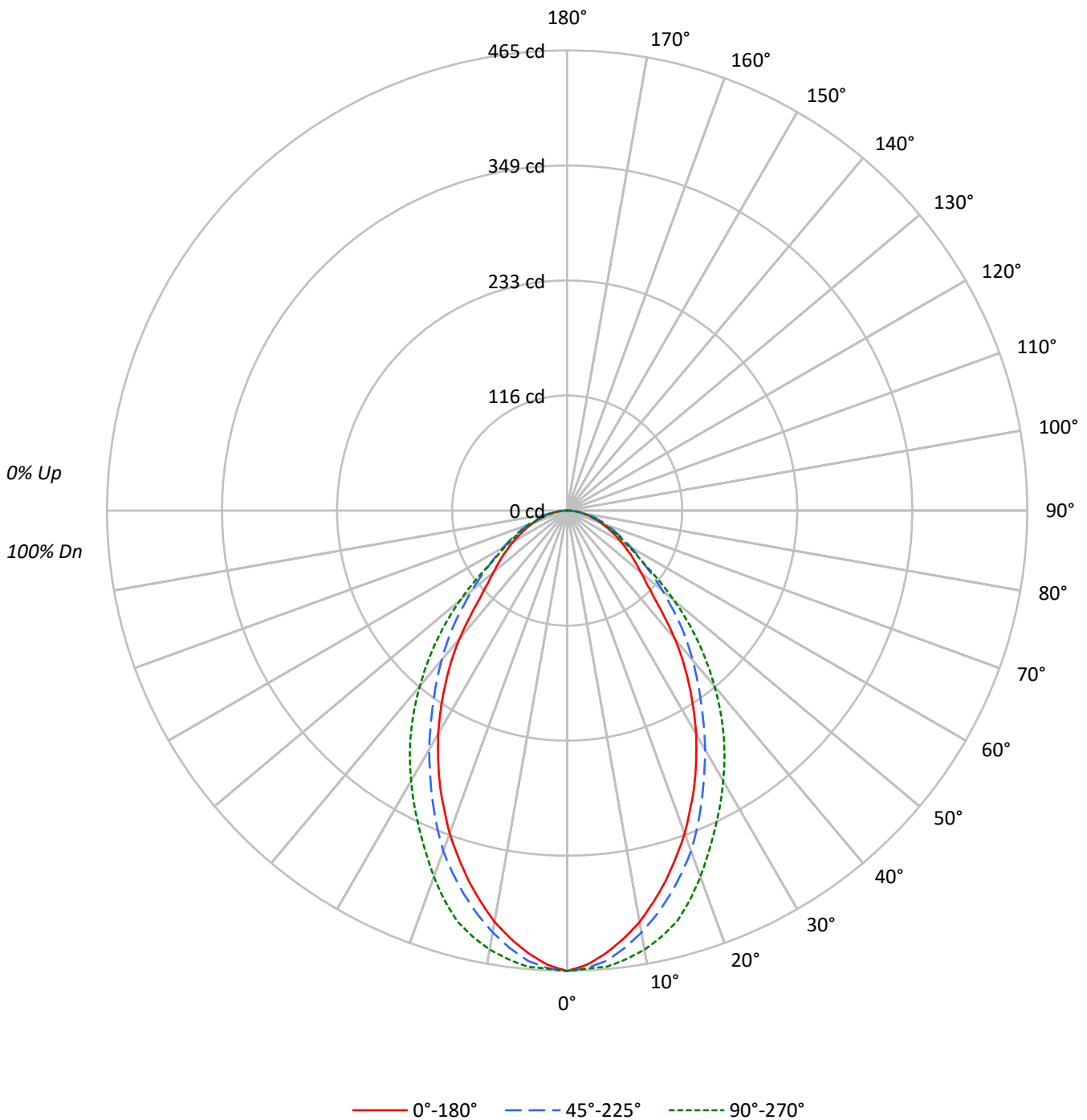
Lumens per Lamp: N/A
Luminaire Lumens: 757.7 lumens
Efficiency: N/A
Efficacy: 38.7 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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	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				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78					76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68					66				
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61					59				
5	81	70	62	56	79	69	61	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	45	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	45	39	35	45	39	34	44	38	34					33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8586	8586	8586
5°	8319	8456	8569
10°	7909	8111	8441
15°	7380	7676	8205
20°	6816	7187	7731
25°	6202	6560	7205
30°	5555	5943	6720
35°	4839	5309	6208
40°	4083	4750	5581
45°	3244	4194	4883
50°	2793	3606	4053
55°	2542	3085	3108
60°	2318	2742	2642
65°	2122	2476	2332
70°	1969	2293	2077
75°	1832	2167	1832
80°	1721	2083	1647
85°	1715	2138	1440

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4883 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	5.7
10°-20°	113.6	15.0
20°-30°	149.4	19.7
30°-40°	150.3	19.8
40°-50°	121.8	16.1
50°-60°	83.9	11.1
60°-70°	54.9	7.2
70°-80°	30.6	4.0
80°-90°	10.4	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°	305.9	40.4
0°-40°	456.2	60.2
0°-60°	661.9	87.4
0°-90°	757.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	757.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	465	465	465	465	465	
5°	449	458	456	459	463	42
15°	386	396	402	417	430	108
25°	305	313	322	336	354	140
35°	215	225	236	257	276	134
45°	124	138	161	175	187	98
55°	79	88	96	98	97	71
65°	49	58	57	54	53	49
75°	26	32	30	27	26	27
85°	8	11	10	9	7	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	465.3	465.3	465.3	465.3	465.3
2.5°	459.3	467.4	462.6	462.6	463.3
5°	449.1	457.9	456.5	458.6	462.6
7.5°	436.3	445.7	445.7	451.8	457.2
10°	422.1	431.6	432.9	442.4	450.5
12.5°	404.5	414.0	418.1	430.2	441.0
15°	386.3	395.8	401.8	416.7	429.5
17.5°	366.7	376.2	384.3	399.8	412.6
20°	347.1	355.9	366.0	379.6	393.7
22.5°	325.5	335.0	344.4	357.3	373.5
25°	304.6	312.7	322.2	336.3	353.9
27.5°	282.3	291.1	299.9	316.7	335.0
30°	260.7	269.5	278.9	296.5	315.4
32.5°	237.7	247.2	256.6	276.2	295.8
35°	214.8	224.9	235.7	256.6	275.6
37.5°	192.5	203.3	216.1	237.7	253.9
40°	169.5	181.0	197.2	216.1	231.7
42.5°	145.2	159.4	179.0	195.2	209.4
45°	124.3	138.5	160.7	174.9	187.1
47.5°	108.7	120.2	141.8	154.0	164.1
50°	97.3	106.0	125.6	134.4	141.2
52.5°	87.8	96.6	110.1	116.2	118.2
55°	79.0	87.8	95.9	97.9	96.6
57.5°	70.2	79.7	84.4	82.4	82.4
60°	62.8	72.9	74.3	71.6	71.6
62.5°	55.4	65.5	65.5	62.1	62.1
65°	48.6	58.1	56.7	54.0	53.4
67.5°	42.5	51.3	49.3	46.6	45.9
70°	36.5	44.6	42.5	39.2	38.5
72.5°	31.1	38.5	35.8	33.1	31.7
75°	25.7	31.7	30.4	27.0	25.7
77.5°	20.9	25.7	24.3	21.6	20.3
80°	16.2	20.3	19.6	16.9	15.5
82.5°	12.2	15.5	14.9	12.8	10.8
85°	8.1	10.8	10.1	8.8	6.8
87.5°	4.1	7.4	6.8	6.1	3.4
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	14.20	15.64	14.56	15.95	16.27	14.56	16.00	14.92	16.31	16.63
	3H	15.74	17.03	16.12	17.36	17.72	15.91	17.20	16.28	17.52	17.89
	4H	16.31	17.52	16.72	17.87	18.25	16.39	17.60	16.79	17.95	18.33
	6H	16.75	17.86	17.16	18.23	18.62	16.74	17.86	17.16	18.23	18.62
	8H	16.90	17.96	17.33	18.35	18.75	16.86	17.92	17.29	18.31	18.71
	12H	17.02	18.03	17.45	18.41	18.84	16.93	17.95	17.37	18.33	18.76
4H	2H	14.78	15.99	15.19	16.34	16.72	15.07	16.28	15.47	16.63	17.01
	3H	16.61	17.61	17.02	18.01	18.41	16.65	17.65	17.06	18.05	18.45
	4H	17.35	18.25	17.79	18.67	19.11	17.25	18.15	17.68	18.57	19.01
	6H	17.94	18.72	18.40	19.17	19.63	17.73	18.52	18.19	18.96	19.42
	8H	18.15	18.88	18.62	19.33	19.80	17.90	18.63	18.36	19.07	19.54
	12H	18.32	18.97	18.80	19.45	19.92	18.02	18.67	18.50	19.15	19.62
8H	4H	17.64	18.37	18.10	18.81	19.28	17.55	18.28	18.02	18.73	19.20
	6H	18.40	19.00	18.89	19.49	19.97	18.17	18.77	18.67	19.27	19.75
	8H	18.72	19.26	19.24	19.77	20.26	18.42	18.96	18.93	19.47	19.96
	12H	19.01	19.48	19.52	19.98	20.54	18.63	19.11	19.14	19.60	20.17
12H	4H	17.66	18.31	18.14	18.79	19.26	17.59	18.24	18.07	18.72	19.19
	6H	18.46	19.00	18.97	19.51	20.00	18.25	18.79	18.76	19.30	19.79
	8H	18.85	19.33	19.37	19.83	20.39	18.57	19.05	19.08	19.54	20.11