

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: P1058003

Luminaire Tested: S122RDRP-S485D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058003
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-S485D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

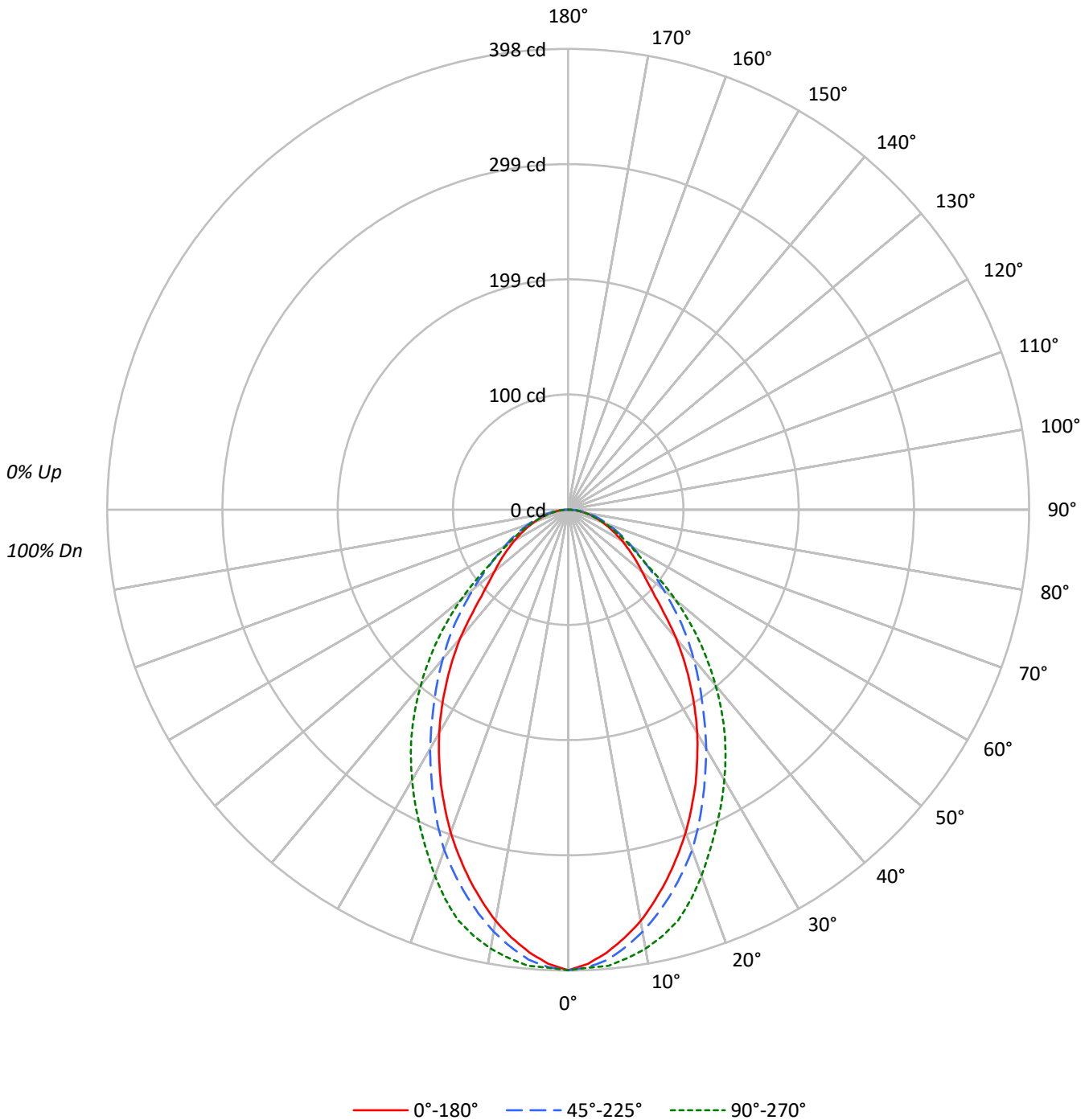
Lumens per Lamp: N/A
Luminaire Lumens: 647.6 lumens
Efficiency: N/A
Efficacy: 33.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	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°	7339	7339	7339
5°	7109	7228	7324
10°	6758	6933	7214
15°	6306	6560	7013
20°	5826	6142	6608
25°	5300	5605	6157
30°	4747	5080	5742
35°	4134	4537	5305
40°	3490	4059	4769
45°	2771	3586	4173
50°	2386	3083	3462
55°	2172	2638	2654
60°	1982	2343	2259
65°	1816	2118	1991
70°	1683	1964	1775
75°	1561	1854	1561
80°	1477	1775	1413
85°	1461	1842	1228

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4173 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.7	5.7
10°-20°	97.0	15.0
20°-30°	127.7	19.7
30°-40°	128.4	19.8
40°-50°	104.1	16.1
50°-60°	71.7	11.1
60°-70°	46.9	7.2
70°-80°	26.1	4.0
80°-90°	8.8	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°	261.5	40.4
0°-40°	389.9	60.2
0°-60°	565.6	87.3
0°-90°	647.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	647.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	384	391	390	392	395	36
15°	330	338	343	356	367	92
25°	260	267	275	287	302	119
35°	184	192	201	219	236	114
45°	106	118	137	150	160	84
55°	68	75	82	84	82	61
65°	42	50	48	46	46	41
75°	22	27	26	23	22	23
85°	7	9	9	8	6	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	397.7	397.7	397.7	397.7	397.7
2.5°	392.5	399.4	395.4	395.4	395.9
5°	383.8	391.3	390.2	391.9	395.4
7.5°	372.9	380.9	380.9	386.1	390.7
10°	360.7	368.8	370.0	378.1	385.0
12.5°	345.7	353.8	357.3	367.7	376.9
15°	330.1	338.2	343.4	356.1	367.1
17.5°	313.4	321.5	328.4	341.7	352.7
20°	296.7	304.2	312.8	324.4	336.5
22.5°	278.2	286.3	294.4	305.3	319.2
25°	260.3	267.2	275.3	287.4	302.4
27.5°	241.3	248.8	256.3	270.7	286.3
30°	222.8	230.3	238.4	253.4	269.5
32.5°	203.2	211.2	219.3	236.1	252.8
35°	183.5	192.2	201.4	219.3	235.5
37.5°	164.5	173.7	184.7	203.2	217.0
40°	144.9	154.7	168.5	184.7	198.0
42.5°	124.1	136.2	153.0	166.8	178.9
45°	106.2	118.3	137.4	149.5	159.9
47.5°	92.9	102.7	121.2	131.6	140.3
50°	83.1	90.6	107.4	114.9	120.6
52.5°	75.0	82.5	94.1	99.3	101.0
55°	67.5	75.0	82.0	83.7	82.5
57.5°	60.0	68.1	72.1	70.4	70.4
60°	53.7	62.3	63.5	61.2	61.2
62.5°	47.3	56.0	56.0	53.1	53.1
65°	41.6	49.6	48.5	46.2	45.6
67.5°	36.4	43.9	42.1	39.8	39.2
70°	31.2	38.1	36.4	33.5	32.9
72.5°	26.6	32.9	30.6	28.3	27.1
75°	21.9	27.1	26.0	23.1	21.9
77.5°	17.9	21.9	20.8	18.5	17.3
80°	13.9	17.3	16.7	14.4	13.3
82.5°	10.4	13.3	12.7	11.0	9.2
85°	6.9	9.2	8.7	7.5	5.8
87.5°	3.5	6.3	5.8	5.2	2.9
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	13.65	15.09	14.02	15.41	15.72	14.01	15.45	14.38	15.77	16.08
	3H	15.20	16.49	15.58	16.82	17.18	15.36	16.65	15.74	16.98	17.34
	4H	15.77	16.98	16.17	17.33	17.71	15.84	17.05	16.24	17.40	17.78
	6H	16.20	17.32	16.61	17.68	18.08	16.20	17.31	16.61	17.68	18.07
	8H	16.36	17.42	16.78	17.81	18.21	16.31	17.37	16.74	17.76	18.16
	12H	16.47	17.48	16.90	17.87	18.30	16.39	17.40	16.82	17.78	18.21
4H	2H	14.24	15.45	14.64	15.80	16.18	14.53	15.74	14.93	16.09	16.47
	3H	16.06	17.06	16.47	17.47	17.87	16.10	17.10	16.51	17.50	17.91
	4H	16.81	17.71	17.24	18.13	18.57	16.70	17.61	17.14	18.02	18.46
	6H	17.40	18.18	17.86	18.62	19.08	17.19	17.97	17.65	18.41	18.88
	8H	17.61	18.34	18.07	18.78	19.25	17.35	18.08	17.82	18.53	19.00
	12H	17.77	18.43	18.26	18.91	19.38	17.47	18.12	17.96	18.60	19.08
8H	4H	17.09	17.83	17.56	18.27	18.74	17.01	17.74	17.47	18.18	18.65
	6H	17.85	18.45	18.35	18.95	19.43	17.62	18.23	18.12	18.72	19.20
	8H	18.17	18.72	18.69	19.23	19.72	17.87	18.42	18.39	18.93	19.42
	12H	18.46	18.94	18.97	19.43	20.00	18.08	18.56	18.60	19.06	19.62
12H	4H	17.11	17.77	17.60	18.25	18.72	17.04	17.69	17.52	18.17	18.64
	6H	17.91	18.45	18.43	18.96	19.45	17.70	18.24	18.22	18.76	19.24
	8H	18.31	18.79	18.82	19.28	19.85	18.02	18.50	18.53	18.99	19.56