

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: P1058002

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058002
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
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-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

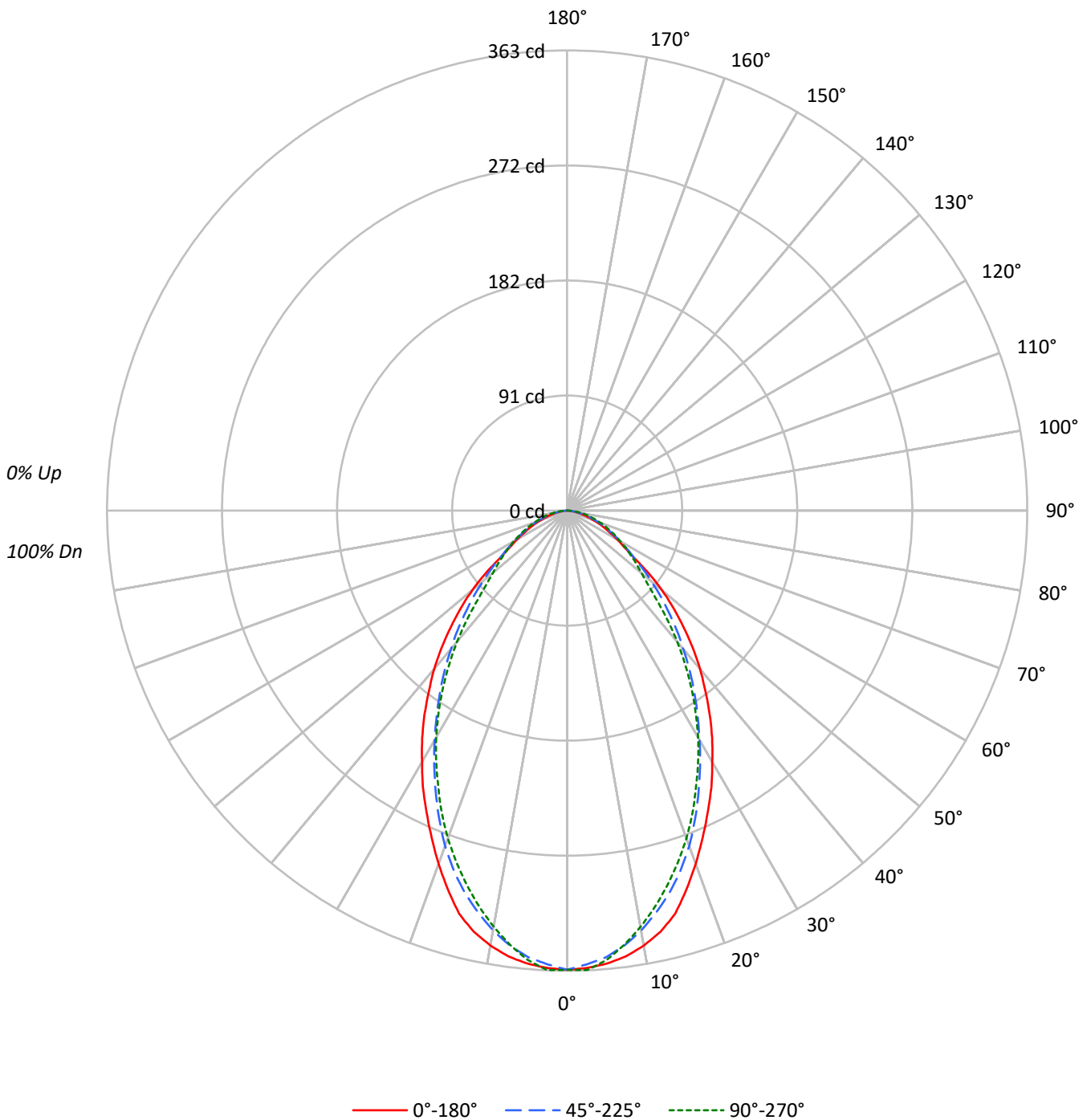
Lumens per Lamp: N/A
Luminaire Lumens: 550.1 lumens
Efficiency: N/A
Efficacy: 28.1 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1058002

CATALOG NUMBER: S122RDRP-S485D930-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1058002

CATALOG NUMBER: S122RDRP-S485D930-X4F0-XX-UDD-WVL-B

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90					88				
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79					77				
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70					68				
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63					61				
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56					54				
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51					49				
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46					44				
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42					41				
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39					37				
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36					34				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6683	6683	6683
5°	6644	6550	6592
10°	6528	6301	6247
15°	6291	5960	5840
20°	5822	5528	5402
25°	5342	4990	4897
30°	4879	4449	4400
35°	4417	3938	3845
40°	3931	3433	3252
45°	3387	2949	2604
50°	2799	2483	2185
55°	2024	2059	1966
60°	1683	1768	1786
65°	1436	1537	1637
70°	1182	1370	1494
75°	984	1148	1355
80°	733	924	1222
85°	254	487	1101

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3387 cd/sqm



TEST NUMBER: P1058002

CATALOG NUMBER: S122RDRP-S485D930-X4F0-XX-UDD-WVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.5	6.1
10°-20°	88.2	16.0
20°-30°	114.1	20.7
30°-40°	111.9	20.3
40°-50°	88.1	16.0
50°-60°	57.8	10.5
60°-70°	35.2	6.4
70°-80°	17.6	3.2
80°-90°	3.8	0.7
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°	235.8	42.9
0°-40°	347.7	63.2
0°-60°	493.6	89.7
0°-90°	550.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	550.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	362	362	362	362	362	
5°	359	359	354	356	356	34
15°	329	325	312	308	306	92
25°	262	254	245	244	240	121
35°	196	185	175	174	171	122
45°	130	122	113	105	100	100
55°	63	66	64	62	61	60
65°	33	34	35	37	38	33
75°	14	14	16	18	19	15
85°	1	2	2	4	5	2
90°	0	0	0	0	0	



TEST NUMBER: P1058002

CATALOG NUMBER: S122RDRP-S485D930-X4F0-XX-UDD-WVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	362.2	362.2	362.2	362.2	362.2
2.5°	361.1	361.6	358.2	361.6	362.8
5°	358.7	358.7	353.6	355.9	355.9
7.5°	354.7	354.1	346.1	346.1	345.5
10°	348.4	346.1	336.3	334.5	333.4
12.5°	340.3	336.3	324.7	321.8	320.1
15°	329.3	324.7	312.0	308.0	305.7
17.5°	313.2	308.6	297.6	293.0	290.7
20°	296.5	289.5	281.5	277.4	275.1
22.5°	279.2	271.1	263.6	260.7	258.4
25°	262.4	253.8	245.1	244.0	240.5
27.5°	246.3	235.9	227.2	226.7	223.8
30°	229.0	218.0	208.8	209.4	206.5
32.5°	212.8	202.4	191.5	192.1	188.6
35°	196.1	185.1	174.8	174.2	170.7
37.5°	178.8	168.4	158.6	156.3	152.8
40°	163.2	152.8	142.5	138.4	135.0
42.5°	146.5	137.3	128.0	121.7	117.1
45°	129.8	121.7	113.0	105.0	99.8
47.5°	113.6	107.3	99.8	90.0	86.5
50°	97.5	92.9	86.5	77.9	76.1
52.5°	80.7	79.0	75.0	69.2	68.6
55°	62.9	66.3	64.0	61.7	61.1
57.5°	53.1	53.6	55.4	54.8	54.8
60°	45.6	45.6	47.9	48.4	48.4
62.5°	38.6	39.2	41.5	42.7	42.7
65°	32.9	33.5	35.2	36.9	37.5
67.5°	27.1	28.3	30.0	31.7	32.3
70°	21.9	23.1	25.4	27.1	27.7
72.5°	17.9	18.5	20.8	22.5	23.1
75°	13.8	14.4	16.1	18.5	19.0
77.5°	9.8	11.0	12.7	14.4	15.6
80°	6.9	7.5	8.7	11.0	11.5
82.5°	4.0	4.6	5.8	7.5	8.1
85°	1.2	1.7	2.3	4.0	5.2
87.5°	0.0	0.0	0.0	1.2	2.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058002
 CATALOG NUMBER: S122RDRP-S485D930-X4F0-XX-UDD-WVL-B

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	12.72	14.12	13.08	14.43	14.74	12.90	14.30	13.27	14.61	14.93
	3H	13.85	15.10	14.23	15.43	15.79	14.36	15.61	14.74	15.94	16.30
	4H	14.20	15.37	14.61	15.72	16.10	14.90	16.07	15.31	16.42	16.80
	6H	14.39	15.46	14.80	15.83	16.22	15.32	16.39	15.73	16.76	17.15
	8H	14.42	15.43	14.84	15.82	16.23	15.44	16.46	15.87	16.85	17.25
	12H	14.40	15.37	14.83	15.76	16.19	15.53	16.50	15.96	16.88	17.31
4H	2H	13.18	14.34	13.58	14.69	15.07	13.33	14.49	13.73	14.84	15.22
	3H	14.52	15.48	14.93	15.88	16.28	15.00	15.96	15.41	16.36	16.76
	4H	14.96	15.82	15.40	16.24	16.68	15.67	16.53	16.10	16.94	17.39
	6H	15.24	15.98	15.70	16.42	16.89	16.20	16.94	16.66	17.39	17.85
	8H	15.28	15.97	15.75	16.42	16.89	16.37	17.06	16.84	17.51	17.98
	12H	15.27	15.89	15.76	16.37	16.84	16.49	17.11	16.98	17.59	18.06
8H	4H	15.18	15.87	15.64	16.32	16.79	15.82	16.51	16.28	16.96	17.42
	6H	15.53	16.09	16.03	16.59	17.07	16.45	17.02	16.95	17.51	17.99
	8H	15.60	16.11	16.12	16.63	17.12	16.68	17.19	17.20	17.71	18.20
	12H	15.62	16.07	16.13	16.56	17.13	16.87	17.32	17.38	17.81	18.38
12H	4H	15.19	15.80	15.67	16.29	16.76	15.80	16.42	16.29	16.90	17.37
	6H	15.55	16.06	16.07	16.57	17.06	16.44	16.95	16.96	17.47	17.96
	8H	15.67	16.12	16.18	16.61	17.18	16.72	17.17	17.23	17.66	18.23