

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: P1058011

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058011
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-S485D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

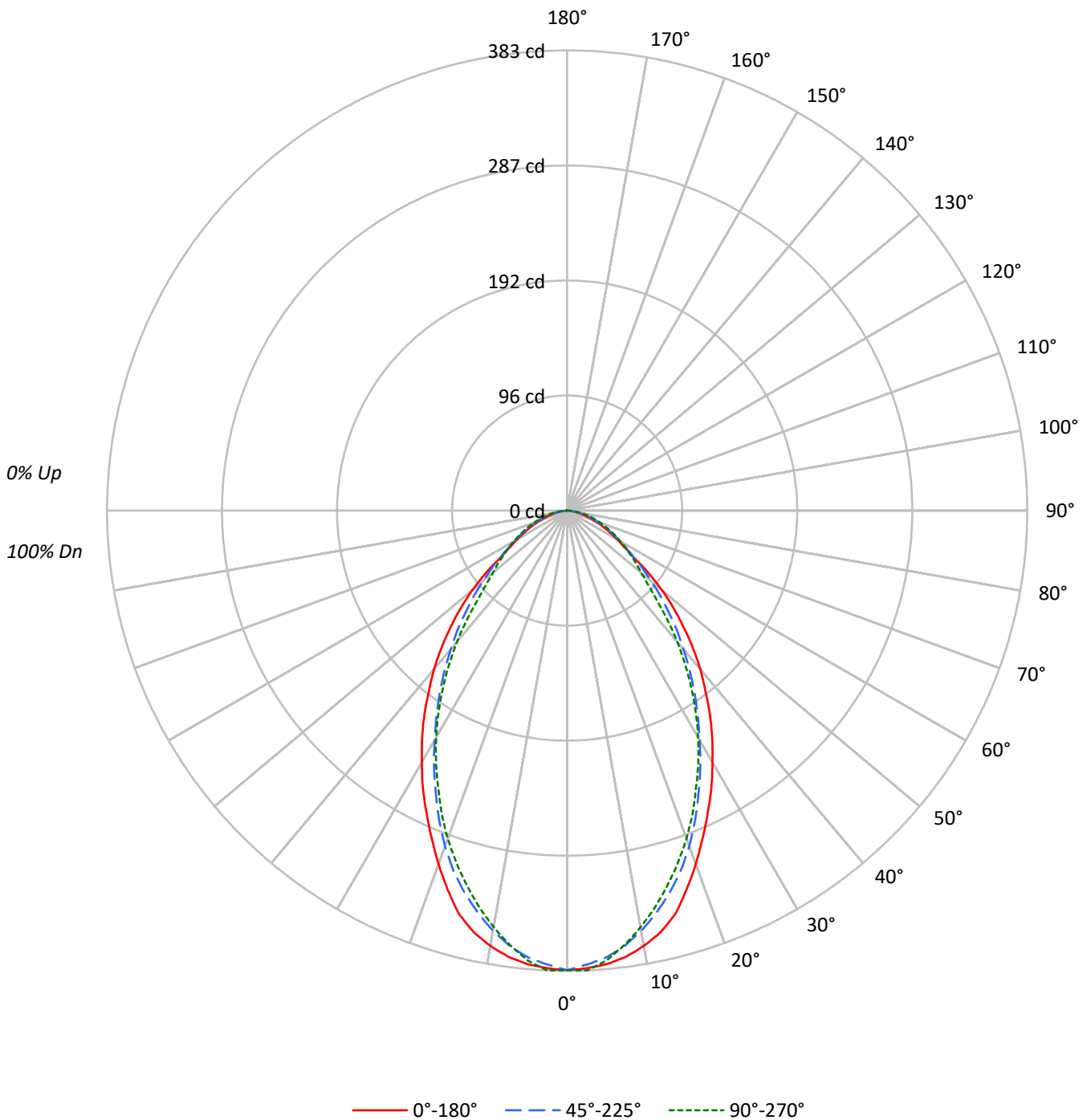
Lumens per Lamp: N/A
Luminaire Lumens: 580.9 lumens
Efficiency: N/A
Efficacy: 29.6 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1058011

CATALOG NUMBER: S122RDRP-S485D935-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1058011

CATALOG NUMBER: S122RDRP-S485D935-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	7058	7058	7058
5°	7018	6916	6961
10°	6893	6654	6597
15°	6644	6295	6167
20°	6148	5836	5704
25°	5642	5271	5171
30°	5152	4698	4647
35°	4665	4158	4061
40°	4153	3623	3433
45°	3575	3116	2750
50°	2954	2624	2308
55°	2136	2175	2078
60°	1775	1867	1890
65°	1515	1624	1729
70°	1246	1446	1575
75°	1041	1219	1433
80°	776	967	1296
85°	254	508	1164

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3575 cd/sqm



TEST NUMBER: P1058011

CATALOG NUMBER: S122RDRP-S485D935-X4F0-XX-UDD-WVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.4	6.1
10°-20°	93.1	16.0
20°-30°	120.5	20.7
30°-40°	118.2	20.3
40°-50°	93.1	16.0
50°-60°	61.0	10.5
60°-70°	37.1	6.4
70°-80°	18.6	3.2
80°-90°	4.0	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°	249.0	42.9
0°-40°	367.2	63.2
0°-60°	521.2	89.7
0°-90°	580.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	580.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	382	382	382	382	382	
5°	379	379	373	376	376	36
15°	348	343	330	325	323	97
25°	277	268	259	258	254	127
35°	207	196	185	184	180	129
45°	137	128	119	111	105	106
55°	66	70	68	65	65	63
65°	35	35	37	39	40	35
75°	15	15	17	20	20	16
85°	1	2	2	4	6	2
90°	0	0	0	0	0	



TEST NUMBER: P1058011

CATALOG NUMBER: S122RDRP-S485D935-X4F0-XX-UDD-WVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	382.5	382.5	382.5	382.5	382.5
2.5°	381.3	381.9	378.2	381.9	383.1
5°	378.9	378.9	373.4	375.8	375.8
7.5°	374.6	374.0	365.5	365.5	364.8
10°	367.9	365.5	355.1	353.3	352.1
12.5°	359.4	355.1	342.9	339.9	338.0
15°	347.8	342.9	329.5	325.3	322.8
17.5°	330.7	325.9	314.3	309.4	307.0
20°	313.1	305.8	297.2	293.0	290.5
22.5°	294.8	286.3	278.4	275.3	272.9
25°	277.1	268.0	258.9	257.6	254.0
27.5°	260.1	249.1	240.0	239.4	236.3
30°	241.8	230.2	220.5	221.1	218.1
32.5°	224.8	213.8	202.2	202.8	199.2
35°	207.1	195.5	184.6	183.9	180.3
37.5°	188.8	177.9	167.5	165.1	161.4
40°	172.4	161.4	150.4	146.2	142.5
42.5°	154.7	145.0	135.2	128.5	123.6
45°	137.0	128.5	119.4	110.9	105.4
47.5°	120.0	113.3	105.4	95.0	91.4
50°	102.9	98.1	91.4	82.2	80.4
52.5°	85.3	83.4	79.2	73.1	72.5
55°	66.4	70.0	67.6	65.2	64.6
57.5°	56.0	56.6	58.5	57.9	57.9
60°	48.1	48.1	50.6	51.2	51.2
62.5°	40.8	41.4	43.9	45.1	45.1
65°	34.7	35.3	37.2	39.0	39.6
67.5°	28.6	29.8	31.7	33.5	34.1
70°	23.1	24.4	26.8	28.6	29.2
72.5°	18.9	19.5	21.9	23.8	24.4
75°	14.6	15.2	17.1	19.5	20.1
77.5°	10.4	11.6	13.4	15.2	16.4
80°	7.3	7.9	9.1	11.6	12.2
82.5°	4.3	4.9	6.1	7.9	8.5
85°	1.2	1.8	2.4	4.3	5.5
87.5°	0.0	0.0	0.0	1.2	2.4
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058011
 CATALOG NUMBER: S122RDRP-S485D935-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	12.91	14.30	13.27	14.62	14.93	13.10	14.49	13.46	14.80	15.12
	3H	14.04	15.28	14.42	15.61	15.98	14.55	15.80	14.93	16.13	16.49
	4H	14.39	15.55	14.79	15.90	16.29	15.10	16.26	15.50	16.61	16.99
	6H	14.58	15.65	14.99	16.02	16.41	15.51	16.58	15.92	16.95	17.34
	8H	14.60	15.62	15.03	16.01	16.41	15.63	16.65	16.06	17.04	17.44
	12H	14.59	15.56	15.02	15.94	16.37	15.72	16.69	16.15	17.07	17.50
4H	2H	13.37	14.53	13.77	14.88	15.26	13.52	14.69	13.92	15.04	15.42
	3H	14.71	15.66	15.12	16.07	16.47	15.19	16.15	15.60	16.55	16.95
	4H	15.15	16.01	15.58	16.43	16.87	15.86	16.72	16.29	17.13	17.58
	6H	15.42	16.17	15.88	16.61	17.07	16.39	17.13	16.85	17.58	18.04
	8H	15.47	16.16	15.94	16.61	17.08	16.56	17.25	17.03	17.70	18.17
	12H	15.46	16.08	15.95	16.56	17.03	16.68	17.30	17.16	17.78	18.25
8H	4H	15.36	16.06	15.83	16.50	16.97	16.01	16.70	16.47	17.15	17.62
	6H	15.71	16.28	16.21	16.78	17.26	16.64	17.21	17.14	17.70	18.18
	8H	15.79	16.30	16.31	16.81	17.31	16.87	17.38	17.39	17.89	18.38
	12H	15.81	16.26	16.32	16.75	17.32	17.06	17.51	17.57	18.00	18.57
12H	4H	15.38	15.99	15.86	16.47	16.95	15.99	16.61	16.48	17.09	17.56
	6H	15.74	16.25	16.26	16.76	17.25	16.63	17.14	17.15	17.65	18.15
	8H	15.85	16.30	16.37	16.80	17.37	16.91	17.36	17.42	17.85	18.42