

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: P1058368

Luminaire Tested: S122RDRP-H485D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058368
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-H485D835-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

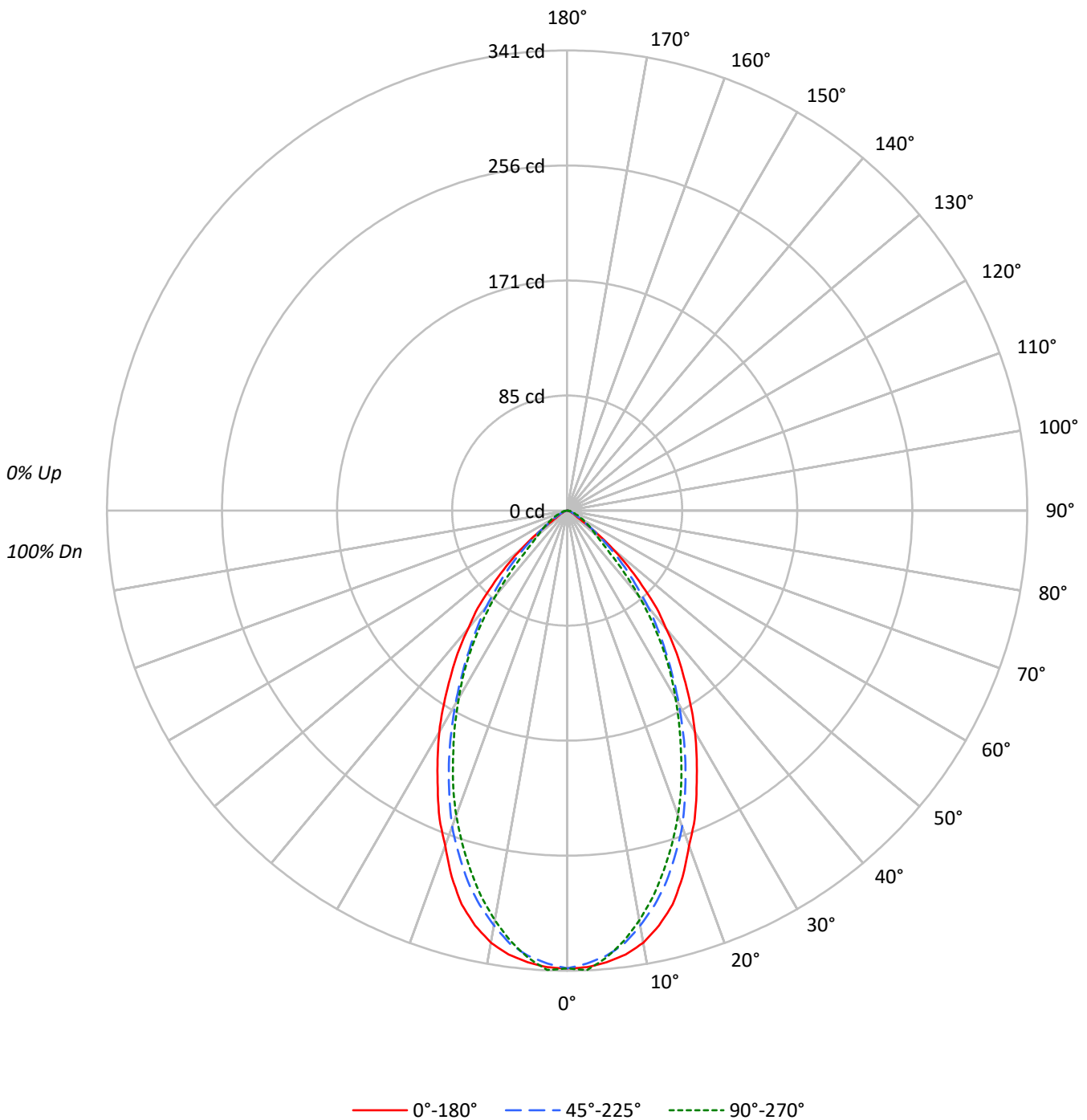
Lumens per Lamp: N/A
Luminaire Lumens: 365.0 lumens
Efficiency: N/A
Efficacy: 21.0 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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: P1058368

CATALOG NUMBER: S122RDRP-H485D835-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1058368

CATALOG NUMBER: S122RDRP-H485D835-X4F0-XX-UDD-SVL-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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6261	6261	6261
5°	6222	6135	6161
10°	6091	5850	5775
15°	5771	5435	5278
20°	5188	4895	4721
25°	4620	4221	4068
30°	4040	3522	3420
35°	3401	2854	2762
40°	2741	2252	1990
45°	2051	1626	1185
50°	1283	1051	778
55°	434	566	631
60°	251	351	498
65°	179	236	384
70°	146	183	291
75°	100	143	242
80°	74	149	213
85°	0	0	148

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2051 cd/sqm



TEST NUMBER: P1058368

CATALOG NUMBER: S122RDRP-H485D835-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.3	8.6
10°-20°	80.1	21.9
20°-30°	96.4	26.4
30°-40°	82.4	22.6
40°-50°	48.3	13.2
50°-60°	17.5	4.8
60°-70°	6.2	1.7
70°-80°	2.5	0.7
80°-90°	0.4	0.1
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°	207.8	56.9
0°-40°	290.1	79.5
0°-60°	355.8	97.5
0°-90°	365.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	365.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	339	339	339	339	339	
5°	336	337	331	333	333	32
15°	302	297	284	279	276	84
25°	227	217	207	204	200	104
35°	151	140	127	125	123	94
45°	79	70	62	52	45	61
55°	14	19	18	18	20	17
65°	4	5	5	8	9	4
75°	1	2	2	3	3	2
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



TEST NUMBER: P1058368

CATALOG NUMBER: S122RDRP-H485D835-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	339.3	339.3	339.3	339.3	339.3
2.5°	338.7	339.3	335.9	339.3	340.7
5°	335.9	336.6	331.2	332.6	332.6
7.5°	331.9	331.2	323.8	322.4	321.7
10°	325.1	323.1	312.2	310.2	308.2
12.5°	314.9	310.9	299.4	296.0	293.3
15°	302.1	297.3	284.5	279.1	276.3
17.5°	284.5	279.1	266.9	261.4	258.7
20°	264.2	258.7	249.3	243.2	240.4
22.5°	247.2	238.4	228.3	224.2	220.8
25°	226.9	217.4	207.3	203.9	199.8
27.5°	207.9	196.4	186.3	183.6	180.2
30°	189.6	177.5	165.3	165.3	160.5
32.5°	170.0	158.5	145.6	144.9	142.2
35°	151.0	139.5	126.7	125.3	122.6
37.5°	133.4	121.9	109.7	105.7	102.3
40°	113.8	103.6	93.5	86.7	82.6
42.5°	98.2	86.7	76.5	68.4	63.0
45°	78.6	70.4	62.3	52.2	45.4
47.5°	61.0	55.5	48.8	37.3	33.9
50°	44.7	42.0	36.6	27.8	27.1
52.5°	28.4	29.8	26.4	21.7	23.7
55°	13.5	19.0	17.6	18.3	19.6
57.5°	8.8	9.5	12.9	14.9	16.3
60°	6.8	6.8	9.5	12.2	13.5
62.5°	5.4	5.4	7.5	10.2	10.8
65°	4.1	4.7	5.4	7.5	8.8
67.5°	3.4	3.4	4.1	6.1	6.8
70°	2.7	2.7	3.4	4.7	5.4
72.5°	2.0	2.0	2.7	4.1	4.1
75°	1.4	2.0	2.0	2.7	3.4
77.5°	1.4	1.4	1.4	2.0	2.7
80°	0.7	0.7	1.4	1.4	2.0
82.5°	0.7	0.7	0.7	0.7	1.4
85°	0.0	0.0	0.0	0.7	0.7
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058368
 CATALOG NUMBER: S122RDRP-H485D835-X4F0-XX-UDD-SVL-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	2.27	3.43	2.63	3.74	4.06	5.66	6.82	6.02	7.13	7.45
	3H	2.79	3.81	3.17	4.14	4.51	6.38	7.41	6.76	7.74	8.10
	4H	2.92	3.87	3.33	4.22	4.61	6.60	7.55	7.01	7.90	8.29
	6H	3.01	3.87	3.42	4.25	4.64	6.75	7.62	7.17	7.99	8.38
	8H	3.01	3.83	3.45	4.22	4.63	6.78	7.60	7.22	7.99	8.40
	12H	2.98	3.76	3.41	4.14	4.58	6.79	7.57	7.22	7.95	8.38
4H	2H	2.57	3.52	2.98	3.87	4.26	5.62	6.57	6.03	6.92	7.31
	3H	3.23	4.00	3.64	4.40	4.81	6.50	7.26	6.91	7.67	8.07
	4H	3.47	4.15	3.90	4.57	5.02	6.78	7.46	7.21	7.88	8.33
	6H	3.60	4.19	4.07	4.63	5.11	7.00	7.59	7.47	8.03	8.51
	8H	3.62	4.17	4.09	4.62	5.09	7.05	7.60	7.52	8.04	8.52
	12H	3.59	4.06	4.08	4.55	5.03	7.07	7.55	7.56	8.04	8.51
8H	4H	3.57	4.12	4.05	4.57	5.04	6.71	7.25	7.18	7.70	8.18
	6H	3.76	4.20	4.27	4.70	5.18	6.97	7.41	7.48	7.91	8.39
	8H	3.81	4.21	4.34	4.73	5.22	7.04	7.43	7.56	7.95	8.45
	12H	3.79	4.14	4.31	4.64	5.21	7.10	7.45	7.62	7.95	8.52
12H	4H	3.56	4.04	4.05	4.53	5.00	6.66	7.14	7.15	7.62	8.10
	6H	3.76	4.16	4.29	4.68	5.17	6.92	7.32	7.45	7.84	8.33
	8H	3.84	4.19	4.36	4.69	5.26	7.01	7.36	7.53	7.86	8.43