

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058513

Luminaire Tested: S122RDR-H675D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058513
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D950-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

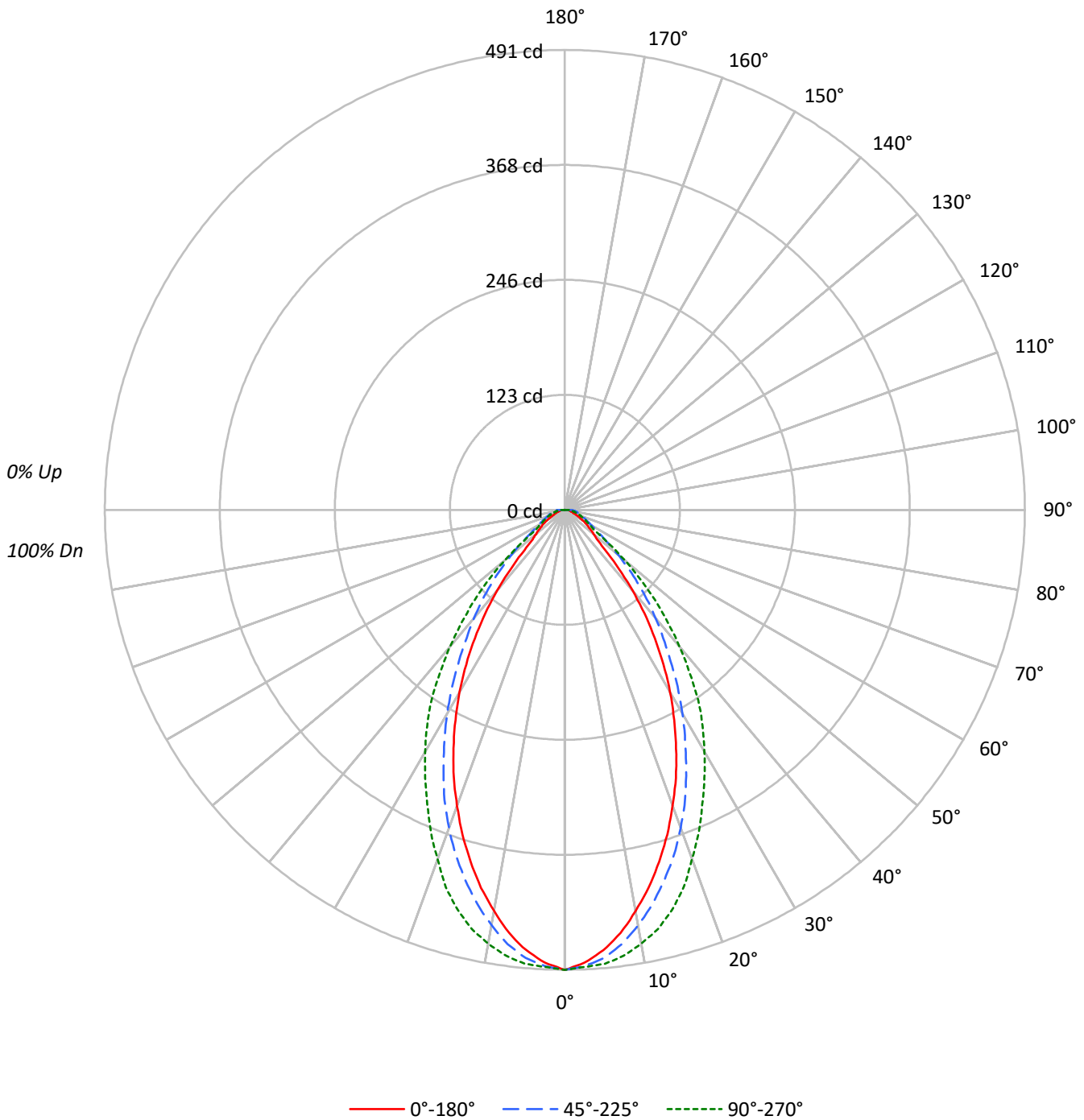
Lumens per Lamp: N/A
Luminaire Lumens: 592.5 lumens
Efficiency: N/A
Efficacy: 25.2 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): 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: P1058513

CATALOG NUMBER: S122RDR-H675D950-X4F0-XX-UDD-SVL-S

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9062	9062	9062
5°	8745	8897	9013
10°	8149	8439	8812
15°	7425	7825	8448
20°	6602	7099	7794
25°	5719	6236	7067
30°	4788	5348	6352
35°	3775	4429	5593
40°	2707	3623	4584
45°	1584	2860	3546
50°	1145	2081	2394
55°	962	1486	1255
60°	768	1203	1070
65°	633	1070	991
70°	540	1025	928
75°	513	1098	905
80°	574	1350	967
85°	953	2117	1334

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3546 cd/sqm

TEST NUMBER: P1058513

CATALOG NUMBER: S122RDR-H675D950-X4F0-XX-UDD-SVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	7.6
10°-20°	115.3	19.5
20°-30°	141.7	23.9
30°-40°	125.3	21.1
40°-50°	79.9	13.5
50°-60°	39.0	6.6
60°-70°	23.2	3.9
70°-80°	14.8	2.5
80°-90°	8.2	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°	302.0	51.0
0°-40°	427.3	72.1
0°-60°	546.2	92.2
0°-90°	592.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	592.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	491	491	491	491	491	
5°	472	482	480	482	487	44
15°	389	400	410	428	442	108
25°	281	291	306	325	347	129
35°	168	177	197	224	248	104
45°	61	78	110	123	136	51
55°	30	40	46	44	39	27
65°	14	27	24	23	23	15
75°	7	16	15	14	13	8
85°	4	9	10	9	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	491.1	491.1	491.1	491.1	491.1
2.5°	483.9	492.9	487.5	487.5	488.4
5°	472.1	482.1	480.3	482.1	486.6
7.5°	455.8	465.8	467.6	474.8	480.3
10°	434.9	444.9	450.4	462.1	470.3
12.5°	413.2	423.2	431.3	446.7	458.5
15°	388.7	399.6	409.6	427.7	442.2
17.5°	363.4	374.2	386.9	405.0	422.3
20°	336.2	346.1	361.5	378.8	396.9
22.5°	309.9	319.0	335.3	351.6	373.3
25°	280.9	290.9	306.3	325.3	347.1
27.5°	252.8	262.8	278.2	299.9	322.6
30°	224.7	233.8	251.0	273.7	298.1
32.5°	195.7	204.8	223.8	248.3	273.7
35°	167.6	176.7	196.6	223.8	248.3
37.5°	139.5	149.5	172.2	197.5	218.4
40°	112.4	124.1	150.4	172.2	190.3
42.5°	85.2	101.5	129.6	147.7	162.2
45°	60.7	77.9	109.6	123.2	135.9
47.5°	46.2	59.8	90.6	100.6	108.7
50°	39.9	48.9	72.5	79.7	83.4
52.5°	34.4	43.5	58.0	60.7	58.9
55°	29.9	39.9	46.2	43.5	39.0
57.5°	25.4	37.2	38.1	32.6	33.5
60°	20.8	33.5	32.6	28.1	29.0
62.5°	17.2	30.8	28.1	25.4	25.4
65°	14.5	27.2	24.5	22.7	22.7
67.5°	11.8	24.5	21.7	19.9	19.9
70°	10.0	21.7	19.0	17.2	17.2
72.5°	9.1	19.0	17.2	15.4	15.4
75°	7.2	16.3	15.4	13.6	12.7
77.5°	6.3	13.6	13.6	12.7	10.9
80°	5.4	11.8	12.7	10.9	9.1
82.5°	5.4	10.9	10.9	10.0	7.2
85°	4.5	9.1	10.0	9.1	6.3
87.5°	2.7	8.2	8.2	7.2	4.5
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	9.69	10.97	10.06	11.29	11.60	9.21	10.49	9.57	10.80	11.11
	3H	10.87	12.01	11.25	12.34	12.70	10.77	11.91	11.15	12.24	12.60
	4H	11.30	12.36	11.70	12.71	13.09	11.45	12.51	11.86	12.86	13.25
	6H	11.64	12.61	12.05	12.99	13.38	12.10	13.08	12.52	13.45	13.85
	8H	11.83	12.76	12.26	13.15	13.55	12.39	13.32	12.82	13.71	14.11
	12H	12.05	12.93	12.48	13.32	13.75	12.71	13.59	13.14	13.97	14.40
4H	2H	10.20	11.26	10.60	11.61	11.99	9.81	10.87	10.21	11.22	11.61
	3H	11.84	12.71	12.25	13.12	13.52	11.61	12.48	12.02	12.89	13.29
	4H	12.60	13.38	13.03	13.80	14.25	12.45	13.23	12.88	13.65	14.10
	6H	13.20	13.88	13.66	14.33	14.79	13.31	13.99	13.77	14.44	14.90
	8H	13.50	14.13	13.97	14.58	15.05	13.70	14.34	14.17	14.78	15.25
	12H	13.81	14.37	14.30	14.86	15.33	14.13	14.70	14.62	15.18	15.65
8H	4H	13.02	13.65	13.49	14.10	14.57	12.91	13.54	13.38	13.99	14.46
	6H	13.97	14.49	14.47	14.98	15.47	14.02	14.54	14.52	15.04	15.52
	8H	14.51	14.98	15.03	15.50	15.99	14.60	15.07	15.12	15.59	16.08
	12H	15.08	15.49	15.59	15.99	16.56	15.27	15.68	15.78	16.18	16.75
12H	4H	13.09	13.65	13.57	14.13	14.61	12.99	13.55	13.48	14.04	14.51
	6H	14.15	14.62	14.67	15.13	15.63	14.21	14.68	14.73	15.19	15.68
	8H	14.84	15.26	15.36	15.75	16.32	14.92	15.33	15.43	15.83	16.40