

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: P1058105

Luminaire Tested: S122RDRP-S675D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058105  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S675D950-X4F0-XX-UDD-BVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

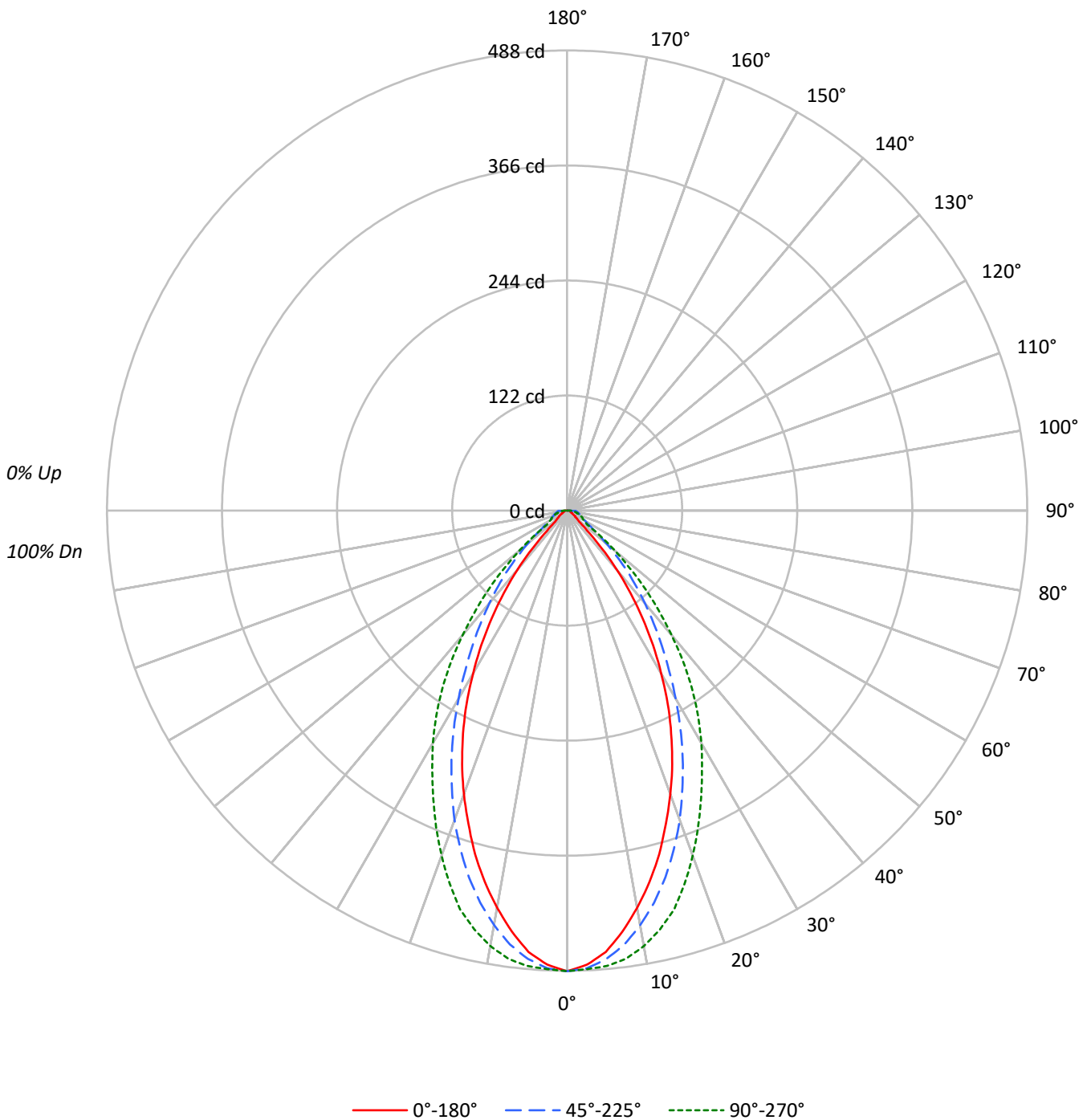
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 526.6 lumens  
Efficiency: N/A  
Efficacy: 20.4 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
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: P1058105

CATALOG NUMBER: S122RDRP-S675D950-X4F0-XX-UDD-BVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1058105

CATALOG NUMBER: S122RDRP-S675D950-X4F0-XX-UDD-BVL-S

**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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90					90			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81					81			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74					74			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67					67			
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61					61			
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57					57			
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52					52			
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48					48			
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45					45			
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42					42			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9014	9014	9014
5°	8702	8841	8980
10°	8014	8364	8786
15°	7206	7687	8367
20°	6286	6855	7645
25°	5316	5906	6841
30°	4246	4905	6062
35°	3140	3942	5208
40°	1985	3088	4148
45°	780	2320	3053
50°	402	1559	1880
55°	331	1023	843
60°	244	830	760
65°	205	777	777
70°	200	809	755
75°	264	934	799
80°	393	1190	893
85°	593	1990	1186

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 3977 cd/sqm



TEST NUMBER: P1058105

CATALOG NUMBER: S122RDRP-S675D950-X4F0-XX-UDD-BVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.7	8.5
10°-20°	112.9	21.4
20°-30°	134.1	25.5
30°-40°	111.6	21.2
40°-50°	62.3	11.8
50°-60°	25.2	4.8
60°-70°	16.1	3.1
70°-80°	12.1	2.3
80°-90°	7.7	1.5
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°	291.7	55.4
0°-40°	403.2	76.6
0°-60°	490.7	93.2
0°-90°	526.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	526.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	488	488	488	488	488	
5°	470	478	477	481	485	43
15°	377	388	402	423	438	105
25°	261	271	290	313	336	119
35°	139	152	175	204	231	87
45°	30	50	89	104	117	28
55°	10	22	32	31	26	9
65°	5	19	18	17	18	5
75°	4	13	13	12	11	4
85°	3	8	9	8	6	3
90°	0	0	0	0	0	



TEST NUMBER: P1058105

CATALOG NUMBER: S122RDRP-S675D950-X4F0-XX-UDD-BVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	488.5	488.5	488.5	488.5	488.5
2.5°	482.0	489.5	485.7	485.7	486.7
5°	469.8	478.2	477.3	481.0	484.8
7.5°	450.2	459.5	464.2	472.6	479.2
10°	427.7	438.0	446.4	459.5	468.9
12.5°	403.4	413.7	425.8	442.7	454.8
15°	377.2	388.4	402.4	423.0	438.0
17.5°	348.1	360.3	376.2	398.7	414.6
20°	320.1	332.2	349.1	371.5	389.3
22.5°	291.1	301.4	319.1	341.6	363.1
25°	261.1	271.4	290.1	312.6	336.0
27.5°	231.2	241.5	260.2	283.6	309.8
30°	199.3	210.6	230.2	256.4	284.5
32.5°	169.4	180.6	201.2	230.2	258.3
35°	139.4	152.5	175.0	204.0	231.2
37.5°	110.4	125.4	150.7	177.8	202.1
40°	82.4	98.3	128.2	151.6	172.2
42.5°	54.3	73.0	107.6	127.3	143.2
45°	29.9	50.5	88.9	103.9	117.0
47.5°	16.8	32.8	70.2	82.4	89.8
50°	14.0	24.3	54.3	62.7	65.5
52.5°	11.2	22.5	41.2	45.9	44.0
55°	10.3	21.5	31.8	30.9	26.2
57.5°	8.4	21.5	25.3	22.5	22.5
60°	6.6	20.6	22.5	19.7	20.6
62.5°	5.6	19.7	20.6	18.7	18.7
65°	4.7	18.7	17.8	16.8	17.8
67.5°	3.7	16.8	16.8	15.9	15.9
70°	3.7	15.9	15.0	14.0	14.0
72.5°	3.7	14.0	14.0	13.1	13.1
75°	3.7	13.1	13.1	12.2	11.2
77.5°	3.7	11.2	12.2	11.2	10.3
80°	3.7	10.3	11.2	10.3	8.4
82.5°	3.7	9.4	10.3	9.4	7.5
85°	2.8	8.4	9.4	8.4	5.6
87.5°	2.8	8.4	9.4	7.5	4.7
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058105  
 CATALOG NUMBER: S122RDRP-S675D950-X4F0-XX-UDD-BVL-S

**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	6.00	7.22	6.36	7.53	7.84	7.09	8.31	7.46	8.62	8.94
	3H	7.32	8.41	7.70	8.74	9.10	9.11	10.20	9.49	10.53	10.89
	4H	7.89	8.90	8.30	9.26	9.64	10.07	11.08	10.47	11.43	11.81
	6H	8.46	9.39	8.87	9.76	10.15	11.01	11.94	11.43	12.31	12.71
	8H	8.78	9.66	9.21	10.05	10.46	11.46	12.34	11.89	12.73	13.14
	12H	9.09	9.93	9.52	10.31	10.74	11.88	12.72	12.32	13.11	13.54
4H	2H	6.97	7.98	7.37	8.33	8.71	7.77	8.78	8.17	9.13	9.51
	3H	8.99	9.82	9.40	10.23	10.63	10.04	10.87	10.45	11.28	11.68
	4H	10.07	10.81	10.50	11.24	11.68	11.19	11.94	11.63	12.36	12.80
	6H	10.93	11.58	11.40	12.03	12.50	12.36	13.01	12.82	13.45	13.92
	8H	11.35	11.95	11.82	12.40	12.87	12.92	13.53	13.39	13.97	14.45
	12H	11.72	12.26	12.21	12.74	13.22	13.46	14.00	13.95	14.48	14.96
8H	4H	10.84	11.45	11.31	11.89	12.37	11.74	12.35	12.21	12.79	13.27
	6H	12.18	12.68	12.68	13.17	13.66	13.19	13.69	13.70	14.19	14.67
	8H	12.90	13.34	13.42	13.86	14.35	13.96	14.41	14.48	14.92	15.42
	12H	13.59	13.98	14.10	14.48	15.05	14.75	15.14	15.26	15.63	16.21
12H	4H	11.00	11.53	11.48	12.02	12.49	11.85	12.38	12.33	12.87	13.34
	6H	12.50	12.95	13.03	13.46	13.96	13.42	13.87	13.94	14.38	14.88
	8H	13.41	13.80	13.92	14.30	14.87	14.33	14.72	14.85	15.22	15.79