

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: P1058186

Luminaire Tested: S122RDRP-S865D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058186
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-S865D950-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

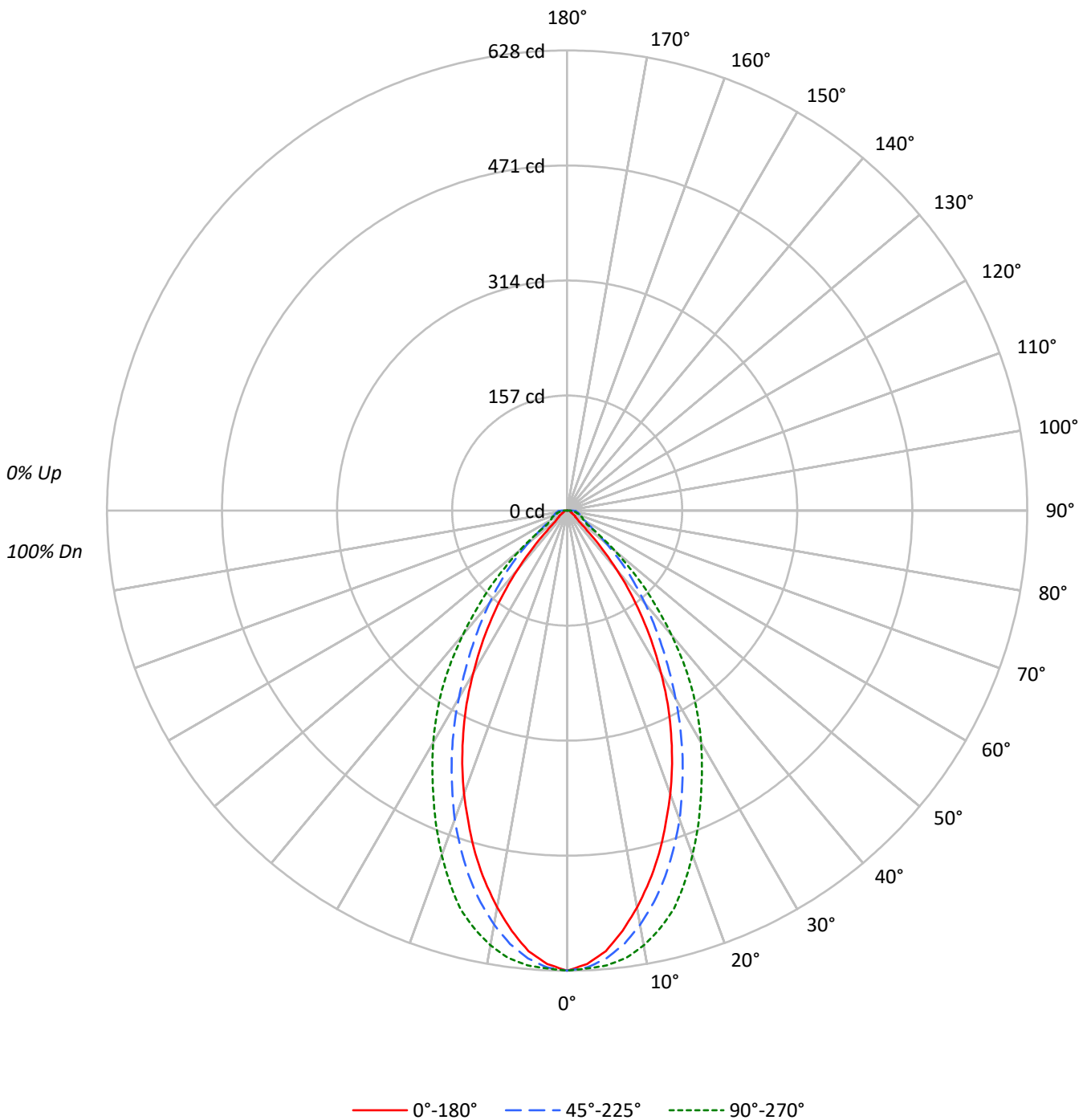
Lumens per Lamp: N/A
Luminaire Lumens: 676.7 lumens
Efficiency: N/A
Efficacy: 19.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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: P1058186

CATALOG NUMBER: S122RDRP-S865D950-X4F0-XX-UDD-BVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1058186

CATALOG NUMBER: S122RDRP-S865D950-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11584	11584	11584
5°	11182	11362	11540
10°	10298	10749	11289
15°	9259	9878	10751
20°	8077	8809	9824
25°	6831	7590	8791
30°	5459	6305	7790
35°	4037	5066	6693
40°	2549	3970	5331
45°	1005	2983	3922
50°	517	2004	2417
55°	425	1316	1084
60°	310	1067	978
65°	262	1000	1000
70°	259	1036	971
75°	342	1198	1027
80°	510	1530	1148
85°	762	2541	1524

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 5076 cd/sqm



TEST NUMBER: P1058186

CATALOG NUMBER: S122RDRP-S865D950-X4F0-XX-UDD-BVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	8.5
10°-20°	145.0	21.4
20°-30°	172.4	25.5
30°-40°	143.4	21.2
40°-50°	80.1	11.8
50°-60°	32.4	4.8
60°-70°	20.7	3.1
70°-80°	15.5	2.3
80°-90°	9.9	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°	374.8	55.4
0°-40°	518.2	76.6
0°-60°	630.6	93.2
0°-90°	676.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	676.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	628	628	628	628	628	
5°	604	615	613	618	623	56
15°	485	499	517	544	563	135
25°	336	349	373	402	432	153
35°	179	196	225	262	297	111
45°	38	65	114	134	150	36
55°	13	28	41	40	34	11
65°	6	24	23	22	23	6
75°	5	17	17	16	14	5
85°	4	11	12	11	7	4
90°	0	0	0	0	0	



TEST NUMBER: P1058186

CATALOG NUMBER: S122RDRP-S865D950-X4F0-XX-UDD-BVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	627.8	627.8	627.8	627.8	627.8
2.5°	619.4	629.0	624.2	624.2	625.4
5°	603.7	614.6	613.4	618.2	623.0
7.5°	578.5	590.5	596.5	607.3	615.8
10°	549.6	562.8	573.7	590.5	602.5
12.5°	518.3	531.6	547.2	568.9	584.5
15°	484.7	499.1	517.1	543.6	562.8
17.5°	447.4	463.0	483.5	512.3	532.8
20°	411.3	426.9	448.6	477.5	500.3
22.5°	374.0	387.3	410.1	439.0	466.6
25°	335.5	348.8	372.8	401.7	431.8
27.5°	297.1	310.3	334.3	364.4	398.1
30°	256.2	270.6	295.9	329.5	365.6
32.5°	217.7	232.1	258.6	295.9	331.9
35°	179.2	196.0	224.9	262.2	297.1
37.5°	141.9	161.2	193.6	228.5	259.8
40°	105.8	126.3	164.8	194.8	221.3
42.5°	69.8	93.8	138.3	163.6	184.0
45°	38.5	64.9	114.3	133.5	150.3
47.5°	21.6	42.1	90.2	105.8	115.5
50°	18.0	31.3	69.8	80.6	84.2
52.5°	14.4	28.9	52.9	58.9	56.5
55°	13.2	27.7	40.9	39.7	33.7
57.5°	10.8	27.7	32.5	28.9	28.9
60°	8.4	26.5	28.9	25.3	26.5
62.5°	7.2	25.3	26.5	24.1	24.1
65°	6.0	24.1	22.9	21.6	22.9
67.5°	4.8	21.6	21.6	20.4	20.4
70°	4.8	20.4	19.2	18.0	18.0
72.5°	4.8	18.0	18.0	16.8	16.8
75°	4.8	16.8	16.8	15.6	14.4
77.5°	4.8	14.4	15.6	14.4	13.2
80°	4.8	13.2	14.4	13.2	10.8
82.5°	4.8	12.0	13.2	12.0	9.6
85°	3.6	10.8	12.0	10.8	7.2
87.5°	3.6	10.8	12.0	9.6	6.0
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1058186

CATALOG NUMBER: S122RDRP-S865D950-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	6.88	8.10	7.25	8.42	8.73	7.96	9.18	8.33	9.49	9.81
	3H	8.21	9.29	8.59	9.62	9.99	9.98	11.06	10.36	11.39	11.76
	4H	8.78	9.79	9.18	10.14	10.53	10.93	11.94	11.33	12.29	12.68
	6H	9.34	10.27	9.76	10.65	11.04	11.87	12.80	12.29	13.18	13.57
	8H	9.67	10.55	10.10	10.94	11.35	12.32	13.20	12.76	13.59	14.00
	12H	9.97	10.82	10.41	11.20	11.63	12.75	13.59	13.18	13.97	14.40
4H	2H	7.85	8.86	8.25	9.21	9.60	8.64	9.65	9.04	10.00	10.39
	3H	9.87	10.70	10.28	11.10	11.51	10.91	11.74	11.32	12.15	12.55
	4H	10.94	11.69	11.38	12.11	12.55	12.05	12.80	12.49	13.22	13.67
	6H	11.81	12.46	12.28	12.91	13.37	13.22	13.87	13.69	14.32	14.78
	8H	12.22	12.83	12.69	13.28	13.75	13.78	14.39	14.25	14.83	15.31
	12H	12.60	13.14	13.09	13.62	14.09	14.32	14.86	14.81	15.34	15.82
8H	4H	11.71	12.32	12.18	12.76	13.24	12.60	13.21	13.07	13.66	14.13
	6H	13.05	13.54	13.55	14.04	14.52	14.06	14.55	14.56	15.05	15.53
	8H	13.76	14.21	14.29	14.73	15.22	14.82	15.26	15.34	15.78	16.27
	12H	14.46	14.85	14.97	15.34	15.92	15.60	16.00	16.12	16.49	17.07
12H	4H	11.87	12.40	12.35	12.89	13.36	12.71	13.24	13.20	13.73	14.20
	6H	13.37	13.82	13.89	14.33	14.83	14.28	14.73	14.80	15.24	15.74
	8H	14.27	14.66	14.79	15.16	15.73	15.19	15.58	15.70	16.08	16.65