

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: P1058088

Luminaire Tested: S122RDRP-S675D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058088
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

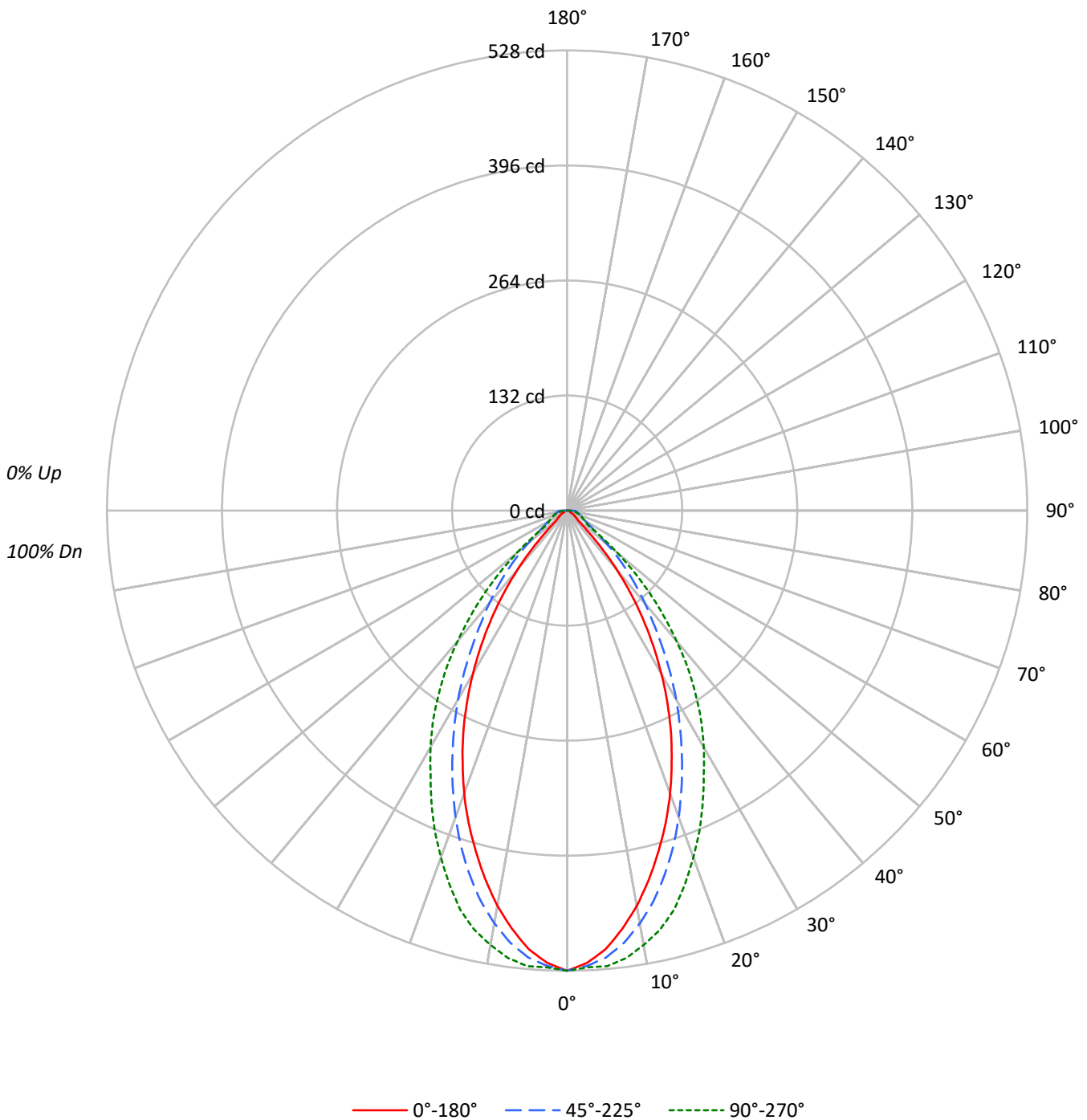
Lumens per Lamp: N/A
Luminaire Lumens: 574.7 lumens
Efficiency: N/A
Efficacy: 22.3 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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: P1058088

CATALOG NUMBER: S122RDRP-S675D935-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1058088

CATALOG NUMBER: S122RDRP-S675D935-X4F0-XX-UDD-BVL-W

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	76	81	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	67	64	71	66	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9743	9743	9743
5°	9358	9530	9717
10°	8627	9007	9481
15°	7731	8262	9053
20°	6784	7350	8312
25°	5746	6346	7499
30°	4609	5329	6678
35°	3406	4262	5785
40°	2137	3339	4702
45°	838	2513	3484
50°	413	1697	2133
55°	325	1113	952
60°	251	904	875
65°	183	847	847
70°	227	869	869
75°	242	962	905
80°	361	1254	988
85°	720	2138	1440

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 3934 cd/sqm



TEST NUMBER: P1058088

CATALOG NUMBER: S122RDRP-S675D935-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.2	8.4
10°-20°	121.9	21.2
20°-30°	145.9	25.4
30°-40°	122.8	21.4
40°-50°	69.9	12.2
50°-60°	27.6	4.8
60°-70°	17.4	3.0
70°-80°	12.9	2.2
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°	316.0	55.0
0°-40°	438.8	76.3
0°-60°	536.2	93.3
0°-90°	574.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	574.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	528	528	528	528	528	
5°	505	516	514	520	525	47
15°	405	419	432	458	474	113
25°	282	295	312	344	368	129
35°	151	165	189	230	257	94
45°	32	57	96	121	134	30
55°	10	22	35	36	30	9
65°	4	19	19	19	19	5
75°	3	14	14	13	13	4
85°	3	9	10	9	7	3
90°	0	0	0	0	0	



TEST NUMBER: P1058088

CATALOG NUMBER: S122RDRP-S675D935-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	528.0	528.0	528.0	528.0	528.0
2.5°	519.6	528.9	522.9	523.8	524.6
5°	505.2	516.2	514.5	520.4	524.6
7.5°	484.1	495.9	500.1	510.3	517.9
10°	460.4	473.9	480.7	496.8	506.0
12.5°	433.4	448.6	458.7	479.0	492.5
15°	404.7	419.0	432.5	457.9	473.9
17.5°	375.9	390.3	404.7	432.5	449.4
20°	345.5	359.0	374.3	403.8	423.3
22.5°	313.4	327.8	343.0	373.4	397.1
25°	282.2	294.8	311.7	343.8	368.3
27.5°	249.2	261.9	280.5	313.4	339.6
30°	216.3	228.9	250.1	283.9	313.4
32.5°	183.3	196.8	219.7	256.8	286.4
35°	151.2	164.7	189.2	229.8	256.8
37.5°	120.0	135.2	162.2	201.9	227.3
40°	88.7	106.4	138.6	174.0	195.2
42.5°	59.1	81.1	116.6	146.2	163.9
45°	32.1	56.6	96.3	120.8	133.5
47.5°	17.7	36.3	76.9	96.3	103.9
50°	14.4	25.3	59.1	73.5	74.3
52.5°	11.8	22.8	43.9	52.4	48.2
55°	10.1	22.0	34.6	35.5	29.6
57.5°	8.4	21.1	28.7	25.3	25.3
60°	6.8	21.1	24.5	22.8	23.7
62.5°	5.1	21.1	22.0	20.3	21.1
65°	4.2	19.4	19.4	18.6	19.4
67.5°	4.2	17.7	17.7	16.9	17.7
70°	4.2	16.9	16.1	16.1	16.1
72.5°	3.4	15.2	15.2	14.4	14.4
75°	3.4	13.5	13.5	12.7	12.7
77.5°	3.4	12.7	12.7	11.8	11.0
80°	3.4	11.0	11.8	11.0	9.3
82.5°	3.4	10.1	11.0	10.1	7.6
85°	3.4	9.3	10.1	9.3	6.8
87.5°	2.5	9.3	9.3	7.6	5.1
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058088
 CATALOG NUMBER: S122RDRP-S675D935-X4F0-XX-UDD-BVL-W

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	5.59	6.81	5.96	7.13	7.44	7.61	8.84	7.98	9.15	9.46
	3H	7.13	8.22	7.51	8.55	8.92	9.59	10.68	9.98	11.01	11.38
	4H	7.69	8.70	8.10	9.06	9.44	10.51	11.53	10.92	11.88	12.26
	6H	8.25	9.19	8.67	9.56	9.95	11.40	12.33	11.81	12.70	13.09
	8H	8.55	9.43	8.98	9.82	10.23	11.80	12.68	12.23	13.07	13.48
	12H	8.91	9.76	9.35	10.14	10.57	12.25	13.09	12.68	13.47	13.90
4H	2H	6.78	7.79	7.18	8.14	8.53	8.23	9.25	8.64	9.60	9.98
	3H	8.98	9.81	9.39	10.22	10.62	10.49	11.32	10.90	11.73	12.13
	4H	10.04	10.78	10.47	11.20	11.65	11.56	12.31	12.00	12.73	13.18
	6H	10.94	11.58	11.40	12.03	12.50	12.68	13.32	13.14	13.77	14.24
	8H	11.32	11.93	11.79	12.38	12.85	13.20	13.80	13.67	14.25	14.72
	12H	11.75	12.28	12.23	12.76	13.24	13.78	14.31	14.26	14.79	15.27
8H	4H	10.84	11.45	11.31	11.89	12.36	12.06	12.66	12.53	13.11	13.58
	6H	12.23	12.72	12.73	13.22	13.70	13.45	13.95	13.96	14.45	14.93
	8H	12.94	13.39	13.47	13.91	14.40	14.19	14.64	14.71	15.15	15.65
	12H	13.70	14.09	14.21	14.58	15.16	15.02	15.42	15.54	15.91	16.49
12H	4H	11.00	11.54	11.49	12.02	12.50	12.16	12.69	12.64	13.18	13.65
	6H	12.56	13.00	13.08	13.52	14.01	13.67	14.12	14.19	14.63	15.13
	8H	13.47	13.86	13.99	14.36	14.93	14.55	14.95	15.07	15.44	16.02