

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: P1058102

Luminaire Tested: S122RDRP-S675D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058102
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D940-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

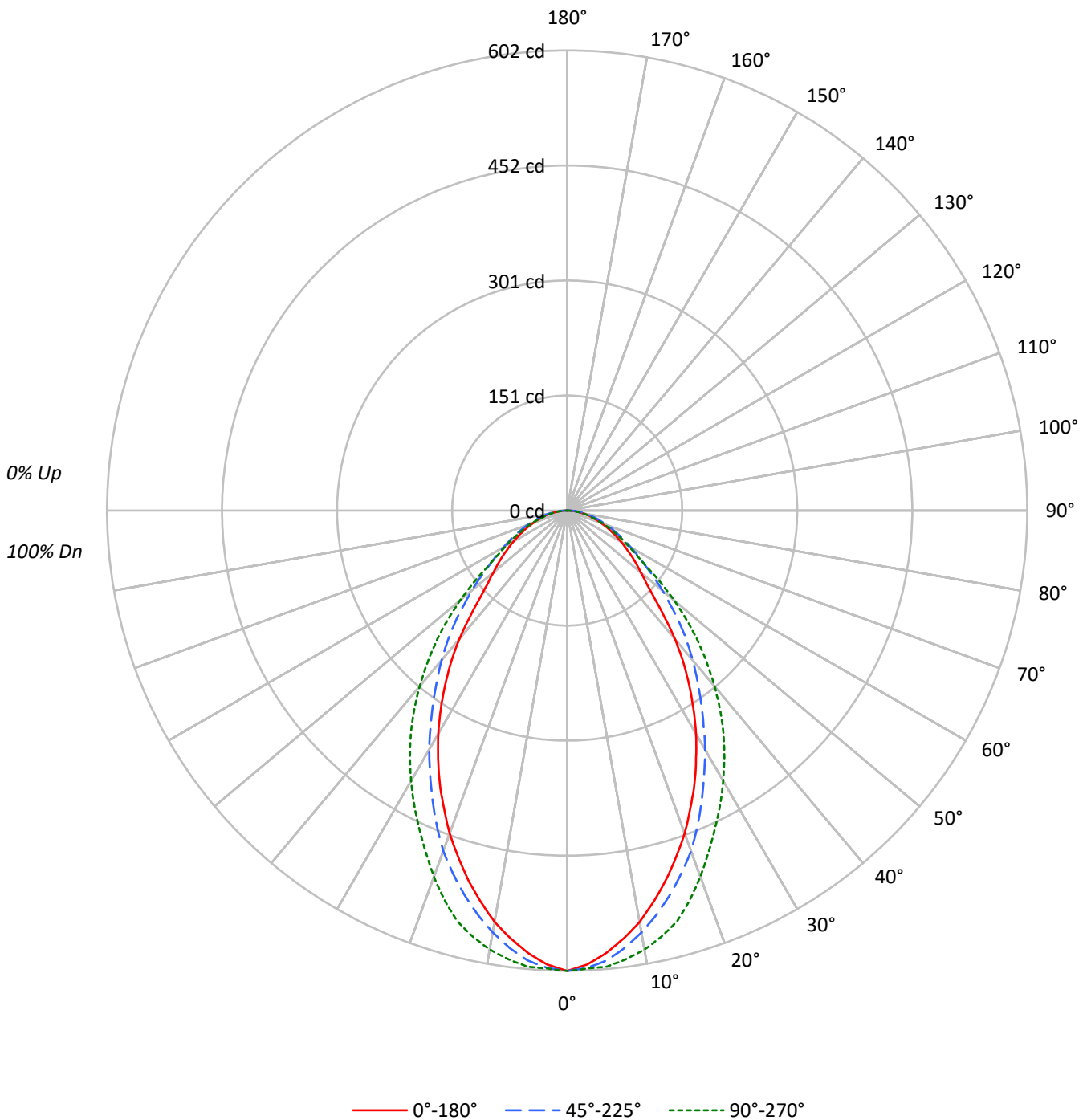
Lumens per Lamp: N/A
Luminaire Lumens: 980.8 lumens
Efficiency: N/A
Efficacy: 38.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1058102

CATALOG NUMBER: S122RDRP-S675D940-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1058102

CATALOG NUMBER: S122RDRP-S675D940-X4F0-XX-UDD-WVL-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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87					87			
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76					76			
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66					66			
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59					59			
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52					52			
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47					47			
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43					43			
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39					39			
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36					36			
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11114	11114	11114
5°	10767	10945	11092
10°	10238	10498	10926
15°	9552	9936	10621
20°	8823	9304	10007
25°	8026	8490	9327
30°	7189	7692	8698
35°	6262	6873	8035
40°	5285	6150	7222
45°	4196	5431	6318
50°	3614	4668	5245
55°	3291	3992	4021
60°	3000	3550	3421
65°	2746	3205	3017
70°	2547	2973	2687
75°	2367	2802	2367
80°	2232	2699	2136
85°	2223	2774	1842

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6318 cd/sqm



TEST NUMBER: P1058102

CATALOG NUMBER: S122RDRP-S675D940-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	5.7
10°-20°	147.0	15.0
20°-30°	193.4	19.7
30°-40°	194.5	19.8
40°-50°	157.6	16.1
50°-60°	108.6	11.1
60°-70°	71.1	7.2
70°-80°	39.6	4.0
80°-90°	13.4	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°	396.0	40.4
0°-40°	590.5	60.2
0°-60°	856.7	87.4
0°-90°	980.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	980.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	602	602	602	602	602	
5°	581	593	591	594	599	54
15°	500	512	520	539	556	140
25°	394	405	417	435	458	181
35°	278	291	305	332	357	173
45°	161	179	208	226	242	127
55°	102	114	124	127	125	92
65°	63	75	73	70	69	63
75°	33	41	39	35	33	35
85°	10	14	13	11	9	11
90°	0	0	0	0	0	



TEST NUMBER: P1058102

CATALOG NUMBER: S122RDRP-S675D940-X4F0-XX-UDD-WVL-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	602.3	602.3	602.3	602.3	602.3
2.5°	594.4	604.9	598.8	598.8	599.7
5°	581.3	592.7	590.9	593.6	598.8
7.5°	564.7	576.9	576.9	584.8	591.8
10°	546.4	558.6	560.3	572.6	583.1
12.5°	523.6	535.9	541.1	556.8	570.8
15°	500.0	512.3	520.1	539.4	556.0
17.5°	474.7	486.9	497.4	517.5	534.1
20°	449.3	460.7	473.8	491.3	509.6
22.5°	421.3	433.6	445.8	462.4	483.4
25°	394.2	404.7	417.0	435.3	458.1
27.5°	365.4	376.8	388.1	410.0	433.6
30°	337.4	348.8	361.0	383.8	408.2
32.5°	307.7	319.9	332.2	357.5	382.9
35°	278.0	291.1	305.1	332.2	356.7
37.5°	249.1	263.1	279.7	307.7	328.7
40°	219.4	234.3	255.3	279.7	299.8
42.5°	187.9	206.3	231.7	252.6	271.0
45°	160.8	179.2	208.1	226.4	242.1
47.5°	140.7	155.6	183.6	199.3	212.4
50°	125.9	137.2	162.6	174.0	182.7
52.5°	113.6	125.0	142.5	150.4	153.0
55°	102.3	113.6	124.1	126.8	125.0
57.5°	90.9	103.2	109.3	106.6	106.6
60°	81.3	94.4	96.2	92.7	92.7
62.5°	71.7	84.8	84.8	80.4	80.4
65°	62.9	75.2	73.4	69.9	69.1
67.5°	55.1	66.4	63.8	60.3	59.4
70°	47.2	57.7	55.1	50.7	49.8
72.5°	40.2	49.8	46.3	42.8	41.1
75°	33.2	41.1	39.3	35.0	33.2
77.5°	27.1	33.2	31.5	28.0	26.2
80°	21.0	26.2	25.4	21.9	20.1
82.5°	15.7	20.1	19.2	16.6	14.0
85°	10.5	14.0	13.1	11.4	8.7
87.5°	5.2	9.6	8.7	7.9	4.4
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058102
 CATALOG NUMBER: S122RDRP-S675D940-X4F0-XX-UDD-WVL-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	15.10	16.54	15.46	16.85	17.17	15.45	16.89	15.82	17.21	17.52
	3H	16.64	17.93	17.02	18.26	18.62	16.80	18.09	17.18	18.42	18.78
	4H	17.21	18.42	17.61	18.77	19.15	17.28	18.49	17.68	18.84	19.22
	6H	17.64	18.76	18.06	19.13	19.52	17.64	18.75	18.05	19.12	19.51
	8H	17.80	18.86	18.22	19.25	19.65	17.75	18.81	18.18	19.20	19.61
	12H	17.91	18.93	18.34	19.31	19.74	17.83	18.84	18.26	19.22	19.65
4H	2H	15.68	16.89	16.08	17.24	17.62	15.97	17.18	16.37	17.53	17.91
	3H	17.50	18.51	17.92	18.91	19.31	17.54	18.54	17.95	18.94	19.35
	4H	18.25	19.15	18.69	19.57	20.01	18.15	19.05	18.58	19.46	19.90
	6H	18.84	19.62	19.30	20.06	20.53	18.63	19.41	19.09	19.86	20.32
	8H	19.05	19.78	19.51	20.22	20.69	18.79	19.52	19.26	19.97	20.44
	12H	19.22	19.87	19.70	20.35	20.82	18.91	19.57	19.40	20.05	20.52
8H	4H	18.54	19.27	19.00	19.71	20.18	18.45	19.18	18.91	19.62	20.09
	6H	19.29	19.90	19.79	20.39	20.87	19.07	19.67	19.56	20.16	20.64
	8H	19.62	20.16	20.13	20.67	21.16	19.32	19.86	19.83	20.37	20.86
	12H	19.90	20.38	20.41	20.87	21.44	19.53	20.01	20.04	20.50	21.07
12H	4H	18.56	19.21	19.04	19.69	20.16	18.48	19.13	18.97	19.61	20.09
	6H	19.35	19.90	19.87	20.41	20.90	19.14	19.69	19.66	20.20	20.69
	8H	19.75	20.23	20.26	20.72	21.29	19.46	19.94	19.97	20.43	21.00