

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: P1058101

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058101
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
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-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

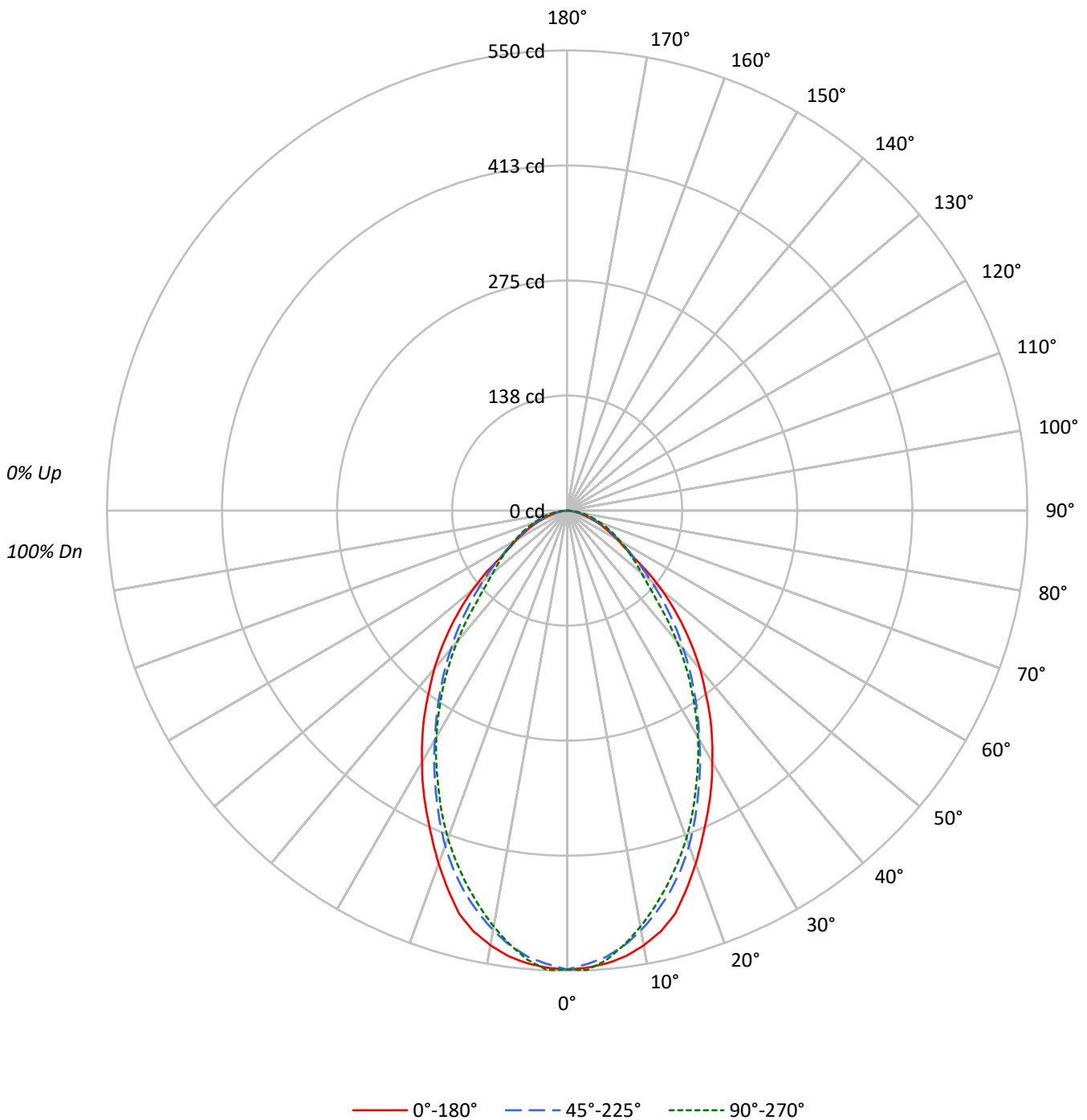
Lumens per Lamp: N/A
Luminaire Lumens: 833.1 lumens
Efficiency: N/A
Efficacy: 32.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1058101

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

Luminous Intensity Polar Plot





TEST NUMBER: P1058101

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

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77					77			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54					54			
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49					49			
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44					44			
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41					41			
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10123	10123	10123
5°	10064	9919	9984
10°	9886	9543	9460
15°	9529	9028	8845
20°	8817	8371	8183
25°	8093	7560	7417
30°	7389	6737	6663
35°	6690	5963	5825
40°	5955	5198	4924
45°	5128	4468	3943
50°	4237	3761	3310
55°	3063	3121	2979
60°	2546	2676	2709
65°	2174	2327	2480
70°	1791	2072	2261
75°	1497	1747	2053
80°	1116	1392	1860
85°	360	741	1673

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5128 cd/sqm



TEST NUMBER: P1058101

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.7	6.1
10°-20°	133.5	16.0
20°-30°	172.8	20.7
30°-40°	169.5	20.3
40°-50°	133.5	16.0
50°-60°	87.5	10.5
60°-70°	53.3	6.4
70°-80°	26.6	3.2
80°-90°	5.7	0.7
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°	357.1	42.9
0°-40°	526.6	63.2
0°-60°	747.5	89.7
0°-90°	833.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	833.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	549	549	549	549	549	
5°	543	543	536	539	539	51
15°	499	492	473	466	463	139
25°	398	384	371	370	364	183
35°	297	280	265	264	259	185
45°	196	184	171	159	151	151
55°	95	100	97	94	93	90
65°	50	51	53	56	57	50
75°	21	22	24	28	29	22
85°	2	3	4	6	8	4
90°	0	0	0	0	0	



TEST NUMBER: P1058101

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	548.6	548.6	548.6	548.6	548.6
2.5°	546.8	547.7	542.5	547.7	549.5
5°	543.3	543.3	535.5	539.0	539.0
7.5°	537.2	536.4	524.1	524.1	523.3
10°	527.6	524.1	509.3	506.7	504.9
12.5°	515.4	509.3	491.8	487.4	484.8
15°	498.8	491.8	472.6	466.5	463.0
17.5°	474.3	467.3	450.7	443.8	440.3
20°	449.0	438.5	426.3	420.2	416.7
22.5°	422.8	410.6	399.2	394.8	391.3
25°	397.5	384.4	371.3	369.5	364.3
27.5°	373.0	357.3	344.2	343.3	338.9
30°	346.8	330.2	316.2	317.1	312.7
32.5°	322.3	306.6	290.0	290.9	285.6
35°	297.0	280.4	264.7	263.8	258.6
37.5°	270.8	255.1	240.2	236.7	231.5
40°	247.2	231.5	215.8	209.7	204.4
42.5°	221.9	207.9	193.9	184.3	177.3
45°	196.5	184.3	171.2	159.0	151.1
47.5°	172.1	162.5	151.1	136.3	131.0
50°	147.6	140.6	131.0	117.9	115.3
52.5°	122.3	119.7	113.6	104.8	104.0
55°	95.2	100.5	97.0	93.5	92.6
57.5°	80.4	81.2	83.9	83.0	83.0
60°	69.0	69.0	72.5	73.4	73.4
62.5°	58.5	59.4	62.9	64.6	64.6
65°	49.8	50.7	53.3	55.9	56.8
67.5°	41.1	42.8	45.4	48.0	48.9
70°	33.2	34.9	38.4	41.1	41.9
72.5°	27.1	28.0	31.4	34.1	34.9
75°	21.0	21.8	24.5	28.0	28.8
77.5°	14.9	16.6	19.2	21.8	23.6
80°	10.5	11.4	13.1	16.6	17.5
82.5°	6.1	7.0	8.7	11.4	12.2
85°	1.7	2.6	3.5	6.1	7.9
87.5°	0.0	0.0	0.0	1.7	3.5
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058101
 CATALOG NUMBER: S122RDRP-S675D940-X4F0-XX-UDD-WVL-B

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	14.16	15.56	14.53	15.87	16.19	14.35	15.74	14.71	16.05	16.37
	3H	15.30	16.54	15.67	16.87	17.23	15.80	17.05	16.18	17.38	17.74
	4H	15.65	16.81	16.05	17.16	17.54	16.35	17.51	16.75	17.86	18.24
	6H	15.83	16.90	16.25	17.27	17.67	16.76	17.83	17.17	18.20	18.59
	8H	15.86	16.88	16.29	17.27	17.67	16.89	17.90	17.31	18.29	18.70
	12H	15.85	16.82	16.28	17.20	17.63	16.97	17.94	17.40	18.32	18.75
4H	2H	14.62	15.78	15.02	16.13	16.52	14.77	15.94	15.17	16.29	16.67
	3H	15.96	16.92	16.37	17.32	17.72	16.44	17.40	16.85	17.80	18.21
	4H	16.40	17.26	16.84	17.68	18.12	17.11	17.97	17.54	18.39	18.83
	6H	16.68	17.42	17.14	17.87	18.33	17.64	18.39	18.10	18.83	19.29
	8H	16.72	17.42	17.19	17.86	18.33	17.81	18.51	18.28	18.95	19.42
	12H	16.72	17.33	17.20	17.81	18.29	17.93	18.55	18.42	19.03	19.50
8H	4H	16.62	17.31	17.09	17.76	18.23	17.26	17.95	17.72	18.40	18.87
	6H	16.97	17.54	17.47	18.03	18.51	17.89	18.46	18.39	18.95	19.43
	8H	17.05	17.56	17.56	18.07	18.56	18.12	18.63	18.64	19.15	19.64
	12H	17.06	17.51	17.57	18.01	18.57	18.31	18.76	18.82	19.25	19.82
12H	4H	16.63	17.25	17.11	17.73	18.20	17.24	17.86	17.73	18.34	18.81
	6H	16.99	17.50	17.51	18.02	18.51	17.88	18.39	18.40	18.91	19.40
	8H	17.11	17.56	17.62	18.05	18.62	18.16	18.61	18.67	19.10	19.67