

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: P1057825

Luminaire Tested: S122RDRP-S1005D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057825
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D927-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

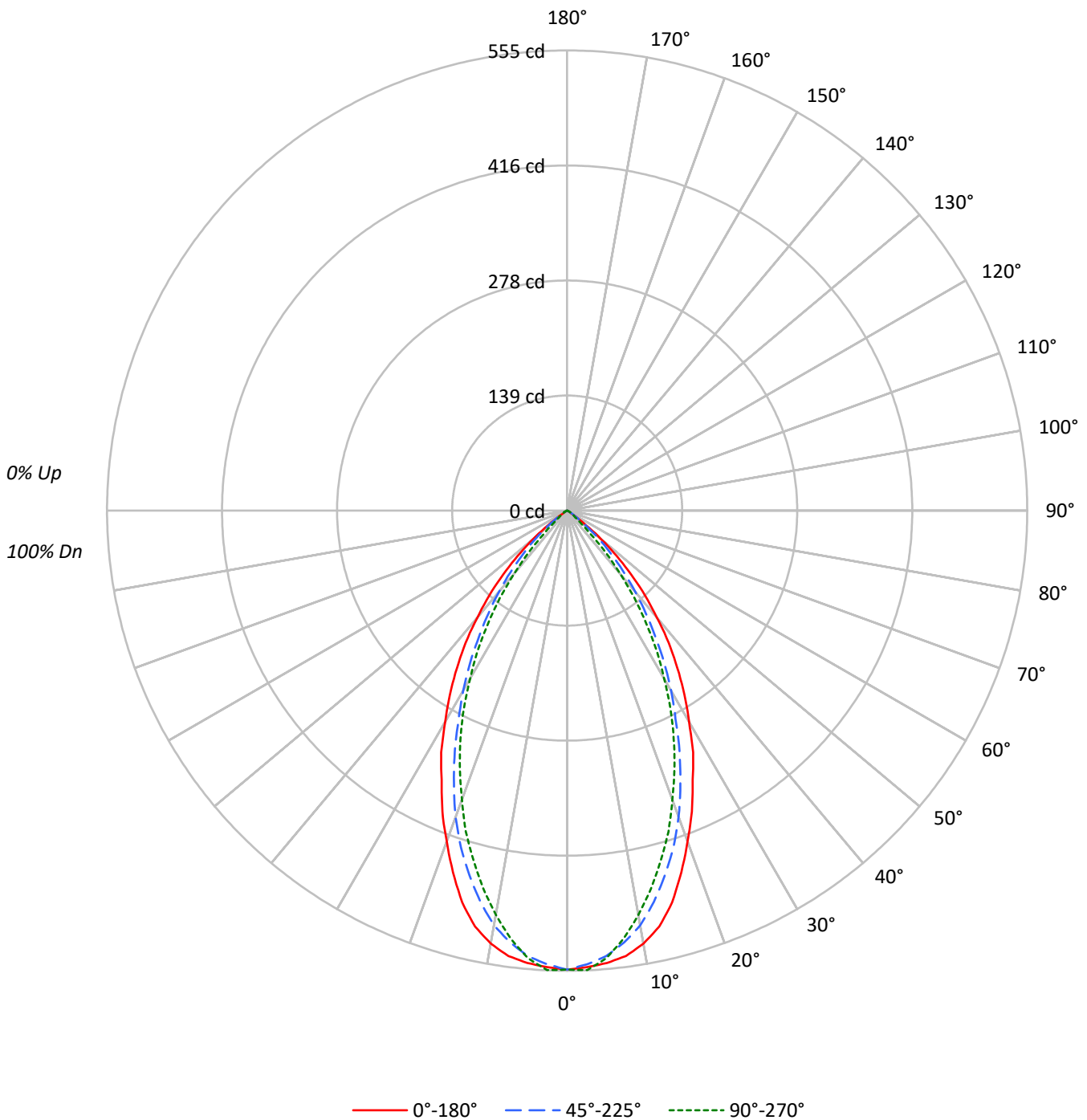
Lumens per Lamp: N/A
Luminaire Lumens: 520.6 lumens
Efficiency: N/A
Efficacy: 12.5 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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: P1057825

CATALOG NUMBER: S122RDRP-S1005D927-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1057825

CATALOG NUMBER: S122RDRP-S1005D927-X4F0-XX-UDD-BVL-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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93					93			
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86					86			
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79					79			
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73					73			
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67					67			
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62					62			
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58					58			
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54					54			
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51					51			
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47					47			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10215	10215	10215
5°	10145	9993	10038
10°	9934	9517	9277
15°	9345	8698	8339
20°	8342	7721	7285
25°	7291	6529	6196
30°	6260	5337	4988
35°	5219	4165	3744
40°	4059	3074	2397
45°	2839	2046	1039
50°	1544	1077	370
55°	225	376	264
60°	44	85	173
65°	0	52	100
70°	0	0	65
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2839 cd/sqm



TEST NUMBER: P1057825

CATALOG NUMBER: S122RDRP-S1005D927-X4F0-XX-UDD-BVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.8	9.8
10°-20°	128.2	24.6
20°-30°	149.4	28.7
30°-40°	119.8	23.0
40°-50°	59.5	11.4
50°-60°	11.7	2.3
60°-70°	1.0	0.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	328.4	63.1
0°-40°	448.2	86.1
0°-60°	519.4	99.8
0°-90°	520.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	520.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	554	554	554	554	554	
5°	548	548	540	541	542	52
15°	489	480	455	444	436	136
25°	358	341	321	314	304	165
35°	232	208	185	177	166	144
45°	109	96	78	53	40	84
55°	7	14	12	7	8	14
65°	0	0	1	1	2	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P1057825

CATALOG NUMBER: S122RDRP-S1005D927-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	553.6	553.6	553.6	553.6	553.6
2.5°	551.2	553.6	547.7	553.6	554.7
5°	547.7	547.7	539.5	540.7	541.9
7.5°	541.9	539.5	525.5	523.1	520.8
10°	530.2	525.5	507.9	498.6	495.1
12.5°	513.8	506.8	483.4	472.8	467.0
15°	489.2	479.8	455.3	443.6	436.5
17.5°	457.6	449.4	426.0	413.1	406.1
20°	424.8	413.1	393.2	380.4	371.0
22.5°	393.2	378.0	357.0	347.6	338.2
25°	358.1	340.6	320.7	313.7	304.3
27.5°	328.9	306.6	283.2	278.5	270.3
30°	293.8	272.7	250.5	243.4	234.1
32.5°	263.3	239.9	217.7	209.5	201.3
35°	231.7	208.3	184.9	176.7	166.2
37.5°	201.3	179.1	155.7	142.8	133.4
40°	168.5	149.8	127.6	111.2	99.5
42.5°	139.3	122.9	101.8	80.8	69.1
45°	108.8	96.0	78.4	52.7	39.8
47.5°	80.8	71.4	57.3	30.4	21.1
50°	53.8	50.3	37.5	15.2	12.9
52.5°	29.3	31.6	22.2	9.4	10.5
55°	7.0	14.0	11.7	7.0	8.2
57.5°	1.2	2.3	5.9	5.9	5.9
60°	1.2	1.2	2.3	3.5	4.7
62.5°	1.2	0.0	1.2	2.3	3.5
65°	0.0	0.0	1.2	1.2	2.3
67.5°	0.0	0.0	0.0	1.2	1.2
70°	0.0	0.0	0.0	1.2	1.2
72.5°	0.0	0.0	0.0	0.0	1.2
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1057825
 CATALOG NUMBER: S122RDRP-S1005D927-X4F0-XX-UDD-BVL-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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00