

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: P1057807

Luminaire Tested: S122RDRP-S1005D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057807
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-S1005D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

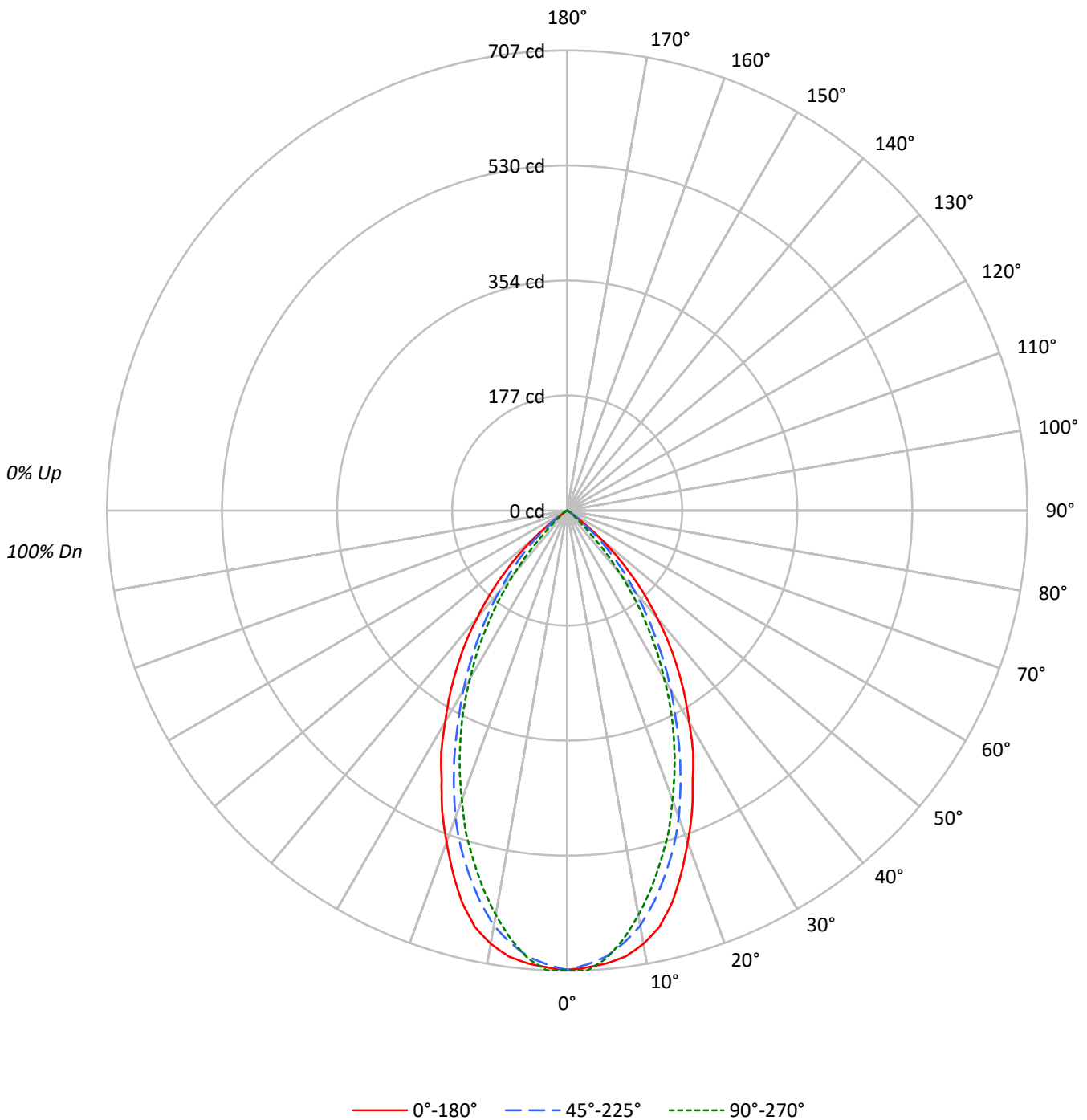
Lumens per Lamp: N/A
Luminaire Lumens: 663.6 lumens
Efficiency: N/A
Efficacy: 15.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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CATALOG NUMBER: S122RDRP-S1005D840-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13022	13022	13022
5°	12933	12740	12796
10°	12664	12132	11825
15°	11913	11088	10631
20°	10635	9844	9286
25°	9294	8323	7898
30°	7979	6803	6358
35°	6654	5309	4773
40°	5174	3917	3054
45°	3622	2610	1323
50°	1969	1369	471
55°	290	479	335
60°	55	111	221
65°	0	65	131
70°	0	0	81
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3622 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.8	9.8
10°-20°	163.4	24.6
20°-30°	190.5	28.7
30°-40°	152.7	23.0
40°-50°	75.8	11.4
50°-60°	15.0	2.3
60°-70°	1.3	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°	418.7	63.1
0°-40°	571.4	86.1
0°-60°	662.2	99.8
0°-90°	663.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	663.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	706	706	706	706	706	
5°	698	698	688	689	691	66
15°	624	612	580	565	556	173
25°	456	434	409	400	388	210
35°	295	266	236	225	212	184
45°	139	122	100	67	51	107
55°	9	18	15	9	10	18
65°	0	0	2	2	3	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P1057807

CATALOG NUMBER: S122RDRP-S1005D840-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	705.7	705.7	705.7	705.7	705.7
2.5°	702.7	705.7	698.2	705.7	707.2
5°	698.2	698.2	687.8	689.3	690.8
7.5°	690.8	687.8	669.9	666.9	663.9
10°	675.9	669.9	647.5	635.6	631.1
12.5°	655.0	646.0	616.2	602.7	595.3
15°	623.6	611.7	580.4	565.4	556.5
17.5°	583.4	572.9	543.1	526.7	517.7
20°	541.6	526.7	501.3	484.9	472.9
22.5°	501.3	481.9	455.0	443.1	431.2
25°	456.5	434.2	408.8	399.8	387.9
27.5°	419.2	390.9	361.1	355.1	344.6
30°	374.5	347.6	319.3	310.3	298.4
32.5°	335.7	305.8	277.5	267.1	256.6
35°	295.4	265.6	235.7	225.3	211.9
37.5°	256.6	228.3	198.4	182.0	170.1
40°	214.8	191.0	162.6	141.7	126.8
42.5°	177.5	156.7	129.8	102.9	88.0
45°	138.8	122.3	100.0	67.1	50.7
47.5°	102.9	91.0	73.1	38.8	26.9
50°	68.6	64.2	47.7	19.4	16.4
52.5°	37.3	40.3	28.3	11.9	13.4
55°	9.0	17.9	14.9	9.0	10.4
57.5°	1.5	3.0	7.5	7.5	7.5
60°	1.5	1.5	3.0	4.5	6.0
62.5°	1.5	0.0	1.5	3.0	4.5
65°	0.0	0.0	1.5	1.5	3.0
67.5°	0.0	0.0	0.0	1.5	1.5
70°	0.0	0.0	0.0	1.5	1.5
72.5°	0.0	0.0	0.0	0.0	1.5
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



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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	0.09	0.41
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.44
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11
	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