

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: P1058050

Luminaire Tested: S122RDRP-S675D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058050
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-S675D840-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

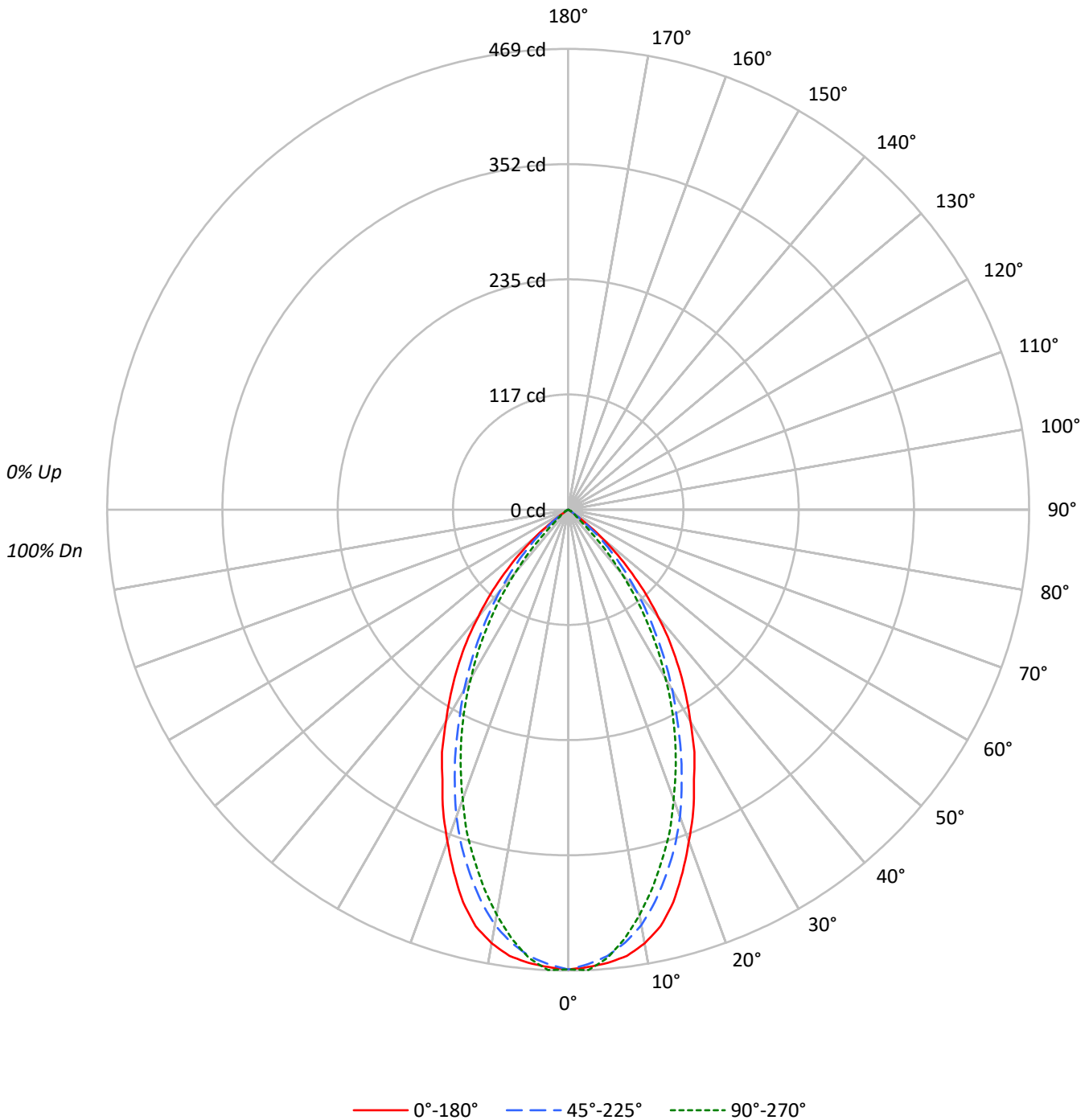
Lumens per Lamp: N/A
Luminaire Lumens: 440.0 lumens
Efficiency: N/A
Efficacy: 17.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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	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	100	100	100	100	100		
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93	93	93	93	93	93	93		
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86	86	86	86	86	86	86		
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79	79	79	79	79	79	79		
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73	73	73	73	73	73	73		
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67	67	67	67	67	67	67		
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62	62	62	62	62	62	62		
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58	58	58	58	58	58	58		
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54	54	54	54	54	54	54		
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51	51	51	51	51	51	51		
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47	47	47	47	47	47	47		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8634	8634	8634
5°	8576	8446	8484
10°	8396	8044	7841
15°	7899	7351	7049
20°	7052	6527	6158
25°	6163	5520	5237
30°	5291	4511	4217
35°	4413	3521	3165
40°	3433	2597	2026
45°	2401	1730	877
50°	1306	910	313
55°	190	318	222
60°	37	74	148
65°	0	44	87
70°	0	0	54
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2401 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.0	9.8
10°-20°	108.4	24.6
20°-30°	126.3	28.7
30°-40°	101.2	23.0
40°-50°	50.3	11.4
50°-60°	9.9	2.3
60°-70°	0.9	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°	277.6	63.1
0°-40°	378.9	86.1
0°-60°	439.1	99.8
0°-90°	440.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	440.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	468	468	468	468	468	
5°	463	463	456	457	458	44
15°	414	406	385	375	369	115
25°	303	288	271	265	257	139
35°	196	176	156	149	140	122
45°	92	81	66	44	34	71
55°	6	12	10	6	7	12
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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	467.9	467.9	467.9	467.9	467.9
2.5°	465.9	467.9	463.0	467.9	468.9
5°	463.0	463.0	456.0	457.0	458.0
7.5°	458.0	456.0	444.2	442.2	440.2
10°	448.1	444.2	429.3	421.4	418.5
12.5°	434.3	428.3	408.6	399.7	394.7
15°	413.5	405.6	384.8	374.9	369.0
17.5°	386.8	379.9	360.1	349.2	343.3
20°	359.1	349.2	332.4	321.5	313.6
22.5°	332.4	319.5	301.7	293.8	285.9
25°	302.7	287.9	271.1	265.1	257.2
27.5°	278.0	259.2	239.4	235.4	228.5
30°	248.3	230.5	211.7	205.8	197.9
32.5°	222.6	202.8	184.0	177.1	170.2
35°	195.9	176.1	156.3	149.4	140.5
37.5°	170.2	151.4	131.6	120.7	112.8
40°	142.5	126.6	107.8	94.0	84.1
42.5°	117.7	103.9	86.1	68.3	58.4
45°	92.0	81.1	66.3	44.5	33.6
47.5°	68.3	60.3	48.5	25.7	17.8
50°	45.5	42.5	31.7	12.9	10.9
52.5°	24.7	26.7	18.8	7.9	8.9
55°	5.9	11.9	9.9	5.9	6.9
57.5°	1.0	2.0	4.9	4.9	4.9
60°	1.0	1.0	2.0	3.0	4.0
62.5°	1.0	0.0	1.0	2.0	3.0
65°	0.0	0.0	1.0	1.0	2.0
67.5°	0.0	0.0	0.0	1.0	1.0
70°	0.0	0.0	0.0	1.0	1.0
72.5°	0.0	0.0	0.0	0.0	1.0
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	0.00	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