

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: P1058098

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058098
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D940-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

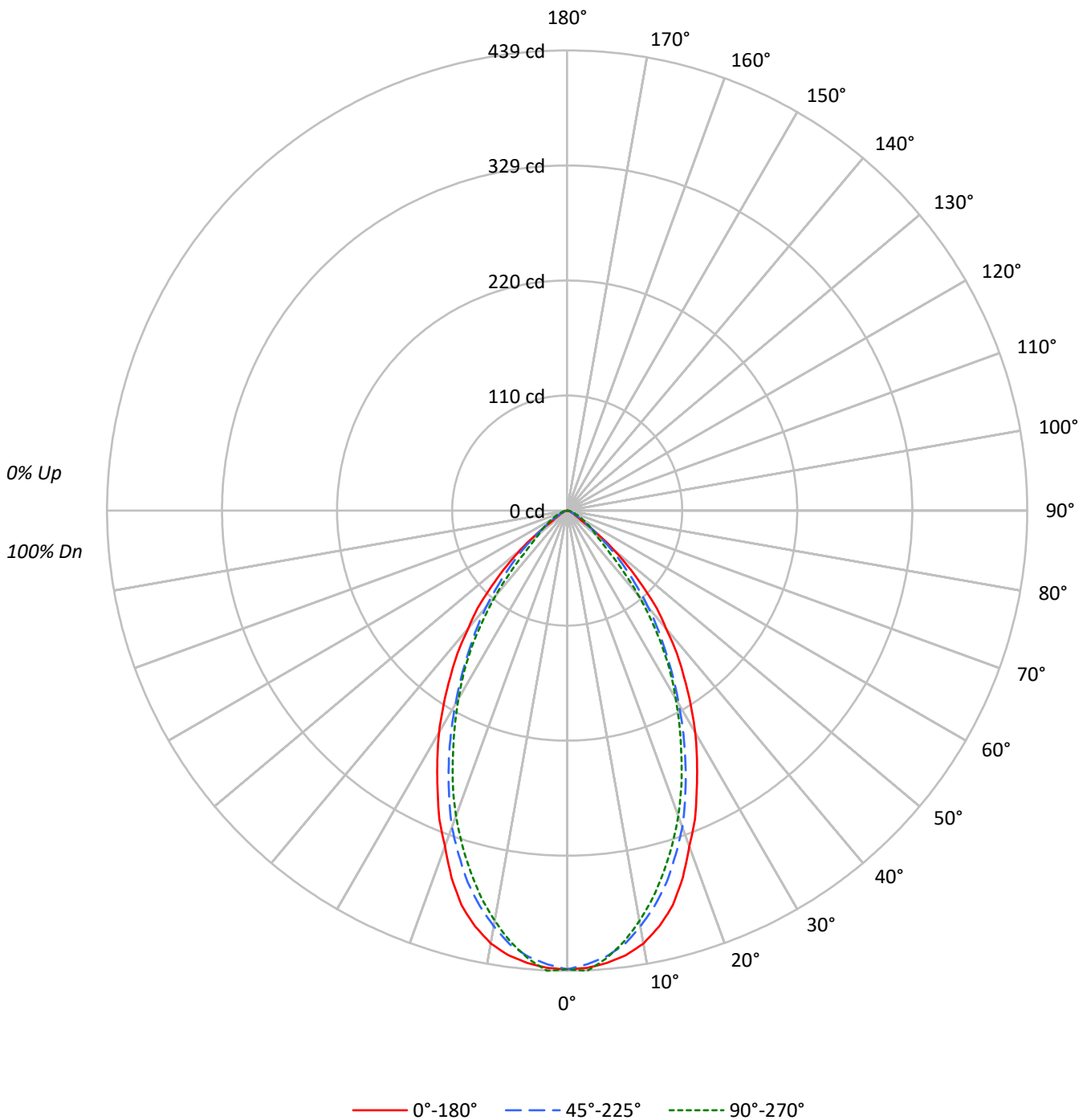
Lumens per Lamp: N/A
Luminaire Lumens: 470.6 lumens
Efficiency: N/A
Efficacy: 18.2 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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			
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92					92			
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84					84			
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76					76			
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70					70			
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64					64			
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59					59			
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54					54			
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50					50			
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47					47			
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44					44			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8075	8075	8075
5°	8024	7911	7944
10°	7856	7545	7446
15°	7443	7009	6808
20°	6690	6311	6089
25°	5957	5442	5247
30°	5212	4541	4411
35°	4388	3679	3561
40°	3534	2903	2568
45°	2643	2098	1527
50°	1654	1355	1002
55°	563	730	814
60°	321	450	646
65°	227	306	498
70°	189	237	378
75°	121	185	314
80°	96	181	276
85°	0	0	191

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2643 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.3	8.6
10°-20°	103.3	21.9
20°-30°	124.3	26.4
30°-40°	106.2	22.6
40°-50°	62.2	13.2
50°-60°	22.5	4.8
60°-70°	8.0	1.7
70°-80°	3.2	0.7
80°-90°	0.6	0.1
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°	267.9	56.9
0°-40°	374.1	79.5
0°-60°	458.9	97.5
0°-90°	470.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	470.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	438	438	438	438	438	
5°	433	434	427	429	429	41
15°	390	384	367	360	356	108
25°	293	280	267	263	258	134
35°	195	180	163	162	158	122
45°	101	91	80	67	58	78
55°	18	24	23	24	25	22
65°	5	6	7	10	11	6
75°	2	3	3	4	4	2
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	437.6	437.6	437.6	437.6	437.6
2.5°	436.7	437.6	433.2	437.6	439.4
5°	433.2	434.1	427.1	428.9	428.9
7.5°	428.0	427.1	417.5	415.8	414.9
10°	419.3	416.6	402.7	400.1	397.4
12.5°	406.2	400.9	386.1	381.7	378.2
15°	389.6	383.5	366.9	359.9	356.4
17.5°	366.9	359.9	344.1	337.2	333.7
20°	340.7	333.7	321.4	313.6	310.1
22.5°	318.8	307.5	294.4	289.1	284.8
25°	292.6	280.4	267.3	262.9	257.7
27.5°	268.2	253.3	240.2	236.7	232.3
30°	244.6	228.9	213.1	213.1	207.0
32.5°	219.2	204.4	187.8	186.9	183.4
35°	194.8	179.9	163.3	161.6	158.1
37.5°	172.1	157.2	141.5	136.3	131.9
40°	146.7	133.6	120.5	111.8	106.6
42.5°	126.7	111.8	98.7	88.2	81.2
45°	101.3	90.8	80.4	67.3	58.5
47.5°	78.6	71.6	62.9	48.0	43.7
50°	57.6	54.2	47.2	35.8	34.9
52.5°	36.7	38.4	34.1	28.0	30.6
55°	17.5	24.5	22.7	23.6	25.3
57.5°	11.4	12.2	16.6	19.2	21.0
60°	8.7	8.7	12.2	15.7	17.5
62.5°	7.0	7.0	9.6	13.1	14.0
65°	5.2	6.1	7.0	9.6	11.4
67.5°	4.4	4.4	5.2	7.9	8.7
70°	3.5	3.5	4.4	6.1	7.0
72.5°	2.6	2.6	3.5	5.2	5.2
75°	1.7	2.6	2.6	3.5	4.4
77.5°	1.7	1.7	1.7	2.6	3.5
80°	0.9	0.9	1.7	1.7	2.6
82.5°	0.9	0.9	0.9	0.9	1.7
85°	0.0	0.0	0.0	0.9	0.9
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	3.13	4.29	3.50	4.61	4.92	6.53	7.70	6.90	8.01	8.32
	3H	3.66	4.68	4.04	5.01	5.38	7.26	8.29	7.65	8.62	8.98
	4H	3.79	4.74	4.19	5.09	5.47	7.48	8.43	7.89	8.78	9.17
	6H	3.86	4.72	4.27	5.10	5.49	7.63	8.50	8.05	8.87	9.27
	8H	3.87	4.68	4.30	5.07	5.48	7.66	8.48	8.09	8.87	9.28
	12H	3.83	4.61	4.27	5.00	5.43	7.66	8.44	8.09	8.82	9.25
4H	2H	3.44	4.39	3.85	4.74	5.13	6.50	7.45	6.91	7.80	8.19
	3H	4.11	4.88	4.52	5.28	5.69	7.38	8.15	7.79	8.55	8.96
	4H	4.34	5.03	4.78	5.45	5.89	7.66	8.34	8.10	8.76	9.21
	6H	4.46	5.04	4.92	5.49	5.96	7.88	8.47	8.35	8.91	9.39
	8H	4.48	5.02	4.95	5.47	5.95	7.92	8.47	8.40	8.92	9.39
	12H	4.44	4.92	4.93	5.41	5.88	7.94	8.42	8.43	8.91	9.38
8H	4H	4.44	4.99	4.92	5.44	5.91	7.59	8.13	8.06	8.58	9.06
	6H	4.61	5.05	5.11	5.55	6.03	7.84	8.28	8.35	8.78	9.27
	8H	4.66	5.06	5.19	5.57	6.07	7.90	8.30	8.43	8.82	9.31
	12H	4.64	4.99	5.16	5.48	6.06	7.97	8.31	8.48	8.81	9.39
12H	4H	4.43	4.91	4.92	5.39	5.87	7.54	8.02	8.03	8.50	8.98
	6H	4.60	5.00	5.13	5.52	6.01	7.79	8.19	8.32	8.71	9.20
	8H	4.69	5.03	5.20	5.53	6.11	7.88	8.22	8.39	8.72	9.30