

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: P1058492

Luminaire Tested: S122RDRP-H675D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058492
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-H675D935-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

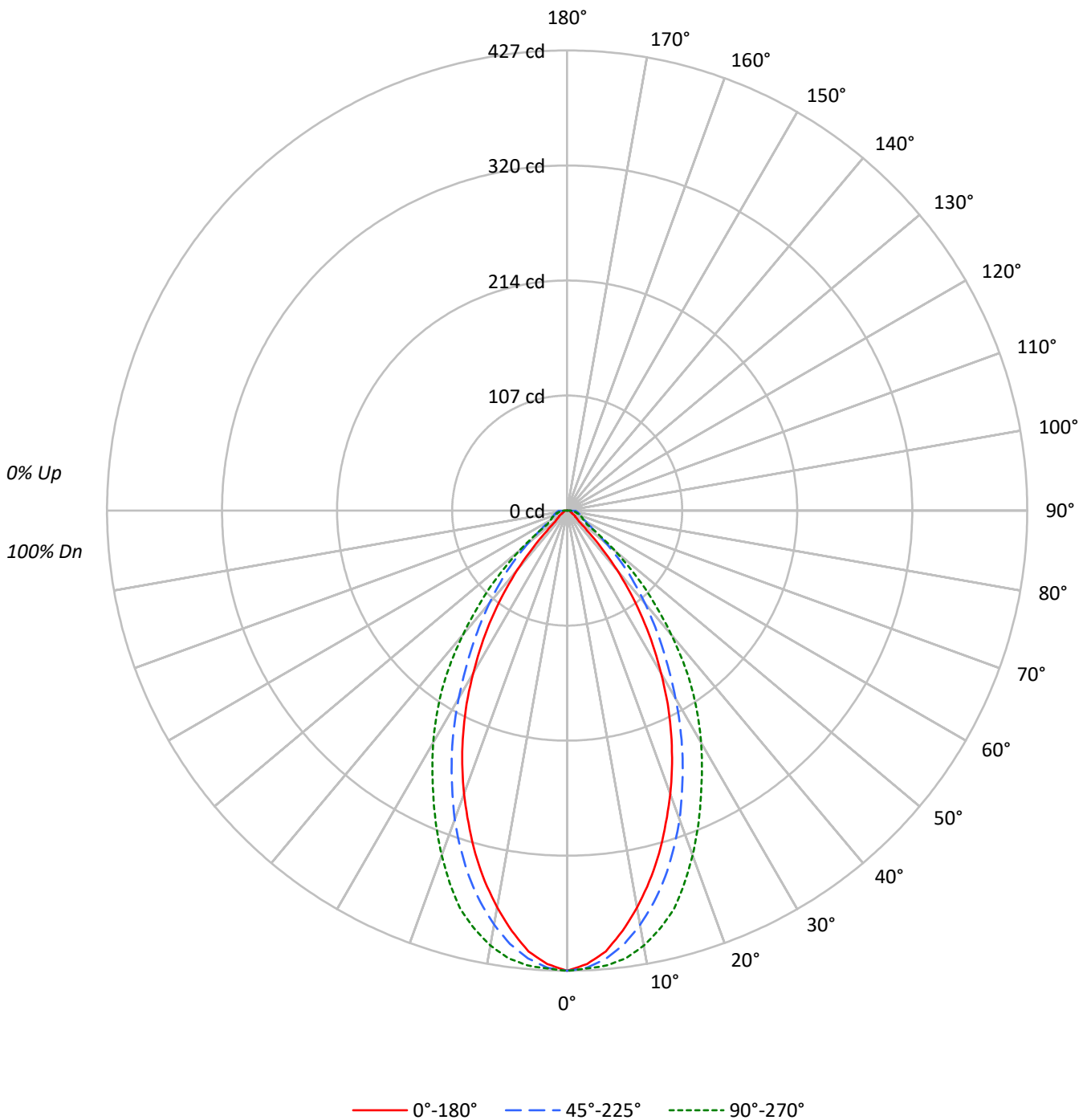
Lumens per Lamp: N/A
Luminaire Lumens: 460.3 lumens
Efficiency: N/A
Efficacy: 19.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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	0
RCR																			
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90	
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81	
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74	
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67	
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61	
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57	
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52	
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48	
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45	
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7879	7879	7879
5°	7606	7726	7848
10°	7004	7309	7678
15°	6296	6719	7313
20°	5492	5991	6682
25°	4646	5163	5978
30°	3712	4287	5297
35°	2746	3447	4550
40°	1734	2700	3625
45°	684	2028	2667
50°	353	1361	1645
55°	290	894	737
60°	210	723	664
65°	179	677	677
70°	178	707	664
75°	235	820	699
80°	351	1041	786
85°	529	1736	1037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 3469 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.1	8.5
10°-20°	98.6	21.4
20°-30°	117.2	25.5
30°-40°	97.5	21.2
40°-50°	54.5	11.8
50°-60°	22.0	4.8
60°-70°	14.1	3.1
70°-80°	10.6	2.3
80°-90°	6.7	1.5
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°	254.9	55.4
0°-40°	352.4	76.6
0°-60°	428.9	93.2
0°-90°	460.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	460.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	427	427	427	427	427	
5°	411	418	417	420	424	38
15°	330	339	352	370	383	92
25°	228	237	254	273	294	104
35°	122	133	153	178	202	76
45°	26	44	78	91	102	25
55°	9	19	28	27	23	8
65°	4	16	16	15	16	4
75°	3	12	12	11	10	3
85°	2	7	8	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	427.0	427.0	427.0	427.0	427.0
2.5°	421.2	427.8	424.5	424.5	425.3
5°	410.6	418.0	417.1	420.4	423.7
7.5°	393.4	401.6	405.7	413.1	418.8
10°	373.8	382.8	390.1	401.6	409.8
12.5°	352.5	361.5	372.2	386.9	397.5
15°	329.6	339.4	351.7	369.7	382.8
17.5°	304.3	314.9	328.8	348.4	362.3
20°	279.7	290.4	305.1	324.7	340.3
22.5°	254.4	263.4	278.9	298.5	317.4
25°	228.2	237.2	253.6	273.2	293.6
27.5°	202.0	211.0	227.4	247.8	270.7
30°	174.2	184.0	201.2	224.1	248.6
32.5°	148.0	157.9	175.9	201.2	225.7
35°	121.9	133.3	153.0	178.3	202.0
37.5°	96.5	109.6	131.7	155.4	176.7
40°	72.0	85.9	112.1	132.5	150.5
42.5°	47.4	63.8	94.1	111.2	125.1
45°	26.2	44.2	77.7	90.8	102.2
47.5°	14.7	28.6	61.3	72.0	78.5
50°	12.3	21.3	47.4	54.8	57.3
52.5°	9.8	19.6	36.0	40.1	38.4
55°	9.0	18.8	27.8	27.0	22.9
57.5°	7.4	18.8	22.1	19.6	19.6
60°	5.7	18.0	19.6	17.2	18.0
62.5°	4.9	17.2	18.0	16.4	16.4
65°	4.1	16.4	15.5	14.7	15.5
67.5°	3.3	14.7	14.7	13.9	13.9
70°	3.3	13.9	13.1	12.3	12.3
72.5°	3.3	12.3	12.3	11.5	11.5
75°	3.3	11.5	11.5	10.6	9.8
77.5°	3.3	9.8	10.6	9.8	9.0
80°	3.3	9.0	9.8	9.0	7.4
82.5°	3.3	8.2	9.0	8.2	6.5
85°	2.5	7.4	8.2	7.4	4.9
87.5°	2.5	7.4	8.2	6.5	4.1
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	5.54	6.76	5.90	7.07	7.38	6.60	7.82	6.97	8.13	8.45
	3H	6.87	7.95	7.25	8.29	8.65	8.64	9.72	9.02	10.05	10.42
	4H	7.45	8.46	7.85	8.81	9.20	9.59	10.61	10.00	10.96	11.34
	6H	8.02	8.95	8.44	9.32	9.72	10.54	11.47	10.96	11.85	12.24
	8H	8.35	9.23	8.78	9.62	10.03	10.99	11.87	11.42	12.26	12.67
	12H	8.66	9.50	9.10	9.89	10.32	11.41	12.25	11.85	12.64	13.07
4H	2H	6.49	7.50	6.90	7.86	8.24	7.28	8.29	7.68	8.64	9.02
	3H	8.53	9.36	8.94	9.77	10.17	9.57	10.40	9.98	10.81	11.21
	4H	9.62	10.36	10.05	10.78	11.23	10.72	11.47	11.15	11.89	12.33
	6H	10.49	11.14	10.95	11.58	12.05	11.89	12.54	12.35	12.99	13.45
	8H	10.90	11.51	11.37	11.96	12.43	12.45	13.06	12.92	13.50	13.98
	12H	11.29	11.82	11.78	12.31	12.78	12.99	13.53	13.48	14.01	14.49
8H	4H	10.39	10.99	10.86	11.44	11.91	11.27	11.87	11.74	12.32	12.79
	6H	11.73	12.22	12.23	12.72	13.20	12.73	13.22	13.23	13.72	14.20
	8H	12.44	12.89	12.97	13.41	13.90	13.49	13.94	14.01	14.45	14.94
	12H	13.14	13.54	13.66	14.03	14.61	14.28	14.67	14.79	15.17	15.74
12H	4H	10.54	11.08	11.03	11.56	12.03	11.38	11.91	11.86	12.39	12.87
	6H	12.05	12.49	12.57	13.01	13.50	12.95	13.40	13.48	13.91	14.41
	8H	12.95	13.35	13.47	13.84	14.41	13.86	14.25	14.38	14.75	15.32