

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058493

Luminaire Tested: S122RDR-H675D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058493
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE 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

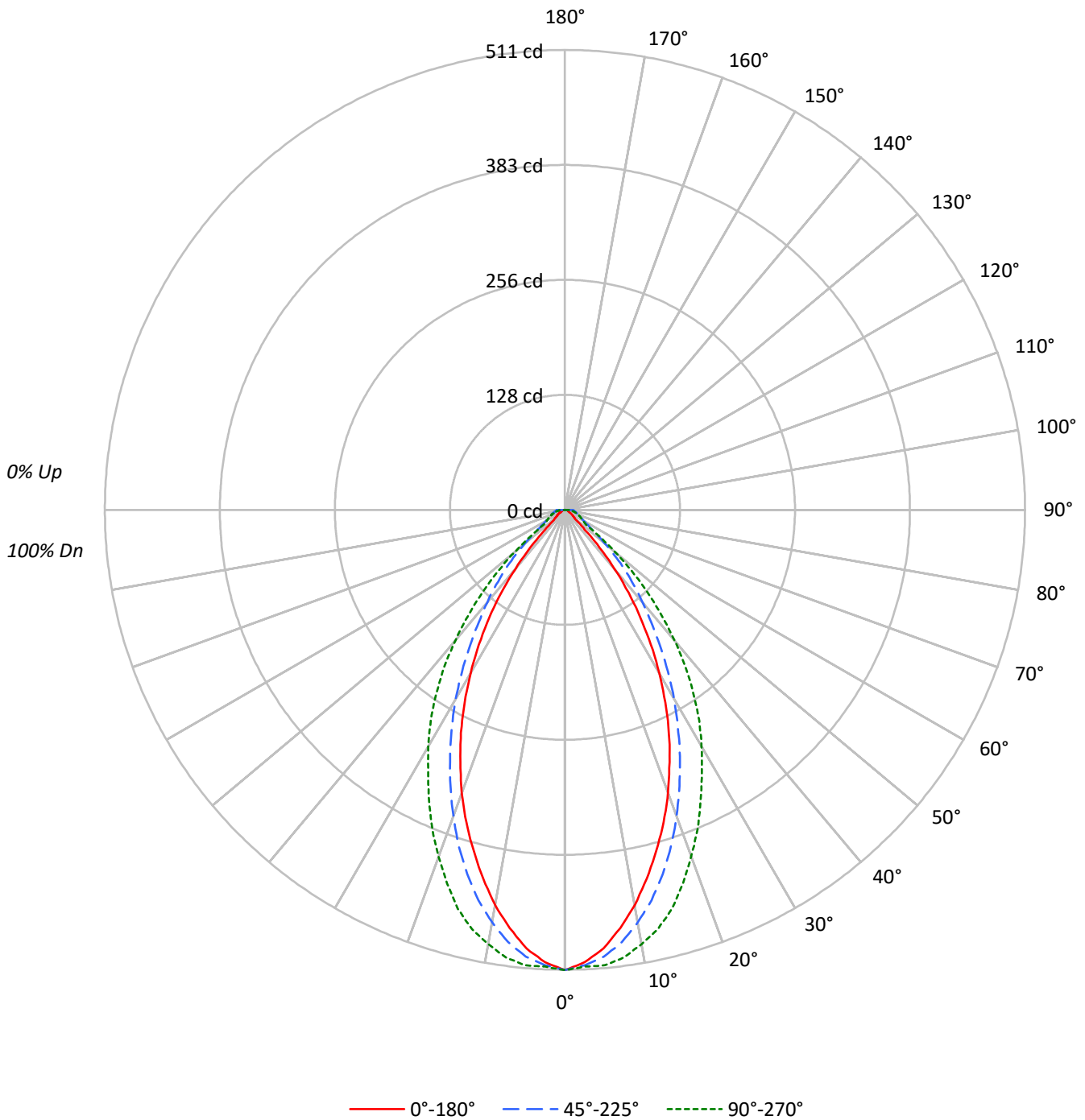
Lumens per Lamp: N/A
Luminaire Lumens: 556.5 lumens
Efficiency: N/A
Efficacy: 23.7 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): 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	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	76	81	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	67	64	71	66	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56				
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45				
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9435	9435	9435
5°	9061	9228	9410
10°	8355	8722	9181
15°	7487	8002	8768
20°	6570	7116	8049
25°	5562	6147	7262
30°	4462	5161	6467
35°	3298	4129	5602
40°	2069	3233	4553
45°	812	2435	3374
50°	399	1645	2067
55°	315	1078	920
60°	240	875	845
65°	179	821	821
70°	221	836	836
75°	235	934	877
80°	351	1222	956
85°	699	2075	1376

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 3807 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.7	8.4
10°-20°	118.1	21.2
20°-30°	141.2	25.4
30°-40°	118.9	21.4
40°-50°	67.7	12.2
50°-60°	26.7	4.8
60°-70°	16.8	3.0
70°-80°	12.5	2.2
80°-90°	8.0	1.4
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°	306.0	55.0
0°-40°	424.9	76.3
0°-60°	519.3	93.3
0°-90°	556.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	556.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	511	511	511	511	511	
5°	489	500	498	504	508	45
15°	392	406	419	443	459	109
25°	273	286	302	333	357	124
35°	146	160	183	222	249	91
45°	31	55	93	117	129	29
55°	10	21	34	34	29	9
65°	4	19	19	18	19	5
75°	3	13	13	12	12	4
85°	3	9	10	9	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	511.3	511.3	511.3	511.3	511.3
2.5°	503.1	512.1	506.4	507.2	508.0
5°	489.2	499.9	498.2	503.9	508.0
7.5°	468.8	480.2	484.3	494.1	501.5
10°	445.9	459.0	465.5	481.0	490.0
12.5°	419.7	434.4	444.2	463.9	477.0
15°	391.9	405.8	418.9	443.4	459.0
17.5°	364.1	378.0	391.9	418.9	435.2
20°	334.6	347.7	362.4	391.1	409.9
22.5°	303.5	317.4	332.1	361.6	384.5
25°	273.2	285.5	301.9	333.0	356.7
27.5°	241.3	253.6	271.6	303.5	328.9
30°	209.4	221.7	242.2	274.9	303.5
32.5°	177.5	190.6	212.7	248.7	277.3
35°	146.4	159.5	183.3	222.5	248.7
37.5°	116.2	130.9	157.1	195.5	220.1
40°	85.9	103.1	134.2	168.5	189.0
42.5°	57.3	78.5	112.9	141.5	158.7
45°	31.1	54.8	93.3	117.0	129.3
47.5°	17.2	35.2	74.4	93.3	100.6
50°	13.9	24.5	57.3	71.2	72.0
52.5°	11.5	22.1	42.5	50.7	46.6
55°	9.8	21.3	33.5	34.4	28.6
57.5°	8.2	20.5	27.8	24.5	24.5
60°	6.5	20.5	23.7	22.1	22.9
62.5°	4.9	20.5	21.3	19.6	20.5
65°	4.1	18.8	18.8	18.0	18.8
67.5°	4.1	17.2	17.2	16.4	17.2
70°	4.1	16.4	15.5	15.5	15.5
72.5°	3.3	14.7	14.7	13.9	13.9
75°	3.3	13.1	13.1	12.3	12.3
77.5°	3.3	12.3	12.3	11.5	10.6
80°	3.3	10.6	11.5	10.6	9.0
82.5°	3.3	9.8	10.6	9.8	7.4
85°	3.3	9.0	9.8	9.0	6.5
87.5°	2.5	9.0	9.0	7.4	4.9
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	5.50	6.73	5.87	7.04	7.35	7.50	8.72	7.87	9.04	9.35
	3H	7.05	8.13	7.43	8.46	8.83	9.48	10.57	9.86	10.90	11.26
	4H	7.60	8.62	8.01	8.97	9.35	10.40	11.41	10.80	11.76	12.15
	6H	8.16	9.09	8.58	9.46	9.86	11.28	12.21	11.70	12.58	12.98
	8H	8.46	9.34	8.89	9.73	10.14	11.69	12.57	12.12	12.96	13.37
	12H	8.82	9.66	9.25	10.04	10.48	12.13	12.97	12.56	13.35	13.78
4H	2H	6.68	7.70	7.09	8.05	8.43	8.12	9.14	8.53	9.49	9.87
	3H	8.88	9.72	9.30	10.12	10.52	10.37	11.20	10.78	11.61	12.01
	4H	9.94	10.68	10.37	11.10	11.55	11.45	12.20	11.88	12.62	13.06
	6H	10.83	11.48	11.30	11.93	12.40	12.56	13.21	13.02	13.65	14.12
	8H	11.22	11.82	11.69	12.27	12.74	13.08	13.69	13.55	14.14	14.61
	12H	11.64	12.18	12.13	12.66	13.13	13.66	14.19	14.14	14.68	15.15
8H	4H	10.74	11.34	11.21	11.79	12.26	11.94	12.55	12.41	13.00	13.47
	6H	12.12	12.61	12.62	13.11	13.59	13.34	13.83	13.84	14.33	14.81
	8H	12.84	13.28	13.36	13.80	14.29	14.08	14.52	14.60	15.04	15.53
	12H	13.59	13.98	14.10	14.48	15.05	14.91	15.30	15.42	15.80	16.37
12H	4H	10.90	11.44	11.39	11.92	12.39	12.04	12.58	12.53	13.06	13.54
	6H	12.45	12.89	12.97	13.41	13.90	13.55	14.00	14.08	14.52	15.01
	8H	13.36	13.75	13.88	14.25	14.82	14.44	14.83	14.96	15.33	15.90