

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: P1058497

Luminaire Tested: S122RDR-H675D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058497
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D935-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

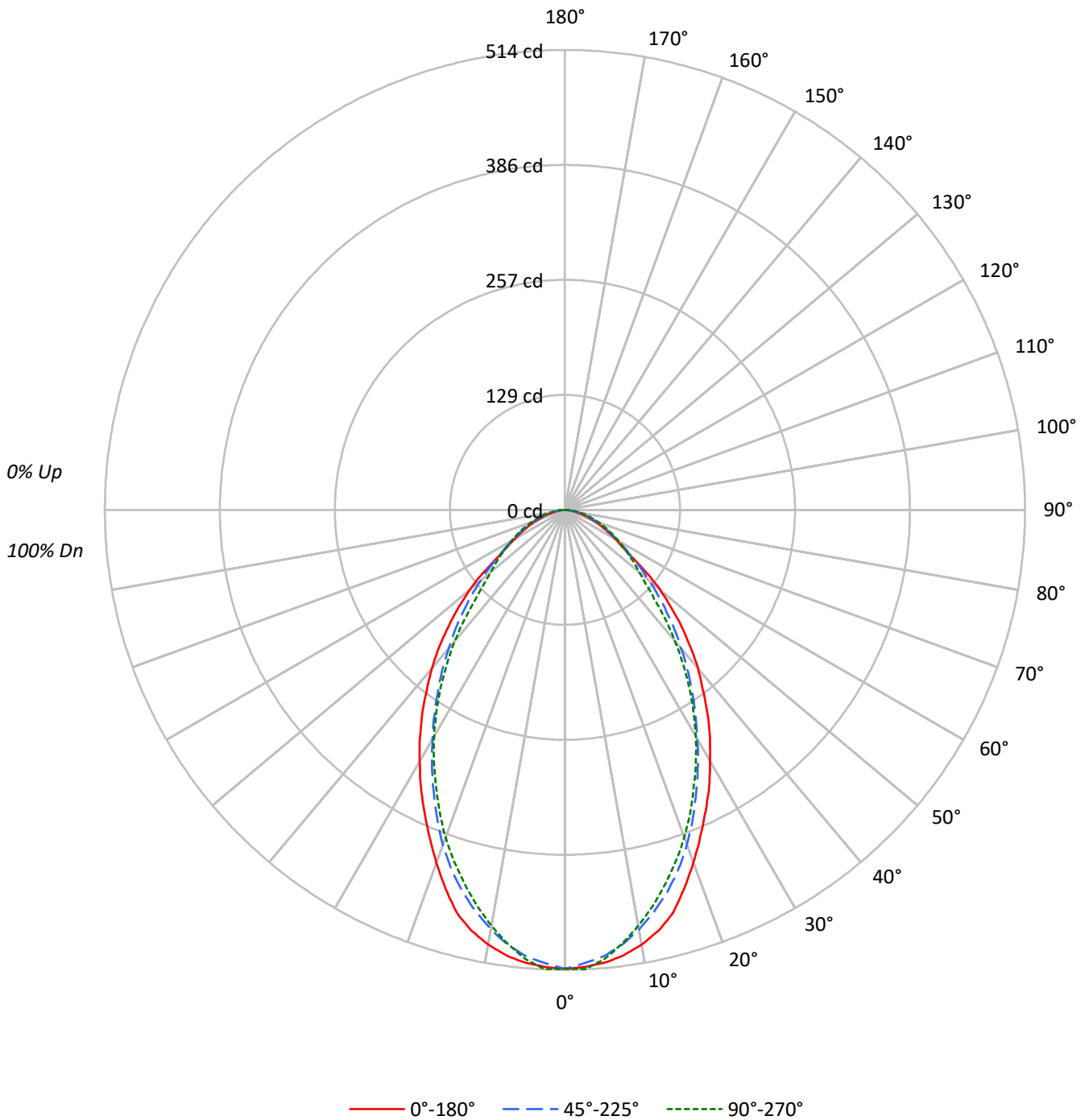
Lumens per Lamp: N/A
Luminaire Lumens: 779.0 lumens
Efficiency: N/A
Efficacy: 33.1 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9464	9464	9464
5°	9410	9274	9336
10°	9243	8923	8846
15°	8910	8442	8270
20°	8243	7827	7650
25°	7566	7067	6935
30°	6910	6301	6230
35°	6256	5575	5447
40°	5567	4859	4603
45°	4796	4178	3687
50°	3962	3517	3095
55°	2863	2918	2786
60°	2380	2502	2532
65°	2035	2174	2318
70°	1672	1937	2115
75°	1397	1633	1925
80°	1041	1307	1732
85°	339	699	1567

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4796 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	6.1
10°-20°	124.9	16.0
20°-30°	161.6	20.7
30°-40°	158.5	20.3
40°-50°	124.8	16.0
50°-60°	81.8	10.5
60°-70°	49.8	6.4
70°-80°	24.9	3.2
80°-90°	5.4	0.7
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°	333.9	42.9
0°-40°	492.4	63.2
0°-60°	699.0	89.7
0°-90°	779.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	779.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	513	513	513	513	513	
5°	508	508	501	504	504	48
15°	466	460	442	436	433	130
25°	372	359	347	346	341	171
35°	278	262	248	247	242	173
45°	184	172	160	149	141	142
55°	89	94	91	87	87	85
65°	47	47	50	52	53	46
75°	20	20	23	26	27	21
85°	2	2	3	6	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	512.9	512.9	512.9	512.9	512.9
2.5°	511.3	512.1	507.2	512.1	513.8
5°	508.0	508.0	500.7	504.0	504.0
7.5°	502.3	501.5	490.1	490.1	489.2
10°	493.3	490.1	476.2	473.7	472.1
12.5°	481.9	476.2	459.8	455.8	453.3
15°	466.4	459.8	441.9	436.2	432.9
17.5°	443.5	437.0	421.5	414.9	411.7
20°	419.8	410.0	398.6	392.9	389.6
22.5°	395.3	383.9	373.3	369.2	365.9
25°	371.6	359.4	347.1	345.5	340.6
27.5°	348.8	334.1	321.8	321.0	316.9
30°	324.3	308.7	295.7	296.5	292.4
32.5°	301.4	286.7	271.2	272.0	267.1
35°	277.7	262.2	247.5	246.7	241.8
37.5°	253.2	238.5	224.6	221.3	216.4
40°	231.1	216.4	201.7	196.0	191.1
42.5°	207.5	194.4	181.3	172.3	165.8
45°	183.8	172.3	160.1	148.7	141.3
47.5°	160.9	151.9	141.3	127.4	122.5
50°	138.0	131.5	122.5	110.3	107.8
52.5°	114.3	111.9	106.2	98.0	97.2
55°	89.0	93.9	90.7	87.4	86.6
57.5°	75.1	76.0	78.4	77.6	77.6
60°	64.5	64.5	67.8	68.6	68.6
62.5°	54.7	55.5	58.8	60.4	60.4
65°	46.6	47.4	49.8	52.3	53.1
67.5°	38.4	40.0	42.5	44.9	45.7
70°	31.0	32.7	35.9	38.4	39.2
72.5°	25.3	26.1	29.4	31.9	32.7
75°	19.6	20.4	22.9	26.1	27.0
77.5°	13.9	15.5	18.0	20.4	22.1
80°	9.8	10.6	12.3	15.5	16.3
82.5°	5.7	6.5	8.2	10.6	11.4
85°	1.6	2.5	3.3	5.7	7.4
87.5°	0.0	0.0	0.0	1.6	3.3
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	13.93	15.33	14.30	15.64	15.96	14.11	15.51	14.48	15.82	16.14
	3H	15.06	16.31	15.44	16.64	17.00	15.57	16.81	15.95	17.14	17.51
	4H	15.42	16.58	15.82	16.93	17.31	16.11	17.28	16.51	17.63	18.01
	6H	15.60	16.67	16.01	17.04	17.43	16.53	17.60	16.94	17.97	18.36
	8H	15.63	16.64	16.06	17.03	17.44	16.65	17.67	17.08	18.06	18.46
	12H	15.61	16.58	16.04	16.97	17.40	16.74	17.71	17.17	18.09	18.52
4H	2H	14.39	15.55	14.79	15.90	16.28	14.54	15.70	14.94	16.05	16.43
	3H	15.73	16.69	16.14	17.09	17.49	16.21	17.17	16.62	17.57	17.97
	4H	16.17	17.03	16.61	17.45	17.89	16.87	17.73	17.31	18.15	18.59
	6H	16.44	17.19	16.90	17.63	18.10	17.41	18.15	17.87	18.60	19.06
	8H	16.49	17.18	16.95	17.63	18.10	17.58	18.27	18.04	18.72	19.19
	12H	16.48	17.10	16.97	17.58	18.05	17.70	18.31	18.18	18.79	19.27
8H	4H	16.39	17.08	16.85	17.53	18.00	17.02	17.72	17.49	18.16	18.63
	6H	16.73	17.30	17.23	17.80	18.28	17.65	18.22	18.15	18.72	19.20
	8H	16.81	17.32	17.33	17.83	18.32	17.89	18.40	18.41	18.91	19.40
	12H	16.83	17.28	17.34	17.77	18.34	18.07	18.52	18.59	19.02	19.59
12H	4H	16.40	17.01	16.88	17.49	17.97	17.01	17.63	17.49	18.11	18.58
	6H	16.76	17.27	17.28	17.78	18.27	17.65	18.16	18.17	18.67	19.16
	8H	16.87	17.32	17.39	17.82	18.39	17.92	18.37	18.44	18.87	19.44