

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: P1058452

Luminaire Tested: S122RDR-H675D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058452
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-H675D835-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, 80 CRI LEDS
Ballast/Driver: -

Summary

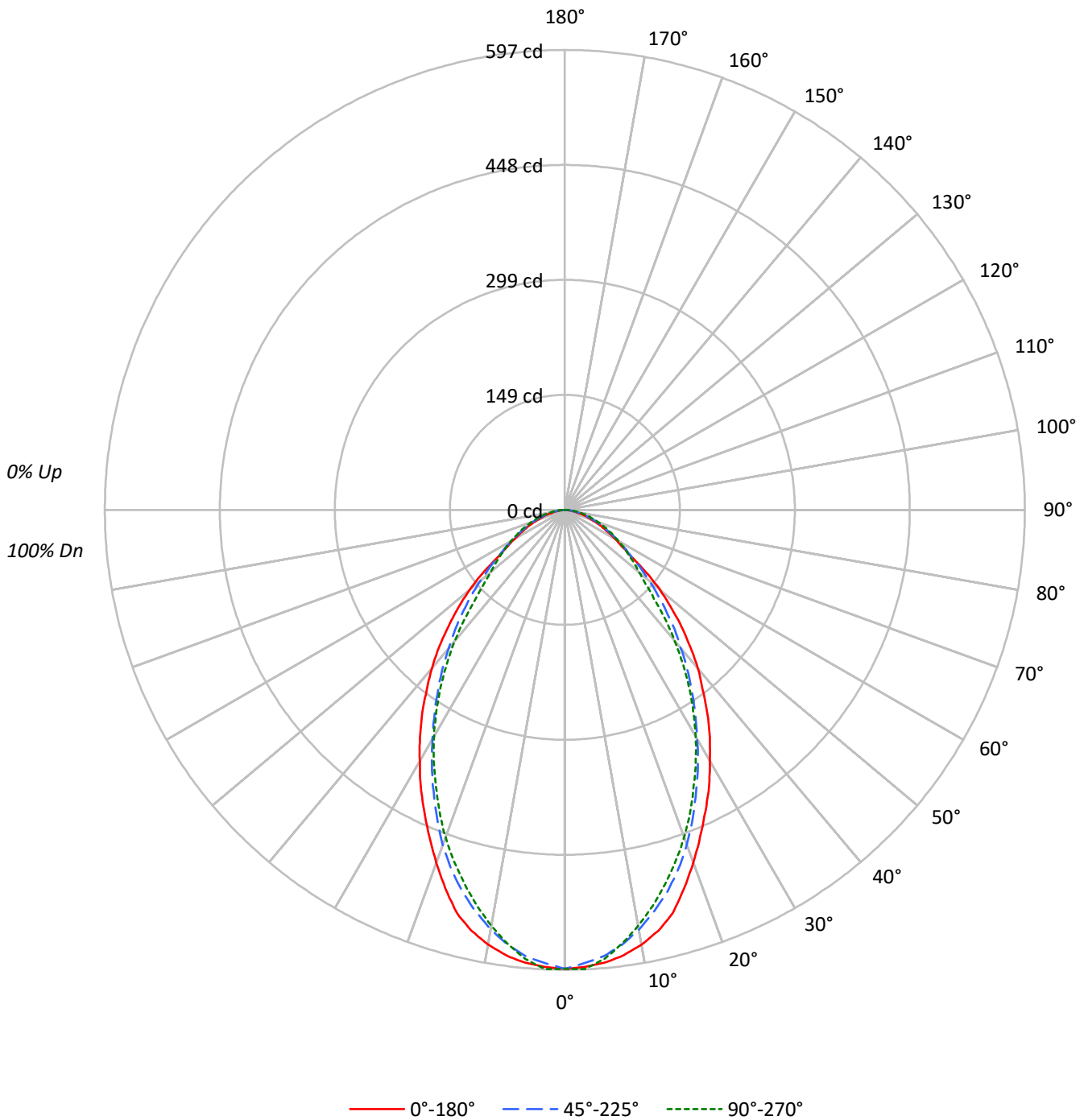
Lumens per Lamp: N/A
Luminaire Lumens: 904.8 lumens
Efficiency: N/A
Efficacy: 38.5 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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°	10992	10992	10992
5°	10930	10771	10841
10°	10736	10364	10274
15°	10348	9804	9605
20°	9575	9090	8886
25°	8787	8209	8054
30°	8024	7317	7236
35°	7265	6474	6325
40°	6468	5644	5348
45°	5569	4851	4282
50°	4602	4085	3594
55°	3326	3388	3236
60°	2764	2904	2941
65°	2362	2528	2694
70°	1942	2250	2455
75°	1626	1896	2232
80°	1211	1509	2019
85°	402	805	1800

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5569 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.1	6.1
10°-20°	145.0	16.0
20°-30°	187.7	20.7
30°-40°	184.1	20.3
40°-50°	145.0	16.0
50°-60°	95.0	10.5
60°-70°	57.8	6.4
70°-80°	28.9	3.2
80°-90°	6.2	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°	387.8	42.9
0°-40°	571.9	63.2
0°-60°	811.8	89.7
0°-90°	904.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	904.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	596	596	596	596	596	
5°	590	590	582	585	585	56
15°	542	534	513	507	503	151
25°	432	417	403	401	396	198
35°	322	304	287	286	281	201
45°	213	200	186	173	164	165
55°	103	109	105	102	101	98
65°	54	55	58	61	62	54
75°	23	24	27	30	31	24
85°	2	3	4	7	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	595.7	595.7	595.7	595.7	595.7
2.5°	593.8	594.8	589.1	594.8	596.7
5°	590.1	590.1	581.5	585.3	585.3
7.5°	583.4	582.5	569.2	569.2	568.2
10°	573.0	569.2	553.1	550.2	548.3
12.5°	559.7	553.1	534.1	529.3	526.5
15°	541.7	534.1	513.2	506.6	502.8
17.5°	515.1	507.5	489.5	481.9	478.1
20°	487.6	476.2	462.9	456.3	452.5
22.5°	459.1	445.9	433.5	428.8	425.0
25°	431.6	417.4	403.2	401.3	395.6
27.5°	405.1	388.0	373.8	372.8	368.1
30°	376.6	358.6	343.4	344.4	339.6
32.5°	350.0	333.0	314.9	315.9	310.2
35°	322.5	304.5	287.4	286.5	280.8
37.5°	294.1	277.0	260.9	257.1	251.4
40°	268.5	251.4	234.3	227.7	222.0
42.5°	241.0	225.8	210.6	200.2	192.6
45°	213.4	200.2	185.9	172.7	164.1
47.5°	186.9	176.4	164.1	148.0	142.3
50°	160.3	152.7	142.3	128.1	125.2
52.5°	132.8	130.0	123.3	113.8	112.9
55°	103.4	109.1	105.3	101.5	100.6
57.5°	87.3	88.2	91.1	90.1	90.1
60°	74.9	74.9	78.7	79.7	79.7
62.5°	63.6	64.5	68.3	70.2	70.2
65°	54.1	55.0	57.9	60.7	61.7
67.5°	44.6	46.5	49.3	52.2	53.1
70°	36.0	37.9	41.7	44.6	45.5
72.5°	29.4	30.4	34.2	37.0	37.9
75°	22.8	23.7	26.6	30.4	31.3
77.5°	16.1	18.0	20.9	23.7	25.6
80°	11.4	12.3	14.2	18.0	19.0
82.5°	6.6	7.6	9.5	12.3	13.3
85°	1.9	2.8	3.8	6.6	8.5
87.5°	0.0	0.0	0.0	1.9	3.8
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	14.45	15.85	14.82	16.16	16.47	14.63	16.03	14.99	16.34	16.65
	3H	15.58	16.83	15.96	17.16	17.52	16.09	17.33	16.47	17.66	18.03
	4H	15.93	17.10	16.34	17.45	17.83	16.63	17.79	17.03	18.14	18.53
	6H	16.12	17.19	16.53	17.56	17.95	17.04	18.12	17.46	18.48	18.88
	8H	16.15	17.16	16.57	17.55	17.96	17.17	18.19	17.60	18.58	18.98
	12H	16.13	17.10	16.56	17.48	17.91	17.25	18.23	17.69	18.61	19.04
4H	2H	14.91	16.07	15.31	16.42	16.80	15.06	16.22	15.46	16.57	16.95
	3H	16.25	17.21	16.66	17.61	18.01	16.73	17.69	17.14	18.09	18.49
	4H	16.69	17.55	17.13	17.97	18.41	17.39	18.25	17.83	18.67	19.11
	6H	16.96	17.71	17.42	18.15	18.62	17.93	18.67	18.39	19.12	19.58
	8H	17.01	17.70	17.47	18.15	18.62	18.10	18.79	18.56	19.24	19.71
	12H	17.00	17.62	17.49	18.10	18.57	18.22	18.83	18.70	19.31	19.79
8H	4H	16.91	17.60	17.37	18.05	18.52	17.54	18.24	18.01	18.68	19.15
	6H	17.25	17.82	17.75	18.32	18.80	18.17	18.74	18.67	19.24	19.72
	8H	17.33	17.84	17.85	18.35	18.84	18.41	18.92	18.93	19.43	19.92
	12H	17.35	17.80	17.86	18.29	18.86	18.59	19.04	19.10	19.54	20.10
12H	4H	16.92	17.53	17.40	18.01	18.49	17.53	18.15	18.01	18.63	19.10
	6H	17.28	17.79	17.80	18.30	18.79	18.17	18.68	18.69	19.19	19.68
	8H	17.39	17.84	17.91	18.34	18.91	18.44	18.89	18.96	19.39	19.96