

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: P1058489

Luminaire Tested: S122RDR-H675D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058489
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D930-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

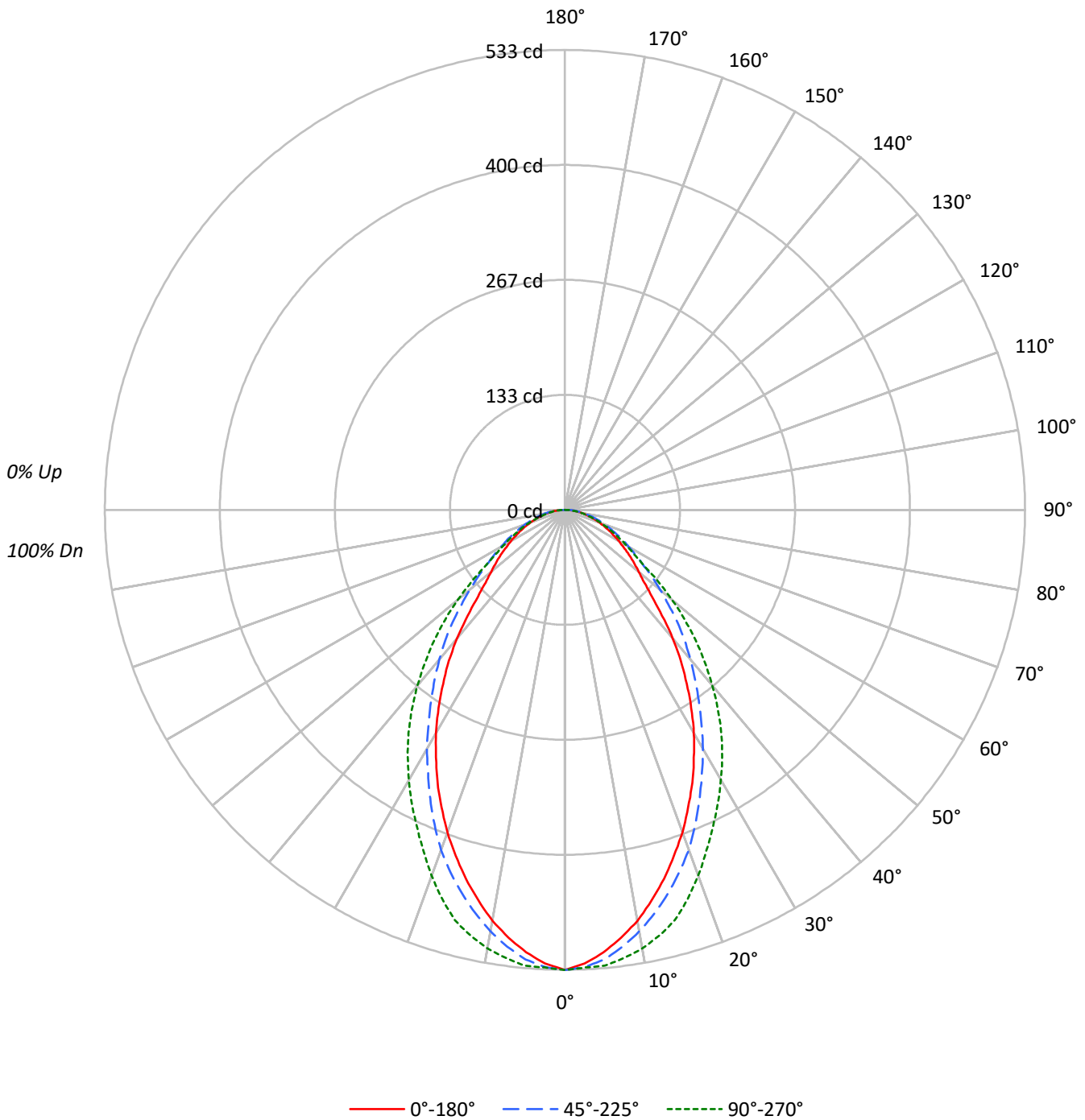
Lumens per Lamp: N/A
Luminaire Lumens: 868.4 lumens
Efficiency: N/A
Efficacy: 37.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47				
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43				
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9841	9841	9841
5°	9534	9691	9821
10°	9063	9295	9672
15°	8457	8797	9403
20°	7811	8238	8860
25°	7108	7517	8258
30°	6367	6812	7700
35°	5544	6084	7114
40°	4680	5444	6395
45°	3716	4807	5595
50°	3201	4134	4645
55°	2915	3536	3561
60°	2657	3141	3026
65°	2432	2838	2668
70°	2255	2633	2379
75°	2096	2481	2096
80°	1977	2380	1891
85°	1969	2456	1630

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5595 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.2	5.7
10°-20°	130.1	15.0
20°-30°	171.3	19.7
30°-40°	172.2	19.8
40°-50°	139.6	16.1
50°-60°	96.1	11.1
60°-70°	62.9	7.2
70°-80°	35.1	4.0
80°-90°	11.9	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°	350.6	40.4
0°-40°	522.8	60.2
0°-60°	758.5	87.4
0°-90°	868.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	868.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	533	533	533	533	533	
5°	515	525	523	526	530	48
15°	443	454	460	478	492	124
25°	349	358	369	385	406	160
35°	246	258	270	294	316	154
45°	142	159	184	200	214	113
55°	91	101	110	112	111	81
65°	56	67	65	62	61	56
75°	29	36	35	31	29	31
85°	9	12	12	10	8	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	533.3	533.3	533.3	533.3	533.3
2.5°	526.3	535.6	530.2	530.2	530.9
5°	514.7	524.8	523.2	525.5	530.2
7.5°	500.0	510.8	510.8	517.8	524.0
10°	483.7	494.6	496.1	507.0	516.2
12.5°	463.6	474.4	479.1	493.0	505.4
15°	442.7	453.5	460.5	477.5	492.2
17.5°	420.3	431.1	440.4	458.2	472.9
20°	397.8	407.9	419.5	435.0	451.2
22.5°	373.1	383.9	394.7	409.4	428.0
25°	349.1	358.4	369.2	385.4	405.6
27.5°	323.5	333.6	343.6	363.0	383.9
30°	298.8	308.8	319.7	339.8	361.4
32.5°	272.4	283.3	294.1	316.6	339.0
35°	246.1	257.7	270.1	294.1	315.8
37.5°	220.6	233.0	247.7	272.4	291.0
40°	194.3	207.4	226.0	247.7	265.5
42.5°	166.4	182.7	205.1	223.7	239.9
45°	142.4	158.7	184.2	200.5	214.4
47.5°	124.6	137.8	162.5	176.5	188.1
50°	111.5	121.5	144.0	154.0	161.8
52.5°	100.6	110.7	126.2	133.1	135.4
55°	90.6	100.6	109.9	112.2	110.7
57.5°	80.5	91.3	96.7	94.4	94.4
60°	72.0	83.6	85.1	82.0	82.0
62.5°	63.5	75.1	75.1	71.2	71.2
65°	55.7	66.6	65.0	61.9	61.1
67.5°	48.8	58.8	56.5	53.4	52.6
70°	41.8	51.1	48.8	44.9	44.1
72.5°	35.6	44.1	41.0	37.9	36.4
75°	29.4	36.4	34.8	31.0	29.4
77.5°	24.0	29.4	27.9	24.8	23.2
80°	18.6	23.2	22.4	19.3	17.8
82.5°	13.9	17.8	17.0	14.7	12.4
85°	9.3	12.4	11.6	10.1	7.7
87.5°	4.6	8.5	7.7	7.0	3.9
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	14.67	16.11	15.04	16.43	16.74	15.03	16.47	15.40	16.78	17.10
	3H	16.22	17.51	16.60	17.84	18.20	16.38	17.67	16.76	18.00	18.36
	4H	16.79	18.00	17.19	18.35	18.73	16.86	18.07	17.26	18.42	18.80
	6H	17.22	18.33	17.63	18.70	19.09	17.21	18.33	17.63	18.70	19.09
	8H	17.37	18.43	17.80	18.82	19.23	17.33	18.39	17.76	18.78	19.18
	12H	17.49	18.50	17.92	18.88	19.31	17.41	18.42	17.84	18.80	19.23
4H	2H	15.26	16.47	15.66	16.82	17.20	15.55	16.75	15.95	17.10	17.48
	3H	17.08	18.08	17.49	18.48	18.89	17.12	18.12	17.53	18.52	18.92
	4H	17.83	18.73	18.26	19.15	19.59	17.72	18.63	18.16	19.04	19.48
	6H	18.42	19.20	18.87	19.64	20.10	18.21	18.99	18.66	19.43	19.89
	8H	18.62	19.36	19.09	19.80	20.27	18.37	19.10	18.83	19.55	20.01
	12H	18.79	19.44	19.28	19.92	20.40	18.49	19.14	18.97	19.62	20.09
8H	4H	18.11	18.84	18.58	19.29	19.76	18.03	18.76	18.49	19.20	19.67
	6H	18.87	19.47	19.37	19.97	20.44	18.64	19.25	19.14	19.74	20.22
	8H	19.19	19.73	19.71	20.25	20.74	18.89	19.43	19.41	19.95	20.43
	12H	19.48	19.96	19.99	20.45	21.02	19.10	19.58	19.61	20.07	20.64
12H	4H	18.13	18.78	18.62	19.26	19.74	18.06	18.71	18.54	19.19	19.66
	6H	18.93	19.47	19.44	19.98	20.47	18.72	19.26	19.24	19.77	20.26
	8H	19.33	19.81	19.84	20.30	20.87	19.04	19.52	19.55	20.01	20.58