

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: P1058165

Luminaire Tested: S122RDRP-S865D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058165
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: S122RDRP-S865D930-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

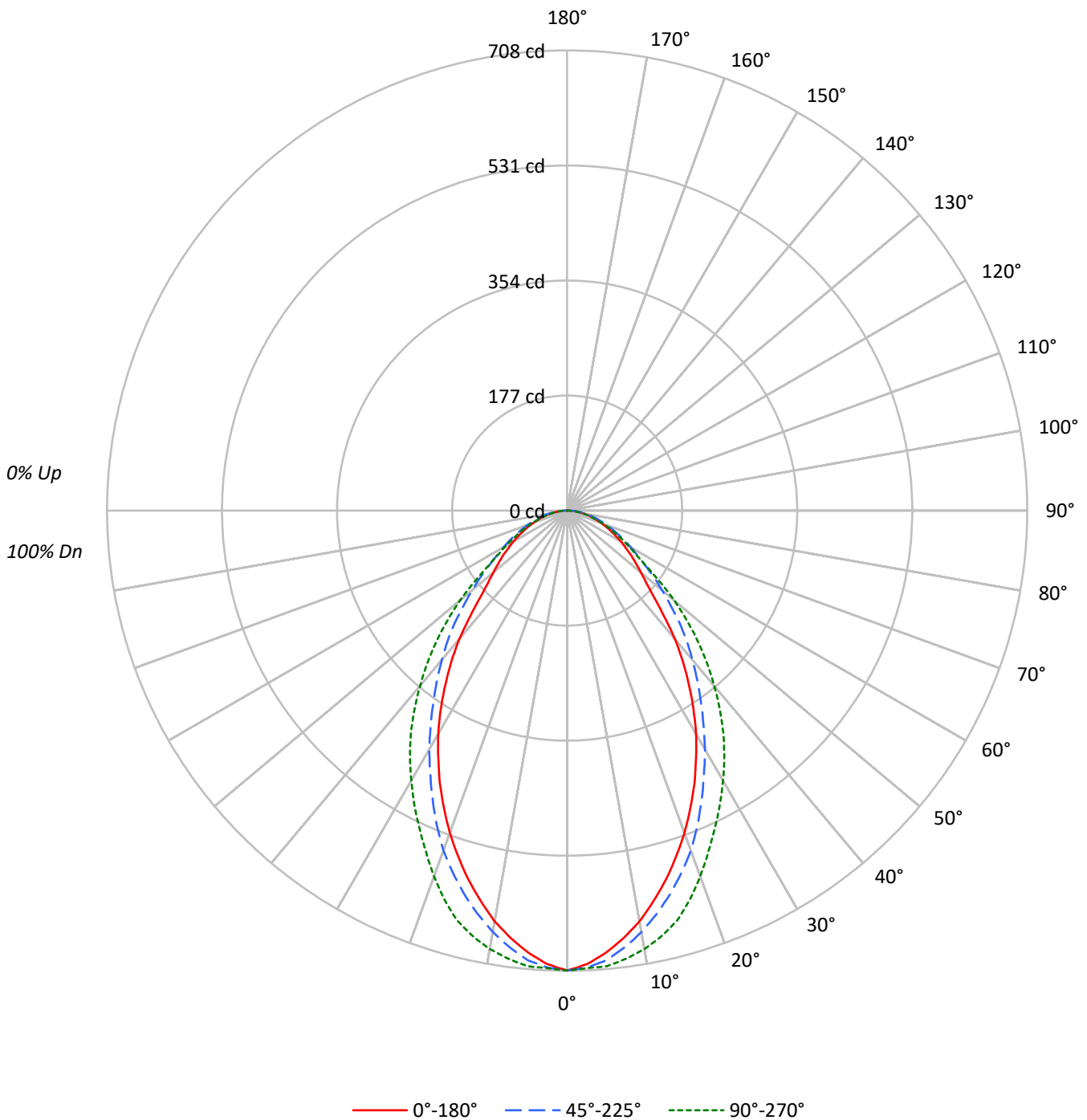
Lumens per Lamp: N/A
Luminaire Lumens: 1152.3 lumens
Efficiency: N/A
Efficacy: 32.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	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°	13059	13059	13059
5°	12651	12860	13033
10°	12027	12337	12837
15°	11223	11674	12478
20°	10366	10932	11758
25°	9431	9974	10958
30°	8448	9038	10221
35°	7357	8076	9441
40°	6210	7224	8486
45°	4932	6378	7424
50°	4246	5483	6163
55°	3867	4691	4726
60°	3524	4170	4019
65°	3231	3768	3541
70°	2994	3491	3156
75°	2780	3294	2780
80°	2625	3167	2508
85°	2604	3260	2181

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7424 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.3	5.7
10°-20°	172.7	15.0
20°-30°	227.3	19.7
30°-40°	228.5	19.8
40°-50°	185.2	16.1
50°-60°	127.6	11.1
60°-70°	83.5	7.2
70°-80°	46.5	4.0
80°-90°	15.7	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°	465.3	40.4
0°-40°	693.8	60.2
0°-60°	1006.6	87.4
0°-90°	1152.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1152.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	683	696	694	697	704	64
15°	588	602	611	634	653	165
25°	463	476	490	512	538	212
35°	327	342	358	390	419	204
45°	189	211	244	266	284	149
55°	120	134	146	149	147	108
65°	74	88	86	82	81	74
75°	39	48	46	41	39	42
85°	12	16	15	13	10	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	707.7	707.7	707.7	707.7	707.7
2.5°	698.4	710.7	703.6	703.6	704.6
5°	683.0	696.4	694.3	697.4	703.6
7.5°	663.5	677.9	677.9	687.1	695.3
10°	641.9	656.3	658.4	672.7	685.1
12.5°	615.2	629.6	635.8	654.3	670.7
15°	587.5	601.9	611.1	633.7	653.2
17.5°	557.7	572.1	584.4	608.0	627.6
20°	527.9	541.3	556.7	577.2	598.8
22.5°	495.1	509.4	523.8	543.3	568.0
25°	463.2	475.5	489.9	511.5	538.2
27.5°	429.3	442.7	456.0	481.7	509.4
30°	396.5	409.8	424.2	450.9	479.7
32.5°	361.5	375.9	390.3	420.1	449.9
35°	326.6	342.0	358.5	390.3	419.1
37.5°	292.7	309.2	328.7	361.5	386.2
40°	257.8	275.3	299.9	328.7	352.3
42.5°	220.8	242.4	272.2	296.8	318.4
45°	189.0	210.6	244.4	266.0	284.5
47.5°	165.4	182.8	215.7	234.2	249.6
50°	147.9	161.3	191.0	204.4	214.7
52.5°	133.5	146.9	167.4	176.7	179.7
55°	120.2	133.5	145.8	148.9	146.9
57.5°	106.8	121.2	128.4	125.3	125.3
60°	95.5	110.9	113.0	108.9	108.9
62.5°	84.2	99.6	99.6	94.5	94.5
65°	74.0	88.3	86.3	82.2	81.1
67.5°	64.7	78.1	75.0	70.9	69.8
70°	55.5	67.8	64.7	59.6	58.5
72.5°	47.2	58.5	54.4	50.3	48.3
75°	39.0	48.3	46.2	41.1	39.0
77.5°	31.8	39.0	37.0	32.9	30.8
80°	24.7	30.8	29.8	25.7	23.6
82.5°	18.5	23.6	22.6	19.5	16.4
85°	12.3	16.4	15.4	13.4	10.3
87.5°	6.2	11.3	10.3	9.2	5.1
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	15.66	17.10	16.02	17.41	17.72	16.02	17.46	16.38	17.77	18.08
	3H	17.20	18.49	17.58	18.82	19.18	17.36	18.65	17.74	18.98	19.34
	4H	17.77	18.98	18.17	19.33	19.71	17.84	19.05	18.24	19.40	19.78
	6H	18.20	19.32	18.62	19.68	20.08	18.20	19.31	18.61	19.68	20.07
	8H	18.36	19.42	18.78	19.81	20.21	18.31	19.37	18.74	19.76	20.17
	12H	18.47	19.49	18.90	19.87	20.30	18.39	19.40	18.82	19.79	20.22
4H	2H	16.24	17.45	16.64	17.80	18.18	16.53	17.74	16.93	18.09	18.47
	3H	18.06	19.07	18.48	19.47	19.87	18.10	19.10	18.51	19.51	19.91
	4H	18.81	19.71	19.25	20.13	20.57	18.71	19.61	19.14	20.03	20.47
	6H	19.40	20.18	19.86	20.62	21.09	19.19	19.97	19.65	20.42	20.88
	8H	19.61	20.34	20.07	20.78	21.25	19.35	20.08	19.82	20.53	21.00
	12H	19.78	20.43	20.26	20.91	21.38	19.47	20.13	19.96	20.61	21.08
8H	4H	19.10	19.83	19.56	20.27	20.74	19.01	19.74	19.47	20.19	20.65
	6H	19.85	20.46	20.35	20.95	21.43	19.63	20.23	20.13	20.72	21.20
	8H	20.18	20.72	20.69	21.23	21.72	19.88	20.42	20.39	20.93	21.42
	12H	20.46	20.94	20.97	21.43	22.00	20.09	20.57	20.60	21.06	21.63
12H	4H	19.12	19.77	19.60	20.25	20.72	19.04	19.70	19.53	20.18	20.65
	6H	19.91	20.46	20.43	20.97	21.46	19.70	20.25	20.22	20.76	21.25
	8H	20.31	20.79	20.82	21.28	21.85	20.02	20.50	20.53	21.00	21.56