

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: P1058171

Luminaire Tested: S122RDRP-S865D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058171
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S865D935-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

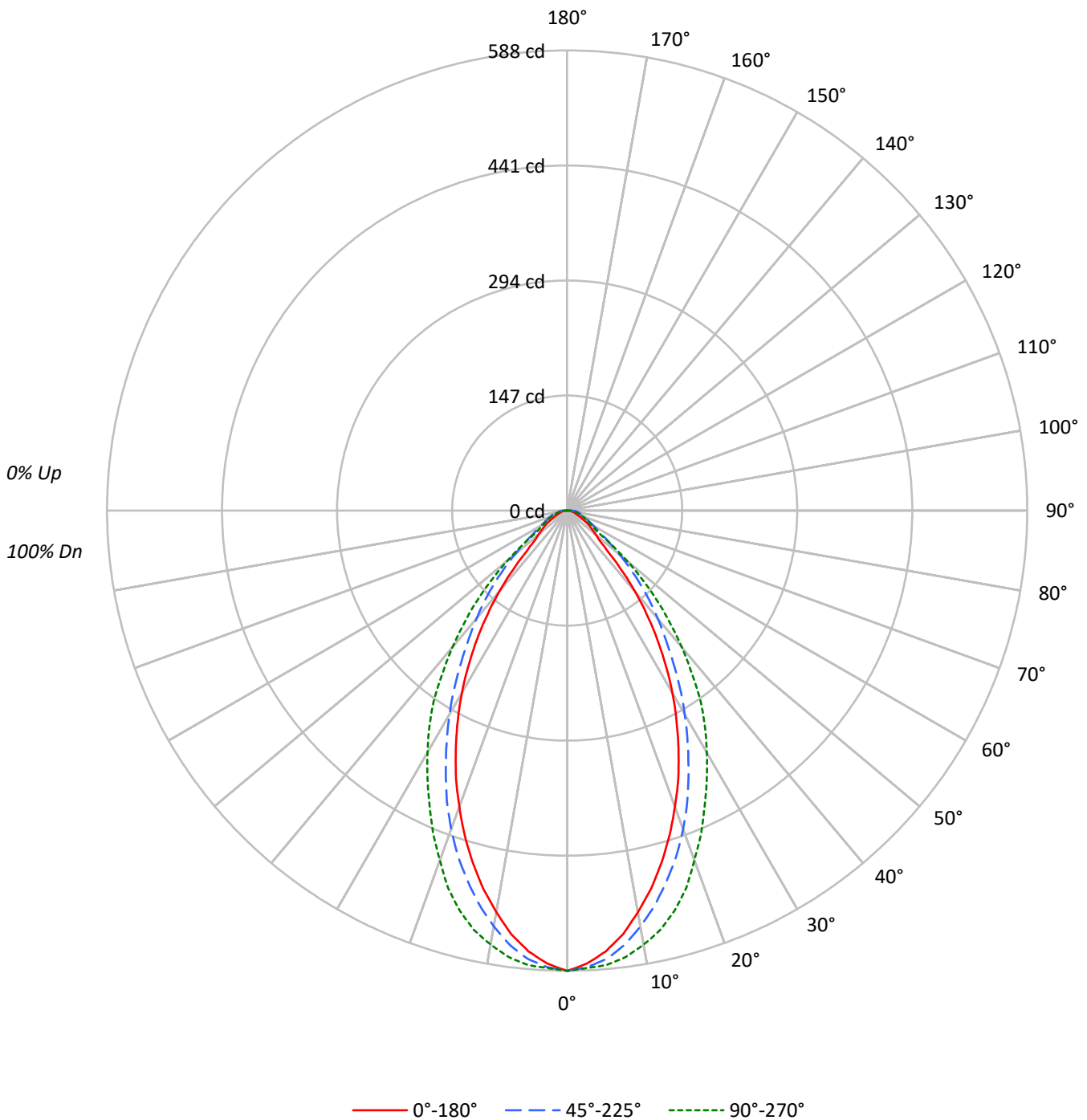
Lumens per Lamp: N/A
Luminaire Lumens: 709.6 lumens
Efficiency: N/A
Efficacy: 20.3 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10854	10854	10854
5°	10473	10654	10795
10°	9760	10107	10553
15°	8895	9370	10117
20°	7906	8503	9333
25°	6849	7468	8464
30°	5734	6405	7607
35°	4523	5305	6699
40°	3242	4341	5490
45°	1897	3426	4248
50°	1372	2492	2865
55°	1152	1779	1502
60°	923	1443	1281
65°	760	1279	1183
70°	642	1230	1111
75°	620	1312	1084
80°	691	1615	1158
85°	1143	2519	1609

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4248 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.9	7.6
10°-20°	138.1	19.5
20°-30°	169.7	23.9
30°-40°	150.0	21.1
40°-50°	95.8	13.5
50°-60°	46.7	6.6
60°-70°	27.8	3.9
70°-80°	17.8	2.5
80°-90°	9.8	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°	361.7	51.0
0°-40°	511.7	72.1
0°-60°	654.2	92.2
0°-90°	709.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	709.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	588	588	588	588	588	
5°	565	577	575	577	583	53
15°	466	479	490	512	530	130
25°	336	348	367	390	416	154
35°	201	212	236	268	297	125
45°	73	93	131	148	163	61
55°	36	48	55	52	47	32
65°	17	33	29	27	27	17
75°	9	20	18	16	15	10
85°	5	11	12	11	8	5
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	588.2	588.2	588.2	588.2	588.2
2.5°	579.5	590.4	583.9	583.9	585.0
5°	565.4	577.4	575.2	577.4	582.8
7.5°	545.9	557.8	560.0	568.7	575.2
10°	520.9	532.9	539.4	553.5	563.2
12.5°	494.9	506.8	516.6	535.0	549.1
15°	465.6	478.6	490.5	512.2	529.6
17.5°	435.2	448.2	463.4	485.1	505.7
20°	402.6	414.6	433.0	453.6	475.3
22.5°	371.2	382.0	401.5	421.1	447.1
25°	336.4	348.4	366.8	389.6	415.7
27.5°	302.8	314.7	333.2	359.2	386.4
30°	269.1	280.0	300.6	327.7	357.0
32.5°	234.4	245.3	268.1	297.4	327.7
35°	200.8	211.6	235.5	268.1	297.4
37.5°	167.1	179.1	206.2	236.6	261.5
40°	134.6	148.7	180.2	206.2	227.9
42.5°	102.0	121.5	155.2	176.9	194.3
45°	72.7	93.3	131.3	147.6	162.8
47.5°	55.3	71.6	108.5	120.5	130.2
50°	47.8	58.6	86.8	95.5	99.8
52.5°	41.2	52.1	69.5	72.7	70.5
55°	35.8	47.8	55.3	52.1	46.7
57.5°	30.4	44.5	45.6	39.1	40.2
60°	25.0	40.2	39.1	33.6	34.7
62.5°	20.6	36.9	33.6	30.4	30.4
65°	17.4	32.6	29.3	27.1	27.1
67.5°	14.1	29.3	26.0	23.9	23.9
70°	11.9	26.0	22.8	20.6	20.6
72.5°	10.9	22.8	20.6	18.4	18.4
75°	8.7	19.5	18.4	16.3	15.2
77.5°	7.6	16.3	16.3	15.2	13.0
80°	6.5	14.1	15.2	13.0	10.9
82.5°	6.5	13.0	13.0	11.9	8.7
85°	5.4	10.9	11.9	10.9	7.6
87.5°	3.3	9.8	9.8	8.7	5.4
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	10.31	11.59	10.68	11.91	12.22	9.84	11.12	10.21	11.43	11.75
	3H	11.49	12.63	11.87	12.96	13.32	11.40	12.54	11.78	12.87	13.24
	4H	11.92	12.98	12.32	13.33	13.71	12.09	13.15	12.49	13.50	13.88
	6H	12.26	13.24	12.68	13.61	14.01	12.73	13.71	13.15	14.08	14.48
	8H	12.46	13.38	12.89	13.78	14.18	13.02	13.95	13.45	14.34	14.75
	12H	12.68	13.56	13.11	13.94	14.37	13.34	14.23	13.77	14.61	15.04
4H	2H	10.82	11.88	11.22	12.23	12.61	10.44	11.50	10.84	11.85	12.24
	3H	12.46	13.33	12.87	13.74	14.14	12.24	13.11	12.65	13.52	13.92
	4H	13.22	14.01	13.66	14.43	14.87	13.08	13.87	13.52	14.29	14.73
	6H	13.82	14.50	14.29	14.95	15.42	13.94	14.62	14.40	15.06	15.53
	8H	14.12	14.76	14.59	15.21	15.68	14.33	14.96	14.80	15.41	15.88
	12H	14.44	15.00	14.92	15.48	15.96	14.76	15.33	15.25	15.81	16.28
8H	4H	13.64	14.28	14.11	14.72	15.19	13.54	14.17	14.01	14.62	15.09
	6H	14.59	15.11	15.09	15.61	16.09	14.65	15.17	15.15	15.66	16.15
	8H	15.13	15.60	15.66	16.12	16.61	15.22	15.69	15.75	16.21	16.70
	12H	15.70	16.12	16.22	16.61	17.18	15.90	16.31	16.41	16.81	17.38
12H	4H	13.71	14.27	14.20	14.76	15.23	13.62	14.18	14.11	14.67	15.14
	6H	14.77	15.24	15.29	15.76	16.25	14.83	15.30	15.35	15.81	16.31
	8H	15.46	15.88	15.98	16.37	16.94	15.54	15.95	16.05	16.45	17.02