

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: P1057931

Luminaire Tested: S122RDRP-S290D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057931
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-S290D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

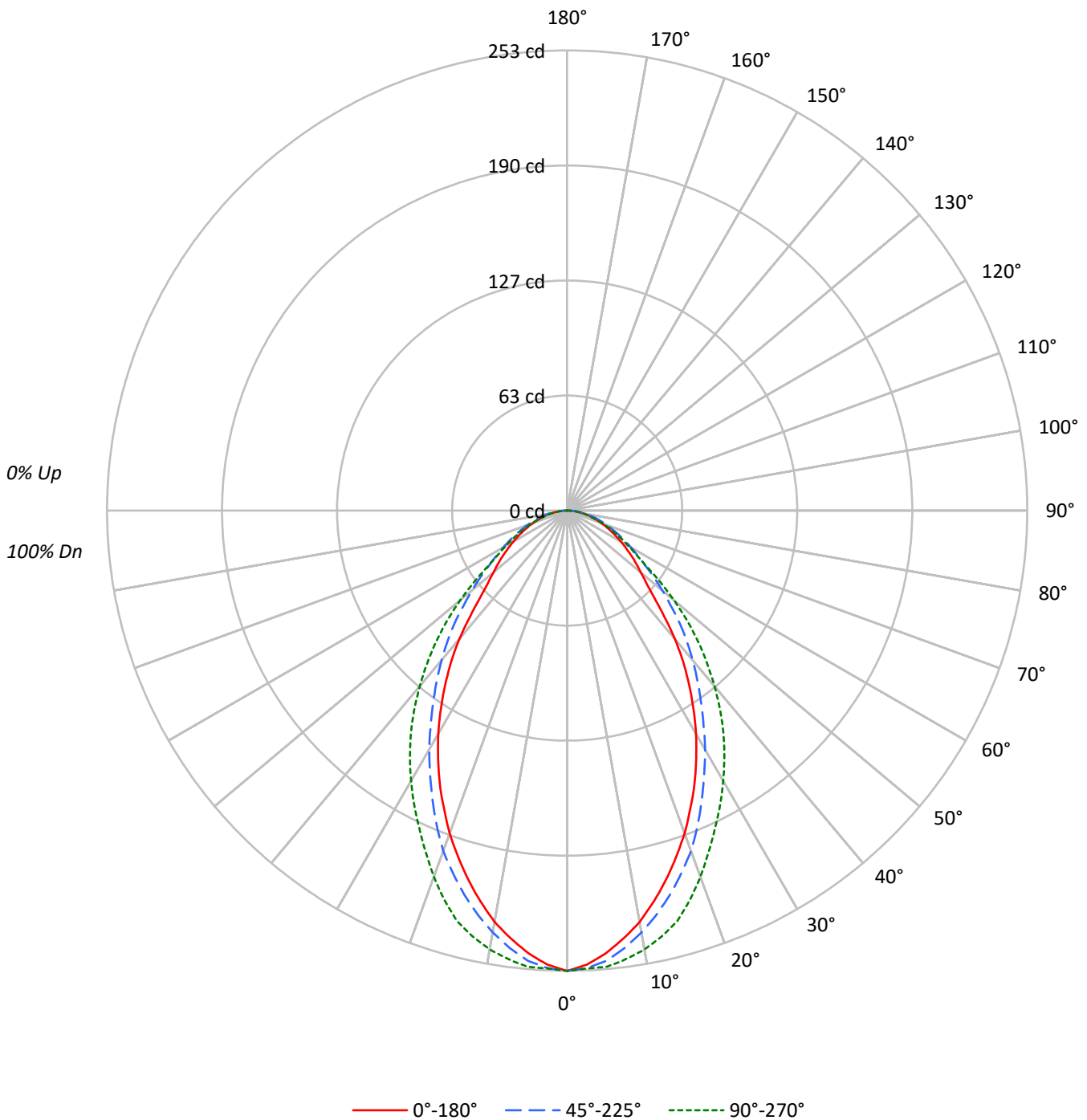
Lumens per Lamp: N/A
Luminaire Lumens: 412.2 lumens
Efficiency: N/A
Efficacy: 33.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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°	4670	4670	4670
5°	4525	4601	4662
10°	4302	4413	4591
15°	4014	4176	4464
20°	3707	3910	4206
25°	3374	3567	3919
30°	3021	3232	3656
35°	2631	2888	3377
40°	2221	2585	3035
45°	1764	2281	2657
50°	1519	1961	2205
55°	1383	1679	1689
60°	1262	1491	1436
65°	1157	1349	1266
70°	1068	1246	1128
75°	998	1176	998
80°	935	1137	893
85°	932	1164	783

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2657 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.4	5.7
10°-20°	61.8	15.0
20°-30°	81.3	19.7
30°-40°	81.7	19.8
40°-50°	66.3	16.1
50°-60°	45.6	11.1
60°-70°	29.9	7.2
70°-80°	16.6	4.0
80°-90°	5.6	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°	166.4	40.4
0°-40°	248.2	60.2
0°-60°	360.1	87.4
0°-90°	412.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	412.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	253	253	253	253	253	
5°	244	249	248	250	252	23
15°	210	215	219	227	234	59
25°	166	170	175	183	192	76
35°	117	122	128	140	150	73
45°	68	75	87	95	102	53
55°	43	48	52	53	52	39
65°	26	32	31	29	29	26
75°	14	17	16	15	14	15
85°	4	6	6	5	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	253.1	253.1	253.1	253.1	253.1
2.5°	249.8	254.2	251.7	251.7	252.0
5°	244.3	249.1	248.4	249.5	251.7
7.5°	237.3	242.5	242.5	245.8	248.7
10°	229.6	234.8	235.5	240.6	245.0
12.5°	220.1	225.2	227.4	234.0	239.9
15°	210.1	215.3	218.6	226.7	233.7
17.5°	199.5	204.6	209.0	217.5	224.5
20°	188.8	193.6	199.1	206.5	214.2
22.5°	177.1	182.2	187.4	194.3	203.2
25°	165.7	170.1	175.2	183.0	192.5
27.5°	153.6	158.3	163.1	172.3	182.2
30°	141.8	146.6	151.7	161.3	171.6
32.5°	129.3	134.5	139.6	150.3	160.9
35°	116.8	122.3	128.2	139.6	149.9
37.5°	104.7	110.6	117.6	129.3	138.1
40°	92.2	98.5	107.3	117.6	126.0
42.5°	79.0	86.7	97.4	106.2	113.9
45°	67.6	75.3	87.4	95.2	101.8
47.5°	59.1	65.4	77.2	83.8	89.3
50°	52.9	57.7	68.3	73.1	76.8
52.5°	47.8	52.5	59.9	63.2	64.3
55°	43.0	47.8	52.2	53.3	52.5
57.5°	38.2	43.4	45.9	44.8	44.8
60°	34.2	39.7	40.4	38.9	38.9
62.5°	30.1	35.6	35.6	33.8	33.8
65°	26.5	31.6	30.9	29.4	29.0
67.5°	23.1	27.9	26.8	25.3	25.0
70°	19.8	24.2	23.1	21.3	20.9
72.5°	16.9	20.9	19.5	18.0	17.3
75°	14.0	17.3	16.5	14.7	14.0
77.5°	11.4	14.0	13.2	11.8	11.0
80°	8.8	11.0	10.7	9.2	8.4
82.5°	6.6	8.4	8.1	7.0	5.9
85°	4.4	5.9	5.5	4.8	3.7
87.5°	2.2	4.0	3.7	3.3	1.8
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	12.09	13.53	12.46	13.84	14.16	12.44	13.88	12.81	14.19	14.51
	3H	13.63	14.92	14.01	15.25	15.61	13.79	15.08	14.16	15.40	15.77
	4H	14.20	15.41	14.60	15.76	16.14	14.27	15.48	14.67	15.83	16.21
	6H	14.63	15.75	15.05	16.11	16.51	14.62	15.74	15.04	16.11	16.50
	8H	14.78	15.84	15.21	16.23	16.64	14.74	15.80	15.17	16.19	16.59
	12H	14.90	15.91	15.33	16.30	16.73	14.82	15.83	15.25	16.21	16.64
4H	2H	12.68	13.88	13.08	14.23	14.61	12.96	14.17	13.36	14.51	14.90
	3H	14.49	15.49	14.90	15.89	16.30	14.53	15.53	14.94	15.93	16.33
	4H	15.24	16.14	15.67	16.56	17.00	15.14	16.04	15.57	16.45	16.89
	6H	15.83	16.61	16.29	17.05	17.52	15.62	16.40	16.08	16.84	17.31
	8H	16.04	16.77	16.50	17.21	17.68	15.78	16.51	16.25	16.96	17.43
	12H	16.20	16.86	16.69	17.34	17.81	15.90	16.56	16.39	17.04	17.51
8H	4H	15.52	16.26	15.99	16.70	17.17	15.44	16.17	15.90	16.61	17.08
	6H	16.28	16.89	16.78	17.38	17.86	16.05	16.66	16.55	17.15	17.63
	8H	16.60	17.15	17.12	17.66	18.15	16.30	16.85	16.82	17.36	17.85
	12H	16.89	17.37	17.40	17.86	18.43	16.52	17.00	17.03	17.49	18.06
12H	4H	15.54	16.20	16.03	16.68	17.15	15.47	16.12	15.95	16.60	17.07
	6H	16.34	16.89	16.86	17.40	17.89	16.13	16.68	16.65	17.19	17.68
	8H	16.74	17.22	17.25	17.71	18.28	16.45	16.93	16.96	17.42	17.99