

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: P1057922

Luminaire Tested: S122RDRP-S290D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057922
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-S290D930-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

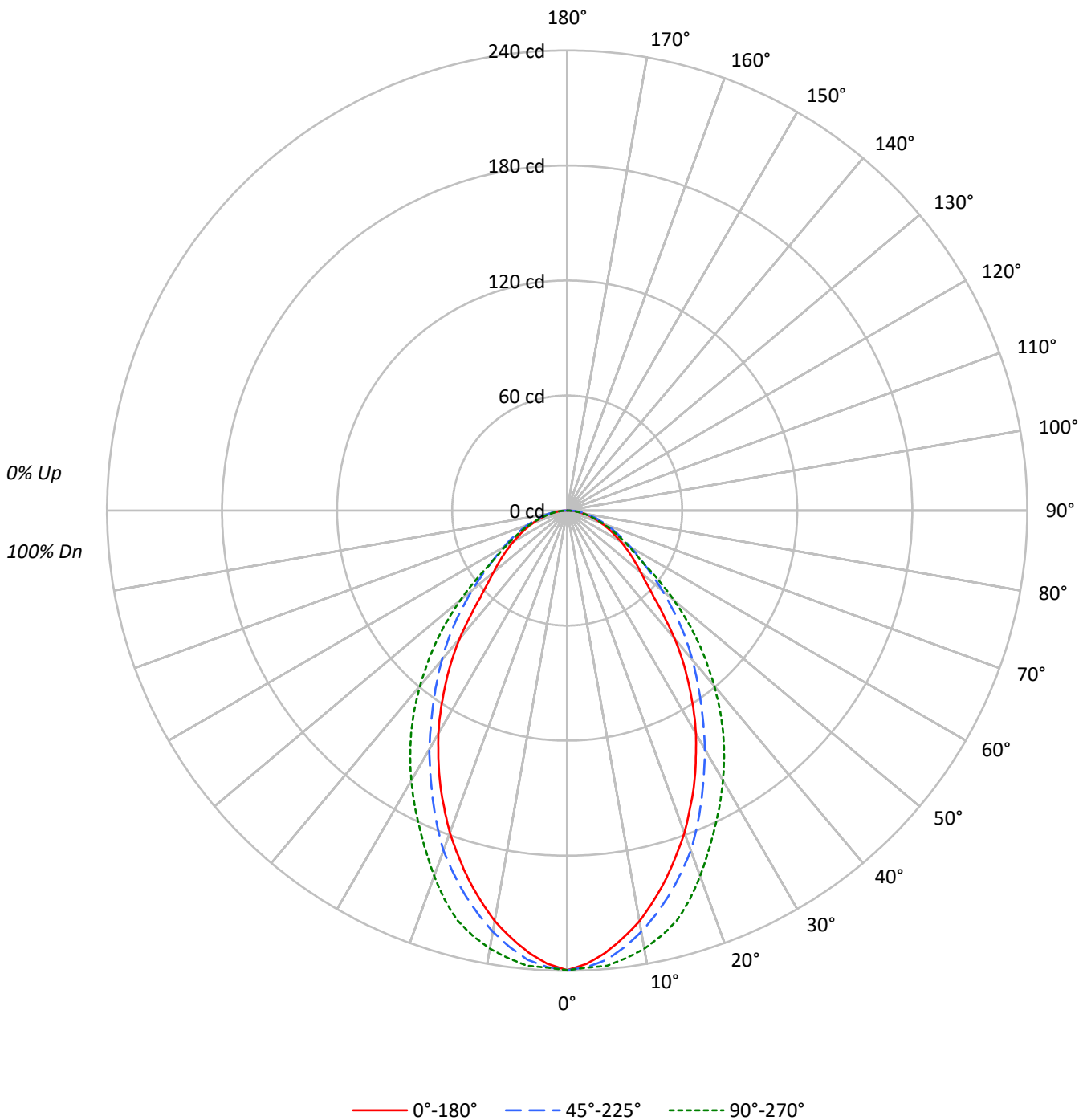
Lumens per Lamp: N/A
Luminaire Lumens: 390.3 lumens
Efficiency: N/A
Efficacy: 31.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	4423	4423	4423
5°	4284	4357	4414
10°	4073	4178	4347
15°	3802	3954	4228
20°	3511	3703	3982
25°	3194	3378	3712
30°	2862	3062	3462
35°	2491	2735	3196
40°	2103	2447	2874
45°	1670	2161	2516
50°	1438	1857	2087
55°	1309	1589	1599
60°	1196	1413	1362
65°	1092	1275	1201
70°	1014	1182	1068
75°	941	1119	941
80°	882	1073	850
85°	889	1101	741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2516 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.1	5.7
10°-20°	58.5	15.0
20°-30°	77.0	19.7
30°-40°	77.4	19.8
40°-50°	62.7	16.1
50°-60°	43.2	11.1
60°-70°	28.3	7.2
70°-80°	15.7	4.0
80°-90°	5.3	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°	157.6	40.4
0°-40°	235.0	60.2
0°-60°	340.9	87.4
0°-90°	390.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	390.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	240	240	240	240	240	
5°	231	236	235	236	238	22
15°	199	204	207	215	221	56
25°	157	161	166	173	182	72
35°	111	116	121	132	142	69
45°	64	71	83	90	96	51
55°	41	45	49	50	50	36
65°	25	30	29	28	28	25
75°	13	16	16	14	13	14
85°	4	6	5	4	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	239.7	239.7	239.7	239.7	239.7
2.5°	236.6	240.7	238.3	238.3	238.6
5°	231.3	235.9	235.2	236.2	238.3
7.5°	224.7	229.6	229.6	232.7	235.5
10°	217.4	222.3	223.0	227.9	232.0
12.5°	208.4	213.3	215.3	221.6	227.2
15°	199.0	203.9	207.0	214.6	221.3
17.5°	188.9	193.8	197.9	205.9	212.6
20°	178.8	183.3	188.6	195.5	202.8
22.5°	167.7	172.5	177.4	184.0	192.4
25°	156.9	161.1	165.9	173.2	182.3
27.5°	145.4	149.9	154.5	163.2	172.5
30°	134.3	138.8	143.7	152.7	162.5
32.5°	122.5	127.3	132.2	142.3	152.4
35°	110.6	115.8	121.4	132.2	141.9
37.5°	99.1	104.7	111.3	122.5	130.8
40°	87.3	93.2	101.6	111.3	119.3
42.5°	74.8	82.1	92.2	100.5	107.8
45°	64.0	71.3	82.8	90.1	96.4
47.5°	56.0	61.9	73.1	79.3	84.5
50°	50.1	54.6	64.7	69.2	72.7
52.5°	45.2	49.7	56.7	59.8	60.9
55°	40.7	45.2	49.4	50.4	49.7
57.5°	36.2	41.1	43.5	42.4	42.4
60°	32.4	37.6	38.3	36.9	36.9
62.5°	28.5	33.7	33.7	32.0	32.0
65°	25.0	29.9	29.2	27.8	27.5
67.5°	21.9	26.4	25.4	24.0	23.7
70°	18.8	23.0	21.9	20.2	19.8
72.5°	16.0	19.8	18.4	17.0	16.4
75°	13.2	16.4	15.7	13.9	13.2
77.5°	10.8	13.2	12.5	11.1	10.4
80°	8.3	10.4	10.1	8.7	8.0
82.5°	6.3	8.0	7.7	6.6	5.6
85°	4.2	5.6	5.2	4.5	3.5
87.5°	2.1	3.8	3.5	3.1	1.7
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	11.90	13.34	12.27	13.66	13.97	12.25	13.69	12.61	14.00	14.32
	3H	13.44	14.73	13.82	15.06	15.43	13.60	14.89	13.98	15.22	15.58
	4H	14.01	15.22	14.41	15.57	15.95	14.08	15.29	14.48	15.64	16.02
	6H	14.44	15.56	14.86	15.93	16.32	14.43	15.55	14.85	15.92	16.31
	8H	14.60	15.66	15.02	16.05	16.45	14.55	15.61	14.98	16.00	16.40
	12H	14.71	15.73	15.15	16.11	16.54	14.63	15.64	15.06	16.02	16.45
4H	2H	12.49	13.69	12.89	14.04	14.42	12.76	13.97	13.16	14.32	14.70
	3H	14.31	15.31	14.72	15.71	16.11	14.34	15.34	14.75	15.74	16.14
	4H	15.05	15.95	15.49	16.37	16.81	14.94	15.84	15.38	16.26	16.70
	6H	15.64	16.42	16.10	16.86	17.33	15.42	16.21	15.88	16.65	17.11
	8H	15.85	16.58	16.31	17.02	17.49	15.59	16.32	16.05	16.77	17.23
	12H	16.02	16.67	16.50	17.15	17.62	15.71	16.36	16.19	16.84	17.32
8H	4H	15.34	16.07	15.80	16.51	16.98	15.24	15.98	15.71	16.42	16.89
	6H	16.09	16.70	16.59	17.19	17.67	15.86	16.47	16.36	16.96	17.44
	8H	16.42	16.96	16.93	17.47	17.96	16.11	16.65	16.63	17.16	17.65
	12H	16.70	17.18	17.21	17.68	18.24	16.32	16.80	16.83	17.30	17.86
12H	4H	15.36	16.01	15.84	16.49	16.96	15.28	15.93	15.76	16.41	16.88
	6H	16.15	16.69	16.67	17.21	17.70	15.94	16.48	16.46	16.99	17.48
	8H	16.55	17.03	17.06	17.52	18.09	16.26	16.74	16.77	17.23	17.80