

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: P1057940

Luminaire Tested: S122RDRP-S290D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057940
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-S290D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

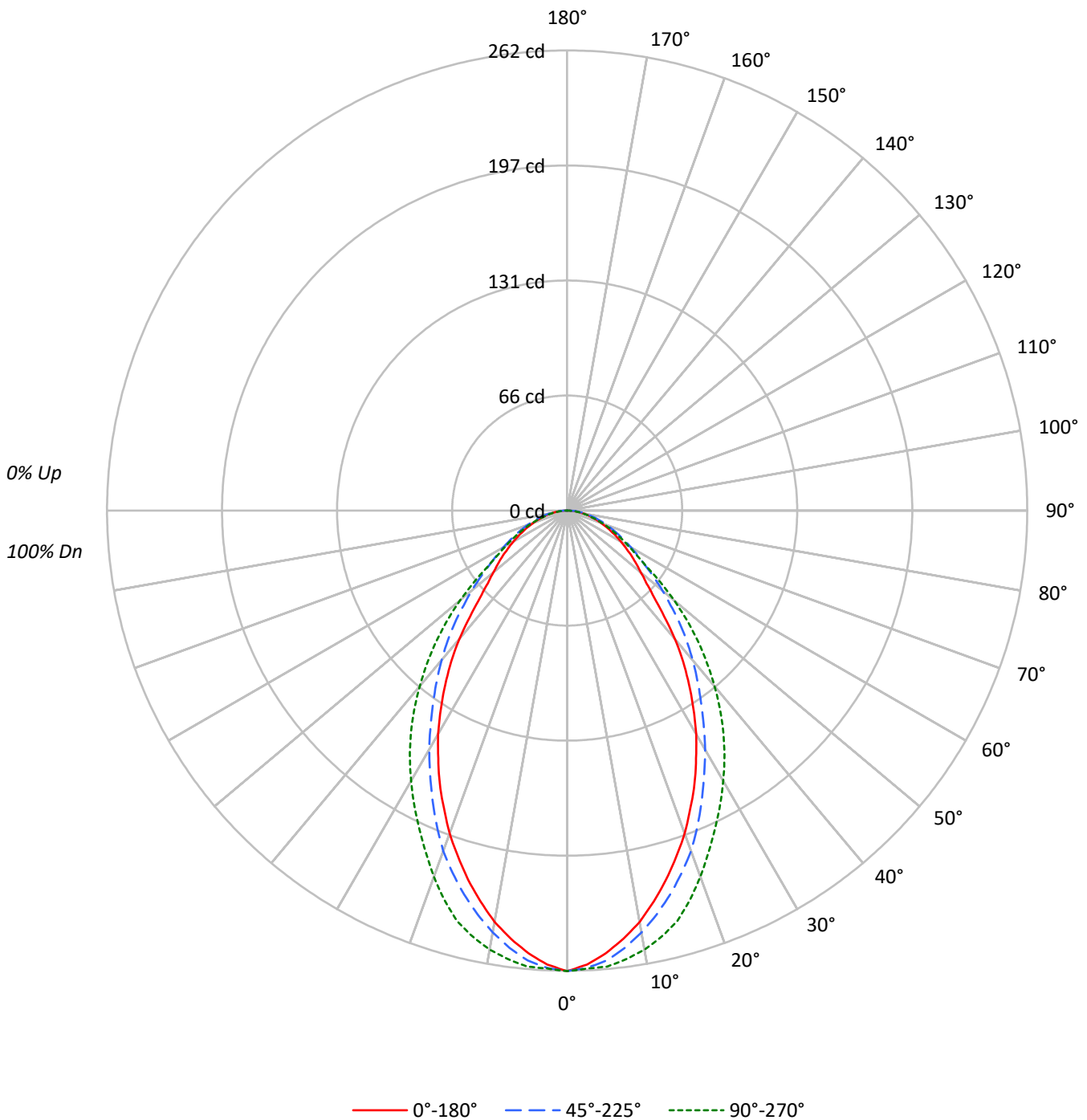
Lumens per Lamp: N/A
Luminaire Lumens: 426.9 lumens
Efficiency: N/A
Efficacy: 34.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	4838	4838	4838
5°	4686	4764	4827
10°	4456	4570	4755
15°	4157	4325	4623
20°	3841	4049	4355
25°	3494	3695	4060
30°	3130	3347	3786
35°	2726	2991	3496
40°	2300	2676	3143
45°	1827	2364	2750
50°	1573	2032	2282
55°	1432	1737	1750
60°	1306	1546	1487
65°	1196	1397	1314
70°	1106	1295	1171
75°	1034	1219	1034
80°	967	1169	935
85°	974	1207	805

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2750 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.2	5.7
10°-20°	64.0	15.0
20°-30°	84.2	19.7
30°-40°	84.7	19.8
40°-50°	68.6	16.1
50°-60°	47.3	11.1
60°-70°	30.9	7.2
70°-80°	17.2	4.0
80°-90°	5.8	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°	172.4	40.4
0°-40°	257.0	60.2
0°-60°	372.9	87.3
0°-90°	426.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	426.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	262	262	262	262	262	
5°	253	258	257	258	261	24
15°	218	223	226	235	242	61
25°	172	176	182	190	199	79
35°	121	127	133	145	155	75
45°	70	78	91	98	105	55
55°	44	50	54	55	54	40
65°	27	33	32	30	30	27
75°	14	18	17	15	14	15
85°	5	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°	262.2	262.2	262.2	262.2	262.2
2.5°	258.7	263.3	260.6	260.6	261.0
5°	253.0	258.0	257.2	258.4	260.6
7.5°	245.8	251.1	251.1	254.5	257.6
10°	237.8	243.1	243.9	249.2	253.8
12.5°	227.9	233.2	235.5	242.4	248.5
15°	217.6	223.0	226.4	234.8	242.0
17.5°	206.6	211.9	216.5	225.2	232.5
20°	195.6	200.5	206.2	213.8	221.8
22.5°	183.4	188.7	194.0	201.3	210.4
25°	171.6	176.2	181.5	189.5	199.4
27.5°	159.0	164.0	168.9	178.4	188.7
30°	146.9	151.8	157.1	167.0	177.7
32.5°	133.9	139.3	144.6	155.6	166.7
35°	121.0	126.7	132.8	144.6	155.2
37.5°	108.4	114.5	121.8	133.9	143.1
40°	95.5	102.0	111.1	121.8	130.5
42.5°	81.8	89.8	100.8	110.0	118.0
45°	70.0	78.0	90.6	98.5	105.4
47.5°	61.3	67.7	79.9	86.8	92.5
50°	54.8	59.7	70.8	75.7	79.5
52.5°	49.5	54.4	62.0	65.4	66.6
55°	44.5	49.5	54.0	55.2	54.4
57.5°	39.6	44.9	47.6	46.4	46.4
60°	35.4	41.1	41.9	40.3	40.3
62.5°	31.2	36.9	36.9	35.0	35.0
65°	27.4	32.7	32.0	30.4	30.1
67.5°	24.0	28.9	27.8	26.3	25.9
70°	20.5	25.1	24.0	22.1	21.7
72.5°	17.5	21.7	20.2	18.6	17.9
75°	14.5	17.9	17.1	15.2	14.5
77.5°	11.8	14.5	13.7	12.2	11.4
80°	9.1	11.4	11.0	9.5	8.8
82.5°	6.8	8.8	8.4	7.2	6.1
85°	4.6	6.1	5.7	4.9	3.8
87.5°	2.3	4.2	3.8	3.4	1.9
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	12.21	13.65	12.57	13.96	14.28	12.56	14.00	12.93	14.32	14.63
	3H	13.75	15.04	14.13	15.37	15.73	13.91	15.20	14.29	15.53	15.89
	4H	14.32	15.53	14.72	15.88	16.26	14.40	15.60	14.80	15.95	16.33
	6H	14.75	15.87	15.17	16.24	16.63	14.75	15.87	15.16	16.23	16.63
	8H	14.91	15.97	15.33	16.36	16.76	14.87	15.93	15.30	16.32	16.72
	12H	15.02	16.04	15.45	16.42	16.85	14.94	15.96	15.37	16.34	16.77
4H	2H	12.79	14.00	13.20	14.35	14.73	13.08	14.29	13.48	14.64	15.02
	3H	14.62	15.62	15.03	16.02	16.42	14.66	15.66	15.07	16.06	16.46
	4H	15.36	16.27	15.80	16.68	17.12	15.26	16.16	15.69	16.58	17.02
	6H	15.95	16.73	16.41	17.18	17.64	15.74	16.52	16.20	16.97	17.43
	8H	16.16	16.89	16.62	17.34	17.80	15.91	16.64	16.37	17.08	17.55
	12H	16.33	16.98	16.81	17.46	17.93	16.03	16.68	16.51	17.16	17.63
8H	4H	15.65	16.38	16.11	16.82	17.29	15.56	16.29	16.03	16.74	17.21
	6H	16.40	17.01	16.90	17.50	17.98	16.18	16.78	16.68	17.27	17.75
	8H	16.73	17.27	17.24	17.78	18.27	16.43	16.97	16.94	17.48	17.97
	12H	17.01	17.49	17.53	17.99	18.55	16.64	17.11	17.15	17.61	18.17
12H	4H	15.67	16.32	16.15	16.80	17.27	15.59	16.25	16.08	16.73	17.20
	6H	16.46	17.01	16.98	17.52	18.01	16.25	16.80	16.77	17.31	17.80
	8H	16.86	17.34	17.37	17.84	18.40	16.57	17.05	17.08	17.55	18.11