

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: P1057862

Luminaire Tested: S122RDRP-S1005D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057862
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D950-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

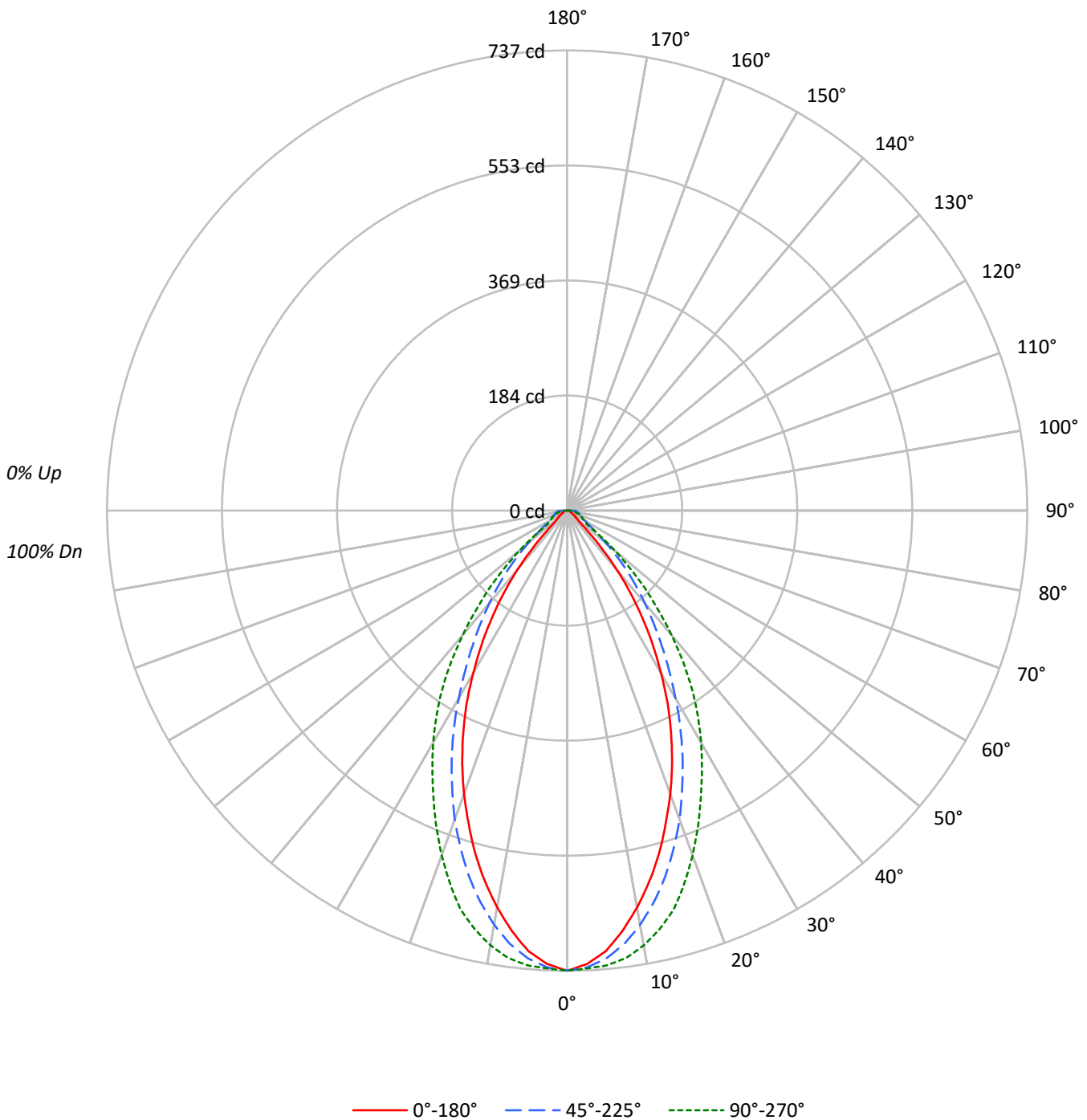
Lumens per Lamp: N/A
Luminaire Lumens: 794.2 lumens
Efficiency: N/A
Efficacy: 19.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13596	13596	13596
5°	13124	13333	13542
10°	12085	12616	13249
15°	10866	11594	12620
20°	9479	10339	11531
25°	8018	8908	10316
30°	6405	7398	9143
35°	4737	5945	7853
40°	2992	4659	6256
45°	1180	3499	4603
50°	609	2351	2836
55°	499	1544	1271
60°	365	1251	1148
65°	310	1170	1170
70°	302	1219	1144
75°	399	1412	1205
80°	595	1796	1350
85°	889	2985	1800

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 5965 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.4	8.5
10°-20°	170.2	21.4
20°-30°	202.3	25.5
30°-40°	168.3	21.2
40°-50°	94.0	11.8
50°-60°	38.0	4.8
60°-70°	24.3	3.1
70°-80°	18.2	2.3
80°-90°	11.6	1.5
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°	439.9	55.4
0°-40°	608.1	76.6
0°-60°	740.1	93.2
0°-90°	794.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	794.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	737	737	737	737	737	
5°	708	721	720	726	731	66
15°	569	586	607	638	661	158
25°	394	409	438	471	507	180
35°	210	230	264	308	349	130
45°	45	76	134	157	176	42
55°	16	32	48	47	40	14
65°	7	28	27	25	27	7
75°	6	20	20	18	17	6
85°	4	13	14	13	8	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	736.8	736.8	736.8	736.8	736.8
2.5°	726.9	738.2	732.5	732.5	733.9
5°	708.5	721.2	719.8	725.5	731.1
7.5°	678.9	693.0	700.1	712.8	722.7
10°	645.0	660.6	673.3	693.0	707.1
12.5°	608.3	623.9	642.2	667.6	686.0
15°	568.8	585.7	606.9	638.0	660.6
17.5°	525.1	543.4	567.4	601.3	625.3
20°	482.7	501.1	526.5	560.3	587.2
22.5°	439.0	454.5	481.3	515.2	547.6
25°	393.8	409.3	437.5	471.4	506.7
27.5°	348.6	364.2	392.4	427.7	467.2
30°	300.6	317.6	347.2	386.7	429.1
32.5°	255.5	272.4	303.5	347.2	389.6
35°	210.3	230.1	263.9	307.7	348.6
37.5°	166.5	189.1	227.2	268.2	304.9
40°	124.2	148.2	193.4	228.7	259.7
42.5°	81.9	110.1	162.3	192.0	216.0
45°	45.2	76.2	134.1	156.7	176.4
47.5°	25.4	49.4	105.9	124.2	135.5
50°	21.2	36.7	81.9	94.6	98.8
52.5°	16.9	33.9	62.1	69.2	66.3
55°	15.5	32.5	48.0	46.6	39.5
57.5°	12.7	32.5	38.1	33.9	33.9
60°	9.9	31.1	33.9	29.6	31.1
62.5°	8.5	29.6	31.1	28.2	28.2
65°	7.1	28.2	26.8	25.4	26.8
67.5°	5.6	25.4	25.4	24.0	24.0
70°	5.6	24.0	22.6	21.2	21.2
72.5°	5.6	21.2	21.2	19.8	19.8
75°	5.6	19.8	19.8	18.3	16.9
77.5°	5.6	16.9	18.3	16.9	15.5
80°	5.6	15.5	16.9	15.5	12.7
82.5°	5.6	14.1	15.5	14.1	11.3
85°	4.2	12.7	14.1	12.7	8.5
87.5°	4.2	12.7	14.1	11.3	7.1
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	7.44	8.66	7.81	8.97	9.29	8.51	9.73	8.88	10.04	10.36
	3H	8.77	9.85	9.15	10.18	10.55	10.54	11.63	10.92	11.96	12.32
	4H	9.34	10.35	9.74	10.70	11.09	11.49	12.50	11.90	12.86	13.24
	6H	9.90	10.83	10.31	11.20	11.59	12.44	13.37	12.85	13.74	14.13
	8H	10.22	11.10	10.65	11.49	11.90	12.89	13.77	13.32	14.16	14.56
	12H	10.52	11.37	10.96	11.75	12.18	13.31	14.15	13.75	14.54	14.97
4H	2H	8.40	9.41	8.80	9.76	10.15	9.19	10.20	9.59	10.55	10.93
	3H	10.43	11.26	10.84	11.66	12.07	11.47	12.30	11.89	12.71	13.11
	4H	11.51	12.25	11.94	12.67	13.12	12.62	13.36	13.05	13.78	14.23
	6H	12.37	13.02	12.84	13.47	13.93	13.78	14.43	14.25	14.88	15.35
	8H	12.78	13.39	13.25	13.83	14.31	14.34	14.95	14.82	15.40	15.87
	12H	13.16	13.69	13.64	14.18	14.65	14.89	15.43	15.38	15.91	16.38
8H	4H	12.28	12.88	12.75	13.33	13.80	13.17	13.77	13.64	14.22	14.69
	6H	13.61	14.11	14.11	14.60	15.09	14.62	15.11	15.12	15.61	16.09
	8H	14.32	14.77	14.85	15.29	15.78	15.38	15.83	15.90	16.34	16.84
	12H	15.01	15.41	15.53	15.90	16.48	16.17	16.56	16.69	17.06	17.63
12H	4H	12.43	12.97	12.92	13.45	13.92	13.27	13.81	13.76	14.29	14.77
	6H	13.93	14.38	14.45	14.89	15.39	14.84	15.29	15.37	15.81	16.30
	8H	14.83	15.22	15.35	15.72	16.29	15.75	16.14	16.27	16.64	17.21