

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058268

Luminaire Tested: S122RDR-H1005D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058268
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H1005D950-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

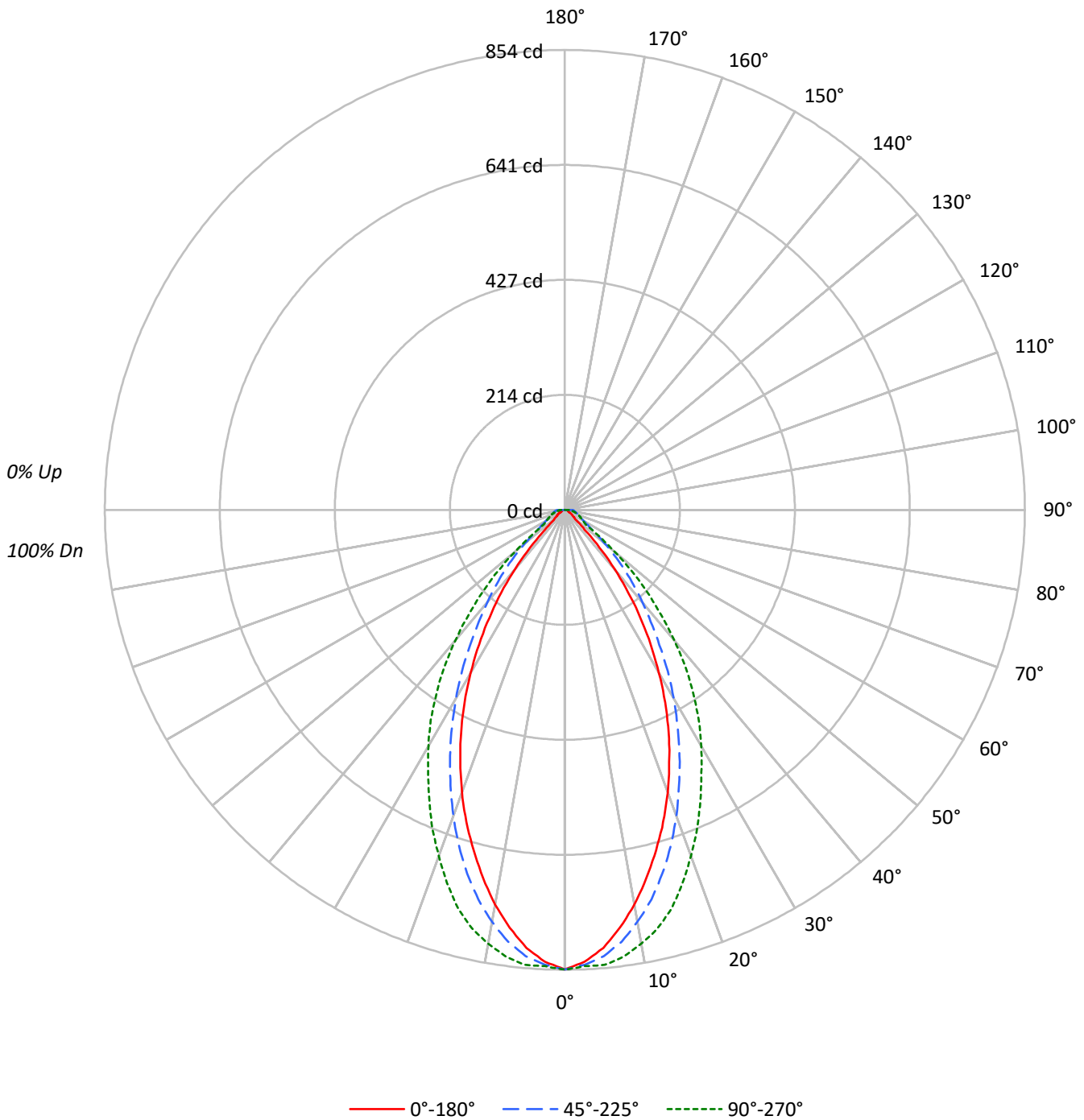
Lumens per Lamp: N/A
Luminaire Lumens: 929.0 lumens
Efficiency: N/A
Efficacy: 25.5 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): 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	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	76	81	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	67	64	71	66	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56				
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45				
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15749	15749	15749
5°	15126	15406	15709
10°	13946	14559	15327
15°	12496	13357	14635
20°	10967	11880	13435
25°	9286	10259	12122
30°	7449	8612	10794
35°	5505	6891	9351
40°	3454	5396	7600
45°	1354	4063	5631
50°	666	2744	3451
55°	528	1802	1538
60°	402	1461	1410
65°	297	1371	1371
70°	367	1397	1397
75°	392	1554	1462
80°	584	2030	1594
85°	1164	3472	2308

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 6346 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.9	8.4
10°-20°	197.1	21.2
20°-30°	235.8	25.4
30°-40°	198.4	21.4
40°-50°	113.0	12.2
50°-60°	44.6	4.8
60°-70°	28.1	3.0
70°-80°	20.9	2.2
80°-90°	13.3	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°	510.8	55.0
0°-40°	709.2	76.3
0°-60°	866.8	93.3
0°-90°	929.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	929.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	854	854	854	854	854	
5°	817	834	832	841	848	76
15°	654	677	699	740	766	183
25°	456	477	504	556	595	208
35°	244	266	306	371	415	152
45°	52	92	156	195	216	49
55°	16	36	56	57	48	15
65°	7	31	31	30	31	8
75°	6	22	22	20	20	6
85°	6	15	16	15	11	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	853.5	853.5	853.5	853.5	853.5
2.5°	839.9	854.9	845.3	846.7	848.1
5°	816.6	834.4	831.7	841.2	848.1
7.5°	782.5	801.6	808.4	824.8	837.1
10°	744.3	766.1	777.0	803.0	818.0
12.5°	700.6	725.1	741.5	774.3	796.2
15°	654.1	677.3	699.2	740.2	766.1
17.5°	607.7	630.9	654.1	699.2	726.5
20°	558.5	580.4	605.0	652.8	684.2
22.5°	506.6	529.9	554.4	603.6	641.8
25°	456.1	476.6	503.9	555.8	595.4
27.5°	402.9	423.3	453.4	506.6	549.0
30°	349.6	370.1	404.2	458.8	506.6
32.5°	296.3	318.2	355.1	415.1	462.9
35°	244.4	266.3	305.9	371.4	415.1
37.5°	193.9	218.5	262.2	326.4	367.4
40°	143.4	172.1	224.0	281.3	315.5
42.5°	95.6	131.1	188.5	236.3	264.9
45°	51.9	91.5	155.7	195.3	215.8
47.5°	28.7	58.7	124.3	155.7	168.0
50°	23.2	41.0	95.6	118.8	120.2
52.5°	19.1	36.9	71.0	84.7	77.8
55°	16.4	35.5	56.0	57.4	47.8
57.5°	13.7	34.1	46.4	41.0	41.0
60°	10.9	34.1	39.6	36.9	38.2
62.5°	8.2	34.1	35.5	32.8	34.1
65°	6.8	31.4	31.4	30.0	31.4
67.5°	6.8	28.7	28.7	27.3	28.7
70°	6.8	27.3	25.9	25.9	25.9
72.5°	5.5	24.6	24.6	23.2	23.2
75°	5.5	21.8	21.8	20.5	20.5
77.5°	5.5	20.5	20.5	19.1	17.8
80°	5.5	17.8	19.1	17.8	15.0
82.5°	5.5	16.4	17.8	16.4	12.3
85°	5.5	15.0	16.4	15.0	10.9
87.5°	4.1	15.0	15.0	12.3	8.2
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	7.26	8.49	7.63	8.80	9.11	9.30	10.52	9.66	10.83	11.15
	3H	8.81	9.89	9.19	10.22	10.59	11.27	12.35	11.65	12.68	13.05
	4H	9.37	10.38	9.77	10.73	11.11	12.18	13.19	12.59	13.55	13.93
	6H	9.93	10.86	10.34	11.23	11.62	13.07	14.00	13.48	14.37	14.76
	8H	10.22	11.10	10.66	11.50	11.90	13.47	14.35	13.90	14.74	15.15
	12H	10.59	11.43	11.02	11.81	12.24	13.91	14.75	14.35	15.14	15.57
4H	2H	8.45	9.46	8.86	9.81	10.20	9.92	10.93	10.32	11.28	11.67
	3H	10.65	11.49	11.07	11.89	12.30	12.16	12.99	12.57	13.40	13.80
	4H	11.70	12.45	12.14	12.87	13.32	13.23	13.98	13.67	14.40	14.84
	6H	12.61	13.25	13.07	13.70	14.17	14.34	14.99	14.81	15.44	15.91
	8H	12.99	13.60	13.46	14.05	14.52	14.87	15.47	15.34	15.92	16.39
	12H	13.42	13.95	13.90	14.44	14.91	15.44	15.97	15.93	16.46	16.93
8H	4H	12.51	13.11	12.98	13.56	14.03	13.72	14.33	14.19	14.78	15.25
	6H	13.89	14.39	14.40	14.89	15.37	15.12	15.62	15.63	16.12	16.60
	8H	14.62	15.06	15.14	15.58	16.07	15.86	16.31	16.39	16.82	17.32
	12H	15.37	15.76	15.88	16.26	16.83	16.69	17.08	17.21	17.58	18.15
12H	4H	12.67	13.20	13.16	13.69	14.16	13.82	14.36	14.31	14.84	15.32
	6H	14.23	14.67	14.75	15.19	15.68	15.34	15.79	15.86	16.30	16.79
	8H	15.14	15.54	15.66	16.03	16.61	16.23	16.62	16.74	17.12	17.69