

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: P1057830

Luminaire Tested: S122RDRP-S1005D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057830
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D927-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

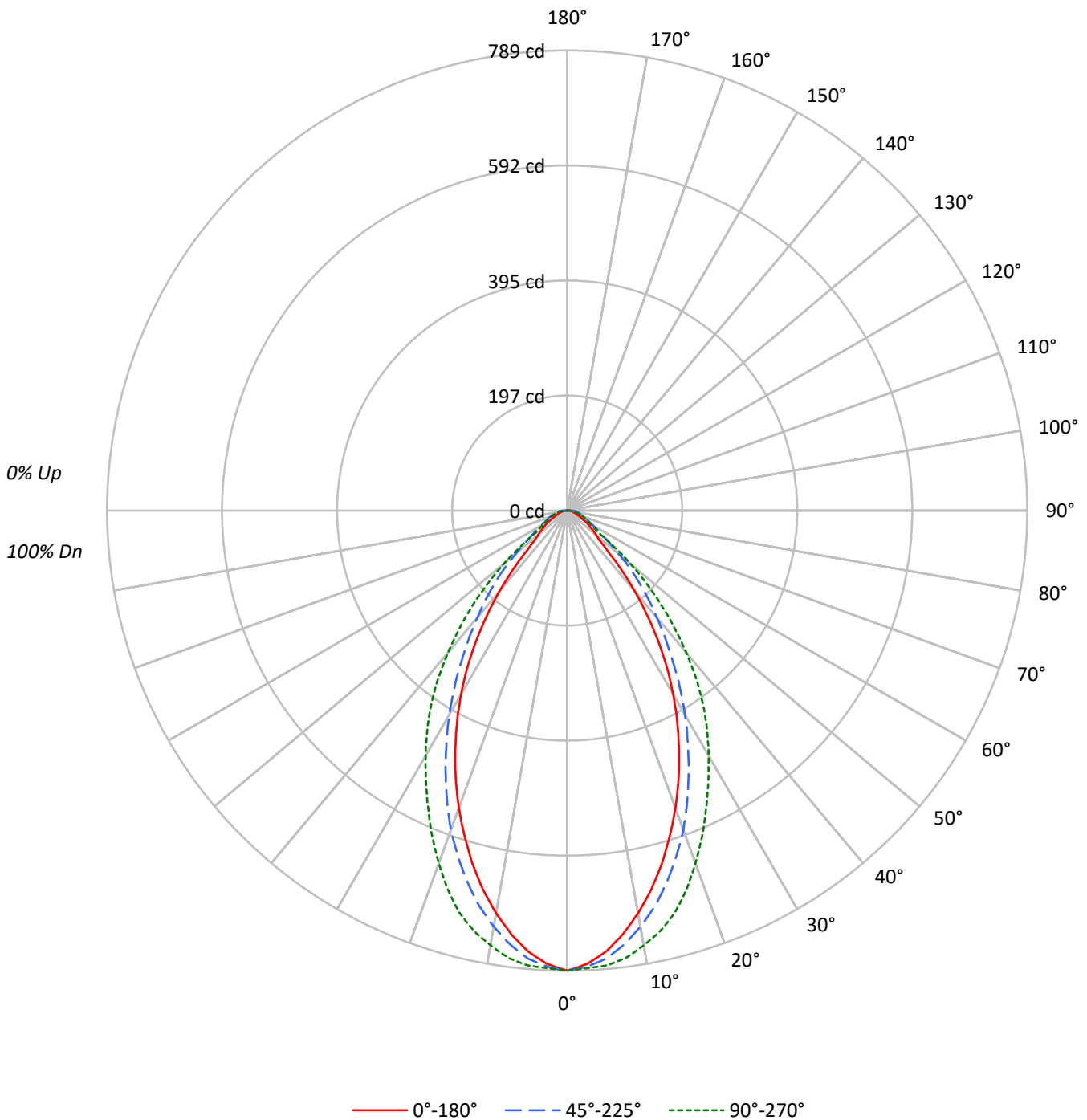
Lumens per Lamp: N/A
Luminaire Lumens: 956.8 lumens
Efficiency: N/A
Efficacy: 22.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																												
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80																												
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72																												
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65																												
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59																												
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54																												
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50																												
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46																												
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42																												
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14555	14555	14555
5°	14068	14285	14502
10°	13133	13571	14186
15°	11978	12604	13636
20°	10655	11438	12634
25°	9235	10046	11477
30°	7741	8614	10338
35°	6098	7127	9161
40°	4348	5759	7650
45°	2570	4556	5934
50°	1852	3298	4036
55°	1547	2374	2036
60°	1255	1904	1731
65°	1022	1690	1585
70°	885	1646	1516
75°	834	1668	1504
80°	871	1998	1615
85°	1249	3218	1990

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5934 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.3	7.6
10°-20°	185.9	19.4
20°-30°	229.3	24.0
30°-40°	203.9	21.3
40°-50°	130.2	13.6
50°-60°	62.5	6.5
60°-70°	36.7	3.8
70°-80°	23.4	2.5
80°-90°	12.5	1.3
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°	487.5	51.0
0°-40°	691.4	72.3
0°-60°	884.1	92.4
0°-90°	956.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	956.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	789	789	789	789	789	
5°	760	774	771	776	783	71
15°	627	642	660	690	714	175
25°	454	471	493	529	564	208
35°	271	292	316	364	407	168
45°	98	128	175	203	227	83
55°	48	62	74	72	63	43
65°	23	42	39	35	36	24
75°	12	26	23	22	21	13
85°	6	14	15	13	9	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	788.8	788.8	788.8	788.8	788.8
2.5°	778.2	791.1	782.9	782.9	785.3
5°	759.5	773.5	771.2	775.9	782.9
7.5°	732.5	747.8	750.1	763.0	773.5
10°	700.9	717.3	724.3	743.1	757.1
12.5°	665.7	682.1	695.0	718.5	738.4
15°	627.0	642.3	659.8	690.3	713.8
17.5°	584.8	604.8	622.3	654.0	680.9
20°	542.6	561.4	582.5	613.0	643.4
22.5°	499.3	516.9	538.0	569.6	604.8
25°	453.6	471.2	493.4	528.6	563.7
27.5°	409.0	426.6	447.7	486.4	523.9
30°	363.3	380.9	404.3	444.2	485.2
32.5°	317.6	336.4	359.8	403.2	446.5
35°	270.7	291.8	316.4	364.5	406.7
37.5°	225.0	246.1	276.6	323.5	363.3
40°	180.5	205.1	239.1	281.3	317.6
42.5°	137.1	164.1	206.3	240.3	271.9
45°	98.5	127.8	174.6	202.8	227.4
47.5°	75.0	96.1	144.2	166.4	184.0
50°	64.5	77.4	114.9	131.3	140.6
52.5°	56.3	68.0	91.4	99.6	99.6
55°	48.1	62.1	73.8	71.5	63.3
57.5°	41.0	56.3	60.9	51.6	53.9
60°	34.0	51.6	51.6	45.7	46.9
62.5°	28.1	48.1	44.5	39.8	41.0
65°	23.4	42.2	38.7	35.2	36.3
67.5°	18.8	37.5	34.0	31.6	31.6
70°	16.4	34.0	30.5	28.1	28.1
72.5°	14.1	29.3	27.0	24.6	24.6
75°	11.7	25.8	23.4	22.3	21.1
77.5°	10.5	22.3	21.1	18.8	17.6
80°	8.2	18.8	18.8	17.6	15.2
82.5°	7.0	16.4	16.4	15.2	12.9
85°	5.9	14.1	15.2	12.9	9.4
87.5°	4.7	12.9	12.9	10.5	7.0
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	10.98	12.26	11.34	12.57	12.88	10.77	12.05	11.13	12.36	12.67
	3H	12.21	13.35	12.59	13.68	14.04	12.36	13.49	12.74	13.82	14.19
	4H	12.66	13.72	13.07	14.07	14.46	13.07	14.13	13.48	14.48	14.87
	6H	13.04	14.02	13.46	14.39	14.78	13.73	14.70	14.14	15.07	15.46
	8H	13.20	14.12	13.63	14.51	14.91	14.05	14.98	14.49	15.37	15.77
	12H	13.35	14.24	13.79	14.62	15.05	14.35	15.24	14.79	15.62	16.05
4H	2H	11.53	12.59	11.93	12.94	13.32	11.36	12.42	11.76	12.77	13.16
	3H	13.22	14.09	13.64	14.50	14.90	13.19	14.07	13.61	14.47	14.87
	4H	14.02	14.80	14.45	15.22	15.66	14.07	14.85	14.50	15.27	15.71
	6H	14.66	15.34	15.12	15.79	16.25	14.92	15.59	15.38	16.04	16.51
	8H	14.91	15.54	15.38	15.99	16.46	15.34	15.97	15.81	16.42	16.89
	12H	15.16	15.72	15.64	16.20	16.67	15.74	16.30	16.23	16.78	17.26
8H	4H	14.44	15.07	14.91	15.52	15.99	14.49	15.12	14.96	15.57	16.04
	6H	15.41	15.93	15.92	16.43	16.91	15.57	16.09	16.08	16.59	17.07
	8H	15.90	16.37	16.43	16.89	17.38	16.16	16.63	16.69	17.15	17.64
	12H	16.41	16.82	16.92	17.32	17.89	16.77	17.18	17.28	17.68	18.25
12H	4H	14.50	15.06	14.99	15.55	16.02	14.56	15.12	15.05	15.61	16.08
	6H	15.58	16.05	16.10	16.57	17.06	15.74	16.21	16.26	16.72	17.21
	8H	16.22	16.63	16.73	17.13	17.70	16.45	16.86	16.96	17.36	17.93