

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: P1058070

Luminaire Tested: S122RDRP-S675D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058070
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: S122RDRP-S675D927-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

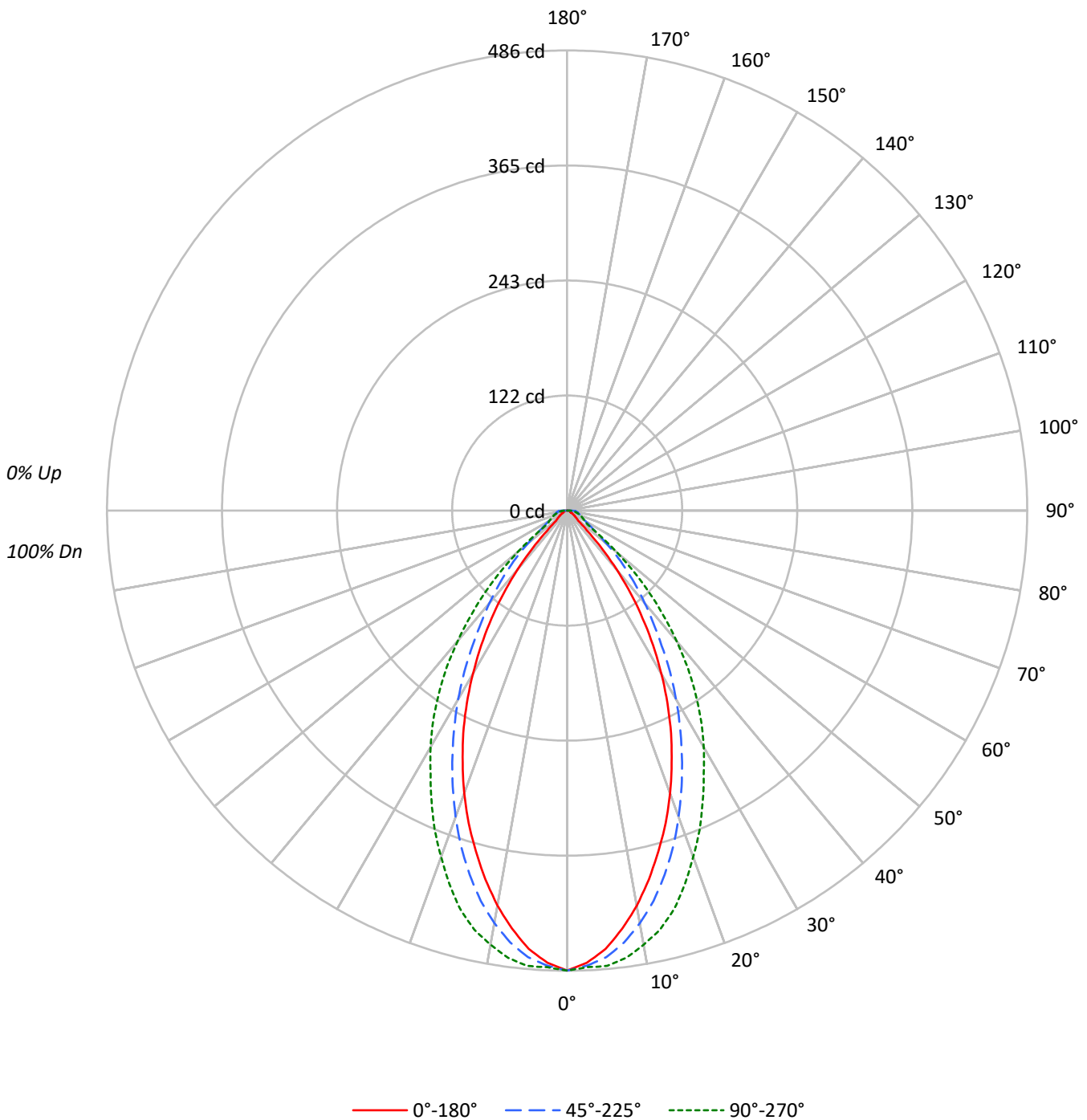
Lumens per Lamp: N/A
Luminaire Lumens: 528.8 lumens
Efficiency: N/A
Efficacy: 20.5 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	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°	8964	8964	8964
5°	8609	8769	8941
10°	7937	8287	8724
15°	7112	7603	8331
20°	6243	6761	7647
25°	5285	5839	6900
30°	4240	4903	6145
35°	3133	3922	5323
40°	1966	3071	4326
45°	770	2312	3205
50°	379	1562	1964
55°	299	1026	875
60°	229	830	805
65°	170	782	782
70°	210	798	798
75°	221	884	834
80°	329	1158	914
85°	656	1969	1313

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 3638 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.4	8.4
10°-20°	112.2	21.2
20°-30°	134.2	25.4
30°-40°	113.0	21.4
40°-50°	64.3	12.2
50°-60°	25.4	4.8
60°-70°	16.0	3.0
70°-80°	11.9	2.2
80°-90°	7.6	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°	290.8	55.0
0°-40°	403.7	76.3
0°-60°	493.4	93.3
0°-90°	528.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	528.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	486	486	486	486	486	
5°	465	475	473	479	483	43
15°	372	386	398	421	436	104
25°	260	271	287	316	339	118
35°	139	152	174	211	236	86
45°	30	52	89	111	123	28
55°	9	20	32	33	27	8
65°	4	18	18	17	18	4
75°	3	12	12	12	12	3
85°	3	9	9	9	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	485.8	485.8	485.8	485.8	485.8
2.5°	478.0	486.6	481.1	481.9	482.7
5°	464.8	474.9	473.4	478.8	482.7
7.5°	445.4	456.3	460.2	469.5	476.5
10°	423.6	436.1	442.3	457.0	465.6
12.5°	398.8	412.7	422.1	440.7	453.2
15°	372.3	385.5	398.0	421.3	436.1
17.5°	345.9	359.1	372.3	398.0	413.5
20°	317.9	330.4	344.3	371.5	389.4
22.5°	288.4	301.6	315.6	343.6	365.3
25°	259.6	271.3	286.8	316.4	338.9
27.5°	229.3	241.0	258.1	288.4	312.5
30°	199.0	210.6	230.1	261.2	288.4
32.5°	168.7	181.1	202.1	236.3	263.5
35°	139.1	151.6	174.1	211.4	236.3
37.5°	110.4	124.4	149.2	185.8	209.1
40°	81.6	97.9	127.5	160.1	179.6
42.5°	54.4	74.6	107.3	134.5	150.8
45°	29.5	52.1	88.6	111.2	122.8
47.5°	16.3	33.4	70.7	88.6	95.6
50°	13.2	23.3	54.4	67.6	68.4
52.5°	10.9	21.0	40.4	48.2	44.3
55°	9.3	20.2	31.9	32.6	27.2
57.5°	7.8	19.4	26.4	23.3	23.3
60°	6.2	19.4	22.5	21.0	21.8
62.5°	4.7	19.4	20.2	18.7	19.4
65°	3.9	17.9	17.9	17.1	17.9
67.5°	3.9	16.3	16.3	15.5	16.3
70°	3.9	15.5	14.8	14.8	14.8
72.5°	3.1	14.0	14.0	13.2	13.2
75°	3.1	12.4	12.4	11.7	11.7
77.5°	3.1	11.7	11.7	10.9	10.1
80°	3.1	10.1	10.9	10.1	8.6
82.5°	3.1	9.3	10.1	9.3	7.0
85°	3.1	8.6	9.3	8.6	6.2
87.5°	2.3	8.6	8.6	7.0	4.7
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	5.30	6.52	5.67	6.84	7.15	7.33	8.55	7.70	8.86	9.18
	3H	6.85	7.93	7.23	8.26	8.63	9.31	10.39	9.69	10.72	11.09
	4H	7.40	8.41	7.81	8.76	9.15	10.22	11.24	10.63	11.59	11.97
	6H	7.96	8.89	8.38	9.26	9.66	11.11	12.04	11.53	12.41	12.81
	8H	8.25	9.13	8.68	9.52	9.93	11.51	12.39	11.95	12.79	13.19
	12H	8.61	9.45	9.05	9.84	10.27	11.96	12.80	12.39	13.18	13.61
4H	2H	6.49	7.51	6.90	7.86	8.24	7.95	8.97	8.36	9.32	9.70
	3H	8.69	9.53	9.11	9.93	10.34	10.20	11.03	10.61	11.44	11.84
	4H	9.74	10.49	10.18	10.91	11.36	11.28	12.02	11.71	12.44	12.89
	6H	10.64	11.29	11.11	11.74	12.21	12.39	13.04	12.85	13.48	13.95
	8H	11.03	11.63	11.50	12.08	12.55	12.91	13.52	13.38	13.96	14.44
	12H	11.45	11.98	11.93	12.47	12.94	13.49	14.02	13.97	14.50	14.98
8H	4H	10.55	11.15	11.02	11.60	12.07	11.77	12.37	12.24	12.82	13.29
	6H	11.93	12.43	12.44	12.93	13.41	13.17	13.66	13.67	14.16	14.64
	8H	12.65	13.10	13.17	13.61	14.11	13.90	14.35	14.43	14.87	15.36
	12H	13.40	13.80	13.92	14.29	14.87	14.74	15.13	15.25	15.63	16.20
12H	4H	10.71	11.25	11.20	11.73	12.21	11.87	12.40	12.36	12.89	13.36
	6H	12.26	12.71	12.79	13.23	13.72	13.38	13.83	13.91	14.35	14.84
	8H	13.18	13.57	13.69	14.07	14.64	14.27	14.66	14.78	15.16	15.73