

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: P1058079

Luminaire Tested: S122RDRP-S675D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058079
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-S675D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

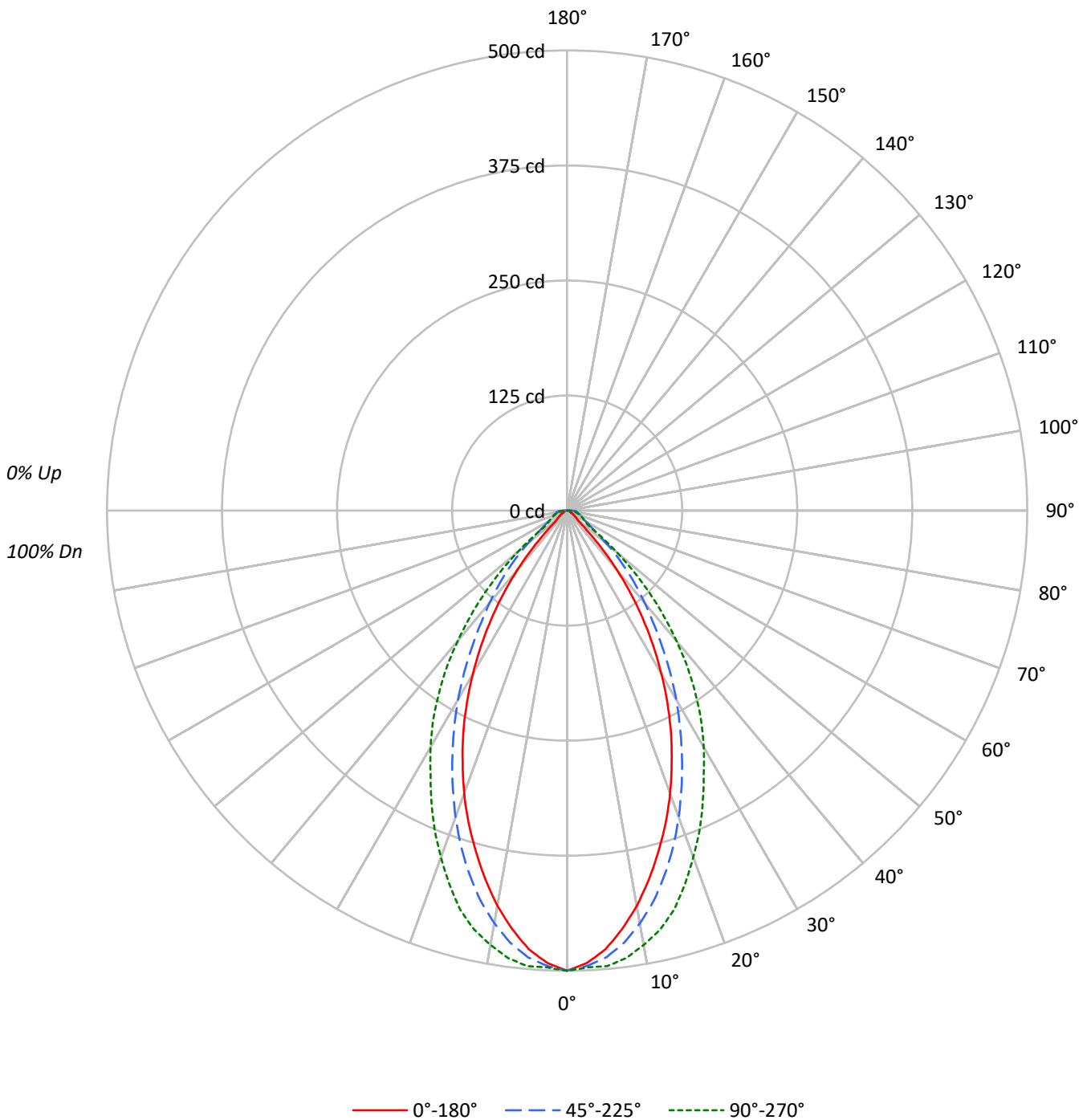
Lumens per Lamp: N/A
Luminaire Lumens: 544.2 lumens
Efficiency: N/A
Efficacy: 21.1 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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°	9226	9226	9226
5°	8861	9024	9202
10°	8169	8529	8979
15°	7320	7825	8574
20°	6425	6959	7870
25°	5440	6010	7102
30°	4364	5046	6324
35°	3226	4037	5478
40°	2023	3160	4451
45°	793	2380	3299
50°	390	1608	2021
55°	309	1055	901
60°	236	856	827
65°	175	803	803
70°	216	820	820
75°	228	913	856
80°	340	1190	935
85°	677	2032	1355

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 3723 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.7	8.4
10°-20°	115.5	21.2
20°-30°	138.1	25.4
30°-40°	116.2	21.4
40°-50°	66.2	12.2
50°-60°	26.1	4.8
60°-70°	16.4	3.0
70°-80°	12.2	2.2
80°-90°	7.8	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°	299.2	55.0
0°-40°	415.5	76.3
0°-60°	507.8	93.3
0°-90°	544.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	544.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	500	500	500	500	500	
5°	478	489	487	493	497	44
15°	383	397	410	434	449	107
25°	267	279	295	326	349	122
35°	143	156	179	218	243	89
45°	30	54	91	114	126	29
55°	10	21	33	34	28	9
65°	4	18	18	18	18	4
75°	3	13	13	12	12	3
85°	3	9	10	9	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	500.0	500.0	500.0	500.0	500.0
2.5°	492.0	500.8	495.2	496.0	496.8
5°	478.4	488.8	487.2	492.8	496.8
7.5°	458.4	469.6	473.6	483.2	490.4
10°	436.0	448.8	455.2	470.4	479.2
12.5°	410.4	424.8	434.4	453.6	466.4
15°	383.2	396.8	409.6	433.6	448.8
17.5°	356.0	369.6	383.2	409.6	425.6
20°	327.2	340.0	354.4	382.4	400.8
22.5°	296.8	310.4	324.8	353.6	376.0
25°	267.2	279.2	295.2	325.6	348.8
27.5°	236.0	248.0	265.6	296.8	321.6
30°	204.8	216.8	236.8	268.8	296.8
32.5°	173.6	186.4	208.0	243.2	271.2
35°	143.2	156.0	179.2	217.6	243.2
37.5°	113.6	128.0	153.6	191.2	215.2
40°	84.0	100.8	131.2	164.8	184.8
42.5°	56.0	76.8	110.4	138.4	155.2
45°	30.4	53.6	91.2	114.4	126.4
47.5°	16.8	34.4	72.8	91.2	98.4
50°	13.6	24.0	56.0	69.6	70.4
52.5°	11.2	21.6	41.6	49.6	45.6
55°	9.6	20.8	32.8	33.6	28.0
57.5°	8.0	20.0	27.2	24.0	24.0
60°	6.4	20.0	23.2	21.6	22.4
62.5°	4.8	20.0	20.8	19.2	20.0
65°	4.0	18.4	18.4	17.6	18.4
67.5°	4.0	16.8	16.8	16.0	16.8
70°	4.0	16.0	15.2	15.2	15.2
72.5°	3.2	14.4	14.4	13.6	13.6
75°	3.2	12.8	12.8	12.0	12.0
77.5°	3.2	12.0	12.0	11.2	10.4
80°	3.2	10.4	11.2	10.4	8.8
82.5°	3.2	9.6	10.4	9.6	7.2
85°	3.2	8.8	9.6	8.8	6.4
87.5°	2.4	8.8	8.8	7.2	4.8
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	5.41	6.63	5.78	6.95	7.26	7.44	8.66	7.80	8.97	9.28
	3H	6.96	8.04	7.34	8.37	8.74	9.41	10.49	9.79	10.83	11.19
	4H	7.51	8.52	7.91	8.87	9.26	10.32	11.34	10.73	11.69	12.07
	6H	8.07	9.00	8.48	9.37	9.76	11.21	12.14	11.62	12.51	12.90
	8H	8.36	9.24	8.79	9.63	10.04	11.61	12.49	12.04	12.88	13.29
	12H	8.72	9.56	9.16	9.95	10.38	12.05	12.89	12.49	13.28	13.71
4H	2H	6.60	7.61	7.00	7.96	8.35	8.06	9.07	8.46	9.42	9.80
	3H	8.80	9.63	9.21	10.04	10.44	10.30	11.13	10.71	11.54	11.94
	4H	9.85	10.60	10.29	11.02	11.46	11.37	12.12	11.81	12.54	12.99
	6H	10.75	11.39	11.21	11.84	12.31	12.48	13.13	12.95	13.58	14.05
	8H	11.13	11.74	11.60	12.19	12.66	13.01	13.61	13.48	14.06	14.53
	12H	11.55	12.09	12.04	12.57	13.05	13.58	14.12	14.07	14.60	15.08
8H	4H	10.65	11.26	11.12	11.71	12.18	11.86	12.47	12.33	12.92	13.39
	6H	12.04	12.53	12.54	13.03	13.51	13.26	13.76	13.77	14.26	14.74
	8H	12.75	13.20	13.28	13.72	14.21	14.00	14.45	14.52	14.96	15.46
	12H	13.51	13.90	14.02	14.39	14.97	14.83	15.23	15.35	15.72	16.30
12H	4H	10.82	11.35	11.30	11.83	12.31	11.96	12.50	12.45	12.98	13.46
	6H	12.37	12.81	12.89	13.33	13.82	13.48	13.93	14.00	14.44	14.93
	8H	13.28	13.68	13.80	14.17	14.74	14.36	14.76	14.88	15.25	15.83