

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: P1058097

Luminaire Tested: S122RDRP-S675D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058097
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-S675D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

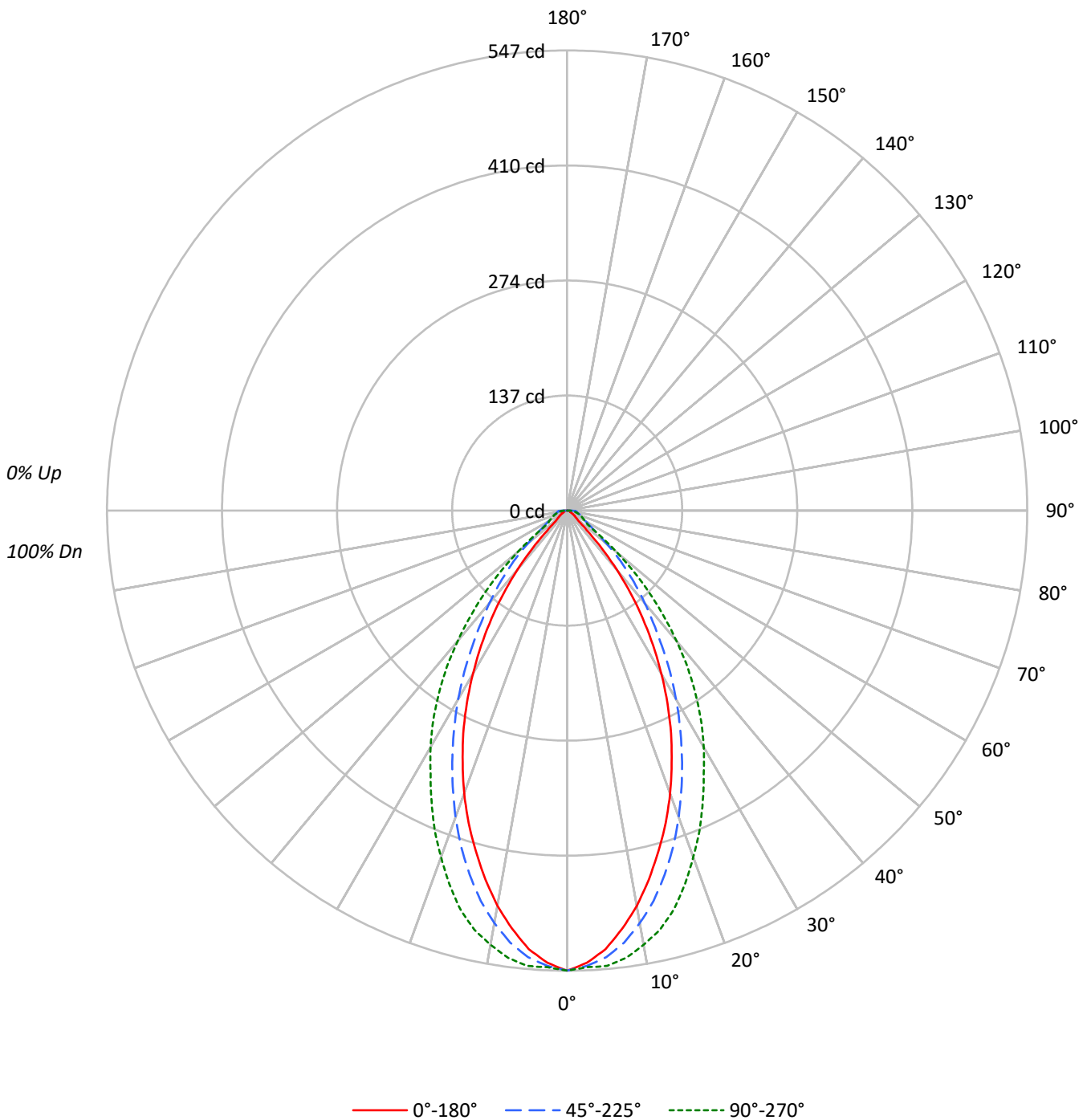
Lumens per Lamp: N/A
Luminaire Lumens: 595.1 lumens
Efficiency: N/A
Efficacy: 23.1 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	10090	10090	10090
5°	9691	9869	10064
10°	8936	9327	9820
15°	8006	8558	9376
20°	7028	7611	8609
25°	5949	6574	7767
30°	4773	5519	6916
35°	3528	4415	5992
40°	2214	3457	4868
45°	866	2602	3606
50°	428	1757	2210
55°	338	1155	984
60°	258	937	904
65°	192	878	878
70°	237	896	896
75°	250	998	934
80°	372	1296	1020
85°	741	2223	1482

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 4061 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.9	8.4
10°-20°	126.3	21.2
20°-30°	151.1	25.4
30°-40°	127.1	21.4
40°-50°	72.4	12.2
50°-60°	28.5	4.8
60°-70°	18.0	3.0
70°-80°	13.3	2.2
80°-90°	8.5	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°	327.3	55.0
0°-40°	454.4	76.4
0°-60°	555.3	93.3
0°-90°	595.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	595.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	547	547	547	547	547	
5°	523	535	533	539	543	48
15°	419	434	448	474	491	117
25°	292	305	323	356	382	133
35°	157	171	196	238	266	97
45°	33	59	100	125	138	31
55°	10	23	36	37	31	9
65°	4	20	20	19	20	5
75°	4	14	14	13	13	4
85°	4	10	10	10	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	546.8	546.8	546.8	546.8	546.8
2.5°	538.1	547.7	541.6	542.5	543.3
5°	523.2	534.6	532.8	539.0	543.3
7.5°	501.3	513.6	518.0	528.5	536.3
10°	476.9	490.8	497.8	514.5	524.1
12.5°	448.9	464.6	475.1	496.1	510.1
15°	419.1	434.0	448.0	474.2	490.8
17.5°	389.4	404.2	419.1	448.0	465.5
20°	357.9	371.9	387.6	418.2	438.4
22.5°	324.6	339.5	355.2	386.7	411.2
25°	292.2	305.4	322.9	356.1	381.5
27.5°	258.1	271.2	290.5	324.6	351.7
30°	224.0	237.1	259.0	294.0	324.6
32.5°	189.9	203.9	227.5	266.0	296.6
35°	156.6	170.6	196.0	238.0	266.0
37.5°	124.2	140.0	168.0	209.1	235.4
40°	91.9	110.2	143.5	180.2	202.1
42.5°	61.2	84.0	120.7	151.4	169.7
45°	33.2	58.6	99.7	125.1	138.2
47.5°	18.4	37.6	79.6	99.7	107.6
50°	14.9	26.2	61.2	76.1	77.0
52.5°	12.2	23.6	45.5	54.2	49.9
55°	10.5	22.7	35.9	36.7	30.6
57.5°	8.7	21.9	29.7	26.2	26.2
60°	7.0	21.9	25.4	23.6	24.5
62.5°	5.2	21.9	22.7	21.0	21.9
65°	4.4	20.1	20.1	19.2	20.1
67.5°	4.4	18.4	18.4	17.5	18.4
70°	4.4	17.5	16.6	16.6	16.6
72.5°	3.5	15.7	15.7	14.9	14.9
75°	3.5	14.0	14.0	13.1	13.1
77.5°	3.5	13.1	13.1	12.2	11.4
80°	3.5	11.4	12.2	11.4	9.6
82.5°	3.5	10.5	11.4	10.5	7.9
85°	3.5	9.6	10.5	9.6	7.0
87.5°	2.6	9.6	9.6	7.9	5.2
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	5.73	6.95	6.09	7.26	7.58	7.73	8.96	8.10	9.27	9.58
	3H	7.27	8.36	7.66	8.69	9.06	9.71	10.80	10.09	11.13	11.50
	4H	7.83	8.84	8.23	9.19	9.58	10.63	11.64	11.03	11.99	12.38
	6H	8.38	9.31	8.80	9.69	10.08	11.51	12.44	11.93	12.81	13.21
	8H	8.68	9.56	9.11	9.95	10.36	11.92	12.80	12.35	13.19	13.60
	12H	9.04	9.88	9.47	10.26	10.69	12.36	13.20	12.80	13.59	14.02
4H	2H	6.91	7.92	7.31	8.27	8.66	8.36	9.37	8.76	9.72	10.10
	3H	9.11	9.94	9.52	10.35	10.75	10.61	11.44	11.02	11.84	12.25
	4H	10.16	10.91	10.60	11.33	11.78	11.68	12.42	12.11	12.84	13.29
	6H	11.06	11.71	11.52	12.15	12.62	12.79	13.44	13.25	13.88	14.35
	8H	11.44	12.05	11.91	12.50	12.97	13.31	13.92	13.78	14.37	14.84
	12H	11.86	12.40	12.35	12.88	13.36	13.89	14.42	14.38	14.91	15.38
8H	4H	10.96	11.57	11.43	12.01	12.49	12.17	12.77	12.64	13.22	13.69
	6H	12.34	12.84	12.85	13.34	13.82	13.57	14.06	14.07	14.56	15.04
	8H	13.06	13.51	13.59	14.03	14.52	14.31	14.75	14.83	15.27	15.76
	12H	13.81	14.21	14.33	14.70	15.28	15.14	15.53	15.66	16.03	16.60
12H	4H	11.12	11.66	11.61	12.14	12.62	12.27	12.80	12.76	13.29	13.76
	6H	12.68	13.12	13.20	13.64	14.13	13.78	14.23	14.31	14.75	15.24
	8H	13.59	13.99	14.11	14.48	15.05	14.67	15.07	15.19	15.56	16.13