

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: P1058052

Luminaire Tested: S122RDRP-S675D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058052  
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-S675D840-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, 80 CRI LEDS  
Ballast/Driver: -

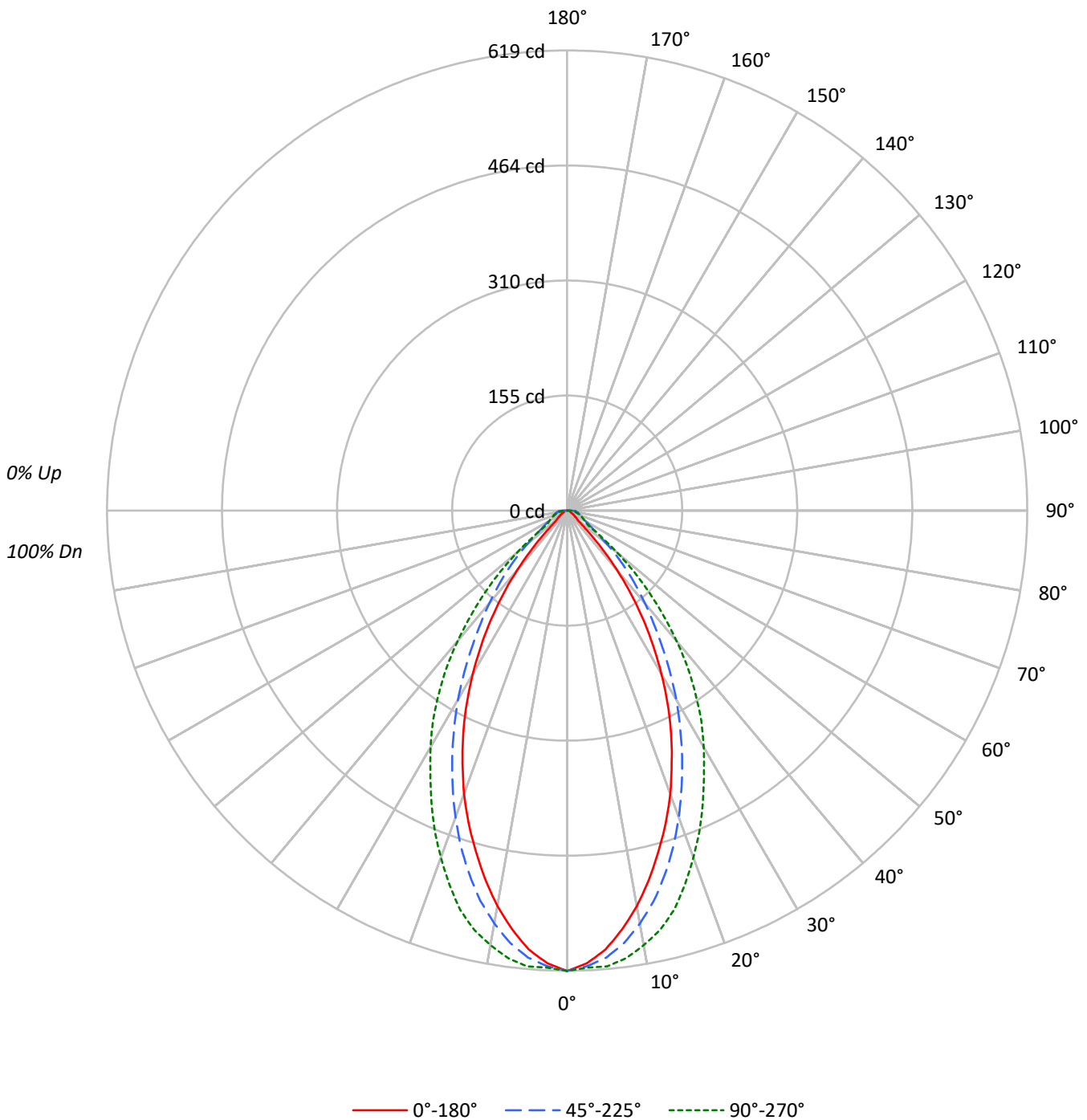
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 674.1 lumens  
Efficiency: N/A  
Efficacy: 26.1 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<sub>in</sub>): 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°	11428	11428	11428
5°	10977	11179	11397
10°	10118	10564	11120
15°	9066	9691	10620
20°	7959	8621	9748
25°	6739	7444	8796
30°	5406	6249	7832
35°	3996	5001	6785
40°	2505	3914	5514
45°	984	2949	4087
50°	482	1992	2503
55°	383	1306	1116
60°	292	1059	1022
65°	218	995	995
70°	270	1014	1014
75°	285	1134	1062
80°	425	1477	1158
85°	847	2519	1673

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 87.5°  
 Luminance: 4611 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.6	8.4
10°-20°	143.0	21.2
20°-30°	171.1	25.4
30°-40°	144.0	21.4
40°-50°	82.0	12.2
50°-60°	32.3	4.8
60°-70°	20.4	3.0
70°-80°	15.1	2.2
80°-90°	9.6	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°	370.6	55.0
0°-40°	514.6	76.3
0°-60°	628.9	93.3
0°-90°	674.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	674.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	619	619	619	619	619	
5°	593	605	604	610	615	55
15°	475	492	507	537	556	132
25°	331	346	366	403	432	151
35°	177	193	222	270	301	110
45°	38	66	113	142	157	35
55°	12	26	41	42	35	11
65°	5	23	23	22	23	6
75°	4	16	16	15	15	4
85°	4	11	12	11	8	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	619.3	619.3	619.3	619.3	619.3
2.5°	609.4	620.3	613.4	614.4	615.3
5°	592.6	605.4	603.5	610.4	615.3
7.5°	567.8	581.7	586.6	598.5	607.4
10°	540.0	555.9	563.8	582.6	593.5
12.5°	508.3	526.2	538.1	561.8	577.7
15°	474.6	491.5	507.3	537.1	555.9
17.5°	440.9	457.8	474.6	507.3	527.2
20°	405.3	421.1	439.0	473.6	496.4
22.5°	367.6	384.5	402.3	438.0	465.7
25°	331.0	345.8	365.6	403.3	432.0
27.5°	292.3	307.2	329.0	367.6	398.3
30°	253.7	268.5	293.3	332.9	367.6
32.5°	215.0	230.9	257.6	301.2	335.9
35°	177.4	193.2	222.0	269.5	301.2
37.5°	140.7	158.5	190.3	236.8	266.5
40°	104.0	124.9	162.5	204.1	228.9
42.5°	69.4	95.1	136.7	171.4	192.2
45°	37.7	66.4	113.0	141.7	156.6
47.5°	20.8	42.6	90.2	113.0	121.9
50°	16.8	29.7	69.4	86.2	87.2
52.5°	13.9	26.8	51.5	61.4	56.5
55°	11.9	25.8	40.6	41.6	34.7
57.5°	9.9	24.8	33.7	29.7	29.7
60°	7.9	24.8	28.7	26.8	27.7
62.5°	5.9	24.8	25.8	23.8	24.8
65°	5.0	22.8	22.8	21.8	22.8
67.5°	5.0	20.8	20.8	19.8	20.8
70°	5.0	19.8	18.8	18.8	18.8
72.5°	4.0	17.8	17.8	16.8	16.8
75°	4.0	15.9	15.9	14.9	14.9
77.5°	4.0	14.9	14.9	13.9	12.9
80°	4.0	12.9	13.9	12.9	10.9
82.5°	4.0	11.9	12.9	11.9	8.9
85°	4.0	10.9	11.9	10.9	7.9
87.5°	3.0	10.9	10.9	8.9	5.9
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	6.16	7.38	6.53	7.70	8.01	8.17	9.40	8.54	9.71	10.02
	3H	7.71	8.79	8.09	9.12	9.49	10.15	11.23	10.53	11.56	11.93
	4H	8.26	9.28	8.67	9.63	10.01	11.06	12.08	11.47	12.43	12.81
	6H	8.83	9.76	9.24	10.13	10.52	11.95	12.88	12.37	13.25	13.65
	8H	9.12	10.00	9.55	10.39	10.80	12.35	13.23	12.78	13.62	14.03
	12H	9.49	10.33	9.92	10.71	11.14	12.79	13.64	13.23	14.02	14.45
4H	2H	7.35	8.36	7.75	8.71	9.09	8.80	9.81	9.20	10.16	10.54
	3H	9.54	10.38	9.96	10.78	11.19	11.04	11.87	11.45	12.28	12.68
	4H	10.60	11.35	11.04	11.77	12.22	12.11	12.86	12.55	13.28	13.73
	6H	11.50	12.15	11.97	12.60	13.06	13.23	13.88	13.69	14.32	14.79
	8H	11.89	12.49	12.36	12.94	13.41	13.75	14.36	14.22	14.80	15.28
	12H	12.31	12.85	12.80	13.33	13.81	14.32	14.86	14.81	15.34	15.82
8H	4H	11.40	12.01	11.88	12.46	12.93	12.61	13.21	13.08	13.66	14.13
	6H	12.79	13.29	13.29	13.78	14.27	14.01	14.50	14.51	15.00	15.48
	8H	13.51	13.96	14.03	14.47	14.96	14.75	15.19	15.27	15.71	16.20
	12H	14.26	14.65	14.78	15.15	15.72	15.58	15.97	16.09	16.47	17.04
12H	4H	11.57	12.10	12.05	12.59	13.06	12.71	13.24	13.20	13.73	14.20
	6H	13.12	13.57	13.64	14.08	14.58	14.23	14.67	14.75	15.19	15.68
	8H	14.04	14.43	14.55	14.93	15.50	15.11	15.51	15.63	16.00	16.57