

Scaled data based on original data using  
LM-79-2019 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: S122RDR-S675D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
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: S122RDR-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: -

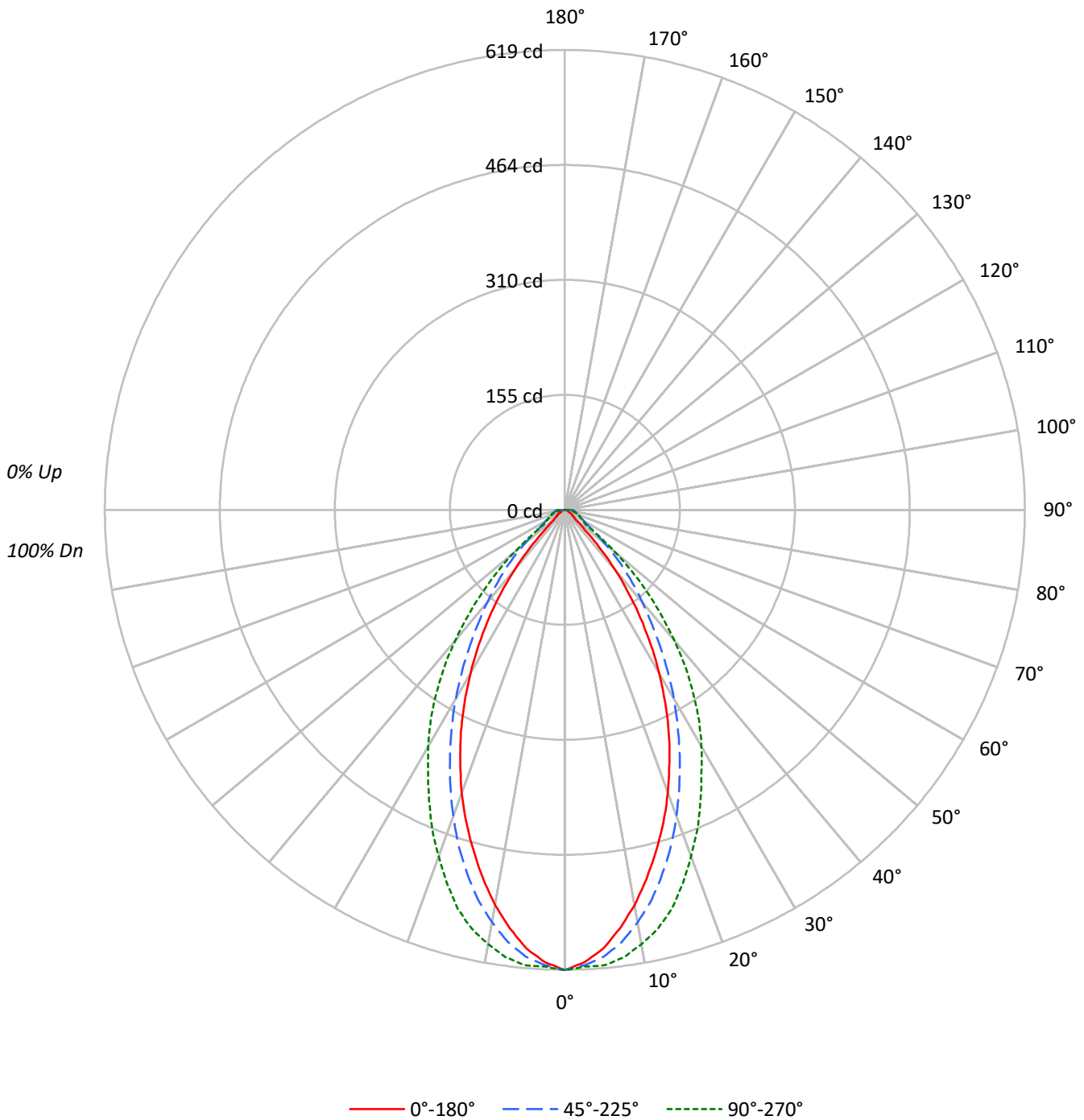
**Summary**

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 (Ain): 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

TEST NUMBER: P1058052

CATALOG NUMBER: S122RDR-S675D840-X4F0-XX-UDD-BVL-W

### Luminous Intensity Polar Plot



TEST NUMBER: P1058052

CATALOG NUMBER: S122RDR-S675D840-X4F0-XX-UDD-BVL-W

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									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°	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



TEST NUMBER: P1058052

CATALOG NUMBER: S122RDR-S675D840-X4F0-XX-UDD-BVL-W

**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	



TEST NUMBER: P1058052

CATALOG NUMBER: S122RDR-S675D840-X4F0-XX-UDD-BVL-W

**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

(END OF REPORT)