

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: P1055243

Luminaire Tested: S122R3DR-S675D935-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055243  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122R3DR-S675D935-X4F0-XX-UDD-FLL-S  
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

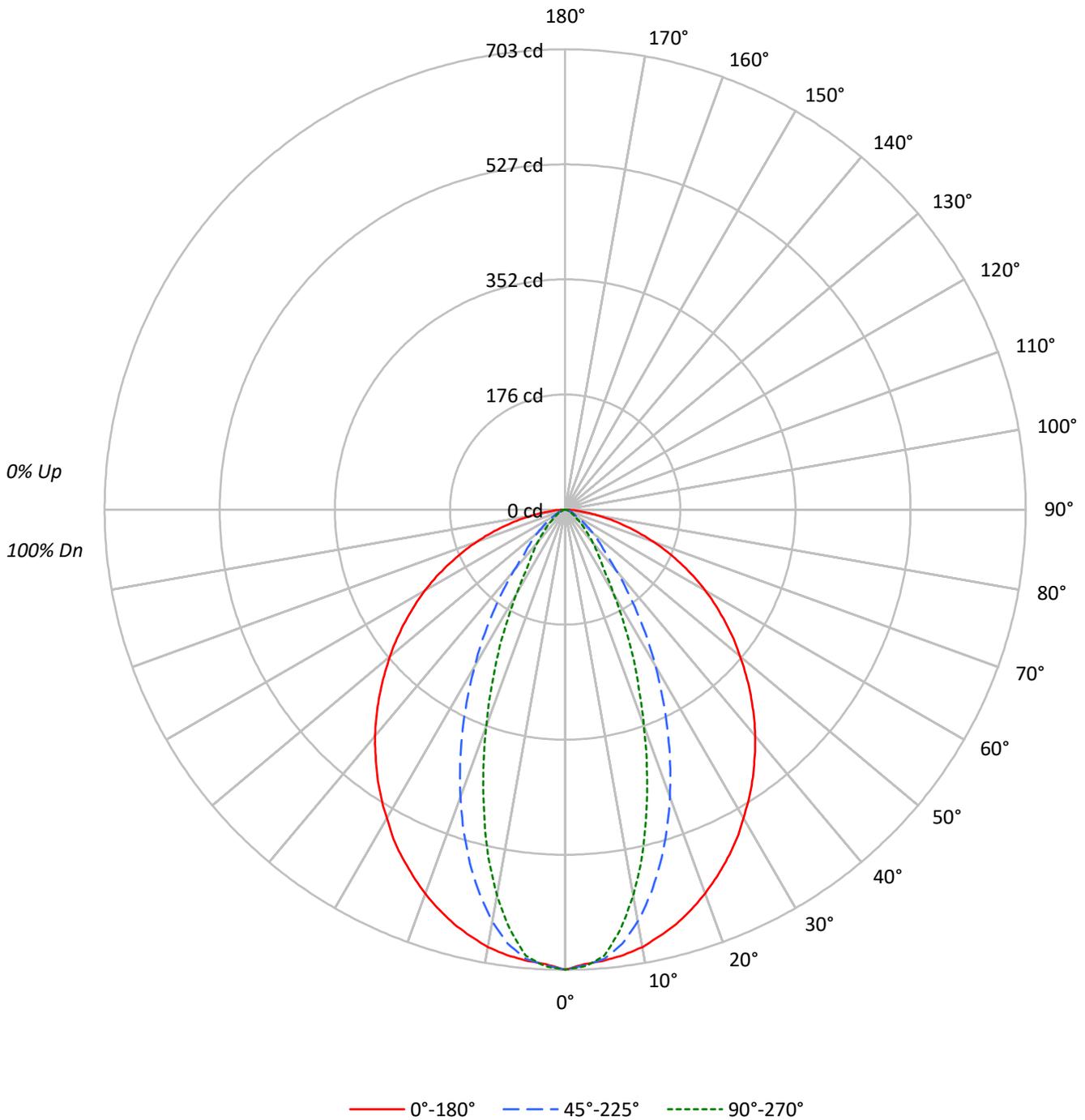
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 805.2 lumens  
Efficiency: N/A  
Efficacy: 30.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81  
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 26.4  
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

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CATALOG NUMBER: S122R3DR-S675D935-X4F0-XX-UDD-FLL-S

### 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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100	
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90			90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71			71	
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64			64	
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			58	
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53			53	
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49			49	
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45			45	
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42			42	
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39			39	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13311	13311	13311
5°	13149	13100	13018
10°	13053	12291	11512
15°	12851	10994	9389
20°	12585	9426	7083
25°	12275	7722	5057
30°	11905	6027	3220
35°	11550	4420	2151
40°	11159	2980	1617
45°	10728	2101	1152
50°	10278	1598	813
55°	9840	1110	598
60°	9363	750	489
65°	8684	542	386
70°	7916	427	332
75°	6866	381	249
80°	5444	284	284
85°	3000	370	196

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10728 cd/sqm



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CATALOG NUMBER: S122R3DR-S675D935-X4F0-XX-UDD-FLL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.2	8.0
10°-20°	157.7	19.6
20°-30°	180.1	22.4
30°-40°	152.7	19.0
40°-50°	114.0	14.2
50°-60°	73.7	9.1
60°-70°	41.1	5.1
70°-80°	18.0	2.2
80°-90°	3.7	0.5
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°	402.0	49.9
0°-40°	554.7	68.9
0°-60°	742.3	92.2
0°-90°	805.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	805.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	691	700	689	682	684	66
15°	655	639	560	501	479	184
25°	587	518	369	270	242	270
35°	499	376	191	104	93	312
45°	400	238	78	51	43	309
55°	298	113	34	21	18	266
65°	194	41	12	10	9	193
75°	94	9	5	4	3	100
85°	14	1	2	1	1	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	702.6	702.6	702.6	702.6	702.6
2.5°	694.8	705.2	696.5	696.5	698.3
5°	691.4	700.0	688.8	681.9	684.5
7.5°	686.2	692.2	669.0	648.3	646.6
10°	678.5	681.0	638.9	607.0	598.4
12.5°	667.3	661.2	601.8	557.1	542.4
15°	655.2	638.9	560.5	501.1	478.7
17.5°	640.6	611.3	514.9	442.6	415.0
20°	624.2	582.9	467.5	381.4	351.3
22.5°	606.1	551.0	418.4	323.7	293.6
25°	587.2	518.3	369.4	270.4	241.9
27.5°	567.4	483.9	321.2	222.1	191.1
30°	544.2	448.6	275.5	175.6	147.2
32.5°	522.6	411.6	233.3	136.0	111.9
35°	499.4	376.3	191.1	104.2	93.0
37.5°	475.3	341.0	154.1	87.8	78.4
40°	451.2	305.7	120.5	74.0	65.4
42.5°	426.2	271.2	93.0	62.0	53.4
45°	400.4	237.6	78.4	50.8	43.0
47.5°	374.5	204.1	65.4	40.5	34.4
50°	348.7	172.2	54.2	31.9	27.6
52.5°	323.7	142.1	43.0	25.8	22.4
55°	297.9	112.8	33.6	20.7	18.1
57.5°	272.1	87.8	25.8	17.2	15.5
60°	247.1	66.3	19.8	13.8	12.9
62.5°	221.3	53.4	15.5	11.2	10.3
65°	193.7	41.3	12.1	9.5	8.6
67.5°	168.8	30.1	9.5	7.7	6.9
70°	142.9	20.7	7.7	6.9	6.0
72.5°	118.0	12.9	6.0	5.2	5.2
75°	93.8	8.6	5.2	4.3	3.4
77.5°	71.5	5.2	3.4	3.4	2.6
80°	49.9	3.4	2.6	2.6	2.6
82.5°	31.0	2.6	1.7	1.7	1.7
85°	13.8	0.9	1.7	0.9	0.9
87.5°	2.6	0.9	0.9	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)