

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: P1055202

Luminaire Tested: S122R3DR-S485D835-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1055202  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122R3DR-S485D835-X4F0-XX-UDD-FLL-W  
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

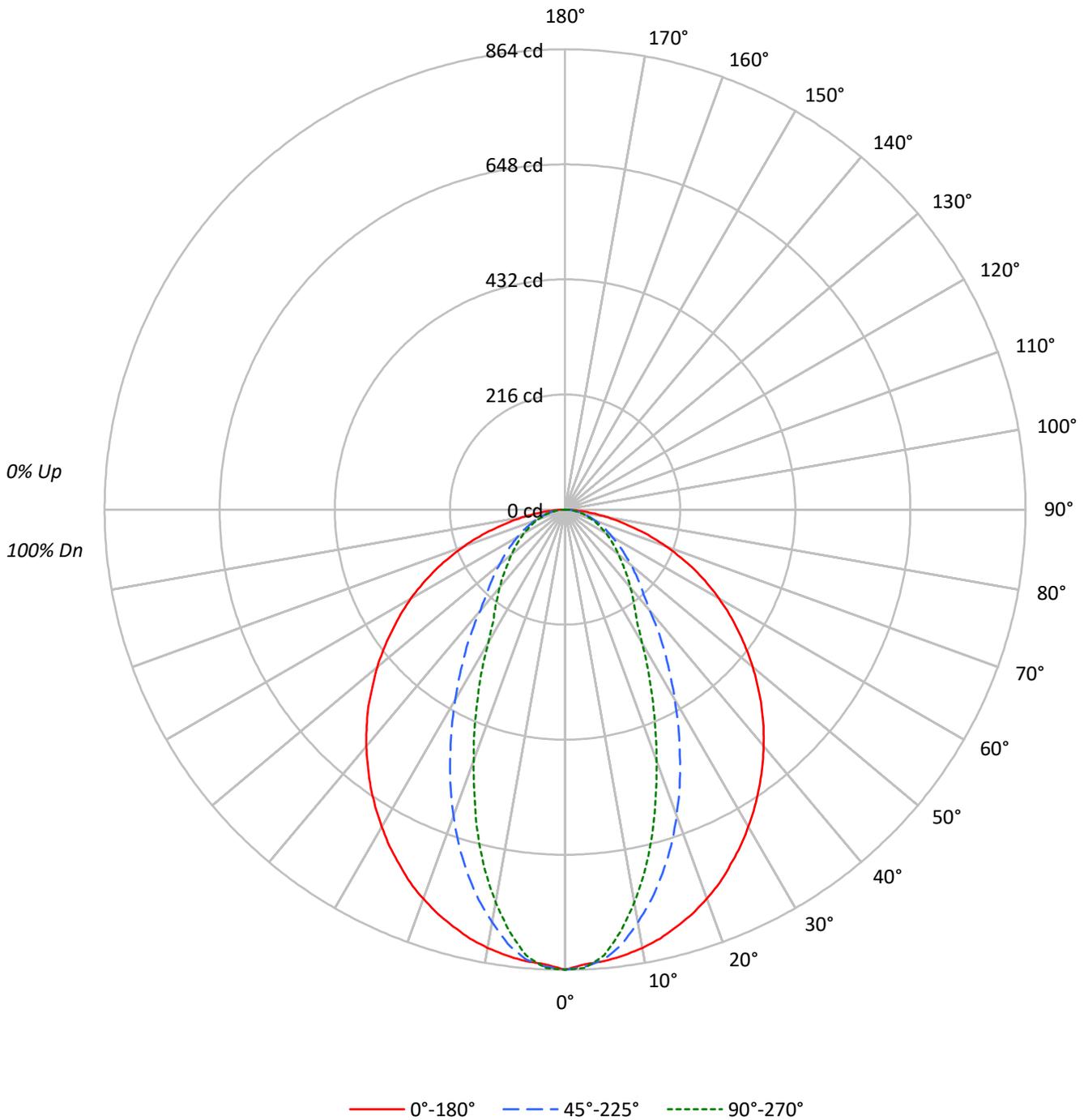
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1306.4 lumens  
Efficiency: N/A  
Efficacy: 68.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9  
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.1  
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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### 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				
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				

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

	0°	45°	90°
0°	16364	16364	16364
5°	16179	16124	15973
10°	16073	15129	14407
15°	15891	13867	12394
20°	15680	12333	10119
25°	15367	10657	8075
30°	15040	9004	6303
35°	14698	7533	5294
40°	14342	6109	4714
45°	13970	5340	4217
50°	13558	4725	3852
55°	13097	4271	3577
60°	12641	3884	3338
65°	12041	3559	3138
70°	11162	3318	2958
75°	9882	3016	2804
80°	8434	2837	2597
85°	5804	2522	2348

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13970 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.1	6.1
10°-20°	199.8	15.3
20°-30°	246.2	18.8
30°-40°	236.2	18.1
40°-50°	203.8	15.6
50°-60°	158.1	12.1
60°-70°	108.2	8.3
70°-80°	58.8	4.5
80°-90°	16.1	1.2
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°	525.2	40.2
0°-40°	761.4	58.3
0°-60°	1123.2	86.0
0°-90°	1306.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1306.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	851	863	848	837	840	81
15°	810	786	707	649	632	229
25°	735	656	510	416	386	339
35°	636	504	326	243	229	397
45°	521	351	199	165	157	402
55°	396	211	129	112	108	355
65°	269	115	79	72	70	265
75°	135	53	41	39	38	145
85°	27	13	12	12	11	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	863.7	863.7	863.7	863.7	863.7
2.5°	854.3	868.7	858.6	858.6	860.8
5°	850.7	863.0	847.8	837.0	839.9
7.5°	844.2	852.9	822.5	799.4	798.7
10°	835.5	836.2	786.4	756.1	748.9
12.5°	824.7	813.1	749.6	704.1	693.3
15°	810.2	785.7	707.0	649.2	631.9
17.5°	795.1	757.5	661.5	589.3	565.4
20°	777.7	723.6	611.7	529.3	501.9
22.5°	758.3	691.1	561.8	471.6	442.7
25°	735.1	656.4	509.8	416.0	386.3
27.5°	712.8	621.0	460.0	366.8	336.5
30°	687.5	582.8	411.6	319.9	288.1
32.5°	662.2	543.8	366.8	275.1	251.3
35°	635.5	504.1	325.7	242.6	228.9
37.5°	608.0	465.1	286.7	221.0	208.7
40°	579.9	426.1	247.0	200.0	190.6
42.5°	551.0	387.8	219.5	182.7	174.0
45°	521.4	351.0	199.3	164.6	157.4
47.5°	489.6	314.1	179.8	149.5	143.0
50°	460.0	278.7	160.3	135.8	130.7
52.5°	428.2	244.1	144.4	123.5	119.2
55°	396.5	210.9	129.3	111.9	108.3
57.5°	365.4	179.1	114.8	101.1	98.2
60°	333.6	153.8	102.5	91.0	88.1
62.5°	301.1	133.6	91.0	81.6	78.7
65°	268.6	114.8	79.4	72.2	70.0
67.5°	234.7	96.8	69.3	63.5	62.1
70°	201.5	80.9	59.9	54.9	53.4
72.5°	169.0	65.7	50.6	46.9	45.5
75°	135.0	52.7	41.2	39.0	38.3
77.5°	105.4	41.2	33.2	31.8	31.1
80°	77.3	30.3	26.0	24.6	23.8
82.5°	51.3	20.9	18.8	18.1	17.3
85°	26.7	13.0	11.6	11.6	10.8
87.5°	8.7	5.8	5.8	5.8	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)