

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: P1055201

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055201
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-S485D835-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, 80 CRI LEDS
Ballast/Driver: -

Summary

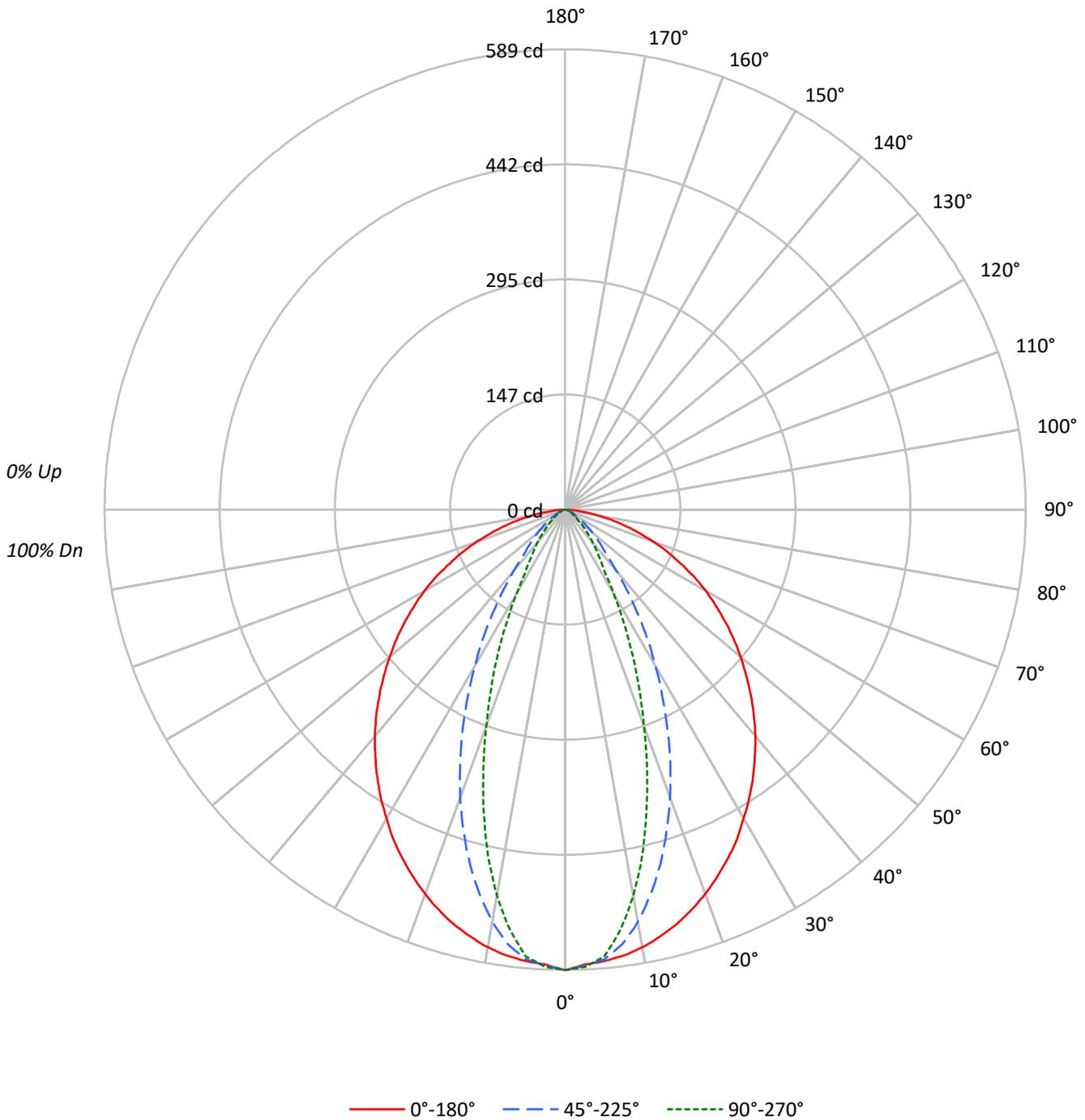
Lumens per Lamp: N/A
Luminaire Lumens: 675.3 lumens
Efficiency: N/A
Efficacy: 35.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	100	102	99	97	98	96	94	94	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11165	11165	11165
5°	11029	10987	10918
10°	10946	10308	9656
15°	10780	9221	7875
20°	10557	7905	5940
25°	10295	6476	4242
30°	9985	5056	2702
35°	9686	3708	1804
40°	9359	2500	1358
45°	8997	1760	967
50°	8621	1341	681
55°	8254	931	502
60°	7855	629	409
65°	7285	453	323
70°	6642	360	283
75°	5761	315	212
80°	4571	240	240
85°	2522	304	152

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8997 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.9	8.0
10°-20°	132.2	19.6
20°-30°	151.1	22.4
30°-40°	128.1	19.0
40°-50°	95.6	14.2
50°-60°	61.8	9.1
60°-70°	34.4	5.1
70°-80°	15.1	2.2
80°-90°	3.1	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°	337.2	49.9
0°-40°	465.3	68.9
0°-60°	622.6	92.2
0°-90°	675.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	675.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	580	587	578	572	574	55
15°	550	536	470	420	402	155
25°	492	435	310	227	203	227
35°	419	316	160	87	78	262
45°	336	199	66	43	36	259
55°	250	95	28	17	15	223
65°	162	35	10	8	7	162
75°	79	7	4	4	3	84
85°	12	1	1	1	1	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	589.3	589.3	589.3	589.3	589.3
2.5°	582.8	591.4	584.2	584.2	585.7
5°	579.9	587.1	577.7	571.9	574.1
7.5°	575.5	580.6	561.1	543.8	542.3
10°	569.0	571.2	535.8	509.1	501.9
12.5°	559.7	554.6	504.8	467.2	455.0
15°	549.6	535.8	470.1	420.3	401.5
17.5°	537.3	512.7	431.8	371.2	348.1
20°	523.6	488.9	392.1	319.9	294.6
22.5°	508.4	462.2	351.0	271.5	246.3
25°	492.5	434.7	309.8	226.8	202.9
27.5°	475.9	405.8	269.4	186.3	160.3
30°	456.4	376.2	231.1	147.3	123.5
32.5°	438.3	345.2	195.7	114.1	93.9
35°	418.8	315.6	160.3	87.4	78.0
37.5°	398.6	286.0	129.3	73.7	65.7
40°	378.4	256.4	101.1	62.1	54.9
42.5°	357.5	227.5	78.0	52.0	44.8
45°	335.8	199.3	65.7	42.6	36.1
47.5°	314.1	171.1	54.9	33.9	28.9
50°	292.5	144.4	45.5	26.7	23.1
52.5°	271.5	119.2	36.1	21.7	18.8
55°	249.9	94.6	28.2	17.3	15.2
57.5°	228.2	73.7	21.7	14.4	13.0
60°	207.3	55.6	16.6	11.6	10.8
62.5°	185.6	44.8	13.0	9.4	8.7
65°	162.5	34.7	10.1	7.9	7.2
67.5°	141.5	25.3	7.9	6.5	5.8
70°	119.9	17.3	6.5	5.8	5.1
72.5°	98.9	10.8	5.1	4.3	4.3
75°	78.7	7.2	4.3	3.6	2.9
77.5°	59.9	4.3	2.9	2.9	2.2
80°	41.9	2.9	2.2	2.2	2.2
82.5°	26.0	2.2	1.4	1.4	1.4
85°	11.6	0.7	1.4	0.7	0.7
87.5°	2.2	0.7	0.7	0.7	0.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)