

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: P1055269

Luminaire Tested: S122R3DR-S865D935-X4F0-XX-UDD-FLL-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055269
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S865D935-X4F0-XX-UDD-FLL-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

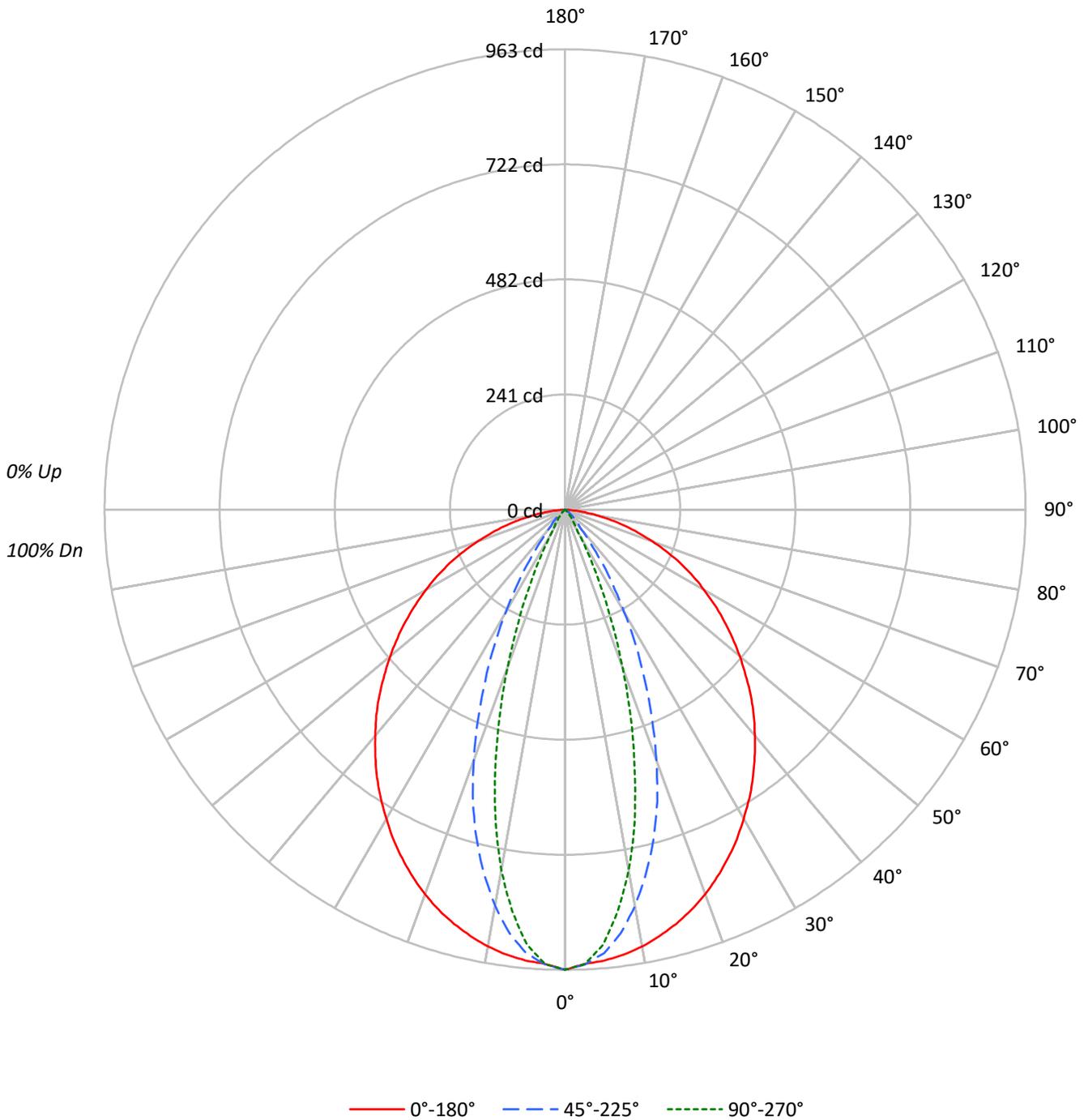
Lumens per Lamp: N/A
Luminaire Lumens: 875.8 lumens
Efficiency: N/A
Efficacy: 25.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	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	68	64	71	66	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	62	59	66	62	58	56
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	47	44	43

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18237	18237	18237
5°	18012	17717	17381
10°	17859	16198	14752
15°	17600	14020	11047
20°	17267	11266	7071
25°	16839	8257	3631
30°	16340	5397	1186
35°	15841	2995	692
40°	15270	1204	383
45°	14704	801	147
50°	14056	457	65
55°	13414	218	36
60°	12705	83	0
65°	11956	49	0
70°	10724	61	0
75°	9231	81	0
80°	7005	0	0
85°	2891	239	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14704 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.3	9.9
10°-20°	200.5	22.9
20°-30°	203.6	23.2
30°-40°	152.8	17.4
40°-50°	107.0	12.2
50°-60°	65.5	7.5
60°-70°	39.0	4.5
70°-80°	18.0	2.1
80°-90°	3.2	0.4
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°	490.4	56.0
0°-40°	643.1	73.4
0°-60°	815.6	93.1
0°-90°	875.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	875.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	963	963	963	963	963	
5°	947	956	932	914	914	90
15°	897	849	715	605	563	253
25°	806	664	395	226	174	371
35°	685	446	130	39	30	428
45°	549	236	30	9	6	423
55°	406	72	7	2	1	363
65°	267	21	1	1	0	263
75°	126	2	1	1	0	134
85°	13	0	1	1	0	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	962.6	962.6	962.6	962.6	962.6
2.5°	951.5	965.9	952.6	950.4	951.5
5°	947.1	956.0	931.6	913.9	913.9
7.5°	939.4	939.4	894.0	857.5	846.4
10°	928.3	916.1	842.0	783.4	766.8
12.5°	913.9	885.2	781.1	698.2	671.6
15°	897.3	848.6	714.8	605.2	563.2
17.5°	878.5	807.7	640.6	504.5	455.9
20°	856.4	763.4	558.8	401.6	350.7
22.5°	832.0	714.8	475.8	309.8	255.6
25°	805.5	663.9	395.0	225.7	173.7
27.5°	777.8	610.8	320.9	154.9	106.2
30°	746.9	555.4	246.7	91.8	54.2
32.5°	717.0	502.3	184.8	49.8	39.8
35°	684.9	445.9	129.5	38.7	29.9
37.5°	651.7	392.8	79.7	28.8	22.1
40°	617.4	338.6	48.7	21.0	15.5
42.5°	584.2	287.7	38.7	14.4	10.0
45°	548.8	235.7	29.9	8.9	5.5
47.5°	512.3	188.1	22.1	5.5	3.3
50°	476.9	146.1	15.5	3.3	2.2
52.5°	441.5	107.3	10.0	2.2	1.1
55°	406.1	71.9	6.6	2.2	1.1
57.5°	370.7	50.9	4.4	1.1	1.1
60°	335.3	39.8	2.2	1.1	0.0
62.5°	302.1	31.0	2.2	1.1	1.1
65°	266.7	21.0	1.1	1.1	0.0
67.5°	229.0	13.3	1.1	1.1	0.0
70°	193.6	7.7	1.1	1.1	0.0
72.5°	159.3	4.4	1.1	1.1	0.0
75°	126.1	2.2	1.1	1.1	0.0
77.5°	94.0	1.1	0.0	1.1	0.0
80°	64.2	0.0	0.0	1.1	0.0
82.5°	37.6	0.0	0.0	1.1	0.0
85°	13.3	0.0	1.1	1.1	0.0
87.5°	0.0	0.0	1.1	1.1	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)