

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: P1055271

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055271
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-S865D935-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, 90 CRI LEDS
Ballast/Driver: -

Summary

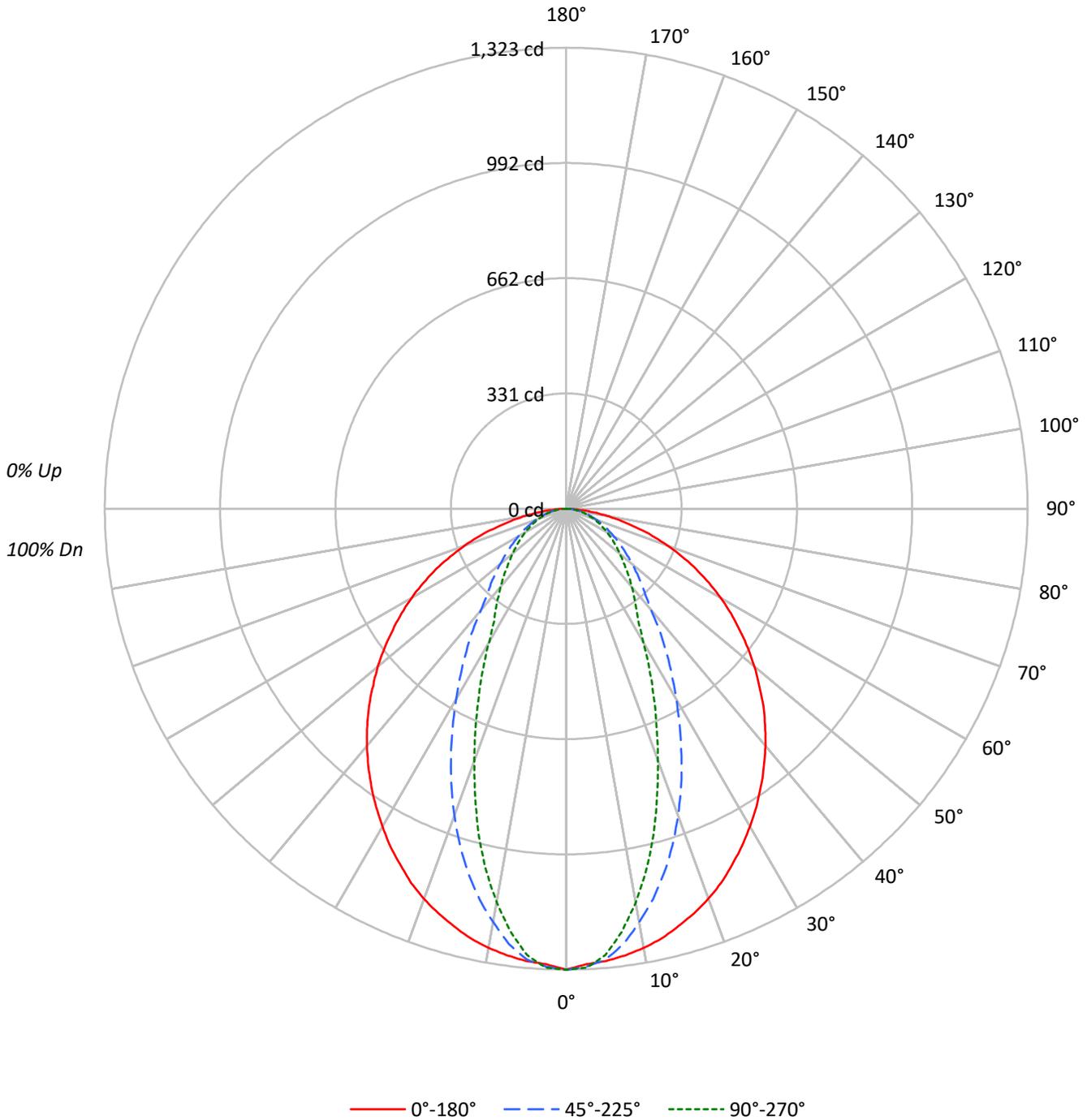
Lumens per Lamp: N/A
Luminaire Lumens: 2001.6 lumens
Efficiency: N/A
Efficacy: 57.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87			87	
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75			75	
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66			66	
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58			58	
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52			52	
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46			46	
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42			42	
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38			38	
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35			35	
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32			32	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25071	25071	25071
5°	24788	24705	24473
10°	24627	23180	22074
15°	24349	21246	18988
20°	24025	18896	15504
25°	23547	16328	12373
30°	23043	13798	9659
35°	22520	11541	8111
40°	21974	9359	7224
45°	21403	8183	6463
50°	20774	7239	5904
55°	20063	6543	5483
60°	19370	5953	5115
65°	18452	5456	4810
70°	17100	5085	4537
75°	15145	4619	4290
80°	12918	4342	3982
85°	8891	3848	3608

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 21403 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.3	6.1
10°-20°	306.2	15.3
20°-30°	377.3	18.8
30°-40°	361.9	18.1
40°-50°	312.2	15.6
50°-60°	242.2	12.1
60°-70°	165.8	8.3
70°-80°	90.0	4.5
80°-90°	24.7	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°	804.7	40.2
0°-40°	1166.6	58.3
0°-60°	1721.0	86.0
0°-90°	2001.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2001.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1323	1323	1323	1323	1323	
5°	1303	1322	1299	1282	1287	124
15°	1241	1204	1083	995	968	350
25°	1126	1006	781	637	592	519
35°	974	772	499	372	351	609
45°	799	538	305	252	241	616
55°	607	323	198	172	166	544
65°	412	176	122	111	107	406
75°	207	81	63	60	59	222
85°	41	20	18	18	17	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1323.3	1323.3	1323.3	1323.3	1323.3
2.5°	1308.9	1331.0	1315.6	1315.6	1318.9
5°	1303.4	1322.2	1299.0	1282.4	1286.8
7.5°	1293.4	1306.7	1260.2	1224.8	1223.7
10°	1280.1	1281.3	1204.9	1158.4	1147.4
12.5°	1263.6	1245.8	1148.5	1078.8	1062.2
15°	1241.4	1203.8	1083.2	994.7	968.1
17.5°	1218.2	1160.7	1013.5	902.9	866.3
20°	1191.6	1108.7	937.2	811.0	769.0
22.5°	1161.8	1058.9	860.8	722.5	678.2
25°	1126.4	1005.8	781.1	637.3	591.9
27.5°	1092.1	951.5	704.8	562.1	515.6
30°	1053.3	892.9	630.7	490.2	441.5
32.5°	1014.6	833.1	562.1	421.6	385.0
35°	973.7	772.3	499.0	371.8	350.7
37.5°	931.6	712.5	439.3	338.6	319.8
40°	888.5	652.8	378.4	306.5	292.1
42.5°	844.2	594.2	336.4	279.9	266.7
45°	798.8	537.7	305.4	252.3	241.2
47.5°	750.2	481.3	275.5	229.0	219.1
50°	704.8	427.1	245.6	208.0	200.3
52.5°	656.1	374.0	221.3	189.2	182.6
55°	607.4	323.1	198.1	171.5	166.0
57.5°	559.9	274.4	175.9	154.9	150.5
60°	511.2	235.7	157.1	139.4	135.0
62.5°	461.4	204.7	139.4	125.0	120.6
65°	411.6	175.9	121.7	110.6	107.3
67.5°	359.6	148.3	106.2	97.4	95.2
70°	308.7	123.9	91.8	84.1	81.9
72.5°	258.9	100.7	77.5	71.9	69.7
75°	206.9	80.8	63.1	59.7	58.6
77.5°	161.5	63.1	50.9	48.7	47.6
80°	118.4	46.5	39.8	37.6	36.5
82.5°	78.6	32.1	28.8	27.7	26.6
85°	40.9	19.9	17.7	17.7	16.6
87.5°	13.3	8.9	8.9	8.9	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)