

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: P1055175

Luminaire Tested: S122R3DR-S290D835-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055175
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-S290D835-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

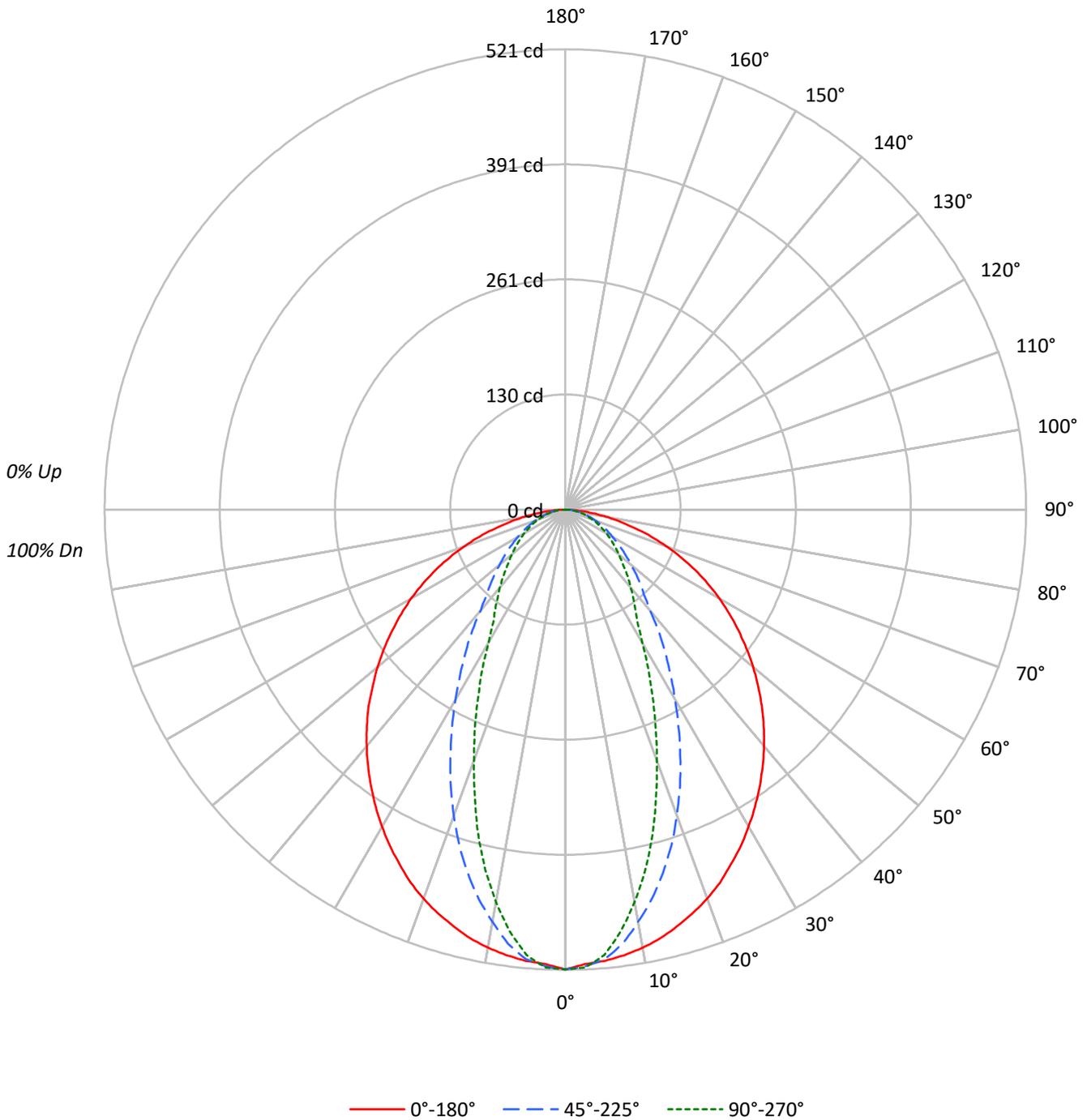
Lumens per Lamp: N/A
Luminaire Lumens: 787.4 lumens
Efficiency: N/A
Efficacy: 62.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 12.6
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	
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	
1	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87	87	87	
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75	75	75	
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66	66	66	
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58	58	58	
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52	52	52	
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46	46	46	
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42	42	42	
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38	38	38	
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35	35	35	
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32	32	32	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9863	9863	9863
5°	9751	9718	9627
10°	9688	9119	8684
15°	9580	8358	7471
20°	9452	7434	6099
25°	9263	6424	4869
30°	9066	5428	3800
35°	8858	4540	3192
40°	8644	3683	2842
45°	8421	3218	2543
50°	8173	2847	2323
55°	7894	2573	2157
60°	7620	2342	2012
65°	7258	2147	1892
70°	6725	2000	1784
75°	5959	1815	1691
80°	5084	1713	1571
85°	3500	1522	1413

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8421 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.7	6.1
10°-20°	120.4	15.3
20°-30°	148.4	18.8
30°-40°	142.4	18.1
40°-50°	122.8	15.6
50°-60°	95.3	12.1
60°-70°	65.2	8.3
70°-80°	35.4	4.5
80°-90°	9.7	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°	316.5	40.2
0°-40°	458.9	58.3
0°-60°	677.0	86.0
0°-90°	787.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	787.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	513	520	511	504	506	49
15°	488	474	426	391	381	138
25°	443	396	307	251	233	204
35°	383	304	196	146	138	240
45°	314	212	120	99	95	242
55°	239	127	78	68	65	214
65°	162	69	48	44	42	160
75°	81	32	25	24	23	87
85°	16	8	7	7	6	21
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	520.6	520.6	520.6	520.6	520.6
2.5°	514.9	523.6	517.5	517.5	518.8
5°	512.7	520.1	511.0	504.5	506.2
7.5°	508.8	514.0	495.8	481.8	481.4
10°	503.6	504.0	474.0	455.7	451.4
12.5°	497.1	490.1	451.8	424.4	417.8
15°	488.4	473.6	426.1	391.3	380.9
17.5°	479.2	456.6	398.7	355.2	340.8
20°	468.8	436.1	368.7	319.0	302.5
22.5°	457.0	416.5	338.6	284.2	266.8
25°	443.1	395.7	307.3	250.7	232.9
27.5°	429.6	374.3	277.3	221.1	202.8
30°	414.4	351.3	248.1	192.8	173.7
32.5°	399.1	327.7	221.1	165.8	151.5
35°	383.0	303.8	196.3	146.2	138.0
37.5°	366.5	280.3	172.8	133.2	125.8
40°	349.5	256.8	148.9	120.6	114.9
42.5°	332.1	233.7	132.3	110.1	104.9
45°	314.3	211.5	120.1	99.2	94.9
47.5°	295.1	189.3	108.4	90.1	86.2
50°	277.3	168.0	96.6	81.8	78.8
52.5°	258.1	147.1	87.1	74.4	71.8
55°	239.0	127.1	77.9	67.5	65.3
57.5°	220.2	107.9	69.2	60.9	59.2
60°	201.1	92.7	61.8	54.8	53.1
62.5°	181.5	80.5	54.8	49.2	47.4
65°	161.9	69.2	47.9	43.5	42.2
67.5°	141.5	58.3	41.8	38.3	37.4
70°	121.4	48.7	36.1	33.1	32.2
72.5°	101.9	39.6	30.5	28.3	27.4
75°	81.4	31.8	24.8	23.5	23.1
77.5°	63.5	24.8	20.0	19.2	18.7
80°	46.6	18.3	15.7	14.8	14.4
82.5°	30.9	12.6	11.3	10.9	10.4
85°	16.1	7.8	7.0	7.0	6.5
87.5°	5.2	3.5	3.5	3.5	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)