

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: P1055262

Luminaire Tested: S122R3DR-S865D850-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055262
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-S865D850-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

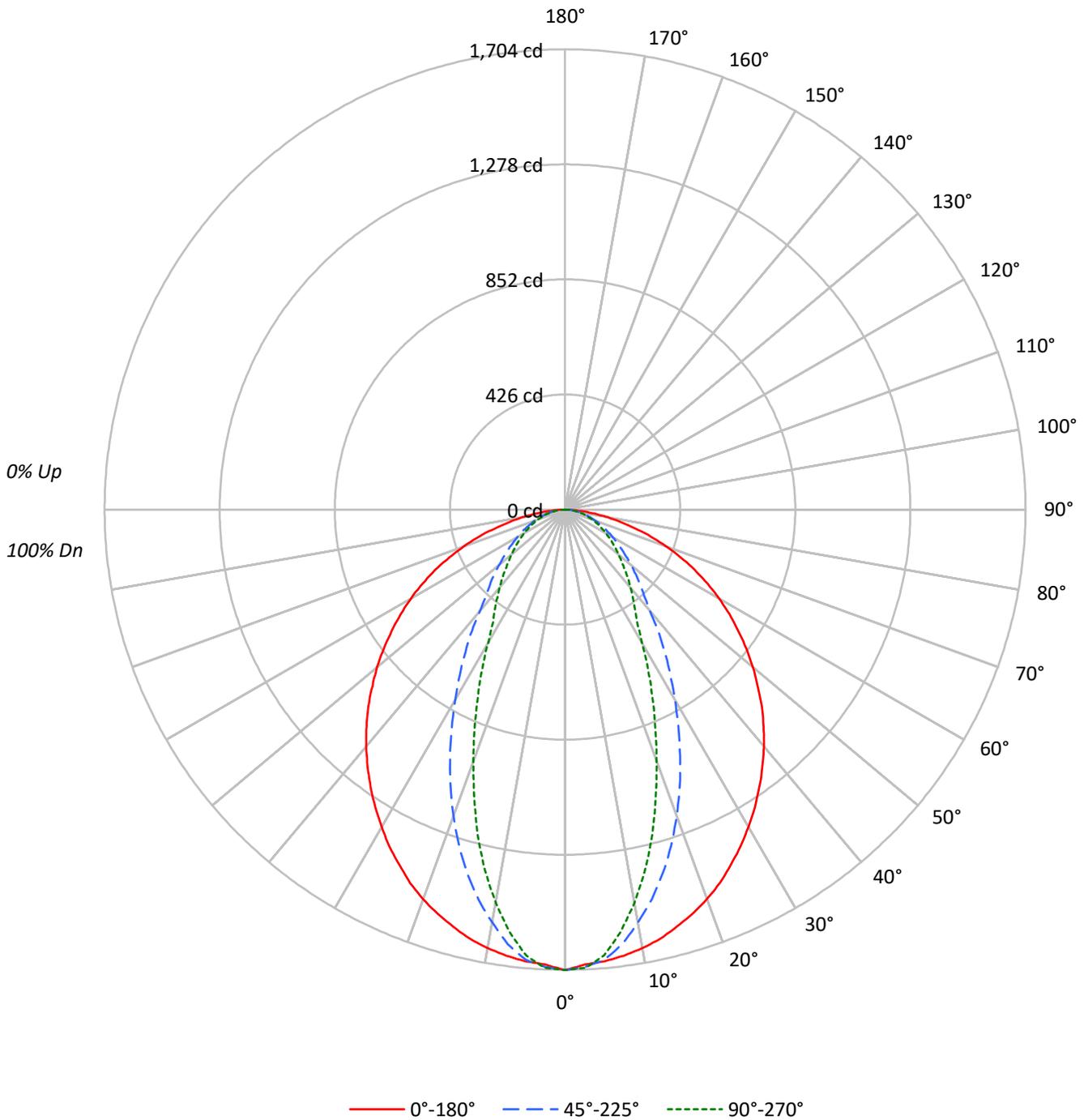
Lumens per Lamp: N/A
Luminaire Lumens: 2578.1 lumens
Efficiency: N/A
Efficacy: 74.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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°	32293	32293	32293
5°	31928	31819	31521
10°	31722	29858	28432
15°	31363	27366	24459
20°	30946	24337	19970
25°	30328	21032	15938
30°	29680	17771	12439
35°	29006	14865	10450
40°	28303	12054	9304
45°	27568	10538	8325
50°	26757	9326	7601
55°	25844	8426	7062
60°	24948	7669	6589
65°	23769	7029	6195
70°	22025	6553	5844
75°	19508	5944	5527
80°	16638	5597	5128
85°	11456	4956	4652

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 27568 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.2	6.1
10°-20°	394.3	15.3
20°-30°	485.9	18.8
30°-40°	466.2	18.1
40°-50°	402.1	15.6
50°-60°	312.0	12.1
60°-70°	213.6	8.3
70°-80°	116.0	4.5
80°-90°	31.8	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°	1036.4	40.2
0°-40°	1502.6	58.3
0°-60°	2216.7	86.0
0°-90°	2578.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2578.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1704	1704	1704	1704	1704	
5°	1679	1703	1673	1652	1657	159
15°	1599	1550	1395	1281	1247	451
25°	1451	1295	1006	821	762	669
35°	1254	995	643	479	452	784
45°	1029	693	393	325	311	793
55°	782	416	255	221	214	700
65°	530	227	157	142	138	523
75°	266	104	81	77	76	286
85°	53	26	23	23	21	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1704.5	1704.5	1704.5	1704.5	1704.5
2.5°	1685.9	1714.4	1694.5	1694.5	1698.8
5°	1678.8	1703.0	1673.1	1651.7	1657.4
7.5°	1666.0	1683.1	1623.2	1577.6	1576.2
10°	1648.9	1650.3	1552.0	1492.1	1477.9
12.5°	1627.5	1604.7	1479.3	1389.5	1368.1
15°	1599.0	1550.5	1395.2	1281.2	1247.0
17.5°	1569.1	1495.0	1305.4	1162.9	1115.9
20°	1534.9	1428.0	1207.1	1044.6	990.5
22.5°	1496.4	1363.9	1108.8	930.6	873.6
25°	1450.8	1295.4	1006.1	820.9	762.4
27.5°	1406.6	1225.6	907.8	724.0	664.1
30°	1356.7	1150.1	812.3	631.3	568.6
32.5°	1306.9	1073.1	724.0	543.0	495.9
35°	1254.1	994.7	642.7	478.8	451.8
37.5°	1200.0	917.8	565.8	436.1	411.9
40°	1144.4	840.8	487.4	394.8	376.2
42.5°	1087.4	765.3	433.2	360.6	343.5
45°	1028.9	692.6	393.3	324.9	310.7
47.5°	966.2	619.9	354.9	295.0	282.2
50°	907.8	550.1	316.4	267.9	257.9
52.5°	845.1	481.7	285.0	243.7	235.1
55°	782.4	416.1	255.1	220.9	213.8
57.5°	721.1	353.4	226.6	199.5	193.8
60°	658.4	303.6	202.4	179.6	173.9
62.5°	594.3	263.7	179.6	161.0	155.3
65°	530.2	226.6	156.8	142.5	138.2
67.5°	463.2	191.0	136.8	125.4	122.6
70°	397.6	159.6	118.3	108.3	105.5
72.5°	333.5	129.7	99.8	92.6	89.8
75°	266.5	104.0	81.2	77.0	75.5
77.5°	208.1	81.2	65.6	62.7	61.3
80°	152.5	59.9	51.3	48.5	47.0
82.5°	101.2	41.3	37.1	35.6	34.2
85°	52.7	25.7	22.8	22.8	21.4
87.5°	17.1	11.4	11.4	11.4	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)