

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: P1055253

Luminaire Tested: S122R3DR-S865D830-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055253
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-S865D830-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

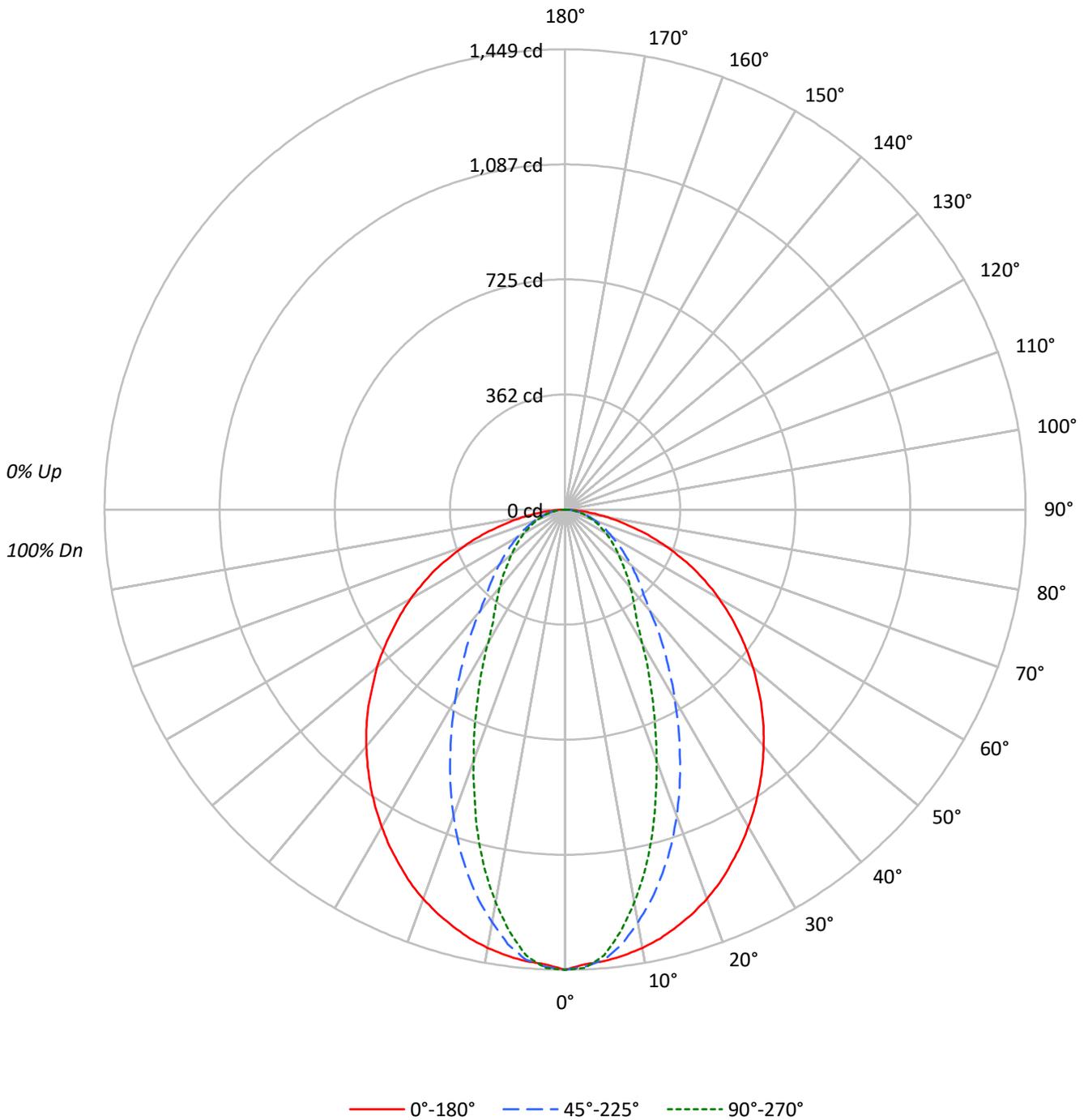
Lumens per Lamp: N/A
Luminaire Lumens: 2191.1 lumens
Efficiency: N/A
Efficacy: 63.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27445	27445	27445
5°	27135	27044	26791
10°	26960	25375	24163
15°	26656	23259	20787
20°	26301	20684	16972
25°	25775	17875	13546
30°	25226	15104	10573
35°	24653	12635	8881
40°	24054	10244	7909
45°	23431	8957	7073
50°	22743	7926	6461
55°	21966	7161	6002
60°	21204	6517	5600
65°	20200	5971	5267
70°	18718	5567	4963
75°	16580	5051	4700
80°	14140	4757	4364
85°	9739	4217	3956

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 23431 cd/sqm



TEST NUMBER: P105253

CATALOG NUMBER: S122R3DR-S865D830-X4F0-XX-UDD-FLL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.7	6.1
10°-20°	335.2	15.3
20°-30°	413.0	18.8
30°-40°	396.2	18.1
40°-50°	341.8	15.6
50°-60°	265.1	12.1
60°-70°	181.5	8.3
70°-80°	98.6	4.5
80°-90°	27.0	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°	880.9	40.2
0°-40°	1277.1	58.3
0°-60°	1884.0	86.0
0°-90°	2191.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2191.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1449	1449	1449	1449	1449	
5°	1427	1447	1422	1404	1409	135
15°	1359	1318	1186	1089	1060	383
25°	1233	1101	855	698	648	568
35°	1066	845	546	407	384	667
45°	874	589	334	276	264	674
55°	665	354	217	188	182	595
65°	451	193	133	121	118	445
75°	226	88	69	65	64	243
85°	45	22	19	19	18	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1448.6	1448.6	1448.6	1448.6	1448.6
2.5°	1432.9	1457.1	1440.2	1440.2	1443.8
5°	1426.8	1447.4	1422.0	1403.8	1408.7
7.5°	1415.9	1430.5	1379.6	1340.8	1339.6
10°	1401.4	1402.6	1319.0	1268.2	1256.0
12.5°	1383.2	1363.8	1257.3	1180.9	1162.8
15°	1359.0	1317.8	1185.8	1088.9	1059.8
17.5°	1333.6	1270.6	1109.5	988.4	948.4
20°	1304.5	1213.7	1025.9	887.8	841.8
22.5°	1271.8	1159.1	942.3	790.9	742.5
25°	1233.0	1101.0	855.1	697.7	648.0
27.5°	1195.5	1041.7	771.6	615.3	564.4
30°	1153.1	977.5	690.4	536.6	483.3
32.5°	1110.7	912.1	615.3	461.5	421.5
35°	1065.9	845.4	546.3	407.0	384.0
37.5°	1019.9	780.0	480.9	370.6	350.0
40°	972.6	714.6	414.2	335.5	319.8
42.5°	924.2	650.4	368.2	306.4	291.9
45°	874.5	588.7	334.3	276.2	264.0
47.5°	821.2	526.9	301.6	250.7	239.8
50°	771.6	467.5	268.9	227.7	219.2
52.5°	718.3	409.4	242.2	207.1	199.9
55°	665.0	353.7	216.8	187.7	181.7
57.5°	612.9	300.4	192.6	169.6	164.7
60°	559.6	258.0	172.0	152.6	147.8
62.5°	505.1	224.1	152.6	136.9	132.0
65°	450.6	192.6	133.2	121.1	117.5
67.5°	393.6	162.3	116.3	106.6	104.2
70°	337.9	135.7	100.5	92.1	89.6
72.5°	283.4	110.2	84.8	78.7	76.3
75°	226.5	88.4	69.0	65.4	64.2
77.5°	176.8	69.0	55.7	53.3	52.1
80°	129.6	50.9	43.6	41.2	40.0
82.5°	86.0	35.1	31.5	30.3	29.1
85°	44.8	21.8	19.4	19.4	18.2
87.5°	14.5	9.7	9.7	9.7	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)