

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: P1055226

Luminaire Tested: S122R3DR-S675D830-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055226
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-S675D830-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

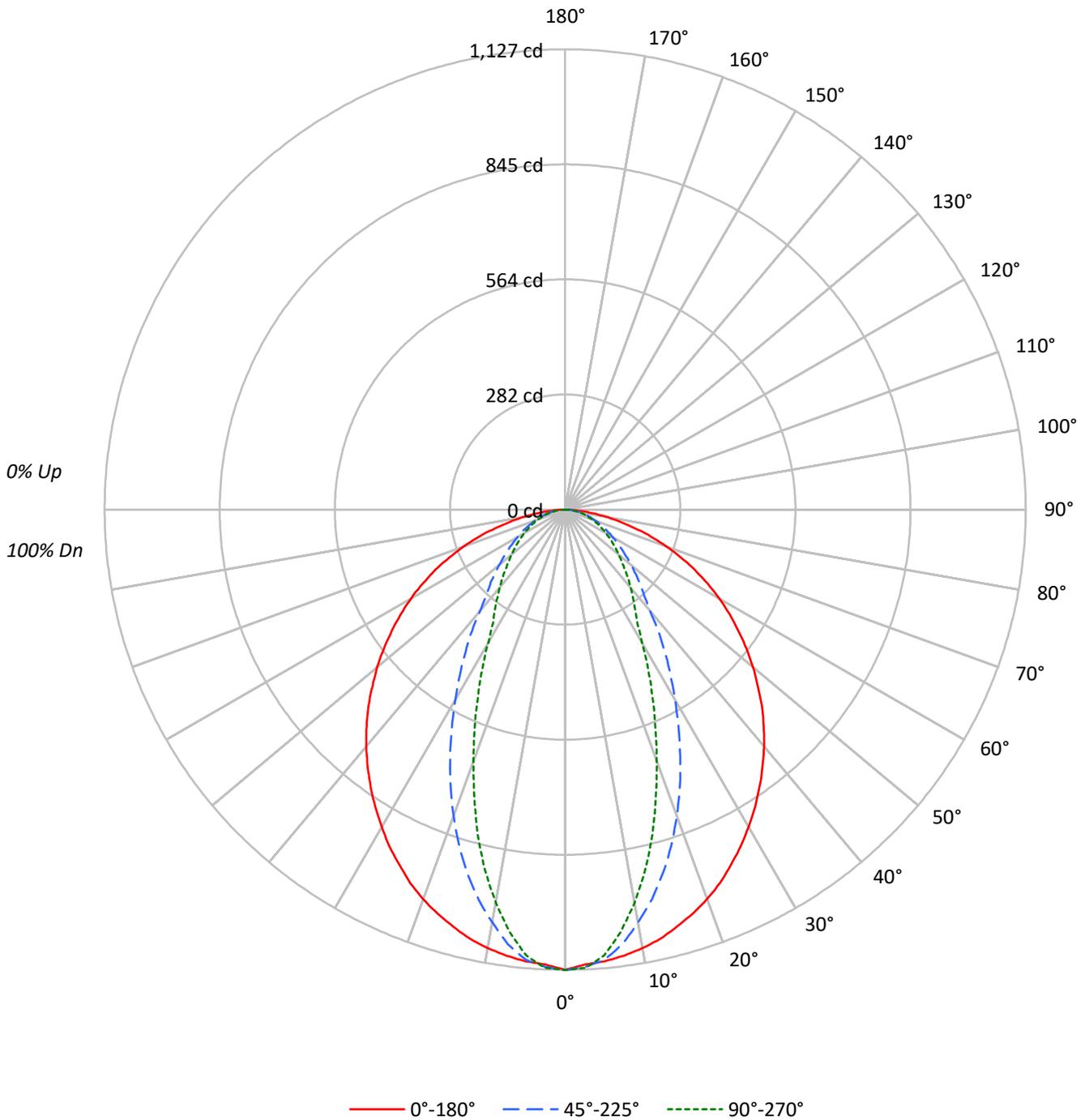
Lumens per Lamp: N/A
Luminaire Lumens: 1705.1 lumens
Efficiency: N/A
Efficacy: 64.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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	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°	21358	21358	21358
5°	21116	21044	20848
10°	20979	19746	18803
15°	20742	18098	16176
20°	20466	16095	13208
25°	20058	13910	10542
30°	19630	11752	8228
35°	19183	9832	6911
40°	18720	7971	6153
45°	18233	6969	5506
50°	17696	6166	5028
55°	17094	5572	4671
60°	16502	5070	4358
65°	15717	4649	4097
70°	14569	4332	3861
75°	12905	3931	3660
80°	11009	3699	3393
85°	7587	3282	3065

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18233 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.3	6.1
10°-20°	260.8	15.3
20°-30°	321.4	18.8
30°-40°	308.3	18.1
40°-50°	265.9	15.6
50°-60°	206.3	12.1
60°-70°	141.3	8.3
70°-80°	76.7	4.5
80°-90°	21.0	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°	685.5	40.2
0°-40°	993.8	58.3
0°-60°	1466.1	86.0
0°-90°	1705.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1705.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1127	1127	1127	1127	1127	
5°	1110	1126	1106	1092	1096	105
15°	1058	1026	923	847	825	298
25°	960	857	665	543	504	442
35°	829	658	425	317	299	519
45°	680	458	260	215	206	524
55°	518	275	169	146	141	463
65°	351	150	104	94	91	346
75°	176	69	54	51	50	189
85°	35	17	15	15	14	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1127.3	1127.3	1127.3	1127.3	1127.3
2.5°	1115.0	1133.9	1120.7	1120.7	1123.5
5°	1110.3	1126.3	1106.5	1092.4	1096.2
7.5°	1101.8	1113.1	1073.6	1043.4	1042.5
10°	1090.5	1091.5	1026.4	986.8	977.4
12.5°	1076.4	1061.3	978.4	919.0	904.8
15°	1057.5	1025.5	922.7	847.3	824.7
17.5°	1037.7	988.7	863.4	769.1	738.0
20°	1015.1	944.4	798.3	690.9	655.1
22.5°	989.7	902.0	733.3	615.5	577.8
25°	959.5	856.8	665.4	542.9	504.3
27.5°	930.3	810.6	600.4	478.8	439.2
30°	897.3	760.6	537.2	417.5	376.1
32.5°	864.3	709.7	478.8	359.1	328.0
35°	829.4	657.9	425.1	316.7	298.8
37.5°	793.6	607.0	374.2	288.4	272.4
40°	756.9	556.1	322.3	261.1	248.8
42.5°	719.2	506.1	286.5	238.5	227.2
45°	680.5	458.1	260.1	214.9	205.5
47.5°	639.0	410.0	234.7	195.1	186.6
50°	600.4	363.8	209.2	177.2	170.6
52.5°	558.9	318.6	188.5	161.2	155.5
55°	517.5	275.2	168.7	146.1	141.4
57.5°	476.9	233.8	149.9	132.0	128.2
60°	435.5	200.8	133.8	118.8	115.0
62.5°	393.0	174.4	118.8	106.5	102.7
65°	350.6	149.9	103.7	94.3	91.4
67.5°	306.3	126.3	90.5	82.9	81.1
70°	263.0	105.6	78.2	71.6	69.7
72.5°	220.6	85.8	66.0	61.3	59.4
75°	176.3	68.8	53.7	50.9	50.0
77.5°	137.6	53.7	43.4	41.5	40.5
80°	100.9	39.6	33.9	32.0	31.1
82.5°	66.9	27.3	24.5	23.6	22.6
85°	34.9	17.0	15.1	15.1	14.1
87.5°	11.3	7.5	7.5	7.5	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)