

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: P1055199

Luminaire Tested: S122R3DR-S485D830-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055199
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-S485D830-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

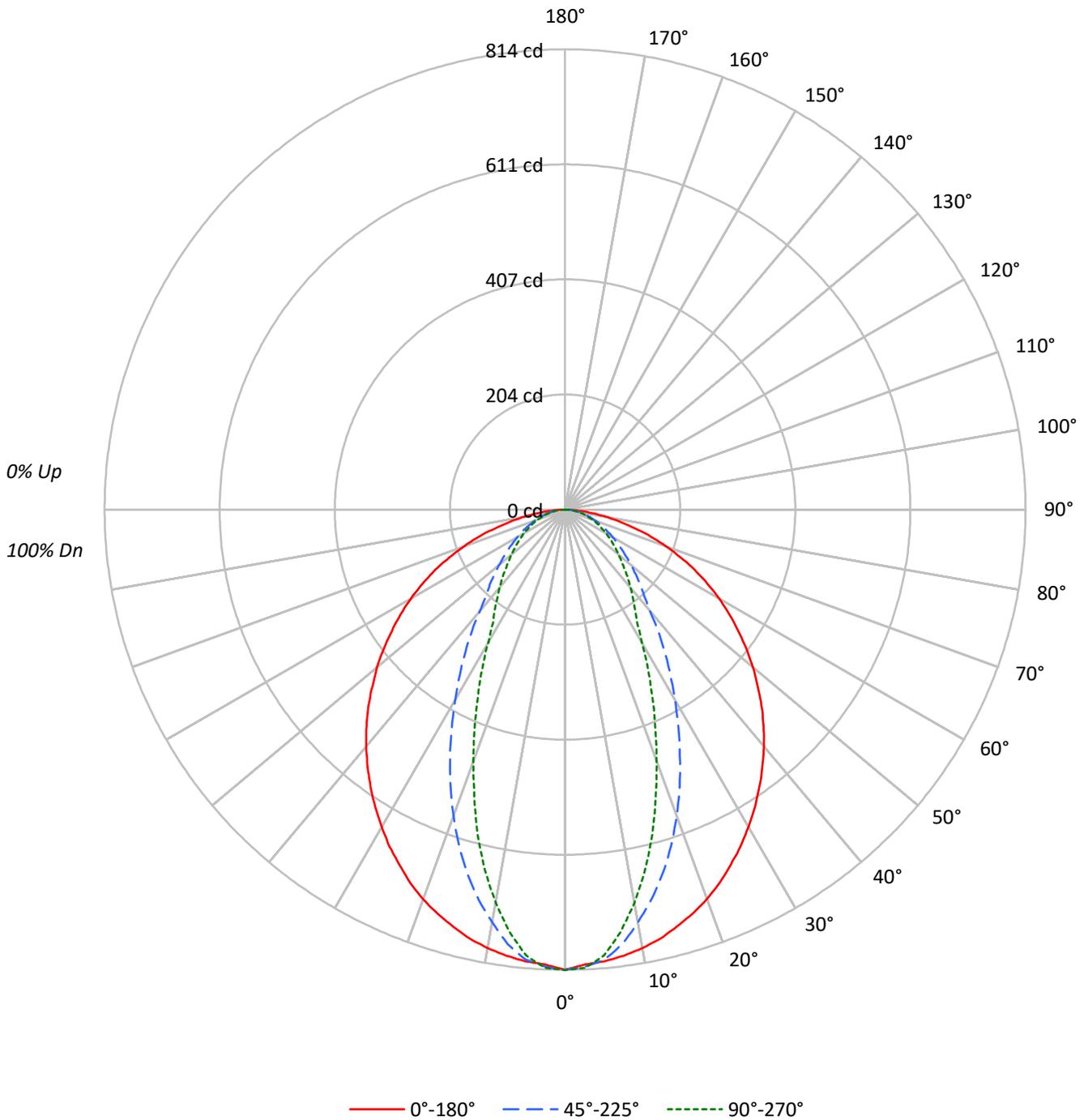
Lumens per Lamp: N/A
Luminaire Lumens: 1231.3 lumens
Efficiency: N/A
Efficacy: 64.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
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

TEST NUMBER: P1055199

CATALOG NUMBER: S122R3DR-S485D830-X4F0-XX-UDD-FLL-W

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°	15424	15424	15424
5°	15249	15197	15055
10°	15150	14259	13578
15°	14979	13071	11682
20°	14781	11623	9539
25°	14485	10045	7611
30°	14176	8488	5942
35°	13854	7100	4991
40°	13519	5758	4444
45°	13166	5034	3976
50°	12780	4454	3631
55°	12344	4023	3372
60°	11917	3664	3145
65°	11351	3358	2959
70°	10519	3130	2792
75°	9319	2840	2643
80°	7943	2673	2455
85°	5478	2369	2217

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13166 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.6	6.1
10°-20°	188.3	15.3
20°-30°	232.1	18.8
30°-40°	222.7	18.1
40°-50°	192.1	15.6
50°-60°	149.0	12.1
60°-70°	102.0	8.3
70°-80°	55.4	4.5
80°-90°	15.2	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°	495.0	40.2
0°-40°	717.7	58.3
0°-60°	1058.7	86.0
0°-90°	1231.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1231.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	814	814	814	814	814	
5°	802	813	799	789	792	76
15°	764	740	666	612	596	215
25°	693	619	480	392	364	319
35°	599	475	307	229	216	375
45°	491	331	188	155	148	379
55°	374	199	122	106	102	334
65°	253	108	75	68	66	250
75°	127	50	39	37	36	136
85°	25	12	11	11	10	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	814.1	814.1	814.1	814.1	814.1
2.5°	805.2	818.8	809.3	809.3	811.3
5°	801.8	813.4	799.1	788.9	791.6
7.5°	795.7	803.8	775.3	753.5	752.8
10°	787.5	788.2	741.2	712.6	705.8
12.5°	777.3	766.4	706.5	663.6	653.4
15°	763.7	740.5	666.4	611.9	595.6
17.5°	749.4	714.0	623.5	555.4	532.9
20°	733.1	682.0	576.5	498.9	473.1
22.5°	714.7	651.4	529.5	444.5	417.2
25°	692.9	618.7	480.5	392.1	364.1
27.5°	671.8	585.4	433.6	345.8	317.2
30°	648.0	549.3	388.0	301.5	271.6
32.5°	624.2	512.5	345.8	259.3	236.9
35°	599.0	475.1	307.0	228.7	215.8
37.5°	573.1	438.3	270.2	208.3	196.7
40°	546.6	401.6	232.8	188.5	179.7
42.5°	519.3	365.5	206.9	172.2	164.0
45°	491.4	330.8	187.9	155.2	148.4
47.5°	461.5	296.1	169.5	140.9	134.8
50°	433.6	262.7	151.1	128.0	123.2
52.5°	403.6	230.1	136.1	116.4	112.3
55°	373.7	198.7	121.8	105.5	102.1
57.5°	344.4	168.8	108.2	95.3	92.6
60°	314.5	145.0	96.7	85.8	83.0
62.5°	283.8	125.9	85.8	76.9	74.2
65°	253.2	108.2	74.9	68.1	66.0
67.5°	221.2	91.2	65.3	59.9	58.5
70°	189.9	76.2	56.5	51.7	50.4
72.5°	159.3	61.9	47.6	44.2	42.9
75°	127.3	49.7	38.8	36.8	36.1
77.5°	99.4	38.8	31.3	29.9	29.3
80°	72.8	28.6	24.5	23.1	22.5
82.5°	48.3	19.7	17.7	17.0	16.3
85°	25.2	12.3	10.9	10.9	10.2
87.5°	8.2	5.4	5.4	5.4	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)