

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: P1055208

Luminaire Tested: S122R3DR-S485D850-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055208
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-S485D850-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

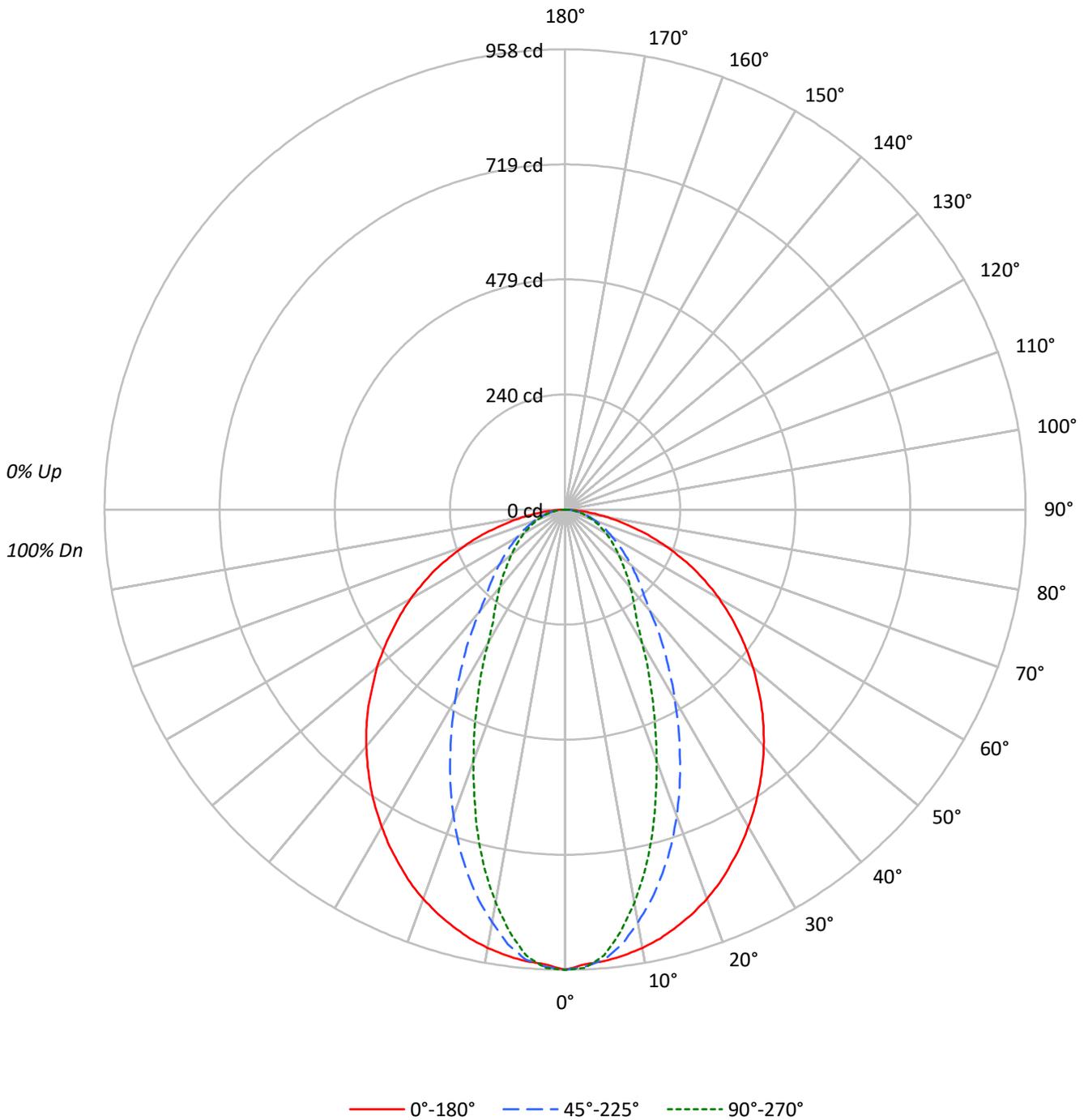
Lumens per Lamp: N/A
Luminaire Lumens: 1448.7 lumens
Efficiency: N/A
Efficacy: 75.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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: P1055208

CATALOG NUMBER: S122R3DR-S485D850-X4F0-XX-UDD-FLL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1055208

CATALOG NUMBER: S122R3DR-S485D850-X4F0-XX-UDD-FLL-W

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°	18146	18146	18146
5°	17942	17881	17714
10°	17826	16778	15977
15°	17625	15378	13744
20°	17390	13676	11222
25°	17043	11819	8958
30°	16679	9987	6990
35°	16301	8354	5872
40°	15905	6774	5228
45°	15492	5921	4678
50°	15035	5241	4274
55°	14524	4737	3967
60°	14020	4308	3702
65°	13355	3949	3483
70°	12375	3684	3285
75°	10966	3338	3104
80°	9350	3142	2880
85°	6434	2782	2609

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15492 cd/sqm



TEST NUMBER: P1055208

CATALOG NUMBER: S122R3DR-S485D850-X4F0-XX-UDD-FLL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.8	6.1
10°-20°	221.6	15.3
20°-30°	273.1	18.8
30°-40°	262.0	18.1
40°-50°	226.0	15.6
50°-60°	175.3	12.1
60°-70°	120.0	8.3
70°-80°	65.2	4.5
80°-90°	17.8	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°	582.4	40.2
0°-40°	844.4	58.3
0°-60°	1245.7	86.0
0°-90°	1448.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1448.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	958	958	958	958	958	
5°	943	957	940	928	931	90
15°	899	871	784	720	701	253
25°	815	728	565	461	428	376
35°	705	559	361	269	254	441
45°	578	389	221	183	175	446
55°	440	234	143	124	120	394
65°	298	127	88	80	78	294
75°	150	58	46	43	42	160
85°	30	14	13	13	12	38
90°	0	0	0	0	0	



TEST NUMBER: P1055208

CATALOG NUMBER: S122R3DR-S485D850-X4F0-XX-UDD-FLL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	957.8	957.8	957.8	957.8	957.8
2.5°	947.4	963.4	952.2	952.2	954.6
5°	943.4	957.0	940.2	928.2	931.4
7.5°	936.2	945.8	912.2	886.5	885.7
10°	926.6	927.4	872.1	838.5	830.5
12.5°	914.6	901.8	831.3	780.8	768.8
15°	898.6	871.3	784.0	720.0	700.7
17.5°	881.7	840.1	733.6	653.5	627.1
20°	862.5	802.5	678.3	587.0	556.6
22.5°	840.9	766.4	623.1	523.0	490.9
25°	815.3	728.0	565.4	461.3	428.5
27.5°	790.4	688.7	510.1	406.8	373.2
30°	762.4	646.3	456.5	354.8	319.5
32.5°	734.4	603.0	406.8	305.1	278.7
35°	704.8	559.0	361.2	269.1	253.9
37.5°	674.3	515.8	317.9	245.1	231.4
40°	643.1	472.5	273.9	221.8	211.4
42.5°	611.1	430.1	243.5	202.6	193.0
45°	578.2	389.2	221.0	182.6	174.6
47.5°	543.0	348.4	199.4	165.8	158.6
50°	510.1	309.1	177.8	150.6	145.0
52.5°	474.9	270.7	160.2	136.9	132.1
55°	439.7	233.9	143.4	124.1	120.1
57.5°	405.2	198.6	127.3	112.1	108.9
60°	370.0	170.6	113.7	100.9	97.7
62.5°	334.0	148.2	100.9	90.5	87.3
65°	297.9	127.3	88.1	80.1	77.7
67.5°	260.3	107.3	76.9	70.5	68.9
70°	223.4	89.7	66.5	60.9	59.3
72.5°	187.4	72.9	56.1	52.1	50.5
75°	149.8	58.5	45.6	43.2	42.4
77.5°	116.9	45.6	36.8	35.2	34.4
80°	85.7	33.6	28.8	27.2	26.4
82.5°	56.9	23.2	20.8	20.0	19.2
85°	29.6	14.4	12.8	12.8	12.0
87.5°	9.6	6.4	6.4	6.4	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)