

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: P1055213

Luminaire Tested: S122R3DR-S485D930-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055213
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S485D930-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

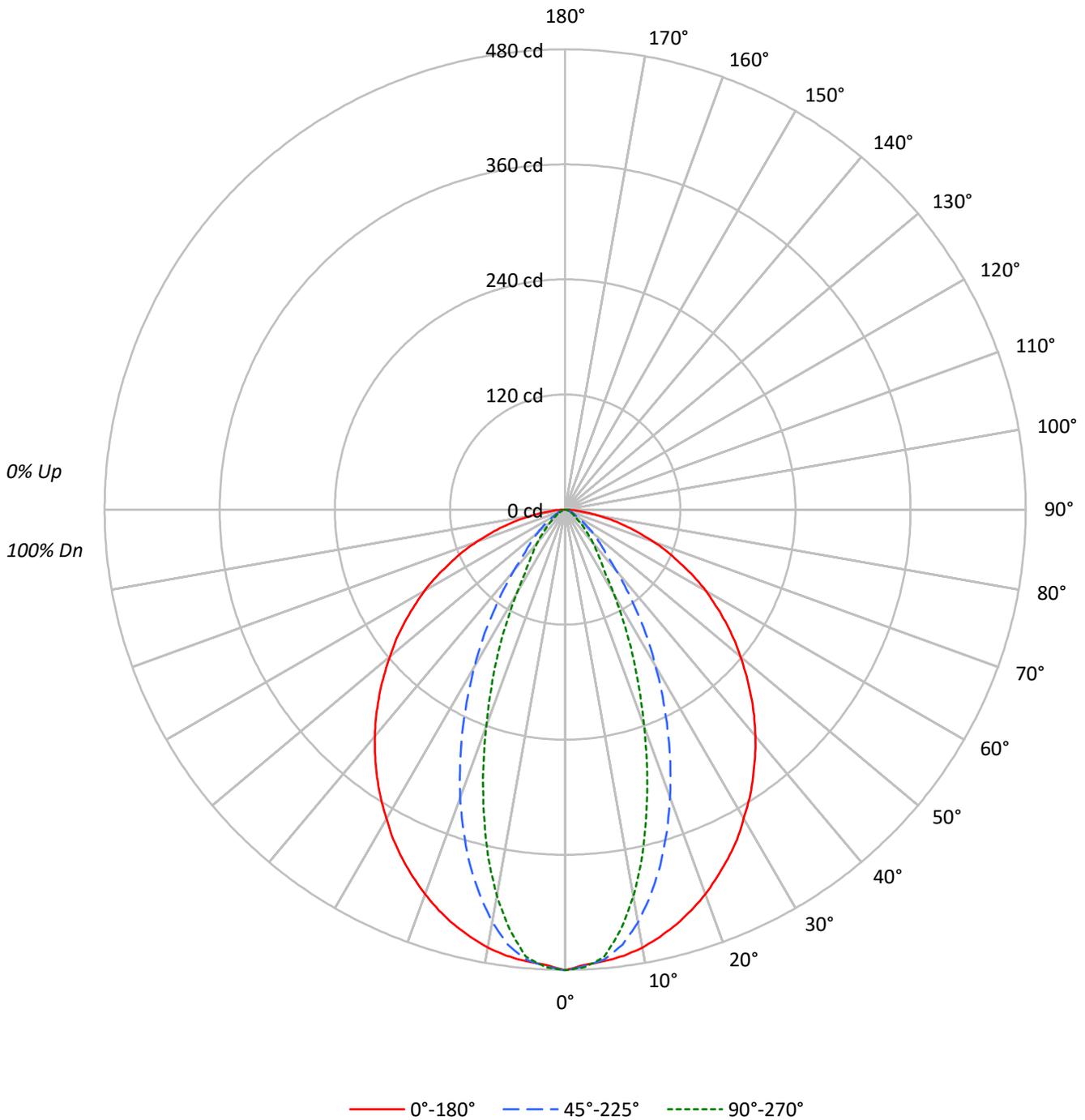
Lumens per Lamp: N/A
Luminaire Lumens: 550.6 lumens
Efficiency: N/A
Efficacy: 28.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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

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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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9102	9102	9102
5°	8992	8958	8902
10°	8925	8405	7872
15°	8787	7518	6422
20°	8607	6446	4843
25°	8393	5280	3458
30°	8140	4122	2203
35°	7898	3023	1471
40°	7630	2038	1106
45°	7336	1436	788
50°	7027	1094	554
55°	6728	760	410
60°	6404	512	333
65°	5940	368	264
70°	5412	294	227
75°	4700	256	176
80°	3720	196	196
85°	2043	261	130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7336 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.9	8.0
10°-20°	107.8	19.6
20°-30°	123.2	22.4
30°-40°	104.4	19.0
40°-50°	77.9	14.2
50°-60°	50.4	9.1
60°-70°	28.1	5.1
70°-80°	12.3	2.2
80°-90°	2.6	0.5
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°	274.9	49.9
0°-40°	379.3	68.9
0°-60°	507.6	92.2
0°-90°	550.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	550.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	480	480	480	480	480	
5°	473	479	471	466	468	45
15°	448	437	383	343	327	126
25°	402	354	253	185	165	185
35°	342	257	131	71	64	213
45°	274	162	54	35	29	211
55°	204	77	23	14	12	182
65°	132	28	8	6	6	132
75°	64	6	4	3	2	68
85°	9	1	1	1	1	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	480.4	480.4	480.4	480.4	480.4
2.5°	475.1	482.2	476.3	476.3	477.5
5°	472.8	478.7	471.0	466.3	468.1
7.5°	469.2	473.4	457.5	443.3	442.2
10°	463.9	465.7	436.9	415.1	409.2
12.5°	456.3	452.2	411.5	380.9	370.9
15°	448.0	436.9	383.3	342.7	327.4
17.5°	438.0	418.0	352.1	302.6	283.8
20°	426.9	398.6	319.7	260.8	240.2
22.5°	414.5	376.8	286.1	221.4	200.8
25°	401.5	354.4	252.6	184.9	165.4
27.5°	388.0	330.9	219.6	151.9	130.7
30°	372.1	306.7	188.4	120.1	100.7
32.5°	357.4	281.4	159.6	93.0	76.5
35°	341.5	257.3	130.7	71.2	63.6
37.5°	325.0	233.1	105.4	60.1	53.6
40°	308.5	209.0	82.4	50.6	44.7
42.5°	291.4	185.5	63.6	42.4	36.5
45°	273.8	162.5	53.6	34.7	29.4
47.5°	256.1	139.5	44.7	27.7	23.6
50°	238.4	117.8	37.1	21.8	18.8
52.5°	221.4	97.1	29.4	17.7	15.3
55°	203.7	77.1	23.0	14.1	12.4
57.5°	186.0	60.1	17.7	11.8	10.6
60°	169.0	45.3	13.5	9.4	8.8
62.5°	151.3	36.5	10.6	7.7	7.1
65°	132.5	28.3	8.2	6.5	5.9
67.5°	115.4	20.6	6.5	5.3	4.7
70°	97.7	14.1	5.3	4.7	4.1
72.5°	80.7	8.8	4.1	3.5	3.5
75°	64.2	5.9	3.5	2.9	2.4
77.5°	48.9	3.5	2.4	2.4	1.8
80°	34.1	2.4	1.8	1.8	1.8
82.5°	21.2	1.8	1.2	1.2	1.2
85°	9.4	0.6	1.2	0.6	0.6
87.5°	1.8	0.6	0.6	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)