

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: P1055210

Luminaire Tested: S122R3DR-S485D927-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055210
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-S485D927-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

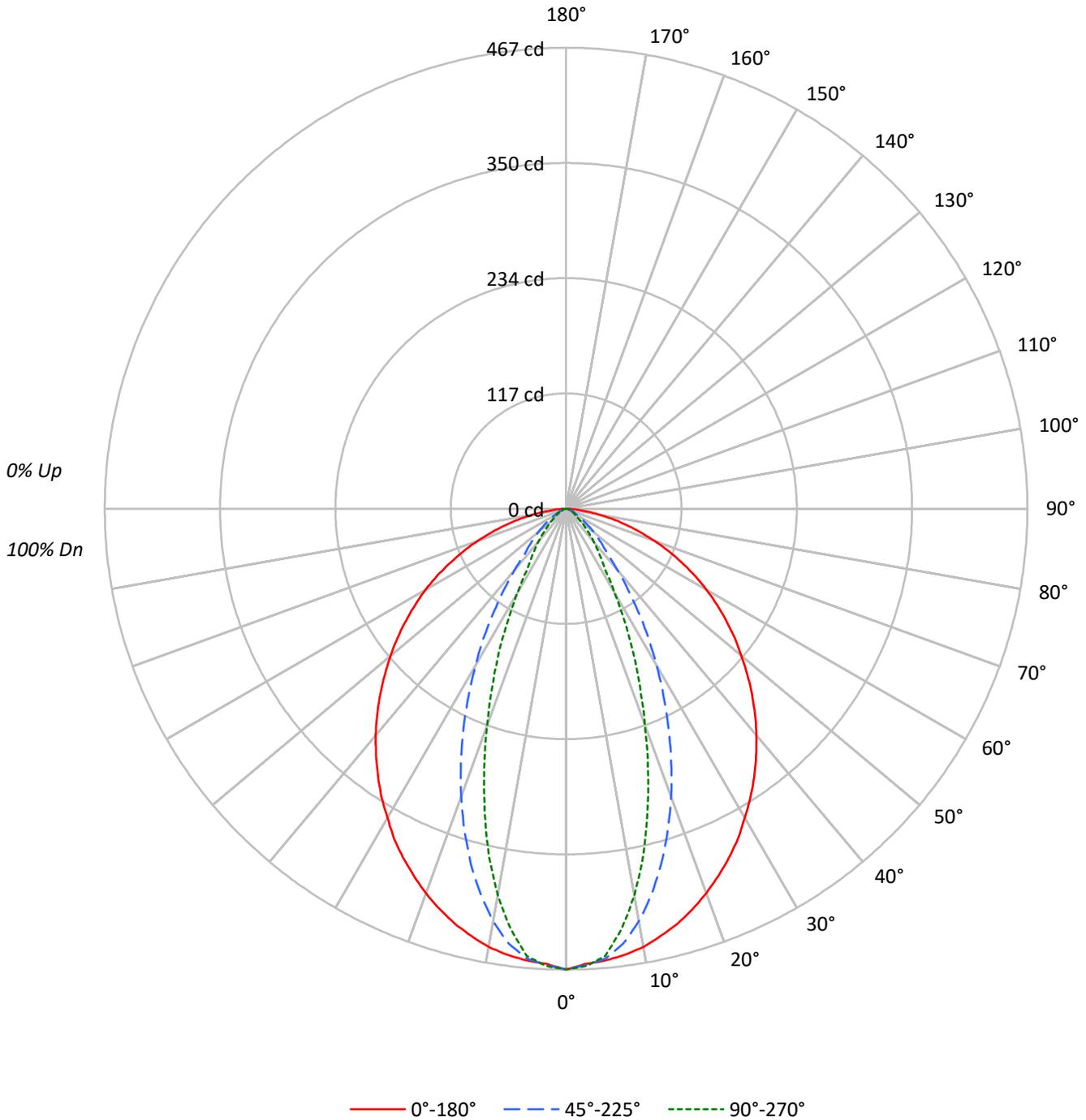
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 535.0 lumens
Efficiency: N/A
Efficacy: 28.0 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





TEST NUMBER: P105210

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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	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°	8844	8844	8844
5°	8737	8705	8649
10°	8673	8167	7649
15°	8538	7304	6239
20°	8361	6262	4706
25°	8157	5130	3361
30°	7908	4006	2140
35°	7674	2937	1429
40°	7415	1981	1076
45°	7127	1396	766
50°	6829	1061	539
55°	6537	737	396
60°	6222	500	326
65°	5770	359	256
70°	5262	283	222
75°	4568	249	168
80°	3622	185	185
85°	2000	239	130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7127 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.7	8.0
10°-20°	104.8	19.6
20°-30°	119.7	22.4
30°-40°	101.5	19.0
40°-50°	75.7	14.2
50°-60°	48.9	9.1
60°-70°	27.3	5.1
70°-80°	12.0	2.2
80°-90°	2.5	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°	267.1	49.9
0°-40°	368.6	68.9
0°-60°	493.2	92.2
0°-90°	535.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	535.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	467	467	467	467	467	
5°	459	465	458	453	455	44
15°	435	424	372	333	318	123
25°	390	344	245	180	161	180
35°	332	250	127	69	62	207
45°	266	158	52	34	29	205
55°	198	75	22	14	12	177
65°	129	28	8	6	6	128
75°	62	6	3	3	2	67
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°	466.8	466.8	466.8	466.8	466.8
2.5°	461.7	468.5	462.8	462.8	463.9
5°	459.4	465.1	457.7	453.1	454.8
7.5°	455.9	459.9	444.5	430.8	429.6
10°	450.8	452.5	424.5	403.3	397.6
12.5°	443.4	439.3	399.9	370.1	360.4
15°	435.3	424.5	372.4	332.9	318.1
17.5°	425.6	406.2	342.1	294.0	275.7
20°	414.7	387.3	310.6	253.4	233.4
22.5°	402.7	366.1	278.0	215.1	195.1
25°	390.2	344.4	245.4	179.6	160.8
27.5°	377.0	321.5	213.4	147.6	127.0
30°	361.5	298.0	183.1	116.7	97.8
32.5°	347.2	273.4	155.0	90.4	74.4
35°	331.8	250.0	127.0	69.2	61.8
37.5°	315.8	226.5	102.4	58.4	52.1
40°	299.8	203.1	80.1	49.2	43.5
42.5°	283.2	180.2	61.8	41.2	35.5
45°	266.0	157.9	52.1	33.8	28.6
47.5°	248.8	135.6	43.5	26.9	22.9
50°	231.7	114.4	36.0	21.2	18.3
52.5°	215.1	94.4	28.6	17.2	14.9
55°	197.9	74.9	22.3	13.7	12.0
57.5°	180.8	58.4	17.2	11.4	10.3
60°	164.2	44.0	13.2	9.2	8.6
62.5°	147.0	35.5	10.3	7.4	6.9
65°	128.7	27.5	8.0	6.3	5.7
67.5°	112.1	20.0	6.3	5.1	4.6
70°	95.0	13.7	5.1	4.6	4.0
72.5°	78.4	8.6	4.0	3.4	3.4
75°	62.4	5.7	3.4	2.9	2.3
77.5°	47.5	3.4	2.3	2.3	1.7
80°	33.2	2.3	1.7	1.7	1.7
82.5°	20.6	1.7	1.1	1.1	1.1
85°	9.2	0.6	1.1	0.6	0.6
87.5°	1.7	0.6	0.6	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)