

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: P1055219

Luminaire Tested: S122R3DR-S485D940-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055219
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-S485D940-X4F0-XX-UDD-FLL-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

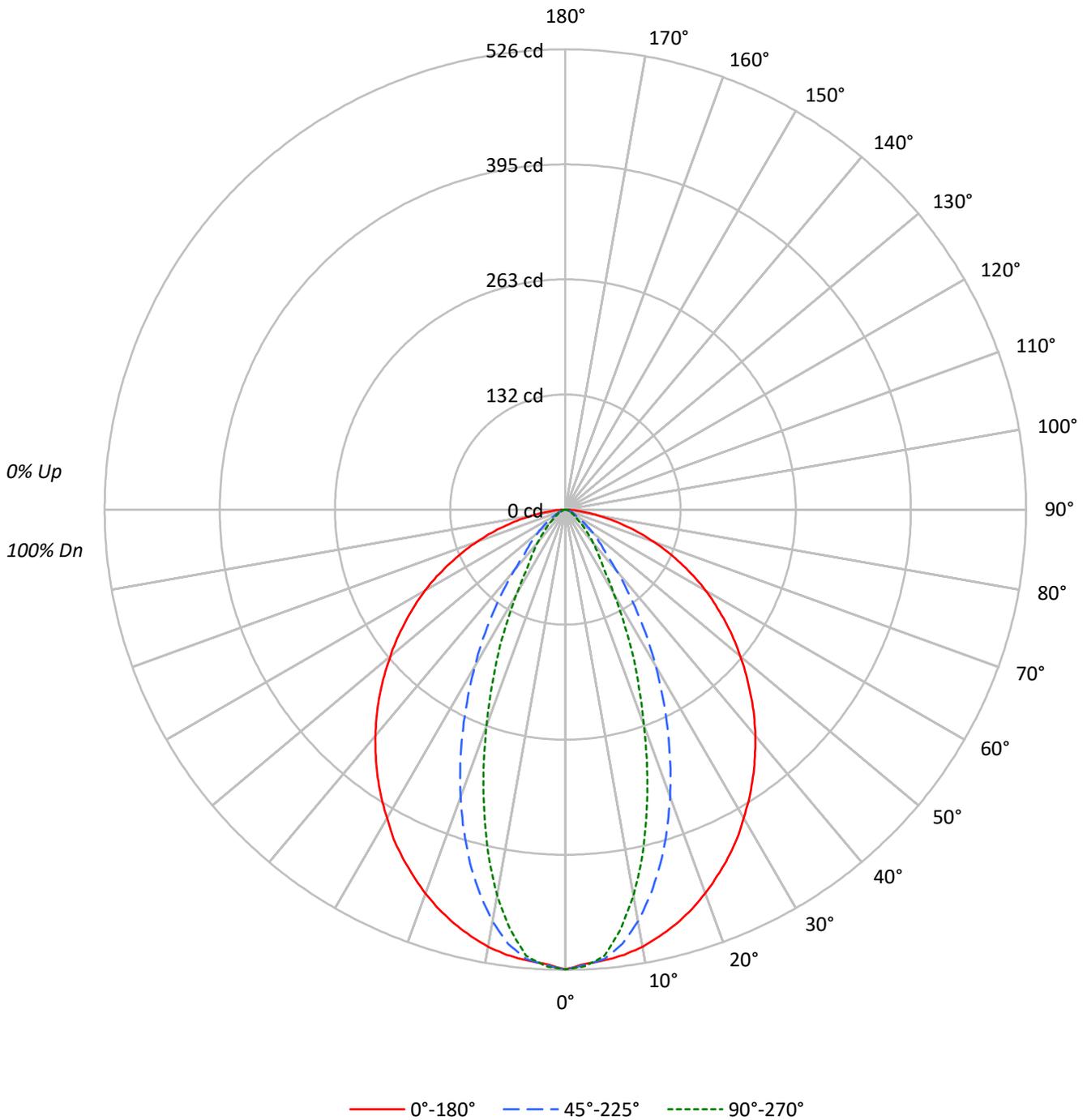
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 602.2 lumens
Efficiency: N/A
Efficacy: 31.5 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										
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	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°	9956	9956	9956
5°	9834	9798	9735
10°	9761	9192	8609
15°	9611	8222	7022
20°	9414	7051	5296
25°	9181	5776	3782
30°	8904	4509	2409
35°	8639	3307	1607
40°	8345	2231	1209
45°	8022	1570	863
50°	7687	1197	607
55°	7359	829	446
60°	7002	561	368
65°	6496	403	287
70°	5922	321	249
75°	5139	285	190
80°	4070	207	207
85°	2239	283	130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8022 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.0	8.0
10°-20°	117.9	19.6
20°-30°	134.7	22.4
30°-40°	114.2	19.0
40°-50°	85.2	14.2
50°-60°	55.1	9.1
60°-70°	30.7	5.1
70°-80°	13.5	2.2
80°-90°	2.8	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°	300.7	49.9
0°-40°	414.9	68.9
0°-60°	555.2	92.2
0°-90°	602.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	602.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	526	526	526	526	526	
5°	517	524	515	510	512	49
15°	490	478	419	375	358	138
25°	439	388	276	202	181	202
35°	374	281	143	78	70	233
45°	299	178	59	38	32	231
55°	223	84	25	16	14	199
65°	145	31	9	7	6	144
75°	70	6	4	3	3	75
85°	10	1	1	1	1	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	525.5	525.5	525.5	525.5	525.5
2.5°	519.7	527.4	520.9	520.9	522.2
5°	517.1	523.5	515.2	510.0	511.9
7.5°	513.2	517.7	500.3	484.9	483.6
10°	507.4	509.4	477.8	454.0	447.5
12.5°	499.1	494.5	450.1	416.6	405.7
15°	490.0	477.8	419.2	374.8	358.0
17.5°	479.1	457.2	385.1	331.0	310.4
20°	466.9	435.9	349.7	285.3	262.7
22.5°	453.3	412.1	313.0	242.1	219.6
25°	439.2	387.7	276.3	202.2	180.9
27.5°	424.4	361.9	240.2	166.1	143.0
30°	407.0	335.5	206.1	131.4	110.1
32.5°	390.9	307.8	174.5	101.7	83.7
35°	373.5	281.4	143.0	77.9	69.5
37.5°	355.5	255.0	115.3	65.7	58.6
40°	337.4	228.6	90.2	55.4	48.9
42.5°	318.8	202.8	69.5	46.4	39.9
45°	299.4	177.7	58.6	38.0	32.2
47.5°	280.1	152.6	48.9	30.3	25.8
50°	260.8	128.8	40.6	23.8	20.6
52.5°	242.1	106.3	32.2	19.3	16.7
55°	222.8	84.4	25.1	15.5	13.5
57.5°	203.5	65.7	19.3	12.9	11.6
60°	184.8	49.6	14.8	10.3	9.7
62.5°	165.5	39.9	11.6	8.4	7.7
65°	144.9	30.9	9.0	7.1	6.4
67.5°	126.2	22.5	7.1	5.8	5.2
70°	106.9	15.5	5.8	5.2	4.5
72.5°	88.2	9.7	4.5	3.9	3.9
75°	70.2	6.4	3.9	3.2	2.6
77.5°	53.4	3.9	2.6	2.6	1.9
80°	37.3	2.6	1.9	1.9	1.9
82.5°	23.2	1.9	1.3	1.3	1.3
85°	10.3	0.6	1.3	0.6	0.6
87.5°	1.9	0.6	0.6	0.6	0.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)