

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: P1055192

Luminaire Tested: S122R3DR-S290D940-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055192
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-S290D940-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: -

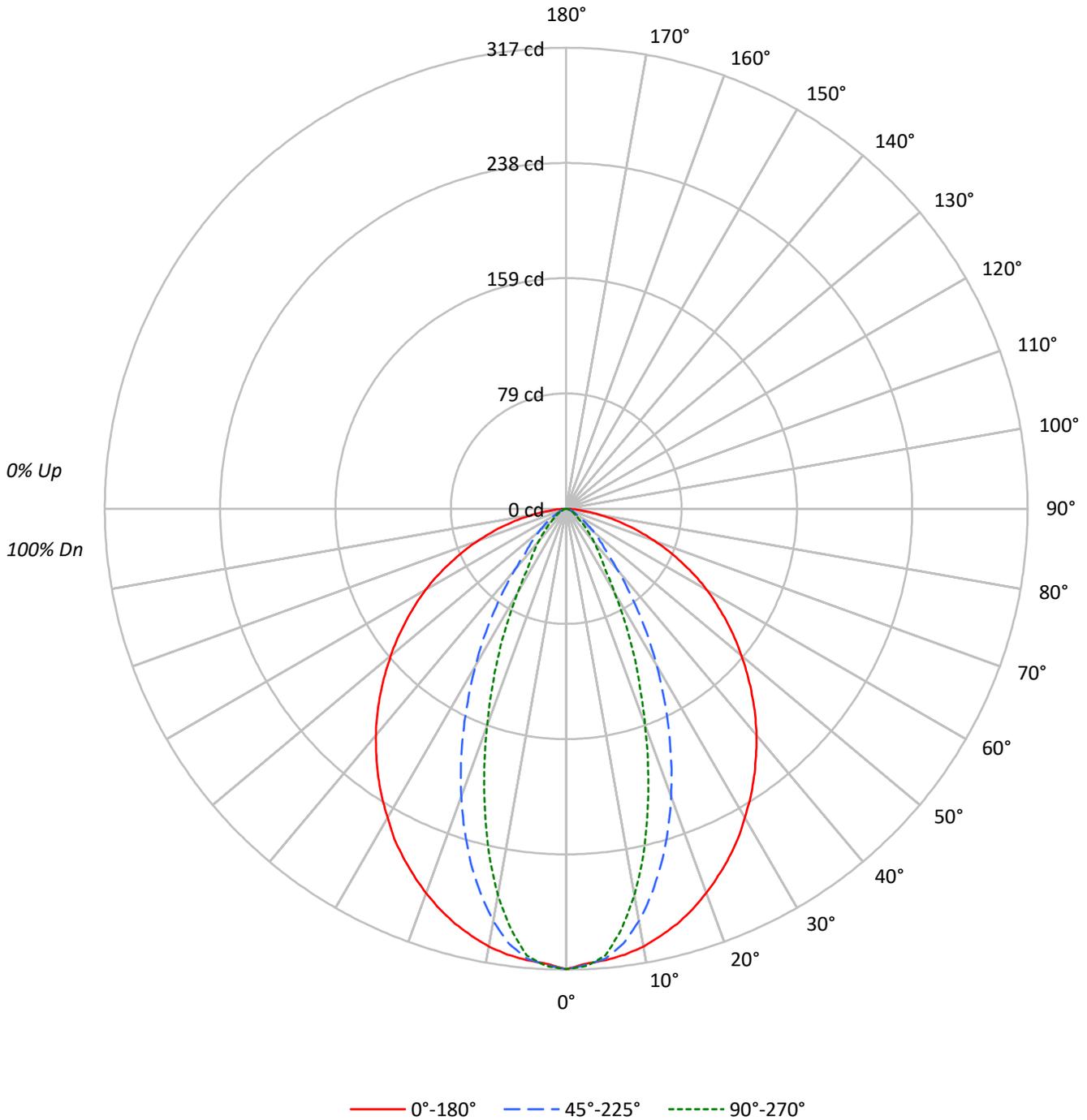
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 363.0 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): 12.6
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	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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90			90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71			71	
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64			64	
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			58	
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53			53	
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49			49	
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47	45			45	
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42			42	
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39			39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6000	6000	6000
5°	5928	5905	5869
10°	5883	5541	5189
15°	5794	4957	4233
20°	5674	4250	3194
25°	5533	3481	2281
30°	5366	2717	1453
35°	5206	1994	969
40°	5030	1343	730
45°	4836	946	520
50°	4633	722	365
55°	4436	499	271
60°	4221	337	220
65°	3914	242	175
70°	3567	194	150
75°	3096	168	117
80°	2455	131	131
85°	1348	174	87

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4836 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.0	8.0
10°-20°	71.1	19.6
20°-30°	81.2	22.4
30°-40°	68.9	19.0
40°-50°	51.4	14.2
50°-60°	33.2	9.1
60°-70°	18.5	5.1
70°-80°	8.1	2.2
80°-90°	1.7	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°	181.2	49.9
0°-40°	250.1	68.9
0°-60°	334.6	92.2
0°-90°	363.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	363.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	317	317	317	317	317	
5°	312	316	310	307	309	30
15°	295	288	253	226	216	83
25°	265	234	166	122	109	122
35°	225	170	86	47	42	141
45°	180	107	35	23	19	139
55°	134	51	15	9	8	120
65°	87	19	5	4	4	87
75°	42	4	2	2	2	45
85°	6	0	1	0	0	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	316.7	316.7	316.7	316.7	316.7
2.5°	313.2	317.9	314.0	314.0	314.8
5°	311.7	315.5	310.5	307.4	308.6
7.5°	309.3	312.1	301.6	292.3	291.5
10°	305.8	307.0	288.0	273.6	269.7
12.5°	300.8	298.1	271.3	251.1	244.5
15°	295.4	288.0	252.7	225.9	215.8
17.5°	288.8	275.6	232.1	199.5	187.1
20°	281.4	262.8	210.8	171.9	158.4
22.5°	273.2	248.4	188.6	145.9	132.4
25°	264.7	233.7	166.5	121.9	109.1
27.5°	255.8	218.1	144.8	100.1	86.2
30°	245.3	202.2	124.2	79.2	66.4
32.5°	235.6	185.5	105.2	61.3	50.5
35°	225.1	169.6	86.2	47.0	41.9
37.5°	214.2	153.7	69.5	39.6	35.3
40°	203.4	137.8	54.3	33.4	29.5
42.5°	192.1	122.3	41.9	27.9	24.1
45°	180.5	107.1	35.3	22.9	19.4
47.5°	168.8	92.0	29.5	18.2	15.5
50°	157.2	77.6	24.5	14.4	12.4
52.5°	145.9	64.0	19.4	11.6	10.1
55°	134.3	50.8	15.1	9.3	8.2
57.5°	122.6	39.6	11.6	7.8	7.0
60°	111.4	29.9	8.9	6.2	5.8
62.5°	99.7	24.1	7.0	5.0	4.7
65°	87.3	18.6	5.4	4.3	3.9
67.5°	76.1	13.6	4.3	3.5	3.1
70°	64.4	9.3	3.5	3.1	2.7
72.5°	53.2	5.8	2.7	2.3	2.3
75°	42.3	3.9	2.3	1.9	1.6
77.5°	32.2	2.3	1.6	1.6	1.2
80°	22.5	1.6	1.2	1.2	1.2
82.5°	14.0	1.2	0.8	0.8	0.8
85°	6.2	0.4	0.8	0.4	0.4
87.5°	1.2	0.4	0.4	0.4	0.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)