

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: P1055615

Luminaire Tested: S123R3DR-S340D927-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055615
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S340D927-X4F0-XX-UDD-FLL-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

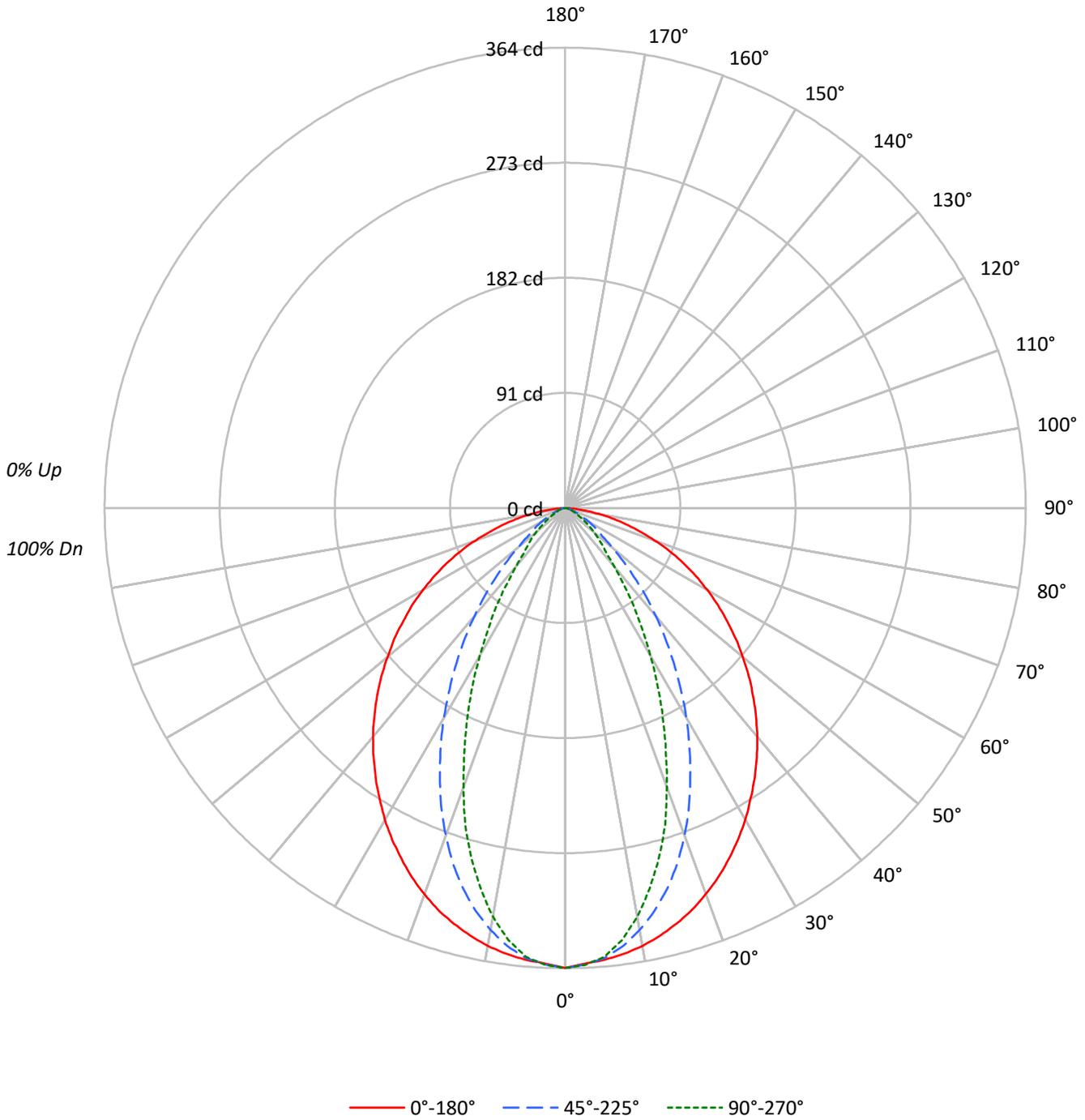
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 505.9 lumens
Efficiency: N/A
Efficacy: 40.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' 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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70				70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62				62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51				51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46				46
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42				42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4386	4386	4386
5°	4340	4323	4311
10°	4306	4149	4019
15°	4248	3891	3576
20°	4171	3539	3013
25°	4073	3114	2430
30°	3965	2669	1872
35°	3841	2202	1385
40°	3717	1753	944
45°	3581	1311	711
50°	3434	912	557
55°	3283	666	406
60°	3125	499	292
65°	2941	334	225
70°	2661	243	183
75°	2297	177	144
80°	1840	146	118
85°	954	138	97

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3581 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.6	6.6
10°-20°	87.5	17.3
20°-30°	110.0	21.7
30°-40°	102.4	20.2
40°-50°	78.4	15.5
50°-60°	52.1	10.3
60°-70°	28.1	5.6
70°-80°	11.5	2.3
80°-90°	2.2	0.4
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°	231.1	45.7
0°-40°	333.6	65.9
0°-60°	464.1	91.7
0°-90°	505.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	505.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	364	364	364	364	364	
5°	359	362	357	356	356	34
15°	340	335	312	293	286	96
25°	306	286	234	195	183	141
35°	261	222	150	106	94	163
45°	210	155	77	45	42	162
55°	156	90	32	22	19	140
65°	103	35	12	9	8	102
75°	49	8	4	3	3	53
85°	7	1	1	1	1	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	363.8	363.8	363.8	363.8	363.8
2.5°	360.7	365.1	361.4	361.7	361.7
5°	358.6	362.4	357.2	355.8	356.2
7.5°	355.8	358.3	349.6	345.1	344.5
10°	351.7	352.4	338.9	331.0	328.3
12.5°	346.5	344.1	326.5	313.4	308.3
15°	340.3	334.8	311.7	293.4	286.5
17.5°	333.4	324.1	294.8	271.0	262.7
20°	325.1	312.0	275.8	246.2	234.8
22.5°	316.2	299.3	255.8	220.7	207.9
25°	306.2	285.5	234.1	195.2	182.7
27.5°	295.8	270.7	212.7	171.0	158.3
30°	284.8	255.5	191.7	147.6	134.5
32.5°	272.7	238.9	170.0	125.9	112.8
35°	261.0	222.4	149.6	105.9	94.1
37.5°	248.6	205.8	130.0	88.3	75.2
40°	236.2	189.0	111.4	71.0	60.0
42.5°	223.1	172.1	93.8	56.5	47.9
45°	210.0	155.2	76.9	45.2	41.7
47.5°	196.9	138.3	62.1	39.0	35.5
50°	183.1	122.1	48.6	33.1	29.7
52.5°	170.0	105.9	37.9	27.2	24.1
55°	156.2	90.3	31.7	22.1	19.3
57.5°	143.4	74.5	26.2	17.2	15.2
60°	129.6	60.3	20.7	13.4	12.1
62.5°	116.5	47.2	15.9	10.7	9.7
65°	103.1	34.8	11.7	8.6	7.9
67.5°	89.6	25.2	9.0	6.9	6.6
70°	75.5	19.0	6.9	5.5	5.2
72.5°	62.1	13.4	5.2	4.5	4.1
75°	49.3	8.3	3.8	3.4	3.1
77.5°	37.9	4.8	2.8	2.8	2.4
80°	26.5	2.8	2.1	2.1	1.7
82.5°	16.2	1.7	1.4	1.4	1.4
85°	6.9	1.0	1.0	1.0	0.7
87.5°	1.0	0.3	0.3	0.3	0.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)