

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: P1055622

Luminaire Tested: S123R3DR-S340D935-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055622
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S340D935-X4F0-XX-UDD-FLL-W
Description: DEFINE 3, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

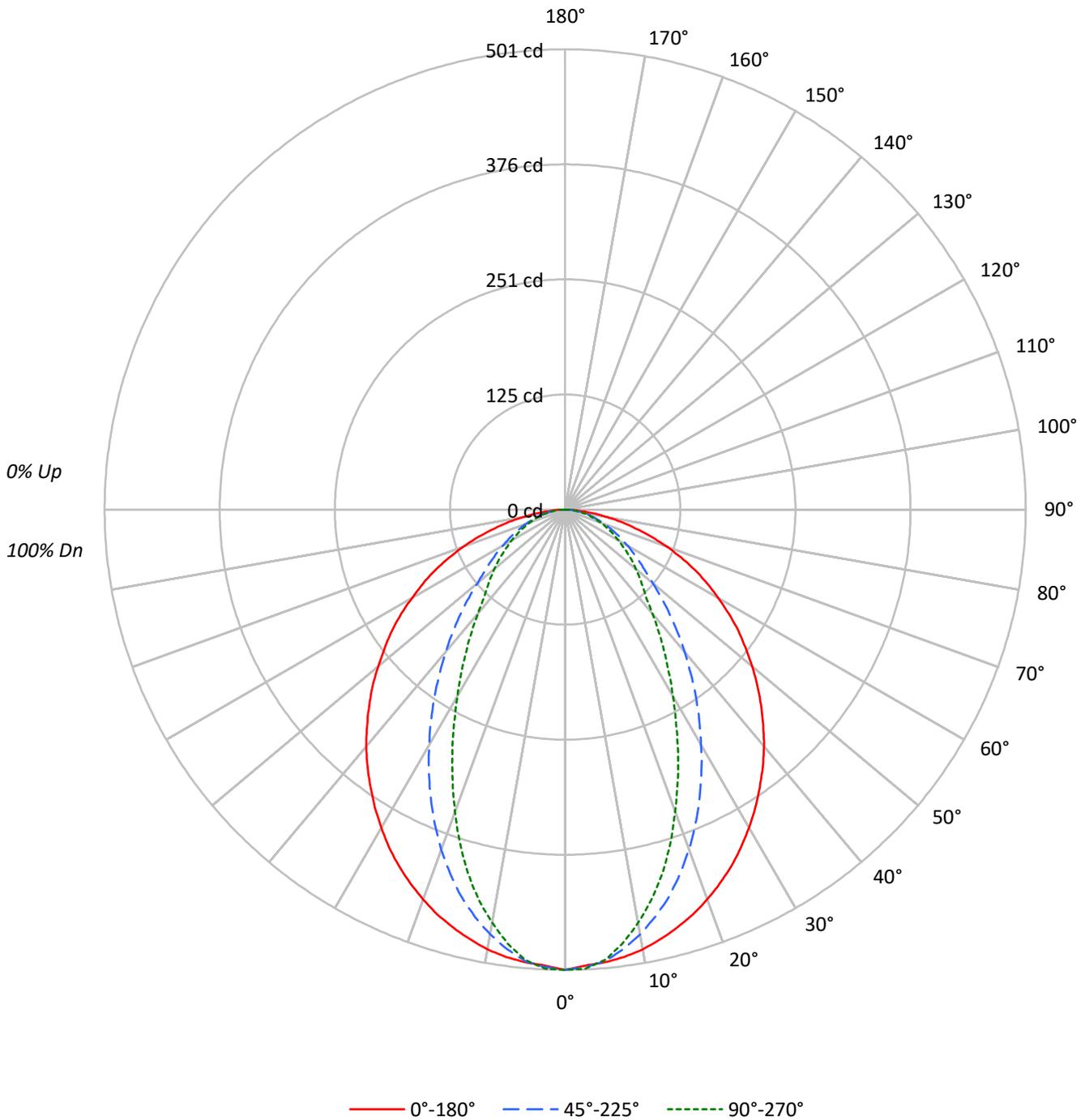
Lumens per Lamp: N/A
Luminaire Lumens: 878.7 lumens
Efficiency: N/A
Efficacy: 69.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.83 / 1.02
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88				86	
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76				74	
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67				65	
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59				57	
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	62	56	52				50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47				45	
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42				40	
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	39				37	
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35				34	
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33				31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6040	6040	6040
5°	5987	5974	5959
10°	5951	5749	5592
15°	5880	5445	5108
20°	5794	5054	4491
25°	5694	4601	3863
30°	5567	4117	3266
35°	5432	3640	2758
40°	5296	3179	2318
45°	5137	2742	2044
50°	4976	2333	1878
55°	4828	2079	1732
60°	4627	1878	1618
65°	4436	1720	1518
70°	4135	1586	1428
75°	3699	1467	1346
80°	3173	1354	1250
85°	2227	1245	1190

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5137 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.4	5.3
10°-20°	122.9	14.0
20°-30°	161.9	18.4
30°-40°	164.3	18.7
40°-50°	142.8	16.3
50°-60°	111.9	12.7
60°-70°	76.0	8.7
70°-80°	41.2	4.7
80°-90°	11.3	1.3
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°	331.2	37.7
0°-40°	495.5	56.4
0°-60°	750.2	85.4
0°-90°	878.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	878.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	501	501	501	501	501	
5°	495	501	494	489	492	47
15°	471	464	436	415	409	133
25°	428	402	346	303	290	197
35°	369	325	247	200	187	231
45°	301	242	161	124	120	233
55°	230	160	99	84	82	205
65°	156	86	60	54	53	154
75°	79	40	32	29	29	85
85°	16	10	9	8	9	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	501.0	501.0	501.0	501.0	501.0
2.5°	496.9	503.3	498.4	498.8	500.3
5°	494.7	500.7	493.6	489.1	492.4
7.5°	491.3	495.8	482.7	475.6	476.7
10°	486.1	487.6	469.6	458.3	456.8
12.5°	478.9	476.3	453.8	437.3	434.7
15°	471.1	464.3	436.2	414.9	409.2
17.5°	462.1	450.8	415.6	389.4	380.8
20°	451.6	435.8	393.9	360.5	350.0
22.5°	440.3	420.1	370.3	330.9	320.0
25°	428.0	402.1	345.9	302.8	290.4
27.5°	414.5	384.1	321.2	275.1	261.2
30°	399.9	365.4	295.7	248.1	234.6
32.5°	384.9	345.5	271.3	223.0	209.9
35°	369.1	325.3	247.3	200.1	187.4
37.5°	353.0	304.7	224.1	178.4	166.4
40°	336.5	283.7	202.0	158.1	147.3
42.5°	318.9	262.7	180.6	139.0	130.8
45°	301.3	241.7	160.8	124.0	119.9
47.5°	283.7	220.4	142.0	113.6	109.8
50°	265.3	199.7	124.4	103.8	100.1
52.5°	247.3	179.5	109.8	94.4	91.8
55°	229.7	159.6	98.9	84.3	82.4
57.5°	211.4	140.2	88.1	76.5	74.2
60°	191.9	121.4	77.9	68.2	67.1
62.5°	174.3	103.8	69.0	61.1	60.0
65°	155.5	86.2	60.3	54.0	53.2
67.5°	136.4	71.6	52.5	47.2	46.8
70°	117.3	60.3	45.0	40.8	40.5
72.5°	98.6	49.8	37.9	35.2	34.5
75°	79.4	39.7	31.5	29.2	28.9
77.5°	62.2	30.7	25.1	23.6	23.2
80°	45.7	22.9	19.5	18.4	18.0
82.5°	30.0	15.7	13.9	13.1	13.1
85°	16.1	9.7	9.0	8.2	8.6
87.5°	5.6	4.1	4.1	3.7	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)