

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: P1055628

Luminaire Tested: S123R3DR-S340D950-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055628
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-S340D950-X4F0-XX-UDD-FLL-W
Description: DEFINE 3, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

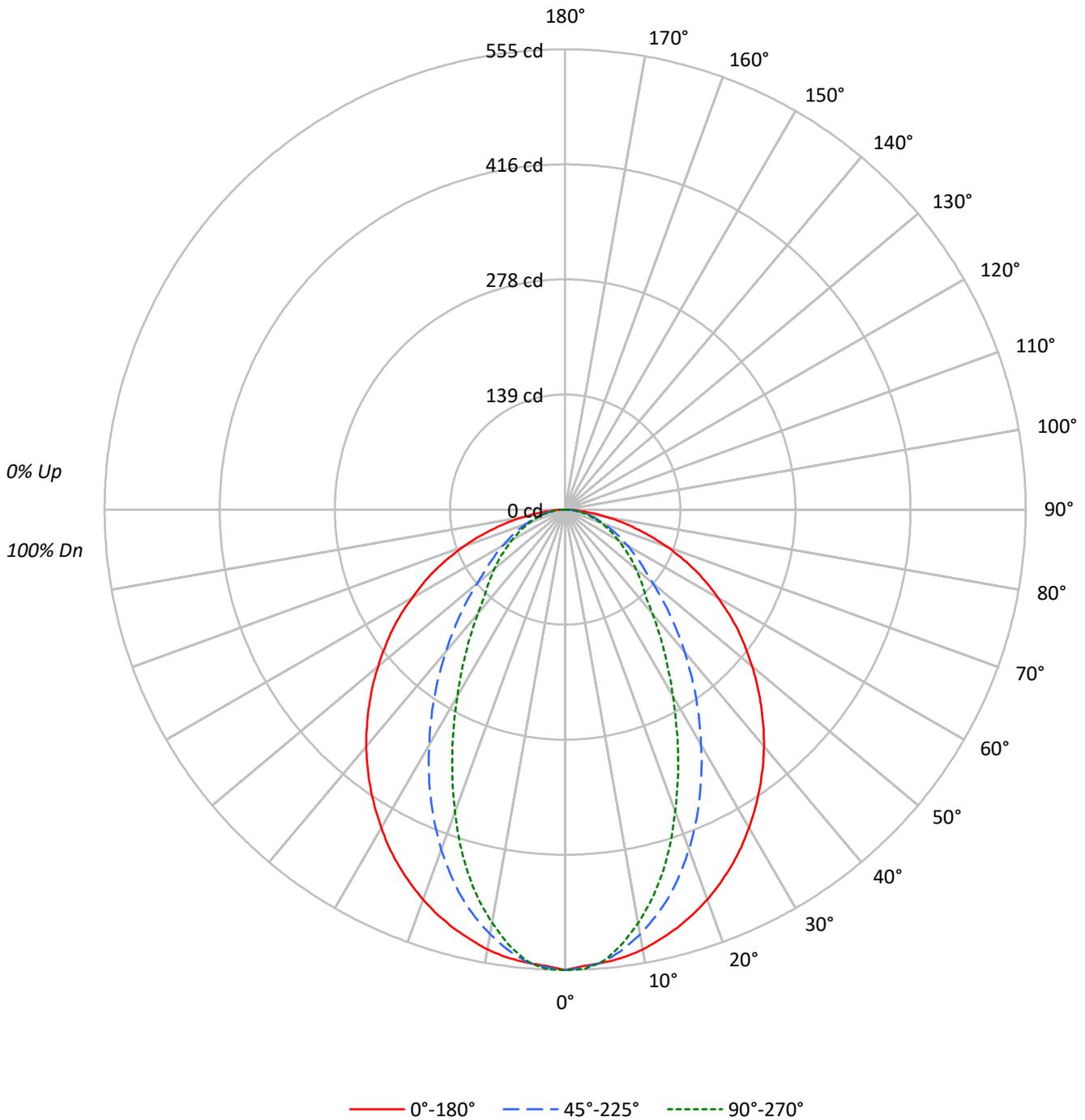
Lumens per Lamp: N/A
Luminaire Lumens: 973.7 lumens
Efficiency: N/A
Efficacy: 77.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.83 / 1.02
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

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										
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	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°	6694	6694	6694
5°	6633	6619	6603
10°	6594	6370	6197
15°	6515	6032	5659
20°	6420	5599	4976
25°	6308	5099	4281
30°	6169	4561	3618
35°	6020	4034	3055
40°	5869	3522	2569
45°	5693	3037	2266
50°	5514	2587	2080
55°	5350	2304	1921
60°	5126	2083	1792
65°	4915	1909	1683
70°	4583	1755	1579
75°	4099	1626	1491
80°	3520	1500	1382
85°	2476	1383	1328

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5693 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	5.3
10°-20°	136.2	14.0
20°-30°	179.4	18.4
30°-40°	182.0	18.7
40°-50°	158.2	16.3
50°-60°	124.0	12.7
60°-70°	84.2	8.7
70°-80°	45.6	4.7
80°-90°	12.6	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°	367.0	37.7
0°-40°	549.0	56.4
0°-60°	831.2	85.4
0°-90°	973.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	973.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	555	555	555	555	555	
5°	548	555	547	542	546	52
15°	522	514	483	460	453	147
25°	474	446	383	336	322	218
35°	409	360	274	222	208	256
45°	334	268	178	137	133	258
55°	254	177	110	93	91	227
65°	172	96	67	60	59	170
75°	88	44	35	32	32	94
85°	18	11	10	9	10	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	555.2	555.2	555.2	555.2	555.2
2.5°	550.6	557.7	552.3	552.7	554.3
5°	548.1	554.8	546.9	541.9	545.6
7.5°	544.4	549.4	534.8	526.9	528.2
10°	538.6	540.2	520.3	507.8	506.2
12.5°	530.7	527.8	502.9	484.6	481.7
15°	522.0	514.5	483.3	459.7	453.4
17.5°	512.0	499.5	460.5	431.4	421.9
20°	500.4	482.9	436.4	399.5	387.8
22.5°	487.9	465.5	410.3	366.7	354.6
25°	474.2	445.5	383.3	335.5	321.8
27.5°	459.3	425.6	355.9	304.8	289.4
30°	443.1	404.9	327.6	274.9	259.9
32.5°	426.4	382.8	300.6	247.1	232.5
35°	409.0	360.4	274.1	221.7	207.6
37.5°	391.2	337.6	248.3	197.7	184.4
40°	372.9	314.3	223.8	175.2	163.2
42.5°	353.4	291.1	200.1	154.1	144.9
45°	333.9	267.8	178.1	137.4	132.9
47.5°	314.3	244.2	157.4	125.8	121.7
50°	294.0	221.3	137.9	115.0	110.9
52.5°	274.1	198.9	121.7	104.6	101.7
55°	254.5	176.9	109.6	93.4	91.4
57.5°	234.2	155.3	97.6	84.7	82.2
60°	212.6	134.5	86.4	75.6	74.3
62.5°	193.1	115.0	76.4	67.7	66.4
65°	172.3	95.5	66.9	59.8	59.0
67.5°	151.1	79.3	58.1	52.3	51.9
70°	130.0	66.9	49.8	45.3	44.8
72.5°	109.2	55.2	41.9	39.0	38.2
75°	88.0	44.0	34.9	32.4	32.0
77.5°	68.9	34.0	27.8	26.2	25.7
80°	50.7	25.3	21.6	20.3	19.9
82.5°	33.2	17.4	15.4	14.5	14.5
85°	17.9	10.8	10.0	9.1	9.6
87.5°	6.2	4.6	4.6	4.2	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)