

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: P1059040

Luminaire Tested: S123RDR-S1000D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059040
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D927-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

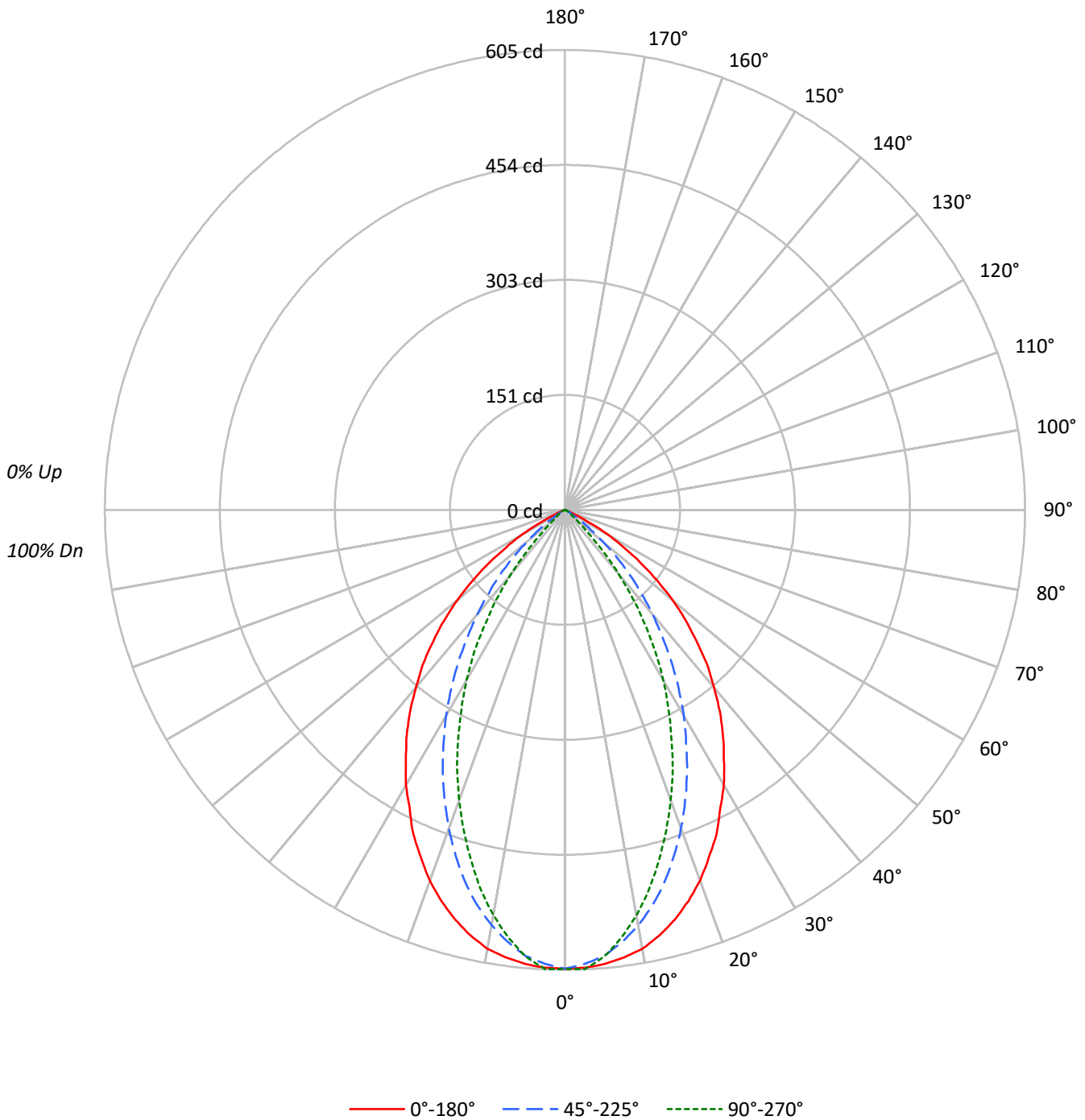
Lumens per Lamp: N/A
Luminaire Lumens: 688.9 lumens
Efficiency: N/A
Efficacy: 19.7 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7089	7089	7089
5°	7070	6945	6956
10°	6990	6619	6457
15°	6783	6157	5802
20°	6488	5576	5078
25°	6109	4925	4295
30°	5668	4232	3506
35°	5198	3498	2606
40°	4665	2742	1669
45°	4069	2003	694
50°	3374	1189	267
55°	2487	497	199
60°	1508	183	115
65°	406	108	53
70°	0	34	34
75°	0	0	45
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4069 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	8.1
10°-20°	143.4	20.8
20°-30°	178.8	25.9
30°-40°	159.8	23.2
40°-50°	100.9	14.6
50°-60°	42.2	6.1
60°-70°	7.9	1.2
70°-80°	0.3	0.0
80°-90°	0.0	0.0
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°	377.8	54.8
0°-40°	537.6	78.0
0°-60°	680.7	98.8
0°-90°	688.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	688.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	604	604	604	604	604	
5°	600	599	589	591	590	57
15°	558	544	506	485	477	157
25°	472	434	380	347	332	216
35°	363	310	244	200	182	226
45°	245	191	121	64	42	189
55°	122	84	24	10	10	109
65°	15	11	4	2	2	21
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	603.7	603.7	603.7	603.7	603.7
2.5°	602.8	603.7	597.9	603.7	604.7
5°	599.8	598.9	589.2	591.1	590.1
7.5°	594.0	591.1	573.6	569.7	567.8
10°	586.2	578.5	555.1	545.4	541.5
12.5°	573.6	562.9	532.8	517.2	511.4
15°	558.0	544.4	506.5	485.1	477.3
17.5°	539.6	520.1	477.3	454.0	442.4
20°	519.2	491.9	446.2	418.0	406.4
22.5°	494.8	464.7	413.2	383.0	370.4
25°	471.5	433.6	380.1	347.1	331.5
27.5°	442.4	402.5	345.1	311.1	294.6
30°	418.0	372.4	312.1	274.2	258.6
32.5°	388.9	341.2	278.0	236.2	221.7
35°	362.6	310.1	244.0	200.3	181.8
37.5°	334.4	280.0	210.0	164.3	146.8
40°	304.3	249.9	178.9	128.3	108.9
42.5°	277.1	219.7	147.8	95.3	75.8
45°	245.0	190.6	120.6	64.2	41.8
47.5°	215.8	163.3	91.4	36.0	22.4
50°	184.7	135.1	65.1	18.5	14.6
52.5°	152.6	107.9	42.8	12.6	11.7
55°	121.5	83.6	24.3	9.7	9.7
57.5°	91.4	60.3	12.6	7.8	6.8
60°	64.2	39.9	7.8	5.8	4.9
62.5°	36.9	23.3	5.8	3.9	3.9
65°	14.6	10.7	3.9	1.9	1.9
67.5°	1.0	2.9	1.9	1.0	1.0
70°	0.0	0.0	1.0	1.0	1.0
72.5°	0.0	0.0	1.0	1.0	1.0
75°	0.0	0.0	0.0	0.0	1.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)