

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: P1059046

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059046
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D927-X4F0-XX-UDD-WVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

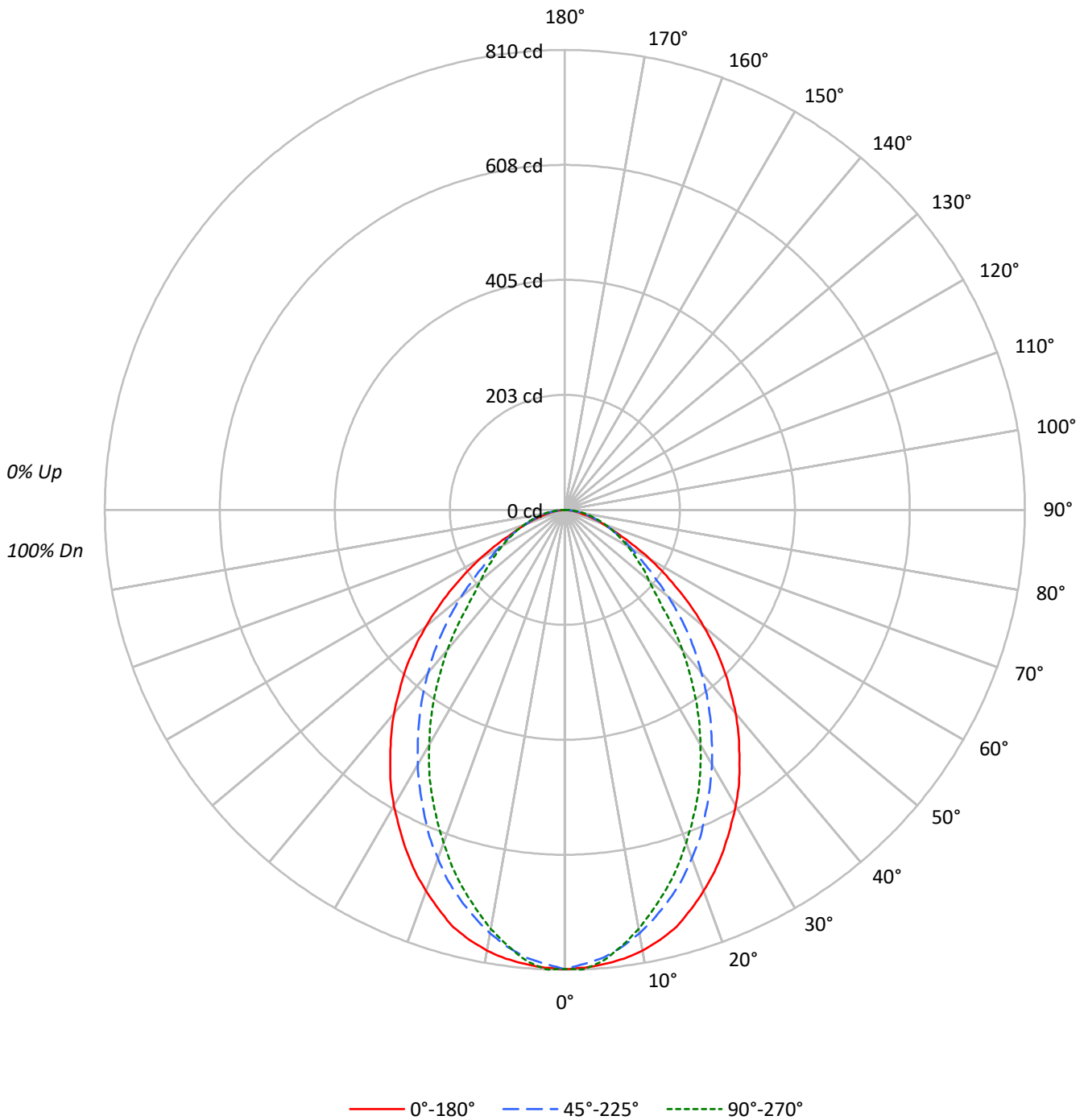
Lumens per Lamp: N/A
Luminaire Lumens: 1414.8 lumens
Efficiency: N/A
Efficacy: 40.4 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89			88		
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78			76		
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68			66		
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60			58		
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54			52		
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48			47		
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44			42		
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40			38		
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37			35		
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34			32		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9498	9498	9498
5°	9466	9328	9386
10°	9402	9031	8938
15°	9243	8640	8404
20°	8930	8165	7800
25°	8565	7608	7180
30°	8160	7026	6473
35°	7679	6398	5728
40°	7169	5738	4933
45°	6571	5070	4052
50°	5826	4351	3517
55°	4956	3642	3224
60°	4042	3173	2992
65°	3079	2809	2781
70°	2403	2503	2602
75°	1942	2250	2427
80°	1447	1839	2238
85°	781	1186	1967

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6571 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.1	5.3
10°-20°	202.0	14.3
20°-30°	274.6	19.4
30°-40°	284.7	20.1
40°-50°	240.1	17.0
50°-60°	170.4	12.0
60°-70°	104.2	7.4
70°-80°	51.8	3.7
80°-90°	11.8	0.8
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°	551.8	39.0
0°-40°	836.5	59.1
0°-60°	1247.0	88.1
0°-90°	1414.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1414.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	809	809	809	809	809	
5°	803	803	791	796	796	76
15°	760	746	711	698	691	213
25°	661	632	587	566	554	304
35°	536	495	446	415	400	335
45°	396	354	305	264	244	304
55°	242	217	178	162	158	217
65°	111	107	101	101	100	113
75°	43	46	50	52	54	46
85°	6	7	9	13	15	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	808.9	808.9	808.9	808.9	808.9
2.5°	807.0	807.9	800.2	808.9	809.9
5°	803.1	803.1	791.4	796.3	796.3
7.5°	797.3	795.3	775.9	775.9	773.9
10°	788.5	782.7	757.4	752.5	749.6
12.5°	775.9	766.1	735.0	726.3	720.4
15°	760.3	745.7	710.7	698.1	691.3
17.5°	737.9	723.4	684.5	667.0	659.2
20°	714.6	693.2	653.4	635.9	624.2
22.5°	689.3	662.1	623.2	601.8	589.2
25°	661.1	632.0	587.2	565.9	554.2
27.5°	631.0	598.9	553.2	528.9	517.2
30°	601.8	564.9	518.2	491.0	477.4
32.5°	570.7	528.9	481.3	453.1	439.5
35°	535.7	494.9	446.3	415.2	399.6
37.5°	502.7	460.8	410.3	377.2	359.7
40°	467.7	425.8	374.3	340.3	321.8
42.5°	430.7	390.8	340.3	300.4	282.9
45°	395.7	353.9	305.3	263.5	244.0
47.5°	357.8	318.9	271.3	228.5	214.9
50°	318.9	282.9	238.2	199.3	192.5
52.5°	281.0	250.8	205.1	179.9	177.0
55°	242.1	216.8	177.9	162.4	157.5
57.5°	206.1	187.6	152.6	144.9	142.9
60°	172.1	156.5	135.1	130.3	127.4
62.5°	139.0	130.3	117.6	115.7	113.8
65°	110.8	106.9	101.1	101.1	100.1
67.5°	87.5	87.5	86.5	88.5	87.5
70°	70.0	71.0	72.9	74.9	75.8
72.5°	55.4	58.3	60.3	63.2	64.2
75°	42.8	45.7	49.6	51.5	53.5
77.5°	31.1	34.0	37.9	40.8	42.8
80°	21.4	23.3	27.2	31.1	33.1
82.5°	13.6	14.6	17.5	21.4	23.3
85°	5.8	6.8	8.8	12.6	14.6
87.5°	0.0	0.0	1.0	3.9	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)