

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: P1059042

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059042
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
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-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

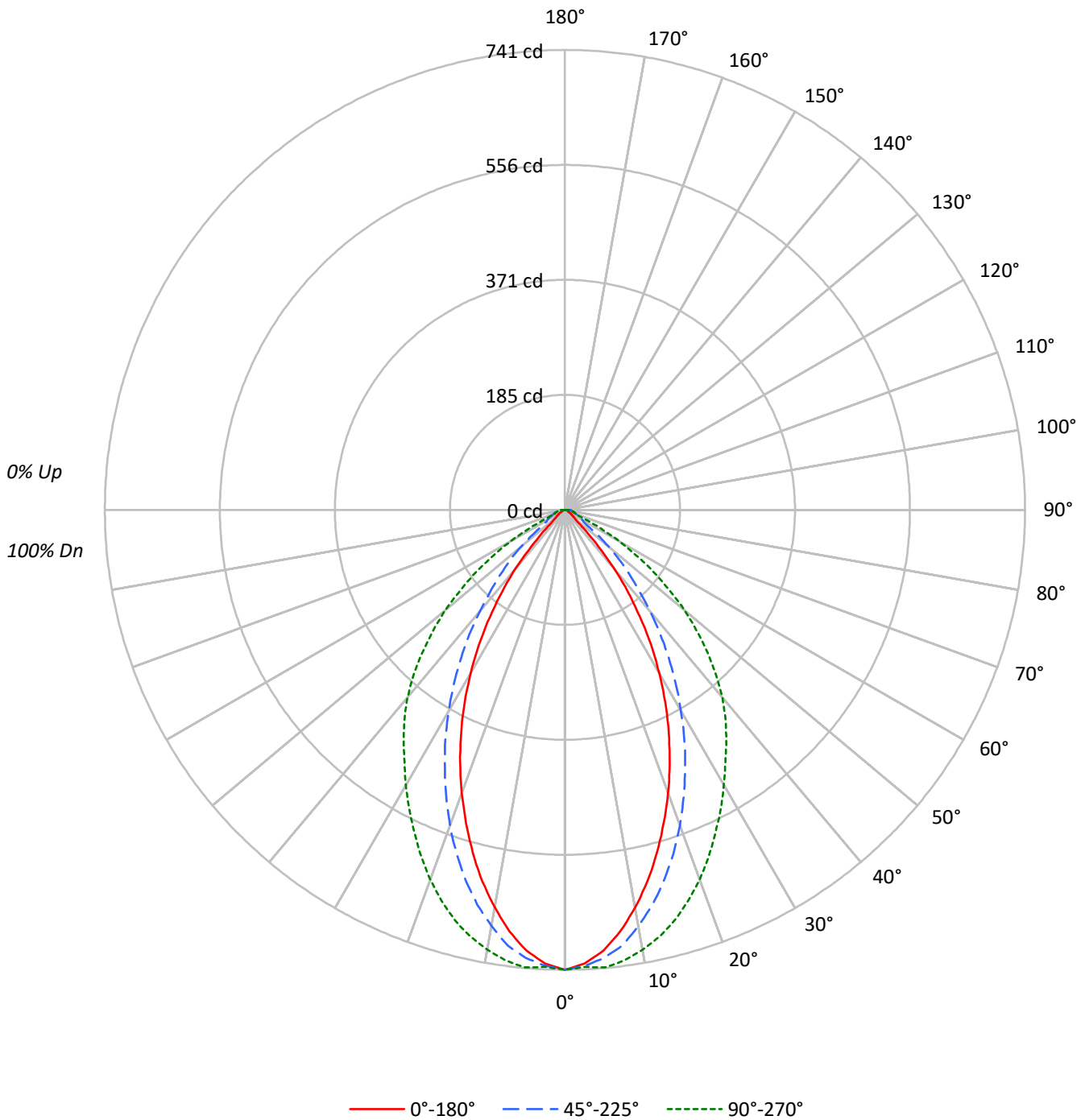
Lumens per Lamp: N/A
Luminaire Lumens: 889.7 lumens
Efficiency: N/A
Efficacy: 25.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55				
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8701	8701	8701
5°	8402	8540	8724
10°	7756	8116	8580
15°	6961	7506	8322
20°	6072	6765	7921
25°	5123	5930	7432
30°	4119	5070	6945
35°	3015	4174	6491
40°	1881	3254	6046
45°	711	2426	5385
50°	338	1672	4589
55°	260	917	3548
60°	183	777	2332
65°	136	675	975
70°	134	635	635
75°	177	662	662
80°	264	791	724
85°	525	1307	1051

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5385 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	7.6
10°-20°	174.4	19.6
20°-30°	215.9	24.3
30°-40°	193.6	21.8
40°-50°	126.9	14.3
50°-60°	63.5	7.1
60°-70°	24.8	2.8
70°-80°	14.0	1.6
80°-90°	8.6	1.0
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°	458.4	51.5
0°-40°	651.9	73.3
0°-60°	842.4	94.7
0°-90°	889.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	889.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	741	741	741	741	741	
5°	713	724	724	732	740	66
15°	573	596	617	658	685	159
25°	395	420	458	523	574	180
35°	210	239	291	379	453	131
45°	43	69	146	250	324	41
55°	13	16	45	123	173	12
65°	5	15	24	32	35	5
75°	4	15	15	15	15	4
85°	4	10	10	10	8	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	741.0	741.0	741.0	741.0	741.0
2.5°	731.3	742.0	735.2	736.2	737.1
5°	712.8	724.5	724.5	732.3	740.1
7.5°	684.6	698.2	707.9	721.6	732.3
10°	650.5	667.0	680.7	705.0	719.6
12.5°	613.5	633.9	651.5	683.6	704.0
15°	572.6	595.9	617.4	658.3	684.6
17.5°	528.8	552.1	580.4	628.1	660.2
20°	485.9	509.3	541.4	595.0	633.9
22.5°	441.1	465.5	499.5	558.9	604.7
25°	395.4	419.7	457.7	522.9	573.6
27.5°	349.6	373.9	416.8	487.9	543.4
30°	303.8	328.2	373.9	449.9	512.2
32.5°	258.0	284.3	332.1	414.8	481.0
35°	210.3	238.6	291.2	378.8	452.8
37.5°	166.5	192.8	252.2	347.6	424.6
40°	122.7	150.9	212.3	317.4	394.4
42.5°	79.8	110.0	176.3	284.3	360.3
45°	42.8	69.1	146.1	250.3	324.3
47.5°	23.4	38.0	117.8	214.2	287.3
50°	18.5	21.4	91.5	183.1	251.2
52.5°	15.6	17.5	65.2	153.9	211.3
55°	12.7	15.6	44.8	122.7	173.3
57.5°	10.7	13.6	35.1	95.4	135.4
60°	7.8	11.7	33.1	70.1	99.3
62.5°	5.8	12.7	29.2	48.7	65.2
65°	4.9	14.6	24.3	32.1	35.1
67.5°	3.9	15.6	21.4	20.4	20.4
70°	3.9	14.6	18.5	17.5	18.5
72.5°	3.9	15.6	16.6	15.6	16.6
75°	3.9	14.6	14.6	14.6	14.6
77.5°	3.9	13.6	13.6	12.7	12.7
80°	3.9	11.7	11.7	11.7	10.7
82.5°	3.9	10.7	10.7	10.7	8.8
85°	3.9	9.7	9.7	9.7	7.8
87.5°	2.9	8.8	9.7	8.8	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)