

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: P1057873

Luminaire Tested: S122RDR-S290D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057873
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

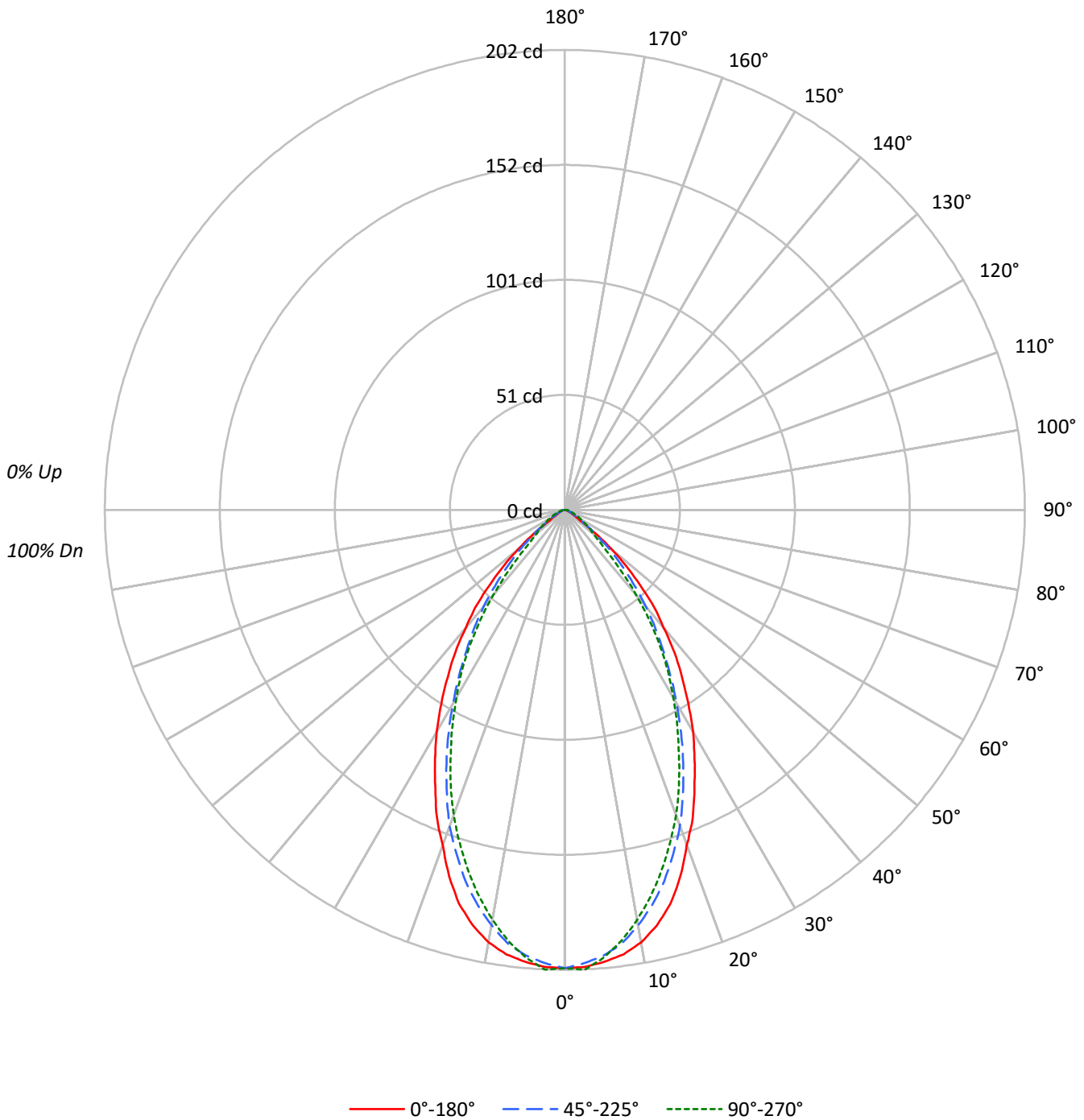
Lumens per Lamp: N/A
Luminaire Lumens: 216.5 lumens
Efficiency: N/A
Efficacy: 17.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	99	100	98	96	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	93	87	82	98	91	86	82	88	84	80	86	82	79	84	81	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3714	3714	3714
5°	3692	3640	3655
10°	3614	3472	3425
15°	3423	3225	3133
20°	3077	2904	2802
25°	2740	2504	2413
30°	2397	2090	2028
35°	2018	1692	1638
40°	1626	1337	1180
45°	1216	966	702
50°	761	623	462
55°	257	335	376
60°	148	207	295
65°	105	140	227
70°	86	108	173
75°	57	86	143
80°	43	85	128
85°	0	0	85

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1216 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.6	8.6
10°-20°	47.5	21.9
20°-30°	57.2	26.4
30°-40°	48.9	22.6
40°-50°	28.6	13.2
50°-60°	10.4	4.8
60°-70°	3.7	1.7
70°-80°	1.5	0.7
80°-90°	0.3	0.1
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°	123.3	56.9
0°-40°	172.1	79.5
0°-60°	211.1	97.5
0°-90°	216.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	216.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	201	201	201	201	201	
5°	199	200	196	197	197	19
15°	179	176	169	166	164	50
25°	135	129	123	121	118	62
35°	90	83	75	74	73	56
45°	47	42	37	31	27	36
55°	8	11	10	11	12	10
65°	2	3	3	4	5	3
75°	1	1	1	2	2	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	201.3	201.3	201.3	201.3	201.3
2.5°	200.9	201.3	199.3	201.3	202.1
5°	199.3	199.7	196.5	197.3	197.3
7.5°	196.9	196.5	192.1	191.3	190.9
10°	192.9	191.7	185.3	184.1	182.8
12.5°	186.9	184.5	177.6	175.6	174.0
15°	179.2	176.4	168.8	165.6	164.0
17.5°	168.8	165.6	158.3	155.1	153.5
20°	156.7	153.5	147.9	144.3	142.7
22.5°	146.7	141.5	135.4	133.0	131.0
25°	134.6	129.0	123.0	121.0	118.5
27.5°	123.4	116.5	110.5	108.9	106.9
30°	112.5	105.3	98.1	98.1	95.2
32.5°	100.9	94.0	86.4	86.0	84.4
35°	89.6	82.8	75.1	74.3	72.7
37.5°	79.2	72.3	65.1	62.7	60.7
40°	67.5	61.5	55.5	51.4	49.0
42.5°	58.3	51.4	45.4	40.6	37.4
45°	46.6	41.8	37.0	30.9	26.9
47.5°	36.2	33.0	28.9	22.1	20.1
50°	26.5	24.9	21.7	16.5	16.1
52.5°	16.9	17.7	15.7	12.9	14.1
55°	8.0	11.3	10.4	10.9	11.7
57.5°	5.2	5.6	7.6	8.8	9.6
60°	4.0	4.0	5.6	7.2	8.0
62.5°	3.2	3.2	4.4	6.0	6.4
65°	2.4	2.8	3.2	4.4	5.2
67.5°	2.0	2.0	2.4	3.6	4.0
70°	1.6	1.6	2.0	2.8	3.2
72.5°	1.2	1.2	1.6	2.4	2.4
75°	0.8	1.2	1.2	1.6	2.0
77.5°	0.8	0.8	0.8	1.2	1.6
80°	0.4	0.4	0.8	0.8	1.2
82.5°	0.4	0.4	0.4	0.4	0.8
85°	0.0	0.0	0.0	0.4	0.4
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)