

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: P1057874

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057874
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
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-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

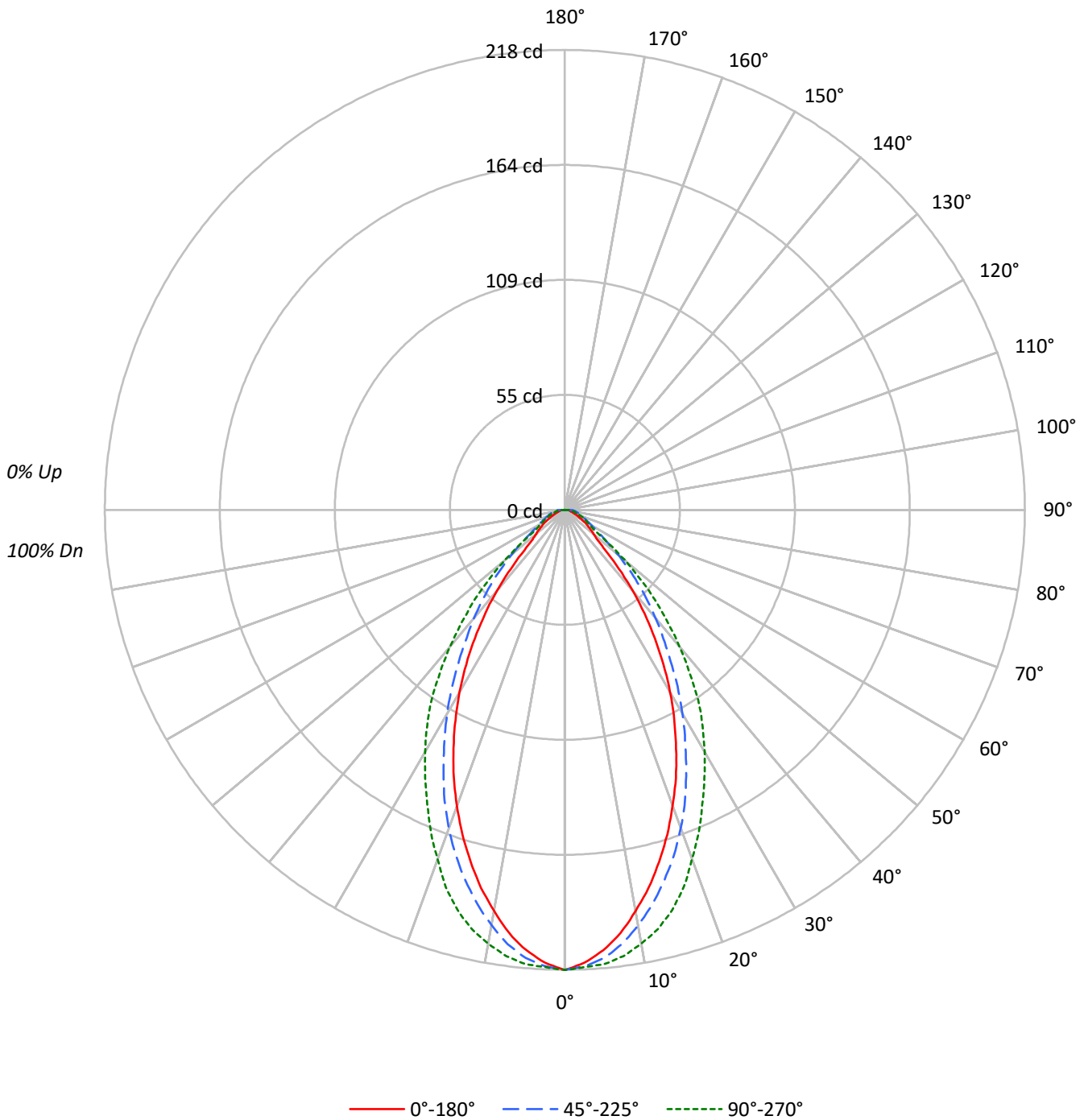
Lumens per Lamp: N/A
Luminaire Lumens: 263.1 lumens
Efficiency: N/A
Efficacy: 21.0 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80			80	
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72			72	
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65			65	
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59			59	
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54			54	
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50			50	
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46			46	
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42			42	
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39			39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4024	4024	4024
5°	3882	3951	4003
10°	3618	3747	3912
15°	3297	3475	3752
20°	2932	3154	3460
25°	2539	2769	3137
30°	2126	2376	2821
35°	1676	1967	2485
40°	1202	1609	2035
45°	705	1271	1576
50°	508	924	1062
55°	428	660	557
60°	343	535	476
65°	279	476	441
70°	237	459	410
75°	228	485	399
80°	255	595	425
85°	423	932	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1576 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.0	7.6
10°-20°	51.2	19.5
20°-30°	62.9	23.9
30°-40°	55.6	21.1
40°-50°	35.5	13.5
50°-60°	17.3	6.6
60°-70°	10.3	3.9
70°-80°	6.6	2.5
80°-90°	3.6	1.4
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°	134.1	51.0
0°-40°	189.7	72.1
0°-60°	242.6	92.2
0°-90°	263.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	263.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	218	218	218	218	218	
5°	210	214	213	214	216	19
15°	173	178	182	190	196	48
25°	125	129	136	144	154	57
35°	74	78	87	99	110	46
45°	27	35	49	55	60	23
55°	13	18	20	19	17	12
65°	6	12	11	10	10	6
75°	3	7	7	6	6	4
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	218.1	218.1	218.1	218.1	218.1
2.5°	214.9	218.9	216.5	216.5	216.9
5°	209.6	214.1	213.3	214.1	216.1
7.5°	202.4	206.8	207.6	210.9	213.3
10°	193.1	197.6	200.0	205.2	208.8
12.5°	183.5	187.9	191.5	198.4	203.6
15°	172.6	177.5	181.9	189.9	196.4
17.5°	161.4	166.2	171.8	179.9	187.5
20°	149.3	153.7	160.6	168.2	176.2
22.5°	137.6	141.6	148.9	156.1	165.8
25°	124.7	129.2	136.0	144.5	154.1
27.5°	112.3	116.7	123.5	133.2	143.3
30°	99.8	103.8	111.5	121.5	132.4
32.5°	86.9	90.9	99.4	110.3	121.5
35°	74.4	78.5	87.3	99.4	110.3
37.5°	62.0	66.4	76.5	87.7	97.0
40°	49.9	55.1	66.8	76.5	84.5
42.5°	37.8	45.1	57.5	65.6	72.0
45°	27.0	34.6	48.7	54.7	60.4
47.5°	20.5	26.6	40.2	44.7	48.3
50°	17.7	21.7	32.2	35.4	37.0
52.5°	15.3	19.3	25.8	27.0	26.2
55°	13.3	17.7	20.5	19.3	17.3
57.5°	11.3	16.5	16.9	14.5	14.9
60°	9.3	14.9	14.5	12.5	12.9
62.5°	7.6	13.7	12.5	11.3	11.3
65°	6.4	12.1	10.9	10.1	10.1
67.5°	5.2	10.9	9.7	8.9	8.9
70°	4.4	9.7	8.5	7.6	7.6
72.5°	4.0	8.5	7.6	6.8	6.8
75°	3.2	7.2	6.8	6.0	5.6
77.5°	2.8	6.0	6.0	5.6	4.8
80°	2.4	5.2	5.6	4.8	4.0
82.5°	2.4	4.8	4.8	4.4	3.2
85°	2.0	4.0	4.4	4.0	2.8
87.5°	1.2	3.6	3.6	3.2	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)