

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: P1057871

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057871
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D830-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

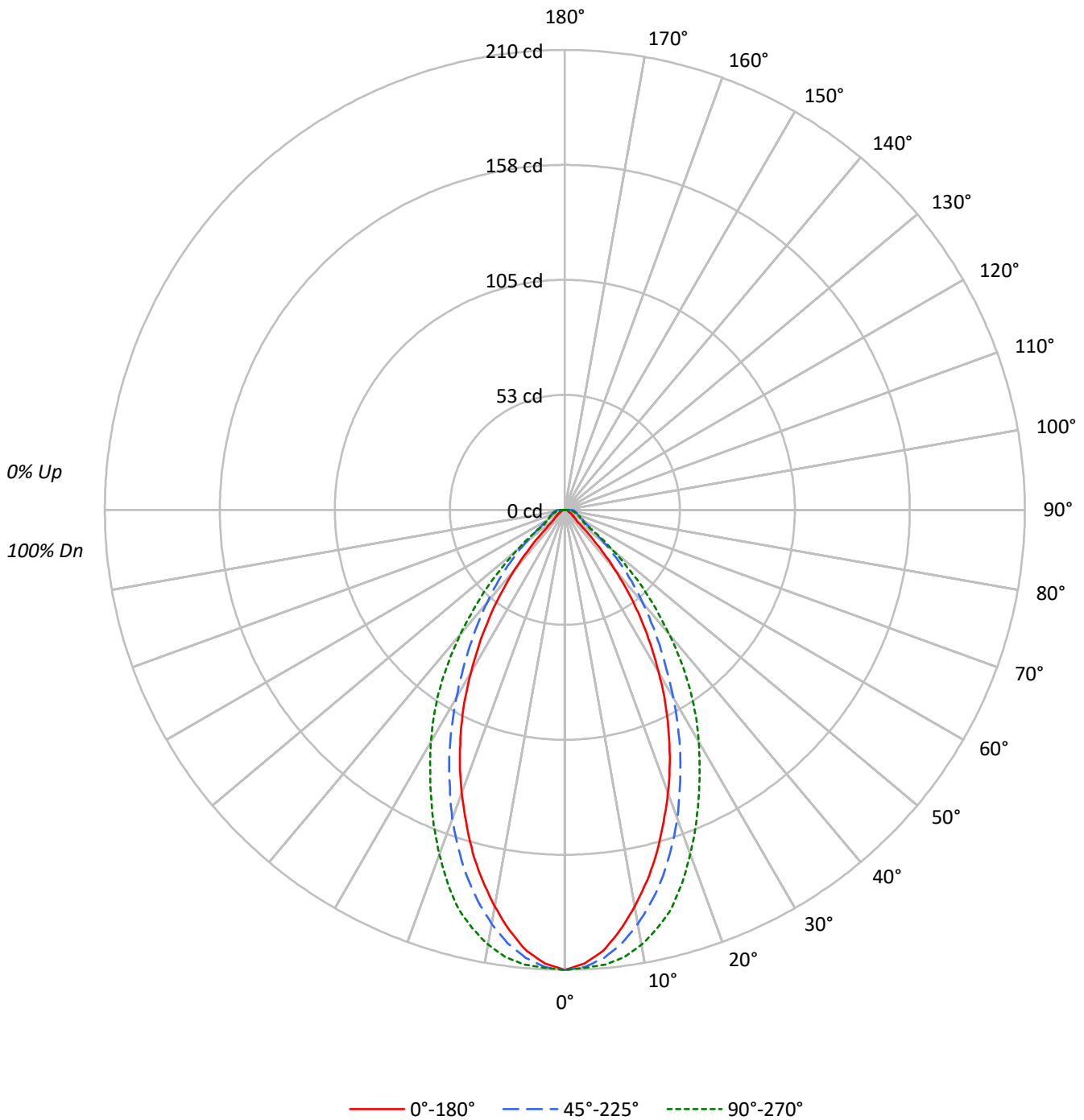
Lumens per Lamp: N/A
Luminaire Lumens: 226.4 lumens
Efficiency: N/A
Efficacy: 18.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3877	3877	3877
5°	3742	3803	3862
10°	3446	3598	3777
15°	3099	3307	3597
20°	2702	2947	3287
25°	2286	2541	2942
30°	1826	2109	2606
35°	1352	1696	2239
40°	853	1327	1785
45°	337	997	1313
50°	172	669	810
55°	142	441	364
60°	103	358	328
65°	87	332	332
70°	86	345	324
75°	114	399	342
80°	170	510	383
85°	254	847	508

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 1692 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.2	8.5
10°-20°	48.5	21.4
20°-30°	57.7	25.5
30°-40°	48.0	21.2
40°-50°	26.8	11.8
50°-60°	10.8	4.8
60°-70°	6.9	3.1
70°-80°	5.2	2.3
80°-90°	3.3	1.5
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°	125.4	55.4
0°-40°	173.4	76.6
0°-60°	211.0	93.2
0°-90°	226.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	226.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	210	210	210	210	210	
5°	202	206	205	207	208	19
15°	162	167	173	182	188	45
25°	112	117	125	134	144	51
35°	60	66	75	88	99	37
45°	13	22	38	45	50	12
55°	4	9	14	13	11	4
65°	2	8	8	7	8	2
75°	2	6	6	5	5	2
85°	1	4	4	4	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	210.1	210.1	210.1	210.1	210.1
2.5°	207.3	210.5	208.9	208.9	209.3
5°	202.0	205.7	205.3	206.9	208.5
7.5°	193.6	197.6	199.6	203.2	206.1
10°	183.9	188.3	192.0	197.6	201.6
12.5°	173.5	177.9	183.1	190.4	195.6
15°	162.2	167.0	173.1	181.9	188.3
17.5°	149.7	154.9	161.8	171.4	178.3
20°	137.6	142.9	150.1	159.8	167.4
22.5°	125.2	129.6	137.2	146.9	156.2
25°	112.3	116.7	124.8	134.4	144.5
27.5°	99.4	103.8	111.9	121.9	133.2
30°	85.7	90.6	99.0	110.3	122.3
32.5°	72.8	77.7	86.5	99.0	111.1
35°	60.0	65.6	75.3	87.7	99.4
37.5°	47.5	53.9	64.8	76.5	86.9
40°	35.4	42.3	55.1	65.2	74.1
42.5°	23.3	31.4	46.3	54.7	61.6
45°	12.9	21.7	38.2	44.7	50.3
47.5°	7.2	14.1	30.2	35.4	38.6
50°	6.0	10.5	23.3	27.0	28.2
52.5°	4.8	9.7	17.7	19.7	18.9
55°	4.4	9.3	13.7	13.3	11.3
57.5°	3.6	9.3	10.9	9.7	9.7
60°	2.8	8.9	9.7	8.5	8.9
62.5°	2.4	8.5	8.9	8.0	8.0
65°	2.0	8.0	7.6	7.2	7.6
67.5°	1.6	7.2	7.2	6.8	6.8
70°	1.6	6.8	6.4	6.0	6.0
72.5°	1.6	6.0	6.0	5.6	5.6
75°	1.6	5.6	5.6	5.2	4.8
77.5°	1.6	4.8	5.2	4.8	4.4
80°	1.6	4.4	4.8	4.4	3.6
82.5°	1.6	4.0	4.4	4.0	3.2
85°	1.2	3.6	4.0	3.6	2.4
87.5°	1.2	3.6	4.0	3.2	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)