

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: P1057898

Luminaire Tested: S122RDR-S290D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057898
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-S290D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

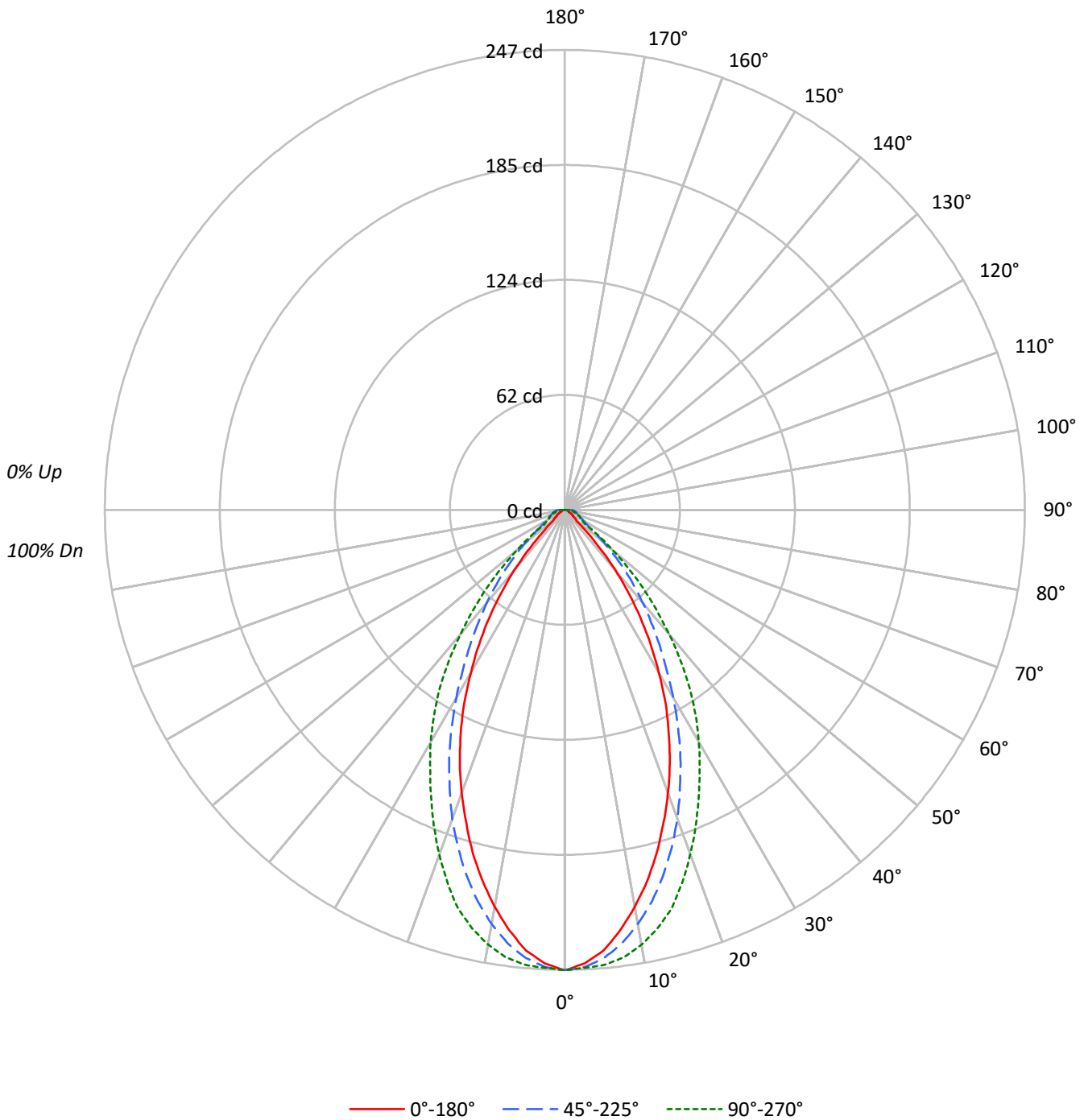
Lumens per Lamp: N/A
Luminaire Lumens: 266.5 lumens
Efficiency: N/A
Efficacy: 21.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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°	4561	4561	4561
5°	4403	4473	4544
10°	4055	4233	4444
15°	3645	3889	4233
20°	3179	3468	3868
25°	2690	2989	3461
30°	2150	2482	3068
35°	1590	1996	2636
40°	1004	1563	2098
45°	397	1174	1545
50°	204	789	950
55°	167	518	428
60°	122	421	384
65°	105	393	393
70°	103	410	383
75°	135	471	406
80°	202	606	457
85°	296	995	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 1988 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.6	8.5
10°-20°	57.1	21.4
20°-30°	67.9	25.5
30°-40°	56.5	21.2
40°-50°	31.5	11.8
50°-60°	12.7	4.8
60°-70°	8.2	3.1
70°-80°	6.1	2.3
80°-90°	3.9	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°	147.6	55.4
0°-40°	204.0	76.6
0°-60°	248.3	93.2
0°-90°	266.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	266.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	247	247	247	247	247	
5°	238	242	242	243	245	22
15°	191	196	204	214	222	53
25°	132	137	147	158	170	60
35°	71	77	89	103	117	44
45°	15	26	45	53	59	14
55°	5	11	16	16	13	5
65°	2	10	9	8	9	2
75°	2	7	7	6	6	2
85°	1	4	5	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	247.2	247.2	247.2	247.2	247.2
2.5°	243.9	247.7	245.8	245.8	246.2
5°	237.7	242.0	241.5	243.4	245.3
7.5°	227.8	232.5	234.9	239.1	242.4
10°	216.4	221.6	225.9	232.5	237.2
12.5°	204.1	209.3	215.5	224.0	230.1
15°	190.8	196.5	203.6	214.0	221.6
17.5°	176.2	182.3	190.4	201.7	209.8
20°	161.9	168.1	176.6	188.0	197.0
22.5°	147.3	152.5	161.5	172.8	183.7
25°	132.1	137.3	146.8	158.2	170.0
27.5°	117.0	122.2	131.6	143.5	156.7
30°	100.9	106.5	116.5	129.7	144.0
32.5°	85.7	91.4	101.8	116.5	130.7
35°	70.6	77.2	88.6	103.2	117.0
37.5°	55.9	63.5	76.2	90.0	102.3
40°	41.7	49.7	64.9	76.7	87.1
42.5°	27.5	36.9	54.5	64.4	72.5
45°	15.2	25.6	45.0	52.6	59.2
47.5°	8.5	16.6	35.5	41.7	45.5
50°	7.1	12.3	27.5	31.7	33.1
52.5°	5.7	11.4	20.8	23.2	22.3
55°	5.2	10.9	16.1	15.6	13.3
57.5°	4.3	10.9	12.8	11.4	11.4
60°	3.3	10.4	11.4	9.9	10.4
62.5°	2.8	9.9	10.4	9.5	9.5
65°	2.4	9.5	9.0	8.5	9.0
67.5°	1.9	8.5	8.5	8.1	8.1
70°	1.9	8.1	7.6	7.1	7.1
72.5°	1.9	7.1	7.1	6.6	6.6
75°	1.9	6.6	6.6	6.2	5.7
77.5°	1.9	5.7	6.2	5.7	5.2
80°	1.9	5.2	5.7	5.2	4.3
82.5°	1.9	4.7	5.2	4.7	3.8
85°	1.4	4.3	4.7	4.3	2.8
87.5°	1.4	4.3	4.7	3.8	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)