

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: P1057904

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057904
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D850-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

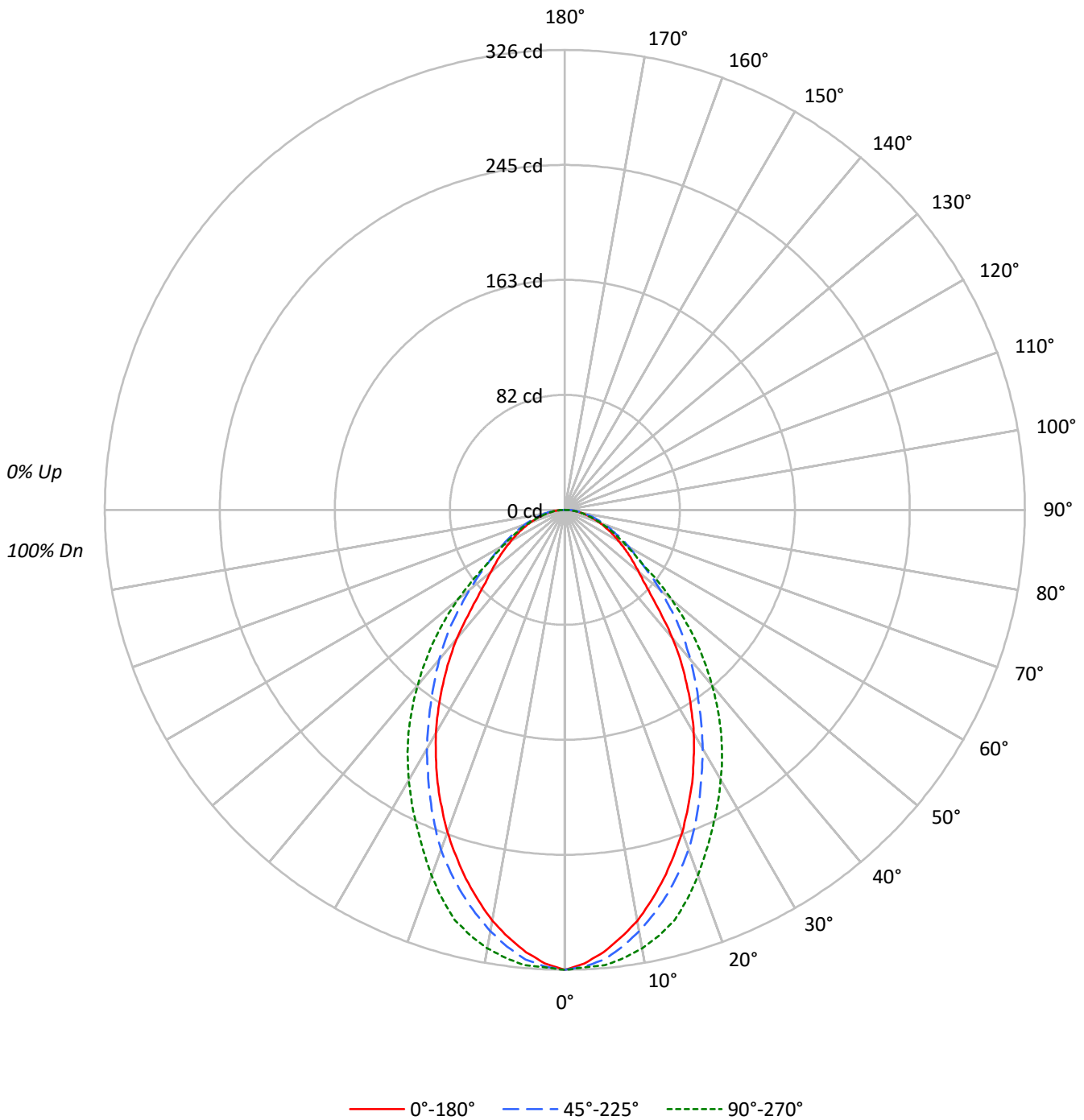
Lumens per Lamp: N/A
Luminaire Lumens: 530.9 lumens
Efficiency: N/A
Efficacy: 42.5 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1057904

CATALOG NUMBER: S122RDR-S290D850-X4F0-XX-UDD-WVL-S

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66				
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59				
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52				
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47				
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43				
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6016	6016	6016
5°	5829	5925	6003
10°	5542	5683	5913
15°	5171	5380	5750
20°	4776	5037	5418
25°	4345	4595	5049
30°	3893	4163	4709
35°	3390	3719	4350
40°	2862	3329	3909
45°	2273	2938	3421
50°	1955	2526	2839
55°	1782	2162	2178
60°	1624	1923	1853
65°	1489	1733	1633
70°	1381	1608	1457
75°	1283	1519	1283
80°	1211	1456	1158
85°	1207	1503	995

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3421 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.1	5.7
10°-20°	79.6	15.0
20°-30°	104.7	19.7
30°-40°	105.3	19.8
40°-50°	85.3	16.1
50°-60°	58.8	11.1
60°-70°	38.5	7.2
70°-80°	21.4	4.0
80°-90°	7.3	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°	214.4	40.4
0°-40°	319.6	60.2
0°-60°	463.8	87.4
0°-90°	530.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	530.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	326	326	326	326	326	
5°	315	321	320	321	324	29
15°	271	277	282	292	301	76
25°	213	219	226	236	248	98
35°	150	158	165	180	193	94
45°	87	97	113	123	131	69
55°	55	62	67	69	68	50
65°	34	41	40	38	37	34
75°	18	22	21	19	18	19
85°	6	8	7	6	5	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	326.0	326.0	326.0	326.0	326.0
2.5°	321.8	327.5	324.1	324.1	324.6
5°	314.7	320.8	319.9	321.3	324.1
7.5°	305.7	312.3	312.3	316.6	320.4
10°	295.8	302.4	303.3	309.9	315.6
12.5°	283.4	290.1	292.9	301.4	309.0
15°	270.7	277.3	281.6	292.0	301.0
17.5°	256.9	263.6	269.3	280.1	289.1
20°	243.2	249.4	256.5	265.9	275.9
22.5°	228.1	234.7	241.3	250.3	261.7
25°	213.4	219.1	225.7	235.7	248.0
27.5°	197.8	204.0	210.1	221.9	234.7
30°	182.7	188.8	195.4	207.7	221.0
32.5°	166.6	173.2	179.8	193.5	207.3
35°	150.5	157.6	165.1	179.8	193.1
37.5°	134.9	142.4	151.4	166.6	177.9
40°	118.8	126.8	138.2	151.4	162.3
42.5°	101.7	111.7	125.4	136.8	146.7
45°	87.1	97.0	112.6	122.6	131.1
47.5°	76.2	84.2	99.4	107.9	115.0
50°	68.1	74.3	88.0	94.2	98.9
52.5°	61.5	67.7	77.1	81.4	82.8
55°	55.4	61.5	67.2	68.6	67.7
57.5°	49.2	55.8	59.2	57.7	57.7
60°	44.0	51.1	52.1	50.2	50.2
62.5°	38.8	45.9	45.9	43.5	43.5
65°	34.1	40.7	39.7	37.9	37.4
67.5°	29.8	36.0	34.5	32.7	32.2
70°	25.6	31.2	29.8	27.4	27.0
72.5°	21.8	27.0	25.1	23.2	22.2
75°	18.0	22.2	21.3	18.9	18.0
77.5°	14.7	18.0	17.0	15.1	14.2
80°	11.4	14.2	13.7	11.8	10.9
82.5°	8.5	10.9	10.4	9.0	7.6
85°	5.7	7.6	7.1	6.2	4.7
87.5°	2.8	5.2	4.7	4.3	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)