

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: P1057922

Luminaire Tested: S122RDR-S290D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057922
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-S290D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

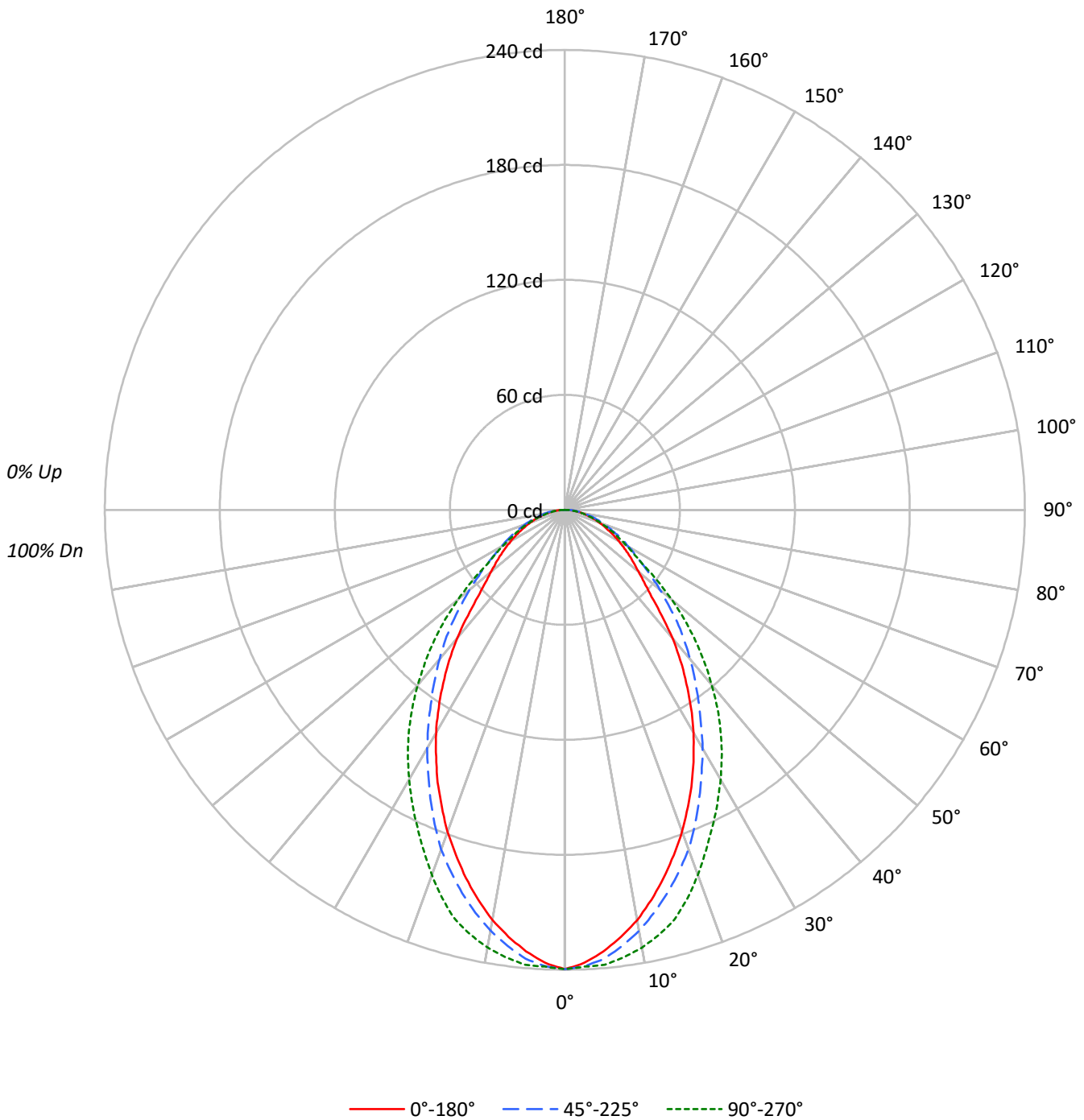
Lumens per Lamp: N/A
Luminaire Lumens: 390.3 lumens
Efficiency: N/A
Efficacy: 31.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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				
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°	4423	4423	4423
5°	4284	4357	4414
10°	4073	4178	4347
15°	3802	3954	4228
20°	3511	3703	3982
25°	3194	3378	3712
30°	2862	3062	3462
35°	2491	2735	3196
40°	2103	2447	2874
45°	1670	2161	2516
50°	1438	1857	2087
55°	1309	1589	1599
60°	1196	1413	1362
65°	1092	1275	1201
70°	1014	1182	1068
75°	941	1119	941
80°	882	1073	850
85°	889	1101	741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2516 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.1	5.7
10°-20°	58.5	15.0
20°-30°	77.0	19.7
30°-40°	77.4	19.8
40°-50°	62.7	16.1
50°-60°	43.2	11.1
60°-70°	28.3	7.2
70°-80°	15.7	4.0
80°-90°	5.3	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°	157.6	40.4
0°-40°	235.0	60.2
0°-60°	340.9	87.4
0°-90°	390.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	390.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	240	240	240	240	240	
5°	231	236	235	236	238	22
15°	199	204	207	215	221	56
25°	157	161	166	173	182	72
35°	111	116	121	132	142	69
45°	64	71	83	90	96	51
55°	41	45	49	50	50	36
65°	25	30	29	28	28	25
75°	13	16	16	14	13	14
85°	4	6	5	4	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	239.7	239.7	239.7	239.7	239.7
2.5°	236.6	240.7	238.3	238.3	238.6
5°	231.3	235.9	235.2	236.2	238.3
7.5°	224.7	229.6	229.6	232.7	235.5
10°	217.4	222.3	223.0	227.9	232.0
12.5°	208.4	213.3	215.3	221.6	227.2
15°	199.0	203.9	207.0	214.6	221.3
17.5°	188.9	193.8	197.9	205.9	212.6
20°	178.8	183.3	188.6	195.5	202.8
22.5°	167.7	172.5	177.4	184.0	192.4
25°	156.9	161.1	165.9	173.2	182.3
27.5°	145.4	149.9	154.5	163.2	172.5
30°	134.3	138.8	143.7	152.7	162.5
32.5°	122.5	127.3	132.2	142.3	152.4
35°	110.6	115.8	121.4	132.2	141.9
37.5°	99.1	104.7	111.3	122.5	130.8
40°	87.3	93.2	101.6	111.3	119.3
42.5°	74.8	82.1	92.2	100.5	107.8
45°	64.0	71.3	82.8	90.1	96.4
47.5°	56.0	61.9	73.1	79.3	84.5
50°	50.1	54.6	64.7	69.2	72.7
52.5°	45.2	49.7	56.7	59.8	60.9
55°	40.7	45.2	49.4	50.4	49.7
57.5°	36.2	41.1	43.5	42.4	42.4
60°	32.4	37.6	38.3	36.9	36.9
62.5°	28.5	33.7	33.7	32.0	32.0
65°	25.0	29.9	29.2	27.8	27.5
67.5°	21.9	26.4	25.4	24.0	23.7
70°	18.8	23.0	21.9	20.2	19.8
72.5°	16.0	19.8	18.4	17.0	16.4
75°	13.2	16.4	15.7	13.9	13.2
77.5°	10.8	13.2	12.5	11.1	10.4
80°	8.3	10.4	10.1	8.7	8.0
82.5°	6.3	8.0	7.7	6.6	5.6
85°	4.2	5.6	5.2	4.5	3.5
87.5°	2.1	3.8	3.5	3.1	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)