

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: P1057949

Luminaire Tested: S122RDR-S290D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057949
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-S290D950-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, 90 CRI LEDS
Ballast/Driver: -

Summary

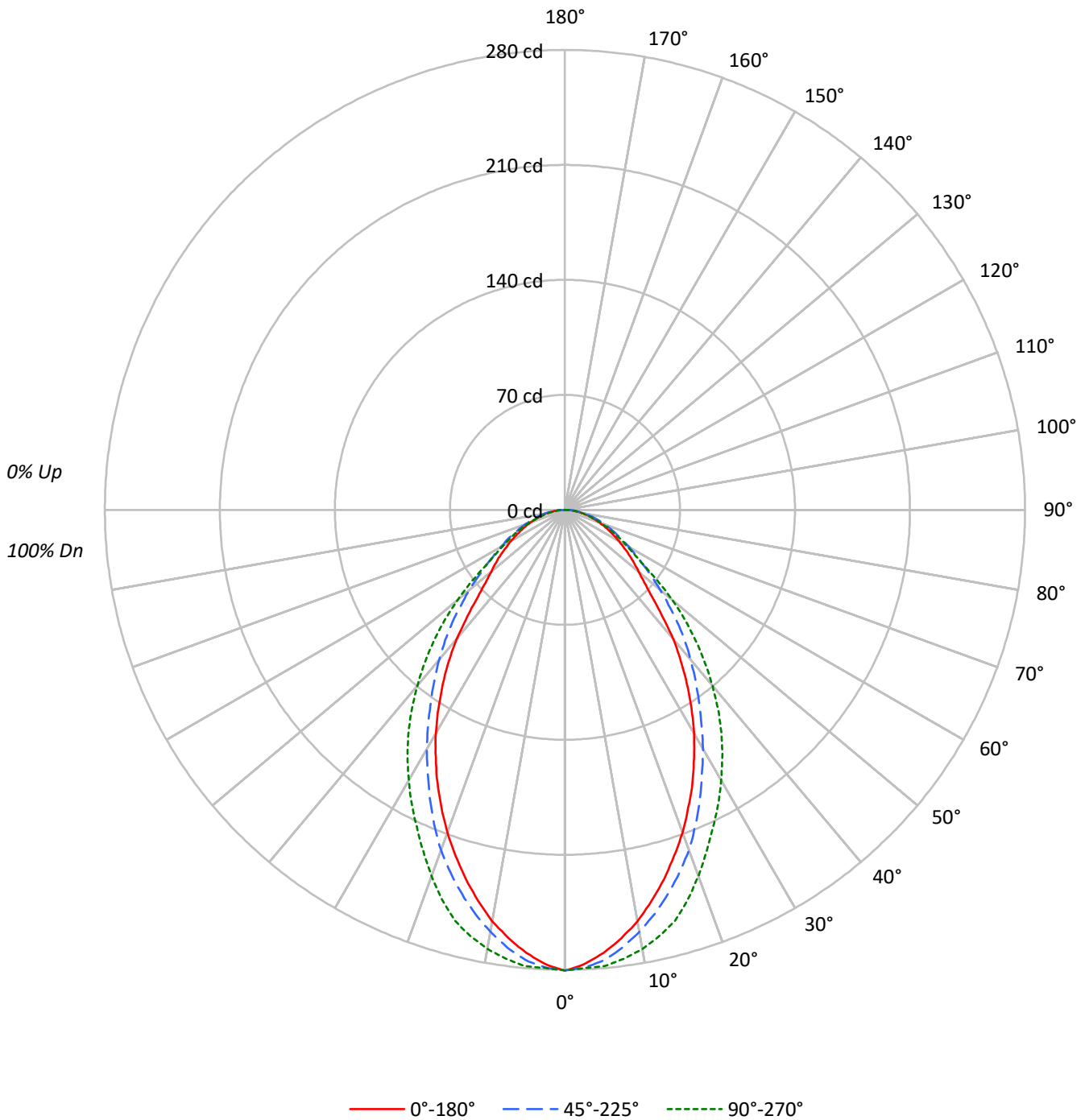
Lumens per Lamp: N/A
Luminaire Lumens: 456.7 lumens
Efficiency: N/A
Efficacy: 36.5 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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	86	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°	5176	5176	5176
5°	5014	5098	5164
10°	4767	4889	5087
15°	4447	4627	4946
20°	4108	4332	4660
25°	3738	3954	4343
30°	3347	3582	4050
35°	2915	3201	3742
40°	2462	2864	3363
45°	1955	2529	2944
50°	1682	2173	2443
55°	1531	1859	1872
60°	1399	1653	1591
65°	1279	1493	1406
70°	1187	1381	1252
75°	1105	1305	1105
80°	1041	1254	999
85°	1037	1291	868

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2944 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.9	5.7
10°-20°	68.4	15.0
20°-30°	90.1	19.7
30°-40°	90.6	19.8
40°-50°	73.4	16.1
50°-60°	50.6	11.1
60°-70°	33.1	7.2
70°-80°	18.4	4.0
80°-90°	6.2	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°	184.4	40.4
0°-40°	275.0	60.2
0°-60°	398.9	87.3
0°-90°	456.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	456.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	280	280	280	280	280	
5°	271	276	275	276	279	25
15°	233	238	242	251	259	65
25°	184	188	194	203	213	84
35°	129	136	142	155	166	81
45°	75	83	97	105	113	59
55°	48	53	58	59	58	43
65°	29	35	34	33	32	29
75°	16	19	18	16	16	17
85°	5	6	6	5	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	280.5	280.5	280.5	280.5	280.5
2.5°	276.8	281.7	278.8	278.8	279.2
5°	270.7	276.0	275.2	276.4	278.8
7.5°	263.0	268.7	268.7	272.3	275.6
10°	254.4	260.1	260.9	266.6	271.5
12.5°	243.8	249.5	252.0	259.3	265.8
15°	232.8	238.5	242.2	251.2	258.9
17.5°	221.0	226.7	231.6	241.0	248.7
20°	209.2	214.5	220.6	228.8	237.3
22.5°	196.2	201.9	207.6	215.3	225.1
25°	183.6	188.5	194.2	202.7	213.3
27.5°	170.2	175.4	180.7	190.9	201.9
30°	157.1	162.4	168.1	178.7	190.1
32.5°	143.3	149.0	154.7	166.5	178.3
35°	129.4	135.6	142.1	154.7	166.1
37.5°	116.0	122.5	130.3	143.3	153.1
40°	102.2	109.1	118.9	130.3	139.6
42.5°	87.5	96.1	107.9	117.6	126.2
45°	74.9	83.4	96.9	105.4	112.8
47.5°	65.5	72.5	85.5	92.8	98.9
50°	58.6	63.9	75.7	81.0	85.1
52.5°	52.9	58.2	66.4	70.0	71.2
55°	47.6	52.9	57.8	59.0	58.2
57.5°	42.3	48.0	50.9	49.7	49.7
60°	37.9	44.0	44.8	43.1	43.1
62.5°	33.4	39.5	39.5	37.5	37.5
65°	29.3	35.0	34.2	32.6	32.2
67.5°	25.6	30.9	29.7	28.1	27.7
70°	22.0	26.9	25.6	23.6	23.2
72.5°	18.7	23.2	21.6	19.9	19.1
75°	15.5	19.1	18.3	16.3	15.5
77.5°	12.6	15.5	14.7	13.0	12.2
80°	9.8	12.2	11.8	10.2	9.4
82.5°	7.3	9.4	9.0	7.7	6.5
85°	4.9	6.5	6.1	5.3	4.1
87.5°	2.4	4.5	4.1	3.7	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)