

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: P1057895

Luminaire Tested: S122RDR-S290D840-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057895
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-S290D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

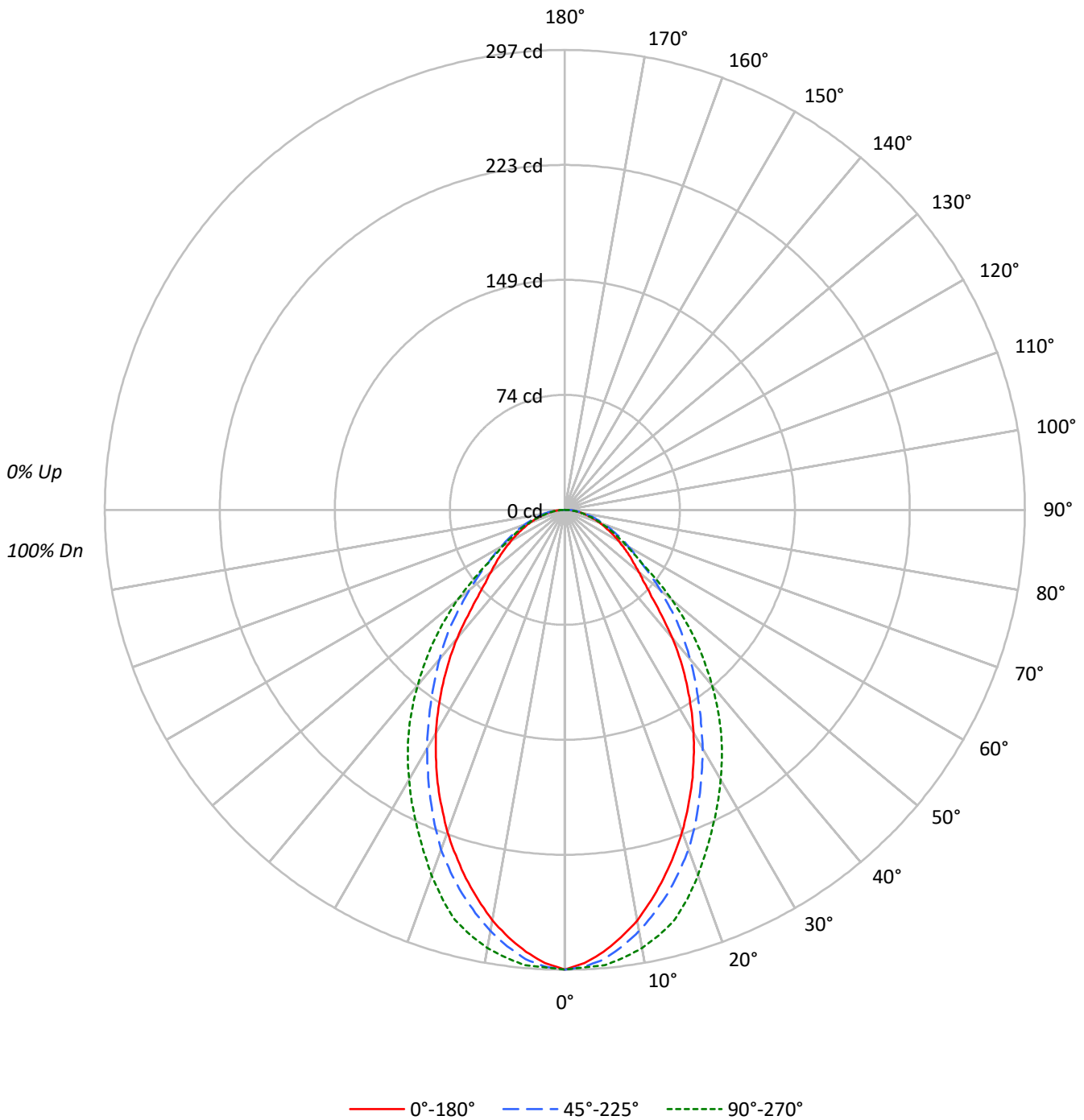
Lumens per Lamp: N/A
Luminaire Lumens: 483.4 lumens
Efficiency: N/A
Efficacy: 38.7 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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°	5479	5479	5479
5°	5309	5396	5468
10°	5046	5175	5385
15°	4709	4898	5236
20°	4350	4585	4933
25°	3956	4184	4597
30°	3543	3793	4287
35°	3086	3388	3960
40°	2606	3030	3560
45°	2069	2677	3116
50°	1783	2299	2586
55°	1621	1969	1982
60°	1480	1749	1687
65°	1354	1581	1485
70°	1257	1462	1327
75°	1169	1383	1169
80°	1095	1328	1052
85°	1101	1376	910

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3116 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.4	5.7
10°-20°	72.5	15.0
20°-30°	95.3	19.7
30°-40°	95.9	19.8
40°-50°	77.7	16.1
50°-60°	53.5	11.1
60°-70°	35.0	7.2
70°-80°	19.5	4.0
80°-90°	6.6	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°	195.2	40.4
0°-40°	291.1	60.2
0°-60°	422.3	87.4
0°-90°	483.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	483.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	297	297	297	297	297	
5°	287	292	291	293	295	27
15°	246	252	256	266	274	69
25°	194	200	206	215	226	89
35°	137	144	150	164	176	85
45°	79	88	103	112	119	63
55°	50	56	61	62	62	45
65°	31	37	36	34	34	31
75°	16	20	19	17	16	18
85°	5	7	6	6	4	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	296.9	296.9	296.9	296.9	296.9
2.5°	293.0	298.2	295.2	295.2	295.6
5°	286.6	292.2	291.3	292.6	295.2
7.5°	278.4	284.4	284.4	288.3	291.7
10°	269.3	275.3	276.2	282.2	287.4
12.5°	258.1	264.1	266.7	274.5	281.4
15°	246.5	252.5	256.4	265.9	274.1
17.5°	234.0	240.0	245.2	255.1	263.3
20°	221.5	227.1	233.5	242.2	251.2
22.5°	207.7	213.7	219.8	227.9	238.3
25°	194.3	199.5	205.5	214.6	225.8
27.5°	180.1	185.7	191.3	202.1	213.7
30°	166.3	171.9	178.0	189.2	201.2
32.5°	151.7	157.7	163.7	176.2	188.7
35°	137.0	143.5	150.4	163.7	175.8
37.5°	122.8	129.7	137.9	151.7	162.0
40°	108.2	115.5	125.8	137.9	147.8
42.5°	92.6	101.7	114.2	124.5	133.6
45°	79.3	88.3	102.6	111.6	119.4
47.5°	69.4	76.7	90.5	98.2	104.7
50°	62.1	67.7	80.1	85.7	90.1
52.5°	56.0	61.6	70.2	74.1	75.4
55°	50.4	56.0	61.2	62.5	61.6
57.5°	44.8	50.8	53.9	52.6	52.6
60°	40.1	46.5	47.4	45.7	45.7
62.5°	35.3	41.8	41.8	39.6	39.6
65°	31.0	37.1	36.2	34.5	34.0
67.5°	27.1	32.7	31.5	29.7	29.3
70°	23.3	28.4	27.1	25.0	24.6
72.5°	19.8	24.6	22.8	21.1	20.3
75°	16.4	20.3	19.4	17.2	16.4
77.5°	13.4	16.4	15.5	13.8	12.9
80°	10.3	12.9	12.5	10.8	9.9
82.5°	7.8	9.9	9.5	8.2	6.9
85°	5.2	6.9	6.5	5.6	4.3
87.5°	2.6	4.7	4.3	3.9	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)