

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: P1057903

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057903
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
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-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

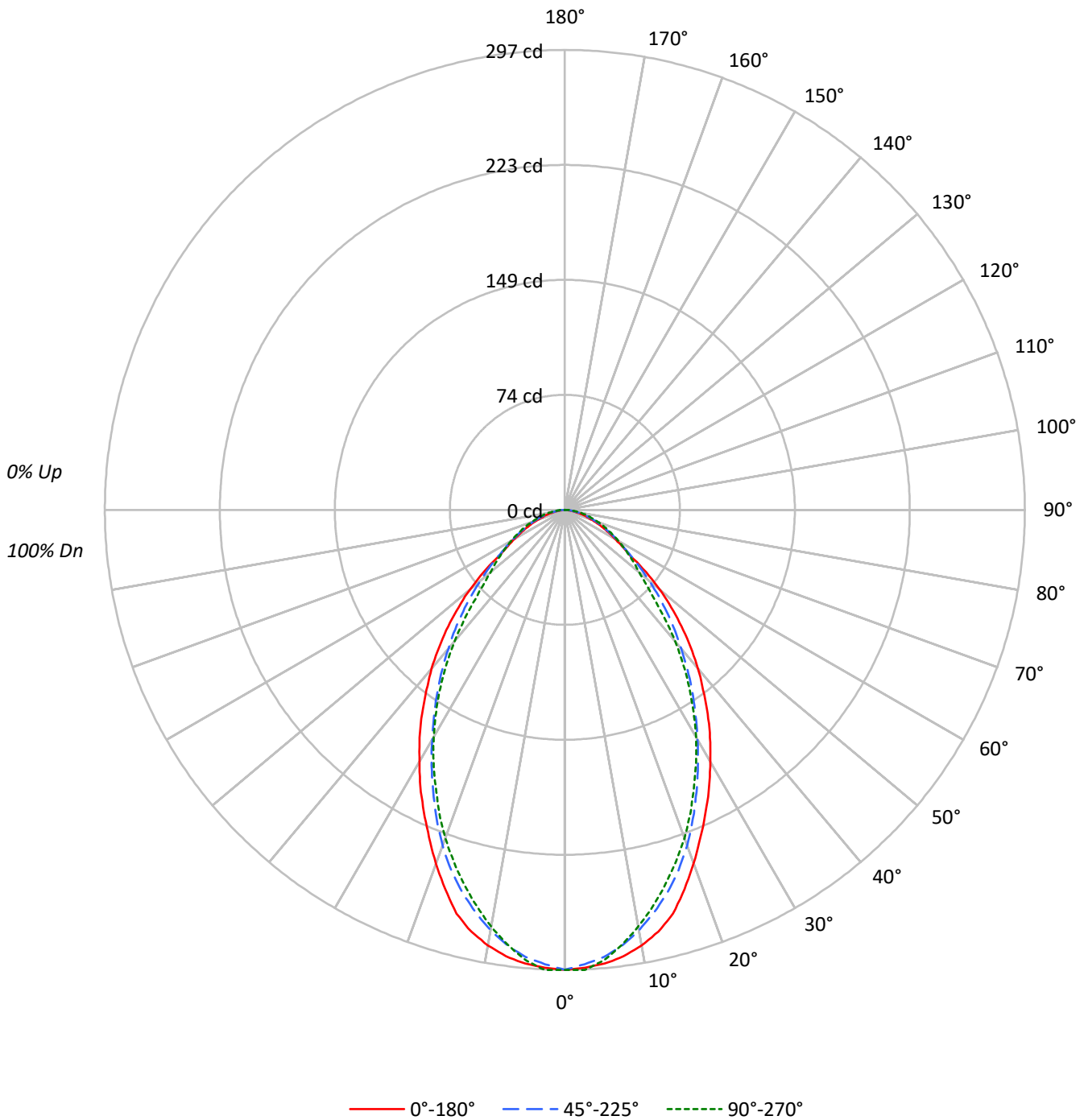
Lumens per Lamp: N/A
Luminaire Lumens: 451.0 lumens
Efficiency: N/A
Efficacy: 36.1 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5480	5480	5480
5°	5448	5370	5405
10°	5351	5166	5121
15°	5158	4887	4787
20°	4774	4532	4430
25°	4381	4092	4015
30°	3999	3648	3607
35°	3622	3228	3154
40°	3223	2813	2667
45°	2777	2419	2135
50°	2294	2035	1791
55°	1657	1689	1612
60°	1380	1447	1465
65°	1179	1257	1340
70°	971	1122	1225
75°	806	941	1112
80°	606	754	1010
85°	191	402	910

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2777 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.4	6.1
10°-20°	72.3	16.0
20°-30°	93.6	20.7
30°-40°	91.8	20.3
40°-50°	72.3	16.0
50°-60°	47.4	10.5
60°-70°	28.8	6.4
70°-80°	14.4	3.2
80°-90°	3.1	0.7
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°	193.3	42.9
0°-40°	285.0	63.2
0°-60°	404.7	89.7
0°-90°	451.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	451.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	297	297	297	297	297	
5°	294	294	290	292	292	28
15°	270	266	256	252	251	75
25°	215	208	201	200	197	99
35°	161	152	143	143	140	100
45°	106	100	93	86	82	82
55°	52	54	52	51	50	49
65°	27	27	29	30	31	27
75°	11	12	13	15	16	12
85°	1	1	2	3	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	297.0	297.0	297.0	297.0	297.0
2.5°	296.0	296.5	293.7	296.5	297.4
5°	294.1	294.1	289.9	291.8	291.8
7.5°	290.8	290.3	283.7	283.7	283.2
10°	285.6	283.7	275.7	274.3	273.3
12.5°	279.0	275.7	266.2	263.9	262.4
15°	270.0	266.2	255.8	252.5	250.6
17.5°	256.8	253.0	244.0	240.2	238.3
20°	243.1	237.4	230.8	227.4	225.6
22.5°	228.9	222.2	216.1	213.7	211.8
25°	215.2	208.1	201.0	200.0	197.2
27.5°	201.9	193.4	186.3	185.8	183.5
30°	187.7	178.7	171.2	171.7	169.3
32.5°	174.5	166.0	157.0	157.5	154.6
35°	160.8	151.8	143.3	142.8	140.0
37.5°	146.6	138.1	130.0	128.1	125.3
40°	133.8	125.3	116.8	113.5	110.7
42.5°	120.1	112.5	105.0	99.8	96.0
45°	106.4	99.8	92.7	86.1	81.8
47.5°	93.2	88.0	81.8	73.8	70.9
50°	79.9	76.1	70.9	63.8	62.4
52.5°	66.2	64.8	61.5	56.7	56.3
55°	51.5	54.4	52.5	50.6	50.1
57.5°	43.5	44.0	45.4	44.9	44.9
60°	37.4	37.4	39.2	39.7	39.7
62.5°	31.7	32.2	34.0	35.0	35.0
65°	27.0	27.4	28.8	30.3	30.7
67.5°	22.2	23.2	24.6	26.0	26.5
70°	18.0	18.9	20.8	22.2	22.7
72.5°	14.7	15.1	17.0	18.4	18.9
75°	11.3	11.8	13.2	15.1	15.6
77.5°	8.0	9.0	10.4	11.8	12.8
80°	5.7	6.1	7.1	9.0	9.5
82.5°	3.3	3.8	4.7	6.1	6.6
85°	0.9	1.4	1.9	3.3	4.3
87.5°	0.0	0.0	0.0	0.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)