

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: P1057986

Luminaire Tested: S122RDR-S485D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057986
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S485D850-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

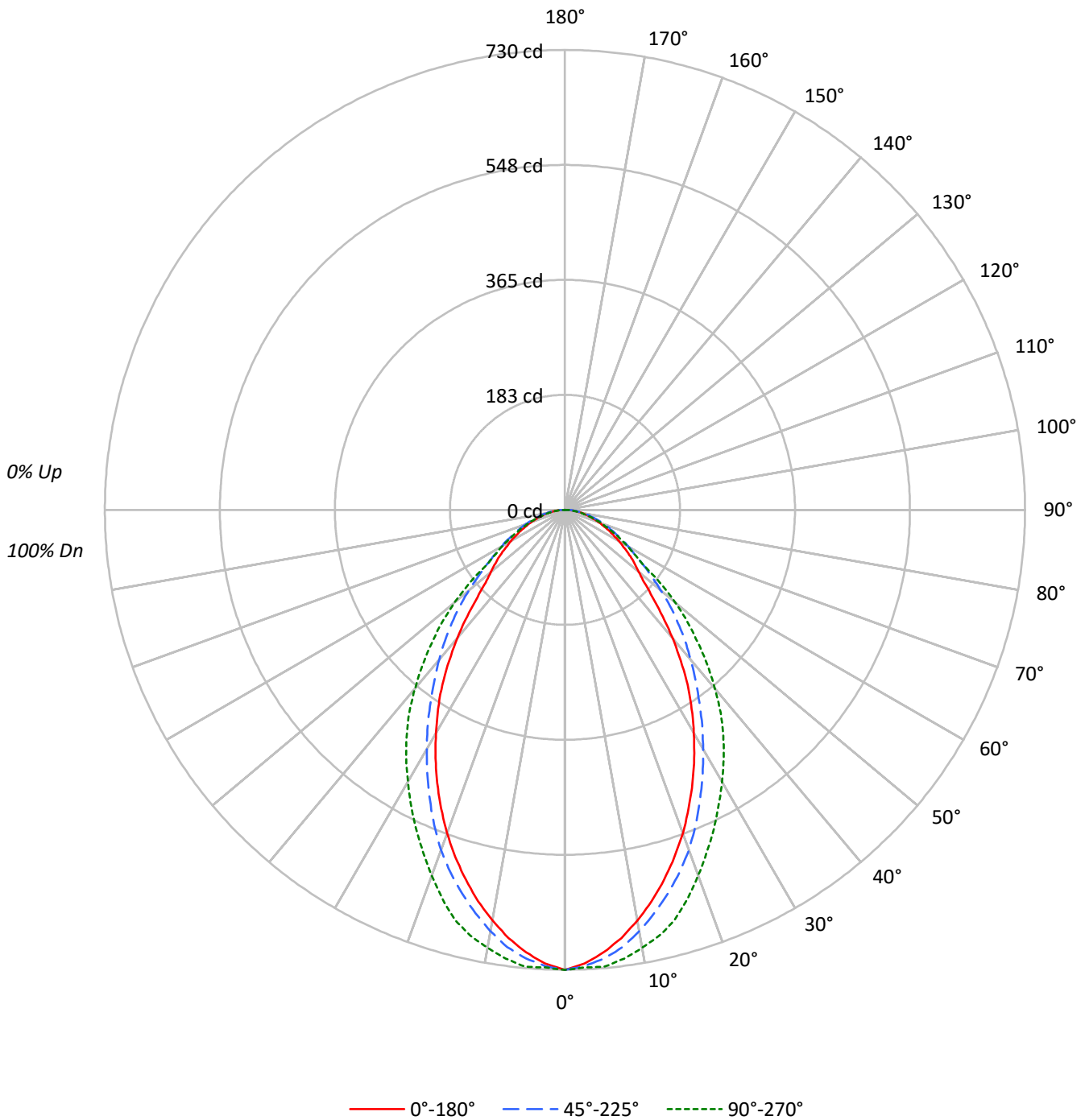
Lumens per Lamp: N/A
Luminaire Lumens: 1190.4 lumens
Efficiency: N/A
Efficacy: 60.7 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	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	46	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	40	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13474	13474	13474
5°	13061	13235	13481
10°	12402	12726	13225
15°	11609	12045	12870
20°	10731	11285	12134
25°	9750	10327	11381
30°	8717	9335	10624
35°	7641	8366	9869
40°	6393	7470	8908
45°	5123	6618	7787
50°	4395	5701	6537
55°	4015	4848	4826
60°	3650	4288	4200
65°	3327	3838	3668
70°	3048	3518	3264
75°	2852	3244	2852
80°	2667	3007	2508
85°	2668	3155	2160

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7787 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.4	5.7
10°-20°	178.5	15.0
20°-30°	235.4	19.8
30°-40°	237.0	19.9
40°-50°	192.9	16.2
50°-60°	131.5	11.0
60°-70°	85.4	7.2
70°-80°	47.0	3.9
80°-90°	15.3	1.3
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°	481.2	40.4
0°-40°	718.3	60.3
0°-60°	1042.7	87.6
0°-90°	1190.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1190.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	705	718	714	721	728	66
15°	608	623	630	656	674	170
25°	479	495	507	530	559	220
35°	339	356	371	404	438	211
45°	196	221	254	276	298	155
55°	125	137	151	152	150	112
65°	76	90	88	83	84	76
75°	40	50	46	41	40	42
85°	13	16	15	12	10	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	730.2	730.2	730.2	730.2	730.2
2.5°	720.8	732.5	724.7	725.5	727.0
5°	705.1	718.4	714.5	720.8	727.8
7.5°	685.4	698.8	700.3	709.8	718.4
10°	661.9	676.8	679.2	693.3	705.8
12.5°	636.0	652.5	655.6	676.0	692.5
15°	607.7	623.4	630.5	656.4	673.7
17.5°	577.9	592.8	603.8	627.3	647.0
20°	546.5	560.6	574.7	595.9	617.9
22.5°	512.7	528.4	541.7	562.9	588.1
25°	478.9	494.6	507.2	530.0	559.0
27.5°	444.4	460.1	472.7	497.0	528.4
30°	409.1	425.5	438.1	465.6	498.6
32.5°	374.5	391.0	405.1	434.2	468.7
35°	339.2	356.5	371.4	403.6	438.1
37.5°	301.5	321.1	340.0	372.2	405.9
40°	265.4	287.4	310.1	340.0	369.8
42.5°	229.3	253.6	281.9	307.0	334.5
45°	196.3	220.6	253.6	275.6	298.4
47.5°	170.4	190.8	226.1	244.2	264.6
50°	153.1	167.2	198.6	212.8	227.7
52.5°	139.0	150.7	172.7	182.2	190.0
55°	124.8	137.4	150.7	151.5	150.0
57.5°	110.7	124.8	131.9	126.4	129.5
60°	98.9	113.1	116.2	110.7	113.8
62.5°	86.4	102.1	102.1	96.6	98.1
65°	76.2	90.3	87.9	83.2	84.0
67.5°	66.0	80.1	76.2	71.4	71.4
70°	56.5	69.9	65.2	60.5	60.5
72.5°	47.9	58.9	55.7	50.2	49.5
75°	40.0	49.5	45.5	40.8	40.0
77.5°	32.2	40.0	36.9	33.0	31.4
80°	25.1	32.2	28.3	25.1	23.6
82.5°	18.8	24.3	21.2	18.1	16.5
85°	12.6	16.5	14.9	11.8	10.2
87.5°	6.3	11.0	9.4	7.9	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)