

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: P1057818

Luminaire Tested: S122RDR-S1005D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057818
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D850-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

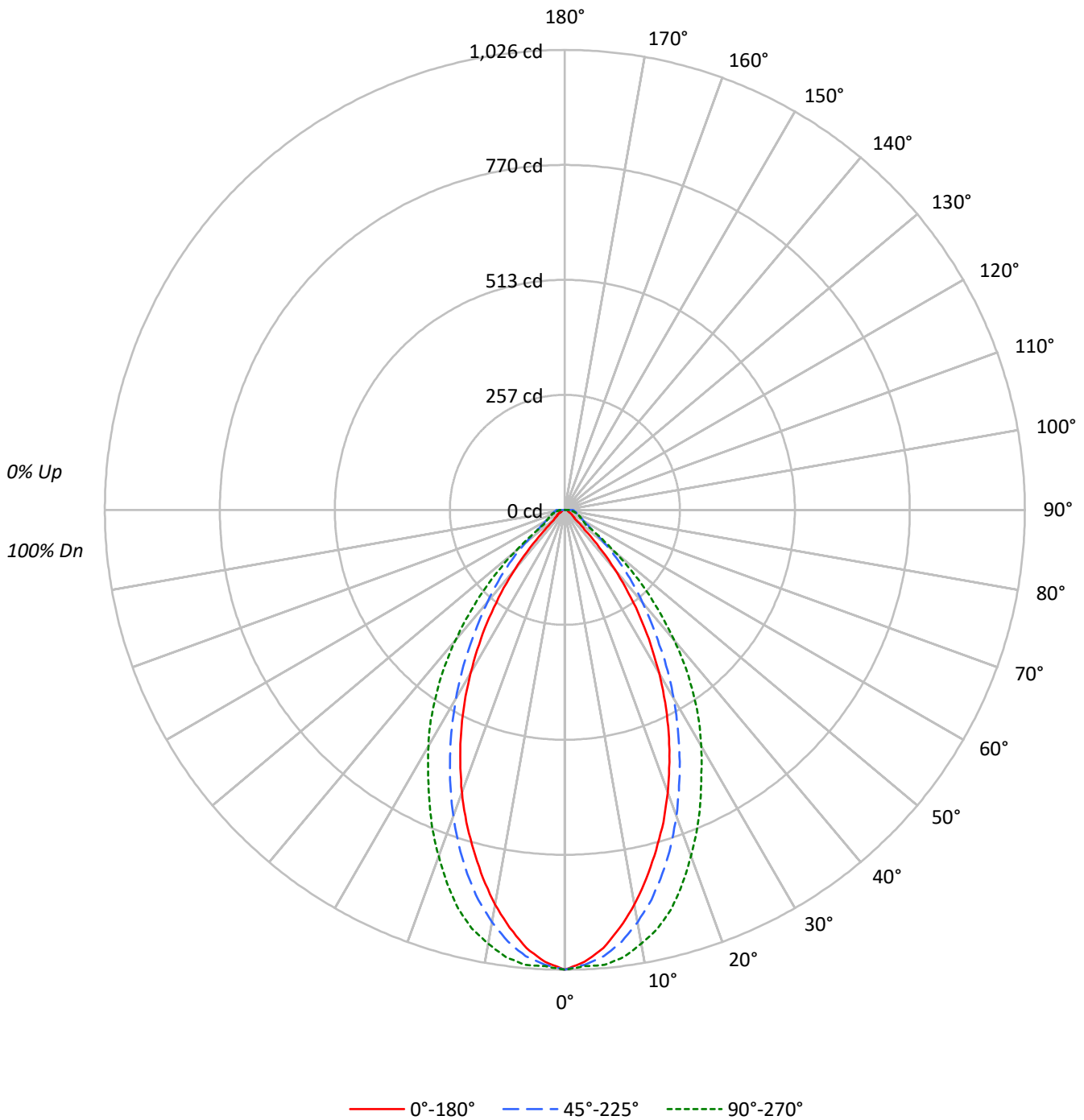
Lumens per Lamp: N/A
Luminaire Lumens: 1116.4 lumens
Efficiency: N/A
Efficacy: 26.7 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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

TEST NUMBER: P1057818

CATALOG NUMBER: S122RDR-S1005D850-X4F0-XX-UDD-BVL-W

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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18927	18927	18927
5°	18178	18512	18877
10°	16758	17497	18419
15°	15017	16053	17589
20°	13180	14276	16145
25°	11159	12330	14568
30°	8951	10351	12974
35°	6618	8281	11238
40°	4150	6482	9132
45°	1628	4883	6767
50°	801	3298	4145
55°	634	2165	1847
60°	483	1757	1698
65°	358	1646	1646
70°	442	1683	1683
75°	471	1875	1754
80°	701	2444	1923
85°	1397	4171	2774

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 7657 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.7	8.4
10°-20°	236.8	21.2
20°-30°	283.3	25.4
30°-40°	238.5	21.4
40°-50°	135.8	12.2
50°-60°	53.5	4.8
60°-70°	33.7	3.0
70°-80°	25.1	2.2
80°-90°	16.0	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°	613.9	55.0
0°-40°	852.3	76.3
0°-60°	1041.7	93.3
0°-90°	1116.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1116.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1026	1026	1026	1026	1026	
5°	981	1003	999	1011	1019	91
15°	786	814	840	890	921	219
25°	548	573	606	668	716	250
35°	294	320	368	446	499	182
45°	62	110	187	235	259	59
55°	20	43	67	69	57	18
65°	8	38	38	36	38	9
75°	7	26	26	25	25	7
85°	7	18	20	18	13	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1025.7	1025.7	1025.7	1025.7	1025.7
2.5°	1009.3	1027.3	1015.8	1017.5	1019.1
5°	981.4	1002.7	999.4	1010.9	1019.1
7.5°	940.4	963.3	971.5	991.2	1006.0
10°	894.4	920.7	933.8	965.0	983.0
12.5°	841.9	871.4	891.1	930.5	956.8
15°	786.1	814.0	840.3	889.5	920.7
17.5°	730.3	758.2	786.1	840.3	873.1
20°	671.2	697.5	727.0	784.5	822.2
22.5°	608.9	636.8	666.3	725.4	771.3
25°	548.1	572.7	605.6	667.9	715.5
27.5°	484.1	508.7	544.8	608.9	659.7
30°	420.1	444.7	485.8	551.4	608.9
32.5°	356.1	382.4	426.7	498.9	556.3
35°	293.8	320.0	367.6	446.4	498.9
37.5°	233.0	262.6	315.1	392.2	441.5
40°	172.3	206.8	269.1	338.1	379.1
42.5°	114.9	157.5	226.5	283.9	318.4
45°	62.4	110.0	187.1	234.7	259.3
47.5°	34.5	70.6	149.3	187.1	201.9
50°	27.9	49.2	114.9	142.8	144.4
52.5°	23.0	44.3	85.3	101.7	93.5
55°	19.7	42.7	67.3	68.9	57.4
57.5°	16.4	41.0	55.8	49.2	49.2
60°	13.1	41.0	47.6	44.3	46.0
62.5°	9.8	41.0	42.7	39.4	41.0
65°	8.2	37.7	37.7	36.1	37.7
67.5°	8.2	34.5	34.5	32.8	34.5
70°	8.2	32.8	31.2	31.2	31.2
72.5°	6.6	29.5	29.5	27.9	27.9
75°	6.6	26.3	26.3	24.6	24.6
77.5°	6.6	24.6	24.6	23.0	21.3
80°	6.6	21.3	23.0	21.3	18.1
82.5°	6.6	19.7	21.3	19.7	14.8
85°	6.6	18.1	19.7	18.1	13.1
87.5°	4.9	18.1	18.1	14.8	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)