

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: P1057823

Luminaire Tested: S122RDR-S1005D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057823
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-S1005D850-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, 80 CRI LEDS
Ballast/Driver: -

Summary

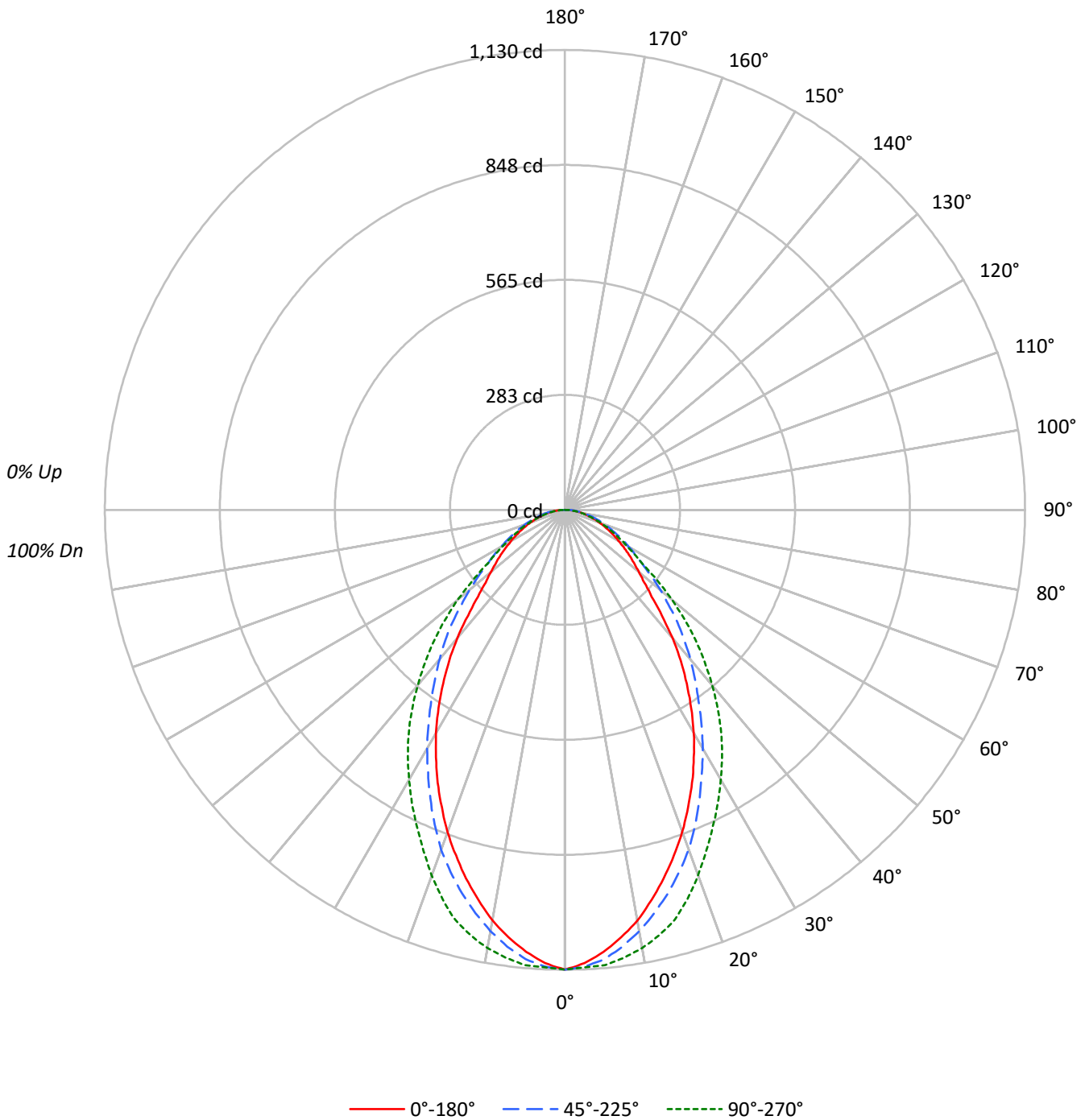
Lumens per Lamp: N/A
Luminaire Lumens: 1839.6 lumens
Efficiency: N/A
Efficacy: 44.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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	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°	20846	20846	20846
5°	20197	20531	20803
10°	19202	19693	20491
15°	17917	18637	19921
20°	16550	17451	18771
25°	15056	15924	17493
30°	13485	14429	16315
35°	11745	12890	15070
40°	9912	11533	13547
45°	7873	10183	11853
50°	6778	8756	9838
55°	6170	7489	7544
60°	5628	6658	6414
65°	5157	6012	5654
70°	4775	5573	5044
75°	4442	5262	4442
80°	4187	5048	4006
85°	4171	5208	3472

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11853 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.3	5.7
10°-20°	275.7	15.0
20°-30°	362.8	19.7
30°-40°	364.8	19.8
40°-50°	295.7	16.1
50°-60°	203.7	11.1
60°-70°	133.3	7.2
70°-80°	74.3	4.0
80°-90°	25.1	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°	742.8	40.4
0°-40°	1107.6	60.2
0°-60°	1606.9	87.4
0°-90°	1839.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1839.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1130	1130	1130	1130	1130	
5°	1090	1112	1108	1113	1123	102
15°	938	961	976	1012	1043	263
25°	740	759	782	816	859	339
35°	521	546	572	623	669	325
45°	302	336	390	425	454	239
55°	192	213	233	238	234	172
65°	118	141	138	131	130	118
75°	62	77	74	66	62	67
85°	20	26	25	21	16	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1129.7	1129.7	1129.7	1129.7	1129.7
2.5°	1114.9	1134.6	1123.1	1123.1	1124.8
5°	1090.4	1111.7	1108.4	1113.3	1123.1
7.5°	1059.2	1082.2	1082.2	1096.9	1110.0
10°	1024.8	1047.7	1051.0	1074.0	1093.6
12.5°	982.1	1005.1	1014.9	1044.4	1070.7
15°	937.9	960.8	975.6	1011.7	1042.8
17.5°	890.3	913.3	932.9	970.7	1001.8
20°	842.8	864.1	888.7	921.5	955.9
22.5°	790.3	813.3	836.2	867.4	906.7
25°	739.5	759.1	782.1	816.5	859.2
27.5°	685.4	706.7	728.0	769.0	813.3
30°	632.9	654.2	677.2	719.8	765.7
32.5°	577.1	600.1	623.1	670.6	718.2
35°	521.4	546.0	572.2	623.1	669.0
37.5°	467.3	493.5	524.7	577.1	616.5
40°	411.5	439.4	478.8	524.7	562.4
42.5°	352.5	387.0	434.5	473.9	508.3
45°	301.7	336.1	390.2	424.7	454.2
47.5°	264.0	291.9	344.3	373.8	398.4
50°	236.1	257.4	305.0	326.3	342.7
52.5°	213.2	234.5	267.3	282.0	286.9
55°	191.8	213.2	232.8	237.7	234.5
57.5°	170.5	193.5	205.0	200.0	200.0
60°	152.5	177.1	180.4	173.8	173.8
62.5°	134.4	159.0	159.0	150.8	150.8
65°	118.1	141.0	137.7	131.2	129.5
67.5°	103.3	124.6	119.7	113.1	111.5
70°	88.5	108.2	103.3	95.1	93.5
72.5°	75.4	93.5	86.9	80.3	77.1
75°	62.3	77.1	73.8	65.6	62.3
77.5°	50.8	62.3	59.0	52.5	49.2
80°	39.4	49.2	47.5	41.0	37.7
82.5°	29.5	37.7	36.1	31.2	26.2
85°	19.7	26.2	24.6	21.3	16.4
87.5°	9.8	18.0	16.4	14.8	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)