

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: P1057822

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057822  
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-S1005D850-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: -

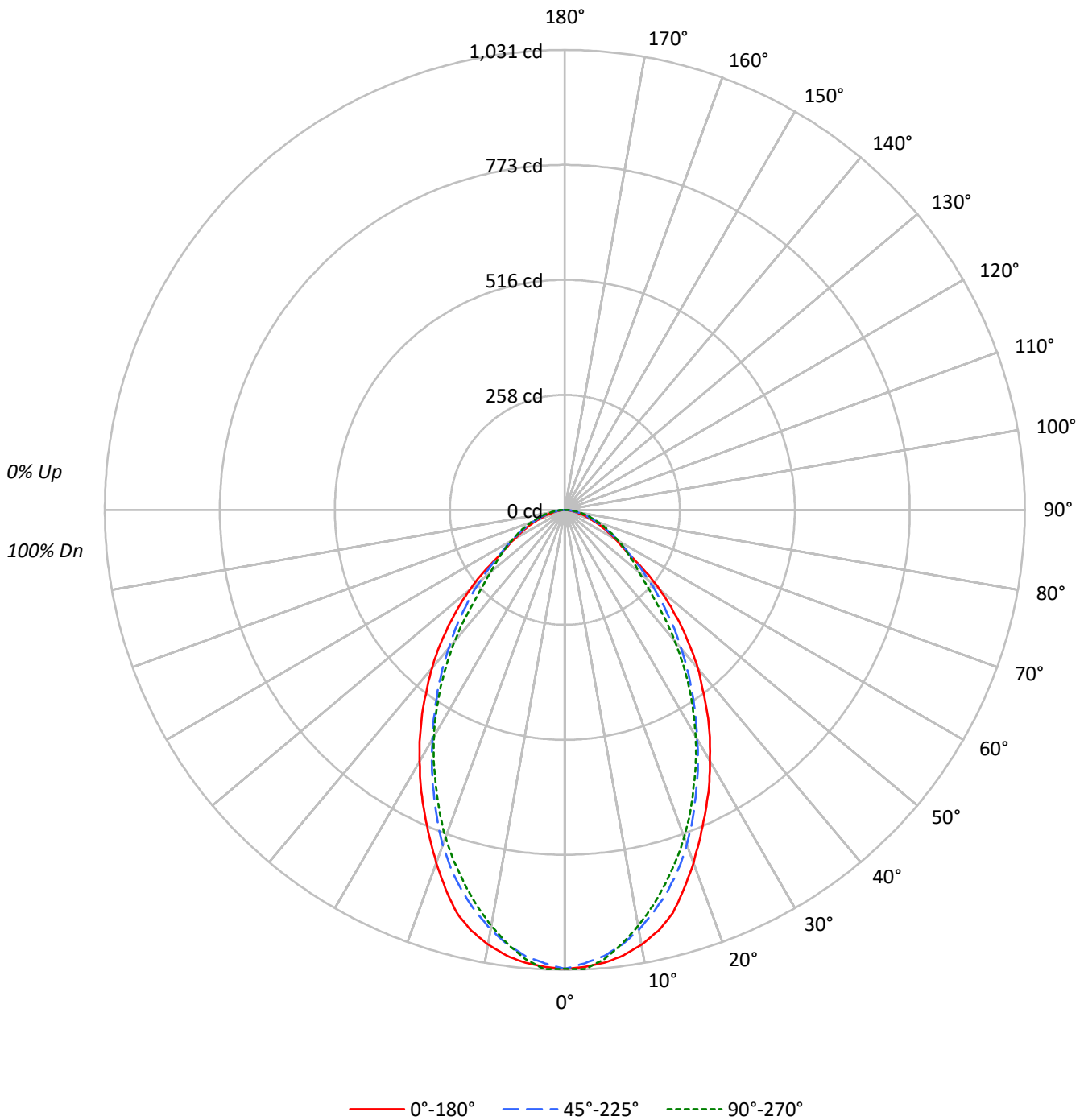
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1562.7 lumens  
Efficiency: N/A  
Efficacy: 37.4 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): 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				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	18988	18988	18988
5°	18877	18604	18725
10°	18542	17898	17744
15°	17873	16933	16589
20°	16538	15702	15346
25°	15178	14177	13910
30°	13860	12637	12499
35°	12549	11184	10925
40°	11170	9748	9235
45°	9621	8379	7398
50°	7949	7056	6209
55°	5746	5852	5588
60°	4775	5019	5078
65°	4078	4362	4650
70°	3361	3890	4241
75°	2802	3272	3857
80°	2093	2614	3485
85°	699	1397	3112

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9621 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.1	6.1
10°-20°	250.5	16.0
20°-30°	324.2	20.7
30°-40°	317.9	20.3
40°-50°	250.4	16.0
50°-60°	164.1	10.5
60°-70°	99.9	6.4
70°-80°	49.9	3.2
80°-90°	10.8	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°	669.7	42.9
0°-40°	987.7	63.2
0°-60°	1402.1	89.7
0°-90°	1562.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1562.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1029	1029	1029	1029	1029	
5°	1019	1019	1004	1011	1011	96
15°	936	922	886	875	868	261
25°	746	721	696	693	683	343
35°	557	526	496	495	485	347
45°	369	346	321	298	284	284
55°	179	188	182	175	174	170
65°	93	95	100	105	106	93
75°	39	41	46	52	54	42
85°	3	5	7	12	15	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1029.0	1029.0	1029.0	1029.0	1029.0
2.5°	1025.7	1027.3	1017.5	1027.3	1030.6
5°	1019.1	1019.1	1004.4	1010.9	1010.9
7.5°	1007.7	1006.0	983.1	983.1	981.4
10°	989.6	983.1	955.2	950.3	947.0
12.5°	966.7	955.2	922.5	914.3	909.3
15°	935.6	922.5	886.4	874.9	868.4
17.5°	889.7	876.6	845.4	832.3	825.8
20°	842.2	822.5	799.6	788.1	781.5
22.5°	793.0	770.1	748.8	740.6	734.0
25°	745.5	720.9	696.3	693.1	683.2
27.5°	699.6	670.1	645.6	643.9	635.7
30°	650.5	619.3	593.1	594.8	586.6
32.5°	604.6	575.1	544.0	545.6	535.8
35°	557.1	525.9	496.5	494.8	485.0
37.5°	507.9	478.4	450.6	444.0	434.2
40°	463.7	434.2	404.7	393.2	383.4
42.5°	416.2	390.0	363.7	345.7	332.6
45°	368.7	345.7	321.1	298.2	283.5
47.5°	322.8	304.8	283.5	255.6	245.8
50°	276.9	263.8	245.8	221.2	216.3
52.5°	229.4	224.5	213.0	196.6	195.0
55°	178.6	188.4	181.9	175.3	173.7
57.5°	150.7	152.4	157.3	155.7	155.7
60°	129.4	129.4	136.0	137.6	137.6
62.5°	109.8	111.4	118.0	121.2	121.2
65°	93.4	95.0	99.9	104.9	106.5
67.5°	77.0	80.3	85.2	90.1	91.8
70°	62.3	65.5	72.1	77.0	78.6
72.5°	50.8	52.4	59.0	63.9	65.5
75°	39.3	41.0	45.9	52.4	54.1
77.5°	27.9	31.1	36.0	41.0	44.2
80°	19.7	21.3	24.6	31.1	32.8
82.5°	11.5	13.1	16.4	21.3	22.9
85°	3.3	4.9	6.6	11.5	14.7
87.5°	0.0	0.0	0.0	3.3	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)