

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: P1057798

Luminaire Tested: S122RDR-S1005D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057798
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D835-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

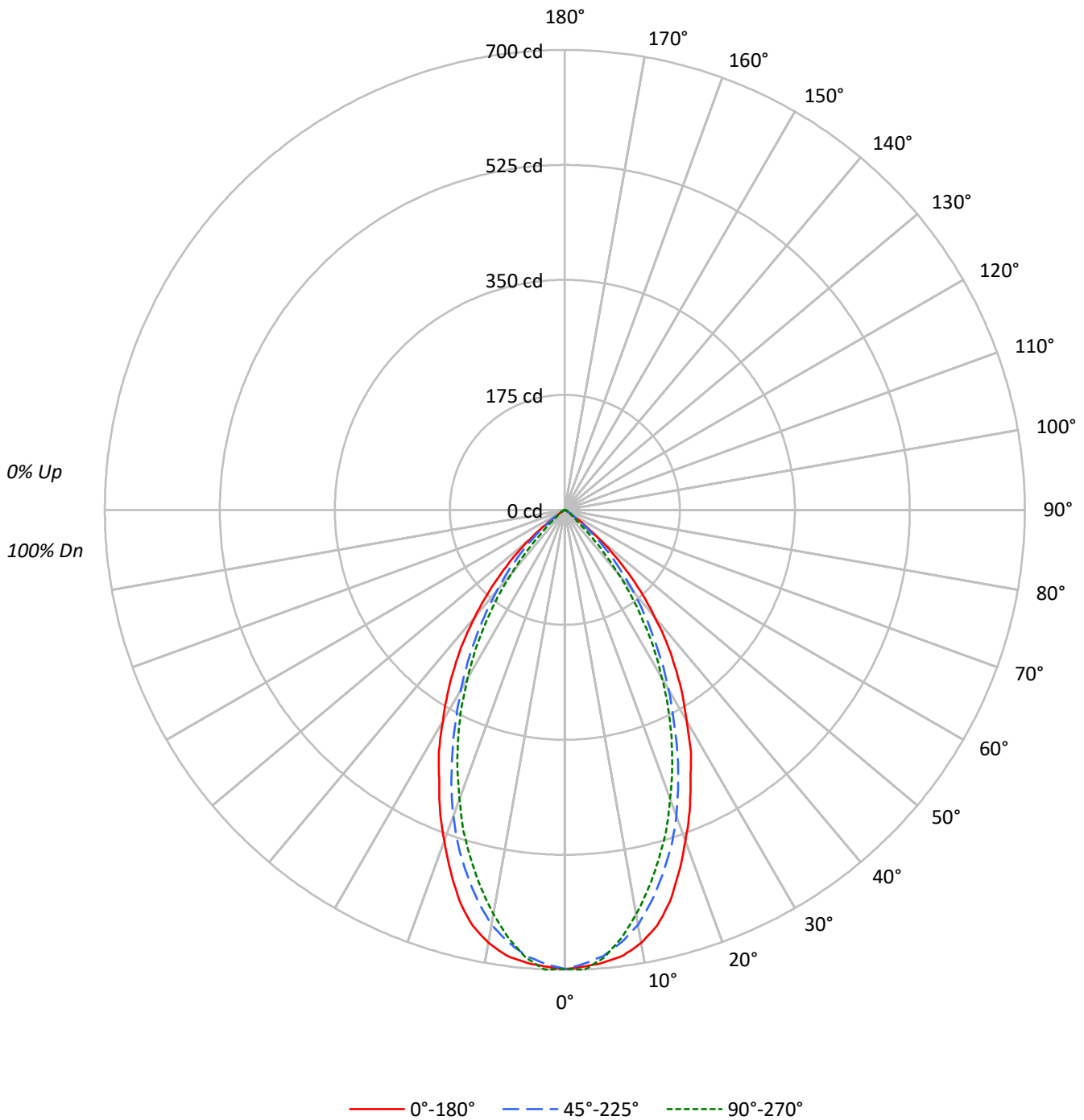
Lumens per Lamp: N/A
Luminaire Lumens: 657.1 lumens
Efficiency: N/A
Efficacy: 15.7 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12895	12895	12895
5°	12807	12616	12670
10°	12539	12014	11709
15°	11796	10979	10528
20°	10531	9748	9196
25°	9205	8242	7820
30°	7901	6737	6296
35°	6589	5258	4726
40°	5124	3878	3025
45°	3586	2583	1310
50°	1952	1358	468
55°	286	476	331
60°	55	111	218
65°	0	65	131
70°	0	0	81
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3586 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.2	9.8
10°-20°	161.8	24.6
20°-30°	188.6	28.7
30°-40°	151.2	23.0
40°-50°	75.1	11.4
50°-60°	14.8	2.3
60°-70°	1.3	0.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	414.6	63.1
0°-40°	565.8	86.1
0°-60°	655.7	99.8
0°-90°	657.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	657.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	699	699	699	699	699	
5°	691	691	681	682	684	65
15°	618	606	575	560	551	171
25°	452	430	405	396	384	208
35°	292	263	233	223	210	182
45°	137	121	99	66	50	106
55°	9	18	15	9	10	18
65°	0	0	2	2	3	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	698.8	698.8	698.8	698.8	698.8
2.5°	695.8	698.8	691.4	698.8	700.3
5°	691.4	691.4	681.1	682.5	684.0
7.5°	684.0	681.1	663.3	660.4	657.4
10°	669.2	663.3	641.2	629.4	624.9
12.5°	648.6	639.7	610.2	596.9	589.5
15°	617.5	605.7	574.7	559.9	551.1
17.5°	577.7	567.3	537.8	521.5	512.6
20°	536.3	521.5	496.4	480.1	468.3
22.5°	496.4	477.2	450.6	438.8	427.0
25°	452.1	429.9	404.8	395.9	384.1
27.5°	415.1	387.1	357.5	351.6	341.3
30°	370.8	344.2	316.2	307.3	295.5
32.5°	332.4	302.9	274.8	264.4	254.1
35°	292.5	263.0	233.4	223.1	209.8
37.5°	254.1	226.0	196.5	180.2	168.4
40°	212.7	189.1	161.0	140.4	125.6
42.5°	175.8	155.1	128.5	101.9	87.2
45°	137.4	121.1	99.0	66.5	50.2
47.5°	101.9	90.1	72.4	38.4	26.6
50°	68.0	63.5	47.3	19.2	16.3
52.5°	36.9	39.9	28.1	11.8	13.3
55°	8.9	17.7	14.8	8.9	10.3
57.5°	1.5	3.0	7.4	7.4	7.4
60°	1.5	1.5	3.0	4.4	5.9
62.5°	1.5	0.0	1.5	3.0	4.4
65°	0.0	0.0	1.5	1.5	3.0
67.5°	0.0	0.0	0.0	1.5	1.5
70°	0.0	0.0	0.0	1.5	1.5
72.5°	0.0	0.0	0.0	0.0	1.5
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)