

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: P1057789

Luminaire Tested: S122RDR-S1005D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057789
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-S1005D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

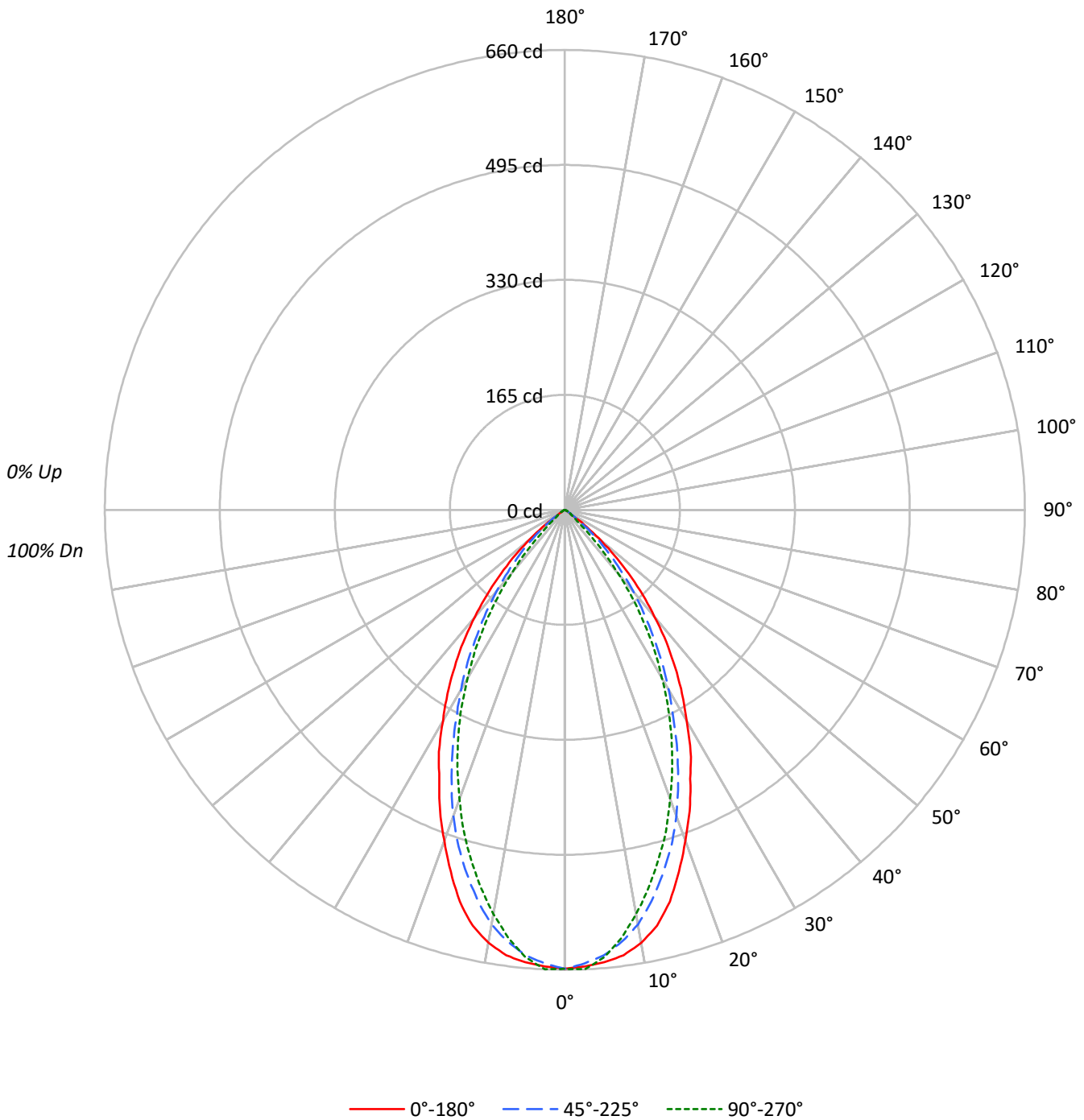
Lumens per Lamp: N/A
Luminaire Lumens: 619.4 lumens
Efficiency: N/A
Efficacy: 14.8 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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°	12153	12153	12153
5°	12071	11890	11942
10°	11819	11323	11036
15°	11120	10348	9922
20°	9926	9188	8668
25°	8675	7767	7370
30°	7447	6350	5934
35°	6211	4956	4453
40°	4830	3657	2852
45°	3379	2435	1234
50°	1840	1280	439
55°	270	447	312
60°	52	103	207
65°	0	61	122
70°	0	0	76
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3379 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.5	9.8
10°-20°	152.5	24.6
20°-30°	177.8	28.7
30°-40°	142.5	23.0
40°-50°	70.8	11.4
50°-60°	14.0	2.3
60°-70°	1.2	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°	390.8	63.1
0°-40°	533.3	86.1
0°-60°	618.0	99.8
0°-90°	619.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	619.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	659	659	659	659	659	
5°	652	652	642	643	645	62
15°	582	571	542	528	519	162
25°	426	405	382	373	362	196
35°	276	248	220	210	198	171
45°	130	114	93	63	47	100
55°	8	17	14	8	10	17
65°	0	0	1	1	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°	658.6	658.6	658.6	658.6	658.6
2.5°	655.9	658.6	651.7	658.6	660.0
5°	651.7	651.7	641.9	643.3	644.7
7.5°	644.7	641.9	625.2	622.4	619.7
10°	630.8	625.2	604.3	593.2	589.0
12.5°	611.3	602.9	575.1	562.6	555.6
15°	582.1	570.9	541.7	527.8	519.4
17.5°	544.5	534.7	506.9	491.5	483.2
20°	505.5	491.5	467.9	452.6	441.4
22.5°	467.9	449.8	424.7	413.6	402.4
25°	426.1	405.2	381.5	373.2	362.0
27.5°	391.3	364.8	337.0	331.4	321.7
30°	349.5	324.4	298.0	289.6	278.5
32.5°	313.3	285.5	259.0	249.3	239.5
35°	275.7	247.9	220.0	210.3	197.7
37.5°	239.5	213.1	185.2	169.9	158.7
40°	200.5	178.2	151.8	132.3	118.4
42.5°	165.7	146.2	121.1	96.1	82.2
45°	129.5	114.2	93.3	62.7	47.3
47.5°	96.1	84.9	68.2	36.2	25.1
50°	64.1	59.9	44.6	18.1	15.3
52.5°	34.8	37.6	26.5	11.1	12.5
55°	8.4	16.7	13.9	8.4	9.7
57.5°	1.4	2.8	7.0	7.0	7.0
60°	1.4	1.4	2.8	4.2	5.6
62.5°	1.4	0.0	1.4	2.8	4.2
65°	0.0	0.0	1.4	1.4	2.8
67.5°	0.0	0.0	0.0	1.4	1.4
70°	0.0	0.0	0.0	1.4	1.4
72.5°	0.0	0.0	0.0	0.0	1.4
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)