

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: P1057957

Luminaire Tested: S122RDR-S485D830-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057957
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-S485D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

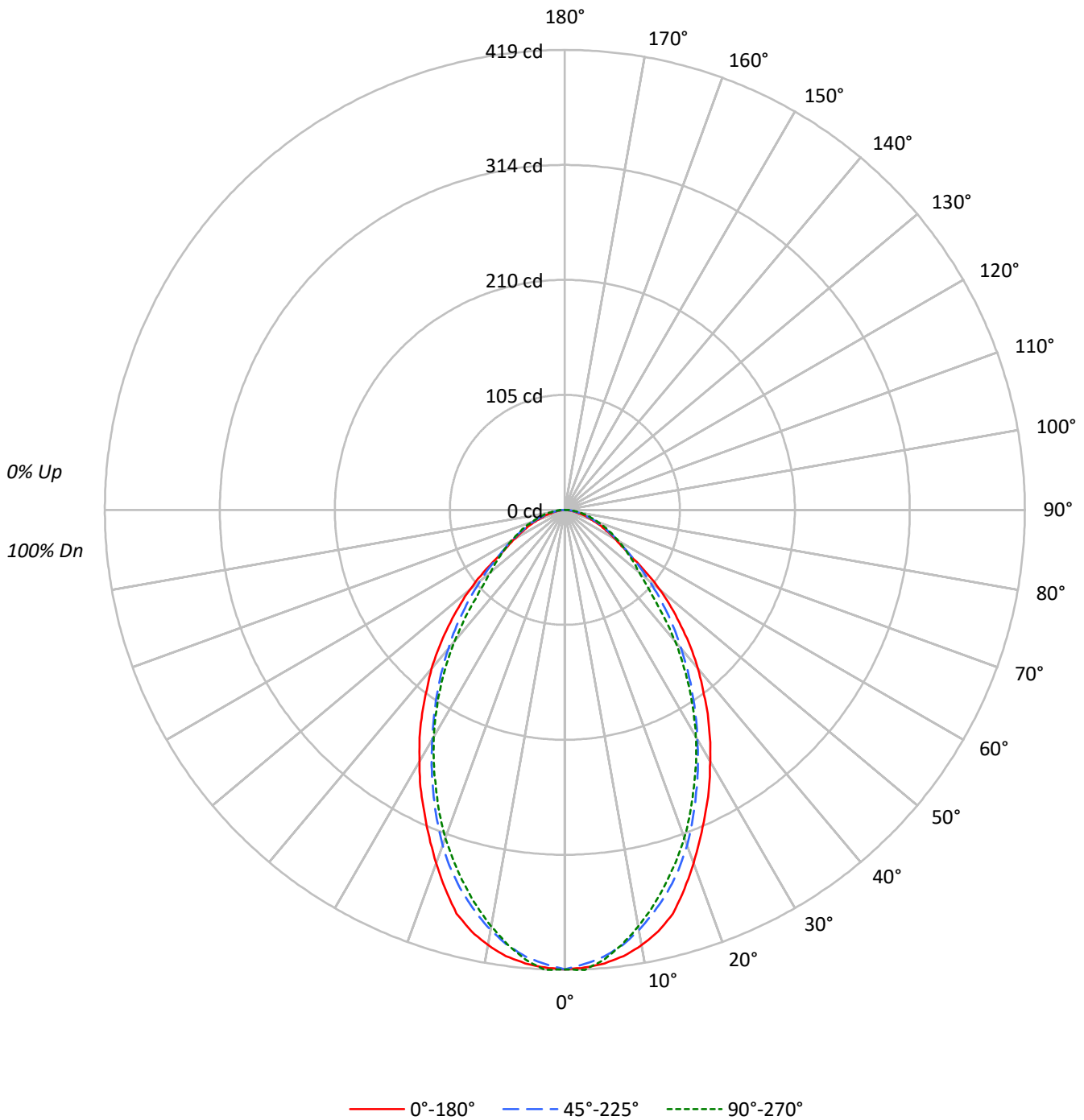
Lumens per Lamp: N/A
Luminaire Lumens: 635.9 lumens
Efficiency: N/A
Efficacy: 32.4 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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°	7726	7726	7726
5°	7681	7570	7620
10°	7545	7283	7221
15°	7273	6891	6751
20°	6729	6390	6246
25°	6177	5770	5660
30°	5640	5144	5086
35°	5107	4550	4447
40°	4545	3967	3758
45°	3914	3411	3011
50°	3235	2871	2526
55°	2339	2381	2274
60°	1945	2041	2067
65°	1659	1777	1891
70°	1365	1581	1726
75°	1141	1333	1568
80°	850	1063	1413
85°	275	572	1270

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3914 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	6.1
10°-20°	101.9	16.0
20°-30°	131.9	20.7
30°-40°	129.4	20.3
40°-50°	101.9	16.0
50°-60°	66.8	10.5
60°-70°	40.7	6.4
70°-80°	20.3	3.2
80°-90°	4.4	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°	272.6	42.9
0°-40°	401.9	63.2
0°-60°	570.6	89.7
0°-90°	635.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	635.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	419	419	419	419	419	
5°	415	415	409	411	411	39
15°	381	375	361	356	353	106
25°	303	293	283	282	278	139
35°	227	214	202	201	197	141
45°	150	141	131	121	115	116
55°	73	77	74	71	71	69
65°	38	39	41	43	43	38
75°	16	17	19	21	22	17
85°	1	2	3	5	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	418.7	418.7	418.7	418.7	418.7
2.5°	417.4	418.1	414.1	418.1	419.4
5°	414.7	414.7	408.7	411.4	411.4
7.5°	410.1	409.4	400.1	400.1	399.4
10°	402.7	400.1	388.7	386.7	385.4
12.5°	393.4	388.7	375.4	372.1	370.1
15°	380.7	375.4	360.7	356.1	353.4
17.5°	362.1	356.7	344.1	338.7	336.1
20°	342.7	334.7	325.4	320.7	318.1
22.5°	322.7	313.4	304.7	301.4	298.7
25°	303.4	293.4	283.4	282.0	278.0
27.5°	284.7	272.7	262.7	262.0	258.7
30°	264.7	252.0	241.4	242.0	238.7
32.5°	246.0	234.0	221.4	222.0	218.0
35°	226.7	214.0	202.0	201.4	197.4
37.5°	206.7	194.7	183.4	180.7	176.7
40°	188.7	176.7	164.7	160.0	156.0
42.5°	169.4	158.7	148.0	140.7	135.4
45°	150.0	140.7	130.7	121.4	115.4
47.5°	131.4	124.0	115.4	104.0	100.0
50°	112.7	107.4	100.0	90.0	88.0
52.5°	93.3	91.3	86.7	80.0	79.3
55°	72.7	76.7	74.0	71.3	70.7
57.5°	61.3	62.0	64.0	63.3	63.3
60°	52.7	52.7	55.3	56.0	56.0
62.5°	44.7	45.3	48.0	49.3	49.3
65°	38.0	38.7	40.7	42.7	43.3
67.5°	31.3	32.7	34.7	36.7	37.3
70°	25.3	26.7	29.3	31.3	32.0
72.5°	20.7	21.3	24.0	26.0	26.7
75°	16.0	16.7	18.7	21.3	22.0
77.5°	11.3	12.7	14.7	16.7	18.0
80°	8.0	8.7	10.0	12.7	13.3
82.5°	4.7	5.3	6.7	8.7	9.3
85°	1.3	2.0	2.7	4.7	6.0
87.5°	0.0	0.0	0.0	1.3	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)