

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: P1057792

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057792
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S1005D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

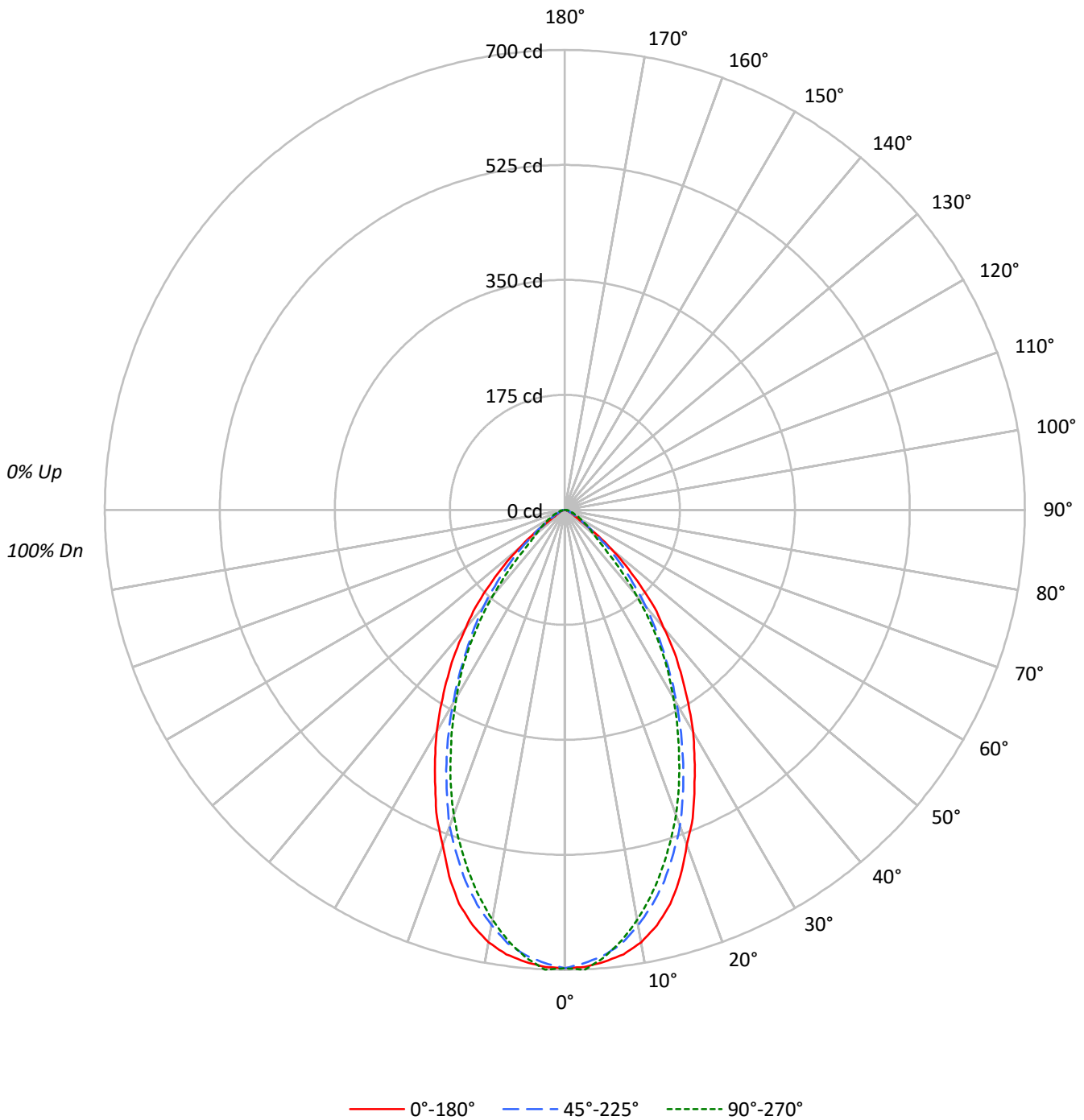
Lumens per Lamp: N/A
Luminaire Lumens: 750.3 lumens
Efficiency: N/A
Efficacy: 17.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1057792

CATALOG NUMBER: S122RDR-S1005D830-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1057792

CATALOG NUMBER: S122RDR-S1005D830-X4F0-XX-UDD-SVL-B

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	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12872	12872	12872
5°	12792	12612	12664
10°	12524	12027	11872
15°	11863	11172	10853
20°	10663	10062	9706
25°	9498	8675	8364
30°	8308	7240	7031
35°	6994	5866	5677
40°	5634	4630	4093
45°	4214	3343	2435
50°	2638	2159	1599
55°	894	1165	1300
60°	513	720	1026
65°	367	485	790
70°	302	378	599
75°	200	299	499
80°	149	298	446
85°	0	0	296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4214 cd/sqm



TEST NUMBER: P1057792

CATALOG NUMBER: S122RDR-S1005D830-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.3	8.6
10°-20°	164.6	21.9
20°-30°	198.2	26.4
30°-40°	169.3	22.6
40°-50°	99.2	13.2
50°-60°	35.9	4.8
60°-70°	12.7	1.7
70°-80°	5.1	0.7
80°-90°	0.9	0.1
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°	427.1	56.9
0°-40°	596.4	79.5
0°-60°	731.5	97.5
0°-90°	750.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	750.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	698	698	698	698	698	
5°	691	692	681	684	684	65
15°	621	611	585	574	568	172
25°	466	447	426	419	411	214
35°	310	287	260	258	252	194
45°	162	145	128	107	93	125
55°	28	39	36	38	40	35
65°	8	10	11	15	18	9
75°	3	4	4	6	7	4
85°	0	0	0	1	1	1
90°	0	0	0	0	0	



TEST NUMBER: P1057792

CATALOG NUMBER: S122RDR-S1005D830-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	697.6	697.6	697.6	697.6	697.6
2.5°	696.2	697.6	690.6	697.6	700.4
5°	690.6	692.0	680.9	683.7	683.7
7.5°	682.3	680.9	665.6	662.8	661.4
10°	668.4	664.2	641.9	637.7	633.6
12.5°	647.5	639.1	615.5	608.5	602.9
15°	621.0	611.3	584.8	573.7	568.1
17.5°	584.8	573.7	548.6	537.5	531.9
20°	543.0	531.9	512.4	499.9	494.3
22.5°	508.2	490.1	469.2	460.9	453.9
25°	466.5	447.0	426.1	419.1	410.8
27.5°	427.5	403.8	382.9	377.3	370.4
30°	389.9	364.8	339.8	339.8	330.0
32.5°	349.5	325.8	299.4	298.0	292.4
35°	310.5	286.8	260.4	257.6	252.0
37.5°	274.3	250.6	225.6	217.2	210.3
40°	233.9	213.0	192.2	178.2	169.9
42.5°	201.9	178.2	157.3	140.6	129.5
45°	161.5	144.8	128.1	107.2	93.3
47.5°	125.3	114.2	100.3	76.6	69.6
50°	91.9	86.3	75.2	57.1	55.7
52.5°	58.5	61.3	54.3	44.6	48.7
55°	27.8	39.0	36.2	37.6	40.4
57.5°	18.1	19.5	26.5	30.6	33.4
60°	13.9	13.9	19.5	25.1	27.8
62.5°	11.1	11.1	15.3	20.9	22.3
65°	8.4	9.7	11.1	15.3	18.1
67.5°	7.0	7.0	8.4	12.5	13.9
70°	5.6	5.6	7.0	9.7	11.1
72.5°	4.2	4.2	5.6	8.4	8.4
75°	2.8	4.2	4.2	5.6	7.0
77.5°	2.8	2.8	2.8	4.2	5.6
80°	1.4	1.4	2.8	2.8	4.2
82.5°	1.4	1.4	1.4	1.4	2.8
85°	0.0	0.0	0.0	1.4	1.4
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)