

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: P1058032

Luminaire Tested: S122RDR-S675D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058032
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-S675D830-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

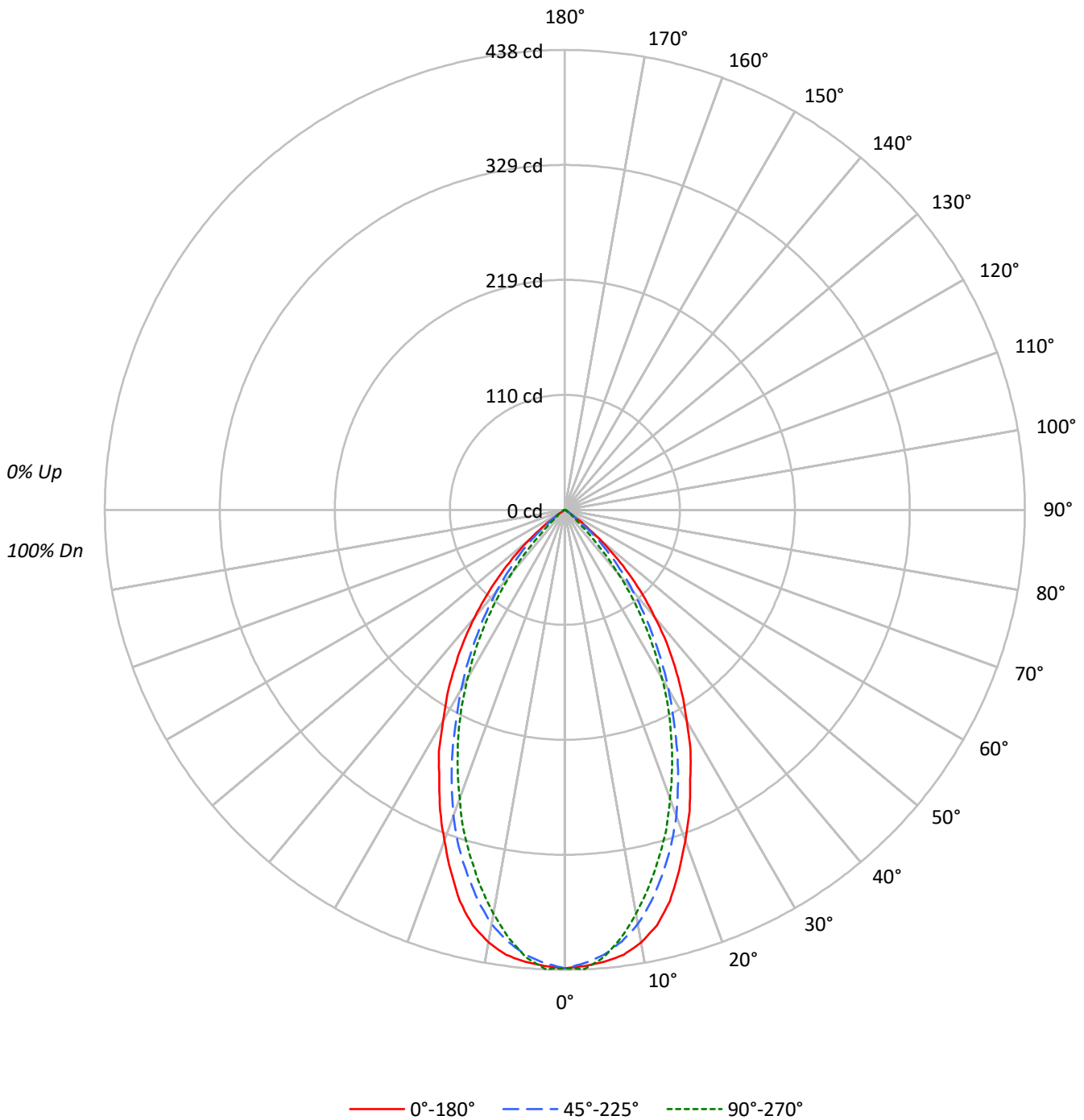
Lumens per Lamp: N/A
Luminaire Lumens: 410.6 lumens
Efficiency: N/A
Efficacy: 15.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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: P1058032

CATALOG NUMBER: S122RDR-S675D830-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1058032

CATALOG NUMBER: S122RDR-S675D830-X4F0-XX-UDD-BVL-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	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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93				93
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86				86
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79				79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73				73
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67				67
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	63				63
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58				58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54				54
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51				51
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47				47

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8058	8058	8058
5°	8004	7883	7919
10°	7838	7508	7319
15°	7372	6862	6579
20°	6582	6091	5748
25°	5752	5151	4888
30°	4937	4210	3935
35°	4118	3287	2953
40°	3204	2423	1891
45°	2242	1615	819
50°	1220	847	293
55°	177	296	209
60°	33	66	137
65°	0	39	79
70°	0	0	49
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2242 cd/sqm



TEST NUMBER: P1058032

CATALOG NUMBER: S122RDR-S675D830-X4F0-XX-UDD-BVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.1	9.8
10°-20°	101.1	24.6
20°-30°	117.9	28.7
30°-40°	94.5	23.0
40°-50°	46.9	11.4
50°-60°	9.2	2.3
60°-70°	0.8	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°	259.1	63.1
0°-40°	353.6	86.1
0°-60°	409.8	99.8
0°-90°	410.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	410.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	437	437	437	437	437	
5°	432	432	426	427	428	41
15°	386	379	359	350	344	107
25°	282	269	253	247	240	130
35°	183	164	146	139	131	114
45°	86	76	62	42	31	66
55°	6	11	9	6	6	11
65°	0	0	1	1	2	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P1058032

CATALOG NUMBER: S122RDR-S675D830-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	436.7	436.7	436.7	436.7	436.7
2.5°	434.9	436.7	432.1	436.7	437.6
5°	432.1	432.1	425.6	426.6	427.5
7.5°	427.5	425.6	414.6	412.7	410.9
10°	418.3	414.6	400.7	393.3	390.6
12.5°	405.3	399.8	381.3	373.0	368.4
15°	385.9	378.6	359.2	349.9	344.4
17.5°	361.0	354.5	336.1	325.9	320.4
20°	335.2	325.9	310.2	300.1	292.7
22.5°	310.2	298.2	281.6	274.2	266.8
25°	282.5	268.7	253.0	247.4	240.1
27.5°	259.4	241.9	223.4	219.7	213.3
30°	231.7	215.1	197.6	192.0	184.7
32.5°	207.7	189.3	171.7	165.3	158.8
35°	182.8	164.3	145.9	139.4	131.1
37.5°	158.8	141.3	122.8	112.6	105.3
40°	133.0	118.2	100.6	87.7	78.5
42.5°	109.9	96.9	80.3	63.7	54.5
45°	85.9	75.7	61.9	41.5	31.4
47.5°	63.7	56.3	45.2	24.0	16.6
50°	42.5	39.7	29.5	12.0	10.2
52.5°	23.1	24.9	17.5	7.4	8.3
55°	5.5	11.1	9.2	5.5	6.5
57.5°	0.9	1.8	4.6	4.6	4.6
60°	0.9	0.9	1.8	2.8	3.7
62.5°	0.9	0.0	0.9	1.8	2.8
65°	0.0	0.0	0.9	0.9	1.8
67.5°	0.0	0.0	0.0	0.9	0.9
70°	0.0	0.0	0.0	0.9	0.9
72.5°	0.0	0.0	0.0	0.0	0.9
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)