

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: P1058041

Luminaire Tested: S122RDR-S675D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058041
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-S675D835-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

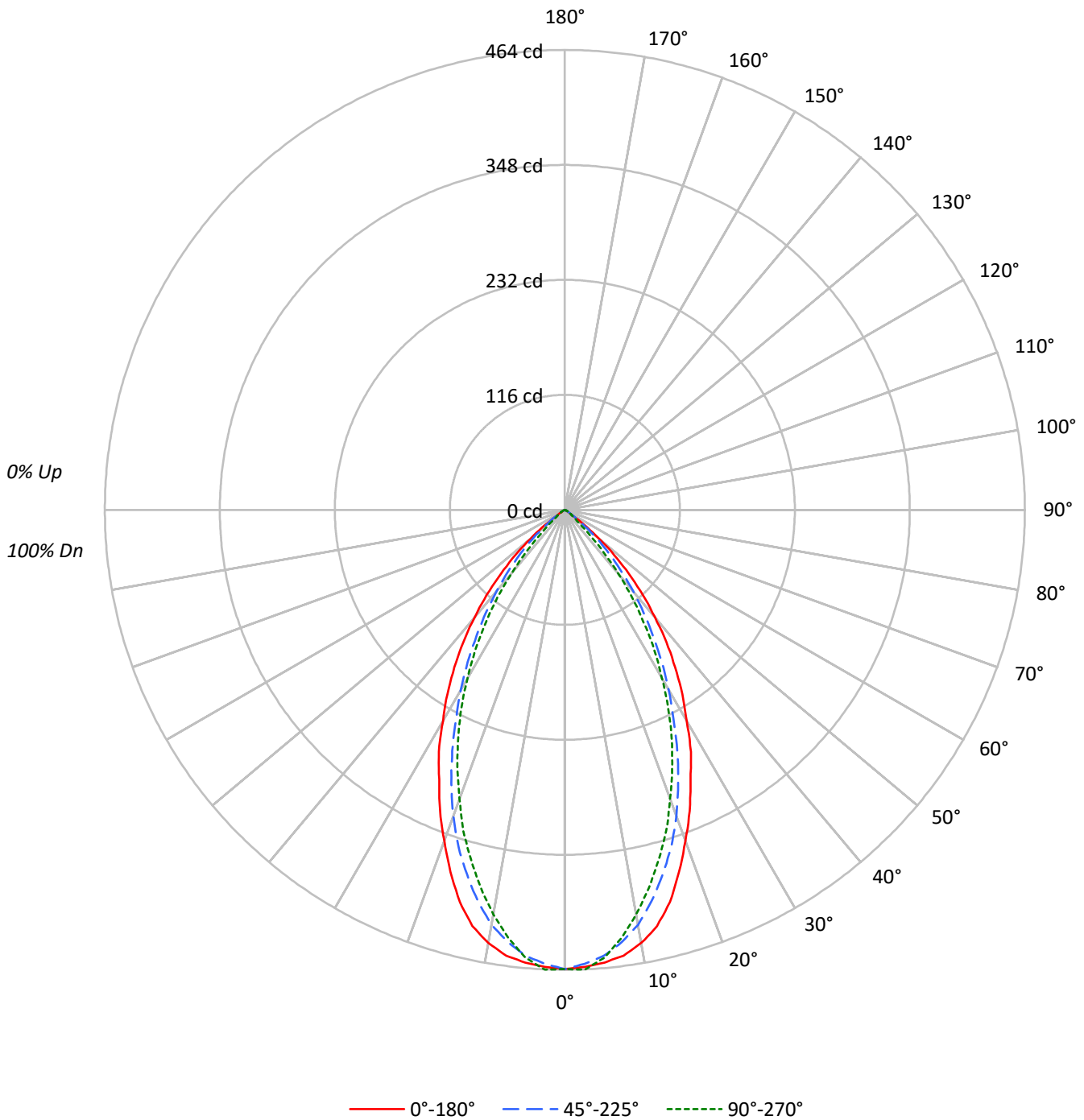
Lumens per Lamp: N/A
Luminaire Lumens: 435.7 lumens
Efficiency: N/A
Efficacy: 16.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1058041

CATALOG NUMBER: S122RDR-S675D835-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1058041

CATALOG NUMBER: S122RDR-S675D835-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	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°	8549	8549	8549
5°	8491	8365	8402
10°	8316	7965	7765
15°	7823	7280	6980
20°	6983	6462	6097
25°	6104	5465	5186
30°	5239	4466	4174
35°	4370	3487	3133
40°	3399	2573	2007
45°	2377	1712	869
50°	1295	899	310
55°	190	315	222
60°	37	74	144
65°	0	44	87
70°	0	0	54
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2377 cd/sqm



TEST NUMBER: P1058041

CATALOG NUMBER: S122RDR-S675D835-X4F0-XX-UDD-BVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.6	9.8
10°-20°	107.3	24.6
20°-30°	125.1	28.7
30°-40°	100.2	23.0
40°-50°	49.8	11.4
50°-60°	9.8	2.3
60°-70°	0.9	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°	274.9	63.1
0°-40°	375.2	86.1
0°-60°	434.8	99.8
0°-90°	435.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	435.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	463	463	463	463	463	
5°	458	458	452	453	454	43
15°	410	402	381	371	365	114
25°	300	285	268	262	255	138
35°	194	174	155	148	139	121
45°	91	80	66	44	33	70
55°	6	12	10	6	7	12
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: P1058041

CATALOG NUMBER: S122RDR-S675D835-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	463.3	463.3	463.3	463.3	463.3
2.5°	461.4	463.3	458.4	463.3	464.3
5°	458.4	458.4	451.6	452.6	453.6
7.5°	453.6	451.6	439.8	437.9	435.9
10°	443.8	439.8	425.1	417.3	414.4
12.5°	430.0	424.2	404.6	395.8	390.9
15°	409.5	401.6	381.1	371.3	365.4
17.5°	383.0	376.2	356.6	345.8	339.9
20°	355.6	345.8	329.1	318.4	310.5
22.5°	329.1	316.4	298.8	290.9	283.1
25°	299.8	285.1	268.4	262.5	254.7
27.5°	275.3	256.7	237.1	233.1	226.3
30°	245.9	228.2	209.6	203.8	195.9
32.5°	220.4	200.8	182.2	175.3	168.5
35°	194.0	174.4	154.8	147.9	139.1
37.5°	168.5	149.9	130.3	119.5	111.7
40°	141.1	125.4	106.8	93.1	83.3
42.5°	116.6	102.9	85.2	67.6	57.8
45°	91.1	80.3	65.6	44.1	33.3
47.5°	67.6	59.8	48.0	25.5	17.6
50°	45.1	42.1	31.3	12.7	10.8
52.5°	24.5	26.4	18.6	7.8	8.8
55°	5.9	11.8	9.8	5.9	6.9
57.5°	1.0	2.0	4.9	4.9	4.9
60°	1.0	1.0	2.0	2.9	3.9
62.5°	1.0	0.0	1.0	2.0	2.9
65°	0.0	0.0	1.0	1.0	2.0
67.5°	0.0	0.0	0.0	1.0	1.0
70°	0.0	0.0	0.0	1.0	1.0
72.5°	0.0	0.0	0.0	0.0	1.0
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)