

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: P1058042

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058042
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
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-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

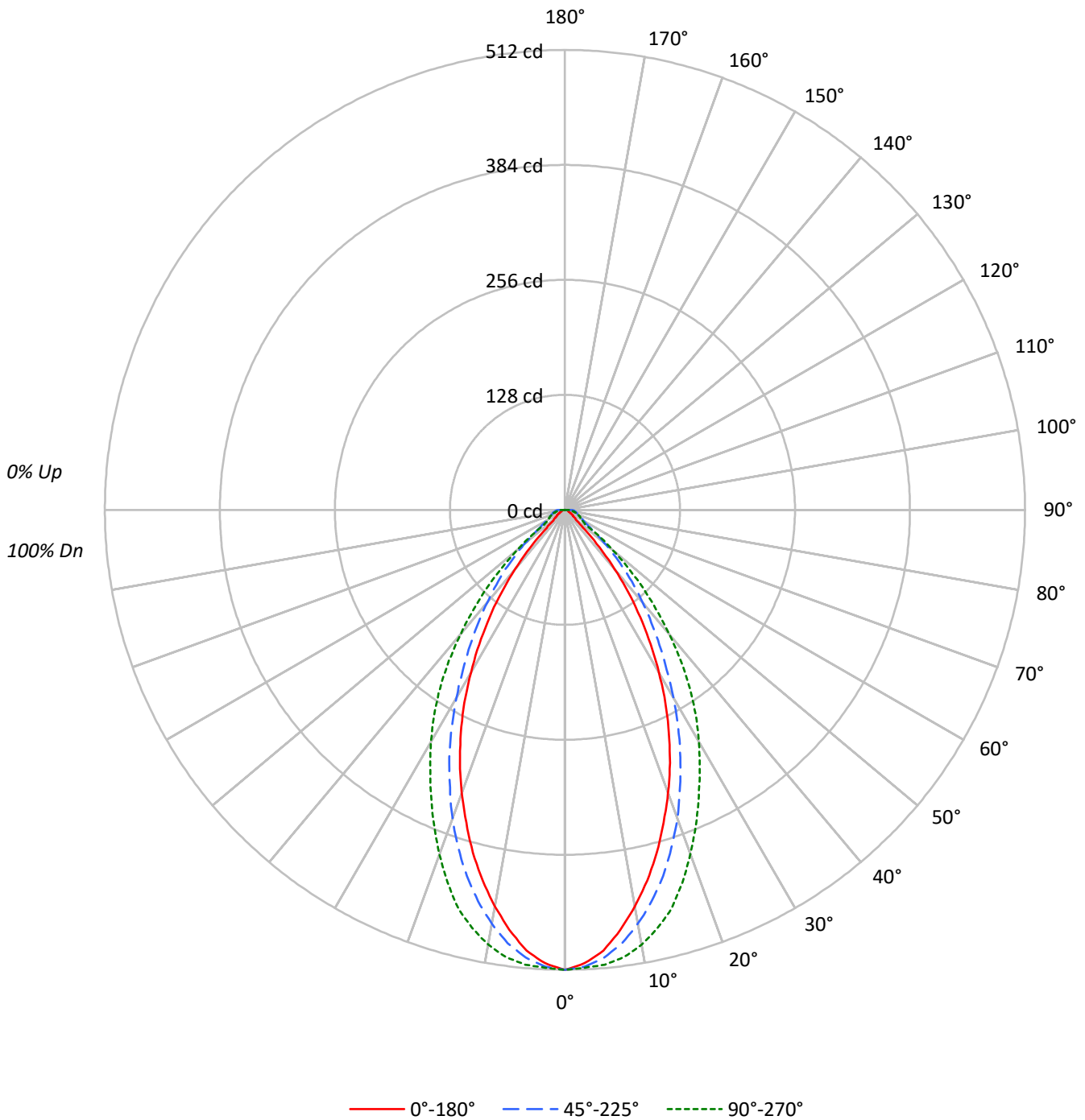
Lumens per Lamp: N/A
Luminaire Lumens: 552.0 lumens
Efficiency: N/A
Efficacy: 21.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1058042

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

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90													90															
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81													81															
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74													74															
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67													67															
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61													61															
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57													57															
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52													52															
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48													48															
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45													45															
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42													42															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9450	9450	9450
5°	9123	9267	9413
10°	8400	8767	9209
15°	7552	8058	8770
20°	6588	7185	8014
25°	5573	6191	7171
30°	4453	5141	6354
35°	3293	4131	5458
40°	2079	3237	4348
45°	819	2432	3199
50°	422	1633	1972
55°	347	1075	885
60°	255	867	797
65°	214	812	812
70°	210	847	793
75°	278	977	841
80°	414	1254	935
85°	614	2075	1249

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 4146 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	8.5
10°-20°	118.3	21.4
20°-30°	140.6	25.5
30°-40°	116.9	21.2
40°-50°	65.3	11.8
50°-60°	26.4	4.8
60°-70°	16.9	3.1
70°-80°	12.7	2.3
80°-90°	8.1	1.5
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°	305.7	55.4
0°-40°	422.7	76.6
0°-60°	514.4	93.2
0°-90°	552.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	552.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	512	512	512	512	512	
5°	492	501	500	504	508	46
15°	395	407	422	443	459	110
25°	274	284	304	328	352	125
35°	146	160	183	214	242	91
45°	31	53	93	109	123	30
55°	11	23	33	32	28	9
65°	5	20	19	18	19	5
75°	4	14	14	13	12	4
85°	3	9	10	9	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	512.1	512.1	512.1	512.1	512.1
2.5°	505.2	513.1	509.1	509.1	510.1
5°	492.5	501.3	500.3	504.2	508.2
7.5°	471.9	481.7	486.6	495.4	502.3
10°	448.3	459.1	467.9	481.7	491.5
12.5°	422.8	433.6	446.4	464.0	476.8
15°	395.3	407.1	421.8	443.4	459.1
17.5°	364.9	377.7	394.4	417.9	434.6
20°	335.5	348.3	365.9	389.5	408.1
22.5°	305.1	315.9	334.5	358.1	380.6
25°	273.7	284.5	304.1	327.7	352.2
27.5°	242.3	253.1	272.7	297.2	324.7
30°	209.0	220.7	241.3	268.8	298.2
32.5°	177.6	189.3	210.9	241.3	270.8
35°	146.2	159.9	183.4	213.9	242.3
37.5°	115.8	131.5	157.9	186.4	211.9
40°	86.3	103.0	134.4	158.9	180.5
42.5°	56.9	76.5	112.8	133.4	150.1
45°	31.4	53.0	93.2	108.9	122.6
47.5°	17.7	34.3	73.6	86.3	94.2
50°	14.7	25.5	56.9	65.7	68.7
52.5°	11.8	23.5	43.2	48.1	46.1
55°	10.8	22.6	33.4	32.4	27.5
57.5°	8.8	22.6	26.5	23.5	23.5
60°	6.9	21.6	23.5	20.6	21.6
62.5°	5.9	20.6	21.6	19.6	19.6
65°	4.9	19.6	18.6	17.7	18.6
67.5°	3.9	17.7	17.7	16.7	16.7
70°	3.9	16.7	15.7	14.7	14.7
72.5°	3.9	14.7	14.7	13.7	13.7
75°	3.9	13.7	13.7	12.8	11.8
77.5°	3.9	11.8	12.8	11.8	10.8
80°	3.9	10.8	11.8	10.8	8.8
82.5°	3.9	9.8	10.8	9.8	7.8
85°	2.9	8.8	9.8	8.8	5.9
87.5°	2.9	8.8	9.8	7.8	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)