

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: P1058061

Luminaire Tested: S122RDR-S675D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058061
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S675D850-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

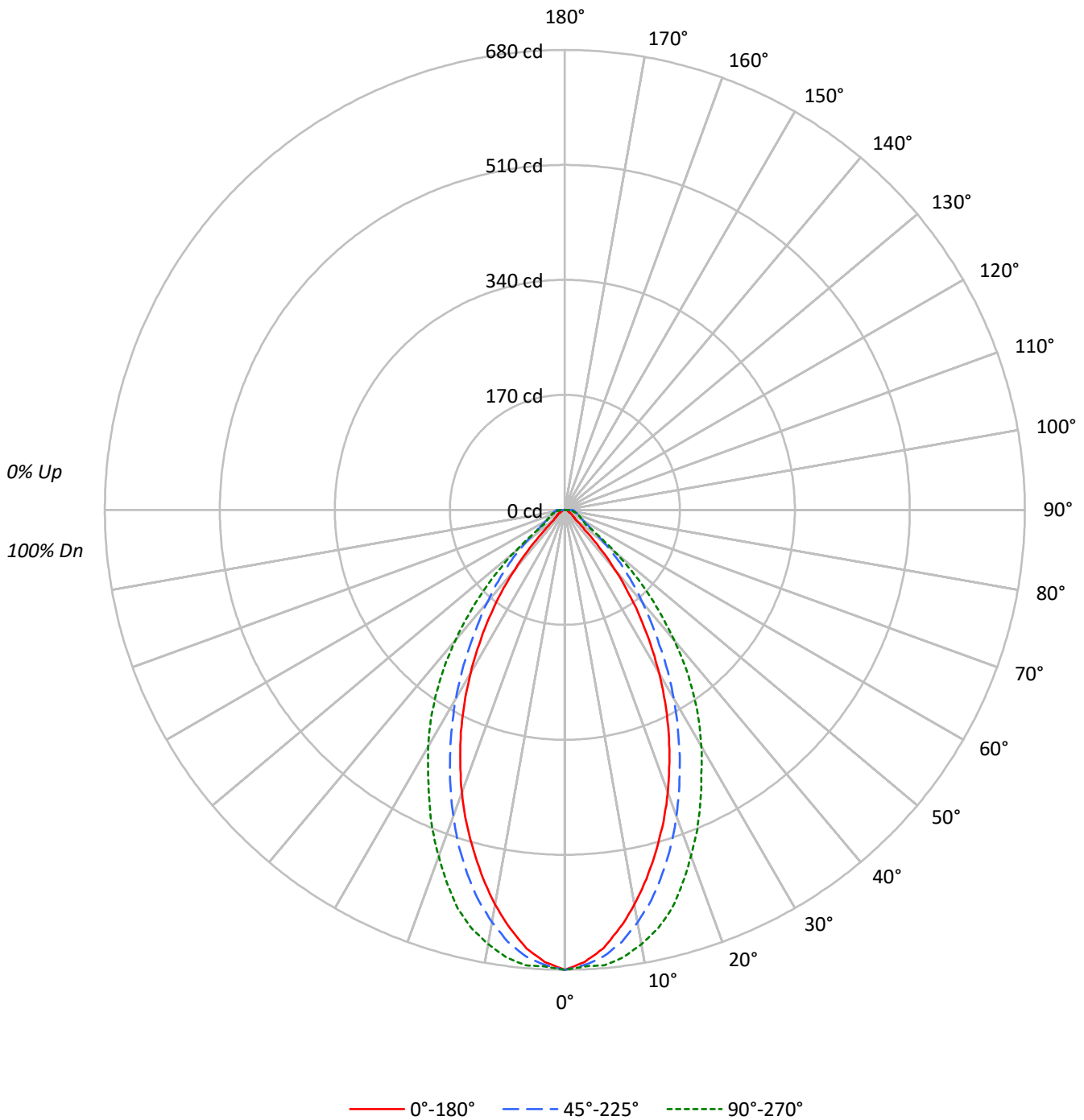
Lumens per Lamp: N/A
Luminaire Lumens: 740.3 lumens
Efficiency: N/A
Efficacy: 28.7 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12550	12550	12550
5°	12053	12275	12516
10°	11111	11602	12213
15°	9957	10643	11663
20°	8740	9467	10706
25°	7399	8175	9659
30°	5936	6863	8602
35°	4388	5490	7452
40°	2753	4300	6056
45°	1080	3238	4486
50°	531	2187	2750
55°	421	1435	1226
60°	321	1166	1126
65°	236	1092	1092
70°	291	1117	1117
75°	314	1241	1162
80°	468	1615	1275
85°	932	2774	1842

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 5076 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.1	8.4
10°-20°	157.0	21.2
20°-30°	187.9	25.4
30°-40°	158.1	21.4
40°-50°	90.0	12.2
50°-60°	35.5	4.8
60°-70°	22.4	3.0
70°-80°	16.6	2.2
80°-90°	10.6	1.4
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°	407.0	55.0
0°-40°	565.1	76.3
0°-60°	690.7	93.3
0°-90°	740.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	740.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	680	680	680	680	680	
5°	651	665	663	670	676	60
15°	521	540	557	590	610	145
25°	363	380	402	443	474	166
35°	195	212	244	296	331	121
45°	41	73	124	156	172	39
55°	13	28	45	46	38	12
65°	5	25	25	24	25	6
75°	4	17	17	16	16	5
85°	4	12	13	12	9	4
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	680.1	680.1	680.1	680.1	680.1
2.5°	669.2	681.2	673.6	674.7	675.7
5°	650.7	664.9	662.7	670.3	675.7
7.5°	623.5	638.8	644.2	657.2	667.0
10°	593.0	610.5	619.2	639.8	651.8
12.5°	558.2	577.8	590.9	617.0	634.4
15°	521.2	539.7	557.1	589.8	610.5
17.5°	484.2	502.7	521.2	557.1	578.9
20°	445.1	462.5	482.1	520.1	545.2
22.5°	403.7	422.2	441.8	481.0	511.4
25°	363.4	379.8	401.5	442.9	474.4
27.5°	321.0	337.3	361.3	403.7	437.4
30°	278.6	294.9	322.1	365.6	403.7
32.5°	236.1	253.5	282.9	330.8	368.9
35°	194.8	212.2	243.7	296.0	330.8
37.5°	154.5	174.1	208.9	260.1	292.7
40°	114.3	137.1	178.5	224.2	251.4
42.5°	76.2	104.5	150.2	188.3	211.1
45°	41.4	72.9	124.1	155.6	171.9
47.5°	22.9	46.8	99.0	124.1	133.8
50°	18.5	32.6	76.2	94.7	95.8
52.5°	15.2	29.4	56.6	67.5	62.0
55°	13.1	28.3	44.6	45.7	38.1
57.5°	10.9	27.2	37.0	32.6	32.6
60°	8.7	27.2	31.6	29.4	30.5
62.5°	6.5	27.2	28.3	26.1	27.2
65°	5.4	25.0	25.0	23.9	25.0
67.5°	5.4	22.9	22.9	21.8	22.9
70°	5.4	21.8	20.7	20.7	20.7
72.5°	4.4	19.6	19.6	18.5	18.5
75°	4.4	17.4	17.4	16.3	16.3
77.5°	4.4	16.3	16.3	15.2	14.1
80°	4.4	14.1	15.2	14.1	12.0
82.5°	4.4	13.1	14.1	13.1	9.8
85°	4.4	12.0	13.1	12.0	8.7
87.5°	3.3	12.0	12.0	9.8	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)