

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: P1058127

Luminaire Tested: S122RDR-S865D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058127
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S865D835-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

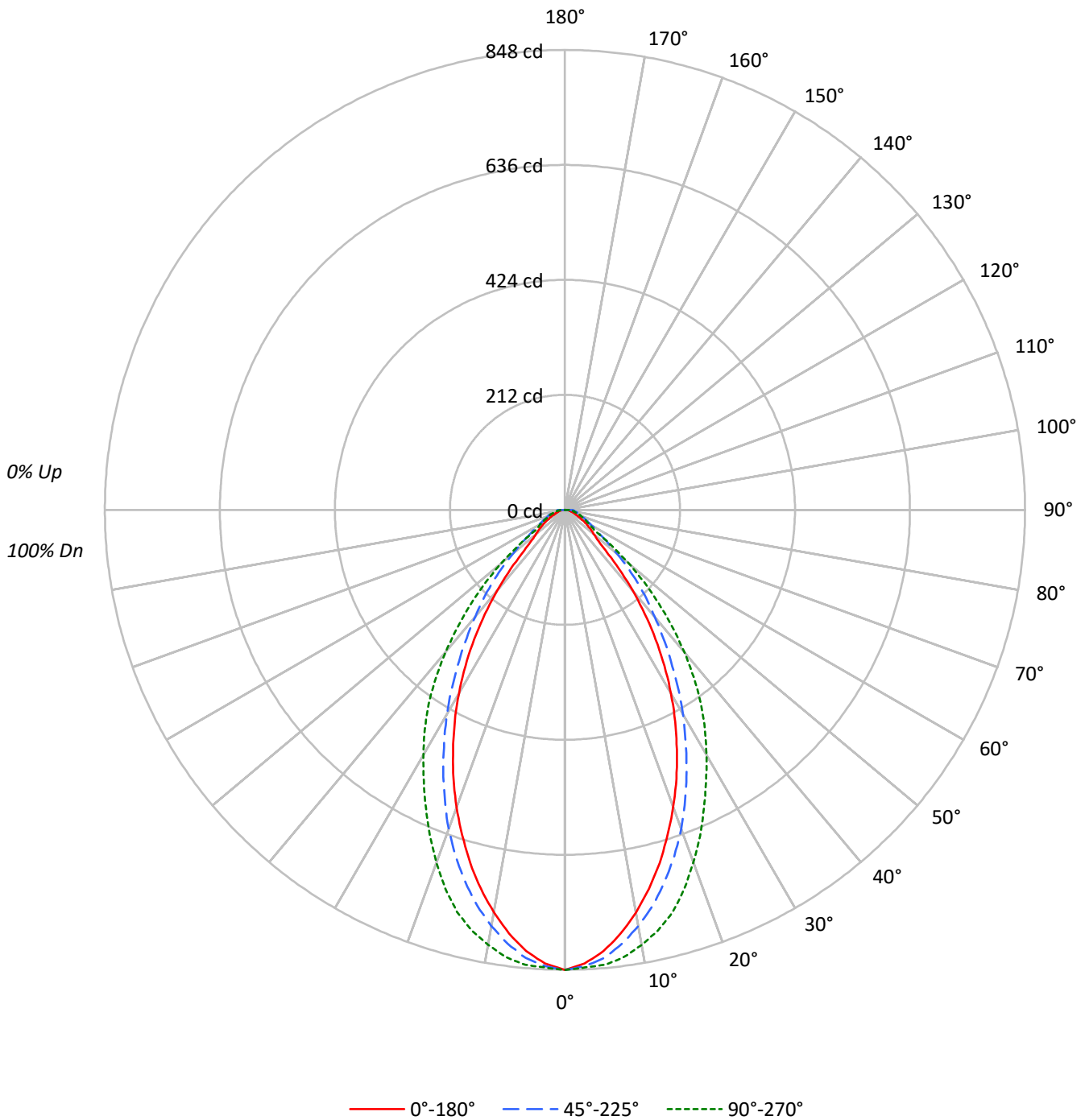
Lumens per Lamp: N/A
Luminaire Lumens: 1029.1 lumens
Efficiency: N/A
Efficacy: 29.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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: P1058127

CATALOG NUMBER: S122RDR-S865D835-X4F0-XX-UDD-SVL-W

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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15655	15655	15655
5°	15131	15365	15598
10°	14126	14598	15260
15°	12883	13558	14666
20°	11462	12302	13591
25°	9934	10805	12346
30°	8327	9266	11120
35°	6560	7668	9853
40°	4675	6195	8228
45°	2764	4901	6383
50°	1989	3545	4343
55°	1663	2554	2191
60°	1351	2048	1860
65°	1100	1816	1707
70°	950	1770	1635
75°	898	1797	1618
80°	935	2147	1743
85°	1334	3472	2138

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6383 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.8	7.6
10°-20°	199.9	19.4
20°-30°	246.6	24.0
30°-40°	219.4	21.3
40°-50°	140.0	13.6
50°-60°	67.2	6.5
60°-70°	39.5	3.8
70°-80°	25.2	2.5
80°-90°	13.4	1.3
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°	524.4	51.0
0°-40°	743.7	72.3
0°-60°	951.0	92.4
0°-90°	1029.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1029.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	848	848	848	848	848	
5°	817	832	830	834	842	76
15°	674	691	710	742	768	188
25°	488	507	531	568	606	223
35°	291	314	340	392	437	181
45°	106	137	188	218	245	89
55°	52	67	79	77	68	47
65°	25	45	42	38	39	25
75°	13	28	25	24	23	14
85°	6	15	16	14	10	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	848.4	848.4	848.4	848.4	848.4
2.5°	837.1	850.9	842.1	842.1	844.6
5°	816.9	832.0	829.5	834.5	842.1
7.5°	787.9	804.3	806.8	820.7	832.0
10°	753.9	771.5	779.1	799.2	814.4
12.5°	716.0	733.7	747.6	772.8	794.2
15°	674.4	690.8	709.7	742.5	767.7
17.5°	629.1	650.5	669.4	703.4	732.4
20°	583.7	603.8	626.5	659.3	692.1
22.5°	537.0	555.9	578.6	612.7	650.5
25°	487.9	506.8	530.7	568.5	606.4
27.5°	440.0	458.9	481.6	523.2	563.5
30°	390.8	409.7	434.9	477.8	521.9
32.5°	341.6	361.8	387.0	433.7	480.3
35°	291.2	313.9	340.4	392.1	437.4
37.5°	242.0	264.7	297.5	347.9	390.8
40°	194.1	220.6	257.2	302.6	341.6
42.5°	147.5	176.5	221.9	258.4	292.5
45°	105.9	137.4	187.8	218.1	244.6
47.5°	80.7	103.4	155.1	179.0	197.9
50°	69.3	83.2	123.5	141.2	151.3
52.5°	60.5	73.1	98.3	107.2	107.2
55°	51.7	66.8	79.4	76.9	68.1
57.5°	44.1	60.5	65.6	55.5	58.0
60°	36.6	55.5	55.5	49.2	50.4
62.5°	30.3	51.7	47.9	42.9	44.1
65°	25.2	45.4	41.6	37.8	39.1
67.5°	20.2	40.3	36.6	34.0	34.0
70°	17.6	36.6	32.8	30.3	30.3
72.5°	15.1	31.5	29.0	26.5	26.5
75°	12.6	27.7	25.2	24.0	22.7
77.5°	11.3	24.0	22.7	20.2	18.9
80°	8.8	20.2	20.2	18.9	16.4
82.5°	7.6	17.6	17.6	16.4	13.9
85°	6.3	15.1	16.4	13.9	10.1
87.5°	5.0	13.9	13.9	11.3	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)