

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: P1058123

Luminaire Tested: S122RDR-S865D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058123
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-S865D835-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

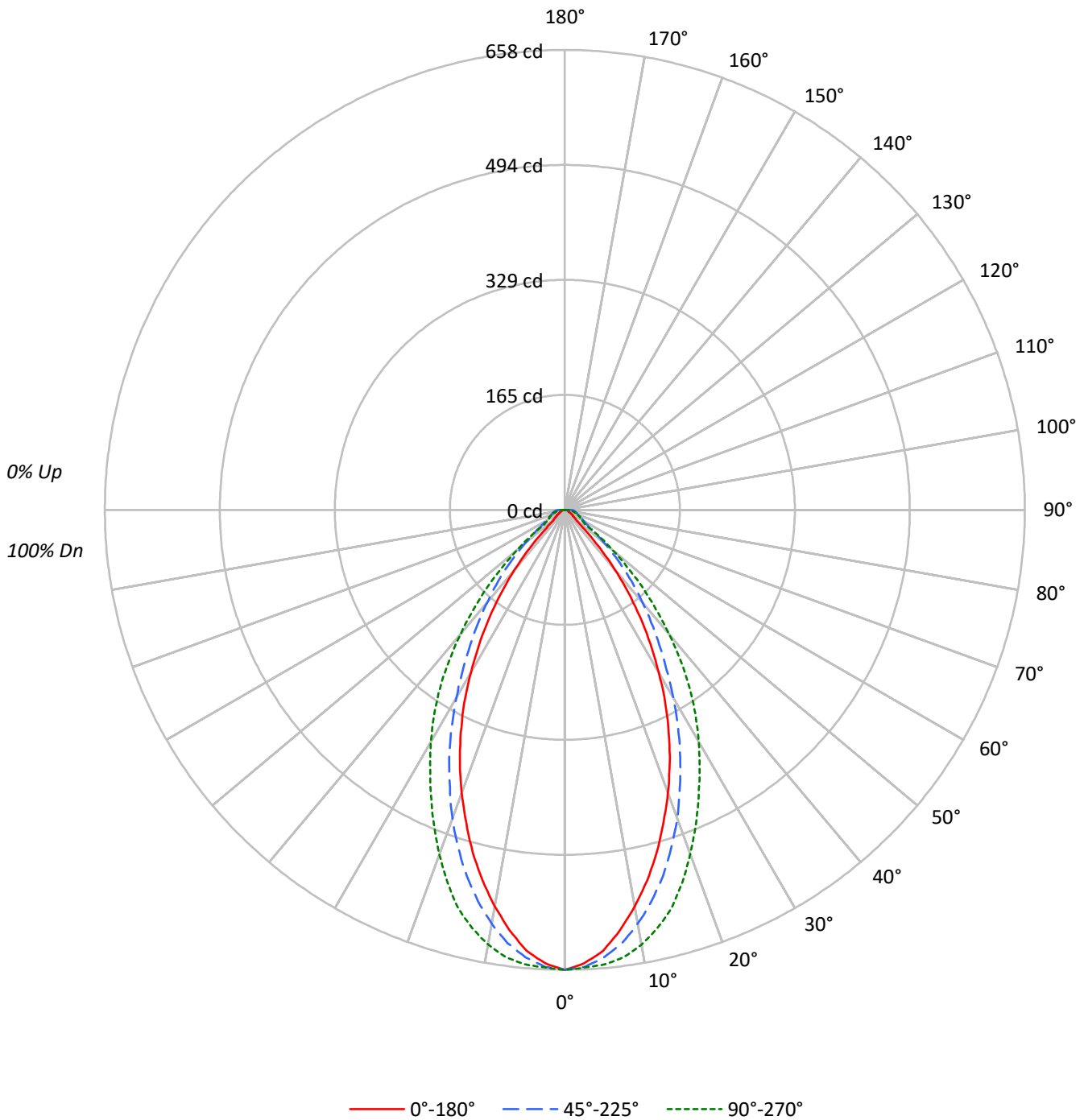
Lumens per Lamp: N/A
Luminaire Lumens: 709.3 lumens
Efficiency: N/A
Efficacy: 20.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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	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	77	82	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	68	64	71	67	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57				
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45				
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12144	12144	12144
5°	11721	11908	12095
10°	10794	11267	11834
15°	9705	10356	11271
20°	8465	9233	10297
25°	7161	7957	9215
30°	5721	6607	8165
35°	4230	5309	7015
40°	2671	4160	5588
45°	1052	3126	4113
50°	543	2098	2532
55°	447	1380	1136
60°	325	1118	1022
65°	275	1048	1048
70°	270	1090	1020
75°	356	1255	1077
80°	531	1605	1201
85°	805	2668	1609

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 5330 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.2	8.5
10°-20°	152.0	21.4
20°-30°	180.7	25.5
30°-40°	150.3	21.2
40°-50°	83.9	11.8
50°-60°	33.9	4.8
60°-70°	21.7	3.1
70°-80°	16.3	2.3
80°-90°	10.4	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°	392.9	55.4
0°-40°	543.2	76.6
0°-60°	661.0	93.2
0°-90°	709.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	709.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	658	658	658	658	658	
5°	633	644	643	648	653	59
15°	508	523	542	570	590	141
25°	352	366	391	421	453	160
35°	188	206	236	275	311	117
45°	40	68	120	140	158	38
55°	14	29	43	42	35	12
65°	6	25	24	23	24	6
75°	5	18	18	16	15	5
85°	4	11	13	11	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	658.1	658.1	658.1	658.1	658.1
2.5°	649.2	659.3	654.3	654.3	655.5
5°	632.8	644.2	642.9	648.0	653.0
7.5°	606.4	619.0	625.3	636.6	645.5
10°	576.1	590.0	601.3	619.0	631.6
12.5°	543.3	557.2	573.6	596.3	612.7
15°	508.0	523.2	542.1	569.8	590.0
17.5°	469.0	485.3	506.8	537.0	558.5
20°	431.1	447.5	470.2	500.5	524.4
22.5°	392.1	405.9	429.9	460.1	489.1
25°	351.7	365.6	390.8	421.1	452.6
27.5°	311.4	325.2	350.5	382.0	417.3
30°	268.5	283.6	310.1	345.4	383.2
32.5°	228.2	243.3	271.0	310.1	347.9
35°	187.8	205.5	235.7	274.8	311.4
37.5°	148.8	168.9	203.0	239.5	272.3
40°	110.9	132.4	172.7	204.2	232.0
42.5°	73.1	98.3	145.0	171.4	192.9
45°	40.3	68.1	119.8	139.9	157.6
47.5°	22.7	44.1	94.5	110.9	121.0
50°	18.9	32.8	73.1	84.5	88.2
52.5°	15.1	30.3	55.5	61.8	59.3
55°	13.9	29.0	42.9	41.6	35.3
57.5°	11.3	29.0	34.0	30.3	30.3
60°	8.8	27.7	30.3	26.5	27.7
62.5°	7.6	26.5	27.7	25.2	25.2
65°	6.3	25.2	24.0	22.7	24.0
67.5°	5.0	22.7	22.7	21.4	21.4
70°	5.0	21.4	20.2	18.9	18.9
72.5°	5.0	18.9	18.9	17.6	17.6
75°	5.0	17.6	17.6	16.4	15.1
77.5°	5.0	15.1	16.4	15.1	13.9
80°	5.0	13.9	15.1	13.9	11.3
82.5°	5.0	12.6	13.9	12.6	10.1
85°	3.8	11.3	12.6	11.3	7.6
87.5°	3.8	11.3	12.6	10.1	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)