

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: P1059176

Luminaire Tested: S123RDR-S340D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059176
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D835-X4F0-XX-UDD-BVL-S
Description: DEFINE 3 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

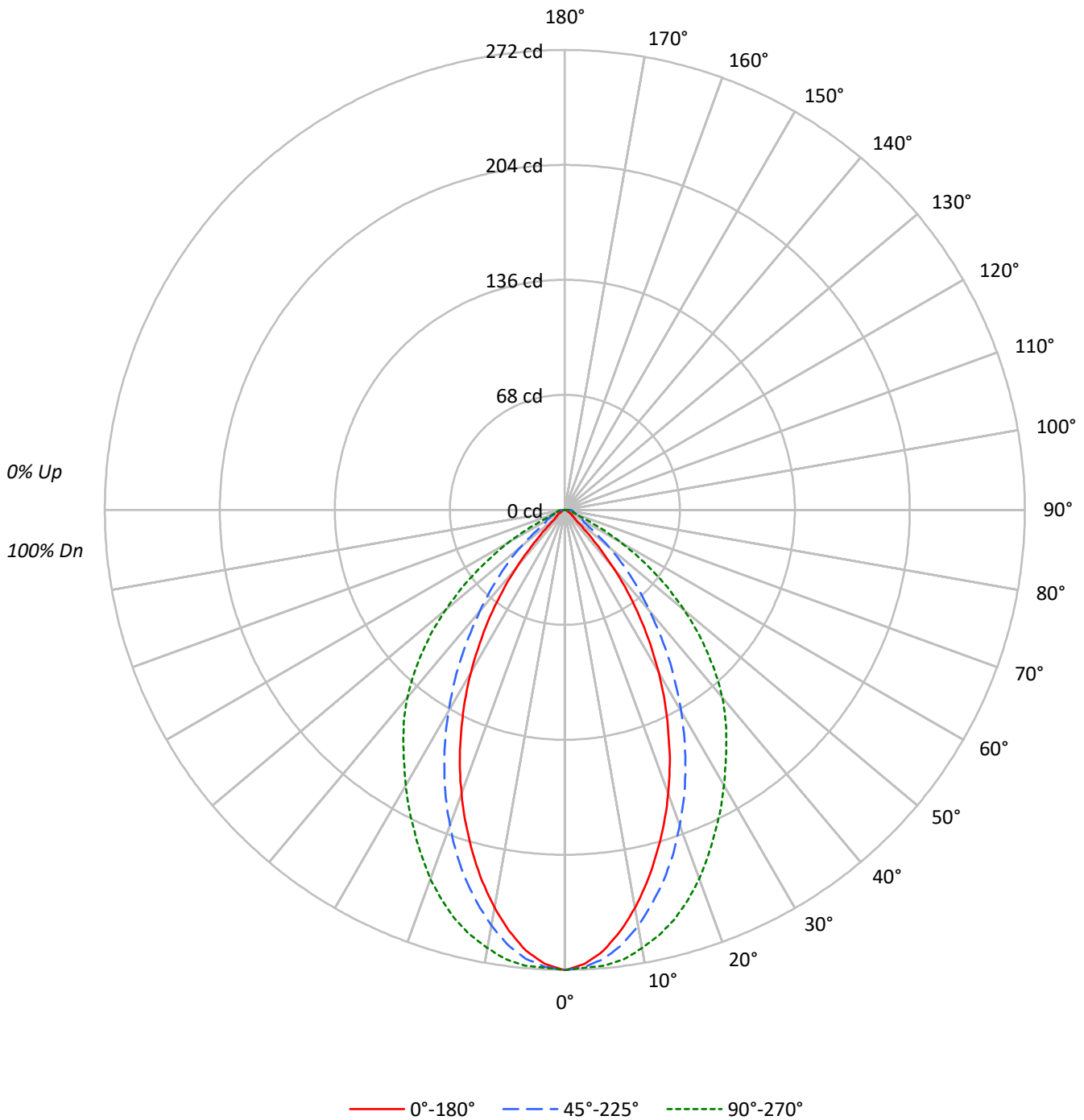
Lumens per Lamp: N/A
Luminaire Lumens: 327.0 lumens
Efficiency: N/A
Efficacy: 26.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	98	98	96	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66				
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55				
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52	50				
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3196	3196	3196
5°	3086	3140	3188
10°	2849	2977	3137
15°	2555	2752	3046
20°	2232	2480	2903
25°	1876	2184	2723
30°	1506	1863	2550
35°	1104	1534	2387
40°	682	1193	2220
45°	262	898	1976
50°	130	616	1673
55°	102	340	1312
60°	68	284	881
65°	58	256	395
70°	58	230	230
75°	77	245	227
80°	115	311	250
85°	162	498	337

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1976 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.0	7.6
10°-20°	63.9	19.5
20°-30°	79.3	24.3
30°-40°	71.1	21.7
40°-50°	46.7	14.3
50°-60°	23.4	7.2
60°-70°	9.2	2.8
70°-80°	5.2	1.6
80°-90°	3.2	1.0
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°	168.2	51.4
0°-40°	239.2	73.2
0°-60°	309.3	94.6
0°-90°	327.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	327.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	272	272	272	272	272	
5°	262	266	266	268	270	24
15°	210	217	226	242	251	59
25°	145	154	169	192	210	66
35°	77	87	107	140	166	48
45°	16	26	54	91	119	15
55°	5	6	17	45	64	4
65°	2	6	9	12	14	2
75°	2	5	5	5	5	2
85°	1	4	4	4	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	272.2	272.2	272.2	272.2	272.2
2.5°	268.9	272.6	270.5	270.5	271.0
5°	261.8	266.0	266.4	268.1	270.5
7.5°	251.4	256.8	259.3	264.3	268.1
10°	238.9	244.7	249.7	258.5	263.1
12.5°	225.2	231.0	238.5	250.6	257.6
15°	210.2	216.9	226.4	241.8	250.6
17.5°	194.8	201.5	213.1	230.6	241.8
20°	178.6	186.1	198.5	218.5	232.3
22.5°	162.3	170.7	184.0	205.6	221.4
25°	144.8	154.0	168.6	192.3	210.2
27.5°	128.2	137.8	153.2	179.0	199.4
30°	111.1	120.7	137.4	165.2	188.1
32.5°	93.7	104.5	122.0	152.3	176.9
35°	77.0	87.4	107.0	139.9	166.5
37.5°	60.8	71.2	91.6	127.8	156.1
40°	44.5	55.4	77.8	116.1	144.8
42.5°	29.1	40.4	65.8	104.5	132.4
45°	15.8	26.2	54.1	91.2	119.0
47.5°	8.7	14.2	43.7	78.7	106.1
50°	7.1	7.9	33.7	67.0	91.6
52.5°	5.8	6.7	24.1	55.8	78.3
55°	5.0	5.8	16.6	45.0	64.1
57.5°	4.2	5.0	13.3	34.5	50.4
60°	2.9	5.0	12.1	25.4	37.5
62.5°	2.5	5.0	10.4	17.5	25.0
65°	2.1	5.8	9.2	11.7	14.2
67.5°	1.7	5.8	7.9	7.5	7.5
70°	1.7	5.8	6.7	6.2	6.7
72.5°	1.7	6.2	6.2	5.8	5.8
75°	1.7	5.4	5.4	5.0	5.0
77.5°	1.7	5.0	5.0	4.6	4.6
80°	1.7	4.6	4.6	4.2	3.7
82.5°	1.7	4.2	4.2	3.7	3.3
85°	1.2	3.7	3.7	3.7	2.5
87.5°	1.2	3.3	3.7	3.3	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)