

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: P1059175

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059175
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
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-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

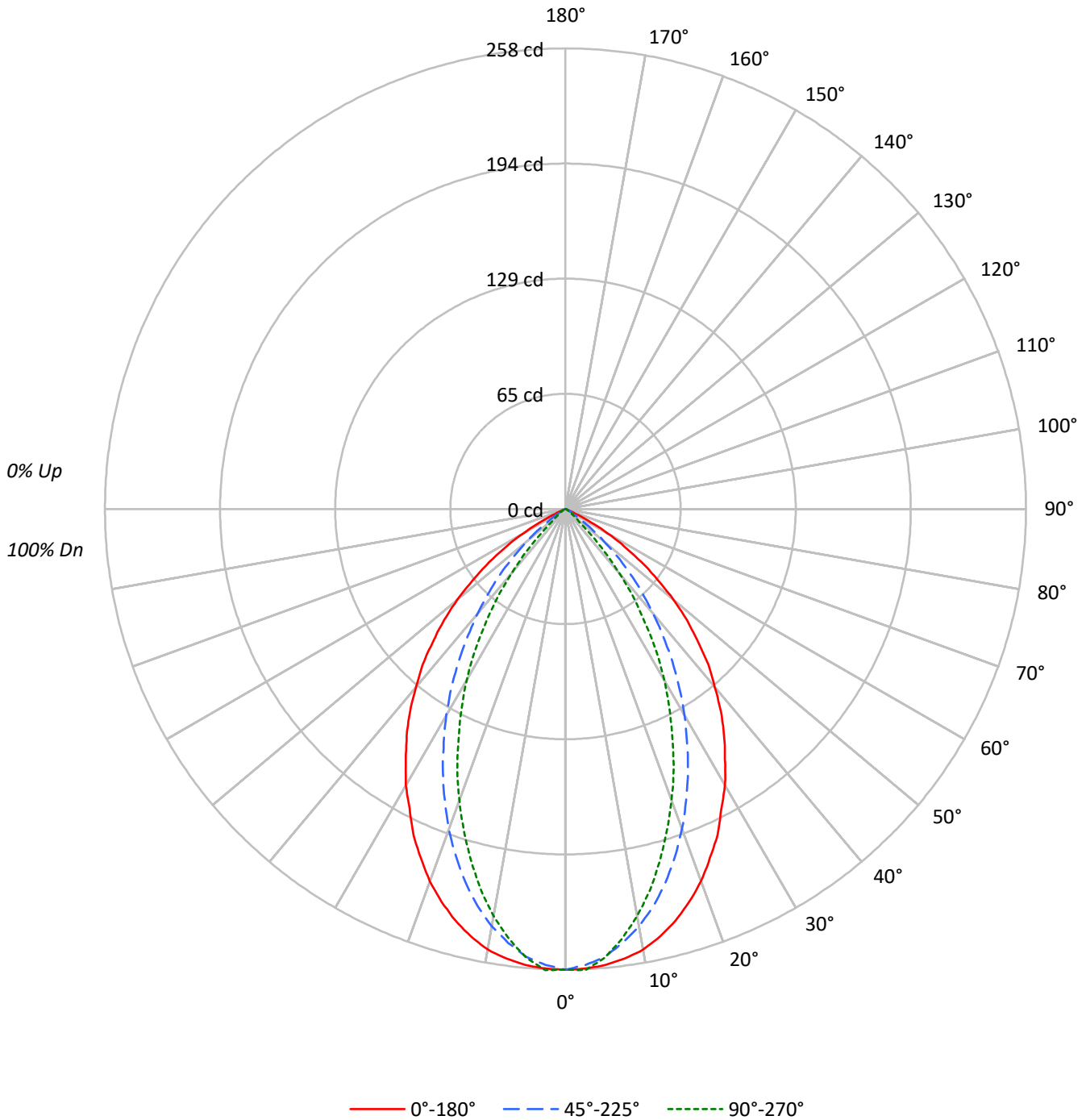
Lumens per Lamp: N/A
Luminaire Lumens: 294.5 lumens
Efficiency: N/A
Efficacy: 23.6 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3031	3031	3031
5°	3023	2969	2974
10°	2989	2831	2760
15°	2901	2633	2481
20°	2774	2384	2172
25°	2612	2105	1836
30°	2423	1809	1500
35°	2222	1495	1114
40°	1994	1173	714
45°	1739	855	297
50°	1443	510	113
55°	1065	213	86
60°	643	78	49
65°	172	47	22
70°	0	14	14
75°	0	0	18
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1739 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.8	8.1
10°-20°	61.3	20.8
20°-30°	76.4	25.9
30°-40°	68.3	23.2
40°-50°	43.1	14.6
50°-60°	18.1	6.1
60°-70°	3.4	1.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	161.5	54.8
0°-40°	229.9	78.0
0°-60°	291.0	98.8
0°-90°	294.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	294.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	258	258	258	258	258	
5°	256	256	252	253	252	24
15°	239	233	217	207	204	67
25°	202	185	162	148	142	92
35°	155	133	104	86	78	97
45°	105	82	52	27	18	81
55°	52	36	10	4	4	47
65°	6	5	2	1	1	9
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	258.1	258.1	258.1	258.1	258.1
2.5°	257.7	258.1	255.6	258.1	258.5
5°	256.5	256.1	251.9	252.7	252.3
7.5°	254.0	252.7	245.2	243.6	242.8
10°	250.7	247.3	237.4	233.2	231.5
12.5°	245.2	240.7	227.8	221.1	218.6
15°	238.6	232.8	216.6	207.4	204.1
17.5°	230.7	222.4	204.1	194.1	189.1
20°	222.0	210.3	190.8	178.7	173.8
22.5°	211.6	198.7	176.7	163.8	158.4
25°	201.6	185.4	162.5	148.4	141.7
27.5°	189.1	172.1	147.6	133.0	125.9
30°	178.7	159.2	133.4	117.2	110.6
32.5°	166.3	145.9	118.9	101.0	94.8
35°	155.0	132.6	104.3	85.6	77.7
37.5°	143.0	119.7	89.8	70.2	62.8
40°	130.1	106.8	76.5	54.9	46.6
42.5°	118.5	93.9	63.2	40.7	32.4
45°	104.7	81.5	51.5	27.4	17.9
47.5°	92.3	69.8	39.1	15.4	9.6
50°	79.0	57.8	27.9	7.9	6.2
52.5°	65.3	46.1	18.3	5.4	5.0
55°	52.0	35.7	10.4	4.2	4.2
57.5°	39.1	25.8	5.4	3.3	2.9
60°	27.4	17.0	3.3	2.5	2.1
62.5°	15.8	10.0	2.5	1.7	1.7
65°	6.2	4.6	1.7	0.8	0.8
67.5°	0.4	1.2	0.8	0.4	0.4
70°	0.0	0.0	0.4	0.4	0.4
72.5°	0.0	0.0	0.4	0.4	0.4
75°	0.0	0.0	0.0	0.0	0.4
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)