

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: P1059259

Luminaire Tested: S123RDR-S560D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059259
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S560D835-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

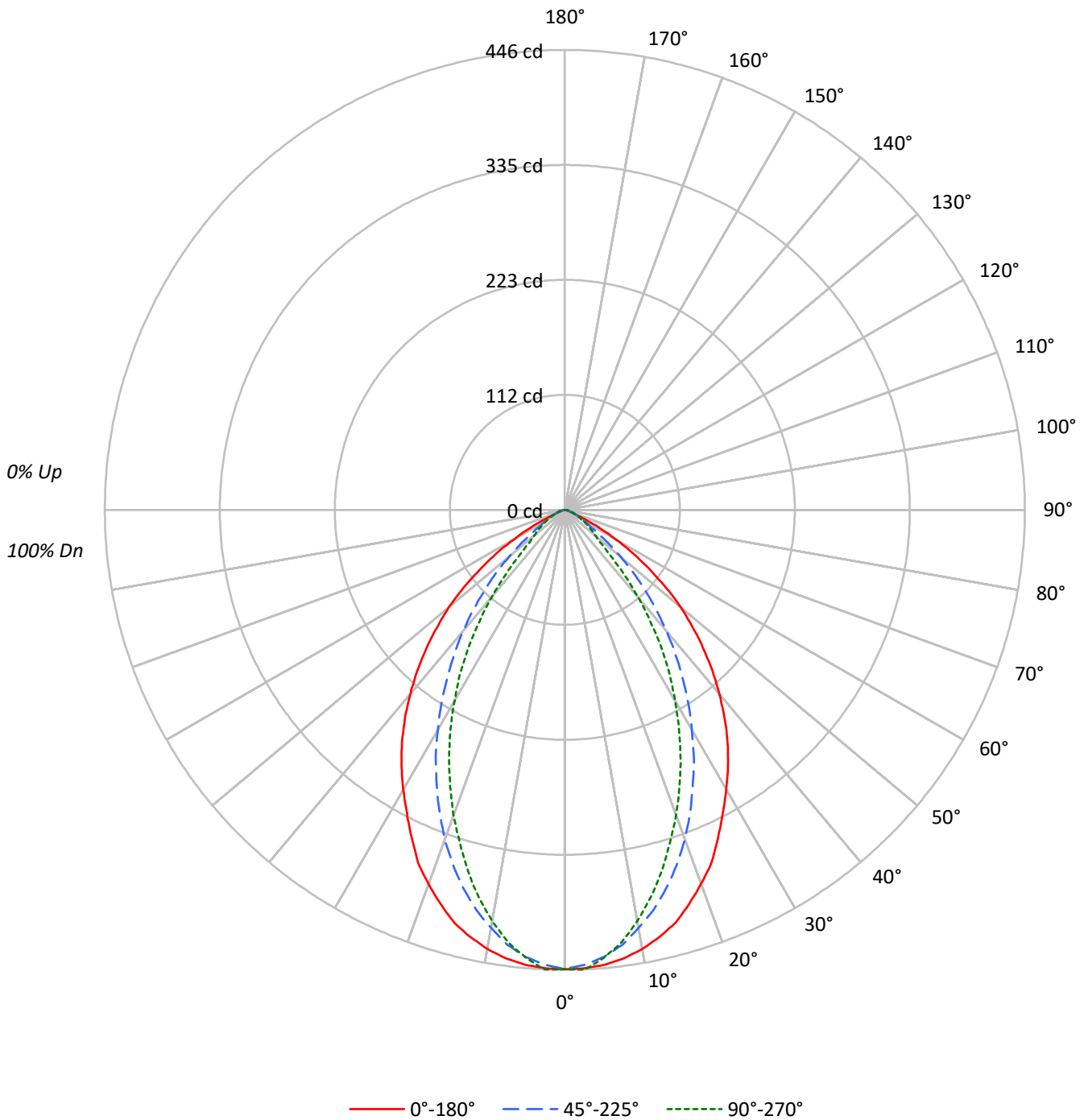
Lumens per Lamp: N/A
Luminaire Lumens: 575.2 lumens
Efficiency: N/A
Efficacy: 29.3 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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: P1059259

CATALOG NUMBER: S123RDR-S560D835-X4F0-XX-UDD-SVL-B

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			100	
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91			91	
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82			82	
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73			73	
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66			66	
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60			60	
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55			55	
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50			50	
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46			46	
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42			42	
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39			39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5231	5231	5231
5°	5219	5130	5138
10°	5156	4910	4828
15°	5039	4620	4410
20°	4826	4249	3939
25°	4549	3807	3440
30°	4245	3338	2899
35°	3945	2847	2334
40°	3573	2347	1692
45°	3150	1822	1020
50°	2671	1273	692
55°	2033	762	579
60°	1329	486	453
65°	556	364	364
70°	189	261	285
75°	154	186	218
80°	95	142	189
85°	94	94	189

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3150 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.1	7.2
10°-20°	107.7	18.7
20°-30°	138.1	24.0
30°-40°	129.6	22.5
40°-50°	90.4	15.7
50°-60°	46.7	8.1
60°-70°	16.0	2.8
70°-80°	4.6	0.8
80°-90°	1.0	0.2
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°	286.9	49.9
0°-40°	416.5	72.4
0°-60°	553.7	96.3
0°-90°	575.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	575.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	443	442	435	437	436	42
15°	414	404	380	368	363	116
25°	351	329	294	274	266	161
35°	275	241	199	173	163	171
45°	190	155	110	76	61	146
55°	99	74	37	29	28	89
65°	20	17	13	12	13	24
75°	3	3	4	5	5	3
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	445.5	445.5	445.5	445.5	445.5
2.5°	444.9	445.5	441.4	445.5	446.2
5°	442.8	442.1	435.2	437.3	435.9
7.5°	438.7	436.6	425.5	422.8	422.8
10°	432.4	428.3	411.8	406.9	404.9
12.5°	424.2	418.6	397.3	388.3	384.9
15°	414.5	404.2	380.0	367.6	362.8
17.5°	400.7	386.9	360.7	346.2	338.6
20°	386.2	369.0	340.0	322.8	315.2
22.5°	371.1	350.4	317.3	298.6	290.4
25°	351.1	329.0	293.8	273.8	265.5
27.5°	331.7	308.3	271.1	248.3	240.0
30°	313.1	285.5	246.2	224.2	213.8
32.5°	294.5	263.5	222.8	198.6	189.0
35°	275.2	241.4	198.6	173.1	162.8
37.5°	254.5	220.0	175.9	148.3	135.9
40°	233.1	197.3	153.1	122.1	110.4
42.5°	211.7	176.6	130.4	98.6	84.8
45°	189.7	155.2	109.7	75.9	61.4
47.5°	167.6	133.8	89.7	55.2	46.2
50°	146.2	113.8	69.7	40.7	37.9
52.5°	122.8	94.5	52.4	33.8	33.1
55°	99.3	74.5	37.2	29.0	28.3
57.5°	78.6	57.9	26.9	24.1	23.4
60°	56.6	41.4	20.7	20.0	19.3
62.5°	37.2	28.3	16.6	15.9	15.9
65°	20.0	17.2	13.1	12.4	13.1
67.5°	8.3	9.7	9.7	10.3	10.3
70°	5.5	6.2	7.6	8.3	8.3
72.5°	4.1	4.8	5.5	6.2	6.2
75°	3.4	3.4	4.1	4.8	4.8
77.5°	2.1	2.8	2.8	3.4	4.1
80°	1.4	2.1	2.1	2.8	2.8
82.5°	0.7	1.4	1.4	2.1	2.1
85°	0.7	0.7	0.7	0.7	1.4
87.5°	0.0	0.0	0.0	0.0	0.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)