

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: P1059257

Luminaire Tested: S123RDR-S560D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059257
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-S560D835-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

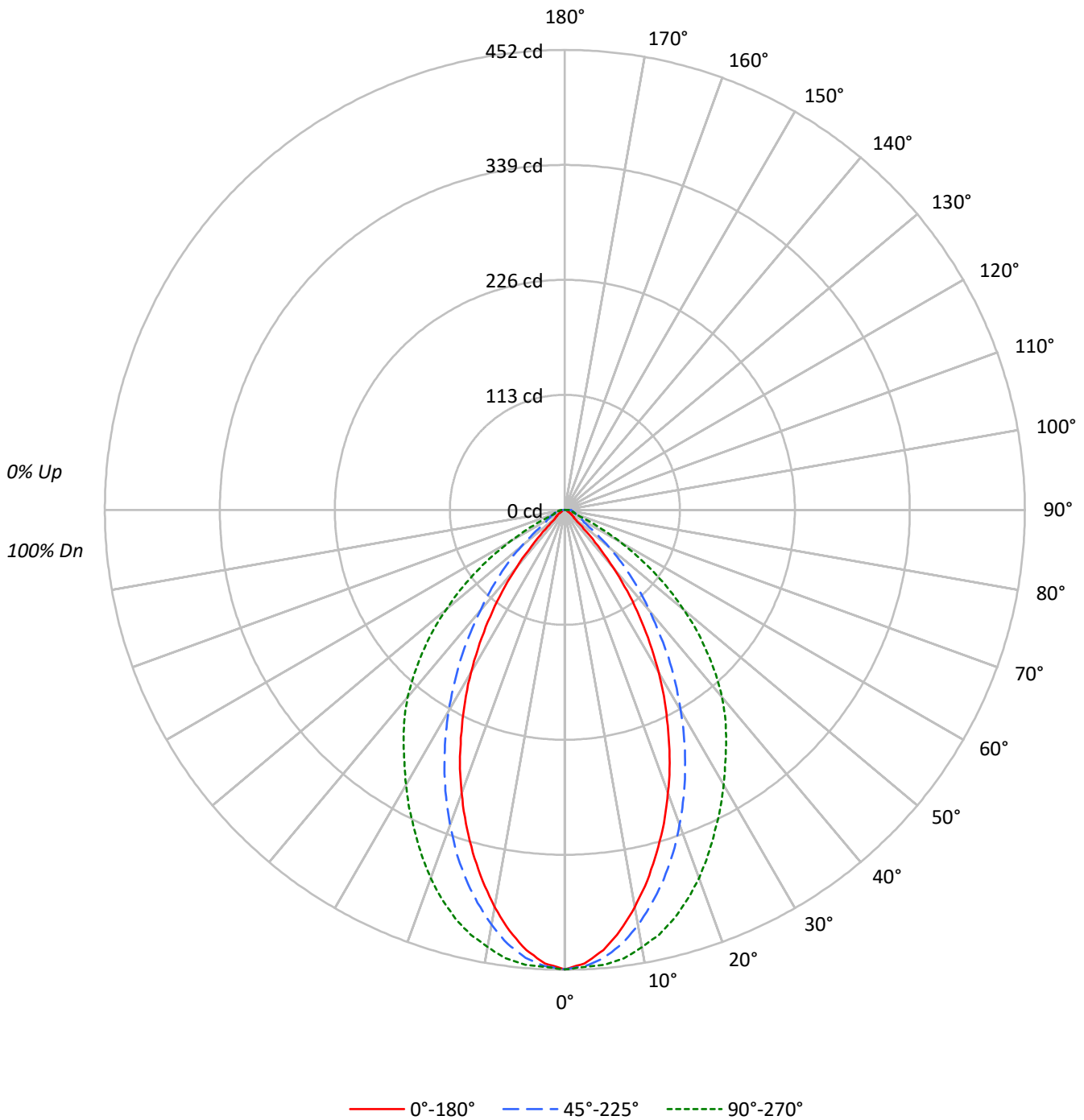
Lumens per Lamp: N/A
Luminaire Lumens: 542.5 lumens
Efficiency: N/A
Efficacy: 27.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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°	5303	5303	5303
5°	5120	5210	5291
10°	4727	4940	5203
15°	4239	4567	5054
20°	3703	4116	4815
25°	3113	3624	4518
30°	2500	3090	4232
35°	1832	2544	3959
40°	1133	1979	3683
45°	435	1491	3280
50°	214	1021	2775
55°	170	565	2176
60°	113	470	1461
65°	97	422	653
70°	96	378	378
75°	127	408	377
80°	189	514	419
85°	283	835	552

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3280 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.4	7.6
10°-20°	106.0	19.5
20°-30°	131.6	24.3
30°-40°	117.9	21.7
40°-50°	77.5	14.3
50°-60°	38.8	7.2
60°-70°	15.3	2.8
70°-80°	8.6	1.6
80°-90°	5.4	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°	279.0	51.4
0°-40°	396.9	73.2
0°-60°	513.2	94.6
0°-90°	542.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	542.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	452	452	452	452	452	
5°	434	441	442	445	449	40
15°	349	360	376	401	416	97
25°	240	256	280	319	349	110
35°	128	145	178	232	276	79
45°	26	44	90	151	198	25
55°	8	10	28	75	106	7
65°	4	10	15	19	24	4
75°	3	9	9	8	8	3
85°	2	6	6	6	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	451.6	451.6	451.6	451.6	451.6
2.5°	446.1	452.3	448.9	448.9	449.6
5°	434.4	441.3	442.0	444.7	448.9
7.5°	417.1	426.1	430.2	438.5	444.7
10°	396.4	406.1	414.3	428.8	436.4
12.5°	373.6	383.3	395.7	415.7	427.5
15°	348.7	359.8	375.7	401.2	415.7
17.5°	323.2	334.2	353.6	382.6	401.2
20°	296.3	308.7	329.4	362.6	385.3
22.5°	269.3	283.1	305.2	341.1	367.4
25°	240.3	255.5	279.7	319.0	348.7
27.5°	212.7	228.6	254.1	296.9	330.8
30°	184.4	200.3	227.9	274.2	312.1
32.5°	155.4	173.3	202.3	252.7	293.5
35°	127.8	145.0	177.5	232.0	276.2
37.5°	100.8	118.1	151.9	212.0	259.0
40°	73.9	91.8	129.1	192.7	240.3
42.5°	48.3	67.0	109.1	173.3	219.6
45°	26.2	43.5	89.8	151.2	197.5
47.5°	14.5	23.5	72.5	130.5	176.1
50°	11.7	13.1	55.9	111.2	151.9
52.5°	9.7	11.0	40.1	92.5	129.8
55°	8.3	9.7	27.6	74.6	106.3
57.5°	6.9	8.3	22.1	57.3	83.6
60°	4.8	8.3	20.0	42.1	62.2
62.5°	4.1	8.3	17.3	29.0	41.4
65°	3.5	9.7	15.2	19.3	23.5
67.5°	2.8	9.7	13.1	12.4	12.4
70°	2.8	9.7	11.0	10.4	11.0
72.5°	2.8	10.4	10.4	9.7	9.7
75°	2.8	9.0	9.0	8.3	8.3
77.5°	2.8	8.3	8.3	7.6	7.6
80°	2.8	7.6	7.6	6.9	6.2
82.5°	2.8	6.9	6.9	6.2	5.5
85°	2.1	6.2	6.2	6.2	4.1
87.5°	2.1	5.5	6.2	5.5	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)