

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: P1059264

Luminaire Tested: S123RDR-S560D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059264
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S560D835-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

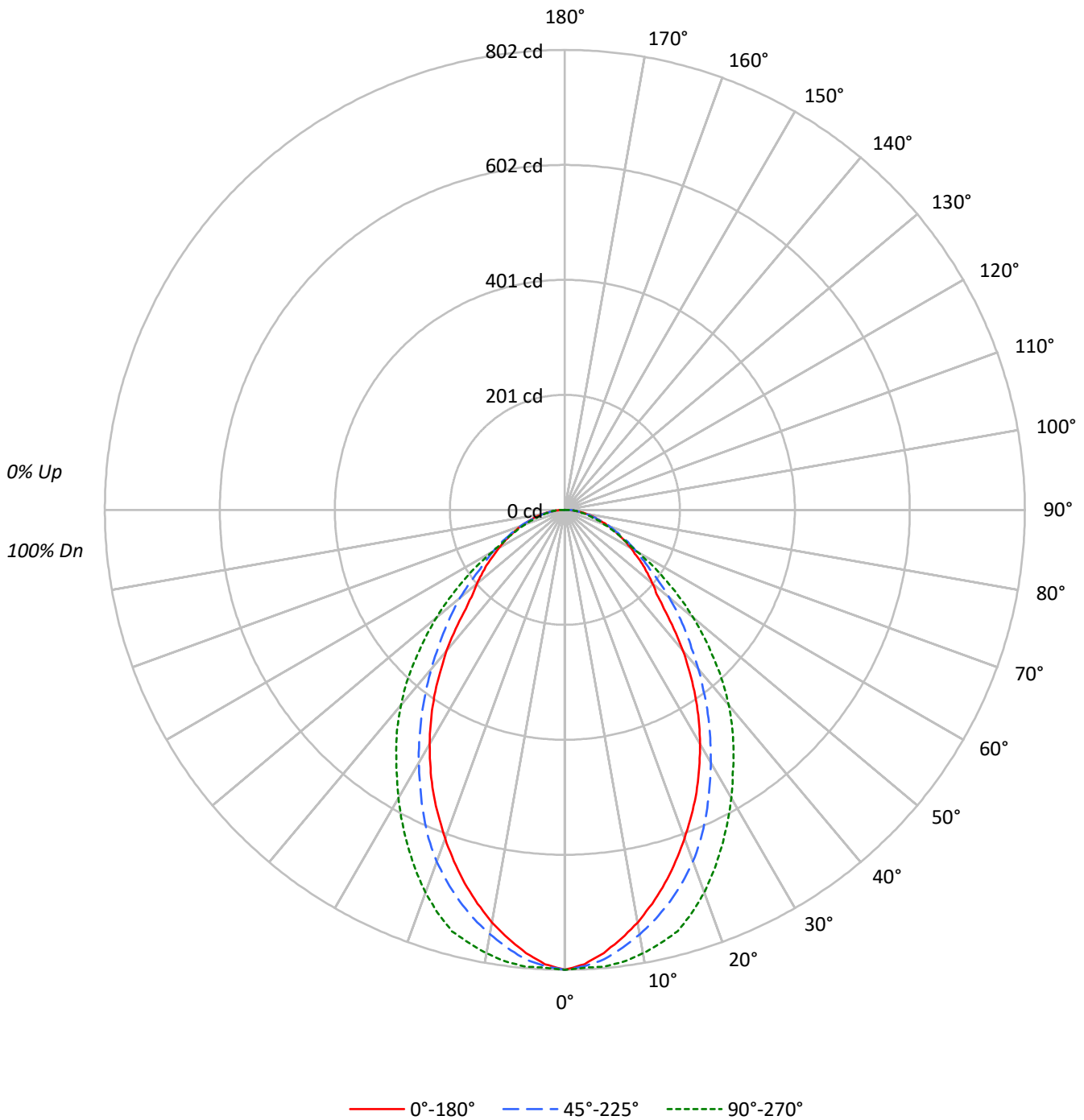
Lumens per Lamp: N/A
Luminaire Lumens: 1409.2 lumens
Efficiency: N/A
Efficacy: 71.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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: P1059264

CATALOG NUMBER: S123RDR-S560D835-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1059264

CATALOG NUMBER: S123RDR-S560D835-X4F0-XX-UDD-WVL-W

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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9417	9417	9417
5°	9143	9274	9420
10°	8715	8962	9365
15°	8197	8600	9246
20°	7624	8159	8875
25°	7038	7565	8388
30°	6392	6906	7870
35°	5688	6233	7351
40°	4908	5554	6814
45°	4057	4917	6109
50°	3644	4337	5332
55°	3376	3701	4422
60°	3112	3372	3387
65°	2895	3048	2837
70°	2726	2771	2489
75°	2568	2473	2191
80°	2428	2238	2056
85°	2331	2506	2331

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6109 cd/sqm



TEST NUMBER: P1059264

CATALOG NUMBER: S123RDR-S560D835-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.3	5.3
10°-20°	200.1	14.2
20°-30°	270.7	19.2
30°-40°	278.2	19.7
40°-50°	233.6	16.6
50°-60°	167.5	11.9
60°-70°	106.6	7.6
70°-80°	58.6	4.2
80°-90°	19.5	1.4
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°	545.1	38.7
0°-40°	823.3	58.4
0°-60°	1224.4	86.9
0°-90°	1409.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1409.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	802	802	802	802	802	
5°	776	790	787	792	799	73
15°	674	693	707	738	761	189
25°	543	564	584	616	647	249
35°	397	418	435	474	513	247
45°	244	266	296	339	368	193
55°	165	168	181	205	216	147
65°	104	110	110	104	102	104
75°	57	62	54	50	48	60
85°	17	18	19	19	17	19
90°	0	0	0	0	0	



TEST NUMBER: P1059264

CATALOG NUMBER: S123RDR-S560D835-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	802.0	802.0	802.0	802.0	802.0
2.5°	793.0	804.0	796.4	797.1	799.2
5°	775.7	789.5	786.8	792.3	799.2
7.5°	754.3	769.5	770.2	783.3	794.4
10°	730.9	746.8	751.6	771.6	785.4
12.5°	703.3	720.5	730.9	755.7	773.7
15°	674.3	692.9	707.4	737.8	760.6
17.5°	642.5	662.6	681.2	713.6	737.1
20°	610.1	631.5	652.9	683.3	710.2
22.5°	576.3	598.4	620.5	650.1	679.8
25°	543.2	563.9	583.9	615.6	647.4
27.5°	507.3	528.7	545.9	581.1	614.2
30°	471.4	492.8	509.3	545.9	580.4
32.5°	434.1	456.2	471.4	509.3	545.2
35°	396.8	418.2	434.8	473.5	512.8
37.5°	357.5	381.0	397.5	441.0	479.7
40°	320.2	342.3	362.3	407.9	444.5
42.5°	281.6	304.4	327.1	374.1	407.9
45°	244.3	265.7	296.1	338.9	367.9
47.5°	217.4	231.2	266.4	302.3	329.9
50°	199.5	205.0	237.4	269.2	291.9
52.5°	181.5	185.7	207.7	236.7	254.0
55°	164.9	168.4	180.8	205.0	216.0
57.5°	147.0	150.5	160.8	174.6	180.8
60°	132.5	135.3	143.6	145.6	144.2
62.5°	118.0	122.2	126.3	121.5	119.4
65°	104.2	110.4	109.7	103.5	102.1
67.5°	91.8	98.0	94.6	88.3	86.3
70°	79.4	85.6	80.7	74.5	72.5
72.5°	67.6	74.5	66.9	61.4	60.0
75°	56.6	62.1	54.5	50.4	48.3
77.5°	46.2	50.4	43.5	40.0	38.6
80°	35.9	38.6	33.1	31.1	30.4
82.5°	26.2	27.6	24.2	25.5	24.8
85°	17.3	17.9	18.6	19.3	17.3
87.5°	8.3	11.7	11.7	11.0	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)