

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: P1059260

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059260
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
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-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

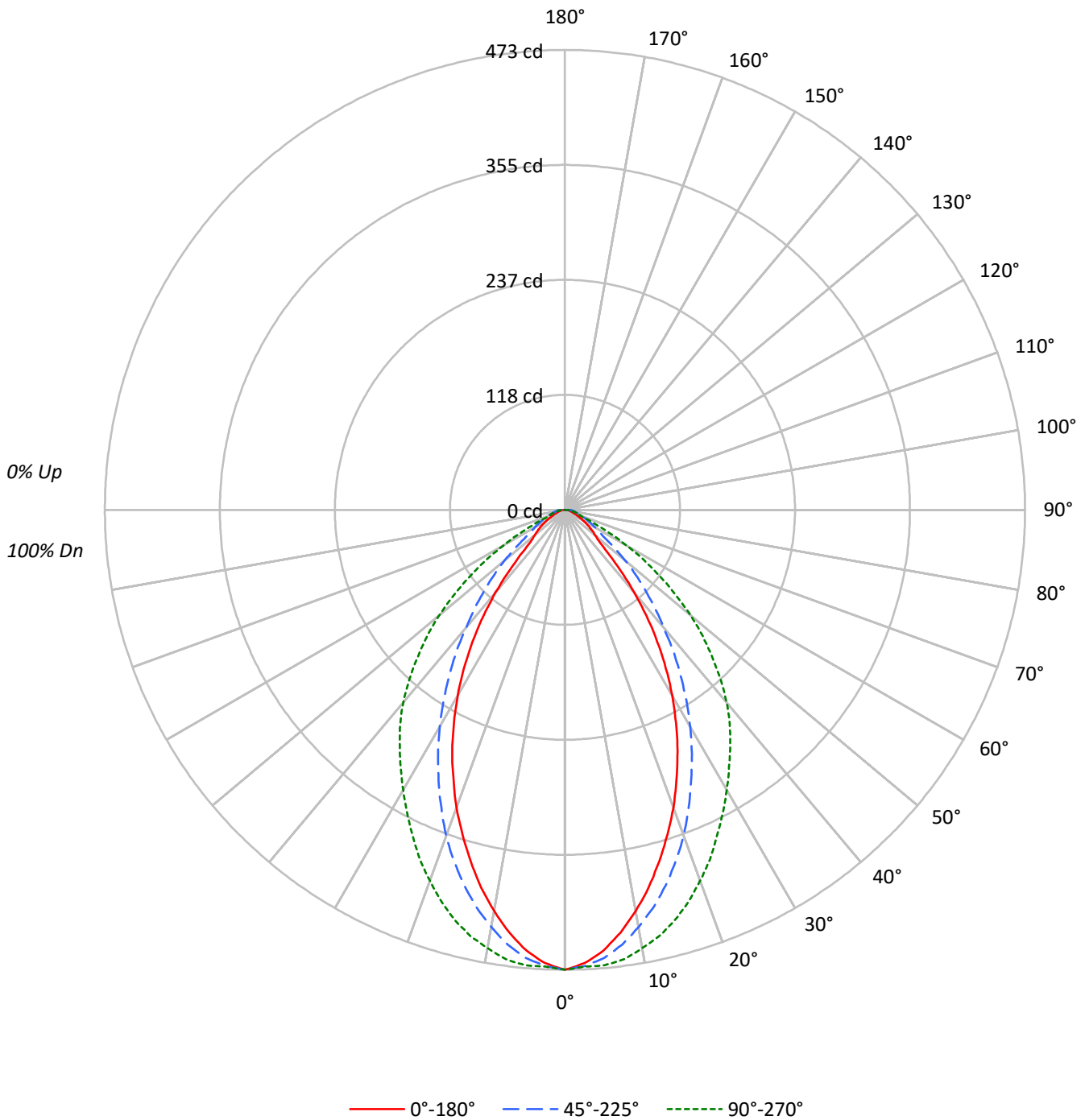
Lumens per Lamp: N/A
Luminaire Lumens: 633.4 lumens
Efficiency: N/A
Efficacy: 32.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

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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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5553	5553	5553
5°	5363	5453	5542
10°	4997	5195	5459
15°	4549	4860	5312
20°	4072	4461	5073
25°	3551	3980	4795
30°	2986	3491	4512
35°	2375	2959	4246
40°	1694	2413	3969
45°	1010	1938	3554
50°	744	1476	3078
55°	622	1003	2444
60°	503	827	1719
65°	403	709	920
70°	333	618	570
75°	313	594	531
80°	325	656	514
85°	472	930	647

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3554 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.4	6.9
10°-20°	112.9	17.8
20°-30°	144.0	22.7
30°-40°	135.4	21.4
40°-50°	97.3	15.4
50°-60°	55.8	8.8
60°-70°	25.5	4.0
70°-80°	12.8	2.0
80°-90°	6.3	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°	300.3	47.4
0°-40°	435.7	68.8
0°-60°	588.8	93.0
0°-90°	633.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	633.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	473	473	473	473	473	
5°	455	464	463	466	470	42
15°	374	387	400	421	437	105
25°	274	286	307	340	370	125
35°	166	177	206	253	296	103
45°	61	74	117	172	214	51
55°	30	31	49	90	119	27
65°	14	20	26	28	33	15
75°	7	14	13	12	12	8
85°	4	7	7	6	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	472.9	472.9	472.9	472.9	472.9
2.5°	466.7	473.6	469.5	469.5	470.2
5°	455.0	464.0	462.6	466.0	470.2
7.5°	438.4	448.1	450.9	459.1	466.0
10°	419.1	430.1	435.7	448.8	457.8
12.5°	397.7	410.1	419.1	435.7	448.8
15°	374.2	387.3	399.8	421.2	437.0
17.5°	350.1	363.2	379.0	403.9	422.5
20°	325.9	339.0	357.0	383.2	406.0
22.5°	299.6	312.8	332.1	361.8	389.4
25°	274.1	286.5	307.2	340.4	370.1
27.5°	247.2	259.6	282.4	318.3	351.4
30°	220.2	232.7	257.5	296.2	332.8
32.5°	193.3	205.1	232.0	274.8	314.1
35°	165.7	177.4	206.4	253.4	296.2
37.5°	137.4	149.1	183.0	234.1	278.2
40°	110.5	123.6	157.4	214.7	258.9
42.5°	84.2	98.0	136.7	194.0	236.8
45°	60.8	73.9	116.7	171.9	214.0
47.5°	46.3	53.2	98.7	149.8	191.9
50°	40.7	41.4	80.8	129.8	168.5
52.5°	35.2	35.9	62.8	110.5	143.6
55°	30.4	31.1	49.0	90.4	119.4
57.5°	25.5	26.9	40.0	71.8	96.0
60°	21.4	24.2	35.2	54.5	73.2
62.5°	17.3	22.1	30.4	40.0	52.5
65°	14.5	20.0	25.5	28.3	33.1
67.5°	11.7	18.6	21.4	20.0	20.0
70°	9.7	16.6	18.0	16.6	16.6
72.5°	8.3	15.9	15.2	13.8	13.8
75°	6.9	13.8	13.1	11.7	11.7
77.5°	6.2	11.7	11.0	10.4	9.7
80°	4.8	9.7	9.7	9.0	7.6
82.5°	4.1	8.3	8.3	7.6	6.2
85°	3.5	6.9	6.9	6.2	4.8
87.5°	2.8	6.2	6.2	5.5	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)