

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: P1059307

Luminaire Tested: S123RDR-S560D935-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059307
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S560D935-X4F0-XX-UDD-WVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

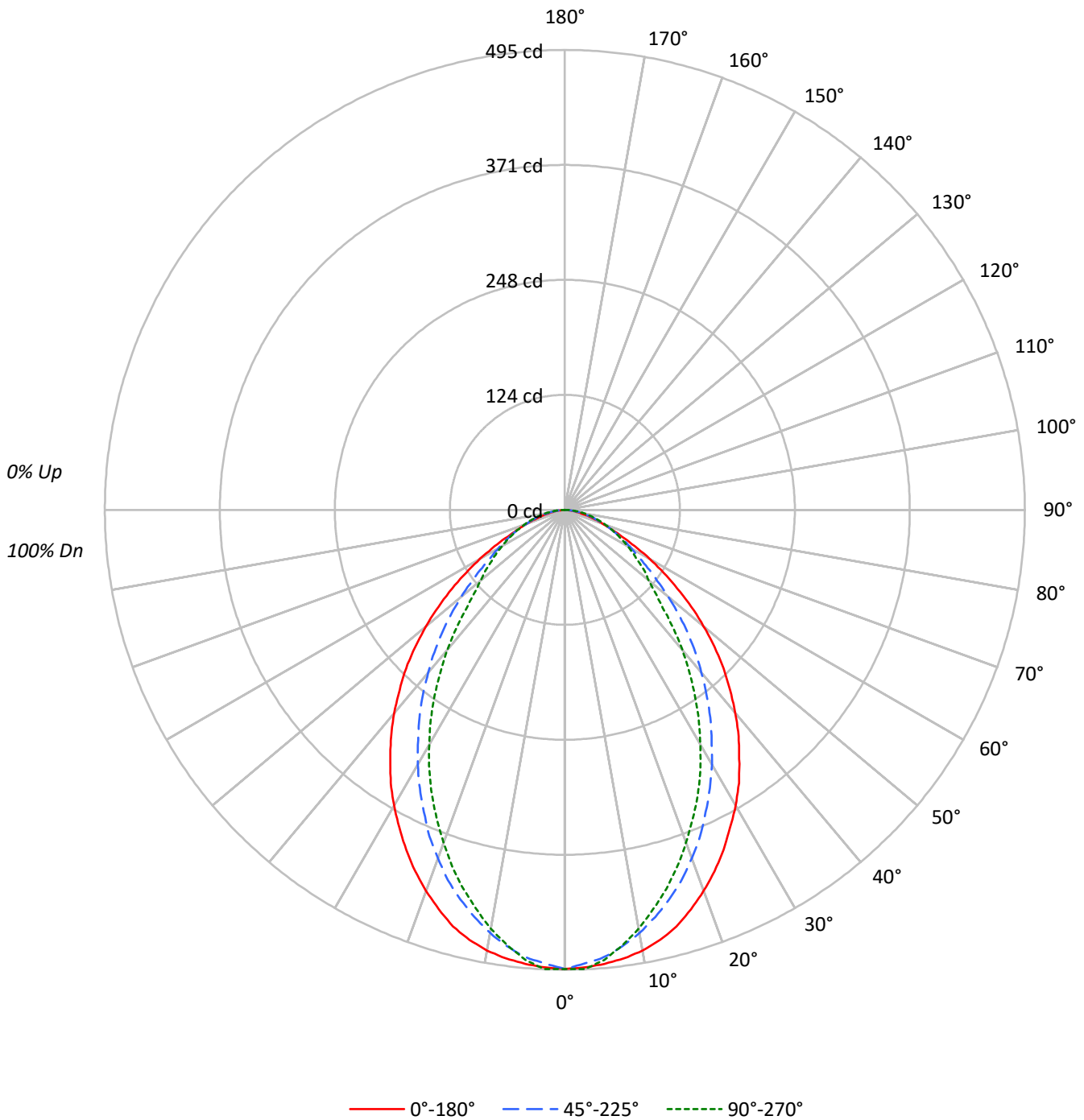
Lumens per Lamp: N/A
Luminaire Lumens: 864.1 lumens
Efficiency: N/A
Efficacy: 44.1 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

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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			100	
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89			88		
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78			76		
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68			66		
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60			58		
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54			52		
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48			47		
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44			42		
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40			38		
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37			35		
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34			32		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5802	5802	5802
5°	5782	5698	5732
10°	5742	5516	5459
15°	5646	5277	5133
20°	5455	4986	4763
25°	5232	4647	4386
30°	4984	4291	3954
35°	4690	3908	3499
40°	4378	3504	3014
45°	4014	3097	2474
50°	3559	2658	2148
55°	3028	2225	1969
60°	2468	1938	1827
65°	1881	1717	1700
70°	1469	1528	1590
75°	1184	1375	1484
80°	886	1123	1366
85°	485	714	1199

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4014 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.9	5.3
10°-20°	123.4	14.3
20°-30°	167.7	19.4
30°-40°	173.9	20.1
40°-50°	146.7	17.0
50°-60°	104.1	12.0
60°-70°	63.6	7.4
70°-80°	31.7	3.7
80°-90°	7.2	0.8
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°	337.0	39.0
0°-40°	510.9	59.1
0°-60°	761.7	88.1
0°-90°	864.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	864.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	494	494	494	494	494	
5°	490	490	483	486	486	47
15°	464	456	434	426	422	130
25°	404	386	359	346	338	186
35°	327	302	273	254	244	205
45°	242	216	186	161	149	186
55°	148	132	109	99	96	133
65°	68	65	62	62	61	69
75°	26	28	30	32	33	28
85°	4	4	5	8	9	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	494.1	494.1	494.1	494.1	494.1
2.5°	492.9	493.5	488.7	494.1	494.7
5°	490.5	490.5	483.4	486.3	486.3
7.5°	486.9	485.7	473.9	473.9	472.7
10°	481.6	478.0	462.6	459.6	457.8
12.5°	473.9	467.9	448.9	443.6	440.0
15°	464.4	455.5	434.1	426.4	422.2
17.5°	450.7	441.8	418.1	407.4	402.6
20°	436.5	423.4	399.0	388.4	381.2
22.5°	421.0	404.4	380.6	367.6	359.9
25°	403.8	386.0	358.7	345.6	338.5
27.5°	385.4	365.8	337.9	323.0	315.9
30°	367.6	345.0	316.5	299.9	291.6
32.5°	348.6	323.0	293.9	276.7	268.4
35°	327.2	302.3	272.6	253.6	244.1
37.5°	307.0	281.5	250.6	230.4	219.7
40°	285.6	260.1	228.6	207.8	196.6
42.5°	263.1	238.7	207.8	183.5	172.8
45°	241.7	216.2	186.5	160.9	149.0
47.5°	218.5	194.8	165.7	139.5	131.2
50°	194.8	172.8	145.5	121.7	117.6
52.5°	171.6	153.2	125.3	109.9	108.1
55°	147.9	132.4	108.7	99.2	96.2
57.5°	125.9	114.6	93.2	88.5	87.3
60°	105.1	95.6	82.5	79.6	77.8
62.5°	84.9	79.6	71.9	70.7	69.5
65°	67.7	65.3	61.8	61.8	61.2
67.5°	53.4	53.4	52.9	54.0	53.4
70°	42.8	43.3	44.5	45.7	46.3
72.5°	33.8	35.6	36.8	38.6	39.2
75°	26.1	27.9	30.3	31.5	32.7
77.5°	19.0	20.8	23.2	24.9	26.1
80°	13.1	14.3	16.6	19.0	20.2
82.5°	8.3	8.9	10.7	13.1	14.3
85°	3.6	4.2	5.3	7.7	8.9
87.5°	0.0	0.0	0.6	2.4	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)