

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: P1059292

Luminaire Tested: S123RDR-S560D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059292
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S560D930-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

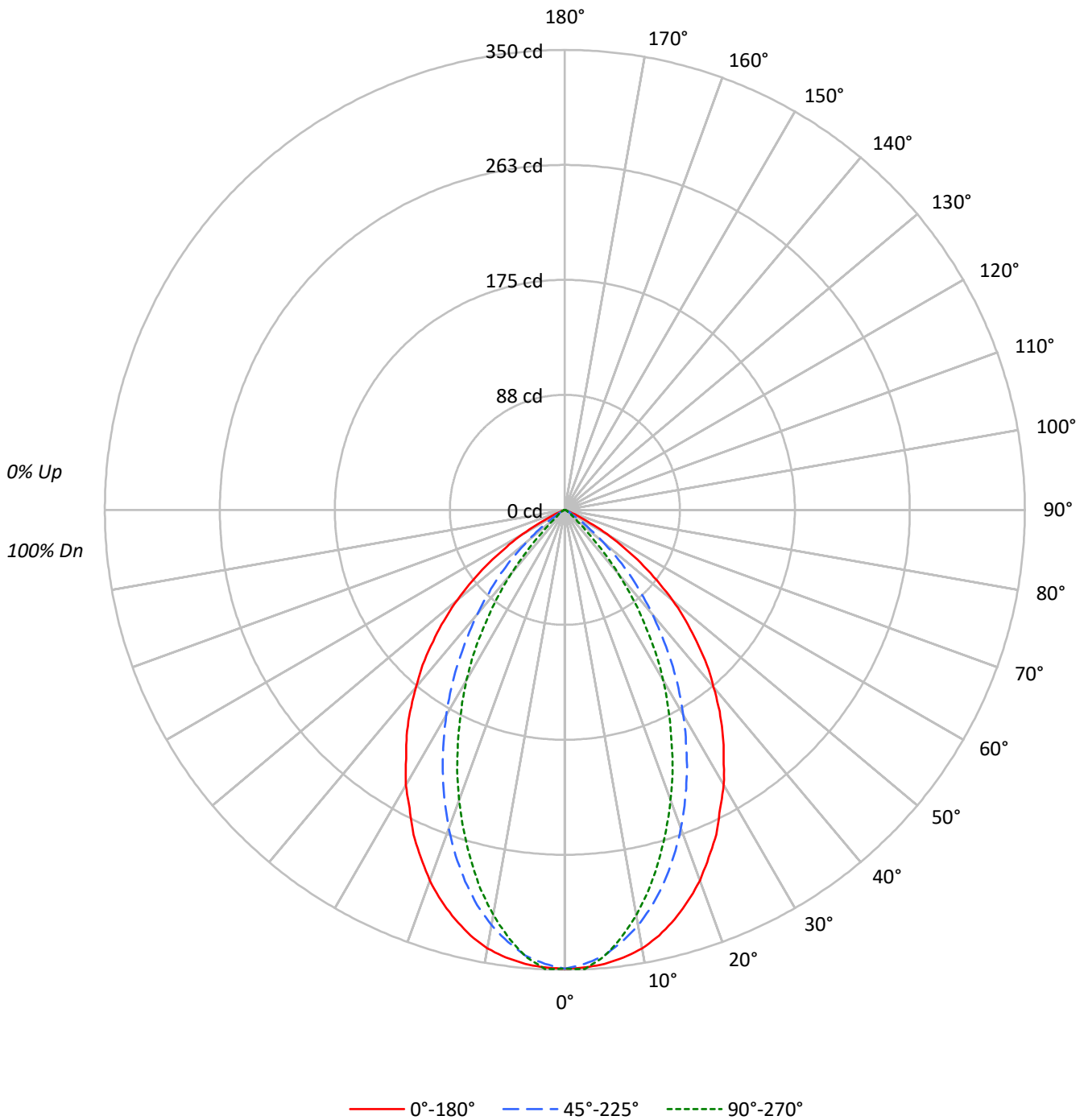
Lumens per Lamp: N/A
Luminaire Lumens: 398.5 lumens
Efficiency: N/A
Efficacy: 20.3 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4100	4100	4100
5°	4089	4016	4023
10°	4042	3829	3734
15°	3923	3561	3356
20°	3753	3225	2937
25°	3533	2848	2484
30°	3279	2447	2028
35°	3006	2023	1507
40°	2698	1587	966
45°	2353	1157	402
50°	1951	689	153
55°	1439	289	115
60°	871	106	66
65°	233	61	31
70°	0	21	21
75°	0	0	27
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2353 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.1	8.1
10°-20°	83.0	20.8
20°-30°	103.4	25.9
30°-40°	92.4	23.2
40°-50°	58.3	14.6
50°-60°	24.4	6.1
60°-70°	4.6	1.2
70°-80°	0.2	0.0
80°-90°	0.0	0.0
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°	218.5	54.8
0°-40°	310.9	78.0
0°-60°	393.7	98.8
0°-90°	398.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	398.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	349	349	349	349	349	
5°	347	346	341	342	341	33
15°	323	315	293	281	276	91
25°	273	251	220	201	192	125
35°	210	179	141	116	105	131
45°	142	110	70	37	24	109
55°	70	48	14	6	6	63
65°	8	6	2	1	1	12
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	349.2	349.2	349.2	349.2	349.2
2.5°	348.6	349.2	345.8	349.2	349.7
5°	346.9	346.4	340.7	341.9	341.3
7.5°	343.5	341.9	331.7	329.5	328.4
10°	339.0	334.6	321.1	315.4	313.2
12.5°	331.7	325.6	308.1	299.1	295.8
15°	322.7	314.9	292.9	280.6	276.1
17.5°	312.1	300.8	276.1	262.6	255.8
20°	300.3	284.5	258.1	241.8	235.0
22.5°	286.2	268.8	239.0	221.5	214.2
25°	272.7	250.8	219.8	200.7	191.7
27.5°	255.8	232.8	199.6	179.9	170.4
30°	241.8	215.3	180.5	158.6	149.6
32.5°	224.9	197.4	160.8	136.6	128.2
35°	209.7	179.4	141.1	115.8	105.1
37.5°	193.4	161.9	121.5	95.0	84.9
40°	176.0	144.5	103.5	74.2	63.0
42.5°	160.2	127.1	85.5	55.1	43.9
45°	141.7	110.2	69.7	37.1	24.2
47.5°	124.8	94.5	52.9	20.8	12.9
50°	106.8	78.2	37.7	10.7	8.4
52.5°	88.3	62.4	24.7	7.3	6.7
55°	70.3	48.4	14.1	5.6	5.6
57.5°	52.9	34.9	7.3	4.5	3.9
60°	37.1	23.1	4.5	3.4	2.8
62.5°	21.4	13.5	3.4	2.2	2.2
65°	8.4	6.2	2.2	1.1	1.1
67.5°	0.6	1.7	1.1	0.6	0.6
70°	0.0	0.0	0.6	0.6	0.6
72.5°	0.0	0.0	0.6	0.6	0.6
75°	0.0	0.0	0.0	0.0	0.6
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)