

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: P1059298

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059298
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-S560D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

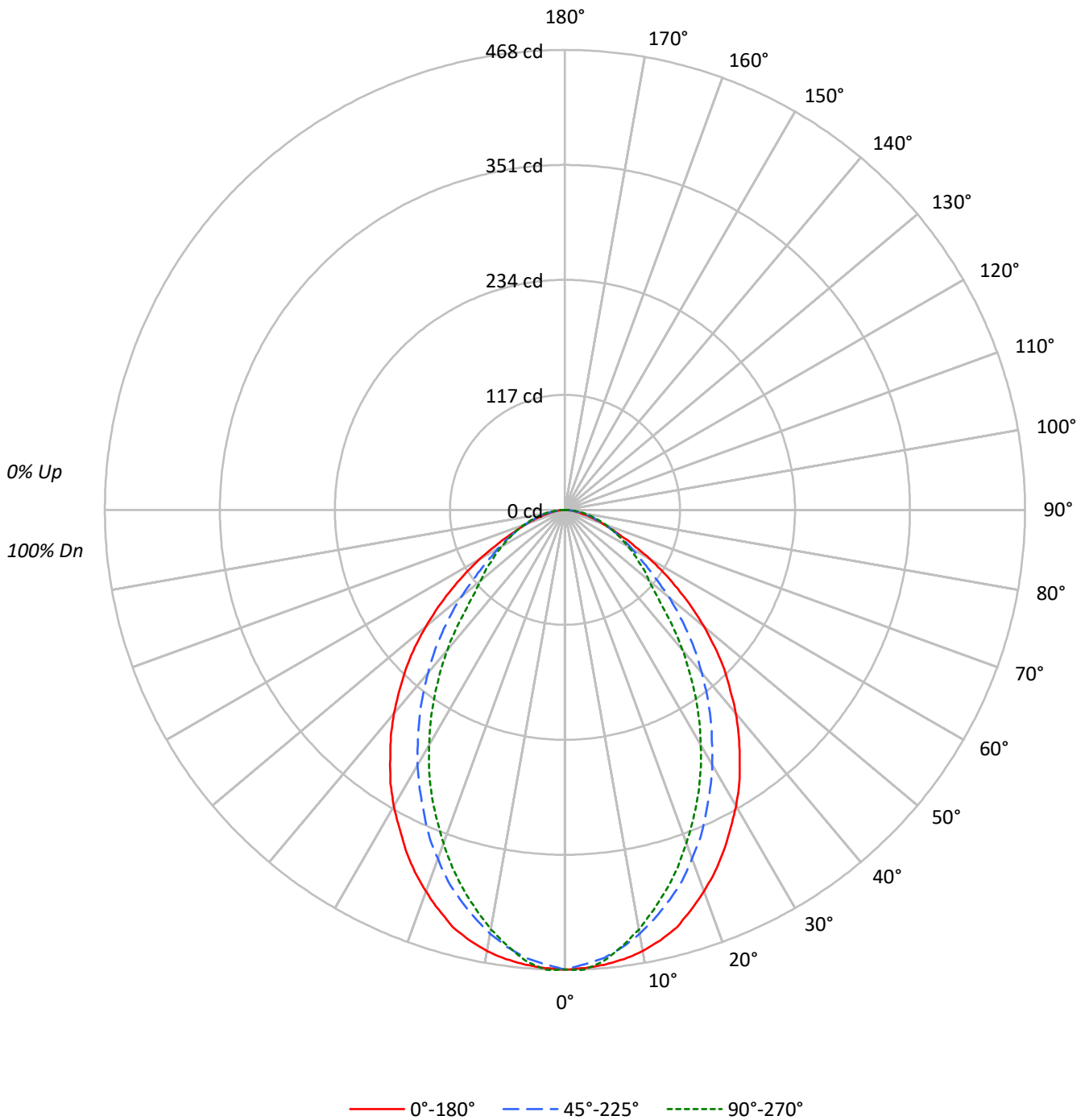
Lumens per Lamp: N/A
Luminaire Lumens: 818.2 lumens
Efficiency: N/A
Efficacy: 41.7 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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				
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°	5493	5493	5493
5°	5475	5395	5428
10°	5437	5223	5169
15°	5345	4996	4860
20°	5165	4722	4511
25°	4955	4400	4153
30°	4720	4064	3744
35°	4441	3700	3313
40°	4146	3319	2853
45°	3801	2933	2343
50°	3369	2517	2033
55°	2866	2107	1865
60°	2337	1837	1731
65°	1781	1625	1609
70°	1390	1449	1507
75°	1121	1302	1402
80°	839	1062	1292
85°	458	687	1132

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3801 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.4	5.3
10°-20°	116.8	14.3
20°-30°	158.8	19.4
30°-40°	164.7	20.1
40°-50°	138.9	17.0
50°-60°	98.6	12.0
60°-70°	60.2	7.4
70°-80°	30.0	3.7
80°-90°	6.8	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°	319.1	39.0
0°-40°	483.8	59.1
0°-60°	721.2	88.1
0°-90°	818.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	818.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	468	468	468	468	468	
5°	464	464	458	460	460	44
15°	440	431	411	404	400	123
25°	382	366	340	327	320	176
35°	310	286	258	240	231	194
45°	229	205	177	152	141	176
55°	140	125	103	94	91	126
65°	64	62	58	58	58	65
75°	25	26	29	30	31	27
85°	3	4	5	7	8	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	467.8	467.8	467.8	467.8	467.8
2.5°	466.7	467.3	462.8	467.8	468.4
5°	464.5	464.5	457.7	460.5	460.5
7.5°	461.1	460.0	448.7	448.7	447.6
10°	456.0	452.7	438.0	435.2	433.5
12.5°	448.7	443.1	425.1	420.0	416.7
15°	439.7	431.3	411.0	403.7	399.8
17.5°	426.8	418.4	395.9	385.7	381.2
20°	413.3	400.9	377.9	367.7	361.0
22.5°	398.7	382.9	360.4	348.1	340.8
25°	382.4	365.5	339.6	327.3	320.5
27.5°	364.9	346.4	320.0	305.9	299.1
30°	348.1	326.7	299.7	284.0	276.1
32.5°	330.1	305.9	278.3	262.0	254.2
35°	309.8	286.2	258.1	240.1	231.1
37.5°	290.7	266.5	237.3	218.2	208.1
40°	270.5	246.3	216.5	196.8	186.1
42.5°	249.1	226.0	196.8	173.8	163.6
45°	228.9	204.7	176.6	152.4	141.1
47.5°	206.9	184.4	156.9	132.1	124.3
50°	184.4	163.6	137.8	115.3	111.3
52.5°	162.5	145.1	118.6	104.0	102.3
55°	140.0	125.4	102.9	93.9	91.1
57.5°	119.2	108.5	88.3	83.8	82.7
60°	99.5	90.5	78.2	75.3	73.7
62.5°	80.4	75.3	68.0	66.9	65.8
65°	64.1	61.9	58.5	58.5	57.9
67.5°	50.6	50.6	50.0	51.2	50.6
70°	40.5	41.0	42.2	43.3	43.9
72.5°	32.1	33.7	34.9	36.5	37.1
75°	24.7	26.4	28.7	29.8	30.9
77.5°	18.0	19.7	21.9	23.6	24.7
80°	12.4	13.5	15.7	18.0	19.1
82.5°	7.9	8.4	10.1	12.4	13.5
85°	3.4	3.9	5.1	7.3	8.4
87.5°	0.0	0.0	0.6	2.2	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)