

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: P1059283

Luminaire Tested: S123RDR-S560D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059283
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-S560D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

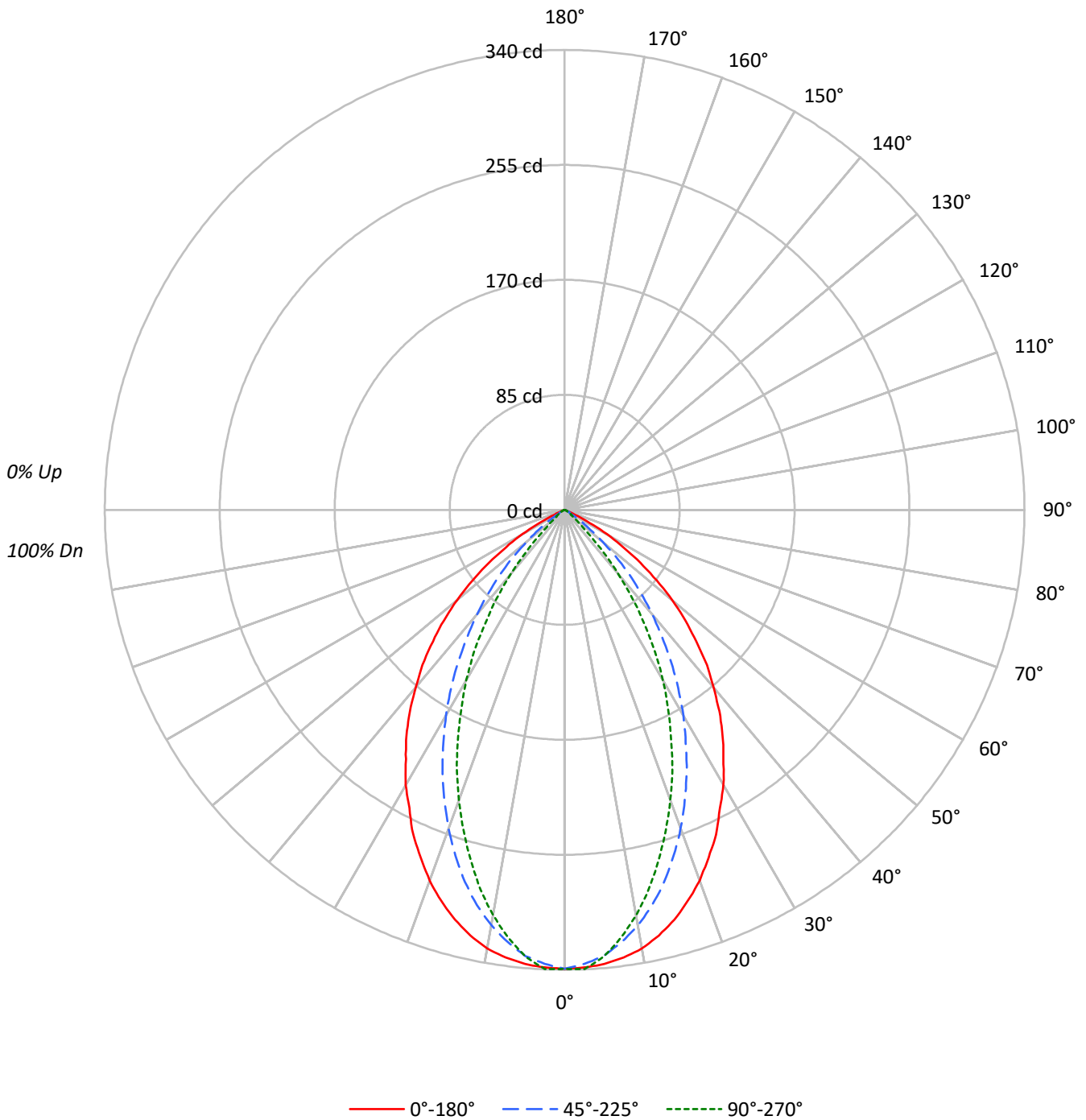
Lumens per Lamp: N/A
Luminaire Lumens: 387.1 lumens
Efficiency: N/A
Efficacy: 19.8 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.93
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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°	3984	3984	3984
5°	3973	3903	3909
10°	3928	3720	3628
15°	3812	3460	3260
20°	3645	3134	2854
25°	3433	2767	2414
30°	3185	2378	1970
35°	2921	1965	1465
40°	2621	1541	938
45°	2287	1124	390
50°	1896	669	150
55°	1398	280	113
60°	848	103	63
65°	228	61	31
70°	0	17	17
75°	0	0	23
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2287 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.2	8.1
10°-20°	80.6	20.8
20°-30°	100.5	25.9
30°-40°	89.8	23.2
40°-50°	56.7	14.6
50°-60°	23.7	6.1
60°-70°	4.5	1.2
70°-80°	0.1	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°	212.3	54.8
0°-40°	302.1	78.0
0°-60°	382.5	98.8
0°-90°	387.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	387.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	339	339	339	339	339	
5°	337	336	331	332	332	32
15°	314	306	285	273	268	88
25°	265	244	214	195	186	121
35°	204	174	137	112	102	127
45°	138	107	68	36	24	106
55°	68	47	14	6	6	61
65°	8	6	2	1	1	12
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	339.3	339.3	339.3	339.3	339.3
2.5°	338.7	339.3	336.0	339.3	339.8
5°	337.1	336.5	331.1	332.2	331.6
7.5°	333.8	332.2	322.3	320.1	319.1
10°	329.4	325.1	312.0	306.5	304.3
12.5°	322.3	316.3	299.4	290.6	287.4
15°	313.6	305.9	284.6	272.6	268.2
17.5°	303.2	292.3	268.2	255.1	248.6
20°	291.7	276.4	250.8	234.9	228.4
22.5°	278.1	261.1	232.2	215.3	208.2
25°	265.0	243.7	213.6	195.0	186.3
27.5°	248.6	226.2	193.9	174.8	165.5
30°	234.9	209.2	175.4	154.1	145.3
32.5°	218.5	191.8	156.2	132.8	124.6
35°	203.8	174.3	137.1	112.5	102.2
37.5°	187.9	157.3	118.0	92.3	82.5
40°	171.0	140.4	100.5	72.1	61.2
42.5°	155.7	123.5	83.0	53.5	42.6
45°	137.7	107.1	67.7	36.1	23.5
47.5°	121.3	91.8	51.4	20.2	12.6
50°	103.8	75.9	36.6	10.4	8.2
52.5°	85.8	60.6	24.0	7.1	6.6
55°	68.3	47.0	13.7	5.5	5.5
57.5°	51.4	33.9	7.1	4.4	3.8
60°	36.1	22.4	4.4	3.3	2.7
62.5°	20.8	13.1	3.3	2.2	2.2
65°	8.2	6.0	2.2	1.1	1.1
67.5°	0.5	1.6	1.1	0.5	0.5
70°	0.0	0.0	0.5	0.5	0.5
72.5°	0.0	0.0	0.5	0.5	0.5
75°	0.0	0.0	0.0	0.0	0.5
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)