

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 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: S123RDRP-S560D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
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: S123RDRP-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

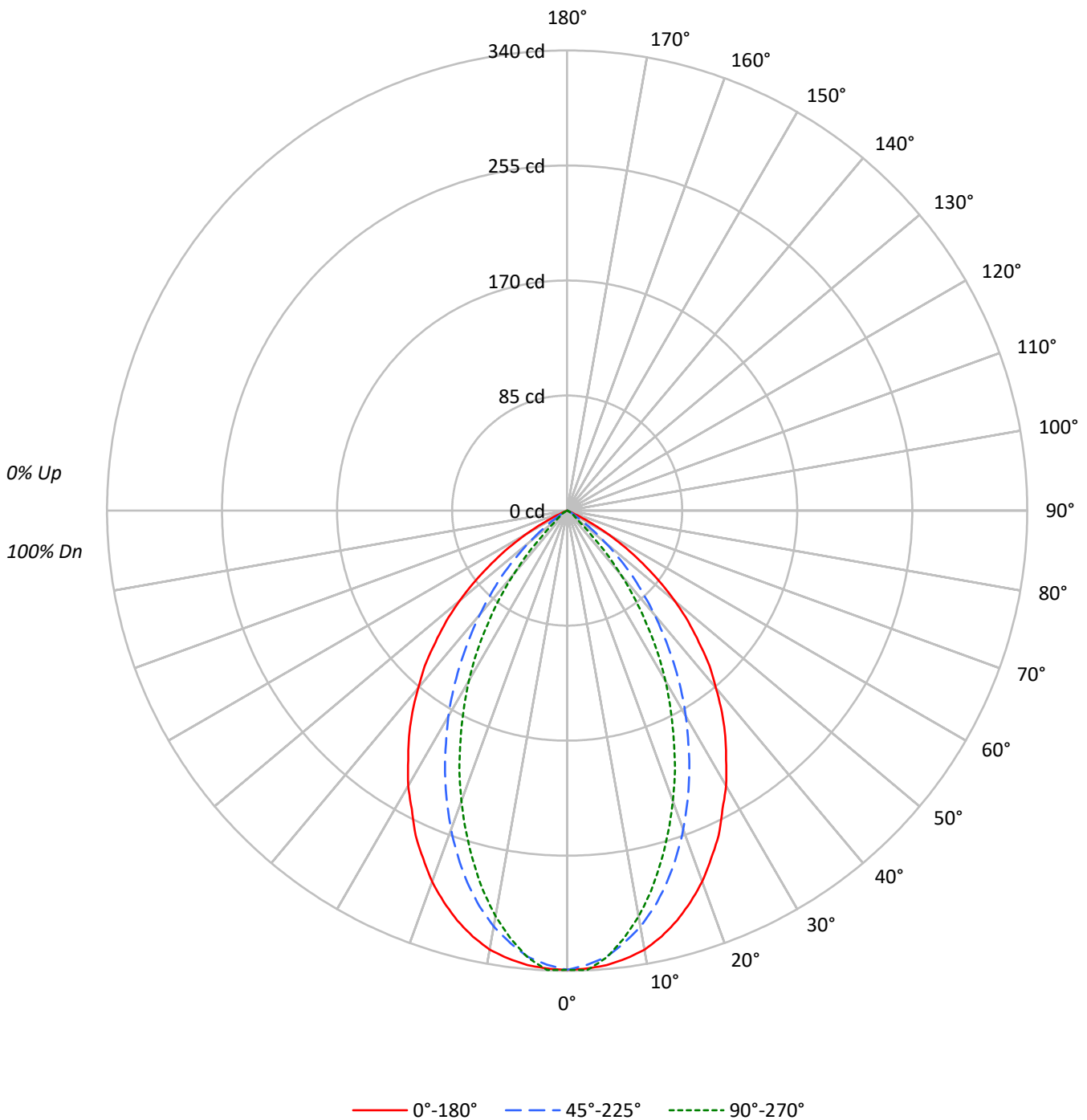
Lumens per Lamp: N/A
Luminaire Lumens: 387.1 lumens
Efficiency: N/A
Efficacy: 19.8 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.93
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (A_{in}): 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	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	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	



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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



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	10.00	11.18	10.36	11.49	11.80	0.00	0.00	0.00	0.00	0.00
	3H	9.84	10.87	10.22	11.20	11.57	0.00	0.00	0.00	0.00	0.00
	4H	9.75	10.71	10.16	11.06	11.45	0.00	0.00	0.00	0.00	0.00
	6H	9.66	10.53	10.08	10.91	11.30	0.00	0.00	0.00	0.00	0.00
	8H	9.61	10.43	10.04	10.82	11.23	0.00	0.00	0.00	0.00	0.00
	12H	9.56	10.34	9.99	10.73	11.16	0.00	0.00	0.00	0.00	0.00
4H	2H	9.76	10.71	10.16	11.06	11.45	0.00	0.00	0.00	0.00	0.00
	3H	9.59	10.36	10.01	10.77	11.17	0.00	0.00	0.00	0.00	0.00
	4H	9.49	10.17	9.93	10.59	11.04	0.00	0.00	0.00	0.00	0.00
	6H	9.39	9.98	9.86	10.42	10.90	0.00	0.00	0.00	0.00	0.00
	8H	9.33	9.87	9.80	10.32	10.79	0.00	0.00	0.00	0.00	0.00
	12H	9.27	9.75	9.76	10.23	10.71	0.00	0.00	0.00	0.00	0.00
8H	4H	9.33	9.87	9.80	10.32	10.79	0.00	0.00	0.00	0.00	0.00
	6H	9.21	9.65	9.72	10.15	10.63	0.00	0.00	0.00	0.00	0.00
	8H	9.14	9.53	9.67	10.05	10.55	0.00	0.00	0.00	0.00	0.00
	12H	9.08	9.43	9.60	9.93	10.51	0.00	0.00	0.00	0.00	0.00
12H	4H	9.27	9.75	9.76	10.23	10.71	0.00	0.00	0.00	0.00	0.00
	6H	9.14	9.53	9.67	10.05	10.55	0.00	0.00	0.00	0.00	0.00
	8H	9.08	9.43	9.60	9.93	10.51	0.00	0.00	0.00	0.00	0.00