

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



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: P1058401

Luminaire Tested: S122RDR-H485D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058401
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H485D930-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

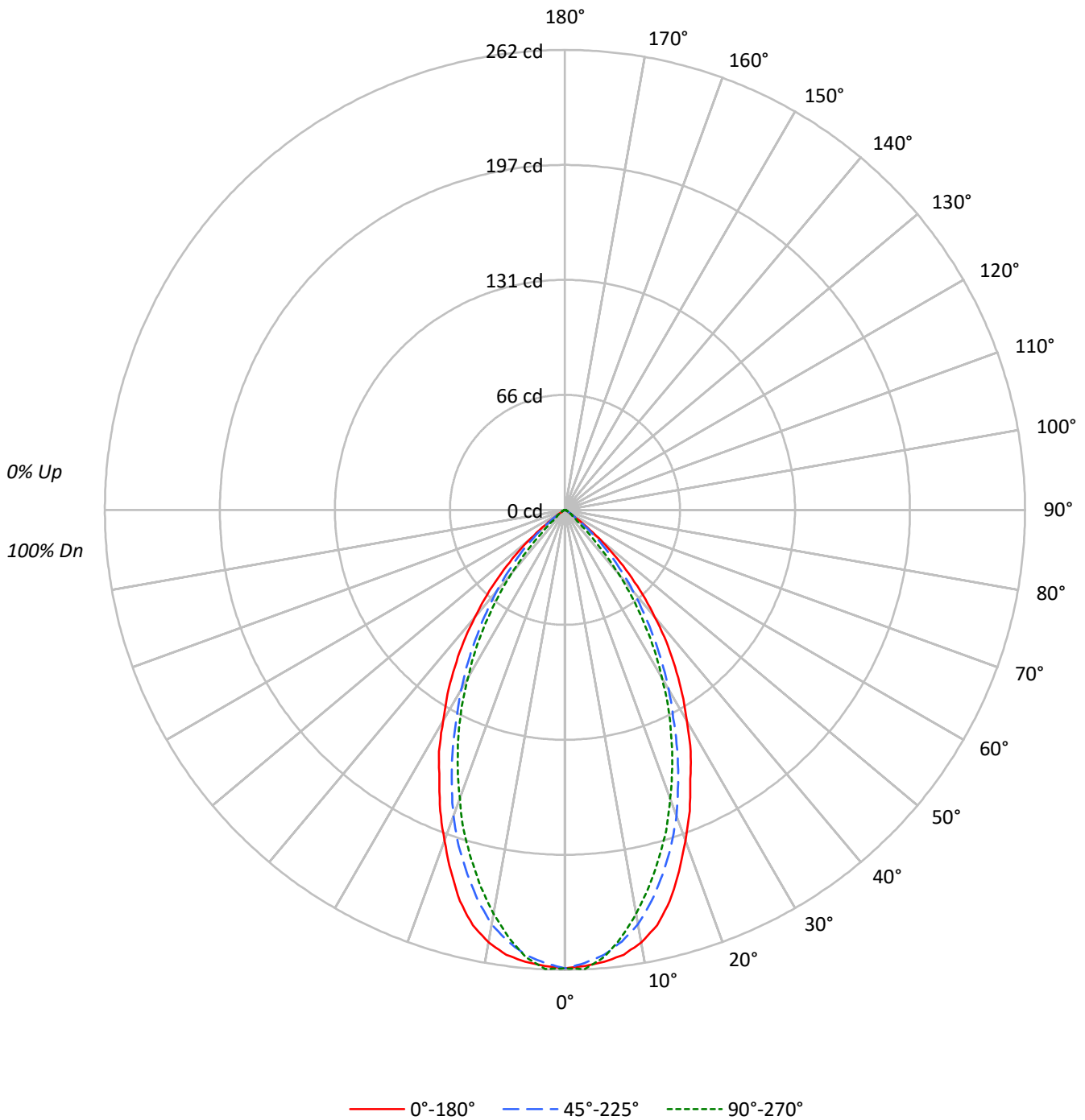
Lumens per Lamp: N/A
Luminaire Lumens: 245.7 lumens
Efficiency: N/A
Efficacy: 14.1 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95				93	
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87				86	
3	101	95	89	85	99	93	89	85	91	87	83	88	85	82	86	83	81				79	
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75				73	
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69				67	
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64				62	
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60				58	
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56				54	
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52				51	
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49				47	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4820	4820	4820
5°	4786	4716	4736
10°	4688	4491	4377
15°	4409	4103	3935
20°	3937	3645	3438
25°	3441	3080	2924
30°	2953	2518	2352
35°	2462	1967	1766
40°	1915	1450	1130
45°	1341	966	491
50°	729	508	175
55°	106	177	125
60°	22	41	81
65°	0	26	48
70°	0	0	32
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1341 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.0	9.8
10°-20°	60.5	24.6
20°-30°	70.5	28.7
30°-40°	56.5	23.0
40°-50°	28.1	11.4
50°-60°	5.5	2.3
60°-70°	0.5	0.2
70°-80°	0.0	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°	155.0	63.1
0°-40°	211.5	86.1
0°-60°	245.1	99.8
0°-90°	245.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	245.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	261	261	261	261	261	
5°	258	258	255	255	256	24
15°	231	226	215	209	206	64
25°	169	161	151	148	144	78
35°	109	98	87	83	78	68
45°	51	45	37	25	19	40
55°	3	7	6	3	4	7
65°	0	0	1	1	1	0
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°	261.2	261.2	261.2	261.2	261.2
2.5°	260.1	261.2	258.4	261.2	261.8
5°	258.4	258.4	254.6	255.1	255.7
7.5°	255.7	254.6	248.0	246.8	245.7
10°	250.2	248.0	239.7	235.3	233.6
12.5°	242.4	239.1	228.1	223.1	220.3
15°	230.8	226.4	214.8	209.3	206.0
17.5°	215.9	212.1	201.0	194.9	191.6
20°	200.5	194.9	185.6	179.5	175.1
22.5°	185.6	178.4	168.4	164.0	159.6
25°	169.0	160.7	151.3	148.0	143.6
27.5°	155.2	144.7	133.6	131.4	127.6
30°	138.6	128.7	118.2	114.9	110.4
32.5°	124.3	113.2	102.7	98.8	95.0
35°	109.3	98.3	87.3	83.4	78.4
37.5°	95.0	84.5	73.4	67.4	63.0
40°	79.5	70.7	60.2	52.5	46.9
42.5°	65.7	58.0	48.0	38.1	32.6
45°	51.4	45.3	37.0	24.9	18.8
47.5°	38.1	33.7	27.1	14.4	9.9
50°	25.4	23.7	17.7	7.2	6.1
52.5°	13.8	14.9	10.5	4.4	5.0
55°	3.3	6.6	5.5	3.3	3.9
57.5°	0.6	1.1	2.8	2.8	2.8
60°	0.6	0.6	1.1	1.7	2.2
62.5°	0.6	0.0	0.6	1.1	1.7
65°	0.0	0.0	0.6	0.6	1.1
67.5°	0.0	0.0	0.0	0.6	0.6
70°	0.0	0.0	0.0	0.6	0.6
72.5°	0.0	0.0	0.0	0.0	0.6
75°	0.0	0.0	0.0	0.0	0.0
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00