

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: P1058005

Luminaire Tested: S122RDRP-S485D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058005
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: S122RDRP-S485D935-X4F0-XX-UDD-BVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

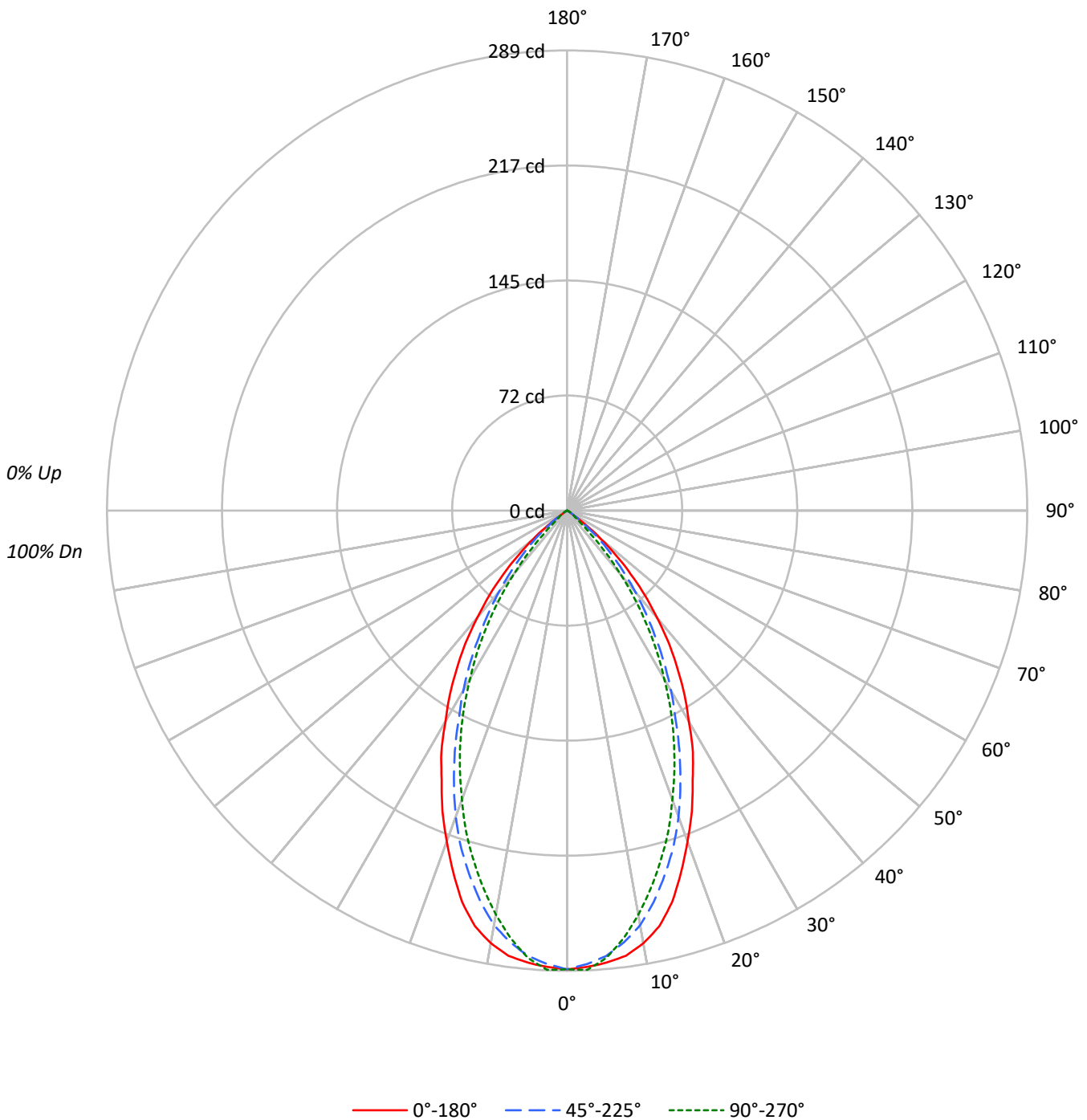
Lumens per Lamp: N/A
Luminaire Lumens: 270.9 lumens
Efficiency: N/A
Efficacy: 13.8 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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	90	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°	5316	5316	5316
5°	5279	5201	5223
10°	5170	4952	4827
15°	4864	4526	4340
20°	4342	4018	3792
25°	3795	3398	3225
30°	3258	2776	2595
35°	2717	2167	1949
40°	2113	1599	1248
45°	1477	1065	540
50°	804	560	192
55°	119	196	138
60°	22	44	89
65°	0	26	52
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: 1477 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.5	9.8
10°-20°	66.7	24.6
20°-30°	77.8	28.7
30°-40°	62.3	23.0
40°-50°	31.0	11.4
50°-60°	6.1	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°	170.9	63.1
0°-40°	233.3	86.1
0°-60°	270.3	99.8
0°-90°	270.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	270.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	288	288	288	288	288	
5°	285	285	281	281	282	27
15°	255	250	237	231	227	71
25°	186	177	167	163	158	86
35°	121	108	96	92	86	75
45°	57	50	41	27	21	44
55°	4	7	6	4	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	288.1	288.1	288.1	288.1	288.1
2.5°	286.9	288.1	285.0	288.1	288.7
5°	285.0	285.0	280.8	281.4	282.0
7.5°	282.0	280.8	273.5	272.3	271.0
10°	275.9	273.5	264.3	259.5	257.6
12.5°	267.4	263.7	251.5	246.1	243.0
15°	254.6	249.7	236.9	230.8	227.2
17.5°	238.1	233.9	221.7	215.0	211.3
20°	221.1	215.0	204.6	197.9	193.1
22.5°	204.6	196.7	185.8	180.9	176.0
25°	186.4	177.2	166.9	163.2	158.4
27.5°	171.1	159.6	147.4	145.0	140.7
30°	152.9	141.9	130.3	126.7	121.8
32.5°	137.0	124.9	113.3	109.0	104.8
35°	120.6	108.4	96.2	92.0	86.5
37.5°	104.8	93.2	81.0	74.3	69.4
40°	87.7	78.0	66.4	57.9	51.8
42.5°	72.5	64.0	53.0	42.0	35.9
45°	56.6	49.9	40.8	27.4	20.7
47.5°	42.0	37.2	29.8	15.8	11.0
50°	28.0	26.2	19.5	7.9	6.7
52.5°	15.2	16.4	11.6	4.9	5.5
55°	3.7	7.3	6.1	3.7	4.3
57.5°	0.6	1.2	3.0	3.0	3.0
60°	0.6	0.6	1.2	1.8	2.4
62.5°	0.6	0.0	0.6	1.2	1.8
65°	0.0	0.0	0.6	0.6	1.2
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