

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: P1057999

Luminaire Tested: S122RDRP-S485D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057999
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S485D930-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

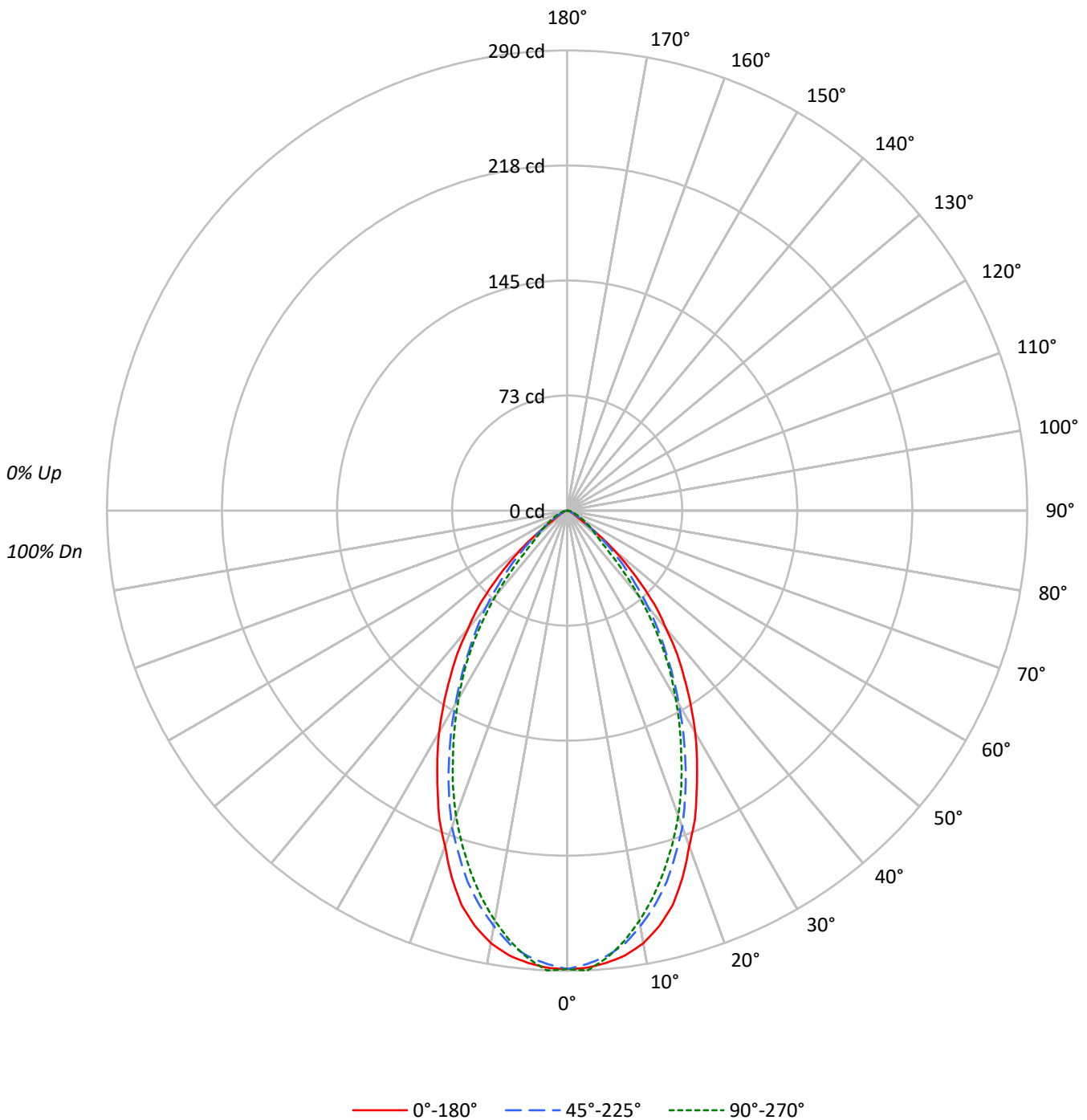
Lumens per Lamp: N/A
Luminaire Lumens: 310.8 lumens
Efficiency: N/A
Efficacy: 15.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	107	104	110	107	105	103	103	101	99	100	98	96	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	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5331	5331	5331
5°	5299	5223	5246
10°	5186	4982	4917
15°	4913	4627	4495
20°	4416	4167	4020
25°	3934	3594	3463
30°	3441	2998	2913
35°	2897	2428	2352
40°	2334	1917	1696
45°	1746	1386	1007
50°	1094	893	663
55°	370	483	537
60°	214	299	424
65°	153	201	327
70°	124	156	248
75°	86	121	207
80°	64	128	181
85°	0	0	127

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1746 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.6	8.6
10°-20°	68.2	21.9
20°-30°	82.1	26.4
30°-40°	70.1	22.6
40°-50°	41.1	13.2
50°-60°	14.9	4.8
60°-70°	5.3	1.7
70°-80°	2.1	0.7
80°-90°	0.4	0.1
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°	176.9	56.9
0°-40°	247.0	79.5
0°-60°	303.0	97.5
0°-90°	310.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	310.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	289	289	289	289	289	
5°	286	287	282	283	283	27
15°	257	253	242	238	235	71
25°	193	185	176	174	170	89
35°	129	119	108	107	104	80
45°	67	60	53	44	39	52
55°	12	16	15	16	17	14
65°	4	4	5	6	8	4
75°	1	2	2	2	3	1
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	288.9	288.9	288.9	288.9	288.9
2.5°	288.4	288.9	286.1	288.9	290.1
5°	286.1	286.6	282.0	283.2	283.2
7.5°	282.6	282.0	275.7	274.5	273.9
10°	276.8	275.1	265.9	264.1	262.4
12.5°	268.2	264.7	254.9	252.0	249.7
15°	257.2	253.2	242.2	237.6	235.3
17.5°	242.2	237.6	227.2	222.6	220.3
20°	224.9	220.3	212.2	207.0	204.7
22.5°	210.5	203.0	194.4	190.9	188.0
25°	193.2	185.1	176.5	173.6	170.1
27.5°	177.1	167.2	158.6	156.3	153.4
30°	161.5	151.1	140.7	140.7	136.7
32.5°	144.8	135.0	124.0	123.4	121.1
35°	128.6	118.8	107.8	106.7	104.4
37.5°	113.6	103.8	93.4	90.0	87.1
40°	96.9	88.2	79.6	73.8	70.4
42.5°	83.6	73.8	65.2	58.2	53.6
45°	66.9	60.0	53.1	44.4	38.6
47.5°	51.9	47.3	41.5	31.7	28.8
50°	38.1	35.8	31.1	23.6	23.1
52.5°	24.2	25.4	22.5	18.5	20.2
55°	11.5	16.1	15.0	15.6	16.7
57.5°	7.5	8.1	11.0	12.7	13.8
60°	5.8	5.8	8.1	10.4	11.5
62.5°	4.6	4.6	6.3	8.7	9.2
65°	3.5	4.0	4.6	6.3	7.5
67.5°	2.9	2.9	3.5	5.2	5.8
70°	2.3	2.3	2.9	4.0	4.6
72.5°	1.7	1.7	2.3	3.5	3.5
75°	1.2	1.7	1.7	2.3	2.9
77.5°	1.2	1.2	1.2	1.7	2.3
80°	0.6	0.6	1.2	1.2	1.7
82.5°	0.6	0.6	0.6	0.6	1.2
85°	0.0	0.0	0.0	0.6	0.6
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	1.72	2.88	2.08	3.19	3.51	5.10	6.26	5.46	6.57	6.89
	3H	2.24	3.26	2.62	3.59	3.96	5.82	6.85	6.21	7.18	7.55
	4H	2.37	3.32	2.78	3.67	4.06	6.05	6.99	6.45	7.34	7.73
	6H	2.46	3.33	2.88	3.70	4.09	6.19	7.06	6.61	7.43	7.83
	8H	2.47	3.28	2.90	3.68	4.08	6.23	7.04	6.66	7.44	7.84
	12H	2.43	3.21	2.87	3.60	4.03	6.23	7.01	6.67	7.40	7.83
4H	2H	2.02	2.97	2.43	3.32	3.71	5.06	6.01	5.47	6.36	6.75
	3H	2.68	3.45	3.09	3.85	4.26	5.94	6.71	6.35	7.11	7.52
	4H	2.91	3.60	3.35	4.02	4.47	6.22	6.90	6.66	7.33	7.77
	6H	3.05	3.64	3.52	4.08	4.56	6.44	7.03	6.91	7.48	7.95
	8H	3.07	3.62	3.54	4.07	4.54	6.49	7.04	6.97	7.49	7.96
	12H	3.04	3.52	3.53	4.00	4.48	6.52	7.00	7.01	7.48	7.96
8H	4H	3.02	3.57	3.50	4.02	4.49	6.15	6.70	6.62	7.15	7.62
	6H	3.21	3.65	3.72	4.15	4.64	6.41	6.85	6.92	7.35	7.84
	8H	3.26	3.66	3.79	4.18	4.67	6.48	6.88	7.01	7.40	7.89
	12H	3.24	3.59	3.76	4.09	4.66	6.55	6.90	7.07	7.39	7.97
12H	4H	3.01	3.49	3.50	3.97	4.45	6.10	6.58	6.59	7.07	7.54
	6H	3.21	3.61	3.74	4.13	4.62	6.36	6.76	6.89	7.28	7.77
	8H	3.29	3.64	3.81	4.14	4.71	6.46	6.80	6.98	7.30	7.88