

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: P1057993

Luminaire Tested: S122RDRP-S485D927-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057993
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S485D927-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

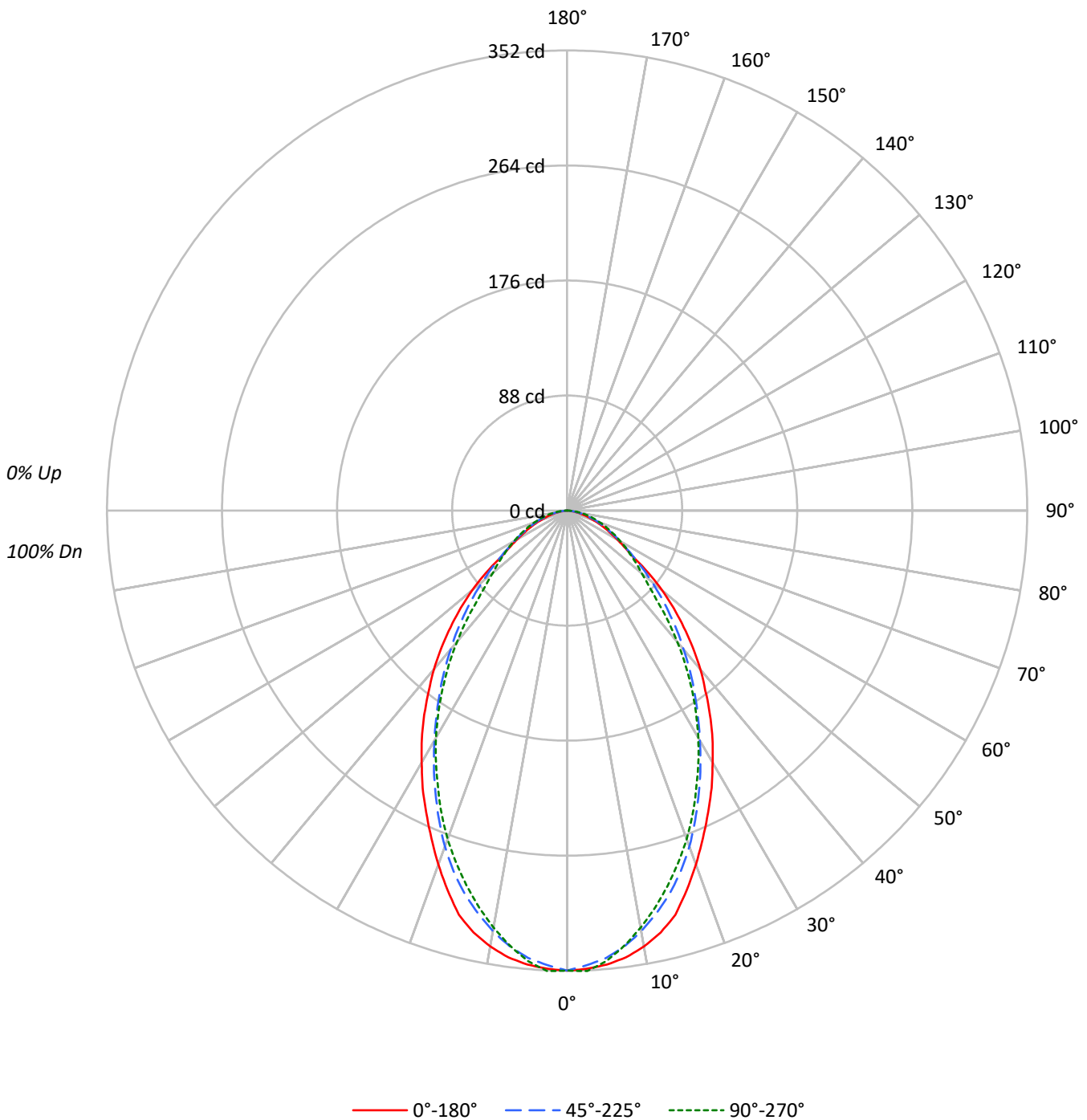
Lumens per Lamp: N/A
Luminaire Lumens: 534.5 lumens
Efficiency: N/A
Efficacy: 27.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6493	6493	6493
5°	6457	6363	6405
10°	6343	6121	6069
15°	6113	5792	5674
20°	5657	5371	5249
25°	5192	4850	4758
30°	4741	4323	4274
35°	4291	3825	3737
40°	3820	3334	3158
45°	3291	2865	2531
50°	2719	2414	2124
55°	1966	2001	1911
60°	1635	1716	1738
65°	1393	1493	1589
70°	1149	1333	1451
75°	955	1119	1319
80°	712	893	1190
85°	233	466	1059

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3291 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.5	6.1
10°-20°	85.7	16.0
20°-30°	110.9	20.7
30°-40°	108.7	20.3
40°-50°	85.6	16.0
50°-60°	56.1	10.5
60°-70°	34.2	6.4
70°-80°	17.1	3.2
80°-90°	3.7	0.7
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°	229.1	42.9
0°-40°	337.8	63.2
0°-60°	479.6	89.7
0°-90°	534.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	534.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	352	352	352	352	352	
5°	349	349	344	346	346	33
15°	320	316	303	299	297	89
25°	255	247	238	237	234	117
35°	190	180	170	169	166	119
45°	126	118	110	102	97	97
55°	61	64	62	60	59	58
65°	32	32	34	36	36	32
75°	13	14	16	18	18	14
85°	1	2	2	4	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	351.9	351.9	351.9	351.9	351.9
2.5°	350.8	351.4	348.0	351.4	352.5
5°	348.6	348.6	343.5	345.8	345.8
7.5°	344.7	344.1	336.2	336.2	335.7
10°	338.5	336.2	326.7	325.0	323.9
12.5°	330.6	326.7	315.5	312.7	311.0
15°	320.0	315.5	303.2	299.3	297.0
17.5°	304.3	299.8	289.2	284.7	282.4
20°	288.1	281.3	273.5	269.6	267.3
22.5°	271.2	263.4	256.1	253.3	251.1
25°	255.0	246.6	238.2	237.1	233.7
27.5°	239.3	229.2	220.8	220.2	217.4
30°	222.5	211.8	202.9	203.4	200.6
32.5°	206.8	196.7	186.1	186.6	183.3
35°	190.5	179.9	169.8	169.2	165.9
37.5°	173.7	163.6	154.1	151.9	148.5
40°	158.6	148.5	138.4	134.5	131.1
42.5°	142.3	133.4	124.4	118.2	113.8
45°	126.1	118.2	109.8	102.0	97.0
47.5°	110.4	104.2	97.0	87.4	84.1
50°	94.7	90.2	84.1	75.7	74.0
52.5°	78.5	76.8	72.9	67.2	66.7
55°	61.1	64.4	62.2	60.0	59.4
57.5°	51.6	52.1	53.8	53.2	53.2
60°	44.3	44.3	46.5	47.1	47.1
62.5°	37.5	38.1	40.3	41.5	41.5
65°	31.9	32.5	34.2	35.9	36.4
67.5°	26.3	27.5	29.1	30.8	31.4
70°	21.3	22.4	24.7	26.3	26.9
72.5°	17.4	17.9	20.2	21.9	22.4
75°	13.4	14.0	15.7	17.9	18.5
77.5°	9.5	10.6	12.3	14.0	15.1
80°	6.7	7.3	8.4	10.6	11.2
82.5°	3.9	4.5	5.6	7.3	7.8
85°	1.1	1.7	2.2	3.9	5.0
87.5°	0.0	0.0	0.0	1.1	2.2
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	12.62	14.02	12.99	14.33	14.65	12.80	14.19	13.16	14.51	14.82
	3H	13.75	15.00	14.13	15.33	15.69	14.26	15.50	14.64	15.83	16.20
	4H	14.11	15.27	14.51	15.62	16.00	14.80	15.96	15.20	16.31	16.70
	6H	14.29	15.36	14.70	15.73	16.12	15.21	16.28	15.63	16.65	17.05
	8H	14.31	15.33	14.74	15.72	16.13	15.34	16.36	15.77	16.75	17.15
	12H	14.30	15.27	14.73	15.65	16.08	15.42	16.39	15.85	16.78	17.21
4H	2H	13.08	14.24	13.48	14.59	14.98	13.23	14.39	13.63	14.74	15.12
	3H	14.42	15.38	14.83	15.78	16.18	14.90	15.86	15.31	16.26	16.66
	4H	14.86	15.72	15.30	16.14	16.58	15.56	16.42	16.00	16.84	17.28
	6H	15.13	15.88	15.59	16.32	16.78	16.10	16.84	16.56	17.28	17.75
	8H	15.18	15.87	15.64	16.32	16.79	16.26	16.96	16.73	17.40	17.87
	12H	15.17	15.79	15.66	16.27	16.74	16.38	17.00	16.87	17.48	17.95
8H	4H	15.08	15.77	15.54	16.22	16.69	15.71	16.41	16.18	16.85	17.32
	6H	15.42	15.99	15.92	16.49	16.96	16.34	16.91	16.84	17.40	17.88
	8H	15.50	16.01	16.02	16.52	17.01	16.57	17.08	17.09	17.60	18.09
	12H	15.52	15.97	16.03	16.46	17.03	16.76	17.21	17.27	17.70	18.27
12H	4H	15.09	15.70	15.57	16.18	16.66	15.70	16.31	16.18	16.80	17.27
	6H	15.45	15.96	15.96	16.47	16.96	16.34	16.85	16.85	17.36	17.85
	8H	15.56	16.01	16.08	16.51	17.08	16.61	17.06	17.12	17.55	18.12