

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: P1058028

Luminaire Tested: S122RDRP-S485D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058028
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S485D950-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

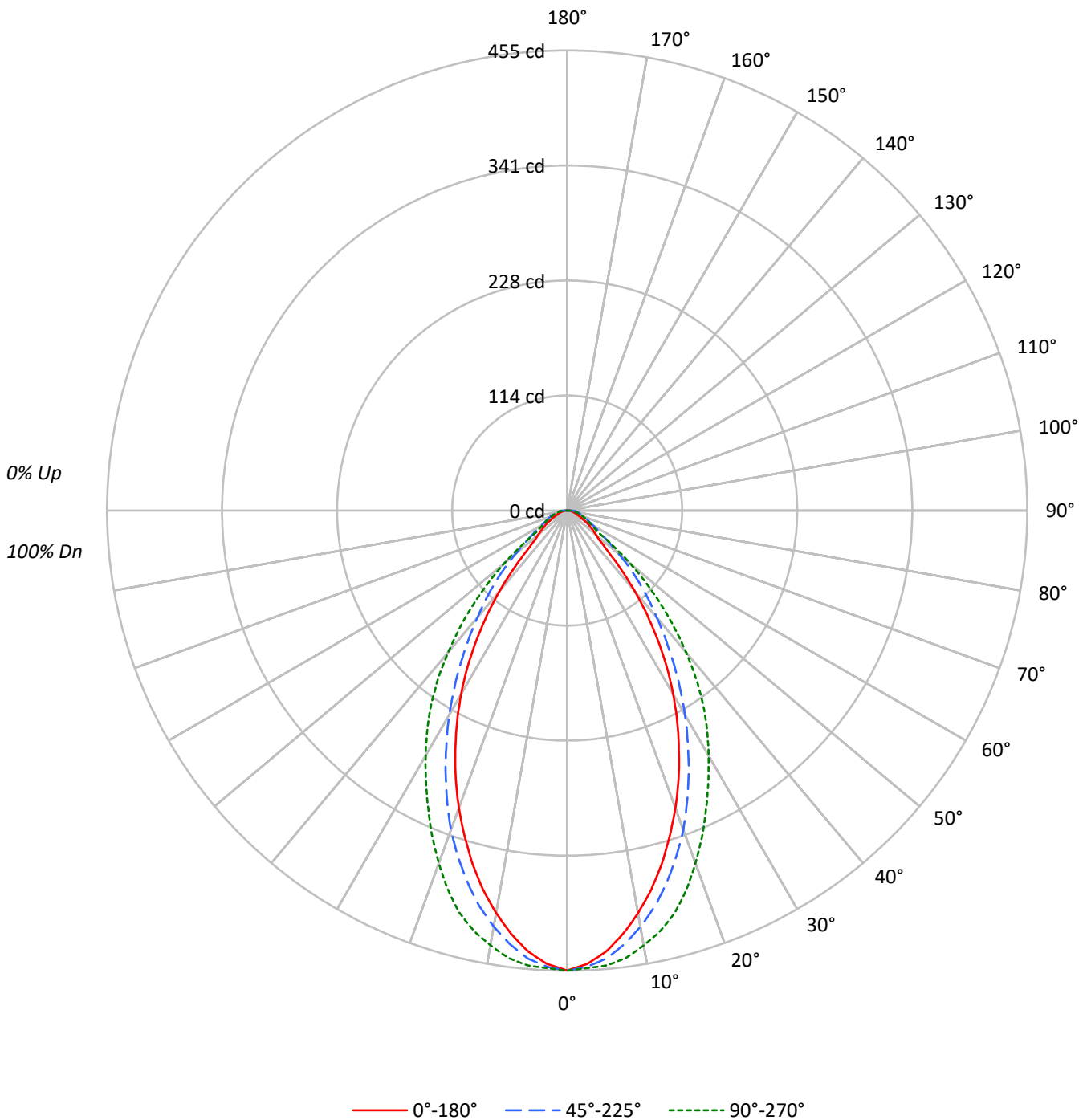
Lumens per Lamp: N/A
Luminaire Lumens: 551.7 lumens
Efficiency: N/A
Efficacy: 28.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8392	8392	8392
5°	8111	8237	8363
10°	7572	7826	8181
15°	6908	7269	7863
20°	6144	6596	7285
25°	5324	5792	6619
30°	4464	4969	5962
35°	3516	4111	5282
40°	2508	3322	4413
45°	1482	2628	3421
50°	1068	1900	2328
55°	891	1370	1174
60°	723	1096	996
65°	589	974	917
70°	513	950	874
75°	485	962	870
80°	499	1148	935
85°	720	1863	1143

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3421 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.7	7.6
10°-20°	107.2	19.4
20°-30°	132.2	24.0
30°-40°	117.6	21.3
40°-50°	75.1	13.6
50°-60°	36.0	6.5
60°-70°	21.2	3.8
70°-80°	13.5	2.4
80°-90°	7.2	1.3
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°	281.1	51.0
0°-40°	398.7	72.3
0°-60°	509.8	92.4
0°-90°	551.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	551.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	455	455	455	455	455	
5°	438	446	445	447	452	41
15°	362	370	380	398	412	101
25°	262	272	284	305	325	120
35°	156	168	182	210	234	97
45°	57	74	101	117	131	48
55°	28	36	43	41	36	25
65°	14	24	22	20	21	14
75°	7	15	14	13	12	7
85°	3	8	9	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	454.8	454.8	454.8	454.8	454.8
2.5°	448.8	456.2	451.5	451.5	452.8
5°	437.9	446.0	444.7	447.4	451.5
7.5°	422.4	431.2	432.5	440.0	446.0
10°	404.1	413.6	417.7	428.5	436.6
12.5°	383.9	393.3	400.8	414.3	425.8
15°	361.6	370.4	380.5	398.1	411.6
17.5°	337.2	348.7	358.9	377.1	392.7
20°	312.9	323.7	335.9	353.5	371.0
22.5°	287.9	298.0	310.2	328.5	348.7
25°	261.5	271.7	284.5	304.8	325.1
27.5°	235.9	246.0	258.2	280.5	302.1
30°	209.5	219.6	233.2	256.1	279.8
32.5°	183.2	194.0	207.5	232.5	257.5
35°	156.1	168.3	182.5	210.2	234.5
37.5°	129.8	141.9	159.5	186.5	209.5
40°	104.1	118.3	137.9	162.2	183.2
42.5°	79.1	94.6	118.9	138.5	156.8
45°	56.8	73.7	100.7	116.9	131.1
47.5°	43.3	55.4	83.1	96.0	106.1
50°	37.2	44.6	66.2	75.7	81.1
52.5°	32.4	39.2	52.7	57.4	57.4
55°	27.7	35.8	42.6	41.2	36.5
57.5°	23.7	32.4	35.1	29.7	31.1
60°	19.6	29.7	29.7	26.4	27.0
62.5°	16.2	27.7	25.7	23.0	23.7
65°	13.5	24.3	22.3	20.3	21.0
67.5°	10.8	21.6	19.6	18.2	18.2
70°	9.5	19.6	17.6	16.2	16.2
72.5°	8.1	16.9	15.5	14.2	14.2
75°	6.8	14.9	13.5	12.8	12.2
77.5°	6.1	12.8	12.2	10.8	10.1
80°	4.7	10.8	10.8	10.1	8.8
82.5°	4.1	9.5	9.5	8.8	7.4
85°	3.4	8.1	8.8	7.4	5.4
87.5°	2.7	7.4	7.4	6.1	4.1
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	9.06	10.33	9.42	10.65	10.96	8.85	10.12	9.21	10.44	10.75
	3H	10.29	11.43	10.67	11.76	12.12	10.44	11.57	10.82	11.90	12.27
	4H	10.75	11.80	11.15	12.16	12.54	11.16	12.21	11.56	12.57	12.95
	6H	11.12	12.10	11.54	12.47	12.86	11.81	12.78	12.22	13.15	13.55
	8H	11.28	12.20	11.71	12.59	13.00	12.13	13.06	12.57	13.45	13.85
	12H	11.44	12.32	11.87	12.71	13.14	12.43	13.31	12.87	13.70	14.13
4H	2H	9.61	10.67	10.01	11.02	11.40	9.44	10.50	9.85	10.85	11.24
	3H	11.30	12.18	11.72	12.58	12.98	11.28	12.15	11.69	12.55	12.95
	4H	12.10	12.88	12.54	13.30	13.75	12.15	12.93	12.58	13.35	13.79
	6H	12.74	13.42	13.21	13.87	14.33	12.99	13.67	13.46	14.12	14.58
	8H	13.00	13.63	13.47	14.08	14.55	13.42	14.05	13.89	14.50	14.97
	12H	13.24	13.80	13.73	14.29	14.76	13.82	14.38	14.30	14.86	15.34
8H	4H	12.52	13.15	12.99	13.60	14.07	12.57	13.20	13.04	13.65	14.12
	6H	13.50	14.01	14.00	14.51	14.99	13.65	14.17	14.15	14.67	15.15
	8H	13.99	14.46	14.51	14.97	15.47	14.24	14.71	14.77	15.23	15.72
	12H	14.50	14.91	15.01	15.40	15.97	14.84	15.26	15.36	15.75	16.32
12H	4H	12.59	13.15	13.07	13.63	14.10	12.64	13.20	13.13	13.69	14.16
	6H	13.66	14.13	14.19	14.65	15.14	13.82	14.28	14.34	14.80	15.29
	8H	14.31	14.72	14.82	15.21	15.78	14.53	14.94	15.05	15.44	16.01