

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: P1057992

Luminaire Tested: S122RDRP-S485D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057992
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-S485D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

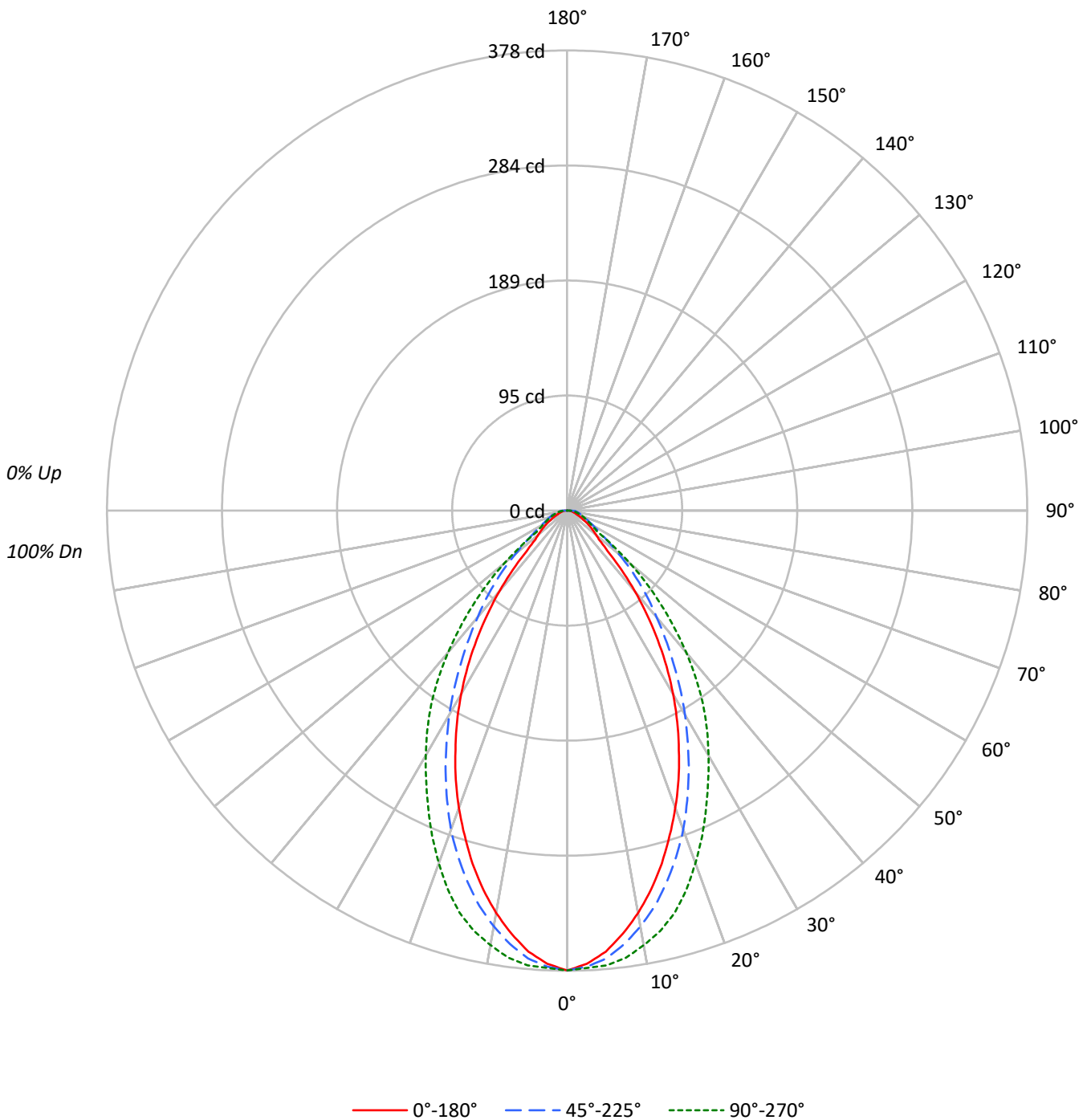
Lumens per Lamp: N/A
Luminaire Lumens: 458.1 lumens
Efficiency: N/A
Efficacy: 23.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	6969	6969	6969
5°	6737	6841	6944
10°	6288	6498	6792
15°	5735	6037	6530
20°	5102	5477	6050
25°	4422	4811	5495
30°	3707	4125	4950
35°	2919	3413	4386
40°	2081	2758	3664
45°	1229	2182	2842
50°	887	1579	1932
55°	740	1139	975
60°	602	912	827
65°	489	808	760
70°	426	788	728
75°	399	799	720
80°	414	956	776
85°	593	1546	953

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2842 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.6	7.6
10°-20°	89.0	19.4
20°-30°	109.8	24.0
30°-40°	97.7	21.3
40°-50°	62.3	13.6
50°-60°	29.9	6.5
60°-70°	17.6	3.8
70°-80°	11.2	2.5
80°-90°	6.0	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°	233.4	51.0
0°-40°	331.1	72.3
0°-60°	423.3	92.4
0°-90°	458.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	458.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	378	378	378	378	378	
5°	364	370	369	372	375	34
15°	300	308	316	330	342	84
25°	217	226	236	253	270	99
35°	130	140	152	174	195	81
45°	47	61	84	97	109	40
55°	23	30	35	34	30	21
65°	11	20	18	17	17	11
75°	6	12	11	11	10	6
85°	3	7	7	6	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	377.7	377.7	377.7	377.7	377.7
2.5°	372.6	378.8	374.9	374.9	376.0
5°	363.7	370.4	369.3	371.5	374.9
7.5°	350.7	358.0	359.2	365.3	370.4
10°	335.6	343.5	346.8	355.8	362.5
12.5°	318.8	326.6	332.8	344.0	353.6
15°	300.2	307.5	316.0	330.5	341.8
17.5°	280.0	289.6	298.0	313.1	326.1
20°	259.8	268.8	278.9	293.5	308.1
22.5°	239.1	247.5	257.6	272.7	289.6
25°	217.2	225.6	236.3	253.1	269.9
27.5°	195.9	204.3	214.4	232.9	250.9
30°	174.0	182.4	193.6	212.7	232.3
32.5°	152.1	161.1	172.3	193.1	213.8
35°	129.6	139.7	151.5	174.5	194.7
37.5°	107.7	117.9	132.4	154.9	174.0
40°	86.4	98.2	114.5	134.7	152.1
42.5°	65.7	78.6	98.8	115.0	130.2
45°	47.1	61.2	83.6	97.1	108.9
47.5°	35.9	46.0	69.0	79.7	88.1
50°	30.9	37.0	55.0	62.9	67.3
52.5°	26.9	32.5	43.8	47.7	47.7
55°	23.0	29.7	35.4	34.2	30.3
57.5°	19.6	26.9	29.2	24.7	25.8
60°	16.3	24.7	24.7	21.9	22.4
62.5°	13.5	23.0	21.3	19.1	19.6
65°	11.2	20.2	18.5	16.8	17.4
67.5°	9.0	18.0	16.3	15.2	15.2
70°	7.9	16.3	14.6	13.5	13.5
72.5°	6.7	14.0	12.9	11.8	11.8
75°	5.6	12.3	11.2	10.7	10.1
77.5°	5.1	10.7	10.1	9.0	8.4
80°	3.9	9.0	9.0	8.4	7.3
82.5°	3.4	7.9	7.9	7.3	6.2
85°	2.8	6.7	7.3	6.2	4.5
87.5°	2.2	6.2	6.2	5.1	3.4
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	8.41	9.68	8.77	10.00	10.31	8.21	9.48	8.57	9.80	10.11
	3H	9.65	10.78	10.03	11.11	11.48	9.81	10.94	10.19	11.27	11.64
	4H	10.10	11.16	10.50	11.51	11.89	10.52	11.58	10.93	11.93	12.32
	6H	10.48	11.45	10.90	11.83	12.22	11.17	12.15	11.59	12.52	12.91
	8H	10.64	11.56	11.07	11.95	12.36	11.50	12.43	11.93	12.82	13.22
	12H	10.80	11.68	11.23	12.06	12.49	11.80	12.69	12.24	13.07	13.50
4H	2H	8.96	10.02	9.36	10.37	10.75	8.80	9.86	9.20	10.21	10.59
	3H	10.66	11.53	11.07	11.94	12.34	10.64	11.51	11.06	11.92	12.32
	4H	11.45	12.23	11.89	12.65	13.10	11.52	12.30	11.95	12.72	13.16
	6H	12.10	12.78	12.56	13.22	13.69	12.36	13.04	12.82	13.48	13.95
	8H	12.35	12.98	12.82	13.43	13.90	12.79	13.42	13.26	13.87	14.34
	12H	12.60	13.16	13.08	13.64	14.12	13.19	13.75	13.68	14.23	14.71
8H	4H	11.87	12.50	12.34	12.95	13.42	11.93	12.57	12.40	13.02	13.49
	6H	12.85	13.37	13.36	13.87	14.35	13.02	13.54	13.52	14.03	14.52
	8H	13.35	13.82	13.87	14.33	14.82	13.61	14.08	14.13	14.59	15.09
	12H	13.85	14.26	14.37	14.76	15.33	14.22	14.63	14.73	15.12	15.70
12H	4H	11.94	12.50	12.42	12.98	13.45	12.01	12.57	12.50	13.05	13.53
	6H	13.02	13.49	13.54	14.01	14.50	13.18	13.65	13.71	14.17	14.66
	8H	13.66	14.08	14.18	14.57	15.14	13.90	14.31	14.41	14.80	15.38