

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: P1058010

Luminaire Tested: S122RDRP-S485D935-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058010
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-S485D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

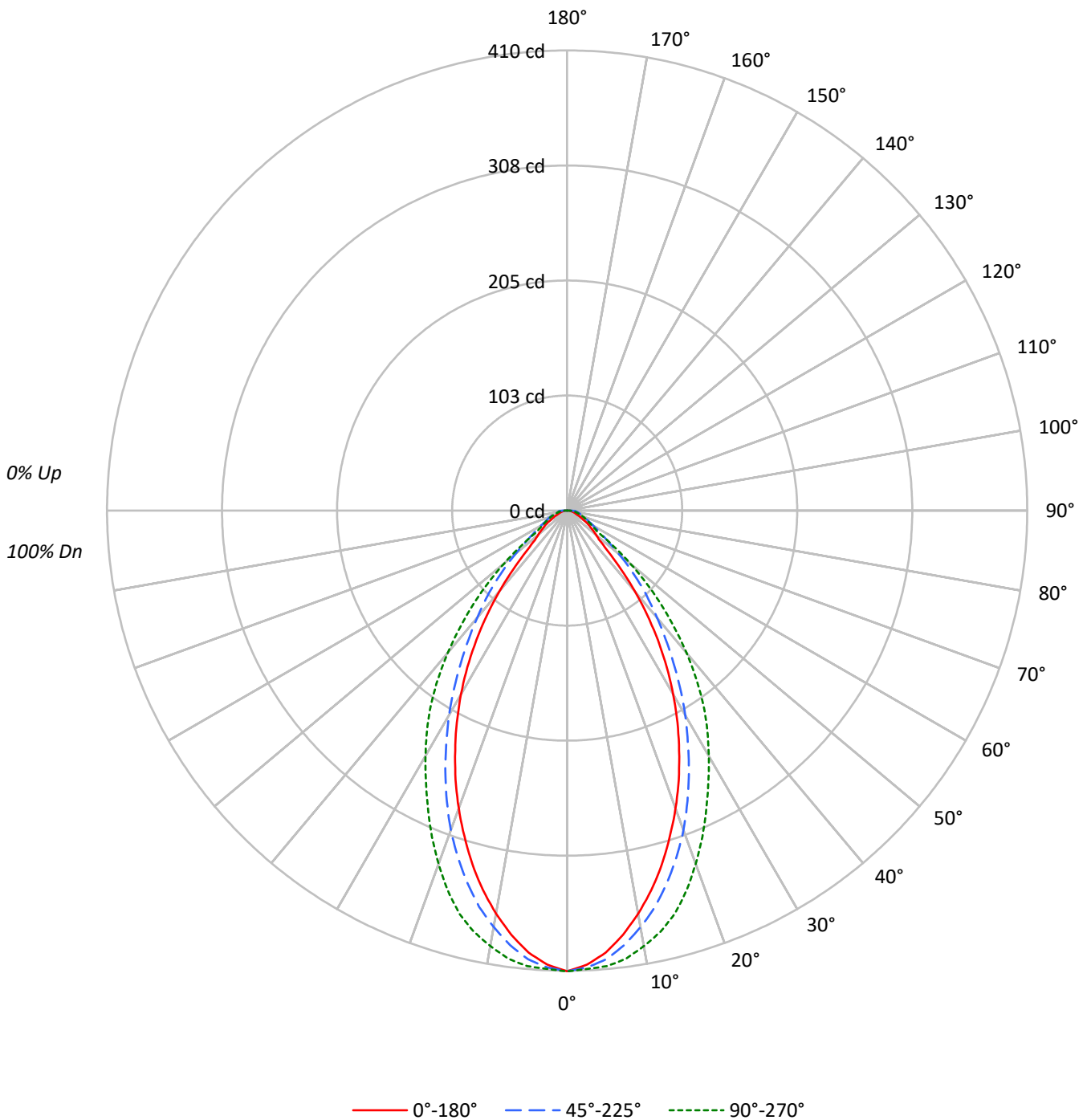
Lumens per Lamp: N/A
Luminaire Lumens: 497.9 lumens
Efficiency: N/A
Efficacy: 25.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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°	7575	7575	7575
5°	7320	7433	7546
10°	6833	7062	7382
15°	6233	6560	7097
20°	5545	5952	6576
25°	4805	5228	5974
30°	4029	4483	5380
35°	3174	3710	4769
40°	2262	2997	3982
45°	1336	2372	3087
50°	962	1717	2101
55°	804	1235	1058
60°	653	989	900
65°	533	878	825
70°	459	858	788
75°	435	870	784
80°	457	1041	839
85°	635	1673	1037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3087 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.6	7.6
10°-20°	96.7	19.4
20°-30°	119.3	24.0
30°-40°	106.1	21.3
40°-50°	67.7	13.6
50°-60°	32.5	6.5
60°-70°	19.1	3.8
70°-80°	12.2	2.4
80°-90°	6.5	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°	253.7	51.0
0°-40°	359.8	72.3
0°-60°	460.1	92.4
0°-90°	497.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	497.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	410	410	410	410	410	
5°	395	403	401	404	407	37
15°	326	334	343	359	372	91
25°	236	245	257	275	293	108
35°	141	152	165	190	212	88
45°	51	66	91	106	118	43
55°	25	32	38	37	33	23
65°	12	22	20	18	19	12
75°	6	13	12	12	11	7
85°	3	7	8	7	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	410.5	410.5	410.5	410.5	410.5
2.5°	405.0	411.7	407.4	407.4	408.7
5°	395.2	402.6	401.3	403.8	407.4
7.5°	381.2	389.1	390.4	397.1	402.6
10°	364.7	373.3	376.9	386.7	394.0
12.5°	346.4	355.0	361.7	373.9	384.3
15°	326.3	334.3	343.4	359.3	371.5
17.5°	304.4	314.7	323.9	340.4	354.4
20°	282.4	292.2	303.1	319.0	334.9
22.5°	259.8	269.0	280.0	296.4	314.7
25°	236.0	245.2	256.8	275.1	293.4
27.5°	212.9	222.0	233.0	253.1	272.6
30°	189.1	198.2	210.4	231.2	252.5
32.5°	165.3	175.1	187.3	209.8	232.4
35°	140.9	151.9	164.7	189.7	211.7
37.5°	117.1	128.1	143.9	168.3	189.1
40°	93.9	106.7	124.4	146.4	165.3
42.5°	71.4	85.4	107.4	125.0	141.5
45°	51.2	66.5	90.9	105.5	118.3
47.5°	39.0	50.0	75.0	86.6	95.8
50°	33.5	40.3	59.8	68.3	73.2
52.5°	29.3	35.4	47.6	51.8	51.8
55°	25.0	32.3	38.4	37.2	32.9
57.5°	21.3	29.3	31.7	26.8	28.1
60°	17.7	26.8	26.8	23.8	24.4
62.5°	14.6	25.0	23.2	20.7	21.3
65°	12.2	22.0	20.1	18.3	18.9
67.5°	9.8	19.5	17.7	16.5	16.5
70°	8.5	17.7	15.9	14.6	14.6
72.5°	7.3	15.2	14.0	12.8	12.8
75°	6.1	13.4	12.2	11.6	11.0
77.5°	5.5	11.6	11.0	9.8	9.1
80°	4.3	9.8	9.8	9.1	7.9
82.5°	3.7	8.5	8.5	7.9	6.7
85°	3.0	7.3	7.9	6.7	4.9
87.5°	2.4	6.7	6.7	5.5	3.7
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	8.71	9.99	9.07	10.30	10.61	8.49	9.77	8.86	10.08	10.40
	3H	9.94	11.07	10.32	11.40	11.77	10.09	11.22	10.47	11.55	11.92
	4H	10.39	11.45	10.79	11.80	12.18	10.80	11.86	11.21	12.21	12.60
	6H	10.77	11.75	11.19	12.12	12.51	11.45	12.43	11.87	12.80	13.19
	8H	10.93	11.85	11.36	12.24	12.65	11.78	12.70	12.21	13.09	13.50
	12H	11.09	11.97	11.52	12.35	12.78	12.08	12.96	12.51	13.35	13.78
4H	2H	9.26	10.31	9.66	10.67	11.05	9.08	10.14	9.49	10.49	10.88
	3H	10.95	11.82	11.36	12.23	12.63	10.92	11.79	11.34	12.20	12.60
	4H	11.74	12.53	12.18	12.95	13.39	11.80	12.58	12.23	13.00	13.44
	6H	12.39	13.07	12.85	13.51	13.98	12.64	13.32	13.10	13.76	14.23
	8H	12.64	13.28	13.11	13.72	14.19	13.06	13.70	13.53	14.14	14.61
	12H	12.89	13.45	13.37	13.93	14.40	13.47	14.03	13.95	14.51	14.98
8H	4H	12.16	12.80	12.63	13.24	13.71	12.22	12.85	12.69	13.30	13.77
	6H	13.15	13.66	13.65	14.16	14.64	13.30	13.82	13.80	14.31	14.80
	8H	13.64	14.10	14.16	14.62	15.11	13.89	14.35	14.41	14.87	15.36
	12H	14.13	14.55	14.65	15.04	15.61	14.49	14.90	15.01	15.40	15.97
12H	4H	12.23	12.79	12.72	13.27	13.75	12.29	12.85	12.78	13.34	13.81
	6H	13.31	13.78	13.83	14.30	14.79	13.46	13.93	13.99	14.45	14.94
	8H	13.95	14.36	14.46	14.85	15.43	14.17	14.58	14.69	15.08	15.65