

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: P1058018

Luminaire Tested: S122RDRP-S485D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058018
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S485D940-X4F0-XX-UDD-SVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

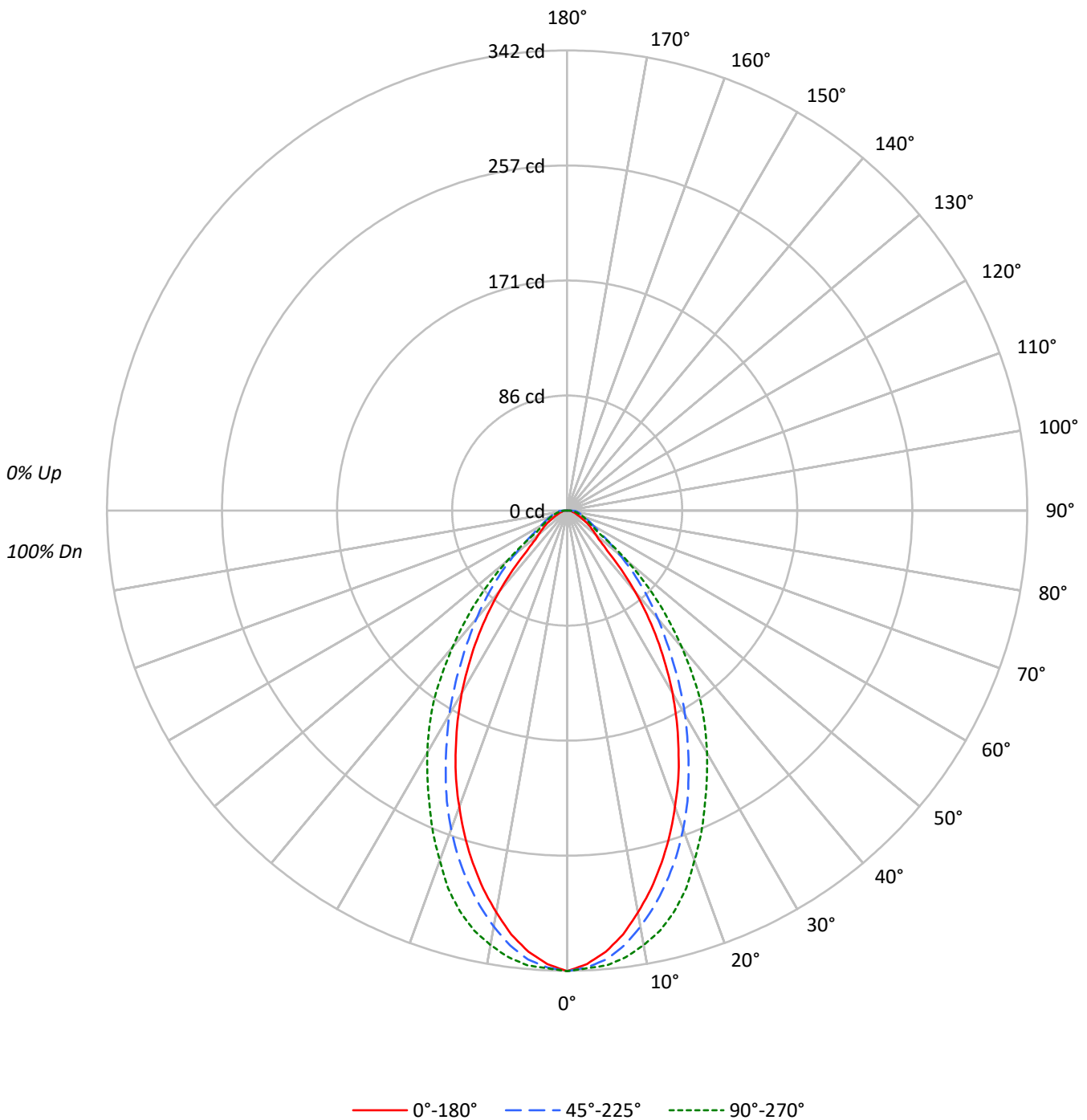
Lumens per Lamp: N/A
Luminaire Lumens: 413.0 lumens
Efficiency: N/A
Efficacy: 21.1 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (Ain): 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6316	6316	6316
5°	6096	6201	6283
10°	5681	5882	6142
15°	5177	5454	5888
20°	4601	4948	5432
25°	3986	4347	4925
30°	3337	3729	4428
35°	2631	3088	3899
40°	1886	2524	3194
45°	1104	1994	2471
50°	798	1450	1668
55°	669	1036	875
60°	535	838	745
65°	441	747	690
70°	372	718	647
75°	364	763	627
80°	404	935	669
85°	677	1461	932

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2471 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.4	7.6
10°-20°	80.4	19.5
20°-30°	98.8	23.9
30°-40°	87.3	21.1
40°-50°	55.7	13.5
50°-60°	27.2	6.6
60°-70°	16.2	3.9
70°-80°	10.3	2.5
80°-90°	5.7	1.4
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°	210.5	51.0
0°-40°	297.8	72.1
0°-60°	380.7	92.2
0°-90°	413.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	413.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	342	342	342	342	342	
5°	329	336	335	336	339	31
15°	271	278	286	298	308	76
25°	196	203	214	227	242	90
35°	117	123	137	156	173	73
45°	42	54	76	86	95	36
55°	21	28	32	30	27	19
65°	10	19	17	16	16	10
75°	5	11	11	10	9	6
85°	3	6	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°	342.3	342.3	342.3	342.3	342.3
2.5°	337.3	343.6	339.8	339.8	340.4
5°	329.1	336.0	334.8	336.0	339.2
7.5°	317.7	324.6	325.9	331.0	334.8
10°	303.2	310.1	313.9	322.1	327.8
12.5°	288.0	295.0	300.6	311.4	319.6
15°	271.0	278.5	285.5	298.1	308.2
17.5°	253.3	260.9	269.7	282.3	294.3
20°	234.3	241.3	252.0	264.0	276.6
22.5°	216.0	222.3	233.7	245.1	260.2
25°	195.8	202.7	213.5	226.7	241.9
27.5°	176.2	183.2	193.9	209.1	224.9
30°	156.6	163.0	175.0	190.7	207.8
32.5°	136.4	142.7	156.0	173.1	190.7
35°	116.8	123.2	137.1	156.0	173.1
37.5°	97.3	104.2	120.0	137.7	152.2
40°	78.3	86.5	104.8	120.0	132.6
42.5°	59.4	70.7	90.3	103.0	113.1
45°	42.3	54.3	76.4	85.9	94.7
47.5°	32.2	41.7	63.2	70.1	75.8
50°	27.8	34.1	50.5	55.6	58.1
52.5°	24.0	30.3	40.4	42.3	41.1
55°	20.8	27.8	32.2	30.3	27.2
57.5°	17.7	25.9	26.5	22.7	23.4
60°	14.5	23.4	22.7	19.6	20.2
62.5°	12.0	21.5	19.6	17.7	17.7
65°	10.1	18.9	17.1	15.8	15.8
67.5°	8.2	17.1	15.2	13.9	13.9
70°	6.9	15.2	13.3	12.0	12.0
72.5°	6.3	13.3	12.0	10.7	10.7
75°	5.1	11.4	10.7	9.5	8.8
77.5°	4.4	9.5	9.5	8.8	7.6
80°	3.8	8.2	8.8	7.6	6.3
82.5°	3.8	7.6	7.6	6.9	5.1
85°	3.2	6.3	6.9	6.3	4.4
87.5°	1.9	5.7	5.7	5.1	3.2
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	8.43	9.71	8.80	10.03	10.34	7.95	9.23	8.32	9.54	9.86
	3H	9.61	10.75	9.99	11.08	11.44	9.52	10.65	9.90	10.98	11.35
	4H	10.04	11.11	10.45	11.46	11.84	10.20	11.26	10.60	11.61	11.99
	6H	10.39	11.36	10.80	11.74	12.13	10.85	11.82	11.26	12.19	12.59
	8H	10.58	11.51	11.02	11.90	12.31	11.14	12.06	11.57	12.45	12.86
	12H	10.81	11.69	11.24	12.07	12.51	11.45	12.34	11.89	12.72	13.15
4H	2H	8.94	10.00	9.34	10.35	10.74	8.56	9.62	8.96	9.97	10.35
	3H	10.59	11.46	11.00	11.87	12.27	10.36	11.23	10.77	11.64	12.04
	4H	11.35	12.14	11.79	12.56	13.00	11.20	11.98	11.63	12.40	12.84
	6H	11.95	12.63	12.42	13.08	13.55	12.05	12.73	12.52	13.18	13.65
	8H	12.25	12.89	12.72	13.34	13.81	12.44	13.08	12.91	13.53	14.00
	12H	12.57	13.13	13.06	13.62	14.09	12.88	13.44	13.37	13.93	14.40
8H	4H	11.77	12.41	12.24	12.85	13.32	11.65	12.29	12.12	12.74	13.21
	6H	12.72	13.24	13.22	13.73	14.22	12.76	13.28	13.26	13.78	14.26
	8H	13.26	13.73	13.79	14.25	14.74	13.34	13.81	13.86	14.32	14.82
	12H	13.83	14.25	14.35	14.74	15.31	14.01	14.42	14.52	14.92	15.49
12H	4H	11.84	12.40	12.33	12.89	13.36	11.74	12.30	12.22	12.78	13.26
	6H	12.90	13.37	13.42	13.88	14.38	12.95	13.42	13.47	13.93	14.42
	8H	13.59	14.01	14.11	14.50	15.07	13.66	14.07	14.17	14.57	15.14