

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: P1057997

Luminaire Tested: S122RDRP-S485D930-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057997
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S485D930-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

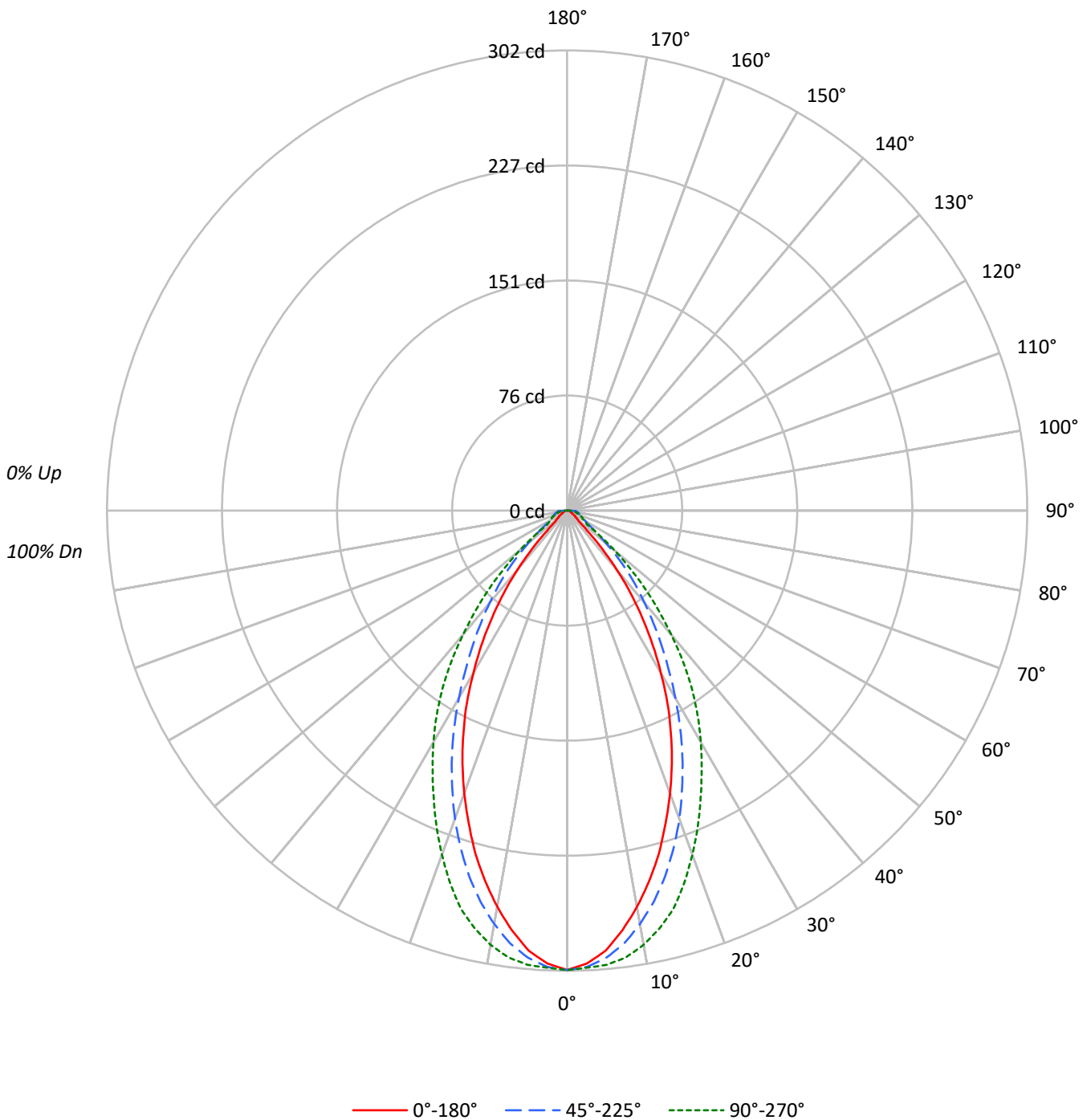
Lumens per Lamp: N/A
Luminaire Lumens: 325.0 lumens
Efficiency: N/A
Efficacy: 16.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	60	55	50	59	54	50	58	54	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5563	5563	5563
5°	5370	5457	5542
10°	4947	5162	5423
15°	4447	4745	5164
20°	3878	4230	4719
25°	3280	3644	4221
30°	2621	3028	3742
35°	1940	2433	3215
40°	1224	1905	2561
45°	483	1433	1884
50°	250	962	1160
55°	206	631	521
60°	148	513	469
65°	127	480	480
70°	124	496	469
75°	164	577	492
80°	244	733	553
85°	360	1228	741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 2454 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.6	8.5
10°-20°	69.7	21.4
20°-30°	82.8	25.5
30°-40°	68.9	21.2
40°-50°	38.5	11.8
50°-60°	15.5	4.8
60°-70°	9.9	3.1
70°-80°	7.5	2.3
80°-90°	4.8	1.5
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°	180.0	55.4
0°-40°	248.9	76.6
0°-60°	302.9	93.2
0°-90°	325.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	325.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	302	302	302	302	302	
5°	290	295	295	297	299	27
15°	233	240	248	261	270	65
25°	161	168	179	193	207	73
35°	86	94	108	126	143	53
45°	18	31	55	64	72	17
55°	6	13	20	19	16	6
65°	3	12	11	10	11	3
75°	2	8	8	8	7	2
85°	2	5	6	5	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	301.5	301.5	301.5	301.5	301.5
2.5°	297.5	302.1	299.8	299.8	300.3
5°	289.9	295.1	294.6	296.9	299.2
7.5°	277.8	283.6	286.5	291.7	295.7
10°	264.0	270.3	275.5	283.6	289.4
12.5°	248.9	255.3	262.8	273.2	280.7
15°	232.8	239.7	248.4	261.1	270.3
17.5°	214.9	222.4	232.2	246.0	255.9
20°	197.5	205.0	215.4	229.3	240.3
22.5°	179.6	186.0	197.0	210.8	224.1
25°	161.1	167.5	179.0	192.9	207.3
27.5°	142.7	149.0	160.6	175.0	191.2
30°	123.0	130.0	142.1	158.3	175.6
32.5°	104.5	111.5	124.2	142.1	159.4
35°	86.1	94.1	108.0	125.9	142.7
37.5°	68.2	77.4	93.0	109.7	124.8
40°	50.8	60.6	79.1	93.6	106.3
42.5°	33.5	45.1	66.4	78.6	88.4
45°	18.5	31.2	54.9	64.1	72.2
47.5°	10.4	20.2	43.3	50.8	55.4
50°	8.7	15.0	33.5	38.7	40.4
52.5°	6.9	13.9	25.4	28.3	27.1
55°	6.4	13.3	19.6	19.1	16.2
57.5°	5.2	13.3	15.6	13.9	13.9
60°	4.0	12.7	13.9	12.1	12.7
62.5°	3.5	12.1	12.7	11.6	11.6
65°	2.9	11.6	11.0	10.4	11.0
67.5°	2.3	10.4	10.4	9.8	9.8
70°	2.3	9.8	9.2	8.7	8.7
72.5°	2.3	8.7	8.7	8.1	8.1
75°	2.3	8.1	8.1	7.5	6.9
77.5°	2.3	6.9	7.5	6.9	6.4
80°	2.3	6.4	6.9	6.4	5.2
82.5°	2.3	5.8	6.4	5.8	4.6
85°	1.7	5.2	5.8	5.2	3.5
87.5°	1.7	5.2	5.8	4.6	2.9
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	4.33	5.55	4.70	5.87	6.18	5.42	6.64	5.78	6.95	7.27
	3H	5.66	6.75	6.04	7.08	7.44	7.44	8.53	7.82	8.86	9.22
	4H	6.24	7.25	6.64	7.60	7.98	8.39	9.40	8.80	9.75	10.14
	6H	6.80	7.73	7.21	8.10	8.49	9.34	10.27	9.76	10.64	11.04
	8H	7.12	8.00	7.56	8.39	8.80	9.79	10.67	10.22	11.06	11.47
	12H	7.43	8.27	7.86	8.65	9.08	10.22	11.06	10.65	11.44	11.87
4H	2H	5.30	6.31	5.70	6.66	7.05	6.10	7.11	6.50	7.46	7.84
	3H	7.32	8.15	7.74	8.56	8.96	8.37	9.21	8.79	9.61	10.02
	4H	8.40	9.15	8.84	9.57	10.02	9.52	10.26	9.95	10.68	11.13
	6H	9.27	9.92	9.74	10.37	10.84	10.69	11.34	11.15	11.79	12.25
	8H	9.69	10.29	10.16	10.74	11.21	11.25	11.86	11.72	12.30	12.78
	12H	10.06	10.60	10.55	11.08	11.55	11.80	12.33	12.28	12.82	13.29
8H	4H	9.17	9.78	9.64	10.23	10.70	10.07	10.67	10.54	11.12	11.59
	6H	10.52	11.01	11.02	11.51	11.99	11.53	12.02	12.03	12.52	13.00
	8H	11.23	11.68	11.76	12.20	12.69	12.29	12.74	12.81	13.25	13.75
	12H	11.92	12.32	12.44	12.81	13.38	13.08	13.47	13.60	13.97	14.54
12H	4H	9.33	9.86	9.82	10.35	10.82	10.17	10.71	10.66	11.19	11.67
	6H	10.84	11.28	11.36	11.80	12.29	11.75	12.20	12.28	12.72	13.21
	8H	11.75	12.14	12.26	12.63	13.21	12.66	13.05	13.18	13.55	14.12