

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: P1055267

Luminaire Tested: S122R3DRP-S865D930-X4F0-XX-UDD-F-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1055267
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DRP-S865D930-X4F0-XX-UDD-F-S
Description: DEFINE 2, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

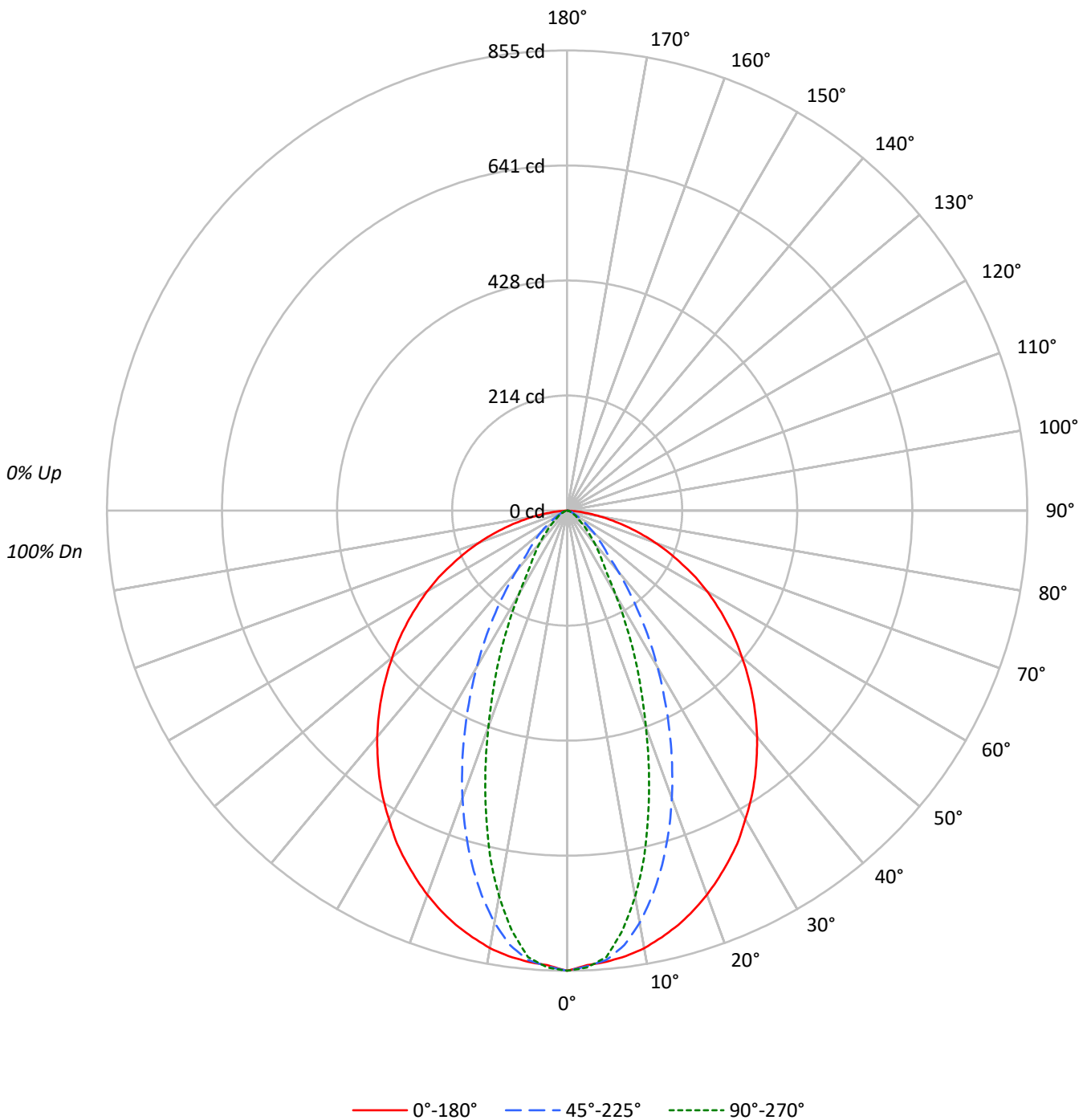
Lumens per Lamp: N/A
Luminaire Lumens: 979.7 lumens
Efficiency: N/A
Efficacy: 28.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.64 / 0.81
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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

TEST NUMBER: P105267

CATALOG NUMBER: S122R3DRP-S865D930-X4F0-XX-UDD-F-S

Luminous Intensity Polar Plot



TEST NUMBER: P1055267

CATALOG NUMBER: S122R3DRP-S865D930-X4F0-XX-UDD-F-S

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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92
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	74	80	76	73
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	47
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16197	16197	16197
5°	16000	15941	15840
10°	15883	14956	14009
15°	15638	13379	11425
20°	15315	11470	8619
25°	14936	9397	6154
30°	14487	7335	3920
35°	14055	5380	2618
40°	13578	3628	1969
45°	13054	2553	1404
50°	12506	1945	987
55°	11974	1351	727
60°	11394	913	595
65°	10566	659	471
70°	9633	521	404
75°	8360	461	307
80°	6634	338	338
85°	3652	456	217

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13054 cd/sqm



TEST NUMBER: P1055267

CATALOG NUMBER: S122R3DRP-S865D930-X4F0-XX-UDD-F-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.2	8.0
10°-20°	191.9	19.6
20°-30°	219.2	22.4
30°-40°	185.8	19.0
40°-50°	138.7	14.2
50°-60°	89.6	9.1
60°-70°	50.0	5.1
70°-80°	21.9	2.2
80°-90°	4.5	0.5
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°	489.2	49.9
0°-40°	675.0	68.9
0°-60°	903.3	92.2
0°-90°	979.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	979.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	855	855	855	855	855	
5°	841	852	838	830	833	80
15°	797	777	682	610	582	225
25°	714	631	450	329	294	329
35°	608	458	233	127	113	380
45°	487	289	95	62	52	376
55°	362	137	41	25	22	324
65°	236	50	15	12	10	234
75°	114	10	6	5	4	122
85°	17	1	2	1	1	24
90°	0	0	0	0	0	



TEST NUMBER: P1055267

CATALOG NUMBER: S122R3DRP-S865D930-X4F0-XX-UDD-F-S

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	854.9	854.9	854.9	854.9	854.9
2.5°	845.5	858.1	847.6	847.6	849.7
5°	841.3	851.8	838.2	829.8	832.9
7.5°	835.0	842.4	814.1	788.9	786.8
10°	825.6	828.7	777.4	738.6	728.2
12.5°	812.0	804.6	732.3	677.9	660.1
15°	797.3	777.4	682.1	609.8	582.5
17.5°	779.5	743.9	626.5	538.5	505.0
20°	759.6	709.3	568.9	464.1	427.5
22.5°	737.6	670.5	509.2	393.9	357.3
25°	714.5	630.7	449.5	329.0	294.4
27.5°	690.4	588.8	390.8	270.3	232.6
30°	662.2	545.9	335.3	213.7	179.2
32.5°	636.0	500.8	283.9	165.5	136.2
35°	607.7	457.8	232.6	126.8	113.2
37.5°	578.3	414.9	187.5	106.9	95.3
40°	549.0	371.9	146.7	90.1	79.6
42.5°	518.6	330.0	113.2	75.4	65.0
45°	487.2	289.2	95.3	61.8	52.4
47.5°	455.8	248.3	79.6	49.2	41.9
50°	424.3	209.5	66.0	38.8	33.5
52.5°	393.9	172.9	52.4	31.4	27.2
55°	362.5	137.3	40.9	25.1	22.0
57.5°	331.1	106.9	31.4	21.0	18.9
60°	300.7	80.7	24.1	16.8	15.7
62.5°	269.3	65.0	18.9	13.6	12.6
65°	235.7	50.3	14.7	11.5	10.5
67.5°	205.4	36.7	11.5	9.4	8.4
70°	173.9	25.1	9.4	8.4	7.3
72.5°	143.5	15.7	7.3	6.3	6.3
75°	114.2	10.5	6.3	5.2	4.2
77.5°	87.0	6.3	4.2	4.2	3.1
80°	60.8	4.2	3.1	3.1	3.1
82.5°	37.7	3.1	2.1	2.1	2.1
85°	16.8	1.0	2.1	1.0	1.0
87.5°	3.1	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1055267

CATALOG NUMBER: S122R3DRP-S865D930-X4F0-XX-UDD-F-S

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	17.93	19.25	18.29	19.56	19.88	4.25	5.57	4.62	5.88	6.20
	3H	20.40	21.57	20.78	21.90	22.26	5.10	6.27	5.48	6.60	6.96
	4H	21.35	22.45	21.76	22.80	23.18	5.37	6.46	5.77	6.81	7.20
	6H	22.04	23.05	22.46	23.42	23.81	5.56	6.56	5.97	6.93	7.32
	8H	22.24	23.19	22.67	23.58	23.98	5.63	6.58	6.06	6.97	7.38
	12H	22.32	23.23	22.75	23.61	24.04	5.65	6.56	6.08	6.94	7.37
4H	2H	17.71	18.81	18.12	19.16	19.54	4.82	5.92	5.23	6.27	6.65
	3H	20.20	21.09	20.61	21.50	21.90	5.85	6.75	6.26	7.15	7.55
	4H	21.14	21.94	21.58	22.36	22.80	6.21	7.01	6.65	7.43	7.88
	6H	21.90	22.59	22.36	23.03	23.50	6.50	7.19	6.96	7.64	8.10
	8H	22.14	22.78	22.61	23.23	23.70	6.60	7.24	7.07	7.69	8.16
	12H	22.27	22.84	22.75	23.32	23.79	6.64	7.21	7.13	7.69	8.17
8H	4H	21.01	21.65	21.48	22.10	22.57	6.59	7.23	7.05	7.68	8.15
	6H	21.75	22.27	22.25	22.77	23.25	6.94	7.46	7.44	7.96	8.44
	8H	21.99	22.46	22.51	22.98	23.47	7.08	7.55	7.60	8.06	8.55
	12H	22.14	22.56	22.66	23.05	23.62	7.15	7.57	7.67	8.06	8.63
12H	4H	20.96	21.53	21.45	22.01	22.49	6.71	7.27	7.19	7.76	8.23
	6H	21.69	22.16	22.21	22.67	23.16	7.06	7.53	7.58	8.04	8.53
	8H	21.95	22.36	22.47	22.86	23.43	7.24	7.65	7.75	8.14	8.72