

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: P1059130

Luminaire Tested: S123RDRP-S1165D930-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059130
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1165D930-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

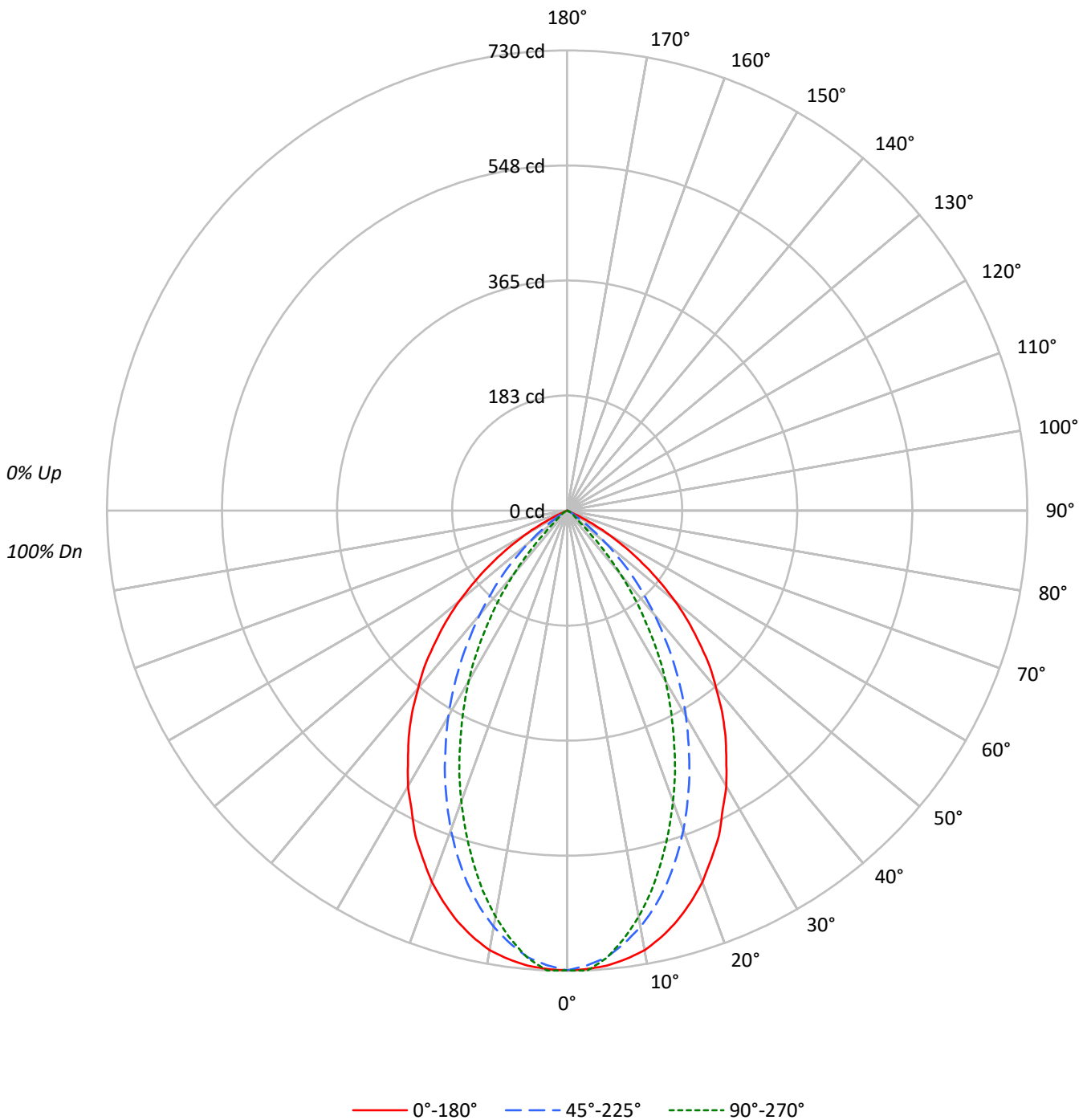
Lumens per Lamp: N/A
Luminaire Lumens: 832.1 lumens
Efficiency: N/A
Efficacy: 19.9 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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: P1059130

CATALOG NUMBER: S123RDRP-S1165D930-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1059130

CATALOG NUMBER: S123RDRP-S1165D930-X4F0-XX-UDD-BVL-B

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	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					100			
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92					92			
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84					84			
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76					76			
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69					69			
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63					63			
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58					58			
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53					53			
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49					49			
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46					46			
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42					42			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8563	8563	8563
5°	8540	8388	8402
10°	8443	7995	7799
15°	8194	7437	7010
20°	7836	6735	6133
25°	7379	5948	5188
30°	6846	5110	4236
35°	6279	4224	3148
40°	5633	3313	2016
45°	4914	2418	839
50°	4076	1438	322
55°	3005	602	240
60°	1820	221	139
65°	489	131	64
70°	0	41	41
75°	0	0	54
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4914 cd/sqm



TEST NUMBER: P1059130

CATALOG NUMBER: S123RDRP-S1165D930-X4F0-XX-UDD-BVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.1	8.1
10°-20°	173.2	20.8
20°-30°	215.9	25.9
30°-40°	193.1	23.2
40°-50°	121.8	14.6
50°-60°	51.0	6.1
60°-70°	9.6	1.2
70°-80°	0.3	0.0
80°-90°	0.0	0.0
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°	456.3	54.8
0°-40°	649.4	78.0
0°-60°	822.2	98.8
0°-90°	832.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	832.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	729	729	729	729	729	
5°	724	723	712	714	713	69
15°	674	658	612	586	577	189
25°	570	524	459	419	400	261
35°	438	375	295	242	220	273
45°	296	230	146	78	50	228
55°	147	101	29	12	12	132
65°	18	13	5	2	2	25
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P1059130

CATALOG NUMBER: S123RDRP-S1165D930-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	729.2	729.2	729.2	729.2	729.2
2.5°	728.0	729.2	722.2	729.2	730.4
5°	724.5	723.3	711.6	714.0	712.8
7.5°	717.5	714.0	692.8	688.1	685.8
10°	708.1	698.7	670.5	658.8	654.1
12.5°	692.8	679.9	643.5	624.7	617.7
15°	674.0	657.6	611.8	586.0	576.6
17.5°	651.7	628.2	576.6	548.4	534.3
20°	627.1	594.2	539.0	504.9	490.8
22.5°	597.7	561.3	499.1	462.7	447.4
25°	569.5	523.7	459.1	419.2	400.4
27.5°	534.3	486.1	416.9	375.8	355.8
30°	504.9	449.7	376.9	331.1	312.4
32.5°	469.7	412.2	335.8	285.3	267.7
35°	438.0	374.6	294.7	241.9	219.6
37.5°	403.9	338.2	253.6	198.5	177.3
40°	367.5	301.8	216.1	155.0	131.5
42.5°	334.7	265.4	178.5	115.1	91.6
45°	295.9	230.2	145.6	77.5	50.5
47.5°	260.7	197.3	110.4	43.4	27.0
50°	223.1	163.2	78.7	22.3	17.6
52.5°	184.4	130.3	51.7	15.3	14.1
55°	146.8	101.0	29.4	11.7	11.7
57.5°	110.4	72.8	15.3	9.4	8.2
60°	77.5	48.1	9.4	7.0	5.9
62.5°	44.6	28.2	7.0	4.7	4.7
65°	17.6	12.9	4.7	2.3	2.3
67.5°	1.2	3.5	2.3	1.2	1.2
70°	0.0	0.0	1.2	1.2	1.2
72.5°	0.0	0.0	1.2	1.2	1.2
75°	0.0	0.0	0.0	0.0	1.2
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1059130
 CATALOG NUMBER: S123RDRP-S1165D930-X4F0-XX-UDD-BVL-B

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	12.65	13.83	13.02	14.14	14.46	0.00	0.00	0.00	0.00	0.00
	3H	12.49	13.52	12.87	13.85	14.22	0.00	0.00	0.00	0.00	0.00
	4H	12.41	13.36	12.81	13.71	14.10	0.00	0.00	0.00	0.00	0.00
	6H	12.31	13.18	12.73	13.56	13.95	0.00	0.00	0.00	0.00	0.00
	8H	12.26	13.09	12.70	13.48	13.88	0.00	0.00	0.00	0.00	0.00
	12H	12.21	13.00	12.65	13.38	13.81	0.00	0.00	0.00	0.00	0.00
4H	2H	12.41	13.36	12.82	13.72	14.10	0.00	0.00	0.00	0.00	0.00
	3H	12.25	13.01	12.66	13.42	13.83	0.00	0.00	0.00	0.00	0.00
	4H	12.14	12.82	12.58	13.24	13.69	0.00	0.00	0.00	0.00	0.00
	6H	12.04	12.63	12.51	13.08	13.55	0.00	0.00	0.00	0.00	0.00
	8H	11.98	12.52	12.45	12.97	13.45	0.00	0.00	0.00	0.00	0.00
	12H	11.92	12.40	12.41	12.88	13.36	0.00	0.00	0.00	0.00	0.00
8H	4H	11.98	12.52	12.45	12.97	13.45	0.00	0.00	0.00	0.00	0.00
	6H	11.86	12.30	12.37	12.80	13.29	0.00	0.00	0.00	0.00	0.00
	8H	11.79	12.19	12.32	12.71	13.20	0.00	0.00	0.00	0.00	0.00
	12H	11.74	12.09	12.26	12.58	13.16	0.00	0.00	0.00	0.00	0.00
12H	4H	11.92	12.40	12.41	12.88	13.36	0.00	0.00	0.00	0.00	0.00
	6H	11.79	12.19	12.32	12.71	13.20	0.00	0.00	0.00	0.00	0.00
	8H	11.74	12.09	12.26	12.58	13.16	0.00	0.00	0.00	0.00	0.00