

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058247

Luminaire Tested: S122RDR-H1005D930-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058247
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H1005D930-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

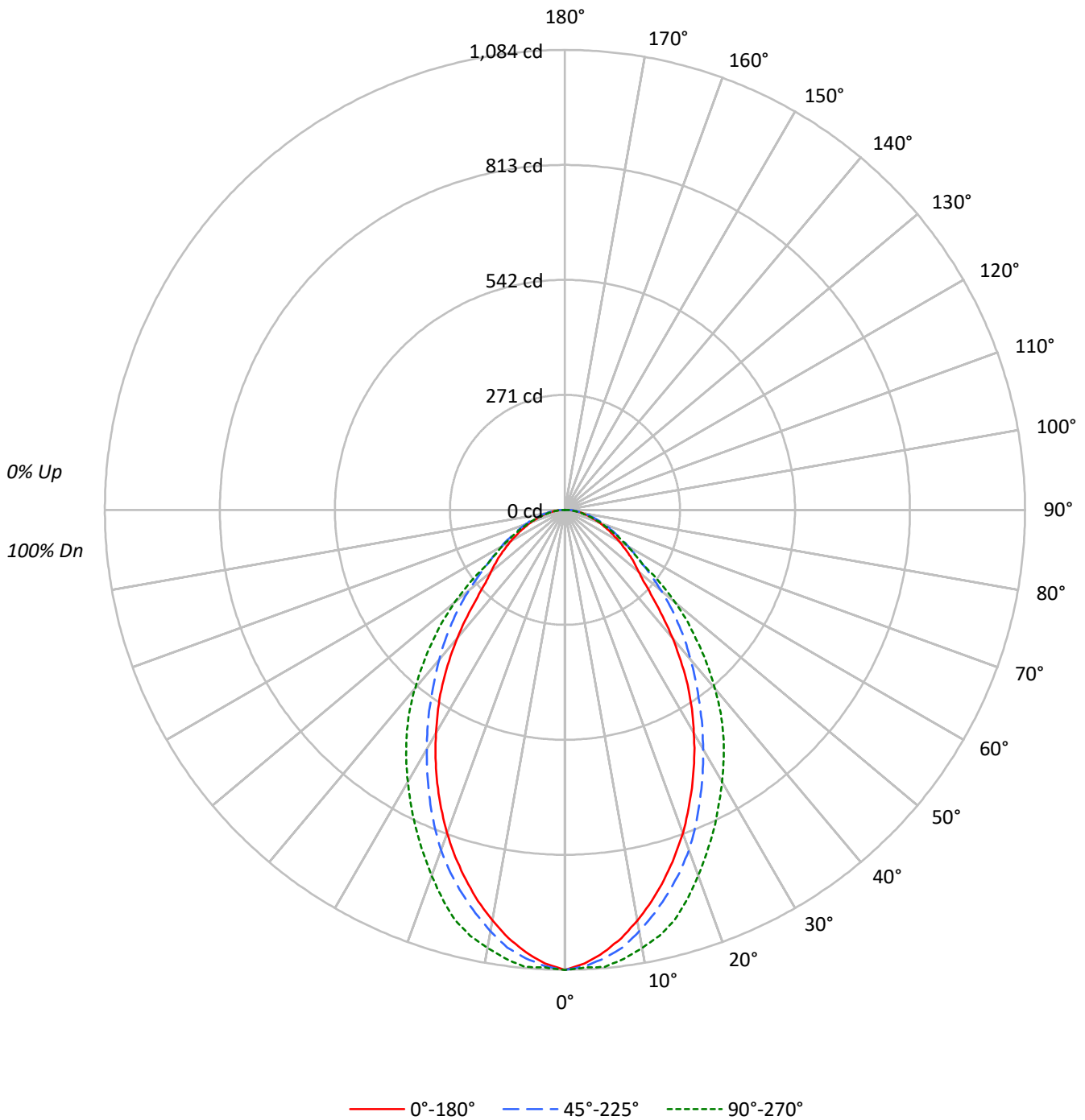
Lumens per Lamp: N/A
Luminaire Lumens: 1768.0 lumens
Efficiency: N/A
Efficacy: 48.4 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
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

TEST NUMBER: P1058247

CATALOG NUMBER: S122RDR-H1005D930-X4F0-XX-UDD-WVL-W

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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	40	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20012	20012	20012
5°	19395	19655	20023
10°	18419	18900	19642
15°	17243	17888	19113
20°	15937	16762	18021
25°	14482	15337	16905
30°	12944	13865	15778
35°	11349	12426	14658
40°	9493	11095	13229
45°	7607	9828	11563
50°	6528	8469	9709
55°	5964	7203	7164
60°	5421	6370	6241
65°	4938	5702	5449
70°	4532	5222	4845
75°	4242	4820	4242
80°	3964	4463	3719
85°	3959	4700	3218

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11563 cd/sqm



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CATALOG NUMBER: S122RDR-H1005D930-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.1	5.7
10°-20°	265.0	15.0
20°-30°	349.6	19.8
30°-40°	352.0	19.9
40°-50°	286.5	16.2
50°-60°	195.3	11.0
60°-70°	126.8	7.2
70°-80°	69.8	3.9
80°-90°	22.8	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°	714.7	40.4
0°-40°	1066.7	60.3
0°-60°	1548.6	87.6
0°-90°	1768.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1768.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1084	1084	1084	1084	1084	
5°	1047	1067	1061	1070	1081	98
15°	903	926	936	975	1000	253
25°	711	735	753	787	830	326
35°	504	529	552	599	651	313
45°	292	328	377	409	443	230
55°	185	204	224	225	223	166
65°	113	134	131	124	125	112
75°	60	74	68	61	60	63
85°	19	24	22	18	15	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1084.5	1084.5	1084.5	1084.5	1084.5
2.5°	1070.5	1088.0	1076.3	1077.5	1079.8
5°	1047.1	1067.0	1061.1	1070.5	1081.0
7.5°	1018.0	1037.8	1040.2	1054.1	1067.0
10°	983.0	1005.2	1008.7	1029.7	1048.3
12.5°	944.5	969.0	973.7	1004.0	1028.5
15°	902.6	925.9	936.4	974.9	1000.5
17.5°	858.2	880.4	896.7	931.7	960.9
20°	811.6	832.6	853.6	885.1	917.7
22.5°	761.5	784.8	804.6	836.1	873.4
25°	711.3	734.6	753.3	787.1	830.3
27.5°	660.0	683.3	702.0	738.1	784.8
30°	607.5	632.0	650.7	691.5	740.5
32.5°	556.2	580.7	601.7	644.8	696.2
35°	503.8	529.4	551.6	599.4	650.7
37.5°	447.8	476.9	504.9	552.7	602.9
40°	394.1	426.8	460.6	504.9	549.2
42.5°	340.5	376.6	418.6	455.9	496.8
45°	291.5	327.7	376.6	409.3	443.1
47.5°	253.0	283.4	335.8	362.7	393.0
50°	227.4	248.4	295.0	316.0	338.2
52.5°	206.4	223.9	256.5	270.5	282.2
55°	185.4	204.1	223.9	225.1	222.7
57.5°	164.4	185.4	195.9	187.7	192.4
60°	146.9	167.9	172.6	164.4	169.1
62.5°	128.3	151.6	151.6	143.4	145.8
65°	113.1	134.1	130.6	123.6	124.8
67.5°	98.0	118.9	113.1	106.1	106.1
70°	84.0	103.8	96.8	89.8	89.8
72.5°	71.1	87.5	82.8	74.6	73.5
75°	59.5	73.5	67.6	60.6	59.5
77.5°	47.8	59.5	54.8	49.0	46.6
80°	37.3	47.8	42.0	37.3	35.0
82.5°	28.0	36.1	31.5	26.8	24.5
85°	18.7	24.5	22.2	17.5	15.2
87.5°	9.3	16.3	14.0	11.7	9.3
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	17.13	18.57	17.49	18.88	19.19	17.38	18.81	17.74	19.13	19.44
	3H	18.66	19.94	19.04	20.27	20.64	18.73	20.02	19.11	20.35	20.71
	4H	19.22	20.42	19.62	20.77	21.15	19.21	20.42	19.62	20.77	21.15
	6H	19.64	20.76	20.06	21.12	21.52	19.56	20.67	19.98	21.04	21.44
	8H	19.80	20.85	20.22	21.24	21.65	19.67	20.73	20.10	21.12	21.52
	12H	19.91	20.92	20.34	21.30	21.73	19.74	20.75	20.17	21.13	21.56
4H	2H	17.70	18.91	18.10	19.26	19.64	17.90	19.10	18.30	19.45	19.83
	3H	19.51	20.50	19.92	20.90	21.31	19.47	20.47	19.89	20.87	21.28
	4H	20.25	21.15	20.68	21.56	22.00	20.07	20.97	20.50	21.38	21.82
	6H	20.83	21.61	21.29	22.06	22.52	20.54	21.32	21.00	21.76	22.22
	8H	21.04	21.77	21.51	22.22	22.69	20.69	21.42	21.15	21.86	22.33
	12H	21.21	21.86	21.69	22.34	22.81	20.80	21.45	21.28	21.93	22.40
8H	4H	20.51	21.24	20.98	21.69	22.16	20.36	21.09	20.82	21.53	22.00
	6H	21.27	21.87	21.77	22.36	22.84	20.95	21.55	21.45	22.04	22.52
	8H	21.59	22.13	22.11	22.64	23.13	21.17	21.71	21.69	22.22	22.71
	12H	21.87	22.35	22.39	22.84	23.41	21.35	21.83	21.87	22.32	22.89
12H	4H	20.53	21.18	21.01	21.66	22.13	20.39	21.04	20.88	21.52	21.99
	6H	21.31	21.85	21.83	22.37	22.86	21.02	21.56	21.53	22.07	22.56
	8H	21.71	22.19	22.22	22.68	23.25	21.30	21.78	21.81	22.27	22.84