

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: P1058202

Luminaire Tested: S122RDRP-H1005D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058202
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: S122RDRP-H1005D830-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, 80 CRI LEDS
Ballast/Driver: -

Summary

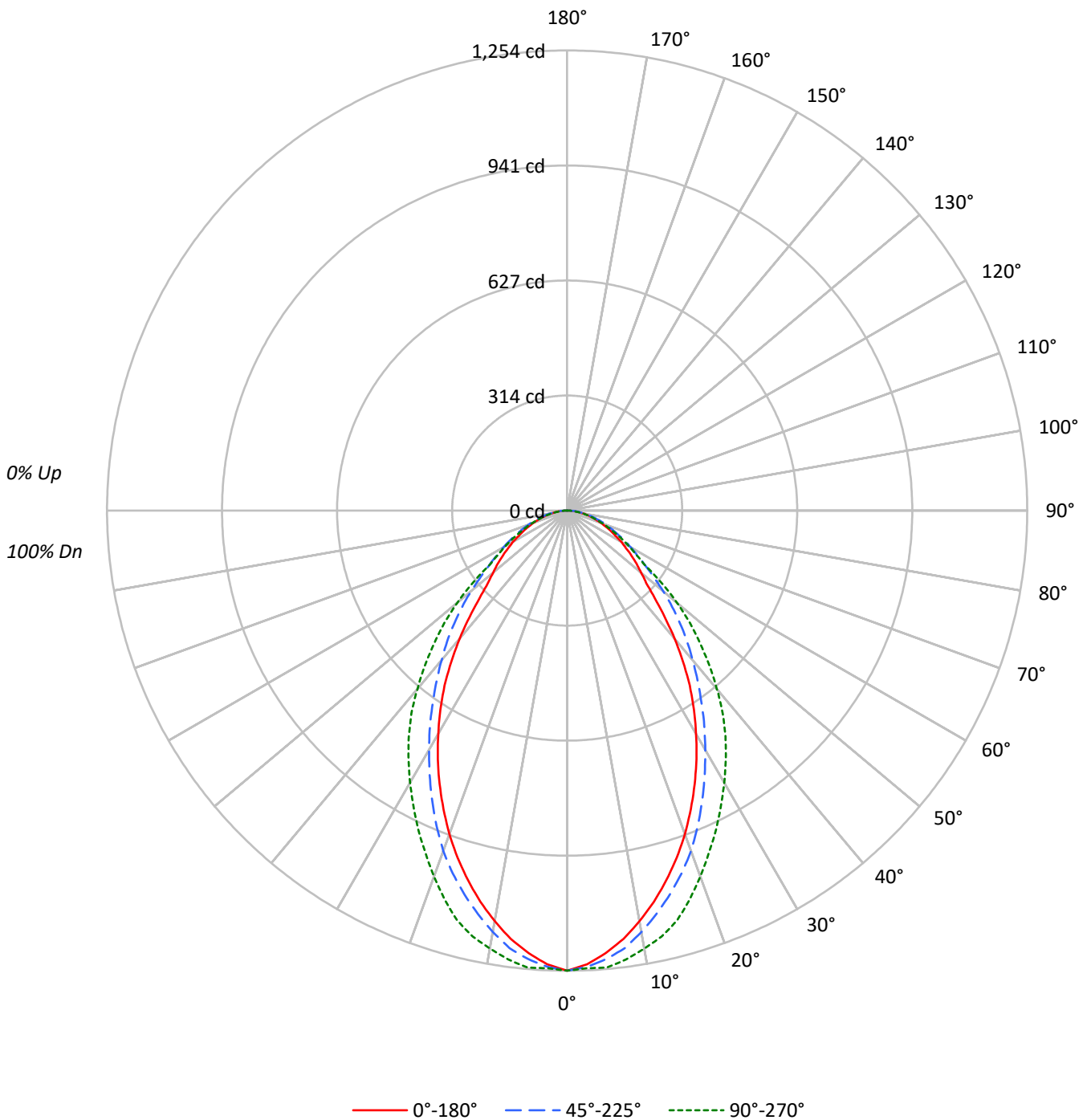
Lumens per Lamp: N/A
Luminaire Lumens: 2043.9 lumens
Efficiency: N/A
Efficacy: 56.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (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: P1058202

CATALOG NUMBER: S122RDRP-H1005D830-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1058202

CATALOG NUMBER: S122RDRP-H1005D830-X4F0-XX-UDD-WVL-W

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°	23134	23134	23134
5°	22424	22724	23148
10°	21293	21849	22708
15°	19932	20679	22097
20°	18425	19378	20833
25°	16742	17732	19542
30°	14966	16027	18239
35°	13119	14363	16944
40°	10977	12827	15293
45°	8794	11362	13369
50°	7547	9792	11222
55°	6894	8326	8284
60°	6270	7363	7215
65°	5711	6593	6296
70°	5239	6037	5600
75°	4905	5575	4905
80°	4580	5154	4293
85°	4573	5420	3705

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13369 cd/sqm



TEST NUMBER: P1058202

CATALOG NUMBER: S122RDRP-H1005D830-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.7	5.7
10°-20°	306.4	15.0
20°-30°	404.1	19.8
30°-40°	407.0	19.9
40°-50°	331.2	16.2
50°-60°	225.8	11.0
60°-70°	146.6	7.2
70°-80°	80.7	3.9
80°-90°	26.3	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°	826.3	40.4
0°-40°	1233.2	60.3
0°-60°	1790.3	87.6
0°-90°	2043.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2043.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1254	1254	1254	1254	1254	
5°	1211	1234	1227	1238	1250	113
15°	1043	1070	1082	1127	1157	292
25°	822	849	871	910	960	377
35°	582	612	638	693	752	362
45°	337	379	435	473	512	266
55°	214	236	259	260	258	192
65°	131	155	151	143	144	130
75°	69	85	78	70	69	73
85°	22	28	26	20	18	23
90°	0	0	0	0	0	



TEST NUMBER: P1058202

CATALOG NUMBER: S122RDRP-H1005D830-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1253.7	1253.7	1253.7	1253.7	1253.7
2.5°	1237.5	1257.8	1244.3	1245.6	1248.3
5°	1210.6	1233.5	1226.8	1237.5	1249.7
7.5°	1176.9	1199.8	1202.5	1218.7	1233.5
10°	1136.4	1162.0	1166.1	1190.4	1211.9
12.5°	1091.9	1120.3	1125.6	1160.7	1189.0
15°	1043.4	1070.4	1082.5	1127.0	1156.7
17.5°	992.2	1017.8	1036.7	1077.1	1110.8
20°	938.3	962.5	986.8	1023.2	1060.9
22.5°	880.3	907.3	930.2	966.6	1009.7
25°	822.3	849.3	870.9	910.0	959.8
27.5°	763.0	790.0	811.5	853.3	907.3
30°	702.4	730.7	752.2	799.4	856.0
32.5°	643.0	671.3	695.6	745.5	804.8
35°	582.4	612.0	637.6	692.9	752.2
37.5°	517.7	551.4	583.7	639.0	697.0
40°	455.7	493.4	532.5	583.7	634.9
42.5°	393.6	435.4	484.0	527.1	574.3
45°	337.0	378.8	435.4	473.2	512.3
47.5°	292.5	327.6	388.2	419.3	454.3
50°	262.9	287.1	341.1	365.3	390.9
52.5°	238.6	258.8	296.6	312.8	326.2
55°	214.3	235.9	258.8	260.2	257.5
57.5°	190.1	214.3	226.5	217.0	222.4
60°	169.9	194.1	199.5	190.1	195.5
62.5°	148.3	175.3	175.3	165.8	168.5
65°	130.8	155.0	151.0	142.9	144.2
67.5°	113.2	137.5	130.8	122.7	122.7
70°	97.1	120.0	111.9	103.8	103.8
72.5°	82.2	101.1	95.7	86.3	84.9
75°	68.8	84.9	78.2	70.1	68.8
77.5°	55.3	68.8	63.4	56.6	53.9
80°	43.1	55.3	48.5	43.1	40.4
82.5°	32.4	41.8	36.4	31.0	28.3
85°	21.6	28.3	25.6	20.2	17.5
87.5°	10.8	18.9	16.2	13.5	10.8
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058202

CATALOG NUMBER: S122RDRP-H1005D830-X4F0-XX-UDD-WVL-W

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	17.63	19.07	18.00	19.38	19.70	17.88	19.32	18.24	19.63	19.95
	3H	19.16	20.45	19.54	20.78	21.14	19.24	20.52	19.62	20.85	21.22
	4H	19.72	20.93	20.12	21.28	21.66	19.72	20.92	20.12	21.27	21.65
	6H	20.15	21.26	20.56	21.63	22.02	20.07	21.18	20.48	21.55	21.94
	8H	20.30	21.36	20.73	21.75	22.15	20.18	21.23	20.60	21.62	22.02
	12H	20.41	21.42	20.84	21.81	22.24	20.24	21.26	20.67	21.64	22.07
4H	2H	18.20	19.41	18.60	19.76	20.14	18.40	19.61	18.80	19.96	20.34
	3H	20.01	21.01	20.42	21.41	21.81	19.98	20.98	20.39	21.38	21.78
	4H	20.75	21.65	21.18	22.06	22.51	20.57	21.47	21.01	21.89	22.33
	6H	21.34	22.12	21.80	22.56	23.02	21.04	21.82	21.50	22.26	22.73
	8H	21.55	22.28	22.01	22.72	23.19	21.19	21.92	21.66	22.36	22.83
	12H	21.71	22.36	22.20	22.84	23.31	21.30	21.95	21.78	22.43	22.90
8H	4H	21.02	21.74	21.48	22.19	22.66	20.86	21.59	21.33	22.04	22.51
	6H	21.77	22.37	22.27	22.87	23.34	21.45	22.05	21.95	22.55	23.03
	8H	22.10	22.64	22.61	23.15	23.64	21.67	22.21	22.19	22.73	23.22
	12H	22.38	22.86	22.89	23.35	23.92	21.86	22.33	22.37	22.83	23.39
12H	4H	21.03	21.68	21.51	22.16	22.63	20.90	21.55	21.38	22.03	22.50
	6H	21.82	22.36	22.33	22.87	23.36	21.52	22.06	22.04	22.57	23.06
	8H	22.21	22.69	22.73	23.18	23.75	21.81	22.28	22.32	22.78	23.34