

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: P1058151

Luminaire Tested: S122RDRP-S865D927-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058151
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S865D927-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

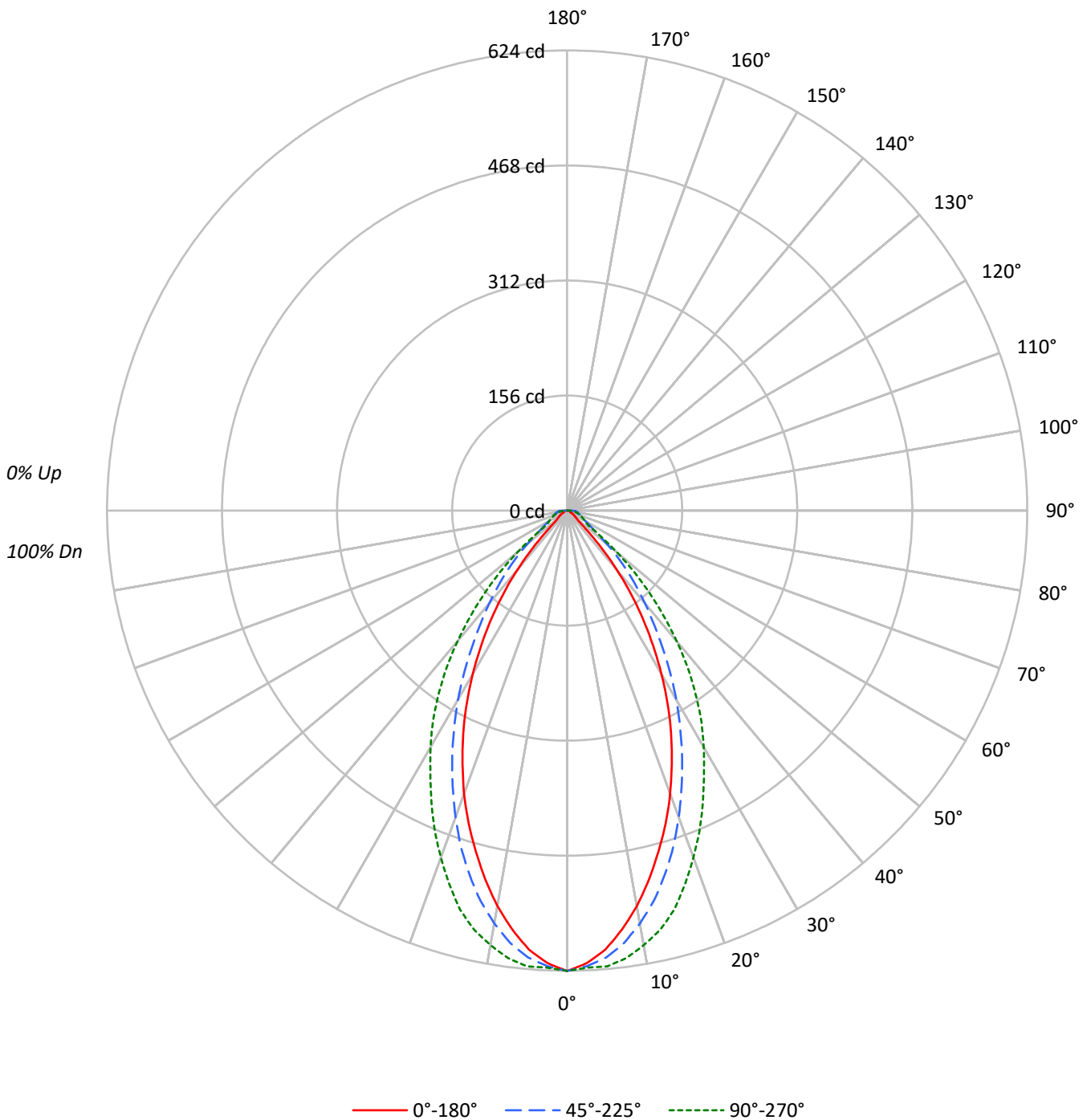
Lumens per Lamp: N/A
Luminaire Lumens: 679.6 lumens
Efficiency: N/A
Efficacy: 19.4 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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: P1058151

CATALOG NUMBER: S122RDRP-S865D927-X4F0-XX-UDD-BVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1058151

CATALOG NUMBER: S122RDRP-S865D927-X4F0-XX-UDD-BVL-W

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90						90														
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81						81														
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	73						73														
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67						67														
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61						61														
6	82	71	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56						56														
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52						52														
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48						48														
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45						45														
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42						42														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11520	11520	11520
5°	11064	11268	11490
10°	10200	10650	11210
15°	9141	9769	10706
20°	8022	8689	9826
25°	6792	7505	8867
30°	5448	6301	7896
35°	4028	5039	6841
40°	2527	3946	5557
45°	992	2972	4118
50°	488	2007	2523
55°	386	1319	1126
60°	295	1070	1033
65°	218	1004	1004
70°	270	1025	1025
75°	285	1141	1069
80°	425	1488	1169
85°	847	2541	1694

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 4653 cd/sqm



TEST NUMBER: P1058151

CATALOG NUMBER: S122RDRP-S865D927-X4F0-XX-UDD-BVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.0	8.4
10°-20°	144.2	21.2
20°-30°	172.5	25.4
30°-40°	145.1	21.4
40°-50°	82.6	12.2
50°-60°	32.6	4.8
60°-70°	20.5	3.0
70°-80°	15.3	2.2
80°-90°	9.7	1.4
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°	373.6	55.0
0°-40°	518.8	76.3
0°-60°	634.0	93.3
0°-90°	679.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	679.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	624	624	624	624	624	
5°	597	610	608	615	620	55
15°	478	495	511	541	560	134
25°	334	349	369	406	436	152
35°	179	195	224	272	304	111
45°	38	67	114	143	158	36
55°	12	26	41	42	35	11
65°	5	23	23	22	23	6
75°	4	16	16	15	15	4
85°	4	11	12	11	8	4
90°	0	0	0	0	0	



TEST NUMBER: P1058151

CATALOG NUMBER: S122RDRP-S865D927-X4F0-XX-UDD-BVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	624.3	624.3	624.3	624.3	624.3
2.5°	614.3	625.3	618.3	619.3	620.3
5°	597.3	610.3	608.3	615.3	620.3
7.5°	572.4	586.3	591.3	603.3	612.3
10°	544.4	560.4	568.4	587.3	598.3
12.5°	512.4	530.4	542.4	566.4	582.3
15°	478.5	495.4	511.4	541.4	560.4
17.5°	444.5	461.5	478.5	511.4	531.4
20°	408.5	424.5	442.5	477.5	500.4
22.5°	370.6	387.6	405.5	441.5	469.5
25°	333.6	348.6	368.6	406.5	435.5
27.5°	294.7	309.7	331.6	370.6	401.5
30°	255.7	270.7	295.7	335.6	370.6
32.5°	216.8	232.7	259.7	303.7	338.6
35°	178.8	194.8	223.7	271.7	303.7
37.5°	141.8	159.8	191.8	238.7	268.7
40°	104.9	125.9	163.8	205.8	230.7
42.5°	69.9	95.9	137.8	172.8	193.8
45°	38.0	66.9	113.9	142.8	157.8
47.5°	21.0	43.0	90.9	113.9	122.9
50°	17.0	30.0	69.9	86.9	87.9
52.5°	14.0	27.0	51.9	61.9	56.9
55°	12.0	26.0	41.0	42.0	35.0
57.5°	10.0	25.0	34.0	30.0	30.0
60°	8.0	25.0	29.0	27.0	28.0
62.5°	6.0	25.0	26.0	24.0	25.0
65°	5.0	23.0	23.0	22.0	23.0
67.5°	5.0	21.0	21.0	20.0	21.0
70°	5.0	20.0	19.0	19.0	19.0
72.5°	4.0	18.0	18.0	17.0	17.0
75°	4.0	16.0	16.0	15.0	15.0
77.5°	4.0	15.0	15.0	14.0	13.0
80°	4.0	13.0	14.0	13.0	11.0
82.5°	4.0	12.0	13.0	12.0	9.0
85°	4.0	11.0	12.0	11.0	8.0
87.5°	3.0	11.0	11.0	9.0	6.0
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058151
 CATALOG NUMBER: S122RDRP-S865D927-X4F0-XX-UDD-BVL-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	6.19	7.41	6.56	7.72	8.04	8.21	9.44	8.58	9.75	10.06
	3H	7.73	8.82	8.11	9.15	9.52	10.19	11.27	10.57	11.60	11.97
	4H	8.29	9.30	8.69	9.65	10.04	11.10	12.11	11.51	12.47	12.85
	6H	8.85	9.78	9.26	10.15	10.54	11.99	12.92	12.40	13.29	13.68
	8H	9.14	10.02	9.57	10.41	10.82	12.39	13.27	12.82	13.66	14.07
	12H	9.50	10.34	9.93	10.73	11.16	12.83	13.67	13.26	14.06	14.49
4H	2H	7.38	8.39	7.78	8.74	9.12	8.83	9.85	9.24	10.20	10.58
	3H	9.58	10.41	9.99	10.82	11.22	11.08	11.91	11.49	12.32	12.72
	4H	10.63	11.38	11.07	11.80	12.24	12.15	12.90	12.59	13.32	13.76
	6H	11.53	12.17	11.99	12.62	13.09	13.26	13.91	13.73	14.36	14.82
	8H	11.91	12.52	12.38	12.96	13.44	13.78	14.39	14.26	14.84	15.31
	12H	12.33	12.87	12.82	13.35	13.83	14.36	14.90	14.85	15.38	15.85
8H	4H	11.43	12.04	11.90	12.49	12.96	12.64	13.25	13.11	13.70	14.17
	6H	12.81	13.31	13.32	13.81	14.29	14.04	14.54	14.54	15.03	15.52
	8H	13.53	13.98	14.06	14.50	14.99	14.78	15.23	15.30	15.74	16.24
	12H	14.28	14.68	14.80	15.17	15.75	15.61	16.01	16.13	16.50	17.07
12H	4H	11.59	12.13	12.08	12.61	13.09	12.74	13.28	13.23	13.76	14.24
	6H	13.14	13.59	13.67	14.11	14.60	14.26	14.70	14.78	15.22	15.71
	8H	14.06	14.45	14.58	14.95	15.52	15.14	15.54	15.66	16.03	16.61