

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: P1058157

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058157
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-S865D927-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

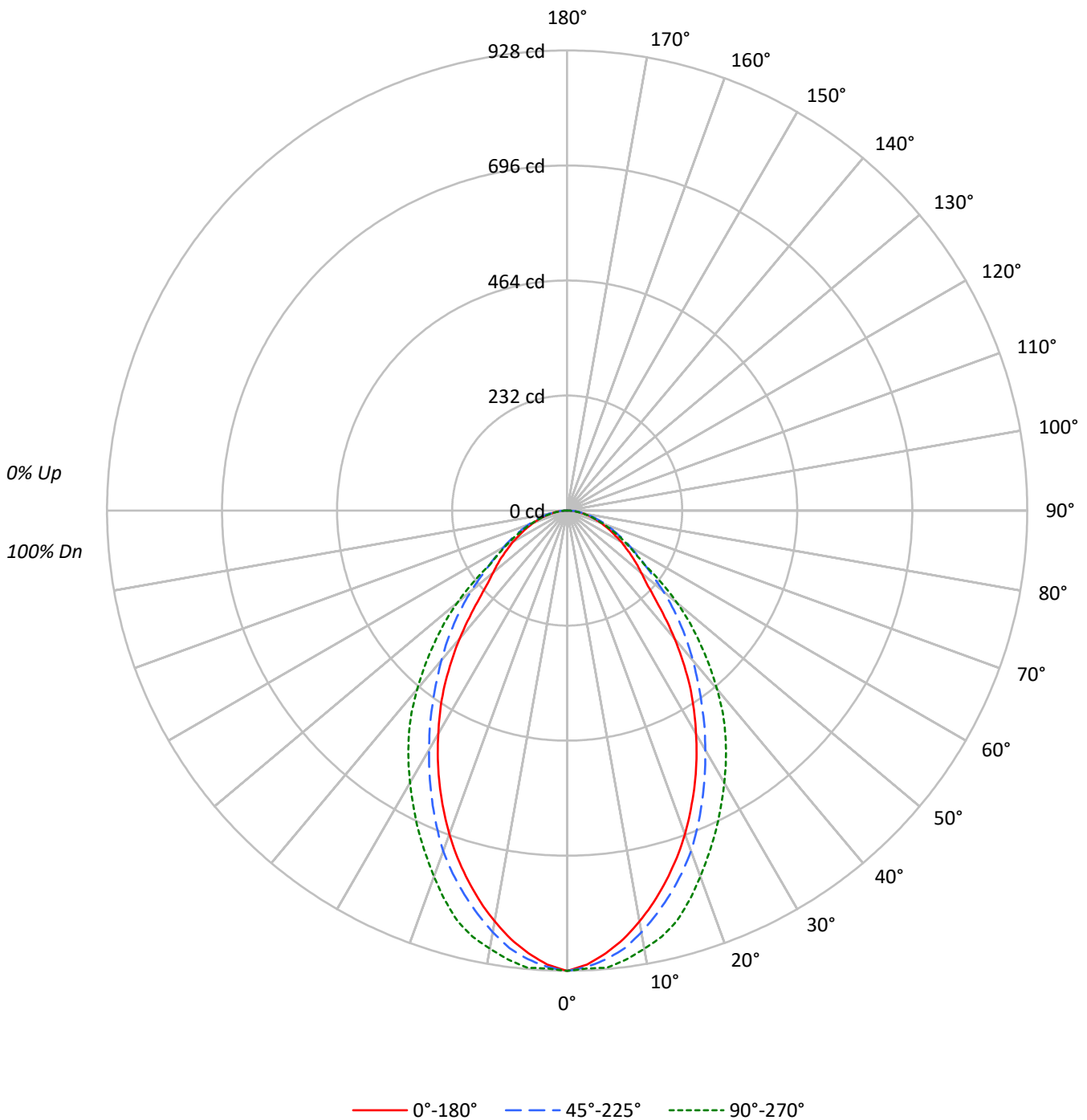
Lumens per Lamp: N/A
Luminaire Lumens: 1513.2 lumens
Efficiency: N/A
Efficacy: 43.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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: P1058157

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

Luminous Intensity Polar Plot





TEST NUMBER: P1058157

CATALOG NUMBER: S122RDRP-S865D927-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°	17128	17128	17128
5°	16600	16823	17137
10°	15764	16176	16811
15°	14757	15309	16358
20°	13640	14347	15425
25°	12395	13126	14468
30°	11080	11866	13504
35°	9711	10635	12545
40°	8125	9495	11324
45°	6511	8413	9898
50°	5586	7249	8308
55°	5106	6164	6132
60°	4643	5451	5340
65°	4227	4881	4663
70°	3879	4467	4143
75°	3629	4128	3629
80°	3390	3815	3177
85°	3387	4023	2752

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9898 cd/sqm



TEST NUMBER: P1058157

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.7	5.7
10°-20°	226.9	15.0
20°-30°	299.2	19.8
30°-40°	301.3	19.9
40°-50°	245.2	16.2
50°-60°	167.2	11.0
60°-70°	108.5	7.2
70°-80°	59.8	3.9
80°-90°	19.5	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°	611.7	40.4
0°-40°	913.0	60.3
0°-60°	1325.4	87.6
0°-90°	1513.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1513.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	928	928	928	928	928	
5°	896	913	908	916	925	84
15°	772	792	801	834	856	216
25°	609	629	645	674	711	279
35°	431	453	472	513	557	268
45°	250	280	322	350	379	197
55°	159	175	192	193	191	142
65°	97	115	112	106	107	96
75°	51	63	58	52	51	54
85°	16	21	19	15	13	17
90°	0	0	0	0	0	



TEST NUMBER: P1058157

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	928.2	928.2	928.2	928.2	928.2
2.5°	916.2	931.2	921.2	922.2	924.2
5°	896.2	913.2	908.2	916.2	925.2
7.5°	871.3	888.2	890.2	902.2	913.2
10°	841.3	860.3	863.3	881.3	897.2
12.5°	808.4	829.4	833.4	859.3	880.3
15°	772.5	792.4	801.4	834.4	856.3
17.5°	734.6	753.5	767.5	797.4	822.4
20°	694.6	712.6	730.6	757.5	785.5
22.5°	651.7	671.7	688.6	715.6	747.5
25°	608.8	628.8	644.7	673.7	710.6
27.5°	564.9	584.8	600.8	631.8	671.7
30°	520.0	540.9	556.9	591.8	633.8
32.5°	476.1	497.0	515.0	551.9	595.8
35°	431.1	453.1	472.1	513.0	556.9
37.5°	383.2	408.2	432.1	473.1	516.0
40°	337.3	365.3	394.2	432.1	470.1
42.5°	291.4	322.4	358.3	390.2	425.2
45°	249.5	280.4	322.4	350.3	379.3
47.5°	216.6	242.5	287.4	310.4	336.3
50°	194.6	212.6	252.5	270.5	289.4
52.5°	176.7	191.6	219.6	231.5	241.5
55°	158.7	174.7	191.6	192.6	190.6
57.5°	140.7	158.7	167.7	160.7	164.7
60°	125.8	143.7	147.7	140.7	144.7
62.5°	109.8	129.7	129.7	122.8	124.8
65°	96.8	114.8	111.8	105.8	106.8
67.5°	83.8	101.8	96.8	90.8	90.8
70°	71.9	88.8	82.8	76.8	76.8
72.5°	60.9	74.9	70.9	63.9	62.9
75°	50.9	62.9	57.9	51.9	50.9
77.5°	40.9	50.9	46.9	41.9	39.9
80°	31.9	40.9	35.9	31.9	29.9
82.5°	24.0	30.9	26.9	23.0	21.0
85°	16.0	21.0	19.0	15.0	13.0
87.5°	8.0	14.0	12.0	10.0	8.0
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1058157
 CATALOG NUMBER: S122RDRP-S865D927-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	16.59	18.03	16.95	18.34	18.65	16.84	18.27	17.20	18.59	18.90
	3H	18.12	19.40	18.50	19.73	20.10	18.19	19.48	18.57	19.81	20.17
	4H	18.68	19.88	19.08	20.23	20.61	18.67	19.88	19.08	20.23	20.61
	6H	19.10	20.21	19.52	20.58	20.97	19.02	20.13	19.44	20.50	20.89
	8H	19.26	20.31	19.68	20.70	21.10	19.13	20.19	19.56	20.58	20.98
	12H	19.37	20.38	19.80	20.76	21.19	19.20	20.21	19.63	20.59	21.02
4H	2H	17.16	18.37	17.56	18.72	19.10	17.36	18.56	17.76	18.91	19.29
	3H	18.96	19.96	19.38	20.36	20.77	18.93	19.93	19.35	20.33	20.74
	4H	19.71	20.60	20.14	21.02	21.46	19.53	20.42	19.96	20.84	21.28
	6H	20.29	21.07	20.75	21.52	21.98	20.00	20.78	20.45	21.22	21.68
	8H	20.50	21.23	20.97	21.68	22.15	20.15	20.87	20.61	21.32	21.79
	12H	20.67	21.32	21.15	21.80	22.27	20.26	20.90	20.74	21.38	21.86
8H	4H	19.97	20.70	20.44	21.15	21.61	19.82	20.55	20.28	20.99	21.46
	6H	20.73	21.33	21.23	21.82	22.30	20.41	21.01	20.91	21.50	21.98
	8H	21.05	21.59	21.57	22.10	22.59	20.63	21.17	21.15	21.68	22.17
	12H	21.33	21.81	21.85	22.30	22.87	20.81	21.29	21.33	21.78	22.35
12H	4H	19.99	20.64	20.47	21.12	21.59	19.85	20.50	20.34	20.98	21.45
	6H	20.77	21.31	21.29	21.82	22.31	20.48	21.02	20.99	21.53	22.02
	8H	21.17	21.65	21.68	22.14	22.71	20.76	21.24	21.27	21.73	22.30