

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: P1058157

Luminaire Tested: S122RDR-S865D927-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S122RDR-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

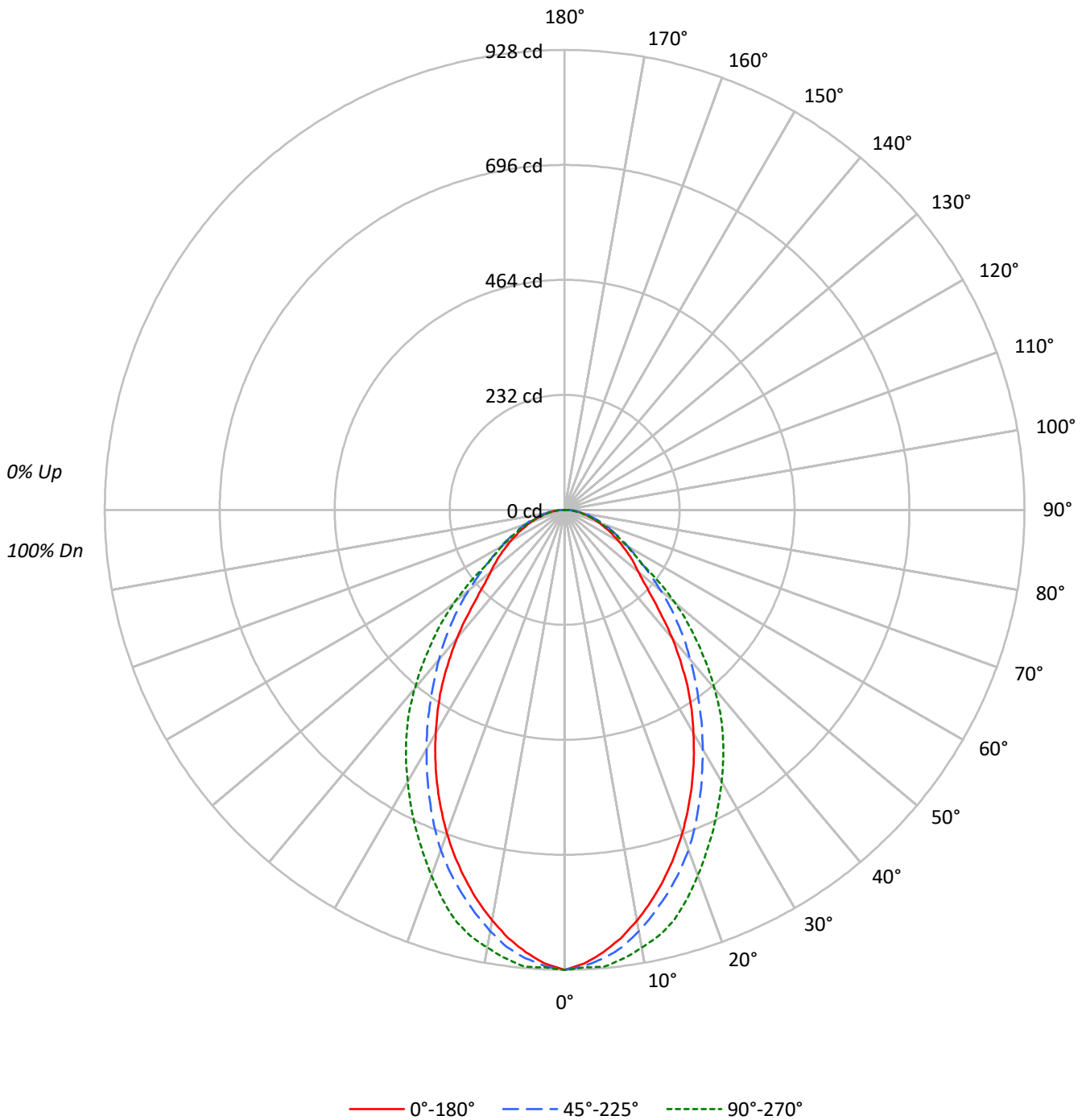
Lumens per Lamp: N/A
Luminaire Lumens: 1513.2 lumens
Efficiency: N/A
Efficacy: 43.2 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: S122RDR-S865D927-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1058157

CATALOG NUMBER: S122RDR-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: S122RDR-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: S122RDR-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

(END OF REPORT)