

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: P1058175

Luminaire Tested: S122RDR-S865D935-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058175
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-S865D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

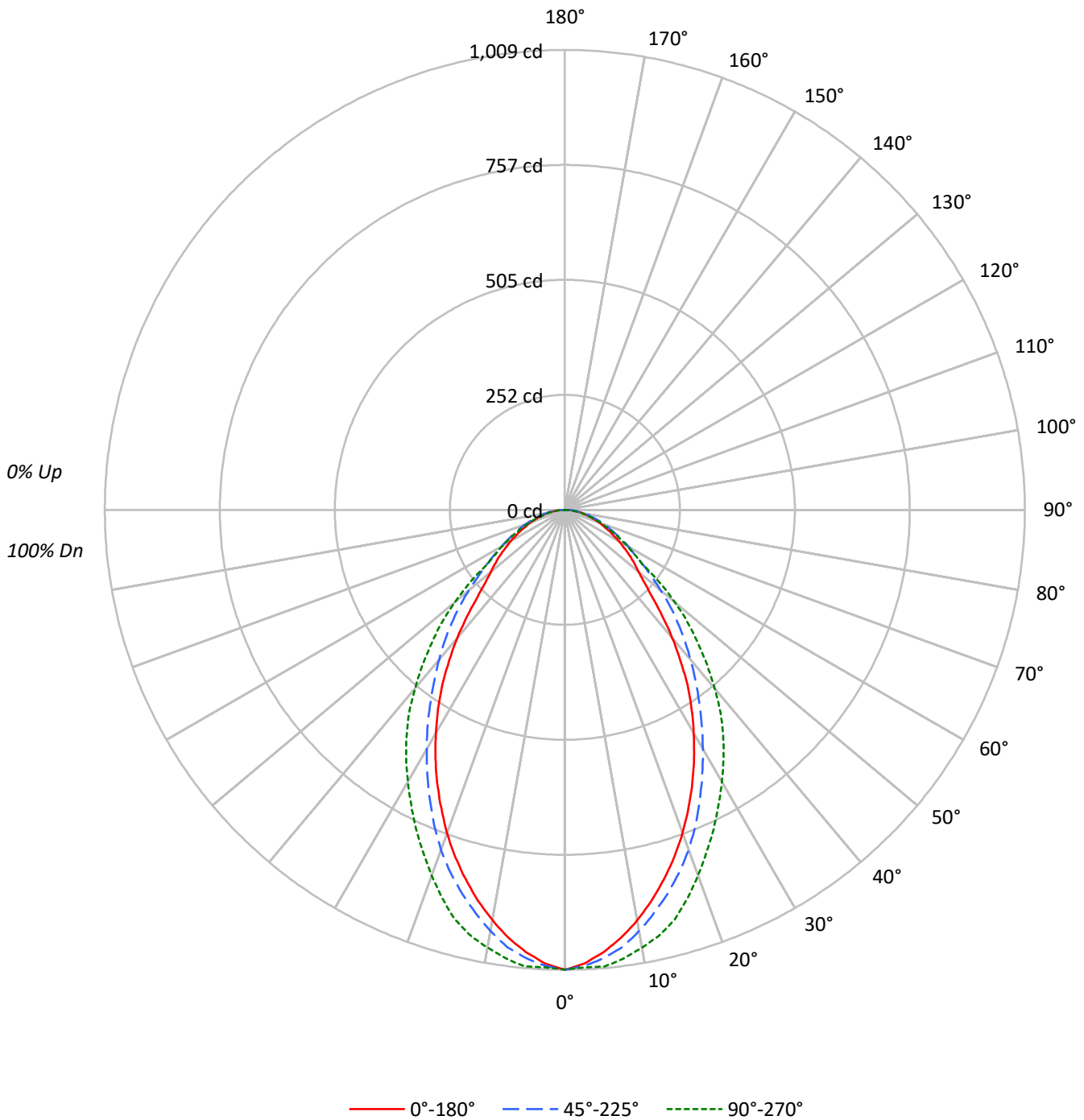
Lumens per Lamp: N/A
Luminaire Lumens: 1644.6 lumens
Efficiency: N/A
Efficacy: 47.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1058175

CATALOG NUMBER: S122RDR-S865D935-X4F0-XX-UDD-WVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1058175

CATALOG NUMBER: S122RDR-S865D935-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	100	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°	18615	18615	18615
5°	18043	18284	18625
10°	17133	17581	18272
15°	16039	16639	17780
20°	14826	15592	16764
25°	13472	14266	15724
30°	12041	12897	14676
35°	10556	11558	13635
40°	8831	10322	12307
45°	7077	9144	10757
50°	6072	7877	9031
55°	5549	6701	6666
60°	5045	5923	5805
65°	4593	5305	5069
70°	4214	4856	4505
75°	3943	4484	3943
80°	3687	4155	3454
85°	3684	4361	2985

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10757 cd/sqm



TEST NUMBER: P1058175

CATALOG NUMBER: S122RDR-S865D935-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.1	5.7
10°-20°	246.6	15.0
20°-30°	325.2	19.8
30°-40°	327.5	19.9
40°-50°	266.5	16.2
50°-60°	181.7	11.0
60°-70°	117.9	7.2
70°-80°	64.9	3.9
80°-90°	21.2	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°	664.9	40.4
0°-40°	992.3	60.3
0°-60°	1440.5	87.6
0°-90°	1644.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1644.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1009	1009	1009	1009	1009	
5°	974	992	987	996	1006	91
15°	840	861	871	907	931	235
25°	662	683	701	732	772	303
35°	469	492	513	558	605	291
45°	271	305	350	381	412	214
55°	172	190	208	209	207	154
65°	105	125	122	115	116	105
75°	55	68	63	56	55	59
85°	17	23	21	16	14	19
90°	0	0	0	0	0	



TEST NUMBER: P1058175

CATALOG NUMBER: S122RDR-S865D935-X4F0-XX-UDD-WVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1008.8	1008.8	1008.8	1008.8	1008.8
2.5°	995.8	1012.1	1001.2	1002.3	1004.5
5°	974.1	992.5	987.1	995.8	1005.5
7.5°	947.0	965.4	967.6	980.6	992.5
10°	914.4	935.0	938.3	957.8	975.2
12.5°	878.6	901.4	905.8	934.0	956.7
15°	839.6	861.3	871.0	906.8	930.7
17.5°	798.4	819.0	834.2	866.7	893.8
20°	755.0	774.5	794.0	823.3	853.7
22.5°	708.3	730.0	748.5	777.8	812.5
25°	661.7	683.4	700.7	732.2	772.3
27.5°	614.0	635.7	653.0	686.6	730.0
30°	565.1	587.9	605.3	643.2	688.8
32.5°	517.4	540.2	559.7	599.9	647.6
35°	468.6	492.5	513.1	557.6	605.3
37.5°	416.5	443.7	469.7	514.2	560.8
40°	366.6	397.0	428.5	469.7	510.9
42.5°	316.7	350.4	389.4	424.1	462.1
45°	271.2	304.8	350.4	380.7	412.2
47.5°	235.4	263.6	312.4	337.4	365.6
50°	211.5	231.0	274.4	294.0	314.6
52.5°	192.0	208.3	238.6	251.7	262.5
55°	172.5	189.8	208.3	209.4	207.2
57.5°	152.9	172.5	182.2	174.6	179.0
60°	136.7	156.2	160.5	152.9	157.3
62.5°	119.3	141.0	141.0	133.4	135.6
65°	105.2	124.7	121.5	115.0	116.1
67.5°	91.1	110.6	105.2	98.7	98.7
70°	78.1	96.5	90.0	83.5	83.5
72.5°	66.2	81.4	77.0	69.4	68.3
75°	55.3	68.3	62.9	56.4	55.3
77.5°	44.5	55.3	51.0	45.6	43.4
80°	34.7	44.5	39.1	34.7	32.5
82.5°	26.0	33.6	29.3	24.9	22.8
85°	17.4	22.8	20.6	16.3	14.1
87.5°	8.7	15.2	13.0	10.8	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)