

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: P1057882

Luminaire Tested: S122RDR-S290D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057882
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D835-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

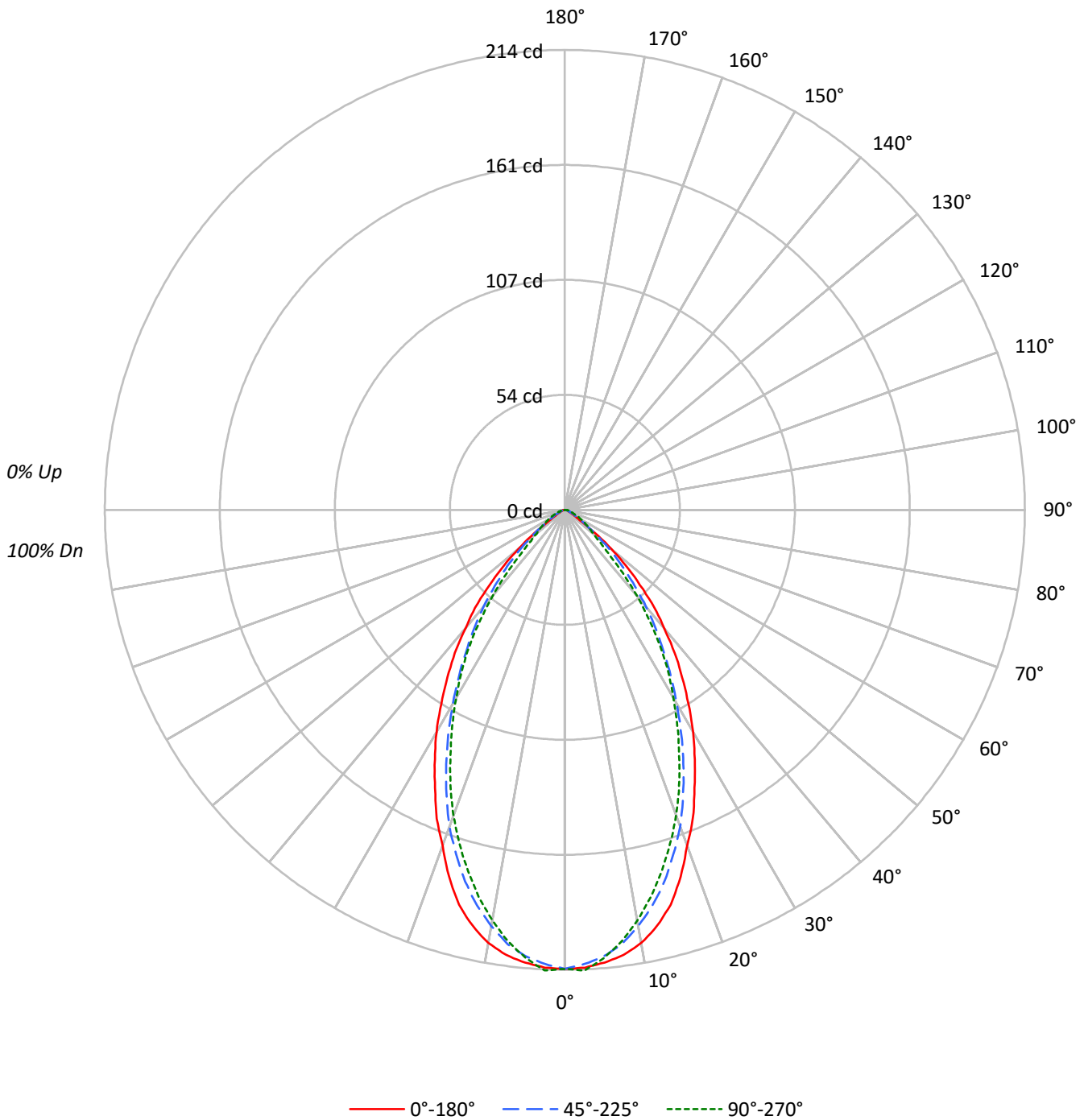
Lumens per Lamp: N/A
Luminaire Lumens: 229.7 lumens
Efficiency: N/A
Efficacy: 18.4 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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: P1057882

CATALOG NUMBER: S122RDR-S290D835-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1057882

CATALOG NUMBER: S122RDR-S290D835-X4F0-XX-UDD-SVL-B

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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3941	3941	3941
5°	3918	3862	3877
10°	3835	3684	3635
15°	3633	3421	3324
20°	3266	3081	2973
25°	2907	2657	2561
30°	2544	2216	2152
35°	2142	1795	1739
40°	1725	1416	1253
45°	1292	1023	746
50°	807	660	491
55°	273	357	399
60°	159	221	314
65°	114	148	240
70°	92	113	183
75°	64	93	150
80°	43	96	138
85°	0	0	85

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1292 cd/sqm



TEST NUMBER: P1057882

CATALOG NUMBER: S122RDR-S290D835-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.7	8.6
10°-20°	50.4	21.9
20°-30°	60.7	26.4
30°-40°	51.8	22.6
40°-50°	30.4	13.2
50°-60°	11.0	4.8
60°-70°	3.9	1.7
70°-80°	1.6	0.7
80°-90°	0.3	0.1
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°	130.8	56.9
0°-40°	182.6	79.5
0°-60°	224.0	97.5
0°-90°	229.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	229.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	214	214	214	214	214	
5°	212	212	208	209	209	20
15°	190	187	179	176	174	53
25°	143	137	130	128	126	66
35°	95	88	80	79	77	59
45°	50	44	39	33	29	38
55°	8	12	11	12	12	11
65°	3	3	3	5	6	3
75°	1	1	1	2	2	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P1057882

CATALOG NUMBER: S122RDR-S290D835-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	213.6	213.6	213.6	213.6	213.6
2.5°	213.2	213.6	211.5	213.6	214.5
5°	211.5	211.9	208.5	209.3	209.3
7.5°	208.9	208.5	203.8	202.9	202.5
10°	204.7	203.4	196.6	195.3	194.0
12.5°	198.3	195.7	188.5	186.3	184.6
15°	190.2	187.2	179.1	175.7	174.0
17.5°	179.1	175.7	168.0	164.6	162.9
20°	166.3	162.9	156.9	153.1	151.4
22.5°	155.6	150.1	143.7	141.1	139.0
25°	142.8	136.9	130.5	128.3	125.8
27.5°	130.9	123.6	117.2	115.5	113.4
30°	119.4	111.7	104.0	104.0	101.0
32.5°	107.0	99.8	91.7	91.2	89.5
35°	95.1	87.8	79.7	78.9	77.2
37.5°	84.0	76.7	69.1	66.5	64.4
40°	71.6	65.2	58.8	54.6	52.0
42.5°	61.8	54.6	48.2	43.1	39.7
45°	49.5	44.3	39.2	32.8	28.6
47.5°	38.4	35.0	30.7	23.4	21.3
50°	28.1	26.4	23.0	17.5	17.1
52.5°	17.9	18.8	16.6	13.6	14.9
55°	8.5	11.9	11.1	11.5	12.4
57.5°	5.5	6.0	8.1	9.4	10.2
60°	4.3	4.3	6.0	7.7	8.5
62.5°	3.4	3.4	4.7	6.4	6.8
65°	2.6	3.0	3.4	4.7	5.5
67.5°	2.1	2.1	2.6	3.8	4.3
70°	1.7	1.7	2.1	3.0	3.4
72.5°	1.3	1.3	1.7	2.6	2.6
75°	0.9	1.3	1.3	1.7	2.1
77.5°	0.9	0.9	0.9	1.3	1.7
80°	0.4	0.4	0.9	0.9	1.3
82.5°	0.4	0.4	0.4	0.4	0.9
85°	0.0	0.0	0.0	0.4	0.4
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)