

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: P1057948

Luminaire Tested: S122RDR-S290D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057948
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D950-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

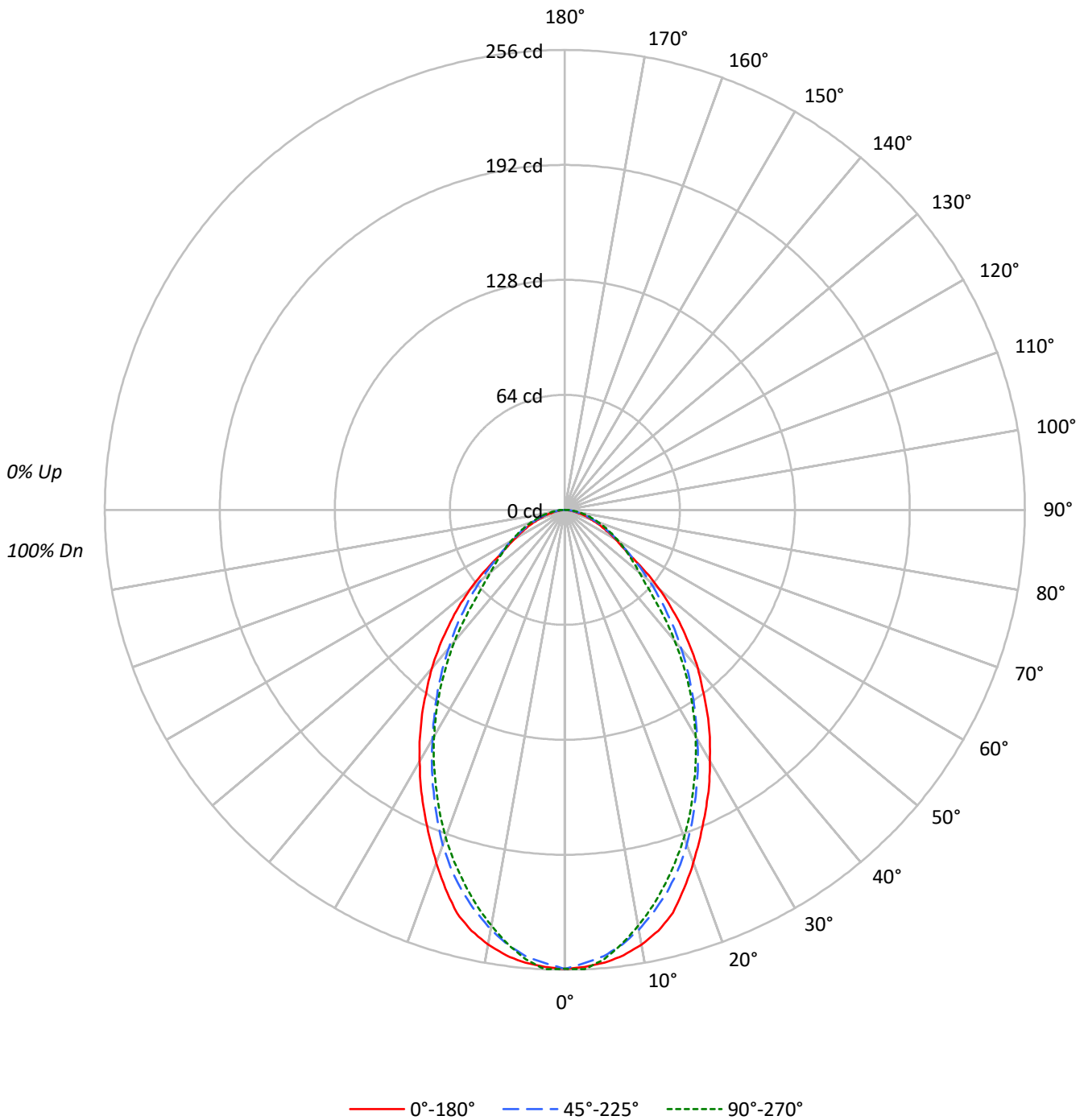
Lumens per Lamp: N/A
Luminaire Lumens: 388.0 lumens
Efficiency: N/A
Efficacy: 31.0 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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: P1057948

CATALOG NUMBER: S122RDR-S290D950-X4F0-XX-UDD-WVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1057948

CATALOG NUMBER: S122RDR-S290D950-X4F0-XX-UDD-WVL-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	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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4715	4715	4715
5°	4686	4620	4649
10°	4604	4444	4405
15°	4438	4205	4119
20°	4106	3898	3810
25°	3769	3520	3453
30°	3441	3139	3102
35°	3115	2777	2712
40°	2773	2421	2293
45°	2388	2080	1837
50°	1972	1751	1542
55°	1425	1454	1387
60°	1185	1247	1262
65°	1013	1083	1153
70°	836	966	1052
75°	699	813	955
80°	521	648	861
85°	169	339	783

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2388 cd/sqm



TEST NUMBER: P1057948

CATALOG NUMBER: S122RDR-S290D950-X4F0-XX-UDD-WVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.6	6.1
10°-20°	62.2	16.0
20°-30°	80.5	20.7
30°-40°	78.9	20.3
40°-50°	62.1	16.0
50°-60°	40.7	10.5
60°-70°	24.8	6.4
70°-80°	12.4	3.2
80°-90°	2.7	0.7
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°	166.3	42.9
0°-40°	245.2	63.2
0°-60°	348.1	89.7
0°-90°	388.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	388.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	256	256	256	256	256	
5°	253	253	249	251	251	24
15°	232	229	220	217	216	65
25°	185	179	173	172	170	85
35°	138	131	123	123	120	86
45°	92	86	80	74	70	71
55°	44	47	45	44	43	42
65°	23	24	25	26	26	23
75°	10	10	11	13	13	10
85°	1	1	2	3	4	2
90°	0	0	0	0	0	



TEST NUMBER: P1057948

CATALOG NUMBER: S122RDR-S290D950-X4F0-XX-UDD-WVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	255.5	255.5	255.5	255.5	255.5
2.5°	254.6	255.0	252.6	255.0	255.9
5°	253.0	253.0	249.4	251.0	251.0
7.5°	250.2	249.8	244.1	244.1	243.7
10°	245.7	244.1	237.2	235.9	235.1
12.5°	240.0	237.2	229.0	227.0	225.8
15°	232.3	229.0	220.1	217.2	215.6
17.5°	220.9	217.6	209.9	206.6	205.0
20°	209.1	204.2	198.5	195.7	194.0
22.5°	196.9	191.2	185.9	183.9	182.2
25°	185.1	179.0	172.9	172.1	169.6
27.5°	173.7	166.4	160.3	159.9	157.8
30°	161.5	153.8	147.3	147.7	145.6
32.5°	150.1	142.8	135.0	135.5	133.0
35°	138.3	130.6	123.3	122.8	120.4
37.5°	126.1	118.8	111.9	110.2	107.8
40°	115.1	107.8	100.5	97.6	95.2
42.5°	103.3	96.8	90.3	85.8	82.6
45°	91.5	85.8	79.7	74.0	70.4
47.5°	80.1	75.7	70.4	63.5	61.0
50°	68.7	65.5	61.0	54.9	53.7
52.5°	56.9	55.7	52.9	48.8	48.4
55°	44.3	46.8	45.2	43.5	43.1
57.5°	37.4	37.8	39.1	38.6	38.6
60°	32.1	32.1	33.8	34.2	34.2
62.5°	27.3	27.7	29.3	30.1	30.1
65°	23.2	23.6	24.8	26.0	26.4
67.5°	19.1	19.9	21.2	22.4	22.8
70°	15.5	16.3	17.9	19.1	19.5
72.5°	12.6	13.0	14.6	15.9	16.3
75°	9.8	10.2	11.4	13.0	13.4
77.5°	6.9	7.7	8.9	10.2	11.0
80°	4.9	5.3	6.1	7.7	8.1
82.5°	2.8	3.3	4.1	5.3	5.7
85°	0.8	1.2	1.6	2.8	3.7
87.5°	0.0	0.0	0.0	0.8	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)