

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: P1057943

Luminaire Tested: S122RDR-S290D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057943
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-S290D950-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

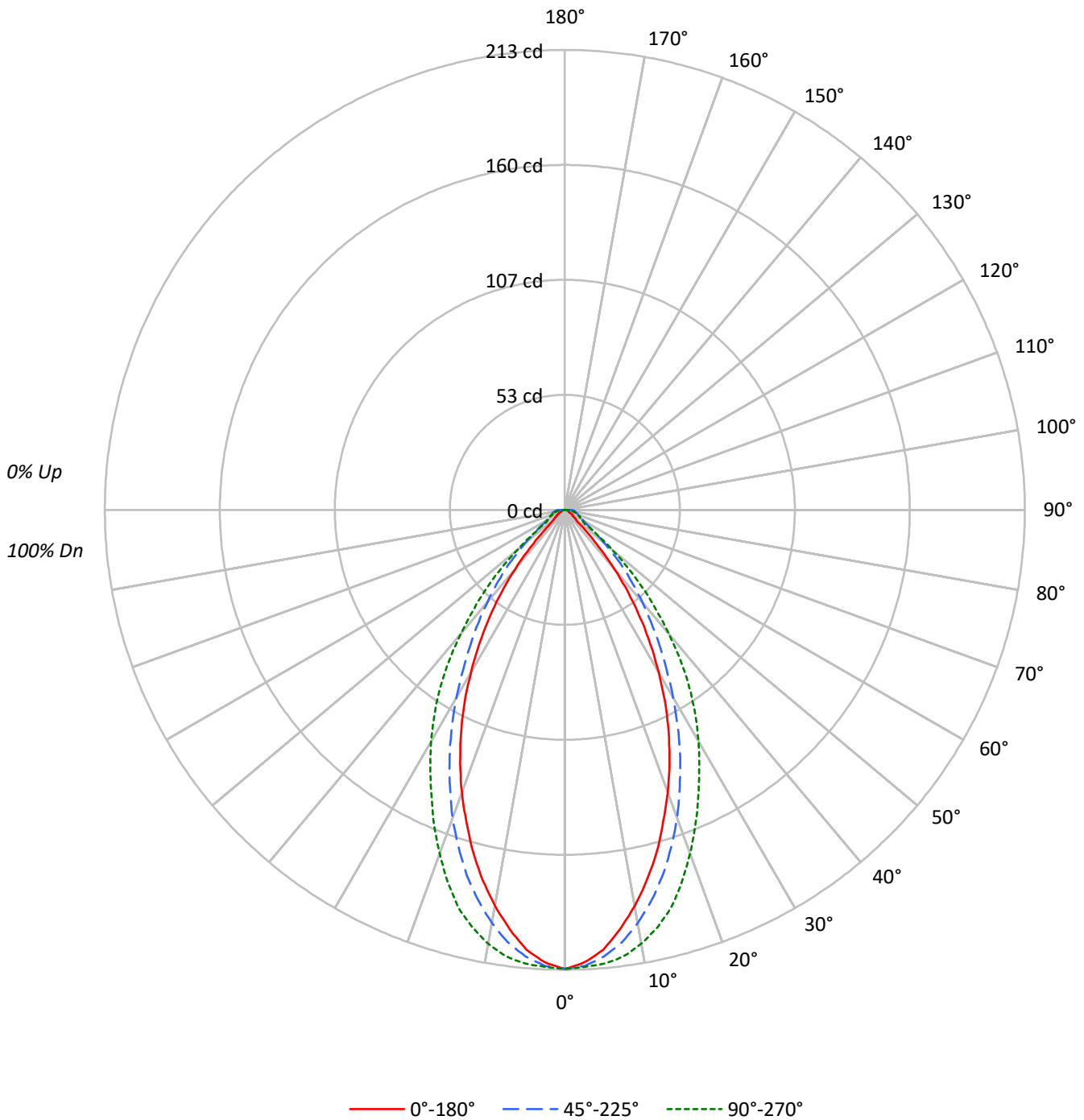
Lumens per Lamp: N/A
Luminaire Lumens: 229.2 lumens
Efficiency: N/A
Efficacy: 18.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90																												
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81																												
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74																												
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67																												
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61																												
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57																												
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52																												
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48																												
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45																												
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3923	3923	3923
5°	3788	3847	3908
10°	3489	3641	3824
15°	3137	3347	3641
20°	2735	2983	3328
25°	2313	2571	2977
30°	1849	2135	2638
35°	1367	1717	2266
40°	862	1344	1807
45°	339	1010	1328
50°	175	677	818
55°	145	444	367
60°	107	362	332
65°	87	336	336
70°	86	351	329
75°	114	406	349
80°	170	521	393
85°	254	868	508

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 1734 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.5	8.5
10°-20°	49.1	21.4
20°-30°	58.4	25.5
30°-40°	48.6	21.2
40°-50°	27.1	11.8
50°-60°	11.0	4.8
60°-70°	7.0	3.1
70°-80°	5.3	2.3
80°-90°	3.4	1.5
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°	126.9	55.4
0°-40°	175.5	76.6
0°-60°	213.6	93.2
0°-90°	229.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	229.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	213	213	213	213	213	
5°	204	208	208	209	211	19
15°	164	169	175	184	191	46
25°	114	118	126	136	146	52
35°	61	66	76	89	101	38
45°	13	22	39	45	51	12
55°	4	9	14	13	11	4
65°	2	8	8	7	8	2
75°	2	6	6	5	5	2
85°	1	4	4	4	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	212.6	212.6	212.6	212.6	212.6
2.5°	209.8	213.0	211.4	211.4	211.8
5°	204.5	208.2	207.7	209.4	211.0
7.5°	195.9	200.0	202.0	205.7	208.6
10°	186.2	190.6	194.3	200.0	204.1
12.5°	175.6	180.0	185.3	192.7	198.0
15°	164.2	169.0	175.2	184.1	190.6
17.5°	151.5	156.8	163.8	173.5	180.5
20°	139.3	144.6	151.9	161.7	169.5
22.5°	126.7	131.2	138.9	148.7	158.1
25°	113.6	118.1	126.3	136.1	146.2
27.5°	100.6	105.1	113.2	123.4	134.8
30°	86.8	91.7	100.2	111.6	123.8
32.5°	73.7	78.6	87.6	100.2	112.4
35°	60.7	66.4	76.2	88.8	100.6
37.5°	48.1	54.6	65.6	77.4	88.0
40°	35.8	42.8	55.8	66.0	75.0
42.5°	23.6	31.8	46.8	55.4	62.3
45°	13.0	22.0	38.7	45.2	50.9
47.5°	7.3	14.3	30.6	35.8	39.1
50°	6.1	10.6	23.6	27.3	28.5
52.5°	4.9	9.8	17.9	20.0	19.1
55°	4.5	9.4	13.8	13.4	11.4
57.5°	3.7	9.4	11.0	9.8	9.8
60°	2.9	9.0	9.8	8.6	9.0
62.5°	2.4	8.6	9.0	8.1	8.1
65°	2.0	8.1	7.7	7.3	7.7
67.5°	1.6	7.3	7.3	6.9	6.9
70°	1.6	6.9	6.5	6.1	6.1
72.5°	1.6	6.1	6.1	5.7	5.7
75°	1.6	5.7	5.7	5.3	4.9
77.5°	1.6	4.9	5.3	4.9	4.5
80°	1.6	4.5	4.9	4.5	3.7
82.5°	1.6	4.1	4.5	4.1	3.3
85°	1.2	3.7	4.1	3.7	2.4
87.5°	1.2	3.7	4.1	3.3	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)