

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: P1057945

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057945
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-S290D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

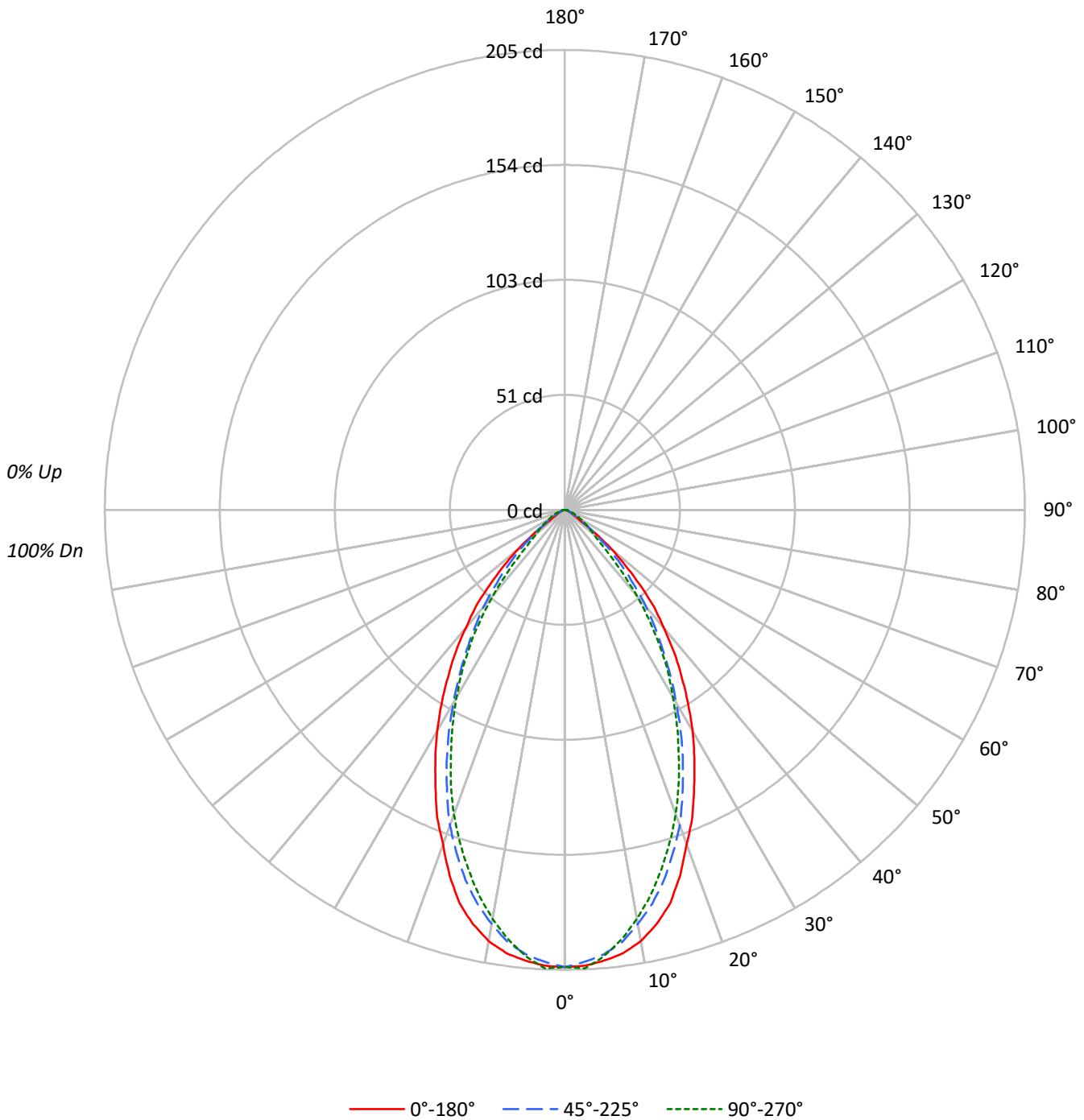
Lumens per Lamp: N/A
Luminaire Lumens: 219.1 lumens
Efficiency: N/A
Efficacy: 17.5 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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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				
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	81	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°	3761	3761	3761
5°	3736	3684	3699
10°	3657	3513	3468
15°	3465	3263	3171
20°	3114	2940	2836
25°	2775	2535	2443
30°	2427	2114	2054
35°	2043	1714	1658
40°	1645	1351	1195
45°	1232	976	712
50°	769	632	468
55°	261	341	380
60°	151	210	299
65°	105	144	231
70°	86	108	178
75°	57	86	143
80°	43	85	128
85°	0	0	85

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1232 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.8	8.6
10°-20°	48.1	21.9
20°-30°	57.9	26.4
30°-40°	49.5	22.6
40°-50°	29.0	13.2
50°-60°	10.5	4.8
60°-70°	3.7	1.7
70°-80°	1.5	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°	124.8	56.9
0°-40°	174.2	79.5
0°-60°	213.7	97.5
0°-90°	219.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	219.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	204	204	204	204	204	
5°	202	202	199	200	200	19
15°	181	179	171	168	166	50
25°	136	131	124	122	120	63
35°	91	84	76	75	74	57
45°	47	42	37	31	27	36
55°	8	11	11	11	12	10
65°	2	3	3	4	5	3
75°	1	1	1	2	2	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	203.8	203.8	203.8	203.8	203.8
2.5°	203.4	203.8	201.7	203.8	204.6
5°	201.7	202.2	198.9	199.7	199.7
7.5°	199.3	198.9	194.4	193.6	193.2
10°	195.2	194.0	187.5	186.3	185.1
12.5°	189.1	186.7	179.8	177.7	176.1
15°	181.4	178.6	170.8	167.6	166.0
17.5°	170.8	167.6	160.3	157.0	155.4
20°	158.6	155.4	149.7	146.0	144.4
22.5°	148.5	143.2	137.1	134.6	132.6
25°	136.3	130.6	124.5	122.4	120.0
27.5°	124.9	118.0	111.9	110.2	108.2
30°	113.9	106.6	99.2	99.2	96.4
32.5°	102.1	95.2	87.5	87.0	85.4
35°	90.7	83.8	76.1	75.2	73.6
37.5°	80.1	73.2	65.9	63.5	61.4
40°	68.3	62.2	56.1	52.1	49.6
42.5°	59.0	52.1	46.0	41.1	37.8
45°	47.2	42.3	37.4	31.3	27.3
47.5°	36.6	33.4	29.3	22.4	20.3
50°	26.8	25.2	22.0	16.7	16.3
52.5°	17.1	17.9	15.9	13.0	14.2
55°	8.1	11.4	10.6	11.0	11.8
57.5°	5.3	5.7	7.7	8.9	9.8
60°	4.1	4.1	5.7	7.3	8.1
62.5°	3.3	3.3	4.5	6.1	6.5
65°	2.4	2.8	3.3	4.5	5.3
67.5°	2.0	2.0	2.4	3.7	4.1
70°	1.6	1.6	2.0	2.8	3.3
72.5°	1.2	1.2	1.6	2.4	2.4
75°	0.8	1.2	1.2	1.6	2.0
77.5°	0.8	0.8	0.8	1.2	1.6
80°	0.4	0.4	0.8	0.8	1.2
82.5°	0.4	0.4	0.4	0.4	0.8
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)