

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: P1057925

Luminaire Tested: S122RDR-S290D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057925
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-S290D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

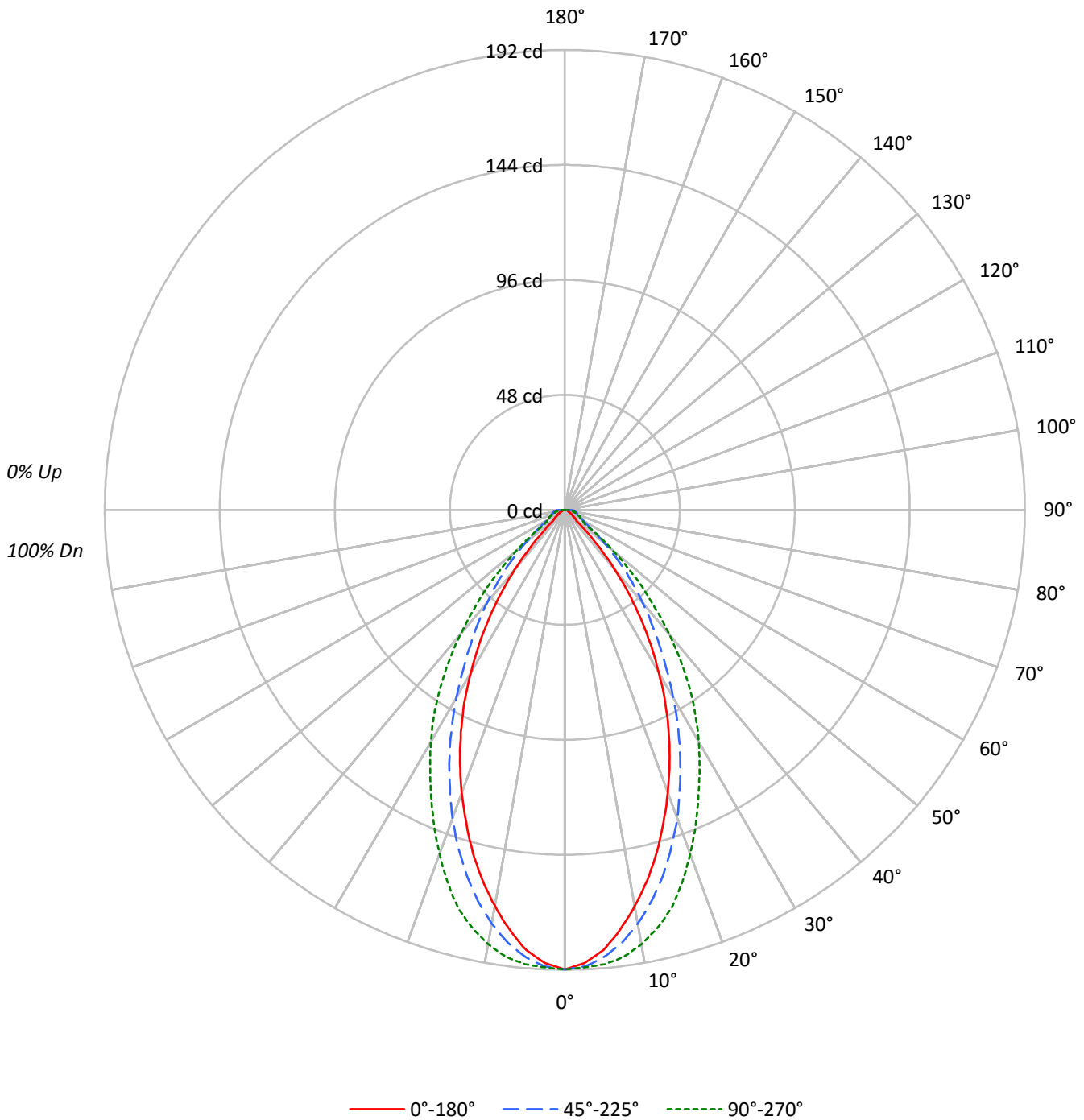
Lumens per Lamp: N/A
Luminaire Lumens: 206.9 lumens
Efficiency: N/A
Efficacy: 16.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	
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	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°	3541	3541	3541
5°	3419	3473	3527
10°	3148	3286	3451
15°	2831	3020	3288
20°	2468	2692	3002
25°	2089	2321	2688
30°	1668	1926	2382
35°	1234	1548	2045
40°	780	1214	1628
45°	308	911	1200
50°	158	611	738
55°	129	402	331
60°	96	325	299
65°	79	306	306
70°	81	318	297
75°	107	364	314
80°	159	468	351
85°	233	783	466

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 1565 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.6	8.5
10°-20°	44.3	21.4
20°-30°	52.7	25.5
30°-40°	43.8	21.2
40°-50°	24.5	11.8
50°-60°	9.9	4.8
60°-70°	6.3	3.1
70°-80°	4.7	2.3
80°-90°	3.0	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°	114.6	55.4
0°-40°	158.4	76.6
0°-60°	192.8	93.2
0°-90°	206.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	206.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	192	192	192	192	192	
5°	185	188	188	189	190	17
15°	148	153	158	166	172	41
25°	103	107	114	123	132	47
35°	55	60	69	80	91	34
45°	12	20	35	41	46	11
55°	4	8	12	12	10	4
65°	2	7	7	7	7	2
75°	2	5	5	5	4	2
85°	1	3	4	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	191.9	191.9	191.9	191.9	191.9
2.5°	189.3	192.3	190.8	190.8	191.2
5°	184.6	187.9	187.5	189.0	190.4
7.5°	176.8	180.5	182.3	185.7	188.2
10°	168.0	172.1	175.4	180.5	184.2
12.5°	158.5	162.5	167.3	173.9	178.7
15°	148.2	152.6	158.1	166.2	172.1
17.5°	136.8	141.5	147.8	156.6	162.9
20°	125.7	130.5	137.1	146.0	152.9
22.5°	114.3	118.4	125.4	134.2	142.6
25°	102.6	106.6	114.0	122.8	132.0
27.5°	90.8	94.9	102.2	111.4	121.7
30°	78.3	82.7	90.4	100.7	111.8
32.5°	66.5	71.0	79.0	90.4	101.5
35°	54.8	59.9	68.7	80.1	90.8
37.5°	43.4	49.3	59.2	69.9	79.4
40°	32.4	38.6	50.4	59.6	67.6
42.5°	21.3	28.7	42.3	50.0	56.2
45°	11.8	19.9	34.9	40.8	46.0
47.5°	6.6	12.9	27.6	32.4	35.3
50°	5.5	9.6	21.3	24.6	25.7
52.5°	4.4	8.8	16.2	18.0	17.3
55°	4.0	8.5	12.5	12.1	10.3
57.5°	3.3	8.5	9.9	8.8	8.8
60°	2.6	8.1	8.8	7.7	8.1
62.5°	2.2	7.7	8.1	7.4	7.4
65°	1.8	7.4	7.0	6.6	7.0
67.5°	1.5	6.6	6.6	6.2	6.2
70°	1.5	6.2	5.9	5.5	5.5
72.5°	1.5	5.5	5.5	5.1	5.1
75°	1.5	5.1	5.1	4.8	4.4
77.5°	1.5	4.4	4.8	4.4	4.0
80°	1.5	4.0	4.4	4.0	3.3
82.5°	1.5	3.7	4.0	3.7	2.9
85°	1.1	3.3	3.7	3.3	2.2
87.5°	1.1	3.3	3.7	2.9	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)