

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: P1057826

Luminaire Tested: S122RDR-S1005D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057826
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-S1005D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

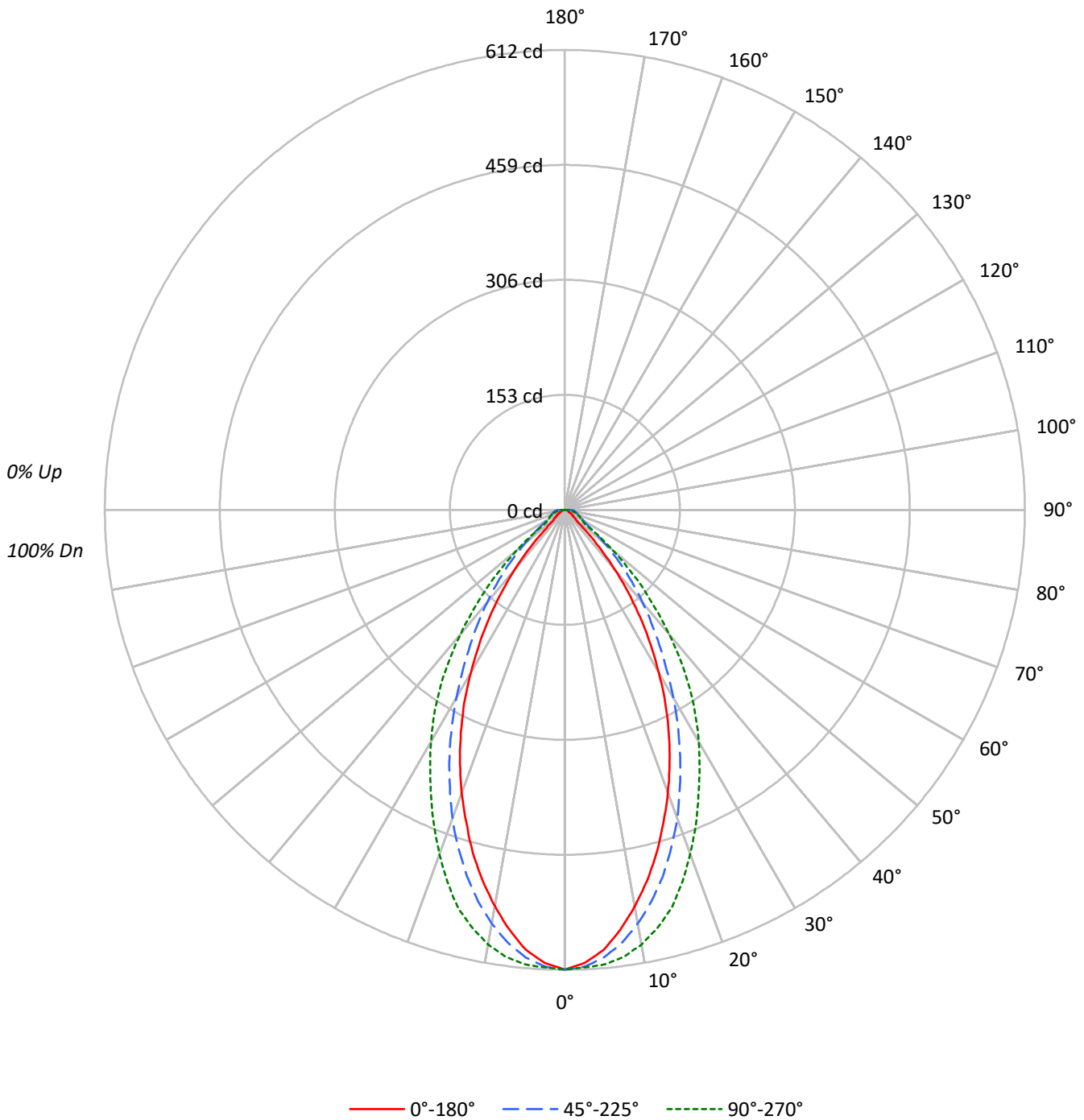
Lumens per Lamp: N/A
Luminaire Lumens: 659.5 lumens
Efficiency: N/A
Efficacy: 15.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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°	11289	11289	11289
5°	10899	11071	11245
10°	10036	10476	11002
15°	9023	9628	10478
20°	7870	8585	9575
25°	6658	7397	8568
30°	5318	6143	7592
35°	3933	4938	6521
40°	2483	3869	5196
45°	979	2904	3823
50°	505	1952	2354
55°	415	1280	1055
60°	303	1037	952
65°	258	974	974
70°	254	1014	950
75°	335	1169	1005
80°	499	1498	1116
85°	741	2477	1482

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 4949 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.0	8.5
10°-20°	141.3	21.4
20°-30°	168.0	25.5
30°-40°	139.7	21.2
40°-50°	78.0	11.8
50°-60°	31.5	4.8
60°-70°	20.2	3.1
70°-80°	15.1	2.3
80°-90°	9.6	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°	365.3	55.4
0°-40°	505.0	76.6
0°-60°	614.5	93.2
0°-90°	659.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	659.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	612	612	612	612	612	
5°	588	599	598	602	607	54
15°	472	486	504	530	548	131
25°	327	340	363	392	421	149
35°	175	191	219	256	290	108
45°	38	63	111	130	146	35
55°	13	27	40	39	33	11
65°	6	23	22	21	22	6
75°	5	16	16	15	14	5
85°	4	10	12	10	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	611.8	611.8	611.8	611.8	611.8
2.5°	603.6	613.0	608.3	608.3	609.5
5°	588.4	598.9	597.7	602.4	607.1
7.5°	563.7	575.5	581.3	591.9	600.1
10°	535.6	548.5	559.1	575.5	587.2
12.5°	505.1	518.0	533.3	554.4	569.6
15°	472.3	486.4	504.0	529.8	548.5
17.5°	436.0	451.2	471.2	499.3	519.2
20°	400.8	416.1	437.2	465.3	487.6
22.5°	364.5	377.4	399.7	427.8	454.7
25°	327.0	339.9	363.3	391.5	420.8
27.5°	289.5	302.4	325.8	355.1	387.9
30°	249.6	263.7	288.3	321.1	356.3
32.5°	212.1	226.2	252.0	288.3	323.5
35°	174.6	191.0	219.2	255.5	289.5
37.5°	138.3	157.1	188.7	222.7	253.2
40°	103.1	123.1	160.6	189.9	215.7
42.5°	68.0	91.4	134.8	159.4	179.3
45°	37.5	63.3	111.3	130.1	146.5
47.5°	21.1	41.0	87.9	103.1	112.5
50°	17.6	30.5	68.0	78.5	82.0
52.5°	14.1	28.1	51.6	57.4	55.1
55°	12.9	27.0	39.8	38.7	32.8
57.5°	10.5	27.0	31.6	28.1	28.1
60°	8.2	25.8	28.1	24.6	25.8
62.5°	7.0	24.6	25.8	23.4	23.4
65°	5.9	23.4	22.3	21.1	22.3
67.5°	4.7	21.1	21.1	19.9	19.9
70°	4.7	19.9	18.8	17.6	17.6
72.5°	4.7	17.6	17.6	16.4	16.4
75°	4.7	16.4	16.4	15.2	14.1
77.5°	4.7	14.1	15.2	14.1	12.9
80°	4.7	12.9	14.1	12.9	10.5
82.5°	4.7	11.7	12.9	11.7	9.4
85°	3.5	10.5	11.7	10.5	7.0
87.5°	3.5	10.5	11.7	9.4	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)