

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: P1060268

Luminaire Tested: S124RDR-S1020D930-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060268
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1020D930-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

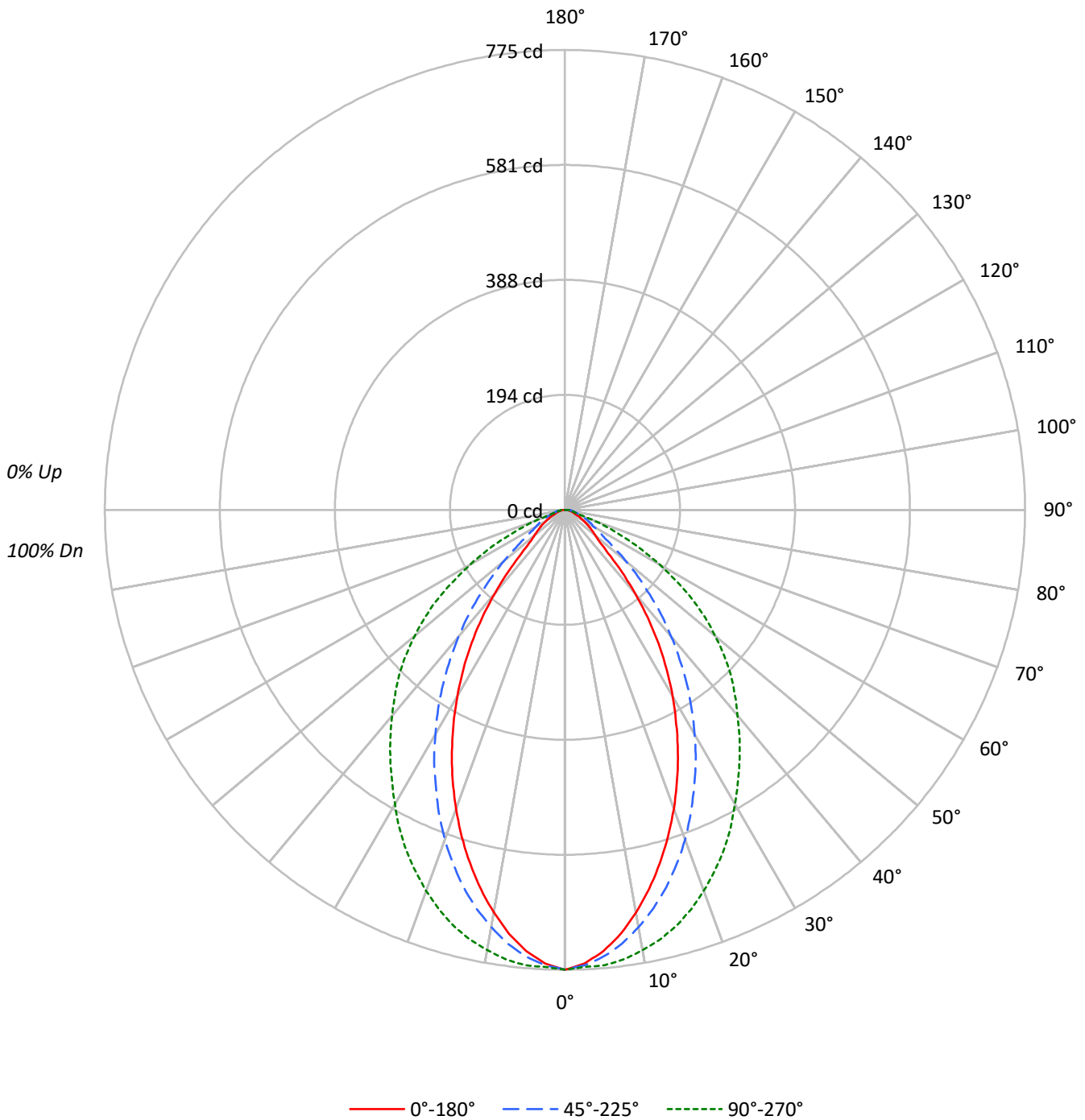
Lumens per Lamp: N/A
Luminaire Lumens: 1089.6 lumens
Efficiency: N/A
Efficacy: 31.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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				100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79				79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70				70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63				63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57				57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51				51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47				47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43				43
9	65	54	46	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6673	6673	6673
5°	6451	6528	6656
10°	6025	6241	6586
15°	5502	5871	6469
20°	4915	5420	6261
25°	4280	4889	6013
30°	3607	4342	5696
35°	2881	3762	5390
40°	2073	3125	5087
45°	1248	2461	4814
50°	898	1783	4425
55°	755	1200	3923
60°	611	951	3159
65°	483	864	2270
70°	423	720	1216
75°	393	655	589
80°	392	684	536
85°	583	978	682

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4814 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.1	6.5
10°-20°	186.4	17.1
20°-30°	241.9	22.2
30°-40°	232.5	21.3
40°-50°	172.5	15.8
50°-60°	105.7	9.7
60°-70°	51.3	4.7
70°-80°	19.5	1.8
80°-90°	8.8	0.8
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°	499.4	45.8
0°-40°	731.8	67.2
0°-60°	1010.0	92.7
0°-90°	1089.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1089.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	746	757	755	762	770	69
15°	617	635	659	698	726	172
25°	450	473	515	581	633	206
35°	274	299	358	443	513	170
45°	102	128	202	309	395	85
55°	50	52	80	180	261	45
65°	24	26	42	67	111	24
75°	12	19	20	18	18	13
85°	6	10	10	9	7	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	774.9	774.9	774.9	774.9	774.9
2.5°	765.0	773.9	768.0	770.0	771.0
5°	746.3	757.2	755.2	762.1	770.0
7.5°	720.7	733.5	737.4	751.2	764.1
10°	689.1	704.9	713.8	736.5	753.2
12.5°	654.6	671.4	688.1	718.7	741.4
15°	617.2	634.9	658.6	698.0	725.6
17.5°	577.7	597.4	626.0	673.4	705.9
20°	536.3	557.0	591.5	643.8	683.2
22.5°	493.9	515.6	554.1	612.2	658.6
25°	450.5	473.2	514.6	580.7	632.9
27.5°	406.2	429.8	477.2	547.2	604.3
30°	362.8	385.5	436.7	512.7	572.8
32.5°	318.4	342.1	397.3	477.2	542.2
35°	274.1	298.7	357.9	442.7	512.7
37.5°	228.7	255.3	317.5	409.1	483.1
40°	184.4	210.0	278.0	374.6	452.5
42.5°	141.0	168.6	240.6	340.1	423.9
45°	102.5	128.2	202.1	308.6	395.3
47.5°	76.9	92.7	166.6	279.0	363.8
50°	67.0	70.0	133.1	246.5	330.3
52.5°	58.2	60.1	103.5	211.0	296.8
55°	50.3	52.3	79.9	180.4	261.3
57.5°	42.4	44.4	64.1	150.8	220.8
60°	35.5	37.5	55.2	120.3	183.4
62.5°	29.6	30.6	49.3	91.7	146.9
65°	23.7	25.6	42.4	67.0	111.4
67.5°	19.7	21.7	34.5	46.3	77.9
70°	16.8	21.7	28.6	32.5	48.3
72.5°	13.8	19.7	23.7	22.7	22.7
75°	11.8	18.7	19.7	17.7	17.7
77.5°	9.9	16.8	15.8	14.8	13.8
80°	7.9	13.8	13.8	11.8	10.8
82.5°	6.9	10.8	10.8	10.8	8.9
85°	5.9	9.9	9.9	8.9	6.9
87.5°	3.9	7.9	8.9	7.9	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)