

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: P1060265

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060265
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1020D930-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

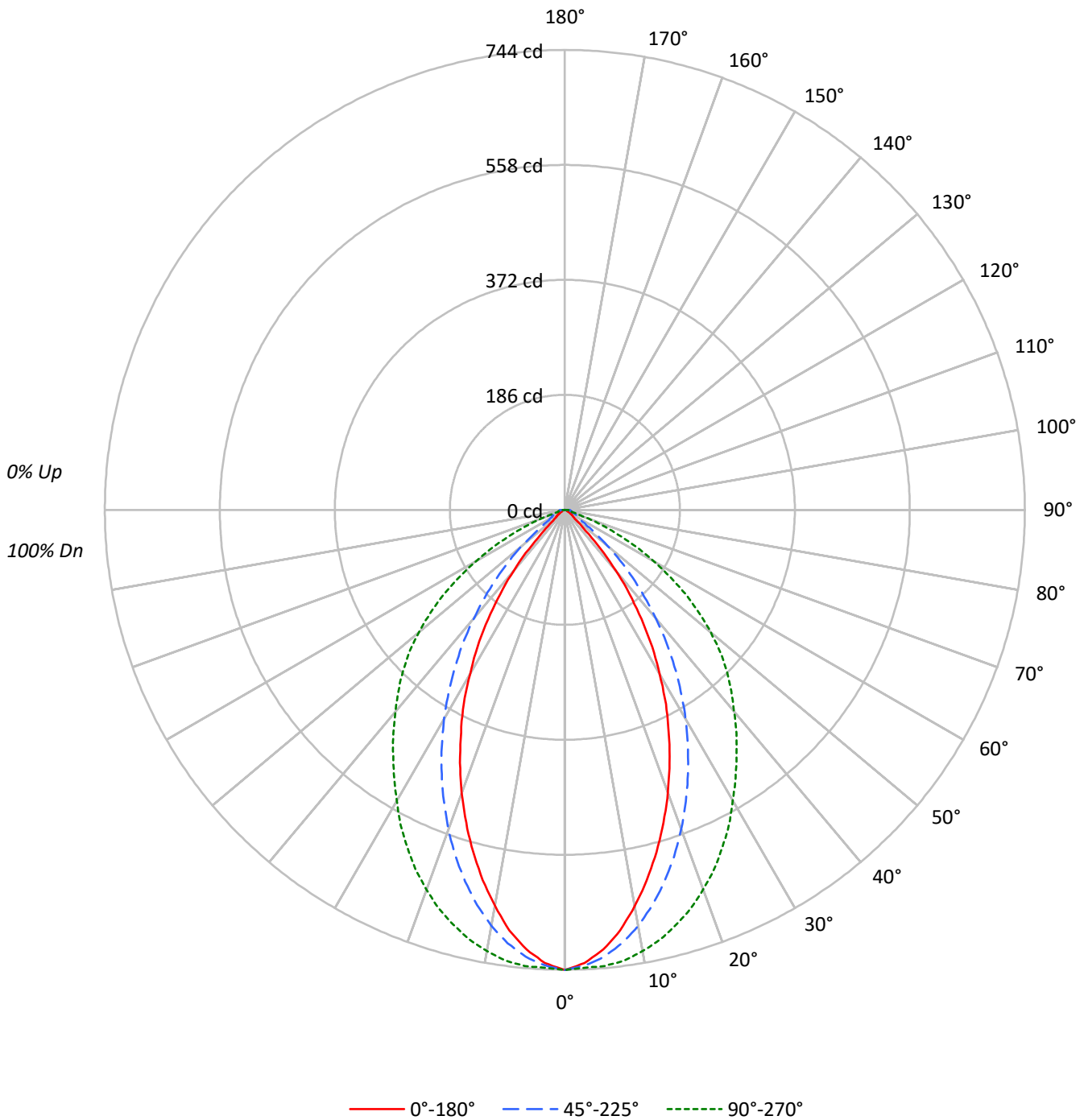
Lumens per Lamp: N/A
Luminaire Lumens: 934.4 lumens
Efficiency: N/A
Efficacy: 26.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90			90	
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81			81	
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73			73	
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65			65	
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59			59	
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54			54	
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50			50	
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46			46	
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42			42	
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39			39	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6411	6411	6411
5°	6171	6274	6402
10°	5691	5976	6338
15°	5107	5547	6198
20°	4464	5042	5991
25°	3776	4479	5725
30°	3050	3883	5402
35°	2271	3244	5090
40°	1441	2572	4789
45°	576	1885	4516
50°	251	1202	4122
55°	192	622	3597
60°	136	425	2854
65°	100	422	1950
70°	98	373	894
75°	130	393	359
80°	193	441	392
85°	385	781	583

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4516 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.1	7.3
10°-20°	175.8	18.8
20°-30°	222.0	23.8
30°-40°	203.9	21.8
40°-50°	139.0	14.9
50°-60°	75.4	8.1
60°-70°	32.0	3.4
70°-80°	11.1	1.2
80°-90°	7.0	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°	465.9	49.9
0°-40°	669.9	71.7
0°-60°	884.3	94.6
0°-90°	934.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	934.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	714	725	726	732	741	66
15°	573	592	622	667	695	160
25°	397	423	471	544	602	182
35°	216	245	309	405	484	134
45°	47	76	155	274	371	44
55°	13	14	41	151	240	12
65°	5	6	21	47	96	5
75°	4	11	12	11	11	4
85°	4	8	8	8	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	744.5	744.5	744.5	744.5	744.5
2.5°	733.7	742.5	737.6	739.6	741.5
5°	713.9	724.8	725.8	731.7	740.6
7.5°	686.3	699.1	707.0	721.8	735.6
10°	650.8	666.6	683.4	707.0	724.8
12.5°	613.3	630.1	654.8	688.3	712.0
15°	572.9	591.7	622.2	666.6	695.2
17.5°	530.5	551.2	587.7	640.0	676.5
20°	487.1	509.8	550.2	609.4	653.8
22.5°	442.8	466.4	510.8	577.8	630.1
25°	397.4	423.0	471.4	544.3	602.5
27.5°	354.0	377.7	430.9	510.8	574.9
30°	306.7	333.3	390.5	476.3	543.3
32.5°	263.3	288.9	349.1	440.8	513.8
35°	216.0	244.6	308.6	405.3	484.2
37.5°	171.6	199.2	269.2	371.8	455.6
40°	128.2	156.8	228.8	338.2	426.0
42.5°	85.8	116.4	190.3	303.7	398.4
45°	47.3	75.9	154.8	274.1	370.8
47.5°	24.7	41.4	121.3	244.6	341.2
50°	18.7	22.7	89.7	212.0	307.7
52.5°	15.8	16.8	61.1	179.5	274.1
55°	12.8	13.8	41.4	150.9	239.6
57.5°	9.9	10.8	29.6	123.3	201.2
60°	7.9	8.9	24.7	94.7	165.7
62.5°	5.9	6.9	23.7	70.0	130.2
65°	4.9	5.9	20.7	47.3	95.7
67.5°	3.9	5.9	17.7	30.6	64.1
70°	3.9	7.9	14.8	19.7	35.5
72.5°	3.9	8.9	12.8	12.8	12.8
75°	3.9	10.8	11.8	10.8	10.8
77.5°	3.9	9.9	9.9	9.9	9.9
80°	3.9	8.9	8.9	8.9	7.9
82.5°	3.9	7.9	8.9	8.9	6.9
85°	3.9	7.9	7.9	7.9	5.9
87.5°	3.0	7.9	7.9	7.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)