

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: P1060256

Luminaire Tested: S124RDR-S1020D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060256
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-S1020D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

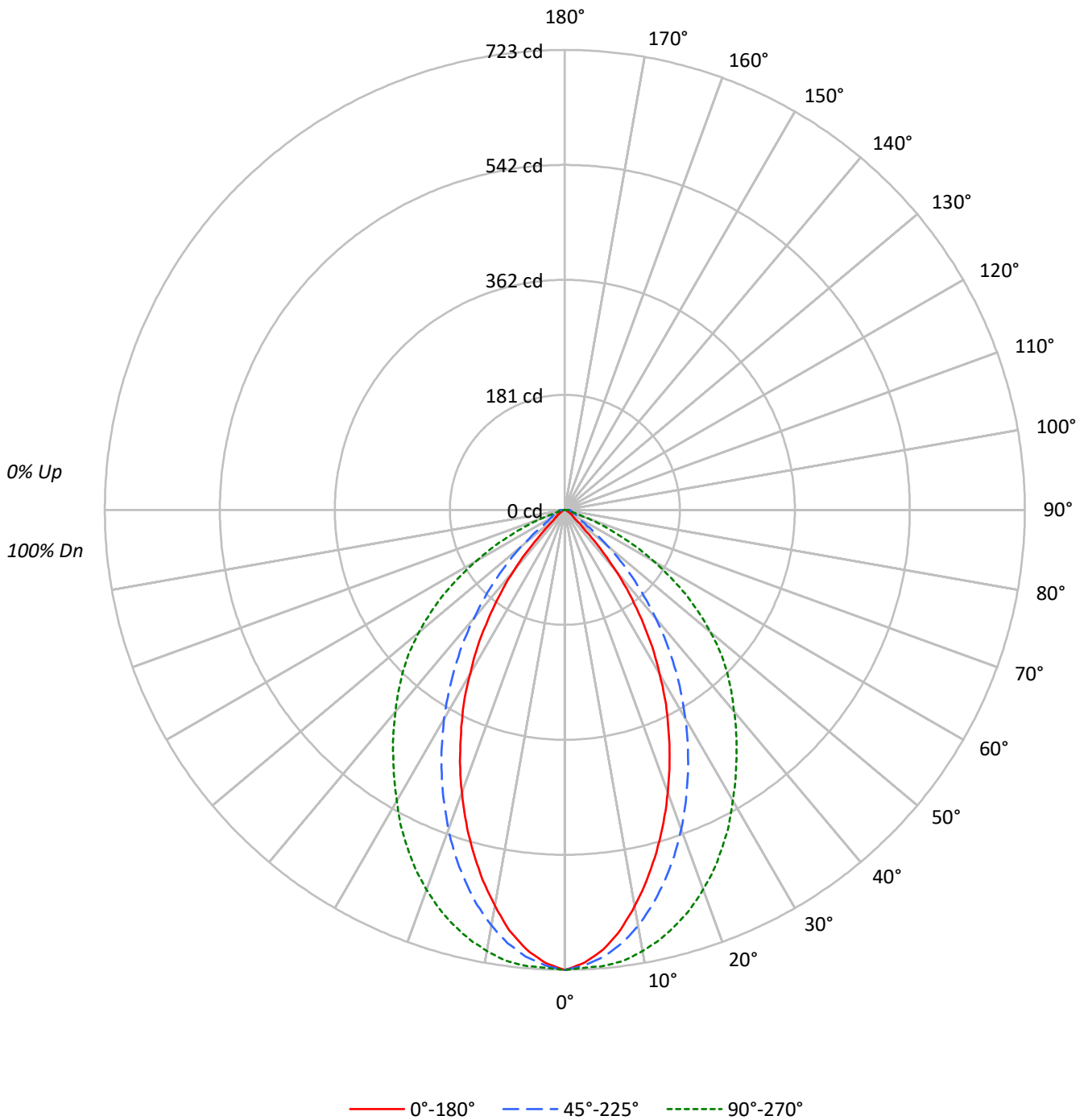
Lumens per Lamp: N/A
Luminaire Lumens: 907.9 lumens
Efficiency: N/A
Efficacy: 25.9 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6229	6229	6229
5°	5996	6096	6220
10°	5530	5806	6158
15°	4963	5390	6022
20°	4337	4899	5821
25°	3668	4352	5562
30°	2963	3772	5249
35°	2205	3153	4945
40°	1401	2499	4653
45°	560	1832	4388
50°	244	1168	4004
55°	188	604	3495
60°	133	413	2773
65°	98	410	1893
70°	96	363	869
75°	126	383	349
80°	188	426	382
85°	375	761	563

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4388 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.2	7.3
10°-20°	170.8	18.8
20°-30°	215.7	23.8
30°-40°	198.1	21.8
40°-50°	135.1	14.9
50°-60°	73.3	8.1
60°-70°	31.1	3.4
70°-80°	10.7	1.2
80°-90°	6.8	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°	452.7	49.9
0°-40°	650.9	71.7
0°-60°	859.2	94.6
0°-90°	907.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	907.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	723	723	723	723	723	
5°	694	704	705	711	720	64
15°	557	575	605	648	676	155
25°	386	411	458	529	585	177
35°	210	238	300	394	470	130
45°	46	74	150	266	360	42
55°	12	13	40	147	233	11
65°	5	6	20	46	93	5
75°	4	10	12	10	10	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°	723.4	723.4	723.4	723.4	723.4
2.5°	712.8	721.5	716.7	718.6	720.5
5°	693.7	704.2	705.2	710.9	719.6
7.5°	666.9	679.3	687.0	701.4	714.8
10°	632.4	647.7	664.0	687.0	704.2
12.5°	596.0	612.2	636.2	668.8	691.8
15°	556.7	574.9	604.6	647.7	675.5
17.5°	515.5	535.6	571.0	621.8	657.3
20°	473.3	495.4	534.6	592.1	635.2
22.5°	430.2	453.2	496.3	561.5	612.2
25°	386.1	411.0	458.0	528.9	585.4
27.5°	344.0	367.0	418.7	496.3	558.6
30°	298.0	323.8	379.4	462.8	527.9
32.5°	255.8	280.7	339.2	428.3	499.2
35°	209.8	237.6	299.9	393.8	470.4
37.5°	166.7	193.5	261.6	361.2	442.7
40°	124.6	152.3	222.3	328.6	413.9
42.5°	83.4	113.1	184.9	295.1	387.1
45°	46.0	73.8	150.4	266.4	360.3
47.5°	24.0	40.2	117.9	237.6	331.5
50°	18.2	22.0	87.2	206.0	298.9
52.5°	15.3	16.3	59.4	174.4	266.4
55°	12.5	13.4	40.2	146.6	232.8
57.5°	9.6	10.5	28.7	119.8	195.5
60°	7.7	8.6	24.0	92.0	161.0
62.5°	5.7	6.7	23.0	68.0	126.5
65°	4.8	5.7	20.1	46.0	92.9
67.5°	3.8	5.7	17.2	29.7	62.3
70°	3.8	7.7	14.4	19.2	34.5
72.5°	3.8	8.6	12.5	12.5	12.5
75°	3.8	10.5	11.5	10.5	10.5
77.5°	3.8	9.6	9.6	9.6	9.6
80°	3.8	8.6	8.6	8.6	7.7
82.5°	3.8	7.7	8.6	8.6	6.7
85°	3.8	7.7	7.7	7.7	5.7
87.5°	2.9	7.7	7.7	7.7	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)