

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: P1060255

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060255
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
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-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

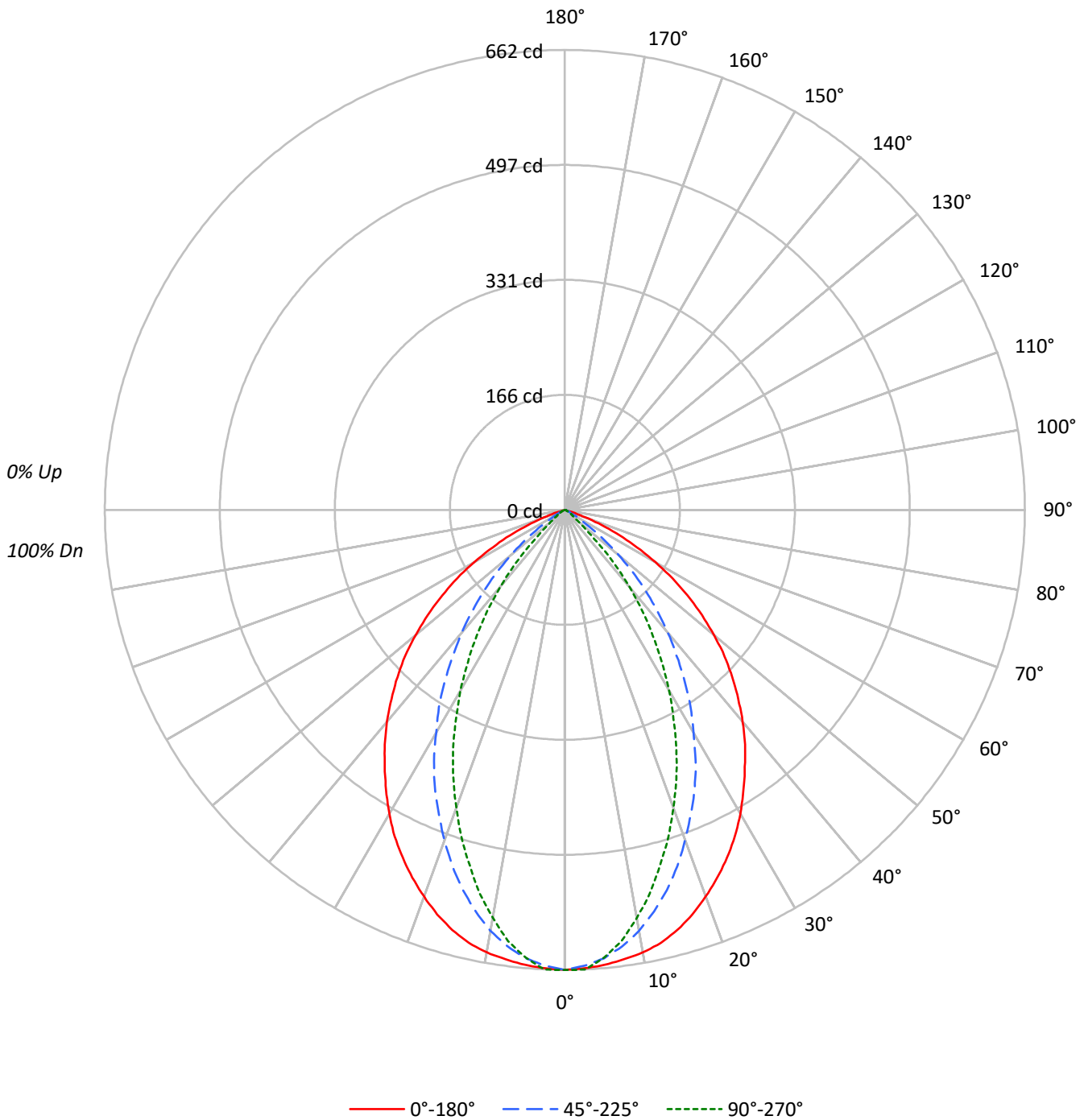
Lumens per Lamp: N/A
Luminaire Lumens: 864.8 lumens
Efficiency: N/A
Efficacy: 24.7 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5703	5703	5703
5°	5683	5600	5593
10°	5657	5381	5214
15°	5580	5051	4719
20°	5429	4640	4183
25°	5247	4201	3611
30°	5024	3683	2988
35°	4748	3159	2324
40°	4475	2593	1624
45°	4149	1994	804
50°	3744	1346	269
55°	3232	689	186
60°	2589	248	133
65°	1775	137	59
70°	796	73	48
75°	0	33	33
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4149 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.2	7.1
10°-20°	160.3	18.5
20°-30°	207.6	24.0
30°-40°	197.2	22.8
40°-50°	139.6	16.1
50°-60°	71.7	8.3
60°-70°	25.1	2.9
70°-80°	2.2	0.3
80°-90°	0.0	0.0
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°	429.0	49.6
0°-40°	626.2	72.4
0°-60°	837.6	96.8
0°-90°	864.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	864.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	662	662	662	662	662	
5°	658	658	648	648	647	62
15°	626	607	567	540	529	176
25°	552	509	442	395	380	254
35°	452	386	300	242	221	283
45°	341	262	164	94	66	262
55°	215	142	46	13	12	192
65°	87	42	7	4	3	87
75°	0	1	1	1	1	7
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	662.3	662.3	662.3	662.3	662.3
2.5°	660.4	662.3	656.6	661.3	662.3
5°	657.5	658.5	647.9	647.9	647.0
7.5°	652.7	650.8	633.6	626.9	625.9
10°	647.0	640.3	615.4	601.0	596.3
12.5°	638.4	625.9	592.4	571.4	565.6
15°	625.9	606.8	566.6	539.8	529.3
17.5°	610.6	585.7	537.9	505.3	494.8
20°	592.4	560.9	506.3	469.9	456.5
22.5°	573.3	536.9	473.8	432.6	419.2
25°	552.2	509.2	442.2	395.3	380.0
27.5°	530.2	479.5	407.7	358.9	338.8
30°	505.3	449.8	370.4	319.7	300.5
32.5°	478.5	417.3	336.9	282.3	259.4
35°	451.7	385.7	300.5	242.1	221.1
37.5°	425.9	356.0	264.2	202.9	182.8
40°	398.1	323.5	230.7	167.5	144.5
42.5°	369.4	291.9	196.2	131.1	106.2
45°	340.7	262.2	163.7	93.8	66.0
47.5°	312.0	230.7	132.1	59.3	35.4
50°	279.5	200.0	100.5	31.6	20.1
52.5°	248.8	171.3	71.8	18.2	15.3
55°	215.3	141.6	45.9	13.4	12.4
57.5°	183.8	112.9	25.8	10.5	9.6
60°	150.3	87.1	14.4	8.6	7.7
62.5°	116.8	63.2	9.6	5.7	4.8
65°	87.1	42.1	6.7	3.8	2.9
67.5°	57.4	23.9	4.8	1.9	1.9
70°	31.6	11.5	2.9	1.9	1.9
72.5°	11.5	3.8	1.9	1.0	1.0
75°	0.0	1.0	1.0	1.0	1.0
77.5°	0.0	0.0	0.0	0.0	1.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)