

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: P1060291

Luminaire Tested: S124RDR-S1020D950-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060291
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-S1020D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

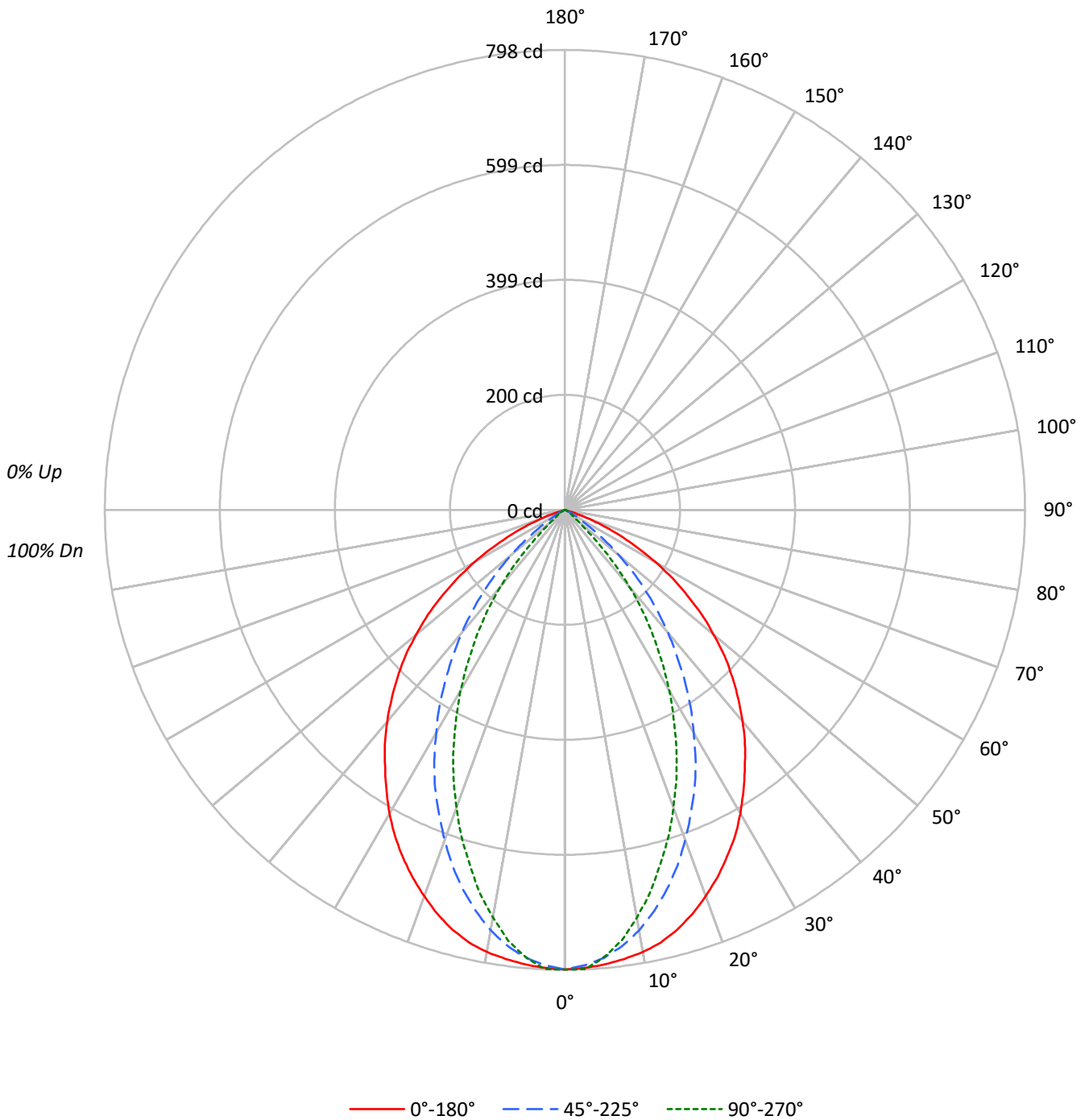
Lumens per Lamp: N/A
Luminaire Lumens: 1041.5 lumens
Efficiency: N/A
Efficacy: 29.8 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6868	6868	6868
5°	6844	6745	6735
10°	6812	6480	6279
15°	6720	6083	5682
20°	6538	5587	5038
25°	6318	5059	4348
30°	6051	4436	3598
35°	5719	3804	2798
40°	5390	3123	1956
45°	4997	2400	968
50°	4509	1621	324
55°	3893	830	225
60°	3117	298	158
65°	2137	165	71
70°	957	88	58
75°	0	40	40
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4997 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.7	7.1
10°-20°	193.1	18.5
20°-30°	249.9	24.0
30°-40°	237.5	22.8
40°-50°	168.2	16.1
50°-60°	86.3	8.3
60°-70°	30.2	2.9
70°-80°	2.6	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°	516.7	49.6
0°-40°	754.2	72.4
0°-60°	1008.7	96.8
0°-90°	1041.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1041.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	798	798	798	798	798	
5°	792	793	780	780	779	75
15°	754	731	682	650	637	212
25°	665	613	532	476	458	306
35°	544	464	362	292	266	340
45°	410	316	197	113	80	316
55°	259	171	55	16	15	232
65°	105	51	8	5	4	104
75°	0	1	1	1	1	9
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	797.6	797.6	797.6	797.6	797.6
2.5°	795.3	797.6	790.7	796.4	797.6
5°	791.8	793.0	780.3	780.3	779.1
7.5°	786.1	783.8	763.0	754.9	753.8
10°	779.1	771.1	741.1	723.8	718.1
12.5°	768.8	753.8	713.5	688.1	681.2
15°	753.8	730.7	682.3	650.1	637.4
17.5°	735.4	705.4	647.8	608.6	595.9
20°	713.5	675.4	609.7	565.9	549.8
22.5°	690.4	646.6	570.5	521.0	504.8
25°	665.0	613.2	532.5	476.0	457.6
27.5°	638.5	577.4	491.0	432.2	408.0
30°	608.6	541.7	446.1	385.0	361.9
32.5°	576.3	502.5	405.7	340.0	312.4
35°	544.0	464.5	361.9	291.6	266.2
37.5°	512.9	428.8	318.1	244.3	220.1
40°	479.5	389.6	277.8	201.7	174.0
42.5°	444.9	351.5	236.3	157.9	127.9
45°	410.3	315.8	197.1	113.0	79.5
47.5°	375.7	277.8	159.1	71.5	42.6
50°	336.6	240.9	121.0	38.0	24.2
52.5°	299.7	206.3	86.4	21.9	18.4
55°	259.3	170.6	55.3	16.1	15.0
57.5°	221.3	136.0	31.1	12.7	11.5
60°	181.0	104.9	17.3	10.4	9.2
62.5°	140.6	76.1	11.5	6.9	5.8
65°	104.9	50.7	8.1	4.6	3.5
67.5°	69.2	28.8	5.8	2.3	2.3
70°	38.0	13.8	3.5	2.3	2.3
72.5°	13.8	4.6	2.3	1.2	1.2
75°	0.0	1.2	1.2	1.2	1.2
77.5°	0.0	0.0	0.0	0.0	1.2
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)