

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: P1060285

Luminaire Tested: S124RDR-S1020D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060285
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1020D940-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

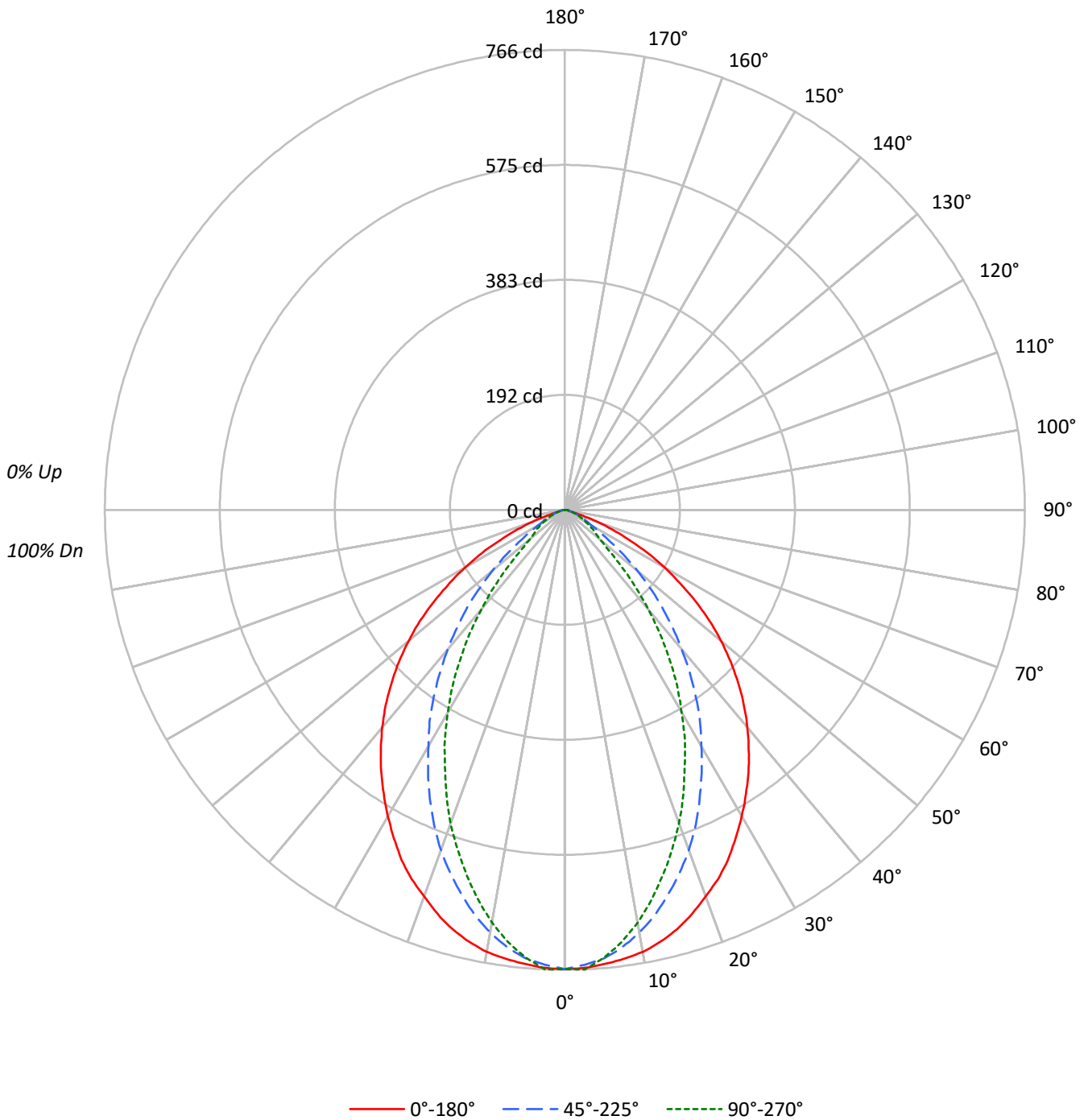
Lumens per Lamp: N/A
Luminaire Lumens: 1127.8 lumens
Efficiency: N/A
Efficacy: 32.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6587	6587	6587
5°	6565	6481	6472
10°	6538	6255	6104
15°	6445	5916	5618
20°	6279	5529	5094
25°	6111	5046	4484
30°	5860	4520	3867
35°	5606	3998	3194
40°	5316	3403	2422
45°	4972	2781	1627
50°	4547	2107	1010
55°	3995	1390	857
60°	3303	854	704
65°	2392	658	571
70°	1302	488	433
75°	286	359	396
80°	213	268	322
85°	217	217	316

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4972 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.9	6.3
10°-20°	188.2	16.7
20°-30°	249.3	22.1
30°-40°	247.5	21.9
40°-50°	190.4	16.9
50°-60°	113.5	10.1
60°-70°	51.6	4.6
70°-80°	13.4	1.2
80°-90°	3.0	0.3
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°	508.4	45.1
0°-40°	755.9	67.0
0°-60°	1059.8	94.0
0°-90°	1127.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1127.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	760	761	750	750	749	72
15°	723	705	664	641	630	203
25°	643	597	531	487	472	295
35°	533	466	380	322	304	333
45°	408	329	228	159	134	314
55°	266	190	93	58	57	237
65°	117	70	32	28	28	118
75°	9	11	11	12	12	18
85°	2	2	2	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	764.9	764.9	764.9	764.9	764.9
2.5°	763.8	764.9	758.4	763.8	766.0
5°	759.5	760.6	749.8	749.8	748.7
7.5°	754.1	752.0	734.7	728.3	726.1
10°	747.7	740.1	715.3	702.4	698.1
12.5°	736.9	725.0	691.6	673.3	665.8
15°	722.9	704.6	663.6	641.0	630.2
17.5°	705.6	683.0	634.5	605.5	593.6
20°	685.2	655.0	603.3	566.7	555.9
22.5°	665.8	628.1	568.8	526.8	515.0
25°	643.2	596.8	531.1	486.9	471.9
27.5°	616.2	566.7	493.4	448.2	433.1
30°	589.3	534.4	454.6	407.2	388.9
32.5°	561.3	501.0	419.1	365.2	348.0
35°	533.3	466.5	380.3	322.1	303.8
37.5°	503.1	432.0	341.5	281.2	260.7
40°	472.9	398.6	302.7	241.3	215.5
42.5°	441.7	364.1	265.0	200.4	174.5
45°	408.3	328.6	228.4	159.4	133.6
47.5°	374.9	295.2	191.8	119.6	95.9
50°	339.4	259.6	157.3	87.3	75.4
52.5°	303.8	225.2	122.8	67.9	64.6
55°	266.1	189.6	92.6	58.2	57.1
57.5°	227.3	157.3	66.8	50.6	48.5
60°	191.8	127.1	49.6	43.1	40.9
62.5°	155.1	95.9	40.9	35.6	33.4
65°	117.4	70.0	32.3	28.0	28.0
67.5°	85.1	47.4	25.9	22.6	21.5
70°	51.7	29.1	19.4	18.3	17.2
72.5°	25.9	17.2	15.1	14.0	14.0
75°	8.6	10.8	10.8	11.9	11.9
77.5°	6.5	7.5	7.5	8.6	8.6
80°	4.3	5.4	5.4	6.5	6.5
82.5°	3.2	3.2	4.3	4.3	5.4
85°	2.2	2.2	2.2	3.2	3.2
87.5°	1.1	1.1	1.1	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)