

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: P1060258

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060258
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-S1020D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

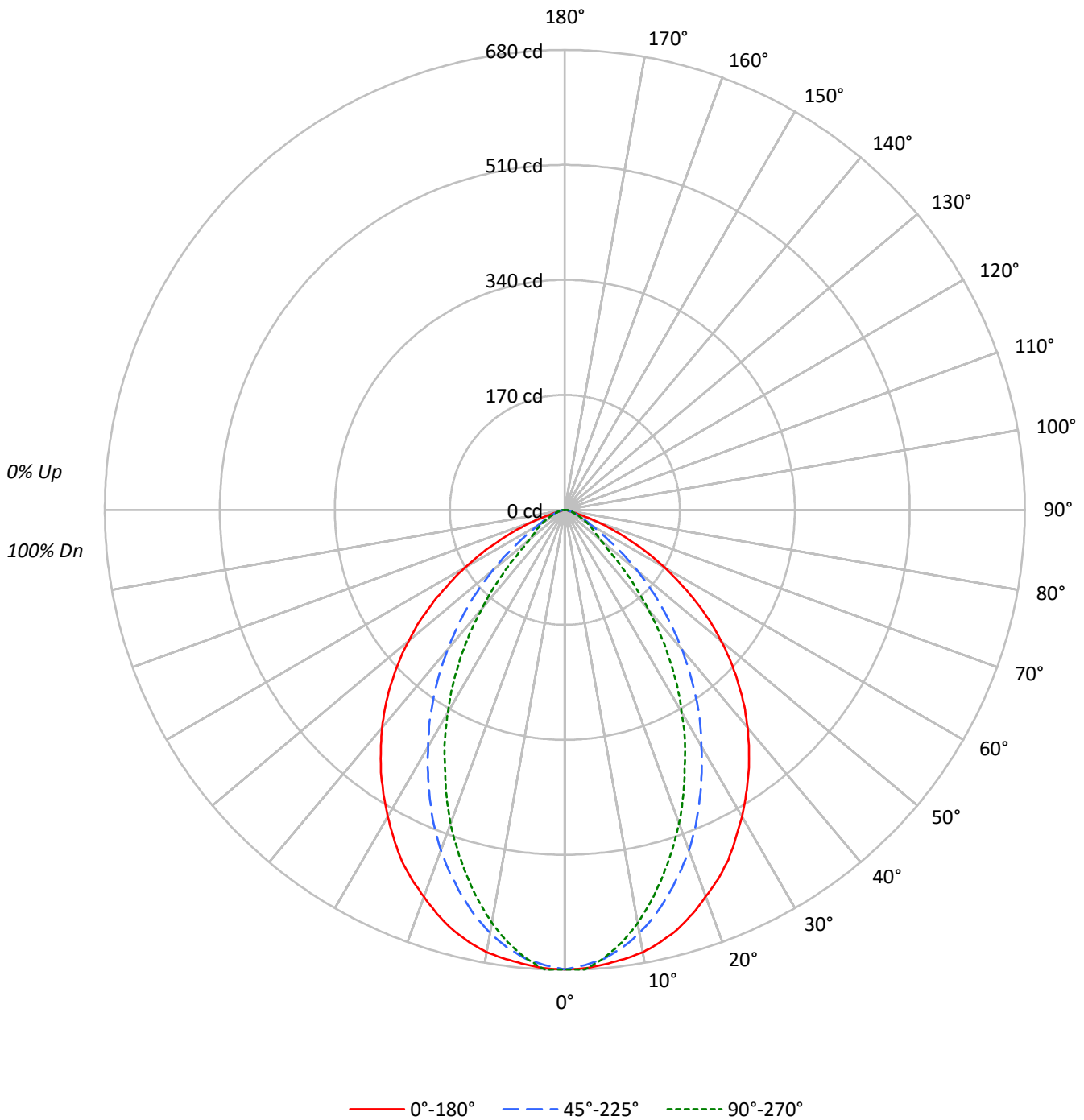
Lumens per Lamp: N/A
Luminaire Lumens: 1001.9 lumens
Efficiency: N/A
Efficacy: 28.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	5851	5851	5851
5°	5832	5758	5750
10°	5808	5557	5423
15°	5725	5256	4991
20°	5578	4912	4525
25°	5429	4483	3983
30°	5205	4016	3435
35°	4981	3551	2837
40°	4723	3023	2152
45°	4417	2471	1446
50°	4039	1871	898
55°	3549	1236	761
60°	2935	758	627
65°	2125	585	507
70°	1156	433	385
75°	256	319	349
80°	188	238	283
85°	188	188	287

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4417 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.9	6.3
10°-20°	167.2	16.7
20°-30°	221.5	22.1
30°-40°	219.9	21.9
40°-50°	169.2	16.9
50°-60°	100.8	10.1
60°-70°	45.8	4.6
70°-80°	11.9	1.2
80°-90°	2.6	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°	451.7	45.1
0°-40°	671.5	67.0
0°-60°	941.5	94.0
0°-90°	1001.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1001.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	680	680	680	680	680	
5°	675	676	666	666	665	64
15°	642	626	590	570	560	181
25°	571	530	472	433	419	262
35°	474	414	338	286	270	296
45°	363	292	203	142	119	279
55°	236	168	82	52	51	211
65°	104	62	29	25	25	105
75°	8	10	10	10	10	16
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°	679.5	679.5	679.5	679.5	679.5
2.5°	678.6	679.5	673.8	678.6	680.5
5°	674.7	675.7	666.1	666.1	665.2
7.5°	670.0	668.0	652.7	647.0	645.1
10°	664.2	657.5	635.5	624.0	620.2
12.5°	654.6	644.1	614.4	598.2	591.5
15°	642.2	625.9	589.6	569.5	559.9
17.5°	626.9	606.8	563.7	537.9	527.3
20°	608.7	581.9	536.0	503.4	493.8
22.5°	591.5	558.0	505.3	468.0	457.5
25°	571.4	530.2	471.8	432.6	419.2
27.5°	547.4	503.4	438.3	398.1	384.7
30°	523.5	474.7	403.9	361.8	345.5
32.5°	498.6	445.0	372.3	324.4	309.1
35°	473.8	414.4	337.8	286.2	269.9
37.5°	447.0	383.8	303.4	249.8	231.6
40°	420.2	354.1	268.9	214.4	191.4
42.5°	392.4	323.5	235.4	178.0	155.0
45°	362.7	291.9	202.9	141.6	118.7
47.5°	333.1	262.2	170.4	106.2	85.2
50°	301.5	230.7	139.7	77.5	67.0
52.5°	269.9	200.0	109.1	60.3	57.4
55°	236.4	168.4	82.3	51.7	50.7
57.5°	201.9	139.7	59.3	45.0	43.1
60°	170.4	112.9	44.0	38.3	36.4
62.5°	137.8	85.2	36.4	31.6	29.7
65°	104.3	62.2	28.7	24.9	24.9
67.5°	75.6	42.1	23.0	20.1	19.1
70°	45.9	25.8	17.2	16.3	15.3
72.5°	23.0	15.3	13.4	12.4	12.4
75°	7.7	9.6	9.6	10.5	10.5
77.5°	5.7	6.7	6.7	7.7	7.7
80°	3.8	4.8	4.8	5.7	5.7
82.5°	2.9	2.9	3.8	3.8	4.8
85°	1.9	1.9	1.9	2.9	2.9
87.5°	1.0	1.0	1.0	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)