

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: P998492

Luminaire Tested: S124DR-B350DB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P998492
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DR-B350DB2750-4F0-XX-W2A-F_2700K
Description: Define 4 Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

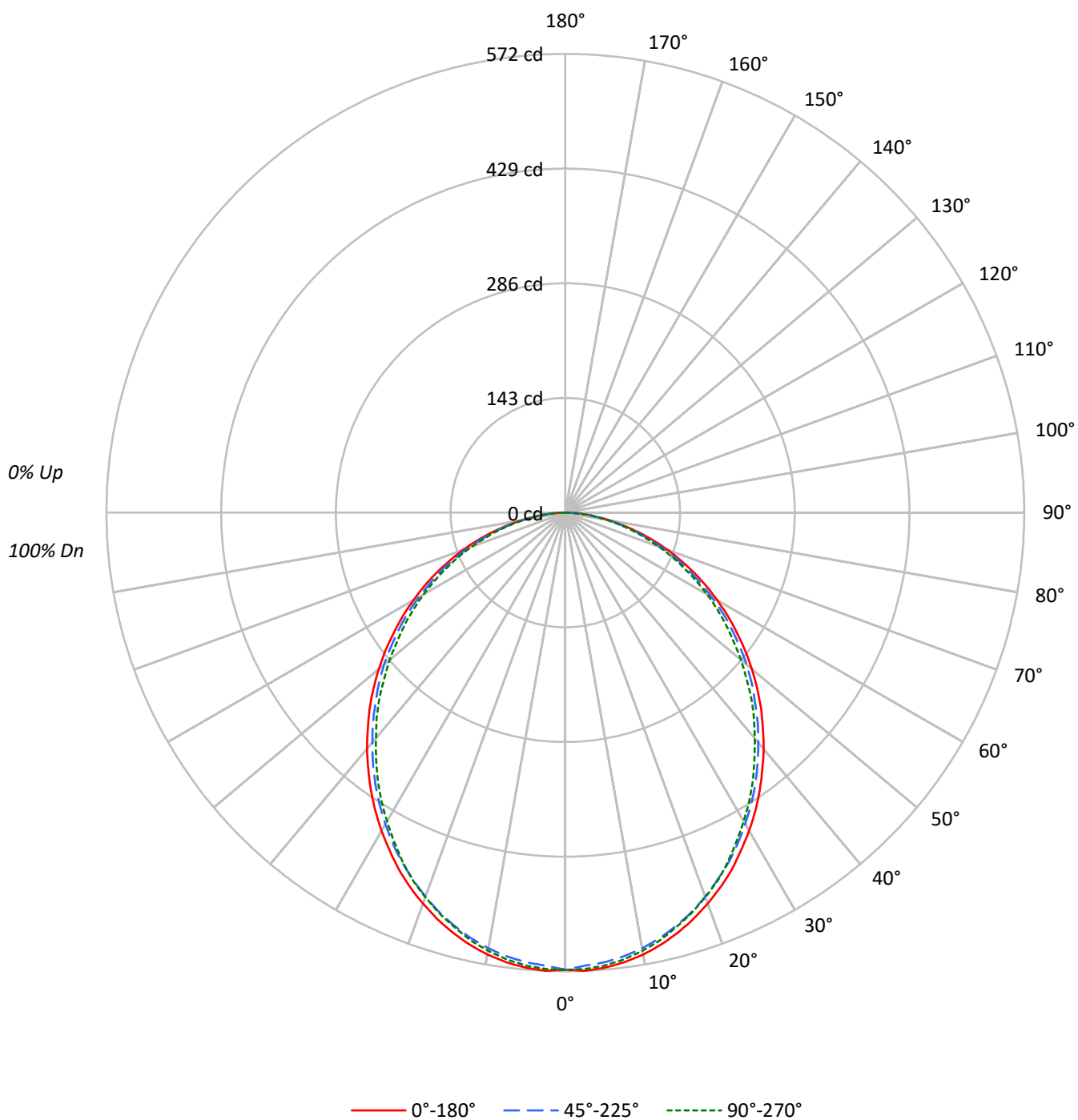
Lumens per Lamp: N/A
Luminaire Lumens: 1463.0 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 13
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						
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84						
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70						
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60						
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51						
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44						
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39						
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35						
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31						
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28						
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25						

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4648	4648	4648
5°	4662	4606	4640
10°	4633	4568	4591
15°	4576	4504	4515
20°	4502	4423	4427
25°	4418	4331	4319
30°	4313	4223	4184
35°	4206	4110	4056
40°	4094	3982	3909
45°	3976	3855	3781
50°	3848	3742	3627
55°	3708	3597	3480
60°	3568	3435	3330
65°	3411	3278	3147
70°	3233	3071	2952
75°	2965	2820	2747
80°	2639	2531	2465
85°	2311	2217	2180

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3976 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	3.7
10°-20°	151.4	10.3
20°-30°	222.8	15.2
30°-40°	258.9	17.7
40°-50°	258.9	17.7
50°-60°	226.5	15.5
60°-70°	168.1	11.5
70°-80°	95.4	6.5
80°-90°	27.3	1.9
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°	427.8	29.2
0°-40°	686.8	46.9
0°-60°	1172.2	80.1
0°-90°	1463.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1463.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	570	570	570	570	570	
5°	570	568	563	568	567	54
15°	542	540	534	536	535	153
25°	491	488	481	482	480	226
35°	422	419	413	410	407	264
45°	345	342	334	329	328	266
55°	261	259	253	248	245	234
65°	177	174	170	165	163	175
75°	94	92	90	88	87	100
85°	25	25	24	24	23	28
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	570.0	570.0	570.0	570.0	570.0
2.5°	571.8	570.5	565.4	570.0	569.5
5°	569.5	567.7	562.7	567.7	566.8
7.5°	565.4	563.6	558.1	562.2	561.8
10°	559.5	557.7	551.7	555.4	554.5
12.5°	551.7	549.9	543.5	547.6	546.2
15°	542.1	540.3	533.5	536.2	534.8
17.5°	531.2	528.9	522.5	524.3	523.4
20°	518.8	516.6	509.7	511.1	510.2
22.5°	505.6	502.4	495.5	498.3	496.5
25°	491.0	487.8	481.4	481.8	480.0
27.5°	474.5	471.3	465.4	464.5	462.2
30°	458.1	454.4	448.5	446.7	444.4
32.5°	440.7	437.5	431.1	428.9	426.6
35°	422.5	419.3	412.9	409.7	407.4
37.5°	403.3	400.5	393.7	390.5	387.3
40°	384.6	380.9	374.1	369.5	367.2
42.5°	364.5	362.6	354.9	349.4	348.0
45°	344.8	341.6	334.3	329.3	327.9
47.5°	324.3	322.0	315.1	309.7	306.0
50°	303.3	301.4	295.0	288.7	285.9
52.5°	282.7	280.4	273.6	268.1	264.4
55°	260.8	259.4	253.0	247.5	244.8
57.5°	240.2	238.9	232.5	227.0	224.3
60°	218.8	216.5	210.6	206.4	204.2
62.5°	197.8	195.9	189.5	185.9	183.6
65°	176.8	174.5	169.9	165.3	163.1
67.5°	155.3	153.5	148.9	144.3	143.9
70°	135.6	132.5	128.8	125.1	123.8
72.5°	114.6	111.4	108.7	106.0	104.6
75°	94.1	91.8	89.5	87.7	87.2
77.5°	74.0	73.1	70.8	70.3	69.0
80°	56.2	54.8	53.9	53.0	52.5
82.5°	38.8	38.4	38.4	37.9	37.5
85°	24.7	24.7	23.7	23.7	23.3
87.5°	11.9	11.4	11.0	11.0	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)