

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: P1032820

Luminaire Tested: S124DIW-B795D470UB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032820
REPORT IS A COMBINATION OF REPORTS P998162 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D470UB2750-4F0-XX-W2A-F_2700K
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

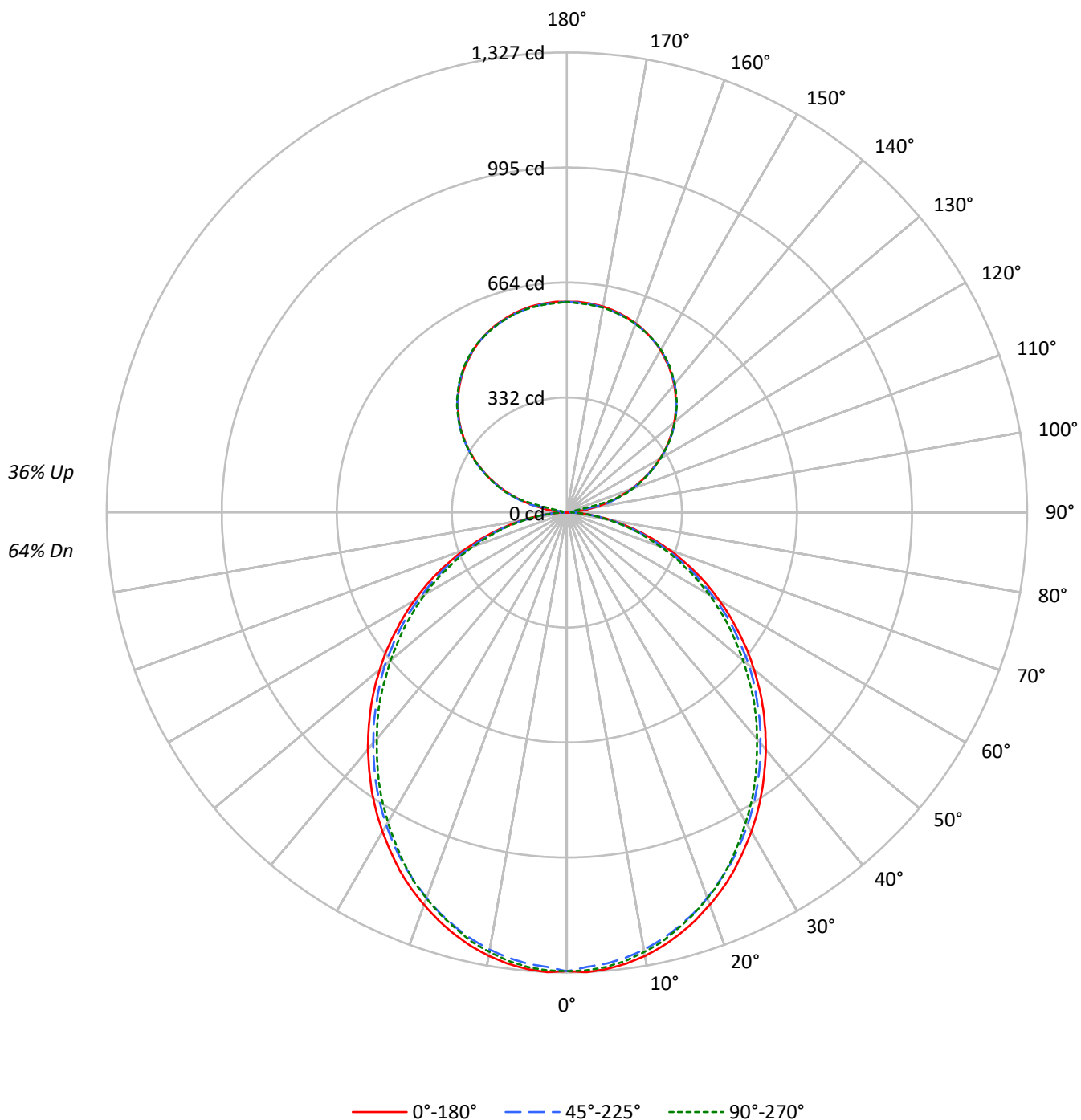
Lumens per Lamp: N/A
Luminaire Lumens: 5277.0 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 49.1
Input Voltage (V):
Input Current (A_{in}): 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64		
1	101	97	93	89	95	91	87	84	80	77	75	70	68	67	61	60	59	54		
2	92	84	78	73	86	79	74	69	70	66	62	62	58	56	54	51	49	45		
3	84	74	67	61	78	70	63	58	62	57	52	55	50	47	48	45	42	38		
4	77	66	58	51	72	62	55	49	55	49	45	49	44	40	43	39	36	33		
5	71	59	50	44	66	55	48	42	49	43	39	44	39	35	38	35	32	29		
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28	25		
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	32	28	25	22		
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	29	25	22	20		
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20	18		
10	49	36	29	24	46	35	28	23	31	26	22	28	23	20	25	21	18	16		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10789	10789	10789
5°	10798	10479	10492
10°	10706	10188	10117
15°	10553	9842	9694
20°	10357	9468	9255
25°	10136	9072	8784
30°	9870	8645	8267
35°	9595	8208	7766
40°	9307	7737	7234
45°	9005	7265	6737
50°	8673	6807	6186
55°	8310	6272	5639
60°	7938	5686	5069
65°	7514	5082	4427
70°	7025	4354	3738
75°	6294	3509	2994
80°	5363	2537	2106
85°	4162	1412	1134

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9005 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.7	2.4
10°-20°	351.3	6.7
20°-30°	517.1	9.8
30°-40°	601.1	11.4
40°-50°	601.0	11.4
50°-60°	525.7	10.0
60°-70°	390.3	7.4
70°-80°	221.4	4.2
80°-90°	64.7	1.2
90°-100°	20.2	0.4
100°-110°	132.8	2.5
110°-120°	253.6	4.8
120°-130°	321.9	6.1
130°-140°	344.4	6.5
140°-150°	322.0	6.1
150°-160°	259.7	4.9
160°-170°	167.5	3.2
170°-180°	57.7	1.1
0°-30°	993.1	18.8
0°-40°	1594.2	30.2
0°-60°	2720.9	51.6
0°-90°	3397.3	64.4
90°-120°	406.6	7.7
90°-150°	1394.9	26.4
90°-180°	1880.0	35.6
0°-180°	5277.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1323	1323	1323	1323	1323	
5°	1322	1318	1306	1318	1316	125
15°	1258	1254	1238	1245	1242	355
25°	1140	1132	1117	1118	1114	524
35°	981	973	958	951	946	613
45°	800	793	776	764	761	617
55°	605	602	587	575	568	542
65°	410	405	394	384	378	406
75°	218	213	208	204	202	232
85°	57	57	55	55	54	62
90°	1	6	10	13	14	5
95°	25	10	10	13	13	31
105°	137	140	142	146	130	143
115°	255	257	256	257	257	251
125°	359	361	360	361	362	321
135°	445	445	447	448	448	343
145°	513	515	515	515	516	321
155°	563	563	562	564	562	260
165°	594	592	592	595	591	168
175°	608	605	605	609	604	58
180°	608	608	608	608	608	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1323.1	1323.1	1323.1	1323.1	1323.1
2.5°	1327.3	1324.2	1312.5	1323.1	1322.0
5°	1322.0	1317.8	1306.1	1317.8	1315.7
7.5°	1312.5	1308.3	1295.5	1305.1	1304.0
10°	1298.7	1294.5	1280.7	1289.2	1287.1
12.5°	1280.7	1276.5	1261.6	1271.2	1268.0
15°	1258.4	1254.2	1238.3	1244.6	1241.5
17.5°	1233.0	1227.7	1212.8	1217.1	1215.0
20°	1204.4	1199.1	1183.2	1186.3	1184.2
22.5°	1173.6	1166.2	1150.3	1156.7	1152.4
25°	1139.7	1132.3	1117.4	1118.5	1114.2
27.5°	1101.5	1094.1	1080.3	1078.2	1072.9
30°	1063.4	1054.9	1041.1	1036.9	1031.6
32.5°	1023.1	1015.7	1000.8	995.5	990.2
35°	980.7	973.2	958.4	951.0	945.7
37.5°	936.1	929.8	913.9	906.5	899.0
40°	892.7	884.2	868.3	857.7	852.4
42.5°	846.0	841.8	823.8	811.0	807.9
45°	800.4	793.0	776.1	764.4	761.2
47.5°	752.7	747.4	731.5	718.8	710.3
50°	704.0	699.7	684.9	670.0	663.7
52.5°	656.3	650.9	635.0	622.3	613.8
55°	605.4	602.2	587.3	574.6	568.3
57.5°	557.7	554.5	539.6	526.9	520.5
60°	507.8	502.5	488.7	479.2	473.9
62.5°	459.1	454.8	440.0	431.5	426.2
65°	410.3	405.0	394.4	383.8	378.5
67.5°	360.5	356.2	345.6	335.0	334.0
70°	314.9	307.5	299.0	290.5	287.3
72.5°	266.1	258.7	252.3	246.0	242.8
75°	218.4	213.1	207.8	203.6	202.5
77.5°	171.7	169.6	164.3	163.3	160.1
80°	130.4	127.2	125.1	123.0	121.9
82.5°	90.1	89.1	89.1	88.0	86.9
85°	57.2	57.2	55.1	55.1	54.1
87.5°	27.6	26.5	25.4	25.4	25.4
90°	1.4	6.4	10.0	12.7	13.6
92.5°	6.8	5.9	9.5	12.3	12.3
95°	25.0	9.5	10.0	12.7	13.2
97.5°	47.7	57.7	10.0	12.3	12.7
100°	74.5	82.7	20.0	12.3	12.7
102.5°	104.5	110.0	115.4	13.2	13.2
105°	136.8	139.5	141.8	145.8	129.5
107.5°	166.3	167.7	170.8	173.1	174.9
110°	196.3	197.6	200.4	201.3	202.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.4	228.1	229.0	228.5	230.4
115°	255.3	256.7	256.3	257.2	257.2
117.5°	282.2	284.0	285.3	284.9	284.9
120°	309.4	311.2	310.8	311.7	310.8
122.5°	334.9	335.8	336.7	337.1	336.2
125°	358.9	360.8	359.9	361.2	361.7
127.5°	382.1	382.6	384.8	384.4	383.9
130°	404.4	404.8	406.2	406.7	406.7
132.5°	424.8	425.7	427.6	428.0	427.6
135°	445.3	444.8	446.6	447.5	448.5
137.5°	463.4	463.4	465.7	466.6	466.2
140°	481.2	482.1	483.0	484.3	484.8
142.5°	497.1	498.9	499.3	500.2	500.2
145°	513.4	514.8	514.8	515.2	516.2
147.5°	526.1	528.9	528.4	528.9	529.3
150°	540.2	542.0	541.6	541.6	542.0
152.5°	552.0	553.4	552.5	553.4	553.0
155°	562.9	563.4	562.0	563.9	562.5
157.5°	572.5	572.5	570.7	572.9	570.7
160°	580.7	579.3	578.9	581.6	578.9
162.5°	587.9	586.1	585.7	588.4	585.2
165°	593.8	591.6	591.6	595.2	591.1
167.5°	598.8	596.6	596.1	600.2	595.7
170°	602.9	600.2	600.7	604.3	599.8
172.5°	605.7	602.9	603.4	607.0	602.0
175°	607.5	604.8	605.2	609.3	603.8
177.5°	608.8	605.7	606.6	610.2	604.8
180°	607.5	607.5	607.5	607.5	607.5

(END OF REPORT)