

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: P1033799

Luminaire Tested: S124DIW-B795D770UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033799
REPORT IS A COMBINATION OF REPORTS P998210 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D770UB27-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

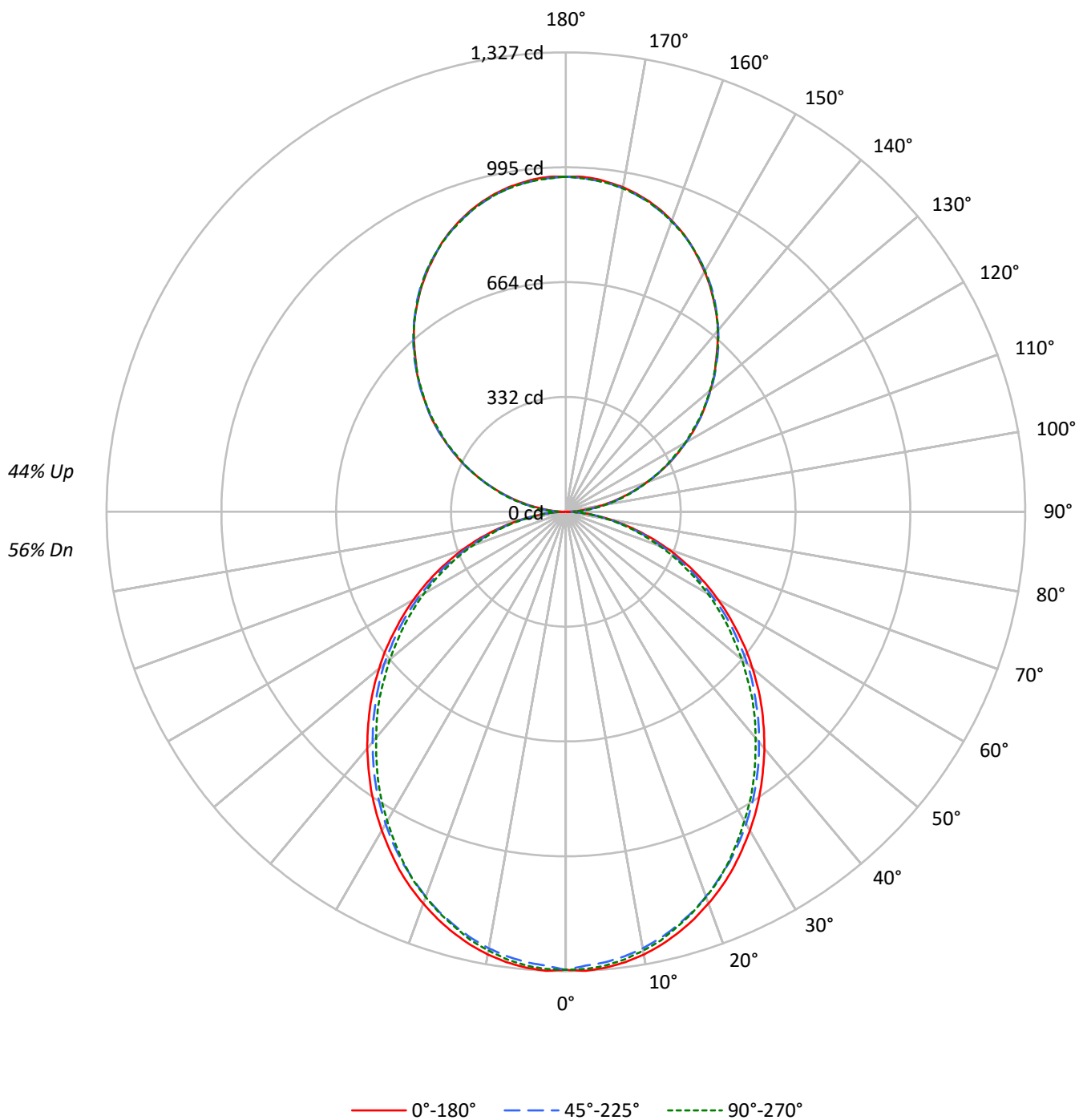
Lumens per Lamp: N/A
Luminaire Lumens: 6083.0 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 59.1
Input Voltage (V):
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52
2	90	83	76	71	84	77	72	67	67	62	59	57	54	51	48	46	44
3	82	73	65	59	76	68	61	56	59	54	49	50	46	43	42	40	37
4	75	64	56	50	70	60	53	48	52	47	42	45	40	37	38	35	32
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28
6	64	51	43	37	59	48	41	36	42	36	32	36	32	28	31	27	25
7	59	47	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22
8	55	42	34	29	51	40	33	28	35	29	25	30	26	22	26	22	20
9	51	39	31	26	47	36	29	25	32	26	22	28	23	20	24	20	18
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	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	2.1
10°-20°	351.3	5.8
20°-30°	517.1	8.5
30°-40°	601.1	9.9
40°-50°	601.0	9.9
50°-60°	525.7	8.6
60°-70°	390.3	6.4
70°-80°	221.4	3.6
80°-90°	65.5	1.1
90°-100°	63.1	1.0
100°-110°	188.9	3.1
110°-120°	321.0	5.3
120°-130°	423.3	7.0
130°-140°	475.4	7.8
140°-150°	467.3	7.7
150°-160°	393.0	6.5
160°-170°	261.5	4.3
170°-180°	91.6	1.5
0°-30°	993.1	16.3
0°-40°	1594.2	26.2
0°-60°	2720.9	44.7
0°-90°	3398.1	55.9
90°-120°	572.9	9.4
90°-150°	1938.9	31.9
90°-180°	2685.0	44.1
0°-180°	6083.0	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°	2	10	16	21	22	7
95°	45	52	57	59	59	49
105°	174	175	178	180	183	185
115°	326	326	325	324	323	322
125°	475	475	474	473	472	424
135°	613	617	617	616	614	474
145°	745	748	748	748	745	466
155°	853	853	852	855	852	393
165°	929	926	925	930	926	262
175°	966	962	962	967	962	92
180°	968	968	968	968	968	

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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°	2.2	10.5	16.5	21.0	22.5
92.5°	19.5	29.2	32.9	35.2	35.9
95°	44.9	51.6	56.9	59.1	59.1
97.5°	71.8	77.8	83.8	86.8	86.8
100°	104.8	107.8	114.5	116.0	116.0
102.5°	139.2	139.9	145.9	148.2	148.9
105°	174.4	175.1	178.1	180.4	182.6
107.5°	211.0	211.8	212.5	215.5	214.8
110°	248.5	250.0	249.2	247.7	250.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	287.4	287.4	285.9	285.9	285.9
115°	326.3	326.3	324.8	324.1	323.3
117.5°	363.0	363.0	362.2	360.0	357.7
120°	399.6	402.6	400.4	396.6	398.1
122.5°	437.8	438.6	437.8	435.6	431.8
125°	475.2	475.2	474.5	473.0	471.5
127.5°	508.9	511.2	509.7	508.2	507.4
130°	544.8	547.1	547.1	545.6	542.6
132.5°	581.5	583.0	582.2	580.8	580.0
135°	612.9	617.4	617.4	615.9	613.7
137.5°	648.1	650.4	651.8	649.6	650.4
140°	683.3	684.8	684.8	684.0	683.3
142.5°	715.5	717.0	716.2	716.2	716.2
145°	744.7	747.6	748.4	747.6	745.4
147.5°	774.6	778.3	777.6	776.8	776.1
150°	801.5	804.5	804.5	804.5	803.8
152.5°	827.0	828.5	829.2	831.5	829.2
155°	853.2	853.2	852.4	855.4	852.4
157.5°	875.6	874.1	874.1	876.4	874.1
160°	895.1	894.3	893.6	895.8	892.1
162.5°	913.0	910.8	910.0	914.5	910.8
165°	928.8	926.5	925.0	929.5	926.5
167.5°	941.5	938.5	938.5	943.0	938.5
170°	952.0	948.2	949.0	953.5	948.2
172.5°	959.4	956.4	956.4	961.7	956.4
175°	966.2	962.4	961.7	966.9	961.7
177.5°	969.2	965.4	965.4	970.7	964.7
180°	967.7	967.7	967.7	967.7	967.7

(END OF REPORT)