

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: P1033681

Luminaire Tested: S124DIW-B795D1050UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033681
REPORT IS A COMBINATION OF REPORTS P997945 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1050UB27-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

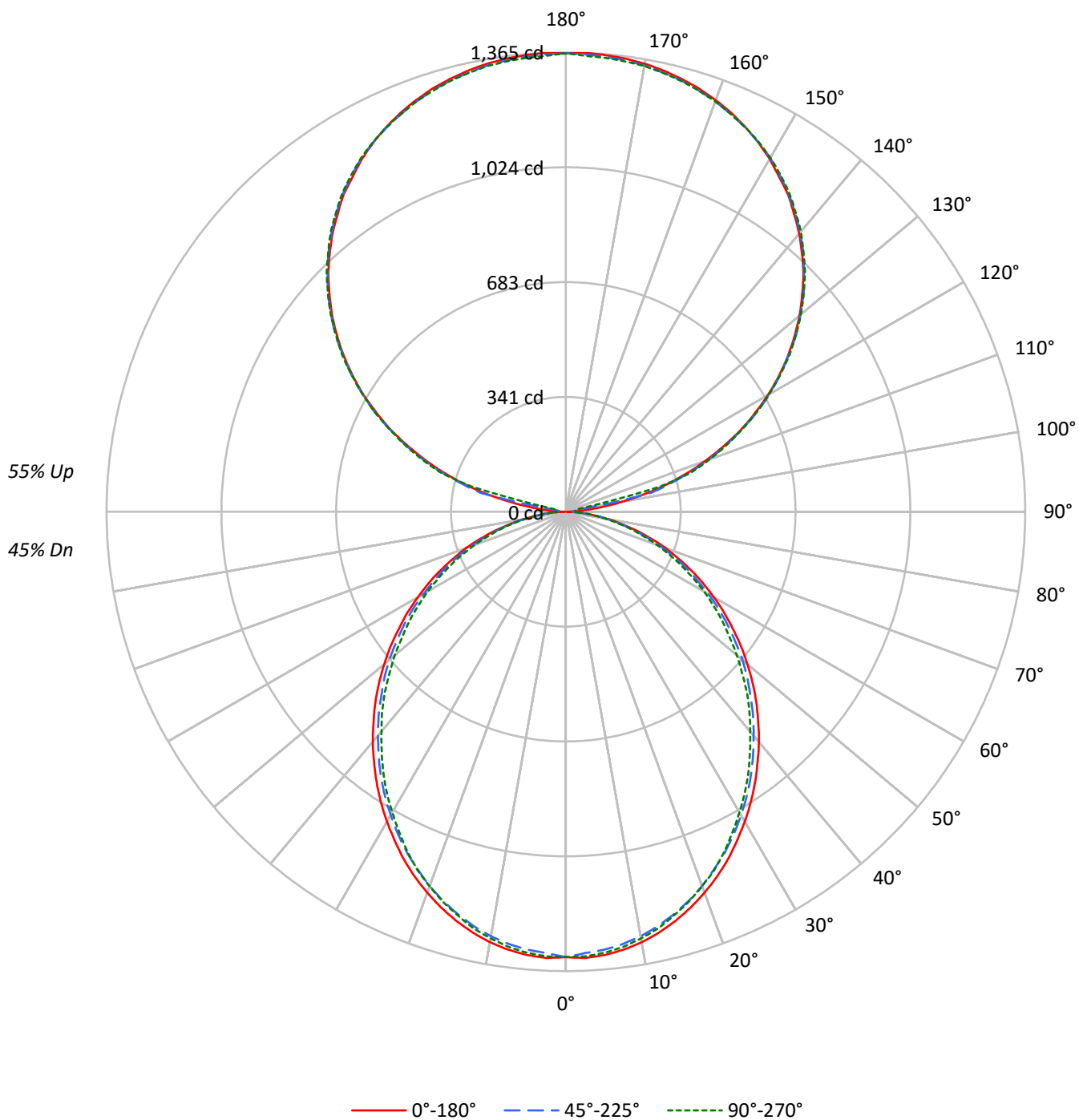
Lumens per Lamp: N/A
Luminaire Lumens: 7613.0 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 67.4
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	97	92	88	85	88	85	81	78	70	68	66	57	56	54	45	44	43
2	88	81	74	69	80	74	69	64	62	58	55	50	48	45	40	38	36
3	80	71	63	58	73	65	59	54	54	50	46	44	41	38	35	33	31
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	31	29	27
5	67	56	48	42	61	51	44	39	43	38	34	35	31	28	28	25	23
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16
9	49	37	30	25	45	35	28	23	29	24	20	25	20	18	20	17	15
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13

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	1.6
10°-20°	351.3	4.6
20°-30°	517.1	6.8
30°-40°	601.1	7.9
40°-50°	601.0	7.9
50°-60°	525.7	6.9
60°-70°	390.3	5.1
70°-80°	221.4	2.9
80°-90°	66.2	0.9
90°-100°	45.2	0.6
100°-110°	297.7	3.9
110°-120°	568.5	7.5
120°-130°	721.7	9.5
130°-140°	772.1	10.1
140°-150°	721.9	9.5
150°-160°	582.2	7.6
160°-170°	375.5	4.9
170°-180°	129.4	1.7
0°-30°	993.1	13.0
0°-40°	1594.2	20.9
0°-60°	2720.9	35.7
0°-90°	3398.8	44.6
90°-120°	911.4	12.0
90°-150°	3127.1	41.1
90°-180°	4214.0	55.4
0°-180°	7613.0	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°	3	14	22	28	31	7
95°	56	21	22	28	30	69
105°	307	313	318	327	290	321
115°	572	576	574	576	576	563
125°	805	809	807	810	811	719
135°	998	997	1001	1003	1005	769
145°	1151	1154	1154	1155	1157	719
155°	1262	1263	1260	1264	1261	582
165°	1331	1326	1326	1334	1325	376
175°	1362	1356	1357	1366	1354	130
180°	1362	1362	1362	1362	1362	

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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°	3.1	14.3	22.4	28.5	30.6
92.5°	15.3	13.2	21.4	27.5	27.5
95°	56.0	21.4	22.4	28.5	29.5
97.5°	107.0	129.4	22.4	27.5	28.5
100°	167.1	185.4	44.8	27.5	28.5
102.5°	234.3	246.5	258.7	29.5	29.5
105°	306.6	312.7	317.8	327.0	290.3
107.5°	372.8	375.9	383.0	388.1	392.2
110°	440.0	443.1	449.2	451.2	454.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	505.2	511.3	513.4	512.4	516.4
115°	572.5	575.5	574.5	576.5	576.5
117.5°	632.6	636.6	639.7	638.7	638.7
120°	693.7	697.8	696.7	698.8	696.7
122.5°	750.7	752.8	754.8	755.8	753.8
125°	804.7	808.8	806.7	809.8	810.8
127.5°	856.7	857.7	862.8	861.8	860.7
130°	906.6	907.6	910.6	911.7	911.7
132.5°	952.4	954.4	958.5	959.5	958.5
135°	998.2	997.2	1001.3	1003.3	1005.4
137.5°	1039.0	1039.0	1044.1	1046.1	1045.1
140°	1078.7	1080.8	1082.8	1085.9	1086.9
142.5°	1114.4	1118.4	1119.5	1121.5	1121.5
145°	1151.0	1154.1	1154.1	1155.1	1157.2
147.5°	1179.6	1185.7	1184.7	1185.7	1186.7
150°	1211.1	1215.2	1214.2	1214.2	1215.2
152.5°	1237.6	1240.7	1238.6	1240.7	1239.7
155°	1262.1	1263.1	1260.0	1264.1	1261.1
157.5°	1283.5	1283.5	1279.4	1284.5	1279.4
160°	1301.8	1298.7	1297.7	1303.8	1297.7
162.5°	1318.1	1314.0	1313.0	1319.1	1312.0
165°	1331.3	1326.2	1326.2	1334.4	1325.2
167.5°	1342.5	1337.4	1336.4	1345.6	1335.4
170°	1351.7	1345.6	1346.6	1354.8	1344.6
172.5°	1357.8	1351.7	1352.7	1360.9	1349.7
175°	1361.9	1355.8	1356.8	1366.0	1353.7
177.5°	1365.0	1357.8	1359.9	1368.0	1355.8
180°	1361.9	1361.9	1361.9	1361.9	1361.9

(END OF REPORT)