

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: P1033700

Luminaire Tested: S124DIW-B795D1050UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033700
REPORT IS A COMBINATION OF REPORTS P997994 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B795D1050UB40-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

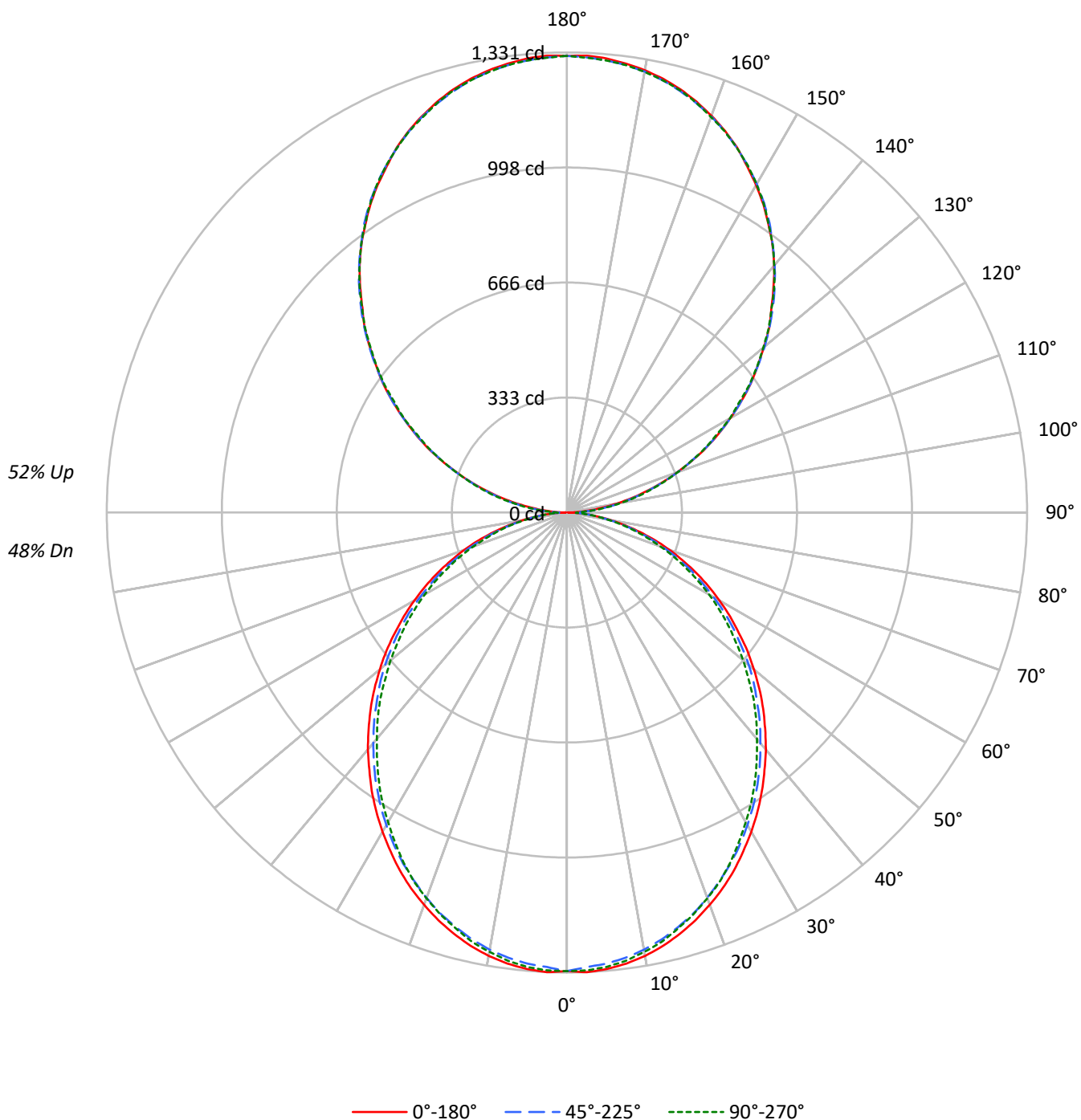
Lumens per Lamp: N/A
Luminaire Lumens: 7074.0 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54
1	97	93	89	86	89	86	82	79	72	70	68	60	58	56	48	47	46
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	40	39
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	37	35	33
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	31	28
5	68	56	48	42	62	52	45	40	44	39	34	37	33	30	30	27	25
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	22
7	58	46	38	32	53	42	35	30	36	31	26	30	26	23	25	22	19
8	54	41	34	28	49	38	32	27	33	27	24	28	24	20	23	20	17
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16
10	47	35	27	23	43	32	26	21	28	23	19	24	19	17	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10821	10821	10821
5°	10830	10510	10523
10°	10738	10218	10146
15°	10584	9871	9722
20°	10387	9495	9283
25°	10166	9099	8810
30°	9899	8671	8291
35°	9623	8232	7789
40°	9335	7759	7255
45°	9032	7286	6756
50°	8697	6827	6204
55°	8334	6291	5655
60°	7961	5703	5084
65°	7536	5096	4439
70°	7045	4367	3750
75°	6311	3519	3003
80°	5380	2545	2113
85°	4177	1417	1136

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9032 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.1	1.8
10°-20°	352.4	5.0
20°-30°	518.6	7.3
30°-40°	602.8	8.5
40°-50°	602.8	8.5
50°-60°	527.2	7.5
60°-70°	391.4	5.5
70°-80°	222.1	3.1
80°-90°	66.4	0.9
90°-100°	86.1	1.2
100°-110°	257.9	3.6
110°-120°	438.1	6.2
120°-130°	577.8	8.2
130°-140°	649.0	9.2
140°-150°	637.9	9.0
150°-160°	536.5	7.6
160°-170°	356.9	5.0
170°-180°	125.0	1.8
0°-30°	996.1	14.1
0°-40°	1598.9	22.6
0°-60°	2728.9	38.6
0°-90°	3408.8	48.2
90°-120°	782.1	11.1
90°-150°	2646.7	37.4
90°-180°	3665.0	51.8
0°-180°	7074.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1327	1327	1327	1327	1327	
5°	1326	1322	1310	1322	1320	126
15°	1262	1258	1242	1248	1245	356
25°	1143	1136	1121	1122	1118	526
35°	984	976	961	954	948	615
45°	803	795	778	767	763	619
55°	607	604	589	576	570	544
65°	412	406	396	385	380	407
75°	219	214	208	204	203	232
85°	57	57	55	55	54	62
90°	3	14	22	29	31	8
95°	61	70	78	81	81	66
105°	238	239	243	246	249	252
115°	445	445	443	442	441	439
125°	649	649	648	646	644	578
135°	837	843	843	841	838	647
145°	1016	1021	1022	1021	1018	636
155°	1165	1165	1164	1168	1164	536
165°	1268	1265	1263	1269	1265	357
175°	1319	1314	1313	1320	1313	125
180°	1321	1321	1321	1321	1321	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1327.0	1327.0	1327.0	1327.0	1327.0
2.5°	1331.3	1328.1	1316.4	1327.0	1325.9
5°	1325.9	1321.7	1310.0	1321.7	1319.6
7.5°	1316.4	1312.1	1299.4	1308.9	1307.9
10°	1302.5	1298.3	1284.5	1293.0	1290.8
12.5°	1284.5	1280.2	1265.3	1274.9	1271.7
15°	1262.1	1257.9	1241.9	1248.3	1245.1
17.5°	1236.6	1231.3	1216.4	1220.7	1218.5
20°	1207.9	1202.6	1186.6	1189.8	1187.7
22.5°	1177.1	1169.6	1153.7	1160.1	1155.8
25°	1143.0	1135.6	1120.7	1121.8	1117.5
27.5°	1104.8	1097.3	1083.5	1081.4	1076.1
30°	1066.5	1058.0	1044.2	1039.9	1034.6
32.5°	1026.1	1018.6	1003.8	998.4	993.1
35°	983.6	976.1	961.2	953.8	948.5
37.5°	938.9	932.5	916.6	909.1	901.7
40°	895.3	886.8	870.8	860.2	854.9
42.5°	848.5	844.3	826.2	813.4	810.2
45°	802.8	795.3	778.3	766.6	763.4
47.5°	754.9	749.6	733.7	720.9	712.4
50°	706.0	701.8	686.9	672.0	665.6
52.5°	658.2	652.9	636.9	624.2	615.7
55°	607.1	604.0	589.1	576.3	569.9
57.5°	559.3	556.1	541.2	528.5	522.1
60°	509.3	504.0	490.2	480.6	475.3
62.5°	460.4	456.2	441.3	432.8	427.4
65°	411.5	406.2	395.5	384.9	379.6
67.5°	361.5	357.3	346.6	336.0	334.9
70°	315.8	308.4	299.9	291.3	288.2
72.5°	266.9	259.4	253.1	246.7	243.5
75°	219.0	213.7	208.4	204.2	203.1
77.5°	172.3	170.1	164.8	163.7	160.6
80°	130.8	127.6	125.5	123.3	122.3
82.5°	90.4	89.3	89.3	88.3	87.2
85°	57.4	57.4	55.3	55.3	54.2
87.5°	27.6	26.6	25.5	25.5	25.5
90°	3.1	14.3	22.5	28.6	30.6
92.5°	26.6	39.8	45.0	48.0	49.0
95°	61.3	70.5	77.6	80.7	80.7
97.5°	98.1	106.2	114.4	118.5	118.5
100°	143.0	147.1	156.3	158.4	158.4
102.5°	190.0	191.0	199.2	202.3	203.3
105°	238.0	239.1	243.1	246.2	249.3
107.5°	288.1	289.1	290.1	294.2	293.2
110°	339.2	341.2	340.2	338.2	341.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	392.3	392.3	390.3	390.3	390.3
115°	445.4	445.4	443.4	442.4	441.3
117.5°	495.5	495.5	494.5	491.4	488.3
120°	545.5	549.6	546.6	541.5	543.5
122.5°	597.6	598.7	597.6	594.6	589.5
125°	648.7	648.7	647.7	645.7	643.6
127.5°	694.7	697.8	695.7	693.7	692.7
130°	743.7	746.8	746.8	744.8	740.7
132.5°	793.8	795.8	794.8	792.8	791.8
135°	836.7	842.8	842.8	840.8	837.7
137.5°	884.7	887.8	889.8	886.8	887.8
140°	932.7	934.8	934.8	933.8	932.7
142.5°	976.7	978.7	977.7	977.7	977.7
145°	1016.5	1020.6	1021.6	1020.6	1017.5
147.5°	1057.4	1062.5	1061.5	1060.4	1059.4
150°	1094.2	1098.2	1098.2	1098.2	1097.2
152.5°	1128.9	1130.9	1132.0	1135.0	1132.0
155°	1164.7	1164.7	1163.6	1167.7	1163.6
157.5°	1195.3	1193.3	1193.3	1196.3	1193.3
160°	1221.9	1220.8	1219.8	1222.9	1217.8
162.5°	1246.4	1243.3	1242.3	1248.4	1243.3
165°	1267.8	1264.8	1262.7	1268.9	1264.8
167.5°	1285.2	1281.1	1281.1	1287.2	1281.1
170°	1299.5	1294.4	1295.4	1301.5	1294.4
172.5°	1309.7	1305.6	1305.6	1312.8	1305.6
175°	1318.9	1313.8	1312.8	1319.9	1312.8
177.5°	1323.0	1317.9	1317.9	1325.0	1316.9
180°	1321.0	1321.0	1321.0	1321.0	1321.0

(END OF REPORT)