

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: P1033122

Luminaire Tested: S124DIW-B1020D1340UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033122
REPORT IS A COMBINATION OF REPORTS P996689 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1340UB27-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

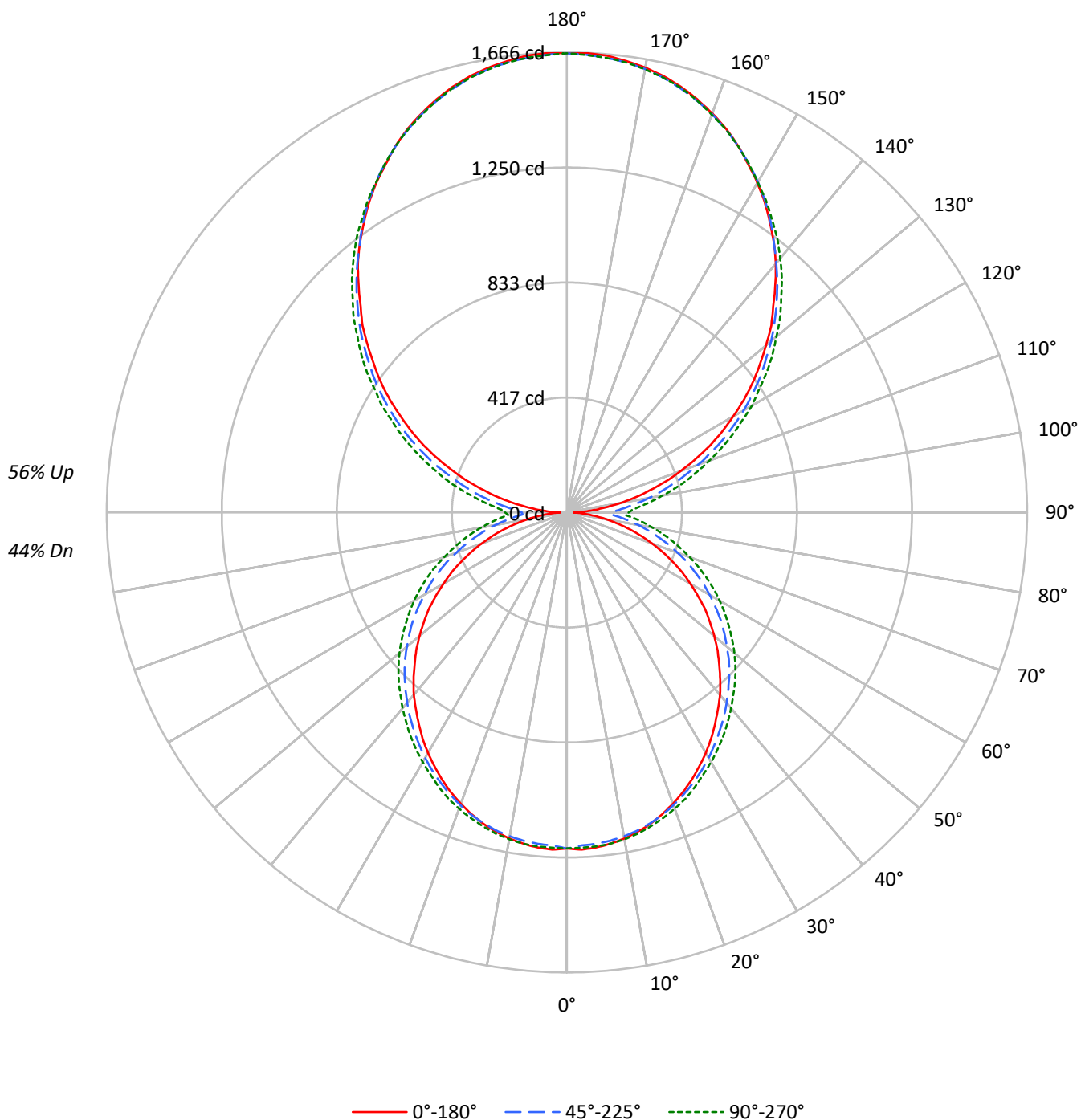
Lumens per Lamp: N/A
Luminaire Lumens: 8766.0 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 88.9
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
RCR																	
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	50	50	50
1	96	91	87	83	87	83	80	76	69	66	64	55	54	52	43	42	41
2	87	79	72	67	79	72	67	62	60	56	52	48	45	43	37	35	34
3	79	69	61	55	72	63	57	51	52	47	43	42	39	36	33	30	28
4	72	61	53	46	65	56	49	43	46	41	37	37	33	30	29	26	24
5	66	54	46	39	60	50	42	37	41	36	31	33	29	26	26	23	21
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	24	21	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	22	18	16
8	52	39	31	26	47	36	29	24	30	25	21	25	21	18	20	17	14
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13
10	45	33	25	21	41	30	24	19	26	20	17	21	17	14	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9921	9921	9921
5°	9948	9663	9680
10°	9884	9472	9445
15°	9791	9259	9181
20°	9654	9027	8923
25°	9499	8772	8646
30°	9333	8519	8363
35°	9144	8261	8111
40°	8992	8012	7851
45°	8768	7780	7620
50°	8577	7515	7378
55°	8379	7260	7098
60°	8072	6942	6834
65°	7734	6601	6517
70°	7324	6209	6151
75°	6752	5776	5802
80°	6108	5332	5436
85°	5254	4887	5140

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8768 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	1.3
10°-20°	330.3	3.8
20°-30°	499.4	5.7
30°-40°	604.2	6.9
40°-50°	638.7	7.3
50°-60°	601.1	6.9
60°-70°	498.8	5.7
70°-80°	350.0	4.0
80°-90°	200.9	2.3
90°-100°	225.9	2.6
100°-110°	411.7	4.7
110°-120°	609.9	7.0
120°-130°	760.3	8.7
130°-140°	831.3	9.5
140°-150°	805.9	9.2
150°-160°	675.4	7.7
160°-170°	449.4	5.1
170°-180°	157.4	1.8
0°-30°	945.0	10.8
0°-40°	1549.1	17.7
0°-60°	2789.0	31.8
0°-90°	3838.7	43.8
90°-120°	1247.6	14.2
90°-150°	3645.0	41.6
90°-180°	4927.0	56.2
0°-180°	8766.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1218	1214	1204	1215	1214	116
15°	1168	1169	1165	1177	1176	329
25°	1068	1076	1080	1095	1097	492
35°	935	951	965	984	988	585
45°	779	805	831	854	861	602
55°	610	639	680	707	715	544
65°	422	466	512	546	557	419
75°	234	285	342	380	392	249
85°	72	129	191	232	245	75
90°	26	94	163	210	224	21
95°	95	151	216	257	269	98
105°	312	340	396	434	449	332
115°	569	581	622	651	659	562
125°	822	821	854	877	882	733
135°	1056	1064	1073	1093	1097	817
145°	1281	1285	1286	1293	1295	802
155°	1466	1466	1465	1470	1465	675
165°	1596	1592	1590	1598	1592	450
175°	1660	1654	1653	1662	1653	158
180°	1663	1663	1663	1663	1663	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1216.6	1216.6	1216.6	1216.6	1216.6
2.5°	1222.1	1218.0	1207.1	1216.6	1215.3
5°	1218.0	1213.9	1204.4	1215.3	1213.9
7.5°	1209.8	1207.1	1198.9	1211.2	1209.8
10°	1198.9	1197.6	1190.7	1203.0	1201.6
12.5°	1183.9	1183.9	1179.8	1190.7	1190.7
15°	1167.6	1168.9	1164.9	1177.1	1175.8
17.5°	1145.8	1149.9	1148.5	1160.8	1159.4
20°	1122.6	1126.7	1128.1	1141.7	1141.7
22.5°	1096.7	1102.2	1104.9	1118.5	1121.3
25°	1068.1	1076.3	1080.4	1095.4	1096.7
27.5°	1036.8	1049.1	1054.5	1068.1	1069.5
30°	1005.5	1016.4	1025.9	1040.9	1043.6
32.5°	971.4	985.0	995.9	1013.6	1016.4
35°	934.6	951.0	964.6	983.7	987.7
37.5°	897.8	916.9	933.3	952.3	956.4
40°	862.4	880.1	899.2	919.6	925.1
42.5°	821.5	842.0	865.1	888.3	892.4
45°	779.3	805.2	831.1	854.2	861.0
47.5°	739.8	765.7	795.6	818.8	827.0
50°	696.2	726.2	756.1	783.4	791.6
52.5°	652.6	682.6	718.0	745.2	753.4
55°	610.4	639.0	679.8	707.1	715.3
57.5°	562.7	598.1	637.6	670.3	677.1
60°	516.4	551.8	596.7	628.1	639.0
62.5°	471.4	510.9	555.9	587.2	598.1
65°	422.3	465.9	512.3	546.3	557.2
67.5°	376.0	422.3	471.4	505.5	516.4
70°	328.3	374.7	426.4	463.2	472.8
72.5°	282.0	329.7	385.6	421.0	431.9
75°	234.3	284.7	342.0	380.1	392.4
77.5°	189.4	242.5	302.5	340.6	354.2
80°	148.5	203.0	262.9	303.8	314.7
82.5°	107.6	164.9	224.8	267.0	279.3
85°	72.2	129.4	190.7	231.6	245.2
87.5°	45.0	100.8	160.8	200.3	212.5
90°	25.7	94.3	163.2	210.4	223.9
92.5°	53.8	118.3	183.3	225.4	237.5
95°	94.9	151.4	216.3	256.9	269.2
97.5°	139.8	189.7	255.8	296.3	308.6
100°	195.1	235.6	300.3	339.7	349.3
102.5°	254.2	285.5	347.5	386.9	399.1
105°	312.0	340.5	396.0	434.0	448.7
107.5°	375.0	399.4	448.4	487.6	495.8
110°	437.9	459.6	506.0	534.7	549.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	503.4	519.8	562.1	592.1	603.0
115°	569.0	581.2	622.2	650.9	659.1
117.5°	632.0	640.1	679.7	704.5	711.5
120°	693.6	702.9	738.5	759.4	772.9
122.5°	759.2	760.5	796.0	819.4	822.5
125°	822.2	820.9	853.6	876.9	882.5
127.5°	880.0	882.6	907.2	929.2	937.5
130°	940.5	942.9	964.7	986.7	989.7
132.5°	1003.5	1004.7	1019.8	1040.3	1047.2
135°	1056.1	1063.8	1073.4	1092.7	1096.9
137.5°	1116.6	1119.1	1127.1	1143.6	1151.8
140°	1177.0	1178.3	1179.6	1196.0	1201.5
142.5°	1231.0	1233.6	1230.9	1245.9	1251.3
145°	1281.2	1284.9	1286.2	1293.1	1294.7
147.5°	1332.6	1337.7	1336.4	1336.5	1340.6
150°	1378.9	1382.7	1382.7	1382.7	1381.4
152.5°	1421.3	1423.8	1425.1	1429.0	1425.1
155°	1466.3	1466.3	1465.0	1470.2	1465.0
157.5°	1504.9	1502.3	1502.3	1506.2	1502.3
160°	1538.3	1537.0	1535.7	1539.6	1533.2
162.5°	1569.2	1565.3	1564.0	1571.8	1565.3
165°	1596.2	1592.3	1589.8	1597.5	1592.3
167.5°	1618.1	1612.9	1612.9	1620.6	1612.9
170°	1636.1	1629.6	1630.9	1638.6	1629.6
172.5°	1648.9	1643.8	1643.8	1652.8	1643.8
175°	1660.5	1654.1	1652.8	1661.8	1652.8
177.5°	1665.7	1659.2	1659.2	1668.2	1657.9
180°	1663.1	1663.1	1663.1	1663.1	1663.1

(END OF REPORT)