

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: P1033148

Luminaire Tested: S124DIW-B1020D1340UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033148
REPORT IS A COMBINATION OF REPORTS P996749 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1340UB50-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

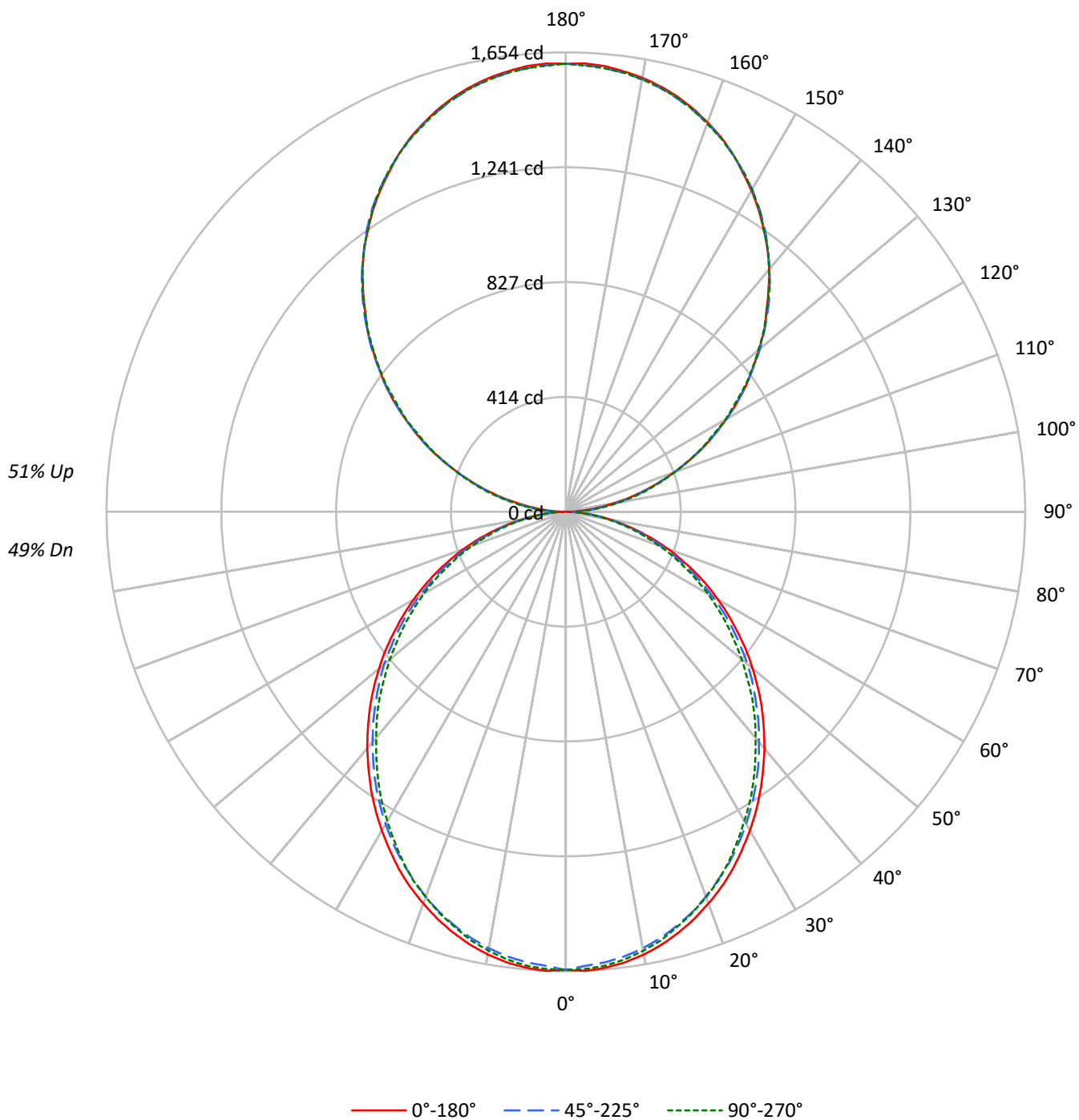
Lumens per Lamp: N/A
Luminaire Lumens: 8712.0 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 88.9
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49		
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41		
2	89	81	75	70	81	75	70	65	63	59	56	53	50	47	43	41	39	34		
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	38	35	33	29		
4	74	63	55	49	68	59	52	46	50	44	40	41	37	34	34	31	29	25		
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	22		
6	63	50	42	37	57	47	40	34	40	34	30	34	29	26	28	24	22	19		
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	19	17		
8	54	41	34	28	49	39	32	27	33	28	24	28	24	20	23	20	17	15		
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14		
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14	12		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13448	13448	13448
5°	13460	13062	13078
10°	13345	12698	12610
15°	13154	12268	12082
20°	12910	11802	11537
25°	12635	11309	10949
30°	12302	10776	10304
35°	11959	10230	9681
40°	11601	9644	9017
45°	11225	9055	8397
50°	10810	8485	7710
55°	10358	7818	7028
60°	9895	7088	6318
65°	9365	6335	5518
70°	8757	5427	4659
75°	7844	4374	3732
80°	6683	3162	2626
85°	5196	1760	1413

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11225 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.4	1.8
10°-20°	437.9	5.0
20°-30°	644.5	7.4
30°-40°	749.2	8.6
40°-50°	749.1	8.6
50°-60°	655.2	7.5
60°-70°	486.5	5.6
70°-80°	276.0	3.2
80°-90°	82.5	0.9
90°-100°	105.1	1.2
100°-110°	314.9	3.6
110°-120°	535.0	6.1
120°-130°	705.6	8.1
130°-140°	792.5	9.1
140°-150°	778.9	8.9
150°-160°	655.1	7.5
160°-170°	435.9	5.0
170°-180°	152.6	1.8
0°-30°	1237.9	14.2
0°-40°	1987.1	22.8
0°-60°	3391.5	38.9
0°-90°	4236.4	48.6
90°-120°	955.0	11.0
90°-150°	3232.0	37.1
90°-180°	4476.0	51.4
0°-180°	8712.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1649	1649	1649	1649	1649	
5°	1648	1643	1628	1643	1640	156
15°	1569	1563	1544	1551	1547	442
25°	1421	1411	1393	1394	1389	654
35°	1222	1213	1195	1185	1179	764
45°	998	988	967	953	949	769
55°	755	751	732	716	708	676
65°	511	505	492	478	472	506
75°	272	266	259	254	252	289
85°	71	71	69	69	67	77
90°	4	18	27	35	37	10
95°	75	86	95	99	99	81
105°	291	292	297	301	304	308
115°	544	544	541	540	539	536
125°	792	792	791	788	786	706
135°	1022	1029	1029	1027	1023	790
145°	1241	1246	1248	1246	1242	777
155°	1422	1422	1421	1426	1421	654
165°	1548	1544	1542	1549	1544	437
175°	1610	1604	1603	1612	1603	153
180°	1613	1613	1613	1613	1613	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1649.2	1649.2	1649.2	1649.2	1649.2
2.5°	1654.5	1650.5	1636.0	1649.2	1647.9
5°	1647.9	1642.6	1628.1	1642.6	1640.0
7.5°	1636.0	1630.7	1614.8	1626.7	1625.4
10°	1618.8	1613.5	1596.3	1606.9	1604.3
12.5°	1596.3	1591.1	1572.6	1584.5	1580.5
15°	1568.6	1563.3	1543.5	1551.4	1547.4
17.5°	1536.9	1530.3	1511.8	1517.1	1514.4
20°	1501.2	1494.6	1474.8	1478.7	1476.1
22.5°	1462.9	1453.6	1433.8	1441.7	1436.4
25°	1420.6	1411.3	1392.8	1394.2	1388.9
27.5°	1373.0	1363.8	1346.6	1343.9	1337.3
30°	1325.4	1314.9	1297.7	1292.4	1285.8
32.5°	1275.2	1266.0	1247.5	1240.9	1234.3
35°	1222.4	1213.1	1194.6	1185.4	1178.8
37.5°	1166.9	1158.9	1139.1	1129.9	1120.6
40°	1112.7	1102.1	1082.3	1069.1	1062.5
42.5°	1054.5	1049.3	1026.8	1010.9	1007.0
45°	997.7	988.5	967.3	952.8	948.8
47.5°	938.2	931.6	911.8	896.0	885.4
50°	877.5	872.2	853.7	835.2	827.2
52.5°	818.0	811.4	791.6	775.7	765.1
55°	754.6	750.6	732.1	716.2	708.3
57.5°	695.1	691.1	672.6	656.8	648.8
60°	633.0	626.4	609.2	597.3	590.7
62.5°	572.2	566.9	548.4	537.8	531.2
65°	511.4	504.8	491.6	478.4	471.8
67.5°	449.3	444.0	430.8	417.6	416.3
70°	392.5	383.2	372.7	362.1	358.1
72.5°	331.7	322.4	314.5	306.6	302.6
75°	272.2	265.6	259.0	253.7	252.4
77.5°	214.1	211.4	204.8	203.5	199.5
80°	162.5	158.6	155.9	153.3	152.0
82.5°	112.3	111.0	111.0	109.7	108.4
85°	71.4	71.4	68.7	68.7	67.4
87.5°	34.4	33.0	31.7	31.7	31.7
90°	3.7	17.5	27.4	34.9	37.4
92.5°	32.4	48.7	54.9	58.6	59.9
95°	74.9	86.1	94.8	98.6	98.6
97.5°	119.8	129.7	139.7	144.7	144.7
100°	174.7	179.6	190.9	193.4	193.4
102.5°	232.0	233.3	243.3	247.0	248.3
105°	290.7	291.9	296.9	300.6	304.4
107.5°	351.8	353.0	354.3	359.3	358.0
110°	414.2	416.7	415.4	412.9	416.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	479.0	479.0	476.5	476.5	476.5
115°	543.9	543.9	541.4	540.2	538.9
117.5°	605.0	605.0	603.8	600.1	596.3
120°	666.2	671.2	667.4	661.2	663.7
122.5°	729.8	731.0	729.8	726.0	719.8
125°	792.2	792.2	790.9	788.4	785.9
127.5°	848.3	852.0	849.6	847.1	845.8
130°	908.2	911.9	911.9	909.4	904.4
132.5°	969.3	971.8	970.6	968.1	966.8
135°	1021.7	1029.2	1029.2	1026.7	1023.0
137.5°	1080.3	1084.1	1086.6	1082.8	1084.1
140°	1139.0	1141.5	1141.5	1140.2	1139.0
142.5°	1192.6	1195.1	1193.9	1193.9	1193.9
145°	1241.3	1246.3	1247.5	1246.3	1242.5
147.5°	1291.2	1297.4	1296.2	1294.9	1293.7
150°	1336.1	1341.1	1341.1	1341.1	1339.8
152.5°	1378.5	1381.0	1382.2	1386.0	1382.2
155°	1422.2	1422.2	1420.9	1425.9	1420.9
157.5°	1459.6	1457.1	1457.1	1460.8	1457.1
160°	1492.0	1490.8	1489.5	1493.3	1487.0
162.5°	1522.0	1518.2	1517.0	1524.5	1518.2
165°	1548.2	1544.4	1541.9	1549.4	1544.4
167.5°	1569.4	1564.4	1564.4	1571.9	1564.4
170°	1586.8	1580.6	1581.8	1589.3	1580.6
172.5°	1599.3	1594.3	1594.3	1603.0	1594.3
175°	1610.5	1604.3	1603.0	1611.8	1603.0
177.5°	1615.5	1609.3	1609.3	1618.0	1608.0
180°	1613.0	1613.0	1613.0	1613.0	1613.0

(END OF REPORT)