

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: P1032642

Luminaire Tested: S124DIW-B350D1340UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032642
REPORT IS A COMBINATION OF REPORTS P997372 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1340UB2750-4F0-XX-W2A-F_3500K
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

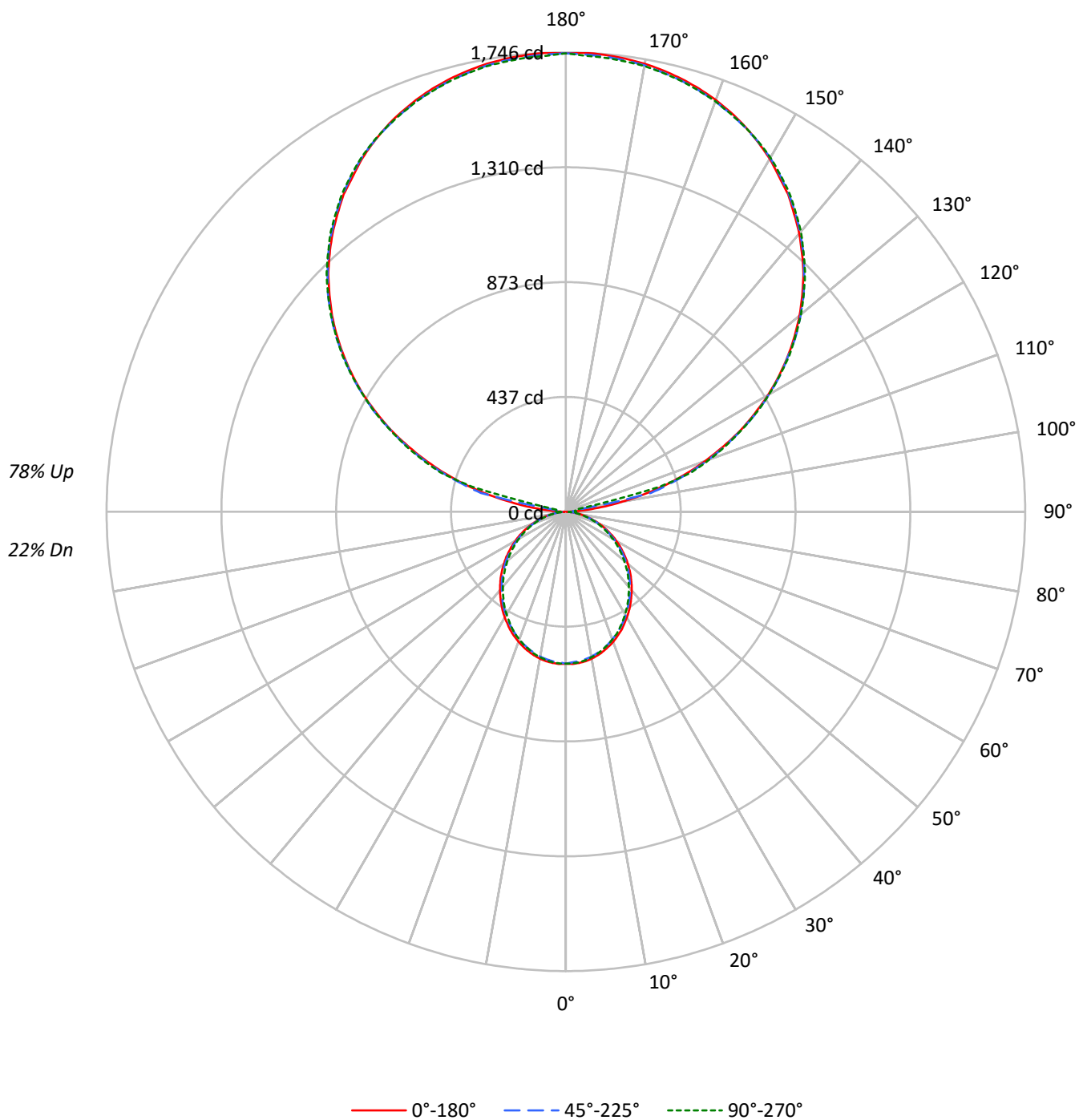
Lumens per Lamp: N/A
Luminaire Lumens: 6877.1 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.1
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	50	30	10
RCR																				
0	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30			22
1	91	87	84	80	81	77	74	72	59	57	55	42	41	40	26	26	25			18
2	83	76	70	65	73	68	63	59	52	48	46	37	35	33	23	22	21			15
3	76	67	60	54	67	59	54	49	45	41	38	33	30	28	21	19	18			13
4	69	59	51	46	61	53	46	41	40	36	32	29	26	24	18	17	16			11
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	17	15	13			10
6	58	47	39	34	51	42	35	30	32	28	24	23	20	18	15	13	12			8
7	54	42	34	29	47	38	31	26	29	24	21	21	18	16	14	12	10			7
8	50	38	31	26	44	34	28	23	26	22	18	19	16	14	12	11	9			7
9	46	34	27	23	41	31	25	20	24	20	16	18	15	12	11	10	8			6
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8			5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4708	4708	4708
5°	4712	4573	4579
10°	4673	4446	4415
15°	4606	4295	4230
20°	4520	4132	4039
25°	4424	3959	3834
30°	4307	3772	3608
35°	4187	3581	3389
40°	4062	3376	3157
45°	3930	3171	2940
50°	3784	2971	2699
55°	3627	2737	2461
60°	3464	2482	2212
65°	3278	2218	1932
70°	3065	1900	1631
75°	2746	1532	1307
80°	2340	1107	919
85°	1819	618	495

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3930 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	0.8
10°-20°	153.3	2.2
20°-30°	225.7	3.3
30°-40°	262.3	3.8
40°-50°	262.3	3.8
50°-60°	229.4	3.3
60°-70°	170.3	2.5
70°-80°	96.6	1.4
80°-90°	31.3	0.5
90°-100°	57.8	0.8
100°-110°	380.9	5.5
110°-120°	727.3	10.6
120°-130°	923.3	13.4
130°-140°	987.7	14.4
140°-150°	923.6	13.4
150°-160°	744.8	10.8
160°-170°	480.4	7.0
170°-180°	165.5	2.4
0°-30°	433.4	6.3
0°-40°	695.7	10.1
0°-60°	1187.4	17.3
0°-90°	1485.6	21.6
90°-120°	1166.1	17.0
90°-150°	4000.7	58.2
90°-180°	5391.0	78.4
0°-180°	6877.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	577	575	570	575	574	55
15°	549	547	540	543	542	155
25°	497	494	488	488	486	229
35°	428	425	418	415	413	268
45°	349	346	339	334	332	269
55°	264	263	256	251	248	237
65°	179	177	172	168	165	177
75°	95	93	91	89	88	101
85°	25	25	24	24	24	27
90°	4	18	29	36	39	5
95°	72	27	29	36	38	88
105°	392	400	407	418	371	411
115°	732	736	735	738	738	721
125°	1030	1035	1032	1036	1037	919
135°	1277	1276	1281	1284	1286	984
145°	1473	1476	1476	1478	1480	920
155°	1615	1616	1612	1617	1613	744
165°	1703	1697	1697	1707	1695	481
175°	1742	1734	1736	1748	1732	166
180°	1742	1742	1742	1742	1742	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	577.4	577.4	577.4	577.4	577.4
2.5°	579.2	577.9	572.8	577.4	576.9
5°	576.9	575.1	570.0	575.1	574.2
7.5°	572.8	570.9	565.4	569.5	569.1
10°	566.8	564.9	558.9	562.6	561.7
12.5°	558.9	557.0	550.6	554.7	553.3
15°	549.2	547.3	540.4	543.2	541.8
17.5°	538.1	535.8	529.3	531.1	530.2
20°	525.6	523.3	516.3	517.7	516.8
22.5°	512.2	508.9	502.0	504.8	502.9
25°	497.4	494.1	487.6	488.1	486.3
27.5°	480.7	477.5	471.4	470.5	468.2
30°	464.0	460.3	454.3	452.5	450.2
32.5°	446.5	443.2	436.7	434.4	432.1
35°	428.0	424.7	418.2	415.0	412.7
37.5°	408.5	405.8	398.8	395.6	392.3
40°	389.6	385.9	378.9	374.3	372.0
42.5°	369.2	367.3	359.5	353.9	352.5
45°	349.3	346.1	338.7	333.6	332.2
47.5°	328.5	326.2	319.2	313.7	310.0
50°	307.2	305.4	298.9	292.4	289.6
52.5°	286.4	284.1	277.1	271.6	267.9
55°	264.2	262.8	256.3	250.8	248.0
57.5°	243.4	242.0	235.5	229.9	227.2
60°	221.6	219.3	213.3	209.1	206.8
62.5°	200.3	198.5	192.0	188.3	186.0
65°	179.0	176.7	172.1	167.5	165.2
67.5°	157.3	155.5	150.8	146.2	145.7
70°	137.4	134.2	130.5	126.8	125.4
72.5°	116.1	112.9	110.1	107.3	105.9
75°	95.3	93.0	90.7	88.8	88.4
77.5°	75.0	74.0	71.7	71.2	69.9
80°	56.9	55.5	54.6	53.7	53.2
82.5°	39.3	38.9	38.9	38.4	37.9
85°	25.0	25.0	24.1	24.1	23.6
87.5°	12.0	11.6	11.1	11.1	11.1
90°	3.9	18.2	28.7	36.5	39.1
92.5°	19.5	16.9	27.4	35.2	35.2
95°	71.7	27.4	28.7	36.5	37.8
97.5°	136.8	165.5	28.7	35.2	36.5
100°	213.7	237.2	57.3	35.2	36.5
102.5°	299.7	315.4	331.0	37.8	37.8
105°	392.3	400.1	406.6	418.3	371.4
107.5°	477.0	480.9	490.0	496.5	501.7
110°	563.0	566.9	574.7	577.3	581.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	646.4	654.2	656.8	655.5	660.7
115°	732.4	736.3	735.0	737.6	737.6
117.5°	809.3	814.5	818.4	817.1	817.1
120°	887.5	892.7	891.4	894.0	891.4
122.5°	960.4	963.0	965.6	967.0	964.3
125°	1029.5	1034.7	1032.1	1036.0	1037.3
127.5°	1096.0	1097.3	1103.8	1102.5	1101.2
130°	1159.8	1161.1	1165.0	1166.3	1166.3
132.5°	1218.5	1221.1	1226.3	1227.6	1226.3
135°	1277.1	1275.8	1281.0	1283.6	1286.2
137.5°	1329.2	1329.2	1335.7	1338.4	1337.1
140°	1380.1	1382.7	1385.3	1389.2	1390.5
142.5°	1425.7	1430.9	1432.2	1434.8	1434.8
145°	1472.6	1476.5	1476.5	1477.8	1480.4
147.5°	1509.1	1516.9	1515.6	1516.9	1518.2
150°	1549.5	1554.7	1553.4	1553.4	1554.7
152.5°	1583.3	1587.3	1584.7	1587.3	1586.0
155°	1614.6	1615.9	1612.0	1617.2	1613.3
157.5°	1642.0	1642.0	1636.8	1643.3	1636.8
160°	1665.4	1661.5	1660.2	1668.1	1660.2
162.5°	1686.3	1681.1	1679.8	1687.6	1678.5
165°	1703.2	1696.7	1696.7	1707.2	1695.4
167.5°	1717.6	1711.1	1709.8	1721.5	1708.5
170°	1729.3	1721.5	1722.8	1733.2	1720.2
172.5°	1737.1	1729.3	1730.6	1741.0	1726.7
175°	1742.3	1734.5	1735.8	1747.5	1731.9
177.5°	1746.2	1737.1	1739.7	1750.2	1734.5
180°	1742.3	1742.3	1742.3	1742.3	1742.3

(END OF REPORT)