

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: P1033397

Luminaire Tested: S124DIW-B350D1050UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033397
REPORT IS A COMBINATION OF REPORTS P997321 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1050UB35-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

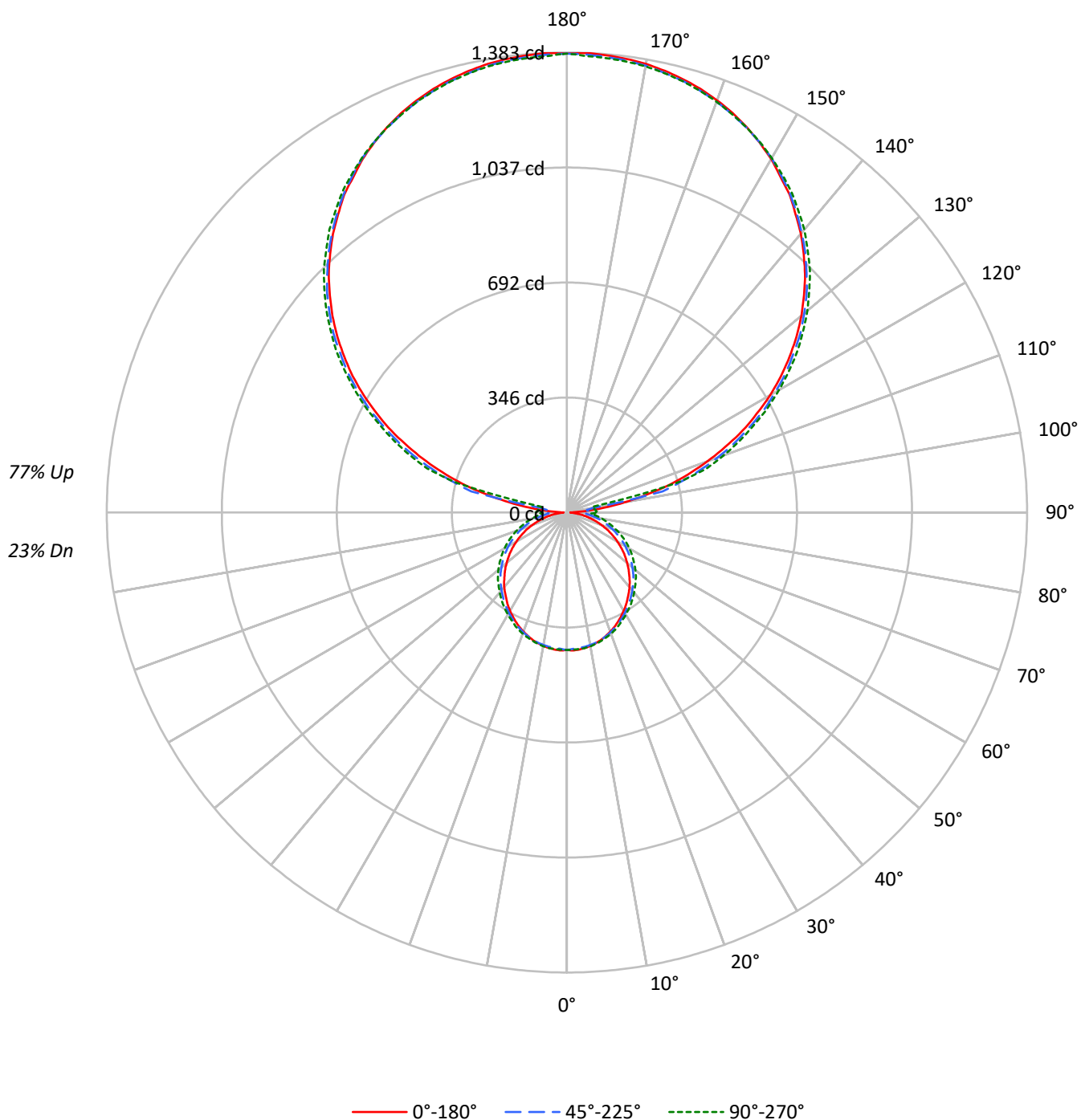
Lumens per Lamp: N/A
Luminaire Lumens: 5681.0 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31
1	91	87	83	79	81	77	74	71	59	57	55	42	41	40	27	26	25
2	83	76	70	64	73	67	62	58	51	48	45	37	35	33	23	22	21
3	75	66	59	53	67	59	53	48	45	41	37	32	30	27	21	19	18
4	69	58	51	45	61	52	45	40	40	35	32	29	26	23	18	16	15
5	63	52	44	38	56	46	39	34	35	31	27	26	22	20	16	14	13
6	58	46	38	33	51	41	34	30	32	27	23	23	20	17	15	13	11
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	13	11	10
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8
10	43	31	24	19	38	28	22	18	22	17	14	16	13	11	10	8	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3370	3370	3370
5°	3379	3282	3288
10°	3358	3218	3209
15°	3326	3145	3119
20°	3279	3066	3031
25°	3227	2980	2937
30°	3170	2894	2841
35°	3106	2806	2755
40°	3054	2721	2667
45°	2978	2643	2589
50°	2913	2552	2506
55°	2846	2466	2411
60°	2742	2358	2321
65°	2628	2242	2214
70°	2488	2110	2089
75°	2294	1962	1971
80°	2073	1811	1847
85°	1783	1660	1746

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3425 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	0.7
10°-20°	112.2	2.0
20°-30°	169.6	3.0
30°-40°	205.2	3.6
40°-50°	217.0	3.8
50°-60°	204.2	3.6
60°-70°	169.4	3.0
70°-80°	118.9	2.1
80°-90°	69.9	1.2
90°-100°	85.7	1.5
100°-110°	331.2	5.8
110°-120°	595.7	10.5
120°-130°	742.3	13.1
130°-140°	787.0	13.9
140°-150°	732.3	12.9
150°-160°	589.8	10.4
160°-170°	380.4	6.7
170°-180°	131.1	2.3
0°-30°	321.0	5.7
0°-40°	526.2	9.3
0°-60°	947.4	16.7
0°-90°	1305.6	23.0
90°-120°	1012.6	17.8
90°-150°	3274.2	57.6
90°-180°	4375.0	77.0
0°-180°	5681.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	414	412	409	413	412	39
15°	397	397	396	400	399	112
25°	363	366	367	372	372	167
35°	318	323	328	334	336	199
45°	265	274	282	290	292	205
55°	207	217	231	240	243	185
65°	144	158	174	186	189	142
75°	80	97	116	129	133	85
85°	24	44	65	79	83	26
90°	10	40	68	88	94	8
95°	63	43	63	82	87	75
105°	315	330	352	373	340	330
115°	583	590	604	616	619	574
125°	817	821	830	842	846	730
135°	1012	1011	1019	1028	1033	780
145°	1167	1169	1169	1173	1177	729
155°	1278	1280	1276	1281	1278	590
165°	1349	1344	1344	1352	1342	381
175°	1380	1374	1374	1384	1371	131
180°	1380	1380	1380	1380	1380	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.3	413.3	413.3	413.3	413.3
2.5°	415.1	413.7	410.0	413.3	412.8
5°	413.7	412.3	409.1	412.8	412.3
7.5°	411.0	410.0	407.3	411.4	411.0
10°	407.3	406.8	404.5	408.6	408.2
12.5°	402.2	402.2	400.8	404.5	404.5
15°	396.6	397.1	395.7	399.8	399.4
17.5°	389.2	390.6	390.1	394.3	393.8
20°	381.3	382.7	383.2	387.8	387.8
22.5°	372.5	374.4	375.3	379.9	380.9
25°	362.8	365.6	367.0	372.1	372.5
27.5°	352.2	356.3	358.2	362.8	363.3
30°	341.5	345.2	348.5	353.6	354.5
32.5°	330.0	334.6	338.3	344.3	345.2
35°	317.5	323.0	327.7	334.1	335.5
37.5°	305.0	311.5	317.0	323.5	324.9
40°	292.9	299.0	305.4	312.4	314.2
42.5°	279.1	286.0	293.9	301.7	303.1
45°	264.7	273.5	282.3	290.2	292.5
47.5°	251.3	260.1	270.3	278.1	280.9
50°	236.5	246.7	256.8	266.1	268.9
52.5°	221.7	231.9	243.9	253.1	255.9
55°	207.3	217.0	230.9	240.2	243.0
57.5°	191.1	203.2	216.6	227.7	230.0
60°	175.4	187.4	202.7	213.3	217.0
62.5°	160.1	173.5	188.8	199.5	203.2
65°	143.5	158.3	174.0	185.6	189.3
67.5°	127.7	143.5	160.1	171.7	175.4
70°	111.5	127.3	144.9	157.3	160.6
72.5°	95.8	112.0	131.0	143.0	146.7
75°	79.6	96.7	116.2	129.1	133.3
77.5°	64.3	82.4	102.7	115.7	120.3
80°	50.4	69.0	89.3	103.2	106.9
82.5°	36.6	56.0	76.4	90.7	94.9
85°	24.5	44.0	64.8	78.7	83.3
87.5°	15.3	34.2	54.6	68.0	72.2
90°	10.5	40.3	68.5	88.1	93.9
92.5°	22.4	36.5	64.7	83.9	87.6
95°	62.8	43.0	63.0	81.7	86.8
97.5°	114.0	150.1	60.6	77.9	83.0
100°	174.3	204.9	80.6	75.6	79.8
102.5°	242.4	265.0	295.0	74.8	78.5
105°	314.8	330.2	352.5	373.3	339.9
107.5°	381.9	392.8	416.2	433.0	440.3
110°	449.5	459.1	481.5	494.1	500.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	515.0	526.8	544.2	553.2	561.1
115°	582.7	589.9	603.8	616.0	619.3
117.5°	643.6	650.5	667.4	676.2	679.9
120°	705.0	710.6	722.9	734.3	735.9
122.5°	762.8	764.9	779.4	789.8	790.9
125°	817.1	820.7	830.3	842.2	845.9
127.5°	869.7	870.3	884.6	892.0	894.2
130°	919.8	920.3	930.8	940.3	943.0
132.5°	966.2	967.8	977.5	986.4	988.1
135°	1012.2	1011.1	1018.6	1028.0	1032.8
137.5°	1053.4	1053.0	1060.0	1069.1	1070.3
140°	1093.7	1095.4	1097.8	1106.9	1110.3
142.5°	1129.4	1133.5	1134.1	1141.2	1143.0
145°	1166.6	1169.1	1169.1	1173.0	1176.8
147.5°	1195.4	1201.1	1200.1	1201.6	1204.5
150°	1227.4	1231.1	1230.0	1230.0	1231.1
152.5°	1253.8	1256.9	1254.8	1256.9	1255.8
155°	1278.5	1279.6	1276.5	1280.6	1277.5
157.5°	1300.2	1300.2	1296.1	1301.2	1296.1
160°	1318.8	1315.7	1314.6	1320.8	1314.6
162.5°	1335.3	1331.2	1330.1	1336.3	1329.1
165°	1348.7	1343.5	1343.5	1351.8	1342.5
167.5°	1360.1	1354.9	1353.9	1363.1	1352.8
170°	1369.3	1363.1	1364.2	1372.4	1362.1
172.5°	1375.5	1369.3	1370.4	1378.6	1367.3
175°	1379.7	1373.5	1374.5	1383.8	1371.4
177.5°	1382.8	1375.5	1377.6	1385.9	1373.5
180°	1379.7	1379.7	1379.7	1379.7	1379.7

(END OF REPORT)