

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: P1033385

Luminaire Tested: S124DIW-B350D1050UB27-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033385
REPORT IS A COMBINATION OF REPORTS P997282 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1050UB27-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

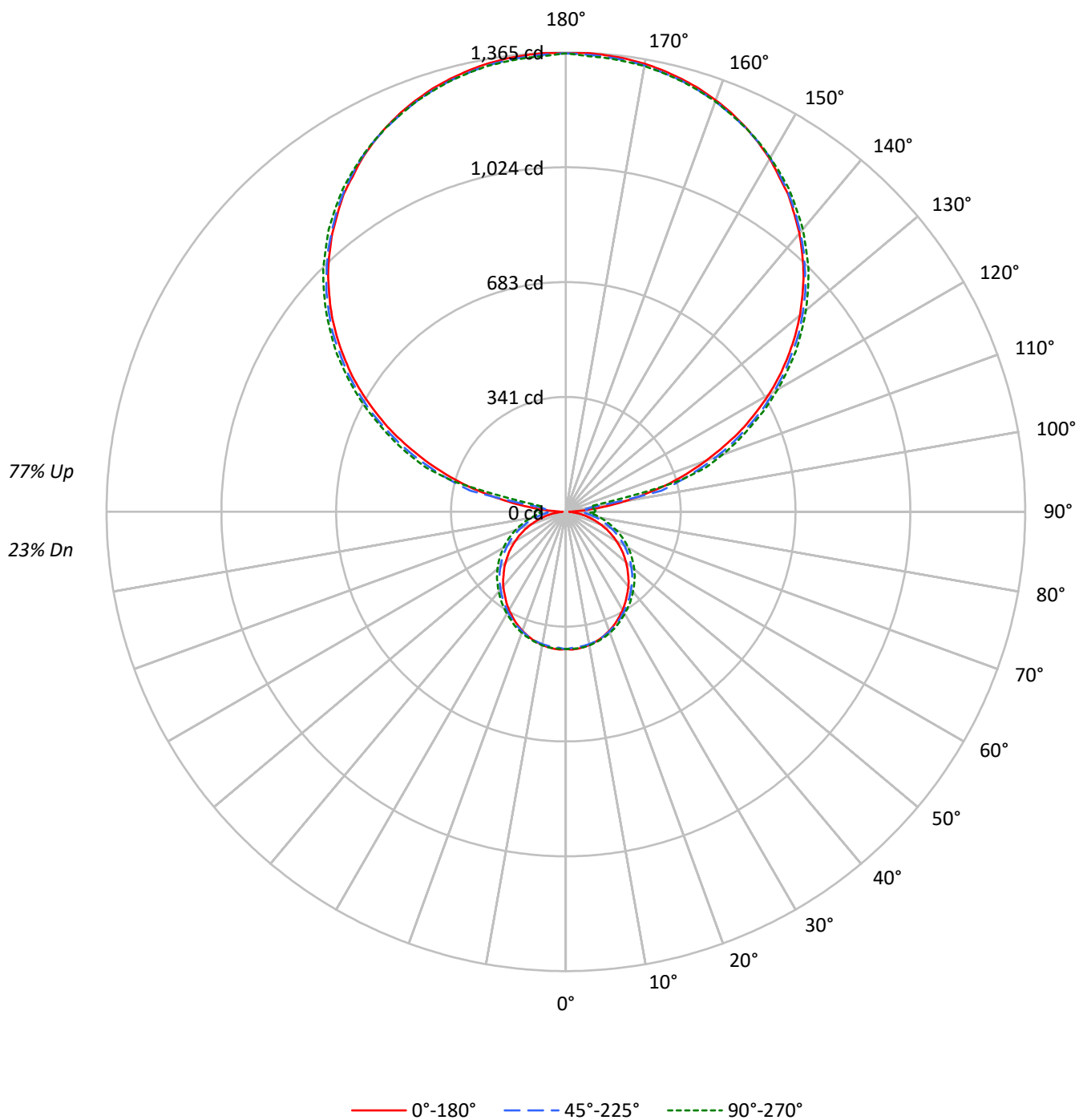
Lumens per Lamp: N/A
Luminaire Lumens: 5608.0 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1033385

CATALOG NUMBER: S124DIW-B350D1050UB27-4F0-XX-W2A-D

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°	3327	3327	3327
5°	3336	3240	3246
10°	3314	3176	3168
15°	3283	3105	3079
20°	3238	3027	2993
25°	3186	2942	2900
30°	3130	2857	2805
35°	3066	2770	2720
40°	3015	2687	2633
45°	2940	2609	2555
50°	2877	2520	2474
55°	2810	2435	2380
60°	2707	2328	2292
65°	2593	2214	2186
70°	2456	2082	2062
75°	2265	1937	1946
80°	2048	1789	1822
85°	1761	1640	1723

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 90°
Luminance: 3392 cd/sqm

TEST NUMBER: P1033385

CATALOG NUMBER: S124DIW-B350D1050UB27-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	0.7
10°-20°	110.8	2.0
20°-30°	167.5	3.0
30°-40°	202.6	3.6
40°-50°	214.2	3.8
50°-60°	201.6	3.6
60°-70°	167.3	3.0
70°-80°	117.4	2.1
80°-90°	69.0	1.2
90°-100°	84.6	1.5
100°-110°	326.9	5.8
110°-120°	588.1	10.5
120°-130°	732.7	13.1
130°-140°	776.8	13.9
140°-150°	722.9	12.9
150°-160°	582.2	10.4
160°-170°	375.5	6.7
170°-180°	129.4	2.3
0°-30°	316.9	5.7
0°-40°	519.5	9.3
0°-60°	935.3	16.7
0°-90°	1288.9	23.0
90°-120°	999.6	17.8
90°-150°	3232.0	57.6
90°-180°	4319.0	77.0
0°-180°	5608.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	408	408	408	408	408	
5°	408	407	404	408	407	39
15°	392	392	391	395	394	110
25°	358	361	362	367	368	165
35°	313	319	324	330	331	196
45°	261	270	279	286	289	202
55°	205	214	228	237	240	182
65°	142	156	172	183	187	140
75°	79	96	115	128	132	84
85°	24	43	64	78	82	25
90°	10	40	68	87	93	8
95°	62	42	62	81	86	74
105°	311	326	348	369	336	326
115°	575	582	596	608	611	566
125°	806	810	820	831	835	720
135°	999	998	1005	1015	1020	770
145°	1152	1154	1154	1158	1162	720
155°	1262	1263	1260	1264	1261	582
165°	1331	1326	1326	1334	1325	376
175°	1362	1356	1357	1366	1354	130
180°	1362	1362	1362	1362	1362	

TEST NUMBER: P1033385

CATALOG NUMBER: S124DIW-B350D1050UB27-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	408.0	408.0	408.0	408.0	408.0
2.5°	409.8	408.4	404.8	408.0	407.5
5°	408.4	407.1	403.9	407.5	407.1
7.5°	405.7	404.8	402.0	406.2	405.7
10°	402.0	401.6	399.3	403.4	403.0
12.5°	397.0	397.0	395.7	399.3	399.3
15°	391.5	392.0	390.6	394.7	394.3
17.5°	384.2	385.6	385.1	389.3	388.8
20°	376.5	377.8	378.3	382.9	382.9
22.5°	367.8	369.6	370.5	375.1	376.0
25°	358.2	360.9	362.3	367.3	367.8
27.5°	347.7	351.8	353.6	358.2	358.6
30°	337.2	340.8	344.0	349.1	350.0
32.5°	325.8	330.3	334.0	339.9	340.8
35°	313.4	318.9	323.5	329.9	331.2
37.5°	301.1	307.5	313.0	319.4	320.7
40°	289.2	295.1	301.5	308.4	310.2
42.5°	275.5	282.3	290.1	297.9	299.3
45°	261.3	270.0	278.7	286.5	288.7
47.5°	248.1	256.8	266.8	274.6	277.3
50°	233.5	243.5	253.6	262.7	265.4
52.5°	218.8	228.9	240.8	249.9	252.7
55°	204.7	214.3	228.0	237.1	239.9
57.5°	188.7	200.6	213.8	224.8	227.1
60°	173.2	185.0	200.1	210.6	214.3
62.5°	158.1	171.3	186.4	196.9	200.6
65°	141.6	156.3	171.8	183.2	186.9
67.5°	126.1	141.6	158.1	169.5	173.2
70°	110.1	125.6	143.0	155.3	158.5
72.5°	94.6	110.6	129.3	141.2	144.8
75°	78.6	95.5	114.7	127.5	131.6
77.5°	63.5	81.3	101.4	114.2	118.8
80°	49.8	68.1	88.2	101.9	105.5
82.5°	36.1	55.3	75.4	89.5	93.7
85°	24.2	43.4	64.0	77.7	82.2
87.5°	15.1	33.8	53.9	67.2	71.3
90°	10.4	39.9	67.6	87.0	92.7
92.5°	22.2	36.0	63.9	82.8	86.4
95°	61.9	42.4	62.1	80.6	85.7
97.5°	112.5	148.1	59.9	76.8	82.0
100°	172.1	202.3	79.5	74.6	78.8
102.5°	239.3	261.6	291.1	73.8	77.5
105°	310.7	325.9	348.0	368.6	335.5
107.5°	376.9	387.8	410.9	427.4	434.7
110°	443.7	453.2	475.2	487.7	494.5

TEST NUMBER: P1033385

CATALOG NUMBER: S124DIW-B350D1050UB27-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	508.4	520.0	537.2	546.2	553.9
115°	575.2	582.4	596.0	608.0	611.2
117.5°	635.3	642.1	658.9	667.5	671.1
120°	696.0	701.5	713.6	724.8	726.4
122.5°	753.0	755.1	769.4	779.6	780.8
125°	806.5	810.2	819.5	831.3	835.0
127.5°	858.5	859.1	873.3	880.5	882.6
130°	908.0	908.5	918.8	928.1	930.9
132.5°	953.8	955.3	964.9	973.7	975.4
135°	999.1	998.1	1005.4	1014.7	1019.6
137.5°	1039.9	1039.5	1046.4	1055.2	1056.5
140°	1079.6	1081.3	1083.7	1092.8	1096.0
142.5°	1114.9	1118.9	1119.5	1126.5	1128.4
145°	1151.5	1154.1	1154.1	1157.8	1161.8
147.5°	1180.1	1185.7	1184.7	1186.2	1189.0
150°	1211.6	1215.2	1214.2	1214.2	1215.2
152.5°	1237.6	1240.7	1238.6	1240.7	1239.7
155°	1262.1	1263.1	1260.0	1264.1	1261.1
157.5°	1283.5	1283.5	1279.4	1284.5	1279.4
160°	1301.8	1298.7	1297.7	1303.8	1297.7
162.5°	1318.1	1314.0	1313.0	1319.1	1312.0
165°	1331.3	1326.2	1326.2	1334.4	1325.2
167.5°	1342.5	1337.4	1336.4	1345.6	1335.4
170°	1351.7	1345.6	1346.6	1354.8	1344.6
172.5°	1357.8	1351.7	1352.7	1360.9	1349.7
175°	1361.9	1355.8	1356.8	1366.0	1353.7
177.5°	1365.0	1357.8	1359.9	1368.0	1355.8
180°	1361.9	1361.9	1361.9	1361.9	1361.9

(END OF REPORT)