

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: P1033547

Luminaire Tested: S124DIW-B575D1050UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033547
REPORT IS A COMBINATION OF REPORTS P997655 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1050UB35-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

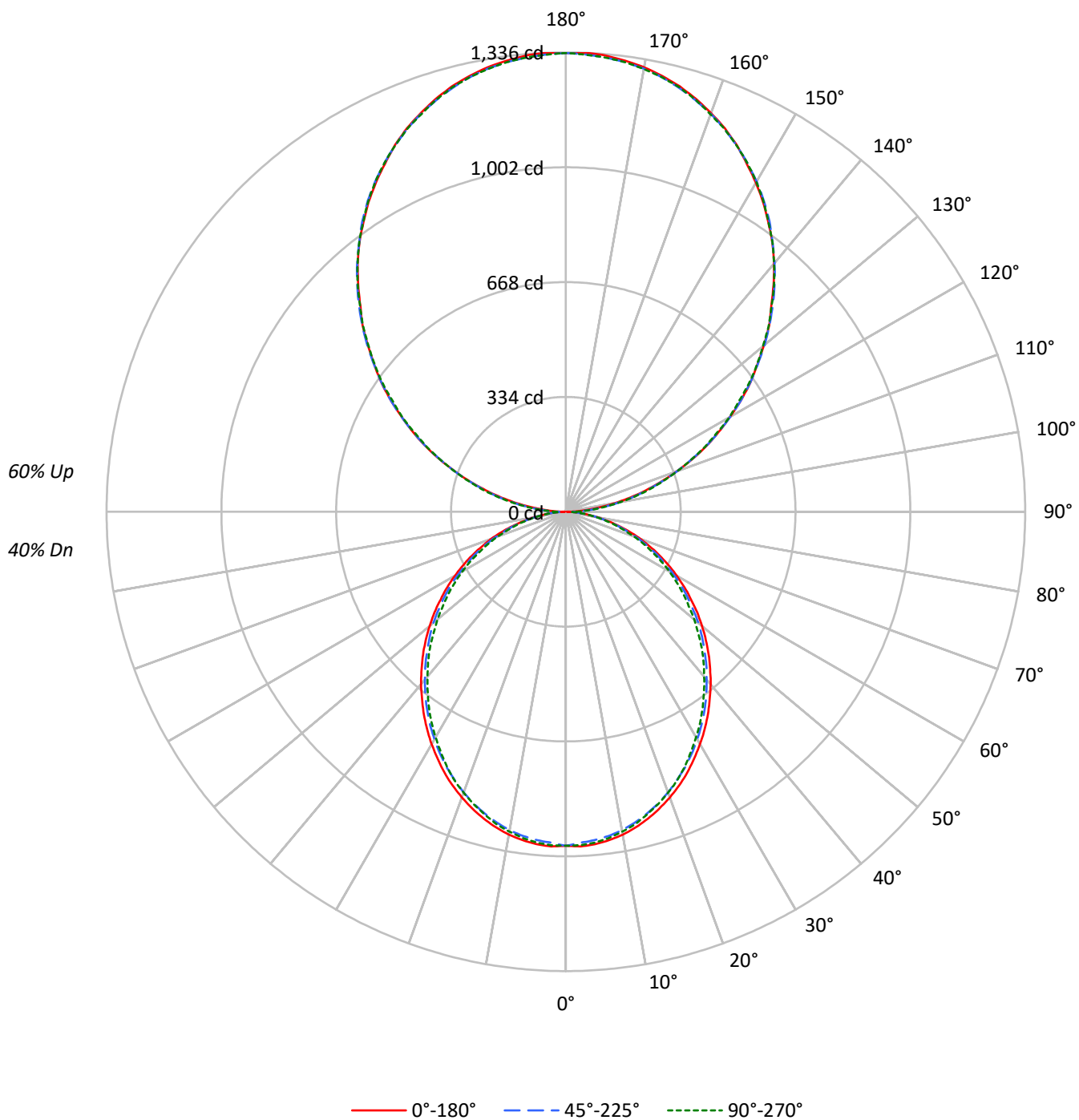
Lumens per Lamp: N/A
Luminaire Lumens: 6198.0 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 55.5
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: P1033547

CATALOG NUMBER: S124DIW-B575D1050UB35-4F0-XX-W2A-F1

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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	40	40	34
2	87	80	74	69	79	73	68	63	60	56	53	48	45	43	37	35	33	33	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	28	28	24
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25	25	25	21
5	67	55	47	41	60	50	43	38	42	37	32	34	30	27	26	23	21	21	21	18
6	61	49	41	36	56	45	38	33	38	32	28	30	26	23	24	21	19	19	19	16
7	57	44	37	31	51	41	34	29	34	29	25	28	24	21	22	19	17	17	17	14
8	52	40	33	27	48	37	30	26	31	26	22	25	21	18	20	17	15	15	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	18	16	13	13	13	11
10	46	34	27	22	41	31	25	20	26	21	18	21	18	15	17	14	12	12	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7920	7920	7920
5°	7927	7692	7702
10°	7860	7479	7426
15°	7747	7225	7116
20°	7603	6951	6794
25°	7441	6660	6449
30°	7246	6347	6069
35°	7043	6026	5701
40°	6832	5680	5310
45°	6611	5333	4946
50°	6367	4997	4541
55°	6100	4605	4140
60°	5828	4175	3721
65°	5516	3730	3249
70°	5156	3196	2744
75°	4619	2575	2199
80°	3936	1862	1546
85°	3056	1038	832

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6611 cd/sqm

TEST NUMBER: P1033547

CATALOG NUMBER: S124DIW-B575D1050UB35-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	1.5
10°-20°	257.9	4.2
20°-30°	379.6	6.1
30°-40°	441.2	7.1
40°-50°	441.2	7.1
50°-60°	385.9	6.2
60°-70°	286.5	4.6
70°-80°	162.5	2.6
80°-90°	49.4	0.8
90°-100°	87.0	1.4
100°-110°	260.5	4.2
110°-120°	442.6	7.1
120°-130°	583.6	9.4
130°-140°	655.5	10.6
140°-150°	644.3	10.4
150°-160°	541.9	8.7
160°-170°	360.6	5.8
170°-180°	126.3	2.0
0°-30°	729.1	11.8
0°-40°	1170.3	18.9
0°-60°	1997.4	32.2
0°-90°	2495.9	40.3
90°-120°	790.0	12.7
90°-150°	2673.5	43.1
90°-180°	3702.0	59.7
0°-180°	6198.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	971	971	971	971	971	
5°	970	967	959	967	966	92
15°	924	921	909	914	911	260
25°	837	831	820	821	818	385
35°	720	714	704	698	694	450
45°	588	582	570	561	559	453
55°	444	442	431	422	417	398
65°	301	297	290	282	278	298
75°	160	156	152	149	149	170
85°	42	42	40	40	40	45
90°	3	14	23	29	31	7
95°	62	71	78	82	82	67
105°	240	242	246	249	252	255
115°	450	450	448	447	446	444
125°	655	655	654	652	650	584
135°	845	851	851	849	846	654
145°	1027	1031	1032	1031	1028	643
155°	1176	1176	1175	1180	1175	541
165°	1281	1278	1276	1282	1278	361
175°	1332	1327	1326	1333	1326	126
180°	1334	1334	1334	1334	1334	

TEST NUMBER: P1033547

CATALOG NUMBER: S124DIW-B575D1050UB35-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	971.3	971.3	971.3	971.3	971.3
2.5°	974.4	972.1	963.5	971.3	970.5
5°	970.5	967.4	958.8	967.4	965.8
7.5°	963.5	960.4	951.1	958.1	957.3
10°	953.4	950.3	940.2	946.4	944.8
12.5°	940.2	937.0	926.1	933.2	930.8
15°	923.8	920.7	909.0	913.7	911.4
17.5°	905.1	901.2	890.3	893.5	891.9
20°	884.1	880.2	868.6	870.9	869.3
22.5°	861.6	856.1	844.4	849.1	846.0
25°	836.6	831.2	820.3	821.1	818.0
27.5°	808.6	803.2	793.1	791.5	787.6
30°	780.6	774.4	764.3	761.2	757.3
32.5°	751.0	745.6	734.7	730.8	726.9
35°	719.9	714.5	703.6	698.1	694.2
37.5°	687.2	682.5	670.9	665.4	660.0
40°	655.3	649.1	637.4	629.6	625.7
42.5°	621.1	618.0	604.7	595.4	593.0
45°	587.6	582.2	569.7	561.1	558.8
47.5°	552.6	548.7	537.0	527.7	521.4
50°	516.8	513.7	502.8	491.9	487.2
52.5°	481.8	477.9	466.2	456.8	450.6
55°	444.4	442.1	431.2	421.8	417.2
57.5°	409.4	407.0	396.1	386.8	382.1
60°	372.8	368.9	358.8	351.8	347.9
62.5°	337.0	333.9	323.0	316.8	312.9
65°	301.2	297.3	289.5	281.7	277.8
67.5°	264.6	261.5	253.7	245.9	245.2
70°	231.1	225.7	219.5	213.2	210.9
72.5°	195.3	189.9	185.2	180.6	178.2
75°	160.3	156.4	152.5	149.4	148.7
77.5°	126.1	124.5	120.6	119.9	117.5
80°	95.7	93.4	91.8	90.3	89.5
82.5°	66.2	65.4	65.4	64.6	63.8
85°	42.0	42.0	40.5	40.5	39.7
87.5°	20.2	19.5	18.7	18.7	18.7
90°	3.1	14.4	22.7	28.9	31.0
92.5°	26.8	40.2	45.4	48.5	49.5
95°	61.9	71.2	78.4	81.5	81.5
97.5°	99.1	107.3	115.6	119.7	119.7
100°	144.5	148.6	157.9	159.9	159.9
102.5°	191.9	193.0	201.2	204.3	205.4
105°	240.4	241.5	245.6	248.7	251.8
107.5°	291.0	292.0	293.1	297.2	296.2
110°	342.6	344.7	343.6	341.6	344.7

TEST NUMBER: P1033547

CATALOG NUMBER: S124DIW-B575D1050UB35-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	396.3	396.3	394.2	394.2	394.2
115°	449.9	449.9	447.9	446.8	445.8
117.5°	500.5	500.5	499.5	496.4	493.3
120°	551.1	555.2	552.1	546.9	549.0
122.5°	603.7	604.7	603.7	600.6	595.4
125°	655.3	655.3	654.2	652.2	650.1
127.5°	701.7	704.8	702.7	700.7	699.6
130°	751.2	754.3	754.3	752.3	748.1
132.5°	801.8	803.9	802.8	800.8	799.7
135°	845.1	851.3	851.3	849.3	846.2
137.5°	893.7	896.7	898.8	895.7	896.7
140°	942.2	944.2	944.2	943.2	942.2
142.5°	986.5	988.6	987.6	987.6	987.6
145°	1026.8	1030.9	1031.9	1030.9	1027.8
147.5°	1068.0	1073.2	1072.2	1071.1	1070.1
150°	1105.2	1109.3	1109.3	1109.3	1108.3
152.5°	1140.3	1142.3	1143.4	1146.5	1143.4
155°	1176.4	1176.4	1175.4	1179.5	1175.4
157.5°	1207.4	1205.3	1205.3	1208.4	1205.3
160°	1234.2	1233.2	1232.1	1235.2	1230.1
162.5°	1259.0	1255.9	1254.8	1261.0	1255.9
165°	1280.6	1277.5	1275.5	1281.7	1277.5
167.5°	1298.2	1294.0	1294.0	1300.2	1294.0
170°	1312.6	1307.5	1308.5	1314.7	1307.5
172.5°	1322.9	1318.8	1318.8	1326.0	1318.8
175°	1332.2	1327.1	1326.0	1333.3	1326.0
177.5°	1336.3	1331.2	1331.2	1338.4	1330.2
180°	1334.3	1334.3	1334.3	1334.3	1334.3

(END OF REPORT)