

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: P1031369

Luminaire Tested: S123DIW-B1000D460UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031369
REPORT IS A COMBINATION OF REPORTS P990769 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D460UB40-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

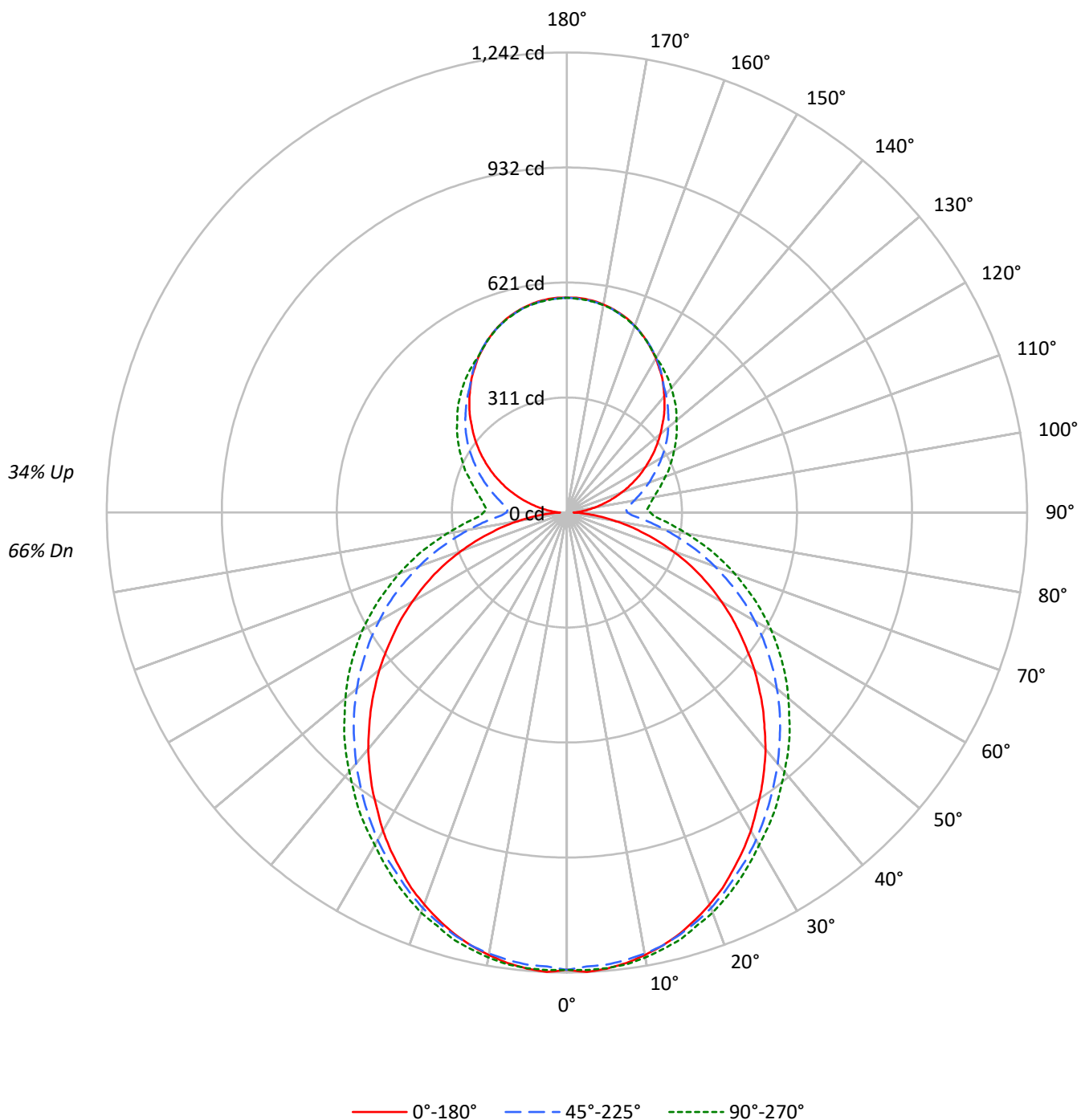
Lumens per Lamp: N/A
Luminaire Lumens: 5758.0 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 60
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: P1031369

CATALOG NUMBER: S123DIW-B1000D460UB40-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1031369

CATALOG NUMBER: S123DIW-B1000D460UB40-4F0-XX-W2A-D1

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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71
1	100	95	90	86	94	89	85	82	79	76	73	69	67	65	60	59	57
2	91	82	75	69	85	77	71	66	68	64	59	60	56	53	52	50	47
3	82	72	64	57	77	68	60	55	60	54	49	53	48	44	46	42	39
4	75	63	55	48	70	60	52	46	53	47	42	47	42	38	41	37	34
5	69	56	48	41	64	53	45	39	47	41	36	42	37	32	37	33	29
6	63	51	42	36	59	48	40	34	43	36	31	38	32	28	33	29	26
7	59	46	37	31	55	43	35	30	39	32	27	34	29	25	30	26	23
8	54	41	33	28	51	39	32	27	35	29	24	31	26	22	28	23	20
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	26	21	18
10	47	35	27	22	45	33	26	21	30	24	20	27	22	18	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13291	13291	13291
5°	13328	12901	12891
10°	13203	12552	12456
15°	13029	12166	11995
20°	12781	11736	11500
25°	12476	11251	10987
30°	12163	10814	10472
35°	11813	10353	10053
40°	11478	9932	9608
45°	11107	9525	9243
50°	10741	9122	8847
55°	10333	8708	8482
60°	9937	8284	8108
65°	9527	7834	7672
70°	8914	7328	7221
75°	8137	6751	6755
80°	7231	6166	6224
85°	6330	5695	5843

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11107 cd/sqm

TEST NUMBER: P1031369

CATALOG NUMBER: S123DIW-B1000D460UB40-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.1	2.0
10°-20°	333.9	5.8
20°-30°	499.4	8.7
30°-40°	596.2	10.4
40°-50°	623.8	10.8
50°-60°	585.4	10.2
60°-70°	489.0	8.5
70°-80°	349.6	6.1
80°-90°	209.3	3.6
90°-100°	168.1	2.9
100°-110°	209.1	3.6
110°-120°	256.5	4.5
120°-130°	289.7	5.0
130°-140°	300.9	5.2
140°-150°	283.1	4.9
150°-160°	235.4	4.1
160°-170°	156.7	2.7
170°-180°	54.9	1.0
0°-30°	950.4	16.5
0°-40°	1546.6	26.9
0°-60°	2755.9	47.9
0°-90°	3803.8	66.1
90°-120°	633.7	11.0
90°-150°	1507.2	26.2
90°-180°	1954.0	33.9
0°-180°	5758.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1235	1235	1235	1235	1235	
5°	1236	1234	1225	1236	1235	117
15°	1177	1181	1180	1193	1192	332
25°	1063	1076	1080	1098	1098	490
35°	915	936	954	974	979	572
45°	748	780	814	839	850	577
55°	570	615	663	700	710	511
65°	394	447	506	546	560	390
75°	214	277	344	389	405	228
85°	66	133	204	250	264	68
90°	18	88	163	210	225	15
95°	42	97	167	210	224	41
105°	113	146	208	246	259	121
115°	200	218	265	298	308	199
125°	287	289	327	353	361	257
135°	370	372	386	408	414	285
145°	447	447	448	459	462	279
155°	511	511	511	513	510	235
165°	556	555	555	558	554	157
175°	578	577	577	579	576	55
180°	580	580	580	580	580	

TEST NUMBER: P1031369

CATALOG NUMBER: S123DIW-B1000D460UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1234.8	1234.8	1234.8	1234.8	1234.8
2.5°	1241.6	1237.5	1226.8	1237.5	1236.2
5°	1236.2	1233.5	1225.4	1236.2	1234.8
7.5°	1226.8	1226.8	1218.7	1232.1	1230.8
10°	1213.3	1216.0	1209.3	1222.7	1220.0
12.5°	1197.2	1201.2	1197.2	1209.3	1206.6
15°	1177.0	1181.0	1179.7	1193.1	1191.8
17.5°	1152.8	1160.8	1159.5	1171.6	1168.9
20°	1125.9	1133.9	1136.6	1148.7	1150.1
22.5°	1097.6	1105.7	1109.7	1125.9	1124.5
25°	1062.7	1076.1	1080.1	1097.6	1097.6
27.5°	1029.0	1043.8	1051.9	1066.7	1068.0
30°	992.7	1010.2	1021.0	1037.1	1037.1
32.5°	952.4	972.5	987.3	1004.8	1008.8
35°	914.7	936.2	953.7	973.9	979.3
37.5°	874.3	898.5	918.7	941.6	945.6
40°	834.0	858.2	885.1	908.0	913.3
42.5°	789.6	820.5	848.8	874.3	882.4
45°	747.9	780.2	813.8	839.4	850.1
47.5°	703.5	739.8	777.5	805.7	813.8
50°	660.5	698.1	739.8	770.8	780.2
52.5°	614.7	655.1	702.2	734.4	746.5
55°	570.3	614.7	663.2	699.5	710.2
57.5°	527.3	573.0	625.5	661.8	673.9
60°	481.6	530.0	585.1	622.8	637.6
62.5°	438.5	488.3	547.5	585.1	598.6
65°	394.1	446.6	505.8	546.1	559.6
67.5°	349.7	404.9	464.1	508.5	519.2
70°	302.7	360.5	425.1	468.1	481.6
72.5°	259.6	317.5	384.7	429.1	442.5
75°	213.9	277.1	344.4	388.7	404.9
77.5°	174.9	238.1	305.3	352.4	364.5
80°	133.2	199.1	269.0	314.8	328.2
82.5°	96.8	164.1	235.4	281.1	294.6
85°	65.9	133.2	204.5	250.2	263.6
87.5°	40.4	107.6	176.2	221.9	235.4
90°	18.0	88.4	162.9	210.5	224.9
92.5°	29.8	90.4	160.3	206.1	217.3
95°	41.7	97.4	166.9	210.4	223.8
97.5°	57.7	108.4	174.3	217.0	229.9
100°	74.1	119.9	184.0	224.3	238.7
102.5°	93.3	132.2	196.0	235.0	248.0
105°	113.3	146.4	208.4	246.0	259.1
107.5°	135.6	164.3	221.3	258.9	270.6
110°	156.1	181.3	236.0	272.8	282.6

TEST NUMBER: P1031369

CATALOG NUMBER: S123DIW-B1000D460UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.9	198.2	249.3	285.2	297.4
115°	200.3	217.9	265.4	298.1	308.4
117.5°	223.5	234.8	279.6	311.9	321.3
120°	243.6	253.1	295.2	325.6	334.1
122.5°	266.0	270.5	311.3	339.5	347.5
125°	287.3	288.7	326.8	353.3	360.9
127.5°	308.3	309.7	342.4	366.6	374.2
130°	329.2	331.6	357.1	380.9	385.7
132.5°	348.9	352.5	371.8	393.8	400.9
135°	370.3	371.6	386.0	408.5	414.3
137.5°	389.9	390.8	401.6	420.9	426.2
140°	409.0	411.3	415.8	435.6	439.1
142.5°	427.7	428.7	429.6	446.6	451.0
145°	447.3	446.9	448.2	458.6	462.1
147.5°	462.8	464.6	466.0	470.0	472.7
150°	480.6	481.5	482.4	482.4	482.4
152.5°	495.2	496.5	497.0	497.9	495.6
155°	510.7	510.7	511.1	512.9	509.7
157.5°	523.9	523.4	523.9	525.7	523.0
160°	536.2	535.2	535.2	537.5	535.7
162.5°	547.1	545.7	546.2	548.5	545.3
165°	556.2	554.8	554.8	557.6	554.4
167.5°	563.9	562.1	562.6	565.3	562.6
170°	570.3	568.5	568.5	571.7	568.5
172.5°	575.3	573.5	573.5	576.2	573.1
175°	578.5	576.7	576.7	579.4	576.2
177.5°	580.3	578.5	578.5	581.3	578.1
180°	579.9	579.9	579.9	579.9	579.9

(END OF REPORT)