

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: P1031588

Luminaire Tested: S123DIW-B340D1320UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031588
REPORT IS A COMBINATION OF REPORTS P991279 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1320UB30-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

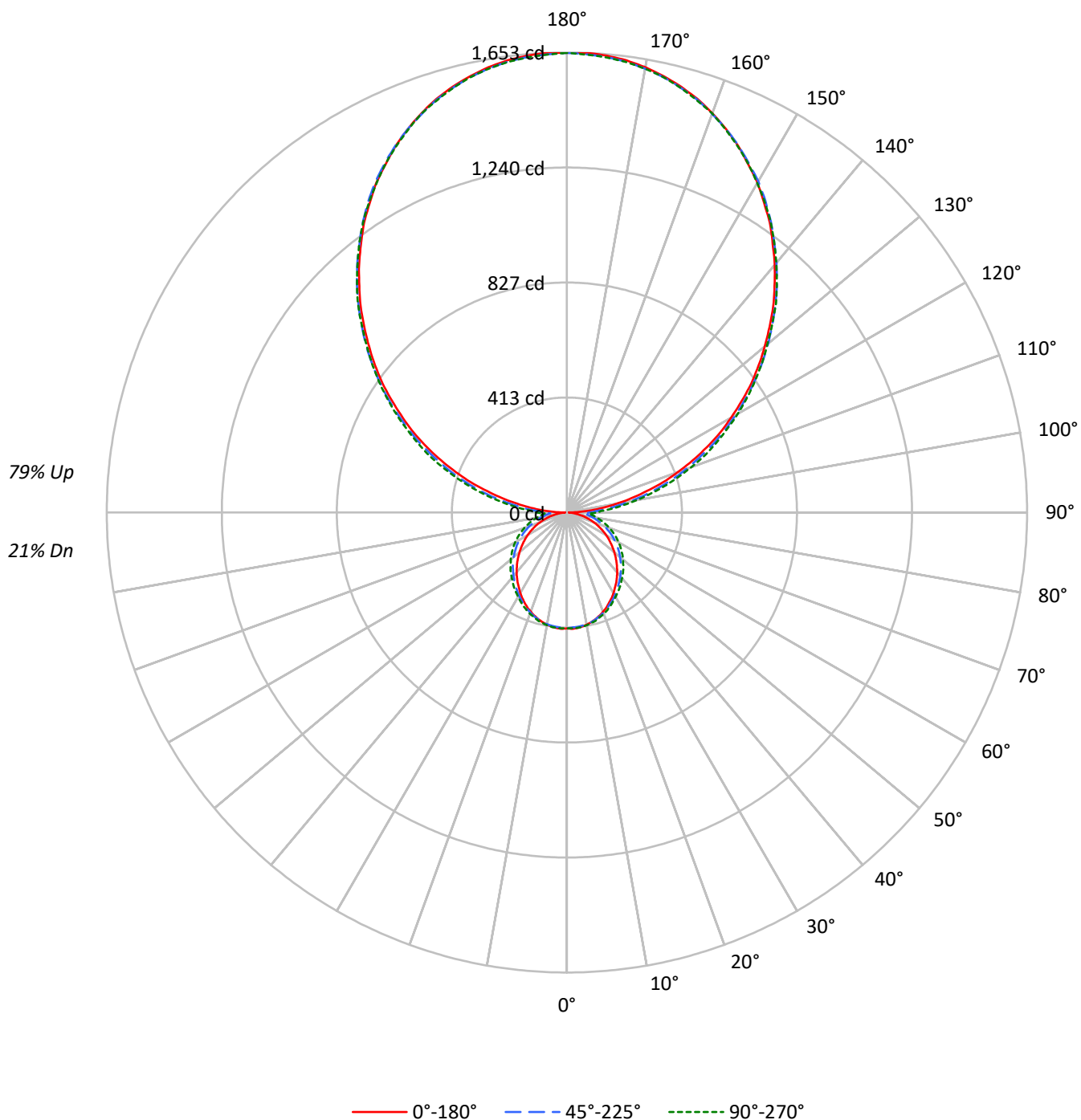
Lumens per Lamp: N/A
Luminaire Lumens: 5978.9 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1031588

CATALOG NUMBER: S123DIW-B340D1320UB30-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1031588

CATALOG NUMBER: S123DIW-B340D1320UB30-4F0-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	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30
1	91	87	83	79	80	77	74	71	58	56	54	41	40	39	26	25	24
2	83	75	69	64	73	67	62	57	51	47	44	36	34	32	22	21	20
3	75	66	59	53	66	59	53	48	45	40	37	32	29	27	20	18	17
4	69	58	50	45	60	52	45	40	39	35	31	28	25	23	17	16	14
5	63	52	44	38	55	46	39	34	35	30	27	25	22	19	16	14	12
6	58	46	38	33	51	41	34	29	31	27	23	22	19	17	14	12	11
7	53	41	34	28	47	37	30	26	28	24	20	20	17	15	13	11	10
8	49	37	30	25	43	33	27	22	26	21	18	18	15	13	12	10	8
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	11	9	8
10	42	31	24	19	37	28	22	17	21	17	14	16	12	10	10	8	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4481	4481	4481
5°	4493	4349	4346
10°	4451	4232	4199
15°	4392	4102	4044
20°	4308	3957	3877
25°	4205	3793	3704
30°	4101	3646	3530
35°	3981	3490	3389
40°	3869	3349	3239
45°	3744	3211	3116
50°	3620	3075	2982
55°	3484	2936	2859
60°	3349	2793	2733
65°	3213	2641	2586
70°	3004	2470	2433
75°	2743	2276	2277
80°	2438	2079	2098
85°	2132	1919	1970

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3744 cd/sqm

TEST NUMBER: P1031588

CATALOG NUMBER: S123DIW-B340D1320UB30-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.5	0.7
10°-20°	112.6	1.9
20°-30°	168.3	2.8
30°-40°	201.0	3.4
40°-50°	210.3	3.5
50°-60°	197.3	3.3
60°-70°	164.8	2.8
70°-80°	117.9	2.0
80°-90°	73.6	1.2
90°-100°	150.4	2.5
100°-110°	354.2	5.9
110°-120°	569.5	9.5
120°-130°	733.1	12.3
130°-140°	815.7	13.6
140°-150°	797.6	13.3
150°-160°	670.5	11.2
160°-170°	446.4	7.5
170°-180°	156.3	2.6
0°-30°	320.4	5.4
0°-40°	521.4	8.7
0°-60°	929.0	15.5
0°-90°	1285.3	21.5
90°-120°	1074.0	18.0
90°-150°	3420.4	57.2
90°-180°	4694.0	78.5
0°-180°	5978.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	417	416	413	417	416	40
15°	397	398	398	402	402	112
25°	358	363	364	370	370	165
35°	308	316	322	328	330	193
45°	252	263	274	283	287	194
55°	192	207	224	236	239	172
65°	133	150	170	184	189	131
75°	72	93	116	131	136	77
85°	22	45	69	84	89	23
90°	7	42	82	103	110	10
95°	82	108	141	160	165	88
105°	296	309	340	353	360	316
115°	554	563	577	589	591	548
125°	808	812	823	827	825	721
135°	1048	1055	1059	1062	1062	808
145°	1271	1273	1277	1279	1276	794
155°	1454	1454	1456	1461	1452	670
165°	1584	1580	1580	1588	1579	447
175°	1648	1643	1643	1650	1641	157
180°	1652	1652	1652	1652	1652	

TEST NUMBER: P1031588

CATALOG NUMBER: S123DIW-B340D1320UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	416.3	416.3	416.3	416.3	416.3
2.5°	418.5	417.2	413.6	417.2	416.7
5°	416.7	415.8	413.1	416.7	416.3
7.5°	413.6	413.6	410.8	415.4	414.9
10°	409.0	409.9	407.7	412.2	411.3
12.5°	403.6	404.9	403.6	407.7	406.7
15°	396.8	398.1	397.7	402.2	401.8
17.5°	388.6	391.3	390.9	395.0	394.1
20°	379.5	382.3	383.2	387.3	387.7
22.5°	370.0	372.7	374.1	379.5	379.1
25°	358.2	362.8	364.1	370.0	370.0
27.5°	346.9	351.9	354.6	359.6	360.0
30°	334.7	340.5	344.2	349.6	349.6
32.5°	321.0	327.8	332.8	338.7	340.1
35°	308.3	315.6	321.5	328.3	330.1
37.5°	294.7	302.9	309.7	317.4	318.8
40°	281.1	289.3	298.4	306.1	307.9
42.5°	266.2	276.6	286.1	294.7	297.5
45°	252.1	263.0	274.3	283.0	286.6
47.5°	237.2	249.4	262.1	271.6	274.3
50°	222.6	235.3	249.4	259.8	263.0
52.5°	207.2	220.8	236.7	247.6	251.7
55°	192.3	207.2	223.6	235.8	239.4
57.5°	177.8	193.2	210.9	223.1	227.2
60°	162.3	178.7	197.3	209.9	214.9
62.5°	147.8	164.6	184.6	197.3	201.8
65°	132.9	150.5	170.5	184.1	188.6
67.5°	117.9	136.5	156.4	171.4	175.0
70°	102.0	121.5	143.3	157.8	162.3
72.5°	87.5	107.0	129.7	144.7	149.2
75°	72.1	93.4	116.1	131.0	136.5
77.5°	58.9	80.3	102.9	118.8	122.9
80°	44.9	67.1	90.7	106.1	110.6
82.5°	32.6	55.3	79.4	94.8	99.3
85°	22.2	44.9	68.9	84.3	88.9
87.5°	13.6	36.3	59.4	74.8	79.4
90°	7.2	42.4	82.3	103.0	110.1
92.5°	44.3	71.6	102.1	121.0	122.5
95°	81.6	108.3	140.9	160.1	164.7
97.5°	130.4	153.2	182.3	202.4	205.6
100°	180.6	202.8	230.2	247.2	254.3
102.5°	238.4	255.0	284.5	301.1	304.4
105°	295.5	309.0	340.2	352.9	359.6
107.5°	362.6	373.4	397.2	413.3	416.1
110°	424.4	435.2	455.9	472.9	473.9

TEST NUMBER: P1031588

CATALOG NUMBER: S123DIW-B340D1320UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	489.3	496.9	514.1	531.9	536.0
115°	553.7	563.0	576.7	588.9	591.2
117.5°	619.9	624.8	637.6	648.5	648.2
120°	680.4	690.5	698.9	708.1	708.6
122.5°	744.0	750.0	761.5	767.7	766.9
125°	808.4	812.3	822.8	827.1	825.1
127.5°	868.1	875.4	884.1	885.4	883.4
130°	927.8	937.7	942.9	946.3	939.9
132.5°	987.0	997.4	1001.6	1003.3	999.9
135°	1048.0	1055.3	1058.9	1062.0	1061.7
137.5°	1103.8	1109.8	1116.8	1117.6	1116.1
140°	1161.7	1168.2	1170.8	1176.3	1169.5
142.5°	1214.9	1220.9	1223.5	1228.1	1223.9
145°	1270.7	1272.8	1276.7	1279.0	1275.6
147.5°	1318.2	1323.4	1327.3	1328.7	1322.7
150°	1368.8	1371.4	1374.0	1374.0	1367.1
152.5°	1410.4	1414.2	1415.5	1418.1	1411.6
155°	1454.5	1454.5	1455.8	1461.0	1451.9
157.5°	1492.1	1490.8	1492.1	1497.3	1489.5
160°	1527.1	1524.5	1524.5	1531.0	1525.8
162.5°	1558.3	1554.4	1555.7	1562.2	1553.1
165°	1584.2	1580.3	1580.3	1588.1	1579.0
167.5°	1606.3	1601.1	1602.4	1610.2	1602.4
170°	1624.4	1619.2	1619.2	1628.3	1619.2
172.5°	1638.7	1633.5	1633.5	1641.3	1632.2
175°	1647.8	1642.6	1642.6	1650.4	1641.3
177.5°	1653.0	1647.8	1647.8	1655.6	1646.5
180°	1651.7	1651.7	1651.7	1651.7	1651.7

(END OF REPORT)