

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: P1031593

Luminaire Tested: S123DIW-B340D1320UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031593
REPORT IS A COMBINATION OF REPORTS P991287 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1320UB35-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

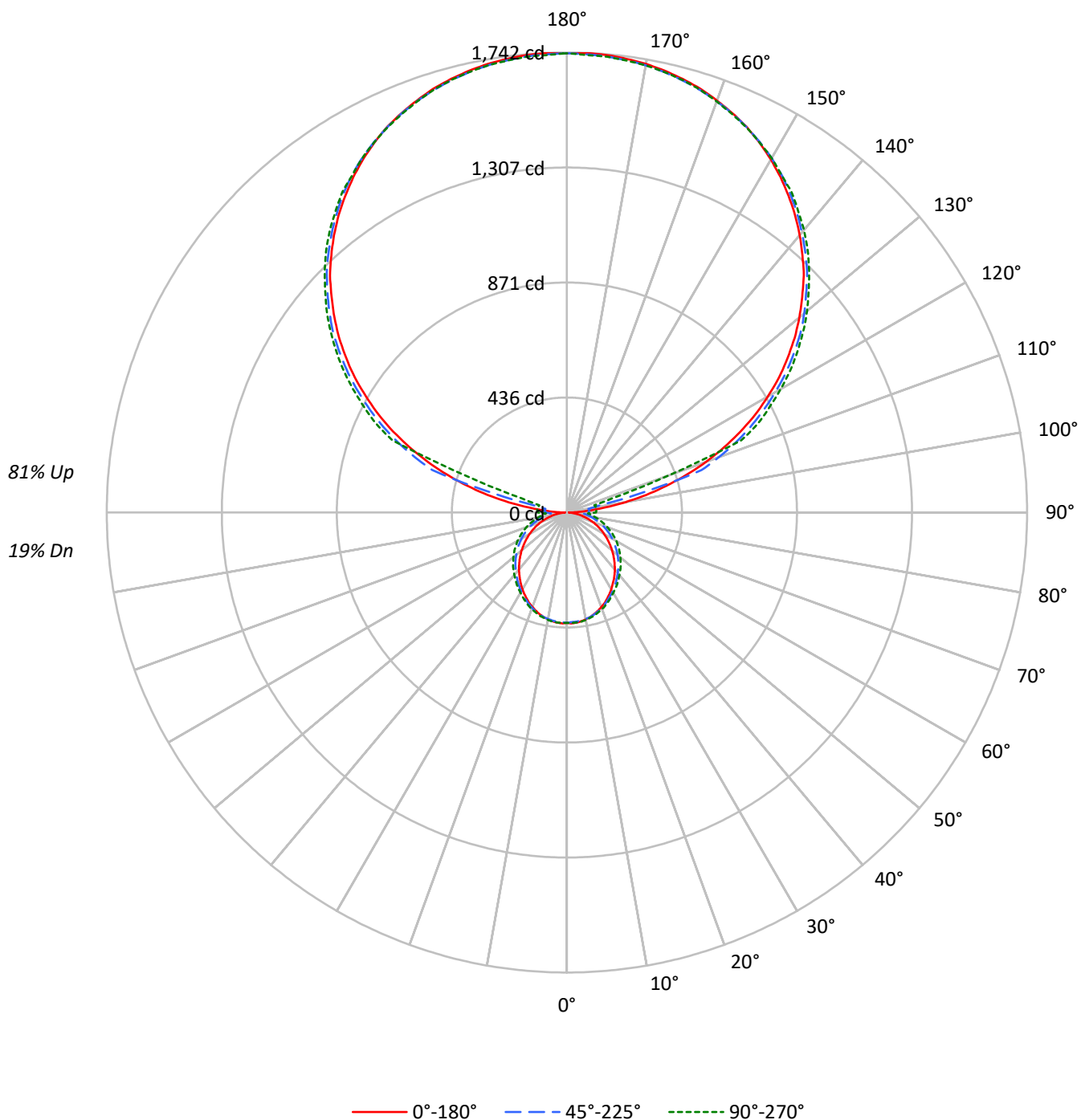
Lumens per Lamp: N/A
Luminaire Lumens: 6710.0 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P1031593

CATALOG NUMBER: S123DIW-B340D1320UB35-4F0-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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28
1	90	86	82	79	80	76	73	70	57	55	53	40	39	37	24	23	23
2	82	75	69	64	72	66	61	57	50	47	44	35	33	31	21	20	19
3	75	66	59	53	66	58	52	47	44	40	36	31	28	26	18	17	16
4	68	58	50	44	60	51	45	40	39	34	31	27	24	22	16	15	13
5	62	51	43	38	55	45	39	34	34	30	26	24	21	19	15	13	12
6	57	46	38	32	50	41	34	29	31	26	23	22	19	16	13	11	10
7	53	41	33	28	46	36	30	25	28	23	20	20	17	14	12	10	9
8	49	37	30	25	43	33	27	22	25	21	17	18	15	13	11	9	8
9	45	34	26	22	40	30	24	20	23	18	15	16	13	11	10	8	7
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4500	4500	4500
5°	4512	4368	4365
10°	4470	4250	4217
15°	4411	4119	4061
20°	4327	3973	3894
25°	4224	3809	3720
30°	4118	3660	3545
35°	4000	3505	3403
40°	3885	3363	3253
45°	3760	3225	3129
50°	3636	3089	2995
55°	3499	2948	2872
60°	3363	2805	2746
65°	3225	2652	2597
70°	3019	2481	2444
75°	2754	2286	2287
80°	2448	2088	2107
85°	2142	1927	1979

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3760 cd/sqm

TEST NUMBER: P1031593

CATALOG NUMBER: S123DIW-B340D1320UB35-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	0.6
10°-20°	113.1	1.7
20°-30°	169.1	2.5
30°-40°	201.9	3.0
40°-50°	211.2	3.1
50°-60°	198.2	3.0
60°-70°	165.5	2.5
70°-80°	118.4	1.8
80°-90°	73.9	1.1
90°-100°	105.6	1.6
100°-110°	329.0	4.9
110°-120°	748.3	11.2
120°-130°	934.7	13.9
130°-140°	990.9	14.8
140°-150°	922.5	13.7
150°-160°	743.2	11.1
160°-170°	479.6	7.1
170°-180°	165.3	2.5
0°-30°	321.8	4.8
0°-40°	523.6	7.8
0°-60°	933.0	13.9
0°-90°	1290.8	19.2
90°-120°	1182.9	17.6
90°-150°	4031.1	60.1
90°-180°	5419.0	80.8
0°-180°	6710.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	418	418	418	418	418	
5°	418	418	415	418	418	40
15°	398	400	399	404	404	112
25°	360	364	366	372	372	166
35°	310	317	323	330	332	194
45°	253	264	276	284	288	195
55°	193	208	224	237	240	173
65°	133	151	171	185	189	132
75°	72	94	117	132	137	77
85°	22	45	69	85	89	23
90°	7	42	82	103	110	9
95°	84	49	85	108	113	98
105°	389	414	317	101	108	412
115°	724	738	766	790	798	716
125°	1020	1030	1048	1060	1066	911
135°	1268	1276	1286	1298	1296	977
145°	1463	1472	1474	1480	1482	916
155°	1611	1608	1610	1616	1608	742
165°	1699	1695	1694	1704	1695	480
175°	1739	1733	1734	1743	1733	166
180°	1739	1739	1739	1739	1739	

TEST NUMBER: P1031593

CATALOG NUMBER: S123DIW-B340D1320UB35-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	418.1	418.1	418.1	418.1	418.1
2.5°	420.3	419.0	415.3	419.0	418.5
5°	418.5	417.6	414.9	418.5	418.1
7.5°	415.3	415.3	412.6	417.1	416.7
10°	410.8	411.7	409.4	414.0	413.0
12.5°	405.3	406.7	405.3	409.4	408.5
15°	398.5	399.8	399.4	403.9	403.5
17.5°	390.3	393.0	392.6	396.7	395.7
20°	381.2	383.9	384.8	388.9	389.4
22.5°	371.6	374.3	375.7	381.2	380.7
25°	359.8	364.3	365.7	371.6	371.6
27.5°	348.4	353.4	356.1	361.1	361.6
30°	336.1	342.0	345.6	351.1	351.1
32.5°	322.4	329.3	334.3	340.2	341.6
35°	309.7	317.0	322.9	329.7	331.5
37.5°	296.0	304.2	311.0	318.8	320.1
40°	282.3	290.5	299.7	307.4	309.2
42.5°	267.3	277.8	287.4	296.0	298.7
45°	253.2	264.1	275.5	284.2	287.8
47.5°	238.2	250.5	263.2	272.8	275.5
50°	223.6	236.4	250.5	260.9	264.1
52.5°	208.1	221.8	237.7	248.6	252.7
55°	193.1	208.1	224.5	236.8	240.5
57.5°	178.5	194.0	211.8	224.1	228.2
60°	163.0	179.4	198.1	210.9	215.9
62.5°	148.5	165.3	185.3	198.1	202.7
65°	133.4	151.2	171.2	184.9	189.4
67.5°	118.4	137.1	157.1	172.1	175.8
70°	102.5	122.0	143.9	158.5	163.0
72.5°	87.9	107.5	130.2	145.3	149.8
75°	72.4	93.8	116.6	131.6	137.1
77.5°	59.2	80.6	103.4	119.3	123.4
80°	45.1	67.4	91.1	106.6	111.1
82.5°	32.8	55.6	79.7	95.2	99.7
85°	22.3	45.1	69.2	84.7	89.3
87.5°	13.7	36.4	59.7	75.1	79.7
90°	7.2	42.4	82.5	103.1	110.3
92.5°	35.2	47.0	81.4	105.4	110.8
95°	83.8	48.6	85.2	108.3	112.9
97.5°	148.0	128.1	83.7	107.7	113.6
100°	222.4	262.9	82.2	105.8	111.7
102.5°	307.2	336.8	132.5	102.6	109.8
105°	388.6	413.8	317.1	101.2	107.8
107.5°	474.8	496.0	534.0	347.3	182.2
110°	560.8	579.4	611.8	581.0	399.9

TEST NUMBER: P1031593

CATALOG NUMBER: S123DIW-B340D1320UB35-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	643.5	659.0	690.5	713.5	715.0
115°	724.5	737.7	765.7	789.6	798.4
117.5°	804.6	817.3	839.2	860.5	865.5
120°	877.8	891.7	910.6	931.4	934.6
122.5°	952.7	962.6	981.9	998.5	1003.0
125°	1019.5	1029.8	1048.2	1060.3	1066.1
127.5°	1086.7	1096.5	1114.4	1127.3	1128.0
130°	1148.7	1158.5	1172.8	1186.7	1186.8
132.5°	1207.6	1218.0	1228.6	1242.0	1241.3
135°	1268.3	1275.7	1285.9	1297.9	1296.3
137.5°	1320.0	1330.0	1335.6	1349.4	1349.1
140°	1371.3	1379.0	1384.2	1396.3	1395.9
142.5°	1419.1	1426.4	1430.2	1440.0	1438.4
145°	1463.0	1471.6	1474.2	1480.3	1482.2
147.5°	1505.2	1511.6	1514.2	1518.2	1513.5
150°	1543.9	1547.8	1550.4	1553.0	1550.0
152.5°	1578.8	1580.1	1581.4	1586.6	1580.1
155°	1611.1	1608.5	1609.8	1616.3	1608.5
157.5°	1636.9	1636.9	1635.7	1643.4	1633.1
160°	1660.2	1658.9	1657.6	1665.4	1656.3
162.5°	1682.2	1678.3	1677.0	1686.0	1678.3
165°	1699.0	1695.1	1693.8	1704.1	1695.1
167.5°	1713.2	1708.0	1708.0	1718.3	1708.0
170°	1724.8	1719.6	1719.6	1730.0	1719.6
172.5°	1732.6	1726.1	1727.4	1737.7	1726.1
175°	1739.0	1732.6	1733.8	1742.9	1732.6
177.5°	1741.6	1735.1	1736.4	1746.8	1733.8
180°	1739.0	1739.0	1739.0	1739.0	1739.0

(END OF REPORT)