

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: P1031566

Luminaire Tested: S123DIW-B340D1030UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031566
REPORT IS A COMBINATION OF REPORTS P991221 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1030UB35-4F0-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

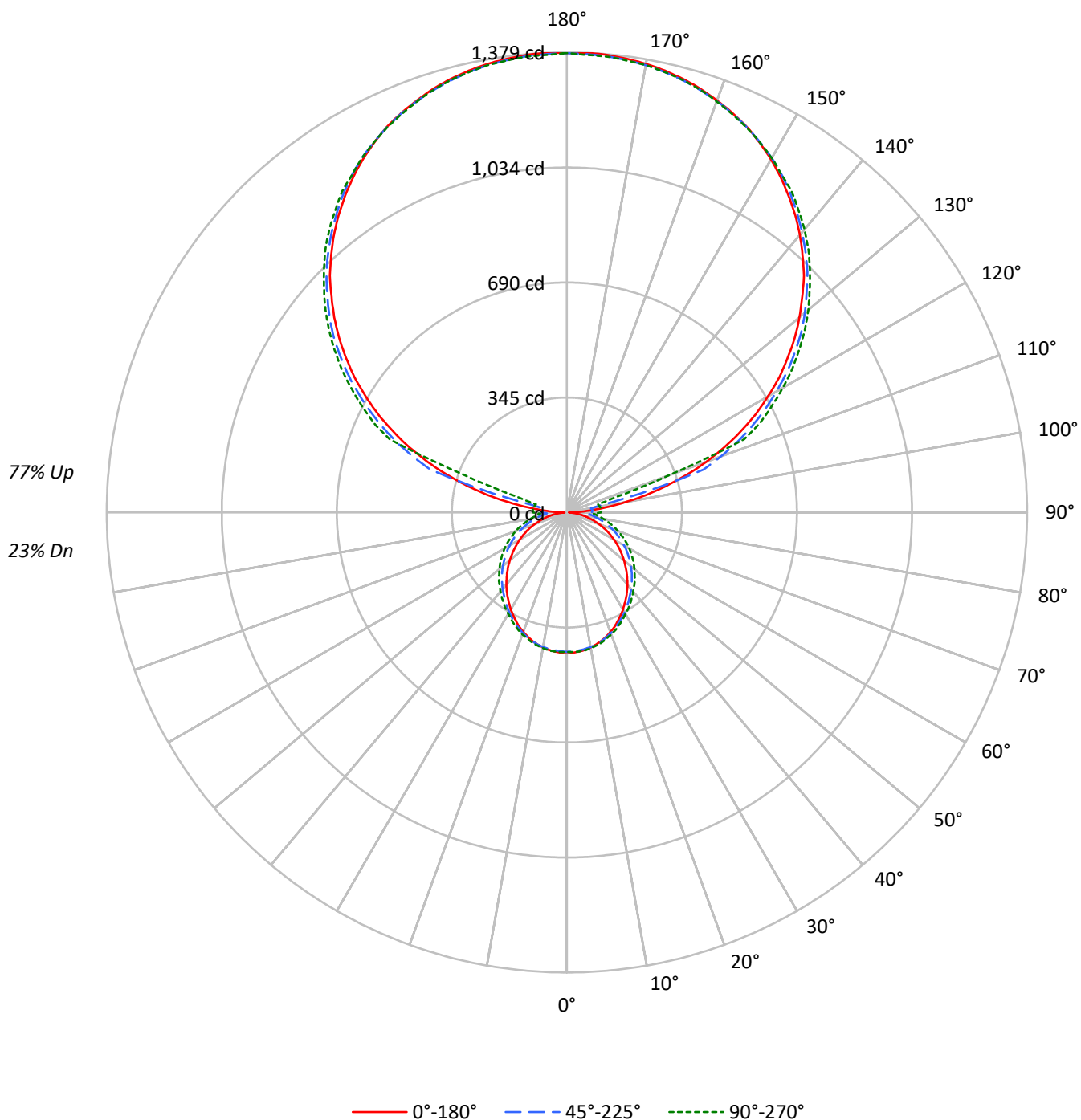
Lumens per Lamp: N/A
Luminaire Lumens: 5606.0 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	69	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	9	7

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	0.7
10°-20°	113.1	2.0
20°-30°	169.1	3.0
30°-40°	201.9	3.6
40°-50°	211.2	3.8
50°-60°	198.2	3.5
60°-70°	165.5	3.0
70°-80°	118.4	2.1
80°-90°	73.2	1.3
90°-100°	92.8	1.7
100°-110°	267.3	4.8
110°-120°	597.1	10.7
120°-130°	742.8	13.3
130°-140°	785.8	14.0
140°-150°	730.8	13.0
150°-160°	588.5	10.5
160°-170°	379.8	6.8
170°-180°	130.9	2.3
0°-30°	321.8	5.7
0°-40°	523.6	9.3
0°-60°	933.0	16.6
0°-90°	1290.1	23.0
90°-120°	957.2	17.1
90°-150°	3216.6	57.4
90°-180°	4316.0	77.0
0°-180°	5606.0	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	40	76	96	102	8
95°	67	43	77	98	103	78
105°	308	331	258	90	96	327
115°	574	586	611	633	640	567
125°	808	816	833	845	850	722
135°	1005	1010	1019	1031	1030	773
145°	1159	1165	1167	1173	1175	725
155°	1276	1274	1275	1280	1274	588
165°	1345	1342	1341	1350	1342	380
175°	1377	1372	1373	1380	1372	131
180°	1377	1377	1377	1377	1377	

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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°	6.9	39.5	76.1	95.5	102.2
92.5°	29.0	42.4	74.4	96.6	101.7
95°	67.4	43.3	76.8	98.1	102.7
97.5°	118.2	105.8	75.1	96.9	102.5
100°	177.0	212.1	73.4	94.7	100.4
102.5°	244.0	270.1	112.6	91.5	98.2
105°	308.5	330.7	258.3	89.9	96.0
107.5°	376.6	395.4	429.4	284.1	154.2
110°	444.7	461.1	490.5	468.7	326.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	510.2	523.7	552.3	572.9	574.9
115°	574.2	585.8	611.4	632.6	640.3
117.5°	637.7	648.4	669.0	688.1	692.8
120°	695.5	707.0	725.1	743.7	746.9
122.5°	754.8	762.9	781.1	796.3	800.5
125°	807.6	815.8	833.1	844.6	849.9
127.5°	860.8	868.5	885.0	897.2	898.3
130°	909.9	917.6	930.8	943.6	944.3
132.5°	956.5	964.7	974.5	986.8	987.0
135°	1004.6	1010.3	1019.4	1030.7	1029.8
137.5°	1045.5	1053.3	1058.4	1070.8	1071.1
140°	1086.0	1092.2	1096.5	1107.5	1107.7
142.5°	1123.9	1129.5	1132.6	1141.6	1140.8
145°	1158.7	1165.3	1167.4	1173.0	1174.9
147.5°	1191.9	1197.0	1199.1	1202.5	1199.2
150°	1222.6	1225.7	1227.7	1229.8	1227.6
152.5°	1250.2	1251.3	1252.3	1256.4	1251.3
155°	1275.8	1273.8	1274.8	1279.9	1273.8
157.5°	1296.3	1296.3	1295.3	1301.4	1293.2
160°	1314.7	1313.7	1312.7	1318.8	1311.6
162.5°	1332.1	1329.0	1328.0	1335.2	1329.0
165°	1345.4	1342.3	1341.3	1349.5	1342.3
167.5°	1356.7	1352.6	1352.6	1360.7	1352.6
170°	1365.9	1361.8	1361.8	1370.0	1361.8
172.5°	1372.0	1366.9	1367.9	1376.1	1366.9
175°	1377.1	1372.0	1373.0	1380.2	1372.0
177.5°	1379.2	1374.0	1375.1	1383.3	1373.0
180°	1377.1	1377.1	1377.1	1377.1	1377.1

(END OF REPORT)