

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: P1031568

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031568
REPORT IS A COMBINATION OF REPORTS P991224 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-F
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

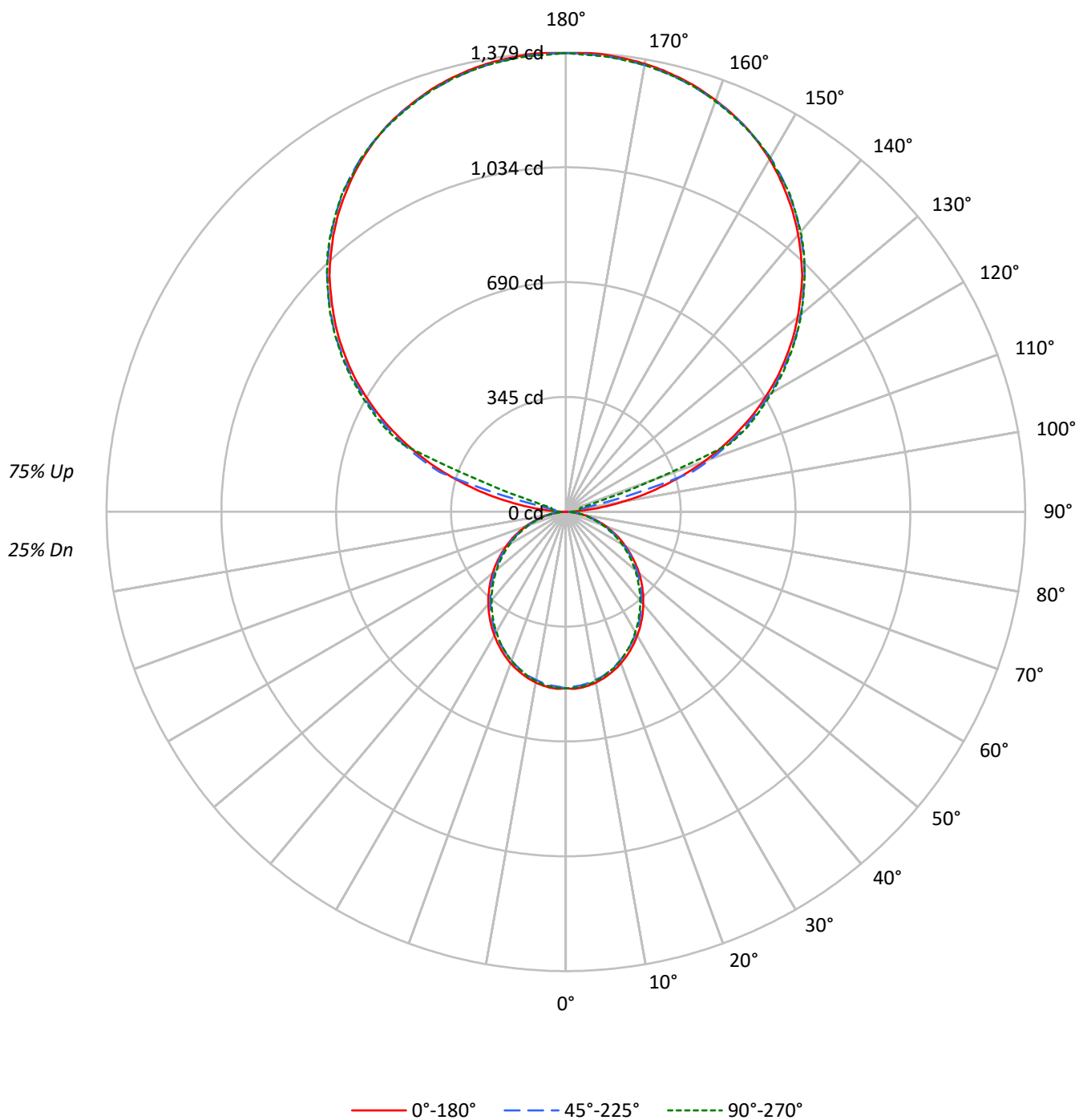
Lumens per Lamp: N/A
Luminaire Lumens: 5580.0 lumens
Efficiency: N/A
Efficacy: 125.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
Input Voltage (V):
Input Current (A_{in}): 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	90	90	90	90	69	69	69	50	50	50	33	33	33
1	92	88	84	81	82	78	75	72	61	58	57	44	43	42	29	28	28
2	84	77	71	66	74	68	64	59	53	50	47	39	37	35	25	24	23
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11
8	50	38	31	26	45	34	28	24	27	22	19	20	17	15	14	12	10
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5704	5704	5704
5°	5717	5506	5499
10°	5667	5321	5265
15°	5588	5127	5012
20°	5497	4911	4761
25°	5380	4684	4492
30°	5253	4449	4210
35°	5119	4209	3928
40°	4978	3957	3653
45°	4824	3712	3364
50°	4667	3438	3074
55°	4466	3153	2780
60°	4259	2839	2468
65°	4064	2498	2143
70°	3784	2120	1762
75°	3378	1680	1368
80°	2921	1180	967
85°	2276	635	485

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4824 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.0	0.9
10°-20°	141.0	2.5
20°-30°	208.3	3.7
30°-40°	243.3	4.4
40°-50°	244.6	4.4
50°-60°	214.8	3.9
60°-70°	160.0	2.9
70°-80°	91.1	1.6
80°-90°	28.6	0.5
90°-100°	48.6	0.9
100°-110°	234.8	4.2
110°-120°	575.4	10.3
120°-130°	730.4	13.1
130°-140°	780.3	14.0
140°-150°	729.6	13.1
150°-160°	588.5	10.5
160°-170°	379.8	6.8
170°-180°	130.9	2.3
0°-30°	399.3	7.2
0°-40°	642.6	11.5
0°-60°	1102.0	19.7
0°-90°	1381.8	24.8
90°-120°	858.7	15.4
90°-150°	3099.0	55.5
90°-180°	4198.0	75.2
0°-180°	5580.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	530	530	530	530	530	
5°	530	528	523	528	527	50
15°	505	503	497	501	498	142
25°	458	456	450	450	449	211
35°	396	394	388	385	383	248
45°	325	323	317	312	309	251
55°	246	246	240	235	233	221
65°	168	166	161	158	156	166
75°	89	87	86	83	82	95
85°	24	23	23	22	22	25
90°	1	11	25	29	31	5
95°	62	20	32	39	39	75
105°	305	316	224	43	45	323
115°	572	578	587	598	602	565
125°	806	814	818	820	823	720
135°	1004	1010	1014	1017	1014	773
145°	1158	1165	1167	1169	1169	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°	529.9	529.9	529.9	529.9	529.9
2.5°	532.1	530.3	525.3	529.9	529.4
5°	530.3	528.0	523.0	527.6	526.7
7.5°	526.2	523.9	518.9	523.0	522.6
10°	520.8	518.5	512.6	516.7	515.7
12.5°	513.5	511.6	506.2	508.9	508.5
15°	504.8	503.0	497.1	500.7	498.0
17.5°	495.2	493.0	487.0	489.8	488.9
20°	484.3	481.6	475.6	477.5	476.1
22.5°	472.0	469.3	463.3	464.7	462.9
25°	458.3	455.6	449.7	450.1	448.8
27.5°	444.2	441.5	435.1	435.6	434.2
30°	428.7	426.4	420.1	420.1	416.9
32.5°	413.2	410.0	405.5	402.3	400.9
35°	396.4	393.6	387.7	385.0	382.7
37.5°	379.5	375.9	369.9	366.8	365.4
40°	361.7	359.0	352.6	349.0	347.2
42.5°	344.0	340.8	334.4	330.8	328.9
45°	324.8	323.0	317.1	311.6	309.4
47.5°	306.2	303.4	298.0	292.5	290.7
50°	287.0	284.8	278.8	273.8	271.1
52.5°	267.0	265.6	259.2	255.1	252.4
55°	246.5	246.0	240.1	235.1	232.8
57.5°	227.3	225.5	221.0	216.4	213.7
60°	206.4	205.9	200.5	196.4	194.1
62.5°	187.7	186.3	180.9	176.8	175.4
65°	168.1	165.8	161.3	157.6	156.3
67.5°	147.2	145.3	141.7	138.5	136.7
70°	128.5	125.7	123.0	119.8	117.5
72.5°	108.9	107.1	103.9	101.1	100.2
75°	88.8	87.0	85.7	83.4	82.0
77.5°	71.1	70.2	68.3	66.5	66.5
80°	53.8	52.4	51.5	51.0	51.0
82.5°	36.9	36.9	36.9	36.0	35.5
85°	23.7	22.8	22.8	21.9	21.9
87.5°	11.8	10.5	10.0	9.6	9.6
90°	1.0	11.3	24.6	28.6	30.7
92.5°	23.5	17.4	26.6	33.8	34.8
95°	62.4	20.5	31.7	38.9	38.9
97.5°	113.6	84.9	32.7	40.9	41.9
100°	172.9	193.4	33.8	41.9	43.0
102.5°	240.4	253.7	75.7	41.9	44.0
105°	304.9	316.1	224.1	43.0	45.0
107.5°	373.4	382.6	398.0	240.4	106.4
110°	442.0	450.2	461.4	427.7	281.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	507.5	514.6	525.9	535.1	533.0
115°	571.9	578.1	587.3	597.5	601.6
117.5°	635.4	642.5	647.6	655.8	656.8
120°	693.7	702.9	706.0	714.1	714.1
122.5°	753.0	760.2	764.3	769.4	770.4
125°	806.2	814.4	818.5	820.5	822.6
127.5°	859.4	867.6	872.7	875.8	873.7
130°	908.5	916.7	920.8	924.9	922.9
132.5°	955.6	963.8	966.8	970.9	967.9
135°	1003.7	1009.8	1013.9	1017.0	1013.9
137.5°	1044.6	1052.8	1054.8	1059.9	1057.9
140°	1085.5	1091.7	1094.7	1098.8	1096.8
142.5°	1123.4	1129.5	1132.6	1135.7	1132.6
145°	1158.2	1165.3	1167.4	1169.4	1169.4
147.5°	1191.9	1197.0	1199.1	1201.1	1196.0
150°	1222.6	1225.7	1227.7	1229.8	1226.7
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)