

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: P1031854

Luminaire Tested: S123DIW-B775D1030UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031854
REPORT IS A COMBINATION OF REPORTS P991881 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1030UB35-4F0-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

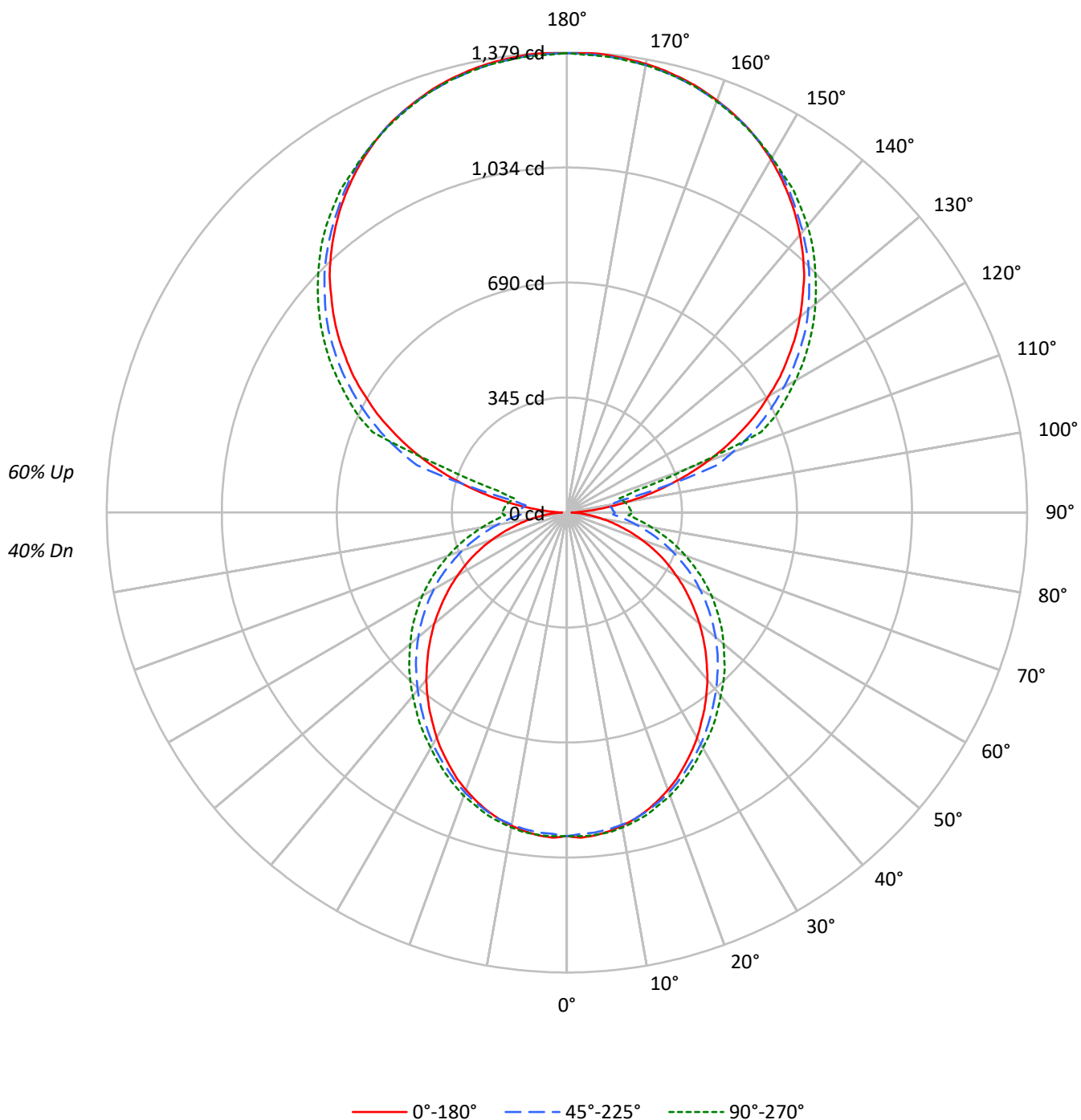
Lumens per Lamp: N/A
Luminaire Lumens: 7462.0 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 67.4
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

TEST NUMBER: P1031854

CATALOG NUMBER: S123DIW-B775D1030UB35-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1031854

CATALOG NUMBER: S123DIW-B775D1030UB35-4F0-XX-W2A-D

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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47
1	95	90	86	82	86	82	78	75	67	64	62	53	51	50	40	39	38
2	86	78	72	66	78	71	66	61	58	54	51	46	43	41	35	33	31
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	31	28	26
4	71	60	52	46	64	55	48	43	45	40	36	36	32	29	27	25	22
5	65	54	45	39	59	49	42	36	40	35	31	32	28	25	24	22	19
6	60	48	40	34	54	44	37	31	36	31	26	29	25	22	22	19	17
7	55	43	35	29	50	39	32	27	33	27	23	26	22	19	20	17	15
8	51	39	31	26	47	36	29	24	30	24	20	24	20	17	18	16	13
9	48	36	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12
10	45	32	25	20	40	30	23	19	25	20	16	20	16	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10444	10444	10444
5°	10473	10138	10130
10°	10375	9863	9788
15°	10238	9560	9426
20°	10043	9222	9036
25°	9803	8842	8633
30°	9558	8496	8228
35°	9281	8135	7899
40°	9019	7805	7550
45°	8728	7485	7263
50°	8440	7167	6951
55°	8121	6842	6666
60°	7808	6510	6371
65°	7487	6155	6028
70°	7003	5758	5674
75°	6394	5305	5309
80°	5679	4846	4891
85°	4976	4475	4593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8728 cd/sqm

TEST NUMBER: P1031854

CATALOG NUMBER: S123DIW-B775D1030UB35-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.0	1.2
10°-20°	262.4	3.5
20°-30°	392.4	5.3
30°-40°	468.5	6.3
40°-50°	490.2	6.6
50°-60°	460.0	6.2
60°-70°	384.2	5.1
70°-80°	274.7	3.7
80°-90°	166.2	2.2
90°-100°	151.3	2.0
100°-110°	310.3	4.2
110°-120°	625.8	8.4
120°-130°	759.2	10.2
130°-140°	793.2	10.6
140°-150°	732.3	9.8
150°-160°	588.5	7.9
160°-170°	379.8	5.1
170°-180°	130.9	1.8
0°-30°	746.8	10.0
0°-40°	1215.3	16.3
0°-60°	2165.5	29.0
0°-90°	2990.7	40.1
90°-120°	1087.4	14.6
90°-150°	3372.0	45.2
90°-180°	4471.0	59.9
0°-180°	7462.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	971	969	963	971	970	92
15°	925	928	927	938	936	261
25°	835	846	849	862	862	385
35°	719	736	749	765	770	449
45°	588	613	640	660	668	453
55°	448	483	521	550	558	401
65°	310	351	397	429	440	306
75°	168	218	271	306	318	180
85°	52	105	161	197	207	53
90°	15	77	144	184	197	13
95°	74	73	136	176	187	84
105°	313	350	303	152	163	332
115°	577	596	643	679	691	570
125°	809	818	852	876	886	724
135°	1006	1011	1027	1049	1051	774
145°	1159	1165	1167	1178	1182	726
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	

TEST NUMBER: P1031854

CATALOG NUMBER: S123DIW-B775D1030UB35-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	970.3	970.3	970.3	970.3	970.3
2.5°	975.6	972.4	964.0	972.4	971.4
5°	971.4	969.3	962.9	971.4	970.3
7.5°	964.0	964.0	957.6	968.2	967.1
10°	953.4	955.5	950.2	960.8	958.7
12.5°	940.7	943.9	940.7	950.2	948.1
15°	924.9	928.0	927.0	937.5	936.5
17.5°	905.8	912.2	911.1	920.6	918.5
20°	884.7	891.0	893.1	902.7	903.7
22.5°	862.5	868.8	872.0	884.7	883.6
25°	835.0	845.6	848.8	862.5	862.5
27.5°	808.6	820.2	826.6	838.2	839.2
30°	780.1	793.8	802.2	814.9	814.9
32.5°	748.3	764.2	775.8	789.6	792.7
35°	718.7	735.7	749.4	765.3	769.5
37.5°	687.0	706.1	721.9	739.9	743.1
40°	655.3	674.4	695.5	713.5	717.7
42.5°	620.4	644.8	667.0	687.0	693.4
45°	587.7	613.0	639.5	659.6	668.0
47.5°	552.8	581.3	610.9	633.1	639.5
50°	519.0	548.6	581.3	605.7	613.0
52.5°	483.0	514.8	551.7	577.1	586.6
55°	448.2	483.0	521.1	549.6	558.1
57.5°	414.3	450.3	491.5	520.0	529.5
60°	378.4	416.5	459.8	489.4	501.0
62.5°	344.6	383.7	430.2	459.8	470.4
65°	309.7	350.9	397.4	429.1	439.7
67.5°	274.8	318.2	364.7	399.5	408.0
70°	237.8	283.3	334.0	367.8	378.4
72.5°	204.0	249.4	302.3	337.2	347.7
75°	168.1	217.7	270.6	305.5	318.2
77.5°	137.4	187.1	239.9	276.9	286.4
80°	104.6	156.4	211.4	247.3	257.9
82.5°	76.1	129.0	185.0	220.9	231.5
85°	51.8	104.6	160.7	196.6	207.2
87.5°	31.7	84.6	138.5	174.4	185.0
90°	14.7	76.8	144.0	184.0	196.6
92.5°	36.2	75.5	137.6	179.7	190.2
95°	74.0	73.3	136.3	176.3	186.9
97.5°	124.2	133.5	131.0	170.9	182.5
100°	182.4	236.7	125.8	164.5	176.2
102.5°	248.9	291.8	161.3	157.1	169.8
105°	313.4	349.9	303.4	151.9	163.4
107.5°	380.8	412.2	470.9	341.9	217.4
110°	448.3	475.6	529.0	522.8	385.0

TEST NUMBER: P1031854

CATALOG NUMBER: S123DIW-B775D1030UB35-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	513.8	535.7	587.2	622.8	630.2
115°	577.2	596.1	643.3	678.9	691.4
117.5°	640.7	656.2	697.3	730.8	740.3
120°	697.9	712.4	750.4	782.8	790.2
122.5°	757.2	766.5	803.4	831.8	840.2
125°	809.4	817.6	852.3	876.5	886.0
127.5°	862.6	869.7	901.2	925.5	930.8
130°	911.7	918.8	944.1	968.2	972.6
132.5°	957.7	965.9	984.8	1007.9	1012.3
135°	1005.8	1010.9	1026.6	1048.7	1050.9
137.5°	1046.7	1053.9	1063.3	1085.3	1088.6
140°	1086.6	1092.8	1098.9	1118.9	1122.2
142.5°	1124.5	1129.5	1132.6	1149.4	1151.6
145°	1159.3	1165.3	1167.4	1177.9	1182.1
147.5°	1191.9	1197.0	1199.1	1204.3	1203.4
150°	1222.6	1225.7	1227.7	1229.8	1228.8
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)