

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: P1031888

Luminaire Tested: S123DIW-B775D1320UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031888
REPORT IS A COMBINATION OF REPORTS P991957 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1320UB40-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

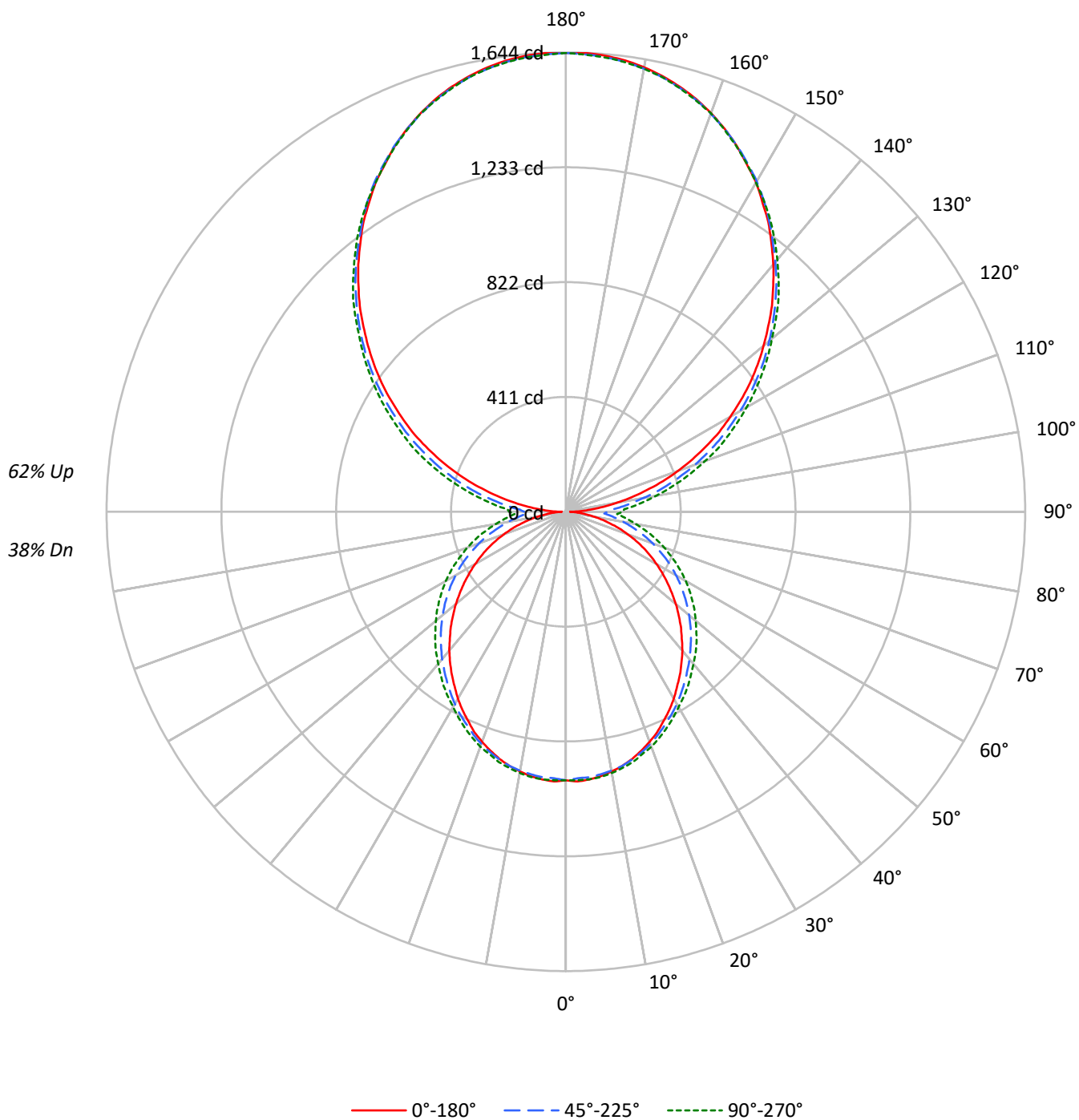
Lumens per Lamp: N/A
Luminaire Lumens: 7783.0 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 78
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: P1031888

CATALOG NUMBER: S123DIW-B775D1320UB40-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1031888

CATALOG NUMBER: S123DIW-B775D1320UB40-4F0-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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45
1	94	90	86	82	85	81	78	75	66	63	61	52	50	48	39	38	36
2	86	78	72	66	77	71	65	61	57	53	50	45	42	40	33	32	30
3	78	68	61	55	70	62	55	50	50	46	42	39	36	33	29	27	25
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	24	22
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	23	21	19
6	60	48	40	34	54	43	36	31	36	30	26	28	24	21	21	18	16
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	19	17	14
8	51	39	31	26	46	36	29	24	29	24	20	23	19	16	18	15	13
9	48	35	28	23	43	32	26	21	27	22	18	21	17	15	16	14	12
10	44	32	25	20	40	30	23	19	25	20	16	20	16	13	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10342	10342	10342
5°	10370	10039	10030
10°	10273	9766	9692
15°	10137	9466	9333
20°	9944	9132	8948
25°	9706	8754	8548
30°	9464	8414	8147
35°	9191	8055	7821
40°	8931	7728	7476
45°	8642	7412	7193
50°	8357	7097	6883
55°	8041	6775	6600
60°	7732	6446	6309
65°	7414	6095	5969
70°	6935	5701	5618
75°	6330	5252	5255
80°	5624	4797	4844
85°	4928	4431	4546

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8642 cd/sqm

TEST NUMBER: P1031888

CATALOG NUMBER: S123DIW-B775D1320UB40-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	1.2
10°-20°	259.8	3.3
20°-30°	388.5	5.0
30°-40°	463.9	6.0
40°-50°	485.4	6.2
50°-60°	455.5	5.9
60°-70°	380.5	4.9
70°-80°	272.0	3.5
80°-90°	165.3	2.1
90°-100°	207.4	2.7
100°-110°	394.8	5.1
110°-120°	594.7	7.6
120°-130°	745.1	9.6
130°-140°	818.3	10.5
140°-150°	794.6	10.2
150°-160°	666.7	8.6
160°-170°	443.9	5.7
170°-180°	155.4	2.0
0°-30°	739.5	9.5
0°-40°	1203.4	15.5
0°-60°	2144.3	27.6
0°-90°	2962.1	38.1
90°-120°	1196.9	15.4
90°-150°	3554.9	45.7
90°-180°	4821.0	61.9
0°-180°	7783.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	961	961	961	961	961	
5°	962	960	954	962	961	91
15°	916	919	918	928	927	258
25°	827	837	840	854	854	381
35°	712	728	742	758	762	445
45°	582	607	633	653	662	449
55°	444	478	516	544	553	397
65°	307	348	394	425	435	303
75°	166	216	268	302	315	178
85°	51	104	159	195	205	53
90°	15	79	149	190	203	15
95°	88	137	199	237	247	93
105°	299	326	383	412	424	319
115°	554	570	605	632	639	548
125°	806	809	837	854	856	719
135°	1043	1050	1060	1074	1076	804
145°	1264	1266	1270	1277	1276	789
155°	1446	1446	1448	1453	1444	666
165°	1575	1571	1571	1579	1570	444
175°	1638	1633	1633	1641	1632	156
180°	1642	1642	1642	1642	1642	

TEST NUMBER: P1031888

CATALOG NUMBER: S123DIW-B775D1320UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	960.8	960.8	960.8	960.8	960.8
2.5°	966.0	962.9	954.5	962.9	961.8
5°	961.8	959.7	953.5	961.8	960.8
7.5°	954.5	954.5	948.2	958.7	957.6
10°	944.0	946.1	940.9	951.4	949.3
12.5°	931.5	934.6	931.5	940.9	938.8
15°	915.8	918.9	917.9	928.3	927.3
17.5°	896.9	903.2	902.2	911.6	909.5
20°	876.0	882.3	884.4	893.8	894.9
22.5°	854.0	860.3	863.5	876.0	875.0
25°	826.8	837.3	840.4	854.0	854.0
27.5°	800.7	812.2	818.4	830.0	831.0
30°	772.4	786.0	794.4	806.9	806.9
32.5°	741.0	756.7	768.2	781.8	785.0
35°	711.7	728.4	742.0	757.7	761.9
37.5°	680.3	699.1	714.8	732.6	735.8
40°	648.9	667.7	688.7	706.5	710.6
42.5°	614.4	638.4	660.4	680.3	686.6
45°	581.9	607.0	633.2	653.1	661.5
47.5°	547.4	575.6	604.9	626.9	633.2
50°	513.9	543.2	575.6	599.7	607.0
52.5°	478.3	509.7	546.3	571.4	580.9
55°	443.8	478.3	516.0	544.2	552.6
57.5°	410.3	445.9	486.7	514.9	524.4
60°	374.7	412.4	455.3	484.6	496.1
62.5°	341.2	379.9	426.0	455.3	465.7
65°	306.7	347.5	393.5	424.9	435.4
67.5°	272.1	315.0	361.1	395.6	404.0
70°	235.5	280.5	330.7	364.2	374.7
72.5°	202.0	247.0	299.3	333.9	344.3
75°	166.4	215.6	267.9	302.5	315.0
77.5°	136.1	185.2	237.6	274.2	283.6
80°	103.6	154.9	209.3	244.9	255.4
82.5°	75.4	127.7	183.2	218.7	229.2
85°	51.3	103.6	159.1	194.7	205.1
87.5°	31.4	83.7	137.1	172.7	183.2
90°	14.9	79.1	149.3	190.0	203.0
92.5°	51.3	104.0	164.1	202.5	209.4
95°	87.6	137.4	199.1	236.7	247.1
97.5°	135.6	179.7	236.6	274.5	283.7
100°	184.9	226.1	280.7	314.9	328.0
102.5°	241.9	275.1	331.2	364.4	373.5
105°	298.7	326.4	383.0	412.3	424.2
107.5°	364.7	387.9	436.0	468.2	476.3
110°	425.6	447.0	491.4	523.8	529.6

TEST NUMBER: P1031888

CATALOG NUMBER: S123DIW-B775D1320UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	490.1	506.0	545.8	578.4	587.8
115°	553.5	570.0	605.1	631.5	638.6
117.5°	619.3	629.0	662.0	687.1	691.6
120°	678.9	691.9	720.0	742.7	747.5
122.5°	742.1	749.4	779.2	798.4	801.9
125°	805.5	809.4	837.2	854.1	856.2
127.5°	864.9	871.6	895.3	908.4	910.6
130°	924.2	933.6	950.6	965.3	962.6
132.5°	982.6	992.9	1006.0	1018.4	1019.3
135°	1043.2	1049.9	1060.2	1073.8	1076.4
137.5°	1098.7	1104.0	1115.3	1125.6	1127.0
140°	1155.6	1162.1	1166.6	1181.0	1177.2
142.5°	1208.5	1214.0	1216.6	1228.9	1227.6
145°	1264.0	1265.6	1269.5	1276.6	1275.6
147.5°	1310.7	1315.9	1319.8	1322.9	1319.3
150°	1361.1	1363.6	1366.2	1366.2	1360.6
152.5°	1402.3	1406.2	1407.5	1410.1	1403.6
155°	1446.2	1446.2	1447.5	1452.7	1443.6
157.5°	1483.6	1482.3	1483.6	1488.8	1481.0
160°	1518.5	1515.9	1515.9	1522.3	1517.2
162.5°	1549.4	1545.5	1546.8	1553.3	1544.3
165°	1575.2	1571.3	1571.3	1579.1	1570.1
167.5°	1597.2	1592.0	1593.3	1601.0	1593.3
170°	1615.2	1610.1	1610.1	1619.1	1610.1
172.5°	1629.4	1624.2	1624.2	1632.0	1623.0
175°	1638.4	1633.3	1633.3	1641.0	1632.0
177.5°	1643.6	1638.4	1638.4	1646.2	1637.1
180°	1642.3	1642.3	1642.3	1642.3	1642.3

(END OF REPORT)