

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: P1031859

Luminaire Tested: S123DIW-B775D1030UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031859
REPORT IS A COMBINATION OF REPORTS P991891 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1030UB40-4F0-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

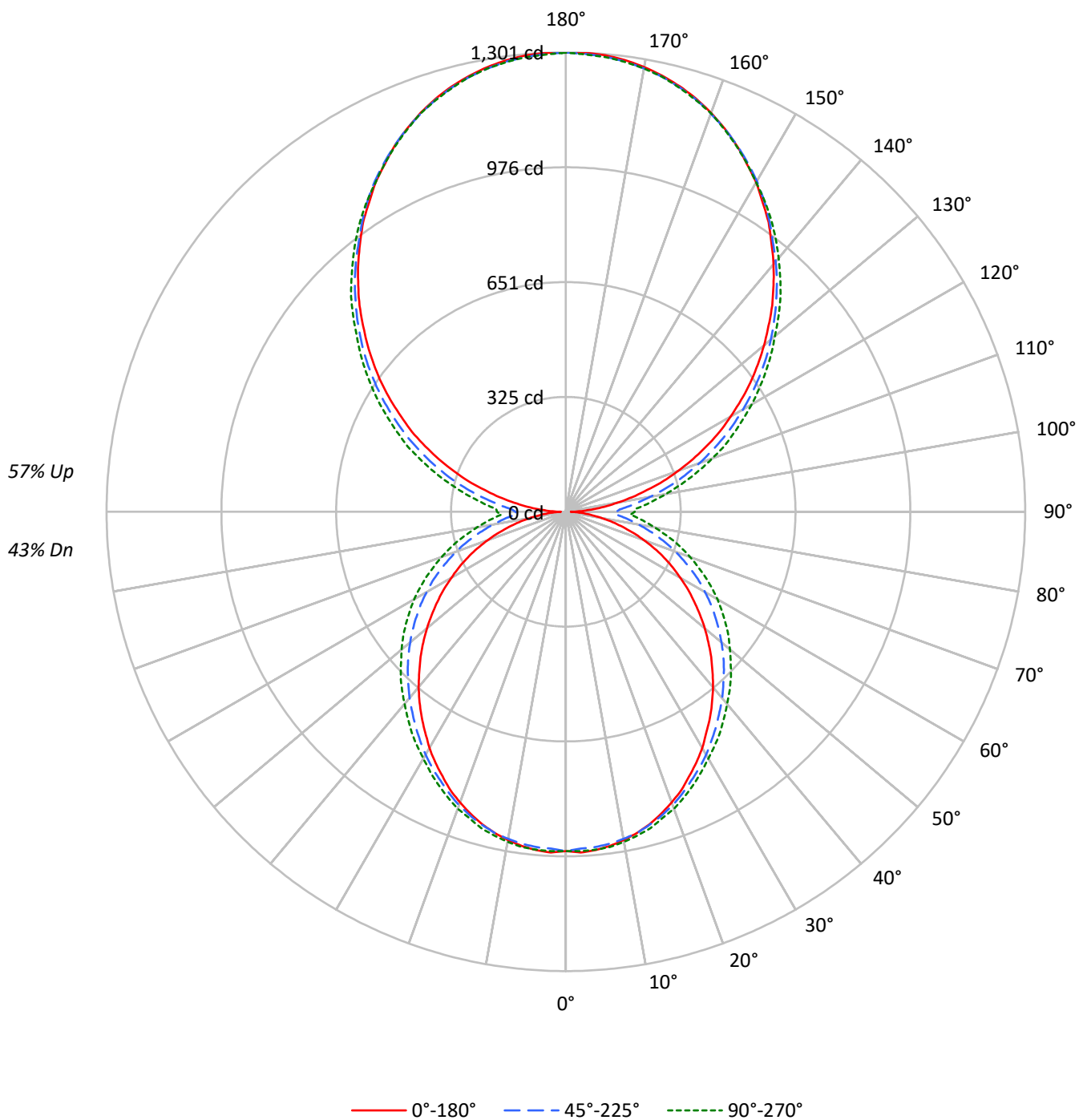
Lumens per Lamp: N/A
Luminaire Lumens: 6835.0 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 67.4
Input Voltage (V):
Input Current (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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50
1	95	91	86	83	87	83	79	76	68	66	63	55	53	52	43	41	40
2	86	79	72	67	79	72	66	62	59	55	52	48	45	42	37	35	33
3	79	69	61	55	71	63	56	51	52	47	43	42	38	35	33	30	28
4	72	61	53	46	65	56	49	43	46	41	36	37	33	30	29	26	24
5	66	54	46	39	60	49	42	37	41	35	31	33	29	26	26	23	21
6	60	48	40	34	55	44	37	32	37	31	27	30	26	23	23	20	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16
8	52	39	32	26	47	36	29	24	30	25	21	25	21	18	20	17	14
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13
10	45	33	26	21	41	30	24	19	26	20	17	21	17	14	17	14	12

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	1.3
10°-20°	259.8	3.8
20°-30°	388.5	5.7
30°-40°	463.9	6.8
40°-50°	485.4	7.1
50°-60°	455.5	6.7
60°-70°	380.5	5.6
70°-80°	272.0	4.0
80°-90°	164.6	2.4
90°-100°	185.4	2.7
100°-110°	328.2	4.8
110°-120°	481.3	7.0
120°-130°	595.9	8.7
130°-140°	650.6	9.5
140°-150°	629.7	9.2
150°-160°	528.0	7.7
160°-170°	351.5	5.1
170°-180°	123.1	1.8
0°-30°	739.5	10.8
0°-40°	1203.4	17.6
0°-60°	2144.3	31.4
0°-90°	2961.4	43.3
90°-120°	994.8	14.6
90°-150°	2871.1	42.0
90°-180°	3874.0	56.7
0°-180°	6835.0	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	76	143	182	195	14
95°	72	120	179	216	226	75
105°	238	265	320	349	360	255
115°	439	455	491	517	524	435
125°	638	642	670	688	691	570
135°	826	832	842	857	860	637
145°	1001	1002	1005	1013	1013	625
155°	1145	1145	1146	1150	1143	527
165°	1247	1244	1244	1250	1243	352
175°	1297	1293	1293	1299	1292	123
180°	1300	1300	1300	1300	1300	

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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°	14.6	76.1	142.8	182.5	194.9
92.5°	43.2	94.4	152.8	190.4	197.8
95°	71.8	119.7	179.2	215.8	226.2
97.5°	109.6	152.3	207.6	244.1	253.6
100°	148.3	188.0	241.3	274.6	287.2
102.5°	193.3	225.7	279.9	312.3	321.7
105°	238.2	265.4	319.6	348.9	360.3
107.5°	290.3	313.3	360.3	391.6	400.0
110°	338.3	359.1	403.1	434.4	440.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	389.4	405.0	444.8	476.1	485.5
115°	439.4	455.0	490.7	516.8	524.2
117.5°	491.5	500.9	534.4	559.5	564.9
120°	538.5	549.8	579.3	602.3	607.6
122.5°	588.5	594.7	625.1	645.0	649.3
125°	638.5	641.6	669.9	687.8	691.1
127.5°	685.5	690.6	714.8	729.5	732.8
130°	732.5	739.7	757.5	773.3	772.5
132.5°	778.5	786.6	800.3	814.0	816.3
135°	826.5	831.5	842.1	856.8	860.0
137.5°	870.4	874.4	884.9	896.5	898.7
140°	915.3	920.4	924.6	939.3	937.3
142.5°	957.2	961.3	963.3	975.9	976.0
145°	1001.1	1002.1	1005.2	1012.6	1012.7
147.5°	1037.9	1042.0	1045.0	1048.1	1046.2
150°	1077.7	1079.8	1081.8	1081.8	1077.8
152.5°	1110.4	1113.5	1114.5	1116.6	1111.4
155°	1145.2	1145.2	1146.2	1150.3	1143.1
157.5°	1174.8	1173.8	1174.8	1178.9	1172.7
160°	1202.4	1200.3	1200.3	1205.4	1201.3
162.5°	1226.9	1223.8	1224.8	1229.9	1222.8
165°	1247.3	1244.2	1244.2	1250.4	1243.2
167.5°	1264.7	1260.6	1261.6	1267.7	1261.6
170°	1279.0	1274.9	1274.9	1282.0	1274.9
172.5°	1290.2	1286.1	1286.1	1292.3	1285.1
175°	1297.4	1293.3	1293.3	1299.4	1292.3
177.5°	1301.4	1297.4	1297.4	1303.5	1296.3
180°	1300.4	1300.4	1300.4	1300.4	1300.4

(END OF REPORT)