

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: P1031845

Luminaire Tested: S123DIW-B775D1030UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031845
REPORT IS A COMBINATION OF REPORTS P991846 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1030UB27-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

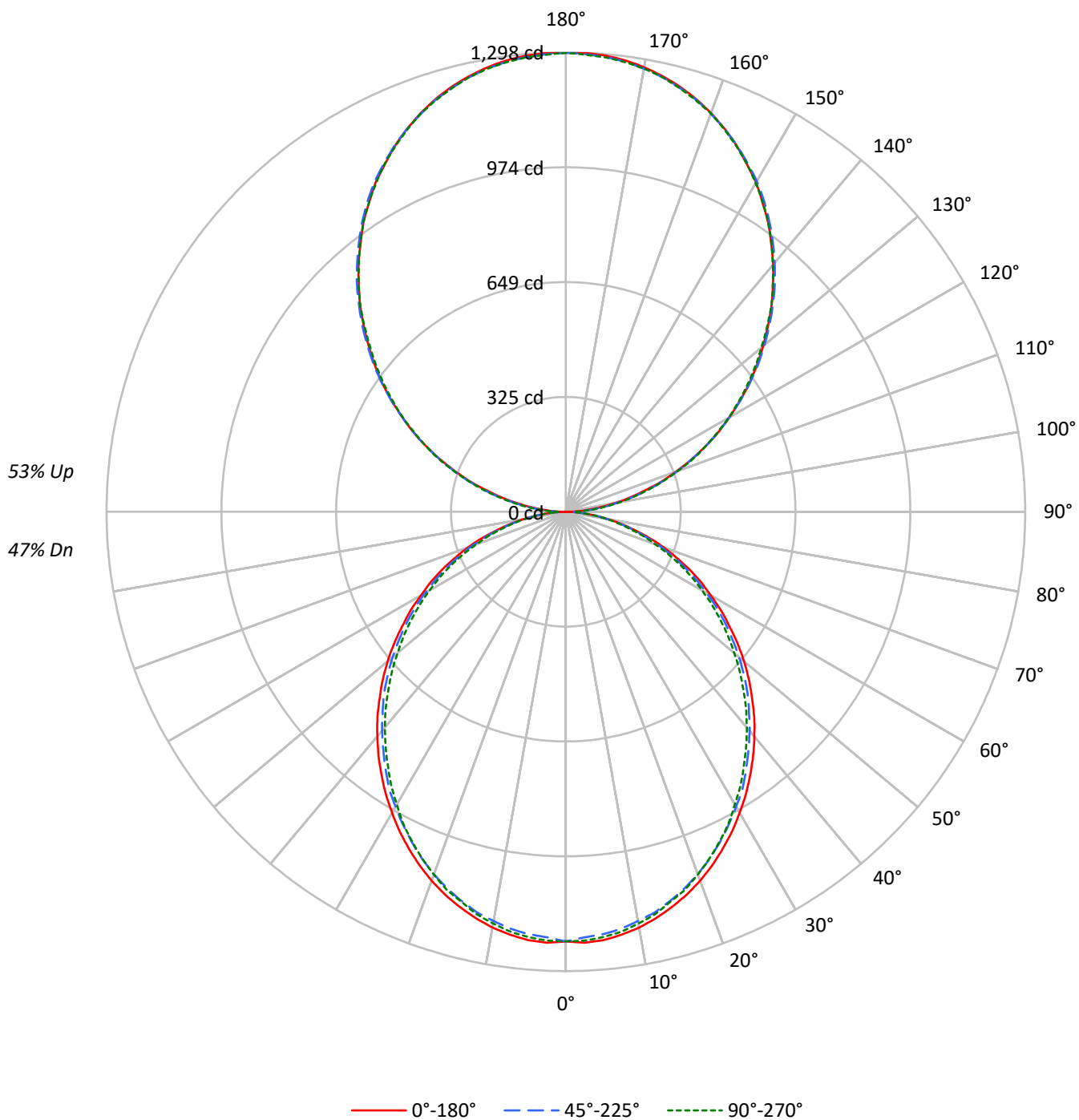
Lumens per Lamp: N/A
Luminaire Lumens: 6755.0 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1031845

CATALOG NUMBER: S123DIW-B775D1030UB27-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1031845

CATALOG NUMBER: S123DIW-B775D1030UB27-4F0-XX-W2A-F1

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	98	98	98	98	82	82	82	67	67	67	53	53	53
1	97	93	89	85	89	85	82	79	71	69	67	59	57	55	47	46	45
2	88	81	75	70	81	75	69	65	63	59	55	51	49	46	41	39	38
3	81	71	64	58	74	66	59	54	55	50	46	45	42	39	37	34	32
4	74	63	55	49	67	58	51	46	49	44	40	40	37	33	33	30	28
5	68	56	48	42	62	52	45	39	44	38	34	36	32	29	29	26	24
6	62	50	42	36	57	46	39	34	39	34	30	33	29	25	27	24	21
7	58	45	37	32	53	42	35	30	36	30	26	30	26	22	24	21	19
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	22	19	17
9	50	37	30	25	46	35	28	24	30	24	21	25	21	18	21	17	15
10	46	34	27	22	43	32	25	21	27	22	19	23	19	16	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13065	13065	13065
5°	13097	12615	12595
10°	12981	12187	12063
15°	12801	11744	11481
20°	12593	11250	10906
25°	12326	10730	10290
30°	12033	10192	9643
35°	11726	9642	9000
40°	11405	9065	8367
45°	11051	8502	7706
50°	10692	7875	7042
55°	10230	7222	6369
60°	9756	6501	5654
65°	9309	5723	4908
70°	8667	4858	4038
75°	7741	3846	3135
80°	6688	2702	2217
85°	5216	1454	1110

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11051 cd/sqm

TEST NUMBER: P1031845

CATALOG NUMBER: S123DIW-B775D1030UB27-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	1.7
10°-20°	323.1	4.8
20°-30°	477.2	7.1
30°-40°	557.3	8.3
40°-50°	560.3	8.3
50°-60°	492.2	7.3
60°-70°	366.6	5.4
70°-80°	208.6	3.1
80°-90°	62.0	0.9
90°-100°	83.5	1.2
100°-110°	252.7	3.7
110°-120°	430.1	6.4
120°-130°	565.9	8.4
130°-140°	636.1	9.4
140°-150°	625.3	9.3
150°-160°	526.5	7.8
160°-170°	350.5	5.2
170°-180°	122.7	1.8
0°-30°	914.7	13.5
0°-40°	1472.1	21.8
0°-60°	2524.5	37.4
0°-90°	3161.7	46.8
90°-120°	766.3	11.3
90°-150°	2593.6	38.4
90°-180°	3593.0	53.2
0°-180°	6755.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1214	1214	1214	1214	1214	
5°	1215	1210	1198	1209	1206	115
15°	1156	1152	1139	1147	1141	326
25°	1050	1044	1030	1031	1028	484
35°	908	902	888	882	877	568
45°	744	740	726	714	709	574
55°	565	564	550	538	533	506
65°	385	380	370	361	358	380
75°	204	199	196	191	188	217
85°	54	52	52	50	50	58
90°	1	11	24	28	31	8
95°	60	67	75	80	80	66
105°	229	231	240	240	242	245
115°	433	436	434	435	434	428
125°	634	637	635	631	626	565
135°	822	828	827	823	821	633
145°	997	999	1002	1001	997	623
155°	1142	1142	1143	1147	1140	526
165°	1244	1241	1241	1247	1240	351
175°	1294	1290	1290	1296	1289	123
180°	1297	1297	1297	1297	1297	

TEST NUMBER: P1031845

CATALOG NUMBER: S123DIW-B775D1030UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1213.8	1213.8	1213.8	1213.8	1213.8
2.5°	1219.0	1214.8	1203.4	1213.8	1212.8
5°	1214.8	1209.6	1198.2	1208.6	1206.5
7.5°	1205.5	1200.2	1188.8	1198.2	1197.1
10°	1192.9	1187.7	1174.1	1183.5	1181.5
12.5°	1176.2	1172.1	1159.5	1165.8	1164.8
15°	1156.4	1152.2	1138.7	1147.0	1140.7
17.5°	1134.5	1129.3	1115.7	1122.0	1119.9
20°	1109.4	1103.2	1089.6	1093.8	1090.7
22.5°	1081.3	1075.0	1061.4	1064.6	1060.4
25°	1049.9	1043.7	1030.1	1031.2	1028.0
27.5°	1017.6	1011.3	996.7	997.8	994.6
30°	982.1	976.9	962.3	962.3	955.0
32.5°	946.6	939.3	928.9	921.6	918.4
35°	908.0	901.7	888.2	881.9	876.7
37.5°	869.4	861.0	847.5	840.2	837.0
40°	828.7	822.4	807.8	799.5	795.3
42.5°	788.0	780.7	766.1	757.7	753.5
45°	744.1	740.0	726.4	713.9	708.7
47.5°	701.4	695.1	682.6	670.0	665.9
50°	657.5	652.3	638.7	627.3	621.0
52.5°	611.6	608.5	593.9	584.5	578.2
55°	564.6	563.6	550.0	538.5	533.3
57.5°	520.8	516.6	506.2	495.8	489.5
60°	472.8	471.7	459.2	449.8	444.6
62.5°	430.0	426.9	414.3	404.9	401.8
65°	385.1	379.9	369.5	361.1	358.0
67.5°	337.1	332.9	324.6	317.3	313.1
70°	294.3	288.1	281.8	274.5	269.3
72.5°	249.4	245.3	238.0	231.7	229.6
75°	203.5	199.3	196.2	191.0	187.9
77.5°	162.8	160.7	156.6	152.4	152.4
80°	123.2	120.0	117.9	116.9	116.9
82.5°	84.5	84.5	84.5	82.5	81.4
85°	54.3	52.2	52.2	50.1	50.1
87.5°	27.1	24.0	23.0	21.9	21.9
90°	1.0	11.2	24.4	28.5	30.6
92.5°	30.6	36.7	42.8	45.8	43.8
95°	60.1	67.2	75.4	79.5	79.5
97.5°	98.8	103.9	110.0	115.1	114.1
100°	138.5	144.7	149.8	152.8	154.8
102.5°	184.4	187.4	194.6	197.6	196.6
105°	229.2	231.2	240.4	240.4	242.5
107.5°	282.2	283.2	287.3	290.3	289.3
110°	331.1	333.1	335.2	339.2	337.2

TEST NUMBER: P1031845

CATALOG NUMBER: S123DIW-B775D1030UB27-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	382.0	383.0	383.0	388.1	388.1
115°	433.0	436.0	434.0	435.0	434.0
117.5°	484.9	485.9	483.9	483.9	480.8
120°	532.8	538.9	533.8	532.8	530.7
122.5°	582.7	586.8	584.7	581.7	578.6
125°	633.6	636.7	634.7	630.6	626.5
127.5°	680.5	686.6	684.6	678.5	674.4
130°	727.4	735.5	732.5	728.4	721.2
132.5°	774.2	782.4	780.3	775.2	770.1
135°	822.1	828.2	827.2	823.1	821.1
137.5°	865.9	871.0	874.1	869.0	865.9
140°	911.7	916.8	917.9	916.8	909.7
142.5°	953.5	958.6	960.6	959.6	954.5
145°	997.3	999.4	1002.4	1001.4	997.3
147.5°	1035.0	1039.1	1042.1	1042.1	1036.0
150°	1074.7	1076.8	1078.8	1078.8	1072.7
152.5°	1107.3	1110.4	1111.4	1113.5	1108.4
155°	1142.0	1142.0	1143.0	1147.1	1139.9
157.5°	1171.5	1170.5	1171.5	1175.6	1169.5
160°	1199.0	1197.0	1197.0	1202.1	1198.0
162.5°	1223.5	1220.4	1221.4	1226.5	1219.4
165°	1243.8	1240.8	1240.8	1246.9	1239.8
167.5°	1261.2	1257.1	1258.1	1264.2	1258.1
170°	1275.4	1271.4	1271.4	1278.5	1271.4
172.5°	1286.6	1282.6	1282.6	1288.7	1281.5
175°	1293.8	1289.7	1289.7	1295.8	1288.7
177.5°	1297.8	1293.8	1293.8	1299.9	1292.7
180°	1296.8	1296.8	1296.8	1296.8	1296.8

(END OF REPORT)