

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: P1030965

Luminaire Tested: S123DIW-B775D1320UB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1030965
REPORT IS A COMBINATION OF REPORTS P991930 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1320UB2750-4F0-XX-W2A-F_2700K
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

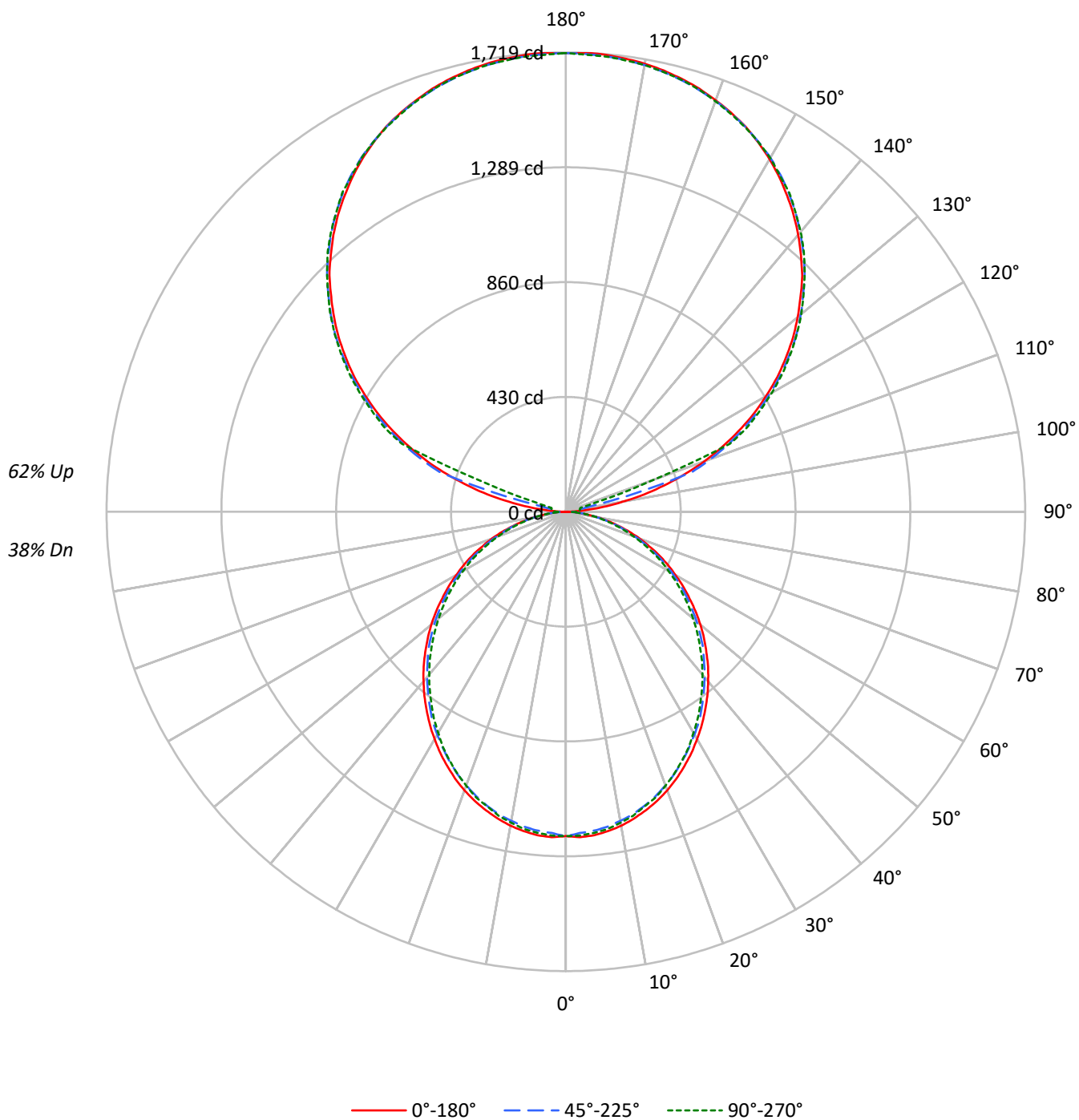
Lumens per Lamp: N/A
Luminaire Lumens: 8396.0 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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

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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	50	30	10
RCR																				
0	104	104	104	104	95	95	95	95	76	76	76	60	60	60	45	45	45			38
1	95	91	87	83	86	82	79	76	67	65	63	53	51	50	39	39	38			32
2	86	79	73	68	78	72	67	62	59	55	52	46	44	41	35	33	32			26
3	79	70	62	57	71	63	57	52	52	47	43	41	38	35	31	29	27			22
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23			19
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20			17
6	61	49	41	35	55	45	38	33	37	32	28	29	26	23	22	20	18			15
7	56	44	36	31	51	40	33	29	33	28	24	27	23	20	20	18	16			13
8	52	40	32	27	47	37	30	25	30	25	21	24	21	18	19	16	14			12
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13			10
10	45	33	26	21	41	31	24	20	25	21	17	21	17	14	16	13	12			9

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	1.4
10°-20°	323.1	3.8
20°-30°	477.2	5.7
30°-40°	557.3	6.6
40°-50°	560.3	6.7
50°-60°	492.2	5.9
60°-70°	366.6	4.4
70°-80°	208.6	2.5
80°-90°	62.7	0.7
90°-100°	60.6	0.7
100°-110°	292.7	3.5
110°-120°	717.2	8.5
120°-130°	910.5	10.8
130°-140°	972.7	11.6
140°-150°	909.6	10.8
150°-160°	733.7	8.7
160°-170°	473.5	5.6
170°-180°	163.2	1.9
0°-30°	914.7	10.9
0°-40°	1472.1	17.5
0°-60°	2524.5	30.1
0°-90°	3162.4	37.7
90°-120°	1070.5	12.7
90°-150°	3863.3	46.0
90°-180°	5234.0	62.3
0°-180°	8396.0	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	14	31	36	38	8
95°	78	26	40	48	48	93
105°	380	394	279	54	56	403
115°	713	721	732	745	750	704
125°	1005	1015	1020	1023	1025	898
135°	1251	1259	1264	1268	1264	963
145°	1444	1453	1455	1458	1458	904
155°	1590	1588	1589	1596	1588	733
165°	1677	1673	1672	1682	1673	474
175°	1717	1710	1712	1720	1710	163
180°	1717	1717	1717	1717	1717	

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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°	1.3	14.0	30.6	35.7	38.3
92.5°	29.3	21.7	33.2	42.1	43.4
95°	77.8	25.5	39.5	48.5	48.5
97.5°	141.6	105.9	40.8	51.0	52.3
100°	215.5	241.1	42.1	52.3	53.6
102.5°	299.7	316.3	94.4	52.3	54.8
105°	380.1	394.1	279.3	53.6	56.1
107.5°	465.5	477.0	496.1	299.7	132.6
110°	551.0	561.2	575.2	533.1	350.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	632.6	641.5	655.6	667.0	664.5
115°	713.0	720.6	732.1	744.8	749.9
117.5°	792.0	801.0	807.3	817.5	818.8
120°	864.7	876.2	880.0	890.2	890.2
122.5°	938.7	947.6	952.7	959.1	960.4
125°	1005.0	1015.2	1020.3	1022.9	1025.4
127.5°	1071.4	1081.6	1087.9	1091.8	1089.2
130°	1132.6	1142.8	1147.9	1153.0	1150.4
132.5°	1191.2	1201.5	1205.3	1210.4	1206.6
135°	1251.2	1258.8	1263.9	1267.8	1263.9
137.5°	1302.2	1312.4	1315.0	1321.3	1318.8
140°	1353.2	1360.9	1364.7	1369.8	1367.3
142.5°	1400.4	1408.1	1411.9	1415.7	1411.9
145°	1443.8	1452.7	1455.3	1457.8	1457.8
147.5°	1485.9	1492.2	1494.8	1497.3	1491.0
150°	1524.1	1528.0	1530.5	1533.1	1529.2
152.5°	1558.6	1559.8	1561.1	1566.2	1559.8
155°	1590.5	1587.9	1589.2	1595.6	1587.9
157.5°	1616.0	1616.0	1614.7	1622.3	1612.1
160°	1638.9	1637.6	1636.4	1644.0	1635.1
162.5°	1660.6	1656.8	1655.5	1664.4	1656.8
165°	1677.2	1673.4	1672.1	1682.3	1673.4
167.5°	1691.2	1686.1	1686.1	1696.3	1686.1
170°	1702.7	1697.6	1697.6	1707.8	1697.6
172.5°	1710.3	1704.0	1705.2	1715.4	1704.0
175°	1716.7	1710.3	1711.6	1720.5	1710.3
177.5°	1719.3	1712.9	1714.2	1724.4	1711.6
180°	1716.7	1716.7	1716.7	1716.7	1716.7

(END OF REPORT)