

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: P1031884

Luminaire Tested: S123DIW-B775D1320UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031884
REPORT IS A COMBINATION OF REPORTS P991951 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1320UB35-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

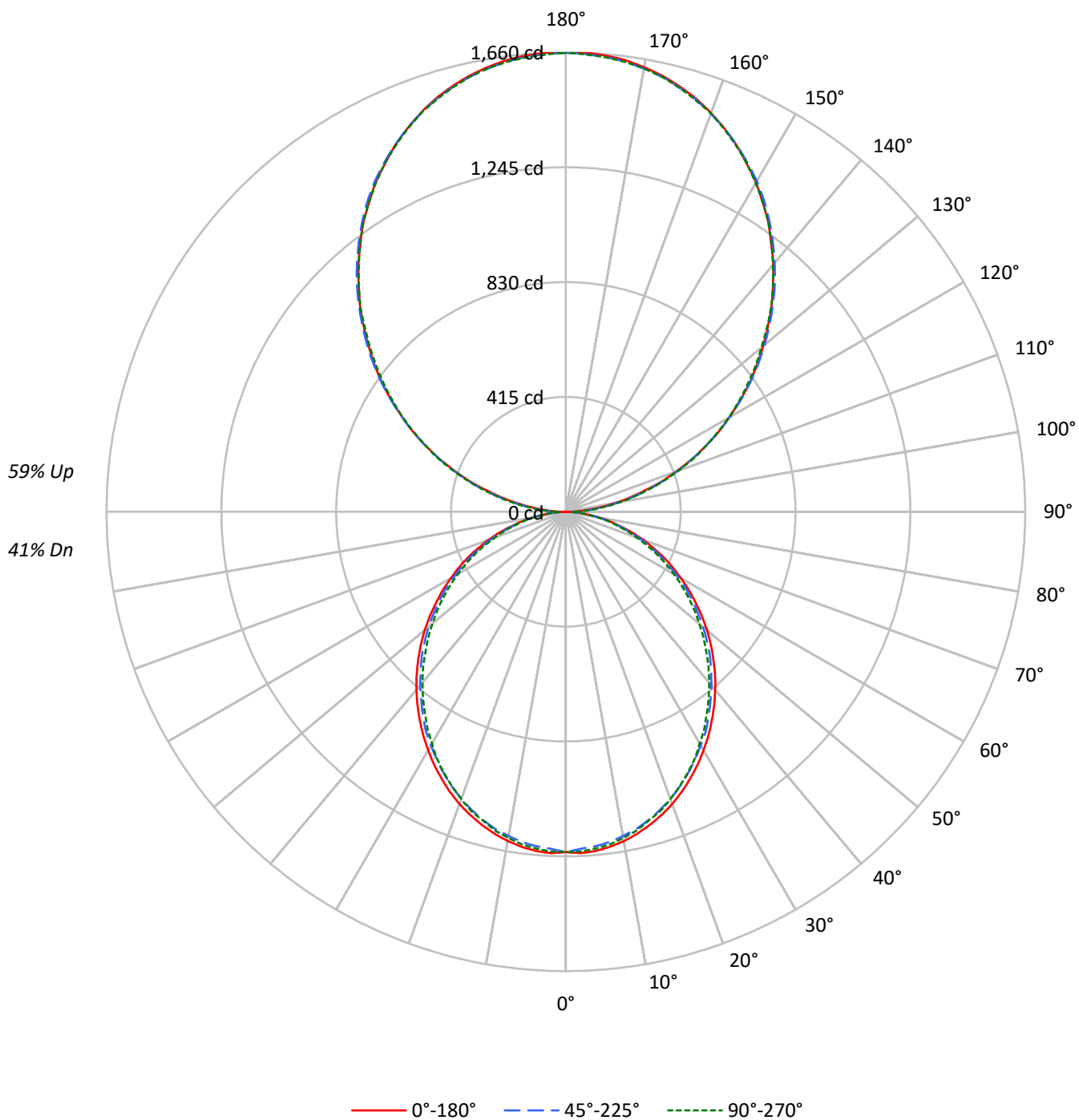
Lumens per Lamp: N/A
Luminaire Lumens: 7800.0 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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
RCR																	
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48
1	96	91	88	84	87	83	80	77	69	66	64	55	53	52	42	41	40
2	87	80	74	69	79	73	68	63	60	56	53	48	46	43	37	35	34
3	79	70	63	57	72	64	58	53	53	48	45	43	39	37	33	31	29
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25
5	67	55	47	41	60	51	44	38	42	37	33	34	30	27	26	24	22
6	61	49	41	36	56	45	38	33	38	32	28	31	27	24	24	21	19
7	57	45	37	31	51	41	34	29	34	29	25	28	24	21	22	19	17
8	53	40	33	27	48	37	30	26	31	26	22	25	21	19	20	17	15
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	19	16	14
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13235	13235	13235
5°	13268	12778	12759
10°	13150	12346	12219
15°	12967	11895	11631
20°	12757	11396	11047
25°	12486	10870	10424
30°	12190	10325	9768
35°	11879	9767	9117
40°	11552	9183	8475
45°	11195	8612	7806
50°	10832	7977	7134
55°	10364	7316	6452
60°	9882	6586	5728
65°	9430	5797	4971
70°	8779	4922	4090
75°	7844	3897	3175
80°	6775	2739	2245
85°	5283	1473	1124

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11195 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.9	1.5
10°-20°	327.3	4.2
20°-30°	483.4	6.2
30°-40°	564.6	7.2
40°-50°	567.5	7.3
50°-60°	498.6	6.4
60°-70°	371.3	4.8
70°-80°	211.3	2.7
80°-90°	63.6	0.8
90°-100°	106.8	1.4
100°-110°	323.2	4.1
110°-120°	550.2	7.1
120°-130°	723.9	9.3
130°-140°	813.7	10.4
140°-150°	799.9	10.3
150°-160°	673.4	8.6
160°-170°	448.3	5.7
170°-180°	157.0	2.0
0°-30°	926.6	11.9
0°-40°	1491.2	19.1
0°-60°	2557.3	32.8
0°-90°	3203.5	41.1
90°-120°	980.2	12.6
90°-150°	3317.7	42.5
90°-180°	4596.0	58.9
0°-180°	7800.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1230	1230	1230	1230	1230	
5°	1231	1225	1214	1224	1222	117
15°	1171	1167	1153	1162	1156	330
25°	1064	1057	1044	1044	1041	490
35°	920	913	900	893	888	575
45°	754	750	736	723	718	582
55°	572	571	557	546	540	512
65°	390	385	374	366	363	385
75°	206	202	199	194	190	220
85°	55	53	53	51	51	59
90°	1	14	31	36	39	9
95°	77	86	96	102	102	85
105°	293	296	308	308	310	314
115°	554	558	555	556	555	548
125°	811	814	812	807	801	723
135°	1052	1060	1058	1053	1050	810
145°	1276	1278	1282	1281	1276	797
155°	1461	1461	1462	1467	1458	672
165°	1591	1587	1587	1595	1586	449
175°	1655	1650	1650	1658	1648	157
180°	1659	1659	1659	1659	1659	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1229.6	1229.6	1229.6	1229.6	1229.6
2.5°	1234.8	1230.6	1219.0	1229.6	1228.5
5°	1230.6	1225.3	1213.7	1224.3	1222.2
7.5°	1221.1	1215.8	1204.2	1213.7	1212.6
10°	1208.4	1203.1	1189.4	1198.9	1196.8
12.5°	1191.5	1187.3	1174.6	1180.9	1179.9
15°	1171.4	1167.2	1153.4	1161.9	1155.6
17.5°	1149.2	1143.9	1130.2	1136.5	1134.4
20°	1123.8	1117.5	1103.7	1108.0	1104.8
22.5°	1095.3	1088.9	1075.2	1078.4	1074.1
25°	1063.6	1057.2	1043.5	1044.5	1041.4
27.5°	1030.8	1024.5	1009.7	1010.7	1007.5
30°	994.9	989.6	974.8	974.8	967.4
32.5°	958.9	951.5	940.9	933.5	930.4
35°	919.8	913.4	899.7	893.4	888.1
37.5°	880.7	872.2	858.5	851.1	847.9
40°	839.4	833.1	818.3	809.8	805.6
42.5°	798.2	790.8	776.0	767.5	763.3
45°	753.8	749.6	735.8	723.1	717.9
47.5°	710.5	704.1	691.4	678.7	674.5
50°	666.1	660.8	647.0	635.4	629.1
52.5°	619.5	616.4	601.6	592.0	585.7
55°	572.0	570.9	557.2	545.5	540.2
57.5°	527.6	523.3	512.8	502.2	495.8
60°	478.9	477.9	465.2	455.7	450.4
62.5°	435.6	432.4	419.7	410.2	407.0
65°	390.1	384.8	374.3	365.8	362.6
67.5°	341.5	337.3	328.8	321.4	317.2
70°	298.1	291.8	285.5	278.1	272.8
72.5°	252.7	248.4	241.0	234.7	232.6
75°	206.2	201.9	198.8	193.5	190.3
77.5°	164.9	162.8	158.6	154.4	154.4
80°	124.8	121.6	119.5	118.4	118.4
82.5°	85.6	85.6	85.6	83.5	82.5
85°	55.0	52.9	52.9	50.7	50.7
87.5°	27.5	24.3	23.3	22.2	22.2
90°	1.3	14.3	31.3	36.5	39.1
92.5°	39.1	46.9	54.7	58.6	56.0
95°	76.9	86.0	96.4	101.6	101.6
97.5°	126.4	132.9	140.7	147.3	146.0
100°	177.2	185.0	191.6	195.5	198.1
102.5°	235.9	239.8	248.9	252.8	251.5
105°	293.2	295.8	307.5	307.5	310.1
107.5°	361.0	362.3	367.5	371.4	370.1
110°	423.5	426.1	428.7	433.9	431.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	488.7	490.0	490.0	496.5	496.5
115°	553.8	557.7	555.1	556.4	555.1
117.5°	620.3	621.6	619.0	619.0	615.1
120°	681.5	689.4	682.8	681.5	678.9
122.5°	745.4	750.6	748.0	744.1	740.2
125°	810.6	814.5	811.9	806.6	801.4
127.5°	870.5	878.3	875.7	867.9	862.7
130°	930.4	940.9	937.0	931.7	922.6
132.5°	990.4	1000.8	998.2	991.7	985.2
135°	1051.6	1059.5	1058.1	1052.9	1050.3
137.5°	1107.7	1114.2	1118.1	1111.6	1107.7
140°	1166.3	1172.8	1174.1	1172.8	1163.7
142.5°	1219.7	1226.3	1228.9	1227.6	1221.0
145°	1275.8	1278.4	1282.3	1281.0	1275.8
147.5°	1324.0	1329.2	1333.1	1333.1	1325.3
150°	1374.8	1377.4	1380.0	1380.0	1372.2
152.5°	1416.5	1420.4	1421.7	1424.3	1417.8
155°	1460.8	1460.8	1462.1	1467.3	1458.2
157.5°	1498.6	1497.3	1498.6	1503.8	1496.0
160°	1533.8	1531.2	1531.2	1537.7	1532.5
162.5°	1565.1	1561.2	1562.5	1569.0	1559.9
165°	1591.1	1587.2	1587.2	1595.0	1585.9
167.5°	1613.3	1608.1	1609.4	1617.2	1609.4
170°	1631.5	1626.3	1626.3	1635.4	1626.3
172.5°	1645.9	1640.6	1640.6	1648.5	1639.3
175°	1655.0	1649.8	1649.8	1657.6	1648.5
177.5°	1660.2	1655.0	1655.0	1662.8	1653.7
180°	1658.9	1658.9	1658.9	1658.9	1658.9

(END OF REPORT)