

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: P1030963

Luminaire Tested: S123DIW-B775D1320UB2750-4F0-XX-W2A-D_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1030963
REPORT IS A COMBINATION OF REPORTS P991927 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-D_5000K
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

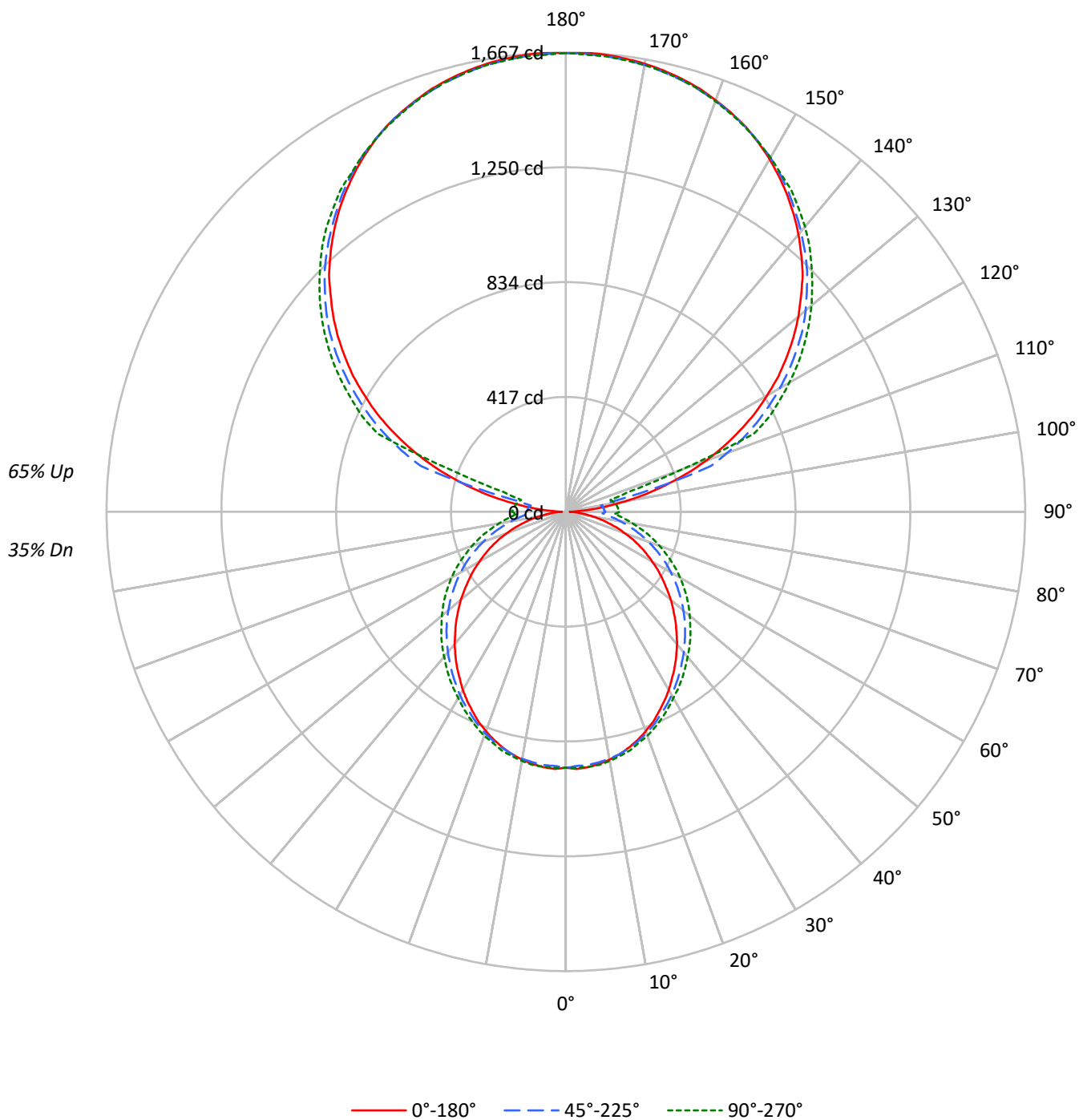
Lumens per Lamp: N/A
Luminaire Lumens: 8202.0 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42
1	94	89	85	81	84	81	77	74	64	62	60	50	48	47	36	35	34
2	85	77	71	66	76	70	65	60	56	52	49	43	41	38	31	30	28
3	77	68	60	54	69	61	55	50	49	45	41	38	35	32	28	25	24
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20
5	65	53	45	39	58	48	41	36	39	34	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	31	35	29	26	27	23	20	20	17	15
7	55	43	35	29	49	39	32	27	31	26	22	25	21	18	18	15	13
8	51	39	31	26	46	35	28	24	29	23	20	22	19	16	17	14	12
9	47	35	28	23	42	32	25	21	26	21	18	21	17	14	15	13	11
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10002	10002	10002
5°	10030	9709	9701
10°	9936	9446	9374
15°	9804	9155	9027
20°	9618	8832	8654
25°	9388	8467	8268
30°	9152	8137	7880
35°	8889	7791	7564
40°	8637	7475	7231
45°	8358	7168	6956
50°	8082	6864	6658
55°	7777	6552	6384
60°	7478	6234	6102
65°	7170	5895	5773
70°	6708	5515	5434
75°	6121	5079	5083
80°	5440	4642	4684
85°	4764	4286	4397

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8358 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	1.1
10°-20°	251.3	3.1
20°-30°	375.8	4.6
30°-40°	448.7	5.5
40°-50°	469.4	5.7
50°-60°	440.5	5.4
60°-70°	368.0	4.5
70°-80°	263.1	3.2
80°-90°	159.9	1.9
90°-100°	157.1	1.9
100°-110°	356.2	4.3
110°-120°	743.9	9.1
120°-130°	910.6	11.1
130°-140°	955.7	11.7
140°-150°	884.7	10.8
150°-160°	711.5	8.7
160°-170°	459.2	5.6
170°-180°	158.2	1.9
0°-30°	715.2	8.7
0°-40°	1163.9	14.2
0°-60°	2073.9	25.3
0°-90°	2864.8	34.9
90°-120°	1257.2	15.3
90°-150°	4008.2	48.9
90°-180°	5337.0	65.1
0°-180°	8202.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	929	929	929	929	929	
5°	930	928	922	930	929	88
15°	886	889	888	898	897	250
25°	800	810	813	826	826	369
35°	688	704	718	733	737	430
45°	563	587	612	632	640	434
55°	429	463	499	526	534	384
65°	297	336	381	411	421	293
75°	161	208	259	292	305	172
85°	50	100	154	188	198	51
90°	14	76	144	183	196	14
95°	87	75	138	179	189	99
105°	377	415	347	156	168	399
115°	697	716	764	800	813	688
125°	978	988	1022	1046	1055	874
135°	1215	1222	1238	1260	1261	936
145°	1401	1409	1411	1422	1426	877
155°	1542	1540	1541	1547	1540	711
165°	1627	1623	1622	1632	1623	460
175°	1665	1659	1660	1669	1659	158
180°	1665	1665	1665	1665	1665	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	929.2	929.2	929.2	929.2	929.2
2.5°	934.3	931.3	923.2	931.3	930.3
5°	930.3	928.2	922.2	930.3	929.2
7.5°	923.2	923.2	917.1	927.2	926.2
10°	913.1	915.1	910.0	920.1	918.1
12.5°	900.9	903.9	900.9	910.0	908.0
15°	885.7	888.8	887.7	897.9	896.9
17.5°	867.5	873.6	872.6	881.7	879.6
20°	847.3	853.3	855.4	864.5	865.5
22.5°	826.0	832.1	835.1	847.3	846.2
25°	799.7	809.8	812.8	826.0	826.0
27.5°	774.4	785.5	791.6	802.7	803.7
30°	747.0	760.2	768.3	780.4	780.4
32.5°	716.7	731.9	743.0	756.2	759.2
35°	688.3	704.5	717.7	732.9	736.9
37.5°	658.0	676.2	691.4	708.6	711.6
40°	627.6	645.8	666.1	683.3	687.3
42.5°	594.2	617.5	638.7	658.0	664.0
45°	562.8	587.1	612.4	631.6	639.7
47.5°	529.4	556.7	585.1	606.3	612.4
50°	497.0	525.4	556.7	580.0	587.1
52.5°	462.6	493.0	528.4	552.7	561.8
55°	429.2	462.6	499.0	526.4	534.5
57.5°	396.8	431.2	470.7	498.0	507.1
60°	362.4	398.8	440.3	468.7	479.8
62.5°	330.0	367.4	412.0	440.3	450.5
65°	296.6	336.1	380.6	411.0	421.1
67.5°	263.2	304.7	349.2	382.6	390.7
70°	227.8	271.3	319.9	352.3	362.4
72.5°	195.4	238.9	289.5	322.9	333.0
75°	160.9	208.5	259.1	292.5	304.7
77.5°	131.6	179.2	229.8	265.2	274.3
80°	100.2	149.8	202.5	236.9	247.0
82.5°	72.9	123.5	177.1	211.6	221.7
85°	49.6	100.2	153.9	188.3	198.4
87.5°	30.4	81.0	132.6	167.0	177.1
90°	14.4	76.4	144.1	183.4	196.0
92.5°	40.5	76.7	138.5	180.5	190.9
95°	86.6	75.3	138.5	178.6	188.7
97.5°	147.4	149.3	133.7	174.0	185.3
100°	218.1	275.3	128.9	168.1	179.5
102.5°	298.8	343.2	173.5	161.0	173.7
105°	376.7	414.6	346.8	156.3	167.8
107.5°	458.6	490.9	551.0	387.9	234.9
110°	540.5	568.6	622.7	608.1	439.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	619.6	642.4	694.5	730.9	737.5
115°	696.6	716.1	763.6	800.3	813.3
117.5°	773.2	790.0	830.6	864.8	874.1
120°	842.6	858.9	896.0	929.2	936.3
122.5°	914.4	925.2	961.5	989.9	998.2
125°	977.7	987.6	1022.0	1045.6	1055.2
127.5°	1042.0	1050.9	1082.4	1106.4	1111.1
130°	1101.4	1110.3	1135.6	1159.7	1163.3
132.5°	1157.3	1167.2	1186.1	1209.3	1212.7
135°	1215.4	1221.9	1237.9	1259.9	1261.2
137.5°	1264.9	1273.8	1283.4	1305.8	1308.4
140°	1313.4	1320.8	1327.5	1347.7	1350.3
142.5°	1359.2	1365.6	1369.3	1386.2	1387.5
145°	1401.2	1408.9	1411.4	1421.9	1425.9
147.5°	1441.0	1447.2	1449.7	1455.2	1453.1
150°	1478.1	1481.9	1484.3	1486.8	1485.1
152.5°	1511.5	1512.8	1514.0	1519.0	1512.8
155°	1542.5	1540.0	1541.2	1547.4	1540.0
157.5°	1567.2	1567.2	1566.0	1573.4	1563.5
160°	1589.5	1588.2	1587.0	1594.4	1585.8
162.5°	1610.5	1606.8	1605.6	1614.2	1606.8
165°	1626.6	1622.9	1621.6	1631.5	1622.9
167.5°	1640.2	1635.2	1635.2	1645.1	1635.2
170°	1651.3	1646.4	1646.4	1656.3	1646.4
172.5°	1658.7	1652.6	1653.8	1663.7	1652.6
175°	1664.9	1658.7	1660.0	1668.6	1658.7
177.5°	1667.4	1661.2	1662.5	1672.3	1660.0
180°	1664.9	1664.9	1664.9	1664.9	1664.9

(END OF REPORT)