

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: P1031878

Luminaire Tested: S123DIW-B775D1320UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031878
REPORT IS A COMBINATION OF REPORTS P991942 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1320UB30-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

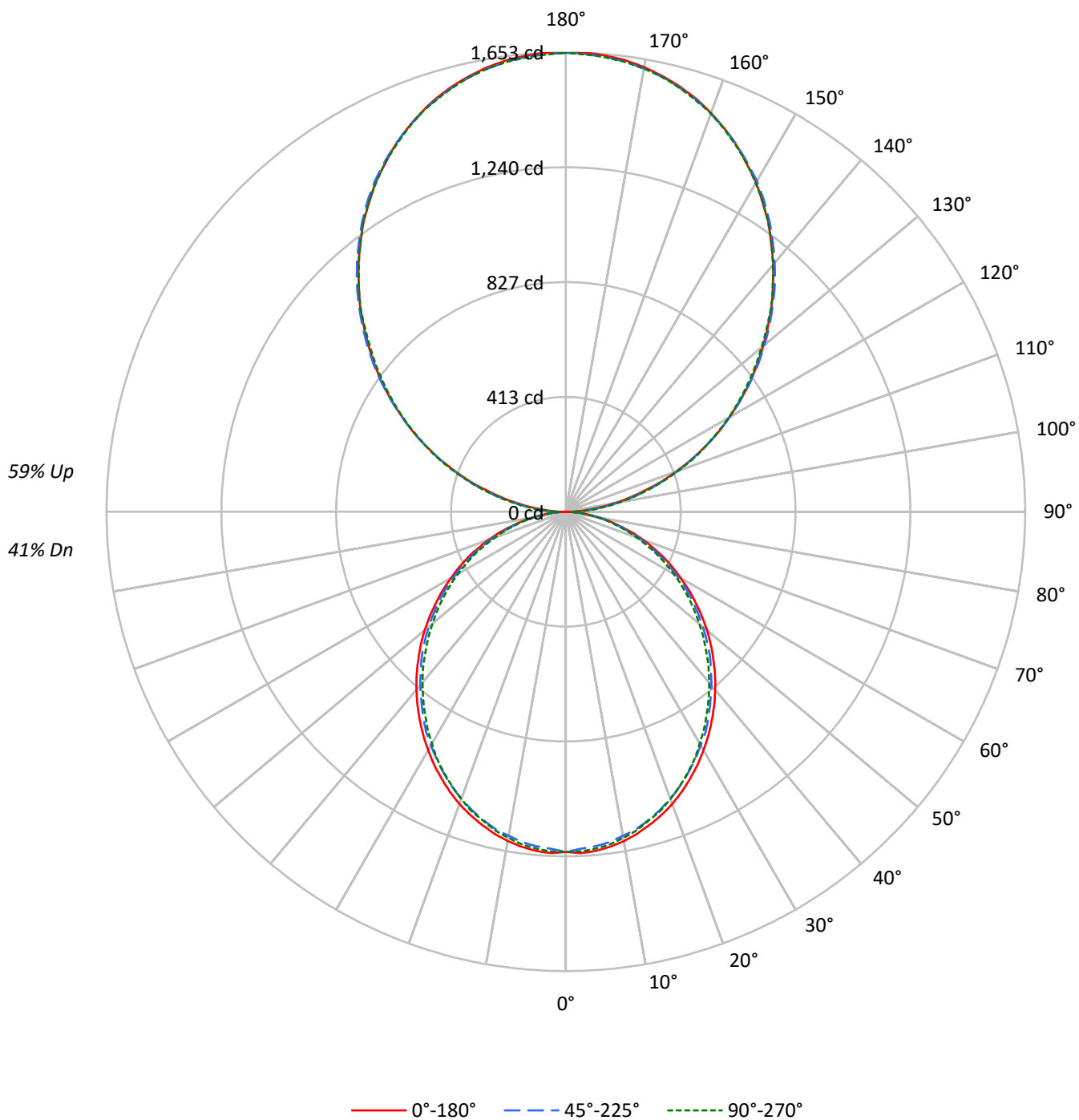
Lumens per Lamp: N/A
Luminaire Lumens: 7766.0 lumens
Efficiency: N/A
Efficacy: 99.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	13177	13177	13177
5°	13209	12722	12703
10°	13092	12292	12165
15°	12910	11844	11580
20°	12701	11347	10999
25°	12431	10822	10378
30°	12136	10279	9725
35°	11827	9725	9076
40°	11503	9142	8438
45°	11146	8575	7771
50°	10783	7943	7102
55°	10319	7284	6424
60°	9838	6557	5702
65°	9389	5771	4949
70°	8740	4899	4072
75°	7809	3879	3161
80°	6743	2725	2236
85°	5254	1465	1119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11146 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	1.5
10°-20°	325.9	4.2
20°-30°	481.3	6.2
30°-40°	562.1	7.2
40°-50°	565.1	7.3
50°-60°	496.4	6.4
60°-70°	369.7	4.8
70°-80°	210.4	2.7
80°-90°	63.3	0.8
90°-100°	106.3	1.4
100°-110°	321.8	4.1
110°-120°	547.8	7.1
120°-130°	720.7	9.3
130°-140°	810.1	10.4
140°-150°	796.4	10.3
150°-160°	670.5	8.6
160°-170°	446.4	5.7
170°-180°	156.3	2.0
0°-30°	922.6	11.9
0°-40°	1484.6	19.1
0°-60°	2546.1	32.8
0°-90°	3189.5	41.1
90°-120°	976.0	12.6
90°-150°	3303.2	42.5
90°-180°	4576.0	58.9
0°-180°	7766.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1224	1224	1224	1224	1224	
5°	1225	1220	1208	1219	1217	116
15°	1166	1162	1148	1157	1150	329
25°	1059	1053	1039	1040	1037	488
35°	916	910	896	890	884	573
45°	750	746	733	720	715	579
55°	570	568	555	543	538	510
65°	388	383	373	364	361	383
75°	205	201	198	193	190	219
85°	55	53	53	50	50	59
90°	1	14	31	36	39	9
95°	77	86	96	101	101	84
105°	292	294	306	306	309	313
115°	551	555	553	554	553	546
125°	807	811	808	803	798	720
135°	1047	1055	1054	1048	1046	807
145°	1270	1273	1277	1275	1270	793
155°	1454	1454	1456	1461	1452	670
165°	1584	1580	1580	1588	1579	447
175°	1648	1643	1643	1650	1641	157
180°	1652	1652	1652	1652	1652	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1224.2	1224.2	1224.2	1224.2	1224.2
2.5°	1229.4	1225.2	1213.7	1224.2	1223.1
5°	1225.2	1220.0	1208.4	1218.9	1216.8
7.5°	1215.8	1210.5	1198.9	1208.4	1207.3
10°	1203.1	1197.9	1184.2	1193.7	1191.5
12.5°	1186.3	1182.1	1169.4	1175.8	1174.7
15°	1166.3	1162.1	1148.4	1156.8	1150.5
17.5°	1144.2	1138.9	1125.2	1131.6	1129.4
20°	1118.9	1112.6	1098.9	1103.1	1100.0
22.5°	1090.5	1084.2	1070.5	1073.7	1069.4
25°	1058.9	1052.6	1038.9	1040.0	1036.8
27.5°	1026.3	1020.0	1005.2	1006.3	1003.1
30°	990.5	985.2	970.5	970.5	963.1
32.5°	954.7	947.3	936.8	929.5	926.3
35°	915.8	909.5	895.8	889.5	884.2
37.5°	876.8	868.4	854.7	847.3	844.2
40°	835.8	829.5	814.7	806.3	802.1
42.5°	794.7	787.3	772.6	764.2	760.0
45°	750.5	746.3	732.6	720.0	714.7
47.5°	707.4	701.0	688.4	675.8	671.6
50°	663.1	657.9	644.2	632.6	626.3
52.5°	616.8	613.7	598.9	589.5	583.1
55°	569.5	568.4	554.7	543.1	537.9
57.5°	525.3	521.0	510.5	500.0	493.7
60°	476.8	475.8	463.1	453.7	448.4
62.5°	433.7	430.5	417.9	408.4	405.3
65°	388.4	383.1	372.6	364.2	361.0
67.5°	340.0	335.8	327.4	320.0	315.8
70°	296.8	290.5	284.2	276.8	271.6
72.5°	251.6	247.4	240.0	233.7	231.6
75°	205.3	201.0	197.9	192.6	189.5
77.5°	164.2	162.1	157.9	153.7	153.7
80°	124.2	121.0	118.9	117.9	117.9
82.5°	85.3	85.3	85.3	83.2	82.1
85°	54.7	52.6	52.6	50.5	50.5
87.5°	27.4	24.2	23.2	22.1	22.1
90°	1.3	14.3	31.1	36.3	38.9
92.5°	38.9	46.7	54.5	58.4	55.8
95°	76.6	85.6	96.0	101.2	101.2
97.5°	125.9	132.3	140.1	146.6	145.3
100°	176.5	184.2	190.7	194.6	197.2
102.5°	234.8	238.7	247.8	251.7	250.4
105°	291.9	294.5	306.2	306.2	308.8
107.5°	359.4	360.7	365.9	369.8	368.5
110°	421.7	424.3	426.9	432.1	429.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	486.6	487.8	487.8	494.3	494.3
115°	551.4	555.3	552.7	554.0	552.7
117.5°	617.6	618.9	616.3	616.3	612.4
120°	678.6	686.4	679.9	678.6	676.0
122.5°	742.2	747.3	744.7	740.9	737.0
125°	807.0	810.9	808.3	803.1	797.9
127.5°	866.7	874.5	871.9	864.1	858.9
130°	926.4	936.8	932.9	927.7	918.6
132.5°	986.1	996.5	993.9	987.4	980.9
135°	1047.1	1054.8	1053.5	1048.4	1045.8
137.5°	1102.9	1109.3	1113.2	1106.7	1102.9
140°	1161.2	1167.7	1169.0	1167.7	1158.6
142.5°	1214.4	1220.9	1223.5	1222.2	1215.7
145°	1270.2	1272.8	1276.7	1275.4	1270.2
147.5°	1318.2	1323.4	1327.3	1327.3	1319.5
150°	1368.8	1371.4	1374.0	1374.0	1366.2
152.5°	1410.4	1414.2	1415.5	1418.1	1411.6
155°	1454.5	1454.5	1455.8	1461.0	1451.9
157.5°	1492.1	1490.8	1492.1	1497.3	1489.5
160°	1527.1	1524.5	1524.5	1531.0	1525.8
162.5°	1558.3	1554.4	1555.7	1562.2	1553.1
165°	1584.2	1580.3	1580.3	1588.1	1579.0
167.5°	1606.3	1601.1	1602.4	1610.2	1602.4
170°	1624.4	1619.2	1619.2	1628.3	1619.2
172.5°	1638.7	1633.5	1633.5	1641.3	1632.2
175°	1647.8	1642.6	1642.6	1650.4	1641.3
177.5°	1653.0	1647.8	1647.8	1655.6	1646.5
180°	1651.7	1651.7	1651.7	1651.7	1651.7

(END OF REPORT)