

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: P1031877

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031877
REPORT IS A COMBINATION OF REPORTS P991941 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-F
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

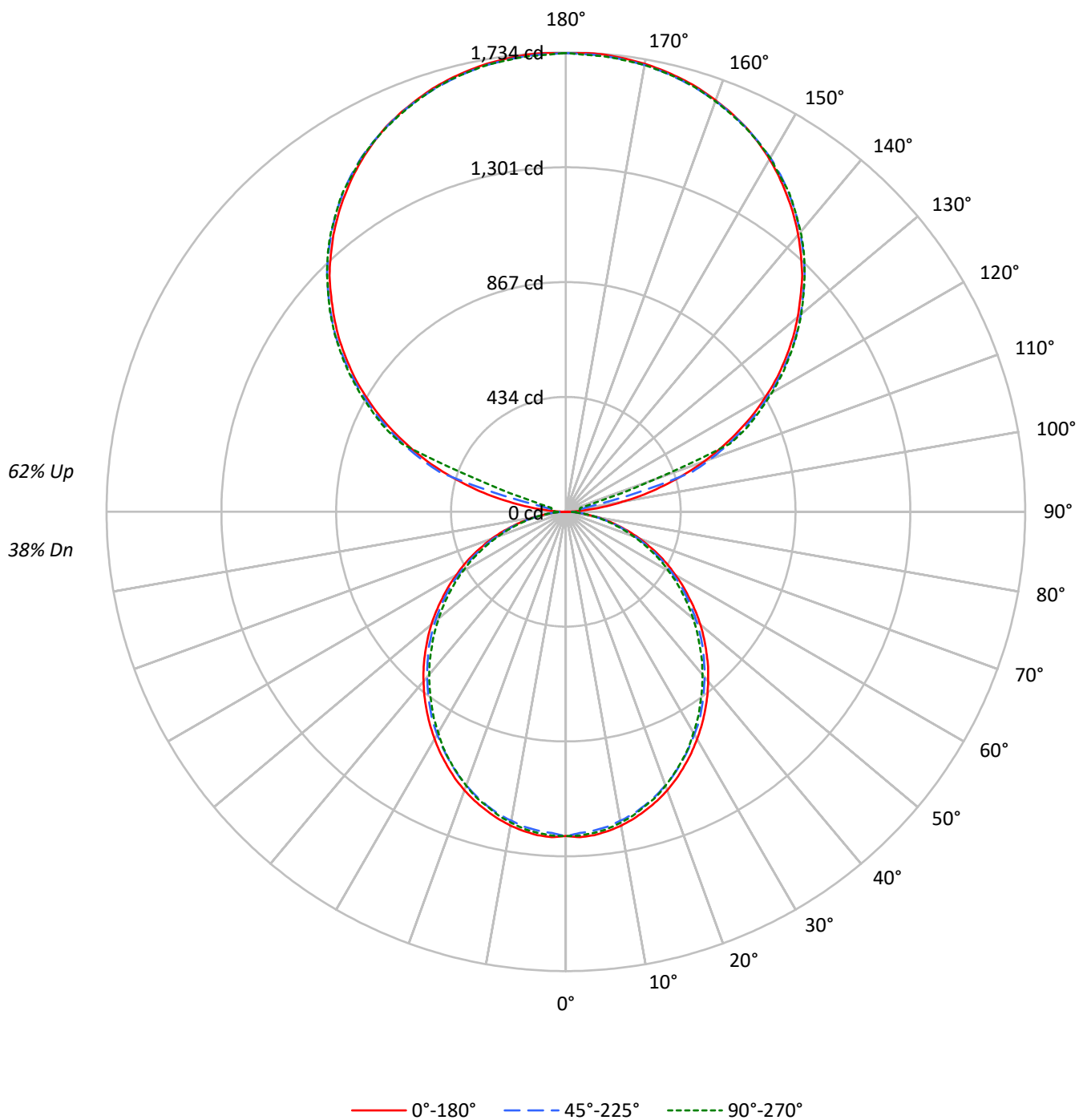
Lumens per Lamp: N/A
Luminaire Lumens: 8468.0 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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	1.4
10°-20°	325.9	3.8
20°-30°	481.3	5.7
30°-40°	562.1	6.6
40°-50°	565.1	6.7
50°-60°	496.4	5.9
60°-70°	369.7	4.4
70°-80°	210.4	2.5
80°-90°	63.3	0.7
90°-100°	61.1	0.7
100°-110°	295.2	3.5
110°-120°	723.4	8.5
120°-130°	918.4	10.8
130°-140°	981.1	11.6
140°-150°	917.4	10.8
150°-160°	740.0	8.7
160°-170°	477.5	5.6
170°-180°	164.6	1.9
0°-30°	922.6	10.9
0°-40°	1484.6	17.5
0°-60°	2546.1	30.1
0°-90°	3189.5	37.7
90°-120°	1079.7	12.8
90°-150°	3896.5	46.0
90°-180°	5279.0	62.3
0°-180°	8468.0	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	8
95°	78	26	40	49	49	94
105°	383	398	282	54	57	406
115°	719	727	738	751	756	710
125°	1014	1024	1029	1032	1034	906
135°	1262	1270	1275	1279	1275	972
145°	1456	1465	1468	1470	1470	912
155°	1604	1602	1603	1609	1602	739
165°	1692	1688	1686	1697	1688	478
175°	1732	1725	1726	1735	1725	165
180°	1732	1732	1732	1732	1732	

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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	14.2	30.9	36.0	38.6
92.5°	29.6	21.9	33.4	42.5	43.7
95°	78.5	25.7	39.9	48.9	48.9
97.5°	142.8	106.8	41.2	51.5	52.7
100°	217.4	243.1	42.5	52.7	54.0
102.5°	302.3	319.0	95.2	52.7	55.3
105°	383.3	397.5	281.7	54.0	56.6
107.5°	469.5	481.1	500.4	302.3	133.8
110°	555.7	566.0	580.2	537.7	353.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	638.0	647.1	661.2	672.8	670.2
115°	719.1	726.8	738.4	751.2	756.4
117.5°	798.8	807.8	814.3	824.6	825.9
120°	872.2	883.7	887.6	897.9	897.9
122.5°	946.8	955.8	960.9	967.4	968.6
125°	1013.7	1024.0	1029.1	1031.7	1034.3
127.5°	1080.6	1090.9	1097.3	1101.1	1098.6
130°	1142.3	1152.6	1157.7	1162.9	1160.3
132.5°	1201.5	1211.8	1215.6	1220.8	1216.9
135°	1261.9	1269.7	1274.8	1278.7	1274.8
137.5°	1313.4	1323.7	1326.3	1332.7	1330.1
140°	1364.9	1372.6	1376.4	1381.6	1379.0
142.5°	1412.4	1420.2	1424.0	1427.9	1424.0
145°	1456.2	1465.2	1467.8	1470.3	1470.3
147.5°	1498.6	1505.1	1507.6	1510.2	1503.8
150°	1537.2	1541.1	1543.7	1546.2	1542.4
152.5°	1572.0	1573.2	1574.5	1579.7	1573.2
155°	1604.1	1601.5	1602.8	1609.3	1601.5
157.5°	1629.8	1629.8	1628.6	1636.3	1626.0
160°	1653.0	1651.7	1650.4	1658.1	1649.1
162.5°	1674.9	1671.0	1669.7	1678.7	1671.0
165°	1691.6	1687.7	1686.4	1696.7	1687.7
167.5°	1705.7	1700.6	1700.6	1710.9	1700.6
170°	1717.3	1712.2	1712.2	1722.5	1712.2
172.5°	1725.0	1718.6	1719.9	1730.2	1718.6
175°	1731.5	1725.0	1726.3	1735.3	1725.0
177.5°	1734.0	1727.6	1728.9	1739.2	1726.3
180°	1731.5	1731.5	1731.5	1731.5	1731.5

(END OF REPORT)