

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P226209

Luminaire Tested: **MLN-B3-D-U-T2-XX**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226209
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29120)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: MLN-B3-D-U-T2-XX
Description: METROLINE ARCHITECTURAL LED LUMINAIRE
70 CRI, 4000K LEDS AND TYPE II DISTRIBUTION
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11112 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 3.75' x H: 0.17')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U1 - G3

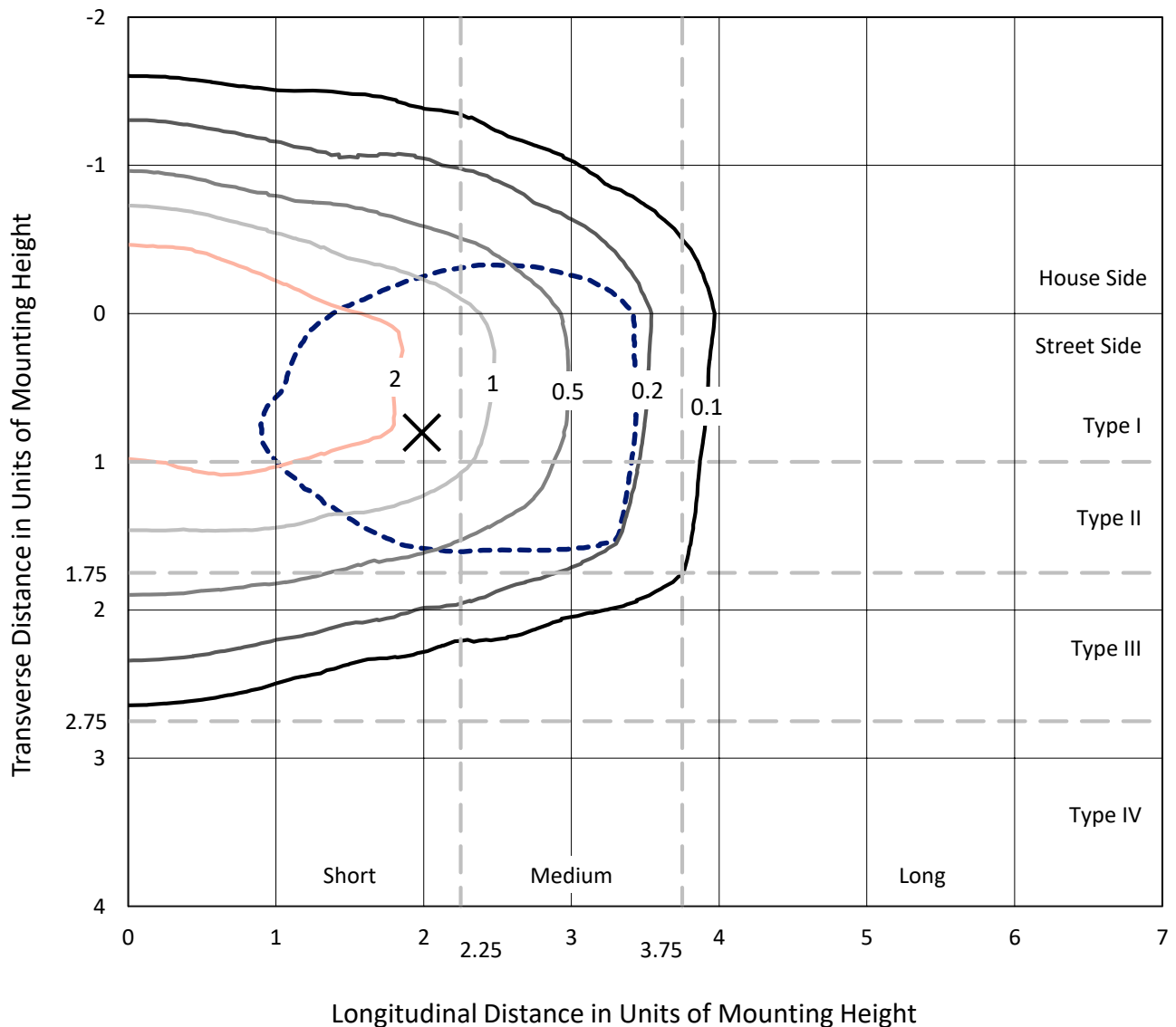
Input Watts (W): 93.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P226209
 CATALOG NUMBER: MLN-B3-D-U-T2-XX

Iso-Footcandle Lines of Horizontal Illumination

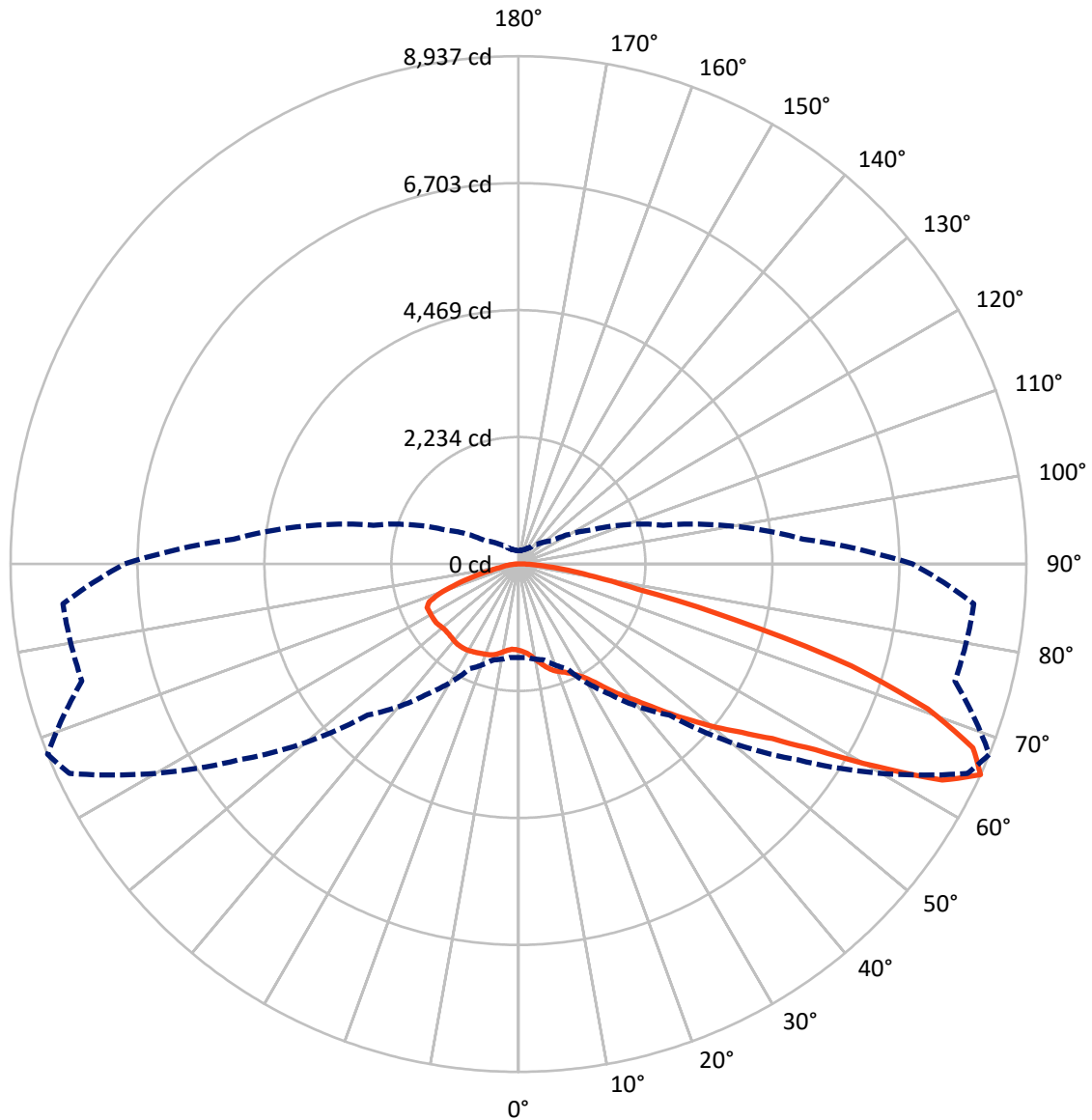
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.6 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P226209
CATALOG NUMBER: MLN-B3-D-U-T2-XX

Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical



REPORT NUMBER: P226209

CATALOG NUMBER: MLN-B3-D-U-T2-XX

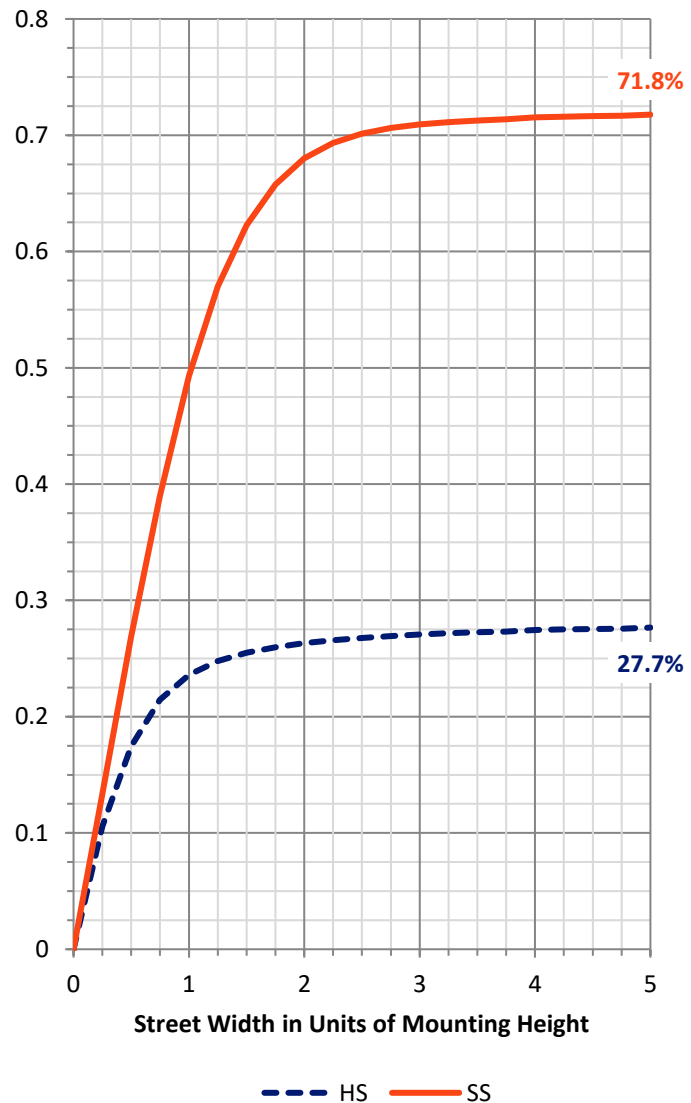
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3111.8	2.9	3114.7
	% Fixture	28.0	0.0	28.0
Street Side	Lumens	7993.9	3.4	7997.2
	% Fixture	71.9	0.0	72.0
Total	Lumens	11105.7	6.3	11112.0
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.0	1.3
10°-20°	485.7	4.4
20°-30°	825.4	7.4
30°-40°	1177.3	10.6
40°-50°	1728.6	15.6
50°-60°	2371.1	21.3
60°-70°	2871.0	25.8
70°-80°	1330.6	12.0
80°-90°	166.0	1.5
90°-100°	6.2	0.1
100°-110°	0.1	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	11105.7	99.9
0°-180°	11112.0	100.0



REPORT NUMBER: P226209

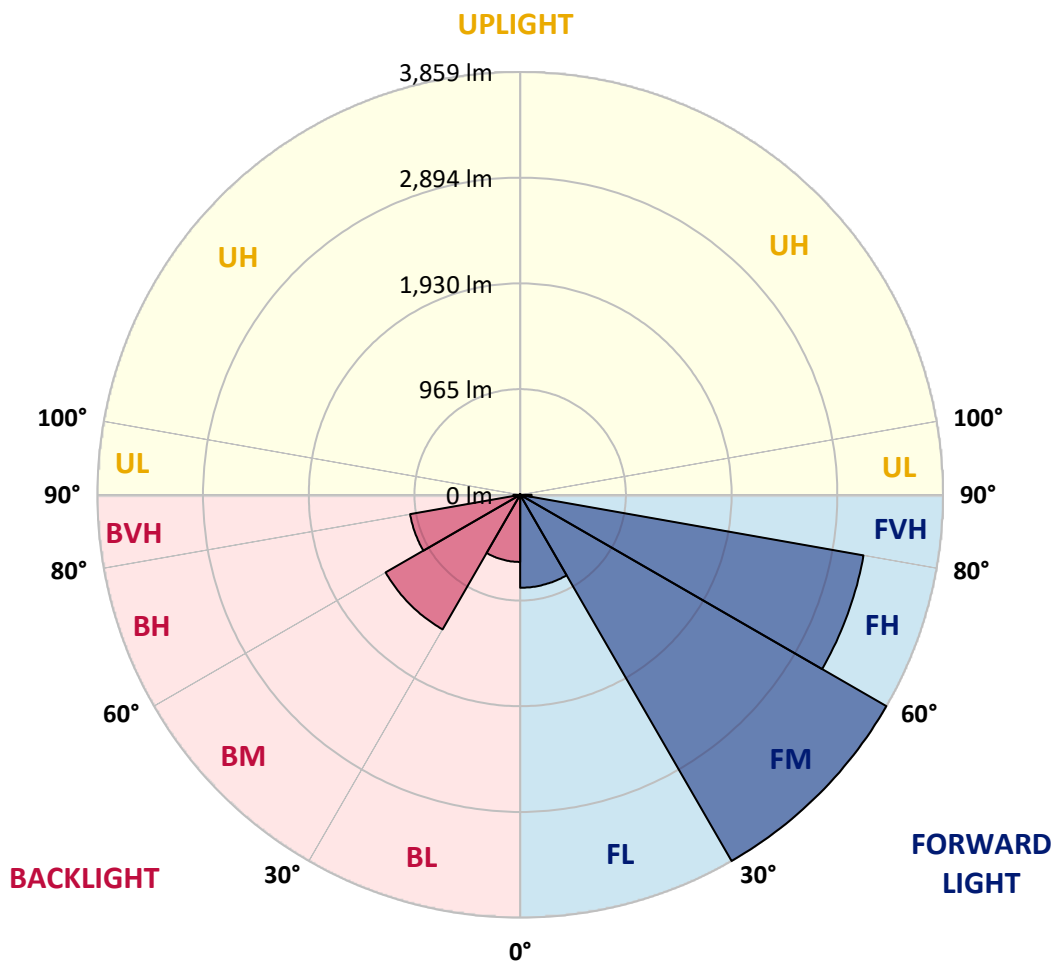
CATALOG NUMBER: MLN-B3-D-U-T2-XX

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	848.2	7.6			
FM	(30°-60°)	3859.2	34.7			
FH	(60°-80°)	3181.7	28.6			G2/5000
FVH	(80°-90°)	104.8	0.9			G2/225
BL	(0°-30°)	612.9	5.5	B2/1000		
BM	(30°-60°)	1417.8	12.8	B2/2500		
BH	(60°-80°)	1019.9	9.2	B3/2500		G3/2500
BVH	(80°-90°)	61.2	0.6			G1/100
UL	(90°-100°)	6.2	0.1		U1/10	
UH	(100°-180°)	2.9	0.0		U1/10	

BUG Rating: B3-U1-G3

Type II Short





REPORT NUMBER: P226209

CATALOG NUMBER: MLN-B3-D-U-T2-XX

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	1520.0	1520.0	1520.0	1520.0	1520.0	1520.0	1520.0	1520.0	1520.0	1520.0	1520.0
2.5°	1605.0	1593.0	1578.0	1576.0	1559.0	1561.0	1555.0	1546.0	1543.0	1532.0	1516.0
5°	1682.1	1666.0	1647.0	1641.0	1620.0	1620.0	1603.0	1585.0	1579.0	1565.0	1545.0
7.5°	1773.1	1759.1	1737.1	1727.1	1699.1	1694.1	1668.0	1645.0	1636.0	1620.0	1595.0
10°	1871.1	1860.1	1834.1	1825.1	1790.1	1783.1	1751.1	1724.1	1715.1	1693.1	1660.0
12.5°	1960.1	1948.1	1927.1	1915.1	1886.1	1878.1	1843.1	1813.1	1802.1	1777.1	1739.1
15°	2031.1	2017.1	2000.1	1995.1	1972.1	1973.1	1937.1	1903.1	1891.1	1862.1	1814.1
17.5°	2077.1	2065.1	2052.1	2052.1	2042.1	2054.1	2023.1	1977.1	1965.1	1927.1	1872.1
20°	2091.1	2084.1	2079.1	2093.1	2094.1	2122.1	2096.1	2038.1	2019.1	1975.1	1921.1
22.5°	2084.1	2080.1	2084.1	2104.1	2127.1	2189.1	2164.1	2091.1	2068.1	2019.1	1976.1
25°	2062.1	2059.1	2067.1	2099.1	2146.1	2245.1	2239.1	2157.1	2131.1	2078.1	2038.1
27.5°	2024.1	2027.1	2044.1	2078.1	2159.1	2302.1	2326.1	2247.1	2215.1	2152.1	2111.1
30°	1983.1	1988.1	2022.1	2073.1	2179.1	2374.1	2445.1	2362.1	2325.1	2255.1	2199.1
32.5°	1937.1	1945.1	1999.1	2077.1	2227.1	2473.1	2599.1	2525.1	2489.1	2400.1	2318.1
35°	1899.1	1908.1	1983.1	2106.1	2305.1	2599.1	2806.1	2740.1	2696.1	2596.1	2462.1
37.5°	1923.1	1934.1	2019.1	2186.1	2432.1	2754.1	3001.1	2964.1	2918.1	2815.1	2640.1
40°	2032.1	2047.1	2151.1	2366.1	2653.1	2974.1	3213.1	3182.1	3144.1	3072.1	2871.1
42.5°	2146.1	2161.1	2293.1	2586.1	2972.1	3307.1	3483.1	3443.1	3425.1	3383.1	3169.1
45°	2215.1	2240.1	2387.1	2759.1	3270.1	3690.1	3841.1	3741.1	3762.1	3773.1	3528.1
47.5°	2262.1	2286.1	2438.1	2885.1	3494.1	4015.1	4258.1	4067.1	4120.1	4158.1	3882.1
50°	2291.1	2315.1	2471.1	2961.1	3627.1	4223.1	4658.1	4448.1	4516.1	4523.1	4226.1
52.5°	2293.1	2316.1	2464.1	2963.1	3653.1	4344.1	4962.1	4883.1	4923.1	4893.1	4618.1
55°	2237.1	2258.1	2404.1	2871.1	3553.1	4373.1	5243.2	5416.2	5421.2	5381.2	5168.2
57.5°	2154.1	2170.1	2306.1	2739.1	3409.1	4338.1	5532.2	6190.2	6161.2	6125.2	6036.2
60°	2101.1	2111.1	2231.1	2632.1	3306.1	4221.1	5875.2	7260.2	7231.2	7040.2	7161.2
62.5°	1966.1	1973.1	2096.1	2473.1	3212.1	4038.1	6063.2	8338.2	8374.2	7718.2	7871.2
65°	1647.0	1650.0	1748.1	2035.1	2791.1	3757.1	6012.2	8720.3	8937.3	7953.2	8046.2
67.5°	1199.0	1196.0	1249.0	1427.0	2002.1	3233.1	5660.2	8174.2	8628.3	8112.2	7885.2
70°	778.0	779.0	809.0	889.0	1195.0	2271.1	4568.1	7183.2	7641.2	7852.2	7173.2
72.5°	407.0	420.0	410.0	449.0	675.0	1299.0	2975.1	5922.2	6128.2	6341.2	5584.2
75°	204.0	212.0	224.0	241.0	342.0	763.0	1740.1	4150.1	3972.1	3492.1	3195.1
77.5°	151.0	157.0	170.0	180.0	214.0	437.0	1209.0	2340.1	2149.1	1693.1	1523.0
80°	107.0	114.0	136.0	146.0	159.0	211.0	784.0	1343.0	1357.0	1026.0	506.0
82.5°	60.0	73.0	99.0	113.0	115.0	133.0	318.0	841.0	874.0	564.0	183.0
85°	30.0	45.0	71.0	85.0	77.0	83.0	157.0	404.0	432.0	317.0	100.0
87.5°	2.0	27.0	49.0	58.0	53.0	53.0	74.0	183.0	189.0	166.0	57.0
90°	0.0	16.0	30.0	35.0	30.0	26.0	30.0	59.0	64.0	49.0	12.0
92.5°	0.0	6.0	14.0	13.0	10.0	6.0	5.0	3.0	2.0	1.0	1.0
95°	0.0	1.0	3.0	2.0	2.0	1.0	1.0	1.0	1.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0
100°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P226209

CATALOG NUMBER: MLN-B3-D-U-T2-XX

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P226209

CATALOG NUMBER: MLN-B3-D-U-T2-XX

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1520.0	1520.0	1520.0	1520.0	1520.0	1520.0	1520.0	1520.0	1520.0	1520.0	1520.0
2.5°	1515.0	1512.0	1507.0	1502.0	1499.0	1494.0	1479.0	1473.0	1477.0	1494.0	1497.0
5°	1542.0	1536.0	1517.0	1501.0	1489.0	1477.0	1453.0	1442.0	1439.0	1453.0	1458.0
7.5°	1586.0	1578.0	1548.0	1519.0	1493.0	1469.0	1432.0	1411.0	1403.0	1413.0	1417.0
10°	1651.0	1635.0	1593.0	1548.0	1507.0	1467.0	1414.0	1380.0	1364.0	1370.0	1372.0
12.5°	1723.1	1704.1	1648.0	1586.0	1527.0	1469.0	1396.0	1348.0	1325.0	1326.0	1327.0
15°	1795.1	1769.1	1700.1	1623.0	1546.0	1471.0	1380.0	1318.0	1283.0	1281.0	1281.0
17.5°	1848.1	1819.1	1735.1	1645.0	1558.0	1469.0	1362.0	1286.0	1246.0	1237.0	1237.0
20°	1897.1	1863.1	1759.1	1655.0	1556.0	1461.0	1339.0	1252.0	1201.0	1188.0	1190.0
22.5°	1949.1	1906.1	1782.1	1665.0	1550.0	1447.0	1313.0	1207.0	1146.0	1131.0	1132.0
25°	2006.1	1953.1	1808.1	1679.1	1549.0	1425.0	1266.0	1144.0	1081.0	1066.0	1067.0
27.5°	2073.1	2001.1	1832.1	1693.1	1540.0	1383.0	1195.0	1075.0	1011.0	997.0	997.0
30°	2153.1	2056.1	1864.1	1704.1	1511.0	1316.0	1123.0	1006.0	941.0	925.0	922.0
32.5°	2248.1	2127.1	1910.1	1705.1	1459.0	1233.0	1051.0	939.0	874.0	854.0	853.0
35°	2371.1	2219.1	1967.1	1689.1	1391.0	1157.0	991.0	873.0	807.0	789.0	788.0
37.5°	2520.1	2348.1	2034.1	1660.0	1323.0	1092.0	923.0	806.0	734.0	712.0	711.0
40°	2728.1	2515.1	2091.1	1624.0	1262.0	1032.0	853.0	727.0	654.0	633.0	630.0
42.5°	2975.1	2698.1	2127.1	1589.0	1216.0	962.0	768.0	643.0	577.0	565.0	562.0
45°	3239.1	2882.1	2149.1	1563.0	1175.0	878.0	672.0	569.0	516.0	504.0	501.0
47.5°	3501.1	3045.1	2167.1	1552.0	1123.0	774.0	592.0	512.0	466.0	455.0	452.0
50°	3773.1	3189.1	2190.1	1550.0	1048.0	673.0	527.0	463.0	420.0	406.0	402.0
52.5°	4088.1	3352.1	2231.1	1556.0	941.0	602.0	482.0	414.0	371.0	355.0	351.0
55°	4509.1	3574.1	2281.1	1561.0	821.0	559.0	444.0	366.0	323.0	307.0	303.0
57.5°	5144.2	3893.1	2336.1	1541.0	735.0	534.0	405.0	322.0	286.0	273.0	272.0
60°	5980.2	4318.1	2412.1	1506.0	692.0	516.0	372.0	293.0	267.0	254.0	252.0
62.5°	6627.2	4725.1	2519.1	1460.0	686.0	503.0	353.0	283.0	257.0	241.0	240.0
65°	6935.2	5031.2	2640.1	1414.0	708.0	502.0	353.0	284.0	254.0	236.0	233.0
67.5°	6908.2	5084.2	2600.1	1324.0	706.0	506.0	365.0	288.0	257.0	235.0	232.0
70°	6418.2	4791.1	2336.1	1112.0	635.0	472.0	361.0	290.0	259.0	232.0	227.0
72.5°	5284.2	4107.1	1902.1	812.0	526.0	403.0	332.0	283.0	251.0	224.0	219.0
75°	3395.1	2912.1	1361.0	548.0	411.0	335.0	292.0	263.0	230.0	207.0	204.0
77.5°	1491.0	1296.0	720.0	392.0	325.0	269.0	241.0	224.0	203.0	174.0	166.0
80°	404.0	340.0	301.0	321.0	252.0	212.0	193.0	184.0	170.0	132.0	123.0
82.5°	162.0	157.0	192.0	247.0	180.0	149.0	147.0	141.0	137.0	96.0	87.0
85°	92.0	94.0	120.0	154.0	106.0	90.0	95.0	100.0	102.0	66.0	61.0
87.5°	47.0	50.0	76.0	74.0	61.0	46.0	53.0	61.0	63.0	35.0	25.0
90°	6.0	9.0	30.0	32.0	25.0	18.0	24.0	28.0	32.0	17.0	3.0
92.5°	1.0	1.0	2.0	6.0	7.0	5.0	7.0	10.0	12.0	6.0	0.0
95°	1.0	1.0	1.0	1.0	2.0	2.0	2.0	3.0	4.0	1.0	0.0
97.5°	1.0	1.0	2.0	2.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0
100°	1.0	1.0	2.0	2.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P226209

CATALOG NUMBER: MLN-B3-D-U-T2-XX

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)