

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: P226217

Luminaire Tested: **MLN-B1-D-U-T3-7030-XX**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226217
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29662)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: MLN-B1-D-U-T3-7030-XX
Description: METROLINE ARCHITECTURAL LED LUMINAIRE
70 CRI, 3000K LEDS AND TYPE III DISTRIBUTION
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4948 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 3.75' x H: 0.17')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U1 - G1

Input Watts (W): 42.1
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

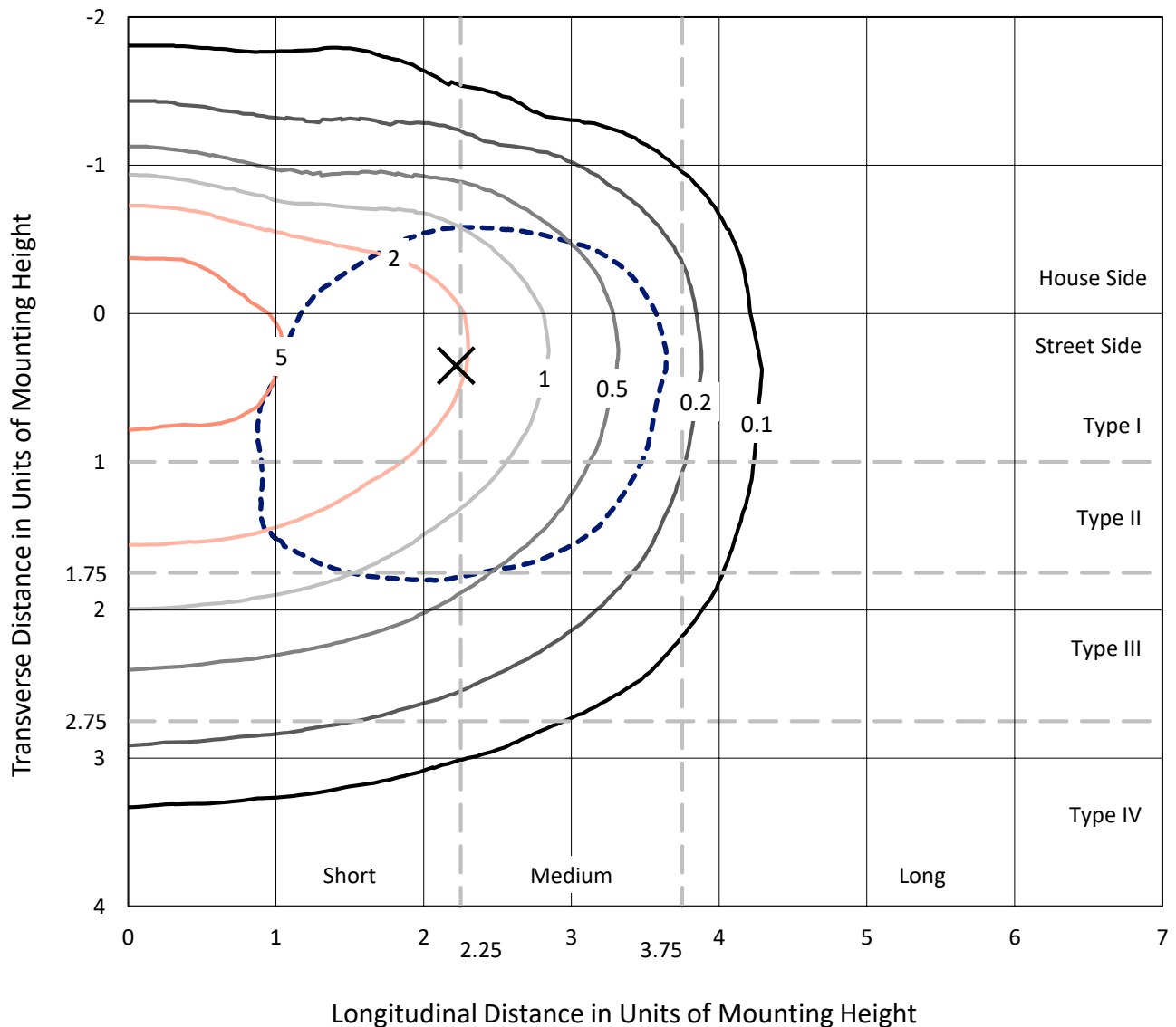


REPORT NUMBER: P226217

CATALOG NUMBER: MLN-B1-D-U-T3-7030-XX

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

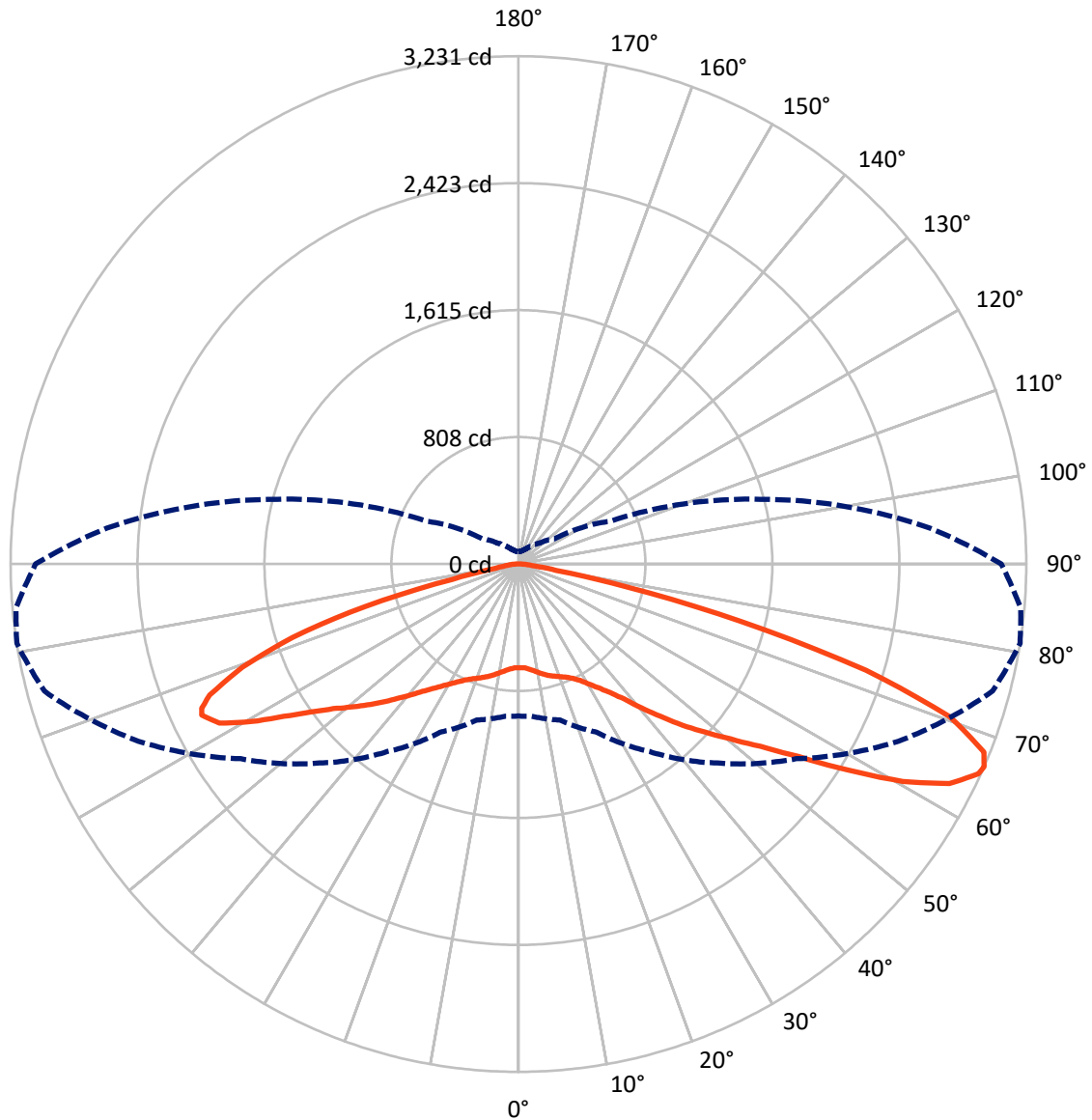


Based on 10 foot mounting height. Maximum calculated value = 7 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P226217

CATALOG NUMBER: MLN-B1-D-U-T3-7030-XX

Luminous Intensity Polar Plot



— Vertical Plane Through 81-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical



REPORT NUMBER: P226217

CATALOG NUMBER: MLN-B1-D-U-T3-7030-XX

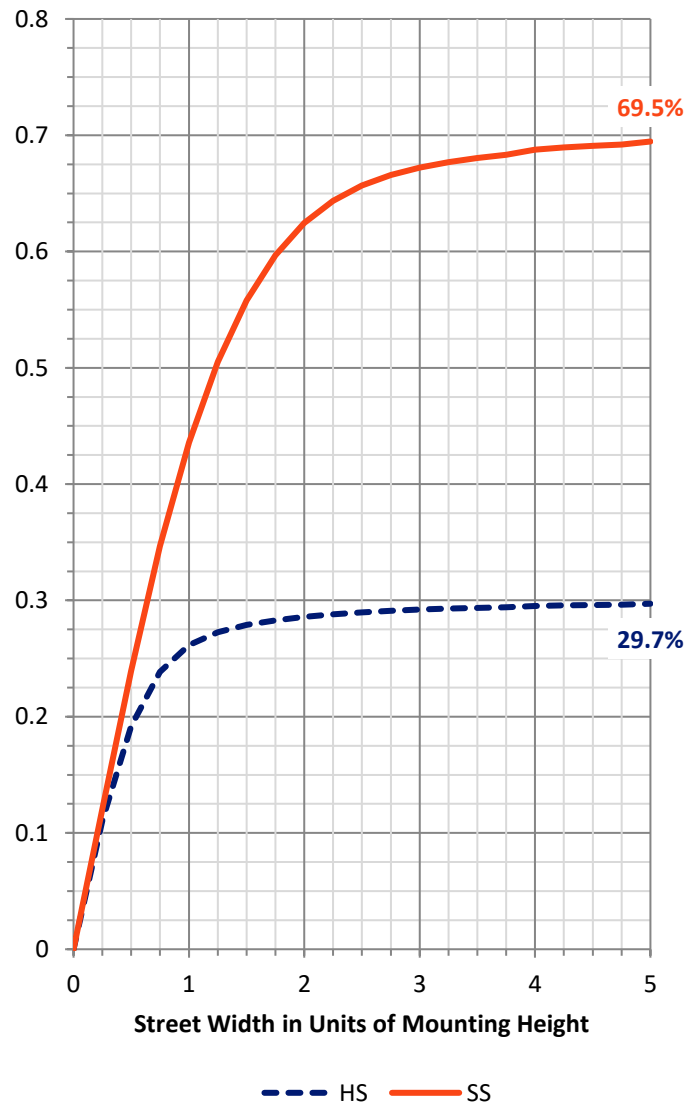
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1488.1	1.8	1489.9
	% Fixture	30.1	0.0	30.1
Street Side	Lumens	3455.5	2.6	3458.1
	% Fixture	69.8	0.1	69.9
Total	Lumens	4943.6	4.4	4948.0
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.9	1.3
10°-20°	205.7	4.2
20°-30°	351.2	7.1
30°-40°	525.1	10.6
40°-50°	752.2	15.2
50°-60°	1031.2	20.8
60°-70°	1262.9	25.5
70°-80°	640.8	13.0
80°-90°	109.7	2.2
90°-100°	4.3	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°	4943.6	99.9
0°-180°	4948.0	100.0



REPORT NUMBER: P226217

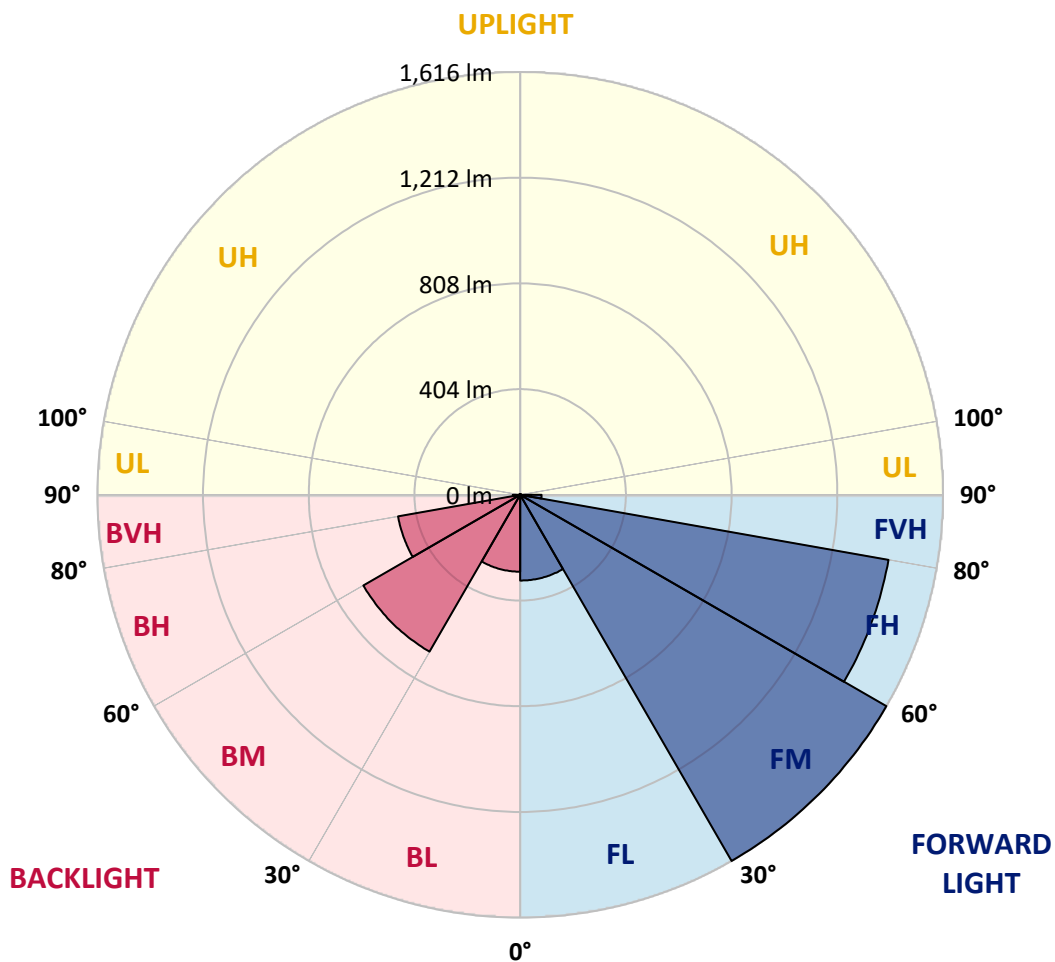
CATALOG NUMBER: MLN-B1-D-U-T3-7030-XX

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	327.8	6.6			
FM	(30°-60°)	1616.3	32.7			
FH	(60°-80°)	1429.6	28.9			G1/1800
FVH	(80°-90°)	81.8	1.7			G1/100
BL	(0°-30°)	294.0	5.9	B1/500		
BM	(30°-60°)	692.1	14.0	B1/1000		
BH	(60°-80°)	474.0	9.6	B1/500		G1/500
BVH	(80°-90°)	27.9	0.6			G1/100
UL	(90°-100°)	4.3	0.1		U1/10	
UH	(100°-180°)	1.8	0.0		U1/10	

BUG Rating: B1-U1-G1

Type III Short





REPORT NUMBER: P226217

CATALOG NUMBER: MLN-B1-D-U-T3-7030-XX

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	81°	85°
0°	660.8	660.8	660.8	660.8	660.8	660.8	660.8	660.8	660.8	660.8	660.8
2.5°	671.8	669.8	663.7	662.4	660.0	664.9	665.3	665.3	661.6	660.0	658.7
5°	678.4	676.3	670.2	669.8	666.5	672.2	672.7	671.8	670.2	670.2	670.2
7.5°	696.8	694.4	687.8	684.1	679.2	683.3	683.7	683.7	683.3	684.1	684.5
10°	725.1	719.7	712.4	705.8	697.2	699.3	698.5	700.1	699.7	702.1	701.3
12.5°	750.0	746.4	737.3	730.0	718.9	718.5	714.8	714.8	716.9	720.2	720.2
15°	771.7	769.3	760.3	753.7	742.7	737.8	730.8	730.8	733.7	736.5	736.1
17.5°	790.2	789.7	779.5	775.0	763.5	758.2	746.4	745.1	748.4	750.0	750.0
20°	807.8	806.5	797.1	791.8	782.8	780.3	760.7	757.4	762.3	765.2	764.8
22.5°	819.6	817.2	808.6	804.1	799.6	800.4	778.3	770.9	778.3	782.4	781.6
25°	829.1	827.4	816.4	814.7	815.1	822.9	800.4	794.3	802.4	805.7	804.9
27.5°	840.5	838.5	828.2	825.0	834.0	850.3	834.8	826.2	835.2	839.7	840.1
30°	865.5	863.9	850.3	845.4	861.4	892.1	881.0	872.5	873.7	886.4	888.0
32.5°	923.2	920.8	906.4	897.4	915.0	954.3	948.2	936.7	927.7	940.0	943.3
35°	983.0	980.5	971.9	967.4	994.5	1044.8	1039.1	1023.5	995.3	1003.9	1005.9
37.5°	1018.6	1021.5	1023.9	1037.0	1082.1	1148.8	1151.3	1130.8	1085.3	1087.4	1084.5
40°	1049.7	1053.0	1065.3	1100.9	1171.3	1249.5	1282.3	1253.6	1206.1	1201.6	1190.2
42.5°	1075.1	1082.1	1104.2	1161.5	1252.8	1344.9	1401.8	1375.6	1339.6	1324.4	1309.3
45°	1105.4	1110.3	1141.8	1219.2	1324.4	1434.6	1508.3	1494.8	1473.9	1462.4	1427.6
47.5°	1129.2	1137.7	1171.7	1264.3	1387.9	1516.5	1609.8	1619.6	1620.4	1596.7	1557.8
50°	1160.7	1171.3	1201.2	1303.6	1430.9	1581.1	1704.8	1745.3	1772.7	1749.0	1690.4
52.5°	1195.1	1208.6	1240.1	1355.6	1473.1	1631.1	1789.9	1873.9	1940.2	1925.9	1863.2
55°	1240.1	1252.0	1287.6	1418.2	1532.4	1690.0	1883.3	2030.7	2168.2	2162.1	2100.7
57.5°	1287.6	1294.1	1334.3	1476.3	1614.3	1789.1	1995.9	2245.6	2465.9	2472.4	2406.5
60°	1252.0	1257.7	1304.8	1472.2	1656.9	1884.5	2115.4	2492.5	2791.8	2807.7	2751.6
62.5°	1151.7	1157.0	1211.9	1394.4	1622.1	1902.9	2195.7	2658.7	3031.3	3075.9	3007.9
65°	1023.9	1029.7	1086.2	1247.1	1520.5	1839.5	2192.4	2698.0	3127.5	3216.7	3179.9
66°	966.6	971.9	1027.2	1180.3	1456.7	1790.3	2158.4	2666.9	3122.6	3230.6	3207.7
67.5°	878.6	865.1	914.6	1076.3	1344.5	1690.9	2065.1	2593.2	3061.2	3193.4	3185.2
70°	672.2	660.8	713.6	855.7	1106.6	1455.4	1835.4	2343.5	2797.1	2912.9	2929.3
72.5°	462.6	454.4	503.2	624.3	829.5	1136.9	1489.4	1930.0	2262.4	2311.5	2373.8
75°	326.3	321.4	350.5	416.4	556.4	783.2	1098.0	1373.2	1480.8	1461.2	1523.0
77.5°	190.8	195.3	234.6	288.2	385.7	493.3	747.2	845.0	786.9	700.9	662.0
80°	94.6	95.4	130.2	172.4	274.7	372.6	486.0	547.8	495.8	242.8	179.3
82.5°	43.8	47.9	64.3	79.4	122.4	269.4	411.0	523.6	445.0	99.5	79.4
85°	18.8	25.0	41.4	49.1	51.6	107.7	335.7	472.0	283.3	60.2	48.3
87.5°	5.7	13.5	28.2	34.4	31.1	39.3	125.7	215.3	102.8	29.9	27.0
90°	0.0	8.2	17.6	19.7	17.2	16.0	36.4	66.3	26.6	10.6	9.8
92.5°	0.0	3.7	9.8	9.4	7.0	4.5	5.3	5.3	1.6	1.2	1.2
95°	0.0	0.8	3.7	2.5	1.6	0.8	0.4	0.4	0.4	0.4	0.4
97.5°	0.0	0.0	0.4	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4
100°	0.0	0.0	0.4	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4
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



REPORT NUMBER: P226217

CATALOG NUMBER: MLN-B1-D-U-T3-7030-XX

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	81°	85°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P226217

CATALOG NUMBER: MLN-B1-D-U-T3-7030-XX

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	660.8	660.8	660.8	660.8	660.8	660.8	660.8	660.8	660.8	660.8	660.8
2.5°	660.8	660.0	661.6	663.7	664.5	665.3	658.7	658.7	660.8	668.6	669.0
5°	671.8	670.2	669.4	670.2	671.4	672.7	665.7	665.3	667.3	674.7	675.9
7.5°	685.4	684.1	682.9	681.7	681.7	682.5	674.3	673.1	675.5	682.9	683.7
10°	702.5	700.9	698.5	696.8	696.0	694.8	682.1	677.6	678.0	684.9	686.2
12.5°	718.9	718.5	716.9	717.3	714.8	708.7	687.8	676.8	672.7	677.6	679.2
15°	734.9	734.9	737.8	740.6	734.5	719.7	691.1	671.4	660.8	664.5	665.3
17.5°	749.2	750.9	757.0	760.7	750.4	730.0	690.7	661.2	643.6	644.0	644.0
20°	765.6	767.2	775.4	776.6	762.3	735.7	684.9	644.0	621.5	619.0	617.0
22.5°	781.6	784.4	792.2	790.2	769.7	735.3	673.1	624.8	597.3	592.8	590.8
25°	802.9	807.8	812.7	803.3	774.2	727.9	655.1	603.1	569.1	560.9	558.4
27.5°	835.2	840.1	837.7	816.4	775.0	712.4	636.6	576.4	533.5	521.2	519.9
30°	881.0	881.5	865.5	829.1	771.7	696.8	610.0	540.8	492.1	478.6	477.8
32.5°	935.5	926.9	895.4	838.5	763.1	672.7	571.9	497.8	450.8	437.2	434.8
35°	994.9	982.6	927.7	848.7	747.2	635.0	526.1	454.0	410.6	397.9	395.9
37.5°	1066.5	1047.3	964.2	855.7	720.6	586.7	478.2	410.6	368.1	355.4	352.5
40°	1158.6	1129.2	1005.9	856.1	680.0	529.4	429.5	364.4	323.4	310.3	309.1
42.5°	1269.2	1218.4	1048.1	848.7	632.9	480.6	381.6	315.2	276.4	261.6	262.0
45°	1386.3	1322.4	1093.5	834.4	588.7	425.4	325.1	265.3	230.5	219.4	219.0
47.5°	1506.2	1428.4	1141.8	818.4	539.6	372.6	274.7	218.6	191.6	185.9	182.6
50°	1631.1	1541.4	1189.7	802.0	484.7	320.6	226.4	180.5	158.4	152.7	150.7
52.5°	1787.5	1664.7	1236.0	788.5	431.5	269.8	186.7	151.1	131.0	124.9	123.2
55°	2011.4	1838.7	1292.1	771.3	385.7	225.2	158.9	127.3	111.4	105.6	104.0
57.5°	2302.9	2054.4	1366.2	748.0	344.3	195.7	138.0	112.2	101.5	95.8	94.6
60°	2628.8	2307.4	1476.7	725.1	310.7	180.1	126.9	106.4	96.2	90.5	89.7
62.5°	2918.3	2525.2	1600.0	704.2	293.1	176.9	126.5	104.4	91.7	85.6	84.7
65°	3064.4	2636.6	1624.5	670.2	284.5	185.5	134.7	104.0	88.0	81.1	80.2
66°	3071.4	2627.6	1592.2	645.2	278.0	188.3	138.0	103.6	86.4	79.4	78.6
67.5°	3014.1	2553.9	1502.5	582.6	261.2	187.1	141.2	102.8	83.9	76.6	76.2
70°	2729.1	2278.4	1266.3	452.8	221.1	169.9	134.7	98.7	79.4	72.1	70.8
72.5°	2190.3	1866.5	980.1	324.3	182.2	147.8	122.8	92.9	75.3	67.6	66.3
75°	1407.5	1241.7	668.6	233.0	154.3	129.4	108.1	88.4	70.8	62.6	61.8
77.5°	495.0	483.5	350.9	179.7	133.9	111.8	93.3	79.4	64.3	51.2	48.7
80°	128.6	135.1	162.1	154.3	113.0	93.3	77.4	67.6	55.3	40.5	39.7
82.5°	69.6	74.5	100.3	122.4	90.9	74.1	61.4	51.6	43.8	32.8	30.3
85°	44.2	46.7	65.1	74.5	59.4	54.9	45.4	37.3	32.3	20.9	18.8
87.5°	27.8	32.3	41.4	40.1	30.7	23.3	30.3	25.0	22.5	12.7	9.4
90°	8.2	11.1	16.4	16.8	12.7	9.4	14.7	14.7	14.3	7.0	0.0
92.5°	0.8	0.8	1.2	2.9	3.3	3.7	6.1	7.8	7.8	1.6	0.0
95°	0.4	0.4	0.4	0.8	1.2	1.6	2.0	3.3	3.3	0.4	0.0
97.5°	0.4	0.4	0.8	0.8	0.8	0.8	0.4	0.8	0.4	0.0	0.0
100°	0.4	0.8	0.8	0.8	0.8	0.8	0.8	0.4	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



REPORT NUMBER: P226217

CATALOG NUMBER: MLN-B1-D-U-T3-7030-XX

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)