

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: P226226

Luminaire Tested: **MLN-B1-D-U-T4-7030-XX**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P226226  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29663)  
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-T4-7030-XX  
Description: METROLINE ARCHITECTURAL LED LUMINAIRE  
70 CRI, 3000K LEDS AND TYPE IV DISTRIBUTION  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4929 lumens  
Efficiency: N/A  
Efficacy: 117.1 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 3.75' x H: 0.17')  
IES Classification: Type IV - Short - 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

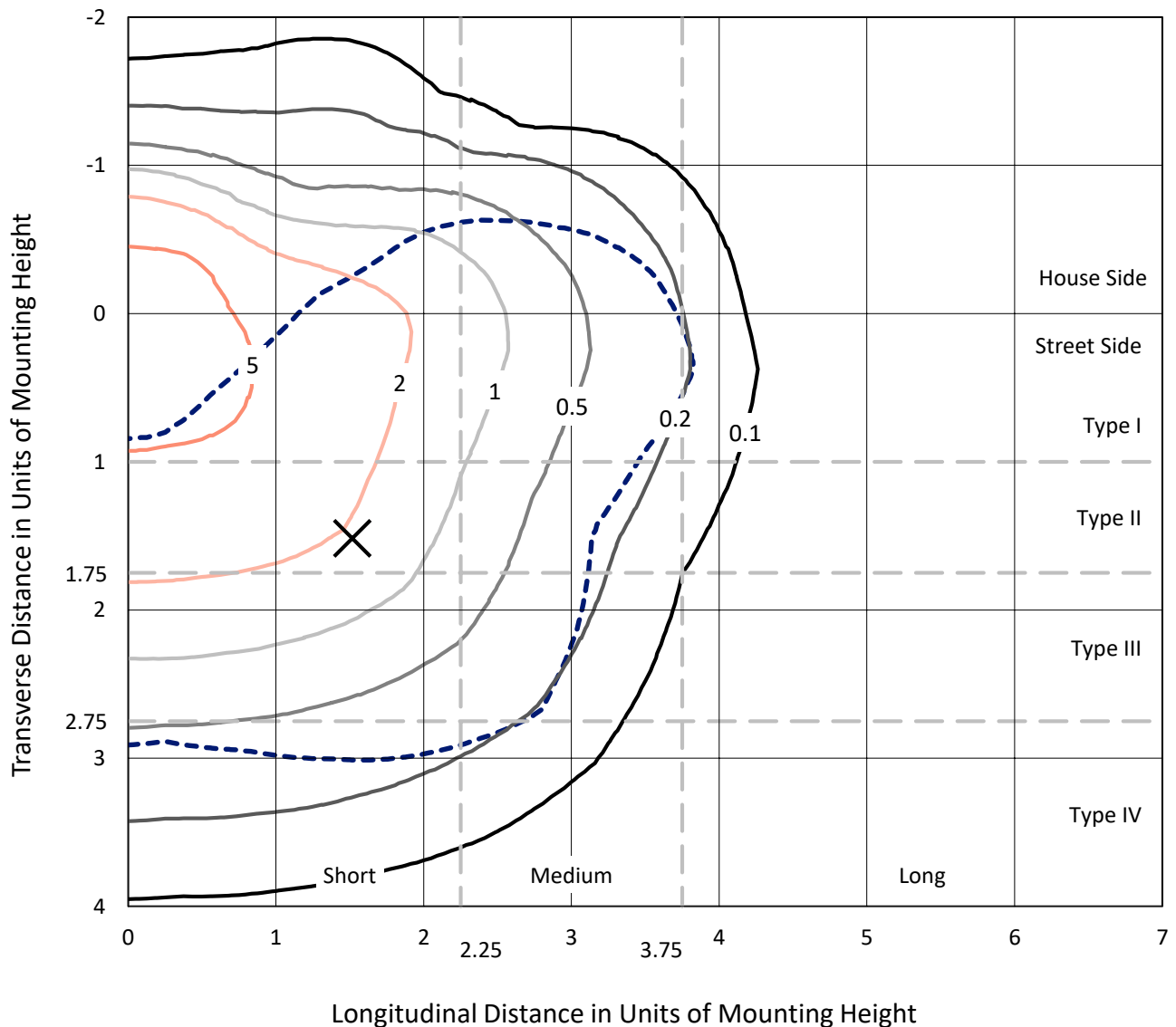


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

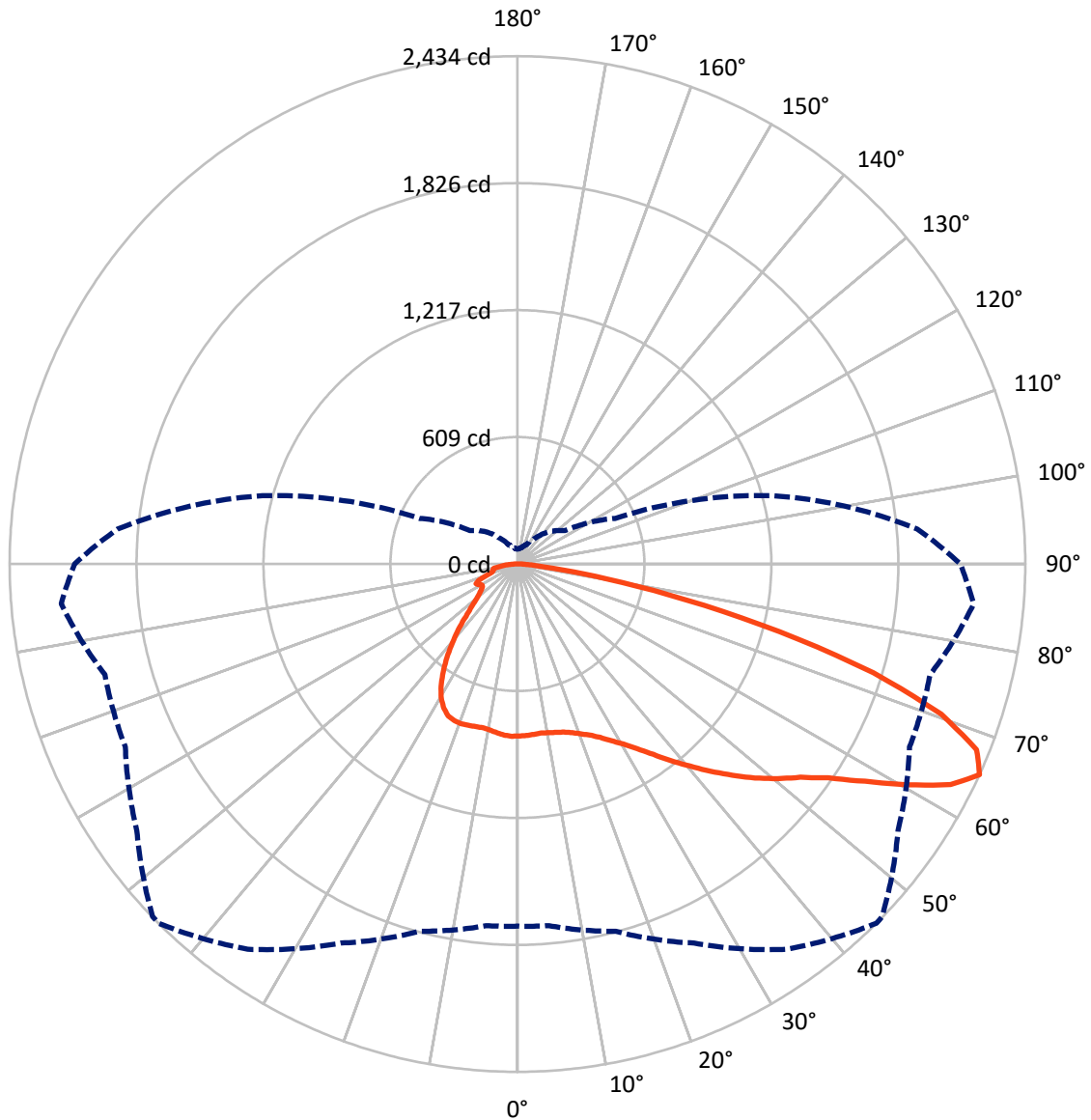


Based on 10 foot mounting height. Maximum calculated value = 8.2 fc  
 Type IV - Short - Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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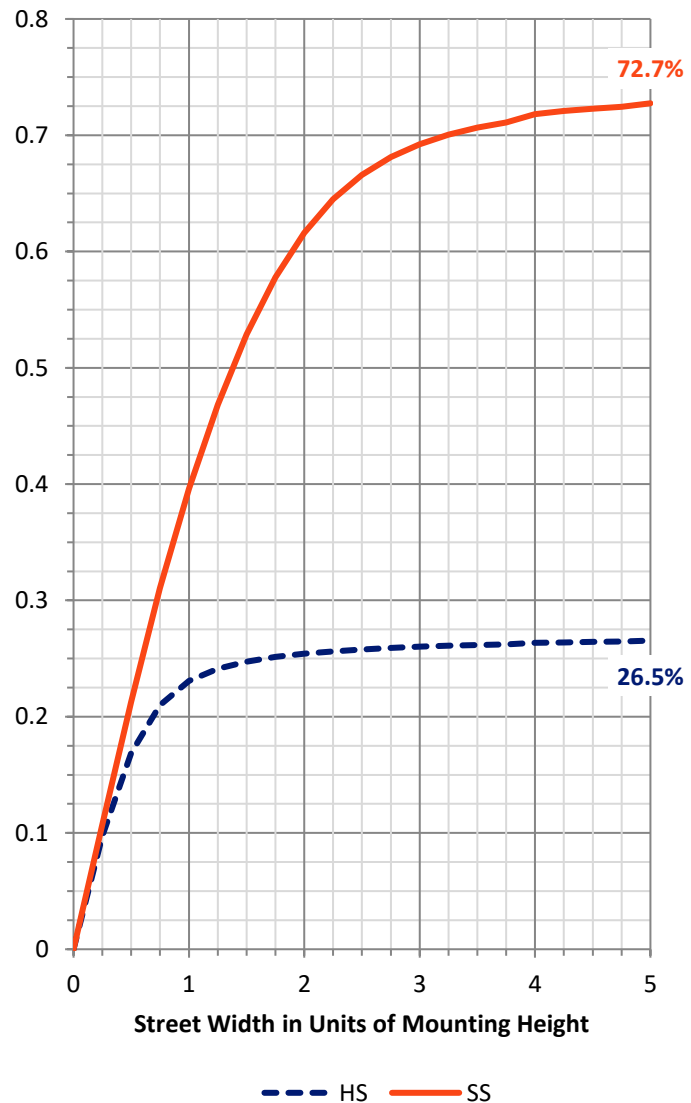
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1326.5	2.0	1328.5
	% Fixture	26.9	0.0	27.0
<b>Street Side</b>	Lumens	3598.1	2.4	3600.5
	% Fixture	73.0	0.0	73.0
<b>Total</b>	Lumens	4924.6	4.4	4929.0
	% Fixture	99.9	0.1	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.0	1.6
10°-20°	231.0	4.7
20°-30°	385.2	7.8
30°-40°	544.1	11.0
40°-50°	707.4	14.4
50°-60°	951.2	19.3
60°-70°	1236.3	25.1
70°-80°	702.6	14.3
80°-90°	88.7	1.8
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°	4924.6	99.9
0°-180°	4929.0	100.0



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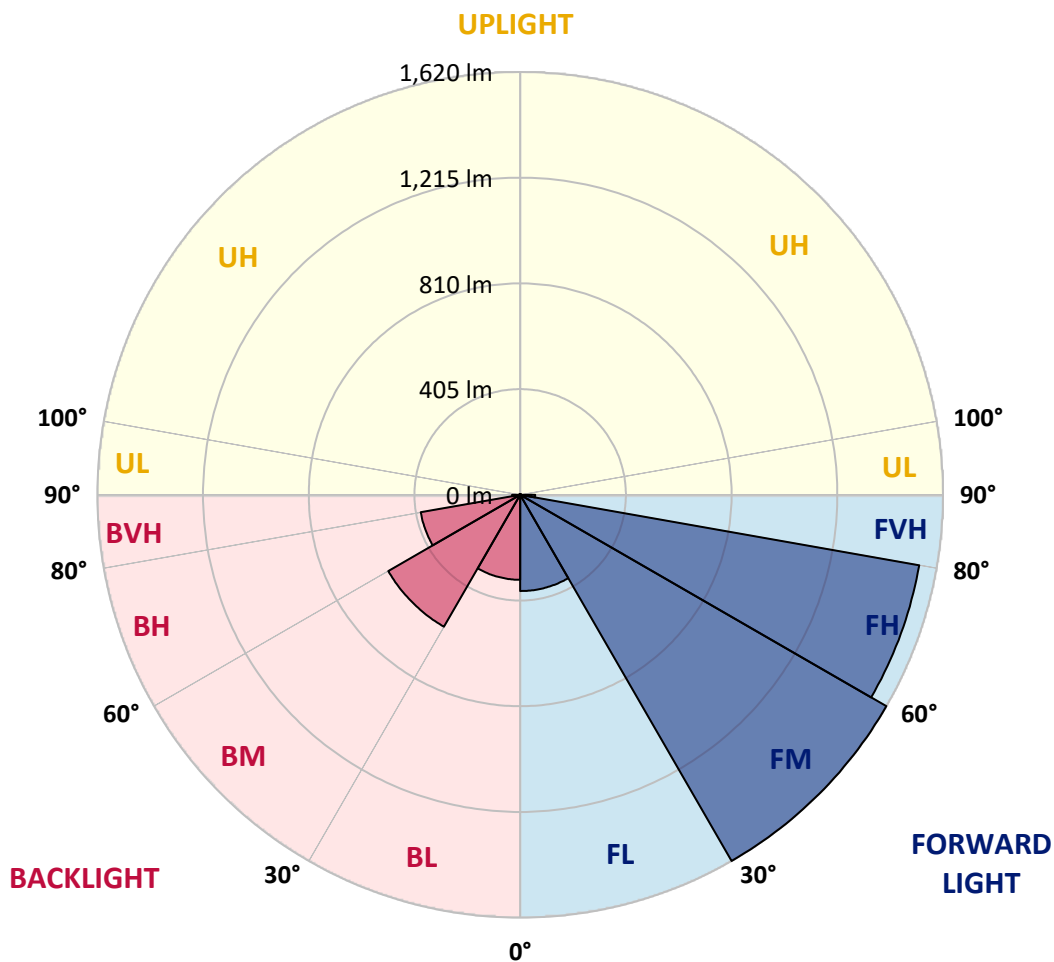
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	368.7	7.5			
FM	(30°-60°)	1619.5	32.9			
FH	(60°-80°)	1552.1	31.5			G1/1800
FVH	(80°-90°)	57.8	1.2			G1/100
BL	(0°-30°)	325.5	6.6	B1/500		
BM	(30°-60°)	583.3	11.8	B1/1000		
BH	(60°-80°)	386.8	7.8	B1/500		G1/500
BVH	(80°-90°)	30.9	0.6			G1/100
UL	(90°-100°)	4.3	0.1		U1/10	
UH	(100°-180°)	2.0	0.0		U1/10	

**BUG Rating: B1-U1-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	824.2	824.2	824.2	824.2	824.2	824.2	824.2	824.2	824.2	824.2	824.2
2.5°	828.2	826.6	820.9	819.2	817.6	822.9	825.8	825.0	825.8	822.1	820.1
5°	816.4	815.6	809.8	811.1	811.1	820.1	822.1	823.7	827.0	826.2	827.4
7.5°	809.4	807.8	803.3	804.5	807.0	818.0	820.1	824.6	829.9	832.3	832.8
10°	809.8	807.8	803.3	805.3	807.4	822.1	823.3	830.3	835.6	836.4	835.2
12.5°	818.0	816.4	810.6	812.3	813.9	828.2	830.3	836.4	842.2	841.3	837.7
15°	833.2	831.5	824.2	825.0	824.6	835.6	840.1	841.8	848.3	844.2	835.2
17.5°	855.7	855.3	847.1	846.7	843.0	849.9	852.4	848.3	851.6	842.6	828.7
20°	883.1	882.7	873.3	870.0	865.9	868.8	870.0	858.5	852.8	838.9	820.9
22.5°	913.0	911.8	902.8	898.3	891.7	890.5	891.3	870.0	856.1	838.1	818.0
25°	951.9	950.7	938.0	933.1	922.8	920.8	922.0	894.6	873.3	849.5	825.4
27.5°	985.5	985.1	977.3	969.9	960.9	958.4	959.7	931.0	904.0	877.0	848.7
30°	1028.9	1025.6	1012.9	1007.6	1004.7	1002.2	1001.0	978.9	949.8	917.5	886.0
32.5°	1069.4	1066.9	1055.1	1052.6	1054.2	1054.7	1052.6	1032.1	1003.1	966.2	928.1
35°	1118.5	1115.7	1103.0	1105.0	1114.4	1120.6	1121.4	1097.6	1061.6	1014.5	967.0
37.5°	1162.3	1161.1	1157.0	1166.4	1184.0	1196.3	1192.6	1175.4	1125.9	1063.7	999.0
40°	1209.0	1208.6	1208.2	1230.7	1262.6	1273.3	1271.6	1255.7	1194.3	1122.2	1043.6
42.5°	1258.1	1258.5	1260.6	1296.6	1342.1	1357.2	1354.8	1334.7	1266.3	1195.1	1101.3
45°	1313.0	1317.5	1321.2	1364.2	1421.9	1444.0	1441.6	1414.9	1336.7	1271.2	1164.4
47.5°	1372.0	1378.1	1381.0	1431.3	1498.9	1532.0	1526.3	1492.3	1401.8	1344.1	1230.3
50°	1446.9	1452.2	1453.8	1504.6	1578.3	1616.4	1611.9	1569.7	1466.9	1417.4	1315.5
52.5°	1530.4	1539.0	1541.9	1593.4	1661.4	1697.8	1694.6	1649.5	1541.9	1496.4	1418.2
55°	1629.1	1641.3	1649.1	1705.6	1771.5	1807.2	1801.8	1745.7	1645.0	1590.6	1541.4
57.5°	1730.2	1733.9	1762.5	1838.3	1921.0	1964.4	1953.7	1866.1	1769.9	1702.8	1683.5
60°	1762.9	1763.8	1815.3	1927.9	2067.5	2148.2	2135.9	2007.0	1932.4	1844.8	1858.7
62.5°	1776.5	1781.4	1853.4	2010.6	2208.0	2329.6	2322.2	2148.2	2051.6	1986.1	2054.4
65°	1735.5	1740.0	1822.3	2004.5	2253.8	2434.0	2430.7	2226.8	2073.7	2047.5	2194.9
67.5°	1573.0	1598.4	1695.4	1891.1	2162.1	2373.8	2373.8	2176.0	1988.5	2029.1	2216.2
70°	1342.9	1329.4	1442.4	1645.4	1930.4	2154.3	2160.9	1993.4	1793.2	1861.2	2061.4
72.5°	1028.0	1022.3	1129.6	1308.9	1552.9	1783.8	1795.3	1661.4	1457.1	1536.9	1778.1
75°	776.7	764.4	843.4	969.9	1130.0	1296.6	1312.2	1196.3	1020.7	1134.1	1330.2
77.5°	457.7	470.8	534.3	625.6	764.4	823.3	836.4	735.7	585.5	669.8	676.4
80°	205.5	206.3	267.8	325.5	401.2	430.3	420.9	373.0	280.9	303.4	179.7
82.5°	70.4	81.1	126.9	151.9	182.2	172.0	167.9	162.1	152.3	165.4	82.3
85°	22.5	34.8	67.1	80.2	86.0	74.5	73.3	80.2	104.0	123.6	55.3
87.5°	4.1	13.5	38.5	45.4	46.3	34.8	33.6	42.2	65.5	78.2	31.5
90°	0.0	7.8	20.1	22.1	20.5	14.7	13.9	17.6	28.7	29.5	10.2
92.5°	0.0	2.9	9.0	9.4	7.0	4.1	3.7	3.7	4.1	2.9	2.5
95°	0.0	0.4	2.9	2.0	1.6	1.2	1.2	1.2	1.2	1.2	1.2
97.5°	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2
100°	0.0	0.4	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.2
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



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	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





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	824.2	824.2	824.2	824.2	824.2	824.2	824.2	824.2	824.2	824.2	824.2
2.5°	820.9	820.5	821.7	825.4	825.4	825.8	818.4	818.0	820.1	828.2	828.2
5°	829.1	828.2	825.8	825.4	824.6	822.1	814.3	811.9	813.5	820.5	820.5
7.5°	833.2	830.7	826.2	821.7	818.0	814.3	804.1	801.2	802.9	809.8	809.4
10°	834.0	829.5	822.1	814.7	809.8	805.7	791.8	789.4	790.6	798.0	798.4
12.5°	833.2	826.6	816.4	809.8	805.7	802.0	785.7	779.1	775.8	782.4	782.0
15°	828.7	821.3	811.9	810.2	809.0	804.1	781.6	766.4	757.8	761.9	761.5
17.5°	821.3	815.1	809.4	815.6	818.4	808.6	776.7	752.1	739.4	740.2	738.6
20°	813.1	805.7	806.5	821.3	826.6	811.1	770.1	735.3	717.7	714.4	712.0
22.5°	807.0	799.6	806.1	827.8	831.1	809.0	757.4	713.2	689.0	684.1	683.7
25°	810.6	803.3	814.7	833.2	830.7	799.6	737.4	690.3	659.6	653.4	652.6
27.5°	827.4	817.2	828.7	836.4	821.7	775.8	710.7	659.6	627.2	618.6	617.8
30°	856.1	838.5	839.3	831.9	800.0	741.5	674.7	619.0	586.7	576.0	577.7
32.5°	889.7	862.6	843.4	811.9	759.9	691.5	623.1	567.4	540.4	531.4	531.8
35°	921.6	887.2	841.8	779.9	706.2	628.0	561.3	515.0	488.8	481.5	483.1
37.5°	952.3	912.2	833.6	734.5	640.3	561.7	498.3	452.8	430.3	422.9	423.7
40°	994.1	944.5	821.7	682.9	572.8	489.3	429.5	387.7	369.7	363.2	365.2
42.5°	1046.1	984.6	810.6	632.1	510.1	422.1	361.1	326.7	309.9	305.0	306.7
45°	1100.5	1031.3	802.0	585.5	452.4	352.1	305.0	272.7	255.1	249.7	250.6
47.5°	1164.0	1082.9	807.8	551.9	400.0	299.3	256.7	224.4	205.5	198.6	199.0
50°	1241.8	1155.0	829.5	533.9	346.4	260.0	219.0	184.6	162.9	153.9	151.5
52.5°	1345.3	1240.1	863.9	530.2	306.7	231.7	186.3	151.9	130.2	120.4	119.1
55°	1461.2	1334.3	907.7	529.0	280.0	212.1	161.7	126.5	106.4	96.6	95.4
57.5°	1592.2	1445.2	957.6	521.2	266.1	199.4	145.8	111.4	94.6	85.2	83.5
60°	1770.3	1595.9	1048.1	520.8	264.5	197.3	140.8	107.7	89.7	79.0	77.8
62.5°	1983.2	1787.1	1180.3	528.1	276.8	209.2	147.8	106.9	86.4	75.7	74.5
65°	2122.8	1923.0	1264.3	516.7	278.4	219.9	154.3	103.2	82.7	72.9	71.6
67.5°	2127.7	1921.0	1224.2	448.7	239.5	201.4	146.6	97.4	79.0	70.0	69.2
70°	1970.5	1771.9	1082.5	347.2	192.0	160.5	126.5	88.8	74.1	65.9	65.1
72.5°	1681.1	1505.0	886.4	260.4	153.5	130.6	110.5	82.7	68.8	61.0	60.6
75°	1201.2	1073.1	644.4	203.9	133.1	119.5	101.9	81.9	65.1	57.3	56.1
77.5°	534.3	455.7	357.8	179.3	127.7	119.5	97.9	79.8	61.4	50.8	49.5
80°	137.6	144.1	184.6	169.1	124.1	115.0	91.3	72.9	56.5	43.0	41.8
82.5°	77.0	78.2	114.6	133.5	103.6	88.4	77.8	59.8	48.3	36.0	34.4
85°	53.6	51.2	68.8	73.7	59.8	60.2	56.1	44.2	36.8	25.8	22.9
87.5°	29.1	30.7	36.4	31.9	29.1	29.1	36.8	30.7	26.6	14.7	10.2
90°	8.6	11.5	18.4	16.0	14.3	12.3	18.8	17.6	16.4	7.8	0.0
92.5°	2.5	2.0	3.3	3.7	4.1	4.1	7.0	7.8	8.2	2.5	0.0
95°	1.2	0.8	0.8	0.4	1.2	1.6	2.5	2.9	3.3	0.8	0.0
97.5°	1.2	1.2	0.8	0.8	0.4	0.4	0.8	0.8	0.8	0.0	0.0
100°	1.2	1.2	0.8	0.8	0.8	0.4	0.4	0.4	0.4	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: P226226

CATALOG NUMBER: MLN-B1-D-U-T4-7030-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)