

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: P226205

Luminaire Tested: **MLN-B1-D-U-T2-8030-XX**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226205
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-B1-D-U-T2-8030-XX
Description: METROLINE ARCHITECTURAL LED LUMINAIRE
80 CRI, 3000K LEDS AND TYPE II DISTRIBUTION
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4194 lumens
Efficiency: N/A
Efficacy: 99.6 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: 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

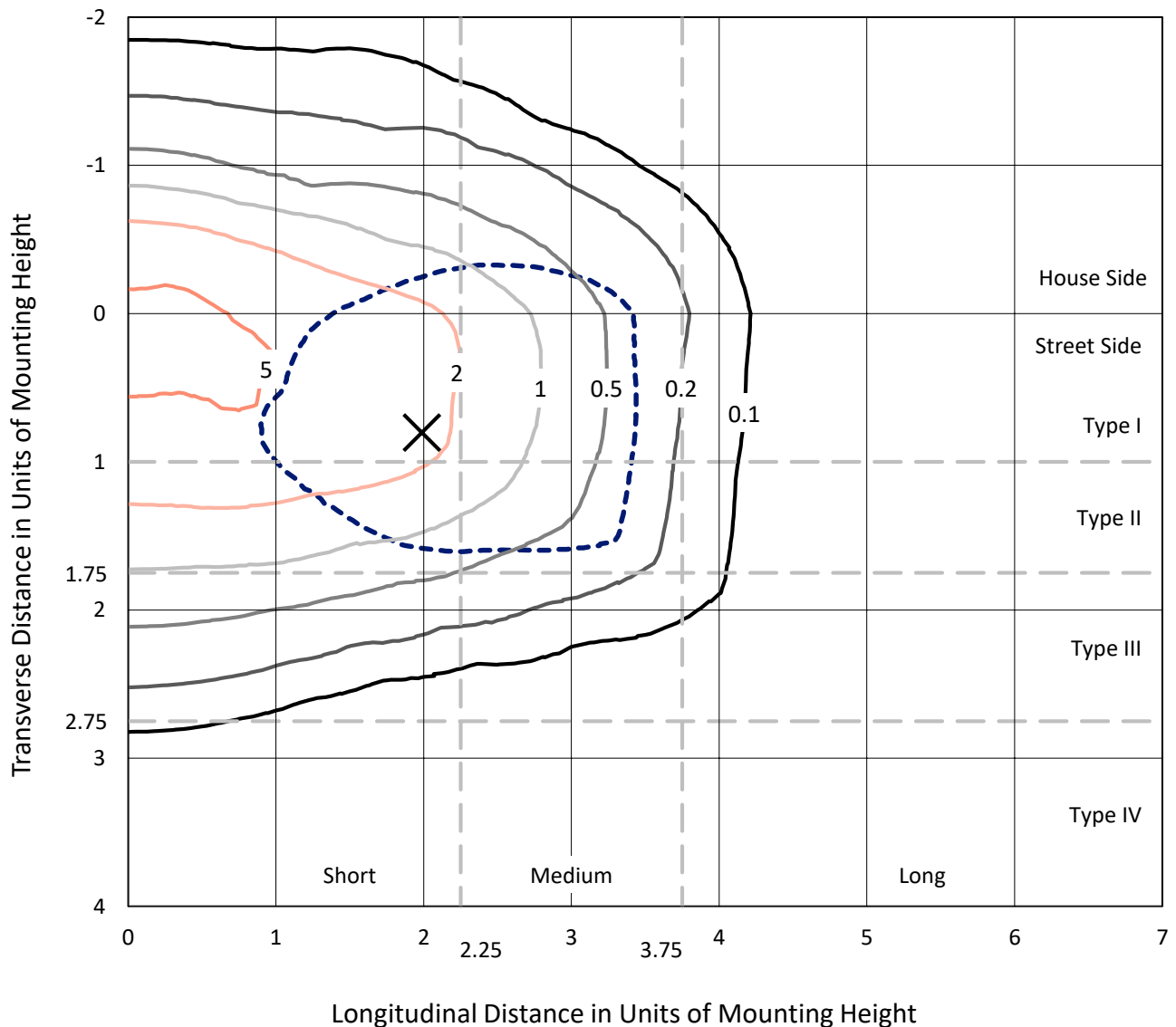


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

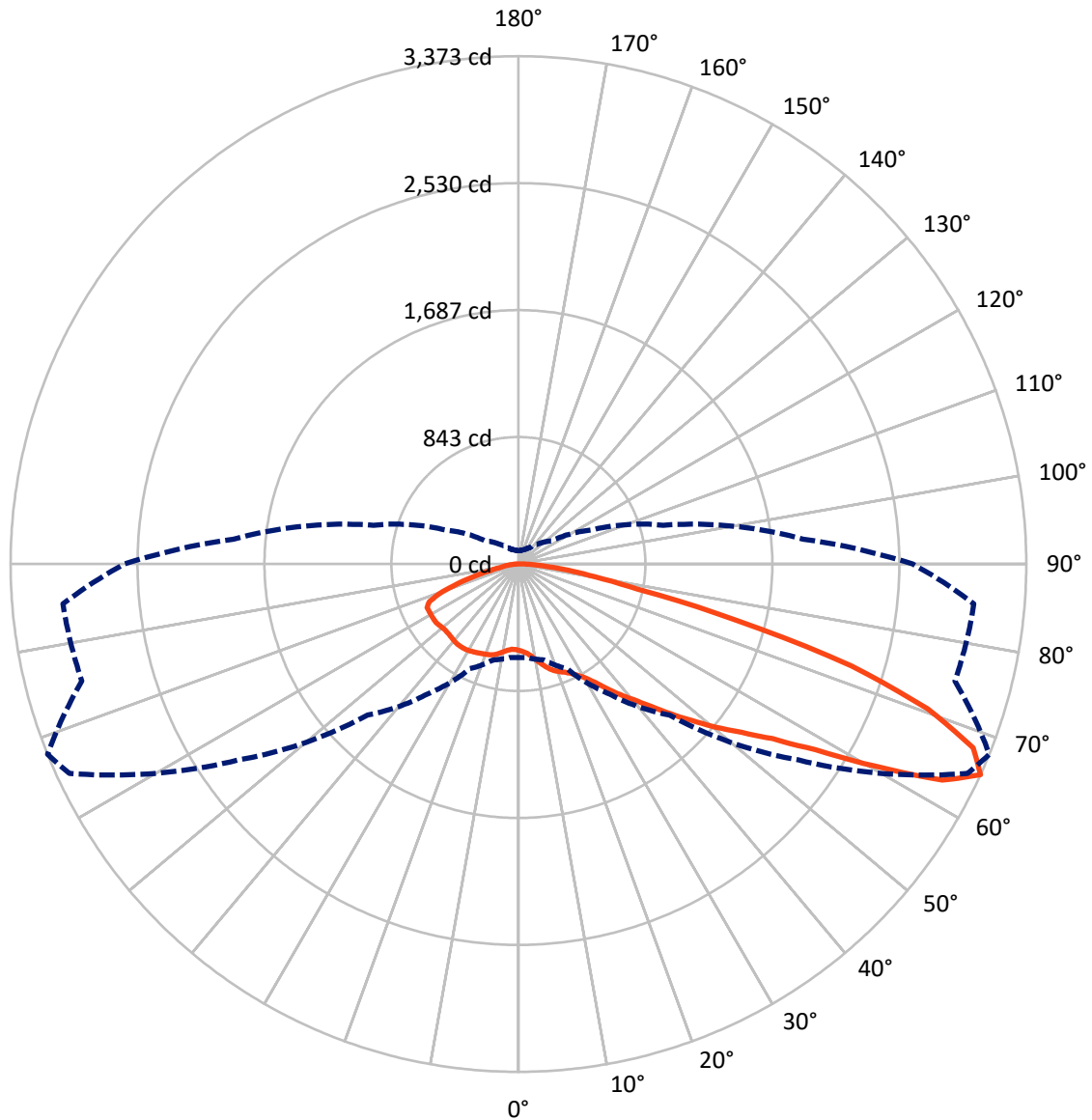


Based on 10 foot mounting height. Maximum calculated value = 6.9 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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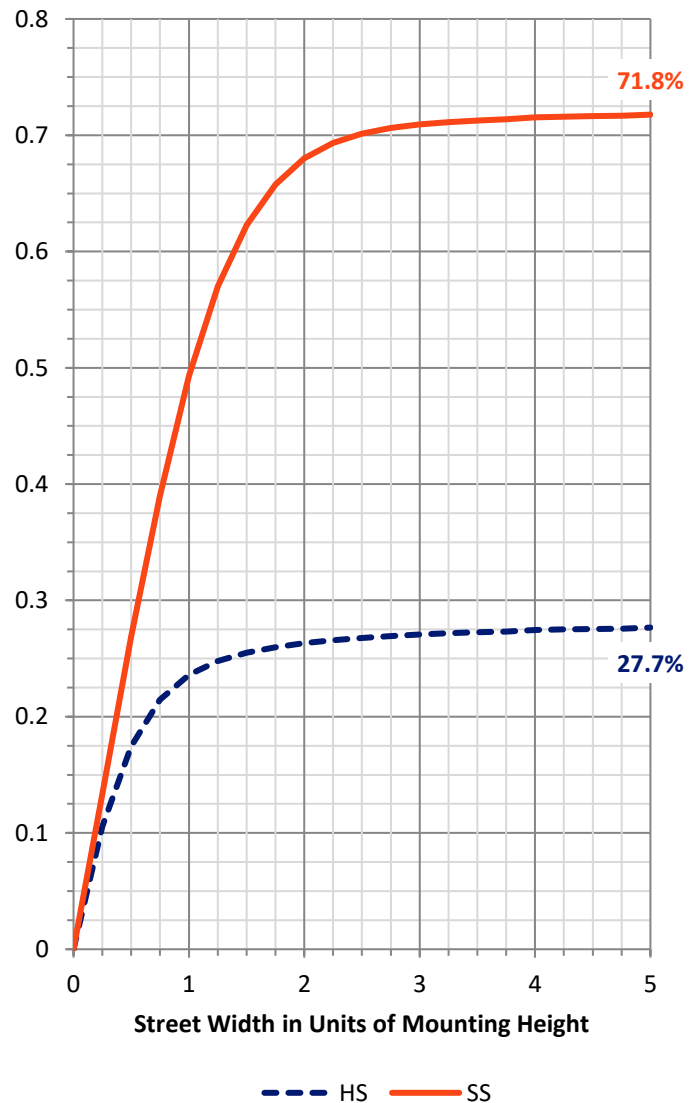
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1174.5	1.1	1175.6
	% Fixture	28.0	0.0	28.0
Street Side	Lumens	3017.1	1.3	3018.4
	% Fixture	71.9	0.0	72.0
Total	Lumens	4191.6	2.4	4194.0
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.6	1.3
10°-20°	183.3	4.4
20°-30°	311.5	7.4
30°-40°	444.3	10.6
40°-50°	652.4	15.6
50°-60°	894.9	21.3
60°-70°	1083.6	25.8
70°-80°	502.2	12.0
80°-90°	62.7	1.5
90°-100°	2.4	0.1
100°-110°	0.0	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°	4191.6	99.9
0°-180°	4194.0	100.0



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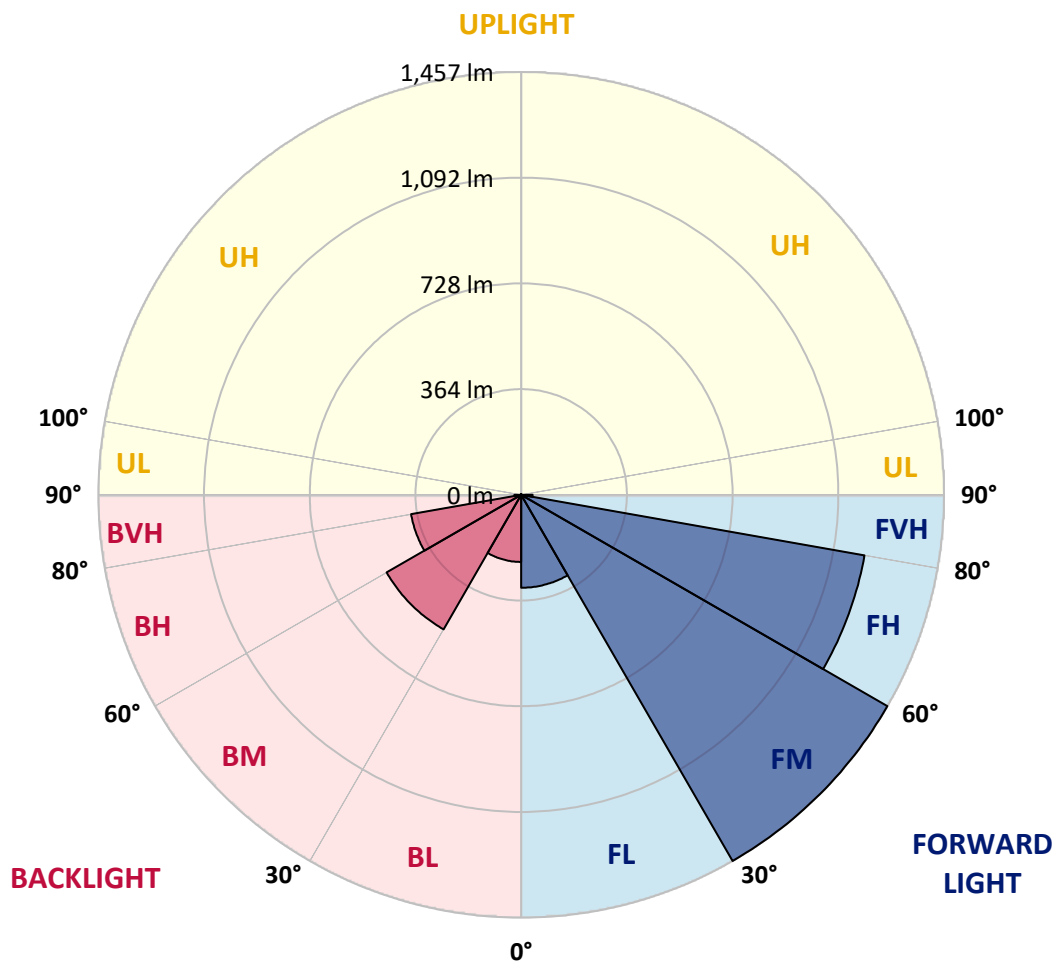
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	320.1	7.6			
FM	(30°-60°)	1456.6	34.7			
FH	(60°-80°)	1200.9	28.6			G1/1800
FVH	(80°-90°)	39.6	0.9			G1/100
BL	(0°-30°)	231.3	5.5	B1/500		
BM	(30°-60°)	535.1	12.8	B1/1000		
BH	(60°-80°)	385.0	9.2	B1/500		G1/500
BVH	(80°-90°)	23.1	0.6			G1/100
UL	(90°-100°)	2.4	0.1		U1/10	
UH	(100°-180°)	1.1	0.0		U1/10	

BUG Rating: B1-U1-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7
2.5°	605.8	601.3	595.6	594.8	588.4	589.2	586.9	583.5	582.4	578.2	572.2
5°	634.9	628.8	621.6	619.4	611.5	611.5	605.0	598.2	596.0	590.7	583.1
7.5°	669.2	663.9	655.6	651.8	641.3	639.4	629.6	620.9	617.5	611.5	602.0
10°	706.2	702.0	692.2	688.8	675.6	673.0	660.9	650.7	647.3	639.0	626.6
12.5°	739.8	735.3	727.3	722.8	711.9	708.8	695.6	684.3	680.1	670.7	656.4
15°	766.6	761.3	754.9	753.0	744.3	744.7	731.1	718.3	713.7	702.8	684.7
17.5°	783.9	779.4	774.5	774.5	770.7	775.3	763.6	746.2	741.7	727.3	706.6
20°	789.2	786.6	784.7	790.0	790.4	800.9	791.1	769.2	762.1	745.4	725.1
22.5°	786.6	785.1	786.6	794.1	802.8	826.2	816.8	789.2	780.5	762.1	745.8
25°	778.3	777.2	780.2	792.2	810.0	847.4	845.1	814.1	804.3	784.3	769.2
27.5°	763.9	765.1	771.5	784.3	814.9	868.9	877.9	848.1	836.0	812.3	796.8
30°	748.5	750.4	763.2	782.4	822.4	896.0	922.8	891.5	877.6	851.1	830.0
32.5°	731.1	734.1	754.5	783.9	840.6	933.4	981.0	953.0	939.5	905.9	874.9
35°	716.8	720.2	748.5	794.9	870.0	981.0	1059.1	1034.2	1017.6	979.8	929.3
37.5°	725.8	730.0	762.1	825.1	917.9	1039.5	1132.7	1118.7	1101.4	1062.5	996.4
40°	767.0	772.6	811.9	893.0	1001.4	1122.5	1212.7	1201.0	1186.7	1159.5	1083.6
42.5°	810.0	815.7	865.5	976.1	1121.8	1248.2	1314.6	1299.5	1292.7	1276.9	1196.1
45°	836.0	845.5	901.0	1041.4	1234.2	1392.8	1449.8	1412.0	1419.9	1424.1	1331.6
47.5°	853.8	862.8	920.2	1088.9	1318.8	1515.4	1607.1	1535.1	1555.1	1569.4	1465.2
50°	864.7	873.8	932.7	1117.6	1369.0	1593.9	1758.1	1678.9	1704.5	1707.2	1595.1
52.5°	865.5	874.2	930.0	1118.4	1378.8	1639.6	1872.9	1843.0	1858.1	1846.8	1743.0
55°	844.3	852.3	907.4	1083.6	1341.0	1650.5	1978.9	2044.2	2046.1	2031.0	1950.6
57.5°	813.0	819.0	870.4	1033.8	1286.7	1637.3	2088.0	2336.4	2325.4	2311.8	2278.2
60°	793.0	796.8	842.1	993.4	1247.8	1593.2	2217.5	2740.2	2729.3	2657.2	2702.9
62.5°	742.0	744.7	791.1	933.4	1212.3	1524.1	2288.4	3147.1	3160.7	2913.1	2970.8
65°	621.6	622.8	659.8	768.1	1053.4	1418.0	2269.2	3291.3	3373.2	3001.8	3036.9
67.5°	452.6	451.4	471.4	538.6	755.6	1220.3	2136.3	3085.2	3256.6	3061.8	2976.1
70°	293.6	294.0	305.3	335.5	451.0	857.2	1724.2	2711.2	2884.0	2963.7	2707.4
72.5°	153.6	158.5	154.8	169.5	254.8	490.3	1122.9	2235.2	2313.0	2393.4	2107.6
75°	77.0	80.0	84.5	91.0	129.1	288.0	656.7	1566.4	1499.2	1318.0	1205.9
77.5°	57.0	59.3	64.2	67.9	80.8	164.9	456.3	883.2	811.1	639.0	574.8
80°	40.4	43.0	51.3	55.1	60.0	79.6	295.9	506.9	512.2	387.3	191.0
82.5°	22.6	27.6	37.4	42.7	43.4	50.2	120.0	317.4	329.9	212.9	69.1
85°	11.3	17.0	26.8	32.1	29.1	31.3	59.3	152.5	163.1	119.6	37.7
87.5°	0.8	10.2	18.5	21.9	20.0	20.0	27.9	69.1	71.3	62.7	21.5
90°	0.0	6.0	11.3	13.2	11.3	9.8	11.3	22.3	24.2	18.5	4.5
92.5°	0.0	2.3	5.3	4.9	3.8	2.3	1.9	1.1	0.8	0.4	0.4
95°	0.0	0.4	1.1	0.8	0.8	0.4	0.4	0.4	0.4	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.4
100°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.0	0.0	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
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°	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7
2.5°	571.8	570.7	568.8	566.9	565.8	563.9	558.2	556.0	557.5	563.9	565.0
5°	582.0	579.7	572.6	566.5	562.0	557.5	548.4	544.3	543.1	548.4	550.3
7.5°	598.6	595.6	584.3	573.3	563.5	554.5	540.5	532.6	529.5	533.3	534.8
10°	623.2	617.1	601.3	584.3	568.8	553.7	533.7	520.9	514.8	517.1	517.8
12.5°	650.3	643.2	622.0	598.6	576.4	554.5	526.9	508.8	500.1	500.5	500.9
15°	677.5	667.7	641.6	612.6	583.5	555.2	520.9	497.5	484.3	483.5	483.5
17.5°	697.5	686.6	654.9	620.9	588.1	554.5	514.1	485.4	470.3	466.9	466.9
20°	716.0	703.2	663.9	624.7	587.3	551.4	505.4	472.6	453.3	448.4	449.2
22.5°	735.6	719.4	672.6	628.4	585.0	546.2	495.6	455.6	432.5	426.9	427.3
25°	757.1	737.1	682.4	633.7	584.7	537.9	477.8	431.8	408.0	402.4	402.7
27.5°	782.4	755.3	691.5	639.0	581.3	522.0	451.0	405.7	381.6	376.3	376.3
30°	812.6	776.0	703.6	643.2	570.3	496.7	423.9	379.7	355.2	349.1	348.0
32.5°	848.5	802.8	720.9	643.5	550.7	465.4	396.7	354.4	329.9	322.3	322.0
35°	894.9	837.5	742.4	637.5	525.0	436.7	374.0	329.5	304.6	297.8	297.4
37.5°	951.2	886.2	767.7	626.6	499.4	412.2	348.4	304.2	277.0	268.7	268.4
40°	1029.7	949.3	789.2	613.0	476.3	389.5	322.0	274.4	246.8	238.9	237.8
42.5°	1122.9	1018.3	802.8	599.8	459.0	363.1	289.9	242.7	217.8	213.3	212.1
45°	1222.5	1087.8	811.1	589.9	443.5	331.4	253.6	214.8	194.8	190.2	189.1
47.5°	1321.4	1149.3	817.9	585.8	423.9	292.1	223.4	193.2	175.9	171.7	170.6
50°	1424.1	1203.7	826.6	585.0	395.6	254.0	198.9	174.8	158.5	153.2	151.7
52.5°	1543.0	1265.2	842.1	587.3	355.2	227.2	181.9	156.3	140.0	134.0	132.5
55°	1701.9	1349.0	860.9	589.2	309.9	211.0	167.6	138.1	121.9	115.9	114.4
57.5°	1941.6	1469.4	881.7	581.6	277.4	201.6	152.9	121.5	107.9	103.0	102.7
60°	2257.1	1629.8	910.4	568.4	261.2	194.8	140.4	110.6	100.8	95.9	95.1
62.5°	2501.3	1783.4	950.8	551.1	258.9	189.9	133.2	106.8	97.0	91.0	90.6
65°	2617.6	1898.9	996.4	533.7	267.2	189.5	133.2	107.2	95.9	89.1	87.9
67.5°	2607.4	1918.9	981.3	499.7	266.5	191.0	137.8	108.7	97.0	88.7	87.6
70°	2422.4	1808.3	881.7	419.7	239.7	178.2	136.3	109.5	97.8	87.6	85.7
72.5°	1994.4	1550.2	717.9	306.5	198.5	152.1	125.3	106.8	94.7	84.5	82.7
75°	1281.4	1099.1	513.7	206.8	155.1	126.4	110.2	99.3	86.8	78.1	77.0
77.5°	562.8	489.2	271.8	148.0	122.7	101.5	91.0	84.5	76.6	65.7	62.7
80°	152.5	128.3	113.6	121.2	95.1	80.0	72.8	69.4	64.2	49.8	46.4
82.5°	61.1	59.3	72.5	93.2	67.9	56.2	55.5	53.2	51.7	36.2	32.8
85°	34.7	35.5	45.3	58.1	40.0	34.0	35.9	37.7	38.5	24.9	23.0
87.5°	17.7	18.9	28.7	27.9	23.0	17.4	20.0	23.0	23.8	13.2	9.4
90°	2.3	3.4	11.3	12.1	9.4	6.8	9.1	10.6	12.1	6.4	1.1
92.5°	0.4	0.4	0.8	2.3	2.6	1.9	2.6	3.8	4.5	2.3	0.0
95°	0.4	0.4	0.4	0.4	0.8	0.8	0.8	1.1	1.5	0.4	0.0
97.5°	0.4	0.4	0.8	0.8	0.8	0.4	0.0	0.0	0.0	0.0	0.0
100°	0.4	0.4	0.8	0.8	0.8	0.4	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



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CATALOG NUMBER: MLN-B1-D-U-T2-8030-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)