

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: P231181

Luminaire Tested: **ARCH-M-AF48-60-D-U-T3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231181
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-60-D-U-T3-7050
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 405mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8725 lumens
Efficiency: N/A
Efficacy: 138.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 63
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



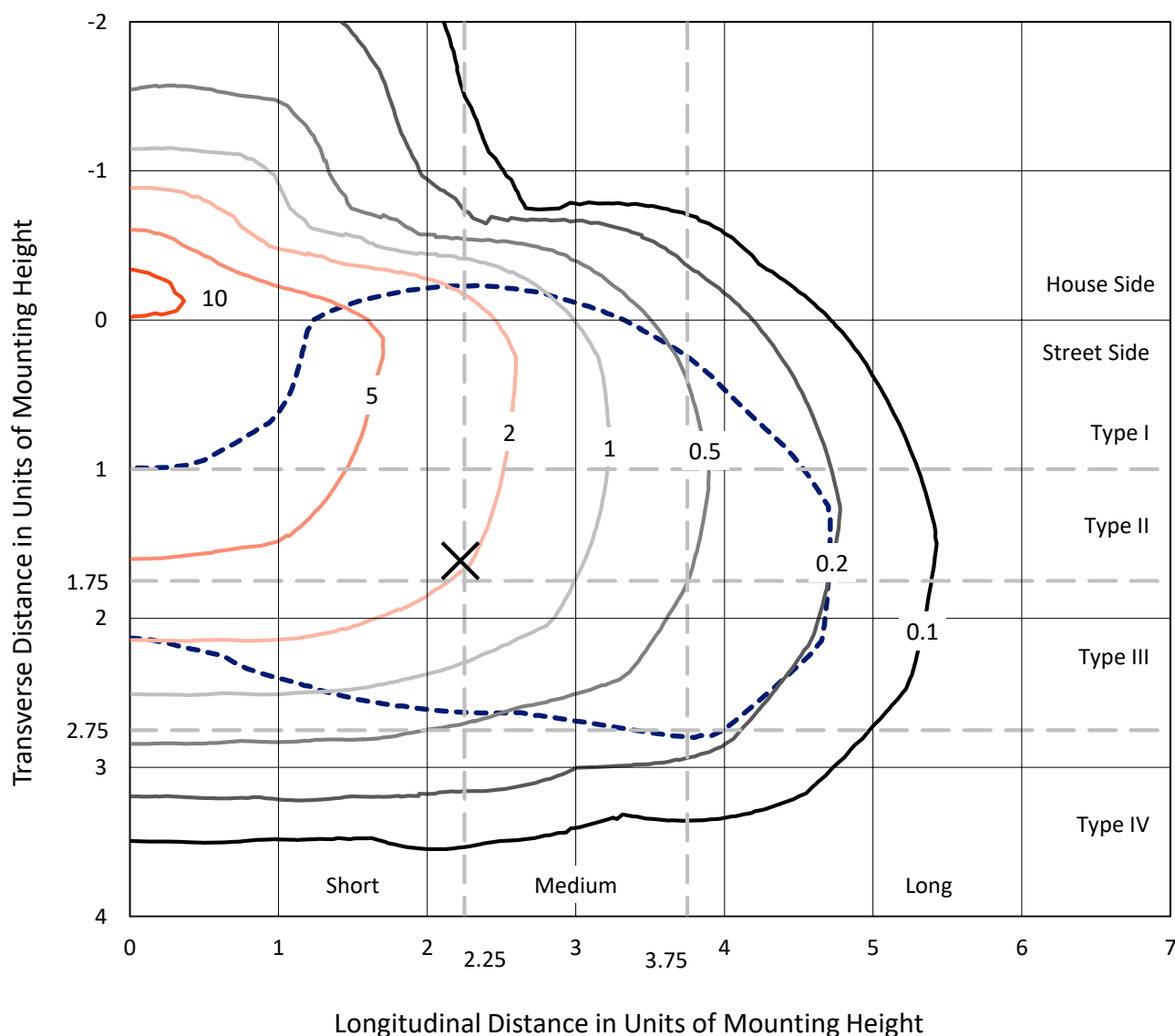
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

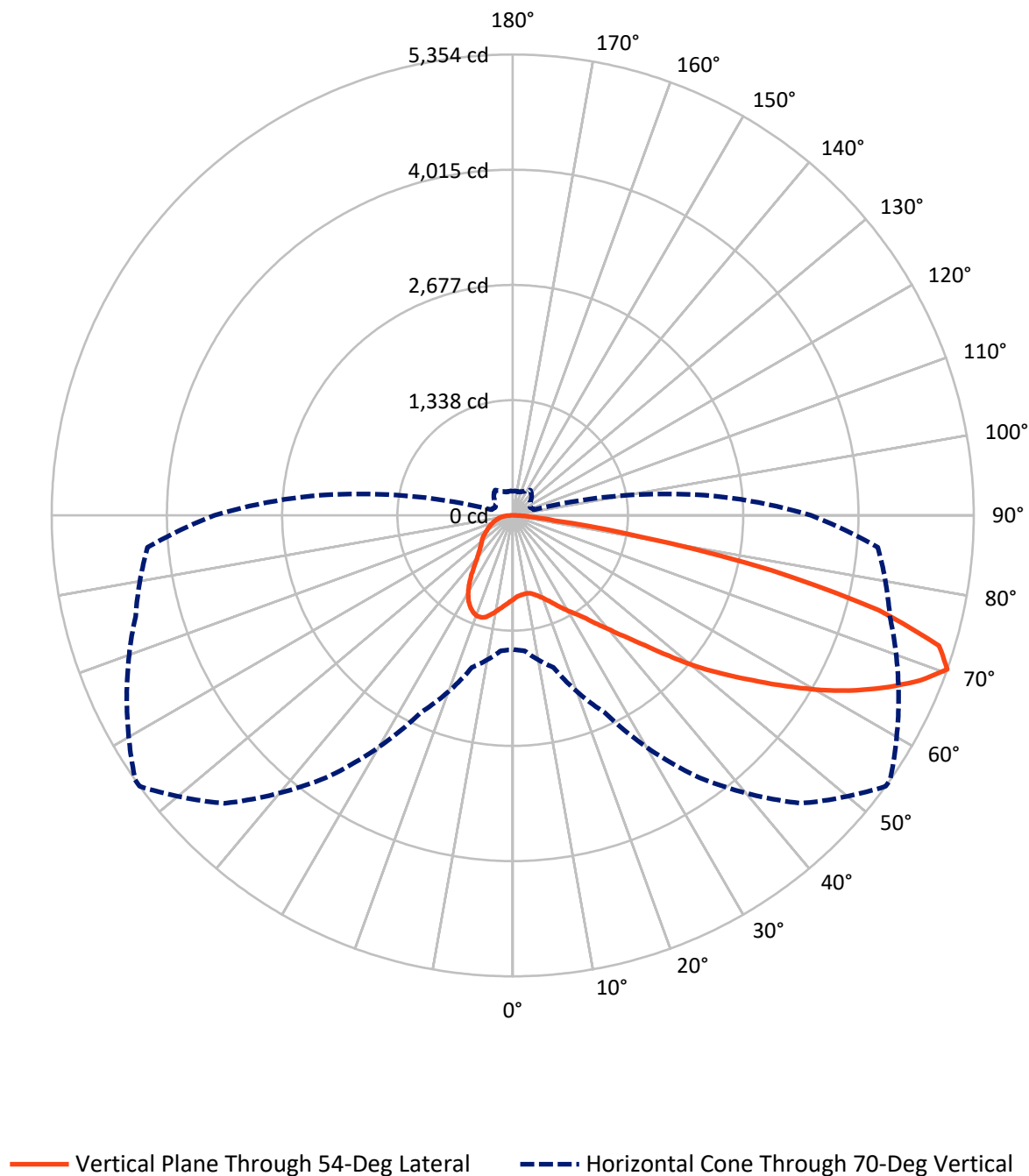


Based on 10 foot mounting height. Maximum calculated value = 11.3 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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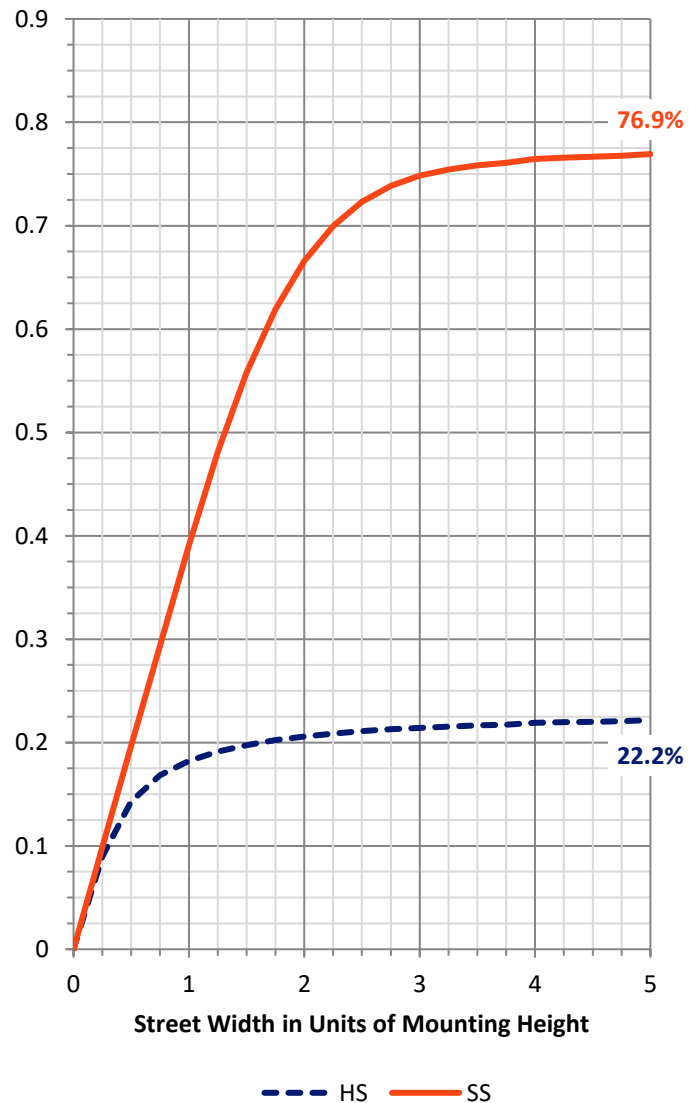
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1978.8	0.0	1978.8
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	6746.2	0.0	6746.2
	% Fixture	77.3	0.0	77.3
Total	Lumens	8725.0	0.0	8725.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.8	1.1
10°-20°	306.1	3.5
20°-30°	531.8	6.1
30°-40°	777.2	8.9
40°-50°	1219.7	14.0
50°-60°	1875.6	21.5
60°-70°	2291.6	26.3
70°-80°	1420.8	16.3
80°-90°	206.4	2.4
90°-100°	0.0	0.0
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°	8725.0	100.0
0°-180°	8725.0	100.0

Coefficient of Utilization



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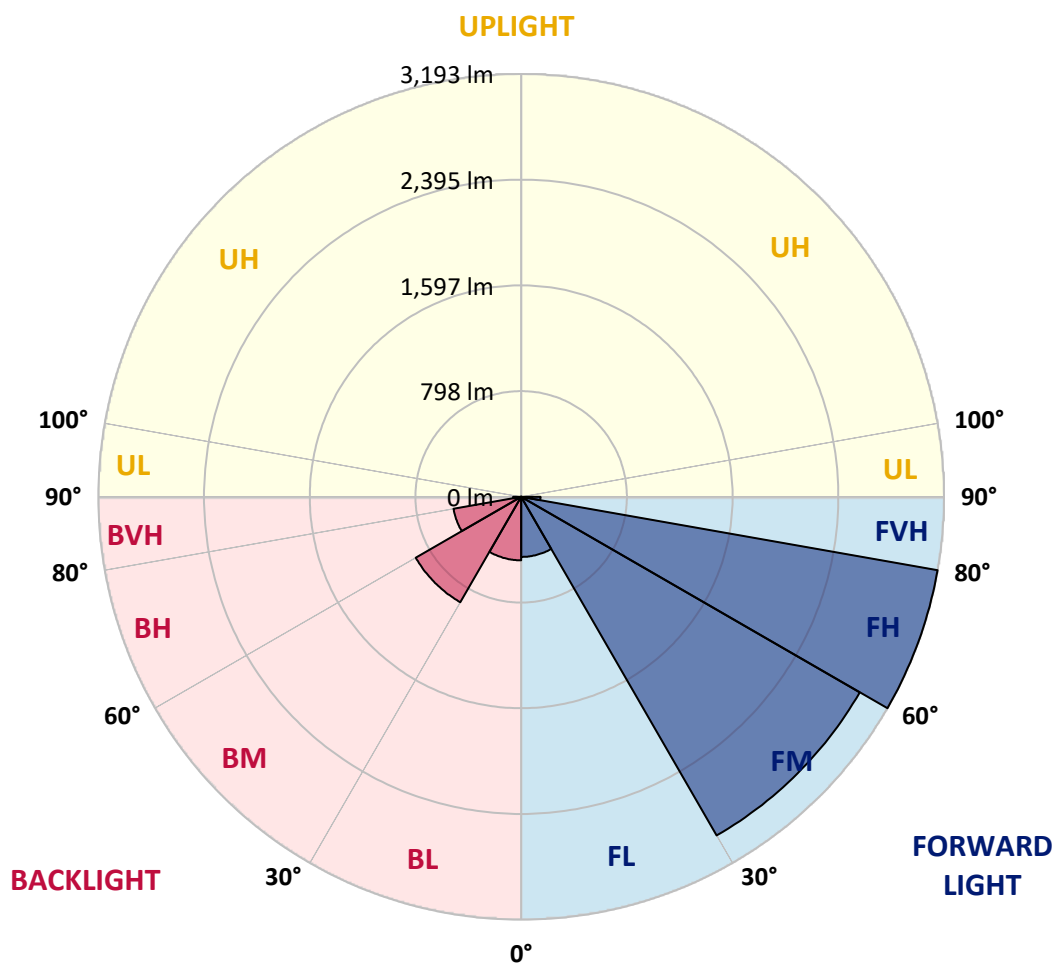
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	454.0	5.2			
FM	(30°-60°)	2953.0	33.8			
FH	(60°-80°)	3193.5	36.6			G2/5000
FVH	(80°-90°)	145.7	1.7			G2/225
BL	(0°-30°)	479.7	5.5	B1/500		
BM	(30°-60°)	919.5	10.5	B1/1000		
BH	(60°-80°)	518.9	5.9	B2/1000		G2/1000
BVH	(80°-90°)	60.7	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	976.2	976.2	976.2	976.2	976.2	976.2	976.2	976.2	976.2	976.2	976.2
2.5°	937.8	934.6	934.6	939.4	941.0	945.8	945.8	947.4	952.2	960.2	969.8
5°	909.1	907.5	909.1	915.4	918.6	928.2	931.4	933.0	942.6	955.4	969.8
7.5°	880.3	878.7	881.9	891.5	901.1	915.4	923.4	925.0	939.4	957.0	976.2
10°	870.7	869.1	873.9	881.9	891.5	907.5	920.2	921.8	942.6	963.4	990.5
12.5°	883.5	881.9	886.7	894.7	904.3	915.4	929.8	931.4	958.6	985.7	1014.5
15°	915.4	915.4	917.0	921.8	931.4	941.0	953.8	955.4	984.1	1016.1	1044.8
17.5°	965.0	961.8	961.8	960.2	966.6	971.4	987.3	988.9	1019.3	1048.0	1076.8
20°	1025.7	1024.1	1017.7	1009.7	1008.1	1011.3	1027.3	1028.9	1059.2	1083.2	1110.4
22.5°	1099.2	1100.8	1086.4	1068.8	1060.8	1065.6	1080.0	1081.6	1104.0	1124.7	1148.7
25°	1196.6	1191.8	1171.1	1145.5	1129.5	1129.5	1143.9	1143.9	1164.7	1177.5	1193.4
27.5°	1289.3	1279.7	1260.5	1223.8	1198.2	1203.0	1217.4	1217.4	1236.6	1241.4	1249.3
30°	1389.9	1380.4	1356.4	1310.1	1276.5	1273.3	1290.9	1289.3	1314.8	1313.3	1306.9
32.5°	1513.0	1508.2	1468.2	1409.1	1364.4	1353.2	1369.2	1370.8	1386.7	1381.9	1361.2
35°	1685.5	1683.9	1647.2	1543.3	1484.2	1463.4	1473.0	1473.0	1484.2	1471.4	1436.3
37.5°	1902.8	1906.0	1874.0	1720.6	1637.6	1602.4	1604.0	1602.4	1605.6	1591.2	1554.5
40°	2120.1	2128.0	2126.4	1941.1	1835.7	1775.0	1752.6	1749.4	1757.4	1751.0	1715.9
42.5°	2406.0	2425.2	2380.5	2212.7	2094.5	1992.2	1931.5	1923.5	1941.1	1949.1	1915.6
45°	2703.2	2696.8	2626.5	2505.1	2398.0	2267.0	2152.0	2139.2	2152.0	2176.0	2140.8
47.5°	2858.2	2853.4	2835.8	2775.1	2759.1	2608.9	2434.8	2423.6	2399.6	2433.2	2391.7
50°	3113.8	3118.6	3046.7	3040.3	3107.4	3024.3	2754.3	2728.8	2685.6	2712.8	2677.6
52.5°	3299.1	3278.3	3233.6	3289.5	3498.8	3454.1	3054.7	3043.5	3003.5	2997.2	2981.2
55°	3374.2	3374.2	3382.2	3511.6	3810.3	3751.2	3380.6	3391.8	3337.4	3292.7	3313.5
57.5°	3396.6	3406.1	3474.8	3688.9	4176.2	3982.9	3740.0	3756.0	3677.7	3588.3	3653.8
60°	3286.3	3315.1	3479.6	3789.6	4382.3	4228.9	4118.7	4123.5	4010.0	3879.0	3994.1
62.5°	3003.5	3038.7	3332.7	3831.1	4348.7	4481.3	4476.6	4487.7	4332.8	4169.8	4313.6
65°	2656.9	2692.0	3005.1	3714.5	4323.2	4661.9	4804.1	4834.4	4634.7	4415.8	4513.3
67.5°	2147.2	2193.5	2490.7	3321.5	4198.6	4810.5	5110.8	5142.8	4868.0	4543.7	4495.7
70°	1556.1	1578.5	1827.7	2524.3	3690.5	4729.0	5353.7	5352.1	4944.7	4534.1	4256.1
72.5°	749.3	766.9	982.5	1567.3	2639.3	4013.2	5177.9	5208.3	4839.2	4395.1	3708.1
75°	308.3	325.9	397.8	661.4	1385.1	2652.1	4388.7	4460.6	4395.1	3944.5	2901.3
77.5°	191.7	198.1	233.3	341.9	632.7	1238.2	3072.2	3169.7	3482.8	3160.1	1915.6
80°	143.8	148.6	174.1	239.6	399.4	456.9	1525.7	1648.8	2110.5	1813.3	867.5
82.5°	119.8	121.4	139.0	174.1	271.6	262.0	488.9	544.8	984.1	691.8	298.8
85°	111.8	115.0	124.6	124.6	172.5	164.6	202.9	212.5	286.0	236.4	103.8
87.5°	57.5	54.3	110.2	97.5	89.5	79.9	86.3	92.7	107.0	113.4	46.3
90°	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°	976.2	976.2	976.2	976.2	976.2	976.2	976.2	976.2	976.2	976.2	976.2
2.5°	973.0	977.7	985.7	993.7	1003.3	1014.5	1020.9	1028.9	1035.3	1032.1	1030.5
5°	977.7	985.7	1003.3	1019.3	1038.5	1060.8	1075.2	1091.2	1104.0	1107.2	1102.4
7.5°	985.7	1000.1	1024.1	1052.8	1078.4	1107.2	1129.5	1151.9	1167.9	1171.1	1171.1
10°	1004.9	1020.9	1052.8	1091.2	1121.5	1151.9	1177.5	1195.0	1209.4	1215.8	1215.8
12.5°	1032.1	1051.2	1089.6	1135.9	1169.5	1198.2	1212.6	1220.6	1227.0	1233.4	1235.0
15°	1064.0	1084.8	1131.1	1180.6	1215.8	1230.2	1230.2	1228.6	1228.6	1231.8	1235.0
17.5°	1096.0	1118.3	1166.3	1219.0	1241.4	1233.4	1222.2	1217.4	1214.2	1212.6	1217.4
20°	1129.5	1151.9	1199.8	1249.3	1243.0	1209.4	1193.4	1182.2	1172.7	1167.9	1174.3
22.5°	1166.3	1187.0	1236.6	1270.1	1222.2	1171.1	1140.7	1123.1	1107.2	1097.6	1104.0
25°	1209.4	1230.2	1278.1	1276.5	1185.4	1113.5	1065.6	1036.9	1019.3	1009.7	1009.7
27.5°	1260.5	1278.1	1324.4	1260.5	1134.3	1036.9	966.6	939.4	934.6	926.6	926.6
30°	1313.3	1327.6	1367.6	1223.8	1064.0	936.2	859.5	846.7	848.3	840.4	842.0
32.5°	1367.6	1381.9	1393.1	1169.5	973.0	822.8	771.7	762.1	760.5	754.1	747.7
35°	1444.3	1465.0	1396.3	1096.0	862.7	728.5	691.8	682.2	672.6	650.2	650.2
37.5°	1560.9	1583.3	1388.3	1004.9	749.3	655.0	621.5	608.7	592.7	570.4	562.4
40°	1720.6	1720.6	1370.8	902.7	658.2	595.9	564.0	548.0	530.4	508.0	503.3
42.5°	1909.2	1864.4	1343.6	798.8	591.1	556.0	527.2	509.6	488.9	463.3	460.1
45°	2129.6	2008.2	1305.3	706.2	541.6	532.0	514.4	484.1	448.9	421.8	417.0
47.5°	2343.7	2137.6	1268.5	640.6	500.1	522.4	508.0	456.9	409.0	370.6	365.9
50°	2578.6	2252.7	1225.4	586.3	468.1	516.0	500.1	417.0	364.3	337.1	333.9
52.5°	2813.4	2369.3	1179.1	528.8	440.9	503.3	480.9	388.2	362.7	325.9	321.1
55°	3061.1	2505.1	1124.7	464.9	409.0	477.7	455.3	386.6	373.8	325.9	314.7
57.5°	3302.3	2655.3	1036.9	402.6	373.8	439.3	445.7	377.0	349.9	322.7	309.9
60°	3569.1	2815.0	891.5	349.9	343.5	407.4	433.0	356.3	322.7	313.1	306.7
62.5°	3783.2	2958.8	696.6	313.1	317.9	381.8	417.0	343.5	311.5	303.5	302.0
65°	3875.8	2962.0	500.1	281.2	292.4	357.9	401.0	332.3	302.0	298.8	297.2
67.5°	3778.4	2799.0	351.5	250.8	265.2	335.5	380.2	321.1	292.4	294.0	290.8
70°	3463.7	2455.6	257.2	222.1	239.6	311.5	357.9	306.7	281.2	284.4	279.6
72.5°	2898.1	1914.0	206.1	198.1	218.9	286.0	335.5	290.8	263.6	265.2	255.6
75°	2140.8	1268.5	172.5	177.3	194.9	262.0	306.7	270.0	244.4	238.0	231.7
77.5°	1273.3	651.8	142.2	155.0	174.1	233.3	274.8	244.4	223.7	212.5	207.7
80°	525.6	263.6	116.6	131.0	151.8	207.7	242.8	214.1	199.7	188.5	182.1
82.5°	209.3	129.4	92.7	107.0	127.8	180.5	212.5	188.5	174.1	166.2	148.6
85°	79.9	63.9	62.3	75.1	95.9	139.0	175.7	158.2	147.0	126.2	121.4
87.5°	32.0	28.8	28.8	36.7	54.3	87.9	126.2	110.2	115.0	91.1	92.7
90°	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)