

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: P157320

Luminaire Tested: **VST-E02-LED-E-U-5MQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157320
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33708)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E02-LED-E-U-5MQ
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (42) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6397.7 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

Input Watts (W): 52.1
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



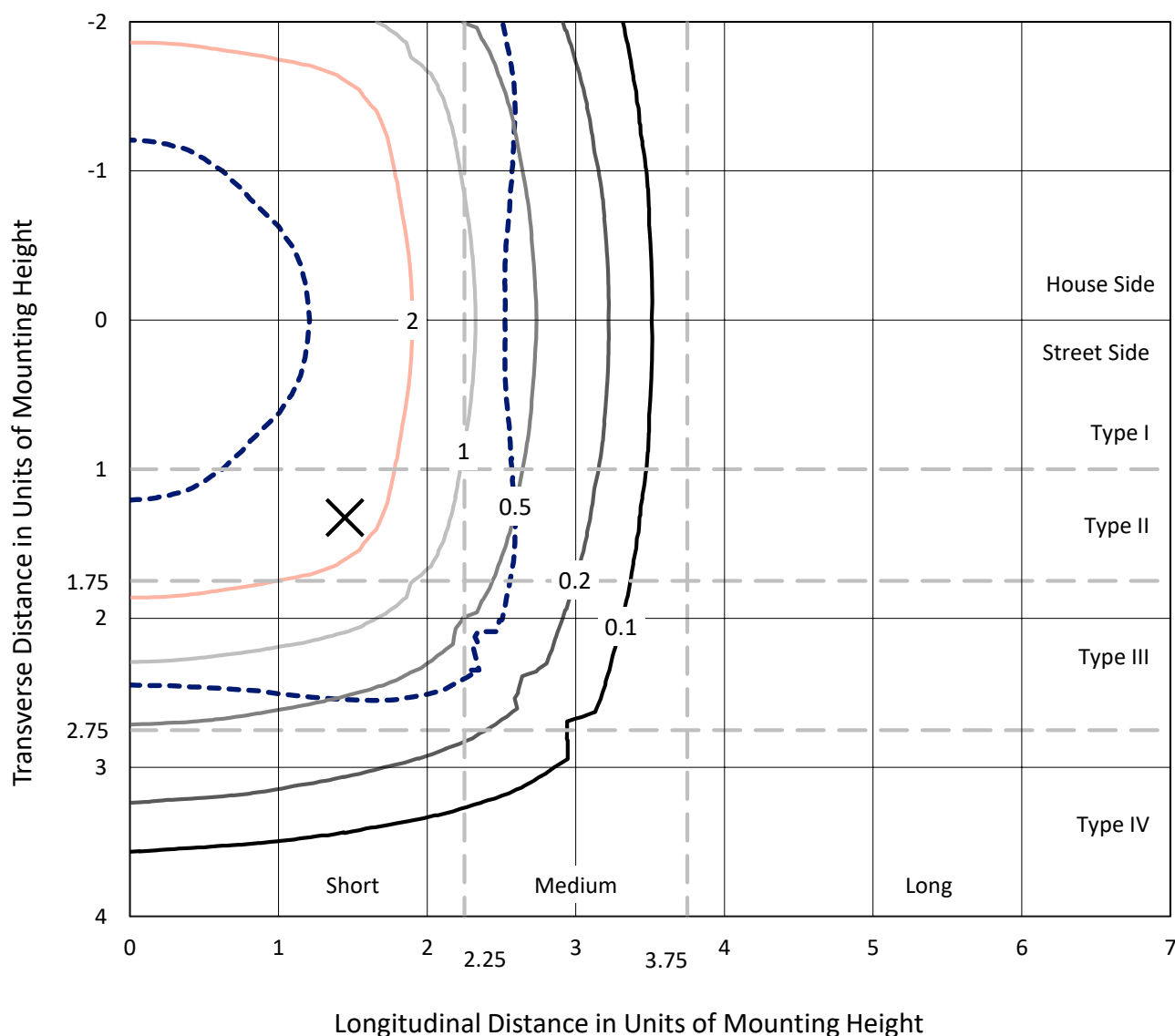
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

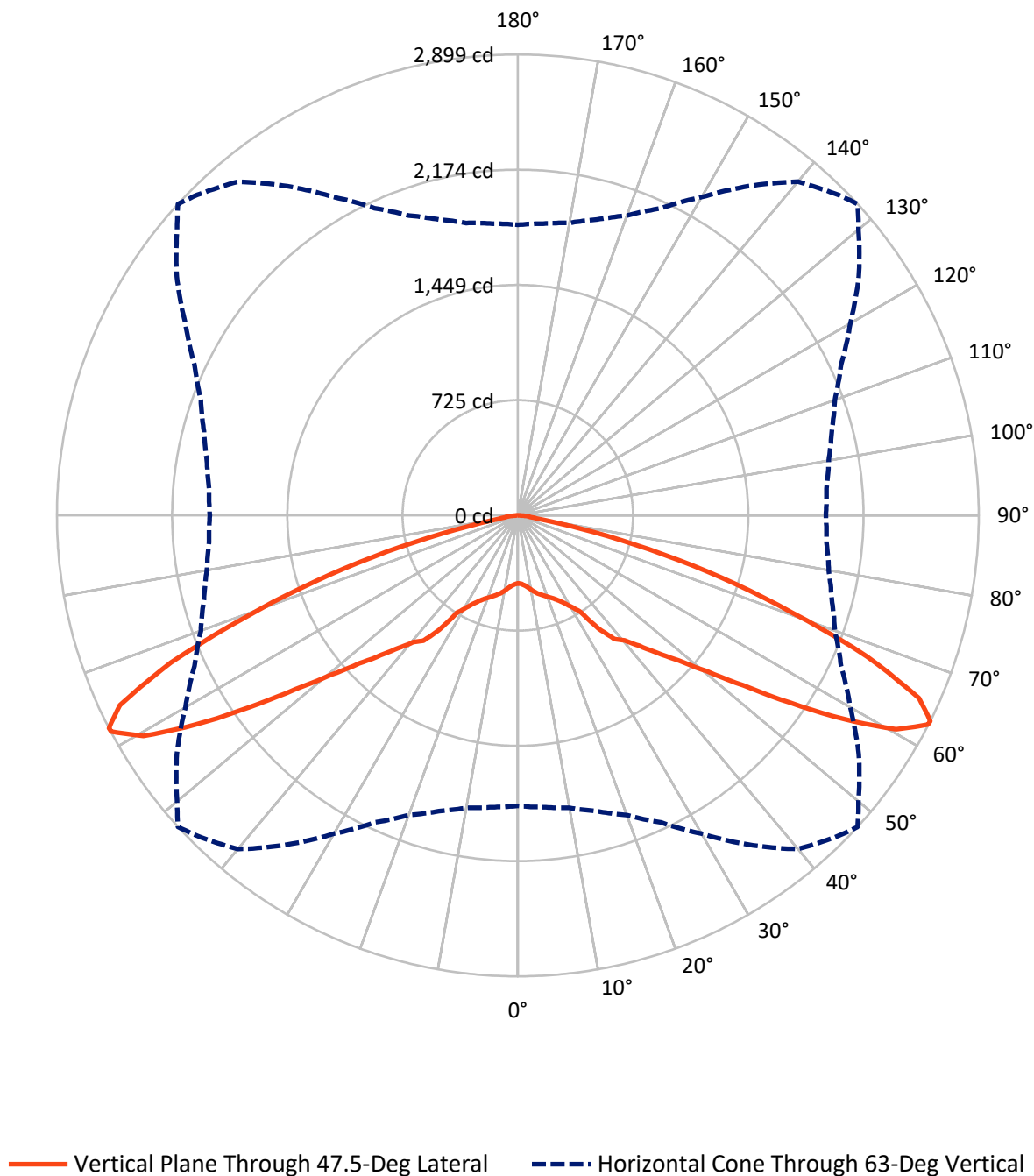


Based on 10 foot mounting height. Maximum calculated value = 4.7 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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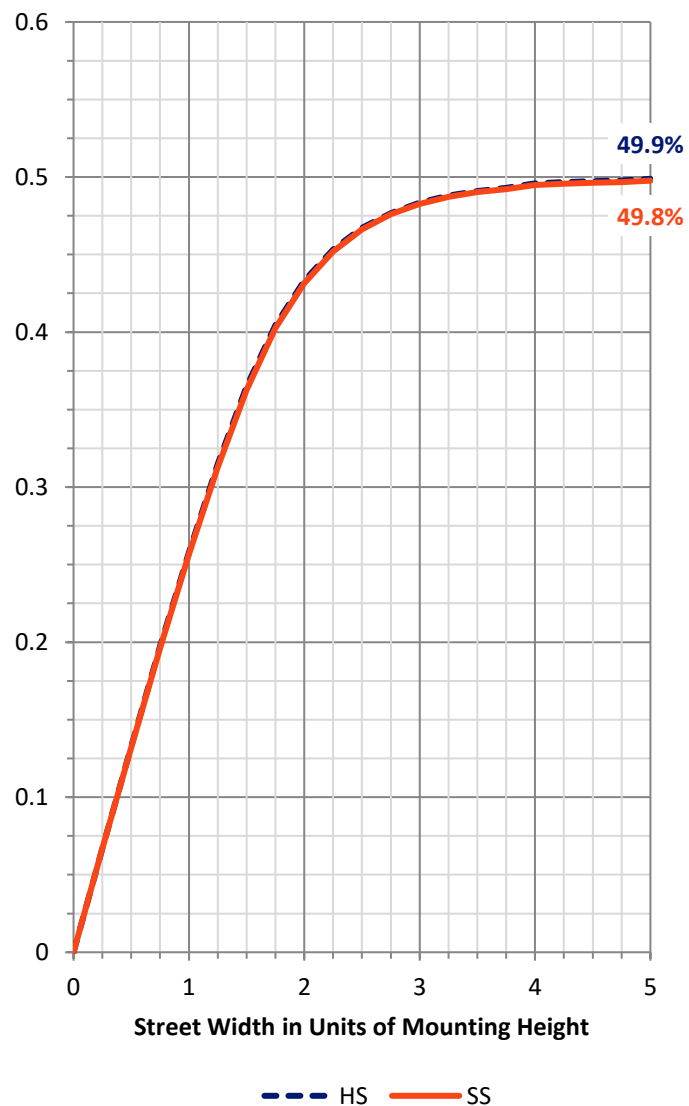
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3198.9	0.0	3198.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3198.9	0.0	3198.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	6397.7	0.0	6397.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	0.7
10°-20°	145.8	2.3
20°-30°	278.9	4.4
30°-40°	533.4	8.3
40°-50°	923.0	14.4
50°-60°	1657.7	25.9
60°-70°	2015.8	31.5
70°-80°	728.0	11.4
80°-90°	72.1	1.1
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°	6397.7	100.0
0°-180°	6397.7	100.0

Coefficient of Utilization



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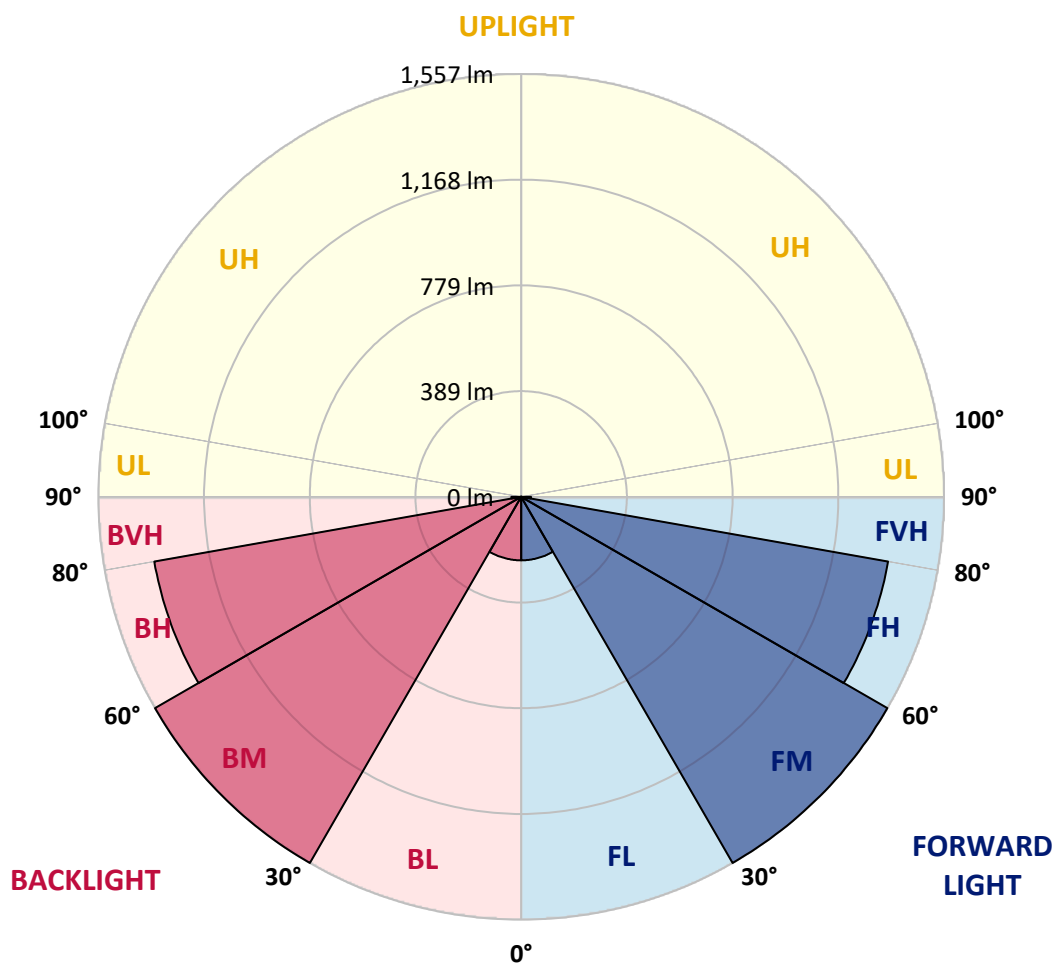
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	233.8	3.7			
FM	(30°-60°)	1557.1	24.3			
FH	(60°-80°)	1371.9	21.4			G1/1800
FVH	(80°-90°)	36.1	0.6			G1/100
BL	(0°-30°)	233.8	3.7	B1/500		
BM	(30°-60°)	1557.1	24.3	B2/2500		
BH	(60°-80°)	1371.9	21.4	B3/2500		G1/1800
BVH	(80°-90°)	36.1	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2
2.5°	430.0	429.2	429.6	430.0	429.6	429.2	429.2	429.2	430.0	429.2	431.2
5°	438.4	437.6	438.0	438.0	438.0	437.2	437.2	437.2	436.8	437.2	441.6
7.5°	454.4	453.2	452.8	453.6	452.8	452.4	452.0	452.0	451.2	451.2	456.8
10°	473.6	472.0	472.8	473.2	472.0	471.2	471.2	471.2	470.0	469.6	476.8
12.5°	494.8	494.0	494.0	493.2	492.8	492.0	491.6	492.0	490.4	490.4	497.6
15°	515.2	513.6	514.0	512.8	512.0	511.2	510.8	510.4	509.6	509.6	514.0
17.5°	534.0	532.8	532.4	531.2	530.0	528.8	528.0	527.6	526.4	526.4	530.4
20°	553.6	552.4	551.6	549.6	547.6	546.4	544.8	544.0	542.4	542.8	547.2
22.5°	576.0	574.0	572.4	570.8	567.2	564.8	562.8	561.2	560.4	560.4	566.4
25°	606.0	604.8	602.4	597.2	592.8	589.2	586.0	584.4	582.8	582.0	591.2
27.5°	642.8	641.6	638.4	633.2	627.2	621.2	617.6	614.8	612.8	611.6	624.8
30°	691.6	689.6	686.8	678.4	673.2	664.0	660.0	656.0	651.6	652.8	668.4
32.5°	787.2	784.4	775.6	766.4	750.4	738.0	725.2	715.6	706.4	705.2	722.0
35°	874.0	872.8	871.2	864.8	858.8	851.2	845.2	835.2	826.8	824.8	872.0
37.5°	920.8	923.6	921.2	920.4	920.4	924.0	935.2	946.4	954.4	959.2	985.6
40°	992.4	992.4	989.6	988.0	984.8	989.6	994.4	1002.8	1006.4	1006.8	1033.6
42.5°	1073.6	1074.0	1071.2	1066.4	1064.8	1069.2	1075.6	1083.6	1088.4	1089.6	1120.8
45°	1164.0	1162.8	1160.4	1158.8	1160.0	1164.0	1171.6	1187.2	1194.4	1200.0	1234.0
47.5°	1262.0	1270.0	1263.2	1264.4	1264.4	1276.8	1294.0	1306.8	1318.4	1329.2	1365.2
50°	1390.4	1391.6	1392.8	1396.4	1398.8	1415.2	1436.8	1452.0	1468.8	1482.8	1541.6
52.5°	1562.0	1559.6	1565.6	1569.6	1583.2	1592.0	1628.0	1647.2	1670.4	1688.4	1774.4
55°	1767.2	1766.0	1774.8	1778.0	1796.0	1817.6	1857.6	1899.6	1939.2	1961.2	2078.8
57.5°	1914.4	1917.6	1932.8	1954.0	1989.2	2035.2	2094.8	2187.6	2262.8	2286.8	2416.4
60°	1946.8	1957.2	1980.0	2022.4	2082.8	2168.4	2285.6	2427.6	2565.2	2611.2	2732.8
62.5°	1856.0	1868.0	1901.6	1952.4	2031.2	2158.0	2327.2	2527.6	2732.0	2834.4	2895.6
63°	1827.2	1842.0	1867.2	1926.0	2006.0	2131.2	2311.2	2527.2	2739.2	2850.8	2898.8
65°	1692.0	1694.8	1732.4	1791.2	1881.2	2011.2	2192.8	2442.4	2677.6	2806.4	2773.2
67.5°	1456.0	1467.6	1499.2	1558.4	1646.0	1781.2	1978.4	2209.2	2416.0	2518.8	2370.4
70°	1176.4	1175.6	1214.8	1262.4	1339.6	1458.4	1631.2	1839.6	2003.6	2078.4	1830.0
72.5°	840.4	819.6	848.4	901.2	964.4	1059.2	1196.0	1358.0	1504.8	1569.6	1338.0
75°	382.8	377.2	402.8	455.2	519.2	603.6	716.0	856.0	996.8	1072.8	852.4
77.5°	128.8	130.4	140.4	159.2	193.6	236.0	306.0	395.6	509.6	584.8	400.0
80°	86.4	88.8	92.0	94.8	98.8	105.2	120.4	143.6	178.8	216.4	126.4
82.5°	70.8	73.6	80.8	84.0	86.4	88.4	89.6	91.2	91.2	92.0	80.0
85°	50.8	55.6	65.2	71.2	73.6	75.2	77.2	79.6	76.0	72.8	62.0
87.5°	17.6	24.0	35.2	38.8	41.6	42.0	44.8	49.6	47.2	38.4	18.8
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°
0°	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2	427.2
2.5°	429.2	428.8	429.2	429.6	429.6	429.6	430.0	430.4	430.4
5°	437.2	437.6	437.2	437.6	437.6	438.0	438.0	438.8	438.8
7.5°	450.8	451.6	451.2	452.0	452.0	452.8	452.4	453.6	453.6
10°	469.2	470.0	470.8	471.2	470.8	471.6	472.4	472.8	472.4
12.5°	490.0	490.4	490.0	490.8	490.8	491.6	491.6	492.8	492.8
15°	509.2	508.8	508.4	509.6	510.4	510.8	511.6	512.8	511.6
17.5°	526.4	526.8	526.0	527.2	528.8	530.0	530.8	532.4	532.0
20°	543.6	542.8	543.6	545.6	547.2	548.8	550.4	552.8	552.4
22.5°	560.4	561.2	563.2	564.8	567.6	570.0	572.0	575.2	576.4
25°	584.0	584.0	587.2	589.2	593.2	596.4	600.8	604.4	606.4
27.5°	614.0	614.0	617.6	622.0	628.0	633.6	638.4	643.2	642.4
30°	654.8	656.8	660.0	665.6	673.6	680.4	686.8	691.6	692.0
32.5°	708.4	710.8	720.4	734.8	751.6	764.4	774.0	785.6	787.2
35°	830.0	836.0	848.4	860.0	866.8	874.4	879.2	879.6	880.4
37.5°	958.0	947.6	938.0	929.2	925.2	924.4	924.4	926.0	926.8
40°	1004.8	999.6	995.2	989.6	991.2	990.8	993.6	996.0	997.6
42.5°	1084.8	1080.8	1076.8	1069.6	1073.6	1072.4	1076.4	1080.0	1082.0
45°	1196.4	1184.0	1175.2	1163.6	1167.6	1165.2	1165.2	1169.6	1170.4
47.5°	1319.6	1305.2	1287.2	1272.8	1268.0	1263.6	1267.6	1267.6	1263.2
50°	1467.2	1450.0	1428.8	1405.6	1397.6	1393.2	1394.8	1396.8	1384.4
52.5°	1667.6	1648.4	1618.4	1583.2	1575.6	1572.0	1571.2	1568.4	1565.2
55°	1939.2	1903.2	1866.4	1820.0	1806.0	1802.0	1802.4	1799.2	1806.8
57.5°	2259.6	2206.8	2122.0	2065.6	2032.0	2019.2	2007.6	2002.8	2003.2
60°	2576.8	2469.2	2342.4	2244.0	2173.6	2128.8	2093.6	2074.0	2068.4
62.5°	2781.2	2612.0	2421.6	2262.0	2146.4	2072.4	2016.8	1981.6	1970.4
63°	2797.2	2618.0	2414.4	2243.2	2121.6	2044.0	1985.6	1949.2	1937.2
65°	2762.4	2557.6	2320.4	2116.4	1983.2	1897.2	1834.0	1799.6	1790.4
67.5°	2492.0	2321.6	2080.0	1869.2	1734.8	1647.6	1575.2	1542.4	1532.0
70°	2027.2	1910.4	1712.4	1532.4	1407.2	1323.2	1250.0	1222.8	1222.4
72.5°	1502.8	1351.2	1233.2	1101.2	992.0	925.2	861.6	831.2	816.0
75°	994.0	831.6	699.6	588.4	479.6	419.6	348.0	317.2	299.2
77.5°	500.8	371.2	266.0	184.4	143.2	117.6	107.6	102.4	102.0
80°	166.8	125.2	107.6	100.8	98.8	99.2	98.0	96.0	93.6
82.5°	92.4	97.2	98.0	95.2	95.2	93.6	92.0	84.4	80.4
85°	79.2	87.2	88.0	86.4	86.0	83.6	80.8	70.4	64.4
87.5°	49.6	57.2	56.0	50.0	55.2	51.6	48.8	31.6	23.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)