

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: P157761

Luminaire Tested: **VST-E02-LED-E-U-5XQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157761
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33710)
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-5XQ-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE
Light Source: (42) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6490.2 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B3 - U1 - G2

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

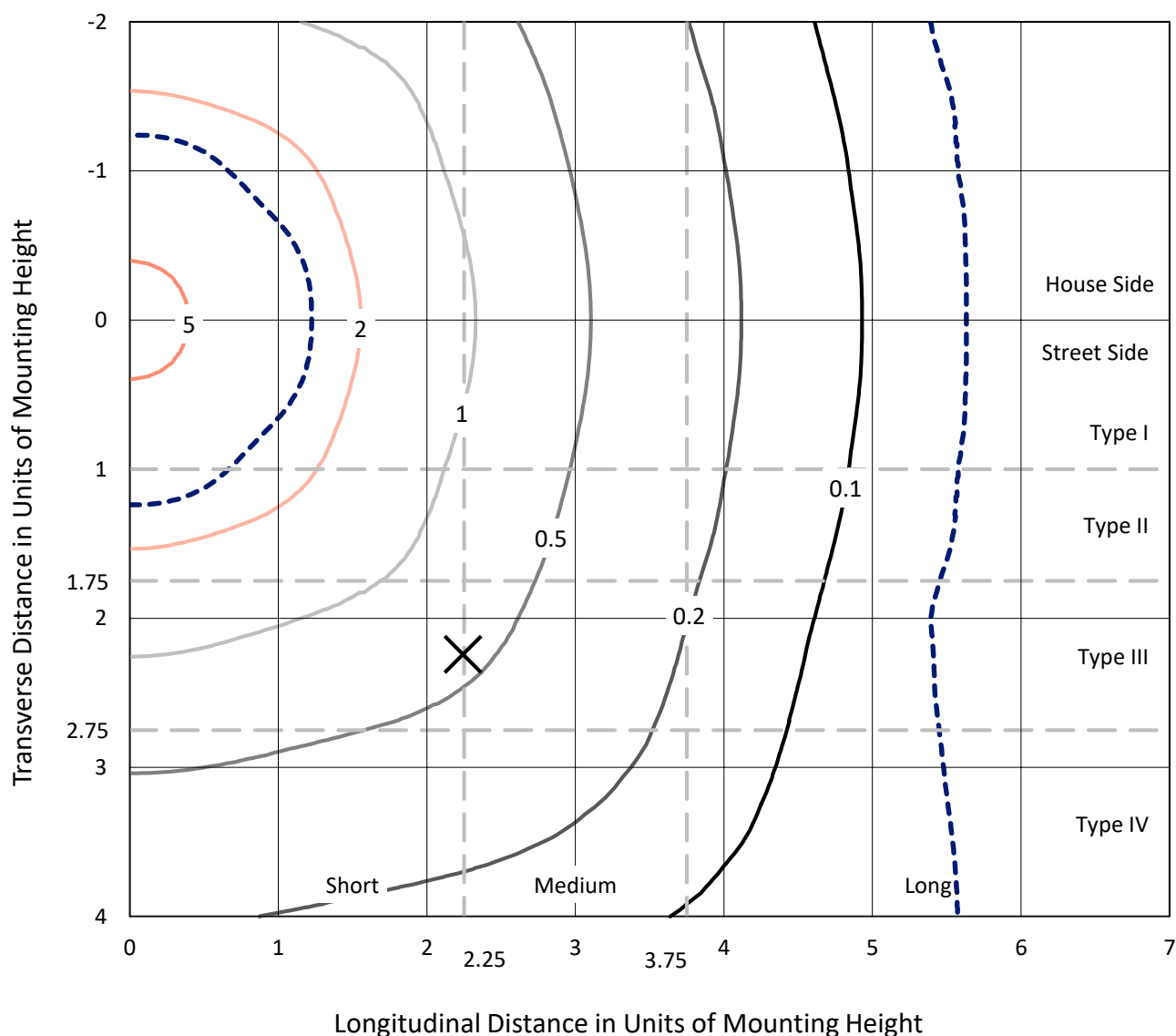


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

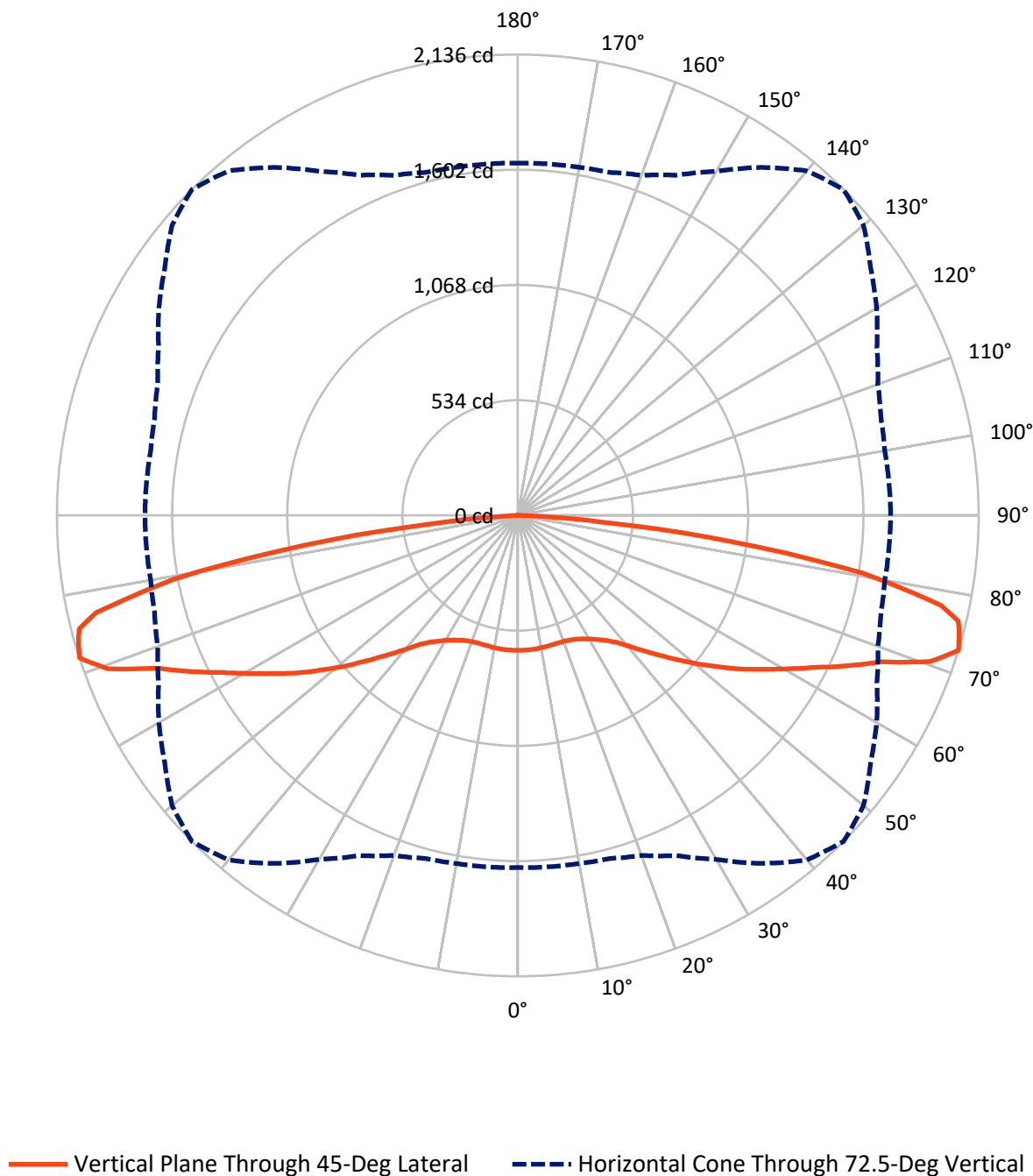


Based on 10 foot mounting height. Maximum calculated value = 6.2 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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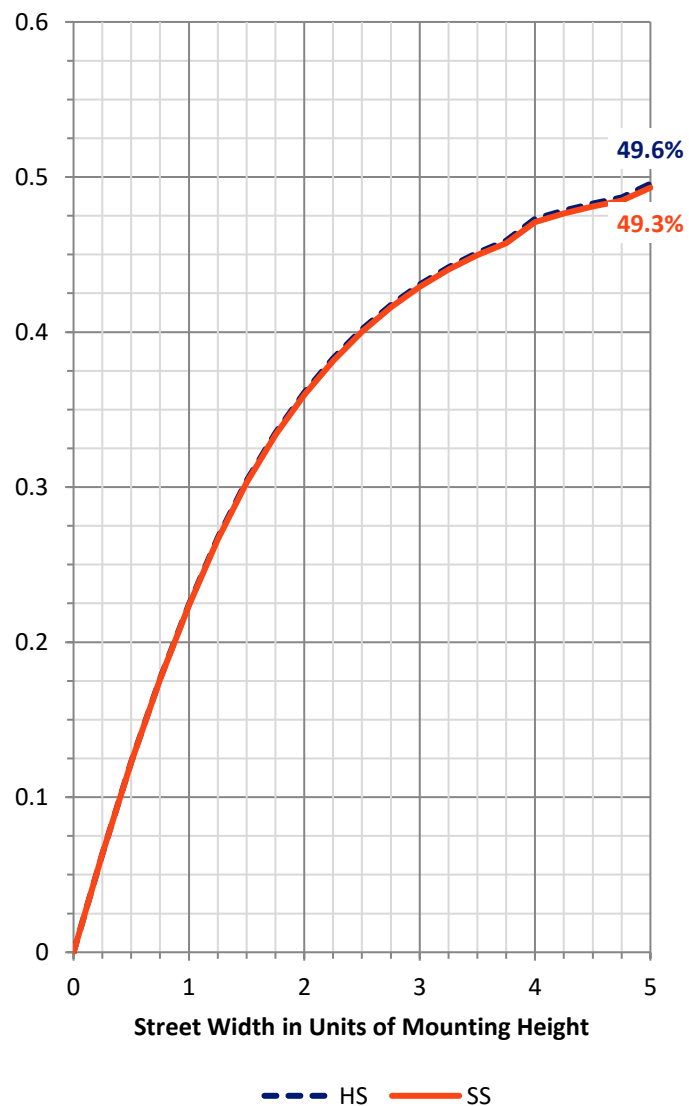
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3243.6	1.5	3245.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3243.6	1.5	3245.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	6487.1	3.1	6490.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.6	0.9
10°-20°	176.0	2.7
20°-30°	294.4	4.5
30°-40°	447.4	6.9
40°-50°	708.6	10.9
50°-60°	1084.0	16.7
60°-70°	1551.3	23.9
70°-80°	1775.1	27.4
80°-90°	390.7	6.0
90°-100°	0.3	0.0
100°-110°	0.7	0.0
110°-120°	0.5	0.0
120°-130°	0.5	0.0
130°-140°	0.5	0.0
140°-150°	0.4	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	6487.1	100.0
0°-180°	6490.2	100.0

Coefficient of Utilization



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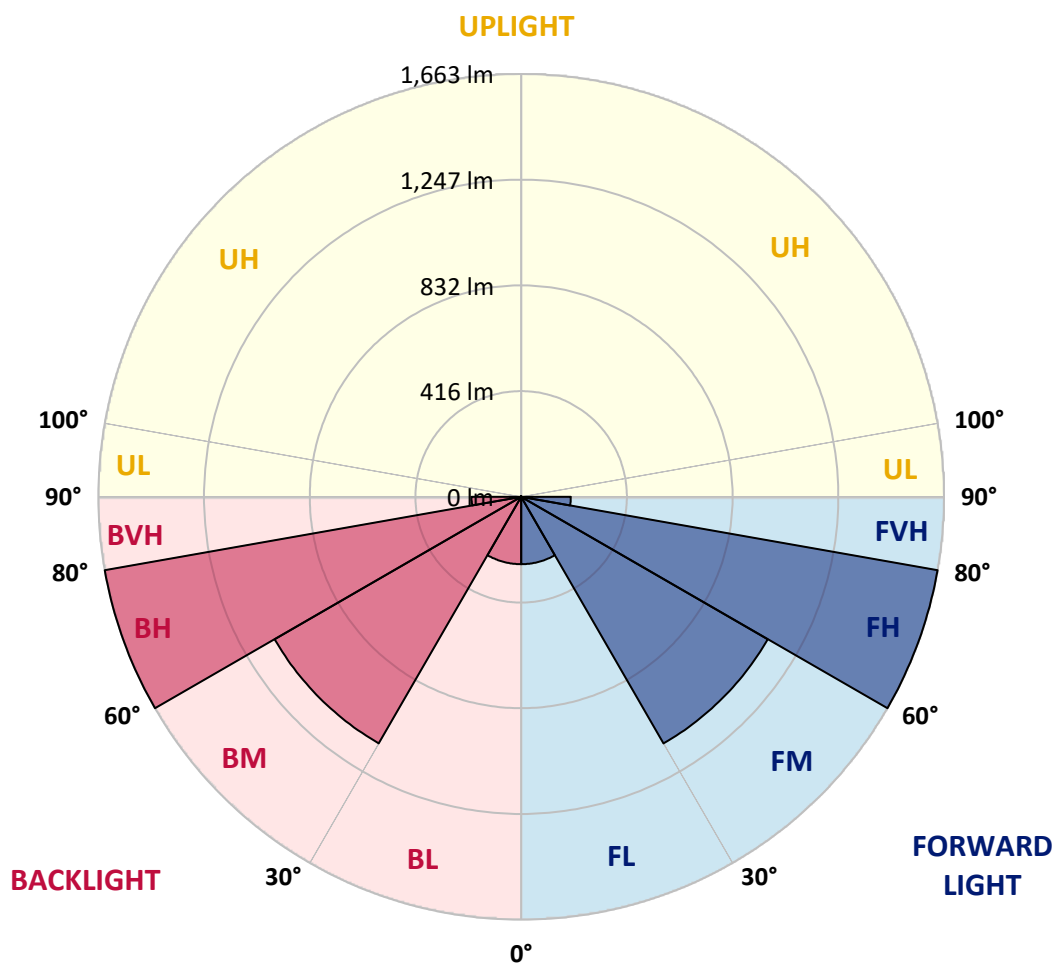
CATALOG NUMBER: VST-E02-LED-E-U-5XQ-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	265.0	4.1			
FM	(30°-60°)	1120.0	17.3			
FH	(60°-80°)	1663.2	25.6			G1/1800
FVH	(80°-90°)	195.3	3.0			G2/225
BL	(0°-30°)	265.0	4.1	B1/500		
BM	(30°-60°)	1120.0	17.3	B2/2500		
BH	(60°-80°)	1663.2	25.6	B3/2500		G1/1800
BVH	(80°-90°)	195.3	3.0			G2/225
UL	(90°-100°)	0.3	0.0		U1/10	
UH	(100°-180°)	1.5	0.0		U1/10	

BUG Rating: B3-U1-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	624.7	624.7	624.7	624.7	624.7	624.7	624.7	624.7	624.7	624.7	624.7
2.5°	625.1	624.3	624.7	625.5	625.1	625.1	624.7	624.7	625.5	624.7	625.1
5°	625.5	624.7	625.1	625.5	625.1	625.5	625.1	625.1	625.1	624.7	625.5
7.5°	623.9	623.9	624.3	624.3	623.9	624.3	624.3	624.3	623.9	623.9	624.7
10°	623.0	622.6	622.6	623.0	622.6	622.6	623.0	623.0	622.3	622.3	623.0
12.5°	621.8	621.4	621.4	621.4	621.0	621.0	621.4	621.4	621.0	620.6	621.8
15°	621.0	620.6	620.6	620.6	619.7	620.2	620.2	620.2	619.7	619.4	620.6
17.5°	620.6	620.2	620.2	620.2	619.7	619.7	619.7	619.7	619.4	619.4	620.2
20°	621.4	621.4	621.4	621.4	621.0	621.0	621.0	621.4	621.4	621.4	622.3
22.5°	623.5	623.5	623.9	624.3	624.3	625.1	625.5	625.9	625.9	626.3	627.2
25°	628.8	628.8	629.2	629.6	630.8	631.7	633.3	634.1	634.6	634.6	635.0
27.5°	638.6	639.1	639.9	640.7	642.4	643.6	645.2	646.9	647.3	647.7	648.1
30°	650.9	651.4	653.0	653.8	655.9	658.3	660.4	662.0	663.3	664.1	663.7
32.5°	668.6	669.4	671.5	672.7	675.6	678.1	680.9	683.4	684.6	685.9	685.4
35°	693.2	695.3	697.3	698.6	701.5	703.5	707.2	709.7	712.1	711.3	711.7
37.5°	729.8	731.4	731.8	732.7	735.5	737.2	741.2	744.5	745.8	746.6	747.0
40°	779.0	779.0	781.1	779.4	783.1	783.5	788.5	793.0	794.2	797.5	795.0
42.5°	836.5	836.1	837.3	836.1	836.1	840.2	844.3	852.5	853.3	857.4	854.9
45°	898.9	898.9	897.7	898.0	898.9	903.4	908.3	917.3	921.4	923.9	922.3
47.5°	966.6	964.9	964.6	964.1	966.6	971.5	978.9	987.5	997.8	998.6	997.8
50°	1035.1	1034.7	1031.9	1034.3	1036.0	1038.4	1052.4	1063.9	1074.5	1081.1	1079.0
52.5°	1107.4	1103.7	1103.7	1103.7	1107.8	1115.6	1127.9	1143.5	1157.9	1164.8	1163.6
55°	1180.4	1179.2	1175.5	1173.8	1179.2	1190.3	1207.9	1226.8	1245.7	1256.3	1252.3
57.5°	1247.3	1245.3	1245.7	1246.1	1252.3	1267.0	1287.5	1312.6	1333.1	1344.6	1341.7
60°	1299.9	1297.4	1301.9	1303.1	1314.2	1338.8	1371.7	1403.3	1430.4	1441.9	1437.4
62.5°	1359.4	1357.7	1360.6	1360.2	1372.1	1399.6	1443.5	1494.0	1535.0	1549.8	1543.3
65°	1455.4	1450.5	1449.3	1444.7	1452.5	1473.9	1517.8	1576.5	1642.2	1679.9	1670.9
67.5°	1570.4	1569.1	1565.0	1562.6	1565.4	1592.1	1634.4	1691.0	1757.9	1810.1	1821.5
70°	1646.3	1647.9	1652.0	1658.2	1682.0	1733.7	1810.9	1896.7	1988.6	2027.6	2020.6
72.5°	1631.9	1634.4	1637.6	1645.4	1676.6	1738.6	1840.4	1968.5	2083.8	2135.5	2091.2
75°	1561.7	1563.8	1571.2	1583.1	1621.3	1696.4	1805.9	1941.8	2060.8	2112.5	2066.2
76°	1496.9	1503.4	1517.0	1531.0	1576.9	1658.6	1775.6	1920.5	2046.5	2099.0	2054.3
77.5°	1349.9	1355.7	1366.8	1391.0	1443.1	1547.8	1684.4	1826.9	1958.2	2005.4	1967.6
80°	1015.9	1020.8	1031.0	1060.2	1105.3	1170.2	1276.1	1415.2	1559.3	1621.3	1596.6
82.5°	428.9	434.6	475.3	517.6	567.2	637.4	706.4	829.5	935.4	1006.0	968.2
85°	47.2	58.3	71.8	97.7	119.8	159.7	198.7	273.4	345.6	389.5	344.3
87.5°	8.2	9.4	13.6	17.2	19.3	22.1	26.7	37.4	50.9	43.9	44.8
90°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.8	0.8	0.8	0.8
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4
97.5°	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
100°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8	0.8
102.5°	0.4	0.4	0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.8	0.8
105°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
107.5°	0.4	0.4	0.4	0.4	0.8	0.8	0.4	0.4	0.4	0.8	0.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
112.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
115°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
117.5°	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
120°	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
122.5°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4
125°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4
127.5°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4
130°	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4
132.5°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4
135°	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4
137.5°	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4
140°	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4
142.5°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4
145°	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.0	0.4
147.5°	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4
150°	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.0	0.0	0.0
152.5°	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.0	0.0
155°	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.0	0.4
157.5°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.0	0.0	0.0
160°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.0	0.0	0.0
162.5°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.0	0.0	0.0
165°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	624.7	624.7	624.7	624.7	624.7	624.7	624.7	624.7
2.5°	624.7	624.7	625.5	625.1	625.1	625.5	626.3	625.9
5°	625.1	625.5	624.7	625.1	625.5	625.5	625.9	625.5
7.5°	624.3	624.3	624.3	624.7	625.1	624.7	625.1	625.1
10°	622.6	623.0	622.6	623.5	623.9	623.9	624.3	624.3
12.5°	621.4	621.4	621.4	622.3	622.6	622.6	623.0	622.6
15°	620.2	620.2	619.7	620.6	621.4	621.4	621.8	621.8
17.5°	619.7	619.7	619.4	620.2	621.0	621.0	621.4	621.4
20°	621.0	621.4	620.6	621.4	622.3	622.6	622.6	622.6
22.5°	625.9	625.5	624.3	624.7	625.1	625.1	625.1	625.1
25°	633.3	632.5	631.3	630.8	630.4	630.0	630.0	630.0
27.5°	646.0	644.8	642.8	642.4	641.9	641.1	641.1	641.1
30°	661.2	659.6	657.1	656.3	655.1	654.2	653.8	653.4
32.5°	683.0	679.7	676.8	674.8	673.6	671.1	670.7	669.8
35°	708.0	705.5	701.5	700.2	698.2	697.0	696.5	694.4
37.5°	742.5	739.6	735.9	735.1	734.7	733.4	733.4	733.0
40°	790.5	787.6	784.4	781.1	781.9	782.3	782.3	780.7
42.5°	849.2	844.7	838.1	840.2	838.9	837.3	840.6	838.6
45°	916.1	910.0	905.0	903.0	903.0	900.9	904.2	904.2
47.5°	990.4	980.5	971.5	971.9	968.6	969.5	971.5	974.4
50°	1068.8	1055.6	1047.1	1042.9	1039.7	1040.9	1044.6	1045.4
52.5°	1150.1	1134.1	1122.5	1116.4	1112.3	1114.0	1116.8	1119.3
55°	1234.6	1217.0	1199.7	1193.2	1188.2	1191.5	1191.9	1195.2
57.5°	1322.9	1298.6	1278.5	1268.7	1263.8	1267.0	1269.5	1272.8
60°	1411.9	1384.0	1360.2	1348.7	1341.7	1346.3	1352.0	1353.7
62.5°	1515.4	1476.8	1450.1	1433.7	1430.4	1434.9	1436.5	1441.5
65°	1637.6	1591.3	1554.4	1534.3	1533.4	1535.9	1539.5	1540.8
67.5°	1777.2	1725.5	1675.9	1655.7	1647.9	1655.3	1659.0	1663.9
70°	1974.2	1903.2	1831.4	1786.7	1767.8	1762.0	1763.7	1769.0
72.5°	1996.4	1920.1	1836.3	1775.6	1742.3	1727.2	1726.7	1727.6
75°	1948.0	1826.0	1766.9	1697.2	1650.0	1625.3	1622.0	1621.7
76°	1923.7	1779.7	1694.3	1638.9	1582.3	1557.2	1553.5	1551.5
77.5°	1821.5	1666.8	1538.3	1504.7	1450.5	1418.9	1425.5	1420.1
80°	1460.3	1306.9	1185.8	1091.0	1093.8	1070.8	1061.4	1058.5
82.5°	860.7	734.7	600.9	522.5	447.8	428.1	368.6	355.0
85°	275.0	194.9	118.2	85.8	58.3	48.8	38.2	34.9
87.5°	36.5	28.7	23.4	22.6	20.5	17.6	11.5	8.2
90°	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0
97.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
100°	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4
102.5°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4
105°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
107.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	0.4	0.4	0.4	0.4	0.4	0.8	0.8	0.8
112.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8
115°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8
117.5°	0.4	0.4	0.4	0.4	0.4	0.8	0.8	0.8
120°	0.4	0.4	0.4	0.4	0.4	0.8	0.8	0.8
122.5°	0.4	0.4	0.4	0.4	0.8	0.8	0.8	0.8
125°	0.4	0.4	0.4	0.4	0.8	0.8	0.8	0.8
127.5°	0.4	0.4	0.4	0.4	0.8	0.8	0.8	0.8
130°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.8
132.5°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.8
135°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.8
137.5°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.8
140°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.8
142.5°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.8
145°	0.4	0.4	0.4	0.4	0.8	0.8	0.8	0.8
147.5°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.8
150°	0.4	0.4	0.4	0.4	0.8	0.8	0.8	0.8
152.5°	0.4	0.4	0.4	0.4	0.8	0.8	0.8	0.8
155°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.8
157.5°	0.4	0.4	0.4	0.4	0.8	0.8	0.8	0.8
160°	0.4	0.4	0.4	0.4	0.8	0.8	0.8	0.8
162.5°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.8
165°	0.4	0.4	0.4	0.8	0.8	0.8	0.8	0.8
167.5°	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
172.5°	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
177.5°	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

(END OF REPORT)