

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: P237224

Luminaire Tested: **ARCH-L-AF72-110-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237224  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-110-D-U-T3-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 485mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11238 lumens  
Efficiency: N/A  
Efficacy: 99.5 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G2

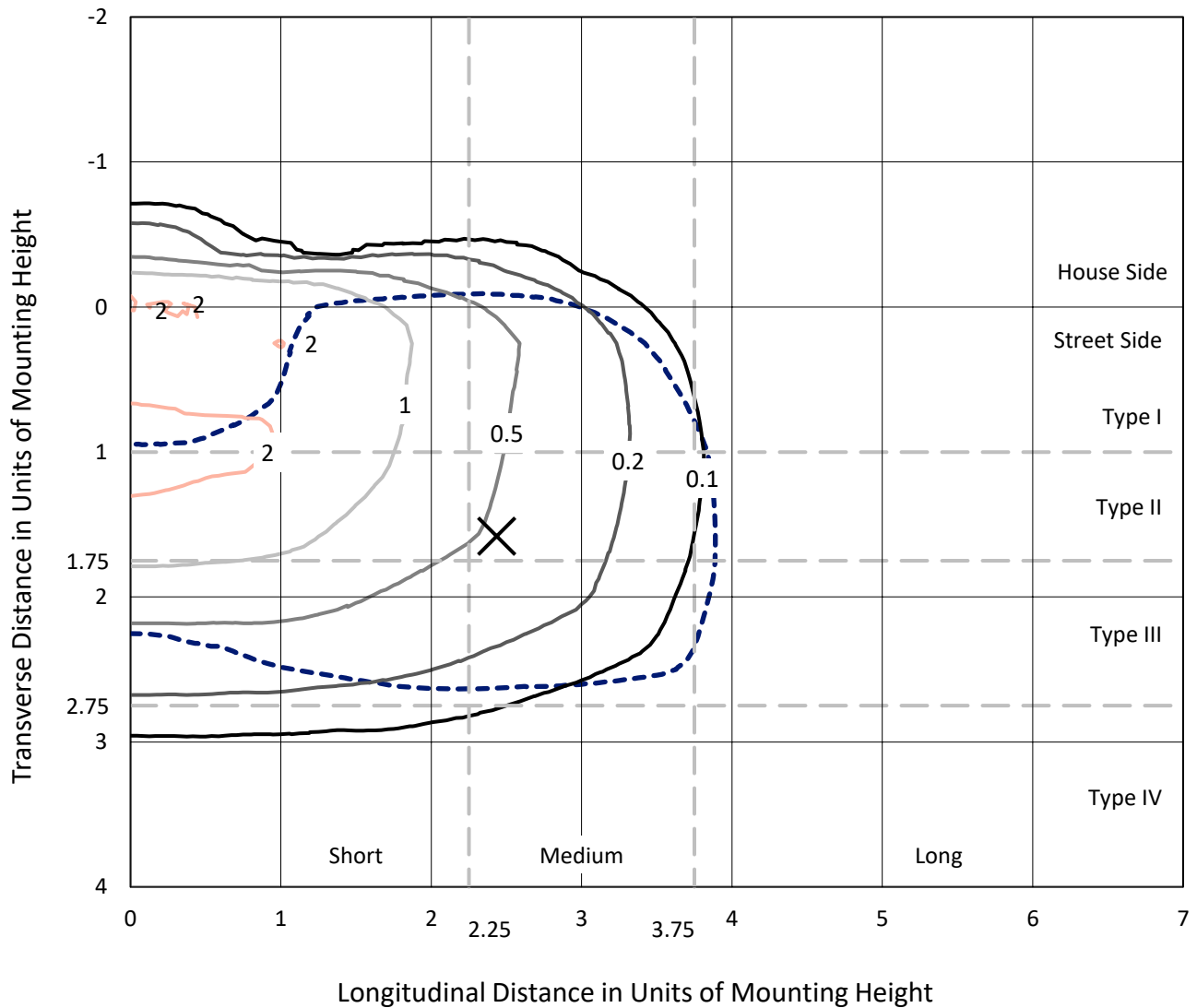
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

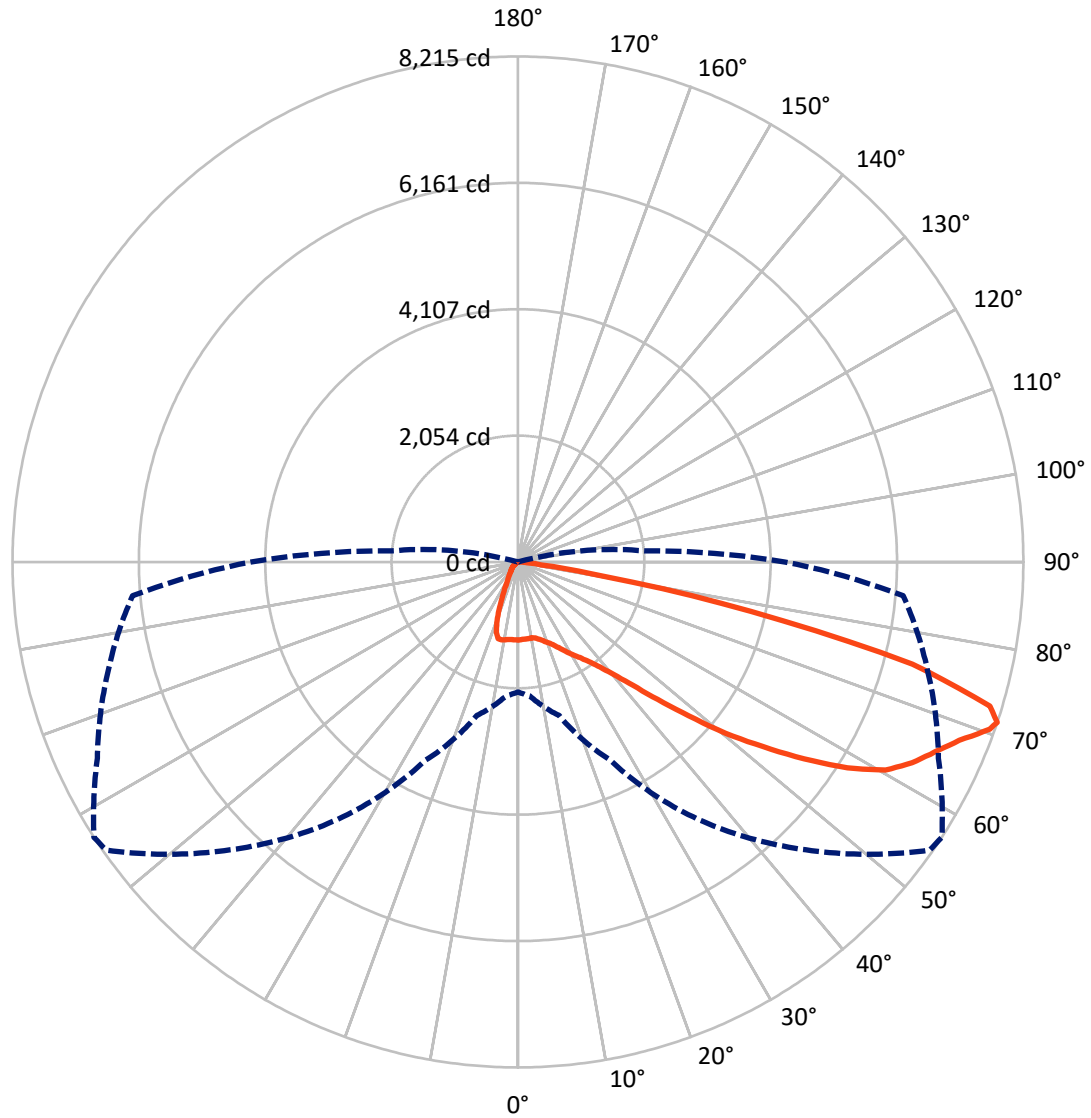
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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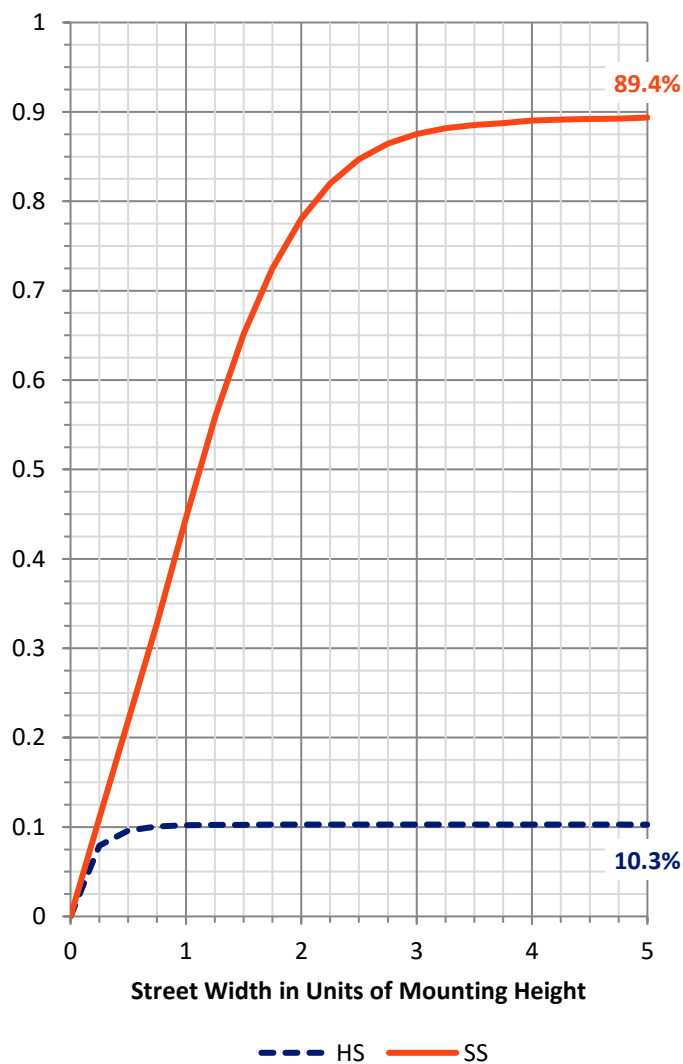
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1164.6	0.0	1164.6
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	10073.4	0.0	10073.4
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	11238.0	0.0	11238.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.3	1.1
10°-20°	318.9	2.8
20°-30°	497.5	4.4
30°-40°	840.9	7.5
40°-50°	1633.2	14.5
50°-60°	2742.6	24.4
60°-70°	3273.1	29.1
70°-80°	1724.9	15.3
80°-90°	87.6	0.8
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°	11238.0	100.0
0°-180°	11238.0	100.0

**Coefficient of Utilization**



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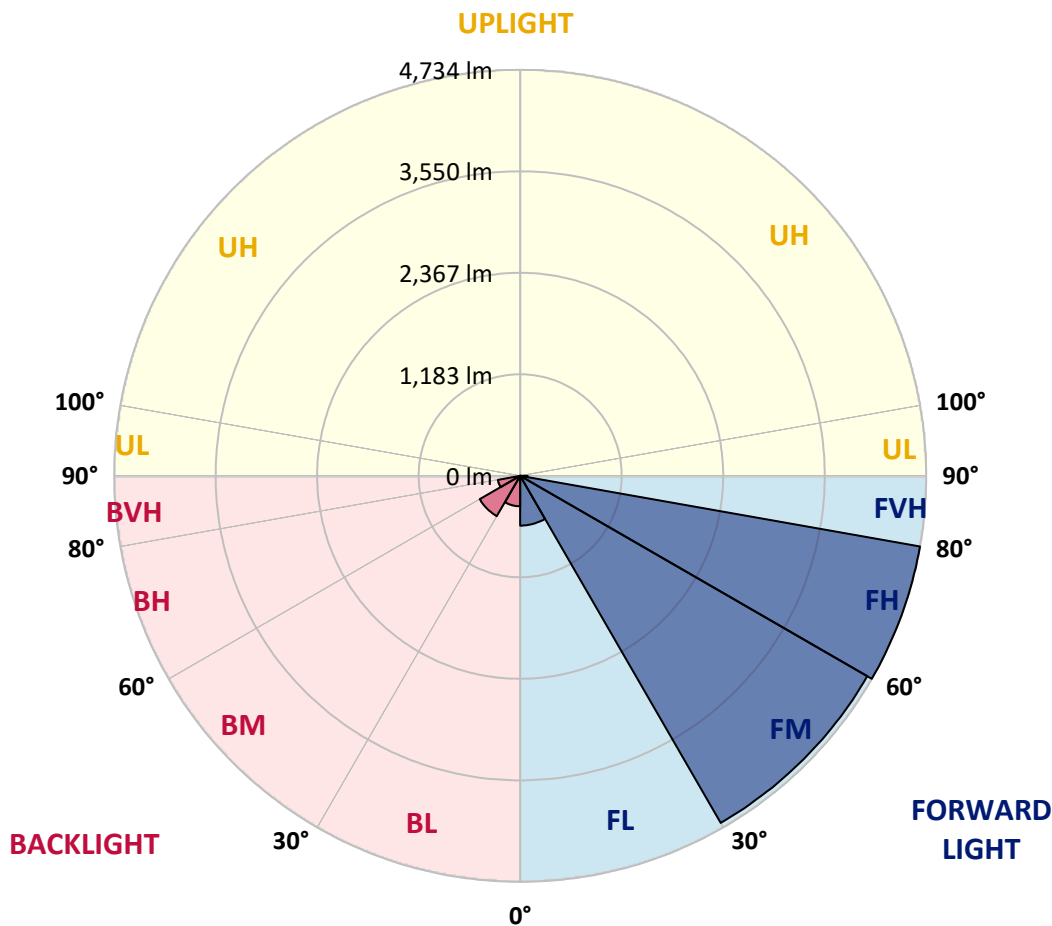
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	580.2	5.2			
FM (30°-60°)	4672.9	41.6			
FH (60°-80°)	4733.5	42.1			G2/5000
FVH (80°-90°)	86.8	0.8			G1/100
BL (0°-30°)	355.5	3.2	B1/500		
BM (30°-60°)	543.8	4.8	B1/1000		
BH (60°-80°)	264.5	2.4	B1/500		G1/500
BVH (80°-90°)	0.8	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1270.1	1270.1	1270.1	1270.1	1270.1	1270.1	1270.1	1270.1	1270.1	1270.1	1270.1
2.5°	1251.7	1251.7	1251.7	1254.4	1257.0	1257.0	1262.2	1259.6	1259.6	1259.6	1264.8
5°	1217.7	1220.3	1222.9	1228.2	1238.6	1246.5	1259.6	1259.6	1262.2	1267.4	1270.1
7.5°	1170.6	1173.2	1181.0	1191.5	1212.5	1230.8	1251.7	1257.0	1264.8	1277.9	1283.2
10°	1141.7	1147.0	1157.5	1170.6	1194.1	1217.7	1243.9	1251.7	1275.3	1298.9	1312.0
12.5°	1133.9	1136.5	1147.0	1167.9	1196.7	1225.5	1259.6	1267.4	1301.5	1338.2	1359.1
15°	1147.0	1149.6	1154.8	1178.4	1212.5	1249.1	1293.6	1304.1	1346.0	1387.9	1414.1
17.5°	1170.6	1170.6	1175.8	1196.7	1233.4	1275.3	1332.9	1348.6	1395.8	1442.9	1471.7
20°	1186.3	1186.3	1194.1	1215.1	1257.0	1312.0	1380.0	1401.0	1453.4	1505.7	1531.9
22.5°	1202.0	1204.6	1212.5	1236.0	1283.2	1359.1	1437.7	1458.6	1518.8	1573.8	1600.0
25°	1246.5	1243.9	1246.5	1267.4	1322.4	1416.7	1516.2	1542.4	1605.3	1665.5	1678.6
27.5°	1369.6	1364.3	1330.3	1317.2	1359.1	1476.9	1615.7	1641.9	1715.2	1775.5	1775.5
30°	1652.4	1641.9	1558.1	1450.8	1416.7	1531.9	1710.0	1746.7	1840.9	1893.3	1877.6
32.5°	2011.2	1987.6	1880.2	1696.9	1560.7	1605.3	1809.5	1851.4	1971.9	2016.4	1982.3
35°	2404.0	2401.3	2267.8	2032.1	1838.3	1757.1	1937.8	1987.6	2139.5	2178.7	2123.8
37.5°	2820.3	2830.8	2741.8	2417.1	2189.2	2005.9	2108.0	2165.7	2351.6	2398.7	2346.3
40°	3283.8	3281.2	3247.2	2862.2	2610.8	2359.4	2354.2	2406.6	2631.8	2705.1	2631.8
42.5°	3870.4	3865.2	3742.1	3396.4	3121.5	2820.3	2713.0	2731.3	2982.7	3103.1	2995.8
45°	4467.5	4430.8	4289.4	3990.9	3747.3	3391.2	3186.9	3186.9	3401.7	3566.7	3399.1
47.5°	4800.1	4763.4	4705.8	4540.8	4467.5	4069.4	3768.3	3731.6	3899.2	4066.8	3831.1
50°	5237.4	5237.4	5093.4	5030.5	5156.2	4876.0	4409.9	4373.2	4454.4	4587.9	4278.9
52.5°	5583.0	5520.2	5418.1	5473.1	5831.8	5703.5	5051.5	4980.7	5043.6	5077.6	4669.1
55°	5727.1	5666.8	5659.0	5860.6	6415.8	6237.7	5708.7	5645.9	5640.7	5473.1	5009.6
57.5°	5755.9	5703.5	5803.0	6156.5	6984.0	6675.0	6363.4	6316.3	6169.6	5750.6	5357.8
60°	5512.3	5538.5	5779.4	6318.9	7319.2	7054.7	6916.0	6866.2	6528.4	5986.3	5745.4
62.5°	5012.2	5075.0	5525.4	6334.6	7196.2	7209.3	7222.3	7188.3	6806.0	6201.1	6135.6
65°	4420.3	4438.7	4980.7	6117.3	6981.4	7162.1	7447.6	7444.9	7018.1	6442.0	6575.5
67.5°	3642.6	3674.0	4142.8	5384.0	6552.0	7141.2	7743.5	7735.6	7259.0	6716.9	6837.4
70°	2710.3	2749.6	3129.3	4187.3	5593.5	6879.3	8131.0	8136.3	7513.0	6926.4	6656.7
71°	2113.3	2184.0	2582.0	3556.2	5103.8	6614.8	8167.7	8214.8	7541.8	6897.6	6284.9
72.5°	1037.0	1120.8	1621.0	2503.5	4200.4	6023.0	7926.8	8018.4	7361.1	6538.9	5373.6
75°	269.7	285.4	484.5	1023.9	2252.1	3990.9	6392.2	6625.3	6017.7	4978.1	3283.8
77.5°	170.2	175.5	227.8	398.0	843.2	1516.2	3755.2	3870.4	3438.3	2521.8	1157.5
80°	120.5	123.1	144.0	256.6	492.3	442.6	1351.2	1401.0	1243.9	667.8	206.9
82.5°	73.3	73.3	104.7	165.0	303.8	240.9	356.1	379.7	335.2	185.9	68.1
85°	41.9	44.5	65.5	112.6	144.0	117.8	133.6	141.4	144.0	123.1	28.8
87.5°	34.0	36.7	57.6	94.3	78.6	57.6	57.6	60.2	62.8	73.3	13.1
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°	1270.1	1270.1	1270.1	1270.1	1270.1	1270.1	1270.1	1270.1	1270.1	1270.1	1270.1
2.5°	1264.8	1264.8	1267.4	1264.8	1264.8	1264.8	1267.4	1267.4	1267.4	1272.7	1275.3
5°	1270.1	1270.1	1270.1	1267.4	1264.8	1264.8	1270.1	1272.7	1272.7	1280.5	1280.5
7.5°	1283.2	1283.2	1277.9	1272.7	1267.4	1259.6	1262.2	1264.8	1262.2	1264.8	1264.8
10°	1312.0	1312.0	1304.1	1293.6	1277.9	1254.4	1222.9	1183.6	1147.0	1133.9	1128.7
12.5°	1359.1	1356.5	1340.8	1322.4	1288.4	1207.2	1089.4	950.6	835.4	803.9	793.5
15°	1411.5	1406.2	1387.9	1356.5	1264.8	1050.1	803.9	625.9	515.9	489.7	484.5
17.5°	1466.5	1458.6	1432.4	1369.6	1157.5	780.4	518.5	392.8	332.6	327.3	330.0
20°	1524.1	1513.6	1476.9	1343.4	934.9	521.1	335.2	303.8	298.5	298.5	301.1
22.5°	1589.5	1576.5	1526.7	1249.1	680.9	345.7	288.1	285.4	282.8	280.2	280.2
25°	1665.5	1649.8	1573.8	1078.9	468.7	282.8	275.0	267.1	261.9	256.6	254.0
27.5°	1757.1	1736.2	1610.5	869.4	322.1	264.5	259.3	246.2	235.7	225.2	225.2
30°	1848.8	1822.6	1600.0	654.7	261.9	246.2	235.7	220.0	204.3	193.8	191.2
32.5°	1945.7	1919.5	1531.9	439.9	238.3	225.2	212.1	188.5	170.2	157.1	154.5
35°	2089.7	2068.8	1398.4	290.7	214.7	199.0	180.7	157.1	133.6	120.5	117.8
37.5°	2304.4	2278.3	1233.4	222.6	188.5	165.0	149.3	123.1	99.5	86.4	83.8
40°	2592.5	2513.9	1037.0	196.4	165.0	136.2	115.2	89.0	70.7	62.8	62.8
42.5°	2927.7	2741.8	824.9	178.1	146.6	112.6	83.8	60.2	49.8	47.1	47.1
45°	3283.8	2953.9	612.8	165.0	128.3	89.0	60.2	41.9	36.7	34.0	34.0
47.5°	3650.5	3126.7	426.8	149.3	107.4	68.1	41.9	31.4	26.2	23.6	23.6
50°	3993.5	3239.3	301.1	133.6	91.7	49.8	31.4	23.6	18.3	18.3	18.3
52.5°	4231.8	3228.8	217.4	115.2	70.7	34.0	20.9	15.7	15.7	15.7	15.7
55°	4441.3	3189.6	170.2	99.5	55.0	23.6	15.7	13.1	13.1	10.5	10.5
57.5°	4619.4	3126.7	144.0	81.2	39.3	18.3	10.5	10.5	7.9	7.9	7.9
60°	4771.3	3048.2	120.5	68.1	26.2	13.1	7.9	5.2	5.2	2.6	5.2
62.5°	4978.1	2998.4	104.7	52.4	18.3	7.9	5.2	2.6	2.6	0.0	0.0
65°	5130.0	2904.1	89.0	36.7	10.5	5.2	2.6	2.6	0.0	0.0	0.0
67.5°	5135.3	2733.9	65.5	20.9	7.9	5.2	2.6	0.0	0.0	0.0	0.0
70°	4721.5	2330.6	41.9	10.5	5.2	2.6	2.6	0.0	0.0	0.0	0.0
71°	4341.8	2063.5	34.0	7.9	5.2	2.6	0.0	0.0	0.0	0.0	0.0
72.5°	3577.1	1516.2	26.2	7.9	2.6	2.6	0.0	0.0	0.0	0.0	0.0
75°	1971.9	549.9	13.1	5.2	2.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	631.1	167.6	7.9	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	107.4	26.2	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	36.7	10.5	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.5	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.2	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)