

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: P573566

Luminaire Tested: **ARCH-S-PA2-90-740-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573566  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-90-740-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 910mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9553 lumens  
Efficiency: N/A  
Efficacy: 103.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

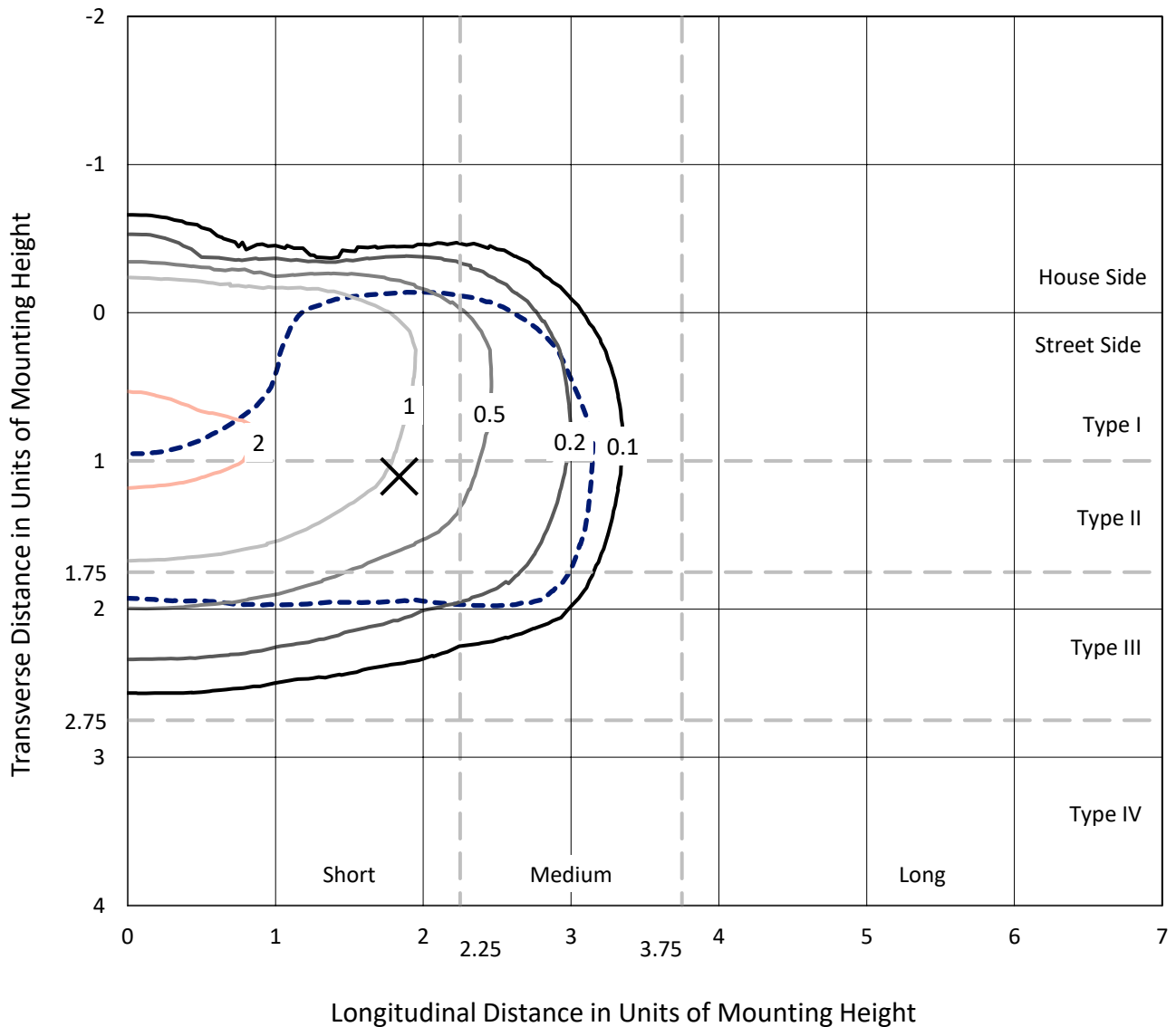
Input Watts (W): 92.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

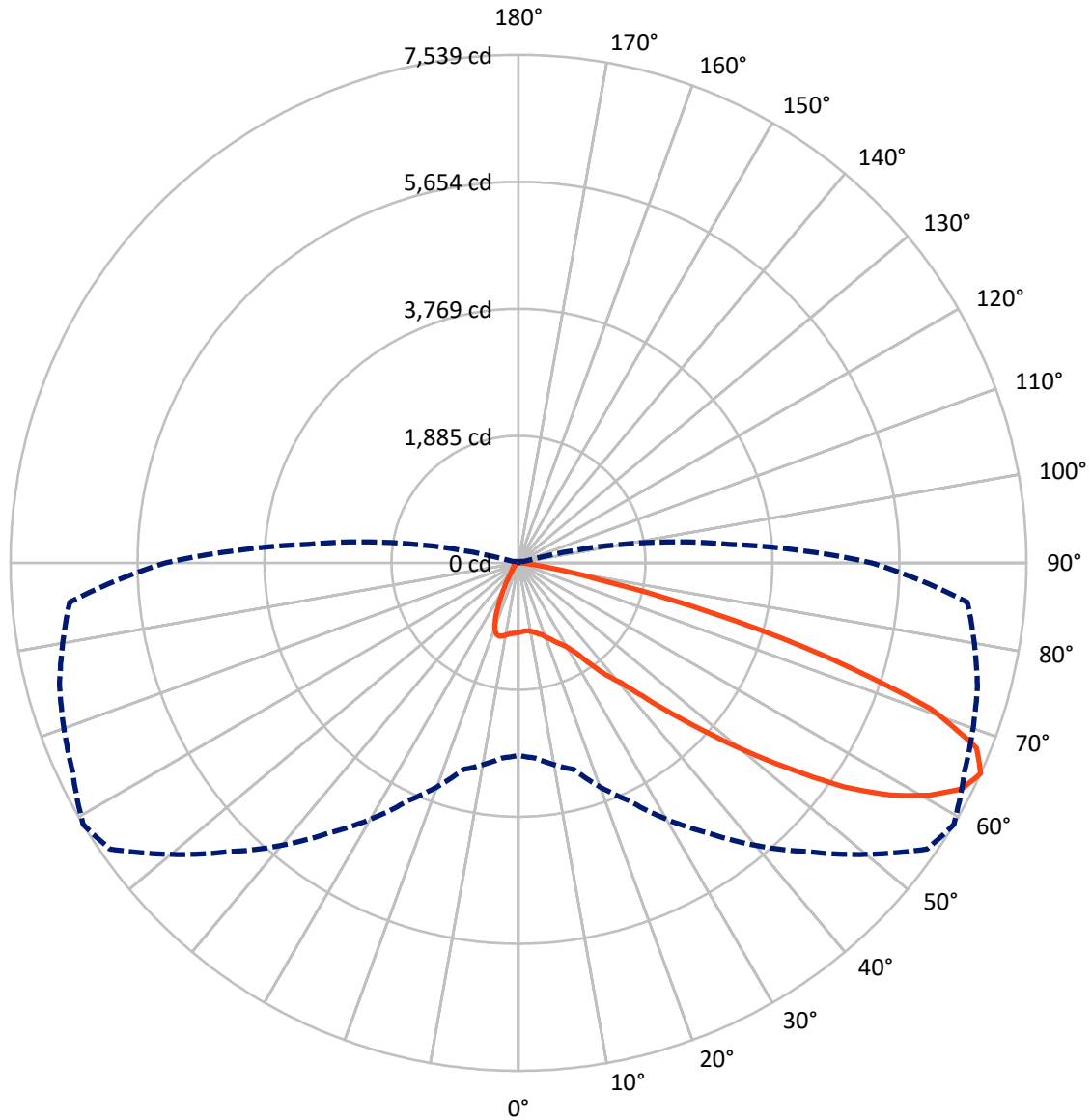
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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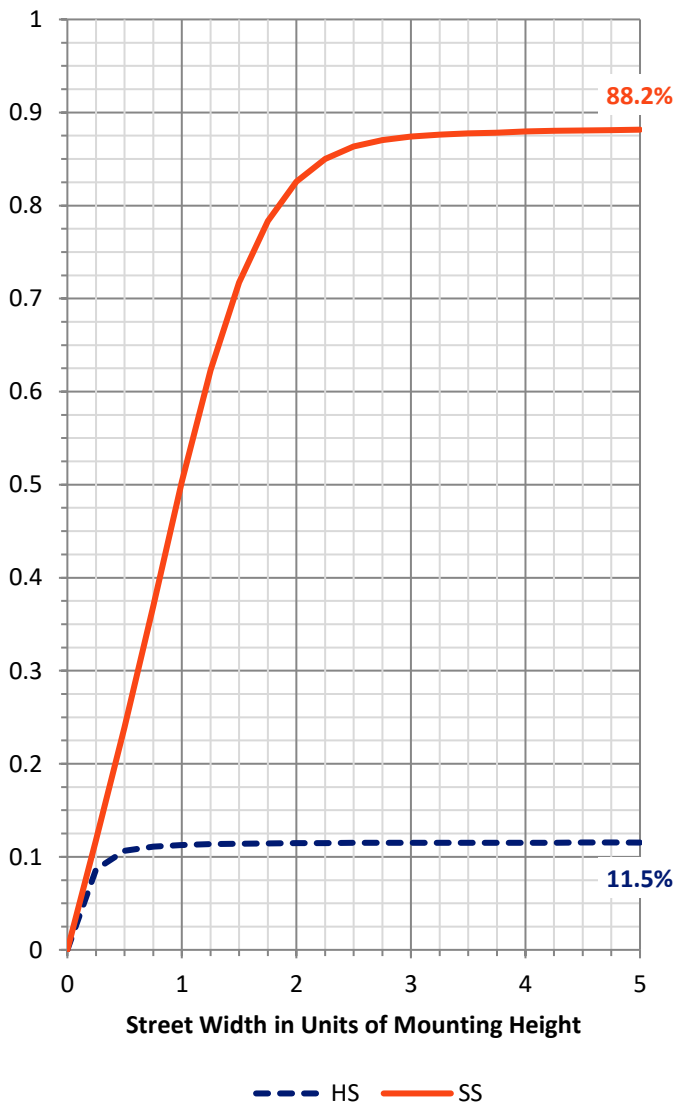
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1114.5	0.0	1114.5
	% Fixture	11.7	0.0	11.7
<b>Street Side</b>	Lumens	8438.6	0.0	8438.6
	% Fixture	88.3	0.0	88.3
<b>Total</b>	Lumens	9553.0	0.0	9553.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.5	1.0
10°-20°	277.1	2.9
20°-30°	470.7	4.9
30°-40°	833.8	8.7
40°-50°	1572.8	16.5
50°-60°	2661.1	27.9
60°-70°	2766.8	29.0
70°-80°	829.7	8.7
80°-90°	43.5	0.5
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°	9553.0	100.0
0°-180°	9553.0	100.0

**Coefficient of Utilization**



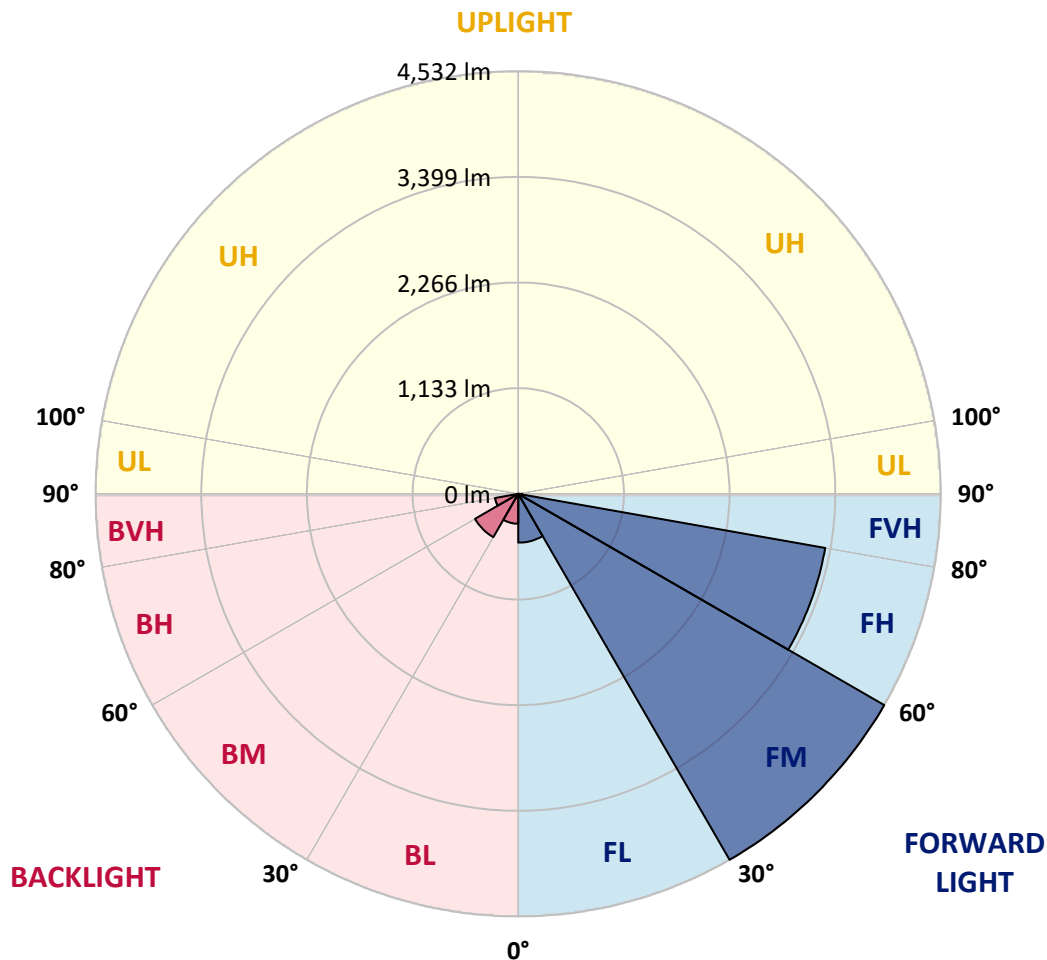
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	523.9	5.5			
FM (30°-60°)	4532.0	47.4			
FH (60°-80°)	3342.9	35.0			G2/5000
FVH (80°-90°)	39.8	0.4			G1/100
BL (0°-30°)	321.5	3.4	B1/500		
BM (30°-60°)	535.7	5.6	B1/1000		
BH (60°-80°)	253.6	2.7	B1/500		G1/500
BVH (80°-90°)	3.7	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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1032.3	1032.3	1032.3	1032.3	1032.3	1032.3	1032.3	1032.3	1032.3	1032.3	1032.3
2.5°	1004.5	1001.0	1001.0	1008.0	1011.4	1014.9	1021.9	1021.9	1021.9	1028.8	1032.3
5°	955.8	955.8	959.3	966.3	980.2	990.6	1011.4	1014.9	1018.4	1035.8	1042.7
7.5°	924.5	924.5	928.0	941.9	959.3	983.6	1011.4	1018.4	1028.8	1053.2	1070.5
10°	921.1	917.6	924.5	938.5	959.3	990.6	1021.9	1032.3	1053.2	1084.4	1108.8
12.5°	931.5	928.0	935.0	948.9	969.7	1001.0	1042.7	1060.1	1084.4	1126.1	1160.9
15°	938.5	935.0	941.9	959.3	983.6	1021.9	1070.5	1091.4	1122.7	1181.8	1216.5
17.5°	959.3	955.8	959.3	973.2	997.5	1039.2	1101.8	1122.7	1174.8	1240.8	1279.1
20°	1053.2	1049.7	1028.8	1021.9	1025.3	1063.6	1143.5	1178.3	1240.8	1324.3	1352.1
22.5°	1247.8	1233.9	1195.7	1133.1	1091.4	1105.3	1195.7	1233.9	1317.3	1411.2	1432.0
25°	1508.5	1498.0	1442.4	1334.7	1216.5	1181.8	1254.7	1306.9	1407.7	1511.9	1505.0
27.5°	1803.9	1783.1	1730.9	1581.5	1421.6	1306.9	1327.7	1372.9	1484.1	1595.4	1560.6
30°	2061.1	2054.2	1995.1	1870.0	1682.3	1511.9	1439.0	1463.3	1564.1	1682.3	1640.6
32.5°	2297.5	2276.6	2228.0	2109.8	1936.0	1762.2	1616.2	1616.2	1699.6	1838.7	1776.1
35°	2558.1	2544.2	2485.2	2367.0	2200.1	1995.1	1863.0	1849.1	1918.6	2075.0	1939.5
37.5°	2825.8	2791.0	2763.2	2641.6	2474.7	2297.5	2137.6	2106.3	2141.1	2255.8	2088.9
40°	3159.5	3159.5	3096.9	2985.7	2829.3	2641.6	2419.1	2339.2	2328.7	2478.2	2349.6
42.5°	3548.7	3538.3	3486.2	3381.9	3232.4	3058.7	2777.1	2704.1	2697.2	2877.9	2725.0
45°	3997.1	3990.2	3927.6	3840.7	3736.4	3545.3	3267.2	3194.2	3152.5	3361.0	3180.3
47.5°	4407.2	4382.9	4362.1	4372.5	4313.4	4097.9	3837.2	3750.3	3746.9	3910.2	3677.3
50°	4688.8	4674.9	4747.9	4817.4	4928.6	4793.1	4483.7	4407.2	4348.2	4563.7	4195.2
52.5°	4873.0	4866.0	5012.0	5210.1	5439.5	5429.1	5154.5	5109.3	5060.7	5119.8	4657.5
55°	4946.0	4946.0	5119.8	5484.7	5887.9	6061.7	5933.1	5870.5	5700.2	5578.6	5165.0
57.5°	4859.1	4848.7	5074.6	5550.8	6166.0	6524.0	6579.6	6506.6	6239.0	6103.4	5728.0
60°	4490.7	4497.6	4765.2	5366.6	6145.1	6711.7	7069.7	7003.6	6736.0	6534.4	6200.7
62.5°	3802.5	3861.6	4143.1	4796.5	5700.2	6562.2	7351.2	7386.0	7097.5	6847.2	6621.3
65°	2857.1	2909.2	3176.8	3899.8	4890.4	6061.7	7403.3	7538.9	7306.0	7052.3	6687.3
67.5°	1737.9	1755.3	2082.0	2627.7	3600.9	5050.3	7038.4	7333.8	7167.0	6749.9	6033.9
70°	809.8	855.0	1014.9	1435.5	2280.1	3719.0	6082.6	6499.6	6312.0	5794.1	4588.0
72.5°	316.3	330.2	431.0	663.9	1209.6	2339.2	4539.3	4817.4	4688.8	4115.3	2735.4
75°	156.4	166.8	208.5	316.3	552.6	966.3	2773.6	2954.4	2742.4	2068.1	1157.4
77.5°	114.7	114.7	139.0	194.6	302.4	358.0	1167.9	1310.4	1237.4	799.4	316.3
80°	76.5	83.4	97.3	132.1	191.2	173.8	441.4	524.8	437.9	246.8	111.2
82.5°	45.2	48.7	73.0	93.8	128.6	100.8	149.5	166.8	180.7	121.7	52.1
85°	24.3	24.3	48.7	69.5	69.5	45.2	52.1	59.1	69.5	73.0	27.8
87.5°	7.0	7.0	31.3	41.7	27.8	24.3	27.8	27.8	31.3	38.2	13.9
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°	1032.3	1032.3	1032.3	1032.3	1032.3	1032.3	1032.3	1032.3	1032.3	1032.3	1032.3
2.5°	1035.8	1035.8	1039.2	1039.2	1042.7	1042.7	1042.7	1042.7	1046.2	1049.7	1049.7
5°	1046.2	1049.7	1049.7	1049.7	1049.7	1042.7	1039.2	1035.8	1035.8	1039.2	1039.2
7.5°	1074.0	1077.5	1074.0	1067.1	1056.6	1042.7	1028.8	1028.8	1025.3	1028.8	1025.3
10°	1115.7	1115.7	1112.2	1094.9	1077.5	1049.7	1021.9	1001.0	987.1	983.6	976.7
12.5°	1167.9	1167.9	1157.4	1126.1	1094.9	1042.7	969.7	900.2	844.6	820.3	813.3
15°	1220.0	1220.0	1206.1	1160.9	1098.3	973.2	820.3	674.3	590.9	556.1	535.3
17.5°	1282.6	1275.6	1251.3	1188.7	1060.1	834.2	587.4	437.9	371.9	340.6	340.6
20°	1348.6	1341.6	1296.5	1192.2	962.8	597.8	382.3	302.4	285.0	278.1	278.1
22.5°	1421.6	1404.2	1334.7	1164.4	757.7	406.7	288.5	267.6	260.7	257.2	257.2
25°	1480.7	1452.9	1362.5	1087.9	542.2	285.0	253.7	246.8	232.9	229.4	222.4
27.5°	1525.9	1484.1	1372.9	924.5	358.0	236.4	225.9	212.0	198.1	184.2	184.2
30°	1584.9	1532.8	1379.9	719.5	243.3	205.1	194.6	177.3	159.9	146.0	146.0
32.5°	1703.1	1626.6	1383.3	504.0	201.6	180.7	159.9	139.0	121.7	114.7	111.2
35°	1831.7	1727.4	1345.1	326.7	177.3	152.9	128.6	111.2	93.8	90.4	90.4
37.5°	1974.2	1876.9	1261.7	222.4	156.4	128.6	104.3	86.9	76.5	73.0	73.0
40°	2214.1	2099.4	1122.7	177.3	135.6	107.7	86.9	73.0	66.0	62.6	62.6
42.5°	2558.1	2360.0	948.9	152.9	118.2	90.4	69.5	59.1	55.6	52.1	52.1
45°	2954.4	2652.0	747.3	139.0	104.3	76.5	59.1	52.1	48.7	45.2	45.2
47.5°	3409.7	2954.4	590.9	121.7	90.4	66.0	52.1	45.2	41.7	38.2	38.2
50°	3840.7	3190.7	444.9	107.7	79.9	55.6	45.2	41.7	38.2	34.8	34.8
52.5°	4195.2	3350.6	337.1	93.8	69.5	48.7	41.7	38.2	31.3	31.3	31.3
55°	4622.7	3475.7	257.2	83.4	62.6	45.2	38.2	31.3	27.8	24.3	24.3
57.5°	4994.6	3520.9	187.7	73.0	55.6	41.7	34.8	27.8	20.9	17.4	17.4
60°	5244.9	3482.7	135.6	62.6	48.7	34.8	27.8	20.9	13.9	10.4	10.4
62.5°	5422.2	3399.3	104.3	55.6	41.7	31.3	24.3	17.4	10.4	7.0	7.0
65°	5244.9	3142.1	83.4	48.7	34.8	27.8	17.4	13.9	7.0	3.5	3.5
67.5°	4535.8	2634.6	66.0	41.7	31.3	24.3	17.4	10.4	3.5	0.0	0.0
70°	3260.2	1880.4	55.6	38.2	27.8	20.9	13.9	7.0	3.5	0.0	0.0
72.5°	1817.8	969.7	52.1	34.8	27.8	20.9	13.9	7.0	3.5	0.0	0.0
75°	736.9	333.7	48.7	34.8	27.8	17.4	13.9	7.0	3.5	0.0	0.0
77.5°	215.5	114.7	41.7	31.3	27.8	20.9	13.9	7.0	3.5	0.0	0.0
80°	76.5	52.1	31.3	27.8	20.9	17.4	13.9	10.4	3.5	0.0	0.0
82.5°	34.8	20.9	13.9	10.4	10.4	10.4	10.4	7.0	3.5	0.0	0.0
85°	13.9	10.4	7.0	3.5	3.5	3.5	3.5	3.5	3.5	0.0	0.0
87.5°	10.4	7.0	3.5	3.5	3.5	3.5	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)