

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: P573541

Luminaire Tested: **ARCH-S-PA2-90-727-U-T4W-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573541  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-90-727-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 910mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

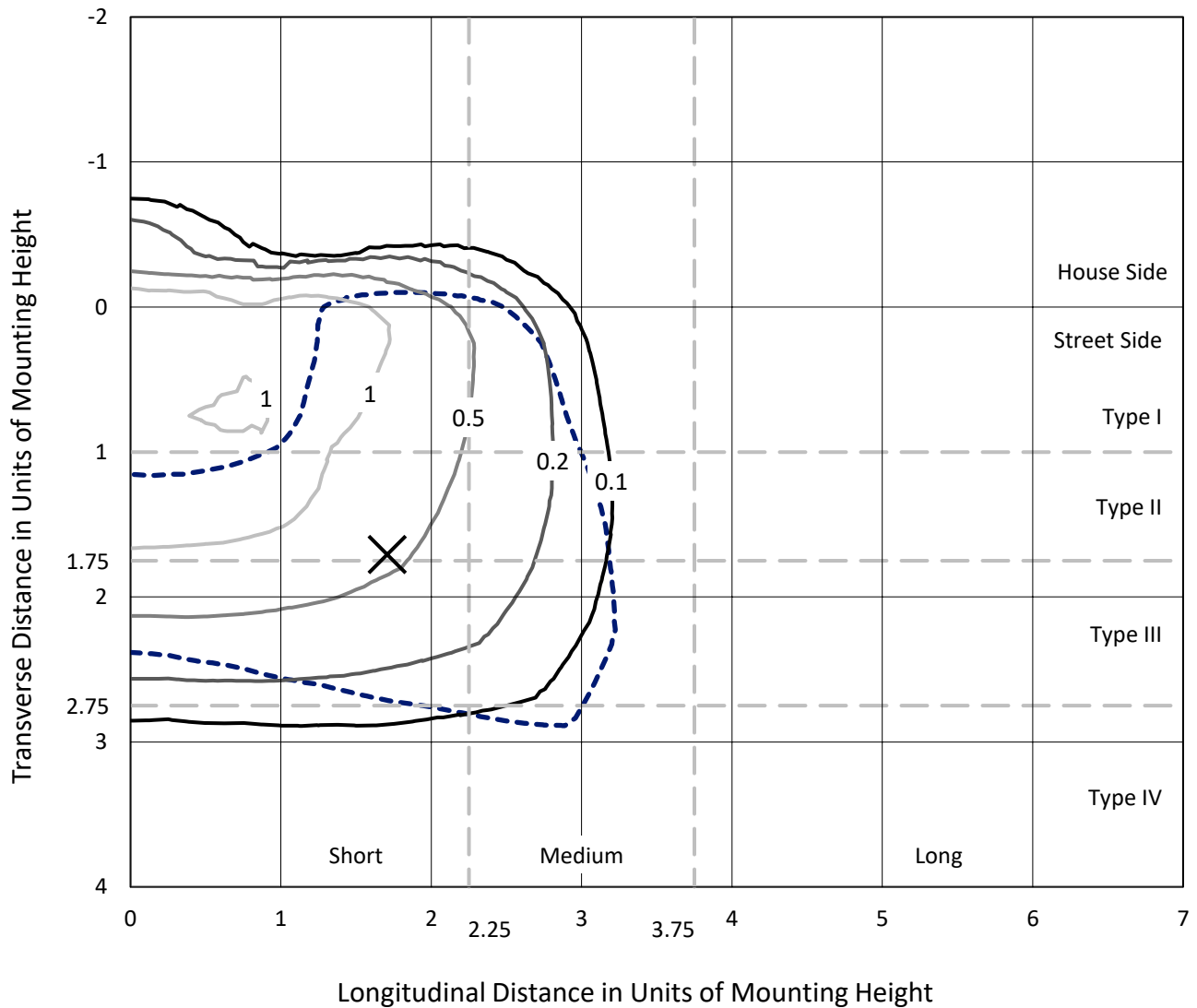
Lumens per Lamp: N/A  
Luminaire Lumens: 7870 lumens  
Efficiency: N/A  
Efficacy: 85.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 92.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

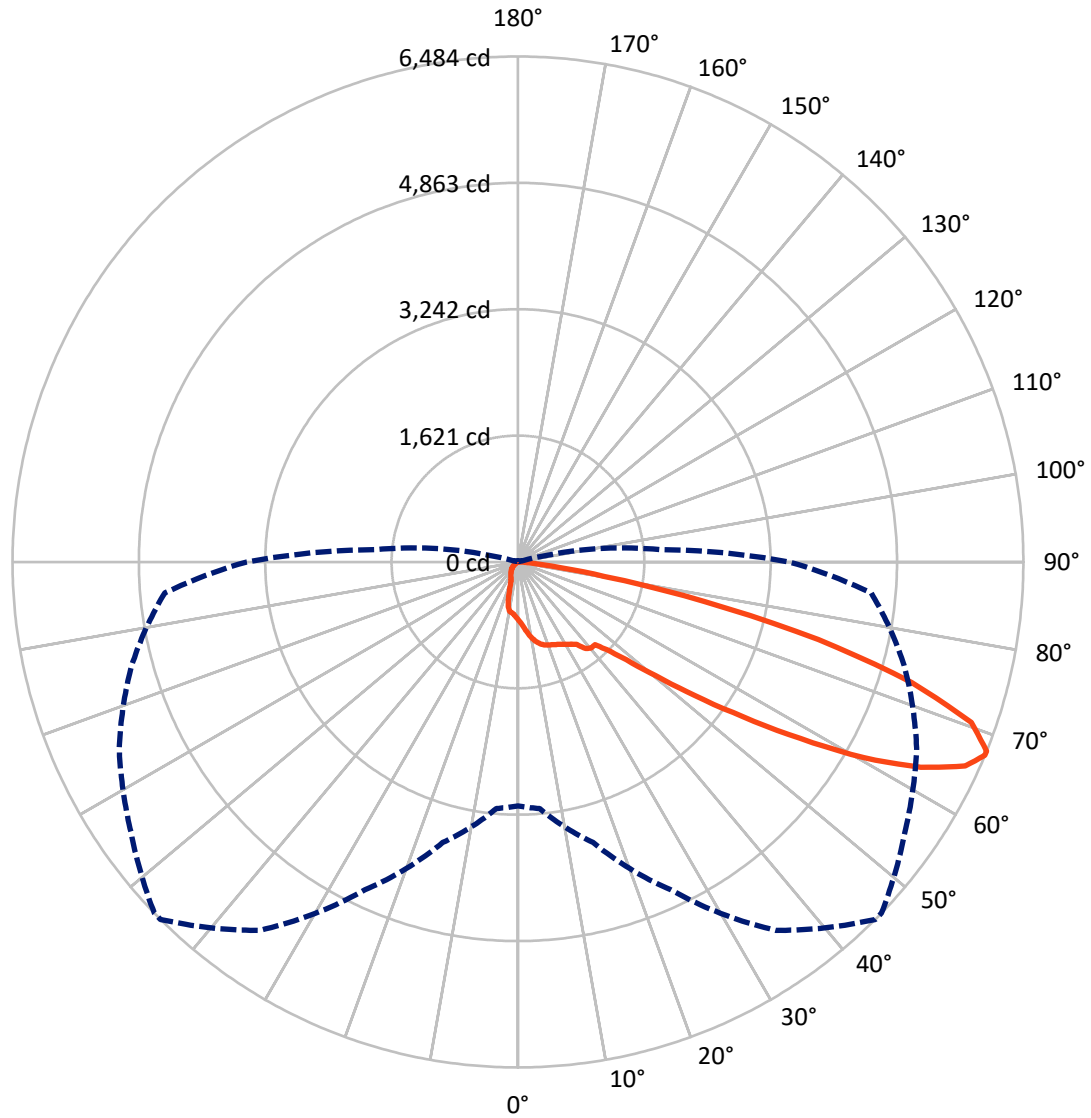
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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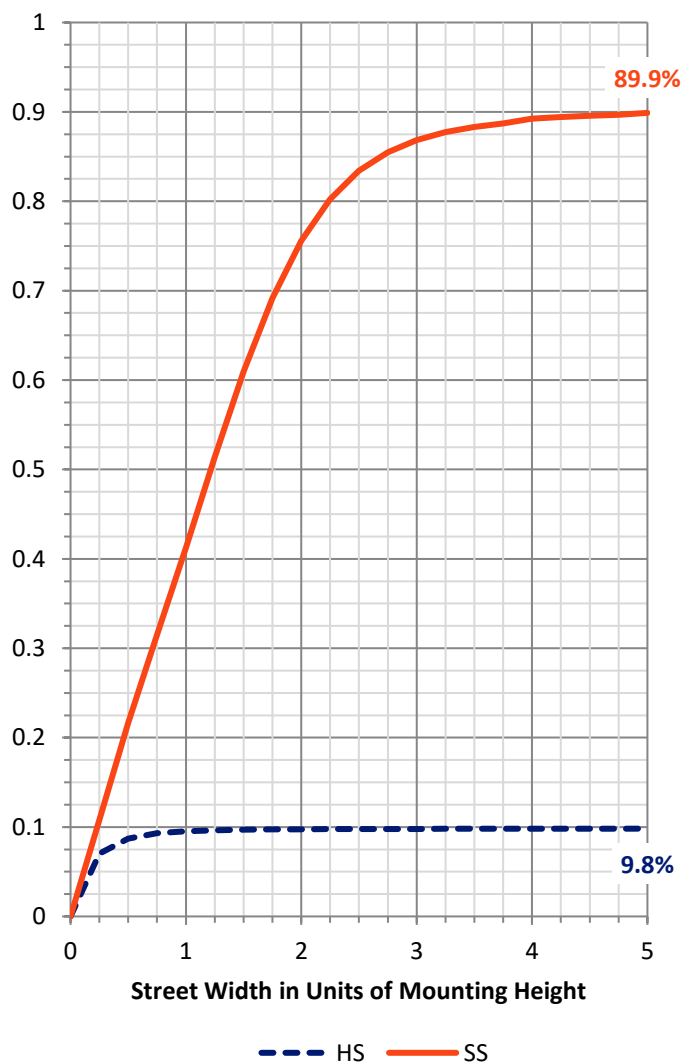
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	779.8	0.0	779.8
	% Fixture	9.9	0.0	9.9
<b>Street Side</b>	Lumens	7090.2	0.0	7090.2
	% Fixture	90.1	0.0	90.1
<b>Total</b>	Lumens	7870.0	0.0	7870.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.7	0.9
10°-20°	225.8	2.9
20°-30°	361.2	4.6
30°-40°	519.9	6.6
40°-50°	912.1	11.6
50°-60°	1921.8	24.4
60°-70°	2657.6	33.8
70°-80°	1112.6	14.1
80°-90°	84.1	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°	7870.0	100.0
0°-180°	7870.0	100.0

**Coefficient of Utilization**



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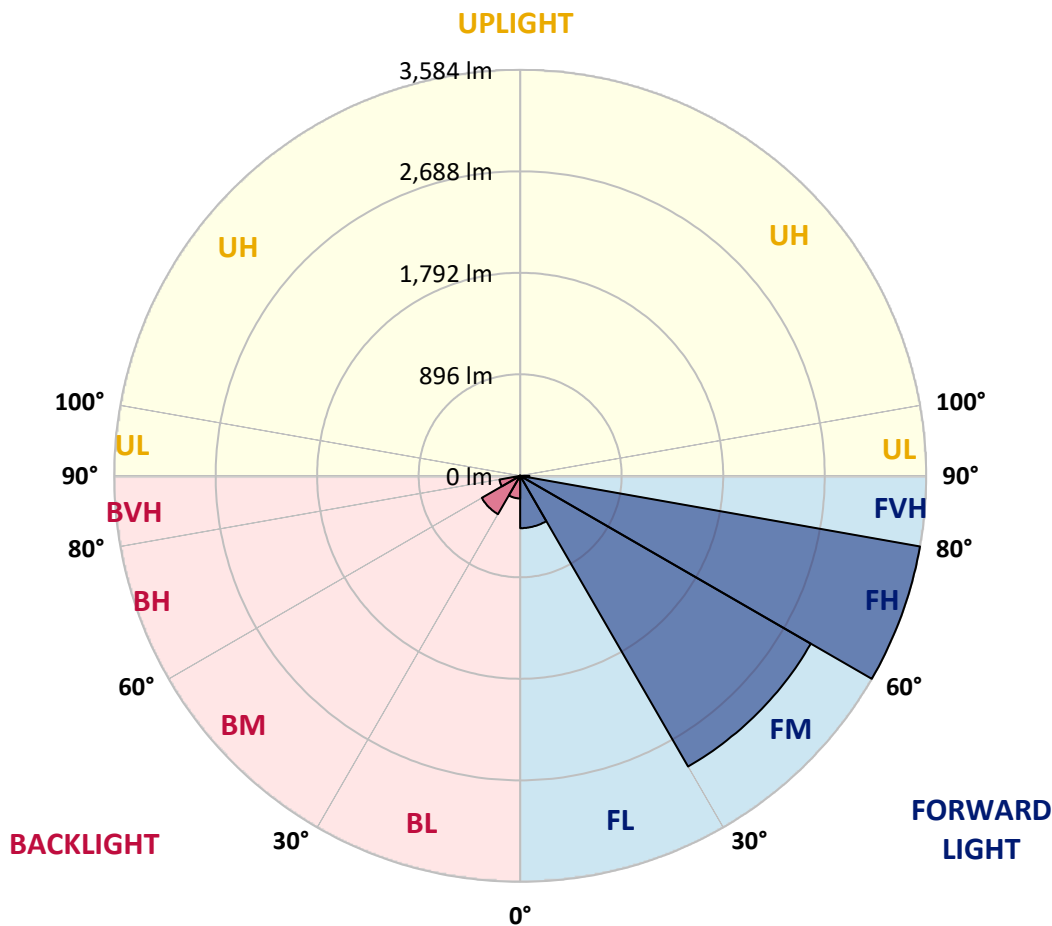
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	461.9	5.9			
FM (30°-60°)	2963.2	37.7			
FH (60°-80°)	3583.8	45.5			G2/5000
FVH (80°-90°)	81.3	1.0			G1/100
BL (0°-30°)	199.9	2.5	B1/500		
BM (30°-60°)	390.7	5.0	B1/1000		
BH (60°-80°)	186.4	2.4	B1/500		G1/500
BVH (80°-90°)	2.8	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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3
2.5°	828.6	814.1	811.2	808.3	799.5	787.9	790.8	782.1	767.5	758.8	750.1
5°	930.4	915.8	910.0	892.6	875.1	849.0	849.0	825.7	799.5	776.3	753.0
7.5°	1035.0	1023.4	1011.8	985.6	959.4	924.5	921.6	886.8	846.0	811.2	773.4
10°	1122.3	1113.5	1099.0	1067.0	1032.1	994.3	985.6	953.6	901.3	854.8	805.3
12.5°	1192.0	1183.3	1163.0	1131.0	1087.4	1049.6	1046.7	1006.0	953.6	904.2	843.1
15°	1244.4	1229.8	1206.6	1171.7	1128.1	1093.2	1087.4	1052.5	1003.0	947.8	875.1
17.5°	1253.1	1244.4	1224.0	1186.2	1148.4	1119.3	1116.4	1090.3	1046.7	988.5	912.9
20°	1229.8	1226.9	1209.5	1180.4	1151.3	1136.8	1133.9	1116.4	1081.5	1029.2	953.6
22.5°	1194.9	1192.0	1180.4	1165.9	1154.2	1151.3	1151.3	1145.5	1125.2	1075.7	1006.0
25°	1171.7	1168.8	1163.0	1154.2	1154.2	1171.7	1174.6	1180.4	1163.0	1125.2	1049.6
27.5°	1174.6	1168.8	1163.0	1154.2	1165.9	1197.8	1200.7	1215.3	1200.7	1165.9	1099.0
30°	1215.3	1206.6	1189.1	1168.8	1183.3	1226.9	1229.8	1247.3	1235.6	1218.2	1154.2
32.5°	1279.2	1273.4	1238.5	1203.7	1212.4	1256.0	1261.8	1293.8	1308.3	1282.2	1203.7
35°	1372.3	1351.9	1308.3	1273.4	1267.6	1299.6	1308.3	1360.7	1398.5	1334.5	1232.7
37.5°	1447.9	1430.4	1360.7	1305.4	1337.4	1410.1	1413.0	1477.0	1445.0	1340.3	1279.2
40°	1703.7	1700.8	1578.7	1404.3	1369.4	1450.8	1462.4	1474.0	1459.5	1407.2	1381.0
42.5°	2116.6	2081.7	1945.0	1677.6	1439.2	1447.9	1453.7	1514.7	1590.3	1567.1	1575.8
45°	2564.3	2535.2	2381.1	2043.9	1677.6	1604.9	1610.7	1709.5	1854.9	1884.0	1930.5
47.5°	2977.2	2930.6	2843.4	2503.3	2084.6	1872.4	1884.0	2003.2	2244.5	2308.5	2381.1
50°	3326.0	3294.1	3212.7	2988.8	2584.7	2293.9	2305.6	2404.4	2718.4	2820.2	2913.2
52.5°	3831.9	3788.3	3631.3	3526.7	3221.4	2843.4	2817.3	2921.9	3282.4	3349.3	3474.3
55°	4297.1	4207.0	4113.9	4070.3	3942.4	3500.5	3491.8	3512.1	3811.6	3846.5	4070.3
57.5°	4494.8	4477.4	4555.9	4701.2	4730.3	4273.9	4236.1	4157.6	4393.1	4390.1	4651.8
60°	4619.8	4619.8	4829.2	5189.7	5422.3	5099.6	5047.2	4803.0	4887.3	4890.2	5131.5
62.5°	4541.3	4561.7	4887.3	5431.0	5899.1	5800.2	5765.3	5355.4	5349.6	5282.7	5367.0
65°	4055.8	4090.7	4614.0	5297.3	6073.5	6306.1	6291.6	5826.4	5657.8	5413.5	5224.6
67°	3308.6	3372.6	4006.4	4814.6	5875.8	6480.6	6483.5	6029.9	5660.7	5195.5	4721.6
67.5°	3128.3	3174.9	3724.4	4640.2	5768.2	6483.5	6483.5	6056.1	5643.2	5128.6	4547.1
70°	1994.5	2006.1	2605.0	3590.6	4928.0	6169.5	6192.7	5858.4	5140.3	4151.7	3192.3
72.5°	985.6	959.4	1375.2	2311.4	3698.2	5279.8	5340.9	5003.6	4067.4	2712.6	1686.3
75°	386.7	412.8	598.9	1229.8	2317.2	3980.2	4026.7	3640.0	2616.6	1398.5	665.8
77.5°	171.5	171.5	255.8	552.4	1218.2	2442.2	2465.5	2221.2	1381.0	575.7	203.5
80°	93.0	98.9	133.7	241.3	613.5	1122.3	1224.0	1101.9	625.1	252.9	69.8
82.5°	46.5	49.4	81.4	136.6	308.2	424.5	447.7	468.1	287.8	157.0	29.1
85°	17.4	20.4	43.6	78.5	139.6	142.5	142.5	183.2	157.0	119.2	14.5
87.5°	2.9	5.8	20.4	32.0	55.2	49.4	43.6	58.1	87.2	75.6	8.7
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°	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3
2.5°	744.3	738.5	726.8	718.1	712.3	706.5	700.7	700.7	697.8	697.8	700.7
5°	744.3	732.7	709.4	694.9	683.2	674.5	668.7	668.7	665.8	668.7	671.6
7.5°	758.8	741.4	709.4	683.2	668.7	654.2	648.3	645.4	645.4	648.3	645.4
10°	782.1	758.8	718.1	683.2	662.9	642.5	610.6	581.5	555.3	543.7	540.8
12.5°	811.2	782.1	732.7	692.0	660.0	590.2	503.0	447.7	412.8	395.4	389.6
15°	843.1	808.3	750.1	703.6	616.4	485.5	372.1	311.1	290.7	293.6	296.6
17.5°	878.0	840.2	776.3	697.8	529.1	360.5	273.3	258.8	267.5	276.2	276.2
20°	912.9	872.2	802.4	654.2	415.8	267.5	244.2	247.1	255.8	264.6	264.6
22.5°	959.4	915.8	828.6	578.6	308.2	232.6	232.6	238.4	244.2	252.9	252.9
25°	1008.9	965.3	846.0	485.5	229.7	218.1	221.0	226.8	232.6	241.3	241.3
27.5°	1061.2	1017.6	843.1	375.1	200.6	200.6	203.5	212.2	218.1	226.8	226.8
30°	1119.3	1081.5	811.2	273.3	186.1	183.2	183.2	191.9	200.6	206.4	209.3
32.5°	1168.8	1136.8	755.9	206.4	174.4	168.6	165.7	168.6	177.4	183.2	186.1
35°	1209.5	1197.8	674.5	177.4	162.8	154.1	148.3	145.4	148.3	148.3	151.2
37.5°	1285.1	1288.0	578.6	165.7	154.1	142.5	130.8	122.1	116.3	113.4	110.5
40°	1427.5	1424.6	476.8	157.0	145.4	130.8	113.4	101.8	87.2	81.4	81.4
42.5°	1628.1	1584.5	363.4	148.3	136.6	119.2	95.9	78.5	64.0	61.1	61.1
45°	1988.7	1808.4	273.3	142.5	127.9	104.7	78.5	58.1	49.4	46.5	46.5
47.5°	2387.0	2067.1	218.1	133.7	119.2	93.0	61.1	46.5	37.8	37.8	37.8
50°	2826.0	2314.3	183.2	125.0	104.7	78.5	49.4	37.8	34.9	32.0	34.9
52.5°	3305.7	2509.1	159.9	113.4	90.1	64.0	40.7	34.9	29.1	29.1	29.1
55°	3736.0	2639.9	133.7	98.9	75.6	52.3	37.8	29.1	26.2	23.3	20.4
57.5°	4125.6	2709.7	107.6	84.3	58.1	43.6	32.0	23.3	20.4	14.5	14.5
60°	4326.2	2645.7	84.3	66.9	46.5	34.9	26.2	20.4	14.5	8.7	8.7
62.5°	4358.2	2480.0	66.9	52.3	40.7	29.1	20.4	14.5	8.7	5.8	5.8
65°	4079.1	2189.3	55.2	43.6	32.0	23.3	17.4	11.6	5.8	2.9	2.9
67°	3579.0	1884.0	49.4	37.8	29.1	20.4	14.5	8.7	5.8	2.9	0.0
67.5°	3480.1	1828.7	46.5	37.8	29.1	20.4	14.5	8.7	5.8	2.9	0.0
70°	2285.2	1264.7	43.6	34.9	26.2	17.4	11.6	8.7	2.9	0.0	0.0
72.5°	1247.3	636.7	40.7	32.0	23.3	17.4	11.6	5.8	2.9	0.0	0.0
75°	456.5	241.3	34.9	29.1	20.4	17.4	11.6	5.8	2.9	0.0	0.0
77.5°	154.1	84.3	32.0	29.1	23.3	17.4	11.6	5.8	2.9	0.0	0.0
80°	52.3	37.8	26.2	23.3	17.4	14.5	11.6	5.8	2.9	0.0	0.0
82.5°	20.4	11.6	8.7	8.7	8.7	11.6	11.6	8.7	2.9	0.0	0.0
85°	8.7	5.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	0.0	0.0
87.5°	8.7	5.8	2.9	2.9	2.9	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)