

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: P397836

Luminaire Tested: **ARCH-S-PA1-50-730-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397836  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-50-730-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7180 lumens  
Efficiency: N/A  
Efficacy: 133.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G2

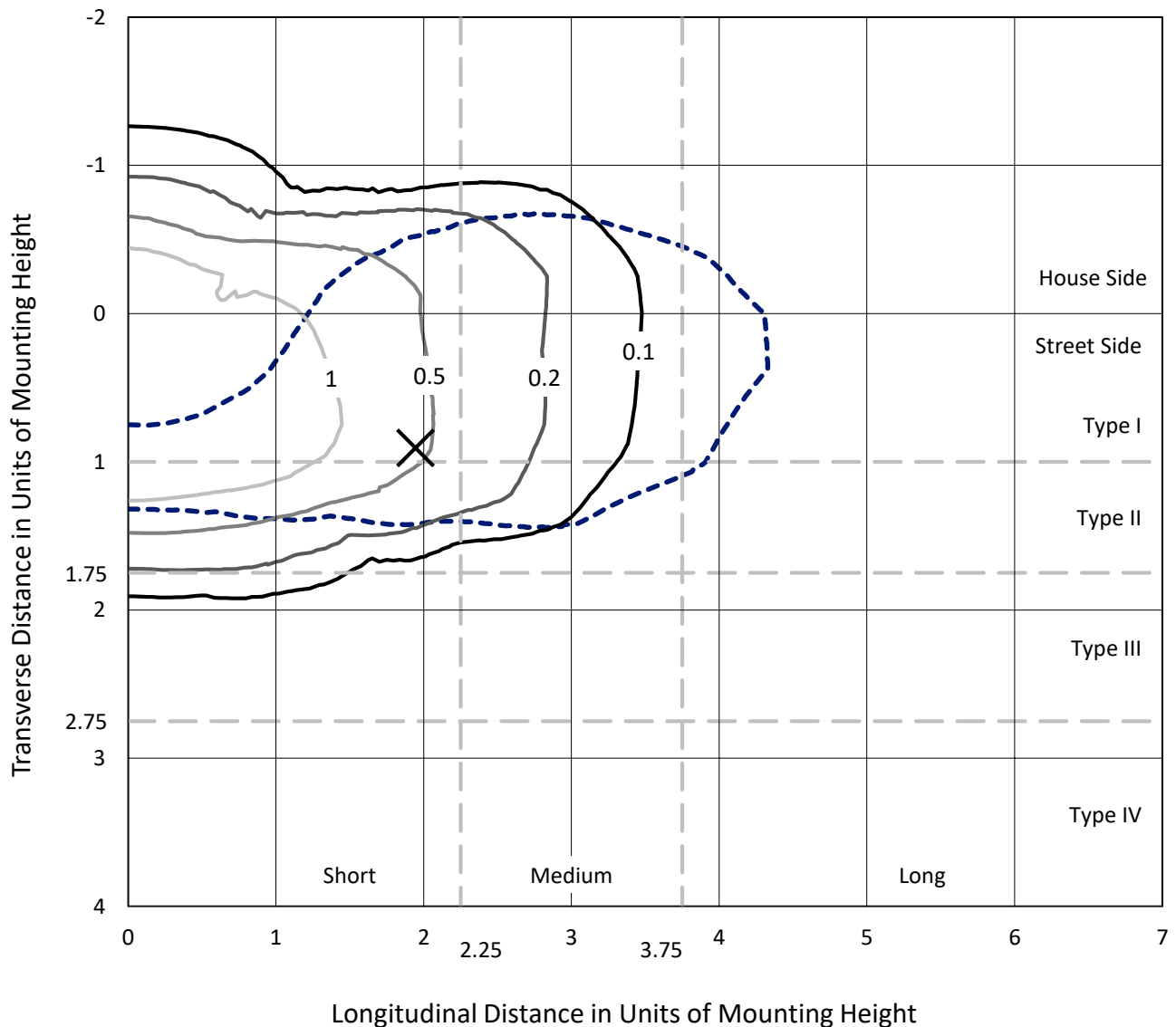
Input Watts (W): 54  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

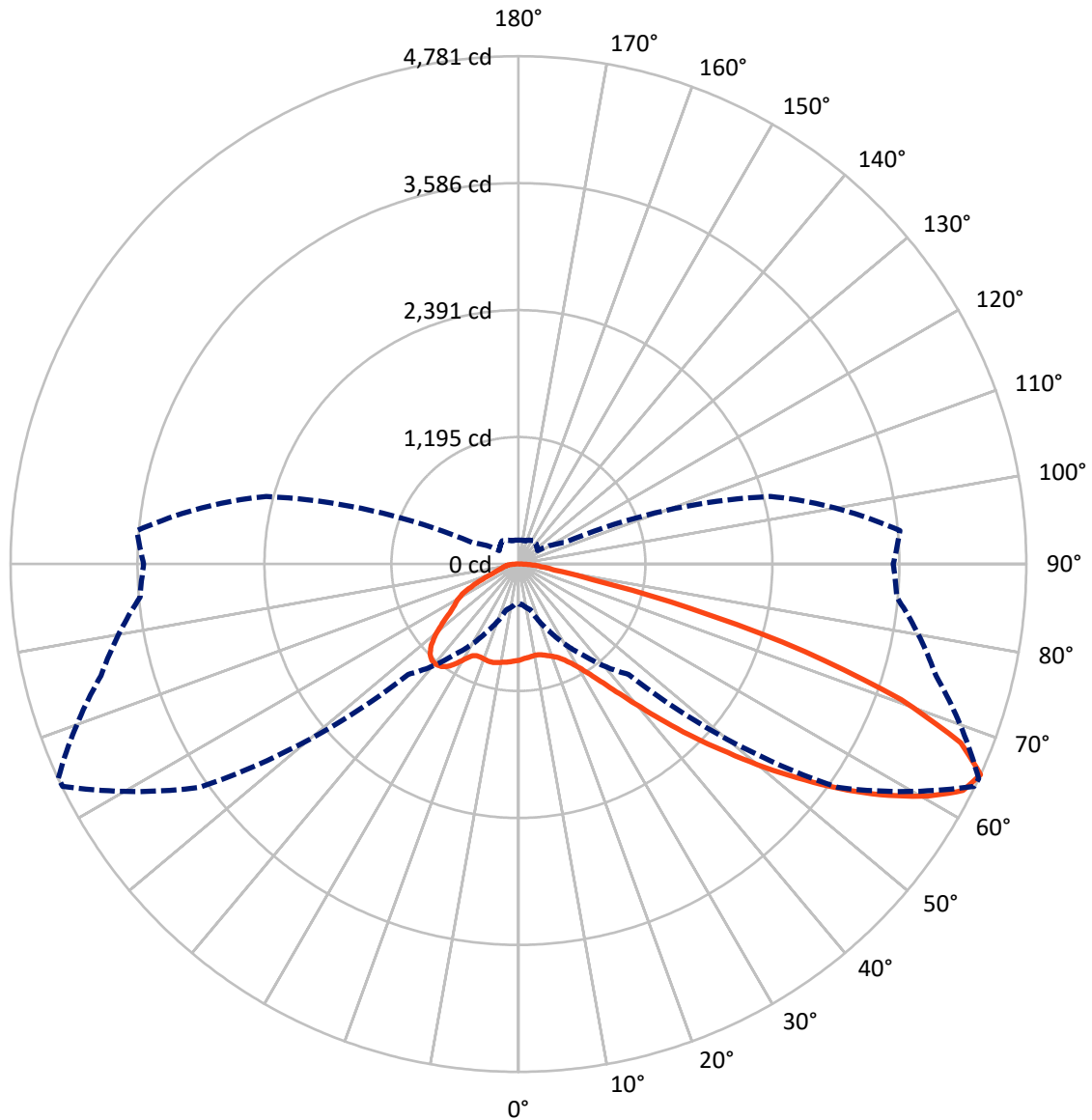


Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type II - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2075.9	0.0	2075.9
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	5104.2	0.0	5104.2
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	7180.0	0.0	7180.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.4	1.2
10°-20°	258.1	3.6
20°-30°	458.4	6.4
30°-40°	775.5	10.8
40°-50°	1350.0	18.8
50°-60°	1744.6	24.3
60°-70°	1526.6	21.3
70°-80°	830.4	11.6
80°-90°	150.0	2.1
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°	7180.0	100.0
0°-180°	7180.0	100.0



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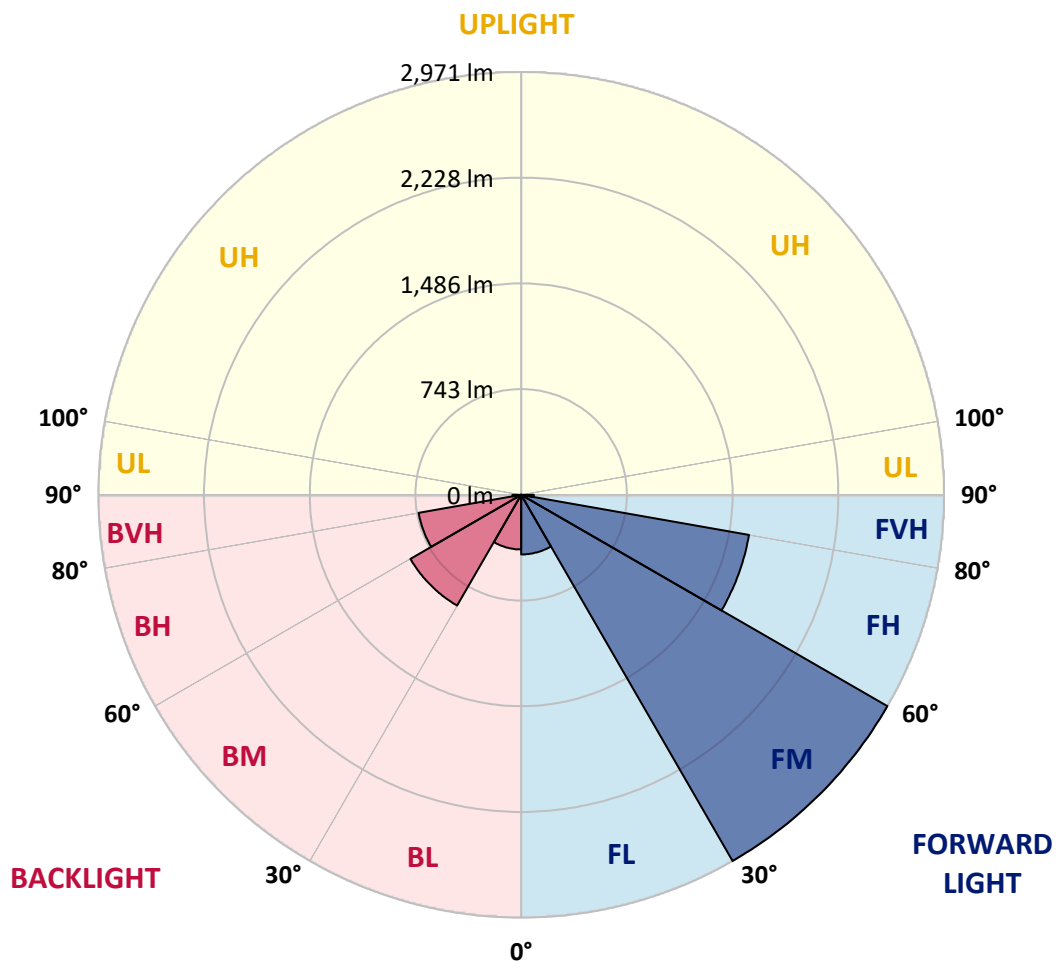
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	418.9	5.8			
FM	(30°-60°)	2971.3	41.4			
FH	(60°-80°)	1625.7	22.6			G1/1800
FVH	(80°-90°)	88.3	1.2			G1/100
BL	(0°-30°)	384.0	5.3	B1/500		
BM	(30°-60°)	898.8	12.5	B1/1000		
BH	(60°-80°)	731.3	10.2	B2/1000		G2/1000
BVH	(80°-90°)	61.8	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	907.3	907.3	907.3	907.3	907.3	907.3	907.3	907.3	907.3	907.3	907.3
2.5°	891.2	890.3	888.4	890.3	891.2	893.1	892.1	894.0	893.1	895.9	900.6
5°	868.5	866.6	865.7	870.4	873.2	878.0	879.9	886.5	885.5	890.3	897.8
7.5°	843.0	843.0	842.1	847.7	851.5	860.0	866.6	878.0	878.9	887.4	895.9
10°	823.2	824.1	823.2	827.9	833.5	843.9	855.3	871.3	872.3	884.6	893.1
12.5°	815.6	815.6	815.6	822.2	829.8	843.9	857.2	874.2	876.1	889.3	896.9
15°	826.0	826.9	825.0	831.7	840.2	857.2	869.5	887.4	889.3	901.6	906.3
17.5°	862.8	866.6	861.9	865.7	863.8	877.0	888.4	906.3	907.3	917.7	919.5
20°	935.6	939.4	931.8	927.1	910.1	909.2	913.9	928.1	928.1	934.7	929.9
22.5°	1048.1	1051.9	1038.6	1020.7	980.0	960.2	949.8	956.4	955.5	958.3	946.0
25°	1197.4	1196.5	1180.4	1147.3	1082.1	1033.9	1008.4	998.0	998.0	992.3	977.2
27.5°	1382.6	1368.5	1340.1	1300.4	1209.7	1142.6	1087.8	1061.3	1056.6	1039.6	1011.2
30°	1580.1	1569.8	1529.1	1471.5	1366.6	1280.6	1189.8	1136.9	1134.1	1097.2	1054.7
32.5°	1812.6	1795.6	1750.3	1681.3	1555.6	1434.6	1321.2	1240.9	1236.1	1177.6	1119.0
35°	2111.3	2097.1	2009.2	1940.2	1778.6	1619.8	1485.6	1378.8	1375.1	1303.2	1228.6
37.5°	2469.5	2432.6	2347.5	2218.1	2048.0	1859.9	1689.8	1555.6	1550.9	1471.5	1377.0
40°	2788.9	2755.8	2680.2	2561.1	2378.7	2169.9	1939.3	1776.7	1772.0	1675.6	1556.5
42.5°	3025.2	3002.5	2953.3	2884.3	2753.9	2627.3	2257.8	2044.2	2035.7	1910.9	1762.5
45°	3162.2	3144.2	3115.9	3132.9	3131.0	3107.4	2637.7	2362.7	2335.3	2173.6	1992.2
47.5°	3129.1	3113.0	3124.4	3256.7	3439.1	3576.1	3080.0	2688.7	2651.9	2441.1	2237.0
50°	2890.0	2896.6	2956.2	3209.4	3618.7	3923.0	3570.5	3060.1	3011.0	2710.4	2469.5
52.5°	2454.3	2470.4	2615.0	2969.4	3598.8	4147.9	4013.7	3443.8	3378.6	2973.2	2681.1
55°	1949.7	1990.3	2177.4	2549.8	3339.9	4164.0	4348.2	3829.4	3757.6	3219.8	2865.4
57.5°	1442.2	1502.7	1719.1	2061.2	2843.7	3909.7	4515.5	4198.0	4111.0	3464.6	3060.1
60°	914.8	951.7	1201.2	1604.7	2176.5	3287.9	4493.8	4511.7	4436.1	3708.4	3263.3
62.5°	584.1	602.0	727.7	1144.5	1521.6	2434.5	4256.6	4749.0	4697.9	3930.5	3456.1
65°	375.2	382.8	447.0	704.1	1035.8	1469.6	3665.9	4774.5	4781.1	4069.4	3575.2
67.5°	305.3	309.0	332.7	434.7	732.4	811.8	2553.6	4411.6	4491.9	4033.5	3534.5
70°	277.8	282.6	307.1	346.8	567.0	560.4	1236.1	3691.4	3822.8	3826.6	3354.0
72.5°	234.4	241.0	274.1	327.9	438.5	442.3	523.6	2629.2	2822.9	3420.2	3082.8
75°	195.6	199.4	227.8	289.2	371.4	353.5	367.6	1394.0	1673.7	2742.6	2794.6
77.5°	158.8	162.6	183.3	230.6	329.8	275.0	289.2	577.4	713.5	1861.8	2284.2
80°	113.4	117.2	140.8	179.6	249.5	247.6	214.5	318.5	345.9	1006.5	1483.8
82.5°	81.3	84.1	106.8	128.5	172.9	248.6	161.6	216.4	226.8	446.1	598.2
85°	54.8	54.8	73.7	85.1	111.5	156.9	130.4	146.5	153.1	211.7	161.6
87.5°	23.6	23.6	39.7	43.5	58.6	72.8	97.3	73.7	75.6	114.4	66.2
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°	907.3	907.3	907.3	907.3	907.3	907.3	907.3	907.3	907.3	907.3	907.3
2.5°	903.5	904.4	906.3	912.0	915.8	921.4	924.3	928.1	928.1	926.2	927.1
5°	901.6	904.4	911.0	921.4	928.1	938.4	946.0	951.7	953.6	951.7	952.6
7.5°	900.6	905.4	916.7	931.8	941.3	954.5	964.9	971.5	976.3	974.4	975.3
10°	897.8	905.4	919.5	938.4	952.6	965.9	975.3	978.1	981.0	979.1	978.1
12.5°	901.6	910.1	925.2	947.9	964.0	974.4	977.2	972.5	965.9	962.1	961.1
15°	909.2	917.7	932.8	956.4	970.6	974.4	967.7	952.6	937.5	929.0	928.1
17.5°	919.5	925.2	937.5	958.3	969.6	964.9	951.7	933.7	922.4	915.8	916.7
20°	926.2	926.2	935.6	951.7	961.1	957.4	941.3	921.4	903.5	895.0	892.1
22.5°	935.6	930.9	931.8	946.0	959.2	953.6	919.5	884.6	859.1	849.6	848.7
25°	961.1	947.9	939.4	947.9	979.1	932.8	864.7	824.1	800.5	792.0	792.9
27.5°	992.3	974.4	956.4	970.6	995.2	885.5	794.8	748.5	734.3	727.7	730.5
30°	1023.5	999.9	976.3	1027.3	983.8	811.8	705.0	659.7	647.4	642.6	646.4
32.5°	1081.2	1042.4	1014.1	1102.9	948.8	727.7	607.7	566.1	554.8	549.1	547.2
35°	1177.6	1128.4	1100.1	1169.0	899.7	634.1	518.8	489.5	477.3	465.0	463.1
37.5°	1316.5	1256.9	1231.4	1206.8	830.7	541.5	450.8	430.9	413.0	394.1	393.1
40°	1482.8	1405.3	1386.4	1223.9	735.3	454.6	403.5	384.6	362.0	344.0	344.9
42.5°	1674.7	1575.4	1534.8	1219.1	617.1	408.3	369.5	348.7	328.9	312.8	311.9
45°	1879.7	1767.3	1673.7	1186.1	499.9	376.1	348.7	324.2	304.3	286.4	284.5
47.5°	2106.5	1980.9	1802.2	1121.8	413.0	353.5	336.4	301.5	283.5	272.2	272.2
50°	2335.3	2185.0	1920.4	1024.5	362.0	336.4	318.5	289.2	275.0	265.6	265.6
52.5°	2530.9	2397.6	2017.7	908.2	329.8	322.3	306.2	283.5	268.4	259.9	258.9
55°	2720.8	2595.1	2104.7	792.9	303.4	303.4	303.4	278.8	261.8	254.2	253.3
57.5°	2909.9	2803.1	2195.4	717.3	279.7	287.3	297.7	273.1	256.1	249.5	248.6
60°	3123.4	3052.6	2300.3	664.4	258.9	270.3	290.1	266.5	246.7	241.0	240.0
62.5°	3350.3	3350.3	2395.7	589.7	240.0	256.1	278.8	258.0	238.2	233.4	232.5
65°	3527.9	3604.5	2457.2	478.2	221.1	241.9	265.6	246.7	226.8	225.9	224.0
67.5°	3548.7	3668.7	2418.4	361.0	204.1	226.8	252.3	234.4	215.5	215.5	212.6
70°	3399.4	3521.3	2297.5	270.3	191.8	211.7	235.3	219.3	201.3	203.2	198.5
72.5°	3149.9	3180.1	1996.9	213.6	177.7	195.6	214.5	202.2	186.2	186.2	179.6
75°	2821.0	2652.8	1450.7	178.6	160.7	176.7	193.7	183.3	169.2	164.4	160.7
77.5°	2245.5	1922.3	843.0	154.0	146.5	158.8	170.1	162.6	150.3	139.9	139.9
80°	1368.5	1126.5	372.4	133.3	129.5	138.9	146.5	138.0	127.6	117.2	114.4
82.5°	520.7	434.7	180.5	114.4	113.4	119.1	124.7	116.2	108.7	104.0	89.8
85°	142.7	131.4	123.8	95.5	93.6	92.6	99.2	95.5	85.1	69.9	62.4
87.5°	53.9	61.4	67.1	58.6	62.4	57.6	66.2	60.5	53.9	35.0	31.2
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)