

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: P397759

Luminaire Tested: **ARCH-S-PA1-40-727-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397759  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-40-727-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5069 lumens  
Efficiency: N/A  
Efficacy: 126.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

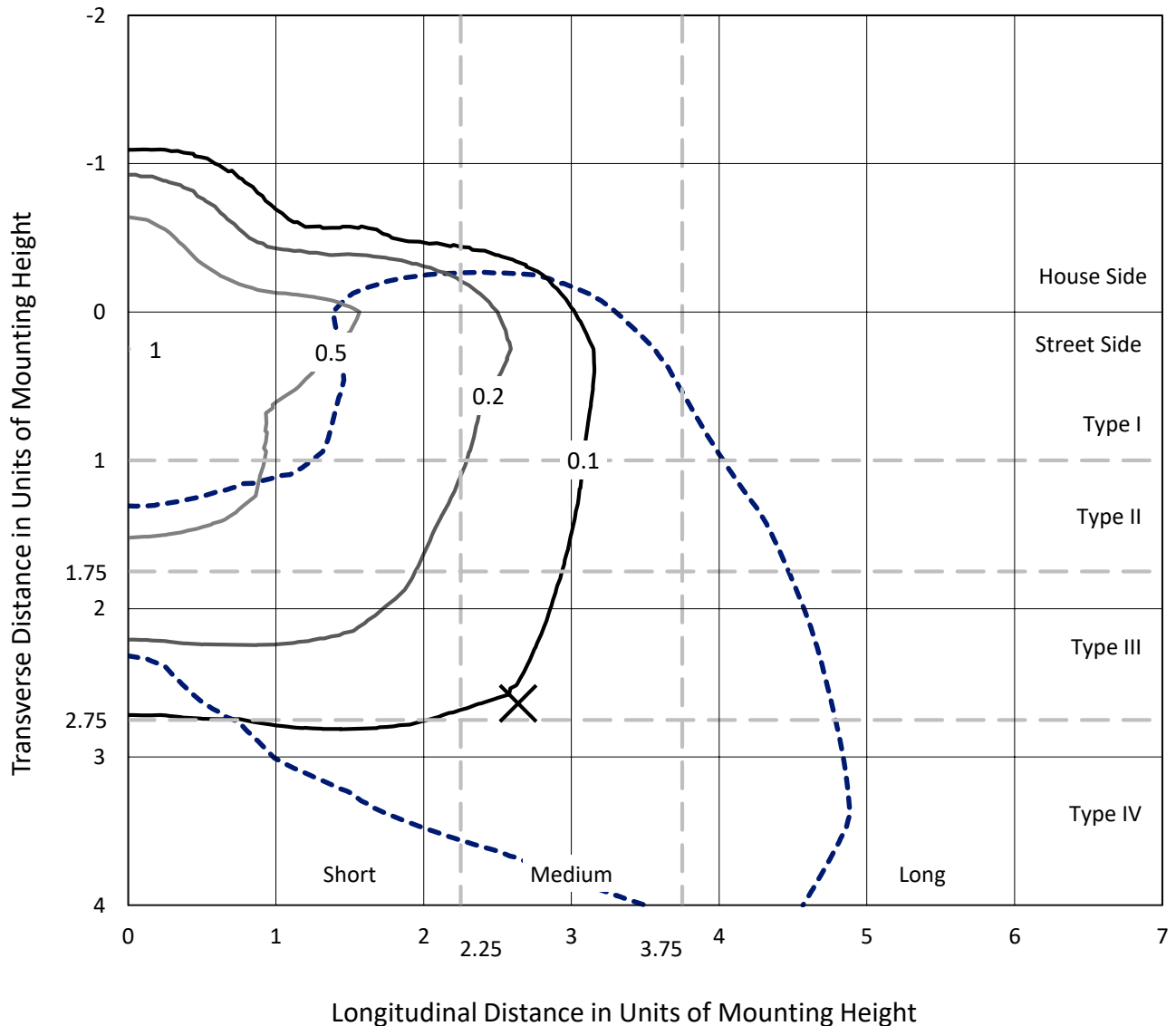
Input Watts (W): 40  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

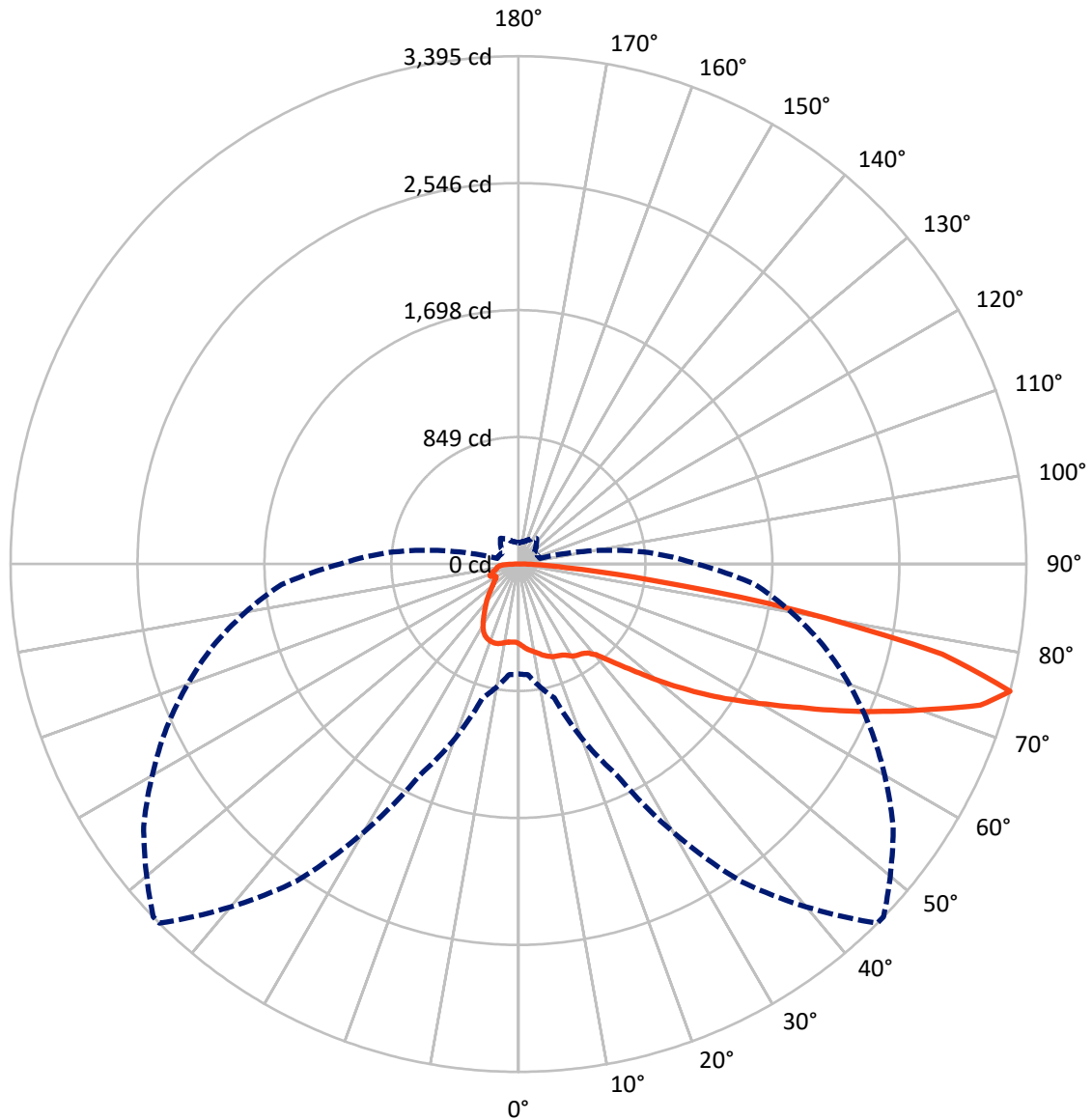


Based on 25 foot mounting height. Maximum calculated value = 1 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1120.2	0.0	1120.2
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	3948.8	0.0	3948.8
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	5069.0	0.0	5069.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.7	1.0
10°-20°	167.5	3.3
20°-30°	285.6	5.6
30°-40°	400.2	7.9
40°-50°	588.0	11.6
50°-60°	935.8	18.5
60°-70°	1331.2	26.3
70°-80°	1114.6	22.0
80°-90°	193.4	3.8
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°	5069.0	100.0
0°-180°	5069.0	100.0

**Coefficient of Utilization**



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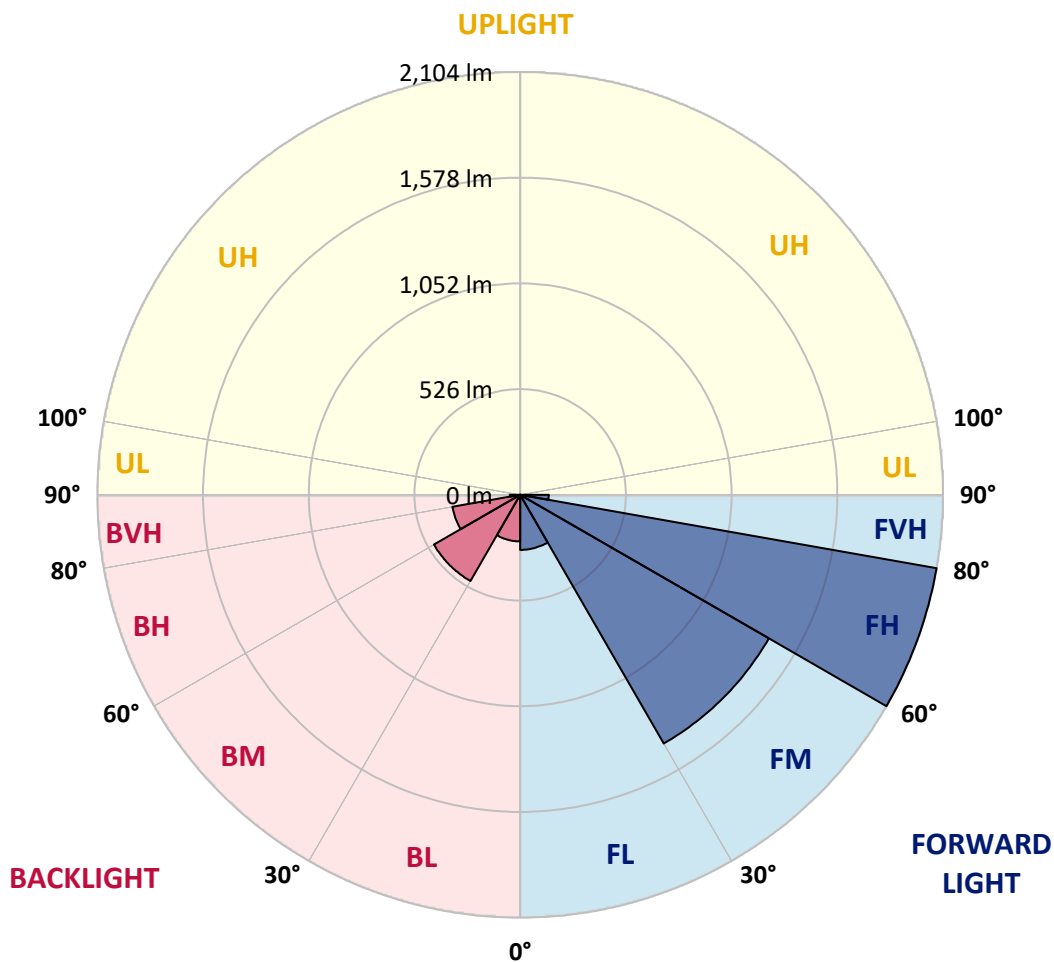
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	274.0	5.4			
FM (30°-60°)	1428.8	28.2			
FH (60°-80°)	2103.8	41.5			G2/5000
FVH (80°-90°)	142.2	2.8			G2/225
BL (0°-30°)	231.8	4.6	B1/500		
BM (30°-60°)	495.2	9.8	B1/1000		
BH (60°-80°)	342.0	6.7	B1/500		G1/500
BVH (80°-90°)	51.2	1.0			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

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

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	532.4	532.4	532.4	532.4	532.4	532.4	532.4	532.4	532.4	532.4	532.4
2.5°	562.8	560.1	558.8	558.8	553.4	550.0	549.3	544.5	540.5	536.4	533.0
5°	595.3	593.3	589.2	585.9	578.4	568.9	567.6	557.4	547.3	537.8	529.6
7.5°	625.1	621.1	616.3	609.6	597.4	584.5	582.5	568.3	554.0	539.8	529.0
10°	650.2	646.1	639.4	629.9	614.3	598.7	596.7	581.8	566.9	550.0	534.4
12.5°	673.9	670.5	660.4	647.5	629.2	615.0	613.0	600.1	584.5	565.5	545.2
15°	694.2	690.8	680.0	665.1	644.1	633.3	630.6	618.4	602.8	582.5	561.5
17.5°	704.4	704.4	692.9	676.6	657.0	648.9	646.8	631.9	617.7	598.1	577.1
20°	707.8	709.1	701.0	681.4	664.4	661.0	659.0	646.8	630.6	611.6	592.0
22.5°	709.8	712.5	705.7	683.4	669.2	667.1	665.8	657.7	644.8	626.5	606.9
25°	716.6	716.6	711.8	686.8	675.3	674.6	674.6	669.8	661.0	645.5	625.8
27.5°	726.7	726.1	720.0	694.2	688.8	690.8	690.2	689.5	683.4	667.8	646.8
30°	743.7	743.7	736.9	709.1	705.7	714.5	715.2	716.6	707.1	682.7	665.8
32.5°	769.4	766.7	759.9	724.0	718.6	726.7	728.1	727.4	719.3	696.3	688.1
35°	848.7	842.6	818.2	757.2	730.1	734.9	735.5	738.9	740.3	722.0	717.9
37.5°	987.5	979.4	942.1	835.8	766.7	755.2	754.5	763.3	770.8	754.5	754.5
40°	1138.5	1131.8	1110.1	971.2	834.4	796.5	793.8	801.9	811.4	799.9	803.3
42.5°	1268.6	1274.0	1276.0	1114.8	936.0	873.7	866.3	854.7	869.7	859.5	873.0
45°	1366.1	1363.4	1400.7	1261.8	1067.4	970.6	960.4	929.3	948.2	947.5	977.3
47.5°	1469.7	1465.0	1480.6	1400.0	1217.1	1089.1	1073.5	1027.5	1055.9	1075.5	1125.0
50°	1567.9	1569.3	1574.7	1509.0	1379.7	1233.4	1213.7	1152.1	1192.7	1234.0	1303.8
52.5°	1696.0	1686.5	1679.7	1636.4	1561.8	1383.7	1370.9	1300.4	1357.3	1406.1	1498.9
55°	1807.7	1801.6	1797.5	1795.5	1714.2	1549.7	1536.1	1463.0	1544.9	1579.5	1716.3
57.5°	1926.9	1923.5	1945.2	1979.7	1947.2	1718.3	1704.1	1633.6	1725.1	1749.5	1952.0
60°	2014.3	2016.3	2075.9	2164.0	2141.6	1901.2	1884.2	1821.9	1900.5	1922.2	2187.7
62.5°	2015.0	2035.3	2173.4	2331.3	2357.0	2111.8	2092.2	2024.4	2080.7	2080.7	2399.0
65°	1822.6	1845.6	2155.8	2372.6	2575.1	2362.4	2343.4	2237.1	2258.1	2229.7	2597.4
67.5°	1630.9	1658.0	1949.9	2376.0	2728.2	2630.6	2608.3	2449.8	2413.9	2342.1	2736.3
70°	1503.6	1522.6	1766.4	2331.9	2820.3	2911.0	2894.1	2651.6	2536.5	2436.2	2707.2
72.5°	1265.9	1259.1	1492.1	2122.7	2871.7	3229.4	3215.1	2871.1	2642.8	2391.5	2308.9
75°	734.9	743.0	925.9	1555.1	2588.6	3395.3	3393.9	3058.7	2596.1	2112.5	1591.0
77.5°	212.0	218.1	304.1	683.4	1637.0	2896.1	2988.9	2797.2	2194.4	1505.6	824.9
80°	92.8	97.5	132.1	227.6	705.1	1891.7	1973.0	1891.7	1323.4	690.8	323.7
82.5°	54.9	58.2	86.0	140.9	338.0	900.1	1009.9	881.8	571.0	293.3	134.1
85°	31.2	32.5	49.4	89.4	212.7	314.9	353.5	331.2	278.4	166.6	70.4
87.5°	14.2	14.9	24.4	42.0	119.2	106.3	110.4	146.3	161.2	101.6	35.2
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°	532.4	532.4	532.4	532.4	532.4	532.4	532.4	532.4	532.4	532.4	532.4
2.5°	531.7	529.6	525.6	524.2	522.2	522.9	523.6	523.6	524.2	522.2	522.2
5°	526.3	522.9	518.8	518.8	518.8	524.2	529.0	531.7	533.0	533.0	531.7
7.5°	524.2	520.2	515.4	516.8	518.1	524.9	533.7	542.5	545.2	545.2	543.9
10°	528.3	524.2	520.8	522.9	526.3	531.7	538.5	546.6	553.4	554.0	553.4
12.5°	537.8	533.0	529.6	533.7	537.8	541.2	544.5	547.9	556.7	558.1	558.1
15°	553.4	548.6	544.5	547.9	549.3	549.3	549.3	549.3	558.1	559.4	559.4
17.5°	568.9	564.9	560.8	561.5	557.4	552.0	550.0	549.3	554.0	558.1	558.8
20°	583.8	580.4	576.4	569.6	559.4	549.3	545.9	545.9	548.6	554.7	554.7
22.5°	600.1	596.0	589.2	573.7	556.7	542.5	539.1	541.2	544.5	552.7	552.0
25°	618.4	613.0	601.4	572.3	547.9	531.0	531.7	537.8	543.9	552.7	552.7
27.5°	638.7	631.2	608.2	561.5	528.3	512.0	518.1	532.4	541.2	550.6	552.0
30°	661.0	654.3	613.6	542.5	496.5	481.6	496.5	519.5	533.0	541.8	543.9
32.5°	688.1	682.7	618.4	518.1	455.1	442.3	463.9	492.4	514.1	524.2	526.3
35°	722.0	716.6	624.5	490.4	416.5	403.0	422.6	451.8	480.2	493.1	497.1
37.5°	766.0	757.9	629.9	460.6	384.0	368.4	377.9	404.3	430.1	447.7	452.4
40°	822.2	809.4	634.6	426.7	355.6	338.0	341.4	354.2	369.1	384.7	390.8
42.5°	901.5	875.7	635.3	390.8	326.5	310.2	308.8	312.9	312.9	312.9	314.9
45°	1011.9	963.1	636.7	356.9	296.7	279.7	275.7	274.3	264.1	244.5	243.1
47.5°	1151.4	1077.6	642.8	328.5	265.5	250.6	245.2	239.8	220.8	200.5	196.4
50°	1330.2	1210.3	654.9	301.4	239.1	228.9	222.2	209.3	188.3	172.7	168.6
52.5°	1536.1	1368.1	666.5	273.0	219.4	212.7	204.5	189.0	166.6	157.1	155.8
55°	1772.5	1544.2	689.5	247.9	202.5	197.8	190.3	175.4	158.5	151.7	151.0
57.5°	2014.3	1741.3	722.0	225.5	186.3	183.5	183.5	170.7	159.8	157.1	157.1
60°	2247.3	1910.7	696.9	204.5	171.4	172.7	185.6	182.2	174.1	177.5	179.5
62.5°	2428.1	2010.2	565.5	187.6	160.5	172.7	205.9	205.9	196.4	195.1	195.1
65°	2505.3	2008.9	397.6	174.7	156.5	189.6	229.6	218.8	193.7	184.2	182.2
67.5°	2485.7	1920.8	274.3	165.9	155.1	207.3	240.4	210.0	181.5	173.4	167.3
70°	2313.0	1734.6	211.3	157.8	153.1	199.8	237.1	199.8	172.0	164.6	159.2
72.5°	1866.0	1391.2	175.4	149.7	144.9	184.9	225.5	190.3	164.6	156.5	151.0
75°	1190.0	875.1	148.3	138.8	129.4	165.9	210.0	180.8	156.5	145.6	141.6
77.5°	572.3	377.3	129.4	126.0	116.5	153.7	194.4	168.6	145.6	136.8	134.1
80°	231.6	172.7	112.4	113.1	107.0	146.3	183.5	157.1	134.8	125.3	120.6
82.5°	120.6	100.2	94.8	97.5	97.5	139.5	175.4	147.7	125.3	121.2	105.7
85°	65.0	62.3	73.1	78.6	84.7	126.0	163.2	137.5	114.5	98.2	94.8
87.5°	31.8	40.6	41.3	47.4	58.9	100.9	137.5	115.1	95.5	79.2	77.9
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)