

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: P573136

Luminaire Tested: **ARCH-S-PA2-40-727-U-T4W-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573136  
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-PA2-40-727-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 420mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

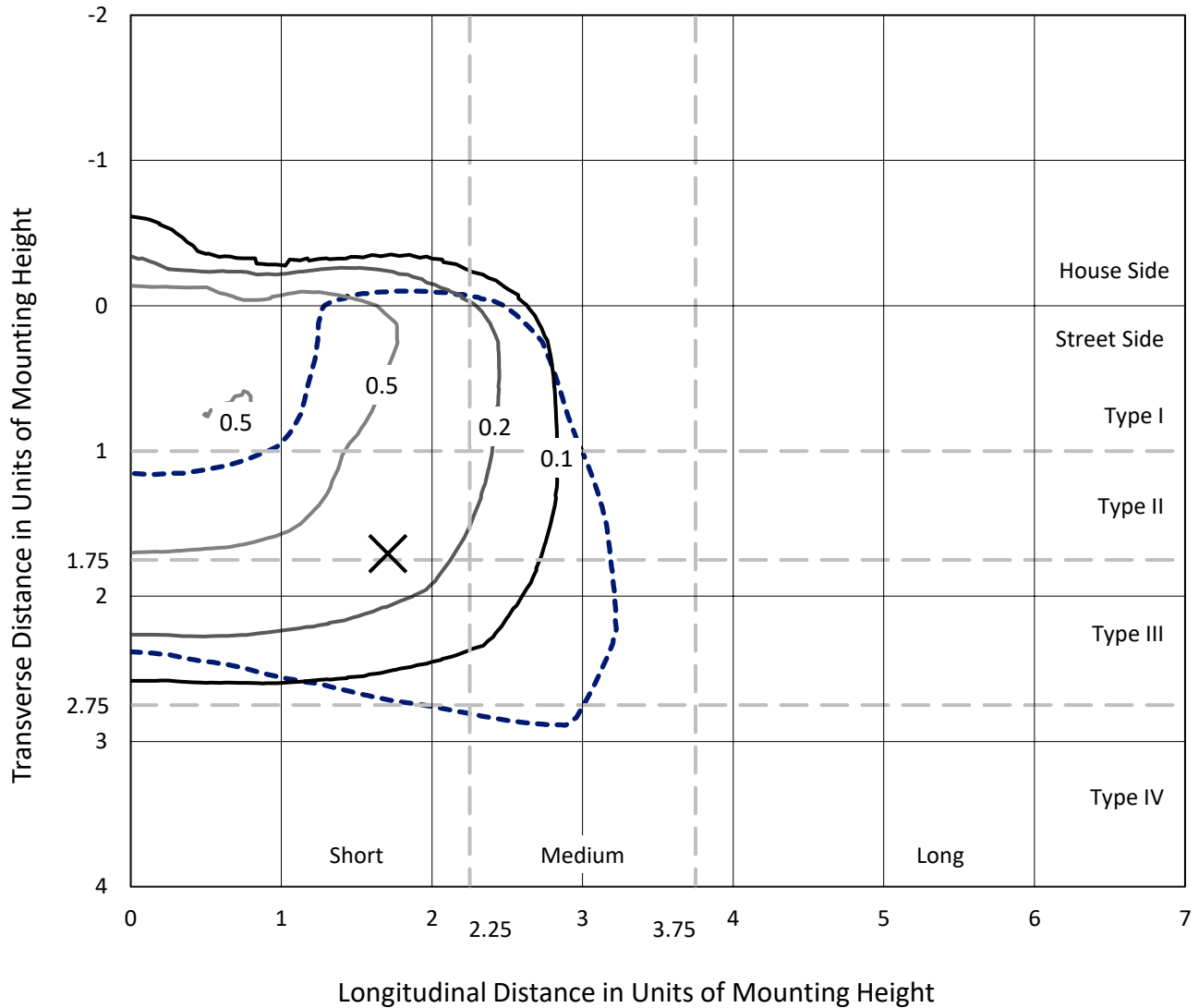
Lumens per Lamp: N/A  
Luminaire Lumens: 4107 lumens  
Efficiency: N/A  
Efficacy: 94.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G2  
  
Input Watts (W): 43.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

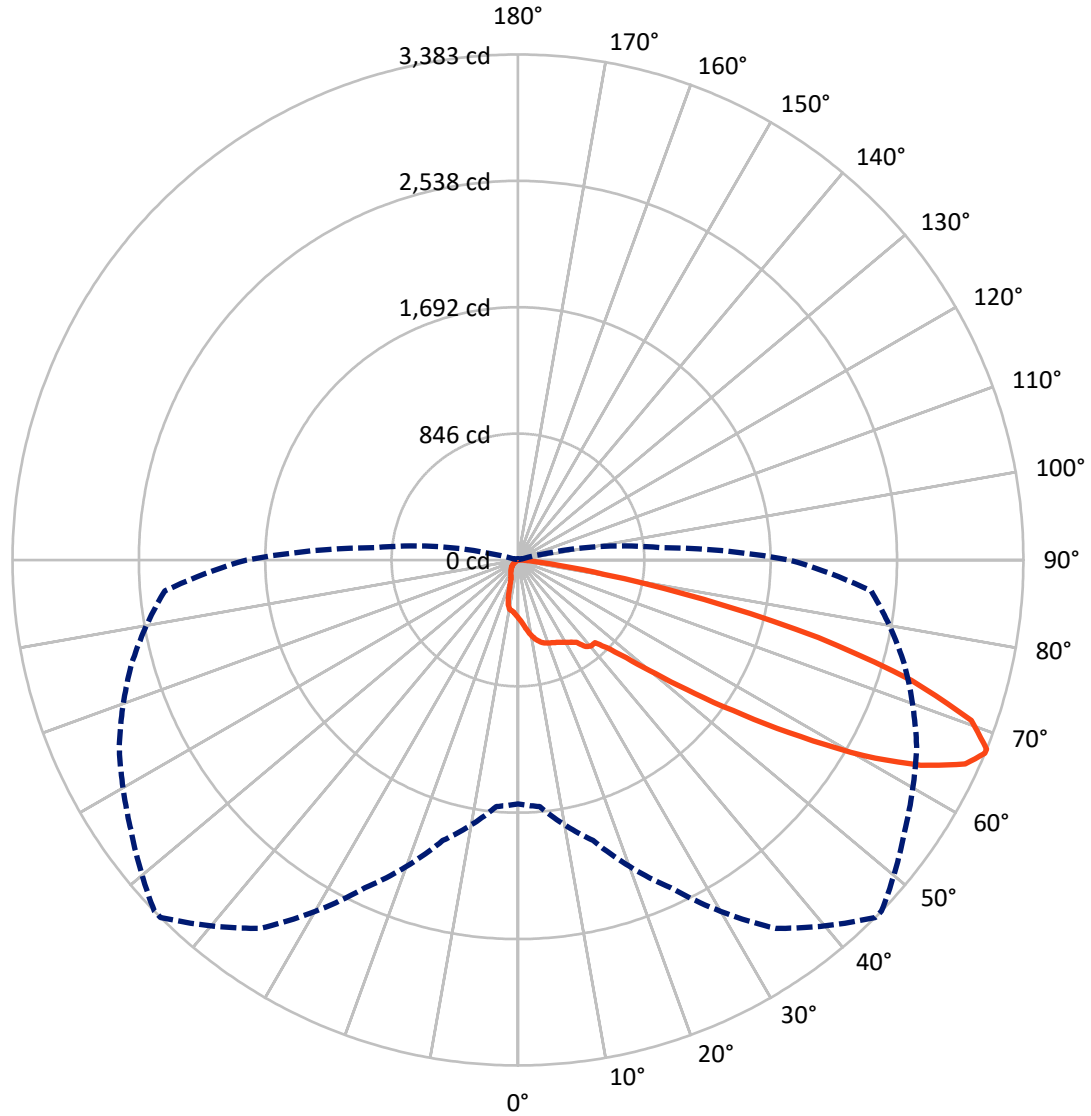
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 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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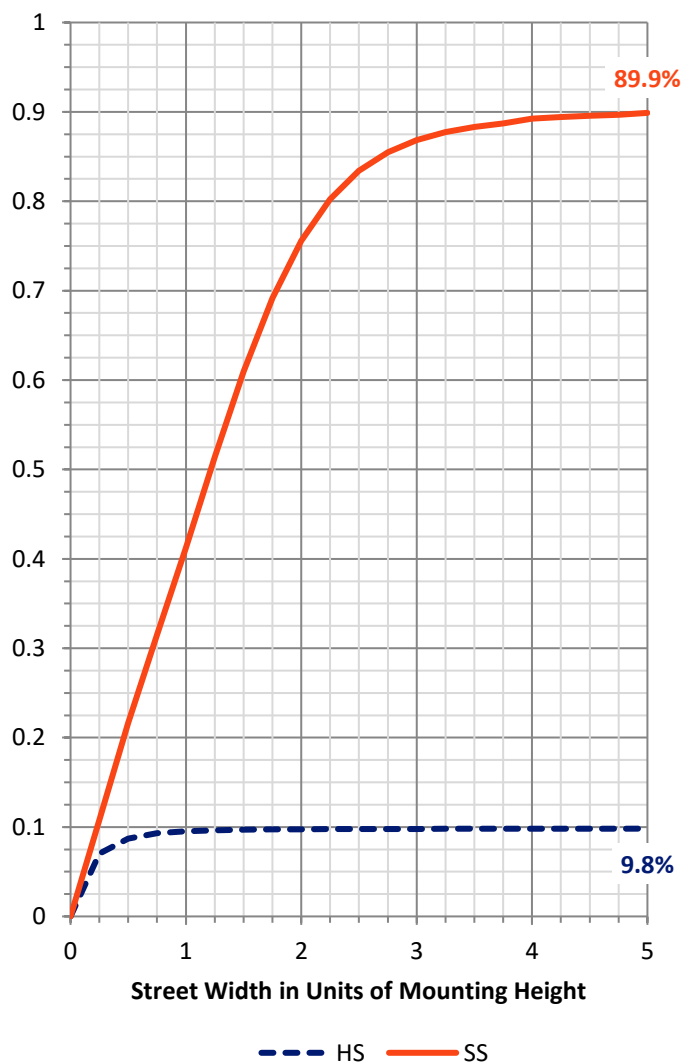
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	406.9	0.0	406.9
	% Fixture	9.9	0.0	9.9
<b>Street Side</b>	Lumens	3700.0	0.0	3700.0
	% Fixture	90.1	0.0	90.1
<b>Total</b>	Lumens	4107.0	0.0	4107.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.0	0.9
10°-20°	117.9	2.9
20°-30°	188.5	4.6
30°-40°	271.3	6.6
40°-50°	476.0	11.6
50°-60°	1002.9	24.4
60°-70°	1386.9	33.8
70°-80°	580.6	14.1
80°-90°	43.9	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°	4107.0	100.0
0°-180°	4107.0	100.0

**Coefficient of Utilization**



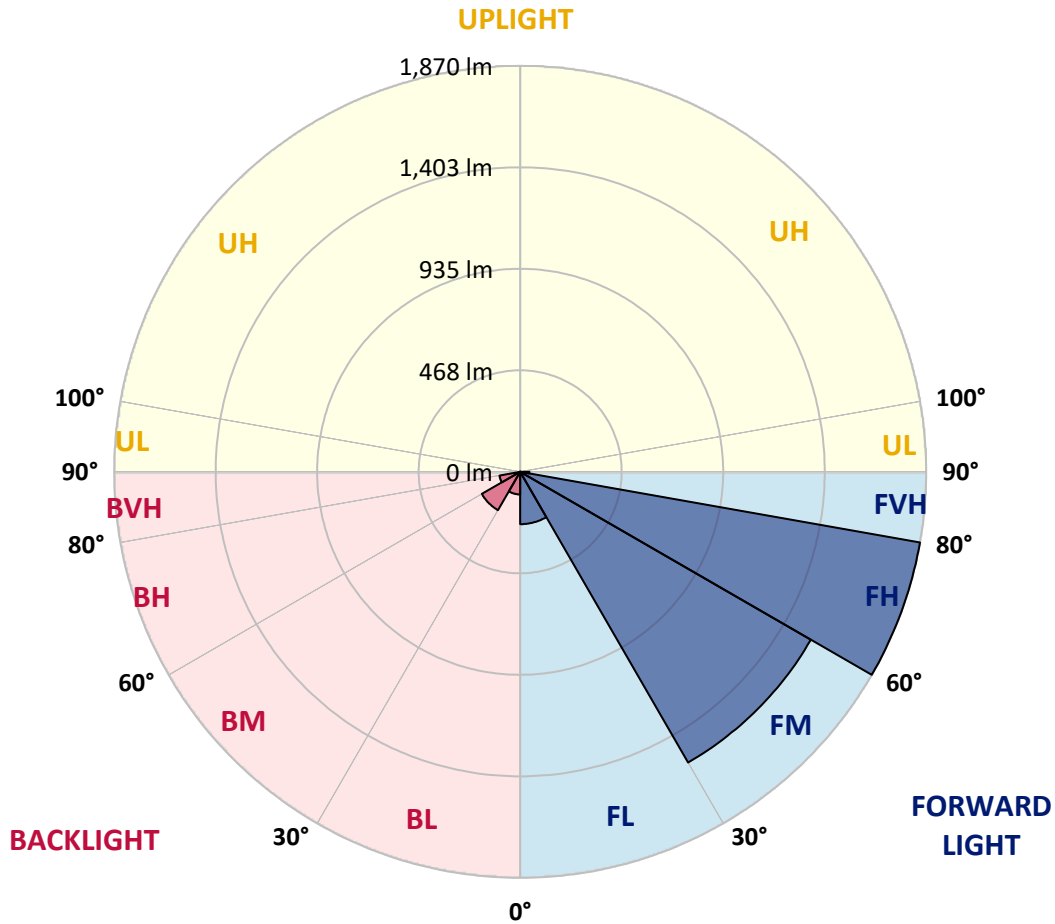
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	241.1	5.9			
FM (30°-60°)	1546.3	37.7			
FH (60°-80°)	1870.2	45.5			G2/5000
FVH (80°-90°)	42.4	1.0			G1/100
BL (0°-30°)	104.3	2.5	B0/110		
BM (30°-60°)	203.9	5.0	B0/220		
BH (60°-80°)	97.3	2.4	B0/110		G0/110
BVH (80°-90°)	1.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4
2.5°	432.4	424.8	423.3	421.8	417.2	411.2	412.7	408.1	400.5	396.0	391.4
5°	485.5	477.9	474.9	465.8	456.7	443.0	443.0	430.9	417.2	405.1	393.0
7.5°	540.1	534.1	528.0	514.3	500.7	482.5	481.0	462.8	441.5	423.3	403.6
10°	585.7	581.1	573.5	556.8	538.6	518.9	514.3	497.7	470.3	446.1	420.3
12.5°	622.1	617.5	606.9	590.2	567.4	547.7	546.2	525.0	497.7	471.9	440.0
15°	649.4	641.8	629.7	611.4	588.7	570.5	567.4	549.2	523.4	494.6	456.7
17.5°	653.9	649.4	638.8	619.0	599.3	584.1	582.6	569.0	546.2	515.9	476.4
20°	641.8	640.3	631.2	616.0	600.8	593.2	591.7	582.6	564.4	537.1	497.7
22.5°	623.6	622.1	616.0	608.4	602.3	600.8	600.8	597.8	587.2	561.4	525.0
25°	611.4	609.9	606.9	602.3	602.3	611.4	613.0	616.0	606.9	587.2	547.7
27.5°	613.0	609.9	606.9	602.3	608.4	625.1	626.6	634.2	626.6	608.4	573.5
30°	634.2	629.7	620.5	609.9	617.5	640.3	641.8	650.9	644.8	635.7	602.3
32.5°	667.6	664.5	646.3	628.1	632.7	655.4	658.5	675.2	682.8	669.1	628.1
35°	716.1	705.5	682.8	664.5	661.5	678.2	682.8	710.1	729.8	696.4	643.3
37.5°	755.6	746.5	710.1	681.2	697.9	735.9	737.4	770.8	754.1	699.4	667.6
40°	889.1	887.6	823.9	732.8	714.6	757.1	763.2	769.2	761.7	734.3	720.7
42.5°	1104.5	1086.3	1015.0	875.4	751.0	755.6	758.6	790.5	829.9	817.8	822.3
45°	1338.2	1323.0	1242.6	1066.6	875.4	837.5	840.5	892.1	968.0	983.2	1007.4
47.5°	1553.6	1529.4	1483.9	1306.3	1087.9	977.1	983.2	1045.4	1171.3	1204.7	1242.6
50°	1735.7	1719.0	1676.5	1559.7	1348.8	1197.1	1203.2	1254.8	1418.6	1471.7	1520.3
52.5°	1999.7	1977.0	1895.0	1840.4	1681.1	1483.9	1470.2	1524.8	1713.0	1747.9	1813.1
55°	2242.5	2195.4	2146.9	2124.1	2057.4	1826.7	1822.2	1832.8	1989.1	2007.3	2124.1
57.5°	2345.6	2336.5	2377.5	2453.4	2468.5	2230.3	2210.6	2169.6	2292.5	2291.0	2427.6
60°	2410.9	2410.9	2520.1	2708.3	2829.6	2661.2	2633.9	2506.5	2550.5	2552.0	2677.9
62.5°	2369.9	2380.5	2550.5	2834.2	3078.5	3026.9	3008.7	2794.7	2791.7	2756.8	2800.8
65°	2116.5	2134.7	2407.8	2764.4	3169.5	3290.9	3283.3	3040.5	2952.5	2825.1	2726.5
67°	1726.6	1760.0	2090.7	2512.5	3066.3	3381.9	3383.4	3146.7	2954.1	2711.3	2464.0
67.5°	1632.5	1656.8	1943.6	2421.5	3010.2	3383.4	3383.4	3160.4	2944.9	2676.4	2373.0
70°	1040.8	1046.9	1359.4	1873.8	2571.7	3219.6	3231.7	3057.2	2682.5	2166.6	1665.9
72.5°	514.3	500.7	717.7	1206.2	1929.9	2755.3	2787.2	2611.2	2122.6	1415.6	880.0
75°	201.8	215.4	312.5	641.8	1209.2	2077.1	2101.4	1899.6	1365.5	729.8	347.4
77.5°	89.5	89.5	133.5	288.3	635.7	1274.5	1286.6	1159.2	720.7	300.4	106.2
80°	48.6	51.6	69.8	125.9	320.1	585.7	638.8	575.0	326.2	132.0	36.4
82.5°	24.3	25.8	42.5	71.3	160.8	221.5	233.7	244.3	150.2	81.9	15.2
85°	9.1	10.6	22.8	41.0	72.8	74.3	74.3	95.6	81.9	62.2	7.6
87.5°	1.5	3.0	10.6	16.7	28.8	25.8	22.8	30.3	45.5	39.4	4.6
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°	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4
2.5°	388.4	385.4	379.3	374.8	371.7	368.7	365.7	365.7	364.1	364.1	365.7
5°	388.4	382.3	370.2	362.6	356.5	352.0	349.0	349.0	347.4	349.0	350.5
7.5°	396.0	386.9	370.2	356.5	349.0	341.4	338.3	336.8	336.8	338.3	336.8
10°	408.1	396.0	374.8	356.5	345.9	335.3	318.6	303.4	289.8	283.7	282.2
12.5°	423.3	408.1	382.3	361.1	344.4	308.0	262.5	233.7	215.4	206.3	203.3
15°	440.0	421.8	391.4	367.2	321.7	253.4	194.2	162.3	151.7	153.2	154.8
17.5°	458.2	438.5	405.1	364.1	276.1	188.1	142.6	135.0	139.6	144.1	144.1
20°	476.4	455.2	418.8	341.4	217.0	139.6	127.4	129.0	133.5	138.1	138.1
22.5°	500.7	477.9	432.4	301.9	160.8	121.4	121.4	124.4	127.4	132.0	132.0
25°	526.5	503.7	441.5	253.4	119.9	113.8	115.3	118.3	121.4	125.9	125.9
27.5°	553.8	531.0	440.0	195.7	104.7	104.7	106.2	110.8	113.8	118.3	118.3
30°	584.1	564.4	423.3	142.6	97.1	95.6	95.6	100.1	104.7	107.7	109.2
32.5°	609.9	593.2	394.5	107.7	91.0	88.0	86.5	88.0	92.6	95.6	97.1
35°	631.2	625.1	352.0	92.6	85.0	80.4	77.4	75.9	77.4	77.4	78.9
37.5°	670.6	672.1	301.9	86.5	80.4	74.3	68.3	63.7	60.7	59.2	57.7
40°	745.0	743.4	248.8	81.9	75.9	68.3	59.2	53.1	45.5	42.5	42.5
42.5°	849.7	826.9	189.7	77.4	71.3	62.2	50.1	41.0	33.4	31.9	31.9
45°	1037.8	943.7	142.6	74.3	66.8	54.6	41.0	30.3	25.8	24.3	24.3
47.5°	1245.6	1078.8	113.8	69.8	62.2	48.6	31.9	24.3	19.7	19.7	19.7
50°	1474.8	1207.7	95.6	65.2	54.6	41.0	25.8	19.7	18.2	16.7	18.2
52.5°	1725.1	1309.4	83.4	59.2	47.0	33.4	21.2	18.2	15.2	15.2	15.2
55°	1949.6	1377.6	69.8	51.6	39.4	27.3	19.7	15.2	13.7	12.1	10.6
57.5°	2153.0	1414.1	56.1	44.0	30.3	22.8	16.7	12.1	10.6	7.6	7.6
60°	2257.6	1380.7	44.0	34.9	24.3	18.2	13.7	10.6	7.6	4.6	4.6
62.5°	2274.3	1294.2	34.9	27.3	21.2	15.2	10.6	7.6	4.6	3.0	3.0
65°	2128.7	1142.5	28.8	22.8	16.7	12.1	9.1	6.1	3.0	1.5	1.5
67°	1867.7	983.2	25.8	19.7	15.2	10.6	7.6	4.6	3.0	1.5	0.0
67.5°	1816.1	954.3	24.3	19.7	15.2	10.6	7.6	4.6	3.0	1.5	0.0
70°	1192.5	660.0	22.8	18.2	13.7	9.1	6.1	4.6	1.5	0.0	0.0
72.5°	650.9	332.3	21.2	16.7	12.1	9.1	6.1	3.0	1.5	0.0	0.0
75°	238.2	125.9	18.2	15.2	10.6	9.1	6.1	3.0	1.5	0.0	0.0
77.5°	80.4	44.0	16.7	15.2	12.1	9.1	6.1	3.0	1.5	0.0	0.0
80°	27.3	19.7	13.7	12.1	9.1	7.6	6.1	3.0	1.5	0.0	0.0
82.5°	10.6	6.1	4.6	4.6	4.6	6.1	6.1	4.6	1.5	0.0	0.0
85°	4.6	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0
87.5°	4.6	3.0	1.5	1.5	1.5	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)