

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: P573377

Luminaire Tested: **ARCH-S-PA2-70-727-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573377  
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-PA2-70-727-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 725mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

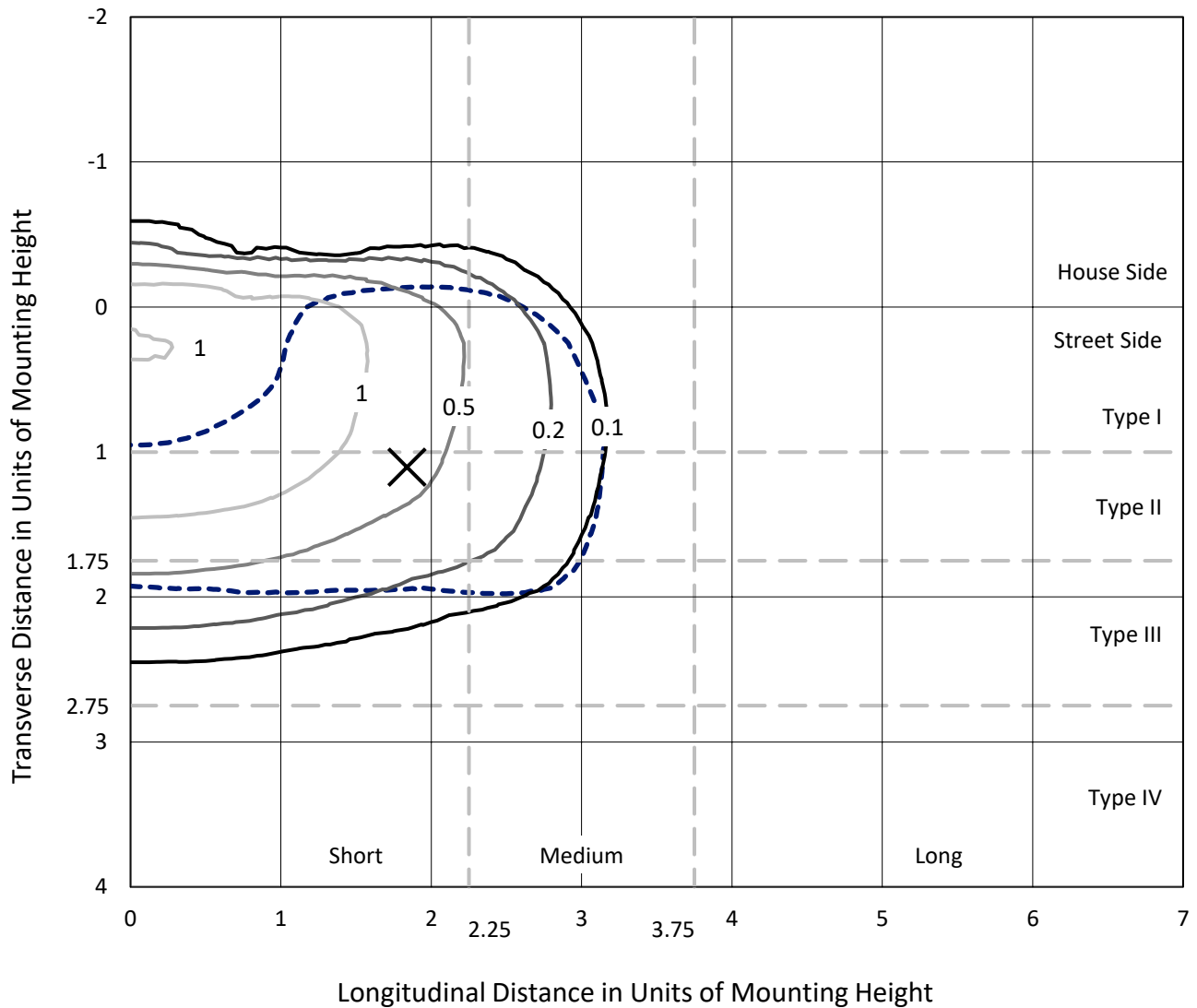
Lumens per Lamp: N/A  
Luminaire Lumens: 6663 lumens  
Efficiency: N/A  
Efficacy: 91.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 73.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

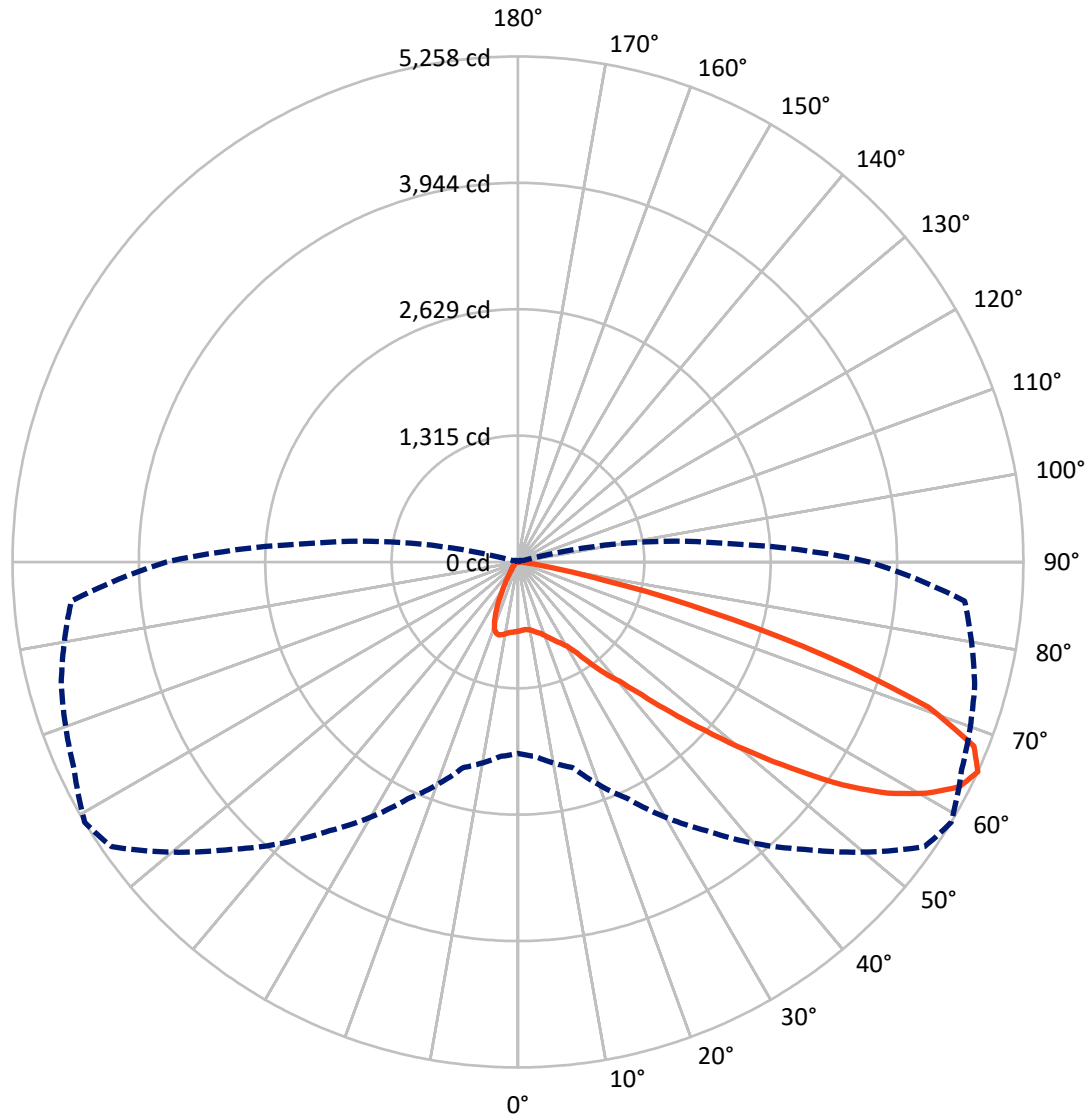
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc  
 Type III - Short - N/A

REPORT NUMBER: P573377  
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### Luminous Intensity Polar Plot



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

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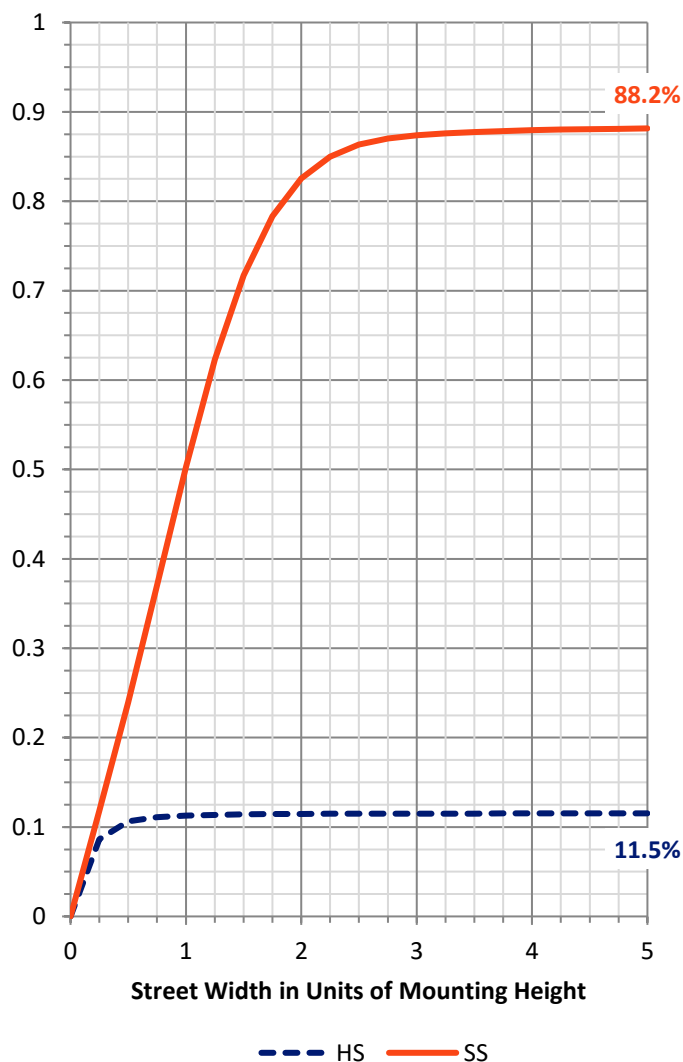
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	777.3	0.0	777.3
	% Fixture	11.7	0.0	11.7
<b>Street Side</b>	Lumens	5885.7	0.0	5885.7
	% Fixture	88.3	0.0	88.3
<b>Total</b>	Lumens	6663.0	0.0	6663.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.0	1.0
10°-20°	193.3	2.9
20°-30°	328.3	4.9
30°-40°	581.5	8.7
40°-50°	1097.0	16.5
50°-60°	1856.1	27.9
60°-70°	1929.7	29.0
70°-80°	578.7	8.7
80°-90°	30.3	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°	6663.0	100.0
0°-180°	6663.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P573377

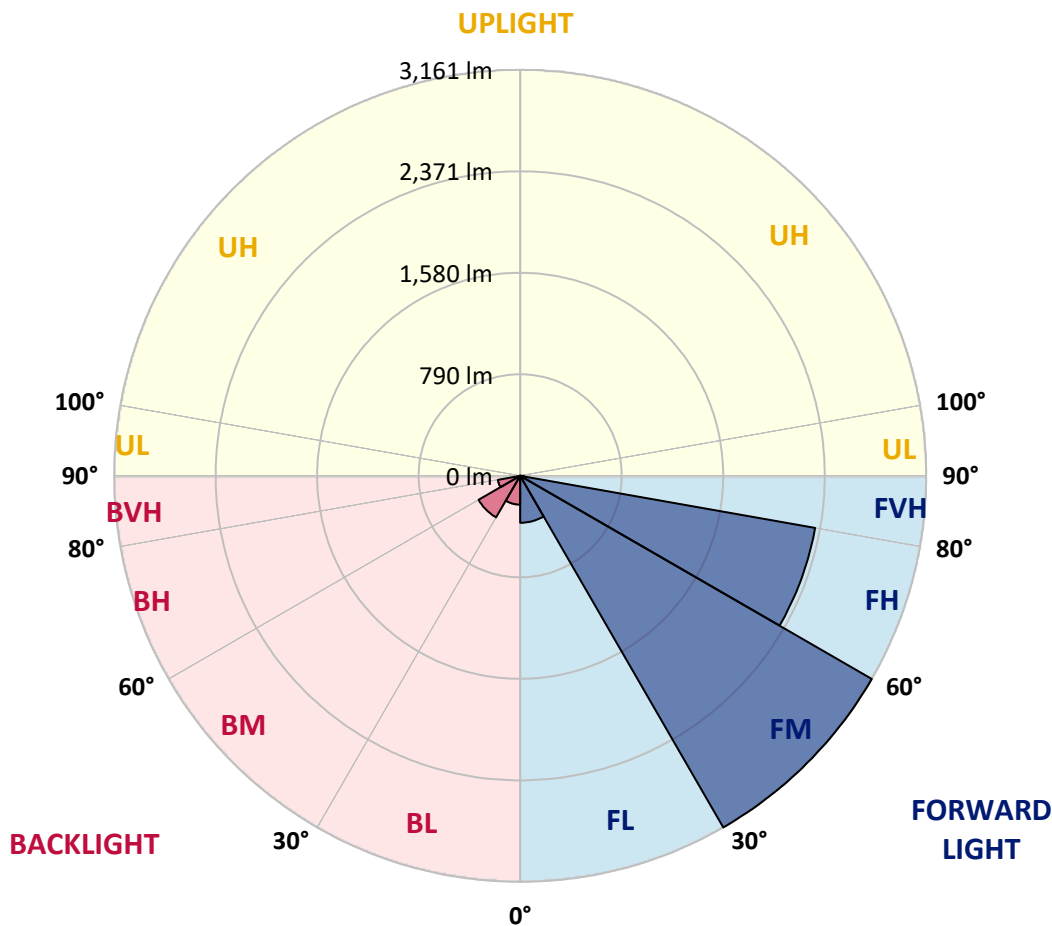
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	365.4	5.5			
FM (30°-60°)	3160.9	47.4			
FH (60°-80°)	2331.6	35.0			G2/5000
FVH (80°-90°)	27.8	0.4			G1/100
BL (0°-30°)	224.2	3.4	B1/500		
BM (30°-60°)	373.7	5.6	B1/1000		
BH (60°-80°)	176.8	2.7	B1/500		G1/500
BVH (80°-90°)	2.6	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





REPORT NUMBER: P573377

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	720.0	720.0	720.0	720.0	720.0	720.0	720.0	720.0	720.0	720.0	720.0
2.5°	700.6	698.2	698.2	703.0	705.5	707.9	712.7	712.7	712.7	717.6	720.0
5°	666.7	666.7	669.1	673.9	683.6	690.9	705.5	707.9	710.3	722.4	727.3
7.5°	644.9	644.9	647.3	657.0	669.1	686.1	705.5	710.3	717.6	734.5	746.7
10°	642.4	640.0	644.9	654.5	669.1	690.9	712.7	720.0	734.5	756.4	773.3
12.5°	649.7	647.3	652.1	661.8	676.4	698.2	727.3	739.4	756.4	785.5	809.7
15°	654.5	652.1	657.0	669.1	686.1	712.7	746.7	761.2	783.0	824.2	848.5
17.5°	669.1	666.7	669.1	678.8	695.8	724.9	768.5	783.0	819.4	865.5	892.1
20°	734.5	732.1	717.6	712.7	715.2	741.8	797.6	821.8	865.5	923.6	943.0
22.5°	870.3	860.6	833.9	790.3	761.2	770.9	833.9	860.6	918.8	984.2	998.8
25°	1052.1	1044.9	1006.1	930.9	848.5	824.2	875.2	911.5	981.8	1054.6	1049.7
27.5°	1258.2	1243.6	1207.3	1103.0	991.5	911.5	926.1	957.6	1035.2	1112.7	1088.5
30°	1437.6	1432.7	1391.5	1304.2	1173.3	1054.6	1003.6	1020.6	1090.9	1173.3	1144.2
32.5°	1602.4	1587.9	1553.9	1471.5	1350.3	1229.1	1127.3	1127.3	1185.5	1282.4	1238.8
35°	1784.3	1774.6	1733.3	1650.9	1534.6	1391.5	1299.4	1289.7	1338.2	1447.3	1352.7
37.5°	1970.9	1946.7	1927.3	1842.4	1726.1	1602.4	1490.9	1469.1	1493.3	1573.3	1457.0
40°	2203.6	2203.6	2160.0	2082.4	1973.3	1842.4	1687.3	1631.5	1624.3	1728.5	1638.8
42.5°	2475.2	2467.9	2431.5	2358.8	2254.6	2133.3	1937.0	1886.1	1881.2	2007.3	1900.6
45°	2787.9	2783.0	2739.4	2678.8	2606.1	2472.7	2278.8	2227.9	2198.8	2344.3	2218.2
47.5°	3074.0	3057.0	3042.4	3049.7	3008.5	2858.2	2676.4	2615.8	2613.3	2727.3	2564.9
50°	3270.3	3260.6	3311.5	3360.0	3437.6	3343.0	3127.3	3074.0	3032.7	3183.0	2926.1
52.5°	3398.8	3394.0	3495.8	3634.0	3794.0	3786.7	3595.2	3563.7	3529.7	3570.9	3248.5
55°	3449.7	3449.7	3570.9	3825.5	4106.7	4227.9	4138.2	4094.6	3975.8	3890.9	3602.4
57.5°	3389.1	3381.8	3539.4	3871.5	4300.6	4550.3	4589.1	4538.2	4351.5	4257.0	3995.2
60°	3132.1	3137.0	3323.7	3743.0	4286.1	4681.2	4930.9	4884.9	4698.2	4557.6	4324.9
62.5°	2652.1	2693.3	2889.7	3345.5	3975.8	4577.0	5127.3	5151.5	4950.3	4775.8	4618.2
65°	1992.7	2029.1	2215.8	2720.0	3410.9	4227.9	5163.7	5258.2	5095.8	4918.8	4664.3
67.5°	1212.1	1224.2	1452.1	1832.7	2511.5	3522.4	4909.1	5115.2	4998.8	4707.9	4208.5
70°	564.9	596.4	707.9	1001.2	1590.3	2594.0	4242.4	4533.4	4402.4	4041.2	3200.0
72.5°	220.6	230.3	300.6	463.0	843.6	1631.5	3166.1	3360.0	3270.3	2870.3	1907.9
75°	109.1	116.4	145.5	220.6	385.5	673.9	1934.6	2060.6	1912.7	1442.4	807.3
77.5°	80.0	80.0	97.0	135.8	210.9	249.7	814.5	913.9	863.0	557.6	220.6
80°	53.3	58.2	67.9	92.1	133.3	121.2	307.9	366.1	305.5	172.1	77.6
82.5°	31.5	33.9	50.9	65.5	89.7	70.3	104.2	116.4	126.1	84.8	36.4
85°	17.0	17.0	33.9	48.5	48.5	31.5	36.4	41.2	48.5	50.9	19.4
87.5°	4.8	4.8	21.8	29.1	19.4	17.0	19.4	19.4	21.8	26.7	9.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P573377

CATALOG NUMBER: ARCH-S-PA2-70-727-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	720.0	720.0	720.0	720.0	720.0	720.0	720.0	720.0	720.0	720.0	720.0
2.5°	722.4	722.4	724.9	724.9	727.3	727.3	727.3	727.3	729.7	732.1	732.1
5°	729.7	732.1	732.1	732.1	732.1	727.3	724.9	722.4	722.4	724.9	724.9
7.5°	749.1	751.5	749.1	744.2	737.0	727.3	717.6	717.6	715.2	717.6	715.2
10°	778.2	778.2	775.8	763.6	751.5	732.1	712.7	698.2	688.5	686.1	681.2
12.5°	814.5	814.5	807.3	785.5	763.6	727.3	676.4	627.9	589.1	572.1	567.3
15°	850.9	850.9	841.2	809.7	766.1	678.8	572.1	470.3	412.1	387.9	373.3
17.5°	894.5	889.7	872.7	829.1	739.4	581.8	409.7	305.5	259.4	237.6	237.6
20°	940.6	935.8	904.2	831.5	671.5	417.0	266.7	210.9	198.8	193.9	193.9
22.5°	991.5	979.4	930.9	812.1	528.5	283.6	201.2	186.7	181.8	179.4	179.4
25°	1032.7	1013.3	950.3	758.8	378.2	198.8	177.0	172.1	162.4	160.0	155.2
27.5°	1064.2	1035.2	957.6	644.9	249.7	164.8	157.6	147.9	138.2	128.5	128.5
30°	1105.5	1069.1	962.4	501.8	169.7	143.0	135.8	123.6	111.5	101.8	101.8
32.5°	1187.9	1134.6	964.9	351.5	140.6	126.1	111.5	97.0	84.8	80.0	77.6
35°	1277.6	1204.9	938.2	227.9	123.6	106.7	89.7	77.6	65.5	63.0	63.0
37.5°	1377.0	1309.1	880.0	155.2	109.1	89.7	72.7	60.6	53.3	50.9	50.9
40°	1544.2	1464.2	783.0	123.6	94.5	75.2	60.6	50.9	46.1	43.6	43.6
42.5°	1784.3	1646.1	661.8	106.7	82.4	63.0	48.5	41.2	38.8	36.4	36.4
45°	2060.6	1849.7	521.2	97.0	72.7	53.3	41.2	36.4	33.9	31.5	31.5
47.5°	2378.2	2060.6	412.1	84.8	63.0	46.1	36.4	31.5	29.1	26.7	26.7
50°	2678.8	2225.5	310.3	75.2	55.8	38.8	31.5	29.1	26.7	24.2	24.2
52.5°	2926.1	2337.0	235.2	65.5	48.5	33.9	29.1	26.7	21.8	21.8	21.8
55°	3224.3	2424.3	179.4	58.2	43.6	31.5	26.7	21.8	19.4	17.0	17.0
57.5°	3483.7	2455.8	130.9	50.9	38.8	29.1	24.2	19.4	14.5	12.1	12.1
60°	3658.2	2429.1	94.5	43.6	33.9	24.2	19.4	14.5	9.7	7.3	7.3
62.5°	3781.8	2370.9	72.7	38.8	29.1	21.8	17.0	12.1	7.3	4.8	4.8
65°	3658.2	2191.5	58.2	33.9	24.2	19.4	12.1	9.7	4.8	2.4	2.4
67.5°	3163.7	1837.6	46.1	29.1	21.8	17.0	12.1	7.3	2.4	0.0	0.0
70°	2274.0	1311.5	38.8	26.7	19.4	14.5	9.7	4.8	2.4	0.0	0.0
72.5°	1267.9	676.4	36.4	24.2	19.4	14.5	9.7	4.8	2.4	0.0	0.0
75°	513.9	232.7	33.9	24.2	19.4	12.1	9.7	4.8	2.4	0.0	0.0
77.5°	150.3	80.0	29.1	21.8	19.4	14.5	9.7	4.8	2.4	0.0	0.0
80°	53.3	36.4	21.8	19.4	14.5	12.1	9.7	7.3	2.4	0.0	0.0
82.5°	24.2	14.5	9.7	7.3	7.3	7.3	7.3	4.8	2.4	0.0	0.0
85°	9.7	7.3	4.8	2.4	2.4	2.4	2.4	2.4	2.4	0.0	0.0
87.5°	7.3	4.8	2.4	2.4	2.4	2.4	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)