

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: P572644

Luminaire Tested: **ARCH-S-PA2-100-727-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572644  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-100-727-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1010mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

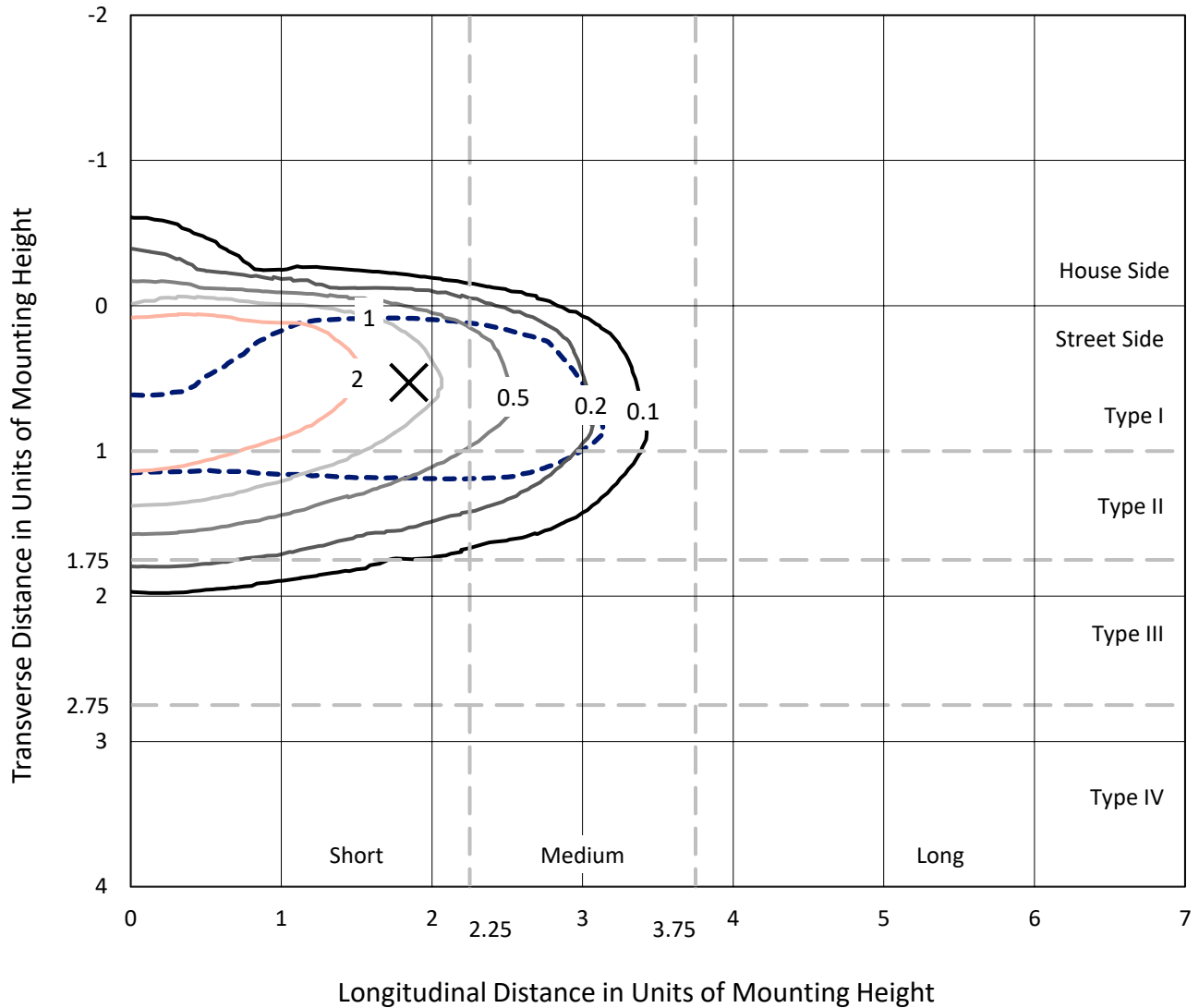
Lumens per Lamp: N/A  
Luminaire Lumens: 8948 lumens  
Efficiency: N/A  
Efficacy: 86.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 103.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

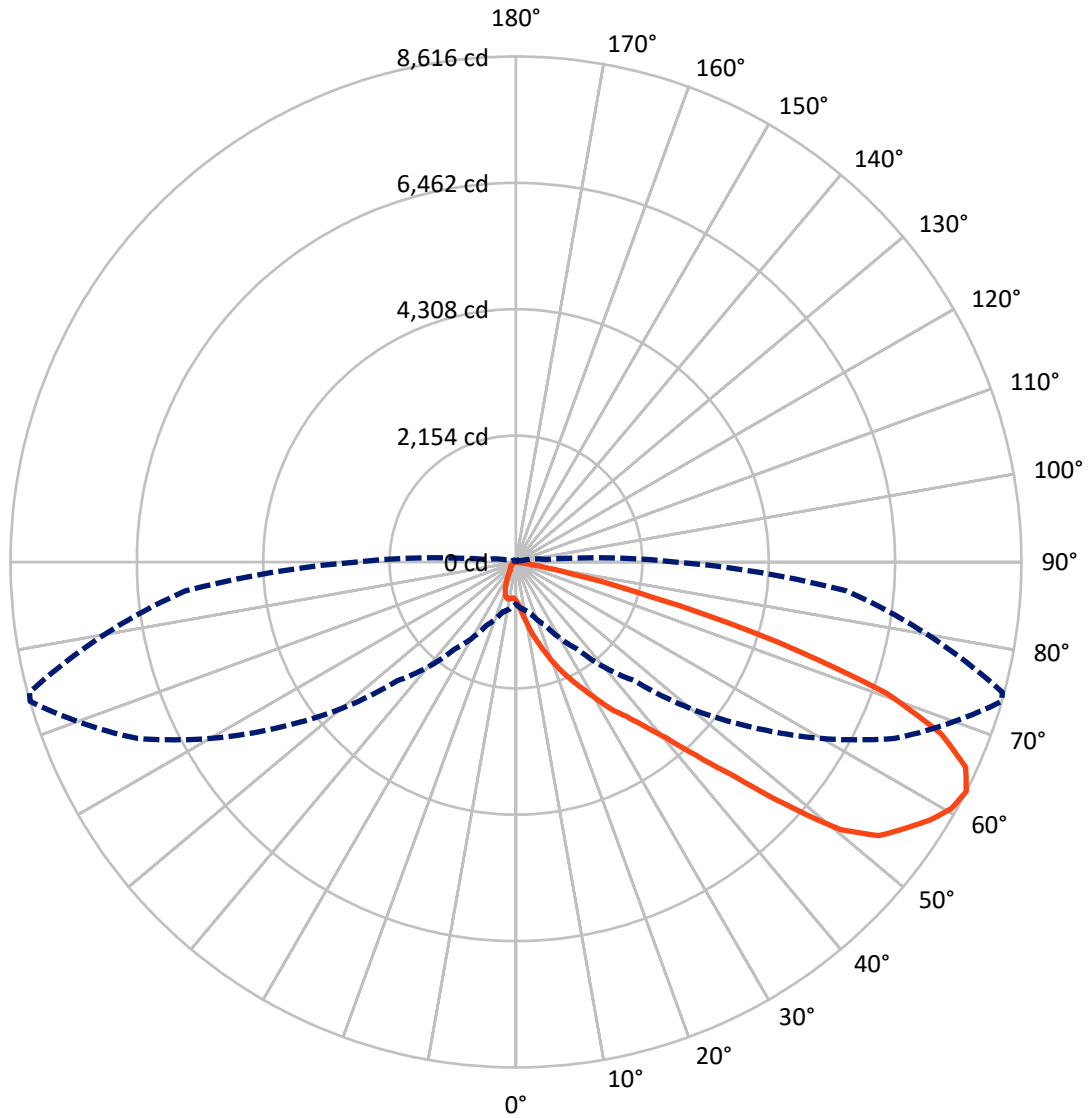
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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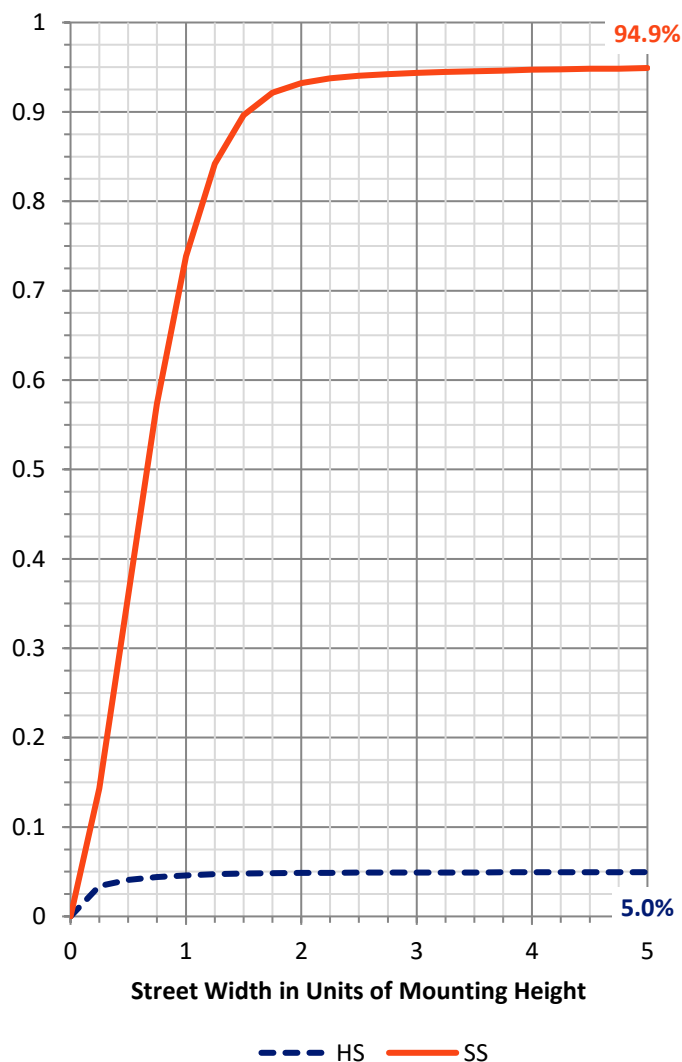
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	446.2	0.0	446.2
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	8501.7	0.0	8501.7
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	8948.0	0.0	8948.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.9	0.9
10°-20°	344.1	3.8
20°-30°	738.4	8.3
30°-40°	1295.1	14.5
40°-50°	2007.7	22.4
50°-60°	2314.6	25.9
60°-70°	1626.1	18.2
70°-80°	506.6	5.7
80°-90°	33.5	0.4
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°	8948.0	100.0
0°-180°	8948.0	100.0

**Coefficient of Utilization**

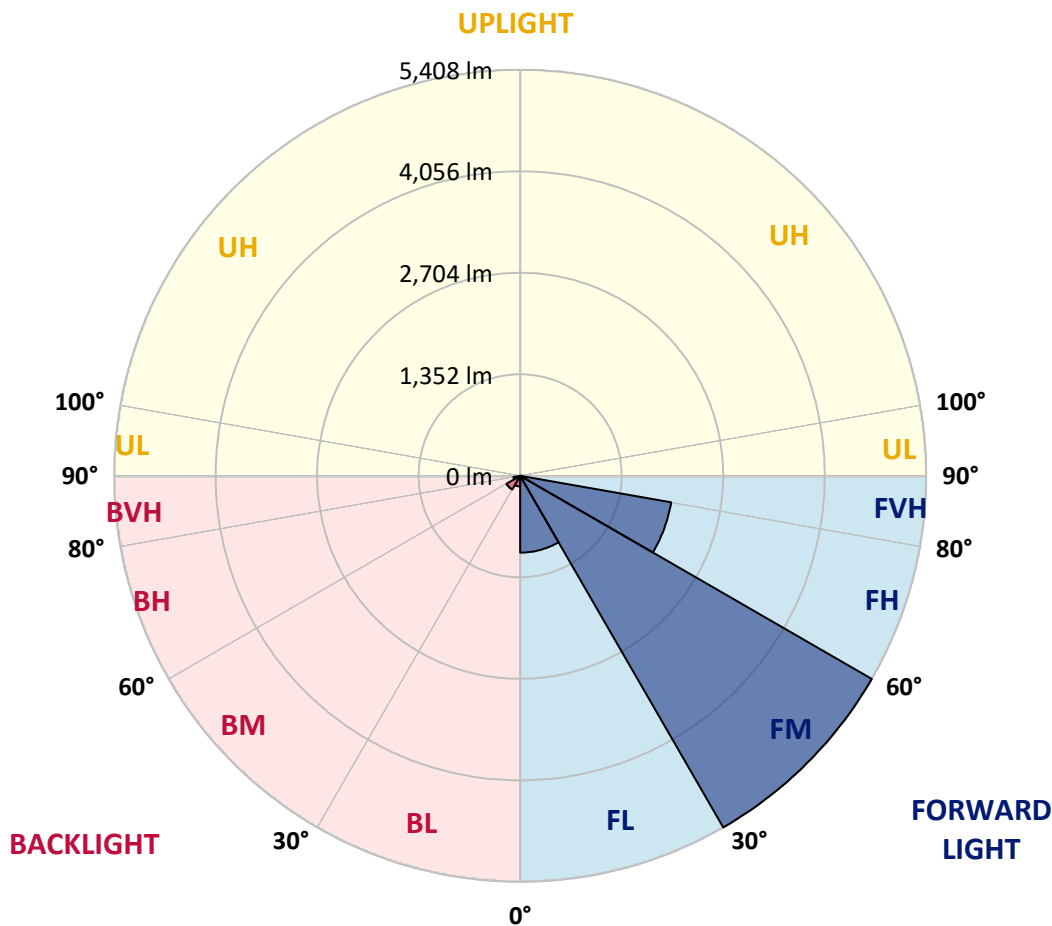


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1022.8	11.4			
FM (30°-60°)	5407.7	60.4			
FH (60°-80°)	2042.3	22.8			G2/5000
FVH (80°-90°)	28.9	0.3			G1/100
BL (0°-30°)	141.6	1.6	B1/500		
BM (30°-60°)	209.7	2.3	B0/220		
BH (60°-80°)	90.3	1.0	B0/110		G0/110
BVH (80°-90°)	4.6	0.1			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	655.0	655.0	655.0	655.0	655.0	655.0	655.0	655.0	655.0	655.0	655.0
2.5°	910.1	894.4	875.5	859.7	828.2	806.2	777.8	746.3	711.7	708.6	680.2
5°	1275.4	1228.2	1228.2	1187.2	1140.0	1055.0	976.2	878.6	806.2	799.9	724.3
7.5°	1650.1	1612.4	1590.3	1527.3	1451.8	1357.3	1231.3	1067.6	935.3	913.3	790.4
10°	1999.7	1971.4	1930.4	1880.0	1813.9	1659.6	1502.1	1288.0	1077.0	1061.3	869.2
12.5°	2270.5	2235.9	2217.0	2195.0	2109.9	1987.1	1782.4	1511.6	1259.7	1225.0	947.9
15°	2475.2	2459.5	2440.6	2440.6	2396.5	2276.8	2065.8	1750.9	1436.0	1395.1	1048.7
17.5°	2639.0	2620.1	2616.9	2635.8	2623.2	2538.2	2339.8	1980.8	1618.7	1587.2	1152.6
20°	2821.6	2796.4	2796.4	2812.2	2809.0	2761.8	2588.6	2245.3	1832.8	1776.1	1272.3
22.5°	3079.9	3064.1	3051.5	3026.3	3007.4	2963.3	2812.2	2503.6	2037.5	1984.0	1395.1
25°	3426.3	3407.4	3350.7	3306.6	3224.7	3158.6	3029.5	2733.5	2245.3	2185.5	1514.7
27.5°	3763.2	3725.4	3671.9	3615.2	3523.9	3410.5	3249.9	2950.7	2462.6	2399.6	1637.6
30°	4119.1	4090.7	4024.6	3933.3	3819.9	3693.9	3501.8	3212.1	2711.4	2642.1	1769.8
32.5°	4402.5	4358.4	4298.6	4210.4	4093.9	4005.7	3797.9	3498.7	2998.0	2906.7	1908.4
35°	4629.2	4594.6	4515.9	4430.8	4342.7	4317.5	4090.7	3731.7	3227.9	3142.8	2056.4
37.5°	4774.1	4739.5	4673.3	4588.3	4553.7	4597.7	4449.7	4049.8	3536.5	3429.4	2226.4
40°	4887.5	4846.5	4793.0	4755.2	4742.6	4865.4	4849.7	4462.3	3942.7	3879.7	2459.5
42.5°	4969.3	4928.4	4893.8	4890.6	4972.5	5211.8	5388.2	5038.6	4509.6	4380.5	2758.6
45°	4865.4	4830.8	4849.7	4959.9	5158.3	5536.2	6040.0	5854.3	5192.9	5101.6	3237.3
47.5°	4575.7	4553.7	4638.7	4840.2	5208.7	5734.6	6669.9	6748.6	6169.2	6030.6	3857.7
50°	4122.2	4119.1	4254.5	4528.5	5051.2	5810.2	6987.9	7608.3	7170.6	7028.9	4361.6
52.5°	3508.1	3495.5	3693.9	4075.0	4679.6	5668.5	7047.8	7951.6	7750.0	7583.1	4679.6
55°	2812.2	2783.8	3020.0	3438.9	4131.7	5255.9	6887.2	8027.2	8027.2	7876.0	4915.8
57.5°	1977.7	2021.7	2217.0	2720.9	3454.6	4638.7	6490.4	7957.9	8307.4	8178.3	5233.9
60°	1247.1	1266.0	1480.1	1886.3	2620.1	3813.6	5781.8	7658.7	8531.0	8455.4	5489.0
62.5°	718.0	777.8	884.9	1193.5	1807.6	2865.7	4906.4	7120.2	8616.0	8584.6	5655.9
65°	437.7	444.0	494.4	673.9	1111.6	1955.6	3927.0	6370.7	8423.9	8452.3	5624.4
67.5°	327.5	327.5	343.3	425.1	633.0	1243.9	2897.2	5460.6	7809.9	7901.2	5328.3
70°	283.4	283.4	286.6	311.8	390.5	736.9	1914.7	4402.5	6695.1	6685.6	4402.5
72.5°	223.6	233.0	251.9	264.5	296.0	431.4	1121.1	3076.7	4651.3	4761.5	2834.2
75°	179.5	182.7	207.8	229.9	248.8	292.9	529.1	1710.0	2440.6	2440.6	1247.1
77.5°	138.6	144.9	160.6	182.7	207.8	207.8	220.4	661.3	944.7	913.3	368.4
80°	88.2	91.3	116.5	144.9	173.2	148.0	119.7	220.4	258.2	248.8	100.8
82.5°	53.5	56.7	75.6	116.5	116.5	81.9	75.6	91.3	81.9	75.6	40.9
85°	15.7	18.9	53.5	75.6	66.1	31.5	37.8	40.9	37.8	34.6	22.0
87.5°	3.1	3.1	15.7	18.9	15.7	15.7	12.6	15.7	15.7	15.7	9.4
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°	655.0	655.0	655.0	655.0	655.0	655.0	655.0	655.0	655.0	655.0	655.0
2.5°	664.5	651.9	626.7	607.8	592.0	576.3	563.7	560.5	554.2	554.2	551.1
5°	692.8	664.5	617.2	585.7	560.5	538.5	519.6	500.7	494.4	488.1	491.3
7.5°	736.9	692.8	626.7	579.4	535.4	485.0	444.0	409.4	384.2	377.9	368.4
10°	793.6	727.5	642.4	566.8	485.0	396.8	340.1	305.5	292.9	277.1	280.3
12.5°	850.3	768.4	655.0	532.2	399.9	311.8	264.5	242.5	233.0	229.9	233.0
15°	916.4	812.5	648.7	469.2	321.2	251.9	223.6	214.1	207.8	207.8	204.7
17.5°	982.5	850.3	626.7	387.3	258.2	214.1	201.5	192.1	185.8	182.7	182.7
20°	1055.0	884.9	576.3	308.6	214.1	195.2	182.7	170.1	163.8	163.8	163.8
22.5°	1130.5	910.1	510.2	245.6	192.1	173.2	160.6	151.2	144.9	144.9	144.9
25°	1196.7	922.7	431.4	204.7	176.4	157.5	144.9	135.4	132.3	129.1	129.1
27.5°	1259.7	919.5	349.6	179.5	157.5	141.7	129.1	122.8	116.5	116.5	116.5
30°	1322.6	900.7	277.1	163.8	144.9	126.0	116.5	110.2	107.1	103.9	103.9
32.5°	1376.2	869.2	217.3	151.2	132.3	113.4	103.9	97.6	97.6	94.5	94.5
35°	1429.7	821.9	182.7	141.7	119.7	103.9	94.5	91.3	88.2	88.2	88.2
37.5°	1486.4	762.1	160.6	129.1	107.1	94.5	88.2	85.0	81.9	78.7	78.7
40°	1555.7	702.3	151.2	119.7	97.6	85.0	78.7	75.6	72.4	72.4	72.4
42.5°	1665.9	651.9	141.7	107.1	88.2	78.7	72.4	66.1	66.1	63.0	63.0
45°	1873.7	633.0	132.3	97.6	81.9	69.3	66.1	59.8	56.7	56.7	56.7
47.5°	2144.6	636.1	122.8	88.2	75.6	63.0	59.8	56.7	50.4	50.4	50.4
50°	2368.2	620.4	113.4	81.9	66.1	59.8	53.5	50.4	47.2	47.2	47.2
52.5°	2456.3	592.0	103.9	75.6	63.0	53.5	50.4	47.2	44.1	44.1	44.1
55°	2544.5	579.4	94.5	66.1	56.7	53.5	47.2	44.1	40.9	37.8	37.8
57.5°	2705.1	585.7	85.0	63.0	53.5	50.4	44.1	37.8	31.5	28.3	28.3
60°	2790.1	563.7	78.7	56.7	50.4	47.2	37.8	28.3	22.0	18.9	18.9
62.5°	2717.7	500.7	72.4	53.5	47.2	40.9	28.3	22.0	15.7	9.4	9.4
65°	2516.2	412.5	66.1	50.4	40.9	31.5	25.2	15.7	9.4	6.3	6.3
67.5°	2261.1	324.4	59.8	47.2	37.8	28.3	22.0	12.6	6.3	3.1	3.1
70°	1826.5	233.0	56.7	44.1	34.6	25.2	18.9	12.6	6.3	3.1	3.1
72.5°	1177.8	151.2	50.4	40.9	31.5	25.2	15.7	9.4	6.3	3.1	3.1
75°	544.8	100.8	47.2	37.8	31.5	22.0	15.7	12.6	6.3	3.1	3.1
77.5°	160.6	72.4	44.1	34.6	28.3	22.0	15.7	12.6	6.3	3.1	3.1
80°	66.1	50.4	34.6	31.5	28.3	22.0	15.7	12.6	6.3	3.1	3.1
82.5°	31.5	22.0	15.7	12.6	15.7	15.7	12.6	12.6	6.3	3.1	3.1
85°	15.7	9.4	6.3	6.3	6.3	3.1	3.1	6.3	6.3	3.1	3.1
87.5°	9.4	6.3	6.3	6.3	3.1	3.1	3.1	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)