

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: P573535

Luminaire Tested: **ARCH-S-PA2-90-727-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573535  
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-PA2-90-727-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 910mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

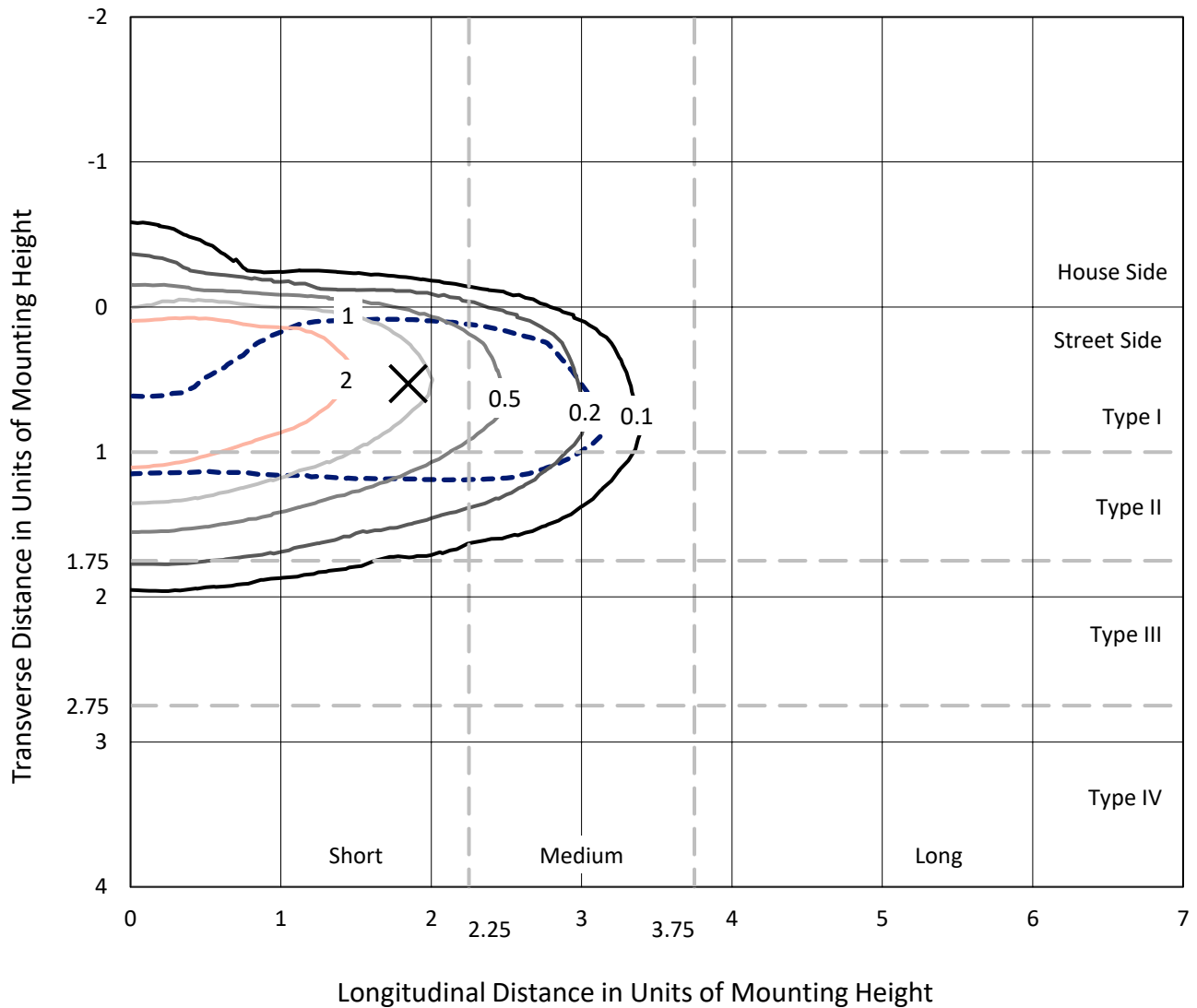
Lumens per Lamp: N/A  
Luminaire Lumens: 8260 lumens  
Efficiency: N/A  
Efficacy: 89.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 92.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

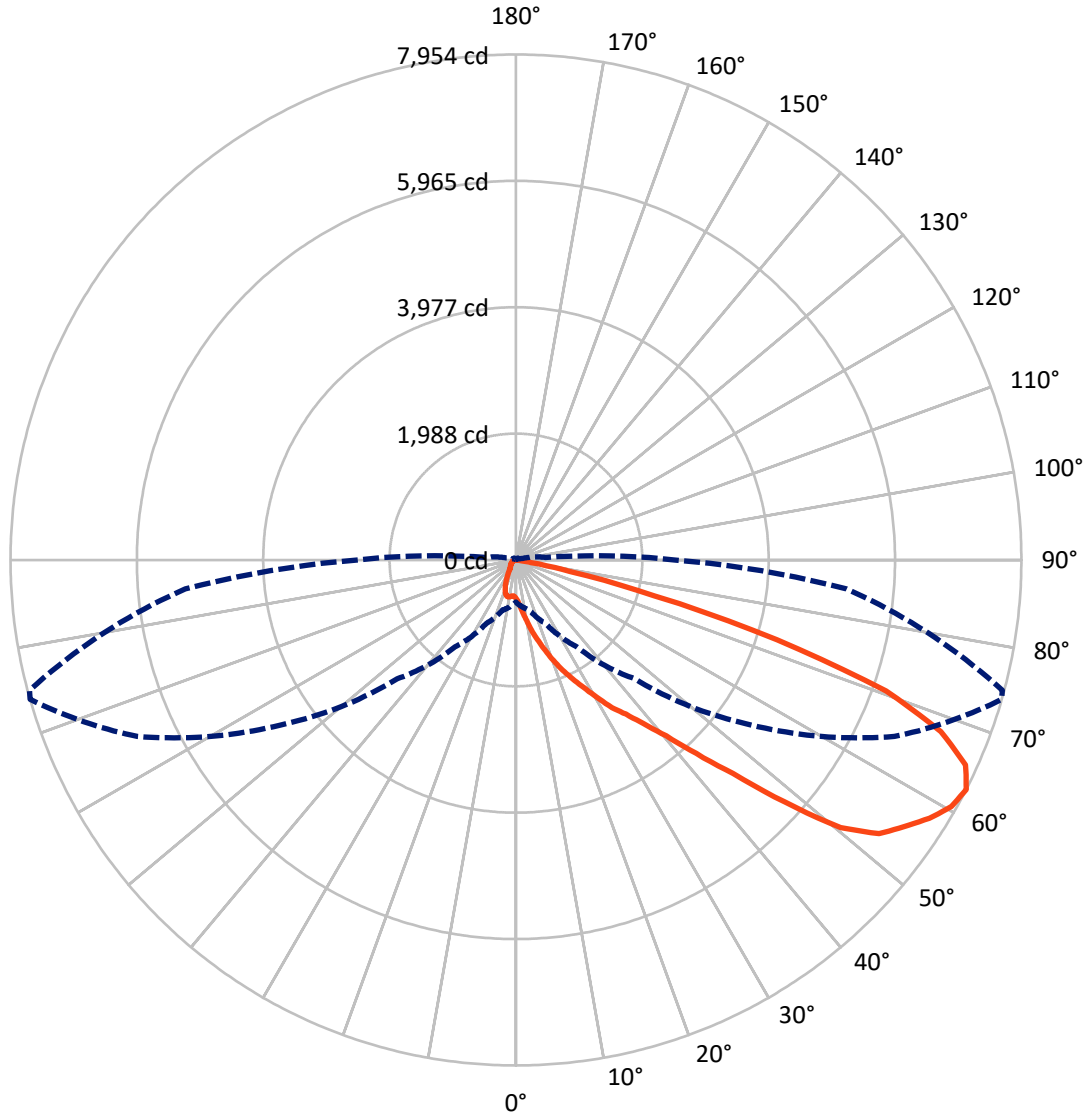
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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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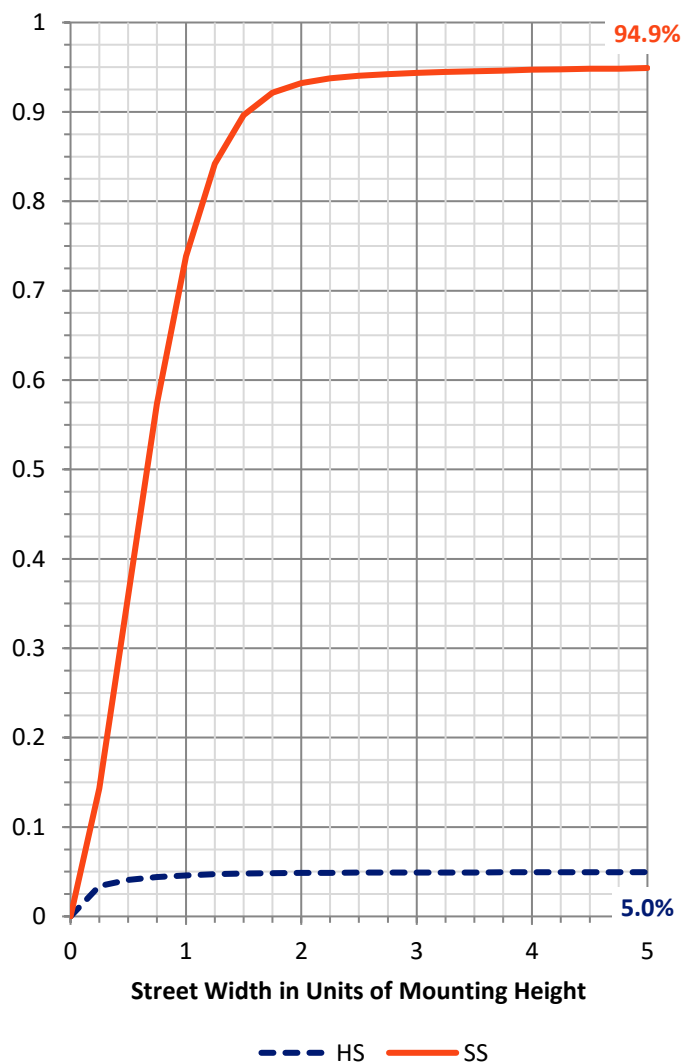
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	412.0	0.0	412.0
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	7848.0	0.0	7848.0
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	8260.0	0.0	8260.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.6	0.9
10°-20°	317.6	3.8
20°-30°	681.7	8.3
30°-40°	1195.5	14.5
40°-50°	1853.4	22.4
50°-60°	2136.6	25.9
60°-70°	1501.0	18.2
70°-80°	467.6	5.7
80°-90°	30.9	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°	8260.0	100.0
0°-180°	8260.0	100.0

**Coefficient of Utilization**

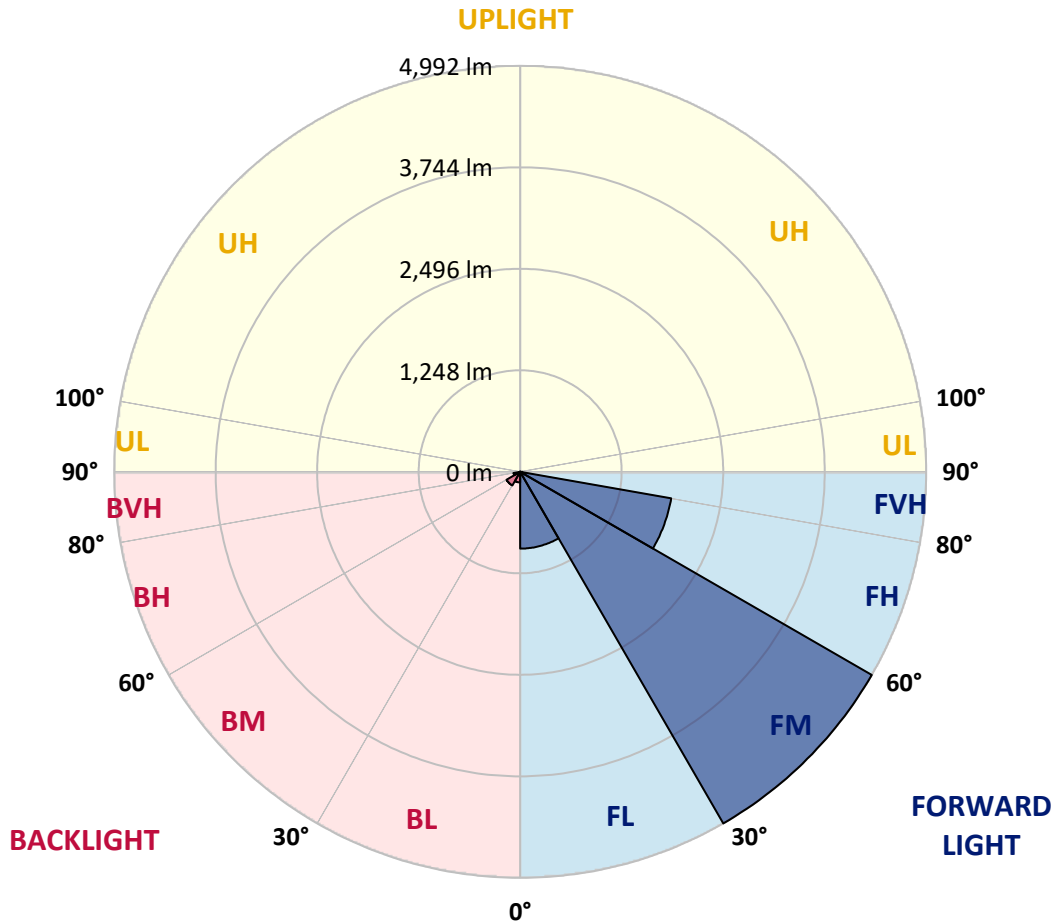


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	944.2	11.4			
FM (30°-60°)	4991.9	60.4			
FH (60°-80°)	1885.3	22.8			G2/5000
FVH (80°-90°)	26.7	0.3			G1/100
BL (0°-30°)	130.7	1.6	B1/500		
BM (30°-60°)	193.6	2.3	B0/220		
BH (60°-80°)	83.4	1.0	B0/110		G0/110
BVH (80°-90°)	4.2	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°	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7
2.5°	840.1	825.6	808.1	793.6	764.5	744.2	718.0	689.0	657.0	654.1	627.9
5°	1177.3	1133.7	1133.7	1095.9	1052.3	973.8	901.2	811.1	744.2	738.4	668.6
7.5°	1523.3	1488.4	1468.0	1409.9	1340.1	1252.9	1136.6	985.5	863.4	843.0	729.7
10°	1845.9	1819.8	1782.0	1735.5	1674.4	1532.0	1386.6	1189.0	994.2	979.7	802.3
12.5°	2096.0	2064.0	2046.5	2026.2	1947.7	1834.3	1645.4	1395.4	1162.8	1130.8	875.0
15°	2284.9	2270.4	2252.9	2252.9	2212.2	2101.8	1907.0	1616.3	1325.6	1287.8	968.0
17.5°	2436.1	2418.6	2415.7	2433.2	2421.5	2343.0	2159.9	1828.5	1494.2	1465.1	1064.0
20°	2604.7	2581.4	2581.4	2596.0	2593.0	2549.4	2389.6	2072.7	1691.9	1639.6	1174.4
22.5°	2843.1	2828.5	2816.9	2793.6	2776.2	2735.5	2596.0	2311.1	1880.8	1831.4	1287.8
25°	3162.8	3145.4	3093.1	3052.4	2976.8	2915.7	2796.5	2523.3	2072.7	2017.5	1398.3
27.5°	3473.9	3439.0	3389.6	3337.2	3252.9	3148.3	3000.0	2723.9	2273.3	2215.1	1511.6
30°	3802.4	3776.2	3715.2	3630.9	3526.2	3409.9	3232.6	2965.1	2502.9	2439.0	1633.7
32.5°	4064.0	4023.3	3968.1	3886.7	3779.1	3697.7	3505.8	3229.7	2767.5	2683.2	1761.6
35°	4273.3	4241.3	4168.6	4090.2	4008.8	3985.5	3776.2	3444.8	2979.7	2901.2	1898.3
37.5°	4407.0	4375.0	4314.0	4235.5	4203.5	4244.2	4107.6	3738.4	3264.6	3165.7	2055.3
40°	4511.7	4473.9	4424.5	4389.6	4378.0	4491.3	4476.8	4119.2	3639.6	3581.4	2270.4
42.5°	4587.3	4549.5	4517.5	4514.6	4590.2	4811.1	4973.9	4651.2	4162.8	4043.6	2546.5
45°	4491.3	4459.3	4476.8	4578.5	4761.7	5110.5	5575.6	5404.1	4793.7	4709.4	2988.4
47.5°	4223.9	4203.5	4282.0	4468.1	4808.2	5293.7	6157.0	6229.7	5694.8	5566.9	3561.1
50°	3805.3	3802.4	3927.4	4180.3	4662.8	5363.4	6450.6	7023.3	6619.3	6488.4	4026.2
52.5°	3238.4	3226.8	3409.9	3761.7	4319.8	5232.6	6505.9	7340.2	7154.1	7000.1	4319.8
55°	2596.0	2569.8	2787.8	3174.5	3814.0	4851.8	6357.6	7410.0	7410.0	7270.4	4537.8
57.5°	1825.6	1866.3	2046.5	2511.7	3189.0	4282.0	5991.3	7346.0	7668.7	7549.5	4831.4
60°	1151.2	1168.6	1366.3	1741.3	2418.6	3520.4	5337.3	7069.8	7875.1	7805.3	5066.9
62.5°	662.8	718.0	816.9	1101.8	1668.6	2645.4	4529.1	6572.7	7953.6	7924.5	5221.0
65°	404.1	409.9	456.4	622.1	1026.2	1805.3	3625.0	5880.9	7776.2	7802.4	5191.9
67.5°	302.3	302.3	316.9	392.4	584.3	1148.3	2674.4	5040.7	7209.4	7293.7	4918.7
70°	261.6	261.6	264.5	287.8	360.5	680.2	1767.5	4064.0	6180.3	6171.6	4064.0
72.5°	206.4	215.1	232.6	244.2	273.3	398.3	1034.9	2840.1	4293.6	4395.4	2616.3
75°	165.7	168.6	191.9	212.2	229.7	270.4	488.4	1578.5	2252.9	2252.9	1151.2
77.5°	127.9	133.7	148.3	168.6	191.9	191.9	203.5	610.5	872.1	843.0	340.1
80°	81.4	84.3	107.6	133.7	159.9	136.6	110.5	203.5	238.4	229.7	93.0
82.5°	49.4	52.3	69.8	107.6	107.6	75.6	69.8	84.3	75.6	69.8	37.8
85°	14.5	17.4	49.4	69.8	61.0	29.1	34.9	37.8	34.9	32.0	20.3
87.5°	2.9	2.9	14.5	17.4	14.5	14.5	11.6	14.5	14.5	14.5	8.7
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°	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7	604.7
2.5°	613.4	601.8	578.5	561.1	546.5	532.0	520.4	517.4	511.6	511.6	508.7
5°	639.5	613.4	569.8	540.7	517.4	497.1	479.7	462.2	456.4	450.6	453.5
7.5°	680.2	639.5	578.5	534.9	494.2	447.7	409.9	377.9	354.7	348.8	340.1
10°	732.6	671.5	593.0	523.3	447.7	366.3	314.0	282.0	270.4	255.8	258.7
12.5°	784.9	709.3	604.7	491.3	369.2	287.8	244.2	223.8	215.1	212.2	215.1
15°	845.9	750.0	598.8	433.1	296.5	232.6	206.4	197.7	191.9	191.9	189.0
17.5°	907.0	784.9	578.5	357.6	238.4	197.7	186.0	177.3	171.5	168.6	168.6
20°	973.8	816.9	532.0	284.9	197.7	180.2	168.6	157.0	151.2	151.2	151.2
22.5°	1043.6	840.1	470.9	226.7	177.3	159.9	148.3	139.5	133.7	133.7	133.7
25°	1104.7	851.8	398.3	189.0	162.8	145.4	133.7	125.0	122.1	119.2	119.2
27.5°	1162.8	848.8	322.7	165.7	145.4	130.8	119.2	113.4	107.6	107.6	107.6
30°	1220.9	831.4	255.8	151.2	133.7	116.3	107.6	101.7	98.8	95.9	95.9
32.5°	1270.4	802.3	200.6	139.5	122.1	104.7	95.9	90.1	90.1	87.2	87.2
35°	1319.8	758.7	168.6	130.8	110.5	95.9	87.2	84.3	81.4	81.4	81.4
37.5°	1372.1	703.5	148.3	119.2	98.8	87.2	81.4	78.5	75.6	72.7	72.7
40°	1436.1	648.3	139.5	110.5	90.1	78.5	72.7	69.8	66.9	66.9	66.9
42.5°	1537.8	601.8	130.8	98.8	81.4	72.7	66.9	61.0	61.0	58.1	58.1
45°	1729.7	584.3	122.1	90.1	75.6	64.0	61.0	55.2	52.3	52.3	52.3
47.5°	1979.7	587.2	113.4	81.4	69.8	58.1	55.2	52.3	46.5	46.5	46.5
50°	2186.1	572.7	104.7	75.6	61.0	55.2	49.4	46.5	43.6	43.6	43.6
52.5°	2267.5	546.5	95.9	69.8	58.1	49.4	46.5	43.6	40.7	40.7	40.7
55°	2348.9	534.9	87.2	61.0	52.3	49.4	43.6	40.7	37.8	34.9	34.9
57.5°	2497.1	540.7	78.5	58.1	49.4	46.5	40.7	34.9	29.1	26.2	26.2
60°	2575.6	520.4	72.7	52.3	46.5	43.6	34.9	26.2	20.3	17.4	17.4
62.5°	2508.7	462.2	66.9	49.4	43.6	37.8	26.2	20.3	14.5	8.7	8.7
65°	2322.7	380.8	61.0	46.5	37.8	29.1	23.3	14.5	8.7	5.8	5.8
67.5°	2087.2	299.4	55.2	43.6	34.9	26.2	20.3	11.6	5.8	2.9	2.9
70°	1686.1	215.1	52.3	40.7	32.0	23.3	17.4	11.6	5.8	2.9	2.9
72.5°	1087.2	139.5	46.5	37.8	29.1	23.3	14.5	8.7	5.8	2.9	2.9
75°	502.9	93.0	43.6	34.9	29.1	20.3	14.5	11.6	5.8	2.9	2.9
77.5°	148.3	66.9	40.7	32.0	26.2	20.3	14.5	11.6	5.8	2.9	2.9
80°	61.0	46.5	32.0	29.1	26.2	20.3	14.5	11.6	5.8	2.9	2.9
82.5°	29.1	20.3	14.5	11.6	14.5	14.5	11.6	11.6	5.8	2.9	2.9
85°	14.5	8.7	5.8	5.8	5.8	2.9	2.9	5.8	5.8	2.9	2.9
87.5°	8.7	5.8	5.8	5.8	2.9	2.9	2.9	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)