

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: P573429

Luminaire Tested: **ARCH-S-PA2-70-827-U-T2U-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573429  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-70-827-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 725mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II U OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5407 lumens  
Efficiency: N/A  
Efficacy: 73.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

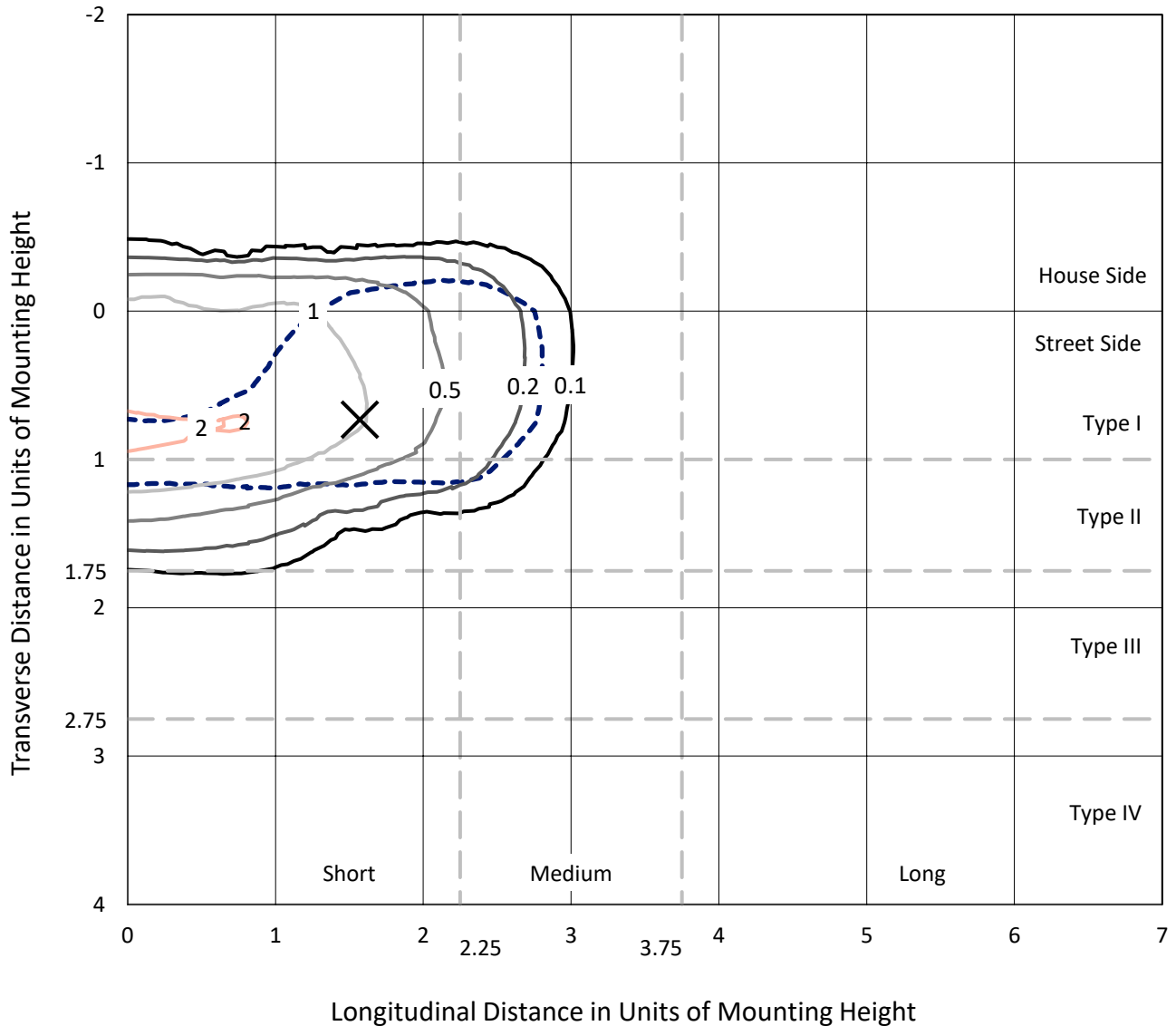
Input Watts (W): 73.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

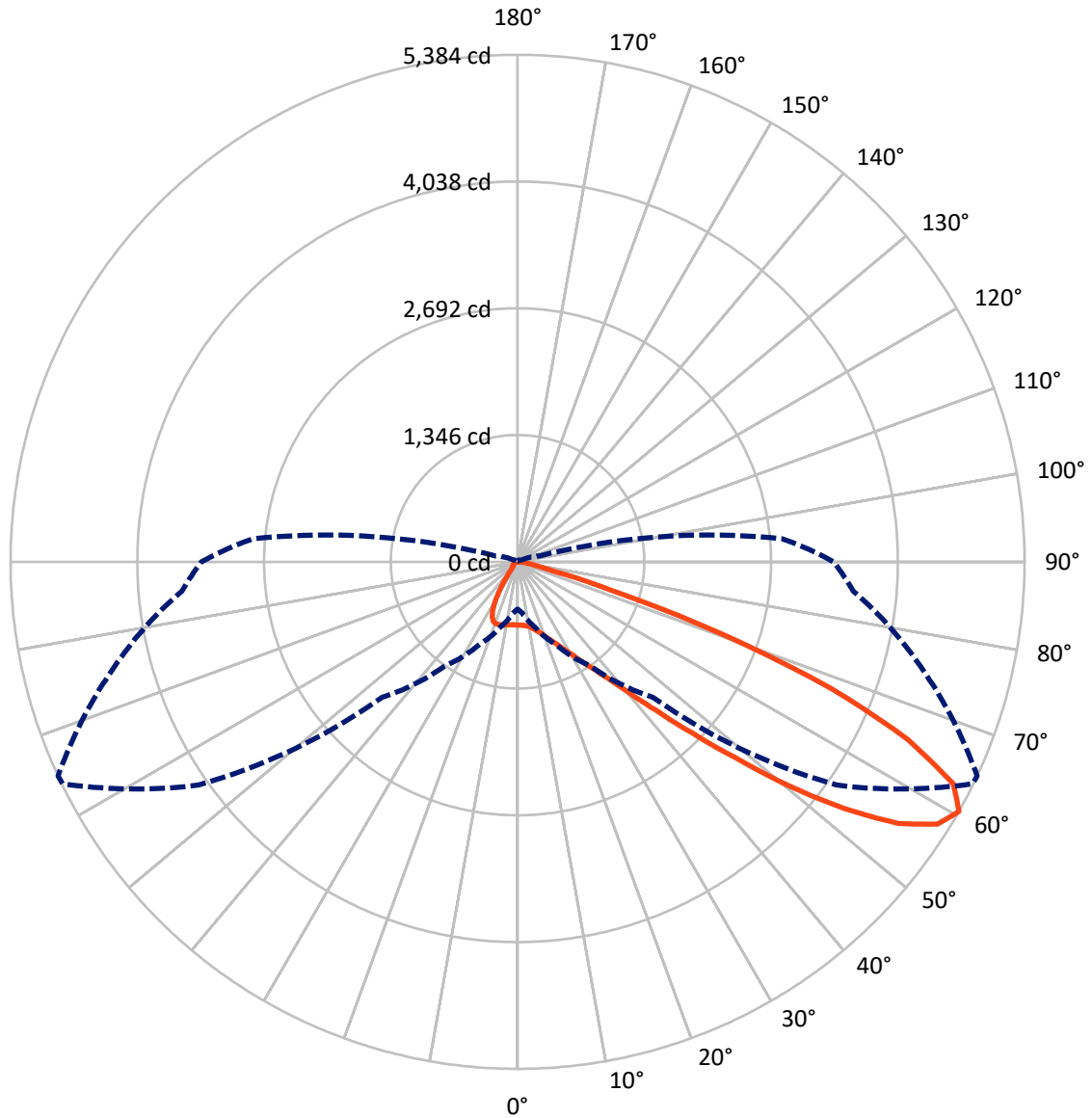
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical

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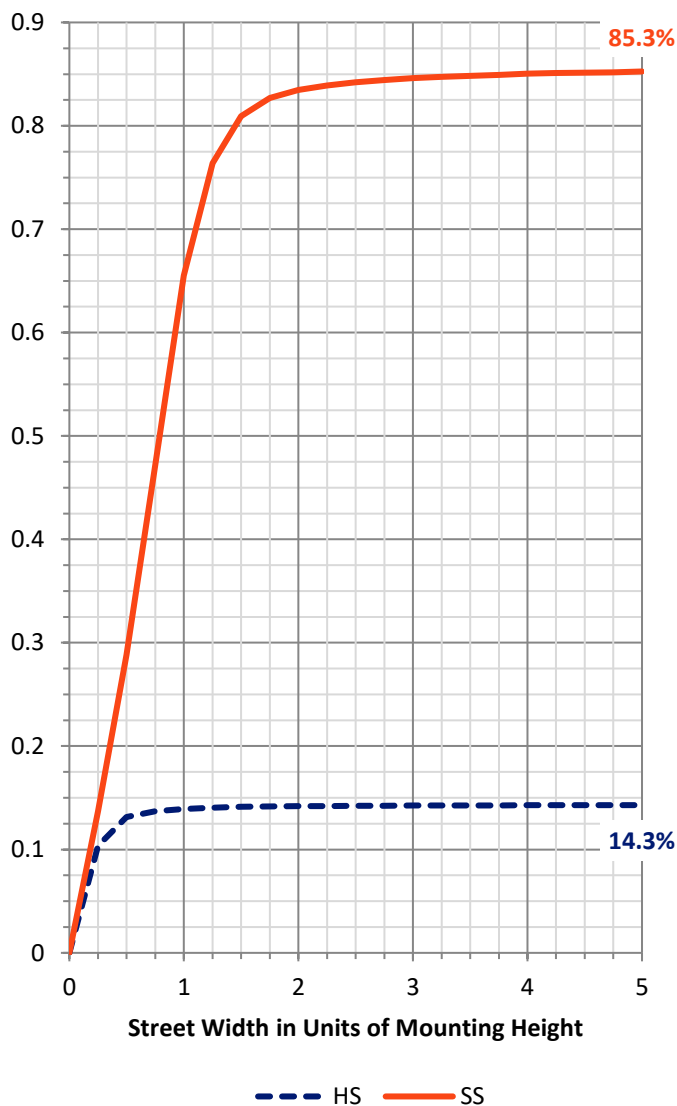
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	782.8	0.0	782.8
	% Fixture	14.5	0.0	14.5
<b>Street Side</b>	Lumens	4624.2	0.0	4624.2
	% Fixture	85.5	0.0	85.5
<b>Total</b>	Lumens	5407.0	0.0	5407.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.7	1.2
10°-20°	180.6	3.3
20°-30°	306.8	5.7
30°-40°	633.1	11.7
40°-50°	1273.2	23.5
50°-60°	1557.9	28.8
60°-70°	1102.2	20.4
70°-80°	265.6	4.9
80°-90°	24.0	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°	5407.0	100.0
0°-180°	5407.0	100.0

**Coefficient of Utilization**

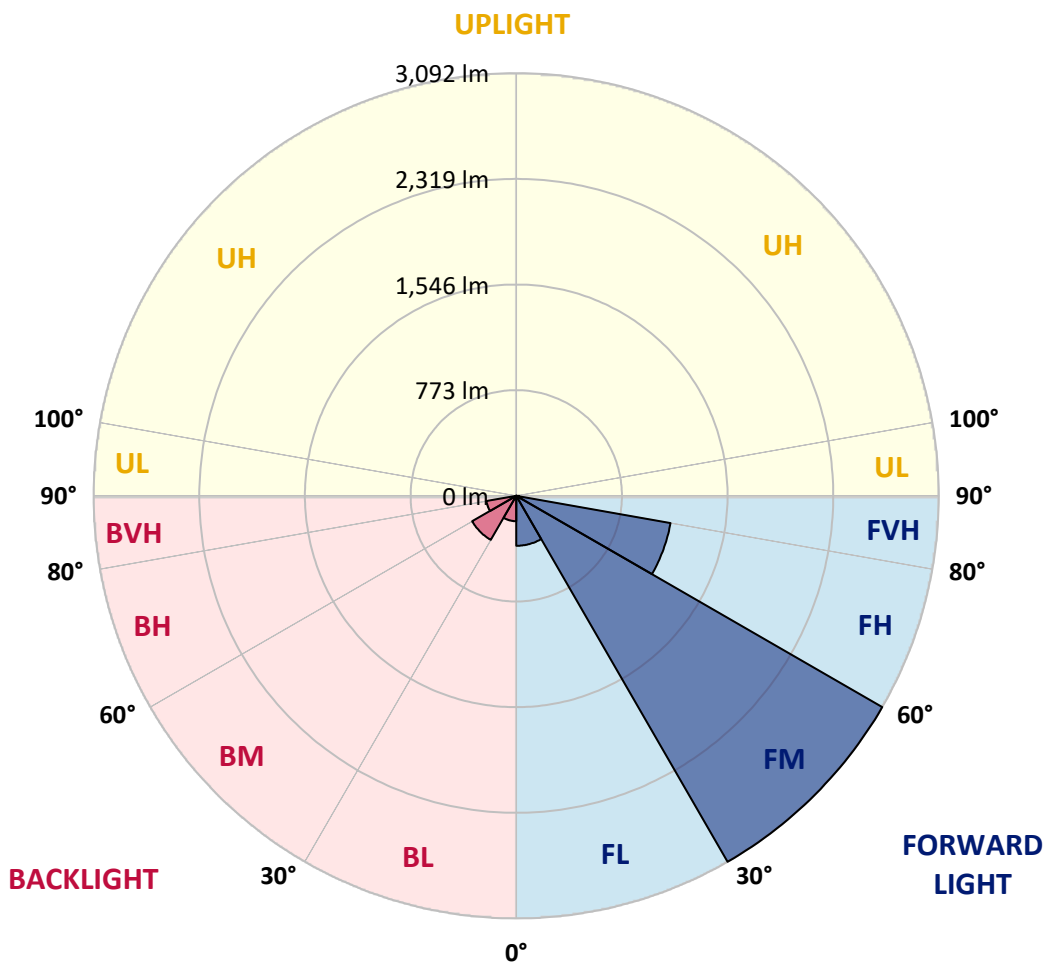


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	365.5	6.8			
FM (30°-60°)	3092.0	57.2			
FH (60°-80°)	1145.9	21.2			G1/1800
FVH (80°-90°)	20.9	0.4			G1/100
BL (0°-30°)	185.6	3.4	B1/500		
BM (30°-60°)	372.2	6.9	B1/1000		
BH (60°-80°)	221.9	4.1	B1/500		G1/500
BVH (80°-90°)	3.1	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-G1**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6
2.5°	675.7	673.6	673.6	673.6	675.7	675.7	677.8	673.6	673.6	673.6	673.6
5°	671.4	669.3	669.3	671.4	673.6	673.6	677.8	677.8	677.8	680.0	680.0
7.5°	680.0	675.7	675.7	677.8	680.0	680.0	684.2	686.4	686.4	690.6	692.8
10°	690.6	688.5	688.5	692.8	697.0	697.0	703.4	703.4	703.4	707.7	709.8
12.5°	705.6	703.4	703.4	709.8	716.2	720.5	724.7	726.9	729.0	729.0	729.0
15°	726.9	724.7	724.7	731.1	739.7	750.3	756.7	756.7	761.0	758.8	750.3
17.5°	756.7	754.6	756.7	761.0	771.6	782.3	795.1	797.2	795.1	790.8	778.0
20°	805.7	799.3	803.6	814.3	814.3	820.7	837.7	844.1	846.2	833.4	810.0
22.5°	856.9	856.9	861.2	873.9	865.4	873.9	888.9	899.5	903.8	893.1	854.8
25°	952.8	957.1	950.7	946.4	925.1	929.4	948.6	969.9	969.9	961.3	905.9
27.5°	1163.8	1159.6	1114.8	1053.0	997.6	1001.8	1021.0	1048.7	1050.9	1031.7	957.1
30°	1466.5	1470.8	1383.4	1242.7	1121.2	1089.2	1110.5	1142.5	1146.8	1114.8	1023.2
32.5°	1939.7	1903.5	1741.5	1553.9	1325.8	1210.7	1219.3	1253.4	1266.2	1238.4	1127.6
35°	2551.5	2466.2	2223.2	1990.9	1660.5	1428.2	1362.1	1398.3	1404.7	1389.8	1257.6
37.5°	2916.0	2847.8	2690.0	2479.0	2091.1	1718.0	1549.7	1585.9	1579.5	1549.7	1387.7
40°	3141.9	3103.6	3018.3	2920.3	2673.0	2174.2	1858.7	1828.9	1831.0	1788.4	1598.7
42.5°	3269.8	3235.7	3203.8	3229.3	3156.9	3001.3	2306.4	2169.9	2157.2	2076.2	1843.8
45°	3276.2	3225.1	3263.4	3412.6	3527.8	3734.5	2890.4	2574.9	2581.3	2447.0	2148.6
47.5°	3031.1	2990.6	3101.4	3393.5	3775.0	4214.1	3570.4	3129.1	3099.3	2835.0	2457.7
50°	2547.2	2545.1	2692.2	3105.7	3775.0	4461.4	4299.4	3779.3	3747.3	3240.0	2739.1
52.5°	2016.5	2057.0	2157.2	2549.4	3427.6	4437.9	4836.5	4450.7	4361.2	3600.2	2973.5
55°	1568.8	1553.9	1675.4	1946.1	2717.8	4032.9	5011.3	4979.4	4904.7	3920.0	3180.3
57.5°	963.5	1018.9	1183.0	1423.9	1978.1	3171.8	4759.8	5301.2	5256.5	4218.4	3395.6
60°	500.9	543.6	720.5	972.0	1351.4	2033.5	4131.0	5375.8	5384.4	4459.3	3578.9
62.5°	315.5	313.3	394.3	682.1	869.7	1142.5	3208.0	5111.5	5192.5	4644.7	3753.7
65°	236.6	238.7	270.7	451.9	590.4	596.8	1903.5	4420.9	4555.2	4693.7	3813.4
67.5°	219.6	221.7	236.6	296.3	443.4	398.6	837.7	3408.4	3596.0	4241.8	3583.2
70°	196.1	198.2	221.7	245.1	334.7	292.0	377.3	2052.7	2312.8	3078.0	2867.0
72.5°	153.5	157.7	185.4	232.3	249.4	221.7	262.2	908.1	1059.4	1692.5	1641.3
75°	113.0	115.1	140.7	179.1	219.6	157.7	202.5	360.2	394.3	635.2	541.4
77.5°	78.9	78.9	98.1	134.3	183.3	110.8	144.9	194.0	198.2	236.6	155.6
80°	49.0	51.2	61.8	91.7	113.0	106.6	89.5	130.0	130.0	123.6	63.9
82.5°	27.7	29.8	42.6	61.8	76.7	72.5	57.6	74.6	76.7	78.9	36.2
85°	12.8	14.9	25.6	38.4	44.8	34.1	34.1	38.4	38.4	51.2	21.3
87.5°	2.1	2.1	12.8	17.1	14.9	17.1	17.1	21.3	21.3	25.6	10.7
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°	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6	673.6
2.5°	671.4	671.4	671.4	669.3	669.3	667.2	662.9	662.9	662.9	662.9	665.1
5°	680.0	677.8	675.7	669.3	665.1	656.5	648.0	645.9	639.5	639.5	641.6
7.5°	690.6	690.6	684.2	673.6	662.9	648.0	633.1	622.4	611.8	609.6	607.5
10°	709.8	705.6	699.2	680.0	662.9	639.5	616.0	588.3	567.0	556.3	552.1
12.5°	724.7	722.6	709.8	688.5	660.8	624.6	571.3	507.3	456.2	428.4	428.4
15°	746.1	741.8	722.6	692.8	654.4	569.1	460.4	362.4	306.9	277.1	272.8
17.5°	767.4	758.8	735.4	694.9	626.7	468.9	321.9	232.3	194.0	179.1	174.8
20°	792.9	778.0	743.9	697.0	558.5	341.1	208.9	155.6	140.7	134.3	136.4
22.5°	827.1	801.5	752.4	684.2	456.2	221.7	147.1	125.8	117.2	110.8	110.8
25°	869.7	833.4	767.4	648.0	330.4	149.2	117.2	104.4	95.9	91.7	89.5
27.5°	908.1	863.3	782.3	584.1	211.0	117.2	98.1	87.4	78.9	76.7	74.6
30°	959.2	897.4	797.2	481.7	138.6	95.9	83.1	72.5	66.1	63.9	63.9
32.5°	1046.6	963.5	824.9	366.6	104.4	83.1	70.3	61.8	57.6	55.4	55.4
35°	1148.9	1044.5	848.4	255.8	89.5	70.3	59.7	53.3	51.2	49.0	49.0
37.5°	1255.5	1140.4	852.6	162.0	78.9	61.8	53.3	49.0	44.8	44.8	44.8
40°	1447.3	1308.8	833.4	108.7	68.2	55.4	46.9	44.8	40.5	40.5	40.5
42.5°	1671.2	1513.4	784.4	87.4	61.8	49.0	44.8	40.5	36.2	36.2	34.1
45°	1961.0	1745.8	701.3	76.7	55.4	44.8	40.5	36.2	34.1	32.0	32.0
47.5°	2233.9	2010.1	622.4	68.2	51.2	42.6	36.2	32.0	29.8	29.8	29.8
50°	2493.9	2212.6	530.8	63.9	46.9	40.5	34.1	29.8	27.7	25.6	25.6
52.5°	2681.5	2372.4	445.5	57.6	42.6	36.2	32.0	27.7	23.4	21.3	21.3
55°	2890.4	2534.4	368.8	51.2	40.5	34.1	27.7	23.4	19.2	17.1	17.1
57.5°	3124.9	2692.2	298.4	46.9	38.4	29.8	23.4	19.2	14.9	12.8	12.8
60°	3357.2	2817.9	238.7	42.6	34.1	27.7	21.3	14.9	10.7	8.5	8.5
62.5°	3589.6	2903.2	183.3	38.4	32.0	23.4	17.1	10.7	6.4	4.3	4.3
65°	3685.5	2879.8	136.4	34.1	27.7	19.2	14.9	10.7	6.4	4.3	4.3
67.5°	3419.0	2589.9	95.9	34.1	25.6	19.2	12.8	8.5	4.3	2.1	2.1
70°	2668.7	1999.4	70.3	34.1	25.6	19.2	12.8	8.5	4.3	2.1	2.1
72.5°	1513.4	1112.7	53.3	29.8	23.4	17.1	12.8	8.5	4.3	2.1	2.1
75°	539.3	358.1	40.5	27.7	21.3	14.9	12.8	8.5	4.3	2.1	2.1
77.5°	130.0	91.7	32.0	23.4	19.2	14.9	10.7	8.5	6.4	2.1	2.1
80°	53.3	38.4	25.6	19.2	14.9	12.8	10.7	8.5	4.3	2.1	2.1
82.5°	23.4	19.2	10.7	10.7	8.5	8.5	8.5	8.5	4.3	2.1	2.1
85°	10.7	8.5	4.3	4.3	2.1	2.1	2.1	4.3	4.3	2.1	2.1
87.5°	6.4	4.3	4.3	4.3	2.1	2.1	2.1	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)