

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: P573509

Luminaire Tested: **ARCH-S-PA2-80-827-U-T2R**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573509  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-80-827-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 820mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8729 lumens  
Efficiency: N/A  
Efficacy: 105.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

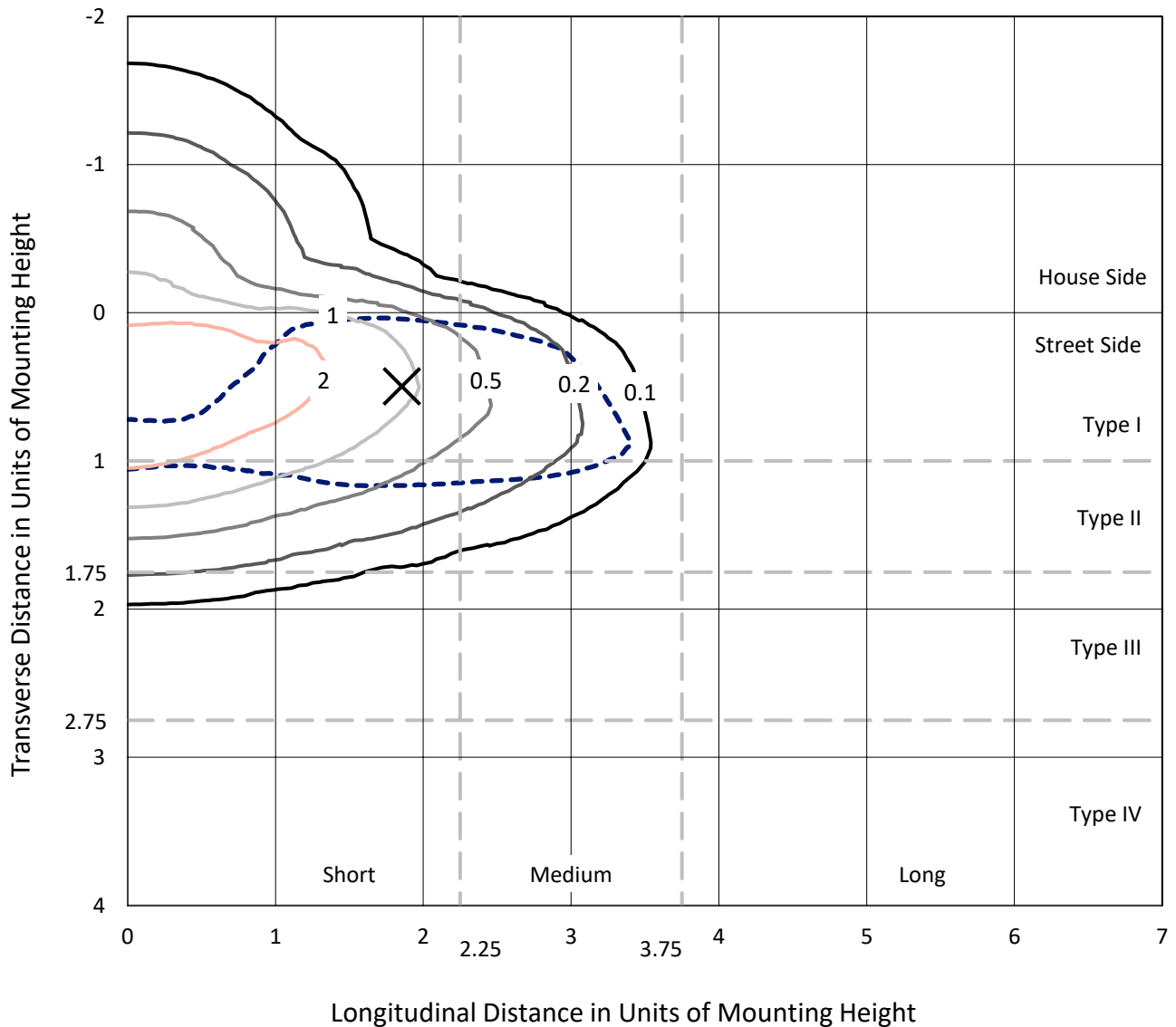
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

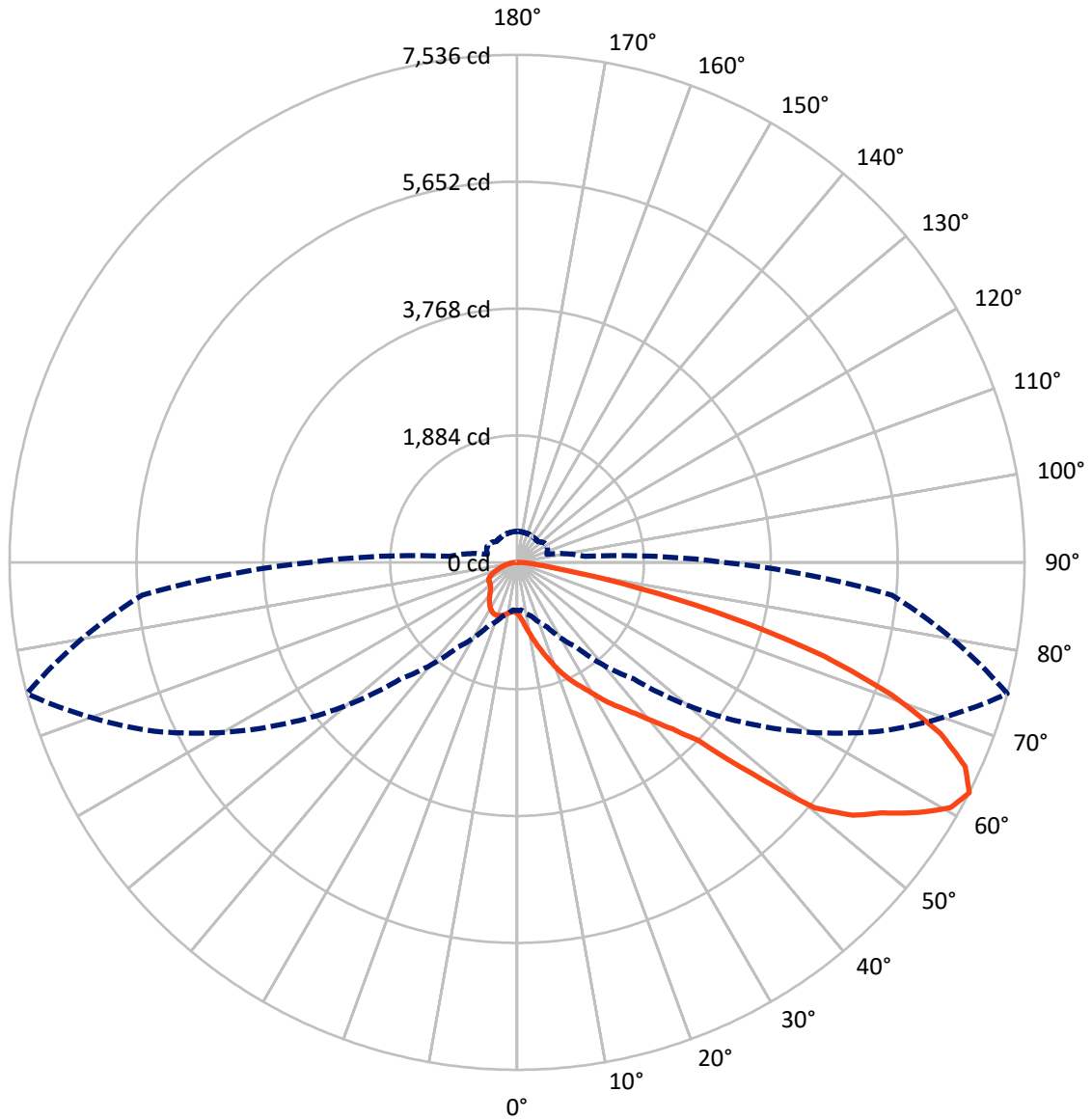
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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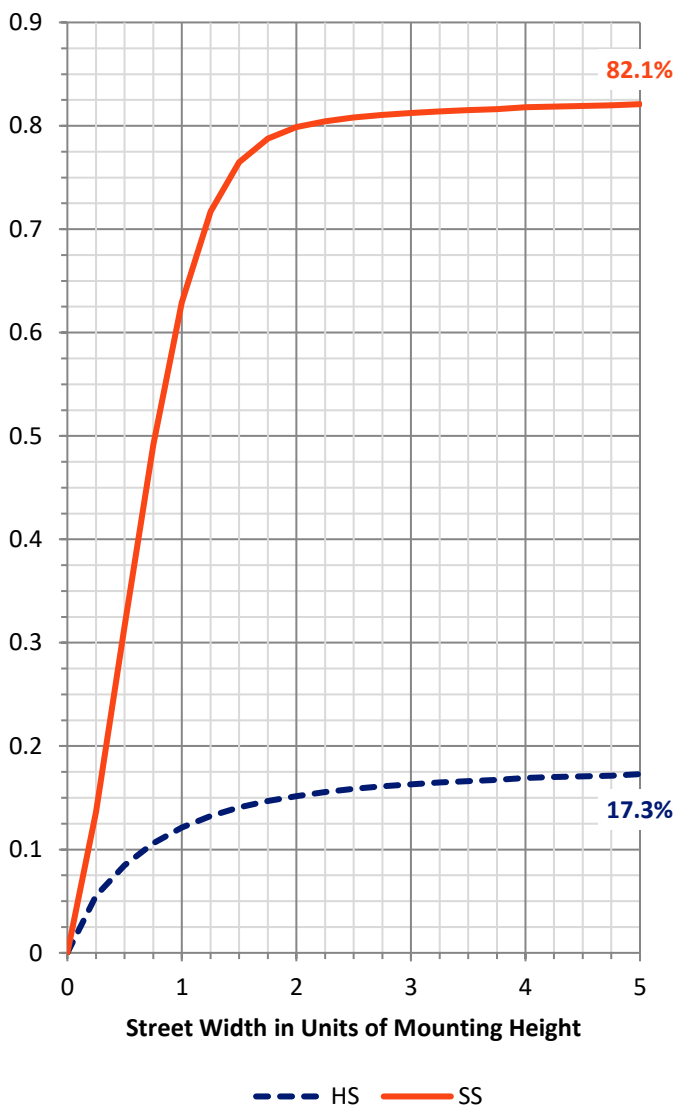
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1539.5	0.0	1539.5
	% Fixture	17.6	0.0	17.6
<b>Street Side</b>	Lumens	7189.5	0.0	7189.5
	% Fixture	82.4	0.0	82.4
<b>Total</b>	Lumens	8729.0	0.0	8729.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.4	1.0
10°-20°	361.2	4.1
20°-30°	714.6	8.2
30°-40°	1191.1	13.6
40°-50°	1757.7	20.1
50°-60°	2112.9	24.2
60°-70°	1642.1	18.8
70°-80°	726.5	8.3
80°-90°	131.5	1.5
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°	8729.0	100.0
0°-180°	8729.0	100.0



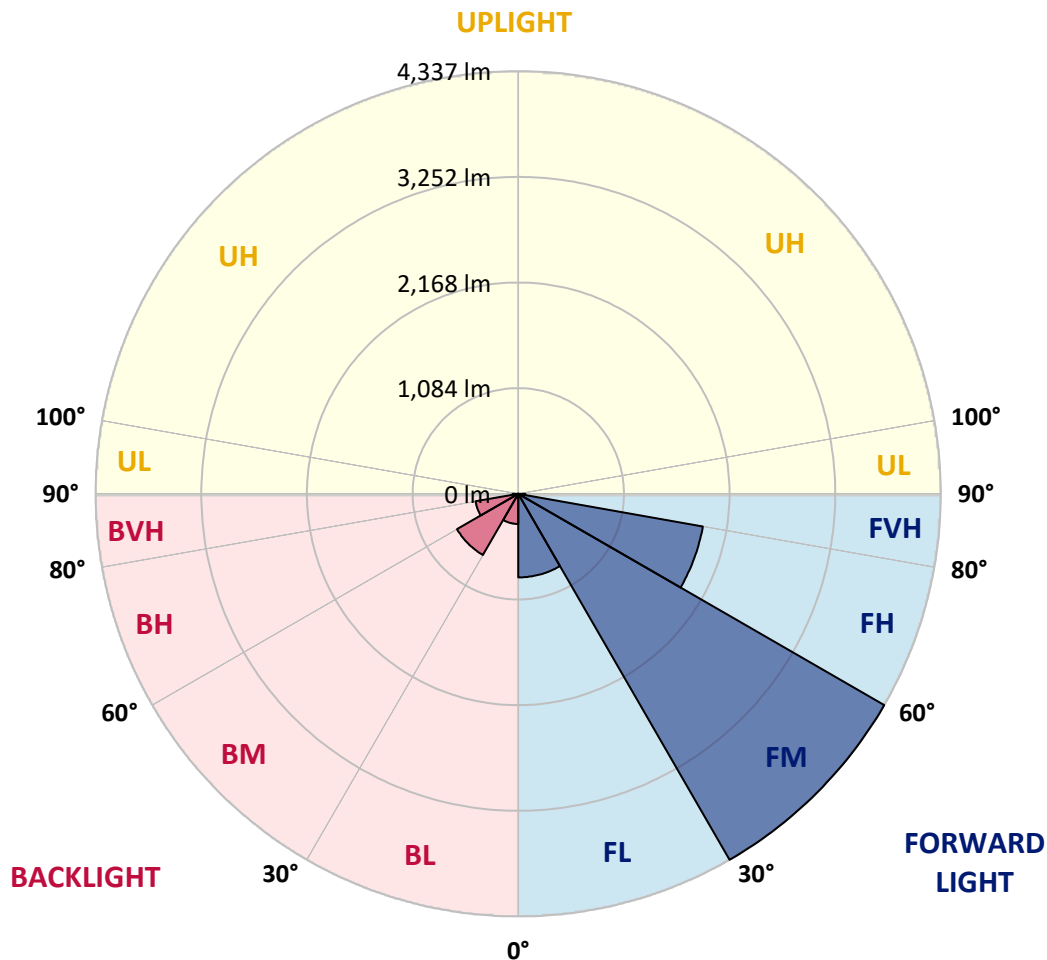
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	857.4	9.8			
FM (30°-60°)	4336.6	49.7			
FH (60°-80°)	1923.2	22.0			G2/5000
FVH (80°-90°)	72.3	0.8			G1/100
BL (0°-30°)	309.8	3.5	B1/500		
BM (30°-60°)	725.1	8.3	B1/1000		
BH (60°-80°)	445.4	5.1	B1/500		G1/500
BVH (80°-90°)	59.2	0.7			G1/100
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°	75°	85°	90°
0°	760.9	760.9	760.9	760.9	760.9	760.9	760.9	760.9	760.9	760.9	760.9
2.5°	972.9	944.6	944.6	914.0	916.4	890.4	862.2	833.9	803.3	779.7	767.9
5°	1272.1	1250.9	1243.8	1208.5	1151.9	1088.3	1020.0	949.3	876.3	819.8	791.5
7.5°	1552.4	1535.9	1526.5	1486.4	1408.7	1340.4	1232.0	1102.4	977.6	871.6	829.2
10°	1759.7	1747.9	1729.1	1710.2	1653.7	1594.8	1460.5	1276.8	1093.0	935.2	871.6
12.5°	1910.4	1894.0	1894.0	1891.6	1853.9	1799.7	1674.9	1477.0	1227.3	1005.9	918.7
15°	2011.7	2009.4	2016.4	2030.6	2021.2	1985.8	1861.0	1660.7	1363.9	1086.0	972.9
17.5°	2087.1	2077.7	2091.8	2129.5	2157.8	2143.7	2040.0	1837.4	1514.7	1173.1	1031.8
20°	2169.6	2150.7	2169.6	2216.7	2252.0	2273.2	2223.7	2007.0	1677.2	1267.3	1088.3
22.5°	2327.4	2325.0	2315.6	2329.7	2353.3	2391.0	2362.7	2179.0	1835.1	1361.6	1154.3
25°	2610.1	2584.2	2558.2	2527.6	2501.7	2513.5	2489.9	2339.2	1978.8	1465.2	1210.8
27.5°	2925.7	2897.5	2850.3	2775.0	2704.3	2661.9	2612.4	2478.2	2117.7	1559.4	1265.0
30°	3215.5	3206.1	3135.4	3052.9	2930.4	2852.7	2758.5	2638.3	2285.0	1663.1	1321.5
32.5°	3486.4	3467.5	3396.9	3309.7	3166.0	3078.8	2949.3	2812.7	2475.8	1790.3	1380.4
35°	3719.6	3700.7	3618.3	3507.6	3382.7	3307.3	3158.9	2968.1	2650.1	1901.0	1429.9
37.5°	3896.3	3875.1	3797.3	3689.0	3578.2	3542.9	3415.7	3166.0	2848.0	2040.0	1491.1
40°	3995.2	3969.3	3917.5	3842.1	3750.2	3733.7	3679.5	3411.0	3097.7	2209.6	1580.6
42.5°	4007.0	3983.4	3955.2	3948.1	3941.0	3955.2	3981.1	3689.0	3382.7	2435.8	1712.6
45°	3903.3	3889.2	3891.6	3971.6	4082.4	4211.9	4367.4	4098.9	3766.7	2866.8	2009.4
47.5°	3681.9	3674.8	3726.7	3860.9	4108.3	4402.7	4843.2	4800.8	4676.0	3561.8	2391.0
50°	3323.8	3312.1	3422.8	3634.8	3988.1	4466.3	5163.6	5627.7	5731.3	4101.2	2640.7
52.5°	2810.3	2824.4	2996.4	3286.1	3712.5	4398.0	5295.5	5966.9	6240.1	4499.3	2831.5
55°	2285.0	2263.8	2419.3	2777.3	3305.0	4148.3	5321.4	6162.4	6569.9	4866.8	3017.6
57.5°	1665.5	1717.3	1882.2	2207.3	2779.7	3696.0	5170.7	6296.7	7012.8	5234.3	3189.6
60°	1128.4	1128.4	1274.4	1599.5	2148.4	3147.2	4767.9	6247.2	7399.1	5521.7	3227.3
62.5°	718.5	711.4	829.2	1060.0	1538.2	2445.2	4164.8	5936.3	7535.8	5590.0	3069.4
65°	454.6	464.1	506.5	647.8	984.7	1736.1	3342.7	5316.7	7312.0	5432.2	2793.8
67.5°	365.1	367.5	388.7	447.6	605.4	1114.2	2478.2	4461.6	6777.2	5034.0	2471.1
70°	322.7	327.4	332.1	353.3	414.6	704.3	1627.8	3592.4	5900.9	4341.5	2124.8
72.5°	294.5	299.2	303.9	308.6	341.6	459.4	961.1	2723.1	4760.8	3335.6	1620.7
75°	270.9	275.6	275.6	278.0	296.8	341.6	527.7	1877.5	3314.4	2075.3	1010.6
77.5°	242.6	245.0	245.0	249.7	268.5	268.5	327.4	1161.3	1839.8	939.9	511.2
80°	204.9	209.7	209.7	216.7	235.6	207.3	219.1	593.6	763.2	386.3	228.5
82.5°	150.8	160.2	164.9	176.7	188.5	157.8	157.8	299.2	322.7	172.0	122.5
85°	82.4	84.8	122.5	131.9	139.0	94.2	106.0	148.4	160.2	75.4	61.2
87.5°	23.6	25.9	58.9	73.0	66.0	40.0	44.8	56.5	56.5	21.2	16.5
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	760.9	760.9	760.9	760.9	760.9	760.9	760.9	760.9	760.9	760.9
2.5°	758.5	739.7	723.2	711.4	699.6	692.6	690.2	685.5	685.5	687.9
5°	767.9	735.0	709.1	694.9	685.5	680.8	678.4	678.4	680.8	680.8
7.5°	791.5	742.0	718.5	706.7	697.3	692.6	692.6	690.2	692.6	692.6
10°	824.5	763.2	737.3	723.2	716.1	709.1	706.7	704.3	704.3	704.3
12.5°	859.8	786.8	758.5	742.0	730.3	720.8	716.1	711.4	709.1	709.1
15°	892.8	810.3	772.7	753.8	737.3	723.2	713.8	706.7	704.3	704.3
17.5°	928.1	826.8	782.1	756.2	735.0	716.1	704.3	694.9	690.2	690.2
20°	965.8	838.6	782.1	749.1	720.8	702.0	687.9	678.4	669.0	669.0
22.5°	996.4	843.3	772.7	732.6	704.3	680.8	666.7	654.9	647.8	647.8
25°	1022.4	838.6	751.5	706.7	673.7	652.5	638.4	629.0	621.9	621.9
27.5°	1038.8	819.8	725.5	678.4	647.8	626.6	617.2	607.8	603.0	603.0
30°	1048.3	796.2	692.6	647.8	617.2	605.4	600.7	591.3	584.2	581.8
32.5°	1053.0	760.9	659.6	617.2	596.0	591.3	591.3	579.5	570.1	567.7
35°	1048.3	723.2	626.6	591.3	584.2	586.6	581.8	567.7	555.9	551.2
37.5°	1041.2	678.4	591.3	572.4	579.5	584.2	570.1	551.2	532.4	527.7
40°	1036.5	638.4	563.0	553.6	574.8	577.1	551.2	515.9	501.8	497.0
42.5°	1060.0	598.3	537.1	539.4	563.0	565.4	518.2	501.8	492.3	490.0
45°	1140.1	563.0	515.9	530.0	548.9	539.4	501.8	499.4	492.3	490.0
47.5°	1201.4	537.1	506.5	523.0	537.1	504.1	499.4	497.0	490.0	487.6
50°	1222.6	520.6	504.1	518.2	520.6	487.6	494.7	494.7	487.6	485.3
52.5°	1224.9	511.2	508.8	515.9	494.7	480.6	490.0	490.0	482.9	480.6
55°	1234.4	506.5	511.2	515.9	466.4	471.1	480.6	482.9	475.8	473.5
57.5°	1215.5	499.4	515.9	518.2	454.6	461.7	471.1	471.1	471.1	471.1
60°	1142.5	485.3	513.5	513.5	445.2	449.9	459.4	464.1	466.4	466.4
62.5°	1008.2	457.0	499.4	499.4	435.8	440.5	452.3	452.3	459.4	459.4
65°	838.6	417.0	471.1	468.8	426.4	431.1	445.2	440.5	452.3	454.6
67.5°	699.6	367.5	428.7	433.4	417.0	428.7	438.2	421.7	445.2	445.2
70°	558.3	308.6	372.2	393.4	400.5	431.1	424.0	398.1	428.7	421.7
72.5°	433.4	261.5	306.2	343.9	381.6	428.7	393.4	365.1	384.0	372.2
75°	315.7	216.7	252.1	285.0	355.7	421.7	362.8	320.4	320.4	315.7
77.5°	221.4	176.7	202.6	226.1	329.8	402.8	325.1	275.6	263.8	261.5
80°	150.8	139.0	160.2	174.3	292.1	365.1	280.3	228.5	207.3	202.6
82.5°	98.9	98.9	108.4	117.8	226.1	303.9	219.1	169.6	219.1	209.7
85°	56.5	58.9	58.9	68.3	124.9	214.4	155.5	169.6	101.3	94.2
87.5°	18.8	18.8	18.8	18.8	25.9	87.2	66.0	61.2	23.6	21.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)