

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: P397782

Luminaire Tested: **ARCH-S-PA1-40-750-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397782  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-40-750-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6114 lumens  
Efficiency: N/A  
Efficacy: 152.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 40  
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: 28.75 FT

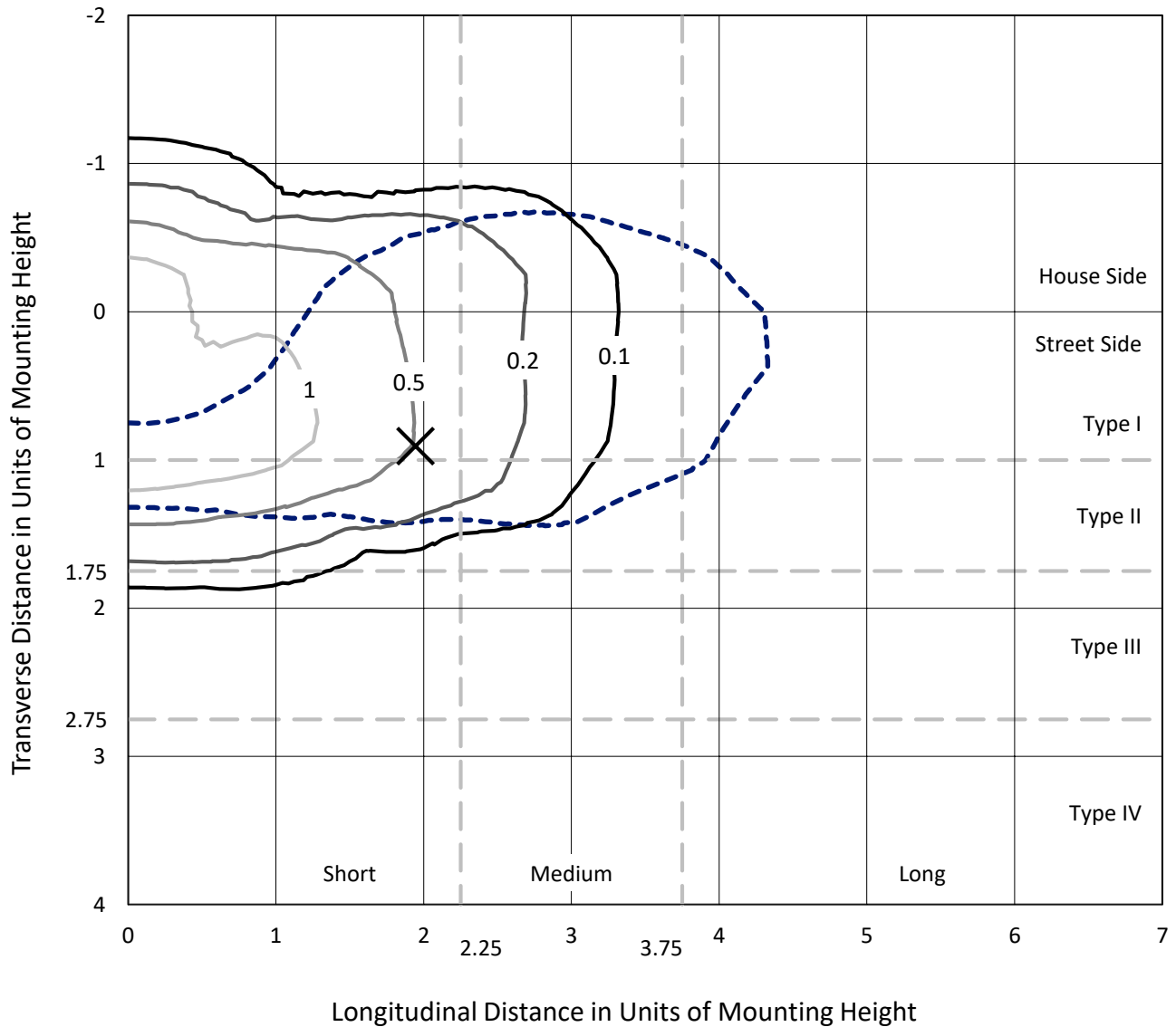


REPORT NUMBER: P397782

CATALOG NUMBER: ARCH-S-PA1-40-750-U-T2U

### Iso-Footcandle Lines of Horizontal Illumination

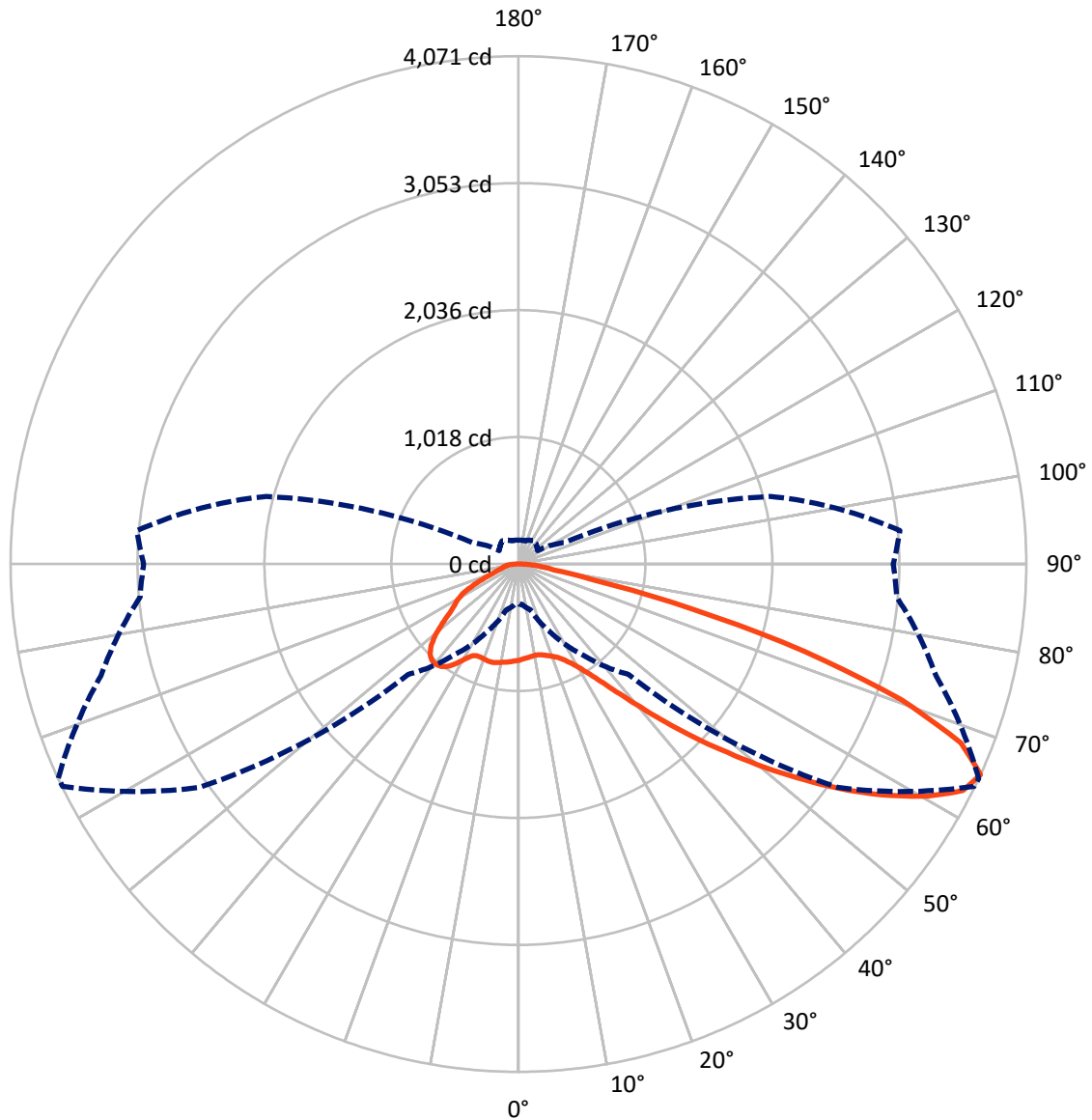
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc  
 Type II - Short - Non-Cutoff

REPORT NUMBER: P397782  
CATALOG NUMBER: ARCH-S-PA1-40-750-U-T2U

### Luminous Intensity Polar Plot



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



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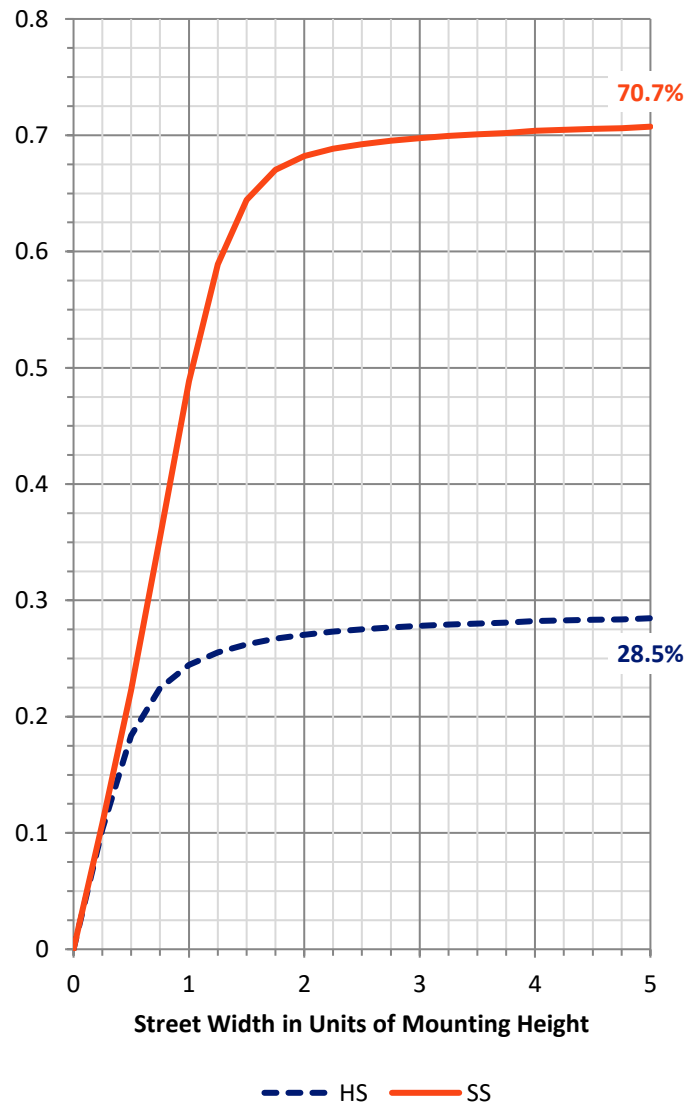
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1767.7	0.0	1767.7
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	4346.4	0.0	4346.4
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	6114.0	0.0	6114.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.6	1.2
10°-20°	219.7	3.6
20°-30°	390.3	6.4
30°-40°	660.4	10.8
40°-50°	1149.6	18.8
50°-60°	1485.6	24.3
60°-70°	1300.0	21.3
70°-80°	707.1	11.6
80°-90°	127.8	2.1
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°	6114.0	100.0
0°-180°	6114.0	100.0



REPORT NUMBER: P397782

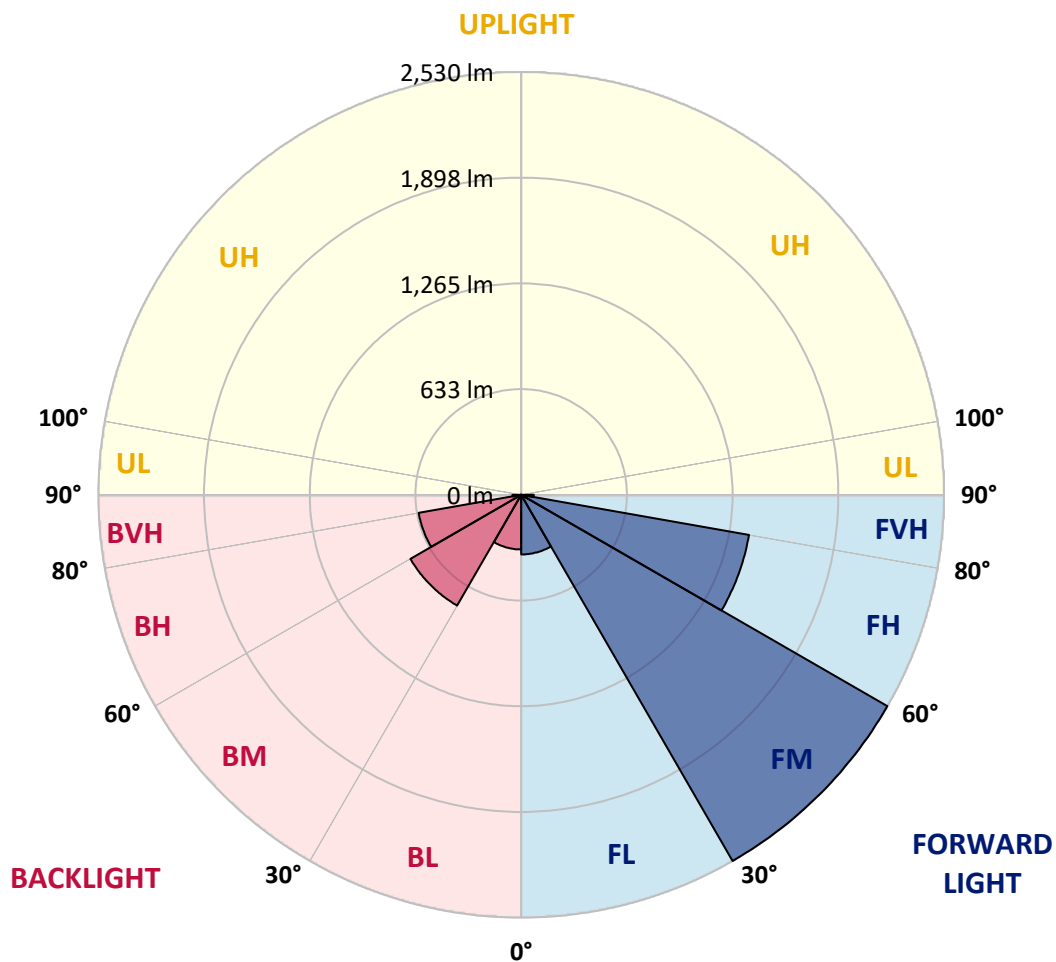
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	356.7	5.8			
FM	(30°-60°)	2530.1	41.4			
FH	(60°-80°)	1384.3	22.6			G1/1800
FVH	(80°-90°)	75.2	1.2			G1/100
BL	(0°-30°)	327.0	5.3	B1/500		
BM	(30°-60°)	765.4	12.5	B1/1000		
BH	(60°-80°)	622.8	10.2	B2/1000		G2/1000
BVH	(80°-90°)	52.6	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	772.6	772.6	772.6	772.6	772.6	772.6	772.6	772.6	772.6	772.6	772.6
2.5°	758.9	758.1	756.5	758.1	758.9	760.5	759.7	761.3	760.5	762.9	766.9
5°	739.6	738.0	737.2	741.2	743.6	747.6	749.2	754.9	754.1	758.1	764.5
7.5°	717.8	717.8	717.0	721.9	725.1	732.3	738.0	747.6	748.4	755.7	762.9
10°	700.9	701.7	700.9	705.0	709.8	718.6	728.3	742.0	742.8	753.2	760.5
12.5°	694.5	694.5	694.5	700.1	706.6	718.6	729.9	744.4	746.0	757.3	763.7
15°	703.4	704.2	702.5	708.2	715.4	729.9	740.4	755.7	757.3	767.7	771.8
17.5°	734.7	738.0	733.9	737.2	735.5	746.8	756.5	771.8	772.6	781.4	783.0
20°	796.7	799.9	793.5	789.5	775.0	774.2	778.2	790.3	790.3	795.9	791.9
22.5°	892.5	895.7	884.4	869.1	834.5	817.6	808.8	814.4	813.6	816.0	805.6
25°	1019.6	1018.8	1005.1	977.0	921.4	880.4	858.7	849.8	849.8	845.0	832.1
27.5°	1177.4	1165.3	1141.1	1107.3	1030.1	972.9	926.3	903.7	899.7	885.2	861.1
30°	1345.5	1336.7	1302.1	1253.0	1163.7	1090.4	1013.2	968.1	965.7	934.3	898.1
32.5°	1543.5	1529.0	1490.4	1431.7	1324.6	1221.6	1125.0	1056.6	1052.6	1002.7	952.8
35°	1797.8	1785.7	1710.9	1652.2	1514.5	1379.3	1265.1	1174.1	1170.9	1109.8	1046.2
37.5°	2102.8	2071.4	1999.0	1888.8	1743.9	1583.8	1438.9	1324.6	1320.6	1253.0	1172.5
40°	2374.8	2346.7	2282.3	2180.9	2025.6	1847.7	1651.4	1512.9	1508.9	1426.8	1325.4
42.5°	2576.0	2556.7	2514.9	2456.1	2345.0	2237.2	1922.6	1740.7	1733.4	1627.2	1500.9
45°	2692.7	2677.4	2653.3	2667.8	2666.1	2646.0	2246.1	2011.9	1988.5	1850.9	1696.4
47.5°	2664.5	2650.9	2660.5	2773.2	2928.5	3045.2	2622.7	2289.5	2258.1	2078.7	1904.9
50°	2460.9	2466.6	2517.3	2732.9	3081.4	3340.5	3040.4	2605.8	2563.9	2308.0	2102.8
52.5°	2089.9	2103.6	2226.8	2528.5	3064.5	3532.1	3417.8	2932.5	2877.0	2531.8	2283.1
55°	1660.2	1694.8	1854.2	2171.2	2844.0	3545.7	3702.7	3260.9	3199.7	2741.8	2440.0
57.5°	1228.1	1279.6	1463.8	1755.2	2421.5	3329.3	3845.1	3574.7	3500.7	2950.2	2605.8
60°	779.0	810.4	1022.8	1366.5	1853.3	2799.7	3826.6	3841.9	3777.5	3157.9	2778.8
62.5°	497.3	512.6	619.7	974.6	1295.7	2073.0	3624.6	4043.9	4000.4	3347.0	2943.0
65°	319.5	325.9	380.6	599.5	882.0	1251.4	3121.6	4065.6	4071.2	3465.3	3044.4
67.5°	259.9	263.2	283.3	370.2	623.7	691.3	2174.4	3756.6	3825.0	3434.7	3009.8
70°	236.6	240.6	261.5	295.3	482.9	477.2	1052.6	3143.4	3255.2	3258.4	2856.1
72.5°	199.6	205.2	233.4	279.2	373.4	376.6	445.8	2238.8	2403.8	2912.4	2625.1
75°	166.6	169.8	193.9	246.3	316.3	301.0	313.0	1187.0	1425.2	2335.4	2379.7
77.5°	135.2	138.4	156.1	196.4	280.9	234.2	246.3	491.7	607.6	1585.4	1945.1
80°	96.6	99.8	119.9	152.9	212.5	210.8	182.7	271.2	294.5	857.1	1263.5
82.5°	69.2	71.6	90.9	109.4	147.3	211.7	137.6	184.3	193.1	379.8	509.4
85°	46.7	46.7	62.8	72.4	95.0	133.6	111.1	124.7	130.4	180.3	137.6
87.5°	20.1	20.1	33.8	37.0	49.9	62.0	82.9	62.8	64.4	97.4	56.3
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: P397782

CATALOG NUMBER: ARCH-S-PA1-40-750-U-T2U

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	772.6	772.6	772.6	772.6	772.6	772.6	772.6	772.6	772.6	772.6	772.6
2.5°	769.3	770.1	771.8	776.6	779.8	784.6	787.0	790.3	790.3	788.7	789.5
5°	767.7	770.1	775.8	784.6	790.3	799.1	805.6	810.4	812.0	810.4	811.2
7.5°	766.9	771.0	780.6	793.5	801.5	812.8	821.7	827.3	831.3	829.7	830.5
10°	764.5	771.0	783.0	799.1	811.2	822.5	830.5	832.9	835.3	833.7	832.9
12.5°	767.7	775.0	787.9	807.2	820.8	829.7	832.1	828.1	822.5	819.2	818.4
15°	774.2	781.4	794.3	814.4	826.5	829.7	824.1	811.2	798.3	791.1	790.3
17.5°	783.0	787.9	798.3	816.0	825.7	821.7	810.4	795.1	785.4	779.8	780.6
20°	788.7	788.7	796.7	810.4	818.4	815.2	801.5	784.6	769.3	762.1	759.7
22.5°	796.7	792.7	793.5	805.6	816.8	812.0	783.0	753.2	731.5	723.5	722.7
25°	818.4	807.2	799.9	807.2	833.7	794.3	736.3	701.7	681.6	674.4	675.2
27.5°	845.0	829.7	814.4	826.5	847.4	754.1	676.8	637.4	625.3	619.7	622.1
30°	871.5	851.4	831.3	874.8	837.7	691.3	600.3	561.7	551.3	547.2	550.5
32.5°	920.6	887.6	863.5	939.1	808.0	619.7	517.5	482.0	472.4	467.6	466.0
35°	1002.7	960.9	936.7	995.5	766.1	540.0	441.8	416.9	406.4	395.9	394.3
37.5°	1121.0	1070.3	1048.6	1027.7	707.4	461.1	383.9	367.0	351.7	335.6	334.8
40°	1262.7	1196.7	1180.6	1042.2	626.1	387.1	343.6	327.5	308.2	292.9	293.7
42.5°	1426.0	1341.5	1306.9	1038.1	525.5	347.7	314.7	297.0	280.1	266.4	265.6
45°	1600.7	1504.9	1425.2	1010.0	425.7	320.3	297.0	276.0	259.1	243.8	242.2
47.5°	1793.8	1686.8	1534.7	955.2	351.7	301.0	286.5	256.7	241.4	231.8	231.8
50°	1988.5	1860.6	1635.3	872.4	308.2	286.5	271.2	246.3	234.2	226.1	226.1
52.5°	2155.1	2041.7	1718.1	773.4	280.9	274.4	260.7	241.4	228.5	221.3	220.5
55°	2316.9	2209.9	1792.2	675.2	258.3	258.3	258.3	237.4	222.9	216.5	215.7
57.5°	2477.8	2386.9	1869.4	610.8	238.2	244.6	253.5	232.6	218.1	212.5	211.7
60°	2659.7	2599.4	1958.8	565.7	220.5	230.2	247.1	226.9	210.0	205.2	204.4
62.5°	2852.8	2852.8	2040.0	502.2	204.4	218.1	237.4	219.7	202.8	198.8	198.0
65°	3004.1	3069.3	2092.4	407.2	188.3	206.0	226.1	210.0	193.1	192.3	190.7
67.5°	3021.8	3124.1	2059.4	307.4	173.8	193.1	214.9	199.6	183.5	183.5	181.1
70°	2894.7	2998.5	1956.4	230.2	163.4	180.3	200.4	186.7	171.4	173.0	169.0
72.5°	2682.2	2708.0	1700.4	181.9	151.3	166.6	182.7	172.2	158.5	158.5	152.9
75°	2402.2	2258.9	1235.3	152.1	136.8	150.5	165.0	156.1	144.1	140.0	136.8
77.5°	1912.1	1636.9	717.8	131.2	124.7	135.2	144.9	138.4	128.0	119.1	119.1
80°	1165.3	959.3	317.1	113.5	110.3	118.3	124.7	117.5	108.6	99.8	97.4
82.5°	443.4	370.2	153.7	97.4	96.6	101.4	106.2	99.0	92.5	88.5	76.5
85°	121.5	111.9	105.4	81.3	79.7	78.9	84.5	81.3	72.4	59.6	53.1
87.5°	45.9	52.3	57.1	49.9	53.1	49.1	56.3	51.5	45.9	29.8	26.6
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)