

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: P397827

Luminaire Tested: **ARCH-S-PA1-50-727-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397827  
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-PA1-50-727-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6593 lumens  
Efficiency: N/A  
Efficacy: 122.1 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): 54  
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

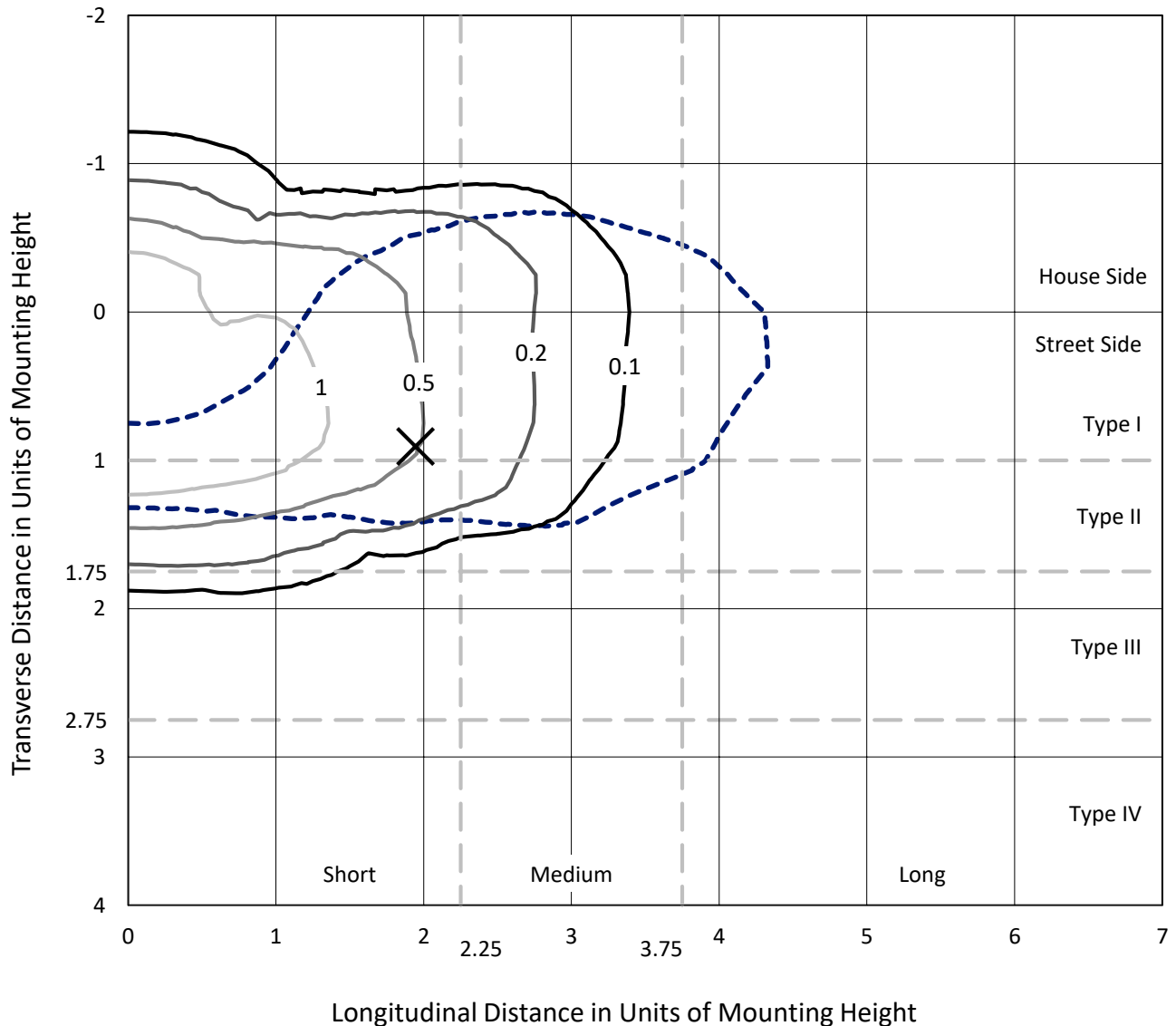


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

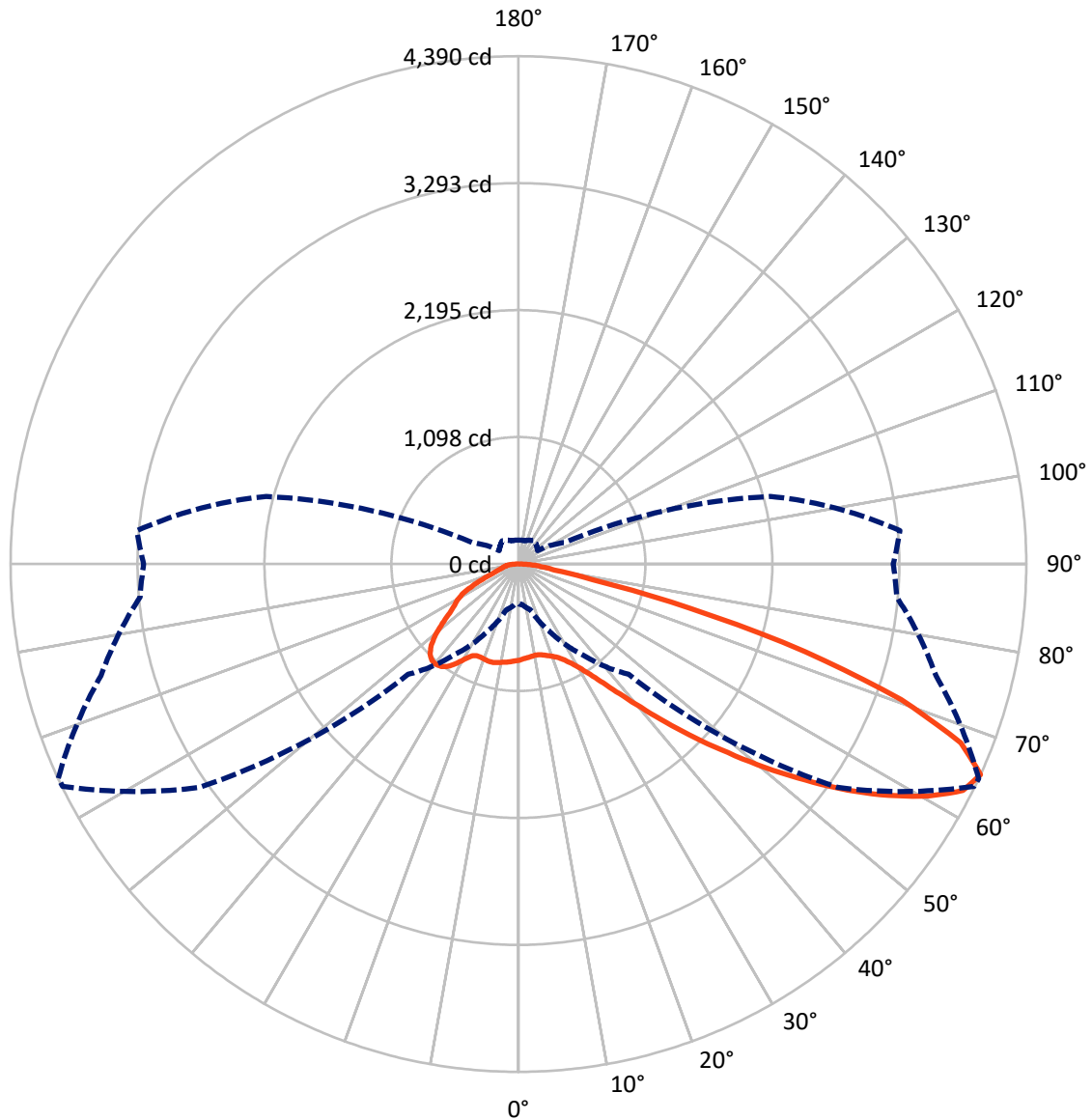


Based on 25 foot mounting height. Maximum calculated value = 1.8 fc  
 Type II - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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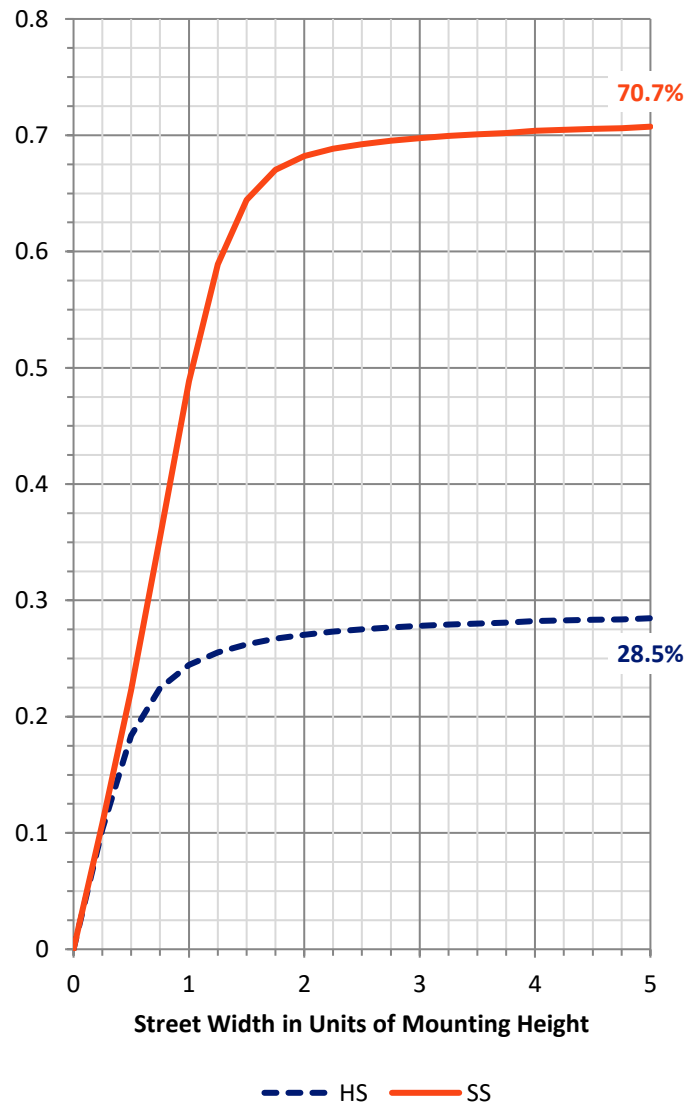
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1906.1	0.0	1906.1
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	4686.9	0.0	4686.9
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	6593.0	0.0	6593.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.4	1.2
10°-20°	237.0	3.6
20°-30°	420.9	6.4
30°-40°	712.1	10.8
40°-50°	1239.6	18.8
50°-60°	1602.0	24.3
60°-70°	1401.8	21.3
70°-80°	762.5	11.6
80°-90°	137.8	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°	6593.0	100.0
0°-180°	6593.0	100.0



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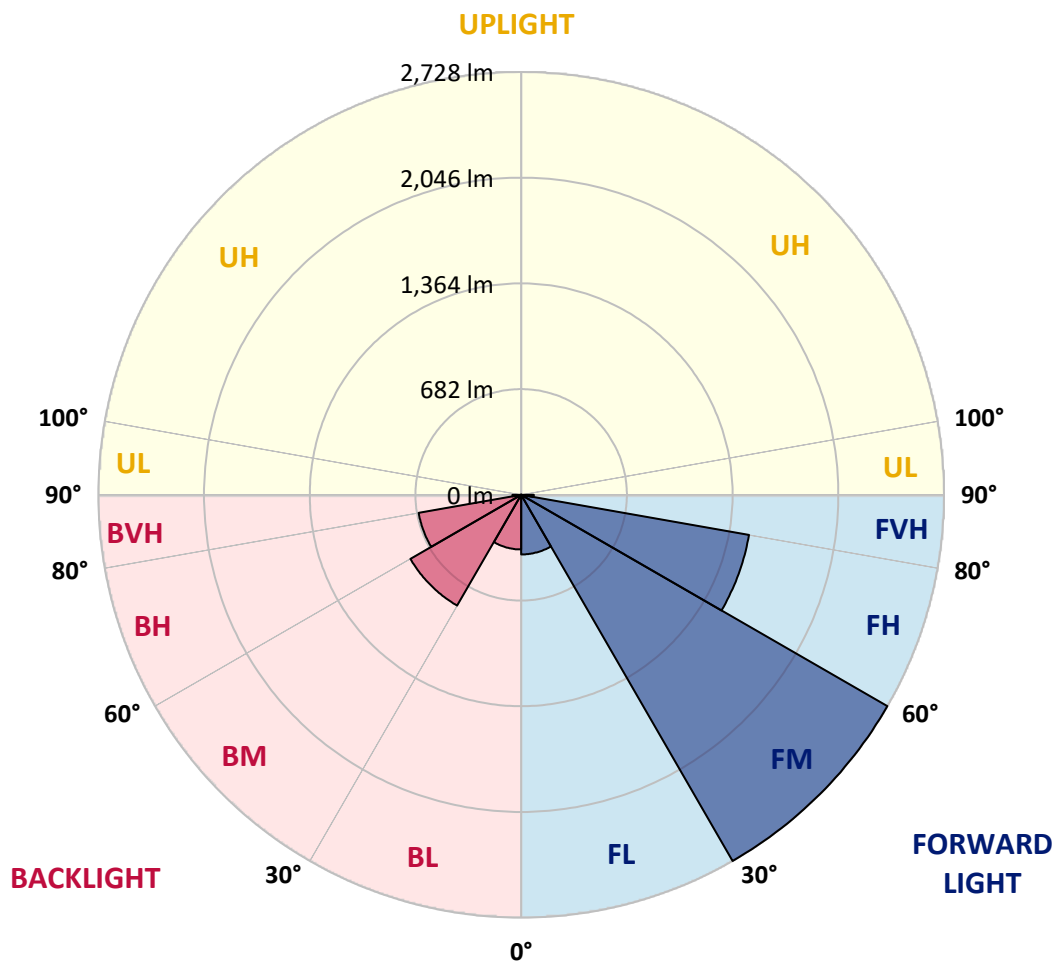
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	384.7	5.8			
FM	(30°-60°)	2728.4	41.4			
FH	(60°-80°)	1492.8	22.6			G1/1800
FVH	(80°-90°)	81.1	1.2			G1/100
BL	(0°-30°)	352.6	5.3	B1/500		
BM	(30°-60°)	825.3	12.5	B1/1000		
BH	(60°-80°)	671.6	10.2	B2/1000		G2/1000
BVH	(80°-90°)	56.7	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°	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1
2.5°	818.3	817.5	815.7	817.5	818.3	820.1	819.2	820.9	820.1	822.7	827.0
5°	797.5	795.8	794.9	799.2	801.8	806.2	807.9	814.0	813.1	817.5	824.4
7.5°	774.1	774.1	773.2	778.4	781.9	789.7	795.8	806.2	807.1	814.9	822.7
10°	755.9	756.7	755.9	760.2	765.4	774.9	785.4	800.1	801.0	812.3	820.1
12.5°	748.9	748.9	748.9	755.0	761.9	774.9	787.1	802.7	804.5	816.6	823.5
15°	758.5	759.3	757.6	763.7	771.5	787.1	798.4	814.9	816.6	827.9	832.2
17.5°	792.3	795.8	791.4	794.9	793.2	805.3	815.7	832.2	833.1	842.6	844.4
20°	859.1	862.6	855.7	851.3	835.7	834.8	839.2	852.2	852.2	858.3	853.9
22.5°	962.4	965.9	953.7	937.2	899.9	881.7	872.1	878.2	877.3	880.0	868.7
25°	1099.5	1098.6	1083.9	1053.5	993.6	949.4	925.9	916.4	916.4	911.2	897.3
27.5°	1269.6	1256.6	1230.5	1194.1	1110.8	1049.2	998.8	974.5	970.2	954.6	928.5
30°	1451.0	1441.4	1404.1	1351.2	1254.8	1175.9	1092.6	1044.0	1041.4	1007.5	968.5
32.5°	1664.4	1648.8	1607.2	1543.8	1428.4	1317.3	1213.2	1139.4	1135.1	1081.3	1027.5
35°	1938.7	1925.7	1844.9	1781.6	1633.2	1487.4	1364.2	1266.1	1262.7	1196.7	1128.1
37.5°	2267.6	2233.7	2155.6	2036.7	1880.5	1707.8	1551.6	1428.4	1424.1	1351.2	1264.4
40°	2560.9	2530.5	2461.1	2351.7	2184.3	1992.5	1780.7	1631.5	1627.1	1538.6	1429.3
42.5°	2777.8	2757.0	2711.9	2648.5	2528.8	2412.5	2073.2	1877.1	1869.2	1754.7	1618.4
45°	2903.7	2887.2	2861.1	2876.8	2875.0	2853.3	2422.0	2169.5	2144.3	1995.9	1829.3
47.5°	2873.3	2858.5	2869.0	2990.4	3157.9	3283.8	2828.2	2468.9	2435.0	2241.5	2054.1
50°	2653.7	2659.8	2714.5	2947.1	3322.8	3602.2	3278.6	2809.9	2764.8	2488.9	2267.6
52.5°	2253.7	2268.4	2401.2	2726.6	3304.6	3808.8	3685.6	3162.3	3102.4	2730.1	2462.0
55°	1790.3	1827.6	1999.4	2341.3	3066.8	3823.5	3992.8	3516.3	3450.4	2956.6	2631.2
57.5°	1324.3	1379.8	1578.5	1892.7	2611.2	3590.1	4146.4	3854.8	3774.9	3181.4	2809.9
60°	840.0	873.9	1103.0	1473.5	1998.5	3019.1	4126.4	4142.9	4073.5	3405.3	2996.5
62.5°	536.3	552.8	668.2	1050.9	1397.2	2235.5	3908.6	4360.7	4313.8	3609.2	3173.5
65°	344.5	351.5	410.5	646.5	951.1	1349.4	3366.2	4384.1	4390.2	3736.8	3282.9
67.5°	280.3	283.8	305.5	399.2	672.5	745.4	2344.8	4050.9	4124.7	3703.8	3245.6
70°	255.1	259.5	282.0	318.5	520.7	514.6	1135.1	3389.6	3510.3	3513.7	3079.8
72.5°	215.2	221.3	251.7	301.1	402.7	406.1	480.8	2414.2	2592.1	3140.6	2830.8
75°	179.6	183.1	209.1	265.5	341.0	324.6	337.6	1280.0	1536.9	2518.4	2566.1
77.5°	145.8	149.3	168.4	211.7	302.9	252.5	265.5	530.2	655.2	1709.6	2097.5
80°	104.1	107.6	129.3	164.9	229.1	227.4	197.0	292.4	317.6	924.2	1362.4
82.5°	74.6	77.2	98.1	118.0	158.8	228.2	148.4	198.7	208.3	409.6	549.3
85°	50.3	50.3	67.7	78.1	102.4	144.1	119.8	134.5	140.6	194.4	148.4
87.5°	21.7	21.7	36.4	39.9	53.8	66.8	89.4	67.7	69.4	105.0	60.7
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°	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1	833.1
2.5°	829.6	830.5	832.2	837.4	840.9	846.1	848.7	852.2	852.2	850.4	851.3
5°	827.9	830.5	836.6	846.1	852.2	861.7	868.7	873.9	875.6	873.9	874.7
7.5°	827.0	831.4	841.8	855.7	864.3	876.5	886.0	892.1	896.4	894.7	895.6
10°	824.4	831.4	844.4	861.7	874.7	886.9	895.6	898.2	900.8	899.0	898.2
12.5°	827.9	835.7	849.6	870.4	885.2	894.7	897.3	893.0	886.9	883.4	882.6
15°	834.8	842.6	856.5	878.2	891.2	894.7	888.6	874.7	860.9	853.0	852.2
17.5°	844.4	849.6	860.9	880.0	890.4	886.0	873.9	857.4	847.0	840.9	841.8
20°	850.4	850.4	859.1	873.9	882.6	879.1	864.3	846.1	829.6	821.8	819.2
22.5°	859.1	854.8	855.7	868.7	880.8	875.6	844.4	812.3	788.8	780.2	779.3
25°	882.6	870.4	862.6	870.4	899.0	856.5	794.0	756.7	735.0	727.2	728.1
27.5°	911.2	894.7	878.2	891.2	913.8	813.1	729.8	687.3	674.3	668.2	670.8
30°	939.8	918.1	896.4	943.3	903.4	745.4	647.4	605.7	594.4	590.1	593.6
32.5°	992.8	957.2	931.2	1012.7	871.3	668.2	558.0	519.8	509.4	504.2	502.5
35°	1081.3	1036.2	1010.1	1073.5	826.1	582.3	476.4	449.5	438.2	427.0	425.2
37.5°	1208.8	1154.2	1130.7	1108.2	762.8	497.3	413.9	395.7	379.2	361.9	361.0
40°	1361.6	1290.4	1273.1	1123.8	675.1	417.4	370.6	353.2	332.4	315.9	316.7
42.5°	1537.7	1446.6	1409.3	1119.5	566.7	374.9	339.3	320.2	302.0	287.2	286.4
45°	1726.1	1622.8	1536.9	1089.1	459.1	345.4	320.2	297.7	279.4	262.9	261.2
47.5°	1934.3	1818.9	1654.9	1030.1	379.2	324.6	308.9	276.8	260.3	249.9	249.9
50°	2144.3	2006.4	1763.4	940.7	332.4	308.9	292.4	265.5	252.5	243.9	243.9
52.5°	2324.0	2201.6	1852.8	834.0	302.9	295.9	281.2	260.3	246.5	238.6	237.8
55°	2498.4	2383.0	1932.6	728.1	278.6	278.6	278.6	256.0	240.4	233.4	232.6
57.5°	2672.0	2573.9	2015.9	658.7	256.9	263.8	273.4	250.8	235.2	229.1	228.2
60°	2868.1	2803.0	2112.2	610.1	237.8	248.2	266.4	244.7	226.5	221.3	220.4
62.5°	3076.4	3076.4	2199.9	541.5	220.4	235.2	256.0	236.9	218.7	214.3	213.5
65°	3239.5	3309.8	2256.3	439.1	203.1	222.2	243.9	226.5	208.3	207.4	205.7
67.5°	3258.6	3368.8	2220.7	331.5	187.4	208.3	231.7	215.2	197.9	197.9	195.3
70°	3121.5	3233.4	2109.6	248.2	176.2	194.4	216.1	201.3	184.8	186.6	182.2
72.5°	2892.4	2920.2	1833.7	196.1	163.1	179.6	197.0	185.7	171.0	171.0	164.9
75°	2590.4	2435.9	1332.1	164.0	147.5	162.3	177.9	168.4	155.3	151.0	147.5
77.5°	2061.9	1765.1	774.1	141.5	134.5	145.8	156.2	149.3	138.0	128.4	128.4
80°	1256.6	1034.4	341.9	122.4	118.9	127.6	134.5	126.7	117.2	107.6	105.0
82.5°	478.2	399.2	165.8	105.0	104.1	109.3	114.5	106.7	99.8	95.5	82.4
85°	131.0	120.6	113.7	87.6	85.9	85.0	91.1	87.6	78.1	64.2	57.3
87.5°	49.5	56.4	61.6	53.8	57.3	52.9	60.7	55.5	49.5	32.1	28.6
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)