

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: P397856

Luminaire Tested: **ARCH-S-PA1-50-750-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397856  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-50-750-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7867 lumens  
Efficiency: N/A  
Efficacy: 145.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - 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

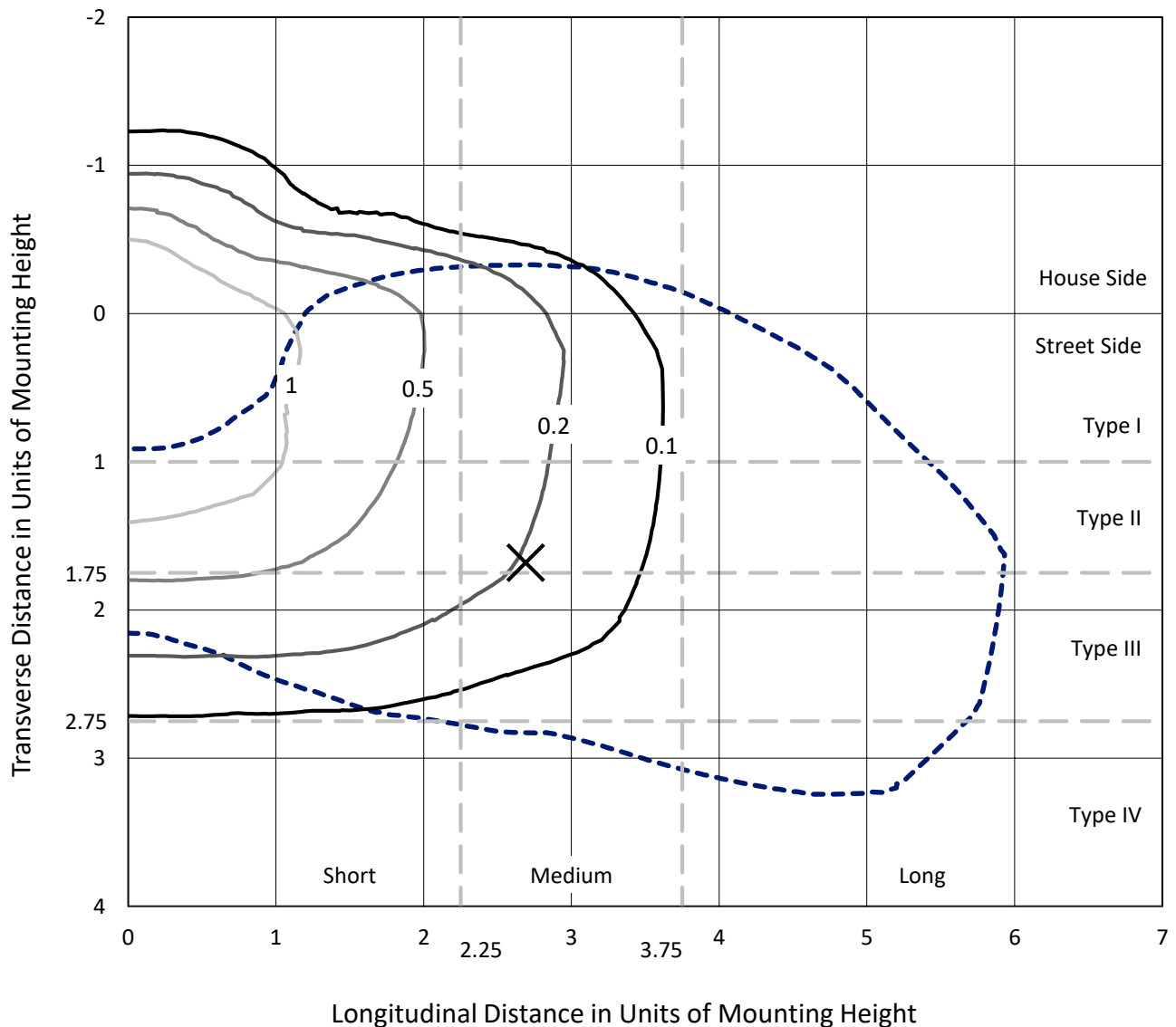


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

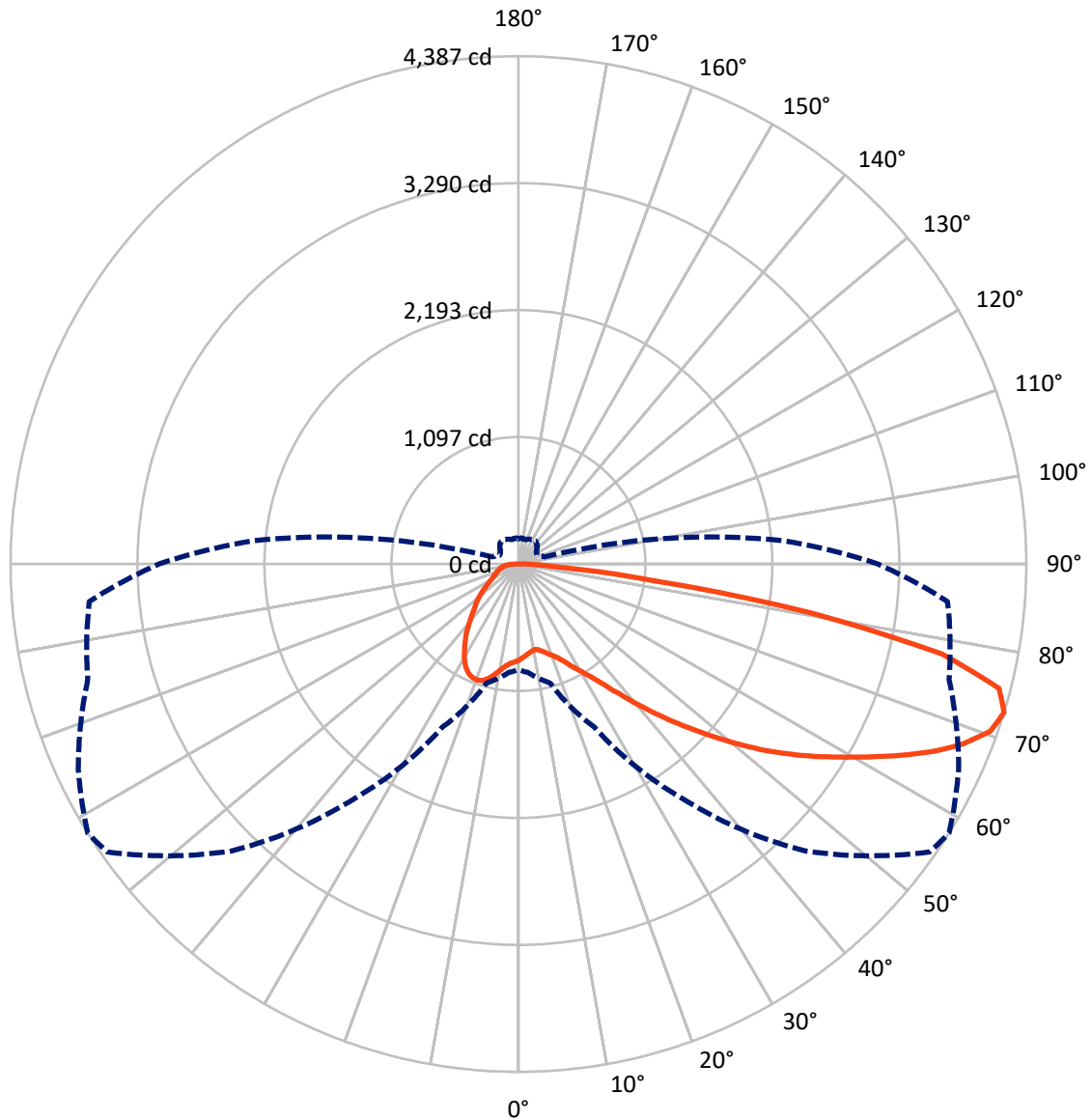


Based on 25 foot mounting height. Maximum calculated value = 1.5 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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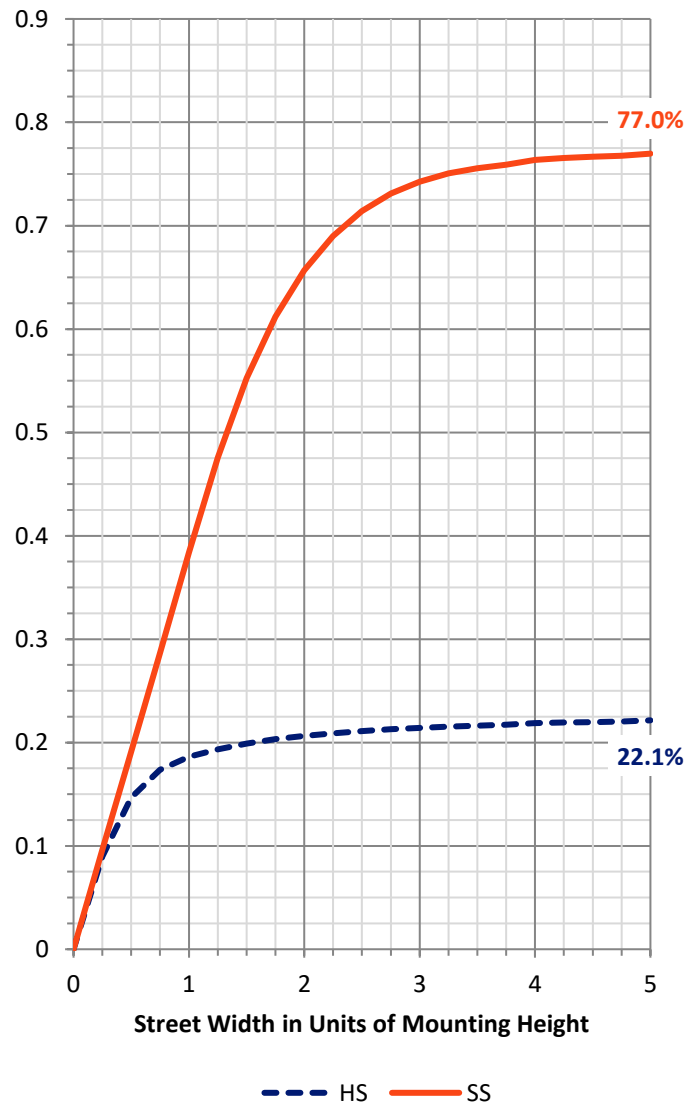
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1784.1	0.0	1784.1
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	6082.9	0.0	6082.9
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	7867.0	0.0	7867.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.9	1.0
10°-20°	253.9	3.2
20°-30°	454.7	5.8
30°-40°	684.1	8.7
40°-50°	1107.7	14.1
50°-60°	1667.5	21.2
60°-70°	1962.5	24.9
70°-80°	1391.6	17.7
80°-90°	265.2	3.4
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°	7867.0	100.0
0°-180°	7867.0	100.0

**Coefficient of Utilization**



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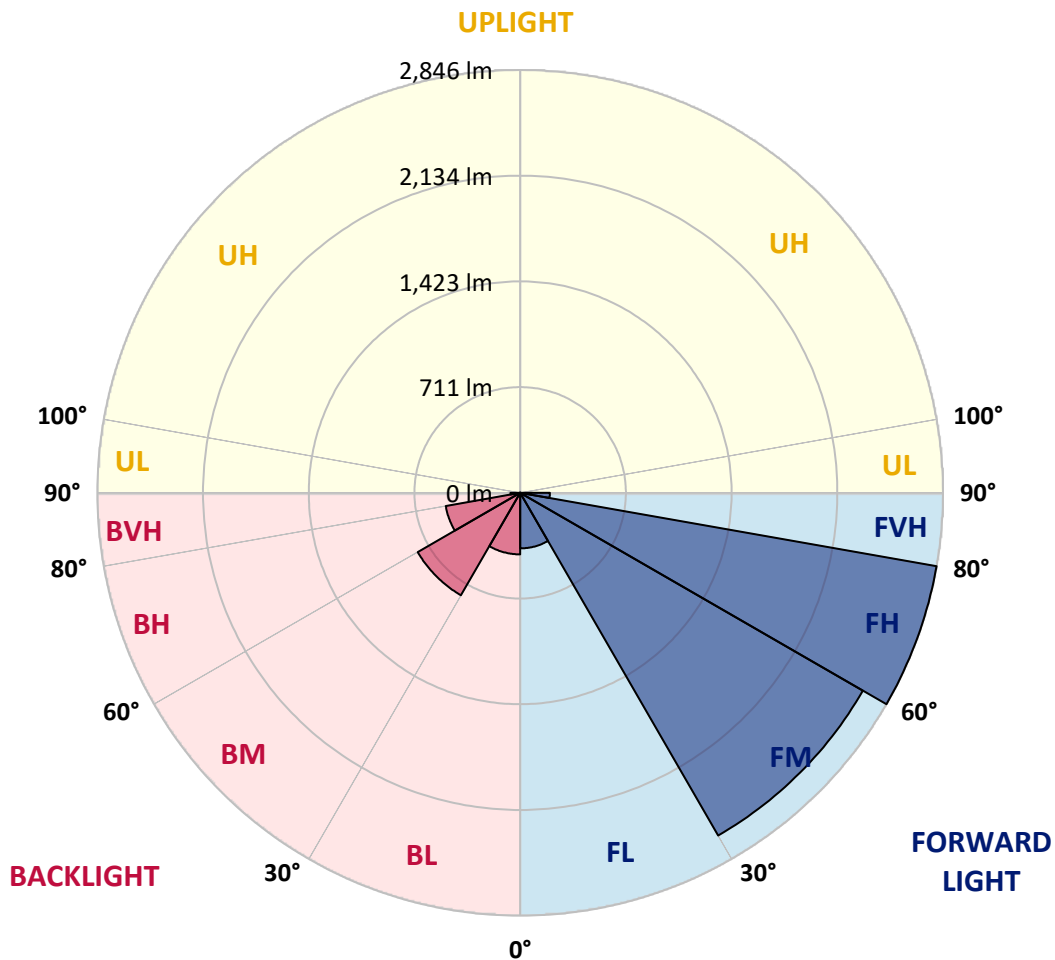
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	374.1	4.8			
FM	(30°-60°)	2663.2	33.9			
FH	(60°-80°)	2845.5	36.2			G2/5000
FVH	(80°-90°)	200.0	2.5			G2/225
BL	(0°-30°)	414.4	5.3	B1/500		
BM	(30°-60°)	796.1	10.1	B1/1000		
BH	(60°-80°)	508.5	6.5	B2/1000		G2/1000
BVH	(80°-90°)	65.1	0.8			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 IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8
2.5°	798.6	794.5	795.5	795.5	799.7	801.8	802.8	805.9	808.0	813.2	820.5
5°	761.3	758.1	759.2	760.2	767.5	774.8	781.0	785.1	791.4	799.7	810.1
7.5°	734.3	732.2	733.2	735.3	741.5	749.8	760.2	766.4	775.8	791.4	809.0
10°	714.5	714.5	715.6	719.7	725.9	736.3	744.6	751.9	770.6	798.6	825.6
12.5°	698.9	698.9	702.1	710.4	720.8	731.1	750.9	759.2	784.1	822.5	854.7
15°	697.9	698.9	700.0	707.3	718.7	741.5	770.6	783.1	813.2	858.9	896.3
17.5°	714.5	715.6	711.4	713.5	727.0	759.2	797.6	812.1	850.6	900.4	938.8
20°	765.4	765.4	752.9	741.5	750.9	786.2	829.8	844.3	886.9	942.0	980.4
22.5°	869.3	874.5	845.4	820.5	805.9	825.6	865.1	880.7	928.5	987.7	1026.1
25°	994.9	1000.1	960.7	925.3	898.3	895.2	921.2	937.8	977.3	1038.5	1070.7
27.5°	1116.4	1107.1	1070.7	1037.5	1003.2	975.2	994.9	1009.5	1055.2	1101.9	1121.6
30°	1212.0	1204.7	1169.4	1145.5	1113.3	1077.0	1065.6	1081.1	1118.5	1162.1	1172.5
32.5°	1317.9	1312.7	1277.4	1246.3	1219.3	1185.0	1160.1	1167.3	1188.1	1219.3	1225.5
35°	1452.9	1464.4	1427.0	1363.6	1333.5	1300.3	1282.6	1284.7	1300.3	1320.0	1309.6
37.5°	1595.2	1608.7	1610.8	1511.1	1470.6	1440.5	1421.8	1429.0	1447.7	1461.2	1429.0
40°	1859.0	1845.5	1791.5	1717.8	1655.4	1626.4	1600.4	1599.4	1612.9	1636.8	1578.6
42.5°	2209.0	2196.5	2087.5	1991.9	1893.3	1860.0	1809.2	1787.3	1793.6	1823.7	1742.7
45°	2544.4	2539.3	2452.0	2340.9	2222.5	2158.1	2041.8	1988.8	1983.6	2007.5	1910.9
47.5°	2842.5	2819.7	2756.3	2670.1	2657.6	2489.4	2275.5	2203.8	2178.9	2192.4	2084.4
50°	3161.3	3083.5	2996.2	2943.3	3033.6	2876.8	2511.2	2436.4	2375.2	2384.5	2272.3
52.5°	3330.6	3199.8	3142.7	3158.2	3279.7	3219.5	2767.7	2676.3	2577.7	2591.2	2459.3
55°	3185.2	3184.2	3209.1	3305.7	3475.0	3405.4	3011.8	2909.0	2801.0	2804.1	2674.3
57.5°	2985.8	3026.3	3155.1	3368.0	3717.0	3600.7	3251.7	3142.7	3044.0	3028.4	2918.3
60°	2804.1	2848.7	3035.7	3357.6	3801.1	3779.3	3480.2	3384.6	3304.7	3259.0	3174.8
62.5°	2527.8	2561.1	2825.9	3291.2	3730.5	3908.1	3711.8	3646.3	3586.1	3491.6	3451.1
65°	2202.8	2214.2	2493.6	3072.0	3642.2	3957.9	3942.3	3913.3	3855.1	3715.9	3724.2
67.5°	1850.7	1873.5	2118.6	2722.0	3449.0	3935.1	4121.0	4144.9	4076.3	3867.6	3898.7
70°	1475.8	1503.8	1689.7	2238.1	3120.8	3836.4	4286.1	4324.5	4192.6	3917.4	3930.9
72.5°	912.9	939.9	1064.5	1554.7	2473.8	3505.1	4337.0	4386.8	4195.7	3850.9	3721.1
75°	315.7	318.8	416.5	745.7	1468.5	2646.2	4170.8	4288.2	4063.8	3609.0	3238.2
77.5°	144.4	149.6	184.9	307.4	651.2	1428.0	3443.8	3737.7	3663.0	3230.9	2492.5
80°	99.7	101.8	127.7	183.8	376.0	502.7	2173.7	2556.9	2687.8	2501.9	1597.3
82.5°	74.8	76.9	98.7	124.6	271.1	244.1	827.7	1188.1	1476.8	1449.8	667.8
85°	71.7	70.6	76.9	83.1	180.7	145.4	267.9	367.6	576.4	493.3	168.2
87.5°	31.2	34.3	78.9	46.7	94.5	67.5	116.3	136.1	175.5	152.7	60.2
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°	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8	829.8
2.5°	823.6	825.6	831.9	841.2	846.4	856.8	864.1	868.2	871.3	872.4	872.4
5°	816.3	820.5	834.0	849.5	864.1	885.9	905.6	917.0	925.3	928.5	929.5
7.5°	818.4	828.8	848.5	871.3	890.0	918.1	942.0	964.8	983.5	990.8	990.8
10°	838.1	852.6	879.7	909.8	933.7	962.7	987.7	1007.4	1029.2	1041.7	1043.7
12.5°	868.2	885.9	921.2	954.4	981.4	1004.3	1027.1	1041.7	1052.1	1061.4	1063.5
15°	910.8	932.6	967.9	1002.2	1026.1	1040.6	1046.9	1046.9	1045.8	1046.9	1048.9
17.5°	953.4	974.2	1009.5	1043.7	1055.2	1046.9	1039.6	1037.5	1036.5	1034.4	1035.4
20°	994.9	1014.7	1044.8	1070.7	1061.4	1032.3	1023.0	1021.9	1018.8	1016.7	1014.7
22.5°	1036.5	1051.0	1075.9	1085.3	1047.9	1006.4	994.9	988.7	984.5	979.4	974.2
25°	1084.2	1088.4	1107.1	1092.6	1014.7	958.6	942.0	932.6	928.5	923.3	919.1
27.5°	1128.9	1128.9	1132.0	1081.1	965.9	895.2	870.3	853.7	852.6	851.6	850.6
30°	1169.4	1164.2	1153.8	1046.9	902.5	817.3	780.0	763.3	769.6	774.8	775.8
32.5°	1217.2	1206.8	1177.7	1000.1	826.7	730.1	684.4	677.1	684.4	690.6	686.5
35°	1292.0	1273.3	1202.6	946.1	754.0	650.1	606.5	596.1	594.1	593.0	584.7
37.5°	1398.9	1366.7	1222.4	888.0	682.3	579.5	547.3	525.5	505.8	485.0	481.9
40°	1529.8	1474.7	1235.9	821.5	606.5	520.3	486.0	458.0	424.8	388.4	384.3
42.5°	1673.1	1591.1	1242.1	747.8	540.0	471.5	428.9	393.6	356.2	328.2	323.0
45°	1827.8	1716.7	1236.9	677.1	486.0	430.0	382.2	343.8	313.6	293.9	289.8
47.5°	1978.4	1861.1	1222.4	621.1	444.5	394.6	345.8	310.5	287.7	265.9	260.7
50°	2171.6	1999.2	1204.7	577.4	398.8	359.3	323.0	285.6	259.6	249.3	247.2
52.5°	2385.5	2137.3	1183.9	522.4	354.1	331.3	308.4	275.2	266.9	247.2	244.1
55°	2617.1	2301.4	1179.8	452.8	314.7	311.6	293.9	284.6	286.6	247.2	242.0
57.5°	2861.2	2476.9	1189.1	383.2	282.5	293.9	300.1	292.9	289.8	252.4	242.0
60°	3115.6	2646.2	1161.1	318.8	257.6	279.4	307.4	288.7	265.9	250.3	243.0
62.5°	3362.8	2788.5	1039.6	273.1	238.9	275.2	303.3	273.1	247.2	247.2	244.1
65°	3542.5	2851.9	813.2	239.9	226.4	270.0	296.0	262.8	242.0	249.3	245.1
67.5°	3563.3	2786.4	546.3	213.9	216.0	260.7	279.4	253.4	236.8	255.5	249.3
70°	3435.5	2616.1	334.4	194.2	202.5	244.1	264.8	244.1	229.5	250.3	240.9
72.5°	3104.2	2298.3	235.8	177.6	188.0	228.5	251.3	235.8	219.1	226.4	217.1
75°	2546.5	1781.1	186.9	162.0	173.4	213.9	239.9	223.3	206.7	203.6	197.3
77.5°	1804.0	1141.4	150.6	149.6	157.9	196.3	224.3	208.7	192.1	185.9	181.7
80°	1037.5	559.8	129.8	135.0	143.3	178.6	205.6	192.1	176.6	167.2	161.0
82.5°	396.7	195.2	114.2	117.4	126.7	159.9	186.9	175.5	159.9	168.2	141.2
85°	128.8	107.0	93.5	96.6	105.9	132.9	165.1	155.8	138.1	122.5	113.2
87.5°	57.1	58.2	49.9	55.0	66.5	88.3	120.5	114.2	100.7	84.1	81.0
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)