

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: P398090

Luminaire Tested: **ARCH-S-PA1-80-827-U-T3**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398090  
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-PA1-80-827-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8000 lumens  
Efficiency: N/A  
Efficacy: 96.4 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): 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: 28.75 FT

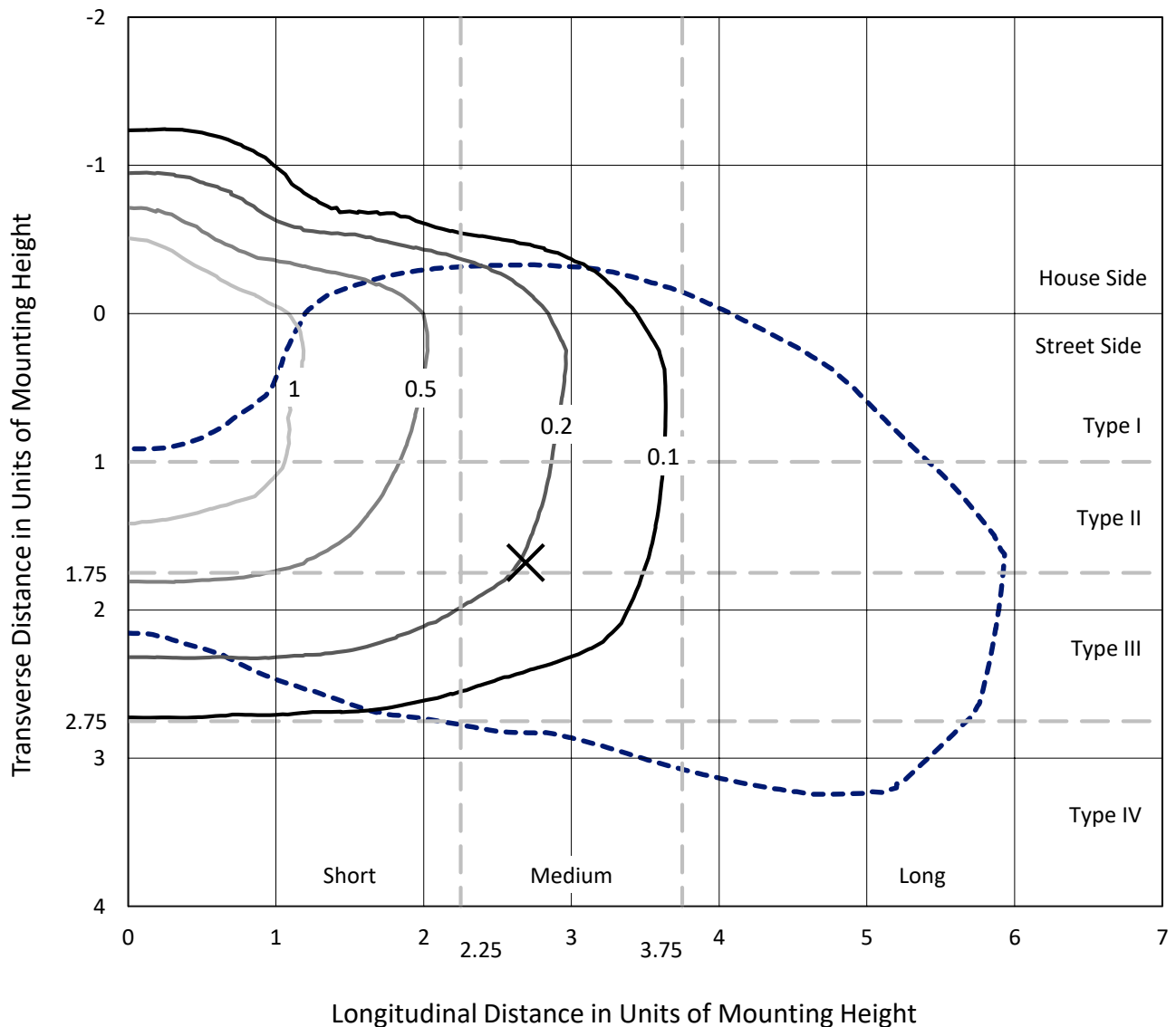


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

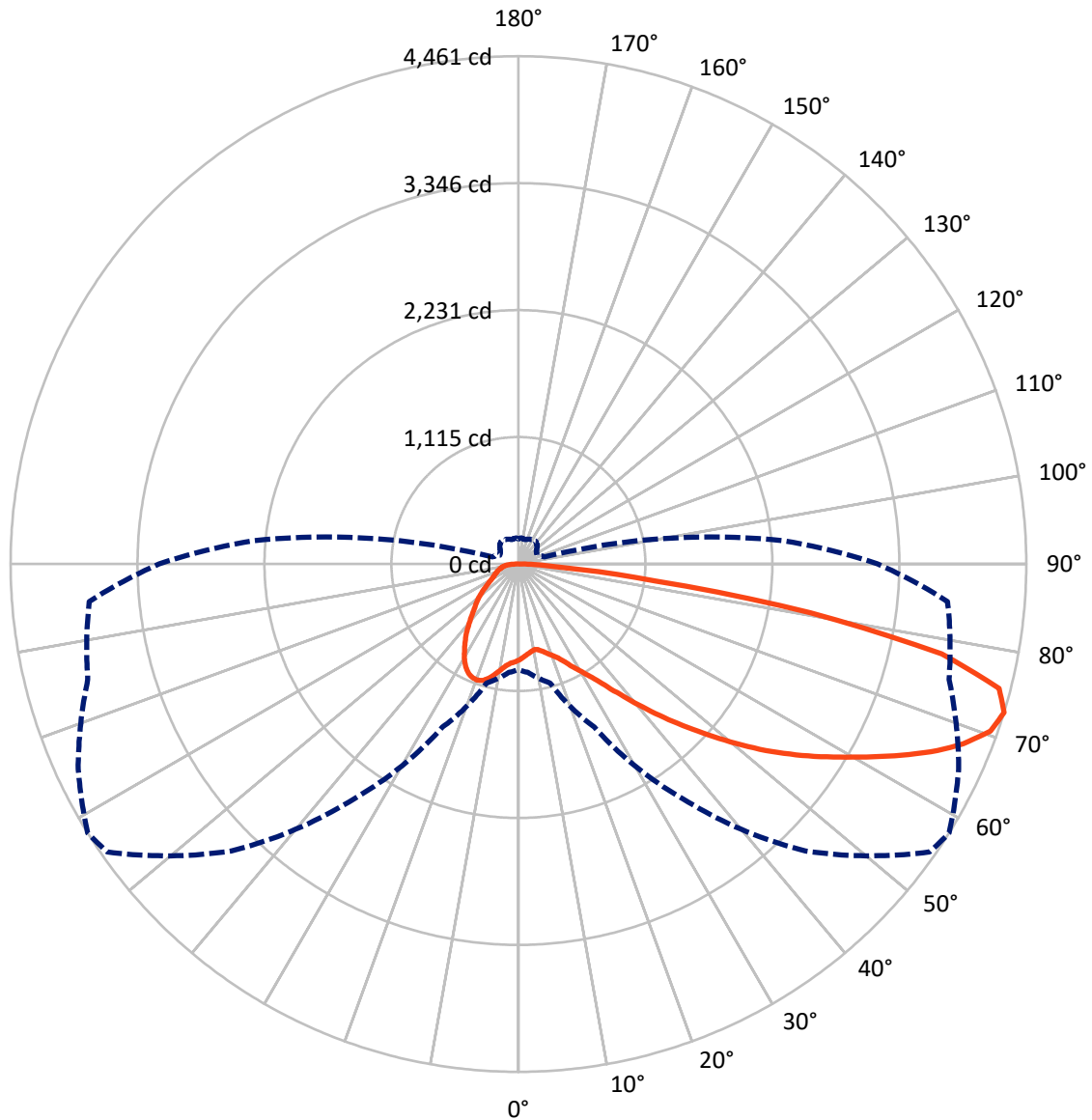


Based on 25 foot mounting height. Maximum calculated value = 1.6 fc  
 Type IV - Medium - Non-Cutoff

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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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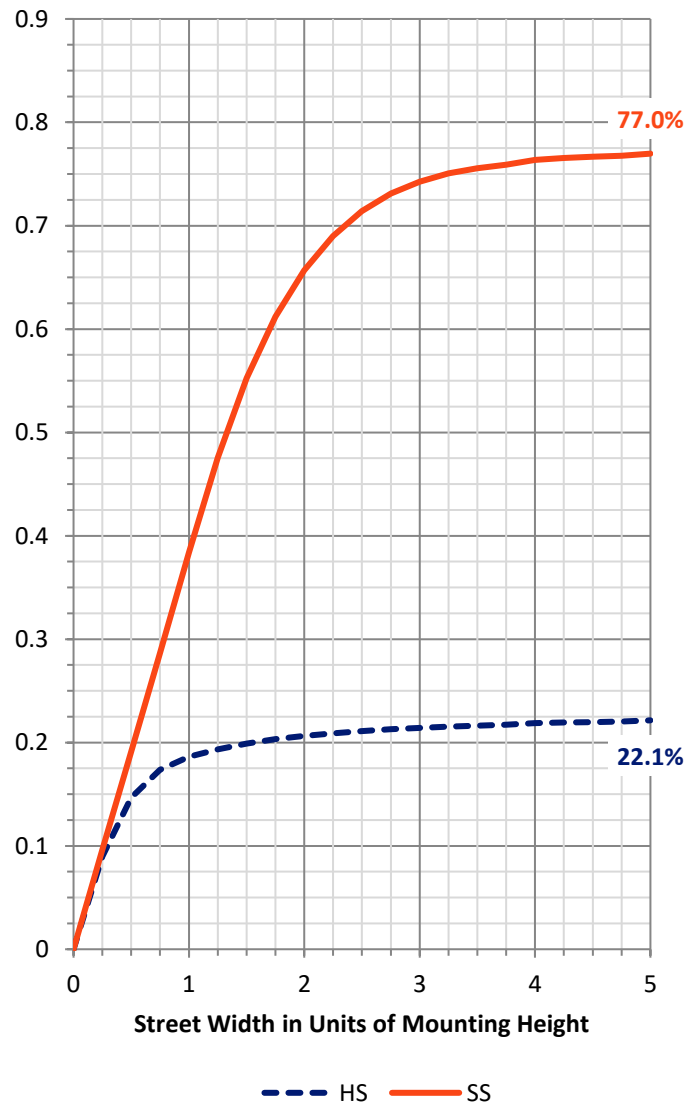
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1814.3	0.0	1814.3
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	6185.7	0.0	6185.7
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	8000.0	0.0	8000.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.3	1.0
10°-20°	258.1	3.2
20°-30°	462.4	5.8
30°-40°	695.6	8.7
40°-50°	1126.5	14.1
50°-60°	1695.7	21.2
60°-70°	1995.6	24.9
70°-80°	1415.1	17.7
80°-90°	269.6	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°	8000.0	100.0
0°-180°	8000.0	100.0

**Coefficient of Utilization**



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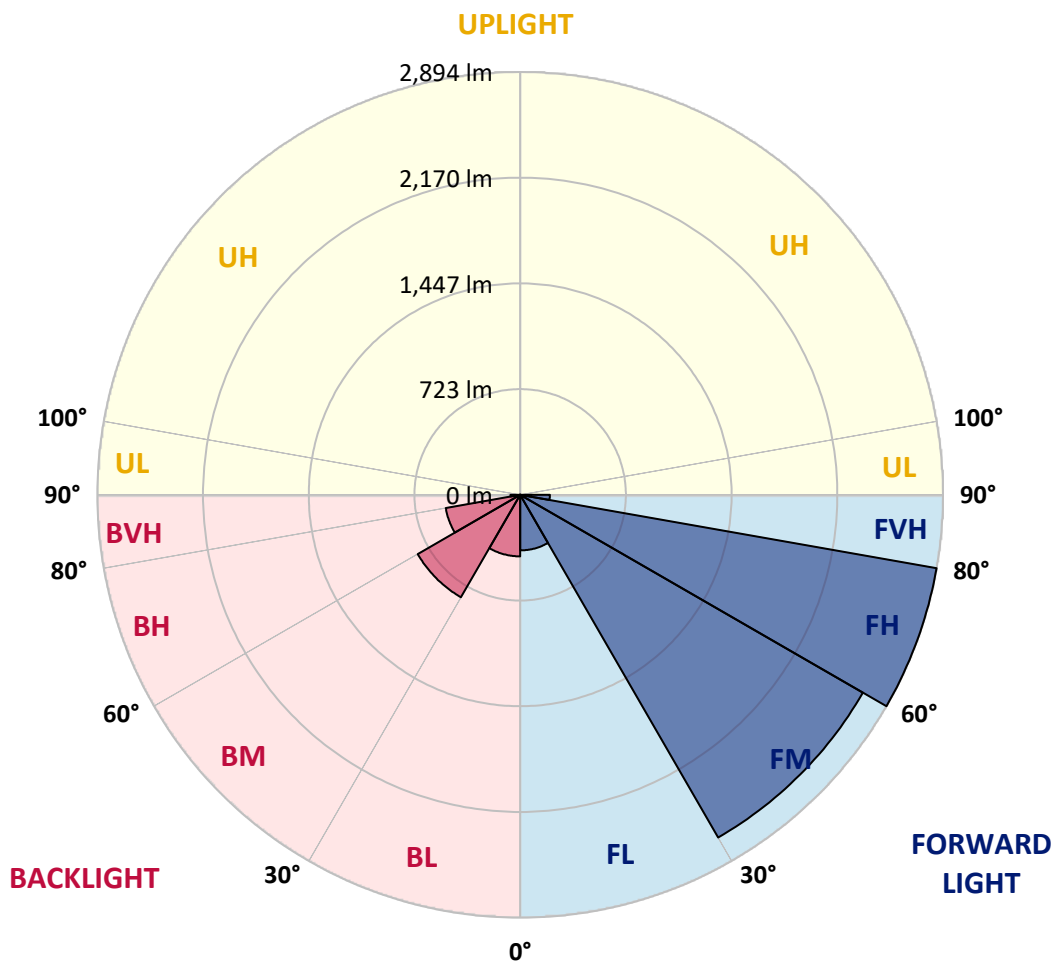
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	380.4	4.8			
FM	(30°-60°)	2708.2	33.9			
FH	(60°-80°)	2893.6	36.2			G2/5000
FVH	(80°-90°)	203.4	2.5			G2/225
BL	(0°-30°)	421.4	5.3	B1/500		
BM	(30°-60°)	809.5	10.1	B1/1000		
BH	(60°-80°)	517.1	6.5	B2/1000		G2/1000
BVH	(80°-90°)	66.2	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°	843.8	843.8	843.8	843.8	843.8	843.8	843.8	843.8	843.8	843.8	843.8
2.5°	812.1	807.9	809.0	809.0	813.2	815.3	816.4	819.5	821.7	826.9	834.3
5°	774.1	771.0	772.0	773.1	780.5	787.9	794.2	798.4	804.8	813.2	823.8
7.5°	746.7	744.6	745.6	747.7	754.1	762.5	773.1	779.4	788.9	804.8	822.7
10°	726.6	726.6	727.7	731.9	738.2	748.8	757.2	764.6	783.6	812.1	839.6
12.5°	710.8	710.8	713.9	722.4	732.9	743.5	763.6	772.0	797.4	836.4	869.2
15°	709.7	710.8	711.8	719.2	730.8	754.1	783.6	796.3	826.9	873.4	911.4
17.5°	726.6	727.7	723.4	725.5	739.3	772.0	811.1	825.9	865.0	915.6	954.7
20°	778.4	778.4	765.7	754.1	763.6	799.5	843.8	858.6	901.9	957.9	997.0
22.5°	884.0	889.2	859.7	834.3	819.5	839.6	879.7	895.6	944.2	1004.4	1043.4
25°	1011.8	1017.0	976.9	941.0	913.5	910.4	936.8	953.7	993.8	1056.1	1088.8
27.5°	1135.3	1125.8	1088.8	1055.1	1020.2	991.7	1011.8	1026.5	1073.0	1120.5	1140.6
30°	1232.5	1225.1	1189.2	1164.9	1132.1	1095.2	1083.6	1099.4	1137.4	1181.8	1192.3
32.5°	1340.2	1334.9	1299.0	1267.3	1239.9	1205.0	1179.7	1187.1	1208.2	1239.9	1246.2
35°	1477.5	1489.1	1451.1	1386.7	1356.0	1322.2	1304.3	1306.4	1322.2	1342.3	1331.8
37.5°	1622.2	1635.9	1638.0	1536.6	1495.4	1464.8	1445.8	1453.2	1472.2	1485.9	1453.2
40°	1890.4	1876.7	1821.8	1746.8	1683.4	1653.9	1627.5	1626.4	1640.1	1664.4	1605.3
42.5°	2246.3	2233.7	2122.8	2025.6	1925.3	1891.5	1839.7	1817.6	1823.9	1854.5	1772.1
45°	2587.5	2582.2	2493.5	2380.5	2260.1	2194.6	2076.3	2022.4	2017.2	2041.5	1943.2
47.5°	2890.6	2867.3	2802.9	2715.3	2702.6	2531.5	2313.9	2241.1	2215.7	2229.4	2119.6
50°	3214.8	3135.6	3046.9	2993.0	3084.9	2925.4	2553.7	2477.6	2415.3	2424.8	2310.8
52.5°	3386.9	3253.9	3195.8	3211.6	3335.2	3273.9	2814.5	2721.6	2621.3	2635.0	2500.9
55°	3239.1	3238.0	3263.4	3361.6	3533.7	3463.0	3062.7	2958.2	2848.3	2851.5	2719.5
57.5°	3036.3	3077.5	3208.5	3425.0	3779.8	3661.5	3306.7	3195.8	3095.5	3079.6	2967.7
60°	2851.5	2896.9	3087.0	3414.4	3865.4	3843.2	3539.0	3441.9	3360.5	3314.1	3228.5
62.5°	2570.6	2604.4	2873.7	3346.8	3793.5	3974.1	3774.5	3708.0	3646.7	3550.6	3509.4
65°	2240.0	2251.6	2535.7	3124.0	3703.8	4024.8	4009.0	3979.4	3920.3	3778.8	3787.2
67.5°	1882.0	1905.2	2154.5	2768.1	3507.3	4001.6	4190.6	4214.9	4145.2	3932.9	3964.6
70°	1500.7	1529.2	1718.3	2275.9	3173.6	3901.3	4358.6	4397.6	4263.5	3983.6	3997.4
72.5°	928.3	955.8	1082.5	1581.0	2515.6	3564.4	4410.3	4461.0	4266.7	3916.0	3784.0
75°	321.1	324.2	423.5	758.3	1493.3	2691.0	4241.3	4360.7	4132.5	3670.0	3292.9
77.5°	146.8	152.1	188.0	312.6	662.2	1452.1	3502.1	3800.9	3724.9	3285.6	2534.7
80°	101.4	103.5	129.9	186.9	382.3	511.2	2210.4	2600.1	2733.2	2544.2	1624.3
82.5°	76.0	78.2	100.3	126.7	275.6	248.2	841.7	1208.2	1501.8	1474.3	679.1
85°	72.9	71.8	78.2	84.5	183.8	147.9	272.5	373.9	586.1	501.7	171.1
87.5°	31.7	34.9	80.3	47.5	96.1	68.6	118.3	138.4	178.5	155.2	61.3
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°	843.8	843.8	843.8	843.8	843.8	843.8	843.8	843.8	843.8	843.8	843.8
2.5°	837.5	839.6	845.9	855.4	860.7	871.3	878.7	882.9	886.1	887.1	887.1
5°	830.1	834.3	848.1	863.9	878.7	900.9	920.9	932.5	941.0	944.2	945.2
7.5°	832.2	842.8	862.8	886.1	905.1	933.6	957.9	981.1	1000.1	1007.5	1007.5
10°	852.3	867.1	894.5	925.2	949.4	979.0	1004.4	1024.4	1046.6	1059.3	1061.4
12.5°	882.9	900.9	936.8	970.6	998.0	1021.3	1044.5	1059.3	1069.8	1079.3	1081.5
15°	926.2	948.4	984.3	1019.1	1043.4	1058.2	1064.6	1064.6	1063.5	1064.6	1066.7
17.5°	969.5	990.6	1026.5	1061.4	1073.0	1064.6	1057.2	1055.1	1054.0	1051.9	1052.9
20°	1011.8	1031.8	1062.4	1088.8	1079.3	1049.8	1040.3	1039.2	1036.0	1033.9	1031.8
22.5°	1054.0	1068.8	1094.1	1103.6	1065.6	1023.4	1011.8	1005.4	1001.2	995.9	990.6
25°	1102.6	1106.8	1125.8	1111.0	1031.8	974.8	957.9	948.4	944.2	938.9	934.7
27.5°	1148.0	1148.0	1151.2	1099.4	982.2	910.4	885.0	868.1	867.1	866.0	865.0
30°	1189.2	1183.9	1173.3	1064.6	917.8	831.2	793.1	776.2	782.6	787.9	788.9
32.5°	1237.8	1227.2	1197.6	1017.0	840.7	742.4	696.0	688.6	696.0	702.3	698.1
35°	1313.8	1294.8	1223.0	962.1	766.7	661.1	616.8	606.2	604.1	603.0	594.6
37.5°	1422.6	1389.8	1243.0	903.0	693.9	589.3	556.6	534.4	514.3	493.2	490.0
40°	1555.6	1499.7	1256.8	835.4	616.8	529.1	494.3	465.7	431.9	395.0	390.8
42.5°	1701.4	1618.0	1263.1	760.4	549.2	479.5	436.2	400.3	362.2	333.7	328.4
45°	1858.7	1745.7	1257.8	688.6	494.3	437.2	388.6	349.6	318.9	298.9	294.7
47.5°	2011.9	1892.5	1243.0	631.6	452.0	401.3	351.7	315.8	292.5	270.4	265.1
50°	2208.3	2033.0	1225.1	587.2	405.5	365.4	328.4	290.4	264.0	253.5	251.4
52.5°	2425.9	2173.5	1204.0	531.2	360.1	336.9	313.7	279.9	271.4	251.4	248.2
55°	2661.4	2340.3	1199.7	460.5	320.0	316.8	298.9	289.4	291.5	251.4	246.1
57.5°	2909.6	2518.8	1209.2	389.7	287.3	298.9	305.2	297.8	294.7	256.6	246.1
60°	3168.3	2691.0	1180.7	324.2	261.9	284.1	312.6	293.6	270.4	254.5	247.1
62.5°	3419.7	2835.6	1057.2	277.8	242.9	279.9	308.4	277.8	251.4	251.4	248.2
65°	3602.4	2900.1	826.9	244.0	230.2	274.6	301.0	267.2	246.1	253.5	249.2
67.5°	3623.5	2833.5	555.5	217.6	219.7	265.1	284.1	257.7	240.8	259.8	253.5
70°	3493.6	2660.3	340.1	197.5	205.9	248.2	269.3	248.2	233.4	254.5	245.0
72.5°	3156.7	2337.2	239.7	180.6	191.2	232.3	255.6	239.7	222.8	230.2	220.7
75°	2589.6	1811.2	190.1	164.8	176.4	217.6	244.0	227.1	210.2	207.0	200.7
77.5°	1834.5	1160.7	153.1	152.1	160.5	199.6	228.1	212.3	195.4	189.0	184.8
80°	1055.1	569.2	132.0	137.3	145.7	181.7	209.1	195.4	179.5	170.0	163.7
82.5°	403.4	198.5	116.2	119.3	128.8	162.6	190.1	178.5	162.6	171.1	143.6
85°	131.0	108.8	95.0	98.2	107.7	135.2	167.9	158.4	140.5	124.6	115.1
87.5°	58.1	59.1	50.7	56.0	67.6	89.8	122.5	116.2	102.4	85.5	82.4
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)