

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: P214860

Luminaire Tested: **ARCH-AF24-90-D-U-T4W-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214860
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-90-D-U-T4W-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8634 lumens
Efficiency: N/A
Efficacy: 91.9 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 - G3

Input Watts (W): 94
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

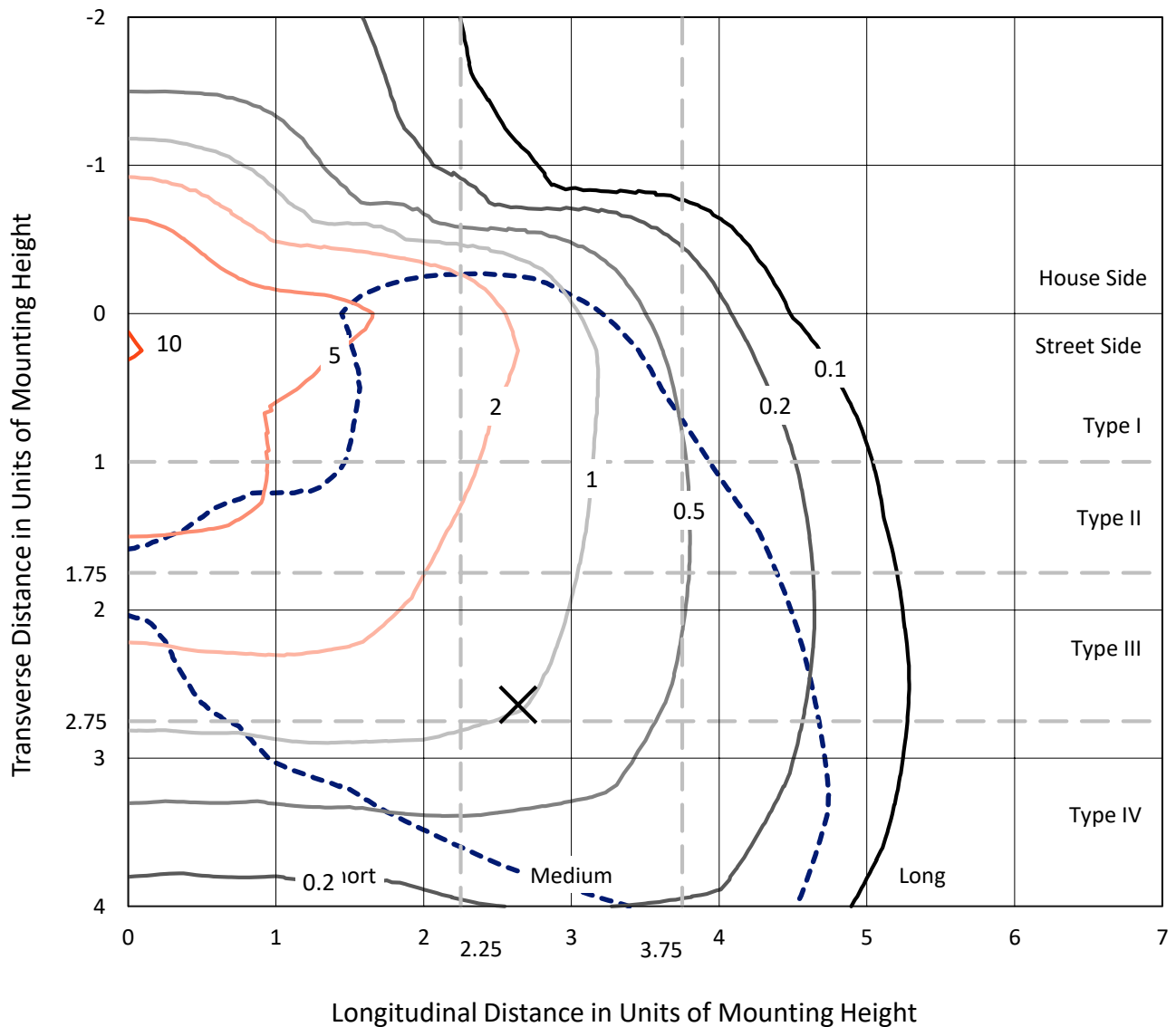


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

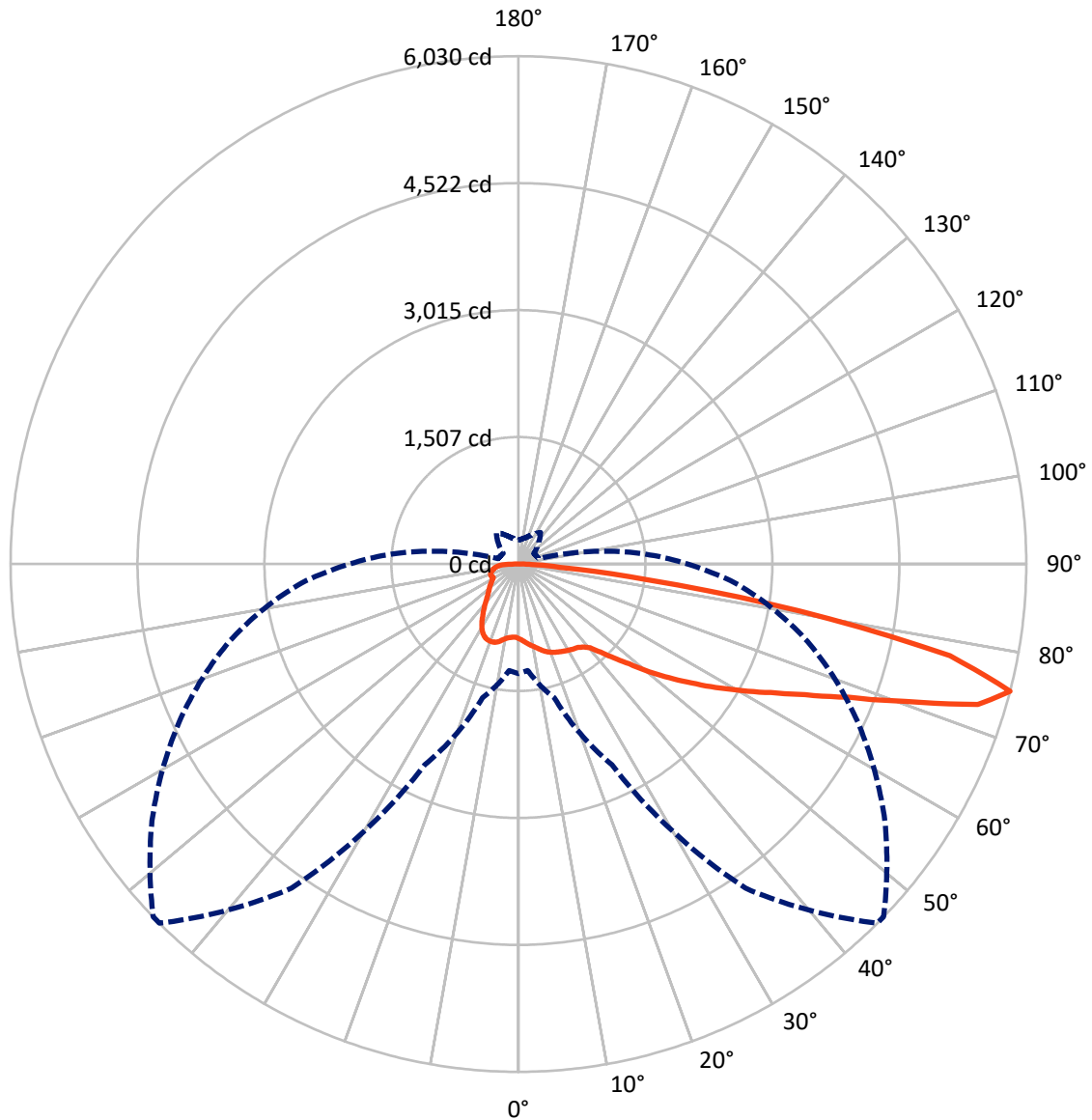


Based on 10 foot mounting height. Maximum calculated value = 10.3 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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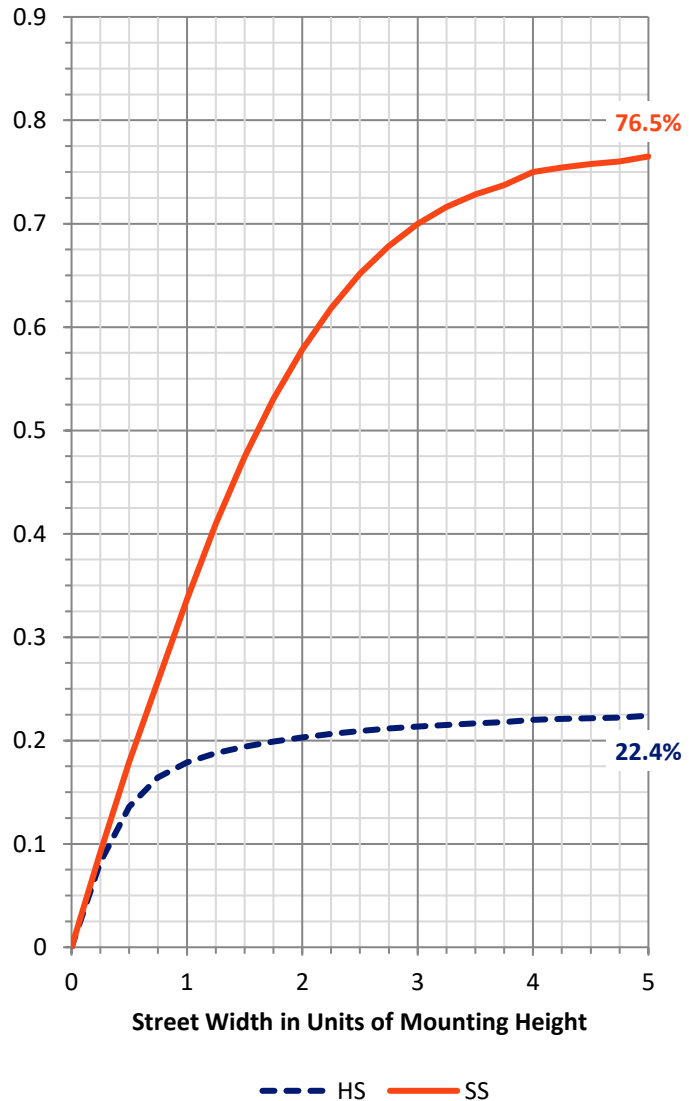
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2000.1	0.0	2000.1
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	6633.9	0.0	6633.9
	% Fixture	76.8	0.0	76.8
Total	Lumens	8634.0	0.0	8634.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.7	1.0
10°-20°	284.2	3.3
20°-30°	487.8	5.6
30°-40°	682.2	7.9
40°-50°	1000.7	11.6
50°-60°	1558.8	18.1
60°-70°	2243.0	26.0
70°-80°	1953.9	22.6
80°-90°	335.6	3.9
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°	8634.0	100.0
0°-180°	8634.0	100.0

Coefficient of Utilization



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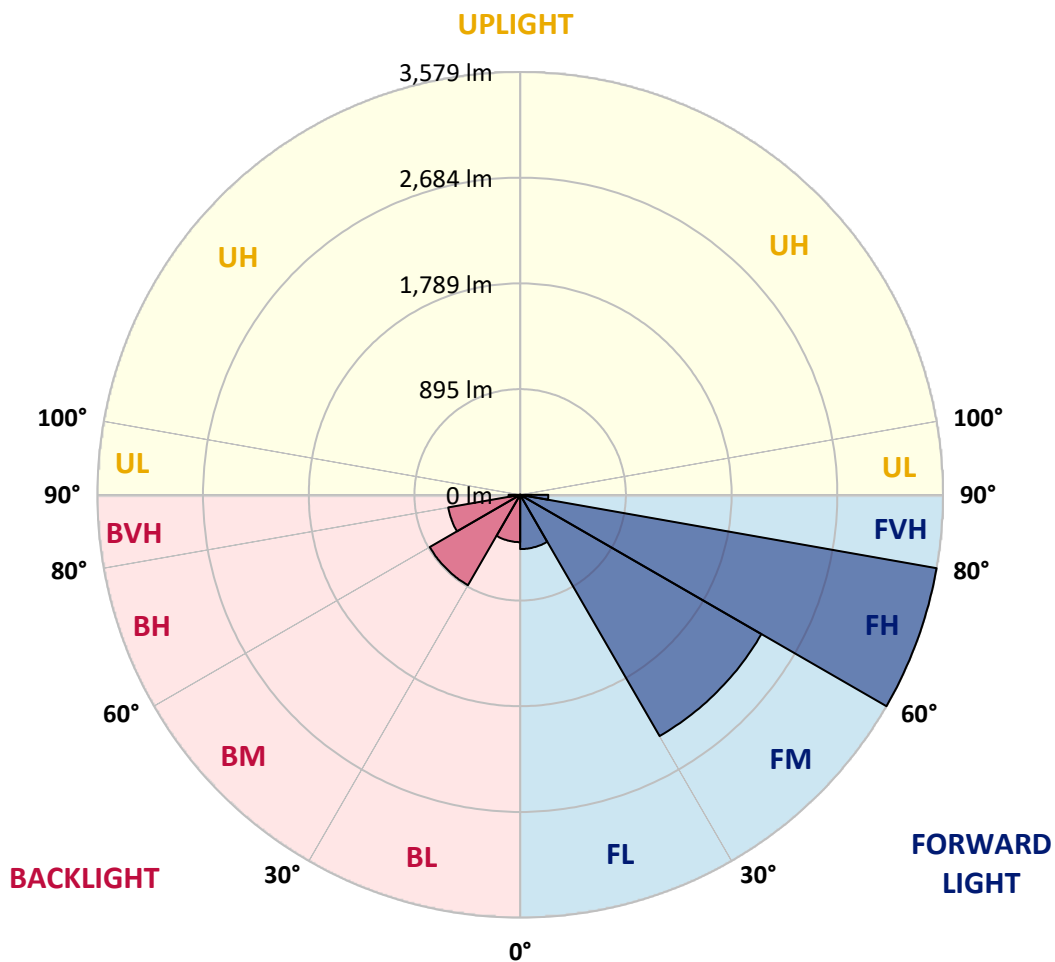
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	459.1	5.3			
FM	(30°-60°)	2357.8	27.3			
FH	(60°-80°)	3578.9	41.5			G2/5000
FVH	(80°-90°)	238.1	2.8			G3/500
BL	(0°-30°)	400.6	4.6	B1/500		
BM	(30°-60°)	884.0	10.2	B1/1000		
BH	(60°-80°)	618.1	7.2	B2/1000		G2/1000
BVH	(80°-90°)	97.5	1.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	885.1	885.1	885.1	885.1	885.1	885.1	885.1	885.1	885.1	885.1	885.1
2.5°	928.8	922.1	922.1	917.0	917.0	908.6	905.3	903.6	895.2	890.1	885.1
5°	982.5	974.1	972.4	960.7	955.6	937.2	935.5	923.7	908.6	893.5	881.7
7.5°	1031.2	1026.2	1017.8	1006.0	990.9	967.4	965.7	947.2	922.1	901.9	885.1
10°	1066.5	1063.1	1051.4	1036.3	1019.5	996.0	994.3	974.1	943.9	920.4	896.9
12.5°	1108.5	1103.4	1088.3	1068.2	1049.7	1027.9	1026.2	1009.4	975.8	945.6	915.3
15°	1148.8	1142.1	1123.6	1103.4	1083.3	1064.8	1064.8	1046.3	1011.1	975.8	940.5
17.5°	1168.9	1165.6	1147.1	1125.3	1108.5	1095.0	1093.4	1076.6	1041.3	1004.4	965.7
20°	1175.7	1177.3	1160.5	1137.0	1125.3	1118.6	1116.9	1105.1	1066.5	1031.2	994.3
22.5°	1174.0	1179.0	1165.6	1140.4	1137.0	1137.0	1137.0	1123.6	1093.4	1058.1	1021.1
25°	1180.7	1187.4	1177.3	1147.1	1147.1	1153.8	1153.8	1147.1	1120.2	1090.0	1053.1
27.5°	1204.2	1209.3	1200.9	1158.9	1160.5	1170.6	1168.9	1170.6	1153.8	1125.3	1088.3
30°	1232.8	1239.5	1229.4	1177.3	1175.7	1185.7	1185.7	1194.1	1182.4	1152.2	1121.9
32.5°	1310.0	1308.3	1276.4	1197.5	1192.5	1202.5	1202.5	1210.9	1204.2	1180.7	1152.2
35°	1540.1	1514.9	1444.4	1263.0	1212.6	1217.7	1217.7	1232.8	1236.1	1217.7	1192.5
37.5°	1775.3	1766.9	1713.1	1437.7	1286.5	1249.6	1247.9	1269.7	1284.8	1269.7	1252.9
40°	2012.1	2005.3	1993.6	1671.1	1441.0	1306.7	1301.6	1320.1	1347.0	1336.9	1326.8
42.5°	2232.1	2228.7	2240.5	1901.2	1637.5	1429.3	1414.2	1392.3	1431.0	1427.6	1427.6
45°	2405.1	2413.5	2420.2	2116.2	1850.8	1587.1	1568.7	1494.8	1546.8	1560.3	1570.4
47.5°	2502.5	2509.2	2532.7	2326.1	2064.1	1770.2	1756.8	1635.9	1704.7	1745.0	1773.6
50°	2641.9	2623.4	2643.6	2531.0	2321.1	2008.7	1971.8	1825.6	1913.0	1983.5	2050.7
52.5°	2776.2	2746.0	2762.8	2767.9	2613.3	2242.2	2203.5	2049.0	2158.2	2269.0	2388.3
55°	2897.2	2895.5	2912.3	2997.9	2895.5	2492.4	2448.7	2295.9	2453.8	2573.0	2774.6
57.5°	2994.6	3011.4	3085.3	3265.0	3221.3	2764.5	2715.8	2583.1	2769.5	2888.8	3223.0
60°	3108.8	3135.7	3258.3	3491.7	3518.6	3050.0	2999.6	2903.9	3093.7	3214.6	3742.0
62.5°	3147.4	3186.1	3438.0	3730.2	3829.3	3362.4	3317.1	3253.2	3434.6	3543.8	4259.3
65°	2890.5	2964.4	3537.1	3852.8	4163.5	3738.6	3700.0	3644.6	3773.9	3846.1	4610.3
67.5°	2819.9	2853.5	3343.9	4029.2	4477.6	4222.3	4183.7	4088.0	4091.3	4061.1	4724.5
70°	2720.8	2757.8	3145.7	4161.9	4927.7	4884.0	4837.0	4554.9	4381.9	4198.8	4499.4
72.5°	2317.7	2306.0	2710.7	3804.1	5144.4	5703.7	5648.2	5057.0	4596.8	4079.6	3797.4
75°	1301.6	1268.0	1644.3	2631.8	4697.6	6029.5	6027.8	5310.6	4445.7	3553.9	2584.8
77.5°	377.9	367.8	542.5	1103.4	3162.5	5238.4	5302.2	4790.0	3710.1	2552.9	1419.2
80°	178.0	181.4	233.5	364.5	1350.3	3380.9	3563.9	3154.1	2217.0	1177.3	586.2
82.5°	112.5	114.2	159.6	235.1	571.0	1535.1	1686.2	1419.2	878.4	508.9	258.6
85°	70.5	70.5	105.8	154.5	340.9	490.4	532.4	483.7	376.2	277.1	141.1
87.5°	38.6	38.6	63.8	89.0	186.4	157.9	162.9	193.1	235.1	169.6	70.5
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	885.1	885.1	885.1	885.1	885.1	885.1	885.1	885.1	885.1	885.1	885.1
2.5°	883.4	880.1	875.0	873.4	871.7	870.0	871.7	875.0	871.7	871.7	873.4
5°	878.4	875.0	868.3	868.3	870.0	871.7	880.1	885.1	886.8	886.8	886.8
7.5°	878.4	873.4	868.3	870.0	873.4	880.1	893.5	901.9	908.6	910.3	910.3
10°	886.8	880.1	876.7	880.1	890.1	895.2	908.6	922.1	930.5	933.8	933.8
12.5°	901.9	895.2	895.2	901.9	915.3	922.1	933.8	943.9	954.0	959.0	959.0
15°	927.1	918.7	920.4	932.1	947.2	954.0	962.4	965.7	974.1	980.8	980.8
17.5°	950.6	942.2	945.6	959.0	969.1	972.4	977.5	975.8	979.2	984.2	985.9
20°	977.5	969.1	970.8	979.2	980.8	977.5	977.5	972.4	970.8	979.2	982.5
22.5°	1004.4	996.0	994.3	989.2	980.8	972.4	967.4	962.4	959.0	967.4	970.8
25°	1036.3	1024.5	1016.1	994.3	972.4	957.3	950.6	947.2	945.6	954.0	957.3
27.5°	1071.5	1059.8	1034.6	987.6	952.3	927.1	922.1	922.1	925.4	930.5	933.8
30°	1105.1	1093.4	1048.0	972.4	917.0	880.1	875.0	880.1	888.5	893.5	898.5
32.5°	1138.7	1127.0	1056.4	948.9	865.0	817.9	814.6	823.0	836.4	839.8	843.1
35°	1184.1	1172.3	1066.5	915.3	799.5	749.1	745.7	750.7	762.5	767.5	772.6
37.5°	1247.9	1241.2	1081.6	878.4	739.0	683.6	673.5	670.1	676.8	675.2	681.9
40°	1331.9	1336.9	1108.5	829.7	680.2	623.1	601.3	591.2	584.5	571.0	577.8
42.5°	1454.5	1457.8	1138.7	774.3	629.8	566.0	537.4	519.0	505.5	483.7	487.1
45°	1634.2	1605.6	1174.0	715.5	584.5	520.7	487.1	465.2	446.8	428.3	430.0
47.5°	1872.7	1785.3	1212.6	666.8	539.1	483.7	453.5	428.3	406.4	391.3	393.0
50°	2166.6	2008.7	1251.2	621.4	493.8	455.2	428.3	401.4	379.6	364.5	362.8
52.5°	2554.6	2277.4	1276.4	571.0	448.4	430.0	406.4	381.3	354.4	335.9	334.2
55°	2957.6	2589.8	1298.3	510.6	404.8	401.4	389.6	361.1	329.2	305.7	302.3
57.5°	3401.0	2924.0	1315.1	451.8	371.2	377.9	374.5	340.9	305.7	283.8	282.2
60°	3804.1	3270.0	1261.3	399.7	340.9	354.4	357.7	329.2	310.7	315.7	317.4
62.5°	4210.6	3537.1	1056.4	361.1	320.8	339.3	367.8	366.1	357.7	366.1	367.8
65°	4356.7	3592.5	749.1	329.2	300.6	346.0	399.7	396.4	357.7	342.6	339.3
67.5°	4274.4	3427.9	503.9	304.0	285.5	354.4	433.3	396.4	344.3	324.1	317.4
70°	3883.1	3023.1	369.5	278.8	272.1	352.7	451.8	394.7	337.6	315.7	307.4
72.5°	3097.0	2332.9	297.3	255.3	251.9	344.3	461.9	391.3	330.9	307.4	297.3
75°	2005.3	1451.1	250.2	231.8	221.7	330.9	456.8	381.3	322.5	292.2	285.5
77.5°	930.5	624.8	213.3	204.9	193.1	310.7	441.7	361.1	304.0	275.4	267.0
80°	433.3	295.6	179.7	178.0	173.0	293.9	421.6	337.6	282.2	258.6	245.2
82.5°	231.8	178.0	146.1	146.1	151.2	273.8	396.4	309.0	253.6	241.9	206.6
85°	122.6	102.5	105.8	114.2	129.3	241.9	362.8	278.8	221.7	184.7	179.7
87.5°	62.1	65.5	65.5	77.3	99.1	196.5	299.0	230.1	188.1	151.2	147.8
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)