

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: P573432

Luminaire Tested: **ARCH-S-PA2-70-827-U-T3**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573432
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-38)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-70-827-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 725mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7871 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

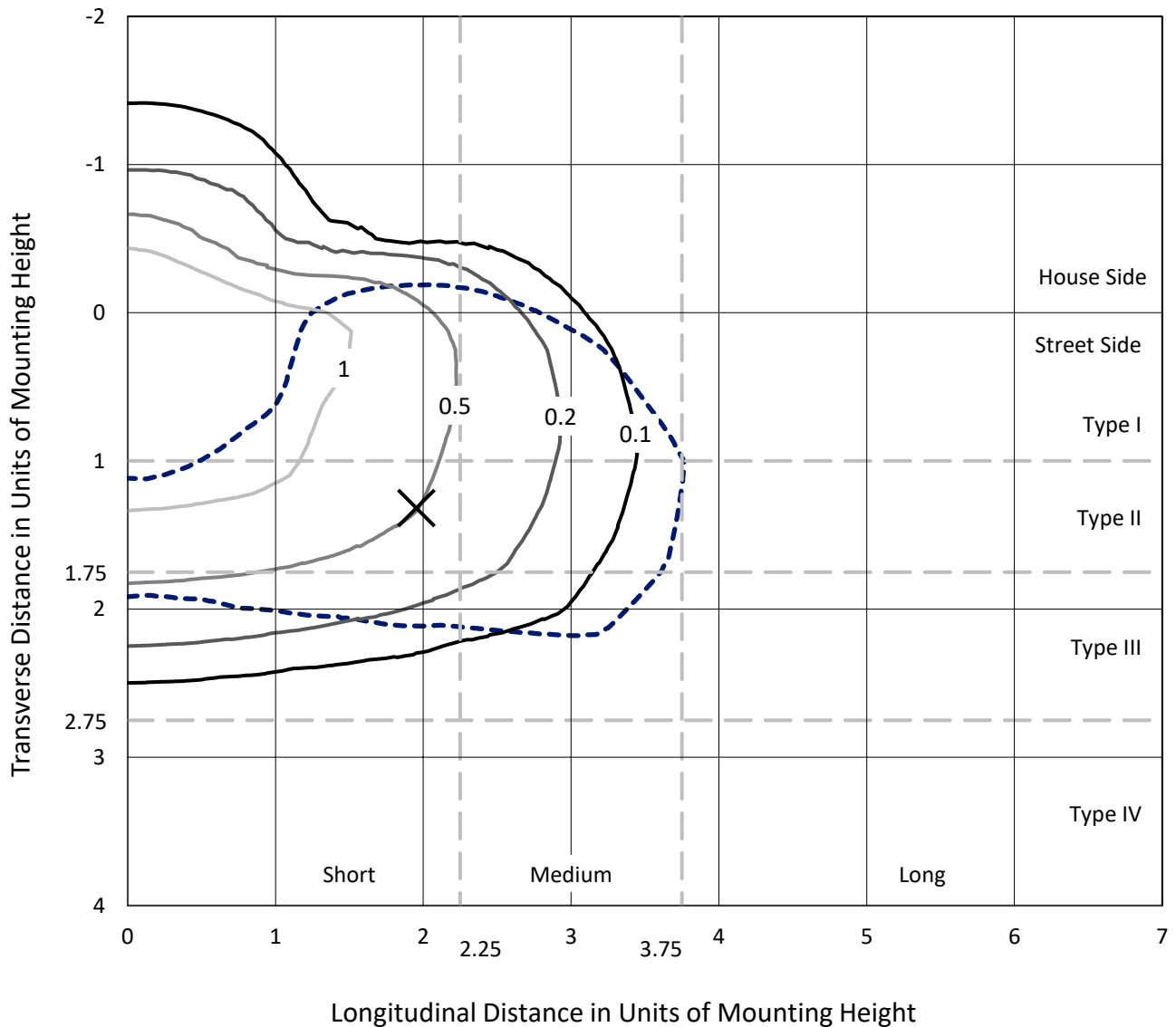
Input Watts (W): 73.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

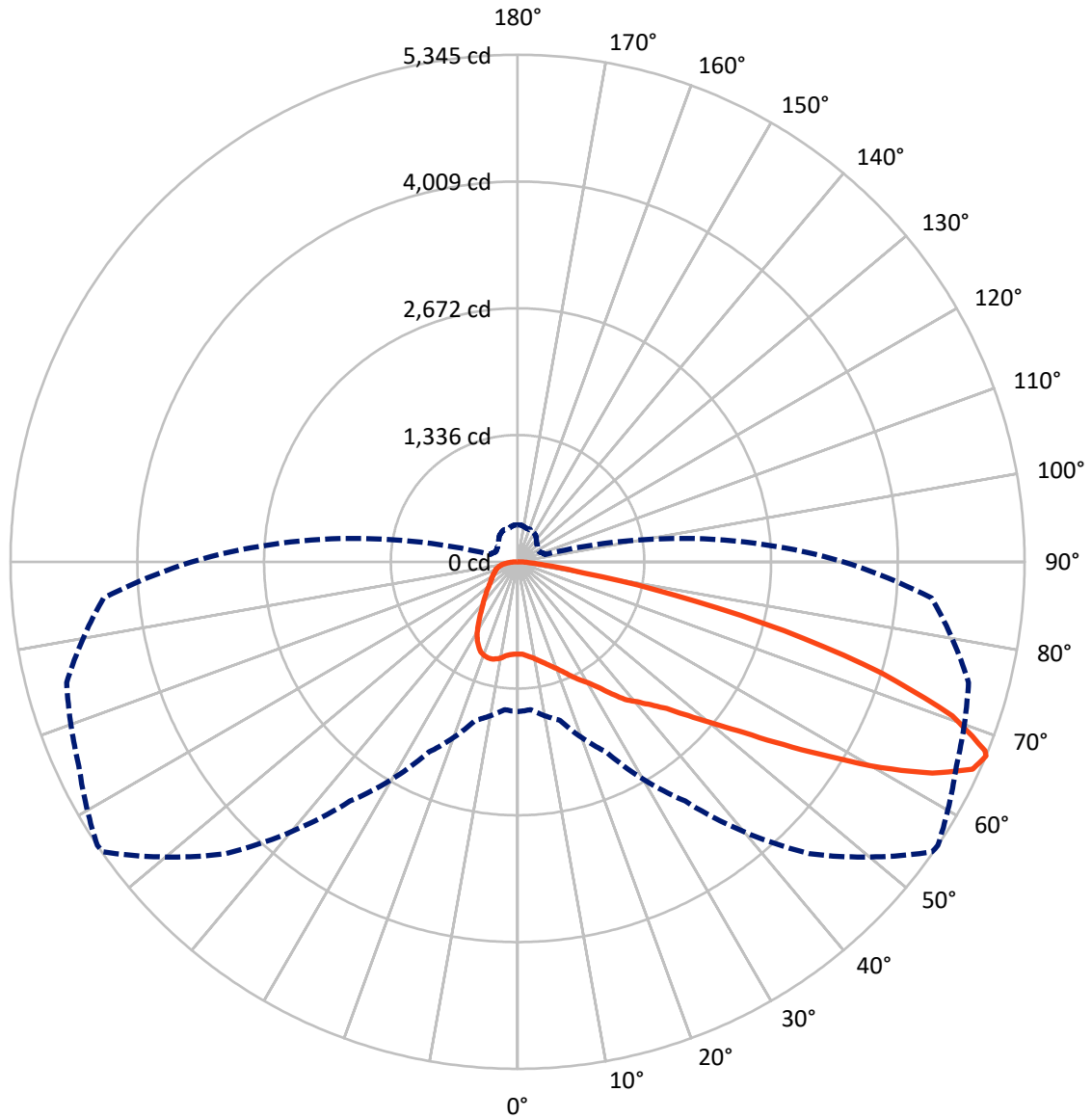
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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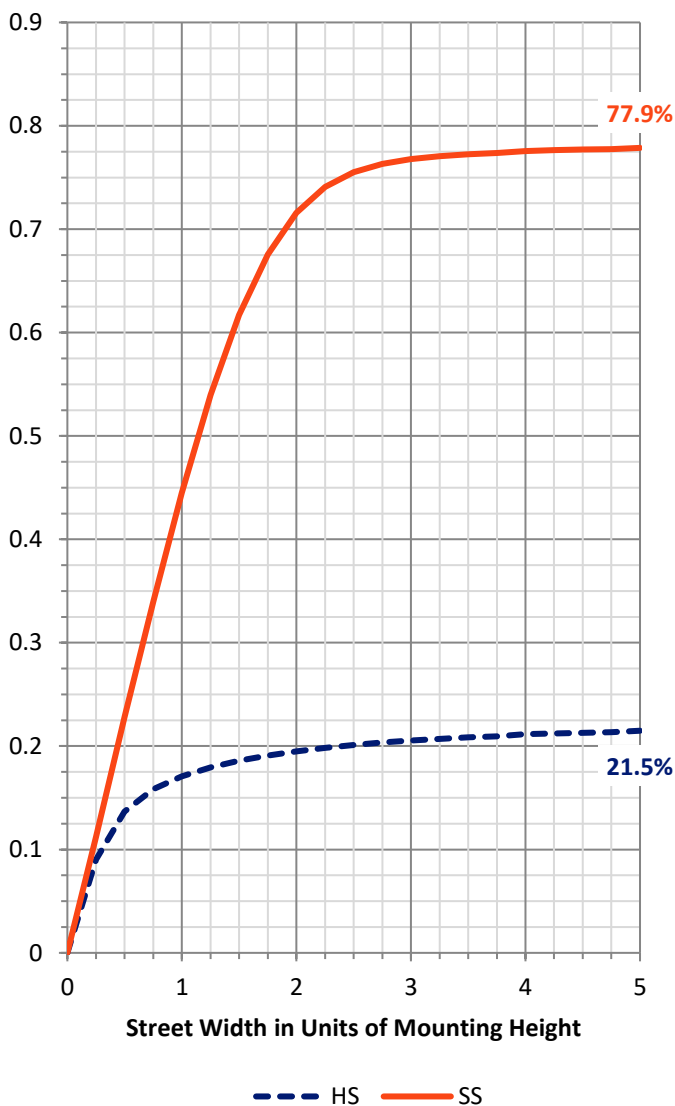
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1722.0	0.0	1722.0
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	6149.0	0.0	6149.0
	% Fixture	78.1	0.0	78.1
Total	Lumens	7871.0	0.0	7871.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.6	1.2
10°-20°	306.6	3.9
20°-30°	533.6	6.8
30°-40°	782.4	9.9
40°-50°	1144.7	14.5
50°-60°	1789.1	22.7
60°-70°	2126.4	27.0
70°-80°	968.4	12.3
80°-90°	124.2	1.6
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°	7871.0	100.0
0°-180°	7871.0	100.0

Coefficient of Utilization



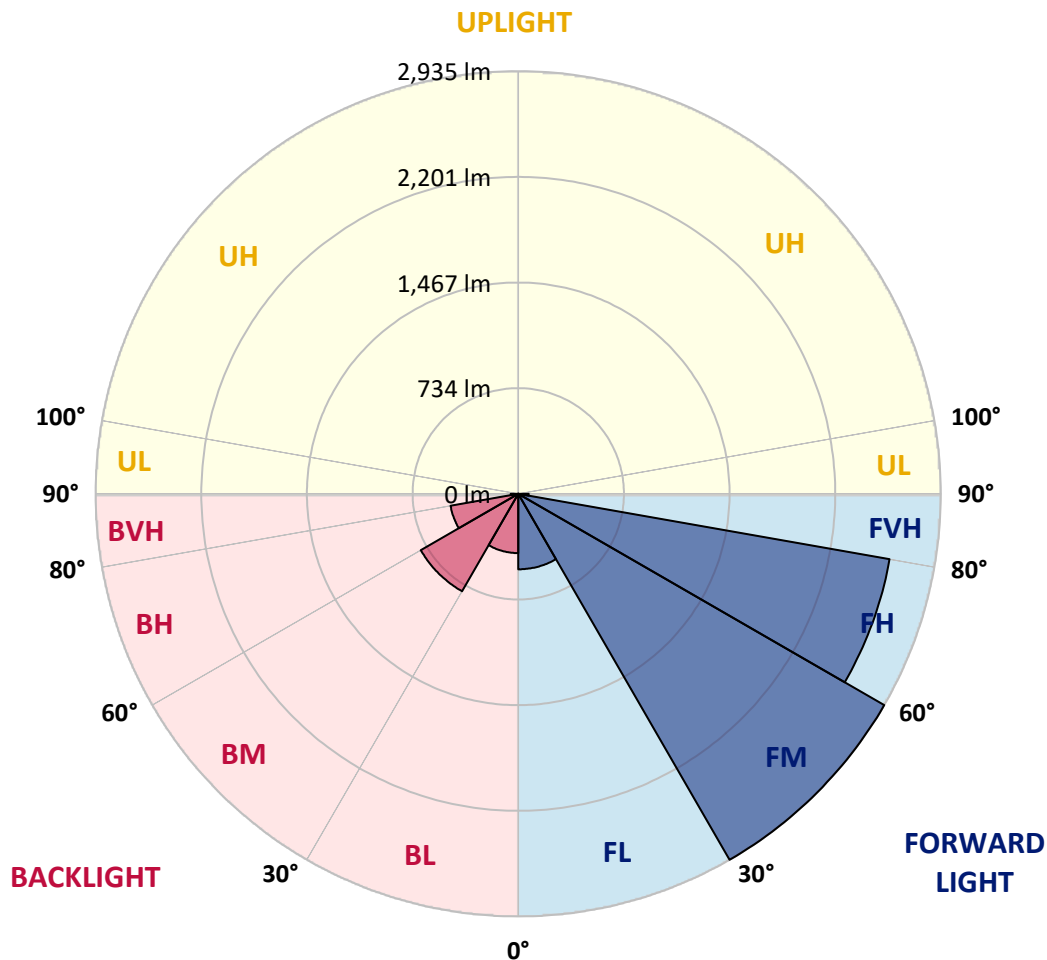
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	524.3	6.7			
FM (30°-60°)	2934.5	37.3			
FH (60°-80°)	2617.8	33.3			G2/5000
FVH (80°-90°)	72.4	0.9			G1/100
BL (0°-30°)	411.5	5.2	B1/500		
BM (30°-60°)	781.7	9.9	B1/1000		
BH (60°-80°)	477.1	6.1	B1/500		G1/500
BVH (80°-90°)	51.8	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8
2.5°	986.7	982.4	980.3	982.4	980.3	976.0	978.2	976.0	973.9	971.8	971.8
5°	999.5	995.2	993.1	995.2	997.3	993.1	993.1	993.1	986.7	984.5	980.3
7.5°	1008.0	1001.6	1001.6	1005.9	1010.1	1012.3	1016.5	1014.4	1008.0	1003.7	995.2
10°	1035.7	1027.2	1027.2	1027.2	1031.4	1035.7	1040.0	1042.1	1040.0	1037.8	1031.4
12.5°	1078.3	1069.8	1069.8	1069.8	1069.8	1067.7	1074.1	1076.2	1080.4	1080.4	1069.8
15°	1135.9	1125.2	1120.9	1112.4	1110.3	1106.0	1114.5	1114.5	1120.9	1123.1	1112.4
17.5°	1191.3	1178.5	1174.2	1165.7	1157.2	1146.5	1155.0	1157.2	1169.9	1172.1	1155.0
20°	1248.8	1244.5	1238.1	1225.4	1210.4	1199.8	1208.3	1206.2	1216.8	1221.1	1199.8
22.5°	1323.4	1312.7	1308.5	1291.4	1274.4	1263.7	1263.7	1268.0	1278.6	1278.6	1246.7
25°	1412.9	1398.0	1387.3	1368.1	1346.8	1334.0	1336.2	1340.4	1355.3	1344.7	1295.7
27.5°	1523.7	1508.8	1493.9	1455.5	1434.2	1408.6	1406.5	1410.8	1434.2	1406.5	1342.6
30°	1628.1	1621.7	1608.9	1579.1	1545.0	1502.4	1483.2	1485.3	1502.4	1464.0	1383.1
32.5°	1717.6	1709.1	1702.7	1681.4	1658.0	1606.8	1581.2	1583.4	1581.2	1534.4	1432.1
35°	1824.2	1811.4	1807.1	1788.0	1758.1	1724.0	1713.4	1709.1	1696.3	1632.4	1496.0
37.5°	1926.5	1913.7	1907.3	1896.6	1873.2	1843.4	1843.4	1841.2	1815.7	1726.2	1559.9
40°	2047.9	2033.0	2013.8	2007.5	1988.3	1967.0	1949.9	1939.3	1894.5	1813.5	1683.5
42.5°	2195.0	2186.5	2175.8	2148.1	2118.3	2114.0	2065.0	2060.7	2028.8	1981.9	1858.3
45°	2406.0	2388.9	2374.0	2365.5	2329.2	2290.9	2222.7	2205.6	2205.6	2195.0	2062.9
47.5°	2619.1	2589.2	2610.5	2604.1	2595.6	2553.0	2420.9	2423.0	2418.7	2446.4	2363.3
50°	2761.8	2744.8	2804.5	2832.2	2891.8	2891.8	2702.2	2678.7	2695.8	2776.8	2670.2
52.5°	2872.7	2862.0	2930.2	3038.9	3215.8	3232.8	3036.8	2987.7	3011.2	3126.3	3083.6
55°	2962.2	2951.5	3030.4	3220.0	3503.5	3607.9	3422.5	3401.2	3354.3	3477.9	3490.7
57.5°	3015.4	2992.0	3111.3	3364.9	3737.9	3978.7	3874.3	3867.9	3759.2	3874.3	3931.8
60°	2934.5	2919.5	3083.6	3424.6	3927.5	4328.2	4404.9	4404.9	4211.0	4272.8	4343.1
62.5°	2672.3	2653.2	2825.8	3286.1	3951.0	4613.7	4931.3	4905.7	4645.7	4643.6	4581.8
65°	2173.7	2150.2	2344.2	2830.0	3654.8	4647.8	5287.1	5272.2	4971.7	4886.5	4596.7
67°	1579.1	1564.2	1730.4	2212.0	3079.4	4351.6	5331.9	5344.7	5101.7	4920.6	4381.4
67.5°	1417.2	1415.0	1553.5	2030.9	2911.0	4242.9	5302.1	5314.8	5099.6	4892.9	4296.2
70°	660.6	690.5	820.5	1163.6	1962.7	3341.5	4811.9	4860.9	4826.8	4573.2	3618.5
72.5°	306.9	319.7	377.2	562.6	1054.9	2154.5	3899.8	4017.0	4166.2	3923.3	2866.3
75°	189.7	193.9	225.9	292.0	496.5	1035.7	2776.8	2904.6	3130.5	2951.5	1832.7
77.5°	149.2	151.3	172.6	208.8	289.8	445.4	1523.7	1683.5	1977.6	1745.3	922.7
80°	110.8	115.1	132.1	162.0	204.6	228.0	647.8	707.5	954.7	731.0	383.6
82.5°	81.0	85.2	102.3	117.2	142.8	144.9	264.3	279.2	409.2	296.2	166.2
85°	68.2	68.2	78.8	87.4	95.9	81.0	130.0	127.9	157.7	134.3	66.1
87.5°	32.0	34.1	74.6	55.4	46.9	34.1	38.4	40.5	49.0	53.3	25.6
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°	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8	971.8
2.5°	969.6	969.6	969.6	971.8	973.9	973.9	976.0	976.0	978.2	980.3	984.5
5°	978.2	978.2	976.0	978.2	982.4	984.5	988.8	993.1	997.3	1001.6	1003.7
7.5°	995.2	993.1	993.1	993.1	997.3	1001.6	1008.0	1012.3	1018.6	1020.8	1025.0
10°	1027.2	1022.9	1022.9	1025.0	1027.2	1020.8	1018.6	1016.5	1022.9	1027.2	1031.4
12.5°	1065.5	1061.3	1059.1	1052.7	1044.2	1031.4	1020.8	1012.3	1014.4	1018.6	1025.0
15°	1106.0	1097.5	1093.2	1078.3	1057.0	1029.3	1012.3	1001.6	1001.6	1001.6	1008.0
17.5°	1148.6	1140.1	1123.1	1095.4	1054.9	1016.5	995.2	976.0	967.5	965.4	969.6
20°	1189.1	1176.3	1148.6	1106.0	1042.1	990.9	963.2	931.3	918.5	910.0	914.2
22.5°	1227.5	1210.4	1172.1	1106.0	1020.8	952.6	903.6	860.9	839.6	835.4	837.5
25°	1268.0	1246.7	1195.5	1093.2	973.9	895.0	826.8	782.1	754.4	750.1	756.5
27.5°	1308.5	1276.5	1214.7	1059.1	920.6	816.2	743.7	701.1	686.2	677.7	679.8
30°	1342.6	1312.7	1233.9	1012.3	848.2	724.6	658.5	639.3	628.7	624.4	624.4
32.5°	1387.3	1359.6	1246.7	956.8	762.9	641.4	598.8	583.9	575.4	564.7	566.9
35°	1442.7	1417.2	1240.3	886.5	681.9	586.0	551.9	530.6	511.5	496.5	494.4
37.5°	1517.3	1498.1	1208.3	801.3	607.4	545.5	511.5	483.7	456.0	432.6	428.3
40°	1640.9	1596.2	1161.4	707.5	556.2	513.6	473.1	439.0	404.9	379.3	372.9
42.5°	1798.6	1704.8	1097.5	611.6	513.6	479.5	439.0	394.2	362.3	338.8	338.8
45°	1981.9	1822.1	1020.8	539.2	468.8	445.4	396.4	358.0	338.8	323.9	321.8
47.5°	2199.2	1939.3	922.7	481.6	432.6	415.6	366.5	343.1	330.3	317.5	315.4
50°	2491.2	2097.0	850.3	432.6	396.4	381.5	358.0	338.8	326.1	317.5	315.4
52.5°	2825.8	2299.4	799.1	394.2	366.5	360.1	355.9	341.0	328.2	321.8	319.7
55°	3188.1	2548.7	750.1	362.3	343.1	351.6	360.1	345.2	336.7	328.2	323.9
57.5°	3529.0	2759.7	671.3	334.6	326.1	341.0	358.0	347.4	336.7	330.3	328.2
60°	3761.3	2866.3	562.6	309.0	309.0	326.1	351.6	336.7	326.1	328.2	328.2
62.5°	3835.9	2825.8	445.4	285.6	292.0	309.0	332.4	323.9	319.7	330.3	330.3
65°	3725.1	2661.7	355.9	266.4	274.9	287.7	321.8	330.3	343.1	366.5	368.7
67°	3435.3	2397.4	300.5	251.5	260.0	281.3	334.6	364.4	364.4	390.0	390.0
67.5°	3350.0	2307.9	292.0	247.2	257.9	281.3	341.0	372.9	364.4	394.2	394.2
70°	2723.5	1815.7	247.2	234.4	249.3	296.2	368.7	375.1	355.9	383.6	381.5
72.5°	2020.2	1312.7	225.9	221.6	232.3	279.2	366.5	360.1	332.4	341.0	334.6
75°	1248.8	760.8	208.8	204.6	211.0	247.2	338.8	328.2	296.2	289.8	283.4
77.5°	603.1	385.7	179.0	185.4	191.8	215.2	298.3	287.7	260.0	245.1	242.9
80°	262.1	198.2	153.4	164.1	166.2	183.3	247.2	234.4	208.8	185.4	185.4
82.5°	130.0	110.8	121.5	136.4	132.1	147.0	193.9	172.6	153.4	127.9	123.6
85°	59.7	63.9	89.5	102.3	89.5	91.6	132.1	121.5	95.9	72.5	74.6
87.5°	21.3	29.8	51.1	61.8	44.8	42.6	70.3	51.1	29.8	8.5	10.7
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)