

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: P234810

Luminaire Tested: **ARCH-M-AF48-90-D-U-T3-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234810
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-90-D-U-T3-8027
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 600mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9561 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

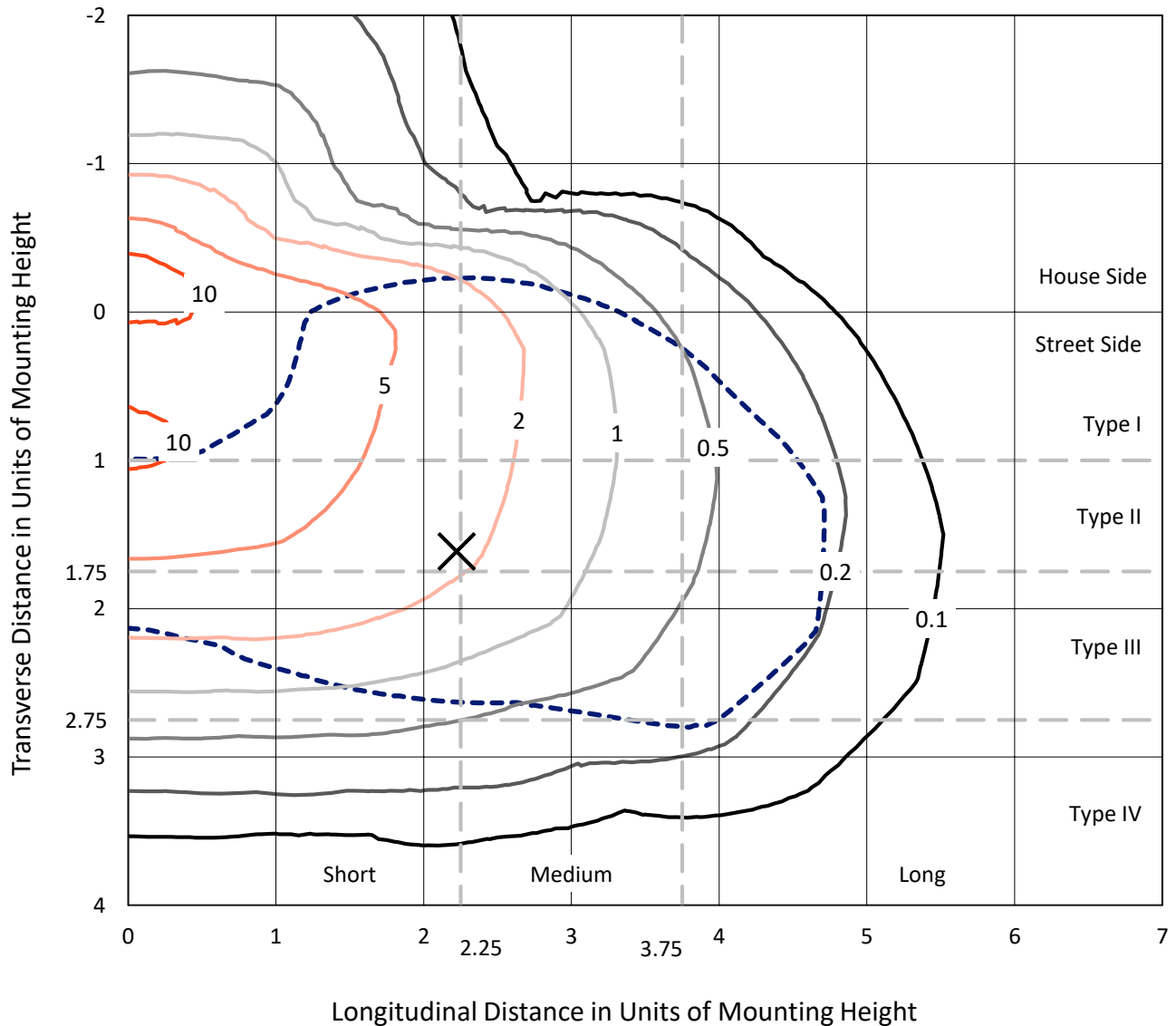
Input Watts (W): 92
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

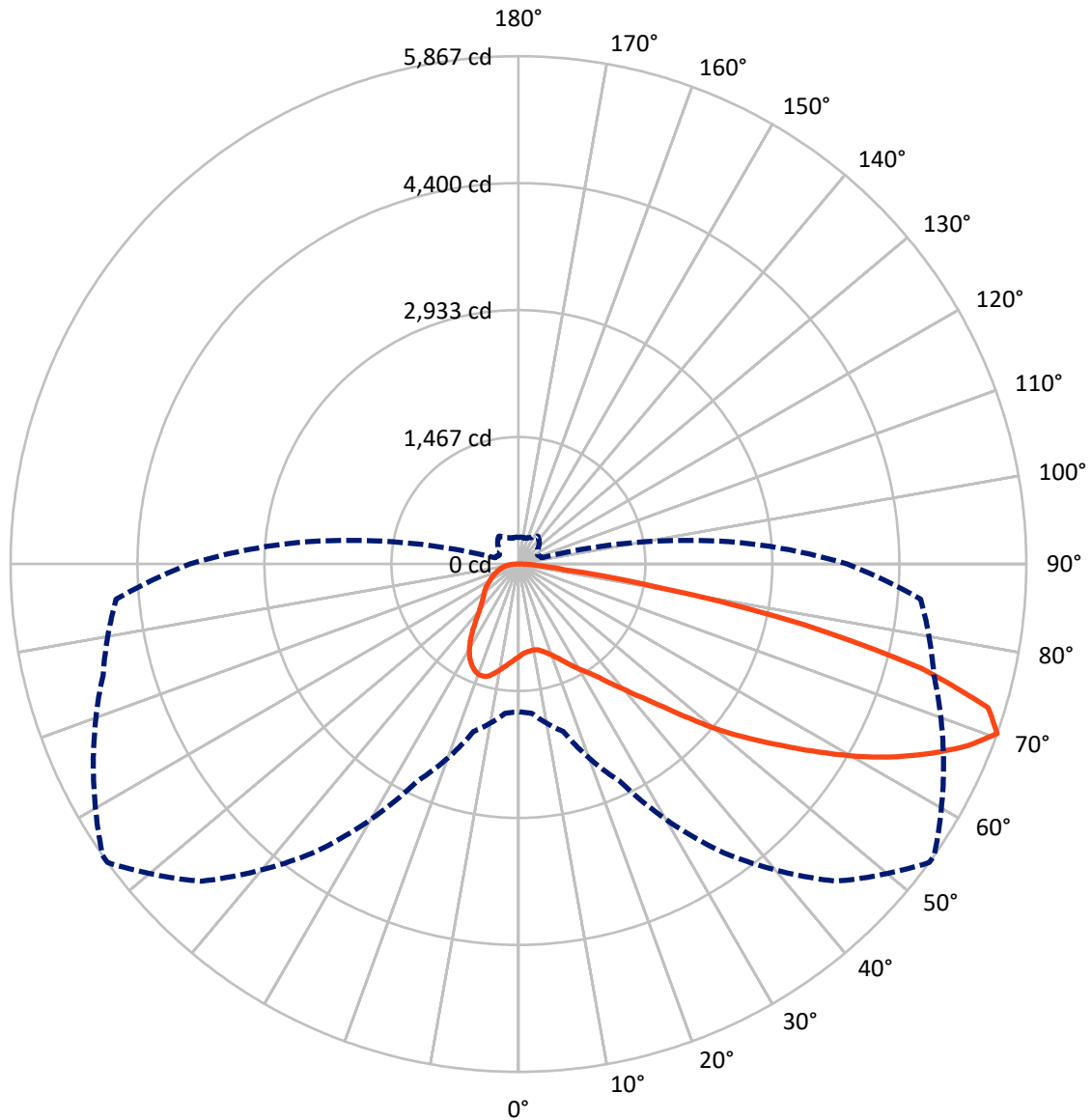


Based on 10 foot mounting height. Maximum calculated value = 12.4 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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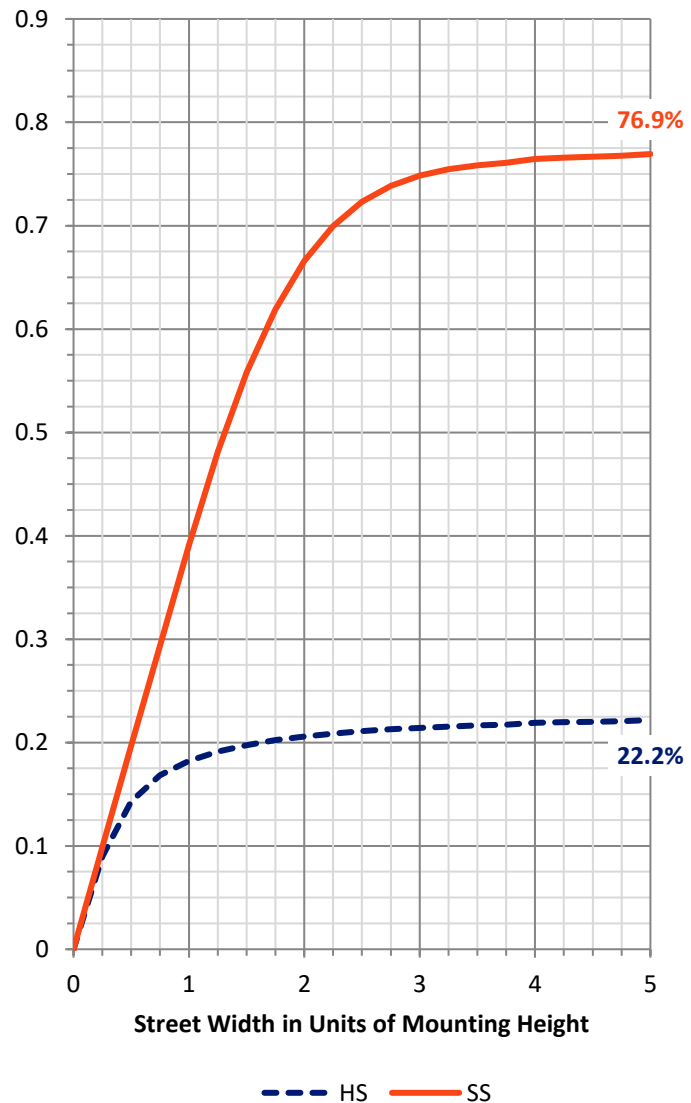
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2168.4	0.0	2168.4
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	7392.6	0.0	7392.6
	% Fixture	77.3	0.0	77.3
Total	Lumens	9561.0	0.0	9561.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.0	1.1
10°-20°	335.4	3.5
20°-30°	582.8	6.1
30°-40°	851.6	8.9
40°-50°	1336.6	14.0
50°-60°	2055.4	21.5
60°-70°	2511.2	26.3
70°-80°	1556.9	16.3
80°-90°	226.2	2.4
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°	9561.0	100.0
0°-180°	9561.0	100.0

Coefficient of Utilization



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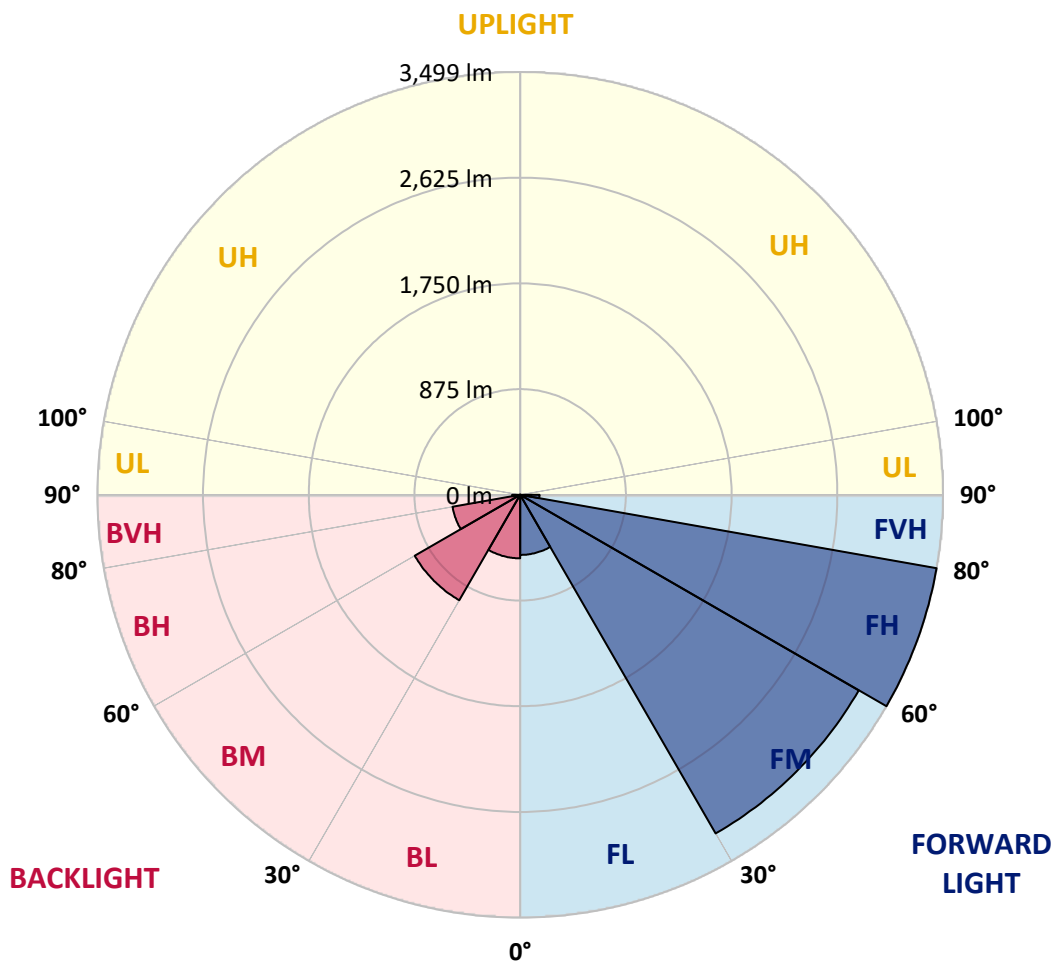
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	497.5	5.2			
FM	(30°-60°)	3236.0	33.8			
FH	(60°-80°)	3499.5	36.6			G2/5000
FVH	(80°-90°)	159.7	1.7			G2/225
BL	(0°-30°)	525.7	5.5	B2/1000		
BM	(30°-60°)	1007.6	10.5	B2/2500		
BH	(60°-80°)	568.6	5.9	B2/1000		G2/1000
BVH	(80°-90°)	66.5	0.7			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1069.7	1069.7	1069.7	1069.7	1069.7	1069.7	1069.7	1069.7	1069.7	1069.7	1069.7
2.5°	1027.7	1024.2	1024.2	1029.4	1031.2	1036.4	1036.4	1038.2	1043.4	1052.2	1062.7
5°	996.2	994.4	996.2	1003.2	1006.7	1017.2	1020.7	1022.4	1032.9	1046.9	1062.7
7.5°	964.6	962.9	966.4	976.9	987.4	1003.2	1011.9	1013.7	1029.4	1048.7	1069.7
10°	954.1	952.4	957.6	966.4	976.9	994.4	1008.4	1010.2	1032.9	1055.7	1085.4
12.5°	968.1	966.4	971.6	980.4	990.9	1003.2	1018.9	1020.7	1050.4	1080.2	1111.7
15°	1003.2	1003.2	1004.9	1010.2	1020.7	1031.2	1045.2	1046.9	1078.4	1113.5	1145.0
17.5°	1057.4	1053.9	1053.9	1052.2	1059.2	1064.4	1081.9	1083.7	1117.0	1148.5	1180.0
20°	1124.0	1122.2	1115.2	1106.4	1104.7	1108.2	1125.7	1127.5	1160.7	1187.0	1216.7
22.5°	1204.5	1206.2	1190.5	1171.2	1162.5	1167.7	1183.5	1185.2	1209.7	1232.5	1258.8
25°	1311.3	1306.0	1283.3	1255.3	1237.8	1237.8	1253.5	1253.5	1276.3	1290.3	1307.8
27.5°	1412.8	1402.3	1381.3	1341.0	1313.0	1318.3	1334.0	1334.0	1355.0	1360.3	1369.1
30°	1523.1	1512.6	1486.4	1435.6	1398.8	1395.3	1414.6	1412.8	1440.8	1439.1	1432.1
32.5°	1657.9	1652.7	1608.9	1544.1	1495.1	1482.8	1500.4	1502.1	1519.6	1514.4	1491.6
35°	1847.0	1845.2	1805.0	1691.2	1626.4	1603.6	1614.2	1614.2	1626.4	1612.4	1573.9
37.5°	2085.1	2088.6	2053.6	1885.5	1794.5	1756.0	1757.7	1756.0	1759.5	1743.7	1703.4
40°	2323.2	2331.9	2330.2	2127.1	2011.6	1945.0	1920.5	1917.0	1925.8	1918.8	1880.3
42.5°	2636.6	2657.6	2608.6	2424.7	2295.2	2183.1	2116.6	2107.9	2127.1	2135.9	2099.1
45°	2962.2	2955.2	2878.2	2745.1	2627.8	2484.3	2358.2	2344.2	2358.2	2384.5	2345.9
47.5°	3132.0	3126.8	3107.5	3041.0	3023.5	2858.9	2668.1	2655.8	2629.6	2666.3	2620.8
50°	3412.1	3417.4	3338.6	3331.6	3405.1	3314.1	3018.2	2990.2	2942.9	2972.7	2934.2
52.5°	3615.2	3592.5	3543.4	3604.7	3834.1	3785.0	3347.4	3335.1	3291.3	3284.3	3266.8
55°	3697.5	3697.5	3706.2	3848.1	4175.4	4110.7	3704.5	3716.8	3657.2	3608.2	3631.0
57.5°	3722.0	3732.5	3807.8	4042.4	4576.4	4364.5	4098.4	4115.9	4030.1	3932.1	4003.9
60°	3601.2	3632.7	3813.0	4152.7	4802.2	4634.1	4513.3	4518.6	4394.3	4250.7	4376.8
62.5°	3291.3	3329.8	3652.0	4198.2	4765.4	4910.7	4905.5	4917.7	4747.9	4569.3	4726.9
65°	2911.4	2949.9	3293.1	4070.4	4737.4	5108.6	5264.4	5297.6	5078.8	4839.0	4945.8
67.5°	2353.0	2403.7	2729.4	3639.7	4600.9	5271.4	5600.5	5635.5	5334.4	4979.0	4926.5
70°	1705.2	1729.7	2002.8	2766.1	4044.1	5182.1	5866.6	5864.9	5418.4	4968.5	4663.9
72.5°	821.1	840.3	1076.7	1717.4	2892.2	4397.8	5674.0	5707.3	5302.9	4816.2	4063.4
75°	337.9	357.1	435.9	724.8	1517.9	2906.2	4809.2	4888.0	4816.2	4322.5	3179.3
77.5°	210.1	217.1	255.6	374.7	693.3	1356.8	3366.6	3473.4	3816.5	3462.9	2099.1
80°	157.6	162.8	190.8	262.6	437.7	500.7	1671.9	1806.7	2312.7	1987.1	950.6
82.5°	131.3	133.1	152.3	190.8	297.6	287.1	535.7	597.0	1078.4	758.1	327.4
85°	122.5	126.1	136.6	136.6	189.1	180.3	222.3	232.8	313.4	259.1	113.8
87.5°	63.0	59.5	120.8	106.8	98.0	87.5	94.5	101.5	117.3	124.3	50.8
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°	1069.7	1069.7	1069.7	1069.7	1069.7	1069.7	1069.7	1069.7	1069.7	1069.7	1069.7
2.5°	1066.2	1071.4	1080.2	1088.9	1099.4	1111.7	1118.7	1127.5	1134.5	1131.0	1129.2
5°	1071.4	1080.2	1099.4	1117.0	1138.0	1162.5	1178.2	1195.7	1209.7	1213.2	1208.0
7.5°	1080.2	1095.9	1122.2	1153.7	1181.7	1213.2	1237.8	1262.3	1279.8	1283.3	1283.3
10°	1101.2	1118.7	1153.7	1195.7	1229.0	1262.3	1290.3	1309.5	1325.3	1332.3	1332.3
12.5°	1131.0	1152.0	1194.0	1244.8	1281.5	1313.0	1328.8	1337.5	1344.5	1351.5	1353.3
15°	1166.0	1188.7	1239.5	1293.8	1332.3	1348.0	1348.0	1346.3	1346.3	1349.8	1353.3
17.5°	1201.0	1225.5	1278.0	1335.8	1360.3	1351.5	1339.3	1334.0	1330.5	1328.8	1334.0
20°	1237.8	1262.3	1314.8	1369.1	1362.1	1325.3	1307.8	1295.5	1285.0	1279.8	1286.8
22.5°	1278.0	1300.8	1355.0	1391.8	1339.3	1283.3	1250.0	1230.7	1213.2	1202.7	1209.7
25°	1325.3	1348.0	1400.6	1398.8	1299.0	1220.2	1167.7	1136.2	1117.0	1106.4	1106.4
27.5°	1381.3	1400.6	1451.3	1381.3	1243.0	1136.2	1059.2	1029.4	1024.2	1015.4	1015.4
30°	1439.1	1454.8	1498.6	1341.0	1166.0	1025.9	941.9	927.9	929.6	920.9	922.6
32.5°	1498.6	1514.4	1526.6	1281.5	1066.2	901.6	845.6	835.1	833.3	826.3	819.3
35°	1582.6	1605.4	1530.1	1201.0	945.4	798.3	758.1	747.6	737.0	712.5	712.5
37.5°	1710.4	1735.0	1521.4	1101.2	821.1	717.8	681.0	667.0	649.5	625.0	616.2
40°	1885.5	1885.5	1502.1	989.2	721.3	653.0	618.0	600.5	581.2	556.7	551.5
42.5°	2092.1	2043.1	1472.3	875.4	647.8	609.2	577.7	558.5	535.7	507.7	504.2
45°	2333.7	2200.6	1430.3	773.8	593.5	583.0	563.7	530.5	491.9	462.2	456.9
47.5°	2568.3	2342.4	1390.1	702.0	548.0	572.5	556.7	500.7	448.2	406.2	400.9
50°	2825.6	2468.5	1342.8	642.5	513.0	565.5	548.0	456.9	399.2	369.4	365.9
52.5°	3083.0	2596.3	1292.0	579.5	483.2	551.5	527.0	425.4	397.4	357.1	351.9
55°	3354.4	2745.1	1232.5	509.5	448.2	523.5	499.0	423.7	409.7	357.1	344.9
57.5°	3618.7	2909.7	1136.2	441.2	409.7	481.4	488.4	413.2	383.4	353.6	339.6
60°	3911.1	3084.7	976.9	383.4	376.4	446.4	474.4	390.4	353.6	343.1	336.1
62.5°	4145.7	3242.3	763.3	343.1	348.4	418.4	456.9	376.4	341.4	332.6	330.9
65°	4247.2	3245.8	548.0	308.1	320.4	392.2	439.4	364.1	330.9	327.4	325.6
67.5°	4140.4	3067.2	385.2	274.9	290.6	367.6	416.7	351.9	320.4	322.1	318.6
70°	3795.5	2690.8	281.9	243.3	262.6	341.4	392.2	336.1	308.1	311.6	306.4
72.5°	3175.8	2097.3	225.8	217.1	239.8	313.4	367.6	318.6	288.9	290.6	280.1
75°	2345.9	1390.1	189.1	194.3	213.6	287.1	336.1	295.9	267.9	260.9	253.9
77.5°	1395.3	714.3	155.8	169.8	190.8	255.6	301.1	267.9	245.1	232.8	227.6
80°	576.0	288.9	127.8	143.6	166.3	227.6	266.1	234.6	218.8	206.6	199.6
82.5°	229.3	141.8	101.5	117.3	140.1	197.8	232.8	206.6	190.8	182.1	162.8
85°	87.5	70.0	68.3	82.3	105.0	152.3	192.6	173.3	161.1	138.3	133.1
87.5°	35.0	31.5	31.5	40.3	59.5	96.3	138.3	120.8	126.1	99.8	101.5
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)