

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: P214748

Luminaire Tested: **ARCH-AF24-90-D-U-T3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214748
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-AF24-90-D-U-T3-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9816 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

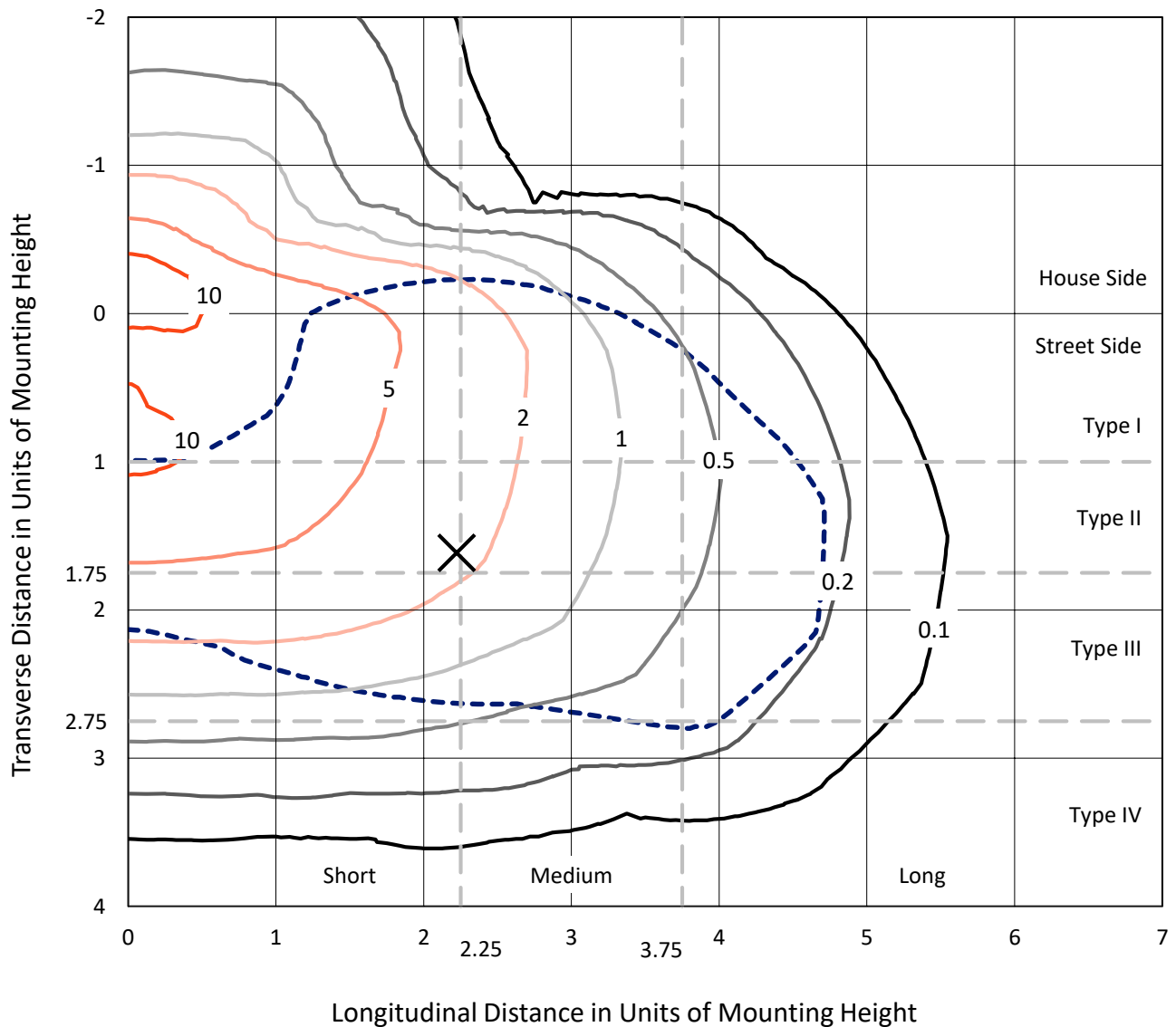
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P214748
 CATALOG NUMBER: ARCH-AF24-90-D-U-T3-7050

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

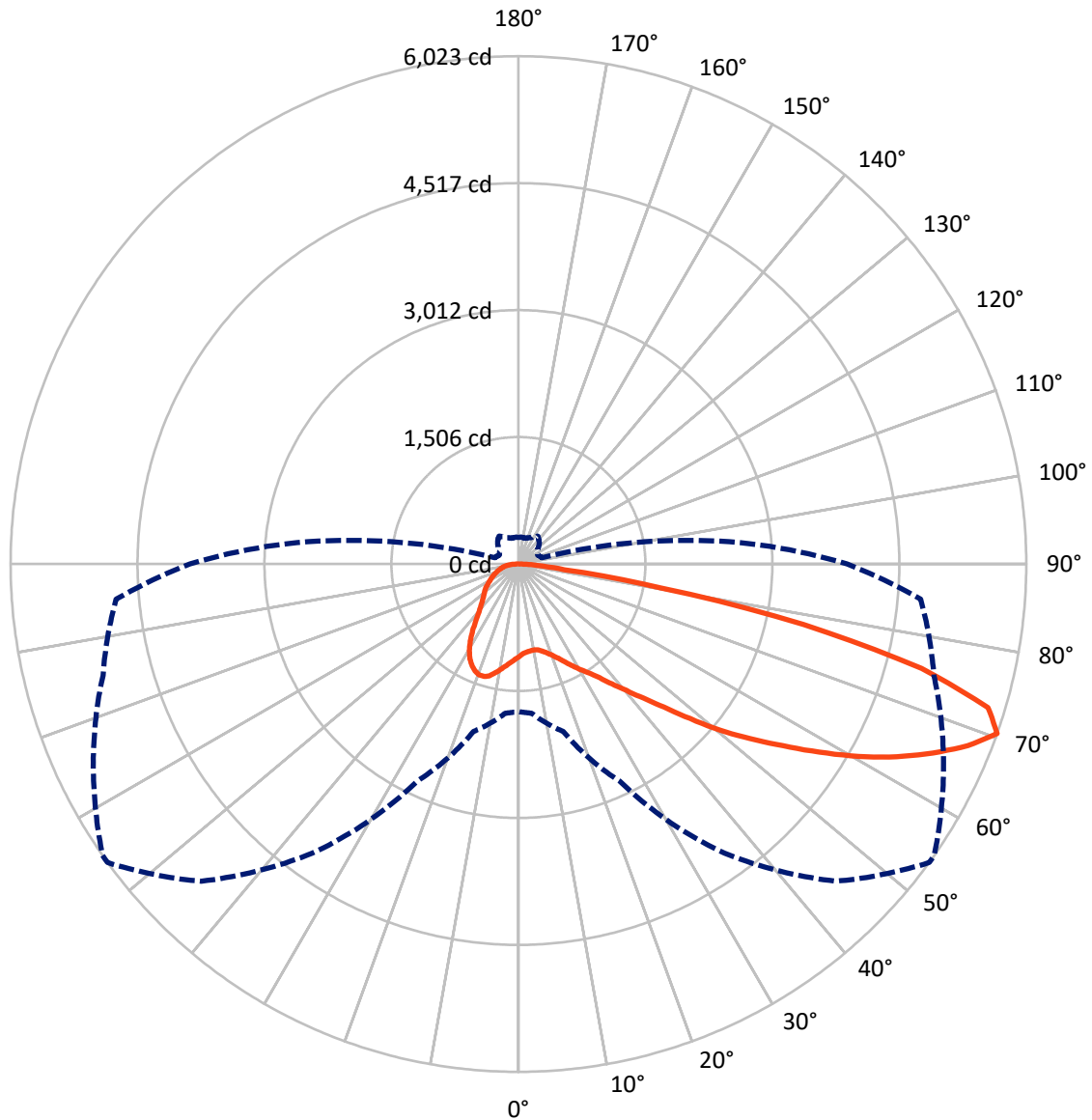


Based on 10 foot mounting height. Maximum calculated value = 12.8 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P214748

CATALOG NUMBER: ARCH-AF24-90-D-U-T3-7050

Luminous Intensity Polar Plot



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



REPORT NUMBER: P214748

CATALOG NUMBER: ARCH-AF24-90-D-U-T3-7050

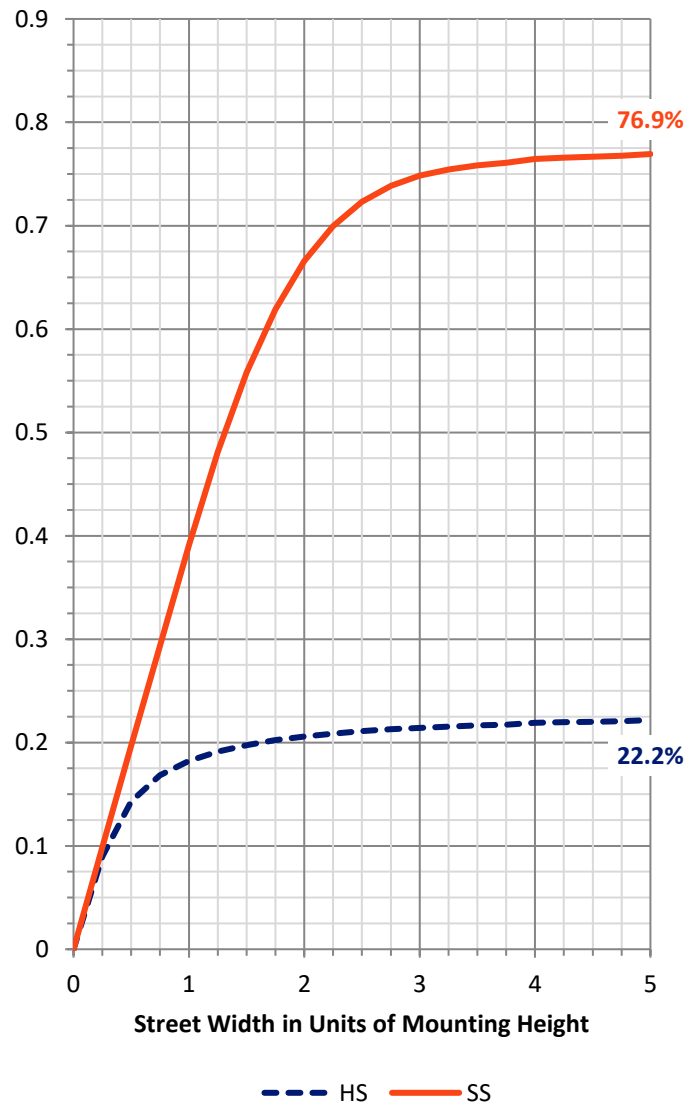
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2226.2	0.0	2226.2
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	7589.8	0.0	7589.8
	% Fixture	77.3	0.0	77.3
Total	Lumens	9816.0	0.0	9816.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.8	1.1
10°-20°	344.4	3.5
20°-30°	598.3	6.1
30°-40°	874.3	8.9
40°-50°	1372.2	14.0
50°-60°	2110.2	21.5
60°-70°	2578.1	26.3
70°-80°	1598.5	16.3
80°-90°	232.2	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°	9816.0	100.0
0°-180°	9816.0	100.0

Coefficient of Utilization



REPORT NUMBER: P214748

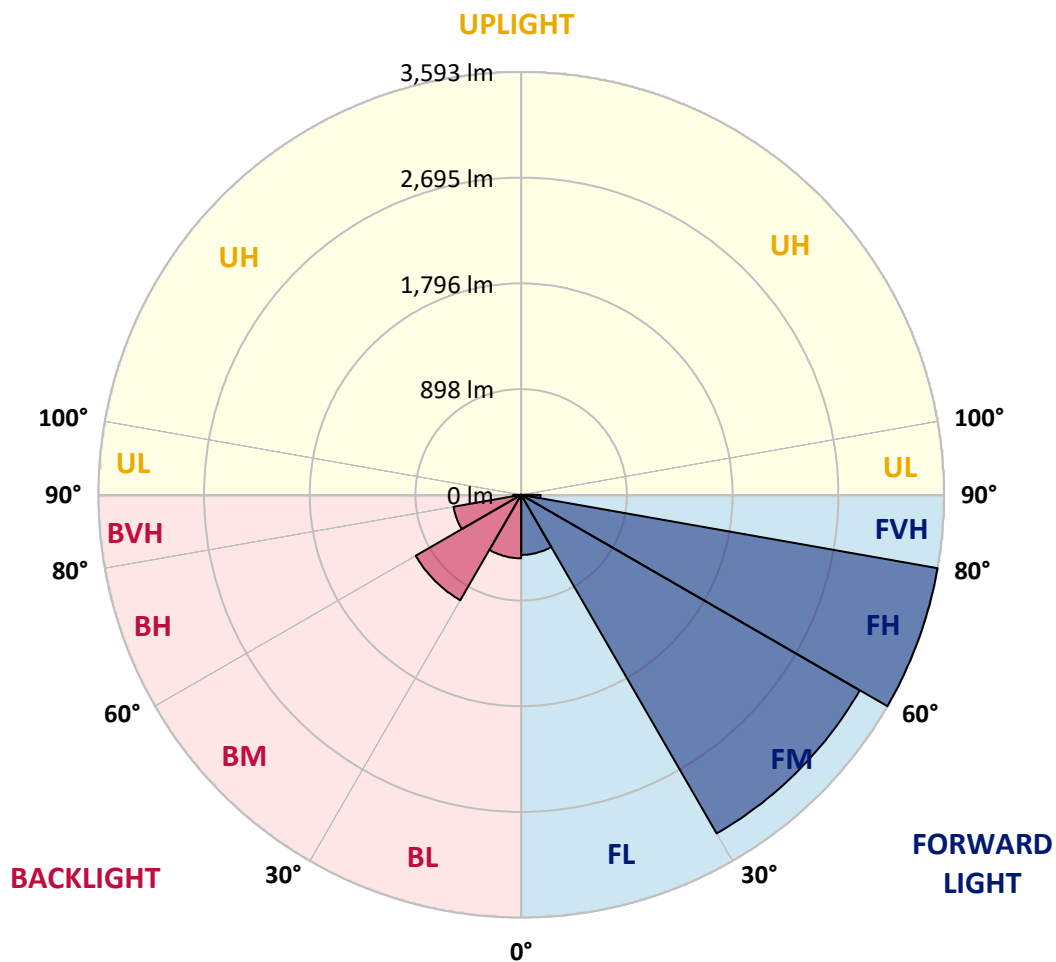
CATALOG NUMBER: ARCH-AF24-90-D-U-T3-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	510.7	5.2			
FM	(30°-60°)	3322.3	33.8			
FH	(60°-80°)	3592.8	36.6			G2/5000
FVH	(80°-90°)	164.0	1.7			G2/225
BL	(0°-30°)	539.7	5.5	B2/1000		
BM	(30°-60°)	1034.5	10.5	B2/2500		
BH	(60°-80°)	583.8	5.9	B2/1000		G2/1000
BVH	(80°-90°)	68.2	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





REPORT NUMBER: P214748

CATALOG NUMBER: ARCH-AF24-90-D-U-T3-7050

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1098.2	1098.2	1098.2	1098.2	1098.2	1098.2	1098.2	1098.2	1098.2	1098.2	1098.2
2.5°	1055.1	1051.5	1051.5	1056.9	1058.7	1064.1	1064.1	1065.9	1071.3	1080.2	1091.0
5°	1022.7	1020.9	1022.7	1029.9	1033.5	1044.3	1047.9	1049.7	1060.5	1074.8	1091.0
7.5°	990.4	988.6	992.2	1002.9	1013.7	1029.9	1038.9	1040.7	1056.9	1076.6	1098.2
10°	979.6	977.8	983.2	992.2	1002.9	1020.9	1035.3	1037.1	1060.5	1083.8	1114.4
12.5°	994.0	992.2	997.6	1006.5	1017.3	1029.9	1046.1	1047.9	1078.4	1109.0	1141.3
15°	1029.9	1029.9	1031.7	1037.1	1047.9	1058.7	1073.0	1074.8	1107.2	1143.1	1175.5
17.5°	1085.6	1082.0	1082.0	1080.2	1087.4	1092.8	1110.8	1112.6	1146.7	1179.1	1211.4
20°	1153.9	1152.1	1144.9	1136.0	1134.2	1137.8	1155.7	1157.5	1191.7	1218.6	1249.2
22.5°	1236.6	1238.4	1222.2	1202.5	1193.5	1198.9	1215.0	1216.8	1242.0	1265.4	1292.3
25°	1346.3	1340.9	1317.5	1288.7	1270.8	1270.8	1286.9	1286.9	1310.3	1324.7	1342.7
27.5°	1450.5	1439.7	1418.1	1376.8	1348.1	1353.4	1369.6	1369.6	1391.2	1396.6	1405.6
30°	1563.7	1553.0	1526.0	1473.9	1436.1	1432.5	1452.3	1450.5	1479.3	1477.5	1470.3
32.5°	1702.1	1696.7	1651.8	1585.3	1535.0	1522.4	1540.4	1542.2	1560.1	1554.8	1531.4
35°	1896.3	1894.5	1853.1	1736.3	1669.8	1646.4	1657.2	1657.2	1669.8	1655.4	1615.9
37.5°	2140.7	2144.3	2108.4	1935.8	1842.3	1802.8	1804.6	1802.8	1806.4	1790.2	1748.9
40°	2385.2	2394.1	2392.3	2183.8	2065.2	1996.9	1971.7	1968.2	1977.1	1970.0	1930.4
42.5°	2706.9	2728.5	2678.1	2489.4	2356.4	2241.4	2173.1	2164.1	2183.8	2192.8	2155.1
45°	3041.2	3034.0	2954.9	2818.3	2697.9	2550.5	2421.1	2406.7	2421.1	2448.1	2408.5
47.5°	3215.6	3210.2	3190.4	3122.1	3104.1	2935.2	2739.2	2726.7	2699.7	2737.4	2690.7
50°	3503.1	3508.5	3427.6	3420.5	3495.9	3402.5	3098.7	3070.0	3021.4	3052.0	3012.4
52.5°	3711.6	3688.3	3637.9	3700.8	3936.3	3886.0	3436.6	3424.0	3379.1	3371.9	3354.0
55°	3796.1	3796.1	3805.1	3950.7	4286.8	4220.3	3803.3	3815.9	3754.8	3704.4	3727.8
57.5°	3821.3	3832.1	3909.3	4150.2	4698.4	4480.9	4207.7	4225.7	4137.6	4037.0	4110.7
60°	3697.3	3729.6	3914.7	4263.4	4930.3	4757.7	4633.7	4639.1	4511.5	4364.1	4493.5
62.5°	3379.1	3418.7	3749.4	4310.2	4892.5	5041.7	5036.3	5048.9	4874.6	4691.2	4853.0
65°	2989.1	3028.6	3380.9	4179.0	4863.8	5244.8	5404.8	5438.9	5214.3	4968.0	5077.7
67.5°	2415.7	2467.8	2802.1	3736.8	4723.6	5412.0	5749.9	5785.8	5476.7	5111.8	5057.9
70°	1750.7	1775.8	2056.2	2839.9	4152.0	5320.3	6023.1	6021.3	5563.0	5101.0	4788.3
72.5°	843.0	862.8	1105.4	1763.3	2969.3	4515.1	5825.4	5859.5	5444.3	4944.7	4171.8
75°	346.9	366.7	447.6	744.1	1558.3	2983.7	4937.5	5018.3	4944.7	4437.8	3264.1
77.5°	215.7	222.9	262.4	384.6	711.8	1393.0	3456.4	3566.0	3918.3	3555.3	2155.1
80°	161.8	167.2	195.9	269.6	449.4	514.1	1716.5	1854.9	2374.4	2040.1	976.0
82.5°	134.8	136.6	156.4	195.9	305.6	294.8	550.0	612.9	1107.2	778.3	336.1
85°	125.8	129.4	140.2	140.2	194.1	185.1	228.3	239.1	321.7	266.0	116.8
87.5°	64.7	61.1	124.0	109.6	100.7	89.9	97.1	104.2	120.4	127.6	52.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P214748

CATALOG NUMBER: ARCH-AF24-90-D-U-T3-7050

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1098.2	1098.2	1098.2	1098.2	1098.2	1098.2	1098.2	1098.2	1098.2	1098.2	1098.2
2.5°	1094.6	1100.0	1109.0	1118.0	1128.8	1141.3	1148.5	1157.5	1164.7	1161.1	1159.3
5°	1100.0	1109.0	1128.8	1146.7	1168.3	1193.5	1209.7	1227.6	1242.0	1245.6	1240.2
7.5°	1109.0	1125.2	1152.1	1184.5	1213.2	1245.6	1270.8	1295.9	1313.9	1317.5	1317.5
10°	1130.6	1148.5	1184.5	1227.6	1261.8	1295.9	1324.7	1344.5	1360.6	1367.8	1367.8
12.5°	1161.1	1182.7	1225.8	1278.0	1315.7	1348.1	1364.2	1373.2	1380.4	1387.6	1389.4
15°	1197.1	1220.4	1272.6	1328.3	1367.8	1384.0	1384.0	1382.2	1382.2	1385.8	1389.4
17.5°	1233.0	1258.2	1312.1	1371.4	1396.6	1387.6	1375.0	1369.6	1366.0	1364.2	1369.6
20°	1270.8	1295.9	1349.8	1405.6	1398.4	1360.6	1342.7	1330.1	1319.3	1313.9	1321.1
22.5°	1312.1	1335.5	1391.2	1428.9	1375.0	1317.5	1283.3	1263.6	1245.6	1234.8	1242.0
25°	1360.6	1384.0	1437.9	1436.1	1333.7	1252.8	1198.9	1166.5	1146.7	1136.0	1136.0
27.5°	1418.1	1437.9	1490.0	1418.1	1276.2	1166.5	1087.4	1056.9	1051.5	1042.5	1042.5
30°	1477.5	1493.6	1538.6	1376.8	1197.1	1053.3	967.0	952.6	954.4	945.4	947.2
32.5°	1538.6	1554.8	1567.3	1315.7	1094.6	925.7	868.1	857.4	855.6	848.4	841.2
35°	1624.9	1648.2	1570.9	1233.0	970.6	819.6	778.3	767.5	756.7	731.5	731.5
37.5°	1756.1	1781.2	1561.9	1130.6	843.0	736.9	699.2	684.8	666.8	641.7	632.7
40°	1935.8	1935.8	1542.2	1015.5	740.5	670.4	634.5	616.5	596.7	571.6	566.2
42.5°	2147.9	2097.6	1511.6	898.7	665.0	625.5	593.1	573.4	550.0	521.2	517.7
45°	2395.9	2259.3	1468.5	794.5	609.3	598.5	578.8	544.6	505.1	474.5	469.1
47.5°	2636.8	2404.9	1427.1	720.8	562.6	587.8	571.6	514.1	460.1	417.0	411.6
50°	2901.0	2534.3	1378.6	659.6	526.6	580.6	562.6	469.1	409.8	379.3	375.7
52.5°	3165.2	2665.5	1326.5	594.9	496.1	566.2	541.0	436.8	408.0	366.7	361.3
55°	3443.8	2818.3	1265.4	523.0	460.1	537.4	512.3	435.0	420.6	366.7	354.1
57.5°	3715.2	2987.3	1166.5	452.9	420.6	494.3	501.5	424.2	393.6	363.1	348.7
60°	4015.4	3167.0	1002.9	393.6	386.4	458.3	487.1	400.8	363.1	352.3	345.1
62.5°	4256.2	3328.8	783.7	352.3	357.7	429.6	469.1	386.4	350.5	341.5	339.7
65°	4360.5	3332.4	562.6	316.3	328.9	402.6	451.1	373.9	339.7	336.1	334.3
67.5°	4250.9	3149.0	395.4	282.2	298.4	377.5	427.8	361.3	328.9	330.7	327.1
70°	3896.8	2762.6	289.4	249.8	269.6	350.5	402.6	345.1	316.3	319.9	314.5
72.5°	3260.5	2153.3	231.9	222.9	246.2	321.7	377.5	327.1	296.6	298.4	287.6
75°	2408.5	1427.1	194.1	199.5	219.3	294.8	345.1	303.8	275.0	267.8	260.6
77.5°	1432.5	733.3	160.0	174.3	195.9	262.4	309.2	275.0	251.6	239.1	233.7
80°	591.3	296.6	131.2	147.4	170.8	233.7	273.2	240.9	224.7	212.1	204.9
82.5°	235.5	145.6	104.2	120.4	143.8	203.1	239.1	212.1	195.9	186.9	167.2
85°	89.9	71.9	70.1	84.5	107.8	156.4	197.7	177.9	165.4	142.0	136.6
87.5°	35.9	32.4	32.4	41.3	61.1	98.9	142.0	124.0	129.4	102.5	104.2
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)