

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: P842415

Luminaire Tested: **ARCH4-40-750-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842415
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-40-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 355mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8044 lumens
Efficiency: N/A
Efficacy: 183.7 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

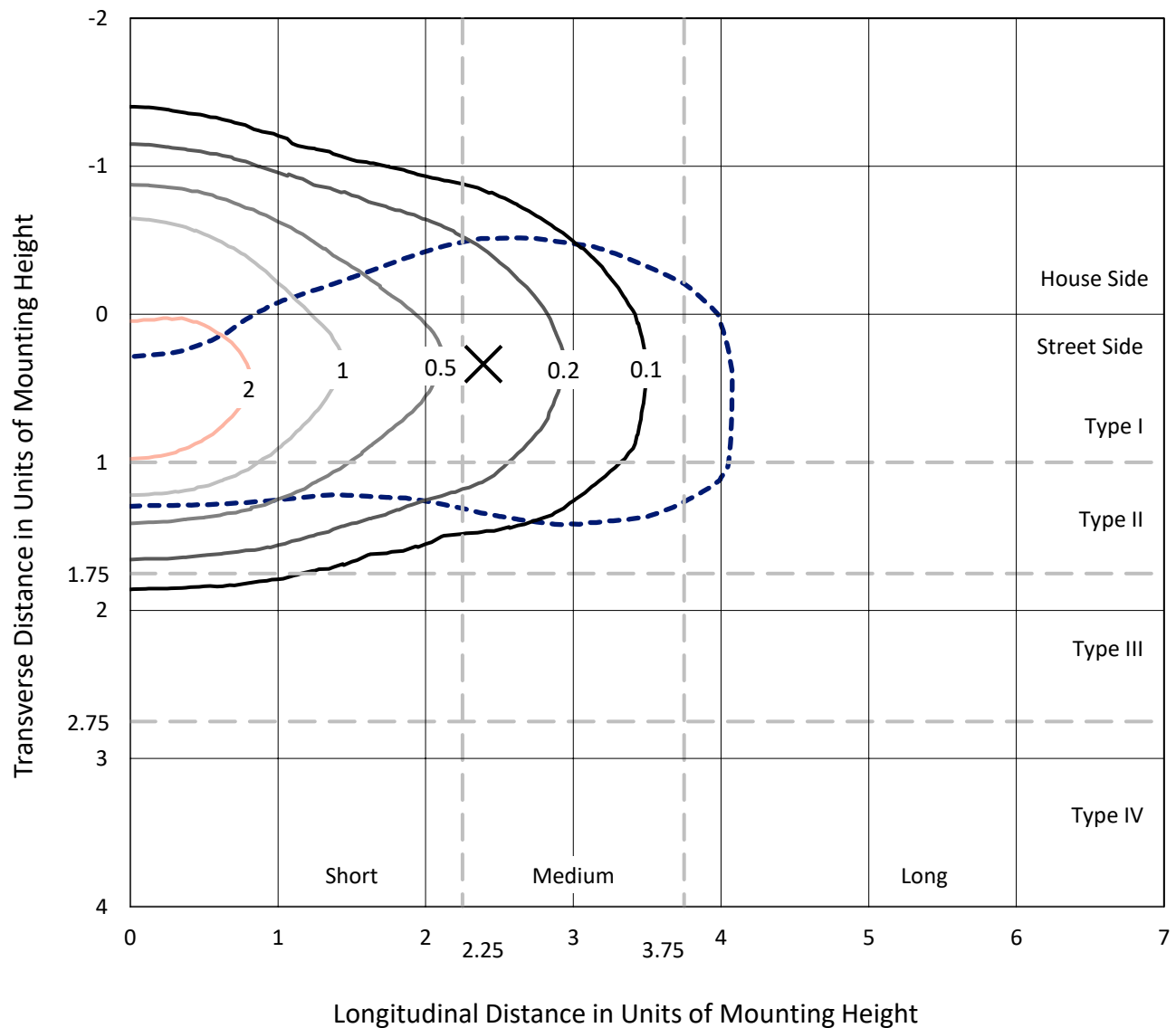
Input Watts (W): 43.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

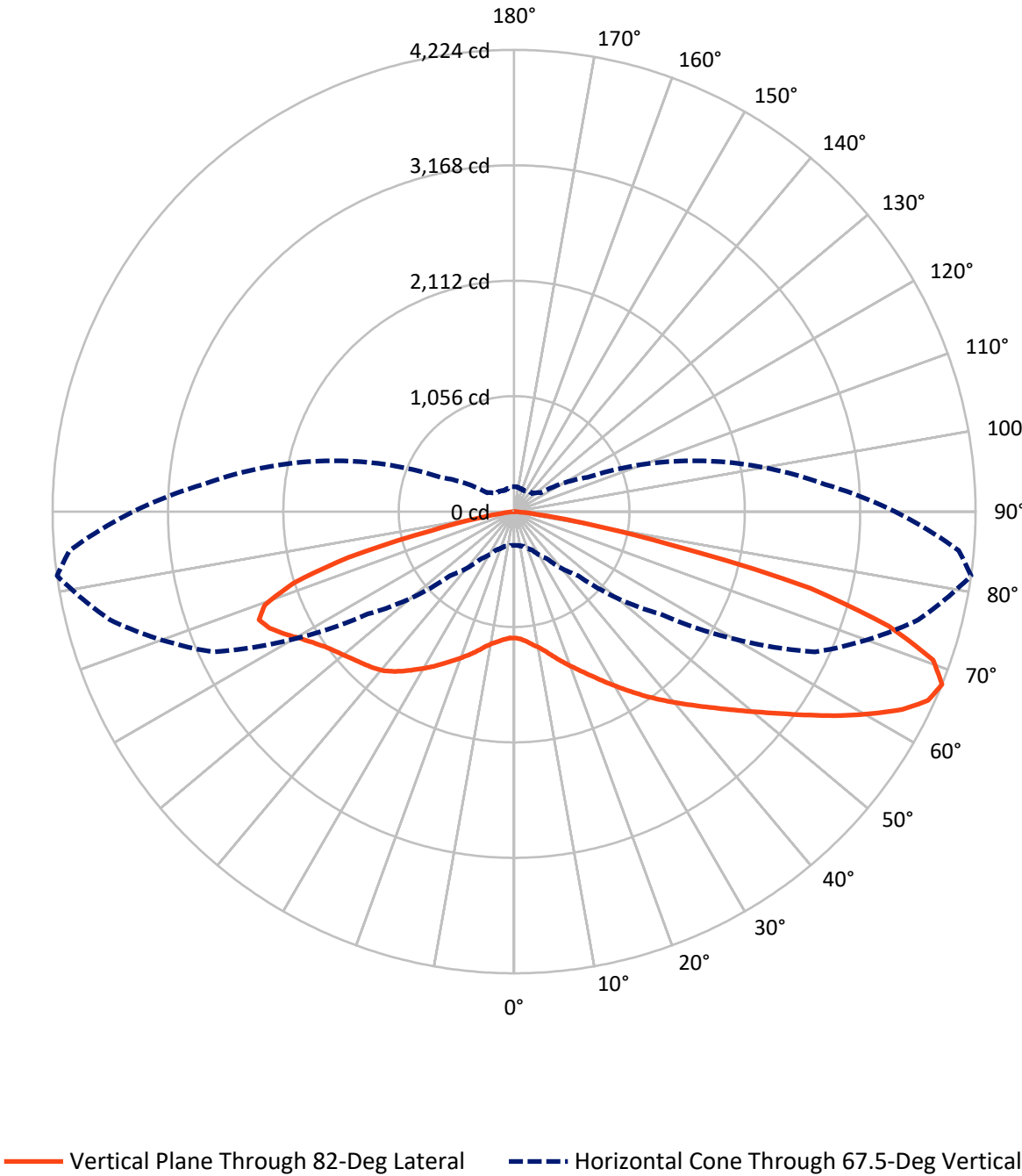
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2449.7	0.0	2449.7
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	5594.3	0.0	5594.3
	% Fixture	69.5	0.0	69.5
Total	Lumens	8044.0	0.0	8044.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.5	1.5
10°-20°	430.4	5.4
20°-30°	865.1	10.8
30°-40°	1358.9	16.9
40°-50°	1655.5	20.6
50°-60°	1564.2	19.4
60°-70°	1291.7	16.1
70°-80°	703.4	8.7
80°-90°	55.3	0.7
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°	8044.0	100.0
0°-180°	8044.0	100.0

Coefficient of Utilization



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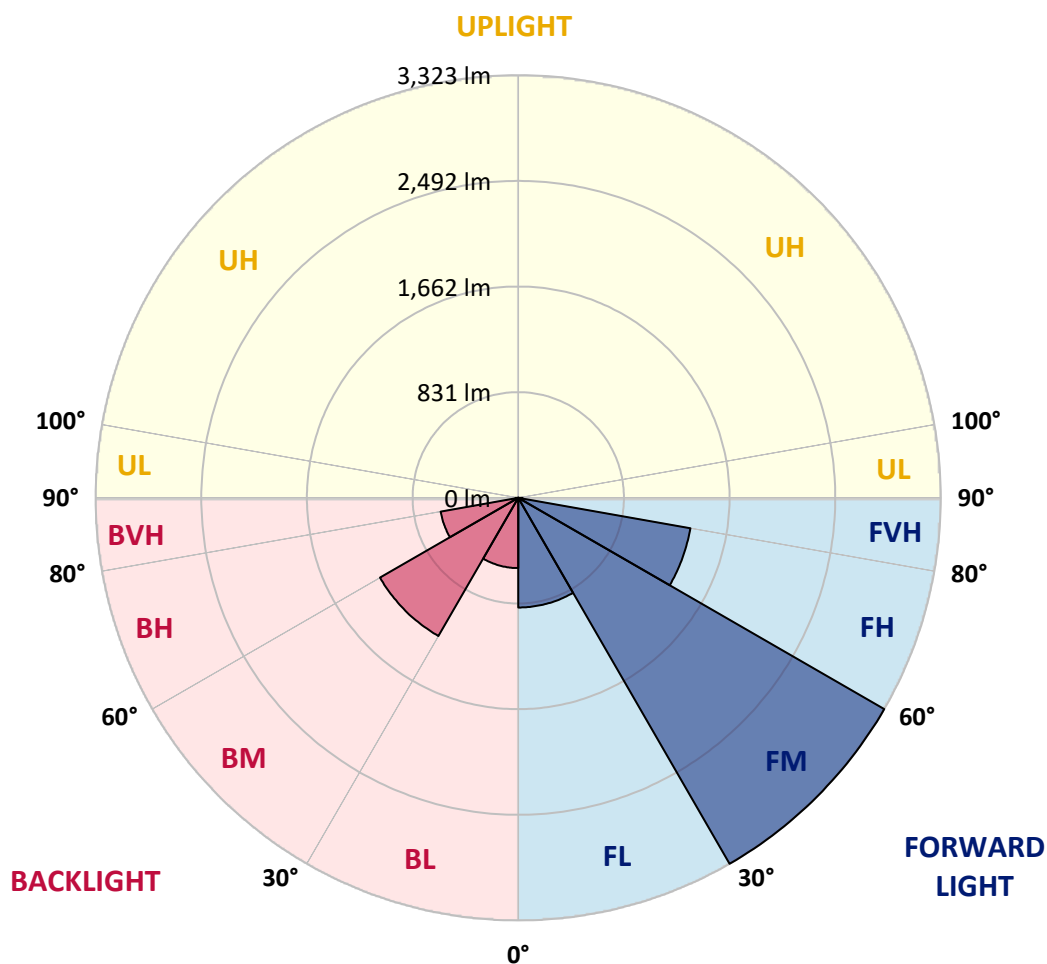
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	862.6	10.7			
FM	(30°-60°)	3323.3	41.3			
FH	(60°-80°)	1375.0	17.1			G1/1800
FVH	(80°-90°)	33.3	0.4			G1/100
BL	(0°-30°)	552.4	6.9	B2/1000		
BM	(30°-60°)	1255.3	15.6	B2/2500		
BH	(60°-80°)	620.0	7.7	B2/1000		G2/1000
BVH	(80°-90°)	22.0	0.3			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 II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1156.3	1156.3	1156.3	1156.3	1156.3	1156.3	1156.3	1156.3	1156.3	1156.3	1156.3
2.5°	1208.9	1208.9	1218.2	1218.2	1210.0	1197.2	1193.7	1179.7	1166.8	1166.8	1168.0
5°	1324.5	1323.3	1330.4	1321.0	1301.2	1275.5	1257.9	1227.6	1201.9	1193.7	1192.5
7.5°	1465.8	1464.7	1468.2	1453.0	1415.6	1373.6	1338.5	1289.5	1247.4	1229.9	1225.2
10°	1623.5	1622.4	1618.8	1593.2	1542.9	1477.5	1425.0	1357.2	1294.1	1266.1	1260.3
12.5°	1804.6	1802.2	1794.0	1756.7	1687.8	1603.7	1527.7	1440.1	1356.0	1317.5	1304.7
15°	2006.6	2003.1	1987.9	1942.4	1850.1	1743.8	1645.7	1533.6	1430.8	1380.6	1363.1
17.5°	2219.2	2219.2	2195.8	2128.1	2025.3	1893.3	1771.9	1629.4	1509.1	1447.2	1426.1
20°	2435.3	2434.1	2404.9	2323.2	2201.7	2049.8	1895.7	1739.2	1589.6	1514.9	1489.2
22.5°	2663.0	2660.7	2624.5	2531.1	2386.2	2214.5	2034.7	1847.8	1678.4	1588.5	1555.8
25°	2924.7	2921.2	2876.8	2762.3	2590.6	2396.7	2191.2	1975.1	1780.0	1670.2	1631.7
27.5°	3202.7	3198.0	3145.4	3012.3	2824.2	2590.6	2364.0	2122.3	1892.2	1761.3	1718.1
30°	3450.3	3446.8	3389.5	3252.9	3036.8	2783.3	2528.7	2269.4	2010.1	1858.3	1804.6
32.5°	3637.2	3637.2	3585.8	3451.4	3227.2	2967.9	2694.6	2408.4	2132.8	1962.2	1899.2
35°	3750.5	3754.0	3709.6	3602.1	3390.7	3141.9	2866.3	2571.9	2263.6	2073.2	2005.5
37.5°	3766.8	3778.5	3752.8	3680.4	3504.0	3286.8	3034.5	2729.6	2399.1	2185.3	2109.4
40°	3690.9	3699.1	3700.2	3672.2	3550.7	3390.7	3182.8	2896.6	2542.7	2303.3	2215.7
42.5°	3539.0	3544.9	3555.4	3563.6	3516.9	3436.3	3296.1	3052.0	2695.7	2423.6	2320.8
45°	3342.8	3341.7	3359.2	3394.2	3391.9	3410.6	3359.2	3193.3	2854.6	2560.3	2437.6
47.5°	3049.7	3043.8	3105.7	3185.1	3224.9	3312.5	3360.3	3304.3	3027.5	2710.9	2570.8
50°	2590.6	2584.8	2720.3	2907.2	3024.0	3157.1	3296.1	3370.9	3208.5	2880.3	2715.6
52.5°	2032.3	2026.5	2198.2	2525.2	2779.8	2973.7	3166.5	3386.0	3380.2	3069.5	2879.1
55°	1511.4	1506.7	1673.7	2027.6	2440.0	2761.2	3007.6	3346.3	3541.4	3286.8	3077.7
57.5°	1065.2	1062.9	1207.7	1500.9	2003.1	2501.9	2854.6	3269.2	3689.7	3522.7	3301.9
60°	747.5	744.0	849.1	1075.7	1514.9	2110.6	2702.8	3166.5	3800.7	3755.1	3540.2
62.5°	503.4	501.1	575.8	765.0	1075.7	1624.7	2472.7	3097.5	3863.7	3988.7	3780.8
65°	381.9	380.8	414.6	518.6	761.5	1166.8	2107.1	3089.4	3871.9	4163.9	3985.2
67.5°	308.4	309.5	328.2	387.8	526.8	829.3	1634.0	3038.0	3828.7	4223.5	4084.5
70°	252.3	252.3	260.5	300.2	388.9	559.5	1141.1	2804.4	3708.4	4068.1	3966.5
72.5°	192.7	193.9	219.6	242.9	293.2	392.4	731.2	2320.8	3424.6	3586.9	3509.8
75°	153.0	151.8	167.0	199.7	227.8	280.3	448.5	1664.4	2914.2	2803.2	2754.1
77.5°	109.8	108.6	120.3	148.3	172.9	198.6	267.5	839.8	1585.0	1456.5	1420.3
80°	74.8	72.4	82.9	102.8	114.5	116.8	130.8	322.4	691.5	651.7	643.6
82.5°	38.5	38.5	44.4	58.4	59.6	60.7	58.4	104.0	228.9	213.7	204.4
85°	15.2	15.2	16.4	19.9	19.9	21.0	21.0	26.9	24.5	23.4	22.2
87.5°	1.2	1.2	2.3	2.3	3.5	3.5	3.5	4.7	5.8	5.8	5.8
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°	1156.3	1156.3	1156.3	1156.3	1156.3	1156.3	1156.3	1156.3	1156.3	1156.3	1156.3
2.5°	1165.7	1161.0	1145.8	1142.3	1140.0	1136.5	1137.6	1129.5	1126.0	1127.1	1122.4
5°	1186.7	1178.5	1159.8	1151.6	1149.3	1145.8	1149.3	1143.5	1137.6	1140.0	1137.6
7.5°	1215.9	1204.2	1180.8	1172.7	1171.5	1168.0	1172.7	1168.0	1163.3	1165.7	1161.0
10°	1246.3	1231.1	1205.4	1197.2	1197.2	1196.0	1200.7	1193.7	1189.0	1190.2	1187.9
12.5°	1290.6	1270.8	1242.8	1235.7	1232.2	1235.7	1236.9	1227.6	1219.4	1220.6	1217.1
15°	1344.4	1322.2	1291.8	1281.3	1279.0	1277.8	1273.1	1261.4	1250.9	1249.8	1246.3
17.5°	1402.8	1374.7	1338.5	1328.0	1317.5	1314.0	1302.3	1287.1	1270.8	1270.8	1266.1
20°	1458.8	1427.3	1384.1	1368.9	1353.7	1339.7	1319.8	1295.3	1274.3	1270.8	1266.1
22.5°	1519.6	1482.2	1432.0	1409.8	1382.9	1354.9	1321.0	1288.3	1261.4	1255.6	1252.1
25°	1587.3	1540.6	1481.0	1448.3	1405.1	1361.9	1311.7	1269.6	1238.1	1228.7	1226.4
27.5°	1662.1	1606.0	1533.6	1485.7	1422.6	1354.9	1290.6	1240.4	1201.9	1190.2	1186.7
30°	1738.0	1671.4	1581.5	1511.4	1422.6	1332.7	1252.1	1193.7	1149.3	1133.0	1130.6
32.5°	1813.9	1739.2	1624.7	1525.4	1408.6	1295.3	1201.9	1133.0	1082.7	1062.9	1067.6
35°	1905.0	1813.9	1664.4	1531.2	1385.2	1249.8	1144.6	1064.0	1012.7	995.1	998.6
37.5°	1999.6	1888.7	1695.9	1526.6	1352.5	1198.4	1080.4	1002.1	937.9	907.5	911.0
40°	2081.4	1956.4	1718.1	1510.2	1310.5	1140.0	1017.3	914.5	825.8	796.6	793.1
42.5°	2158.5	2006.6	1729.8	1485.7	1262.6	1072.2	927.4	795.4	706.6	670.4	671.6
45°	2239.1	2055.7	1725.1	1453.0	1203.0	992.8	811.8	678.6	600.4	567.6	568.8
47.5°	2331.3	2108.2	1720.5	1418.0	1130.6	890.0	700.8	575.8	508.1	484.7	482.4
50°	2429.4	2166.6	1714.6	1374.7	1050.0	775.6	591.0	480.0	422.8	407.6	404.1
52.5°	2540.4	2229.7	1711.1	1323.3	953.1	654.1	492.9	396.0	357.4	346.9	345.7
55°	2673.6	2303.3	1715.8	1261.4	836.3	539.6	410.0	341.1	315.4	309.5	308.4
57.5°	2835.9	2397.9	1729.8	1189.0	713.6	440.3	349.2	307.2	290.8	286.2	286.2
60°	3012.3	2505.4	1755.5	1107.3	591.0	363.2	309.5	280.3	273.3	279.2	279.2
62.5°	3202.7	2631.5	1801.1	1008.0	476.5	307.2	278.0	258.1	253.5	265.1	266.3
65°	3379.0	2754.1	1830.3	888.8	378.4	266.3	253.5	235.9	238.3	250.0	248.8
67.5°	3487.7	2855.8	1789.4	739.3	300.2	235.9	227.8	212.6	218.4	227.8	228.9
70°	3421.1	2798.5	1587.3	558.3	234.8	205.6	199.7	190.4	195.1	206.7	211.4
72.5°	3095.2	2506.5	1234.6	377.3	189.2	172.9	175.2	170.5	176.4	186.9	197.4
75°	2512.4	1894.5	828.1	241.8	149.5	147.2	150.7	147.2	149.5	160.0	165.9
77.5°	1311.7	923.9	412.3	150.7	111.0	114.5	120.3	121.5	128.5	130.8	133.2
80°	612.0	415.8	171.7	84.1	73.6	80.6	92.3	93.4	95.8	99.3	100.4
82.5°	199.7	125.0	79.4	45.6	42.0	45.6	59.6	71.2	72.4	79.4	79.4
85°	21.0	12.8	17.5	18.7	16.4	19.9	26.9	25.7	11.7	7.0	7.0
87.5°	5.8	4.7	5.8	5.8	4.7	4.7	3.5	1.2	0.0	0.0	0.0
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)