

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: P799029

Luminaire Tested: **ARCH1-50-740-U-T2U**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P799029
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-50-740-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1470mA LIGHTSQUARE WITH 10 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6827 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 53
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



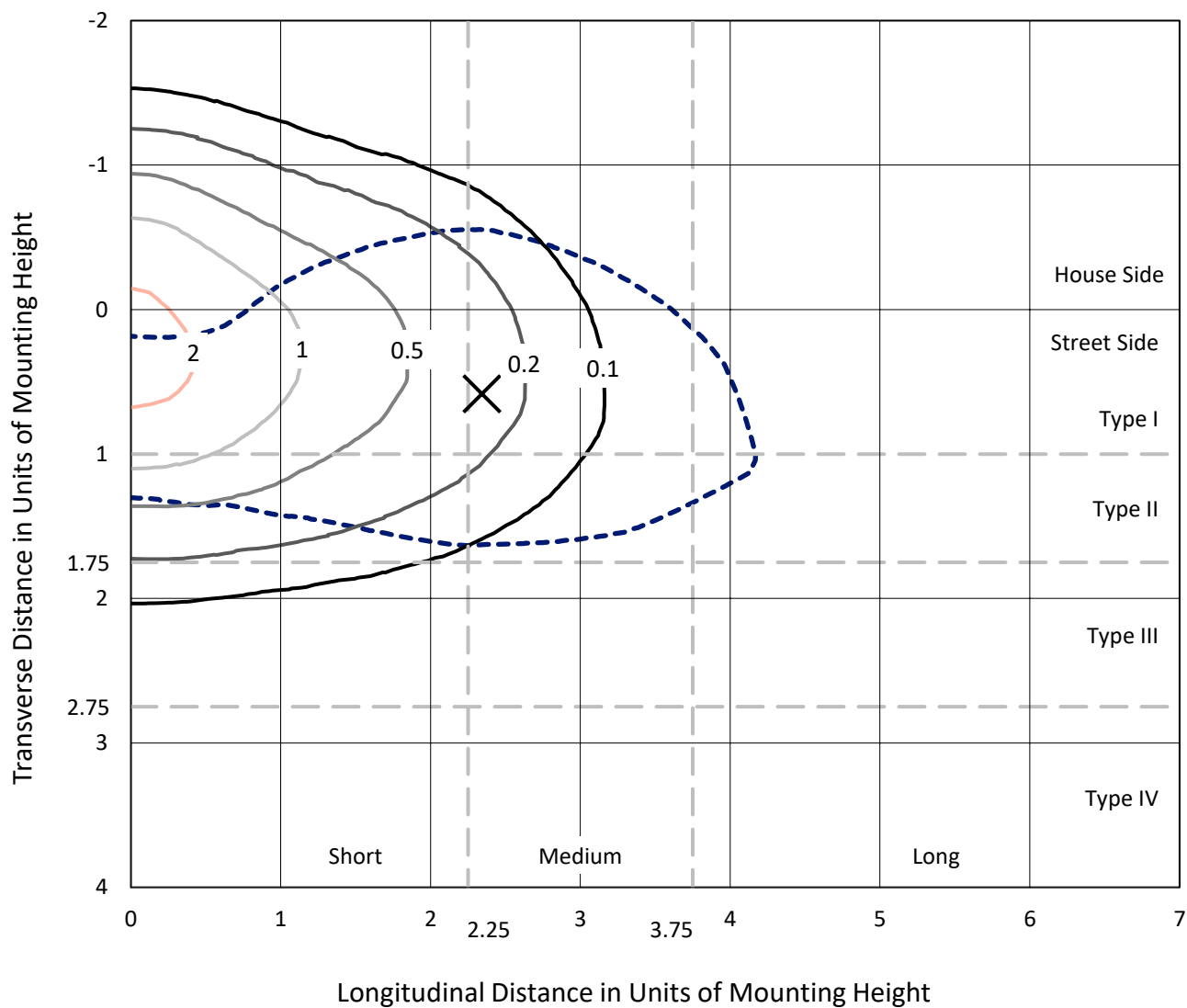
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Iso-Footcandle Lines of Horizontal Illumination

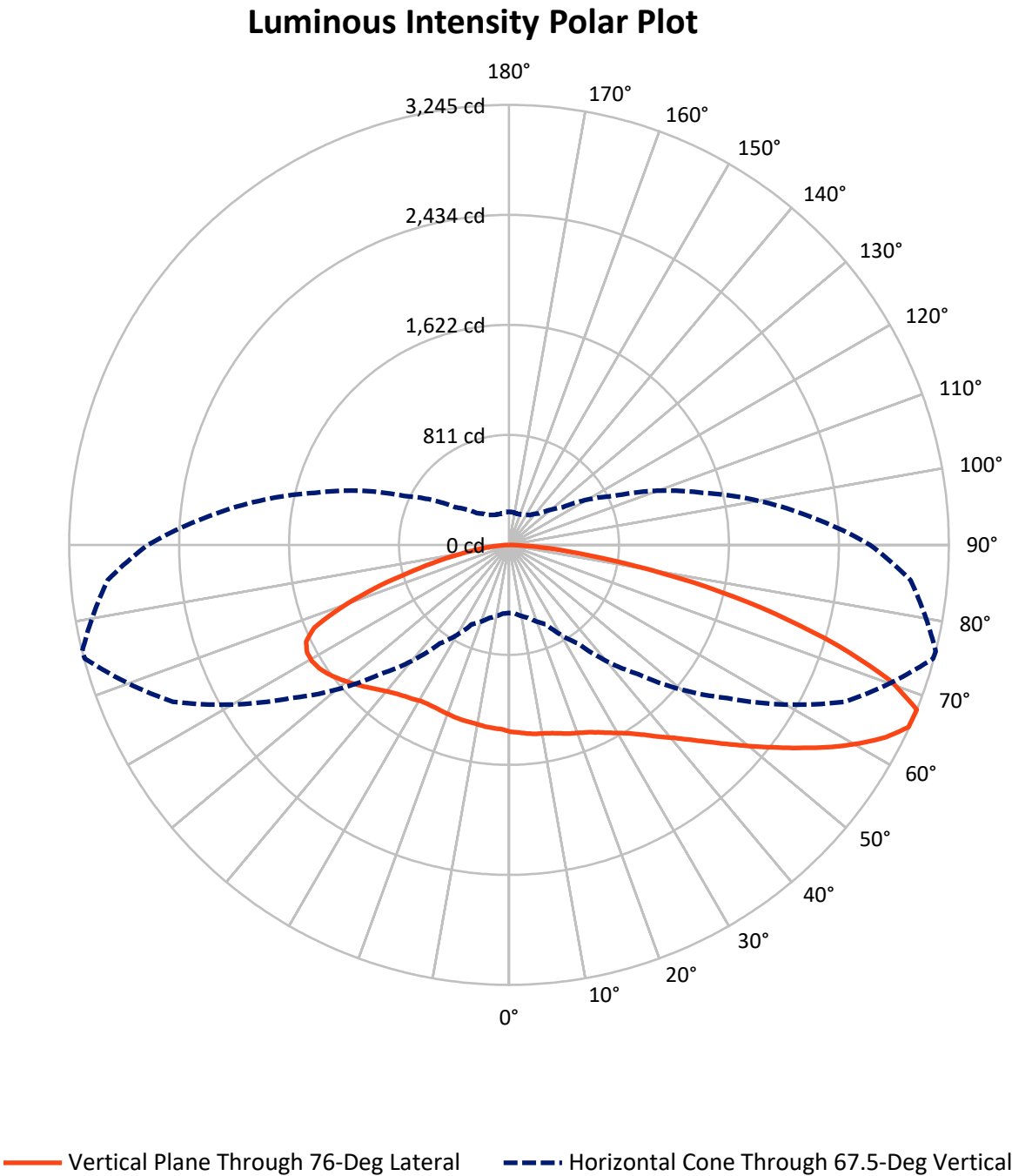
✕ Max cd

--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
Type II - Medium - N/A

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2306.9	0.0	2306.9
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	4520.1	0.0	4520.1
	% Fixture	66.2	0.0	66.2
Total	Lumens	6827.0	0.0	6827.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.0	1.9
10°-20°	406.5	6.0
20°-30°	690.7	10.1
30°-40°	982.8	14.4
40°-50°	1241.2	18.2
50°-60°	1343.9	19.7
60°-70°	1250.0	18.3
70°-80°	671.3	9.8
80°-90°	107.6	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°	6827.0	100.0
0°-180°	6827.0	100.0

Coefficient of Utilization



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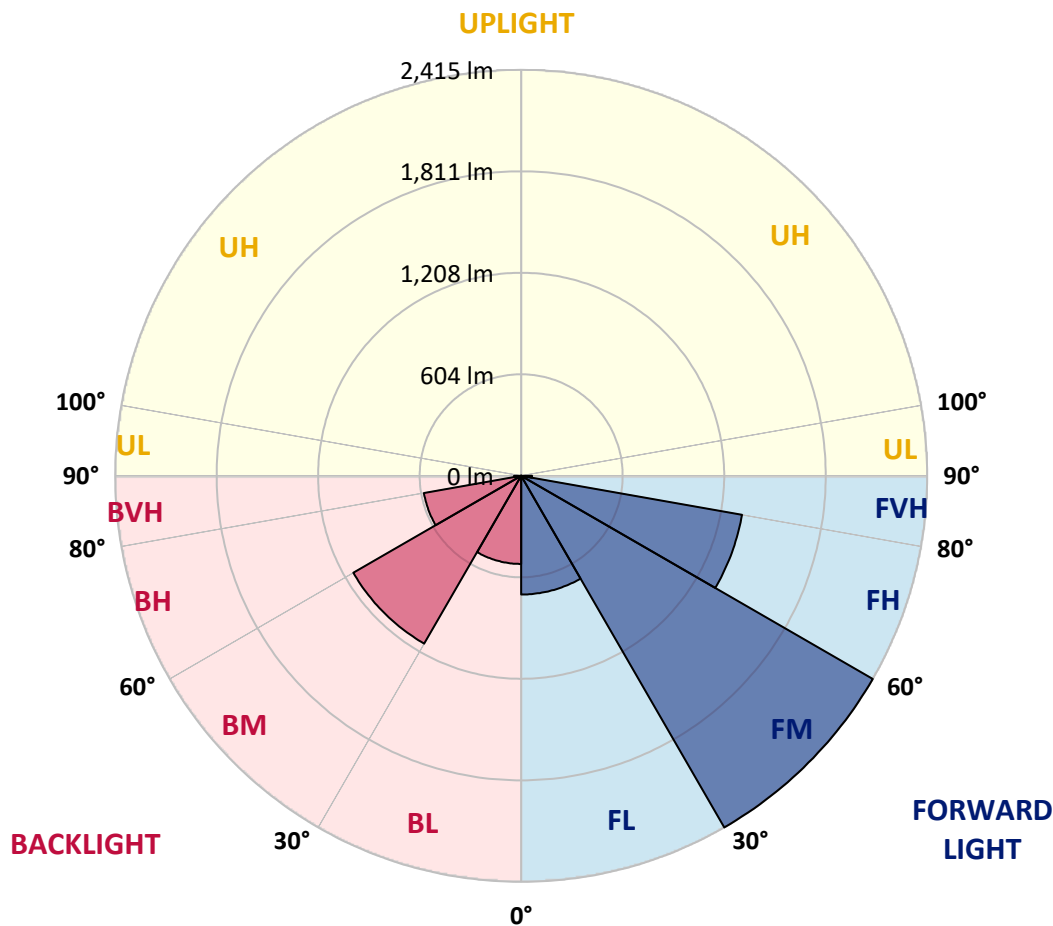
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	706.0	10.3			
FM	(30°-60°)	2415.1	35.4			
FH	(60°-80°)	1333.9	19.5			G1/1800
FVH	(80°-90°)	65.1	1.0			G1/100
BL	(0°-30°)	524.2	7.7	B2/1000		
BM	(30°-60°)	1152.8	16.9	B2/2500		
BH	(60°-80°)	587.4	8.6	B2/1000		G2/1000
BVH	(80°-90°)	42.5	0.6			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°	76°	85°
0°	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0
2.5°	1420.9	1418.3	1408.2	1409.5	1409.5	1408.2	1393.0	1386.6	1386.6	1385.4	1371.4
5°	1471.6	1467.8	1456.4	1453.8	1448.8	1442.4	1418.3	1404.4	1398.1	1396.8	1377.8
7.5°	1531.1	1526.1	1512.1	1504.5	1491.8	1475.4	1444.9	1423.4	1408.2	1406.9	1380.3
10°	1590.7	1585.6	1569.2	1555.2	1537.5	1510.9	1471.6	1439.9	1415.8	1413.3	1381.6
12.5°	1661.7	1656.6	1636.3	1618.6	1592.0	1556.5	1504.5	1461.4	1428.5	1424.7	1385.4
15°	1736.5	1728.9	1708.6	1688.3	1655.4	1609.7	1547.6	1490.6	1448.8	1442.4	1396.8
17.5°	1798.6	1788.4	1772.0	1751.7	1714.9	1661.7	1590.7	1519.7	1467.8	1462.7	1408.2
20°	1851.8	1844.2	1826.5	1807.5	1768.2	1709.9	1631.3	1548.9	1485.5	1479.2	1417.1
22.5°	1902.5	1892.4	1882.2	1868.3	1825.2	1760.6	1678.2	1584.4	1508.3	1500.7	1428.5
25°	1960.8	1949.4	1945.6	1938.0	1887.3	1821.4	1735.2	1628.7	1540.0	1531.1	1448.8
27.5°	2033.1	2020.4	2012.8	2012.8	1951.9	1883.5	1796.0	1680.7	1576.8	1569.2	1474.1
30°	2109.1	2093.9	2082.5	2082.5	2014.1	1945.6	1855.6	1732.7	1618.6	1609.7	1507.1
32.5°	2176.3	2161.1	2148.4	2147.1	2076.2	2007.7	1917.7	1789.7	1669.3	1657.9	1547.6
35°	2228.3	2214.3	2202.9	2205.4	2138.3	2071.1	1987.4	1865.8	1732.7	1720.0	1600.9
37.5°	2260.0	2254.9	2248.5	2257.4	2195.3	2131.9	2059.7	1939.3	1804.9	1793.5	1666.8
40°	2276.4	2272.6	2298.0	2309.4	2243.5	2186.4	2131.9	2015.3	1883.5	1870.8	1742.8
42.5°	2300.5	2332.2	2342.3	2339.8	2279.0	2228.3	2197.8	2097.7	1976.0	1964.6	1834.1
45°	2214.3	2206.7	2262.5	2292.9	2281.5	2254.9	2260.0	2196.6	2083.8	2072.4	1939.3
47.5°	2099.0	2088.8	2120.5	2195.3	2239.7	2265.0	2315.7	2299.2	2208.0	2197.8	2062.2
50°	1855.6	1869.6	1987.4	2087.6	2175.0	2262.5	2362.6	2409.5	2344.9	2334.7	2194.0
52.5°	1585.6	1599.6	1722.5	1953.2	2096.4	2243.5	2396.8	2519.8	2493.2	2481.8	2334.7
55°	1389.2	1419.6	1559.0	1726.3	1984.9	2183.9	2417.1	2632.6	2652.9	2642.7	2488.1
57.5°	1194.0	1216.8	1322.0	1470.3	1832.8	2080.0	2415.9	2737.8	2820.2	2810.0	2644.0
60°	964.6	993.7	1077.4	1237.1	1630.0	1955.8	2380.4	2820.2	2981.2	2973.6	2794.8
62.5°	807.4	816.3	875.8	1014.0	1368.9	1798.6	2300.5	2864.5	3126.9	3121.9	2930.5
65°	650.2	651.5	706.0	821.3	1116.7	1603.4	2164.9	2848.1	3237.2	3239.7	3028.1
67.5°	501.9	508.3	557.7	645.2	887.2	1349.9	1971.0	2736.5	3238.5	3244.8	2972.3
70°	347.3	352.4	427.1	512.1	685.7	1076.1	1708.6	2441.2	2972.3	2977.4	2664.3
72.5°	244.6	247.2	327.0	409.4	536.2	811.2	1289.0	2019.1	2533.7	2537.5	2240.9
75°	182.5	185.1	230.7	310.5	410.7	561.5	880.9	1546.3	2024.2	2024.2	1769.4
77.5°	129.3	130.6	149.6	214.2	273.8	379.0	529.8	1012.7	1485.5	1488.0	1289.0
80°	87.5	88.7	97.6	144.5	171.1	205.3	287.7	531.1	936.7	940.5	818.8
82.5°	45.6	48.2	54.5	73.5	86.2	114.1	148.3	270.0	518.4	528.5	491.8
85°	17.7	17.7	20.3	24.1	31.7	44.4	68.4	102.7	234.5	242.1	216.7
87.5°	6.3	6.3	7.6	7.6	8.9	10.1	11.4	15.2	26.6	26.6	25.3
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°	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0	1379.0
2.5°	1366.4	1366.4	1360.0	1362.6	1361.3	1358.8	1356.2	1360.0	1356.2	1347.4	1346.1
5°	1368.9	1366.4	1356.2	1355.0	1351.2	1346.1	1339.7	1342.3	1335.9	1328.3	1327.1
7.5°	1370.2	1365.1	1351.2	1346.1	1338.5	1328.3	1318.2	1318.2	1309.3	1301.7	1300.5
10°	1367.6	1361.3	1342.3	1332.1	1318.2	1303.0	1289.0	1285.2	1275.1	1266.2	1266.2
12.5°	1368.9	1360.0	1335.9	1319.5	1300.5	1281.4	1263.7	1258.6	1249.8	1240.9	1239.6
15°	1376.5	1363.8	1333.4	1311.9	1284.0	1262.4	1243.4	1239.6	1232.0	1225.7	1225.7
17.5°	1384.1	1367.6	1329.6	1299.2	1265.0	1240.9	1223.1	1223.1	1218.1	1214.3	1214.3
20°	1387.9	1368.9	1322.0	1281.4	1242.1	1216.8	1200.3	1202.9	1201.6	1200.3	1200.3
22.5°	1396.8	1371.4	1315.7	1265.0	1218.1	1191.4	1176.2	1180.0	1178.8	1178.8	1180.0
25°	1410.7	1377.8	1310.6	1249.8	1195.3	1166.1	1149.6	1152.2	1152.2	1152.2	1152.2
27.5°	1429.7	1390.4	1309.3	1235.8	1172.4	1139.5	1119.2	1119.2	1114.1	1115.4	1116.7
30°	1458.9	1414.5	1311.9	1223.1	1148.4	1106.5	1082.4	1078.6	1077.4	1079.9	1081.2
32.5°	1494.4	1447.5	1327.1	1214.3	1123.0	1069.8	1039.3	1038.1	1034.3	1034.3	1034.3
35°	1538.7	1479.2	1341.0	1213.0	1097.7	1030.5	997.5	993.7	984.8	981.0	981.0
37.5°	1595.8	1528.6	1357.5	1204.1	1076.1	992.5	953.2	940.5	930.3	929.1	929.1
40°	1665.5	1584.4	1381.6	1194.0	1053.3	953.2	901.2	879.6	880.9	886.0	886.0
42.5°	1747.9	1652.8	1412.0	1188.9	1020.3	912.6	840.4	815.0	823.9	828.9	830.2
45°	1844.2	1733.9	1446.2	1182.6	989.9	867.0	775.7	744.0	747.8	749.1	750.4
47.5°	1955.8	1823.9	1481.7	1177.5	955.7	809.9	704.7	662.9	661.6	654.0	656.6
50°	2072.4	1919.0	1518.5	1168.6	913.9	742.8	629.9	580.5	570.4	559.0	560.2
52.5°	2196.6	2016.6	1552.7	1154.7	861.9	674.3	559.0	505.7	485.5	472.8	475.3
55°	2333.5	2116.7	1585.6	1133.1	807.4	605.9	495.6	441.1	415.7	405.6	406.9
57.5°	2458.9	2213.1	1609.7	1106.5	747.8	543.8	439.8	386.6	370.1	368.8	370.1
60°	2580.6	2294.2	1619.9	1069.8	687.0	486.7	387.9	347.3	335.9	342.2	343.5
62.5°	2683.3	2346.1	1614.8	1020.3	624.9	432.2	346.0	316.9	309.3	321.9	323.2
65°	2742.9	2362.6	1579.3	949.4	557.7	379.0	306.7	275.0	271.2	278.8	282.7
67.5°	2664.3	2260.0	1483.0	851.8	482.9	329.5	268.7	243.4	237.0	243.4	243.4
70°	2361.4	1958.3	1254.8	697.1	400.5	281.4	233.2	215.5	210.4	215.5	214.2
72.5°	1967.2	1628.7	988.6	543.8	315.6	237.0	202.8	186.3	181.3	176.2	173.6
75°	1526.1	1237.1	717.4	399.3	238.3	190.1	169.8	154.6	142.0	147.0	144.5
77.5°	1117.9	868.2	508.3	276.3	171.1	147.0	133.1	121.7	112.8	122.9	121.7
80°	719.9	561.5	339.7	185.1	117.9	102.7	97.6	91.3	100.1	130.6	133.1
82.5°	439.8	356.2	202.8	120.4	77.3	68.4	63.4	63.4	102.7	112.8	114.1
85°	196.5	188.9	110.3	62.1	43.1	39.3	35.5	45.6	41.8	30.4	31.7
87.5°	31.7	33.0	24.1	21.5	16.5	16.5	12.7	8.9	6.3	3.8	3.8
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)