

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: P798853

Luminaire Tested: **ARCH1-40-727-U-T2U**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798853
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: ARCH1-40-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1220mA LIGHTSQUARE WITH 10 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5393 lumens
Efficiency: N/A
Efficacy: 125.4 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

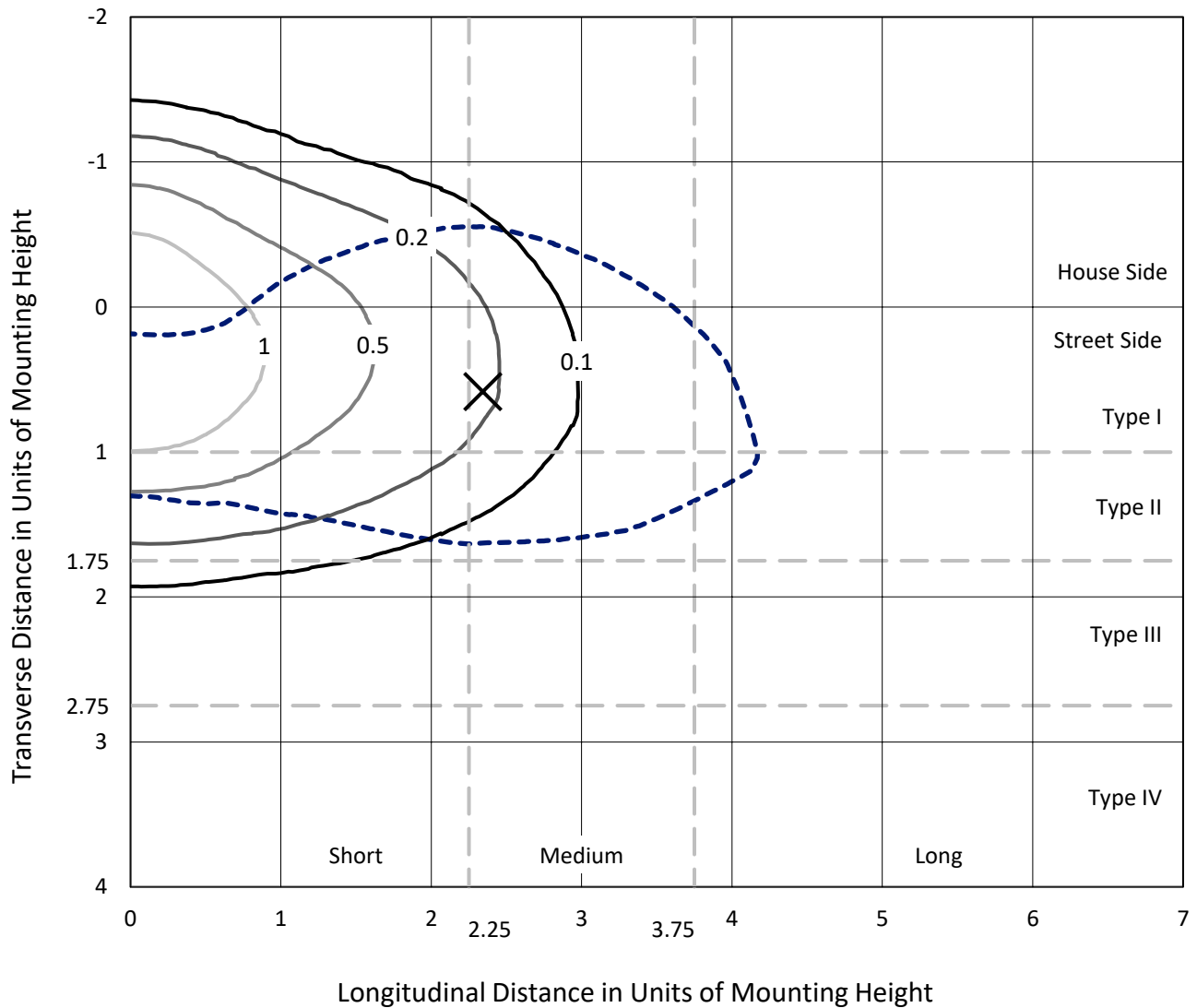
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

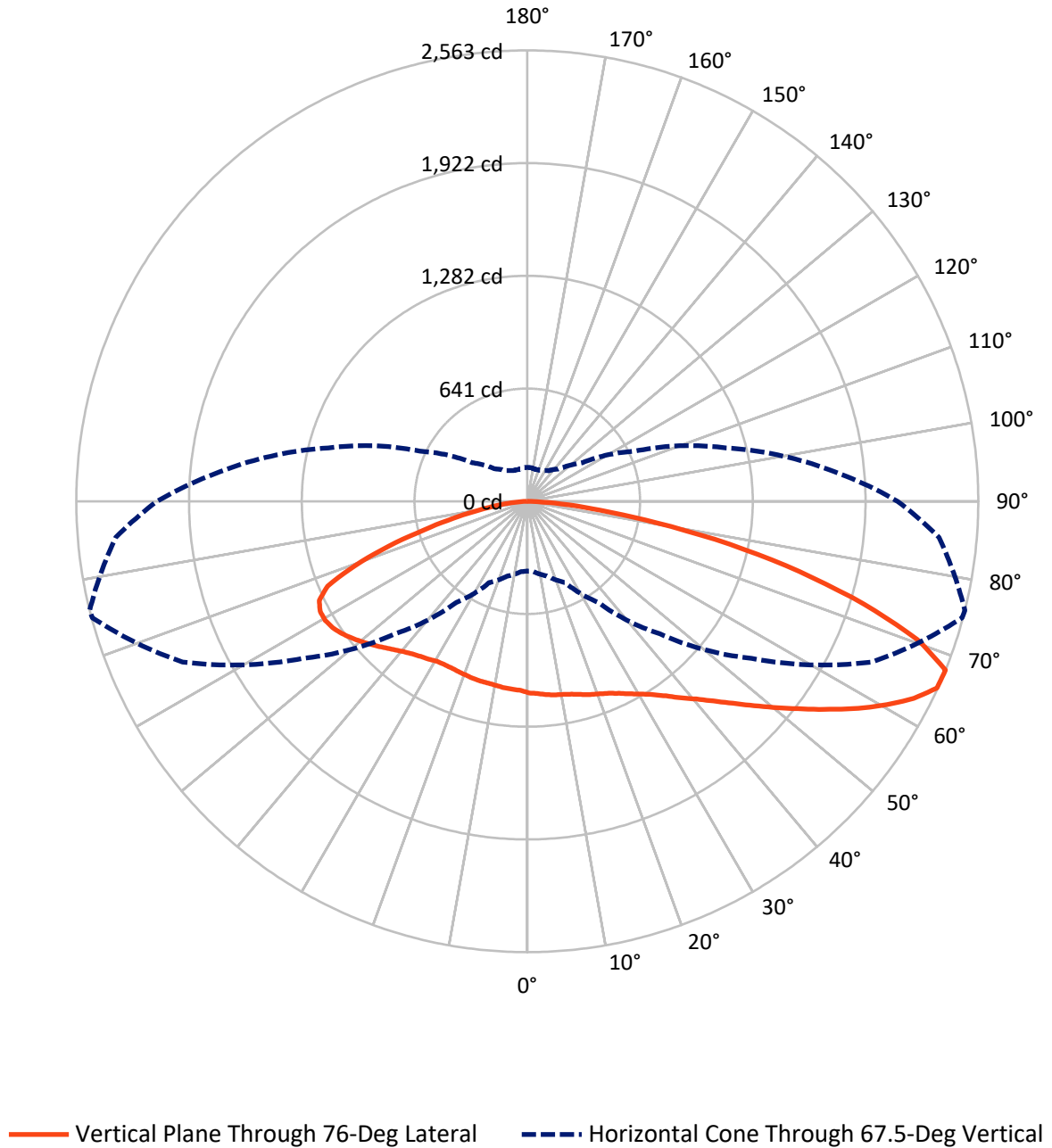
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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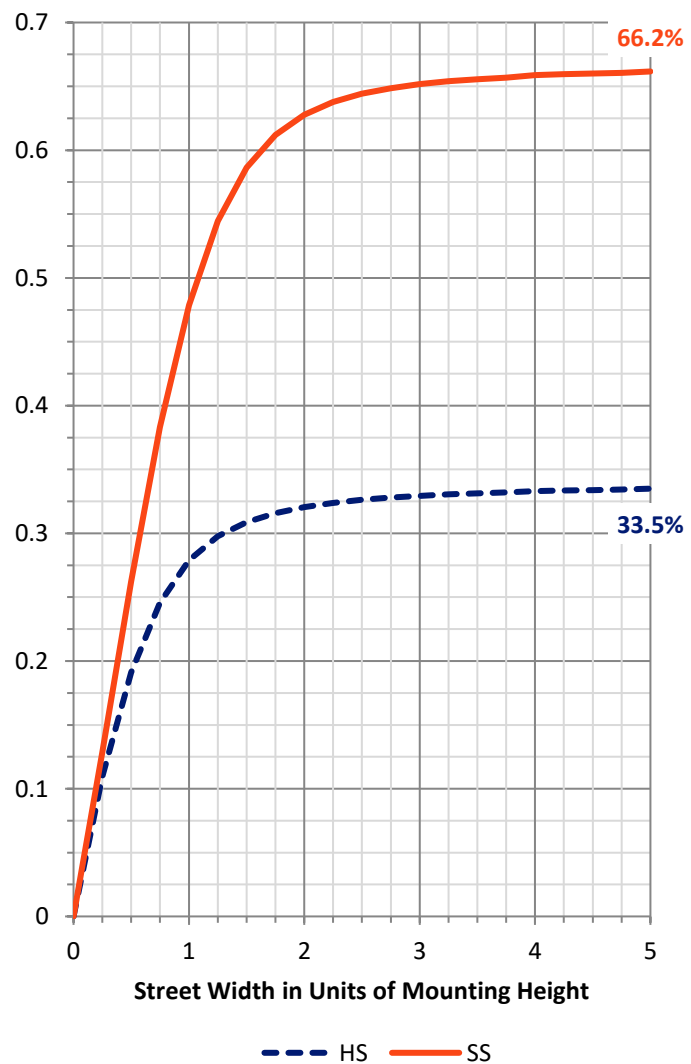
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1822.3	0.0	1822.3
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	3570.7	0.0	3570.7
	% Fixture	66.2	0.0	66.2
Total	Lumens	5393.0	0.0	5393.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.0	1.9
10°-20°	321.1	6.0
20°-30°	545.6	10.1
30°-40°	776.4	14.4
40°-50°	980.5	18.2
50°-60°	1061.6	19.7
60°-70°	987.4	18.3
70°-80°	530.3	9.8
80°-90°	85.0	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°	5393.0	100.0
0°-180°	5393.0	100.0

Coefficient of Utilization



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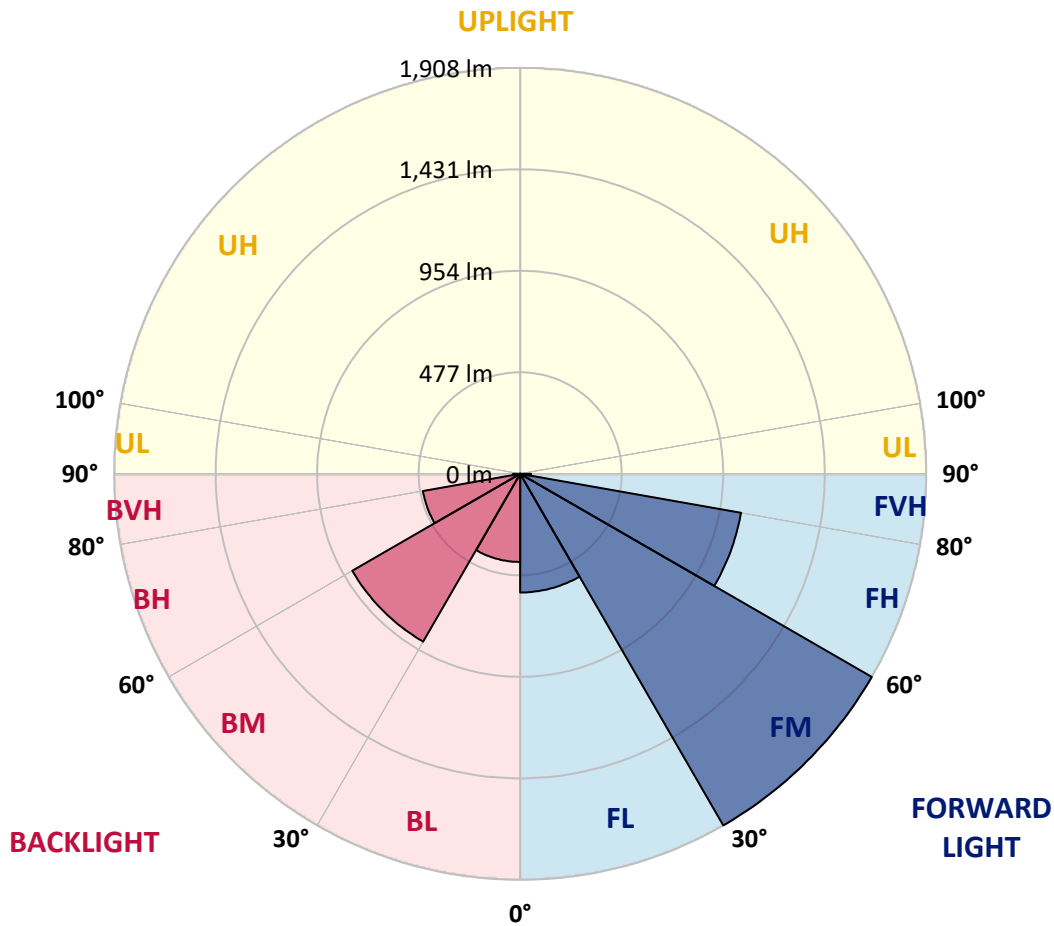
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	557.7	10.3			
FM (30°-60°)	1907.8	35.4			
FH (60°-80°)	1053.7	19.5			G1/1800
FVH (80°-90°)	51.4	1.0			G1/100
BL (0°-30°)	414.1	7.7	B1/500		
BM (30°-60°)	910.6	16.9	B1/1000		
BH (60°-80°)	464.0	8.6	B1/500		G1/500
BVH (80°-90°)	33.6	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1089.4	1089.4	1089.4	1089.4	1089.4	1089.4	1089.4	1089.4	1089.4	1089.4	1089.4
2.5°	1122.4	1120.4	1112.4	1113.4	1113.4	1112.4	1100.4	1095.4	1095.4	1094.4	1083.4
5°	1162.5	1159.5	1150.5	1148.4	1144.4	1139.4	1120.4	1109.4	1104.4	1103.4	1088.4
7.5°	1209.5	1205.5	1194.5	1188.5	1178.5	1165.5	1141.4	1124.4	1112.4	1111.4	1090.4
10°	1256.6	1252.6	1239.6	1228.5	1214.5	1193.5	1162.5	1137.4	1118.4	1116.4	1091.4
12.5°	1312.7	1308.7	1292.6	1278.6	1257.6	1229.6	1188.5	1154.5	1128.4	1125.4	1094.4
15°	1371.7	1365.7	1349.7	1333.7	1307.6	1271.6	1222.5	1177.5	1144.4	1139.4	1103.4
17.5°	1420.8	1412.8	1399.8	1383.7	1354.7	1312.7	1256.6	1200.5	1159.5	1155.5	1112.4
20°	1462.8	1456.8	1442.8	1427.8	1396.8	1350.7	1288.6	1223.5	1173.5	1168.5	1119.4
22.5°	1502.9	1494.9	1486.9	1475.9	1441.8	1390.8	1325.7	1251.6	1191.5	1185.5	1128.4
25°	1549.0	1539.9	1536.9	1530.9	1490.9	1438.8	1370.7	1286.6	1216.5	1209.5	1144.4
27.5°	1606.0	1596.0	1590.0	1590.0	1541.9	1487.9	1418.8	1327.7	1245.6	1239.6	1164.5
30°	1666.1	1654.1	1645.1	1645.1	1591.0	1536.9	1465.8	1368.7	1278.6	1271.6	1190.5
32.5°	1719.2	1707.2	1697.1	1696.1	1640.1	1586.0	1514.9	1413.8	1318.7	1309.7	1222.5
35°	1760.2	1749.2	1740.2	1742.2	1689.1	1636.1	1570.0	1473.9	1368.7	1358.7	1264.6
37.5°	1785.3	1781.2	1776.2	1783.2	1734.2	1684.1	1627.1	1531.9	1425.8	1416.8	1316.7
40°	1798.3	1795.3	1815.3	1824.3	1772.2	1727.2	1684.1	1592.0	1487.9	1477.9	1376.7
42.5°	1817.3	1842.3	1850.3	1848.3	1800.3	1760.2	1736.2	1657.1	1561.0	1552.0	1448.8
45°	1749.2	1743.2	1787.3	1811.3	1802.3	1781.2	1785.3	1735.2	1646.1	1637.1	1531.9
47.5°	1658.1	1650.1	1675.1	1734.2	1769.2	1789.3	1829.3	1816.3	1744.2	1736.2	1629.1
50°	1465.8	1476.9	1570.0	1649.1	1718.2	1787.3	1866.4	1903.4	1852.3	1844.3	1733.2
52.5°	1252.6	1263.6	1360.7	1542.9	1656.1	1772.2	1893.4	1990.5	1969.5	1960.5	1844.3
55°	1097.4	1121.4	1231.6	1363.7	1568.0	1725.2	1909.4	2079.6	2095.6	2087.6	1965.5
57.5°	943.2	961.2	1044.3	1161.5	1447.8	1643.1	1908.4	2162.7	2227.8	2219.8	2088.6
60°	762.0	785.0	851.1	977.2	1287.6	1544.9	1880.4	2227.8	2355.0	2349.0	2207.8
62.5°	637.8	644.8	691.9	801.0	1081.4	1420.8	1817.3	2262.9	2470.1	2466.1	2314.9
65°	513.6	514.6	557.7	648.8	882.1	1266.6	1710.2	2249.8	2557.2	2559.2	2392.0
67.5°	396.5	401.5	440.6	509.6	700.9	1066.3	1557.0	2161.7	2558.2	2563.2	2348.0
70°	274.3	278.4	337.4	404.5	541.7	850.1	1349.7	1928.4	2348.0	2352.0	2104.7
72.5°	193.2	195.2	258.3	323.4	423.5	640.8	1018.3	1595.0	2001.5	2004.5	1770.2
75°	144.2	146.2	182.2	245.3	324.4	443.6	695.9	1221.5	1599.0	1599.0	1397.8
77.5°	102.1	103.1	118.1	169.2	216.3	299.4	418.5	800.0	1173.5	1175.5	1018.3
80°	69.1	70.1	77.1	114.1	135.2	162.2	227.3	419.5	739.9	742.9	646.8
82.5°	36.0	38.0	43.1	58.1	68.1	90.1	117.1	213.3	409.5	417.5	388.5
85°	14.0	14.0	16.0	19.0	25.0	35.0	54.1	81.1	185.2	191.2	171.2
87.5°	5.0	5.0	6.0	6.0	7.0	8.0	9.0	12.0	21.0	21.0	20.0
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°	1089.4	1089.4	1089.4	1089.4	1089.4	1089.4	1089.4	1089.4	1089.4	1089.4	1089.4
2.5°	1079.4	1079.4	1074.4	1076.4	1075.4	1073.4	1071.4	1074.4	1071.4	1064.3	1063.3
5°	1081.4	1079.4	1071.4	1070.4	1067.3	1063.3	1058.3	1060.3	1055.3	1049.3	1048.3
7.5°	1082.4	1078.4	1067.3	1063.3	1057.3	1049.3	1041.3	1041.3	1034.3	1028.3	1027.3
10°	1080.4	1075.4	1060.3	1052.3	1041.3	1029.3	1018.3	1015.3	1007.3	1000.3	1000.3
12.5°	1081.4	1074.4	1055.3	1042.3	1027.3	1012.3	998.3	994.3	987.2	980.2	979.2
15°	1087.4	1077.4	1053.3	1036.3	1014.3	997.3	982.2	979.2	973.2	968.2	968.2
17.5°	1093.4	1080.4	1050.3	1026.3	999.3	980.2	966.2	966.2	962.2	959.2	959.2
20°	1096.4	1081.4	1044.3	1012.3	981.2	961.2	948.2	950.2	949.2	948.2	948.2
22.5°	1103.4	1083.4	1039.3	999.3	962.2	941.2	929.2	932.2	931.2	931.2	932.2
25°	1114.4	1088.4	1035.3	987.2	944.2	921.2	908.1	910.1	910.1	910.1	910.1
27.5°	1129.4	1098.4	1034.3	976.2	926.2	900.1	884.1	884.1	880.1	881.1	882.1
30°	1152.5	1117.4	1036.3	966.2	907.1	874.1	855.1	852.1	851.1	853.1	854.1
32.5°	1180.5	1143.4	1048.3	959.2	887.1	845.1	821.0	820.0	817.0	817.0	817.0
35°	1215.5	1168.5	1059.3	958.2	867.1	814.0	788.0	785.0	778.0	775.0	775.0
37.5°	1260.6	1207.5	1072.4	951.2	850.1	784.0	752.9	742.9	734.9	733.9	733.9
40°	1315.7	1251.6	1091.4	943.2	832.0	752.9	711.9	694.9	695.9	699.9	699.9
42.5°	1380.7	1305.6	1115.4	939.2	806.0	720.9	663.8	643.8	650.8	654.8	655.8
45°	1456.8	1369.7	1142.4	934.2	782.0	684.9	612.8	587.7	590.7	591.7	592.7
47.5°	1544.9	1440.8	1170.5	930.2	755.0	639.8	556.7	523.7	522.7	516.7	518.7
50°	1637.1	1515.9	1199.5	923.2	721.9	586.7	497.6	458.6	450.6	441.6	442.6
52.5°	1735.2	1593.0	1226.5	912.2	680.9	532.7	441.6	399.5	383.5	373.5	375.5
55°	1843.3	1672.1	1252.6	895.1	637.8	478.6	391.5	348.4	328.4	320.4	321.4
57.5°	1942.5	1748.2	1271.6	874.1	590.7	429.5	347.4	305.4	292.4	291.4	292.4
60°	2038.6	1812.3	1279.6	845.1	542.7	384.5	306.4	274.3	265.3	270.3	271.3
62.5°	2119.7	1853.3	1275.6	806.0	493.6	341.4	273.3	250.3	244.3	254.3	255.3
65°	2166.7	1866.4	1247.6	749.9	440.6	299.4	242.3	217.3	214.3	220.3	223.3
67.5°	2104.7	1785.3	1171.5	672.8	381.5	260.3	212.3	192.2	187.2	192.2	192.2
70°	1865.4	1547.0	991.3	550.7	316.4	222.3	184.2	170.2	166.2	170.2	169.2
72.5°	1554.0	1286.6	781.0	429.5	249.3	187.2	160.2	147.2	143.2	139.2	137.2
75°	1205.5	977.2	566.7	315.4	188.2	150.2	134.2	122.2	112.1	116.1	114.1
77.5°	883.1	685.9	401.5	218.3	135.2	116.1	105.1	96.1	89.1	97.1	96.1
80°	568.7	443.6	268.3	146.2	93.1	81.1	77.1	72.1	79.1	103.1	105.1
82.5°	347.4	281.4	160.2	95.1	61.1	54.1	50.1	50.1	81.1	89.1	90.1
85°	155.2	149.2	87.1	49.1	34.0	31.0	28.0	36.0	33.0	24.0	25.0
87.5°	25.0	26.0	19.0	17.0	13.0	13.0	10.0	7.0	5.0	3.0	3.0
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)