

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: P798985

Luminaire Tested: **ARCH1-50-727-U-T4W**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P798985
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH1-50-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1470mA LIGHTSQUARE WITH 10 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6039 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

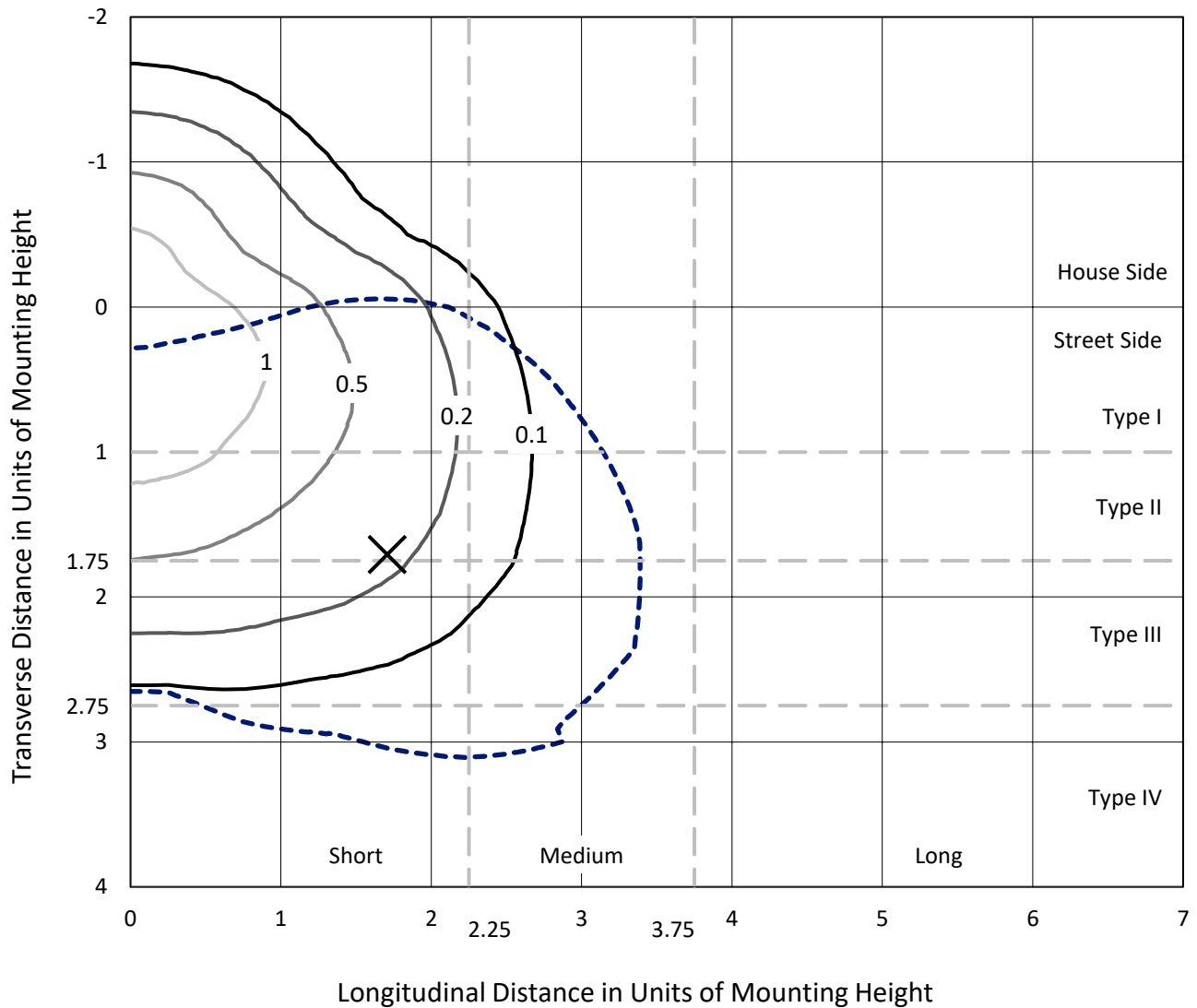
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P798985
 CATALOG NUMBER: ARCH1-50-727-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

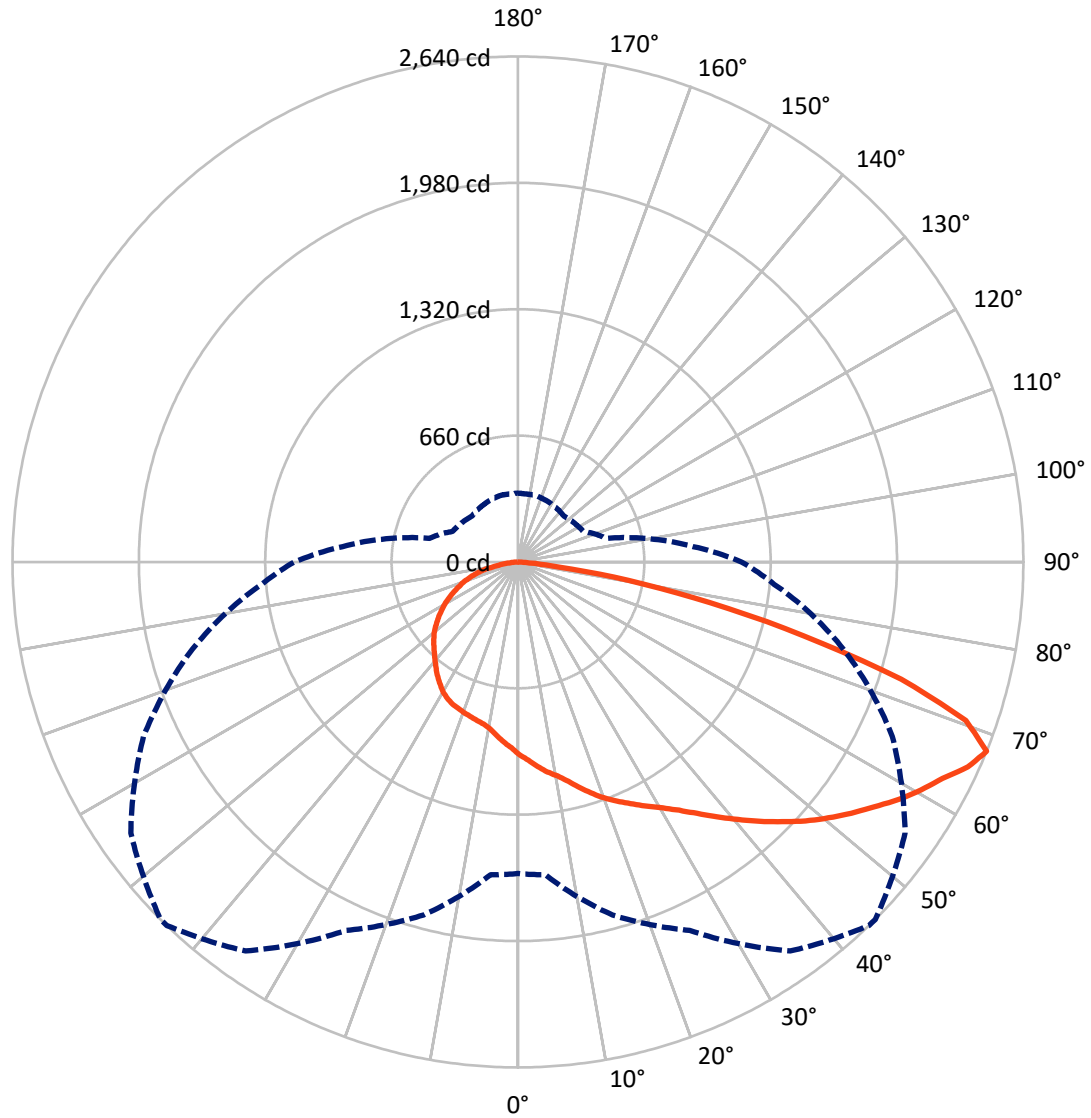
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type IV - Short - N/A

REPORT NUMBER: P798985
CATALOG NUMBER: ARCH1-50-727-U-T4W

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P798985
 CATALOG NUMBER: ARCH1-50-727-U-T4W

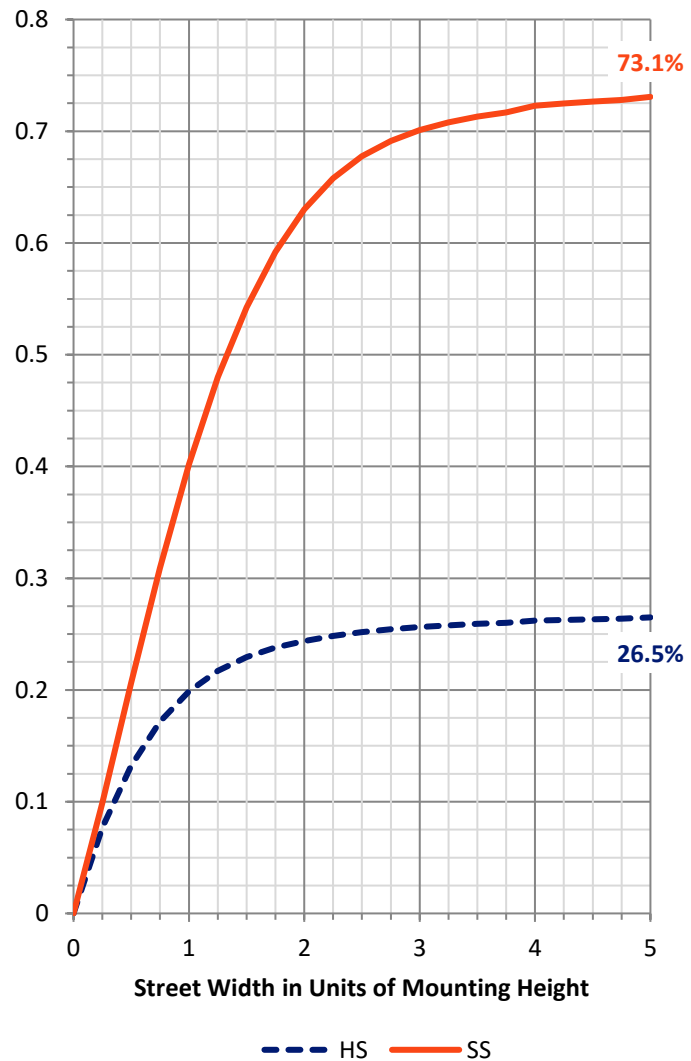
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1613.3	0.0	1613.3
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	4425.7	0.0	4425.7
	% Fixture	73.3	0.0	73.3
Total	Lumens	6039.0	0.0	6039.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.4	1.6
10°-20°	297.9	4.9
20°-30°	514.2	8.5
30°-40°	758.3	12.6
40°-50°	1027.3	17.0
50°-60°	1255.6	20.8
60°-70°	1295.0	21.4
70°-80°	709.3	11.7
80°-90°	85.0	1.4
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°	6039.0	100.0
0°-180°	6039.0	100.0



REPORT NUMBER: P798985

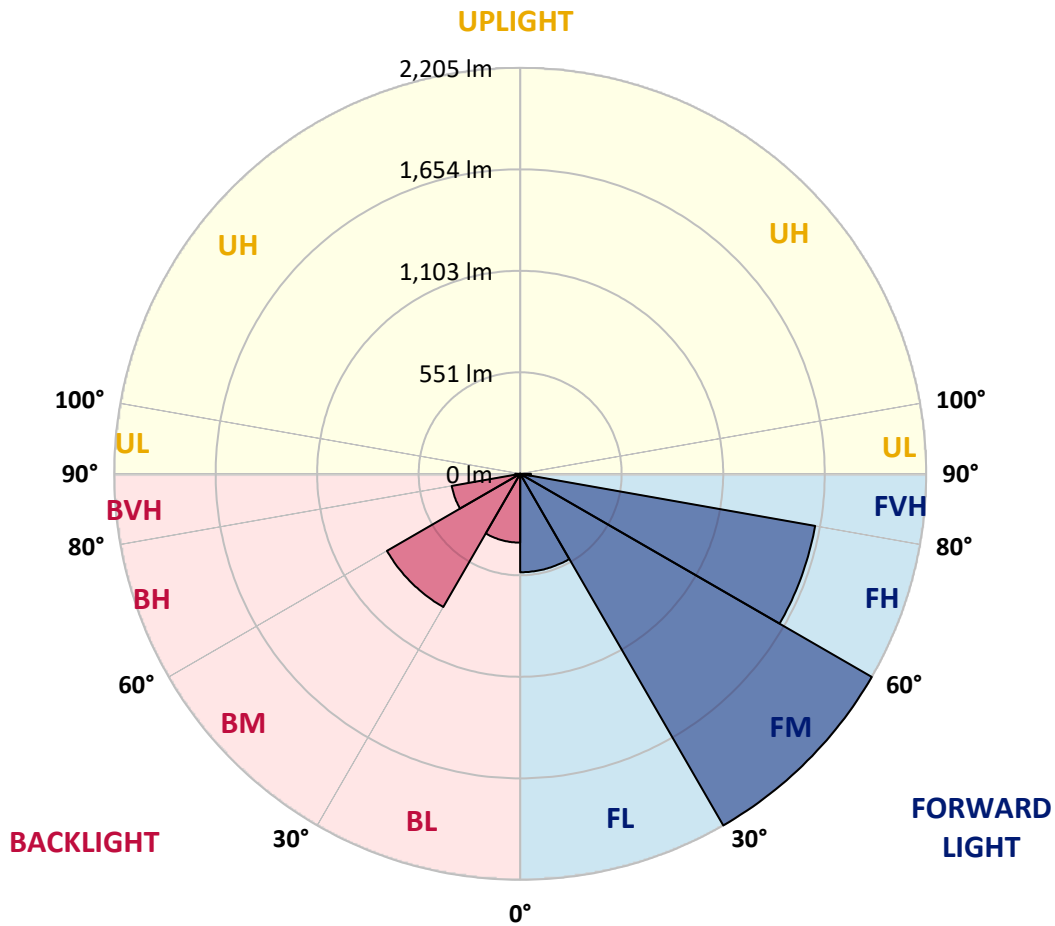
CATALOG NUMBER: ARCH1-50-727-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	534.6	8.9			
FM (30°-60°)	2205.5	36.5			
FH (60°-80°)	1627.0	26.9			G1/1800
FVH (80°-90°)	58.6	1.0			G1/100
BL (0°-30°)	373.9	6.2	B1/500		
BM (30°-60°)	835.7	13.8	B1/1000		
BH (60°-80°)	377.3	6.2	B1/500		G1/500
BVH (80°-90°)	26.5	0.4			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 IV Short



REPORT NUMBER: P798985
 CATALOG NUMBER: ARCH1-50-727-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1007.2	1007.2	1007.2	1007.2	1007.2	1007.2	1007.2	1007.2	1007.2	1007.2	1007.2
2.5°	1051.3	1050.4	1052.2	1045.8	1037.5	1036.6	1036.6	1031.1	1024.7	1011.8	1001.7
5°	1100.9	1099.1	1100.0	1090.8	1079.8	1074.3	1073.4	1061.4	1046.7	1026.5	1008.1
7.5°	1146.9	1145.0	1144.1	1134.0	1117.5	1108.3	1107.4	1089.9	1072.4	1041.2	1014.5
10°	1190.1	1188.2	1186.4	1172.6	1152.4	1138.6	1136.8	1114.7	1092.7	1054.1	1020.1
12.5°	1245.2	1241.5	1239.7	1223.1	1193.7	1179.0	1176.3	1146.9	1119.3	1072.4	1031.1
15°	1303.1	1300.3	1297.6	1282.0	1248.9	1229.6	1225.0	1188.2	1150.5	1096.3	1047.6
17.5°	1346.3	1343.5	1343.5	1329.7	1299.4	1277.4	1273.7	1229.6	1182.7	1118.4	1060.5
20°	1372.9	1370.2	1372.9	1364.7	1341.7	1323.3	1319.6	1270.9	1214.9	1138.6	1071.5
22.5°	1392.2	1389.5	1394.1	1390.4	1373.9	1362.8	1360.1	1312.3	1248.0	1159.7	1082.5
25°	1426.2	1426.2	1426.2	1419.8	1404.2	1400.5	1400.5	1359.2	1290.2	1187.3	1099.1
27.5°	1494.2	1490.6	1486.0	1467.6	1440.9	1440.0	1445.5	1406.9	1338.9	1223.1	1119.3
30°	1594.4	1592.6	1575.1	1536.5	1491.5	1486.9	1490.6	1458.4	1391.3	1260.8	1142.3
32.5°	1724.0	1717.6	1681.7	1623.8	1559.5	1538.4	1545.7	1511.7	1446.5	1299.4	1164.3
35°	1815.9	1817.7	1792.0	1739.6	1663.3	1607.3	1612.8	1571.4	1506.2	1342.6	1191.9
37.5°	1921.6	1928.0	1889.4	1849.9	1779.1	1683.6	1689.1	1633.0	1565.9	1396.8	1221.3
40°	2067.7	2054.8	1989.6	1942.7	1864.6	1763.5	1768.1	1701.9	1634.8	1448.3	1255.3
42.5°	2189.9	2166.9	2087.9	2028.2	1934.4	1848.0	1852.6	1776.4	1704.7	1505.3	1293.0
45°	2365.4	2302.0	2188.1	2158.7	2006.1	1930.8	1935.3	1855.4	1778.2	1565.9	1333.4
47.5°	2467.4	2366.3	2293.7	2278.1	2085.1	2016.2	2021.7	1939.0	1857.2	1634.8	1375.7
50°	2461.0	2395.8	2374.6	2336.0	2155.0	2096.2	2101.7	2025.4	1937.2	1702.9	1416.1
52.5°	2418.7	2430.7	2419.6	2355.3	2224.8	2173.4	2179.8	2110.9	2019.0	1766.3	1453.8
55°	2484.0	2492.2	2471.1	2386.6	2302.0	2250.6	2257.9	2200.9	2099.8	1822.3	1486.0
57.5°	2562.1	2532.7	2511.5	2441.7	2382.0	2334.2	2342.5	2292.8	2169.7	1867.3	1510.8
60°	2558.4	2496.8	2518.0	2445.4	2436.2	2411.4	2418.7	2368.2	2223.0	1900.4	1520.9
62.5°	2370.0	2336.9	2443.5	2418.7	2480.3	2480.3	2489.5	2414.1	2255.2	1914.2	1515.4
65°	2042.9	2044.7	2232.2	2335.1	2532.7	2575.0	2582.3	2442.6	2236.8	1873.8	1463.9
67.5°	1627.5	1639.4	1908.7	2122.8	2480.3	2639.3	2640.2	2468.4	2157.7	1759.8	1344.5
70°	1191.0	1200.2	1518.1	1778.2	2233.1	2496.8	2482.1	2395.8	1985.9	1561.3	1157.9
72.5°	805.0	813.3	1140.4	1365.6	1832.4	2126.5	2094.3	2117.3	1692.7	1282.9	930.9
75°	541.3	551.4	811.5	976.9	1348.1	1614.6	1542.9	1603.6	1309.5	971.4	679.1
77.5°	340.9	347.4	515.5	640.5	920.8	1099.1	1027.4	1028.3	754.5	522.9	364.8
80°	216.9	218.7	312.4	369.4	533.0	660.7	584.5	475.1	340.0	277.5	217.8
82.5°	125.9	123.1	186.6	208.6	253.6	250.9	207.7	196.7	148.9	138.8	111.2
85°	50.5	46.9	81.8	76.3	77.2	81.8	60.7	60.7	48.7	37.7	27.6
87.5°	10.1	10.1	11.0	10.1	10.1	11.0	8.3	8.3	7.4	7.4	7.4
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: P798985
 CATALOG NUMBER: ARCH1-50-727-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1007.2	1007.2	1007.2	1007.2	1007.2	1007.2	1007.2	1007.2	1007.2	1007.2	1007.2
2.5°	999.8	998.0	993.4	981.5	975.0	971.4	965.8	964.0	963.1	964.0	966.8
5°	1002.6	996.2	983.3	964.0	951.1	942.9	933.7	930.0	927.2	927.2	930.0
7.5°	1004.4	994.3	972.3	943.8	925.4	912.5	901.5	896.9	896.0	898.8	899.7
10°	1005.4	990.6	959.4	923.6	899.7	883.1	872.1	869.3	872.1	877.6	878.5
12.5°	1011.8	991.6	952.1	909.8	881.3	864.8	856.5	856.5	863.8	873.9	874.9
15°	1022.8	998.0	948.4	898.8	869.3	854.6	851.9	856.5	867.5	883.1	885.0
17.5°	1031.1	1001.7	940.1	884.0	853.7	844.5	849.1	860.2	875.8	896.9	898.8
20°	1036.6	1001.7	928.2	866.6	838.1	836.3	849.1	866.6	883.1	907.9	910.7
22.5°	1042.1	999.8	914.4	845.5	820.6	826.2	850.0	872.1	888.6	915.3	919.9
25°	1052.2	1002.6	900.6	824.3	802.3	817.9	849.1	875.8	893.2	920.8	928.2
27.5°	1066.0	1009.0	890.5	805.0	783.9	805.0	842.7	874.9	893.2	919.9	928.2
30°	1080.7	1016.4	878.5	783.9	762.7	786.6	828.9	864.8	885.9	910.7	920.8
32.5°	1096.3	1024.7	868.4	760.9	737.0	761.8	808.7	849.1	872.1	895.1	906.1
35°	1117.5	1039.4	862.9	742.5	714.0	736.1	783.0	828.9	853.7	874.9	887.7
37.5°	1143.2	1057.7	860.2	724.1	689.2	707.6	755.4	804.1	830.7	848.2	860.2
40°	1172.6	1080.7	859.2	706.7	664.4	678.2	726.9	775.6	801.3	815.1	825.2
42.5°	1205.7	1106.4	857.4	689.2	639.6	650.6	699.3	747.1	769.2	781.1	790.3
45°	1240.6	1132.2	853.7	668.1	613.0	625.8	670.8	713.1	736.1	746.2	756.3
47.5°	1275.5	1157.9	846.4	644.2	589.1	601.0	640.5	677.3	695.7	704.8	715.0
50°	1309.5	1180.9	828.9	616.6	564.2	575.3	605.6	630.4	644.2	651.5	661.7
52.5°	1339.9	1196.5	804.1	584.5	539.4	544.9	565.2	586.3	597.3	598.2	607.4
55°	1365.6	1204.8	768.3	551.4	512.8	513.7	524.7	541.3	545.9	542.2	548.6
57.5°	1380.3	1200.2	728.7	517.4	485.2	481.5	489.8	498.1	499.0	489.8	496.2
60°	1384.0	1179.0	677.3	483.4	457.6	447.5	450.3	448.5	446.6	442.9	448.5
62.5°	1365.6	1134.0	620.3	450.3	428.2	412.6	411.7	410.8	413.5	414.5	415.4
65°	1298.5	1049.5	552.3	416.3	397.0	375.9	374.9	386.0	389.6	384.1	386.0
67.5°	1168.9	919.9	477.9	376.8	357.5	339.1	346.5	352.9	359.3	357.5	359.3
70°	985.1	755.4	409.9	332.7	314.3	304.2	312.4	318.0	318.9	317.0	318.9
72.5°	774.7	590.0	346.5	287.6	271.1	266.5	276.6	281.2	289.5	293.2	294.1
75°	559.7	435.6	284.0	238.9	225.1	225.1	234.3	242.6	250.0	245.4	242.6
77.5°	312.4	260.1	204.0	164.5	167.3	180.1	183.8	193.0	200.3	199.4	197.6
80°	189.3	162.7	137.8	106.6	105.7	115.8	139.7	155.3	159.0	150.7	149.8
82.5°	98.3	85.5	73.5	59.7	66.2	77.2	80.9	97.4	107.5	103.8	108.4
85°	24.8	23.9	26.7	27.6	34.0	37.7	41.4	48.7	32.2	15.6	15.6
87.5°	7.4	7.4	9.2	9.2	11.9	14.7	13.8	13.8	7.4	0.9	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)