

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: P798851

Luminaire Tested: **ARCH1-40-727-U-T2R**

Issue Date: 4/4/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P798851  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH1-40-727-U-T2R  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1220mA LIGHTSQUARE WITH 10 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

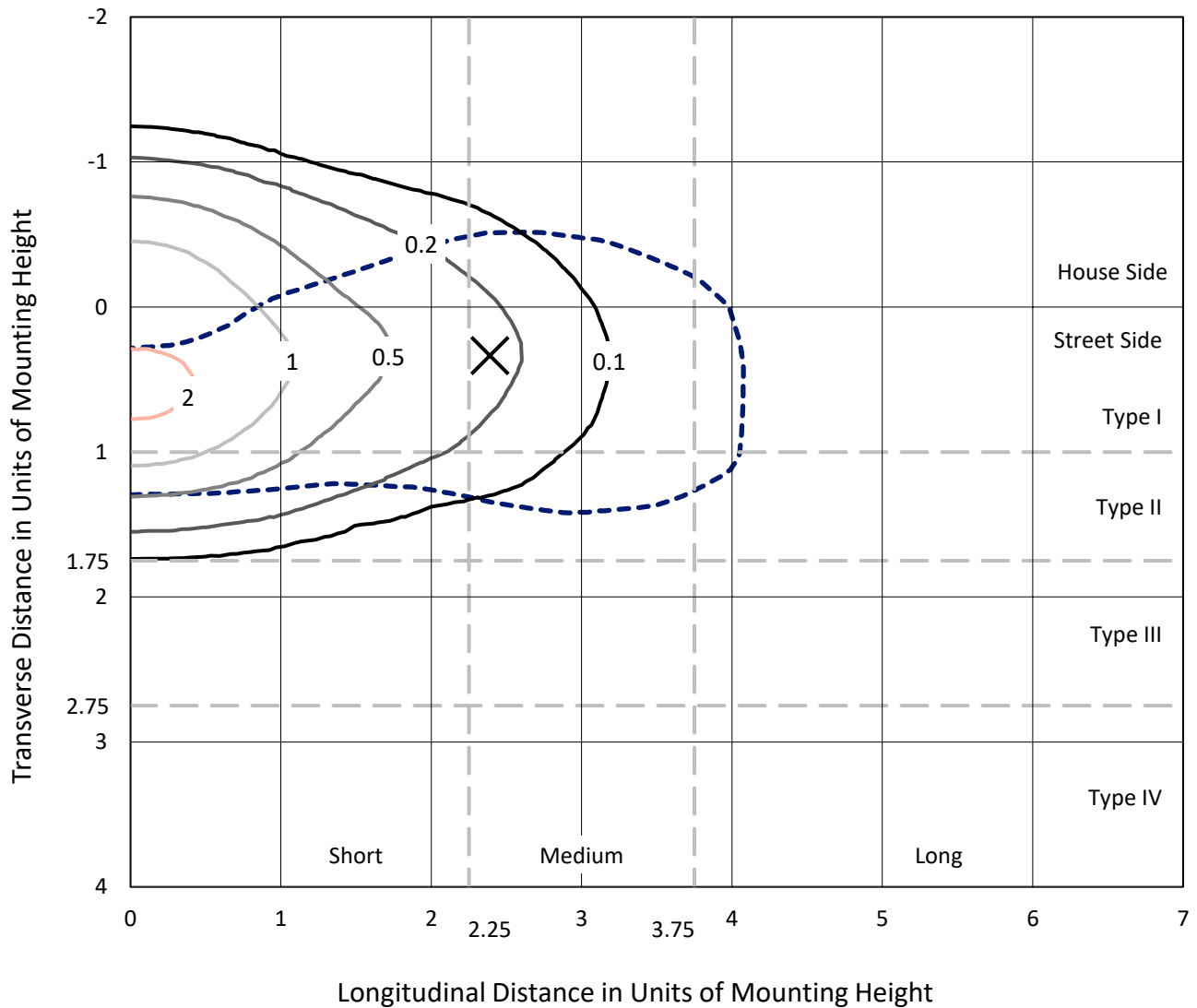
Lumens per Lamp: N/A  
Luminaire Lumens: 5440 lumens  
Efficiency: N/A  
Efficacy: 126.5 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 43  
Input Voltage (V): NR  
Input Current (Ain): NR  
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



REPORT NUMBER: P798851  
 CATALOG NUMBER: ARCH1-40-727-U-T2R

### Iso-Footcandle Lines of Horizontal Illumination

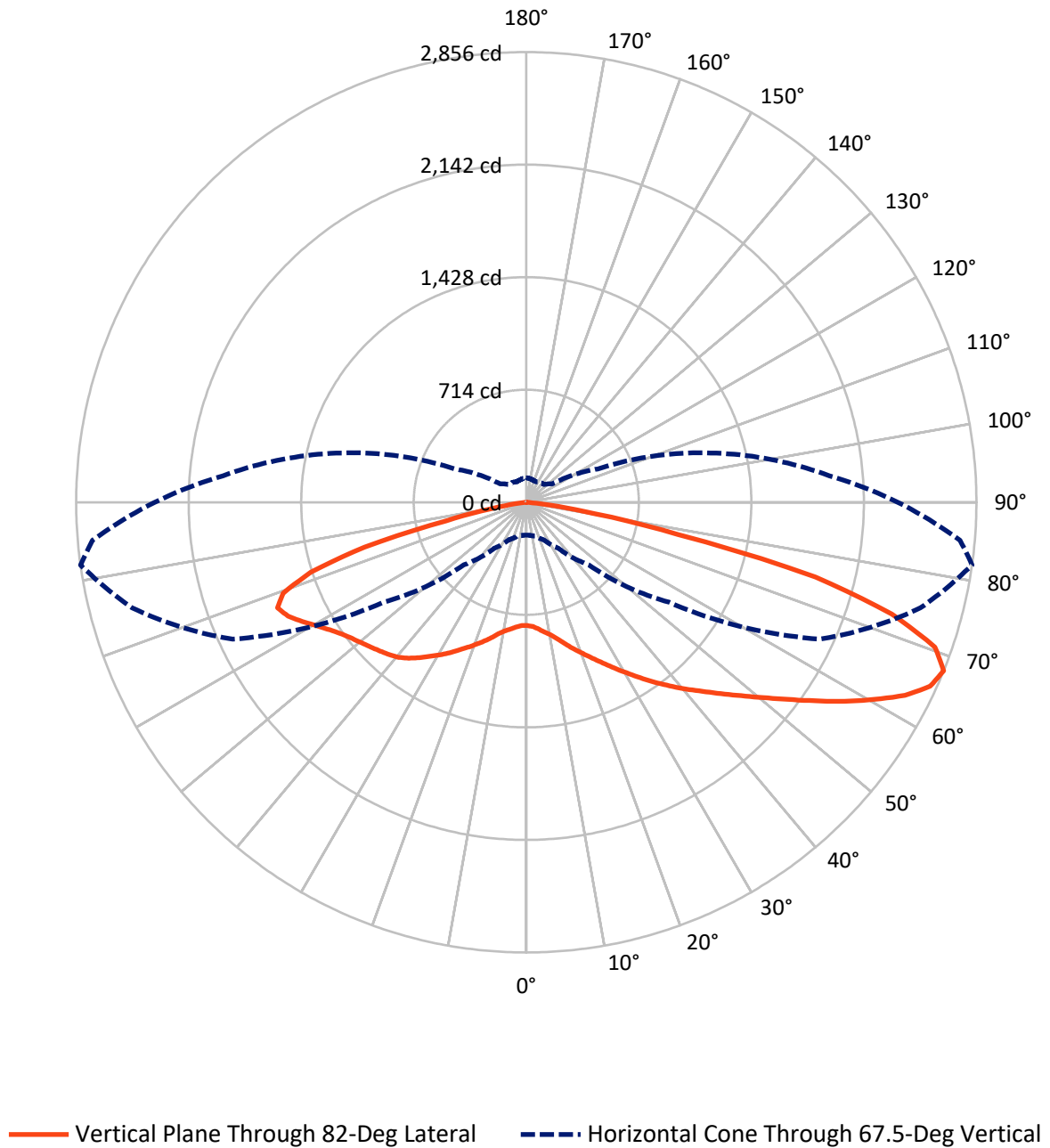
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc  
 Type II - Medium - N/A

REPORT NUMBER: P798851  
CATALOG NUMBER: ARCH1-40-727-U-T2R

### Luminous Intensity Polar Plot



REPORT NUMBER: P798851  
 CATALOG NUMBER: ARCH1-40-727-U-T2R

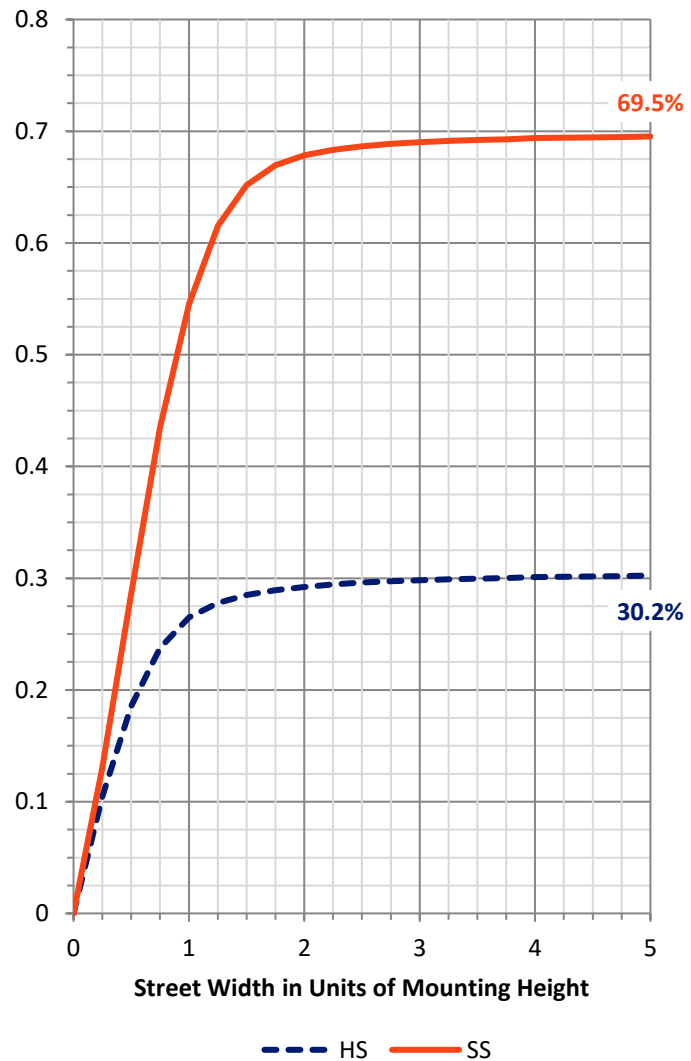
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1656.7	0.0	1656.7
	% Fixture	30.5	0.0	30.5
<b>Street Side</b>	Lumens	3783.3	0.0	3783.3
	% Fixture	69.5	0.0	69.5
<b>Total</b>	Lumens	5440.0	0.0	5440.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.8	1.5
10°-20°	291.1	5.4
20°-30°	585.0	10.8
30°-40°	919.0	16.9
40°-50°	1119.6	20.6
50°-60°	1057.8	19.4
60°-70°	873.5	16.1
70°-80°	475.7	8.7
80°-90°	37.4	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°	5440.0	100.0
0°-180°	5440.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P798851

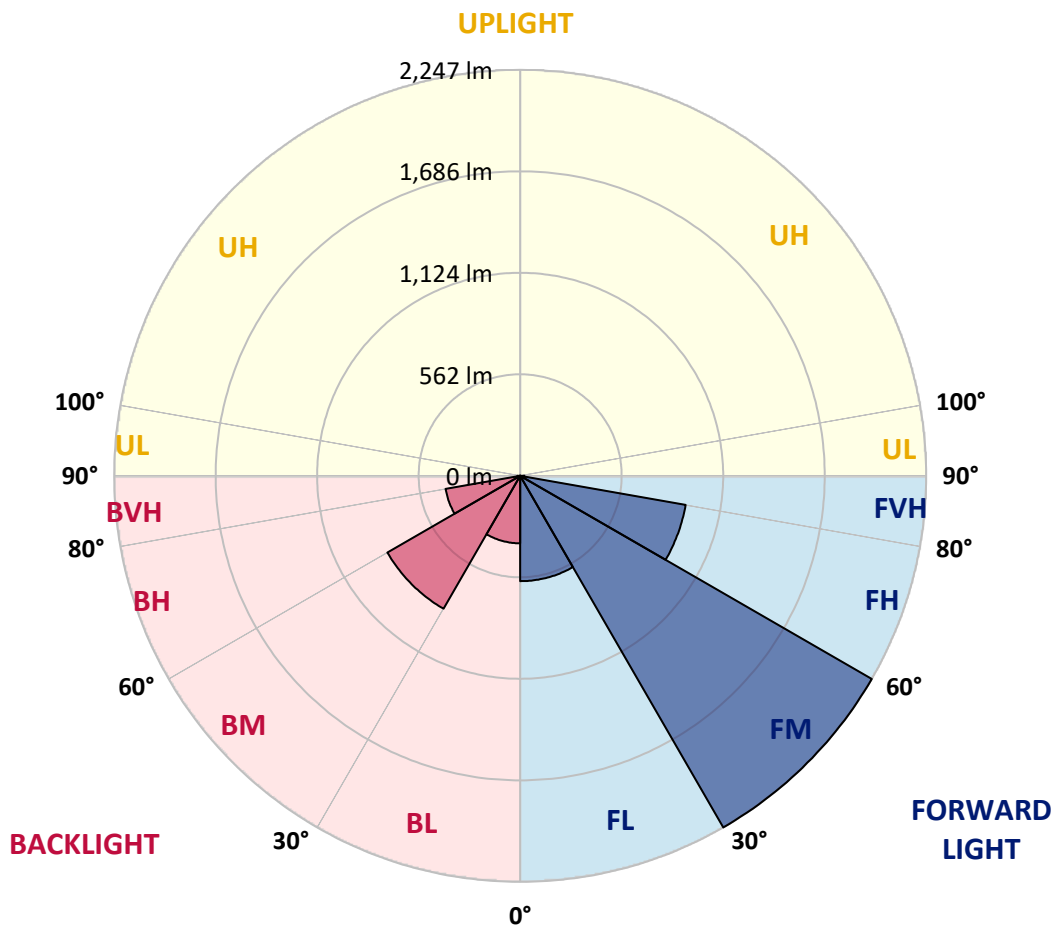
CATALOG NUMBER: ARCH1-40-727-U-T2R

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	583.4	10.7			
FM (30°-60°)	2247.5	41.3			
FH (60°-80°)	929.9	17.1			G1/1800
FVH (80°-90°)	22.5	0.4			G1/100
BL (0°-30°)	373.6	6.9	B1/500		
BM (30°-60°)	848.9	15.6	B1/1000		
BH (60°-80°)	419.3	7.7	B1/500		G1/500
BVH (80°-90°)	14.9	0.3			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



REPORT NUMBER: P798851  
 CATALOG NUMBER: ARCH1-40-727-U-T2R

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	782.0	782.0	782.0	782.0	782.0	782.0	782.0	782.0	782.0	782.0	782.0
2.5°	817.5	817.5	823.9	823.9	818.3	809.6	807.3	797.8	789.1	789.1	789.9
5°	895.7	895.0	899.7	893.4	879.9	862.6	850.7	830.2	812.8	807.3	806.5
7.5°	991.3	990.5	992.9	982.6	957.4	928.9	905.2	872.0	843.6	831.8	828.6
10°	1098.0	1097.2	1094.8	1077.4	1043.5	999.2	963.7	917.9	875.2	856.2	852.3
12.5°	1220.4	1218.8	1213.3	1188.0	1141.4	1084.5	1033.2	973.9	917.1	891.0	882.3
15°	1357.0	1354.7	1344.4	1313.6	1251.2	1179.3	1113.0	1037.1	967.6	933.7	921.8
17.5°	1500.8	1500.8	1485.0	1439.2	1369.7	1280.4	1198.3	1101.9	1020.5	978.7	964.5
20°	1646.9	1646.1	1626.4	1571.1	1489.0	1386.3	1282.0	1176.2	1075.0	1024.5	1007.1
22.5°	1801.0	1799.4	1774.9	1711.7	1613.8	1497.6	1376.0	1249.6	1135.1	1074.3	1052.1
25°	1977.9	1975.5	1945.5	1868.1	1752.0	1620.9	1481.8	1335.7	1203.8	1129.6	1103.5
27.5°	2165.9	2162.7	2127.2	2037.1	1910.0	1752.0	1598.7	1435.2	1279.6	1191.2	1161.9
30°	2333.4	2331.0	2292.3	2199.9	2053.7	1882.3	1710.1	1534.8	1359.4	1256.7	1220.4
32.5°	2459.7	2459.7	2425.0	2334.1	2182.5	2007.1	1822.3	1628.8	1442.4	1327.0	1284.4
35°	2536.4	2538.7	2508.7	2436.0	2293.1	2124.8	1938.4	1739.4	1530.8	1402.1	1356.3
37.5°	2547.4	2555.3	2537.9	2489.0	2369.7	2222.8	2052.2	1846.0	1622.4	1477.9	1426.6
40°	2496.1	2501.6	2502.4	2483.4	2401.3	2293.1	2152.5	1958.9	1719.6	1557.7	1498.4
42.5°	2393.4	2397.3	2404.4	2410.0	2378.4	2323.9	2229.1	2064.0	1823.1	1639.0	1569.5
45°	2260.7	2259.9	2271.7	2295.4	2293.9	2306.5	2271.7	2159.6	1930.5	1731.5	1648.5
47.5°	2062.4	2058.5	2100.3	2154.0	2180.9	2240.1	2272.5	2234.6	2047.4	1833.3	1738.6
50°	1752.0	1748.0	1839.7	1966.1	2045.0	2135.1	2229.1	2279.6	2169.8	1947.9	1836.5
52.5°	1374.4	1370.5	1486.6	1707.8	1880.0	2011.1	2141.4	2289.9	2286.0	2075.8	1947.1
55°	1022.1	1019.0	1131.9	1371.3	1650.1	1867.3	2034.0	2263.1	2395.0	2222.8	2081.4
57.5°	720.4	718.8	816.8	1015.0	1354.7	1692.0	1930.5	2210.9	2495.3	2382.3	2233.0
60°	505.5	503.2	574.3	727.5	1024.5	1427.3	1827.8	2141.4	2570.3	2539.5	2394.2
62.5°	340.4	338.9	389.4	517.4	727.5	1098.7	1672.2	2094.8	2613.0	2697.5	2556.9
65°	258.3	257.5	280.4	350.7	515.0	789.1	1425.0	2089.3	2618.5	2816.0	2695.1
67.5°	208.5	209.3	222.0	262.2	356.2	560.8	1105.1	2054.5	2589.3	2856.3	2762.3
70°	170.6	170.6	176.1	203.0	263.0	378.4	771.7	1896.5	2507.9	2751.2	2682.5
72.5°	130.3	131.1	148.5	164.3	198.3	265.4	494.5	1569.5	2316.0	2425.8	2373.6
75°	103.5	102.7	113.0	135.1	154.0	189.6	303.3	1125.6	1970.8	1895.8	1862.6
77.5°	74.3	73.5	81.4	100.3	116.9	134.3	180.9	567.9	1071.9	985.0	960.5
80°	50.6	49.0	56.1	69.5	77.4	79.0	88.5	218.0	467.6	440.8	435.2
82.5°	26.1	26.1	30.0	39.5	40.3	41.1	39.5	70.3	154.8	144.6	138.2
85°	10.3	10.3	11.1	13.4	13.4	14.2	14.2	18.2	16.6	15.8	15.0
87.5°	0.8	0.8	1.6	1.6	2.4	2.4	2.4	3.2	3.9	3.9	3.9
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: P798851  
 CATALOG NUMBER: ARCH1-40-727-U-T2R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	782.0	782.0	782.0	782.0	782.0	782.0	782.0	782.0	782.0	782.0	782.0
2.5°	788.3	785.2	774.9	772.5	770.9	768.6	769.4	763.8	761.5	762.2	759.1
5°	802.5	797.0	784.4	778.8	777.3	774.9	777.3	773.3	769.4	770.9	769.4
7.5°	822.3	814.4	798.6	793.1	792.3	789.9	793.1	789.9	786.7	788.3	785.2
10°	842.8	832.6	815.2	809.6	809.6	808.9	812.0	807.3	804.1	804.9	803.3
12.5°	872.8	859.4	840.4	835.7	833.3	835.7	836.5	830.2	824.7	825.4	823.1
15°	909.2	894.2	873.6	866.5	864.9	864.1	861.0	853.1	846.0	845.2	842.8
17.5°	948.7	929.7	905.2	898.1	891.0	888.6	880.7	870.5	859.4	859.4	856.2
20°	986.6	965.3	936.0	925.8	915.5	906.0	892.6	876.0	861.8	859.4	856.2
22.5°	1027.7	1002.4	968.4	953.4	935.2	916.3	893.4	871.3	853.1	849.1	846.8
25°	1073.5	1041.9	1001.6	979.5	950.2	921.0	887.1	858.6	837.3	831.0	829.4
27.5°	1124.0	1086.1	1037.1	1004.7	962.1	916.3	872.8	838.9	812.8	804.9	802.5
30°	1175.4	1130.3	1069.5	1022.1	962.1	901.3	846.8	807.3	777.3	766.2	764.6
32.5°	1226.7	1176.2	1098.7	1031.6	952.6	876.0	812.8	766.2	732.2	718.8	722.0
35°	1288.3	1226.7	1125.6	1035.6	936.8	845.2	774.1	719.6	684.8	673.0	675.4
37.5°	1352.3	1277.3	1146.9	1032.4	914.7	810.4	730.7	677.7	634.3	613.7	616.1
40°	1407.6	1323.1	1161.9	1021.3	886.3	770.9	688.0	618.5	558.5	538.7	536.3
42.5°	1459.7	1357.0	1169.8	1004.7	853.9	725.1	627.2	537.9	477.9	453.4	454.2
45°	1514.2	1390.2	1166.7	982.6	813.6	671.4	549.0	458.9	406.0	383.9	384.7
47.5°	1576.6	1425.8	1163.5	958.9	764.6	601.9	473.9	389.4	343.6	327.8	326.2
50°	1643.0	1465.3	1159.6	929.7	710.1	524.5	399.7	324.6	285.9	275.7	273.3
52.5°	1718.0	1507.9	1157.2	895.0	644.6	442.3	333.3	267.8	241.7	234.6	233.8
55°	1808.1	1557.7	1160.4	853.1	565.6	364.9	277.3	230.6	213.3	209.3	208.5
57.5°	1917.9	1621.7	1169.8	804.1	482.6	297.8	236.2	207.7	196.7	193.5	193.5
60°	2037.1	1694.3	1187.2	748.8	399.7	245.7	209.3	189.6	184.8	188.8	188.8
62.5°	2165.9	1779.6	1218.0	681.7	322.3	207.7	188.0	174.6	171.4	179.3	180.1
65°	2285.2	1862.6	1237.8	601.1	255.9	180.1	171.4	159.6	161.1	169.0	168.2
67.5°	2358.6	1931.3	1210.1	500.0	203.0	159.6	154.0	143.8	147.7	154.0	154.8
70°	2313.6	1892.6	1073.5	377.6	158.8	139.0	135.1	128.8	131.9	139.8	143.0
72.5°	2093.2	1695.1	834.9	255.1	128.0	116.9	118.5	115.3	119.3	126.4	133.5
75°	1699.1	1281.2	560.0	163.5	101.1	99.5	101.9	99.5	101.1	108.2	112.2
77.5°	887.1	624.8	278.8	101.9	75.0	77.4	81.4	82.1	86.9	88.5	90.0
80°	413.9	281.2	116.1	56.9	49.8	54.5	62.4	63.2	64.8	67.1	67.9
82.5°	135.1	84.5	53.7	30.8	28.4	30.8	40.3	48.2	49.0	53.7	53.7
85°	14.2	8.7	11.8	12.6	11.1	13.4	18.2	17.4	7.9	4.7	4.7
87.5°	3.9	3.2	3.9	3.9	3.2	3.2	2.4	0.8	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)