

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: P397798

Luminaire Tested: **ARCH-S-PA1-40-827-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397798  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-40-827-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4511 lumens  
Efficiency: N/A  
Efficacy: 112.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 40  
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: 28.75 FT

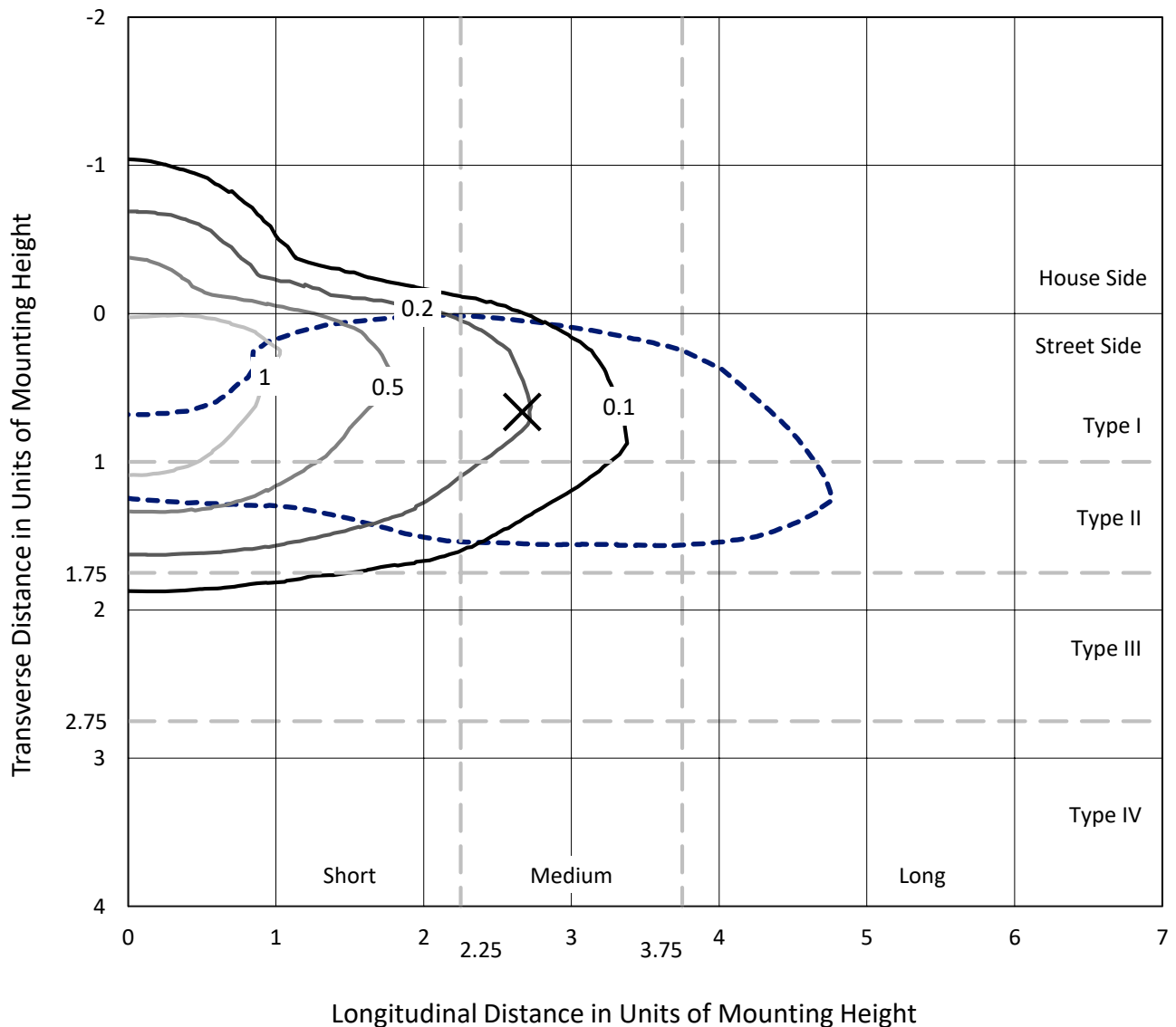


REPORT NUMBER: P397798

CATALOG NUMBER: ARCH-S-PA1-40-827-U-T2R

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

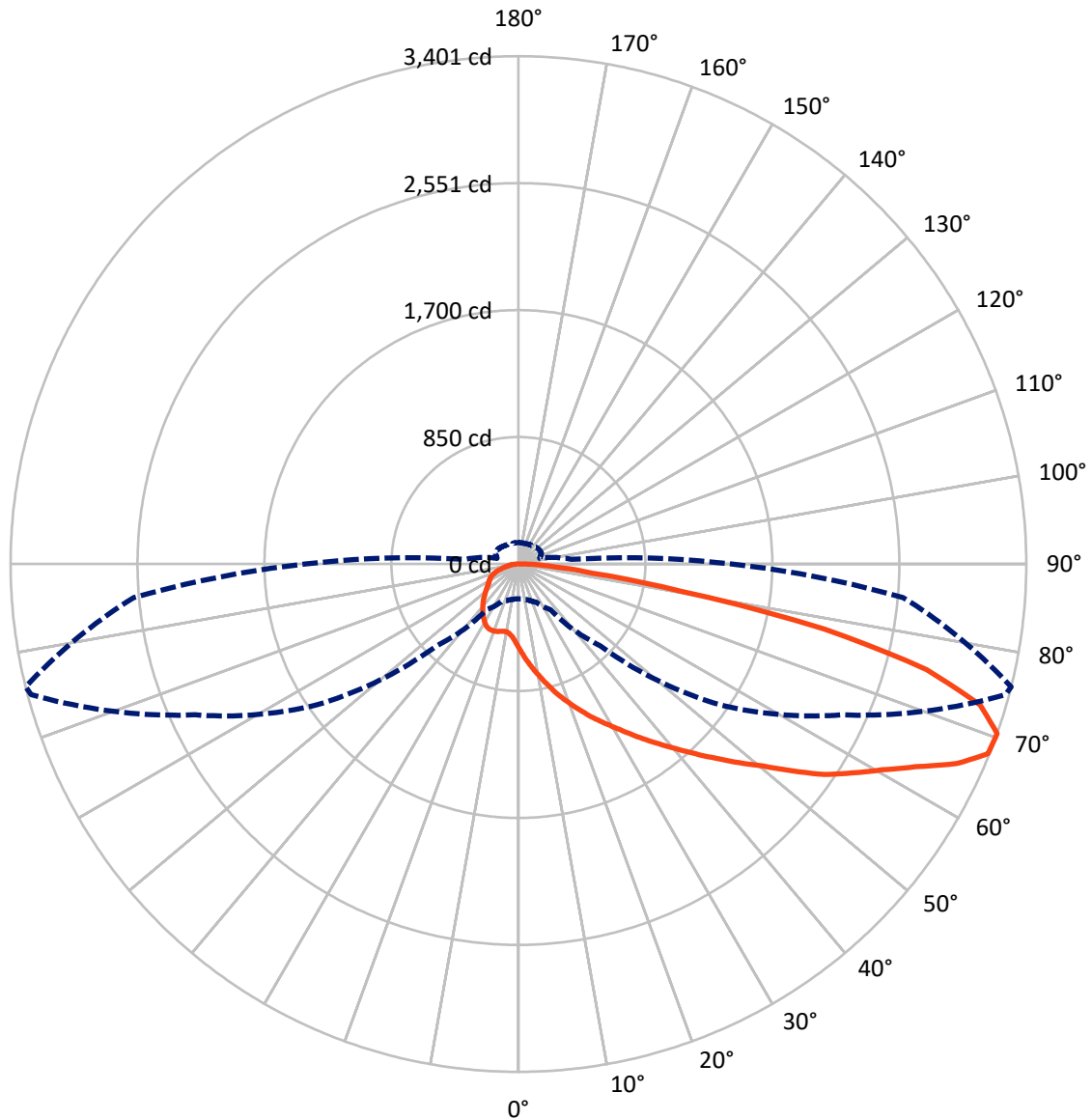


Based on 25 foot mounting height. Maximum calculated value = 1.5 fc  
 Type II - Medium - Non-Cutoff

REPORT NUMBER: P397798

CATALOG NUMBER: ARCH-S-PA1-40-827-U-T2R

### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical



REPORT NUMBER: P397798

CATALOG NUMBER: ARCH-S-PA1-40-827-U-T2R

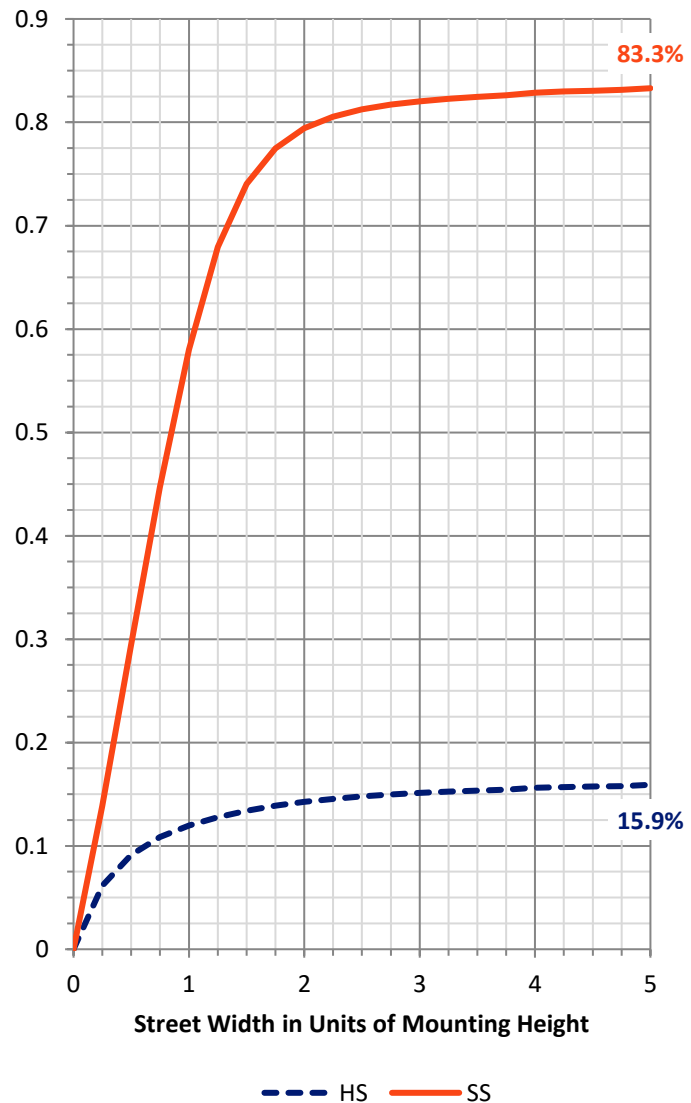
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	736.5	0.0	736.5
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	3774.5	0.0	3774.5
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	4511.0	0.0	4511.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.6	1.3
10°-20°	199.2	4.4
20°-30°	356.4	7.9
30°-40°	576.6	12.8
40°-50°	834.1	18.5
50°-60°	954.6	21.2
60°-70°	878.2	19.5
70°-80°	543.0	12.0
80°-90°	110.3	2.4
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°	4511.0	100.0
0°-180°	4511.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P397798

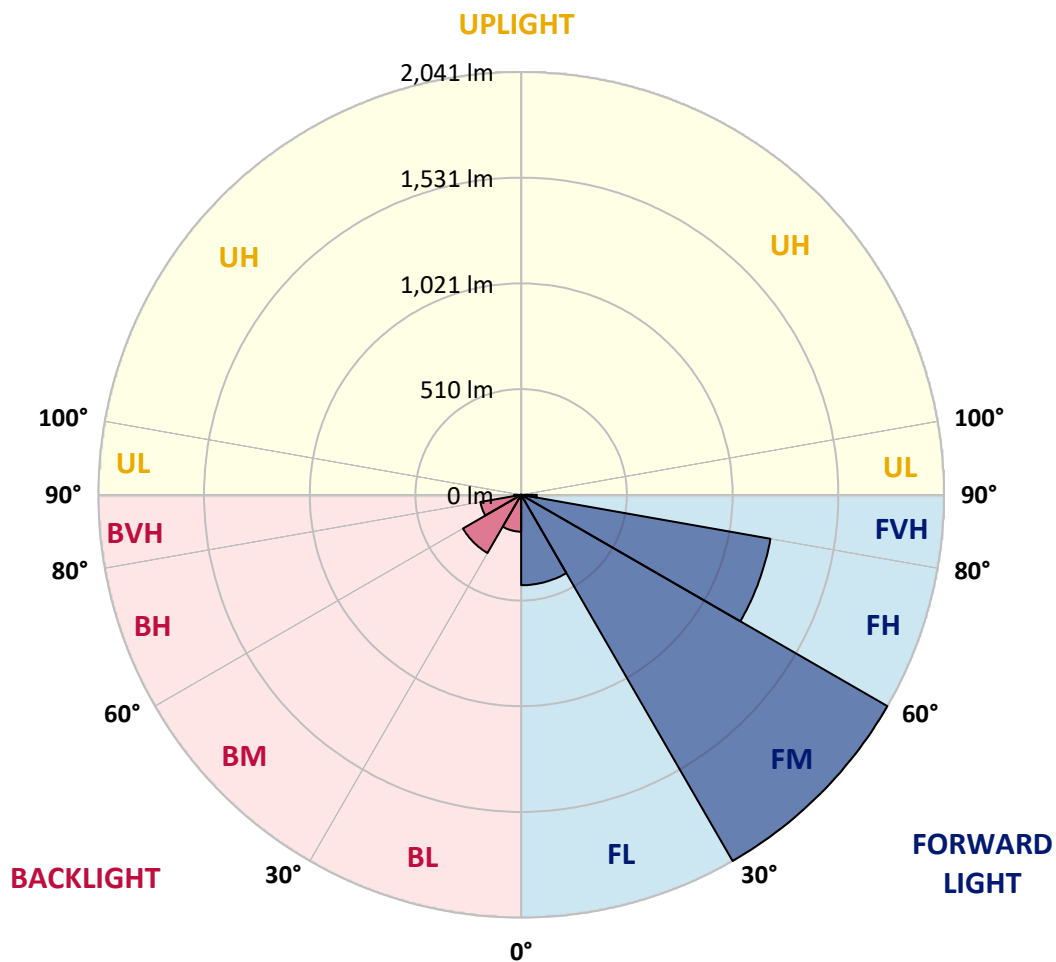
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	436.4	9.7			
FM (30°-60°)	2041.0	45.2			
FH (60°-80°)	1221.5	27.1			G1/1800
FVH (80°-90°)	75.7	1.7			G1/100
BL (0°-30°)	177.9	3.9	B1/500		
BM (30°-60°)	324.3	7.2	B1/1000		
BH (60°-80°)	199.8	4.4	B1/500		G1/500
BVH (80°-90°)	34.6	0.8			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: P397798

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	564.1	564.1	564.1	564.1	564.1	564.1	564.1	564.1	564.1	564.1	564.1
2.5°	718.9	713.6	713.0	704.7	697.0	676.2	661.4	635.3	609.2	608.6	582.5
5°	831.1	825.7	822.7	812.7	799.6	772.3	745.6	705.3	660.8	657.8	608.6
7.5°	907.0	902.2	896.3	892.2	879.7	855.4	822.7	774.7	713.6	707.7	638.9
10°	958.0	955.0	953.8	950.9	943.2	923.6	892.2	841.1	766.4	759.9	670.9
12.5°	979.9	978.8	984.1	992.4	995.4	987.7	957.4	909.4	824.5	817.4	709.5
15°	954.4	955.6	969.3	997.7	1028.0	1044.6	1026.8	979.9	890.4	880.3	754.5
17.5°	942.6	944.4	953.8	981.1	1023.8	1075.4	1083.8	1047.0	953.8	939.6	802.0
20°	963.3	965.7	972.8	994.2	1023.8	1079.0	1122.3	1111.0	1016.1	1001.3	847.7
22.5°	1016.1	1019.1	1018.5	1032.1	1052.3	1090.3	1143.7	1171.5	1081.4	1064.8	895.1
25°	1128.8	1126.5	1106.3	1099.8	1105.1	1129.4	1172.1	1229.7	1149.6	1133.0	944.9
27.5°	1281.9	1278.9	1242.1	1208.9	1179.3	1189.9	1212.5	1276.5	1219.0	1200.0	992.4
30°	1445.6	1442.0	1399.3	1345.3	1279.5	1264.1	1261.1	1317.5	1289.0	1268.8	1042.8
32.5°	1605.2	1602.2	1556.5	1493.6	1402.9	1356.6	1328.1	1363.1	1368.5	1348.9	1098.0
35°	1750.5	1750.5	1711.3	1636.6	1534.0	1464.0	1417.1	1419.5	1459.8	1437.3	1160.9
37.5°	1879.8	1879.2	1836.5	1762.9	1664.5	1584.4	1526.3	1487.7	1547.0	1527.5	1226.7
40°	1982.4	1978.3	1946.8	1882.8	1783.7	1704.2	1645.5	1567.8	1644.3	1626.5	1296.7
42.5°	2057.2	2054.8	2033.4	1977.7	1883.4	1808.6	1768.3	1668.6	1754.6	1736.8	1378.6
45°	2086.2	2091.0	2091.0	2038.2	1963.4	1895.2	1877.4	1779.6	1873.9	1856.1	1466.4
47.5°	2039.4	2051.8	2077.3	2080.9	2015.1	1968.8	1974.7	1891.1	1996.7	1987.2	1562.5
50°	1892.9	1916.0	1971.8	2072.6	2035.8	2025.1	2057.8	2005.0	2128.4	2125.4	1679.3
52.5°	1515.0	1571.3	1745.2	1926.1	2021.6	2051.2	2140.2	2133.1	2298.0	2302.7	1831.8
55°	1162.1	1183.4	1384.5	1692.4	1934.4	2042.9	2195.4	2258.3	2481.9	2487.8	1971.8
57.5°	939.6	953.8	1063.6	1384.5	1735.7	1997.9	2238.7	2331.2	2623.1	2638.5	2096.3
60°	744.4	765.2	838.8	1059.4	1457.5	1889.3	2268.9	2412.5	2774.9	2798.1	2245.2
62.5°	553.4	563.5	632.9	784.8	1153.7	1694.1	2252.9	2500.9	2961.2	2989.1	2424.4
65°	393.9	402.8	452.0	558.2	853.0	1430.2	2159.8	2566.7	3194.9	3223.4	2604.7
67.5°	294.8	298.4	326.3	390.3	574.8	1111.0	1971.2	2555.4	3365.7	3391.2	2677.0
70°	233.1	234.3	248.0	282.4	373.7	773.5	1640.8	2389.9	3378.2	3400.7	2585.7
72.5°	193.4	192.8	200.5	217.1	260.4	489.4	1215.4	2082.7	3218.0	3233.5	2330.6
75°	159.6	160.8	166.1	175.6	198.7	322.7	787.8	1661.5	2839.0	2822.4	1955.7
77.5°	134.1	133.5	135.8	144.1	160.8	231.9	461.5	1200.6	2104.0	2095.7	1283.7
80°	108.0	109.1	112.7	119.8	135.2	176.8	272.9	749.2	1128.8	1098.6	613.4
82.5°	72.4	83.6	90.8	99.1	116.9	130.5	173.2	380.8	504.8	497.1	278.2
85°	34.4	45.7	67.6	77.1	94.9	81.9	117.5	181.5	252.7	249.7	100.2
87.5°	7.1	7.1	36.2	43.3	58.7	35.0	65.3	78.9	122.2	114.5	40.9
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: P397798

CATALOG NUMBER: ARCH-S-PA1-40-827-U-T2R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	564.1	564.1	564.1	564.1	564.1	564.1	564.1	564.1	564.1	564.1	564.1
2.5°	567.1	551.1	519.0	493.5	467.4	452.6	434.2	425.3	423.5	418.8	422.3
5°	577.2	545.7	485.2	445.5	418.8	405.7	399.2	396.8	396.2	395.1	395.1
7.5°	590.8	542.8	463.9	423.5	406.3	402.2	404.0	407.5	408.1	409.3	408.7
10°	607.4	543.4	452.0	418.2	409.9	410.5	416.4	421.2	423.5	425.3	424.7
12.5°	630.6	550.5	450.2	421.8	418.2	420.6	426.5	431.2	433.6	434.2	434.2
15°	660.8	565.3	454.4	429.5	426.5	428.3	431.8	433.6	434.2	433.6	433.6
17.5°	694.0	583.1	460.3	434.2	429.5	427.7	426.5	424.7	421.2	418.8	418.8
20°	726.1	599.1	463.3	433.6	425.3	418.2	411.1	402.2	396.2	391.5	391.5
22.5°	758.1	613.9	463.3	427.1	414.0	400.4	385.6	371.3	362.4	356.5	356.5
25°	791.9	628.2	459.7	415.8	396.2	376.7	356.5	338.7	329.8	323.9	322.7
27.5°	820.4	636.5	450.2	399.8	374.3	349.4	326.3	307.9	301.3	296.0	296.0
30°	850.6	641.8	432.4	379.0	349.4	320.9	297.2	282.4	275.2	267.5	266.9
32.5°	884.4	645.4	412.3	357.1	323.9	293.6	273.5	261.6	246.2	237.9	236.7
35°	923.6	650.1	390.9	332.2	298.4	271.1	259.2	239.6	224.8	217.7	217.1
37.5°	965.1	653.7	367.8	310.2	275.2	256.3	244.4	221.3	208.2	197.5	196.3
40°	1009.0	653.7	344.0	288.9	256.8	249.7	227.2	206.4	184.5	179.1	178.0
42.5°	1057.7	652.5	320.3	268.1	239.6	234.9	217.1	195.2	183.9	179.1	178.0
45°	1109.3	648.4	297.8	244.4	221.9	212.4	198.7	192.8	188.0	188.0	188.0
47.5°	1168.0	644.8	272.3	223.0	208.8	198.1	188.0	184.5	183.9	185.7	187.4
50°	1243.3	643.6	250.9	207.6	198.7	186.3	185.1	182.1	182.7	182.7	182.7
52.5°	1334.7	632.9	230.7	196.3	188.6	173.8	177.4	180.3	181.5	180.9	180.3
55°	1401.7	613.9	213.5	188.6	181.5	169.1	173.8	178.5	179.7	178.0	178.0
57.5°	1462.2	587.3	199.9	182.7	176.8	166.1	171.4	176.2	175.0	174.4	173.8
60°	1531.6	561.7	189.2	179.7	172.0	164.9	169.7	172.6	170.8	169.7	169.1
62.5°	1606.9	536.8	181.5	179.7	168.5	164.3	167.9	169.1	165.5	164.3	164.3
65°	1641.9	497.7	173.2	179.7	166.7	163.1	164.3	163.1	159.6	159.6	159.0
67.5°	1584.4	433.0	162.5	177.4	169.1	161.3	159.0	157.2	153.0	153.0	151.9
70°	1425.4	355.9	147.1	169.7	169.7	160.8	151.9	147.7	143.0	144.7	142.4
72.5°	1217.8	282.4	128.1	156.6	166.1	160.2	144.1	137.6	133.5	135.2	131.7
75°	986.5	218.9	105.6	135.8	157.2	157.2	136.4	127.5	122.8	122.8	118.6
77.5°	628.8	161.9	86.0	112.7	141.2	153.0	129.9	116.3	109.1	107.4	104.4
80°	311.4	113.9	70.6	89.6	120.4	143.6	125.2	103.2	93.1	89.6	84.2
82.5°	165.5	78.9	56.4	70.0	96.1	129.3	119.2	89.0	76.5	71.2	65.3
85°	74.1	48.6	45.1	53.4	73.0	106.2	107.4	73.0	58.7	70.0	51.6
87.5°	27.3	21.9	21.9	27.3	42.1	44.5	75.9	46.9	37.4	25.5	20.2
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)