

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: P348587

Luminaire Tested: **ARCH-N-PA1-50-727-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348587  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-50-727-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 980mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5674 lumens  
Efficiency: N/A  
Efficacy: 109.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 52  
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

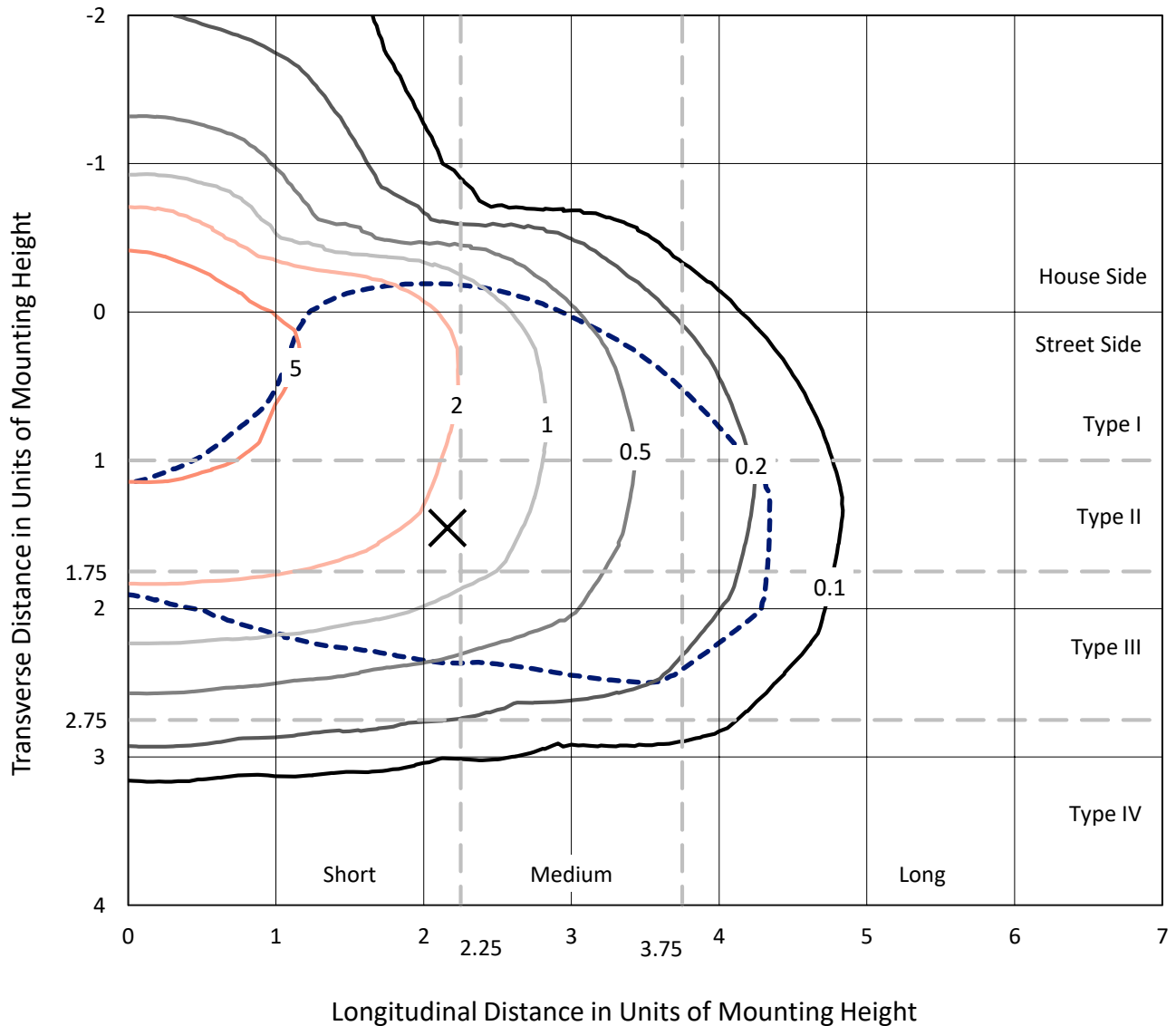


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

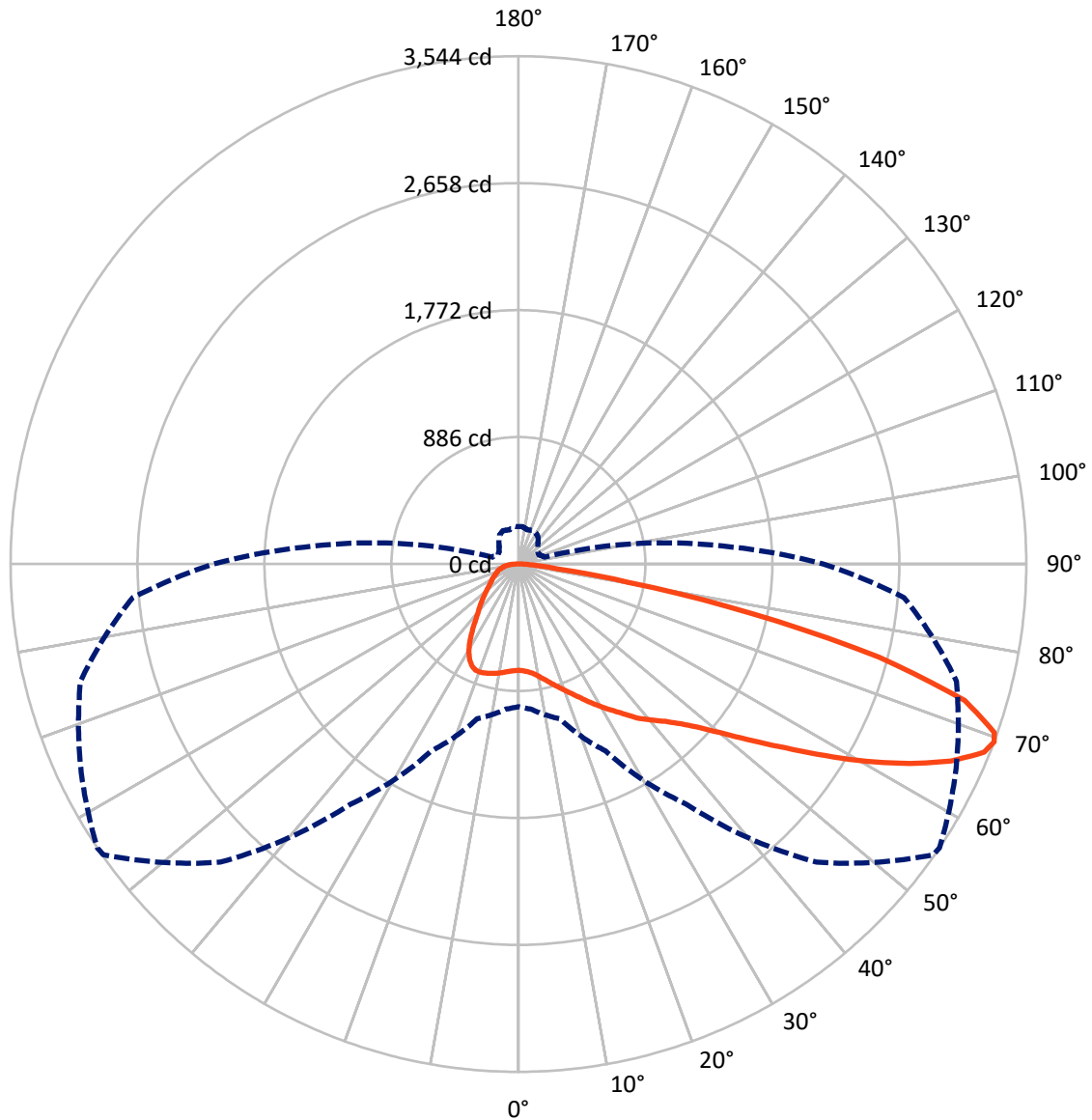


Based on 10 foot mounting height. Maximum calculated value = 8.1 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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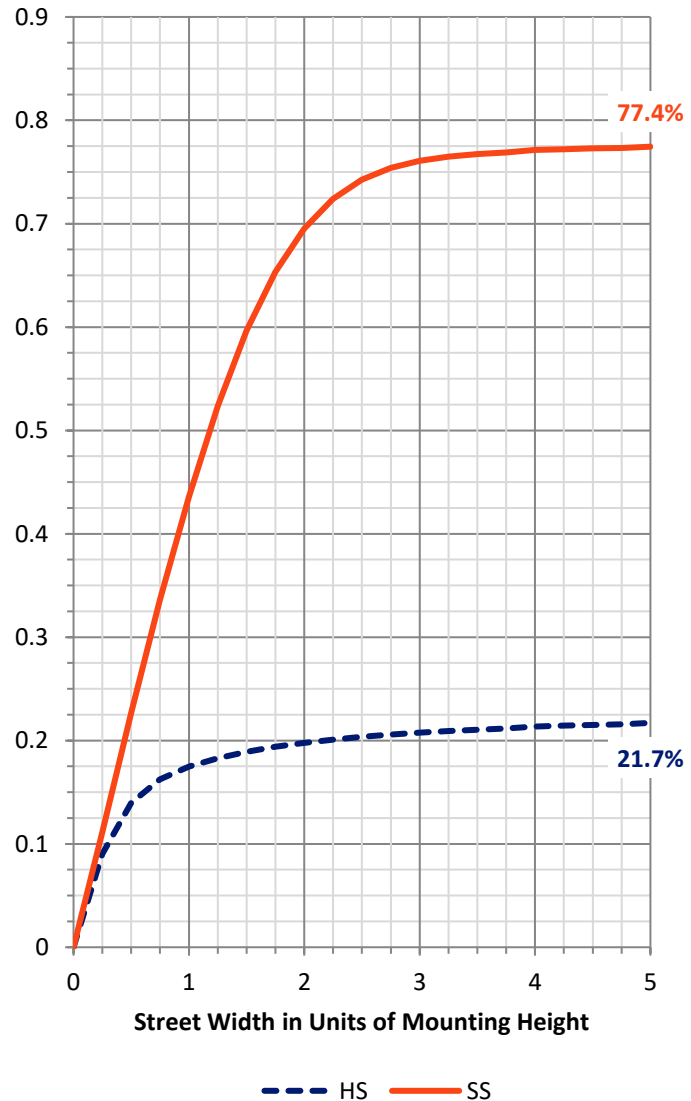
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1263.6	0.0	1263.6
	% Fixture	22.3	0.0	22.3
<b>Street Side</b>	Lumens	4410.4	0.0	4410.4
	% Fixture	77.7	0.0	77.7
<b>Total</b>	Lumens	5674.0	0.0	5674.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.9	1.3
10°-20°	234.3	4.1
20°-30°	409.0	7.2
30°-40°	587.4	10.4
40°-50°	813.0	14.3
50°-60°	1191.2	21.0
60°-70°	1452.2	25.6
70°-80°	802.9	14.2
80°-90°	111.2	2.0
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°	5674.0	100.0
0°-180°	5674.0	100.0



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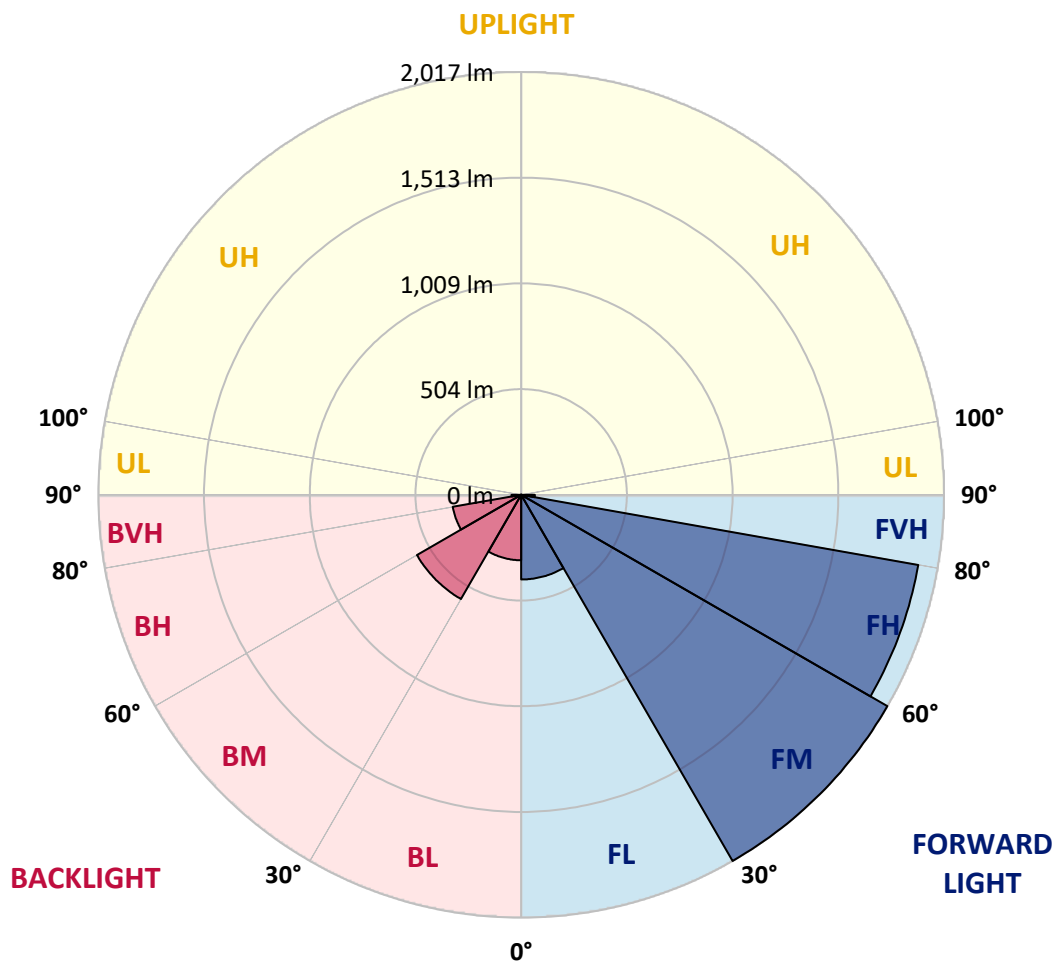
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	403.8	7.1			
FM	(30°-60°)	2017.3	35.6			
FH	(60°-80°)	1923.8	33.9			G2/5000
FVH	(80°-90°)	65.5	1.2			G1/100
BL	(0°-30°)	312.3	5.5	B1/500		
BM	(30°-60°)	574.3	10.1	B1/1000		
BH	(60°-80°)	331.4	5.8	B1/500		G1/500
BVH	(80°-90°)	45.7	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-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8
2.5°	746.5	747.3	746.7	748.2	746.5	747.7	746.7	746.7	746.1	744.3	742.4
5°	758.2	759.8	758.8	760.4	758.2	758.6	756.8	756.8	755.1	751.4	747.5
7.5°	776.6	778.3	777.6	779.1	776.2	776.2	773.8	773.7	770.1	764.1	759.6
10°	798.5	800.8	800.0	802.4	800.0	800.8	798.5	798.5	793.8	785.2	779.5
12.5°	830.3	833.3	831.1	830.9	829.9	831.5	829.6	829.2	824.9	813.1	805.3
15°	872.9	876.1	871.6	871.2	865.7	865.1	865.1	864.5	861.8	847.7	834.8
17.5°	922.0	923.0	919.1	912.8	905.8	901.3	900.7	902.3	902.3	885.8	865.3
20°	970.1	971.9	968.7	961.7	952.7	946.1	941.4	944.5	944.3	924.7	895.6
22.5°	1022.5	1026.6	1021.9	1012.9	1002.3	994.9	986.7	989.4	989.6	965.6	925.3
25°	1090.3	1086.6	1083.7	1071.0	1055.9	1048.3	1040.7	1043.4	1042.6	1009.6	956.0
27.5°	1150.3	1151.1	1147.2	1133.7	1116.3	1099.5	1099.1	1100.9	1097.9	1055.3	984.9
30°	1220.1	1220.5	1215.0	1202.9	1183.9	1162.2	1157.2	1160.1	1153.8	1098.7	1015.4
32.5°	1289.5	1291.4	1285.4	1270.7	1255.5	1229.1	1218.9	1220.9	1205.2	1143.1	1046.9
35°	1350.3	1353.0	1351.1	1341.3	1324.7	1302.0	1289.9	1288.7	1269.4	1197.4	1088.5
37.5°	1412.2	1414.8	1412.6	1404.4	1397.8	1373.7	1367.3	1367.3	1333.7	1252.9	1141.5
40°	1476.0	1479.9	1477.3	1466.0	1460.3	1449.4	1433.9	1430.2	1393.9	1319.6	1227.9
42.5°	1535.2	1540.3	1550.4	1543.8	1532.3	1533.8	1502.7	1500.8	1474.2	1418.1	1336.4
45°	1619.2	1626.7	1643.9	1638.8	1636.4	1627.8	1590.9	1589.1	1579.0	1550.6	1471.1
47.5°	1710.9	1721.1	1752.1	1753.1	1778.3	1762.1	1711.9	1705.8	1708.2	1709.3	1635.5
50°	1795.3	1806.5	1857.5	1881.5	1941.0	1944.5	1864.2	1858.7	1867.9	1894.8	1827.0
52.5°	1862.8	1876.9	1940.6	2014.9	2116.7	2145.6	2051.6	2047.5	2054.3	2100.9	2043.6
55°	1912.2	1927.5	1996.9	2132.1	2294.8	2345.8	2267.4	2263.5	2267.8	2327.0	2279.1
57.5°	1923.8	1927.5	2028.1	2211.1	2445.1	2567.6	2531.5	2523.7	2502.5	2554.1	2539.1
60°	1869.6	1884.5	2002.3	2238.9	2561.4	2786.4	2807.5	2797.7	2738.5	2780.7	2768.6
62.5°	1759.8	1786.4	1906.0	2196.6	2606.9	2965.0	3078.2	3066.5	2964.4	2991.8	2933.5
65°	1580.3	1591.7	1717.4	2051.0	2549.1	3079.4	3319.6	3313.7	3185.3	3142.5	2964.0
67.5°	1259.4	1280.7	1387.4	1746.7	2312.4	3065.9	3506.3	3505.7	3329.6	3198.4	2855.9
69°	994.9	1017.0	1118.6	1438.8	2046.1	2942.5	3537.5	3544.4	3370.2	3164.4	2701.5
70°	793.2	818.8	888.6	1211.9	1809.8	2779.9	3511.5	3523.8	3362.4	3108.3	2559.0
72.5°	337.6	358.3	407.9	624.7	1103.0	2075.8	3210.7	3257.2	3181.2	2844.8	2114.9
75°	147.4	153.8	176.3	254.7	489.6	1129.8	2515.2	2601.2	2720.1	2404.6	1575.4
77.5°	107.9	110.6	122.9	149.5	219.7	426.7	1617.5	1667.5	1961.7	1749.8	966.4
80°	83.5	85.4	95.0	109.9	143.5	172.6	737.7	780.7	1103.0	898.7	402.5
82.5°	66.5	67.8	74.5	80.9	99.1	104.6	244.9	271.7	407.2	248.2	106.5
85°	61.8	63.3	65.7	59.0	63.5	61.4	105.9	110.8	122.9	97.5	44.6
87.5°	28.0	33.0	65.1	45.9	33.8	27.0	43.4	45.3	51.0	51.2	19.7
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°	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8
2.5°	743.5	743.0	743.9	741.6	744.5	744.3	743.4	743.7	745.7	745.5	745.7
5°	748.0	747.7	748.8	747.1	750.6	751.8	752.0	753.7	755.9	756.4	756.4
7.5°	759.4	759.4	760.0	757.6	760.0	759.8	758.8	760.6	762.7	762.9	762.7
10°	778.9	779.1	778.1	772.1	770.1	764.9	760.0	760.2	762.9	765.1	765.6
12.5°	803.6	802.8	798.5	787.3	779.1	768.4	763.3	763.1	765.8	767.6	768.2
15°	831.7	829.6	818.4	800.2	785.8	775.2	767.0	765.1	763.5	761.5	761.7
17.5°	858.3	853.4	834.8	809.6	794.4	780.3	764.5	751.8	743.0	737.9	736.3
20°	885.3	875.7	848.9	818.4	799.1	773.5	743.0	717.2	701.1	693.7	692.3
22.5°	909.9	894.4	862.0	827.6	795.3	750.4	702.5	665.0	642.7	632.7	633.5
25°	933.9	912.4	875.7	834.0	776.6	709.7	646.2	600.1	574.3	563.1	562.7
27.5°	955.0	930.6	890.5	828.8	741.6	651.9	579.6	534.6	513.1	503.5	502.0
30°	979.3	953.5	910.3	808.6	690.4	585.0	514.5	482.8	467.6	458.0	456.2
32.5°	1008.8	984.6	926.5	772.1	624.9	515.2	463.6	441.6	427.7	416.9	415.0
35°	1051.8	1025.6	930.6	719.7	553.0	460.1	426.3	403.6	384.9	371.0	369.6
37.5°	1105.7	1077.0	921.2	651.9	483.2	424.4	395.2	367.3	342.8	323.3	320.2
40°	1183.5	1140.1	895.2	573.7	431.8	396.8	364.9	333.1	302.8	279.9	275.4
42.5°	1277.0	1214.2	855.4	495.9	394.1	368.8	334.8	295.3	266.4	250.2	247.8
45°	1395.8	1291.2	800.0	427.9	356.9	340.9	302.4	266.0	248.0	236.1	234.2
47.5°	1531.5	1377.6	742.0	372.6	325.4	314.7	276.4	252.9	238.7	229.3	227.5
50°	1698.2	1475.2	680.4	327.2	293.8	283.2	264.1	245.7	234.4	227.1	225.4
52.5°	1886.2	1585.2	636.0	291.4	267.6	260.0	257.6	241.8	232.6	227.1	225.4
55°	2088.7	1697.2	588.2	261.3	244.9	247.1	253.3	242.2	235.9	229.3	226.7
57.5°	2291.4	1812.9	534.8	235.9	226.9	237.5	250.4	243.0	237.7	231.2	228.9
60°	2451.7	1886.2	452.1	214.6	212.7	226.9	243.4	237.1	230.3	230.5	230.1
62.5°	2526.6	1882.3	360.8	195.7	198.4	212.7	232.0	227.9	222.2	229.9	230.5
65°	2484.6	1788.5	280.9	178.5	183.2	197.8	220.3	223.4	225.4	240.0	242.0
67.5°	2308.2	1605.9	217.6	163.4	169.3	187.6	221.5	243.4	245.9	261.3	261.1
69°	2125.9	1434.7	189.0	155.6	162.4	190.2	236.7	256.1	246.5	262.9	260.6
70°	1973.0	1299.3	173.8	150.3	159.3	194.7	246.9	255.9	243.5	257.6	253.7
72.5°	1519.5	934.7	147.4	140.5	148.7	186.3	249.8	250.2	236.7	239.4	232.8
75°	1042.2	590.7	128.6	127.2	132.7	167.9	240.4	239.1	218.9	215.0	209.5
77.5°	574.7	300.0	109.3	114.5	118.3	148.7	218.5	216.6	200.0	191.8	189.8
80°	221.7	131.4	92.3	101.8	104.2	128.8	191.6	189.8	175.9	165.4	162.4
82.5°	83.7	68.8	76.2	88.2	87.4	106.3	162.2	161.3	147.8	132.3	127.6
85°	38.7	41.2	60.4	72.7	67.0	78.8	129.8	131.5	115.1	96.8	96.8
87.5°	16.4	23.1	42.8	54.9	45.2	53.2	95.2	90.9	83.5	57.9	54.3
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)