

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: P348550

Luminaire Tested: **ARCH-N-PA1-30-750-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348550  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-30-750-U-T2R  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 560mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4429 lumens  
Efficiency: N/A  
Efficacy: 142.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

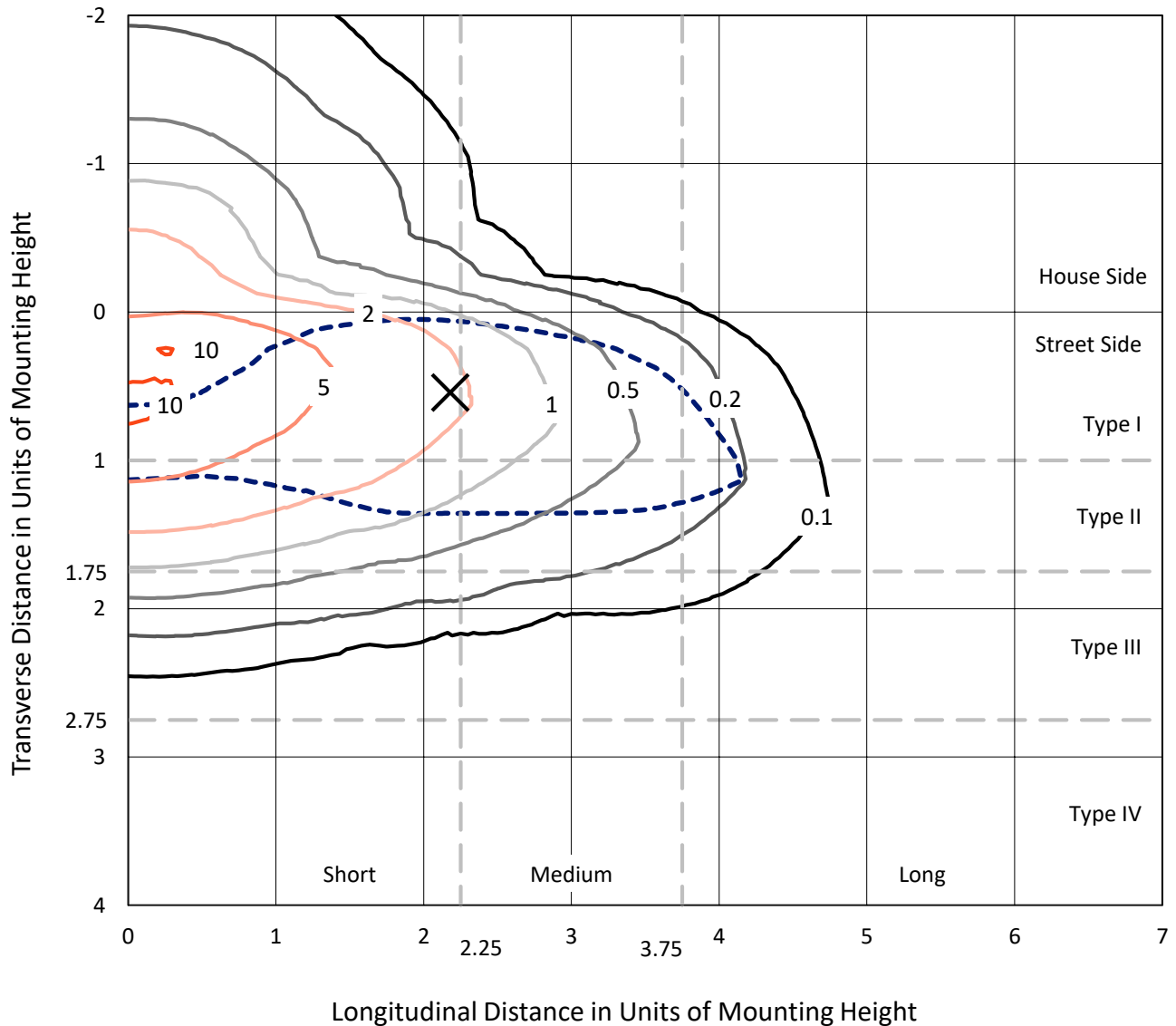
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

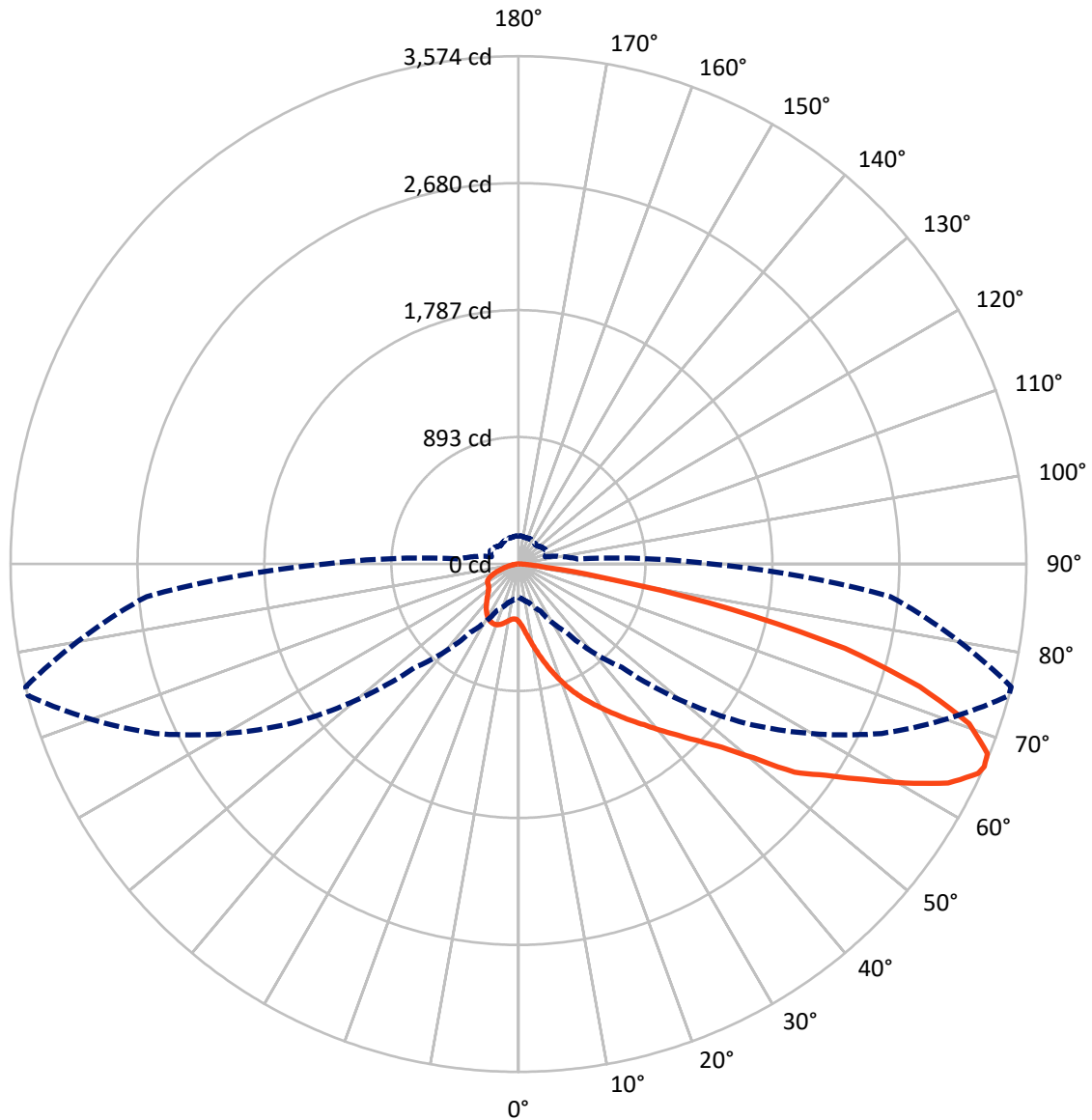
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.7 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical



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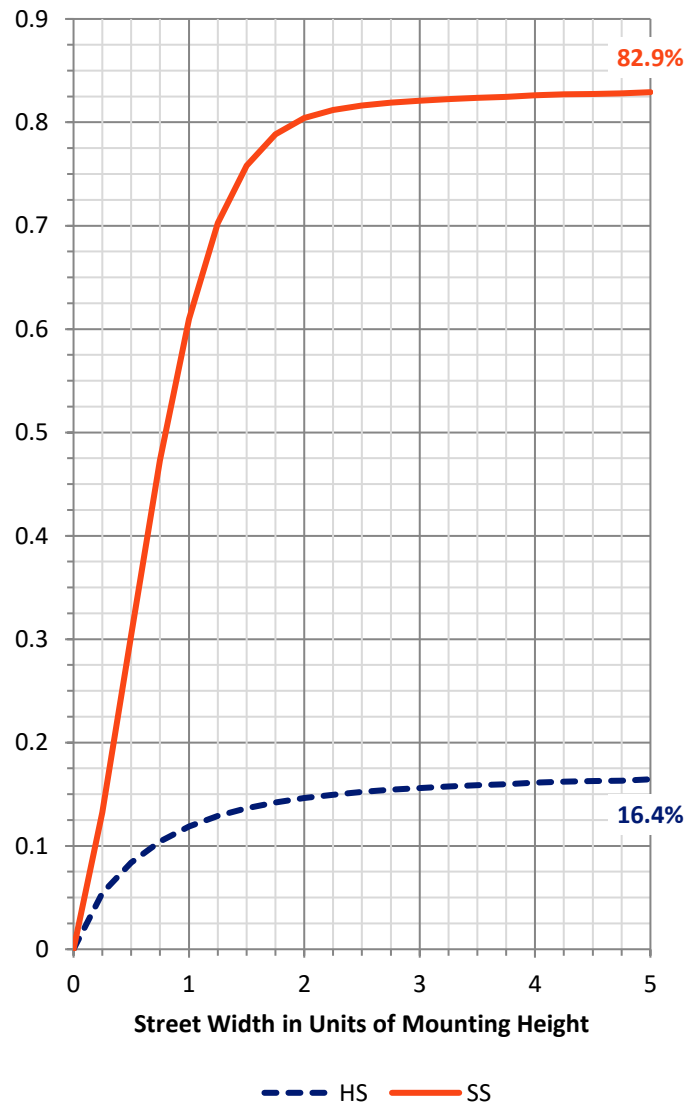
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	745.3	0.0	745.3
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	3683.8	0.0	3683.8
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	4429.0	0.0	4429.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.9	1.1
10°-20°	193.1	4.4
20°-30°	375.3	8.5
30°-40°	612.6	13.8
40°-50°	837.0	18.9
50°-60°	974.9	22.0
60°-70°	874.0	19.7
70°-80°	441.7	10.0
80°-90°	71.3	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°	4429.0	100.0
0°-180°	4429.0	100.0



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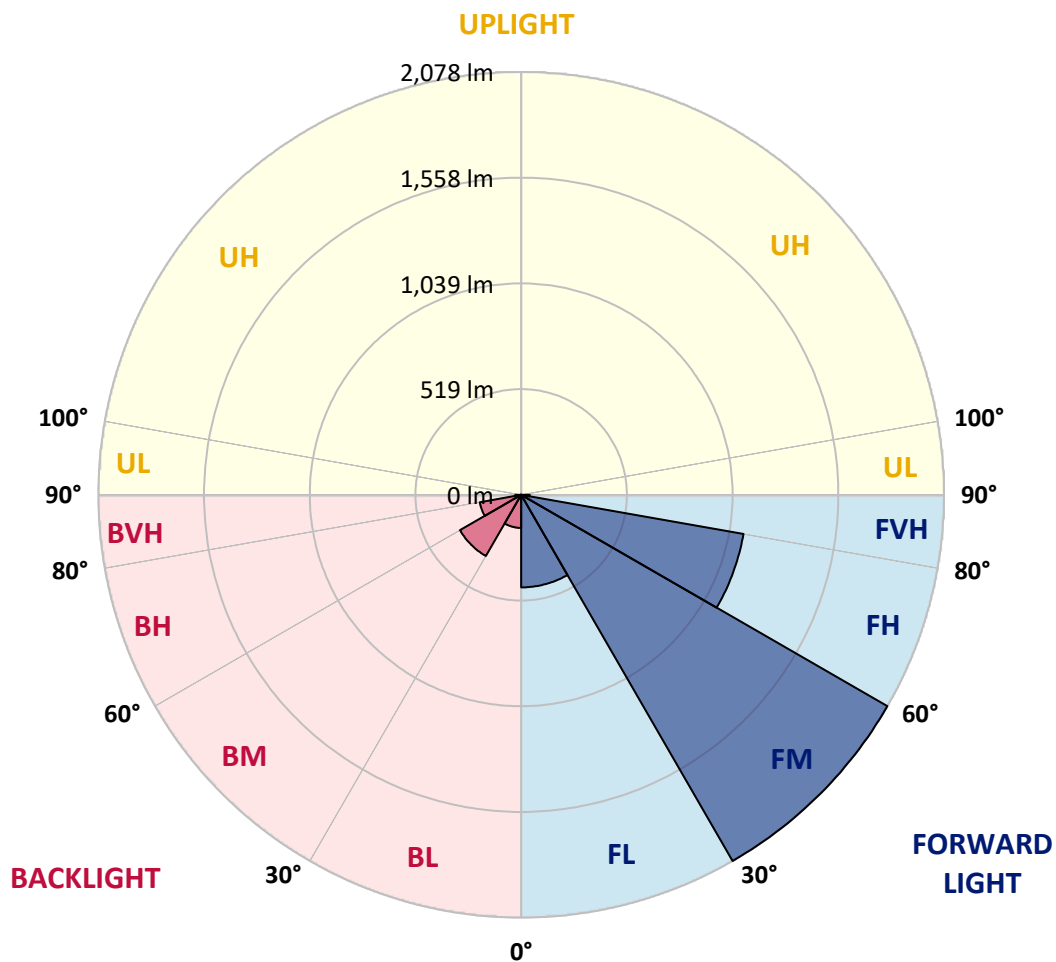
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	454.8	10.3			
FM (30°-60°)	2077.5	46.9			
FH (60°-80°)	1109.3	25.0			G1/1800
FVH (80°-90°)	42.1	1.0			G1/100
BL (0°-30°)	162.5	3.7	B1/500		
BM (30°-60°)	347.0	7.8	B1/1000		
BH (60°-80°)	206.5	4.7	B1/500		G1/500
BVH (80°-90°)	29.2	0.7			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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	404.5	404.5	404.5	404.5	404.5	404.5	404.5	404.5	404.5	404.5	404.5
2.5°	536.9	528.8	528.1	516.2	513.5	490.8	474.1	456.6	436.8	432.9	417.2
5°	689.7	688.9	678.6	659.2	644.0	605.2	566.9	526.3	481.8	474.5	439.4
7.5°	827.1	825.9	818.0	797.1	775.1	727.4	672.7	610.5	538.3	527.6	469.3
10°	931.5	931.0	928.3	913.0	894.3	848.6	788.2	703.2	604.0	589.4	506.7
12.5°	1012.1	1013.0	1014.8	1009.4	1000.5	961.6	899.6	801.6	674.1	659.6	548.4
15°	1066.7	1069.4	1078.7	1086.3	1091.0	1067.1	1007.1	902.2	752.6	735.3	594.5
17.5°	1094.2	1097.2	1113.3	1136.4	1157.8	1155.4	1107.7	998.1	827.9	811.2	644.1
20°	1117.9	1120.2	1138.2	1166.0	1203.8	1220.5	1193.7	1090.4	910.4	890.6	696.8
22.5°	1186.8	1189.6	1195.1	1210.8	1244.2	1274.9	1262.0	1177.8	986.1	967.6	746.7
25°	1319.7	1323.2	1311.4	1298.1	1304.4	1325.7	1328.1	1257.5	1062.7	1041.8	800.4
27.5°	1479.8	1484.8	1464.8	1430.4	1400.3	1392.0	1389.2	1322.7	1136.0	1111.8	853.4
30°	1636.7	1645.2	1619.2	1574.6	1519.4	1480.6	1451.9	1386.6	1208.1	1185.0	903.5
32.5°	1789.9	1786.4	1748.7	1705.1	1640.4	1591.9	1522.4	1455.2	1289.3	1262.7	953.3
35°	1894.8	1896.0	1861.0	1809.3	1747.6	1710.3	1616.8	1529.2	1372.2	1347.7	1009.8
37.5°	1984.1	1978.6	1938.9	1890.6	1837.5	1821.6	1727.3	1610.7	1461.9	1435.2	1070.0
40°	2013.9	2007.5	1981.4	1946.7	1904.2	1902.8	1849.3	1703.0	1563.4	1537.0	1137.8
42.5°	1995.9	1987.6	1976.9	1967.5	1954.4	1960.4	1963.8	1811.2	1675.0	1645.4	1216.3
45°	1929.3	1916.8	1924.3	1944.9	1973.3	2007.3	2067.3	1931.1	1800.0	1775.1	1308.4
47.5°	1826.9	1815.6	1839.0	1883.1	1960.4	2046.4	2165.2	2063.4	1949.1	1924.5	1439.7
50°	1682.8	1686.1	1719.7	1799.8	1916.6	2064.4	2285.8	2238.6	2165.9	2142.9	1618.8
52.5°	1446.5	1447.1	1541.5	1673.1	1839.0	2055.1	2352.7	2462.4	2462.0	2434.2	1789.3
55°	1226.9	1240.3	1315.0	1489.9	1713.3	2017.8	2399.4	2571.3	2656.4	2623.8	1948.2
57.5°	1012.5	1020.3	1091.2	1266.8	1534.0	1918.4	2447.4	2702.0	2880.4	2859.8	2145.8
60°	768.6	780.7	853.9	1016.1	1304.5	1742.1	2451.9	2838.3	3148.2	3127.5	2366.4
62.5°	498.9	519.6	588.2	740.2	1027.0	1488.4	2347.3	2927.5	3402.0	3394.7	2562.1
65°	286.7	302.4	350.0	467.3	708.5	1169.9	2098.4	2893.2	3558.3	3554.1	2635.4
66°	234.3	244.0	280.6	365.2	584.6	1027.4	1953.8	2820.9	3573.7	3573.9	2626.9
67.5°	187.3	191.7	208.1	261.5	431.4	814.3	1695.3	2661.4	3554.5	3559.8	2572.7
70°	155.0	157.3	162.4	175.3	235.5	491.1	1203.3	2246.8	3361.3	3365.4	2360.8
72.5°	139.1	140.4	142.4	144.2	166.1	274.4	735.0	1797.4	2947.1	2952.3	2038.0
75°	126.0	126.8	126.5	126.6	139.4	174.9	379.8	1342.0	2382.9	2372.4	1561.2
77.5°	110.7	111.4	109.9	110.2	123.3	134.4	189.0	939.4	1608.1	1533.8	879.6
80°	93.5	94.1	93.5	94.6	107.4	101.5	109.9	528.5	711.1	672.6	312.7
82.5°	70.7	73.2	75.0	79.2	88.4	72.2	73.5	205.8	216.5	206.1	95.9
85°	31.0	37.7	56.5	60.6	66.5	43.3	48.3	83.9	88.1	85.4	34.9
87.5°	8.1	8.9	28.0	35.2	36.8	19.5	25.1	38.2	40.3	38.2	11.6
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°	404.5	404.5	404.5	404.5	404.5	404.5	404.5	404.5	404.5	404.5	404.5
2.5°	409.0	401.6	388.4	376.7	367.8	361.8	355.8	352.7	350.9	349.1	349.4
5°	422.1	407.2	384.5	368.4	359.4	353.6	350.6	349.4	348.7	346.9	346.9
7.5°	441.8	420.7	389.4	372.9	365.8	361.5	359.7	359.1	358.2	356.1	356.4
10°	466.6	437.1	399.8	383.7	377.3	372.4	369.9	369.0	367.3	364.9	365.2
12.5°	495.7	457.4	413.5	396.6	388.8	382.4	378.2	375.6	372.7	369.6	369.7
15°	527.6	479.5	428.2	408.2	397.6	388.5	381.8	377.4	372.9	369.0	368.8
17.5°	559.9	500.8	439.5	414.5	400.1	388.2	379.1	372.3	366.7	361.9	361.5
20°	594.8	520.1	445.8	413.9	395.3	381.2	369.0	360.6	354.4	349.6	348.8
22.5°	630.3	538.1	446.9	407.8	384.6	367.3	354.5	345.2	338.9	333.9	332.1
25°	662.8	552.1	442.5	395.9	369.7	351.1	338.6	329.1	324.0	318.2	316.4
27.5°	692.4	561.9	433.8	380.7	353.0	334.7	323.0	314.9	309.3	304.8	303.3
30°	719.0	567.2	419.5	362.7	335.9	319.2	309.3	303.7	298.9	293.2	292.1
32.5°	744.3	567.2	401.2	343.0	318.9	305.5	299.7	296.2	290.8	285.2	283.7
35°	769.5	563.7	379.5	322.4	303.3	295.8	295.5	291.4	283.1	275.6	273.7
37.5°	796.2	556.6	355.1	303.1	290.5	291.4	294.0	284.9	273.2	262.5	259.7
40°	826.2	546.9	329.9	286.4	279.8	289.4	289.9	275.6	252.8	243.0	240.4
42.5°	861.6	537.1	306.4	271.7	271.4	283.6	282.2	255.5	241.8	236.8	235.5
45°	908.0	531.5	284.2	257.7	264.8	274.1	269.1	244.3	238.6	235.8	234.6
47.5°	981.2	534.4	263.7	246.6	258.2	264.6	244.8	239.8	235.8	232.3	231.1
50°	1073.0	532.7	247.2	238.9	250.6	254.7	233.8	234.0	231.9	227.9	226.1
52.5°	1142.0	519.8	236.5	234.6	244.0	237.1	226.9	228.2	227.2	221.5	219.5
55°	1208.6	508.7	231.1	232.9	239.2	215.2	218.8	222.1	221.0	215.5	214.6
57.5°	1291.4	506.6	227.8	233.4	235.2	204.2	211.0	215.3	214.6	212.2	211.7
60°	1392.9	507.2	224.8	234.1	230.7	196.1	203.6	209.2	209.6	209.2	208.8
62.5°	1448.7	490.8	217.3	232.0	222.7	189.0	195.9	204.0	204.2	205.1	204.9
65°	1401.4	441.8	203.3	224.6	209.3	183.1	189.3	198.2	195.9	200.0	200.0
66°	1355.3	413.5	196.4	219.8	203.6	180.9	187.2	195.2	192.3	197.9	197.9
67.5°	1261.4	365.8	183.9	209.6	195.5	177.7	184.8	190.2	186.3	194.6	194.0
70°	1089.7	283.0	158.8	186.4	182.1	173.1	181.5	180.3	174.6	187.2	184.8
72.5°	918.7	215.0	127.5	156.1	161.8	167.2	176.8	167.7	160.4	169.3	164.0
75°	712.9	161.6	100.7	121.3	136.7	158.0	171.3	153.1	142.7	141.8	138.9
77.5°	385.4	111.0	79.8	92.6	108.6	146.6	167.5	137.4	121.8	118.2	115.9
80°	152.6	72.2	58.0	70.2	75.9	130.1	158.5	119.2	100.4	96.8	93.4
82.5°	63.0	42.7	37.4	47.1	49.5	111.3	142.2	97.7	77.6	107.4	114.0
85°	27.1	23.5	22.3	24.4	28.0	78.0	113.2	74.6	83.8	74.7	59.4
87.5°	8.1	9.9	9.5	9.3	10.2	18.6	60.3	41.5	61.5	23.3	17.4
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)