

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: P348572

Luminaire Tested: **ARCH-N-PA1-40-830-U-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348572
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-PA1-40-830-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 740mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4445 lumens
Efficiency: N/A
Efficacy: 108.4 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

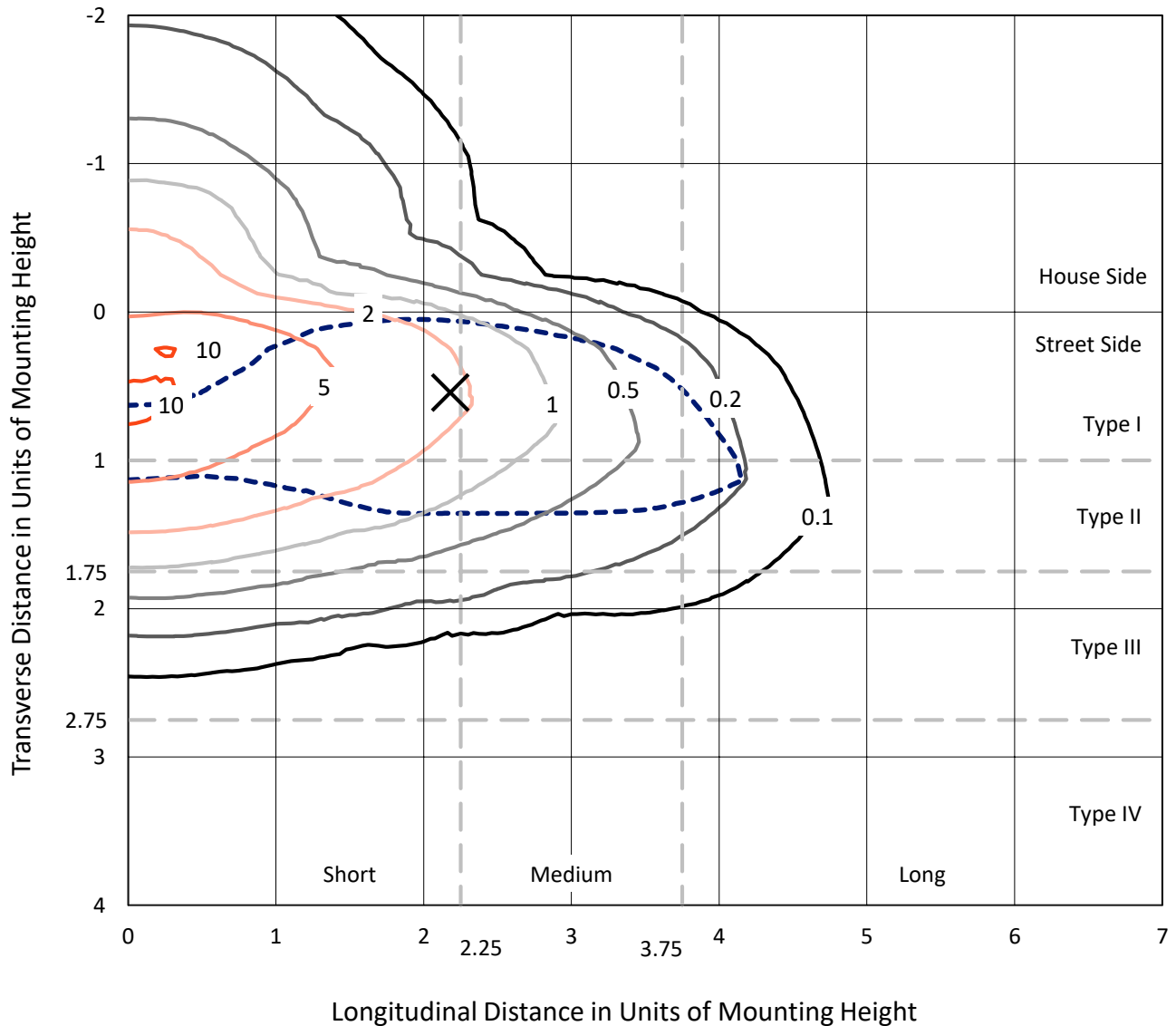
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

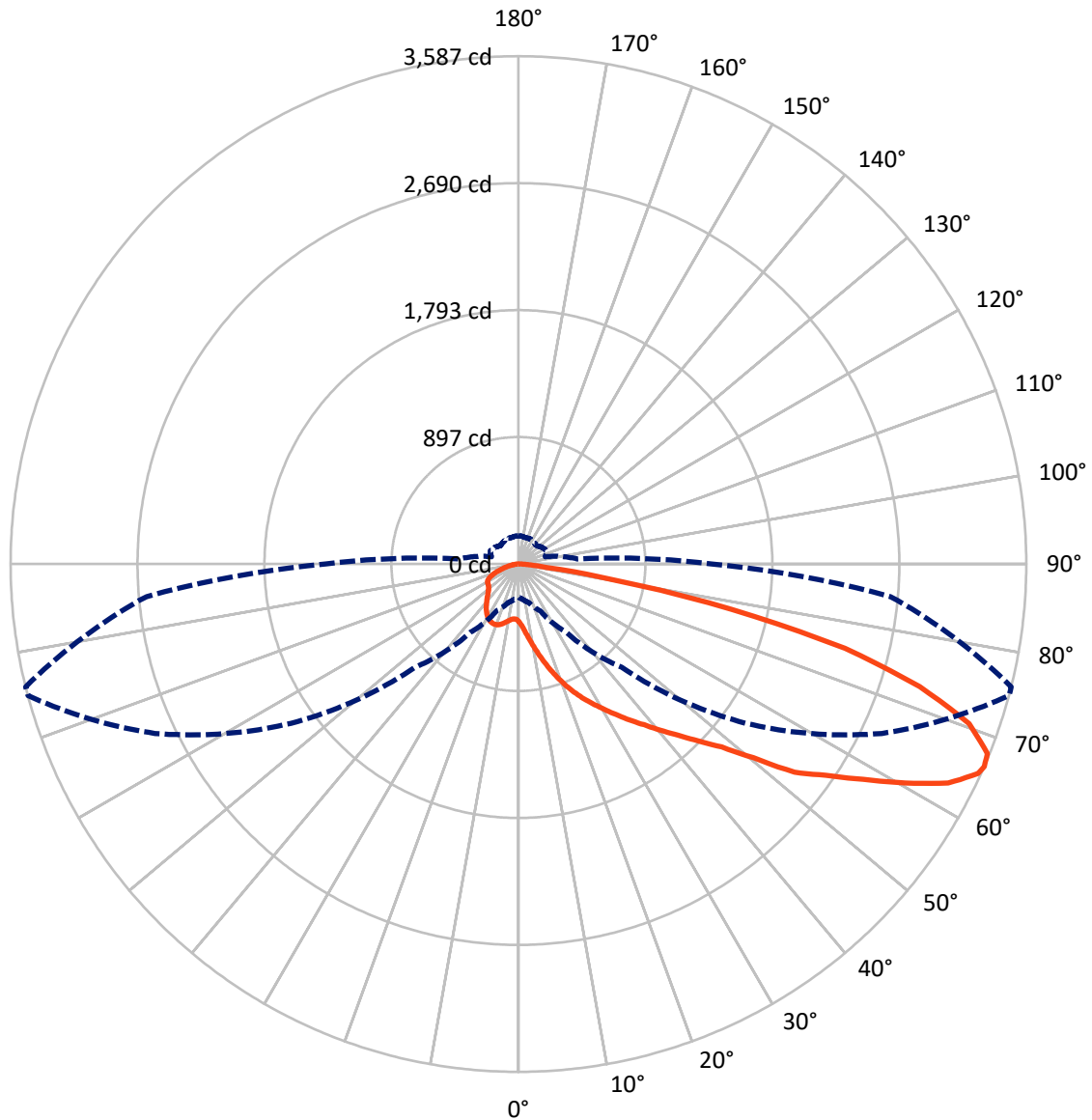
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.8 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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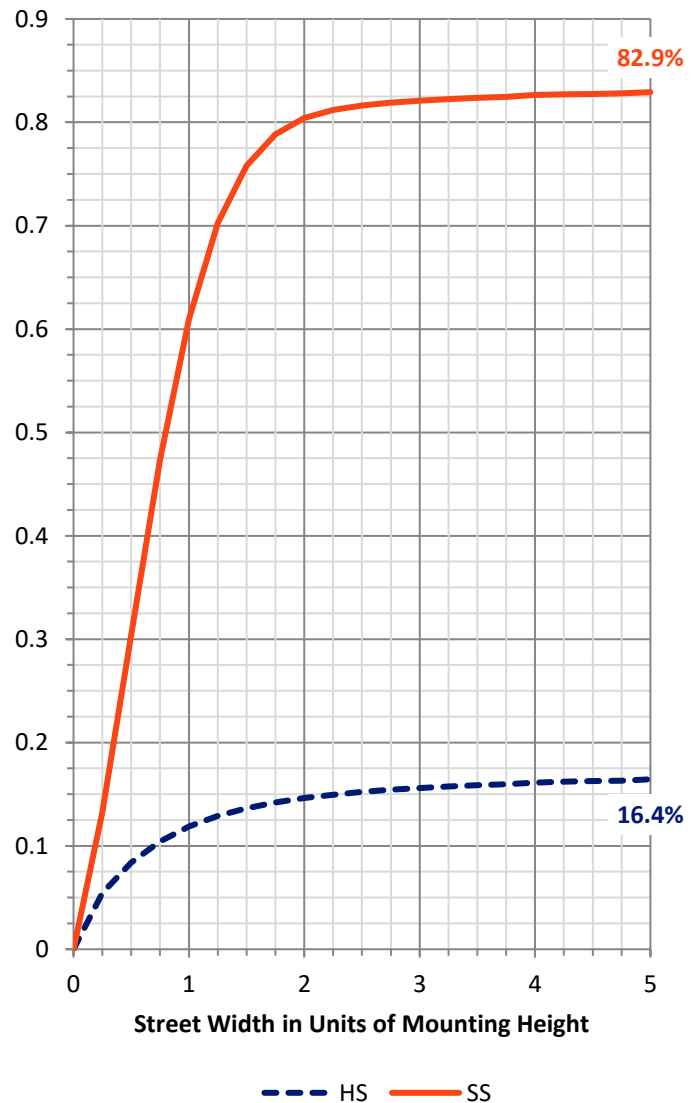
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	747.9	0.0	747.9
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	3697.1	0.0	3697.1
	% Fixture	83.2	0.0	83.2
Total	Lumens	4445.0	0.0	4445.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	1.1
10°-20°	193.8	4.4
20°-30°	376.7	8.5
30°-40°	614.8	13.8
40°-50°	840.0	18.9
50°-60°	978.4	22.0
60°-70°	877.2	19.7
70°-80°	443.3	10.0
80°-90°	71.6	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°	4445.0	100.0
0°-180°	4445.0	100.0



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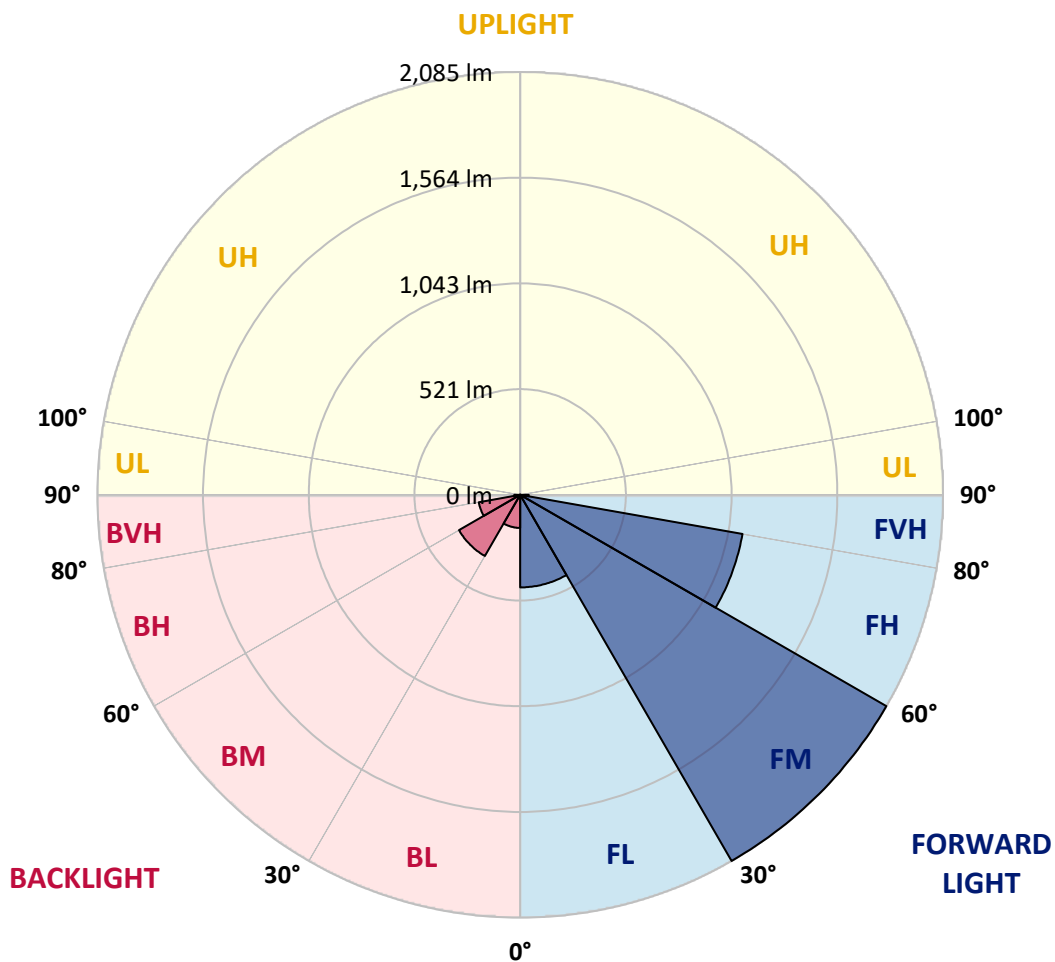
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	456.5	10.3			
FM (30°-60°)	2085.0	46.9			
FH (60°-80°)	1113.3	25.0			G1/1800
FVH (80°-90°)	42.3	1.0			G1/100
BL (0°-30°)	163.1	3.7	B1/500		
BM (30°-60°)	348.3	7.8	B1/1000		
BH (60°-80°)	207.2	4.7	B1/500		G1/500
BVH (80°-90°)	29.3	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°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	538.9	530.7	530.0	518.0	515.3	492.5	475.8	458.3	438.4	434.4	418.8
5°	692.2	691.4	681.0	661.6	646.3	607.4	568.9	528.2	483.5	476.2	440.9
7.5°	830.1	828.9	820.9	799.9	777.9	730.1	675.1	612.7	540.2	529.5	471.0
10°	934.8	934.4	931.7	916.3	897.6	851.7	791.0	705.8	606.2	591.5	508.5
12.5°	1015.7	1016.6	1018.4	1013.0	1004.1	965.0	902.9	804.5	676.5	662.0	550.3
15°	1070.5	1073.2	1082.6	1090.3	1095.0	1071.0	1010.7	905.4	755.3	737.9	596.7
17.5°	1098.1	1101.1	1117.3	1140.5	1162.0	1159.5	1111.7	1001.7	830.9	814.1	646.5
20°	1122.0	1124.2	1142.3	1170.3	1208.1	1224.9	1198.0	1094.3	913.7	893.8	699.3
22.5°	1191.1	1193.9	1199.4	1215.2	1248.7	1279.5	1266.5	1182.0	989.6	971.1	749.4
25°	1324.5	1327.9	1316.2	1302.7	1309.1	1330.5	1332.9	1262.0	1066.6	1045.6	803.3
27.5°	1485.2	1490.2	1470.1	1435.5	1405.4	1397.1	1394.2	1327.5	1140.1	1115.8	856.5
30°	1642.6	1651.2	1625.1	1580.3	1524.9	1485.9	1457.1	1391.6	1212.5	1189.3	906.8
32.5°	1796.3	1792.9	1755.0	1711.2	1646.4	1597.6	1527.9	1460.4	1294.0	1267.3	956.7
35°	1901.7	1902.9	1867.7	1815.8	1753.9	1716.5	1622.7	1534.7	1377.1	1352.5	1013.5
37.5°	1991.3	1985.7	1945.9	1897.5	1844.2	1828.2	1733.6	1616.5	1467.2	1440.4	1073.8
40°	2021.2	2014.7	1988.6	1953.7	1911.0	1909.7	1856.0	1709.1	1569.1	1542.5	1141.9
42.5°	2003.1	1994.8	1984.1	1974.6	1961.4	1967.5	1970.9	1817.8	1681.1	1651.3	1220.7
45°	1936.2	1923.7	1931.3	1951.9	1980.4	2014.6	2074.8	1938.0	1806.5	1781.6	1313.2
47.5°	1833.5	1822.2	1845.7	1889.9	1967.5	2053.8	2173.0	2070.8	1956.2	1931.4	1444.9
50°	1688.9	1692.2	1725.9	1806.3	1923.6	2071.9	2294.0	2246.6	2173.8	2150.7	1624.6
52.5°	1451.7	1452.3	1547.1	1679.1	1845.7	2062.5	2361.2	2471.3	2470.9	2443.0	1795.7
55°	1231.4	1244.8	1319.8	1495.3	1719.5	2025.1	2408.1	2580.6	2666.0	2633.3	1955.2
57.5°	1016.2	1024.0	1095.1	1271.4	1539.5	1925.4	2456.2	2711.7	2890.8	2870.2	2153.5
60°	771.4	783.5	857.0	1019.8	1309.2	1748.4	2460.8	2848.6	3159.6	3138.8	2374.9
62.5°	500.7	521.5	590.3	742.9	1030.7	1493.8	2355.7	2938.1	3414.3	3406.9	2571.4
65°	287.8	303.5	351.3	469.0	711.1	1174.2	2106.0	2903.7	3571.1	3566.9	2644.9
66°	235.1	244.9	281.6	366.5	586.7	1031.1	1960.8	2831.1	3586.7	3586.8	2636.4
67.5°	188.0	192.4	208.8	262.4	432.9	817.3	1701.4	2671.0	3567.3	3572.6	2581.9
70°	155.6	157.8	163.0	176.0	236.3	492.8	1207.7	2254.9	3373.4	3377.5	2369.3
72.5°	139.6	140.9	142.9	144.7	166.7	275.4	737.6	1803.9	2957.7	2963.0	2045.3
75°	126.5	127.2	126.9	127.1	139.9	175.5	381.2	1346.8	2391.5	2380.9	1566.8
77.5°	111.1	111.8	110.3	110.6	123.7	134.9	189.7	942.8	1613.9	1539.4	882.8
80°	93.9	94.5	93.9	94.9	107.7	101.9	110.3	530.4	713.6	675.0	313.9
82.5°	70.9	73.5	75.3	79.5	88.7	72.4	73.8	206.6	217.3	206.9	96.3
85°	31.1	37.9	56.7	60.8	66.7	43.5	48.4	84.2	88.4	85.7	35.0
87.5°	8.1	8.9	28.1	35.3	37.0	19.6	25.2	38.3	40.4	38.3	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°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	410.5	403.1	389.8	378.0	369.1	363.1	357.0	354.0	352.2	350.4	350.7
5°	423.6	408.6	385.9	369.7	360.7	354.9	351.9	350.7	349.9	348.1	348.1
7.5°	443.4	422.2	390.8	374.2	367.1	362.8	361.0	360.4	359.5	357.3	357.6
10°	468.3	438.7	401.3	385.1	378.6	373.8	371.2	370.3	368.7	366.2	366.5
12.5°	497.5	459.0	415.0	398.1	390.2	383.7	379.5	377.0	374.1	370.9	371.1
15°	529.5	481.2	429.8	409.7	399.0	389.9	383.1	378.8	374.2	370.3	370.2
17.5°	562.0	502.7	441.1	416.0	401.6	389.6	380.4	373.6	368.1	363.2	362.8
20°	597.0	522.0	447.4	415.4	396.7	382.5	370.3	361.9	355.7	350.8	350.1
22.5°	632.6	540.1	448.5	409.2	386.0	368.7	355.8	346.5	340.1	335.2	333.3
25°	665.2	554.1	444.1	397.3	371.1	352.4	339.8	330.3	325.2	319.3	317.5
27.5°	694.9	563.9	435.4	382.1	354.3	335.9	324.1	316.0	310.4	305.9	304.4
30°	721.6	569.2	421.0	364.0	337.1	320.4	310.4	304.8	300.0	294.3	293.2
32.5°	747.0	569.2	402.6	344.2	320.1	306.6	300.7	297.3	291.8	286.3	284.8
35°	772.3	565.7	380.9	323.5	304.4	296.8	296.5	292.4	284.2	276.6	274.6
37.5°	799.0	558.6	356.4	304.2	291.5	292.4	295.0	286.0	274.2	263.5	260.6
40°	829.2	548.8	331.1	287.5	280.8	290.5	290.9	276.6	253.7	243.9	241.3
42.5°	864.7	539.0	307.5	272.7	272.4	284.6	283.2	256.4	242.7	237.7	236.3
45°	911.3	533.4	285.2	258.6	265.7	275.1	270.1	245.2	239.5	236.6	235.4
47.5°	984.8	536.3	264.7	247.5	259.1	265.6	245.7	240.7	236.6	233.1	231.9
50°	1076.8	534.6	248.1	239.8	251.6	255.6	234.7	234.8	232.7	228.8	227.0
52.5°	1146.1	521.7	237.4	235.4	244.9	238.0	227.7	229.1	228.0	222.3	220.3
55°	1213.0	510.5	231.9	233.7	240.1	215.9	219.6	222.9	221.8	216.2	215.3
57.5°	1296.1	508.4	228.6	234.2	236.0	204.9	211.7	216.1	215.3	212.9	212.5
60°	1398.0	509.0	225.6	235.0	231.5	196.8	204.3	209.9	210.4	209.9	209.6
62.5°	1453.9	492.5	218.1	232.8	223.5	189.7	196.6	204.8	204.9	205.8	205.7
65°	1406.4	443.4	204.0	225.4	210.1	183.8	190.0	198.9	196.6	200.7	200.7
66°	1360.2	415.0	197.1	220.6	204.3	181.5	187.9	195.9	193.0	198.6	198.6
67.5°	1265.9	367.1	184.6	210.4	196.2	178.4	185.5	190.9	187.0	195.3	194.7
70°	1093.6	284.0	159.4	187.1	182.7	173.7	182.1	180.9	175.2	187.9	185.5
72.5°	922.0	215.8	128.0	156.6	162.4	167.8	177.5	168.3	161.0	169.9	164.6
75°	715.4	162.2	101.1	121.8	137.2	158.6	171.9	153.6	143.2	142.3	139.4
77.5°	386.8	111.4	80.1	93.0	109.0	147.1	168.1	137.9	122.2	118.6	116.3
80°	153.2	72.4	58.2	70.5	76.2	130.5	159.1	119.7	100.8	97.2	93.7
82.5°	63.2	42.9	37.6	47.2	49.6	111.7	142.8	98.1	77.9	107.7	114.4
85°	27.2	23.5	22.3	24.4	28.1	78.3	113.6	74.8	84.1	75.0	59.6
87.5°	8.1	10.0	9.5	9.4	10.3	18.7	60.5	41.6	61.7	23.4	17.5
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)