

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: P265929

Luminaire Tested: **ARCH-AF24-30-D-U-T4W-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265929  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-AF24-30-D-U-T4W-7027  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3436.2 lumens  
Efficiency: N/A  
Efficacy: 110.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-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

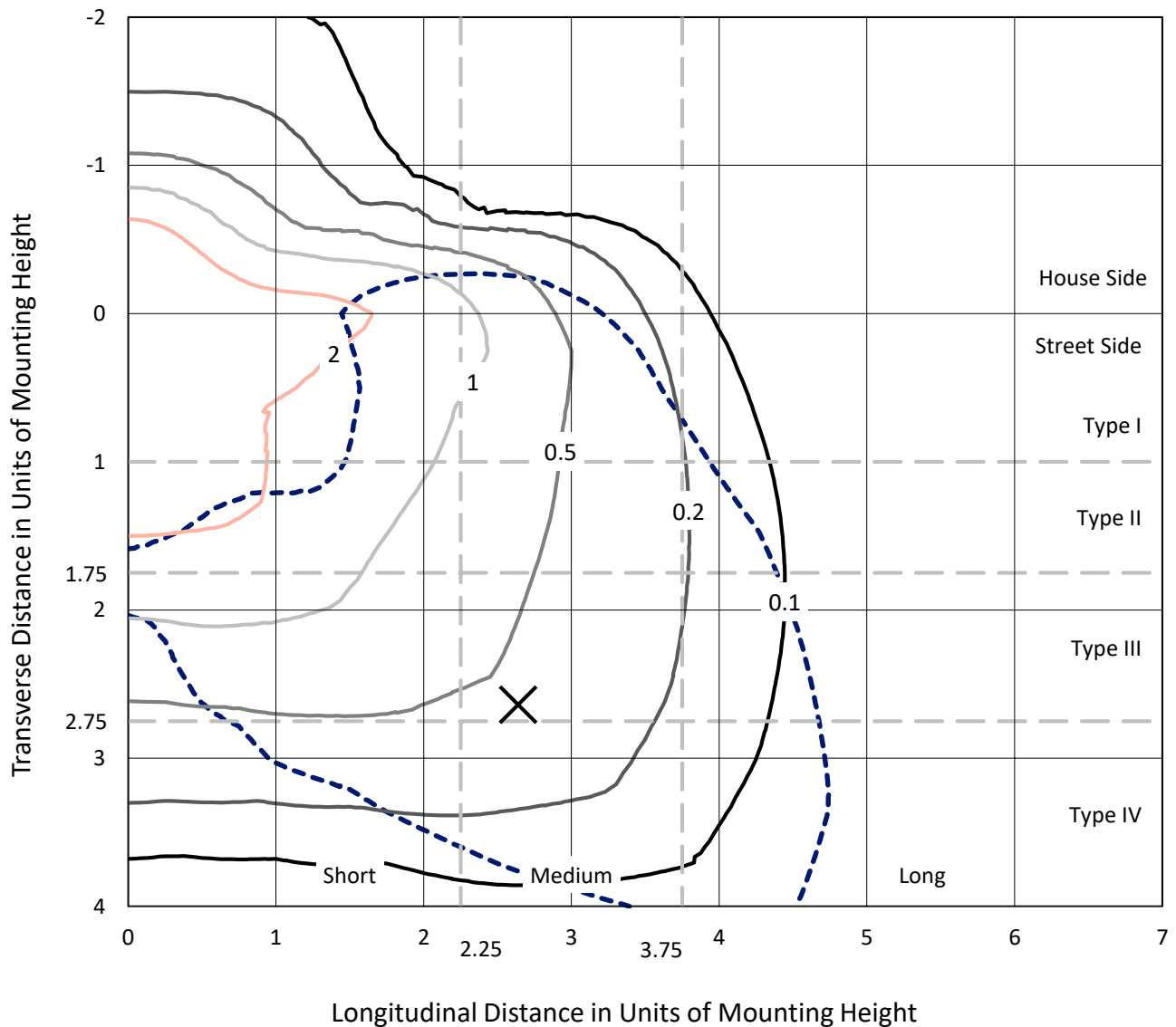


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

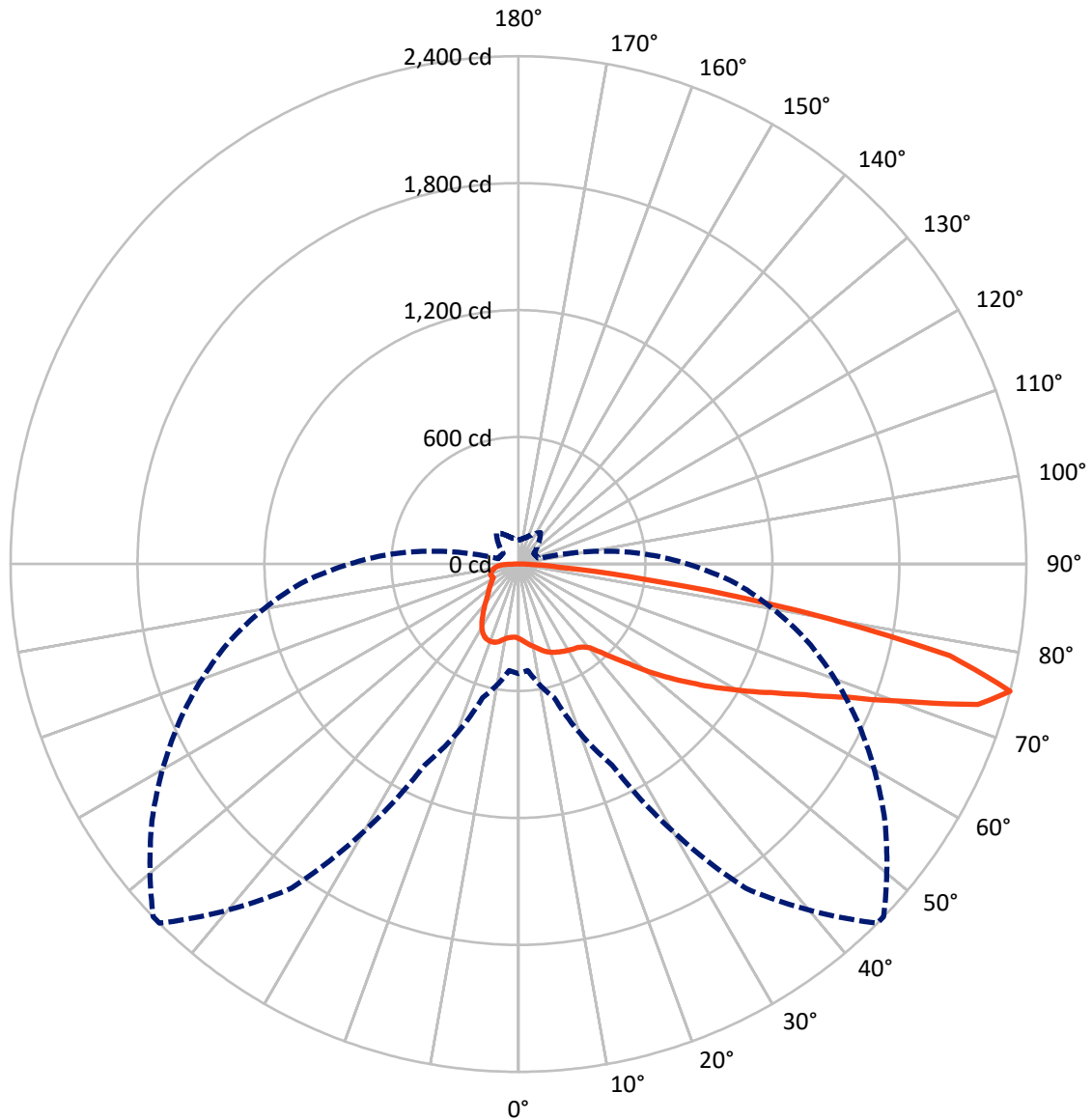


Based on 10 foot mounting height. Maximum calculated value = 4.1 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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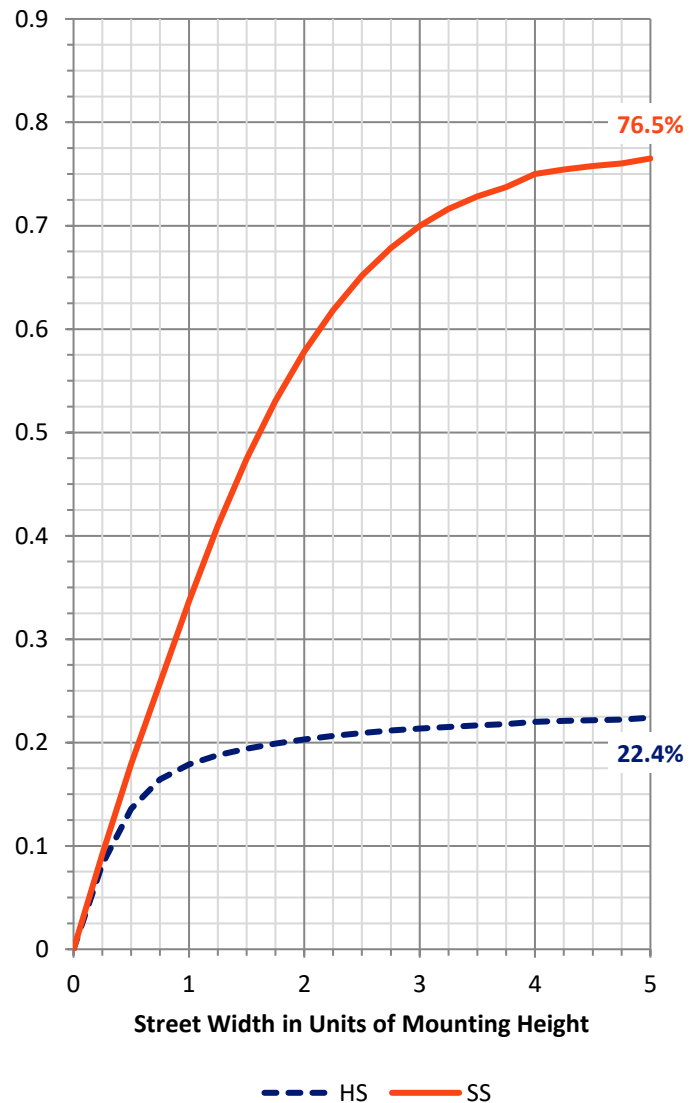
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	796.0	0.0	796.0
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	2640.2	0.0	2640.2
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	3436.2	0.0	3436.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.9	1.0
10°-20°	113.1	3.3
20°-30°	194.1	5.6
30°-40°	271.5	7.9
40°-50°	398.3	11.6
50°-60°	620.4	18.1
60°-70°	892.7	26.0
70°-80°	777.6	22.6
80°-90°	133.5	3.9
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°	3436.2	100.0
0°-180°	3436.2	100.0



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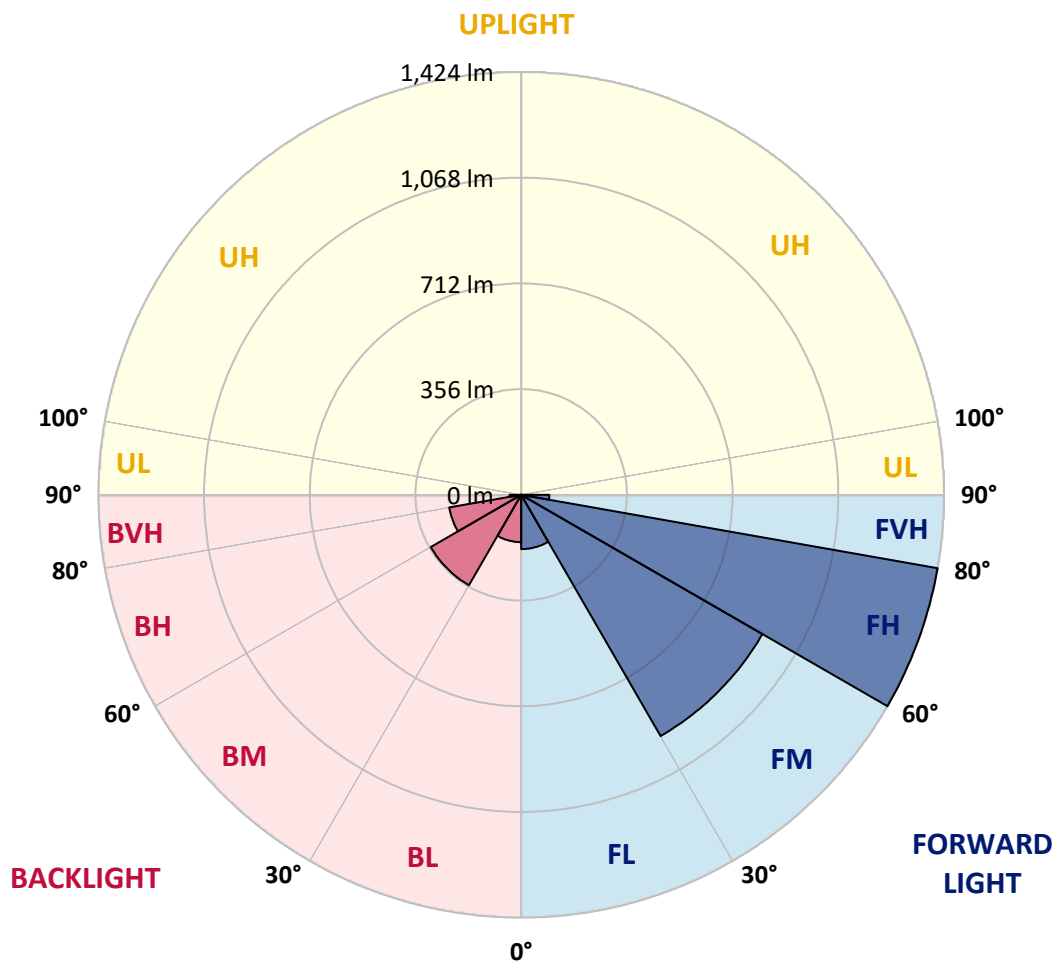
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	182.7	5.3			
FM	(30°-60°)	938.3	27.3			
FH	(60°-80°)	1424.3	41.5			G1/1800
FVH	(80°-90°)	94.8	2.8			G1/100
BL	(0°-30°)	159.4	4.6	B1/500		
BM	(30°-60°)	351.8	10.2	B1/1000		
BH	(60°-80°)	246.0	7.2	B1/500		G1/500
BVH	(80°-90°)	38.8	1.1			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 IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	352.2	352.2	352.2	352.2	352.2	352.2	352.2	352.2	352.2	352.2	352.2
2.5°	369.7	367.0	367.0	364.9	364.9	361.6	360.3	359.6	356.3	354.2	352.2
5°	391.0	387.7	387.0	382.3	380.3	372.9	372.3	367.6	361.6	355.5	350.9
7.5°	410.4	408.4	405.0	400.4	394.4	385.1	384.4	377.0	367.0	359.0	352.2
10°	424.4	423.1	418.4	412.4	405.8	396.4	395.8	387.7	375.6	366.2	356.9
12.5°	441.2	439.1	433.2	425.1	417.7	409.1	408.4	401.7	388.3	376.3	364.4
15°	457.1	454.5	447.1	439.1	431.1	423.8	423.8	416.5	402.4	388.3	374.4
17.5°	465.2	463.9	456.5	447.9	441.2	435.8	435.0	428.4	414.4	399.7	384.4
20°	467.8	468.6	461.9	452.6	447.9	445.2	444.5	439.8	424.4	410.4	395.8
22.5°	467.2	469.3	463.9	453.9	452.6	452.6	452.6	447.1	435.0	421.0	406.5
25°	470.0	472.6	468.6	456.5	456.5	459.3	459.3	456.5	445.7	433.8	419.1
27.5°	479.2	481.2	477.9	461.2	461.9	466.0	465.2	466.0	459.3	447.9	433.2
30°	490.7	493.3	489.2	468.6	467.8	471.9	471.9	475.3	470.5	458.6	446.5
32.5°	521.3	520.7	508.0	476.6	474.6	478.5	478.5	481.9	479.2	470.0	458.6
35°	613.0	602.9	574.8	502.6	482.6	484.5	484.5	490.7	491.9	484.5	474.6
37.5°	706.4	703.2	681.8	572.2	512.0	497.3	496.7	505.3	511.3	505.3	498.6
40°	800.7	798.1	793.5	665.0	573.5	519.9	518.1	525.4	536.1	532.1	528.1
42.5°	888.3	886.9	891.7	756.6	651.7	568.8	562.8	554.2	569.4	568.2	568.2
45°	957.1	960.5	963.3	842.3	736.6	631.7	624.3	594.9	615.6	621.0	625.0
47.5°	996.0	998.6	1008.0	925.8	821.5	704.5	699.2	651.0	678.4	694.5	705.9
50°	1051.5	1044.1	1052.0	1007.3	923.7	799.4	784.7	726.5	761.4	789.4	816.1
52.5°	1104.8	1092.9	1099.5	1101.5	1040.1	892.3	876.9	815.5	858.9	903.1	950.4
55°	1153.1	1152.3	1159.1	1193.0	1152.3	991.9	974.5	913.8	976.5	1024.0	1104.2
57.5°	1191.8	1198.5	1227.9	1299.4	1282.1	1100.2	1080.8	1028.0	1102.2	1149.7	1282.7
60°	1237.2	1247.9	1296.8	1389.7	1400.4	1213.8	1193.8	1155.7	1231.2	1279.4	1489.2
62.5°	1252.5	1268.0	1368.3	1484.5	1524.0	1338.1	1320.1	1294.7	1367.0	1410.3	1695.1
65°	1150.4	1179.7	1407.6	1533.3	1657.1	1488.0	1472.5	1450.5	1502.0	1530.7	1834.8
67.5°	1122.3	1135.6	1330.7	1603.6	1782.0	1680.4	1665.0	1626.9	1628.3	1616.2	1880.2
70°	1082.8	1097.5	1252.0	1656.4	1961.1	1943.8	1925.1	1812.8	1743.9	1671.0	1790.7
72.5°	922.4	917.8	1078.9	1514.0	2047.3	2269.9	2247.9	2012.7	1829.5	1623.5	1511.3
75°	518.1	504.7	654.3	1047.5	1869.6	2399.6	2399.0	2113.5	1769.3	1414.4	1028.6
77.5°	150.3	146.3	216.0	439.1	1258.6	2084.7	2110.2	1906.4	1476.5	1016.1	564.9
80°	70.8	72.3	93.0	145.0	537.4	1345.5	1418.3	1255.3	882.3	468.6	233.3
82.5°	44.7	45.5	63.5	93.6	227.2	610.9	671.2	564.9	349.6	202.6	102.9
85°	28.0	28.0	42.1	61.5	135.6	195.2	211.9	192.4	149.7	110.3	56.1
87.5°	15.5	15.5	25.4	35.5	74.2	62.8	64.9	76.8	93.6	67.6	28.0
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°	352.2	352.2	352.2	352.2	352.2	352.2	352.2	352.2	352.2	352.2	352.2
2.5°	351.5	350.2	348.3	347.6	346.9	346.2	346.9	348.3	346.9	346.9	347.6
5°	349.6	348.3	345.6	345.6	346.2	346.9	350.2	352.2	352.9	352.9	352.9
7.5°	349.6	347.6	345.6	346.2	347.6	350.2	355.5	359.0	361.6	362.2	362.2
10°	352.9	350.2	348.9	350.2	354.2	356.3	361.6	367.0	370.3	371.7	371.7
12.5°	359.0	356.3	356.3	359.0	364.4	367.0	371.7	375.6	379.7	381.7	381.7
15°	368.9	365.6	366.2	371.0	377.0	379.7	382.9	384.4	387.7	390.4	390.4
17.5°	378.4	375.0	376.3	381.7	385.7	387.0	389.1	388.3	389.7	391.8	392.4
20°	389.1	385.7	386.4	389.7	390.4	389.1	389.1	387.0	386.4	389.7	391.0
22.5°	399.7	396.4	395.8	393.6	390.4	387.0	385.1	382.9	381.7	385.1	386.4
25°	412.4	407.7	404.3	395.8	387.0	381.1	378.4	377.0	376.3	379.7	381.1
27.5°	426.4	421.8	411.8	393.0	378.9	368.9	367.0	367.0	368.2	370.3	371.7
30°	439.8	435.0	417.2	387.0	364.9	350.2	348.3	350.2	353.7	355.5	357.6
32.5°	453.1	448.6	420.4	377.6	344.2	325.5	324.2	327.5	332.9	334.2	335.5
35°	471.3	466.6	424.4	364.4	318.2	298.1	296.8	298.7	303.4	305.5	307.5
37.5°	496.7	494.0	430.5	349.6	294.1	272.0	268.1	266.6	269.4	268.8	271.4
40°	530.1	532.1	441.2	330.1	270.7	248.0	239.3	235.3	232.7	227.2	230.0
42.5°	578.9	580.1	453.1	308.2	250.6	225.2	213.8	206.5	201.2	192.4	193.9
45°	650.4	639.1	467.2	284.8	232.7	207.1	193.9	185.1	177.9	170.5	171.0
47.5°	745.2	710.5	482.6	265.4	214.5	192.4	180.5	170.5	161.8	155.8	156.5
50°	862.3	799.4	498.0	247.4	196.5	181.2	170.5	159.8	151.1	145.0	144.4
52.5°	1016.6	906.4	508.0	227.2	178.5	171.0	161.8	151.8	141.0	133.7	132.9
55°	1177.0	1030.6	516.6	203.1	161.1	159.8	155.0	143.6	131.1	121.6	120.4
57.5°	1353.6	1163.8	523.4	179.8	147.7	150.3	149.1	135.6	121.6	112.9	112.3
60°	1514.0	1301.5	502.1	159.1	135.6	141.0	142.4	131.1	123.6	125.7	126.3
62.5°	1675.7	1407.6	420.4	143.6	127.6	135.0	146.3	145.7	142.4	145.7	146.3
65°	1733.9	1429.7	298.1	131.1	119.7	137.7	159.1	157.7	142.4	136.4	135.0
67.5°	1701.1	1364.3	200.5	121.0	113.6	141.0	172.5	157.7	137.0	128.9	126.3
70°	1545.4	1203.2	147.1	111.0	108.2	140.3	179.8	157.1	134.3	125.7	122.3
72.5°	1232.6	928.4	118.2	101.6	100.3	137.0	183.9	155.8	131.7	122.3	118.2
75°	798.1	577.5	99.6	92.3	88.3	131.7	181.7	151.8	128.4	116.3	113.6
77.5°	370.3	248.7	84.9	81.6	76.8	123.6	175.8	143.6	121.0	109.7	106.3
80°	172.5	117.7	71.5	70.8	68.8	117.0	167.8	134.3	112.3	102.9	97.6
82.5°	92.3	70.8	58.1	58.1	60.1	109.0	157.7	123.0	100.9	96.3	82.3
85°	48.8	40.8	42.1	45.5	51.5	96.3	144.4	111.0	88.3	73.5	71.5
87.5°	24.8	26.1	26.1	30.7	39.4	78.2	118.9	91.5	74.9	60.1	58.7
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)