

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: P234710

Luminaire Tested: **ARCH-AF16-20-D-U-T3-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234710
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF16-20-D-U-T3-8027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 420mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2317 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

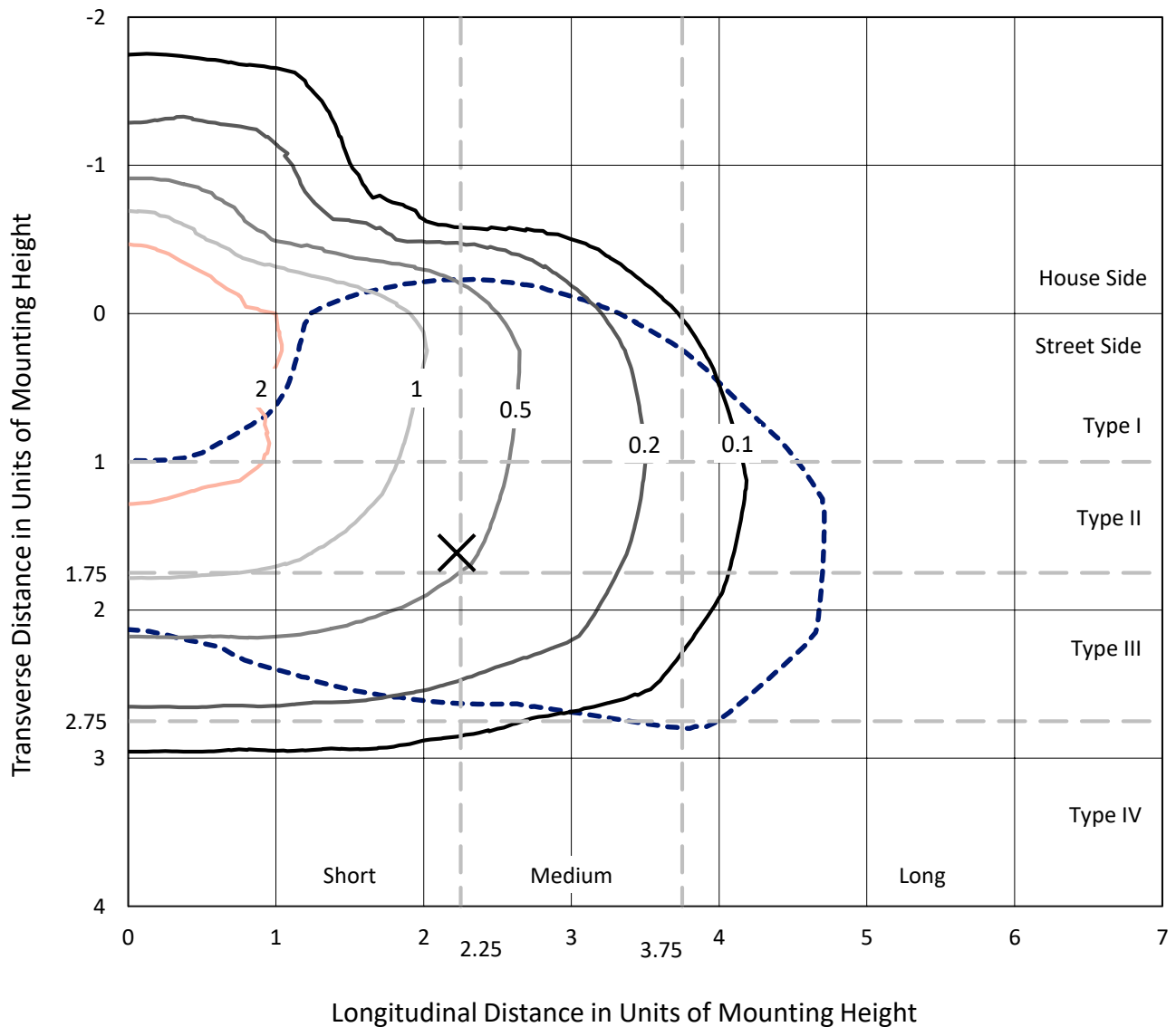
Input Watts (W): 24
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

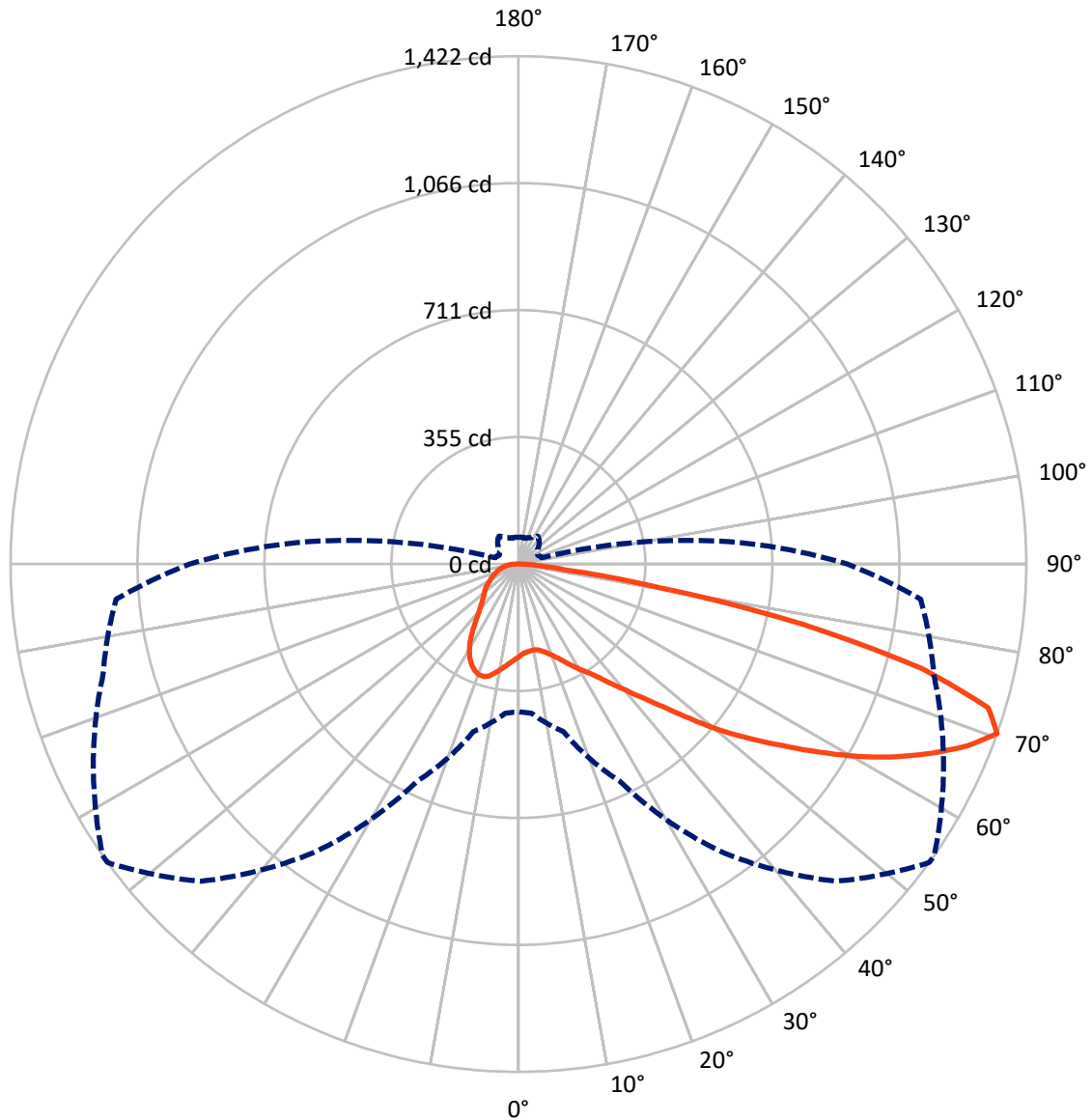


Based on 10 foot mounting height. Maximum calculated value = 3 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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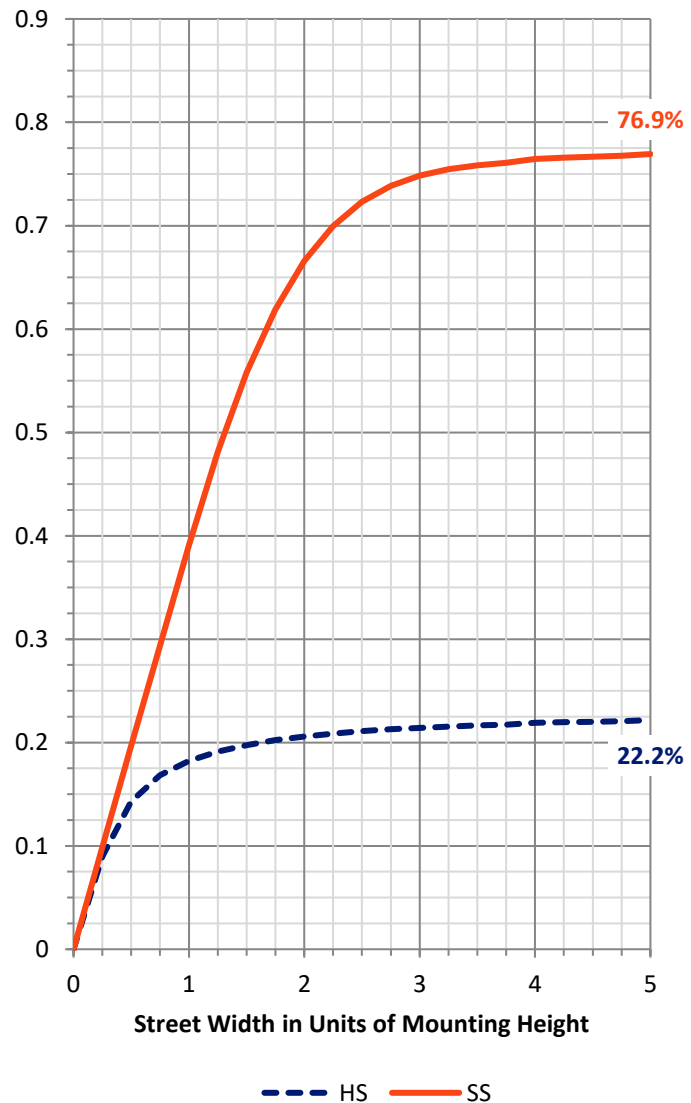
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	525.5	0.0	525.5
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	1791.5	0.0	1791.5
	% Fixture	77.3	0.0	77.3
Total	Lumens	2317.0	0.0	2317.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.4	1.1
10°-20°	81.3	3.5
20°-30°	141.2	6.1
30°-40°	206.4	8.9
40°-50°	323.9	14.0
50°-60°	498.1	21.5
60°-70°	608.5	26.3
70°-80°	377.3	16.3
80°-90°	54.8	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°	2317.0	100.0
0°-180°	2317.0	100.0

Coefficient of Utilization



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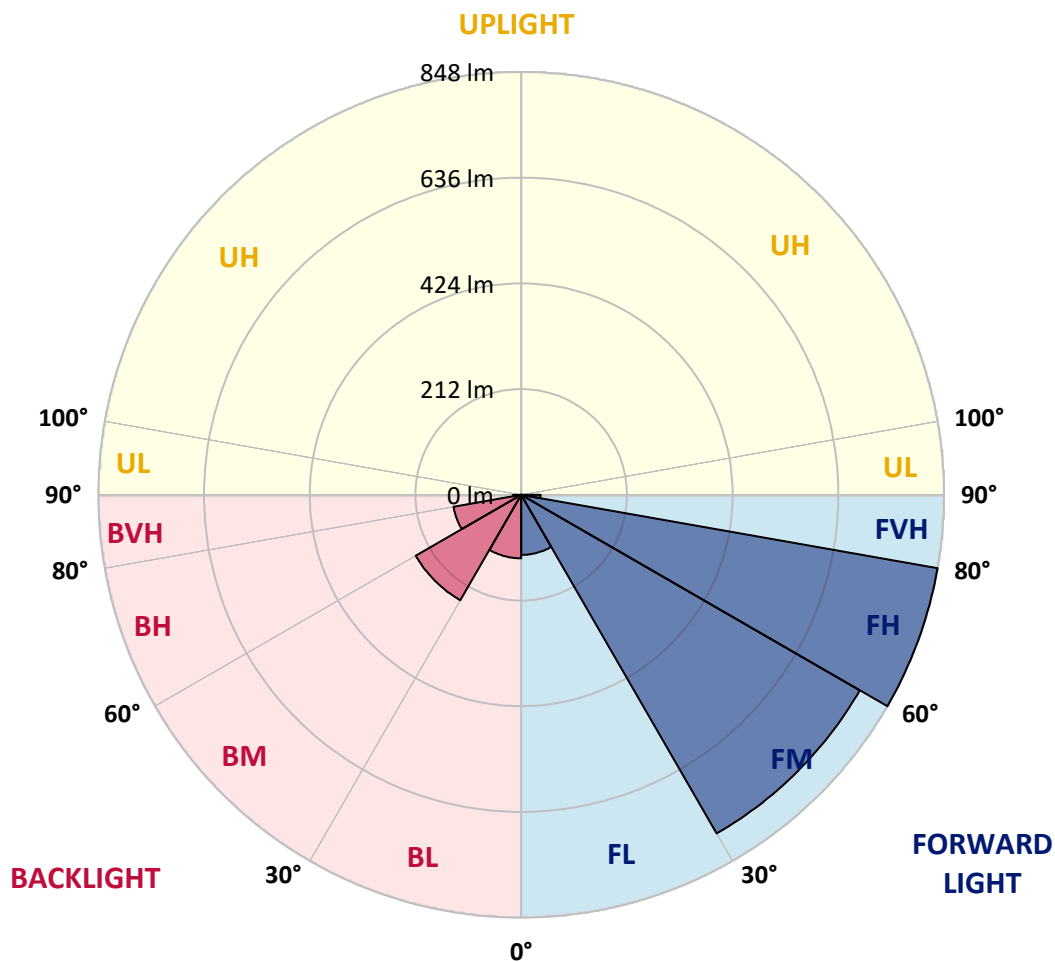
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	120.6	5.2			
FM	(30°-60°)	784.2	33.8			
FH	(60°-80°)	848.1	36.6			G1/1800
FVH	(80°-90°)	38.7	1.7			G1/100
BL	(0°-30°)	127.4	5.5	B1/500		
BM	(30°-60°)	244.2	10.5	B1/1000		
BH	(60°-80°)	137.8	5.9	B1/500		G1/500
BVH	(80°-90°)	16.1	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2
2.5°	249.0	248.2	248.2	249.5	249.9	251.2	251.2	251.6	252.9	255.0	257.5
5°	241.4	241.0	241.4	243.1	244.0	246.5	247.3	247.8	250.3	253.7	257.5
7.5°	233.8	233.3	234.2	236.7	239.3	243.1	245.2	245.6	249.5	254.1	259.2
10°	231.2	230.8	232.1	234.2	236.7	241.0	244.4	244.8	250.3	255.8	263.0
12.5°	234.6	234.2	235.5	237.6	240.1	243.1	246.9	247.3	254.6	261.8	269.4
15°	243.1	243.1	243.5	244.8	247.3	249.9	253.3	253.7	261.3	269.8	277.5
17.5°	256.3	255.4	255.4	255.0	256.7	258.0	262.2	262.6	270.7	278.3	286.0
20°	272.4	272.0	270.3	268.1	267.7	268.6	272.8	273.2	281.3	287.7	294.9
22.5°	291.9	292.3	288.5	283.8	281.7	283.0	286.8	287.2	293.2	298.7	305.0
25°	317.8	316.5	311.0	304.2	300.0	300.0	303.8	303.8	309.3	312.7	316.9
27.5°	342.4	339.8	334.7	325.0	318.2	319.5	323.3	323.3	328.4	329.7	331.8
30°	369.1	366.6	360.2	347.9	339.0	338.1	342.8	342.4	349.2	348.7	347.0
32.5°	401.8	400.5	389.9	374.2	362.3	359.4	363.6	364.0	368.3	367.0	361.5
35°	447.6	447.2	437.4	409.8	394.1	388.6	391.2	391.2	394.1	390.7	381.4
37.5°	505.3	506.1	497.7	456.9	434.9	425.5	426.0	425.5	426.4	422.6	412.8
40°	563.0	565.1	564.7	515.5	487.5	471.4	465.4	464.6	466.7	465.0	455.7
42.5°	638.9	644.0	632.2	587.6	556.2	529.1	512.9	510.8	515.5	517.6	508.7
45°	717.9	716.2	697.5	665.2	636.8	602.0	571.5	568.1	571.5	577.8	568.5
47.5°	759.0	757.7	753.1	736.9	732.7	692.8	646.6	643.6	637.2	646.2	635.1
50°	826.9	828.2	809.1	807.4	825.2	803.1	731.4	724.6	713.2	720.4	711.1
52.5°	876.1	870.6	858.7	873.6	929.1	917.3	811.2	808.2	797.6	795.9	791.7
55°	896.0	896.0	898.2	932.5	1011.9	996.2	897.7	900.7	886.3	874.4	879.9
57.5°	902.0	904.5	922.8	979.6	1109.0	1057.7	993.2	997.4	976.7	952.9	970.3
60°	872.7	880.3	924.0	1006.4	1163.8	1123.0	1093.8	1095.0	1064.9	1030.1	1060.7
62.5°	797.6	807.0	885.0	1017.4	1154.8	1190.1	1188.8	1191.8	1150.6	1107.3	1145.5
65°	705.6	714.9	798.0	986.4	1148.1	1238.0	1275.8	1283.8	1230.8	1172.7	1198.5
67.5°	570.2	582.5	661.4	882.0	1115.0	1277.5	1357.2	1365.7	1292.7	1206.6	1193.9
70°	413.2	419.2	485.4	670.3	980.1	1255.8	1421.7	1421.3	1313.1	1204.1	1130.2
72.5°	199.0	203.6	260.9	416.2	700.9	1065.8	1375.0	1383.1	1285.1	1167.2	984.7
75°	81.9	86.5	105.6	175.6	367.8	704.3	1165.5	1184.5	1167.2	1047.5	770.5
77.5°	50.9	52.6	61.9	90.8	168.0	328.8	815.9	841.7	924.9	839.2	508.7
80°	38.2	39.5	46.2	63.6	106.1	121.3	405.2	437.8	560.5	481.5	230.4
82.5°	31.8	32.2	36.9	46.2	72.1	69.6	129.8	144.7	261.3	183.7	79.3
85°	29.7	30.5	33.1	33.1	45.8	43.7	53.9	56.4	75.9	62.8	27.6
87.5°	15.3	14.4	29.3	25.9	23.8	21.2	22.9	24.6	28.4	30.1	12.3
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°	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2
2.5°	258.4	259.6	261.8	263.9	266.4	269.4	271.1	273.2	274.9	274.1	273.7
5°	259.6	261.8	266.4	270.7	275.8	281.7	285.5	289.8	293.2	294.0	292.7
7.5°	261.8	265.6	272.0	279.6	286.4	294.0	300.0	305.9	310.1	311.0	311.0
10°	266.9	271.1	279.6	289.8	297.8	305.9	312.7	317.3	321.2	322.9	322.9
12.5°	274.1	279.2	289.3	301.7	310.6	318.2	322.0	324.1	325.8	327.5	328.0
15°	282.6	288.1	300.4	313.5	322.9	326.7	326.7	326.3	326.3	327.1	328.0
17.5°	291.0	297.0	309.7	323.7	329.7	327.5	324.6	323.3	322.4	322.0	323.3
20°	300.0	305.9	318.6	331.8	330.1	321.2	316.9	314.0	311.4	310.1	311.8
22.5°	309.7	315.2	328.4	337.3	324.6	311.0	302.9	298.3	294.0	291.5	293.2
25°	321.2	326.7	339.4	339.0	314.8	295.7	283.0	275.3	270.7	268.1	268.1
27.5°	334.7	339.4	351.7	334.7	301.2	275.3	256.7	249.5	248.2	246.1	246.1
30°	348.7	352.6	363.2	325.0	282.6	248.6	228.3	224.9	225.3	223.2	223.6
32.5°	363.2	367.0	370.0	310.6	258.4	218.5	204.9	202.4	201.9	200.3	198.6
35°	383.5	389.1	370.8	291.0	229.1	193.5	183.7	181.2	178.6	172.7	172.7
37.5°	414.5	420.4	368.7	266.9	199.0	173.9	165.0	161.6	157.4	151.5	149.3
40°	456.9	456.9	364.0	239.7	174.8	158.3	149.8	145.5	140.9	134.9	133.6
42.5°	507.0	495.1	356.8	212.1	157.0	147.6	140.0	135.3	129.8	123.0	122.2
45°	565.5	533.3	346.6	187.5	143.8	141.3	136.6	128.6	119.2	112.0	110.7
47.5°	622.4	567.7	336.9	170.1	132.8	138.7	134.9	121.3	108.6	98.4	97.2
50°	684.8	598.2	325.4	155.7	124.3	137.0	132.8	110.7	96.7	89.5	88.7
52.5°	747.1	629.2	313.1	140.4	117.1	133.6	127.7	103.1	96.3	86.5	85.3
55°	812.9	665.2	298.7	123.5	108.6	126.9	120.9	102.7	99.3	86.5	83.6
57.5°	877.0	705.1	275.3	106.9	99.3	116.7	118.4	100.1	92.9	85.7	82.3
60°	947.8	747.6	236.7	92.9	91.2	108.2	115.0	94.6	85.7	83.2	81.5
62.5°	1004.7	785.7	185.0	83.2	84.4	101.4	110.7	91.2	82.7	80.6	80.2
65°	1029.3	786.6	132.8	74.7	77.6	95.0	106.5	88.2	80.2	79.3	78.9
67.5°	1003.4	743.3	93.3	66.6	70.4	89.1	101.0	85.3	77.6	78.1	77.2
70°	919.8	652.1	68.3	59.0	63.6	82.7	95.0	81.5	74.7	75.5	74.2
72.5°	769.6	508.3	54.7	52.6	58.1	75.9	89.1	77.2	70.0	70.4	67.9
75°	568.5	336.9	45.8	47.1	51.8	69.6	81.5	71.7	64.9	63.2	61.5
77.5°	338.1	173.1	37.8	41.2	46.2	61.9	73.0	64.9	59.4	56.4	55.2
80°	139.6	70.0	31.0	34.8	40.3	55.2	64.5	56.9	53.0	50.1	48.4
82.5°	55.6	34.4	24.6	28.4	33.9	47.9	56.4	50.1	46.2	44.1	39.5
85°	21.2	17.0	16.5	19.9	25.5	36.9	46.7	42.0	39.0	33.5	32.2
87.5°	8.5	7.6	7.6	9.8	14.4	23.3	33.5	29.3	30.5	24.2	24.6
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)