

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: P257688

Luminaire Tested: **ARCH-AF16-30-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257688
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF16-30-D-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2633.1 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B0 - U0 - G1

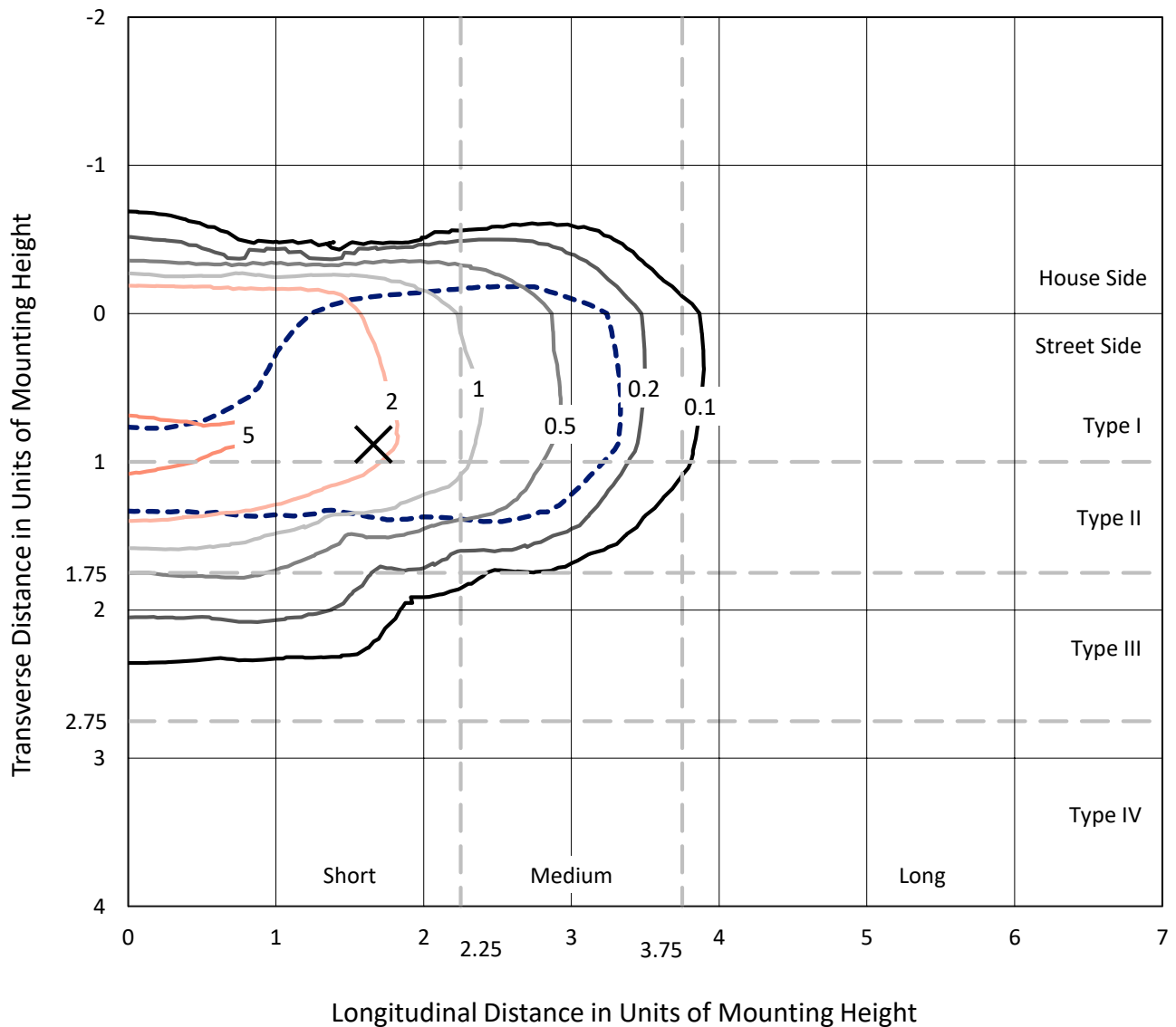
Input Watts (W): 32
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

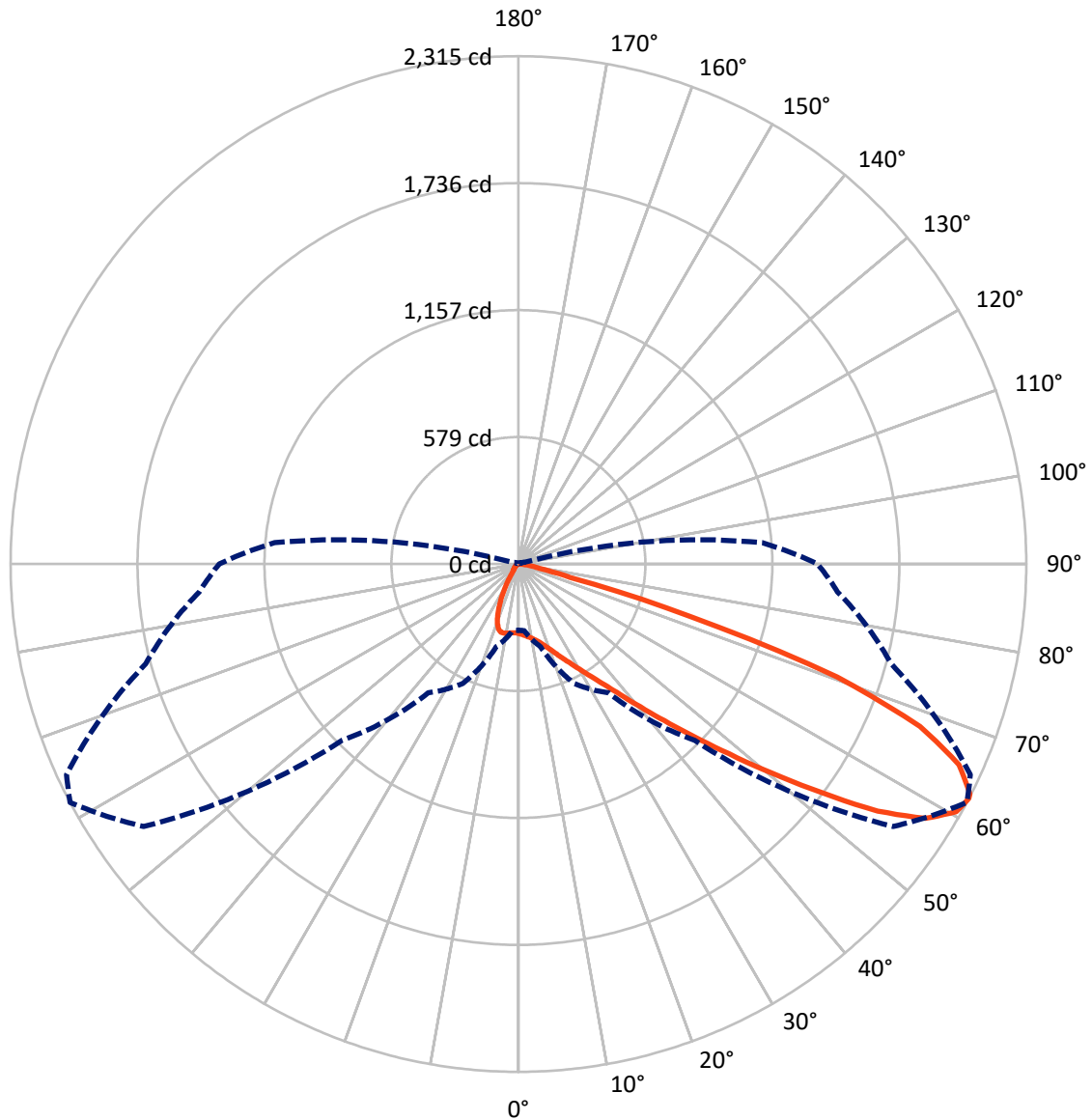
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.1 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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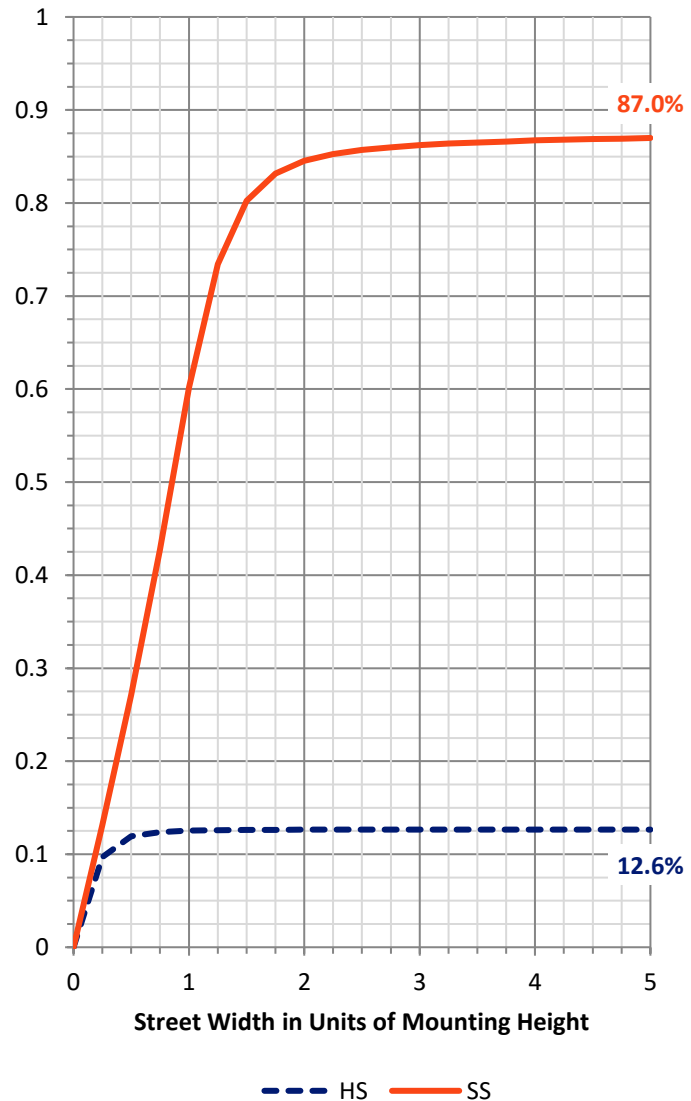
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	336.7	0.0	336.7
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	2296.4	0.0	2296.4
	% Fixture	87.2	0.0	87.2
Total	Lumens	2633.1	0.0	2633.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.5	1.2
10°-20°	85.2	3.2
20°-30°	143.2	5.4
30°-40°	274.4	10.4
40°-50°	560.5	21.3
50°-60°	741.8	28.2
60°-70°	576.2	21.9
70°-80°	208.0	7.9
80°-90°	13.3	0.5
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°	2633.1	100.0
0°-180°	2633.1	100.0



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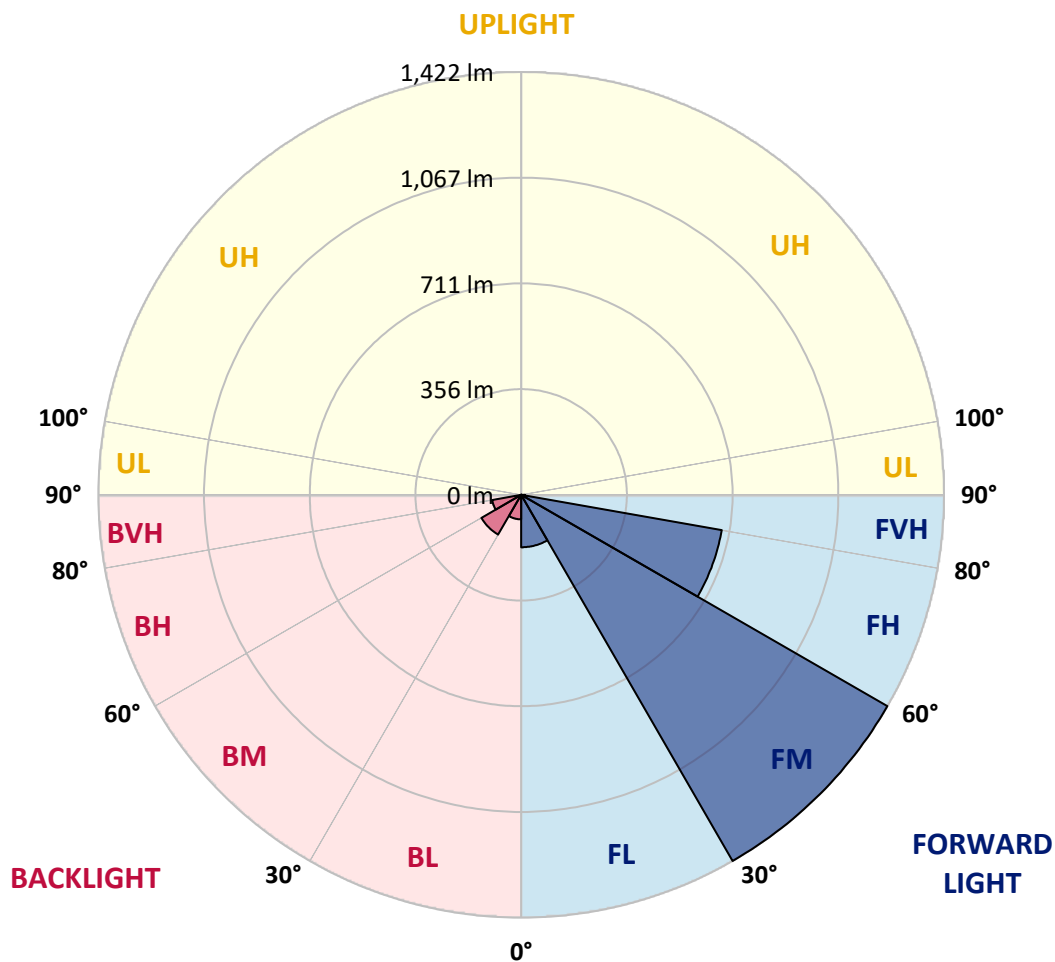
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	176.5	6.7			
FM (30°-60°)	1422.1	54.0			
FH (60°-80°)	685.1	26.0			G1/1800
FVH (80°-90°)	12.7	0.5			G1/100
BL (0°-30°)	82.4	3.1	B0/110		
BM (30°-60°)	154.6	5.9	B0/220		
BH (60°-80°)	99.1	3.8	B0/110		G0/110
BVH (80°-90°)	0.6	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	317.2	317.2	317.2	317.2	317.2	317.2	317.2	317.2	317.2	317.2	317.2
2.5°	325.6	325.0	324.3	323.7	323.7	323.0	322.3	321.1	319.8	318.4	317.8
5°	331.4	330.8	330.1	330.8	330.1	330.1	329.5	328.2	326.9	325.0	323.0
7.5°	335.9	335.3	334.7	335.3	335.9	336.7	337.3	335.9	335.3	332.8	330.8
10°	341.8	341.2	340.5	341.8	341.8	345.0	345.7	345.0	344.3	342.5	339.2
12.5°	350.2	350.9	350.9	352.1	353.4	357.3	358.6	356.7	356.7	354.0	350.2
15°	365.7	365.7	365.7	367.0	367.6	372.9	374.2	372.3	373.5	369.0	365.1
17.5°	380.6	381.3	382.6	385.1	385.1	389.6	392.3	392.3	394.9	389.0	383.9
20°	395.5	396.2	398.1	404.0	404.0	409.8	414.3	416.2	418.8	413.0	404.0
22.5°	411.7	411.7	414.9	424.0	422.1	433.7	442.1	445.4	448.0	440.2	426.0
25°	436.3	433.7	436.3	444.7	443.4	459.6	475.2	478.3	481.6	472.5	451.2
27.5°	482.9	479.0	469.9	470.6	470.6	489.4	511.4	515.9	517.8	510.0	483.5
30°	576.1	576.1	542.5	519.8	504.9	521.7	552.8	560.6	563.1	551.5	516.6
32.5°	738.6	738.6	676.5	618.9	562.5	562.5	598.1	612.3	615.0	601.4	560.6
35°	945.7	944.5	851.2	772.2	662.3	620.8	651.2	675.1	682.9	664.8	617.6
37.5°	1165.9	1157.4	1057.1	966.5	815.6	714.0	723.0	754.7	761.9	747.1	691.3
40°	1344.5	1334.7	1253.8	1178.1	1013.7	862.9	826.6	855.8	864.2	843.4	779.4
42.5°	1506.3	1482.4	1426.7	1372.3	1241.6	1120.5	964.5	976.2	985.2	963.2	878.4
45°	1623.5	1586.6	1558.1	1541.3	1472.0	1403.4	1143.1	1119.8	1123.1	1095.9	986.5
47.5°	1626.7	1600.8	1603.4	1647.5	1675.9	1673.3	1375.6	1292.7	1280.4	1235.1	1101.7
50°	1471.4	1486.2	1533.5	1659.1	1813.2	1906.4	1652.0	1497.3	1460.4	1378.8	1216.3
52.5°	1212.4	1235.7	1324.4	1536.1	1833.2	2059.8	1938.7	1730.9	1665.0	1521.2	1304.4
55°	949.6	950.9	1044.1	1259.7	1699.2	2087.6	2167.8	1987.9	1886.9	1629.4	1362.6
57.5°	653.2	688.8	807.2	952.2	1396.9	1949.1	2254.0	2187.3	2057.2	1696.0	1403.4
60°	427.9	429.8	567.7	735.4	950.9	1586.0	2201.6	2292.8	2195.0	1735.4	1431.2
62°	301.7	304.8	390.4	600.7	716.6	1136.7	2085.7	2314.8	2272.8	1758.8	1460.4
62.5°	279.7	282.2	354.0	567.0	673.2	1019.6	2044.3	2309.6	2284.5	1766.5	1470.7
65°	205.2	205.2	231.7	389.6	493.3	550.9	1732.3	2206.7	2268.9	1828.7	1509.6
67.5°	158.6	159.9	169.0	240.2	372.3	334.0	1105.6	1975.0	2107.1	1920.6	1531.6
70°	136.6	136.0	142.4	159.3	268.6	222.1	486.8	1541.3	1764.6	1897.3	1511.5
72.5°	101.0	101.6	116.5	139.8	187.1	144.3	220.1	818.3	1144.5	1484.9	1295.3
75°	64.8	65.4	82.2	110.1	134.6	94.5	126.8	244.1	468.6	823.4	792.3
77.5°	43.4	44.7	53.7	77.0	117.8	58.9	79.6	102.3	141.2	308.7	284.2
80°	29.2	29.2	34.3	51.8	74.5	49.2	42.8	67.9	73.1	95.9	47.9
82.5°	19.4	19.4	22.6	34.3	48.6	44.0	25.9	36.9	42.8	47.9	16.9
85°	11.7	11.7	15.5	21.4	31.7	24.6	16.9	20.7	22.0	30.4	9.1
87.5°	7.2	6.4	10.3	14.9	16.9	14.9	11.0	11.0	11.7	16.9	4.5
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°	317.2	317.2	317.2	317.2	317.2	317.2	317.2	317.2	317.2	317.2	317.2
2.5°	316.5	315.9	315.3	313.9	312.0	310.7	309.4	308.1	306.8	306.8	308.7
5°	322.3	320.4	317.8	315.3	311.4	308.7	306.8	304.2	303.0	303.0	303.6
7.5°	329.5	327.5	323.0	318.4	312.6	308.1	303.6	297.8	293.3	291.3	293.3
10°	337.3	334.7	328.2	321.1	314.6	303.0	288.1	270.0	254.4	247.2	250.5
12.5°	347.0	343.7	335.9	326.2	311.4	282.8	246.0	203.9	177.4	165.1	167.7
15°	361.2	356.7	345.7	330.8	297.8	236.3	176.0	127.6	102.9	92.6	93.9
17.5°	378.1	372.3	357.3	329.5	262.8	170.2	104.9	74.5	64.0	61.5	61.5
20°	396.2	388.4	369.0	319.8	209.7	106.8	65.4	57.0	53.1	51.1	51.1
22.5°	414.9	404.6	378.7	297.2	149.6	66.7	53.7	47.9	43.4	41.4	41.4
25°	437.6	424.0	388.4	257.7	95.1	53.7	45.9	40.1	35.6	33.0	33.7
27.5°	464.1	446.6	396.8	208.5	61.5	46.6	38.2	32.3	28.4	27.2	27.2
30°	491.9	471.3	398.7	156.0	49.8	40.1	31.7	26.5	23.9	22.6	22.6
32.5°	530.2	503.0	392.9	103.5	42.0	33.7	26.5	22.0	20.0	19.4	19.4
35°	580.6	544.4	379.3	64.0	35.6	27.8	22.0	19.4	17.5	16.9	16.9
37.5°	644.8	602.0	355.4	44.0	30.4	22.6	18.8	16.9	15.5	14.9	14.9
40°	730.2	671.9	324.3	38.2	25.9	19.4	16.2	14.9	13.6	13.6	13.6
42.5°	820.8	756.7	284.2	33.7	22.0	16.9	14.2	13.0	12.3	11.7	11.7
45°	919.8	843.4	234.4	29.8	18.8	14.9	13.0	11.0	10.3	10.3	10.3
47.5°	1018.2	932.8	179.9	25.9	16.2	13.0	11.0	9.7	9.1	8.4	8.4
50°	1119.2	1013.7	132.1	22.6	14.2	11.7	9.7	8.4	7.2	6.4	6.4
52.5°	1192.4	1062.2	96.5	19.4	12.3	9.7	7.8	6.4	5.2	4.5	4.5
55°	1246.1	1092.0	70.6	16.2	11.0	8.4	6.4	5.2	3.9	3.9	3.3
57.5°	1288.2	1106.3	53.1	14.2	9.7	7.2	5.2	3.9	3.3	2.6	2.6
60°	1320.5	1106.9	39.5	11.7	8.4	5.8	3.9	2.6	1.9	1.9	1.9
62°	1363.3	1115.3	32.3	9.7	7.8	5.2	3.3	1.9	1.3	0.6	0.6
62.5°	1375.6	1118.6	31.1	9.7	7.2	4.5	2.6	1.9	1.3	0.6	0.6
65°	1432.5	1124.4	23.9	7.8	5.8	3.9	1.9	1.3	0.0	0.0	0.0
67.5°	1484.3	1115.3	17.5	5.8	4.5	2.6	1.9	0.6	0.0	0.0	0.0
70°	1479.1	1053.2	12.3	3.9	3.3	1.9	1.3	0.0	0.0	0.0	0.0
72.5°	1218.9	788.5	8.4	3.3	1.9	1.3	0.6	0.0	0.0	0.0	0.0
75°	736.0	345.0	5.8	1.9	1.9	1.3	0.6	0.0	0.0	0.0	0.0
77.5°	241.4	124.9	3.9	1.3	1.3	0.6	0.6	0.0	0.0	0.0	0.0
80°	39.5	20.7	1.9	1.3	1.3	0.6	0.6	0.0	0.0	0.0	0.0
82.5°	12.3	5.2	1.3	1.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0
85°	4.5	1.9	1.3	1.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	1.3	1.3	1.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0
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)