

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: P257673

Luminaire Tested: **ARCH-AF16-20-D-U-T2U-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P257673  
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-AF16-20-D-U-T2U-7030-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 420mA 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: 1961.2 lumens  
Efficiency: N/A  
Efficacy: 81.7 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 - G0

Input Watts (W): 24  
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

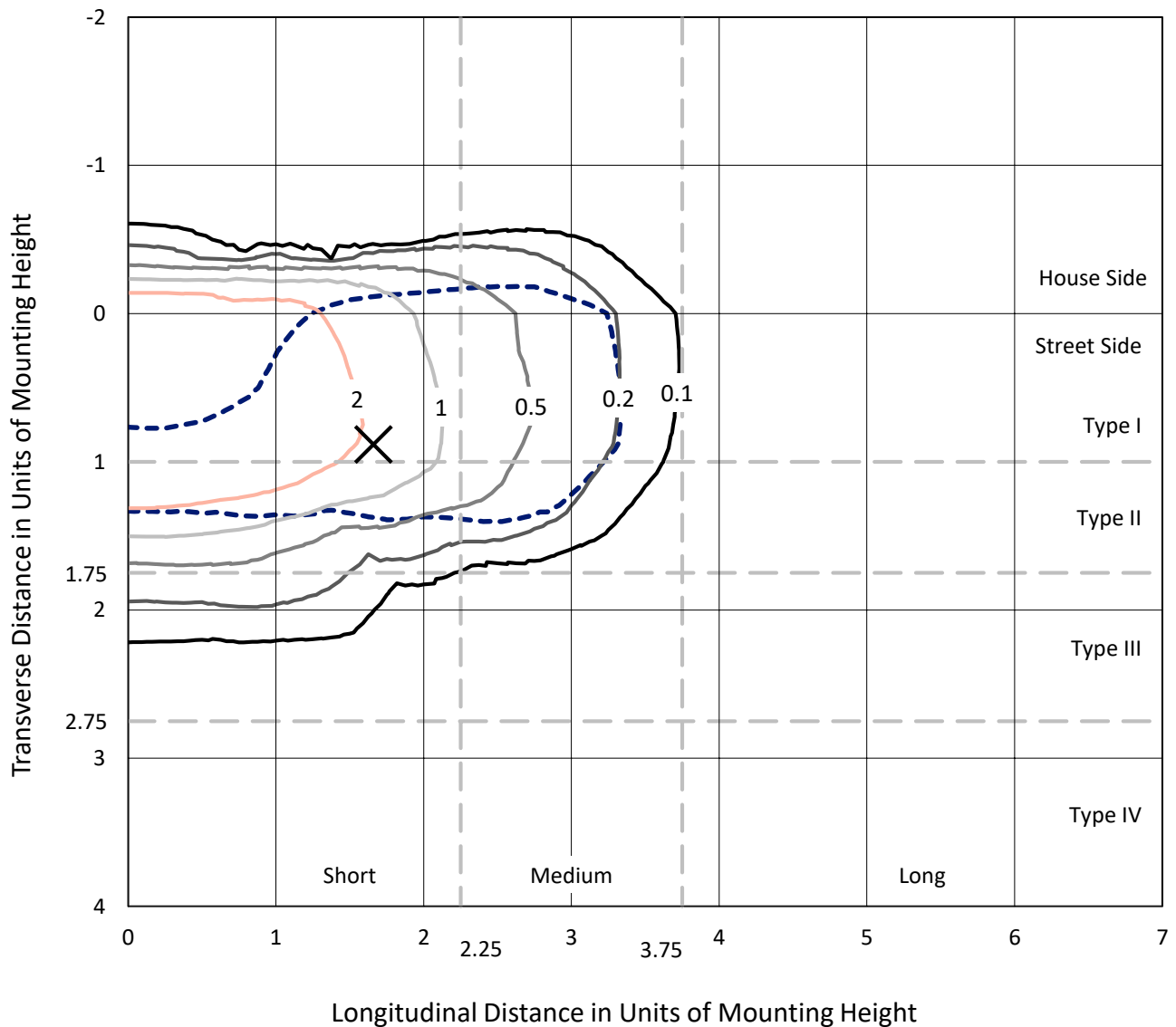


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

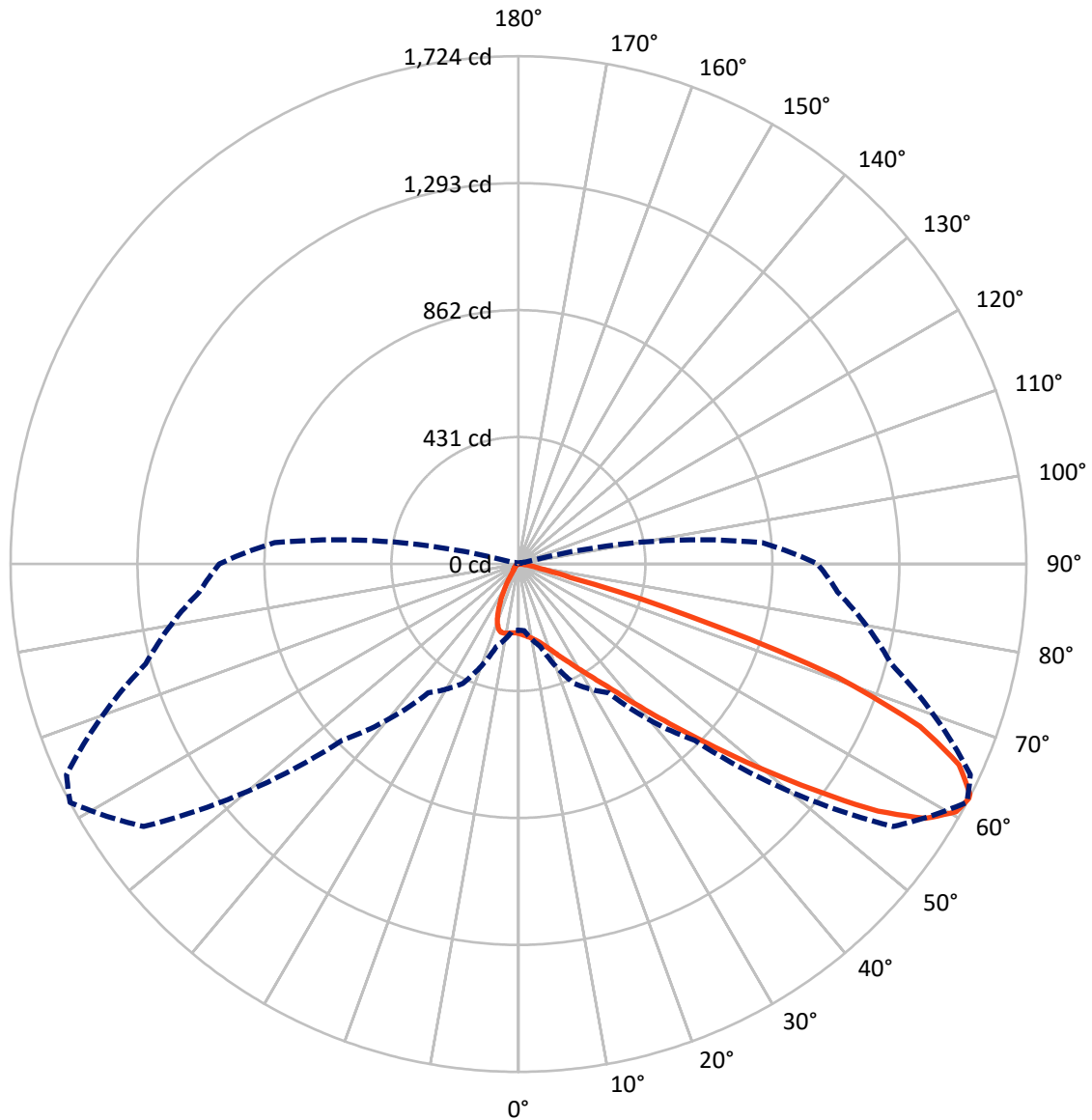


Based on 10 foot mounting height. Maximum calculated value = 4.5 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



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



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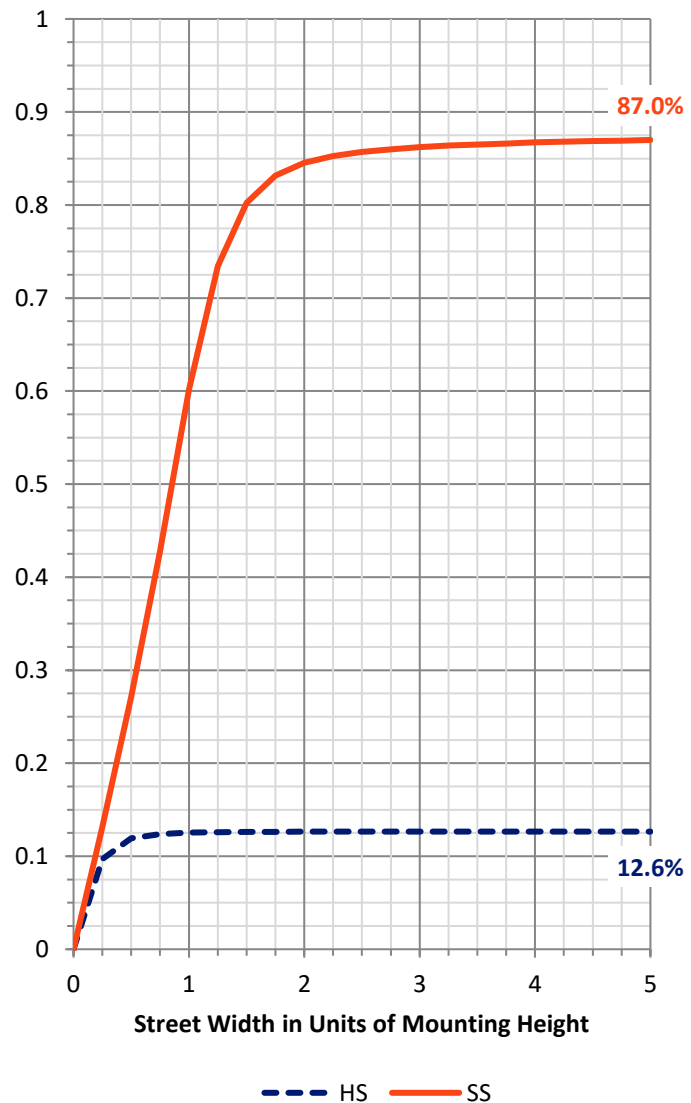
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	250.7	0.0	250.7
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	1710.4	0.0	1710.4
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	1961.2	0.0	1961.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	22.7	1.2
10°-20°	63.5	3.2
20°-30°	106.6	5.4
30°-40°	204.4	10.4
40°-50°	417.5	21.3
50°-60°	552.5	28.2
60°-70°	429.2	21.9
70°-80°	154.9	7.9
80°-90°	9.9	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°	1961.2	100.0
0°-180°	1961.2	100.0



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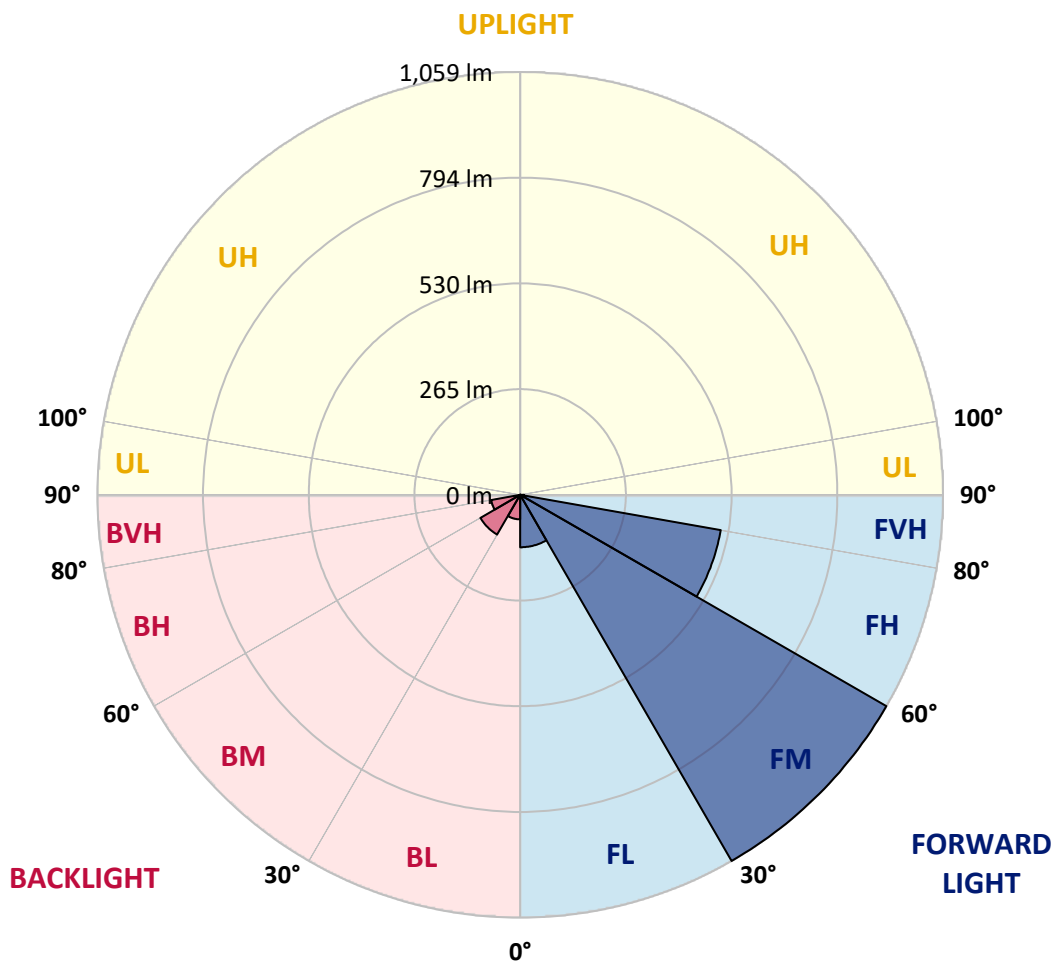
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	131.5	6.7			
FM (30°-60°)	1059.3	54.0			
FH (60°-80°)	510.3	26.0			G0/660
FVH (80°-90°)	9.4	0.5			G0/10
BL (0°-30°)	61.4	3.1	B0/110		
BM (30°-60°)	115.1	5.9	B0/220		
BH (60°-80°)	73.8	3.8	B0/110		G0/110
BVH (80°-90°)	0.4	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-G0**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	236.2	236.2	236.2	236.2	236.2	236.2	236.2	236.2	236.2	236.2	236.2
2.5°	242.5	242.0	241.6	241.0	241.0	240.6	240.2	239.2	238.1	237.2	236.8
5°	246.8	246.4	246.0	246.4	246.0	246.0	245.4	244.4	243.5	242.0	240.6
7.5°	250.2	249.7	249.2	249.7	250.2	250.7	251.2	250.2	249.7	247.8	246.4
10°	254.6	254.1	253.6	254.6	254.6	257.0	257.5	257.0	256.5	255.0	252.6
12.5°	260.8	261.3	261.3	262.3	263.2	266.1	267.1	265.6	265.6	263.8	260.8
15°	272.4	272.4	272.4	273.3	273.9	277.7	278.7	277.2	278.2	274.8	271.9
17.5°	283.5	284.0	284.9	287.0	287.0	290.3	292.2	292.2	294.1	289.7	285.9
20°	294.6	295.1	296.5	300.9	300.9	305.2	308.5	310.0	311.9	307.6	300.9
22.5°	306.7	306.7	309.1	315.8	314.3	323.1	329.3	331.7	333.7	327.9	317.3
25°	324.9	323.1	324.9	331.3	330.3	342.3	353.9	356.3	358.7	352.0	336.1
27.5°	359.7	356.8	350.0	350.5	350.5	364.5	380.9	384.3	385.6	379.9	360.1
30°	429.1	429.1	404.0	387.3	376.1	388.6	411.8	417.6	419.4	410.9	384.7
32.5°	550.1	550.1	503.8	461.0	419.0	419.0	445.6	456.1	458.1	448.0	417.6
35°	704.4	703.4	634.0	575.2	493.2	462.3	485.0	502.9	508.7	495.2	460.0
37.5°	868.4	862.0	787.3	719.8	607.5	531.8	538.5	562.1	567.5	556.3	514.9
40°	1001.5	994.1	933.9	877.5	755.1	642.7	615.6	637.4	643.6	628.2	580.5
42.5°	1122.0	1104.1	1062.6	1022.1	924.8	834.6	718.4	727.1	733.7	717.4	654.3
45°	1209.3	1181.7	1160.6	1148.0	1096.4	1045.3	851.4	834.0	836.5	816.2	734.8
47.5°	1211.6	1192.3	1194.3	1227.1	1248.3	1246.3	1024.6	962.9	953.8	920.0	820.6
50°	1095.9	1107.1	1142.2	1235.7	1350.5	1420.0	1230.5	1115.2	1087.6	1026.9	906.0
52.5°	903.0	920.4	986.5	1144.2	1365.4	1534.2	1444.1	1289.3	1240.1	1133.0	971.6
55°	707.4	708.3	777.7	938.2	1265.7	1555.0	1614.8	1480.7	1405.5	1213.6	1014.9
57.5°	486.5	513.0	601.3	709.2	1040.4	1451.7	1678.9	1629.2	1532.3	1263.2	1045.3
60°	318.7	320.1	422.9	547.7	708.3	1181.3	1639.8	1707.7	1634.9	1292.6	1066.1
62°	224.6	227.0	290.7	447.4	533.7	846.6	1553.4	1724.1	1692.9	1310.0	1087.6
62.5°	208.2	210.3	263.8	422.4	501.4	759.4	1522.6	1720.3	1701.5	1315.8	1095.5
65°	152.9	152.9	172.6	290.3	367.4	410.3	1290.3	1643.7	1689.9	1362.0	1124.4
67.5°	118.1	119.1	125.8	178.8	277.2	248.8	823.5	1471.0	1569.4	1430.5	1140.7
70°	101.7	101.3	106.1	118.6	200.1	165.4	362.5	1148.0	1314.4	1413.2	1125.8
72.5°	75.2	75.7	86.8	104.2	139.3	107.5	163.9	609.4	852.4	1106.0	964.8
75°	48.2	48.7	61.1	82.0	100.3	70.4	94.5	181.8	349.1	613.3	590.1
77.5°	32.3	33.3	40.0	57.4	87.7	43.9	59.3	76.2	105.1	230.0	211.6
80°	21.8	21.8	25.5	38.6	55.4	36.6	31.8	50.6	54.5	71.3	35.7
82.5°	14.4	14.4	16.8	25.5	36.2	32.8	19.3	27.6	31.8	35.7	12.6
85°	8.6	8.6	11.6	16.0	23.6	18.3	12.6	15.4	16.4	22.6	6.8
87.5°	5.4	4.8	7.7	11.0	12.6	11.0	8.2	8.2	8.6	12.6	3.4
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°	236.2	236.2	236.2	236.2	236.2	236.2	236.2	236.2	236.2	236.2	236.2
2.5°	235.8	235.2	234.8	233.9	232.4	231.4	230.4	229.6	228.6	228.6	230.0
5°	240.2	238.6	236.8	234.8	231.9	230.0	228.6	226.6	225.6	225.6	226.1
7.5°	245.4	243.9	240.6	237.2	232.8	229.6	226.1	221.8	218.4	217.0	218.4
10°	251.2	249.2	244.4	239.2	234.4	225.6	214.5	201.0	189.4	184.2	186.7
12.5°	258.4	256.0	250.2	243.0	231.9	210.7	183.2	151.9	132.1	122.9	124.9
15°	269.0	265.6	257.5	246.4	221.8	176.0	131.1	94.9	76.7	69.0	69.9
17.5°	281.6	277.2	266.1	245.4	195.8	126.8	78.1	55.4	47.7	45.8	45.8
20°	295.1	289.3	274.8	238.1	156.2	79.5	48.7	42.4	39.6	38.1	38.1
22.5°	309.1	301.3	282.1	221.4	111.3	49.7	40.0	35.7	32.3	30.8	30.8
25°	325.9	315.8	289.3	191.9	70.9	40.0	34.2	29.9	26.6	24.6	25.0
27.5°	345.7	332.7	295.5	155.2	45.8	34.8	28.4	24.1	21.2	20.2	20.2
30°	366.4	351.0	296.9	116.3	37.1	29.9	23.6	19.7	17.8	16.8	16.8
32.5°	394.9	374.6	292.7	77.1	31.3	25.0	19.7	16.4	15.0	14.4	14.4
35°	432.4	405.5	282.6	47.7	26.6	20.8	16.4	14.4	13.0	12.6	12.6
37.5°	480.2	448.4	264.7	32.8	22.6	16.8	13.9	12.6	11.6	11.0	11.0
40°	543.9	500.5	241.6	28.4	19.3	14.4	12.0	11.0	10.2	10.2	10.2
42.5°	611.5	563.7	211.6	25.0	16.4	12.6	10.6	9.7	9.2	8.6	8.6
45°	685.2	628.2	174.5	22.2	13.9	11.0	9.7	8.2	7.7	7.7	7.7
47.5°	758.4	694.8	134.1	19.3	12.0	9.7	8.2	7.2	6.8	6.2	6.2
50°	833.6	755.1	98.4	16.8	10.6	8.6	7.2	6.2	5.4	4.8	4.8
52.5°	888.2	791.2	71.9	14.4	9.2	7.2	5.8	4.8	3.9	3.4	3.4
55°	928.1	813.4	52.6	12.0	8.2	6.2	4.8	3.9	2.8	2.8	2.4
57.5°	959.6	824.1	39.6	10.6	7.2	5.4	3.9	2.8	2.4	1.9	1.9
60°	983.6	824.5	29.4	8.6	6.2	4.4	2.8	1.9	1.4	1.4	1.4
62°	1015.4	830.7	24.1	7.2	5.8	3.9	2.4	1.4	1.0	0.4	0.4
62.5°	1024.6	833.1	23.2	7.2	5.4	3.4	1.9	1.4	1.0	0.4	0.4
65°	1067.0	837.5	17.8	5.8	4.4	2.8	1.4	1.0	0.0	0.0	0.0
67.5°	1105.6	830.7	13.0	4.4	3.4	1.9	1.4	0.4	0.0	0.0	0.0
70°	1101.7	784.5	9.2	2.8	2.4	1.4	1.0	0.0	0.0	0.0	0.0
72.5°	907.8	587.3	6.2	2.4	1.4	1.0	0.4	0.0	0.0	0.0	0.0
75°	548.2	257.0	4.4	1.4	1.4	1.0	0.4	0.0	0.0	0.0	0.0
77.5°	179.8	93.1	2.8	1.0	1.0	0.4	0.4	0.0	0.0	0.0	0.0
80°	29.4	15.4	1.4	1.0	1.0	0.4	0.4	0.0	0.0	0.0	0.0
82.5°	9.2	3.9	1.0	1.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0
85°	3.4	1.4	1.0	1.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0
87.5°	1.4	1.0	1.0	1.0	0.4	0.4	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)