

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: P348674

Luminaire Tested: **ARCH-N-PA1-19-827-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348674  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-19-827-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 370mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2214 lumens  
Efficiency: N/A  
Efficacy: 116.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 19  
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

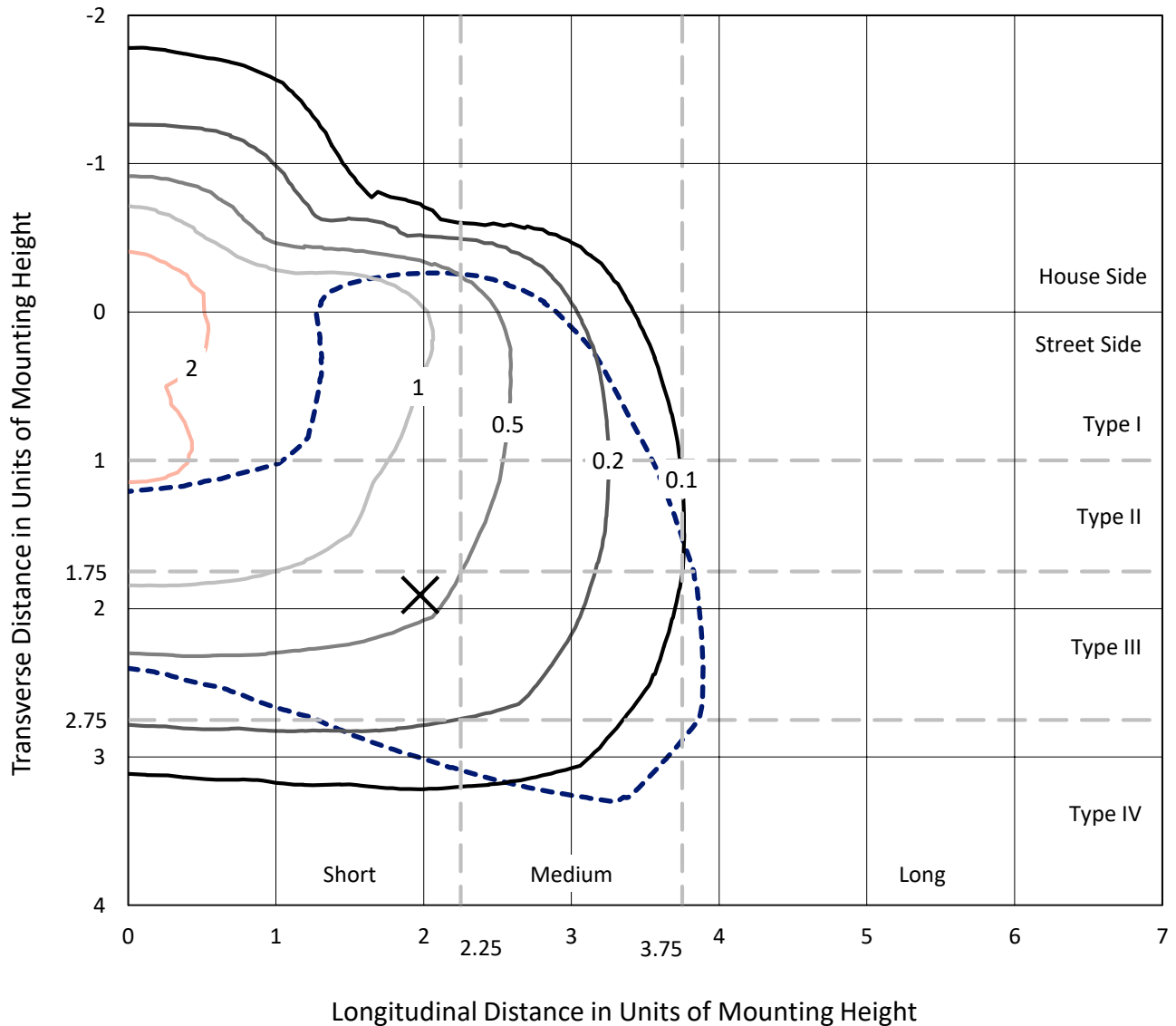


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

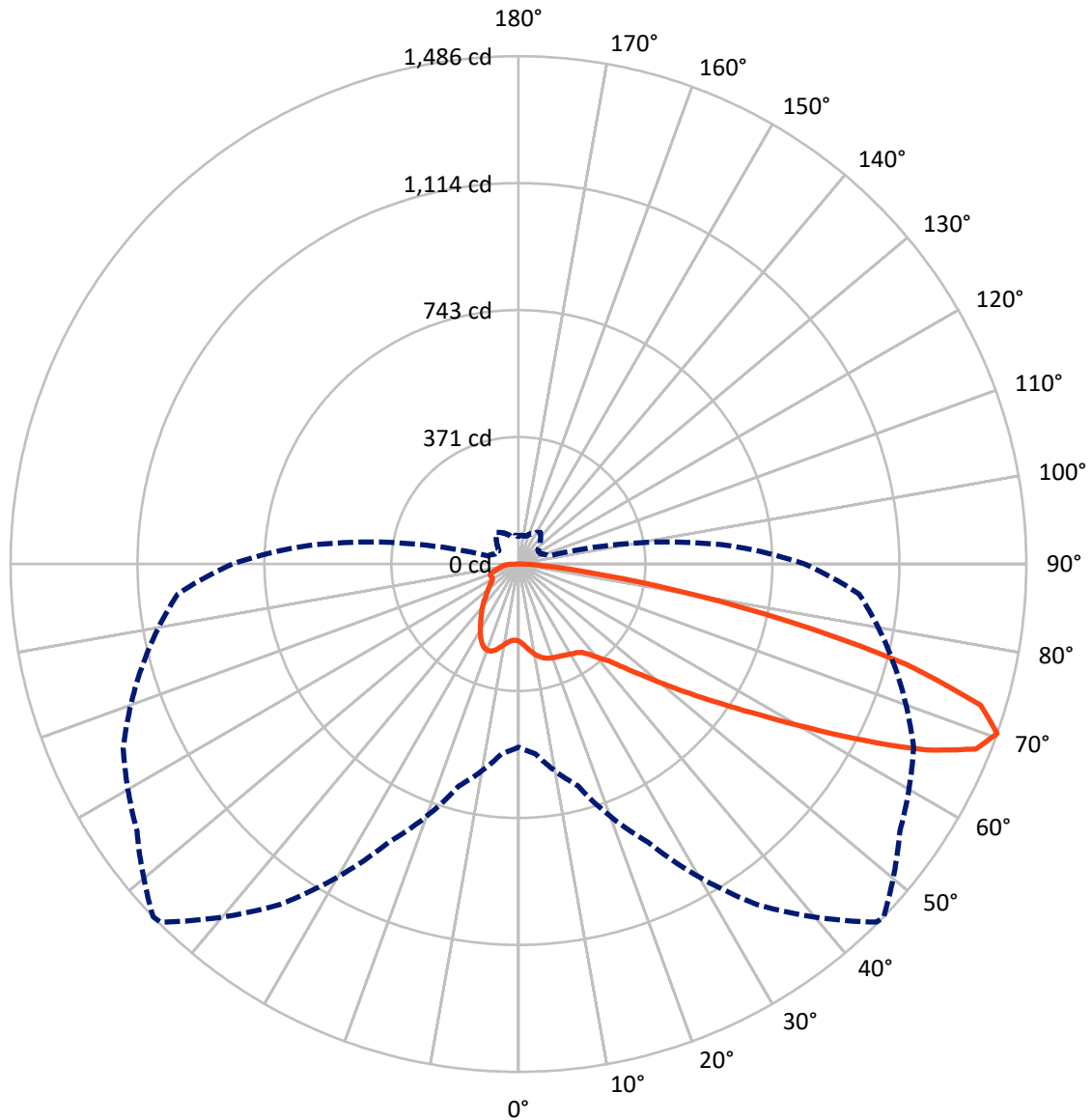


Based on 10 foot mounting height. Maximum calculated value = 2.8 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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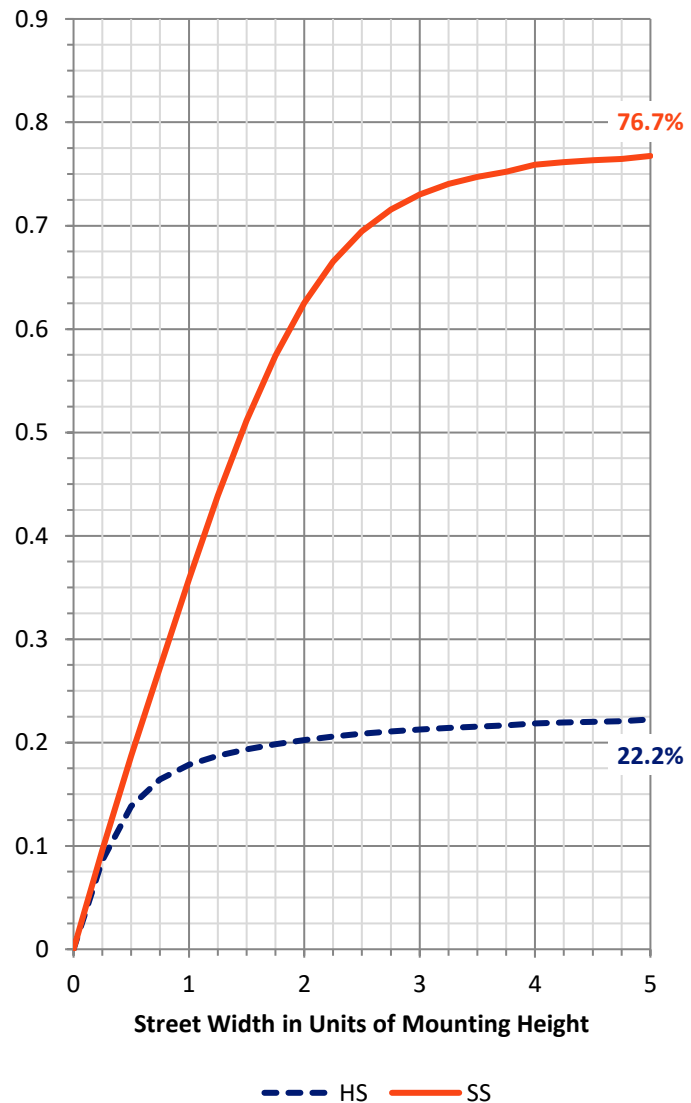
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	507.4	0.0	507.4
	% Fixture	22.9	0.0	22.9
<b>Street Side</b>	Lumens	1706.6	0.0	1706.6
	% Fixture	77.1	0.0	77.1
<b>Total</b>	Lumens	2214.0	0.0	2214.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.0	1.0
10°-20°	76.6	3.5
20°-30°	127.7	5.8
30°-40°	181.3	8.2
40°-50°	266.6	12.0
50°-60°	451.6	20.4
60°-70°	641.0	29.0
70°-80°	389.4	17.6
80°-90°	56.8	2.6
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°	2214.0	100.0
0°-180°	2214.0	100.0



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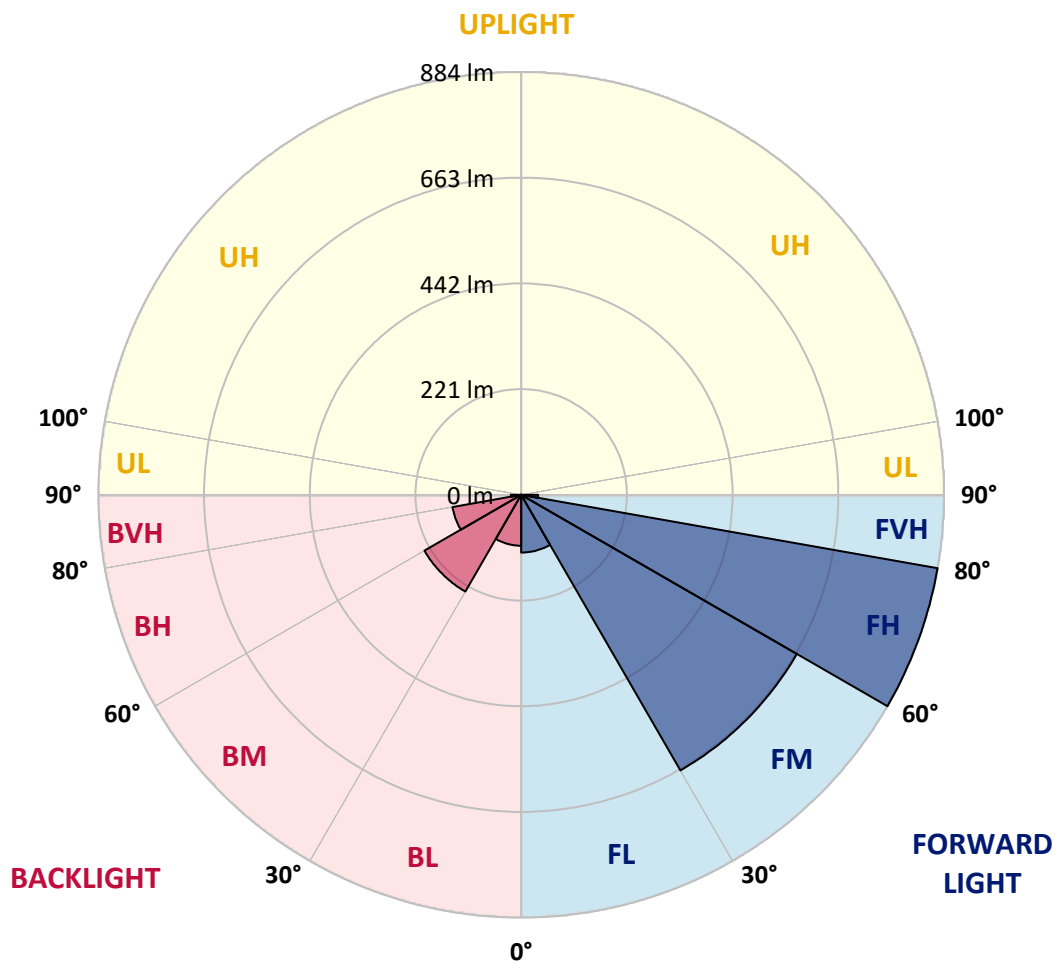
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	120.8	5.5			
FM (30°-60°)	665.9	30.1			
FH (60°-80°)	884.5	39.9			G1/1800
FVH (80°-90°)	35.4	1.6			G1/100
BL (0°-30°)	106.5	4.8	B0/110		
BM (30°-60°)	233.6	10.6	B1/1000		
BH (60°-80°)	145.9	6.6	B1/500		G1/500
BVH (80°-90°)	21.4	1.0			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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	225.6	225.6	225.6	225.6	225.6	225.6	225.6	225.6	225.6	225.6	225.6
2.5°	236.9	237.0	237.3	236.5	234.4	233.8	233.6	231.4	230.0	227.8	226.0
5°	255.8	255.9	255.5	253.4	248.7	245.2	244.9	239.9	235.3	230.5	226.9
7.5°	275.6	275.8	274.4	270.3	263.8	257.7	257.3	250.5	243.6	236.2	230.8
10°	293.1	292.2	289.8	284.2	276.4	269.0	268.7	261.6	253.6	244.7	237.5
12.5°	304.7	304.0	301.0	294.1	285.6	278.8	278.1	271.6	263.8	254.1	245.4
15°	311.2	311.7	307.6	299.9	291.6	285.8	285.3	280.6	273.7	263.9	253.9
17.5°	312.0	312.5	308.5	300.9	294.1	290.1	289.9	286.8	281.8	272.4	261.9
20°	307.2	307.5	304.2	297.9	293.5	292.2	292.2	290.8	287.1	278.8	268.6
22.5°	300.1	300.3	298.0	293.5	291.9	293.8	294.4	293.8	291.2	283.4	273.8
25°	298.4	298.2	295.8	291.2	292.5	296.5	297.2	297.4	295.6	288.8	280.5
27.5°	306.8	306.3	301.6	294.2	295.0	299.9	300.8	303.0	301.9	295.9	288.1
30°	331.1	330.2	320.7	305.7	301.6	304.1	305.3	308.8	309.0	304.0	298.1
32.5°	372.2	371.0	354.1	327.2	312.8	308.5	309.5	314.7	317.5	313.7	307.4
35°	424.1	422.8	400.5	363.8	331.4	316.7	317.5	321.6	327.2	321.8	313.5
37.5°	478.2	475.1	453.6	406.9	361.0	334.4	334.4	334.9	337.5	326.2	320.6
40°	532.0	528.9	509.5	457.5	399.4	362.2	360.4	348.7	346.6	336.8	334.9
42.5°	582.0	581.1	569.6	514.7	444.4	389.5	387.1	367.2	367.6	361.6	361.6
45°	635.2	635.2	625.8	572.4	496.8	433.5	431.0	401.7	406.3	403.5	410.2
47.5°	678.6	679.9	678.7	632.6	557.8	489.3	484.9	449.6	462.3	472.0	491.6
50°	722.9	725.0	725.3	698.6	631.5	555.7	550.7	513.2	541.6	569.2	607.7
52.5°	787.2	792.0	773.0	764.4	721.8	634.5	629.6	594.9	642.4	681.1	747.5
55°	846.9	842.7	829.1	834.4	818.5	724.2	720.5	690.1	754.7	805.0	891.3
57.5°	879.1	878.8	892.5	915.2	922.8	834.8	831.7	802.2	881.3	919.1	1026.2
60°	917.0	917.6	951.4	1002.9	1034.2	972.6	971.2	948.8	1004.2	1025.6	1132.1
62.5°	922.3	931.9	990.1	1078.9	1138.4	1133.5	1136.5	1080.8	1114.3	1110.6	1211.1
65°	861.3	873.9	979.2	1101.8	1242.1	1309.5	1312.3	1213.7	1201.0	1183.3	1239.3
67.5°	736.3	755.0	869.4	1051.9	1276.2	1439.6	1443.5	1316.6	1273.0	1207.9	1171.3
70°	535.8	556.5	671.7	898.4	1215.3	1481.2	1485.7	1362.2	1275.7	1137.8	999.9
72.5°	323.7	339.9	434.8	661.4	1025.8	1405.4	1413.4	1304.4	1164.7	963.8	738.4
75°	142.1	152.7	210.3	381.1	734.3	1162.8	1172.7	1116.5	946.4	700.4	436.4
77.5°	60.5	63.6	86.2	165.6	415.1	794.6	808.2	815.8	642.1	381.1	184.4
80°	37.7	38.9	48.8	74.9	194.3	446.3	461.0	480.0	318.8	140.1	64.4
82.5°	23.0	24.3	32.4	45.3	101.2	202.3	209.3	222.8	123.7	60.5	33.3
85°	13.8	14.8	19.9	28.6	57.6	79.6	79.5	87.9	58.3	38.9	17.6
87.5°	6.6	7.3	10.6	14.9	29.0	29.9	28.0	31.7	35.4	25.5	8.9
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°	225.6	225.6	225.6	225.6	225.6	225.6	225.6	225.6	225.6	225.6	225.6
2.5°	225.4	225.1	224.1	223.4	223.2	222.8	222.4	222.6	222.9	223.0	223.0
5°	225.3	224.5	223.2	222.7	223.4	224.3	225.4	226.9	227.8	228.5	229.0
7.5°	229.0	227.4	225.9	225.6	227.0	229.4	232.0	235.2	237.4	238.9	239.2
10°	235.0	233.1	231.6	231.9	234.4	237.8	241.5	245.6	248.9	250.9	251.1
12.5°	242.0	240.1	238.7	240.0	244.1	248.3	252.1	255.6	258.7	260.7	260.7
15°	250.0	248.7	247.1	250.0	255.5	259.3	260.9	262.6	264.3	265.8	265.5
17.5°	257.8	256.5	255.6	259.1	264.8	266.6	265.5	264.2	264.2	265.0	265.2
20°	264.4	263.3	263.8	267.2	270.2	268.4	264.4	260.3	258.7	259.1	259.6
22.5°	270.3	269.7	271.3	272.9	270.8	264.4	257.2	251.6	249.6	249.4	249.6
25°	277.1	277.0	279.0	276.1	266.7	255.0	245.2	239.8	238.7	239.6	241.1
27.5°	285.6	286.4	287.4	276.9	258.4	240.6	230.7	227.0	228.1	230.3	231.8
30°	296.4	298.7	296.6	275.0	246.4	224.3	214.8	213.7	216.8	220.0	221.5
32.5°	306.9	310.5	305.3	270.0	230.9	206.9	199.6	199.3	203.1	206.1	208.2
35°	315.4	322.5	311.9	260.3	213.1	190.9	185.6	183.5	184.9	188.4	190.9
37.5°	326.5	338.2	316.5	245.3	193.7	177.8	171.5	166.8	165.6	167.0	168.2
40°	346.7	362.2	318.6	224.5	174.7	164.6	158.2	151.3	146.5	143.1	143.1
42.5°	379.8	393.5	317.2	199.2	157.2	151.7	144.5	136.5	128.8	120.9	120.3
45°	433.4	440.1	313.2	172.4	141.8	138.2	131.5	123.5	113.2	104.3	103.4
47.5°	519.2	504.5	306.8	149.0	128.3	126.8	120.5	111.4	100.5	93.3	92.7
50°	636.3	597.4	303.7	130.3	116.3	116.8	111.7	102.0	91.7	86.4	85.8
52.5°	776.3	705.7	309.7	115.9	106.7	108.3	104.5	95.4	86.8	82.6	82.0
55°	921.6	817.8	316.1	105.5	97.6	100.7	99.4	91.9	84.1	80.2	79.7
57.5°	1045.9	901.6	303.2	97.0	89.5	94.3	95.5	89.7	82.7	79.3	78.6
60°	1124.2	935.3	269.4	89.0	83.0	89.3	93.2	89.1	83.3	83.0	82.5
62.5°	1161.3	932.3	218.7	82.7	79.0	87.1	94.9	92.5	89.3	92.1	92.3
65°	1144.6	887.8	162.9	78.6	76.1	87.9	99.9	99.0	91.1	93.8	94.2
67.5°	1034.9	781.5	120.6	74.9	73.0	90.2	109.0	101.1	87.7	89.6	88.4
70°	836.5	619.6	93.0	70.8	69.7	89.9	113.0	99.8	84.0	84.4	81.1
72.5°	576.8	422.5	75.7	67.1	65.0	82.0	110.2	96.6	80.8	77.4	73.0
75°	313.7	226.8	64.3	63.1	56.8	72.0	104.9	94.3	78.0	73.4	71.0
77.5°	123.4	94.1	55.8	57.7	49.6	63.6	99.0	90.0	74.2	68.1	66.9
80°	50.4	48.0	46.3	49.9	42.7	55.6	91.8	84.9	69.6	63.2	60.8
82.5°	28.6	29.9	36.0	39.4	34.6	51.2	88.4	80.8	64.0	56.6	53.7
85°	14.6	17.5	25.1	28.3	25.5	43.6	81.5	70.8	51.4	43.3	43.6
87.5°	7.0	9.8	15.8	17.7	16.5	31.5	60.8	51.3	40.0	31.7	30.7
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)