

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: P348955

Luminaire Tested: **ARCH-N-PA1-20-827-U-T2U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348955  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-20-827-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 420mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2507 lumens  
Efficiency: N/A  
Efficacy: 104.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

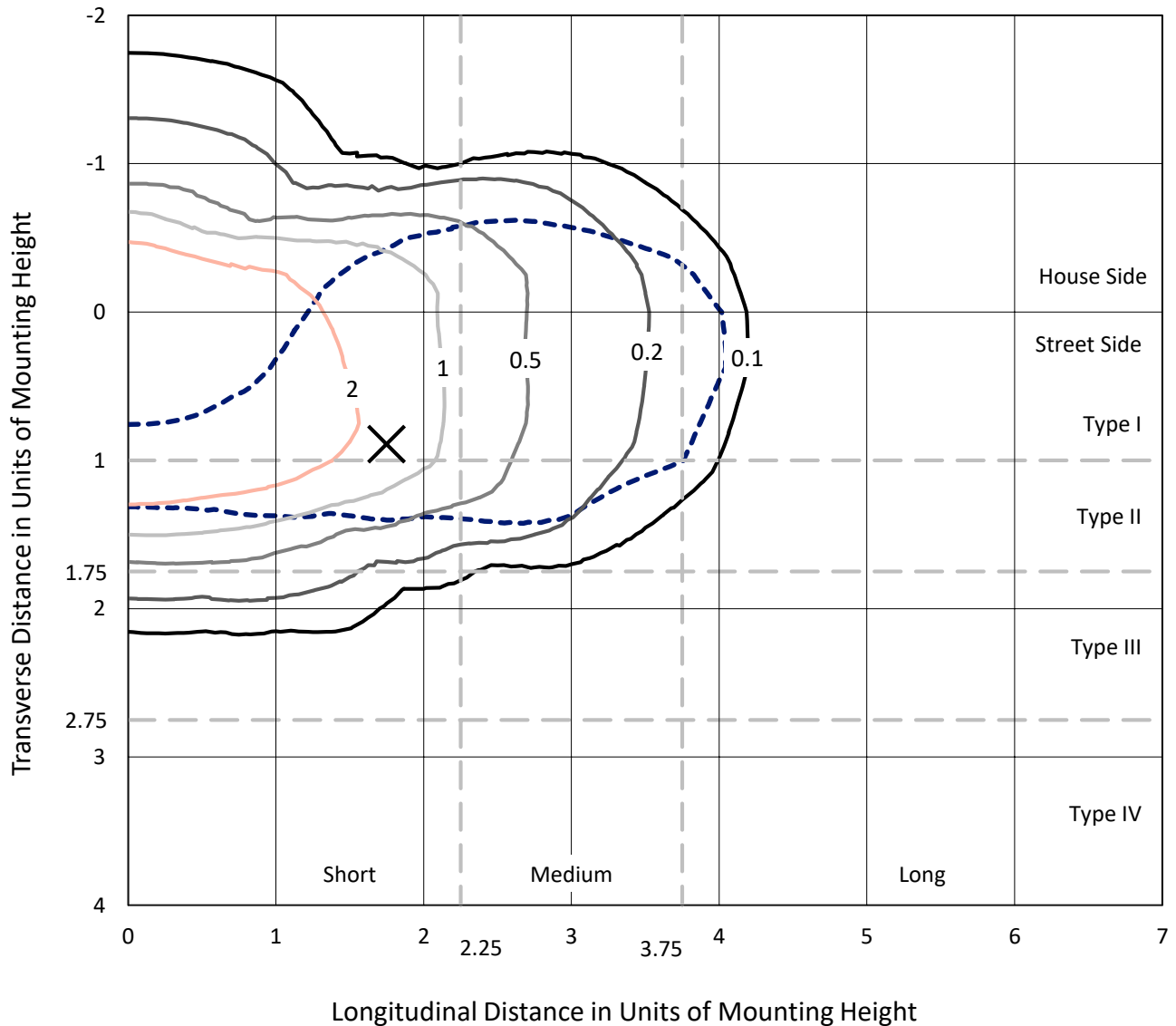
Input Watts (W): 24  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

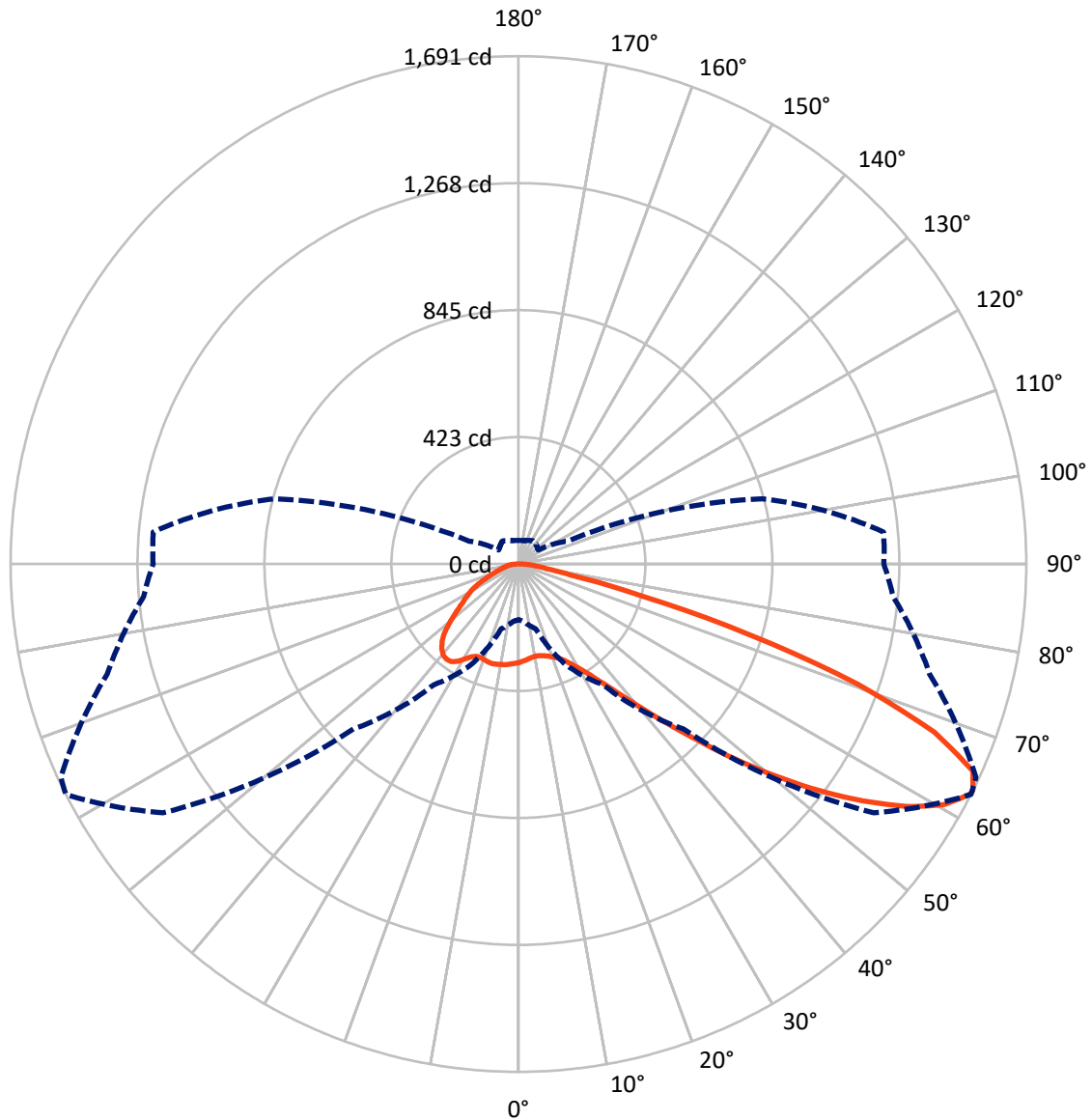
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.3 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical



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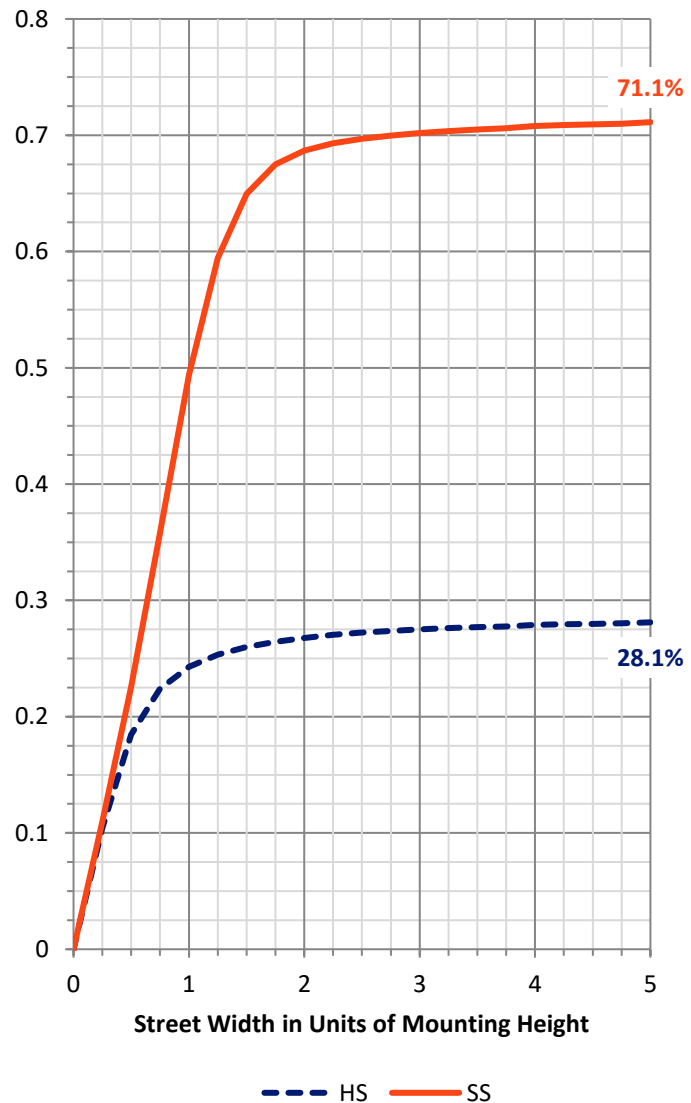
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	715.7	0.0	715.7
	% Fixture	28.5	0.0	28.5
<b>Street Side</b>	Lumens	1791.3	0.0	1791.3
	% Fixture	71.5	0.0	71.5
<b>Total</b>	Lumens	2507.0	0.0	2507.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.1	1.2
10°-20°	91.9	3.7
20°-30°	161.4	6.4
30°-40°	272.0	10.9
40°-50°	476.5	19.0
50°-60°	615.9	24.6
60°-70°	533.1	21.3
70°-80°	276.8	11.0
80°-90°	48.2	1.9
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°	2507.0	100.0
0°-180°	2507.0	100.0



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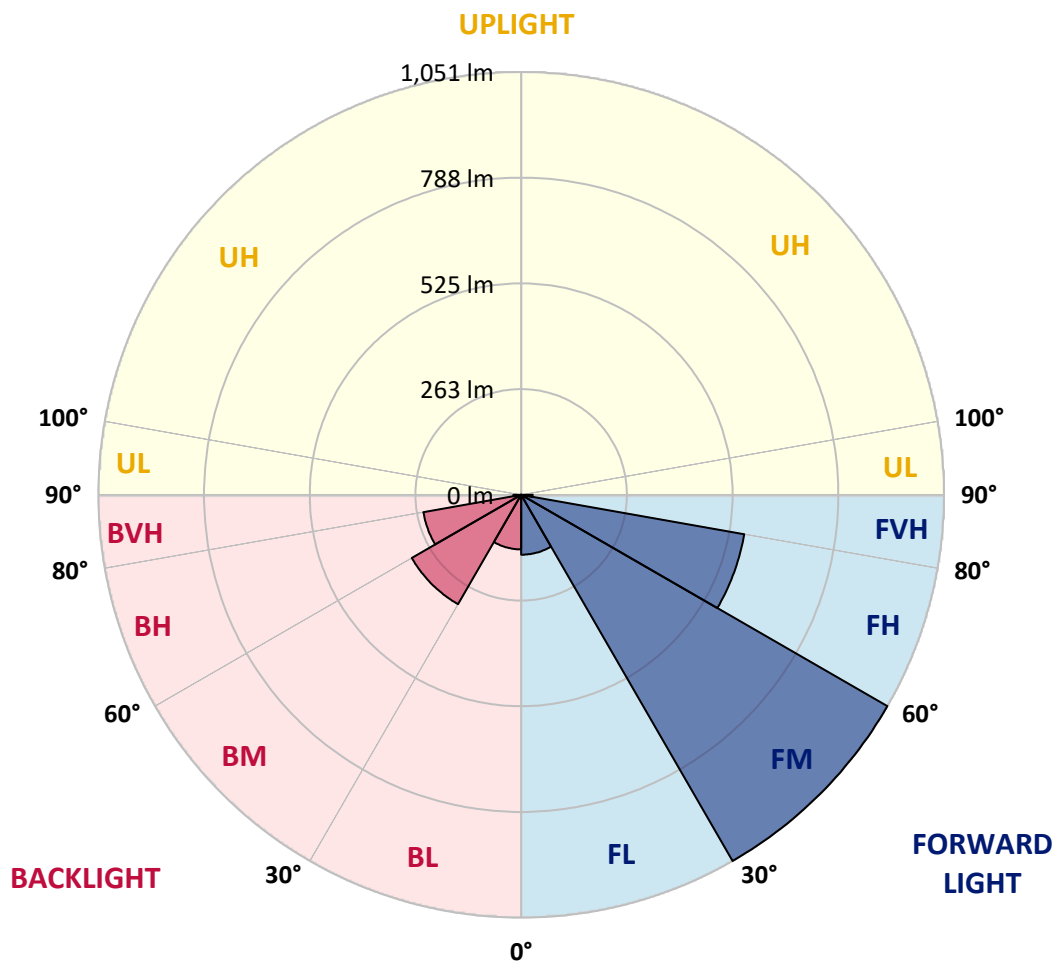
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	148.8	5.9			
FM (30°-60°)	1050.7	41.9			
FH (60°-80°)	563.0	22.5			G0/660
FVH (80°-90°)	28.7	1.1			G1/100
BL (0°-30°)	135.6	5.4	B1/500		
BM (30°-60°)	313.7	12.5	B1/1000		
BH (60°-80°)	246.9	9.8	B1/500		G1/500
BVH (80°-90°)	19.5	0.8			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	328.2	328.2	328.2	328.2	328.2	328.2	328.2	328.2	328.2	328.2	328.2
2.5°	320.5	319.6	321.2	321.9	321.7	323.1	323.1	323.3	323.3	324.5	325.7
5°	311.1	310.6	312.3	313.5	314.4	316.5	317.9	318.6	319.3	321.0	323.8
7.5°	302.2	301.5	303.8	304.8	306.2	309.2	312.5	314.4	315.3	318.9	322.8
10°	294.9	294.7	296.6	297.5	299.1	303.6	308.3	312.3	313.0	317.7	321.4
12.5°	291.4	290.9	293.0	294.2	297.0	302.4	307.8	312.8	313.9	319.3	322.6
15°	294.2	294.7	296.6	296.8	300.1	305.7	311.8	316.7	317.9	323.3	325.7
17.5°	307.6	307.4	308.5	308.1	309.2	312.1	318.6	322.6	324.0	328.0	329.9
20°	331.8	331.1	332.0	328.9	323.8	322.4	326.4	330.8	331.3	333.6	332.5
22.5°	368.6	369.3	367.2	359.4	347.0	341.1	338.6	340.0	341.6	341.4	337.9
25°	416.7	419.0	415.1	401.4	380.6	367.0	357.6	355.5	356.6	353.3	347.9
27.5°	479.8	481.7	473.0	451.9	423.7	403.6	384.8	377.5	377.5	370.5	360.6
30°	549.3	550.4	536.6	509.8	477.2	447.2	419.5	405.4	404.3	390.4	374.9
32.5°	633.7	630.4	614.0	580.9	539.9	498.6	462.9	441.6	439.2	418.3	398.6
35°	742.8	742.8	708.8	671.0	621.1	568.5	521.6	488.5	486.1	462.4	436.9
37.5°	861.3	860.8	830.1	778.0	718.2	653.9	591.3	550.0	544.6	519.2	490.6
40°	979.3	975.3	950.5	901.0	837.1	763.7	677.4	629.3	626.7	590.5	554.7
42.5°	1065.7	1061.9	1050.2	1017.1	975.1	922.1	789.3	724.3	720.5	675.0	631.1
45°	1113.3	1107.9	1106.3	1106.7	1111.4	1111.2	927.5	836.7	823.5	770.7	712.3
47.5°	1102.5	1089.8	1106.7	1150.1	1223.1	1271.0	1088.4	970.2	945.8	870.2	798.9
50°	1015.5	1009.4	1045.5	1133.9	1283.9	1396.3	1265.6	1108.8	1074.3	964.3	880.8
52.5°	862.7	874.4	919.0	1044.8	1272.8	1472.0	1426.5	1252.9	1205.0	1053.9	951.9
55°	686.7	701.5	764.4	897.7	1170.8	1473.0	1542.7	1392.5	1349.8	1146.6	1024.6
57.5°	499.8	520.6	599.2	721.5	991.8	1372.3	1599.9	1523.2	1474.4	1237.9	1095.7
60°	313.9	328.7	414.3	556.1	758.1	1150.1	1585.6	1627.8	1587.5	1324.0	1176.9
62.5°	202.2	209.3	246.4	397.0	528.6	843.5	1479.8	1687.9	1670.5	1402.6	1238.1
63°	185.4	191.5	223.1	367.0	490.1	777.1	1444.1	1690.9	1680.6	1417.4	1252.4
65°	132.6	139.1	155.6	252.2	361.8	521.3	1237.4	1662.5	1674.0	1442.0	1271.9
67.5°	104.6	106.8	114.3	153.2	256.7	296.1	832.7	1492.9	1543.4	1415.7	1243.0
70°	93.6	95.3	103.7	117.5	194.3	191.9	434.3	1200.3	1304.7	1326.1	1170.3
72.5°	81.6	82.8	93.1	110.7	148.3	146.6	188.9	807.1	934.0	1161.9	1069.7
75°	67.6	68.7	77.4	98.3	125.5	115.9	118.3	421.9	535.4	910.8	938.0
77.5°	55.6	56.3	63.6	79.1	110.5	89.4	91.5	177.4	260.2	620.8	740.7
80°	40.4	40.6	47.4	60.1	84.5	80.7	68.0	96.7	118.0	340.2	466.0
82.5°	28.2	28.4	35.4	42.0	58.2	80.5	49.5	64.8	70.9	156.7	207.4
85°	19.7	19.2	24.2	27.7	36.8	48.8	37.8	41.5	43.9	67.8	55.8
87.5°	8.7	8.4	13.6	14.8	18.5	22.5	30.0	21.8	23.2	32.8	17.6
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°	328.2	328.2	328.2	328.2	328.2	328.2	328.2	328.2	328.2	328.2	328.2
2.5°	325.9	326.8	328.2	330.4	332.0	332.7	334.1	334.3	336.5	334.6	334.8
5°	325.4	326.6	329.6	333.4	336.0	337.9	341.4	342.6	344.7	343.7	343.5
7.5°	324.7	326.8	331.3	336.7	340.7	343.7	347.0	349.1	351.2	350.8	350.3
10°	323.8	326.4	332.7	338.1	343.7	347.0	349.4	349.6	350.3	349.8	348.7
12.5°	324.5	327.3	334.6	340.0	345.8	348.2	347.5	344.0	340.9	338.3	337.9
15°	326.8	330.1	336.9	341.8	346.5	345.1	340.9	333.2	327.5	324.3	324.5
17.5°	329.2	332.0	337.2	341.1	343.5	339.3	332.7	326.1	323.5	321.0	320.5
20°	331.3	331.8	335.0	338.6	338.3	335.0	328.9	321.0	315.8	311.6	311.8
22.5°	334.6	332.7	332.9	335.0	337.6	334.6	320.3	306.4	298.7	293.7	293.5
25°	342.1	338.1	334.3	335.5	345.4	325.9	301.7	283.7	276.9	272.4	272.9
27.5°	352.4	347.0	339.5	345.8	351.2	308.8	275.2	256.7	252.0	247.3	248.5
30°	363.7	355.9	346.8	368.1	344.7	281.5	242.4	225.5	221.3	216.8	217.7
32.5°	383.8	372.3	360.4	394.9	329.4	248.5	207.9	192.6	189.8	187.0	187.2
35°	417.4	403.8	390.9	415.3	309.7	214.0	176.9	166.1	163.8	160.5	160.5
37.5°	466.9	445.6	438.7	426.1	282.7	181.8	154.1	146.9	141.9	137.5	137.5
40°	524.4	499.0	493.6	429.4	247.5	155.1	138.2	131.9	125.3	118.7	119.2
42.5°	594.3	560.0	547.6	424.9	204.8	138.0	126.9	119.7	113.3	107.7	106.8
45°	673.1	629.7	598.3	412.0	166.1	127.4	119.7	111.0	103.0	98.1	97.1
47.5°	753.6	705.3	643.1	386.2	138.9	119.9	114.7	102.5	96.9	93.6	93.1
50°	830.6	780.1	680.2	345.6	123.2	114.5	107.5	98.5	93.8	91.0	90.8
52.5°	898.8	851.2	711.4	303.6	112.6	110.0	104.2	96.7	91.7	89.2	88.7
55°	963.8	923.2	742.4	266.1	103.5	102.5	102.5	94.8	89.4	87.0	86.6
57.5°	1035.2	1005.1	773.6	238.6	95.3	97.1	100.4	92.7	86.8	84.7	84.5
60°	1117.5	1099.9	806.4	214.4	88.0	91.3	97.4	89.9	83.8	82.1	81.6
62.5°	1201.7	1202.2	834.8	185.4	81.9	86.8	93.8	87.3	80.9	79.8	79.5
63°	1216.5	1220.8	838.8	179.0	80.5	85.9	92.9	86.3	80.2	79.1	78.8
65°	1252.9	1271.4	842.1	152.3	75.3	82.4	89.4	83.3	77.2	77.0	76.5
67.5°	1244.2	1274.5	821.7	119.4	69.4	77.4	84.5	78.8	73.4	73.4	72.5
70°	1179.5	1199.2	759.0	92.2	65.0	72.3	78.6	74.1	68.5	69.0	67.1
72.5°	1080.2	1058.6	624.3	72.0	59.6	66.4	71.8	68.0	63.1	62.6	60.5
75°	934.7	863.7	447.2	58.2	53.0	58.7	64.3	61.5	57.0	54.4	54.0
77.5°	712.3	613.1	267.9	49.3	47.4	52.1	55.6	53.5	50.0	46.9	47.2
80°	424.2	353.6	120.8	41.8	41.1	44.6	47.4	45.8	43.4	39.7	38.7
82.5°	171.7	136.8	54.2	33.8	34.7	37.3	39.9	38.5	36.6	35.7	30.3
85°	44.6	42.9	31.7	25.3	26.7	27.9	31.4	31.4	29.8	24.4	22.5
87.5°	12.7	16.9	17.6	16.0	18.1	18.3	21.8	21.8	22.3	15.0	13.6
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)