

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: P573029

Luminaire Tested: **ARCH-S-PA2-20-827-U-T4W**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573029  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-20-827-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 220mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2705 lumens  
Efficiency: N/A  
Efficacy: 115.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1

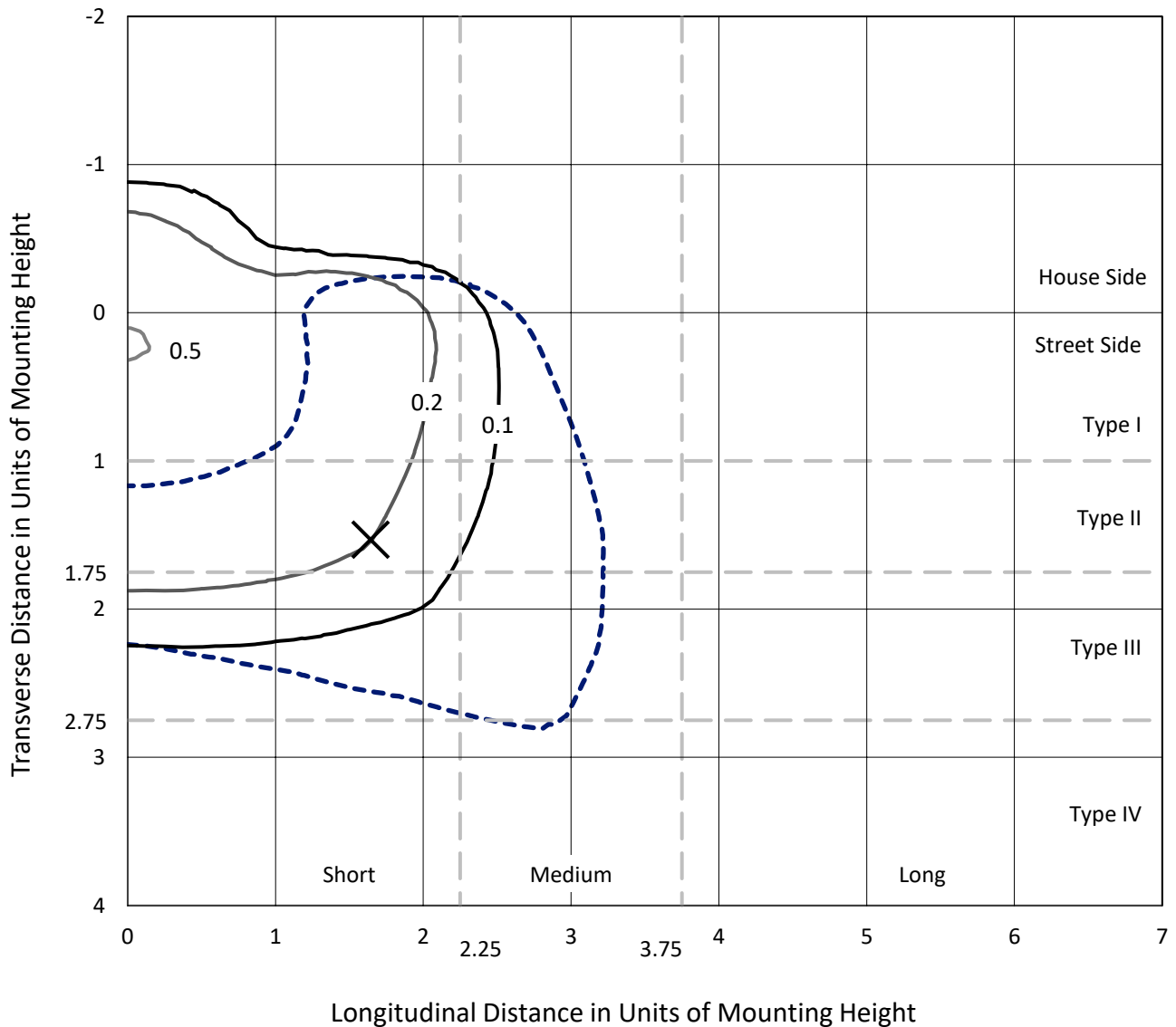
Input Watts (W): 23.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

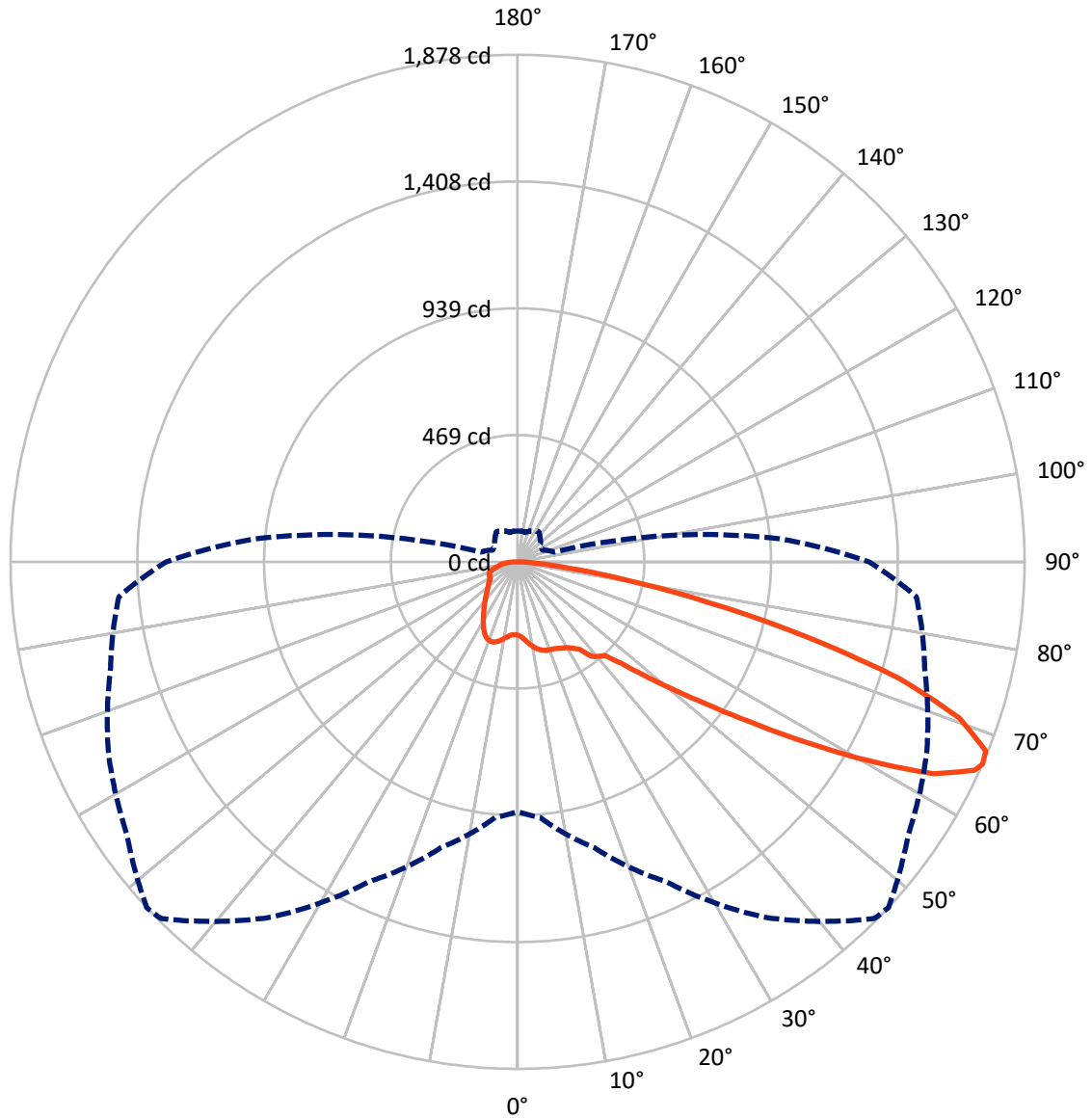
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.5 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

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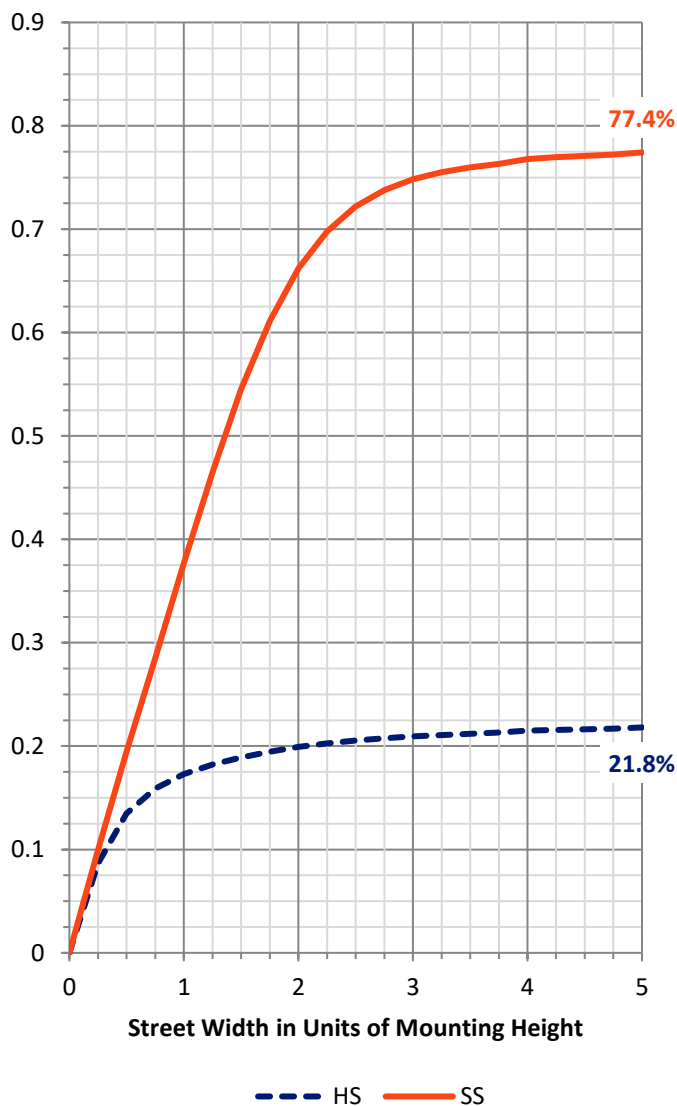
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	601.4	0.0	601.4
	% Fixture	22.2	0.0	22.2
<b>Street Side</b>	Lumens	2103.6	0.0	2103.6
	% Fixture	77.8	0.0	77.8
<b>Total</b>	Lumens	2705.0	0.0	2705.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.7	1.0
10°-20°	90.8	3.4
20°-30°	151.4	5.6
30°-40°	219.9	8.1
40°-50°	336.3	12.4
50°-60°	635.7	23.5
60°-70°	821.4	30.4
70°-80°	369.2	13.6
80°-90°	52.7	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°	2705.0	100.0
0°-180°	2705.0	100.0

**Coefficient of Utilization**



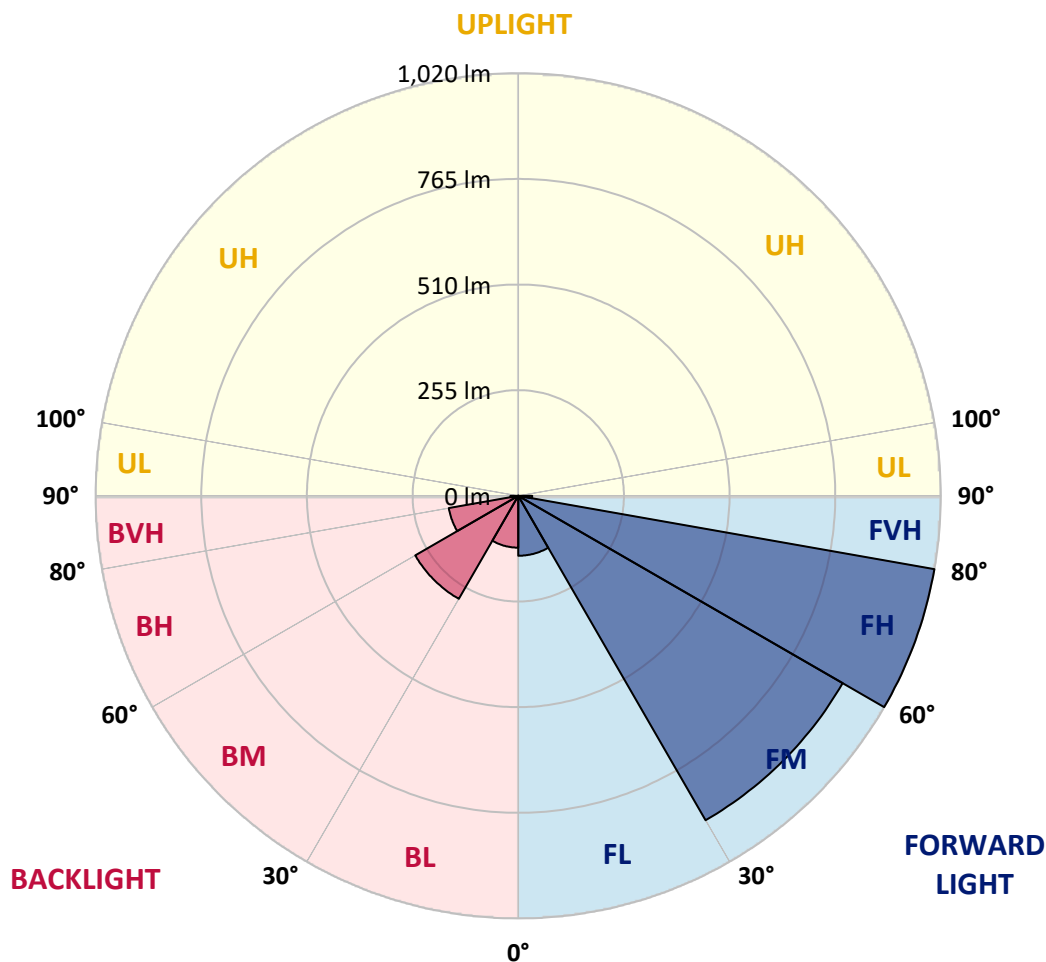
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	144.7	5.4			
FM (30°-60°)	904.6	33.4			
FH (60°-80°)	1020.4	37.7			G1/1800
FVH (80°-90°)	33.8	1.3			G1/100
BL (0°-30°)	125.2	4.6	B1/500		
BM (30°-60°)	287.3	10.6	B1/1000		
BH (60°-80°)	170.2	6.3	B1/500		G1/500
BVH (80°-90°)	18.8	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°	47°	55°	65°	75°	85°
0°	271.9	271.9	271.9	271.9	271.9	271.9	271.9	271.9	271.9	271.9	271.9
2.5°	287.4	285.2	283.7	283.0	281.5	278.5	278.5	277.8	274.9	273.4	272.7
5°	310.2	308.7	305.0	302.1	297.7	291.8	291.0	286.6	280.8	276.3	273.4
7.5°	332.2	330.7	327.1	322.6	315.3	307.9	305.7	299.9	290.3	283.7	278.5
10°	351.3	349.1	344.7	338.8	330.7	322.6	320.4	313.8	304.3	294.7	285.9
12.5°	363.8	362.3	357.2	349.8	341.0	332.9	331.5	325.6	316.0	305.7	294.7
15°	369.7	368.9	363.1	355.7	346.9	340.3	339.6	334.4	326.3	316.0	303.5
17.5°	368.2	367.5	362.3	355.0	348.4	344.7	344.7	341.0	334.4	325.6	312.4
20°	360.9	360.9	356.5	351.3	347.6	346.9	346.9	346.2	341.8	334.4	321.2
22.5°	353.5	353.5	350.6	346.9	346.2	349.1	349.8	351.3	349.8	344.0	332.2
25°	355.0	354.3	350.6	346.2	346.9	353.5	355.0	358.7	357.9	353.5	343.2
27.5°	371.2	370.4	360.9	352.0	351.3	359.4	360.9	366.0	366.0	362.3	355.7
30°	411.6	413.0	395.4	373.4	362.3	367.5	368.9	374.8	377.8	379.2	374.1
32.5°	473.3	471.1	444.7	408.6	384.4	379.2	381.4	386.6	396.9	399.8	387.3
35°	535.8	537.3	511.5	466.0	419.7	400.6	399.1	406.4	421.9	408.6	386.6
37.5°	593.8	591.6	561.5	512.3	466.0	443.9	444.7	441.7	428.5	402.0	391.7
40°	657.1	651.2	626.2	563.0	504.2	467.4	460.8	435.8	424.8	413.8	412.3
42.5°	719.5	720.3	699.7	637.2	549.7	484.3	474.0	448.3	455.7	453.5	452.0
45°	798.2	798.2	777.6	719.5	621.8	547.5	533.6	502.7	514.5	523.3	540.9
47.5°	870.2	865.8	859.9	810.7	715.8	629.9	624.0	588.7	619.6	646.8	682.8
50°	946.6	940.7	937.1	906.9	839.3	754.8	737.2	700.4	768.0	818.7	885.6
52.5°	1065.7	1055.4	1036.3	1019.4	992.9	895.2	873.1	845.9	933.4	997.3	1134.0
55°	1173.0	1164.2	1145.8	1158.3	1154.6	1065.7	1046.6	1020.9	1115.7	1193.6	1350.1
57.5°	1212.7	1213.4	1238.4	1305.3	1340.6	1289.1	1261.9	1236.2	1316.3	1352.3	1493.4
60°	1231.1	1228.9	1293.5	1402.3	1517.0	1532.4	1497.8	1444.9	1475.1	1477.3	1614.7
62.5°	1191.4	1197.2	1286.2	1442.7	1622.8	1733.8	1728.6	1636.0	1608.1	1577.2	1647.0
65°	1040.7	1048.8	1179.6	1370.7	1639.7	1855.8	1860.9	1752.9	1675.0	1589.0	1555.2
66°	926.0	950.3	1095.8	1308.2	1608.8	1868.3	1877.8	1765.4	1672.0	1561.1	1482.4
67.5°	776.9	775.4	937.8	1170.8	1522.8	1857.2	1869.7	1747.7	1632.3	1478.7	1336.9
70°	475.5	490.2	629.9	873.9	1260.5	1719.8	1736.7	1623.5	1461.1	1252.4	988.5
72.5°	244.0	268.3	360.1	568.1	915.0	1421.4	1478.7	1363.3	1194.3	906.2	603.4
75°	129.4	127.9	169.8	307.9	584.3	1066.4	1096.6	1022.3	825.4	540.2	307.2
77.5°	69.1	72.8	88.9	158.0	321.2	681.3	719.5	659.3	470.4	276.3	147.0
80°	47.0	49.2	60.3	88.9	174.2	369.7	405.0	351.3	246.2	130.8	69.1
82.5°	30.1	31.6	41.2	55.1	104.4	179.3	188.9	180.1	120.5	74.2	41.9
85°	18.4	19.1	25.0	35.3	65.4	72.8	75.7	76.4	67.6	48.5	22.8
87.5°	8.8	9.6	14.0	17.6	30.9	26.5	24.3	25.0	37.5	28.7	10.3
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°	271.9	271.9	271.9	271.9	271.9	271.9	271.9	271.9	271.9	271.9	271.9
2.5°	271.9	271.2	269.7	269.0	269.7	269.7	269.7	270.5	271.9	271.9	272.7
5°	271.9	270.5	269.0	269.0	270.5	271.9	273.4	276.3	277.8	278.5	278.5
7.5°	275.6	274.1	272.7	272.7	274.9	277.8	280.8	284.4	288.1	291.0	291.0
10°	283.0	280.8	279.3	280.0	283.7	287.4	291.0	295.5	299.1	302.8	302.8
12.5°	291.0	288.8	286.6	288.1	293.2	297.7	301.3	303.5	307.2	310.2	310.2
15°	299.1	295.5	294.7	297.7	302.8	305.7	307.2	307.2	308.7	311.6	311.6
17.5°	307.9	304.3	303.5	306.5	310.9	310.9	307.9	305.7	305.0	307.2	307.9
20°	316.8	313.1	313.1	315.3	314.6	309.4	304.3	300.6	297.7	299.9	300.6
22.5°	327.8	324.1	322.6	319.7	313.1	302.8	294.7	290.3	288.1	289.6	291.0
25°	338.8	335.9	332.2	321.9	306.5	290.3	280.0	276.3	277.1	280.0	281.5
27.5°	352.8	351.3	342.5	320.4	294.7	272.7	262.4	261.6	264.6	269.0	271.2
30°	369.7	367.5	352.0	316.0	278.5	252.1	244.7	246.2	250.6	254.3	256.5
32.5°	381.4	380.0	356.5	305.7	258.7	233.7	227.8	227.8	230.0	235.2	237.4
35°	385.1	391.0	359.4	290.3	235.2	217.5	211.7	208.0	208.0	212.4	213.9
37.5°	397.6	410.8	360.9	269.7	216.1	202.8	195.5	188.9	186.7	185.9	185.9
40°	426.3	441.7	360.1	243.3	197.7	188.1	179.3	172.0	166.1	158.0	158.8
42.5°	476.3	488.0	357.9	215.3	181.5	174.9	166.1	157.3	147.7	138.9	138.2
45°	572.5	554.9	352.0	191.1	166.8	163.2	155.1	144.8	133.0	124.9	124.9
47.5°	724.7	676.2	348.4	168.3	153.6	152.9	145.5	134.5	122.7	116.9	116.1
50°	933.4	843.7	354.3	152.1	141.8	144.1	138.2	127.9	118.3	113.2	112.4
52.5°	1173.0	1023.8	360.9	141.8	133.0	137.4	134.5	124.9	115.4	111.0	110.2
55°	1358.2	1170.1	351.3	132.3	124.2	130.8	130.8	122.0	113.9	109.5	109.5
57.5°	1488.3	1228.9	318.2	123.5	116.9	124.9	127.1	120.5	113.2	111.7	111.7
60°	1544.1	1225.9	260.2	115.4	111.7	119.1	124.9	119.1	114.7	118.3	119.1
62.5°	1514.0	1162.0	202.1	109.5	108.0	117.6	127.1	124.9	119.8	122.7	124.2
65°	1378.0	1049.5	152.1	104.4	103.6	118.3	133.0	128.6	116.1	116.9	117.6
66°	1301.6	973.8	139.6	102.9	102.2	119.1	136.0	127.1	113.2	114.7	113.9
67.5°	1138.5	854.8	122.7	100.0	99.2	119.1	139.6	124.2	109.5	111.7	109.5
70°	834.9	604.9	105.1	96.3	94.8	116.9	138.9	118.3	101.4	100.0	96.3
72.5°	484.3	366.0	93.3	91.9	88.2	102.9	130.1	108.8	92.6	88.2	84.5
75°	238.1	185.9	83.1	86.7	77.2	90.4	117.6	100.7	85.3	79.4	77.2
77.5°	109.5	94.1	75.0	79.4	68.4	77.9	107.3	91.9	75.7	66.9	64.7
80°	59.5	58.8	63.2	66.1	57.3	68.4	94.8	80.1	63.9	54.4	51.4
82.5°	36.7	37.5	46.3	50.7	44.8	59.5	83.8	66.9	48.5	38.2	39.0
85°	19.1	21.3	30.9	33.8	29.4	44.1	63.2	44.8	27.2	19.8	19.8
87.5°	6.6	8.8	15.4	18.4	16.2	26.5	39.7	21.3	5.9	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)