

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: P397740

Luminaire Tested: **ARCH-S-PA1-30-830-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397740  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-30-830-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2646 lumens  
Efficiency: N/A  
Efficacy: 85.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B0 - U0 - G1

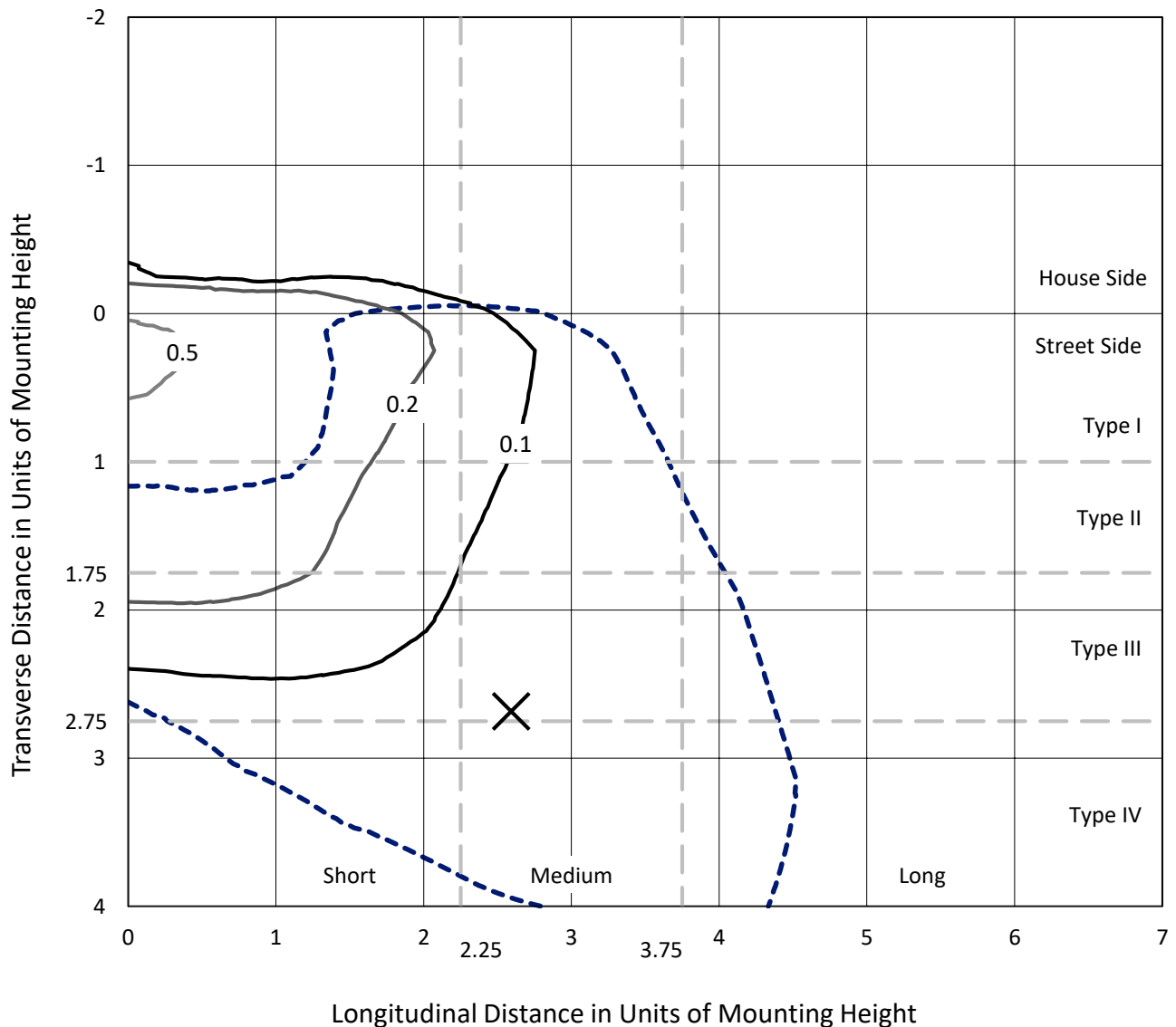
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

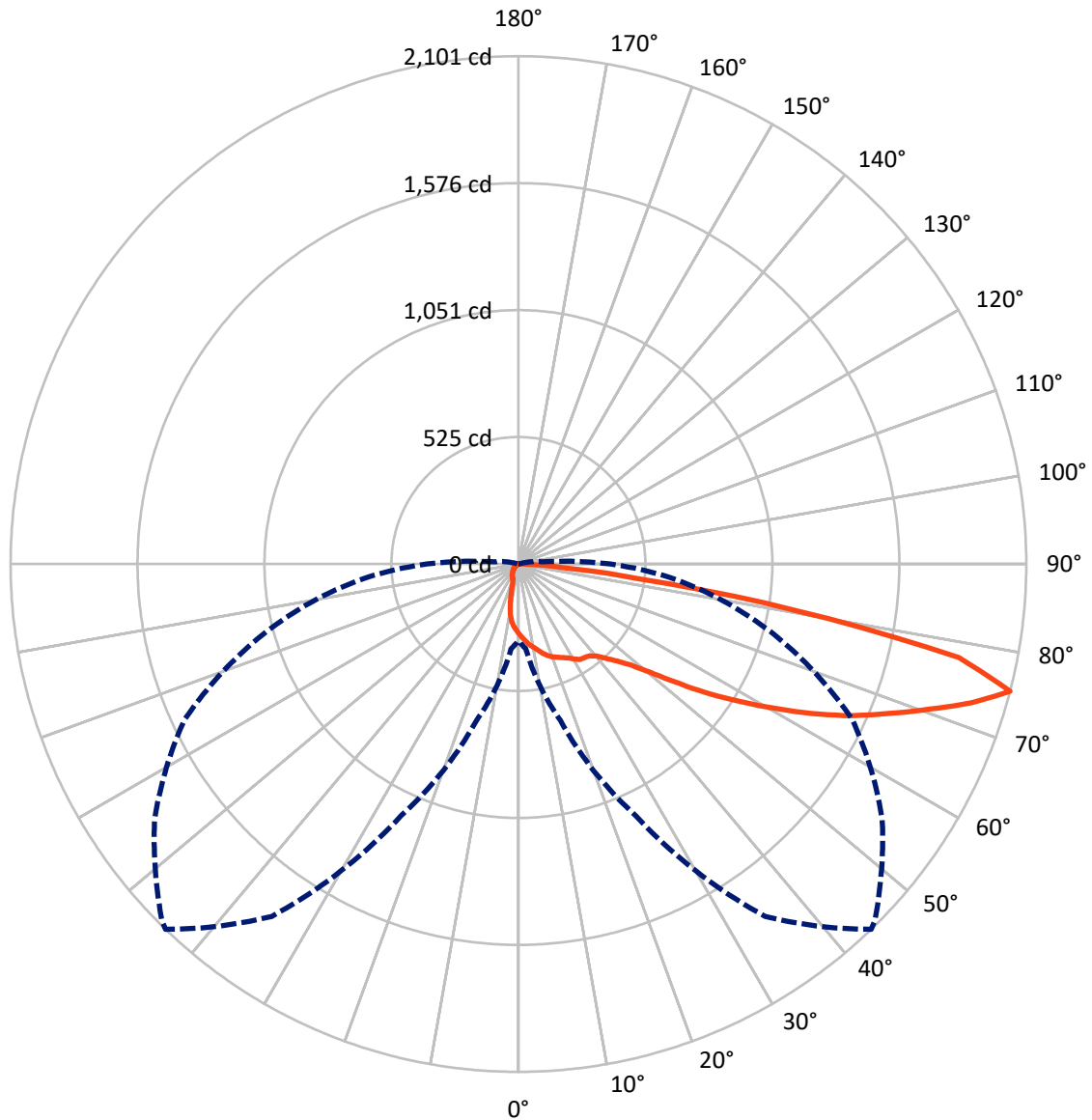


Based on 25 foot mounting height. Maximum calculated value = 0.6 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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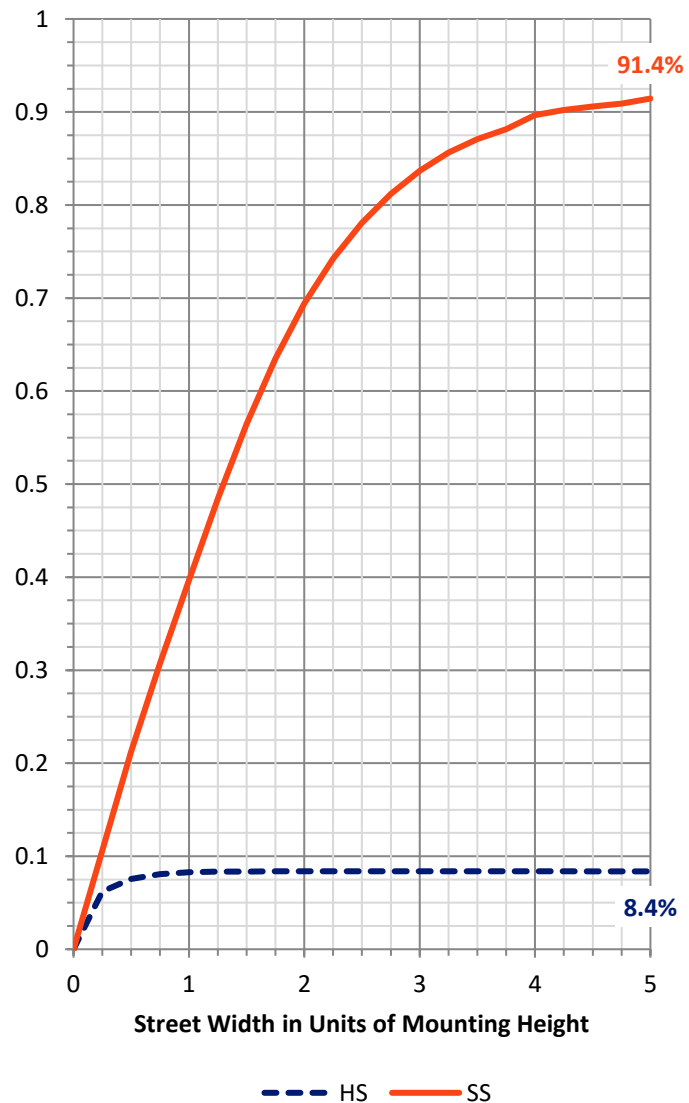
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	223.2	0.0	223.2
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	2422.9	0.0	2422.9
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	2646.0	0.0	2646.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.2	1.0
10°-20°	76.1	2.9
20°-30°	125.6	4.7
30°-40°	182.3	6.9
40°-50°	296.3	11.2
50°-60°	522.4	19.7
60°-70°	750.8	28.4
70°-80°	601.2	22.7
80°-90°	64.1	2.4
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°	2646.0	100.0
0°-180°	2646.0	100.0



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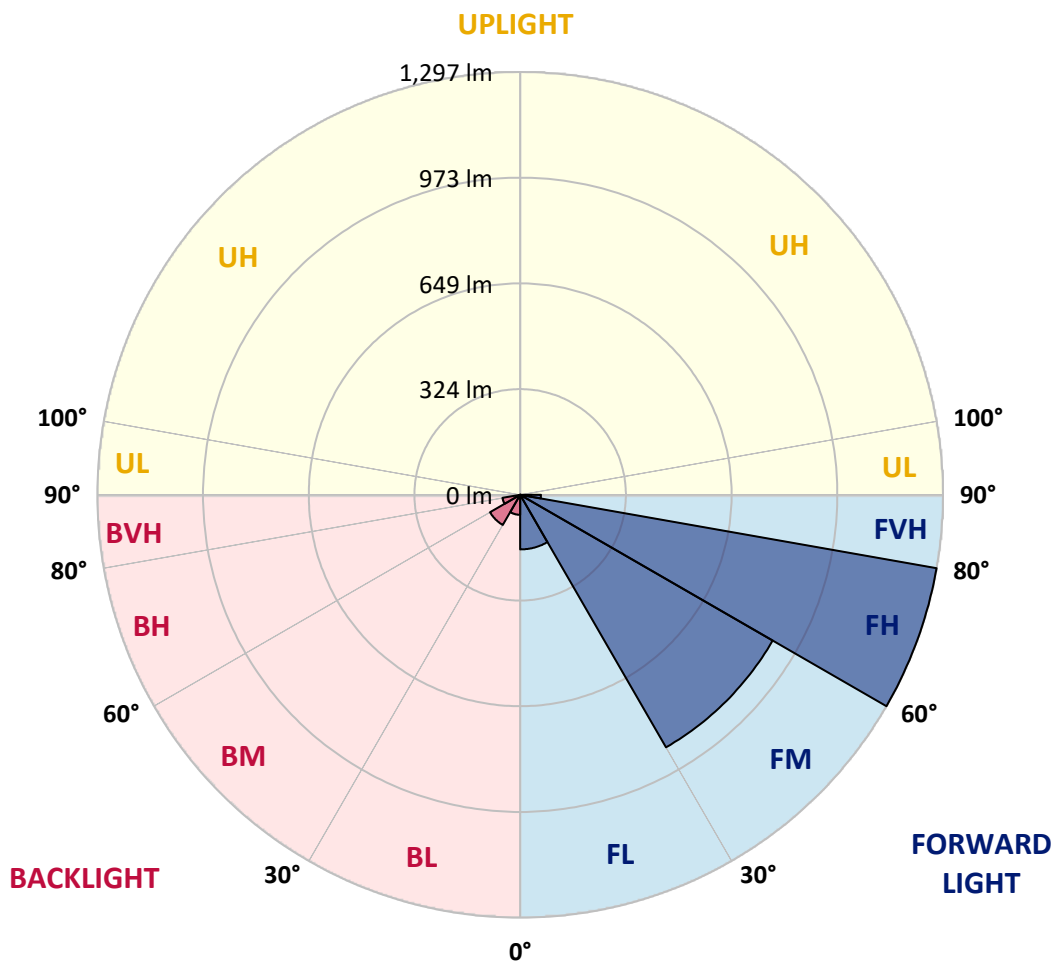
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	167.6	6.3			
FM	(30°-60°)	894.4	33.8			
FH	(60°-80°)	1297.0	49.0			G1/1800
FVH	(80°-90°)	63.9	2.4			G1/100
BL	(0°-30°)	61.3	2.3	B0/110		
BM	(30°-60°)	106.7	4.0	B0/220		
BH	(60°-80°)	55.0	2.1	B0/110		G0/110
BVH	(80°-90°)	0.2	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 IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	288.0	288.0	288.0	288.0	288.0	288.0	288.0	288.0	288.0	288.0	288.0
2.5°	313.9	313.4	311.9	309.5	307.0	304.6	304.1	300.2	295.8	292.4	289.5
5°	341.7	341.2	338.8	333.4	328.0	321.7	321.2	311.9	303.6	294.4	286.5
7.5°	370.5	369.5	365.1	356.8	347.6	337.8	336.8	323.2	311.0	298.7	287.5
10°	393.0	392.0	385.6	375.9	363.2	351.0	349.5	335.4	323.2	307.5	292.4
12.5°	414.9	413.0	404.7	393.9	378.3	366.6	365.1	350.5	335.8	319.7	301.2
15°	435.4	433.0	425.2	411.5	394.9	383.7	382.7	367.1	352.0	333.4	312.9
17.5°	449.6	448.6	439.3	424.2	408.1	398.8	397.8	381.7	366.6	347.1	325.1
20°	456.9	456.9	448.1	431.5	416.9	410.5	409.1	393.9	379.3	360.7	337.8
22.5°	458.4	459.8	453.0	434.9	424.2	418.8	417.9	404.7	390.5	373.4	352.0
25°	461.3	461.3	457.9	438.4	430.5	429.1	428.6	416.9	404.2	387.1	366.1
27.5°	464.7	464.7	462.3	443.2	440.3	439.8	439.3	434.0	423.7	403.7	382.7
30°	473.5	474.0	472.0	453.0	451.0	456.4	457.4	454.5	441.8	416.9	399.8
32.5°	495.5	491.1	485.7	459.8	463.3	470.1	470.6	464.7	451.0	431.0	420.3
35°	550.6	524.8	500.4	465.7	467.2	474.0	475.0	474.5	466.2	449.1	443.7
37.5°	601.9	565.3	530.6	479.4	474.5	481.8	483.8	492.1	485.7	474.0	475.5
40°	631.7	617.5	593.1	516.9	489.1	500.4	502.3	515.0	512.6	507.7	516.9
42.5°	723.4	724.4	698.1	573.1	516.0	534.0	536.5	546.7	550.1	552.6	575.0
45°	829.9	833.3	826.9	674.1	566.7	572.6	576.0	589.7	602.4	618.0	659.0
47.5°	957.7	954.8	931.4	797.6	655.1	622.4	624.8	651.2	673.2	707.3	765.9
50°	1071.0	1078.3	1033.9	912.8	779.6	701.0	698.5	724.4	764.0	811.8	885.5
52.5°	1185.2	1174.5	1114.4	1027.1	927.0	807.9	800.6	814.7	870.4	927.0	1002.7
55°	1215.5	1216.5	1196.0	1152.0	1050.0	937.7	925.5	924.6	993.9	1032.4	1125.7
57.5°	1275.0	1277.5	1282.4	1291.2	1242.8	1067.6	1054.9	1041.2	1108.6	1131.0	1249.2
60°	1335.6	1338.5	1368.3	1415.6	1383.4	1207.7	1194.0	1161.8	1199.4	1229.6	1379.0
62.5°	1327.8	1348.3	1434.7	1528.9	1525.0	1361.4	1344.4	1266.7	1290.7	1317.0	1498.1
65°	1198.9	1220.9	1415.1	1560.1	1667.0	1513.3	1485.4	1375.1	1376.6	1408.3	1612.8
67.5°	1083.7	1107.6	1293.1	1546.9	1760.7	1649.5	1620.6	1484.0	1461.0	1513.7	1674.3
70°	1017.3	1041.2	1196.0	1505.9	1787.1	1800.3	1775.4	1608.4	1561.6	1609.9	1605.5
72.5°	796.2	833.8	1072.0	1427.8	1815.4	1961.9	1942.3	1766.1	1647.0	1509.4	1222.3
75°	317.3	352.0	669.3	1149.1	1779.8	2101.0	2085.9	1836.9	1524.5	1077.8	625.8
77.5°	95.7	102.5	186.0	568.2	1304.8	1862.8	1857.9	1544.5	1078.8	500.4	170.9
80°	31.7	35.1	57.1	156.7	595.5	1163.7	1185.7	984.1	490.1	114.7	34.7
82.5°	13.2	14.6	28.8	63.0	210.9	501.3	494.0	440.8	170.9	71.3	12.7
85°	3.4	4.4	13.2	36.1	77.1	172.8	181.6	147.9	96.7	59.1	3.9
87.5°	0.0	0.0	6.3	14.6	34.7	52.2	54.7	44.9	54.7	44.4	2.0
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°	288.0	288.0	288.0	288.0	288.0	288.0	288.0	288.0	288.0	288.0	288.0
2.5°	287.0	284.6	280.2	277.3	273.4	272.4	270.4	268.0	267.5	265.1	265.6
5°	282.1	278.2	270.4	265.1	258.7	256.8	253.3	250.9	249.0	245.5	246.0
7.5°	281.2	275.3	264.6	254.3	244.1	236.8	226.5	218.2	211.4	204.0	205.5
10°	284.6	277.3	262.1	248.0	229.4	206.0	179.2	161.6	152.8	144.0	145.0
12.5°	291.4	282.6	263.1	241.6	204.0	164.0	126.9	103.0	96.7	92.7	93.2
15°	301.7	290.9	266.0	229.4	169.9	118.6	84.4	74.2	76.6	78.1	78.1
17.5°	312.4	300.2	268.5	207.5	131.3	83.0	68.8	67.9	71.3	74.7	74.7
20°	325.6	310.0	269.0	179.6	94.7	67.4	64.9	64.9	67.4	71.3	71.3
22.5°	338.3	320.7	264.6	147.9	72.2	62.5	62.5	62.5	63.9	67.9	68.3
25°	353.4	333.9	255.3	114.2	62.0	59.6	59.6	60.0	61.0	64.4	64.9
27.5°	369.5	347.6	239.7	83.5	56.6	56.1	56.6	57.1	57.6	61.0	62.0
30°	388.1	362.7	219.7	62.5	51.7	51.7	53.2	54.2	54.2	57.1	58.1
32.5°	409.6	382.7	195.7	51.7	46.9	46.4	48.8	50.3	50.3	52.7	53.7
35°	436.4	403.2	166.9	45.9	43.0	42.0	43.0	45.4	46.4	48.3	48.8
37.5°	472.0	427.6	136.2	42.5	40.0	38.1	38.1	38.6	40.5	42.5	43.0
40°	517.4	454.5	105.9	40.0	37.1	35.1	33.7	33.2	32.7	34.2	35.1
42.5°	574.5	484.7	79.1	37.6	34.7	31.7	29.8	27.8	25.4	24.9	25.4
45°	647.8	521.8	58.6	35.6	33.2	28.8	25.4	22.0	17.6	16.1	16.6
47.5°	734.2	560.4	45.9	33.7	32.2	25.4	21.0	15.1	10.7	9.8	10.3
50°	825.9	597.5	39.1	31.2	30.3	22.0	15.1	9.3	6.3	6.3	6.8
52.5°	904.0	618.5	35.6	29.3	27.3	18.1	9.8	5.4	3.9	3.9	4.4
55°	979.7	629.7	33.2	27.3	23.4	12.7	5.4	3.4	2.4	2.4	2.4
57.5°	1057.8	634.6	30.3	24.9	18.5	7.8	2.9	2.0	1.5	1.5	1.5
60°	1127.1	625.3	25.9	20.5	12.2	3.9	1.5	1.5	1.0	0.5	0.5
62.5°	1185.2	607.7	18.1	14.6	7.3	2.0	1.0	0.5	0.0	0.0	0.0
65°	1220.9	579.4	11.7	9.8	4.4	1.5	0.5	0.0	0.0	0.0	0.0
67.5°	1210.6	526.2	7.3	6.3	2.0	1.0	0.5	0.0	0.0	0.0	0.0
70°	1092.5	431.5	5.4	3.9	1.5	0.5	0.0	0.0	0.0	0.0	0.0
72.5°	787.4	291.9	3.9	2.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	378.8	104.0	2.4	2.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	92.7	22.9	1.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	20.5	4.4	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.8	2.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	2.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	0.5	0.0	0.0	0.0	0.0	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)