

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: P572659

Luminaire Tested: **ARCH-S-PA2-100-730-U-T4W-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572659  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-100-730-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 1010mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

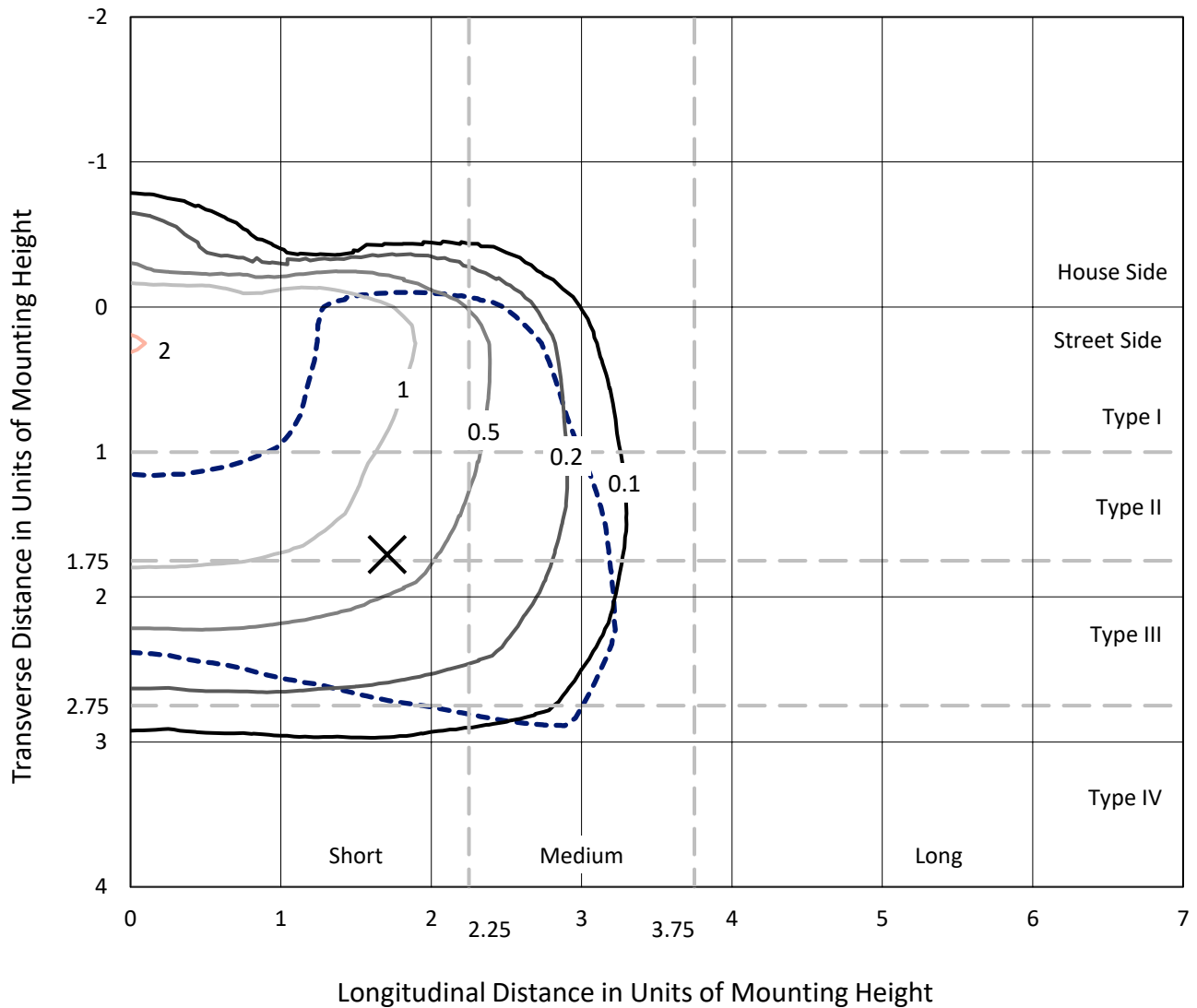
Lumens per Lamp: N/A  
Luminaire Lumens: 9284 lumens  
Efficiency: N/A  
Efficacy: 90.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 103.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

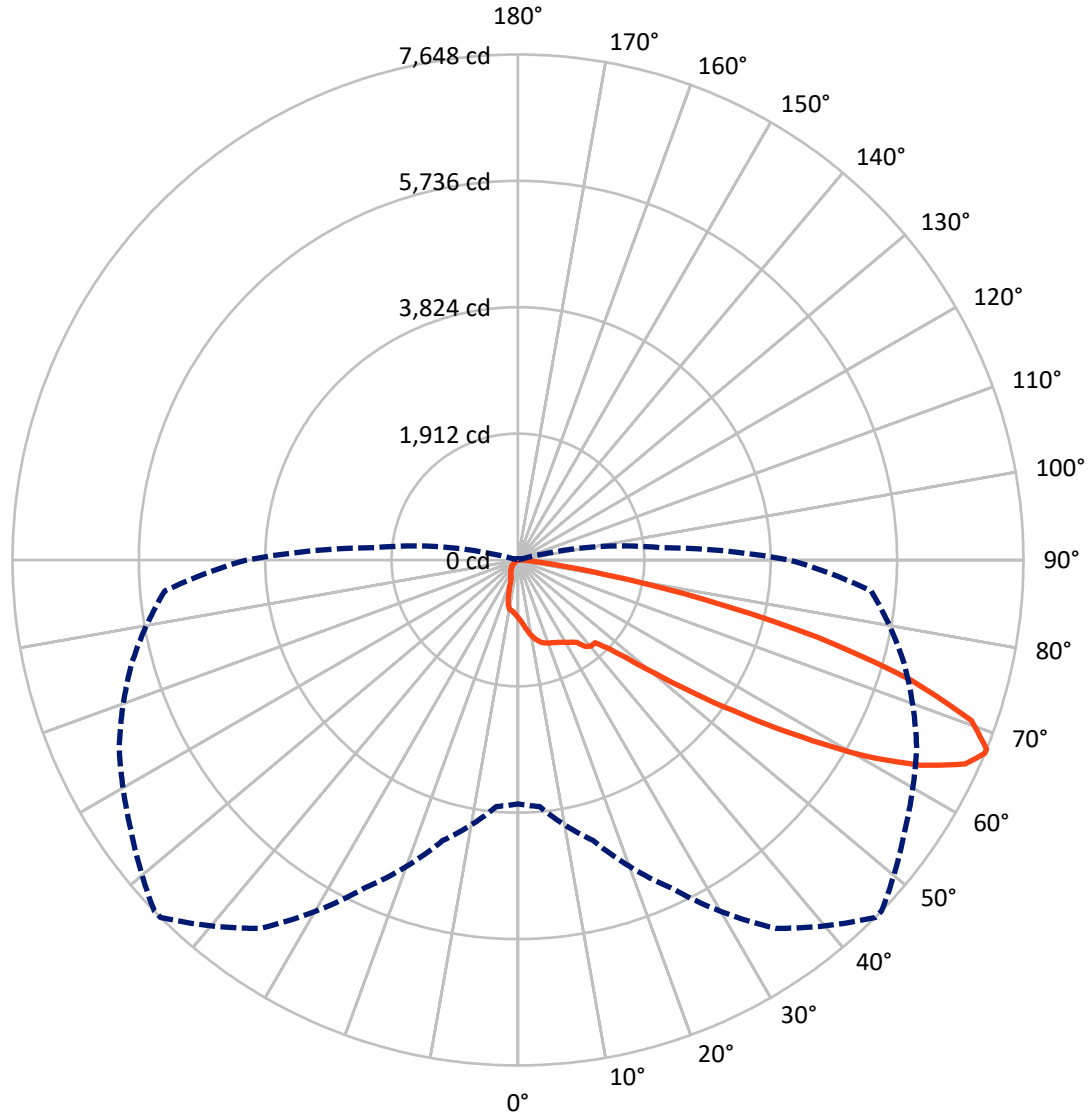
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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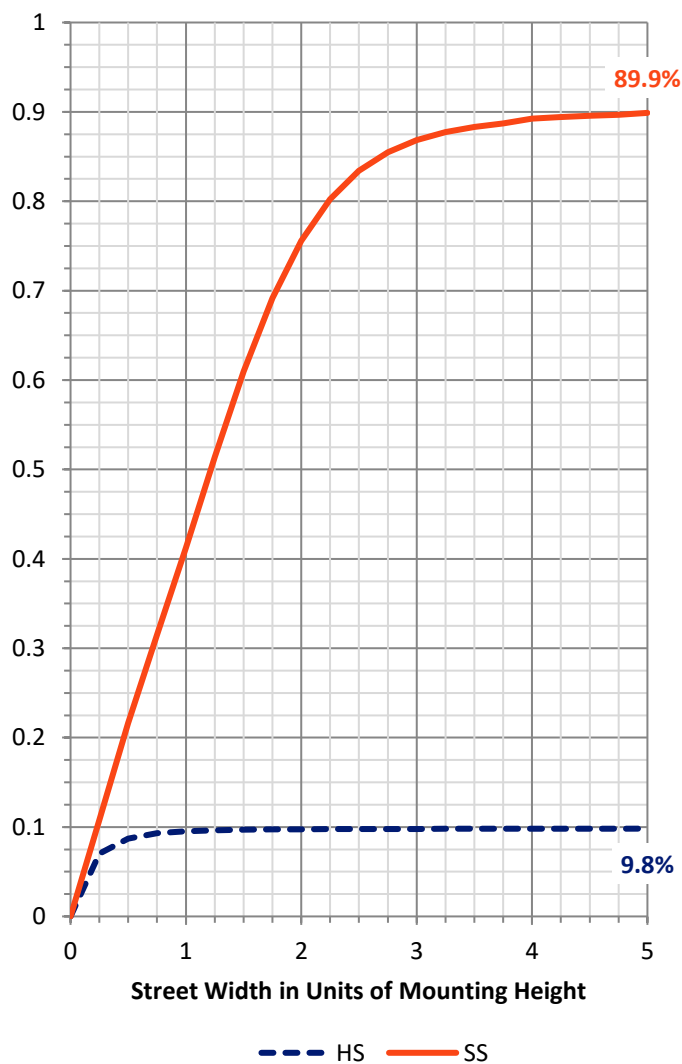
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	919.9	0.0	919.9
	% Fixture	9.9	0.0	9.9
<b>Street Side</b>	Lumens	8364.1	0.0	8364.1
	% Fixture	90.1	0.0	90.1
<b>Total</b>	Lumens	9284.0	0.0	9284.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.1	0.9
10°-20°	266.4	2.9
20°-30°	426.1	4.6
30°-40°	613.3	6.6
40°-50°	1076.0	11.6
50°-60°	2267.1	24.4
60°-70°	3135.1	33.8
70°-80°	1312.5	14.1
80°-90°	99.3	1.1
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°	9284.0	100.0
0°-180°	9284.0	100.0

**Coefficient of Utilization**



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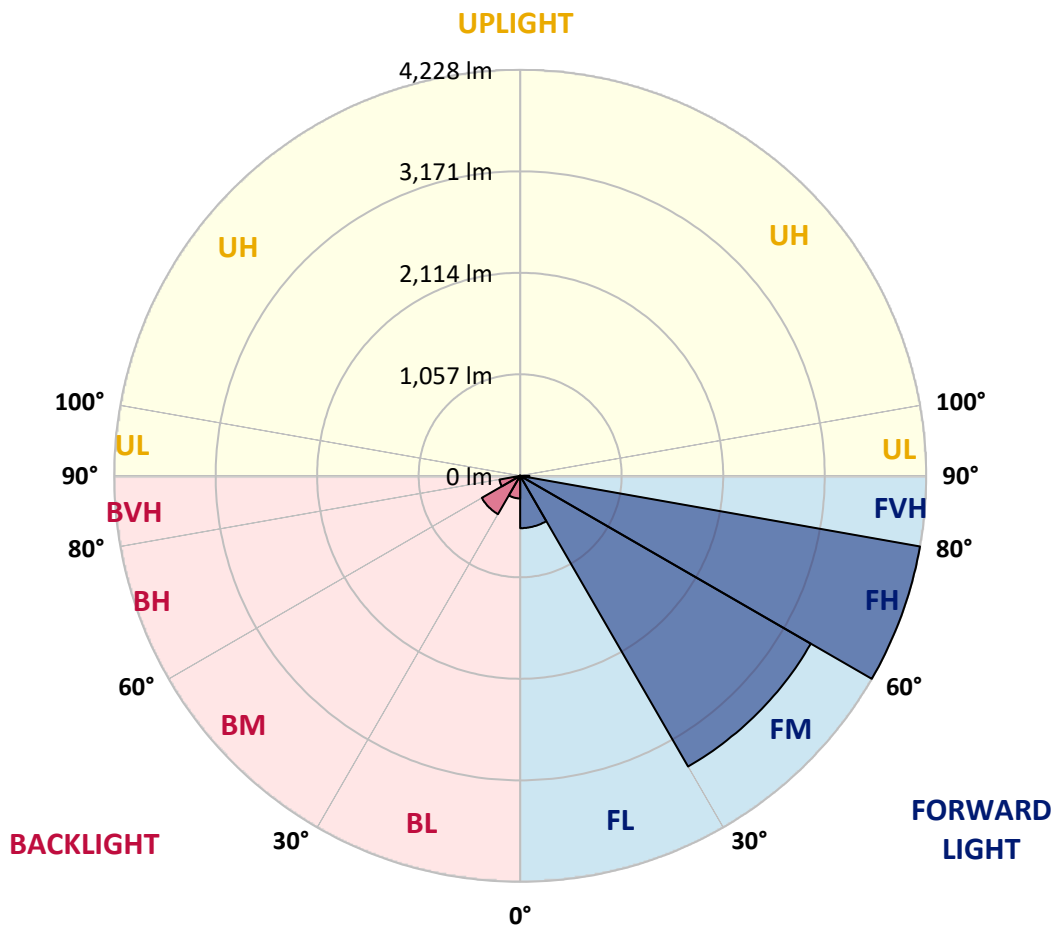
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	544.9	5.9			
FM (30°-60°)	3495.6	37.7			
FH (60°-80°)	4227.7	45.5			G2/5000
FVH (80°-90°)	95.9	1.0			G1/100
BL (0°-30°)	235.8	2.5	B1/500		
BM (30°-60°)	460.9	5.0	B1/1000		
BH (60°-80°)	219.9	2.4	B1/500		G1/500
BVH (80°-90°)	3.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	878.0	878.0	878.0	878.0	878.0	878.0	878.0	878.0	878.0	878.0	878.0
2.5°	977.5	960.3	956.9	953.5	943.2	929.5	932.9	922.6	905.5	895.2	884.9
5°	1097.5	1080.4	1073.5	1052.9	1032.4	1001.5	1001.5	974.0	943.2	915.7	888.3
7.5°	1221.0	1207.3	1193.6	1162.7	1131.8	1090.7	1087.2	1046.1	998.1	956.9	912.3
10°	1323.9	1313.6	1296.4	1258.7	1217.6	1173.0	1162.7	1125.0	1063.2	1008.3	950.0
12.5°	1406.2	1395.9	1371.9	1334.2	1282.7	1238.1	1234.7	1186.7	1125.0	1066.7	994.6
15°	1467.9	1450.8	1423.3	1382.2	1330.7	1289.6	1282.7	1241.6	1183.3	1118.1	1032.4
17.5°	1478.2	1467.9	1443.9	1399.3	1354.8	1320.5	1317.0	1286.2	1234.7	1166.1	1076.9
20°	1450.8	1447.4	1426.8	1392.5	1358.2	1341.0	1337.6	1317.0	1275.9	1214.1	1125.0
22.5°	1409.6	1406.2	1392.5	1375.3	1361.6	1358.2	1358.2	1351.3	1327.3	1269.0	1186.7
25°	1382.2	1378.8	1371.9	1361.6	1361.6	1382.2	1385.6	1392.5	1371.9	1327.3	1238.1
27.5°	1385.6	1378.8	1371.9	1361.6	1375.3	1413.1	1416.5	1433.6	1416.5	1375.3	1296.4
30°	1433.6	1423.3	1402.8	1378.8	1395.9	1447.4	1450.8	1471.4	1457.6	1437.1	1361.6
32.5°	1509.1	1502.2	1461.1	1419.9	1430.2	1481.7	1488.5	1526.2	1543.4	1512.5	1419.9
35°	1618.8	1594.8	1543.4	1502.2	1495.4	1533.1	1543.4	1605.1	1649.7	1574.3	1454.2
37.5°	1708.0	1687.4	1605.1	1540.0	1577.7	1663.4	1666.9	1742.3	1704.6	1581.1	1509.1
40°	2009.8	2006.4	1862.4	1656.6	1615.4	1711.4	1725.2	1738.9	1721.7	1660.0	1629.1
42.5°	2496.9	2455.7	2294.5	1979.0	1697.7	1708.0	1714.9	1786.9	1876.1	1848.6	1858.9
45°	3025.0	2990.7	2809.0	2411.1	1979.0	1893.2	1900.1	2016.7	2188.2	2222.5	2277.4
47.5°	3512.1	3457.2	3354.3	2953.0	2459.1	2208.8	2222.5	2363.1	2647.8	2723.2	2809.0
50°	3923.6	3885.9	3789.9	3525.8	3049.0	2706.1	2719.8	2836.4	3206.8	3326.9	3436.6
52.5°	4520.4	4469.0	4283.8	4160.3	3800.2	3354.3	3323.4	3446.9	3872.2	3951.1	4098.6
55°	5069.2	4962.9	4853.1	4801.7	4650.7	4129.4	4119.1	4143.1	4496.4	4537.6	4801.7
57.5°	5302.4	5281.8	5374.4	5545.9	5580.2	5041.7	4997.1	4904.5	5182.4	5178.9	5487.6
60°	5449.9	5449.9	5696.8	6122.1	6396.5	6015.8	5954.0	5666.0	5765.4	5768.8	6053.5
62.5°	5357.3	5381.3	5765.4	6406.8	6959.0	6842.4	6801.2	6317.6	6310.7	6231.9	6331.3
65°	4784.5	4825.7	5443.0	6249.0	7164.8	7439.1	7422.0	6873.2	6674.3	6386.2	6163.3
67°	3903.1	3978.5	4726.2	5679.7	6931.5	7644.9	7648.3	7113.3	6677.7	6129.0	5569.9
67.5°	3690.4	3745.3	4393.5	5473.9	6804.6	7648.3	7648.3	7144.2	6657.1	6050.1	5364.1
70°	2352.8	2366.5	3073.1	4235.7	5813.4	7277.9	7305.4	6911.0	6063.8	4897.7	3765.9
72.5°	1162.7	1131.8	1622.3	2726.7	4362.6	6228.4	6300.5	5902.6	4798.2	3200.0	1989.3
75°	456.2	487.0	706.5	1450.8	2733.5	4695.3	4750.2	4294.0	3086.8	1649.7	785.4
77.5°	202.4	202.4	301.8	651.7	1437.1	2881.0	2908.4	2620.3	1629.1	679.1	240.1
80°	109.8	116.6	157.8	284.7	723.7	1323.9	1443.9	1299.9	737.4	298.4	82.3
82.5°	54.9	58.3	96.0	161.2	363.6	500.7	528.2	552.2	339.5	185.2	34.3
85°	20.6	24.0	51.4	92.6	164.6	168.1	168.1	216.1	185.2	140.6	17.1
87.5°	3.4	6.9	24.0	37.7	65.2	58.3	51.4	68.6	102.9	89.2	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°	878.0	878.0	878.0	878.0	878.0	878.0	878.0	878.0	878.0	878.0	878.0
2.5°	878.0	871.2	857.4	847.1	840.3	833.4	826.6	826.6	823.1	823.1	826.6
5°	878.0	864.3	836.9	819.7	806.0	795.7	788.8	788.8	785.4	788.8	792.3
7.5°	895.2	874.6	836.9	806.0	788.8	771.7	764.8	761.4	761.4	764.8	761.4
10°	922.6	895.2	847.1	806.0	782.0	758.0	720.2	686.0	655.1	641.4	637.9
12.5°	956.9	922.6	864.3	816.3	778.6	696.2	593.3	528.2	487.0	466.4	459.6
15°	994.6	953.5	884.9	830.0	727.1	572.8	439.0	367.0	343.0	346.4	349.8
17.5°	1035.8	991.2	915.7	823.1	624.2	425.3	322.4	305.2	315.5	325.8	325.8
20°	1076.9	1028.9	946.6	771.7	490.5	315.5	288.1	291.5	301.8	312.1	312.1
22.5°	1131.8	1080.4	977.5	682.5	363.6	274.4	274.4	281.2	288.1	298.4	298.4
25°	1190.1	1138.7	998.1	572.8	271.0	257.2	260.7	267.5	274.4	284.7	284.7
27.5°	1251.9	1200.4	994.6	442.4	236.7	236.7	240.1	250.4	257.2	267.5	267.5
30°	1320.5	1275.9	956.9	322.4	219.5	216.1	216.1	226.4	236.7	243.5	246.9
32.5°	1378.8	1341.0	891.7	243.5	205.8	198.9	195.5	198.9	209.2	216.1	219.5
35°	1426.8	1413.1	795.7	209.2	192.1	181.8	174.9	171.5	174.9	174.9	178.3
37.5°	1516.0	1519.4	682.5	195.5	181.8	168.1	154.3	144.0	137.2	133.8	130.3
40°	1684.0	1680.6	562.5	185.2	171.5	154.3	133.8	120.0	102.9	96.0	96.0
42.5°	1920.7	1869.2	428.7	174.9	161.2	140.6	113.2	92.6	75.5	72.0	72.0
45°	2346.0	2133.3	322.4	168.1	150.9	123.5	92.6	68.6	58.3	54.9	54.9
47.5°	2815.8	2438.6	257.2	157.8	140.6	109.8	72.0	54.9	44.6	44.6	44.6
50°	3333.7	2730.1	216.1	147.5	123.5	92.6	58.3	44.6	41.2	37.7	41.2
52.5°	3899.6	2959.9	188.6	133.8	106.3	75.5	48.0	41.2	34.3	34.3	34.3
55°	4407.2	3114.2	157.8	116.6	89.2	61.7	44.6	34.3	30.9	27.4	24.0
57.5°	4866.8	3196.5	126.9	99.5	68.6	51.4	37.7	27.4	24.0	17.1	17.1
60°	5103.5	3121.1	99.5	78.9	54.9	41.2	30.9	24.0	17.1	10.3	10.3
62.5°	5141.2	2925.6	78.9	61.7	48.0	34.3	24.0	17.1	10.3	6.9	6.9
65°	4811.9	2582.6	65.2	51.4	37.7	27.4	20.6	13.7	6.9	3.4	3.4
67°	4222.0	2222.5	58.3	44.6	34.3	24.0	17.1	10.3	6.9	3.4	0.0
67.5°	4105.4	2157.3	54.9	44.6	34.3	24.0	17.1	10.3	6.9	3.4	0.0
70°	2695.8	1491.9	51.4	41.2	30.9	20.6	13.7	10.3	3.4	0.0	0.0
72.5°	1471.4	751.1	48.0	37.7	27.4	20.6	13.7	6.9	3.4	0.0	0.0
75°	538.5	284.7	41.2	34.3	24.0	20.6	13.7	6.9	3.4	0.0	0.0
77.5°	181.8	99.5	37.7	34.3	27.4	20.6	13.7	6.9	3.4	0.0	0.0
80°	61.7	44.6	30.9	27.4	20.6	17.1	13.7	6.9	3.4	0.0	0.0
82.5°	24.0	13.7	10.3	10.3	10.3	13.7	13.7	10.3	3.4	0.0	0.0
85°	10.3	6.9	3.4	3.4	3.4	3.4	3.4	3.4	3.4	0.0	0.0
87.5°	10.3	6.9	3.4	3.4	3.4	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)