

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: P573595

Luminaire Tested: **ARCH-S-PA2-90-827-U-T4W-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573595  
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-PA2-90-827-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 910mA 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: 6918 lumens  
Efficiency: N/A  
Efficacy: 74.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

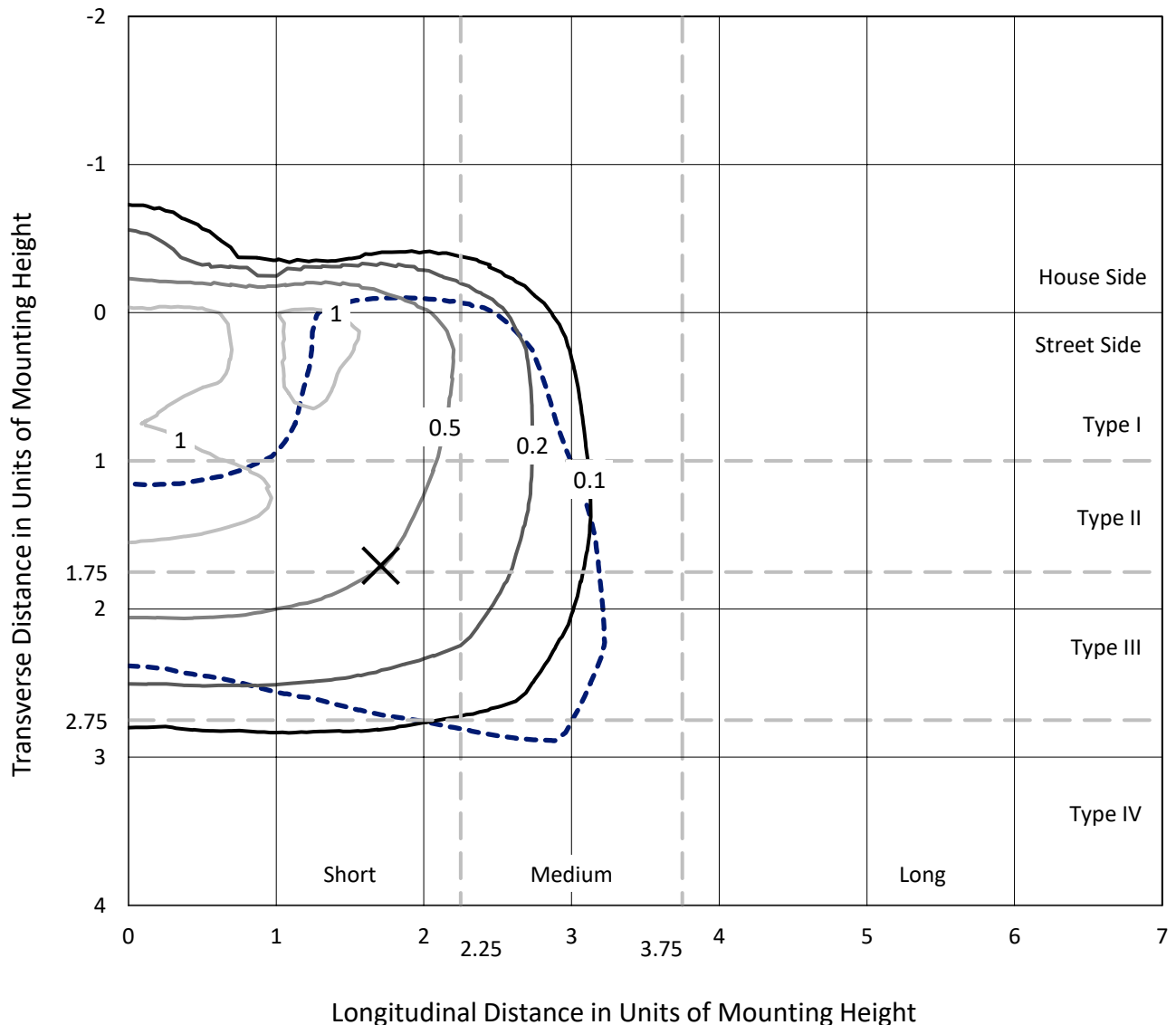
Input Watts (W): 92.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

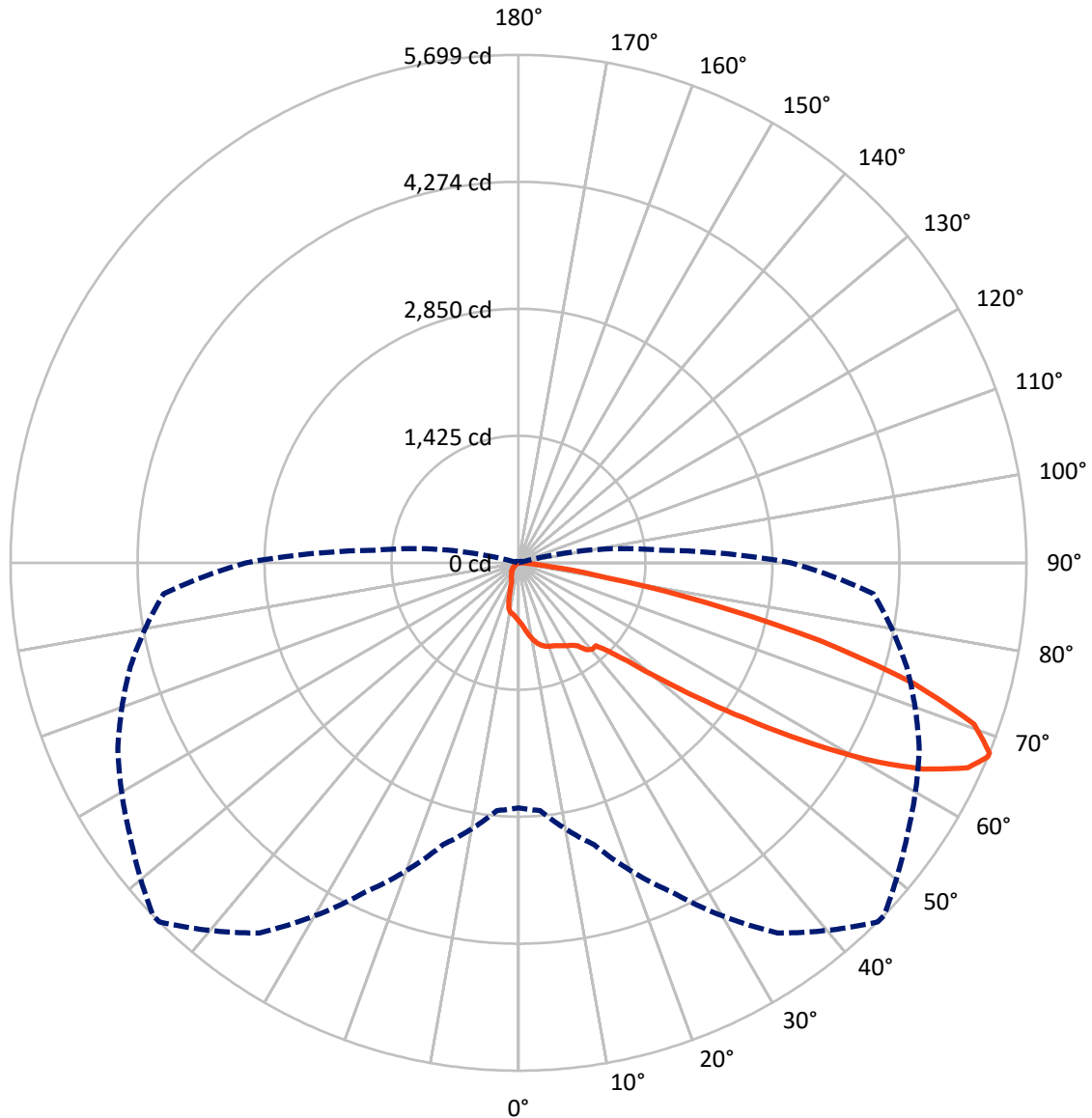
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 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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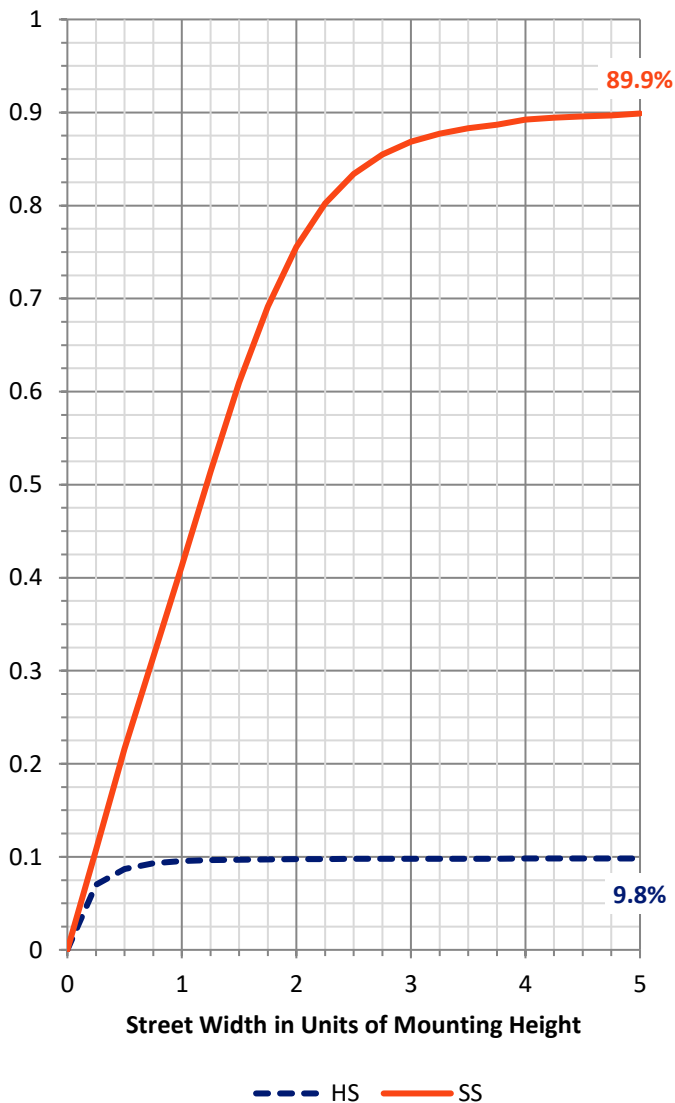
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	685.5	0.0	685.5
	% Fixture	9.9	0.0	9.9
<b>Street Side</b>	Lumens	6232.5	0.0	6232.5
	% Fixture	90.1	0.0	90.1
<b>Total</b>	Lumens	6918.0	0.0	6918.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.7	0.9
10°-20°	198.5	2.9
20°-30°	317.5	4.6
30°-40°	457.0	6.6
40°-50°	801.8	11.6
50°-60°	1689.4	24.4
60°-70°	2336.1	33.8
70°-80°	978.0	14.1
80°-90°	74.0	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°	6918.0	100.0
0°-180°	6918.0	100.0

**Coefficient of Utilization**

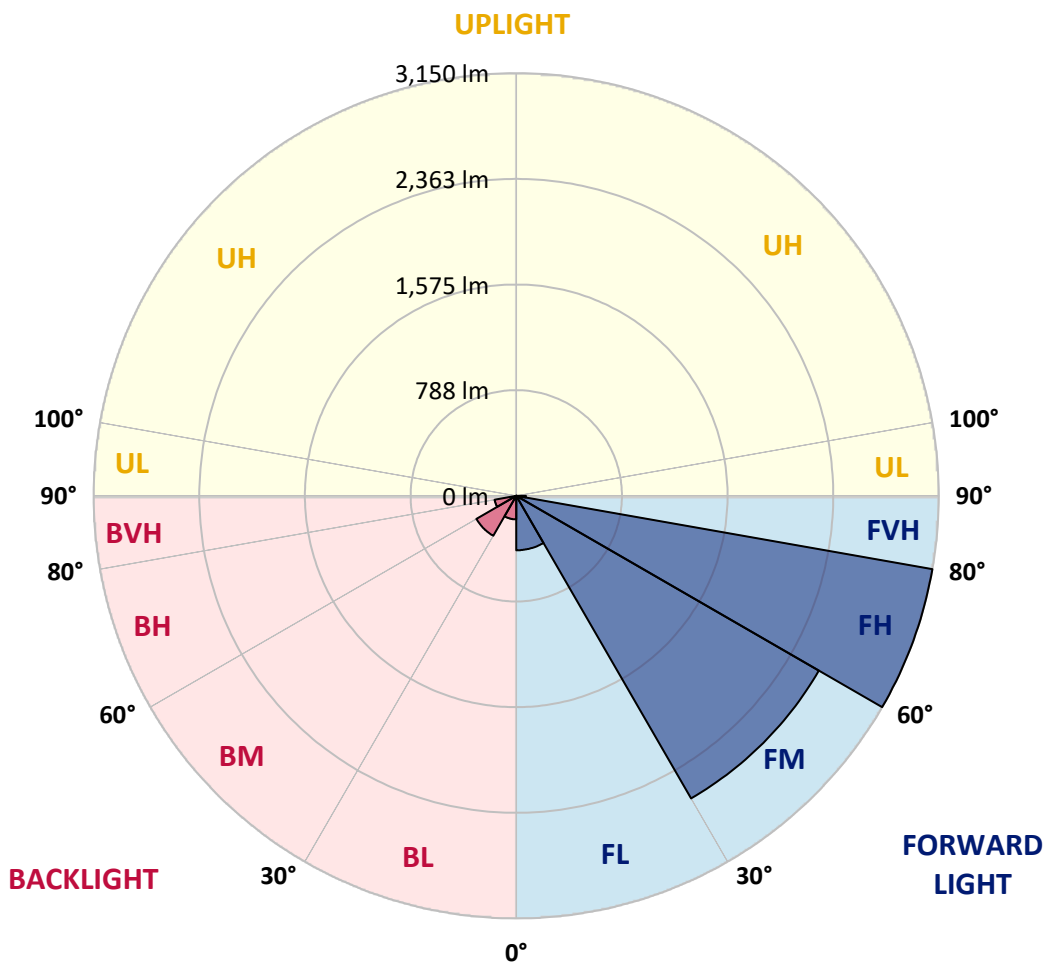


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	406.0	5.9			
FM (30°-60°)	2604.7	37.7			
FH (60°-80°)	3150.3	45.5			G2/5000
FVH (80°-90°)	71.5	1.0			G1/100
BL (0°-30°)	175.7	2.5	B1/500		
BM (30°-60°)	343.4	5.0	B1/1000		
BH (60°-80°)	163.8	2.4	B1/500		G1/500
BVH (80°-90°)	2.5	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°	654.3	654.3	654.3	654.3	654.3	654.3	654.3	654.3	654.3	654.3	654.3
2.5°	728.4	715.6	713.0	710.5	702.8	692.6	695.1	687.5	674.7	667.0	659.4
5°	817.8	805.0	799.9	784.6	769.3	746.3	746.3	725.8	702.8	682.4	661.9
7.5°	909.8	899.6	889.4	866.4	843.4	812.7	810.2	779.5	743.7	713.0	679.8
10°	986.5	978.8	966.1	937.9	907.3	874.0	866.4	838.3	792.3	751.4	707.9
12.5°	1047.8	1040.2	1022.3	994.2	955.8	922.6	920.0	884.3	838.3	794.8	741.2
15°	1093.8	1081.1	1060.6	1029.9	991.6	960.9	955.8	925.2	881.7	833.2	769.3
17.5°	1101.5	1093.8	1075.9	1042.7	1009.5	983.9	981.4	958.4	920.0	868.9	802.5
20°	1081.1	1078.5	1063.2	1037.6	1012.1	999.3	996.7	981.4	950.7	904.7	838.3
22.5°	1050.4	1047.8	1037.6	1024.8	1014.6	1012.1	1012.1	1006.9	989.1	945.6	884.3
25°	1029.9	1027.4	1022.3	1014.6	1014.6	1029.9	1032.5	1037.6	1022.3	989.1	922.6
27.5°	1032.5	1027.4	1022.3	1014.6	1024.8	1052.9	1055.5	1068.3	1055.5	1024.8	966.1
30°	1068.3	1060.6	1045.3	1027.4	1040.2	1078.5	1081.1	1096.4	1086.2	1070.8	1014.6
32.5°	1124.5	1119.4	1088.7	1058.1	1065.7	1104.1	1109.2	1137.3	1150.1	1127.1	1058.1
35°	1206.3	1188.4	1150.1	1119.4	1114.3	1142.4	1150.1	1196.1	1229.3	1173.1	1083.6
37.5°	1272.7	1257.4	1196.1	1147.5	1175.6	1239.5	1242.1	1298.3	1270.2	1178.2	1124.5
40°	1497.6	1495.1	1387.7	1234.4	1203.7	1275.3	1285.5	1295.7	1283.0	1237.0	1214.0
42.5°	1860.5	1829.9	1709.8	1474.6	1265.1	1272.7	1277.8	1331.5	1398.0	1377.5	1385.2
45°	2254.1	2228.6	2093.1	1796.6	1474.6	1410.7	1415.9	1502.7	1630.5	1656.1	1697.0
47.5°	2617.0	2576.1	2499.5	2200.4	1832.4	1645.9	1656.1	1760.9	1973.0	2029.2	2093.1
50°	2923.7	2895.6	2824.0	2627.2	2272.0	2016.4	2026.7	2113.6	2389.6	2479.0	2560.8
52.5°	3368.4	3330.1	3192.1	3100.1	2831.7	2499.5	2476.5	2568.5	2885.4	2944.2	3054.0
55°	3777.3	3698.1	3616.3	3578.0	3465.5	3077.1	3069.4	3087.3	3350.5	3381.2	3578.0
57.5°	3951.1	3935.8	4004.8	4132.6	4158.1	3756.9	3723.6	3654.6	3861.6	3859.1	4089.1
60°	4061.0	4061.0	4245.0	4561.9	4766.4	4482.7	4436.7	4222.0	4296.1	4298.7	4510.8
62.5°	3992.0	4009.9	4296.1	4774.0	5185.5	5098.6	5067.9	4707.6	4702.5	4643.7	4717.8
65°	3565.2	3595.9	4055.9	4656.5	5338.8	5543.3	5530.5	5121.6	4973.4	4758.7	4592.6
67°	2908.4	2964.6	3521.7	4232.2	5165.0	5696.6	5699.2	5300.5	4975.9	4567.0	4150.4
67.5°	2749.9	2790.8	3273.8	4078.9	5070.5	5699.2	5699.2	5323.5	4960.6	4508.2	3997.1
70°	1753.2	1763.4	2289.9	3156.3	4331.9	5423.2	5443.6	5149.7	4518.5	3649.5	2806.1
72.5°	866.4	843.4	1208.8	2031.8	3250.8	4641.1	4694.8	4398.3	3575.4	2384.5	1482.3
75°	339.9	362.9	526.5	1081.1	2036.9	3498.7	3539.6	3199.7	2300.1	1229.3	585.3
77.5°	150.8	150.8	224.9	485.6	1070.8	2146.8	2167.2	1952.5	1214.0	506.0	178.9
80°	81.8	86.9	117.6	212.1	539.3	986.5	1075.9	968.6	549.5	222.3	61.3
82.5°	40.9	43.4	71.6	120.1	270.9	373.1	393.6	411.5	253.0	138.0	25.6
85°	15.3	17.9	38.3	69.0	122.7	125.2	125.2	161.0	138.0	104.8	12.8
87.5°	2.6	5.1	17.9	28.1	48.6	43.4	38.3	51.1	76.7	66.4	7.7
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°	654.3	654.3	654.3	654.3	654.3	654.3	654.3	654.3	654.3	654.3	654.3
2.5°	654.3	649.1	638.9	631.3	626.1	621.0	615.9	615.9	613.4	613.4	615.9
5°	654.3	644.0	623.6	610.8	600.6	592.9	587.8	587.8	585.3	587.8	590.4
7.5°	667.0	651.7	623.6	600.6	587.8	575.0	569.9	567.4	567.4	569.9	567.4
10°	687.5	667.0	631.3	600.6	582.7	564.8	536.7	511.1	488.1	477.9	475.4
12.5°	713.0	687.5	644.0	608.3	580.1	518.8	442.1	393.6	362.9	347.6	342.5
15°	741.2	710.5	659.4	618.5	541.8	426.8	327.1	273.5	255.6	258.1	260.7
17.5°	771.8	738.6	682.4	613.4	465.1	316.9	240.2	227.5	235.1	242.8	242.8
20°	802.5	766.7	705.4	575.0	365.5	235.1	214.7	217.2	224.9	232.6	232.6
22.5°	843.4	805.0	728.4	508.6	270.9	204.5	204.5	209.6	214.7	222.3	222.3
25°	886.8	848.5	743.7	426.8	201.9	191.7	194.2	199.3	204.5	212.1	212.1
27.5°	932.8	894.5	741.2	329.7	176.3	176.3	178.9	186.6	191.7	199.3	199.3
30°	983.9	950.7	713.0	240.2	163.6	161.0	161.0	168.7	176.3	181.5	184.0
32.5°	1027.4	999.3	664.5	181.5	153.3	148.2	145.7	148.2	155.9	161.0	163.6
35°	1063.2	1052.9	592.9	155.9	143.1	135.5	130.3	127.8	130.3	130.3	132.9
37.5°	1129.6	1132.2	508.6	145.7	135.5	125.2	115.0	107.3	102.2	99.7	97.1
40°	1254.8	1252.3	419.1	138.0	127.8	115.0	99.7	89.4	76.7	71.6	71.6
42.5°	1431.2	1392.9	319.5	130.3	120.1	104.8	84.3	69.0	56.2	53.7	53.7
45°	1748.1	1589.6	240.2	125.2	112.5	92.0	69.0	51.1	43.4	40.9	40.9
47.5°	2098.2	1817.1	191.7	117.6	104.8	81.8	53.7	40.9	33.2	33.2	33.2
50°	2484.1	2034.3	161.0	109.9	92.0	69.0	43.4	33.2	30.7	28.1	30.7
52.5°	2905.8	2205.6	140.6	99.7	79.2	56.2	35.8	30.7	25.6	25.6	25.6
55°	3284.1	2320.6	117.6	86.9	66.4	46.0	33.2	25.6	23.0	20.4	17.9
57.5°	3626.5	2381.9	94.6	74.1	51.1	38.3	28.1	20.4	17.9	12.8	12.8
60°	3802.9	2325.7	74.1	58.8	40.9	30.7	23.0	17.9	12.8	7.7	7.7
62.5°	3831.0	2180.0	58.8	46.0	35.8	25.6	17.9	12.8	7.7	5.1	5.1
65°	3585.6	1924.4	48.6	38.3	28.1	20.4	15.3	10.2	5.1	2.6	2.6
67°	3146.1	1656.1	43.4	33.2	25.6	17.9	12.8	7.7	5.1	2.6	0.0
67.5°	3059.2	1607.5	40.9	33.2	25.6	17.9	12.8	7.7	5.1	2.6	0.0
70°	2008.8	1111.7	38.3	30.7	23.0	15.3	10.2	7.7	2.6	0.0	0.0
72.5°	1096.4	559.7	35.8	28.1	20.4	15.3	10.2	5.1	2.6	0.0	0.0
75°	401.2	212.1	30.7	25.6	17.9	15.3	10.2	5.1	2.6	0.0	0.0
77.5°	135.5	74.1	28.1	25.6	20.4	15.3	10.2	5.1	2.6	0.0	0.0
80°	46.0	33.2	23.0	20.4	15.3	12.8	10.2	5.1	2.6	0.0	0.0
82.5°	17.9	10.2	7.7	7.7	7.7	10.2	10.2	7.7	2.6	0.0	0.0
85°	7.7	5.1	2.6	2.6	2.6	2.6	2.6	2.6	2.6	0.0	0.0
87.5°	7.7	5.1	2.6	2.6	2.6	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)