

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: P573244

Luminaire Tested: **ARCH-S-PA2-50-740-U-T4W-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573244  
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-PA2-50-740-U-T4W-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 520mA 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: 5875 lumens  
Efficiency: N/A  
Efficacy: 109.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

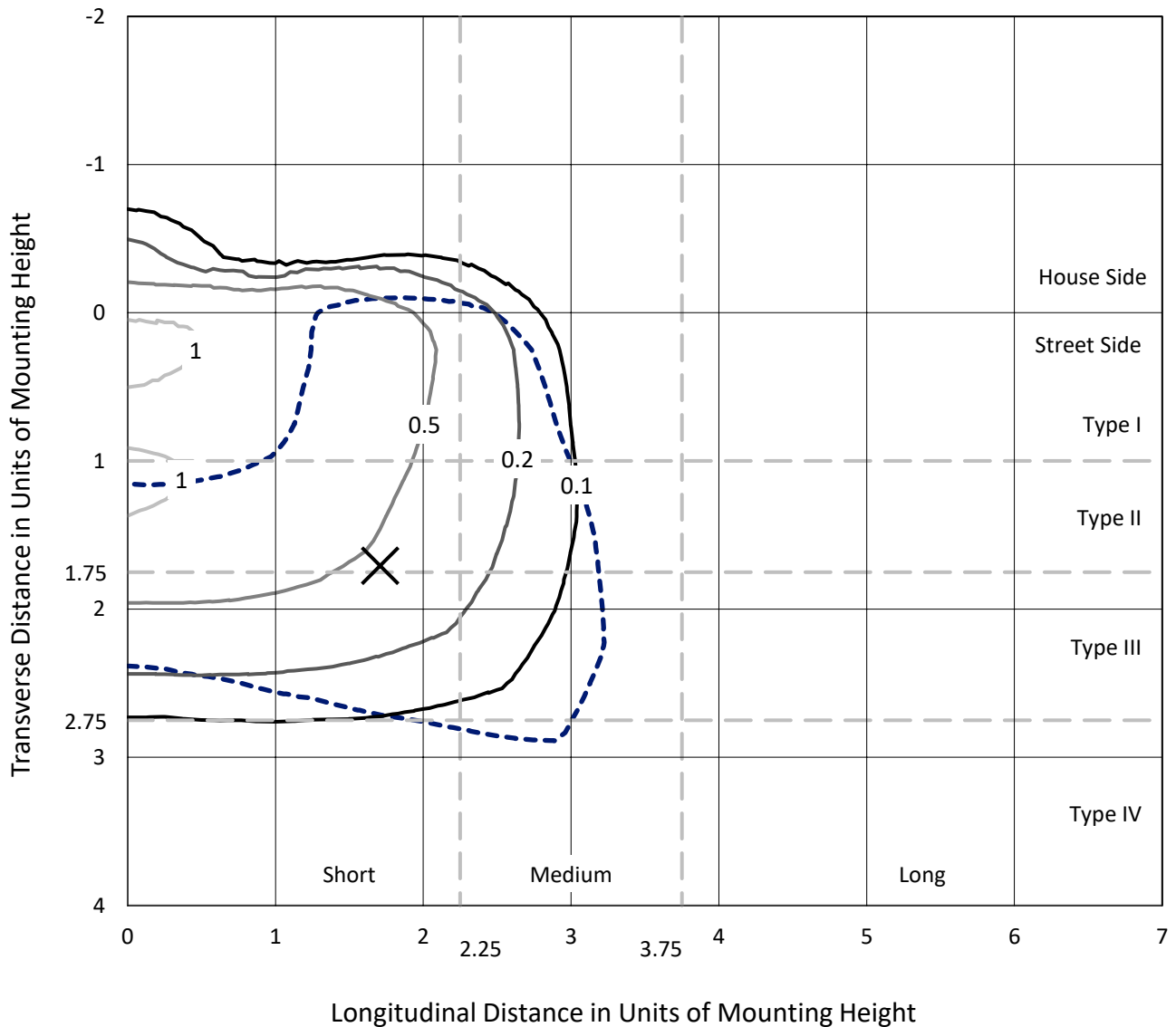
Input Watts (W): 53.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

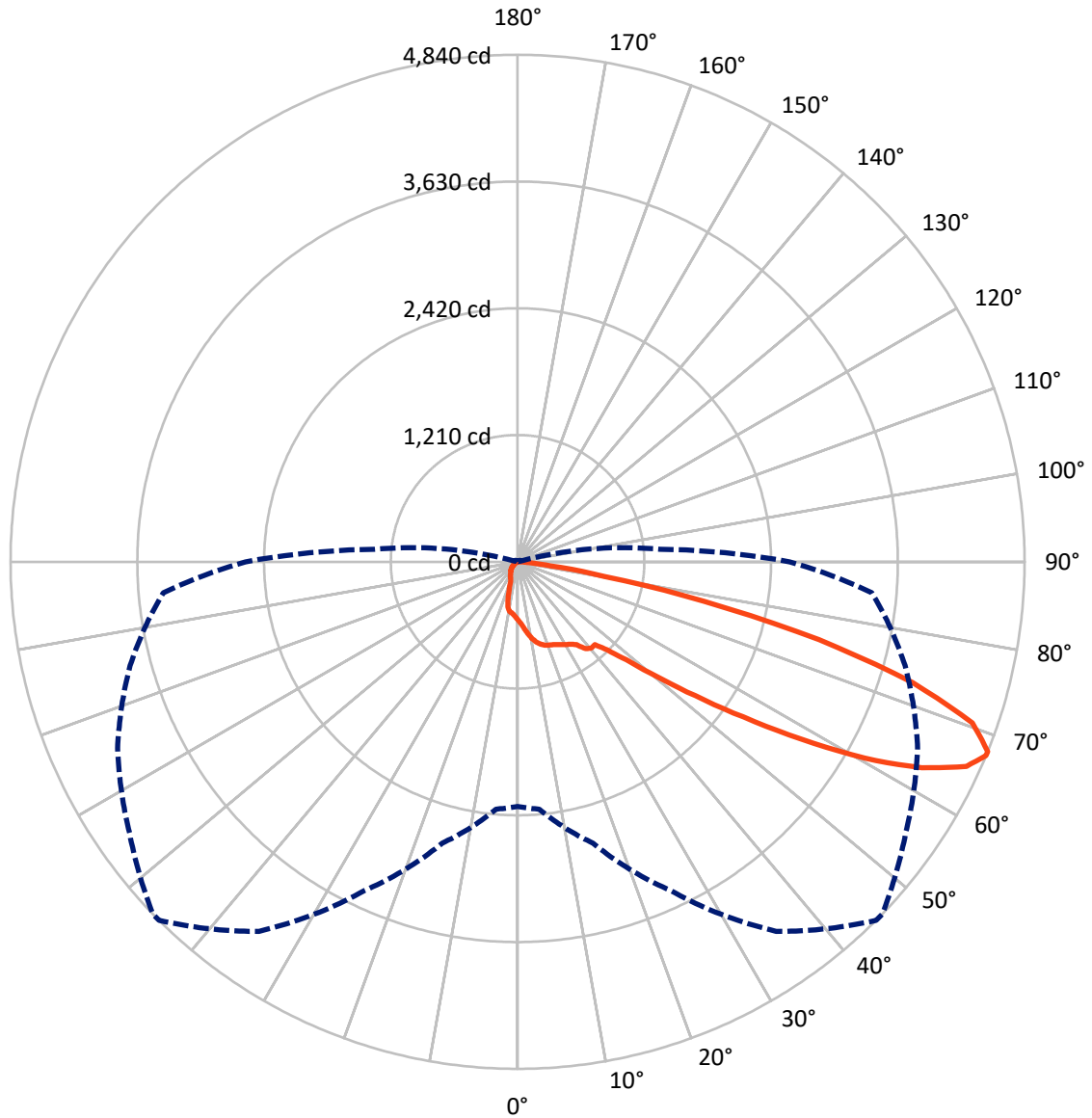
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 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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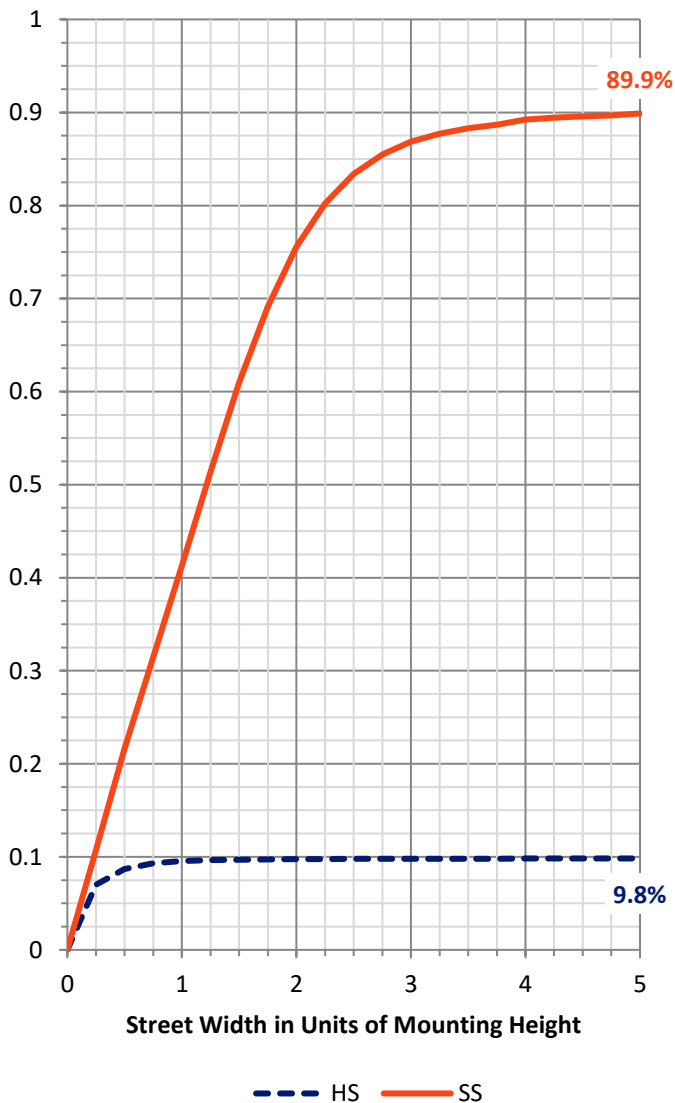
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	582.1	0.0	582.1
	% Fixture	9.9	0.0	9.9
<b>Street Side</b>	Lumens	5292.9	0.0	5292.9
	% Fixture	90.1	0.0	90.1
<b>Total</b>	Lumens	5875.0	0.0	5875.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.8	0.9
10°-20°	168.6	2.9
20°-30°	269.7	4.6
30°-40°	388.1	6.6
40°-50°	680.9	11.6
50°-60°	1434.7	24.4
60°-70°	1983.9	33.8
70°-80°	830.6	14.1
80°-90°	62.8	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°	5875.0	100.0
0°-180°	5875.0	100.0

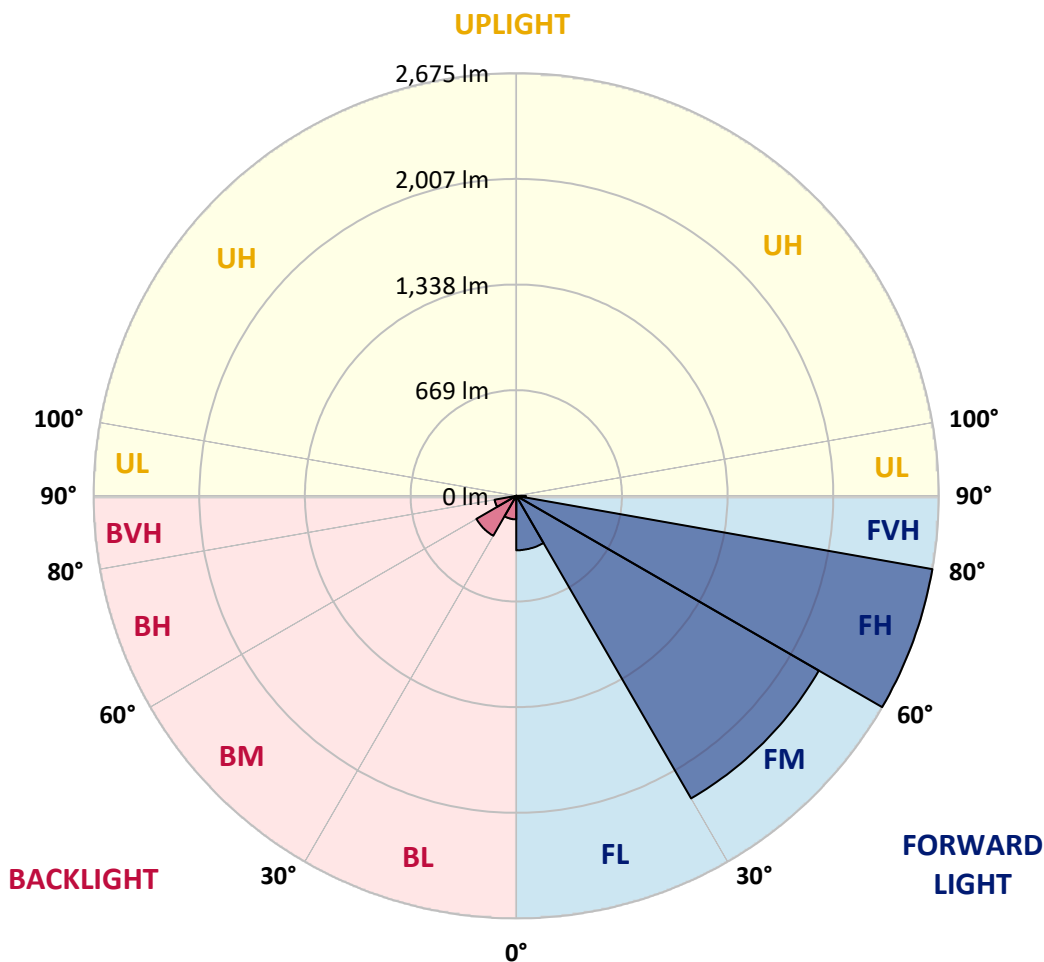


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	344.8	5.9			
FM (30°-60°)	2212.0	37.7			
FH (60°-80°)	2675.3	45.5			G2/5000
FVH (80°-90°)	60.7	1.0			G1/100
BL (0°-30°)	149.2	2.5	B1/500		
BM (30°-60°)	291.7	5.0	B1/1000		
BH (60°-80°)	139.1	2.4	B1/500		G1/500
BVH (80°-90°)	2.1	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°	555.6	555.6	555.6	555.6	555.6	555.6	555.6	555.6	555.6	555.6	555.6
2.5°	618.6	607.7	605.5	603.4	596.9	588.2	590.3	583.8	573.0	566.5	560.0
5°	694.5	683.7	679.3	666.3	653.3	633.8	633.8	616.4	596.9	579.5	562.1
7.5°	772.7	764.0	755.3	735.8	716.2	690.2	688.0	662.0	631.6	605.5	577.3
10°	837.8	831.3	820.4	796.5	770.5	742.3	735.8	711.9	672.8	638.1	601.2
12.5°	889.9	883.3	868.2	844.3	811.7	783.5	781.3	751.0	711.9	675.0	629.4
15°	928.9	918.1	900.7	874.7	842.1	816.1	811.7	785.7	748.8	707.5	653.3
17.5°	935.4	928.9	913.7	885.5	857.3	835.6	833.4	813.9	781.3	737.9	681.5
20°	918.1	915.9	902.9	881.2	859.5	848.6	846.4	833.4	807.4	768.3	711.9
22.5°	892.0	889.9	881.2	870.3	861.6	859.5	859.5	855.1	839.9	803.0	751.0
25°	874.7	872.5	868.2	861.6	861.6	874.7	876.8	881.2	868.2	839.9	783.5
27.5°	876.8	872.5	868.2	861.6	870.3	894.2	896.4	907.2	896.4	870.3	820.4
30°	907.2	900.7	887.7	872.5	883.3	915.9	918.1	931.1	922.4	909.4	861.6
32.5°	955.0	950.6	924.6	898.5	905.0	937.6	941.9	965.8	976.7	957.1	898.5
35°	1024.4	1009.2	976.7	950.6	946.3	970.2	976.7	1015.7	1044.0	996.2	920.2
37.5°	1080.8	1067.8	1015.7	974.5	998.4	1052.6	1054.8	1102.6	1078.7	1000.5	955.0
40°	1271.8	1269.7	1178.5	1048.3	1022.2	1083.0	1091.7	1100.4	1089.5	1050.5	1030.9
42.5°	1580.0	1554.0	1452.0	1252.3	1074.3	1080.8	1085.2	1130.8	1187.2	1169.8	1176.3
45°	1914.3	1892.6	1777.5	1525.8	1252.3	1198.0	1202.4	1276.2	1384.7	1406.4	1441.1
47.5°	2222.5	2187.7	2122.6	1868.7	1556.2	1397.7	1406.4	1495.4	1675.5	1723.3	1777.5
50°	2482.9	2459.0	2398.3	2231.1	1929.5	1712.4	1721.1	1794.9	2029.3	2105.3	2174.7
52.5°	2860.6	2828.0	2710.8	2632.7	2404.8	2122.6	2103.1	2181.2	2450.4	2500.3	2593.6
55°	3207.8	3140.5	3071.1	3038.5	2943.0	2613.1	2606.6	2621.8	2845.4	2871.4	3038.5
57.5°	3355.4	3342.4	3401.0	3509.5	3531.2	3190.5	3162.2	3103.6	3279.4	3277.3	3472.6
60°	3448.7	3448.7	3605.0	3874.1	4047.8	3806.8	3767.8	3585.5	3648.4	3650.6	3830.7
62.5°	3390.1	3405.3	3648.4	4054.3	4403.7	4329.9	4303.9	3997.8	3993.5	3943.6	4006.5
65°	3027.7	3053.7	3444.4	3954.4	4533.9	4707.6	4696.7	4349.4	4223.6	4041.2	3900.2
67°	2469.9	2517.6	2990.8	3594.1	4386.3	4837.8	4839.9	4501.4	4225.7	3878.5	3524.7
67.5°	2335.3	2370.1	2780.3	3463.9	4306.0	4839.9	4839.9	4520.9	4212.7	3828.5	3394.5
70°	1488.9	1497.6	1944.7	2680.4	3678.8	4605.5	4622.9	4373.3	3837.2	3099.3	2383.1
72.5°	735.8	716.2	1026.6	1725.5	2760.7	3941.4	3987.0	3735.2	3036.4	2025.0	1258.8
75°	288.7	308.2	447.1	918.1	1729.8	2971.2	3006.0	2717.3	1953.3	1044.0	497.0
77.5°	128.1	128.1	191.0	412.4	909.4	1823.1	1840.5	1658.2	1030.9	429.7	151.9
80°	69.5	73.8	99.8	180.1	457.9	837.8	913.7	822.6	466.6	188.8	52.1
82.5°	34.7	36.9	60.8	102.0	230.1	316.9	334.2	349.4	214.9	117.2	21.7
85°	13.0	15.2	32.6	58.6	104.2	106.3	106.3	136.7	117.2	89.0	10.9
87.5°	2.2	4.3	15.2	23.9	41.2	36.9	32.6	43.4	65.1	56.4	6.5
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°	555.6	555.6	555.6	555.6	555.6	555.6	555.6	555.6	555.6	555.6	555.6
2.5°	555.6	551.3	542.6	536.1	531.7	527.4	523.1	523.1	520.9	520.9	523.1
5°	555.6	546.9	529.6	518.7	510.0	503.5	499.2	499.2	497.0	499.2	501.4
7.5°	566.5	553.4	529.6	510.0	499.2	488.3	484.0	481.8	481.8	484.0	481.8
10°	583.8	566.5	536.1	510.0	494.8	479.7	455.8	434.1	414.5	405.9	403.7
12.5°	605.5	583.8	546.9	516.6	492.7	440.6	375.5	334.2	308.2	295.2	290.8
15°	629.4	603.4	560.0	525.2	460.1	362.5	277.8	232.2	217.0	219.2	221.4
17.5°	655.5	627.2	579.5	520.9	395.0	269.1	204.0	193.2	199.7	206.2	206.2
20°	681.5	651.1	599.0	488.3	310.4	199.7	182.3	184.5	191.0	197.5	197.5
22.5°	716.2	683.7	618.6	431.9	230.1	173.6	173.6	178.0	182.3	188.8	188.8
25°	753.1	720.6	631.6	362.5	171.5	162.8	164.9	169.3	173.6	180.1	180.1
27.5°	792.2	759.6	629.4	280.0	149.8	149.8	151.9	158.4	162.8	169.3	169.3
30°	835.6	807.4	605.5	204.0	138.9	136.7	136.7	143.2	149.8	154.1	156.3
32.5°	872.5	848.6	564.3	154.1	130.2	125.9	123.7	125.9	132.4	136.7	138.9
35°	902.9	894.2	503.5	132.4	121.5	115.0	110.7	108.5	110.7	110.7	112.9
37.5°	959.3	961.5	431.9	123.7	115.0	106.3	97.7	91.2	86.8	84.6	82.5
40°	1065.7	1063.5	355.9	117.2	108.5	97.7	84.6	76.0	65.1	60.8	60.8
42.5°	1215.4	1182.9	271.3	110.7	102.0	89.0	71.6	58.6	47.7	45.6	45.6
45°	1484.5	1350.0	204.0	106.3	95.5	78.1	58.6	43.4	36.9	34.7	34.7
47.5°	1781.9	1543.1	162.8	99.8	89.0	69.5	45.6	34.7	28.2	28.2	28.2
50°	2109.6	1727.6	136.7	93.3	78.1	58.6	36.9	28.2	26.0	23.9	26.0
52.5°	2467.7	1873.0	119.4	84.6	67.3	47.7	30.4	26.0	21.7	21.7	21.7
55°	2788.9	1970.7	99.8	73.8	56.4	39.1	28.2	21.7	19.5	17.4	15.2
57.5°	3079.8	2022.8	80.3	62.9	43.4	32.6	23.9	17.4	15.2	10.9	10.9
60°	3229.5	1975.0	62.9	49.9	34.7	26.0	19.5	15.2	10.9	6.5	6.5
62.5°	3253.4	1851.3	49.9	39.1	30.4	21.7	15.2	10.9	6.5	4.3	4.3
65°	3045.0	1634.3	41.2	32.6	23.9	17.4	13.0	8.7	4.3	2.2	2.2
67°	2671.7	1406.4	36.9	28.2	21.7	15.2	10.9	6.5	4.3	2.2	0.0
67.5°	2597.9	1365.2	34.7	28.2	21.7	15.2	10.9	6.5	4.3	2.2	0.0
70°	1705.9	944.1	32.6	26.0	19.5	13.0	8.7	6.5	2.2	0.0	0.0
72.5°	931.1	475.3	30.4	23.9	17.4	13.0	8.7	4.3	2.2	0.0	0.0
75°	340.7	180.1	26.0	21.7	15.2	13.0	8.7	4.3	2.2	0.0	0.0
77.5°	115.0	62.9	23.9	21.7	17.4	13.0	8.7	4.3	2.2	0.0	0.0
80°	39.1	28.2	19.5	17.4	13.0	10.9	8.7	4.3	2.2	0.0	0.0
82.5°	15.2	8.7	6.5	6.5	6.5	8.7	8.7	6.5	2.2	0.0	0.0
85°	6.5	4.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.0	0.0
87.5°	6.5	4.3	2.2	2.2	2.2	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)