

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: P237197

Luminaire Tested: **ARCH-L-AF72-240-D-U-T3-7030-HSS**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237197  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-240-D-U-T3-7030-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19496.2 lumens  
Efficiency: N/A  
Efficacy: 80.6 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G4

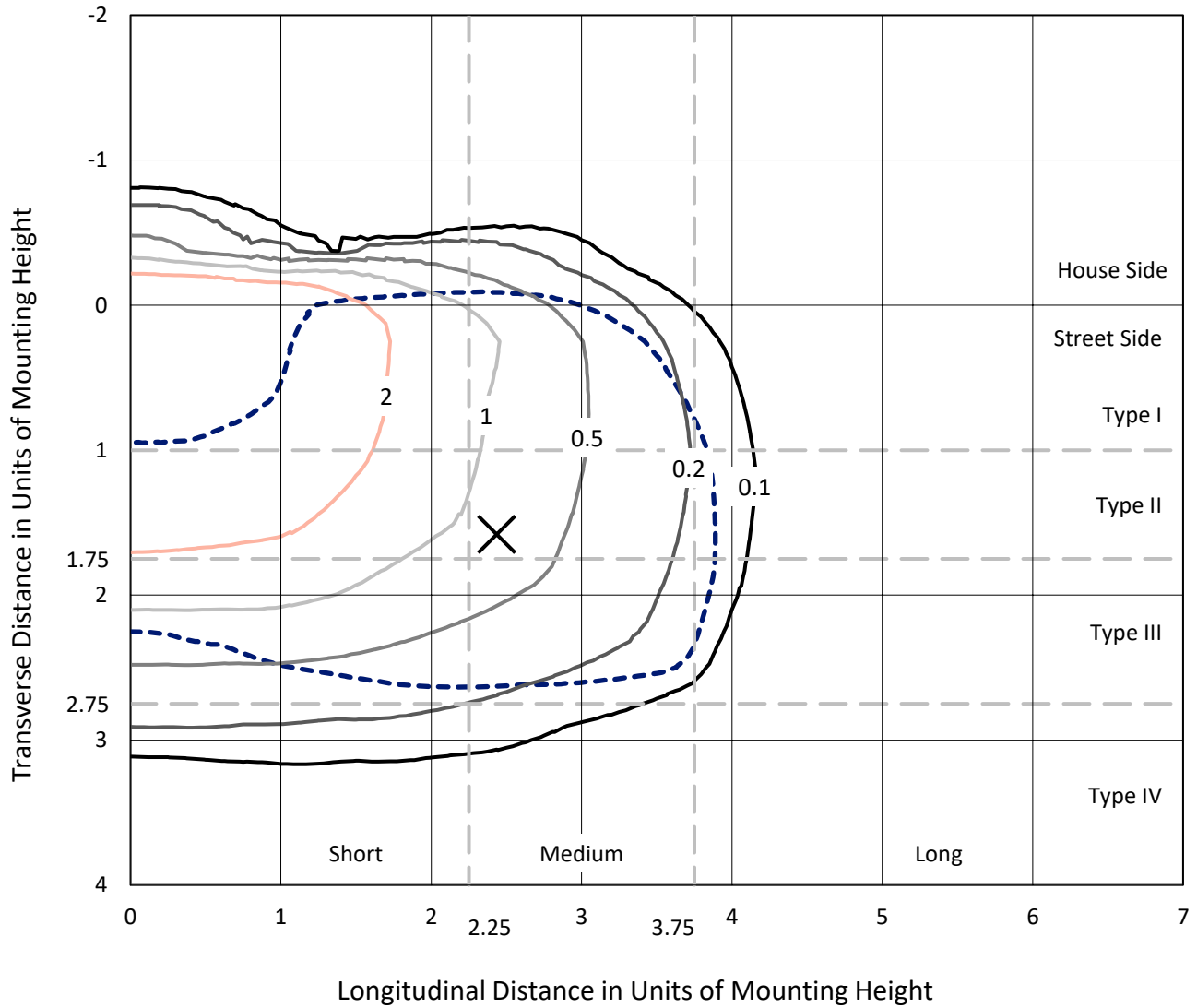
Input Watts (W): 242  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

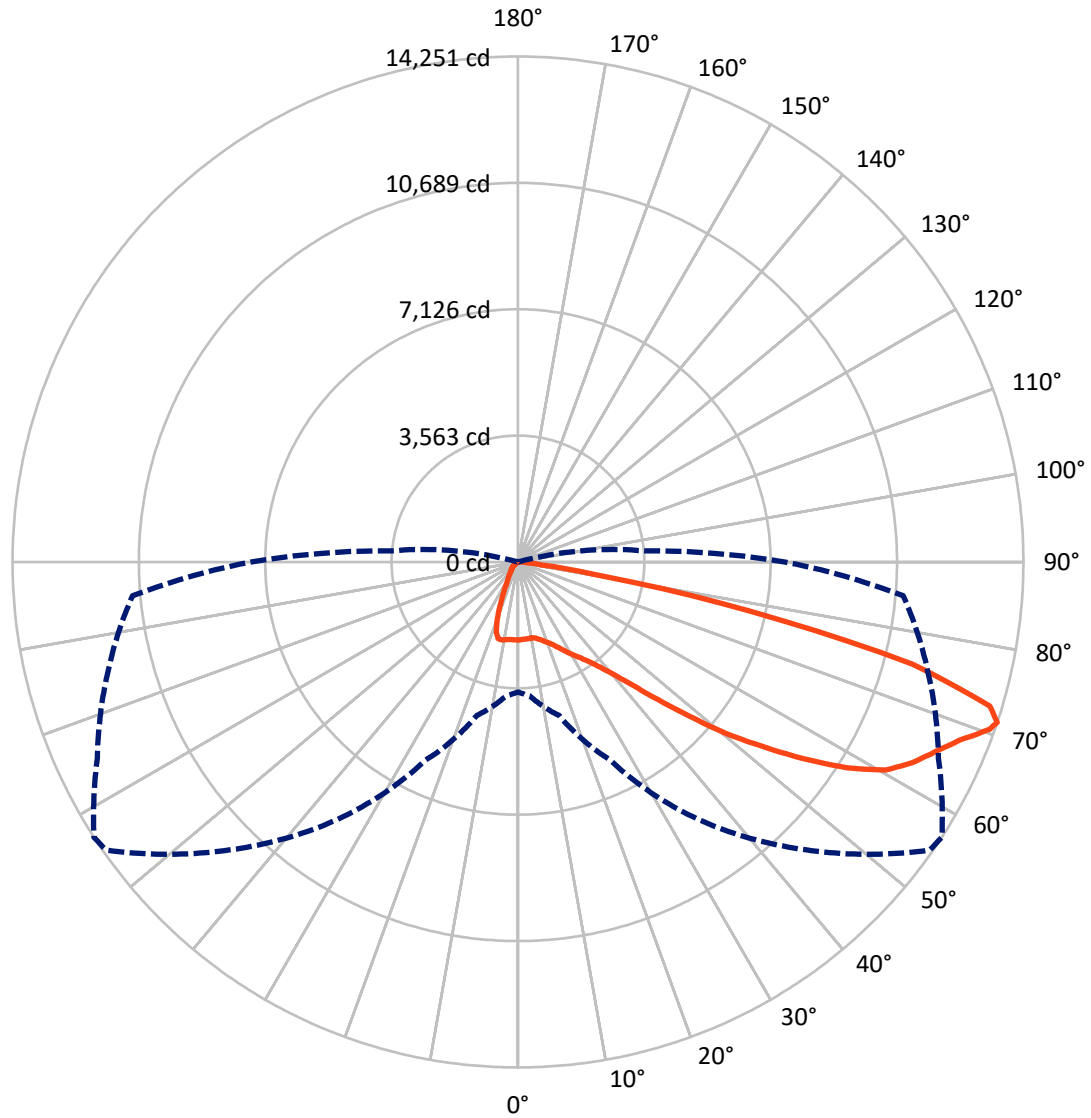
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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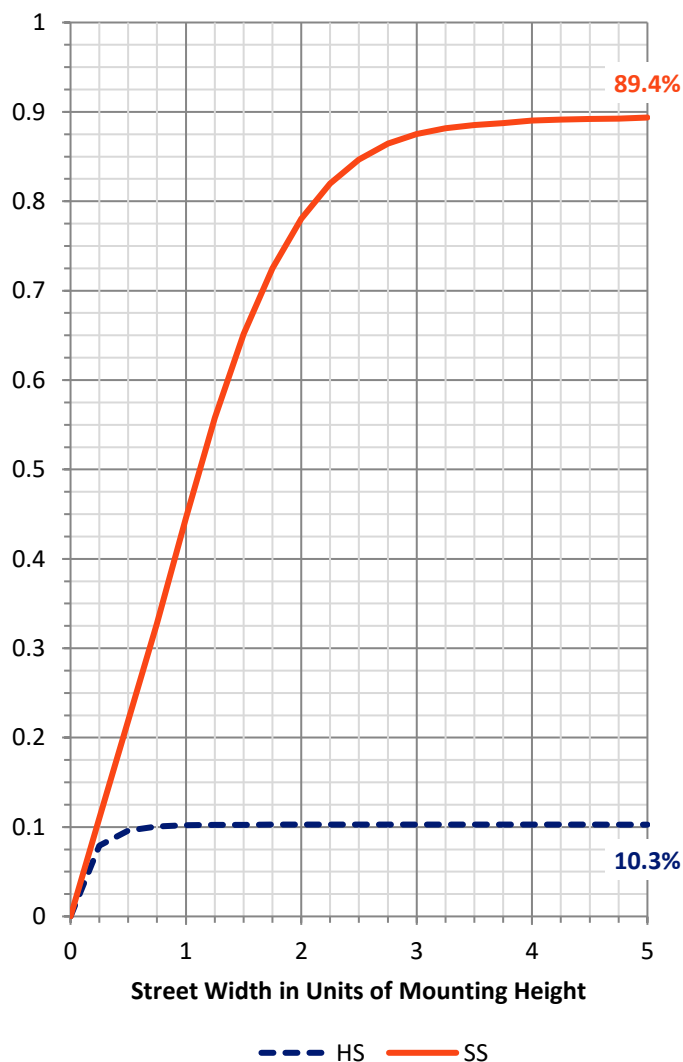
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2020.4	0.0	2020.4
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	17475.8	0.0	17475.8
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	19496.2	0.0	19496.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	206.9	1.1
10°-20°	553.3	2.8
20°-30°	863.1	4.4
30°-40°	1458.8	7.5
40°-50°	2833.3	14.5
50°-60°	4758.0	24.4
60°-70°	5678.3	29.1
70°-80°	2992.5	15.3
80°-90°	152.1	0.8
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°	19496.2	100.0
0°-180°	19496.2	100.0

**Coefficient of Utilization**



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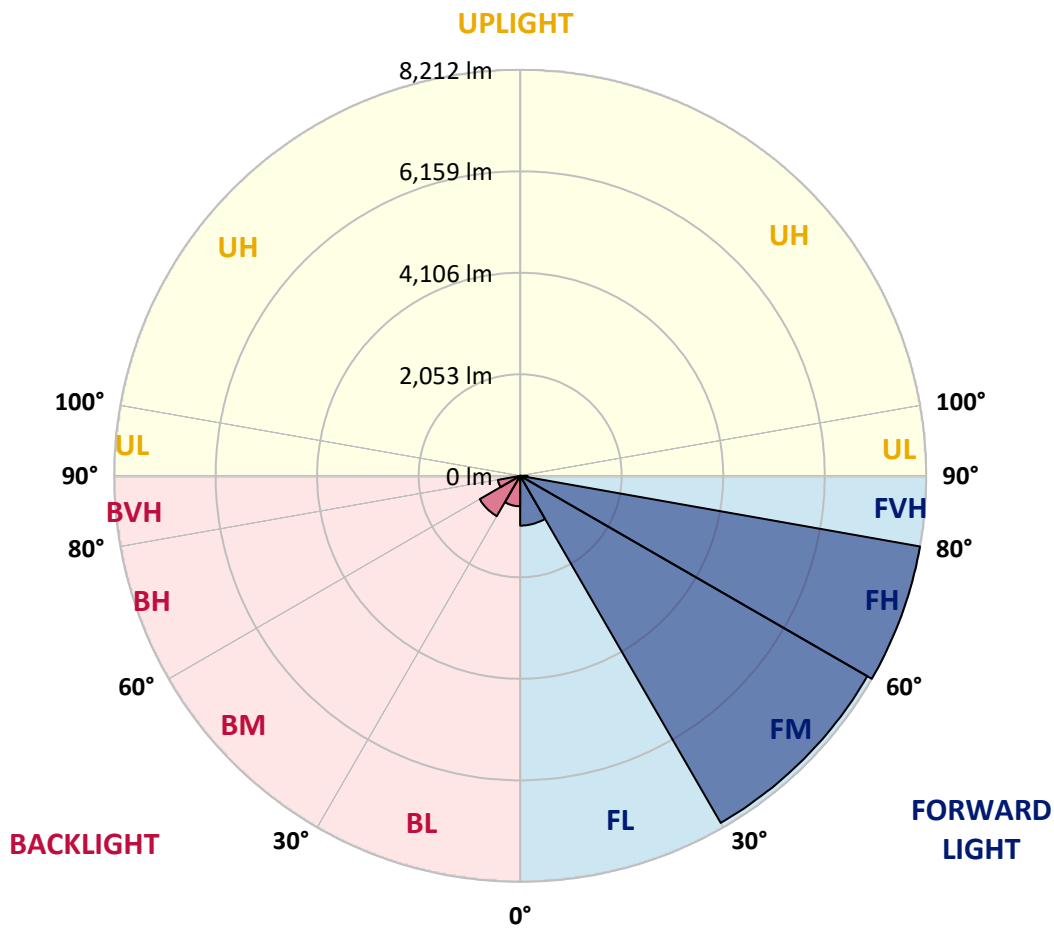
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1006.6	5.2			
FM (30°-60°)	8106.7	41.6			
FH (60°-80°)	8211.9	42.1			G4/12000
FVH (80°-90°)	150.6	0.8			G2/225
BL (0°-30°)	616.7	3.2	B2/1000		
BM (30°-60°)	943.4	4.8	B1/1000		
BH (60°-80°)	458.8	2.4	B1/500		G1/500
BVH (80°-90°)	1.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2203.3	2203.3	2203.3	2203.3	2203.3	2203.3	2203.3	2203.3	2203.3	2203.3	2203.3
2.5°	2171.5	2171.5	2171.5	2176.1	2180.7	2180.7	2189.8	2185.1	2185.1	2185.1	2194.3
5°	2112.5	2117.0	2121.6	2130.7	2148.8	2162.5	2185.1	2185.1	2189.8	2198.9	2203.3
7.5°	2030.7	2035.3	2048.9	2067.0	2103.5	2135.3	2171.5	2180.7	2194.3	2217.0	2226.0
10°	1980.8	1989.8	2007.9	2030.7	2071.7	2112.5	2158.0	2171.5	2212.5	2253.4	2276.1
12.5°	1967.1	1971.7	1989.8	2026.2	2076.2	2126.1	2185.1	2198.9	2257.9	2321.5	2357.9
15°	1989.8	1994.4	2003.5	2044.4	2103.5	2167.0	2244.3	2262.4	2335.1	2407.8	2453.2
17.5°	2030.7	2030.7	2039.9	2076.2	2139.8	2212.5	2312.4	2339.7	2421.4	2503.2	2553.2
20°	2058.0	2058.0	2071.7	2107.9	2180.7	2276.1	2394.2	2430.5	2521.3	2612.3	2657.6
22.5°	2085.2	2089.8	2103.5	2144.3	2226.0	2357.9	2494.2	2530.5	2635.0	2730.4	2775.8
25°	2162.5	2158.0	2162.5	2198.9	2294.2	2457.8	2630.4	2675.9	2784.9	2889.4	2912.1
27.5°	2376.0	2366.9	2307.9	2285.1	2357.9	2562.2	2803.0	2848.5	2975.6	3080.1	3080.1
30°	2866.6	2848.5	2703.1	2516.8	2457.8	2657.6	2966.6	3030.2	3193.7	3284.7	3257.3
32.5°	3489.0	3448.1	3261.9	2943.9	2707.7	2784.9	3139.2	3211.9	3420.9	3498.2	3439.1
35°	4170.5	4165.9	3934.3	3525.4	3189.2	3048.4	3361.8	3448.1	3711.6	3779.9	3684.4
37.5°	4892.8	4910.9	4756.6	4193.3	3798.0	3479.9	3657.1	3757.1	4079.6	4161.4	4070.6
40°	5697.0	5692.4	5633.4	4965.5	4529.5	4093.3	4084.2	4175.1	4565.7	4692.9	4565.7
42.5°	6714.6	6705.5	6491.9	5892.4	5415.3	4892.8	4706.6	4738.3	5174.5	5383.5	5197.3
45°	7750.5	7686.8	7441.4	6923.5	6501.0	5883.2	5528.8	5528.8	5901.4	6187.6	5896.8
47.5°	8327.4	8263.8	8163.9	7877.6	7750.5	7059.9	6537.4	6473.8	6764.6	7055.3	6646.5
50°	9086.1	9086.1	8836.3	8727.2	8945.3	8459.1	7650.5	7586.9	7727.7	7959.4	7423.3
52.5°	9685.8	9576.7	9399.6	9494.9	10117.3	9894.7	8763.4	8640.9	8749.9	8808.9	8100.3
55°	9935.6	9831.1	9817.5	10167.3	11130.5	10821.5	9903.8	9794.8	9785.7	9494.9	8690.8
57.5°	9985.5	9894.7	10067.3	10680.6	12116.3	11580.2	11039.5	10957.8	10703.4	9976.5	9295.0
60°	9563.0	9608.5	10026.5	10962.3	12697.8	12238.9	11998.1	11911.8	11325.9	10385.3	9967.4
62.5°	8695.4	8804.4	9585.8	10989.7	12484.3	12506.9	12529.7	12470.7	11807.3	10757.8	10644.4
65°	7668.6	7700.5	8640.9	10612.5	12111.7	12425.2	12920.4	12915.9	12175.3	11175.8	11407.5
67.5°	6319.3	6373.8	7187.1	9340.5	11366.7	12388.8	13433.8	13420.1	12593.2	11652.8	11861.8
70°	4702.1	4770.2	5428.9	7264.3	9703.9	11934.5	14106.1	14115.2	13034.0	12016.4	11548.3
71°	3666.2	3788.9	4479.4	6169.5	8854.4	11475.7	14169.8	14251.4	13083.9	11966.3	10903.3
72.5°	1799.1	1944.4	2812.2	4343.2	7287.0	10449.0	13751.7	13910.8	12770.4	11344.0	9322.3
75°	467.9	495.2	840.4	1776.3	3907.0	6923.5	11089.5	11493.8	10439.8	8636.3	5697.0
77.5°	295.3	304.4	395.2	690.5	1462.9	2630.4	6514.7	6714.6	5965.0	4375.0	2007.9
80°	209.0	213.5	249.8	445.2	854.1	767.8	2344.1	2430.5	2158.0	1158.4	358.9
82.5°	127.2	127.2	181.7	286.3	526.9	417.9	617.9	658.8	581.5	322.6	118.1
85°	72.6	77.2	113.6	195.3	249.8	204.5	231.7	245.3	249.8	213.5	49.9
87.5°	59.1	63.6	100.0	163.6	136.2	100.0	100.0	104.5	109.0	127.2	22.7
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°	2203.3	2203.3	2203.3	2203.3	2203.3	2203.3	2203.3	2203.3	2203.3	2203.3	2203.3
2.5°	2194.3	2194.3	2198.9	2194.3	2194.3	2194.3	2198.9	2198.9	2198.9	2207.9	2212.5
5°	2203.3	2203.3	2203.3	2198.9	2194.3	2194.3	2203.3	2207.9	2207.9	2221.6	2221.6
7.5°	2226.0	2226.0	2217.0	2207.9	2198.9	2185.1	2189.8	2194.3	2189.8	2194.3	2194.3
10°	2276.1	2276.1	2262.4	2244.3	2217.0	2176.1	2121.6	2053.4	1989.8	1967.1	1958.0
12.5°	2357.9	2353.3	2326.0	2294.2	2235.1	2094.3	1889.8	1649.2	1449.3	1394.7	1376.5
15°	2448.7	2439.6	2407.8	2353.3	2194.3	1821.8	1394.7	1085.8	895.0	849.6	840.4
17.5°	2544.1	2530.5	2485.0	2376.0	2007.9	1353.8	899.5	681.4	577.0	567.9	572.4
20°	2644.1	2625.8	2562.2	2330.6	1621.9	904.0	581.5	526.9	517.9	517.9	522.5
22.5°	2757.6	2734.9	2648.6	2167.0	1181.2	599.8	499.8	495.2	490.7	486.1	486.1
25°	2889.4	2862.1	2730.4	1871.7	813.2	490.7	477.0	463.4	454.3	445.2	440.7
27.5°	3048.4	3012.1	2794.0	1508.4	558.8	458.9	449.7	427.1	408.8	390.7	390.7
30°	3207.5	3162.0	2775.8	1135.8	454.3	427.1	408.8	381.7	354.3	336.2	331.6
32.5°	3375.4	3330.0	2657.6	763.1	413.4	390.7	367.9	327.1	295.3	272.6	268.0
35°	3625.3	3588.9	2426.0	504.2	372.6	345.3	313.5	272.6	231.7	209.0	204.5
37.5°	3997.9	3952.5	2139.8	386.1	327.1	286.3	259.0	213.5	172.6	149.9	145.5
40°	4497.5	4361.3	1799.1	340.8	286.3	236.2	200.0	154.5	122.7	109.0	109.0
42.5°	5079.1	4756.6	1431.1	308.8	254.3	195.3	145.5	104.5	86.4	81.7	81.7
45°	5697.0	5124.6	1063.1	286.3	222.6	154.5	104.5	72.6	63.6	59.1	59.1
47.5°	6333.0	5424.4	740.6	259.0	186.3	118.1	72.6	54.5	45.5	40.9	40.9
50°	6928.1	5619.8	522.5	231.7	159.0	86.4	54.5	40.9	31.8	31.8	31.8
52.5°	7341.5	5601.5	377.1	200.0	122.7	59.1	36.4	27.2	27.2	27.2	27.2
55°	7705.0	5533.4	295.3	172.6	95.4	40.9	27.2	22.7	22.7	18.1	18.1
57.5°	8013.9	5424.4	249.8	140.8	68.2	31.8	18.1	18.1	13.6	13.6	13.6
60°	8277.4	5288.0	209.0	118.1	45.5	22.7	13.6	9.1	9.1	4.6	9.1
62.5°	8636.3	5201.8	181.7	90.9	31.8	13.6	9.1	4.6	4.6	0.0	0.0
65°	8899.8	5038.3	154.5	63.6	18.1	9.1	4.6	4.6	0.0	0.0	0.0
67.5°	8908.9	4743.0	113.6	36.4	13.6	9.1	4.6	0.0	0.0	0.0	0.0
70°	8191.0	4043.2	72.6	18.1	9.1	4.6	4.6	0.0	0.0	0.0	0.0
71°	7532.4	3579.9	59.1	13.6	9.1	4.6	0.0	0.0	0.0	0.0	0.0
72.5°	6205.8	2630.4	45.5	13.6	4.6	4.6	0.0	0.0	0.0	0.0	0.0
75°	3420.9	954.1	22.7	9.1	4.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1094.9	290.7	13.6	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	186.3	45.5	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	63.6	18.1	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.1	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.1	4.6	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)