

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: P237236

Luminaire Tested: **ARCH-L-AF72-230-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237236
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-230-D-U-T3-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 980mA 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: 19499 lumens
Efficiency: N/A
Efficacy: 85.1 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

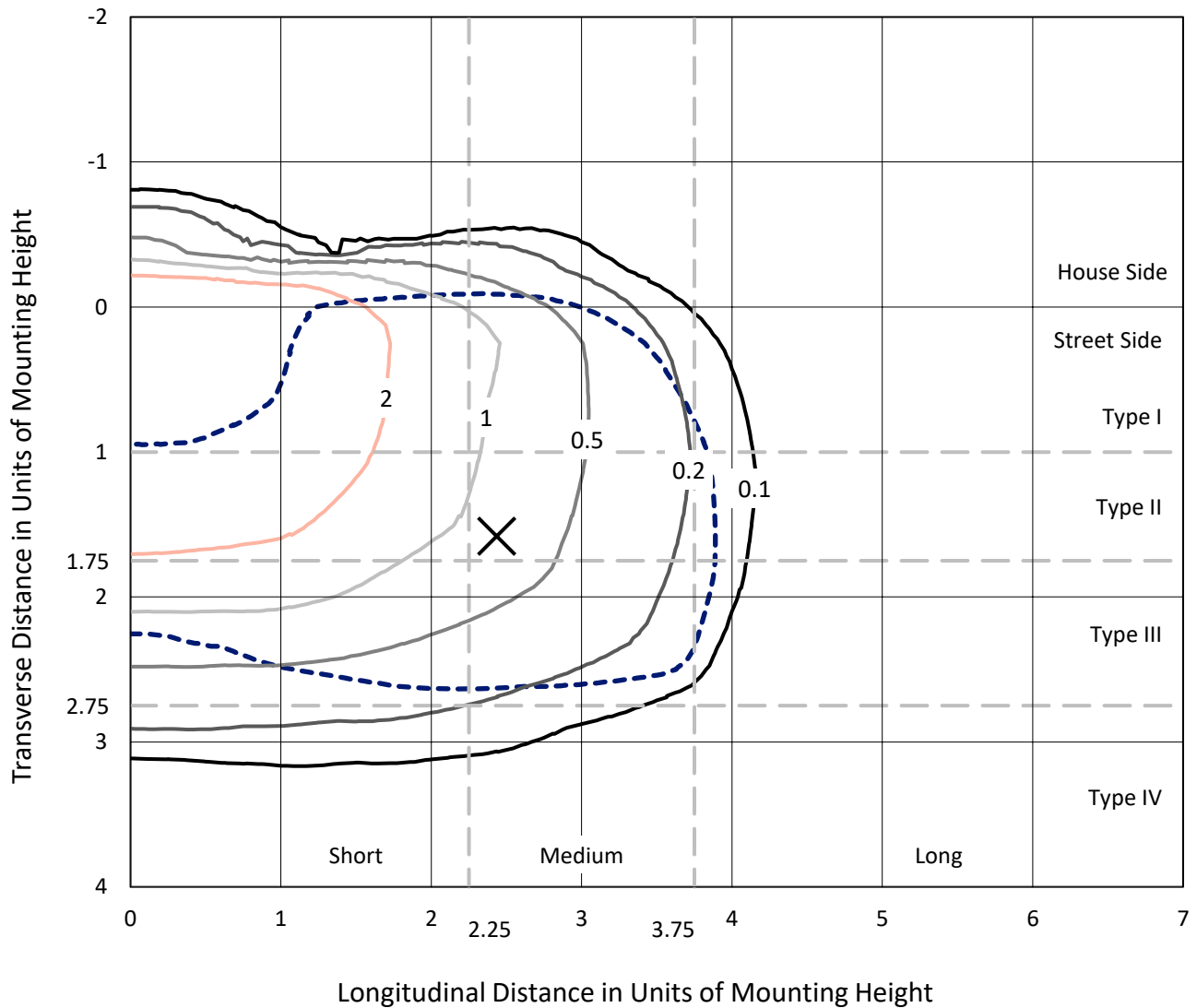
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P237236
 CATALOG NUMBER: ARCH-L-AF72-230-D-U-T3-7050-HSS

Iso-Footcandle Lines of Horizontal Illumination

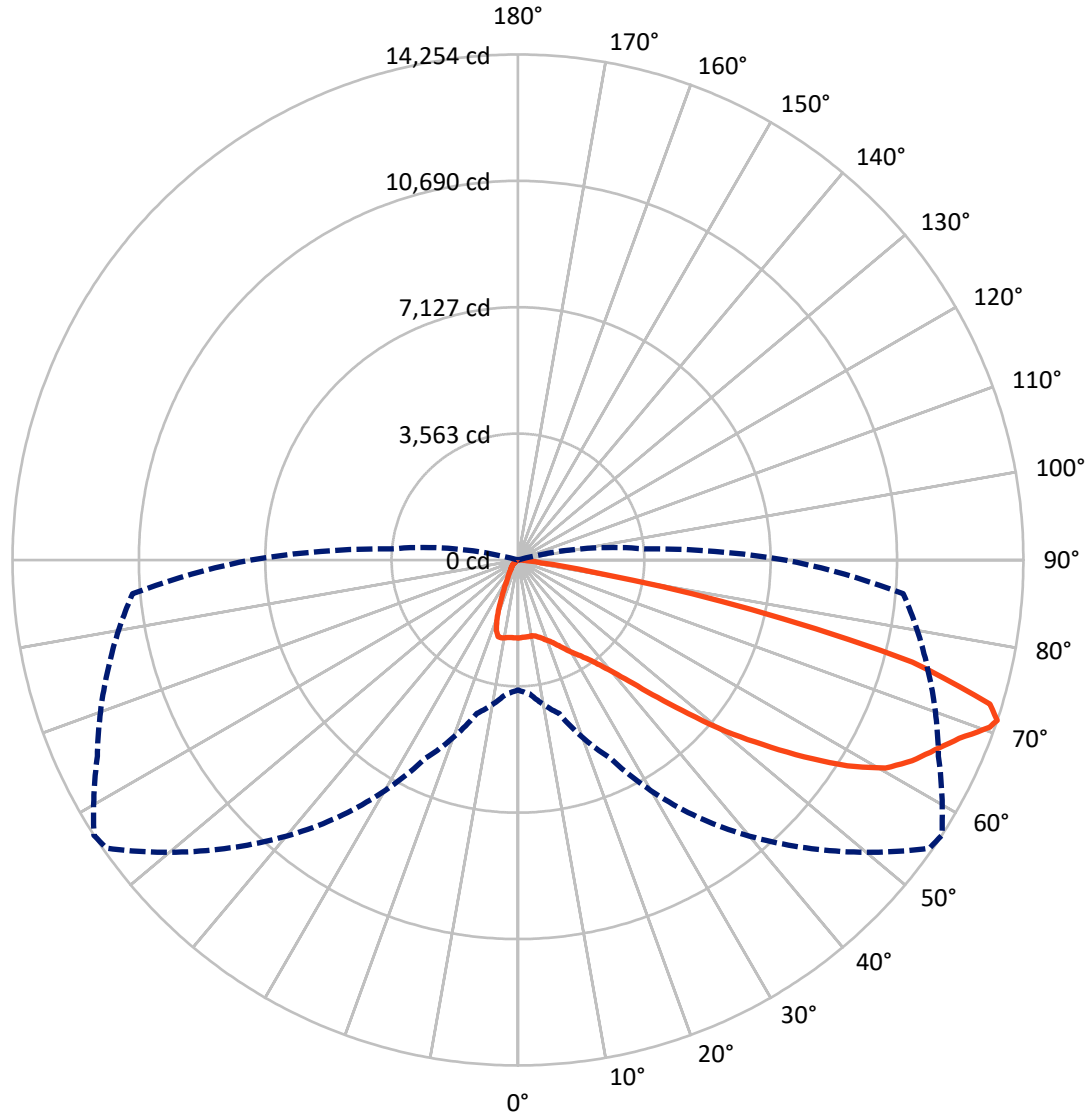
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P237236
CATALOG NUMBER: ARCH-L-AF72-230-D-U-T3-7050-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P237236

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T3-7050-HSS

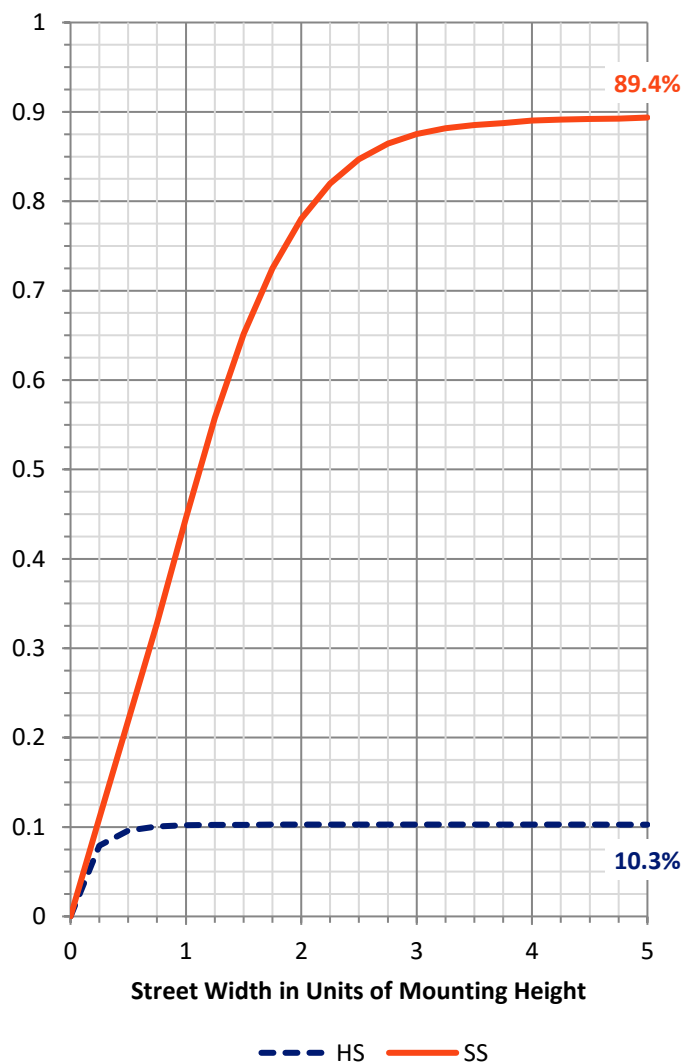
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2020.7	0.0	2020.7
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	17478.3	0.0	17478.3
	% Fixture	89.6	0.0	89.6
Total	Lumens	19499.0	0.0	19499.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.0	1.1
10°-20°	553.3	2.8
20°-30°	863.2	4.4
30°-40°	1459.0	7.5
40°-50°	2833.7	14.5
50°-60°	4758.7	24.4
60°-70°	5679.1	29.1
70°-80°	2992.9	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°	19499.0	100.0
0°-180°	19499.0	100.0

Coefficient of Utilization



REPORT NUMBER: P237236

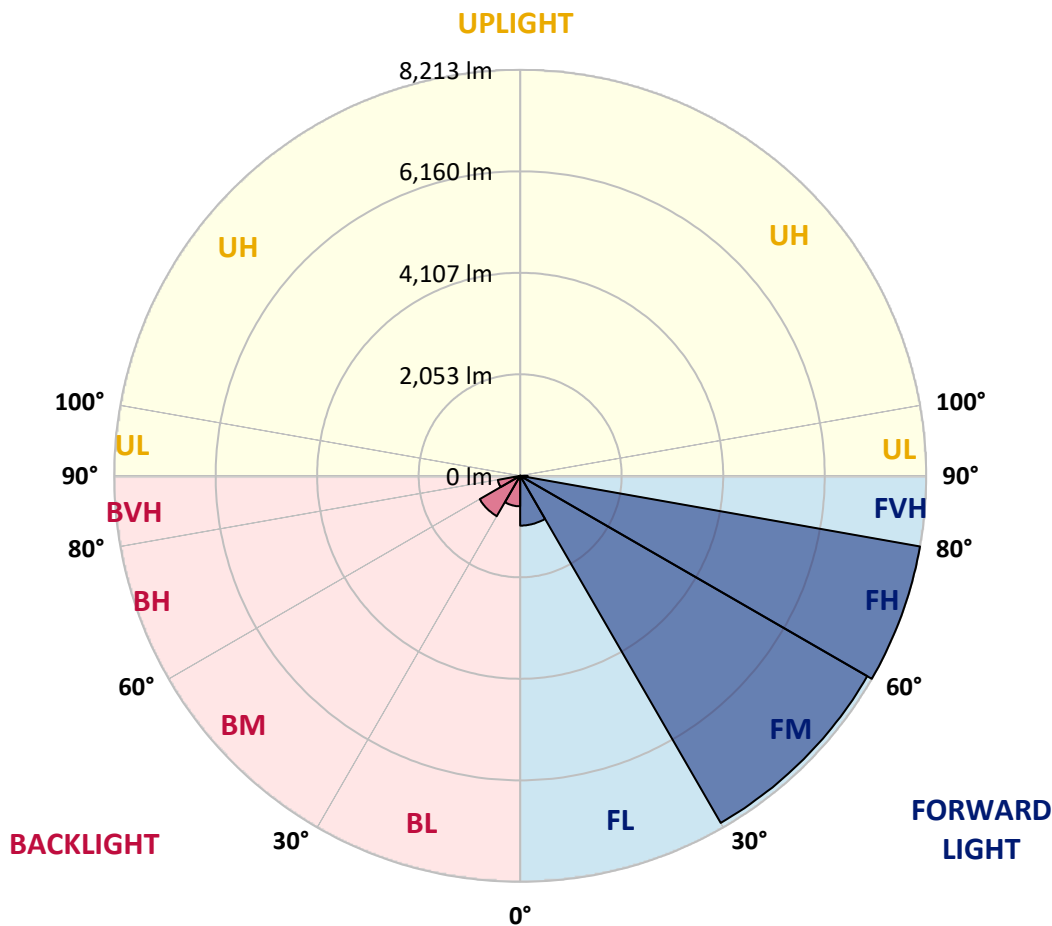
CATALOG NUMBER: ARCH-L-AF72-230-D-U-T3-7050-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1006.7	5.2			
FM (30°-60°)	8107.9	41.6			
FH (60°-80°)	8213.1	42.1			G4/12000
FVH (80°-90°)	150.6	0.8			G2/225
BL (0°-30°)	616.8	3.2	B2/1000		
BM (30°-60°)	943.5	4.8	B1/1000		
BH (60°-80°)	458.9	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





REPORT NUMBER: P237236

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T3-7050-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2203.7	2203.7	2203.7	2203.7	2203.7	2203.7	2203.7	2203.7	2203.7	2203.7	2203.7
2.5°	2171.9	2171.9	2171.9	2176.4	2181.0	2181.0	2190.1	2185.5	2185.5	2185.5	2194.6
5°	2112.8	2117.4	2121.9	2131.0	2149.2	2162.8	2185.5	2185.5	2190.1	2199.1	2203.7
7.5°	2031.0	2035.6	2049.2	2067.4	2103.7	2135.5	2171.9	2181.0	2194.6	2217.3	2226.4
10°	1981.0	1990.1	2008.3	2031.0	2071.9	2112.8	2158.2	2171.9	2212.8	2253.7	2276.4
12.5°	1967.4	1972.0	1990.1	2026.5	2076.5	2126.4	2185.5	2199.1	2258.2	2321.8	2358.2
15°	1990.1	1994.7	2003.8	2044.7	2103.7	2167.3	2244.6	2262.8	2335.4	2408.1	2453.6
17.5°	2031.0	2031.0	2040.1	2076.5	2140.1	2212.8	2312.7	2340.0	2421.8	2503.6	2553.5
20°	2058.3	2058.3	2071.9	2108.3	2181.0	2276.4	2394.5	2430.9	2521.7	2612.6	2658.1
22.5°	2085.5	2090.1	2103.7	2144.6	2226.4	2358.2	2494.5	2530.8	2635.3	2730.7	2776.2
25°	2162.8	2158.2	2162.8	2199.1	2294.6	2458.1	2630.8	2676.2	2785.3	2889.8	2912.5
27.5°	2376.3	2367.3	2308.2	2285.5	2358.2	2562.6	2803.4	2848.9	2976.1	3080.6	3080.6
30°	2867.1	2848.9	2703.5	2517.2	2458.1	2658.1	2967.0	3030.6	3194.2	3285.1	3257.8
32.5°	3489.5	3448.6	3262.4	2944.3	2708.0	2785.3	3139.7	3212.4	3421.4	3498.6	3439.6
35°	4171.1	4166.6	3934.8	3525.9	3189.7	3048.8	3362.3	3448.6	3712.2	3780.3	3684.9
37.5°	4893.5	4911.7	4757.2	4193.8	3798.5	3480.5	3657.7	3757.6	4080.2	4162.0	4071.1
40°	5697.8	5693.2	5634.2	4966.2	4530.0	4093.9	4084.8	4175.6	4566.4	4693.6	4566.4
42.5°	6715.6	6706.5	6492.9	5893.1	5416.1	4893.5	4707.2	4739.1	5175.2	5384.3	5198.0
45°	7751.5	7687.9	7442.5	6924.6	6502.0	5884.1	5529.7	5529.7	5902.2	6188.5	5897.7
47.5°	8328.6	8264.9	8165.0	7878.7	7751.5	7060.9	6538.3	6474.7	6765.5	7056.3	6647.4
50°	9087.4	9087.4	8837.4	8728.4	8946.5	8460.3	7651.5	7587.9	7728.8	7960.5	7424.4
52.5°	9687.1	9578.1	9400.9	9496.3	10118.8	9896.1	8764.8	8642.1	8751.1	8810.2	8101.4
55°	9937.0	9832.5	9818.9	10168.7	11132.0	10823.0	9905.2	9796.2	9787.1	9496.3	8692.1
57.5°	9987.0	9896.1	10068.8	10682.2	12118.0	11581.8	11041.1	10959.3	10704.9	9977.9	9296.4
60°	9564.4	9609.9	10027.9	10963.9	12699.6	12240.7	11999.8	11913.5	11327.4	10386.8	9968.8
62.5°	8696.6	8805.6	9587.2	10991.2	12486.0	12508.7	12531.5	12472.4	11809.0	10759.4	10645.8
65°	7669.7	7701.5	8642.1	10614.0	12113.4	12427.0	12922.2	12917.7	12177.1	11177.4	11409.2
67.5°	6320.3	6374.8	7188.1	9341.8	11368.3	12390.6	13435.6	13422.0	12595.1	11654.5	11863.5
70°	4702.7	4770.9	5429.7	7265.3	9705.3	11936.2	14108.1	14117.2	13035.8	12018.0	11550.0
71°	3666.7	3789.4	4480.1	6170.3	8855.6	11477.3	14171.7	14253.5	13085.8	11968.0	10904.8
72.5°	1799.3	1944.7	2812.5	4343.8	7288.1	10450.5	13753.7	13912.7	12772.3	11345.6	9323.6
75°	468.0	495.3	840.6	1776.6	3907.6	6924.6	11091.1	11495.5	10441.4	8637.5	5697.8
77.5°	295.3	304.4	395.3	690.6	1463.1	2630.8	6515.6	6715.6	5965.8	4375.6	2008.3
80°	209.0	213.6	249.9	445.3	854.2	767.9	2344.5	2430.9	2158.2	1158.6	359.0
82.5°	127.2	127.2	181.7	286.3	527.1	418.0	617.9	658.8	581.6	322.6	118.1
85°	72.7	77.2	113.6	195.4	249.9	204.5	231.7	245.4	249.9	213.6	50.0
87.5°	59.1	63.6	100.0	163.6	136.3	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



REPORT NUMBER: P237236

CATALOG NUMBER: ARCH-L-AF72-230-D-U-T3-7050-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2203.7	2203.7	2203.7	2203.7	2203.7	2203.7	2203.7	2203.7	2203.7	2203.7	2203.7
2.5°	2194.6	2194.6	2199.1	2194.6	2194.6	2194.6	2199.1	2199.1	2199.1	2208.2	2212.8
5°	2203.7	2203.7	2203.7	2199.1	2194.6	2194.6	2203.7	2208.2	2208.2	2221.9	2221.9
7.5°	2226.4	2226.4	2217.3	2208.2	2199.1	2185.5	2190.1	2194.6	2190.1	2194.6	2194.6
10°	2276.4	2276.4	2262.8	2244.6	2217.3	2176.4	2121.9	2053.7	1990.1	1967.4	1958.3
12.5°	2358.2	2353.6	2326.4	2294.6	2235.5	2094.6	1890.2	1649.4	1449.4	1394.9	1376.7
15°	2449.0	2440.0	2408.1	2353.6	2194.6	1822.0	1394.9	1085.9	895.1	849.7	840.6
17.5°	2544.5	2530.8	2485.4	2376.3	2008.3	1354.0	899.6	681.6	577.0	568.0	572.5
20°	2644.4	2626.2	2562.6	2330.9	1622.1	904.2	581.6	527.1	518.0	518.0	522.5
22.5°	2758.0	2735.3	2649.0	2167.3	1181.4	599.8	499.8	495.3	490.7	486.2	486.2
25°	2889.8	2862.5	2730.7	1872.0	813.3	490.7	477.1	463.5	454.4	445.3	440.7
27.5°	3048.8	3012.5	2794.4	1508.5	558.9	458.9	449.8	427.1	408.9	390.8	390.8
30°	3207.8	3162.4	2776.2	1135.9	454.4	427.1	408.9	381.7	354.4	336.2	331.7
32.5°	3376.0	3330.5	2658.1	763.3	413.5	390.8	368.0	327.1	295.3	272.6	268.1
35°	3625.9	3589.5	2426.3	504.3	372.6	345.3	313.5	272.6	231.7	209.0	204.5
37.5°	3998.4	3953.0	2140.1	386.2	327.1	286.3	259.0	213.6	172.7	149.9	145.4
40°	4498.2	4361.9	1799.3	340.8	286.3	236.3	199.9	154.5	122.7	109.0	109.0
42.5°	5079.8	4757.2	1431.3	309.0	254.4	195.4	145.4	104.5	86.3	81.8	81.8
45°	5697.8	5125.3	1063.2	286.3	222.6	154.5	104.5	72.7	63.6	59.1	59.1
47.5°	6333.9	5425.1	740.6	259.0	186.3	118.1	72.7	54.5	45.4	40.9	40.9
50°	6929.1	5620.5	522.5	231.7	159.0	86.3	54.5	40.9	31.8	31.8	31.8
52.5°	7342.6	5602.4	377.1	199.9	122.7	59.1	36.3	27.3	27.3	27.3	27.3
55°	7706.1	5534.2	295.3	172.7	95.4	40.9	27.3	22.7	22.7	18.2	18.2
57.5°	8015.0	5425.1	249.9	140.9	68.2	31.8	18.2	18.2	13.6	13.6	13.6
60°	8278.6	5288.8	209.0	118.1	45.4	22.7	13.6	9.1	9.1	4.5	9.1
62.5°	8637.5	5202.5	181.7	90.9	31.8	13.6	9.1	4.5	4.5	0.0	0.0
65°	8901.1	5038.9	154.5	63.6	18.2	9.1	4.5	4.5	0.0	0.0	0.0
67.5°	8910.1	4743.6	113.6	36.3	13.6	9.1	4.5	0.0	0.0	0.0	0.0
70°	8192.2	4043.9	72.7	18.2	9.1	4.5	4.5	0.0	0.0	0.0	0.0
71°	7533.4	3580.4	59.1	13.6	9.1	4.5	0.0	0.0	0.0	0.0	0.0
72.5°	6206.7	2630.8	45.4	13.6	4.5	4.5	0.0	0.0	0.0	0.0	0.0
75°	3421.4	954.2	22.7	9.1	4.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1095.0	290.8	13.6	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	186.3	45.4	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	63.6	18.2	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.2	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.1	4.5	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)