

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: P237234

Luminaire Tested: **ARCH-L-AF72-210-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237234
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-AF72-210-D-U-T3-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 900mA 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: 18378 lumens
Efficiency: N/A
Efficacy: 87.1 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

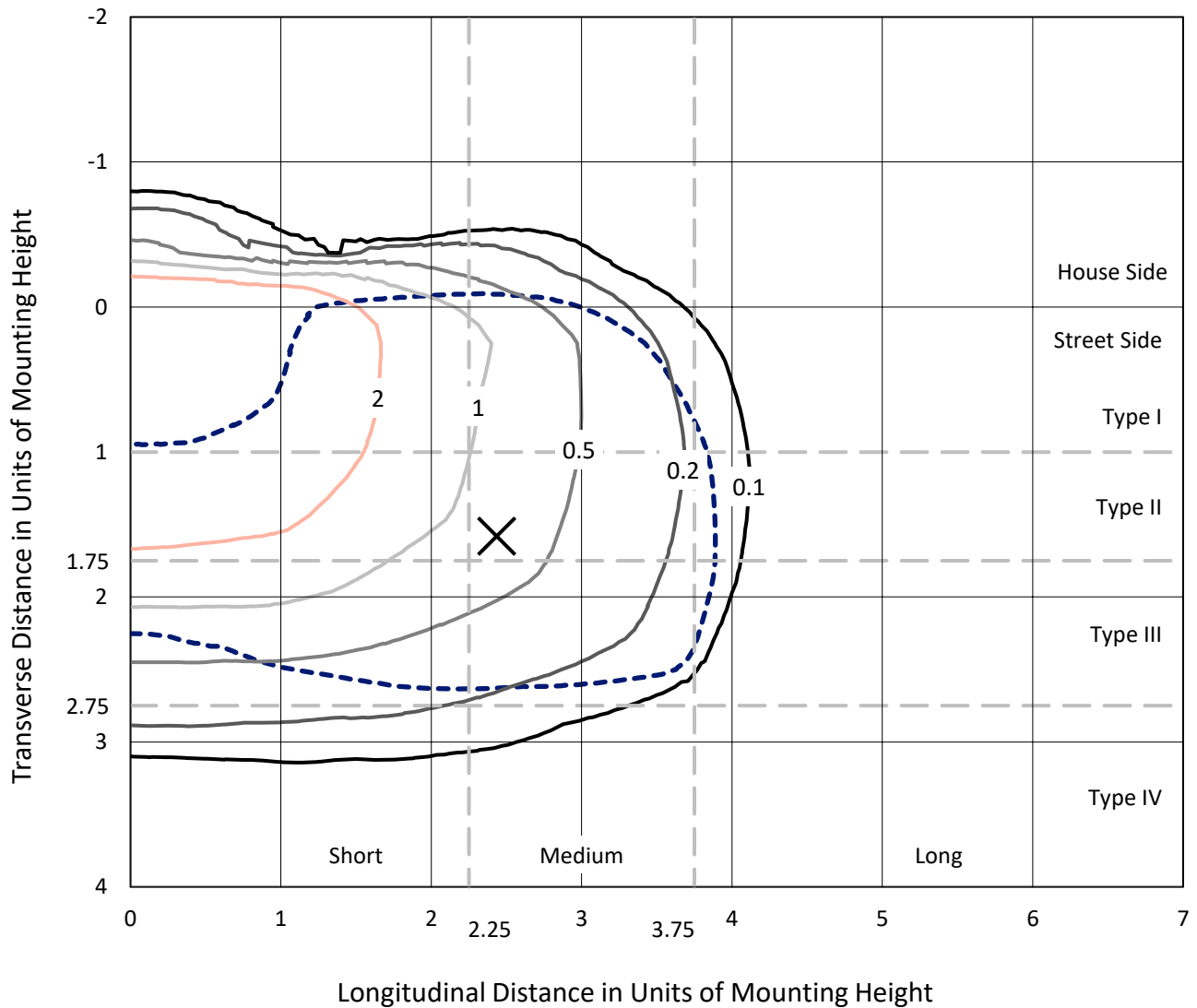
Input Watts (W): 211
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P237234
 CATALOG NUMBER: ARCH-L-AF72-210-D-U-T3-7050-HSS

Iso-Footcandle Lines of Horizontal Illumination

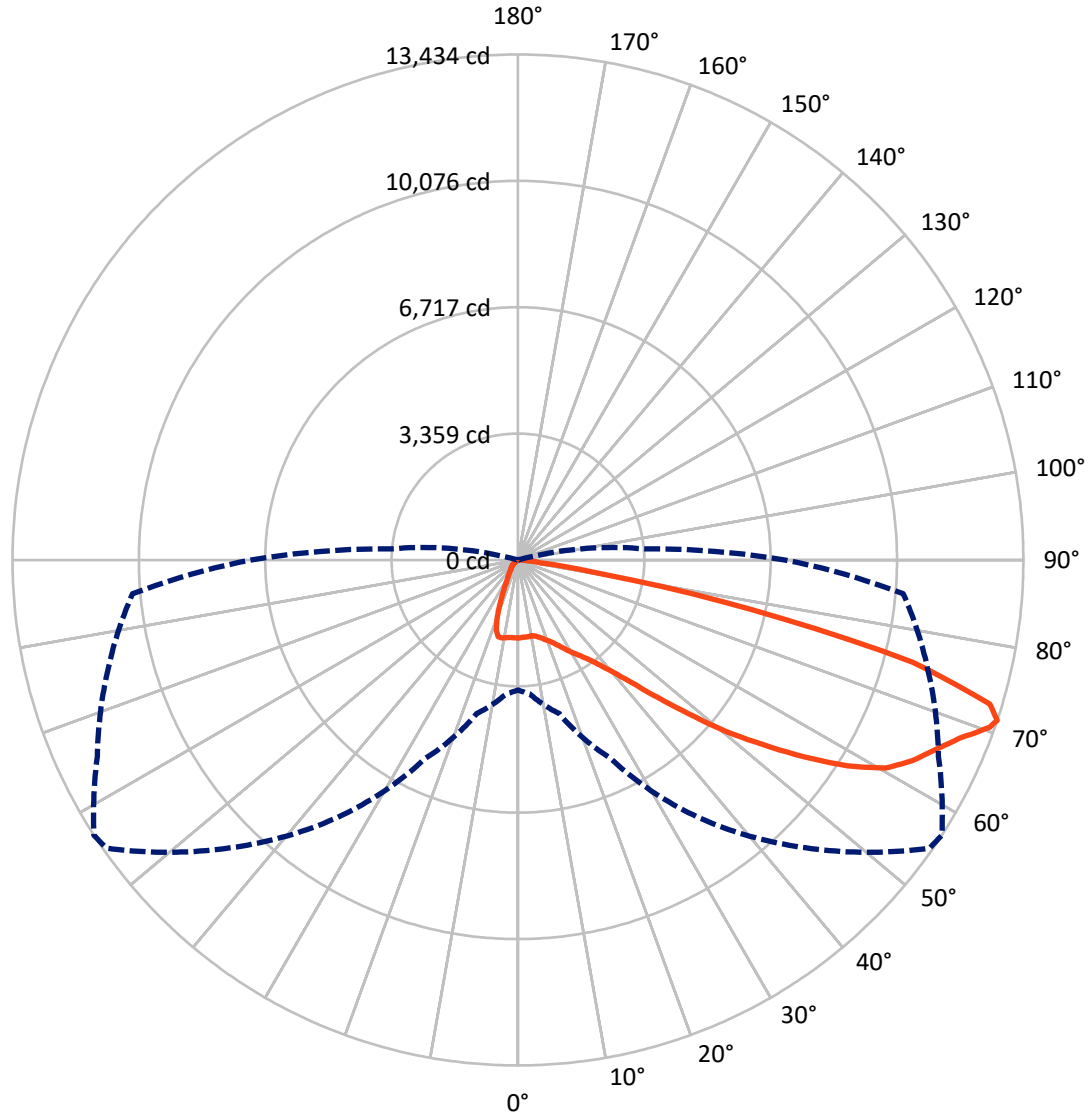
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type III - Medium - N/A

REPORT NUMBER: P237234
CATALOG NUMBER: ARCH-L-AF72-210-D-U-T3-7050-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P237234

CATALOG NUMBER: ARCH-L-AF72-210-D-U-T3-7050-HSS

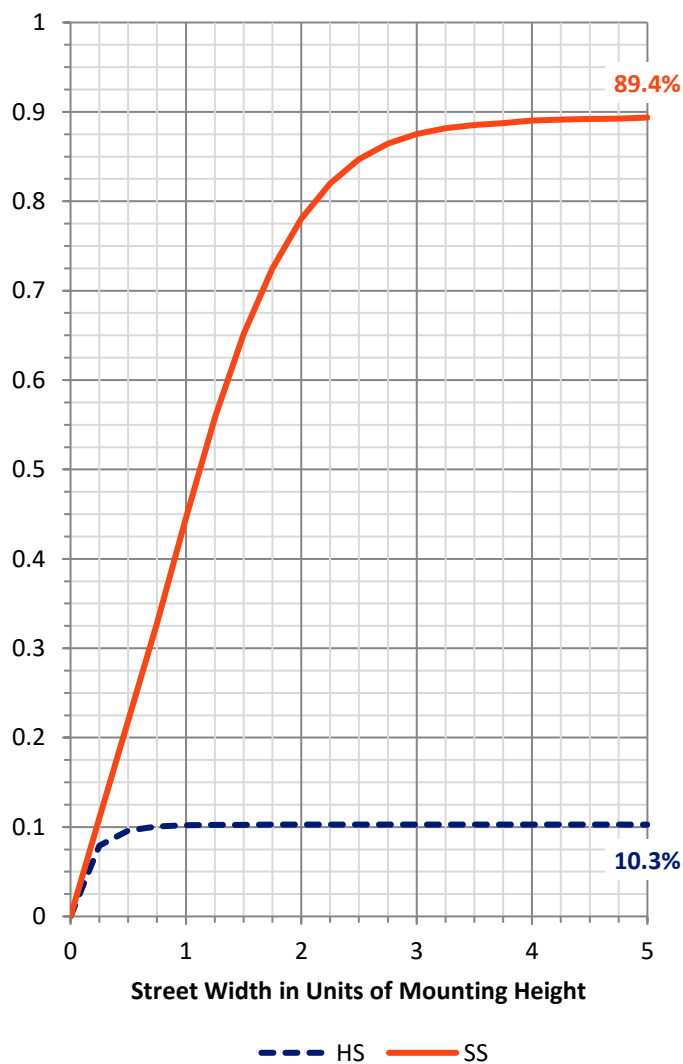
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1904.5	0.0	1904.5
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	16473.5	0.0	16473.5
	% Fixture	89.6	0.0	89.6
Total	Lumens	18378.0	0.0	18378.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.1	1.1
10°-20°	521.5	2.8
20°-30°	813.6	4.4
30°-40°	1375.1	7.5
40°-50°	2670.8	14.5
50°-60°	4485.1	24.4
60°-70°	5352.6	29.1
70°-80°	2820.9	15.3
80°-90°	143.3	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°	18378.0	100.0
0°-180°	18378.0	100.0

Coefficient of Utilization



REPORT NUMBER: P237234

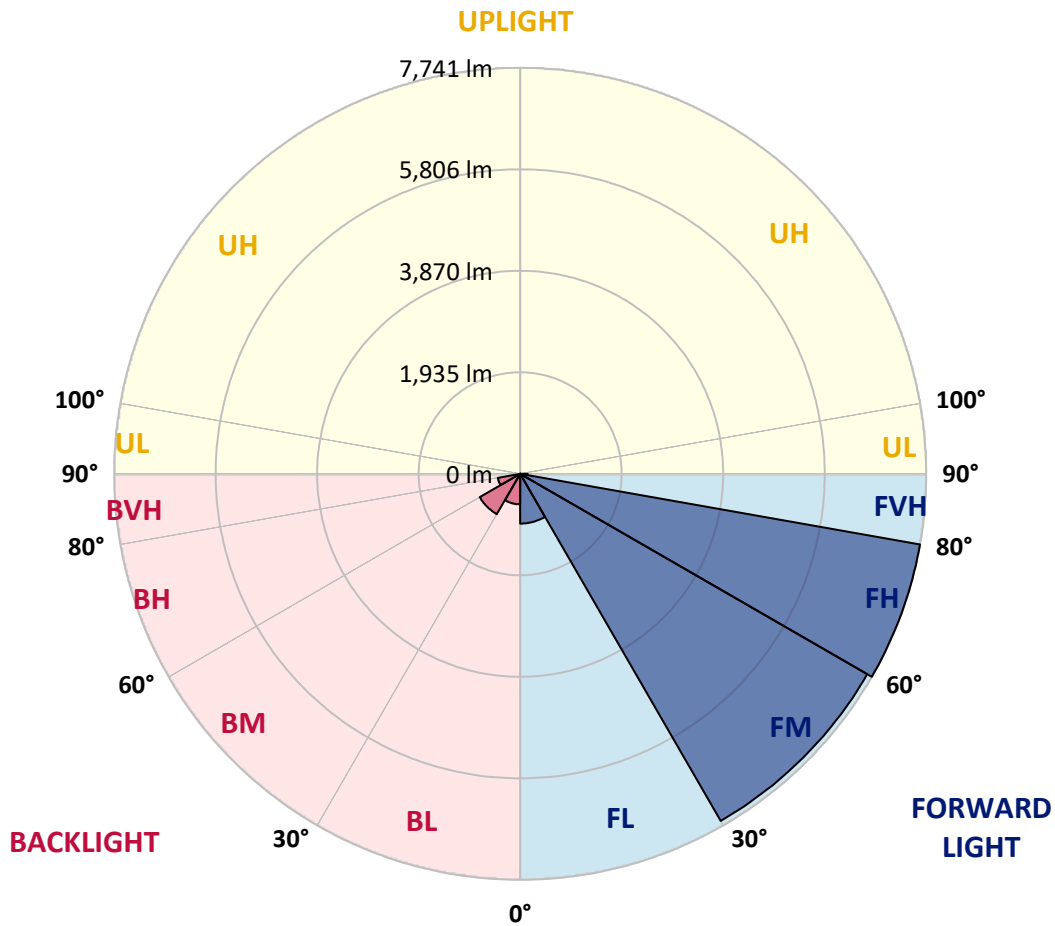
CATALOG NUMBER: ARCH-L-AF72-210-D-U-T3-7050-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	948.8	5.2			
FM (30°-60°)	7641.7	41.6			
FH (60°-80°)	7740.9	42.1			G4/12000
FVH (80°-90°)	142.0	0.8			G2/225
BL (0°-30°)	581.4	3.2	B2/1000		
BM (30°-60°)	889.3	4.8	B1/1000		
BH (60°-80°)	432.5	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: P237234

CATALOG NUMBER: ARCH-L-AF72-210-D-U-T3-7050-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2077.0	2077.0	2077.0	2077.0	2077.0	2077.0	2077.0	2077.0	2077.0	2077.0	2077.0
2.5°	2047.0	2047.0	2047.0	2051.3	2055.6	2055.6	2064.1	2059.9	2059.9	2059.9	2068.4
5°	1991.3	1995.6	1999.9	2008.5	2025.6	2038.5	2059.9	2059.9	2064.1	2072.7	2077.0
7.5°	1914.3	1918.5	1931.4	1948.5	1982.8	2012.8	2047.0	2055.6	2068.4	2089.8	2098.4
10°	1867.2	1875.7	1892.8	1914.3	1952.8	1991.3	2034.2	2047.0	2085.6	2124.1	2145.5
12.5°	1854.3	1858.6	1875.7	1910.0	1957.1	2004.2	2059.9	2072.7	2128.4	2188.3	2222.6
15°	1875.7	1880.0	1888.6	1927.1	1982.8	2042.7	2115.5	2132.7	2201.2	2269.7	2312.5
17.5°	1914.3	1914.3	1922.8	1957.1	2017.0	2085.6	2179.8	2205.5	2282.6	2359.6	2406.7
20°	1940.0	1940.0	1952.8	1987.1	2055.6	2145.5	2256.9	2291.1	2376.8	2462.4	2505.2
22.5°	1965.6	1969.9	1982.8	2021.3	2098.4	2222.6	2351.1	2385.3	2483.8	2573.8	2616.6
25°	2038.5	2034.2	2038.5	2072.7	2162.6	2316.8	2479.5	2522.4	2625.1	2723.6	2745.1
27.5°	2239.7	2231.2	2175.5	2154.1	2222.6	2415.3	2642.3	2685.1	2805.0	2903.5	2903.5
30°	2702.2	2685.1	2548.1	2372.5	2316.8	2505.2	2796.4	2856.4	3010.6	3096.2	3070.5
32.5°	3288.9	3250.4	3074.8	2775.0	2552.3	2625.1	2959.2	3027.7	3224.7	3297.5	3241.8
35°	3931.3	3927.0	3708.6	3323.2	3006.3	2873.5	3169.0	3250.4	3498.8	3563.0	3473.1
37.5°	4612.2	4629.3	4483.7	3952.7	3580.1	3280.4	3447.4	3541.6	3845.6	3922.7	3837.1
40°	5370.2	5365.9	5310.2	4680.7	4269.6	3858.5	3849.9	3935.6	4303.9	4423.8	4303.9
42.5°	6329.5	6320.9	6119.6	5554.3	5104.7	4612.2	4436.6	4466.6	4877.7	5074.7	4899.1
45°	7305.9	7245.9	7014.7	6526.5	6128.2	5545.8	5211.8	5211.8	5562.9	5832.7	5558.6
47.5°	7849.7	7789.8	7695.6	7425.8	7305.9	6654.9	6162.5	6102.5	6376.6	6650.7	6265.2
50°	8564.9	8564.9	8329.4	8226.6	8432.2	7973.9	7211.7	7151.7	7284.5	7502.9	6997.5
52.5°	9130.2	9027.4	8860.4	8950.3	9537.0	9327.2	8260.9	8145.2	8248.0	8303.7	7635.6
55°	9365.7	9267.2	9254.4	9584.1	10492.0	10200.8	9335.8	9233.0	9224.4	8950.3	8192.3
57.5°	9412.8	9327.2	9489.9	10068.1	11421.3	10916.0	10406.4	10329.3	10089.5	9404.3	8761.9
60°	9014.6	9057.4	9451.4	10333.6	11969.5	11536.9	11310.0	11228.6	10676.2	9789.7	9395.7
62.5°	8196.6	8299.4	9036.0	10359.3	11768.2	11789.6	11811.0	11755.4	11130.1	10140.9	10033.8
65°	7228.8	7258.8	8145.2	10003.8	11417.0	11712.5	12179.3	12175.0	11477.0	10534.8	10753.3
67.5°	5956.9	6008.3	6774.9	8804.7	10714.7	11678.3	12663.2	12650.4	11871.0	10984.5	11181.5
70°	4432.3	4496.6	5117.5	6847.7	9147.3	11250.0	13297.0	13305.6	12286.4	11327.1	10886.0
71°	3455.9	3571.6	4222.5	5815.6	8346.5	10817.5	13357.0	13434.1	12333.5	11280.0	10277.9
72.5°	1695.9	1832.9	2650.8	4094.0	6869.1	9849.7	12963.0	13112.9	12038.0	10693.3	8787.6
75°	441.1	466.8	792.3	1674.4	3682.9	6526.5	10453.5	10834.6	9841.1	8141.0	5370.2
77.5°	278.4	286.9	372.6	650.9	1379.0	2479.5	6141.0	6329.5	5622.9	4124.0	1892.8
80°	197.0	201.3	235.5	419.7	805.1	723.7	2209.7	2291.1	2034.2	1092.0	338.3
82.5°	119.9	119.9	171.3	269.8	496.8	394.0	582.4	621.0	548.2	304.1	111.3
85°	68.5	72.8	107.1	184.1	235.5	192.7	218.4	231.3	235.5	201.3	47.1
87.5°	55.7	60.0	94.2	154.2	128.5	94.2	94.2	98.5	102.8	119.9	21.4
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: P237234

CATALOG NUMBER: ARCH-L-AF72-210-D-U-T3-7050-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2077.0	2077.0	2077.0	2077.0	2077.0	2077.0	2077.0	2077.0	2077.0	2077.0	2077.0
2.5°	2068.4	2068.4	2072.7	2068.4	2068.4	2068.4	2072.7	2072.7	2072.7	2081.3	2085.6
5°	2077.0	2077.0	2077.0	2072.7	2068.4	2068.4	2077.0	2081.3	2081.3	2094.1	2094.1
7.5°	2098.4	2098.4	2089.8	2081.3	2072.7	2059.9	2064.1	2068.4	2064.1	2068.4	2068.4
10°	2145.5	2145.5	2132.7	2115.5	2089.8	2051.3	1999.9	1935.7	1875.7	1854.3	1845.7
12.5°	2222.6	2218.3	2192.6	2162.6	2107.0	1974.2	1781.5	1554.5	1366.1	1314.7	1297.6
15°	2308.2	2299.7	2269.7	2218.3	2068.4	1717.3	1314.7	1023.5	843.6	800.8	792.3
17.5°	2398.2	2385.3	2342.5	2239.7	1892.8	1276.2	847.9	642.4	543.9	535.3	539.6
20°	2492.4	2475.3	2415.3	2196.9	1528.8	852.2	548.2	496.8	488.2	488.2	492.5
22.5°	2599.5	2578.0	2496.7	2042.7	1113.4	565.3	471.1	466.8	462.5	458.2	458.2
25°	2723.6	2697.9	2573.8	1764.4	766.6	462.5	449.7	436.8	428.2	419.7	415.4
27.5°	2873.5	2839.3	2633.7	1421.8	526.7	432.5	424.0	402.6	385.4	368.3	368.3
30°	3023.4	2980.6	2616.6	1070.6	428.2	402.6	385.4	359.7	334.0	316.9	312.6
32.5°	3181.9	3139.0	2505.2	719.5	389.7	368.3	346.9	308.3	278.4	256.9	252.7
35°	3417.4	3383.1	2286.8	475.4	351.2	325.5	295.5	256.9	218.4	197.0	192.7
37.5°	3768.6	3725.7	2017.0	364.0	308.3	269.8	244.1	201.3	162.7	141.3	137.0
40°	4239.6	4111.2	1695.9	321.2	269.8	222.7	188.4	145.6	115.6	102.8	102.8
42.5°	4787.8	4483.7	1349.0	291.2	239.8	184.1	137.0	98.5	81.4	77.1	77.1
45°	5370.2	4830.6	1002.1	269.8	209.8	145.6	98.5	68.5	60.0	55.7	55.7
47.5°	5969.7	5113.3	698.0	244.1	175.6	111.3	68.5	51.4	42.8	38.5	38.5
50°	6530.8	5297.4	492.5	218.4	149.9	81.4	51.4	38.5	30.0	30.0	30.0
52.5°	6920.5	5280.3	355.4	188.4	115.6	55.7	34.3	25.7	25.7	25.7	25.7
55°	7263.1	5216.0	278.4	162.7	89.9	38.5	25.7	21.4	21.4	17.1	17.1
57.5°	7554.3	5113.3	235.5	132.8	64.2	30.0	17.1	17.1	12.8	12.8	12.8
60°	7802.6	4984.8	197.0	111.3	42.8	21.4	12.8	8.6	8.6	4.3	8.6
62.5°	8141.0	4903.4	171.3	85.6	30.0	12.8	8.6	4.3	4.3	0.0	0.0
65°	8389.3	4749.2	145.6	60.0	17.1	8.6	4.3	4.3	0.0	0.0	0.0
67.5°	8397.9	4470.9	107.1	34.3	12.8	8.6	4.3	0.0	0.0	0.0	0.0
70°	7721.3	3811.4	68.5	17.1	8.6	4.3	4.3	0.0	0.0	0.0	0.0
71°	7100.3	3374.6	55.7	12.8	8.6	4.3	0.0	0.0	0.0	0.0	0.0
72.5°	5849.8	2479.5	42.8	12.8	4.3	4.3	0.0	0.0	0.0	0.0	0.0
75°	3224.7	899.3	21.4	8.6	4.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1032.1	274.1	12.8	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	175.6	42.8	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	60.0	17.1	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	17.1	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.6	4.3	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)