

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: P237195

Luminaire Tested: **ARCH-L-AF72-220-D-U-T3-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237195
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-AF72-220-D-U-T3-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 945mA 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: 18397.1 lumens
Efficiency: N/A
Efficacy: 82.9 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

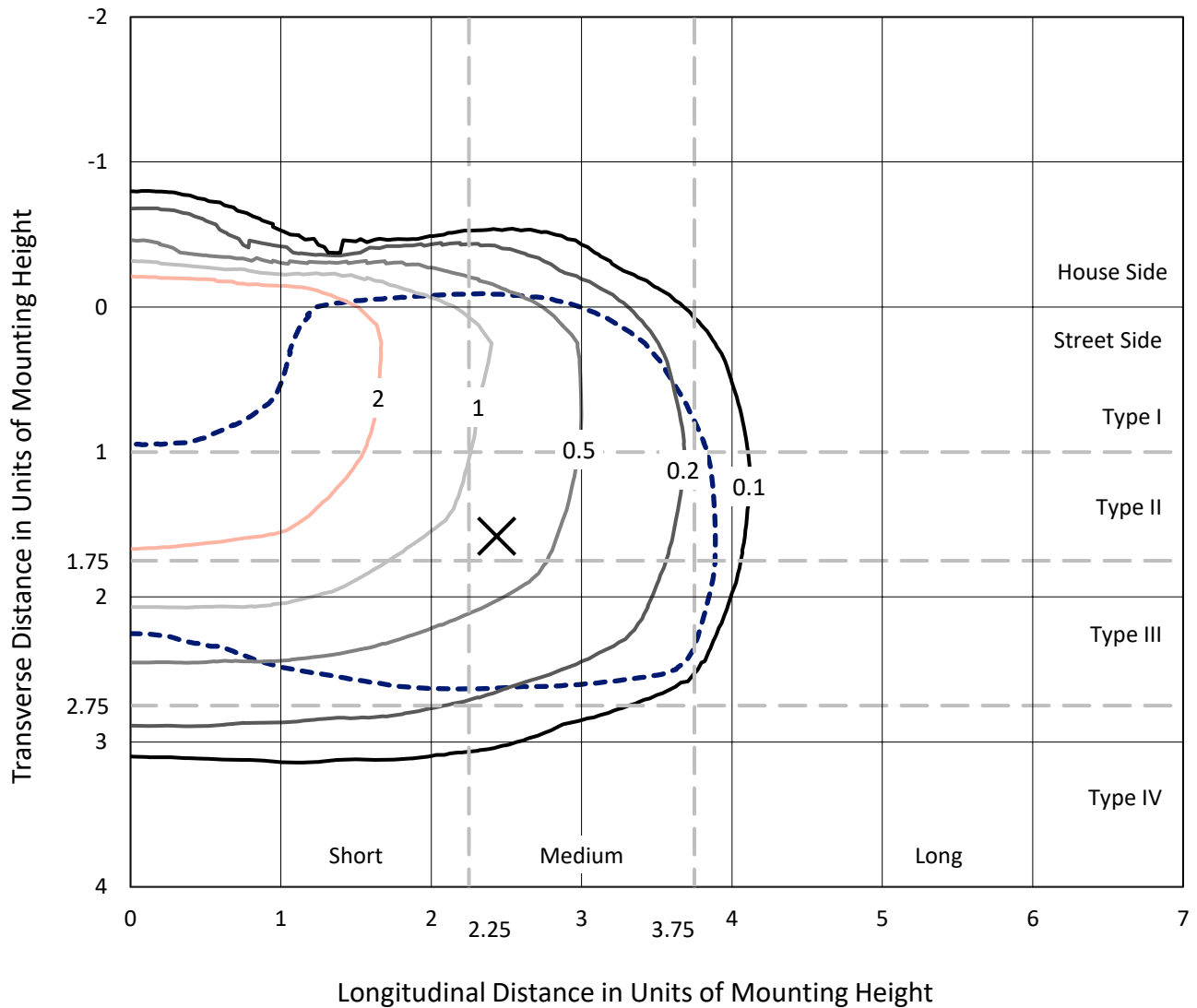
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P237195
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Iso-Footcandle Lines of Horizontal Illumination

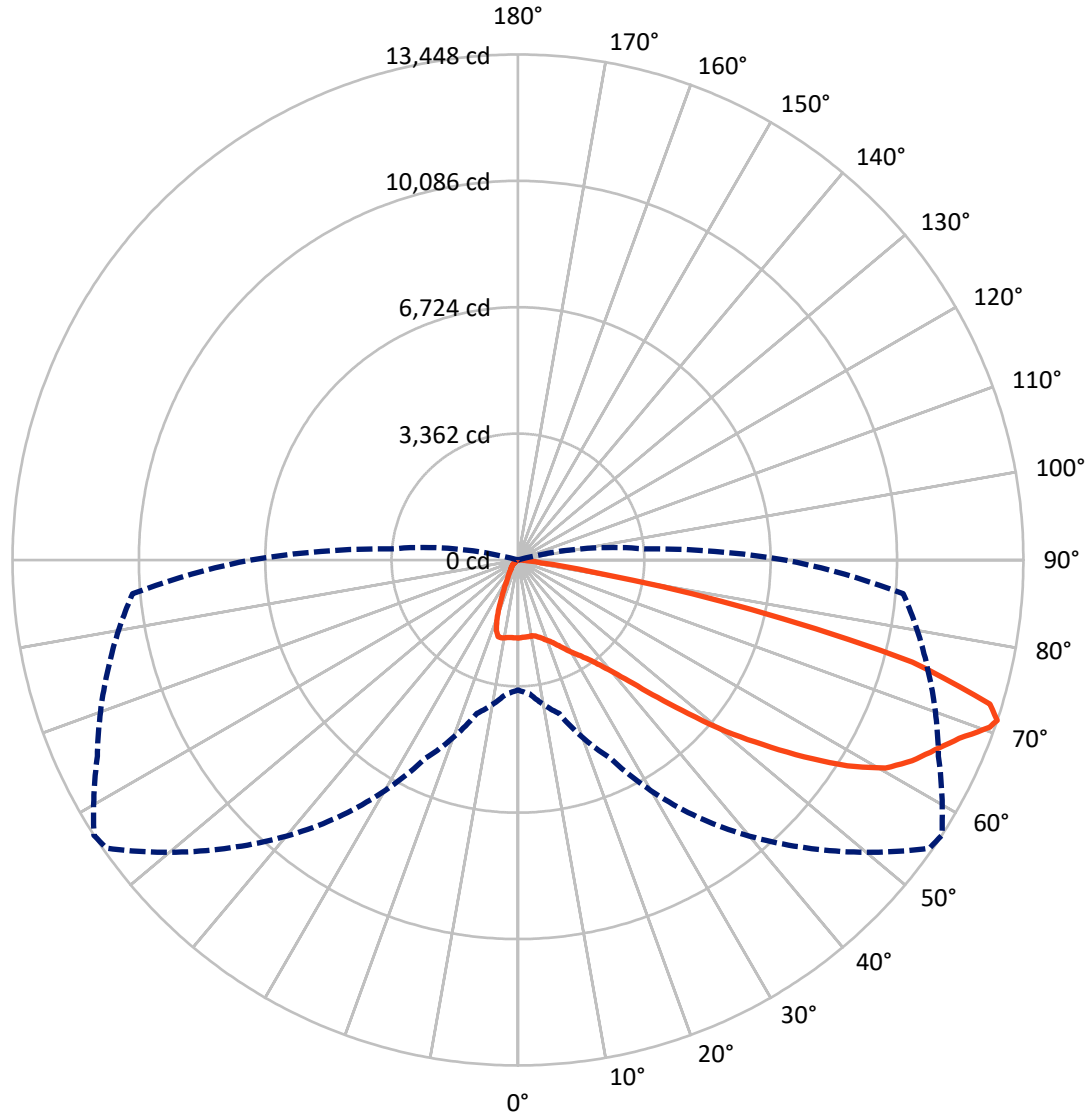
× Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P237195
CATALOG NUMBER: ARCH-L-AF72-220-D-U-T3-7030-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P237195

CATALOG NUMBER: ARCH-L-AF72-220-D-U-T3-7030-HSS

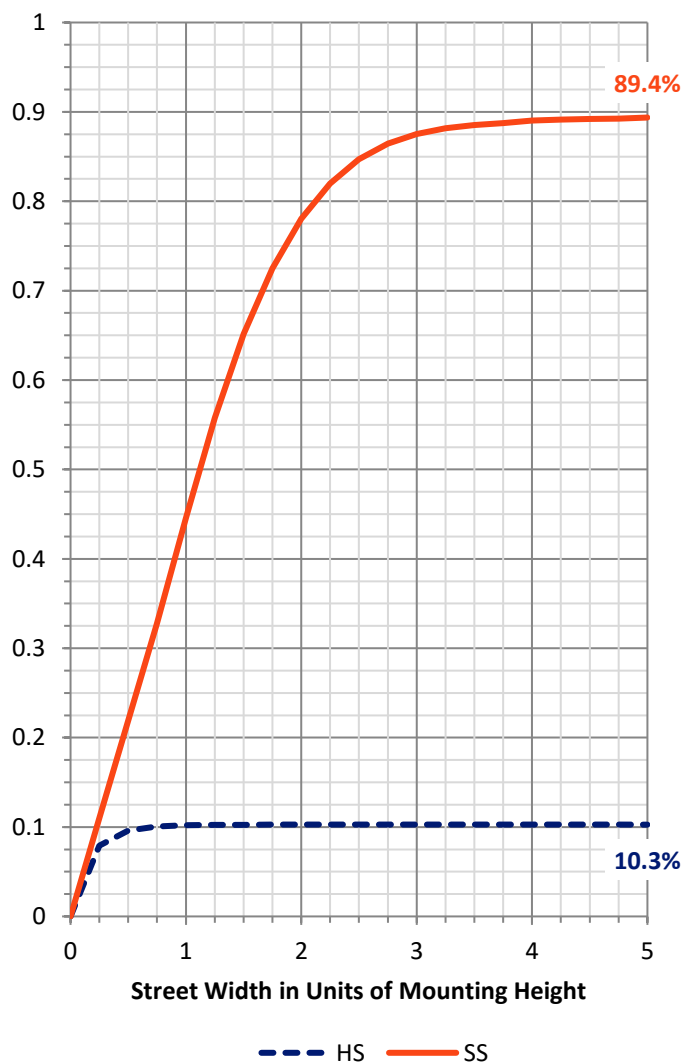
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1906.5	0.0	1906.5
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	16490.6	0.0	16490.6
	% Fixture	89.6	0.0	89.6
Total	Lumens	18397.1	0.0	18397.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.3	1.1
10°-20°	522.1	2.8
20°-30°	814.4	4.4
30°-40°	1376.5	7.5
40°-50°	2673.6	14.5
50°-60°	4489.8	24.4
60°-70°	5358.1	29.1
70°-80°	2823.8	15.3
80°-90°	143.5	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°	18397.1	100.0
0°-180°	18397.1	100.0

Coefficient of Utilization

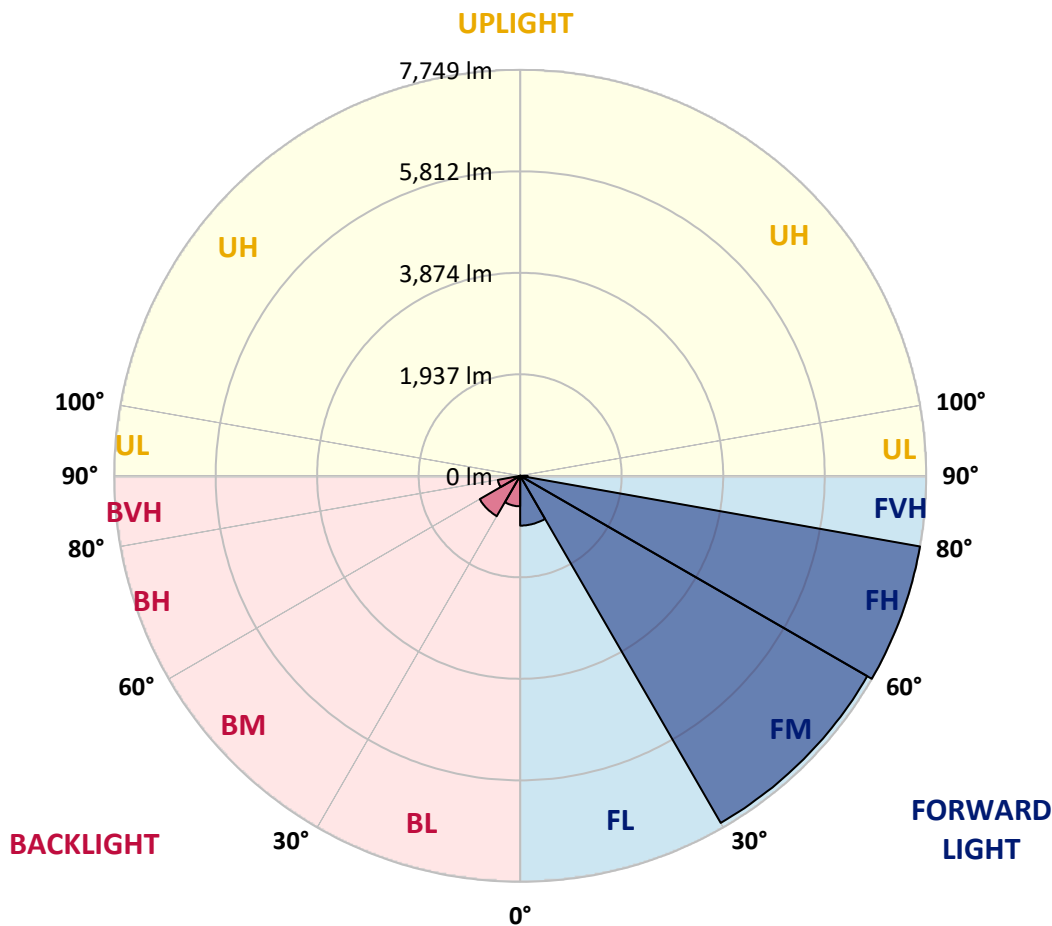


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	949.8	5.2			
FM (30°-60°)	7649.7	41.6			
FH (60°-80°)	7749.0	42.1			G4/12000
FVH (80°-90°)	142.1	0.8			G2/225
BL (0°-30°)	582.0	3.2	B2/1000		
BM (30°-60°)	890.2	4.8	B1/1000		
BH (60°-80°)	433.0	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°	2079.1	2079.1	2079.1	2079.1	2079.1	2079.1	2079.1	2079.1	2079.1	2079.1	2079.1
2.5°	2049.1	2049.1	2049.1	2053.4	2057.7	2057.7	2066.3	2062.0	2062.0	2062.0	2070.6
5°	1993.4	1997.7	2001.9	2010.6	2027.8	2040.5	2062.0	2062.0	2066.3	2074.9	2079.1
7.5°	1916.3	1920.6	1933.4	1950.5	1984.8	2014.8	2049.1	2057.7	2070.6	2092.0	2100.6
10°	1869.1	1877.6	1894.8	1916.3	1954.8	1993.4	2036.3	2049.1	2087.7	2126.3	2147.7
12.5°	1856.2	1860.4	1877.6	1911.9	1959.1	2006.2	2062.0	2074.9	2130.5	2190.6	2224.9
15°	1877.6	1882.0	1890.5	1929.1	1984.8	2044.9	2117.8	2134.9	2203.4	2272.0	2314.8
17.5°	1916.3	1916.3	1924.8	1959.1	2019.1	2087.7	2182.0	2207.8	2284.9	2362.0	2409.2
20°	1942.0	1942.0	1954.8	1989.2	2057.7	2147.7	2259.2	2293.5	2379.2	2465.0	2507.8
22.5°	1967.6	1972.0	1984.8	2023.4	2100.6	2224.9	2353.6	2387.8	2486.4	2576.5	2619.3
25°	2040.5	2036.3	2040.5	2074.9	2164.9	2319.2	2482.2	2525.0	2627.9	2726.4	2747.9
27.5°	2242.0	2233.5	2177.7	2156.3	2224.9	2417.8	2645.0	2687.9	2808.0	2906.6	2906.6
30°	2705.0	2687.9	2550.6	2375.0	2319.2	2507.8	2799.3	2859.4	3013.7	3099.4	3073.7
32.5°	3292.3	3253.7	3078.0	2777.9	2555.0	2627.9	2962.2	3030.9	3228.1	3300.9	3245.2
35°	3935.4	3931.0	3712.4	3326.6	3009.4	2876.5	3172.4	3253.7	3502.5	3566.7	3476.6
37.5°	4617.0	4634.1	4488.4	3956.9	3583.8	3283.8	3451.0	3545.3	3849.6	3926.8	3841.1
40°	5375.8	5371.5	5315.8	4685.6	4274.0	3862.6	3853.9	3939.7	4308.3	4428.4	4308.3
42.5°	6336.1	6327.4	6125.9	5560.1	5109.9	4617.0	4441.3	4471.2	4882.8	5080.0	4904.2
45°	7313.5	7253.4	7022.0	6533.2	6134.6	5551.6	5217.1	5217.1	5568.7	5838.9	5564.3
47.5°	7857.9	7797.9	7703.6	7433.5	7313.5	6661.9	6168.9	6108.8	6383.3	6657.6	6271.7
50°	8573.8	8573.8	8338.0	8235.1	8441.0	7982.3	7219.2	7159.1	7292.1	7510.7	7004.8
52.5°	9139.6	9036.9	8869.5	8959.6	9547.0	9336.9	8269.4	8153.7	8256.6	8312.3	7643.6
55°	9375.4	9276.8	9264.0	9594.0	10502.9	10211.4	9345.5	9242.6	9233.9	8959.6	8200.9
57.5°	9422.6	9336.9	9499.8	10078.5	11433.2	10927.3	10417.3	10340.0	10099.9	9414.0	8771.0
60°	9023.9	9066.8	9461.2	10344.3	11981.9	11548.9	11321.7	11240.3	10687.3	9799.9	9405.5
62.5°	8205.2	8308.0	9045.3	10370.1	11780.5	11801.8	11823.3	11767.6	11141.7	10151.4	10044.2
65°	7236.2	7266.3	8153.7	10014.1	11428.8	11724.7	12191.9	12187.7	11488.9	10545.8	10764.4
67.5°	5963.1	6014.5	6781.8	8813.8	10725.9	11690.4	12676.4	12663.4	11883.2	10996.0	11193.1
70°	4436.9	4501.3	5122.8	6854.7	9156.8	11261.7	13310.8	13319.4	12299.1	11338.8	10897.3
71°	3459.5	3575.3	4226.9	5821.7	8355.2	10828.6	13370.8	13448.0	12346.3	11291.7	10288.6
72.5°	1697.6	1834.8	2653.6	4098.4	6876.2	9859.9	12976.5	13126.5	12050.5	10704.3	8796.7
75°	441.5	467.3	793.1	1676.1	3686.7	6533.2	10464.3	10845.8	9851.3	8149.4	5375.8
77.5°	278.6	287.3	373.0	651.6	1380.4	2482.2	6147.5	6336.1	5628.7	4128.3	1894.8
80°	197.2	201.5	235.8	420.1	805.9	724.5	2212.1	2293.5	2036.3	1093.1	338.7
82.5°	120.0	120.0	171.4	270.1	497.2	394.4	583.0	621.5	548.7	304.4	111.5
85°	68.7	72.8	107.2	184.3	235.8	193.0	218.6	231.5	235.8	201.5	47.2
87.5°	55.7	60.0	94.3	154.3	128.6	94.3	94.3	98.6	102.9	120.0	21.5
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: P237195

CATALOG NUMBER: ARCH-L-AF72-220-D-U-T3-7030-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2079.1	2079.1	2079.1	2079.1	2079.1	2079.1	2079.1	2079.1	2079.1	2079.1	2079.1
2.5°	2070.6	2070.6	2074.9	2070.6	2070.6	2070.6	2074.9	2074.9	2074.9	2083.5	2087.7
5°	2079.1	2079.1	2079.1	2074.9	2070.6	2070.6	2079.1	2083.5	2083.5	2096.2	2096.2
7.5°	2100.6	2100.6	2092.0	2083.5	2074.9	2062.0	2066.3	2070.6	2066.3	2070.6	2070.6
10°	2147.7	2147.7	2134.9	2117.8	2092.0	2053.4	2001.9	1937.7	1877.6	1856.2	1847.7
12.5°	2224.9	2220.5	2194.9	2164.9	2109.1	1976.3	1783.3	1556.2	1367.5	1316.0	1299.0
15°	2310.7	2302.1	2272.0	2220.5	2070.6	1719.0	1316.0	1024.6	844.6	801.6	793.1
17.5°	2400.7	2387.8	2344.9	2242.0	1894.8	1277.5	848.8	643.0	544.4	535.9	540.2
20°	2494.9	2477.8	2417.8	2199.2	1530.4	853.1	548.7	497.2	488.7	488.7	493.0
22.5°	2602.1	2580.7	2499.3	2044.9	1114.6	565.9	471.6	467.3	462.9	458.7	458.7
25°	2726.4	2700.8	2576.5	1766.1	767.3	462.9	450.1	437.2	428.8	420.1	415.8
27.5°	2876.5	2842.3	2636.4	1423.2	527.2	433.0	424.4	402.9	385.8	368.6	368.6
30°	3026.6	2983.7	2619.3	1071.8	428.8	402.9	385.8	360.1	334.4	317.2	312.9
32.5°	3185.1	3142.3	2507.8	720.2	390.0	368.6	347.2	308.6	278.6	257.2	252.9
35°	3420.9	3386.6	2289.2	475.9	351.5	325.8	295.8	257.2	218.6	197.2	193.0
37.5°	3772.5	3729.6	2019.1	364.4	308.6	270.1	244.3	201.5	162.9	141.5	137.2
40°	4244.0	4115.5	1697.6	321.6	270.1	222.9	188.6	145.8	115.7	102.9	102.9
42.5°	4792.7	4488.4	1350.3	291.5	240.1	184.3	137.2	98.6	81.4	77.1	77.1
45°	5375.8	4835.6	1003.1	270.1	210.1	145.8	98.6	68.7	60.0	55.7	55.7
47.5°	5975.9	5118.6	698.7	244.3	175.8	111.5	68.7	51.5	42.8	38.6	38.6
50°	6537.5	5302.9	493.0	218.6	150.0	81.4	51.5	38.6	30.0	30.0	30.0
52.5°	6927.6	5285.8	355.8	188.6	115.7	55.7	34.3	25.6	25.6	25.6	25.6
55°	7270.5	5221.5	278.6	162.9	90.0	38.6	25.6	21.5	21.5	17.2	17.2
57.5°	7562.1	5118.6	235.8	132.9	64.4	30.0	17.2	17.2	12.9	12.9	12.9
60°	7810.7	4990.0	197.2	111.5	42.8	21.5	12.9	8.5	8.5	4.3	8.5
62.5°	8149.4	4908.5	171.4	85.8	30.0	12.9	8.5	4.3	4.3	0.0	0.0
65°	8398.0	4754.2	145.8	60.0	17.2	8.5	4.3	4.3	0.0	0.0	0.0
67.5°	8406.6	4475.5	107.2	34.3	12.9	8.5	4.3	0.0	0.0	0.0	0.0
70°	7729.3	3815.4	68.7	17.2	8.5	4.3	4.3	0.0	0.0	0.0	0.0
71°	7107.7	3378.1	55.7	12.9	8.5	4.3	0.0	0.0	0.0	0.0	0.0
72.5°	5855.9	2482.2	42.8	12.9	4.3	4.3	0.0	0.0	0.0	0.0	0.0
75°	3228.1	900.3	21.5	8.5	4.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1033.1	274.3	12.9	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	175.8	42.8	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	60.0	17.2	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	17.2	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.5	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)