

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: P399630

Luminaire Tested: **ARCH-L-PA3-170-727-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399630
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-170-727-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15746 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G4

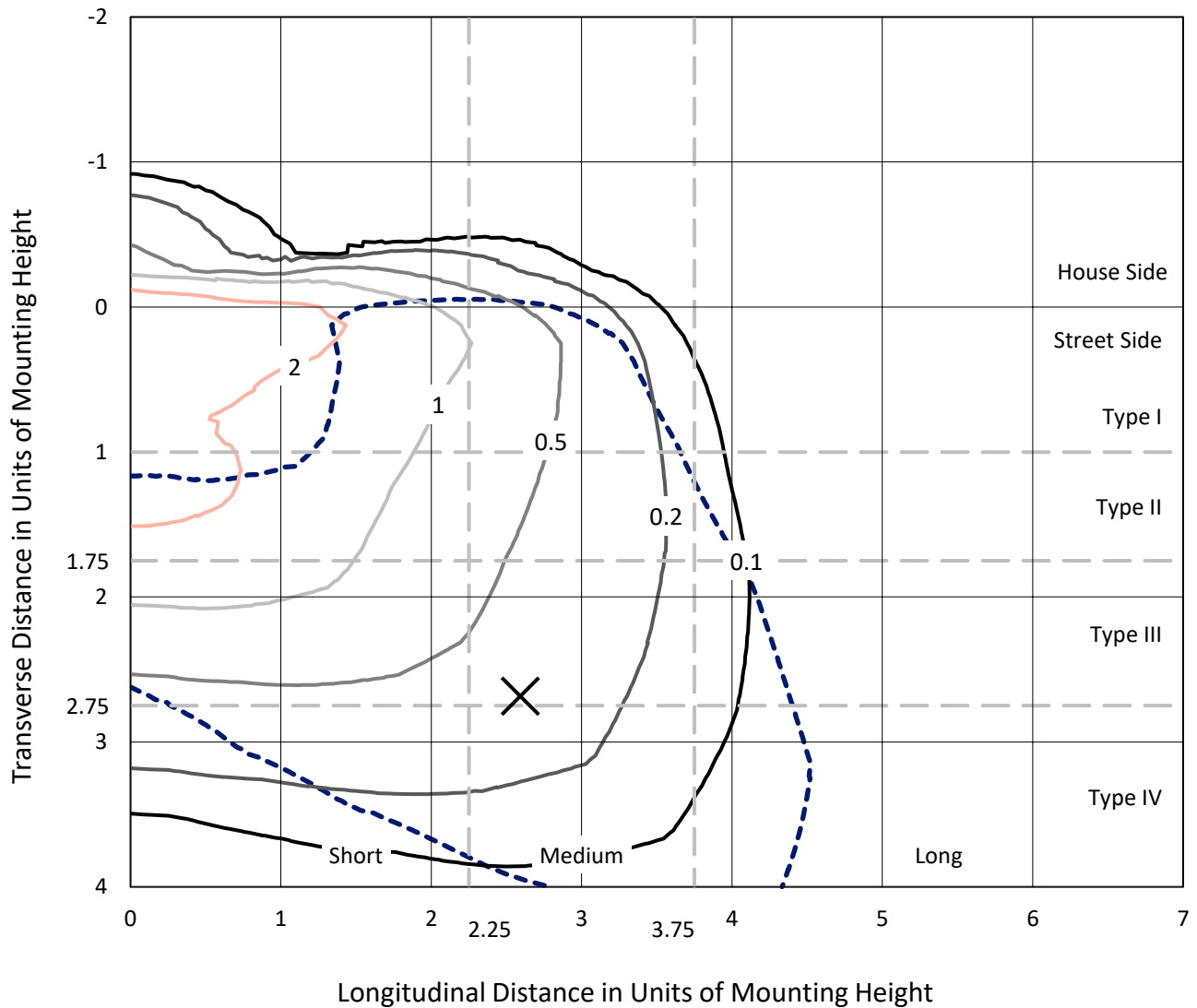
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399630
 CATALOG NUMBER: ARCH-L-PA3-170-727-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

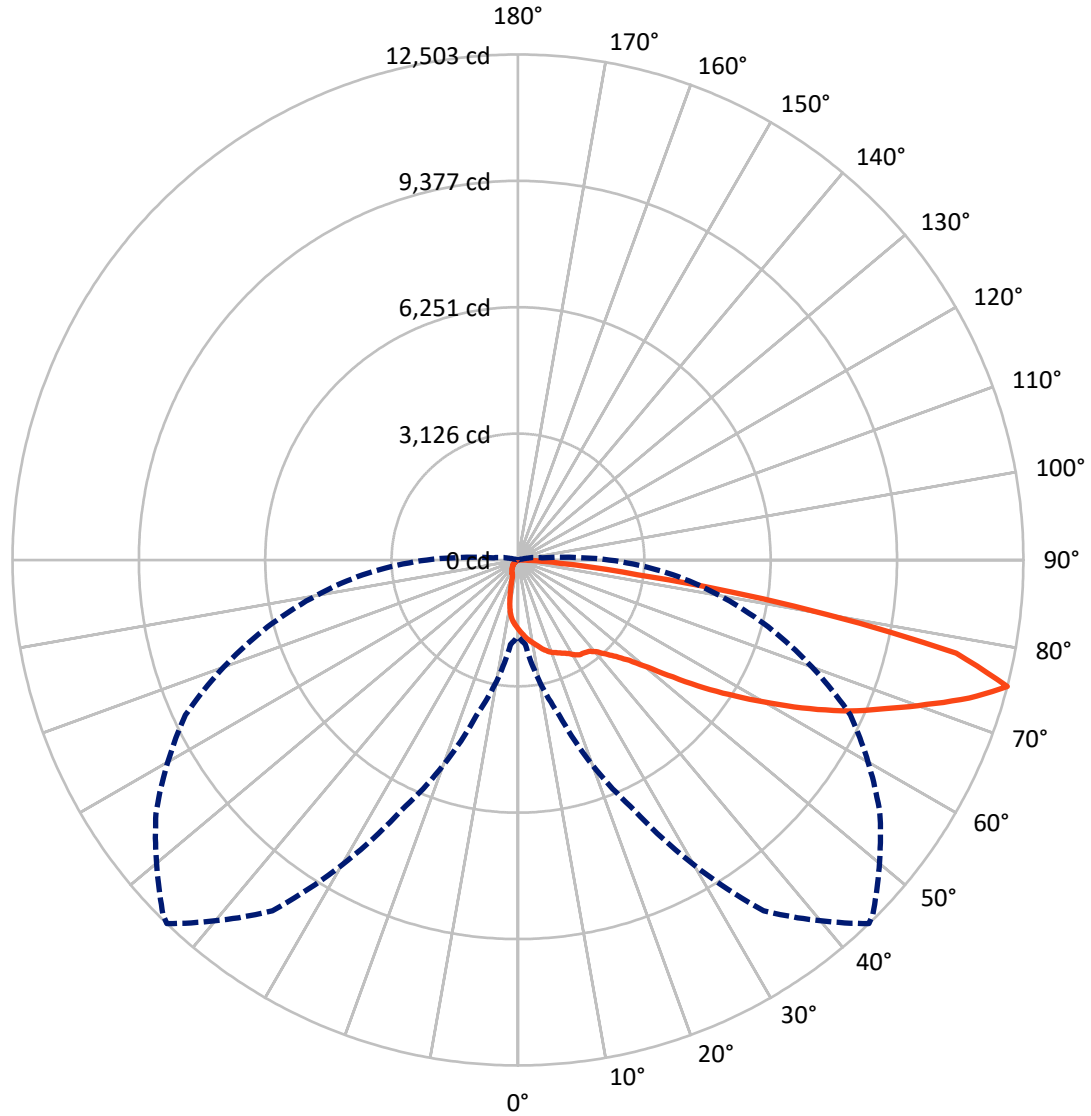
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Medium - N/A

REPORT NUMBER: P399630
CATALOG NUMBER: ARCH-L-PA3-170-727-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P399630
 CATALOG NUMBER: ARCH-L-PA3-170-727-U-T4W-HSS

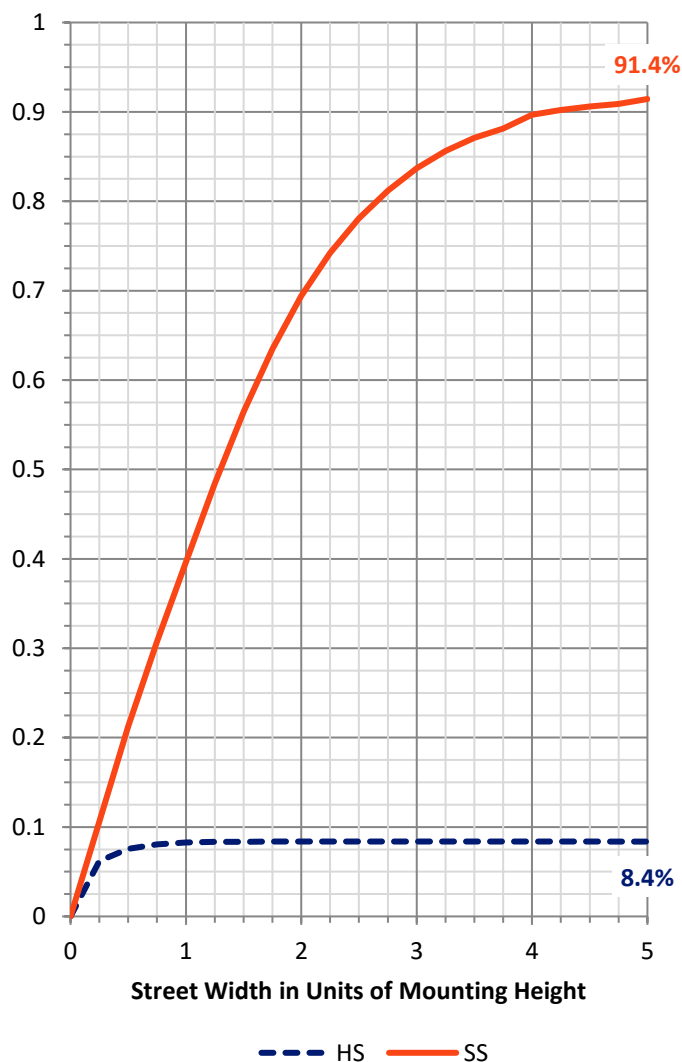
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1327.9	0.0	1327.9
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	14418.1	0.0	14418.1
	% Fixture	91.6	0.0	91.6
Total	Lumens	15746.0	0.0	15746.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	1.0
10°-20°	452.9	2.9
20°-30°	747.4	4.7
30°-40°	1084.8	6.9
40°-50°	1763.5	11.2
50°-60°	3108.8	19.7
60°-70°	4467.9	28.4
70°-80°	3577.8	22.7
80°-90°	381.2	2.4
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°	15746.0	100.0
0°-180°	15746.0	100.0

Coefficient of Utilization



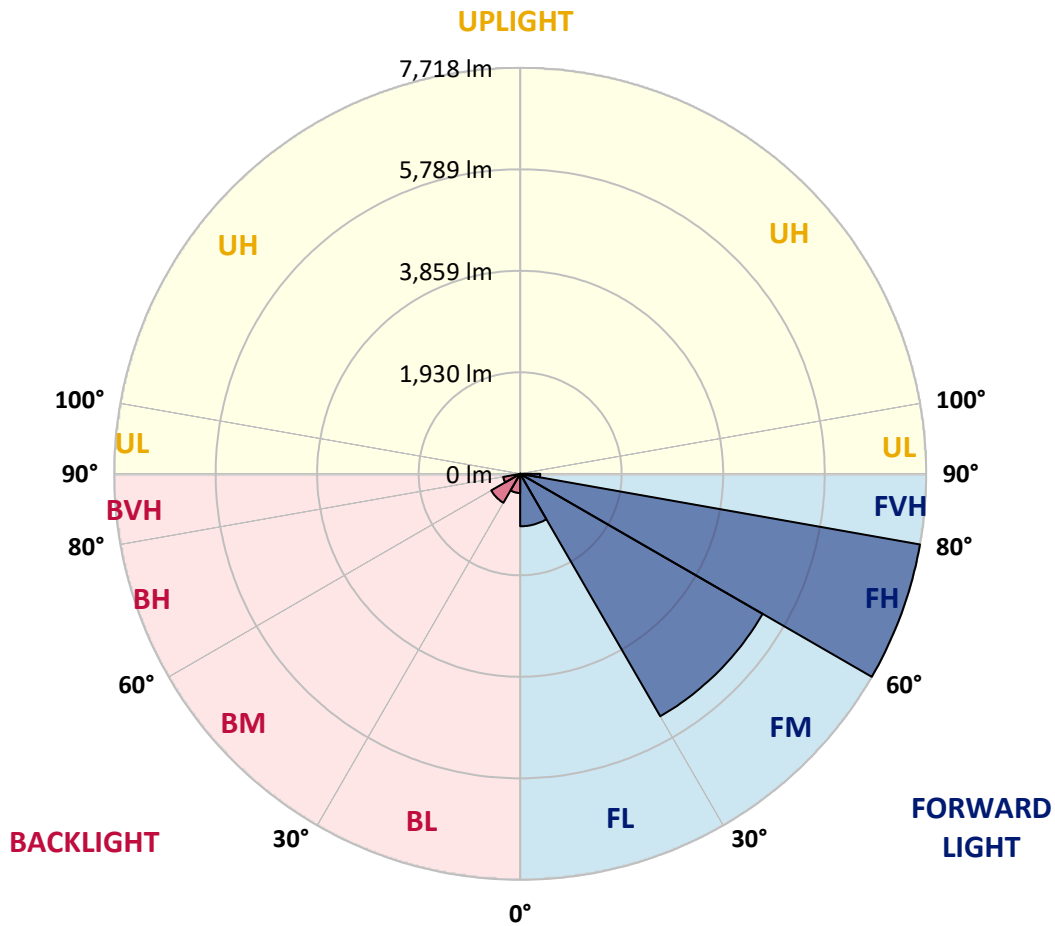
REPORT NUMBER: P399630
 CATALOG NUMBER: ARCH-L-PA3-170-727-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	997.2	6.3			
FM (30°-60°)	5322.3	33.8			
FH (60°-80°)	7718.4	49.0			G4/12000
FVH (80°-90°)	380.2	2.4			G3/500
BL (0°-30°)	364.8	2.3	B1/500		
BM (30°-60°)	634.8	4.0	B1/1000		
BH (60°-80°)	327.4	2.1	B1/500		G1/500
BVH (80°-90°)	1.0	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-G4

Type IV Medium





REPORT NUMBER: P399630

CATALOG NUMBER: ARCH-L-PA3-170-727-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1713.9	1713.9	1713.9	1713.9	1713.9	1713.9	1713.9	1713.9	1713.9	1713.9	1713.9
2.5°	1867.9	1864.9	1856.2	1841.7	1827.2	1812.7	1809.8	1786.5	1760.4	1740.0	1722.6
5°	2033.4	2030.5	2016.0	1984.0	1952.1	1914.3	1911.4	1856.2	1806.8	1751.7	1705.2
7.5°	2204.8	2199.0	2172.9	2123.5	2068.3	2010.2	2004.4	1923.0	1850.4	1777.8	1711.0
10°	2338.4	2332.6	2294.9	2236.8	2161.2	2088.6	2079.9	1995.7	1923.0	1830.1	1740.0
12.5°	2469.2	2457.5	2408.2	2344.3	2251.3	2181.6	2172.9	2085.7	1998.6	1902.7	1792.3
15°	2591.2	2576.6	2530.2	2448.8	2350.1	2283.3	2277.4	2184.5	2094.4	1984.0	1862.0
17.5°	2675.4	2669.6	2614.4	2524.4	2428.5	2373.3	2367.5	2271.6	2181.6	2065.4	1934.7
20°	2719.0	2719.0	2666.7	2567.9	2480.8	2443.0	2434.3	2344.3	2257.1	2146.7	2010.2
22.5°	2727.7	2736.4	2695.7	2588.3	2524.4	2492.4	2486.6	2408.2	2323.9	2222.3	2094.4
25°	2745.1	2745.1	2724.8	2608.6	2562.1	2553.4	2550.5	2480.8	2405.3	2303.6	2178.7
27.5°	2765.5	2765.5	2750.9	2637.7	2620.2	2617.3	2614.4	2582.5	2521.5	2402.4	2277.4
30°	2817.8	2820.7	2809.0	2695.7	2684.1	2716.1	2721.9	2704.5	2628.9	2480.8	2379.1
32.5°	2948.5	2922.3	2890.4	2736.4	2756.8	2797.4	2800.3	2765.5	2684.1	2565.0	2501.1
35°	3276.7	3122.8	2977.5	2771.3	2780.0	2820.7	2826.5	2823.6	2774.2	2672.5	2640.6
37.5°	3581.7	3363.9	3157.6	2852.6	2823.6	2867.1	2878.8	2928.1	2890.4	2820.7	2829.4
40°	3758.9	3674.7	3529.5	3076.3	2910.7	2977.5	2989.1	3064.7	3050.1	3021.1	3076.3
42.5°	4305.1	4310.9	4154.0	3410.4	3070.5	3178.0	3192.5	3253.5	3273.8	3288.3	3422.0
45°	4938.3	4958.7	4920.9	4011.7	3372.6	3407.5	3427.8	3509.1	3584.6	3677.6	3921.6
47.5°	5699.4	5682.0	5542.6	4746.6	3898.4	3703.8	3718.3	3875.1	4005.9	4209.2	4557.8
50°	6373.4	6416.9	6152.6	5432.2	4639.1	4171.4	4156.9	4310.9	4546.2	4830.9	5269.5
52.5°	7053.1	6989.2	6631.9	6111.9	5516.4	4807.6	4764.0	4848.3	5179.4	5516.4	5966.7
55°	7233.2	7239.0	7117.0	6855.6	6248.4	5580.3	5507.7	5501.9	5914.4	6143.9	6698.7
57.5°	7587.6	7602.1	7631.2	7683.5	7395.9	6353.0	6277.5	6196.2	6597.0	6730.7	7433.6
60°	7947.8	7965.2	8142.4	8424.2	8232.5	7186.7	7105.4	6913.7	7137.3	7317.4	8206.3
62.5°	7901.3	8023.3	8537.5	9098.2	9074.9	8101.8	8000.1	7538.2	7680.6	7837.4	8915.1
65°	7134.4	7265.2	8421.3	9284.1	9920.2	9005.2	8839.6	8183.1	8191.8	8380.6	9597.8
67.5°	6448.9	6591.2	7695.1	9205.6	10478.0	9815.7	9644.3	8830.9	8694.4	9008.1	9963.8
70°	6053.8	6196.2	7117.0	8961.6	10634.8	10713.3	10565.1	9571.7	9292.8	9580.4	9554.2
72.5°	4737.9	4961.6	6379.2	8496.8	10803.3	11674.8	11558.6	10509.9	9801.1	8982.0	7273.9
75°	1888.2	2094.4	3982.6	6838.1	10591.3	12502.7	12412.6	10931.1	9072.0	6414.0	3724.1
77.5°	569.4	610.0	1106.8	3381.3	7764.8	11085.1	11056.1	9191.1	6419.8	2977.5	1016.7
80°	188.8	209.2	339.9	932.5	3544.0	6925.3	7056.0	5856.3	2916.5	682.7	206.2
82.5°	78.4	87.1	171.4	374.7	1254.9	2983.3	2939.8	2623.1	1016.7	424.1	75.5
85°	20.3	26.1	78.4	215.0	459.0	1028.3	1080.6	880.2	575.2	351.5	23.2
87.5°	0.0	0.0	37.8	87.1	206.2	310.8	325.3	267.3	325.3	264.3	11.6
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: P399630

CATALOG NUMBER: ARCH-L-PA3-170-727-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1713.9	1713.9	1713.9	1713.9	1713.9	1713.9	1713.9	1713.9	1713.9	1713.9	1713.9
2.5°	1708.1	1693.6	1667.4	1650.0	1626.7	1620.9	1609.3	1594.8	1591.9	1577.4	1580.3
5°	1679.0	1655.8	1609.3	1577.4	1539.6	1528.0	1507.6	1493.1	1481.5	1461.2	1464.1
7.5°	1673.2	1638.4	1574.5	1513.5	1452.5	1408.9	1347.9	1298.5	1257.8	1214.2	1223.0
10°	1693.6	1650.0	1559.9	1475.7	1365.3	1225.9	1066.1	961.5	909.2	856.9	862.8
12.5°	1734.2	1681.9	1565.7	1437.9	1214.2	976.0	755.3	612.9	575.2	551.9	554.8
15°	1795.2	1731.3	1583.2	1365.3	1010.9	705.9	502.5	441.5	456.1	464.8	464.8
17.5°	1859.1	1786.5	1597.7	1234.6	781.4	493.8	409.6	403.8	424.1	444.5	444.5
20°	1937.6	1844.6	1600.6	1069.0	563.6	400.9	386.4	386.4	400.9	424.1	424.1
22.5°	2013.1	1908.5	1574.5	880.2	429.9	371.8	371.8	371.8	380.5	403.8	406.7
25°	2103.1	1987.0	1519.3	679.7	368.9	354.4	354.4	357.3	363.1	383.4	386.4
27.5°	2199.0	2068.3	1426.3	496.7	337.0	334.1	337.0	339.9	342.8	363.1	368.9
30°	2309.4	2158.3	1307.2	371.8	307.9	307.9	316.6	322.4	322.4	339.9	345.7
32.5°	2437.2	2277.4	1164.9	307.9	278.9	276.0	290.5	299.2	299.2	313.7	319.5
35°	2597.0	2399.4	993.5	273.1	255.6	249.8	255.6	270.2	276.0	287.6	290.5
37.5°	2809.0	2544.7	810.5	252.7	238.2	226.6	226.6	229.5	241.1	252.7	255.6
40°	3079.2	2704.5	630.4	238.2	220.8	209.2	200.4	197.5	194.6	203.3	209.2
42.5°	3419.1	2884.6	470.6	223.7	206.2	188.8	177.2	165.6	151.1	148.2	151.1
45°	3854.8	3105.3	348.6	212.1	197.5	171.4	151.1	130.7	104.6	95.9	98.8
47.5°	4369.0	3334.8	273.1	200.4	191.7	151.1	124.9	90.1	63.9	58.1	61.0
50°	4915.1	3555.6	232.4	185.9	180.1	130.7	90.1	55.2	37.8	37.8	40.7
52.5°	5379.9	3680.5	212.1	174.3	162.7	107.5	58.1	32.0	23.2	23.2	26.1
55°	5830.1	3747.3	197.5	162.7	139.4	75.5	32.0	20.3	14.5	14.5	14.5
57.5°	6294.9	3776.4	180.1	148.2	110.4	46.5	17.4	11.6	8.7	8.7	8.7
60°	6707.4	3721.2	154.0	122.0	72.6	23.2	8.7	8.7	5.8	2.9	2.9
62.5°	7053.1	3616.6	107.5	87.1	43.6	11.6	5.8	2.9	0.0	0.0	0.0
65°	7265.2	3448.1	69.7	58.1	26.1	8.7	2.9	0.0	0.0	0.0	0.0
67.5°	7204.2	3131.5	43.6	37.8	11.6	5.8	2.9	0.0	0.0	0.0	0.0
70°	6501.2	2567.9	32.0	23.2	8.7	2.9	0.0	0.0	0.0	0.0	0.0
72.5°	4685.6	1737.1	23.2	14.5	5.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	2254.2	618.7	14.5	11.6	2.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	551.9	136.5	8.7	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	122.0	26.1	5.8	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	40.7	11.6	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.5	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.7	2.9	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)