

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: P237223

Luminaire Tested: **ARCH-L-AF72-100-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237223
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-AF72-100-D-U-T3-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 440mA 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: 10281 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 102
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

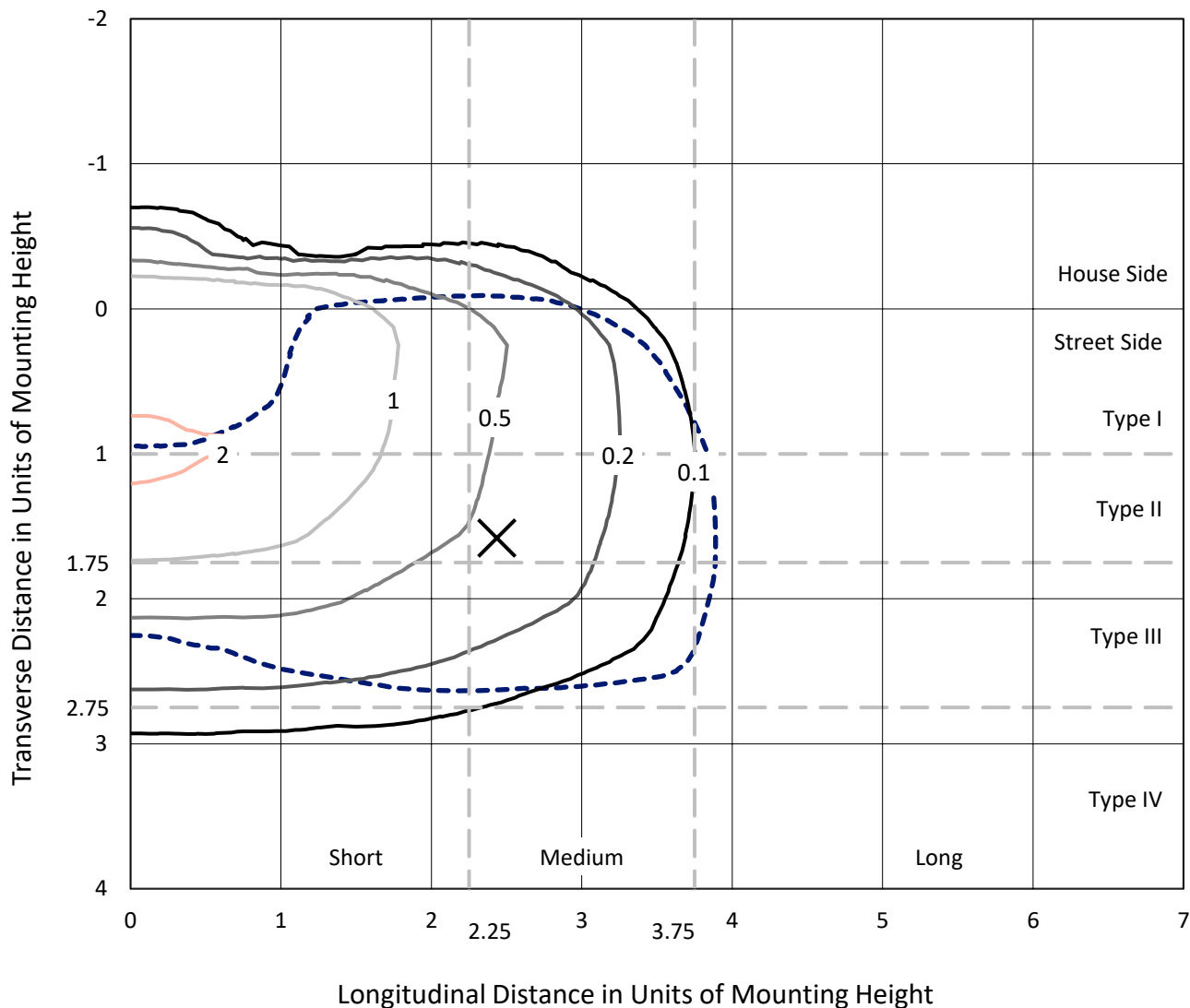


REPORT NUMBER: P237223

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T3-7050-HSS

Iso-Footcandle Lines of Horizontal Illumination

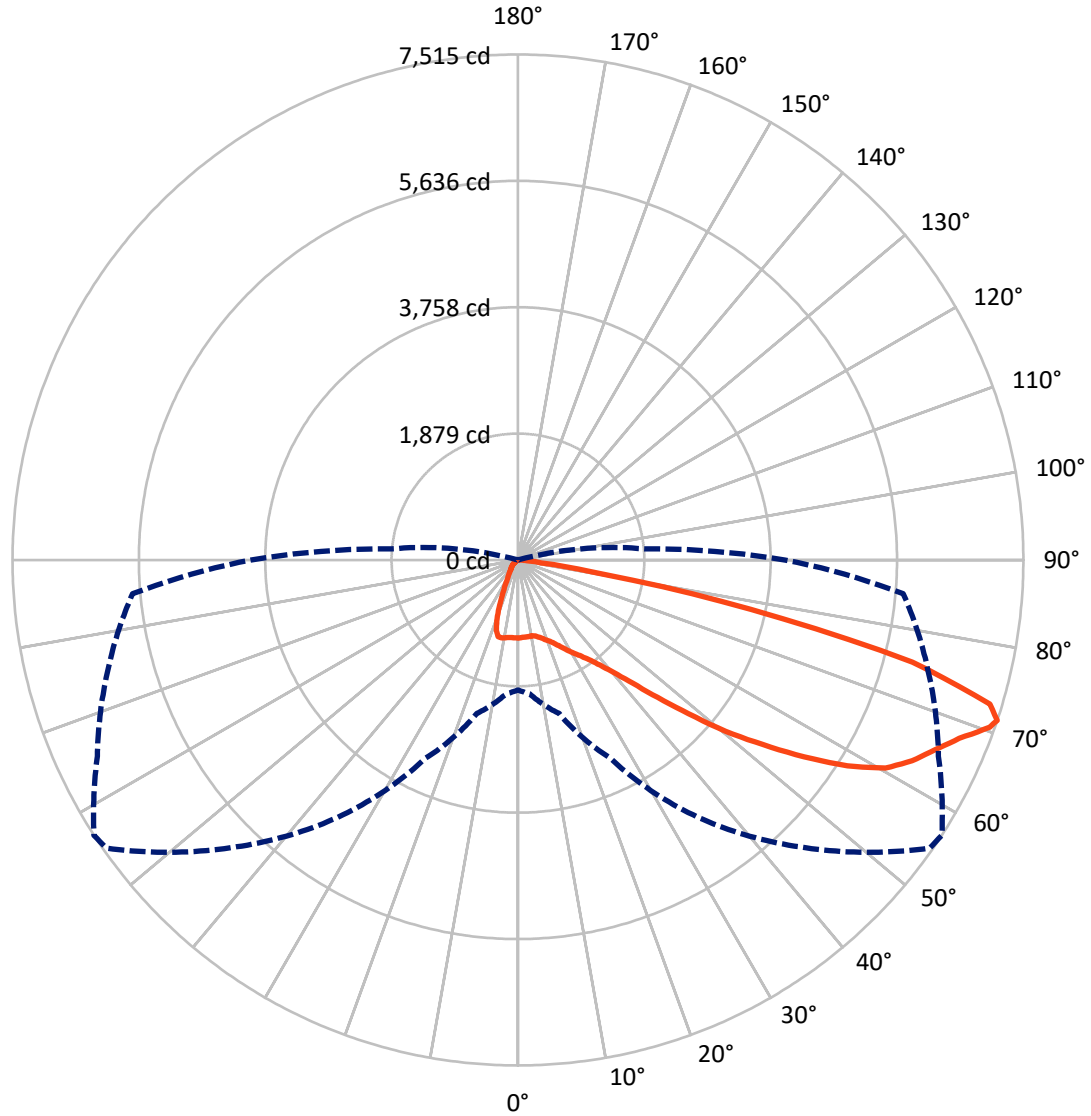
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type III - Medium - N/A

REPORT NUMBER: P237223
CATALOG NUMBER: ARCH-L-AF72-100-D-U-T3-7050-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P237223
 CATALOG NUMBER: ARCH-L-AF72-100-D-U-T3-7050-HSS

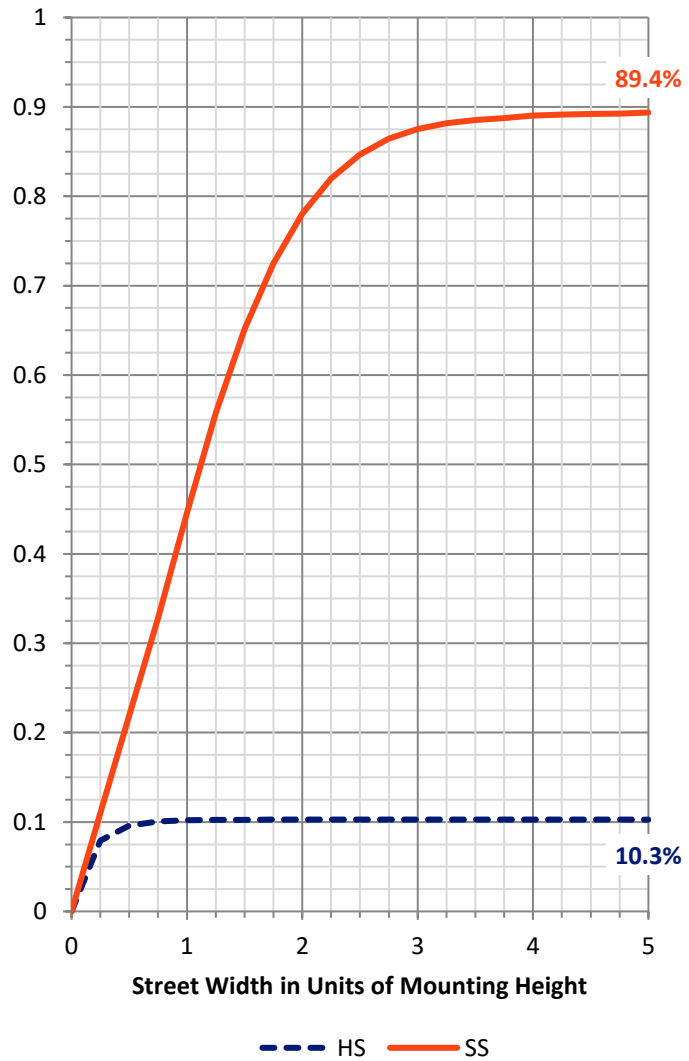
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1065.4	0.0	1065.4
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	9215.6	0.0	9215.6
	% Fixture	89.6	0.0	89.6
Total	Lumens	10281.0	0.0	10281.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.1	1.1
10°-20°	291.8	2.8
20°-30°	455.1	4.4
30°-40°	769.3	7.5
40°-50°	1494.1	14.5
50°-60°	2509.1	24.4
60°-70°	2994.3	29.1
70°-80°	1578.0	15.3
80°-90°	80.2	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°	10281.0	100.0
0°-180°	10281.0	100.0



REPORT NUMBER: P237223

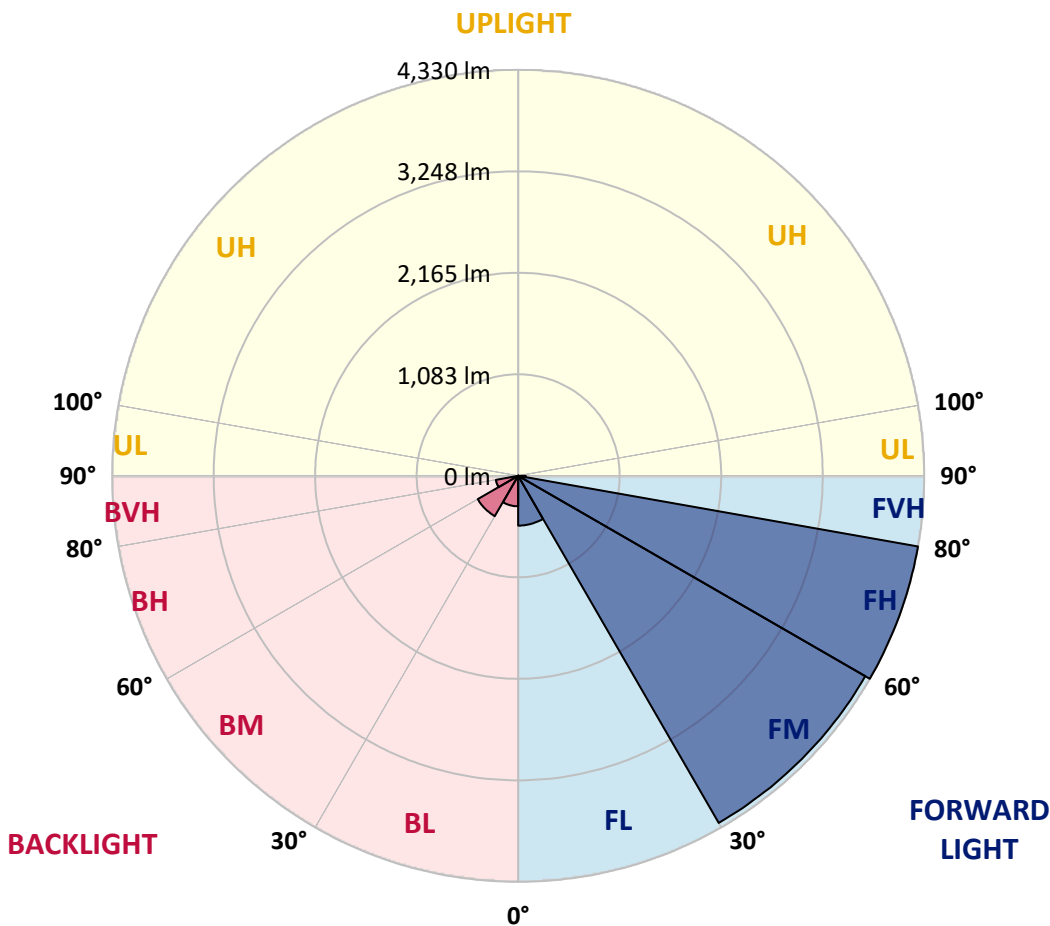
CATALOG NUMBER: ARCH-L-AF72-100-D-U-T3-7050-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	530.8	5.2			
FM (30°-60°)	4274.9	41.6			
FH (60°-80°)	4330.4	42.1			G2/5000
FVH (80°-90°)	79.4	0.8			G1/100
BL (0°-30°)	325.2	3.2	B1/500		
BM (30°-60°)	497.5	4.8	B1/1000		
BH (60°-80°)	242.0	2.4	B1/500		G1/500
BVH (80°-90°)	0.8	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-G2

Type III Medium





REPORT NUMBER: P237223

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T3-7050-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1161.9	1161.9	1161.9	1161.9	1161.9	1161.9	1161.9	1161.9	1161.9	1161.9	1161.9
2.5°	1145.1	1145.1	1145.1	1147.5	1149.9	1149.9	1154.7	1152.3	1152.3	1152.3	1157.1
5°	1114.0	1116.4	1118.8	1123.6	1133.2	1140.3	1152.3	1152.3	1154.7	1159.5	1161.9
7.5°	1070.9	1073.3	1080.5	1090.0	1109.2	1126.0	1145.1	1149.9	1157.1	1169.1	1173.9
10°	1044.5	1049.3	1058.9	1070.9	1092.4	1114.0	1138.0	1145.1	1166.7	1188.3	1200.2
12.5°	1037.3	1039.7	1049.3	1068.5	1094.8	1121.2	1152.3	1159.5	1190.7	1224.2	1243.4
15°	1049.3	1051.7	1056.5	1078.1	1109.2	1142.7	1183.5	1193.1	1231.4	1269.7	1293.7
17.5°	1070.9	1070.9	1075.7	1094.8	1128.4	1166.7	1219.4	1233.8	1276.9	1320.0	1346.4
20°	1085.2	1085.2	1092.4	1111.6	1149.9	1200.2	1262.5	1281.7	1329.6	1377.5	1401.5
22.5°	1099.6	1102.0	1109.2	1130.8	1173.9	1243.4	1315.2	1334.4	1389.5	1439.8	1463.8
25°	1140.3	1138.0	1140.3	1159.5	1209.8	1296.1	1387.1	1411.1	1468.6	1523.7	1535.6
27.5°	1252.9	1248.2	1217.0	1205.0	1243.4	1351.2	1478.1	1502.1	1569.2	1624.3	1624.3
30°	1511.7	1502.1	1425.4	1327.2	1296.1	1401.5	1564.4	1597.9	1684.2	1732.1	1717.7
32.5°	1839.9	1818.3	1720.1	1552.4	1427.8	1468.6	1655.4	1693.8	1804.0	1844.7	1813.5
35°	2199.2	2196.8	2074.7	1859.1	1681.8	1607.5	1772.8	1818.3	1957.3	1993.2	1942.9
37.5°	2580.2	2589.7	2508.3	2211.2	2002.8	1835.1	1928.5	1981.2	2151.3	2194.5	2146.5
40°	3004.2	3001.8	2970.7	2618.5	2388.5	2158.5	2153.7	2201.6	2407.7	2474.7	2407.7
42.5°	3540.8	3536.0	3423.4	3107.2	2855.7	2580.2	2481.9	2498.7	2728.7	2838.9	2740.7
45°	4087.0	4053.5	3924.1	3651.0	3428.2	3102.4	2915.6	2915.6	3112.0	3262.9	3109.6
47.5°	4391.3	4357.8	4305.1	4154.1	4087.0	3722.9	3447.4	3413.9	3567.2	3720.5	3504.9
50°	4791.4	4791.4	4659.6	4602.1	4717.1	4460.8	4034.3	4000.8	4075.1	4197.2	3914.6
52.5°	5107.6	5050.1	4956.7	5007.0	5335.2	5217.8	4621.3	4556.6	4614.1	4645.2	4271.5
55°	5239.4	5184.3	5177.1	5361.6	5869.4	5706.5	5222.6	5165.1	5160.3	5007.0	4583.0
57.5°	5265.7	5217.8	5308.8	5632.3	6389.3	6106.6	5821.5	5778.4	5644.2	5260.9	4901.6
60°	5042.9	5066.9	5287.3	5780.8	6695.9	6454.0	6327.0	6281.5	5972.5	5476.5	5256.1
62.5°	4585.3	4642.8	5054.9	5795.2	6583.4	6595.3	6607.3	6576.2	6226.4	5673.0	5613.1
65°	4043.9	4060.7	4556.6	5596.3	6386.9	6552.2	6813.3	6810.9	6420.4	5893.4	6015.6
67.5°	3332.4	3361.2	3790.0	4925.5	5994.0	6533.0	7084.1	7076.9	6640.8	6144.9	6255.1
70°	2479.5	2515.5	2862.8	3830.7	5117.2	6293.5	7438.6	7443.4	6873.2	6336.6	6089.8
71°	1933.3	1998.0	2362.1	3253.3	4669.2	6051.5	7472.2	7515.3	6899.6	6310.2	5749.7
72.5°	948.7	1025.4	1482.9	2290.3	3842.7	5510.1	7251.7	7335.6	6734.3	5982.0	4916.0
75°	246.8	261.1	443.2	936.7	2060.3	3651.0	5847.9	6061.1	5505.3	4554.2	3004.2
77.5°	155.7	160.5	208.4	364.1	771.4	1387.1	3435.4	3540.8	3145.5	2307.0	1058.9
80°	110.2	112.6	131.8	234.8	450.4	404.9	1236.2	1281.7	1138.0	610.9	189.3
82.5°	67.1	67.1	95.8	150.9	277.9	220.4	325.8	347.4	306.6	170.1	62.3
85°	38.3	40.7	59.9	103.0	131.8	107.8	122.2	129.4	131.8	112.6	26.4
87.5°	31.1	33.5	52.7	86.2	71.9	52.7	52.7	55.1	57.5	67.1	12.0
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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CATALOG NUMBER: ARCH-L-AF72-100-D-U-T3-7050-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1161.9	1161.9	1161.9	1161.9	1161.9	1161.9	1161.9	1161.9	1161.9	1161.9	1161.9
2.5°	1157.1	1157.1	1159.5	1157.1	1157.1	1157.1	1159.5	1159.5	1159.5	1164.3	1166.7
5°	1161.9	1161.9	1161.9	1159.5	1157.1	1157.1	1161.9	1164.3	1164.3	1171.5	1171.5
7.5°	1173.9	1173.9	1169.1	1164.3	1159.5	1152.3	1154.7	1157.1	1154.7	1157.1	1157.1
10°	1200.2	1200.2	1193.1	1183.5	1169.1	1147.5	1118.8	1082.9	1049.3	1037.3	1032.5
12.5°	1243.4	1241.0	1226.6	1209.8	1178.7	1104.4	996.6	869.6	764.2	735.5	725.9
15°	1291.3	1286.5	1269.7	1241.0	1157.1	960.7	735.5	572.6	472.0	448.0	443.2
17.5°	1341.6	1334.4	1310.4	1252.9	1058.9	713.9	474.3	359.4	304.3	299.5	301.9
20°	1394.3	1384.7	1351.2	1229.0	855.3	476.7	306.6	277.9	273.1	273.1	275.5
22.5°	1454.2	1442.2	1396.7	1142.7	622.9	316.2	263.5	261.1	258.7	256.3	256.3
25°	1523.7	1509.3	1439.8	987.0	428.8	258.7	251.5	244.4	239.6	234.8	232.4
27.5°	1607.5	1588.3	1473.3	795.4	294.7	242.0	237.2	225.2	215.6	206.0	206.0
30°	1691.4	1667.4	1463.8	598.9	239.6	225.2	215.6	201.2	186.9	177.3	174.9
32.5°	1780.0	1756.0	1401.5	402.5	218.0	206.0	194.1	172.5	155.7	143.7	141.3
35°	1911.8	1892.6	1279.3	265.9	196.4	182.1	165.3	143.7	122.2	110.2	107.8
37.5°	2108.2	2084.2	1128.4	203.6	172.5	150.9	136.6	112.6	91.0	79.1	76.7
40°	2371.7	2299.9	948.7	179.7	150.9	124.6	105.4	81.5	64.7	57.5	57.5
42.5°	2678.4	2508.3	754.6	162.9	134.2	103.0	76.7	55.1	45.5	43.1	43.1
45°	3004.2	2702.3	560.6	150.9	117.4	81.5	55.1	38.3	33.5	31.1	31.1
47.5°	3339.6	2860.5	390.5	136.6	98.2	62.3	38.3	28.7	24.0	21.6	21.6
50°	3653.4	2963.5	275.5	122.2	83.8	45.5	28.7	21.6	16.8	16.8	16.8
52.5°	3871.4	2953.9	198.8	105.4	64.7	31.1	19.2	14.4	14.4	14.4	14.4
55°	4063.1	2917.9	155.7	91.0	50.3	21.6	14.4	12.0	12.0	9.6	9.6
57.5°	4226.0	2860.5	131.8	74.3	35.9	16.8	9.6	9.6	7.2	7.2	7.2
60°	4364.9	2788.6	110.2	62.3	24.0	12.0	7.2	4.8	4.8	2.4	4.8
62.5°	4554.2	2743.1	95.8	47.9	16.8	7.2	4.8	2.4	2.4	0.0	0.0
65°	4693.2	2656.8	81.5	33.5	9.6	4.8	2.4	2.4	0.0	0.0	0.0
67.5°	4697.9	2501.1	59.9	19.2	7.2	4.8	2.4	0.0	0.0	0.0	0.0
70°	4319.4	2132.2	38.3	9.6	4.8	2.4	2.4	0.0	0.0	0.0	0.0
71°	3972.1	1887.8	31.1	7.2	4.8	2.4	0.0	0.0	0.0	0.0	0.0
72.5°	3272.5	1387.1	24.0	7.2	2.4	2.4	0.0	0.0	0.0	0.0	0.0
75°	1804.0	503.1	12.0	4.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	577.4	153.3	7.2	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	98.2	24.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	33.5	9.6	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.6	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.8	2.4	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)