

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: P237222

Luminaire Tested: **ARCH-L-AF72-90-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237222
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-AF72-90-D-U-T3-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 400mA 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: 9548 lumens
Efficiency: N/A
Efficacy: 102.7 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

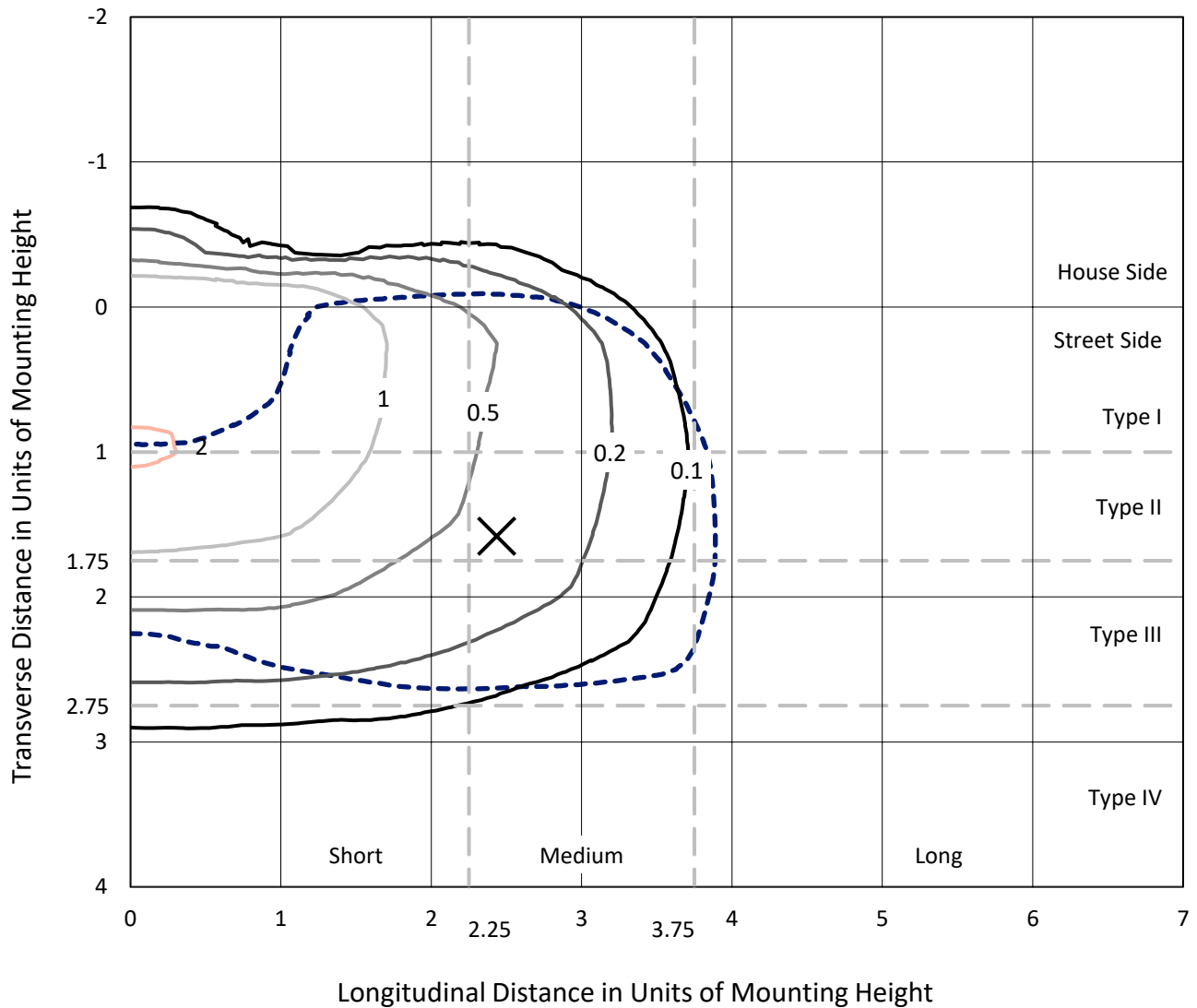
Input Watts (W): 93
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

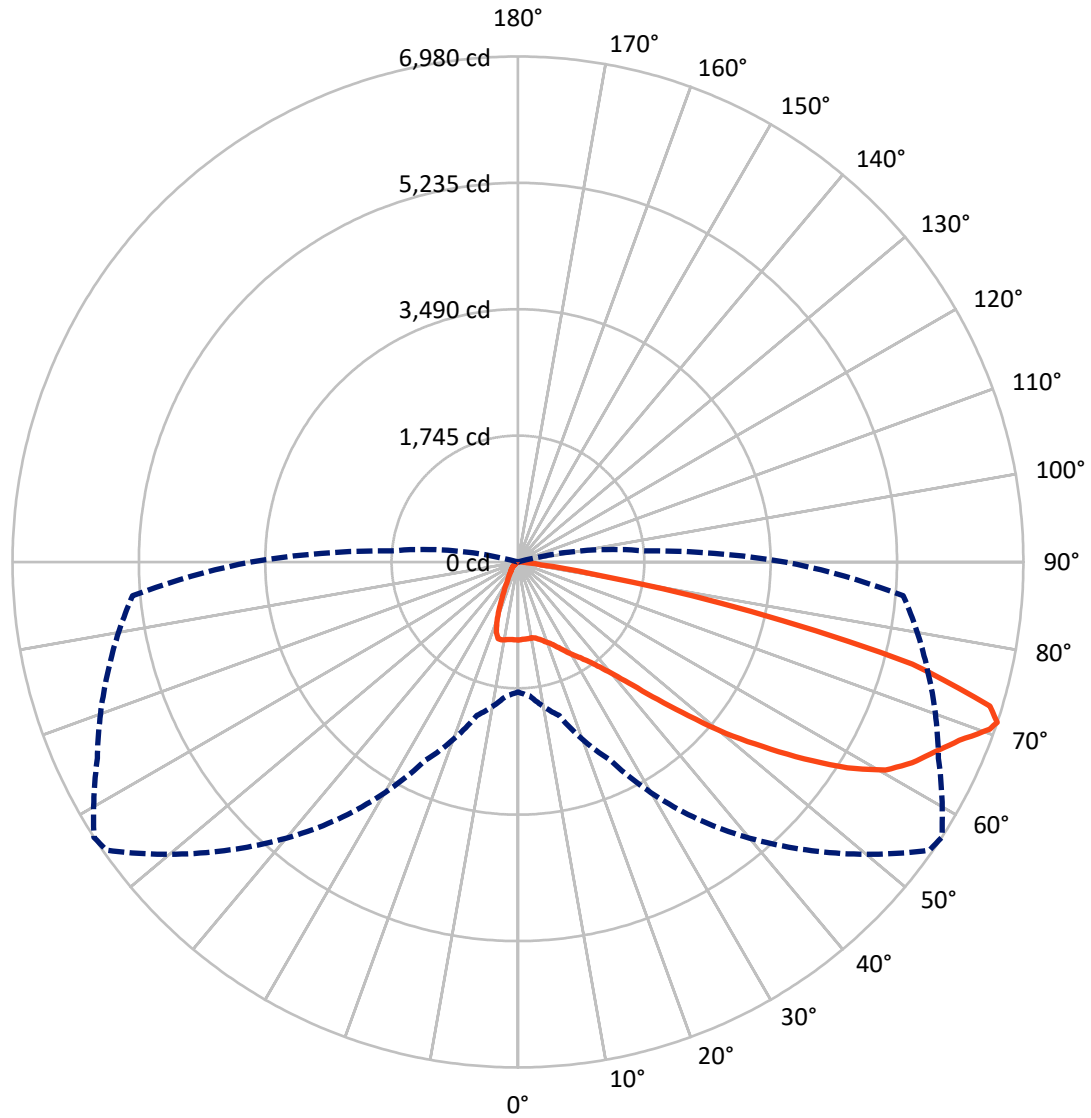
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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

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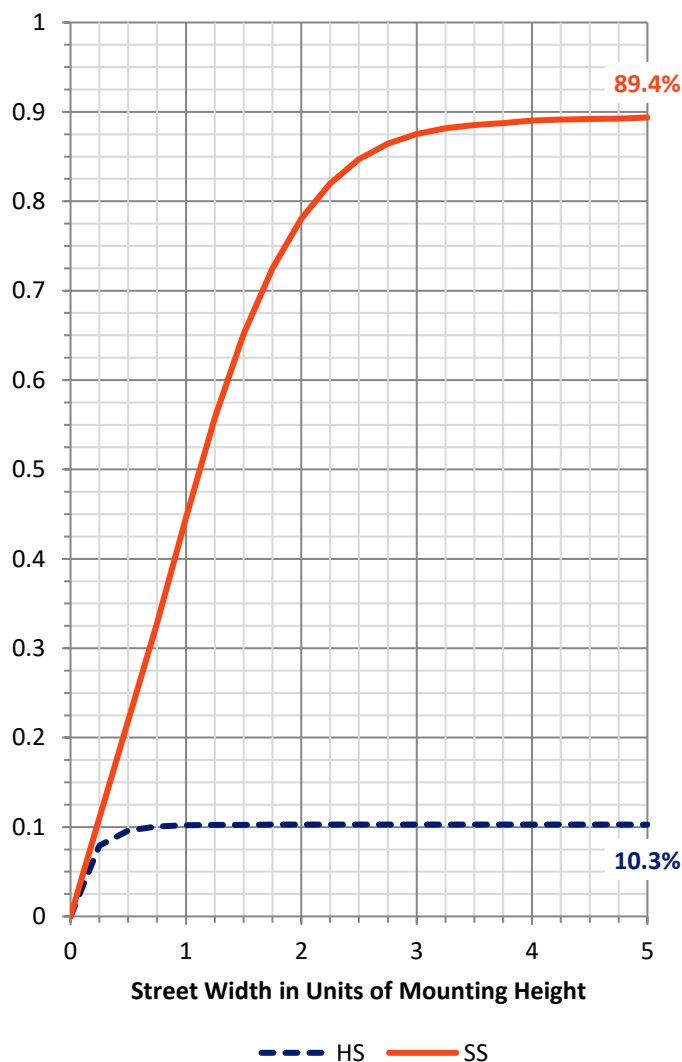
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	989.5	0.0	989.5
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	8558.5	0.0	8558.5
	% Fixture	89.6	0.0	89.6
Total	Lumens	9548.0	0.0	9548.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.3	1.1
10°-20°	271.0	2.8
20°-30°	422.7	4.4
30°-40°	714.4	7.5
40°-50°	1387.6	14.5
50°-60°	2330.2	24.4
60°-70°	2780.8	29.1
70°-80°	1465.5	15.3
80°-90°	74.5	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°	9548.0	100.0
0°-180°	9548.0	100.0

Coefficient of Utilization



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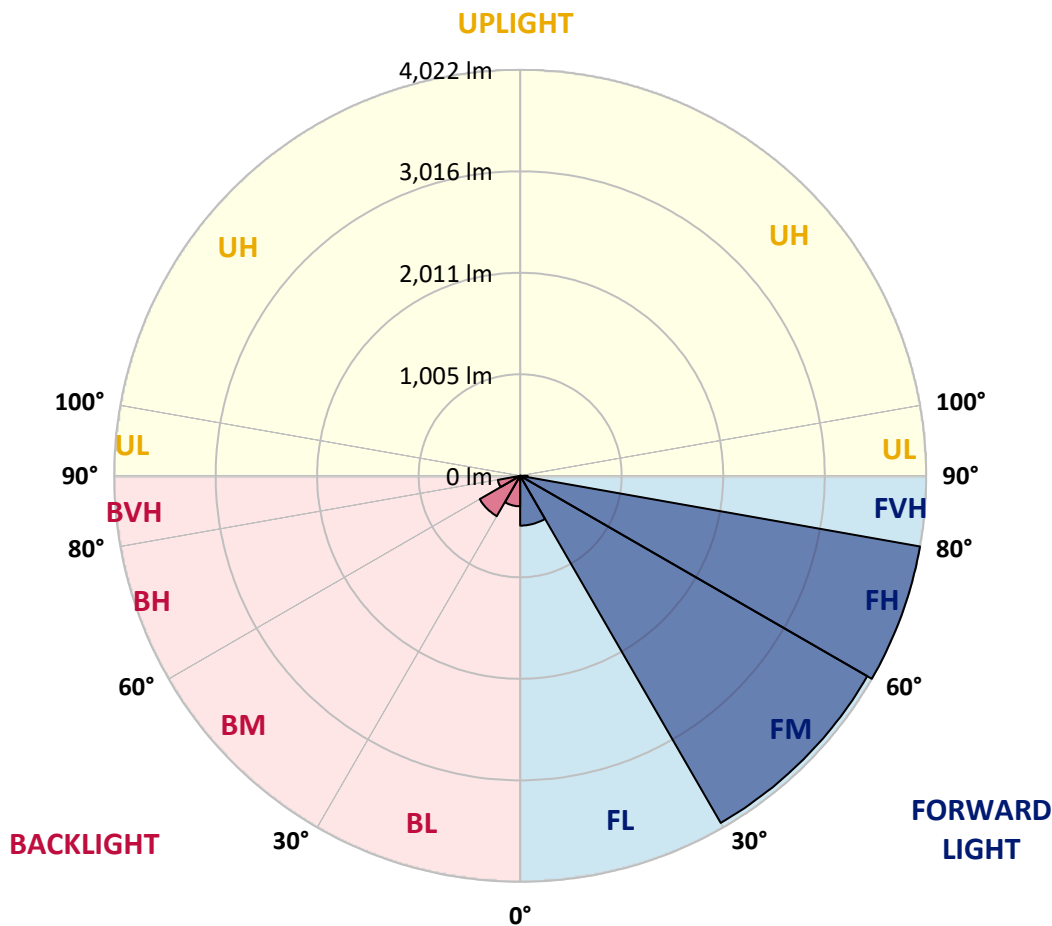
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	492.9	5.2			
FM (30°-60°)	3970.1	41.6			
FH (60°-80°)	4021.7	42.1			G2/5000
FVH (80°-90°)	73.8	0.8			G1/100
BL (0°-30°)	302.0	3.2	B1/500		
BM (30°-60°)	462.0	4.8	B1/1000		
BH (60°-80°)	224.7	2.4	B1/500		G1/500
BVH (80°-90°)	0.7	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1079.1	1079.1	1079.1	1079.1	1079.1	1079.1	1079.1	1079.1	1079.1	1079.1	1079.1
2.5°	1063.5	1063.5	1063.5	1065.7	1067.9	1067.9	1072.4	1070.2	1070.2	1070.2	1074.6
5°	1034.6	1036.8	1039.0	1043.5	1052.4	1059.0	1070.2	1070.2	1072.4	1076.8	1079.1
7.5°	994.5	996.7	1003.4	1012.3	1030.1	1045.7	1063.5	1067.9	1074.6	1085.7	1090.2
10°	970.0	974.5	983.4	994.5	1014.5	1034.6	1056.8	1063.5	1083.5	1103.5	1114.7
12.5°	963.4	965.6	974.5	992.3	1016.8	1041.2	1070.2	1076.8	1105.8	1136.9	1154.7
15°	974.5	976.7	981.2	1001.2	1030.1	1061.3	1099.1	1108.0	1143.6	1179.2	1201.4
17.5°	994.5	994.5	999.0	1016.8	1047.9	1083.5	1132.5	1145.8	1185.9	1225.9	1250.4
20°	1007.9	1007.9	1014.5	1032.3	1067.9	1114.7	1172.5	1190.3	1234.8	1279.3	1301.6
22.5°	1021.2	1023.4	1030.1	1050.1	1090.2	1154.7	1221.5	1239.3	1290.4	1337.2	1359.4
25°	1059.0	1056.8	1059.0	1076.8	1123.6	1203.7	1288.2	1310.5	1363.9	1415.0	1426.2
27.5°	1163.6	1159.2	1130.2	1119.1	1154.7	1254.8	1372.8	1395.0	1457.3	1508.5	1508.5
30°	1403.9	1395.0	1323.8	1232.6	1203.7	1301.6	1452.8	1484.0	1564.1	1608.6	1595.2
32.5°	1708.7	1688.7	1597.5	1441.7	1326.0	1363.9	1537.4	1573.0	1675.3	1713.2	1684.2
35°	2042.4	2040.2	1926.7	1726.5	1561.9	1492.9	1646.4	1688.7	1817.7	1851.1	1804.4
37.5°	2396.2	2405.1	2329.5	2053.6	1860.0	1704.3	1791.0	1840.0	1997.9	2038.0	1993.5
40°	2790.0	2787.8	2758.9	2431.8	2218.2	2004.6	2000.2	2044.7	2236.0	2298.3	2236.0
42.5°	3288.4	3283.9	3179.4	2885.7	2652.1	2396.2	2305.0	2320.6	2534.1	2636.5	2545.3
45°	3795.7	3764.5	3644.4	3390.7	3183.8	2881.2	2707.7	2707.7	2890.1	3030.3	2887.9
47.5°	4078.2	4047.1	3998.1	3857.9	3795.7	3457.5	3201.6	3170.5	3312.9	3455.2	3255.0
50°	4449.8	4449.8	4327.4	4274.0	4380.8	4142.7	3746.7	3715.6	3784.5	3898.0	3635.5
52.5°	4743.5	4690.1	4603.3	4650.0	4954.8	4845.8	4291.8	4231.7	4285.1	4314.1	3967.0
55°	4865.8	4814.6	4808.0	4979.3	5451.0	5299.7	4850.2	4796.9	4792.4	4650.0	4256.2
57.5°	4890.3	4845.8	4930.3	5230.7	5933.8	5671.2	5406.5	5366.4	5241.8	4885.8	4552.1
60°	4683.4	4705.6	4910.3	5368.6	6218.6	5993.8	5875.9	5833.6	5546.6	5086.1	4881.4
62.5°	4258.4	4311.8	4694.5	5382.0	6114.0	6125.1	6136.2	6107.3	5782.5	5268.5	5212.9
65°	3755.6	3771.2	4231.7	5197.3	5931.5	6085.1	6327.6	6325.3	5962.7	5473.2	5586.7
67.5°	3094.8	3121.5	3519.8	4574.4	5566.7	6067.3	6579.0	6572.3	6167.4	5706.8	5809.2
70°	2302.8	2336.1	2658.7	3557.6	4752.4	5844.8	6908.3	6912.7	6383.2	5884.8	5655.7
71°	1795.5	1855.6	2193.7	3021.4	4336.3	5620.1	6939.4	6979.5	6407.7	5860.3	5339.7
72.5°	881.1	952.3	1377.2	2127.0	3568.7	5117.2	6734.7	6812.6	6254.1	5555.5	4565.5
75°	229.2	242.5	411.6	869.9	1913.4	3390.7	5430.9	5629.0	5112.8	4229.5	2790.0
77.5°	144.6	149.1	193.6	338.2	716.4	1288.2	3190.5	3288.4	2921.3	2142.6	983.4
80°	102.3	104.6	122.4	218.0	418.3	376.0	1148.0	1190.3	1056.8	567.3	175.8
82.5°	62.3	62.3	89.0	140.2	258.1	204.7	302.6	322.6	284.8	158.0	57.8
85°	35.6	37.8	55.6	95.7	122.4	100.1	113.5	120.1	122.4	104.6	24.5
87.5°	28.9	31.1	48.9	80.1	66.7	48.9	48.9	51.2	53.4	62.3	11.1
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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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1079.1	1079.1	1079.1	1079.1	1079.1	1079.1	1079.1	1079.1	1079.1	1079.1	1079.1
2.5°	1074.6	1074.6	1076.8	1074.6	1074.6	1074.6	1076.8	1076.8	1076.8	1081.3	1083.5
5°	1079.1	1079.1	1079.1	1076.8	1074.6	1074.6	1079.1	1081.3	1081.3	1088.0	1088.0
7.5°	1090.2	1090.2	1085.7	1081.3	1076.8	1070.2	1072.4	1074.6	1072.4	1074.6	1074.6
10°	1114.7	1114.7	1108.0	1099.1	1085.7	1065.7	1039.0	1005.6	974.5	963.4	958.9
12.5°	1154.7	1152.5	1139.1	1123.6	1094.6	1025.7	925.6	807.6	709.7	683.0	674.1
15°	1199.2	1194.8	1179.2	1152.5	1074.6	892.2	683.0	531.7	438.3	416.1	411.6
17.5°	1245.9	1239.3	1217.0	1163.6	983.4	663.0	440.5	333.7	282.6	278.1	280.3
20°	1294.9	1286.0	1254.8	1141.4	794.3	442.8	284.8	258.1	253.6	253.6	255.9
22.5°	1350.5	1339.4	1297.1	1061.3	578.5	293.7	244.7	242.5	240.3	238.1	238.1
25°	1415.0	1401.7	1337.2	916.7	398.3	240.3	233.6	226.9	222.5	218.0	215.8
27.5°	1492.9	1475.1	1368.3	738.7	273.7	224.7	220.3	209.1	200.2	191.3	191.3
30°	1570.8	1548.5	1359.4	556.2	222.5	209.1	200.2	186.9	173.5	164.6	162.4
32.5°	1653.1	1630.8	1301.6	373.8	202.5	191.3	180.2	160.2	144.6	133.5	131.3
35°	1775.5	1757.7	1188.1	247.0	182.4	169.1	153.5	133.5	113.5	102.3	100.1
37.5°	1957.9	1935.6	1047.9	189.1	160.2	140.2	126.8	104.6	84.5	73.4	71.2
40°	2202.6	2135.9	881.1	166.9	140.2	115.7	97.9	75.6	60.1	53.4	53.4
42.5°	2487.4	2329.5	700.8	151.3	124.6	95.7	71.2	51.2	42.3	40.0	40.0
45°	2790.0	2509.7	520.6	140.2	109.0	75.6	51.2	35.6	31.1	28.9	28.9
47.5°	3101.5	2656.5	362.7	126.8	91.2	57.8	35.6	26.7	22.2	20.0	20.0
50°	3392.9	2752.2	255.9	113.5	77.9	42.3	26.7	20.0	15.6	15.6	15.6
52.5°	3595.4	2743.3	184.7	97.9	60.1	28.9	17.8	13.3	13.3	13.3	13.3
55°	3773.4	2709.9	144.6	84.5	46.7	20.0	13.3	11.1	11.1	8.9	8.9
57.5°	3924.7	2656.5	122.4	69.0	33.4	15.6	8.9	8.9	6.7	6.7	6.7
60°	4053.7	2589.8	102.3	57.8	22.2	11.1	6.7	4.4	4.4	2.2	4.4
62.5°	4229.5	2547.5	89.0	44.5	15.6	6.7	4.4	2.2	2.2	0.0	0.0
65°	4358.5	2467.4	75.6	31.1	8.9	4.4	2.2	2.2	0.0	0.0	0.0
67.5°	4363.0	2322.8	55.6	17.8	6.7	4.4	2.2	0.0	0.0	0.0	0.0
70°	4011.5	1980.1	35.6	8.9	4.4	2.2	2.2	0.0	0.0	0.0	0.0
71°	3688.9	1753.2	28.9	6.7	4.4	2.2	0.0	0.0	0.0	0.0	0.0
72.5°	3039.2	1288.2	22.2	6.7	2.2	2.2	0.0	0.0	0.0	0.0	0.0
75°	1675.3	467.2	11.1	4.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	536.2	142.4	6.7	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	91.2	22.2	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	31.1	8.9	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.9	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.4	2.2	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)