

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: P237183

Luminaire Tested: **ARCH-L-AF72-100-D-U-T3-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237183
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-AF72-100-D-U-T3-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 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: 9943.7 lumens
Efficiency: N/A
Efficacy: 97.5 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

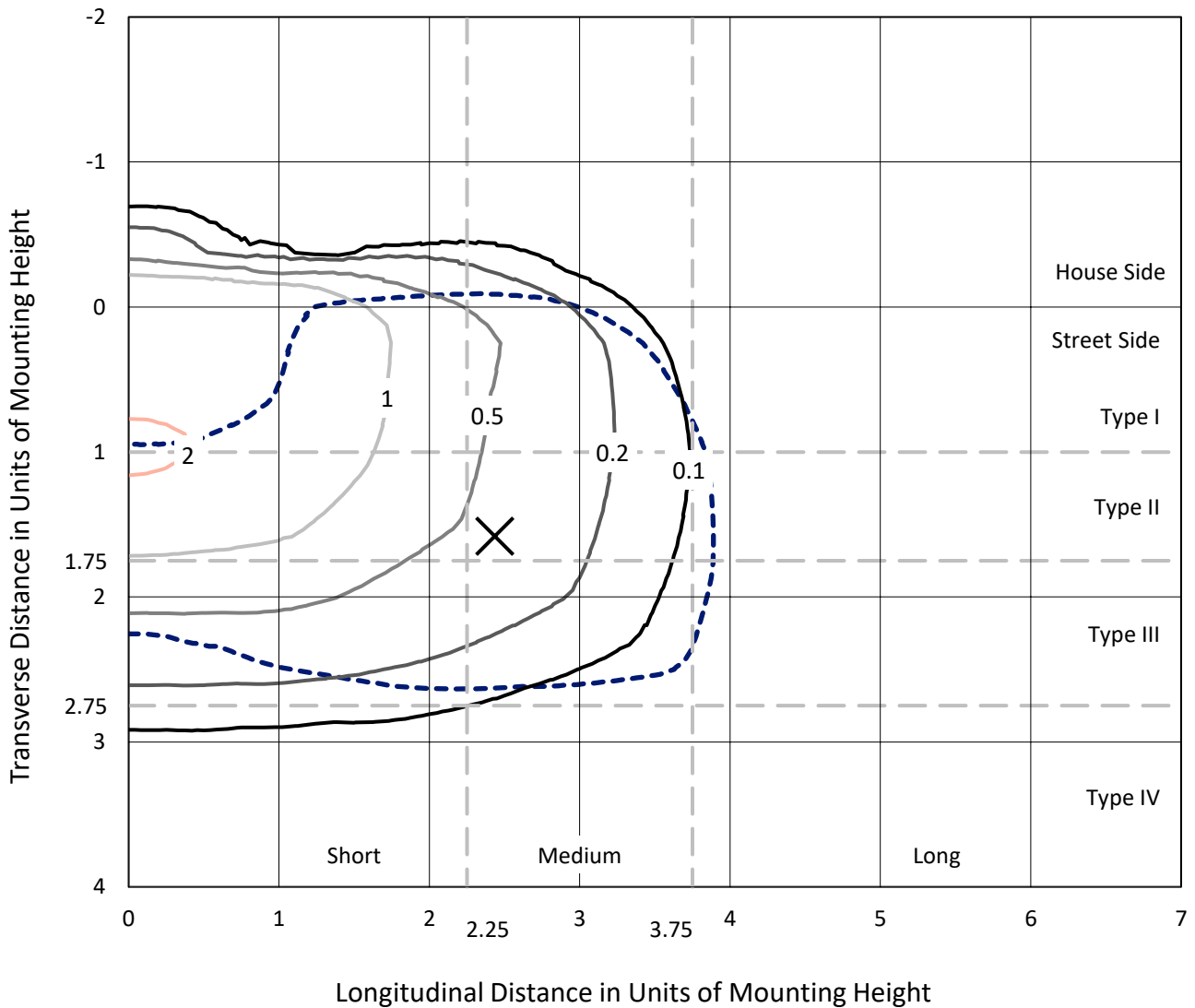
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P237183
 CATALOG NUMBER: ARCH-L-AF72-100-D-U-T3-7030-HSS

Iso-Footcandle Lines of Horizontal Illumination

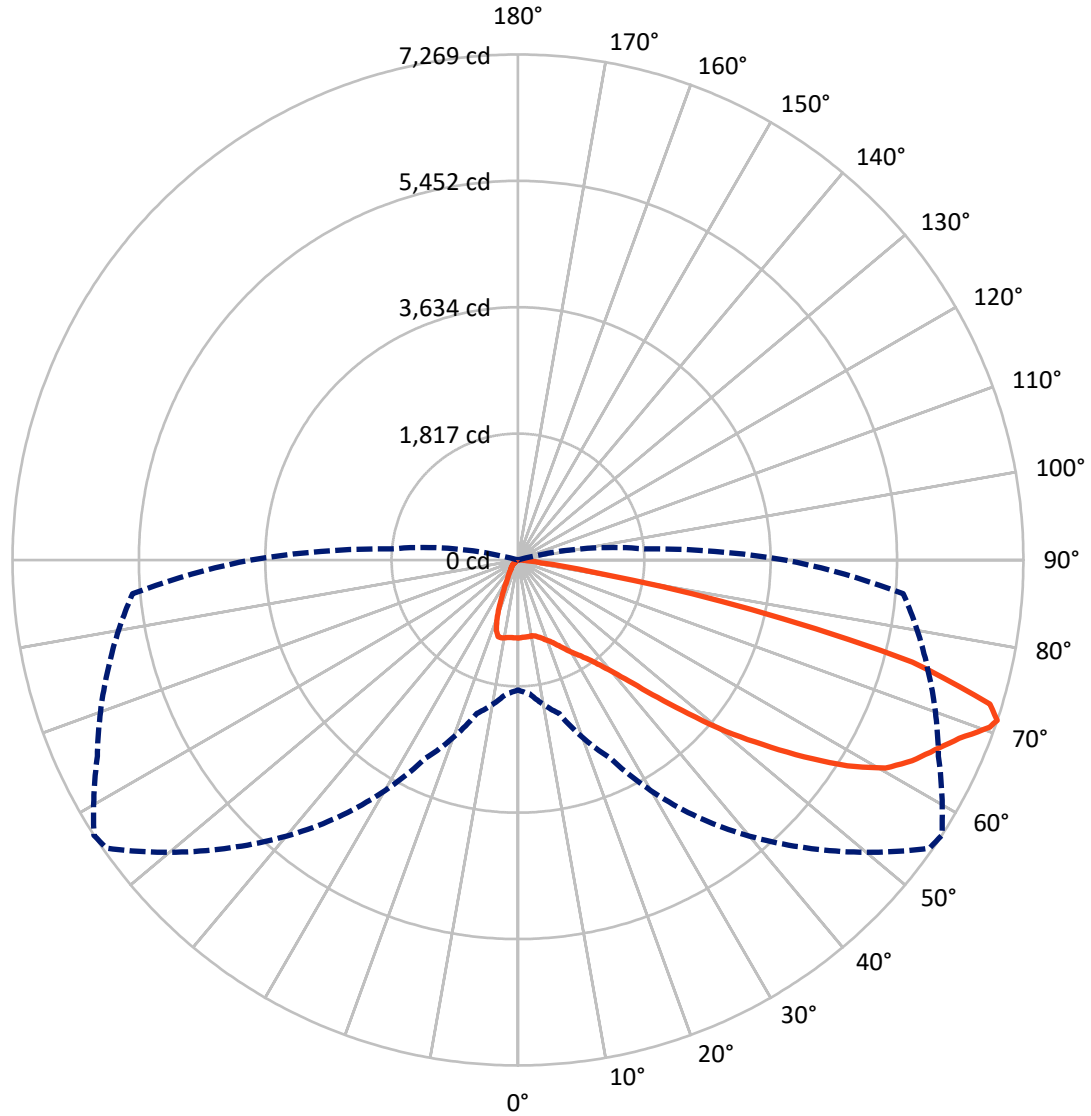
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type III - Medium - N/A

REPORT NUMBER: P237183
CATALOG NUMBER: ARCH-L-AF72-100-D-U-T3-7030-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P237183
 CATALOG NUMBER: ARCH-L-AF72-100-D-U-T3-7030-HSS

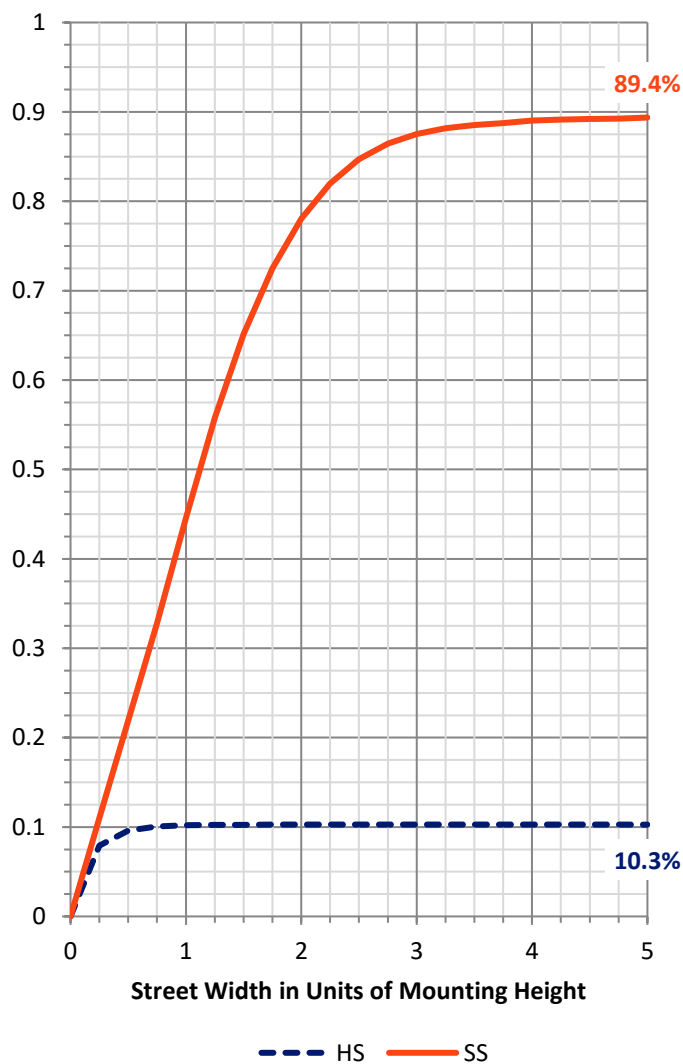
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1030.5	0.0	1030.5
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	8913.2	0.0	8913.2
	% Fixture	89.6	0.0	89.6
Total	Lumens	9943.7	0.0	9943.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.5	1.1
10°-20°	282.2	2.8
20°-30°	440.2	4.4
30°-40°	744.0	7.5
40°-50°	1445.1	14.5
50°-60°	2426.7	24.4
60°-70°	2896.1	29.1
70°-80°	1526.3	15.3
80°-90°	77.6	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°	9943.7	100.0
0°-180°	9943.7	100.0

Coefficient of Utilization



REPORT NUMBER: P237183

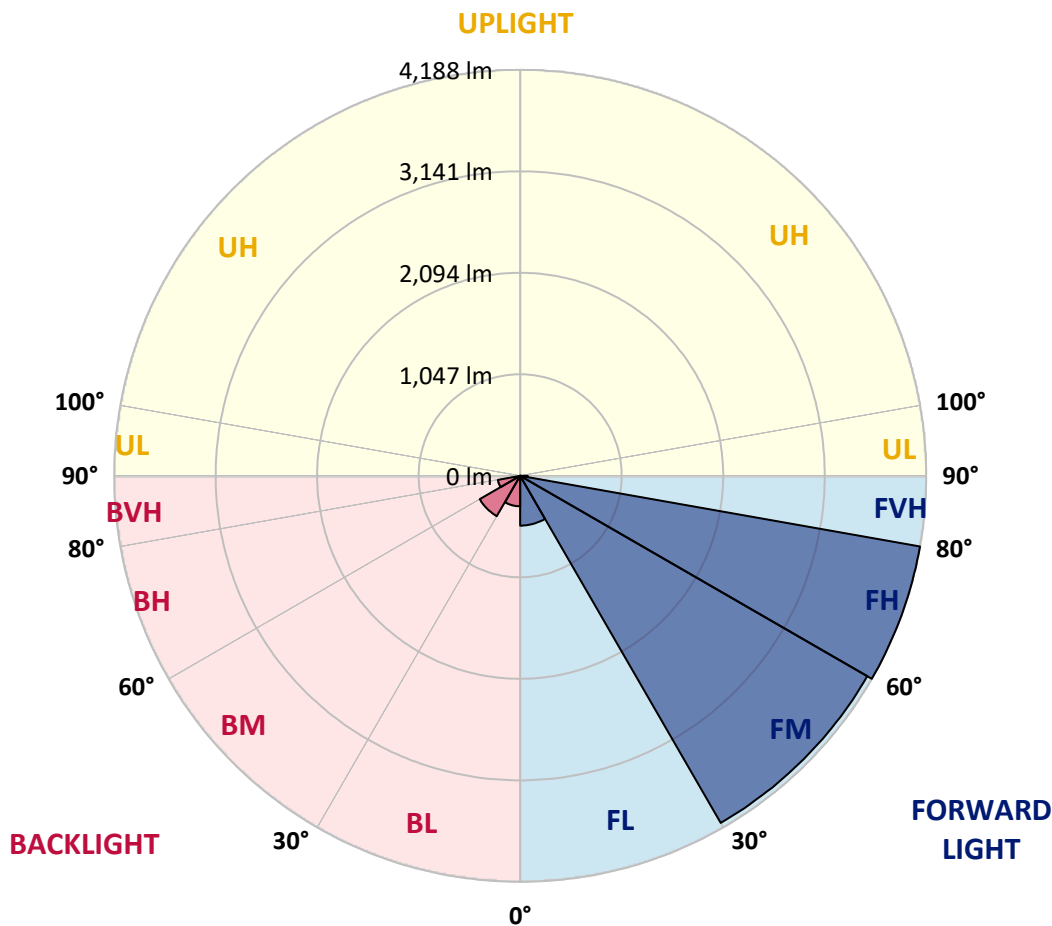
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	513.4	5.2			
FM (30°-60°)	4134.7	41.6			
FH (60°-80°)	4188.4	42.1			G2/5000
FVH (80°-90°)	76.8	0.8			G1/100
BL (0°-30°)	314.6	3.2	B1/500		
BM (30°-60°)	481.2	4.8	B1/1000		
BH (60°-80°)	234.0	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





REPORT NUMBER: P237183

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T3-7030-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1123.8	1123.8	1123.8	1123.8	1123.8	1123.8	1123.8	1123.8	1123.8	1123.8	1123.8
2.5°	1107.6	1107.6	1107.6	1109.8	1112.1	1112.1	1116.8	1114.6	1114.6	1114.6	1119.2
5°	1077.4	1079.8	1082.1	1086.7	1096.0	1103.0	1114.6	1114.6	1116.8	1121.4	1123.8
7.5°	1035.8	1038.1	1044.9	1054.3	1072.8	1089.0	1107.6	1112.1	1119.2	1130.8	1135.4
10°	1010.2	1014.9	1024.2	1035.8	1056.6	1077.4	1100.6	1107.6	1128.4	1149.3	1160.9
12.5°	1003.3	1005.6	1014.9	1033.4	1058.9	1084.4	1114.6	1121.4	1151.6	1184.1	1202.6
15°	1014.9	1017.2	1021.8	1042.7	1072.8	1105.2	1144.6	1153.9	1191.0	1228.1	1251.2
17.5°	1035.8	1035.8	1040.3	1058.9	1091.4	1128.4	1179.4	1193.3	1234.9	1276.7	1302.2
20°	1049.7	1049.7	1056.6	1075.1	1112.1	1160.9	1221.1	1239.6	1286.0	1332.3	1355.5
22.5°	1063.5	1065.9	1072.8	1093.6	1135.4	1202.6	1272.1	1290.6	1343.9	1392.6	1415.8
25°	1103.0	1100.6	1103.0	1121.4	1170.1	1253.5	1341.6	1364.7	1420.4	1473.7	1485.3
27.5°	1211.8	1207.2	1177.0	1165.5	1202.6	1306.8	1429.6	1452.8	1517.7	1571.0	1571.0
30°	1462.1	1452.8	1378.7	1283.7	1253.5	1355.5	1513.0	1545.5	1628.9	1675.3	1661.4
32.5°	1779.5	1758.6	1663.7	1501.4	1381.0	1420.4	1601.0	1638.3	1744.8	1784.2	1754.0
35°	2127.1	2124.8	2006.5	1798.1	1626.6	1554.8	1714.6	1758.6	1893.0	1927.8	1879.2
37.5°	2495.5	2504.8	2426.0	2138.6	1937.0	1774.9	1865.3	1916.2	2080.8	2122.5	2076.2
40°	2905.6	2903.3	2873.2	2532.6	2310.2	2087.7	2083.0	2129.4	2328.7	2393.6	2328.7
42.5°	3424.6	3420.1	3311.1	3005.2	2762.0	2495.5	2400.5	2416.7	2639.1	2745.8	2650.7
45°	3953.0	3920.6	3795.3	3531.3	3315.8	3000.6	2819.9	2819.9	3009.9	3155.9	3007.6
47.5°	4247.2	4214.7	4163.8	4017.8	3953.0	3600.7	3334.3	3301.9	3450.2	3598.5	3389.9
50°	4634.1	4634.1	4506.7	4451.1	4562.3	4314.4	3901.9	3869.5	3941.4	4059.5	3786.2
52.5°	4940.0	4884.4	4794.1	4842.7	5160.2	5046.5	4469.7	4407.1	4462.7	4492.8	4131.4
55°	5067.5	5014.1	5007.3	5185.7	5676.9	5519.3	5051.3	4995.7	4991.0	4842.7	4432.5
57.5°	5093.0	5046.5	5134.6	5447.4	6179.7	5906.2	5630.5	5588.8	5459.0	5088.3	4740.8
60°	4877.5	4900.6	5113.8	5591.2	6476.3	6242.2	6119.4	6075.4	5776.5	5296.9	5083.8
62.5°	4435.0	4490.5	4889.1	5605.0	6367.3	6379.0	6390.6	6360.4	6022.2	5486.9	5429.0
65°	3911.3	3927.5	4407.1	5412.7	6177.3	6337.2	6589.8	6587.5	6209.7	5700.0	5818.2
67.5°	3223.0	3250.9	3665.6	4763.9	5797.4	6318.7	6851.6	6844.6	6423.0	5943.3	6049.9
70°	2398.1	2432.9	2768.9	3705.0	4949.3	6087.0	7194.5	7199.2	6647.8	6128.7	5890.0
71°	1869.9	1932.5	2284.6	3146.5	4516.0	5852.9	7227.0	7268.7	6673.2	6103.2	5561.0
72.5°	917.6	991.7	1434.2	2215.1	3716.6	5329.3	7013.8	7095.0	6513.4	5785.8	4754.6
75°	238.6	252.6	428.7	906.0	1992.7	3531.3	5656.1	5862.2	5324.6	4404.8	2905.6
77.5°	150.6	155.2	201.6	352.3	746.1	1341.6	3322.7	3424.6	3042.4	2231.4	1024.2
80°	106.6	108.9	127.4	227.0	435.6	391.5	1195.7	1239.6	1100.6	590.9	183.0
82.5°	64.9	64.9	92.7	146.0	268.8	213.2	315.1	336.0	296.6	164.6	60.2
85°	37.0	39.5	57.9	99.7	127.4	104.3	118.2	125.1	127.4	108.9	25.4
87.5°	30.1	32.4	51.1	83.4	69.5	51.1	51.1	53.3	55.6	64.9	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1123.8	1123.8	1123.8	1123.8	1123.8	1123.8	1123.8	1123.8	1123.8	1123.8	1123.8
2.5°	1119.2	1119.2	1121.4	1119.2	1119.2	1119.2	1121.4	1121.4	1121.4	1126.1	1128.4
5°	1123.8	1123.8	1123.8	1121.4	1119.2	1119.2	1123.8	1126.1	1126.1	1133.0	1133.0
7.5°	1135.4	1135.4	1130.8	1126.1	1121.4	1114.6	1116.8	1119.2	1116.8	1119.2	1119.2
10°	1160.9	1160.9	1153.9	1144.6	1130.8	1109.8	1082.1	1047.4	1014.9	1003.3	998.6
12.5°	1202.6	1200.2	1186.3	1170.1	1140.0	1068.2	963.8	841.1	739.1	711.4	702.1
15°	1249.0	1244.3	1228.1	1200.2	1119.2	929.1	711.4	553.8	456.4	433.3	428.7
17.5°	1297.6	1290.6	1267.4	1211.8	1024.2	690.5	458.8	347.6	294.2	289.6	291.9
20°	1348.6	1339.3	1306.8	1188.6	827.2	461.1	296.6	268.8	264.2	264.2	266.5
22.5°	1406.5	1394.9	1350.9	1105.2	602.4	305.8	254.9	252.6	250.2	247.9	247.9
25°	1473.7	1459.8	1392.6	954.6	414.7	250.2	243.3	236.3	231.7	227.0	224.7
27.5°	1554.8	1536.1	1425.0	769.3	284.9	234.1	229.5	217.8	208.5	199.3	199.3
30°	1635.8	1612.6	1415.8	579.3	231.7	217.8	208.5	194.6	180.8	171.4	169.2
32.5°	1721.6	1698.4	1355.5	389.3	210.9	199.3	187.7	166.8	150.6	139.0	136.7
35°	1849.0	1830.5	1237.4	257.2	190.0	176.1	159.8	139.0	118.2	106.6	104.3
37.5°	2039.0	2015.9	1091.4	197.0	166.8	146.0	132.1	108.9	88.1	76.5	74.2
40°	2293.9	2224.4	917.6	173.8	146.0	120.5	101.9	78.7	62.6	55.6	55.6
42.5°	2590.5	2426.0	729.9	157.6	129.8	99.7	74.2	53.3	44.0	41.7	41.7
45°	2905.6	2613.7	542.2	146.0	113.5	78.7	53.3	37.0	32.4	30.1	30.1
47.5°	3230.0	2766.6	377.7	132.1	94.9	60.2	37.0	27.8	23.2	20.9	20.9
50°	3533.6	2866.2	266.5	118.2	81.1	44.0	27.8	20.9	16.2	16.2	16.2
52.5°	3744.5	2857.0	192.3	101.9	62.6	30.1	18.6	13.8	13.8	13.8	13.8
55°	3929.7	2822.1	150.6	88.1	48.6	20.9	13.8	11.6	11.6	9.3	9.3
57.5°	4087.4	2766.6	127.4	71.8	34.8	16.2	9.3	9.3	7.0	7.0	7.0
60°	4221.8	2697.1	106.6	60.2	23.2	11.6	7.0	4.6	4.6	2.3	4.6
62.5°	4404.8	2653.1	92.7	46.3	16.2	7.0	4.6	2.3	2.3	0.0	0.0
65°	4539.1	2569.7	78.7	32.4	9.3	4.6	2.3	2.3	0.0	0.0	0.0
67.5°	4543.8	2419.0	57.9	18.6	7.0	4.6	2.3	0.0	0.0	0.0	0.0
70°	4177.7	2062.2	37.0	9.3	4.6	2.3	2.3	0.0	0.0	0.0	0.0
71°	3841.8	1825.8	30.1	7.0	4.6	2.3	0.0	0.0	0.0	0.0	0.0
72.5°	3165.1	1341.6	23.2	7.0	2.3	2.3	0.0	0.0	0.0	0.0	0.0
75°	1744.8	486.6	11.6	4.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	558.5	148.3	7.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	94.9	23.2	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	32.4	9.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.3	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.6	2.3	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)