

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: P214854

Luminaire Tested: **ARCH-AF24-30-D-U-T4W-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214854  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-AF24-30-D-U-T4W-7030  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3501 lumens  
Efficiency: N/A  
Efficacy: 112.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 31  
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

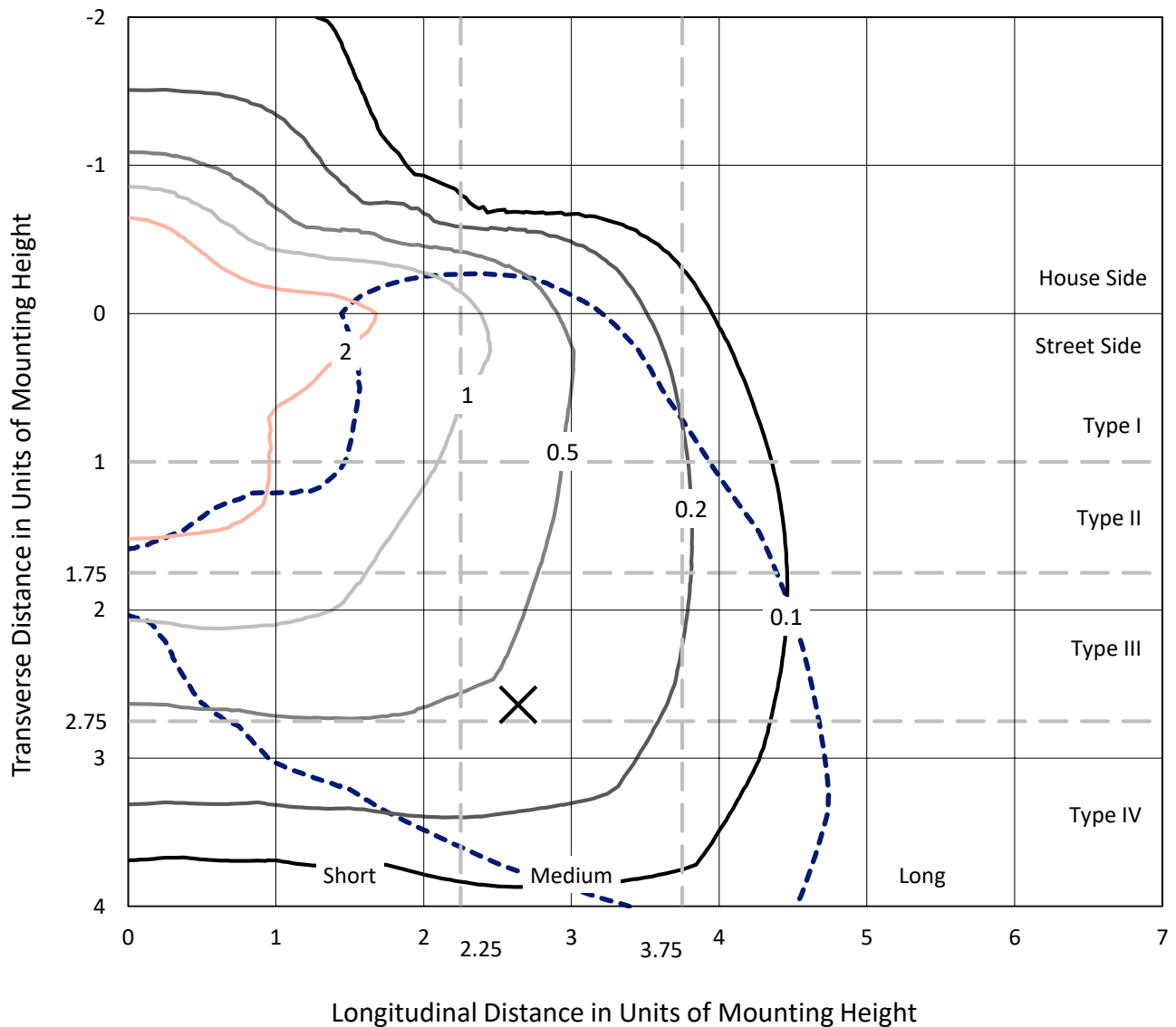


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

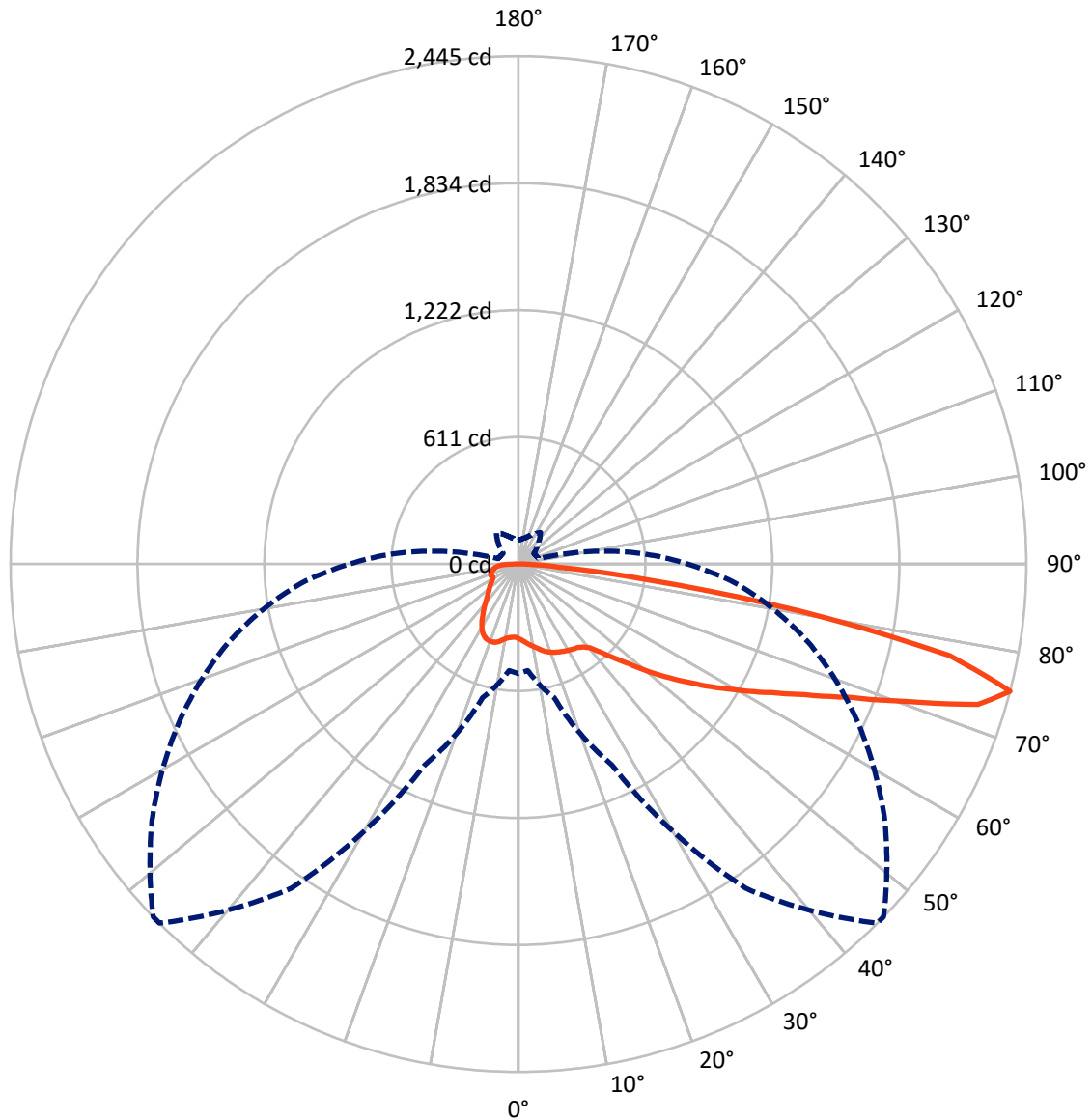


Based on 10 foot mounting height. Maximum calculated value = 4.2 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	811.0	0.0	811.0
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	2690.0	0.0	2690.0
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	3501.0	0.0	3501.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.6	1.0
10°-20°	115.3	3.3
20°-30°	197.8	5.6
30°-40°	276.6	7.9
40°-50°	405.8	11.6
50°-60°	632.1	18.1
60°-70°	909.5	26.0
70°-80°	792.3	22.6
80°-90°	136.1	3.9
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°	3501.0	100.0
0°-180°	3501.0	100.0



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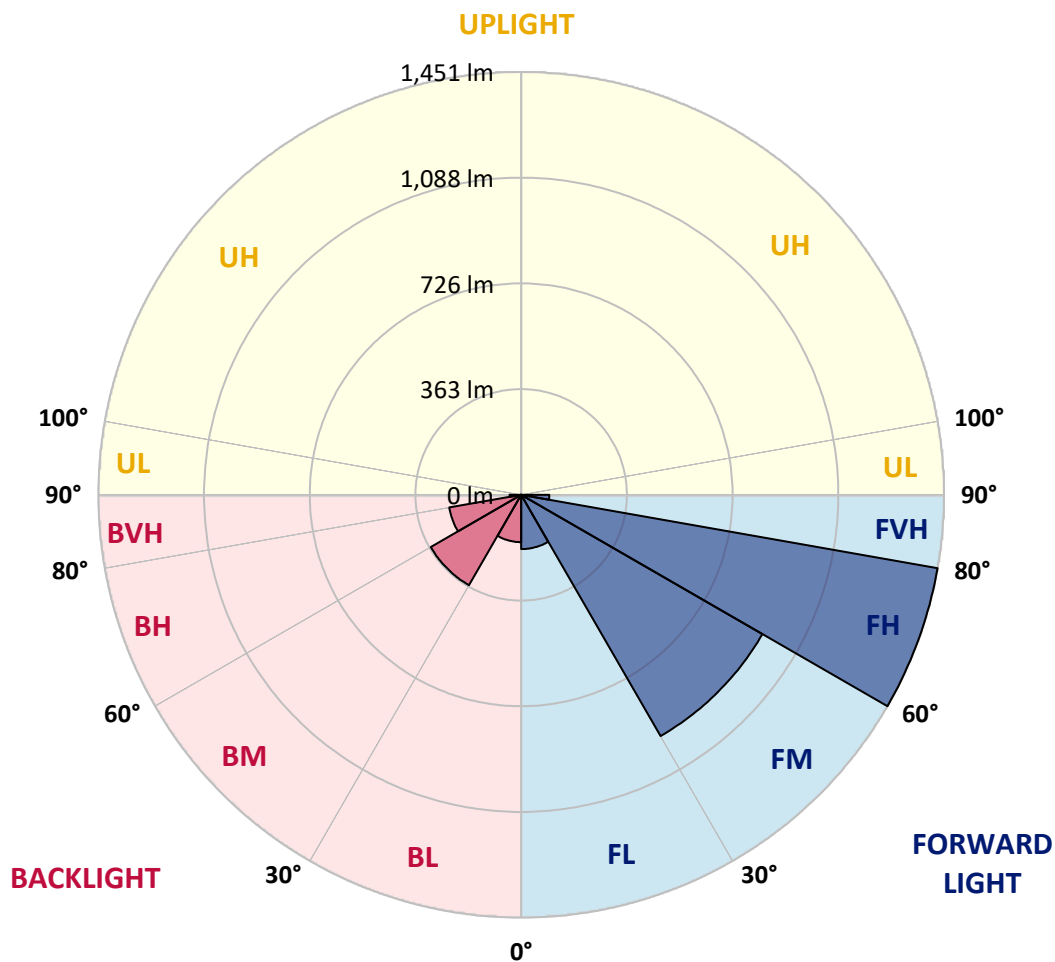
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	186.2	5.3			
FM	(30°-60°)	956.1	27.3			
FH	(60°-80°)	1451.2	41.5			G1/1800
FVH	(80°-90°)	96.5	2.8			G1/100
BL	(0°-30°)	162.4	4.6	B1/500		
BM	(30°-60°)	358.4	10.2	B1/1000		
BH	(60°-80°)	250.6	7.2	B1/500		G1/500
BVH	(80°-90°)	39.5	1.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9
2.5°	376.6	373.9	373.9	371.8	371.8	368.4	367.1	366.4	363.0	360.9	358.9
5°	398.4	395.0	394.3	389.5	387.5	380.0	379.3	374.6	368.4	362.3	357.5
7.5°	418.2	416.1	412.7	407.9	401.8	392.3	391.6	384.1	373.9	365.7	358.9
10°	432.5	431.1	426.3	420.2	413.4	403.9	403.2	395.0	382.7	373.2	363.7
12.5°	449.5	447.4	441.3	433.1	425.6	416.8	416.1	409.3	395.7	383.4	371.2
15°	465.8	463.1	455.6	447.4	439.3	431.8	431.8	424.3	410.0	395.7	381.4
17.5°	474.0	472.6	465.1	456.3	449.5	444.0	443.3	436.5	422.2	407.3	391.6
20°	476.7	477.4	470.6	461.1	456.3	453.6	452.9	448.1	432.5	418.2	403.2
22.5°	476.0	478.1	472.6	462.4	461.1	461.1	461.1	455.6	443.3	429.0	414.1
25°	478.8	481.5	477.4	465.1	465.1	467.9	467.9	465.1	454.2	442.0	427.0
27.5°	488.3	490.3	486.9	469.9	470.6	474.7	474.0	474.7	467.9	456.3	441.3
30°	499.9	502.6	498.5	477.4	476.7	480.8	480.8	484.2	479.4	467.2	454.9
32.5°	531.2	530.5	517.6	485.6	483.5	487.6	487.6	491.0	488.3	478.8	467.2
35°	624.5	614.3	585.7	512.1	491.7	493.7	493.7	499.9	501.2	493.7	483.5
37.5°	719.8	716.4	694.6	583.0	521.7	506.7	506.0	514.9	521.0	514.9	508.0
40°	815.9	813.1	808.4	677.6	584.3	529.8	527.8	535.3	546.2	542.1	538.0
42.5°	905.1	903.7	908.5	770.9	664.0	579.6	573.4	564.6	580.2	578.9	578.9
45°	975.2	978.6	981.4	858.1	750.5	643.6	636.1	606.1	627.2	632.7	636.8
47.5°	1014.7	1017.5	1027.0	943.2	837.0	717.8	712.4	663.3	691.2	707.6	719.2
50°	1071.3	1063.8	1071.9	1026.3	941.2	814.5	799.5	740.3	775.7	804.3	831.5
52.5°	1125.7	1113.5	1120.3	1122.3	1059.7	909.2	893.5	830.9	875.1	920.1	968.4
55°	1174.8	1174.1	1180.9	1215.6	1174.1	1010.6	992.9	931.0	995.0	1043.3	1125.1
57.5°	1214.3	1221.1	1251.0	1323.9	1306.2	1121.0	1101.2	1047.4	1123.0	1171.4	1306.9
60°	1260.6	1271.5	1321.2	1415.9	1426.8	1236.7	1216.3	1177.5	1254.5	1303.5	1517.3
62.5°	1276.2	1291.9	1394.1	1512.6	1552.7	1363.4	1345.0	1319.2	1392.7	1437.0	1727.1
65°	1172.1	1202.0	1434.2	1562.3	1688.3	1516.0	1500.3	1477.8	1530.3	1559.6	1869.4
67.5°	1143.4	1157.1	1355.9	1633.8	1815.6	1712.1	1696.4	1657.6	1659.0	1646.7	1915.7
70°	1103.3	1118.2	1275.6	1687.6	1998.1	1980.4	1961.4	1847.0	1776.8	1702.6	1824.5
72.5°	939.8	935.1	1099.2	1542.5	2086.0	2312.8	2290.3	2050.6	1864.0	1654.2	1539.8
75°	527.8	514.2	666.7	1067.2	1904.8	2444.9	2444.2	2153.4	1802.7	1441.1	1048.1
77.5°	153.2	149.1	220.0	447.4	1282.4	2124.1	2150.0	1942.3	1504.4	1035.2	575.5
80°	72.2	73.6	94.7	147.8	547.5	1370.9	1445.1	1279.0	899.0	477.4	237.7
82.5°	45.6	46.3	64.7	95.3	231.5	622.5	683.8	575.5	356.2	206.4	104.9
85°	28.6	28.6	42.9	62.7	138.2	198.9	215.9	196.1	152.6	112.4	57.2
87.5°	15.7	15.7	25.9	36.1	75.6	64.0	66.1	78.3	95.3	68.8	28.6
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°	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9	358.9
2.5°	358.2	356.9	354.8	354.1	353.5	352.8	353.5	354.8	353.5	353.5	354.1
5°	356.2	354.8	352.1	352.1	352.8	353.5	356.9	358.9	359.6	359.6	359.6
7.5°	356.2	354.1	352.1	352.8	354.1	356.9	362.3	365.7	368.4	369.1	369.1
10°	359.6	356.9	355.5	356.9	360.9	363.0	368.4	373.9	377.3	378.7	378.7
12.5°	365.7	363.0	363.0	365.7	371.2	373.9	378.7	382.7	386.8	388.9	388.9
15°	375.9	372.5	373.2	378.0	384.1	386.8	390.2	391.6	395.0	397.7	397.7
17.5°	385.5	382.1	383.4	388.9	393.0	394.3	396.4	395.7	397.0	399.1	399.8
20°	396.4	393.0	393.6	397.0	397.7	396.4	396.4	394.3	393.6	397.0	398.4
22.5°	407.3	403.9	403.2	401.1	397.7	394.3	392.3	390.2	388.9	392.3	393.6
25°	420.2	415.4	412.0	403.2	394.3	388.2	385.5	384.1	383.4	386.8	388.2
27.5°	434.5	429.7	419.5	400.4	386.1	375.9	373.9	373.9	375.2	377.3	378.7
30°	448.1	443.3	425.0	394.3	371.8	356.9	354.8	356.9	360.3	362.3	364.4
32.5°	461.7	457.0	428.4	384.8	350.7	331.7	330.3	333.7	339.2	340.5	341.9
35°	480.1	475.4	432.5	371.2	324.2	303.7	302.4	304.4	309.2	311.2	313.3
37.5°	506.0	503.3	438.6	356.2	299.7	277.2	273.1	271.7	274.5	273.8	276.5
40°	540.1	542.1	449.5	336.4	275.8	252.7	243.8	239.7	237.0	231.5	234.3
42.5°	589.8	591.1	461.7	314.0	255.4	229.5	217.9	210.4	205.0	196.1	197.5
45°	662.6	651.1	476.0	290.1	237.0	211.1	197.5	188.6	181.2	173.7	174.3
47.5°	759.3	723.9	491.7	270.4	218.6	196.1	183.9	173.7	164.8	158.7	159.4
50°	878.5	814.5	507.4	252.0	200.2	184.6	173.7	162.8	153.9	147.8	147.1
52.5°	1035.8	923.5	517.6	231.5	181.8	174.3	164.8	154.6	143.7	136.2	135.5
55°	1199.3	1050.1	526.4	207.0	164.1	162.8	158.0	146.4	133.5	123.9	122.6
57.5°	1379.1	1185.7	533.2	183.2	150.5	153.2	151.9	138.2	123.9	115.1	114.4
60°	1542.5	1326.0	511.5	162.1	138.2	143.7	145.1	133.5	126.0	128.0	128.7
62.5°	1707.3	1434.2	428.4	146.4	130.1	137.6	149.1	148.5	145.1	148.5	149.1
65°	1766.6	1456.7	303.7	133.5	121.9	140.3	162.1	160.7	145.1	138.9	137.6
67.5°	1733.2	1390.0	204.3	123.3	115.8	143.7	175.7	160.7	139.6	131.4	128.7
70°	1574.5	1225.9	149.8	113.1	110.3	143.0	183.2	160.0	136.9	128.0	124.6
72.5°	1255.8	945.9	120.5	103.5	102.2	139.6	187.3	158.7	134.2	124.6	120.5
75°	<i>813.1</i>	<i>588.4</i>	<i>101.5</i>	<i>94.0</i>	<i>89.9</i>	<i>134.2</i>	<i>185.2</i>	<i>154.6</i>	<i>130.8</i>	<i>118.5</i>	<i>115.8</i>
77.5°	377.3	253.3	86.5	83.1	78.3	126.0	179.1	146.4	123.3	111.7	108.3
80°	175.7	119.9	72.9	72.2	70.1	119.2	170.9	136.9	114.4	104.9	99.4
82.5°	94.0	72.2	59.2	59.2	61.3	111.0	160.7	125.3	102.8	98.1	83.8
85°	49.7	41.5	42.9	46.3	52.4	98.1	147.1	113.1	89.9	74.9	72.9
87.5°	25.2	26.6	26.6	31.3	40.2	79.7	121.2	93.3	76.3	61.3	59.9
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)