

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: P214714

Luminaire Tested: **ARCH-AF24-30-D-U-T3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214714
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
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-T3-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3523 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - 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

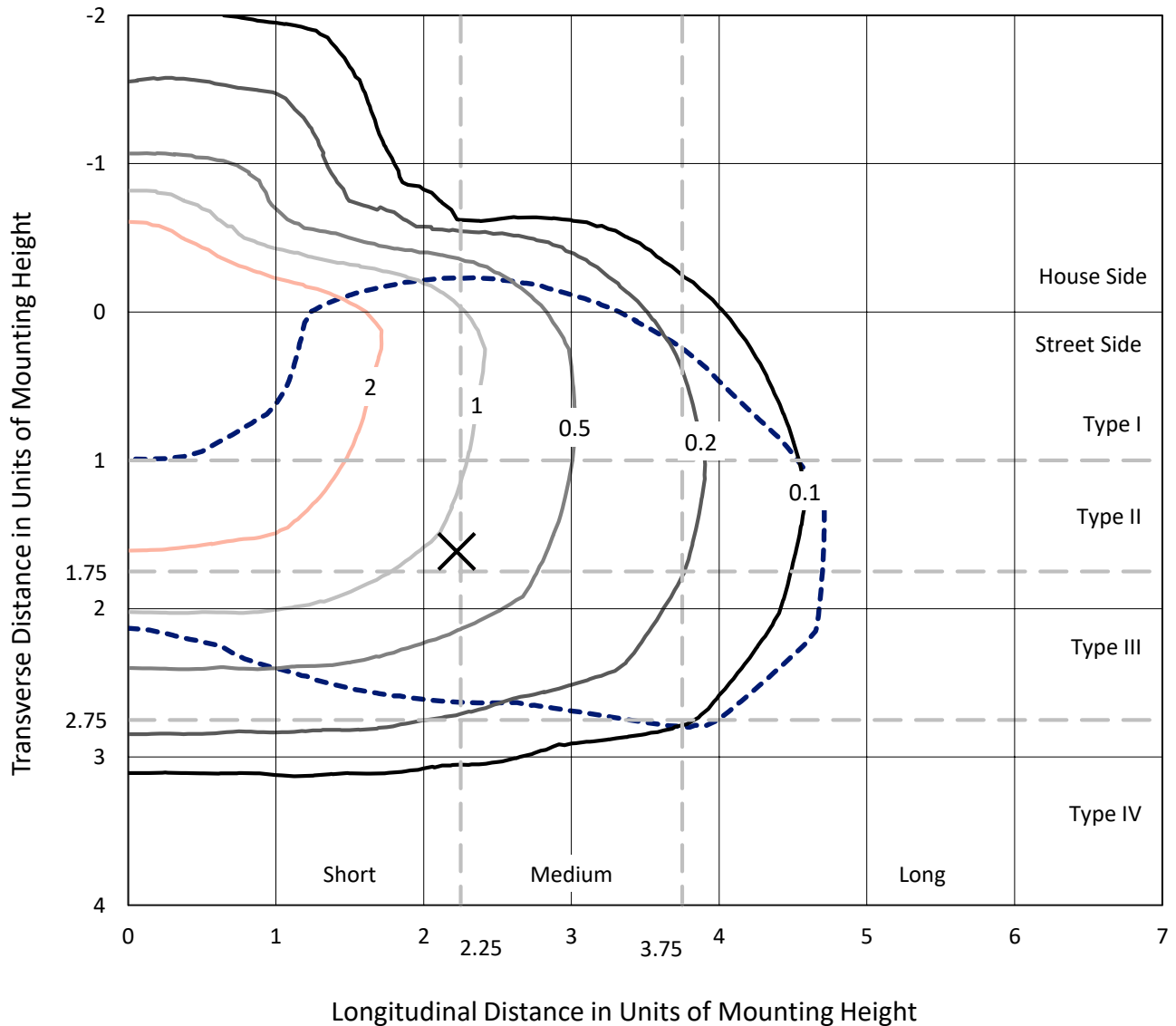




REPORT NUMBER: P214714
 CATALOG NUMBER: ARCH-AF24-30-D-U-T3-7030

Iso-Footcandle Lines of Horizontal Illumination

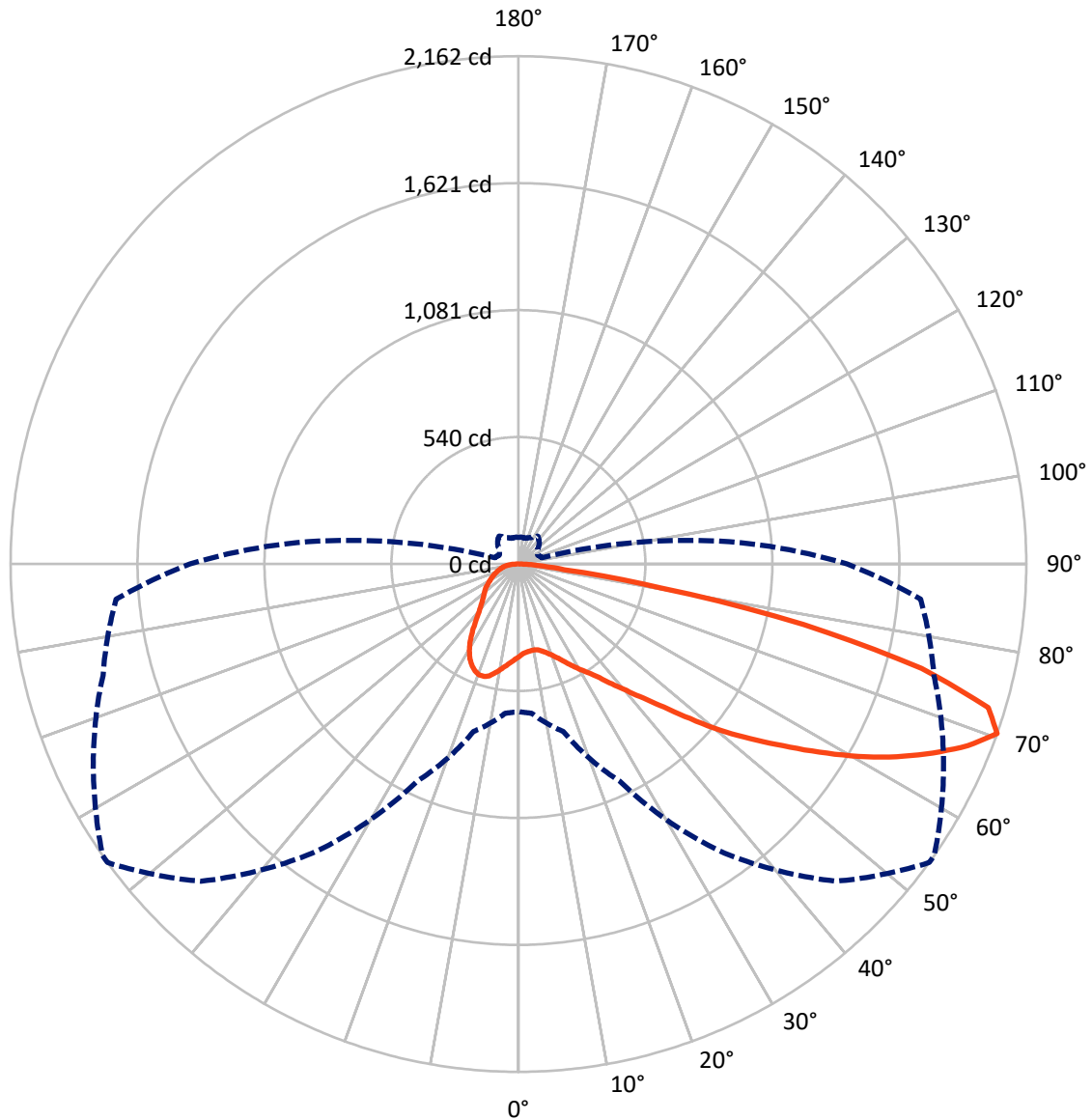
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P214714
CATALOG NUMBER: ARCH-AF24-30-D-U-T3-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



REPORT NUMBER: P214714

CATALOG NUMBER: ARCH-AF24-30-D-U-T3-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	799.0	0.0	799.0
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	2724.0	0.0	2724.0
	% Fixture	77.3	0.0	77.3
Total	Lumens	3523.0	0.0	3523.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	1.1
10°-20°	123.6	3.5
20°-30°	214.7	6.1
30°-40°	313.8	8.9
40°-50°	492.5	14.0
50°-60°	757.4	21.5
60°-70°	925.3	26.3
70°-80°	573.7	16.3
80°-90°	83.3	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°	3523.0	100.0
0°-180°	3523.0	100.0

Coefficient of Utilization



REPORT NUMBER: P214714

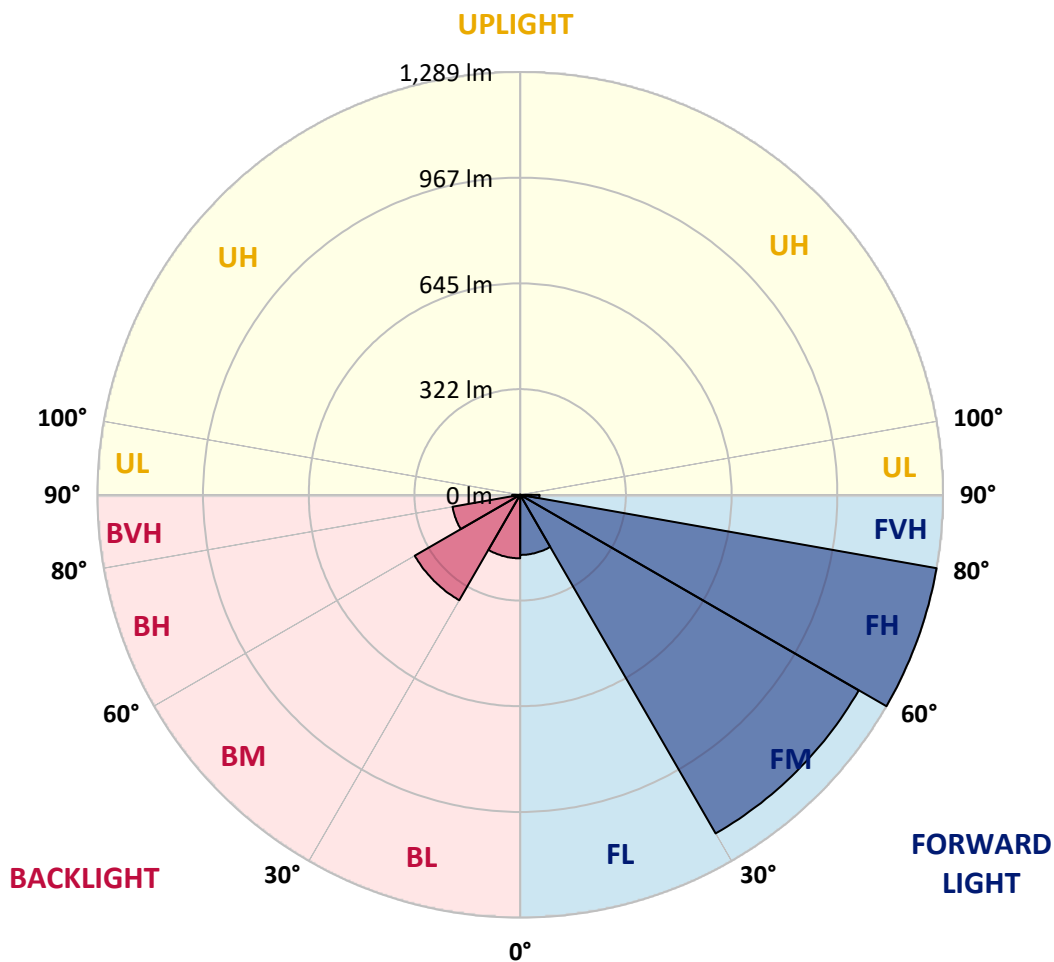
CATALOG NUMBER: ARCH-AF24-30-D-U-T3-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	183.3	5.2			
FM	(30°-60°)	1192.4	33.8			
FH	(60°-80°)	1289.5	36.6			G1/1800
FVH	(80°-90°)	58.8	1.7			G1/100
BL	(0°-30°)	193.7	5.5	B1/500		
BM	(30°-60°)	371.3	10.5	B1/1000		
BH	(60°-80°)	209.5	5.9	B1/500		G1/500
BVH	(80°-90°)	24.5	0.7			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 III Short





REPORT NUMBER: P214714

CATALOG NUMBER: ARCH-AF24-30-D-U-T3-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	394.2	394.2	394.2	394.2	394.2	394.2	394.2	394.2	394.2	394.2	394.2
2.5°	378.7	377.4	377.4	379.3	380.0	381.9	381.9	382.5	384.5	387.7	391.6
5°	367.1	366.4	367.1	369.6	370.9	374.8	376.1	376.7	380.6	385.8	391.6
7.5°	355.4	354.8	356.1	360.0	363.8	369.6	372.9	373.5	379.3	386.4	394.2
10°	351.6	350.9	352.9	356.1	360.0	366.4	371.6	372.2	380.6	389.0	400.0
12.5°	356.7	356.1	358.0	361.3	365.1	369.6	375.4	376.1	387.1	398.0	409.6
15°	369.6	369.6	370.3	372.2	376.1	380.0	385.1	385.8	397.4	410.3	421.9
17.5°	389.6	388.3	388.3	387.7	390.3	392.2	398.7	399.3	411.6	423.2	434.8
20°	414.2	413.5	410.9	407.7	407.1	408.3	414.8	415.4	427.7	437.4	448.3
22.5°	443.8	444.5	438.7	431.6	428.3	430.3	436.1	436.7	445.8	454.1	463.8
25°	483.2	481.2	472.9	462.5	456.1	456.1	461.9	461.9	470.3	475.4	481.9
27.5°	520.6	516.7	509.0	494.1	483.8	485.8	491.6	491.6	499.3	501.2	504.5
30°	561.2	557.4	547.7	529.0	515.4	514.1	521.2	520.6	530.9	530.3	527.7
32.5°	610.9	609.0	592.8	569.0	550.9	546.4	552.8	553.5	559.9	558.0	549.6
35°	680.6	679.9	665.1	623.2	599.3	590.9	594.8	594.8	599.3	594.1	579.9
37.5°	768.3	769.6	756.7	694.8	661.2	647.0	647.7	647.0	648.3	642.5	627.7
40°	856.0	859.3	858.6	783.8	741.2	716.7	707.7	706.4	709.6	707.0	692.8
42.5°	971.5	979.3	961.2	893.5	845.7	804.4	779.9	776.7	783.8	787.0	773.5
45°	1091.5	1088.9	1060.5	1011.5	968.3	915.4	868.9	863.8	868.9	878.6	864.4
47.5°	1154.1	1152.1	1145.0	1120.5	1114.1	1053.4	983.1	978.6	968.9	982.5	965.7
50°	1257.3	1259.2	1230.2	1227.6	1254.7	1221.2	1112.1	1101.8	1084.4	1095.4	1081.2
52.5°	1332.1	1323.7	1305.7	1328.2	1412.8	1394.7	1233.4	1228.9	1212.8	1210.2	1203.7
55°	1362.4	1362.4	1365.7	1417.9	1538.5	1514.7	1365.0	1369.5	1347.6	1329.5	1337.9
57.5°	1371.5	1375.3	1403.1	1489.5	1686.3	1608.2	1510.2	1516.6	1485.0	1448.9	1475.3
60°	1327.0	1338.6	1405.0	1530.2	1769.5	1707.6	1663.1	1665.0	1619.2	1566.3	1612.7
62.5°	1212.8	1227.0	1345.7	1546.9	1755.9	1809.5	1807.6	1812.1	1749.5	1683.7	1741.8
65°	1072.8	1087.0	1213.4	1499.8	1745.6	1882.4	1939.8	1952.1	1871.4	1783.0	1822.4
67.5°	867.0	885.7	1005.7	1341.2	1695.3	1942.4	2063.7	2076.6	1965.6	1834.6	1815.3
70°	628.3	637.4	738.0	1019.2	1490.2	1909.5	2161.7	2161.1	1996.6	1830.8	1718.5
72.5°	302.5	309.6	396.7	632.8	1065.7	1620.5	2090.8	2103.0	1954.0	1774.7	1497.3
75°	124.5	131.6	160.6	267.1	559.3	1070.9	1772.1	1801.1	1774.7	1592.7	1171.5
77.5°	77.4	80.0	94.2	138.1	255.5	499.9	1240.5	1279.9	1406.3	1276.0	773.5
80°	58.1	60.0	70.3	96.8	161.3	184.5	616.1	665.7	852.2	732.2	350.3
82.5°	48.4	49.0	56.1	70.3	109.7	105.8	197.4	220.0	397.4	279.3	120.6
85°	45.2	46.4	50.3	50.3	69.7	66.4	81.9	85.8	115.5	95.5	41.9
87.5°	23.2	21.9	44.5	39.4	36.1	32.3	34.8	37.4	43.2	45.8	18.7
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: P214714

CATALOG NUMBER: ARCH-AF24-30-D-U-T3-7030

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	394.2	394.2	394.2	394.2	394.2	394.2	394.2	394.2	394.2	394.2	394.2
2.5°	392.9	394.8	398.0	401.2	405.1	409.6	412.2	415.4	418.0	416.7	416.1
5°	394.8	398.0	405.1	411.6	419.3	428.3	434.1	440.6	445.8	447.1	445.1
7.5°	398.0	403.8	413.5	425.1	435.4	447.1	456.1	465.1	471.6	472.9	472.9
10°	405.8	412.2	425.1	440.6	452.9	465.1	475.4	482.5	488.3	490.9	490.9
12.5°	416.7	424.5	440.0	458.7	472.2	483.8	489.6	492.9	495.4	498.0	498.7
15°	429.6	438.0	456.7	476.7	490.9	496.7	496.7	496.1	496.1	497.4	498.7
17.5°	442.5	451.6	470.9	492.2	501.2	498.0	493.5	491.6	490.3	489.6	491.6
20°	456.1	465.1	484.5	504.5	501.9	488.3	481.9	477.4	473.5	471.6	474.1
22.5°	470.9	479.3	499.3	512.8	493.5	472.9	460.6	453.5	447.1	443.2	445.8
25°	488.3	496.7	516.1	515.4	478.7	449.6	430.3	418.7	411.6	407.7	407.7
27.5°	509.0	516.1	534.8	509.0	458.0	418.7	390.3	379.3	377.4	374.2	374.2
30°	530.3	536.1	552.2	494.1	429.6	378.0	347.1	341.9	342.5	339.3	340.0
32.5°	552.2	558.0	562.5	472.2	392.9	332.2	311.6	307.7	307.1	304.5	301.9
35°	583.2	591.6	563.8	442.5	348.4	294.2	279.3	275.5	271.6	262.6	262.6
37.5°	630.3	639.3	560.6	405.8	302.5	264.5	250.9	245.8	239.3	230.3	227.1
40°	694.8	694.8	553.5	364.5	265.8	240.6	227.7	221.3	214.2	205.1	203.2
42.5°	770.9	752.8	542.5	322.5	238.7	224.5	212.9	205.8	197.4	187.1	185.8
45°	859.9	810.9	527.0	285.1	218.7	214.8	207.7	195.5	181.3	170.3	168.4
47.5°	946.4	863.1	512.2	258.7	201.9	210.9	205.1	184.5	165.1	149.7	147.7
50°	1041.2	909.6	494.8	236.7	189.0	208.4	201.9	168.4	147.1	136.1	134.8
52.5°	1136.0	956.7	476.1	213.5	178.0	203.2	194.2	156.8	146.4	131.6	129.7
55°	1236.0	1011.5	454.1	187.7	165.1	192.9	183.9	156.1	151.0	131.6	127.1
57.5°	1333.4	1072.1	418.7	162.6	151.0	177.4	180.0	152.2	141.3	130.3	125.1
60°	1441.1	1136.7	360.0	141.3	138.7	164.5	174.8	143.9	130.3	126.4	123.9
62.5°	1527.6	1194.7	281.3	126.4	128.4	154.2	168.4	138.7	125.8	122.6	121.9
65°	1565.0	1196.0	201.9	113.5	118.1	144.5	161.9	134.2	121.9	120.6	120.0
67.5°	1525.6	1130.2	141.9	101.3	107.1	135.5	153.5	129.7	118.1	118.7	117.4
70°	1398.6	991.5	103.9	89.7	96.8	125.8	144.5	123.9	113.5	114.8	112.9
72.5°	1170.2	772.8	83.2	80.0	88.4	115.5	135.5	117.4	106.4	107.1	103.2
75°	864.4	512.2	69.7	71.6	78.7	105.8	123.9	109.0	98.7	96.1	93.5
77.5°	514.1	263.2	57.4	62.6	70.3	94.2	111.0	98.7	90.3	85.8	83.9
80°	212.2	106.4	47.1	52.9	61.3	83.9	98.1	86.4	80.6	76.1	73.5
82.5°	84.5	52.3	37.4	43.2	51.6	72.9	85.8	76.1	70.3	67.1	60.0
85°	32.3	25.8	25.2	30.3	38.7	56.1	71.0	63.9	59.3	51.0	49.0
87.5°	12.9	11.6	11.6	14.8	21.9	35.5	51.0	44.5	46.4	36.8	37.4
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)