

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: P234711

Luminaire Tested: **ARCH-AF16-30-D-U-T3-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234711
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-AF16-30-D-U-T3-8027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2941 lumens
Efficiency: N/A
Efficacy: 91.9 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): 32
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

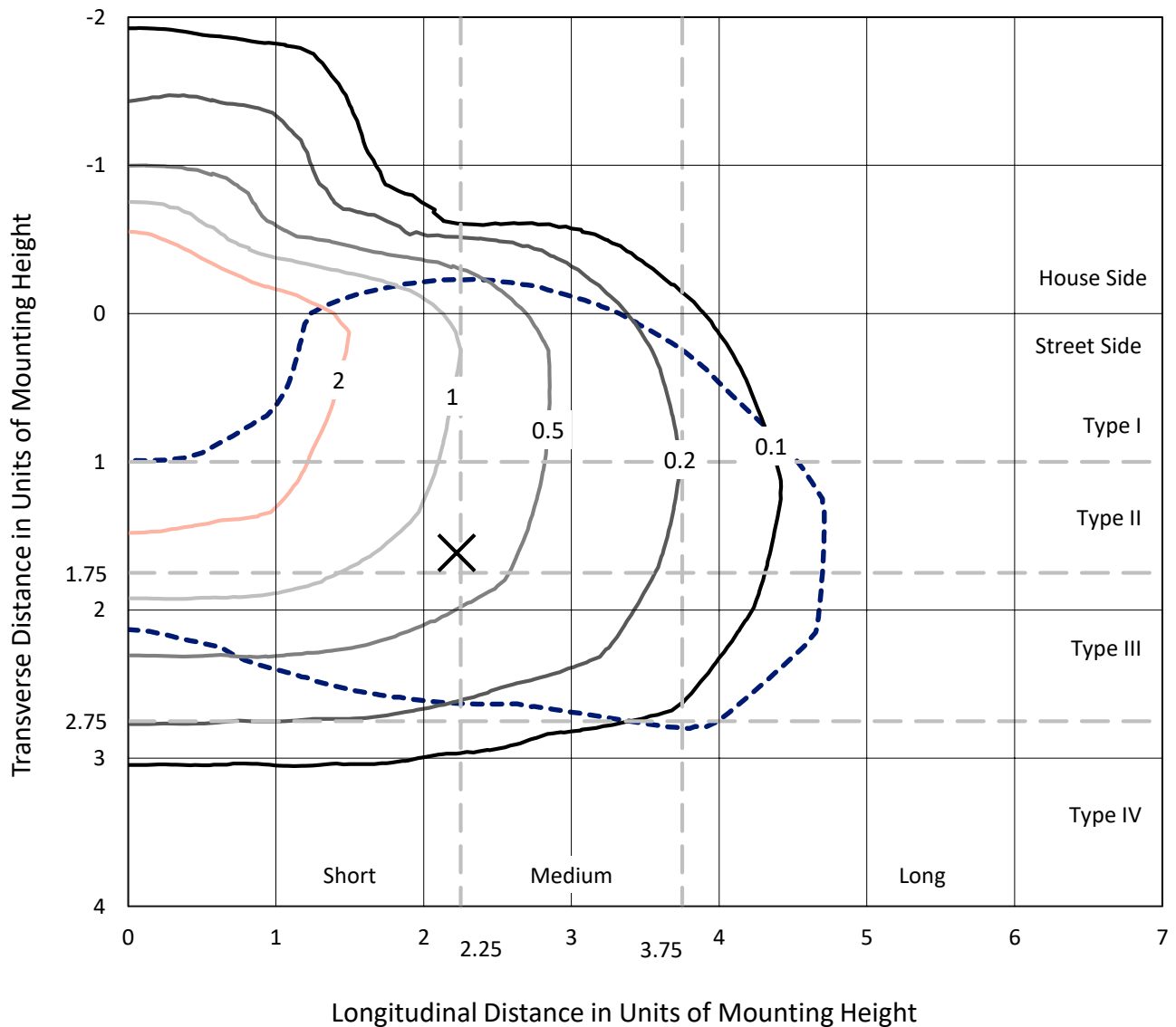


REPORT NUMBER: P234711

CATALOG NUMBER: ARCH-AF16-30-D-U-T3-8027

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

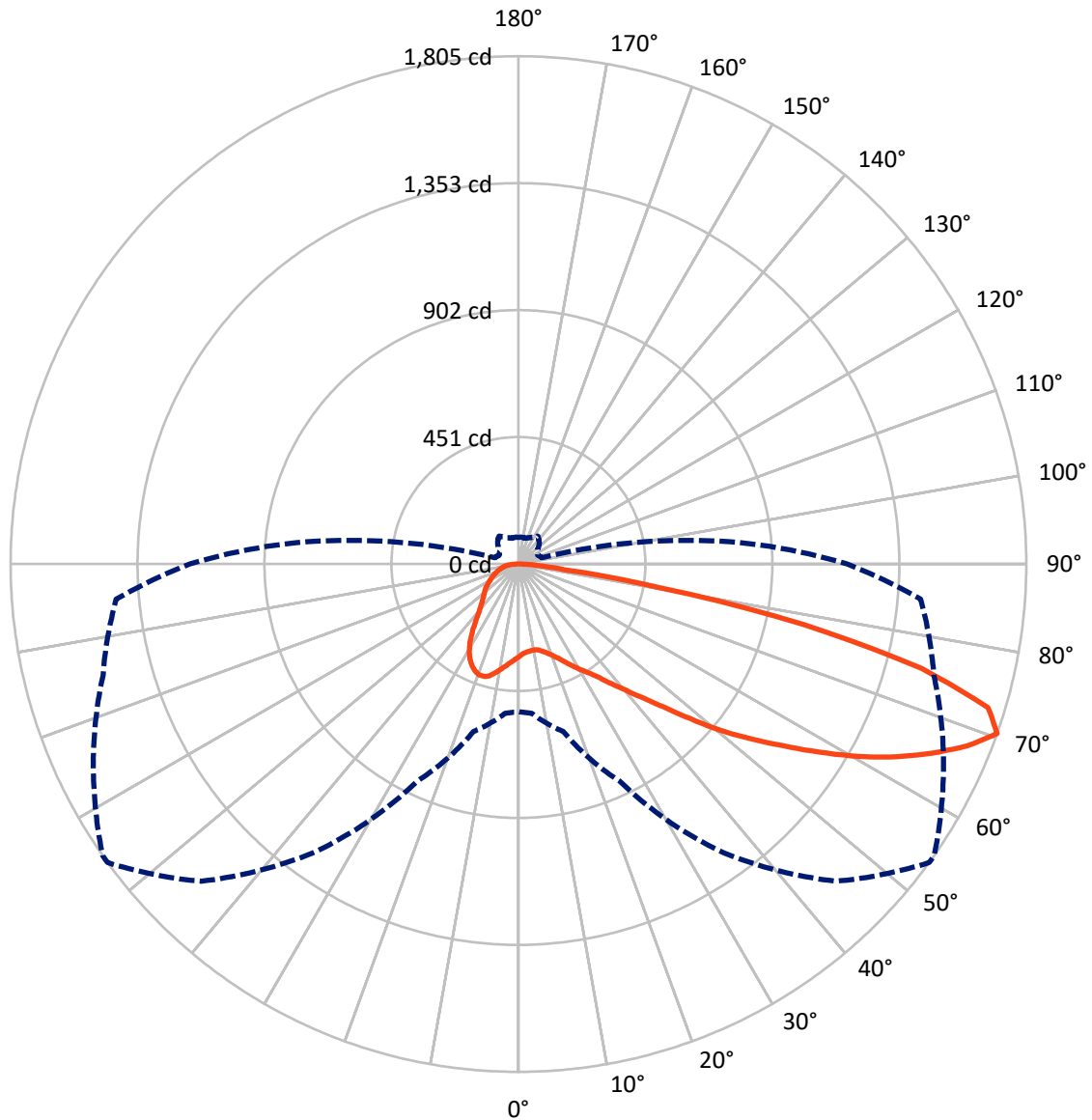


Based on 10 foot mounting height. Maximum calculated value = 3.8 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P234711

CATALOG NUMBER: ARCH-AF16-30-D-U-T3-8027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P234711

CATALOG NUMBER: ARCH-AF16-30-D-U-T3-8027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	667.0	0.0	667.0
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	2274.0	0.0	2274.0
	% Fixture	77.3	0.0	77.3
Total	Lumens	2941.0	0.0	2941.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.3	1.1
10°-20°	103.2	3.5
20°-30°	179.3	6.1
30°-40°	262.0	8.9
40°-50°	411.1	14.0
50°-60°	632.2	21.5
60°-70°	772.4	26.3
70°-80°	478.9	16.3
80°-90°	69.6	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°	2941.0	100.0
0°-180°	2941.0	100.0



REPORT NUMBER: P234711

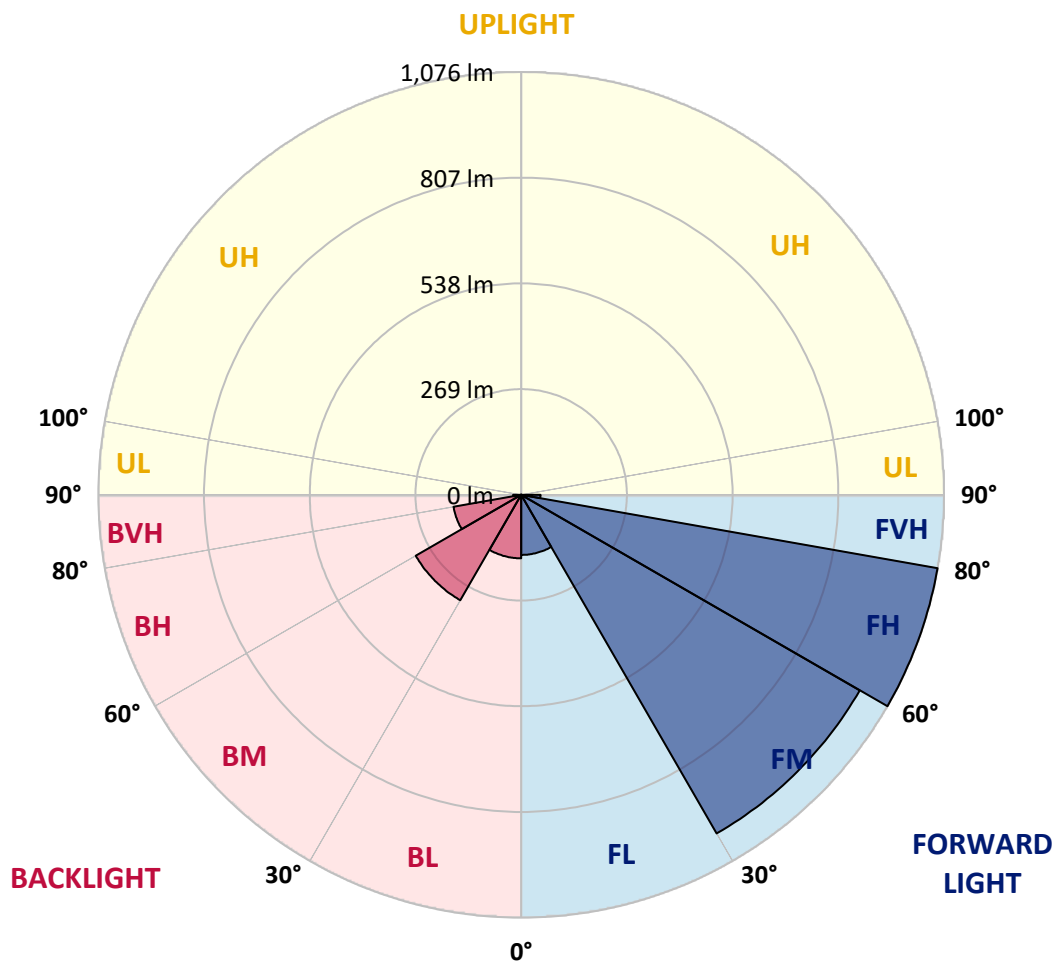
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	153.0	5.2			
FM	(30°-60°)	995.4	33.8			
FH	(60°-80°)	1076.5	36.6			G1/1800
FVH	(80°-90°)	49.1	1.7			G1/100
BL	(0°-30°)	161.7	5.5	B1/500		
BM	(30°-60°)	310.0	10.5	B1/1000		
BH	(60°-80°)	174.9	5.9	B1/500		G1/500
BVH	(80°-90°)	20.4	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: P234711

CATALOG NUMBER: ARCH-AF16-30-D-U-T3-8027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0
2.5°	316.1	315.0	315.0	316.7	317.2	318.8	318.8	319.3	321.0	323.7	326.9
5°	306.4	305.9	306.4	308.6	309.7	312.9	314.0	314.5	317.7	322.0	326.9
7.5°	296.7	296.2	297.3	300.5	303.7	308.6	311.3	311.8	316.7	322.6	329.0
10°	293.5	293.0	294.6	297.3	300.5	305.9	310.2	310.7	317.7	324.7	333.9
12.5°	297.8	297.3	298.9	301.6	304.8	308.6	313.4	314.0	323.1	332.3	342.0
15°	308.6	308.6	309.1	310.7	314.0	317.2	321.5	322.0	331.7	342.5	352.2
17.5°	325.3	324.2	324.2	323.7	325.8	327.4	332.8	333.3	343.6	353.3	363.0
20°	345.7	345.2	343.0	340.3	339.8	340.9	346.3	346.8	357.0	365.1	374.3
22.5°	370.5	371.0	366.2	360.3	357.6	359.2	364.0	364.6	372.1	379.1	387.2
25°	403.4	401.7	394.7	386.1	380.7	380.7	385.6	385.6	392.6	396.9	402.3
27.5°	434.6	431.4	424.9	412.5	403.9	405.5	410.4	410.4	416.8	418.4	421.1
30°	468.5	465.3	457.2	441.6	430.3	429.2	435.1	434.6	443.2	442.7	440.5
32.5°	510.0	508.4	494.9	475.0	459.9	456.1	461.5	462.1	467.4	465.8	458.8
35°	568.1	567.6	555.2	520.2	500.3	493.3	496.5	496.5	500.3	496.0	484.1
37.5°	641.4	642.5	631.7	580.0	552.0	540.1	540.7	540.1	541.2	536.4	524.0
40°	714.6	717.3	716.8	654.3	618.8	598.3	590.8	589.7	592.4	590.2	578.4
42.5°	811.0	817.5	802.4	745.9	706.0	671.5	651.1	648.4	654.3	657.0	645.7
45°	911.2	909.0	885.3	844.4	808.3	764.2	725.4	721.1	725.4	733.5	721.6
47.5°	963.4	961.8	955.9	935.4	930.0	879.4	820.7	816.9	808.9	820.2	806.2
50°	1049.6	1051.2	1027.0	1024.8	1047.4	1019.4	928.4	919.8	905.3	914.4	902.6
52.5°	1112.1	1105.1	1090.0	1108.8	1179.4	1164.3	1029.7	1025.9	1012.4	1010.3	1004.9
55°	1137.4	1137.4	1140.1	1183.7	1284.4	1264.5	1139.5	1143.3	1125.0	1109.9	1116.9
57.5°	1144.9	1148.1	1171.3	1243.5	1407.7	1342.5	1260.7	1266.1	1239.7	1209.5	1231.6
60°	1107.7	1117.4	1172.9	1277.4	1477.2	1425.5	1388.3	1389.9	1351.7	1307.5	1346.3
62.5°	1012.4	1024.3	1123.4	1291.4	1465.9	1510.6	1508.9	1512.7	1460.5	1405.5	1454.0
65°	895.6	907.4	1013.0	1252.1	1457.2	1571.4	1619.3	1629.6	1562.3	1488.5	1521.3
67.5°	723.8	739.4	839.6	1119.6	1415.2	1621.5	1722.7	1733.5	1640.9	1531.6	1515.4
70°	524.5	532.1	616.1	850.9	1244.0	1594.0	1804.6	1804.1	1666.7	1528.3	1434.6
72.5°	252.6	258.5	331.2	528.3	889.6	1352.8	1745.4	1755.6	1631.2	1481.5	1249.9
75°	103.9	109.9	134.1	222.9	466.9	894.0	1479.3	1503.6	1481.5	1329.6	978.0
77.5°	64.6	66.8	78.6	115.2	213.3	417.4	1035.6	1068.4	1174.0	1065.2	645.7
80°	48.5	50.1	58.7	80.8	134.6	154.0	514.3	555.8	711.4	611.2	292.4
82.5°	40.4	40.9	46.9	58.7	91.5	88.3	164.8	183.6	331.7	233.2	100.7
85°	37.7	38.8	42.0	42.0	58.2	55.5	68.4	71.6	96.4	79.7	35.0
87.5°	19.4	18.3	37.2	32.8	30.2	26.9	29.1	31.2	36.1	38.2	15.6
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: P234711

CATALOG NUMBER: ARCH-AF16-30-D-U-T3-8027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0	329.0
2.5°	328.0	329.6	332.3	335.0	338.2	342.0	344.1	346.8	349.0	347.9	347.3
5°	329.6	332.3	338.2	343.6	350.0	357.6	362.4	367.8	372.1	373.2	371.6
7.5°	332.3	337.1	345.2	354.9	363.5	373.2	380.7	388.3	393.7	394.7	394.7
10°	338.7	344.1	354.9	367.8	378.0	388.3	396.9	402.8	407.7	409.8	409.8
12.5°	347.9	354.3	367.3	382.9	394.2	403.9	408.7	411.4	413.6	415.7	416.3
15°	358.7	365.7	381.3	398.0	409.8	414.7	414.7	414.1	414.1	415.2	416.3
17.5°	369.4	377.0	393.1	410.9	418.4	415.7	412.0	410.4	409.3	408.7	410.4
20°	380.7	388.3	404.4	421.1	419.0	407.7	402.3	398.5	395.3	393.7	395.8
22.5°	393.1	400.1	416.8	428.1	412.0	394.7	384.5	378.6	373.2	370.0	372.1
25°	407.7	414.7	430.8	430.3	399.6	375.4	359.2	349.5	343.6	340.3	340.3
27.5°	424.9	430.8	446.4	424.9	382.4	349.5	325.8	316.7	315.0	312.3	312.3
30°	442.7	447.5	461.0	412.5	358.7	315.6	289.7	285.4	286.0	283.3	283.8
32.5°	461.0	465.8	469.6	394.2	328.0	277.3	260.1	256.9	256.3	254.2	252.0
35°	486.8	493.8	470.7	369.4	290.8	245.6	233.2	229.9	226.7	219.2	219.2
37.5°	526.1	533.7	468.0	338.7	252.6	220.8	209.5	205.2	199.8	192.3	189.6
40°	580.0	580.0	462.1	304.3	221.9	200.9	190.1	184.7	178.8	171.3	169.6
42.5°	643.5	628.5	452.9	269.3	199.3	187.4	177.7	171.8	164.8	156.2	155.1
45°	717.9	676.9	440.0	238.0	182.6	179.3	173.4	163.2	151.3	142.2	140.6
47.5°	790.0	720.5	427.6	215.9	168.6	176.1	171.3	154.0	137.9	124.9	123.3
50°	869.2	759.3	413.0	197.6	157.8	173.9	168.6	140.6	122.8	113.6	112.6
52.5°	948.3	798.6	397.4	178.3	148.6	169.6	162.1	130.9	122.2	109.9	108.2
55°	1031.8	844.4	379.1	156.7	137.9	161.0	153.5	130.3	126.0	109.9	106.1
57.5°	1113.1	895.0	349.5	135.7	126.0	148.1	150.2	127.1	117.9	108.8	104.5
60°	1203.1	948.9	300.5	117.9	115.8	137.3	145.9	120.1	108.8	105.6	103.4
62.5°	1275.2	997.3	234.8	105.6	107.2	128.7	140.6	115.8	105.0	102.3	101.8
65°	1306.5	998.4	168.6	94.8	98.5	120.6	135.2	112.0	101.8	100.7	100.2
67.5°	1273.6	943.5	118.5	84.5	89.4	113.1	128.2	108.2	98.5	99.1	98.0
70°	1167.5	827.7	86.7	74.9	80.8	105.0	120.6	103.4	94.8	95.9	94.2
72.5°	976.9	645.2	69.5	66.8	73.8	96.4	113.1	98.0	88.9	89.4	86.2
75°	721.6	427.6	58.2	59.8	65.7	88.3	103.4	91.0	82.4	80.2	78.1
77.5°	429.2	219.7	47.9	52.2	58.7	78.6	92.6	82.4	75.4	71.6	70.0
80°	177.2	88.9	39.3	44.2	51.2	70.0	81.9	72.2	67.3	63.5	61.4
82.5°	70.5	43.6	31.2	36.1	43.1	60.9	71.6	63.5	58.7	56.0	50.1
85°	26.9	21.5	21.0	25.3	32.3	46.9	59.2	53.3	49.5	42.5	40.9
87.5°	10.8	9.7	9.7	12.4	18.3	29.6	42.5	37.2	38.8	30.7	31.2
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)