

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: P265914

Luminaire Tested: **ARCH-AF24-20-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265914
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-20-D-U-T2R-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2484.1 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G1

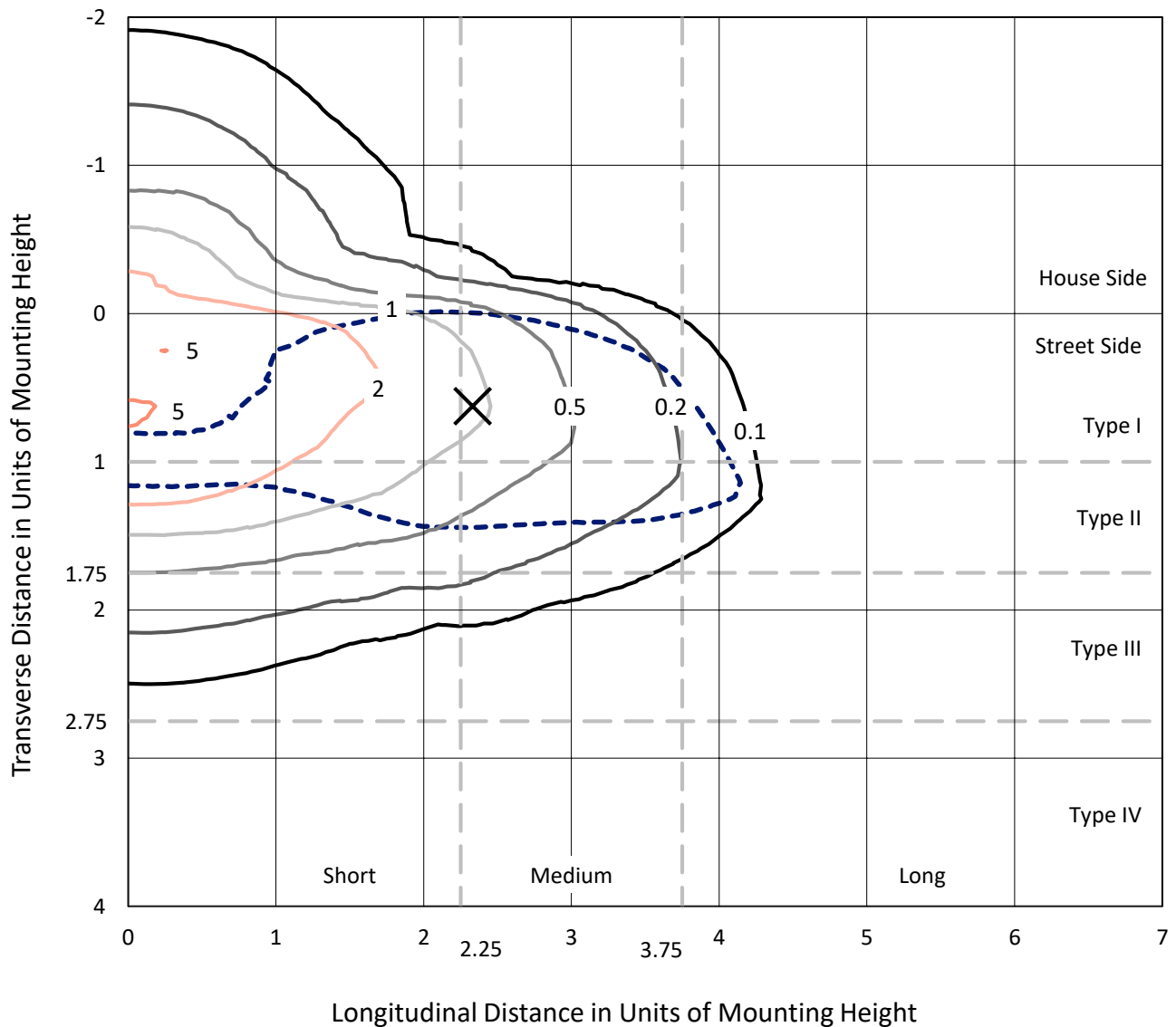
Input Watts (W): 21
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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 CATALOG NUMBER: ARCH-AF24-20-D-U-T2R-7027

Iso-Footcandle Lines of Horizontal Illumination

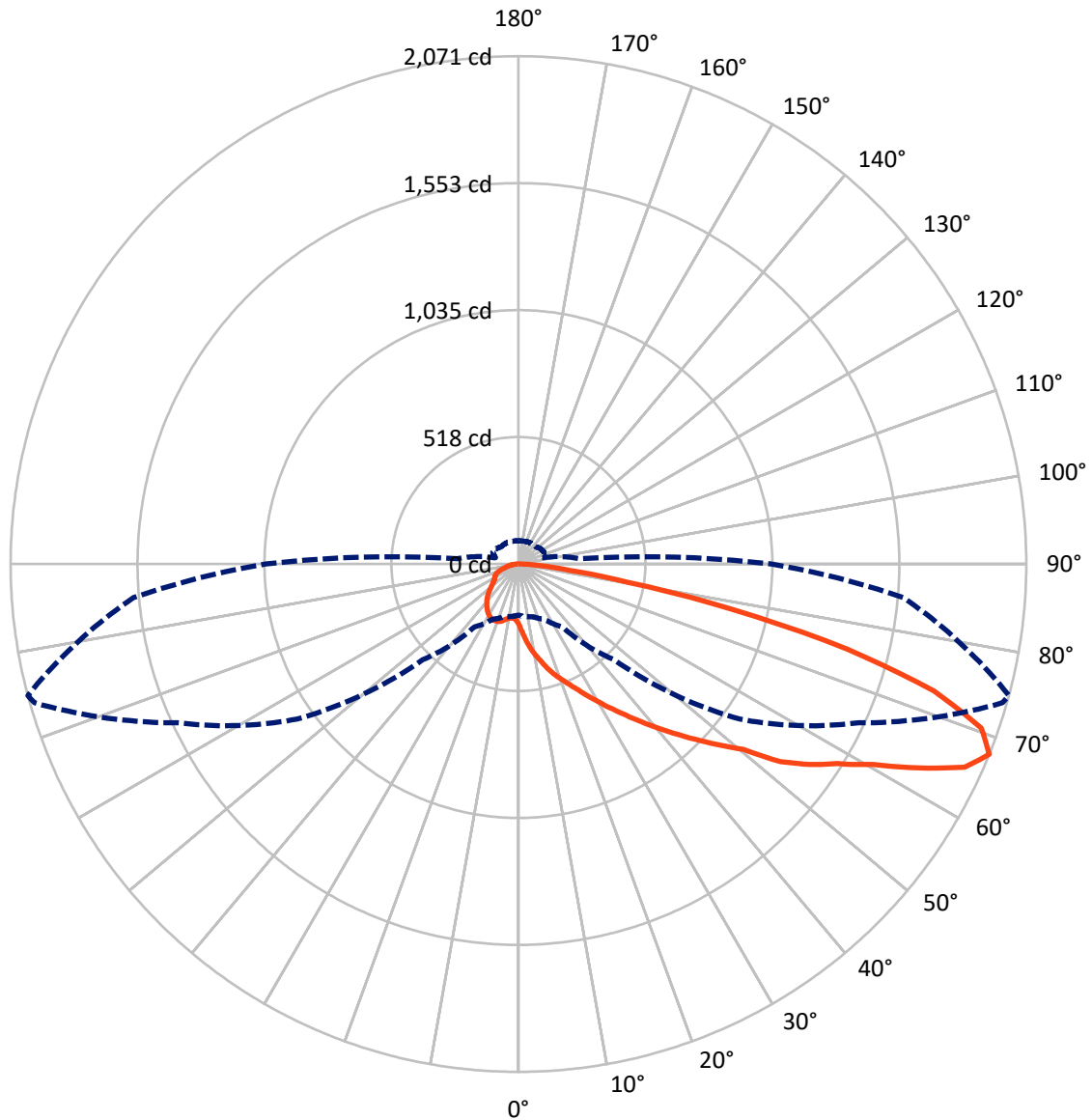
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.2 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P265914
CATALOG NUMBER: ARCH-AF24-20-D-U-T2R-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	424.2	0.0	424.2
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	2059.9	0.0	2059.9
	% Fixture	82.9	0.0	82.9
Total	Lumens	2484.1	0.0	2484.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.9	1.2
10°-20°	104.5	4.2
20°-30°	190.6	7.7
30°-40°	312.9	12.6
40°-50°	452.5	18.2
50°-60°	533.2	21.5
60°-70°	518.2	20.9
70°-80°	288.0	11.6
80°-90°	55.4	2.2
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°	2484.1	100.0
0°-180°	2484.1	100.0

Coefficient of Utilization



REPORT NUMBER: P265914

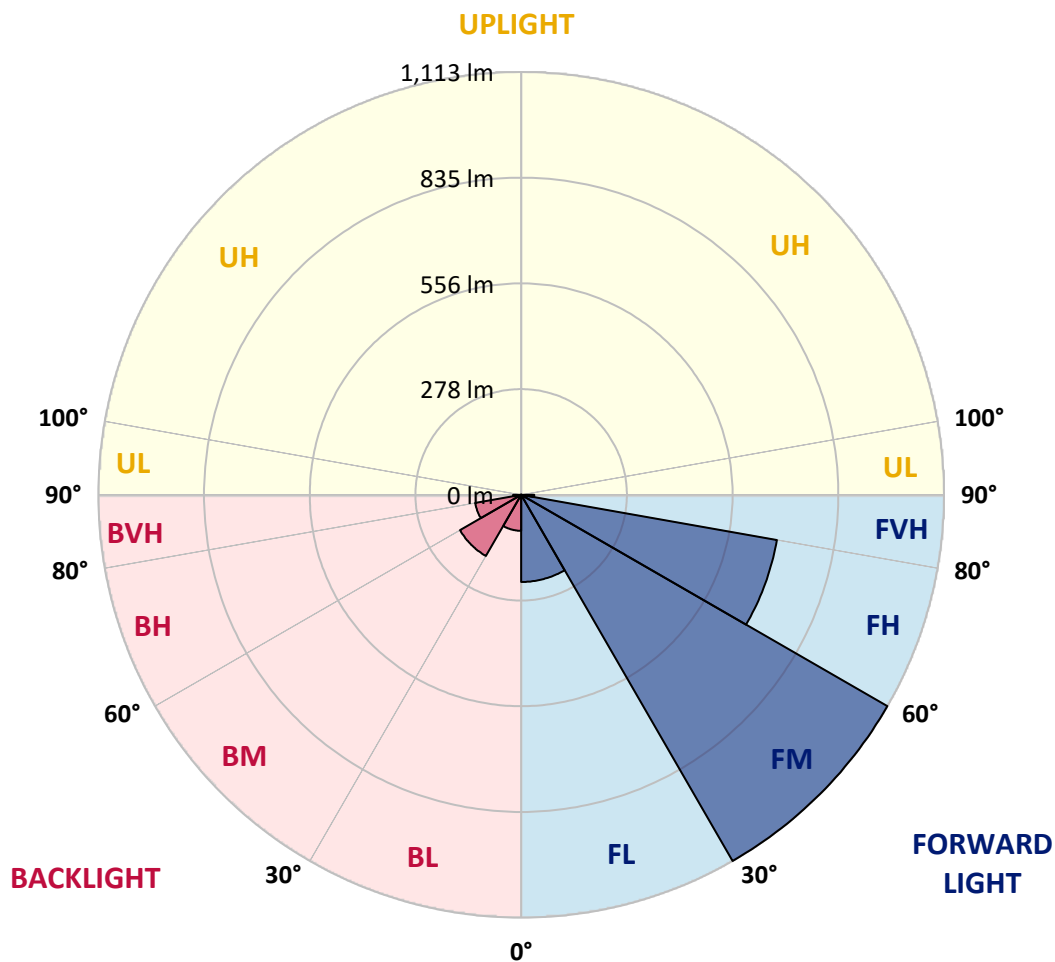
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	229.4	9.2			
FM (30°-60°)	1112.8	44.8			
FH (60°-80°)	683.3	27.5			G1/1800
FVH (80°-90°)	34.5	1.4			G1/100
BL (0°-30°)	94.7	3.8	B0/110		
BM (30°-60°)	185.8	7.5	B0/220		
BH (60°-80°)	122.8	4.9	B1/500		G1/500
BVH (80°-90°)	20.9	0.8			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 II Medium





REPORT NUMBER: P265914

CATALOG NUMBER: ARCH-AF24-20-D-U-T2R-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	246.1	246.1	246.1	246.1	246.1	246.1	246.1	246.1	246.1	246.1	246.1
2.5°	349.0	350.0	348.0	343.2	336.5	324.1	313.1	293.9	276.8	274.7	256.6
5°	410.3	411.3	408.6	403.0	395.8	382.1	367.1	342.3	314.6	309.5	271.1
7.5°	452.3	452.8	449.7	444.0	438.4	424.8	409.7	381.7	348.0	343.8	289.8
10°	488.1	489.1	485.1	481.4	475.2	461.6	446.1	416.5	381.7	376.0	308.9
12.5°	521.3	522.5	519.8	516.7	514.5	502.2	485.1	449.7	412.3	406.2	331.8
15°	543.7	544.7	545.4	549.5	552.0	543.1	526.0	487.6	445.6	439.9	358.9
17.5°	537.5	540.2	547.8	563.0	579.0	579.5	565.6	525.0	478.3	472.1	386.5
20°	519.3	521.3	530.7	553.5	585.2	603.4	602.5	563.0	508.9	502.2	411.9
22.5°	534.4	536.9	536.9	551.0	582.1	615.9	629.4	600.2	539.5	533.4	437.2
25°	598.8	600.2	589.4	583.7	595.1	626.3	651.7	640.9	576.9	569.6	464.9
27.5°	688.6	686.0	672.6	649.7	637.2	645.5	671.5	679.3	620.1	611.2	493.3
30°	777.9	776.3	760.8	730.1	702.1	684.5	693.3	713.6	666.8	656.4	520.8
32.5°	861.6	858.9	841.8	806.0	774.2	741.6	724.5	744.7	716.7	704.7	551.5
35°	938.4	931.6	914.6	877.1	844.3	813.2	771.1	774.2	770.7	758.2	585.2
37.5°	1000.7	995.5	976.8	942.1	907.3	877.6	833.4	808.0	828.9	816.9	624.2
40°	1055.8	1050.1	1030.8	996.0	963.8	935.9	901.0	849.1	894.3	880.8	667.8
42.5°	1097.3	1093.1	1077.5	1043.3	1012.1	986.7	969.5	901.0	962.3	949.2	715.6
45°	1119.6	1115.4	1107.3	1079.7	1051.0	1031.3	1033.0	962.9	1033.4	1022.5	772.3
47.5°	1092.1	1095.3	1102.5	1097.3	1079.7	1070.3	1089.6	1026.7	1112.9	1102.5	833.4
50°	1018.4	1021.6	1050.6	1086.4	1092.6	1104.0	1140.4	1100.5	1197.0	1188.6	909.4
52.5°	837.1	854.3	934.7	1020.5	1079.1	1126.4	1197.0	1209.9	1338.7	1338.7	1043.3
55°	632.5	647.6	739.6	889.1	1026.7	1128.5	1238.6	1284.2	1441.2	1443.1	1113.4
57.5°	512.6	521.9	567.1	720.4	916.6	1102.5	1287.9	1348.1	1526.2	1535.7	1203.8
60°	415.9	421.1	450.8	557.2	764.4	1032.4	1323.3	1439.5	1647.9	1660.7	1319.0
62.5°	334.3	339.6	359.3	423.2	599.8	901.0	1316.9	1534.6	1809.7	1831.0	1470.2
65°	266.9	272.6	285.7	325.0	444.5	738.0	1253.0	1583.4	1977.4	1998.3	1570.3
67.5°	208.2	213.4	222.3	248.2	313.1	552.0	1102.0	1532.0	2052.8	2070.6	1575.5
70°	157.4	160.0	167.3	183.9	223.8	366.7	862.6	1359.6	1985.3	2001.5	1471.8
72.5°	122.0	121.5	125.7	133.9	156.3	252.3	571.7	1105.6	1755.3	1771.8	1255.7
75°	99.7	99.3	101.8	104.5	113.1	169.3	337.6	832.5	1416.6	1384.9	942.1
77.5°	84.1	83.6	86.1	86.7	90.4	116.8	192.1	547.8	945.1	890.6	530.7
80°	71.1	70.6	73.8	74.7	77.3	85.7	110.6	296.5	474.7	449.7	253.4
82.5°	53.4	55.5	61.3	63.9	67.1	63.4	68.5	130.9	220.2	210.4	110.1
85°	26.1	30.6	46.3	51.5	55.1	40.0	46.7	61.9	99.3	94.5	44.6
87.5°	8.9	7.7	27.5	32.7	35.8	18.1	26.1	34.2	41.1	37.4	14.1
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: P265914

CATALOG NUMBER: ARCH-AF24-20-D-U-T2R-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	246.1	246.1	246.1	246.1	246.1	246.1	246.1	246.1	246.1	246.1	246.1
2.5°	248.7	240.9	229.5	220.8	215.1	210.4	208.2	207.7	206.7	206.3	206.3
5°	254.0	239.8	222.3	212.9	210.4	208.2	209.2	209.8	209.8	209.8	209.8
7.5°	261.8	242.1	220.8	214.4	213.9	213.9	217.1	218.6	219.6	219.6	219.6
10°	272.1	245.6	223.3	218.1	219.6	220.8	224.3	226.5	227.5	228.0	228.4
12.5°	286.1	253.4	228.4	224.3	226.5	226.9	229.5	230.5	231.7	232.1	232.1
15°	304.9	264.8	236.9	231.7	232.1	231.7	231.7	230.5	230.1	230.1	231.1
17.5°	324.1	275.8	244.1	236.9	234.7	230.5	227.5	224.8	223.3	222.3	222.8
20°	343.2	285.7	248.2	237.8	232.1	225.4	219.6	216.0	213.9	211.9	212.9
22.5°	362.5	295.0	249.8	234.7	226.5	216.5	210.4	204.6	200.0	196.8	197.4
25°	383.8	305.3	249.8	231.1	218.6	208.2	200.4	191.1	184.3	181.7	182.7
27.5°	405.0	314.1	247.3	224.3	209.8	199.5	187.9	177.1	173.0	171.3	171.8
30°	426.3	321.0	241.5	216.0	200.4	189.1	174.0	166.6	161.5	157.4	157.8
32.5°	447.6	325.6	233.6	205.6	190.6	176.1	163.6	155.2	146.0	140.8	141.3
35°	472.1	329.3	224.3	195.2	179.8	164.6	155.2	141.8	132.0	127.7	126.8
37.5°	497.5	331.8	214.4	183.9	168.8	156.3	147.0	130.3	121.0	115.3	114.8
40°	525.0	332.9	202.6	171.8	158.5	151.2	136.1	123.5	107.4	103.8	103.8
42.5°	557.8	332.4	190.6	160.0	147.0	139.1	128.3	122.6	108.5	104.9	102.9
45°	595.1	332.4	177.7	146.0	135.6	124.1	119.5	115.8	106.4	108.1	109.1
47.5°	637.6	331.4	162.1	134.4	126.2	116.3	113.7	105.9	102.2	103.3	104.5
50°	696.4	332.9	148.0	125.1	119.5	111.1	108.1	103.8	102.2	102.9	102.2
52.5°	777.9	327.7	134.4	119.5	114.3	103.3	103.3	102.9	103.3	102.9	102.9
55°	822.6	316.3	124.7	116.3	110.6	99.7	101.8	102.9	103.8	103.3	103.3
57.5°	886.0	308.5	116.8	114.3	108.5	98.6	100.7	102.9	103.3	102.9	102.9
60°	960.7	303.3	111.7	114.8	107.0	98.6	101.2	102.9	102.2	101.8	101.8
62.5°	1047.5	301.2	108.1	116.3	105.5	99.3	101.2	102.9	100.7	100.3	100.3
65°	1080.1	282.4	103.3	117.4	106.4	99.3	100.7	101.2	98.6	98.2	97.6
67.5°	1029.7	250.3	96.6	115.3	109.6	99.3	99.3	98.6	95.6	95.0	94.1
70°	917.1	207.7	86.1	108.5	111.7	99.7	97.0	94.5	91.4	91.4	89.3
72.5°	751.0	163.6	72.8	96.6	110.1	101.2	93.0	89.3	85.7	85.7	83.6
75°	541.0	122.0	58.2	80.5	103.3	100.7	87.8	83.2	79.0	78.4	75.7
77.5°	308.5	85.7	47.3	62.8	91.9	98.2	83.2	75.7	71.1	69.6	68.0
80°	158.5	57.6	38.4	49.3	76.4	90.9	79.5	67.6	62.3	59.6	57.1
82.5°	75.3	38.4	29.6	36.3	57.6	79.5	74.7	58.2	52.5	49.3	46.3
85°	33.7	22.8	19.8	23.4	41.1	61.9	65.9	47.8	41.1	51.5	37.9
87.5°	10.9	10.4	10.4	10.9	19.8	26.9	48.2	35.4	32.7	26.9	22.8
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)