

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: P348626

Luminaire Tested: **ARCH-N-PA1-20-830-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348626
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-14)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-20-830-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 420mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2711 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 24
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

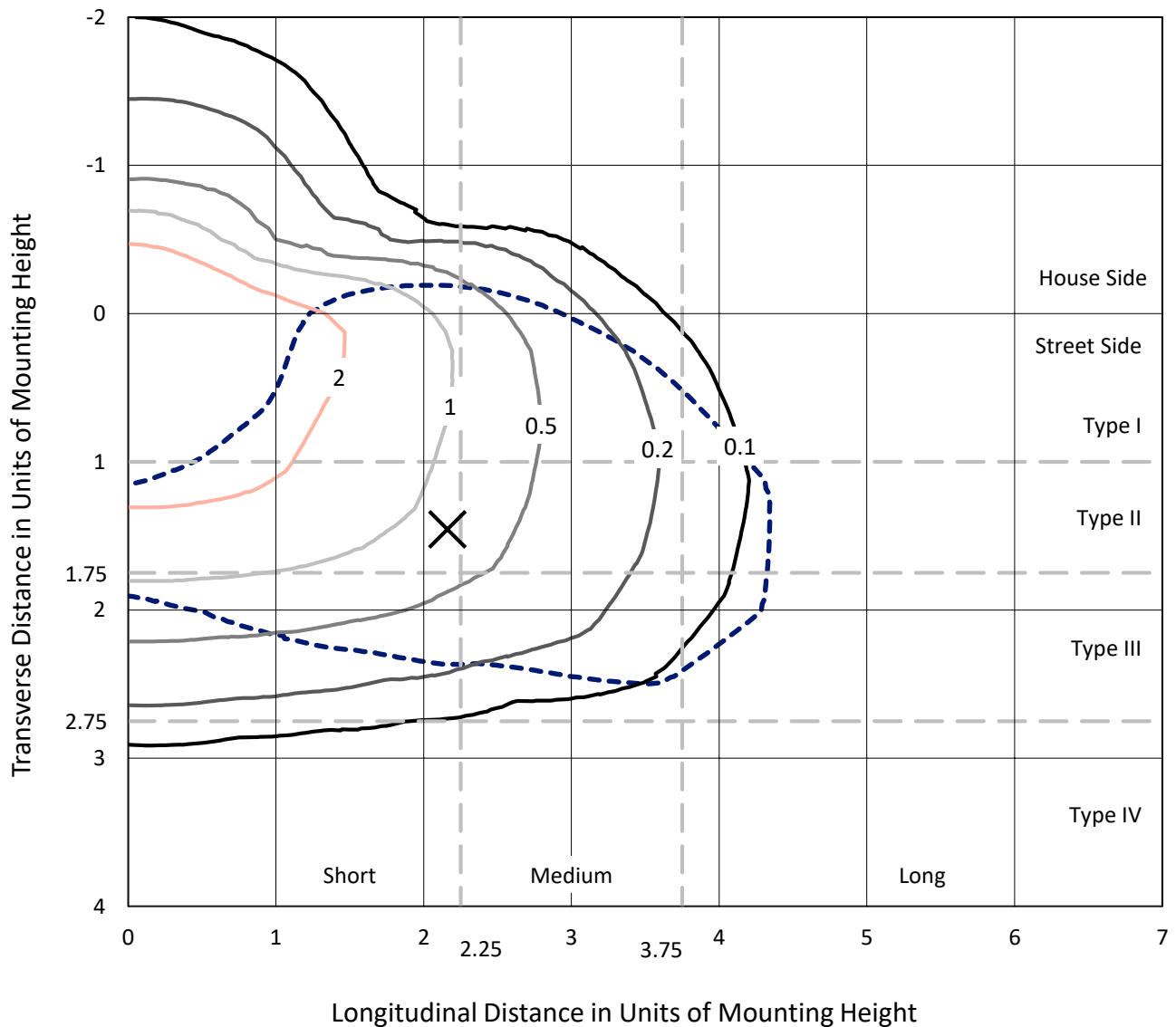


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

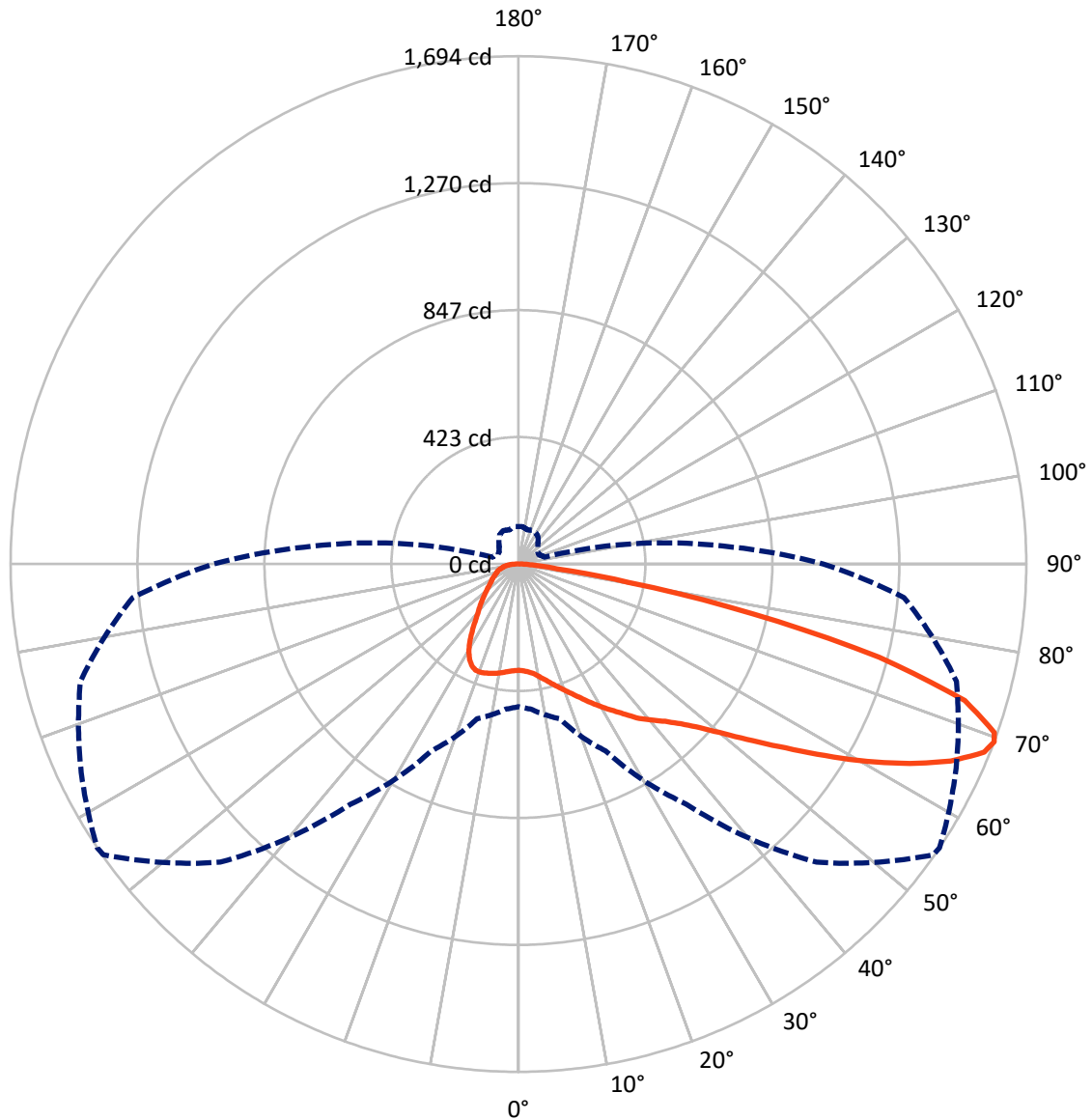


Based on 10 foot mounting height. Maximum calculated value = 3.9 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	603.7	0.0	603.7
	% Fixture	22.3	0.0	22.3
Street Side	Lumens	2107.3	0.0	2107.3
	% Fixture	77.7	0.0	77.7
Total	Lumens	2711.0	0.0	2711.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.8	1.3
10°-20°	111.9	4.1
20°-30°	195.4	7.2
30°-40°	280.7	10.4
40°-50°	388.4	14.3
50°-60°	569.1	21.0
60°-70°	693.9	25.6
70°-80°	383.6	14.2
80°-90°	53.1	2.0
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°	2711.0	100.0
0°-180°	2711.0	100.0



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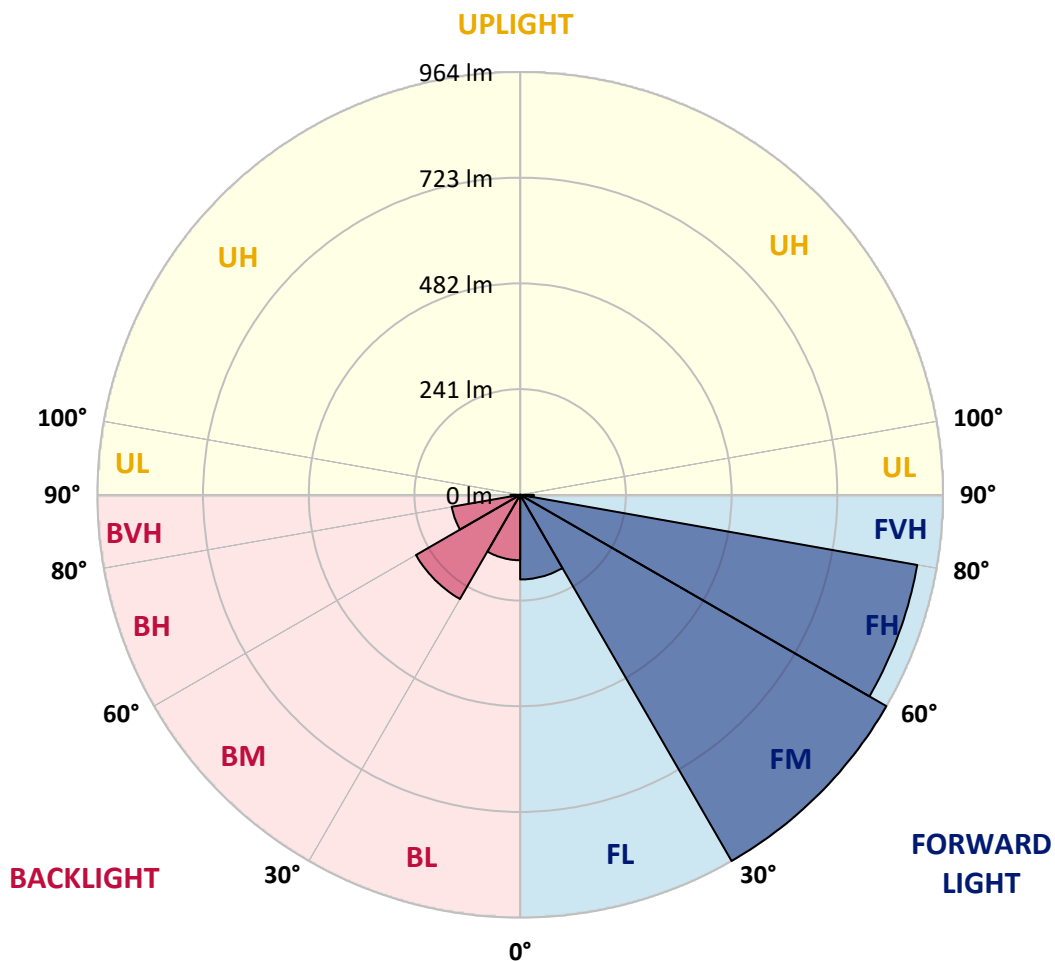
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	192.9	7.1			
FM	(30°-60°)	963.9	35.6			
FH	(60°-80°)	919.2	33.9			G1/1800
FVH	(80°-90°)	31.3	1.2			G1/100
BL	(0°-30°)	149.2	5.5	B1/500		
BM	(30°-60°)	274.4	10.1	B1/1000		
BH	(60°-80°)	158.3	5.8	B1/500		G1/500
BVH	(80°-90°)	21.8	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4
2.5°	356.7	357.0	356.8	357.5	356.7	357.2	356.8	356.8	356.5	355.6	354.7
5°	362.3	363.0	362.5	363.3	362.3	362.5	361.6	361.6	360.8	359.0	357.1
7.5°	371.0	371.9	371.5	372.3	370.9	370.9	369.7	369.6	368.0	365.1	362.9
10°	381.5	382.6	382.3	383.4	382.3	382.6	381.5	381.5	379.3	375.2	372.4
12.5°	396.7	398.1	397.1	397.0	396.5	397.3	396.4	396.2	394.1	388.5	384.8
15°	417.1	418.6	416.4	416.2	413.6	413.4	413.4	413.1	411.8	405.0	398.9
17.5°	440.5	441.0	439.1	436.1	432.8	430.6	430.4	431.1	431.1	423.3	413.4
20°	463.5	464.3	462.9	459.5	455.2	452.0	449.8	451.3	451.2	441.8	427.9
22.5°	488.5	490.5	488.3	484.0	478.9	475.4	471.4	472.8	472.8	461.4	442.1
25°	520.9	519.2	517.8	511.7	504.5	500.9	497.2	498.5	498.2	482.4	456.8
27.5°	549.6	550.0	548.1	541.7	533.4	525.3	525.1	526.0	524.6	504.2	470.6
30°	583.0	583.1	580.5	574.7	565.7	555.3	552.9	554.3	551.3	525.0	485.2
32.5°	616.1	617.0	614.1	607.1	599.9	587.2	582.4	583.3	575.9	546.2	500.2
35°	645.2	646.5	645.5	640.9	632.9	622.1	616.3	615.7	606.5	572.1	520.1
37.5°	674.8	676.0	674.9	671.0	667.8	656.4	653.3	653.3	637.2	598.6	545.4
40°	705.2	707.1	705.9	700.4	697.7	692.5	685.1	683.3	666.0	630.5	586.7
42.5°	733.5	735.9	740.8	737.6	732.1	732.8	718.0	717.1	704.4	677.6	638.5
45°	773.7	777.2	785.4	783.0	781.9	777.8	760.1	759.3	754.4	740.9	702.9
47.5°	817.5	822.3	837.2	837.6	849.7	841.9	817.9	815.0	816.2	816.7	781.4
50°	857.8	863.1	887.5	899.0	927.4	929.1	890.7	888.1	892.5	905.3	872.9
52.5°	890.0	896.7	927.2	962.7	1011.3	1025.2	980.2	978.3	981.5	1003.8	976.4
55°	913.7	920.9	954.1	1018.7	1096.4	1120.8	1083.3	1081.5	1083.5	1111.8	1089.0
57.5°	919.2	920.9	969.0	1056.4	1168.2	1226.8	1209.5	1205.8	1195.7	1220.4	1213.2
60°	893.3	900.4	956.7	1069.7	1223.8	1331.3	1341.4	1336.7	1308.4	1328.6	1322.8
62.5°	840.8	853.5	910.7	1049.5	1245.6	1416.7	1470.7	1465.1	1416.4	1429.5	1401.6
65°	755.1	760.5	820.5	980.0	1217.9	1471.3	1586.1	1583.3	1521.9	1501.5	1416.2
67.5°	601.7	611.9	662.9	834.6	1104.8	1464.9	1675.3	1675.0	1590.8	1528.2	1364.5
69°	475.4	485.9	534.5	687.5	977.6	1405.9	1690.2	1693.5	1610.3	1511.9	1290.8
70°	379.0	391.2	424.6	579.0	864.7	1328.2	1677.8	1683.7	1606.5	1485.1	1222.7
72.5°	161.3	171.2	194.9	298.5	527.0	991.8	1534.1	1556.3	1520.0	1359.2	1010.5
75°	70.4	73.5	84.2	121.7	233.9	539.8	1201.8	1242.9	1299.6	1148.9	752.7
77.5°	51.6	52.9	58.7	71.4	105.0	203.9	772.8	796.7	937.3	836.0	461.7
80°	39.9	40.8	45.4	52.5	68.5	82.5	352.5	373.0	527.0	429.4	192.3
82.5°	31.8	32.4	35.6	38.7	47.3	50.0	117.0	129.8	194.5	118.6	50.9
85°	29.5	30.3	31.4	28.2	30.4	29.3	50.6	53.0	58.7	46.6	21.3
87.5°	13.4	15.8	31.1	21.9	16.2	12.9	20.7	21.7	24.4	24.5	9.4
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°	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4	354.4
2.5°	355.3	355.0	355.4	354.3	355.7	355.6	355.2	355.4	356.3	356.2	356.3
5°	357.4	357.2	357.8	356.9	358.6	359.2	359.3	360.1	361.1	361.4	361.4
7.5°	362.8	362.8	363.1	362.0	363.1	363.0	362.5	363.4	364.4	364.5	364.4
10°	372.2	372.3	371.8	368.9	368.0	365.4	363.1	363.2	364.5	365.5	365.8
12.5°	383.9	383.6	381.5	376.2	372.3	367.1	364.7	364.6	365.9	366.8	367.0
15°	397.4	396.4	391.0	382.3	375.4	370.4	366.5	365.5	364.8	363.9	363.9
17.5°	410.1	407.7	398.9	386.8	379.5	372.8	365.3	359.2	355.0	352.6	351.8
20°	423.0	418.4	405.6	391.0	381.8	369.6	355.0	342.7	335.0	331.4	330.8
22.5°	434.7	427.4	411.9	395.4	380.0	358.5	335.7	317.7	307.1	302.3	302.7
25°	446.2	436.0	418.4	398.5	371.0	339.1	308.8	286.7	274.4	269.1	268.9
27.5°	456.3	444.6	425.5	396.0	354.3	311.5	276.9	255.4	245.2	240.6	239.8
30°	467.9	455.6	434.9	386.4	329.9	279.5	245.8	230.7	223.4	218.8	218.0
32.5°	482.0	470.4	442.7	368.9	298.6	246.2	221.5	211.0	204.3	199.2	198.3
35°	502.5	490.0	444.6	343.9	264.2	219.8	203.7	192.9	183.9	177.3	176.6
37.5°	528.3	514.6	440.2	311.5	230.9	202.8	188.8	175.5	163.8	154.5	153.0
40°	565.5	544.8	427.7	274.1	206.3	189.6	174.4	159.1	144.7	133.7	131.6
42.5°	610.1	580.2	408.7	236.9	188.3	176.2	160.0	141.1	127.3	119.5	118.4
45°	666.9	616.9	382.3	204.4	170.5	162.9	144.5	127.1	118.5	112.8	111.9
47.5°	731.7	658.2	354.5	178.0	155.5	150.4	132.1	120.8	114.0	109.5	108.7
50°	811.4	704.8	325.1	156.3	140.4	135.3	126.2	117.4	112.0	108.5	107.7
52.5°	901.2	757.4	303.9	139.2	127.9	124.2	123.1	115.5	111.1	108.5	107.7
55°	998.0	810.9	281.0	124.9	117.0	118.0	121.0	115.7	112.7	109.5	108.3
57.5°	1094.8	866.2	255.5	112.7	108.4	113.5	119.6	116.1	113.6	110.5	109.4
60°	1171.4	901.2	216.0	102.5	101.6	108.4	116.3	113.3	110.0	110.1	109.9
62.5°	1207.2	899.4	172.4	93.5	94.8	101.6	110.9	108.9	106.2	109.8	110.1
65°	1187.1	854.5	134.2	85.3	87.5	94.5	105.3	106.7	107.7	114.7	115.6
67.5°	1102.9	767.3	103.9	78.1	80.9	89.7	105.8	116.3	117.5	124.9	124.8
69°	1015.7	685.5	90.3	74.3	77.6	90.9	113.1	122.3	117.8	125.6	124.5
70°	942.7	620.8	83.0	71.8	76.1	93.0	118.0	122.3	116.4	123.1	121.2
72.5°	726.0	446.6	70.4	67.1	71.1	89.0	119.4	119.5	113.1	114.4	111.2
75°	498.0	282.2	61.5	60.8	63.4	80.2	114.9	114.2	104.6	102.7	100.1
77.5°	274.6	143.4	52.2	54.7	56.5	71.1	104.4	103.5	95.5	91.6	90.7
80°	105.9	62.8	44.1	48.7	49.8	61.5	91.5	90.7	84.1	79.0	77.6
82.5°	40.0	32.9	36.4	42.1	41.7	50.8	77.5	77.0	70.6	63.2	61.0
85°	18.5	19.7	28.9	34.7	32.0	37.6	62.0	62.9	55.0	46.2	46.2
87.5°	7.8	11.0	20.5	26.2	21.6	25.4	45.5	43.4	39.9	27.6	26.0
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)