

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: P265884

Luminaire Tested: **ARCH-AF16-30-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265884
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-AF16-30-D-U-T4W-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3278.1 lumens
Efficiency: N/A
Efficacy: 102.4 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): 32
Input Voltage (V): NR
Input Current (A_{in}): 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

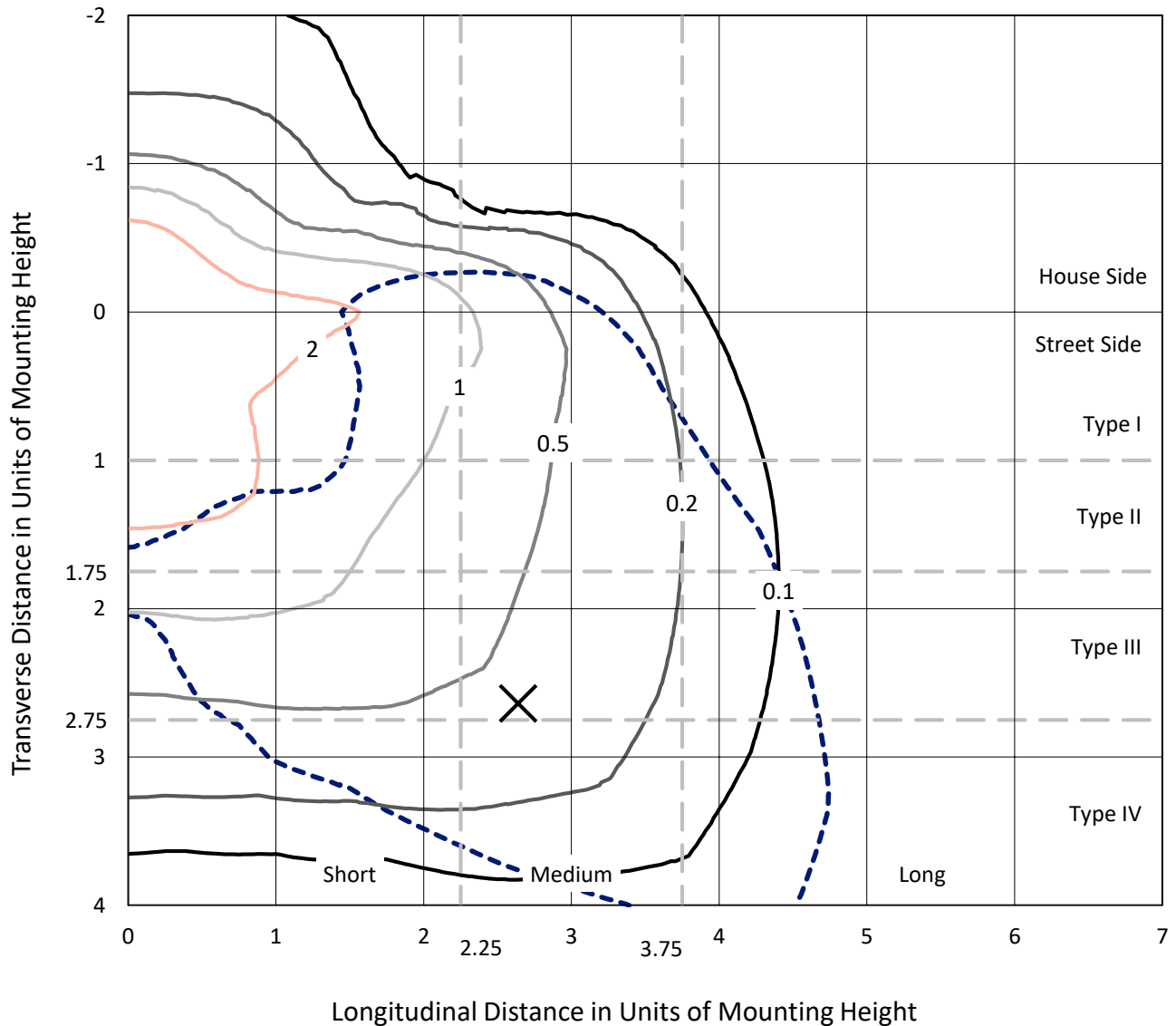


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

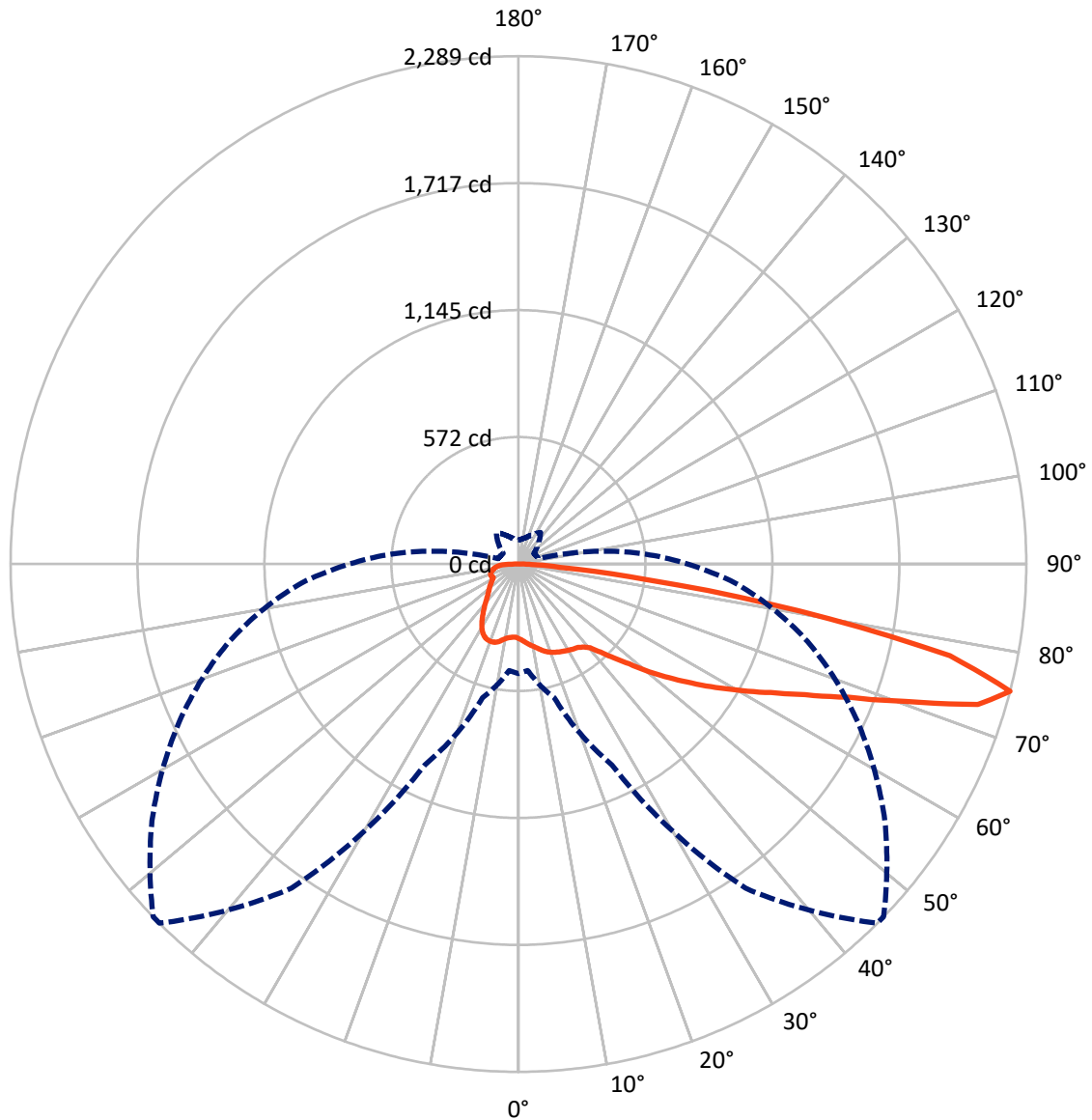


Based on 10 foot mounting height. Maximum calculated value = 3.9 fc
 Type IV - Medium - Non-Cutoff

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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
House Side	Lumens	759.4	0.0	759.4
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	2518.7	0.0	2518.7
	% Fixture	76.8	0.0	76.8
Total	Lumens	3278.1	0.0	3278.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.3	1.0
10°-20°	107.9	3.3
20°-30°	185.2	5.6
30°-40°	259.0	7.9
40°-50°	379.9	11.6
50°-60°	591.9	18.1
60°-70°	851.6	26.0
70°-80°	741.9	22.6
80°-90°	127.4	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°	3278.1	100.0
0°-180°	3278.1	100.0

Coefficient of Utilization



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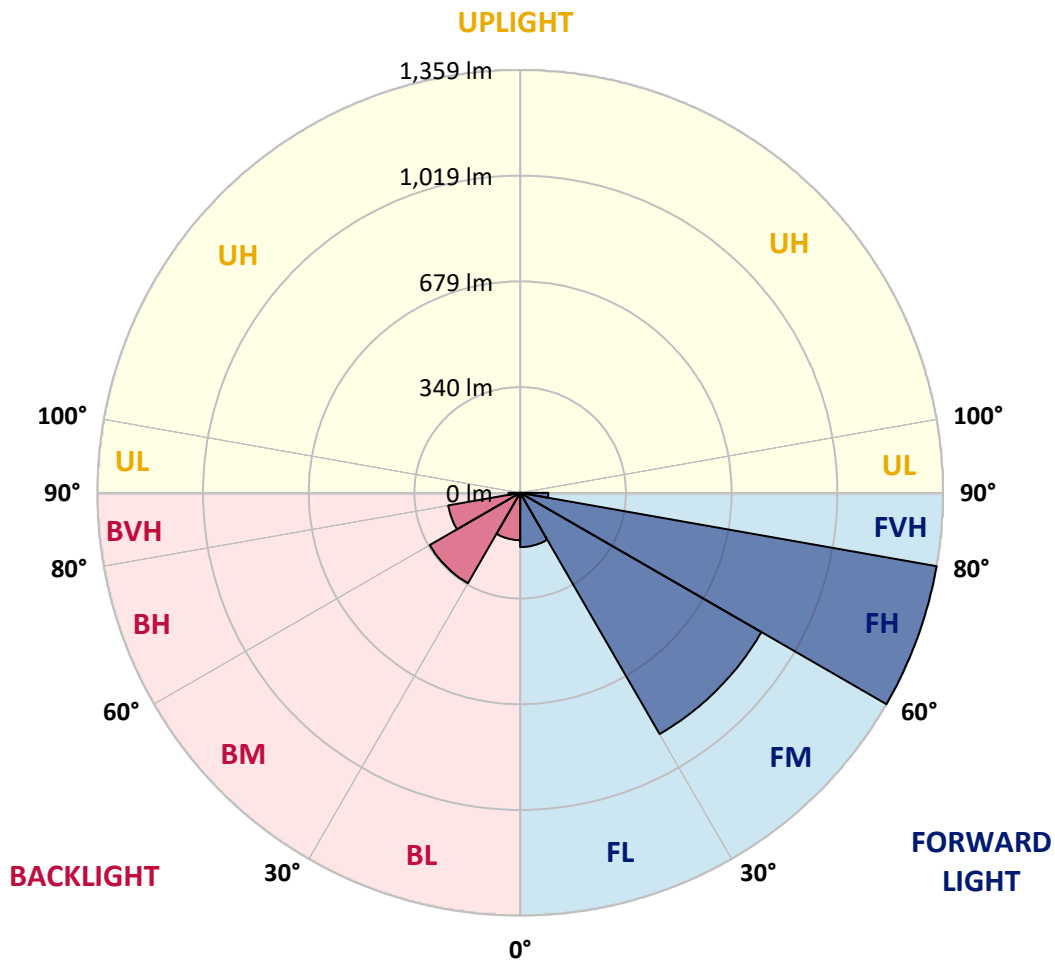
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	174.3	5.3			
FM	(30°-60°)	895.2	27.3			
FH	(60°-80°)	1358.8	41.5			G1/1800
FVH	(80°-90°)	90.4	2.8			G1/100
BL	(0°-30°)	152.1	4.6	B1/500		
BM	(30°-60°)	335.6	10.2	B1/1000		
BH	(60°-80°)	234.7	7.2	B1/500		G1/500
BVH	(80°-90°)	37.0	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°	336.1	336.1	336.1	336.1	336.1	336.1	336.1	336.1	336.1	336.1	336.1
2.5°	352.7	350.1	350.1	348.2	348.2	344.9	343.7	343.1	339.9	337.9	336.1
5°	373.1	369.8	369.3	364.7	362.8	355.8	355.2	350.7	344.9	339.2	334.8
7.5°	391.5	389.7	386.5	382.0	376.2	367.2	366.7	359.6	350.1	342.4	336.1
10°	405.0	403.7	399.1	393.5	387.1	378.1	377.5	369.8	358.3	349.4	340.5
12.5°	420.9	419.0	413.2	405.6	398.6	390.3	389.7	383.2	370.6	359.1	347.6
15°	436.1	433.6	426.6	419.0	411.3	404.2	404.2	397.3	383.8	370.6	357.0
17.5°	443.9	442.5	435.6	427.2	420.9	415.7	415.1	408.8	395.3	381.3	366.7
20°	446.4	446.9	440.6	431.7	427.2	424.7	424.1	419.6	405.0	391.5	377.5
22.5°	445.6	447.6	442.5	433.1	431.7	431.7	431.7	426.6	415.1	401.7	387.7
25°	448.3	450.8	446.9	435.6	435.6	438.2	438.2	435.6	425.3	413.8	399.8
27.5°	457.1	459.2	455.9	440.0	440.6	444.4	443.9	444.4	438.2	427.2	413.2
30°	468.0	470.6	466.8	446.9	446.4	450.2	450.2	453.4	449.0	437.5	425.9
32.5°	497.4	496.8	484.6	454.6	452.7	456.6	456.6	459.8	457.1	448.3	437.5
35°	584.7	575.2	548.4	479.5	460.4	462.3	462.3	468.0	469.4	462.3	452.7
37.5°	674.0	670.9	650.5	545.9	488.5	474.5	473.8	482.1	487.8	482.1	475.7
40°	764.0	761.5	756.9	634.6	547.2	496.1	494.2	501.3	511.5	507.6	503.8
42.5°	847.6	846.3	850.7	721.9	621.7	542.7	536.9	528.7	543.4	542.0	542.0
45°	913.1	916.4	918.8	803.4	702.7	602.7	595.5	567.5	587.3	592.4	596.3
47.5°	950.1	952.7	961.6	883.2	783.7	672.1	667.0	621.1	647.3	662.5	673.4
50°	1003.0	996.0	1003.6	960.9	881.2	762.8	748.6	693.1	726.3	753.0	778.7
52.5°	1054.2	1042.7	1049.0	1050.8	992.2	851.4	836.6	777.9	819.4	861.6	906.7
55°	1100.1	1099.3	1105.8	1138.2	1099.3	946.4	929.7	871.7	931.6	976.9	1053.4
57.5°	1137.0	1143.4	1171.4	1239.7	1223.0	1049.6	1031.2	980.8	1051.6	1096.8	1223.8
60°	1180.4	1190.6	1237.1	1325.7	1335.9	1158.0	1139.0	1102.5	1174.7	1220.4	1420.8
62.5°	1195.0	1209.7	1305.3	1416.3	1453.8	1276.6	1259.5	1235.2	1304.1	1345.5	1617.2
65°	1097.5	1125.4	1343.0	1462.8	1580.7	1419.5	1404.8	1383.7	1432.8	1460.3	1750.4
67.5°	1070.7	1083.4	1269.7	1529.9	1700.0	1603.1	1588.5	1552.1	1553.3	1541.9	1793.7
70°	1033.1	1047.1	1194.3	1580.2	1871.0	1854.5	1836.6	1729.3	1663.8	1594.2	1708.3
72.5°	880.0	875.6	1029.2	1444.4	1953.3	2165.5	2144.6	1920.0	1745.3	1548.9	1441.8
75°	494.2	481.4	624.3	999.3	1783.6	2289.3	2288.6	2016.3	1687.9	1349.3	981.4
77.5°	143.5	139.6	206.0	419.0	1200.8	1988.8	2013.1	1818.7	1408.6	969.4	538.9
80°	67.6	68.9	88.7	138.3	512.8	1283.7	1353.1	1197.6	841.7	446.9	222.5
82.5°	42.7	43.4	60.5	89.3	216.9	582.8	640.2	538.9	333.5	193.2	98.3
85°	26.8	26.8	40.2	58.7	129.4	186.2	202.2	183.7	142.8	105.2	53.5
87.5°	14.6	14.6	24.3	33.7	70.7	59.9	61.9	73.3	89.3	64.4	26.8
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°	336.1	336.1	336.1	336.1	336.1	336.1	336.1	336.1	336.1	336.1	336.1
2.5°	335.3	334.1	332.3	331.6	330.9	330.2	330.9	332.3	330.9	330.9	331.6
5°	333.5	332.3	329.7	329.7	330.2	330.9	334.1	336.1	336.7	336.7	336.7
7.5°	333.5	331.6	329.7	330.2	331.6	334.1	339.2	342.4	344.9	345.6	345.6
10°	336.7	334.1	332.8	334.1	337.9	339.9	344.9	350.1	353.3	354.6	354.6
12.5°	342.4	339.9	339.9	342.4	347.6	350.1	354.6	358.3	362.1	364.2	364.2
15°	352.0	348.8	349.4	353.9	359.6	362.1	365.4	366.7	369.8	372.3	372.3
17.5°	360.8	357.7	359.1	364.2	367.9	369.3	371.1	370.6	371.8	373.6	374.4
20°	371.1	367.9	368.6	371.8	372.3	371.1	371.1	369.3	368.6	371.8	373.1
22.5°	381.3	378.1	377.5	375.6	372.3	369.3	367.2	365.4	364.2	367.2	368.6
25°	393.5	389.0	385.8	377.5	369.3	363.5	360.8	359.6	359.1	362.1	363.5
27.5°	406.8	402.4	392.7	375.0	361.6	352.0	350.1	350.1	351.3	353.3	354.6
30°	419.6	415.1	397.9	369.3	348.2	334.1	332.3	334.1	337.4	339.2	341.1
32.5°	432.4	428.0	401.2	360.3	328.4	310.5	309.2	312.5	317.6	318.9	320.2
35°	449.5	445.1	405.0	347.6	303.5	284.5	283.1	285.0	289.6	291.4	293.3
37.5°	473.8	471.3	410.6	333.5	280.6	259.5	255.7	254.4	256.9	256.3	258.9
40°	505.7	507.6	420.9	315.0	258.3	236.6	228.3	224.4	221.9	216.9	219.4
42.5°	552.2	553.4	432.4	293.9	239.0	215.0	204.1	197.1	192.0	183.7	185.0
45°	620.5	609.6	445.6	271.6	221.9	197.6	185.0	176.6	169.6	162.7	163.2
47.5°	711.0	677.9	460.4	253.1	204.8	183.7	172.1	162.7	154.2	148.6	149.2
50°	822.6	762.8	475.1	236.0	187.4	172.8	162.7	152.4	144.1	138.3	137.7
52.5°	969.9	864.7	484.6	216.9	170.3	163.2	154.2	144.7	134.6	127.5	126.9
55°	1122.9	983.4	492.9	193.9	153.7	152.4	148.0	137.1	125.0	116.1	114.8
57.5°	1291.4	1110.1	499.3	171.5	140.9	143.5	142.2	129.4	116.1	107.7	107.2
60°	1444.4	1241.5	478.8	151.8	129.4	134.6	135.9	125.0	117.9	119.8	120.6
62.5°	1598.7	1343.0	401.2	137.1	121.8	128.7	139.6	139.0	135.9	139.0	139.6
65°	1654.0	1363.9	284.5	125.0	114.2	131.3	151.8	150.5	135.9	130.1	128.7
67.5°	1622.9	1301.6	191.2	115.4	108.4	134.6	164.5	150.5	130.8	123.1	120.6
70°	1474.3	1147.9	140.2	105.9	103.3	133.8	171.5	149.8	128.2	119.8	116.7
72.5°	1175.9	885.6	112.8	96.9	95.7	130.8	175.3	148.6	125.7	116.7	112.8
75°	761.5	550.9	95.0	88.0	84.3	125.7	173.5	144.7	122.3	110.9	108.4
77.5°	353.3	237.2	80.9	77.9	73.3	117.9	167.8	137.1	115.4	104.7	101.4
80°	164.5	112.2	68.2	67.6	65.7	111.6	160.1	128.2	107.2	98.3	93.2
82.5°	88.0	67.6	55.4	55.4	57.4	103.9	150.5	117.3	96.3	91.8	78.4
85°	46.5	38.8	40.2	43.4	49.0	91.8	137.7	105.9	84.3	70.2	68.2
87.5°	23.5	24.9	24.9	29.4	37.5	74.6	113.5	87.3	71.4	57.4	56.1
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)