

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: P348654

Luminaire Tested: **ARCH-N-PA1-20-740-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348654
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-18)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-20-740-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 420mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3411 lumens
Efficiency: N/A
Efficacy: 142.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Short - Non-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

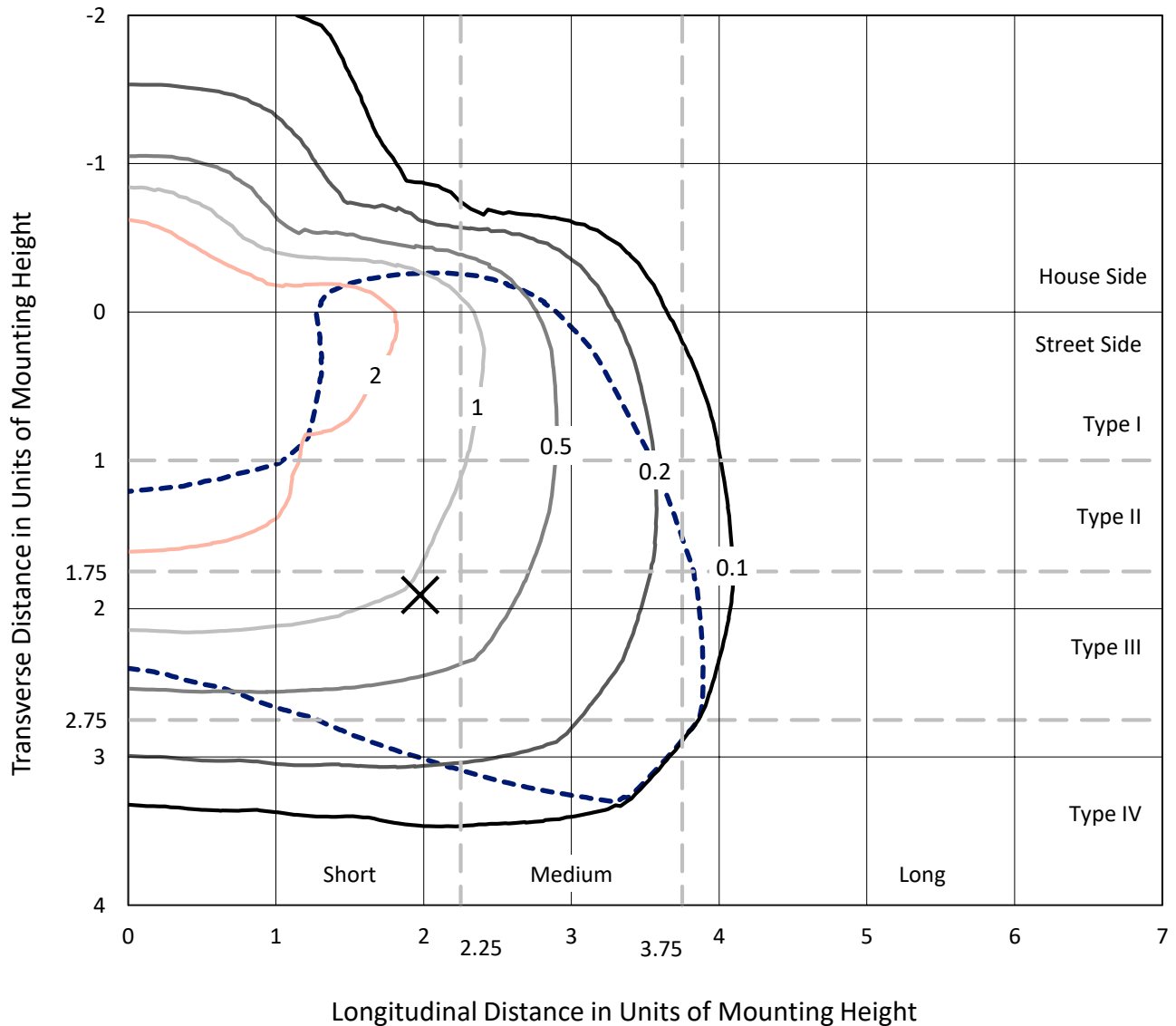


REPORT NUMBER: P348654

CATALOG NUMBER: ARCH-N-PA1-20-740-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

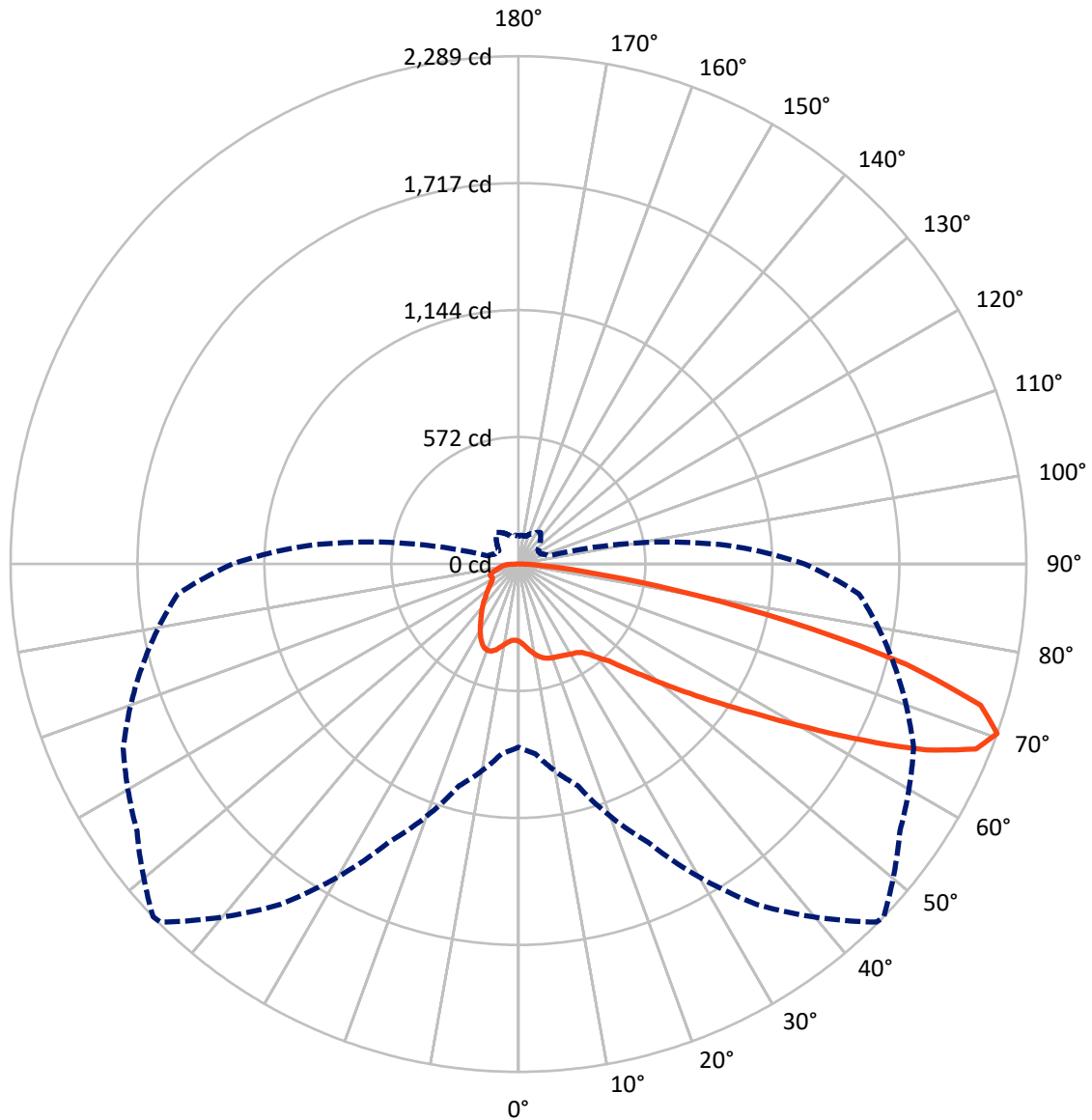


Based on 10 foot mounting height. Maximum calculated value = 4.3 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P348654

CATALOG NUMBER: ARCH-N-PA1-20-740-U-T4W

Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



REPORT NUMBER: P348654

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	781.8	0.0	781.8
	% Fixture	22.9	0.0	22.9
Street Side	Lumens	2629.2	0.0	2629.2
	% Fixture	77.1	0.0	77.1
Total	Lumens	3411.0	0.0	3411.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.4	1.0
10°-20°	118.0	3.5
20°-30°	196.8	5.8
30°-40°	279.3	8.2
40°-50°	410.8	12.0
50°-60°	695.7	20.4
60°-70°	987.5	29.0
70°-80°	599.9	17.6
80°-90°	87.5	2.6
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°	3411.0	100.0
0°-180°	3411.0	100.0



REPORT NUMBER: P348654

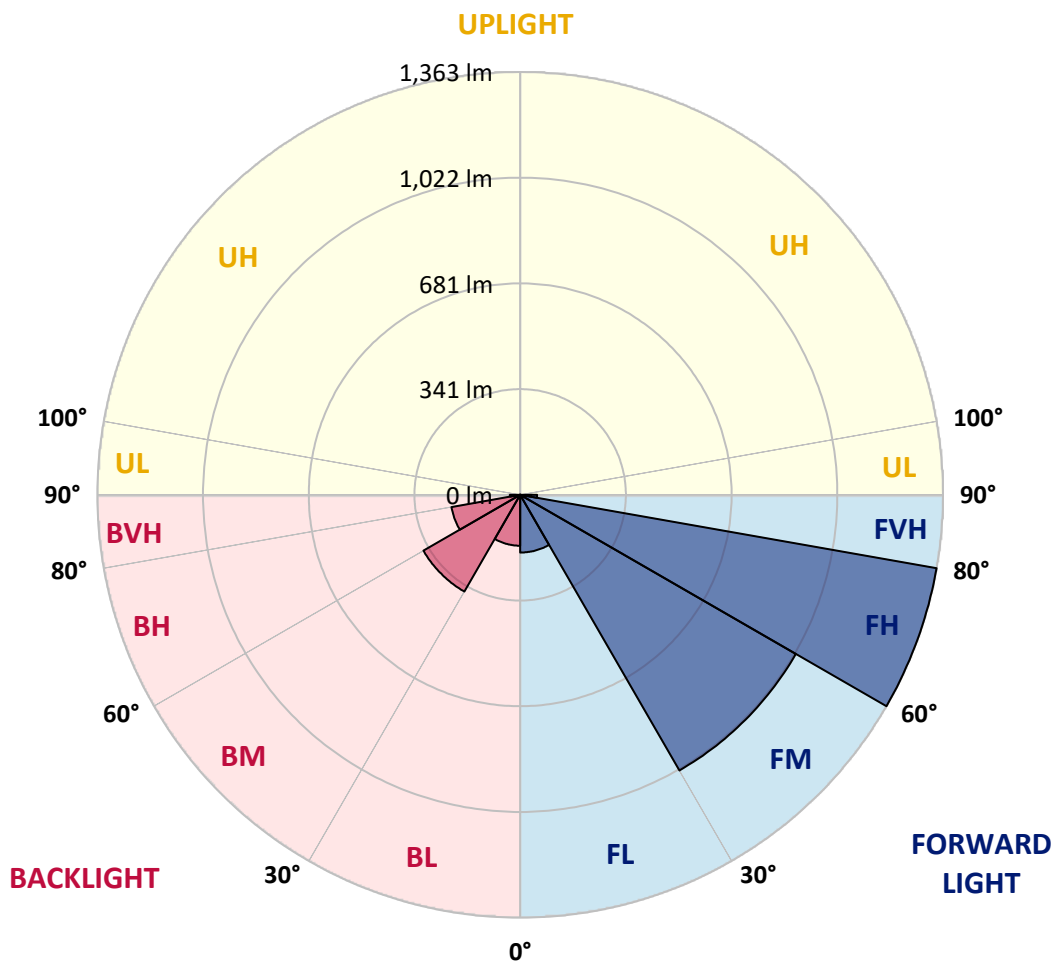
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	186.1	5.5			
FM	(30°-60°)	1025.9	30.1			
FH	(60°-80°)	1362.7	39.9			G1/1800
FVH	(80°-90°)	54.5	1.6			G1/100
BL	(0°-30°)	164.1	4.8	B1/500		
BM	(30°-60°)	359.9	10.6	B1/1000		
BH	(60°-80°)	224.8	6.6	B1/500		G1/500
BVH	(80°-90°)	33.0	1.0			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 Short





REPORT NUMBER: P348654

CATALOG NUMBER: ARCH-N-PA1-20-740-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	347.5	347.5	347.5	347.5	347.5	347.5	347.5	347.5	347.5	347.5	347.5
2.5°	364.9	365.1	365.6	364.4	361.2	360.2	359.9	356.5	354.3	351.0	348.2
5°	394.1	394.3	393.6	390.4	383.1	377.7	377.3	369.6	362.6	355.1	349.5
7.5°	424.6	424.9	422.7	416.5	406.3	397.0	396.4	385.9	375.3	364.0	355.6
10°	451.5	450.1	446.5	437.9	425.8	414.4	413.9	403.0	390.7	377.0	365.8
12.5°	469.5	468.3	463.7	453.2	440.0	429.5	428.5	418.4	406.5	391.5	378.1
15°	479.4	480.2	473.9	462.0	449.2	440.3	439.5	432.3	421.6	406.6	391.2
17.5°	480.7	481.4	475.3	463.5	453.0	447.0	446.6	441.8	434.1	419.7	403.5
20°	473.2	473.7	468.7	459.0	452.1	450.2	450.1	448.0	442.3	429.5	413.8
22.5°	462.4	462.7	459.1	452.1	449.8	452.7	453.5	452.7	448.6	436.6	421.9
25°	459.7	459.5	455.7	448.6	450.6	456.8	457.8	458.2	455.4	444.9	432.1
27.5°	472.7	471.8	464.7	453.3	454.6	462.0	463.4	466.8	465.1	455.8	443.8
30°	510.1	508.7	494.1	471.0	464.7	468.6	470.3	475.7	476.0	468.3	459.3
32.5°	573.4	571.6	545.5	504.2	481.9	475.2	476.9	484.9	489.2	483.3	473.6
35°	653.4	651.4	617.1	560.6	510.6	487.9	489.1	495.5	504.2	495.8	482.9
37.5°	736.7	731.9	698.9	626.9	556.2	515.1	515.1	516.0	520.0	502.5	493.9
40°	819.6	814.8	784.9	704.8	615.3	558.0	555.3	537.2	533.9	518.9	516.0
42.5°	896.6	895.2	877.6	793.0	684.6	600.1	596.4	565.7	566.4	557.0	557.2
45°	978.6	978.6	964.2	881.9	765.4	667.8	664.1	618.9	625.9	621.6	632.0
47.5°	1045.5	1047.6	1045.6	974.6	859.4	753.9	747.1	692.7	712.3	727.1	757.4
50°	1113.7	1117.0	1117.4	1076.3	973.0	856.1	848.4	790.6	834.4	876.9	936.3
52.5°	1212.9	1220.2	1190.9	1177.7	1112.1	977.5	969.9	916.6	989.7	1049.3	1151.7
55°	1304.7	1298.3	1277.4	1285.6	1261.1	1115.7	1110.0	1063.2	1162.7	1240.2	1373.1
57.5°	1354.5	1354.0	1375.0	1410.0	1421.7	1286.2	1281.4	1235.9	1357.7	1416.0	1581.0
60°	1412.8	1413.6	1465.7	1545.2	1593.3	1498.4	1496.3	1461.7	1547.2	1580.1	1744.1
62.5°	1421.0	1435.7	1525.4	1662.2	1753.9	1746.3	1751.0	1665.2	1716.7	1711.1	1865.9
65°	1327.0	1346.4	1508.7	1697.5	1913.6	2017.5	2021.8	1869.8	1850.3	1823.0	1909.4
67.5°	1134.4	1163.1	1339.4	1620.6	1966.3	2217.9	2224.0	2028.5	1961.2	1861.0	1804.6
70°	825.5	857.4	1034.8	1384.1	1872.4	2282.0	2288.9	2098.6	1965.4	1753.0	1540.5
72.5°	498.7	523.7	669.9	1019.0	1580.3	2165.3	2177.5	2009.7	1794.4	1484.8	1137.6
75°	219.0	235.3	323.9	587.2	1131.4	1791.5	1806.8	1720.2	1458.0	1079.1	672.4
77.5°	93.3	97.9	132.8	255.1	639.6	1224.2	1245.2	1256.9	989.2	587.2	284.1
80°	58.1	60.0	75.2	115.4	299.3	687.6	710.2	739.5	491.2	215.8	99.2
82.5°	35.4	37.5	50.0	69.8	155.8	311.7	322.5	343.2	190.6	93.3	51.4
85°	21.2	22.8	30.6	44.1	88.7	122.6	122.5	135.4	89.8	60.0	27.1
87.5°	10.2	11.3	16.3	22.9	44.7	46.0	43.1	48.8	54.5	39.3	13.7
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: P348654

CATALOG NUMBER: ARCH-N-PA1-20-740-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	347.5	347.5	347.5	347.5	347.5	347.5	347.5	347.5	347.5	347.5	347.5
2.5°	347.3	346.8	345.3	344.1	343.9	343.2	342.6	343.0	343.4	343.5	343.5
5°	347.2	345.9	343.9	343.1	344.1	345.5	347.3	349.6	351.0	352.1	352.8
7.5°	352.8	350.3	348.1	347.6	349.7	353.5	357.4	362.3	365.7	368.1	368.5
10°	362.1	359.1	356.9	357.3	361.1	366.4	372.0	378.3	383.5	386.6	386.9
12.5°	372.8	369.9	367.8	369.8	376.0	382.5	388.4	393.9	398.5	401.7	401.7
15°	385.2	383.1	380.7	385.2	393.6	399.5	401.9	404.6	407.2	409.5	409.0
17.5°	397.1	395.1	393.9	399.2	408.0	410.7	409.0	407.0	407.0	408.3	408.6
20°	407.4	405.6	406.5	411.7	416.3	413.5	407.4	401.1	398.5	399.2	399.9
22.5°	416.4	415.6	418.0	420.5	417.2	407.4	396.2	387.7	384.5	384.3	384.5
25°	426.9	426.8	429.8	425.4	410.9	392.8	377.7	369.5	367.7	369.1	371.4
27.5°	440.0	441.3	442.8	426.5	398.1	370.7	355.5	349.7	351.5	354.9	357.1
30°	456.7	460.2	456.9	423.6	379.6	345.5	330.9	329.3	334.1	338.9	341.2
32.5°	472.9	478.4	470.4	416.0	355.8	318.8	307.5	307.0	312.8	317.5	320.8
35°	486.0	496.8	480.6	401.0	328.3	294.2	285.9	282.7	284.8	290.3	294.1
37.5°	503.0	521.1	487.6	378.0	298.4	273.9	264.2	256.9	255.1	257.3	259.1
40°	534.2	558.1	490.9	345.9	269.2	253.5	243.7	233.1	225.8	220.4	220.5
42.5°	585.1	606.3	488.8	306.9	242.2	233.7	222.6	210.4	198.4	186.3	185.4
45°	667.7	678.0	482.5	265.6	218.5	212.9	202.5	190.3	174.4	160.6	159.3
47.5°	800.0	777.2	472.7	229.5	197.6	195.3	185.7	171.6	154.8	143.7	142.8
50°	980.3	920.4	467.9	200.8	179.2	179.9	172.1	157.1	141.2	133.1	132.1
52.5°	1196.0	1087.3	477.1	178.6	164.4	166.8	161.0	147.0	133.7	127.2	126.3
55°	1419.8	1260.0	487.0	162.5	150.4	155.1	153.2	141.6	129.6	123.6	122.8
57.5°	1611.4	1389.0	467.2	149.4	137.9	145.3	147.1	138.2	127.5	122.1	121.2
60°	1732.0	1441.0	415.1	137.2	127.9	137.5	143.6	137.3	128.3	127.8	127.1
62.5°	1789.2	1436.4	337.0	127.5	121.8	134.1	146.1	142.5	137.6	141.8	142.2
65°	1763.5	1367.8	251.0	121.1	117.3	135.4	153.9	152.5	140.3	144.5	145.1
67.5°	1594.5	1204.0	185.8	115.4	112.4	139.0	167.9	155.7	135.1	138.1	136.2
70°	1288.7	954.5	143.3	109.1	107.4	138.6	174.2	153.7	129.3	130.0	125.0
72.5°	888.7	650.9	116.6	103.3	100.2	126.3	169.7	148.8	124.6	119.2	112.5
75°	483.3	349.4	99.1	97.2	87.4	110.9	161.6	145.3	120.2	113.1	109.4
77.5°	190.2	145.0	86.0	89.0	76.5	97.9	152.5	138.7	114.3	104.9	103.1
80°	77.6	74.0	71.3	76.9	65.7	85.7	141.5	130.9	107.2	97.4	93.6
82.5°	44.0	46.0	55.4	60.7	53.3	78.9	136.2	124.6	98.6	87.2	82.8
85°	22.5	27.0	38.6	43.5	39.2	67.1	125.5	109.0	79.1	66.8	67.1
87.5°	10.9	15.1	24.4	27.3	25.4	48.6	93.7	79.0	61.6	48.8	47.3
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)