

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: P214853

Luminaire Tested: **ARCH-AF24-20-D-U-T4W-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214853
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-AF24-20-D-U-T4W-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2501 lumens
Efficiency: N/A
Efficacy: 119.1 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): 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

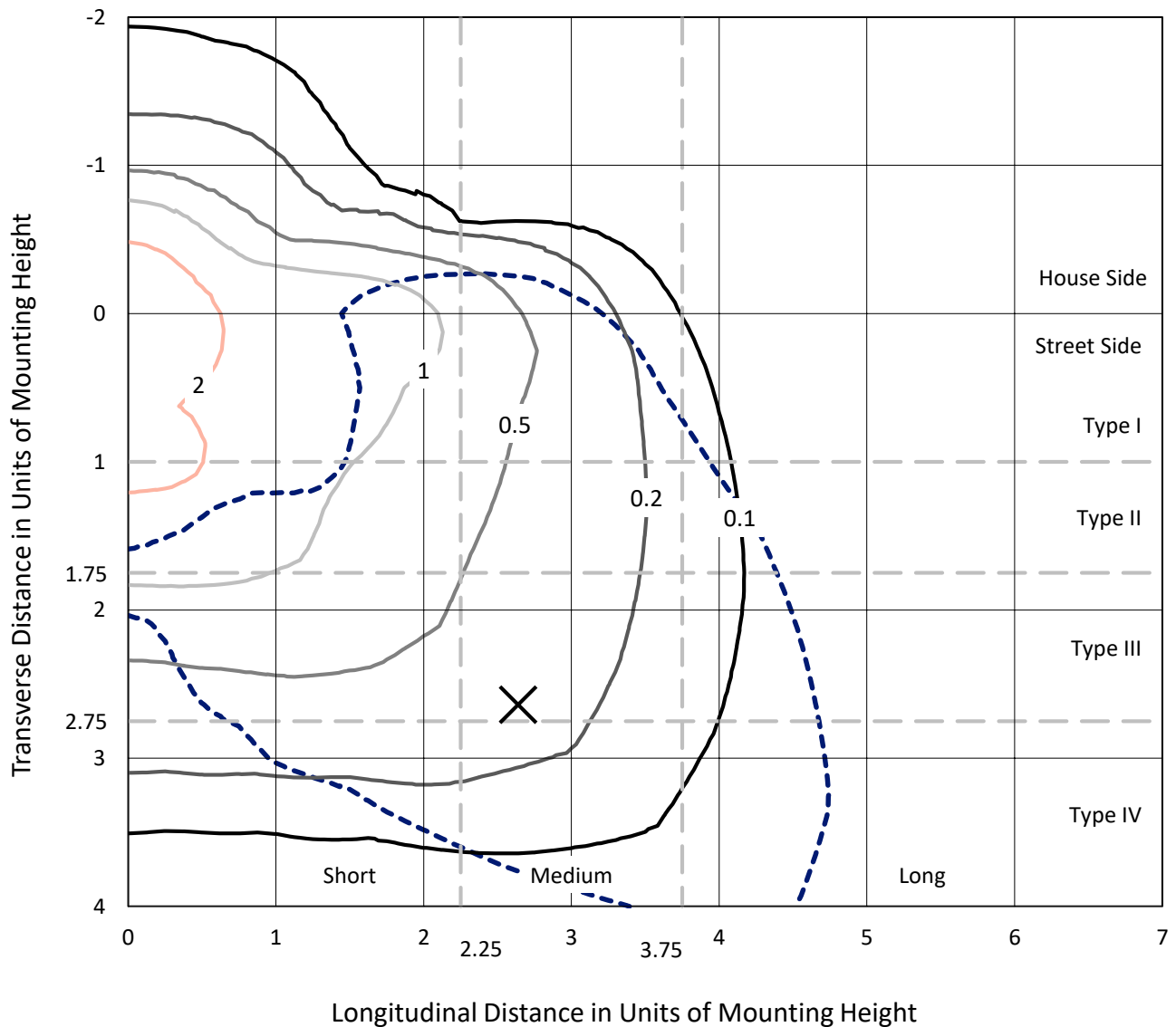


REPORT NUMBER: P214853

CATALOG NUMBER: ARCH-AF24-20-D-U-T4W-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

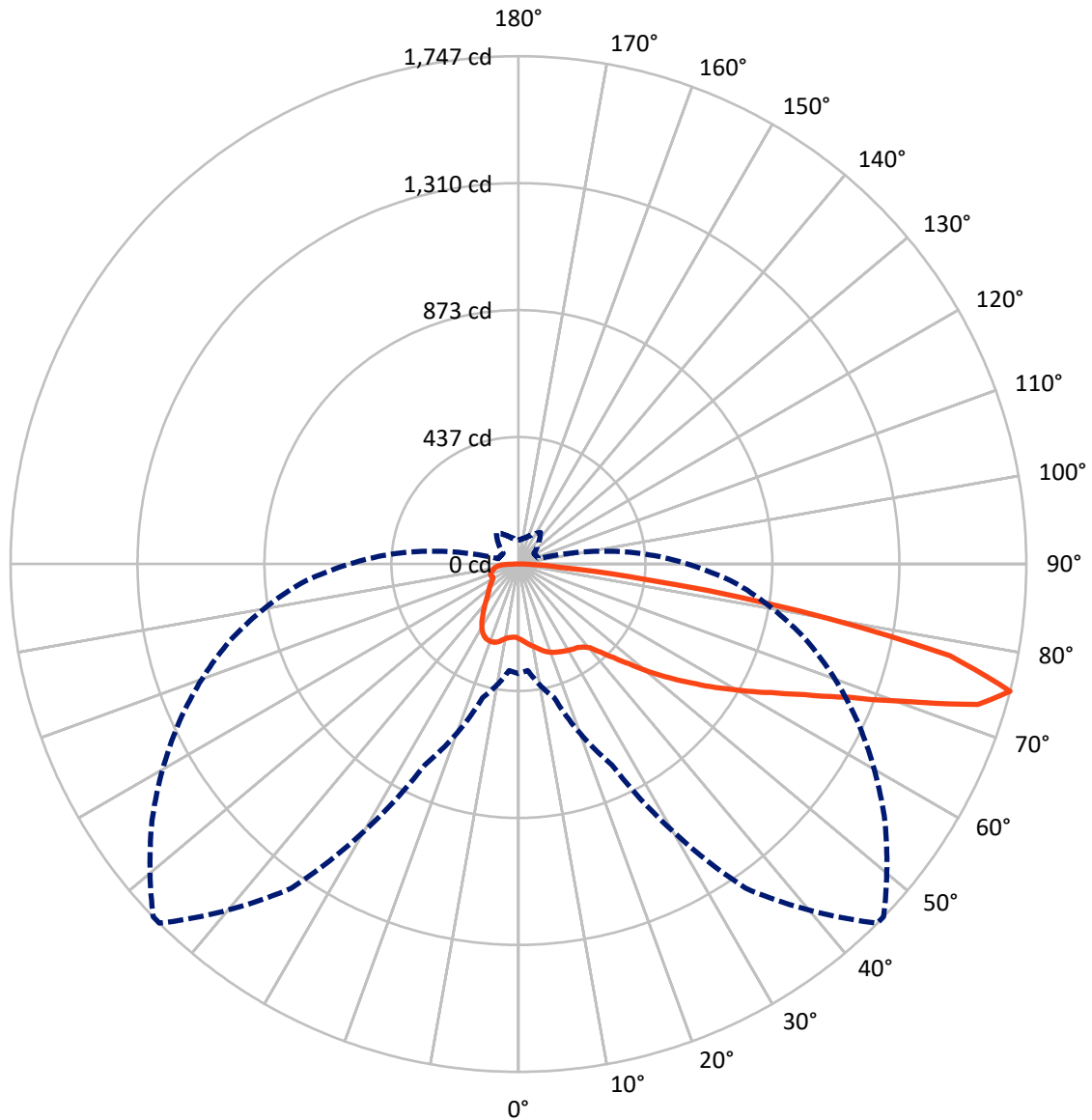


Based on 10 foot mounting height. Maximum calculated value = 3 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P214853

CATALOG NUMBER: ARCH-AF24-20-D-U-T4W-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P214853

CATALOG NUMBER: ARCH-AF24-20-D-U-T4W-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	579.4	0.0	579.4
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	1921.6	0.0	1921.6
	% Fixture	76.8	0.0	76.8
Total	Lumens	2501.0	0.0	2501.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.4	1.0
10°-20°	82.3	3.3
20°-30°	141.3	5.6
30°-40°	197.6	7.9
40°-50°	289.9	11.6
50°-60°	451.5	18.1
60°-70°	649.7	26.0
70°-80°	566.0	22.6
80°-90°	97.2	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°	2501.0	100.0
0°-180°	2501.0	100.0



REPORT NUMBER: P214853

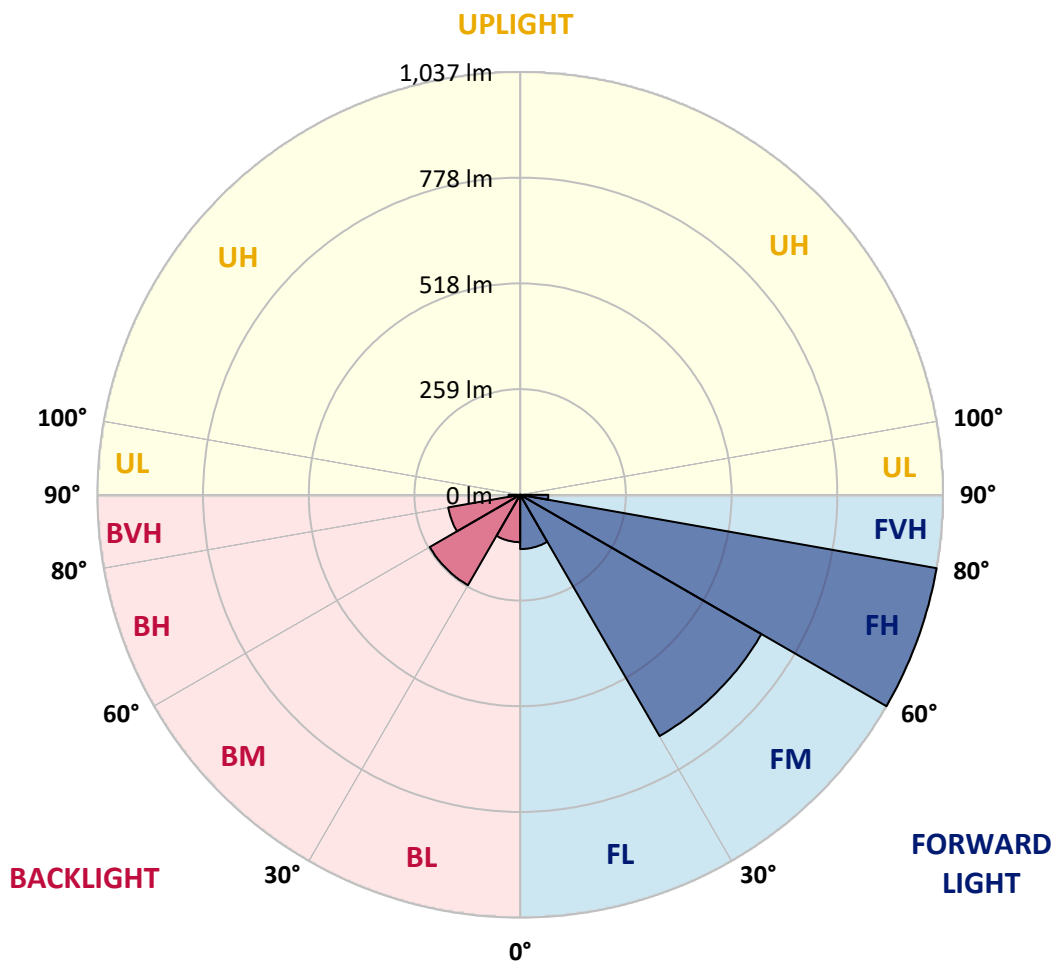
CATALOG NUMBER: ARCH-AF24-20-D-U-T4W-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	133.0	5.3			
FM	(30°-60°)	683.0	27.3			
FH	(60°-80°)	1036.7	41.5			G1/1800
FVH	(80°-90°)	69.0	2.8			G1/100
BL	(0°-30°)	116.0	4.6	B1/500		
BM	(30°-60°)	256.1	10.2	B1/1000		
BH	(60°-80°)	179.0	7.2	B1/500		G1/500
BVH	(80°-90°)	28.2	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





REPORT NUMBER: P214853

CATALOG NUMBER: ARCH-AF24-20-D-U-T4W-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	256.4	256.4	256.4	256.4	256.4	256.4	256.4	256.4	256.4	256.4	256.4
2.5°	269.0	267.1	267.1	265.6	265.6	263.2	262.2	261.7	259.3	257.8	256.4
5°	284.6	282.2	281.7	278.3	276.8	271.5	271.0	267.6	263.2	258.8	255.4
7.5°	298.7	297.3	294.8	291.4	287.0	280.2	279.7	274.4	267.1	261.3	256.4
10°	308.9	308.0	304.6	300.2	295.3	288.5	288.0	282.2	273.4	266.6	259.8
12.5°	321.1	319.6	315.3	309.4	304.1	297.7	297.3	292.4	282.7	273.9	265.1
15°	332.8	330.8	325.5	319.6	313.8	308.4	308.4	303.1	292.9	282.7	272.4
17.5°	338.6	337.6	332.3	326.0	321.1	317.2	316.7	311.8	301.6	290.9	279.7
20°	340.6	341.0	336.2	329.4	326.0	324.0	323.5	320.1	308.9	298.7	288.0
22.5°	340.1	341.5	337.6	330.3	329.4	329.4	329.4	325.5	316.7	306.5	295.8
25°	342.0	344.0	341.0	332.3	332.3	334.2	334.2	332.3	324.5	315.7	305.0
27.5°	348.8	350.3	347.9	335.7	336.2	339.1	338.6	339.1	334.2	326.0	315.3
30°	357.1	359.0	356.1	341.0	340.6	343.5	343.5	345.9	342.5	333.7	325.0
32.5°	379.5	379.0	369.7	346.9	345.4	348.3	348.3	350.8	348.8	342.0	333.7
35°	446.1	438.8	418.4	365.9	351.3	352.7	352.7	357.1	358.1	352.7	345.4
37.5°	514.2	511.8	496.2	416.4	372.7	362.0	361.5	367.8	372.2	367.8	362.9
40°	582.8	580.9	577.5	484.1	417.4	378.5	377.0	382.4	390.2	387.3	384.3
42.5°	646.6	645.6	649.0	550.7	474.3	414.0	409.6	403.3	414.5	413.5	413.5
45°	696.7	699.1	701.1	613.0	536.1	459.7	454.4	433.0	448.1	452.0	454.9
47.5°	724.9	726.8	733.6	673.8	597.9	512.8	508.9	473.9	493.8	505.5	513.7
50°	765.3	759.9	765.8	733.2	672.3	581.9	571.2	528.8	554.1	574.6	594.0
52.5°	804.2	795.4	800.3	801.8	757.0	649.5	638.3	593.5	625.2	657.3	691.8
55°	839.2	838.7	843.6	868.4	838.7	722.0	709.3	665.1	710.8	745.3	803.7
57.5°	867.4	872.3	893.7	945.8	933.1	800.8	786.7	748.2	802.2	836.8	933.6
60°	900.5	908.3	943.8	1011.4	1019.2	883.5	868.9	841.2	896.1	931.2	1083.9
62.5°	911.7	922.9	995.9	1080.5	1109.2	974.0	960.8	942.4	994.9	1026.5	1233.8
65°	837.3	858.7	1024.6	1116.0	1206.0	1083.0	1071.8	1055.7	1093.2	1114.1	1335.5
67.5°	816.8	826.6	968.6	1167.1	1297.0	1223.1	1211.9	1184.2	1185.1	1176.4	1368.5
70°	788.1	798.8	911.2	1205.6	1427.4	1414.8	1401.1	1319.4	1269.3	1216.3	1303.3
72.5°	671.4	668.0	785.2	1101.9	1490.2	1652.2	1636.1	1464.9	1331.6	1181.7	1100.0
75°	377.0	367.3	476.3	762.4	1360.8	1746.6	1746.1	1538.3	1287.8	1029.4	748.7
77.5°	109.5	106.5	157.1	319.6	916.1	1517.4	1535.9	1387.5	1074.7	739.5	411.1
80°	51.6	52.5	67.6	105.6	391.1	979.3	1032.4	913.7	642.2	341.0	169.8
82.5°	32.6	33.1	46.2	68.1	165.4	444.7	488.5	411.1	254.4	147.4	74.9
85°	20.4	20.4	30.6	44.8	98.8	142.1	154.2	140.1	109.0	80.3	40.9
87.5°	11.2	11.2	18.5	25.8	54.0	45.7	47.2	55.9	68.1	49.1	20.4
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: P214853

CATALOG NUMBER: ARCH-AF24-20-D-U-T4W-7030

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	256.4	256.4	256.4	256.4	256.4	256.4	256.4	256.4	256.4	256.4	256.4
2.5°	255.9	254.9	253.5	253.0	252.5	252.0	252.5	253.5	252.5	252.5	253.0
5°	254.4	253.5	251.5	251.5	252.0	252.5	254.9	256.4	256.9	256.9	256.9
7.5°	254.4	253.0	251.5	252.0	253.0	254.9	258.8	261.3	263.2	263.7	263.7
10°	256.9	254.9	254.0	254.9	257.8	259.3	263.2	267.1	269.5	270.5	270.5
12.5°	261.3	259.3	259.3	261.3	265.1	267.1	270.5	273.4	276.3	277.8	277.8
15°	268.6	266.1	266.6	270.0	274.4	276.3	278.8	279.7	282.2	284.1	284.1
17.5°	275.4	272.9	273.9	277.8	280.7	281.7	283.1	282.7	283.6	285.1	285.6
20°	283.1	280.7	281.2	283.6	284.1	283.1	283.1	281.7	281.2	283.6	284.6
22.5°	290.9	288.5	288.0	286.6	284.1	281.7	280.2	278.8	277.8	280.2	281.2
25°	300.2	296.8	294.3	288.0	281.7	277.3	275.4	274.4	273.9	276.3	277.3
27.5°	310.4	307.0	299.7	286.1	275.8	268.6	267.1	267.1	268.1	269.5	270.5
30°	320.1	316.7	303.6	281.7	265.6	254.9	253.5	254.9	257.4	258.8	260.3
32.5°	329.9	326.4	306.0	274.9	250.5	236.9	236.0	238.4	242.3	243.3	244.2
35°	343.0	339.6	308.9	265.1	231.6	217.0	216.0	217.5	220.9	222.3	223.8
37.5°	361.5	359.5	313.3	254.4	214.1	198.0	195.1	194.1	196.1	195.6	197.5
40°	385.8	387.3	321.1	240.3	197.0	180.5	174.2	171.2	169.3	165.4	167.4
42.5°	421.3	422.3	329.9	224.3	182.4	164.0	155.7	150.3	146.4	140.1	141.1
45°	473.4	465.1	340.1	207.3	169.3	150.8	141.1	134.8	129.4	124.1	124.5
47.5°	542.5	517.2	351.3	193.1	156.2	140.1	131.4	124.1	117.7	113.4	113.8
50°	627.6	581.9	362.4	180.0	143.0	131.8	124.1	116.3	110.0	105.6	105.1
52.5°	740.0	659.7	369.7	165.4	129.9	124.5	117.7	110.4	102.7	97.3	96.8
55°	856.7	750.2	376.1	147.9	117.2	116.3	112.9	104.6	95.4	88.5	87.6
57.5°	985.2	847.0	380.9	130.9	107.5	109.5	108.5	98.8	88.5	82.2	81.7
60°	1101.9	947.2	365.4	115.8	98.8	102.7	103.6	95.4	90.0	91.5	91.9
62.5°	1219.7	1024.6	306.0	104.6	92.9	98.3	106.5	106.1	103.6	106.1	106.5
65°	1262.0	1040.6	217.0	95.4	87.1	100.2	115.8	114.8	103.6	99.2	98.3
67.5°	1238.2	993.0	146.0	88.1	82.7	102.7	125.5	114.8	99.7	93.9	91.9
70°	1124.8	875.7	107.0	80.8	78.8	102.2	130.9	114.3	97.8	91.5	89.0
72.5°	897.1	675.8	86.1	73.9	73.0	99.7	133.8	113.4	95.8	89.0	86.1
75°	580.9	420.3	72.5	67.1	64.2	95.8	132.3	110.4	93.4	84.7	82.7
77.5°	269.5	181.0	61.8	59.4	55.9	90.0	128.0	104.6	88.1	79.8	77.4
80°	125.5	85.6	52.1	51.6	50.1	85.1	122.1	97.8	81.7	74.9	71.0
82.5°	67.1	51.6	42.3	42.3	43.8	79.3	114.8	89.5	73.5	70.1	59.8
85°	35.5	29.7	30.6	33.1	37.5	70.1	105.1	80.8	64.2	53.5	52.1
87.5°	18.0	19.0	19.0	22.4	28.7	56.9	86.6	66.7	54.5	43.8	42.8
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)