

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: P234688

Luminaire Tested: **ARCH-AF24-30-D-U-T2R-8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P234688
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-AF24-30-D-U-T2R-8027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3110 lumens
Efficiency: N/A
Efficacy: 100.3 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

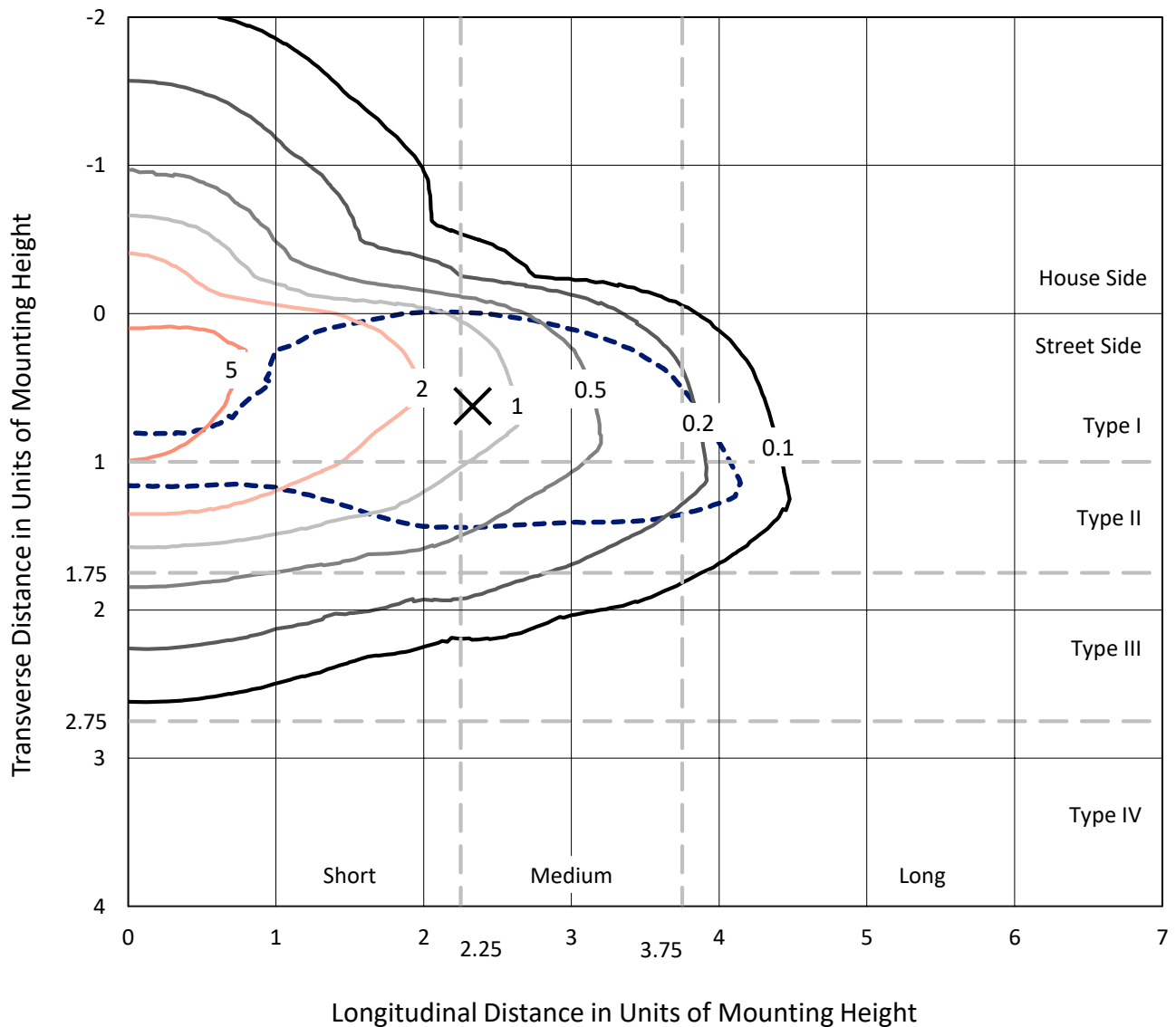
Input Watts (W): 31
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P234688
 CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-8027

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

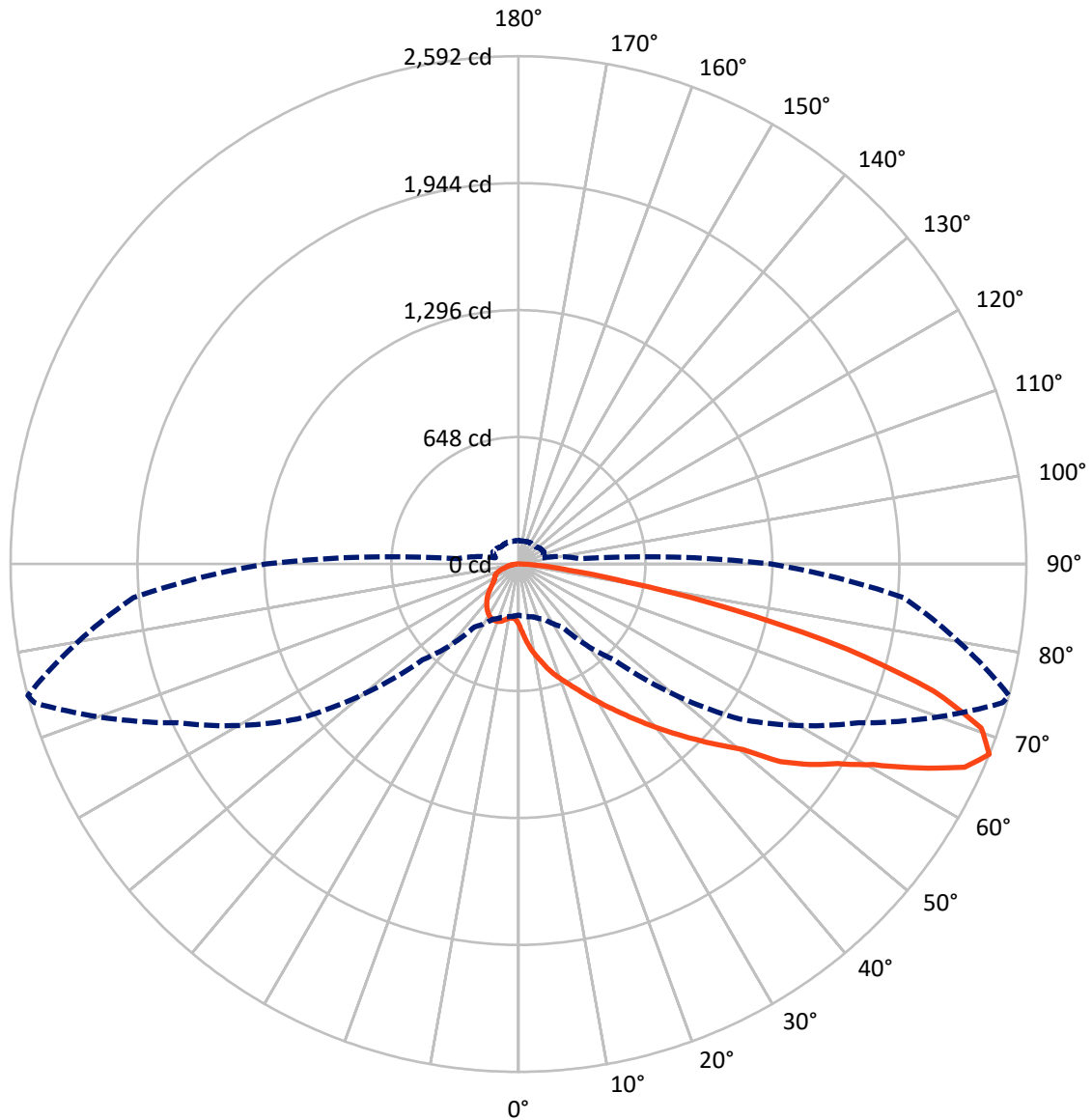


Based on 10 foot mounting height. Maximum calculated value = 6.5 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P234688

CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-8027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P234688

CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-8027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	531.1	0.0	531.1
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	2578.9	0.0	2578.9
	% Fixture	82.9	0.0	82.9
Total	Lumens	3110.0	0.0	3110.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.2	1.2
10°-20°	130.8	4.2
20°-30°	238.6	7.7
30°-40°	391.7	12.6
40°-50°	566.4	18.2
50°-60°	667.6	21.5
60°-70°	648.7	20.9
70°-80°	360.6	11.6
80°-90°	69.3	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°	3110.0	100.0
0°-180°	3110.0	100.0



REPORT NUMBER: P234688

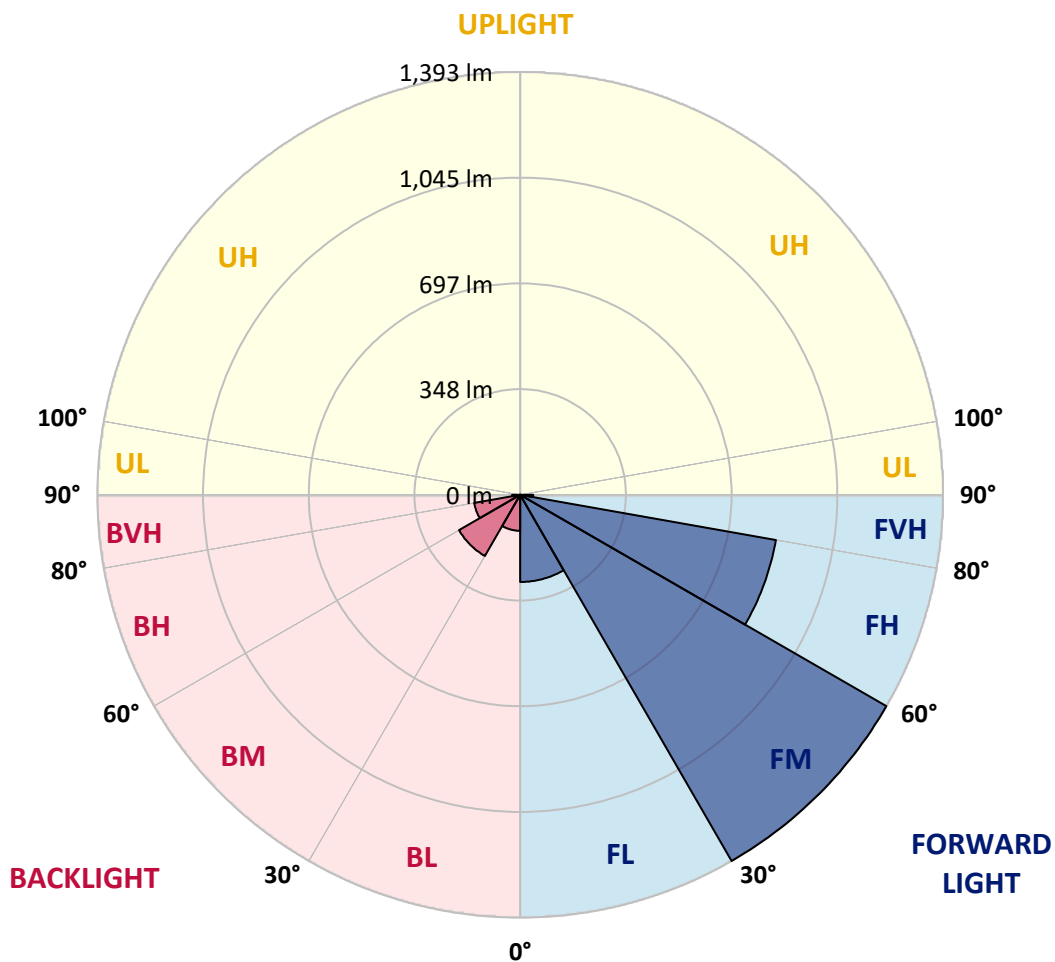
CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-8027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	287.1	9.2			
FM	(30°-60°)	1393.1	44.8			
FH	(60°-80°)	855.5	27.5			G1/1800
FVH	(80°-90°)	43.2	1.4			G1/100
BL	(0°-30°)	118.5	3.8	B1/500		
BM	(30°-60°)	232.6	7.5	B1/1000		
BH	(60°-80°)	153.8	4.9	B1/500		G1/500
BVH	(80°-90°)	26.2	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: P234688

CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-8027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	308.2	308.2	308.2	308.2	308.2	308.2	308.2	308.2	308.2	308.2	308.2
2.5°	436.9	438.2	435.6	429.7	421.3	405.7	392.0	368.0	346.5	343.9	321.2
5°	513.6	514.9	511.7	504.5	495.4	478.5	459.7	428.4	394.0	387.5	339.4
7.5°	566.3	566.9	563.0	555.9	548.7	531.8	513.0	477.9	435.6	430.4	362.8
10°	611.1	612.4	607.2	602.7	594.9	578.0	558.5	521.4	477.9	470.7	386.8
12.5°	652.7	654.0	650.8	646.9	644.3	628.7	607.2	563.0	516.2	508.4	415.4
15°	680.7	682.0	682.7	687.9	691.1	680.1	658.6	610.5	557.8	550.7	449.3
17.5°	672.9	676.2	685.9	704.8	724.9	725.6	708.0	657.3	598.8	591.0	483.7
20°	650.1	652.7	664.5	693.1	732.7	755.5	754.2	704.8	637.1	628.7	515.6
22.5°	669.0	672.3	672.3	689.8	728.8	771.1	788.0	751.6	675.5	667.7	547.4
25°	749.6	751.6	737.9	730.8	745.1	784.1	815.9	802.3	722.3	713.2	581.9
27.5°	862.1	858.8	841.9	813.3	797.7	808.1	840.6	850.4	776.3	765.2	617.6
30°	973.9	972.0	952.5	914.1	879.0	856.9	867.9	893.3	834.8	821.8	652.1
32.5°	1078.6	1075.3	1053.9	1009.0	969.4	928.4	907.0	932.3	897.2	882.3	690.5
35°	1174.8	1166.4	1144.9	1098.1	1057.1	1018.1	965.5	969.4	964.8	949.2	732.7
37.5°	1252.8	1246.3	1222.9	1179.4	1135.8	1098.8	1043.5	1011.6	1037.6	1022.7	781.5
40°	1321.8	1314.6	1290.5	1247.0	1206.7	1171.6	1128.0	1063.0	1119.6	1102.7	836.1
42.5°	1373.8	1368.6	1349.1	1306.1	1267.1	1235.3	1213.8	1128.0	1204.7	1188.5	895.9
45°	1401.7	1396.5	1386.1	1351.7	1315.9	1291.2	1293.1	1205.4	1293.8	1280.1	966.8
47.5°	1367.3	1371.2	1380.3	1373.8	1351.7	1340.0	1364.0	1285.3	1393.3	1380.3	1043.5
50°	1274.9	1278.8	1315.3	1360.1	1367.9	1382.2	1427.7	1377.7	1498.6	1488.2	1138.4
52.5°	1048.0	1069.5	1170.3	1277.5	1351.0	1410.2	1498.6	1514.8	1676.1	1676.1	1306.1
55°	791.9	810.7	925.8	1113.1	1285.3	1412.8	1550.6	1607.8	1804.2	1806.8	1393.9
57.5°	641.7	653.4	710.0	901.8	1147.5	1380.3	1612.4	1687.8	1910.8	1922.5	1507.0
60°	520.8	527.3	564.3	697.6	957.0	1292.5	1656.6	1802.2	2062.9	2079.2	1651.4
62.5°	418.7	425.2	449.9	529.9	750.9	1128.0	1648.8	1921.2	2265.8	2292.4	1840.6
65°	334.2	341.3	357.6	407.0	556.5	923.9	1568.8	1982.3	2475.8	2501.8	1966.0
67.5°	260.7	267.2	278.3	310.8	392.0	691.1	1379.6	1917.9	2570.0	2592.1	1972.6
70°	197.0	200.2	209.3	230.2	280.2	459.0	1079.9	1702.1	2485.5	2505.7	1842.5
72.5°	152.8	152.1	157.3	167.7	195.7	316.0	715.8	1384.2	2197.5	2218.3	1572.1
75°	124.8	124.2	127.4	130.7	141.7	211.9	422.6	1042.2	1773.6	1733.9	1179.4
77.5°	105.3	104.7	107.9	108.6	113.1	146.3	240.6	685.9	1183.3	1115.0	664.5
80°	89.1	88.4	92.3	93.6	96.9	107.3	138.5	371.2	594.2	563.0	317.3
82.5°	67.0	69.6	76.7	80.0	83.9	79.3	85.8	163.8	275.7	263.3	137.8
85°	32.5	38.4	57.9	64.4	68.9	50.1	58.5	77.4	124.2	118.3	55.9
87.5°	11.1	9.8	34.5	41.0	44.9	22.8	32.5	42.9	51.4	46.8	17.6
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: P234688

CATALOG NUMBER: ARCH-AF24-30-D-U-T2R-8027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	308.2	308.2	308.2	308.2	308.2	308.2	308.2	308.2	308.2	308.2	308.2
2.5°	311.4	301.7	287.4	276.3	269.2	263.3	260.7	260.1	258.8	258.1	258.1
5°	317.9	300.4	278.3	266.6	263.3	260.7	262.0	262.7	262.7	262.7	262.7
7.5°	327.7	303.0	276.3	268.5	267.9	267.9	271.8	273.7	275.0	275.0	275.0
10°	340.7	307.5	279.6	273.1	275.0	276.3	280.9	283.5	284.8	285.4	286.1
12.5°	358.2	317.3	286.1	280.9	283.5	284.1	287.4	288.7	290.0	290.6	290.6
15°	381.6	331.6	296.5	290.0	290.6	290.0	290.0	288.7	288.0	288.0	289.3
17.5°	405.7	345.2	305.6	296.5	293.9	288.7	284.8	281.5	279.6	278.3	278.9
20°	429.7	357.6	310.8	297.8	290.6	282.2	275.0	270.5	267.9	265.3	266.6
22.5°	453.8	369.3	312.7	293.9	283.5	271.1	263.3	256.2	250.3	246.4	247.1
25°	480.5	382.3	312.7	289.3	273.7	260.7	251.0	239.3	230.8	227.6	228.9
27.5°	507.1	393.3	309.5	280.9	262.7	249.7	235.4	221.7	216.5	214.5	215.2
30°	533.8	401.8	302.3	270.5	251.0	236.7	217.8	208.7	202.2	197.0	197.6
32.5°	560.4	407.6	292.6	257.5	238.6	220.4	204.8	194.4	182.7	176.2	176.8
35°	591.0	412.2	280.9	244.5	225.0	206.1	194.4	177.5	165.1	159.9	158.6
37.5°	622.8	415.4	268.5	230.2	211.3	195.7	184.0	163.2	151.5	144.3	143.7
40°	657.3	416.7	253.6	215.2	198.3	189.2	170.3	154.7	134.6	130.0	130.0
42.5°	698.3	416.1	238.6	200.2	184.0	174.2	160.6	153.4	135.9	131.3	128.7
45°	745.1	416.1	222.4	182.7	169.7	155.4	149.5	145.0	133.3	135.2	136.5
47.5°	798.4	414.8	202.8	168.4	158.0	145.6	142.4	132.6	128.1	129.4	130.7
50°	871.8	416.7	185.3	156.7	149.5	139.1	135.2	130.0	128.1	128.7	128.1
52.5°	973.9	410.2	168.4	149.5	143.0	129.4	129.4	128.7	129.4	128.7	128.7
55°	1029.8	395.9	156.0	145.6	138.5	124.8	127.4	128.7	130.0	129.4	129.4
57.5°	1109.2	386.2	146.3	143.0	135.9	123.5	126.1	128.7	129.4	128.7	128.7
60°	1202.8	379.7	139.8	143.7	133.9	123.5	126.8	128.7	128.1	127.4	127.4
62.5°	1311.4	377.1	135.2	145.6	132.0	124.2	126.8	128.7	126.1	125.5	125.5
65°	1352.3	353.7	129.4	146.9	133.3	124.2	126.1	126.8	123.5	122.9	122.2
67.5°	1289.2	313.4	120.9	144.3	137.2	124.2	124.2	123.5	119.6	119.0	117.7
70°	1148.2	260.1	107.9	135.9	139.8	124.8	121.6	118.3	114.4	114.4	111.8
72.5°	940.1	204.8	91.0	120.9	137.8	126.8	116.4	111.8	107.3	107.3	104.7
75°	677.5	152.8	72.8	100.8	129.4	126.1	109.9	104.0	98.8	98.2	94.9
77.5°	386.2	107.3	59.2	78.7	115.1	122.9	104.0	94.9	89.1	87.1	85.2
80°	198.3	72.2	48.1	61.8	95.6	113.8	99.5	84.5	78.0	74.8	71.5
82.5°	94.3	48.1	37.1	45.5	72.2	99.5	93.6	72.8	65.7	61.8	57.9
85°	42.3	28.6	24.7	29.3	51.4	77.4	82.6	59.8	51.4	64.4	47.5
87.5°	13.7	13.0	13.0	13.7	24.7	33.8	60.5	44.2	41.0	33.8	28.6
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)