

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: P265923

Luminaire Tested: **ARCH-AF24-30-D-U-T2R-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265923
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-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 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: 3477.4 lumens
Efficiency: N/A
Efficacy: 112.2 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

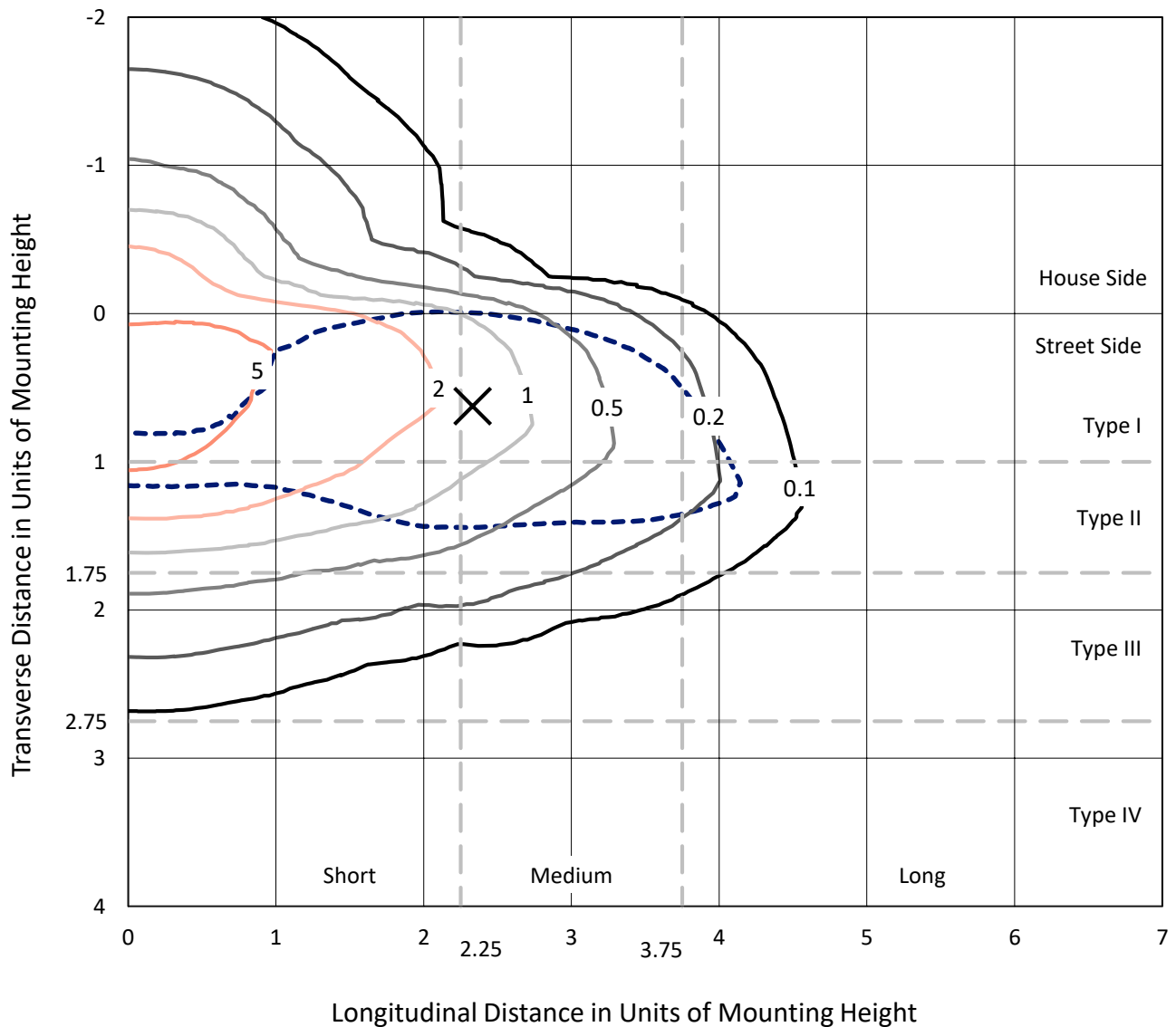
Input Watts (W): 31
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

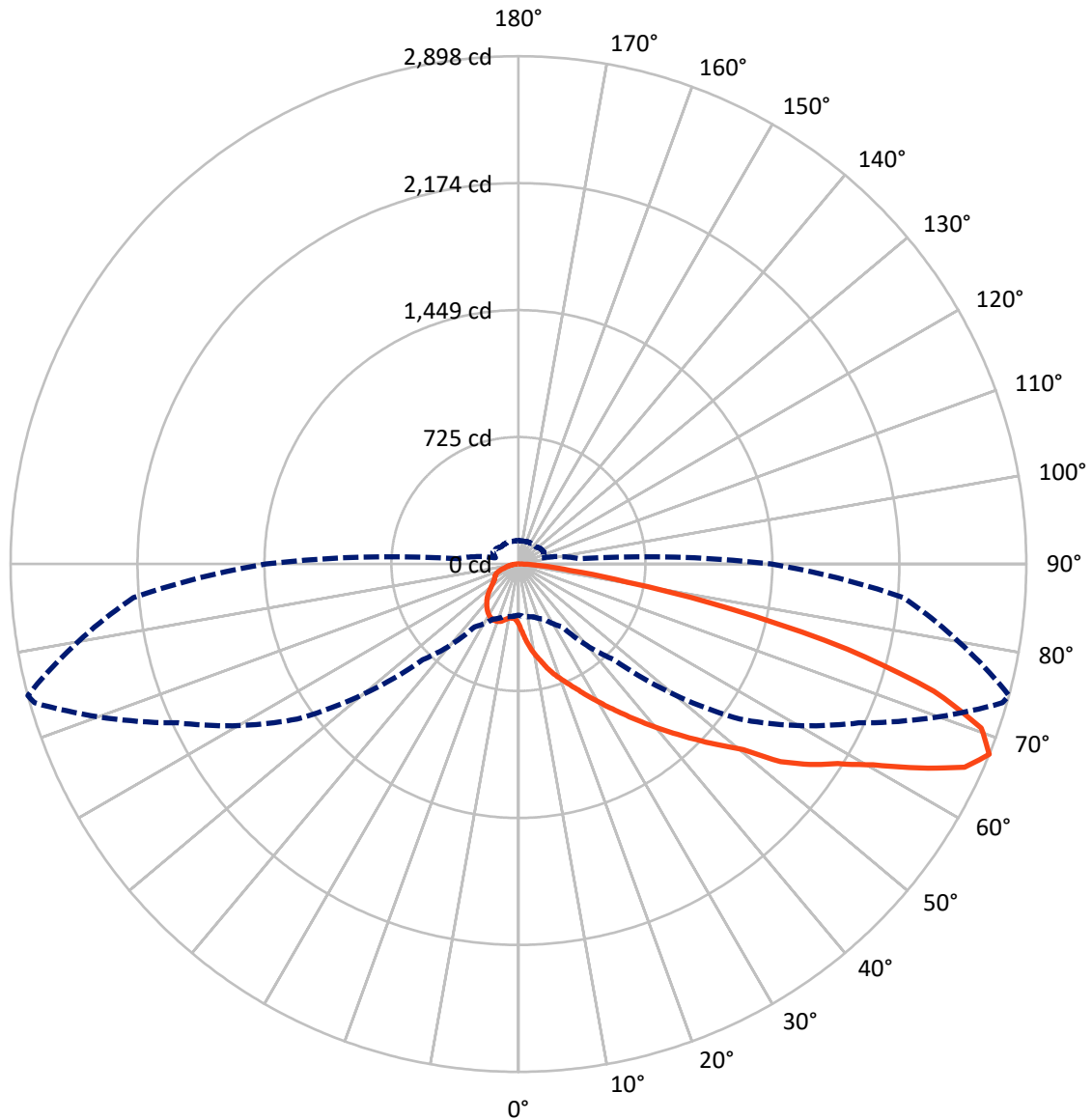
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.2 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	593.8	0.0	593.8
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	2883.6	0.0	2883.6
	% Fixture	82.9	0.0	82.9
Total	Lumens	3477.4	0.0	3477.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.5	1.2
10°-20°	146.3	4.2
20°-30°	266.8	7.7
30°-40°	438.0	12.6
40°-50°	633.4	18.2
50°-60°	746.4	21.5
60°-70°	725.3	20.9
70°-80°	403.2	11.6
80°-90°	77.5	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°	3477.4	100.0
0°-180°	3477.4	100.0



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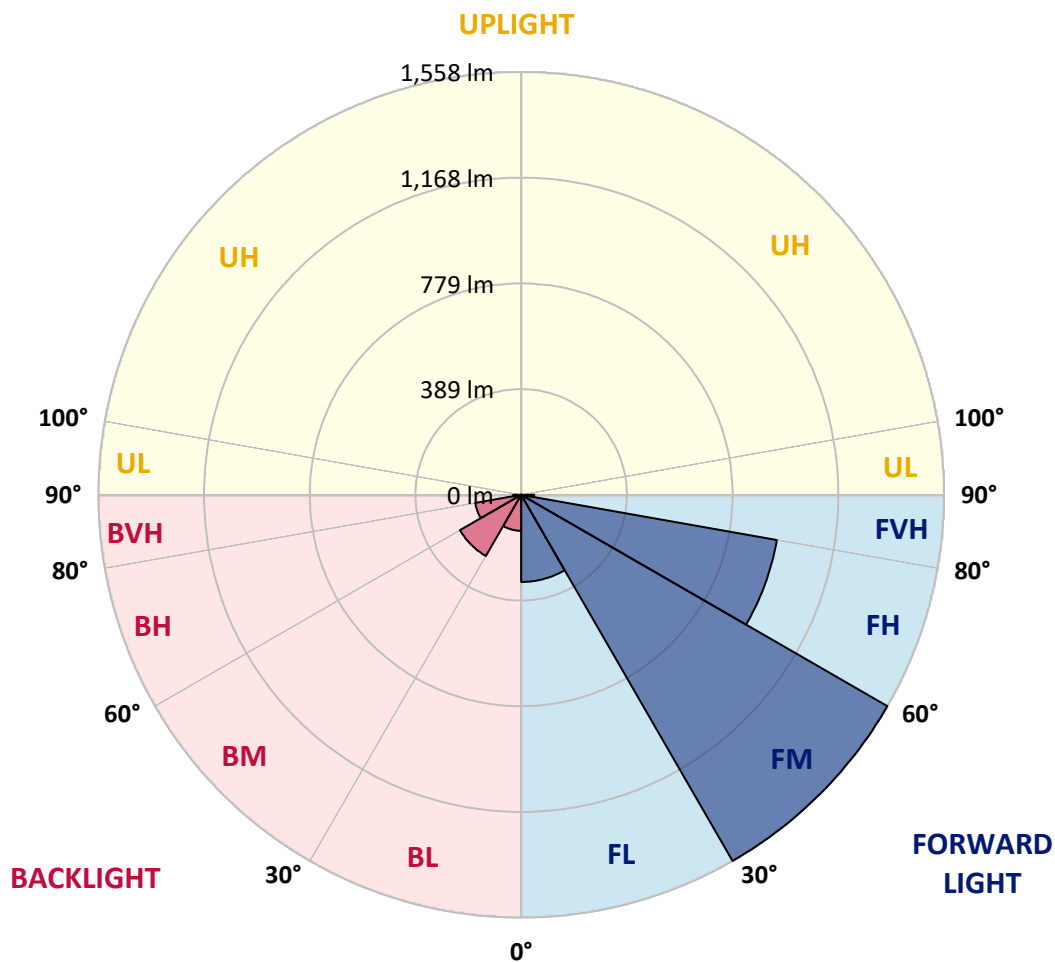
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	321.1	9.2			
FM (30°-60°)	1557.7	44.8			
FH (60°-80°)	956.6	27.5			G1/1800
FVH (80°-90°)	48.3	1.4			G1/100
BL (0°-30°)	132.5	3.8	B1/500		
BM (30°-60°)	260.1	7.5	B1/1000		
BH (60°-80°)	171.9	4.9	B1/500		G1/500
BVH (80°-90°)	29.3	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	344.6	344.6	344.6	344.6	344.6	344.6	344.6	344.6	344.6	344.6	344.6
2.5°	488.5	489.9	487.1	480.6	471.2	453.6	438.4	411.5	387.4	384.6	359.1
5°	574.2	575.8	572.1	564.1	554.0	535.0	514.0	479.1	440.4	433.3	379.4
7.5°	633.1	633.9	629.5	621.5	613.5	594.7	573.6	534.3	487.1	481.2	405.7
10°	683.3	684.8	678.9	673.9	665.1	646.3	624.4	583.0	534.3	526.2	432.5
12.5°	729.9	731.3	727.6	723.3	720.4	703.0	678.9	629.5	577.3	568.4	464.6
15°	761.1	762.7	763.3	769.0	772.7	760.3	736.4	682.6	623.8	615.7	502.3
17.5°	752.4	756.1	767.0	788.1	810.5	811.3	791.6	735.0	669.5	660.9	540.9
20°	727.0	729.9	743.0	775.0	819.3	844.8	843.2	788.1	712.4	703.0	576.4
22.5°	748.0	751.7	751.7	771.3	814.9	862.2	881.1	840.4	755.4	746.6	612.0
25°	838.2	840.4	825.2	817.1	833.1	876.7	912.3	897.0	807.7	797.4	650.6
27.5°	963.9	960.3	941.5	909.4	891.9	903.7	939.9	950.9	868.0	855.6	690.5
30°	1088.9	1086.8	1065.0	1022.1	982.8	958.1	970.4	998.8	933.3	918.8	729.2
32.5°	1206.1	1202.4	1178.3	1128.2	1083.8	1038.1	1014.0	1042.5	1003.1	986.5	772.1
35°	1313.6	1304.2	1280.2	1227.9	1182.0	1138.4	1079.6	1083.8	1078.9	1061.3	819.3
37.5°	1400.8	1393.6	1367.4	1318.7	1269.9	1228.5	1166.8	1131.1	1160.3	1143.5	873.8
40°	1477.9	1469.8	1442.9	1394.3	1349.3	1310.0	1261.3	1188.5	1251.8	1233.0	934.9
42.5°	1536.0	1530.3	1508.4	1460.5	1416.8	1381.2	1357.2	1261.3	1347.1	1328.9	1001.7
45°	1567.4	1561.6	1549.8	1511.3	1471.3	1443.8	1445.9	1347.7	1446.6	1431.4	1081.0
47.5°	1528.7	1533.1	1543.3	1536.0	1511.3	1498.3	1525.1	1437.2	1557.9	1543.3	1166.8
50°	1425.5	1429.9	1470.6	1520.8	1529.5	1545.5	1596.4	1540.5	1675.6	1664.0	1272.9
52.5°	1171.8	1195.9	1308.6	1428.5	1510.6	1576.7	1675.6	1693.8	1874.0	1874.0	1460.5
55°	885.4	906.5	1035.1	1244.5	1437.2	1579.7	1733.8	1797.8	2017.4	2020.2	1558.6
57.5°	717.4	730.6	793.8	1008.3	1283.0	1543.3	1802.9	1887.2	2136.4	2149.6	1685.1
60°	582.3	589.6	631.0	780.0	1070.2	1445.2	1852.2	2015.1	2306.6	2324.9	1846.5
62.5°	468.1	475.5	503.1	592.4	839.6	1261.3	1843.5	2148.1	2533.4	2563.3	2057.9
65°	373.6	381.7	399.8	455.1	622.3	1033.1	1754.1	2216.5	2768.2	2797.3	2198.3
67.5°	291.5	298.7	311.2	347.5	438.4	772.7	1542.6	2144.6	2873.7	2898.3	2205.6
70°	220.3	223.9	234.1	257.4	313.2	513.2	1207.4	1903.1	2779.1	2801.6	2060.3
72.5°	170.9	170.0	175.9	187.6	218.7	353.4	800.4	1547.7	2457.1	2480.4	1757.8
75°	139.5	138.9	142.6	146.2	158.6	237.1	472.5	1165.3	1983.1	1938.8	1318.7
77.5°	117.8	117.0	120.7	121.5	126.5	163.6	269.0	767.0	1323.1	1246.7	743.0
80°	99.6	98.9	103.2	104.7	108.3	120.0	154.9	415.0	664.4	629.5	354.7
82.5°	74.9	77.9	85.8	89.4	93.8	88.8	95.9	183.2	308.2	294.5	154.1
85°	36.3	42.8	64.7	72.0	77.1	56.0	65.4	86.4	138.9	132.3	62.5
87.5°	12.3	10.9	38.5	45.9	50.1	25.4	36.3	48.0	57.4	52.3	19.7
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°	344.6	344.6	344.6	344.6	344.6	344.6	344.6	344.6	344.6	344.6	344.6
2.5°	348.3	337.4	321.4	308.9	300.9	294.5	291.5	290.8	289.3	288.5	288.5
5°	355.5	335.8	311.2	298.1	294.5	291.5	292.9	293.7	293.7	293.7	293.7
7.5°	366.4	338.8	308.9	300.3	299.6	299.6	303.8	306.1	307.5	307.5	307.5
10°	380.9	343.8	312.6	305.3	307.5	308.9	314.0	316.9	318.4	319.2	319.8
12.5°	400.6	354.7	319.8	314.0	316.9	317.7	321.4	322.9	324.2	324.9	324.9
15°	426.8	370.7	331.5	324.2	324.9	324.2	324.2	322.9	322.0	322.0	323.5
17.5°	453.6	386.0	341.6	331.5	328.6	322.9	318.4	314.8	312.6	311.2	311.8
20°	480.6	399.8	347.5	332.9	324.9	315.5	307.5	302.4	299.6	296.6	298.1
22.5°	507.5	413.0	349.7	328.6	316.9	303.2	294.5	286.4	279.9	275.5	276.3
25°	537.2	427.5	349.7	323.5	306.1	291.5	280.6	267.5	258.1	254.4	255.8
27.5°	567.0	439.8	346.0	314.0	293.7	279.2	263.2	247.9	242.1	239.8	240.7
30°	596.8	449.2	338.0	302.4	280.6	264.6	243.5	233.4	226.1	220.3	221.1
32.5°	626.7	455.8	327.2	287.8	266.7	246.4	229.0	217.4	204.3	197.0	197.7
35°	660.9	460.9	314.0	273.4	251.5	230.4	217.4	198.4	184.6	178.9	177.3
37.5°	696.5	464.6	300.3	257.4	236.3	218.7	205.7	182.4	169.4	161.3	160.6
40°	735.0	466.0	283.5	240.7	221.7	211.6	190.5	173.1	150.5	145.3	145.3
42.5°	780.7	465.2	266.7	223.9	205.7	194.8	179.5	171.5	152.0	146.9	144.0
45°	833.1	465.2	248.7	204.3	189.7	173.7	167.3	162.1	148.9	151.3	152.6
47.5°	892.6	463.7	226.8	188.3	176.6	162.9	159.2	148.3	143.2	144.6	146.2
50°	974.8	466.0	207.1	175.2	167.3	155.5	151.3	145.3	143.2	144.0	143.2
52.5°	1088.9	458.8	188.3	167.3	159.9	144.6	144.6	144.0	144.6	144.0	144.0
55°	1151.4	442.8	174.5	162.9	154.9	139.5	142.6	144.0	145.3	144.6	144.6
57.5°	1240.2	431.8	163.6	159.9	152.0	138.1	141.0	144.0	144.6	144.0	144.0
60°	1344.9	424.5	156.2	160.6	149.7	138.1	141.8	144.0	143.2	142.6	142.6
62.5°	1466.3	421.7	151.3	162.9	147.6	138.9	141.8	144.0	141.0	140.2	140.2
65°	1512.0	395.4	144.6	164.3	148.9	138.9	141.0	141.8	138.1	137.4	136.6
67.5°	1441.5	350.3	135.3	161.3	153.4	138.9	138.9	138.1	133.8	132.9	131.6
70°	1283.8	290.8	120.7	152.0	156.2	139.5	136.0	132.3	128.0	128.0	125.0
72.5°	1051.1	229.0	101.8	135.3	154.1	141.8	130.2	125.0	120.0	120.0	117.0
75°	757.5	170.9	81.4	112.6	144.6	141.0	122.9	116.3	110.5	109.8	106.1
77.5°	431.8	120.0	66.1	87.9	128.6	137.4	116.3	106.1	99.6	97.3	95.2
80°	221.7	80.7	53.8	69.1	106.9	127.2	111.2	94.5	87.2	83.6	79.9
82.5°	105.5	53.8	41.4	50.8	80.7	111.2	104.7	81.4	73.4	69.1	64.7
85°	47.3	32.0	27.6	32.7	57.4	86.4	92.3	66.8	57.4	72.0	53.1
87.5°	15.4	14.6	14.6	15.4	27.6	37.8	67.6	49.4	45.9	37.8	32.0
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)