

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: P214569

Luminaire Tested: **ARCH-AF16-30-D-U-T2R-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214569
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-AF16-30-D-U-T2R-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3677.7 lumens
Efficiency: N/A
Efficacy: 114.9 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

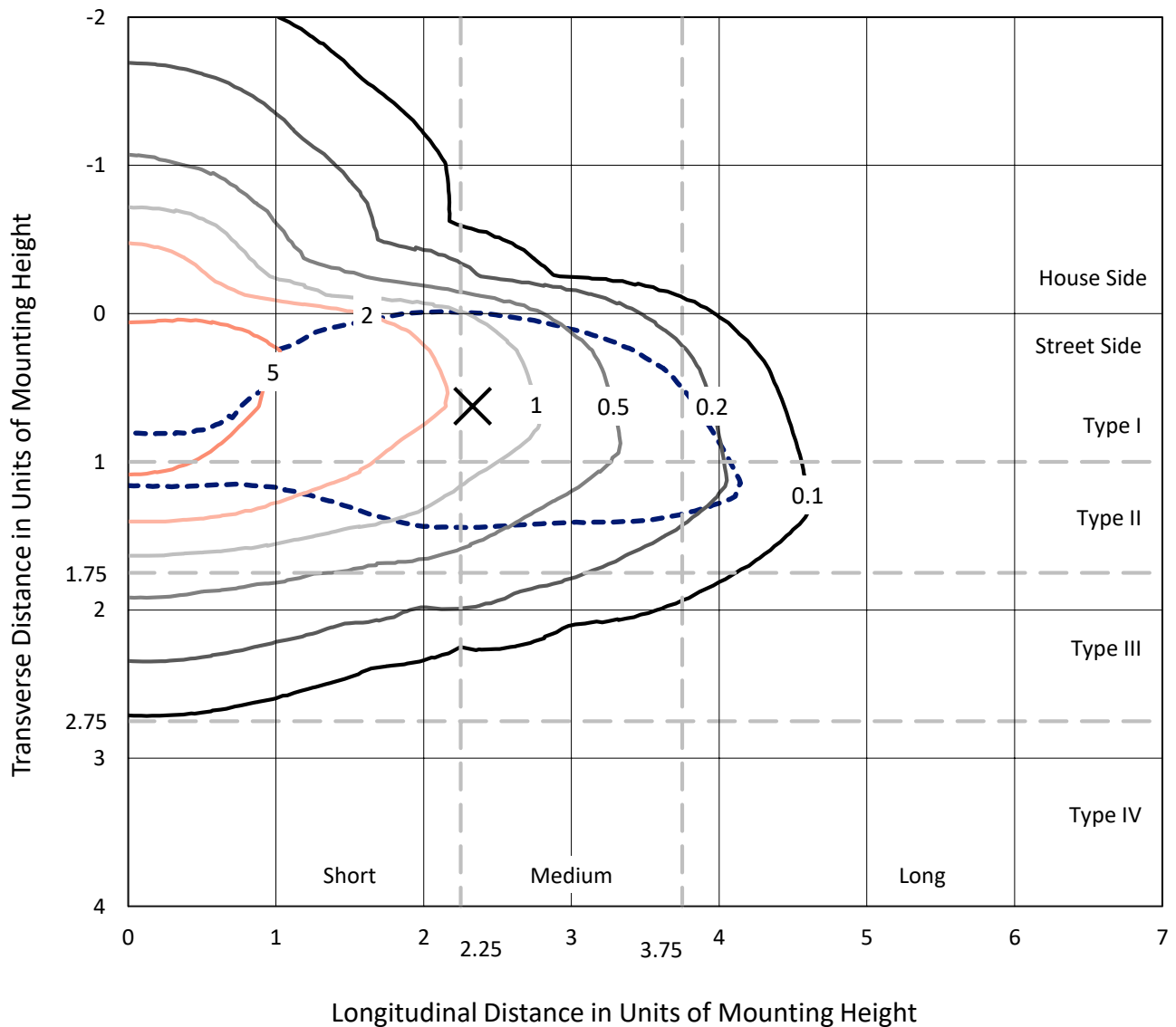
Input Watts (W): 32
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

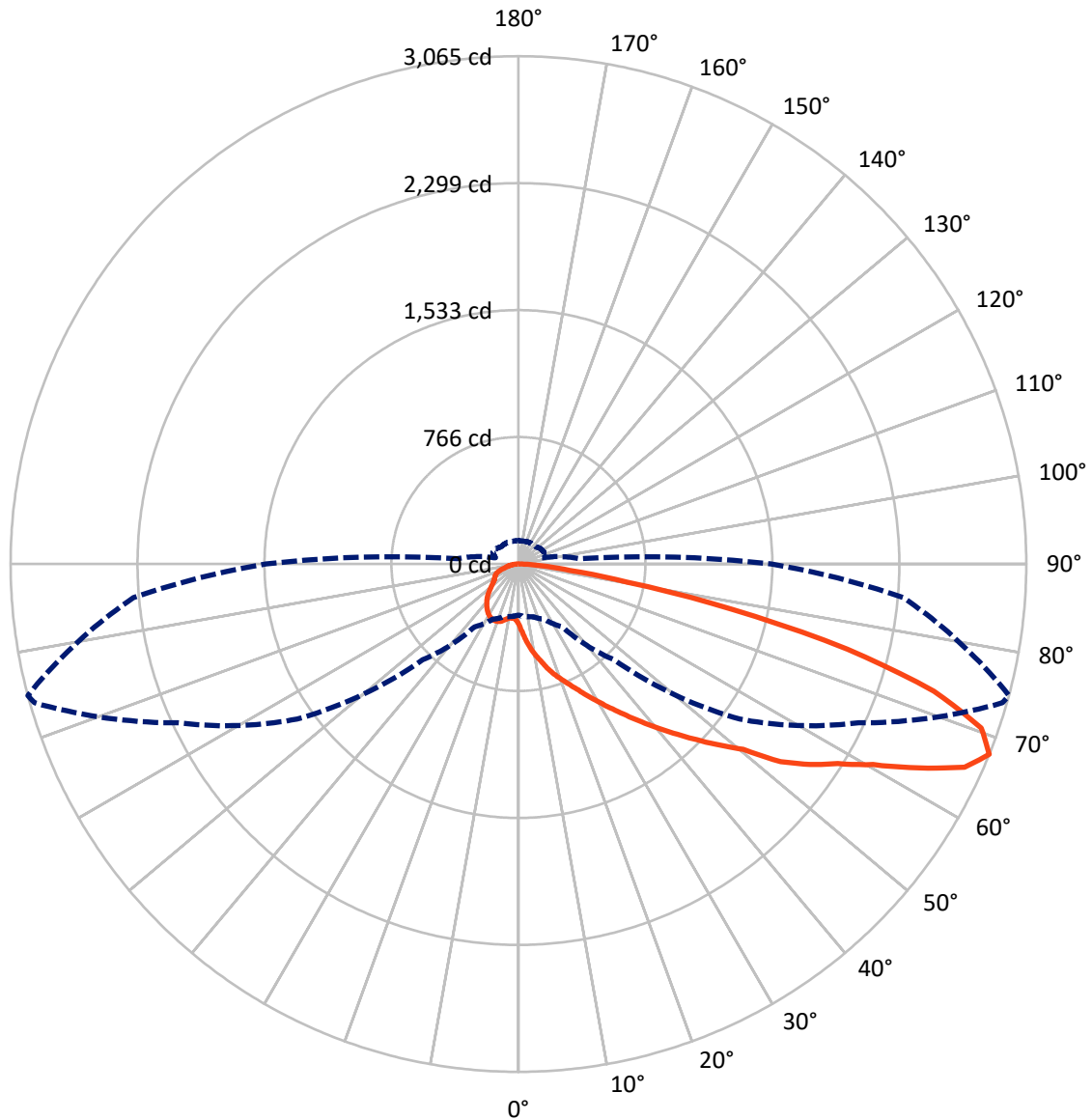
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.6 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	628.0	0.0	628.0
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	3049.7	0.0	3049.7
	% Fixture	82.9	0.0	82.9
Total	Lumens	3677.7	0.0	3677.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.8	1.2
10°-20°	154.7	4.2
20°-30°	282.2	7.7
30°-40°	463.2	12.6
40°-50°	669.8	18.2
50°-60°	789.4	21.5
60°-70°	767.1	20.9
70°-80°	426.4	11.6
80°-90°	82.0	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°	3677.7	100.0
0°-180°	3677.7	100.0



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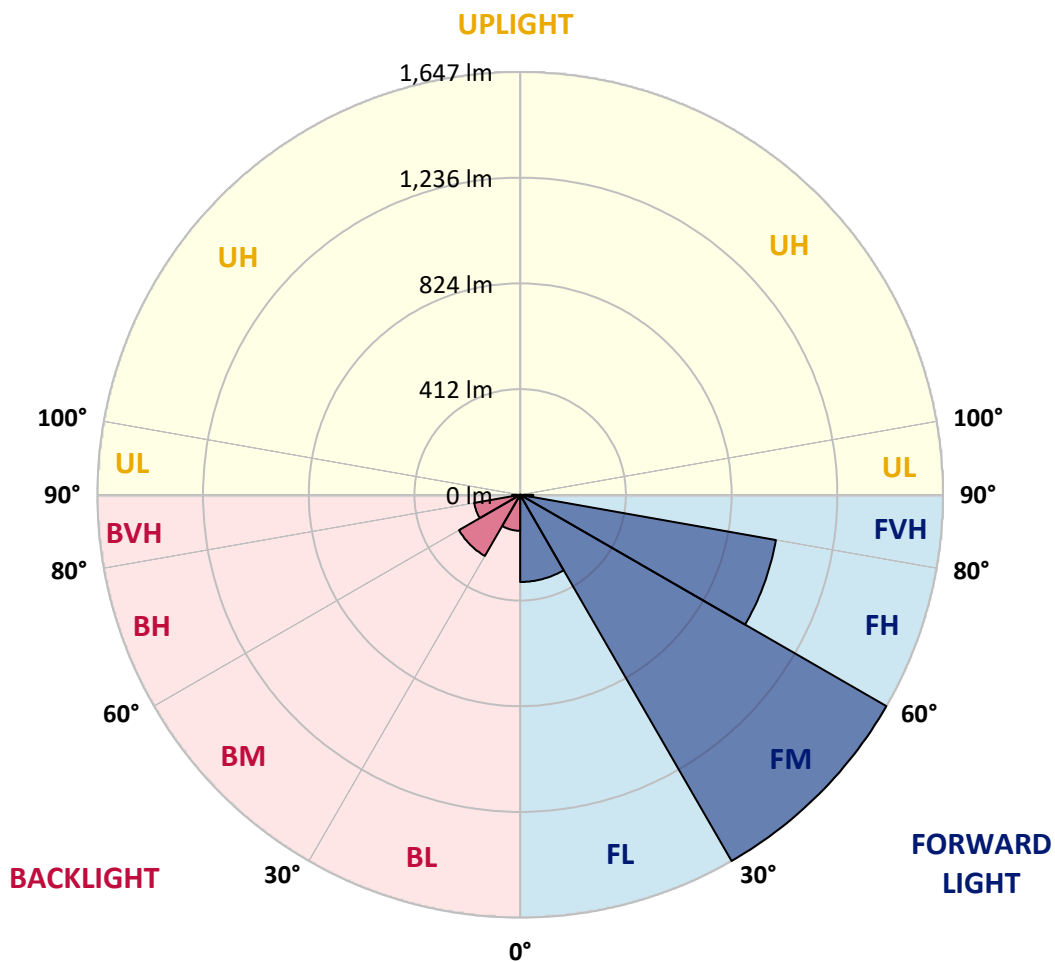
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	339.5	9.2			
FM	(30°-60°)	1647.4	44.8			
FH	(60°-80°)	1011.7	27.5			G1/1800
FVH	(80°-90°)	51.0	1.4			G1/100
BL	(0°-30°)	140.2	3.8	B1/500		
BM	(30°-60°)	275.0	7.5	B1/1000		
BH	(60°-80°)	181.8	4.9	B1/500		G1/500
BVH	(80°-90°)	31.0	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°	364.4	364.4	364.4	364.4	364.4	364.4	364.4	364.4	364.4	364.4	364.4
2.5°	516.7	518.2	515.1	508.2	498.2	479.7	463.6	435.2	409.8	406.7	379.7
5°	607.4	608.9	605.1	596.5	585.8	565.9	543.6	506.6	465.9	458.3	401.3
7.5°	669.6	670.5	665.8	657.3	648.9	628.9	606.6	565.1	515.1	508.9	429.0
10°	722.6	724.3	718.1	712.7	703.5	683.5	660.4	616.6	565.1	556.6	457.5
12.5°	771.9	773.4	769.6	765.0	761.9	743.4	718.1	665.8	610.4	601.3	491.2
15°	804.9	806.5	807.2	813.4	817.3	804.1	778.8	721.8	659.6	651.1	531.2
17.5°	795.7	799.6	811.1	833.4	857.2	858.0	837.3	777.3	708.1	698.8	572.0
20°	768.8	771.9	785.7	819.6	866.4	893.4	891.9	833.4	753.5	743.4	609.6
22.5°	791.1	795.0	795.0	815.7	861.8	911.8	931.8	888.8	798.8	789.6	647.4
25°	886.4	888.8	872.7	864.1	881.0	927.2	964.9	948.7	854.2	843.4	688.2
27.5°	1019.5	1015.6	995.6	961.8	943.4	955.7	994.0	1005.6	918.0	904.8	730.4
30°	1151.7	1149.4	1126.4	1081.0	1039.5	1013.3	1026.4	1056.3	987.1	971.8	771.2
32.5°	1275.5	1271.7	1246.2	1193.2	1146.3	1097.8	1072.5	1102.5	1061.0	1043.3	816.5
35°	1389.2	1379.3	1353.9	1298.5	1250.2	1203.9	1141.6	1146.3	1140.8	1122.5	866.4
37.5°	1481.5	1473.8	1446.1	1394.5	1343.2	1299.3	1234.0	1196.3	1227.1	1209.4	924.2
40°	1563.1	1554.5	1526.2	1474.6	1426.9	1385.4	1333.9	1257.0	1323.9	1303.9	988.7
42.5°	1624.4	1618.3	1595.3	1544.6	1498.4	1460.8	1435.3	1333.9	1424.6	1405.4	1059.5
45°	1657.6	1651.5	1639.1	1598.4	1556.1	1526.9	1529.2	1425.4	1529.9	1513.8	1143.3
47.5°	1616.8	1621.4	1632.3	1624.4	1598.4	1584.6	1613.0	1519.9	1647.6	1632.3	1234.0
50°	1507.7	1512.2	1555.3	1608.4	1617.6	1634.5	1688.4	1629.2	1772.0	1759.8	1346.2
52.5°	1239.3	1264.6	1383.9	1510.7	1597.6	1667.7	1772.0	1791.3	1982.1	1982.1	1544.6
55°	936.5	958.7	1094.8	1316.2	1519.9	1670.7	1833.6	1901.3	2133.5	2136.6	1648.4
57.5°	758.8	772.7	839.5	1066.4	1357.0	1632.3	1906.7	1995.8	2259.6	2273.3	1782.1
60°	615.7	623.6	667.3	824.9	1131.7	1528.4	1958.9	2131.2	2439.4	2458.7	1952.8
62.5°	495.2	502.8	532.0	626.6	888.0	1333.9	1949.7	2271.8	2679.4	2710.8	2176.6
65°	395.2	403.6	422.9	481.3	658.1	1092.5	1855.1	2344.1	2927.7	2958.4	2324.9
67.5°	308.3	316.0	329.1	367.5	463.6	817.3	1631.5	2268.0	3039.1	3065.3	2332.5
70°	232.9	236.8	247.6	272.2	331.4	542.8	1277.0	2012.8	2939.2	2963.0	2178.8
72.5°	180.8	180.0	186.1	198.3	231.4	373.6	846.4	1636.8	2598.6	2623.2	1859.0
75°	147.6	146.9	150.7	154.5	167.6	250.6	499.8	1232.5	2097.3	2050.5	1394.5
77.5°	124.5	123.8	127.7	128.4	133.8	172.9	284.5	811.1	1399.3	1318.5	785.7
80°	105.3	104.6	109.2	110.7	114.5	126.8	163.8	439.0	702.7	665.8	375.2
82.5°	79.2	82.3	90.6	94.6	99.2	93.8	101.5	193.7	326.0	311.4	163.1
85°	38.5	45.4	68.4	76.2	81.5	59.2	69.2	91.4	146.9	140.0	66.1
87.5°	13.1	11.6	40.8	48.4	53.1	26.9	38.5	50.7	60.7	55.4	20.8
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°	364.4	364.4	364.4	364.4	364.4	364.4	364.4	364.4	364.4	364.4	364.4
2.5°	368.3	356.7	339.8	326.8	318.3	311.4	308.3	307.6	306.0	305.3	305.3
5°	376.0	355.2	329.1	315.2	311.4	308.3	309.9	310.7	310.7	310.7	310.7
7.5°	387.5	358.3	326.8	317.5	316.8	316.8	321.3	323.6	325.3	325.3	325.3
10°	402.8	363.7	330.6	322.9	325.3	326.8	332.1	335.2	336.7	337.5	338.2
12.5°	423.6	375.2	338.2	332.1	335.2	336.0	339.8	341.3	342.8	343.6	343.6
15°	451.4	392.1	350.6	342.8	343.6	342.8	342.8	341.3	340.6	340.6	342.1
17.5°	479.7	408.2	361.3	350.6	347.6	341.3	336.7	332.9	330.6	329.1	329.9
20°	508.2	422.9	367.5	352.2	343.6	333.7	325.3	319.8	316.8	313.7	315.2
22.5°	536.7	436.7	369.9	347.6	335.2	320.5	311.4	302.8	296.0	291.4	292.2
25°	568.1	452.2	369.9	342.1	323.6	308.3	296.7	282.9	272.9	269.1	270.6
27.5°	599.8	465.1	365.9	332.1	310.7	295.2	278.3	262.2	256.0	253.7	254.5
30°	631.2	475.2	357.5	319.8	296.7	279.8	257.6	246.8	239.1	232.9	233.7
32.5°	662.7	482.1	346.0	304.5	282.1	260.6	242.2	229.9	216.0	208.3	209.1
35°	698.8	487.4	332.1	289.1	266.0	243.7	229.9	209.9	195.2	189.1	187.6
37.5°	736.5	491.2	317.5	272.2	249.8	231.4	217.5	193.0	179.1	170.7	169.9
40°	777.3	492.8	299.8	254.5	234.5	223.8	201.5	183.0	159.2	153.7	153.7
42.5°	825.7	492.0	282.1	236.8	217.5	206.1	189.9	181.5	160.7	155.2	152.2
45°	881.0	492.0	263.0	216.0	200.7	183.8	176.8	171.4	157.7	159.9	161.4
47.5°	944.1	490.5	239.9	199.1	186.9	172.2	168.4	156.8	151.5	153.0	154.5
50°	1031.0	492.8	219.1	185.3	176.8	164.6	159.9	153.7	151.5	152.2	151.5
52.5°	1151.7	485.1	199.1	176.8	169.2	153.0	153.0	152.2	153.0	152.2	152.2
55°	1217.8	468.1	184.5	172.2	163.8	147.6	150.7	152.2	153.7	153.0	153.0
57.5°	1311.6	456.7	172.9	169.2	160.7	146.1	149.1	152.2	153.0	152.2	152.2
60°	1422.3	448.9	165.3	169.9	158.4	146.1	149.9	152.2	151.5	150.7	150.7
62.5°	1550.7	445.9	159.9	172.2	156.0	146.9	149.9	152.2	149.1	148.4	148.4
65°	1599.1	418.3	153.0	173.7	157.7	146.9	149.1	149.9	146.1	145.4	144.5
67.5°	1524.6	370.6	143.0	170.7	162.2	146.9	146.9	146.1	141.5	140.7	139.2
70°	1357.8	307.6	127.7	160.7	165.3	147.6	143.7	140.0	135.3	135.3	132.2
72.5°	1111.7	242.2	107.6	143.0	163.1	149.9	137.6	132.2	126.8	126.8	123.8
75°	801.1	180.8	86.1	119.2	153.0	149.1	129.9	123.0	116.9	116.2	112.2
77.5°	456.7	126.8	69.9	93.0	136.0	145.4	123.0	112.2	105.3	103.0	100.7
80°	234.5	85.3	57.0	72.9	113.0	134.5	117.7	100.0	92.3	88.4	84.5
82.5°	111.5	57.0	43.8	53.9	85.3	117.7	110.7	86.1	77.7	72.9	68.4
85°	49.9	33.9	29.2	34.6	60.7	91.4	97.7	70.7	60.7	76.2	56.2
87.5°	16.2	15.4	15.4	16.2	29.2	40.0	71.4	52.2	48.4	40.0	33.9
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)