

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: P214849

Luminaire Tested: **ARCH-AF16-30-D-U-T4W-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214849
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-AF16-30-D-U-T4W-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3649.3 lumens
Efficiency: N/A
Efficacy: 114.0 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 - G2

Input Watts (W): 32
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

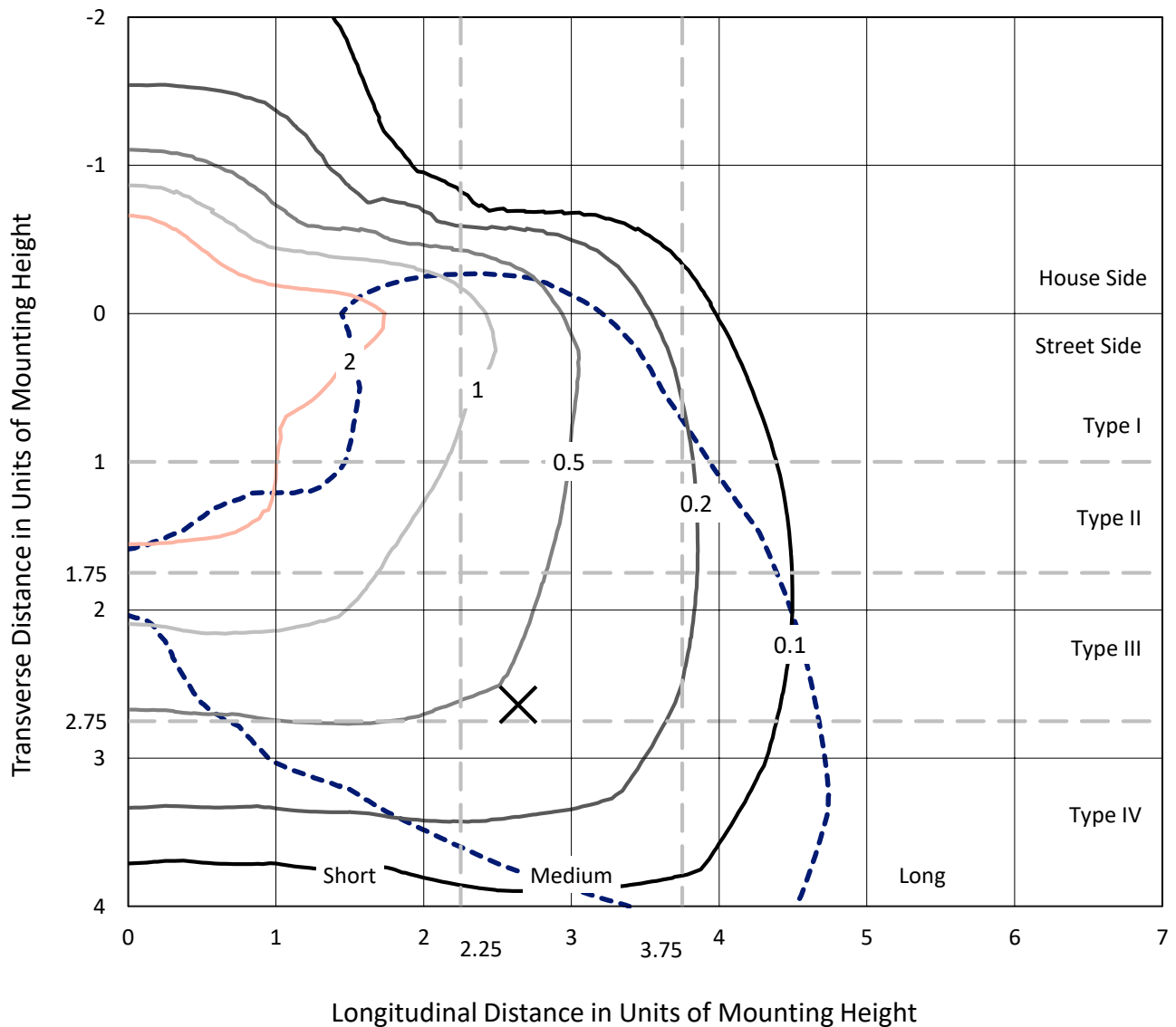


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

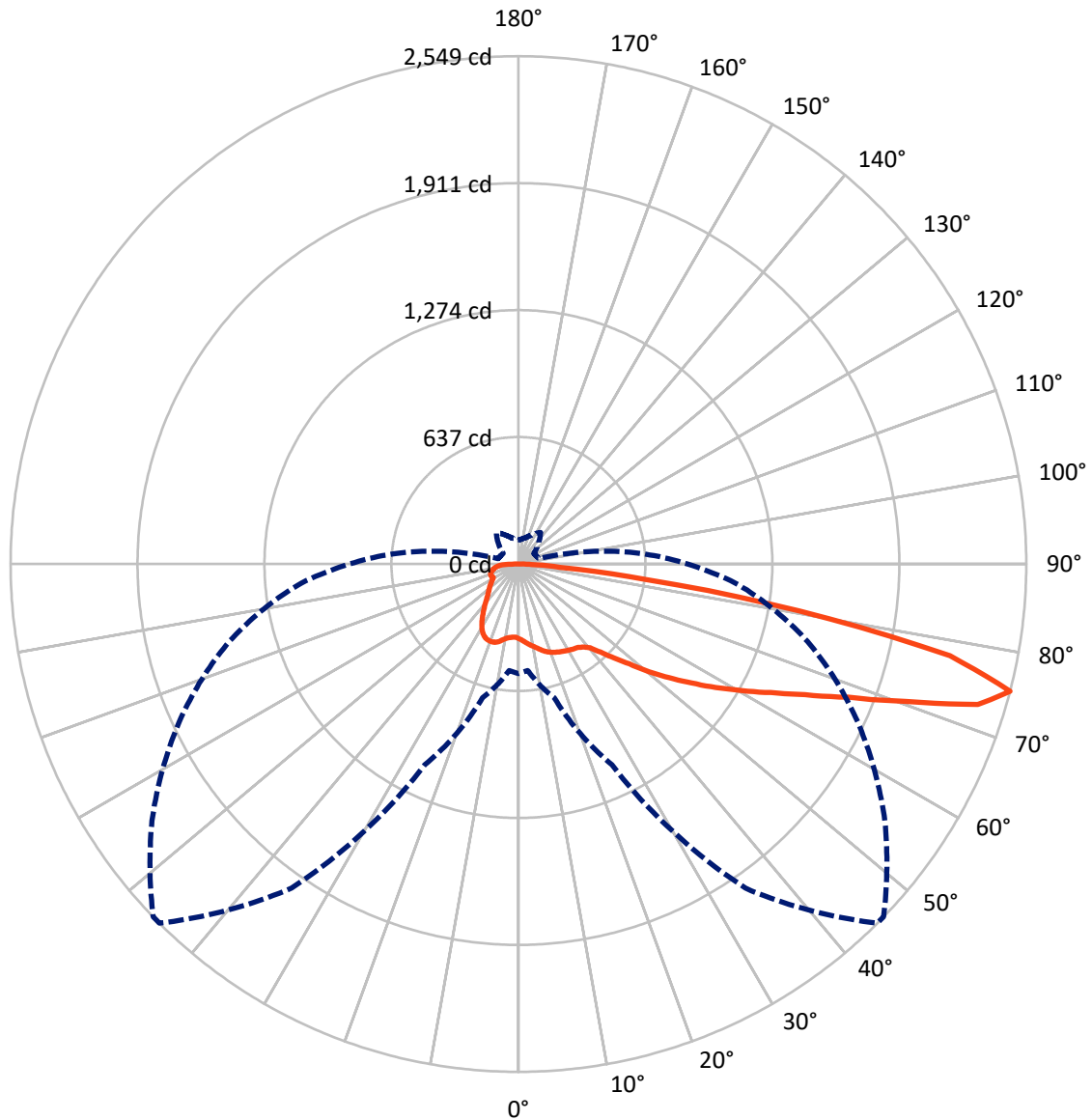


Based on 10 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	845.4	0.0	845.4
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	2803.9	0.0	2803.9
	% Fixture	76.8	0.0	76.8
Total	Lumens	3649.3	0.0	3649.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.1	1.0
10°-20°	120.1	3.3
20°-30°	206.2	5.6
30°-40°	288.3	7.9
40°-50°	423.0	11.6
50°-60°	658.9	18.1
60°-70°	948.0	26.0
70°-80°	825.9	22.6
80°-90°	141.8	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°	3649.3	100.0
0°-180°	3649.3	100.0

Coefficient of Utilization



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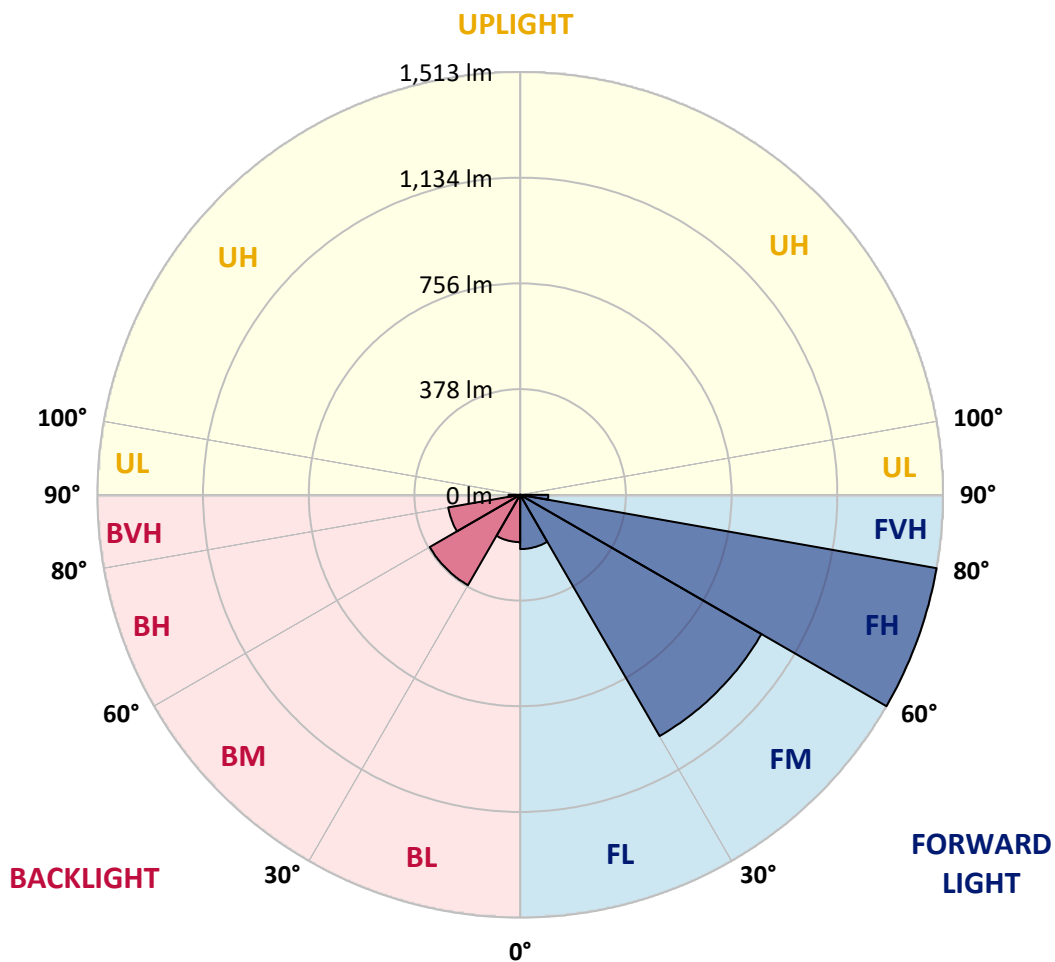
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	194.1	5.3			
FM	(30°-60°)	996.5	27.3			
FH	(60°-80°)	1512.7	41.5			G1/1800
FVH	(80°-90°)	100.6	2.8			G2/225
BL	(0°-30°)	169.3	4.6	B1/500		
BM	(30°-60°)	373.6	10.2	B1/1000		
BH	(60°-80°)	261.3	7.2	B1/500		G1/500
BVH	(80°-90°)	41.2	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-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	374.1	374.1	374.1	374.1	374.1	374.1	374.1	374.1	374.1	374.1	374.1
2.5°	392.6	389.7	389.7	387.6	387.6	384.0	382.6	381.9	378.4	376.2	374.1
5°	415.3	411.7	411.1	406.0	403.9	396.1	395.4	390.4	384.0	377.6	372.7
7.5°	435.8	433.8	430.2	425.2	418.8	408.8	408.2	400.3	389.7	381.2	374.1
10°	450.8	449.4	444.3	438.0	430.9	420.9	420.2	411.7	398.9	389.0	379.0
12.5°	468.5	466.4	460.0	451.5	443.7	434.5	433.8	426.6	412.5	399.7	386.9
15°	485.5	482.7	474.9	466.4	457.9	450.0	450.0	442.3	427.3	412.5	397.4
17.5°	494.1	492.6	484.9	475.6	468.5	462.8	462.1	455.1	440.1	424.5	408.2
20°	496.9	497.5	490.5	480.6	475.6	472.8	472.1	467.1	450.8	435.8	420.2
22.5°	496.1	498.3	492.6	482.1	480.6	480.6	480.6	474.9	462.1	447.2	431.6
25°	499.0	501.8	497.5	484.9	484.9	487.8	487.8	484.9	473.5	460.7	445.1
27.5°	508.9	511.2	507.5	489.8	490.5	494.7	494.1	494.7	487.8	475.6	460.0
30°	521.0	523.9	519.6	497.5	496.9	501.2	501.2	504.7	499.8	487.0	474.1
32.5°	553.7	553.0	539.5	506.1	504.0	508.3	508.3	511.8	508.9	499.0	487.0
35°	650.9	640.3	610.5	533.8	512.5	514.6	514.6	521.0	522.5	514.6	504.0
37.5°	750.3	746.8	724.1	607.7	543.8	528.2	527.4	536.7	543.0	536.7	529.6
40°	850.5	847.7	842.6	706.4	609.1	552.3	550.1	558.0	569.4	565.1	560.8
42.5°	943.5	942.1	947.0	803.6	692.1	604.1	597.7	588.5	604.9	603.4	603.4
45°	1016.5	1020.1	1022.8	894.4	782.3	670.9	662.9	631.7	653.8	659.5	663.8
47.5°	1057.7	1060.6	1070.5	983.2	872.4	748.2	742.5	691.4	720.6	737.5	749.6
50°	1116.6	1108.8	1117.2	1069.7	981.0	849.1	833.4	771.6	808.5	838.3	866.8
52.5°	1173.5	1160.7	1167.8	1169.8	1104.5	947.8	931.3	866.0	912.2	959.1	1009.4
55°	1224.6	1223.8	1231.0	1267.1	1223.8	1053.5	1035.0	970.4	1037.1	1087.5	1172.7
57.5°	1265.7	1272.8	1304.0	1380.0	1361.5	1168.4	1147.9	1091.8	1170.6	1221.0	1362.3
60°	1314.0	1325.4	1377.1	1475.8	1487.1	1289.1	1267.9	1227.3	1307.7	1358.6	1581.6
62.5°	1330.3	1346.6	1453.1	1576.6	1618.4	1421.1	1402.1	1375.0	1451.7	1497.8	1800.3
65°	1221.7	1252.8	1495.0	1628.4	1759.7	1580.2	1563.8	1540.4	1595.0	1625.6	1948.6
67.5°	1191.9	1206.1	1413.4	1703.1	1892.5	1784.6	1768.3	1727.8	1729.2	1716.5	1996.8
70°	1150.0	1165.6	1329.5	1759.1	2082.8	2064.4	2044.5	1925.1	1852.1	1774.7	1901.7
72.5°	979.6	974.7	1145.7	1607.9	2174.4	2410.7	2387.4	2137.4	1942.9	1724.2	1605.0
75°	550.1	535.9	695.0	1112.4	1985.5	2548.5	2547.7	2244.6	1879.0	1502.1	1092.5
77.5°	159.7	155.4	229.3	466.4	1336.7	2214.0	2241.0	2024.6	1568.1	1079.1	599.9
80°	75.3	76.7	98.7	154.0	570.8	1429.0	1506.3	1333.2	937.0	497.5	247.7
82.5°	47.5	48.3	67.4	99.4	241.4	648.8	712.7	599.9	371.3	215.1	109.4
85°	29.8	29.8	44.7	65.3	144.1	207.3	225.1	204.5	159.0	117.1	59.6
87.5°	16.3	16.3	27.0	37.5	78.7	66.7	68.9	81.6	99.4	71.7	29.8
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°	374.1	374.1	374.1	374.1	374.1	374.1	374.1	374.1	374.1	374.1	374.1
2.5°	373.3	371.9	369.9	369.1	368.4	367.6	368.4	369.9	368.4	368.4	369.1
5°	371.3	369.9	367.0	367.0	367.6	368.4	371.9	374.1	374.8	374.8	374.8
7.5°	371.3	369.1	367.0	367.6	369.1	371.9	377.6	381.2	384.0	384.7	384.7
10°	374.8	371.9	370.5	371.9	376.2	378.4	384.0	389.7	393.3	394.7	394.7
12.5°	381.2	378.4	378.4	381.2	386.9	389.7	394.7	398.9	403.1	405.4	405.4
15°	391.8	388.3	389.0	394.0	400.3	403.1	406.8	408.2	411.7	414.5	414.5
17.5°	401.7	398.2	399.7	405.4	409.6	411.1	413.1	412.5	413.9	415.9	416.8
20°	413.1	409.6	410.3	413.9	414.5	413.1	413.1	411.1	410.3	413.9	415.3
22.5°	424.5	420.9	420.2	418.1	414.5	411.1	408.8	406.8	405.4	408.8	410.3
25°	438.0	433.0	429.5	420.2	411.1	404.6	401.7	400.3	399.7	403.1	404.6
27.5°	452.9	448.0	437.2	417.4	402.5	391.8	389.7	389.7	391.1	393.3	394.7
30°	467.1	462.1	442.9	411.1	387.6	371.9	369.9	371.9	375.6	377.6	379.7
32.5°	481.3	476.4	446.6	401.1	365.6	345.7	344.2	347.9	353.6	355.0	356.4
35°	500.4	495.5	450.8	386.9	337.9	316.7	315.2	317.3	322.4	324.4	326.5
37.5°	527.4	524.6	457.1	371.3	312.4	288.9	284.6	283.2	286.0	285.3	288.2
40°	562.9	565.1	468.5	350.7	287.5	263.4	254.1	249.8	247.0	241.4	244.2
42.5°	614.7	616.1	481.3	327.2	266.1	239.3	227.2	219.4	213.7	204.5	205.9
45°	690.7	678.6	496.1	302.4	247.0	220.0	205.9	196.6	188.8	181.1	181.7
47.5°	791.5	754.6	512.5	281.8	228.0	204.5	191.6	181.1	171.7	165.4	166.1
50°	915.7	849.1	528.9	262.7	208.6	192.4	181.1	169.7	160.4	154.0	153.3
52.5°	1079.7	962.6	539.5	241.4	189.6	181.7	171.7	161.1	149.8	141.9	141.3
55°	1250.0	1094.7	548.7	215.8	171.1	169.7	164.7	152.6	139.1	129.2	127.8
57.5°	1437.6	1235.8	555.8	190.9	156.9	159.7	158.3	144.1	129.2	119.9	119.3
60°	1607.9	1382.1	533.0	169.0	144.1	149.8	151.3	139.1	131.3	133.4	134.2
62.5°	1779.7	1495.0	446.6	152.6	135.6	143.3	155.4	154.7	151.3	154.7	155.4
65°	1841.3	1518.3	316.7	139.1	127.1	146.2	169.0	167.5	151.3	144.8	143.3
67.5°	1806.6	1448.9	212.9	128.5	120.7	149.8	183.1	167.5	145.6	137.0	134.2
70°	1641.2	1277.8	156.1	117.9	115.0	149.0	190.9	166.8	142.7	133.4	129.9
72.5°	1309.0	985.9	125.6	107.9	106.5	145.6	195.2	165.4	139.9	129.9	125.6
75°	847.7	613.3	105.8	98.0	93.8	139.9	193.1	161.1	136.2	123.5	120.7
77.5°	393.3	264.1	90.1	86.7	81.6	131.3	186.8	152.6	128.5	116.5	112.9
80°	183.1	124.9	75.9	75.3	73.1	124.2	178.2	142.7	119.3	109.4	103.7
82.5°	98.0	75.3	61.7	61.7	63.9	115.7	167.5	130.6	107.2	102.2	87.3
85°	51.8	43.2	44.7	48.3	54.6	102.2	153.3	117.9	93.8	78.1	75.9
87.5°	26.2	27.7	27.7	32.7	41.8	83.0	126.3	97.2	79.5	63.9	62.5
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)