

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: P214856

Luminaire Tested: **ARCH-AF24-50-D-U-T4W-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214856
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-AF24-50-D-U-T4W-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5825 lumens
Efficiency: N/A
Efficacy: 107.9 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): 54
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

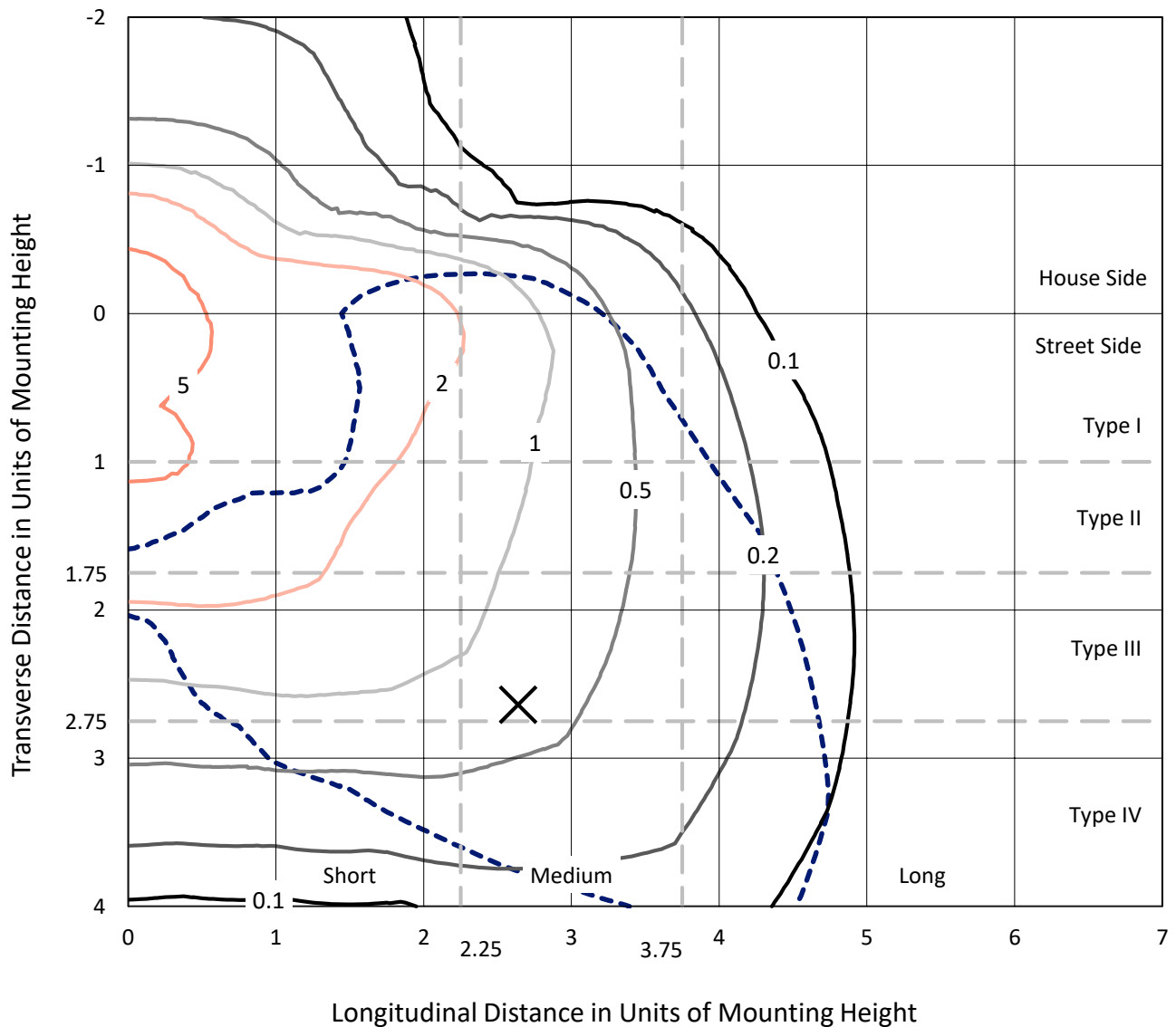


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

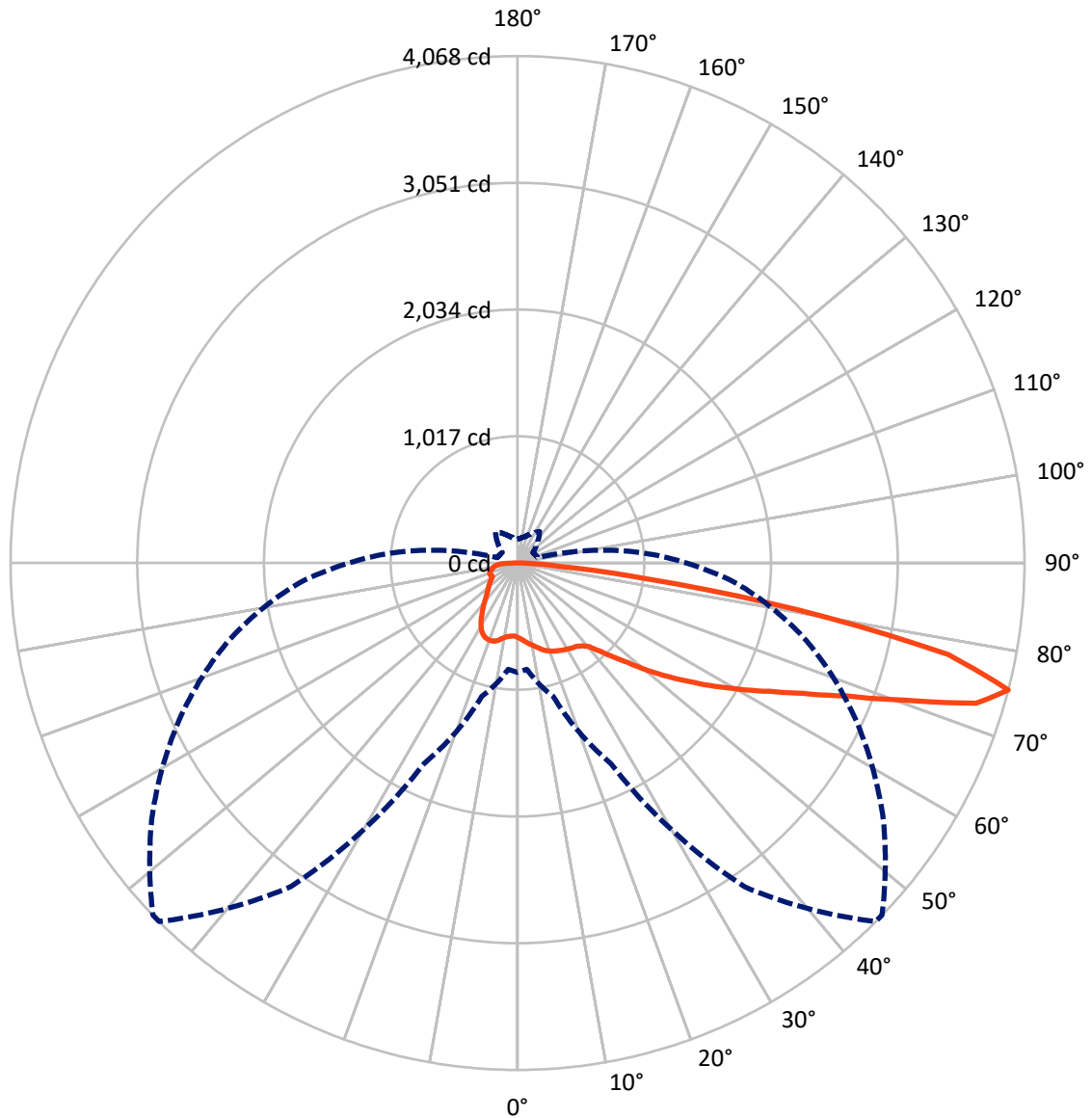


Based on 10 foot mounting height. Maximum calculated value = 7 fc
 Type IV - Medium - Non-Cutoff

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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	1349.4	0.0	1349.4
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	4475.6	0.0	4475.6
	% Fixture	76.8	0.0	76.8
Total	Lumens	5825.0	0.0	5825.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.2	1.0
10°-20°	191.8	3.3
20°-30°	329.1	5.6
30°-40°	460.2	7.9
40°-50°	675.1	11.6
50°-60°	1051.7	18.1
60°-70°	1513.3	26.0
70°-80°	1318.2	22.6
80°-90°	226.4	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°	5825.0	100.0
0°-180°	5825.0	100.0

Coefficient of Utilization



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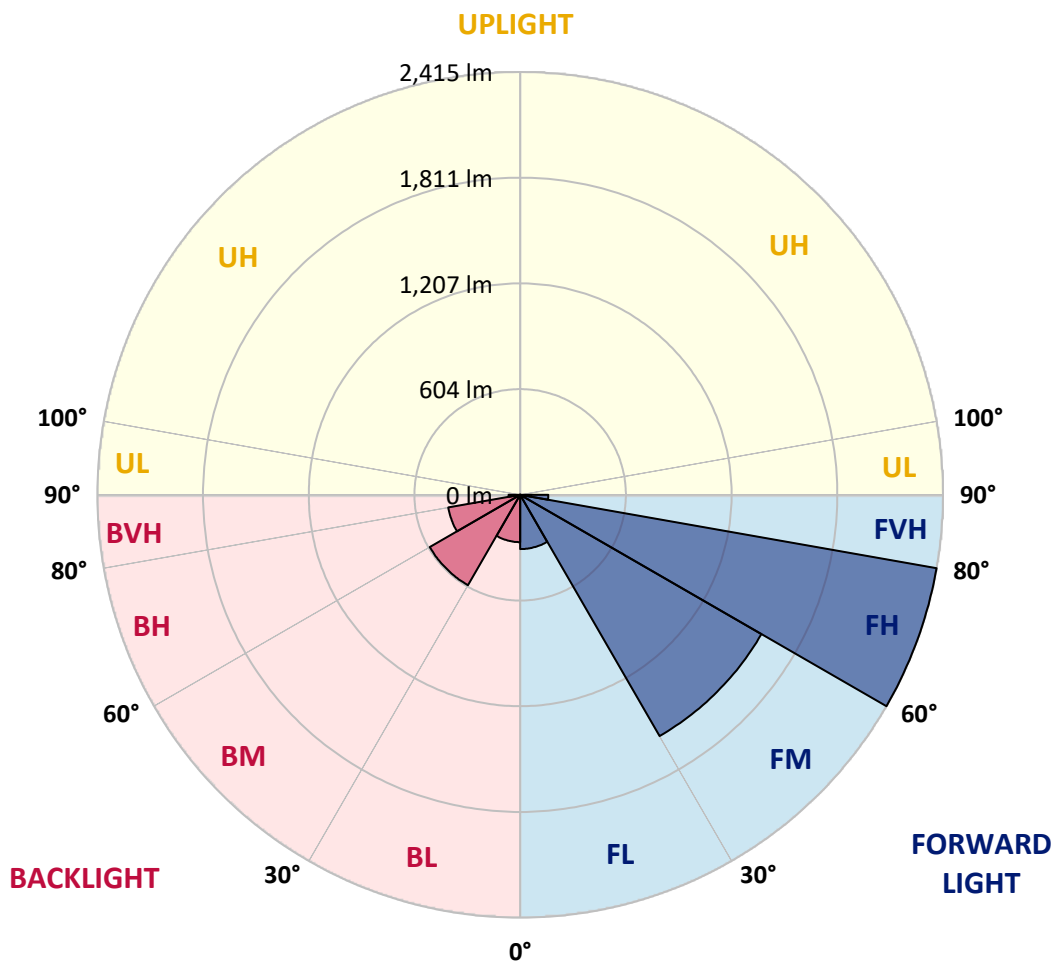
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	309.8	5.3			
FM (30°-60°)	1590.7	27.3			
FH (60°-80°)	2414.5	41.5			G2/5000
FVH (80°-90°)	160.6	2.8			G2/225
BL (0°-30°)	270.3	4.6	B1/500		
BM (30°-60°)	596.4	10.2	B1/1000		
BH (60°-80°)	417.0	7.2	B1/500		G1/500
BVH (80°-90°)	65.8	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°	597.1	597.1	597.1	597.1	597.1	597.1	597.1	597.1	597.1	597.1	597.1
2.5°	626.6	622.1	622.1	618.7	618.7	613.0	610.7	609.6	603.9	600.5	597.1
5°	662.9	657.2	656.1	648.1	644.7	632.3	631.1	623.2	613.0	602.8	594.9
7.5°	695.7	692.3	686.7	678.7	668.5	652.7	651.5	639.1	622.1	608.5	597.1
10°	719.5	717.3	709.3	699.1	687.8	671.9	670.8	657.2	636.8	620.9	605.1
12.5°	747.8	744.4	734.3	720.7	708.2	693.5	692.3	681.0	658.3	637.9	617.5
15°	775.0	770.5	758.0	744.4	730.9	718.4	718.4	705.9	682.1	658.3	634.5
17.5°	788.6	786.4	773.9	759.2	747.8	738.8	737.6	726.3	702.5	677.6	651.5
20°	793.2	794.3	783.0	767.1	759.2	754.6	753.5	745.6	719.5	695.7	670.8
22.5°	792.0	795.4	786.4	769.4	767.1	767.1	767.1	758.0	737.6	713.9	688.9
25°	796.6	801.1	794.3	773.9	773.9	778.4	778.4	773.9	755.8	735.4	710.5
27.5°	812.4	815.8	810.2	781.8	783.0	789.8	788.6	789.8	778.4	759.2	734.3
30°	831.7	836.2	829.4	794.3	793.2	800.0	800.0	805.6	797.7	777.3	756.9
32.5°	883.8	882.7	861.2	807.9	804.5	811.3	811.3	817.0	812.4	796.6	777.3
35°	1039.1	1022.1	974.5	852.1	818.1	821.5	821.5	831.7	834.0	821.5	804.5
37.5°	1197.7	1192.0	1155.8	969.9	868.0	843.0	841.9	856.6	866.8	856.6	845.3
40°	1357.5	1352.9	1345.0	1127.4	972.2	881.6	878.2	890.6	908.7	901.9	895.2
42.5°	1505.9	1503.6	1511.6	1282.7	1104.8	964.3	954.1	939.3	965.4	963.1	963.1
45°	1622.6	1628.3	1632.8	1427.7	1248.7	1070.8	1058.3	1008.5	1043.6	1052.7	1059.5
47.5°	1688.3	1692.9	1708.7	1569.3	1392.6	1194.3	1185.2	1103.6	1150.1	1177.3	1196.6
50°	1782.4	1769.9	1783.5	1707.6	1565.9	1355.2	1330.3	1231.7	1290.6	1338.2	1383.5
52.5°	1873.0	1852.6	1864.0	1867.4	1763.1	1512.7	1486.6	1382.4	1456.0	1530.8	1611.3
55°	1954.6	1953.5	1964.8	2022.6	1953.5	1681.5	1652.1	1549.0	1655.5	1735.9	1871.9
57.5°	2020.3	2031.7	2081.5	2202.8	2173.3	1865.1	1832.2	1742.7	1868.5	1948.9	2174.4
60°	2097.4	2115.5	2198.2	2355.7	2373.9	2057.7	2023.7	1959.1	2087.2	2168.8	2524.6
62.5°	2123.4	2149.5	2319.5	2516.6	2583.5	2268.5	2237.9	2194.8	2317.2	2390.8	2873.5
65°	1950.1	1999.9	2386.3	2599.3	2809.0	2522.3	2496.2	2458.8	2546.1	2594.8	3110.4
67.5°	1902.5	1925.1	2256.0	2718.3	3020.9	2848.6	2822.6	2758.0	2760.2	2739.8	3187.4
70°	1835.6	1860.6	2122.3	2807.8	3324.5	3295.1	3263.3	3073.0	2956.3	2832.8	3035.6
72.5°	1563.7	1555.8	1828.8	2566.5	3470.7	3848.0	3810.6	3411.8	3101.3	2752.3	2561.9
75°	878.2	855.5	1109.3	1775.6	3169.3	4067.8	4066.7	3582.9	2999.3	2397.6	1743.8
77.5°	254.9	248.1	366.0	744.4	2133.6	3534.1	3577.2	3231.6	2503.0	1722.3	957.5
80°	120.1	122.4	157.5	245.9	911.0	2280.9	2404.4	2128.0	1495.7	794.3	395.5
82.5°	75.9	77.1	107.6	158.6	385.3	1035.7	1137.6	957.5	592.6	343.3	174.5
85°	47.6	47.6	71.4	104.2	230.0	330.9	359.2	326.3	253.8	187.0	95.2
87.5°	26.1	26.1	43.1	60.1	125.8	106.5	109.9	130.3	158.6	114.4	47.6
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°	597.1	597.1	597.1	597.1	597.1	597.1	597.1	597.1	597.1	597.1	597.1
2.5°	596.0	593.7	590.3	589.2	588.1	586.9	588.1	590.3	588.1	588.1	589.2
5°	592.6	590.3	585.8	585.8	586.9	588.1	593.7	597.1	598.3	598.3	598.3
7.5°	592.6	589.2	585.8	586.9	589.2	593.7	602.8	608.5	613.0	614.1	614.1
10°	598.3	593.7	591.5	593.7	600.5	603.9	613.0	622.1	627.7	630.0	630.0
12.5°	608.5	603.9	603.9	608.5	617.5	622.1	630.0	636.8	643.6	647.0	647.0
15°	625.5	619.8	620.9	628.9	639.1	643.6	649.3	651.5	657.2	661.7	661.7
17.5°	641.3	635.7	637.9	647.0	653.8	656.1	659.5	658.3	660.6	664.0	665.1
20°	659.5	653.8	654.9	660.6	661.7	659.5	659.5	656.1	654.9	660.6	662.9
22.5°	677.6	671.9	670.8	667.4	661.7	656.1	652.7	649.3	647.0	652.7	654.9
25°	699.1	691.2	685.5	670.8	656.1	645.9	641.3	639.1	637.9	643.6	645.9
27.5°	722.9	715.0	698.0	666.3	642.5	625.5	622.1	622.1	624.3	627.7	630.0
30°	745.6	737.6	707.1	656.1	618.7	593.7	590.3	593.7	599.4	602.8	606.2
32.5°	768.2	760.3	712.7	640.2	583.5	551.8	549.6	555.2	564.3	566.6	568.8
35°	798.8	790.9	719.5	617.5	539.4	505.4	503.1	506.5	514.4	517.8	521.2
37.5°	841.9	837.4	729.7	592.6	498.6	461.2	454.4	452.1	456.6	455.5	460.0
40°	898.6	901.9	747.8	559.8	458.9	420.4	405.7	398.9	394.3	385.3	389.8
42.5°	981.3	983.5	768.2	522.4	424.9	381.9	362.6	350.1	341.1	326.3	328.6
45°	1102.5	1083.2	792.0	482.7	394.3	351.3	328.6	313.9	301.4	288.9	290.1
47.5°	1263.4	1204.5	818.1	449.8	363.7	326.3	305.9	288.9	274.2	264.0	265.1
50°	1461.7	1355.2	844.2	419.2	333.1	307.1	288.9	270.8	256.1	245.9	244.8
52.5°	1723.4	1536.5	861.2	385.3	302.5	290.1	274.2	257.2	239.1	226.6	225.5
55°	1995.4	1747.2	875.9	344.5	273.1	270.8	262.9	243.6	222.1	206.2	204.0
57.5°	2294.5	1972.7	887.2	304.8	250.4	254.9	252.7	230.0	206.2	191.5	190.4
60°	2566.5	2206.2	851.0	269.7	230.0	239.1	241.4	222.1	209.6	213.0	214.2
62.5°	2840.7	2386.3	712.7	243.6	216.4	228.9	248.1	247.0	241.4	247.0	248.1
65°	2939.3	2423.7	505.4	222.1	202.8	233.4	269.7	267.4	241.4	231.2	228.9
67.5°	2883.7	2312.7	339.9	205.1	192.6	239.1	292.3	267.4	232.3	218.7	214.2
70°	2619.7	2039.6	249.3	188.1	183.6	238.0	304.8	266.3	227.8	213.0	207.4
72.5°	2089.4	1573.9	200.6	172.2	170.0	232.3	311.6	264.0	223.2	207.4	200.6
75°	1352.9	979.0	168.8	156.4	149.6	223.2	308.2	257.2	217.6	197.2	192.6
77.5°	627.7	421.5	143.9	138.2	130.3	209.6	298.0	243.6	205.1	185.8	180.2
80°	292.3	199.4	121.2	120.1	116.7	198.3	284.4	227.8	190.4	174.5	165.4
82.5°	156.4	120.1	98.6	98.6	102.0	184.7	267.4	208.5	171.1	163.2	139.4
85°	82.7	69.1	71.4	77.1	87.2	163.2	244.8	188.1	149.6	124.6	121.2
87.5°	41.9	44.2	44.2	52.1	66.9	132.6	201.7	155.2	126.9	102.0	99.7
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)