

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: P348685

Luminaire Tested: **ARCH-N-PA1-50-830-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348685
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-18)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-50-830-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5390 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

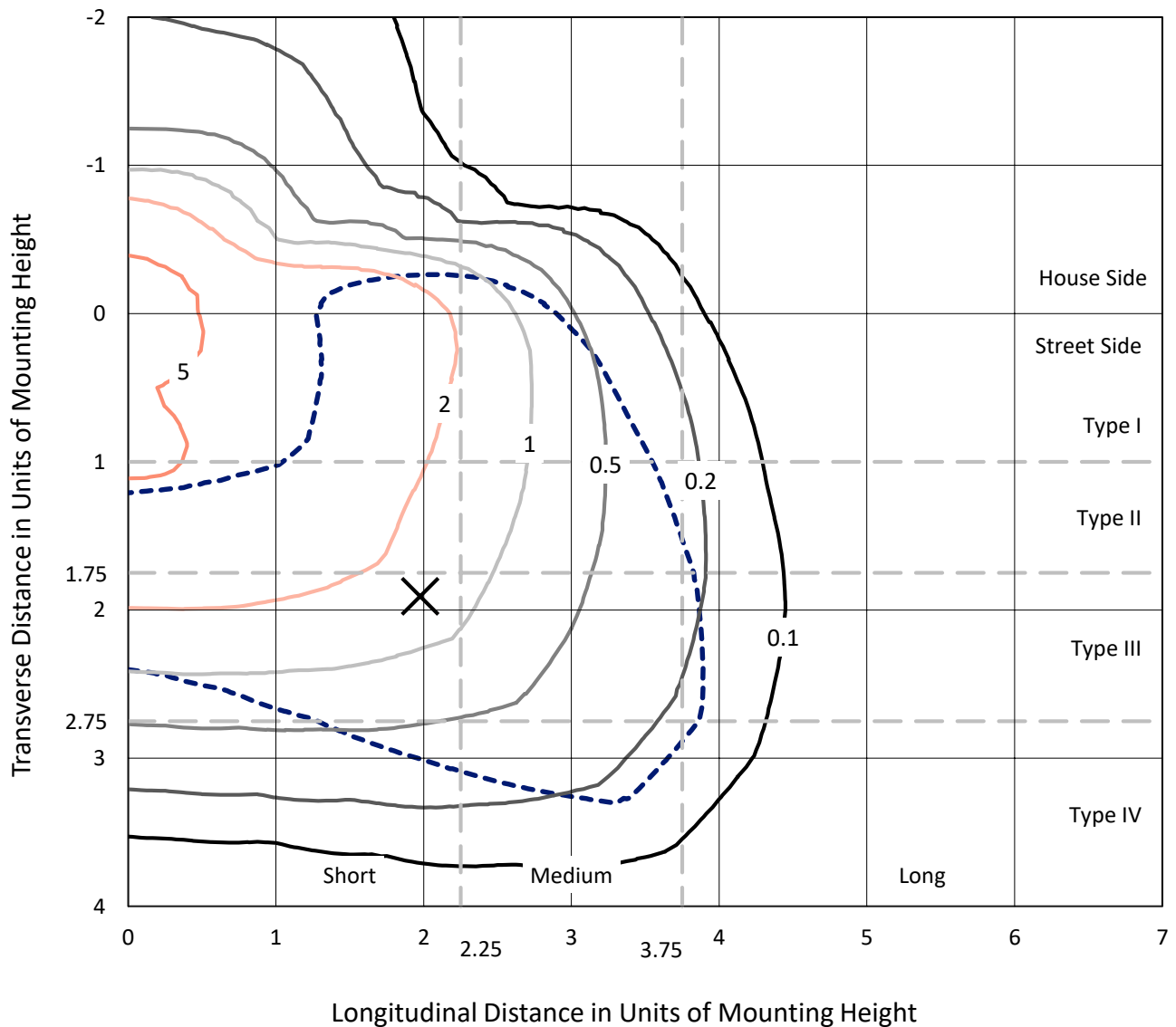
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

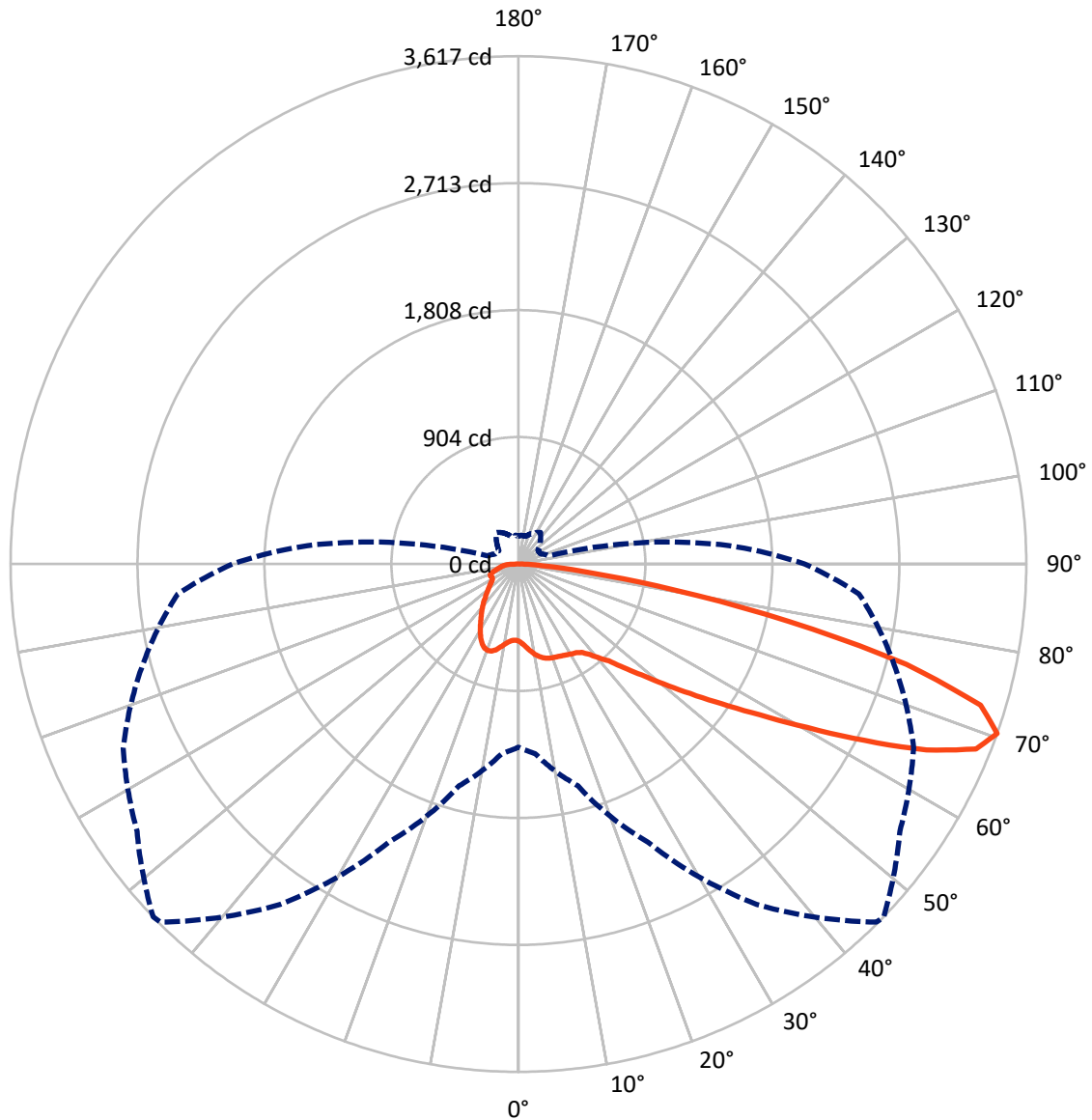
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.9 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1235.4	0.0	1235.4
	% Fixture	22.9	0.0	22.9
Street Side	Lumens	4154.6	0.0	4154.6
	% Fixture	77.1	0.0	77.1
Total	Lumens	5390.0	0.0	5390.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.0	1.0
10°-20°	186.5	3.5
20°-30°	311.0	5.8
30°-40°	441.3	8.2
40°-50°	649.1	12.0
50°-60°	1099.3	20.4
60°-70°	1560.4	29.0
70°-80°	948.0	17.6
80°-90°	138.4	2.6
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°	5390.0	100.0
0°-180°	5390.0	100.0



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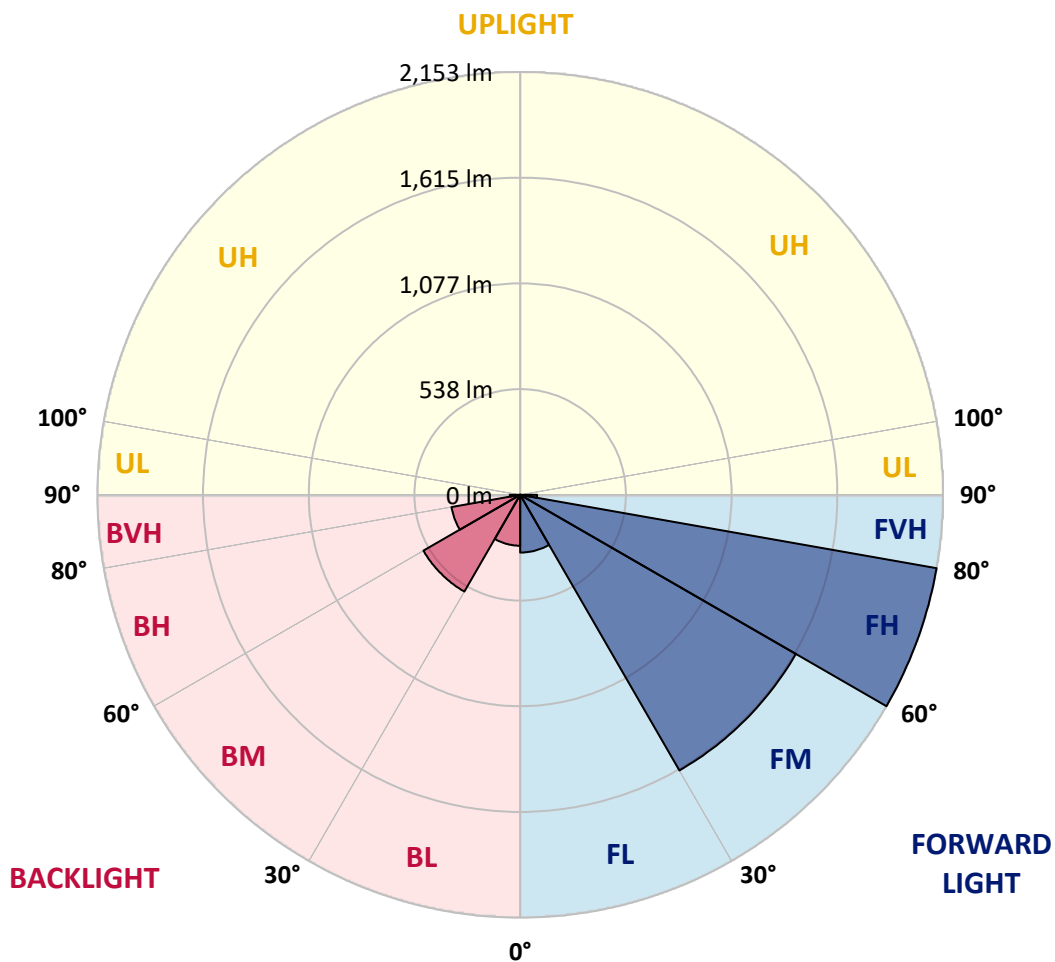
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	294.1	5.5			
FM	(30°-60°)	1621.1	30.1			
FH	(60°-80°)	2153.3	39.9			G2/5000
FVH	(80°-90°)	86.2	1.6			G1/100
BL	(0°-30°)	259.4	4.8	B1/500		
BM	(30°-60°)	568.7	10.6	B1/1000		
BH	(60°-80°)	355.2	6.6	B1/500		G1/500
BVH	(80°-90°)	52.2	1.0			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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1
2.5°	576.6	577.0	577.7	575.9	570.7	569.2	568.7	563.3	559.8	554.7	550.2
5°	622.7	623.1	622.0	616.8	605.4	596.9	596.2	584.0	572.9	561.1	552.3
7.5°	670.9	671.4	667.9	658.2	642.1	627.3	626.4	609.8	593.0	575.1	561.9
10°	713.5	711.3	705.6	691.9	672.9	654.8	654.1	636.8	617.4	595.8	578.1
12.5°	741.9	740.1	732.7	716.1	695.2	678.6	677.2	661.1	642.3	618.7	597.5
15°	757.6	758.9	748.9	730.1	709.8	695.8	694.5	683.1	666.3	642.5	618.1
17.5°	759.6	760.7	751.1	732.5	715.9	706.3	705.7	698.2	686.0	663.1	637.7
20°	747.8	748.5	740.6	725.3	714.4	711.5	711.3	708.0	698.9	678.6	653.9
22.5°	730.6	731.2	725.5	714.4	710.7	715.3	716.6	715.3	708.9	689.9	666.6
25°	726.4	726.0	720.1	708.9	712.0	721.8	723.4	724.0	719.6	703.0	682.9
27.5°	746.9	745.6	734.3	716.3	718.3	730.1	732.3	737.7	734.9	720.3	701.3
30°	806.1	803.9	780.8	744.3	734.3	740.4	743.2	751.7	752.2	740.1	725.8
32.5°	906.1	903.3	862.0	796.7	761.4	750.9	753.5	766.2	773.1	763.7	748.4
35°	1032.4	1029.3	975.1	885.8	806.8	771.0	772.9	783.0	796.7	783.4	763.1
37.5°	1164.1	1156.6	1104.4	990.5	878.9	814.0	814.0	815.3	821.8	794.1	780.4
40°	1295.1	1287.5	1240.3	1113.8	972.3	881.7	877.5	848.9	843.7	819.9	815.3
42.5°	1416.8	1414.6	1386.8	1253.0	1081.9	948.3	942.4	893.9	895.0	880.2	880.4
45°	1546.3	1546.3	1523.6	1393.6	1209.5	1055.3	1049.4	978.0	989.1	982.2	998.7
47.5°	1652.0	1655.3	1652.2	1540.1	1358.0	1191.2	1180.5	1094.6	1125.6	1149.0	1196.8
50°	1759.9	1765.1	1765.6	1700.7	1537.5	1352.8	1340.7	1249.3	1318.5	1385.7	1479.5
52.5°	1916.5	1928.2	1881.9	1861.0	1757.3	1544.7	1532.7	1448.4	1563.8	1658.1	1819.9
55°	2061.7	2051.6	2018.5	2031.5	1992.7	1763.1	1754.0	1680.1	1837.2	1959.7	2169.8
57.5°	2140.3	2139.5	2172.7	2228.1	2246.5	2032.4	2024.8	1952.9	2145.4	2237.5	2498.3
60°	2232.5	2233.8	2316.1	2441.7	2517.7	2367.7	2364.4	2309.8	2444.8	2496.8	2756.0
62.5°	2245.4	2268.7	2410.3	2626.5	2771.5	2759.5	2766.9	2631.3	2712.7	2703.8	2948.4
65°	2096.9	2127.6	2384.0	2682.4	3023.8	3188.0	3194.8	2954.7	2923.9	2880.7	3017.2
67.5°	1792.6	1838.0	2116.5	2560.8	3107.0	3504.7	3514.3	3205.4	3099.1	2940.7	2851.6
70°	1304.5	1354.9	1635.2	2187.1	2958.7	3606.0	3616.9	3316.2	3105.7	2770.0	2434.3
72.5°	788.0	827.5	1058.6	1610.1	2497.2	3421.5	3440.9	3175.7	2835.5	2346.3	1797.6
75°	346.0	371.9	511.9	927.8	1787.8	2830.9	2855.1	2718.2	2303.9	1705.1	1062.5
77.5°	147.4	154.8	209.9	403.0	1010.7	1934.4	1967.6	1986.1	1563.1	927.8	449.0
80°	91.9	94.8	118.8	182.4	473.0	1086.5	1122.3	1168.6	776.2	341.1	156.8
82.5°	55.9	59.2	78.9	110.3	246.3	492.5	509.7	542.3	301.2	147.4	81.2
85°	33.6	36.0	48.3	69.7	140.2	193.7	193.5	214.0	141.8	94.8	42.8
87.5°	16.0	17.9	25.8	36.2	70.6	72.7	68.1	77.1	86.1	62.2	21.6
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°	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1
2.5°	548.8	548.0	545.6	543.8	543.4	542.3	541.4	541.9	542.7	542.9	542.9
5°	548.6	546.6	543.4	542.1	543.8	546.0	548.8	552.5	554.7	556.3	557.4
7.5°	557.4	553.6	550.1	549.3	552.6	558.5	564.8	572.6	577.9	581.6	582.3
10°	572.2	567.4	563.9	564.6	570.5	579.0	587.9	597.8	605.9	610.9	611.3
12.5°	589.2	584.6	581.2	584.4	594.1	604.5	613.7	622.4	629.7	634.7	634.7
15°	608.7	605.4	601.5	608.7	622.0	631.2	635.1	639.3	643.4	647.1	646.3
17.5°	627.5	624.4	622.4	630.9	644.7	648.9	646.3	643.2	643.2	645.2	645.6
20°	643.8	641.0	642.3	650.6	657.8	653.4	643.8	633.8	629.7	630.9	632.0
22.5°	658.0	656.7	660.5	664.4	659.3	643.8	626.1	612.6	607.6	607.2	607.6
25°	674.6	674.4	679.2	672.2	649.3	620.7	596.9	583.8	581.0	583.3	586.9
27.5°	695.2	697.3	699.7	674.0	629.0	585.8	561.7	552.6	555.4	560.8	564.3
30°	721.6	727.1	722.0	669.4	599.9	546.0	522.9	520.4	527.9	535.5	539.2
32.5°	747.2	755.9	743.4	657.4	562.2	503.8	485.9	485.1	494.4	501.7	506.9
35°	767.9	785.1	759.4	633.6	518.7	464.8	451.7	446.8	450.1	458.8	464.7
37.5°	794.8	823.4	770.5	597.3	471.5	432.7	417.4	406.0	403.0	406.5	409.5
40°	844.1	881.9	775.7	546.6	425.4	400.6	385.2	368.4	356.7	348.3	348.4
42.5°	924.5	958.1	772.3	484.9	382.8	369.3	351.8	332.4	313.6	294.4	292.9
45°	1055.1	1071.3	762.4	419.6	345.3	336.5	320.0	300.7	275.6	253.8	251.8
47.5°	1264.1	1228.1	746.9	362.6	312.3	308.6	293.5	271.2	244.6	227.1	225.6
50°	1549.1	1454.5	739.3	317.3	283.1	284.3	271.9	248.3	223.2	210.3	208.8
52.5°	1890.0	1718.1	753.9	282.2	259.7	263.6	254.4	232.2	211.2	201.1	199.6
55°	2243.6	1991.1	769.6	256.8	237.6	245.1	242.0	223.7	204.7	195.3	194.1
57.5°	2546.3	2194.9	738.2	236.1	217.8	229.7	232.4	218.4	201.4	192.9	191.5
60°	2736.8	2277.0	655.9	216.7	202.2	217.3	226.9	216.9	202.7	202.0	200.9
62.5°	2827.2	2269.8	532.5	201.4	192.4	211.9	230.9	225.2	217.5	224.1	224.7
65°	2786.6	2161.3	396.6	191.3	185.4	214.0	243.1	240.9	221.7	228.4	229.3
67.5°	2519.5	1902.5	293.7	182.4	177.6	219.7	265.3	246.1	213.4	218.2	215.3
70°	2036.4	1508.3	226.5	172.5	169.7	219.0	275.2	242.9	204.4	205.5	197.6
72.5°	1404.3	1028.5	184.3	163.2	158.3	199.6	268.2	235.2	196.8	188.3	177.8
75°	763.7	552.1	156.6	153.7	138.2	175.2	255.3	229.7	190.0	178.7	172.8
77.5°	300.5	229.1	135.9	140.6	120.8	154.8	240.9	219.1	180.6	165.8	162.9
80°	122.7	116.9	112.7	121.6	103.9	135.4	223.6	206.8	169.3	153.8	147.9
82.5°	69.5	72.7	87.6	95.9	84.3	124.7	215.3	196.8	155.9	137.8	130.8
85°	35.6	42.6	61.1	68.8	62.0	106.1	198.3	172.3	125.1	105.5	106.1
87.5°	17.2	23.8	38.6	43.2	40.2	76.7	148.1	124.9	97.4	77.1	74.7
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)