

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: P348657

Luminaire Tested: **ARCH-N-PA1-50-740-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348657
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-PA1-50-740-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6783 lumens
Efficiency: N/A
Efficacy: 130.4 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

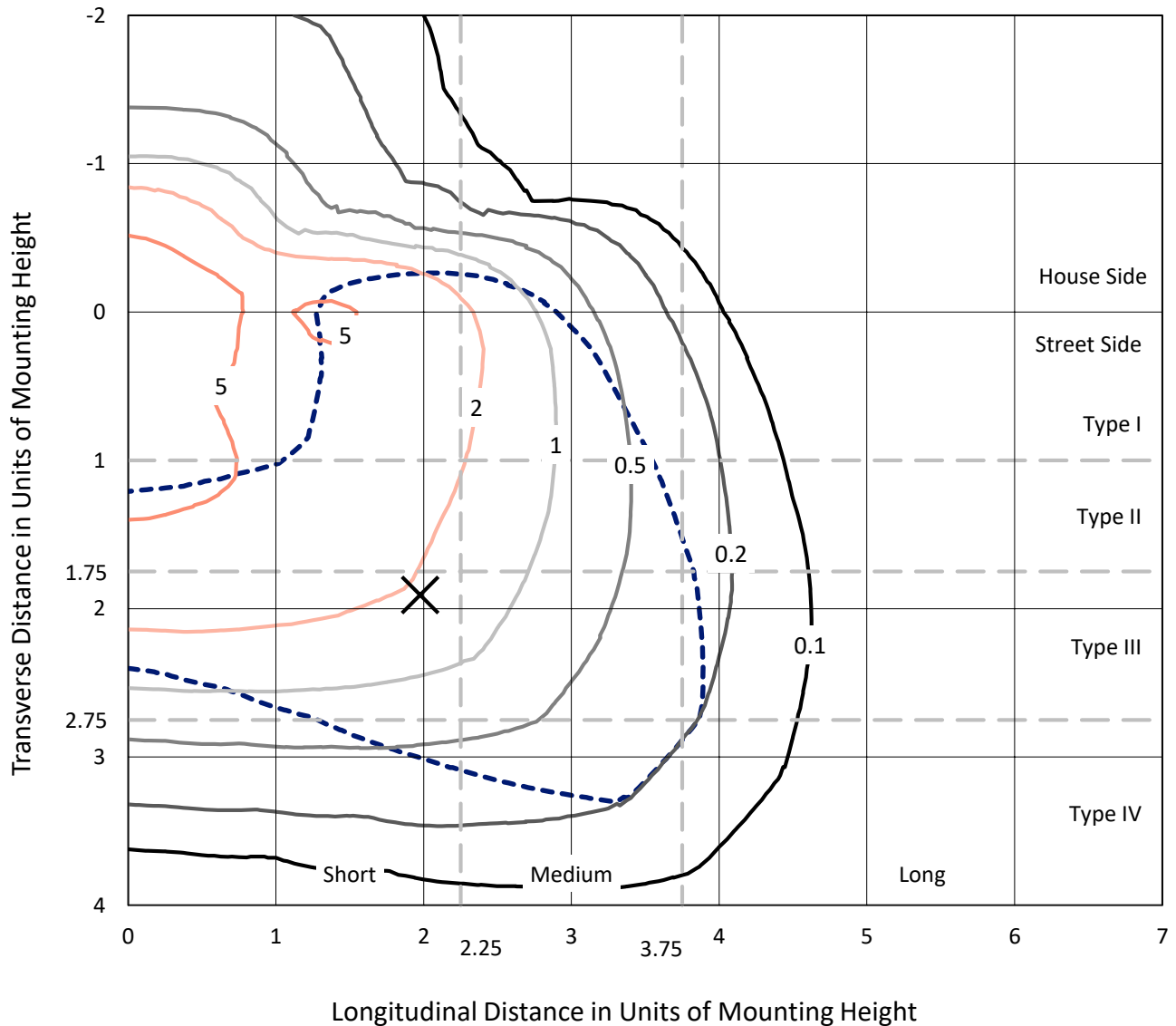
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

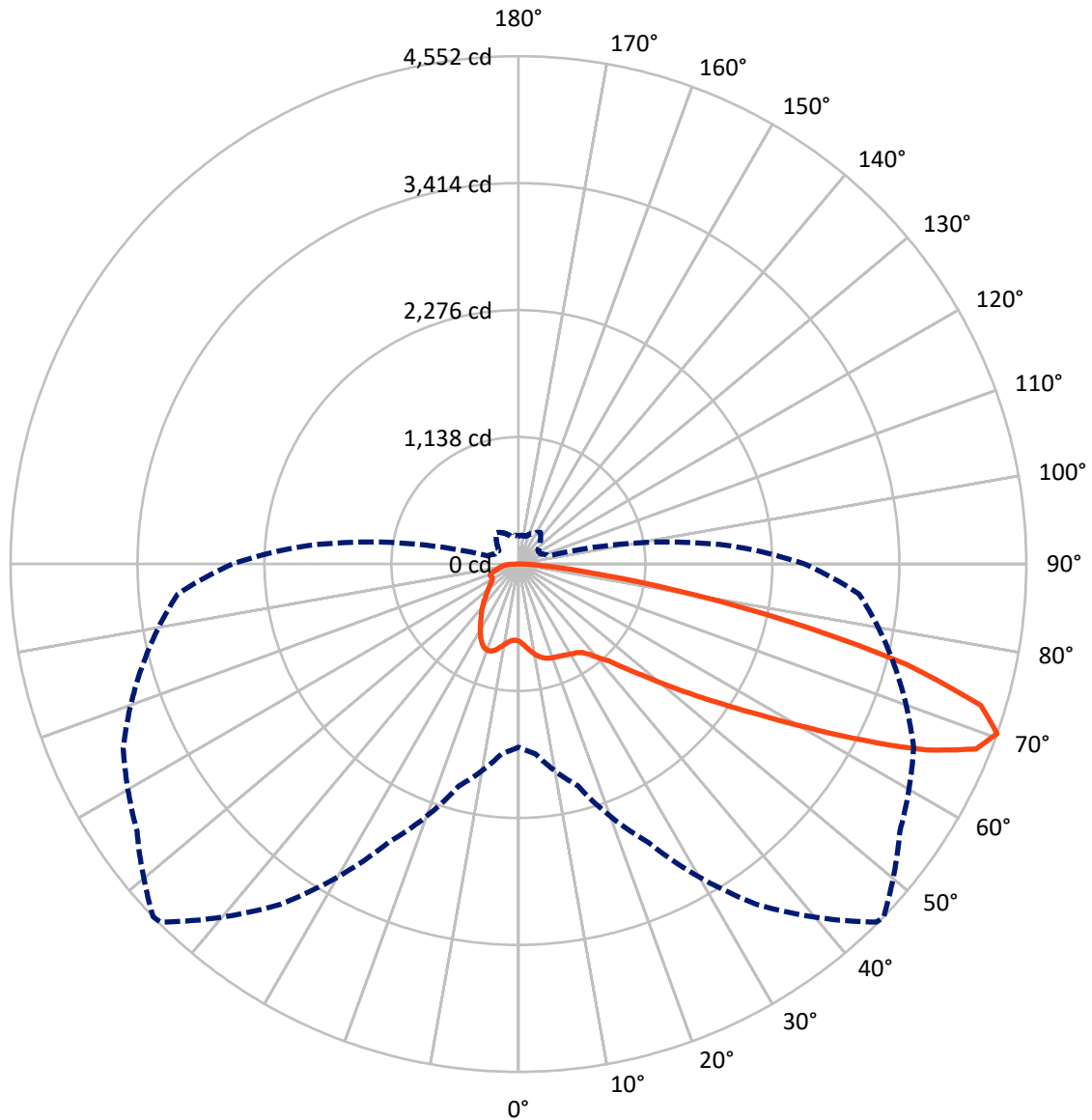
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.6 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	1554.6	0.0	1554.6
	% Fixture	22.9	0.0	22.9
Street Side	Lumens	5228.4	0.0	5228.4
	% Fixture	77.1	0.0	77.1
Total	Lumens	6783.0	0.0	6783.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.4	1.0
10°-20°	234.7	3.5
20°-30°	391.4	5.8
30°-40°	555.4	8.2
40°-50°	816.9	12.0
50°-60°	1383.4	20.4
60°-70°	1963.7	29.0
70°-80°	1193.0	17.6
80°-90°	174.1	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°	6783.0	100.0
0°-180°	6783.0	100.0

Coefficient of Utilization



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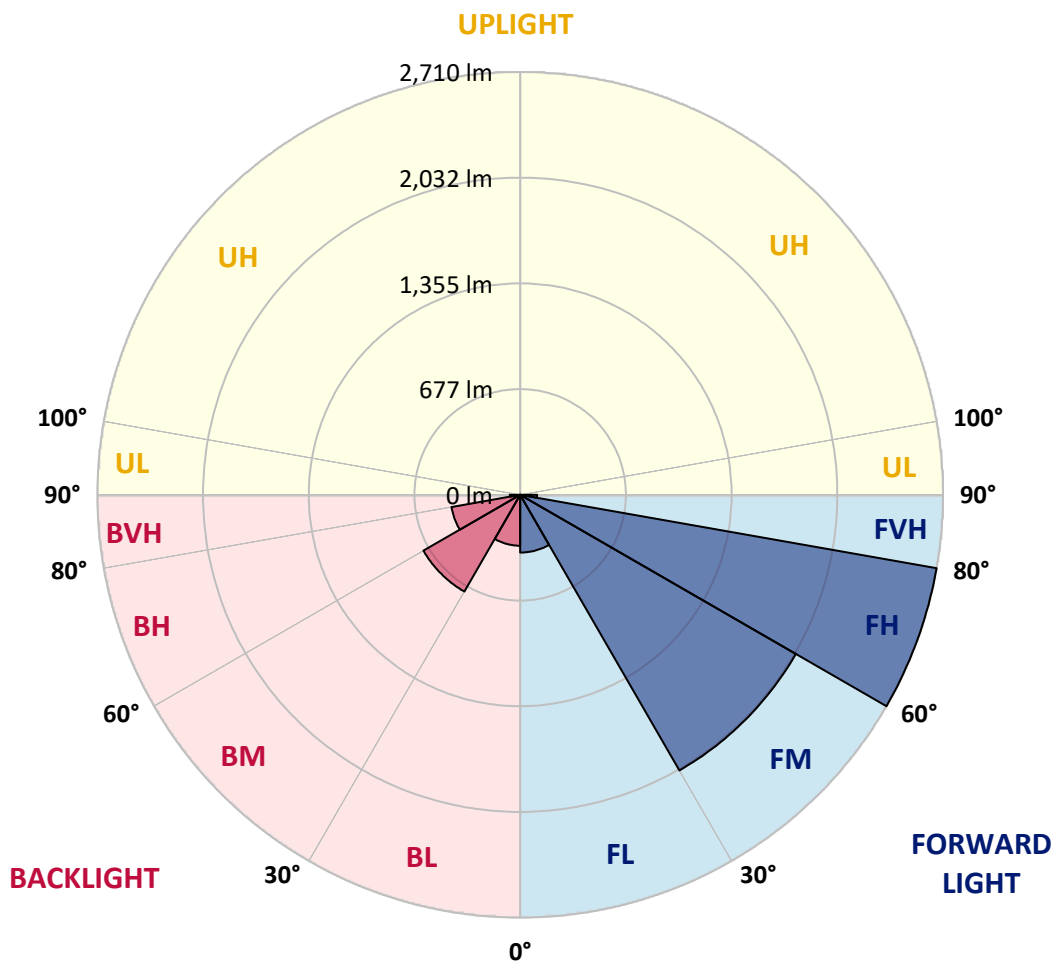
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	370.1	5.5			
FM	(30°-60°)	2040.0	30.1			
FH	(60°-80°)	2709.8	39.9			G2/5000
FVH	(80°-90°)	108.5	1.6			G2/225
BL	(0°-30°)	326.4	4.8	B1/500		
BM	(30°-60°)	715.6	10.6	B1/1000		
BH	(60°-80°)	447.0	6.6	B1/500		G1/500
BVH	(80°-90°)	65.7	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°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	725.6	726.1	727.0	724.7	718.2	716.4	715.7	708.9	704.5	698.0	692.4
5°	783.7	784.1	782.7	776.2	761.9	751.2	750.2	734.9	721.0	706.1	695.0
7.5°	844.3	845.0	840.5	828.2	808.0	789.5	788.3	767.4	746.3	723.8	707.1
10°	897.9	895.1	887.9	870.7	846.8	824.1	823.1	801.3	776.9	749.8	727.5
12.5°	933.6	931.3	922.0	901.1	874.9	854.0	852.2	832.0	808.3	778.6	751.9
15°	953.4	955.0	942.5	918.8	893.2	875.6	874.0	859.6	838.5	808.5	777.9
17.5°	955.9	957.3	945.2	921.8	900.9	888.8	888.1	878.6	863.3	834.5	802.5
20°	941.1	942.0	932.0	912.7	899.0	895.3	895.1	890.9	879.5	854.0	822.9
22.5°	919.5	920.2	913.0	899.0	894.4	900.2	901.8	900.2	892.1	868.2	838.9
25°	914.1	913.7	906.2	892.1	896.0	908.3	910.4	911.1	905.5	884.7	859.4
27.5°	939.9	938.3	924.1	901.4	903.9	918.8	921.6	928.3	924.8	906.5	882.6
30°	1014.4	1011.6	982.6	936.6	924.1	931.8	935.3	945.9	946.6	931.3	913.4
32.5°	1140.2	1136.7	1084.7	1002.6	958.2	945.0	948.3	964.3	972.9	961.0	941.8
35°	1299.2	1295.3	1227.0	1114.7	1015.3	970.3	972.6	985.4	1002.6	985.9	960.3
37.5°	1465.0	1455.5	1389.8	1246.5	1106.1	1024.4	1024.4	1026.0	1034.1	999.3	982.1
40°	1629.8	1620.3	1560.9	1401.6	1223.6	1109.6	1104.2	1068.3	1061.8	1031.8	1026.0
42.5°	1783.0	1780.2	1745.2	1576.9	1361.5	1193.4	1186.0	1124.9	1126.3	1107.7	1108.0
45°	1946.0	1946.0	1917.4	1753.8	1522.1	1328.0	1320.6	1230.8	1244.7	1236.1	1256.8
47.5°	2079.0	2083.1	2079.2	1938.1	1709.0	1499.1	1485.6	1377.5	1416.5	1445.9	1506.1
50°	2214.8	2221.3	2222.0	2140.3	1934.8	1702.5	1687.1	1572.2	1659.3	1743.8	1861.9
52.5°	2411.8	2426.5	2368.2	2342.0	2211.5	1943.9	1928.8	1822.7	1968.0	2086.6	2290.2
55°	2594.5	2581.8	2540.2	2556.5	2507.7	2218.7	2207.3	2114.3	2312.0	2466.2	2730.6
57.5°	2693.4	2692.5	2734.3	2803.9	2827.1	2557.6	2548.1	2457.6	2699.9	2815.8	3144.0
60°	2809.5	2811.1	2914.6	3072.7	3168.4	2979.6	2975.5	2906.7	3076.7	3142.1	3468.3
62.5°	2825.7	2855.0	3033.3	3305.3	3487.8	3472.7	3482.0	3311.4	3413.7	3402.6	3710.4
65°	2638.9	2677.4	3000.1	3375.7	3805.3	4011.9	4020.5	3718.3	3679.5	3625.2	3797.0
67.5°	2255.9	2313.0	2663.5	3222.7	3910.0	4410.5	4422.6	4033.7	3900.0	3700.6	3588.5
70°	1641.6	1705.0	2057.8	2752.4	3723.4	4537.9	4551.6	4173.3	3908.4	3485.9	3063.4
72.5°	991.7	1041.3	1332.2	2026.3	3142.6	4305.8	4330.2	3996.4	3568.3	2952.7	2262.1
75°	435.5	468.0	644.2	1167.6	2249.8	3562.5	3592.9	3420.7	2899.3	2145.8	1337.1
77.5°	185.5	194.8	264.2	507.2	1271.8	2434.4	2476.1	2499.4	1967.1	1167.6	565.0
80°	115.6	119.3	149.5	229.6	595.2	1367.3	1412.3	1470.6	976.8	429.2	197.3
82.5°	70.3	74.5	99.4	138.8	309.9	619.8	641.4	682.5	379.1	185.5	102.1
85°	42.2	45.3	60.8	87.7	176.4	243.7	243.5	269.3	178.5	119.3	53.9
87.5°	20.2	22.5	32.5	45.5	88.9	91.5	85.7	97.0	108.4	78.2	27.2
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°	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1	691.1
2.5°	690.6	689.7	686.6	684.3	683.9	682.5	681.3	682.0	682.9	683.2	683.2
5°	690.4	687.8	683.9	682.2	684.3	687.1	690.6	695.2	698.0	700.1	701.5
7.5°	701.5	696.6	692.2	691.3	695.5	702.9	710.8	720.5	727.3	731.9	732.8
10°	720.1	714.0	709.6	710.6	718.0	728.7	739.8	752.3	762.6	768.8	769.3
12.5°	741.4	735.6	731.4	735.4	747.7	760.7	772.3	783.2	792.5	798.8	798.8
15°	766.0	761.9	757.0	766.0	782.7	794.4	799.2	804.6	809.7	814.3	813.4
17.5°	789.7	785.8	783.2	793.9	811.3	816.6	813.4	809.4	809.4	812.0	812.5
20°	810.1	806.7	808.3	818.7	827.8	822.2	810.1	797.6	792.5	793.9	795.3
22.5°	828.0	826.4	831.3	836.1	829.6	810.1	787.9	770.9	764.6	764.2	764.6
25°	848.9	848.7	854.7	845.9	817.1	781.1	751.2	734.7	731.2	734.0	738.6
27.5°	874.9	877.5	880.5	848.2	791.6	737.2	706.8	695.5	698.9	705.7	710.1
30°	908.1	915.1	908.6	842.4	754.9	687.1	658.1	654.8	664.4	673.9	678.5
32.5°	940.4	951.3	935.5	827.3	707.5	634.0	611.4	610.5	622.1	631.4	637.9
35°	966.4	988.0	955.7	797.4	652.8	585.0	568.5	562.2	566.4	577.3	584.7
37.5°	1000.3	1036.2	969.6	751.6	593.3	544.6	525.3	510.9	507.2	511.6	515.3
40°	1062.2	1109.8	976.1	687.8	535.3	504.2	484.7	463.6	448.9	438.3	438.5
42.5°	1163.4	1205.7	971.9	610.3	481.7	464.7	442.7	418.3	394.6	370.5	368.6
45°	1327.8	1348.2	959.4	528.1	434.5	423.4	402.7	378.4	346.8	319.4	316.9
47.5°	1590.8	1545.5	939.9	456.4	393.0	388.4	369.3	341.2	307.8	285.8	283.9
50°	1949.4	1830.4	930.4	399.3	356.3	357.7	342.2	312.4	280.9	264.6	262.8
52.5°	2378.4	2162.1	948.7	355.2	326.8	331.7	320.1	292.3	265.8	253.0	251.2
55°	2823.4	2505.6	968.5	323.1	299.0	308.5	304.6	281.6	257.7	245.8	244.2
57.5°	3204.3	2762.1	929.0	297.1	274.1	289.0	292.5	274.8	253.5	242.8	241.0
60°	3444.1	2865.4	825.5	272.8	254.4	273.5	285.5	273.0	255.1	254.2	252.8
62.5°	3557.9	2856.4	670.2	253.5	242.1	266.7	290.6	283.4	273.7	282.0	282.7
65°	3506.8	2719.9	499.1	240.7	233.3	269.3	305.9	303.2	279.0	287.4	288.5
67.5°	3170.7	2394.2	369.6	229.6	223.5	276.5	333.8	309.7	268.6	274.6	270.9
70°	2562.7	1898.1	285.1	217.0	213.6	275.5	346.3	305.7	257.2	258.6	248.6
72.5°	1767.2	1294.4	231.9	205.4	199.2	251.2	337.5	296.0	247.7	237.0	223.8
75°	961.0	694.8	197.1	193.4	173.9	220.5	321.3	289.0	239.1	224.9	217.5
77.5°	378.1	288.3	171.1	176.9	152.0	194.8	303.2	275.8	227.3	208.7	205.0
80°	154.4	147.2	141.8	153.0	130.7	170.4	281.3	260.2	213.1	193.6	186.2
82.5°	87.5	91.5	110.3	120.7	106.1	156.9	270.9	247.7	196.2	173.4	164.6
85°	44.8	53.6	76.8	86.6	78.0	133.5	249.5	216.8	157.4	132.8	133.5
87.5°	21.6	29.9	48.5	54.3	50.6	96.6	186.4	157.2	122.6	97.0	94.0
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)