

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: P348643

Luminaire Tested: **ARCH-N-PA1-50-727-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348643
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-PA1-50-727-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5673 lumens
Efficiency: N/A
Efficacy: 109.1 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

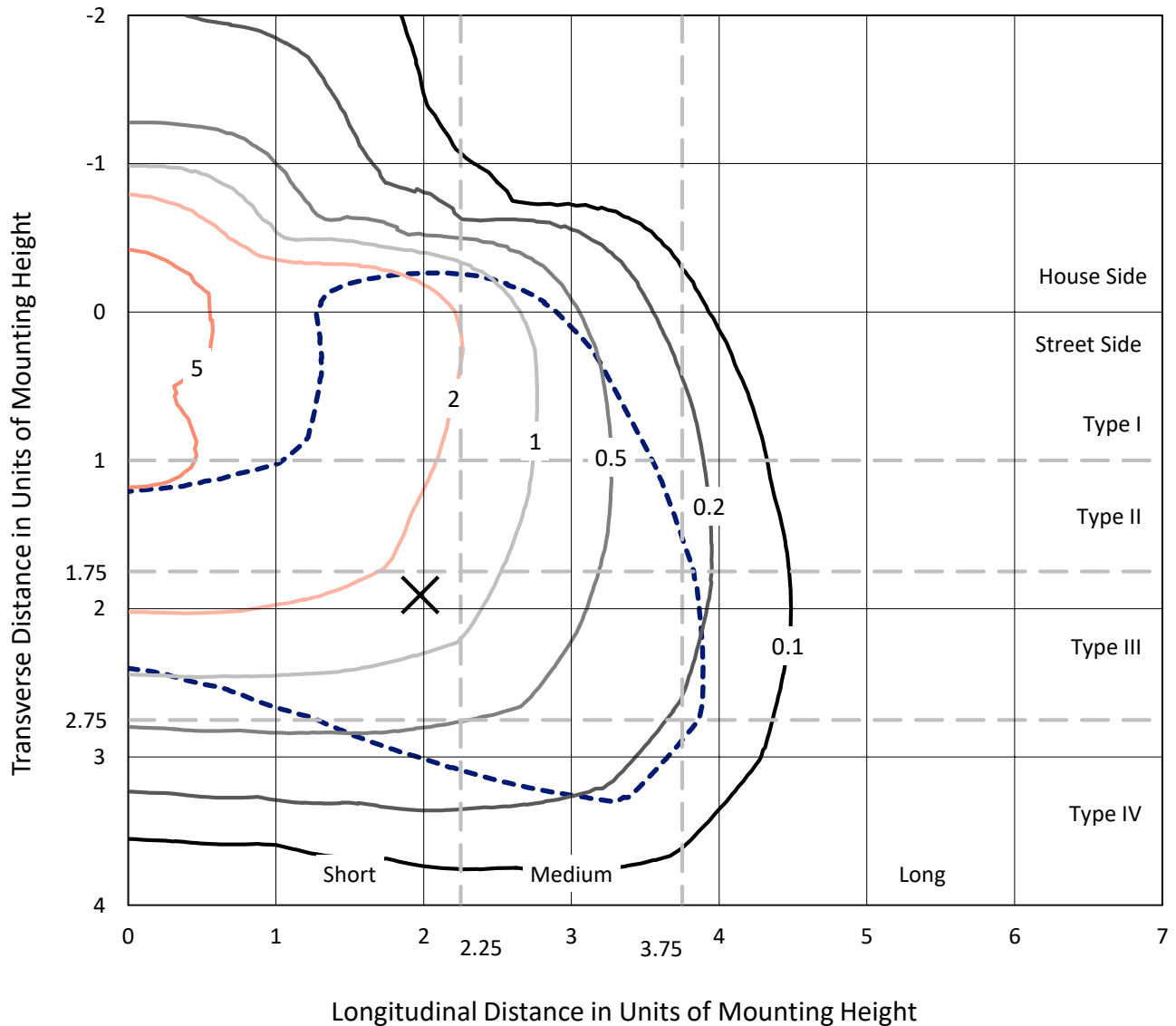


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Iso-Footcandle Lines of Horizontal Illumination

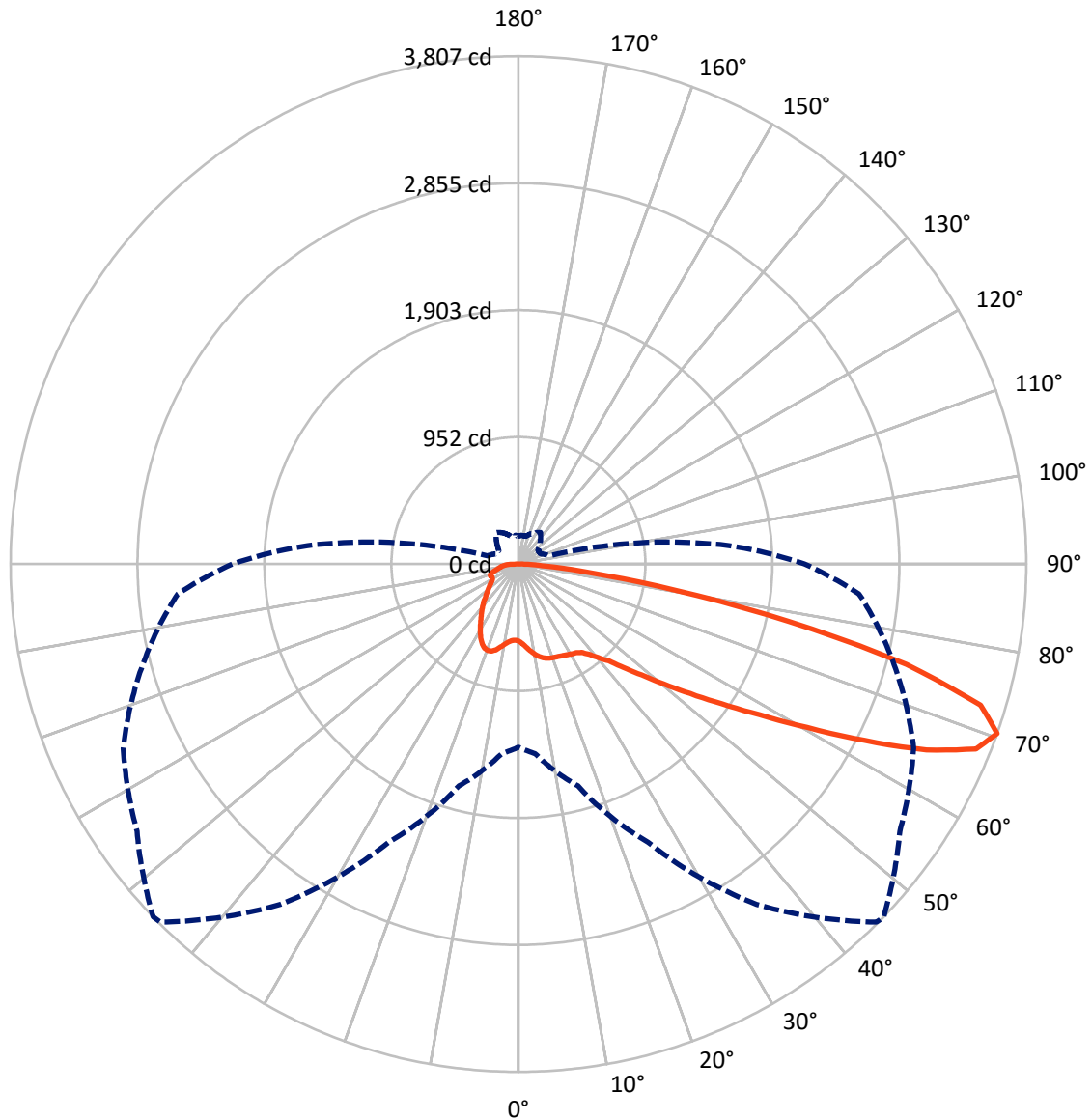
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.2 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	1300.2	0.0	1300.2
	% Fixture	22.9	0.0	22.9
Street Side	Lumens	4372.8	0.0	4372.8
	% Fixture	77.1	0.0	77.1
Total	Lumens	5673.0	0.0	5673.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.9	1.0
10°-20°	196.3	3.5
20°-30°	327.3	5.8
30°-40°	464.5	8.2
40°-50°	683.2	12.0
50°-60°	1157.0	20.4
60°-70°	1642.4	29.0
70°-80°	997.8	17.6
80°-90°	145.6	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°	5673.0	100.0
0°-180°	5673.0	100.0



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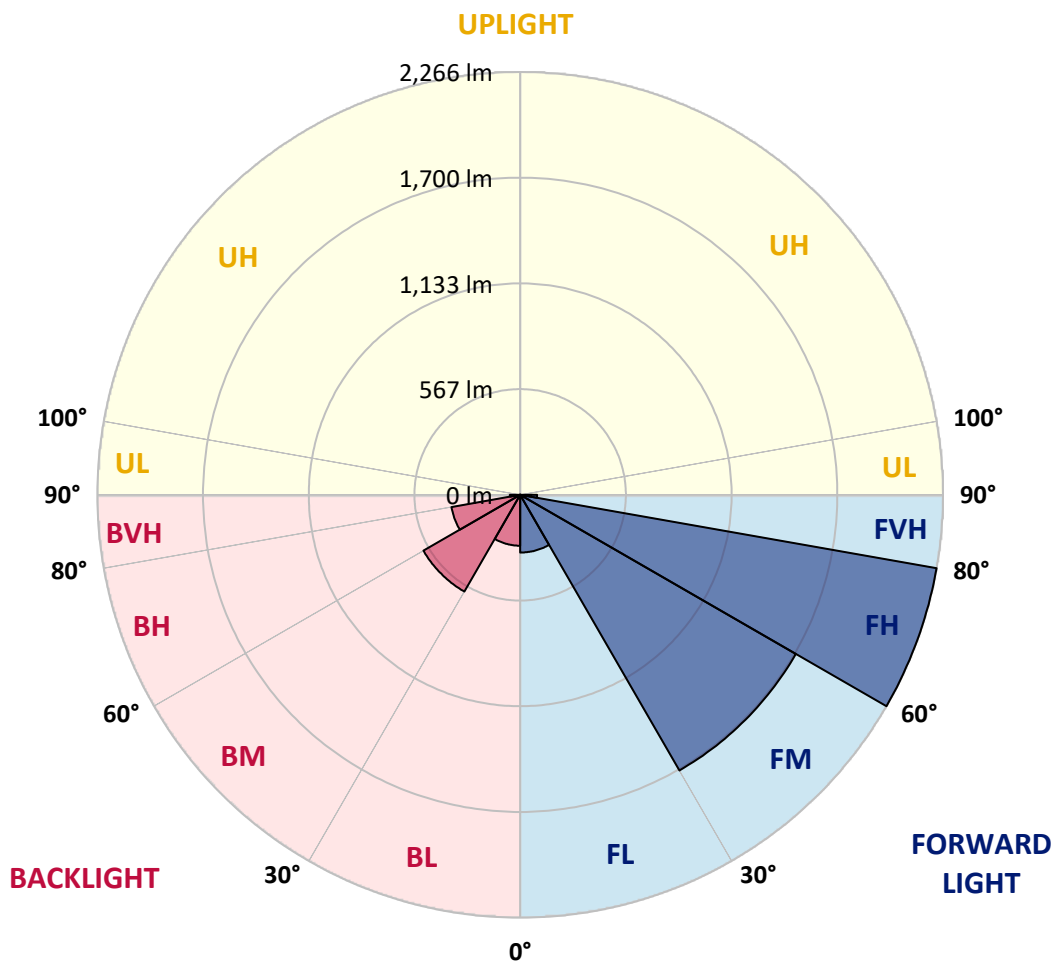
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	309.5	5.5			
FM	(30°-60°)	1706.2	30.1			
FH	(60°-80°)	2266.3	39.9			G2/5000
FVH	(80°-90°)	90.7	1.6			G1/100
BL	(0°-30°)	273.0	4.8	B1/500		
BM	(30°-60°)	598.5	10.6	B1/1000		
BH	(60°-80°)	373.8	6.6	B1/500		G1/500
BVH	(80°-90°)	54.9	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°	578.0	578.0	578.0	578.0	578.0	578.0	578.0	578.0	578.0	578.0	578.0
2.5°	606.9	607.3	608.1	606.1	600.7	599.1	598.5	592.9	589.2	583.8	579.1
5°	655.4	655.8	654.7	649.2	637.2	628.3	627.5	614.7	603.0	590.6	581.3
7.5°	706.1	706.7	703.0	692.7	675.8	660.3	659.3	641.8	624.2	605.3	591.4
10°	751.0	748.6	742.6	728.2	708.2	689.2	688.4	670.2	649.8	627.1	608.4
12.5°	780.8	778.9	771.1	753.7	731.7	714.3	712.7	695.8	676.0	651.2	628.8
15°	797.4	798.7	788.2	768.4	747.1	732.3	731.0	718.9	701.2	676.2	650.6
17.5°	799.5	800.7	790.6	770.9	753.5	743.4	742.8	734.8	722.0	697.9	671.2
20°	787.1	787.8	779.5	763.4	751.9	748.8	748.6	745.1	735.6	714.3	688.2
22.5°	769.0	769.6	763.6	751.9	748.0	752.9	754.3	752.9	746.1	726.1	701.6
25°	764.5	764.2	757.9	746.1	749.4	759.7	761.4	762.0	757.4	739.9	718.7
27.5°	786.1	784.7	772.9	753.9	756.0	768.4	770.8	776.4	773.5	758.1	738.1
30°	848.4	846.1	821.8	783.4	772.9	779.3	782.2	791.1	791.7	778.9	764.0
32.5°	953.6	950.7	907.2	838.5	801.4	790.4	793.1	806.5	813.7	803.8	787.6
35°	1086.6	1083.3	1026.2	932.3	849.2	811.5	813.5	824.1	838.5	824.5	803.2
37.5°	1225.2	1217.3	1162.3	1042.6	925.1	856.8	856.8	858.1	864.9	835.8	821.4
40°	1363.1	1355.1	1305.4	1172.2	1023.3	928.0	923.5	893.5	888.0	863.0	858.1
42.5°	1491.2	1488.9	1459.6	1318.8	1138.7	998.1	991.9	940.8	942.0	926.5	926.7
45°	1627.5	1627.5	1603.6	1466.8	1273.0	1110.7	1104.5	1029.4	1041.0	1033.8	1051.1
47.5°	1738.8	1742.3	1739.0	1620.9	1429.3	1253.8	1242.5	1152.1	1184.7	1209.3	1259.6
50°	1852.3	1857.8	1858.3	1790.0	1618.2	1423.9	1411.0	1314.9	1387.7	1458.4	1557.2
52.5°	2017.2	2029.4	1980.7	1958.7	1849.6	1625.8	1613.1	1524.4	1646.0	1745.2	1915.4
55°	2170.0	2159.3	2124.5	2138.1	2097.3	1855.6	1846.1	1768.3	1933.7	2062.6	2283.7
57.5°	2252.7	2251.9	2286.8	2345.1	2364.5	2139.1	2131.1	2055.4	2258.1	2355.0	2629.5
60°	2349.7	2351.1	2437.7	2569.9	2649.9	2492.0	2488.5	2431.1	2573.2	2627.9	2900.7
62.5°	2363.3	2387.8	2536.9	2764.4	2917.0	2904.4	2912.2	2769.5	2855.1	2845.8	3103.2
65°	2207.0	2239.3	2509.1	2823.2	3182.6	3355.4	3362.6	3109.8	3077.4	3032.0	3175.6
67.5°	1886.7	1934.5	2227.6	2695.3	3270.2	3688.7	3698.8	3373.6	3261.8	3095.0	3001.3
70°	1373.0	1426.0	1721.1	2302.0	3114.1	3795.3	3806.8	3490.3	3268.8	2915.5	2562.1
72.5°	829.4	870.9	1114.2	1694.7	2628.3	3601.2	3621.6	3342.4	2984.4	2469.5	1891.9
75°	364.2	391.4	538.8	976.5	1881.6	2979.5	3005.0	2860.9	2424.9	1794.7	1118.3
77.5°	155.1	162.9	220.9	424.2	1063.7	2036.0	2070.9	2090.4	1645.2	976.5	472.5
80°	96.7	99.8	125.0	192.0	497.8	1143.5	1181.2	1229.9	817.0	359.0	165.0
82.5°	58.8	62.3	83.1	116.1	259.2	518.4	536.4	570.8	317.0	155.1	85.4
85°	35.3	37.9	50.9	73.4	147.5	203.9	203.7	225.2	149.3	99.8	45.0
87.5°	16.9	18.8	27.2	38.1	74.4	76.5	71.6	81.2	90.7	65.4	22.7
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°	578.0	578.0	578.0	578.0	578.0	578.0	578.0	578.0	578.0	578.0	578.0
2.5°	577.6	576.8	574.3	572.3	571.9	570.8	569.8	570.4	571.2	571.4	571.4
5°	577.4	575.2	571.9	570.6	572.3	574.7	577.6	581.5	583.8	585.5	586.7
7.5°	586.7	582.6	578.9	578.2	581.7	587.9	594.5	602.6	608.3	612.1	612.9
10°	602.2	597.2	593.5	594.3	600.5	609.4	618.7	629.2	637.8	643.0	643.4
12.5°	620.1	615.2	611.7	615.0	625.3	636.2	645.9	655.0	662.8	668.1	668.1
15°	640.7	637.2	633.1	640.7	654.7	664.4	668.4	672.9	677.2	681.1	680.3
17.5°	660.5	657.2	655.0	664.0	678.5	683.0	680.3	677.0	677.0	679.1	679.5
20°	677.6	674.7	676.0	684.7	692.3	687.7	677.6	667.1	662.8	664.0	665.1
22.5°	692.5	691.2	695.2	699.3	693.9	677.6	658.9	644.8	639.5	639.1	639.5
25°	710.0	709.8	714.8	707.5	683.4	653.3	628.3	614.5	611.6	613.9	617.8
27.5°	731.7	733.9	736.4	709.4	662.0	616.6	591.2	581.7	584.6	590.2	593.9
30°	759.5	765.3	759.9	704.5	631.4	574.7	550.4	547.7	555.6	563.6	567.5
32.5°	786.5	795.6	782.4	691.9	591.8	530.2	511.4	510.6	520.3	528.1	533.5
35°	808.2	826.3	799.3	666.9	545.9	489.2	475.5	470.2	473.7	482.8	489.0
37.5°	836.6	866.7	810.9	628.6	496.2	455.5	439.3	427.3	424.2	427.9	431.0
40°	888.4	928.2	816.4	575.2	447.7	421.7	405.4	387.7	375.5	366.5	366.7
42.5°	973.1	1008.4	812.9	510.4	402.8	388.7	370.2	349.8	330.0	309.9	308.3
45°	1110.5	1127.6	802.4	441.7	363.4	354.1	336.8	316.5	290.1	267.1	265.0
47.5°	1330.5	1292.6	786.1	381.7	328.7	324.8	308.9	285.4	257.4	239.0	237.4
50°	1630.4	1530.8	778.1	333.9	298.0	299.2	286.2	261.3	234.9	221.3	219.8
52.5°	1989.2	1808.3	793.5	297.0	273.4	277.4	267.7	244.4	222.3	211.6	210.1
55°	2361.4	2095.6	810.0	270.2	250.1	258.0	254.7	235.5	215.5	205.6	204.2
57.5°	2680.0	2310.1	777.0	248.5	229.3	241.7	244.6	229.9	212.0	203.1	201.5
60°	2880.5	2396.5	690.4	228.1	212.8	228.7	238.8	228.3	213.4	212.6	211.4
62.5°	2975.7	2388.9	560.5	212.0	202.5	223.1	243.1	237.1	228.9	235.9	236.5
65°	2932.9	2274.8	417.4	201.3	195.1	225.2	255.9	253.6	233.4	240.4	241.3
67.5°	2651.8	2002.4	309.1	192.0	187.0	231.2	279.2	259.0	224.6	229.7	226.6
70°	2143.4	1587.5	238.4	181.5	178.6	230.4	289.7	255.7	215.1	216.3	207.9
72.5°	1478.0	1082.5	194.0	171.8	166.6	210.1	282.3	247.5	207.2	198.2	187.2
75°	803.8	581.1	164.8	161.7	145.4	184.4	268.7	241.7	200.0	188.1	181.9
77.5°	316.3	241.1	143.1	147.9	127.2	162.9	253.6	230.6	190.1	174.5	171.4
80°	129.1	123.1	118.6	127.9	109.3	142.5	235.3	217.6	178.2	161.9	155.7
82.5°	73.2	76.5	92.2	101.0	88.7	131.2	226.6	207.2	164.1	145.0	137.6
85°	37.5	44.8	64.3	72.4	65.2	111.6	208.7	181.3	131.6	111.1	111.6
87.5°	18.1	25.0	40.6	45.4	42.3	80.8	155.9	131.4	102.5	81.2	78.6
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)