

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: P397757

Luminaire Tested: **ARCH-S-PA1-40-727-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397757
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-40-727-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5104 lumens
Efficiency: N/A
Efficacy: 127.6 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): 40
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

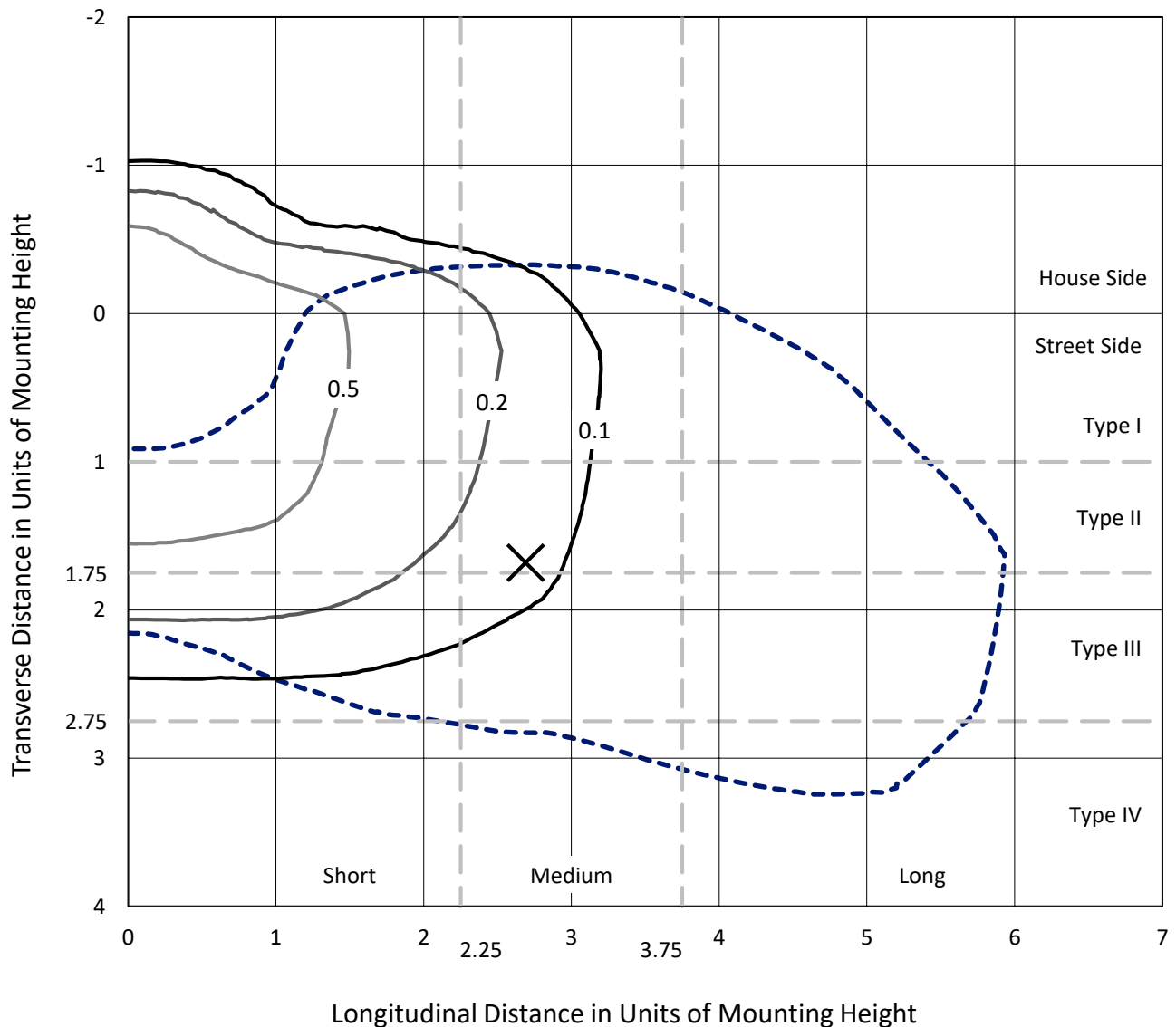


REPORT NUMBER: P397757

CATALOG NUMBER: ARCH-S-PA1-40-727-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

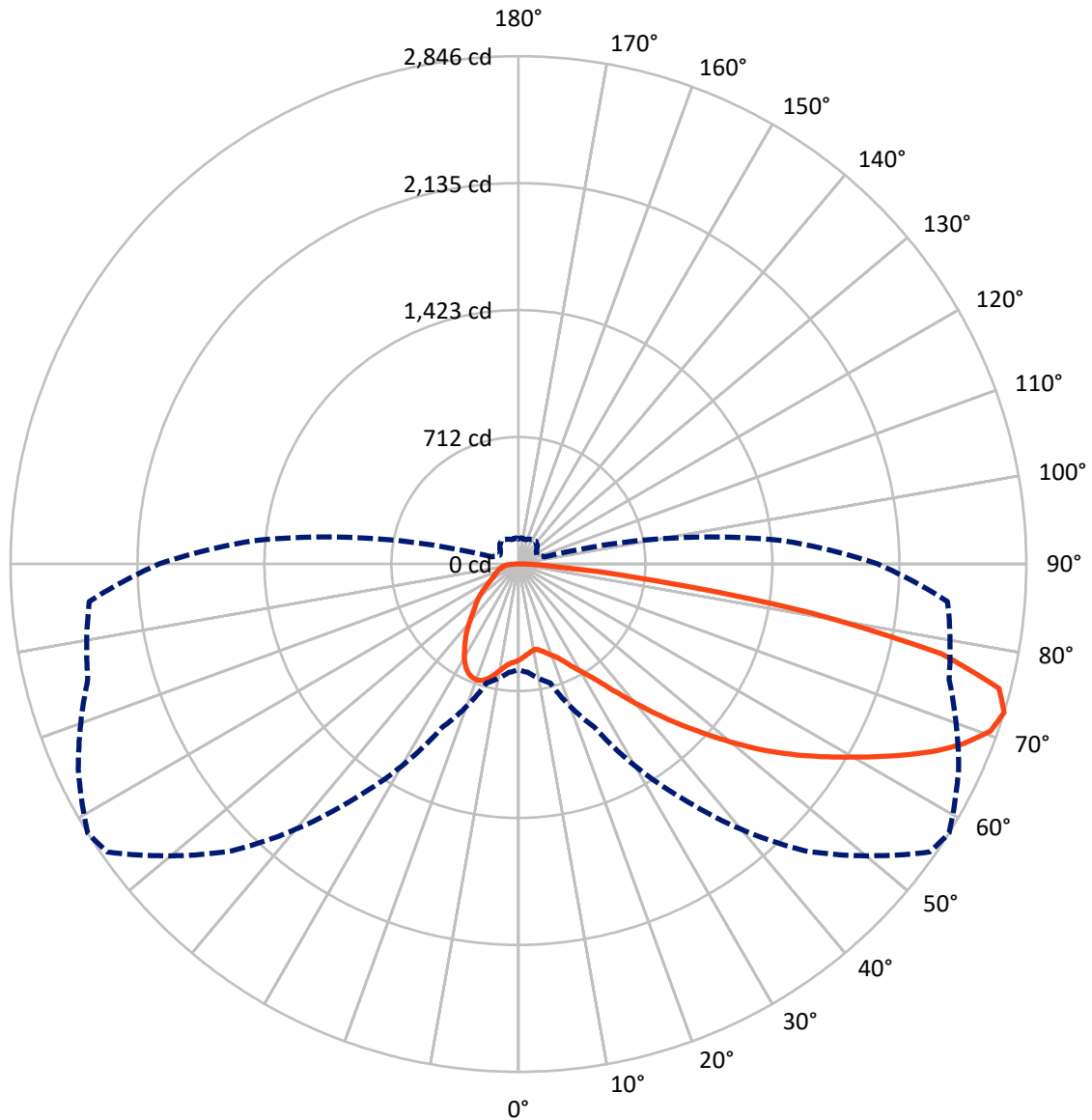


Based on 25 foot mounting height. Maximum calculated value = 1 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P397757

CATALOG NUMBER: ARCH-S-PA1-40-727-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P397757

CATALOG NUMBER: ARCH-S-PA1-40-727-U-T3

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1157.5	0.0	1157.5
	% Fixture	22.7	0.0	22.7
Street Side	Lumens	3946.5	0.0	3946.5
	% Fixture	77.3	0.0	77.3
Total	Lumens	5104.0	0.0	5104.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.9	1.0
10°-20°	164.7	3.2
20°-30°	295.0	5.8
30°-40°	443.8	8.7
40°-50°	718.7	14.1
50°-60°	1081.8	21.2
60°-70°	1273.2	24.9
70°-80°	902.8	17.7
80°-90°	172.0	3.4
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°	5104.0	100.0
0°-180°	5104.0	100.0

Coefficient of Utilization



REPORT NUMBER: P397757

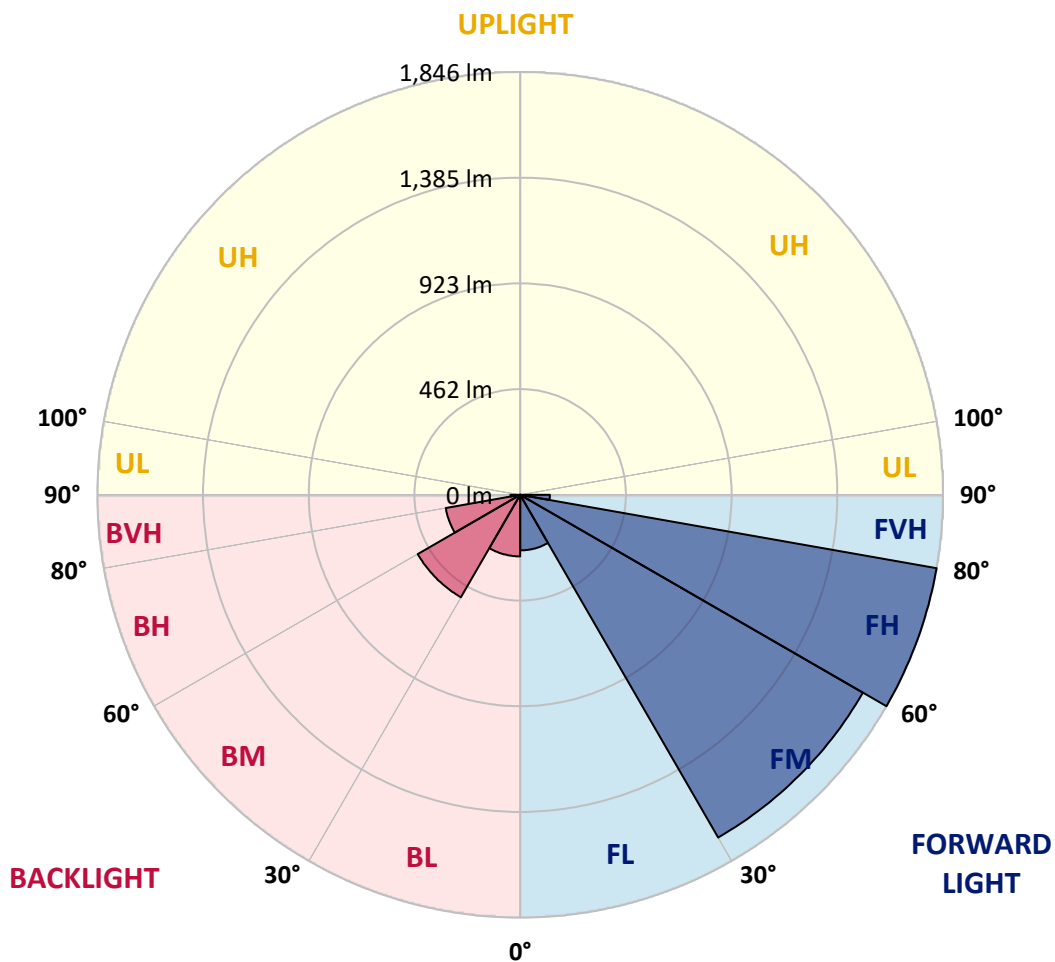
CATALOG NUMBER: ARCH-S-PA1-40-727-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	242.7	4.8			
FM (30°-60°)	1727.9	33.9			
FH (60°-80°)	1846.1	36.2			G2/5000
FVH (80°-90°)	129.8	2.5			G2/225
BL (0°-30°)	268.9	5.3	B1/500		
BM (30°-60°)	516.5	10.1	B1/1000		
BH (60°-80°)	329.9	6.5	B1/500		G1/500
BVH (80°-90°)	42.3	0.8			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





REPORT NUMBER: P397757

CATALOG NUMBER: ARCH-S-PA1-40-727-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4
2.5°	518.1	515.5	516.1	516.1	518.8	520.2	520.8	522.9	524.2	527.6	532.3
5°	493.9	491.9	492.5	493.2	497.9	502.7	506.7	509.4	513.4	518.8	525.6
7.5°	476.4	475.0	475.7	477.0	481.1	486.5	493.2	497.3	503.3	513.4	524.9
10°	463.6	463.6	464.2	466.9	471.0	477.7	483.1	487.8	500.0	518.1	535.7
12.5°	453.5	453.5	455.5	460.9	467.6	474.4	487.2	492.5	508.7	533.6	554.5
15°	452.8	453.5	454.1	458.9	466.3	481.1	500.0	508.0	527.6	557.2	581.5
17.5°	463.6	464.2	461.6	462.9	471.7	492.5	517.5	526.9	551.8	584.2	609.1
20°	496.6	496.6	488.5	481.1	487.2	510.1	538.4	547.8	575.4	611.1	636.1
22.5°	564.0	567.3	548.5	532.3	522.9	535.7	561.3	571.4	602.4	640.8	665.7
25°	645.5	648.9	623.3	600.4	582.8	580.8	597.7	608.4	634.0	673.8	694.7
27.5°	724.3	718.3	694.7	673.1	650.9	632.7	645.5	654.9	684.6	714.9	727.7
30°	786.3	781.6	758.7	743.2	722.3	698.7	691.3	701.4	725.7	754.0	760.7
32.5°	855.0	851.7	828.8	808.6	791.0	768.8	752.6	757.3	770.8	791.0	795.1
35°	942.6	950.1	925.8	884.7	865.2	843.6	832.1	833.5	843.6	856.4	849.7
37.5°	1035.0	1043.7	1045.1	980.4	954.1	934.6	922.4	927.1	939.3	948.0	927.1
40°	1206.1	1197.3	1162.3	1114.5	1074.0	1055.2	1038.3	1037.6	1046.4	1061.9	1024.2
42.5°	1433.2	1425.1	1354.3	1292.3	1228.3	1206.8	1173.8	1159.6	1163.6	1183.2	1130.6
45°	1650.8	1647.4	1590.8	1518.7	1441.9	1400.1	1324.7	1290.3	1287.0	1302.4	1239.8
47.5°	1844.2	1829.4	1788.3	1732.3	1724.2	1615.1	1476.3	1429.8	1413.6	1422.4	1352.3
50°	2051.0	2000.5	1943.9	1909.5	1968.2	1866.4	1629.2	1580.7	1541.0	1547.0	1474.3
52.5°	2160.9	2076.0	2038.9	2049.0	2127.8	2088.8	1795.7	1736.4	1672.4	1681.1	1595.6
55°	2066.5	2065.9	2082.0	2144.7	2254.5	2209.4	1954.0	1887.3	1817.2	1819.3	1735.0
57.5°	1937.2	1963.4	2047.0	2185.1	2411.5	2336.1	2109.7	2038.9	1974.9	1964.8	1893.4
60°	1819.3	1848.2	1969.5	2178.4	2466.1	2451.9	2257.9	2195.9	2144.0	2114.4	2059.8
62.5°	1640.0	1661.6	1833.4	2135.3	2420.3	2535.5	2408.1	2365.7	2326.6	2265.3	2239.0
65°	1429.1	1436.5	1617.8	1993.1	2363.0	2567.8	2557.7	2538.9	2501.1	2410.8	2416.2
67.5°	1200.7	1215.5	1374.5	1766.0	2237.7	2553.0	2673.6	2689.1	2644.7	2509.2	2529.4
70°	957.5	975.7	1096.3	1452.0	2024.8	2489.0	2780.8	2805.7	2720.1	2541.6	2550.3
72.5°	592.3	609.8	690.6	1008.7	1605.0	2274.1	2813.8	2846.1	2722.1	2498.4	2414.2
75°	204.8	206.9	270.2	483.8	952.7	1716.8	2706.0	2782.1	2636.6	2341.4	2100.9
77.5°	93.7	97.0	119.9	199.4	422.5	926.5	2234.3	2425.0	2376.5	2096.2	1617.1
80°	64.7	66.0	82.9	119.3	243.9	326.1	1410.3	1658.9	1743.8	1623.2	1036.3
82.5°	48.5	49.9	64.0	80.9	175.9	158.3	537.0	770.8	958.1	940.6	433.3
85°	46.5	45.8	49.9	53.9	117.2	94.3	173.8	238.5	374.0	320.1	109.2
87.5°	20.2	22.2	51.2	30.3	61.3	43.8	75.5	88.3	113.9	99.0	39.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P397757

CATALOG NUMBER: ARCH-S-PA1-40-727-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4	538.4
2.5°	534.3	535.7	539.7	545.8	549.1	555.9	560.6	563.3	565.3	566.0	566.0
5°	529.6	532.3	541.1	551.2	560.6	574.7	587.6	595.0	600.4	602.4	603.0
7.5°	531.0	537.7	550.5	565.3	577.4	595.6	611.1	626.0	638.1	642.8	642.8
10°	543.8	553.2	570.7	590.2	605.7	624.6	640.8	653.6	667.7	675.8	677.2
12.5°	563.3	574.7	597.7	619.2	636.7	651.6	666.4	675.8	682.6	688.6	690.0
15°	590.9	605.1	628.0	650.2	665.7	675.1	679.2	679.2	678.5	679.2	680.5
17.5°	618.5	632.0	654.9	677.2	684.6	679.2	674.5	673.1	672.4	671.1	671.8
20°	645.5	658.3	677.8	694.7	688.6	669.8	663.7	663.0	661.0	659.6	658.3
22.5°	672.4	681.9	698.1	704.1	679.9	652.9	645.5	641.5	638.8	635.4	632.0
25°	703.4	706.1	718.3	708.8	658.3	621.9	611.1	605.1	602.4	599.0	596.3
27.5°	732.4	732.4	734.4	701.4	626.6	580.8	564.6	553.9	553.2	552.5	551.8
30°	758.7	755.3	748.6	679.2	585.5	530.3	506.0	495.2	499.3	502.7	503.3
32.5°	789.7	783.0	764.1	648.9	536.3	473.7	444.0	439.3	444.0	448.1	445.4
35°	838.2	826.1	780.3	613.8	489.2	421.8	393.5	386.8	385.4	384.7	379.3
37.5°	907.6	886.7	793.1	576.1	442.7	376.0	355.1	340.9	328.1	314.7	312.6
40°	992.5	956.8	801.8	533.0	393.5	337.6	315.3	297.1	275.6	252.0	249.3
42.5°	1085.5	1032.3	805.9	485.1	350.4	305.9	278.3	255.4	231.1	212.9	209.6
45°	1185.9	1113.8	802.5	439.3	315.3	279.0	248.0	223.0	203.5	190.7	188.0
47.5°	1283.6	1207.4	793.1	402.9	288.4	256.0	224.4	201.5	186.6	172.5	169.1
50°	1408.9	1297.1	781.6	374.6	258.7	233.1	209.6	185.3	168.4	161.7	160.4
52.5°	1547.7	1386.7	768.1	338.9	229.8	214.9	200.1	178.6	173.2	160.4	158.3
55°	1698.0	1493.1	765.4	293.8	204.2	202.1	190.7	184.6	186.0	160.4	157.0
57.5°	1856.3	1607.0	771.5	248.6	183.3	190.7	194.7	190.0	188.0	163.7	157.0
60°	2021.4	1716.8	753.3	206.9	167.1	181.3	199.4	187.3	172.5	162.4	157.7
62.5°	2181.8	1809.1	674.5	177.2	155.0	178.6	196.7	177.2	160.4	160.4	158.3
65°	2298.3	1850.2	527.6	155.6	146.9	175.2	192.0	170.5	157.0	161.7	159.0
67.5°	2311.8	1807.8	354.4	138.8	140.1	169.1	181.3	164.4	153.6	165.8	161.7
70°	2228.9	1697.3	217.0	126.0	131.4	158.3	171.8	158.3	148.9	162.4	156.3
72.5°	2014.0	1491.1	153.0	115.2	122.0	148.2	163.1	153.0	142.2	146.9	140.8
75°	1652.1	1155.6	121.3	105.1	112.5	138.8	155.6	144.9	134.1	132.1	128.0
77.5°	1170.4	740.5	97.7	97.0	102.4	127.3	145.5	135.4	124.7	120.6	117.9
80°	673.1	363.2	84.2	87.6	93.0	115.9	133.4	124.7	114.5	108.5	104.4
82.5°	257.4	126.7	74.1	76.1	82.2	103.8	121.3	113.9	103.8	109.2	91.6
85°	83.6	69.4	60.6	62.7	68.7	86.2	107.1	101.1	89.6	79.5	73.4
87.5°	37.1	37.7	32.3	35.7	43.1	57.3	78.2	74.1	65.4	54.6	52.6
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)