

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: P397755

Luminaire Tested: **ARCH-S-PA1-40-727-U-T2U**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397755
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)
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-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5113 lumens
Efficiency: N/A
Efficacy: 127.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

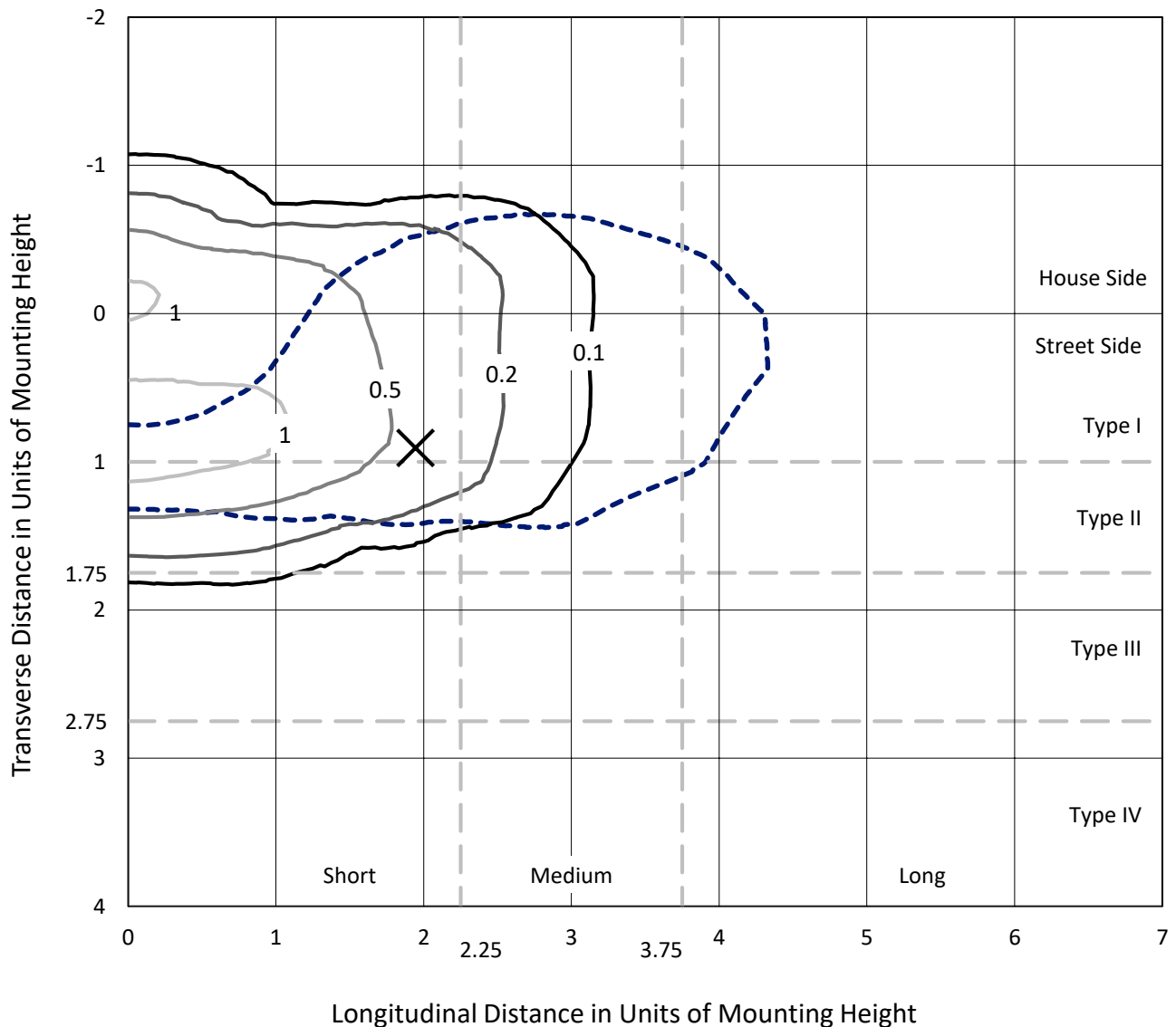
Input Watts (W): 40
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P397755
 CATALOG NUMBER: ARCH-S-PA1-40-727-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

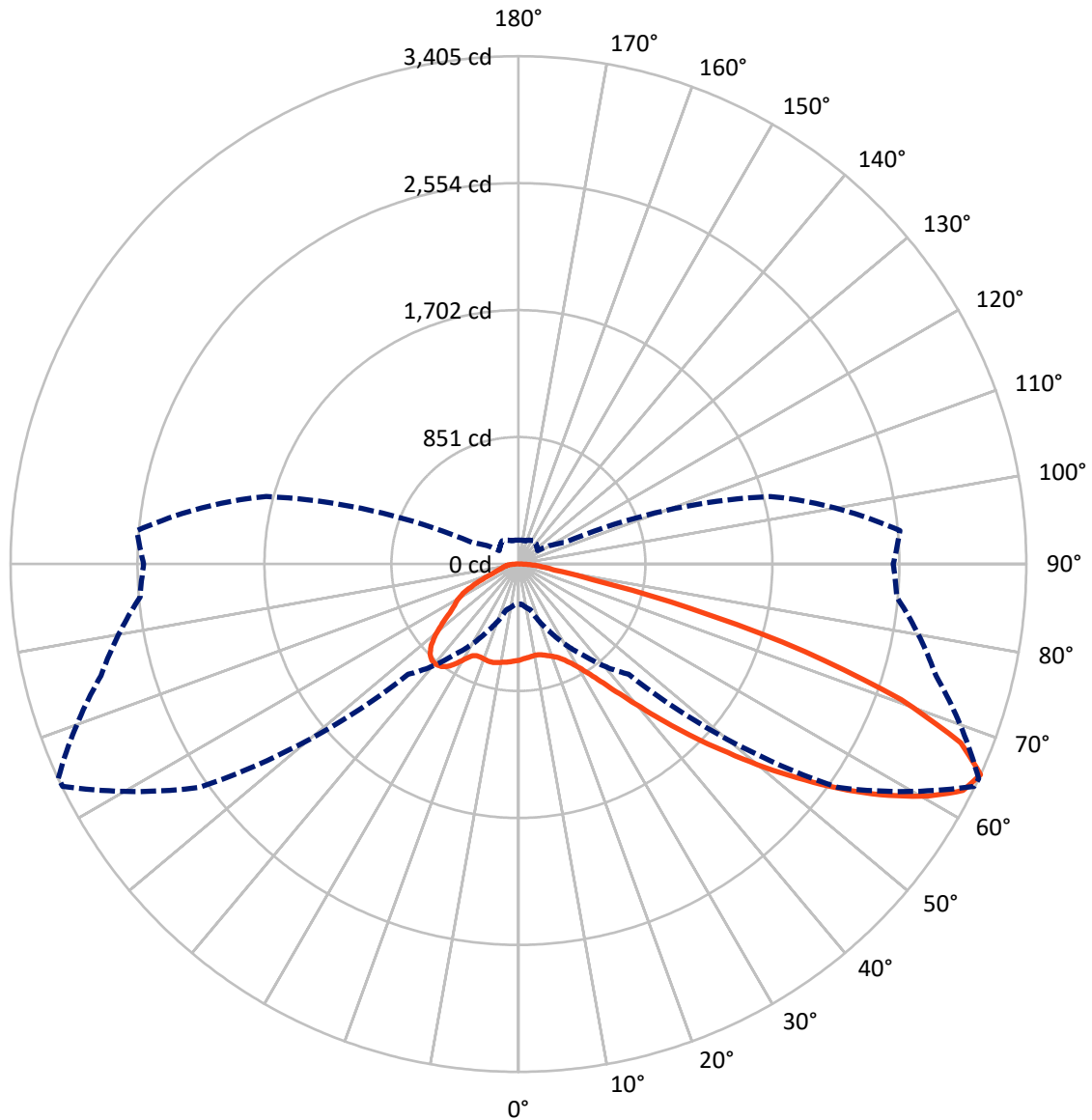


Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P397755

CATALOG NUMBER: ARCH-S-PA1-40-727-U-T2U

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P397755

CATALOG NUMBER: ARCH-S-PA1-40-727-U-T2U

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1478.2	0.0	1478.2
	% Fixture	28.9	0.0	28.9
Street Side	Lumens	3634.8	0.0	3634.8
	% Fixture	71.1	0.0	71.1
Total	Lumens	5113.0	0.0	5113.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.6	1.2
10°-20°	183.8	3.6
20°-30°	326.4	6.4
30°-40°	552.2	10.8
40°-50°	961.3	18.8
50°-60°	1242.4	24.3
60°-70°	1087.1	21.3
70°-80°	591.3	11.6
80°-90°	106.8	2.1
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°	5113.0	100.0
0°-180°	5113.0	100.0



REPORT NUMBER: P397755

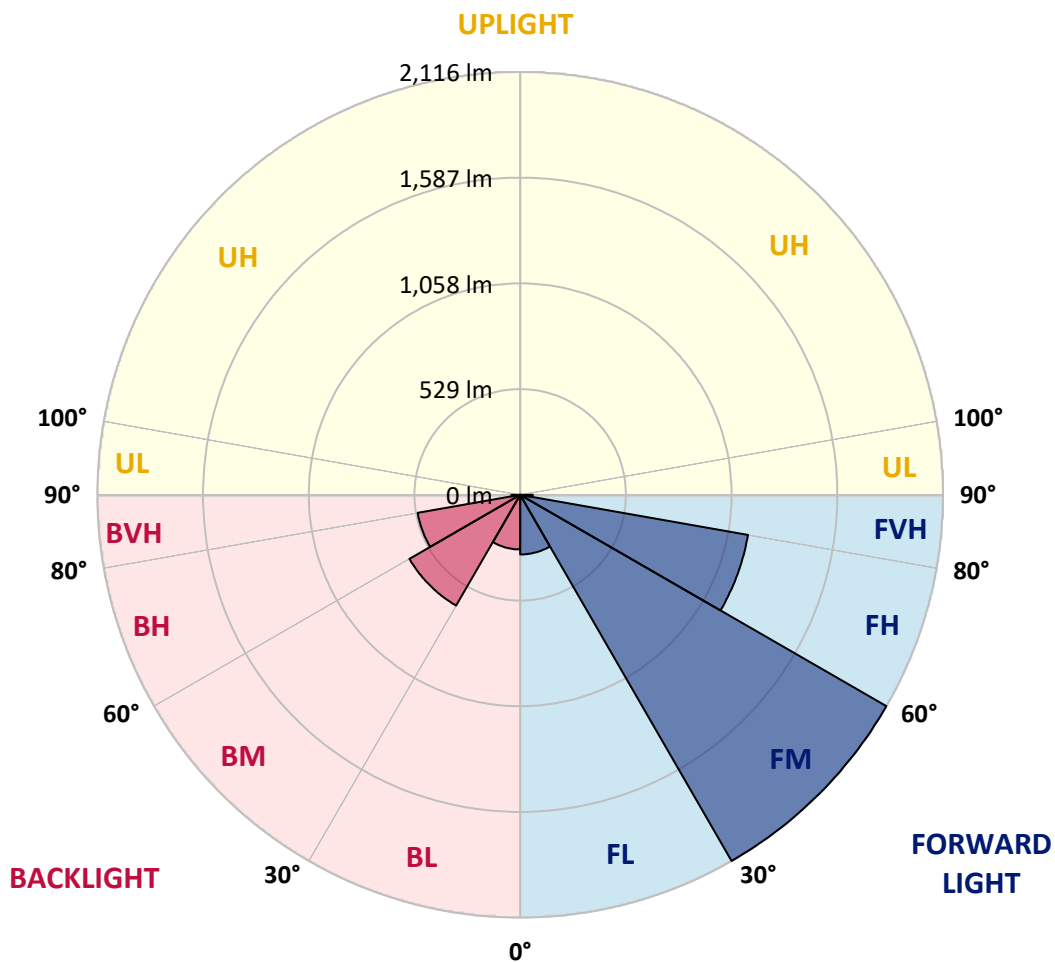
CATALOG NUMBER: ARCH-S-PA1-40-727-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	298.3	5.8			
FM	(30°-60°)	2115.9	41.4			
FH	(60°-80°)	1157.7	22.6			G1/1800
FVH	(80°-90°)	62.9	1.2			G1/100
BL	(0°-30°)	273.4	5.3	B1/500		
BM	(30°-60°)	640.0	12.5	B1/1000		
BH	(60°-80°)	520.8	10.2	B2/1000		G2/1000
BVH	(80°-90°)	44.0	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





REPORT NUMBER: P397755

CATALOG NUMBER: ARCH-S-PA1-40-727-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1
2.5°	634.6	634.0	632.6	634.0	634.6	636.0	635.3	636.7	636.0	638.0	641.4
5°	618.5	617.1	616.5	619.8	621.8	625.2	626.6	631.3	630.6	634.0	639.3
7.5°	600.3	600.3	599.6	603.7	606.4	612.4	617.1	625.2	625.9	631.9	638.0
10°	586.2	586.9	586.2	589.5	593.6	601.0	609.1	620.5	621.2	629.9	636.0
12.5°	580.8	580.8	580.8	585.5	590.9	601.0	610.4	622.5	623.9	633.3	638.7
15°	588.2	588.9	587.5	592.2	598.3	610.4	619.2	631.9	633.3	642.0	645.4
17.5°	614.4	617.1	613.8	616.5	615.1	624.5	632.6	645.4	646.1	653.5	654.8
20°	666.3	669.0	663.6	660.2	648.1	647.4	650.8	660.9	660.9	665.6	662.2
22.5°	746.4	749.0	739.6	726.8	697.9	683.8	676.4	681.1	680.4	682.4	673.7
25°	852.7	852.0	840.6	817.0	770.6	736.3	718.1	710.7	710.7	706.6	695.9
27.5°	984.6	974.5	954.3	926.0	861.4	813.7	774.6	755.8	752.4	740.3	720.1
30°	1125.3	1117.8	1088.9	1047.9	973.2	911.9	847.3	809.6	807.6	781.3	751.1
32.5°	1290.8	1278.7	1246.4	1197.3	1107.8	1021.6	940.8	883.6	880.3	838.6	796.8
35°	1503.5	1493.4	1430.8	1381.7	1266.6	1153.5	1058.0	981.9	979.2	928.1	874.9
37.5°	1758.5	1732.3	1671.7	1579.5	1458.4	1324.5	1203.3	1107.8	1104.4	1047.9	980.6
40°	1986.0	1962.5	1908.6	1823.8	1693.9	1545.2	1381.0	1265.2	1261.9	1193.2	1108.4
42.5°	2154.3	2138.1	2103.1	2054.0	1961.1	1870.9	1607.8	1455.7	1449.6	1360.8	1255.1
45°	2251.8	2239.1	2218.9	2231.0	2229.6	2212.8	1878.3	1682.5	1663.0	1547.9	1418.7
47.5°	2228.3	2216.9	2224.9	2319.1	2449.0	2546.6	2193.3	1914.7	1888.4	1738.4	1593.0
50°	2058.0	2062.7	2105.1	2285.5	2576.9	2793.6	2542.6	2179.2	2144.2	1930.2	1758.5
52.5°	1747.8	1759.2	1862.2	2114.6	2562.8	2953.8	2858.2	2452.4	2406.0	2117.2	1909.3
55°	1388.4	1417.3	1550.6	1815.7	2378.4	2965.2	3096.5	2727.0	2675.8	2292.9	2040.5
57.5°	1027.0	1070.1	1224.2	1467.8	2025.0	2784.2	3215.6	2989.5	2927.5	2467.2	2179.2
60°	651.5	677.7	855.4	1142.7	1549.9	2341.4	3200.1	3212.9	3159.0	2640.8	2323.9
62.5°	415.9	428.7	518.2	815.0	1083.5	1733.6	3031.2	3381.8	3345.5	2799.0	2461.1
65°	267.2	272.6	318.3	501.4	737.6	1046.5	2610.6	3400.0	3404.7	2897.9	2545.9
67.5°	217.4	220.1	236.9	309.6	521.6	578.1	1818.4	3141.5	3198.8	2872.3	2517.0
70°	197.9	201.2	218.7	247.0	403.8	399.1	880.3	2628.7	2722.3	2725.0	2388.5
72.5°	166.9	171.6	195.2	233.5	312.3	315.0	372.8	1872.3	2010.2	2435.6	2195.3
75°	139.3	142.0	162.2	205.9	264.5	251.7	261.8	992.7	1191.9	1953.0	1990.1
77.5°	113.1	115.8	130.6	164.2	234.9	195.8	205.9	411.2	508.1	1325.8	1626.6
80°	80.8	83.5	100.3	127.9	177.7	176.3	152.8	226.8	246.3	716.7	1056.6
82.5°	57.9	59.9	76.0	91.5	123.2	177.0	115.1	154.1	161.5	317.7	426.0
85°	39.0	39.0	52.5	60.6	79.4	111.7	92.9	104.3	109.0	150.8	115.1
87.5°	16.8	16.8	28.3	31.0	41.7	51.8	69.3	52.5	53.8	81.4	47.1
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: P397755

CATALOG NUMBER: ARCH-S-PA1-40-727-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1	646.1
2.5°	643.4	644.1	645.4	649.4	652.1	656.2	658.2	660.9	660.9	659.5	660.2
5°	642.0	644.1	648.8	656.2	660.9	668.3	673.7	677.7	679.1	677.7	678.4
7.5°	641.4	644.7	652.8	663.6	670.3	679.7	687.1	691.8	695.2	693.9	694.5
10°	639.3	644.7	654.8	668.3	678.4	687.8	694.5	696.6	698.6	697.2	696.6
12.5°	642.0	648.1	658.9	675.0	686.5	693.9	695.9	692.5	687.8	685.1	684.4
15°	647.4	653.5	664.2	681.1	691.2	693.9	689.1	678.4	667.6	661.6	660.9
17.5°	654.8	658.9	667.6	682.4	690.5	687.1	677.7	664.9	656.8	652.1	652.8
20°	659.5	659.5	666.3	677.7	684.4	681.7	670.3	656.2	643.4	637.3	635.3
22.5°	666.3	662.9	663.6	673.7	683.1	679.1	654.8	629.9	611.8	605.0	604.4
25°	684.4	675.0	669.0	675.0	697.2	664.2	615.8	586.9	570.0	564.0	564.6
27.5°	706.6	693.9	681.1	691.2	708.7	630.6	566.0	533.0	522.9	518.2	520.2
30°	728.9	712.0	695.2	731.5	700.6	578.1	502.1	469.8	461.0	457.6	460.3
32.5°	769.9	742.3	722.1	785.4	675.7	518.2	432.7	403.1	395.0	391.0	389.7
35°	838.6	803.6	783.4	832.5	640.7	451.6	369.5	348.6	339.9	331.1	329.8
37.5°	937.5	895.1	876.9	859.4	591.6	385.6	321.0	306.9	294.1	280.6	280.0
40°	1055.9	1000.7	987.3	871.5	523.6	323.7	287.4	273.9	257.8	245.0	245.6
42.5°	1192.6	1121.9	1092.9	868.2	439.5	290.7	263.1	248.3	234.2	222.8	222.1
45°	1338.6	1258.5	1191.9	844.6	356.0	267.9	248.3	230.8	216.7	203.9	202.6
47.5°	1500.1	1410.6	1283.4	798.8	294.1	251.7	239.6	214.7	201.9	193.8	193.8
50°	1663.0	1556.0	1367.5	729.5	257.8	239.6	226.8	205.9	195.8	189.1	189.1
52.5°	1802.3	1707.4	1436.8	646.7	234.9	229.5	218.1	201.9	191.1	185.1	184.4
55°	1937.6	1848.0	1498.8	564.6	216.0	216.0	216.0	198.5	186.4	181.0	180.4
57.5°	2072.2	1996.1	1563.4	510.8	199.2	204.6	212.0	194.5	182.4	177.7	177.0
60°	2224.3	2173.8	1638.1	473.1	184.4	192.5	206.6	189.8	175.7	171.6	170.9
62.5°	2385.8	2385.8	1706.0	419.9	170.9	182.4	198.5	183.7	169.6	166.2	165.6
65°	2512.3	2566.8	1749.8	340.5	157.5	172.3	189.1	175.7	161.5	160.8	159.5
67.5°	2527.1	2612.6	1722.2	257.1	145.4	161.5	179.7	166.9	153.4	153.4	151.4
70°	2420.8	2507.6	1636.1	192.5	136.6	150.8	167.6	156.1	143.3	144.7	141.3
72.5°	2243.1	2264.6	1422.0	152.1	126.5	139.3	152.8	144.0	132.6	132.6	127.9
75°	2008.9	1889.1	1033.0	127.2	114.4	125.9	138.0	130.6	120.5	117.1	114.4
77.5°	1599.0	1368.9	600.3	109.7	104.3	113.1	121.1	115.8	107.0	99.6	99.6
80°	974.5	802.2	265.2	94.9	92.2	98.9	104.3	98.3	90.9	83.5	81.4
82.5°	370.8	309.6	128.5	81.4	80.8	84.8	88.8	82.8	77.4	74.0	63.9
85°	101.6	93.5	88.2	68.0	66.6	66.0	70.7	68.0	60.6	49.8	44.4
87.5°	38.4	43.7	47.8	41.7	44.4	41.1	47.1	43.1	38.4	24.9	22.2
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)