

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: P397701

Luminaire Tested: **ARCH-S-PA1-30-740-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397701  
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-PA1-30-740-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4739 lumens  
Efficiency: N/A  
Efficacy: 152.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G1

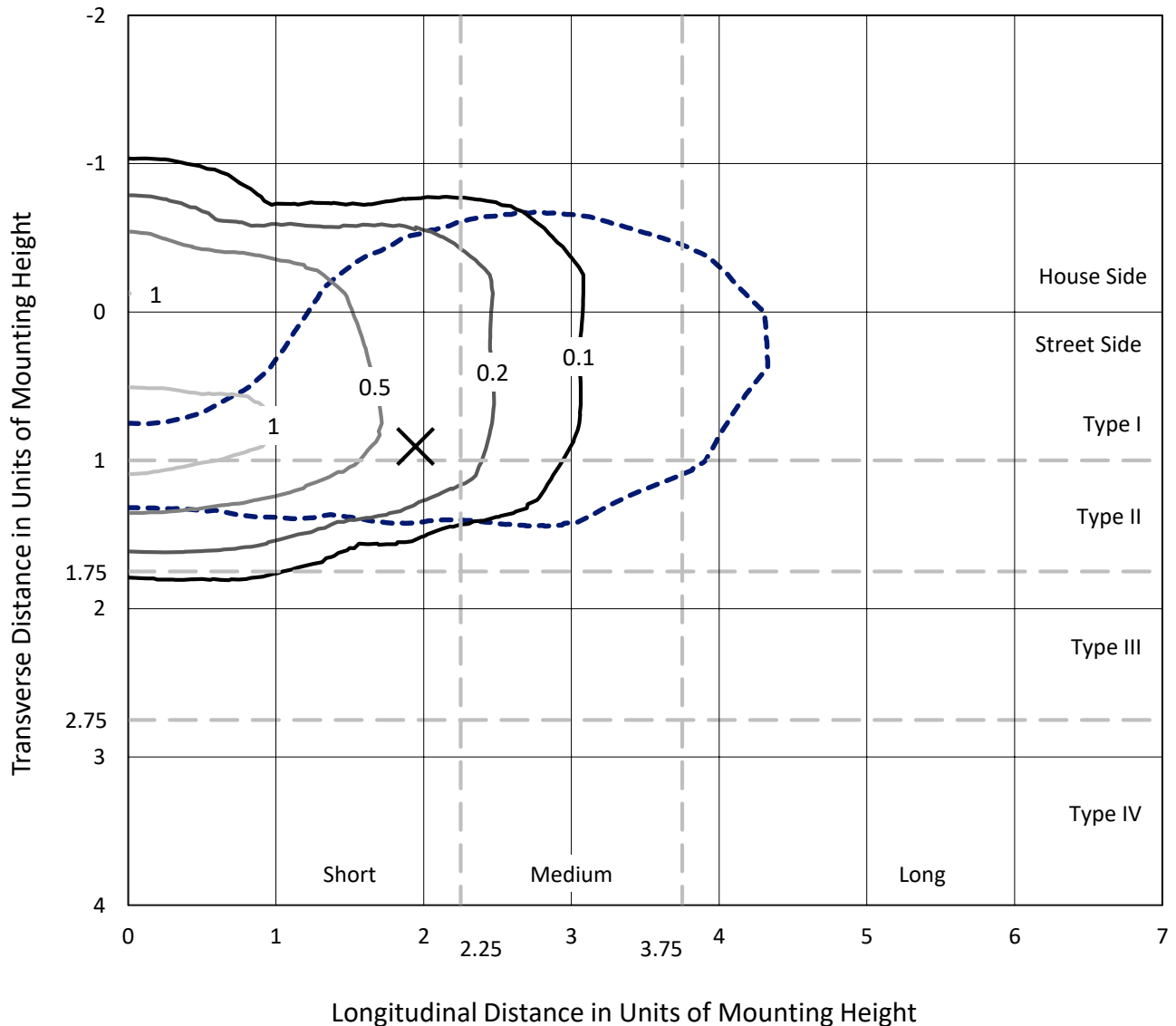
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

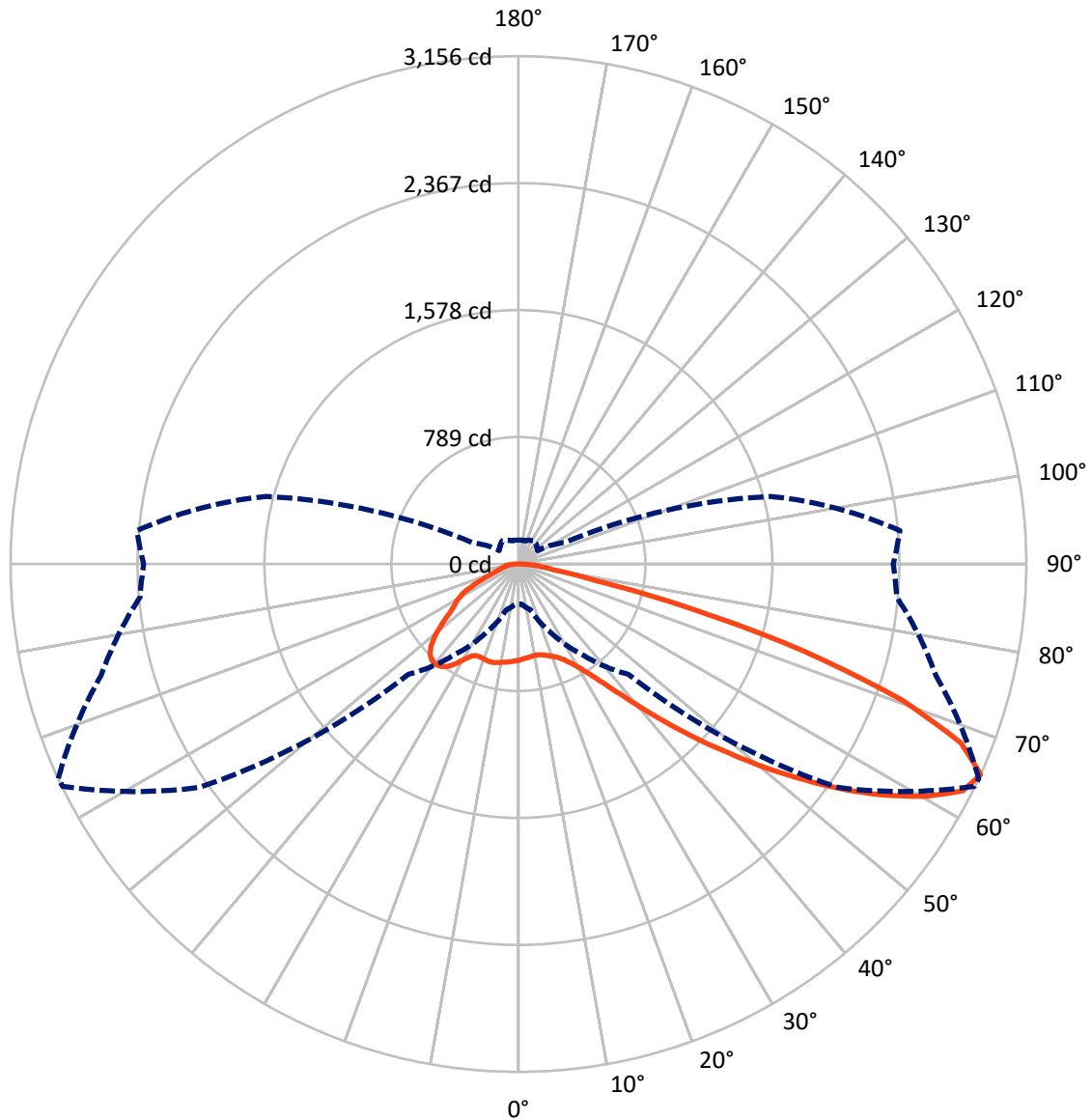
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc  
 Type II - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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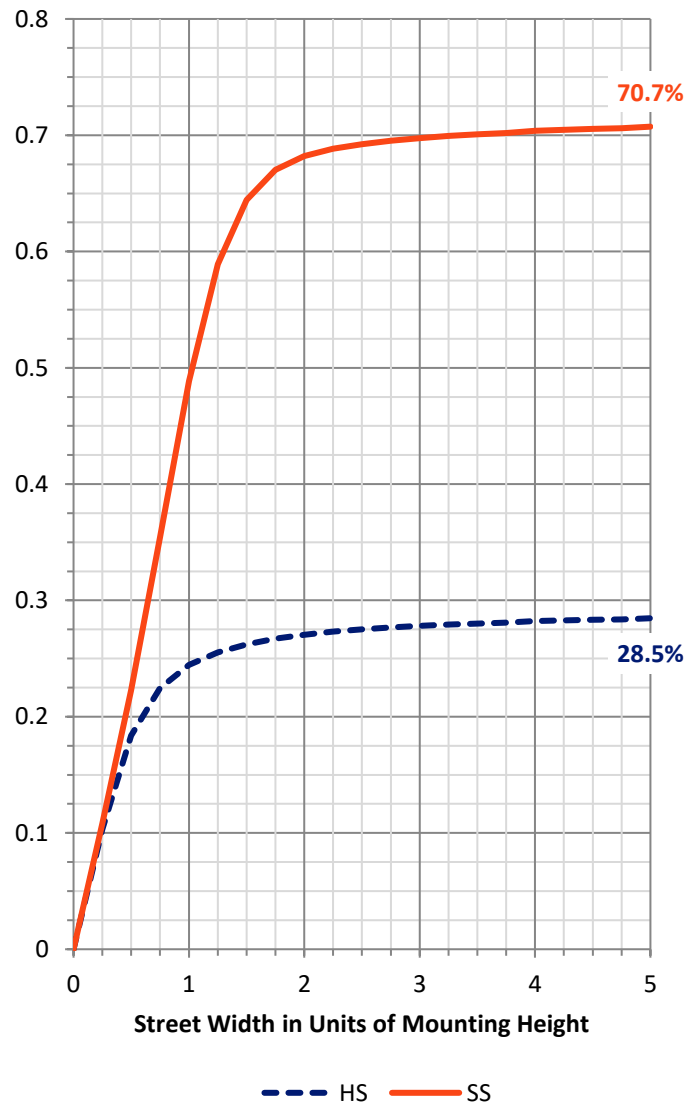
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1370.1	0.0	1370.1
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	3368.9	0.0	3368.9
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	4739.0	0.0	4739.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.0	1.2
10°-20°	170.3	3.6
20°-30°	302.6	6.4
30°-40°	511.8	10.8
40°-50°	891.0	18.8
50°-60°	1151.5	24.3
60°-70°	1007.6	21.3
70°-80°	548.1	11.6
80°-90°	99.0	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°	4739.0	100.0
0°-180°	4739.0	100.0



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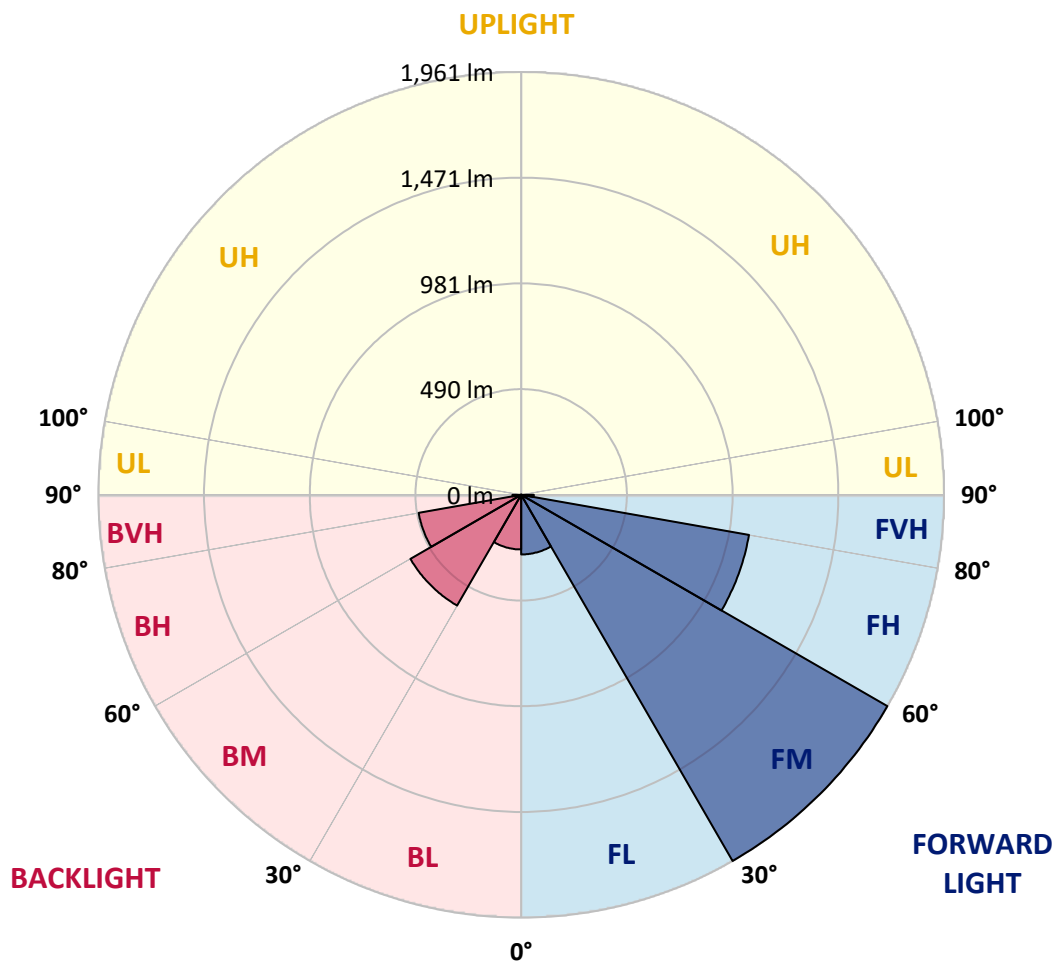
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	276.5	5.8			
FM	(30°-60°)	1961.1	41.4			
FH	(60°-80°)	1073.0	22.6			G1/1800
FVH	(80°-90°)	58.3	1.2			G1/100
BL	(0°-30°)	253.4	5.3	B1/500		
BM	(30°-60°)	593.2	12.5	B1/1000		
BH	(60°-80°)	482.7	10.2	B1/500		G1/500
BVH	(80°-90°)	40.8	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	598.8	598.8	598.8	598.8	598.8	598.8	598.8	598.8	598.8	598.8	598.8
2.5°	588.2	587.6	586.3	587.6	588.2	589.5	588.8	590.1	589.5	591.3	594.5
5°	573.2	572.0	571.4	574.5	576.4	579.5	580.7	585.1	584.5	587.6	592.6
7.5°	556.4	556.4	555.8	559.5	562.0	567.6	572.0	579.5	580.1	585.7	591.3
10°	543.3	543.9	543.3	546.4	550.2	557.0	564.5	575.1	575.7	583.8	589.5
12.5°	538.3	538.3	538.3	542.7	547.7	557.0	565.8	577.0	578.2	587.0	592.0
15°	545.2	545.8	544.6	548.9	554.5	565.8	573.9	585.7	587.0	595.1	598.2
17.5°	569.5	572.0	568.9	571.4	570.1	578.9	586.3	598.2	598.8	605.7	606.9
20°	617.5	620.0	615.0	611.9	600.7	600.1	603.2	612.5	612.5	616.9	613.8
22.5°	691.8	694.3	685.5	673.7	646.8	633.7	626.9	631.3	630.6	632.5	624.4
25°	790.3	789.7	779.1	757.3	714.2	682.4	665.6	658.7	658.7	655.0	645.0
27.5°	912.6	903.2	884.5	858.3	798.4	754.1	718.0	700.5	697.4	686.1	667.4
30°	1042.9	1036.1	1009.3	971.2	902.0	845.2	785.3	750.4	748.5	724.2	696.1
32.5°	1196.4	1185.2	1155.2	1109.7	1026.7	946.9	872.0	819.0	815.9	777.2	738.5
35°	1393.5	1384.1	1326.1	1280.6	1173.9	1069.1	980.6	910.1	907.6	860.2	810.9
37.5°	1629.9	1605.6	1549.4	1464.0	1351.7	1227.6	1115.3	1026.7	1023.6	971.2	908.8
40°	1840.7	1818.9	1769.0	1690.4	1570.0	1432.2	1280.0	1172.7	1169.6	1105.9	1027.3
42.5°	1996.7	1981.7	1949.3	1903.7	1817.7	1734.1	1490.2	1349.2	1343.6	1261.3	1163.3
45°	2087.1	2075.3	2056.6	2067.8	2066.5	2051.0	1740.9	1559.4	1541.3	1434.7	1314.9
47.5°	2065.3	2054.7	2062.2	2149.5	2269.9	2360.3	2032.9	1774.6	1750.3	1611.2	1476.5
50°	1907.5	1911.9	1951.1	2118.3	2388.4	2589.3	2356.6	2019.8	1987.3	1789.0	1629.9
52.5°	1619.9	1630.5	1726.0	1959.9	2375.3	2737.7	2649.1	2273.0	2230.0	1962.4	1769.6
55°	1286.8	1313.7	1437.2	1682.9	2204.4	2748.3	2870.0	2527.5	2480.1	2125.2	1891.3
57.5°	951.9	991.8	1134.6	1360.4	1876.9	2580.5	2980.4	2770.8	2713.4	2286.7	2019.8
60°	603.8	628.1	792.8	1059.2	1436.5	2170.1	2966.0	2977.9	2928.0	2447.7	2153.9
62.5°	385.5	397.3	480.3	755.4	1004.3	1606.8	2809.5	3134.4	3100.8	2594.3	2281.1
65°	247.6	252.6	295.0	464.7	683.7	970.0	2419.6	3151.3	3155.6	2685.9	2359.7
67.5°	201.5	204.0	219.6	286.9	483.4	535.8	1685.4	2911.8	2964.8	2662.2	2332.9
70°	183.4	186.5	202.7	228.9	374.3	369.9	815.9	2436.4	2523.1	2525.6	2213.8
72.5°	154.7	159.1	180.9	216.4	289.4	291.9	345.6	1735.3	1863.2	2257.4	2034.7
75°	129.1	131.6	150.3	190.9	245.1	233.3	242.6	920.1	1104.7	1810.2	1844.5
77.5°	104.8	107.3	121.0	152.2	217.7	181.5	190.9	381.1	470.9	1228.8	1507.6
80°	74.9	77.3	92.9	118.5	164.7	163.4	141.6	210.2	228.3	664.3	979.3
82.5°	53.6	55.5	70.5	84.8	114.1	164.1	106.7	142.8	149.7	294.4	394.8
85°	36.2	36.2	48.7	56.1	73.6	103.5	86.1	96.7	101.1	139.7	106.7
87.5°	15.6	15.6	26.2	28.7	38.7	48.0	64.2	48.7	49.9	75.5	43.7
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°	598.8	598.8	598.8	598.8	598.8	598.8	598.8	598.8	598.8	598.8	598.8
2.5°	596.3	596.9	598.2	601.9	604.4	608.2	610.0	612.5	612.5	611.3	611.9
5°	595.1	596.9	601.3	608.2	612.5	619.4	624.4	628.1	629.4	628.1	628.8
7.5°	594.5	597.6	605.1	615.0	621.3	630.0	636.9	641.2	644.4	643.1	643.7
10°	592.6	597.6	606.9	619.4	628.8	637.5	643.7	645.6	647.5	646.2	645.6
12.5°	595.1	600.7	610.7	625.6	636.2	643.1	645.0	641.9	637.5	635.0	634.4
15°	600.1	605.7	615.7	631.3	640.6	643.1	638.7	628.8	618.8	613.2	612.5
17.5°	606.9	610.7	618.8	632.5	640.0	636.9	628.1	616.3	608.8	604.4	605.1
20°	611.3	611.3	617.5	628.1	634.4	631.9	621.3	608.2	596.3	590.7	588.8
22.5°	617.5	614.4	615.0	624.4	633.1	629.4	606.9	583.8	567.0	560.8	560.1
25°	634.4	625.6	620.0	625.6	646.2	615.7	570.7	543.9	528.3	522.7	523.3
27.5°	655.0	643.1	631.3	640.6	656.8	584.5	524.6	494.0	484.7	480.3	482.2
30°	675.5	659.9	644.4	678.0	649.3	535.8	465.3	435.4	427.3	424.2	426.7
32.5°	713.6	688.0	669.3	727.9	626.3	480.3	401.1	373.6	366.2	362.4	361.2
35°	777.2	744.8	726.1	771.6	593.8	418.5	342.4	323.1	315.0	306.9	305.6
37.5°	868.9	829.6	812.8	796.6	548.3	357.4	297.5	284.4	272.6	260.1	259.5
40°	978.7	927.5	915.1	807.8	485.3	300.0	266.3	253.9	238.9	227.1	227.7
42.5°	1105.3	1039.8	1013.0	804.7	407.3	269.5	243.9	230.2	217.1	206.5	205.8
45°	1240.7	1166.4	1104.7	782.8	330.0	248.3	230.2	214.0	200.9	189.0	187.8
47.5°	1390.4	1307.4	1189.5	740.4	272.6	233.3	222.1	199.0	187.1	179.6	179.6
50°	1541.3	1442.2	1267.5	676.2	238.9	222.1	210.2	190.9	181.5	175.3	175.3
52.5°	1670.5	1582.5	1331.7	599.4	217.7	212.7	202.1	187.1	177.2	171.5	170.9
55°	1795.8	1712.9	1389.1	523.3	200.2	200.2	200.2	184.0	172.8	167.8	167.2
57.5°	1920.6	1850.1	1449.0	473.4	184.6	189.6	196.5	180.3	169.0	164.7	164.1
60°	2061.6	2014.8	1518.3	438.5	170.9	178.4	191.5	175.9	162.8	159.1	158.4
62.5°	2211.3	2211.3	1581.3	389.2	158.4	169.0	184.0	170.3	157.2	154.1	153.4
65°	2328.5	2379.1	1621.8	315.6	146.0	159.7	175.3	162.8	149.7	149.1	147.8
67.5°	2342.3	2421.5	1596.2	238.3	134.7	149.7	166.5	154.7	142.2	142.2	140.3
70°	2243.7	2324.2	1516.4	178.4	126.6	139.7	155.3	144.7	132.9	134.1	131.0
72.5°	2079.0	2099.0	1318.0	141.0	117.3	129.1	141.6	133.5	122.9	122.9	118.5
75°	1862.0	1750.9	957.5	117.9	106.0	116.6	127.9	121.0	111.7	108.5	106.0
77.5°	1482.1	1268.7	556.4	101.7	96.7	104.8	112.3	107.3	99.2	92.3	92.3
80°	903.2	743.5	245.8	88.0	85.5	91.7	96.7	91.1	84.2	77.3	75.5
82.5°	343.7	286.9	119.1	75.5	74.9	78.6	82.3	76.7	71.7	68.6	59.3
85°	94.2	86.7	81.7	63.0	61.8	61.1	65.5	63.0	56.1	46.2	41.2
87.5°	35.6	40.5	44.3	38.7	41.2	38.0	43.7	39.9	35.6	23.1	20.6
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)