

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: P397809

Luminaire Tested: **ARCH-S-PA1-40-830-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397809  
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-PA1-40-830-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 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: 4858 lumens  
Efficiency: N/A  
Efficacy: 121.5 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

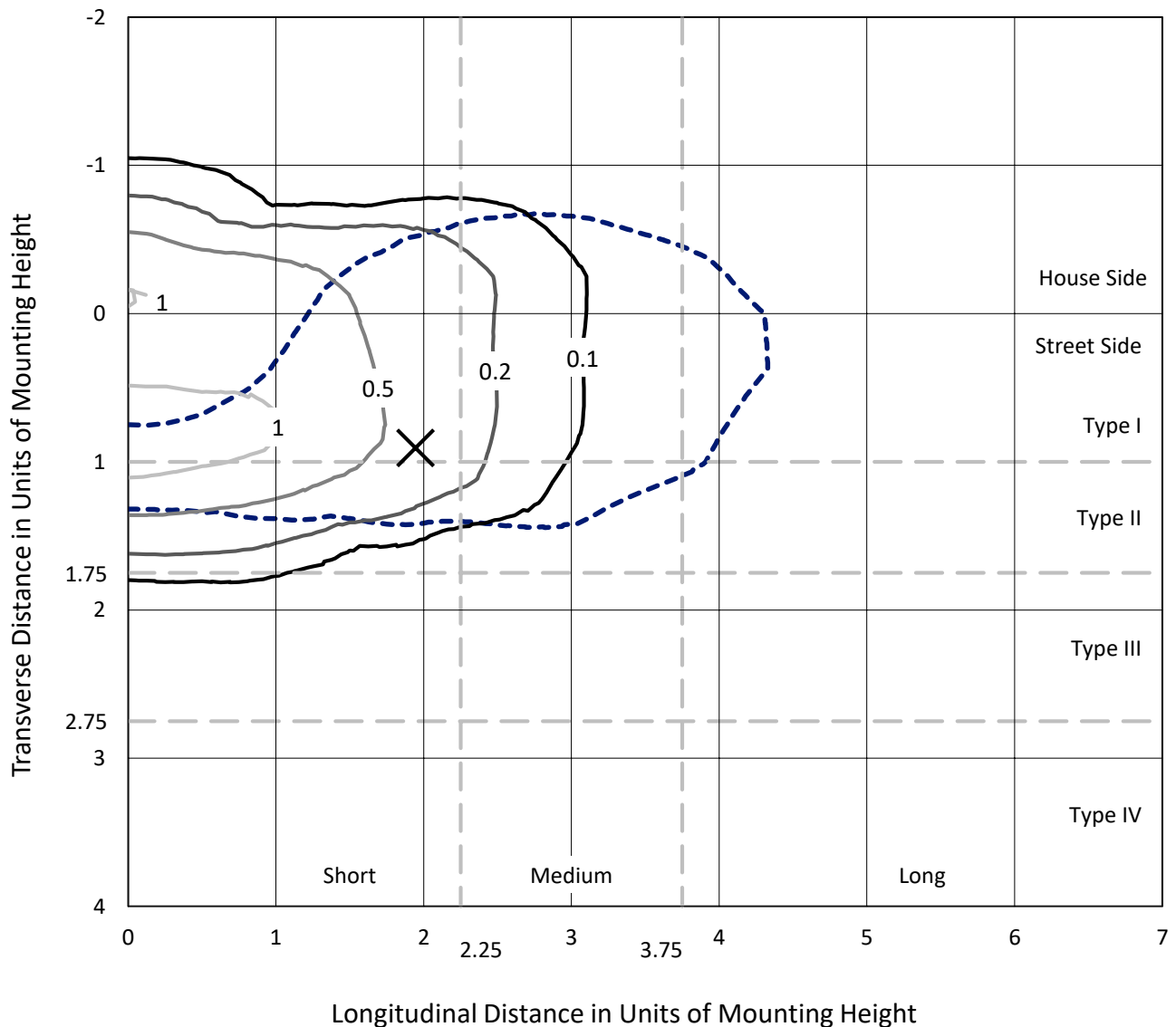
Input Watts (W): 40  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

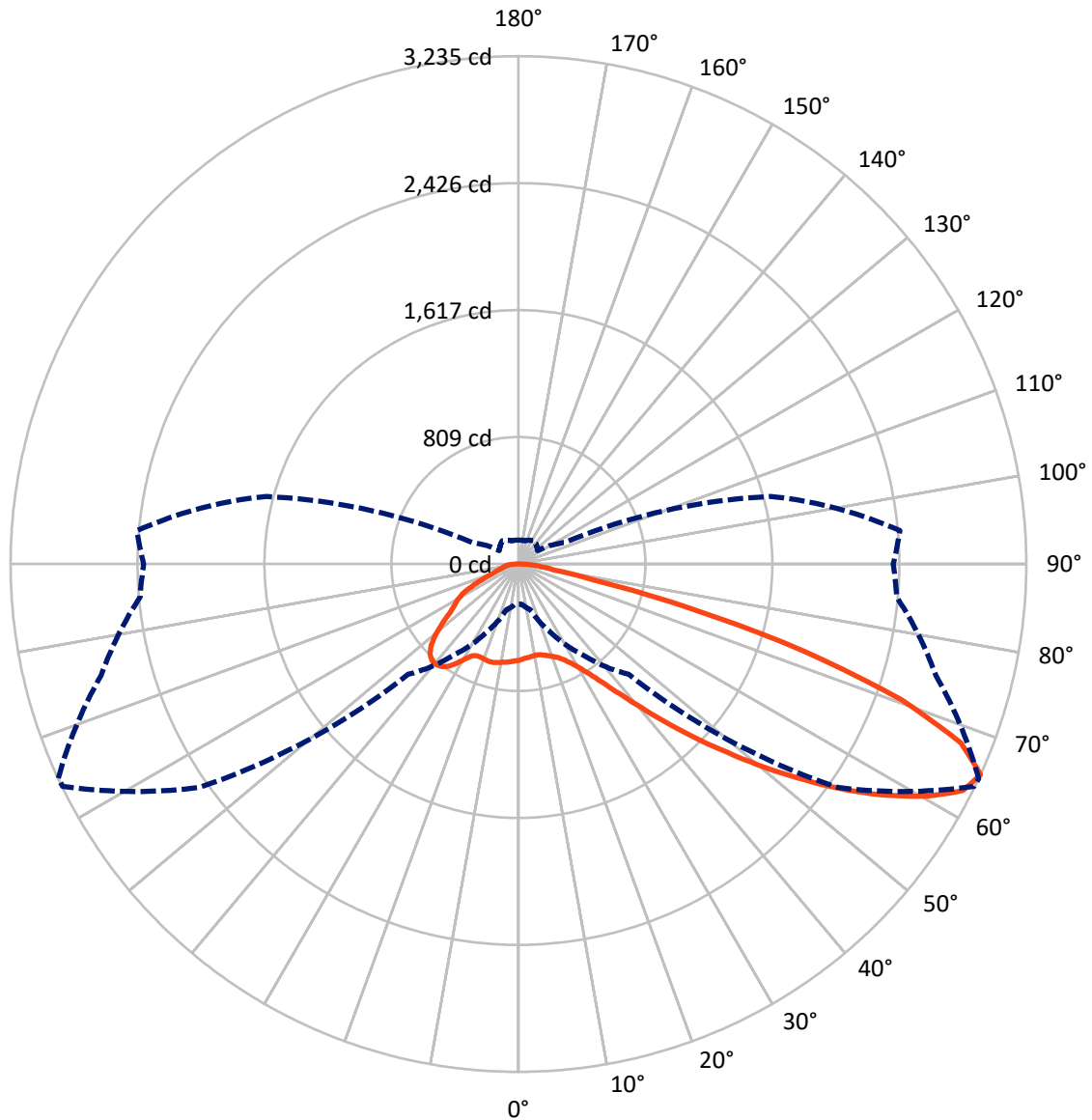
✕ Max cd  
 - - - 1/2 Max cd



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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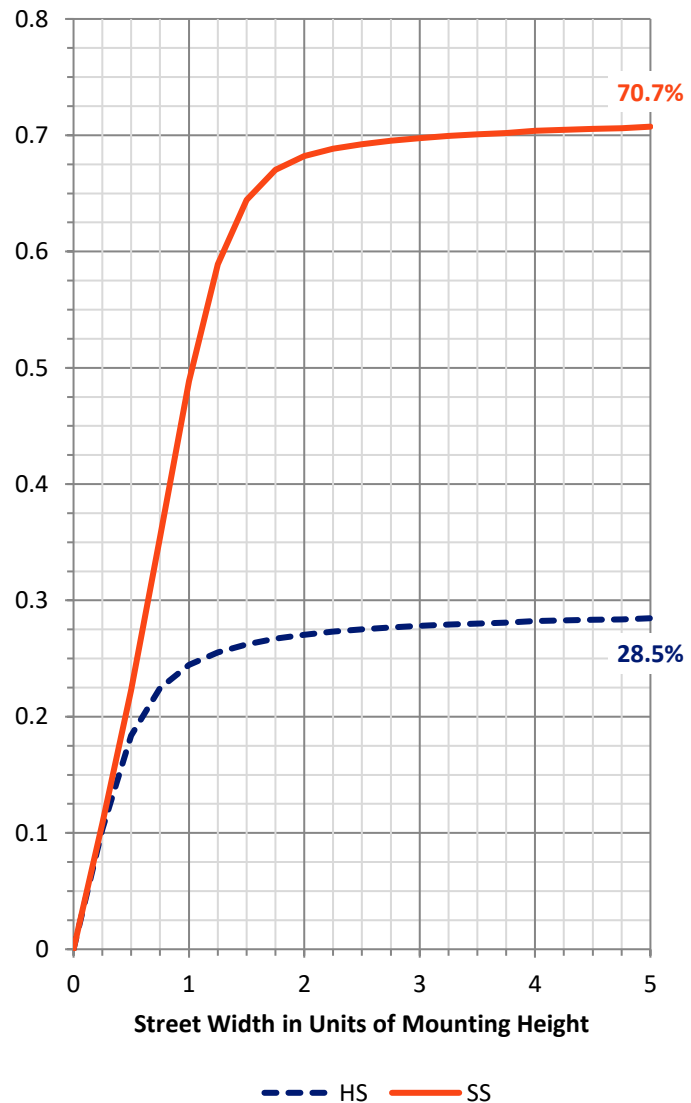
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1404.5	0.0	1404.5
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	3453.5	0.0	3453.5
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	4858.0	0.0	4858.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.5	1.2
10°-20°	174.6	3.6
20°-30°	310.2	6.4
30°-40°	524.7	10.8
40°-50°	913.4	18.8
50°-60°	1180.4	24.3
60°-70°	1032.9	21.3
70°-80°	561.8	11.6
80°-90°	101.5	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°	4858.0	100.0
0°-180°	4858.0	100.0



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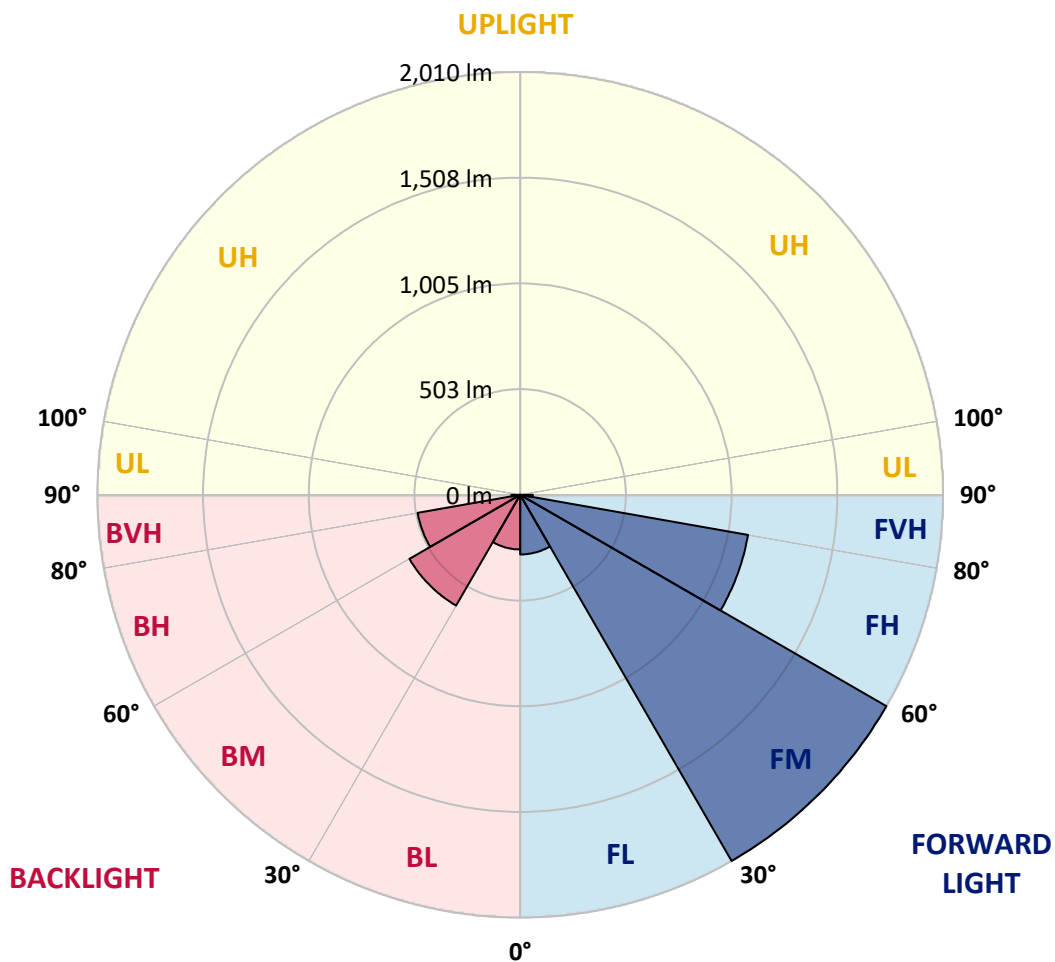
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	283.5	5.8			
FM	(30°-60°)	2010.4	41.4			
FH	(60°-80°)	1099.9	22.6			G1/1800
FVH	(80°-90°)	59.7	1.2			G1/100
BL	(0°-30°)	259.8	5.3	B1/500		
BM	(30°-60°)	608.1	12.5	B1/1000		
BH	(60°-80°)	494.8	10.2	B1/500		G1/500
BVH	(80°-90°)	41.8	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°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	603.0	602.3	601.1	602.3	603.0	604.3	603.6	604.9	604.3	606.2	609.4
5°	587.6	586.4	585.7	588.9	590.8	594.0	595.3	599.8	599.1	602.3	607.5
7.5°	570.4	570.4	569.7	573.6	576.1	581.9	586.4	594.0	594.7	600.4	606.2
10°	556.9	557.6	556.9	560.1	564.0	571.0	578.7	589.6	590.2	598.5	604.3
12.5°	551.8	551.8	551.8	556.3	561.4	571.0	580.0	591.5	592.8	601.7	606.8
15°	558.9	559.5	558.2	562.7	568.5	580.0	588.3	600.4	601.7	610.0	613.2
17.5°	583.8	586.4	583.2	585.7	584.4	593.4	601.1	613.2	613.9	620.9	622.2
20°	633.0	635.6	630.5	627.3	615.8	615.1	618.3	627.9	627.9	632.4	629.2
22.5°	709.1	711.7	702.7	690.6	663.1	649.7	642.6	647.1	646.5	648.4	640.1
25°	810.2	809.5	798.7	776.3	732.2	699.5	682.3	675.2	675.2	671.4	661.2
27.5°	935.5	925.9	906.7	879.9	818.5	773.1	736.0	718.1	714.9	703.4	684.2
30°	1069.1	1062.1	1034.6	995.6	924.6	866.4	805.0	769.2	767.3	742.4	713.6
32.5°	1226.4	1214.9	1184.2	1137.6	1052.5	970.7	893.9	839.6	836.4	796.7	757.1
35°	1428.5	1418.9	1359.4	1312.8	1203.4	1096.0	1005.2	932.9	930.4	881.8	831.3
37.5°	1670.8	1645.9	1588.4	1500.7	1385.6	1258.4	1143.3	1052.5	1049.3	995.6	931.7
40°	1887.0	1864.6	1813.4	1732.9	1609.5	1468.1	1312.1	1202.1	1198.9	1133.7	1053.1
42.5°	2046.8	2031.5	1998.2	1951.5	1863.3	1777.6	1527.6	1383.1	1377.3	1292.9	1192.5
45°	2139.5	2127.4	2108.2	2119.7	2118.4	2102.5	1784.7	1598.6	1580.0	1470.7	1347.9
47.5°	2117.2	2106.3	2114.0	2203.5	2326.9	2419.6	2083.9	1819.2	1794.2	1651.7	1513.5
50°	1955.4	1959.9	2000.1	2171.5	2448.4	2654.3	2415.8	2070.5	2037.2	1833.9	1670.8
52.5°	1660.6	1671.5	1769.3	2009.1	2435.0	2806.5	2715.7	2330.1	2286.0	2011.7	1814.1
55°	1319.1	1346.6	1473.3	1725.2	2259.8	2817.3	2942.0	2591.0	2542.4	2178.5	1938.8
57.5°	975.8	1016.7	1163.1	1394.6	1924.1	2645.3	3055.2	2840.4	2781.5	2344.2	2070.5
60°	619.0	643.9	812.7	1085.8	1472.6	2224.6	3040.5	3052.7	3001.5	2509.1	2208.0
62.5°	395.2	407.3	492.4	774.4	1029.5	1647.2	2880.0	3213.1	3178.6	2659.4	2338.4
65°	253.9	259.0	302.5	476.4	700.8	994.3	2480.4	3230.4	3234.9	2753.4	2419.0
67.5°	206.5	209.1	225.1	294.1	495.6	549.3	1727.7	2984.9	3039.2	2729.1	2391.5
70°	188.0	191.2	207.8	234.7	383.7	379.2	836.4	2497.6	2586.5	2589.1	2269.3
72.5°	158.6	163.1	185.4	221.9	296.7	299.3	354.2	1778.9	1910.0	2314.1	2085.8
75°	132.4	134.9	154.1	195.7	251.3	239.1	248.7	943.2	1132.4	1855.6	1890.8
77.5°	107.4	110.0	124.0	156.0	223.2	186.1	195.7	390.7	482.8	1259.7	1545.5
80°	76.7	79.3	95.3	121.5	168.8	167.5	145.2	215.5	234.0	681.0	1003.9
82.5°	55.0	56.9	72.3	87.0	117.0	168.2	109.3	146.4	153.5	301.8	404.8
85°	37.1	37.1	49.9	57.5	75.5	106.1	88.2	99.1	103.6	143.2	109.3
87.5°	16.0	16.0	26.9	29.4	39.6	49.2	65.9	49.9	51.2	77.4	44.8
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°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	611.3	611.9	613.2	617.1	619.6	623.4	625.4	627.9	627.9	626.6	627.3
5°	610.0	611.9	616.4	623.4	627.9	635.0	640.1	643.9	645.2	643.9	644.5
7.5°	609.4	612.6	620.2	630.5	636.9	645.8	652.9	657.3	660.5	659.3	659.9
10°	607.5	612.6	622.2	635.0	644.5	653.5	659.9	661.8	663.7	662.5	661.8
12.5°	610.0	615.8	626.0	641.4	652.2	659.3	661.2	658.0	653.5	650.9	650.3
15°	615.1	620.9	631.1	647.1	656.7	659.3	654.8	644.5	634.3	628.6	627.9
17.5°	622.2	626.0	634.3	648.4	656.1	652.9	643.9	631.8	624.1	619.6	620.2
20°	626.6	626.6	633.0	643.9	650.3	647.7	636.9	623.4	611.3	605.5	603.6
22.5°	633.0	629.8	630.5	640.1	649.0	645.2	622.2	598.5	581.2	574.8	574.2
25°	650.3	641.4	635.6	641.4	662.5	631.1	585.1	557.6	541.6	535.8	536.5
27.5°	671.4	659.3	647.1	656.7	673.3	599.1	537.8	506.4	496.8	492.4	494.3
30°	692.5	676.5	660.5	695.1	665.6	549.3	477.0	446.3	438.0	434.8	437.4
32.5°	731.5	705.3	686.1	746.2	642.0	492.4	411.2	383.0	375.3	371.5	370.2
35°	796.7	763.5	744.3	791.0	608.7	429.1	351.0	331.2	322.9	314.6	313.3
37.5°	890.7	850.4	833.2	816.6	562.1	366.4	305.0	291.6	279.4	266.6	266.0
40°	1003.3	950.8	938.0	828.1	497.5	307.6	273.0	260.2	244.9	232.8	233.4
42.5°	1133.1	1065.9	1038.4	824.9	417.5	276.2	250.0	236.0	222.5	211.7	211.0
45°	1271.8	1195.7	1132.4	802.5	338.3	254.5	236.0	219.3	205.9	193.7	192.5
47.5°	1425.3	1340.3	1219.4	759.0	279.4	239.1	227.6	204.0	191.8	184.2	184.2
50°	1580.0	1478.4	1299.3	693.1	244.9	227.6	215.5	195.7	186.1	179.7	179.7
52.5°	1712.4	1622.2	1365.2	614.5	223.2	218.0	207.2	191.8	181.6	175.8	175.2
55°	1840.9	1755.9	1424.0	536.5	205.3	205.3	205.3	188.6	177.1	172.0	171.4
57.5°	1968.8	1896.6	1485.4	485.3	189.3	194.4	201.4	184.8	173.3	168.8	168.2
60°	2113.3	2065.4	1556.4	449.5	175.2	182.9	196.3	180.3	166.9	163.1	162.4
62.5°	2266.8	2266.8	1621.0	399.0	162.4	173.3	188.6	174.6	161.1	157.9	157.3
65°	2387.0	2438.8	1662.5	323.6	149.6	163.7	179.7	166.9	153.5	152.8	151.5
67.5°	2401.1	2482.3	1636.3	244.3	138.1	153.5	170.7	158.6	145.8	145.8	143.9
70°	2300.0	2382.5	1554.5	182.9	129.8	143.2	159.2	148.3	136.2	137.5	134.3
72.5°	2131.2	2151.7	1351.1	144.5	120.2	132.4	145.2	136.8	126.0	126.0	121.5
75°	1908.7	1794.9	981.5	120.9	108.7	119.6	131.1	124.0	114.5	111.3	108.7
77.5°	1519.3	1300.6	570.4	104.2	99.1	107.4	115.1	110.0	101.7	94.6	94.6
80°	925.9	762.2	251.9	90.2	87.6	94.0	99.1	93.4	86.3	79.3	77.4
82.5°	352.3	294.1	122.1	77.4	76.7	80.6	84.4	78.7	73.5	70.3	60.7
85°	96.6	88.9	83.8	64.6	63.3	62.7	67.1	64.6	57.5	47.3	42.2
87.5°	36.4	41.6	45.4	39.6	42.2	39.0	44.8	40.9	36.4	23.7	21.1
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)