

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: P348663

Luminaire Tested: **ARCH-N-PA1-40-750-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348663  
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-PA1-40-750-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 740mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5540 lumens  
Efficiency: N/A  
Efficacy: 135.1 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): 41  
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

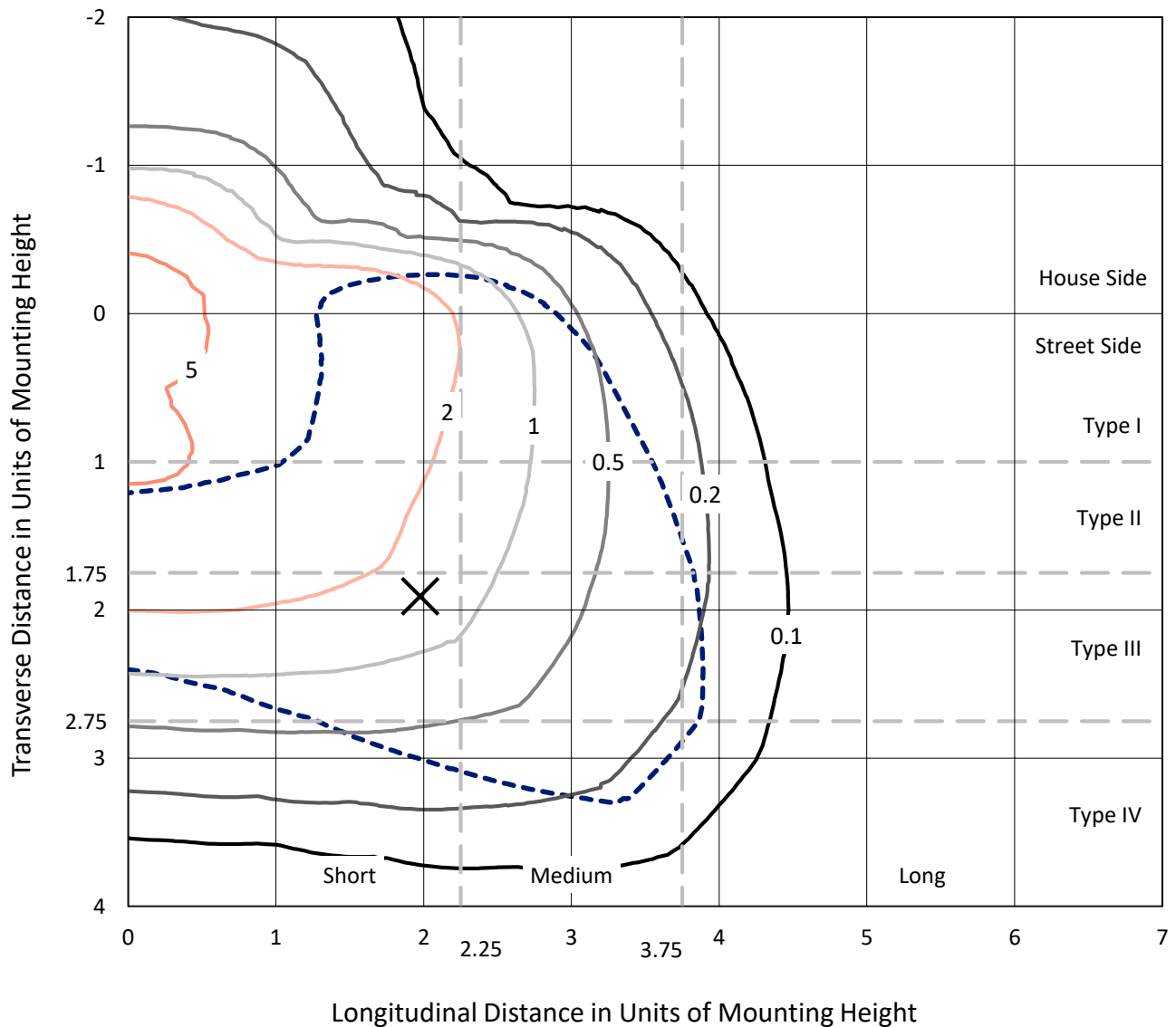


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### Iso-Footcandle Lines of Horizontal Illumination

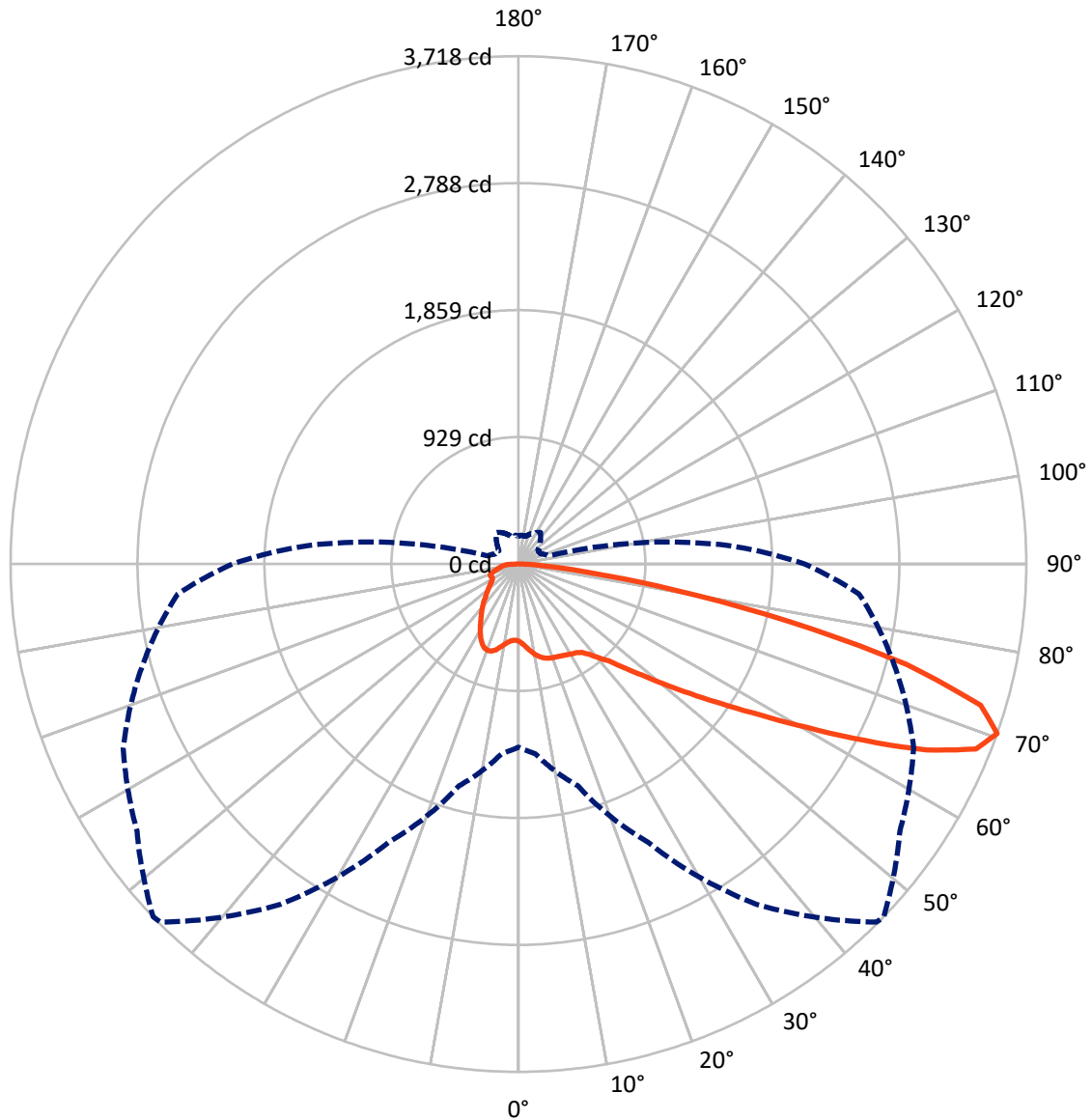
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.1 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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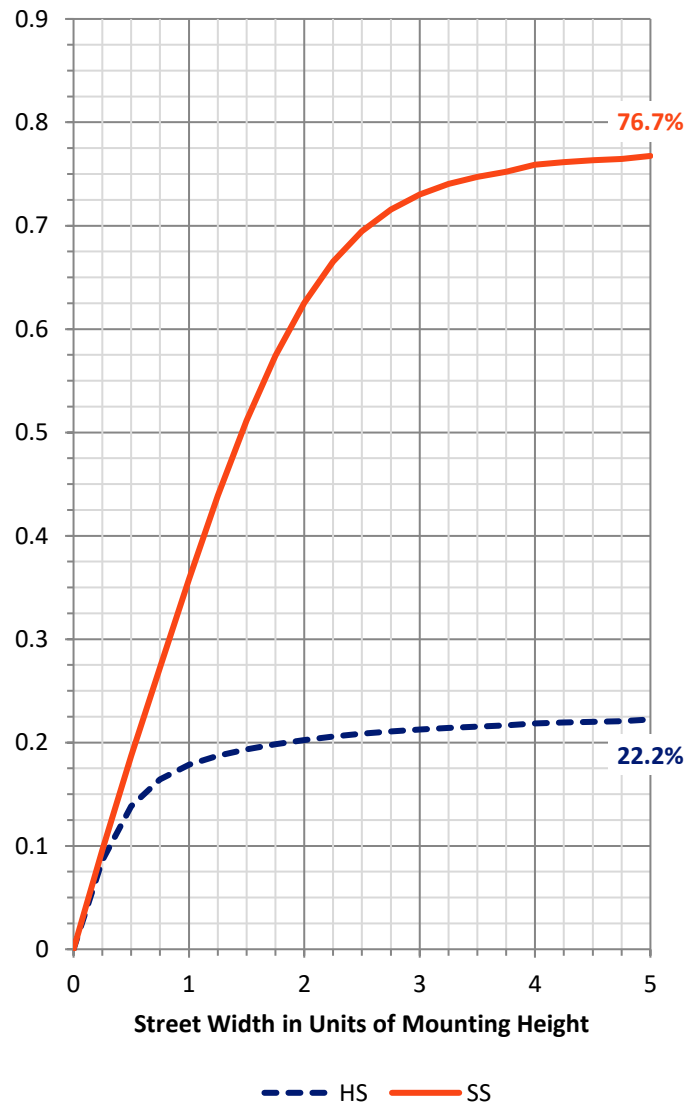
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1269.8	0.0	1269.8
	% Fixture	22.9	0.0	22.9
<b>Street Side</b>	Lumens	4270.3	0.0	4270.3
	% Fixture	77.1	0.0	77.1
<b>Total</b>	Lumens	5540.0	0.0	5540.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.5	1.0
10°-20°	191.7	3.5
20°-30°	319.6	5.8
30°-40°	453.6	8.2
40°-50°	667.2	12.0
50°-60°	1129.9	20.4
60°-70°	1603.9	29.0
70°-80°	974.4	17.6
80°-90°	142.2	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°	5540.0	100.0
0°-180°	5540.0	100.0



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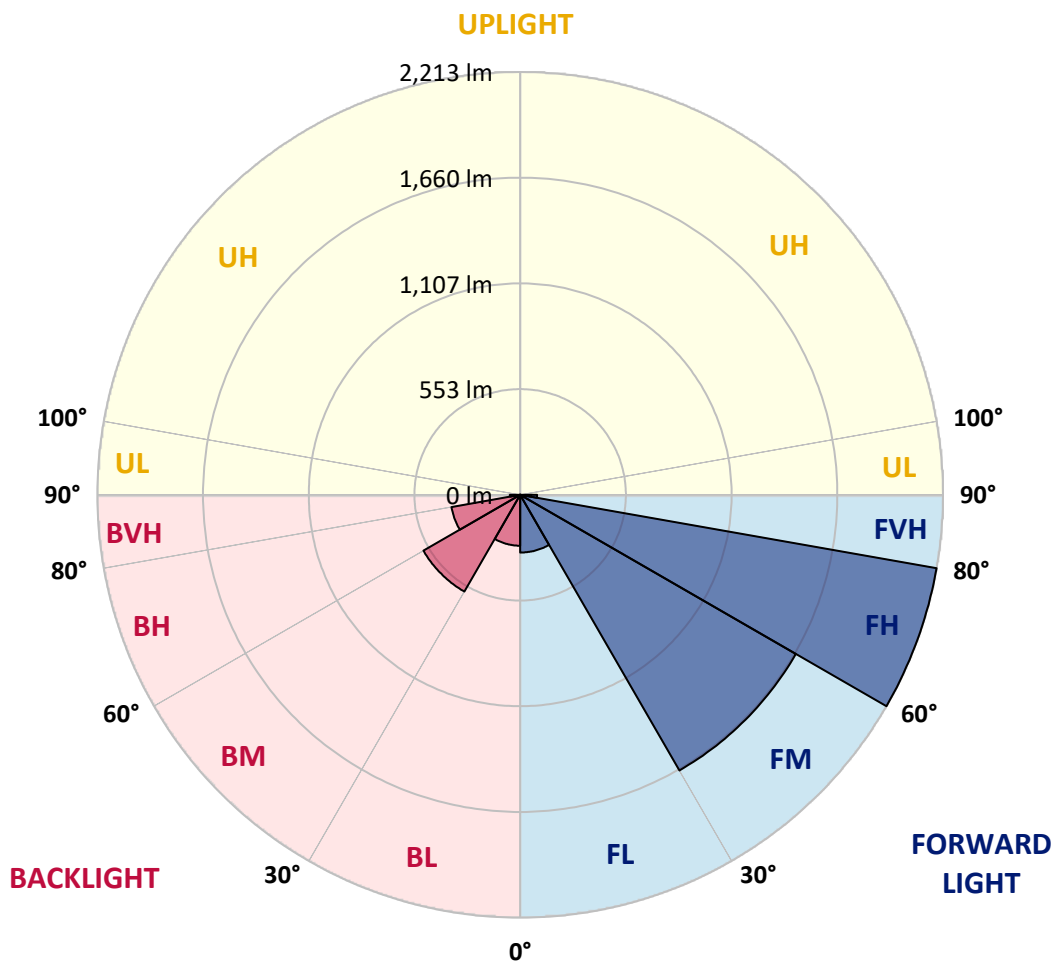
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	302.3	5.5			
FM	(30°-60°)	1666.2	30.1			
FH	(60°-80°)	2213.2	39.9			G2/5000
FVH	(80°-90°)	88.6	1.6			G1/100
BL	(0°-30°)	266.6	4.8	B1/500		
BM	(30°-60°)	584.5	10.6	B1/1000		
BH	(60°-80°)	365.0	6.6	B1/500		G1/500
BVH	(80°-90°)	53.6	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°	564.4	564.4	564.4	564.4	564.4	564.4	564.4	564.4	564.4	564.4	564.4
2.5°	592.7	593.0	593.8	591.9	586.6	585.1	584.5	579.0	575.4	570.1	565.6
5°	640.1	640.4	639.3	634.0	622.2	613.5	612.8	600.3	588.9	576.7	567.6
7.5°	689.5	690.1	686.5	676.5	660.0	644.8	643.9	626.8	609.5	591.2	577.5
10°	733.3	731.1	725.2	711.2	691.6	673.1	672.3	654.5	634.6	612.4	594.2
12.5°	762.5	760.6	753.1	736.0	714.6	697.5	696.0	679.5	660.2	635.9	614.1
15°	778.7	780.0	769.7	750.4	729.6	715.1	713.8	702.1	684.8	660.4	635.3
17.5°	780.7	781.9	772.0	752.9	735.8	726.0	725.4	717.6	705.1	681.6	655.4
20°	768.6	769.4	761.2	745.5	734.3	731.3	731.1	727.7	718.4	697.5	672.1
22.5°	751.0	751.5	745.7	734.3	730.5	735.2	736.6	735.2	728.6	709.1	685.2
25°	746.6	746.2	740.2	728.6	731.8	741.9	743.6	744.2	739.6	722.5	701.9
27.5°	767.7	766.3	754.8	736.2	738.3	750.4	752.7	758.2	755.3	740.4	720.8
30°	828.5	826.2	802.5	765.0	754.8	761.0	763.9	772.6	773.2	760.6	746.0
32.5°	931.3	928.4	886.0	818.9	782.6	771.8	774.5	787.6	794.6	784.9	769.2
35°	1061.2	1057.9	1002.2	910.4	829.3	792.5	794.4	804.8	818.9	805.2	784.3
37.5°	1196.5	1188.7	1135.1	1018.1	903.4	836.7	836.7	838.0	844.6	816.2	802.2
40°	1331.1	1323.4	1274.8	1144.8	999.3	906.3	901.9	872.5	867.2	842.7	838.0
42.5°	1456.3	1454.0	1425.4	1287.9	1112.0	974.7	968.6	918.8	919.9	904.7	904.9
45°	1589.4	1589.4	1566.0	1432.4	1243.2	1084.7	1078.6	1005.2	1016.6	1009.6	1026.5
47.5°	1698.0	1701.4	1698.2	1582.9	1395.8	1224.4	1213.4	1125.0	1156.9	1181.0	1230.1
50°	1808.9	1814.2	1814.8	1748.0	1580.3	1390.5	1378.0	1284.1	1355.2	1424.2	1520.7
52.5°	1969.9	1981.8	1934.2	1912.8	1806.2	1587.6	1575.3	1488.7	1607.4	1704.2	1870.5
55°	2119.1	2108.7	2074.7	2088.0	2048.2	1812.1	1802.8	1726.8	1888.3	2014.2	2230.2
57.5°	2199.8	2199.1	2233.2	2290.1	2309.0	2088.9	2081.2	2007.2	2205.2	2299.8	2567.8
60°	2294.6	2296.0	2380.5	2509.6	2587.8	2433.6	2430.2	2374.1	2512.9	2566.3	2832.7
62.5°	2307.9	2331.8	2477.4	2699.6	2848.6	2836.3	2843.9	2704.5	2788.2	2779.1	3030.5
65°	2155.3	2186.8	2450.3	2757.1	3108.0	3276.7	3283.7	3036.9	3005.2	2960.9	3101.2
67.5°	1842.5	1889.1	2175.4	2632.1	3193.5	3602.3	3612.1	3294.6	3185.3	3022.5	2930.9
70°	1340.8	1392.6	1680.7	2248.0	3041.1	3706.3	3717.5	3408.5	3192.2	2847.1	2502.1
72.5°	809.9	850.5	1088.1	1655.0	2566.7	3516.8	3536.7	3264.0	2914.4	2411.6	1847.6
75°	355.7	382.2	526.1	953.7	1837.5	2909.7	2934.5	2793.8	2368.0	1752.6	1092.1
77.5°	151.5	159.1	215.8	414.3	1038.8	1988.3	2022.4	2041.3	1606.6	953.7	461.5
80°	94.4	97.5	122.1	187.5	486.1	1116.7	1153.5	1201.1	797.8	350.6	161.2
82.5°	57.4	60.9	81.1	113.4	253.1	506.2	523.8	557.4	309.6	151.5	83.4
85°	34.5	37.0	49.7	71.7	144.1	199.1	198.9	219.9	145.8	97.5	44.0
87.5°	16.5	18.4	26.5	37.2	72.6	74.7	70.0	79.2	88.5	63.9	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	564.4	564.4	564.4	564.4	564.4	564.4	564.4	564.4	564.4	564.4	564.4
2.5°	564.0	563.3	560.8	558.9	558.5	557.4	556.5	557.0	557.8	558.0	558.0
5°	563.8	561.8	558.5	557.2	558.9	561.2	564.0	567.8	570.1	571.8	572.9
7.5°	572.9	569.0	565.4	564.6	568.0	574.1	580.5	588.5	594.0	597.8	598.5
10°	588.1	583.2	579.6	580.3	586.4	595.1	604.2	614.5	622.8	627.9	628.3
12.5°	605.6	600.8	597.4	600.6	610.7	621.3	630.8	639.7	647.3	652.4	652.4
15°	625.7	622.2	618.3	625.7	639.3	648.8	652.8	657.1	661.3	665.1	664.3
17.5°	645.0	641.8	639.7	648.4	662.6	667.0	664.3	661.1	661.1	663.2	663.6
20°	661.7	658.8	660.2	668.7	676.1	671.5	661.7	651.4	647.3	648.4	649.5
22.5°	676.3	675.0	678.9	682.9	677.6	661.7	643.5	629.6	624.5	624.1	624.5
25°	693.3	693.2	698.1	690.9	667.4	638.0	613.5	600.1	597.2	599.5	603.3
27.5°	714.6	716.7	719.1	692.8	646.5	602.1	577.3	568.0	570.9	576.4	580.0
30°	741.7	747.4	742.1	688.0	616.6	561.2	537.5	534.8	542.6	550.4	554.2
32.5°	768.0	777.0	764.1	675.7	577.9	517.8	499.4	498.6	508.1	515.7	521.0
35°	789.3	806.9	780.6	651.3	533.1	477.8	464.3	459.2	462.6	471.5	477.6
37.5°	817.0	846.3	791.9	613.9	484.6	444.8	429.0	417.3	414.3	417.9	420.9
40°	867.6	906.4	797.2	561.8	437.2	411.8	395.9	378.6	366.7	358.0	358.1
42.5°	950.2	984.7	793.8	498.4	393.4	379.6	361.6	341.6	322.3	302.6	301.1
45°	1084.5	1101.2	783.6	431.3	354.9	345.8	328.9	309.0	283.3	260.9	258.8
47.5°	1299.3	1262.3	767.7	372.7	321.0	317.2	301.6	278.7	251.4	233.4	231.9
50°	1592.2	1494.9	759.9	326.1	291.0	292.2	279.5	255.2	229.4	216.1	214.6
52.5°	1942.6	1765.9	774.9	290.1	266.9	270.9	261.4	238.7	217.1	206.7	205.1
55°	2306.0	2046.5	791.0	263.9	244.2	252.0	248.7	230.0	210.4	200.8	199.5
57.5°	2617.1	2256.0	758.8	242.7	223.9	236.0	238.9	224.5	207.0	198.3	196.8
60°	2813.0	2340.3	674.2	222.8	207.8	223.3	233.2	223.0	208.4	207.6	206.5
62.5°	2905.9	2332.9	547.4	207.0	197.7	217.8	237.4	231.5	223.5	230.4	230.9
65°	2864.2	2221.5	407.6	196.6	190.5	219.9	249.9	247.6	227.9	234.7	235.7
67.5°	2589.6	1955.5	301.8	187.5	182.6	225.8	272.6	252.9	219.4	224.3	221.3
70°	2093.1	1550.3	232.8	177.3	174.4	225.0	282.9	249.7	210.1	211.2	203.1
72.5°	1443.4	1057.2	189.4	167.8	162.7	205.1	275.7	241.7	202.3	193.6	182.8
75°	784.9	567.5	161.0	157.9	142.0	180.1	262.4	236.0	195.3	183.7	177.6
77.5°	308.8	235.5	139.7	144.5	124.2	159.1	247.6	225.2	185.6	170.4	167.4
80°	126.1	120.2	115.8	124.9	106.7	139.2	229.8	212.5	174.0	158.1	152.1
82.5°	71.5	74.7	90.1	98.6	86.6	128.2	221.3	202.3	160.2	141.6	134.4
85°	36.6	43.8	62.8	70.7	63.7	109.0	203.8	177.1	128.5	108.4	109.0
87.5°	17.6	24.5	39.6	44.4	41.3	78.9	152.2	128.4	100.1	79.2	76.8
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)