

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: P397900

Luminaire Tested: **ARCH-S-PA1-60-727-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397900  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-60-727-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5419 lumens  
Efficiency: N/A  
Efficacy: 84.7 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

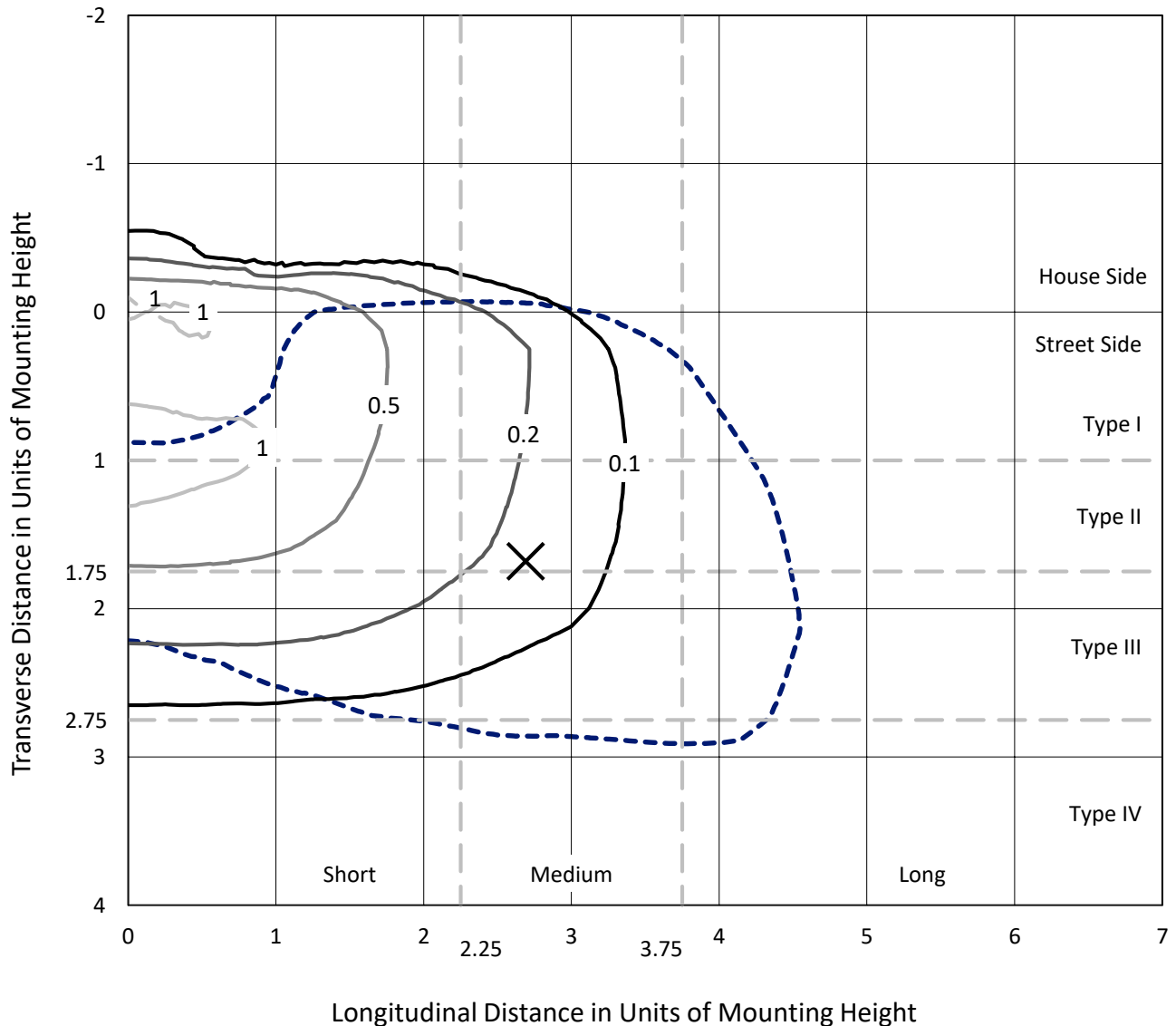
Input Watts (W): 64  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

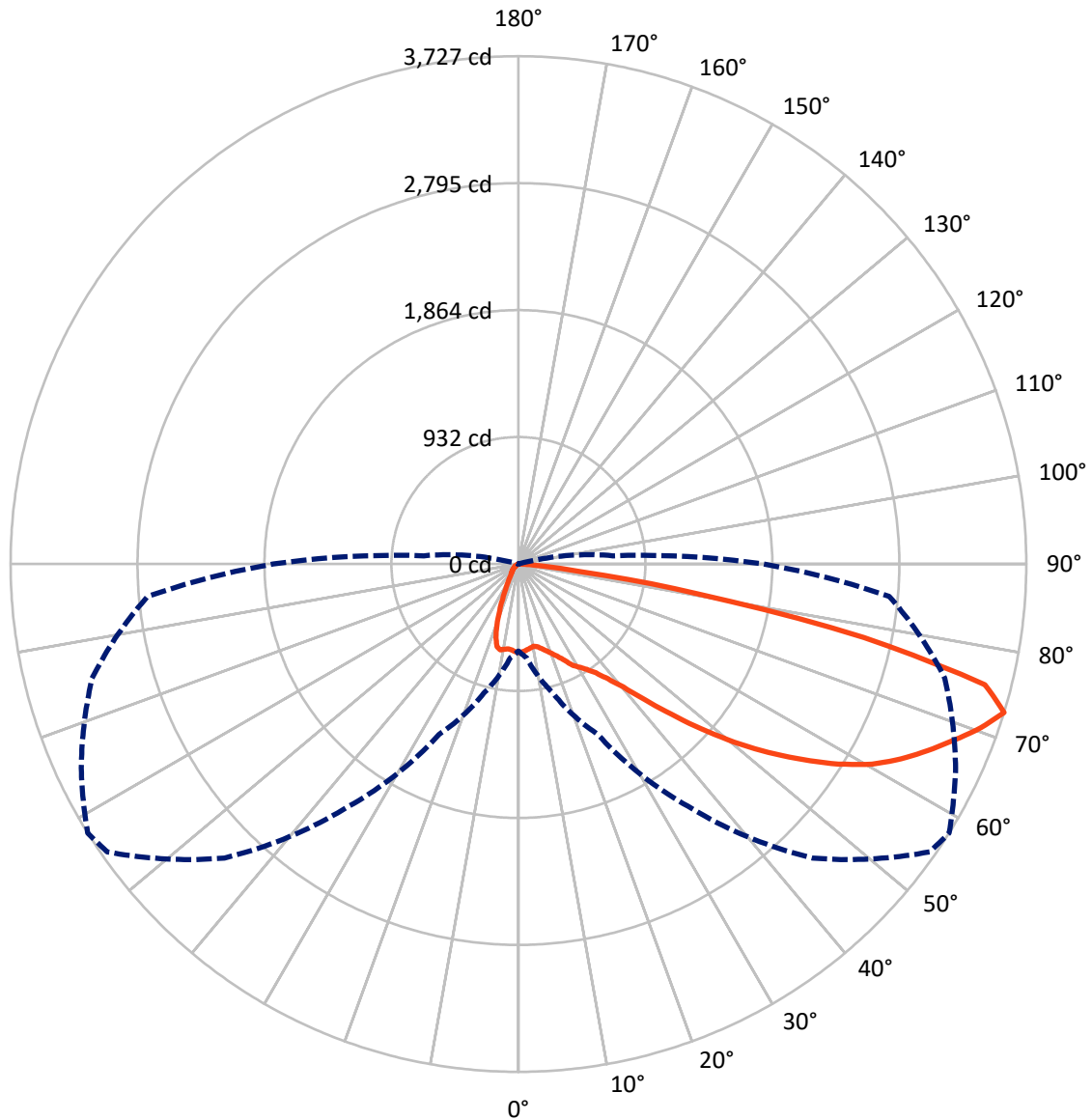


Based on 25 foot mounting height. Maximum calculated value = 1.3 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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



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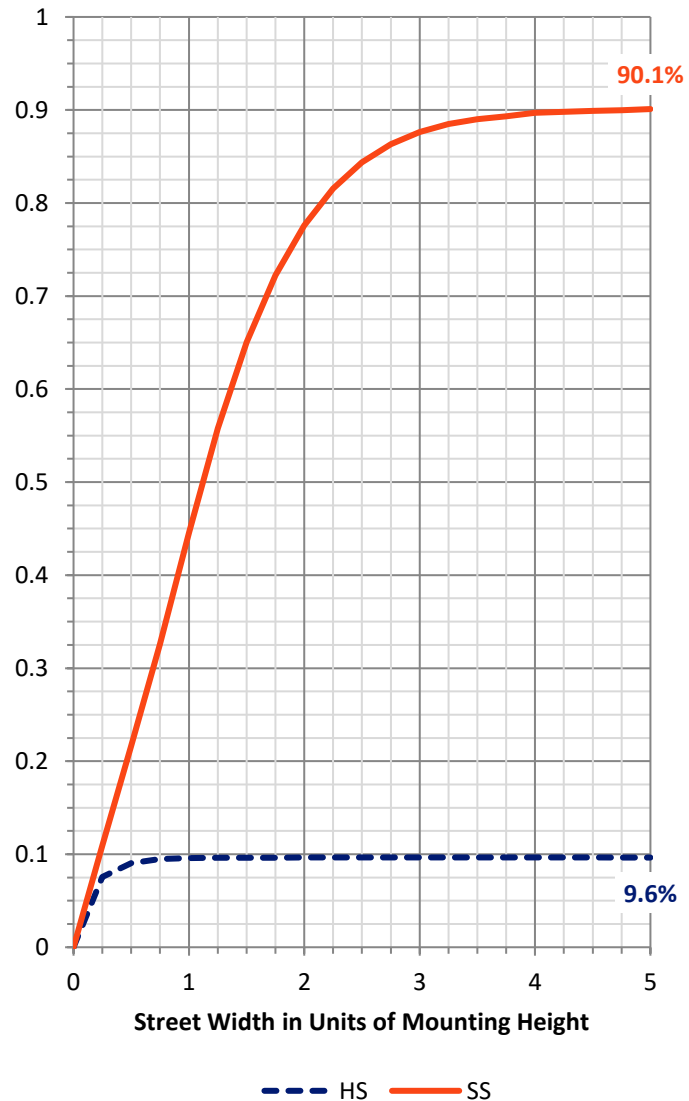
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	527.0	0.0	527.0
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	4892.0	0.0	4892.0
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	5419.0	0.0	5419.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.7	1.1
10°-20°	155.4	2.9
20°-30°	244.2	4.5
30°-40°	421.1	7.8
40°-50°	801.2	14.8
50°-60°	1268.8	23.4
60°-70°	1480.5	27.3
70°-80°	927.3	17.1
80°-90°	60.9	1.1
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°	5419.0	100.0
0°-180°	5419.0	100.0



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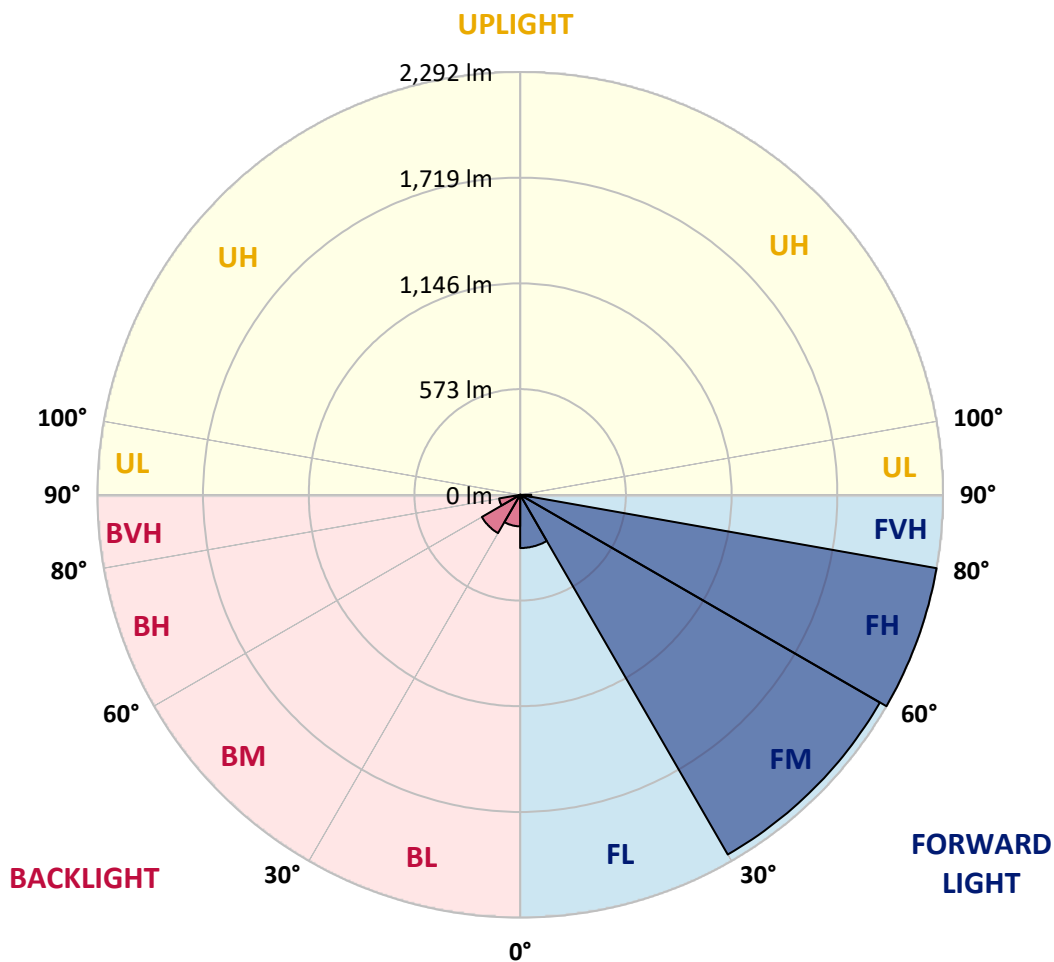
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	288.6	5.3			
FM (30°-60°)	2251.3	41.5			
FH (60°-80°)	2291.9	42.3			G2/5000
FVH (80°-90°)	60.3	1.1			G1/100
BL (0°-30°)	170.6	3.1	B1/500		
BM (30°-60°)	239.8	4.4	B1/1000		
BH (60°-80°)	116.0	2.1	B1/500		G1/500
BVH (80°-90°)	0.6	0.0			G0/10
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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2
2.5°	647.3	644.4	643.5	642.5	643.5	644.4	641.5	644.4	642.5	643.5	645.4
5°	624.1	621.2	620.2	621.2	624.1	628.9	630.9	633.8	633.8	636.7	637.6
7.5°	597.9	596.0	595.0	596.9	602.8	613.4	619.2	623.1	627.0	632.8	638.6
10°	583.4	582.4	581.4	584.4	590.2	599.9	607.6	613.4	628.0	644.4	655.1
12.5°	573.7	573.7	575.6	581.4	589.2	596.9	615.4	623.1	645.4	670.6	685.1
15°	565.9	565.9	568.8	579.5	590.2	608.6	635.7	644.4	670.6	701.6	721.0
17.5°	560.1	562.1	564.0	574.7	595.0	626.0	658.0	670.6	702.6	736.5	757.8
20°	561.1	563.0	564.0	574.7	603.7	646.4	687.1	701.6	738.4	774.3	795.6
22.5°	566.9	569.8	570.8	585.3	619.2	667.7	720.0	736.5	776.2	814.0	830.5
25°	591.1	593.1	587.3	599.9	641.5	700.6	762.7	780.1	819.8	854.7	868.3
27.5°	673.5	675.4	643.5	628.9	659.0	727.8	815.0	839.2	888.6	911.9	913.8
30°	851.8	853.8	790.8	722.0	700.6	751.0	844.1	878.0	941.9	968.1	956.5
32.5°	1081.5	1079.5	993.3	891.5	799.5	791.7	885.7	921.6	991.4	1016.6	1007.8
35°	1312.1	1315.0	1241.4	1088.3	956.5	868.3	939.0	980.7	1065.0	1100.9	1085.4
37.5°	1470.1	1489.5	1457.5	1291.8	1149.3	1009.8	1025.3	1069.9	1175.5	1223.9	1191.0
40°	1693.0	1688.1	1610.6	1488.5	1362.5	1219.1	1164.8	1186.1	1307.3	1372.2	1320.8
42.5°	1992.4	1982.7	1850.9	1731.7	1591.2	1474.0	1363.5	1359.6	1458.5	1534.0	1459.4
45°	2263.8	2249.2	2159.1	2043.8	1889.7	1755.0	1605.8	1571.8	1640.6	1704.6	1617.4
47.5°	2479.9	2455.6	2391.7	2330.6	2292.8	2083.5	1859.6	1808.3	1843.2	1890.7	1767.6
50°	2735.7	2668.8	2575.8	2539.0	2617.5	2455.6	2103.9	2054.4	2052.5	2079.6	1922.6
52.5°	2852.0	2730.8	2678.5	2709.5	2848.1	2801.6	2367.4	2296.7	2268.6	2271.5	2067.0
55°	2711.5	2697.9	2726.0	2822.9	3004.1	2977.0	2620.4	2533.2	2491.5	2439.2	2205.6
57.5°	2551.6	2593.2	2704.7	2889.8	3201.8	3160.1	2869.4	2770.6	2694.0	2573.9	2359.7
60°	2404.3	2446.9	2631.0	2905.3	3310.3	3336.5	3076.8	2982.8	2869.4	2711.5	2529.3
62.5°	2180.4	2213.4	2472.1	2883.0	3262.9	3439.2	3221.2	3150.5	3044.8	2842.3	2724.1
65°	1928.5	1949.8	2205.6	2704.7	3169.8	3427.6	3340.4	3300.7	3197.9	2978.9	2916.9
67.5°	1652.3	1677.5	1890.7	2383.9	2987.6	3373.3	3452.8	3448.9	3331.7	3130.1	3056.5
70°	1334.4	1336.3	1512.7	1976.9	2669.8	3264.8	3592.3	3601.1	3459.6	3243.5	3062.3
72.5°	638.6	690.9	980.7	1380.0	2169.8	3051.6	3683.4	3727.0	3540.0	3239.6	2731.8
75°	146.3	151.2	285.9	656.1	1272.4	2342.2	3455.7	3537.1	3344.3	2801.6	1924.6
77.5°	53.3	56.2	80.4	191.9	489.4	1210.4	2473.1	2592.3	2472.1	1811.2	910.0
80°	35.9	34.9	41.7	85.3	224.8	343.1	1264.6	1335.4	1219.1	618.3	218.0
82.5°	18.4	19.4	29.1	47.5	151.2	119.2	422.5	459.3	377.9	124.0	40.7
85°	8.7	8.7	16.5	30.0	64.0	41.7	94.0	113.4	101.8	54.3	13.6
87.5°	8.7	8.7	15.5	19.4	32.9	17.4	23.3	29.1	27.1	29.1	4.8
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°	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2	650.2
2.5°	645.4	644.4	643.5	645.4	644.4	646.4	646.4	648.3	648.3	646.4	645.4
5°	636.7	634.7	632.8	632.8	631.8	633.8	639.6	644.4	645.4	642.5	641.5
7.5°	637.6	637.6	635.7	631.8	625.1	625.1	625.1	630.9	633.8	631.8	630.9
10°	655.1	656.1	651.2	642.5	630.9	620.2	599.9	569.8	541.7	534.0	531.1
12.5°	685.1	686.1	676.4	660.9	636.7	573.7	496.2	424.5	369.2	353.7	350.8
15°	721.0	722.0	704.5	679.3	605.7	459.3	344.0	262.6	214.2	202.5	201.6
17.5°	757.8	755.9	729.7	681.3	513.6	325.6	209.3	167.6	155.1	152.1	153.1
20°	793.7	787.9	752.0	645.4	395.4	213.2	153.1	143.4	140.5	138.6	138.6
22.5°	826.6	815.0	770.4	574.7	277.2	153.1	136.6	134.7	130.8	127.9	126.9
25°	859.6	843.1	782.0	482.6	186.1	133.7	128.9	125.0	120.2	116.3	115.3
27.5°	899.3	876.0	776.2	366.3	139.5	124.0	120.2	114.4	107.6	101.8	99.8
30°	937.1	910.9	743.3	252.9	119.2	114.4	108.5	99.8	91.1	84.3	82.4
32.5°	984.6	954.5	684.2	165.7	103.7	99.8	94.0	83.3	71.7	64.0	62.0
35°	1052.4	1018.5	608.6	116.3	91.1	84.3	76.6	64.9	52.3	46.5	45.5
37.5°	1147.4	1101.8	513.6	94.0	80.4	70.7	59.1	47.5	38.8	33.9	32.9
40°	1263.7	1193.9	408.0	83.3	71.7	59.1	44.6	33.9	28.1	24.2	24.2
42.5°	1389.6	1280.1	300.4	76.6	63.0	48.5	32.9	24.2	20.4	18.4	17.4
45°	1519.5	1356.7	202.5	70.7	55.2	36.8	23.3	16.5	13.6	13.6	12.6
47.5°	1654.2	1408.1	130.8	64.0	46.5	27.1	15.5	11.6	9.7	9.7	9.7
50°	1787.9	1435.2	93.0	58.1	37.8	18.4	11.6	8.7	7.8	7.8	7.8
52.5°	1884.8	1417.8	74.6	50.4	29.1	13.6	8.7	6.8	5.8	5.8	5.8
55°	1969.2	1387.7	64.9	43.6	21.3	9.7	6.8	5.8	4.8	4.8	4.8
57.5°	2055.4	1348.9	58.1	36.8	15.5	6.8	4.8	3.9	3.9	3.9	3.9
60°	2133.9	1283.1	50.4	29.1	10.7	4.8	3.9	2.9	2.9	2.9	2.9
62.5°	2210.5	1226.8	43.6	22.3	7.8	3.9	1.9	1.9	1.0	1.0	1.0
65°	2254.1	1151.3	34.9	14.5	4.8	2.9	1.0	1.0	0.0	0.0	0.0
67.5°	2240.5	1061.1	24.2	8.7	2.9	1.9	1.0	0.0	0.0	0.0	0.0
70°	2146.5	940.0	14.5	4.8	2.9	1.9	1.0	0.0	0.0	0.0	0.0
72.5°	1797.6	695.8	8.7	3.9	1.9	1.0	0.0	0.0	0.0	0.0	0.0
75°	1200.7	319.8	4.8	2.9	1.0	1.0	0.0	0.0	0.0	0.0	0.0
77.5°	549.5	95.9	2.9	1.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	110.5	25.2	1.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	23.3	4.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)