

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: P397981

Luminaire Tested: **ARCH-S-PA1-70-730-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397981  
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-PA1-70-730-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 930mA 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: 6578 lumens  
Efficiency: N/A  
Efficacy: 88.9 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

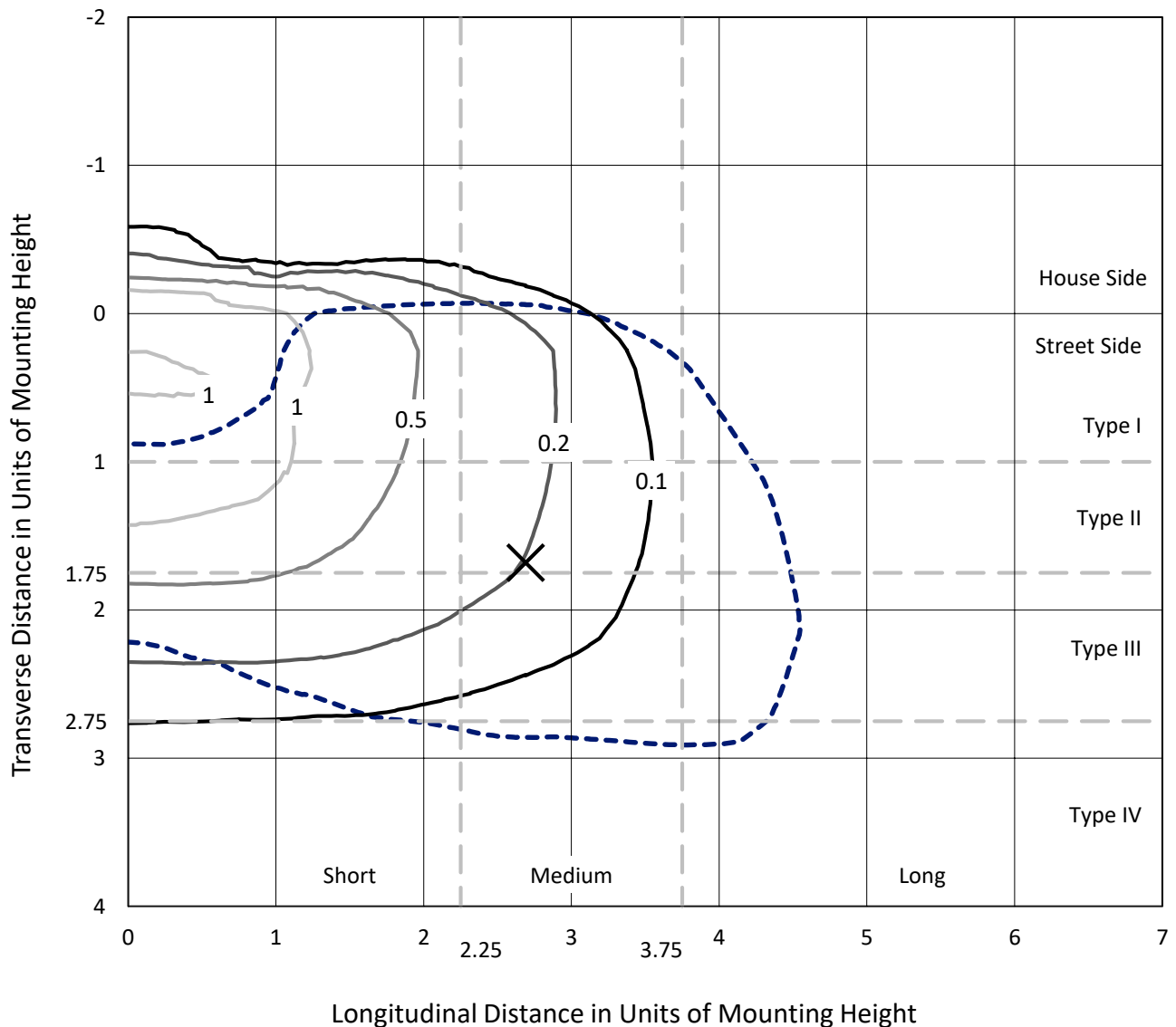
Input Watts (W): 74  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

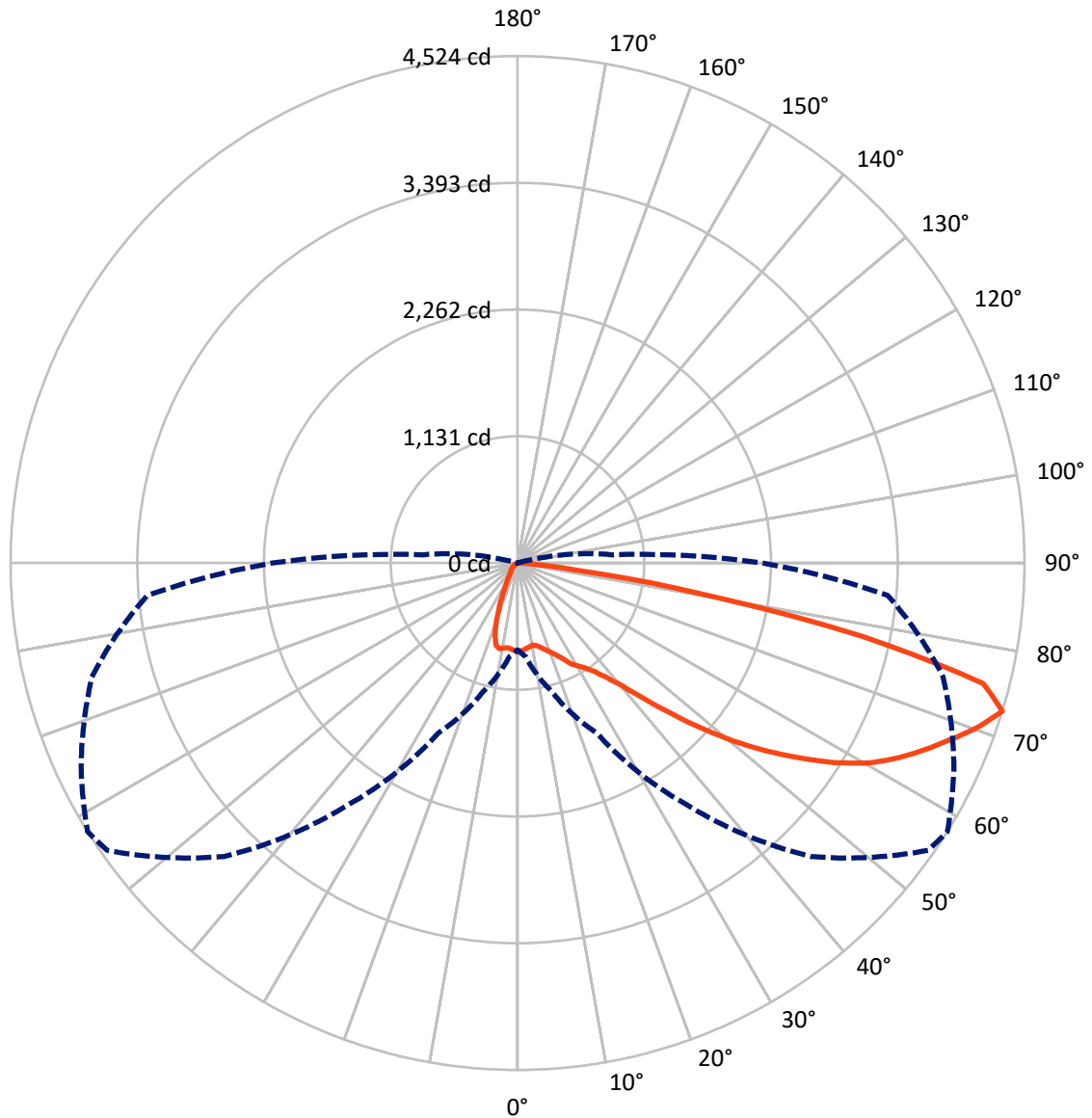


Based on 25 foot mounting height. Maximum calculated value = 1.6 fc  
 Type IV - Medium - Non-Cutoff

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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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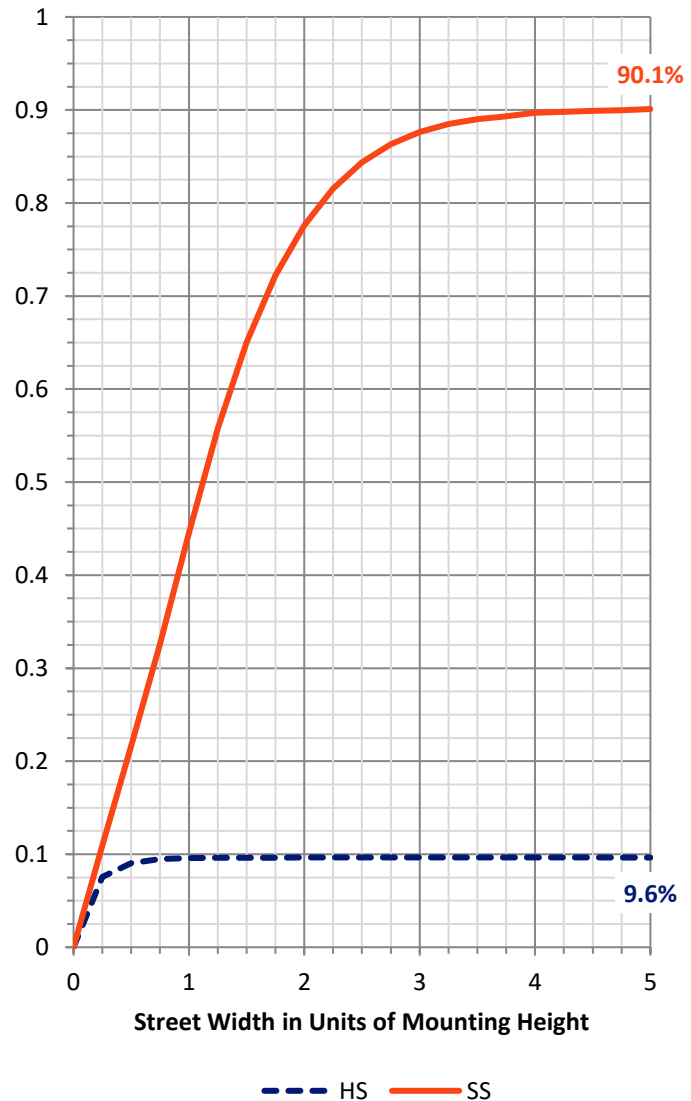
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	639.7	0.0	639.7
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	5938.3	0.0	5938.3
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	6578.0	0.0	6578.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.4	1.1
10°-20°	188.7	2.9
20°-30°	296.4	4.5
30°-40°	511.2	7.8
40°-50°	972.5	14.8
50°-60°	1540.2	23.4
60°-70°	1797.2	27.3
70°-80°	1125.6	17.1
80°-90°	73.9	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°	6578.0	100.0
0°-180°	6578.0	100.0

**Coefficient of Utilization**



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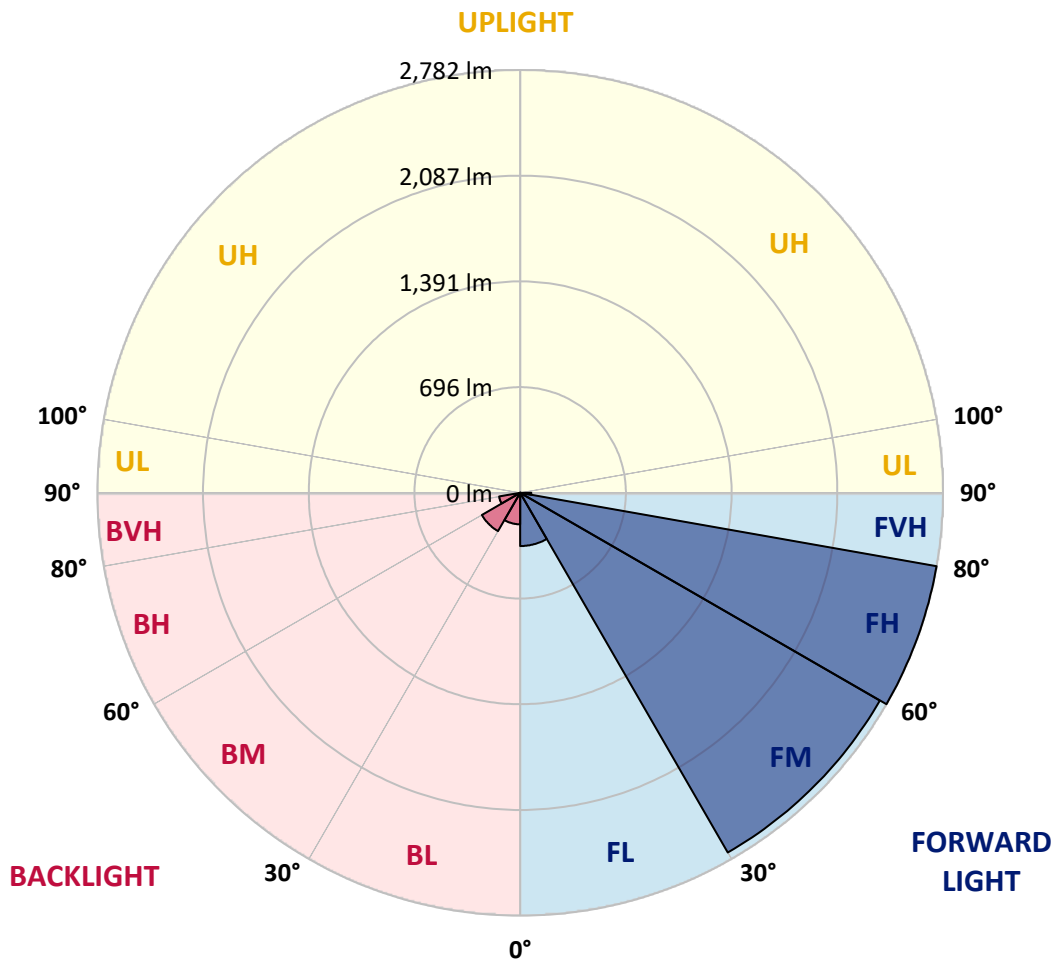
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	350.4	5.3			
FM (30°-60°)	2732.8	41.5			
FH (60°-80°)	2782.0	42.3			G2/5000
FVH (80°-90°)	73.2	1.1			G1/100
BL (0°-30°)	207.1	3.1	B1/500		
BM (30°-60°)	291.1	4.4	B1/1000		
BH (60°-80°)	140.8	2.1	B1/500		G1/500
BVH (80°-90°)	0.7	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°	789.3	789.3	789.3	789.3	789.3	789.3	789.3	789.3	789.3	789.3	789.3
2.5°	785.8	782.3	781.1	779.9	781.1	782.3	778.7	782.3	779.9	781.1	783.4
5°	757.6	754.0	752.9	754.0	757.6	763.4	765.8	769.3	769.3	772.9	774.0
7.5°	725.8	723.4	722.3	724.6	731.7	744.6	751.7	756.4	761.1	768.1	775.2
10°	708.2	707.0	705.8	709.3	716.4	728.2	737.6	744.6	762.3	782.3	795.2
12.5°	696.4	696.4	698.7	705.8	715.2	724.6	747.0	756.4	783.4	814.0	831.7
15°	687.0	687.0	690.5	703.4	716.4	738.7	771.7	782.3	814.0	851.7	875.2
17.5°	679.9	682.3	684.6	697.6	722.3	759.9	798.7	814.0	852.8	894.0	919.9
20°	681.1	683.4	684.6	697.6	732.9	784.6	834.0	851.7	896.4	939.9	965.8
22.5°	688.2	691.7	692.9	710.5	751.7	810.5	874.0	894.0	942.2	988.1	1008.1
25°	717.6	719.9	712.9	728.2	778.7	850.5	925.8	946.9	995.2	1037.5	1054.0
27.5°	817.6	819.9	781.1	763.4	799.9	883.4	989.3	1018.7	1078.7	1106.9	1109.3
30°	1034.0	1036.3	959.9	876.4	850.5	911.7	1024.6	1065.8	1143.4	1175.2	1161.0
32.5°	1312.8	1310.4	1205.7	1082.2	970.5	961.1	1075.2	1118.7	1203.4	1234.0	1223.4
35°	1592.8	1596.3	1506.9	1321.0	1161.0	1054.0	1139.9	1190.4	1292.8	1336.3	1317.5
37.5°	1784.5	1808.0	1769.2	1568.1	1395.1	1225.7	1244.6	1298.7	1426.9	1485.7	1445.7
40°	2055.1	2049.2	1955.1	1806.8	1653.9	1479.8	1414.0	1439.8	1586.9	1665.7	1603.3
42.5°	2418.5	2406.8	2246.8	2102.1	1931.5	1789.2	1655.1	1650.4	1770.4	1862.1	1771.6
45°	2747.9	2730.3	2620.9	2480.9	2293.9	2130.3	1949.2	1908.0	1991.5	2069.2	1963.3
47.5°	3010.2	2980.8	2903.2	2829.1	2783.2	2529.1	2257.4	2195.0	2237.4	2295.0	2145.6
50°	3320.8	3239.6	3126.7	3082.0	3177.3	2980.8	2553.8	2493.8	2491.5	2524.4	2333.8
52.5°	3462.0	3314.9	3251.4	3289.0	3457.2	3400.8	2873.8	2787.9	2753.8	2757.3	2509.1
55°	3291.4	3274.9	3309.0	3426.7	3646.6	3613.7	3180.8	3074.9	3024.4	2960.8	2677.3
57.5°	3097.3	3147.9	3283.1	3507.8	3886.6	3836.0	3483.1	3363.1	3270.2	3124.3	2864.4
60°	2918.5	2970.2	3193.7	3526.6	4018.4	4050.1	3734.9	3620.8	3483.1	3291.4	3070.2
62.5°	2646.8	2686.7	3000.8	3499.6	3960.7	4174.8	3910.1	3824.3	3696.0	3450.2	3306.7
65°	2340.9	2366.8	2677.3	3283.1	3847.8	4160.7	4054.8	4006.6	3881.9	3616.0	3540.8
67.5°	2005.6	2036.2	2295.0	2893.8	3626.6	4094.8	4191.3	4186.6	4044.2	3799.6	3710.2
70°	1619.8	1622.2	1836.3	2399.7	3240.8	3963.1	4360.7	4371.3	4199.5	3937.2	3717.2
72.5°	775.2	838.7	1190.4	1675.1	2633.8	3704.3	4471.2	4524.2	4297.1	3932.5	3316.1
75°	177.6	183.5	347.0	796.4	1544.5	2843.2	4194.8	4293.6	4059.5	3400.8	2336.2
77.5°	64.7	68.2	97.6	232.9	594.0	1469.2	3002.0	3146.7	3000.8	2198.6	1104.6
80°	43.5	42.3	50.6	103.5	272.9	416.4	1535.1	1621.0	1479.8	750.5	264.7
82.5°	22.4	23.5	35.3	57.6	183.5	144.7	512.9	557.6	458.8	150.6	49.4
85°	10.6	10.6	20.0	36.5	77.6	50.6	114.1	137.6	123.5	65.9	16.5
87.5°	10.6	10.6	18.8	23.5	40.0	21.2	28.2	35.3	32.9	35.3	5.9
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°	789.3	789.3	789.3	789.3	789.3	789.3	789.3	789.3	789.3	789.3	789.3
2.5°	783.4	782.3	781.1	783.4	782.3	784.6	784.6	787.0	787.0	784.6	783.4
5°	772.9	770.5	768.1	768.1	767.0	769.3	776.4	782.3	783.4	779.9	778.7
7.5°	774.0	774.0	771.7	767.0	758.7	758.7	758.7	765.8	769.3	767.0	765.8
10°	795.2	796.4	790.5	779.9	765.8	752.9	728.2	691.7	657.6	648.2	644.6
12.5°	831.7	832.8	821.1	802.3	772.9	696.4	602.3	515.2	448.2	429.4	425.8
15°	875.2	876.4	855.2	824.6	735.2	557.6	417.6	318.8	260.0	245.9	244.7
17.5°	919.9	917.5	885.8	827.0	623.5	395.2	254.1	203.5	188.2	184.7	185.9
20°	963.4	956.4	912.8	783.4	479.9	258.8	185.9	174.1	170.6	168.2	168.2
22.5°	1003.4	989.3	935.2	697.6	336.4	185.9	165.9	163.5	158.8	155.3	154.1
25°	1043.4	1023.4	949.3	585.8	225.9	162.3	156.5	151.7	145.9	141.2	140.0
27.5°	1091.6	1063.4	942.2	444.7	169.4	150.6	145.9	138.8	130.6	123.5	121.2
30°	1137.5	1105.8	902.2	307.0	144.7	138.8	131.7	121.2	110.6	102.3	100.0
32.5°	1195.2	1158.7	830.5	201.2	125.9	121.2	114.1	101.2	87.0	77.6	75.3
35°	1277.5	1236.3	738.7	141.2	110.6	102.3	92.9	78.8	63.5	56.5	55.3
37.5°	1392.8	1337.5	623.5	114.1	97.6	85.9	71.8	57.6	47.1	41.2	40.0
40°	1533.9	1449.2	495.2	101.2	87.0	71.8	54.1	41.2	34.1	29.4	29.4
42.5°	1686.9	1553.9	364.7	92.9	76.5	58.8	40.0	29.4	24.7	22.4	21.2
45°	1844.5	1646.9	245.9	85.9	67.1	44.7	28.2	20.0	16.5	16.5	15.3
47.5°	2008.0	1709.2	158.8	77.6	56.5	32.9	18.8	14.1	11.8	11.8	11.8
50°	2170.3	1742.2	112.9	70.6	45.9	22.4	14.1	10.6	9.4	9.4	9.4
52.5°	2288.0	1721.0	90.6	61.2	35.3	16.5	10.6	8.2	7.1	7.1	7.1
55°	2390.3	1684.5	78.8	52.9	25.9	11.8	8.2	7.1	5.9	5.9	5.9
57.5°	2495.0	1637.5	70.6	44.7	18.8	8.2	5.9	4.7	4.7	4.7	4.7
60°	2590.3	1557.5	61.2	35.3	12.9	5.9	4.7	3.5	3.5	3.5	3.5
62.5°	2683.2	1489.2	52.9	27.1	9.4	4.7	2.4	2.4	1.2	1.2	1.2
65°	2736.2	1397.5	42.3	17.6	5.9	3.5	1.2	1.2	0.0	0.0	0.0
67.5°	2719.7	1288.1	29.4	10.6	3.5	2.4	1.2	0.0	0.0	0.0	0.0
70°	2605.6	1141.0	17.6	5.9	3.5	2.4	1.2	0.0	0.0	0.0	0.0
72.5°	2182.1	844.6	10.6	4.7	2.4	1.2	0.0	0.0	0.0	0.0	0.0
75°	1457.5	388.2	5.9	3.5	1.2	1.2	0.0	0.0	0.0	0.0	0.0
77.5°	667.0	116.5	3.5	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	134.1	30.6	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	28.2	5.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.9	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.4	1.2	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)