

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: P258179

Luminaire Tested: **ARCH-M-AF48-60-D-U-T2U-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258179  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-M-AF48-60-D-U-T2U-7030-HSS  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 405mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5873.8 lumens  
Efficiency: N/A  
Efficacy: 93.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 63  
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

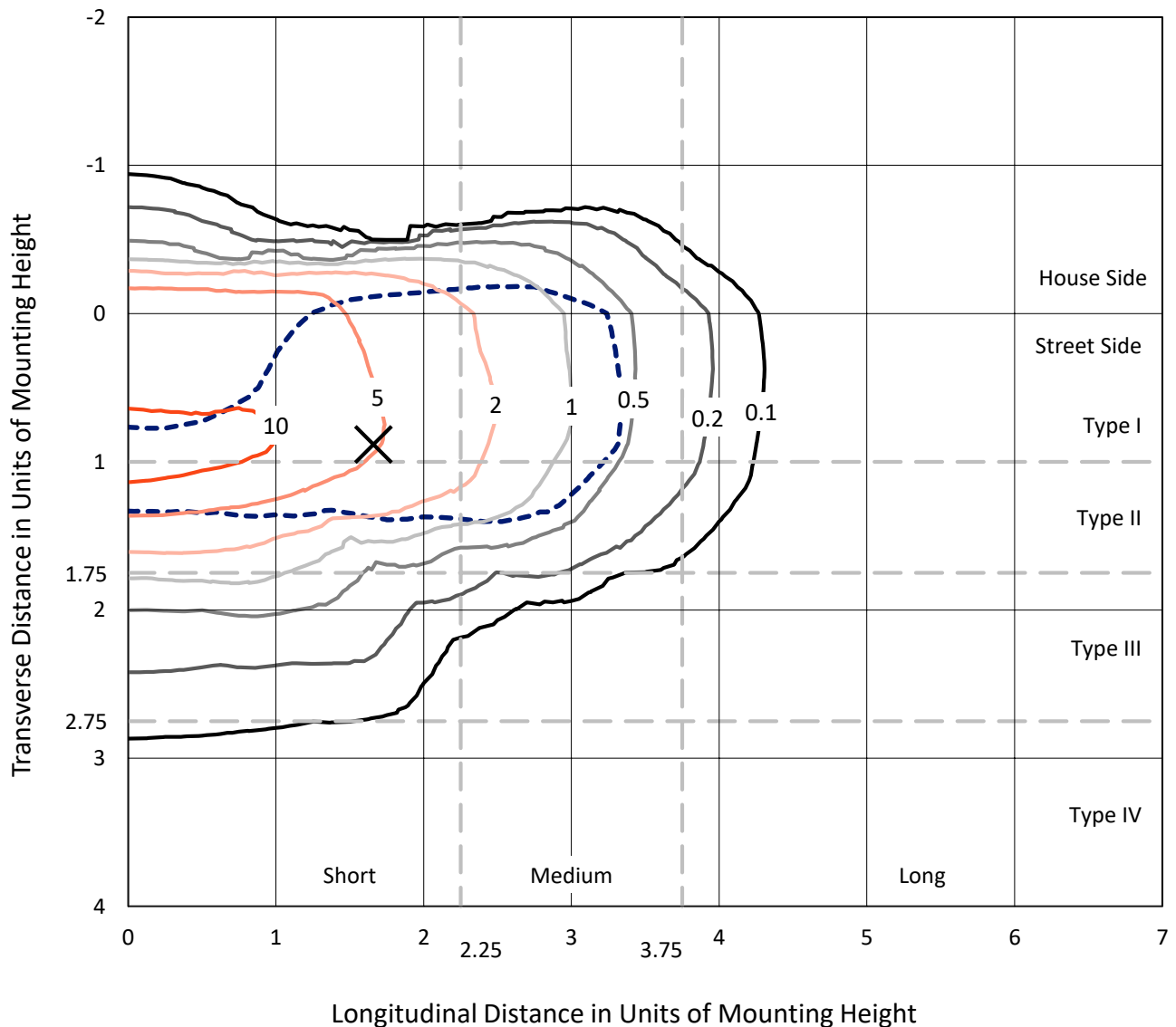


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

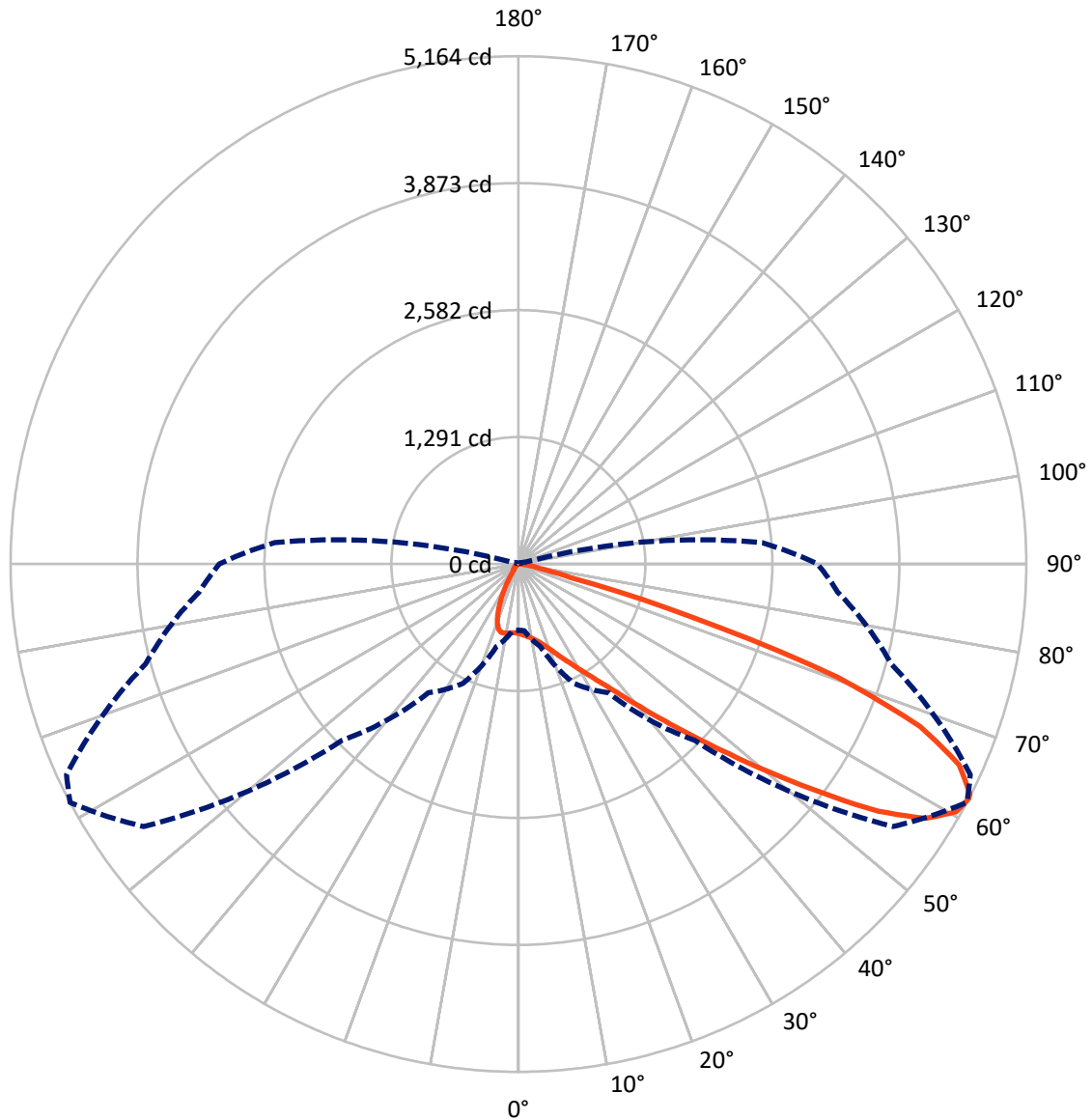


Based on 10 foot mounting height. Maximum calculated value = 13.5 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral      - - - Horizontal Cone Through 62-Deg Vertical

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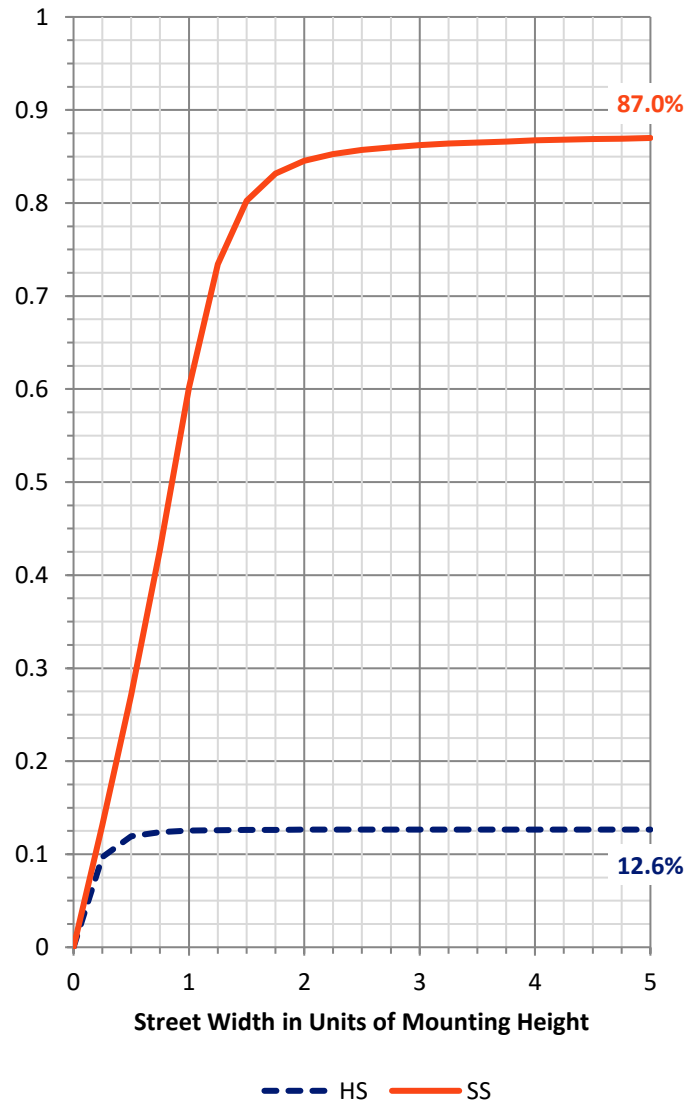
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	751.0	0.0	751.0
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	5122.7	0.0	5122.7
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	5873.8	0.0	5873.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.1	1.2
10°-20°	190.2	3.2
20°-30°	319.4	5.4
30°-40°	612.2	10.4
40°-50°	1250.4	21.3
50°-60°	1654.7	28.2
60°-70°	1285.4	21.9
70°-80°	464.0	7.9
80°-90°	29.6	0.5
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°	5873.8	100.0
0°-180°	5873.8	100.0

**Coefficient of Utilization**



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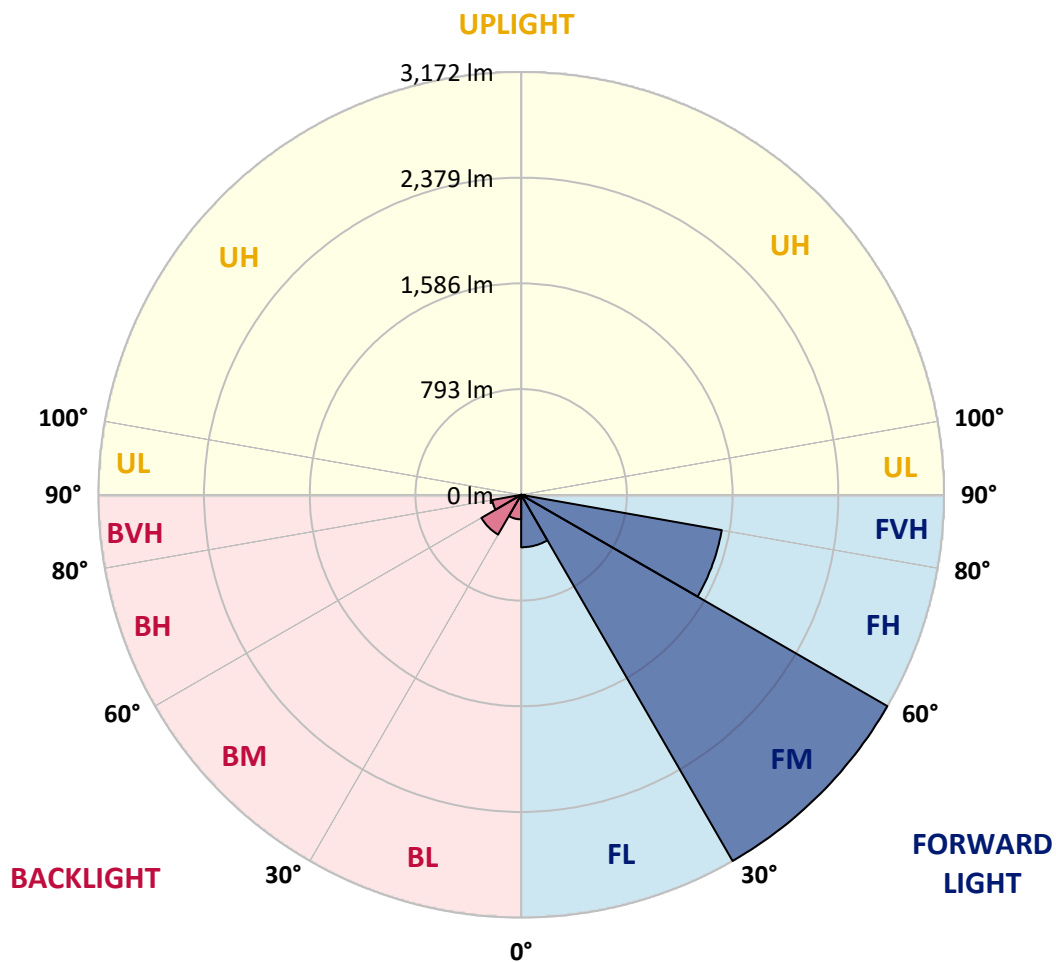
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	393.8	6.7			
FM	(30°-60°)	3172.4	54.0			
FH	(60°-80°)	1528.2	26.0			G1/1800
FVH	(80°-90°)	28.3	0.5			G1/100
BL	(0°-30°)	183.8	3.1	B1/500		
BM	(30°-60°)	344.8	5.9	B1/1000		
BH	(60°-80°)	221.1	3.8	B1/500		G1/500
BVH	(80°-90°)	1.3	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-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	707.6	707.6	707.6	707.6	707.6	707.6	707.6	707.6	707.6	707.6	707.6
2.5°	726.3	724.9	723.4	721.9	721.9	720.6	719.2	716.2	713.4	710.5	709.0
5°	739.3	737.9	736.4	737.9	736.4	736.4	735.0	732.1	729.2	724.9	720.6
7.5°	749.4	748.0	746.6	748.0	749.4	750.9	752.4	749.4	748.0	742.2	737.9
10°	762.4	761.0	759.6	762.4	762.4	769.6	771.2	769.6	768.2	763.9	756.6
12.5°	781.2	782.7	782.7	785.6	788.5	797.1	800.0	795.6	795.6	789.8	781.2
15°	815.8	815.8	815.8	818.8	820.2	831.8	834.6	830.3	833.2	823.0	814.4
17.5°	849.1	850.6	853.5	859.3	859.3	869.2	875.0	875.0	880.8	867.8	856.3
20°	882.3	883.8	888.1	901.1	901.1	914.1	924.3	928.4	934.2	921.3	901.1
22.5°	918.5	918.5	925.7	945.8	941.5	967.5	986.3	993.5	999.2	981.9	950.1
25°	973.3	967.5	973.3	992.1	989.2	1025.3	1060.0	1067.1	1074.3	1054.2	1006.5
27.5°	1077.3	1068.5	1048.4	1049.8	1049.8	1091.7	1140.7	1150.9	1155.2	1137.9	1078.7
30°	1285.2	1285.2	1210.0	1159.6	1126.4	1163.9	1233.2	1250.6	1256.3	1230.3	1152.3
32.5°	1647.6	1647.6	1509.0	1380.5	1254.9	1254.9	1334.3	1366.1	1371.9	1341.4	1250.6
35°	2109.7	2106.8	1898.9	1722.7	1477.1	1384.9	1452.7	1506.1	1523.4	1482.9	1377.6
37.5°	2600.7	2581.9	2358.2	2155.9	1819.5	1592.8	1613.0	1683.6	1699.6	1666.4	1542.2
40°	2999.2	2977.6	2797.0	2628.1	2261.3	1924.9	1844.0	1909.0	1927.8	1881.6	1738.7
42.5°	3360.3	3306.8	3182.6	3061.3	2769.6	2499.7	2151.7	2177.6	2197.9	2148.7	1959.6
45°	3621.6	3539.4	3475.7	3438.3	3283.7	3130.6	2550.1	2498.2	2505.5	2444.7	2200.7
47.5°	3628.8	3571.0	3576.8	3675.1	3738.7	3732.9	3068.5	2883.7	2856.2	2755.2	2457.8
50°	3282.2	3315.5	3420.9	3701.0	4044.7	4252.7	3685.2	3340.0	3257.7	3075.7	2713.4
52.5°	2704.7	2756.6	2954.5	3426.7	4089.5	4594.9	4324.8	3861.3	3714.0	3393.5	2909.7
55°	2118.4	2121.3	2329.2	2810.0	3790.5	4656.9	4836.1	4434.7	4209.3	3634.6	3039.7
57.5°	1457.0	1536.4	1800.7	2124.1	3116.2	4348.0	5028.1	4879.4	4589.1	3783.3	3130.6
60°	954.5	958.9	1266.5	1640.4	2121.3	3537.9	4911.1	5114.8	4896.7	3871.4	3192.8
62°	672.9	680.1	870.8	1340.1	1598.6	2535.7	4652.7	5163.8	5069.9	3923.4	3257.7
62.5°	623.9	629.6	789.8	1265.0	1501.8	2274.3	4560.3	5152.3	5096.0	3940.8	3280.8
65°	457.8	457.8	517.1	869.2	1100.4	1228.8	3864.2	4922.6	5061.3	4079.4	3367.5
67.5°	353.8	356.6	377.0	535.7	830.3	745.1	2466.4	4405.8	4700.4	4284.4	3416.5
70°	304.8	303.2	317.7	355.2	599.3	495.3	1085.9	3438.3	3936.4	4232.4	3371.8
72.5°	225.3	226.7	259.9	311.9	417.4	322.0	491.0	1825.2	2553.1	3312.6	2889.5
75°	144.4	145.9	183.3	245.5	300.4	210.9	283.0	544.4	1045.5	1836.7	1767.5
77.5°	96.8	99.7	119.8	171.9	262.8	131.4	177.6	228.2	314.7	688.8	633.9
80°	65.0	65.0	76.5	115.5	166.1	109.7	95.3	151.7	163.2	213.7	106.8
82.5°	43.2	43.2	50.6	76.5	108.2	98.3	57.8	82.3	95.3	106.8	37.5
85°	26.0	26.0	34.6	47.6	70.8	54.8	37.5	46.2	49.0	67.8	20.2
87.5°	15.9	14.4	23.1	33.3	37.5	33.3	24.6	24.6	26.0	37.5	10.2
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°	707.6	707.6	707.6	707.6	707.6	707.6	707.6	707.6	707.6	707.6	707.6
2.5°	706.2	704.7	703.2	700.4	696.0	693.1	690.2	687.4	684.5	684.5	688.8
5°	719.2	714.8	709.0	703.2	694.6	688.8	684.5	678.7	675.8	675.8	677.3
7.5°	735.0	730.7	720.6	710.5	697.5	687.4	677.3	664.3	654.1	649.8	654.1
10°	752.4	746.6	732.1	716.2	701.8	675.8	642.6	602.1	567.5	551.6	558.9
12.5°	774.0	766.8	749.4	727.7	694.6	631.1	548.7	454.8	395.6	368.2	374.0
15°	805.8	795.6	771.2	737.9	664.3	527.0	392.8	284.5	229.6	206.5	209.3
17.5°	843.3	830.3	797.1	735.0	586.2	379.7	234.0	166.1	142.9	137.2	137.2
20°	883.8	866.4	823.0	713.4	467.8	238.3	145.9	127.1	118.4	114.0	114.0
22.5°	925.7	902.5	844.8	662.7	333.6	148.7	119.8	106.8	96.8	92.5	92.5
25°	976.1	945.8	866.4	574.7	212.3	119.8	102.4	89.5	79.4	73.6	75.1
27.5°	1035.3	996.3	885.2	465.0	137.2	104.1	85.2	72.2	63.6	60.6	60.6
30°	1097.5	1051.3	889.5	348.0	111.2	89.5	70.8	59.2	53.4	50.6	50.6
32.5°	1182.6	1122.0	876.5	231.1	93.9	75.1	59.2	49.0	44.8	43.2	43.2
35°	1295.3	1214.4	846.2	142.9	79.4	62.1	49.0	43.2	39.0	37.5	37.5
37.5°	1438.3	1342.9	792.7	98.3	67.8	50.6	41.8	37.5	34.6	33.3	33.3
40°	1628.8	1498.9	723.4	85.2	57.8	43.2	36.0	33.3	30.4	30.4	30.4
42.5°	1831.0	1688.0	633.9	75.1	49.0	37.5	31.8	28.9	27.5	26.0	26.0
45°	2052.0	1881.6	522.7	66.4	41.8	33.3	28.9	24.6	23.1	23.1	23.1
47.5°	2271.5	2080.9	401.4	57.8	36.0	28.9	24.6	21.7	20.2	18.8	18.8
50°	2496.7	2261.3	294.6	50.6	31.8	26.0	21.7	18.8	15.9	14.4	14.4
52.5°	2659.9	2369.7	215.1	43.2	27.5	21.7	17.4	14.4	11.6	10.2	10.2
55°	2779.8	2436.1	157.5	36.0	24.6	18.8	14.4	11.6	8.6	8.6	7.2
57.5°	2873.6	2467.8	118.4	31.8	21.7	15.9	11.6	8.6	7.2	5.8	5.8
60°	2945.8	2469.3	88.1	26.0	18.8	13.0	8.6	5.8	4.4	4.4	4.4
62°	3041.1	2488.1	72.2	21.7	17.4	11.6	7.2	4.4	2.8	1.4	1.4
62.5°	3068.5	2495.3	69.3	21.7	15.9	10.2	5.8	4.4	2.8	1.4	1.4
65°	3195.7	2508.3	53.4	17.4	13.0	8.6	4.4	2.8	0.0	0.0	0.0
67.5°	3311.1	2488.1	39.0	13.0	10.2	5.8	4.4	1.4	0.0	0.0	0.0
70°	3299.6	2349.4	27.5	8.6	7.2	4.4	2.8	0.0	0.0	0.0	0.0
72.5°	2719.1	1758.8	18.8	7.2	4.4	2.8	1.4	0.0	0.0	0.0	0.0
75°	1641.8	769.6	13.0	4.4	4.4	2.8	1.4	0.0	0.0	0.0	0.0
77.5°	538.6	278.7	8.6	2.8	2.8	1.4	1.4	0.0	0.0	0.0	0.0
80°	88.1	46.2	4.4	2.8	2.8	1.4	1.4	0.0	0.0	0.0	0.0
82.5°	27.5	11.6	2.8	2.8	1.4	1.4	0.0	0.0	0.0	0.0	0.0
85°	10.2	4.4	2.8	2.8	1.4	1.4	0.0	0.0	0.0	0.0	0.0
87.5°	4.4	2.8	2.8	2.8	1.4	1.4	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)