

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: P231232

Luminaire Tested: **ARCH-M-AF48-50-D-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231232  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-M-AF48-50-D-U-T3-HSS  
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 305mA LIGHT ENGINES 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: 5184.3 lumens  
Efficiency: N/A  
Efficacy: 108.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

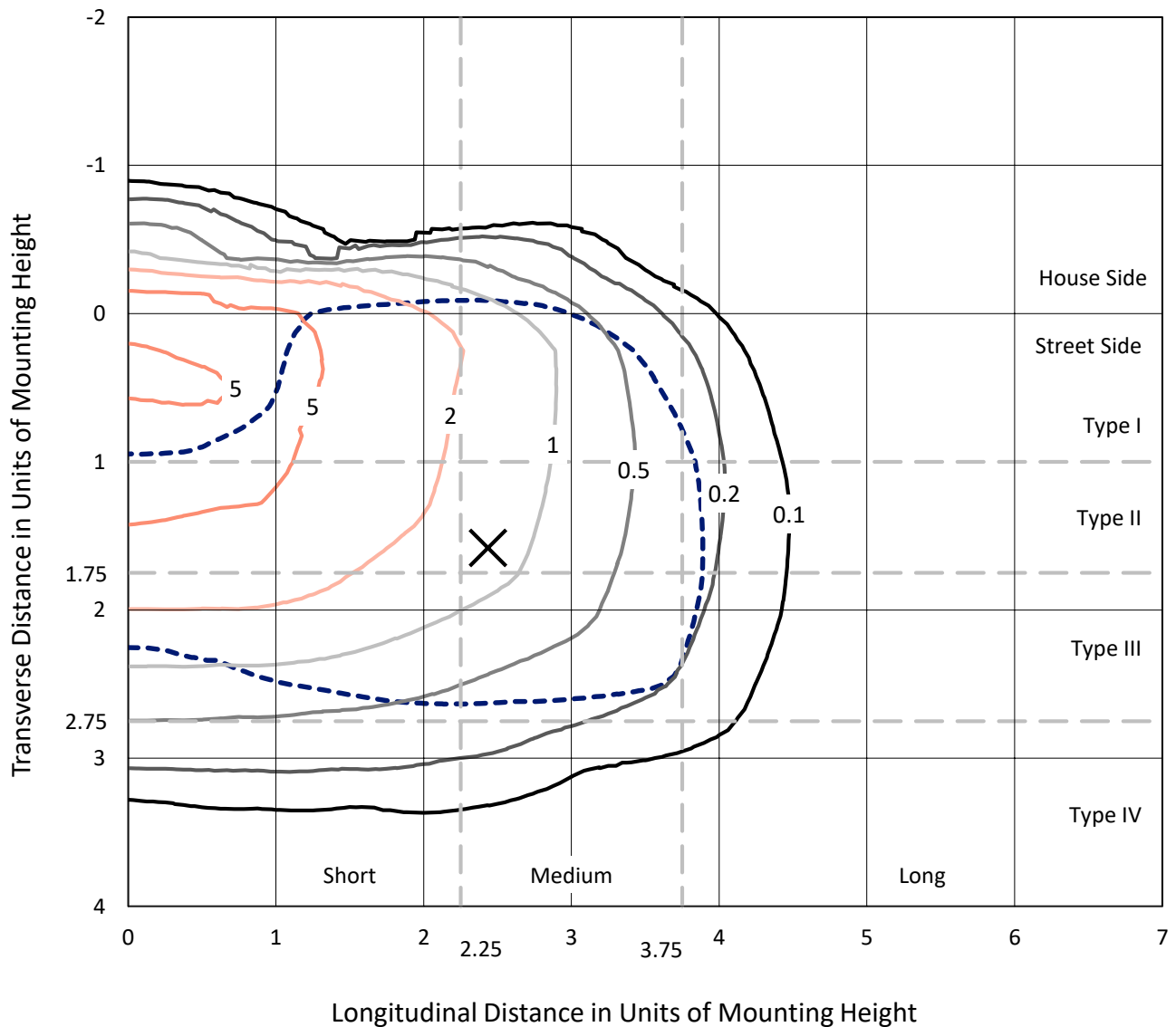
Input Watts (W): 48  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

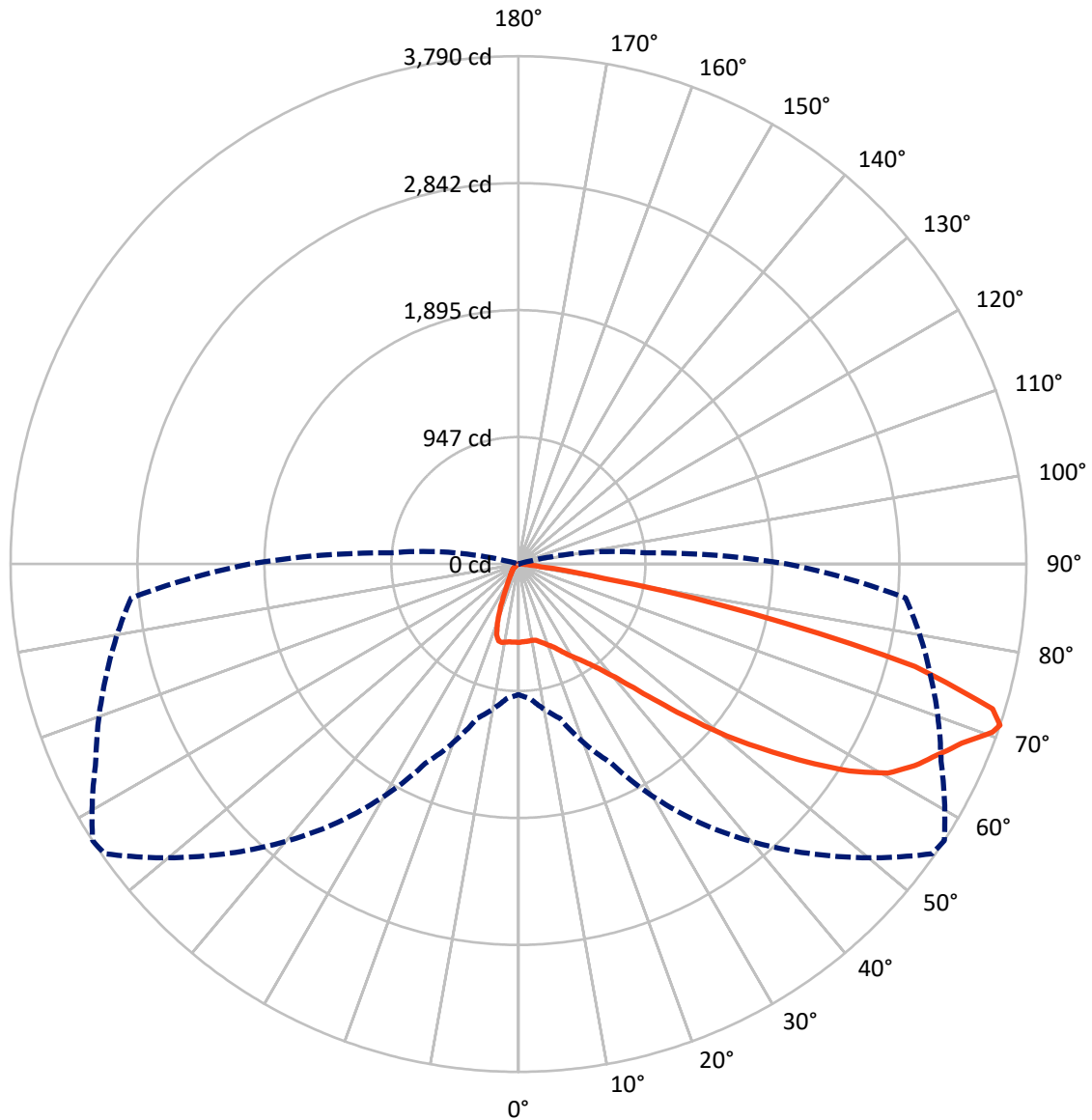


Based on 10 foot mounting height. Maximum calculated value = 7.3 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical



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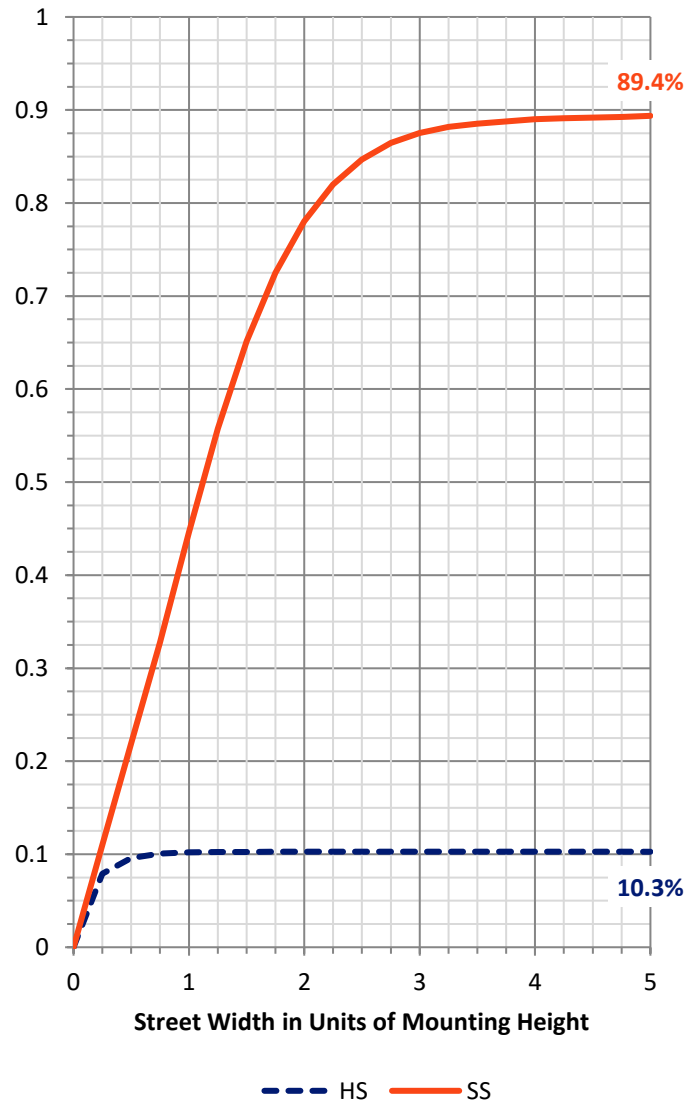
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	537.3	0.0	537.3
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	4647.1	0.0	4647.1
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	5184.3	0.0	5184.3
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.0	1.1
10°-20°	147.1	2.8
20°-30°	229.5	4.4
30°-40°	387.9	7.5
40°-50°	753.4	14.5
50°-60°	1265.2	24.4
60°-70°	1509.9	29.1
70°-80°	795.8	15.3
80°-90°	40.4	0.8
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°	5184.3	100.0
0°-180°	5184.3	100.0



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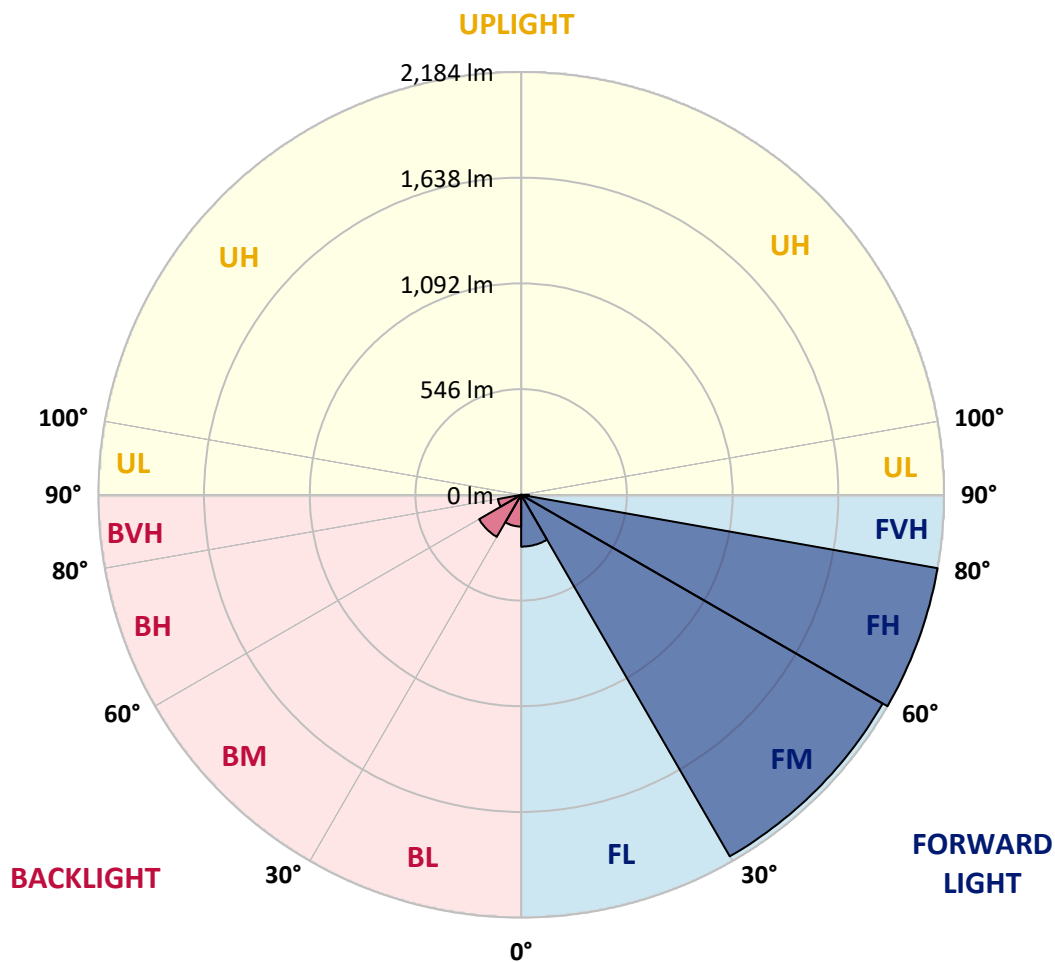
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	267.7	5.2			
FM	(30°-60°)	2155.7	41.6			
FH	(60°-80°)	2183.7	42.1			G2/5000
FVH	(80°-90°)	40.1	0.8			G1/100
BL	(0°-30°)	164.0	3.2	B1/500		
BM	(30°-60°)	250.9	4.8	B1/1000		
BH	(60°-80°)	122.0	2.4	B1/500		G1/500
BVH	(80°-90°)	0.4	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 III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9
2.5°	577.5	577.5	577.5	578.7	579.9	579.9	582.3	581.0	581.0	581.0	583.5
5°	561.7	562.9	564.2	566.6	571.4	575.0	581.0	581.0	582.3	584.7	585.9
7.5°	540.0	541.2	544.8	549.6	559.3	567.7	577.5	579.9	583.5	589.5	592.0
10°	526.7	529.2	534.0	540.0	550.9	561.7	573.9	577.5	588.3	599.2	605.3
12.5°	523.1	524.3	529.2	538.8	552.1	565.4	581.0	584.7	600.4	617.4	627.0
15°	529.2	530.3	532.8	543.6	559.3	576.2	596.8	601.6	620.9	640.3	652.3
17.5°	540.0	540.0	542.4	552.1	569.0	588.3	614.9	622.2	643.8	665.6	678.9
20°	547.3	547.3	550.9	560.6	579.9	605.3	636.7	646.3	670.4	694.6	706.8
22.5°	554.5	555.7	559.3	570.2	592.0	627.0	663.2	672.9	700.7	726.1	738.2
25°	575.0	573.9	575.0	584.7	610.1	653.6	699.5	711.6	740.5	768.3	774.4
27.5°	631.8	629.4	613.7	607.6	627.0	681.4	745.3	757.5	791.3	819.1	819.1
30°	762.3	757.5	718.8	669.2	653.6	706.8	788.9	805.8	849.3	873.4	866.1
32.5°	927.8	916.9	867.4	782.9	720.0	740.5	834.7	854.1	909.7	930.2	914.5
35°	1109.0	1107.8	1046.2	937.4	848.0	810.6	894.0	916.9	986.9	1005.2	979.8
37.5°	1301.1	1305.9	1264.9	1115.0	1010.0	925.4	972.5	999.0	1084.8	1106.6	1082.4
40°	1514.9	1513.7	1498.0	1320.4	1204.4	1088.4	1086.1	1110.2	1214.1	1247.9	1214.1
42.5°	1785.5	1783.1	1726.3	1566.9	1440.0	1301.1	1251.6	1260.0	1376.0	1431.5	1382.0
45°	2060.9	2044.1	1978.8	1841.1	1728.7	1564.4	1470.2	1470.2	1569.3	1645.4	1568.1
47.5°	2214.4	2197.4	2170.9	2094.8	2060.9	1877.3	1738.4	1721.5	1798.8	1876.1	1767.4
50°	2416.1	2416.1	2349.6	2320.7	2378.7	2249.4	2034.3	2017.5	2054.9	2116.5	1974.0
52.5°	2575.6	2546.5	2499.5	2524.8	2690.4	2631.1	2330.4	2297.8	2326.7	2342.5	2153.9
55°	2642.0	2614.3	2610.6	2703.7	2959.7	2877.6	2633.6	2604.5	2602.2	2524.8	2311.1
57.5°	2655.3	2631.1	2677.1	2840.1	3221.9	3079.3	2935.6	2913.9	2846.2	2652.9	2471.7
60°	2543.0	2555.0	2666.2	2915.0	3376.6	3254.5	3190.5	3167.6	3011.7	2761.7	2650.5
62.5°	2312.2	2341.2	2549.0	2922.3	3319.8	3325.8	3331.9	3316.1	3139.7	2860.7	2830.5
65°	2039.2	2047.6	2297.8	2822.0	3220.7	3304.0	3435.7	3434.5	3237.5	2971.8	3033.5
67.5°	1680.4	1694.9	1911.2	2483.7	3022.5	3294.4	3572.2	3568.6	3348.7	3098.6	3154.3
70°	1250.4	1268.5	1443.6	1931.6	2580.4	3173.6	3751.1	3753.4	3465.9	3195.3	3070.9
71°	974.9	1007.5	1191.1	1640.5	2354.5	3051.6	3767.9	3789.6	3479.2	3182.0	2899.3
72.5°	478.4	517.0	747.8	1154.9	1937.7	2778.5	3656.7	3699.1	3395.9	3016.5	2478.9
75°	124.4	131.7	223.5	472.4	1038.9	1841.1	2948.9	3056.4	2776.1	2296.5	1514.9
77.5°	78.6	80.9	105.1	183.6	389.0	699.5	1732.4	1785.5	1586.2	1163.4	534.0
80°	55.5	56.8	66.5	118.4	227.1	204.2	623.4	646.3	573.9	308.0	95.4
82.5°	33.9	33.9	48.3	76.1	140.1	111.1	164.3	175.1	154.7	85.7	31.4
85°	19.3	20.6	30.2	52.0	66.5	54.3	61.6	65.3	66.5	56.8	13.3
87.5°	15.8	16.9	26.6	43.5	36.2	26.6	26.6	27.8	28.9	33.9	6.0
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°	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9	585.9
2.5°	583.5	583.5	584.7	583.5	583.5	583.5	584.7	584.7	584.7	587.1	588.3
5°	585.9	585.9	585.9	584.7	583.5	583.5	585.9	587.1	587.1	590.8	590.8
7.5°	592.0	592.0	589.5	587.1	584.7	581.0	582.3	583.5	582.3	583.5	583.5
10°	605.3	605.3	601.6	596.8	589.5	578.7	564.2	546.1	529.2	523.1	520.7
12.5°	627.0	625.7	618.5	610.1	594.3	556.9	502.6	438.5	385.3	370.9	366.0
15°	651.1	648.8	640.3	625.7	583.5	484.5	370.9	288.7	237.9	225.9	223.5
17.5°	676.5	672.9	660.8	631.8	534.0	360.0	239.2	181.2	153.4	151.0	152.2
20°	703.1	698.3	681.4	619.7	431.3	240.4	154.7	140.1	137.7	137.7	138.9
22.5°	733.3	727.2	704.3	576.2	314.0	159.5	132.9	131.7	130.4	129.3	129.3
25°	768.3	761.1	726.1	497.8	216.3	130.4	126.8	123.3	120.8	118.4	117.2
27.5°	810.6	801.0	743.0	401.1	148.6	122.0	119.6	113.5	108.7	103.9	103.9
30°	852.9	840.8	738.2	302.0	120.8	113.5	108.7	101.5	94.2	89.4	88.2
32.5°	897.5	885.5	706.8	203.0	110.0	103.9	97.9	87.0	78.6	72.5	71.3
35°	964.0	954.4	645.1	134.1	99.0	91.9	83.4	72.5	61.6	55.5	54.3
37.5°	1063.1	1051.0	569.0	102.7	87.0	76.1	68.8	56.8	45.9	39.9	38.7
40°	1195.9	1159.7	478.4	90.6	76.1	62.8	53.2	41.1	32.6	28.9	28.9
42.5°	1350.6	1264.9	380.5	82.1	67.6	52.0	38.7	27.8	22.9	21.8	21.8
45°	1514.9	1362.7	282.6	76.1	59.2	41.1	27.8	19.3	16.9	15.8	15.8
47.5°	1684.0	1442.5	196.9	68.8	49.5	31.4	19.3	14.5	12.1	10.8	10.8
50°	1842.2	1494.3	138.9	61.6	42.2	22.9	14.5	10.8	8.5	8.5	8.5
52.5°	1952.2	1489.5	100.2	53.2	32.6	15.8	9.6	7.3	7.3	7.3	7.3
55°	2048.9	1471.4	78.6	45.9	25.4	10.8	7.3	6.0	6.0	4.8	4.8
57.5°	2131.0	1442.5	66.5	37.4	18.1	8.5	4.8	4.8	3.6	3.6	3.6
60°	2201.1	1406.1	55.5	31.4	12.1	6.0	3.6	2.5	2.5	1.2	2.5
62.5°	2296.5	1383.2	48.3	24.1	8.5	3.6	2.5	1.2	1.2	0.0	0.0
65°	2366.6	1339.8	41.1	16.9	4.8	2.5	1.2	1.2	0.0	0.0	0.0
67.5°	2368.9	1261.2	30.2	9.6	3.6	2.5	1.2	0.0	0.0	0.0	0.0
70°	2178.2	1075.1	19.3	4.8	2.5	1.2	1.2	0.0	0.0	0.0	0.0
71°	2002.9	952.0	15.8	3.6	2.5	1.2	0.0	0.0	0.0	0.0	0.0
72.5°	1650.2	699.5	12.1	3.6	1.2	1.2	0.0	0.0	0.0	0.0	0.0
75°	909.7	253.7	6.0	2.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	291.1	77.3	3.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	49.5	12.1	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	16.9	4.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.8	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	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)