

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: P398024

Luminaire Tested: **ARCH-S-PA1-70-830-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398024  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-70-830-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 930mA LIGHT ENGINE 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: 5461 lumens  
Efficiency: N/A  
Efficacy: 73.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

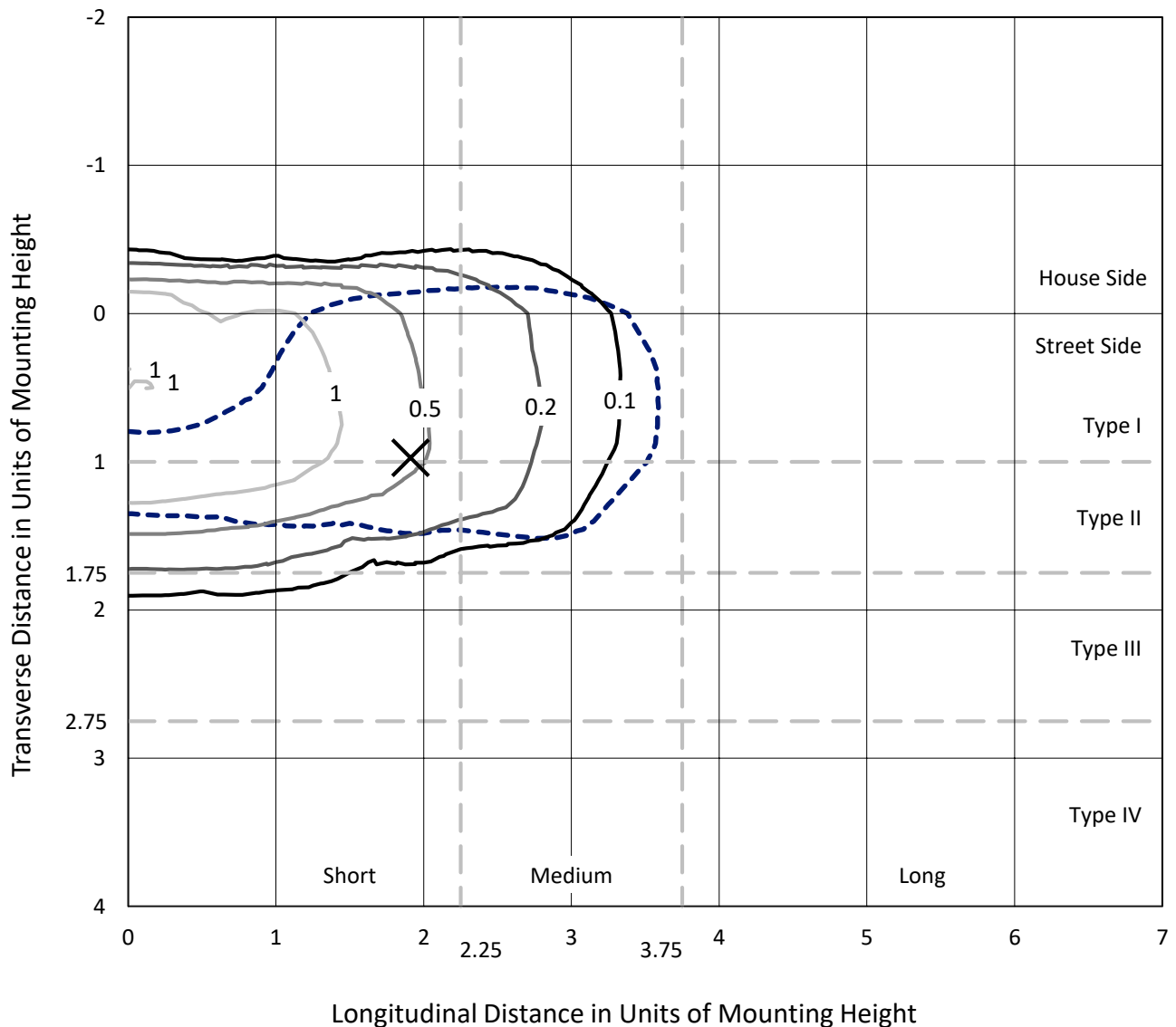
Input Watts (W): 74  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

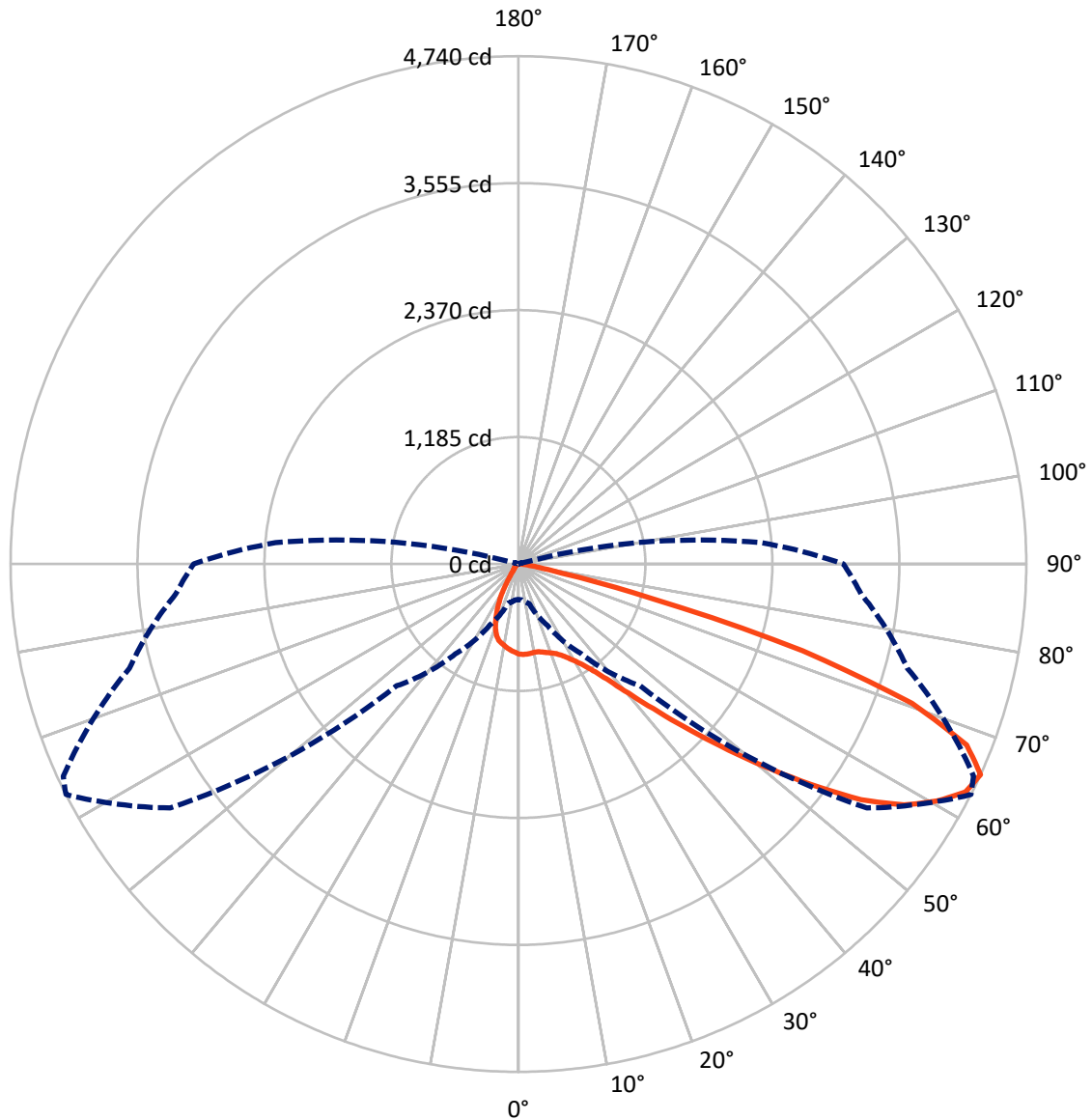
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical



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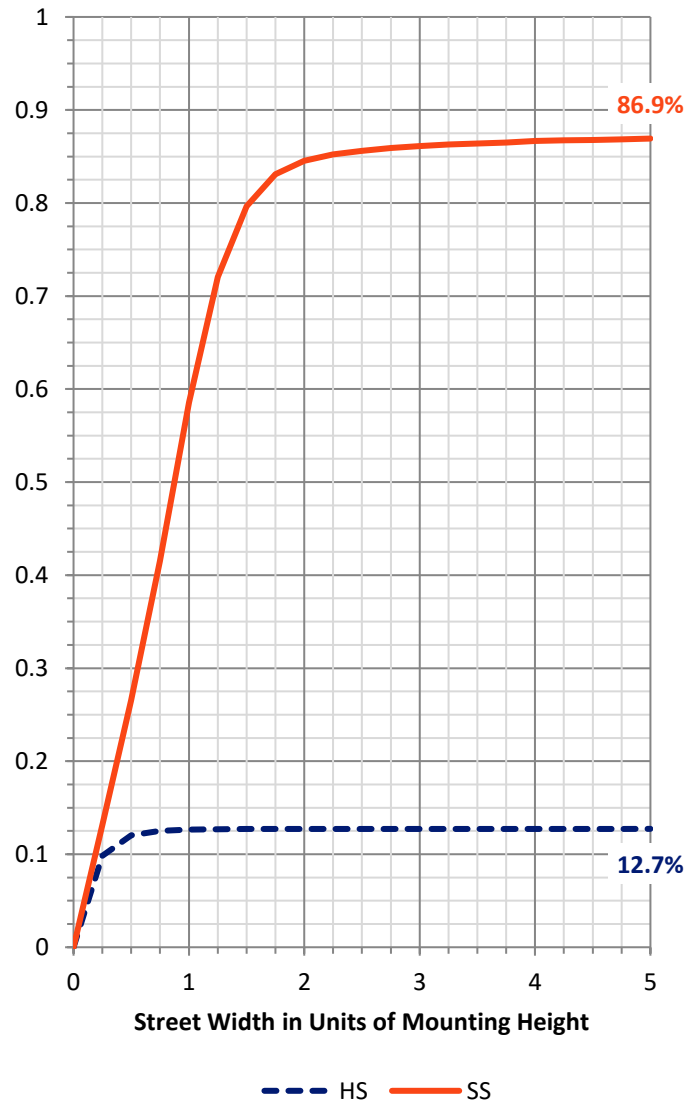
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	702.8	0.0	702.8
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	4758.2	0.0	4758.2
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	5461.0	0.0	5461.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.8	1.4
10°-20°	189.4	3.5
20°-30°	280.7	5.1
30°-40°	521.1	9.5
40°-50°	1104.0	20.2
50°-60°	1526.6	28.0
60°-70°	1222.1	22.4
70°-80°	507.7	9.3
80°-90°	32.6	0.6
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°	5461.0	100.0
0°-180°	5461.0	100.0



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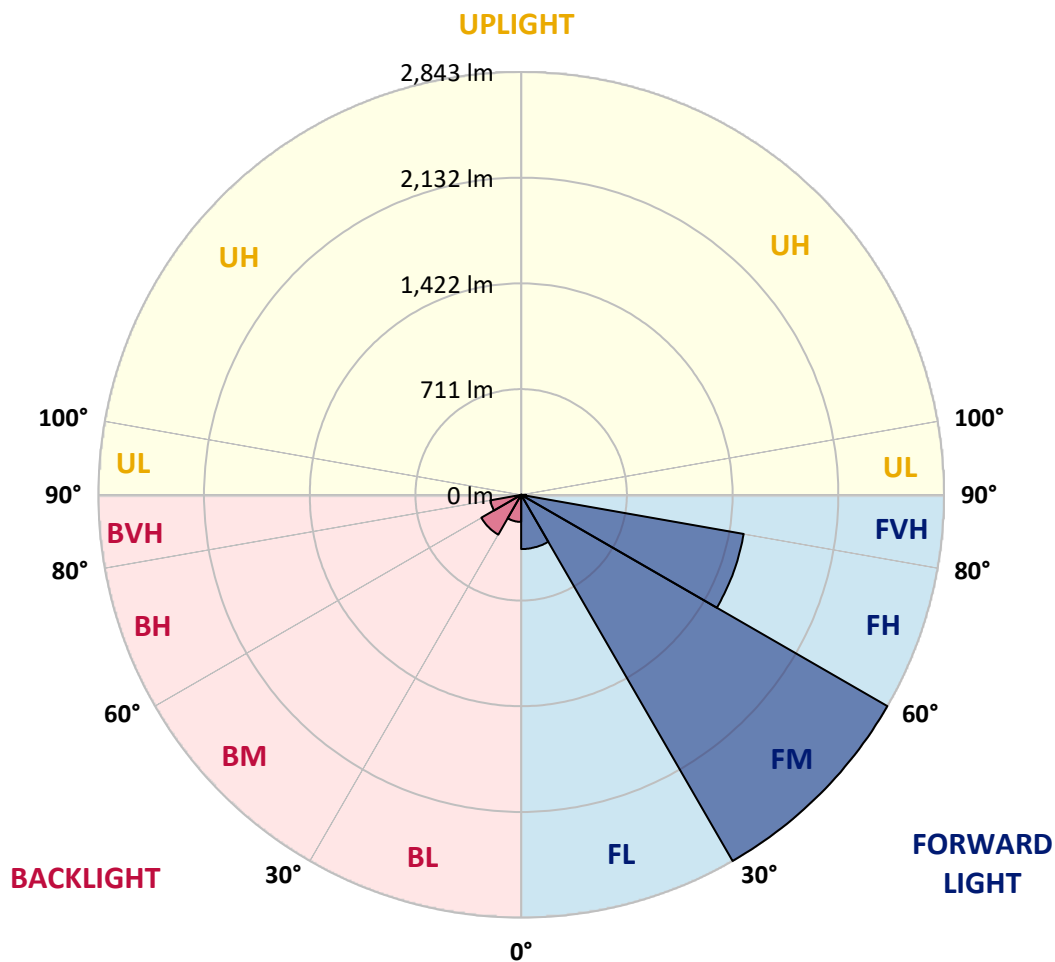
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	364.7	6.7			
FM	(30°-60°)	2843.0	52.1			
FH	(60°-80°)	1519.4	27.8			G1/1800
FVH	(80°-90°)	31.1	0.6			G1/100
BL	(0°-30°)	182.1	3.3	B1/500		
BM	(30°-60°)	308.7	5.7	B1/1000		
BH	(60°-80°)	210.4	3.9	B1/500		G1/500
BVH	(80°-90°)	1.5	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°	63°	65°	75°	85°
0°	841.3	841.3	841.3	841.3	841.3	841.3	841.3	841.3	841.3	841.3	841.3
2.5°	855.7	853.6	851.6	850.5	850.5	849.5	845.4	844.4	842.3	840.2	838.2
5°	847.5	844.4	843.3	844.4	845.4	847.5	845.4	845.4	843.3	841.3	837.1
7.5°	826.8	824.8	825.8	828.9	829.9	837.1	838.2	841.3	841.3	839.2	836.1
10°	802.1	801.1	801.1	806.2	811.4	821.7	828.9	837.1	838.2	838.2	833.0
12.5°	783.5	782.5	785.6	791.8	802.1	815.5	827.9	840.2	842.3	843.3	835.1
15°	772.2	772.2	776.3	788.7	803.1	821.7	836.1	852.6	854.7	853.6	842.3
17.5°	761.9	762.9	771.2	791.8	808.3	833.0	850.5	869.1	870.1	869.1	850.5
20°	757.8	759.8	772.2	799.0	817.6	845.4	868.1	886.6	887.7	883.5	858.8
22.5°	769.1	770.1	785.6	814.5	832.0	862.9	891.8	909.3	910.3	904.2	871.2
25°	808.3	808.3	821.7	846.4	861.9	892.8	923.7	944.4	944.4	937.2	899.0
27.5°	900.0	891.8	888.7	895.9	901.1	934.1	967.0	992.8	991.8	981.5	935.1
30°	1077.4	1056.7	1023.8	986.6	968.1	990.8	1021.7	1054.7	1053.6	1037.2	979.4
32.5°	1375.3	1345.4	1267.1	1169.1	1089.7	1064.0	1092.8	1128.9	1129.9	1110.4	1050.6
35°	1792.9	1745.4	1605.2	1469.1	1287.7	1189.7	1198.0	1237.2	1249.5	1239.2	1170.1
37.5°	2194.9	2151.6	2017.6	1828.9	1582.5	1382.5	1347.5	1381.5	1395.9	1395.9	1322.7
40°	2600.1	2549.6	2431.0	2241.3	1981.5	1683.6	1557.8	1585.6	1601.1	1604.2	1508.3
42.5°	2924.9	2891.9	2801.1	2653.7	2410.4	2211.4	1860.9	1845.4	1859.9	1848.5	1723.8
45°	3149.6	3123.8	3060.9	3005.3	2886.7	2786.7	2266.1	2161.9	2171.2	2132.0	1966.1
47.5°	3196.0	3167.1	3153.7	3231.1	3315.6	3340.3	2764.0	2538.2	2529.0	2442.4	2217.6
50°	2993.9	2997.0	3046.5	3267.1	3619.7	3842.4	3341.4	2963.0	2929.0	2736.2	2451.6
52.5°	2557.8	2607.3	2732.1	3089.8	3712.5	4207.4	3918.7	3413.5	3361.0	3021.8	2626.9
55°	2001.1	2065.0	2270.2	2681.5	3518.7	4370.3	4405.3	3881.6	3762.0	3236.2	2763.0
57.5°	1487.7	1507.3	1746.5	2121.7	3059.9	4210.5	4654.8	4242.4	4088.8	3407.3	2898.1
60°	926.8	939.2	1191.8	1615.5	2317.6	3619.7	4654.8	4490.9	4344.5	3561.0	3021.8
62.5°	576.3	580.4	675.3	1107.3	1575.3	2684.6	4462.0	4683.7	4566.2	3671.3	3128.0
65°	332.0	336.1	380.4	625.8	1024.8	1607.3	3969.2	4740.4	4687.8	3758.9	3210.4
67.5°	242.3	244.3	261.9	351.6	670.1	825.8	2981.6	4512.5	4578.5	3802.2	3208.4
70°	210.3	213.4	236.1	274.2	483.5	507.2	1517.6	3897.1	4081.6	3740.4	3112.5
72.5°	161.9	166.0	200.0	257.7	354.7	365.0	549.5	2773.3	3052.7	3353.7	2849.6
75°	111.3	115.5	149.5	212.4	292.8	273.2	302.1	1276.3	1610.4	2249.6	2169.2
77.5°	71.1	72.2	93.8	154.6	252.6	193.8	207.2	416.5	584.6	1017.6	1023.8
80°	47.4	48.5	57.7	100.0	173.2	179.4	127.8	192.8	211.3	296.9	206.2
82.5°	28.9	28.9	39.2	62.9	105.2	148.5	83.5	101.0	108.3	114.4	53.6
85°	11.3	11.3	23.7	41.2	66.0	69.1	52.6	58.8	61.9	67.0	24.7
87.5°	3.1	3.1	13.4	22.7	28.9	32.0	32.0	28.9	30.9	38.1	12.4
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°	841.3	841.3	841.3	841.3	841.3	841.3	841.3	841.3	841.3	841.3	841.3
2.5°	837.1	834.1	829.9	825.8	821.7	818.6	815.5	815.5	813.4	810.3	808.3
5°	835.1	829.9	820.7	813.4	802.1	793.8	787.7	782.5	779.4	772.2	771.2
7.5°	832.0	825.8	812.4	798.0	779.4	765.0	750.5	740.2	729.9	721.7	719.6
10°	826.8	819.6	800.0	779.4	753.6	726.8	692.8	653.6	617.5	596.9	590.7
12.5°	826.8	817.6	791.8	763.9	726.8	660.9	574.2	487.6	420.6	390.7	382.5
15°	832.0	819.6	785.6	747.5	678.4	544.4	404.1	289.7	216.5	193.8	188.7
17.5°	837.1	819.6	776.3	724.8	589.7	394.9	229.9	152.6	128.9	123.7	123.7
20°	839.2	817.6	763.9	682.5	471.2	245.4	137.1	114.4	105.2	102.1	102.1
22.5°	847.5	818.6	754.7	621.7	342.3	144.3	108.3	95.9	86.6	83.5	83.5
25°	868.1	831.0	756.7	544.4	219.6	109.3	91.8	79.4	70.1	66.0	66.0
27.5°	901.1	858.8	768.1	454.7	138.1	93.8	77.3	63.9	56.7	52.6	52.6
30°	938.2	889.7	773.2	351.6	103.1	79.4	62.9	50.5	45.4	42.3	41.2
32.5°	1003.1	943.3	769.1	241.2	84.5	67.0	50.5	40.2	36.1	35.1	35.1
35°	1107.3	1037.2	760.9	151.6	70.1	53.6	40.2	33.0	29.9	28.9	27.8
37.5°	1248.5	1174.3	736.1	100.0	57.7	42.3	33.0	27.8	24.7	23.7	23.7
40°	1420.7	1331.0	688.7	76.3	49.5	34.0	27.8	23.7	21.7	20.6	20.6
42.5°	1617.6	1505.2	613.4	66.0	41.2	28.9	23.7	19.6	18.6	17.5	17.5
45°	1833.1	1687.7	509.3	58.8	35.1	23.7	19.6	17.5	15.5	15.5	14.4
47.5°	2061.9	1871.2	391.8	51.5	29.9	20.6	17.5	14.4	13.4	12.4	12.4
50°	2282.6	2035.1	275.3	44.3	24.7	17.5	14.4	12.4	11.3	10.3	10.3
52.5°	2438.2	2134.1	194.9	38.1	20.6	15.5	11.3	9.3	8.2	8.2	8.2
55°	2563.0	2196.0	136.1	32.0	17.5	13.4	9.3	7.2	7.2	6.2	6.2
57.5°	2680.5	2236.2	100.0	26.8	14.4	10.3	7.2	5.2	5.2	4.1	4.1
60°	2802.2	2257.8	76.3	21.7	12.4	8.2	5.2	4.1	3.1	3.1	3.1
62.5°	2924.9	2271.2	58.8	17.5	10.3	6.2	4.1	3.1	2.1	1.0	1.0
65°	3032.1	2275.3	45.4	13.4	8.2	4.1	3.1	1.0	0.0	0.0	0.0
67.5°	3064.0	2227.9	35.1	10.3	6.2	3.1	2.1	0.0	0.0	0.0	0.0
70°	2977.4	2102.1	26.8	8.2	5.2	2.1	1.0	0.0	0.0	0.0	0.0
72.5°	2642.4	1763.0	20.6	5.2	4.1	2.1	1.0	0.0	0.0	0.0	0.0
75°	1890.8	940.2	14.4	4.1	3.1	1.0	0.0	0.0	0.0	0.0	0.0
77.5°	870.1	363.9	10.3	3.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0
80°	170.1	90.7	4.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	39.2	15.5	2.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.4	5.2	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.2	2.1	1.0	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)