

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: P398015

Luminaire Tested: **ARCH-S-PA1-70-827-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398015
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-PA1-70-827-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 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: 5052 lumens
Efficiency: N/A
Efficacy: 68.3 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

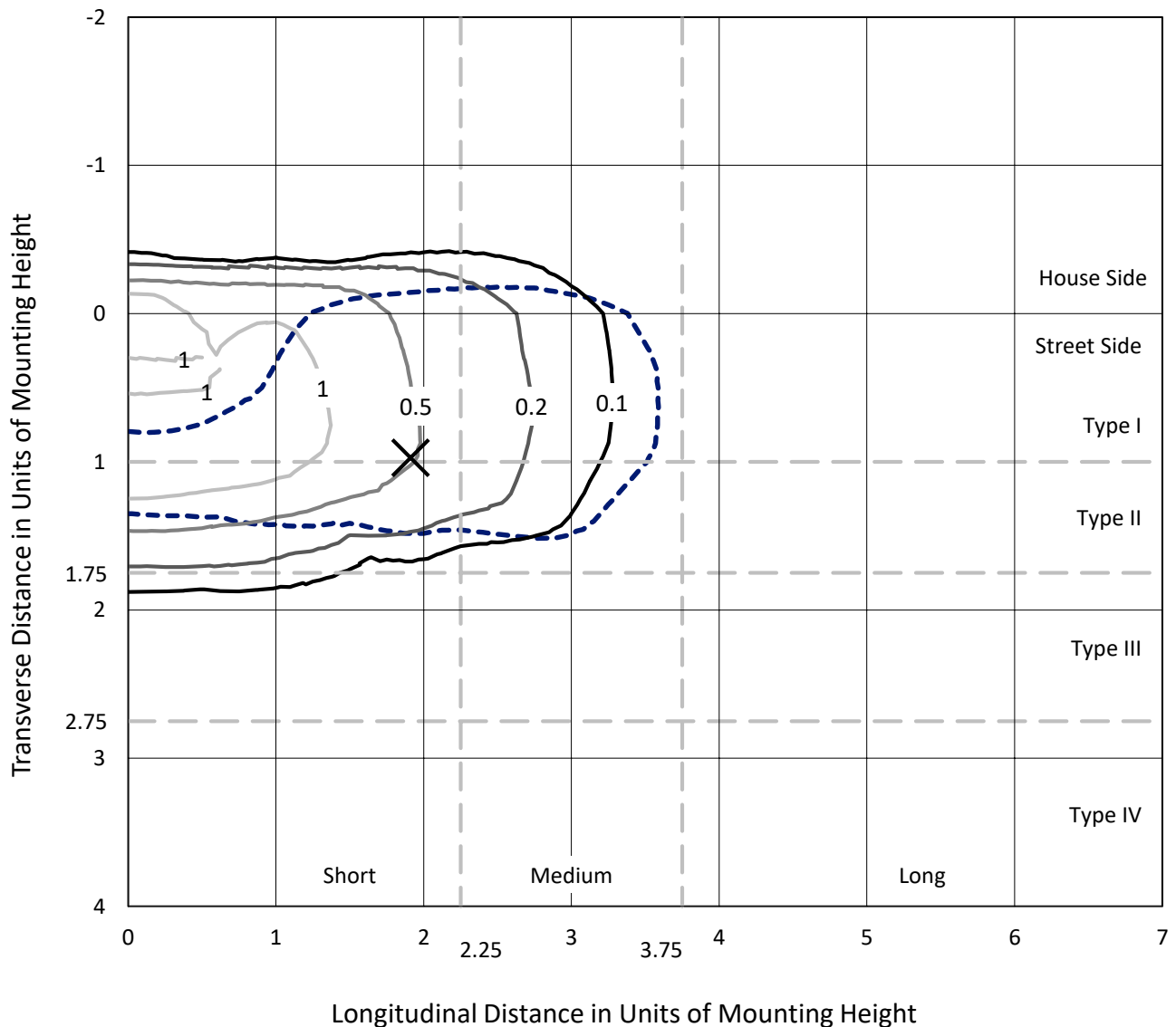
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

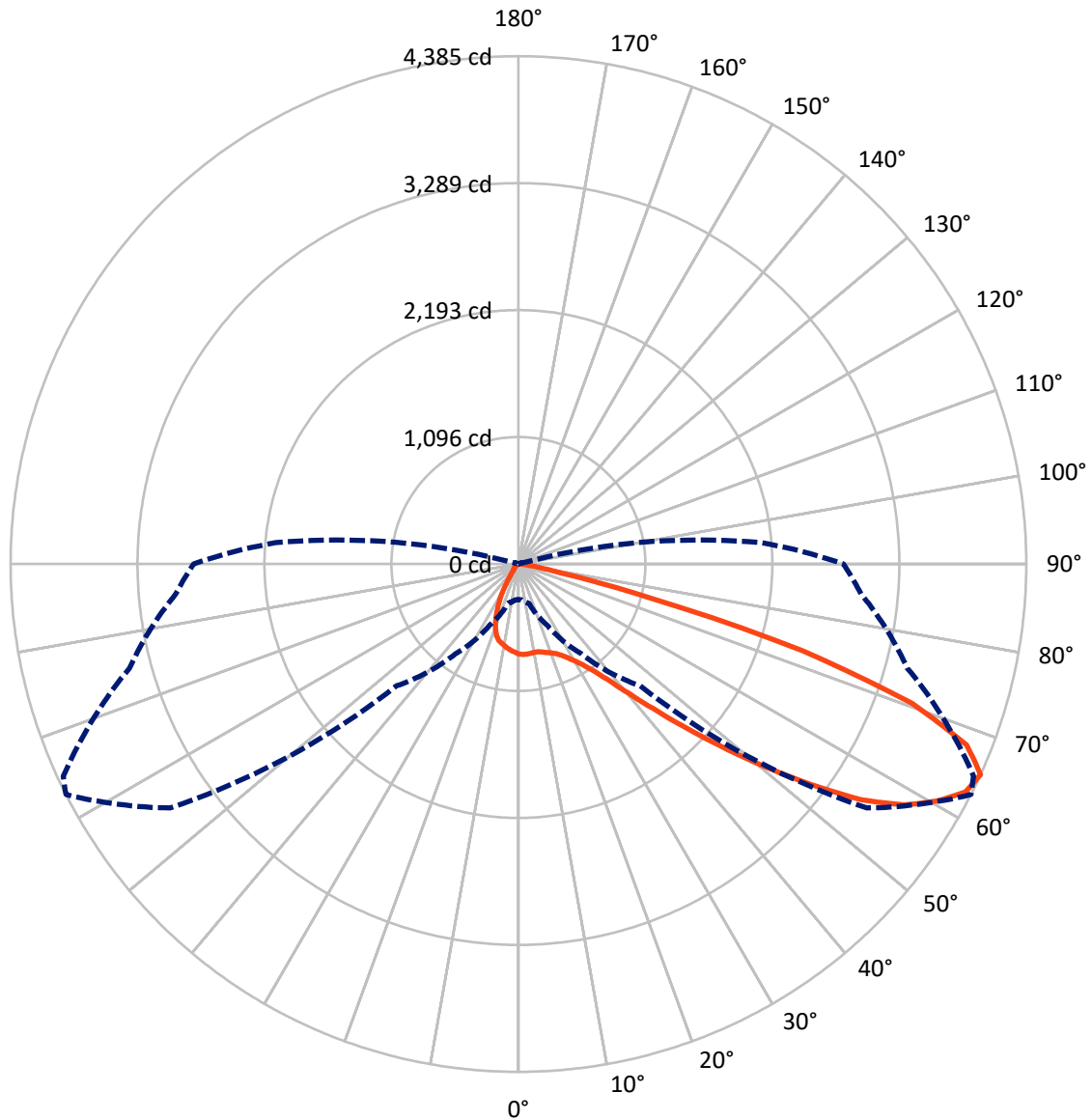
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 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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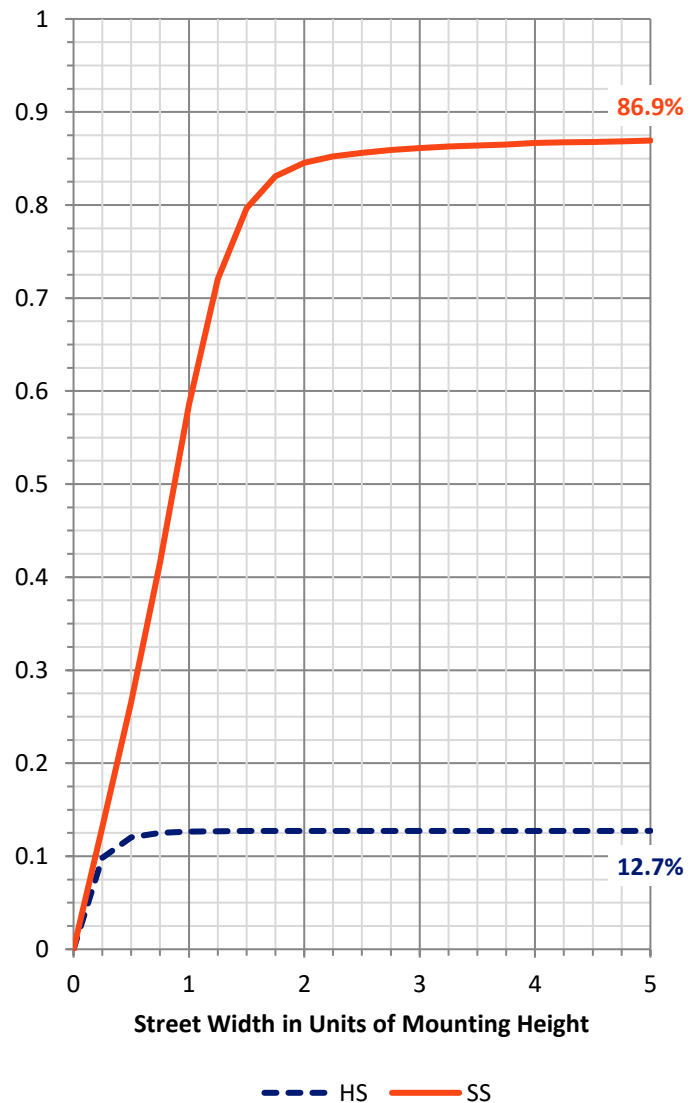
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	650.2	0.0	650.2
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	4401.8	0.0	4401.8
	% Fixture	87.1	0.0	87.1
Total	Lumens	5052.0	0.0	5052.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	1.4
10°-20°	175.2	3.5
20°-30°	259.7	5.1
30°-40°	482.1	9.5
40°-50°	1021.3	20.2
50°-60°	1412.3	28.0
60°-70°	1130.6	22.4
70°-80°	469.7	9.3
80°-90°	30.2	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°	5052.0	100.0
0°-180°	5052.0	100.0



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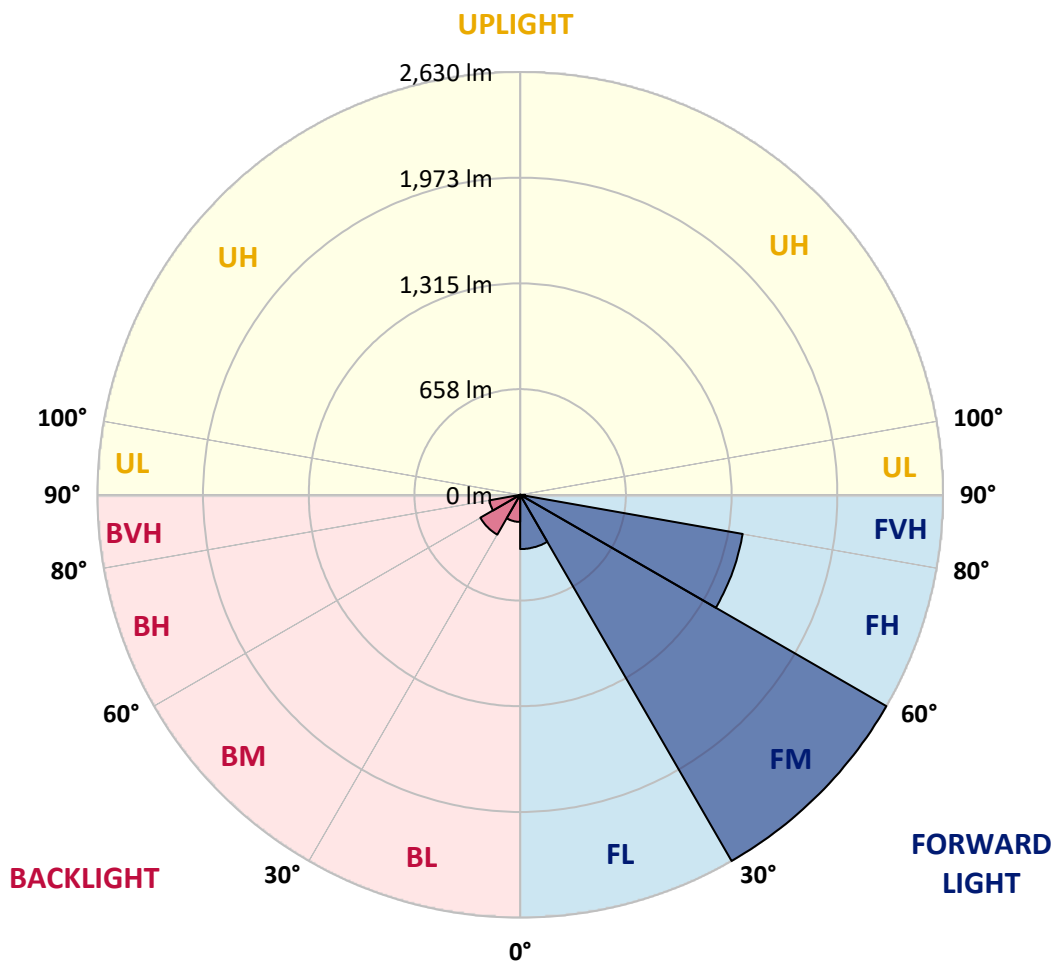
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	337.4	6.7			
FM	(30°-60°)	2630.1	52.1			
FH	(60°-80°)	1405.6	27.8			G1/1800
FVH	(80°-90°)	28.8	0.6			G1/100
BL	(0°-30°)	168.5	3.3	B1/500		
BM	(30°-60°)	285.6	5.7	B1/1000		
BH	(60°-80°)	194.7	3.9	B1/500		G1/500
BVH	(80°-90°)	1.4	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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	778.3	778.3	778.3	778.3	778.3	778.3	778.3	778.3	778.3	778.3	778.3
2.5°	791.6	789.7	787.8	786.8	786.8	785.9	782.1	781.1	779.2	777.3	775.4
5°	784.0	781.1	780.2	781.1	782.1	784.0	782.1	782.1	780.2	778.3	774.4
7.5°	764.9	763.0	764.0	766.8	767.8	774.4	775.4	778.3	778.3	776.4	773.5
10°	742.0	741.1	741.1	745.8	750.6	760.1	766.8	774.4	775.4	775.4	770.6
12.5°	724.9	723.9	726.8	732.5	742.0	754.4	765.9	777.3	779.2	780.2	772.5
15°	714.4	714.4	718.2	729.6	743.0	760.1	773.5	788.8	790.7	789.7	779.2
17.5°	704.8	705.8	713.4	732.5	747.7	770.6	786.8	804.0	805.0	804.0	786.8
20°	701.0	702.9	714.4	739.2	756.3	782.1	803.1	820.2	821.2	817.4	794.5
22.5°	711.5	712.5	726.8	753.5	769.7	798.3	825.0	841.2	842.2	836.4	805.9
25°	747.7	747.7	760.1	783.0	797.3	826.0	854.6	873.6	873.6	867.0	831.7
27.5°	832.6	825.0	822.1	828.8	833.6	864.1	894.6	918.5	917.5	908.0	865.1
30°	996.7	977.6	947.1	912.7	895.6	916.6	945.2	975.7	974.7	959.5	906.1
32.5°	1272.3	1244.6	1172.2	1081.6	1008.1	984.3	1011.0	1044.4	1045.3	1027.2	971.9
35°	1658.6	1614.7	1485.0	1359.1	1191.2	1100.6	1108.3	1144.5	1155.9	1146.4	1082.5
37.5°	2030.5	1990.5	1866.5	1692.0	1464.0	1279.0	1246.6	1278.0	1291.4	1291.4	1223.7
40°	2405.4	2358.6	2249.0	2073.5	1833.1	1557.5	1441.1	1466.9	1481.2	1484.0	1395.3
42.5°	2705.8	2675.3	2591.3	2455.0	2229.9	2045.8	1721.5	1707.2	1720.6	1710.1	1594.7
45°	2913.7	2889.9	2831.7	2780.2	2670.5	2578.0	2096.4	2000.0	2008.6	1972.4	1818.8
47.5°	2956.6	2929.9	2917.5	2989.1	3067.3	3090.2	2557.0	2348.1	2339.6	2259.4	2051.5
50°	2769.7	2772.6	2818.3	3022.4	3348.6	3554.6	3091.1	2741.1	2709.6	2531.3	2268.0
52.5°	2366.3	2412.0	2527.4	2858.4	3434.5	3892.3	3625.2	3157.9	3109.2	2795.5	2430.2
55°	1851.2	1910.4	2100.2	2480.7	3255.2	4043.0	4075.4	3590.9	3480.2	2993.8	2556.1
57.5°	1376.3	1394.4	1615.7	1962.8	2830.7	3895.1	4306.2	3924.7	3782.6	3152.2	2681.0
60°	857.4	868.9	1102.5	1494.5	2144.0	3348.6	4306.2	4154.6	4019.1	3294.3	2795.5
62.5°	533.1	537.0	624.7	1024.3	1457.3	2483.6	4127.8	4332.9	4224.2	3396.3	2893.7
65°	307.1	310.9	351.9	578.9	948.0	1486.9	3672.0	4385.4	4336.7	3477.4	2970.0
67.5°	224.1	226.0	242.3	325.2	619.9	764.0	2758.3	4174.6	4235.6	3517.4	2968.1
70°	194.6	197.4	218.4	253.7	447.3	469.2	1403.9	3605.2	3775.9	3460.2	2879.4
72.5°	149.7	153.6	185.0	238.4	328.1	337.6	508.4	2565.6	2824.1	3102.6	2636.2
75°	103.0	106.8	138.3	196.5	270.9	252.7	279.4	1180.7	1489.8	2081.1	2006.7
77.5°	65.8	66.8	86.8	143.1	233.7	179.3	191.7	385.3	540.8	941.4	947.1
80°	43.9	44.8	53.4	92.5	160.2	166.0	118.3	178.4	195.5	274.7	190.8
82.5°	26.7	26.7	36.2	58.2	97.3	137.3	77.3	93.5	100.1	105.9	49.6
85°	10.5	10.5	21.9	38.2	61.0	63.9	48.6	54.4	57.2	62.0	22.9
87.5°	2.9	2.9	12.4	21.0	26.7	29.6	29.6	26.7	28.6	35.3	11.4
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°	778.3	778.3	778.3	778.3	778.3	778.3	778.3	778.3	778.3	778.3	778.3
2.5°	774.4	771.6	767.8	764.0	760.1	757.3	754.4	754.4	752.5	749.7	747.7
5°	772.5	767.8	759.2	752.5	742.0	734.4	728.7	723.9	721.0	714.4	713.4
7.5°	769.7	764.0	751.6	738.2	721.0	707.7	694.3	684.8	675.3	667.6	665.7
10°	764.9	758.2	740.1	721.0	697.2	672.4	640.9	604.7	571.3	552.2	546.5
12.5°	764.9	756.3	732.5	706.7	672.4	611.4	531.2	451.1	389.1	361.5	353.8
15°	769.7	758.2	726.8	691.5	627.6	503.6	373.9	268.0	200.3	179.3	174.5
17.5°	774.4	758.2	718.2	670.5	545.5	365.3	212.7	141.2	119.2	114.5	114.5
20°	776.4	756.3	706.7	631.4	435.9	227.0	126.8	105.9	97.3	94.4	94.4
22.5°	784.0	757.3	698.1	575.1	316.6	133.5	100.1	88.7	80.1	77.3	77.3
25°	803.1	768.7	700.1	503.6	203.1	101.1	84.9	73.4	64.9	61.0	61.0
27.5°	833.6	794.5	710.5	420.6	127.8	86.8	71.5	59.1	52.5	48.6	48.6
30°	867.9	823.1	715.3	325.2	95.4	73.4	58.2	46.7	42.0	39.1	38.2
32.5°	928.0	872.7	711.5	223.2	78.2	62.0	46.7	37.2	33.4	32.4	32.4
35°	1024.3	959.5	703.9	140.2	64.9	49.6	37.2	30.5	27.7	26.7	25.8
37.5°	1155.0	1086.3	681.0	92.5	53.4	39.1	30.5	25.8	22.9	21.9	21.9
40°	1314.3	1231.3	637.1	70.6	45.8	31.5	25.8	21.9	20.0	19.1	19.1
42.5°	1496.4	1392.5	567.5	61.0	38.2	26.7	21.9	18.1	17.2	16.2	16.2
45°	1695.8	1561.3	471.2	54.4	32.4	21.9	18.1	16.2	14.3	14.3	13.4
47.5°	1907.5	1731.1	362.4	47.7	27.7	19.1	16.2	13.4	12.4	11.4	11.4
50°	2111.6	1882.7	254.7	41.0	22.9	16.2	13.4	11.4	10.5	9.5	9.5
52.5°	2255.6	1974.3	180.3	35.3	19.1	14.3	10.5	8.6	7.6	7.6	7.6
55°	2371.0	2031.5	125.9	29.6	16.2	12.4	8.6	6.7	6.7	5.7	5.7
57.5°	2479.8	2068.7	92.5	24.8	13.4	9.5	6.7	4.8	4.8	3.8	3.8
60°	2592.3	2088.7	70.6	20.0	11.4	7.6	4.8	3.8	2.9	2.9	2.9
62.5°	2705.8	2101.1	54.4	16.2	9.5	5.7	3.8	2.9	1.9	1.0	1.0
65°	2805.0	2104.9	42.0	12.4	7.6	3.8	2.9	1.0	0.0	0.0	0.0
67.5°	2834.6	2061.1	32.4	9.5	5.7	2.9	1.9	0.0	0.0	0.0	0.0
70°	2754.4	1944.7	24.8	7.6	4.8	1.9	1.0	0.0	0.0	0.0	0.0
72.5°	2444.5	1630.9	19.1	4.8	3.8	1.9	1.0	0.0	0.0	0.0	0.0
75°	1749.2	869.8	13.4	3.8	2.9	1.0	0.0	0.0	0.0	0.0	0.0
77.5°	805.0	336.7	9.5	2.9	1.9	1.0	0.0	0.0	0.0	0.0	0.0
80°	157.4	83.9	3.8	1.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	36.2	14.3	1.9	1.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.4	4.8	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.8	1.9	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)