

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: P257697

Luminaire Tested: **ARCH-AF24-70-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P257697
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-AF24-70-D-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 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: 5915.7 lumens
Efficiency: N/A
Efficacy: 79.9 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

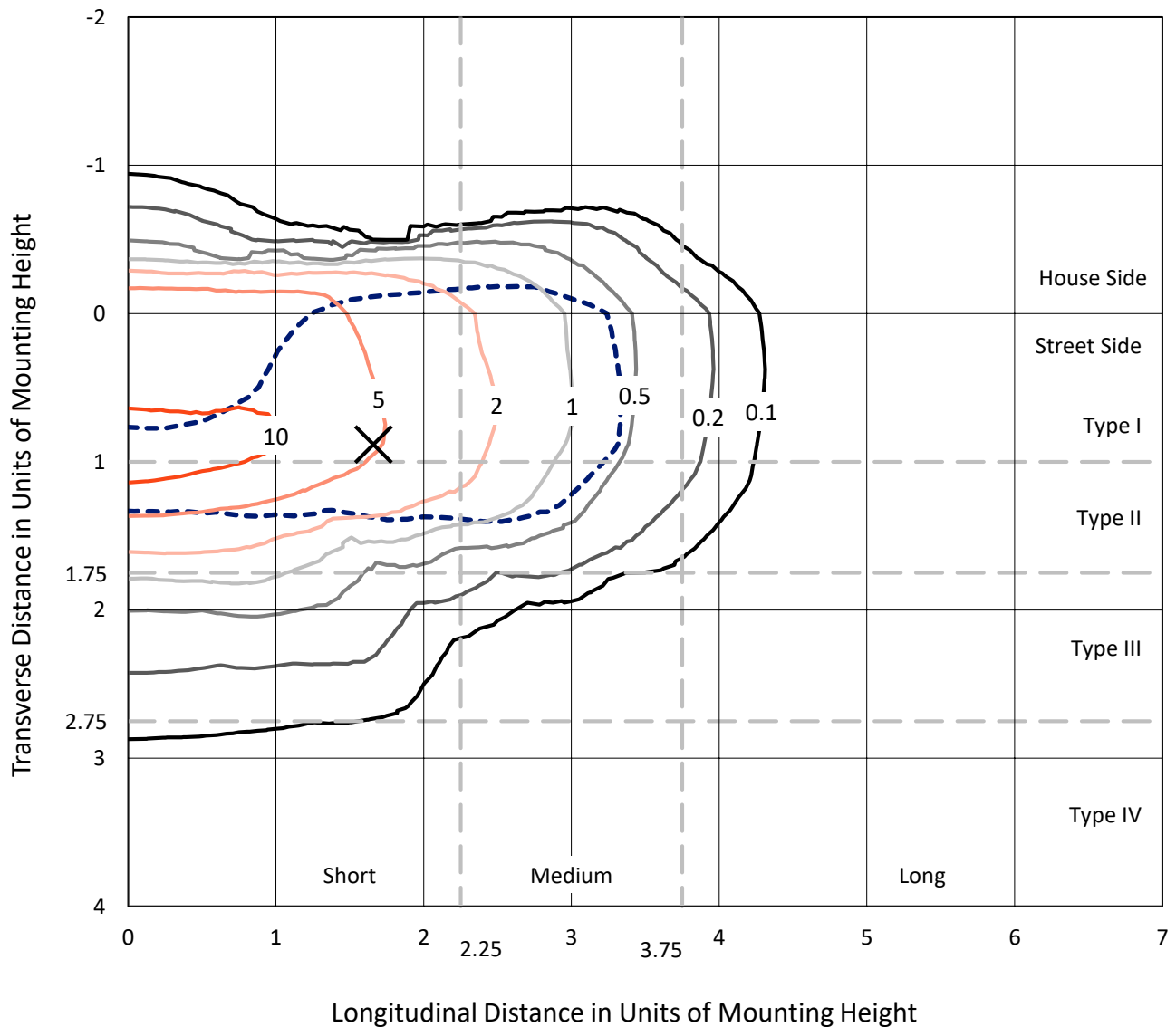
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

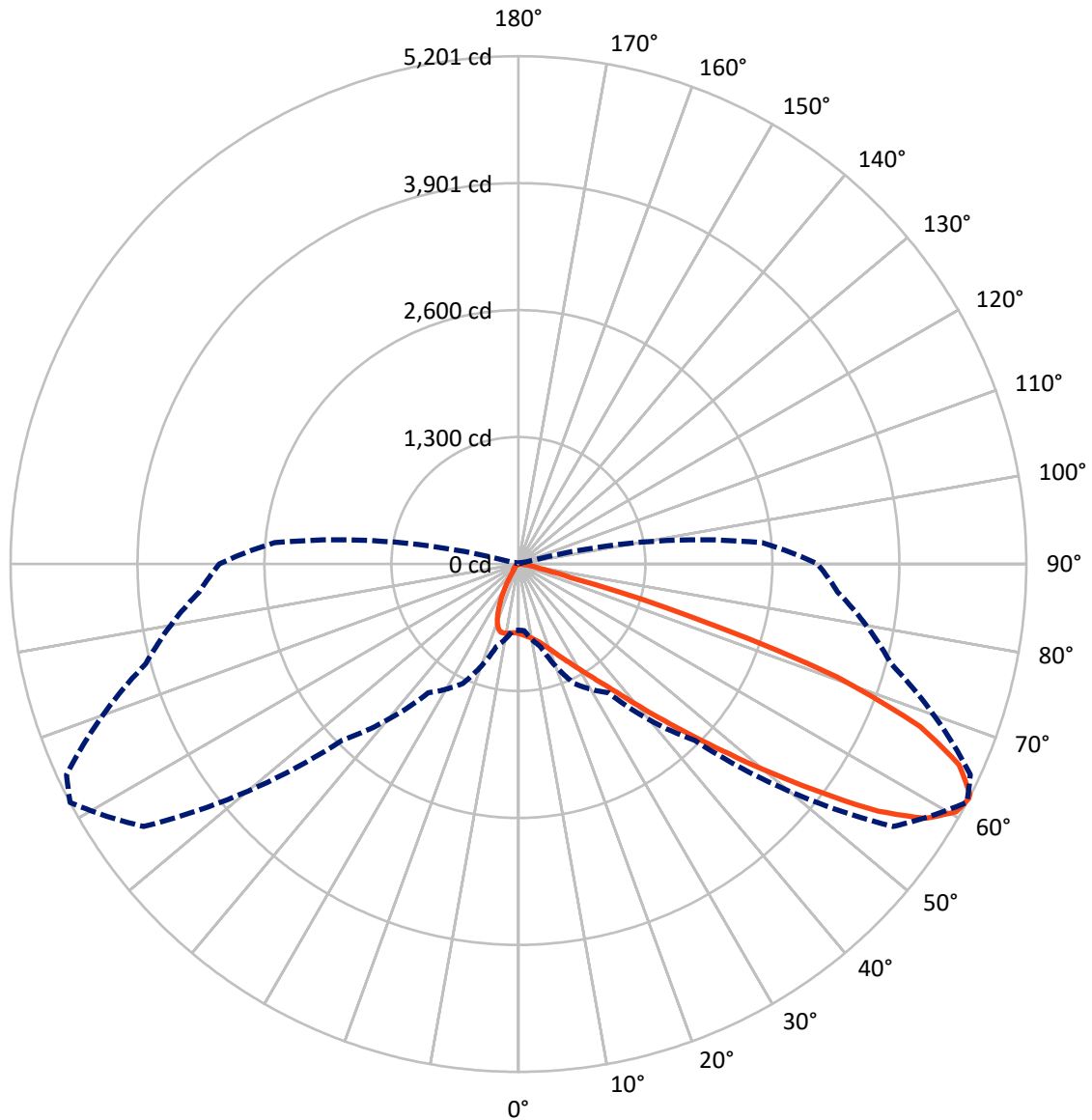
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.6 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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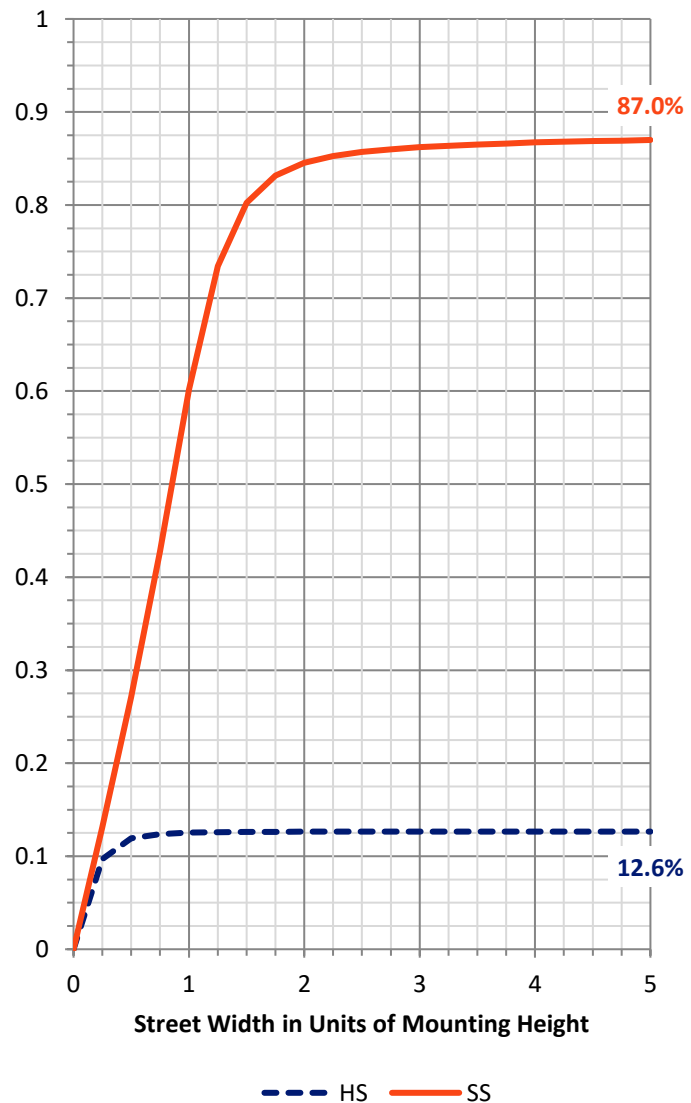
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	756.4	0.0	756.4
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	5159.3	0.0	5159.3
	% Fixture	87.2	0.0	87.2
Total	Lumens	5915.7	0.0	5915.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.6	1.2
10°-20°	191.5	3.2
20°-30°	321.6	5.4
30°-40°	616.5	10.4
40°-50°	1259.3	21.3
50°-60°	1666.5	28.2
60°-70°	1294.6	21.9
70°-80°	467.3	7.9
80°-90°	29.8	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°	5915.7	100.0
0°-180°	5915.7	100.0

Coefficient of Utilization



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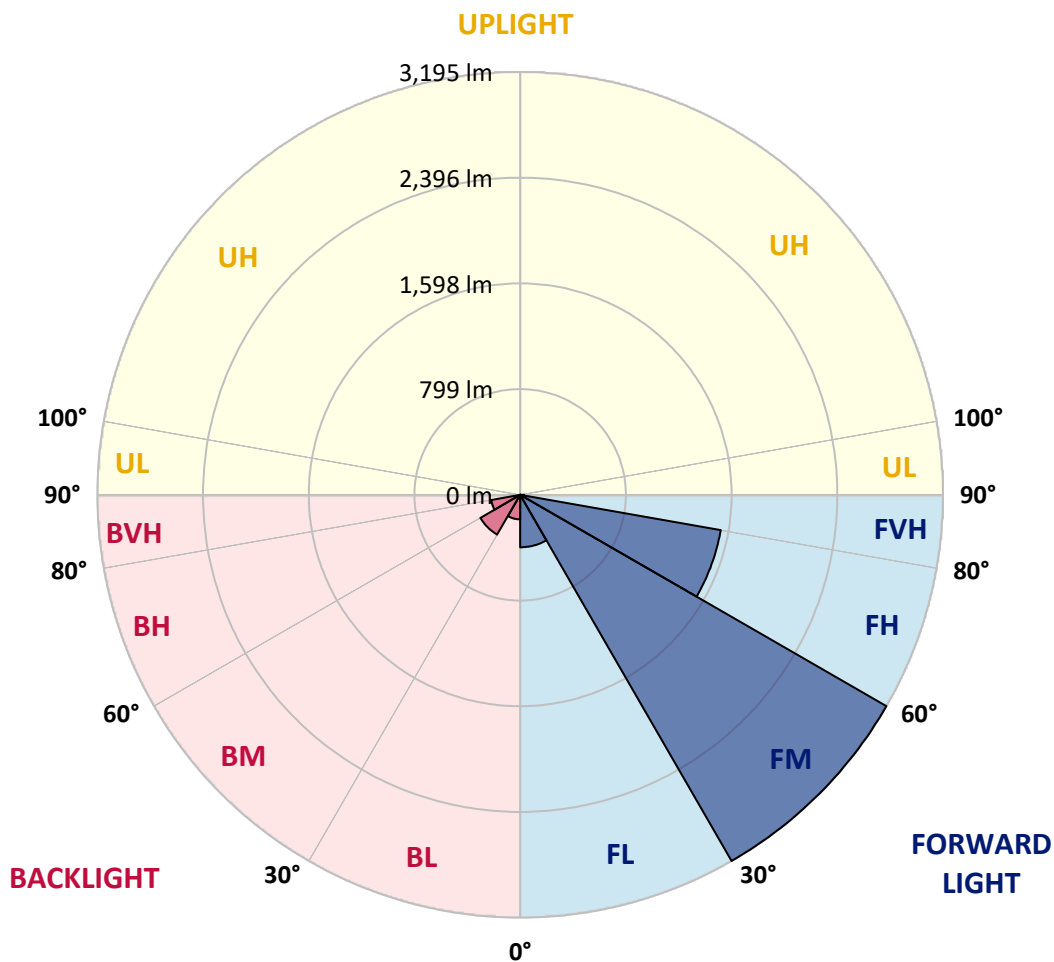
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	396.6	6.7			
FM (30°-60°)	3195.1	54.0			
FH (60°-80°)	1539.1	26.0			G1/1800
FVH (80°-90°)	28.5	0.5			G1/100
BL (0°-30°)	185.1	3.1	B1/500		
BM (30°-60°)	347.2	5.9	B1/1000		
BH (60°-80°)	222.7	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°	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6
2.5°	731.5	730.1	728.6	727.2	727.2	725.7	724.2	721.4	718.4	715.6	714.1
5°	744.6	743.2	741.7	743.2	741.7	741.7	740.3	737.3	734.5	730.1	725.7
7.5°	754.8	753.3	751.9	753.3	754.8	756.3	757.7	754.8	753.3	747.6	743.2
10°	767.9	766.4	765.0	767.9	767.9	775.2	776.6	775.2	773.7	769.4	762.1
12.5°	786.8	788.3	788.3	791.2	794.1	802.8	805.7	801.4	801.4	795.5	786.8
15°	821.7	821.7	821.7	824.6	826.0	837.7	840.6	836.3	839.1	829.0	820.2
17.5°	855.2	856.6	859.5	865.3	865.3	875.5	881.4	881.4	887.1	874.0	862.4
20°	888.6	890.1	894.5	907.5	907.5	920.6	930.8	935.2	940.9	927.9	907.5
22.5°	925.0	925.0	932.2	952.6	948.3	974.4	993.3	1000.5	1006.4	989.0	957.0
25°	980.2	974.4	980.2	999.1	996.3	1032.6	1067.4	1074.7	1082.1	1061.6	1013.6
27.5°	1084.9	1076.2	1055.9	1057.3	1057.3	1099.5	1149.0	1159.1	1163.5	1146.0	1086.4
30°	1294.3	1294.3	1218.7	1167.8	1134.4	1172.2	1242.0	1259.5	1265.3	1239.1	1160.5
32.5°	1659.4	1659.4	1519.8	1390.4	1263.9	1263.9	1343.9	1375.8	1381.6	1351.1	1259.5
35°	2124.8	2121.9	1912.4	1735.0	1487.8	1394.7	1463.0	1516.8	1534.3	1493.6	1387.4
37.5°	2619.3	2600.3	2375.0	2171.3	1832.5	1604.1	1624.4	1695.7	1711.8	1678.4	1553.2
40°	3020.7	2998.9	2817.1	2646.9	2277.5	1938.6	1857.2	1922.6	1941.6	1895.0	1751.0
42.5°	3384.2	3330.4	3205.3	3083.2	2789.4	2517.5	2166.9	2193.1	2213.5	2164.1	1973.6
45°	3647.4	3564.6	3500.6	3462.8	3307.2	3153.0	2568.3	2516.0	2523.3	2462.2	2216.4
47.5°	3654.8	3596.6	3602.4	3701.3	3765.3	3759.4	3090.4	2904.4	2876.6	2774.9	2475.2
50°	3305.7	3339.1	3445.3	3727.4	4073.6	4283.0	3711.5	3363.9	3281.0	3097.7	2732.7
52.5°	2724.0	2776.3	2975.6	3451.1	4118.7	4627.7	4355.7	3889.0	3740.5	3417.7	2930.4
55°	2133.5	2136.4	2345.8	2830.1	3817.7	4690.2	4870.6	4466.3	4239.4	3660.5	3061.4
57.5°	1467.4	1547.4	1813.6	2139.3	3138.4	4379.0	5064.0	4914.3	4621.9	3810.4	3153.0
60°	961.4	965.7	1275.4	1652.2	2136.4	3563.1	4946.2	5151.3	4931.6	3899.1	3215.5
62°	677.7	685.0	877.0	1349.6	1609.9	2553.8	4685.8	5200.7	5106.2	3951.5	3281.0
62.5°	628.3	634.1	795.5	1274.0	1512.5	2290.6	4592.8	5189.1	5132.3	3968.8	3304.2
65°	461.0	461.0	520.7	875.5	1108.2	1237.7	3891.8	4957.8	5097.5	4108.5	3391.5
67.5°	356.3	359.3	379.6	539.6	836.3	750.4	2484.0	4437.2	4733.9	4315.0	3441.0
70°	306.9	305.5	320.0	357.7	603.5	498.8	1093.6	3462.8	3964.5	4262.6	3395.9
72.5°	226.9	228.3	261.8	314.1	420.3	324.3	494.5	1838.2	2571.3	3336.3	2910.1
75°	145.5	146.9	184.7	247.2	302.5	212.4	285.1	548.3	1052.9	1849.9	1780.1
77.5°	97.5	100.4	120.7	173.1	264.7	132.4	178.9	229.8	317.0	693.8	638.4
80°	65.5	65.5	77.1	116.3	167.3	110.5	96.0	152.7	164.4	215.2	107.6
82.5°	43.7	43.7	50.9	77.1	109.0	98.9	58.2	82.9	96.0	107.6	37.8
85°	26.2	26.2	34.9	48.0	71.3	55.2	37.8	46.5	49.4	68.3	20.4
87.5°	16.0	14.5	23.2	33.5	37.8	33.5	24.8	24.8	26.2	37.8	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°	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6
2.5°	711.2	709.7	708.3	705.3	701.0	698.1	695.2	692.2	689.4	689.4	693.8
5°	724.2	719.9	714.1	708.3	699.5	693.8	689.4	683.5	680.7	680.7	682.1
7.5°	740.3	735.9	725.7	715.6	702.5	692.2	682.1	669.0	658.8	654.5	658.8
10°	757.7	751.9	737.3	721.4	706.9	680.7	647.2	606.5	571.5	555.6	562.8
12.5°	779.5	772.2	754.8	732.9	699.5	635.6	552.6	458.1	398.4	370.8	376.7
15°	811.5	801.4	776.6	743.2	669.0	530.8	395.6	286.5	231.3	208.0	210.8
17.5°	849.4	836.3	802.8	740.3	590.4	382.5	235.6	167.3	143.9	138.2	138.2
20°	890.1	872.6	829.0	718.4	471.2	240.0	146.9	128.0	119.3	114.9	114.9
22.5°	932.2	909.0	850.8	667.6	335.9	149.8	120.7	107.6	97.5	93.1	93.1
25°	983.2	952.6	872.6	578.8	213.8	120.7	103.2	90.1	80.0	74.2	75.6
27.5°	1042.8	1003.5	891.5	468.3	138.2	104.8	85.8	72.7	64.0	61.1	61.1
30°	1105.3	1058.8	895.9	350.5	112.0	90.1	71.3	59.6	53.8	50.9	50.9
32.5°	1191.1	1130.1	882.8	232.7	94.5	75.6	59.6	49.4	45.1	43.7	43.7
35°	1304.6	1223.1	852.2	143.9	80.0	62.5	49.4	43.7	39.3	37.8	37.8
37.5°	1448.5	1352.5	798.4	98.9	68.3	50.9	42.1	37.8	34.9	33.5	33.5
40°	1640.5	1509.6	728.6	85.8	58.2	43.7	36.3	33.5	30.6	30.6	30.6
42.5°	1844.1	1700.1	638.4	75.6	49.4	37.8	32.0	29.1	27.6	26.2	26.2
45°	2066.6	1895.0	526.5	66.9	42.1	33.5	29.1	24.8	23.2	23.2	23.2
47.5°	2287.6	2095.7	404.3	58.2	36.3	29.1	24.8	21.8	20.4	18.9	18.9
50°	2514.5	2277.5	296.7	50.9	32.0	26.2	21.8	18.9	16.0	14.5	14.5
52.5°	2678.9	2386.5	216.7	43.7	27.6	21.8	17.5	14.5	11.7	10.2	10.2
55°	2799.6	2453.4	158.6	36.3	24.8	18.9	14.5	11.7	8.7	8.7	7.3
57.5°	2894.1	2485.5	119.3	32.0	21.8	16.0	11.7	8.7	7.3	5.8	5.8
60°	2966.9	2486.9	88.7	26.2	18.9	13.1	8.7	5.8	4.4	4.4	4.4
62°	3062.8	2505.8	72.7	21.8	17.5	11.7	7.3	4.4	2.9	1.4	1.4
62.5°	3090.4	2513.1	69.8	21.8	16.0	10.2	5.8	4.4	2.9	1.4	1.4
65°	3218.4	2526.2	53.8	17.5	13.1	8.7	4.4	2.9	0.0	0.0	0.0
67.5°	3334.8	2505.8	39.3	13.1	10.2	5.8	4.4	1.4	0.0	0.0	0.0
70°	3323.2	2366.2	27.6	8.7	7.3	4.4	2.9	0.0	0.0	0.0	0.0
72.5°	2738.5	1771.3	18.9	7.3	4.4	2.9	1.4	0.0	0.0	0.0	0.0
75°	1653.6	775.2	13.1	4.4	4.4	2.9	1.4	0.0	0.0	0.0	0.0
77.5°	542.5	280.7	8.7	2.9	2.9	1.4	1.4	0.0	0.0	0.0	0.0
80°	88.7	46.5	4.4	2.9	2.9	1.4	1.4	0.0	0.0	0.0	0.0
82.5°	27.6	11.7	2.9	2.9	1.4	1.4	0.0	0.0	0.0	0.0	0.0
85°	10.2	4.4	2.9	2.9	1.4	1.4	0.0	0.0	0.0	0.0	0.0
87.5°	4.4	2.9	2.9	2.9	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)