

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: P348986

Luminaire Tested: **ARCH-N-PA1-50-730-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348986
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-50-730-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 980mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4424 lumens
Efficiency: N/A
Efficacy: 85.1 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

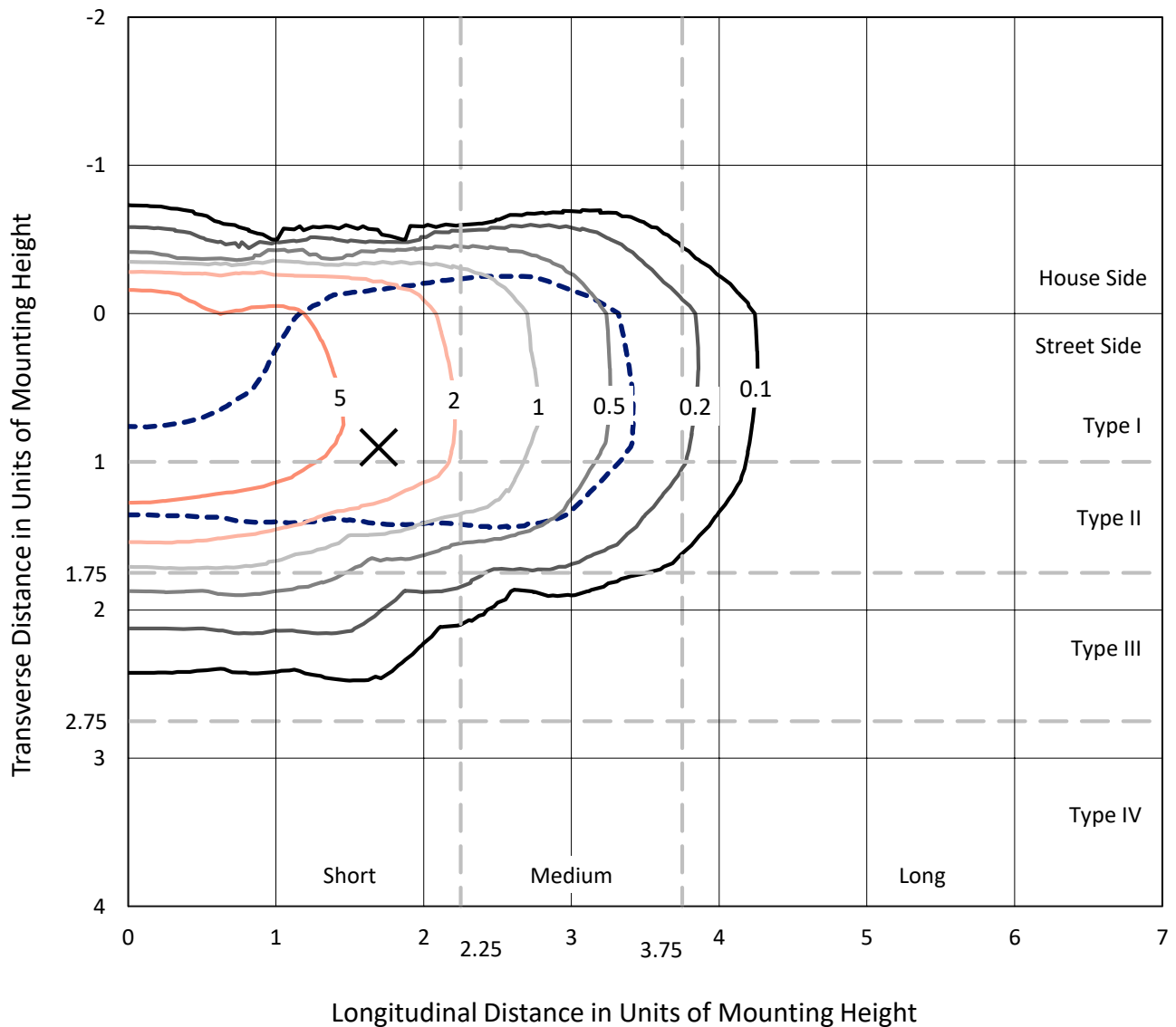
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

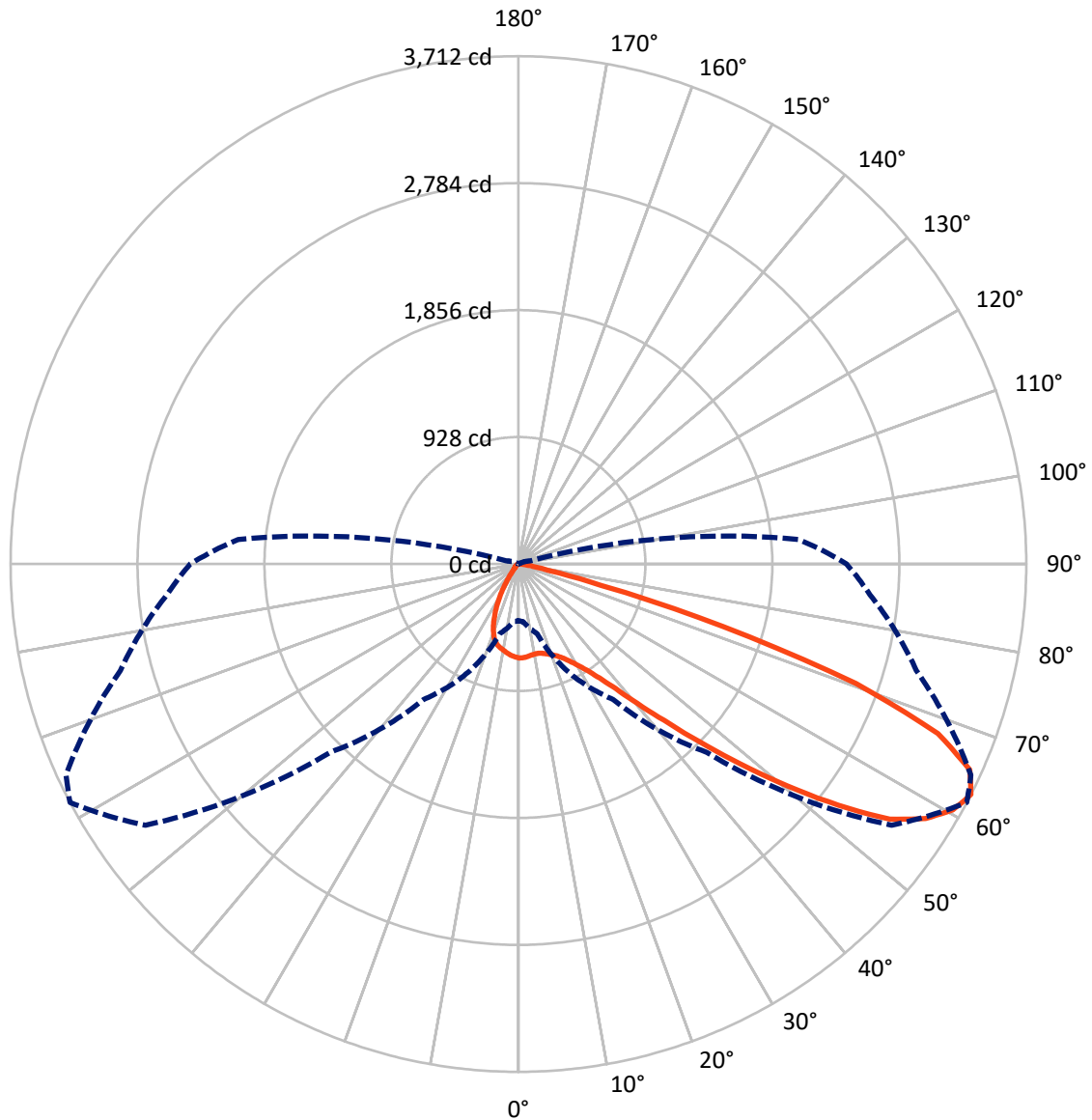
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.8 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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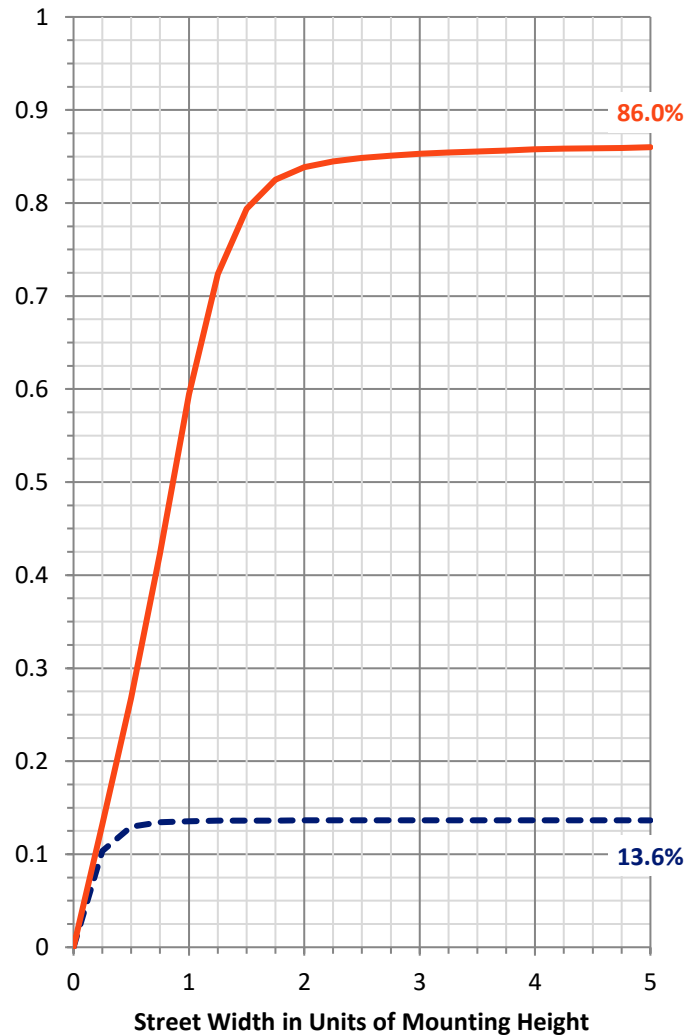
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	610.8	0.0	610.8
	% Fixture	13.8	0.0	13.8
Street Side	Lumens	3813.2	0.0	3813.2
	% Fixture	86.2	0.0	86.2
Total	Lumens	4424.0	0.0	4424.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.6	1.4
10°-20°	157.2	3.6
20°-30°	234.6	5.3
30°-40°	447.0	10.1
40°-50°	932.1	21.1
50°-60°	1238.4	28.0
60°-70°	965.4	21.8
70°-80°	364.9	8.2
80°-90°	21.9	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°	4424.0	100.0
0°-180°	4424.0	100.0



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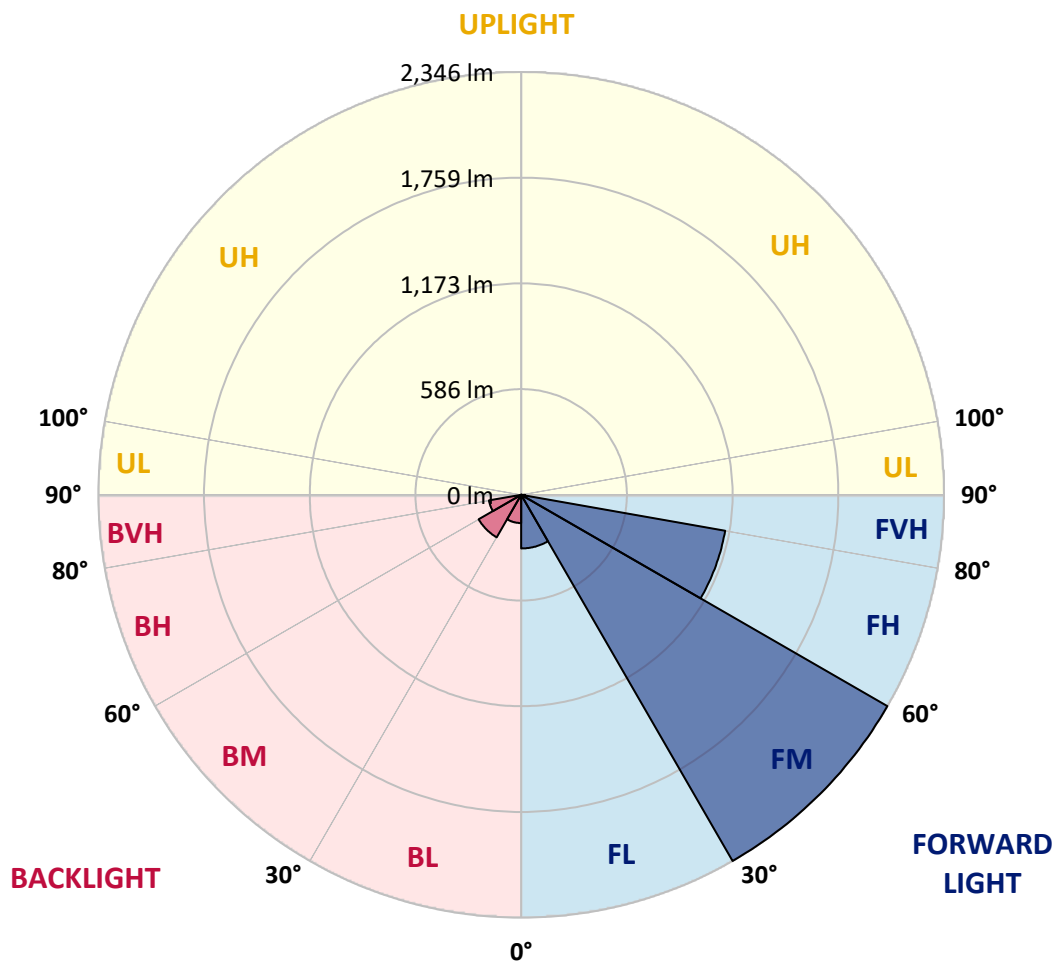
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	297.7	6.7			
FM	(30°-60°)	2345.6	53.0			
FH	(60°-80°)	1149.1	26.0			G1/1800
FVH	(80°-90°)	20.8	0.5			G1/100
BL	(0°-30°)	156.7	3.5	B1/500		
BM	(30°-60°)	271.9	6.1	B1/1000		
BH	(60°-80°)	181.2	4.1	B1/500		G1/500
BVH	(80°-90°)	1.0	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°	687.3	687.3	687.3	687.3	687.3	687.3	687.3	687.3	687.3	687.3	687.3
2.5°	685.0	683.8	686.7	686.7	686.1	687.3	686.1	685.6	685.0	683.8	682.7
5°	667.1	667.1	671.1	672.9	674.6	678.1	679.2	680.4	679.8	680.9	681.5
7.5°	646.3	647.4	652.0	654.4	657.2	664.2	668.2	672.9	673.4	677.5	679.8
10°	628.9	630.1	634.7	637.6	641.6	650.9	659.6	667.6	668.8	676.3	678.1
12.5°	617.4	618.5	623.1	627.2	635.9	647.4	659.6	668.8	671.7	680.9	680.9
15°	612.7	613.9	619.7	626.6	638.2	653.2	668.2	678.1	683.8	691.4	687.9
17.5°	611.0	613.3	623.1	633.5	646.3	662.4	680.9	691.4	697.1	705.2	697.7
20°	616.2	619.1	631.8	646.3	659.6	676.3	696.6	708.1	713.9	719.1	704.6
22.5°	634.7	639.3	650.3	666.5	676.9	697.1	717.4	730.7	737.0	736.4	717.4
25°	679.2	685.0	690.2	698.9	703.5	727.8	749.2	762.5	767.1	765.3	743.4
27.5°	784.4	791.9	773.4	754.4	744.0	766.5	790.2	804.1	808.1	804.6	771.1
30°	961.9	962.5	920.3	860.1	815.6	813.3	842.2	860.7	860.7	853.8	810.4
32.5°	1220.3	1201.8	1148.6	1042.2	941.6	889.0	911.0	928.9	928.9	920.3	870.5
35°	1545.1	1531.3	1443.4	1315.6	1136.5	1010.4	1005.8	1023.2	1023.7	1021.4	964.8
37.5°	1875.8	1841.7	1768.3	1615.1	1404.7	1197.1	1141.7	1153.8	1162.5	1161.3	1090.8
40°	2183.3	2149.2	2087.3	1939.9	1734.2	1472.3	1339.3	1339.3	1339.9	1334.1	1249.2
42.5°	2424.9	2409.3	2363.1	2260.8	2101.8	1905.3	1605.8	1561.9	1552.6	1546.9	1435.3
45°	2581.6	2565.4	2540.5	2519.2	2467.7	2397.2	1963.6	1848.6	1833.6	1776.9	1641.1
47.5°	2590.3	2565.4	2582.2	2663.1	2779.3	2815.7	2405.3	2182.7	2142.8	2040.5	1847.5
50°	2397.2	2399.5	2464.8	2661.4	2975.2	3182.8	2873.5	2550.4	2487.4	2282.7	2029.5
52.5°	2042.3	2065.4	2166.5	2468.9	2984.5	3417.4	3281.0	2929.6	2804.7	2500.1	2157.9
55°	1598.9	1619.7	1785.0	2112.2	2759.6	3451.0	3577.6	3292.6	3127.3	2651.5	2272.9
57.5°	1130.7	1170.0	1375.2	1675.8	2330.7	3194.9	3658.5	3509.9	3349.8	2798.9	2381.0
60°	687.3	707.0	920.3	1270.0	1756.7	2659.0	3563.7	3648.7	3519.2	2926.7	2482.2
62.5°	413.3	424.9	527.2	874.6	1208.7	1946.9	3329.0	3712.2	3648.7	3011.7	2579.3
65°	244.5	252.0	300.0	528.3	805.2	1194.3	2822.0	3625.0	3676.4	3085.1	2635.9
67.5°	176.3	178.6	196.0	284.4	540.5	639.9	1962.5	3307.0	3499.5	3109.3	2602.4
70°	152.0	154.9	171.7	200.0	382.7	377.5	1021.4	2617.4	2966.6	2982.7	2460.8
72.5°	115.0	120.2	148.0	187.9	274.6	268.2	385.0	1560.7	2013.9	2448.6	2121.5
75°	78.0	80.9	109.8	159.5	214.5	200.0	201.7	626.6	985.0	1535.3	1457.8
77.5°	49.1	51.4	67.1	114.5	183.8	141.0	142.8	222.5	355.5	650.9	624.9
80°	33.5	34.7	40.5	74.0	124.3	122.5	91.9	116.2	132.4	200.6	134.7
82.5°	20.2	20.2	26.6	43.9	75.1	97.1	57.8	64.2	70.5	74.6	30.6
85°	6.9	7.5	16.2	27.2	46.2	48.6	32.9	38.2	39.9	43.4	14.5
87.5°	2.9	2.3	8.7	15.0	19.7	22.5	19.1	17.3	19.1	25.4	6.4
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°	687.3	687.3	687.3	687.3	687.3	687.3	687.3	687.3	687.3	687.3	687.3
2.5°	683.3	680.9	680.9	680.4	676.9	675.2	673.4	668.8	671.7	668.2	665.9
5°	679.8	678.1	675.2	672.3	664.2	657.2	654.4	648.6	648.0	643.4	641.1
7.5°	679.2	675.2	670.5	660.7	648.6	637.6	627.8	617.9	613.9	608.7	605.8
10°	676.3	671.1	662.4	646.8	628.9	611.6	589.6	562.4	542.2	530.7	528.9
12.5°	676.9	671.1	657.8	634.7	611.0	572.8	513.9	452.0	401.2	379.8	376.3
15°	681.5	675.2	654.9	623.7	583.3	499.4	391.3	296.5	230.6	206.9	201.7
17.5°	687.3	676.3	648.6	608.1	530.1	387.3	246.3	155.5	118.5	105.2	102.9
20°	690.8	675.7	638.2	584.4	449.1	259.0	134.1	91.3	80.3	77.5	76.3
22.5°	699.4	677.5	629.5	547.4	347.4	156.1	85.0	71.1	64.7	61.3	60.7
25°	717.4	689.0	630.1	499.4	243.4	94.2	68.8	57.8	52.0	48.6	47.4
27.5°	743.4	709.8	641.1	439.9	150.3	71.1	57.2	46.8	40.5	37.6	37.0
30°	776.3	735.3	653.8	362.4	93.6	59.5	46.2	36.4	31.8	30.1	29.5
32.5°	828.3	779.2	664.8	271.1	64.7	49.1	36.4	28.9	26.0	24.3	24.3
35°	914.5	854.9	682.7	181.5	51.4	39.3	29.5	23.7	21.4	20.2	20.2
37.5°	1035.9	963.0	691.4	112.7	42.2	30.6	23.7	19.7	17.9	16.8	16.8
40°	1183.9	1094.3	679.2	69.9	35.3	24.9	19.7	16.8	15.0	14.5	14.5
42.5°	1354.4	1245.1	641.1	49.7	29.5	20.2	16.8	14.5	13.3	12.7	12.7
45°	1545.1	1410.4	572.3	41.6	24.9	17.3	14.5	12.1	11.6	11.0	11.0
47.5°	1735.3	1578.1	483.3	35.8	20.8	14.5	12.1	10.4	9.8	9.2	9.2
50°	1901.2	1724.9	389.0	31.2	17.3	12.7	10.4	8.7	8.1	7.5	7.5
52.5°	1996.0	1812.2	301.2	26.0	15.0	11.0	8.1	6.9	6.4	5.8	5.8
55°	2098.3	1885.0	224.9	22.0	12.1	9.2	6.4	5.2	4.6	4.0	4.0
57.5°	2193.7	1950.3	167.1	17.9	10.4	6.9	5.2	4.0	3.5	2.9	2.9
60°	2286.2	2005.8	123.7	14.5	8.7	5.8	4.0	2.9	2.3	1.7	1.7
62.5°	2398.9	2056.7	90.8	11.6	7.5	4.0	2.9	1.7	1.2	0.6	0.6
65°	2482.7	2082.7	68.2	8.7	6.4	2.9	1.7	1.2	0.0	0.0	0.0
67.5°	2482.2	2032.4	49.7	6.4	4.6	2.3	1.2	0.0	0.0	0.0	0.0
70°	2366.0	1879.8	34.7	5.2	3.5	1.7	0.6	0.0	0.0	0.0	0.0
72.5°	2029.0	1486.7	22.5	3.5	2.9	1.2	0.6	0.0	0.0	0.0	0.0
75°	1369.4	754.9	13.3	2.9	2.3	1.2	0.6	0.0	0.0	0.0	0.0
77.5°	585.6	296.5	6.9	1.7	1.7	0.6	0.0	0.0	0.0	0.0	0.0
80°	122.5	71.7	2.9	1.2	1.2	0.6	0.0	0.0	0.0	0.0	0.0
82.5°	20.8	10.4	1.2	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.2	2.9	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	1.2	0.6	0.6	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)