

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: P397972

Luminaire Tested: **ARCH-S-PA1-70-727-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397972
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-70-727-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 930mA LIGHT ENGINE 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: 6040 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

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

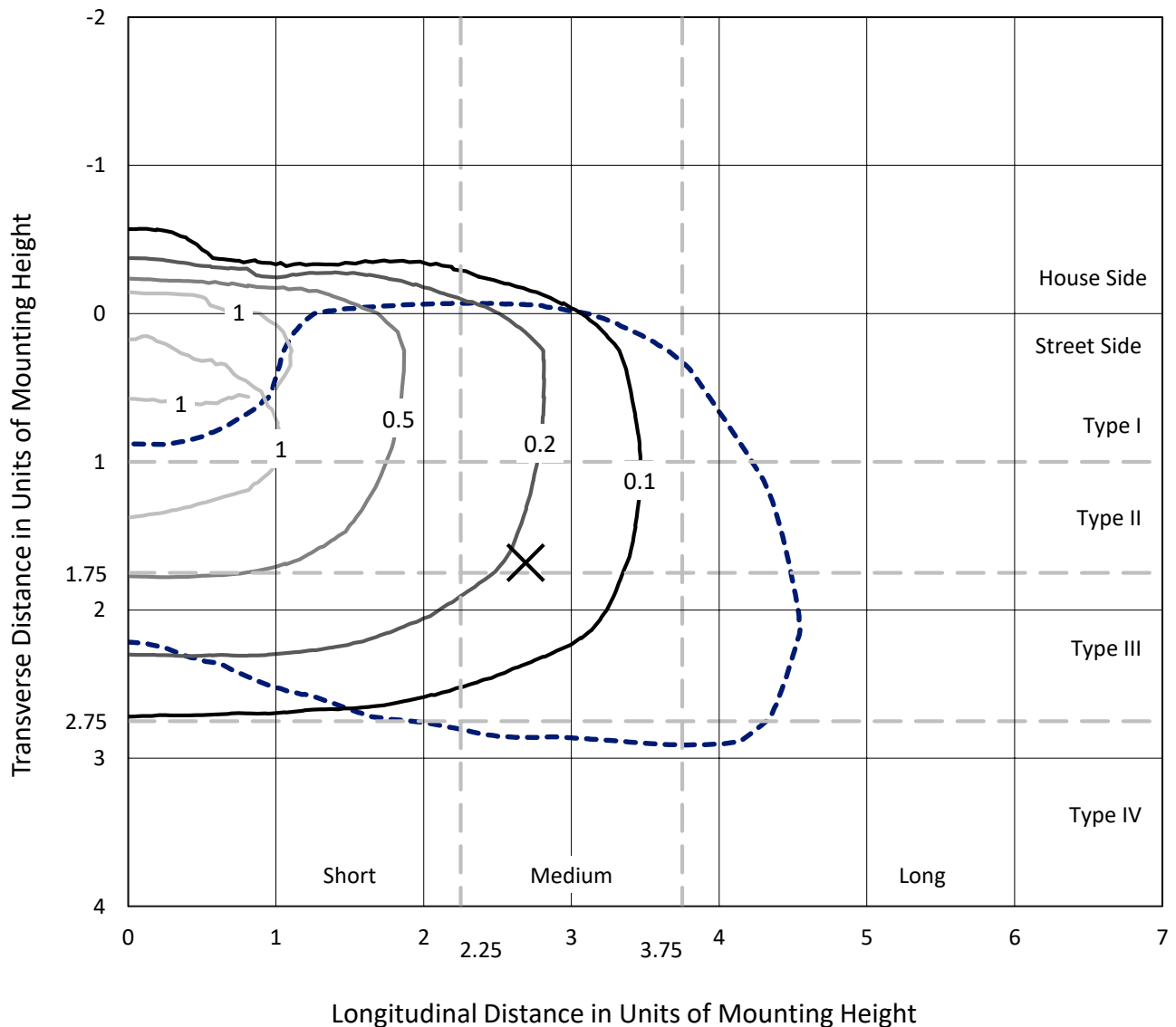


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

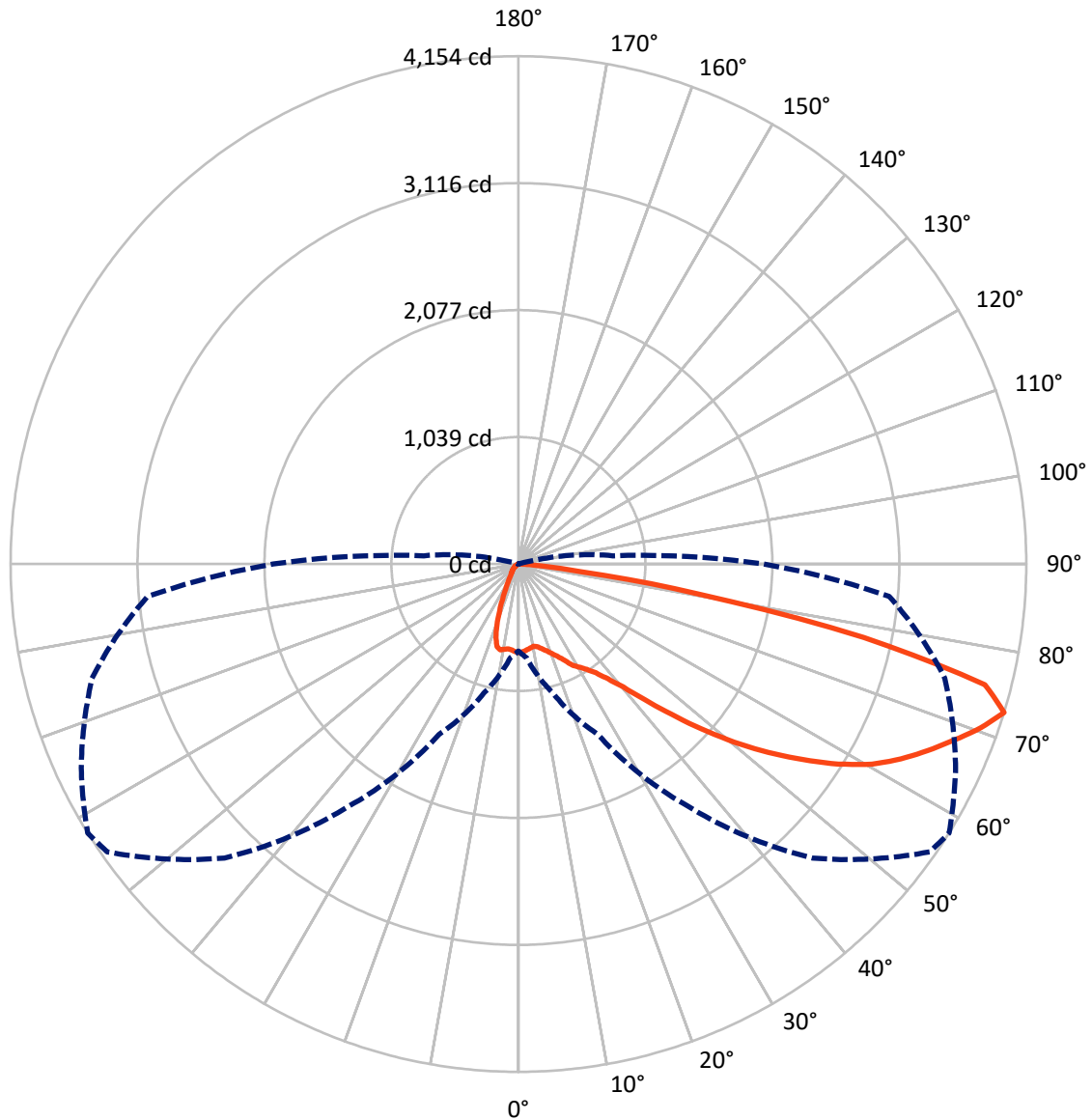


Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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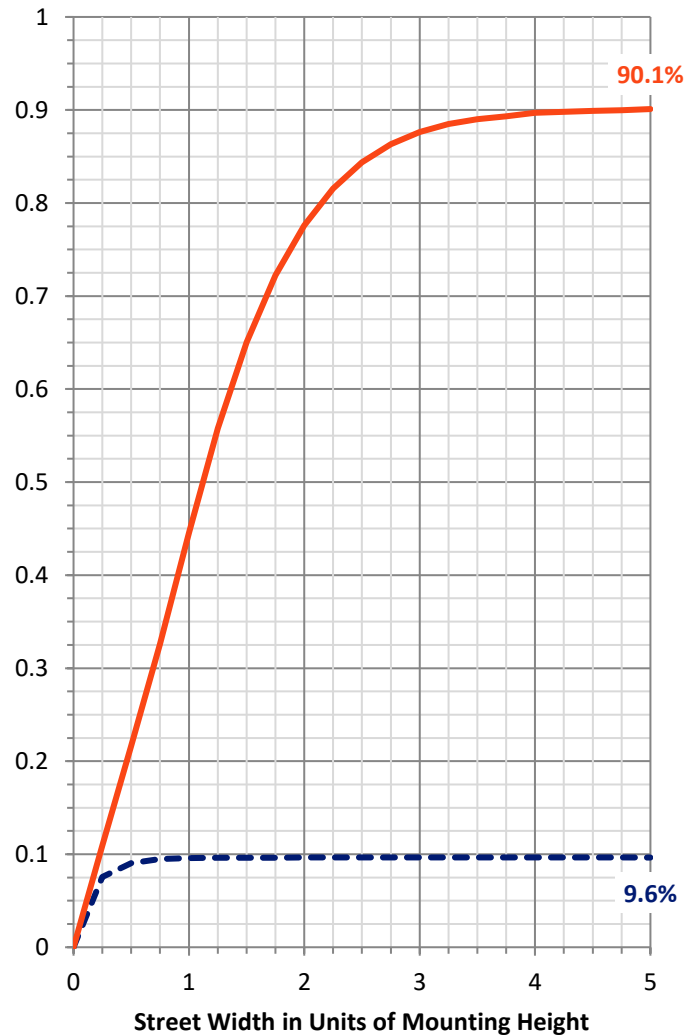
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	587.3	0.0	587.3
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	5452.7	0.0	5452.7
	% Fixture	90.3	0.0	90.3
Total	Lumens	6040.0	0.0	6040.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.5	1.1
10°-20°	173.2	2.9
20°-30°	272.2	4.5
30°-40°	469.4	7.8
40°-50°	893.0	14.8
50°-60°	1414.2	23.4
60°-70°	1650.2	27.3
70°-80°	1033.5	17.1
80°-90°	67.8	1.1
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°	6040.0	100.0
0°-180°	6040.0	100.0



--- HS — SS

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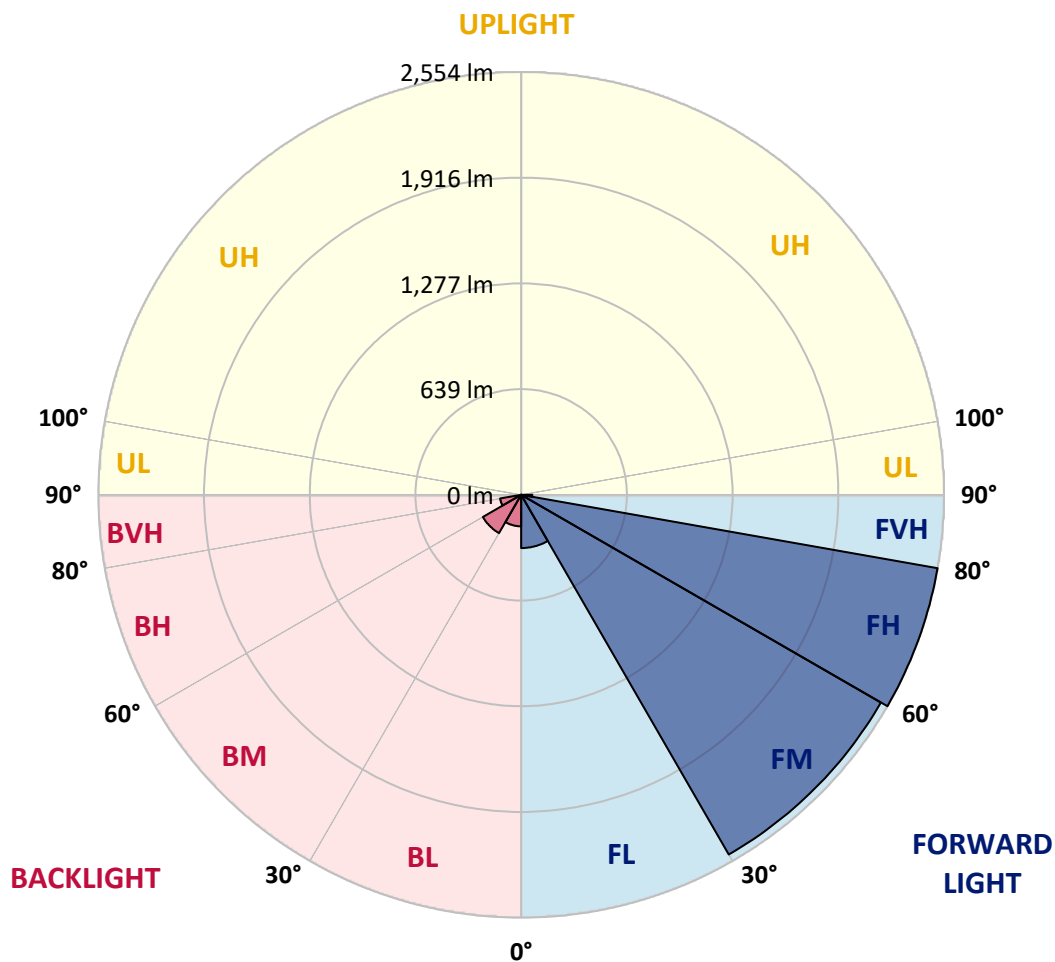
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	321.7	5.3			
FM	(30°-60°)	2509.3	41.5			
FH	(60°-80°)	2554.5	42.3			G2/5000
FVH	(80°-90°)	67.2	1.1			G1/100
BL	(0°-30°)	190.2	3.1	B1/500		
BM	(30°-60°)	267.2	4.4	B1/1000		
BH	(60°-80°)	129.2	2.1	B1/500		G1/500
BVH	(80°-90°)	0.7	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 IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	724.8	724.8	724.8	724.8	724.8	724.8	724.8	724.8	724.8	724.8	724.8
2.5°	721.5	718.3	717.2	716.1	717.2	718.3	715.0	718.3	716.1	717.2	719.4
5°	695.6	692.4	691.3	692.4	695.6	701.0	703.2	706.4	706.4	709.6	710.7
7.5°	666.4	664.3	663.2	665.4	671.8	683.7	690.2	694.5	698.8	705.3	711.8
10°	650.2	649.2	648.1	651.3	657.8	668.6	677.2	683.7	699.9	718.3	730.2
12.5°	639.4	639.4	641.6	648.1	656.7	665.4	685.9	694.5	719.4	747.4	763.6
15°	630.8	630.8	634.0	645.9	657.8	678.3	708.6	718.3	747.4	782.0	803.6
17.5°	624.3	626.5	628.6	640.5	663.2	697.8	733.4	747.4	783.1	820.9	844.7
20°	625.4	627.6	628.6	640.5	672.9	720.4	765.8	782.0	823.1	863.0	886.8
22.5°	631.9	635.1	636.2	652.4	690.2	744.2	802.5	820.9	865.2	907.3	925.7
25°	658.9	661.0	654.6	668.6	715.0	780.9	850.1	869.5	913.8	952.7	967.8
27.5°	750.7	752.8	717.2	701.0	734.5	811.2	908.4	935.4	990.5	1016.4	1018.6
30°	949.4	951.6	881.4	804.7	780.9	837.1	940.8	978.6	1049.9	1079.0	1066.1
32.5°	1205.4	1203.3	1107.1	993.7	891.1	882.5	987.2	1027.2	1105.0	1133.1	1123.3
35°	1462.5	1465.7	1383.6	1213.0	1066.1	967.8	1046.6	1093.1	1187.1	1227.0	1209.7
37.5°	1638.5	1660.2	1624.5	1439.8	1281.0	1125.5	1142.8	1192.5	1310.2	1364.2	1327.5
40°	1887.0	1881.6	1795.2	1659.1	1518.7	1358.8	1298.3	1322.1	1457.1	1529.5	1472.2
42.5°	2220.7	2209.9	2063.0	1930.2	1773.6	1642.9	1519.7	1515.4	1625.6	1709.8	1626.7
45°	2523.2	2507.0	2406.5	2278.0	2106.2	1956.1	1789.8	1752.0	1828.6	1899.9	1802.7
47.5°	2764.0	2737.0	2665.7	2597.7	2555.6	2322.3	2072.8	2015.5	2054.4	2107.3	1970.1
50°	3049.2	2974.7	2871.0	2829.9	2917.4	2737.0	2344.9	2289.9	2287.7	2317.9	2143.0
52.5°	3178.8	3043.8	2985.5	3020.0	3174.5	3122.6	2638.7	2559.9	2528.6	2531.8	2303.9
55°	3022.2	3007.1	3038.4	3146.4	3348.4	3318.1	2920.7	2823.4	2777.0	2718.7	2458.4
57.5°	2844.0	2890.4	3014.6	3220.9	3568.7	3522.3	3198.2	3088.1	3002.7	2868.8	2630.1
60°	2679.8	2727.3	2932.5	3238.2	3689.7	3718.9	3429.4	3324.6	3198.2	3022.2	2819.1
62.5°	2430.3	2467.0	2755.4	3213.4	3636.8	3833.4	3590.3	3511.5	3393.7	3168.0	3036.2
65°	2149.4	2173.2	2458.4	3014.6	3533.1	3820.4	3723.2	3678.9	3564.4	3320.3	3251.2
67.5°	1841.6	1869.7	2107.3	2657.1	3330.0	3759.9	3848.5	3844.2	3713.5	3488.8	3406.7
70°	1487.3	1489.5	1686.1	2203.5	2975.7	3638.9	4004.0	4013.7	3856.0	3615.2	3413.2
72.5°	711.8	770.1	1093.1	1538.1	2418.4	3401.3	4105.6	4154.2	3945.7	3610.9	3044.9
75°	163.1	168.5	318.6	731.2	1418.2	2610.7	3851.7	3942.5	3727.5	3122.6	2145.1
77.5°	59.4	62.6	89.7	213.9	545.5	1349.1	2756.5	2889.3	2755.4	2018.8	1014.2
80°	40.0	38.9	46.4	95.1	250.6	382.4	1409.6	1488.4	1358.8	689.1	243.0
82.5°	20.5	21.6	32.4	52.9	168.5	132.9	470.9	512.0	421.2	138.3	45.4
85°	9.7	9.7	18.4	33.5	71.3	46.4	104.8	126.4	113.4	60.5	15.1
87.5°	9.7	9.7	17.3	21.6	36.7	19.4	25.9	32.4	30.2	32.4	5.4
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°	724.8	724.8	724.8	724.8	724.8	724.8	724.8	724.8	724.8	724.8	724.8
2.5°	719.4	718.3	717.2	719.4	718.3	720.4	720.4	722.6	722.6	720.4	719.4
5°	709.6	707.5	705.3	705.3	704.2	706.4	712.9	718.3	719.4	716.1	715.0
7.5°	710.7	710.7	708.6	704.2	696.7	696.7	696.7	703.2	706.4	704.2	703.2
10°	730.2	731.2	725.8	716.1	703.2	691.3	668.6	635.1	603.8	595.1	591.9
12.5°	763.6	764.7	753.9	736.6	709.6	639.4	553.0	473.1	411.5	394.2	391.0
15°	803.6	804.7	785.3	757.2	675.1	512.0	383.4	292.7	238.7	225.7	224.7
17.5°	844.7	842.5	813.3	759.3	572.5	362.9	233.3	186.9	172.8	169.6	170.7
20°	884.6	878.1	838.2	719.4	440.7	237.6	170.7	159.9	156.6	154.5	154.5
22.5°	921.3	908.4	858.7	640.5	308.9	170.7	152.3	150.1	145.8	142.6	141.5
25°	958.1	939.7	871.7	537.9	207.4	149.1	143.7	139.3	133.9	129.6	128.5
27.5°	1002.4	976.4	865.2	408.3	155.5	138.3	133.9	127.5	119.9	113.4	111.3
30°	1044.5	1015.3	828.5	281.9	132.9	127.5	121.0	111.3	101.5	94.0	91.8
32.5°	1097.4	1063.9	762.6	184.7	115.6	111.3	104.8	92.9	79.9	71.3	69.1
35°	1173.0	1135.2	678.3	129.6	101.5	94.0	85.3	72.4	58.3	51.8	50.8
37.5°	1278.9	1228.1	572.5	104.8	89.7	78.8	65.9	52.9	43.2	37.8	36.7
40°	1408.5	1330.7	454.7	92.9	79.9	65.9	49.7	37.8	31.3	27.0	27.0
42.5°	1548.9	1426.8	334.8	85.3	70.2	54.0	36.7	27.0	22.7	20.5	19.4
45°	1693.6	1512.2	225.7	78.8	61.6	41.0	25.9	18.4	15.1	15.1	14.0
47.5°	1843.8	1569.4	145.8	71.3	51.8	30.2	17.3	13.0	10.8	10.8	10.8
50°	1992.8	1599.7	103.7	64.8	42.1	20.5	13.0	9.7	8.6	8.6	8.6
52.5°	2100.8	1580.2	83.2	56.2	32.4	15.1	9.7	7.6	6.5	6.5	6.5
55°	2194.8	1546.7	72.4	48.6	23.8	10.8	7.6	6.5	5.4	5.4	5.4
57.5°	2290.9	1503.5	64.8	41.0	17.3	7.6	5.4	4.3	4.3	4.3	4.3
60°	2378.4	1430.1	56.2	32.4	11.9	5.4	4.3	3.2	3.2	3.2	3.2
62.5°	2463.8	1367.4	48.6	24.8	8.6	4.3	2.2	2.2	1.1	1.1	1.1
65°	2512.4	1283.2	38.9	16.2	5.4	3.2	1.1	1.1	0.0	0.0	0.0
67.5°	2497.2	1182.7	27.0	9.7	3.2	2.2	1.1	0.0	0.0	0.0	0.0
70°	2392.5	1047.7	16.2	5.4	3.2	2.2	1.1	0.0	0.0	0.0	0.0
72.5°	2003.6	775.5	9.7	4.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0
75°	1338.3	356.4	5.4	3.2	1.1	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	612.4	106.9	3.2	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	123.1	28.1	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	25.9	5.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	1.1	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)