

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: P397983

Luminaire Tested: **ARCH-S-PA1-70-730-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397983
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-70-730-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6459 lumens
Efficiency: N/A
Efficacy: 87.3 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

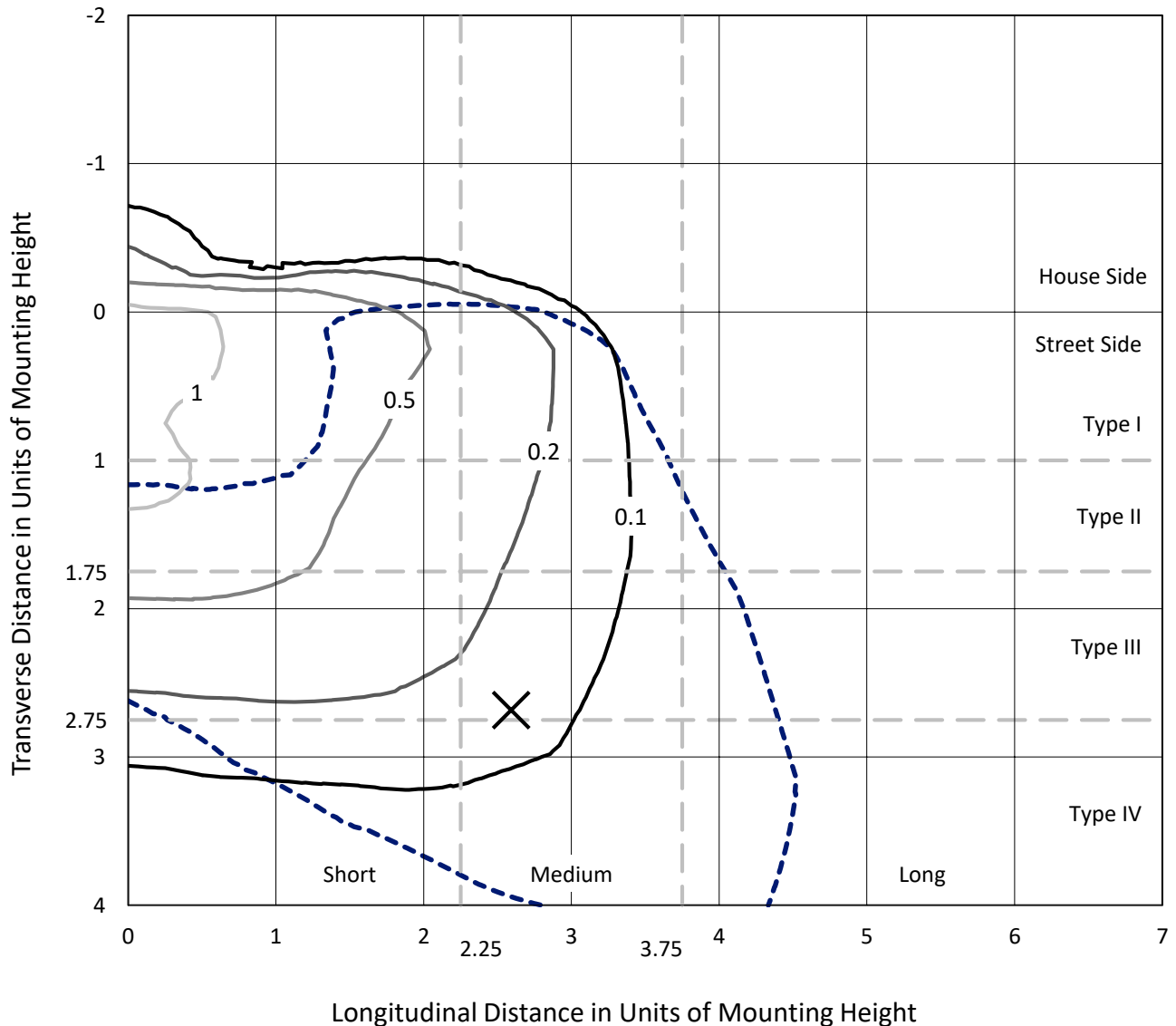
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

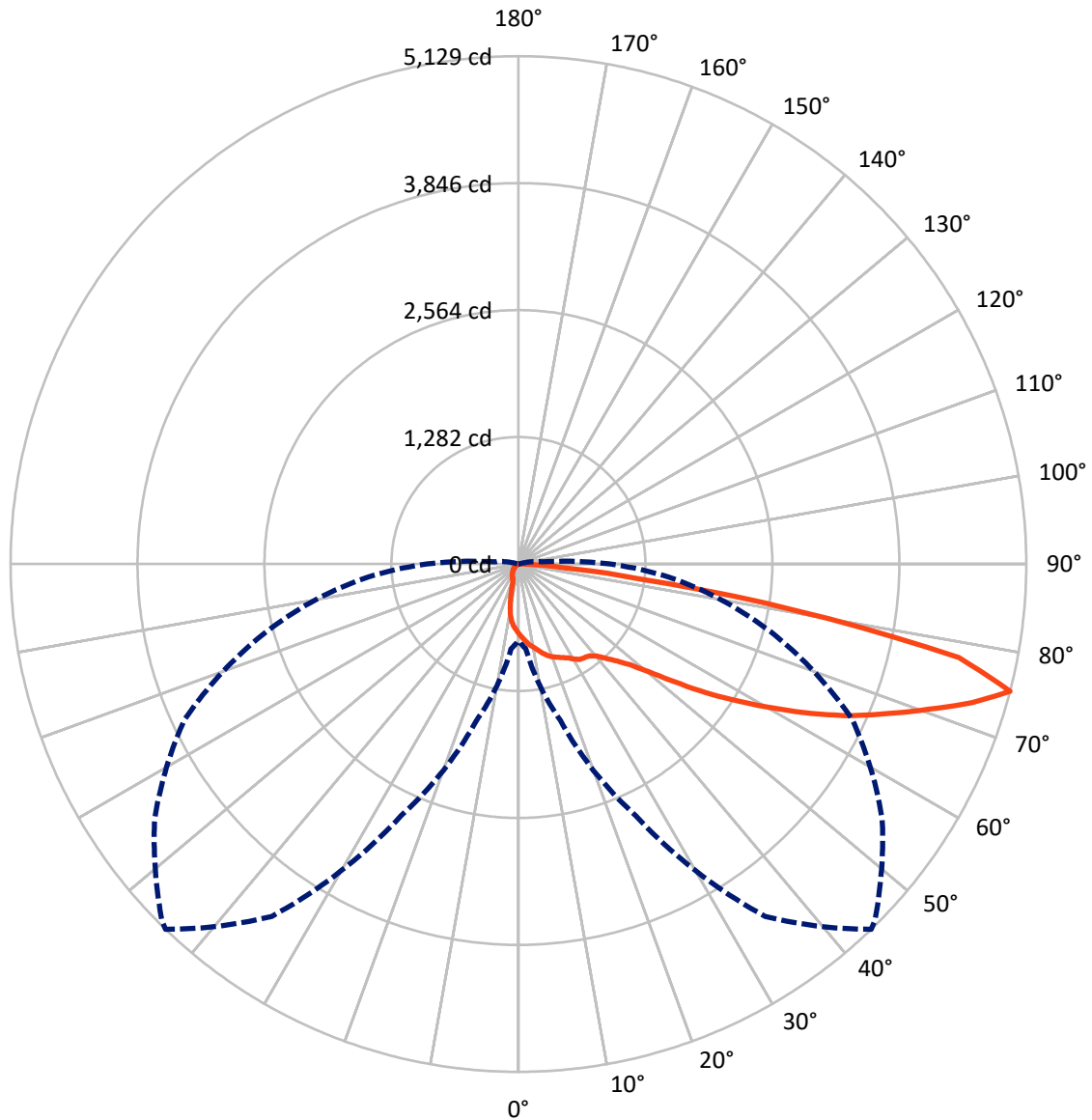
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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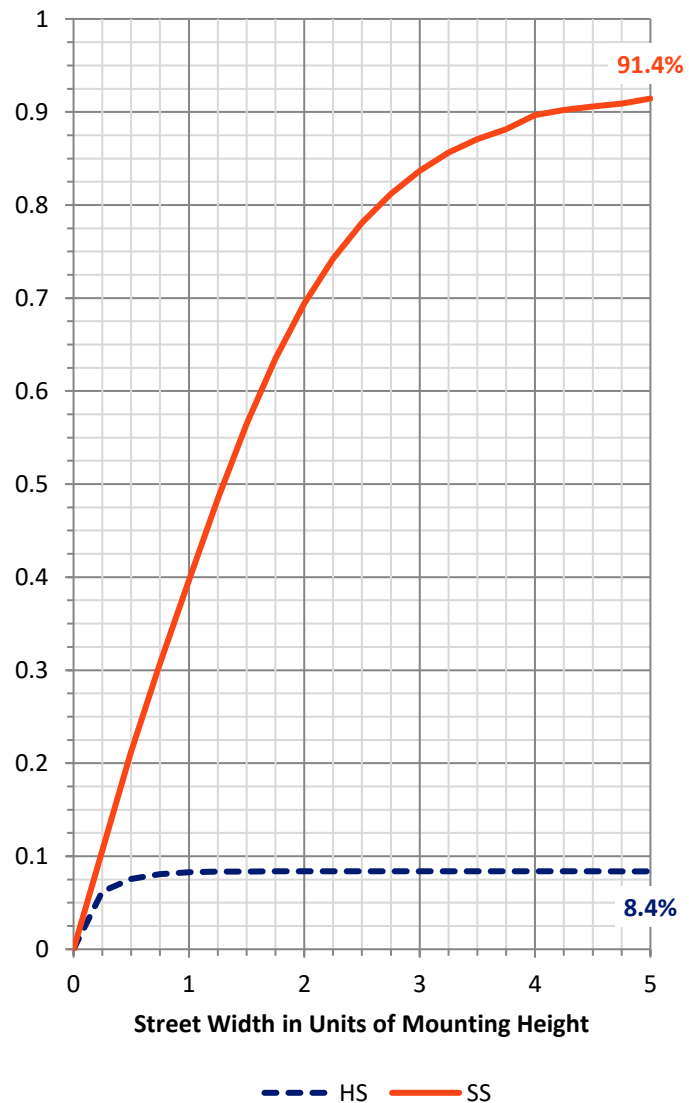
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	544.7	0.0	544.7
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	5914.3	0.0	5914.3
	% Fixture	91.6	0.0	91.6
Total	Lumens	6459.0	0.0	6459.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.3	1.0
10°-20°	185.8	2.9
20°-30°	306.6	4.7
30°-40°	445.0	6.9
40°-50°	723.4	11.2
50°-60°	1275.2	19.7
60°-70°	1832.8	28.4
70°-80°	1467.6	22.7
80°-90°	156.4	2.4
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°	6459.0	100.0
0°-180°	6459.0	100.0



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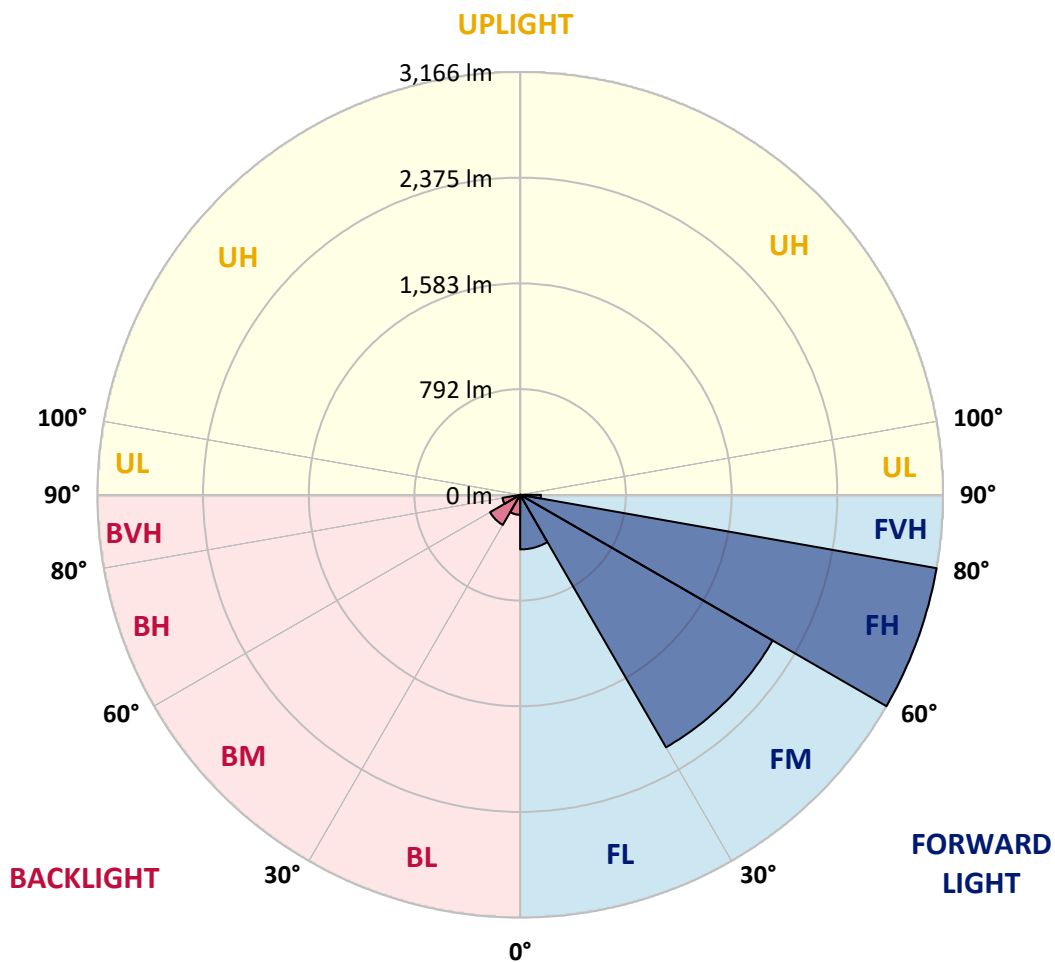
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	409.0	6.3			
FM (30°-60°)	2183.2	33.8			
FH (60°-80°)	3166.1	49.0			G2/5000
FVH (80°-90°)	156.0	2.4			G2/225
BL (0°-30°)	149.6	2.3	B1/500		
BM (30°-60°)	260.4	4.0	B1/1000		
BH (60°-80°)	134.3	2.1	B1/500		G1/500
BVH (80°-90°)	0.4	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-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0
2.5°	766.2	765.0	761.4	755.5	749.5	743.6	742.4	732.8	722.1	713.8	706.6
5°	834.1	832.9	827.0	813.9	800.7	785.3	784.1	761.4	741.2	718.5	699.5
7.5°	904.4	902.0	891.3	871.1	848.4	824.6	822.2	788.8	759.0	729.3	701.8
10°	959.2	956.8	941.4	917.5	886.5	856.8	853.2	818.6	788.8	750.7	713.8
12.5°	1012.9	1008.1	987.8	961.6	923.5	894.9	891.3	855.6	819.8	780.5	735.2
15°	1062.9	1056.9	1037.9	1004.5	964.0	936.6	934.2	896.1	859.1	813.9	763.8
17.5°	1097.5	1095.1	1072.4	1035.5	996.2	973.5	971.1	931.8	894.9	847.2	793.6
20°	1115.3	1115.3	1093.9	1053.4	1017.6	1002.1	998.6	961.6	925.9	880.6	824.6
22.5°	1118.9	1122.5	1105.8	1061.7	1035.5	1022.4	1020.0	987.8	953.3	911.6	859.1
25°	1126.1	1126.1	1117.7	1070.0	1051.0	1047.4	1046.2	1017.6	986.6	944.9	893.7
27.5°	1134.4	1134.4	1128.4	1082.0	1074.8	1073.6	1072.4	1059.3	1034.3	985.4	934.2
30°	1155.8	1157.0	1152.3	1105.8	1101.0	1114.1	1116.5	1109.4	1078.4	1017.6	975.9
32.5°	1209.5	1198.7	1185.6	1122.5	1130.8	1147.5	1148.7	1134.4	1101.0	1052.2	1026.0
35°	1344.1	1281.0	1221.4	1136.8	1140.4	1157.0	1159.4	1158.2	1138.0	1096.3	1083.2
37.5°	1469.2	1379.9	1295.3	1170.1	1158.2	1176.1	1180.9	1201.1	1185.6	1157.0	1160.6
40°	1541.9	1507.4	1447.8	1261.9	1194.0	1221.4	1226.1	1257.1	1251.2	1239.3	1261.9
42.5°	1765.9	1768.3	1704.0	1398.9	1259.5	1303.6	1309.6	1334.6	1342.9	1348.9	1403.7
45°	2025.7	2034.0	2018.6	1645.6	1383.4	1397.7	1406.1	1439.4	1470.4	1508.6	1608.6
47.5°	2337.9	2330.7	2273.6	1947.1	1599.1	1519.3	1525.2	1589.6	1643.2	1726.6	1869.6
50°	2614.3	2632.2	2523.8	2228.3	1903.0	1711.1	1705.2	1768.3	1864.8	1981.6	2161.5
52.5°	2893.2	2867.0	2720.4	2507.1	2262.8	1972.1	1954.2	1988.8	2124.6	2262.8	2447.5
55°	2967.1	2969.4	2919.4	2812.2	2563.1	2289.0	2259.3	2256.9	2426.1	2520.2	2747.8
57.5°	3112.4	3118.4	3130.3	3151.8	3033.8	2606.0	2575.0	2541.7	2706.1	2760.9	3049.3
60°	3260.2	3267.3	3340.0	3455.6	3377.0	2948.0	2914.6	2836.0	2927.7	3001.6	3366.2
62.5°	3241.1	3291.2	3502.1	3732.1	3722.5	3323.3	3281.6	3092.2	3150.6	3214.9	3657.0
65°	2926.5	2980.2	3454.4	3808.3	4069.3	3693.9	3626.0	3356.7	3360.3	3437.7	3937.0
67.5°	2645.3	2703.7	3156.5	3776.1	4298.1	4026.4	3956.1	3622.4	3566.4	3695.1	4087.2
70°	2483.3	2541.7	2919.4	3676.1	4362.4	4394.6	4333.8	3926.3	3811.9	3929.9	3919.1
72.5°	1943.5	2035.2	2616.7	3485.4	4431.5	4789.0	4741.3	4311.2	4020.4	3684.4	2983.7
75°	774.5	859.1	1633.7	2805.0	4344.5	5128.6	5091.7	4484.0	3721.3	2631.0	1527.6
77.5°	233.6	250.2	454.0	1387.0	3185.1	4547.1	4535.2	3770.2	2633.4	1221.4	417.1
80°	77.5	85.8	139.4	382.5	1453.7	2840.7	2894.4	2402.2	1196.4	280.0	84.6
82.5°	32.2	35.7	70.3	153.7	514.8	1223.8	1205.9	1076.0	417.1	174.0	31.0
85°	8.3	10.7	32.2	88.2	188.3	421.8	443.3	361.1	235.9	144.2	9.5
87.5°	0.0	0.0	15.5	35.7	84.6	127.5	133.5	109.6	133.5	108.4	4.8
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°	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0	703.0
2.5°	700.7	694.7	684.0	676.8	667.3	664.9	660.1	654.2	653.0	647.0	648.2
5°	688.7	679.2	660.1	647.0	631.5	626.8	618.4	612.5	607.7	599.4	600.6
7.5°	686.4	672.1	645.8	620.8	595.8	577.9	552.9	532.6	516.0	498.1	501.7
10°	694.7	676.8	639.9	605.3	560.0	502.9	437.3	394.4	373.0	351.5	353.9
12.5°	711.4	689.9	642.3	589.8	498.1	400.4	309.8	251.4	235.9	226.4	227.6
15°	736.4	710.2	649.4	560.0	414.7	289.6	206.1	181.1	187.1	190.7	190.7
17.5°	762.6	732.8	655.4	506.4	320.5	202.6	168.0	165.6	174.0	182.3	182.3
20°	794.8	756.7	656.6	438.5	231.2	164.4	158.5	158.5	164.4	174.0	174.0
22.5°	825.8	782.9	645.8	361.1	176.4	152.5	152.5	152.5	156.1	165.6	166.8
25°	862.7	815.0	623.2	278.8	151.3	145.4	145.4	146.6	148.9	157.3	158.5
27.5°	902.0	848.4	585.1	203.8	138.2	137.0	138.2	139.4	140.6	148.9	151.3
30°	947.3	885.4	536.2	152.5	126.3	126.3	129.9	132.3	132.3	139.4	141.8
32.5°	999.7	934.2	477.8	126.3	114.4	113.2	119.2	122.7	122.7	128.7	131.1
35°	1065.3	984.3	407.5	112.0	104.9	102.5	104.9	110.8	113.2	118.0	119.2
37.5°	1152.3	1043.8	332.5	103.7	97.7	92.9	92.9	94.1	98.9	103.7	104.9
40°	1263.1	1109.4	258.6	97.7	90.6	85.8	82.2	81.0	79.8	83.4	85.8
42.5°	1402.5	1183.2	193.0	91.8	84.6	77.5	72.7	67.9	62.0	60.8	62.0
45°	1581.2	1273.8	143.0	87.0	81.0	70.3	62.0	53.6	42.9	39.3	40.5
47.5°	1792.2	1367.9	112.0	82.2	78.6	62.0	51.2	36.9	26.2	23.8	25.0
50°	2016.2	1458.5	95.3	76.3	73.9	53.6	36.9	22.6	15.5	15.5	16.7
52.5°	2206.8	1509.7	87.0	71.5	66.7	44.1	23.8	13.1	9.5	9.5	10.7
55°	2391.5	1537.2	81.0	66.7	57.2	31.0	13.1	8.3	6.0	6.0	6.0
57.5°	2582.2	1549.1	73.9	60.8	45.3	19.1	7.1	4.8	3.6	3.6	3.6
60°	2751.4	1526.4	63.2	50.0	29.8	9.5	3.6	3.6	2.4	1.2	1.2
62.5°	2893.2	1483.5	44.1	35.7	17.9	4.8	2.4	1.2	0.0	0.0	0.0
65°	2980.2	1414.4	28.6	23.8	10.7	3.6	1.2	0.0	0.0	0.0	0.0
67.5°	2955.1	1284.5	17.9	15.5	4.8	2.4	1.2	0.0	0.0	0.0	0.0
70°	2666.8	1053.4	13.1	9.5	3.6	1.2	0.0	0.0	0.0	0.0	0.0
72.5°	1922.0	712.6	9.5	6.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	924.7	253.8	6.0	4.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	226.4	56.0	3.6	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	50.0	10.7	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	16.7	4.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.6	1.2	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)