

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: P397974

Luminaire Tested: **ARCH-S-PA1-70-727-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397974
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-PA1-70-727-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 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: 5932 lumens
Efficiency: N/A
Efficacy: 80.2 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

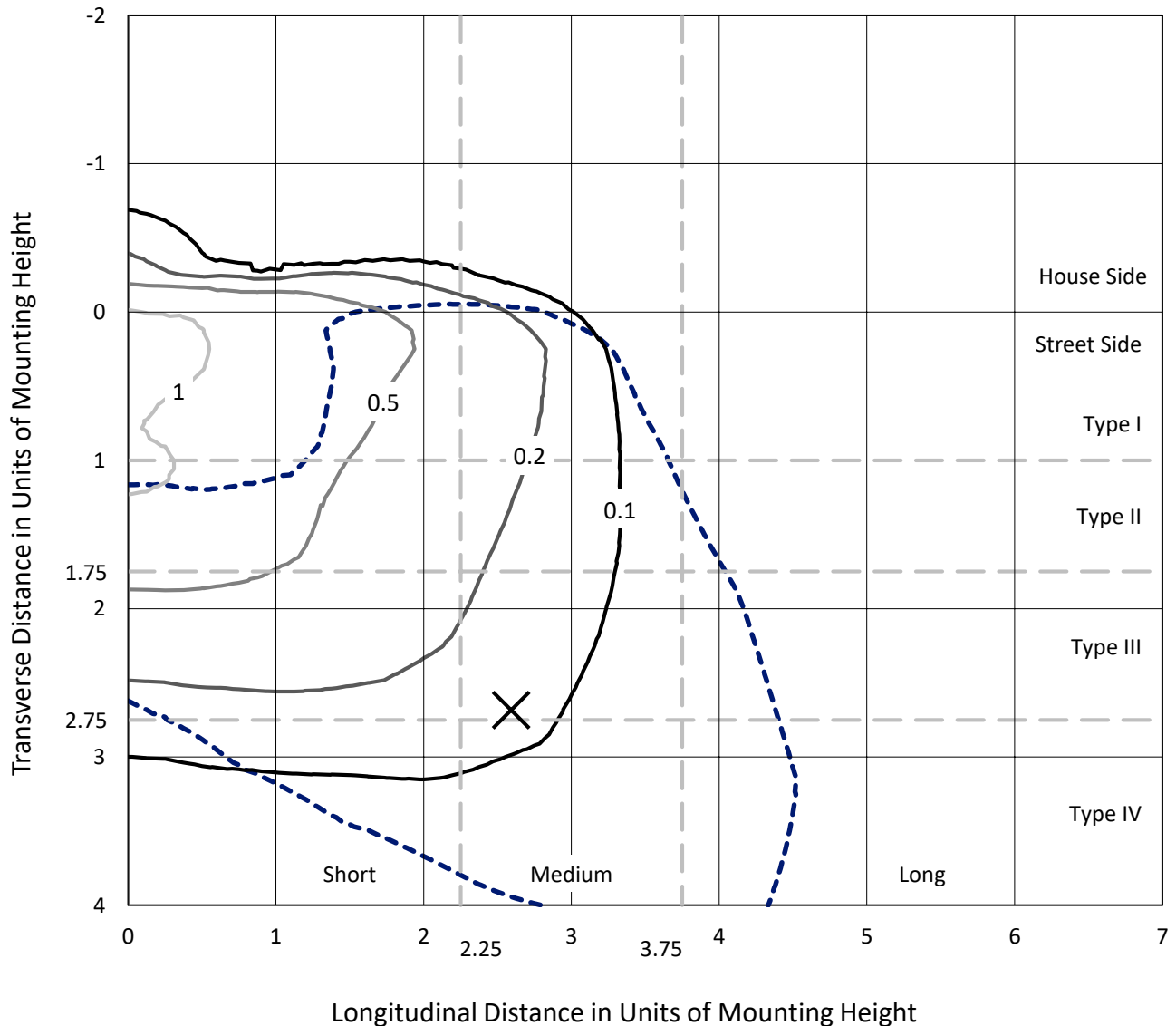
Input Watts (W): 74
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P397974
 CATALOG NUMBER: ARCH-S-PA1-70-727-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

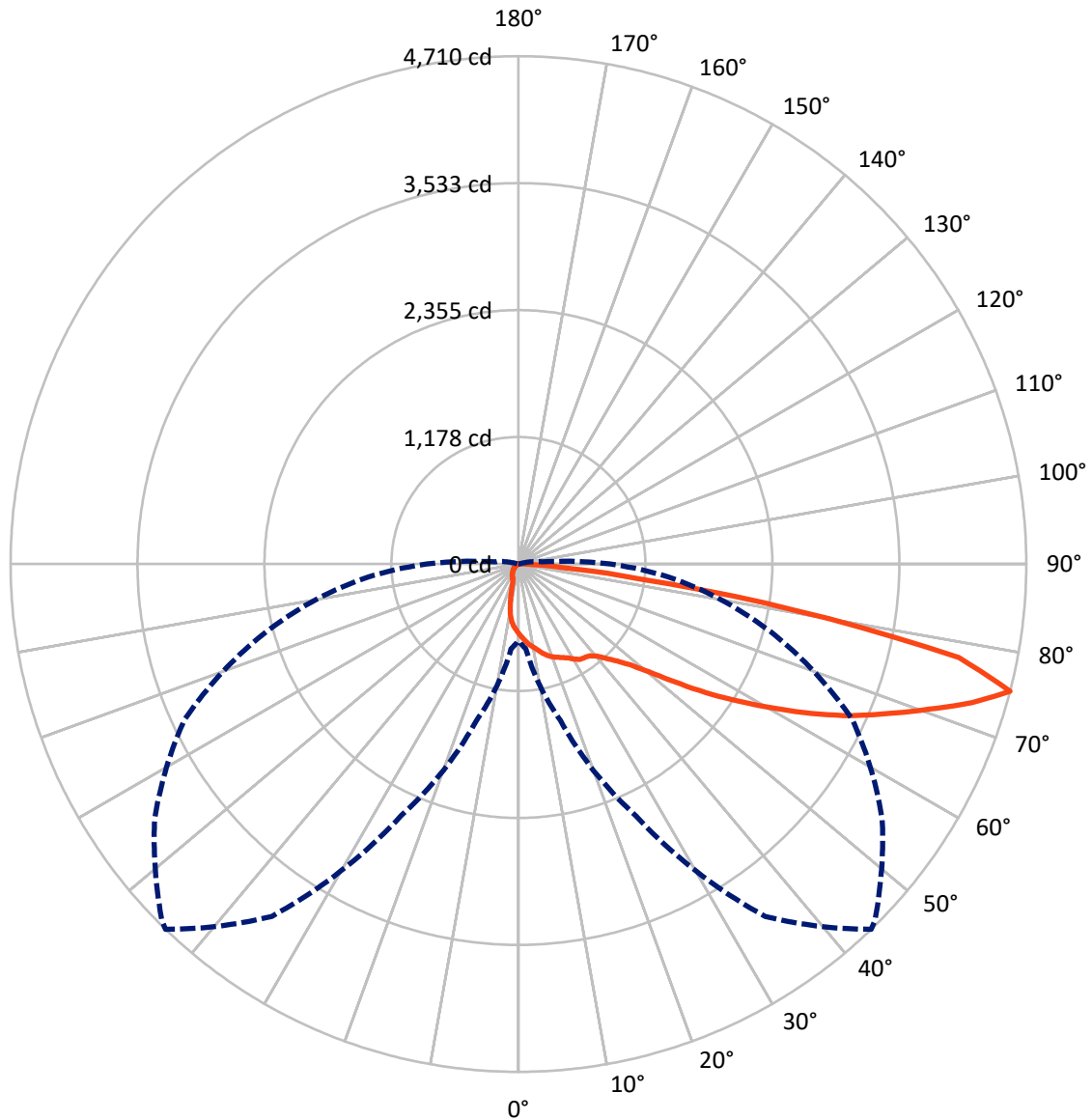


Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P397974

CATALOG NUMBER: ARCH-S-PA1-70-727-U-T4W-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P397974

CATALOG NUMBER: ARCH-S-PA1-70-727-U-T4W-HSS

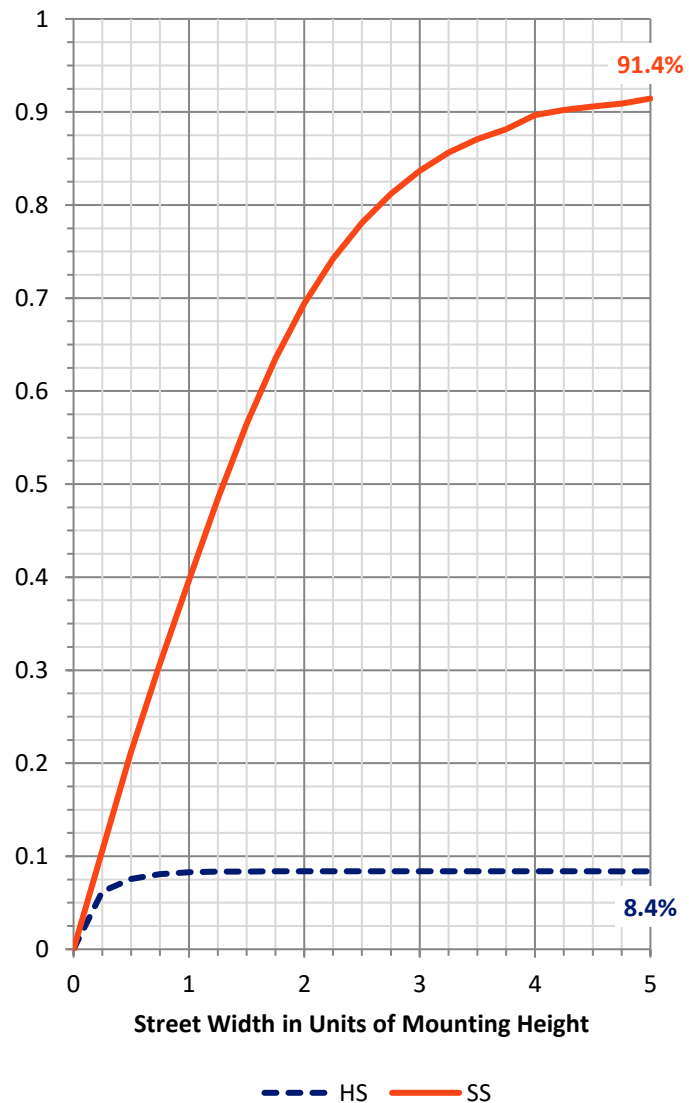
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	500.3	0.0	500.3
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	5431.7	0.0	5431.7
	% Fixture	91.6	0.0	91.6
Total	Lumens	5932.0	0.0	5932.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.9	1.0
10°-20°	170.6	2.9
20°-30°	281.6	4.7
30°-40°	408.7	6.9
40°-50°	664.3	11.2
50°-60°	1171.2	19.7
60°-70°	1683.2	28.4
70°-80°	1347.9	22.7
80°-90°	143.6	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°	5932.0	100.0
0°-180°	5932.0	100.0



REPORT NUMBER: P397974

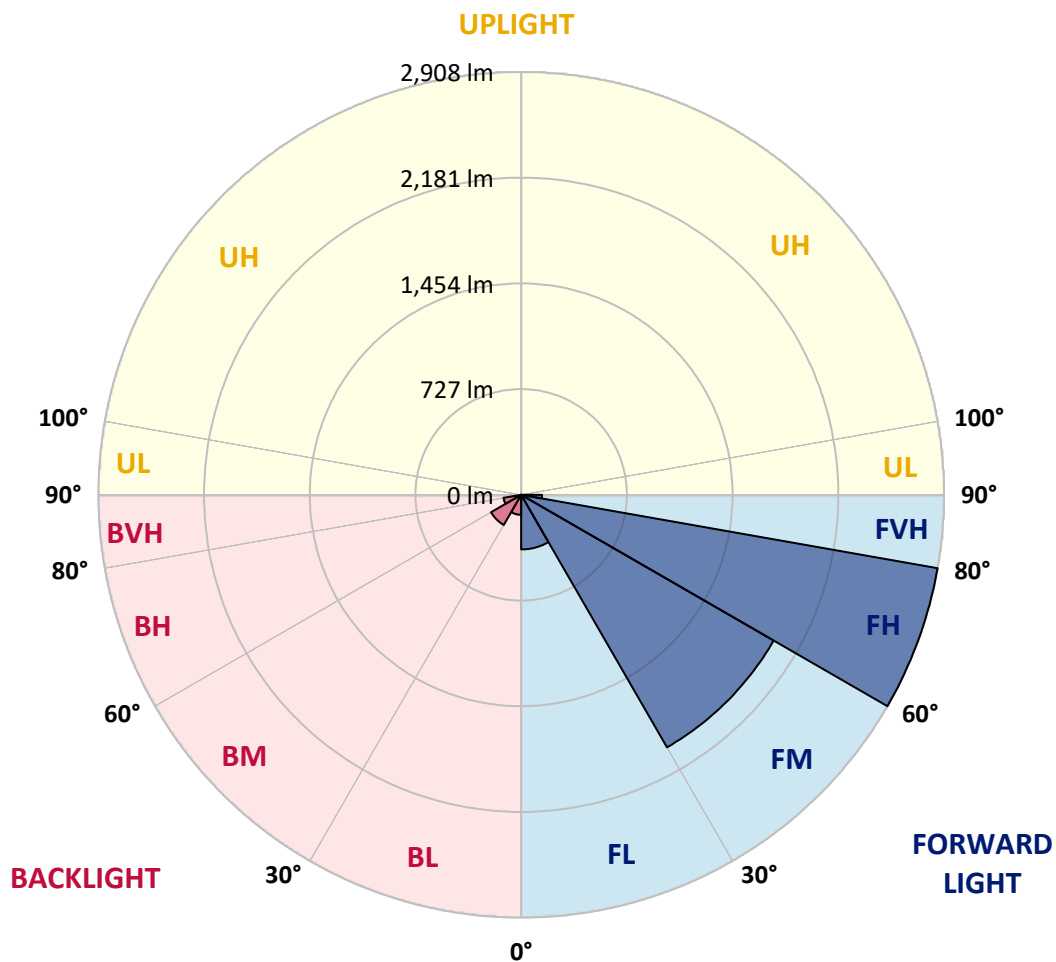
CATALOG NUMBER: ARCH-S-PA1-70-727-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	375.7	6.3			
FM	(30°-60°)	2005.1	33.8			
FH	(60°-80°)	2907.8	49.0			G2/5000
FVH	(80°-90°)	143.2	2.4			G2/225
BL	(0°-30°)	137.4	2.3	B1/500		
BM	(30°-60°)	239.1	4.0	B1/1000		
BH	(60°-80°)	123.3	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





REPORT NUMBER: P397974

CATALOG NUMBER: ARCH-S-PA1-70-727-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	645.7	645.7	645.7	645.7	645.7	645.7	645.7	645.7	645.7	645.7	645.7
2.5°	703.7	702.6	699.3	693.8	688.4	682.9	681.8	673.0	663.2	655.5	649.0
5°	766.1	765.0	759.5	747.5	735.4	721.2	720.1	699.3	680.7	659.9	642.4
7.5°	830.6	828.4	818.6	800.0	779.2	757.3	755.1	724.5	697.1	669.8	644.6
10°	881.0	878.8	864.5	842.7	814.2	786.8	783.6	751.8	724.5	689.5	655.5
12.5°	930.2	925.8	907.2	883.2	848.1	821.9	818.6	785.8	752.9	716.8	675.2
15°	976.2	970.7	953.2	922.6	885.3	860.2	858.0	823.0	789.0	747.5	701.5
17.5°	1007.9	1005.7	984.9	951.0	914.9	894.1	891.9	855.8	821.9	778.1	728.8
20°	1024.3	1024.3	1004.6	967.4	934.6	920.4	917.1	883.2	850.3	808.7	757.3
22.5°	1027.6	1030.9	1015.6	975.1	951.0	939.0	936.8	907.2	875.5	837.2	789.0
25°	1034.2	1034.2	1026.5	982.7	965.2	961.9	960.9	934.6	906.1	867.8	820.8
27.5°	1041.8	1041.8	1036.4	993.7	987.1	986.0	984.9	972.9	949.9	905.0	858.0
30°	1061.5	1062.6	1058.3	1015.6	1011.2	1023.2	1025.4	1018.9	990.4	934.6	896.3
32.5°	1110.8	1100.9	1088.9	1030.9	1038.6	1053.9	1055.0	1041.8	1011.2	966.3	942.2
35°	1234.4	1176.4	1121.7	1044.0	1047.3	1062.6	1064.8	1063.7	1045.1	1006.8	994.8
37.5°	1349.4	1267.3	1189.6	1074.7	1063.7	1080.1	1084.5	1103.1	1088.9	1062.6	1065.9
40°	1416.1	1384.4	1329.7	1158.9	1096.6	1121.7	1126.1	1154.6	1149.1	1138.1	1158.9
42.5°	1621.8	1624.0	1564.9	1284.8	1156.7	1197.2	1202.7	1225.7	1233.4	1238.8	1289.2
45°	1860.4	1868.1	1853.9	1511.3	1270.6	1283.7	1291.4	1322.0	1350.4	1385.5	1477.4
47.5°	2147.1	2140.6	2088.0	1788.2	1468.6	1395.3	1400.8	1459.9	1509.1	1585.7	1717.1
50°	2401.0	2417.5	2317.9	2046.5	1747.7	1571.5	1566.0	1624.0	1712.7	1819.9	1985.2
52.5°	2657.1	2633.0	2498.4	2302.5	2078.2	1811.2	1794.8	1826.5	1951.3	2078.2	2247.8
55°	2725.0	2727.2	2681.2	2582.7	2354.0	2102.3	2074.9	2072.7	2228.1	2314.6	2523.6
57.5°	2858.5	2864.0	2874.9	2894.6	2786.3	2393.4	2364.9	2334.3	2485.3	2535.6	2800.5
60°	2994.2	3000.8	3067.5	3173.7	3101.4	2707.5	2676.8	2604.6	2688.9	2756.7	3091.6
62.5°	2976.7	3022.6	3216.3	3427.6	3418.8	3052.2	3013.9	2839.9	2893.5	2952.6	3358.6
65°	2687.8	2737.0	3172.6	3497.6	3737.3	3392.5	3330.2	3082.8	3086.1	3157.2	3615.8
67.5°	2429.5	2483.1	2899.0	3468.0	3947.4	3697.9	3633.3	3326.9	3275.4	3393.6	3753.7
70°	2280.7	2334.3	2681.2	3376.1	4006.5	4036.0	3980.2	3605.9	3500.9	3609.2	3599.4
72.5°	1784.9	1869.2	2403.2	3201.0	4069.9	4398.3	4354.5	3959.4	3692.4	3383.8	2740.3
75°	711.3	789.0	1500.4	2576.1	3990.1	4710.1	4676.2	4118.1	3417.7	2416.4	1403.0
77.5°	214.5	229.8	417.0	1273.8	2925.2	4176.1	4165.2	3462.6	2418.5	1121.7	383.0
80°	71.1	78.8	128.0	351.3	1335.1	2609.0	2658.2	2206.2	1098.7	257.2	77.7
82.5°	29.5	32.8	64.6	141.2	472.8	1123.9	1107.5	988.2	383.0	159.8	28.5
85°	7.7	9.8	29.5	81.0	172.9	387.4	407.1	331.6	216.7	132.4	8.8
87.5°	0.0	0.0	14.2	32.8	77.7	117.1	122.6	100.7	122.6	99.6	4.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P397974

CATALOG NUMBER: ARCH-S-PA1-70-727-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	645.7	645.7	645.7	645.7	645.7	645.7	645.7	645.7	645.7	645.7	645.7
2.5°	643.5	638.0	628.2	621.6	612.8	610.7	606.3	600.8	599.7	594.2	595.3
5°	632.5	623.8	606.3	594.2	580.0	575.6	568.0	562.5	558.1	550.5	551.6
7.5°	630.4	617.2	593.1	570.2	547.2	530.8	507.8	489.2	473.9	457.4	460.7
10°	638.0	621.6	587.7	555.9	514.4	461.8	401.6	362.2	342.5	322.8	325.0
12.5°	653.3	633.6	589.9	541.7	457.4	367.7	284.5	230.9	216.7	207.9	209.0
15°	676.3	652.2	596.4	514.4	380.8	265.9	189.3	166.3	171.8	175.1	175.1
17.5°	700.4	673.0	601.9	465.1	294.4	186.0	154.3	152.1	159.8	167.4	167.4
20°	729.9	694.9	603.0	402.7	212.3	151.0	145.6	145.6	151.0	159.8	159.8
22.5°	758.4	719.0	593.1	331.6	162.0	140.1	140.1	140.1	143.4	152.1	153.2
25°	792.3	748.5	572.4	256.1	139.0	133.5	133.5	134.6	136.8	144.5	145.6
27.5°	828.4	779.2	537.3	187.1	126.9	125.9	126.9	128.0	129.1	136.8	139.0
30°	870.0	813.1	492.5	140.1	116.0	116.0	119.3	121.5	121.5	128.0	130.2
32.5°	918.2	858.0	438.8	116.0	105.1	104.0	109.4	112.7	112.7	118.2	120.4
35°	978.4	903.9	374.3	102.9	96.3	94.1	96.3	101.8	104.0	108.3	109.4
37.5°	1058.3	958.7	305.3	95.2	89.7	85.4	85.4	86.5	90.8	95.2	96.3
40°	1160.0	1018.9	237.5	89.7	83.2	78.8	75.5	74.4	73.3	76.6	78.8
42.5°	1288.1	1086.7	177.3	84.3	77.7	71.1	66.8	62.4	56.9	55.8	56.9
45°	1452.2	1169.9	131.3	79.9	74.4	64.6	56.9	49.2	39.4	36.1	37.2
47.5°	1645.9	1256.3	102.9	75.5	72.2	56.9	47.1	33.9	24.1	21.9	23.0
50°	1851.7	1339.5	87.5	70.0	67.9	49.2	33.9	20.8	14.2	14.2	15.3
52.5°	2026.8	1386.6	79.9	65.7	61.3	40.5	21.9	12.0	8.8	8.8	9.8
55°	2196.4	1411.7	74.4	61.3	52.5	28.5	12.0	7.7	5.5	5.5	5.5
57.5°	2371.5	1422.7	67.9	55.8	41.6	17.5	6.6	4.4	3.3	3.3	3.3
60°	2526.9	1401.9	58.0	46.0	27.4	8.8	3.3	3.3	2.2	1.1	1.1
62.5°	2657.1	1362.5	40.5	32.8	16.4	4.4	2.2	1.1	0.0	0.0	0.0
65°	2737.0	1299.0	26.3	21.9	9.8	3.3	1.1	0.0	0.0	0.0	0.0
67.5°	2714.0	1179.7	16.4	14.2	4.4	2.2	1.1	0.0	0.0	0.0	0.0
70°	2449.2	967.4	12.0	8.8	3.3	1.1	0.0	0.0	0.0	0.0	0.0
72.5°	1765.2	654.4	8.8	5.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	849.2	233.1	5.5	4.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	207.9	51.4	3.3	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	46.0	9.8	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	15.3	4.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.3	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)