

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: P573523

Luminaire Tested: **ARCH-S-PA2-80-830-U-T4W-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573523
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-80-830-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 820mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6893 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

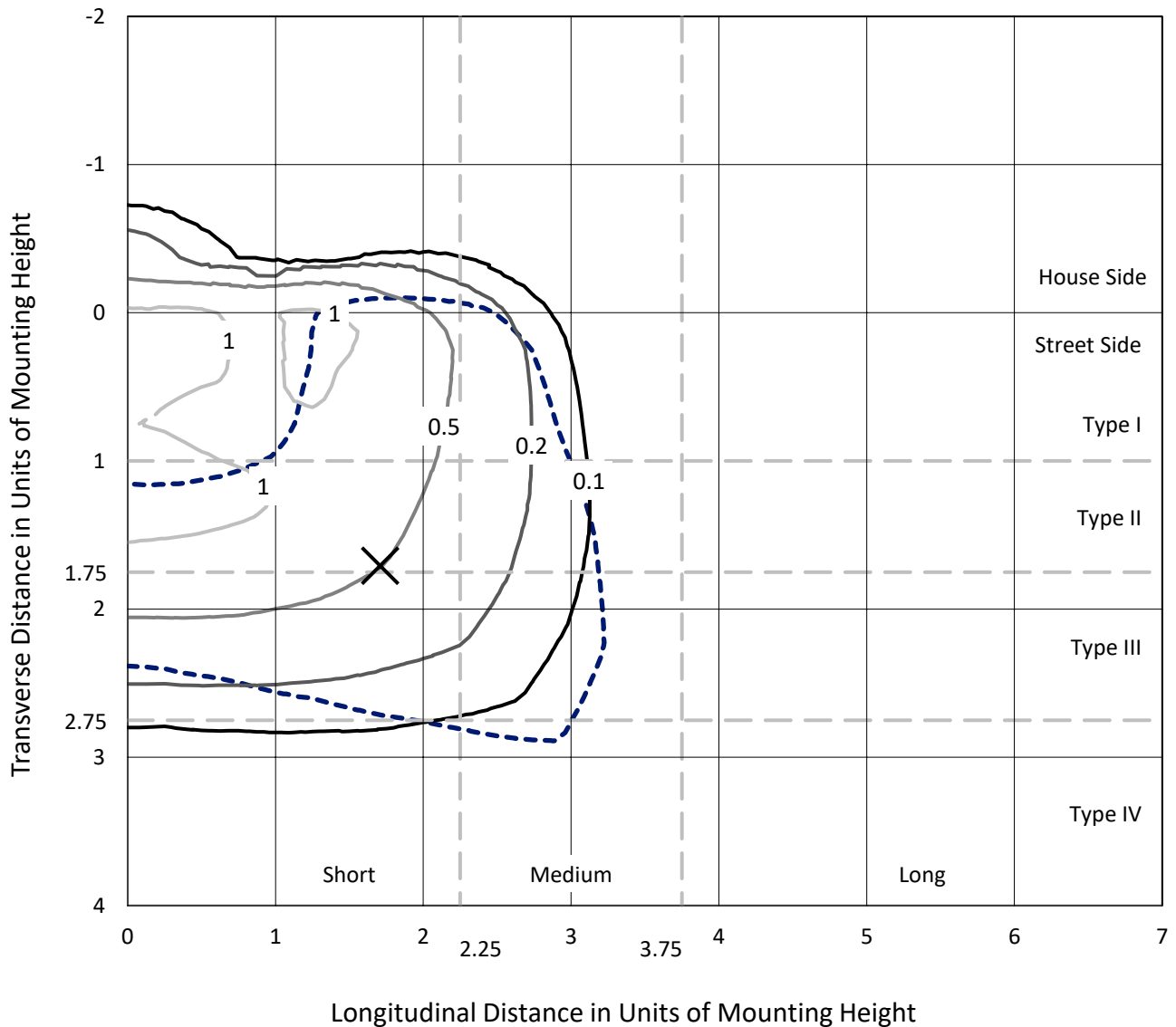
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

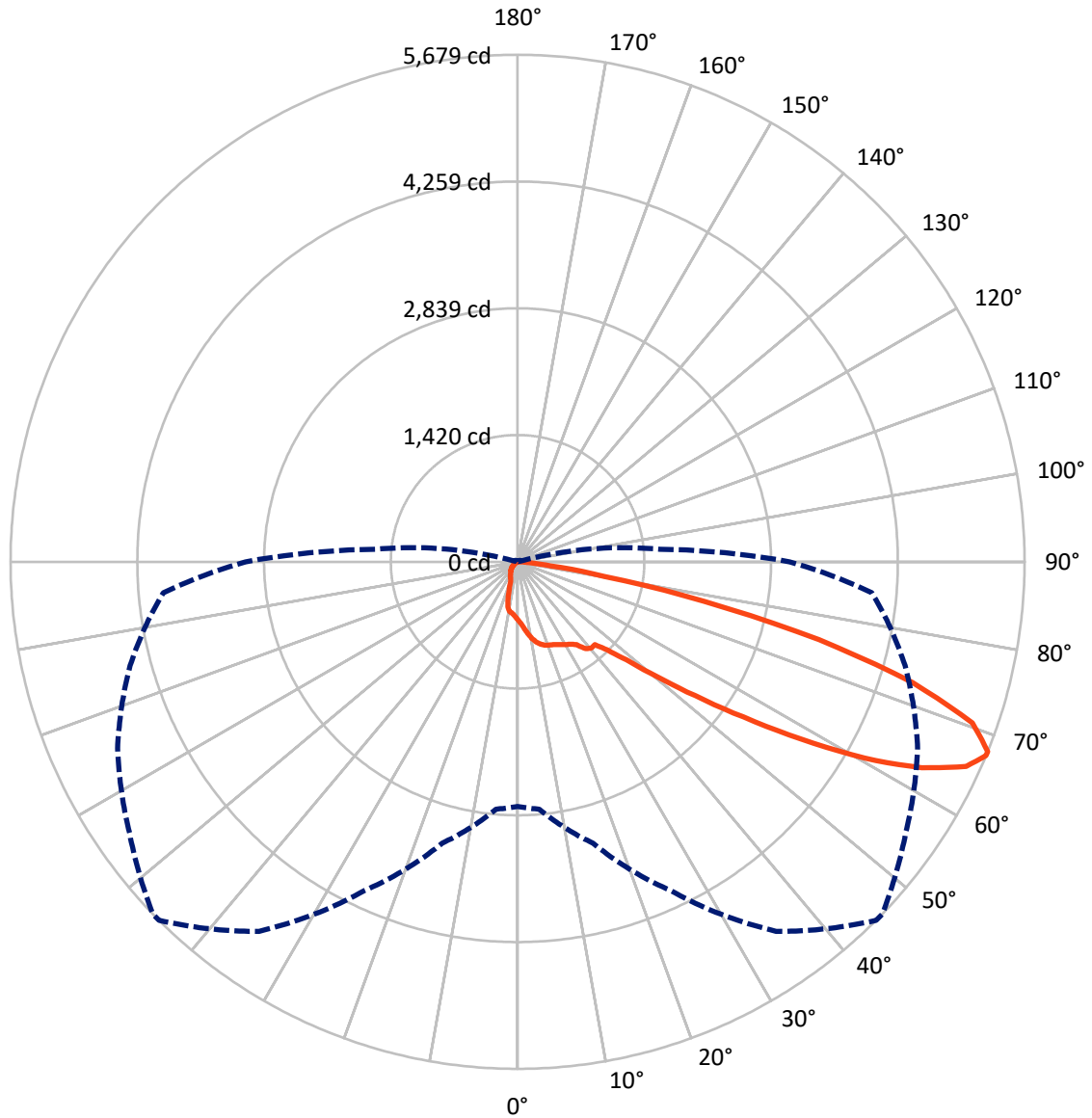
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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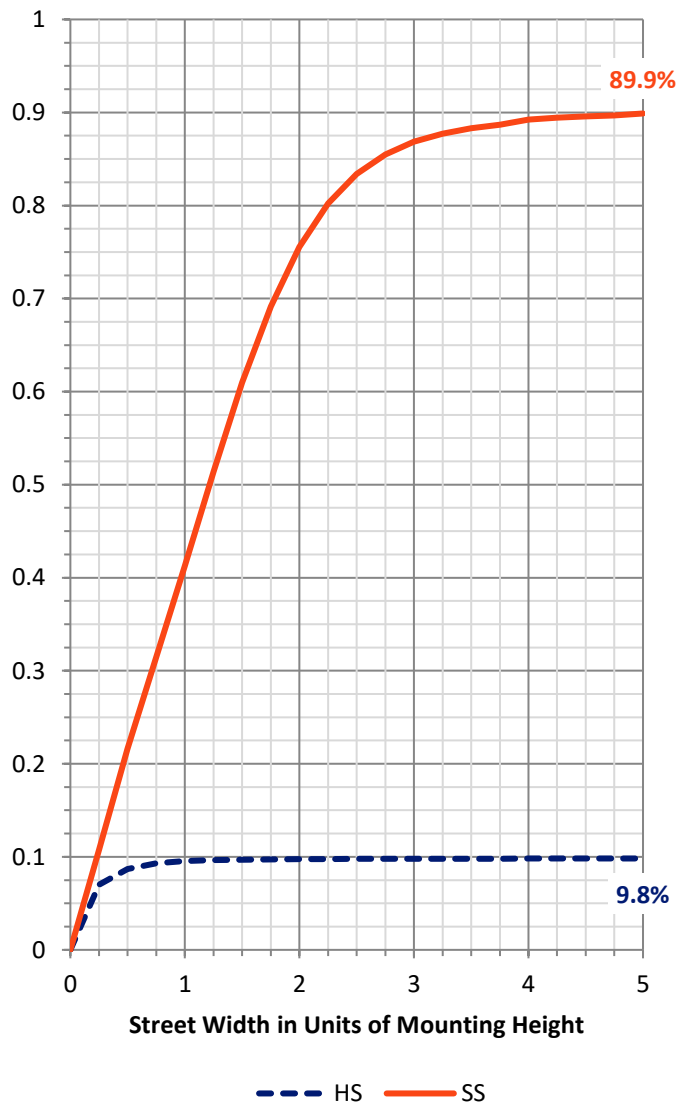
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	683.0	0.0	683.0
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	6210.0	0.0	6210.0
	% Fixture	90.1	0.0	90.1
Total	Lumens	6893.0	0.0	6893.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.4	0.9
10°-20°	197.8	2.9
20°-30°	316.4	4.6
30°-40°	455.4	6.6
40°-50°	798.9	11.6
50°-60°	1683.3	24.4
60°-70°	2327.7	33.8
70°-80°	974.5	14.1
80°-90°	73.7	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°	6893.0	100.0
0°-180°	6893.0	100.0

Coefficient of Utilization



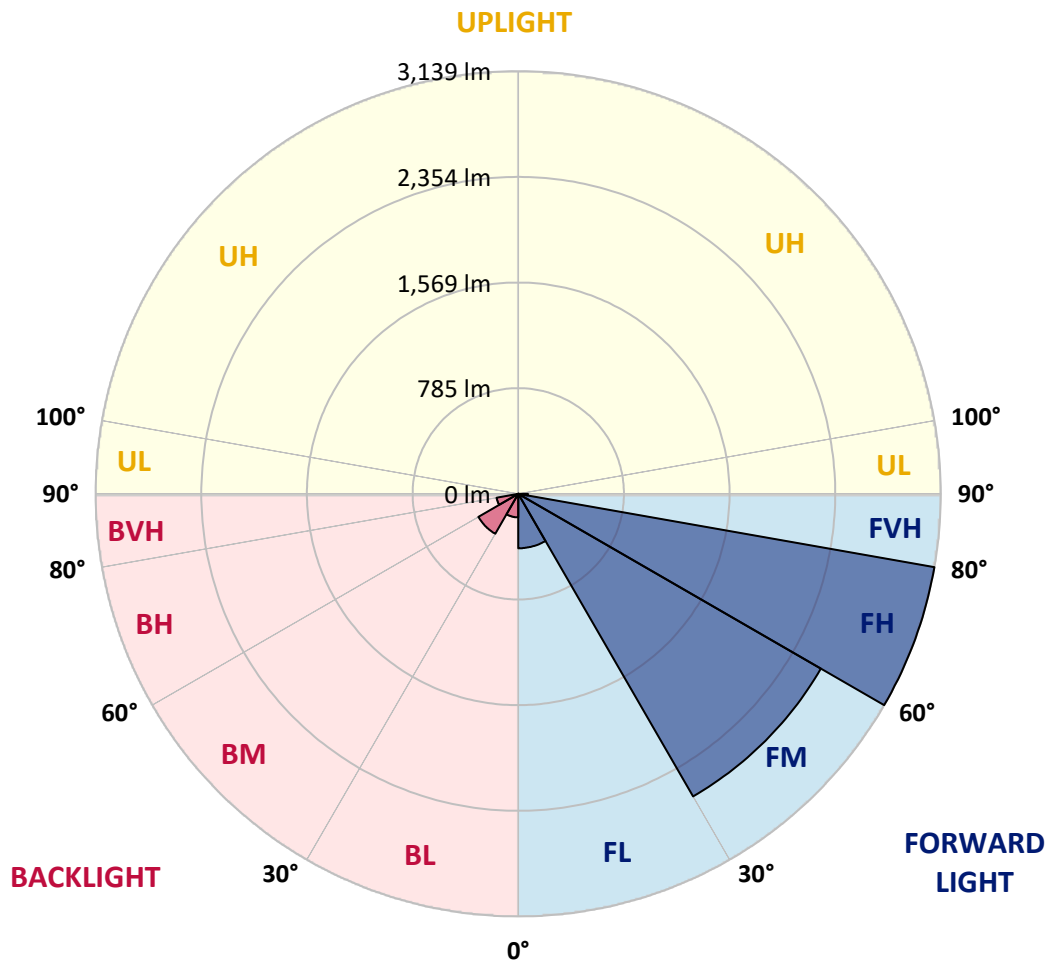
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	404.6	5.9			
FM (30°-60°)	2595.3	37.7			
FH (60°-80°)	3138.9	45.5			G2/5000
FVH (80°-90°)	71.2	1.0			G1/100
BL (0°-30°)	175.0	2.5	B1/500		
BM (30°-60°)	342.2	5.0	B1/1000		
BH (60°-80°)	163.3	2.4	B1/500		G1/500
BVH (80°-90°)	2.5	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	651.9	651.9	651.9	651.9	651.9	651.9	651.9	651.9	651.9	651.9	651.9
2.5°	725.7	713.0	710.5	707.9	700.3	690.1	692.6	685.0	672.3	664.6	657.0
5°	814.9	802.1	797.0	781.8	766.5	743.6	743.6	723.2	700.3	679.9	659.5
7.5°	906.5	896.4	886.2	863.2	840.3	809.8	807.2	776.7	741.0	710.5	677.4
10°	982.9	975.3	962.6	934.5	904.0	870.9	863.2	835.2	789.4	748.7	705.4
12.5°	1044.0	1036.4	1018.6	990.6	952.4	919.3	916.7	881.1	835.2	791.9	738.5
15°	1089.9	1077.2	1056.8	1026.2	988.0	957.5	952.4	921.8	878.5	830.1	766.5
17.5°	1097.5	1089.9	1072.1	1039.0	1005.8	980.4	977.8	954.9	916.7	865.8	799.6
20°	1077.2	1074.6	1059.3	1033.9	1008.4	995.7	993.1	977.8	947.3	901.4	835.2
22.5°	1046.6	1044.0	1033.9	1021.1	1010.9	1008.4	1008.4	1003.3	985.5	942.2	881.1
25°	1026.2	1023.7	1018.6	1010.9	1010.9	1026.2	1028.8	1033.9	1018.6	985.5	919.3
27.5°	1028.8	1023.7	1018.6	1010.9	1021.1	1049.1	1051.7	1064.4	1051.7	1021.1	962.6
30°	1064.4	1056.8	1041.5	1023.7	1036.4	1074.6	1077.2	1092.4	1082.2	1067.0	1010.9
32.5°	1120.4	1115.3	1084.8	1054.2	1061.9	1100.1	1105.2	1133.2	1145.9	1123.0	1054.2
35°	1201.9	1184.1	1145.9	1115.3	1110.3	1138.3	1145.9	1191.7	1224.8	1168.8	1079.7
37.5°	1268.1	1252.9	1191.7	1143.4	1171.4	1235.0	1237.6	1293.6	1265.6	1173.9	1120.4
40°	1492.2	1489.7	1382.7	1229.9	1199.4	1270.7	1280.9	1291.1	1278.3	1232.5	1209.6
42.5°	1853.8	1823.3	1703.6	1469.3	1260.5	1268.1	1273.2	1326.7	1392.9	1372.5	1380.2
45°	2246.0	2220.5	2085.5	1790.2	1469.3	1405.6	1410.7	1497.3	1624.6	1650.1	1690.8
47.5°	2607.6	2566.8	2490.4	2192.5	1825.8	1639.9	1650.1	1754.5	1965.9	2021.9	2085.5
50°	2913.1	2885.1	2813.8	2617.8	2263.8	2009.2	2019.3	2105.9	2380.9	2470.1	2551.5
52.5°	3356.2	3318.0	3180.5	3088.8	2821.5	2490.4	2467.5	2559.2	2874.9	2933.5	3043.0
55°	3763.7	3684.7	3603.2	3565.0	3453.0	3065.9	3058.3	3076.1	3338.4	3369.0	3565.0
57.5°	3936.8	3921.5	3990.3	4117.6	4143.1	3743.3	3710.2	3641.4	3847.7	3845.1	4074.3
60°	4046.3	4046.3	4229.7	4545.4	4749.1	4466.5	4420.6	4206.7	4280.6	4283.1	4494.5
62.5°	3977.6	3995.4	4280.6	4756.8	5166.8	5080.2	5049.6	4690.6	4685.5	4626.9	4700.8
65°	3552.3	3582.9	4041.2	4639.6	5319.5	5523.3	5510.5	5103.1	4955.4	4741.5	4576.0
67°	2897.9	2953.9	3509.0	4216.9	5146.4	5676.0	5678.6	5281.3	4957.9	4550.5	4135.4
67.5°	2740.0	2780.7	3262.0	4064.1	5052.2	5678.6	5678.6	5304.3	4942.7	4491.9	3982.7
70°	1746.9	1757.1	2281.6	3144.9	4316.2	5403.6	5423.9	5131.1	4502.1	3636.3	2796.0
72.5°	863.2	840.3	1204.5	2024.4	3239.1	4624.4	4677.8	4382.4	3562.5	2375.8	1476.9
75°	338.7	361.6	524.6	1077.2	2029.5	3486.1	3526.8	3188.2	2291.8	1224.8	583.1
77.5°	150.2	150.2	224.1	483.8	1067.0	2139.0	2159.4	1945.5	1209.6	504.2	178.3
80°	81.5	86.6	117.1	211.4	537.3	982.9	1072.1	965.1	547.5	221.5	61.1
82.5°	40.7	43.3	71.3	119.7	269.9	371.8	392.2	410.0	252.1	137.5	25.5
85°	15.3	17.8	38.2	68.8	122.2	124.8	124.8	160.4	137.5	104.4	12.7
87.5°	2.5	5.1	17.8	28.0	48.4	43.3	38.2	50.9	76.4	66.2	7.6
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°	651.9	651.9	651.9	651.9	651.9	651.9	651.9	651.9	651.9	651.9	651.9
2.5°	651.9	646.8	636.6	629.0	623.9	618.8	613.7	613.7	611.1	611.1	613.7
5°	651.9	641.7	621.3	608.6	598.4	590.8	585.7	585.7	583.1	585.7	588.2
7.5°	664.6	649.3	621.3	598.4	585.7	573.0	567.9	565.3	565.3	567.9	565.3
10°	685.0	664.6	629.0	598.4	580.6	562.8	534.8	509.3	486.4	476.2	473.6
12.5°	710.5	685.0	641.7	606.1	578.0	516.9	440.5	392.2	361.6	346.3	341.2
15°	738.5	707.9	657.0	616.2	539.8	425.3	325.9	272.5	254.6	257.2	259.7
17.5°	769.0	735.9	679.9	611.1	463.5	315.8	239.4	226.6	234.3	241.9	241.9
20°	799.6	763.9	702.8	573.0	364.1	234.3	213.9	216.4	224.1	231.7	231.7
22.5°	840.3	802.1	725.7	506.7	269.9	203.7	203.7	208.8	213.9	221.5	221.5
25°	883.6	845.4	741.0	425.3	201.2	191.0	193.5	198.6	203.7	211.4	211.4
27.5°	929.5	891.3	738.5	328.5	175.7	175.7	178.3	185.9	191.0	198.6	198.6
30°	980.4	947.3	710.5	239.4	163.0	160.4	160.4	168.1	175.7	180.8	183.3
32.5°	1023.7	995.7	662.1	180.8	152.8	147.7	145.1	147.7	155.3	160.4	163.0
35°	1059.3	1049.1	590.8	155.3	142.6	135.0	129.9	127.3	129.9	129.9	132.4
37.5°	1125.5	1128.1	506.7	145.1	135.0	124.8	114.6	107.0	101.9	99.3	96.8
40°	1250.3	1247.8	417.6	137.5	127.3	114.6	99.3	89.1	76.4	71.3	71.3
42.5°	1426.0	1387.8	318.3	129.9	119.7	104.4	84.0	68.8	56.0	53.5	53.5
45°	1741.8	1583.9	239.4	124.8	112.0	91.7	68.8	50.9	43.3	40.7	40.7
47.5°	2090.6	1810.5	191.0	117.1	104.4	81.5	53.5	40.7	33.1	33.1	33.1
50°	2475.2	2027.0	160.4	109.5	91.7	68.8	43.3	33.1	30.6	28.0	30.6
52.5°	2895.3	2197.6	140.1	99.3	78.9	56.0	35.7	30.6	25.5	25.5	25.5
55°	3272.2	2312.2	117.1	86.6	66.2	45.8	33.1	25.5	22.9	20.4	17.8
57.5°	3613.4	2373.3	94.2	73.8	50.9	38.2	28.0	20.4	17.8	12.7	12.7
60°	3789.1	2317.3	73.8	58.6	40.7	30.6	22.9	17.8	12.7	7.6	7.6
62.5°	3817.1	2172.1	58.6	45.8	35.7	25.5	17.8	12.7	7.6	5.1	5.1
65°	3572.7	1917.5	48.4	38.2	28.0	20.4	15.3	10.2	5.1	2.5	2.5
67°	3134.7	1650.1	43.3	33.1	25.5	17.8	12.7	7.6	5.1	2.5	0.0
67.5°	3048.1	1601.7	40.7	33.1	25.5	17.8	12.7	7.6	5.1	2.5	0.0
70°	2001.5	1107.7	38.2	30.6	22.9	15.3	10.2	7.6	2.5	0.0	0.0
72.5°	1092.4	557.7	35.7	28.0	20.4	15.3	10.2	5.1	2.5	0.0	0.0
75°	399.8	211.4	30.6	25.5	17.8	15.3	10.2	5.1	2.5	0.0	0.0
77.5°	135.0	73.8	28.0	25.5	20.4	15.3	10.2	5.1	2.5	0.0	0.0
80°	45.8	33.1	22.9	20.4	15.3	12.7	10.2	5.1	2.5	0.0	0.0
82.5°	17.8	10.2	7.6	7.6	7.6	10.2	10.2	7.6	2.5	0.0	0.0
85°	7.6	5.1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.0	0.0
87.5°	7.6	5.1	2.5	2.5	2.5	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)