

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: P398089

Luminaire Tested: **ARCH-S-PA1-80-827-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398089
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-PA1-80-827-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 1050mA 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: 5738 lumens
Efficiency: N/A
Efficacy: 69.1 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

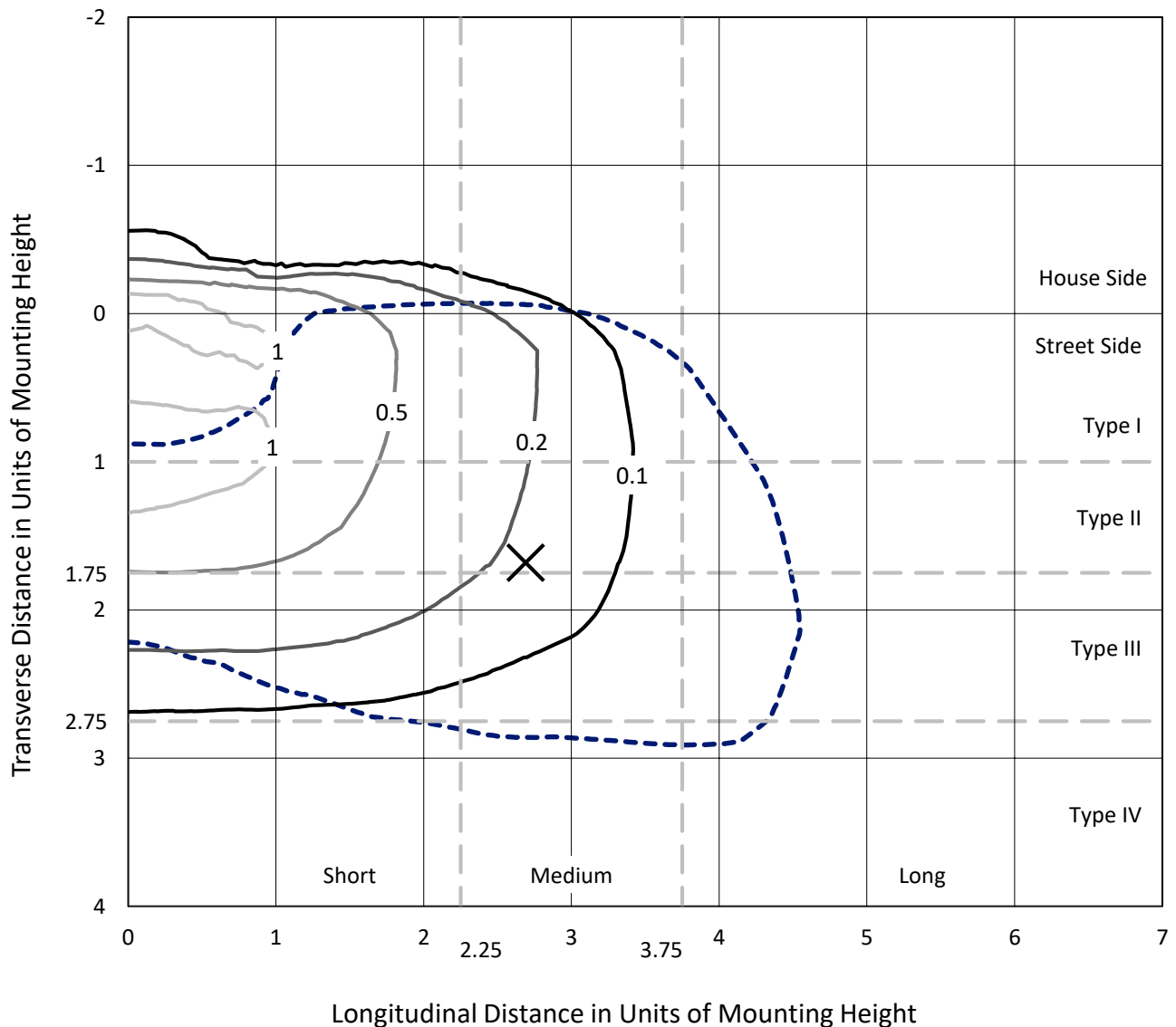
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

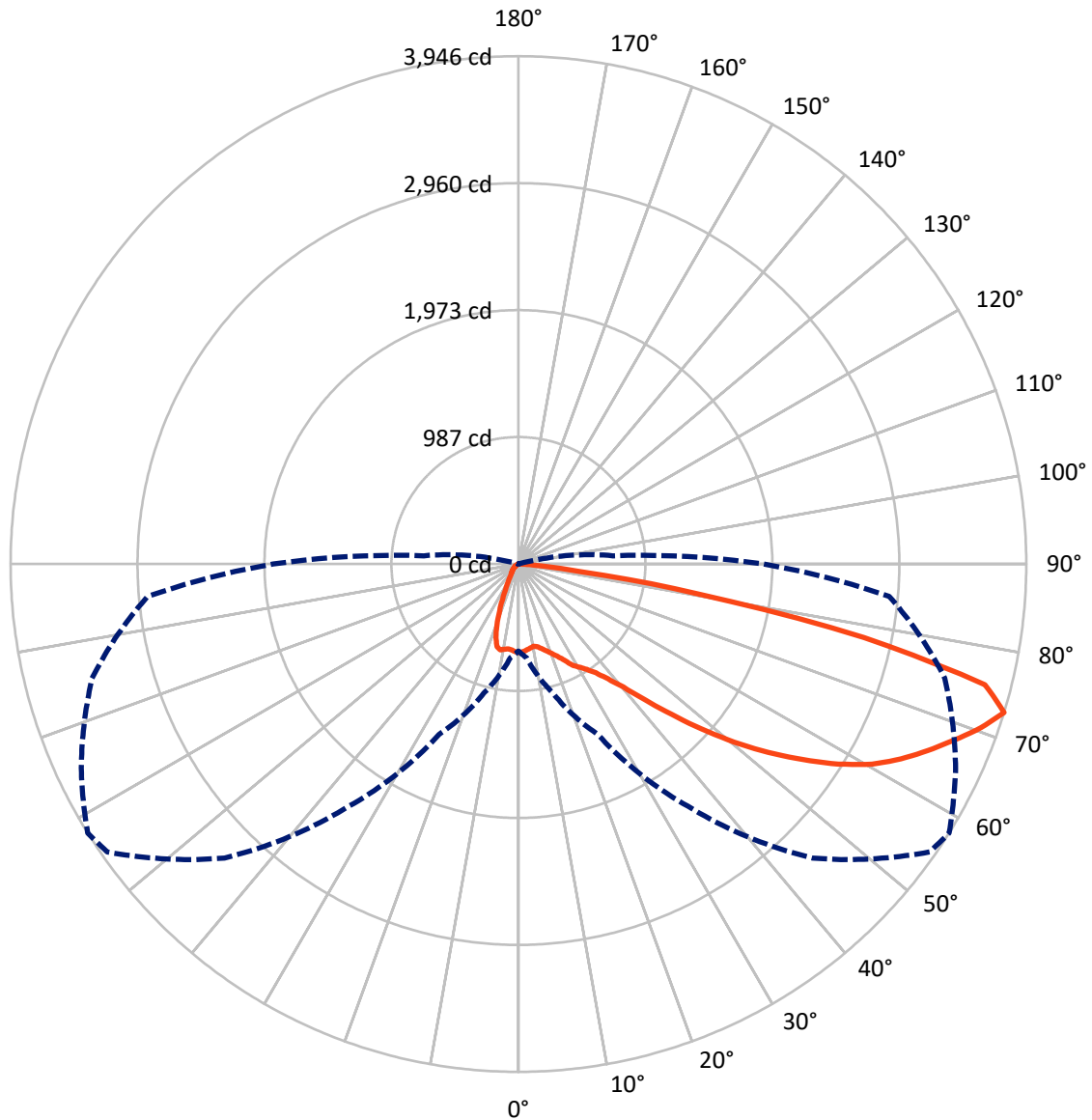


Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type IV - Medium - Non-Cutoff

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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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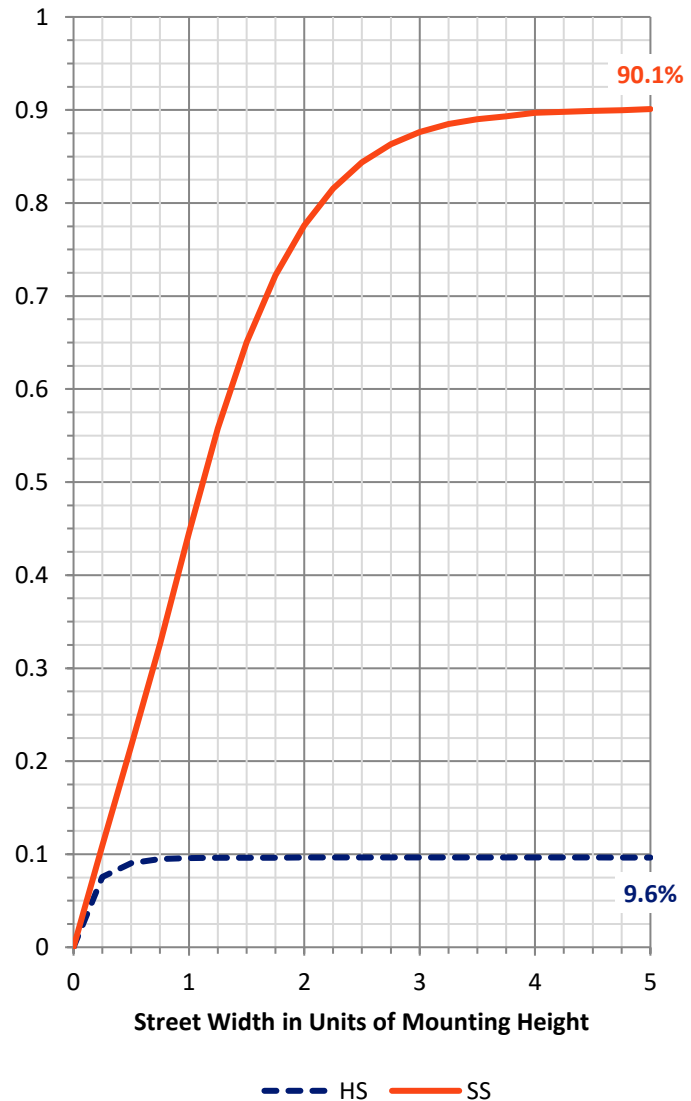
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	558.0	0.0	558.0
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	5180.0	0.0	5180.0
	% Fixture	90.3	0.0	90.3
Total	Lumens	5738.0	0.0	5738.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.2	1.1
10°-20°	164.6	2.9
20°-30°	258.5	4.5
30°-40°	445.9	7.8
40°-50°	848.3	14.8
50°-60°	1343.5	23.4
60°-70°	1567.7	27.3
70°-80°	981.9	17.1
80°-90°	64.4	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°	5738.0	100.0
0°-180°	5738.0	100.0



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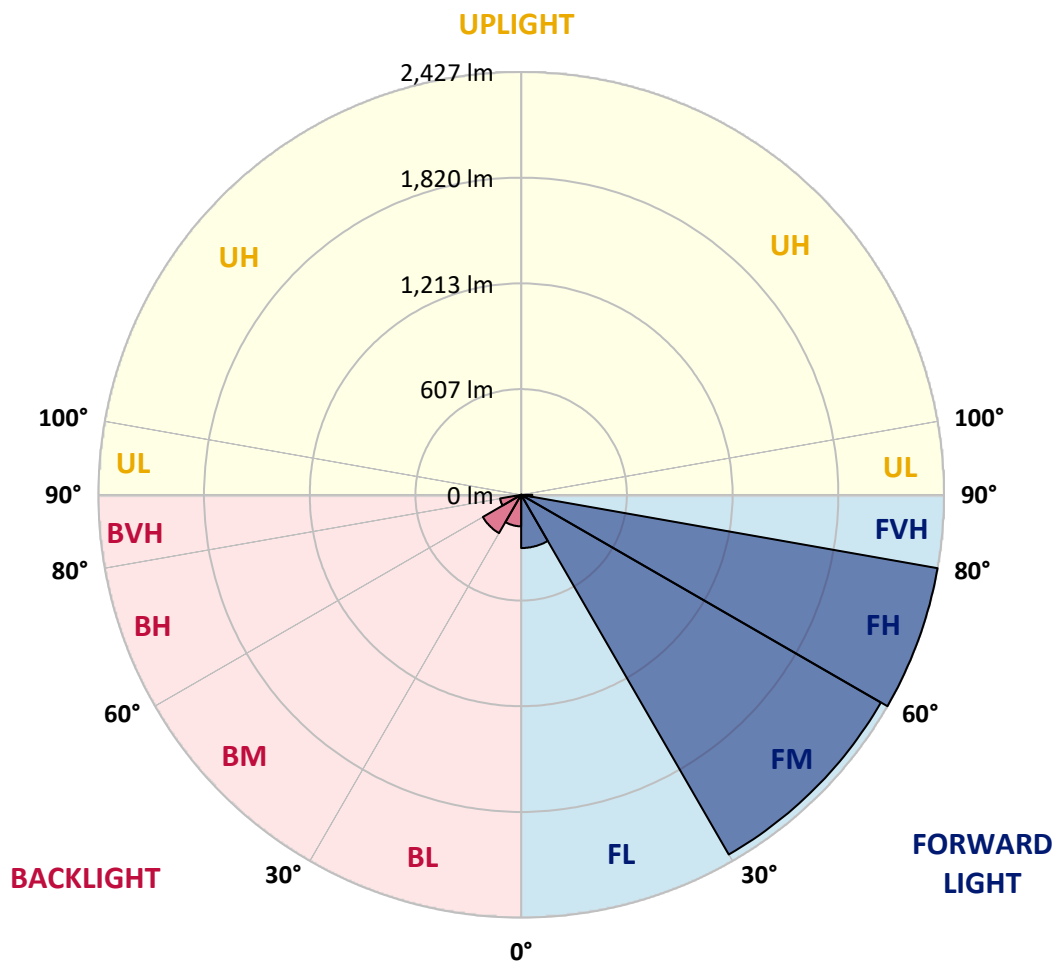
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	305.6	5.3			
FM	(30°-60°)	2383.8	41.5			
FH	(60°-80°)	2426.8	42.3			G2/5000
FVH	(80°-90°)	63.8	1.1			G1/100
BL	(0°-30°)	180.7	3.1	B1/500		
BM	(30°-60°)	253.9	4.4	B1/1000		
BH	(60°-80°)	122.8	2.1	B1/500		G1/500
BVH	(80°-90°)	0.6	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°	688.5	688.5	688.5	688.5	688.5	688.5	688.5	688.5	688.5	688.5	688.5
2.5°	685.4	682.4	681.3	680.3	681.3	682.4	679.3	682.4	680.3	681.3	683.4
5°	660.8	657.7	656.7	657.7	660.8	666.0	668.0	671.1	671.1	674.2	675.2
7.5°	633.1	631.1	630.0	632.1	638.2	649.5	655.7	659.8	663.9	670.1	676.2
10°	617.7	616.7	615.7	618.7	624.9	635.2	643.4	649.5	664.9	682.4	693.7
12.5°	607.5	607.5	609.5	615.7	623.9	632.1	651.6	659.8	683.4	710.1	725.5
15°	599.3	599.3	602.3	613.6	624.9	644.4	673.1	682.4	710.1	742.9	763.4
17.5°	593.1	595.1	597.2	608.5	630.0	662.9	696.7	710.1	743.9	779.8	802.4
20°	594.1	596.2	597.2	608.5	639.3	684.4	727.5	742.9	781.9	819.9	842.4
22.5°	600.3	603.4	604.4	619.8	655.7	707.0	762.4	779.8	821.9	861.9	879.4
25°	625.9	628.0	621.8	635.2	679.3	741.9	807.6	826.0	868.1	905.0	919.4
27.5°	713.2	715.2	681.3	666.0	697.8	770.6	863.0	888.6	941.0	965.6	967.6
30°	902.0	904.0	837.3	764.5	741.9	795.2	893.7	929.7	997.4	1025.1	1012.8
32.5°	1145.1	1143.1	1051.8	944.0	846.5	838.3	937.9	975.8	1049.7	1076.4	1067.2
35°	1389.4	1392.4	1314.5	1152.3	1012.8	919.4	994.3	1038.4	1127.7	1165.7	1149.3
37.5°	1556.6	1577.1	1543.3	1367.8	1217.0	1069.2	1085.6	1132.8	1244.7	1296.0	1261.1
40°	1792.6	1787.5	1705.4	1576.1	1442.7	1290.9	1233.4	1256.0	1384.2	1453.0	1398.6
42.5°	2109.7	2099.4	1959.9	1833.7	1684.9	1560.7	1443.7	1439.6	1544.3	1624.3	1545.3
45°	2397.0	2381.6	2286.2	2164.1	2000.9	1858.3	1700.3	1664.4	1737.2	1804.9	1712.6
47.5°	2625.8	2600.2	2532.5	2467.8	2427.8	2206.2	1969.1	1914.7	1951.7	2002.0	1871.6
50°	2896.7	2825.9	2727.4	2688.4	2771.5	2600.2	2227.7	2175.4	2173.3	2202.0	2035.8
52.5°	3019.9	2891.6	2836.2	2869.0	3015.8	2966.5	2506.8	2431.9	2402.1	2405.2	2188.7
55°	2871.1	2856.7	2886.5	2989.1	3181.0	3152.2	2774.6	2682.3	2638.1	2582.7	2335.4
57.5°	2701.8	2745.9	2863.9	3059.9	3390.3	3346.2	3038.3	2933.7	2852.6	2725.4	2498.6
60°	2545.8	2590.9	2785.9	3076.3	3505.2	3532.9	3257.9	3158.4	3038.3	2871.1	2678.2
62.5°	2308.8	2343.7	2617.6	3052.7	3454.9	3641.7	3410.8	3335.9	3224.1	3009.6	2884.4
65°	2042.0	2064.5	2335.4	2863.9	3356.4	3629.4	3537.0	3495.0	3386.2	3154.3	3088.6
67.5°	1749.5	1776.2	2002.0	2524.2	3163.5	3571.9	3656.1	3652.0	3527.8	3314.4	3236.4
70°	1413.0	1415.0	1601.8	2093.3	2827.0	3457.0	3803.8	3813.1	3663.2	3434.4	3242.5
72.5°	676.2	731.6	1038.4	1461.2	2297.5	3231.2	3900.3	3946.4	3748.4	3430.3	2892.6
75°	154.9	160.1	302.7	694.7	1347.3	2480.1	3659.1	3745.3	3541.1	2966.5	2037.9
77.5°	56.4	59.5	85.2	203.2	518.2	1281.6	2618.7	2744.9	2617.6	1917.8	963.5
80°	38.0	36.9	44.1	90.3	238.1	363.2	1339.1	1414.0	1290.9	654.7	230.9
82.5°	19.5	20.5	30.8	50.3	160.1	126.2	447.4	486.4	400.2	131.3	43.1
85°	9.2	9.2	17.4	31.8	67.7	44.1	99.5	120.1	107.7	57.5	14.4
87.5°	9.2	9.2	16.4	20.5	34.9	18.5	24.6	30.8	28.7	30.8	5.1
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°	688.5	688.5	688.5	688.5	688.5	688.5	688.5	688.5	688.5	688.5	688.5
2.5°	683.4	682.4	681.3	683.4	682.4	684.4	684.4	686.5	686.5	684.4	683.4
5°	674.2	672.1	670.1	670.1	669.0	671.1	677.2	682.4	683.4	680.3	679.3
7.5°	675.2	675.2	673.1	669.0	661.8	661.8	661.8	668.0	671.1	669.0	668.0
10°	693.7	694.7	689.6	680.3	668.0	656.7	635.2	603.4	573.6	565.4	562.3
12.5°	725.5	726.5	716.2	699.8	674.2	607.5	525.4	449.4	391.0	374.5	371.5
15°	763.4	764.5	746.0	719.3	641.3	486.4	364.3	278.1	226.8	214.5	213.4
17.5°	802.4	800.4	772.7	721.4	543.8	344.8	221.6	177.5	164.2	161.1	162.1
20°	840.4	834.2	796.3	683.4	418.7	225.7	162.1	151.9	148.8	146.7	146.7
22.5°	875.3	863.0	815.8	608.5	293.5	162.1	144.7	142.6	138.5	135.4	134.4
25°	910.2	892.7	828.1	511.0	197.0	141.6	136.5	132.4	127.2	123.1	122.1
27.5°	952.2	927.6	821.9	387.9	147.8	131.3	127.2	121.1	113.9	107.7	105.7
30°	992.3	964.6	787.0	267.8	126.2	121.1	114.9	105.7	96.5	89.3	87.2
32.5°	1042.5	1010.7	724.4	175.5	109.8	105.7	99.5	88.2	75.9	67.7	65.7
35°	1114.4	1078.4	644.4	123.1	96.5	89.3	81.1	68.7	55.4	49.3	48.2
37.5°	1214.9	1166.7	543.8	99.5	85.2	74.9	62.6	50.3	41.0	35.9	34.9
40°	1338.1	1264.2	432.0	88.2	75.9	62.6	47.2	35.9	29.8	25.7	25.7
42.5°	1471.5	1355.5	318.1	81.1	66.7	51.3	34.9	25.7	21.5	19.5	18.5
45°	1609.0	1436.6	214.5	74.9	58.5	39.0	24.6	17.4	14.4	14.4	13.3
47.5°	1751.6	1490.9	138.5	67.7	49.3	28.7	16.4	12.3	10.3	10.3	10.3
50°	1893.2	1519.7	98.5	61.6	40.0	19.5	12.3	9.2	8.2	8.2	8.2
52.5°	1995.8	1501.2	79.0	53.4	30.8	14.4	9.2	7.2	6.2	6.2	6.2
55°	2085.1	1469.4	68.7	46.2	22.6	10.3	7.2	6.2	5.1	5.1	5.1
57.5°	2176.4	1428.4	61.6	39.0	16.4	7.2	5.1	4.1	4.1	4.1	4.1
60°	2259.5	1358.6	53.4	30.8	11.3	5.1	4.1	3.1	3.1	3.1	3.1
62.5°	2340.6	1299.1	46.2	23.6	8.2	4.1	2.1	2.1	1.0	1.0	1.0
65°	2386.7	1219.0	36.9	15.4	5.1	3.1	1.0	1.0	0.0	0.0	0.0
67.5°	2372.4	1123.6	25.7	9.2	3.1	2.1	1.0	0.0	0.0	0.0	0.0
70°	2272.9	995.3	15.4	5.1	3.1	2.1	1.0	0.0	0.0	0.0	0.0
72.5°	1903.4	736.8	9.2	4.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0
75°	1271.4	338.6	5.1	3.1	1.0	1.0	0.0	0.0	0.0	0.0	0.0
77.5°	581.8	101.6	3.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	117.0	26.7	2.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	24.6	5.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	1.0	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)