

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: P397585

Luminaire Tested: **ARCH-S-PA1-100-827-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397585  
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-PA1-100-827-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 1200mA 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: 6214 lumens  
Efficiency: N/A  
Efficacy: 64.7 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

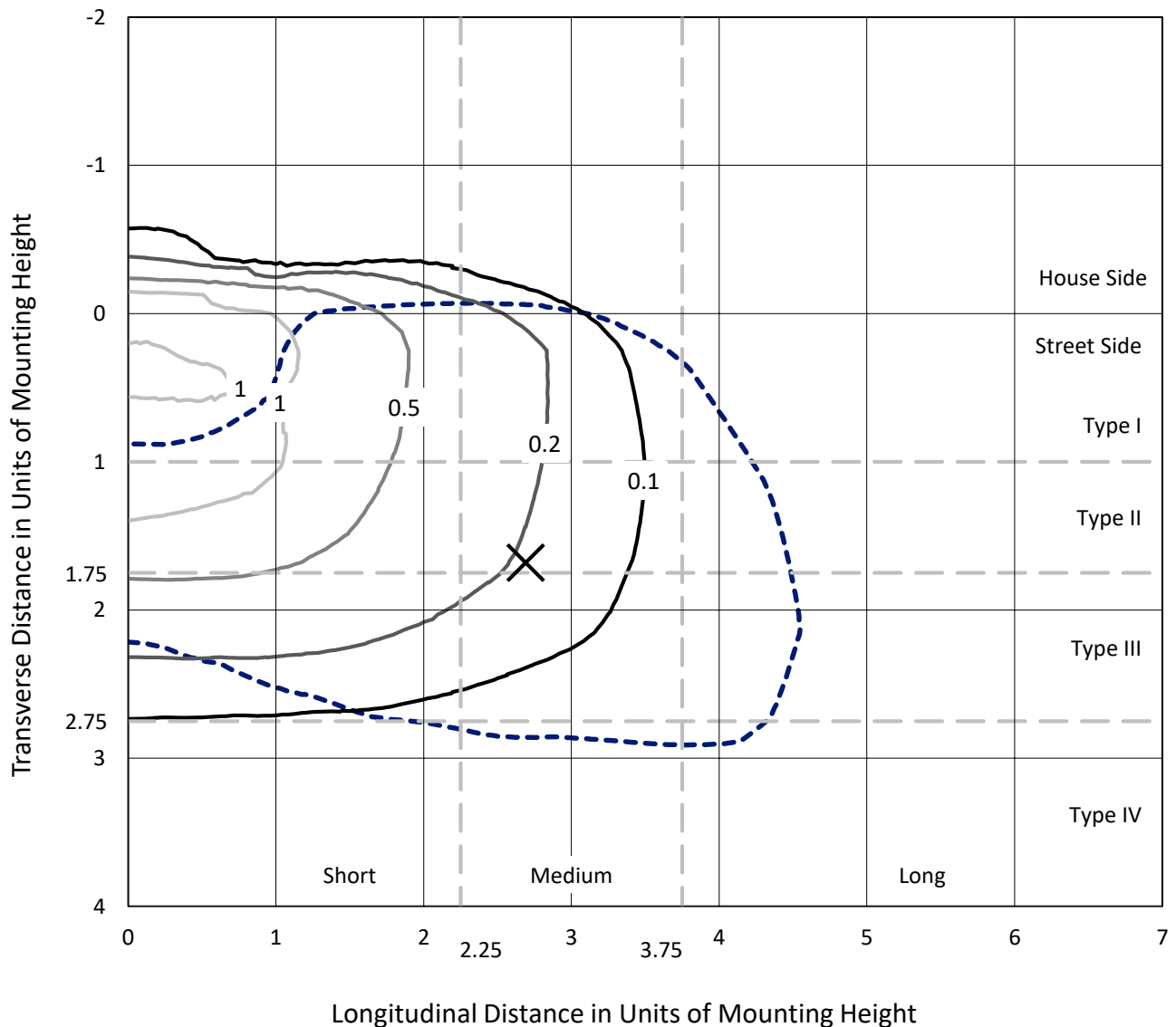
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

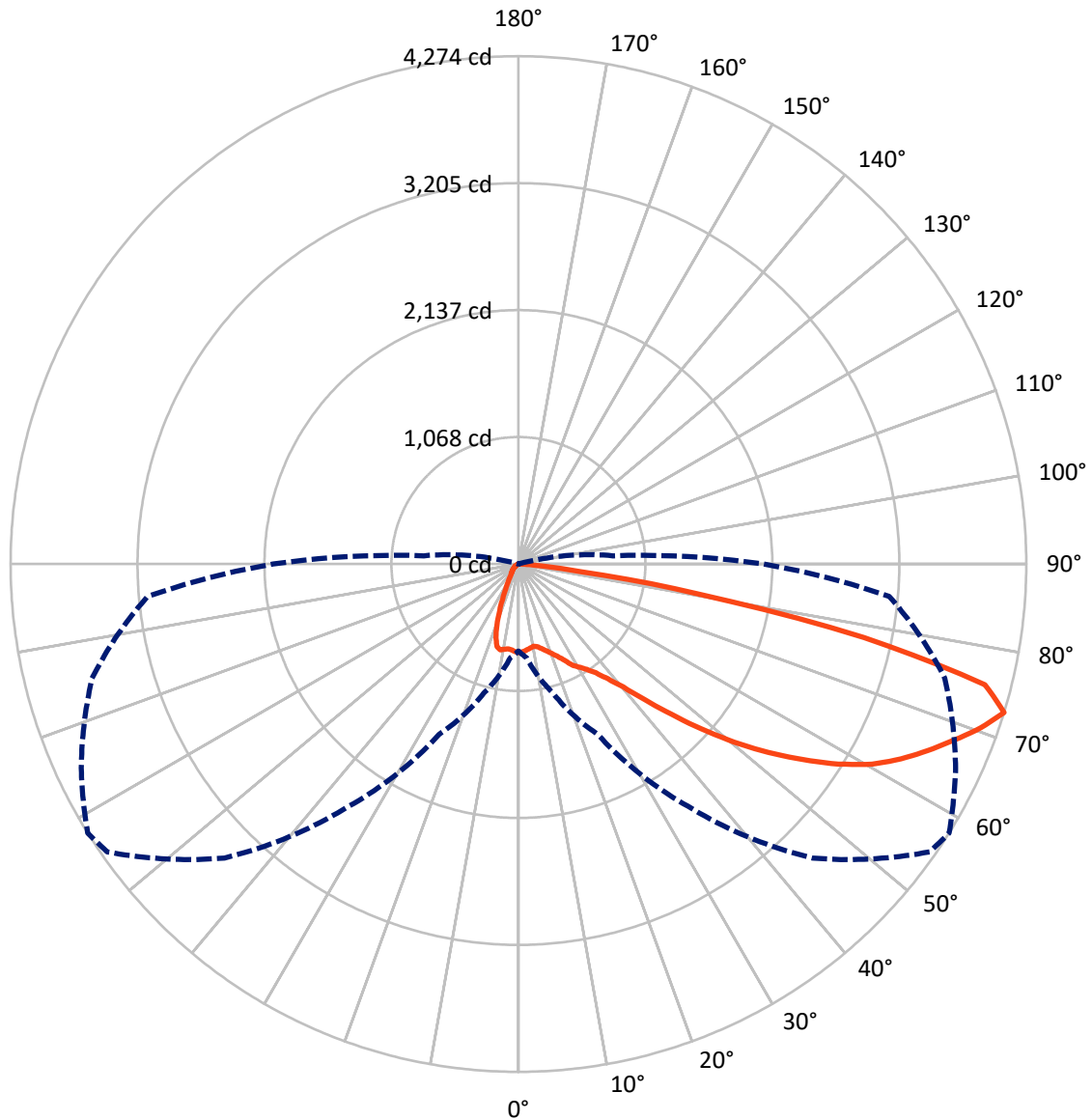
× Max cd  
 - - - 1/2 Max cd



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

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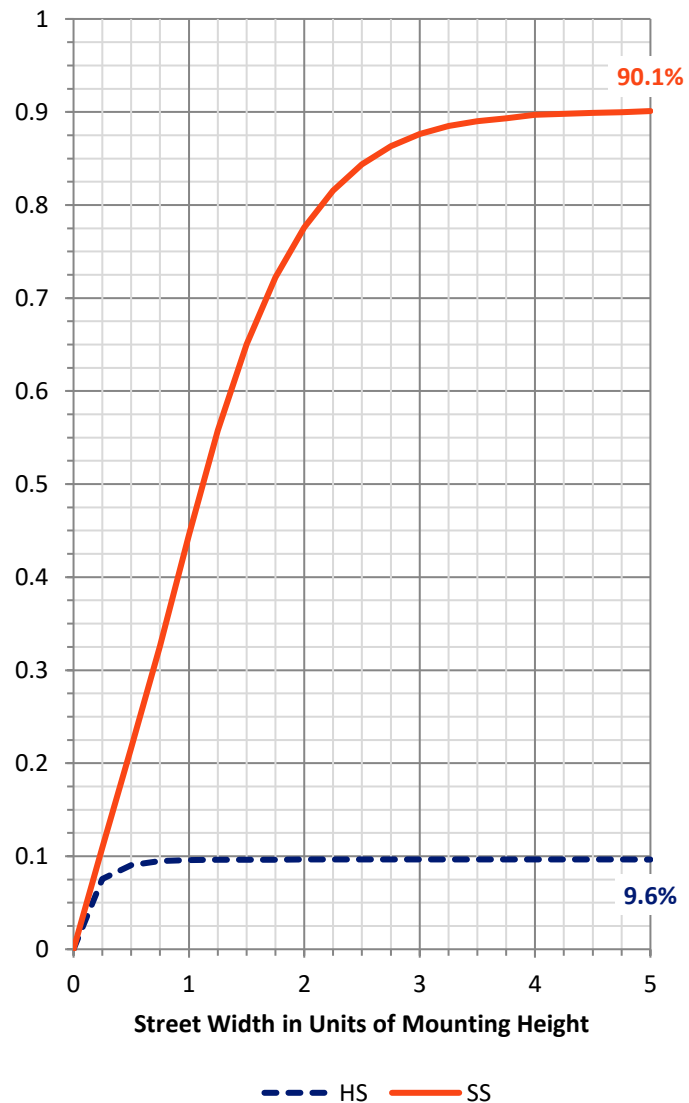
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	604.3	0.0	604.3
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	5609.7	0.0	5609.7
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	6214.0	0.0	6214.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.4	1.1
10°-20°	178.2	2.9
20°-30°	280.0	4.5
30°-40°	482.9	7.8
40°-50°	918.7	14.8
50°-60°	1454.9	23.4
60°-70°	1697.7	27.3
70°-80°	1063.3	17.1
80°-90°	69.8	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°	6214.0	100.0
0°-180°	6214.0	100.0

**Coefficient of Utilization**



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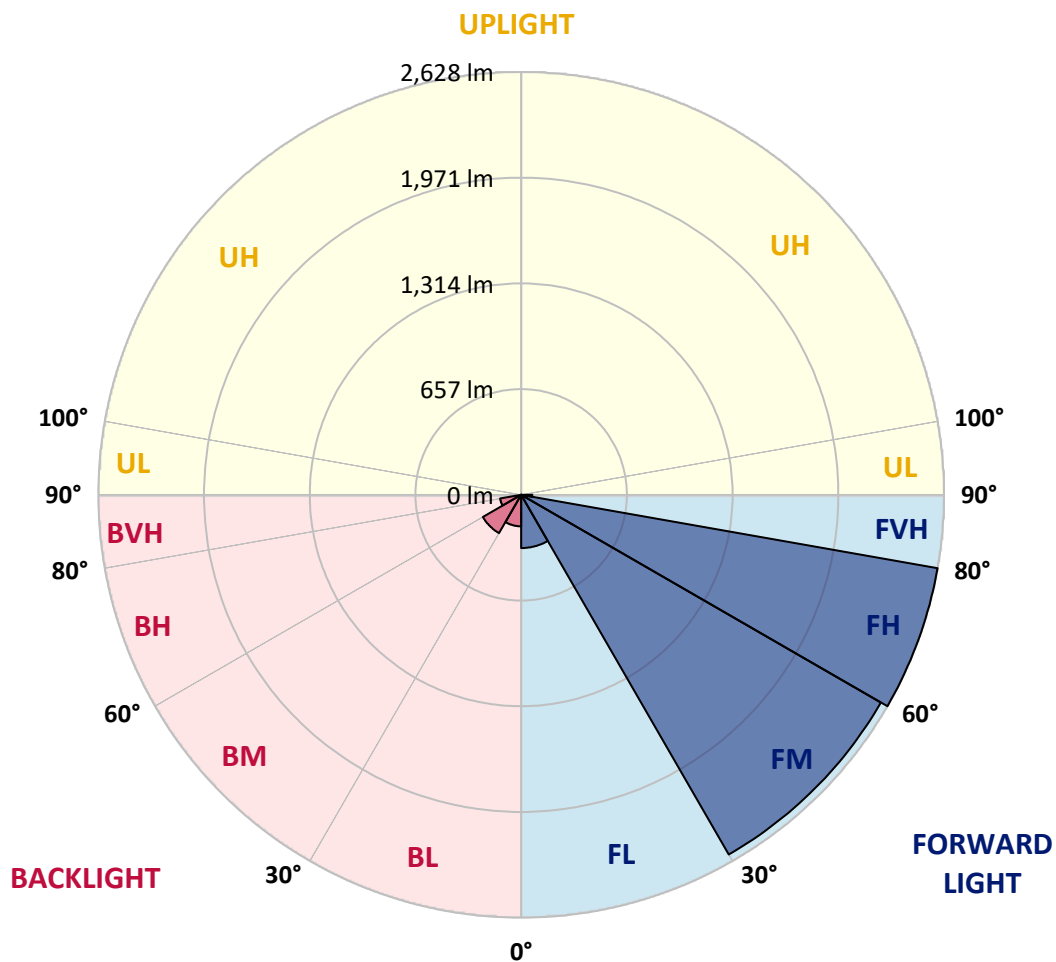
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	331.0	5.3			
FM	(30°-60°)	2581.6	41.5			
FH	(60°-80°)	2628.1	42.3			G2/5000
FVH	(80°-90°)	69.1	1.1			G1/100
BL	(0°-30°)	195.7	3.1	B1/500		
BM	(30°-60°)	274.9	4.4	B1/1000		
BH	(60°-80°)	133.0	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°	745.6	745.6	745.6	745.6	745.6	745.6	745.6	745.6	745.6	745.6	745.6
2.5°	742.3	739.0	737.9	736.8	737.9	739.0	735.6	739.0	736.8	737.9	740.1
5°	715.6	712.3	711.2	712.3	715.6	721.2	723.4	726.8	726.8	730.1	731.2
7.5°	685.6	683.4	682.3	684.5	691.2	703.4	710.1	714.5	719.0	725.6	732.3
10°	669.0	667.9	666.7	670.1	676.7	687.9	696.7	703.4	720.1	739.0	751.2
12.5°	657.9	657.9	660.1	666.7	675.6	684.5	705.6	714.5	740.1	769.0	785.6
15°	649.0	649.0	652.3	664.5	676.7	697.9	729.0	739.0	769.0	804.5	826.8
17.5°	642.3	644.5	646.7	659.0	682.3	717.9	754.5	769.0	805.6	844.5	869.0
20°	643.4	645.6	646.7	659.0	692.3	741.2	787.9	804.5	846.8	887.9	912.3
22.5°	650.1	653.4	654.5	671.2	710.1	765.6	825.7	844.5	890.1	933.4	952.3
25°	677.9	680.1	673.4	687.9	735.6	803.4	874.5	894.5	940.1	980.1	995.7
27.5°	772.3	774.5	737.9	721.2	755.6	834.5	934.6	962.3	1019.0	1045.7	1047.9
30°	976.8	979.0	906.8	827.9	803.4	861.2	967.9	1006.8	1080.1	1110.1	1096.8
32.5°	1240.1	1237.9	1139.0	1022.3	916.8	907.9	1015.7	1056.8	1136.8	1165.7	1155.7
35°	1504.6	1508.0	1423.5	1247.9	1096.8	995.7	1076.8	1124.6	1221.3	1262.4	1244.6
37.5°	1685.8	1708.0	1671.3	1481.3	1317.9	1157.9	1175.7	1226.8	1347.9	1403.5	1365.7
40°	1941.3	1935.8	1846.9	1706.9	1562.4	1397.9	1335.7	1360.2	1499.1	1573.5	1514.6
42.5°	2284.7	2273.6	2122.5	1985.8	1824.7	1690.2	1563.5	1559.1	1672.4	1759.1	1673.5
45°	2595.9	2579.2	2475.8	2343.6	2166.9	2012.5	1841.3	1802.4	1881.3	1954.7	1854.7
47.5°	2843.7	2815.9	2742.5	2672.5	2629.2	2389.2	2132.5	2073.6	2113.6	2168.0	2026.9
50°	3137.0	3060.4	2953.7	2911.4	3001.5	2815.9	2412.5	2355.8	2353.6	2384.7	2204.7
52.5°	3270.4	3131.5	3071.5	3107.0	3265.9	3212.6	2714.8	2633.6	2601.4	2604.7	2370.3
55°	3109.2	3093.7	3125.9	3237.0	3444.8	3413.7	3004.8	2904.8	2857.0	2797.0	2529.2
57.5°	2925.9	2973.7	3101.5	3313.7	3671.5	3623.8	3290.4	3177.0	3089.2	2951.5	2705.9
60°	2757.0	2805.9	3017.0	3331.5	3796.0	3826.0	3528.2	3420.4	3290.4	3109.2	2900.3
62.5°	2500.3	2538.1	2834.8	3305.9	3741.5	3943.8	3693.8	3612.6	3491.5	3259.3	3123.7
65°	2211.4	2235.8	2529.2	3101.5	3634.9	3930.5	3830.4	3784.9	3667.1	3416.0	3344.8
67.5°	1894.7	1923.6	2168.0	2733.7	3426.0	3868.2	3959.3	3954.9	3820.4	3589.3	3504.9
70°	1530.2	1532.4	1734.6	2266.9	3061.5	3743.8	4119.4	4129.4	3967.1	3719.3	3511.5
72.5°	732.3	792.3	1124.6	1582.4	2488.1	3499.3	4223.8	4273.8	4059.4	3714.9	3132.6
75°	167.8	173.4	327.8	752.3	1459.1	2685.9	3962.7	4056.0	3834.9	3212.6	2206.9
77.5°	61.1	64.5	92.2	220.0	561.2	1387.9	2835.9	2972.6	2834.8	2076.9	1043.5
80°	41.1	40.0	47.8	97.8	257.8	393.4	1450.2	1531.3	1397.9	709.0	250.0
82.5°	21.1	22.2	33.3	54.5	173.4	136.7	484.5	526.7	433.4	142.2	46.7
85°	10.0	10.0	18.9	34.4	73.3	47.8	107.8	130.0	116.7	62.2	15.6
87.5°	10.0	10.0	17.8	22.2	37.8	20.0	26.7	33.3	31.1	33.3	5.6
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°	745.6	745.6	745.6	745.6	745.6	745.6	745.6	745.6	745.6	745.6	745.6
2.5°	740.1	739.0	737.9	740.1	739.0	741.2	741.2	743.4	743.4	741.2	740.1
5°	730.1	727.9	725.6	725.6	724.5	726.8	733.4	739.0	740.1	736.8	735.6
7.5°	731.2	731.2	729.0	724.5	716.7	716.7	716.7	723.4	726.8	724.5	723.4
10°	751.2	752.3	746.8	736.8	723.4	711.2	687.9	653.4	621.2	612.3	609.0
12.5°	785.6	786.8	775.6	757.9	730.1	657.9	569.0	486.7	423.4	405.6	402.3
15°	826.8	827.9	807.9	779.0	694.5	526.7	394.5	301.1	245.6	232.2	231.1
17.5°	869.0	866.8	836.8	781.2	589.0	373.4	240.0	192.2	177.8	174.5	175.6
20°	910.1	903.4	862.3	740.1	453.4	244.5	175.6	164.5	161.1	158.9	158.9
22.5°	947.9	934.6	883.4	659.0	317.8	175.6	156.7	154.5	150.0	146.7	145.6
25°	985.7	966.8	896.8	553.4	213.4	153.4	147.8	143.3	137.8	133.3	132.2
27.5°	1031.2	1004.6	890.1	420.0	160.0	142.2	137.8	131.1	123.3	116.7	114.5
30°	1074.6	1044.6	852.3	290.0	136.7	131.1	124.5	114.5	104.5	96.7	94.5
32.5°	1129.0	1094.6	784.5	190.0	118.9	114.5	107.8	95.6	82.2	73.3	71.1
35°	1206.8	1167.9	697.9	133.3	104.5	96.7	87.8	74.5	60.0	53.3	52.2
37.5°	1315.7	1263.5	589.0	107.8	92.2	81.1	67.8	54.5	44.4	38.9	37.8
40°	1449.1	1369.0	467.8	95.6	82.2	67.8	51.1	38.9	32.2	27.8	27.8
42.5°	1593.5	1467.9	344.5	87.8	72.2	55.6	37.8	27.8	23.3	21.1	20.0
45°	1742.4	1555.7	232.2	81.1	63.3	42.2	26.7	18.9	15.6	15.6	14.4
47.5°	1896.9	1614.6	150.0	73.3	53.3	31.1	17.8	13.3	11.1	11.1	11.1
50°	2050.2	1645.7	106.7	66.7	43.3	21.1	13.3	10.0	8.9	8.9	8.9
52.5°	2161.4	1625.7	85.6	57.8	33.3	15.6	10.0	7.8	6.7	6.7	6.7
55°	2258.0	1591.3	74.5	50.0	24.4	11.1	7.8	6.7	5.6	5.6	5.6
57.5°	2356.9	1546.8	66.7	42.2	17.8	7.8	5.6	4.4	4.4	4.4	4.4
60°	2447.0	1471.3	57.8	33.3	12.2	5.6	4.4	3.3	3.3	3.3	3.3
62.5°	2534.7	1406.8	50.0	25.6	8.9	4.4	2.2	2.2	1.1	1.1	1.1
65°	2584.7	1320.2	40.0	16.7	5.6	3.3	1.1	1.1	0.0	0.0	0.0
67.5°	2569.2	1216.8	27.8	10.0	3.3	2.2	1.1	0.0	0.0	0.0	0.0
70°	2461.4	1077.9	16.7	5.6	3.3	2.2	1.1	0.0	0.0	0.0	0.0
72.5°	2061.4	797.9	10.0	4.4	2.2	1.1	0.0	0.0	0.0	0.0	0.0
75°	1376.8	366.7	5.6	3.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	630.1	110.0	3.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	126.7	28.9	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	26.7	5.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.6	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)