

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: P573272

Luminaire Tested: **ARCH-S-PA2-50-827-U-T4W**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573272  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-50-827-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5871 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

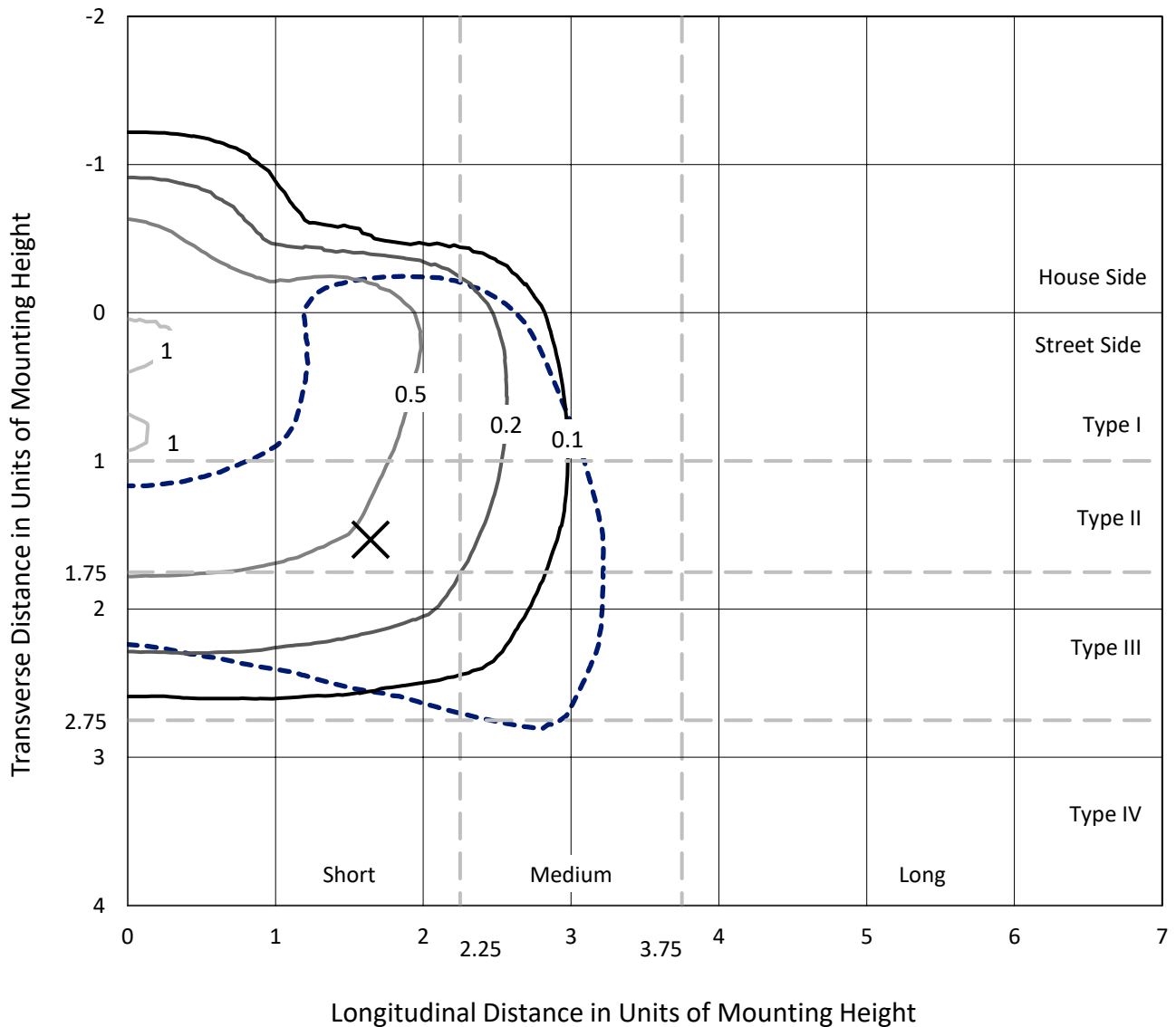
Input Watts (W): 53.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

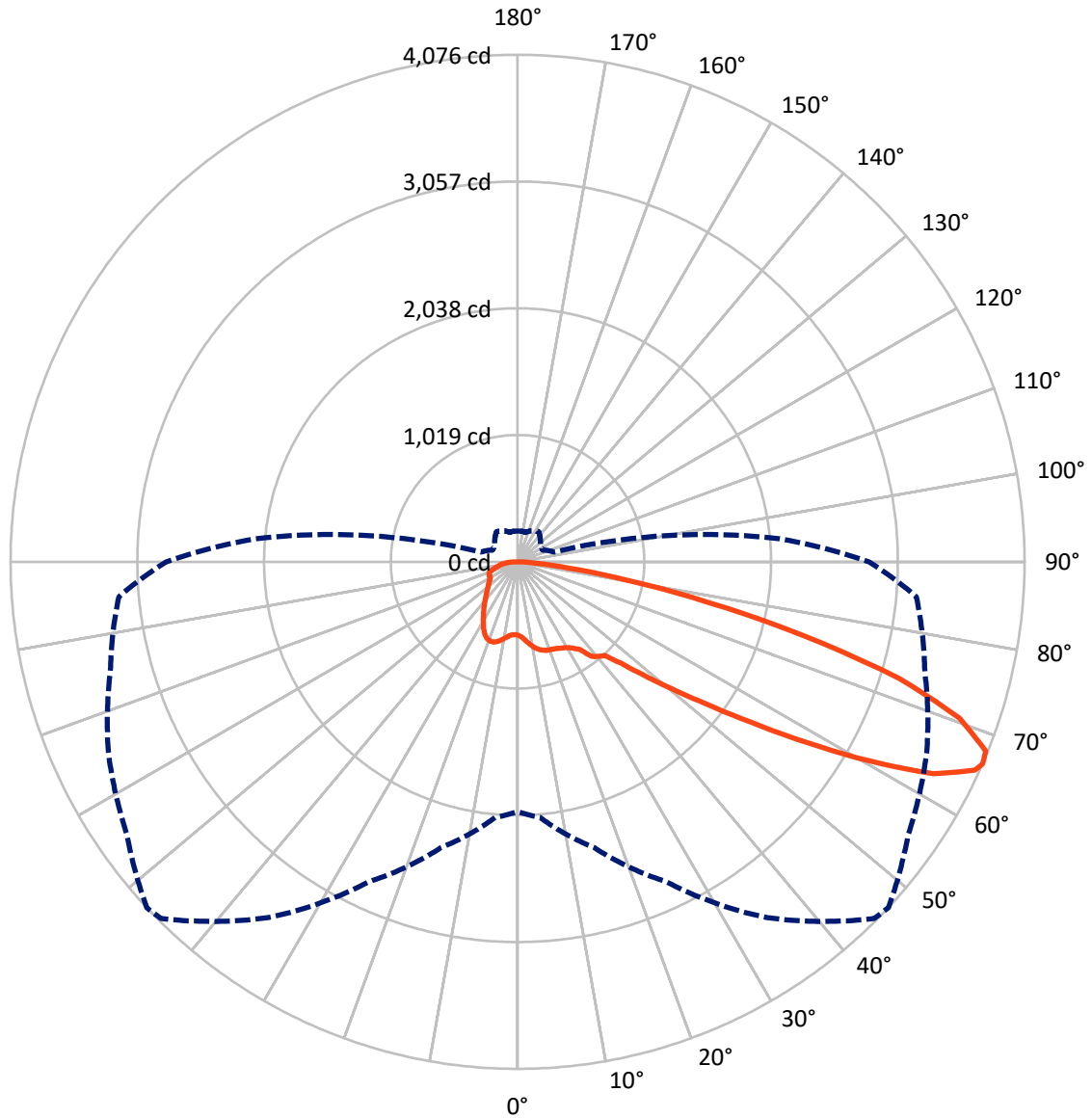
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical



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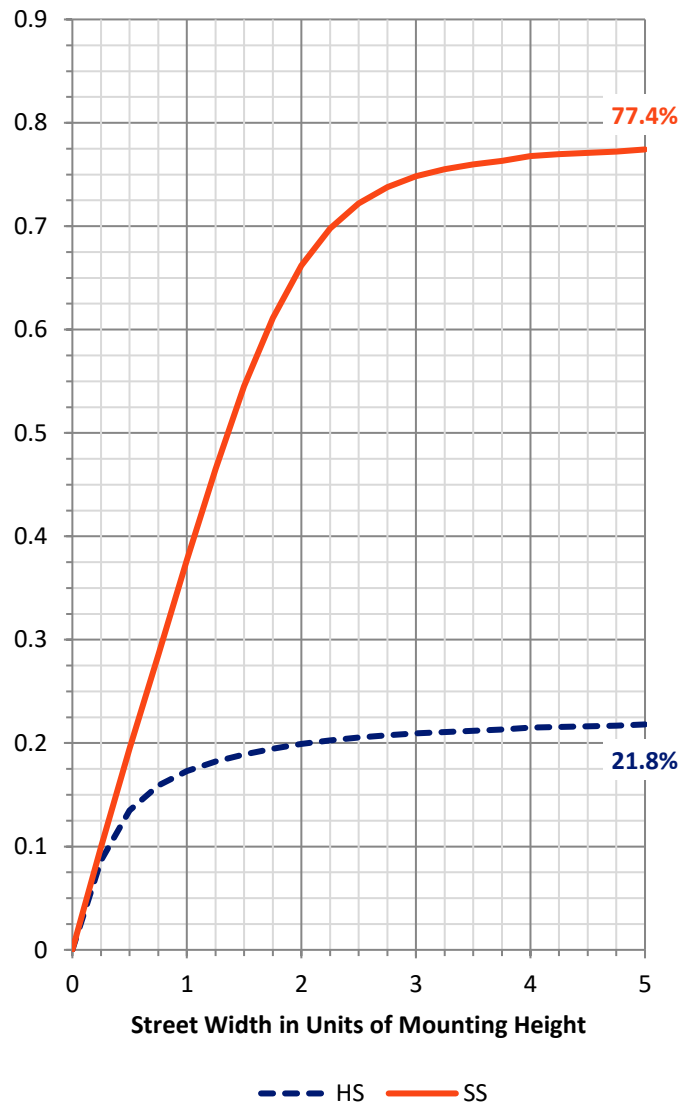
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1305.3	0.0	1305.3
	% Fixture	22.2	0.0	22.2
<b>Street Side</b>	Lumens	4565.7	0.0	4565.7
	% Fixture	77.8	0.0	77.8
<b>Total</b>	Lumens	5871.0	0.0	5871.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.1	1.0
10°-20°	197.1	3.4
20°-30°	328.6	5.6
30°-40°	477.3	8.1
40°-50°	729.9	12.4
50°-60°	1379.7	23.5
60°-70°	1782.8	30.4
70°-80°	801.3	13.6
80°-90°	114.3	1.9
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°	5871.0	100.0
0°-180°	5871.0	100.0

**Coefficient of Utilization**



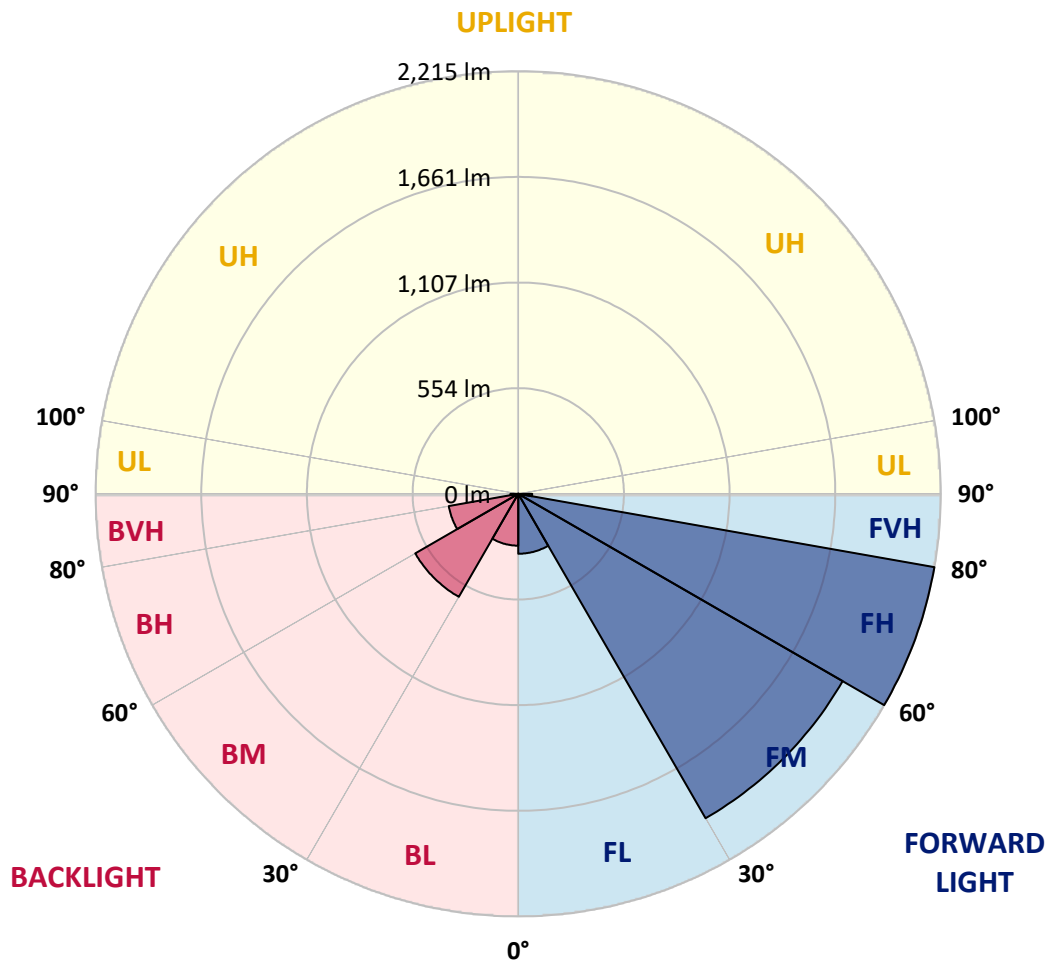
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	314.1	5.4			
FM (30°-60°)	1963.4	33.4			
FH (60°-80°)	2214.8	37.7			G2/5000
FVH (80°-90°)	73.4	1.3			G1/100
BL (0°-30°)	271.6	4.6	B1/500		
BM (30°-60°)	623.5	10.6	B1/1000		
BH (60°-80°)	369.3	6.3	B1/500		G1/500
BVH (80°-90°)	40.9	0.7			G1/100
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°	47°	55°	65°	75°	85°
0°	590.2	590.2	590.2	590.2	590.2	590.2	590.2	590.2	590.2	590.2	590.2
2.5°	623.7	618.9	615.7	614.1	611.0	604.6	604.6	603.0	596.6	593.4	591.8
5°	673.2	670.0	662.0	655.6	646.0	633.3	631.7	622.1	609.4	599.8	593.4
7.5°	721.0	717.8	709.9	700.3	684.3	668.4	663.6	650.8	630.1	615.7	604.6
10°	762.5	757.7	748.1	735.4	717.8	700.3	695.5	681.1	660.4	639.7	620.5
12.5°	789.6	786.4	775.3	759.3	740.2	722.6	719.4	706.7	685.9	663.6	639.7
15°	802.4	800.8	788.0	772.1	752.9	738.6	737.0	725.8	708.3	685.9	658.8
17.5°	799.2	797.6	786.4	770.5	756.1	748.1	748.1	740.2	725.8	706.7	677.9
20°	783.2	783.2	773.7	762.5	754.5	752.9	752.9	751.3	741.8	725.8	697.1
22.5°	767.3	767.3	760.9	752.9	751.3	757.7	759.3	762.5	759.3	746.5	721.0
25°	770.5	768.9	760.9	751.3	752.9	767.3	770.5	778.4	776.8	767.3	744.9
27.5°	805.6	804.0	783.2	764.1	762.5	780.0	783.2	794.4	794.4	786.4	772.1
30°	893.3	896.5	858.2	810.3	786.4	797.6	800.8	813.5	819.9	823.1	811.9
32.5°	1027.3	1022.5	965.1	886.9	834.3	823.1	827.9	839.1	861.4	867.8	840.7
35°	1162.9	1166.1	1110.2	1011.3	910.8	869.4	866.2	882.1	915.6	886.9	839.1
37.5°	1288.9	1284.1	1218.7	1111.8	1011.3	963.5	965.1	958.7	930.0	872.6	850.2
40°	1426.1	1413.3	1359.1	1221.9	1094.3	1014.5	1000.2	945.9	922.0	898.1	894.9
42.5°	1561.7	1563.3	1518.6	1383.0	1193.2	1051.2	1028.9	973.1	989.0	984.2	981.0
45°	1732.4	1732.4	1687.7	1561.7	1349.5	1188.4	1158.1	1091.1	1116.6	1135.8	1174.0
47.5°	1888.7	1879.1	1866.4	1759.5	1553.7	1367.1	1354.3	1277.7	1344.7	1403.8	1481.9
50°	2054.6	2041.8	2033.8	1968.4	1821.7	1638.2	1600.0	1520.2	1667.0	1777.0	1922.2
52.5°	2313.0	2290.7	2249.2	2212.5	2155.1	1942.9	1895.1	1836.0	2025.9	2164.6	2461.4
55°	2545.9	2526.8	2486.9	2514.0	2506.0	2313.0	2271.5	2215.7	2421.5	2590.6	2930.3
57.5°	2632.0	2633.6	2687.9	2833.0	2909.6	2797.9	2738.9	2683.1	2857.0	2935.1	3241.4
60°	2671.9	2667.1	2807.5	3043.6	3292.4	3325.9	3251.0	3136.1	3201.5	3206.3	3504.6
62.5°	2585.8	2598.5	2791.6	3131.3	3522.1	3763.0	3751.8	3550.9	3490.2	3423.2	3574.8
65°	2258.8	2276.3	2560.3	2975.0	3558.8	4027.8	4039.0	3804.5	3635.4	3448.8	3375.4
66°	2009.9	2062.6	2378.4	2839.4	3491.8	4054.9	4075.7	3831.6	3629.0	3388.1	3217.5
67.5°	1686.1	1682.9	2035.4	2541.1	3305.2	4031.0	4058.1	3793.3	3542.9	3209.5	2901.6
70°	1032.1	1064.0	1367.1	1896.7	2735.7	3732.7	3769.4	3523.7	3171.2	2718.2	2145.5
72.5°	529.6	582.2	781.6	1233.1	1986.0	3085.1	3209.5	2959.0	2592.2	1966.8	1309.6
75°	280.8	277.6	368.5	668.4	1268.2	2314.6	2380.0	2218.9	1791.4	1172.5	666.8
77.5°	149.9	157.9	193.0	343.0	697.1	1478.7	1561.7	1430.9	1020.9	599.8	319.0
80°	102.1	106.9	130.8	193.0	378.1	802.4	878.9	762.5	534.4	283.9	149.9
82.5°	65.4	68.6	89.3	119.6	226.5	389.2	410.0	390.8	261.6	161.1	90.9
85°	39.9	41.5	54.2	76.6	142.0	157.9	164.3	165.9	146.8	105.3	49.5
87.5°	19.1	20.7	30.3	38.3	67.0	57.4	52.6	54.2	81.4	62.2	22.3
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°	590.2	590.2	590.2	590.2	590.2	590.2	590.2	590.2	590.2	590.2	590.2
2.5°	590.2	588.6	585.4	583.8	585.4	585.4	585.4	587.0	590.2	590.2	591.8
5°	590.2	587.0	583.8	583.8	587.0	590.2	593.4	599.8	603.0	604.6	604.6
7.5°	598.2	595.0	591.8	591.8	596.6	603.0	609.4	617.3	625.3	631.7	631.7
10°	614.1	609.4	606.2	607.8	615.7	623.7	631.7	641.3	649.2	657.2	657.2
12.5°	631.7	626.9	622.1	625.3	636.5	646.0	654.0	658.8	666.8	673.2	673.2
15°	649.2	641.3	639.7	646.0	657.2	663.6	666.8	666.8	670.0	676.4	676.4
17.5°	668.4	660.4	658.8	665.2	674.8	674.8	668.4	663.6	662.0	666.8	668.4
20°	687.5	679.5	679.5	684.3	682.7	671.6	660.4	652.4	646.0	650.8	652.4
22.5°	711.4	703.5	700.3	693.9	679.5	657.2	639.7	630.1	625.3	628.5	631.7
25°	735.4	729.0	721.0	698.7	665.2	630.1	607.8	599.8	601.4	607.8	611.0
27.5°	765.7	762.5	743.4	695.5	639.7	591.8	569.5	567.9	574.3	583.8	588.6
30°	802.4	797.6	764.1	685.9	604.6	547.1	531.2	534.4	544.0	551.9	556.7
32.5°	827.9	824.7	773.7	663.6	561.5	507.3	494.5	494.5	499.3	510.5	515.2
35°	835.9	848.6	780.0	630.1	510.5	472.2	459.4	451.4	451.4	461.0	464.2
37.5°	863.0	891.7	783.2	585.4	469.0	440.3	424.3	410.0	405.2	403.6	403.6
40°	925.2	958.7	781.6	528.0	429.1	408.4	389.2	373.3	360.5	343.0	344.6
42.5°	1033.7	1059.2	776.8	467.4	394.0	379.7	360.5	341.4	320.6	301.5	299.9
45°	1242.6	1204.4	764.1	414.7	362.1	354.1	336.6	314.2	288.7	271.2	271.2
47.5°	1572.8	1467.6	756.1	365.3	333.4	331.8	315.8	291.9	266.4	253.6	252.0
50°	2025.9	1831.3	768.9	330.2	307.9	312.7	299.9	277.6	256.8	245.7	244.1
52.5°	2545.9	2222.1	783.2	307.9	288.7	298.3	291.9	271.2	250.4	240.9	239.3
55°	2947.9	2539.5	762.5	287.1	269.6	283.9	283.9	264.8	247.3	237.7	237.7
57.5°	3230.2	2667.1	690.7	268.0	253.6	271.2	276.0	261.6	245.7	242.5	242.5
60°	3351.5	2660.7	564.7	250.4	242.5	258.4	271.2	258.4	248.8	256.8	258.4
62.5°	3286.1	2522.0	438.7	237.7	234.5	255.2	276.0	271.2	260.0	266.4	269.6
65°	2990.9	2277.9	330.2	226.5	224.9	256.8	288.7	279.2	252.0	253.6	255.2
66°	2825.1	2113.6	303.1	223.3	221.7	258.4	295.1	276.0	245.7	248.8	247.3
67.5°	2470.9	1855.2	266.4	216.9	215.3	258.4	303.1	269.6	237.7	242.5	237.7
70°	1812.1	1312.8	228.1	209.0	205.8	253.6	301.5	256.8	220.1	216.9	209.0
72.5°	1051.2	794.4	202.6	199.4	191.4	223.3	282.3	236.1	201.0	191.4	183.4
75°	516.8	403.6	180.3	188.2	167.5	196.2	255.2	218.5	185.0	172.3	167.5
77.5°	237.7	204.2	162.7	172.3	148.4	169.1	232.9	199.4	164.3	145.2	140.4
80°	129.2	127.6	137.2	143.6	124.4	148.4	205.8	173.9	138.8	118.0	111.7
82.5°	79.8	81.4	100.5	110.1	97.3	129.2	181.8	145.2	105.3	82.9	84.5
85°	41.5	46.3	67.0	73.4	63.8	95.7	137.2	97.3	59.0	43.1	43.1
87.5°	14.4	19.1	33.5	39.9	35.1	57.4	86.1	46.3	12.8	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)