

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: P237441

Luminaire Tested: **ARCH-L-AF72-280-D-U-T4W-7030-HSS**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237441  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-280-D-U-T4W-7030-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 1180mA LIGHT ENGINES 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: 21016 lumens  
Efficiency: N/A  
Efficacy: 75.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G4

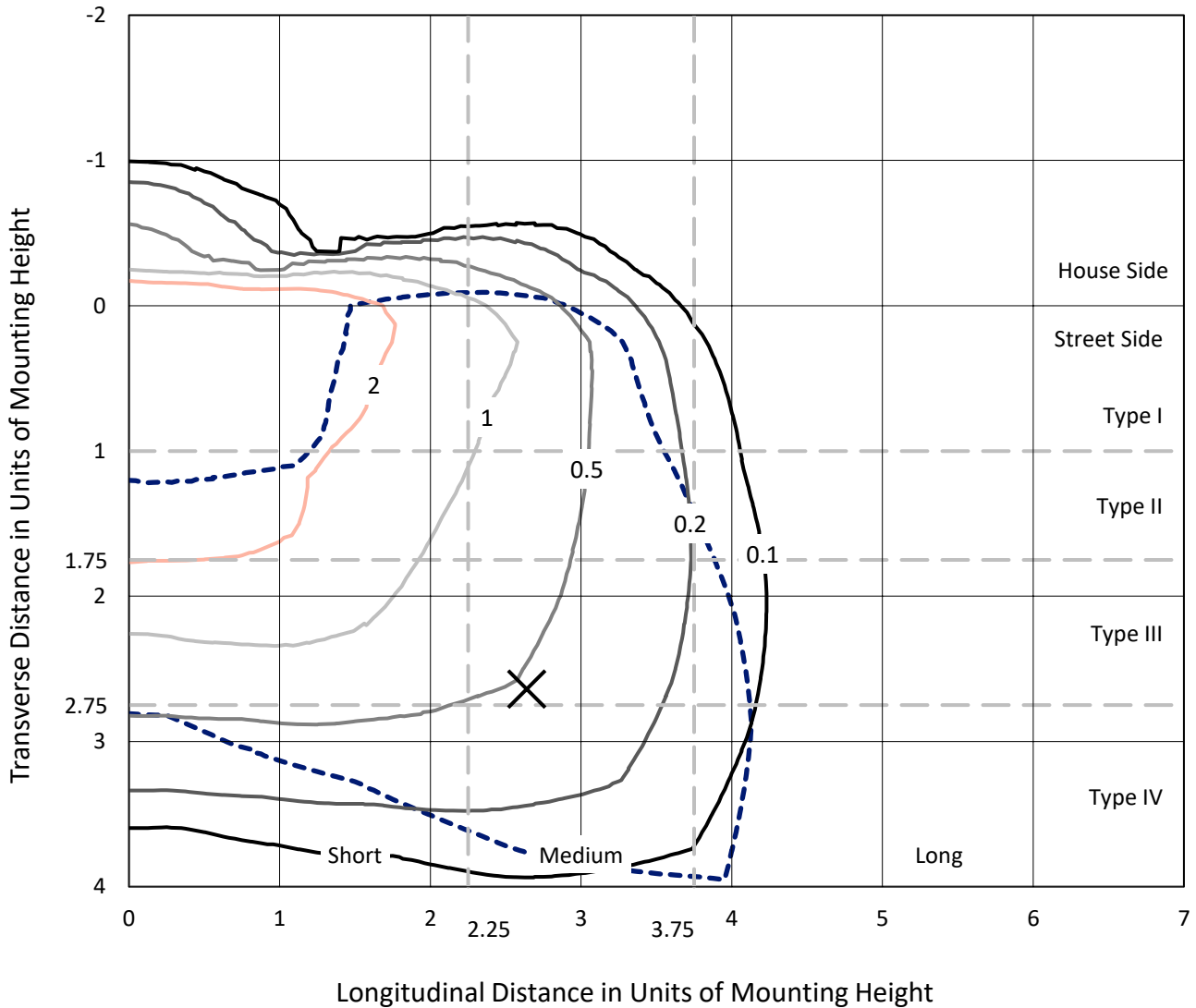
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

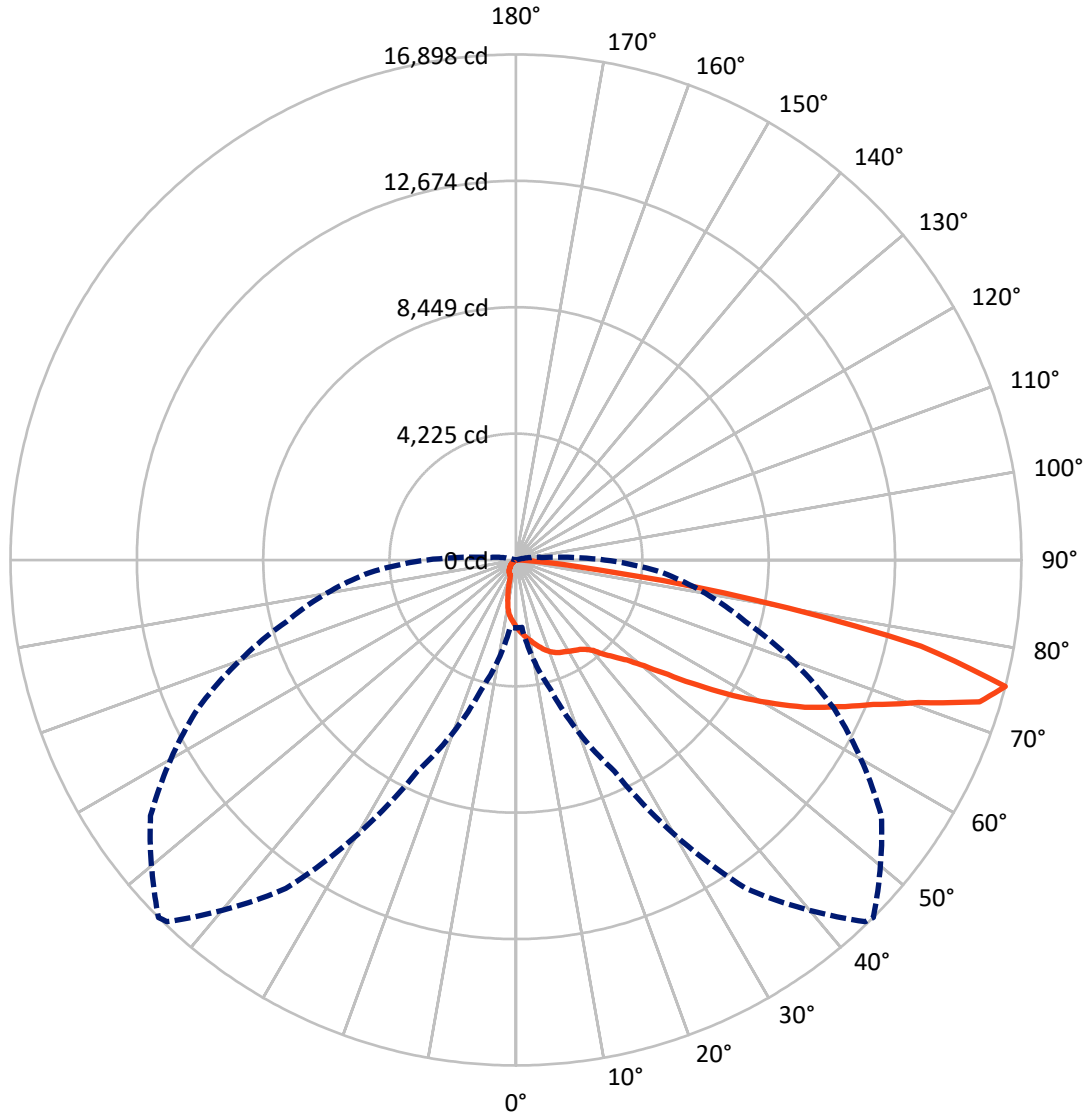
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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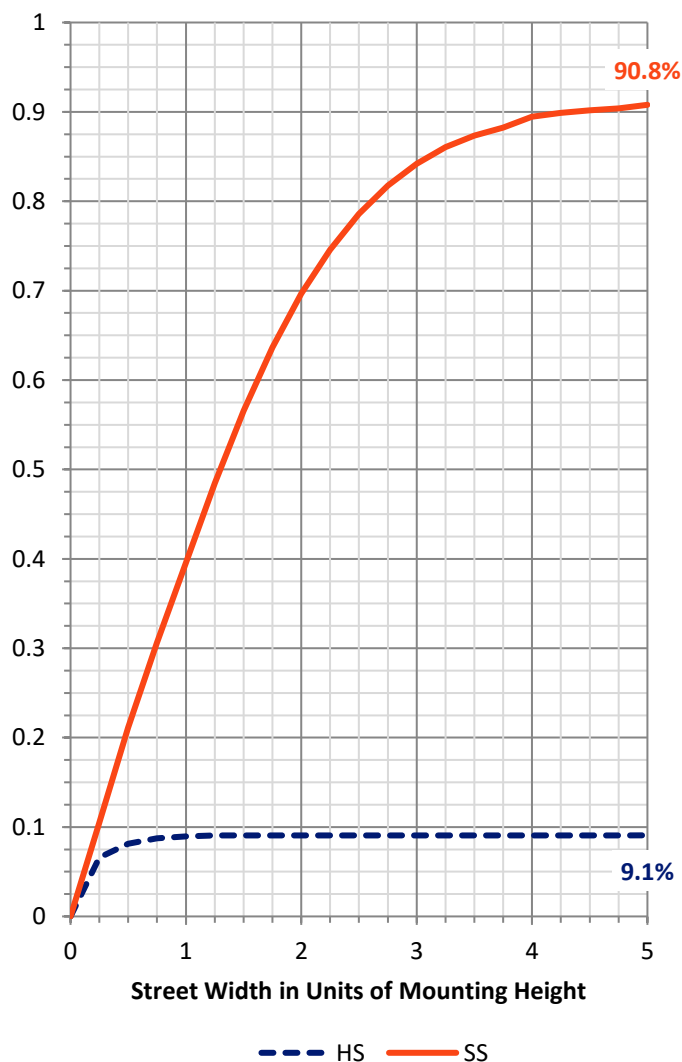
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1922.3	0.0	1922.3
	% Fixture	9.1	0.0	9.1
<b>Street Side</b>	Lumens	19093.7	0.0	19093.7
	% Fixture	90.9	0.0	90.9
<b>Total</b>	Lumens	21016.0	0.0	21016.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.1	1.0
10°-20°	601.0	2.9
20°-30°	995.3	4.7
30°-40°	1440.5	6.9
40°-50°	2358.7	11.2
50°-60°	4202.8	20.0
60°-70°	6178.6	29.4
70°-80°	4661.2	22.2
80°-90°	365.7	1.7
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°	21016.0	100.0
0°-180°	21016.0	100.0

**Coefficient of Utilization**



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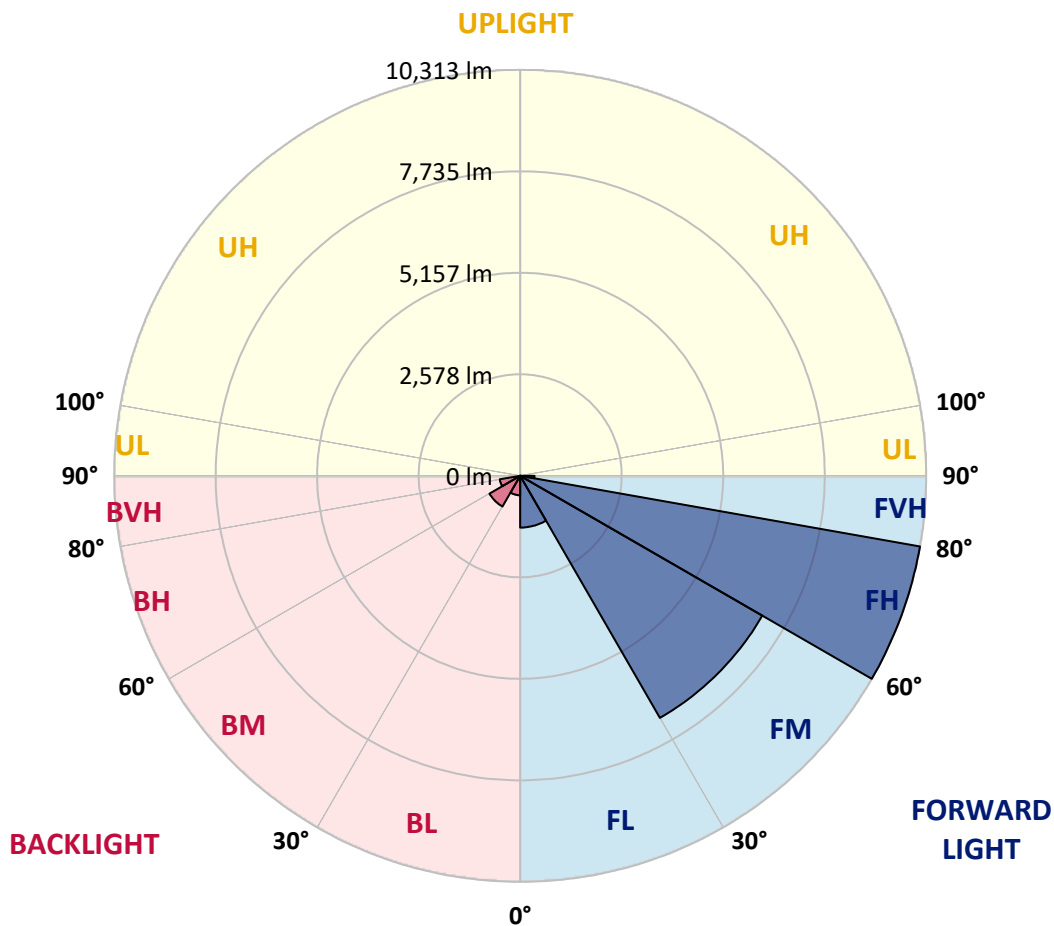
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1314.5	6.3			
FM (30°-60°)	7101.2	33.8			
FH (60°-80°)	10313.3	49.1			G4/12000
FVH (80°-90°)	364.7	1.7			G3/500
BL (0°-30°)	494.0	2.4	B1/500		
BM (30°-60°)	900.8	4.3	B1/1000		
BH (60°-80°)	526.5	2.5	B2/1000		G2/1000
BVH (80°-90°)	1.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	2247.8	2247.8	2247.8	2247.8	2247.8	2247.8	2247.8	2247.8	2247.8	2247.8	2247.8
2.5°	2441.7	2441.7	2436.7	2431.8	2406.9	2382.1	2377.1	2362.1	2317.4	2287.6	2257.8
5°	2645.6	2650.6	2640.7	2615.7	2561.0	2506.4	2501.4	2461.6	2377.1	2317.4	2252.7
7.5°	2839.5	2849.5	2824.7	2779.9	2715.2	2635.7	2630.8	2556.1	2446.7	2362.1	2267.6
10°	3003.6	3003.6	2968.9	2914.2	2844.6	2760.0	2750.0	2665.5	2541.2	2436.7	2312.5
12.5°	3182.7	3177.7	3128.0	3053.4	2973.8	2894.3	2889.3	2784.9	2665.5	2531.2	2377.1
15°	3346.8	3336.9	3272.2	3202.6	3118.0	3033.5	3028.5	2924.1	2799.8	2640.7	2471.6
17.5°	3436.3	3431.3	3371.6	3302.1	3232.4	3167.8	3162.8	3053.4	2919.1	2755.0	2566.1
20°	3451.3	3456.2	3406.4	3346.8	3307.1	3272.2	3272.2	3172.8	3028.5	2854.5	2665.5
22.5°	3456.2	3471.1	3436.3	3356.8	3346.8	3351.7	3361.7	3282.1	3133.0	2968.9	2769.9
25°	3491.1	3510.9	3486.0	3391.5	3381.6	3416.4	3426.4	3391.5	3257.2	3093.1	2889.3
27.5°	3560.6	3580.5	3560.6	3441.3	3426.4	3461.3	3471.1	3491.1	3391.5	3212.5	3013.6
30°	3699.8	3704.9	3660.0	3510.9	3481.1	3525.8	3540.8	3595.4	3515.9	3327.0	3133.0
32.5°	3943.6	3893.8	3759.5	3560.6	3535.7	3585.5	3600.4	3660.0	3630.2	3436.3	3257.2
35°	4440.9	4182.2	3873.9	3630.2	3605.4	3655.2	3675.1	3759.5	3774.5	3590.5	3411.4
37.5°	4435.9	4202.1	4142.4	3764.5	3729.7	3764.5	3789.4	3893.8	3953.5	3794.3	3635.3
40°	4749.2	4649.7	4649.7	4018.1	3903.8	3953.5	3978.3	4082.8	4187.3	4063.0	3898.8
42.5°	5733.8	5669.1	5599.5	4505.6	4147.5	4286.7	4301.6	4366.2	4490.5	4450.7	4256.8
45°	6832.8	6773.2	6504.6	5331.0	4565.2	4590.1	4624.8	4729.3	4908.4	4982.9	4754.2
47.5°	7693.2	7633.5	7404.7	6325.6	5216.6	4997.8	4997.8	5201.8	5480.2	5669.1	5450.4
50°	8384.4	8314.7	8175.6	7384.9	6285.8	5584.7	5554.7	5793.5	6206.3	6499.7	6350.4
52.5°	9055.7	8851.8	8767.3	8478.8	7494.2	6435.1	6355.4	6524.5	7096.4	7459.4	7335.1
55°	9503.4	9473.5	9383.9	9483.4	8762.4	7469.4	7399.8	7434.5	8150.6	8394.4	8240.3
57.5°	9921.1	9916.1	10115.0	10577.5	10144.8	8652.9	8543.5	8488.8	9170.1	9110.5	9244.8
60°	10438.2	10348.7	10811.2	11472.7	11412.9	9806.7	9682.3	9573.0	9950.9	9781.8	10448.1
62.5°	10463.1	10438.2	11378.1	12327.9	12671.2	10980.3	10836.2	10443.2	10632.2	10438.2	11596.9
65°	9513.3	9637.5	11616.9	12780.5	13725.3	12009.7	11835.6	11223.9	11238.9	11109.6	12949.6
67.5°	9299.4	9364.1	10960.5	13267.9	14486.2	13049.1	12885.0	12124.1	11945.1	11955.0	13750.3
70°	8767.3	8866.8	10144.8	13233.1	15087.9	14436.5	14272.4	13446.9	13014.2	12531.8	13133.6
72.5°	6698.5	6867.7	8548.6	11601.9	14923.8	16251.7	16206.9	15122.8	13441.9	11507.4	9935.9
75°	2267.6	2262.6	4490.5	7792.6	13407.1	16808.6	16898.1	14913.9	11726.2	7936.8	4933.2
77.5°	487.3	492.3	925.0	3157.8	8906.6	13496.6	13839.8	11248.8	7563.9	3535.7	1128.8
80°	238.7	243.6	383.0	835.5	3560.6	7568.8	8106.0	5783.5	2794.9	706.2	189.0
82.5°	119.3	124.3	199.0	442.6	1317.8	2690.4	2874.4	2128.5	800.7	397.8	94.5
85°	44.8	44.8	99.4	263.6	601.7	631.5	775.7	616.7	482.4	323.2	24.9
87.5°	10.0	10.0	54.7	129.3	268.6	199.0	199.0	189.0	293.4	218.8	10.0
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°	2247.8	2247.8	2247.8	2247.8	2247.8	2247.8	2247.8	2247.8	2247.8	2247.8	2247.8
2.5°	2242.8	2222.9	2188.1	2153.3	2128.5	2098.6	2083.7	2068.8	2063.8	2058.8	2068.8
5°	2218.0	2188.1	2123.5	2068.8	2019.0	1979.2	1949.4	1919.5	1904.6	1894.7	1899.7
7.5°	2218.0	2173.1	2078.6	1994.2	1914.5	1830.1	1745.5	1680.9	1631.1	1601.3	1606.2
10°	2242.8	2183.1	2058.8	1944.4	1795.2	1616.2	1432.2	1293.0	1198.5	1143.7	1143.7
12.5°	2297.5	2218.0	2063.8	1884.7	1631.1	1317.8	1039.4	870.2	800.7	760.9	765.8
15°	2372.1	2277.6	2088.6	1805.2	1402.4	979.6	726.0	616.7	616.7	626.6	631.5
17.5°	2456.7	2352.3	2108.4	1685.9	1109.0	701.2	571.9	561.9	576.9	601.7	601.7
20°	2541.2	2426.7	2118.4	1496.9	830.5	557.0	542.0	542.0	552.0	576.9	581.8
22.5°	2645.6	2521.2	2108.4	1263.1	621.5	527.1	522.1	522.1	522.1	552.0	552.0
25°	2755.0	2630.8	2068.8	1014.5	527.1	507.3	502.3	497.3	497.3	522.1	527.1
27.5°	2879.3	2745.0	1974.4	775.7	497.3	487.3	482.4	472.4	472.4	492.3	492.3
30°	3003.6	2874.4	1830.1	586.8	472.4	467.4	457.5	447.5	437.6	457.5	457.5
32.5°	3137.9	3008.7	1641.1	467.4	437.6	437.6	432.6	417.7	407.7	417.7	422.8
35°	3317.0	3162.8	1427.3	407.7	392.9	392.9	392.9	387.9	367.9	377.9	377.9
37.5°	3555.7	3376.6	1178.6	377.9	358.1	348.1	348.1	348.1	333.2	338.1	338.1
40°	3859.0	3625.3	939.8	353.1	333.2	308.3	298.4	303.3	293.4	293.4	288.5
42.5°	4271.8	3893.8	706.2	333.2	313.2	278.5	258.6	253.6	243.6	238.7	238.7
45°	4863.5	4222.0	507.3	313.2	298.4	243.6	223.8	208.9	184.0	169.2	169.2
47.5°	5629.4	4595.0	377.9	293.4	283.4	213.8	189.0	159.1	124.3	114.4	114.4
50°	6564.3	5012.7	318.3	263.6	258.6	189.0	149.1	104.5	69.6	59.6	64.7
52.5°	7474.3	5405.6	283.4	233.7	228.8	164.1	109.4	54.7	29.8	29.8	29.8
55°	8240.3	5684.1	258.6	208.9	199.0	129.3	59.6	24.9	15.0	15.0	15.0
57.5°	8931.4	5843.1	233.7	184.0	159.1	89.5	24.9	10.0	10.0	5.0	5.0
60°	9563.0	5937.7	203.9	159.1	124.3	49.7	10.0	5.0	5.0	0.0	0.0
62.5°	10184.6	6007.3	174.0	129.3	94.5	19.8	5.0	5.0	0.0	0.0	0.0
65°	10657.0	5982.5	139.2	104.5	59.6	10.0	5.0	0.0	0.0	0.0	0.0
67.5°	10642.2	5644.4	104.5	79.5	29.8	5.0	0.0	0.0	0.0	0.0	0.0
70°	9518.2	4754.2	69.6	49.7	10.0	5.0	0.0	0.0	0.0	0.0	0.0
72.5°	6753.4	3048.5	44.8	29.8	5.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	2973.8	925.0	24.9	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	581.8	213.8	15.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	139.2	24.9	5.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	59.6	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.0	5.0	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)