

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: P237440

Luminaire Tested: **ARCH-L-AF72-270-D-U-T4W-7030-HSS**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237440
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-AF72-270-D-U-T4W-7030-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 1155mA 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: 20709 lumens
Efficiency: N/A
Efficacy: 75.9 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

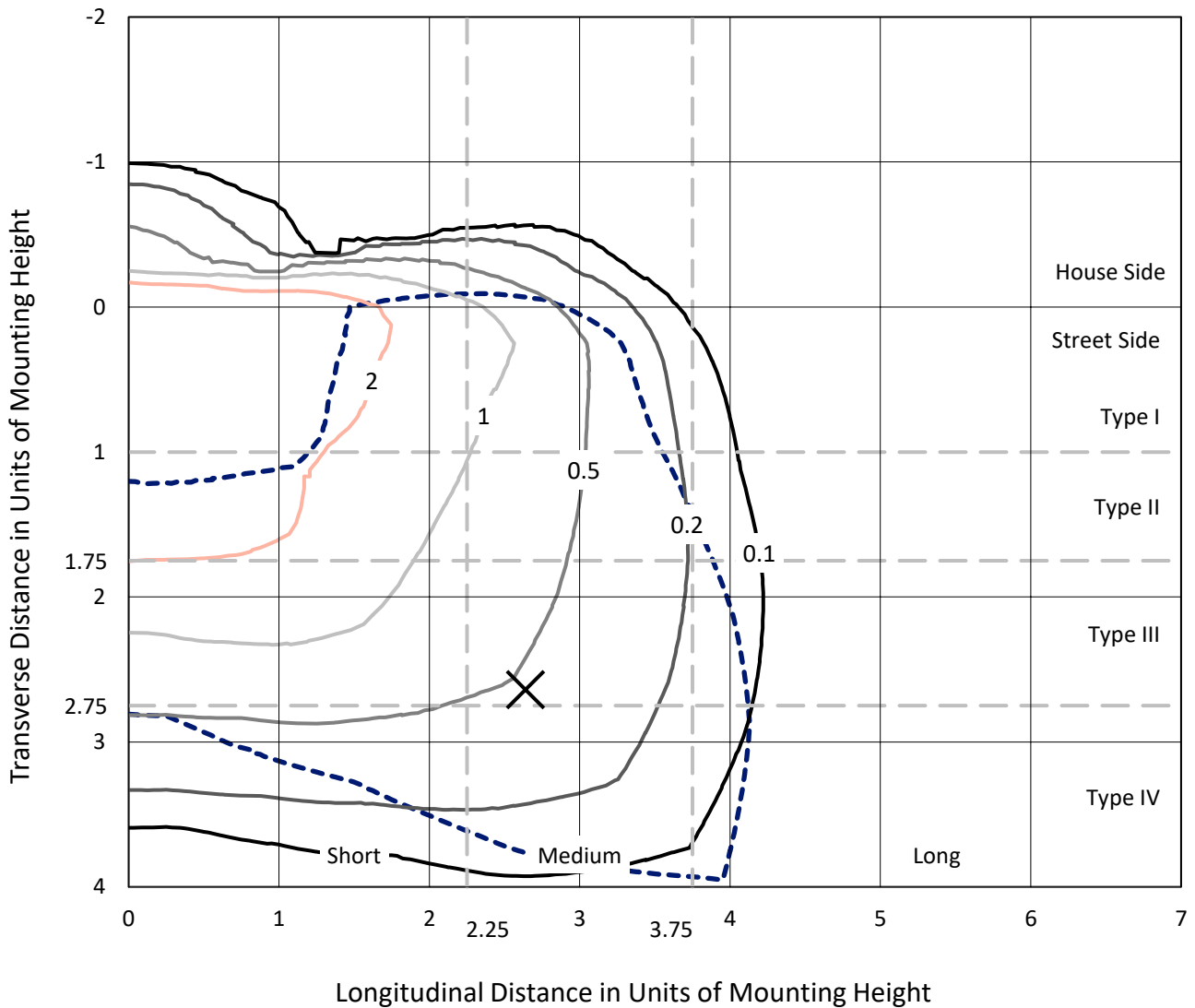
Input Watts (W): 273
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

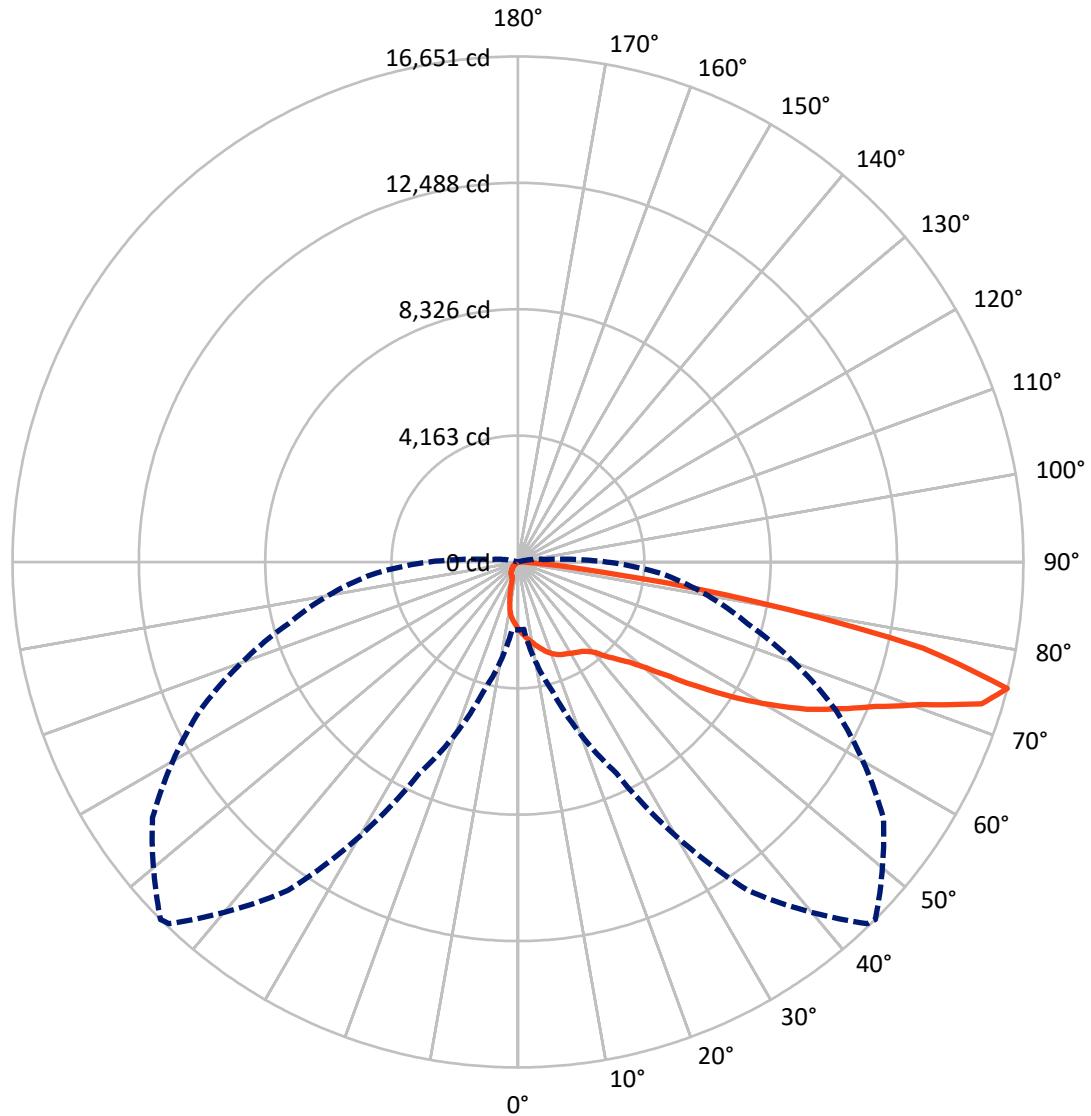
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 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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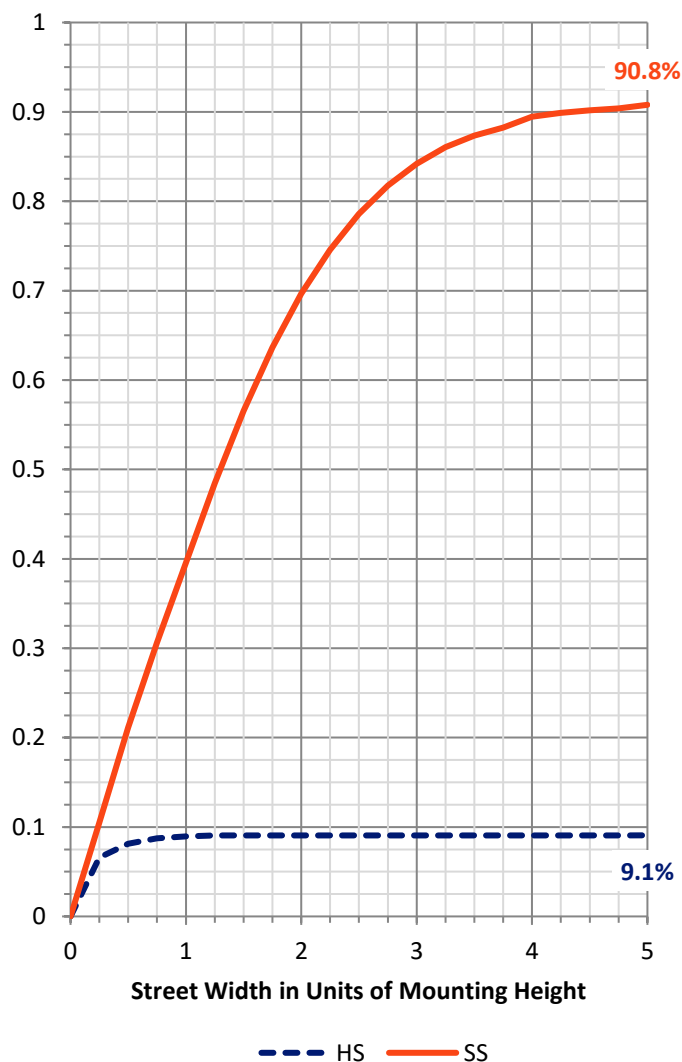
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1894.3	0.0	1894.3
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	18814.8	0.0	18814.8
	% Fixture	90.9	0.0	90.9
Total	Lumens	20709.0	0.0	20709.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.0	1.0
10°-20°	592.2	2.9
20°-30°	980.8	4.7
30°-40°	1419.4	6.9
40°-50°	2324.3	11.2
50°-60°	4141.4	20.0
60°-70°	6088.4	29.4
70°-80°	4593.1	22.2
80°-90°	360.4	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°	20709.0	100.0
0°-180°	20709.0	100.0

Coefficient of Utilization



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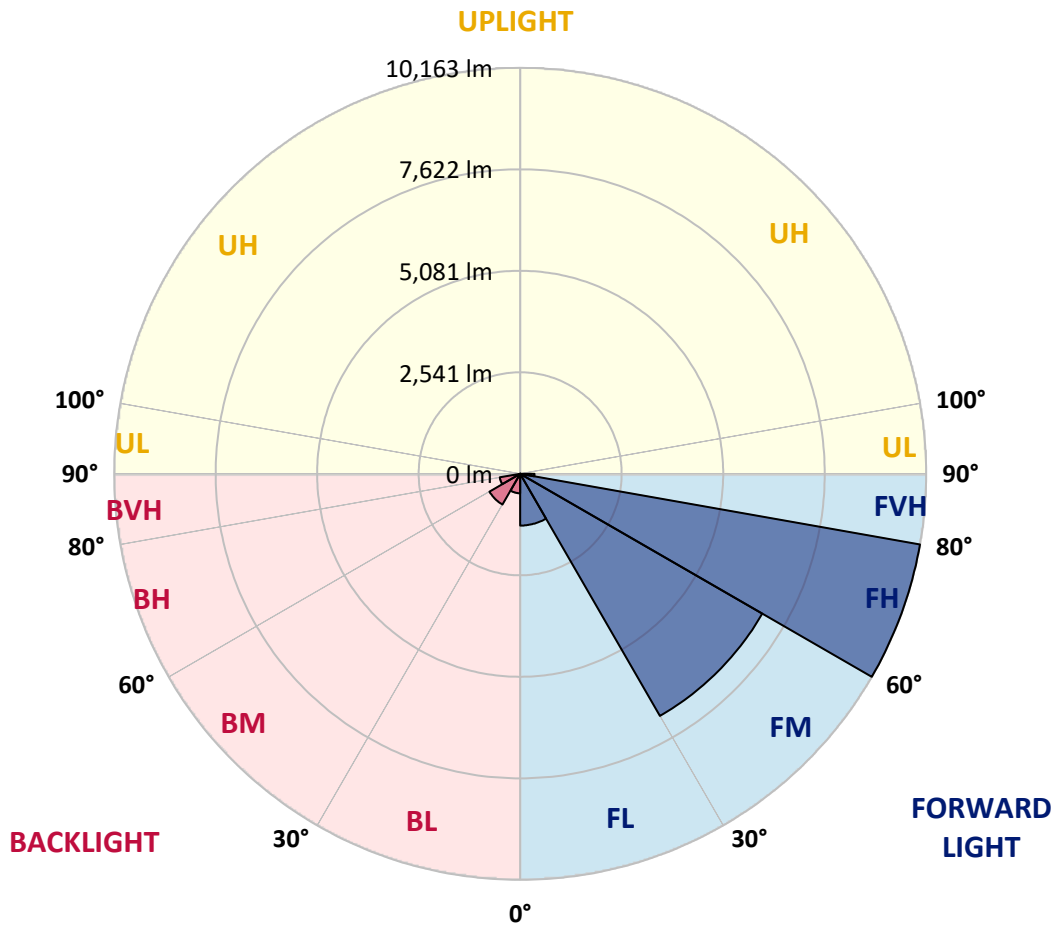
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1295.3	6.3			
FM (30°-60°)	6997.5	33.8			
FH (60°-80°)	10162.7	49.1			G4/12000
FVH (80°-90°)	359.4	1.7			G3/500
BL (0°-30°)	486.8	2.4	B1/500		
BM (30°-60°)	887.7	4.3	B1/1000		
BH (60°-80°)	518.8	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°	2214.9	2214.9	2214.9	2214.9	2214.9	2214.9	2214.9	2214.9	2214.9	2214.9	2214.9
2.5°	2406.0	2406.0	2401.2	2396.3	2371.8	2347.2	2342.3	2327.7	2283.5	2254.1	2224.7
5°	2606.9	2611.9	2602.1	2577.5	2523.7	2469.8	2464.9	2425.7	2342.3	2283.5	2219.8
7.5°	2798.1	2807.9	2783.4	2739.2	2675.5	2597.2	2592.2	2518.8	2411.0	2327.7	2234.6
10°	2959.9	2959.9	2925.5	2871.6	2802.9	2719.7	2709.8	2626.6	2504.0	2401.2	2278.6
12.5°	3136.2	3131.3	3082.3	3008.8	2930.4	2852.0	2847.1	2744.1	2626.6	2494.3	2342.3
15°	3297.9	3288.1	3224.3	3155.9	3072.5	2989.3	2984.3	2881.3	2758.9	2602.1	2435.5
17.5°	3386.2	3381.2	3322.3	3253.8	3185.2	3121.5	3116.6	3008.8	2876.5	2714.8	2528.6
20°	3400.8	3405.7	3356.7	3297.9	3258.6	3224.3	3224.3	3126.4	2984.3	2812.8	2626.6
22.5°	3405.7	3420.5	3386.2	3307.8	3297.9	3302.8	3312.6	3234.2	3087.2	2925.5	2729.6
25°	3440.0	3459.5	3435.1	3342.0	3332.2	3366.5	3376.3	3342.0	3209.7	3048.0	2847.1
27.5°	3508.7	3528.2	3508.7	3391.0	3376.3	3410.6	3420.5	3440.0	3342.0	3165.6	2969.5
30°	3645.9	3650.7	3606.6	3459.5	3430.2	3474.3	3488.9	3543.0	3464.5	3278.4	3087.2
32.5°	3886.0	3836.9	3704.7	3508.7	3484.2	3533.1	3547.8	3606.6	3577.2	3386.2	3209.7
35°	4376.0	4121.2	3817.3	3577.2	3552.7	3601.7	3621.3	3704.7	3719.3	3538.1	3361.6
37.5°	4371.0	4140.7	4081.9	3709.6	3675.3	3709.6	3734.1	3836.9	3895.7	3739.0	3582.2
40°	4679.8	4581.8	4581.8	3959.4	3846.7	3895.7	3920.2	4023.2	4126.0	4003.6	3841.9
42.5°	5650.1	5586.3	5517.7	4439.6	4086.9	4224.1	4238.7	4302.5	4425.0	4385.7	4194.7
45°	6733.0	6674.2	6409.5	5253.1	4498.5	4523.0	4557.3	4660.2	4836.6	4910.1	4684.7
47.5°	7580.7	7522.0	7296.6	6233.2	5140.4	4924.9	4924.9	5125.7	5400.1	5586.3	5370.7
50°	8261.9	8193.4	8056.1	7277.0	6194.0	5503.1	5473.7	5708.9	6115.6	6404.7	6257.8
52.5°	8923.4	8722.6	8639.2	8355.0	7384.8	6341.0	6262.6	6429.3	6992.7	7350.4	7227.9
55°	9364.5	9335.1	9246.8	9344.8	8634.3	7360.2	7291.6	7326.0	8031.6	8271.7	8119.8
57.5°	9776.1	9771.2	9967.1	10423.0	9996.6	8526.6	8418.8	8364.8	9036.2	8977.4	9109.7
60°	10285.7	10197.5	10653.4	11305.0	11246.2	9663.4	9540.9	9433.1	9805.5	9639.0	10295.5
62.5°	10310.2	10285.7	11211.8	12147.9	12486.0	10819.8	10677.8	10290.7	10476.9	10285.7	11427.5
65°	9374.3	9496.9	11447.1	12593.8	13524.8	11834.2	11662.8	11060.0	11074.7	10947.3	12760.4
67.5°	9163.6	9227.3	10800.3	13074.1	14274.6	12858.4	12696.7	11947.0	11770.5	11780.4	13549.4
70°	8639.2	8737.3	9996.6	13039.8	14867.6	14225.5	14063.9	13250.4	12824.1	12348.8	12941.8
72.5°	6600.7	6767.3	8423.7	11432.5	14705.9	16014.2	15970.1	14901.9	13245.5	11339.4	9790.8
75°	2234.6	2229.7	4425.0	7678.7	13211.2	16563.0	16651.2	14696.0	11554.9	7820.9	4861.1
77.5°	480.2	485.1	911.4	3111.7	8776.5	13299.5	13637.5	11084.5	7453.3	3484.2	1112.4
80°	235.2	240.2	377.3	823.3	3508.7	7458.2	7987.5	5699.1	2754.0	695.9	186.2
82.5°	117.6	122.5	196.0	436.2	1298.5	2651.0	2832.3	2097.3	789.0	392.0	93.1
85°	44.1	44.1	98.0	259.7	592.9	622.3	764.5	607.6	475.3	318.5	24.5
87.5°	9.9	9.9	53.9	127.4	264.6	196.0	196.0	186.2	289.1	215.6	9.9
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°	2214.9	2214.9	2214.9	2214.9	2214.9	2214.9	2214.9	2214.9	2214.9	2214.9	2214.9
2.5°	2210.0	2190.4	2156.1	2121.9	2097.3	2068.0	2053.2	2038.6	2033.7	2028.7	2038.6
5°	2185.5	2156.1	2092.5	2038.6	1989.5	1950.3	1920.9	1891.5	1876.8	1867.0	1871.9
7.5°	2185.5	2141.5	2048.3	1965.0	1886.6	1803.4	1720.0	1656.3	1607.3	1577.9	1582.8
10°	2210.0	2151.2	2028.7	1916.0	1769.0	1592.6	1411.3	1274.1	1181.0	1127.1	1127.1
12.5°	2264.0	2185.5	2033.7	1857.2	1607.3	1298.5	1024.2	857.5	789.0	749.7	754.7
15°	2337.5	2244.3	2058.1	1778.8	1381.9	965.5	715.4	607.6	607.6	617.5	622.3
17.5°	2420.7	2317.8	2077.8	1661.2	1092.8	690.9	563.6	553.7	568.4	592.9	592.9
20°	2504.0	2391.3	2087.5	1475.0	818.4	548.8	534.2	534.2	543.9	568.4	573.3
22.5°	2606.9	2484.4	2077.8	1244.7	612.5	519.4	514.5	514.5	514.5	543.9	543.9
25°	2714.8	2592.2	2038.6	999.6	519.4	499.9	495.0	490.0	490.0	514.5	519.4
27.5°	2837.3	2704.9	1945.5	764.5	490.0	480.2	475.3	465.6	465.6	485.1	485.1
30°	2959.9	2832.3	1803.4	578.2	465.6	460.6	450.8	441.1	431.2	450.8	450.8
32.5°	3092.1	2964.6	1617.1	460.6	431.2	431.2	426.3	411.6	401.8	411.6	416.5
35°	3268.5	3116.6	1406.3	401.8	387.1	387.1	387.1	382.2	362.6	372.5	372.5
37.5°	3503.7	3327.3	1161.4	372.5	352.8	343.1	343.1	343.1	328.4	333.2	333.2
40°	3802.7	3572.3	926.2	347.9	328.4	303.8	294.0	299.0	289.1	289.1	284.2
42.5°	4209.3	3836.9	695.9	328.4	308.7	274.5	254.8	249.8	240.2	235.2	235.2
45°	4792.5	4160.4	499.9	308.7	294.0	240.2	220.4	205.9	181.3	166.6	166.6
47.5°	5547.2	4527.9	372.5	289.1	279.2	210.8	186.2	156.8	122.5	112.7	112.7
50°	6468.3	4939.5	313.6	259.7	254.8	186.2	147.1	102.9	68.7	58.8	63.7
52.5°	7365.1	5326.6	279.2	230.3	225.4	161.7	107.8	53.9	29.4	29.4	29.4
55°	8119.8	5601.0	254.8	205.9	196.0	127.4	58.8	24.5	14.7	14.7	14.7
57.5°	8801.0	5757.9	230.3	181.3	156.8	88.2	24.5	9.9	9.9	4.9	4.9
60°	9423.3	5851.0	200.9	156.8	122.5	49.0	9.9	4.9	4.9	0.0	0.0
62.5°	10035.8	5919.5	171.5	127.4	93.1	19.5	4.9	4.9	0.0	0.0	0.0
65°	10501.4	5895.1	137.2	102.9	58.8	9.9	4.9	0.0	0.0	0.0	0.0
67.5°	10486.7	5561.9	102.9	78.4	29.4	4.9	0.0	0.0	0.0	0.0	0.0
70°	9379.2	4684.7	68.7	49.0	9.9	4.9	0.0	0.0	0.0	0.0	0.0
72.5°	6654.7	3003.9	44.1	29.4	4.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	2930.4	911.4	24.5	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	573.3	210.8	14.7	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	137.2	24.5	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	58.8	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.7	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.9	4.9	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)