

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: P400431

Luminaire Tested: **ARCH-L-PA3-280-730-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400431
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-280-730-U-T4W-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: 23515 lumens
Efficiency: N/A
Efficacy: 84.3 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

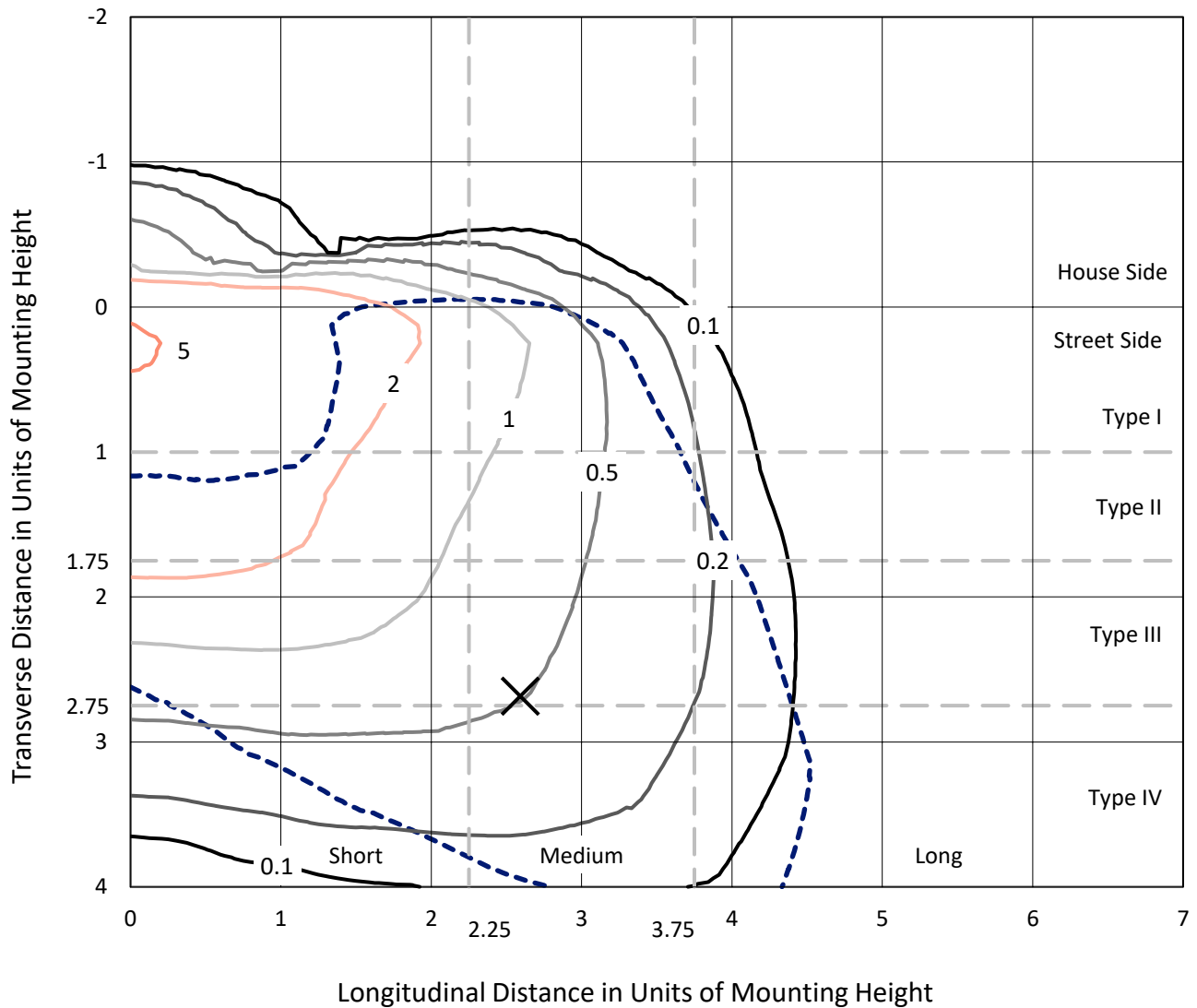
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

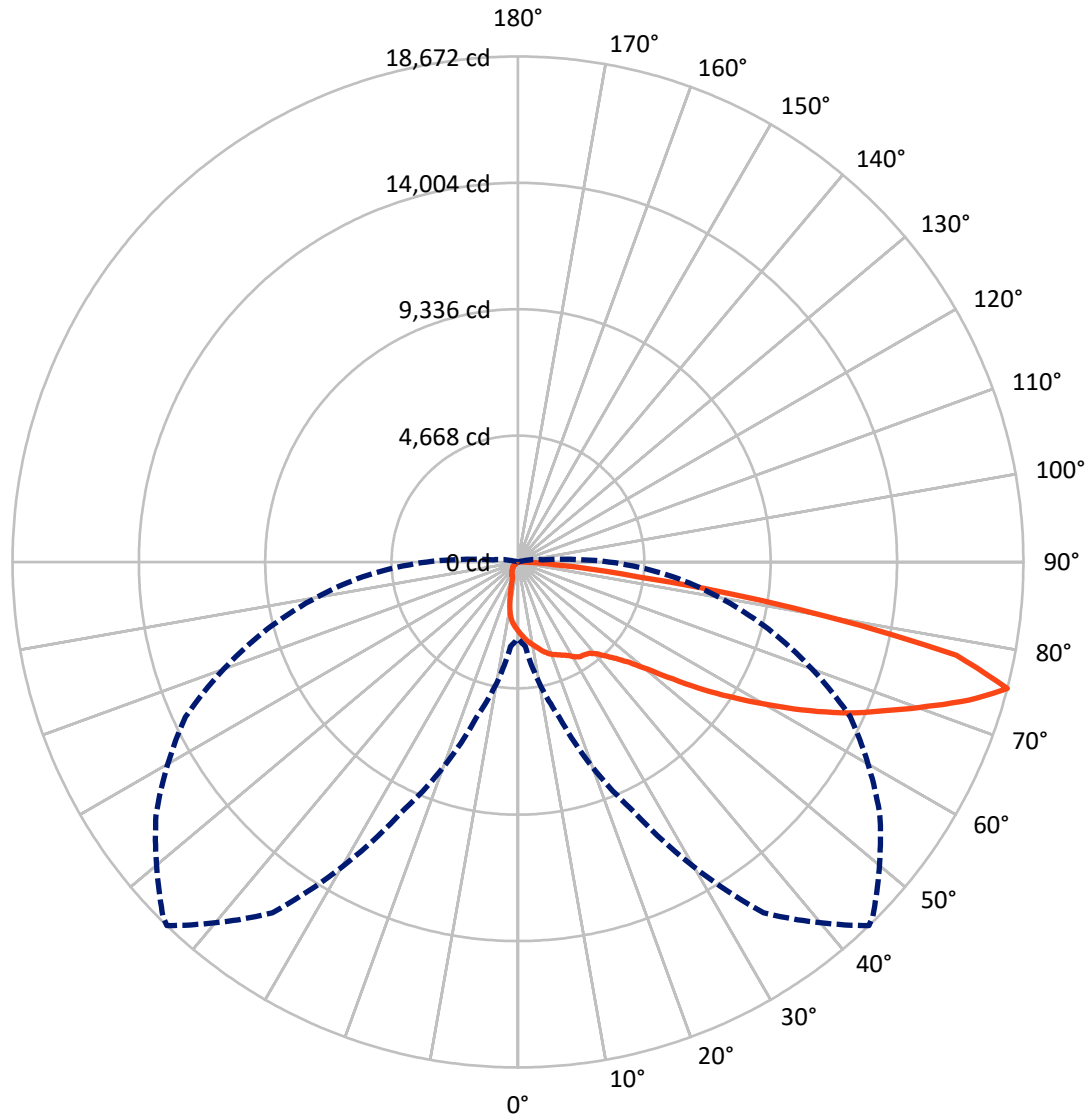
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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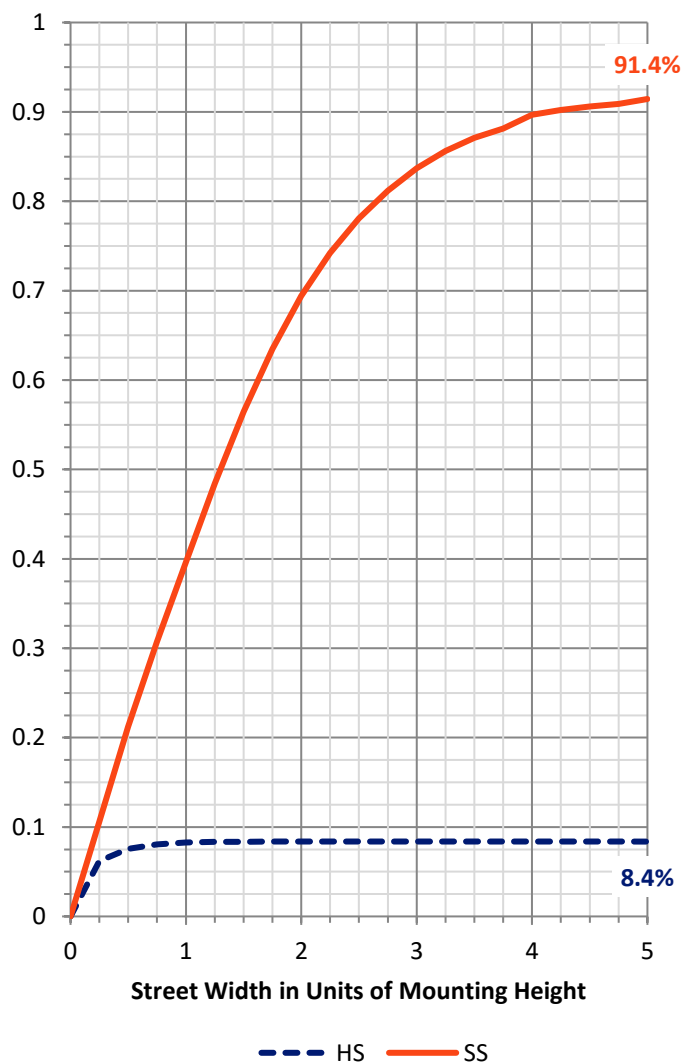
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1983.1	0.0	1983.1
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	21531.9	0.0	21531.9
	% Fixture	91.6	0.0	91.6
Total	Lumens	23515.0	0.0	23515.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.4	1.0
10°-20°	676.4	2.9
20°-30°	1116.2	4.7
30°-40°	1620.1	6.9
40°-50°	2633.5	11.2
50°-60°	4642.6	19.7
60°-70°	6672.4	28.4
70°-80°	5343.1	22.7
80°-90°	569.3	2.4
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°	23515.0	100.0
0°-180°	23515.0	100.0

Coefficient of Utilization



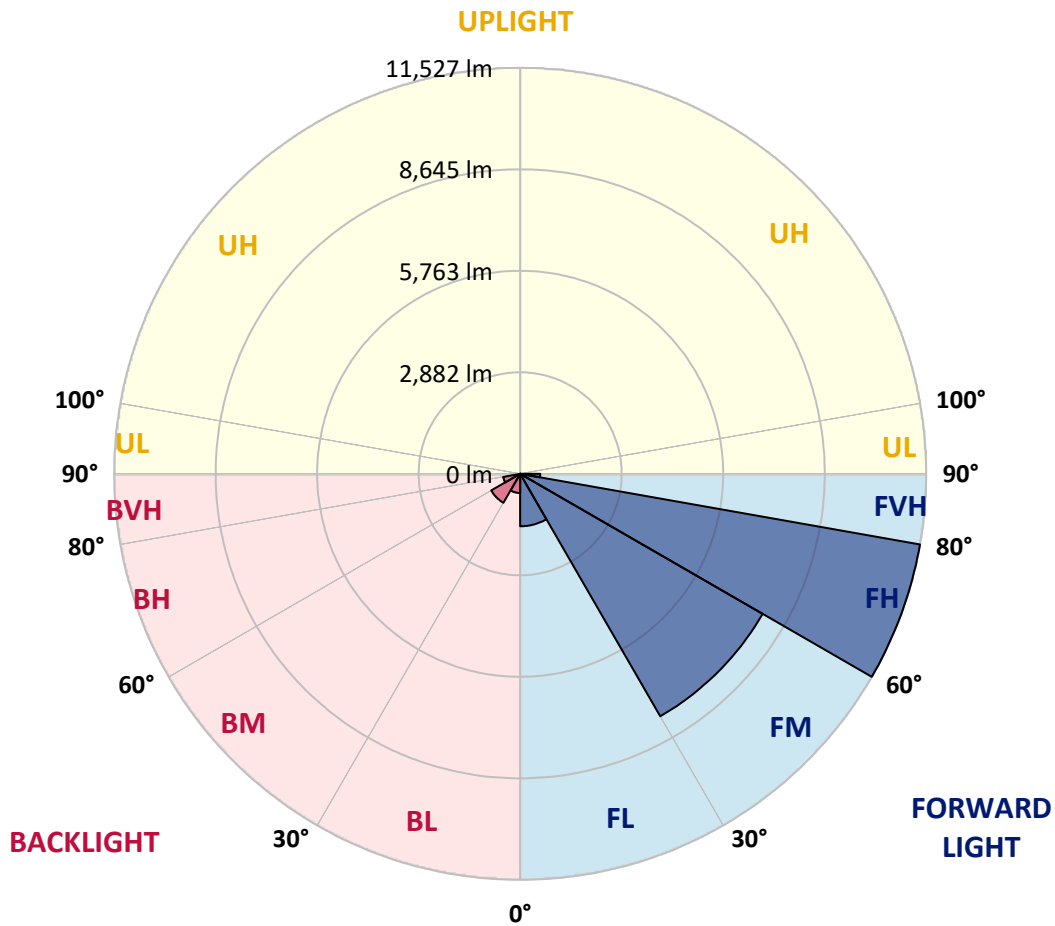
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1489.2	6.3			
FM (30°-60°)	7948.3	33.8			
FH (60°-80°)	11526.6	49.0			G4/12000
FVH (80°-90°)	567.8	2.4			G4/750
BL (0°-30°)	544.8	2.3	B2/1000		
BM (30°-60°)	947.9	4.0	B1/1000		
BH (60°-80°)	488.9	2.1	B1/500		G1/500
BVH (80°-90°)	1.4	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°	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5
2.5°	2789.4	2785.1	2772.1	2750.4	2728.7	2707.0	2702.7	2668.0	2628.9	2598.6	2572.5
5°	3036.7	3032.4	3010.7	2963.0	2915.2	2858.9	2854.5	2772.1	2698.3	2615.9	2546.5
7.5°	3292.7	3284.0	3244.9	3171.2	3088.8	3002.0	2993.3	2871.9	2763.4	2655.0	2555.2
10°	3492.2	3483.5	3427.2	3340.4	3227.6	3119.1	3106.1	2980.3	2871.9	2733.0	2598.6
12.5°	3687.4	3670.1	3596.3	3500.9	3362.1	3258.0	3244.9	3114.8	2984.7	2841.5	2676.6
15°	3869.6	3848.0	3778.5	3657.1	3509.6	3409.8	3401.1	3262.3	3127.8	2963.0	2780.8
17.5°	3995.5	3986.8	3904.4	3769.9	3626.7	3544.3	3535.6	3392.4	3258.0	3084.4	2889.2
20°	4060.5	4060.5	3982.4	3834.9	3704.8	3648.4	3635.4	3500.9	3370.8	3205.9	3002.0
22.5°	4073.5	4086.6	4025.8	3865.3	3769.9	3722.1	3713.5	3596.3	3470.5	3318.7	3127.8
25°	4099.6	4099.6	4069.2	3895.7	3826.3	3813.2	3808.9	3704.8	3592.0	3440.2	3253.6
27.5°	4129.9	4129.9	4108.2	3939.1	3913.0	3908.7	3904.4	3856.6	3765.5	3587.7	3401.1
30°	4208.0	4212.4	4195.0	4025.8	4008.5	4056.2	4064.9	4038.8	3926.0	3704.8	3553.0
32.5°	4403.2	4364.2	4316.5	4086.6	4116.9	4177.7	4182.0	4129.9	4008.5	3830.6	3735.2
35°	4893.5	4663.5	4446.6	4138.6	4151.6	4212.4	4221.0	4216.7	4142.9	3991.1	3943.4
37.5°	5349.0	5023.6	4715.6	4260.1	4216.7	4281.8	4299.1	4372.9	4316.5	4212.4	4225.4
40°	5613.6	5487.8	5270.9	4594.1	4346.8	4446.6	4464.0	4576.8	4555.1	4511.7	4594.1
42.5°	6429.2	6437.8	6203.6	5093.0	4585.4	4746.0	4767.6	4858.7	4889.1	4910.8	5110.4
45°	7374.9	7405.3	7348.9	5991.0	5036.6	5088.7	5119.0	5240.5	5353.3	5492.1	5856.5
47.5°	8511.5	8485.5	8277.2	7088.6	5821.8	5531.2	5552.9	5787.1	5982.3	6286.0	6806.6
50°	9517.9	9583.0	9188.2	8112.4	6928.1	6229.6	6207.9	6437.8	6789.2	7214.4	7869.4
52.5°	10533.1	10437.6	9904.0	9127.5	8238.2	7179.7	7114.6	7240.4	7735.0	8238.2	8910.6
55°	10802.0	10810.7	10628.5	10238.1	9331.4	8333.6	8225.2	8216.5	8832.5	9175.2	10003.8
57.5°	11331.3	11353.0	11396.4	11474.5	11045.0	9487.6	9374.8	9253.3	9852.0	10051.5	11101.4
60°	11869.2	11895.3	12159.9	12580.7	12294.4	10732.6	10611.2	10324.8	10658.9	10927.8	12255.3
62.5°	11799.8	11982.0	12749.9	13587.1	13552.4	12099.1	11947.3	11257.5	11470.1	11704.4	13313.8
65°	10654.5	10849.8	12576.3	13864.8	14814.8	13448.3	13201.0	12220.6	12233.6	12515.6	14333.3
67.5°	9630.7	9843.3	11491.8	13747.7	15647.8	14658.7	14402.7	13188.0	12984.1	13452.7	14879.9
70°	9040.7	9253.3	10628.5	13383.2	15882.0	15999.2	15777.9	14294.3	13877.8	14307.3	14268.2
72.5°	7075.6	7409.6	9526.6	12689.1	16133.6	17435.1	17261.6	15695.5	14637.0	13413.6	10862.8
75°	2819.8	3127.8	5947.6	10212.0	15817.0	18671.5	18537.0	16324.5	13548.1	9578.7	5561.5
77.5°	850.3	911.0	1652.8	5049.6	11595.9	16554.4	16511.1	13726.0	9587.3	4446.6	1518.4
80°	282.0	312.3	507.6	1392.6	5292.6	10342.2	10537.4	8745.7	4355.5	1019.5	308.0
82.5°	117.1	130.1	256.0	559.6	1874.1	4455.3	4390.2	3917.4	1518.4	633.4	112.8
85°	30.4	39.0	117.1	321.0	685.4	1535.7	1613.8	1314.5	859.0	524.9	34.7
87.5°	0.0	0.0	56.4	130.1	308.0	464.2	485.9	399.1	485.9	394.8	17.4
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°	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5	2559.5
2.5°	2550.8	2529.2	2490.1	2464.1	2429.4	2420.7	2403.3	2381.7	2377.3	2355.6	2360.0
5°	2507.5	2472.8	2403.3	2355.6	2299.2	2281.9	2251.5	2229.8	2212.5	2182.1	2186.4
7.5°	2498.8	2446.7	2351.3	2260.2	2169.1	2104.0	2012.9	1939.2	1878.4	1813.4	1826.4
10°	2529.2	2464.1	2329.6	2203.8	2038.9	1830.7	1592.1	1435.9	1357.8	1279.8	1288.4
12.5°	2589.9	2511.8	2338.3	2147.4	1813.4	1457.6	1127.9	915.4	859.0	824.3	828.6
15°	2681.0	2585.5	2364.3	2038.9	1509.7	1054.2	750.5	659.4	681.1	694.1	694.1
17.5°	2776.4	2668.0	2386.0	1843.7	1167.0	737.5	611.7	603.0	633.4	663.7	663.7
20°	2893.6	2754.7	2390.3	1596.4	841.6	598.7	577.0	577.0	598.7	633.4	633.4
22.5°	3006.3	2850.2	2351.3	1314.5	642.0	555.3	555.3	555.3	568.3	603.0	607.3
25°	3140.8	2967.3	2268.9	1015.1	550.9	529.3	529.3	533.6	542.3	572.6	577.0
27.5°	3284.0	3088.8	2130.0	741.8	503.2	498.9	503.2	507.6	511.9	542.3	550.9
30°	3448.8	3223.3	1952.2	555.3	459.8	459.8	472.9	481.5	481.5	507.6	516.2
32.5°	3639.7	3401.1	1739.6	459.8	416.5	412.1	433.8	446.8	446.8	468.5	477.2
35°	3878.3	3583.3	1483.7	407.8	381.8	373.1	381.8	403.4	412.1	429.5	433.8
37.5°	4195.0	3800.2	1210.3	377.4	355.7	338.4	338.4	342.7	360.1	377.4	381.8
40°	4598.5	4038.8	941.4	355.7	329.7	312.3	299.3	295.0	290.7	303.7	312.3
42.5°	5106.0	4307.8	702.8	334.0	308.0	282.0	264.6	247.3	225.6	221.2	225.6
45°	5756.7	4637.5	520.6	316.7	295.0	256.0	225.6	195.2	156.2	143.2	147.5
47.5°	6524.6	4980.2	407.8	299.3	286.3	225.6	186.5	134.5	95.4	86.8	91.1
50°	7340.2	5309.9	347.1	277.6	269.0	195.2	134.5	82.4	56.4	56.4	60.7
52.5°	8034.3	5496.5	316.7	260.3	242.9	160.5	86.8	47.7	34.7	34.7	39.0
55°	8706.7	5596.2	295.0	242.9	208.2	112.8	47.7	30.4	21.7	21.7	21.7
57.5°	9400.8	5639.6	269.0	221.2	164.9	69.4	26.0	17.4	13.0	13.0	13.0
60°	10016.8	5557.2	229.9	182.2	108.5	34.7	13.0	13.0	8.7	4.3	4.3
62.5°	10533.1	5401.0	160.5	130.1	65.1	17.4	8.7	4.3	0.0	0.0	0.0
65°	10849.8	5149.4	104.1	86.8	39.0	13.0	4.3	0.0	0.0	0.0	0.0
67.5°	10758.7	4676.5	65.1	56.4	17.4	8.7	4.3	0.0	0.0	0.0	0.0
70°	9708.8	3834.9	47.7	34.7	13.0	4.3	0.0	0.0	0.0	0.0	0.0
72.5°	6997.5	2594.2	34.7	21.7	8.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	3366.4	924.0	21.7	17.4	4.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	824.3	203.9	13.0	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	182.2	39.0	8.7	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	60.7	17.4	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	21.7	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	13.0	4.3	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)