

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: P258078

Luminaire Tested: **ARCH-L-AF72-220-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258078
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-220-D-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18412 lumens
Efficiency: N/A
Efficacy: 82.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

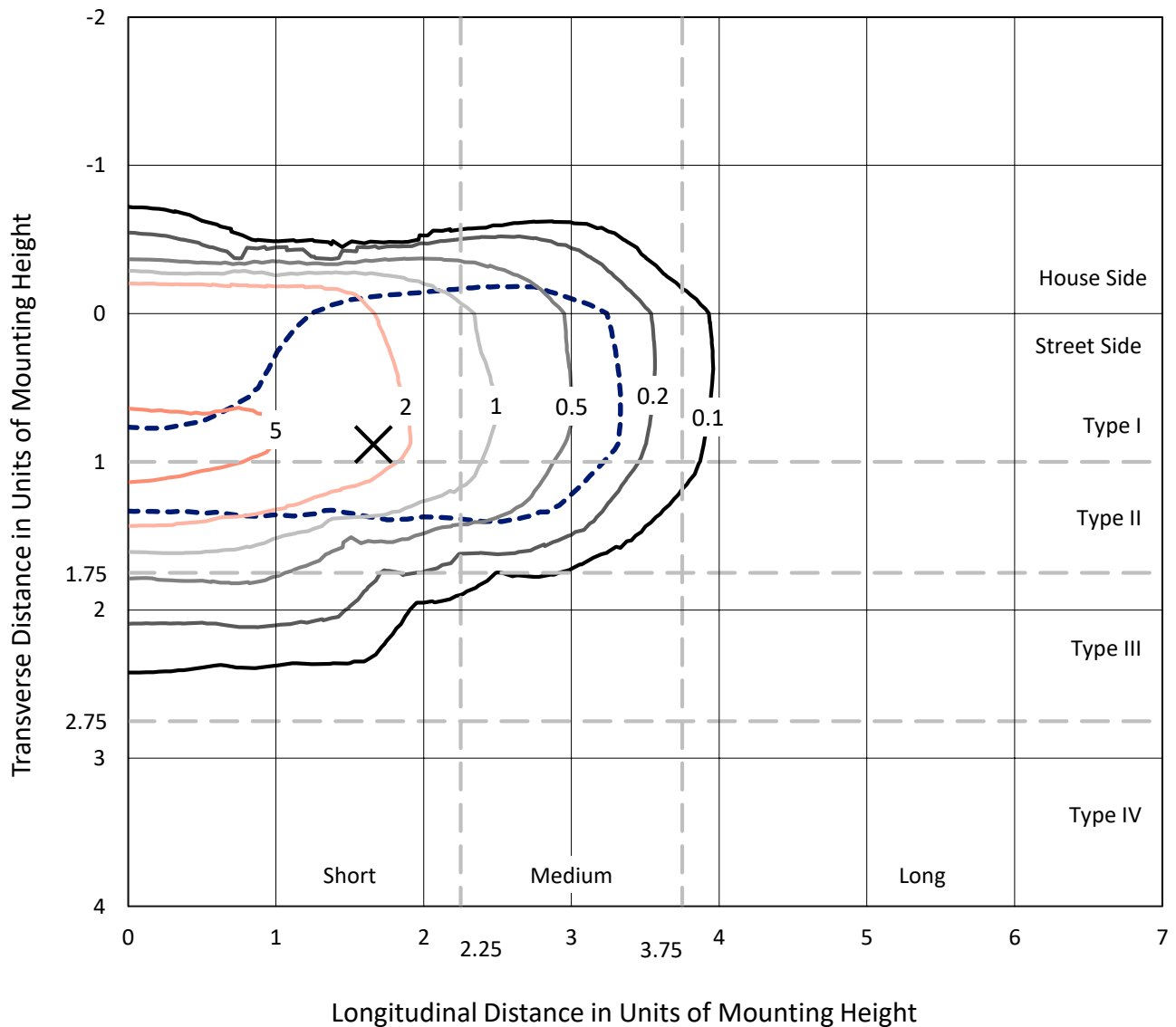
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

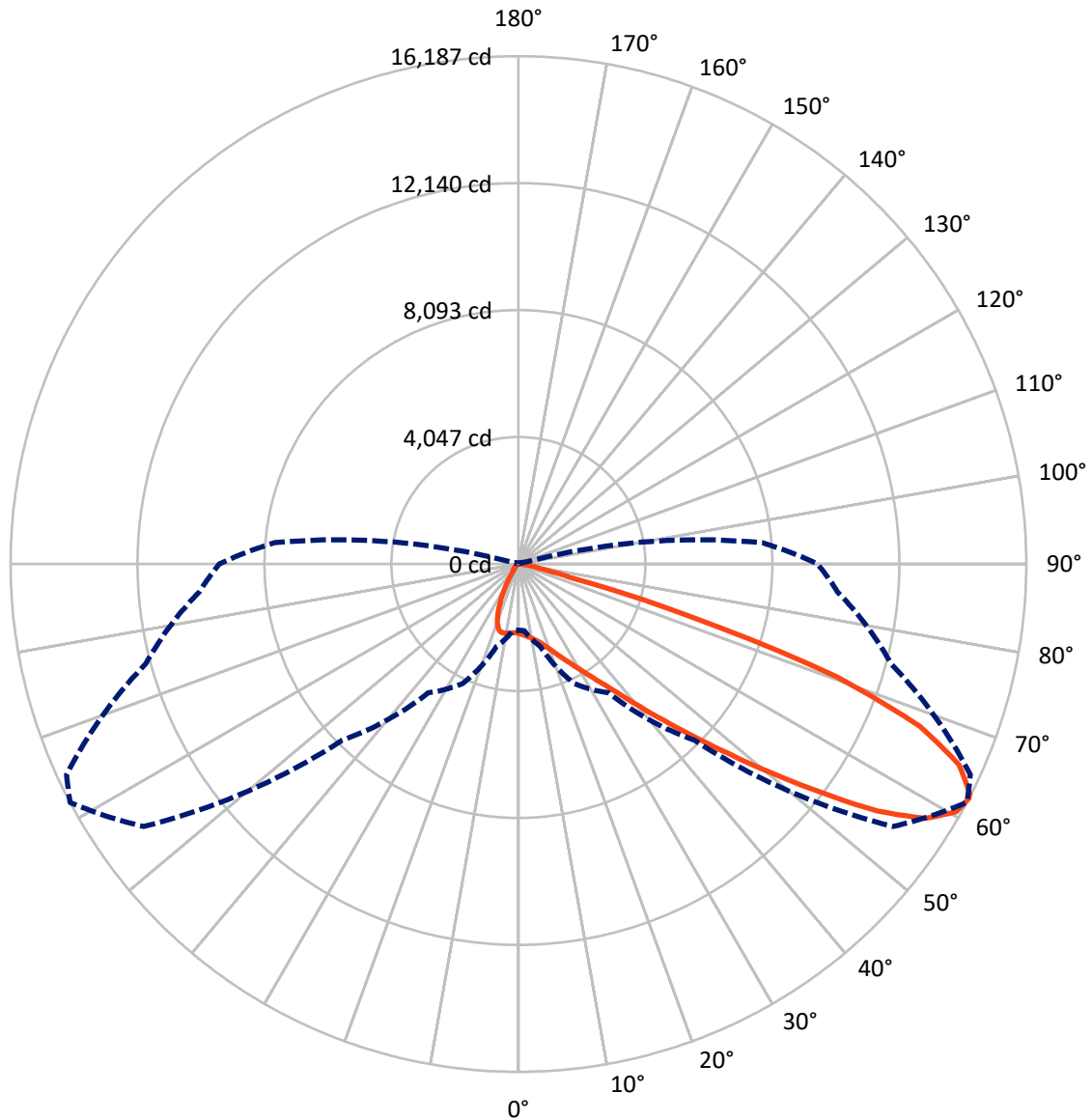
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical



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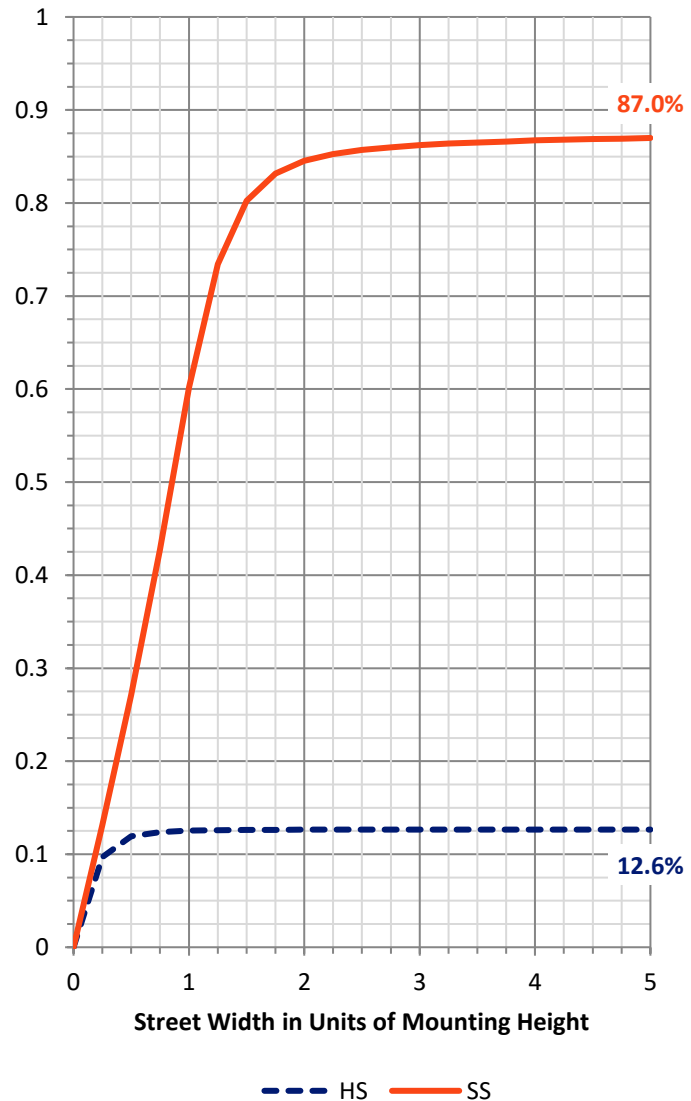
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2354.2	0.0	2354.2
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	16057.9	0.0	16057.9
	% Fixture	87.2	0.0	87.2
Total	Lumens	18412.0	0.0	18412.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.4	1.2
10°-20°	596.1	3.2
20°-30°	1001.1	5.4
30°-40°	1918.9	10.4
40°-50°	3919.4	21.3
50°-60°	5186.8	28.2
60°-70°	4029.3	21.9
70°-80°	1454.4	7.9
80°-90°	92.7	0.5
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°	18412.0	100.0
0°-180°	18412.0	100.0



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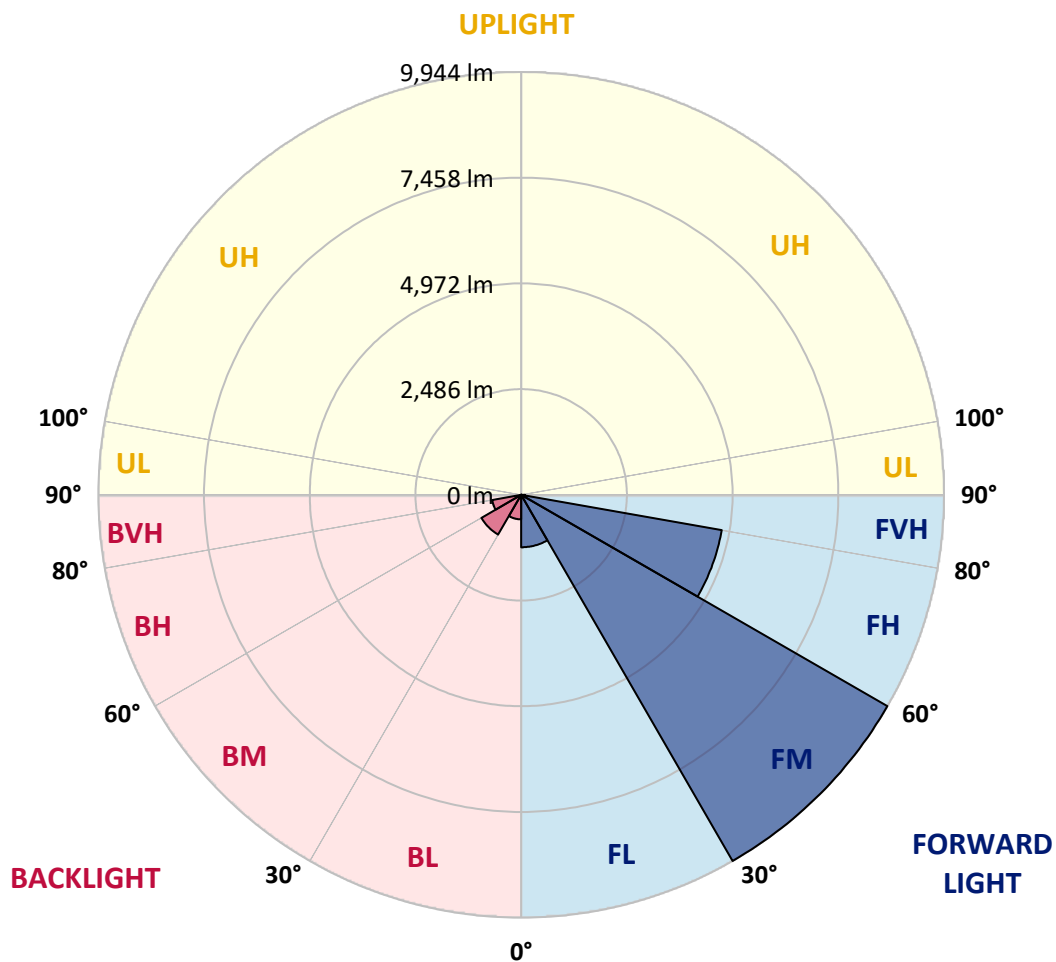
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1234.4	6.7			
FM (30°-60°)	9944.4	54.0			
FH (60°-80°)	4790.4	26.0			G2/5000
FVH (80°-90°)	88.6	0.5			G1/100
BL (0°-30°)	576.2	3.1	B2/1000		
BM (30°-60°)	1080.7	5.9	B2/2500		
BH (60°-80°)	693.2	3.8	B2/1000		G2/1000
BVH (80°-90°)	4.0	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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	2218.0	2218.0	2218.0	2218.0	2218.0	2218.0	2218.0	2218.0	2218.0	2218.0	2218.0
2.5°	2276.8	2272.3	2267.8	2263.3	2263.3	2258.7	2254.2	2245.2	2236.1	2227.1	2222.5
5°	2317.6	2313.0	2308.5	2313.0	2308.5	2308.5	2304.0	2294.9	2285.9	2272.3	2258.7
7.5°	2349.2	2344.7	2340.2	2344.7	2349.2	2353.8	2358.3	2349.2	2344.7	2326.6	2313.0
10°	2390.0	2385.4	2380.9	2390.0	2390.0	2412.6	2417.1	2412.6	2408.1	2394.5	2371.9
12.5°	2448.8	2453.3	2453.3	2462.4	2471.4	2498.7	2507.7	2494.1	2494.1	2476.0	2448.8
15°	2557.5	2557.5	2557.5	2566.5	2571.1	2607.3	2616.3	2602.7	2611.8	2580.1	2553.0
17.5°	2661.6	2666.1	2675.1	2693.2	2693.2	2724.9	2743.0	2743.0	2761.1	2720.4	2684.2
20°	2765.6	2770.3	2783.8	2824.6	2824.6	2865.3	2897.0	2910.5	2928.6	2887.9	2824.6
22.5°	2878.9	2878.9	2901.5	2964.8	2951.3	3032.7	3091.6	3114.2	3132.3	3078.1	2978.4
25°	3050.8	3032.7	3050.8	3109.7	3100.7	3213.8	3322.4	3345.0	3367.7	3304.3	3155.0
27.5°	3376.8	3349.6	3286.2	3290.7	3290.7	3422.0	3575.9	3607.6	3621.1	3566.8	3381.3
30°	4028.6	4028.6	3793.2	3634.7	3530.6	3648.4	3865.6	3919.9	3938.1	3856.5	3612.1
32.5°	5164.7	5164.7	4730.1	4327.3	3933.6	3933.6	4182.4	4282.1	4300.2	4205.1	3919.9
35°	6613.2	6604.2	5952.3	5400.1	4630.6	4340.9	4553.7	4721.1	4775.4	4648.7	4318.3
37.5°	8152.2	8093.4	7391.7	6758.0	5703.4	4992.7	5056.0	5277.9	5327.6	5223.6	4834.3
40°	9401.5	9333.6	8767.8	8238.2	7088.4	6033.8	5780.3	5984.1	6042.9	5898.0	5449.9
42.5°	10533.1	10365.7	9976.3	9596.1	8681.8	7835.3	6744.4	6825.9	6889.3	6735.4	6142.4
45°	11352.4	11094.4	10895.2	10777.6	10293.2	9813.4	7993.7	7830.8	7853.4	7663.3	6898.4
47.5°	11375.0	11193.9	11212.1	11519.9	11719.0	11700.9	9618.8	9039.4	8953.4	8636.6	7704.0
50°	10288.7	10392.8	10723.3	11601.4	12678.7	13330.5	11551.6	10469.8	10211.7	9641.4	8505.2
52.5°	8478.1	8641.1	9261.2	10741.4	12819.0	14403.2	13556.9	12103.9	11642.1	10637.3	9120.8
55°	6640.4	6649.4	7301.2	8808.5	11882.0	14597.9	15159.2	13900.9	13194.7	11393.1	9528.3
57.5°	4567.3	4816.2	5644.5	6658.5	9768.2	13629.3	15761.2	15295.0	14385.1	11859.4	9813.4
60°	2992.0	3005.6	3969.8	5142.1	6649.4	11089.9	15394.6	16032.8	15349.3	12135.5	10008.0
62°	2109.3	2131.9	2729.4	4200.5	5010.8	7948.5	14584.3	16186.7	15892.5	12298.4	10211.7
62.5°	1955.5	1973.6	2476.0	3965.2	4707.5	7129.3	14294.6	16150.4	15974.0	12352.7	10284.1
65°	1434.9	1434.9	1620.5	2724.9	3449.2	3852.0	12112.9	15430.8	15865.4	12787.3	10555.7
67.5°	1109.0	1118.1	1181.4	1679.3	2602.7	2335.7	7731.3	13810.3	14733.7	13430.1	10709.7
70°	955.1	950.5	995.8	1113.5	1878.4	1552.5	3403.9	10777.6	12339.2	13267.2	10569.3
72.5°	706.1	710.6	814.8	977.7	1308.1	1009.4	1539.0	5721.5	8002.9	10383.8	9057.5
75°	452.7	457.2	574.9	769.5	941.5	660.8	887.2	1706.5	3277.1	5757.7	5540.4
77.5°	303.3	312.3	375.7	538.7	823.8	411.9	556.8	715.1	986.7	2159.1	1987.1
80°	203.7	203.7	239.9	362.1	520.6	344.0	298.7	475.3	511.5	669.9	334.9
82.5°	135.7	135.7	158.5	239.9	339.5	307.8	181.1	258.0	298.7	334.9	117.6
85°	81.4	81.4	108.6	149.4	221.8	172.0	117.6	144.8	153.9	212.8	63.3
87.5°	49.8	45.2	72.4	104.1	117.6	104.1	76.9	76.9	81.4	117.6	31.7
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°	2218.0	2218.0	2218.0	2218.0	2218.0	2218.0	2218.0	2218.0	2218.0	2218.0	2218.0
2.5°	2213.5	2209.0	2204.4	2195.4	2181.7	2172.7	2163.6	2154.6	2145.5	2145.5	2159.1
5°	2254.2	2240.6	2222.5	2204.4	2177.2	2159.1	2145.5	2127.4	2118.4	2118.4	2122.9
7.5°	2304.0	2290.4	2258.7	2227.1	2186.3	2154.6	2122.9	2082.2	2050.5	2036.9	2050.5
10°	2358.3	2340.2	2294.9	2245.2	2199.9	2118.4	2014.3	1887.5	1778.9	1729.1	1751.7
12.5°	2426.2	2403.5	2349.2	2281.4	2177.2	1978.1	1720.1	1425.9	1240.2	1154.3	1172.4
15°	2525.8	2494.1	2417.1	2313.0	2082.2	1652.2	1231.2	891.7	719.7	647.3	656.3
17.5°	2643.5	2602.7	2498.7	2304.0	1837.7	1190.5	733.3	520.6	448.2	430.0	430.0
20°	2770.3	2715.9	2580.1	2236.1	1466.6	746.9	457.2	398.3	371.1	357.6	357.6
22.5°	2901.5	2829.1	2648.0	2077.6	1045.7	466.3	375.7	334.9	303.3	289.7	289.7
25°	3060.0	2964.8	2715.9	1801.5	665.4	375.7	321.4	280.6	249.0	230.9	235.4
27.5°	3245.5	3123.3	2774.8	1457.5	430.0	325.9	267.1	226.3	199.2	190.1	190.1
30°	3440.1	3295.2	2788.4	1090.9	348.5	280.6	221.8	185.6	167.5	158.5	158.5
32.5°	3707.2	3517.1	2747.5	724.2	294.2	235.4	185.6	153.9	140.3	135.7	135.7
35°	4060.3	3806.8	2652.5	448.2	249.0	194.7	153.9	135.7	122.2	117.6	117.6
37.5°	4508.3	4209.6	2485.1	307.8	212.8	158.5	131.2	117.6	108.6	104.1	104.1
40°	5105.9	4698.5	2267.8	267.1	181.1	135.7	113.1	104.1	95.0	95.0	95.0
42.5°	5739.6	5291.4	1987.1	235.4	153.9	117.6	99.5	90.5	86.0	81.4	81.4
45°	6432.1	5898.0	1638.6	208.2	131.2	104.1	90.5	76.9	72.4	72.4	72.4
47.5°	7120.1	6522.6	1258.3	181.1	113.1	90.5	76.9	67.9	63.3	58.8	58.8
50°	7826.3	7088.4	923.4	158.5	99.5	81.4	67.9	58.8	49.8	45.2	45.2
52.5°	8337.8	7428.0	674.4	135.7	86.0	67.9	54.3	45.2	36.2	31.7	31.7
55°	8713.5	7636.2	493.4	113.1	76.9	58.8	45.2	36.2	27.1	27.1	22.6
57.5°	9007.7	7735.8	371.1	99.5	67.9	49.8	36.2	27.1	22.6	18.1	18.1
60°	9234.1	7740.3	276.1	81.4	58.8	40.7	27.1	18.1	13.6	13.6	13.6
62°	9532.8	7799.1	226.3	67.9	54.3	36.2	22.6	13.6	9.0	4.5	4.5
62.5°	9618.8	7821.8	217.3	67.9	49.8	31.7	18.1	13.6	9.0	4.5	4.5
65°	10017.1	7862.5	167.5	54.3	40.7	27.1	13.6	9.0	0.0	0.0	0.0
67.5°	10379.3	7799.1	122.2	40.7	31.7	18.1	13.6	4.5	0.0	0.0	0.0
70°	10343.1	7364.6	86.0	27.1	22.6	13.6	9.0	0.0	0.0	0.0	0.0
72.5°	8523.3	5513.3	58.8	22.6	13.6	9.0	4.5	0.0	0.0	0.0	0.0
75°	5146.6	2412.6	40.7	13.6	13.6	9.0	4.5	0.0	0.0	0.0	0.0
77.5°	1688.4	873.6	27.1	9.0	9.0	4.5	4.5	0.0	0.0	0.0	0.0
80°	276.1	144.8	13.6	9.0	9.0	4.5	4.5	0.0	0.0	0.0	0.0
82.5°	86.0	36.2	9.0	9.0	4.5	4.5	0.0	0.0	0.0	0.0	0.0
85°	31.7	13.6	9.0	9.0	4.5	4.5	0.0	0.0	0.0	0.0	0.0
87.5°	13.6	9.0	9.0	9.0	4.5	4.5	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)