

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: P258077

Luminaire Tested: **ARCH-L-AF72-210-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258077
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-AF72-210-D-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 900mA 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: 17789.2 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 II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

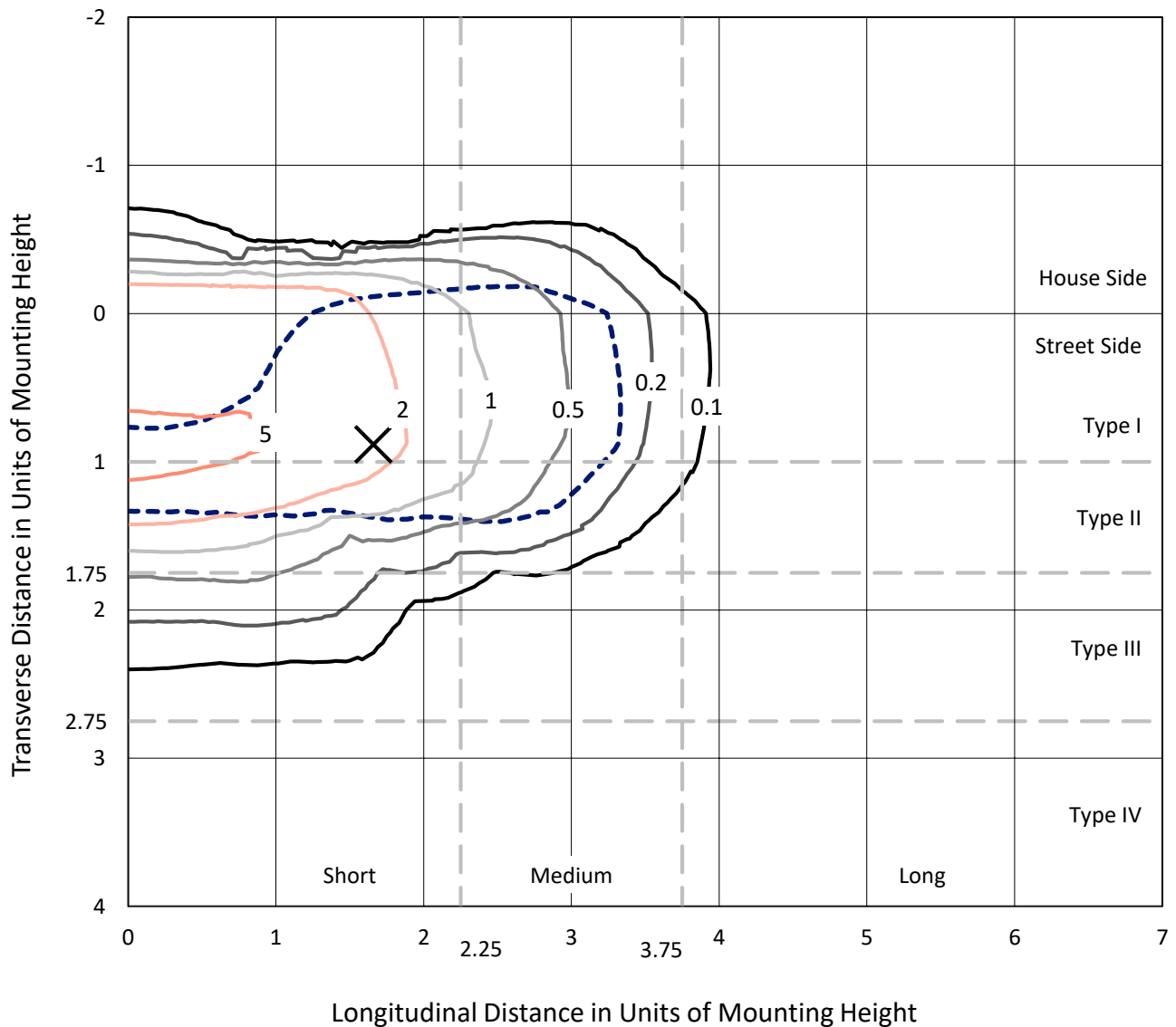
Input Watts (W): 211
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

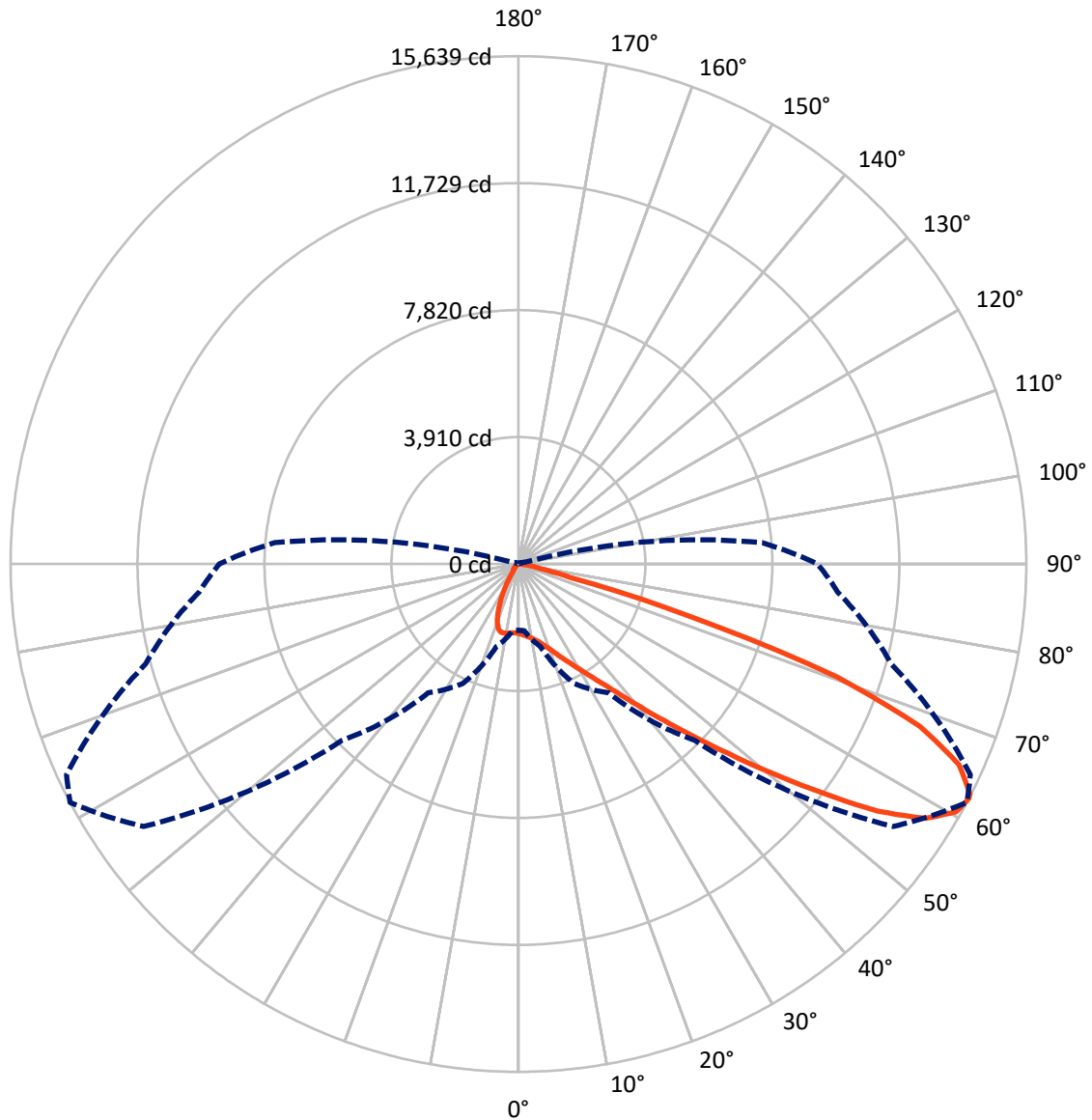
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 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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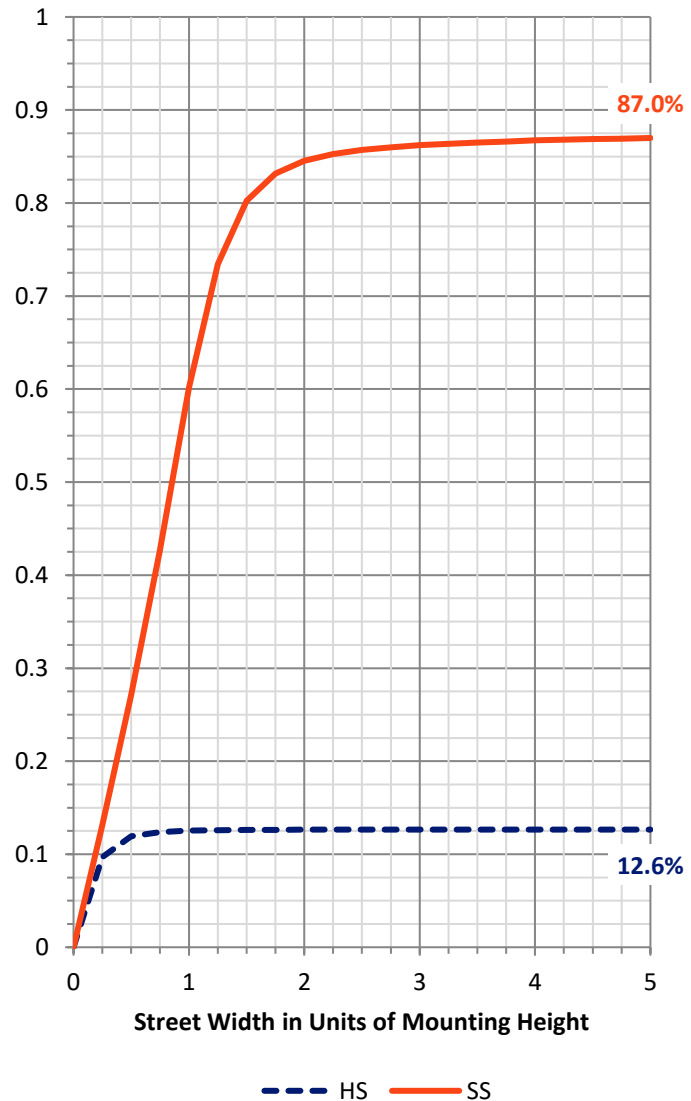
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2274.6	0.0	2274.6
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	15514.6	0.0	15514.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	17789.2	0.0	17789.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.2	1.2
10°-20°	575.9	3.2
20°-30°	967.2	5.4
30°-40°	1854.0	10.4
40°-50°	3786.9	21.3
50°-60°	5011.3	28.2
60°-70°	3893.0	21.9
70°-80°	1405.2	7.9
80°-90°	89.6	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°	17789.2	100.0
0°-180°	17789.2	100.0



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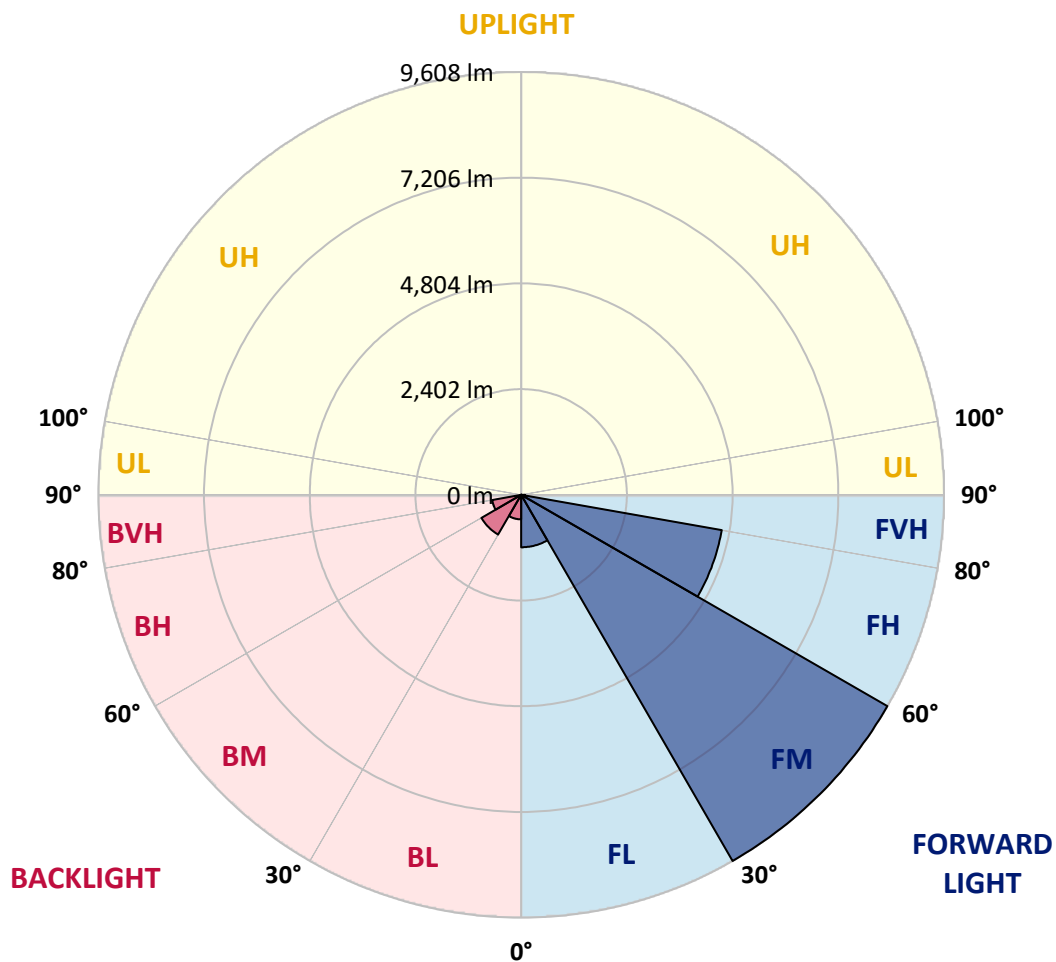
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1192.6	6.7			
FM (30°-60°)	9608.0	54.0			
FH (60°-80°)	4628.3	26.0			G2/5000
FVH (80°-90°)	85.7	0.5			G1/100
BL (0°-30°)	556.7	3.1	B2/1000		
BM (30°-60°)	1044.2	5.9	B2/2500		
BH (60°-80°)	669.8	3.8	B2/1000		G2/1000
BVH (80°-90°)	3.9	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°	2143.0	2143.0	2143.0	2143.0	2143.0	2143.0	2143.0	2143.0	2143.0	2143.0	2143.0
2.5°	2199.8	2195.5	2191.1	2186.7	2186.7	2182.3	2178.0	2169.2	2160.5	2151.7	2147.3
5°	2239.1	2234.7	2230.4	2234.7	2230.4	2230.4	2226.0	2217.2	2208.6	2195.5	2182.3
7.5°	2269.7	2265.4	2261.0	2265.4	2269.7	2274.1	2278.5	2269.7	2265.4	2247.9	2234.7
10°	2309.1	2304.7	2300.4	2309.1	2309.1	2331.0	2335.4	2331.0	2326.6	2313.5	2291.6
12.5°	2366.0	2370.4	2370.4	2379.1	2387.9	2414.1	2422.9	2409.7	2409.7	2392.2	2366.0
15°	2470.9	2470.9	2470.9	2479.6	2484.0	2519.0	2527.8	2514.6	2523.4	2492.8	2466.5
17.5°	2571.5	2575.9	2584.6	2602.1	2602.1	2632.8	2650.3	2650.3	2667.8	2628.4	2593.4
20°	2672.2	2676.4	2689.6	2728.9	2728.9	2768.3	2798.9	2812.1	2829.6	2790.2	2728.9
22.5°	2781.4	2781.4	2803.3	2864.6	2851.4	2930.1	2987.0	3008.8	3026.3	2973.8	2877.7
25°	2947.6	2930.1	2947.6	3004.5	2995.7	3105.1	3210.0	3231.9	3253.8	3192.5	3048.2
27.5°	3262.5	3236.3	3175.0	3179.4	3179.4	3306.3	3454.9	3485.5	3498.7	3446.2	3266.9
30°	3892.2	3892.2	3664.8	3511.8	3411.2	3524.9	3734.8	3787.3	3804.8	3726.1	3489.9
32.5°	4990.0	4990.0	4570.1	4180.9	3800.5	3800.5	4041.0	4137.1	4154.6	4062.9	3787.3
35°	6389.5	6380.7	5750.9	5217.4	4473.9	4194.0	4399.6	4561.3	4613.8	4491.4	4172.1
37.5°	7876.4	7819.5	7141.6	6529.4	5510.4	4823.8	4885.0	5099.3	5147.4	5046.8	4670.7
40°	9083.4	9017.8	8471.2	7959.5	6848.7	5829.7	5584.7	5781.5	5838.4	5698.4	5265.5
42.5°	10176.7	10014.9	9638.9	9271.4	8388.1	7570.2	6516.3	6595.0	6656.2	6507.5	5934.6
45°	10968.3	10719.0	10526.6	10412.9	9944.9	9481.4	7723.3	7565.8	7587.7	7404.0	6664.9
47.5°	10990.2	10815.2	10832.7	11130.1	11322.5	11305.0	9293.3	8733.5	8650.5	8344.3	7443.4
50°	9940.5	10041.2	10360.4	11208.9	12249.7	12879.5	11160.7	10115.6	9866.3	9315.2	8217.5
52.5°	8191.3	8348.7	8947.9	10377.9	12385.3	13915.9	13098.1	11694.3	11248.2	10277.3	8812.2
55°	6415.6	6424.4	7054.2	8510.5	11480.0	14103.9	14646.3	13430.5	12748.2	11007.7	9205.8
57.5°	4412.7	4653.2	5453.6	6433.1	9437.6	13168.1	15228.0	14777.4	13898.4	11458.1	9481.4
60°	2890.8	2903.9	3835.5	4968.1	6424.4	10714.7	14873.7	15490.3	14829.9	11724.9	9669.4
62°	2037.9	2059.8	2637.2	4058.5	4841.3	7679.6	14090.8	15639.0	15354.8	11882.3	9866.3
62.5°	1889.3	1906.8	2392.2	3831.1	4548.2	6888.0	13811.0	15604.0	15433.5	11934.8	9936.2
65°	1386.3	1386.3	1565.6	2632.8	3332.5	3721.7	11703.1	14908.7	15328.5	12354.7	10198.6
67.5°	1071.4	1080.2	1141.4	1622.5	2514.6	2256.6	7469.7	13343.1	14235.2	12975.6	10347.2
70°	922.8	918.4	962.1	1075.8	1814.9	1500.1	3288.8	10412.9	11921.7	12818.2	10211.7
72.5°	682.2	686.6	787.2	944.6	1263.9	975.3	1487.0	5527.9	7732.1	10032.4	8751.0
75°	437.3	441.7	555.5	743.5	909.6	638.5	857.1	1648.8	3166.3	5562.9	5353.0
77.5°	293.0	301.8	362.9	520.4	796.0	397.9	538.0	691.0	953.4	2086.1	1919.9
80°	196.8	196.8	231.8	349.8	502.9	332.4	288.7	459.2	494.2	647.2	323.7
82.5°	131.2	131.2	153.0	231.8	328.0	297.4	174.9	249.3	288.7	323.7	113.8
85°	78.8	78.8	105.0	144.3	214.3	166.2	113.8	139.9	148.7	205.5	61.3
87.5°	48.1	43.8	70.0	100.6	113.8	100.6	74.4	74.4	78.8	113.8	30.6
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°	2143.0	2143.0	2143.0	2143.0	2143.0	2143.0	2143.0	2143.0	2143.0	2143.0	2143.0
2.5°	2138.6	2134.2	2129.8	2121.1	2108.0	2099.2	2090.4	2081.7	2072.9	2072.9	2086.1
5°	2178.0	2164.8	2147.3	2129.8	2103.6	2086.1	2072.9	2055.4	2046.7	2046.7	2051.1
7.5°	2226.0	2212.9	2182.3	2151.7	2112.3	2081.7	2051.1	2011.7	1981.1	1968.0	1981.1
10°	2278.5	2261.0	2217.2	2169.2	2125.5	2046.7	1946.2	1823.7	1718.8	1670.6	1692.5
12.5°	2344.1	2322.2	2269.7	2204.2	2103.6	1911.2	1661.9	1377.6	1198.3	1115.2	1132.7
15°	2440.4	2409.7	2335.4	2234.7	2011.7	1596.3	1189.6	861.5	695.4	625.4	634.1
17.5°	2554.0	2514.6	2414.1	2226.0	1775.5	1150.2	708.5	502.9	432.9	415.4	415.4
20°	2676.4	2624.0	2492.8	2160.5	1417.0	721.6	441.7	384.8	358.6	345.5	345.5
22.5°	2803.3	2733.3	2558.4	2007.3	1010.3	450.4	362.9	323.7	293.0	279.9	279.9
25°	2956.3	2864.6	2624.0	1740.6	642.9	362.9	310.5	271.2	240.5	223.0	227.4
27.5°	3135.7	3017.6	2680.8	1408.2	415.4	314.9	258.0	218.7	192.4	183.7	183.7
30°	3323.8	3183.8	2693.9	1053.9	336.8	271.2	214.3	179.3	161.8	153.0	153.0
32.5°	3581.8	3398.0	2654.7	699.7	284.3	227.4	179.3	148.7	135.5	131.2	131.2
35°	3922.9	3678.0	2562.8	432.9	240.5	188.0	148.7	131.2	118.0	113.8	113.8
37.5°	4355.8	4067.2	2401.0	297.4	205.5	153.0	126.8	113.8	105.0	100.6	100.6
40°	4933.1	4539.5	2191.1	258.0	174.9	131.2	109.4	100.6	91.9	91.9	91.9
42.5°	5545.4	5112.4	1919.9	227.4	148.7	113.8	96.3	87.5	83.1	78.8	78.8
45°	6214.5	5698.4	1583.1	201.2	126.8	100.6	87.5	74.4	70.0	70.0	70.0
47.5°	6879.2	6302.0	1215.8	174.9	109.4	87.5	74.4	65.6	61.3	56.9	56.9
50°	7561.4	6848.7	892.1	153.0	96.3	78.8	65.6	56.9	48.1	43.8	43.8
52.5°	8055.6	7176.6	651.6	131.2	83.1	65.6	52.5	43.8	35.0	30.6	30.6
55°	8418.7	7377.8	476.7	109.4	74.4	56.9	43.8	35.0	26.3	26.3	21.9
57.5°	8703.0	7474.0	358.6	96.3	65.6	48.1	35.0	26.3	21.9	17.5	17.5
60°	8921.6	7478.4	266.8	78.8	56.9	39.4	26.3	17.5	13.1	13.1	13.1
62°	9210.2	7535.3	218.7	65.6	52.5	35.0	21.9	13.1	8.8	4.4	4.4
62.5°	9293.3	7557.2	209.9	65.6	48.1	30.6	17.5	13.1	8.8	4.4	4.4
65°	9678.1	7596.4	161.8	52.5	39.4	26.3	13.1	8.8	0.0	0.0	0.0
67.5°	10028.1	7535.3	118.0	39.4	30.6	17.5	13.1	4.4	0.0	0.0	0.0
70°	9993.1	7115.4	83.1	26.3	21.9	13.1	8.8	0.0	0.0	0.0	0.0
72.5°	8235.0	5326.7	56.9	21.9	13.1	8.8	4.4	0.0	0.0	0.0	0.0
75°	4972.5	2331.0	39.4	13.1	13.1	8.8	4.4	0.0	0.0	0.0	0.0
77.5°	1631.3	844.0	26.3	8.8	8.8	4.4	4.4	0.0	0.0	0.0	0.0
80°	266.8	139.9	13.1	8.8	8.8	4.4	4.4	0.0	0.0	0.0	0.0
82.5°	83.1	35.0	8.8	8.8	4.4	4.4	0.0	0.0	0.0	0.0	0.0
85°	30.6	13.1	8.8	8.8	4.4	4.4	0.0	0.0	0.0	0.0	0.0
87.5°	13.1	8.8	8.8	8.8	4.4	4.4	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)