

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: P258081

Luminaire Tested: **ARCH-L-AF72-250-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258081
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-AF72-250-D-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1070mA 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: 19960.9 lumens
Efficiency: N/A
Efficacy: 79.5 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 - G3

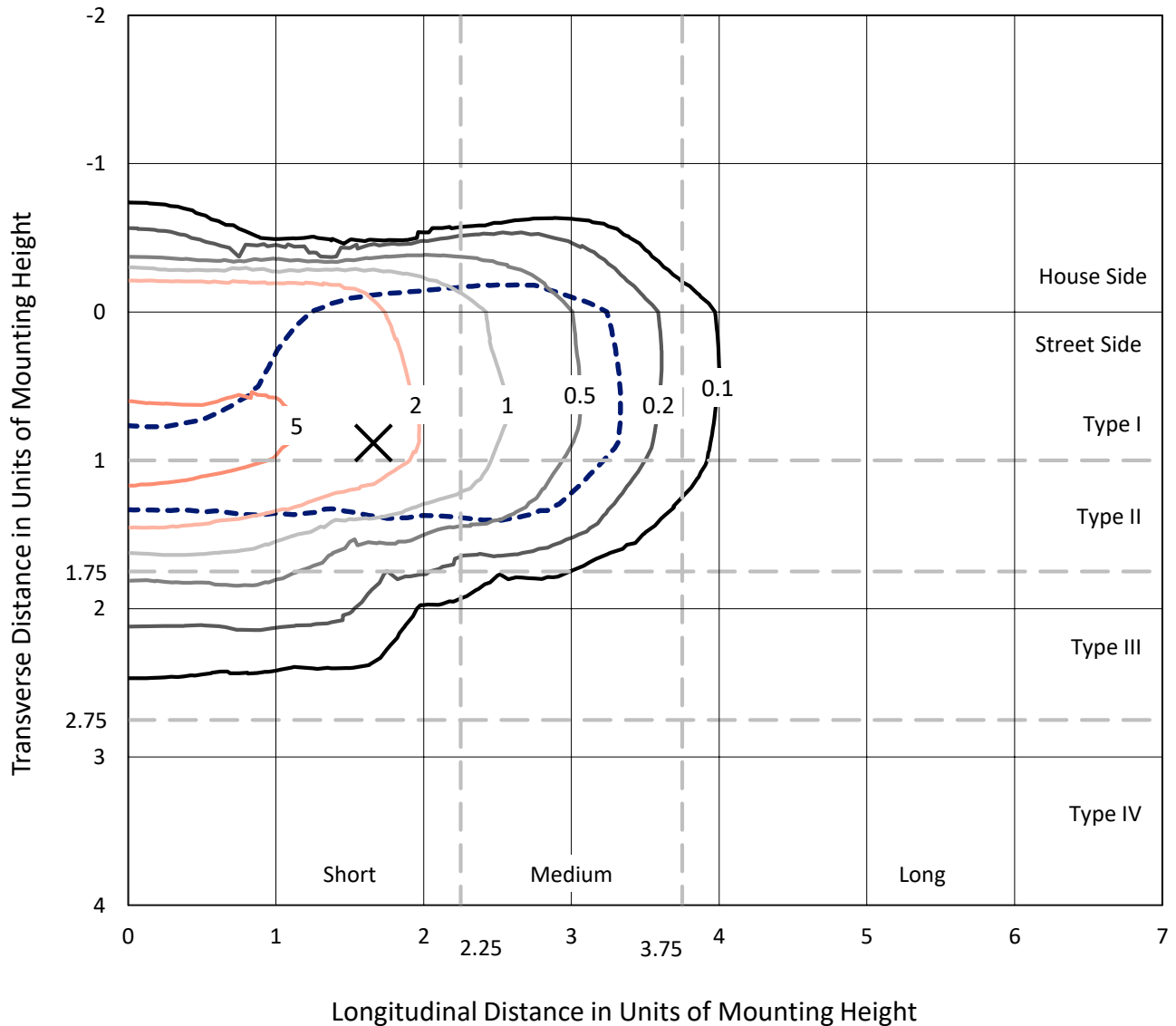
Input Watts (W): 251
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

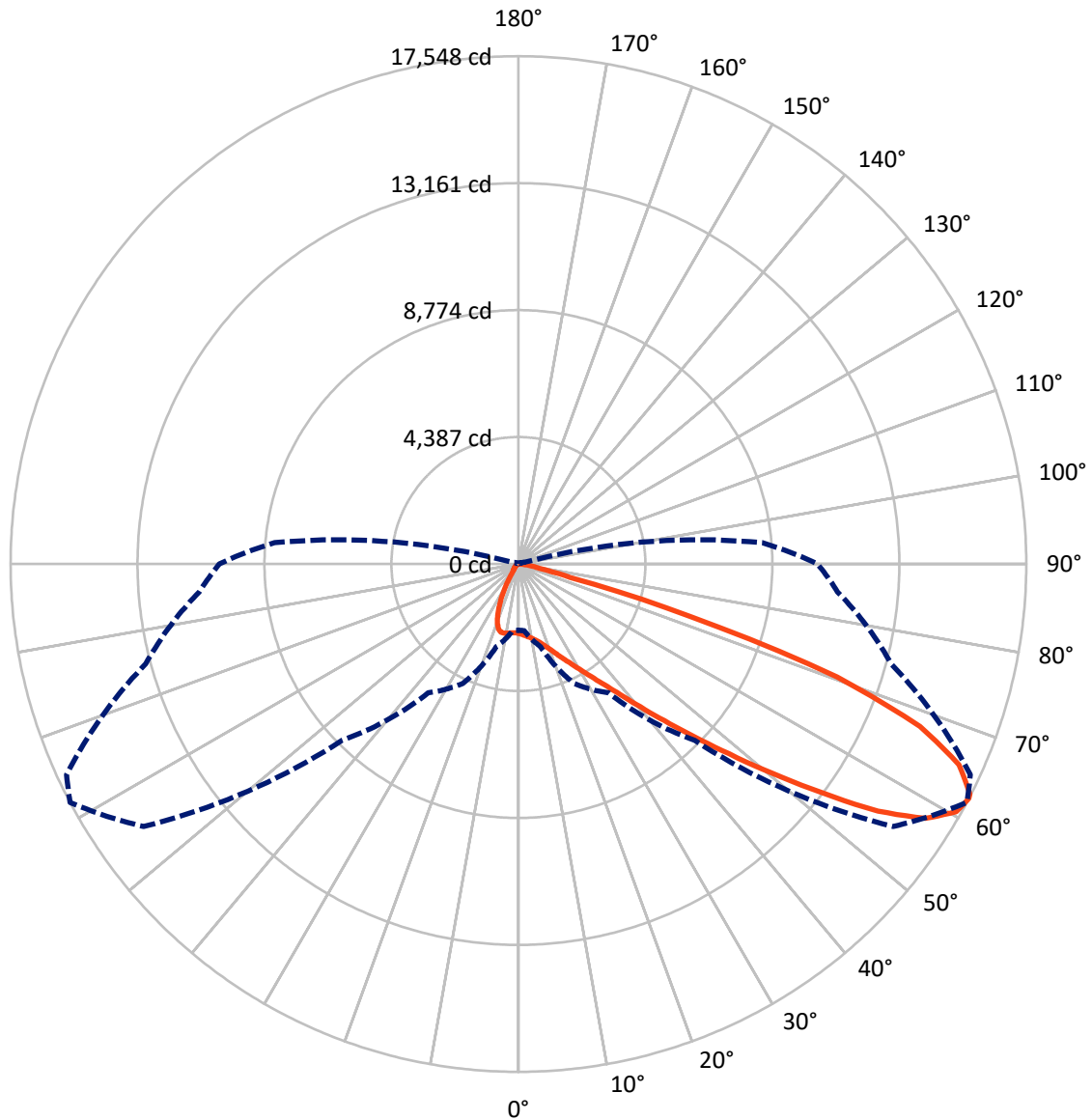
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 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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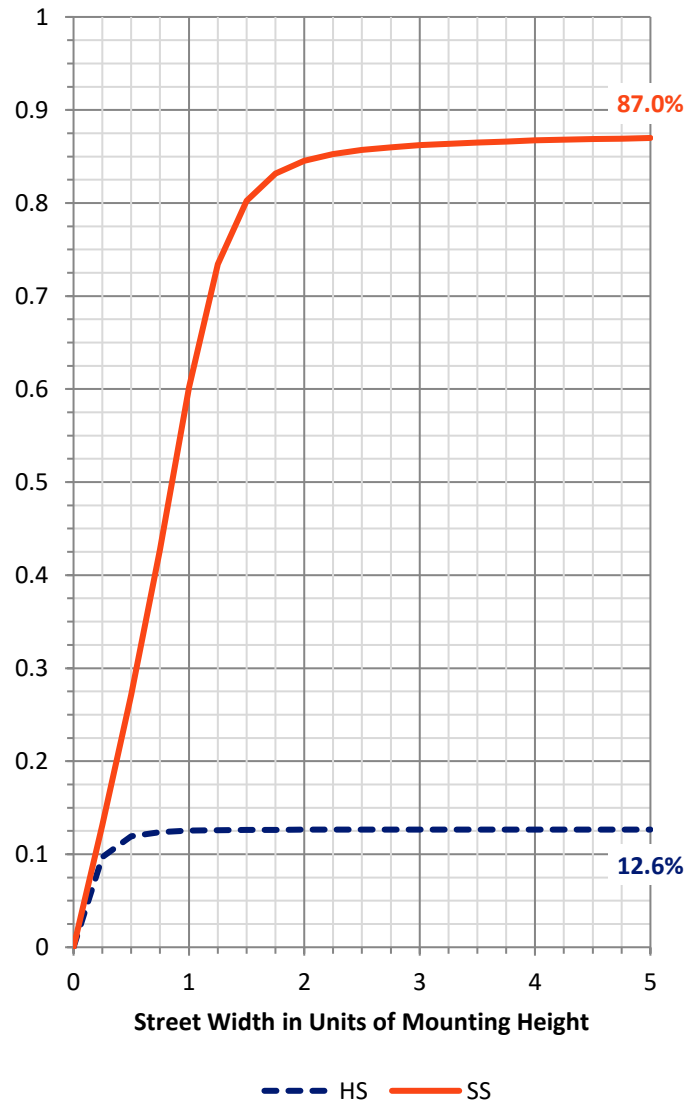
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2552.3	0.0	2552.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	17408.6	0.0	17408.6
	% Fixture	87.2	0.0	87.2
Total	Lumens	19960.9	0.0	19960.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.4	1.2
10°-20°	646.2	3.2
20°-30°	1085.3	5.4
30°-40°	2080.3	10.4
40°-50°	4249.2	21.3
50°-60°	5623.1	28.2
60°-70°	4368.2	21.9
70°-80°	1576.7	7.9
80°-90°	100.5	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°	19960.9	100.0
0°-180°	19960.9	100.0



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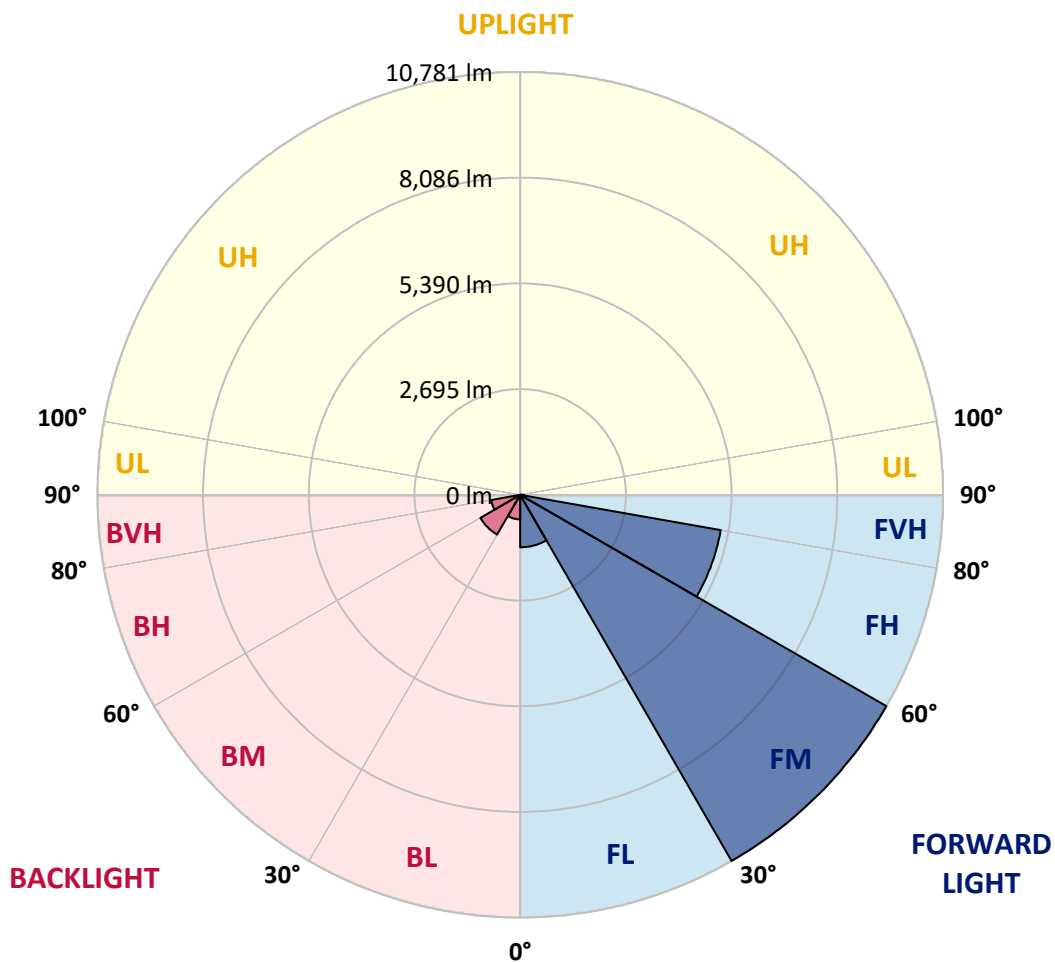
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1338.2	6.7			
FM	(30°-60°)	10780.9	54.0			
FH	(60°-80°)	5193.4	26.0			G3/7500
FVH	(80°-90°)	96.1	0.5			G1/100
BL	(0°-30°)	624.6	3.1	B2/1000		
BM	(30°-60°)	1171.7	5.9	B2/2500		
BH	(60°-80°)	751.6	3.8	B2/1000		G2/1000
BVH	(80°-90°)	4.4	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-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	2404.5	2404.5	2404.5	2404.5	2404.5	2404.5	2404.5	2404.5	2404.5	2404.5	2404.5
2.5°	2468.4	2463.5	2458.6	2453.6	2453.6	2448.7	2443.8	2434.0	2424.2	2414.4	2409.5
5°	2512.5	2507.6	2502.6	2507.6	2502.6	2502.6	2497.7	2487.9	2478.2	2463.5	2448.7
7.5°	2546.8	2541.9	2537.0	2541.9	2546.8	2551.8	2556.7	2546.8	2541.9	2522.3	2507.6
10°	2591.0	2586.1	2581.2	2591.0	2591.0	2615.6	2620.5	2615.6	2610.7	2595.9	2571.4
12.5°	2654.8	2659.7	2659.7	2669.5	2679.3	2708.8	2718.6	2703.9	2703.9	2684.2	2654.8
15°	2772.6	2772.6	2772.6	2782.4	2787.3	2826.5	2836.3	2821.7	2831.4	2797.2	2767.7
17.5°	2885.4	2890.3	2900.2	2919.8	2919.8	2954.2	2973.8	2973.8	2993.5	2949.3	2910.0
20°	2998.3	3003.2	3017.9	3062.1	3062.1	3106.3	3140.7	3155.4	3174.9	3130.8	3062.1
22.5°	3121.0	3121.0	3145.6	3214.2	3199.5	3287.9	3351.6	3376.1	3395.8	3337.0	3228.9
25°	3307.5	3287.9	3307.5	3371.2	3361.4	3484.2	3601.9	3626.5	3651.0	3582.3	3420.3
27.5°	3660.8	3631.4	3562.6	3567.5	3567.5	3709.8	3876.7	3911.0	3925.8	3866.9	3665.7
30°	4367.4	4367.4	4112.3	3940.5	3827.7	3955.2	4190.8	4249.6	4269.3	4181.0	3916.0
32.5°	5599.1	5599.1	5128.1	4691.4	4264.4	4264.4	4534.3	4642.3	4661.9	4558.8	4249.6
35°	7169.5	7159.6	6453.0	5854.3	5020.1	4706.1	4936.7	5118.2	5177.2	5039.8	4681.5
37.5°	8837.9	8774.2	8013.5	7326.5	6183.1	5412.6	5481.4	5721.9	5775.8	5663.0	5240.9
40°	10192.3	10118.7	9505.3	8931.2	7684.7	6541.4	6266.5	6487.3	6551.2	6394.2	5908.3
42.5°	11419.1	11237.5	10815.6	10403.3	9412.1	8494.4	7311.7	7400.1	7468.8	7301.9	6659.1
45°	12307.3	12027.7	11811.7	11684.1	11159.1	10638.9	8666.1	8489.5	8514.0	8307.9	7478.6
47.5°	12331.9	12135.6	12155.2	12488.9	12704.8	12685.2	10427.9	9799.8	9706.5	9363.0	8352.1
50°	11154.2	11267.0	11625.2	12577.3	13745.2	14451.8	12523.3	11350.5	11070.7	10452.4	9220.7
52.5°	9191.2	9367.9	10040.2	11644.9	13897.3	15614.8	14697.1	13121.9	12621.4	11532.0	9888.0
55°	7198.9	7208.7	7915.4	9549.5	12881.5	15825.9	16434.3	15070.1	14304.5	12351.5	10329.8
57.5°	4951.4	5221.2	6119.3	7218.6	10589.8	14775.7	17087.0	16581.5	15595.2	12857.0	10638.9
60°	3243.7	3258.4	4303.7	5574.6	7208.7	12022.7	16689.4	17381.4	16640.4	13156.3	10849.9
62°	2286.8	2311.3	2959.1	4553.9	5432.3	8617.1	15811.1	17548.2	17229.3	13332.9	11070.7
62.5°	2120.0	2139.6	2684.2	4298.7	5103.5	7728.9	15497.0	17509.0	17317.6	13391.9	11149.2
65°	1555.6	1555.6	1756.8	2954.2	3739.3	4176.1	13131.7	16728.7	17199.9	13862.9	11443.6
67.5°	1202.3	1212.1	1280.8	1820.5	2821.7	2532.1	8381.5	14972.0	15973.1	14559.8	11610.5
70°	1035.4	1030.5	1079.6	1207.2	2036.5	1683.2	3690.2	11684.1	13377.1	14383.1	11458.4
72.5°	765.6	770.4	883.3	1060.0	1418.2	1094.4	1668.4	6202.8	8676.0	11257.2	9819.4
75°	490.7	495.6	623.2	834.2	1020.7	716.5	961.8	1850.0	3552.8	6242.0	6006.5
77.5°	328.8	338.6	407.3	584.0	893.1	446.5	603.5	775.3	1069.8	2340.7	2154.2
80°	220.9	220.9	260.0	392.6	564.4	373.0	323.9	515.3	554.5	726.3	363.1
82.5°	147.2	147.2	171.8	260.0	368.1	333.7	196.3	279.7	323.9	363.1	127.6
85°	88.3	88.3	117.7	161.9	240.5	186.5	127.6	157.0	166.8	230.7	68.7
87.5°	54.0	49.1	78.6	112.8	127.6	112.8	83.5	83.5	88.3	127.6	34.4
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°	2404.5	2404.5	2404.5	2404.5	2404.5	2404.5	2404.5	2404.5	2404.5	2404.5	2404.5
2.5°	2399.6	2394.7	2389.8	2380.0	2365.3	2355.4	2345.6	2335.8	2326.0	2326.0	2340.7
5°	2443.8	2429.1	2409.5	2389.8	2360.4	2340.7	2326.0	2306.4	2296.6	2296.6	2301.5
7.5°	2497.7	2483.0	2448.7	2414.4	2370.2	2335.8	2301.5	2257.3	2223.0	2208.2	2223.0
10°	2556.7	2537.0	2487.9	2434.0	2384.9	2296.6	2183.7	2046.3	1928.6	1874.6	1899.1
12.5°	2630.3	2605.8	2546.8	2473.3	2360.4	2144.4	1864.7	1545.8	1344.6	1251.4	1271.0
15°	2738.2	2703.9	2620.5	2507.6	2257.3	1791.2	1334.7	966.7	780.2	701.7	711.6
17.5°	2865.8	2821.7	2708.8	2497.7	1992.3	1290.6	794.9	564.4	485.8	466.2	466.2
20°	3003.2	2944.4	2797.2	2424.2	1590.0	809.7	495.6	431.8	402.4	387.7	387.7
22.5°	3145.6	3067.0	2870.7	2252.4	1133.5	505.4	407.3	363.1	328.8	314.0	314.0
25°	3317.3	3214.2	2944.4	1953.1	721.4	407.3	348.4	304.2	269.9	250.3	255.2
27.5°	3518.4	3386.0	3008.1	1580.2	466.2	353.3	289.5	245.4	215.9	206.1	206.1
30°	3729.5	3572.5	3022.8	1182.6	377.9	304.2	240.5	201.2	181.6	171.8	171.8
32.5°	4019.1	3812.9	2978.7	785.1	319.0	255.2	201.2	166.8	152.1	147.2	147.2
35°	4401.8	4127.0	2875.6	485.8	269.9	211.0	166.8	147.2	132.5	127.6	127.6
37.5°	4887.6	4563.7	2694.0	333.7	230.7	171.8	142.3	127.6	117.7	112.8	112.8
40°	5535.4	5093.7	2458.6	289.5	196.3	147.2	122.7	112.8	103.0	103.0	103.0
42.5°	6222.4	5736.5	2154.2	255.2	166.8	127.6	107.9	98.1	93.2	88.3	88.3
45°	6973.1	6394.2	1776.5	225.8	142.3	112.8	98.1	83.5	78.6	78.6	78.6
47.5°	7719.1	7071.4	1364.2	196.3	122.7	98.1	83.5	73.7	68.7	63.8	63.8
50°	8484.6	7684.7	1001.1	171.8	107.9	88.3	73.7	63.8	54.0	49.1	49.1
52.5°	9039.1	8052.8	731.2	147.2	93.2	73.7	58.9	49.1	39.3	34.4	34.4
55°	9446.4	8278.5	534.9	122.7	83.5	63.8	49.1	39.3	29.5	29.5	24.6
57.5°	9765.4	8386.5	402.4	107.9	73.7	54.0	39.3	29.5	24.6	19.6	19.6
60°	10010.8	8391.4	299.3	88.3	63.8	44.2	29.5	19.6	14.7	14.7	14.7
62°	10334.7	8455.2	245.4	73.7	58.9	39.3	24.6	14.7	9.8	4.9	4.9
62.5°	10427.9	8479.6	235.6	73.7	54.0	34.4	19.6	14.7	9.8	4.9	4.9
65°	10859.7	8523.8	181.6	58.9	44.2	29.5	14.7	9.8	0.0	0.0	0.0
67.5°	11252.3	8455.2	132.5	44.2	34.4	19.6	14.7	4.9	0.0	0.0	0.0
70°	11213.0	7984.0	93.2	29.5	24.6	14.7	9.8	0.0	0.0	0.0	0.0
72.5°	9240.3	5977.0	63.8	24.6	14.7	9.8	4.9	0.0	0.0	0.0	0.0
75°	5579.5	2615.6	44.2	14.7	14.7	9.8	4.9	0.0	0.0	0.0	0.0
77.5°	1830.4	947.0	29.5	9.8	9.8	4.9	4.9	0.0	0.0	0.0	0.0
80°	299.3	157.0	14.7	9.8	9.8	4.9	4.9	0.0	0.0	0.0	0.0
82.5°	93.2	39.3	9.8	9.8	4.9	4.9	0.0	0.0	0.0	0.0	0.0
85°	34.4	14.7	9.8	9.8	4.9	4.9	0.0	0.0	0.0	0.0	0.0
87.5°	14.7	9.8	9.8	9.8	4.9	4.9	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)