

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: P237218

Luminaire Tested: **ARCH-L-AF72-250-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237218
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-250-D-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1070mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21094.2 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B2 - U0 - G4

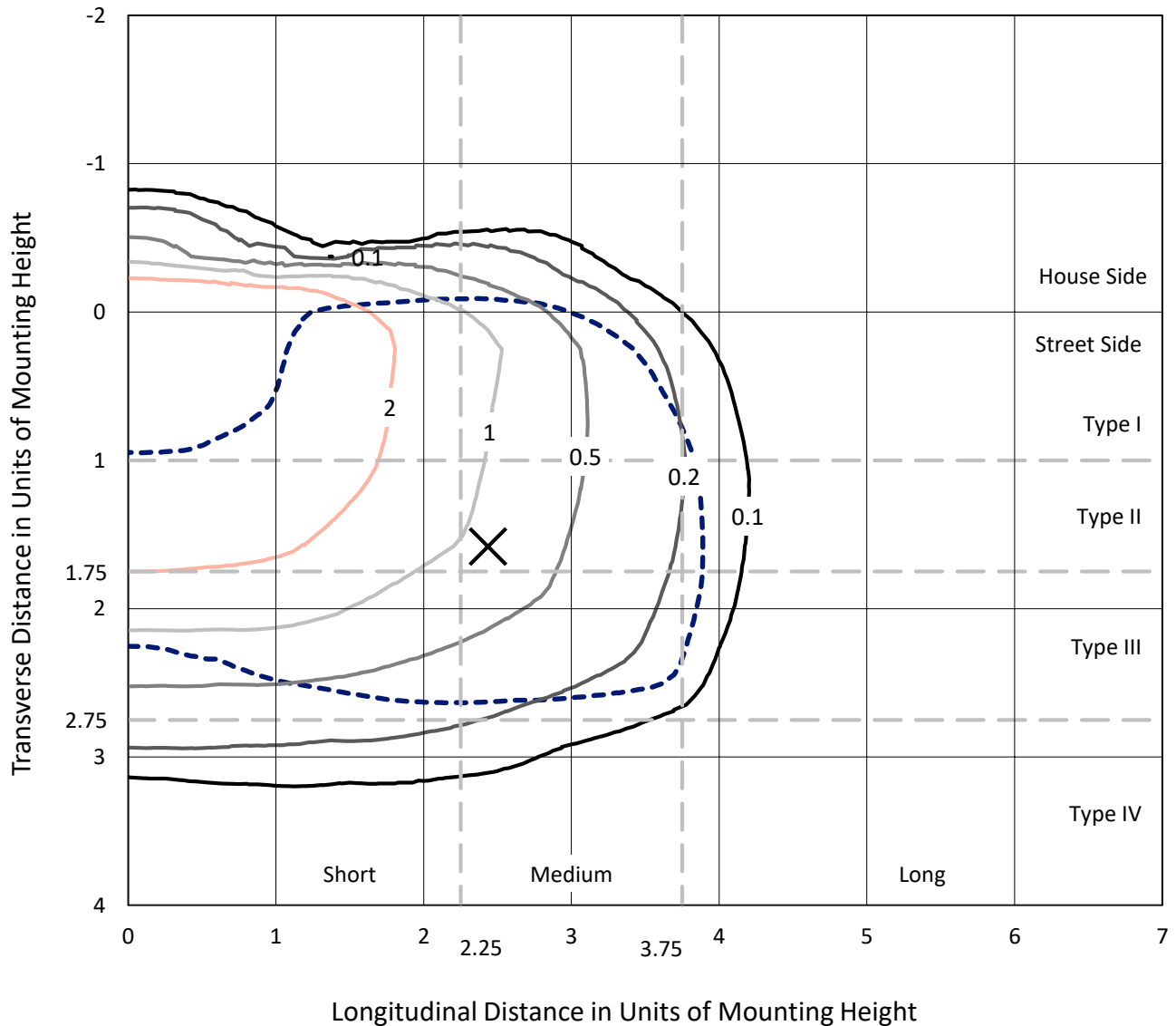
Input Watts (W): 251
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

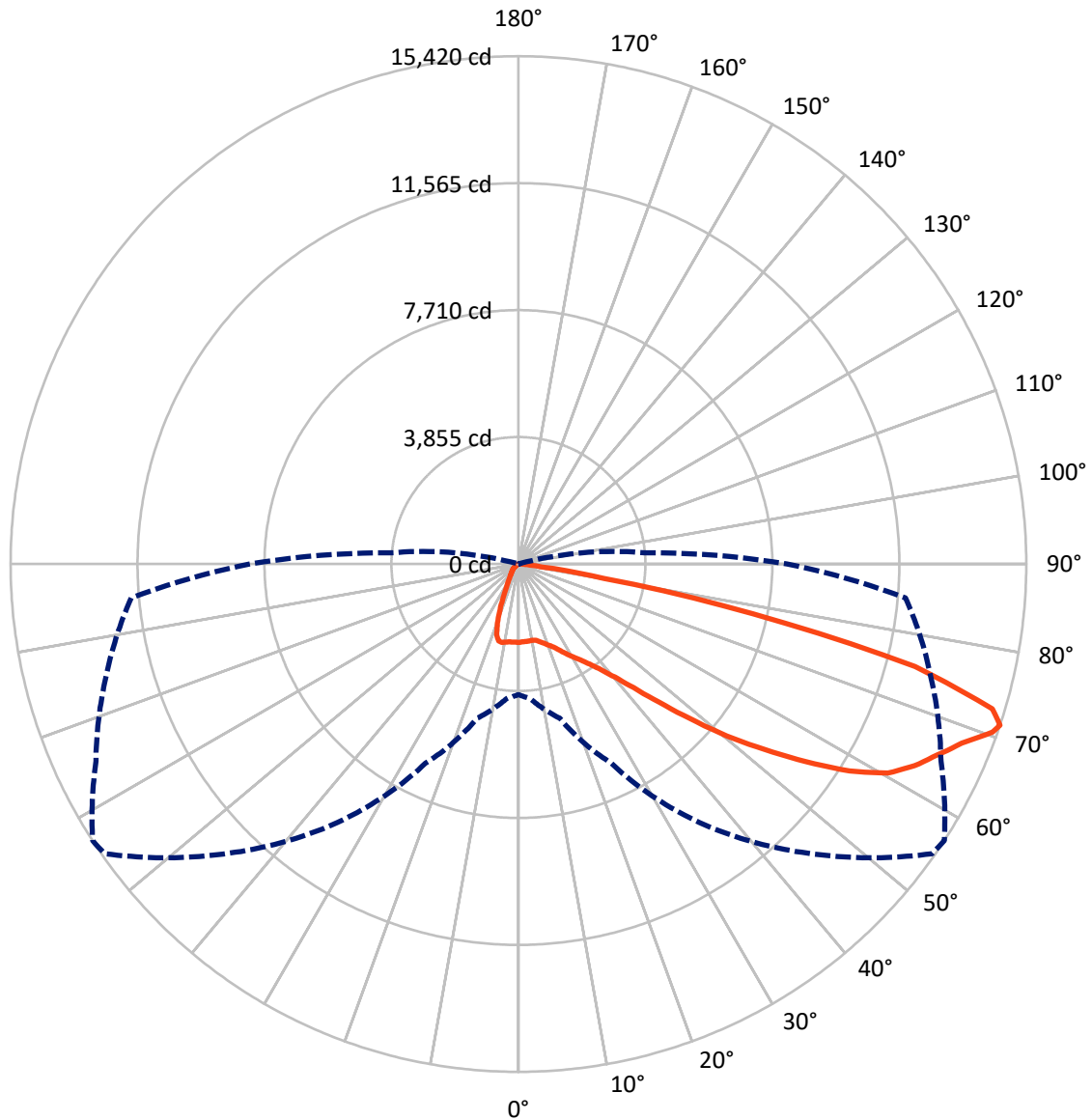


Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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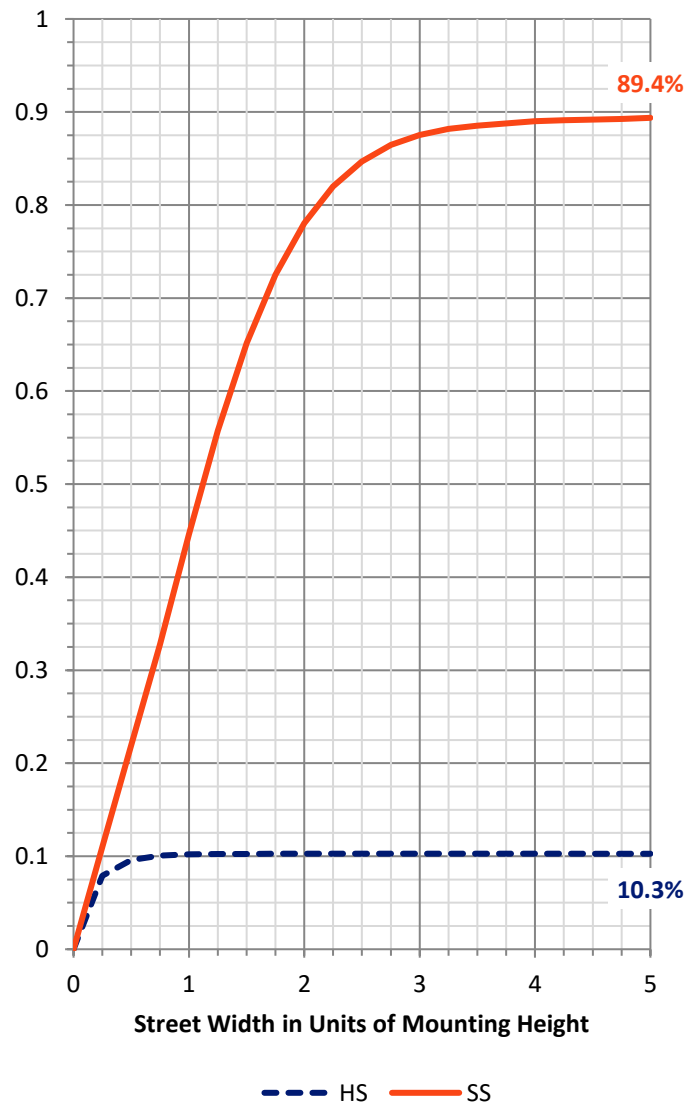
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2186.0	0.0	2186.0
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	18908.2	0.0	18908.2
	% Fixture	89.6	0.0	89.6
Total	Lumens	21094.2	0.0	21094.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.9	1.1
10°-20°	598.6	2.8
20°-30°	933.8	4.4
30°-40°	1578.3	7.5
40°-50°	3065.6	14.5
50°-60°	5148.0	24.4
60°-70°	6143.7	29.1
70°-80°	3237.8	15.3
80°-90°	164.5	0.8
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°	21094.2	100.0
0°-180°	21094.2	100.0

Coefficient of Utilization



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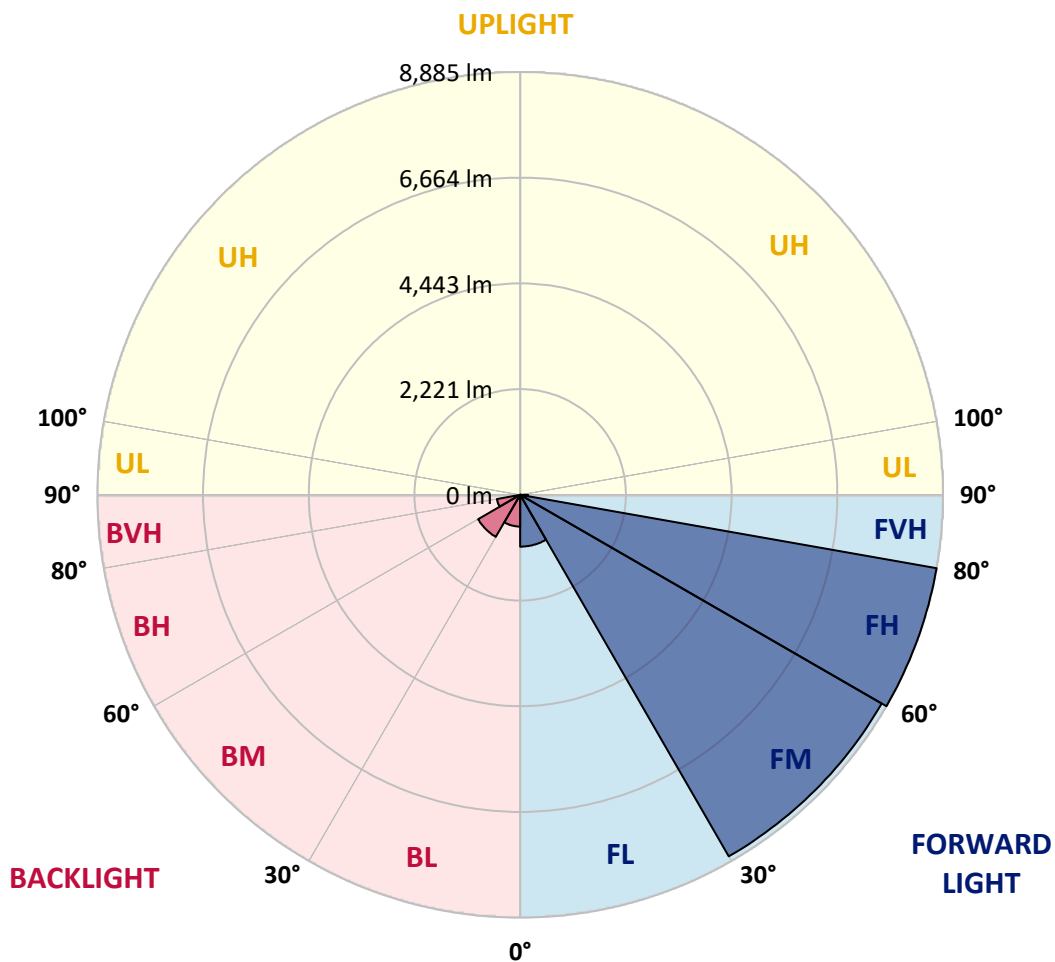
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1089.1	5.2			
FM	(30°-60°)	8771.2	41.6			
FH	(60°-80°)	8885.0	42.1			G4/12000
FVH	(80°-90°)	163.0	0.8			G2/225
BL	(0°-30°)	667.3	3.2	B2/1000		
BM	(30°-60°)	1020.7	4.8	B2/2500		
BH	(60°-80°)	496.4	2.4	B1/500		G1/500
BVH	(80°-90°)	1.6	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	2384.0	2384.0	2384.0	2384.0	2384.0	2384.0	2384.0	2384.0	2384.0	2384.0	2384.0
2.5°	2349.5	2349.5	2349.5	2354.5	2359.4	2359.4	2369.3	2364.3	2364.3	2364.3	2374.2
5°	2285.7	2290.6	2295.5	2305.3	2325.0	2339.7	2364.3	2364.3	2369.3	2379.1	2384.0
7.5°	2197.2	2202.1	2216.8	2236.5	2275.9	2310.2	2349.5	2359.4	2374.2	2398.7	2408.5
10°	2143.1	2152.9	2172.6	2197.2	2241.4	2285.7	2334.8	2349.5	2393.8	2438.0	2462.7
12.5°	2128.4	2133.3	2152.9	2192.3	2246.3	2300.4	2364.3	2379.1	2442.9	2511.8	2551.1
15°	2152.9	2157.8	2167.7	2211.9	2275.9	2344.6	2428.2	2447.9	2526.5	2605.1	2654.4
17.5°	2197.2	2197.2	2207.0	2246.3	2315.1	2393.8	2501.9	2531.4	2619.9	2708.4	2762.5
20°	2226.7	2226.7	2241.4	2280.8	2359.4	2462.7	2590.4	2629.7	2728.0	2826.3	2875.5
22.5°	2256.2	2261.1	2275.9	2320.1	2408.5	2551.1	2698.5	2737.9	2851.0	2954.2	3003.3
25°	2339.7	2334.8	2339.7	2379.1	2482.3	2659.3	2846.1	2895.2	3013.1	3126.2	3150.8
27.5°	2570.8	2561.0	2497.0	2472.5	2551.1	2772.3	3032.8	3081.9	3219.6	3332.7	3332.7
30°	3101.6	3081.9	2924.6	2723.1	2659.3	2875.5	3209.7	3278.6	3455.5	3553.8	3524.4
32.5°	3775.0	3730.8	3529.3	3185.2	2929.6	3013.1	3396.5	3475.2	3701.3	3784.8	3721.0
35°	4512.3	4507.4	4256.7	3814.4	3450.6	3298.2	3637.4	3730.8	4015.9	4089.7	3986.4
37.5°	5293.9	5313.5	5146.5	4536.9	4109.3	3765.2	3956.9	4065.0	4414.0	4502.5	4404.2
40°	6163.9	6159.0	6095.2	5372.5	4900.7	4428.8	4418.9	4517.2	4940.0	5077.6	4940.0
42.5°	7265.0	7255.2	7024.1	6375.2	5859.2	5293.9	5092.4	5126.7	5598.6	5824.8	5623.3
45°	8385.6	8316.9	8051.4	7491.1	7033.9	6365.4	5982.0	5982.0	6385.2	6694.8	6380.2
47.5°	9009.9	8941.1	8833.0	8523.3	8385.6	7638.6	7073.3	7004.5	7319.0	7633.7	7191.2
50°	9830.9	9830.9	9560.5	9442.4	9678.4	9152.4	8277.5	8208.8	8361.1	8611.8	8031.8
52.5°	10479.6	10361.7	10170.0	10273.2	10946.6	10705.8	9481.8	9349.1	9467.1	9530.9	8764.1
55°	10750.0	10636.9	10622.2	11000.7	12042.8	11708.5	10715.6	10597.6	10587.7	10273.2	9403.2
57.5°	10804.1	10705.8	10892.6	11556.1	13109.4	12529.4	11944.5	11856.0	11580.7	10794.3	10056.9
60°	10346.9	10396.0	10848.3	11860.9	13738.5	13242.1	12981.6	12888.2	12254.1	11236.6	10784.4
62.5°	9408.1	9526.0	10371.5	11890.4	13507.6	13532.1	13556.7	13492.8	12775.1	11639.6	11516.8
65°	8297.3	8331.6	9349.1	11482.4	13104.5	13443.6	13979.4	13974.5	13173.3	12091.9	12342.6
67.5°	6837.3	6896.3	7776.2	10106.0	12298.3	13404.3	14534.9	14520.1	13625.5	12608.0	12834.1
70°	5087.4	5161.2	5873.9	7859.7	10499.3	12912.8	15262.3	15272.1	14102.3	13001.3	12494.9
71°	3966.7	4099.5	4846.6	6675.2	9580.1	12416.3	15331.2	15419.7	14156.4	12947.2	11797.0
72.5°	1946.5	2103.8	3042.7	4699.1	7884.3	11305.4	14878.9	15051.0	13817.2	12273.8	10086.4
75°	506.3	535.8	909.3	1921.9	4227.2	7491.1	11998.5	12436.0	11295.6	9344.1	6163.9
77.5°	319.5	329.3	427.6	747.2	1582.8	2846.1	7048.6	7265.0	6453.9	4733.5	2172.6
80°	226.1	231.0	270.4	481.7	924.1	830.7	2536.3	2629.7	2334.8	1253.4	388.3
82.5°	137.6	137.6	196.6	309.6	570.2	452.2	668.5	712.7	629.2	349.0	127.8
85°	78.7	83.6	122.9	211.3	270.4	221.2	250.7	265.5	270.4	231.0	54.1
87.5°	63.9	68.8	108.1	177.0	147.5	108.1	108.1	113.0	117.9	137.6	24.6
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°	2384.0	2384.0	2384.0	2384.0	2384.0	2384.0	2384.0	2384.0	2384.0	2384.0	2384.0
2.5°	2374.2	2374.2	2379.1	2374.2	2374.2	2374.2	2379.1	2379.1	2379.1	2388.9	2393.8
5°	2384.0	2384.0	2384.0	2379.1	2374.2	2374.2	2384.0	2388.9	2388.9	2403.6	2403.6
7.5°	2408.5	2408.5	2398.7	2388.9	2379.1	2364.3	2369.3	2374.2	2369.3	2374.2	2374.2
10°	2462.7	2462.7	2447.9	2428.2	2398.7	2354.5	2295.5	2221.7	2152.9	2128.4	2118.5
12.5°	2551.1	2546.2	2516.7	2482.3	2418.4	2266.0	2044.8	1784.3	1568.0	1509.1	1489.4
15°	2649.4	2639.6	2605.1	2546.2	2374.2	1971.1	1509.1	1174.8	968.3	919.2	909.3
17.5°	2752.7	2737.9	2688.7	2570.8	2172.6	1464.8	973.2	737.3	624.3	614.4	619.3
20°	2860.8	2841.1	2772.3	2521.6	1754.8	978.1	629.2	570.2	560.4	560.4	565.3
22.5°	2983.6	2959.1	2865.7	2344.6	1278.0	648.9	540.7	535.8	530.9	525.9	525.9
25°	3126.2	3096.7	2954.2	2025.1	879.8	530.9	516.1	501.3	491.5	481.7	476.8
27.5°	3298.2	3258.9	3023.0	1631.9	604.6	496.4	486.6	462.1	442.4	422.7	422.7
30°	3470.3	3421.2	3003.3	1228.9	491.5	462.1	442.4	412.9	383.4	363.8	358.9
32.5°	3652.1	3603.0	2875.5	825.8	447.3	422.7	398.1	353.9	319.5	294.9	290.0
35°	3922.5	3883.1	2624.8	545.6	403.0	373.6	339.2	294.9	250.7	226.1	221.2
37.5°	4325.5	4276.4	2315.1	417.8	353.9	309.6	280.2	231.0	186.8	162.2	157.3
40°	4866.3	4718.8	1946.5	368.7	309.6	255.6	216.3	167.2	132.7	117.9	117.9
42.5°	5495.4	5146.5	1548.3	334.2	275.3	211.3	157.3	113.0	93.4	88.5	88.5
45°	6163.9	5544.6	1150.2	309.6	240.9	167.2	113.0	78.7	68.8	63.9	63.9
47.5°	6852.0	5869.0	801.2	280.2	201.5	127.8	78.7	59.0	49.2	44.2	44.2
50°	7496.0	6080.3	565.3	250.7	172.1	93.4	59.0	44.2	34.4	34.4	34.4
52.5°	7943.3	6060.7	408.0	216.3	132.7	63.9	39.3	29.5	29.5	29.5	29.5
55°	8336.5	5986.9	319.5	186.8	103.2	44.2	29.5	24.6	24.6	19.6	19.6
57.5°	8670.7	5869.0	270.4	152.4	73.8	34.4	19.6	19.6	14.7	14.7	14.7
60°	8955.8	5721.6	226.1	127.8	49.2	24.6	14.7	9.8	9.8	4.9	9.8
62.5°	9344.1	5628.2	196.6	98.3	34.4	14.7	9.8	4.9	4.9	0.0	0.0
65°	9629.2	5451.2	167.2	68.8	19.6	9.8	4.9	4.9	0.0	0.0	0.0
67.5°	9639.2	5131.7	122.9	39.3	14.7	9.8	4.9	0.0	0.0	0.0	0.0
70°	8862.4	4374.8	78.7	19.6	9.8	4.9	4.9	0.0	0.0	0.0	0.0
71°	8149.7	3873.3	63.9	14.7	9.8	4.9	0.0	0.0	0.0	0.0	0.0
72.5°	6714.4	2846.1	49.2	14.7	4.9	4.9	0.0	0.0	0.0	0.0	0.0
75°	3701.3	1032.3	24.6	9.8	4.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1184.6	314.6	14.7	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	201.5	49.2	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	68.8	19.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	19.6	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.8	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)