

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: P237216

Luminaire Tested: **ARCH-L-AF72-230-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237216
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-AF72-230-D-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 980mA 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: 19946.5 lumens
Efficiency: N/A
Efficacy: 87.1 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

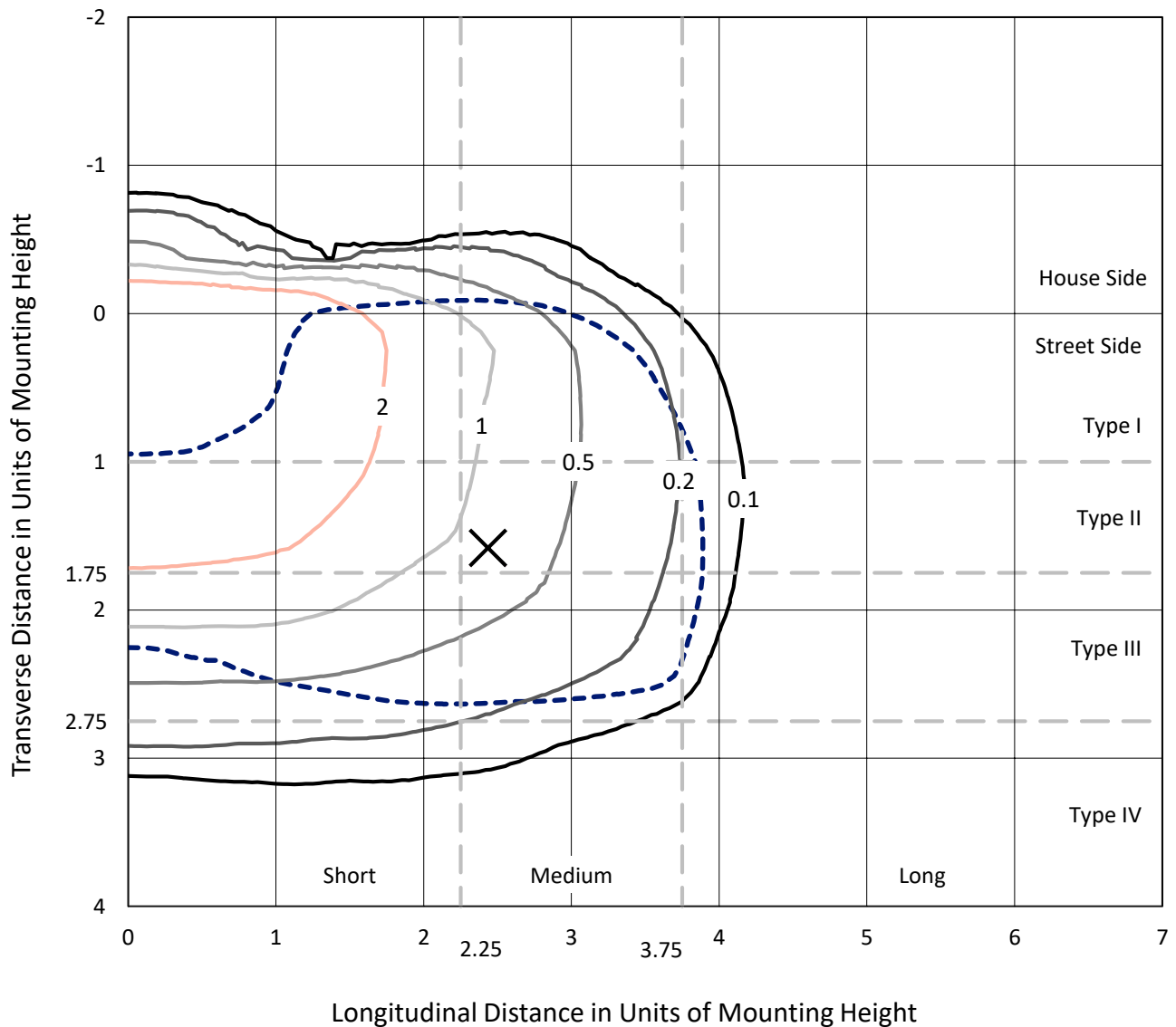
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

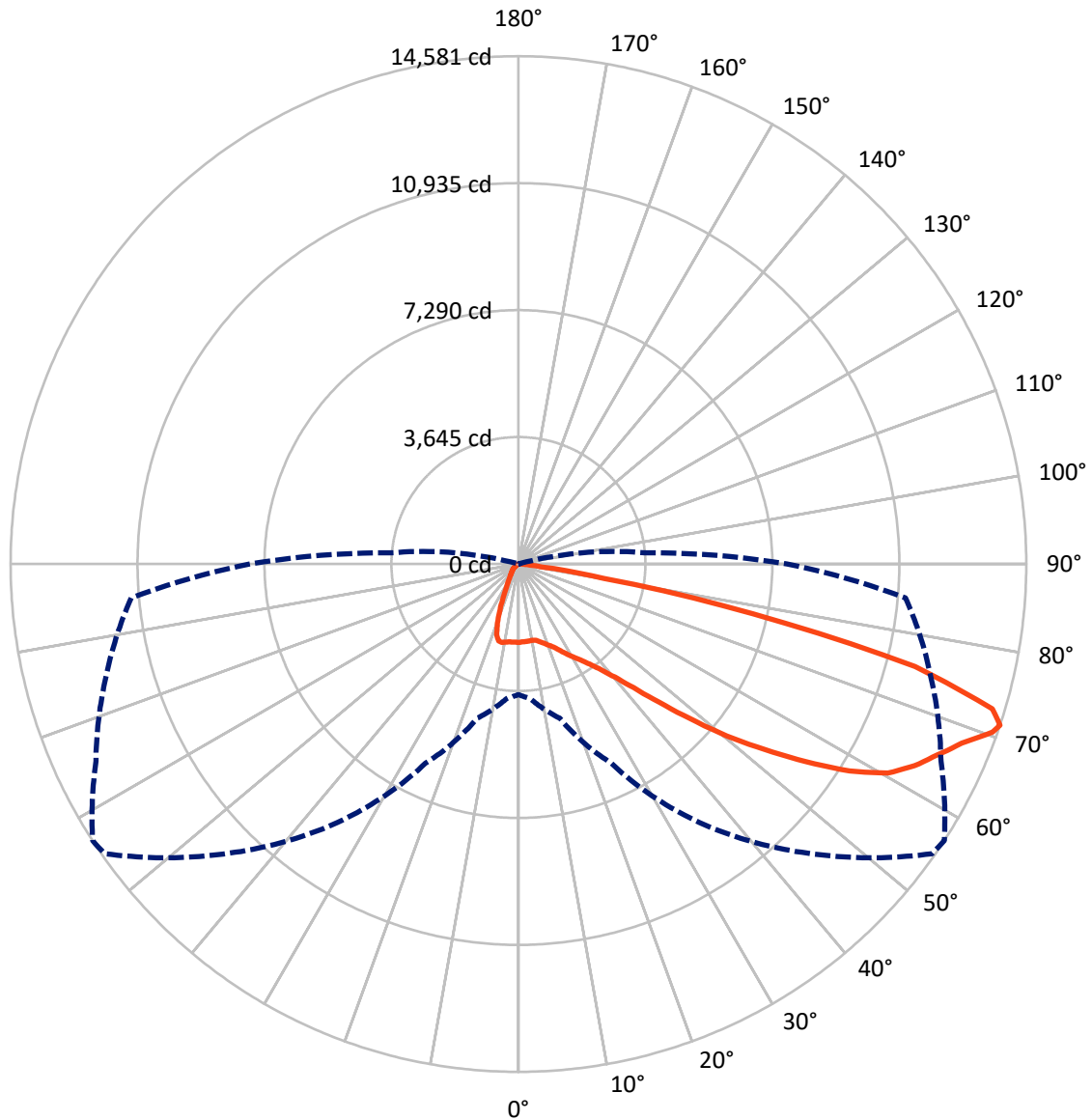


Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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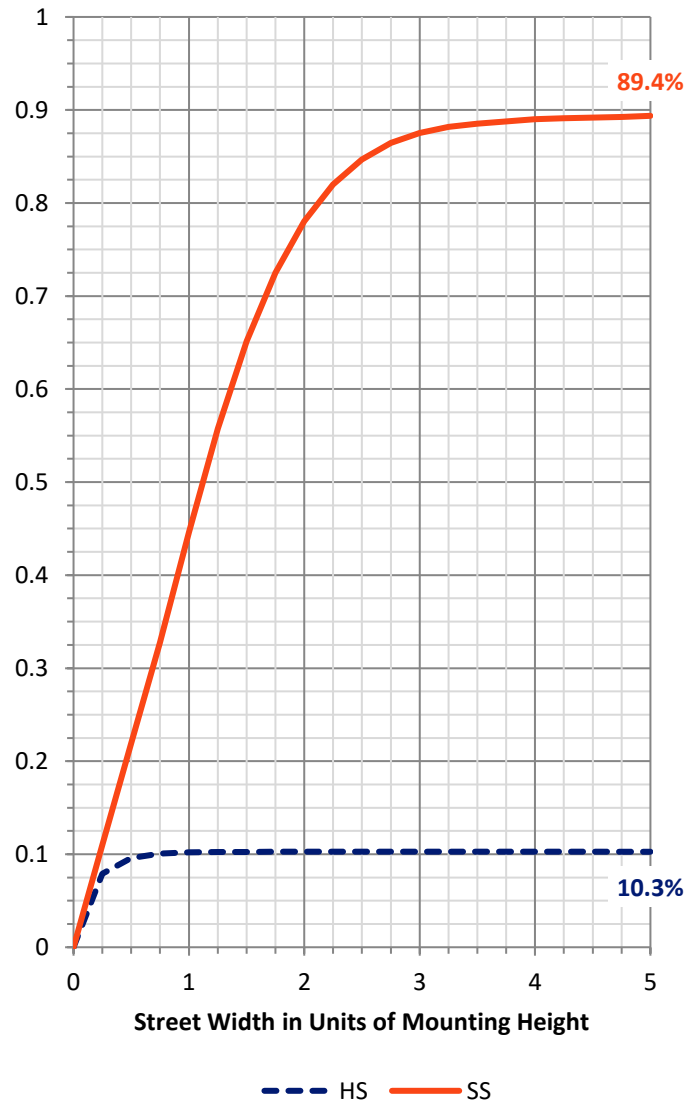
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2067.1	0.0	2067.1
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	17879.4	0.0	17879.4
	% Fixture	89.6	0.0	89.6
Total	Lumens	19946.5	0.0	19946.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.7	1.1
10°-20°	566.0	2.8
20°-30°	883.0	4.4
30°-40°	1492.5	7.5
40°-50°	2898.8	14.5
50°-60°	4867.9	24.4
60°-70°	5809.4	29.1
70°-80°	3061.6	15.3
80°-90°	155.6	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°	19946.5	100.0
0°-180°	19946.5	100.0

Coefficient of Utilization



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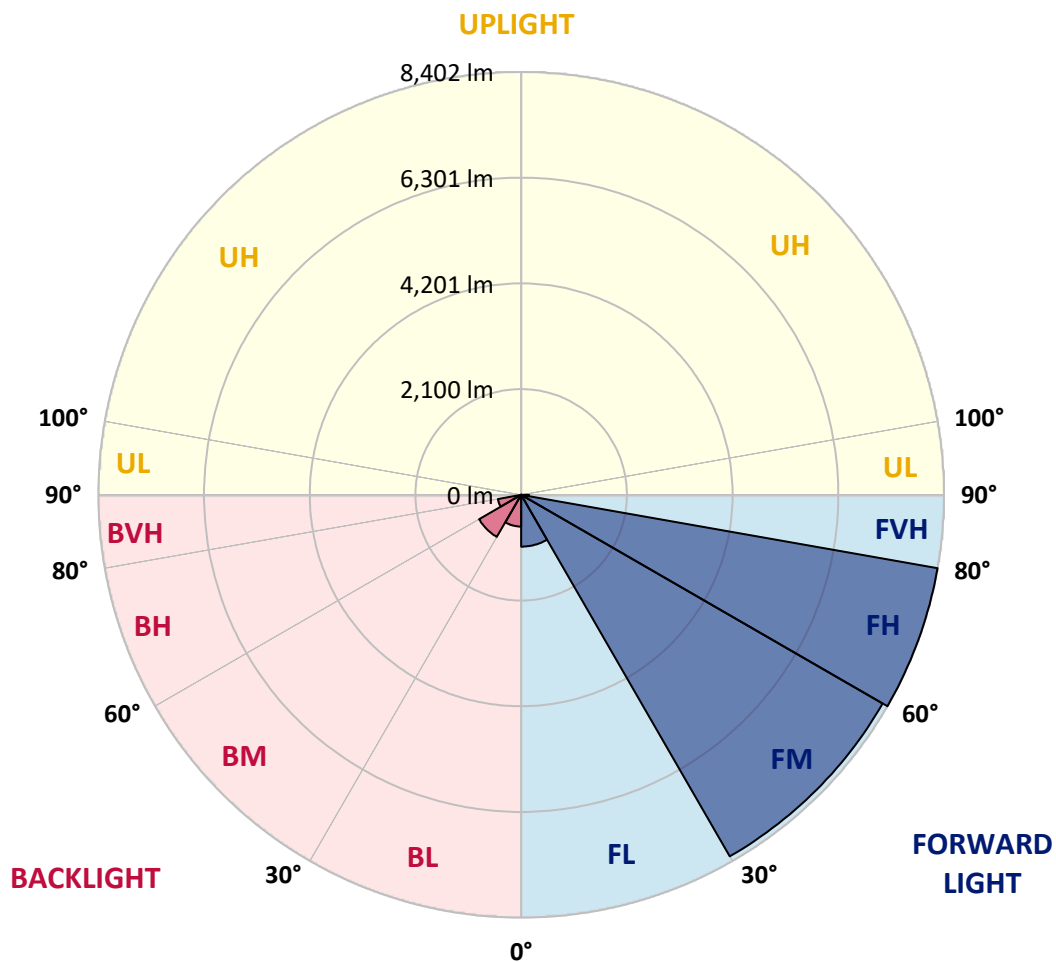
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1029.8	5.2			
FM	(30°-60°)	8293.9	41.6			
FH	(60°-80°)	8401.6	42.1			G4/12000
FVH	(80°-90°)	154.1	0.8			G2/225
BL	(0°-30°)	631.0	3.2	B2/1000		
BM	(30°-60°)	965.2	4.8	B1/1000		
BH	(60°-80°)	469.4	2.4	B1/500		G1/500
BVH	(80°-90°)	1.5	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°	2254.3	2254.3	2254.3	2254.3	2254.3	2254.3	2254.3	2254.3	2254.3	2254.3	2254.3
2.5°	2221.7	2221.7	2221.7	2226.4	2231.1	2231.1	2240.4	2235.7	2235.7	2235.7	2245.0
5°	2161.3	2166.0	2170.6	2179.9	2198.5	2212.4	2235.7	2235.7	2240.4	2249.6	2254.3
7.5°	2077.6	2082.3	2096.2	2114.8	2152.0	2184.5	2221.7	2231.1	2245.0	2268.2	2277.5
10°	2026.5	2035.8	2054.4	2077.6	2119.5	2161.3	2207.7	2221.7	2263.6	2305.4	2328.6
12.5°	2012.6	2017.3	2035.8	2073.0	2124.2	2175.2	2235.7	2249.6	2310.0	2375.1	2412.3
15°	2035.8	2040.5	2049.8	2091.6	2152.0	2217.0	2296.1	2314.7	2389.0	2463.4	2509.9
17.5°	2077.6	2077.6	2086.9	2124.2	2189.2	2263.6	2365.8	2393.7	2477.4	2561.1	2612.1
20°	2105.5	2105.5	2119.5	2156.7	2231.1	2328.6	2449.5	2486.7	2579.6	2672.6	2719.1
22.5°	2133.4	2138.1	2152.0	2193.8	2277.5	2412.3	2551.8	2588.9	2695.8	2793.4	2839.9
25°	2212.4	2207.7	2212.4	2249.6	2347.3	2514.5	2691.2	2737.6	2849.2	2956.1	2979.3
27.5°	2430.8	2421.6	2361.2	2338.0	2412.3	2621.4	2867.7	2914.3	3044.4	3151.3	3151.3
30°	2932.9	2914.3	2765.5	2575.0	2514.5	2719.1	3035.1	3100.2	3267.5	3360.5	3332.6
32.5°	3569.6	3527.7	3337.3	3011.9	2770.2	2849.2	3211.8	3286.1	3499.9	3578.9	3518.5
35°	4266.8	4262.2	4025.1	3606.8	3262.9	3118.8	3439.5	3527.7	3797.4	3867.1	3769.5
37.5°	5005.8	5024.4	4866.4	4290.1	3885.7	3560.4	3741.6	3843.8	4173.8	4257.5	4164.5
40°	5828.6	5823.9	5763.5	5080.2	4634.0	4187.9	4178.5	4271.4	4671.2	4801.3	4671.2
42.5°	6869.7	6860.4	6641.9	6028.4	5540.4	5005.8	4815.2	4847.9	5294.0	5507.9	5317.3
45°	7929.4	7864.3	7613.3	7083.5	6651.2	6019.1	5656.6	5656.6	6037.7	6330.5	6033.1
47.5°	8519.7	8454.6	8352.4	8059.5	7929.4	7223.0	6688.4	6623.3	6920.8	7218.2	6800.0
50°	9296.0	9296.0	9040.2	8928.7	9151.8	8654.5	7827.1	7762.0	7906.2	8143.2	7594.8
52.5°	9909.4	9797.9	9616.7	9714.2	10351.0	10123.2	8966.0	8840.4	8951.9	9012.4	8287.3
55°	10165.1	10058.2	10044.3	10402.1	11387.5	11071.4	10132.5	10021.0	10011.7	9714.2	8891.6
57.5°	10216.2	10123.2	10299.9	10927.4	12396.1	11847.6	11294.5	11210.8	10950.6	10206.9	9509.8
60°	9783.9	9830.5	10258.0	11215.5	12991.1	12521.6	12275.2	12186.9	11587.4	10625.2	10197.6
62.5°	8896.2	9007.7	9807.2	11243.5	12772.6	12795.8	12819.1	12758.7	12080.0	11006.3	10890.1
65°	7845.7	7878.3	8840.4	10857.6	12391.4	12712.2	13218.8	13214.2	12456.6	11433.9	11671.1
67.5°	6465.4	6521.1	7353.1	9556.2	11629.2	12675.0	13744.0	13730.0	12884.2	11922.0	12135.8
70°	4810.6	4880.4	5554.3	7432.0	9928.0	12210.1	14431.9	14441.2	13335.0	12293.8	11815.1
71°	3750.9	3876.4	4582.9	6311.9	9058.8	11740.7	14497.0	14580.6	13386.1	12242.7	11155.1
72.5°	1840.6	1989.3	2877.0	4443.5	7455.4	10690.3	14069.4	14232.0	13065.4	11606.0	9537.6
75°	478.7	506.7	859.9	1817.4	3997.3	7083.5	11345.6	11759.3	10681.0	8835.7	5828.6
77.5°	302.1	311.4	404.4	706.4	1496.7	2691.2	6665.1	6869.7	6102.7	4476.0	2054.4
80°	213.8	218.5	255.6	455.5	873.8	785.5	2398.3	2486.7	2207.7	1185.2	367.2
82.5°	130.1	130.1	185.9	292.9	539.2	427.6	632.1	673.9	594.9	330.0	120.8
85°	74.4	79.0	116.2	199.9	255.6	209.2	237.0	251.0	255.6	218.5	51.1
87.5°	60.5	65.1	102.3	167.4	139.4	102.3	102.3	106.9	111.5	130.1	23.2
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°	2254.3	2254.3	2254.3	2254.3	2254.3	2254.3	2254.3	2254.3	2254.3	2254.3	2254.3
2.5°	2245.0	2245.0	2249.6	2245.0	2245.0	2245.0	2249.6	2249.6	2249.6	2258.9	2263.6
5°	2254.3	2254.3	2254.3	2249.6	2245.0	2245.0	2254.3	2258.9	2258.9	2272.9	2272.9
7.5°	2277.5	2277.5	2268.2	2258.9	2249.6	2235.7	2240.4	2245.0	2240.4	2245.0	2245.0
10°	2328.6	2328.6	2314.7	2296.1	2268.2	2226.4	2170.6	2100.8	2035.8	2012.6	2003.2
12.5°	2412.3	2407.6	2379.8	2347.3	2286.8	2142.7	1933.6	1687.3	1482.7	1426.9	1408.3
15°	2505.2	2496.0	2463.4	2407.6	2245.0	1863.8	1426.9	1110.8	915.6	869.2	859.9
17.5°	2602.9	2588.9	2542.4	2430.8	2054.4	1385.1	920.2	697.2	590.2	581.0	585.6
20°	2705.1	2686.5	2621.4	2384.4	1659.3	925.0	594.9	539.2	529.9	529.9	534.5
22.5°	2821.3	2798.1	2709.8	2217.0	1208.5	613.6	511.3	506.7	502.0	497.4	497.4
25°	2956.1	2928.2	2793.4	1915.0	832.0	502.0	488.0	474.1	464.8	455.5	450.8
27.5°	3118.8	3081.6	2858.5	1543.1	571.7	469.4	460.1	436.9	418.3	399.8	399.8
30°	3281.4	3235.0	2839.9	1162.0	464.8	436.9	418.3	390.5	362.5	343.9	339.3
32.5°	3453.5	3406.9	2719.1	780.8	423.0	399.8	376.4	334.6	302.1	278.9	274.3
35°	3709.1	3671.9	2482.0	515.9	381.2	353.2	320.7	278.9	237.0	213.8	209.2
37.5°	4090.2	4043.7	2189.2	395.1	334.6	292.9	264.9	218.5	176.7	153.3	148.7
40°	4601.4	4462.0	1840.6	348.6	292.9	241.7	204.5	158.0	125.5	111.5	111.5
42.5°	5196.4	4866.4	1464.1	316.1	260.2	199.9	148.7	106.9	88.3	83.7	83.7
45°	5828.6	5242.9	1087.6	292.9	227.7	158.0	106.9	74.4	65.1	60.5	60.5
47.5°	6479.3	5549.6	757.6	264.9	190.6	120.8	74.4	55.8	46.4	41.8	41.8
50°	7088.1	5749.5	534.5	237.0	162.6	88.3	55.8	41.8	32.5	32.5	32.5
52.5°	7511.1	5731.0	385.8	204.5	125.5	60.5	37.1	27.9	27.9	27.9	27.9
55°	7883.0	5661.2	302.1	176.7	97.6	41.8	27.9	23.2	23.2	18.6	18.6
57.5°	8199.0	5549.6	255.6	144.1	69.8	32.5	18.6	18.6	13.9	13.9	13.9
60°	8468.6	5410.2	213.8	120.8	46.4	23.2	13.9	9.3	9.3	4.6	9.3
62.5°	8835.7	5321.9	185.9	93.0	32.5	13.9	9.3	4.6	4.6	0.0	0.0
65°	9105.4	5154.5	158.0	65.1	18.6	9.3	4.6	4.6	0.0	0.0	0.0
67.5°	9114.6	4852.5	116.2	37.1	13.9	9.3	4.6	0.0	0.0	0.0	0.0
70°	8380.2	4136.7	74.4	18.6	9.3	4.6	4.6	0.0	0.0	0.0	0.0
71°	7706.3	3662.6	60.5	13.9	9.3	4.6	0.0	0.0	0.0	0.0	0.0
72.5°	6349.1	2691.2	46.4	13.9	4.6	4.6	0.0	0.0	0.0	0.0	0.0
75°	3499.9	976.1	23.2	9.3	4.6	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1120.1	297.5	13.9	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	190.6	46.4	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	65.1	18.6	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.6	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.3	4.6	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)