

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: P237217

Luminaire Tested: **ARCH-L-AF72-240-D-U-T3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237217
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-AF72-240-D-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1030mA 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: 20620.6 lumens
Efficiency: N/A
Efficacy: 85.2 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): 242
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

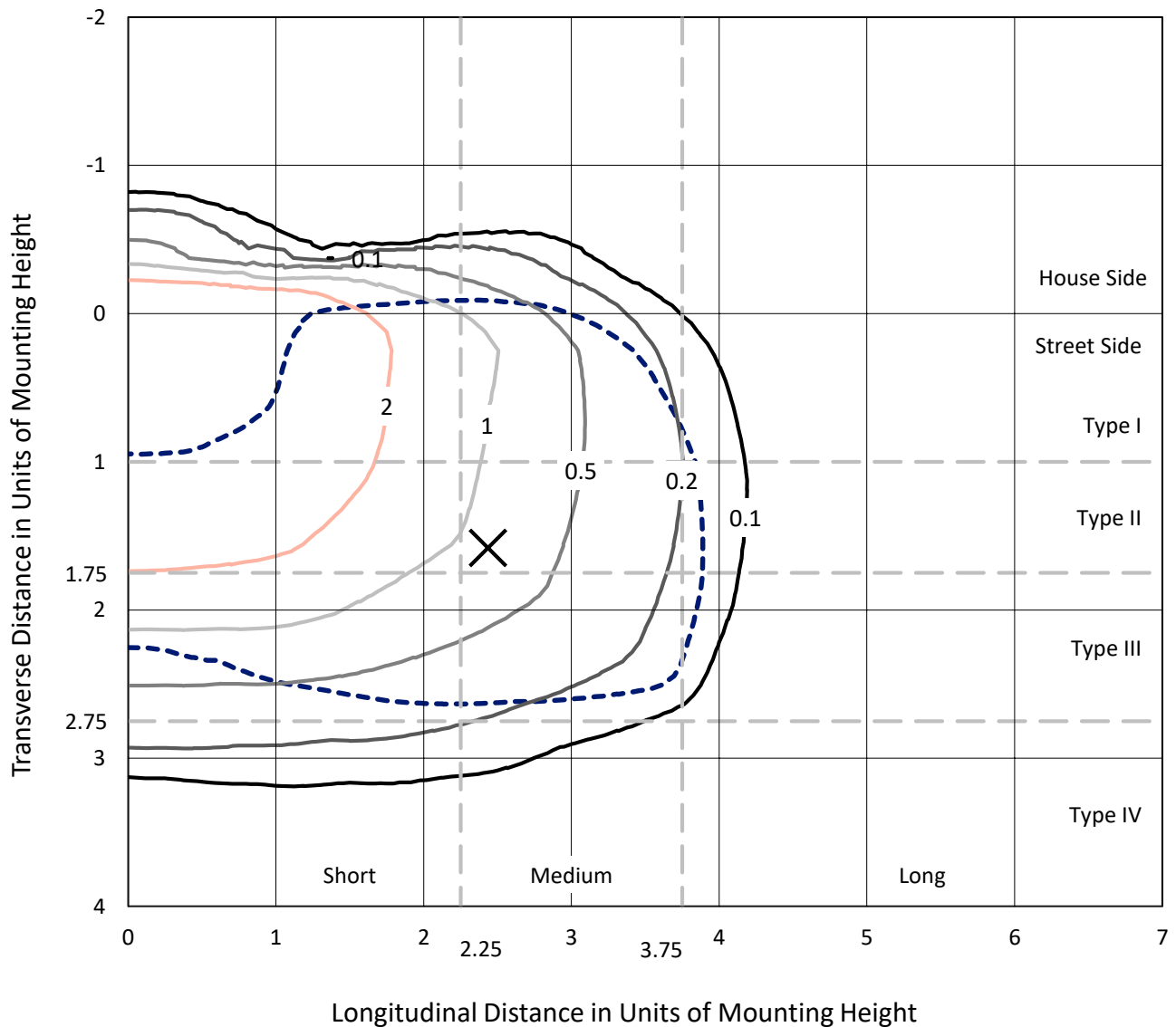


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

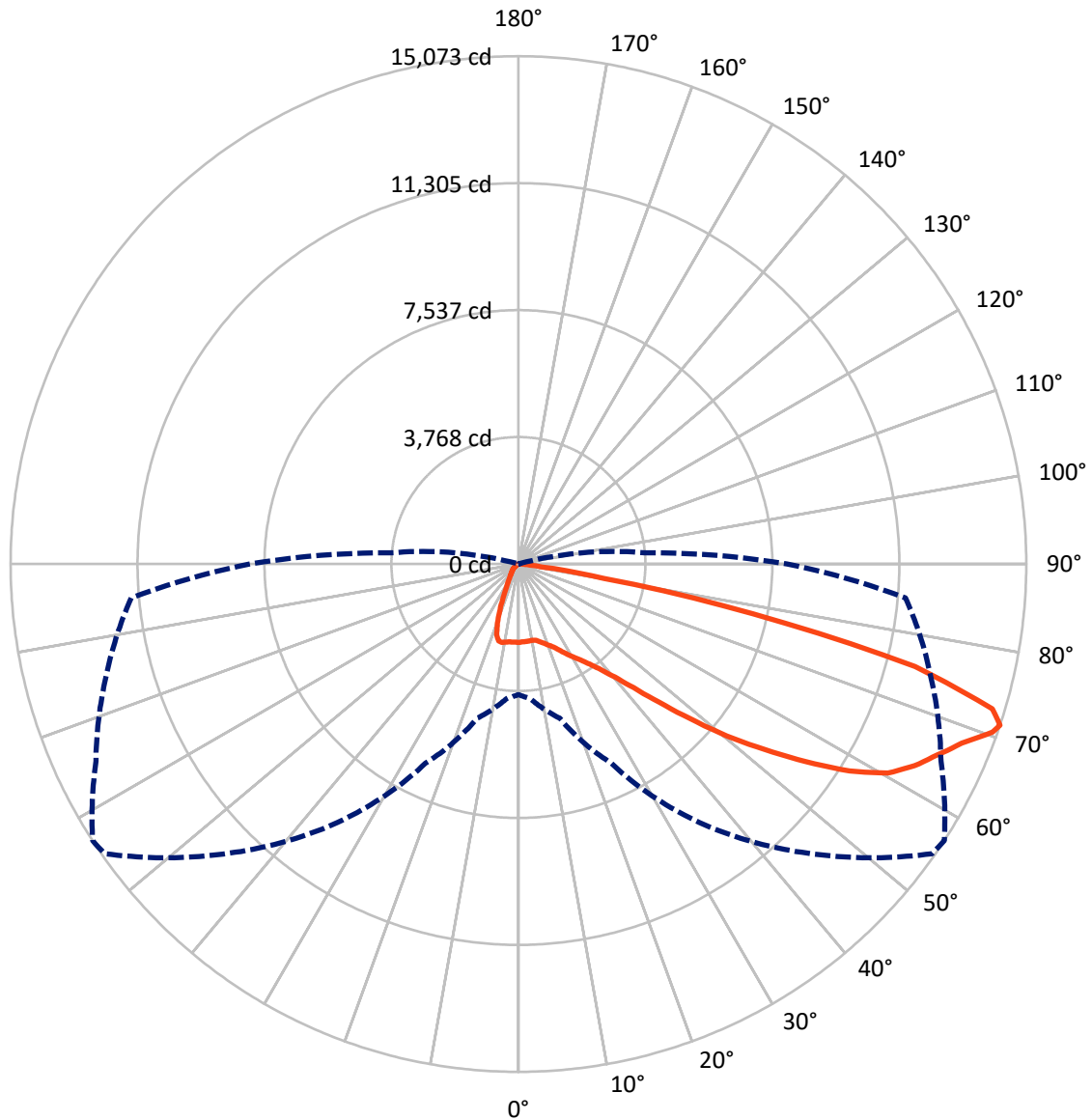


Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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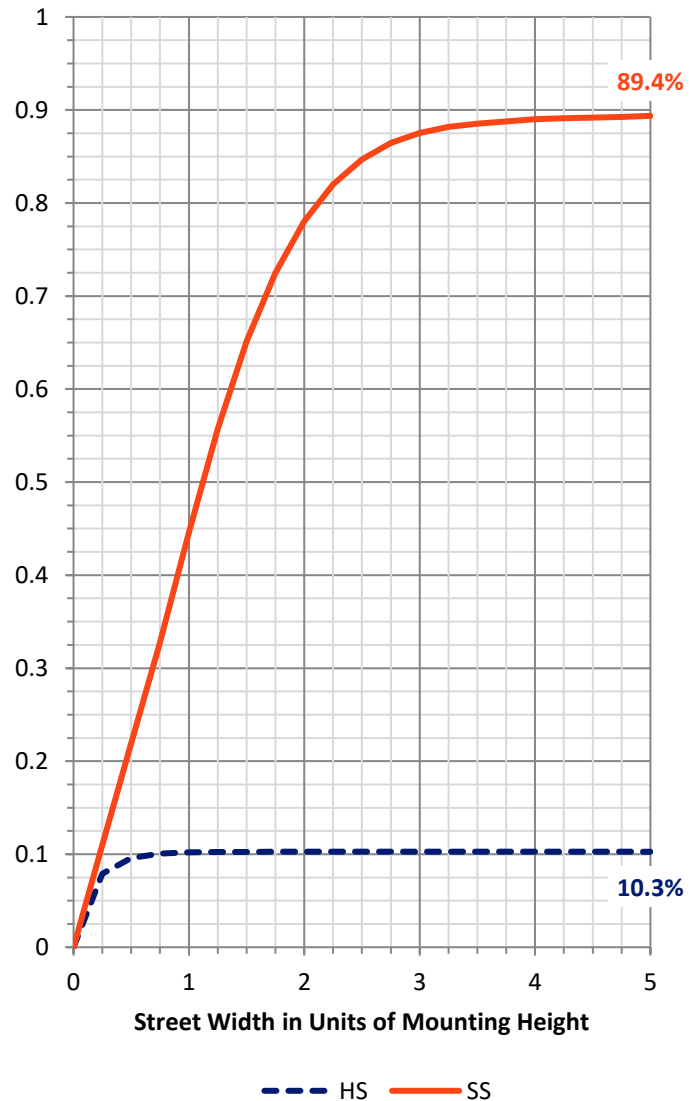
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2136.9	0.0	2136.9
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	18483.7	0.0	18483.7
	% Fixture	89.6	0.0	89.6
Total	Lumens	20620.6	0.0	20620.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.9	1.1
10°-20°	585.2	2.8
20°-30°	912.9	4.4
30°-40°	1542.9	7.5
40°-50°	2996.7	14.5
50°-60°	5032.4	24.4
60°-70°	6005.7	29.1
70°-80°	3165.1	15.3
80°-90°	160.8	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°	20620.6	100.0
0°-180°	20620.6	100.0

Coefficient of Utilization



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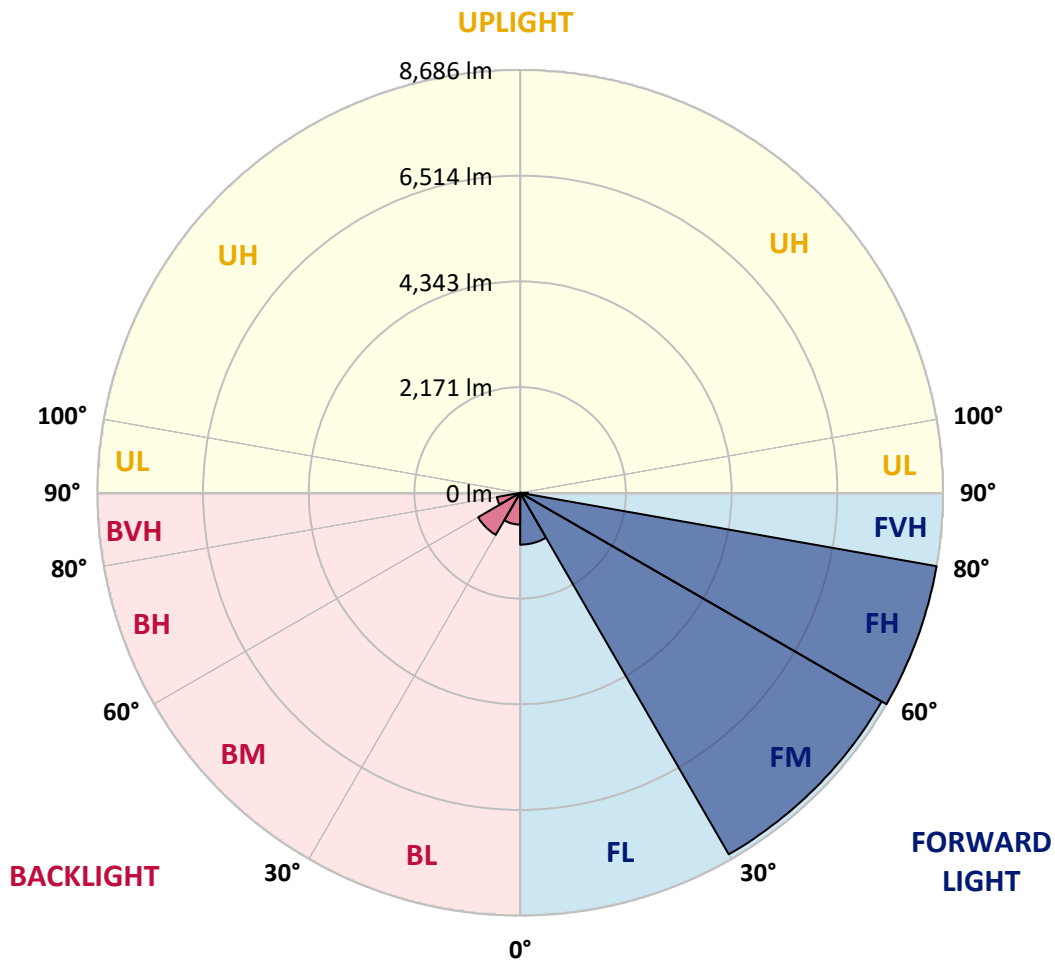
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1064.6	5.2			
FM	(30°-60°)	8574.2	41.6			
FH	(60°-80°)	8685.5	42.1			G4/12000
FVH	(80°-90°)	159.3	0.8			G2/225
BL	(0°-30°)	652.3	3.2	B2/1000		
BM	(30°-60°)	997.8	4.8	B1/1000		
BH	(60°-80°)	485.3	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°	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5
2.5°	2296.8	2296.8	2296.8	2301.6	2306.4	2306.4	2316.1	2311.3	2311.3	2311.3	2320.9
5°	2234.3	2239.1	2243.9	2253.6	2272.8	2287.2	2311.3	2311.3	2316.1	2325.7	2330.5
7.5°	2147.9	2152.7	2167.1	2186.3	2224.7	2258.4	2296.8	2306.4	2320.9	2344.9	2354.4
10°	2095.0	2104.6	2123.9	2147.9	2191.1	2234.3	2282.4	2296.8	2340.1	2383.3	2407.3
12.5°	2080.6	2085.4	2104.6	2143.1	2195.9	2248.8	2311.3	2325.7	2388.1	2455.4	2493.9
15°	2104.6	2109.4	2119.0	2162.3	2224.7	2292.0	2373.7	2392.9	2469.8	2546.6	2594.7
17.5°	2147.9	2147.9	2157.5	2195.9	2263.2	2340.1	2445.8	2474.6	2561.1	2647.6	2700.4
20°	2176.6	2176.6	2191.1	2229.5	2306.4	2407.3	2532.2	2570.7	2666.8	2762.9	2811.0
22.5°	2205.5	2210.3	2224.7	2268.0	2354.4	2493.9	2638.0	2676.4	2786.9	2887.8	2935.9
25°	2287.2	2282.4	2287.2	2325.7	2426.5	2599.5	2782.1	2830.2	2945.5	3056.0	3080.0
27.5°	2513.1	2503.5	2441.0	2416.9	2493.9	2710.0	2964.7	3012.8	3147.3	3257.8	3257.8
30°	3032.0	3012.8	2859.0	2662.0	2599.5	2811.0	3137.7	3205.0	3378.0	3474.0	3445.2
32.5°	3690.3	3647.0	3450.0	3113.7	2863.9	2945.5	3320.3	3397.1	3618.2	3699.9	3637.4
35°	4411.1	4406.3	4161.2	3728.8	3373.2	3224.1	3555.8	3647.0	3925.7	3997.8	3896.9
37.5°	5175.0	5194.2	5030.9	4435.0	4017.0	3680.7	3868.1	3973.8	4314.9	4401.5	4305.3
40°	6025.5	6020.7	5958.3	5251.9	4790.6	4329.3	4319.7	4415.9	4829.0	4963.6	4829.0
42.5°	7101.8	7092.2	6866.5	6232.1	5727.6	5175.0	4978.0	5011.6	5473.0	5693.9	5496.9
45°	8197.4	8130.1	7870.7	7322.9	6876.0	6222.5	5847.7	5847.7	6241.7	6544.4	6236.9
47.5°	8807.6	8740.4	8634.6	8331.9	8197.4	7467.0	6914.4	6847.2	7154.7	7462.2	7029.8
50°	9610.1	9610.1	9345.8	9230.5	9461.2	8947.0	8091.6	8024.4	8173.4	8418.5	7851.5
52.5°	10244.3	10129.1	9941.6	10042.5	10700.8	10465.4	9269.0	9139.1	9254.5	9316.9	8567.4
55°	10508.7	10398.1	10383.7	10753.7	11772.3	11445.6	10475.0	10359.6	10350.0	10042.5	9192.0
57.5°	10561.5	10465.4	10648.0	11296.7	12815.0	12248.1	11676.3	11589.7	11320.7	10551.8	9831.1
60°	10114.6	10162.7	10604.7	11594.5	13430.1	12944.8	12690.1	12598.9	11979.0	10984.3	10542.2
62.5°	9196.8	9312.1	10138.7	11623.4	13204.2	13228.3	13252.3	13189.8	12488.3	11378.4	11258.2
65°	8110.9	8144.5	9139.1	11224.5	12810.2	13141.7	13665.5	13660.7	12877.5	11820.4	12065.5
67.5°	6683.9	6741.5	7601.5	9879.1	12022.2	13103.4	14208.5	14194.1	13319.5	12324.9	12546.0
70°	4973.2	5045.3	5742.0	7683.3	10263.6	12622.8	14919.6	14929.3	13785.7	12709.3	12214.4
71°	3877.7	4007.4	4737.8	6525.2	9365.0	12137.5	14986.9	15073.4	13838.5	12656.5	11532.1
72.5°	1902.8	2056.5	2974.3	4593.7	7707.3	11051.6	14544.8	14713.0	13506.9	11998.2	9859.9
75°	494.9	523.8	888.9	1878.8	4132.3	7322.9	11729.2	12156.7	11041.9	9134.3	6025.5
77.5°	312.3	321.9	418.1	730.4	1547.2	2782.1	6890.4	7101.8	6309.0	4627.2	2123.9
80°	221.1	225.9	264.2	470.9	903.4	812.0	2479.4	2570.7	2282.4	1225.3	379.6
82.5°	134.5	134.5	192.2	302.7	557.4	442.0	653.5	696.7	615.0	341.2	124.9
85°	76.9	81.7	120.1	206.6	264.2	216.3	245.1	259.5	264.2	225.9	52.9
87.5°	62.5	67.3	105.7	173.0	144.1	105.7	105.7	110.5	115.3	134.5	24.0
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°	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5	2330.5
2.5°	2320.9	2320.9	2325.7	2320.9	2320.9	2320.9	2325.7	2325.7	2325.7	2335.3	2340.1
5°	2330.5	2330.5	2330.5	2325.7	2320.9	2320.9	2330.5	2335.3	2335.3	2349.6	2349.6
7.5°	2354.4	2354.4	2344.9	2335.3	2325.7	2311.3	2316.1	2320.9	2316.1	2320.9	2320.9
10°	2407.3	2407.3	2392.9	2373.7	2344.9	2301.6	2243.9	2171.9	2104.6	2080.6	2071.0
12.5°	2493.9	2489.0	2460.2	2426.5	2364.0	2215.1	1998.9	1744.2	1532.8	1475.2	1456.0
15°	2589.9	2580.3	2546.6	2489.0	2320.9	1926.8	1475.2	1148.4	946.6	898.6	888.9
17.5°	2690.9	2676.4	2628.4	2513.1	2123.9	1431.9	951.4	720.8	610.2	600.7	605.5
20°	2796.5	2777.3	2710.0	2465.0	1715.4	956.3	615.0	557.4	547.8	547.8	552.6
22.5°	2916.6	2892.6	2801.4	2292.0	1249.3	634.2	528.6	523.8	518.9	514.1	514.1
25°	3056.0	3027.2	2887.8	1979.7	860.1	518.9	504.5	490.1	480.5	470.9	466.1
27.5°	3224.1	3185.8	2955.1	1595.3	591.1	485.3	475.7	451.6	432.5	413.3	413.3
30°	3392.3	3344.3	2935.9	1201.3	480.5	451.6	432.5	403.7	374.8	355.6	350.8
32.5°	3570.1	3522.1	2811.0	807.2	437.2	413.3	389.2	346.0	312.3	288.3	283.5
35°	3834.4	3796.0	2565.9	533.4	394.0	365.2	331.5	288.3	245.1	221.1	216.3
37.5°	4228.5	4180.4	2263.2	408.5	346.0	302.7	273.8	225.9	182.6	158.6	153.7
40°	4757.0	4612.8	1902.8	360.4	302.7	249.9	211.4	163.4	129.7	115.3	115.3
42.5°	5372.0	5030.9	1513.6	326.7	269.0	206.6	153.7	110.5	91.2	86.5	86.5
45°	6025.5	5420.1	1124.4	302.7	235.5	163.4	110.5	76.9	67.3	62.5	62.5
47.5°	6698.2	5737.2	783.2	273.8	197.0	124.9	76.9	57.7	48.1	43.3	43.3
50°	7327.7	5943.9	552.6	245.1	168.2	91.2	57.7	43.3	33.7	33.7	33.7
52.5°	7764.9	5924.6	398.8	211.4	129.7	62.5	38.5	28.8	28.8	28.8	28.8
55°	8149.3	5852.5	312.3	182.6	100.9	43.3	28.8	24.0	24.0	19.2	19.2
57.5°	8476.1	5737.2	264.2	148.9	72.1	33.7	19.2	19.2	14.4	14.4	14.4
60°	8754.8	5593.1	221.1	124.9	48.1	24.0	14.4	9.6	9.6	4.8	9.6
62.5°	9134.3	5501.7	192.2	96.1	33.7	14.4	9.6	4.8	4.8	0.0	0.0
65°	9413.1	5328.8	163.4	67.3	19.2	9.6	4.8	4.8	0.0	0.0	0.0
67.5°	9422.7	5016.4	120.1	38.5	14.4	9.6	4.8	0.0	0.0	0.0	0.0
70°	8663.5	4276.4	76.9	19.2	9.6	4.8	4.8	0.0	0.0	0.0	0.0
71°	7966.7	3786.4	62.5	14.4	9.6	4.8	0.0	0.0	0.0	0.0	0.0
72.5°	6563.7	2782.1	48.1	14.4	4.8	4.8	0.0	0.0	0.0	0.0	0.0
75°	3618.2	1009.0	24.0	9.6	4.8	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1158.0	307.5	14.4	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	197.0	48.1	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	67.3	19.2	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	19.2	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.6	4.8	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)