

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: P236996

Luminaire Tested: **ARCH-L-AF72-230-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236996
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-230-D-U-T2R-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21310 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

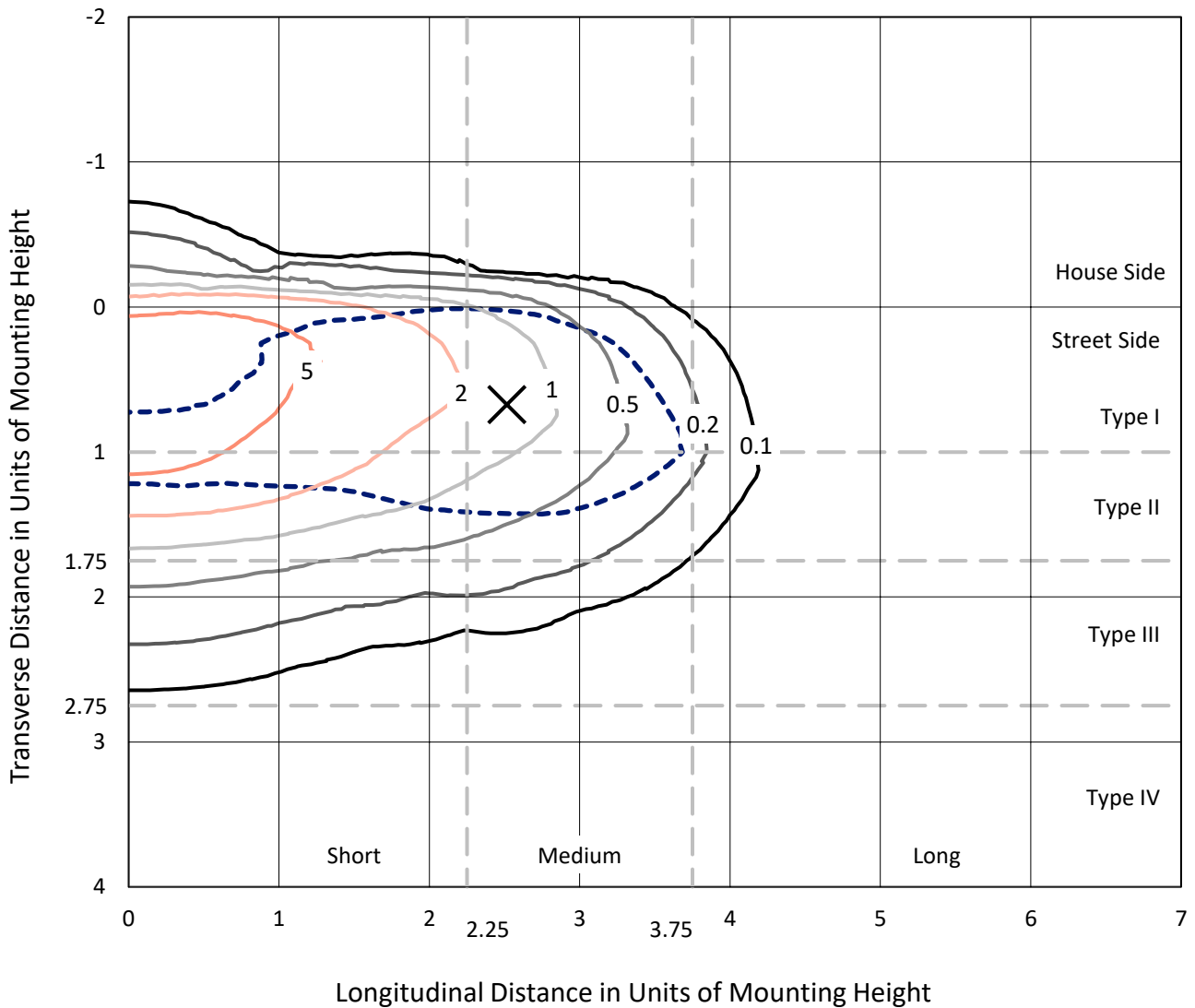
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

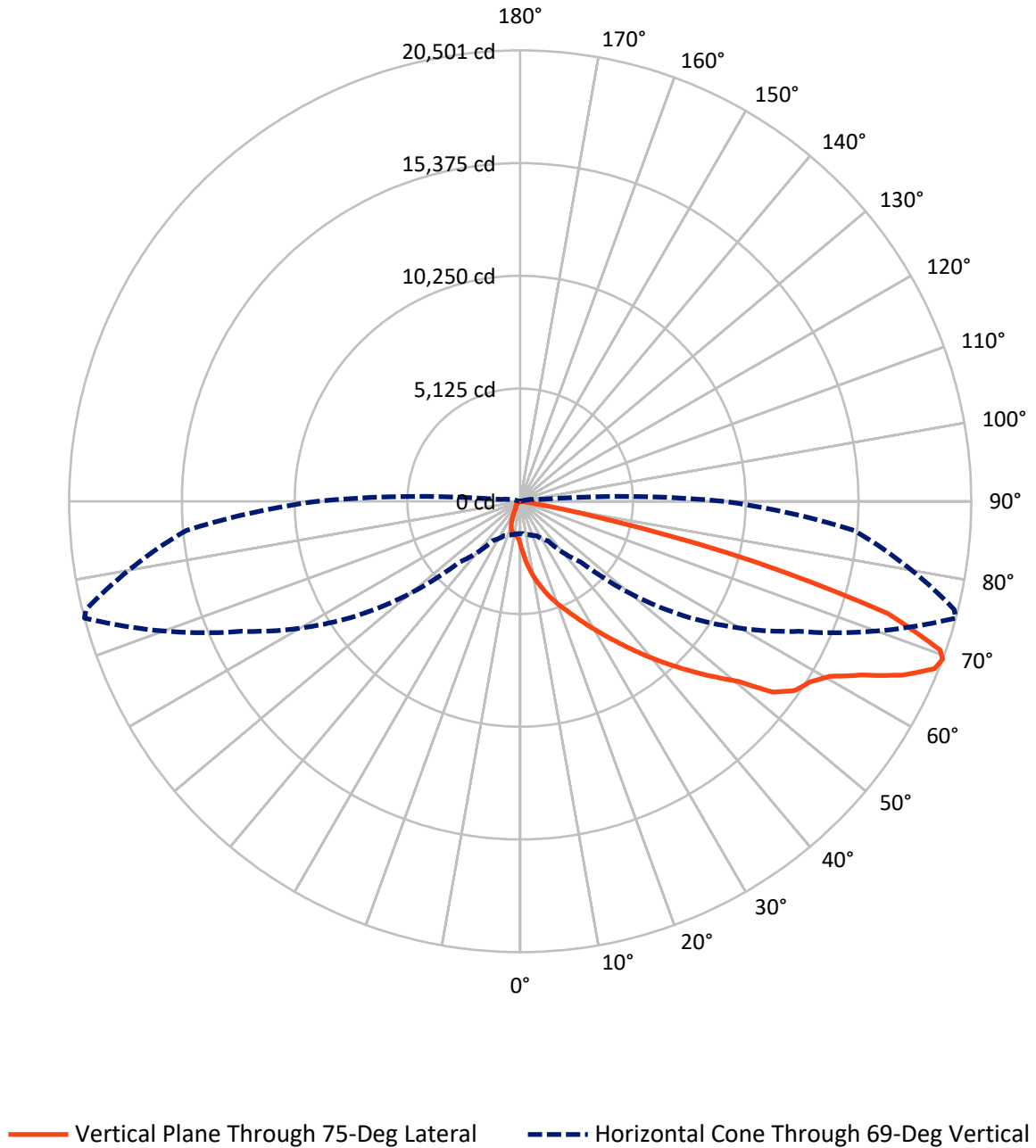
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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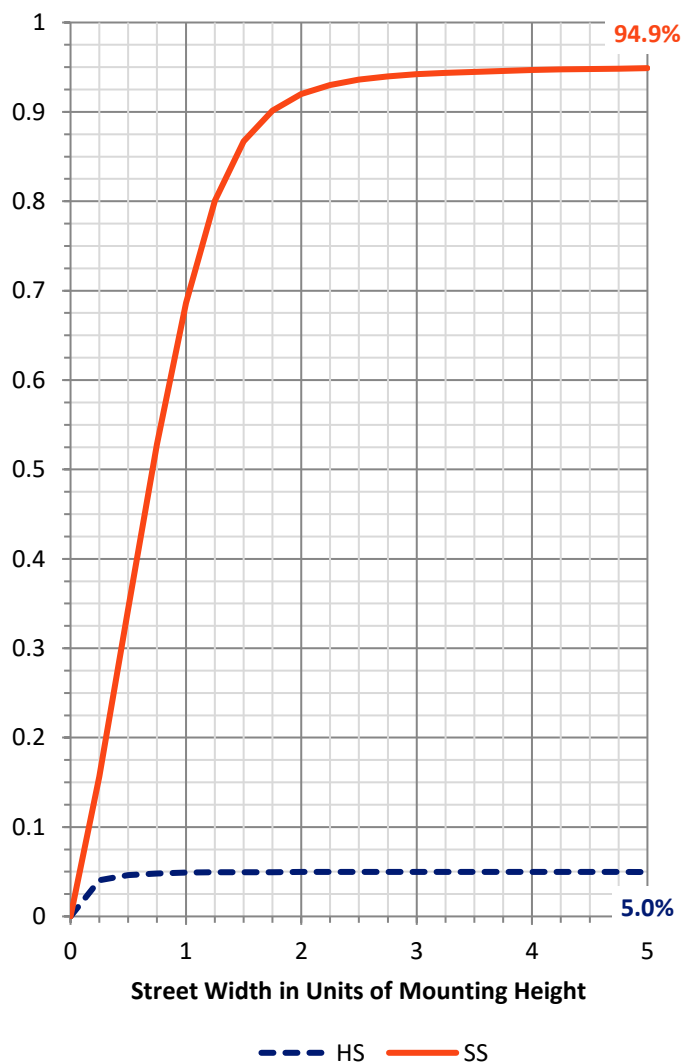
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1063.2	0.0	1063.2
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	20246.8	0.0	20246.8
	% Fixture	95.0	0.0	95.0
Total	Lumens	21310.0	0.0	21310.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.2	1.1
10°-20°	826.6	3.9
20°-30°	1578.0	7.4
30°-40°	2830.7	13.3
40°-50°	4336.9	20.4
50°-60°	5040.6	23.7
60°-70°	4463.5	20.9
70°-80°	1925.3	9.0
80°-90°	77.1	0.4
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°	21310.0	100.0
0°-180°	21310.0	100.0

Coefficient of Utilization



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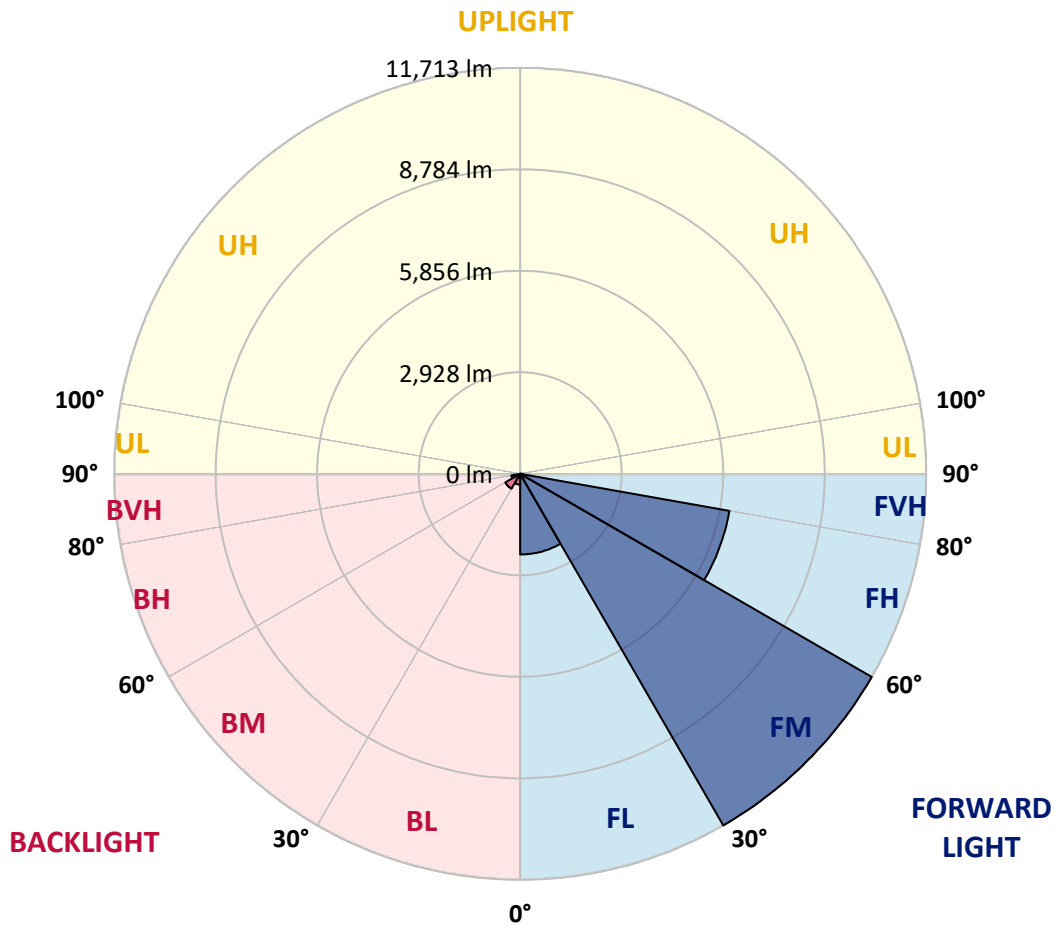
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2327.1	10.9			
FM (30°-60°)	11712.5	55.0			
FH (60°-80°)	6131.2	28.8			G3/7500
FVH (80°-90°)	76.0	0.4			G1/100
BL (0°-30°)	308.8	1.4	B1/500		
BM (30°-60°)	495.7	2.3	B1/1000		
BH (60°-80°)	257.6	1.2	B1/500		G1/500
BVH (80°-90°)	1.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1982.9	1982.9	1982.9	1982.9	1982.9	1982.9	1982.9	1982.9	1982.9	1982.9	1982.9
2.5°	3266.5	3234.3	3202.1	3165.3	3082.4	2939.8	2760.4	2567.2	2327.9	2286.5	2093.3
5°	3965.8	3952.0	3919.8	3869.2	3777.1	3620.7	3418.3	3133.1	2732.8	2663.8	2254.3
7.5°	4458.0	4448.8	4421.2	4361.4	4278.6	4122.2	3910.6	3602.3	3137.7	3059.4	2456.8
10°	4899.7	4895.1	4872.1	4816.9	4734.1	4563.9	4338.4	4016.4	3524.1	3436.7	2691.4
12.5°	5300.0	5304.6	5295.4	5267.8	5208.0	5046.9	4789.3	4439.6	3896.8	3800.2	2972.0
15°	5534.6	5548.4	5585.2	5640.4	5658.8	5530.0	5263.2	4876.7	4278.6	4195.8	3294.1
17.5°	5456.4	5470.2	5585.2	5773.8	5953.3	5971.7	5732.4	5290.8	4655.9	4573.1	3611.5
20°	5267.8	5286.2	5405.8	5663.4	6013.1	6256.9	6160.3	5741.6	5014.7	4913.5	3915.2
22.5°	5479.4	5479.4	5516.2	5672.6	5990.1	6371.9	6500.7	6192.5	5382.8	5258.6	4218.8
25°	6206.3	6192.5	6114.3	6049.9	6151.1	6491.5	6758.4	6652.6	5815.2	5672.6	4540.9
27.5°	7126.4	7190.8	7043.6	6809.0	6579.0	6726.2	6988.4	7108.0	6293.7	6146.5	4872.1
30°	8157.0	8184.6	8009.8	7696.9	7292.1	7149.4	7259.9	7499.1	6813.6	6652.6	5217.2
32.5°	9086.3	9063.3	8916.1	8589.4	8088.0	7779.7	7609.5	7811.9	7379.5	7195.4	5571.4
35°	9909.8	9928.2	9748.8	9371.6	8879.3	8552.6	8147.8	8166.2	8014.4	7802.7	5980.9
37.5°	10650.5	10618.3	10448.1	10070.9	9624.6	9270.3	8842.5	8534.2	8709.1	8488.2	6440.9
40°	11253.2	11221.0	11041.6	10673.5	10254.9	9965.0	9629.2	9026.5	9440.6	9187.5	6933.2
42.5°	11731.7	11694.9	11543.1	11188.8	10784.0	10526.3	10365.3	9633.8	10222.7	9969.6	7485.3
45°	11966.3	11934.1	11842.1	11575.3	11221.0	10995.6	11073.8	10333.1	11060.0	10848.4	8092.6
47.5°	11690.3	11676.5	11782.3	11736.3	11533.9	11414.3	11685.7	11096.8	11938.7	11731.7	8791.9
50°	10853.0	10876.0	11184.2	11566.1	11662.7	11805.3	12187.2	11901.9	12881.9	12661.0	9597.0
52.5°	8787.3	8943.7	9873.0	10793.2	11506.3	12044.5	12776.1	13052.1	14418.5	14202.3	10853.0
55°	6560.6	6625.0	7637.1	9210.5	10876.0	12026.1	13213.1	13728.4	15177.6	14956.8	11184.2
57.5°	5203.4	5226.4	5727.8	7333.5	9578.6	11612.1	13443.1	13972.2	15508.8	15324.8	11676.5
60°	4085.4	4113.0	4476.4	5580.6	7752.1	10494.1	13111.9	14183.9	16157.5	16010.3	12536.8
62.5°	3179.1	3206.7	3427.5	4076.2	5815.2	8773.5	12444.8	14524.3	17390.5	17321.5	13944.6
65°	2461.4	2470.6	2622.4	2926.0	4108.4	6910.2	11630.5	14841.8	19056.0	18996.2	15085.6
67.5°	1817.3	1831.1	1936.9	2125.5	2774.2	4964.1	10296.3	14597.9	20311.9	20137.1	15499.6
69°	1467.6	1481.4	1573.4	1725.3	2189.9	3910.6	9077.1	13995.2	20500.6	20334.9	15237.4
70°	1256.0	1265.2	1357.2	1486.0	1867.9	3321.7	8111.0	13475.4	20252.1	20091.1	14639.3
72.5°	805.1	851.1	943.1	1025.9	1237.6	2199.1	5474.8	11175.0	17473.3	17197.3	11464.9
75°	446.3	460.1	625.7	726.9	823.5	1430.8	3045.6	6970.0	11115.2	10922.0	6132.7
77.5°	368.1	377.3	441.7	552.1	552.1	800.5	1150.2	2746.6	4228.0	3814.0	1660.8
80°	257.6	266.8	335.8	363.5	395.7	450.9	372.7	602.7	653.3	579.7	248.4
82.5°	179.4	188.6	230.0	299.0	317.4	211.6	138.0	179.4	188.6	188.6	96.6
85°	32.2	46.0	170.2	248.4	188.6	64.4	78.2	64.4	59.8	64.4	23.0
87.5°	0.0	0.0	105.8	119.6	101.2	27.6	32.2	23.0	13.8	18.4	9.2
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°	1982.9	1982.9	1982.9	1982.9	1982.9	1982.9	1982.9	1982.9	1982.9	1982.9	1982.9
2.5°	1996.7	1900.1	1734.5	1614.8	1513.6	1435.4	1403.2	1352.6	1315.8	1334.2	1311.2
5°	2051.9	1881.7	1614.8	1444.6	1325.0	1223.8	1141.0	1076.6	1025.9	1016.7	1007.5
7.5°	2139.3	1895.5	1545.8	1334.2	1154.8	998.3	869.5	772.9	699.3	699.3	671.7
10°	2258.9	1932.3	1504.4	1223.8	956.9	745.3	616.5	524.5	487.7	483.1	473.9
12.5°	2424.6	2001.3	1472.2	1081.2	745.3	542.9	464.7	432.5	418.7	414.1	409.5
15°	2650.0	2102.5	1435.4	906.3	565.9	446.3	414.1	386.5	372.7	368.1	363.5
17.5°	2866.2	2194.5	1357.2	726.9	460.1	404.9	368.1	345.1	326.6	322.0	322.0
20°	3068.6	2272.7	1223.8	565.9	414.1	363.5	326.6	299.0	280.6	276.0	276.0
22.5°	3280.3	2337.1	1058.2	460.1	377.3	322.0	285.2	257.6	239.2	234.6	230.0
25°	3505.7	2383.1	869.5	409.5	340.4	285.2	243.8	220.8	207.0	202.4	197.8
27.5°	3749.5	2401.5	690.1	372.7	299.0	248.4	211.6	188.6	179.4	174.8	174.8
30°	3970.4	2383.1	533.7	331.2	262.2	216.2	184.0	165.6	156.4	151.8	151.8
32.5°	4200.4	2337.1	427.9	294.4	230.0	184.0	156.4	142.6	138.0	133.4	133.4
35°	4444.2	2277.3	368.1	262.2	197.8	161.0	138.0	128.8	124.2	119.6	119.6
37.5°	4729.5	2203.7	335.8	234.6	174.8	142.6	119.6	115.0	110.4	110.4	110.4
40°	5051.5	2111.7	312.8	211.6	156.4	124.2	105.8	101.2	96.6	96.6	96.6
42.5°	5392.0	2005.9	289.8	188.6	138.0	105.8	92.0	92.0	87.4	87.4	82.8
45°	5773.8	1900.1	266.8	165.6	119.6	92.0	78.2	73.6	73.6	69.0	69.0
47.5°	6224.7	1803.5	243.8	147.2	105.8	78.2	69.0	64.4	59.8	55.2	55.2
50°	6859.6	1794.3	216.2	128.8	96.6	64.4	55.2	50.6	46.0	41.4	41.4
52.5°	7489.9	1711.4	184.0	105.8	78.2	55.2	41.4	36.8	32.2	32.2	27.6
55°	7632.5	1573.4	161.0	92.0	59.8	41.4	32.2	23.0	23.0	18.4	18.4
57.5°	7945.4	1509.0	138.0	73.6	46.0	32.2	18.4	13.8	13.8	13.8	13.8
60°	8561.8	1490.6	119.6	64.4	32.2	23.0	13.8	9.2	9.2	4.6	4.6
62.5°	9413.0	1472.2	101.2	55.2	23.0	13.8	9.2	4.6	0.0	0.0	0.0
65°	9882.2	1348.0	82.8	41.4	18.4	13.8	4.6	0.0	0.0	0.0	0.0
67.5°	9758.0	1113.4	73.6	27.6	13.8	9.2	4.6	0.0	0.0	0.0	0.0
69°	9238.1	938.5	59.8	23.0	13.8	9.2	4.6	0.0	0.0	0.0	0.0
70°	8612.4	809.7	55.2	18.4	9.2	4.6	4.6	0.0	0.0	0.0	0.0
72.5°	6114.3	423.3	36.8	13.8	9.2	4.6	0.0	0.0	0.0	0.0	0.0
75°	2857.0	188.6	23.0	9.2	4.6	4.6	0.0	0.0	0.0	0.0	0.0
77.5°	630.3	87.4	13.8	9.2	4.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	119.6	32.2	9.2	4.6	4.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	41.4	13.8	4.6	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.8	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.6	0.0	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)