

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: P265744

Luminaire Tested: **ARCH-L-AF72-280-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265744
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-280-D-U-T2R-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1180mA 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: 20898.7 lumens
Efficiency: N/A
Efficacy: 74.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 279
Input Voltage (V): NR
Input Current (A_{in}): 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

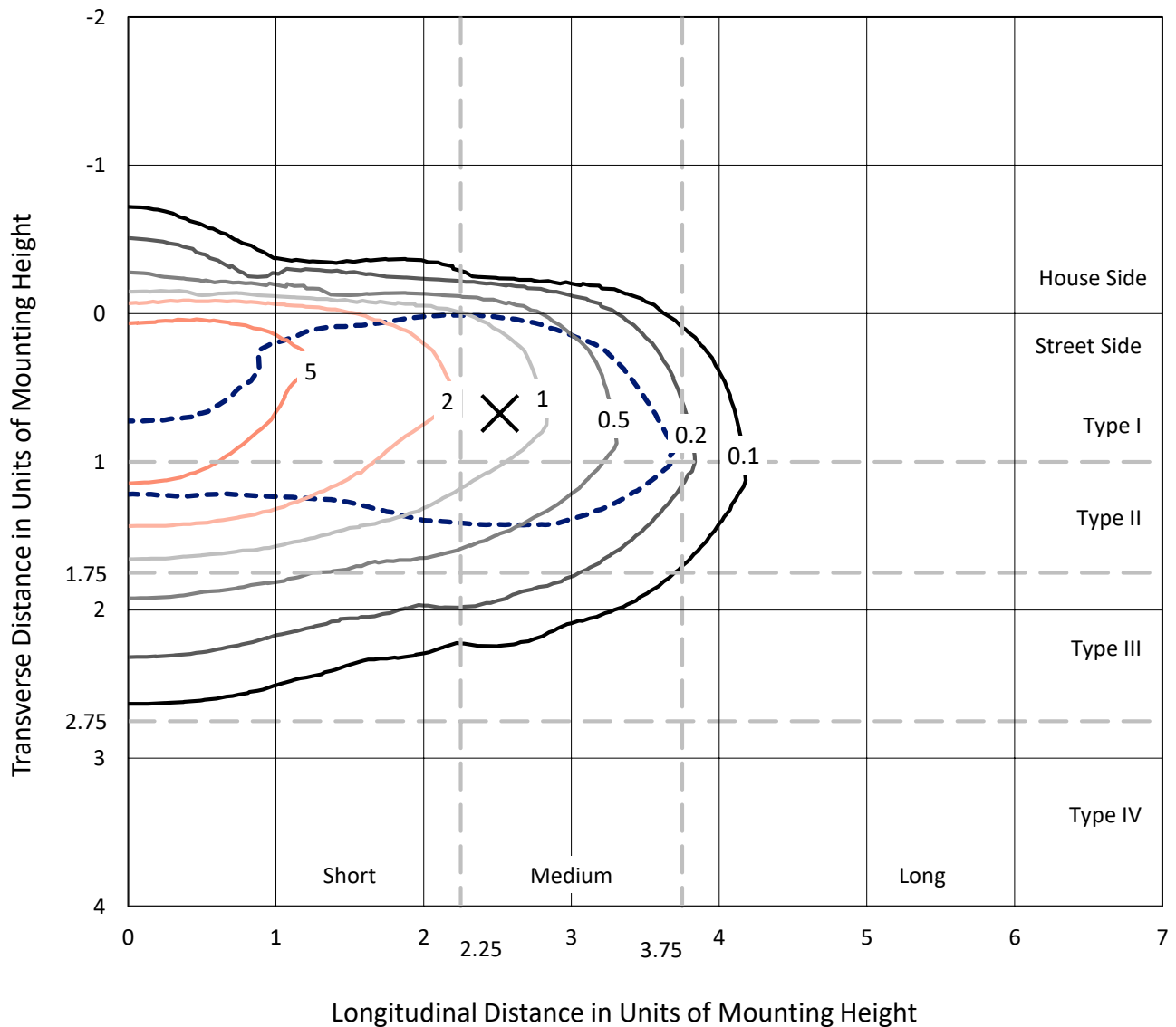


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

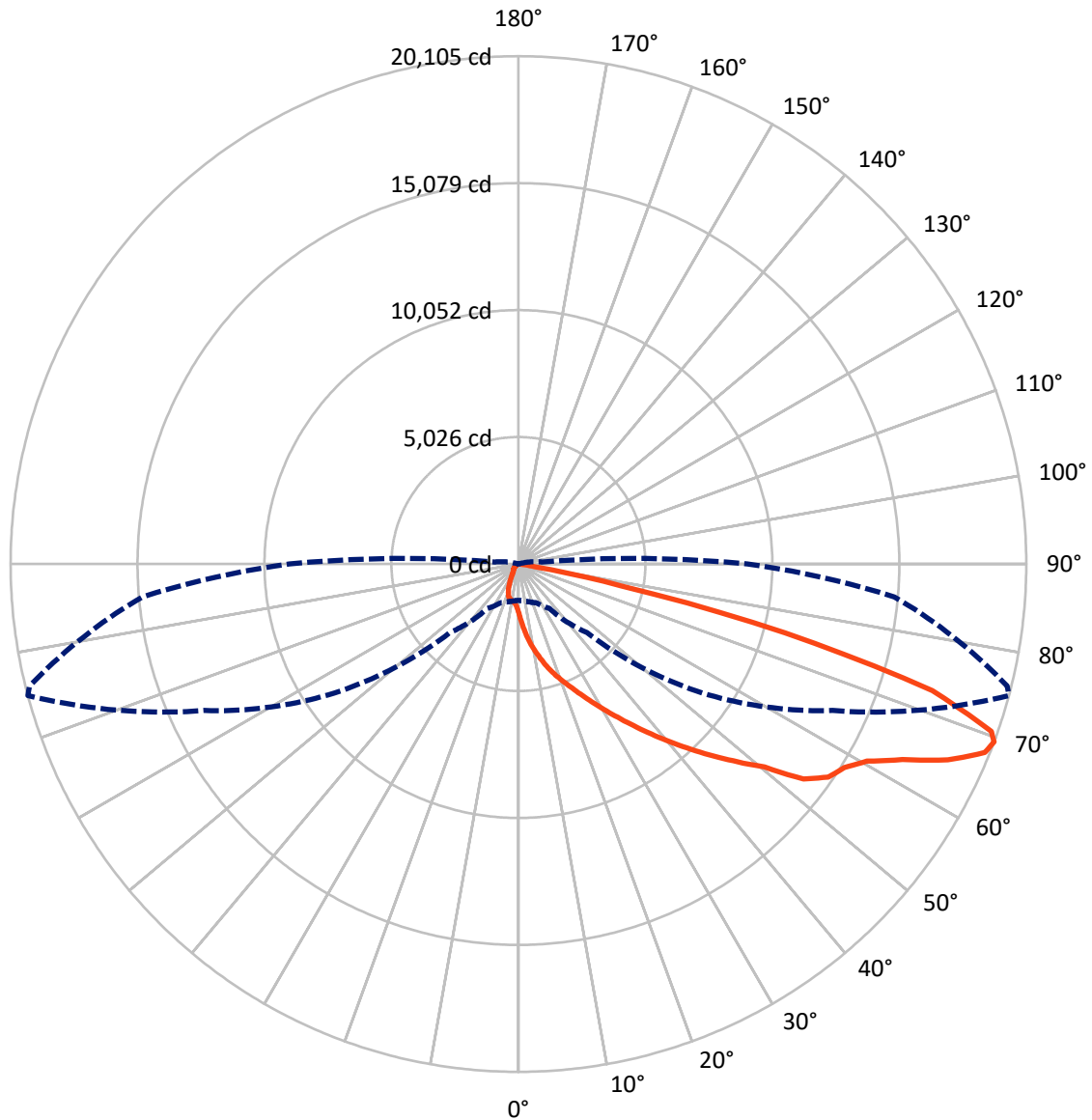


Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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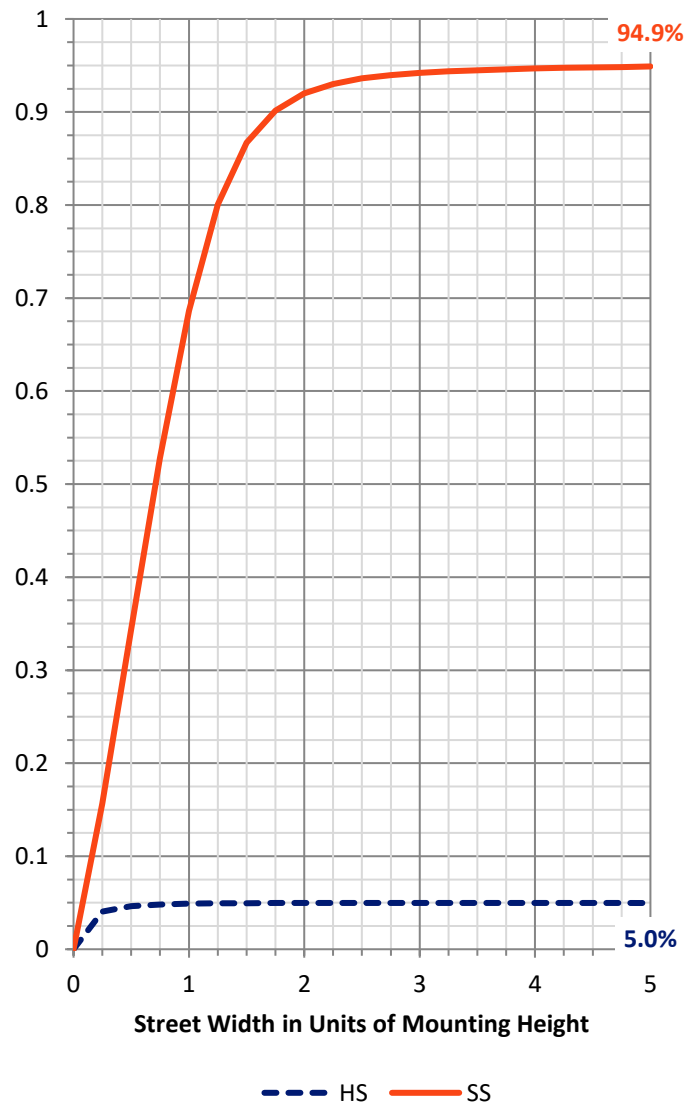
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1042.7	0.0	1042.7
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	19856.0	0.0	19856.0
	% Fixture	95.0	0.0	95.0
Total	Lumens	20898.7	0.0	20898.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.8	1.1
10°-20°	810.7	3.9
20°-30°	1547.6	7.4
30°-40°	2776.1	13.3
40°-50°	4253.2	20.4
50°-60°	4943.3	23.7
60°-70°	4377.3	20.9
70°-80°	1888.1	9.0
80°-90°	75.6	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°	20898.7	100.0
0°-180°	20898.7	100.0

Coefficient of Utilization



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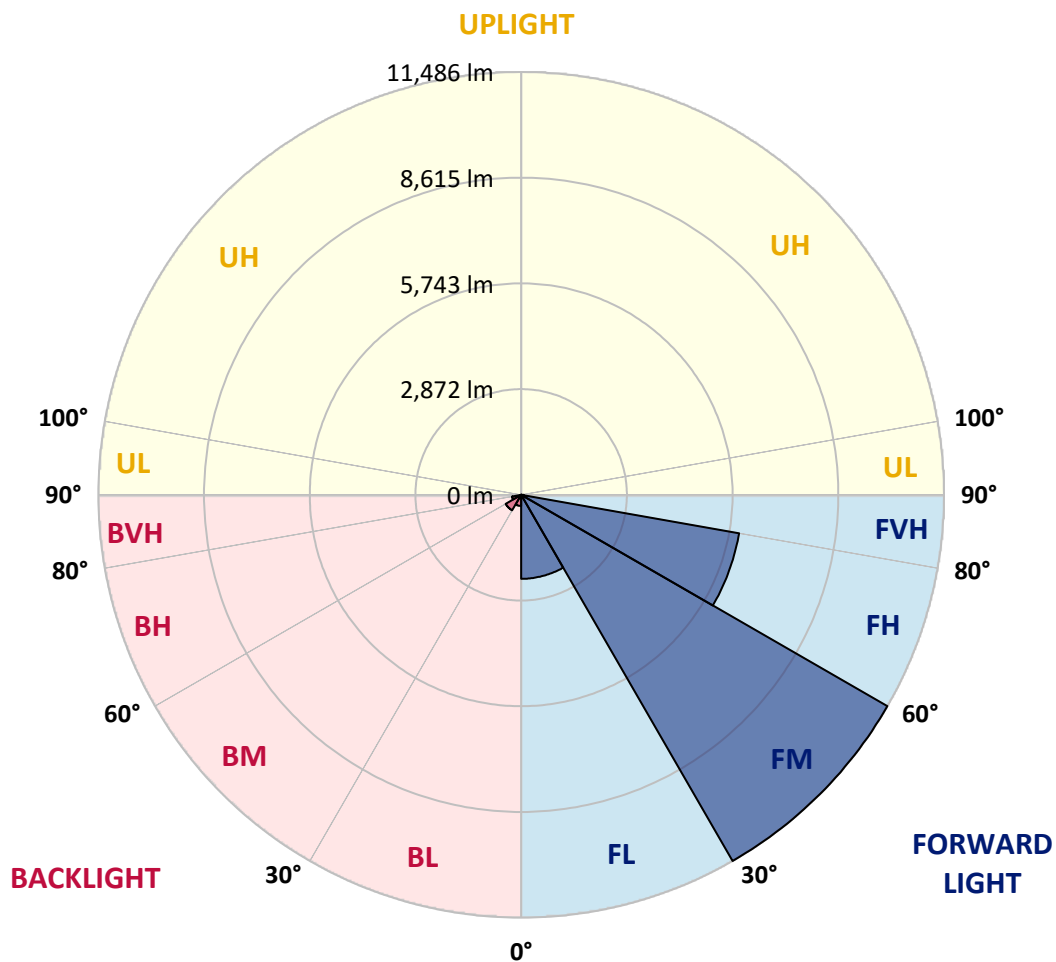
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2282.2	10.9			
FM	(30°-60°)	11486.4	55.0			
FH	(60°-80°)	6012.8	28.8			G3/7500
FVH	(80°-90°)	74.6	0.4			G1/100
BL	(0°-30°)	302.8	1.4	B1/500		
BM	(30°-60°)	486.2	2.3	B1/1000		
BH	(60°-80°)	252.6	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°	1944.7	1944.7	1944.7	1944.7	1944.7	1944.7	1944.7	1944.7	1944.7	1944.7	1944.7
2.5°	3203.4	3171.8	3140.2	3104.2	3022.9	2883.1	2707.1	2517.6	2283.0	2242.3	2052.8
5°	3889.2	3875.6	3844.0	3794.5	3704.3	3550.8	3352.4	3072.7	2680.1	2612.5	2210.8
7.5°	4372.1	4363.0	4335.8	4277.3	4196.1	4042.6	3835.0	3532.8	3077.1	3000.3	2409.3
10°	4805.2	4800.6	4778.1	4723.9	4642.7	4475.7	4254.7	3938.9	3456.0	3370.4	2639.4
12.5°	5197.7	5202.2	5193.1	5166.2	5107.5	4949.5	4696.9	4353.9	3821.6	3726.8	2914.7
15°	5427.7	5441.4	5477.4	5531.6	5549.5	5423.2	5161.7	4782.5	4196.1	4114.9	3230.5
17.5°	5351.1	5364.6	5477.4	5662.3	5838.4	5856.4	5621.9	5188.6	4566.1	4484.8	3541.7
20°	5166.2	5184.1	5301.4	5554.1	5897.1	6136.1	6041.5	5630.8	4918.0	4818.7	3839.5
22.5°	5373.7	5373.7	5409.8	5563.2	5874.5	6248.9	6375.4	6073.0	5278.9	5157.1	4137.4
25°	6086.5	6073.0	5996.2	5933.1	6032.4	6366.3	6628.0	6524.2	5703.0	5563.2	4453.2
27.5°	6988.9	7052.1	6907.6	6677.6	6451.9	6596.3	6853.4	6970.8	6172.3	6027.8	4778.1
30°	7999.5	8026.6	7855.1	7548.4	7151.2	7011.5	7119.7	7354.3	6682.1	6524.2	5116.4
32.5°	8910.9	8888.4	8744.0	8423.6	7931.9	7629.6	7462.6	7661.1	7237.0	7056.5	5463.9
35°	9718.6	9736.5	9560.7	9190.6	8707.9	8387.6	7990.6	8008.6	7859.7	7652.1	5865.5
37.5°	10445.0	10413.4	10246.4	9876.4	9438.9	9091.3	8671.8	8369.5	8540.9	8324.5	6316.6
40°	11036.0	11004.4	10828.4	10467.5	10057.0	9772.8	9443.3	8852.3	9258.3	9010.2	6799.5
42.5°	11505.2	11469.2	11320.4	10972.8	10575.8	10323.1	10165.2	9447.8	10025.4	9777.2	7340.8
45°	11735.4	11703.7	11613.6	11351.8	11004.4	10783.3	10860.1	10133.7	10846.6	10638.9	7936.3
47.5°	11464.7	11451.1	11554.9	11509.8	11311.3	11193.9	11460.1	10882.6	11708.2	11505.2	8622.2
50°	10643.5	10666.0	10968.3	11342.9	11437.6	11577.4	11951.9	11672.1	12633.3	12416.6	9411.7
52.5°	8617.7	8771.1	9682.6	10584.9	11284.1	11812.1	12529.5	12800.2	14140.2	13928.1	10643.5
55°	6433.9	6497.1	7489.7	9032.7	10666.0	11794.0	12958.1	13463.3	14884.6	14668.1	10968.3
57.5°	5102.9	5125.5	5617.3	7191.9	9393.7	11388.0	13183.6	13702.6	15209.6	15029.1	11451.1
60°	4006.5	4033.6	4390.0	5473.0	7602.4	10291.6	12858.8	13910.1	15845.7	15701.3	12294.8
62.5°	3117.7	3144.7	3361.4	3997.5	5703.0	8604.1	12204.6	14244.0	17054.9	16987.2	13675.4
65°	2413.8	2422.9	2571.8	2869.5	4029.1	6776.9	11406.0	14555.2	18688.2	18629.5	14794.5
67.5°	1782.1	1795.7	1899.5	2084.4	2720.6	4868.4	10097.6	14316.2	19919.8	19748.5	15200.5
69°	1439.3	1452.7	1543.1	1692.0	2147.7	3835.0	8901.9	13725.2	20104.8	19942.5	14943.3
70°	1231.8	1240.7	1331.0	1457.3	1831.9	3257.6	7954.4	13215.2	19861.3	19703.3	14356.7
72.5°	789.6	834.6	925.0	1006.1	1213.7	2156.7	5369.1	10959.3	17136.1	16865.4	11243.5
75°	437.7	451.2	613.6	712.9	807.7	1403.2	2986.9	6835.6	10900.7	10711.2	6014.3
77.5°	360.9	370.0	433.2	541.4	541.4	785.1	1127.9	2693.6	4146.3	3740.4	1628.7
80°	252.7	261.6	329.4	356.4	388.0	442.1	365.5	591.1	640.8	568.4	243.6
82.5°	176.0	185.1	225.6	293.2	311.4	207.6	135.4	176.0	185.1	185.1	94.7
85°	31.6	45.2	166.9	243.6	185.1	63.2	76.6	63.2	58.7	63.2	22.5
87.5°	0.0	0.0	103.8	117.3	99.3	27.0	31.6	22.5	13.6	18.1	9.1
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°	1944.7	1944.7	1944.7	1944.7	1944.7	1944.7	1944.7	1944.7	1944.7	1944.7	1944.7
2.5°	1958.1	1863.4	1701.0	1583.6	1484.4	1407.7	1376.2	1326.4	1290.3	1308.4	1285.8
5°	2012.4	1845.4	1583.6	1416.7	1299.4	1200.1	1119.0	1055.8	1006.1	997.1	988.0
7.5°	2098.0	1859.0	1516.0	1308.4	1132.5	979.1	852.8	758.0	685.8	685.8	658.7
10°	2215.3	1895.0	1475.3	1200.1	938.5	731.0	604.6	514.4	478.3	473.8	464.8
12.5°	2377.8	1962.6	1443.8	1060.3	731.0	532.3	455.7	424.1	410.5	406.0	401.5
15°	2598.8	2061.9	1407.7	888.9	555.0	437.7	406.0	378.9	365.5	360.9	356.4
17.5°	2810.8	2152.2	1331.0	712.9	451.2	397.1	360.9	338.4	320.3	315.8	315.8
20°	3009.4	2228.9	1200.1	555.0	406.0	356.4	320.3	293.2	275.2	270.7	270.7
22.5°	3217.0	2292.0	1037.7	451.2	370.0	315.8	279.7	252.7	234.5	230.1	225.6
25°	3438.1	2337.1	852.8	401.5	333.9	279.7	239.0	216.6	203.0	198.5	194.0
27.5°	3677.2	2355.1	676.8	365.5	293.2	243.6	207.6	185.1	176.0	171.4	171.4
30°	3893.8	2337.1	523.4	324.8	257.2	212.1	180.5	162.5	153.4	148.8	148.8
32.5°	4119.4	2292.0	419.6	288.7	225.6	180.5	153.4	139.9	135.4	130.9	130.9
35°	4358.4	2233.4	360.9	257.2	194.0	157.9	135.4	126.3	121.8	117.3	117.3
37.5°	4638.2	2161.2	329.4	230.1	171.4	139.9	117.3	112.7	108.2	108.2	108.2
40°	4954.1	2071.0	306.9	207.6	153.4	121.8	103.8	99.3	94.7	94.7	94.7
42.5°	5288.0	1967.2	284.3	185.1	135.4	103.8	90.2	90.2	85.7	85.7	81.1
45°	5662.3	1863.4	261.6	162.5	117.3	90.2	76.6	72.3	72.3	67.7	67.7
47.5°	6104.5	1768.7	239.0	144.4	103.8	76.6	67.7	63.2	58.7	54.2	54.2
50°	6727.1	1759.6	212.1	126.3	94.7	63.2	54.2	49.6	45.2	40.7	40.7
52.5°	7345.4	1678.5	180.5	103.8	76.6	54.2	40.7	36.1	31.6	31.6	27.0
55°	7485.1	1543.1	157.9	90.2	58.7	40.7	31.6	22.5	22.5	18.1	18.1
57.5°	7792.0	1479.9	135.4	72.3	45.2	31.6	18.1	13.6	13.6	13.6	13.6
60°	8396.5	1461.8	117.3	63.2	31.6	22.5	13.6	9.1	9.1	4.5	4.5
62.5°	9231.3	1443.8	99.3	54.2	22.5	13.6	9.1	4.5	0.0	0.0	0.0
65°	9691.5	1321.9	81.1	40.7	18.1	13.6	4.5	0.0	0.0	0.0	0.0
67.5°	9569.6	1091.9	72.3	27.0	13.6	9.1	4.5	0.0	0.0	0.0	0.0
69°	9059.9	920.5	58.7	22.5	13.6	9.1	4.5	0.0	0.0	0.0	0.0
70°	8446.3	794.1	54.2	18.1	9.1	4.5	4.5	0.0	0.0	0.0	0.0
72.5°	5996.2	415.0	36.1	13.6	9.1	4.5	0.0	0.0	0.0	0.0	0.0
75°	2801.9	185.1	22.5	9.1	4.5	4.5	0.0	0.0	0.0	0.0	0.0
77.5°	618.2	85.7	13.6	9.1	4.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	117.3	31.6	9.1	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	40.7	13.6	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.6	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.5	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)