

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: P265735

Luminaire Tested: **ARCH-L-AF72-270-D-U-T2R-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265735
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-AF72-270-D-U-T2R-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1155mA 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: 20593.5 lumens
Efficiency: N/A
Efficacy: 75.4 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): 273
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

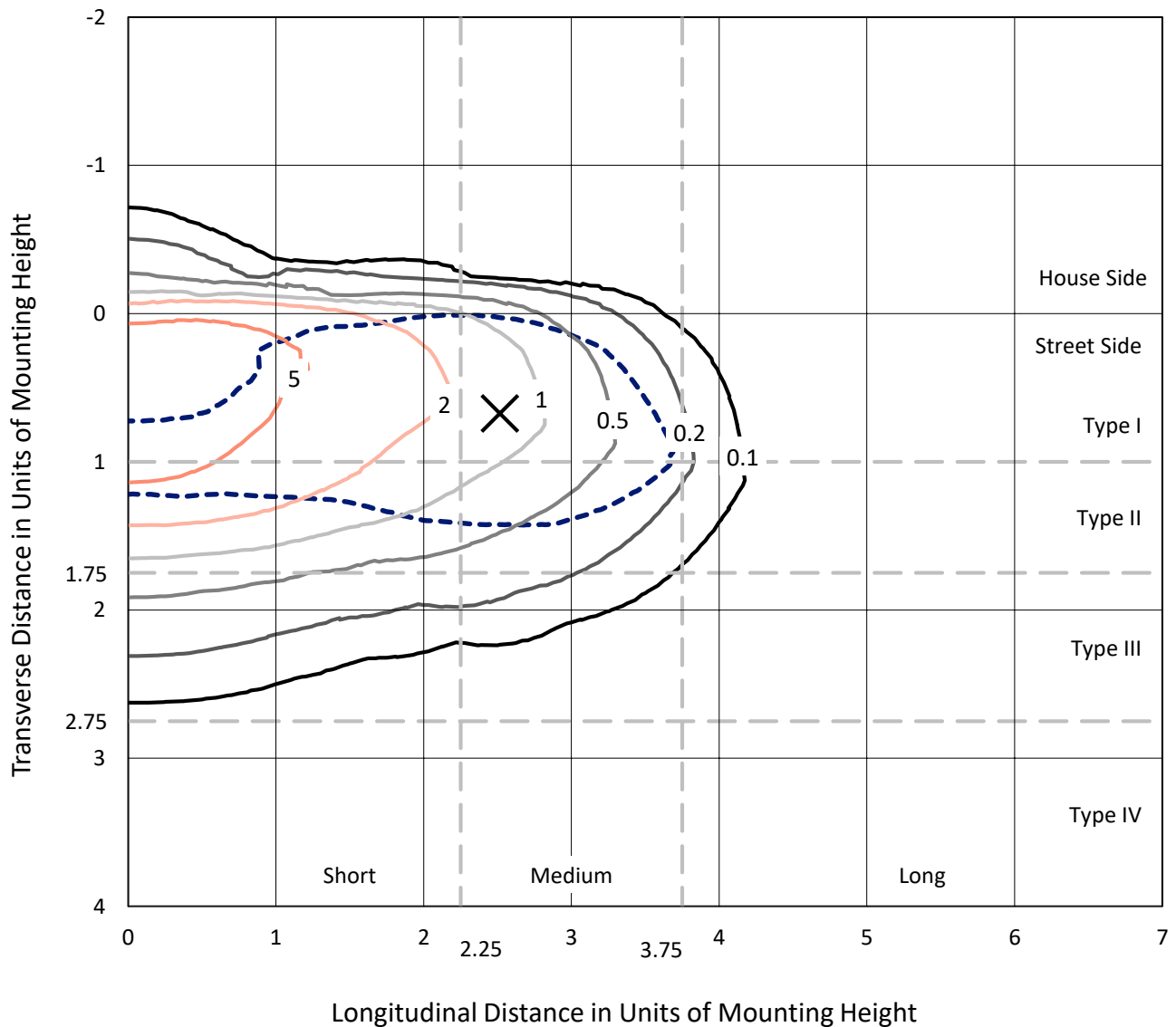


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

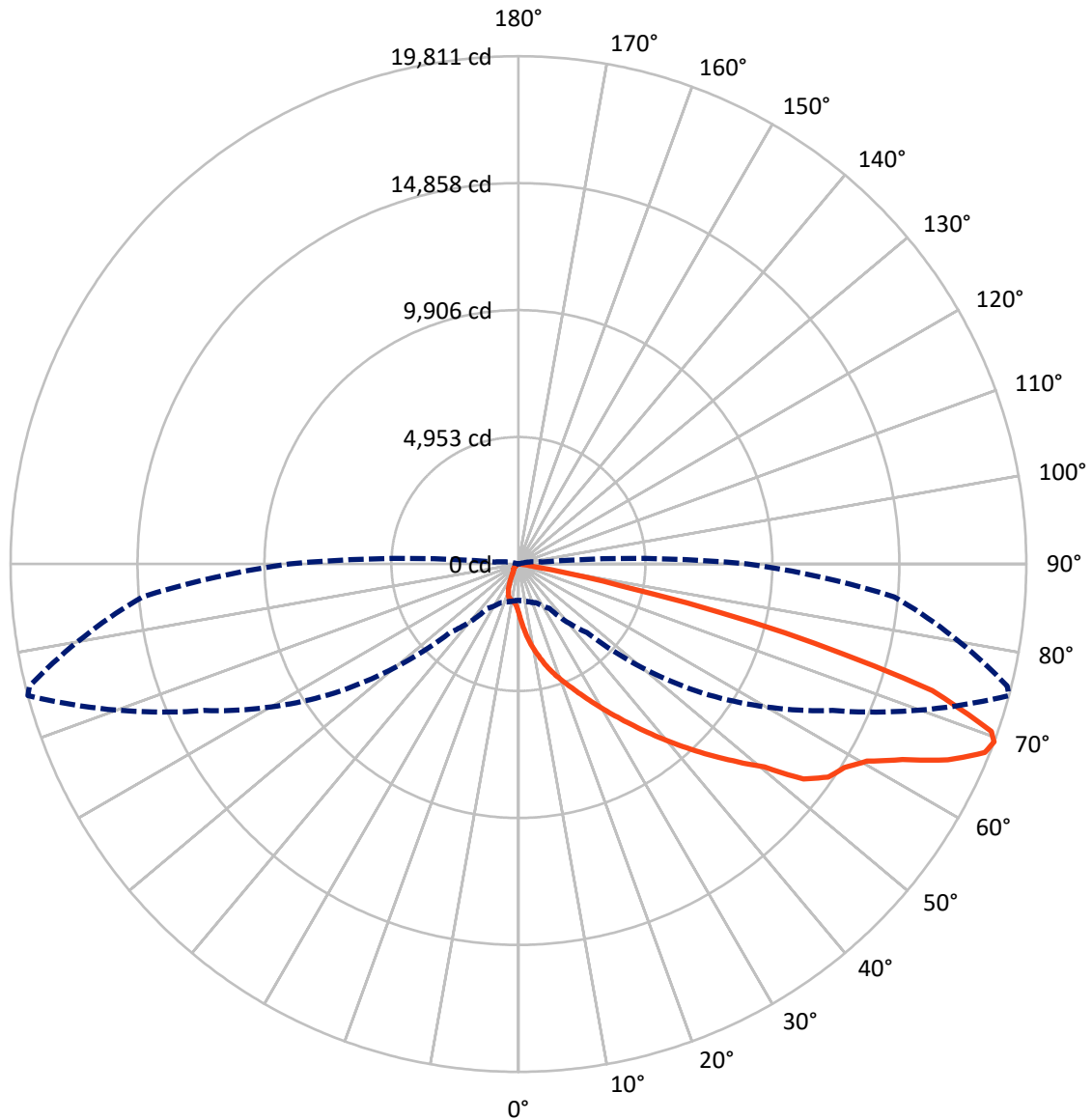


Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



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



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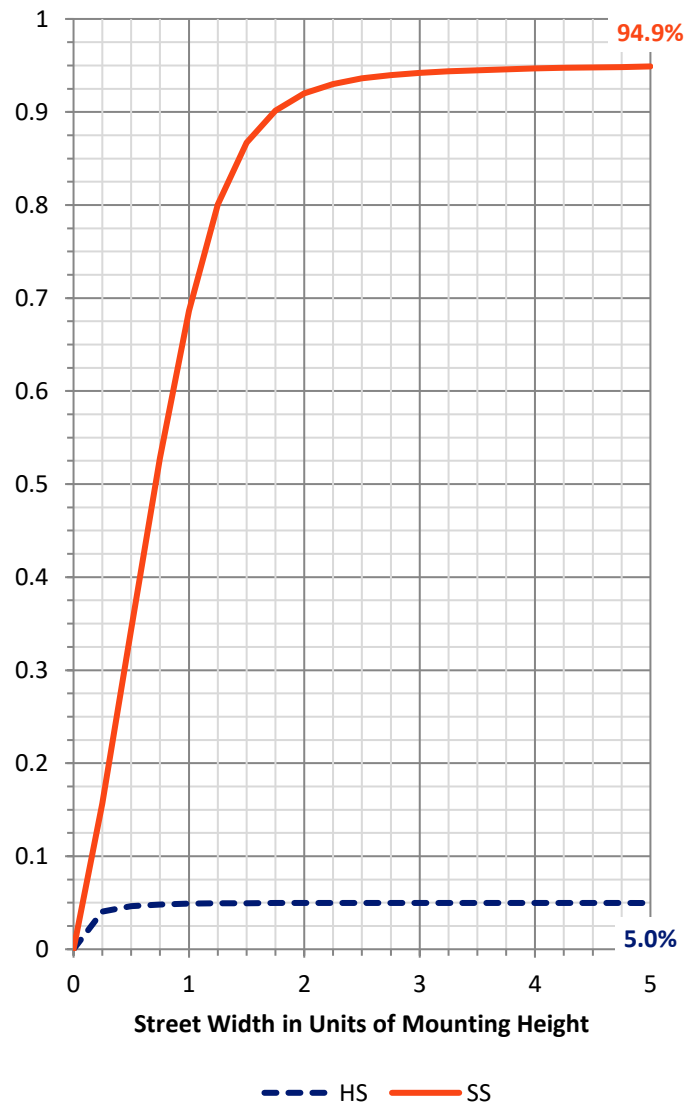
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1027.5	0.0	1027.5
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	19566.0	0.0	19566.0
	% Fixture	95.0	0.0	95.0
Total	Lumens	20593.5	0.0	20593.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.4	1.1
10°-20°	798.8	3.9
20°-30°	1525.0	7.4
30°-40°	2735.6	13.3
40°-50°	4191.1	20.4
50°-60°	4871.1	23.7
60°-70°	4313.4	20.9
70°-80°	1860.5	9.0
80°-90°	74.5	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°	20593.5	100.0
0°-180°	20593.5	100.0

Coefficient of Utilization



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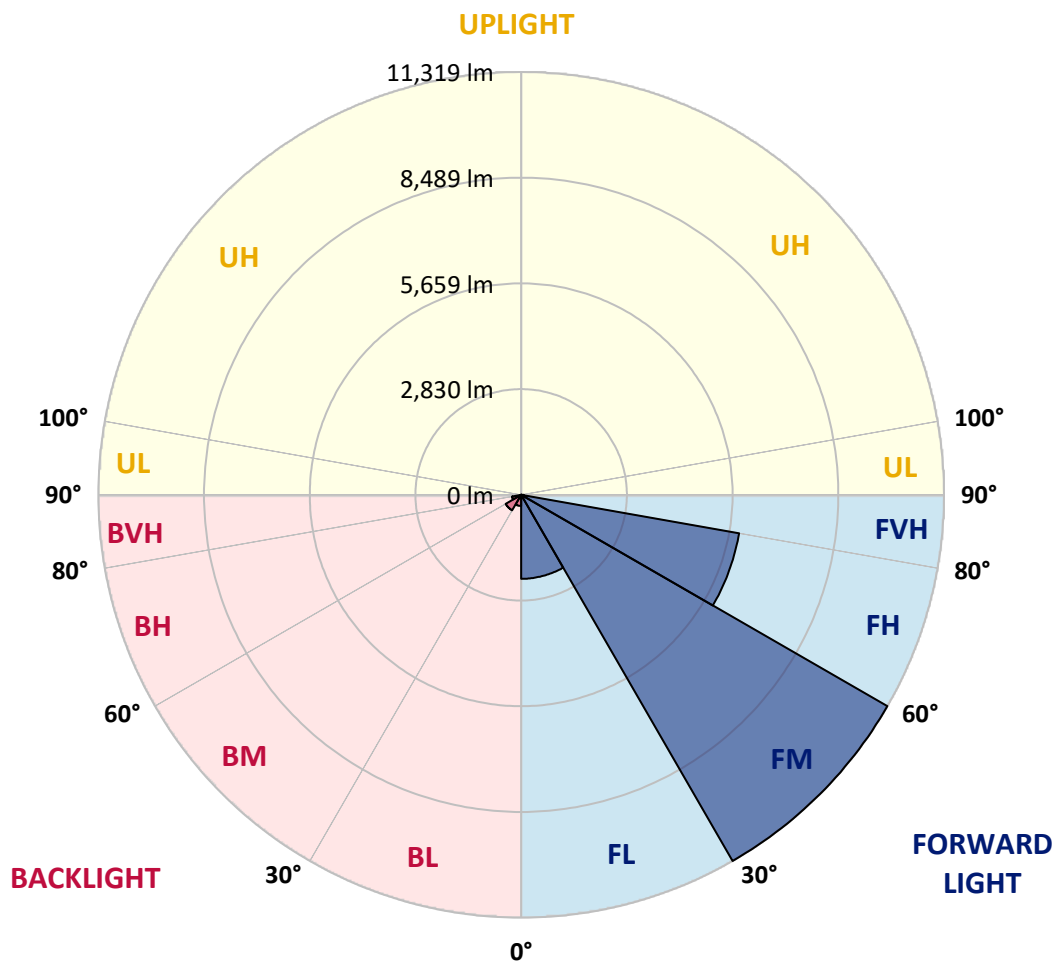
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2248.8	10.9			
FM	(30°-60°)	11318.7	55.0			
FH	(60°-80°)	5925.0	28.8			G3/7500
FVH	(80°-90°)	73.5	0.4			G1/100
BL	(0°-30°)	298.4	1.4	B1/500		
BM	(30°-60°)	479.0	2.3	B1/1000		
BH	(60°-80°)	248.9	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°	1916.3	1916.3	1916.3	1916.3	1916.3	1916.3	1916.3	1916.3	1916.3	1916.3	1916.3
2.5°	3156.6	3125.6	3094.4	3058.8	2978.8	2841.0	2667.5	2480.8	2249.6	2209.7	2023.0
5°	3832.3	3819.1	3788.0	3739.0	3650.2	3499.0	3303.3	3027.6	2640.8	2574.3	2178.5
7.5°	4308.1	4299.3	4272.6	4214.8	4134.8	3983.5	3779.1	3481.2	3032.1	2956.6	2374.1
10°	4735.0	4730.6	4708.2	4654.9	4574.9	4410.4	4192.6	3881.3	3405.7	3321.2	2601.0
12.5°	5121.7	5126.2	5117.4	5090.6	5032.8	4877.3	4628.2	4290.3	3765.8	3672.5	2872.2
15°	5348.5	5361.9	5397.3	5450.7	5468.5	5344.0	5086.3	4712.7	4134.8	4054.7	3183.4
17.5°	5273.0	5286.3	5397.3	5579.7	5753.0	5770.9	5539.7	5112.9	4499.3	4419.3	3490.1
20°	5090.6	5108.4	5224.1	5473.1	5810.9	6046.5	5953.2	5548.7	4846.0	4748.4	3783.5
22.5°	5295.1	5295.1	5330.7	5481.8	5788.7	6157.6	6282.1	5984.2	5201.7	5081.7	4077.0
25°	5997.7	5984.2	5908.7	5846.4	5944.3	6273.3	6531.1	6428.9	5619.6	5481.8	4388.2
27.5°	6886.8	6949.1	6806.7	6580.1	6357.8	6500.0	6753.4	6869.0	6082.1	5939.9	4708.2
30°	7882.6	7909.3	7740.4	7438.1	7046.8	6909.0	7015.8	7246.9	6584.4	6428.9	5041.7
32.5°	8780.8	8758.6	8616.4	8300.6	7816.1	7518.2	7353.6	7549.3	7131.4	6953.5	5384.1
35°	9576.7	9594.3	9421.1	9056.4	8580.7	8265.0	7873.9	7891.6	7744.8	7540.4	5779.8
37.5°	10292.4	10261.2	10096.8	9732.2	9301.1	8958.6	8545.1	8247.2	8416.2	8202.9	6224.4
40°	10874.8	10843.7	10670.3	10314.7	9910.0	9630.0	9305.5	8723.0	9123.1	8878.6	6700.1
42.5°	11337.1	11301.7	11155.0	10812.5	10421.3	10172.3	10016.8	9309.9	9878.9	9634.4	7233.6
45°	11564.1	11532.8	11443.9	11186.1	10843.7	10626.0	10701.5	9985.6	10688.2	10483.6	7820.5
47.5°	11297.3	11283.9	11386.1	11341.7	11146.0	11030.5	11292.8	10723.6	11537.3	11337.1	8496.3
50°	10488.0	10510.3	10808.1	11177.3	11270.6	11408.4	11777.4	11501.7	12448.7	12235.4	9274.3
52.5°	8491.8	8643.0	9541.1	10430.2	11119.4	11639.6	12346.5	12613.2	13933.7	13724.8	10488.0
55°	6340.0	6402.2	7380.4	8900.9	10510.3	11621.7	12768.8	13266.8	14667.3	14453.9	10808.1
57.5°	5028.4	5050.6	5535.3	7086.9	9256.6	11221.6	12991.1	13502.5	14987.3	14809.5	11283.9
60°	3948.1	3974.7	4325.9	5393.0	7491.4	10141.2	12671.0	13706.9	15614.2	15472.0	12115.4
62.5°	3072.2	3098.9	3312.2	3939.2	5619.6	8478.5	12026.4	14035.9	16805.8	16739.0	13475.7
65°	2378.6	2387.4	2534.2	2827.7	3970.2	6677.8	11239.5	14342.7	18415.3	18357.5	14578.4
67.5°	1756.1	1769.5	1871.8	2054.1	2680.9	4797.2	9950.0	14107.1	19629.0	19460.1	14978.5
69°	1418.2	1431.5	1520.6	1667.3	2116.2	3779.1	8771.9	13524.6	19811.2	19651.2	14725.0
70°	1213.8	1222.7	1311.5	1436.0	1805.1	3210.1	7838.3	13022.2	19571.2	19415.5	14147.0
72.5°	778.0	822.5	911.4	991.5	1196.0	2125.2	5290.7	10799.2	16885.8	16619.1	11079.3
75°	431.2	444.7	604.6	702.5	795.8	1382.8	2943.2	6735.6	10741.5	10554.7	5926.5
77.5°	355.6	364.5	426.9	533.6	533.6	773.6	1111.6	2654.2	4085.9	3685.7	1605.0
80°	249.0	257.9	324.6	351.2	382.4	435.7	360.1	582.5	631.2	560.3	240.0
82.5°	173.5	182.3	222.3	289.0	306.9	204.5	133.4	173.5	182.3	182.3	93.3
85°	31.1	44.5	164.5	240.0	182.3	62.3	75.5	62.3	57.9	62.3	22.2
87.5°	0.0	0.0	102.2	115.6	97.8	26.7	31.1	22.2	13.4	17.7	9.0
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°	1916.3	1916.3	1916.3	1916.3	1916.3	1916.3	1916.3	1916.3	1916.3	1916.3	1916.3
2.5°	1929.6	1836.1	1676.1	1560.5	1462.7	1387.2	1356.0	1307.2	1271.6	1289.3	1267.1
5°	1982.9	1818.3	1560.5	1396.1	1280.4	1182.6	1102.6	1040.3	991.5	982.6	973.7
7.5°	2067.4	1831.7	1493.8	1289.3	1116.0	964.8	840.3	746.9	675.7	675.7	649.1
10°	2183.1	1867.2	1453.8	1182.6	924.7	720.3	595.8	506.9	471.3	466.8	458.0
12.5°	2343.0	1934.1	1422.7	1044.8	720.3	524.6	449.1	417.9	404.5	400.1	395.8
15°	2560.9	2031.7	1387.2	875.8	546.9	431.2	400.1	373.4	360.1	355.6	351.2
17.5°	2769.8	2120.7	1311.5	702.5	444.7	391.2	355.6	333.5	315.7	311.3	311.3
20°	2965.5	2196.3	1182.6	546.9	400.1	351.2	315.7	289.0	271.2	266.7	266.7
22.5°	3169.9	2258.6	1022.6	444.7	364.5	311.3	275.7	249.0	231.3	226.7	222.3
25°	3387.8	2303.1	840.3	395.8	329.0	275.7	235.6	213.3	200.1	195.7	191.2
27.5°	3623.5	2320.9	666.9	360.1	289.0	240.0	204.5	182.3	173.5	168.9	168.9
30°	3836.9	2303.1	515.7	320.1	253.4	208.9	177.9	160.1	151.2	146.8	146.8
32.5°	4059.3	2258.6	413.5	284.6	222.3	177.9	151.2	137.8	133.4	128.9	128.9
35°	4294.7	2200.8	355.6	253.4	191.2	155.5	133.4	124.4	120.1	115.6	115.6
37.5°	4570.4	2129.6	324.6	226.7	168.9	137.8	115.6	111.1	106.7	106.7	106.7
40°	4881.7	2040.7	302.3	204.5	151.2	120.1	102.2	97.8	93.3	93.3	93.3
42.5°	5210.7	1938.5	280.1	182.3	133.4	102.2	88.9	88.9	84.5	84.5	79.9
45°	5579.7	1836.1	257.9	160.1	115.6	88.9	75.5	71.1	71.1	66.7	66.7
47.5°	6015.4	1742.8	235.6	142.3	102.2	75.5	66.7	62.3	57.9	53.4	53.4
50°	6629.0	1733.9	208.9	124.4	93.3	62.3	53.4	48.9	44.5	40.1	40.1
52.5°	7238.1	1653.9	177.9	102.2	75.5	53.4	40.1	35.6	31.1	31.1	26.7
55°	7375.9	1520.6	155.5	88.9	57.9	40.1	31.1	22.2	22.2	17.7	17.7
57.5°	7678.3	1458.3	133.4	71.1	44.5	31.1	17.7	13.4	13.4	13.4	13.4
60°	8274.0	1440.5	115.6	62.3	31.1	22.2	13.4	9.0	9.0	4.4	4.4
62.5°	9096.4	1422.7	97.8	53.4	22.2	13.4	9.0	4.4	0.0	0.0	0.0
65°	9549.9	1302.6	79.9	40.1	17.7	13.4	4.4	0.0	0.0	0.0	0.0
67.5°	9429.9	1075.9	71.1	26.7	13.4	9.0	4.4	0.0	0.0	0.0	0.0
69°	8927.4	907.0	57.9	22.2	13.4	9.0	4.4	0.0	0.0	0.0	0.0
70°	8322.8	782.6	53.4	17.7	9.0	4.4	4.4	0.0	0.0	0.0	0.0
72.5°	5908.7	409.0	35.6	13.4	9.0	4.4	0.0	0.0	0.0	0.0	0.0
75°	2760.9	182.3	22.2	9.0	4.4	4.4	0.0	0.0	0.0	0.0	0.0
77.5°	609.1	84.5	13.4	9.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0
80°	115.6	31.1	9.0	4.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	40.1	13.4	4.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.4	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)