

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: McGRAW-EDISON

Report Number: 769004_400MP

Luminaire Tested: **GSM-XX-400-MP-XX-FT-FG-XX-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: 769004_400MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GSM-XX-400-MP-XX-FT-FG-XX-X
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-HORIZONTAL LAMP-FORWARD THROW DISTRIBUTION
Light Source: 400 WATT PULSE-START CLEAR ED-37 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 40000 (1 lamp)
Luminaire Lumens: 17310.4 lumens
Efficiency: 43.3%
Efficacy: 38.3 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

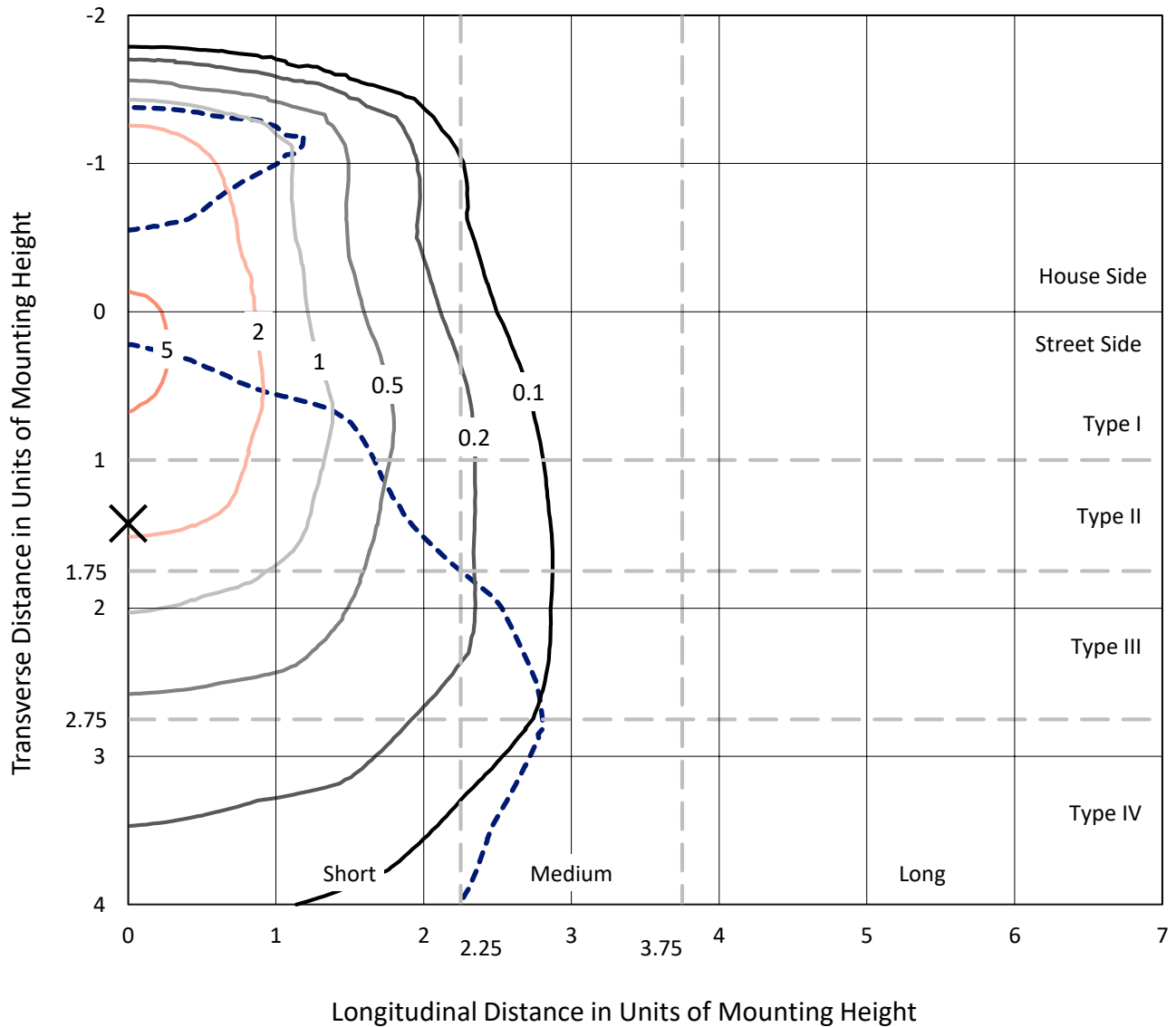
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

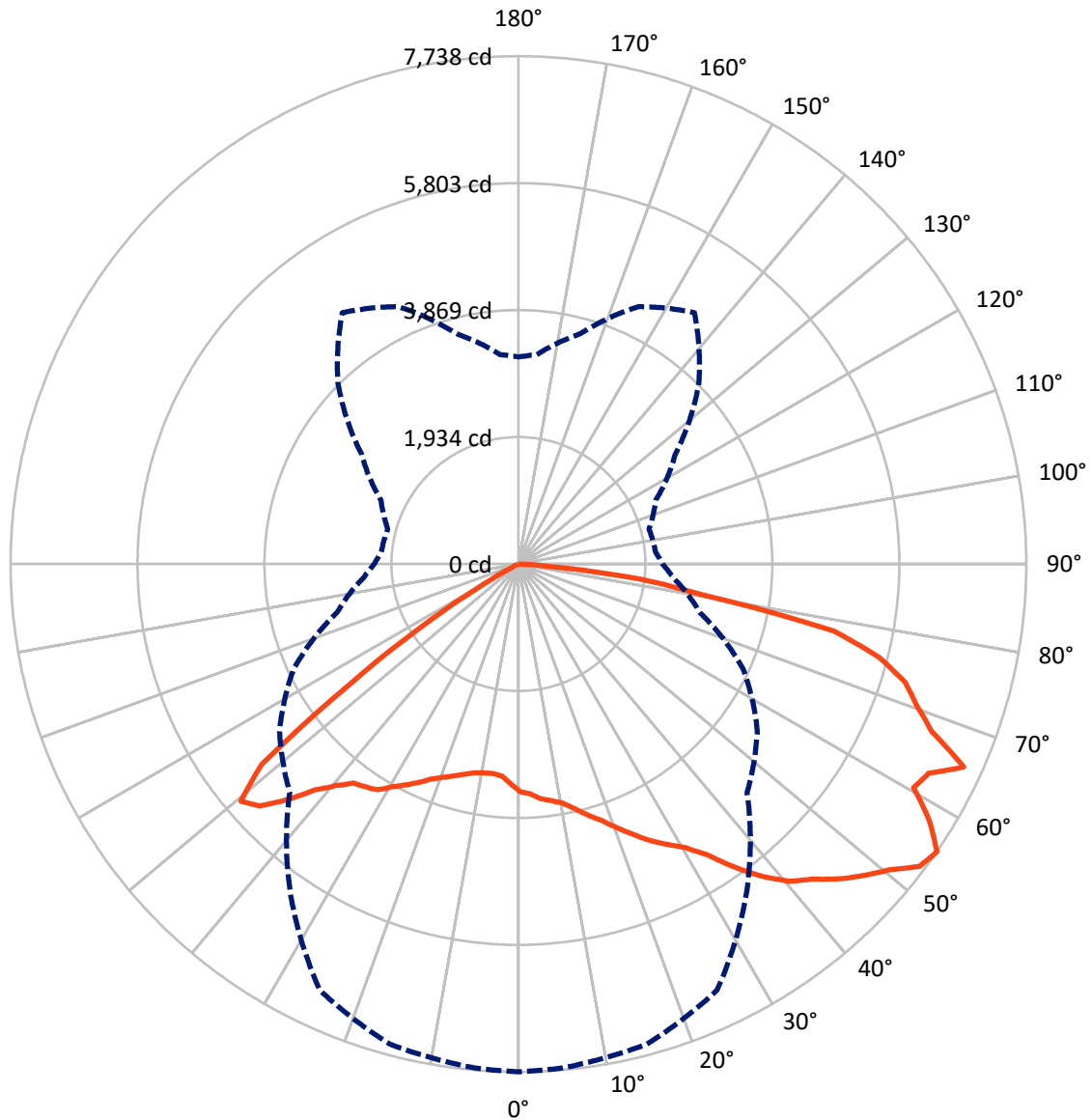
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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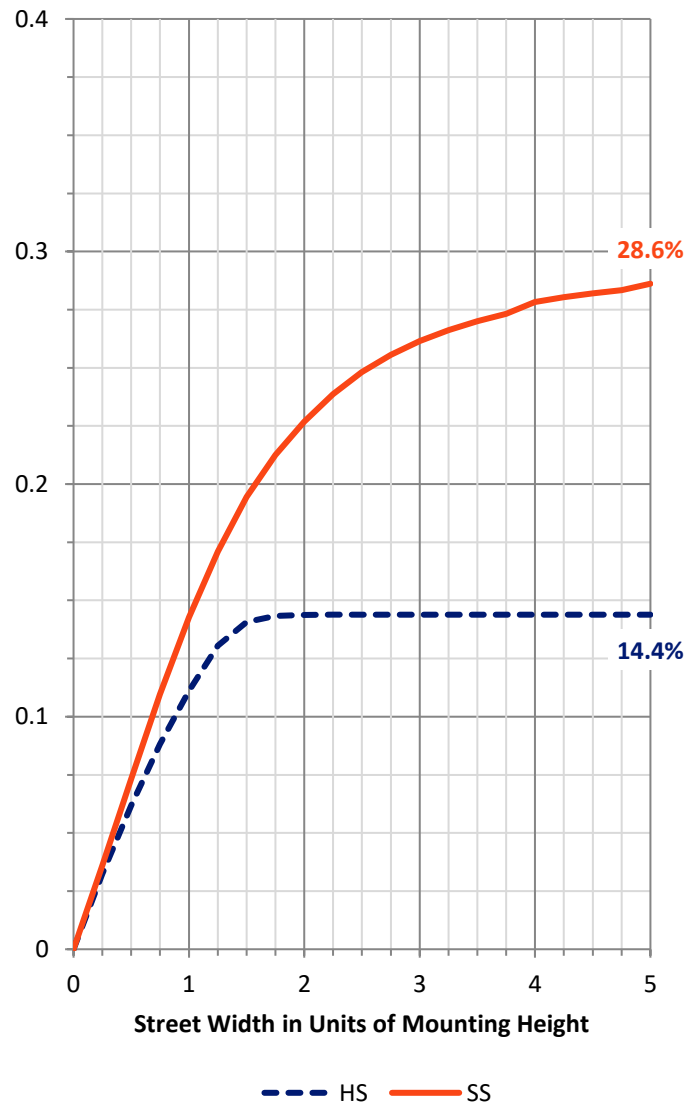
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5783.2	0.0	5783.2
	% Lamp	14.5	0.0	14.5
Street Side	Lumens	11527.2	0.0	11527.2
	% Lamp	28.8	0.0	28.8
Total	Lumens	17310.4	0.0	17310.4
	% Lamp	43.3	0.0	43.3

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	328.5	1.9	0.8
10°-20°	982.5	5.7	2.5
20°-30°	1669.0	9.6	4.2
30°-40°	2445.2	14.1	6.1
40°-50°	3286.4	19.0	8.2
50°-60°	3688.0	21.3	9.2
60°-70°	2895.3	16.7	7.2
70°-80°	1777.2	10.3	4.4
80°-90°	238.3	1.4	0.6
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	17310.4	100.0	43.3
0°-180°	17310.4	100.0	43.3



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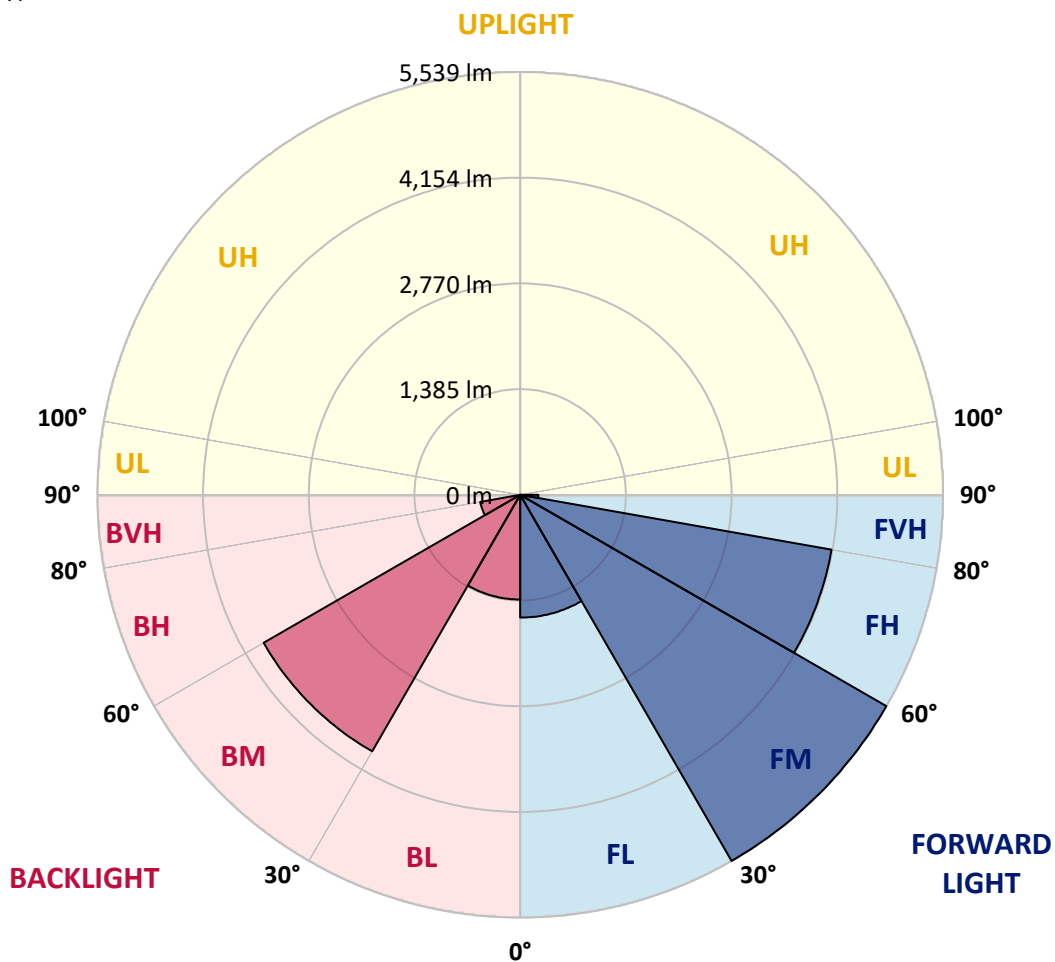
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1608.5	4.0			
FM	(30°-60°)	5539.3	13.8			
FH	(60°-80°)	4141.5	10.4			G2/5000
FVH	(80°-90°)	237.8	0.6			G3/500
BL	(0°-30°)	1371.5	3.4	B3/2500		
BM	(30°-60°)	3880.2	9.7	B3/5000		
BH	(60°-80°)	531.0	1.3	B2/1000		G2/1000
BVH	(80°-90°)	0.5	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		22689.6	56.7			

BUG Rating: B3-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3471.1	3471.1	3471.1	3471.1	3471.1	3471.1	3471.1	3471.1	3471.1	3471.1	3471.1
2.5°	3507.8	3507.8	3514.4	3520.0	3538.9	3538.9	3507.8	3495.6	3483.3	3483.3	3490.0
5°	3593.3	3581.1	3581.1	3587.8	3600.0	3593.3	3551.1	3520.0	3495.6	3471.1	3477.8
7.5°	3642.2	3624.4	3624.4	3636.7	3642.2	3617.8	3563.3	3538.9	3495.6	3458.9	3453.3
10°	3703.3	3710.0	3697.8	3678.9	3654.4	3624.4	3575.6	3538.9	3495.6	3446.7	3428.9
12.5°	3825.6	3813.3	3795.6	3752.2	3703.3	3636.7	3568.9	3514.4	3471.1	3416.7	3385.6
15°	3972.2	3947.8	3930.0	3850.0	3771.1	3678.9	3581.1	3520.0	3471.1	3397.8	3343.3
17.5°	4106.7	4106.7	4040.0	3947.8	3862.2	3740.0	3593.3	3514.4	3465.6	3367.8	3306.7
20°	4290.0	4290.0	4198.9	4064.4	3923.3	3795.6	3624.4	3502.2	3434.4	3318.9	3251.1
22.5°	4473.3	4473.3	4370.0	4228.9	4045.6	3844.4	3654.4	3490.0	3410.0	3282.2	3190.0
25°	4668.9	4656.7	4546.7	4394.4	4180.0	3917.8	3678.9	3483.3	3380.0	3238.9	3147.8
27.5°	4841.1	4841.1	4706.7	4546.7	4326.7	4033.3	3703.3	3495.6	3343.3	3196.7	3098.9
30°	5012.2	5005.6	4871.1	4687.8	4461.1	4137.8	3758.9	3514.4	3318.9	3165.6	3062.2
32.5°	5281.1	5274.4	5097.8	4871.1	4590.0	4260.0	3820.0	3507.8	3282.2	3141.1	3025.6
35°	5672.2	5635.6	5452.2	5176.7	4755.6	4345.6	3862.2	3490.0	3238.9	3111.1	2988.9
37.5°	6038.9	6014.4	5848.9	5580.0	4993.3	4418.9	3930.0	3458.9	3190.0	3050.0	2945.6
40°	6356.7	6325.6	6124.4	5916.7	5311.1	4492.2	3978.9	3458.9	3141.1	2988.9	2896.7
42.5°	6564.4	6527.8	6337.8	6112.2	5543.3	4553.3	3991.1	3483.3	3098.9	2915.6	2798.9
45°	6845.6	6808.9	6618.9	6301.1	5580.0	4590.0	4045.6	3544.4	3080.0	2823.3	2732.2
47.5°	7090.0	7058.9	6882.2	6515.6	5513.3	4590.0	4113.3	3575.6	2994.4	2688.9	2578.9
50°	7322.2	7291.1	7077.8	6680.0	5562.2	4638.9	4253.3	3630.0	2921.1	2554.4	2438.9
52.5°	7652.2	7596.7	7334.4	6863.3	5721.1	4724.4	4400.0	3697.8	2878.9	2456.7	2310.0
55°	7737.8	7706.7	7572.2	7163.3	6068.9	4926.7	4443.3	3776.7	2860.0	2365.6	2194.4
57.5°	7383.3	7346.7	7346.7	7327.8	6631.1	5152.2	4431.1	3844.4	2884.4	2297.8	2102.2
60°	6918.9	6857.8	6821.1	7095.6	6973.3	5286.7	4314.4	3746.7	2830.0	2187.8	1962.2
62.5°	7016.7	6943.3	6680.0	6863.3	6772.2	5293.3	4137.8	3507.8	2688.9	2011.1	1778.9
65°	7456.7	7388.9	7248.9	7254.4	6313.3	5078.9	3881.1	3160.0	2451.1	1778.9	1564.4
67.5°	6784.4	6741.1	6906.7	7481.1	6313.3	4871.1	3600.0	2835.6	2175.6	1540.0	1295.6
70°	6430.0	6386.7	6405.6	6887.8	6148.9	4858.9	3458.9	2517.8	1833.3	1222.2	977.8
72.5°	6161.1	6051.1	5885.6	6557.8	5647.8	5042.2	3355.6	2200.0	1442.2	806.7	623.3
75°	5672.2	5537.8	5286.7	5628.9	4736.7	4290.0	2737.8	1607.8	801.1	458.9	342.2
77.5°	4914.4	4816.7	4620.0	4363.3	3514.4	3025.6	1937.8	984.4	415.6	275.6	207.8
80°	2823.3	2786.7	2646.7	2280.0	1870.0	1674.4	1087.8	568.9	238.9	146.7	73.3
82.5°	1845.6	1808.9	1735.6	1564.4	1161.1	678.9	354.4	153.3	61.1	24.4	6.7
85°	415.6	378.9	403.3	434.4	195.6	104.4	48.9	0.0	0.0	0.0	0.0
87.5°	0.0	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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3471.1	3471.1	3471.1	3471.1	3471.1	3471.1	3471.1	3471.1	3471.1	3471.1
2.5°	3490.0	3465.6	3453.3	3446.7	3416.7	3392.2	3385.6	3367.8	3355.6	3348.9
5°	3458.9	3434.4	3404.4	3367.8	3331.1	3300.0	3287.8	3257.8	3238.9	3238.9
7.5°	3422.2	3380.0	3336.7	3294.4	3257.8	3233.3	3233.3	3221.1	3208.9	3214.4
10°	3385.6	3324.4	3270.0	3238.9	3221.1	3208.9	3221.1	3226.7	3226.7	3226.7
12.5°	3336.7	3251.1	3202.2	3196.7	3190.0	3208.9	3226.7	3233.3	3245.6	3251.1
15°	3306.7	3208.9	3165.6	3177.8	3190.0	3214.4	3245.6	3294.4	3318.9	3312.2
17.5°	3238.9	3147.8	3116.7	3141.1	3177.8	3238.9	3294.4	3336.7	3373.3	3373.3
20°	3177.8	3080.0	3062.2	3116.7	3190.0	3245.6	3324.4	3397.8	3446.7	3446.7
22.5°	3116.7	3001.1	3013.3	3092.2	3196.7	3282.2	3385.6	3471.1	3538.9	3532.2
25°	3050.0	2940.0	2970.0	3080.0	3196.7	3324.4	3453.3	3575.6	3648.9	3654.4
27.5°	2988.9	2891.1	2940.0	3050.0	3196.7	3367.8	3551.1	3691.1	3771.1	3776.7
30°	2945.6	2847.8	2896.7	3037.8	3208.9	3453.3	3673.3	3820.0	3898.9	3898.9
32.5°	2903.3	2798.9	2872.2	3018.9	3245.6	3556.7	3813.3	3972.2	4052.2	4057.8
35°	2860.0	2781.1	2842.2	3001.1	3306.7	3715.6	3984.4	4101.1	4113.3	4118.9
37.5°	2842.2	2811.1	2830.0	3006.7	3392.2	3881.1	4113.3	4162.2	4174.4	4180.0
40°	2817.8	2872.2	2823.3	3031.1	3471.1	3947.8	4186.7	4296.7	4370.0	4375.6
42.5°	2762.2	2921.1	2811.1	3050.0	3520.0	3960.0	4277.8	4473.3	4626.7	4632.2
45°	2701.1	2891.1	2781.1	3067.8	3538.9	4015.6	4436.7	4748.9	5012.2	5036.7
47.5°	2542.2	2720.0	2688.9	3043.3	3544.4	4125.6	4656.7	5024.4	5354.4	5403.3
50°	2377.8	2487.8	2585.6	2994.4	3612.2	4357.8	4816.7	5213.3	5531.1	5562.2
52.5°	2218.9	2273.3	2468.9	2957.8	3727.8	4614.4	4822.2	4993.3	4975.6	4963.3
55°	2096.7	2060.0	2310.0	2915.6	3886.7	4675.6	4326.7	3630.0	3202.2	3153.3
57.5°	1986.7	1888.9	2194.4	2891.1	4076.7	4076.7	2688.9	1827.8	1791.1	1796.7
60°	1852.2	1698.9	2053.3	2842.2	3881.1	2414.4	1356.7	892.2	703.3	696.7
62.5°	1650.0	1503.3	1931.1	2732.2	2744.4	977.8	574.4	238.9	146.7	134.4
65°	1412.2	1283.3	1766.7	2304.4	953.3	330.0	80.0	48.9	31.1	36.7
67.5°	1143.3	1026.7	1351.1	1155.6	251.1	24.4	0.0	0.0	0.0	0.0
70°	813.3	617.8	764.4	281.1	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	446.7	281.1	232.2	36.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	232.2	85.6	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	134.4	24.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	48.9	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	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

(END OF REPORT)