

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: P299672

Luminaire Tested: **GLNA-AF-07-LED-E1-5MQ-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299672  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-07-LED-E1-5MQ-7030-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 34445.2 lumens  
Efficiency: N/A  
Efficacy: 116.8 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G4

Input Watts (W): 295  
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

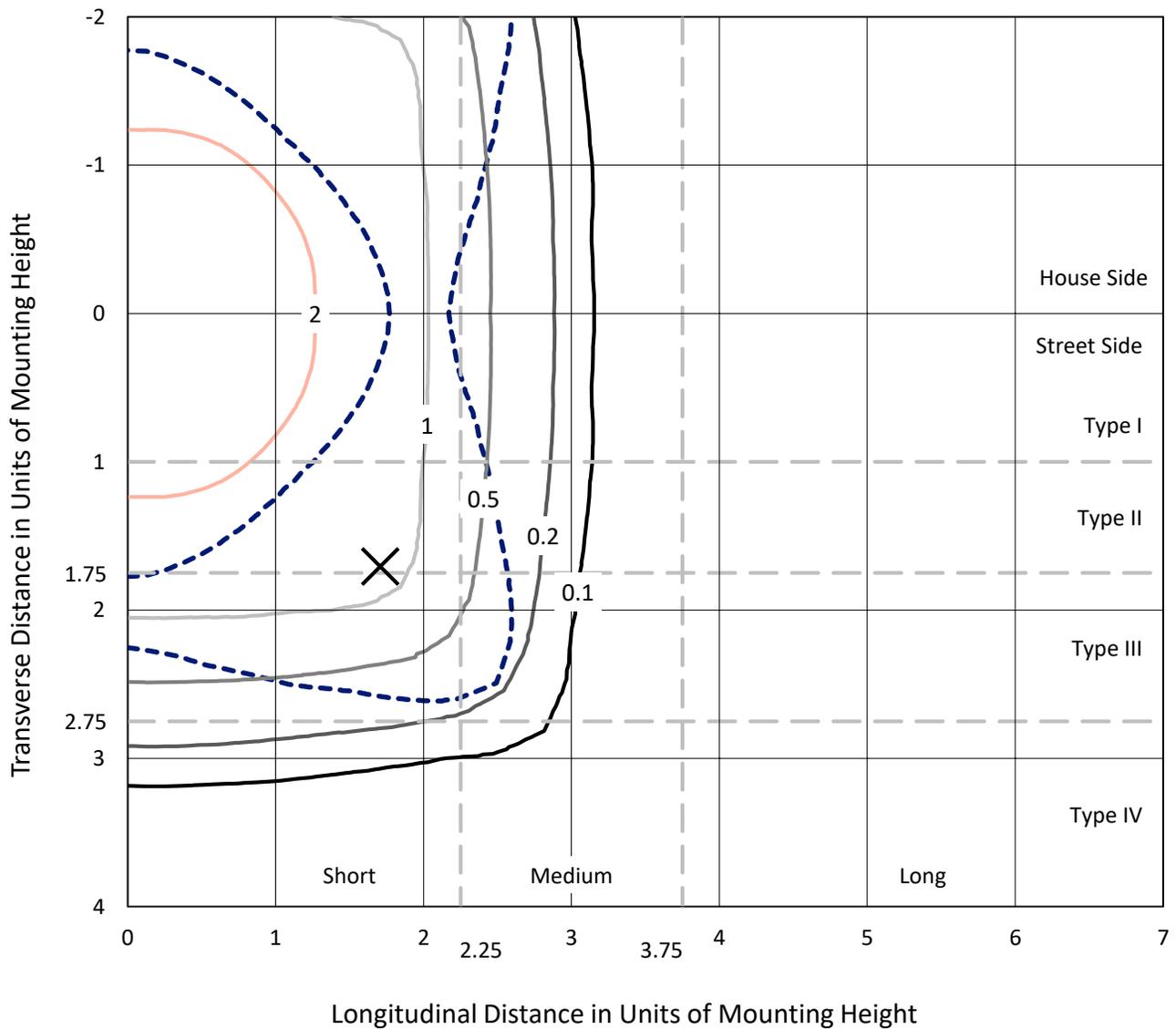


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

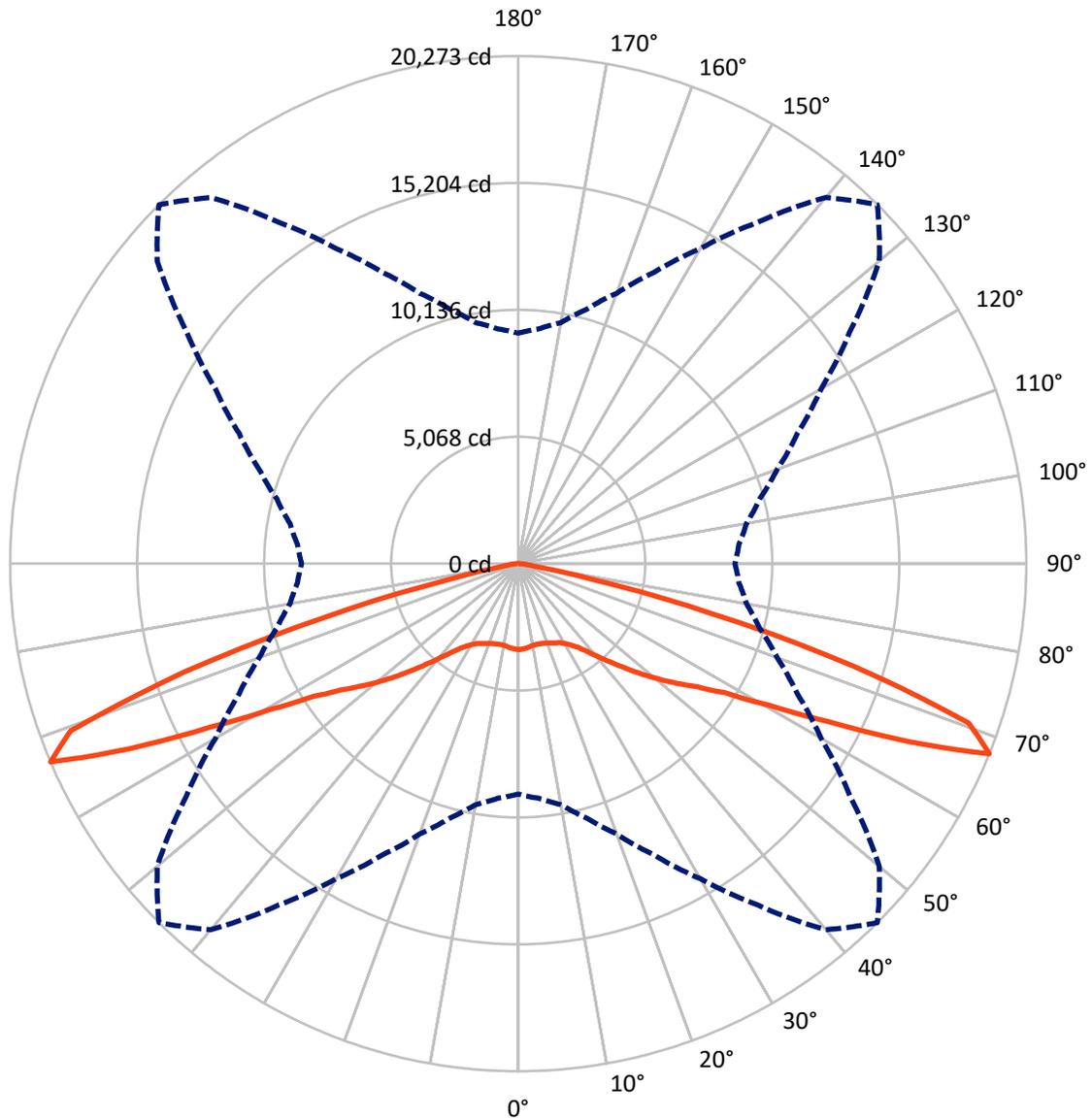


Based on 30 foot mounting height. Maximum calculated value = 3.8 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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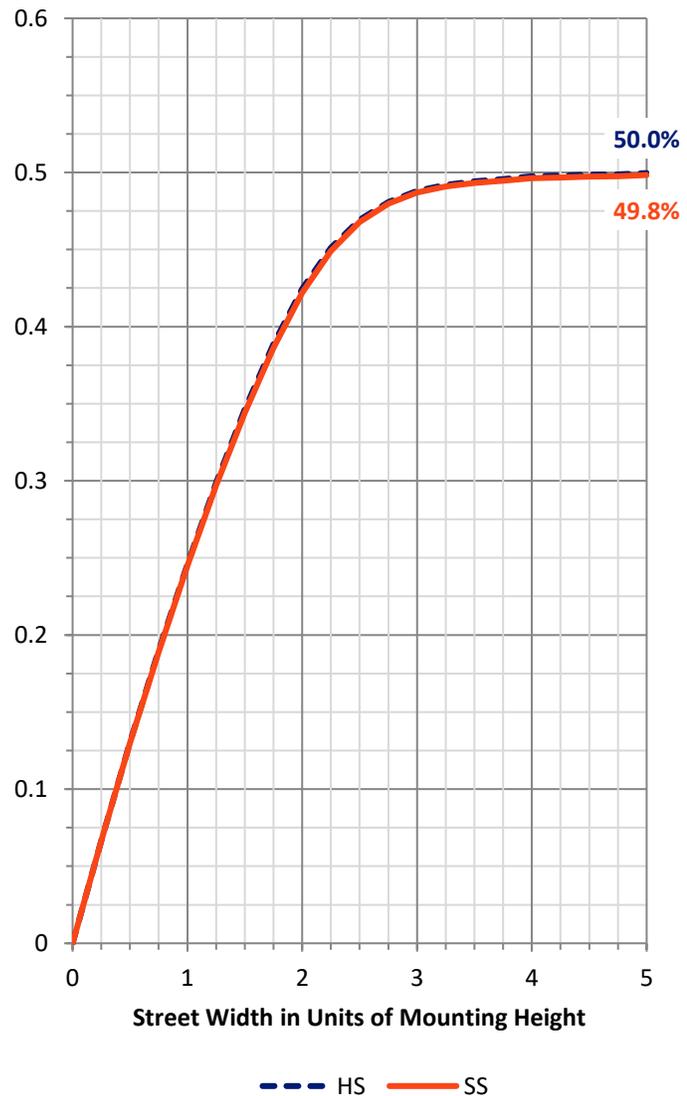
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	17222.6	0.0	17222.6
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	17222.6	0.0	17222.6
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	34445.2	0.0	34445.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	321.3	0.9
10°-20°	932.3	2.7
20°-30°	1584.9	4.6
30°-40°	2590.8	7.5
40°-50°	4625.0	13.4
50°-60°	7797.8	22.6
60°-70°	12101.1	35.1
70°-80°	4251.8	12.3
80°-90°	240.3	0.7
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°	34445.2	100.0
0°-180°	34445.2	100.0



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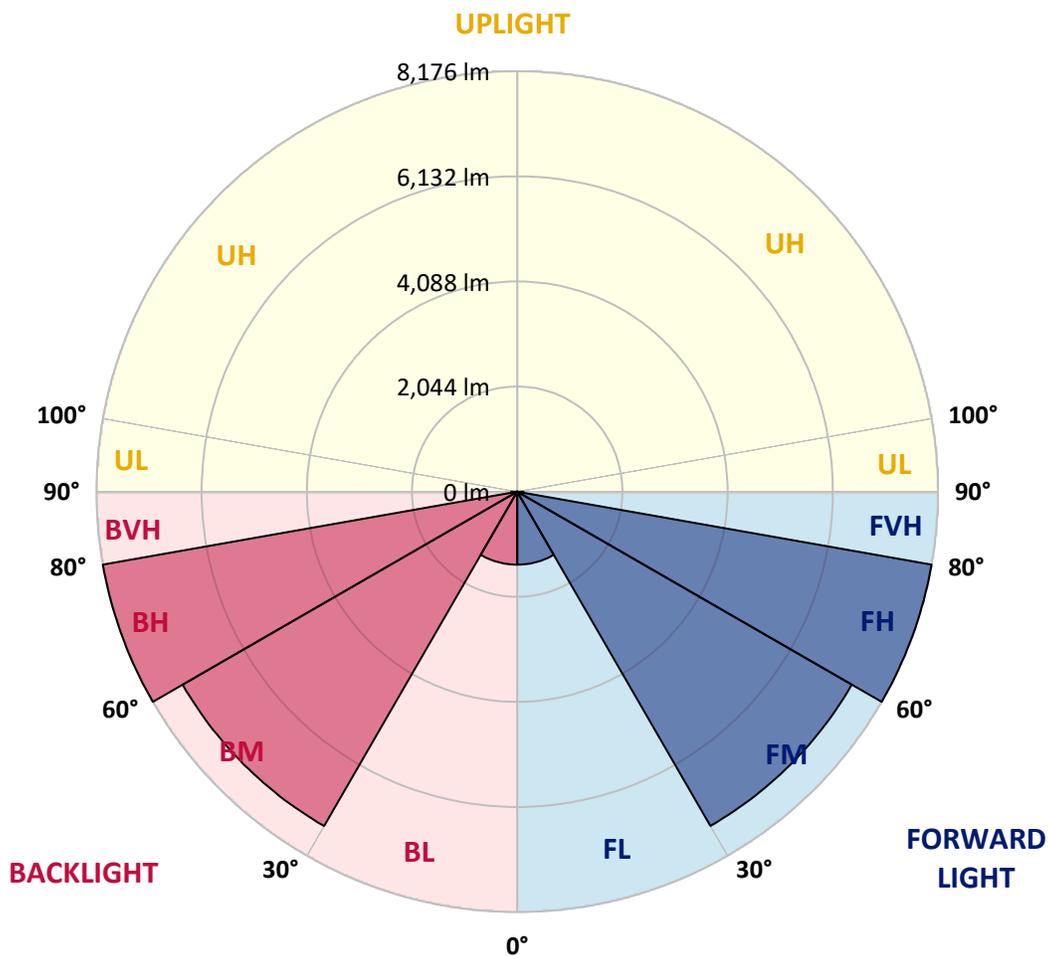
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1419.2	4.1			
FM	(30°-60°)	7506.8	21.8			
FH	(60°-80°)	8176.4	23.7			G4/12000
FVH	(80°-90°)	120.1	0.3			G2/225
BL	(0°-30°)	1419.2	4.1	B3/2500		
BM	(30°-60°)	7506.8	21.8	B4/8500		
BH	(60°-80°)	8176.4	23.7	B5		G4/12000
BVH	(80°-90°)	120.1	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G4**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3432.6	3432.6	3432.6	3432.6	3432.6	3432.6	3432.6	3432.6	3432.6	3432.6	3432.6
2.5°	3419.9	3423.1	3423.1	3423.1	3421.5	3421.5	3418.4	3421.5	3419.9	3415.2	3416.8
5°	3391.4	3394.6	3394.6	3393.0	3397.8	3396.2	3391.4	3394.6	3393.0	3389.8	3391.4
7.5°	3350.2	3355.0	3355.0	3353.4	3358.2	3356.6	3353.4	3355.0	3355.0	3350.2	3350.2
10°	3304.3	3307.5	3307.5	3305.9	3313.8	3313.8	3312.2	3317.0	3318.6	3313.8	3310.6
12.5°	3261.5	3266.3	3266.3	3272.6	3280.5	3283.7	3291.6	3298.0	3304.3	3302.7	3296.4
15°	3236.2	3239.4	3245.7	3253.6	3266.3	3277.4	3290.0	3304.3	3317.0	3320.1	3310.6
17.5°	3220.3	3225.1	3234.6	3245.7	3263.1	3282.1	3301.1	3320.1	3337.6	3343.9	3332.8
20°	3215.6	3218.8	3228.3	3247.3	3271.0	3299.5	3326.5	3348.7	3372.4	3380.3	3372.4
22.5°	3225.1	3231.4	3242.5	3264.7	3296.4	3332.8	3364.5	3394.6	3424.7	3438.9	3427.9
25°	3267.9	3274.2	3288.5	3317.0	3351.8	3389.8	3426.3	3461.1	3488.0	3502.3	3494.4
27.5°	3347.1	3355.0	3372.4	3400.9	3438.9	3480.1	3519.7	3548.2	3570.4	3575.2	3565.7
30°	3465.9	3483.3	3503.9	3535.6	3579.9	3614.8	3654.4	3679.7	3706.6	3706.6	3698.7
32.5°	3651.2	3668.6	3690.8	3720.9	3755.8	3793.8	3828.6	3850.8	3879.3	3880.9	3861.9
35°	3928.4	3936.3	3955.3	3974.3	4006.0	4039.3	4069.4	4083.6	4107.4	4109.0	4091.6
37.5°	4294.3	4295.9	4308.6	4314.9	4343.4	4379.9	4408.4	4417.9	4440.1	4436.9	4419.5
40°	4720.4	4728.3	4733.1	4742.6	4772.7	4807.6	4837.6	4842.4	4866.2	4861.4	4839.2
42.5°	5213.1	5216.2	5243.2	5257.4	5285.9	5303.4	5341.4	5346.1	5374.6	5362.0	5336.6
45°	5765.9	5794.4	5819.8	5848.3	5878.4	5899.0	5929.0	5922.7	5941.7	5922.7	5908.5
47.5°	6347.2	6367.8	6424.9	6469.2	6518.3	6535.7	6578.5	6559.5	6578.5	6551.6	6546.8
50°	6987.2	7023.6	7072.7	7123.4	7175.7	7204.2	7259.6	7235.9	7261.2	7235.9	7221.6
52.5°	7617.6	7627.1	7734.9	7809.3	7882.2	7915.4	7948.7	7937.6	7939.2	7937.6	7923.4
55°	8216.4	8238.6	8346.3	8447.7	8574.4	8667.8	8724.9	8718.5	8704.3	8690.0	8666.3
57.5°	8891.2	8913.4	9036.9	9162.1	9306.2	9439.3	9554.9	9673.7	9719.6	9732.3	9680.0
60°	9803.6	9802.0	9966.8	10118.8	10324.8	10522.8	10776.2	11034.4	11330.6	11468.4	11286.3
62.5°	10731.8	10769.9	11007.5	11276.8	11701.3	12114.7	12582.0	13041.4	13510.2	13892.0	13486.5
65°	10621.0	10766.7	11119.9	11729.8	12513.9	13445.3	14452.7	15518.8	16481.9	17144.0	16401.1
67.5°	9204.8	9412.3	9771.9	10513.3	11493.8	12837.0	14528.8	16637.1	19087.6	20272.5	18804.1
70°	6672.0	6906.4	7283.4	8007.3	8978.3	10255.1	12092.5	14623.8	17867.9	19062.3	17445.0
72.5°	3320.1	3446.9	3679.7	4140.7	4875.7	5911.6	7578.0	10011.1	12881.4	13977.5	12499.6
75°	1127.8	1186.4	1226.0	1376.5	1609.4	2016.5	2844.9	4376.7	6676.7	8004.1	6581.7
77.5°	651.0	652.6	679.6	706.5	746.1	790.4	901.3	1183.3	2046.6	2906.7	2117.9
80°	421.4	419.8	441.9	462.5	489.5	511.6	518.0	548.1	632.0	749.2	670.0
82.5°	218.6	245.5	294.6	321.6	372.2	381.8	369.1	358.0	378.6	392.8	402.3
85°	120.4	104.5	156.8	202.8	224.9	228.1	228.1	215.4	223.3	218.6	237.6
87.5°	55.4	50.7	61.8	99.8	106.1	90.3	95.0	84.0	60.2	58.6	66.5
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3432.6	3432.6	3432.6	3432.6	3432.6	3432.6	3432.6	3432.6
2.5°	3416.8	3418.4	3418.4	3423.1	3424.7	3427.9	3431.0	3432.6
5°	3389.8	3394.6	3391.4	3396.2	3396.2	3399.3	3399.3	3400.9
7.5°	3350.2	3355.0	3355.0	3355.0	3353.4	3358.2	3358.2	3358.2
10°	3309.1	3312.2	3310.6	3307.5	3304.3	3309.1	3307.5	3305.9
12.5°	3296.4	3288.5	3282.1	3279.0	3272.6	3274.2	3269.5	3269.5
15°	3304.3	3290.0	3279.0	3274.2	3267.9	3264.7	3261.5	3263.1
17.5°	3324.9	3307.5	3293.2	3285.3	3277.4	3272.6	3266.3	3267.9
20°	3361.3	3340.7	3320.1	3304.3	3290.0	3282.1	3277.4	3275.8
22.5°	3415.2	3385.1	3355.0	3331.2	3312.2	3301.1	3296.4	3293.2
25°	3477.0	3443.7	3408.8	3381.9	3362.9	3348.7	3339.1	3339.1
27.5°	3554.6	3527.6	3496.0	3464.3	3446.9	3432.6	3426.3	3423.1
30°	3684.5	3659.1	3633.8	3603.7	3581.5	3567.3	3556.2	3546.7
32.5°	3850.8	3830.2	3809.6	3787.4	3766.8	3747.8	3730.4	3722.5
35°	4085.2	4069.4	4055.1	4029.8	4021.9	4010.8	4001.3	3993.4
37.5°	4408.4	4402.0	4402.0	4375.1	4368.8	4364.0	4354.5	4356.1
40°	4832.9	4839.2	4831.3	4821.8	4817.1	4804.4	4804.4	4815.5
42.5°	5335.0	5339.8	5357.2	5341.4	5358.8	5343.0	5333.5	5341.4
45°	5918.0	5935.4	5970.2	5954.4	5965.5	5938.6	5905.3	5906.9
47.5°	6572.2	6588.0	6602.3	6591.2	6592.8	6548.4	6504.1	6493.0
50°	7251.7	7258.1	7266.0	7250.1	7253.3	7204.2	7153.5	7155.1
52.5°	7923.4	7953.4	7985.1	7942.4	7932.9	7877.4	7806.1	7777.6
55°	8691.6	8734.4	8697.9	8623.5	8549.0	8474.6	8381.1	8365.3
57.5°	9638.9	9566.0	9451.9	9311.0	9208.0	9103.5	9008.4	8968.8
60°	10956.8	10682.7	10476.8	10267.7	10136.2	10007.9	9882.8	9863.8
62.5°	12819.6	12346.0	11935.7	11503.3	11150.0	10874.4	10654.2	10592.5
65°	15154.5	14034.6	13063.5	12157.5	11370.2	10776.2	10402.4	10237.6
67.5°	16158.8	13947.4	12282.6	10996.4	9966.8	9247.6	8843.7	8642.5
70°	14199.3	11566.6	9756.1	8468.3	7530.5	6763.8	6397.9	6182.5
72.5°	9768.8	7357.8	5818.2	4748.9	3999.7	3358.2	3104.7	3085.7
75°	4386.2	2905.1	2002.2	1542.9	1298.9	1129.4	1077.1	1037.5
77.5°	1227.6	907.7	809.4	757.2	706.5	647.9	625.7	630.4
80°	597.2	563.9	541.7	508.5	462.5	413.4	391.3	400.8
82.5°	396.0	391.3	405.5	381.8	315.2	267.7	224.9	205.9
85°	240.8	243.9	248.7	250.3	212.3	148.9	101.4	114.1
87.5°	95.0	109.3	118.8	123.6	115.6	71.3	57.0	58.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)