

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: P299378

Luminaire Tested: **GLNA-AF-08-LED-E1-5NQ-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299378  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-08-LED-E1-5NQ-7030  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 47434.5 lumens  
Efficiency: N/A  
Efficacy: 106.6 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G3

Input Watts (W): 445  
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

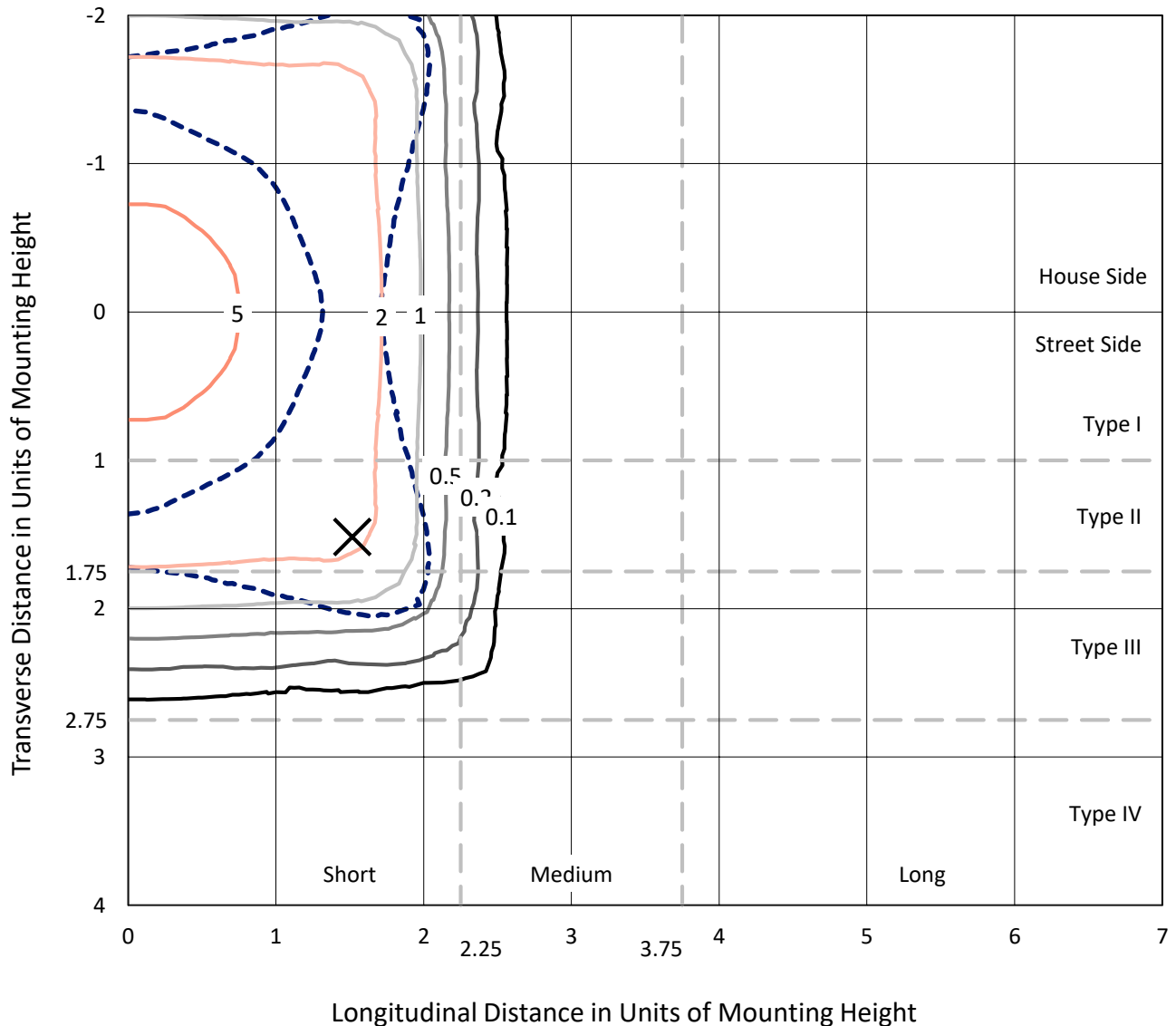


REPORT NUMBER: P299378

CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7030

### Iso-Footcandle Lines of Horizontal Illumination

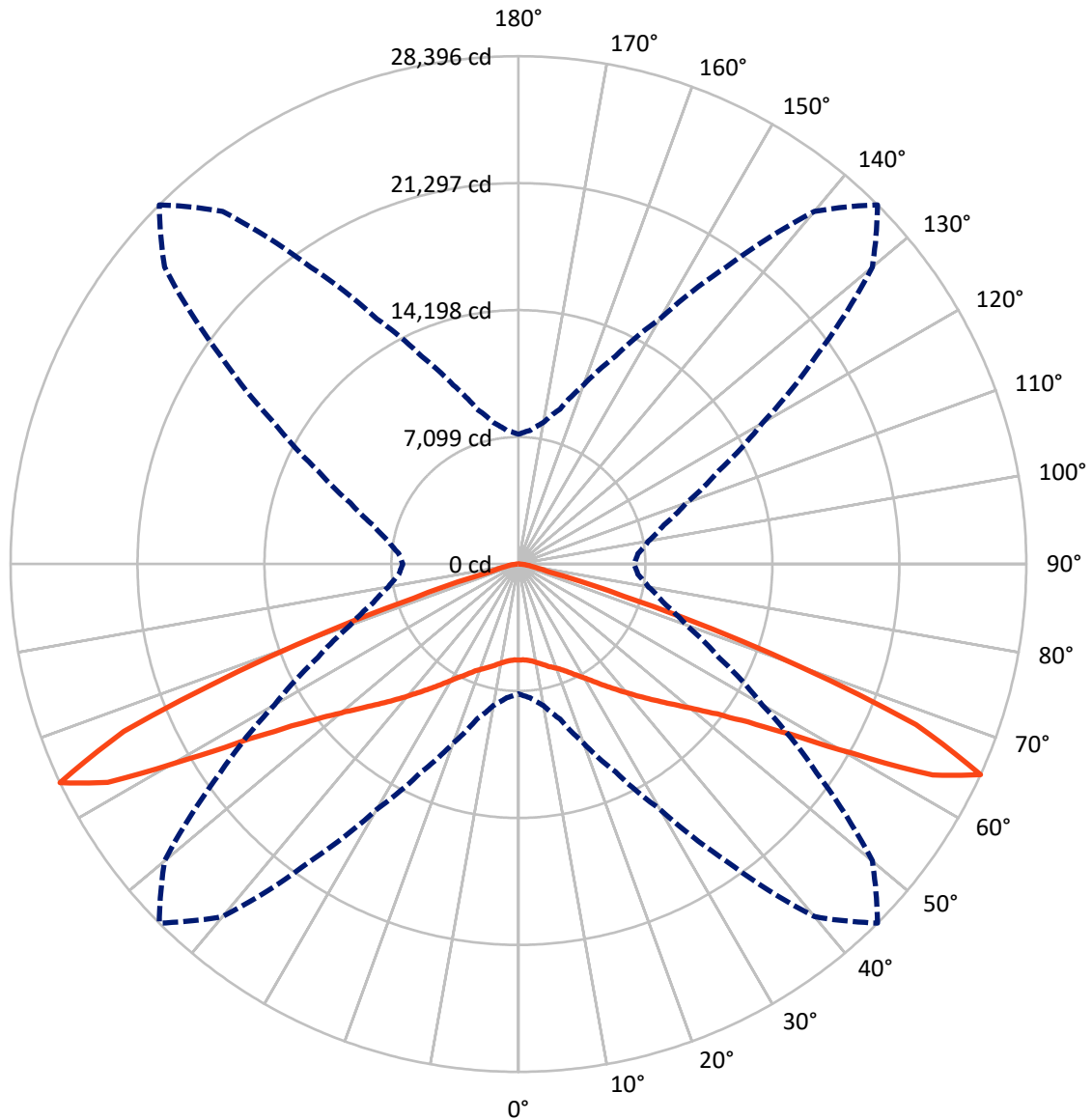
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: P299378  
CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7030

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P299378

CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7030

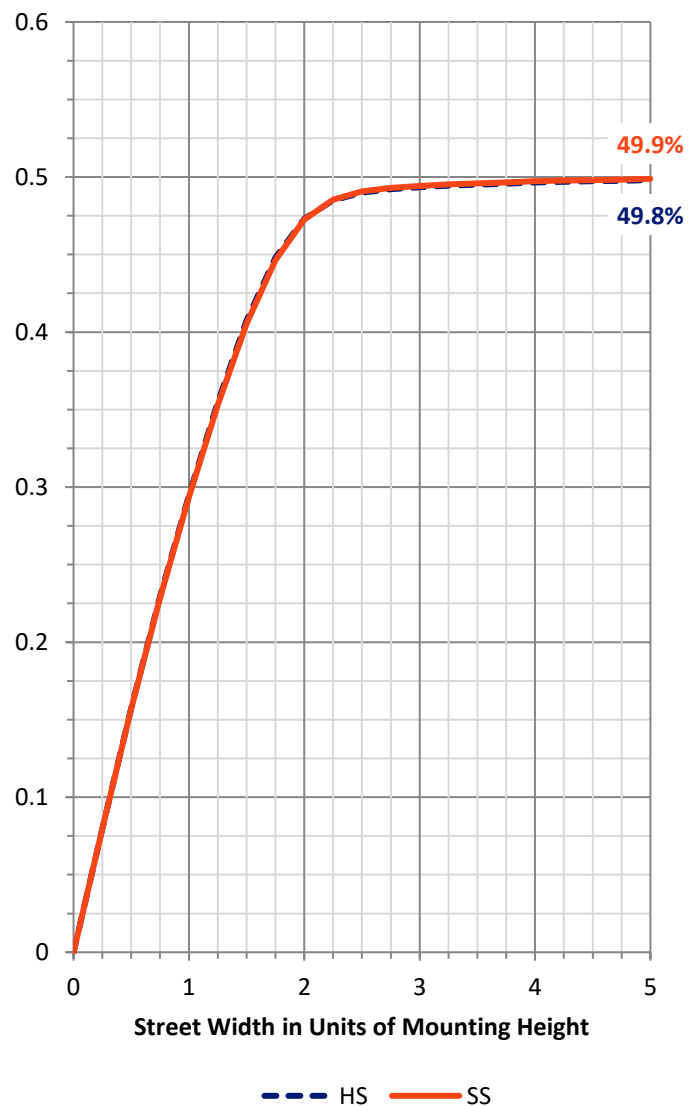
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	23717.2	0.0	23717.2
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	23717.2	0.0	23717.2
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	47434.5	0.0	47434.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	523.1	1.1
10°-20°	1677.8	3.5
20°-30°	3137.1	6.6
30°-40°	5305.8	11.2
40°-50°	8675.5	18.3
50°-60°	13795.4	29.1
60°-70°	12470.1	26.3
70°-80°	1578.2	3.3
80°-90°	271.5	0.6
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°	47434.5	100.0
0°-180°	47434.5	100.0

**Coefficient of Utilization**



REPORT NUMBER: P299378

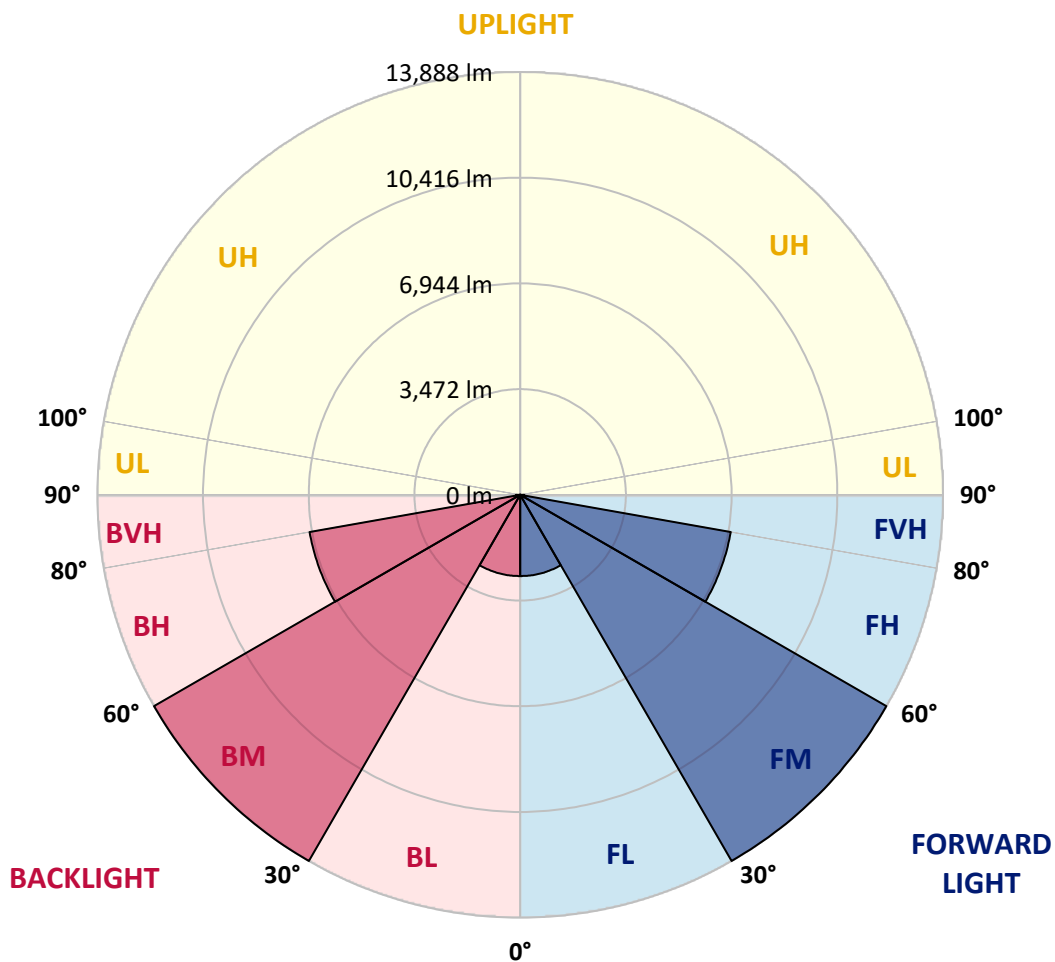
CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7030

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2669.0	5.6			
FM	(30°-60°)	13888.3	29.3			
FH	(60°-80°)	7024.1	14.8			G3/7500
FVH	(80°-90°)	135.7	0.3			G2/225
BL	(0°-30°)	2669.0	5.6	B4/5000		
BM	(30°-60°)	13888.3	29.3	B5		
BH	(60°-80°)	7024.1	14.8	B5		G3/7500
BVH	(80°-90°)	135.7	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-G3**

Type V Short





REPORT NUMBER: P299378

CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5367.2	5367.2	5367.2	5367.2	5367.2	5367.2	5367.2	5367.2	5367.2	5367.2	5367.2
2.5°	5371.7	5376.1	5380.6	5376.1	5380.6	5373.9	5369.5	5376.1	5369.5	5362.8	5367.2
5°	5418.3	5420.6	5420.6	5413.9	5420.6	5416.1	5409.4	5418.3	5411.7	5405.0	5409.4
7.5°	5496.1	5505.0	5498.3	5491.6	5496.1	5491.6	5487.2	5489.4	5487.2	5480.5	5482.8
10°	5600.5	5607.2	5602.7	5600.5	5604.9	5602.7	5598.3	5596.1	5598.3	5591.6	5591.6
12.5°	5727.1	5724.9	5722.7	5724.9	5731.6	5731.6	5729.3	5731.6	5736.0	5738.2	5733.8
15°	5851.5	5856.0	5856.0	5856.0	5869.3	5880.4	5887.1	5891.5	5900.4	5902.6	5893.7
17.5°	6007.0	6007.0	6004.8	6007.0	6020.4	6038.1	6044.8	6053.7	6062.6	6069.2	6058.1
20°	6180.3	6184.8	6184.8	6189.2	6207.0	6227.0	6227.0	6231.4	6227.0	6231.4	6224.8
22.5°	6391.4	6404.7	6404.7	6406.9	6424.7	6449.1	6442.5	6449.1	6438.0	6446.9	6438.0
25°	6666.8	6686.8	6682.4	6682.4	6695.7	6711.3	6713.5	6726.8	6724.6	6735.7	6729.0
27.5°	6977.9	7009.0	7017.8	7015.6	7024.5	7040.1	7044.5	7060.0	7051.2	7060.0	7055.6
30°	7351.1	7364.4	7382.2	7388.8	7399.9	7415.5	7415.5	7417.7	7406.6	7419.9	7426.6
32.5°	7737.6	7762.1	7779.8	7819.8	7839.8	7850.9	7848.7	7853.1	7842.0	7859.8	7873.1
35°	8248.6	8266.3	8295.2	8326.3	8353.0	8350.8	8344.1	8346.3	8346.3	8361.9	8375.2
37.5°	8863.9	8868.4	8906.1	8950.6	8963.9	8950.6	8910.6	8901.7	8881.7	8901.7	8923.9
40°	9514.8	9530.4	9605.9	9634.8	9641.5	9617.0	9559.3	9526.0	9481.5	9506.0	9537.1
42.5°	10196.9	10228.0	10296.8	10347.9	10370.1	10354.6	10274.6	10223.5	10165.8	10179.1	10210.2
45°	10952.2	10990.0	11087.7	11136.6	11178.8	11154.3	11076.6	10998.8	10907.8	10914.4	10963.3
47.5°	11796.4	11834.1	11960.8	12043.0	12065.2	12060.7	11974.1	11867.5	11743.1	11738.6	11780.8
50°	12742.7	12780.5	12938.2	13064.9	13129.3	13122.6	13020.4	12869.4	12718.3	12720.5	12773.8
52.5°	13666.9	13713.6	13877.9	14095.7	14222.3	14313.4	14251.2	14109.0	13924.6	13929.0	13977.9
55°	14533.3	14611.1	14799.9	15095.4	15330.8	15586.3	15659.6	15655.2	15544.1	15575.2	15624.1
57.5°	14953.2	15068.7	15359.7	15826.2	16306.1	16825.9	17265.8	17594.6	17734.5	17945.6	17896.7
60°	14157.9	14342.3	14771.0	15457.5	16406.1	17490.2	18652.0	19787.2	20755.8	21486.7	21066.8
62.5°	11592.0	11831.9	12351.8	13231.5	14666.6	16401.6	18625.4	21309.0	24232.5	25996.4	24736.8
65°	7253.3	7502.1	8030.9	8972.8	10652.3	12809.4	15826.2	20273.8	25736.5	28395.7	25832.0
67.5°	2828.0	2963.5	3250.1	3852.1	5114.0	7033.4	10061.3	15108.7	21642.2	23972.6	21240.1
70°	1417.3	1430.7	1484.0	1595.1	1866.1	2423.7	3687.8	7004.5	12411.7	14990.9	11965.2
72.5°	1024.1	1026.4	1053.0	1101.9	1188.5	1312.9	1552.9	2143.8	4036.5	6169.2	3783.3
75°	784.2	793.1	808.6	835.3	882.0	944.2	1030.8	1235.2	1530.6	1775.0	1492.9
77.5°	604.3	622.0	633.1	657.6	686.5	728.7	753.1	830.9	966.4	1017.5	1001.9
80°	459.9	475.4	499.8	519.8	539.8	559.8	550.9	586.5	657.6	699.8	677.6
82.5°	293.2	311.0	382.1	399.9	408.8	422.1	406.5	408.8	439.9	466.5	439.9
85°	188.8	199.9	242.1	264.4	266.6	275.5	268.8	253.3	253.3	231.0	259.9
87.5°	86.6	88.9	108.9	128.8	133.3	120.0	117.7	113.3	91.1	86.6	93.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299378

CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-7030

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	5367.2	5367.2	5367.2	5367.2	5367.2	5367.2	5367.2	5367.2
2.5°	5365.0	5369.5	5371.7	5378.3	5380.6	5380.6	5382.8	5387.2
5°	5407.2	5413.9	5416.1	5425.0	5427.2	5425.0	5429.4	5431.7
7.5°	5482.8	5493.9	5498.3	5507.2	5500.5	5509.4	5511.6	5511.6
10°	5593.8	5604.9	5607.2	5616.0	5611.6	5616.0	5616.0	5611.6
12.5°	5740.5	5742.7	5736.0	5742.7	5733.8	5738.2	5731.6	5727.1
15°	5902.6	5896.0	5880.4	5880.4	5867.1	5869.3	5867.1	5864.9
17.5°	6060.4	6047.0	6035.9	6031.5	6020.4	6018.1	6011.5	6011.5
20°	6233.6	6227.0	6220.3	6211.4	6200.3	6189.2	6187.0	6191.4
22.5°	6442.5	6440.2	6440.2	6435.8	6420.2	6409.1	6402.5	6402.5
25°	6722.4	6702.4	6702.4	6700.2	6693.5	6686.8	6673.5	6680.2
27.5°	7037.8	7026.7	7035.6	7033.4	7026.7	7026.7	7017.8	7017.8
30°	7426.6	7422.2	7435.5	7424.4	7402.2	7399.9	7391.1	7380.0
32.5°	7875.4	7870.9	7890.9	7877.6	7842.0	7822.0	7804.3	7795.4
35°	8375.2	8377.4	8401.9	8393.0	8353.0	8339.7	8308.6	8304.1
37.5°	8921.7	8957.2	8999.5	9008.3	8975.0	8966.1	8932.8	8915.0
40°	9563.7	9610.4	9674.8	9690.4	9654.8	9648.1	9601.5	9577.1
42.5°	10248.0	10327.9	10407.9	10421.2	10385.7	10350.1	10305.7	10287.9
45°	11012.2	11107.7	11212.1	11238.8	11185.4	11143.2	11085.5	11085.5
47.5°	11869.7	11989.6	12107.4	12180.7	12131.8	12087.4	12018.5	11974.1
50°	12882.7	13047.1	13200.4	13275.9	13198.2	13113.7	12993.8	12953.8
52.5°	14153.4	14331.1	14464.4	14424.4	14304.5	14186.7	14055.7	14002.4
55°	15775.1	15835.1	15835.1	15684.1	15444.1	15246.4	15039.8	14970.9
57.5°	17803.4	17572.4	17216.9	16765.9	16199.5	15706.3	15373.0	15215.3
60°	20187.1	19076.3	17821.2	16588.2	15575.2	14739.9	14244.5	14017.9
62.5°	21775.5	18869.7	16355.0	14375.6	12918.2	11911.9	11227.7	10961.1
65°	20351.5	15737.4	12369.5	10001.4	8413.0	7388.8	6711.3	6462.5
67.5°	14906.5	9861.4	6586.9	4720.8	3458.9	2759.2	2481.5	2365.9
70°	6691.3	3472.3	2128.2	1661.7	1432.9	1315.2	1264.1	1246.3
72.5°	2017.2	1459.6	1230.7	1110.8	1019.7	961.9	919.7	915.3
75°	1217.4	1013.0	899.7	828.6	770.9	724.2	702.0	695.3
77.5°	850.8	744.2	690.9	639.8	595.4	559.8	539.8	524.3
80°	597.6	546.5	522.1	493.2	464.3	431.0	402.1	388.8
82.5°	399.9	388.8	388.8	371.0	346.6	315.5	257.7	244.4
85°	257.7	255.5	259.9	253.3	235.5	202.2	166.6	157.7
87.5°	120.0	122.2	135.5	133.3	128.8	106.6	84.4	80.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)