

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: P299917

Luminaire Tested: **GLNA-AF-08-LED-E1-SL3-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299917
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)
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-SL3-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Medium OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33371.7 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G5

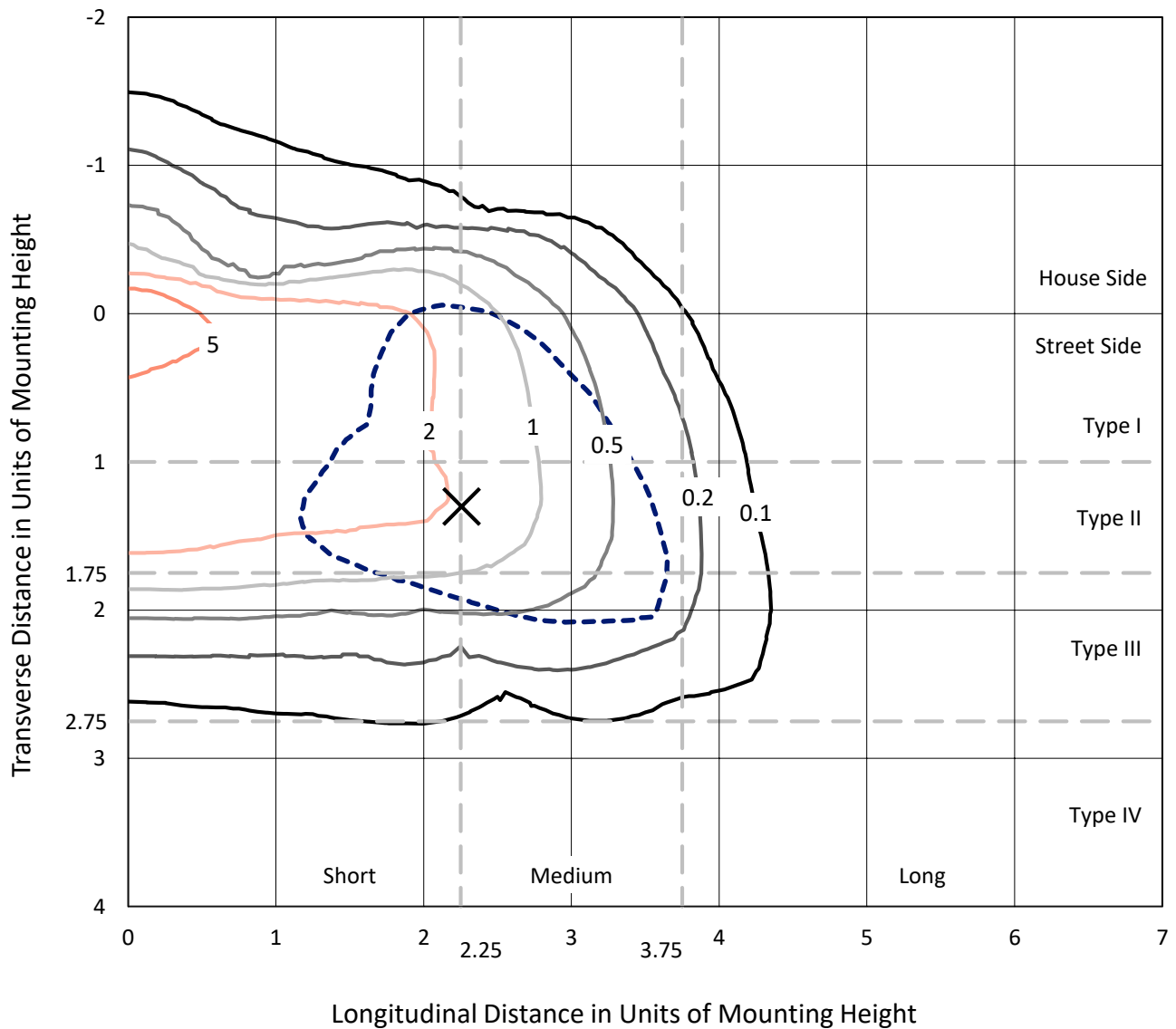
Input Watts (W): 334
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

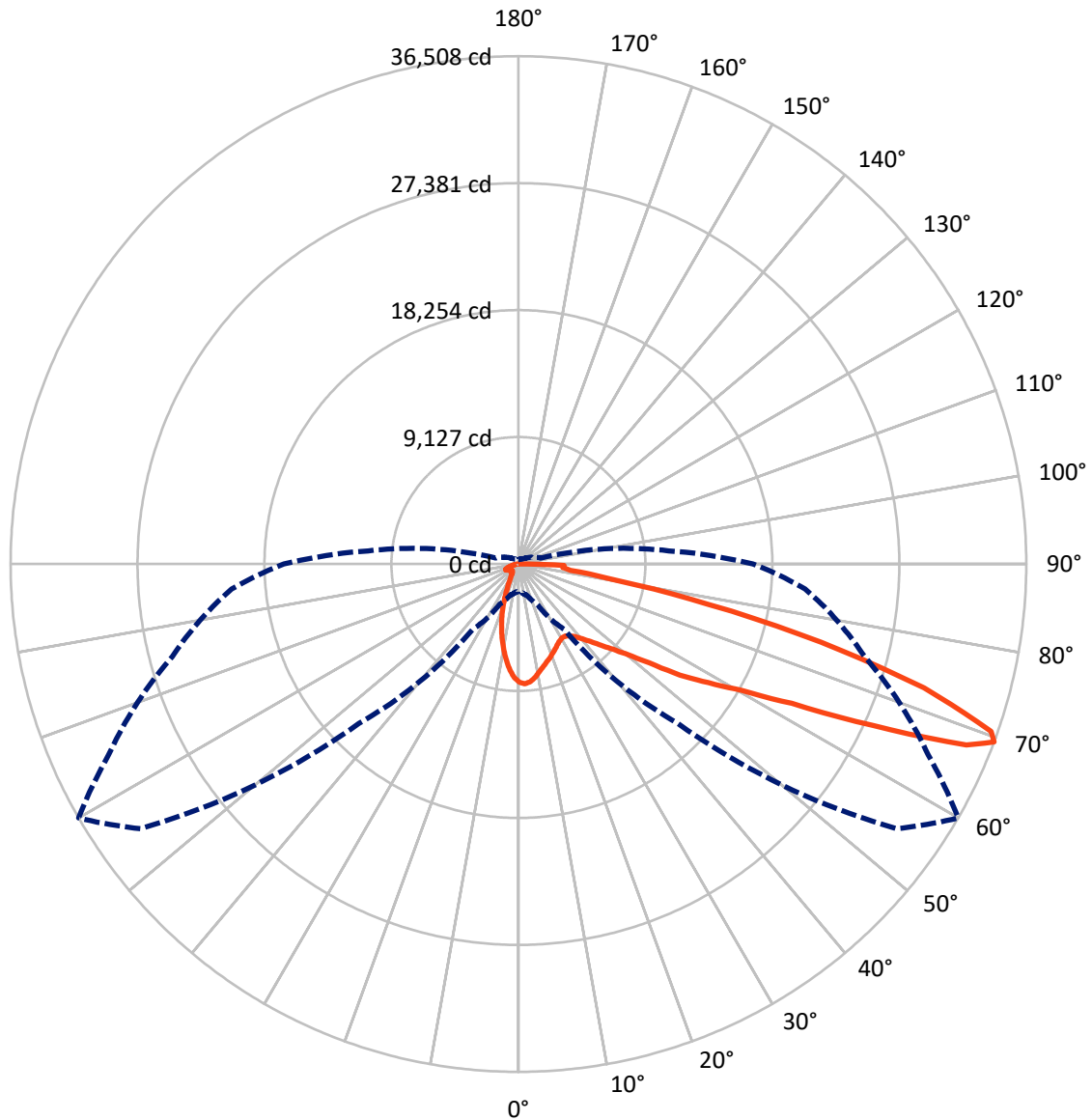
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.4 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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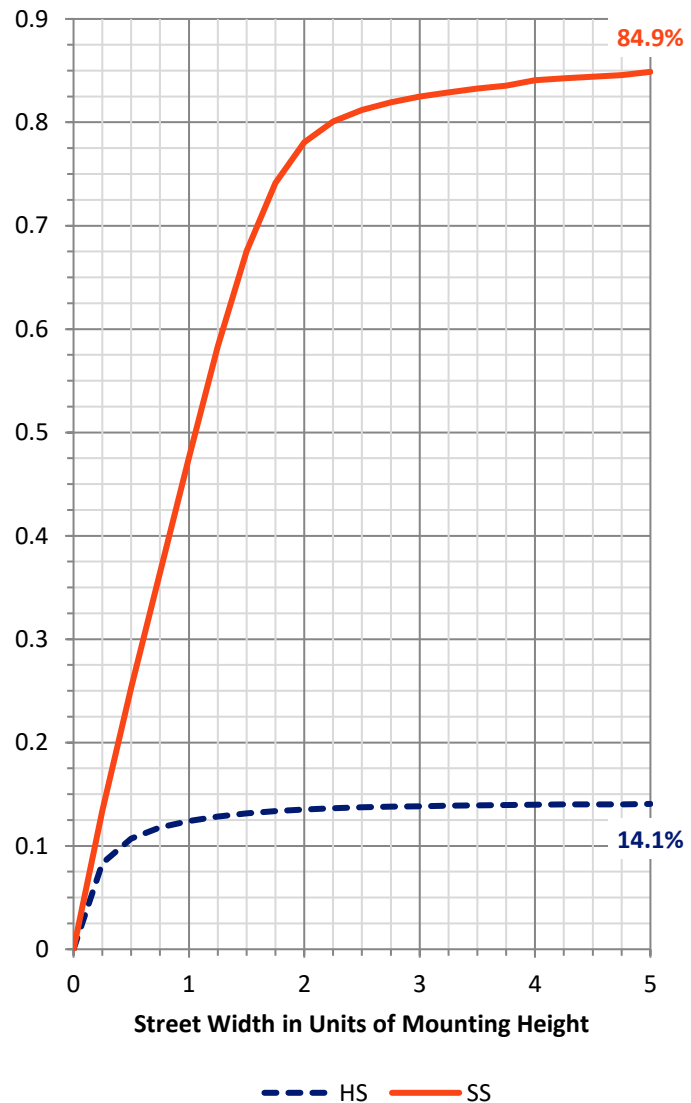
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4747.8	0.0	4747.8
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	28624.0	0.0	28624.0
	% Fixture	85.8	0.0	85.8
Total	Lumens	33371.7	0.0	33371.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	719.0	2.2
10°-20°	1531.9	4.6
20°-30°	1951.9	5.8
30°-40°	2683.4	8.0
40°-50°	4354.1	13.0
50°-60°	6982.8	20.9
60°-70°	9293.6	27.8
70°-80°	5017.8	15.0
80°-90°	837.3	2.5
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°	33371.7	100.0
0°-180°	33371.7	100.0

Coefficient of Utilization



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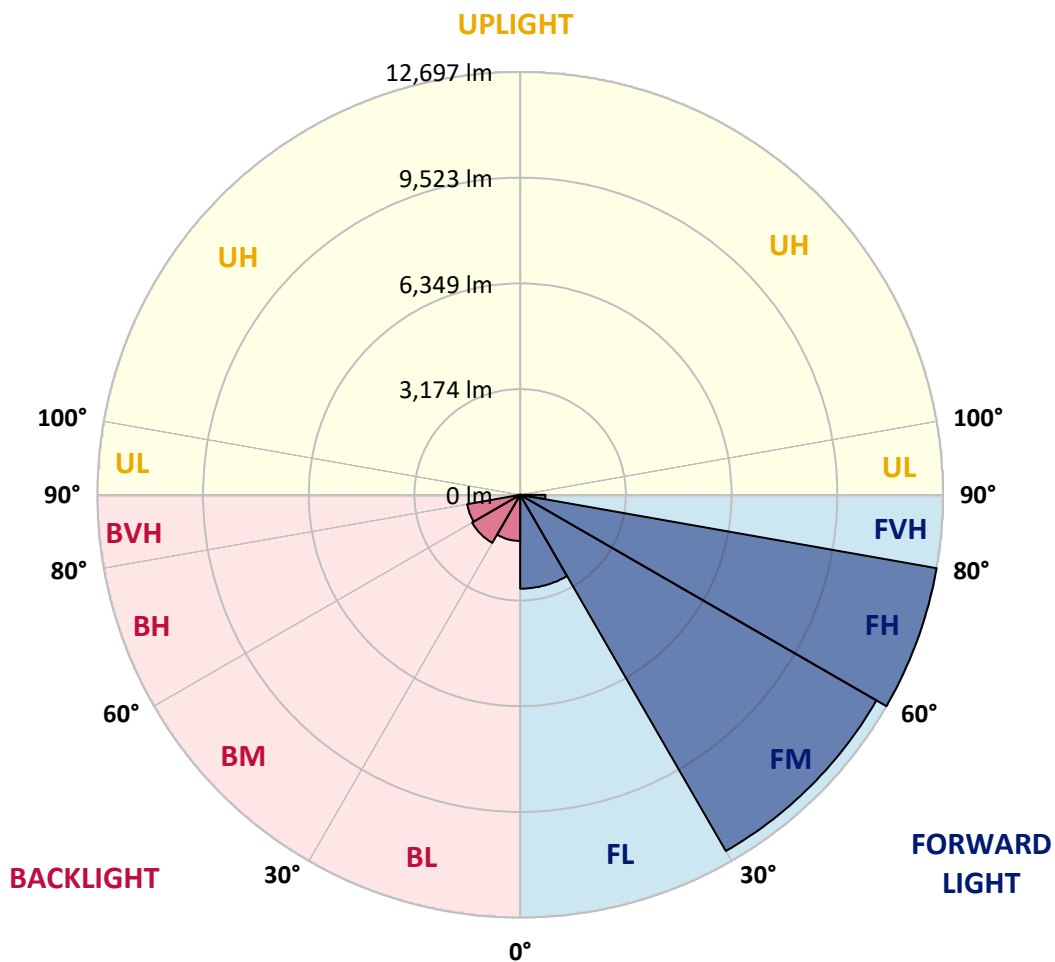
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2817.8	8.4			
FM (30°-60°)	12352.3	37.0			
FH (60°-80°)	12697.3	38.0			G5
FVH (80°-90°)	756.6	2.3			G5
BL (0°-30°)	1385.1	4.2	B3/2500		
BM (30°-60°)	1668.0	5.0	B2/2500		
BH (60°-80°)	1614.1	4.8	B3/2500		G3/2500
BVH (80°-90°)	80.6	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	8503.6	8503.6	8503.6	8503.6	8503.6	8503.6	8503.6	8503.6	8503.6	8503.6	8503.6
2.5°	8677.7	8697.1	8689.0	8684.2	8698.7	8676.1	8629.4	8614.8	8592.3	8539.1	8448.8
5°	8352.1	8410.1	8406.9	8450.4	8523.0	8542.3	8521.3	8524.6	8482.7	8416.6	8266.6
7.5°	7789.5	7813.7	7826.5	7921.7	8053.9	8160.2	8250.5	8279.5	8260.2	8203.8	8010.3
10°	7209.1	7228.5	7259.1	7370.3	7538.0	7684.7	7855.6	7953.9	7995.8	7986.1	7770.1
12.5°	6711.0	6730.3	6770.7	6896.4	7096.3	7276.8	7525.1	7647.6	7747.6	7807.2	7575.1
15°	6264.5	6306.4	6345.1	6490.2	6714.2	6951.2	7231.7	7386.5	7541.2	7675.0	7402.6
17.5°	5916.3	5958.2	5980.7	6112.9	6351.5	6641.7	6970.5	7152.7	7346.2	7565.4	7231.7
20°	5714.8	5734.1	5724.4	5798.6	6013.0	6320.9	6711.0	6922.2	7155.9	7462.2	7060.8
22.5°	5658.3	5659.9	5624.5	5616.4	5755.1	6014.6	6433.7	6690.0	6977.0	7394.5	6914.1
25°	5795.4	5790.5	5693.8	5614.8	5629.3	5780.8	6166.1	6464.4	6827.1	7380.0	6801.3
27.5°	6100.0	6114.5	5971.1	5822.8	5676.1	5671.2	5963.0	6277.4	6704.6	7446.1	6752.9
30°	6527.2	6551.4	6398.3	6209.7	5934.0	5706.7	5884.0	6166.1	6628.8	7583.1	6744.9
32.5°	6994.7	7020.5	6904.5	6706.2	6345.1	5925.9	5938.8	6175.8	6625.6	7775.0	6799.7
35°	7492.9	7521.9	7462.2	7294.6	6893.2	6330.6	6148.4	6332.2	6730.3	8068.4	6946.4
37.5°	8049.0	8094.2	8110.3	7950.7	7521.9	6864.2	6491.8	6628.8	6967.3	8476.2	7215.6
40°	8850.2	8913.1	8908.2	8679.3	8242.5	7584.7	7022.1	7057.6	7336.5	9021.1	7646.0
42.5°	10384.9	10397.8	9996.4	9498.3	9035.6	8342.4	7647.6	7618.6	7845.9	9711.0	8279.5
45°	12337.1	12283.9	11390.8	10428.4	9864.2	9212.9	8461.7	8319.8	8492.3	10552.5	9072.7
47.5°	13957.2	13834.7	12706.3	11377.9	10741.2	10159.2	9417.7	9169.4	9264.5	11506.9	10097.9
50°	14519.8	14427.9	13492.9	12167.8	11571.4	11313.4	10594.5	10243.0	10268.8	12645.0	11298.9
52.5°	14398.9	14386.0	13762.2	12688.5	12348.4	12525.7	12261.3	11785.8	11534.3	13908.9	12595.0
55°	14113.6	14141.0	13915.3	13294.7	13236.6	13696.1	14439.2	14087.8	13305.9	15184.0	13934.6
57.5°	13122.2	13193.1	13689.6	14057.2	14666.5	15350.0	16193.1	16093.2	15213.0	16562.3	15527.4
60°	10571.9	10736.3	12067.9	13908.9	16138.3	18275.9	18653.1	18421.0	17179.7	18272.7	17631.1
62.5°	7407.4	7578.3	9161.3	12042.1	15896.5	21580.6	23050.8	22049.8	20004.0	20792.3	20353.9
65°	3965.7	4047.9	5256.9	8355.3	13420.4	22262.5	29478.1	27954.7	24475.9	23898.8	22683.3
67.5°	2187.6	2232.7	2695.4	4218.8	8595.5	19604.3	33572.8	34723.8	30064.9	25967.1	22259.3
69°	1978.0	2019.9	2323.0	3195.1	5751.8	16209.3	33173.0	36508.3	32515.2	25762.3	20692.4
70°	1934.5	1973.2	2245.6	2945.2	4655.6	13360.8	31833.3	36052.1	33098.8	25028.8	19325.4
72.5°	1741.0	1782.9	2047.3	2645.4	3978.6	6661.0	25215.8	30482.4	30050.4	21701.5	14658.5
75°	1623.3	1662.0	2110.2	2590.6	3809.3	4215.5	16623.6	22465.7	22090.1	15180.8	7903.9
77.5°	694.8	691.6	978.5	2192.4	3865.7	4081.7	8932.4	14034.6	12804.6	6488.5	2269.8
80°	464.3	456.2	464.3	644.8	3544.9	4104.3	4679.8	7123.7	5381.1	1654.0	1118.8
82.5°	399.8	393.3	407.9	393.3	1246.1	4684.6	3978.6	3788.3	2558.3	939.8	554.5
85°	269.2	257.9	351.4	353.0	588.4	4162.3	4481.5	3199.9	2069.9	557.8	274.1
87.5°	129.0	125.7	204.7	249.9	345.0	1691.1	5028.0	3278.9	2087.6	285.3	130.6
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°	8503.6	8503.6	8503.6	8503.6	8503.6	8503.6	8503.6	8503.6	8503.6	8503.6	8503.6
2.5°	8421.4	8355.3	8290.8	8213.4	8132.8	8042.6	7997.4	7952.3	7941.0	7928.1	7883.0
5°	8189.3	8095.8	7934.6	7757.2	7570.2	7388.1	7249.4	7162.4	7096.3	7062.4	7002.8
7.5°	7889.4	7752.4	7470.3	7164.0	6849.6	6562.7	6314.4	6158.1	6009.8	5940.4	5861.4
10°	7604.1	7399.4	6960.9	6509.5	6058.1	5624.5	5216.6	4928.1	4671.7	4528.3	4426.7
12.5°	7359.1	7078.6	6470.8	5859.8	5240.8	4623.4	4012.4	3532.0	3130.6	2919.4	2811.4
15°	7120.5	6781.9	6004.9	5229.5	4434.8	3594.9	2792.1	2247.2	1915.1	1782.9	1737.8
17.5°	6904.5	6470.8	5537.4	4594.4	3603.0	2587.4	1876.4	1576.6	1449.2	1405.7	1391.2
20°	6670.7	6156.5	5052.2	3930.2	2735.7	1808.7	1465.4	1333.2	1281.6	1268.7	1262.2
22.5°	6445.0	5846.9	4587.9	3219.3	1965.1	1396.0	1259.0	1204.2	1196.1	1207.4	1207.4
25°	6253.2	5569.7	4086.6	2476.1	1442.8	1175.2	1126.8	1113.9	1144.6	1186.5	1194.5
27.5°	6109.7	5342.4	3553.0	1828.1	1149.4	1022.0	1020.4	1041.4	1117.2	1197.8	1213.9
30°	6011.4	5126.3	2982.3	1318.7	964.0	899.5	925.3	970.5	1081.7	1196.1	1226.8
32.5°	5961.4	4966.8	2387.5	1020.4	825.4	789.9	833.4	888.2	997.9	1104.3	1144.6
35°	6000.1	4849.1	1826.5	851.2	728.7	701.2	746.4	799.6	864.1	909.2	939.8
37.5°	6145.2	4802.3	1378.3	762.5	662.6	636.8	672.2	702.9	728.7	741.5	756.1
40°	6457.9	4852.3	1104.3	717.4	625.5	593.2	607.7	619.0	635.2	648.0	654.5
42.5°	6919.0	5002.2	989.8	699.6	606.1	559.4	556.2	561.0	582.0	606.1	611.0
45°	7563.8	5266.6	981.7	710.9	596.5	532.0	517.5	523.9	556.2	593.2	599.7
47.5°	8387.5	5669.6	1046.2	744.8	604.5	517.5	493.3	501.4	541.7	591.6	599.7
50°	9385.4	6232.2	1154.2	794.7	640.0	520.7	485.2	490.1	532.0	586.8	594.9
52.5°	10563.8	7030.2	1271.9	843.1	677.1	541.7	491.7	480.4	519.1	567.4	577.1
55°	11874.4	8053.9	1392.8	886.6	696.4	567.4	504.6	467.5	494.9	535.2	543.3
57.5°	13483.3	9485.4	1602.4	928.5	709.3	585.2	517.5	454.6	464.3	493.3	499.7
60°	15661.2	11510.1	1971.5	997.9	738.3	591.6	515.9	443.3	433.6	449.8	453.0
62.5°	18271.1	13709.0	2279.5	1084.9	786.7	596.5	506.2	435.3	407.9	407.9	411.1
65°	19820.3	14297.4	2108.6	1157.5	827.0	591.6	494.9	427.2	388.5	370.8	372.4
67.5°	18506.4	12574.1	1807.1	1172.0	825.4	569.1	477.2	412.7	369.2	341.8	340.1
69°	16860.5	10849.2	1671.7	1133.3	786.7	540.0	454.6	396.6	354.7	325.6	324.0
70°	15533.8	9796.5	1583.0	1091.4	744.8	519.1	436.9	382.1	343.4	316.0	312.7
72.5°	11294.1	6419.2	1352.5	938.2	614.2	435.3	377.2	335.3	306.3	290.2	286.9
75°	5643.8	3061.3	1097.8	760.9	470.7	348.2	309.5	280.5	266.0	262.8	261.2
77.5°	1853.9	1402.5	785.1	567.4	349.8	272.4	249.9	228.9	225.7	235.4	232.1
80°	1018.8	815.7	498.1	375.6	238.6	199.9	196.7	185.4	190.2	206.3	203.1
82.5°	519.1	424.0	307.9	225.7	161.2	143.5	156.4	149.9	156.4	170.9	169.3
85°	256.3	232.1	195.1	137.0	106.4	91.9	111.2	116.1	119.3	130.6	130.6
87.5°	148.3	137.0	103.2	64.5	53.2	48.4	64.5	62.9	74.2	80.6	79.0
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)