

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: P299911

Luminaire Tested: **GLNA-AF-07-LED-E1-SL3-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299911
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-07-LED-E1-SL3-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 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: 29453.1 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B3 - U0 - G4

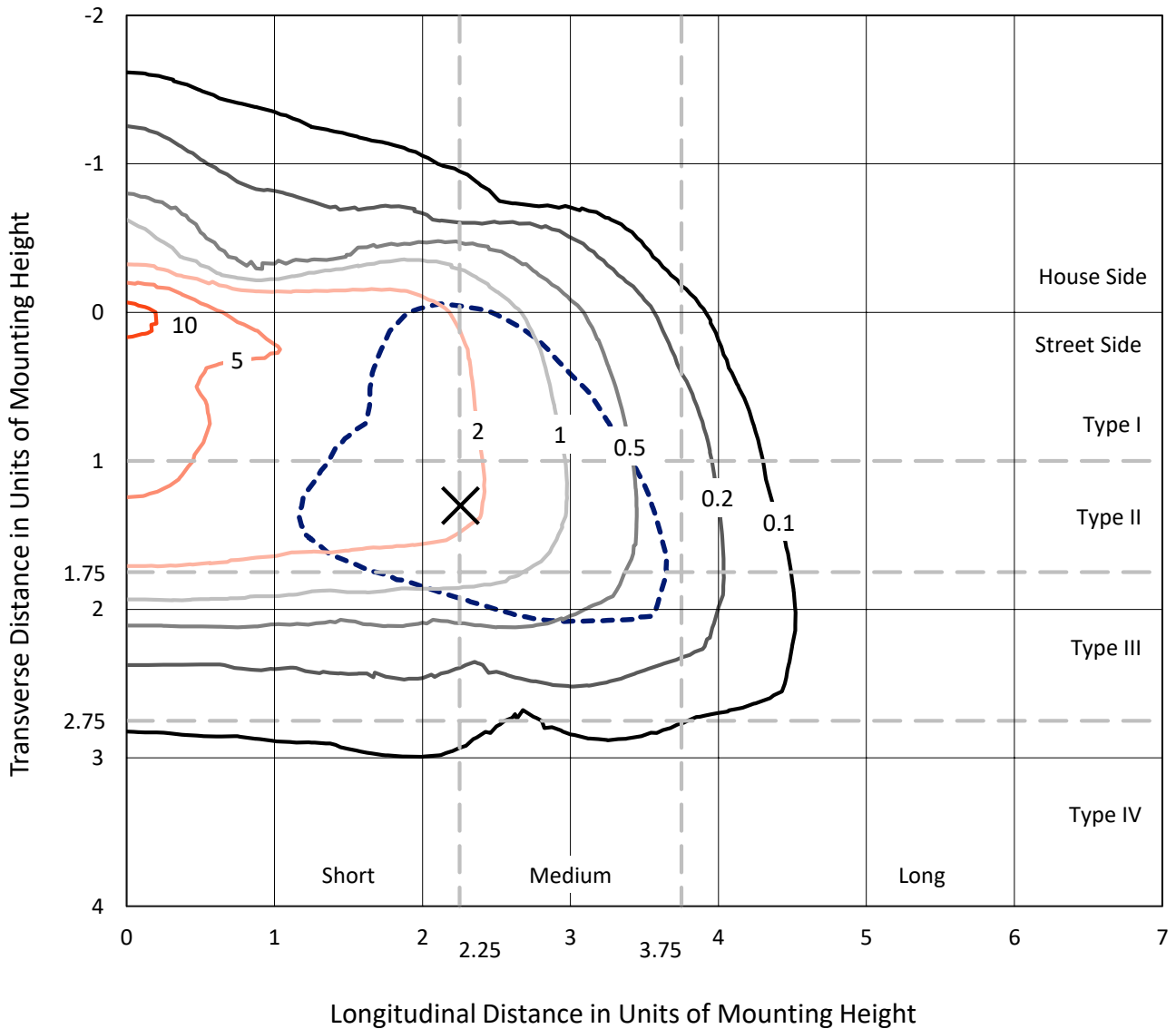
Input Watts (W): 295
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

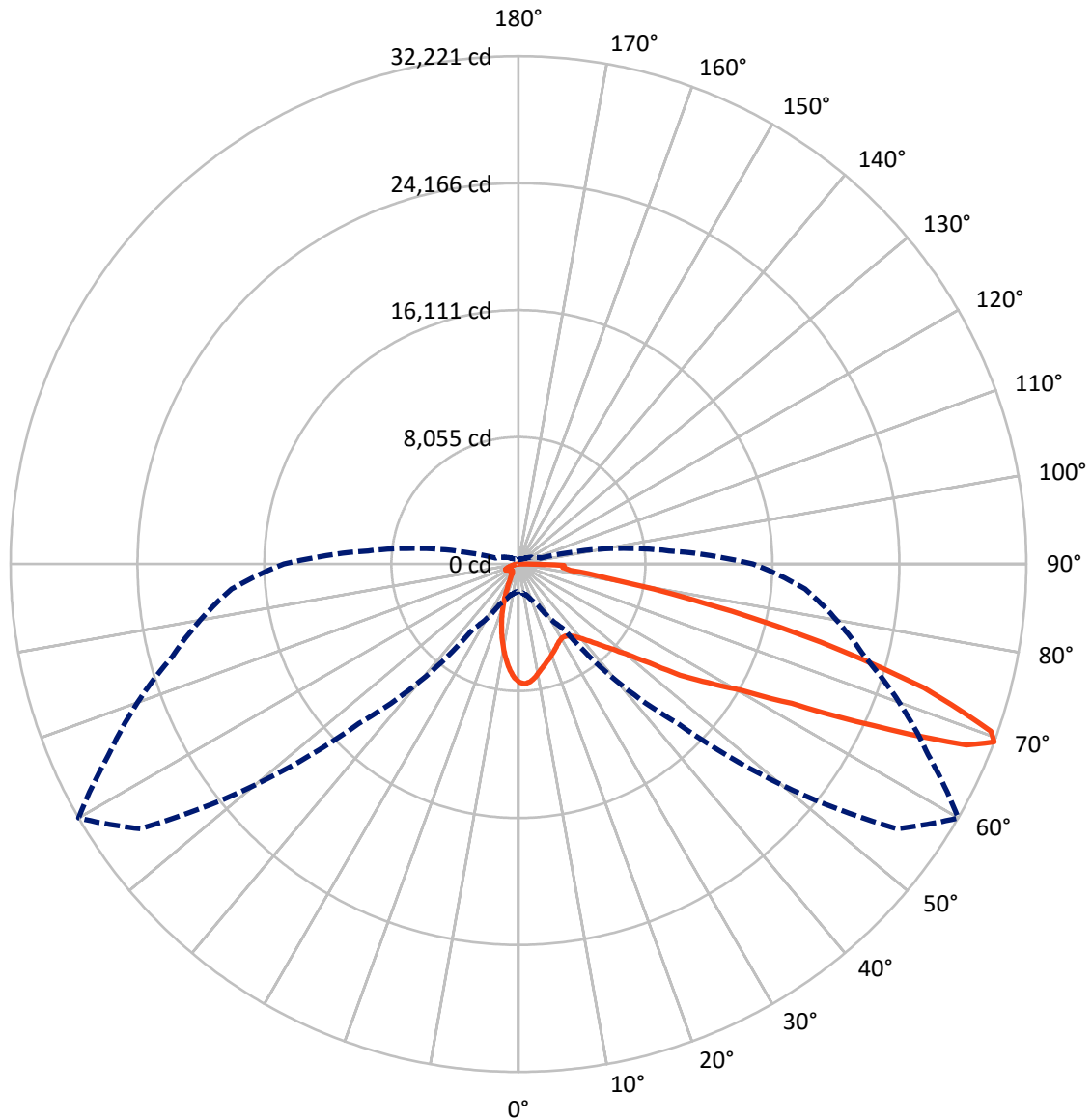
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12 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	4190.2	0.0	4190.2
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	25262.9	0.0	25262.9
	% Fixture	85.8	0.0	85.8
Total	Lumens	29453.1	0.0	29453.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	634.6	2.2
10°-20°	1352.0	4.6
20°-30°	1722.7	5.8
30°-40°	2368.3	8.0
40°-50°	3842.8	13.0
50°-60°	6162.9	20.9
60°-70°	8202.3	27.8
70°-80°	4428.6	15.0
80°-90°	738.9	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°	29453.1	100.0
0°-180°	29453.1	100.0

Coefficient of Utilization



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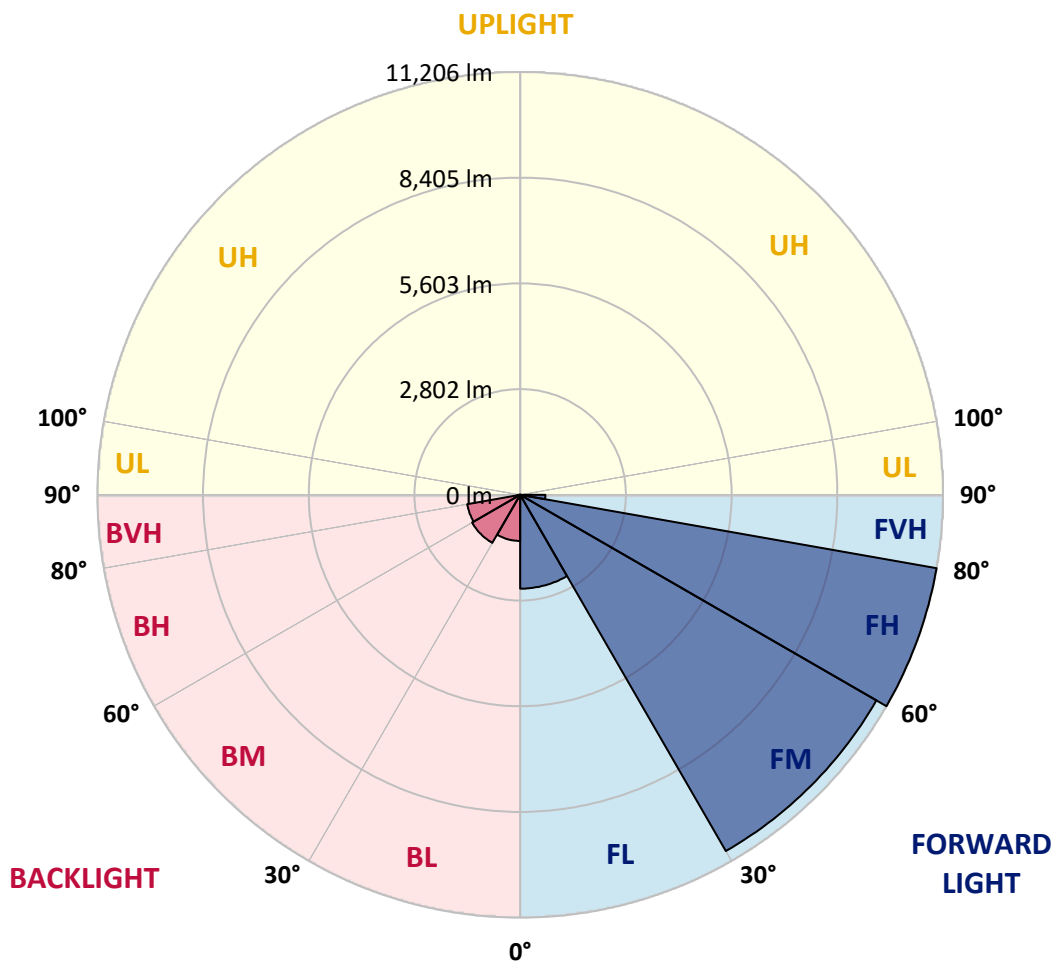
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2486.9	8.4			
FM (30°-60°)	10901.8	37.0			
FH (60°-80°)	11206.3	38.0			G4/12000
FVH (80°-90°)	667.8	2.3			G4/750
BL (0°-30°)	1222.4	4.2	B3/2500		
BM (30°-60°)	1472.1	5.0	B2/2500		
BH (60°-80°)	1424.5	4.8	B3/2500		G3/2500
BVH (80°-90°)	71.2	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-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	7505.1	7505.1	7505.1	7505.1	7505.1	7505.1	7505.1	7505.1	7505.1	7505.1	7505.1
2.5°	7658.8	7675.8	7668.7	7664.5	7677.3	7657.3	7616.1	7603.3	7583.4	7536.4	7456.7
5°	7371.4	7422.6	7419.7	7458.2	7522.2	7539.2	7520.8	7523.6	7486.6	7428.3	7296.0
7.5°	6874.8	6896.2	6907.5	6991.5	7108.1	7202.1	7281.7	7307.3	7290.3	7240.5	7069.7
10°	6362.6	6379.7	6406.7	6504.9	6652.9	6782.3	6933.1	7019.9	7056.9	7048.4	6857.7
12.5°	5923.0	5940.1	5975.6	6086.6	6263.0	6422.4	6641.5	6749.6	6837.8	6890.5	6685.6
15°	5528.9	5565.9	5600.0	5728.1	5925.8	6135.0	6382.5	6519.1	6655.7	6773.8	6533.4
17.5°	5221.6	5258.6	5278.5	5395.1	5605.7	5861.8	6152.0	6312.8	6483.6	6677.1	6382.5
20°	5043.7	5060.8	5052.2	5117.7	5306.9	5578.7	5923.0	6109.4	6315.7	6586.0	6231.7
22.5°	4993.9	4995.3	4964.0	4956.9	5079.3	5308.3	5678.3	5904.5	6157.7	6526.2	6102.3
25°	5114.9	5110.6	5025.2	4955.5	4968.3	5102.0	5442.1	5705.3	6025.4	6513.4	6002.7
27.5°	5383.8	5396.6	5269.9	5139.0	5009.6	5005.3	5262.8	5540.3	5917.3	6571.8	5960.0
30°	5760.8	5782.1	5647.0	5480.5	5237.2	5036.6	5193.1	5442.1	5850.4	6692.7	5952.9
32.5°	6173.4	6196.2	6093.7	5918.7	5600.0	5230.1	5241.5	5450.6	5847.6	6862.0	6001.2
35°	6613.0	6638.6	6586.0	6438.0	6083.8	5587.2	5426.4	5588.6	5940.1	7121.0	6130.7
37.5°	7103.9	7143.7	7157.9	7017.1	6638.6	6058.1	5729.5	5850.4	6149.2	7480.9	6368.3
40°	7811.0	7866.5	7862.2	7660.2	7274.6	6694.1	6197.6	6228.9	6475.0	7961.8	6748.2
42.5°	9165.5	9176.9	8822.6	8383.0	7974.6	7362.8	6749.6	6724.0	6924.6	8570.8	7307.3
45°	10888.4	10841.5	10053.3	9203.9	8705.9	8131.1	7468.1	7342.9	7495.1	9313.4	8007.3
47.5°	12318.3	12210.2	11214.3	10041.9	9479.9	8966.3	8311.8	8092.7	8176.6	10155.7	8912.2
50°	12814.9	12733.8	11908.6	10739.1	10212.6	9985.0	9350.4	9040.3	9063.0	11160.2	9972.2
52.5°	12708.2	12696.8	12146.2	11198.6	10898.4	11054.9	10821.6	10401.9	10179.9	12275.6	11116.1
55°	12456.3	12480.5	12281.3	11733.6	11682.3	12087.8	12743.7	12433.6	11743.5	13401.1	12298.4
57.5°	11581.3	11643.9	12082.1	12406.5	12944.3	13547.6	14291.7	14203.5	13426.7	14617.5	13704.1
60°	9330.5	9475.6	10650.8	12275.6	14243.3	16129.9	16462.9	16258.0	15162.4	16127.1	15560.8
62.5°	6537.6	6688.4	8085.6	10628.1	14029.9	19046.6	20344.2	19460.6	17655.1	18350.9	17963.9
65°	3500.0	3572.6	4639.6	7374.2	11844.5	19648.4	26016.7	24672.2	21601.9	21092.5	20019.8
67.5°	1930.7	1970.5	2378.9	3723.4	7586.2	17302.3	29630.6	30646.4	26534.6	22918.0	19645.6
69°	1745.7	1782.7	2050.2	2819.9	5076.4	14305.9	29277.7	32221.4	28697.2	22737.3	18262.7
70°	1707.3	1741.5	1981.9	2599.4	4109.0	11791.9	28095.4	31818.8	29212.3	22089.9	17056.1
72.5°	1536.6	1573.6	1806.9	2334.8	3511.4	5878.9	22254.9	26903.1	26521.8	19153.3	12937.2
75°	1432.7	1466.9	1862.4	2286.4	3362.0	3720.5	14671.6	19827.7	19496.2	13398.2	6975.8
77.5°	613.2	610.4	863.6	1935.0	3411.8	3602.4	7883.6	12386.6	11301.0	5726.6	2003.3
80°	409.8	402.6	409.8	569.1	3128.7	3622.4	4130.3	6287.2	4749.2	1459.8	987.4
82.5°	352.8	347.2	360.0	347.2	1099.8	4134.6	3511.4	3343.5	2257.9	829.5	489.4
85°	237.6	227.6	310.2	311.6	519.3	3673.6	3955.3	2824.2	1826.8	492.3	241.9
87.5°	113.8	111.0	180.7	220.5	304.5	1492.5	4437.6	2893.9	1842.5	251.8	115.2
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°	7505.1	7505.1	7505.1	7505.1	7505.1	7505.1	7505.1	7505.1	7505.1	7505.1	7505.1
2.5°	7432.5	7374.2	7317.3	7249.0	7177.9	7098.2	7058.4	7018.5	7008.6	6997.2	6957.3
5°	7227.7	7145.1	7002.9	6846.4	6681.3	6520.5	6398.2	6321.4	6263.0	6233.1	6180.5
7.5°	6963.0	6842.1	6593.1	6322.8	6045.3	5792.1	5573.0	5435.0	5304.1	5242.9	5173.2
10°	6711.2	6530.5	6143.5	5745.1	5346.8	4964.0	4604.1	4349.4	4123.2	3996.6	3906.9
12.5°	6494.9	6247.4	5711.0	5171.8	4625.4	4080.5	3541.3	3117.3	2763.0	2576.6	2481.3
15°	6284.4	5985.6	5299.8	4615.5	3914.0	3172.8	2464.2	1983.3	1690.2	1573.6	1533.7
17.5°	6093.7	5711.0	4887.2	4054.9	3179.9	2283.5	1656.1	1391.5	1279.1	1240.7	1227.8
20°	5887.4	5433.6	4459.0	3468.7	2414.4	1596.3	1293.3	1176.6	1131.1	1119.7	1114.0
22.5°	5688.2	5160.4	4049.2	2841.3	1734.4	1232.1	1111.2	1062.8	1055.7	1065.7	1065.7
25°	5518.9	4915.7	3606.7	2185.4	1273.4	1037.2	994.5	983.1	1010.2	1047.2	1054.3
27.5°	5392.3	4715.1	3135.8	1613.4	1014.4	902.0	900.6	919.1	986.0	1057.1	1071.3
30°	5305.5	4524.4	2632.1	1163.8	850.8	793.9	816.7	856.5	954.7	1055.7	1082.7
32.5°	5261.4	4383.5	2107.1	900.6	728.5	697.2	735.6	783.9	880.7	974.6	1010.2
35°	5295.5	4279.7	1612.0	751.2	643.1	618.9	658.7	705.7	762.6	802.4	829.5
37.5°	5423.6	4238.4	1216.5	673.0	584.8	562.0	593.3	620.3	643.1	654.5	667.3
40°	5699.6	4282.5	974.6	633.1	552.0	523.6	536.4	546.3	560.6	572.0	577.6
42.5°	6106.5	4414.8	873.6	617.5	535.0	493.7	490.9	495.1	513.6	535.0	539.2
45°	6675.6	4648.2	866.5	627.4	526.4	469.5	456.7	462.4	490.9	523.6	529.3
47.5°	7402.7	5003.9	923.4	657.3	533.5	456.7	435.4	442.5	478.1	522.2	529.3
50°	8283.4	5500.4	1018.7	701.4	564.8	459.6	428.3	432.5	469.5	517.9	525.0
52.5°	9323.4	6204.7	1122.6	744.1	597.6	478.1	433.9	424.0	458.1	500.8	509.4
55°	10480.1	7108.1	1229.3	782.5	614.6	500.8	445.3	412.6	436.8	472.4	479.5
57.5°	11900.0	8371.6	1414.2	819.5	626.0	516.5	456.7	401.2	409.8	435.4	441.1
60°	13822.2	10158.6	1740.0	880.7	651.6	522.2	455.3	391.3	382.7	397.0	399.8
62.5°	16125.7	12099.2	2011.8	957.5	694.3	526.4	446.7	384.1	360.0	360.0	362.8
65°	17492.9	12618.5	1861.0	1021.5	729.9	522.2	436.8	377.0	342.9	327.2	328.7
67.5°	16333.4	11097.6	1594.9	1034.4	728.5	502.2	421.1	364.2	325.8	301.6	300.2
69°	14880.7	9575.2	1475.4	1000.2	694.3	476.6	401.2	350.0	313.0	287.4	286.0
70°	13709.8	8646.2	1397.2	963.2	657.3	458.1	385.6	337.2	303.0	278.9	276.0
72.5°	9967.9	5665.5	1193.7	828.1	542.1	384.1	332.9	295.9	270.3	256.1	253.3
75°	4981.1	2701.8	968.9	671.5	415.4	307.3	273.2	247.6	234.8	231.9	230.5
77.5°	1636.2	1237.8	692.9	500.8	308.7	240.4	220.5	202.0	199.2	207.7	204.9
80°	899.2	719.9	439.6	331.5	210.6	176.4	173.6	163.6	167.9	182.1	179.3
82.5°	458.1	374.2	271.7	199.2	142.3	126.6	138.0	132.3	138.0	150.8	149.4
85°	226.2	204.9	172.2	120.9	93.9	81.1	98.2	102.4	105.3	115.2	115.2
87.5°	130.9	120.9	91.1	56.9	47.0	42.7	56.9	55.5	65.4	71.1	69.7
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)