

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: P190952

Luminaire Tested: **GLEON-AF-04-LED-E1-AFL-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190952
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-04-LED-E1-AFL-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16602.5 lumens
Efficiency: N/A
Efficacy: 128.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 129
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

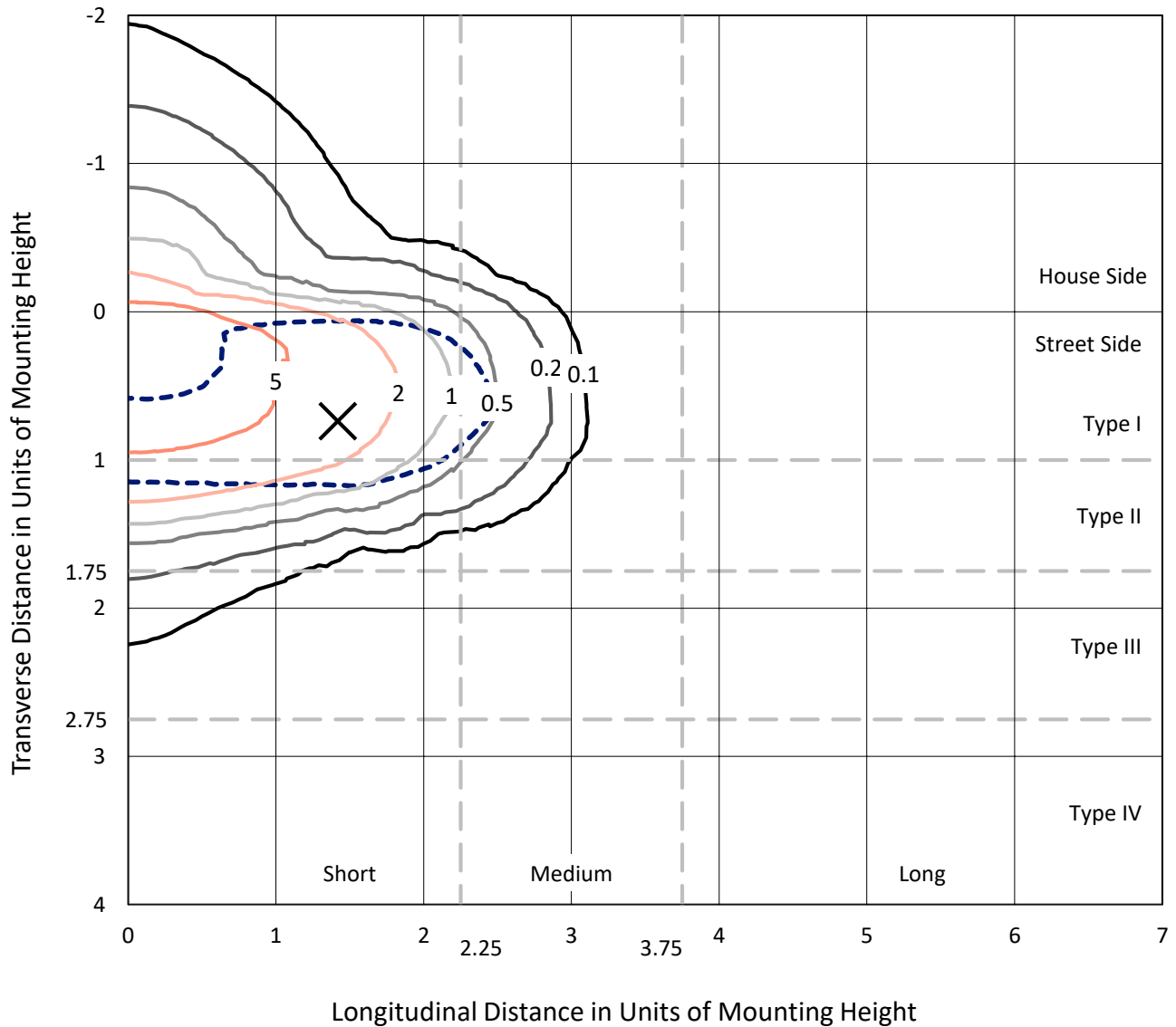


REPORT NUMBER: P190952

CATALOG NUMBER: GLEON-AF-04-LED-E1-AFL-600

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

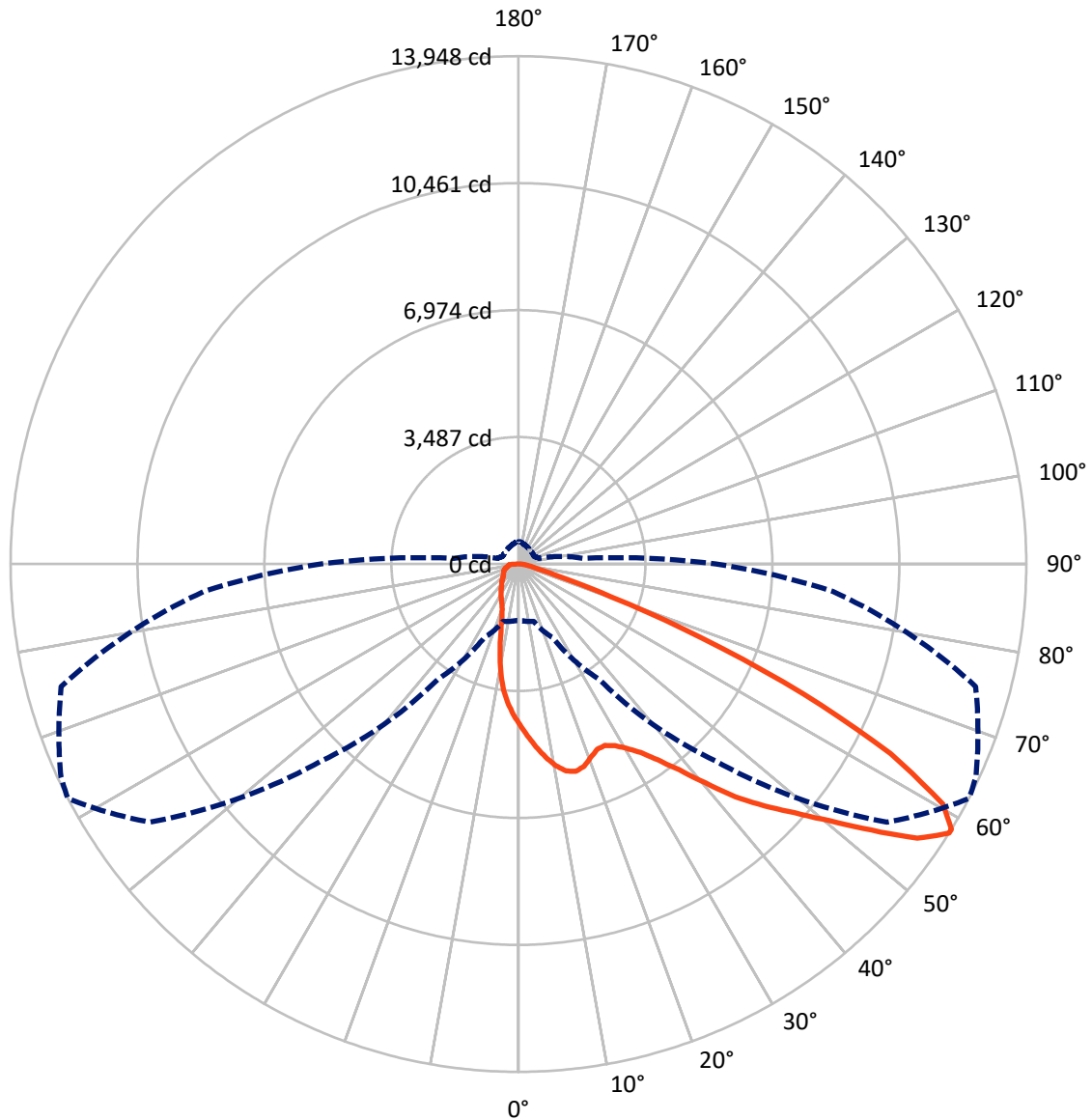


Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P190952

CATALOG NUMBER: GLEON-AF-04-LED-E1-AFL-600

Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2531.9	0.0	2531.9
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	14070.5	0.0	14070.5
	% Fixture	84.7	0.0	84.7
Total	Lumens	16602.5	0.0	16602.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	394.4	2.4
10°-20°	1008.2	6.1
20°-30°	1629.8	9.8
30°-40°	2587.3	15.6
40°-50°	3785.7	22.8
50°-60°	3959.5	23.8
60°-70°	2339.3	14.1
70°-80°	659.0	4.0
80°-90°	239.3	1.4
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°	16602.5	100.0
0°-180°	16602.5	100.0



REPORT NUMBER: P190952

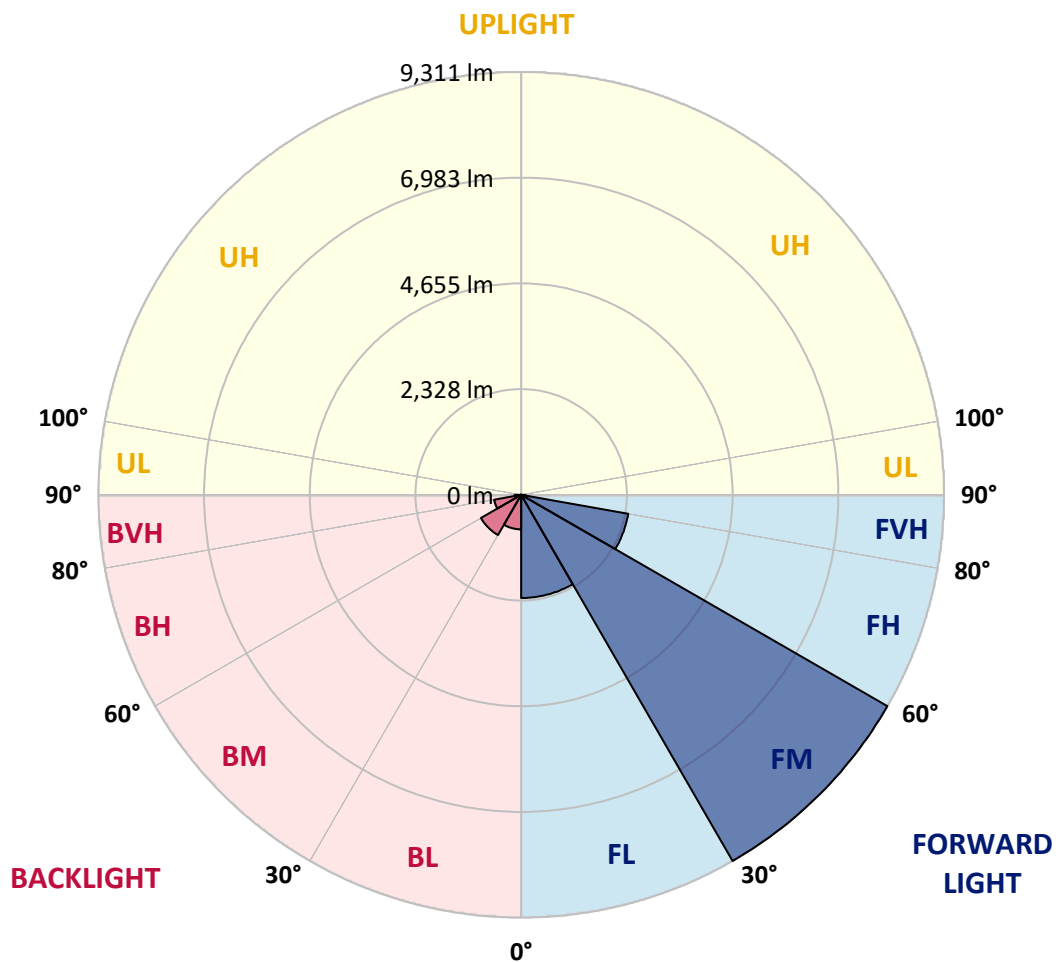
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2271.4	13.7			
FM	(30°-60°)	9310.6	56.1			
FH	(60°-80°)	2394.1	14.4			G2/5000
FVH	(80°-90°)	94.4	0.6			G1/100
BL	(0°-30°)	761.0	4.6	B2/1000		
BM	(30°-60°)	1021.9	6.2	B2/2500		
BH	(60°-80°)	604.1	3.6	B2/1000		G2/1000
BVH	(80°-90°)	144.9	0.9			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





REPORT NUMBER: P190952

CATALOG NUMBER: GLEON-AF-04-LED-E1-AFL-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	4410.1	4410.1	4410.1	4410.1	4410.1	4410.1	4410.1	4410.1	4410.1	4410.1	4410.1
2.5°	5039.5	4998.9	4973.0	4950.4	4920.6	4857.3	4772.1	4718.2	4690.7	4597.8	4487.5
5°	5533.6	5497.5	5471.0	5440.6	5387.4	5288.0	5150.5	5041.0	4987.1	4801.0	4580.6
7.5°	5417.9	5432.7	5478.8	5559.3	5628.2	5614.9	5492.1	5353.0	5281.8	5023.0	4688.4
10°	4720.5	4746.3	4826.1	5014.4	5319.3	5632.1	5727.4	5631.2	5559.3	5242.7	4799.5
12.5°	4580.6	4579.8	4586.0	4636.0	4817.4	5257.6	5735.3	5832.3	5789.2	5452.2	4912.8
15°	4637.6	4639.2	4634.5	4655.6	4711.9	4886.2	5496.0	5909.6	5940.1	5663.4	5030.1
17.5°	4787.7	4783.8	4765.8	4765.8	4786.2	4854.2	5214.6	5837.7	5978.4	5850.2	5133.3
20°	5039.5	5021.5	4973.8	4930.0	4908.1	4944.8	5098.9	5672.0	5911.9	6013.6	5218.5
22.5°	5344.4	5330.3	5252.9	5159.0	5083.2	5082.4	5158.3	5527.3	5797.1	6167.6	5290.4
25°	5738.3	5715.7	5600.8	5450.7	5317.8	5267.0	5288.0	5520.3	5734.5	6334.9	5354.5
27.5°	6201.2	6159.8	6023.7	5807.2	5611.7	5509.3	5478.8	5647.7	5791.5	6542.1	5443.6
30°	6762.5	6714.9	6540.5	6258.3	5982.3	5814.2	5749.3	5873.7	5980.8	6794.6	5586.7
32.5°	7401.3	7332.5	7130.8	6819.6	6456.9	6200.4	6094.8	6172.3	6257.5	7098.7	5765.8
35°	8284.0	8201.8	7910.2	7481.0	7071.4	6718.7	6549.9	6606.2	6689.1	7552.1	6024.6
37.5°	8885.9	8849.1	8655.3	8251.8	7806.2	7400.4	7139.4	7172.2	7219.1	8119.0	6356.0
40°	8880.4	8895.3	8899.2	8903.0	8599.7	8211.2	7930.5	7896.2	7886.7	8741.2	6732.9
42.5°	8435.6	8496.5	8693.5	9093.1	9277.6	9099.4	8842.1	8742.9	8693.5	9474.6	7132.3
45°	7754.7	7787.5	8156.5	8936.7	9624.7	9978.9	9784.2	9471.5	9382.3	10148.5	7463.9
47.5°	7403.6	7439.6	7671.7	8522.4	9620.8	10689.5	10802.1	10206.4	10046.9	10734.8	7750.0
50°	6567.9	6642.9	6935.3	7801.5	9269.8	11016.3	11866.1	11081.9	10752.0	11305.6	8036.9
52.5°	5033.2	5148.9	5476.5	6616.3	8379.3	10854.4	12717.5	12143.7	11677.7	11896.6	8283.1
55°	3174.8	3260.9	3536.0	4672.8	6703.1	10012.4	13040.4	13292.1	12877.7	12456.4	8496.5
57.5°	1726.2	1764.5	1867.7	2579.9	4360.1	8151.0	12569.7	13945.7	13773.7	12931.7	8657.6
58°	1544.9	1570.6	1634.8	2236.0	3866.8	7642.1	12361.0	13948.0	13862.0	13001.3	8670.1
60°	1146.1	1132.8	1075.7	1275.9	2152.3	5279.4	11099.1	13389.8	13642.4	13086.5	8609.2
62.5°	1007.0	974.9	858.5	845.2	1046.8	2432.2	8492.6	11469.7	12066.2	12600.2	8238.5
65°	945.9	911.6	761.5	713.0	755.2	1028.9	5002.7	8602.1	9350.3	11125.7	7291.1
67.5°	900.6	856.1	699.7	633.2	636.4	680.2	2005.3	5417.9	6259.8	8447.3	5671.1
70°	856.8	808.3	647.3	570.7	552.7	537.9	797.4	2712.0	3475.9	5335.7	3615.8
72.5°	810.0	762.2	601.2	521.5	486.3	437.0	520.7	1109.4	1549.6	2524.4	1640.2
75°	741.9	698.9	555.1	477.7	427.6	362.0	393.2	579.3	695.0	1005.4	790.4
77.5°	658.3	623.1	503.5	441.7	379.2	294.0	302.6	401.8	445.6	575.4	469.8
80°	473.0	485.5	448.0	397.1	337.8	238.4	232.2	293.2	316.6	369.8	305.7
82.5°	332.3	339.3	370.6	324.5	279.1	187.6	171.2	206.4	220.4	243.2	165.0
85°	229.0	221.3	254.1	226.0	201.7	125.1	117.2	139.9	148.5	150.9	85.2
87.5°	137.6	137.6	147.0	121.2	108.6	64.9	63.3	79.8	85.2	81.3	47.0
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: P190952

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4410.1	4410.1	4410.1	4410.1	4410.1	4410.1	4410.1	4410.1	4410.1	4410.1	4410.1
2.5°	4421.8	4366.4	4248.3	4153.7	4034.1	3909.7	3840.2	3765.9	3715.1	3678.3	3736.9
5°	4455.5	4342.1	4098.1	3866.8	3611.1	3345.4	3143.6	2956.0	2825.4	2744.1	2820.7
7.5°	4508.7	4334.2	3945.7	3550.2	3091.3	2648.7	2253.2	2005.3	1860.6	1789.6	1834.0
10°	4569.6	4321.8	3766.7	3120.9	2464.2	1906.8	1611.2	1511.2	1478.4	1465.1	1471.3
12.5°	4620.5	4295.2	3547.0	2601.8	1850.5	1505.8	1420.6	1418.2	1425.2	1426.8	1429.2
15°	4656.4	4256.1	3221.0	2060.8	1479.9	1372.1	1367.4	1381.4	1394.7	1400.2	1403.3
17.5°	4680.6	4175.6	2852.8	1629.3	1325.9	1307.1	1318.1	1336.1	1350.2	1354.1	1357.1
20°	4678.3	4057.5	2414.2	1358.8	1242.3	1242.3	1261.0	1275.1	1275.9	1271.2	1273.6
22.5°	4654.0	3895.7	1988.9	1215.0	1168.0	1181.3	1200.0	1186.7	1132.0	1096.1	1098.4
25°	4613.4	3702.6	1624.5	1123.4	1099.2	1122.7	1117.2	1017.1	939.0	903.8	903.8
27.5°	4577.4	3474.4	1344.7	1043.7	1030.4	1059.4	962.4	871.7	838.8	822.5	816.9
30°	4551.6	3228.0	1157.9	967.1	965.6	944.4	834.9	810.0	804.4	791.2	786.4
32.5°	4557.9	2978.6	1038.2	899.9	905.3	808.3	774.0	779.5	774.8	760.7	754.4
35°	4609.5	2741.7	960.0	838.8	822.5	730.2	738.1	748.2	746.7	727.1	720.8
37.5°	4701.7	2517.4	908.5	788.1	717.7	691.1	703.6	719.2	715.3	702.1	697.3
40°	4798.7	2306.3	866.2	748.2	655.9	664.5	675.5	684.0	687.9	691.9	688.8
42.5°	4893.3	2085.8	814.7	707.6	630.1	639.5	644.2	652.8	673.9	688.8	687.9
45°	4949.5	1878.6	761.5	649.7	609.8	615.3	612.1	629.3	655.1	679.3	680.2
47.5°	5012.0	1717.6	719.2	596.5	590.2	594.1	584.8	602.0	625.4	655.1	658.3
50°	5088.0	1621.5	685.7	554.3	563.6	563.6	561.3	576.9	609.8	644.2	650.5
52.5°	5173.9	1602.7	657.5	523.9	537.0	536.3	538.7	562.1	598.1	631.7	637.2
55°	5278.7	1653.5	627.0	501.1	511.3	514.4	522.2	548.8	579.3	617.7	620.0
57.5°	5400.7	1756.7	602.7	483.1	487.8	498.0	510.6	534.8	567.5	609.8	612.1
58°	5421.0	1778.6	598.8	481.6	483.1	494.9	508.9	532.4	565.3	611.3	613.7
60°	5421.7	1851.3	590.2	474.5	465.1	484.7	500.3	523.9	561.3	616.8	622.3
62.5°	5229.4	1850.5	584.0	464.4	446.4	470.7	488.7	516.0	557.4	630.1	641.1
65°	4604.8	1681.6	554.3	448.8	431.6	458.2	478.4	510.6	568.4	687.9	695.0
67.5°	3601.7	1378.3	498.8	426.9	412.0	445.6	472.2	509.7	580.1	701.2	705.9
70°	2381.3	1031.2	437.8	401.8	391.7	430.8	475.4	536.3	566.8	673.1	660.6
72.5°	1236.0	723.9	388.5	370.6	368.3	417.5	520.7	533.2	553.5	633.2	617.7
75°	648.9	502.7	345.6	336.1	340.1	414.4	614.5	519.1	536.3	605.9	635.6
77.5°	397.1	405.7	308.8	304.9	312.7	405.0	613.7	501.1	511.3	557.4	590.2
80°	265.8	329.2	280.7	281.4	286.9	370.6	551.2	473.0	480.8	526.9	560.6
82.5°	168.1	194.7	254.8	268.1	261.2	305.7	468.3	430.8	441.7	602.7	637.2
85°	85.2	121.9	221.3	258.0	235.3	214.2	379.9	377.6	383.1	434.7	454.2
87.5°	39.1	67.2	172.8	225.2	177.5	133.7	276.0	279.9	301.8	308.8	308.8
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)