

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: P191492

Luminaire Tested: **GLEON-AF-04-LED-E1-T3R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191492
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P40129)
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-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25113.4 lumens
Efficiency: N/A
Efficacy: 111.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 225
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

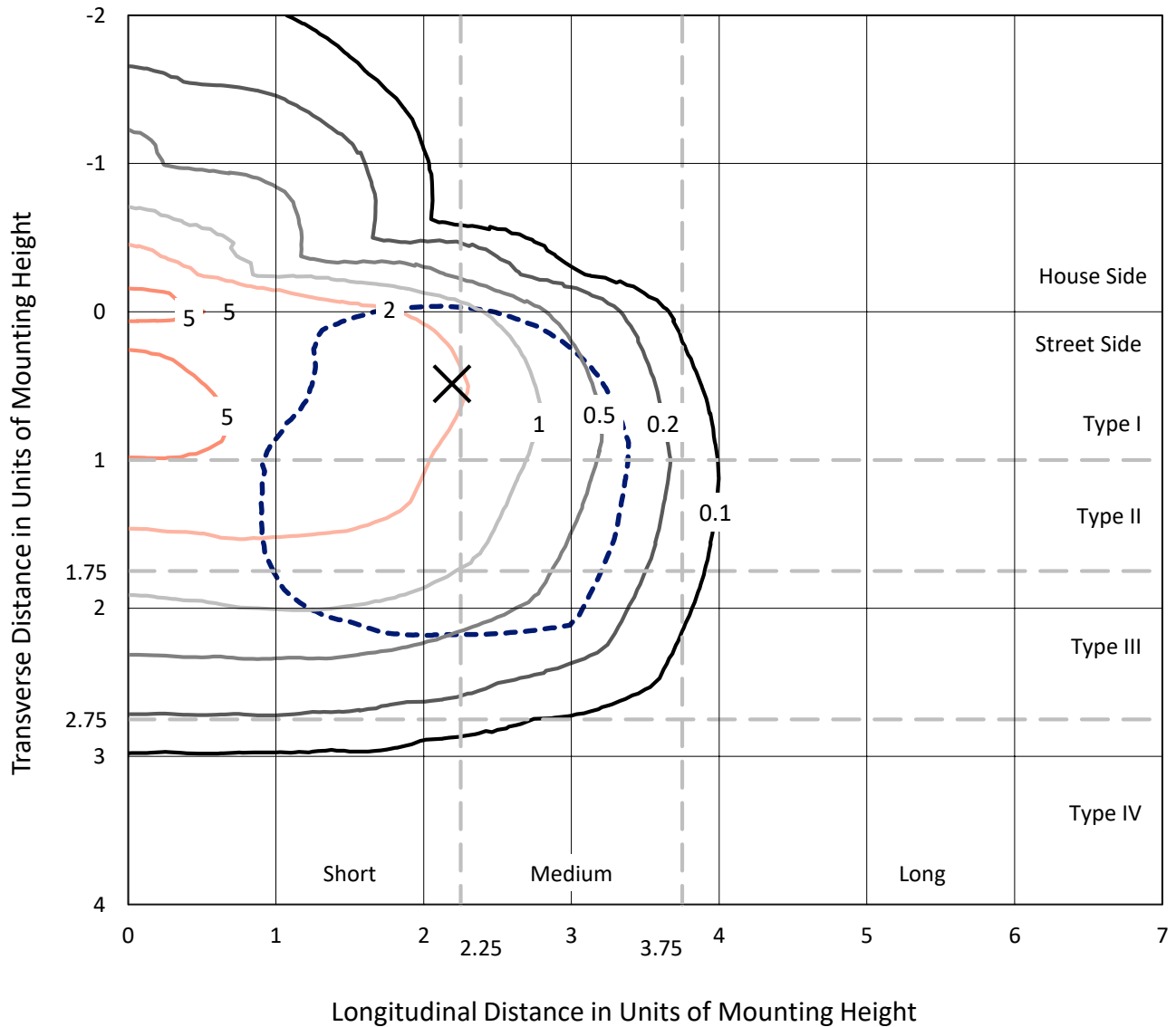


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

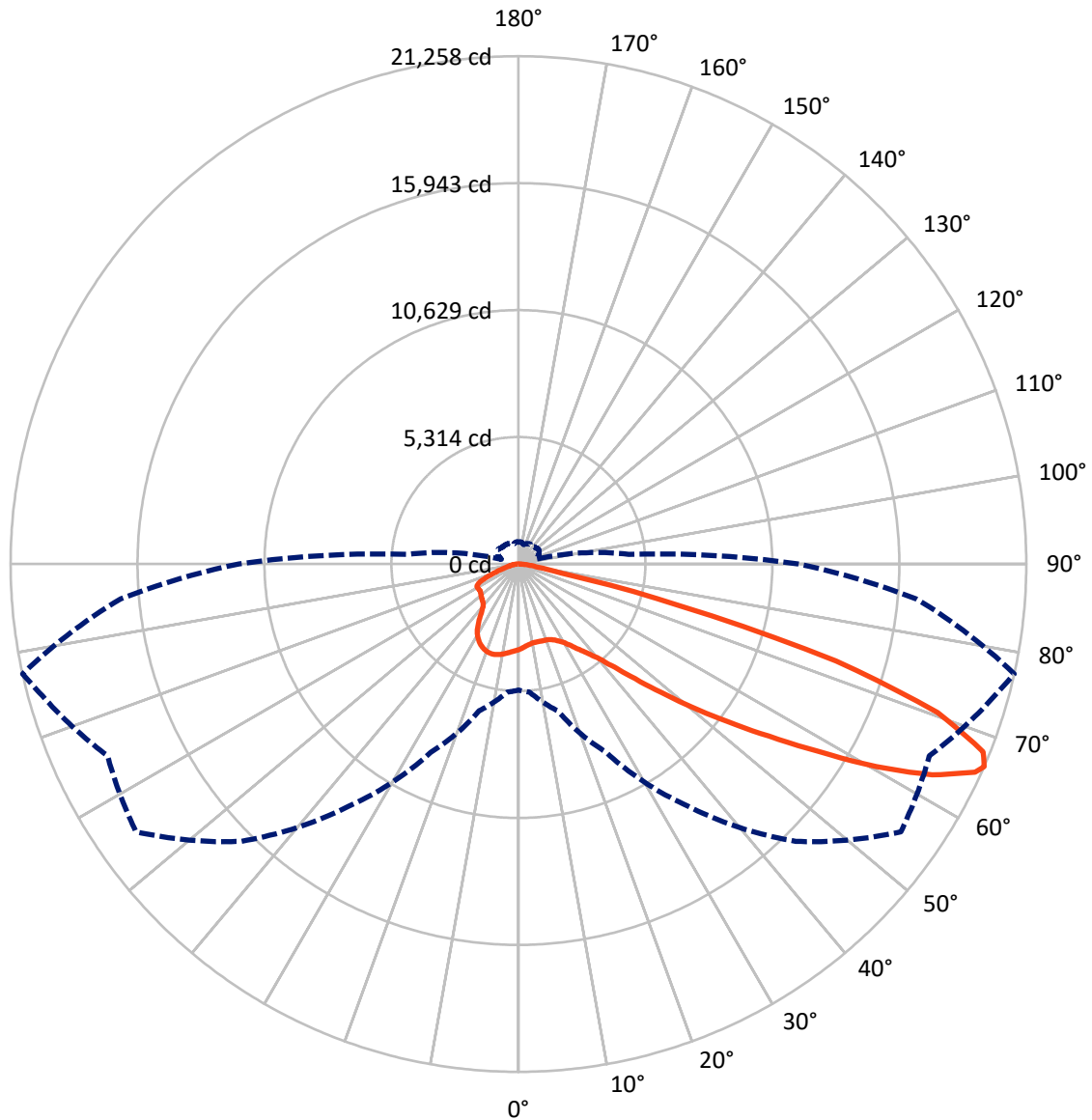


Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4290.5	0.0	4290.5
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	20823.0	0.0	20823.0
	% Fixture	82.9	0.0	82.9
Total	Lumens	25113.4	0.0	25113.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	319.7	1.3
10°-20°	902.0	3.6
20°-30°	1539.4	6.1
30°-40°	2464.4	9.8
40°-50°	3807.2	15.2
50°-60°	5400.0	21.5
60°-70°	7223.7	28.8
70°-80°	3137.1	12.5
80°-90°	319.9	1.3
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°	25113.4	100.0
0°-180°	25113.4	100.0



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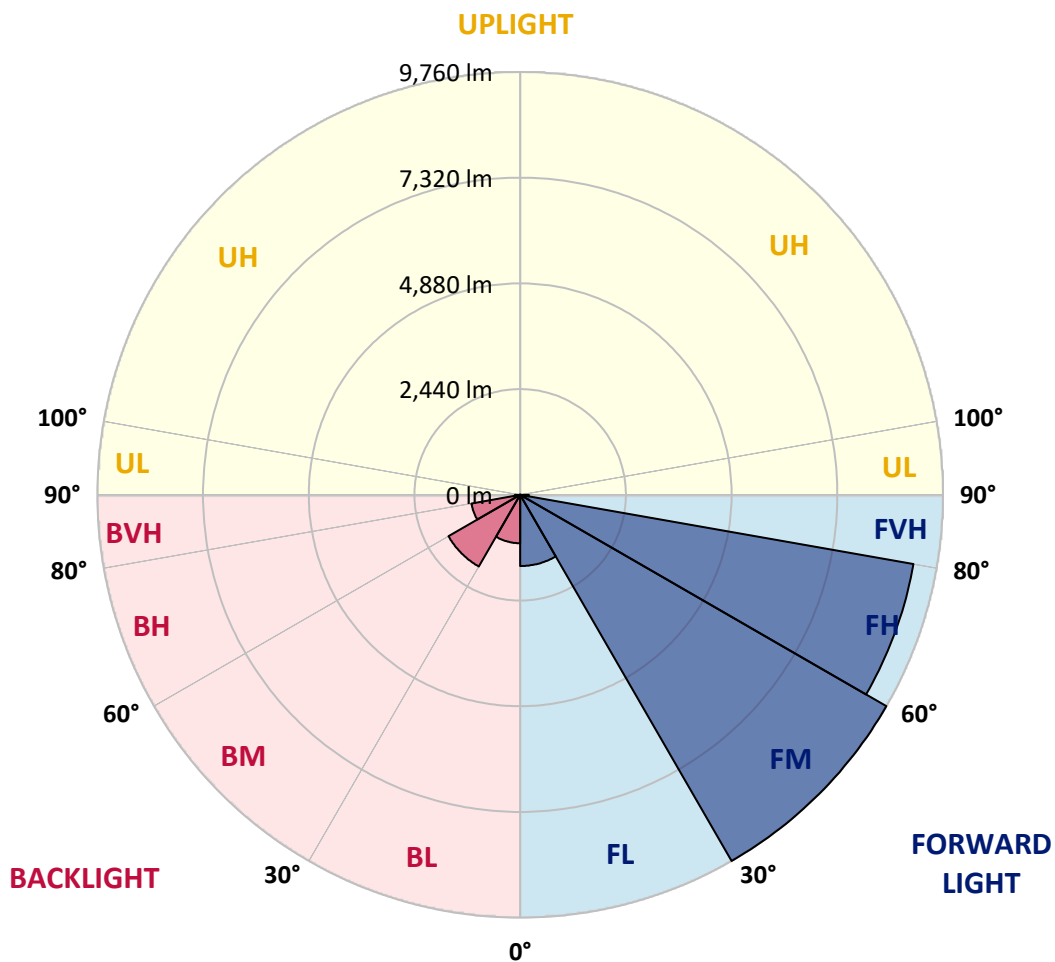
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1643.8	6.5			
FM	(30°-60°)	9760.4	38.9			
FH	(60°-80°)	9218.2	36.7			G4/12000
FVH	(80°-90°)	200.6	0.8			G2/225
BL	(0°-30°)	1117.4	4.4	B3/2500		
BM	(30°-60°)	1911.2	7.6	B2/2500		
BH	(60°-80°)	1142.6	4.5	B3/2500		G3/2500
BVH	(80°-90°)	119.3	0.5			G2/225
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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	3578.8	3578.8	3578.8	3578.8	3578.8	3578.8	3578.8	3578.8	3578.8	3578.8	3578.8
2.5°	3165.8	3187.2	3205.0	3221.6	3254.8	3309.5	3372.4	3423.3	3497.0	3511.2	3550.4
5°	2875.1	2875.1	2889.3	2914.3	2959.4	3041.2	3126.6	3240.6	3400.8	3438.8	3543.2
7.5°	2733.9	2735.1	2743.5	2764.7	2803.9	2878.7	2972.4	3106.5	3323.7	3386.6	3564.6
10°	2786.1	2774.2	2756.4	2745.8	2751.7	2795.6	2884.6	3034.2	3276.2	3356.9	3612.0
12.5°	3078.1	3055.5	2993.8	2911.9	2833.6	2801.6	2853.7	2999.7	3256.1	3349.8	3674.8
15°	3555.1	3545.5	3430.5	3260.8	3070.9	2911.9	2876.3	2986.7	3258.4	3358.0	3749.6
17.5°	4153.1	4140.1	3988.2	3741.3	3431.7	3121.9	2955.8	2997.3	3266.7	3372.4	3822.1
20°	4757.0	4716.7	4552.9	4258.7	3861.2	3408.0	3087.6	3024.7	3277.4	3387.7	3898.0
22.5°	5207.9	5174.8	5027.6	4741.7	4283.6	3739.0	3264.3	3072.1	3311.8	3432.8	3991.8
25°	5604.3	5606.7	5460.7	5184.2	4710.8	4090.2	3492.1	3199.1	3399.6	3525.4	4119.8
27.5°	6094.3	6065.9	5929.4	5655.4	5133.3	4445.0	3767.4	3373.5	3530.1	3657.2	4288.4
30°	6680.6	6660.4	6502.6	6191.7	5602.0	4825.9	4081.9	3576.4	3698.6	3830.3	4509.1
32.5°	7370.0	7360.4	7196.8	6796.9	6143.0	5274.4	4451.0	3844.6	3950.2	4086.7	4825.9
35°	8179.2	8180.4	7987.0	7506.4	6735.1	5796.6	4869.8	4189.9	4256.3	4398.7	5203.2
37.5°	8677.6	8738.1	8665.7	8175.6	7405.6	6380.3	5413.3	4647.9	4605.2	4748.7	5607.9
40°	8784.4	8857.9	9087.0	8837.8	8155.5	7023.5	5895.1	5088.2	5034.8	5210.4	6128.8
42.5°	8634.9	8736.9	9221.1	9396.7	8951.7	7816.2	6542.9	5741.9	5674.3	5910.4	6776.6
45°	8545.9	8621.8	9181.9	9687.4	9642.3	8712.1	7367.6	6563.0	6538.2	6847.8	7524.2
47.5°	8391.7	8460.4	8999.2	9755.1	10048.1	9533.2	8358.4	7567.0	7615.6	8021.4	8367.9
50°	8474.7	8503.2	8795.1	9583.0	10165.6	10134.8	9465.5	8729.9	8896.0	9402.7	9323.1
52.5°	8462.9	8536.4	8771.4	9300.6	10181.0	10506.1	10556.0	10026.8	10376.8	10958.3	10382.7
55°	6841.9	6977.2	8492.5	9229.4	10235.6	10870.5	11526.6	11393.7	12046.4	12723.9	11578.9
57.5°	6533.4	6618.9	7458.9	9378.9	10525.1	11565.8	12606.4	12898.4	13990.0	14776.7	13036.0
60°	6472.9	6578.5	7448.3	9561.6	11112.5	12699.0	14207.2	14719.8	16354.9	17216.4	14725.7
62.5°	6284.2	6398.1	7378.2	9537.9	11946.7	14266.5	16256.4	16656.3	18597.6	19435.3	16139.0
65°	5686.2	5793.0	6807.5	9154.6	12509.2	15939.6	18681.8	18431.4	20368.0	20998.1	16843.8
66°	5276.8	5381.2	6357.8	8703.7	12378.6	16414.3	19540.9	18980.9	20764.3	21257.9	16706.1
67.5°	4528.1	4609.9	5484.4	7693.9	11684.5	16547.2	20263.5	19393.8	20805.8	20980.3	15919.5
70°	2860.9	2884.6	3564.6	5311.3	8844.9	14350.8	19163.6	18368.5	19090.0	18617.7	13345.7
72.5°	1241.1	1232.9	1711.1	2701.9	5007.4	9629.2	15501.7	15156.4	14974.9	13897.5	9342.1
75°	690.6	700.1	888.7	1254.2	2035.1	4729.8	10140.7	9704.0	8193.4	6991.5	4236.1
77.5°	554.1	567.2	736.8	890.0	913.7	1649.4	4745.2	3861.2	2324.6	1865.4	1177.1
80°	437.8	461.6	643.1	692.9	615.8	680.0	1533.1	1225.8	919.6	843.6	609.9
82.5°	346.5	363.1	551.8	524.5	430.8	458.1	734.5	715.6	598.0	544.6	352.4
85°	249.2	280.1	453.3	395.2	282.4	308.5	487.7	467.5	342.9	280.1	155.5
87.5°	102.1	132.9	320.4	262.3	157.8	143.6	243.3	229.0	162.5	118.7	77.1
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°	3578.8	3578.8	3578.8	3578.8	3578.8	3578.8	3578.8	3578.8	3578.8	3578.8	3578.8
2.5°	3575.2	3603.8	3640.5	3663.1	3674.8	3683.2	3696.2	3695.1	3698.6	3699.8	3704.5
5°	3598.9	3646.4	3699.8	3714.0	3714.0	3701.0	3687.9	3666.6	3658.3	3655.9	3658.3
7.5°	3660.6	3712.9	3759.1	3742.6	3707.0	3654.7	3587.1	3527.7	3495.7	3485.1	3482.6
10°	3739.0	3801.9	3820.8	3757.9	3653.6	3527.7	3393.6	3296.4	3240.6	3225.2	3220.5
12.5°	3833.9	3893.2	3867.2	3734.2	3540.8	3337.9	3152.8	2997.3	2881.0	2844.3	2841.9
15°	3938.4	3984.6	3893.2	3660.6	3372.4	3073.3	2743.5	2475.2	2330.5	2284.2	2280.7
17.5°	4035.6	4059.4	3877.8	3532.6	3124.3	2640.1	2202.3	1995.9	1946.1	1957.9	1960.3
20°	4118.7	4118.7	3825.6	3348.6	2733.9	2069.4	1792.9	1789.3	1824.9	1860.5	1867.7
22.5°	4210.1	4155.4	3734.2	3088.7	2180.9	1693.3	1652.9	1686.1	1726.5	1765.6	1771.5
25°	4322.8	4185.1	3607.2	2694.8	1714.7	1537.8	1553.2	1580.6	1600.7	1625.7	1629.2
27.5°	4448.6	4223.2	3440.0	2152.5	1488.0	1440.5	1452.4	1461.9	1459.5	1469.1	1471.4
30°	4599.3	4267.0	3210.9	1682.5	1394.3	1357.5	1336.1	1327.8	1327.8	1343.2	1349.2
32.5°	4801.0	4332.3	2882.3	1441.7	1349.2	1298.1	1229.3	1198.5	1210.4	1262.5	1274.4
35°	5022.9	4402.3	2437.3	1359.8	1339.7	1270.8	1164.0	1107.1	1108.3	1157.0	1172.4
37.5°	5264.9	4491.3	1949.5	1344.5	1361.0	1272.0	1129.6	1051.3	1019.3	1019.3	1025.2
40°	5574.7	4582.6	1578.2	1355.1	1406.1	1286.3	1111.8	1007.4	917.3	919.6	924.3
42.5°	5978.1	4661.0	1378.8	1377.6	1460.7	1305.3	1110.6	949.3	870.9	924.3	973.0
45°	6426.6	4700.2	1291.1	1397.9	1504.7	1317.2	1091.7	939.8	876.9	1035.9	1128.4
47.5°	6942.8	4677.5	1242.4	1404.9	1515.3	1317.2	1070.3	962.3	918.4	1199.6	1307.6
50°	7508.8	4612.3	1194.9	1390.7	1511.7	1314.8	1090.5	984.9	933.9	1228.2	1302.9
52.5°	8174.5	4557.8	1145.1	1359.8	1486.9	1301.7	1114.2	975.4	885.2	1116.6	1168.8
55°	8933.9	4573.2	1089.3	1315.9	1447.7	1276.7	1105.9	937.4	834.2	983.7	1015.7
57.5°	9904.5	4757.0	1022.8	1260.2	1394.3	1235.2	1076.2	919.6	818.8	892.3	911.3
60°	10987.9	5077.4	939.8	1204.4	1327.8	1168.8	1053.7	927.9	825.8	885.2	894.7
62.5°	11783.0	5263.8	868.6	1122.5	1237.7	1095.3	1025.2	938.6	844.9	910.1	907.8
65°	11998.9	4957.6	779.6	1002.7	1115.4	1018.1	989.6	950.4	853.1	930.3	919.6
66°	11696.3	4627.7	740.4	946.9	1053.7	980.1	971.8	949.3	849.6	932.6	914.8
67.5°	10961.8	3951.4	672.8	865.0	955.2	923.2	943.4	938.6	840.1	930.3	905.4
70°	8939.9	2696.0	575.5	720.3	795.0	812.8	888.7	900.6	809.3	888.7	834.2
72.5°	6246.2	1642.2	509.0	558.8	643.1	692.9	814.0	848.4	767.7	776.0	723.8
75°	3018.7	872.2	461.6	433.1	499.6	579.1	723.8	777.2	702.5	649.1	630.0
77.5°	941.0	532.8	391.6	348.8	391.6	467.5	605.2	681.1	625.3	543.5	536.3
80°	505.5	391.6	301.4	280.1	309.7	366.6	475.9	568.4	537.6	487.7	435.5
82.5°	333.5	253.9	223.1	217.2	236.1	280.1	353.6	471.1	471.1	417.7	303.8
85°	172.1	155.5	153.0	153.0	164.9	186.3	240.9	363.1	386.9	220.8	182.7
87.5°	85.4	89.0	83.1	86.6	92.6	91.3	115.1	182.7	218.3	134.1	111.5
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)