

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: EPHESUS

Report Number: P638823

Luminaire Tested: **EPH-VN-04-E-940-U-77-VI**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-08
Report Number: P638823
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-04-E-940-U-77-VI
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 7 distribution lens and Visor
Light Source: (64) 4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19439.3 lumens
Efficiency: N/A
Efficacy: 64.0 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 0.5' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G2

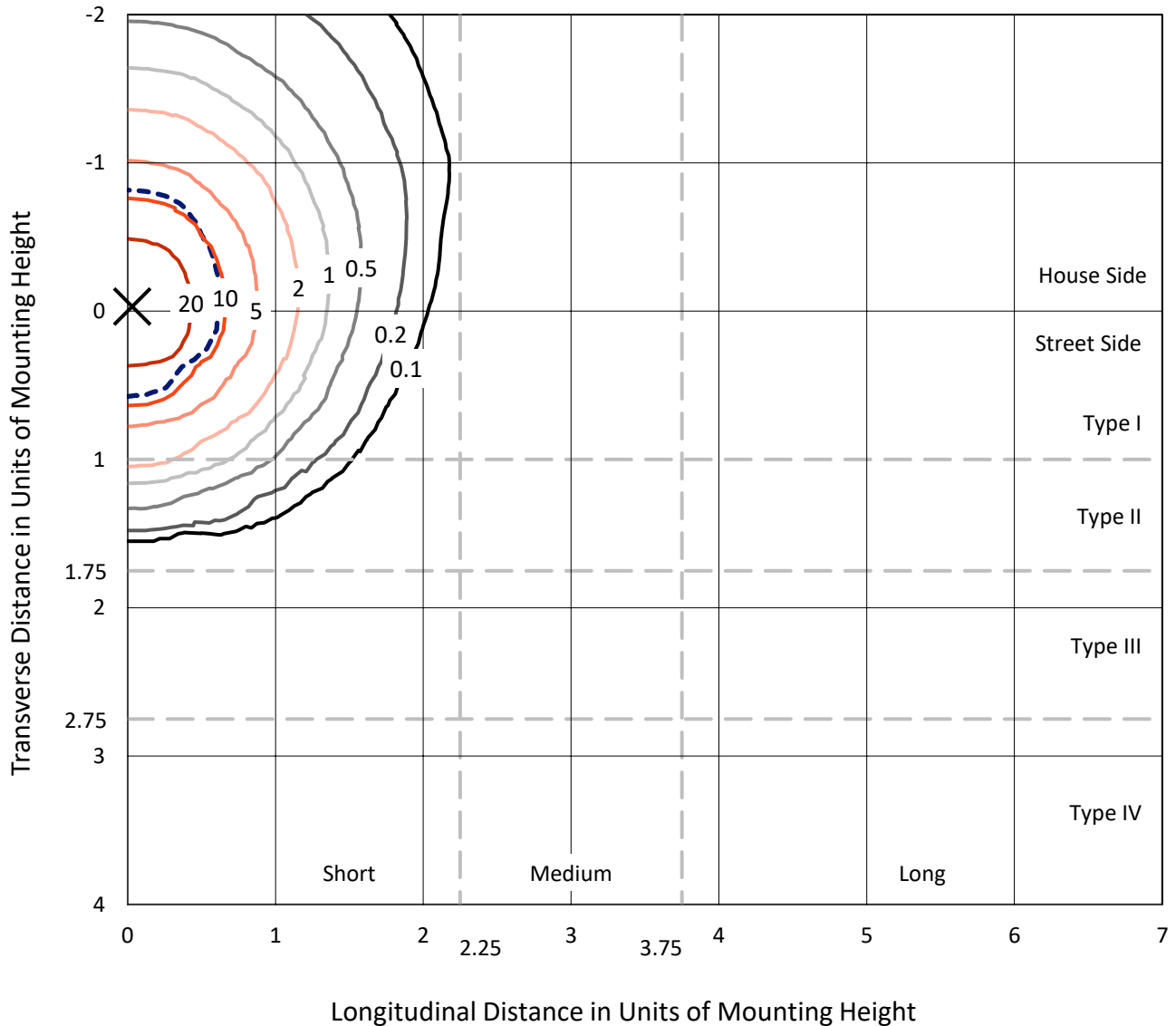
Input Watts (W): 303.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

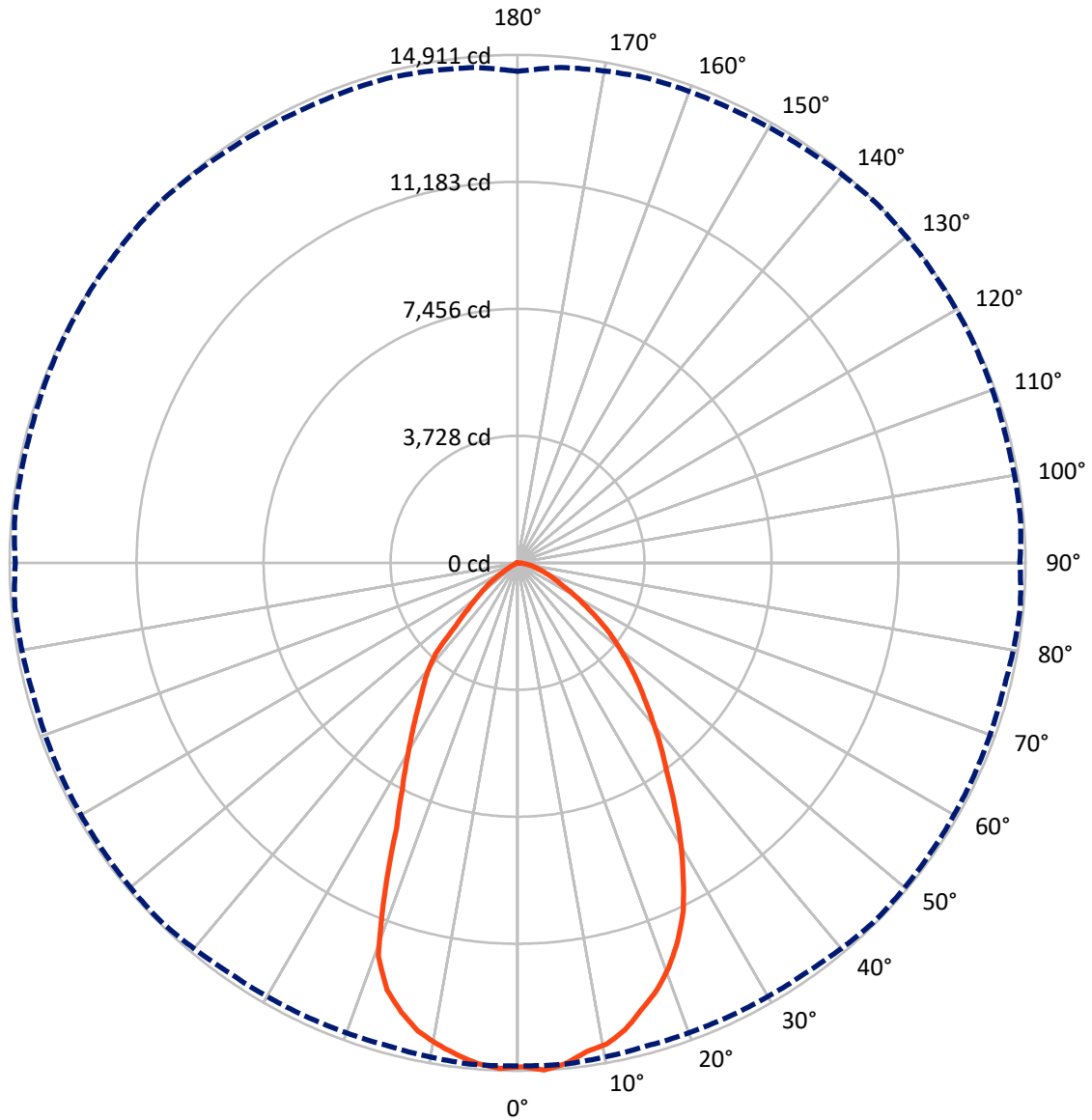
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 37 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 135-Deg Lateral - - - Horizontal Cone Through 2.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11513.0	0.0	11513.0
	% Fixture	59.2	0.0	59.2
Street Side	Lumens	7926.4	0.0	7926.4
	% Fixture	40.8	0.0	40.8
Total	Lumens	19439.3	0.0	19439.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1387.4	7.1
10°-20°	3720.3	19.1
20°-30°	4537.2	23.3
30°-40°	4142.4	21.3
40°-50°	2993.6	15.4
50°-60°	1634.5	8.4
60°-70°	675.8	3.5
70°-80°	273.7	1.4
80°-90°	74.4	0.4
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°	19439.3	100.0
0°-180°	19439.3	100.0

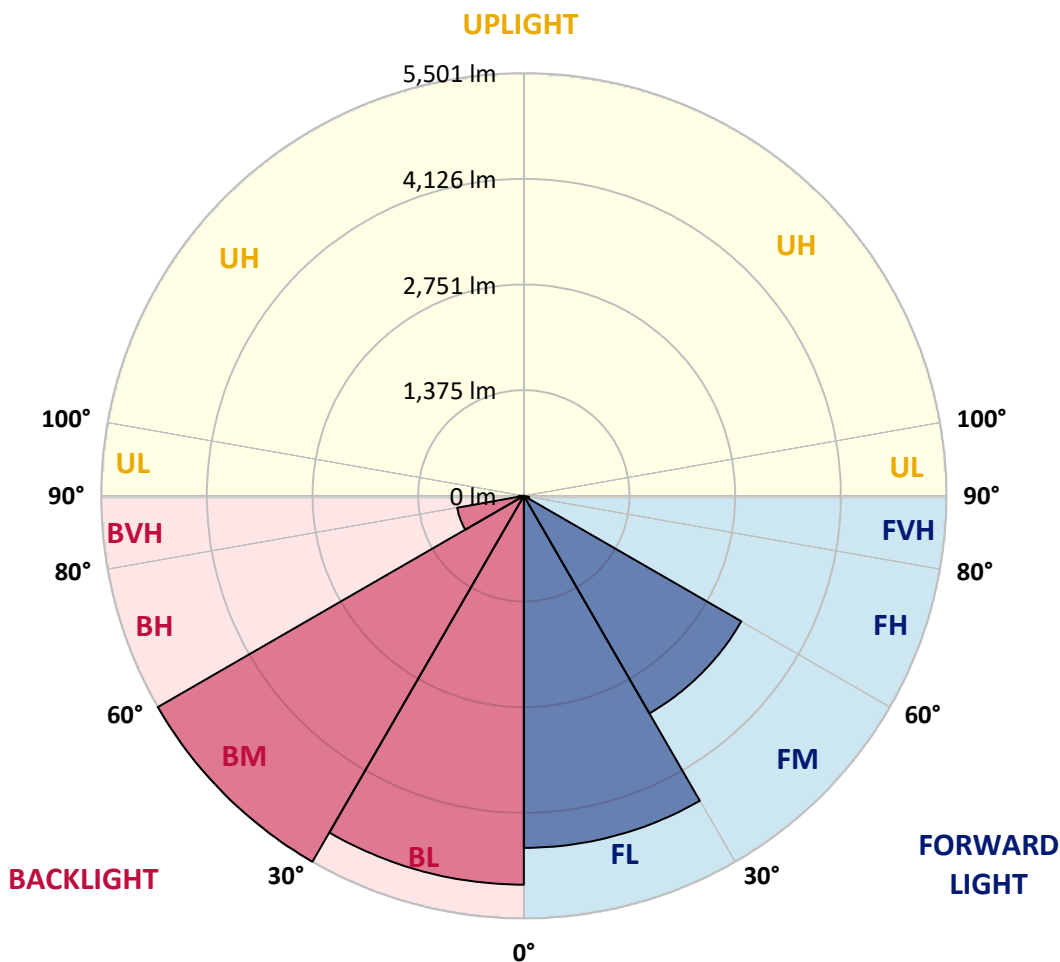


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4582.6	23.6			
FM (30°-60°)	3269.3	16.8			
FH (60°-80°)	68.5	0.4			G0/660
FVH (80°-90°)	6.0	0.0			G0/10
BL (0°-30°)	5062.3	26.0	B5		
BM (30°-60°)	5501.2	28.3	B4/8500		
BH (60°-80°)	881.0	4.5	B2/1000		G2/1000
BVH (80°-90°)	68.5	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G2
 Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	14793.3	14793.3	14793.3	14793.3	14793.3	14793.3	14793.3	14793.3	14793.3	14793.3
2.5°	14765.9	14785.1	14681.1	14692.0	14711.2	14850.8	14815.2	14782.3	14735.8	14815.2
5°	14746.8	14757.7	14648.2	14609.9	14626.3	14752.2	14637.3	14637.3	14626.3	14612.6
7.5°	14598.9	14604.4	14519.5	14451.1	14494.9	14552.4	14467.5	14508.6	14448.4	14494.9
10°	14377.2	14341.6	14240.3	14221.2	14270.4	14325.2	14267.7	14306.0	14251.3	14286.9
12.5°	14051.4	13996.7	13914.6	13889.9	13974.8	14048.7	14002.2	13980.3	13909.1	13996.7
15°	12794.9	12753.9	12940.0	13265.8	13558.7	13621.7	13572.4	13594.3	13446.5	13471.1
17.5°	10531.1	10454.4	10654.2	11426.2	12526.7	13107.0	13063.2	12920.9	12701.9	12751.1
20°	9570.2	9548.3	9526.4	9709.8	10479.0	12239.2	12299.5	11938.1	11626.0	11557.6
22.5°	9028.2	9020.0	8998.1	9039.1	9241.7	10372.3	11062.1	10728.1	10520.1	10500.9
25°	8532.7	8519.0	8453.3	8505.3	8505.3	8571.0	9455.2	9657.8	9474.4	9452.5
27.5°	8029.0	8004.4	7993.4	8018.1	7892.1	7448.7	7673.1	8661.4	8565.5	8571.0
30°	7484.2	7476.0	7445.9	7497.9	7109.2	6559.0	6416.6	7758.0	7777.2	7771.7
32.5°	6674.0	6709.5	6846.4	6903.9	6263.3	5808.9	5570.8	6712.3	7103.7	7095.5
35°	4848.1	4848.1	5294.3	6123.7	5488.6	5146.4	5017.8	5691.2	6438.5	6465.9
37.5°	3985.8	3999.4	4087.0	4464.8	4735.8	4615.4	4577.1	4790.6	5584.4	5628.2
40°	3586.1	3586.1	3586.1	3430.1	3421.8	4158.2	4136.3	4067.9	4823.4	4919.2
42.5°	3222.0	3230.2	3235.7	2841.5	2622.5	3594.3	3545.0	3441.0	4141.8	4254.0
45°	2847.0	2860.7	2877.1	2376.1	2280.3	2586.9	3000.3	2885.3	3468.4	3613.5
47.5°	1738.3	1760.2	2132.5	2014.8	2025.7	1995.6	2447.3	2428.1	2844.2	3049.5
50°	1174.4	1182.6	1218.2	1278.4	1738.3	1568.6	1732.8	2009.3	2159.9	2471.9
52.5°	985.5	999.2	911.6	829.5	1141.5	1226.4	1210.0	1491.9	1552.1	1938.1
55°	692.6	736.4	695.3	687.1	648.8	952.6	917.1	1147.0	1185.3	1472.8
57.5°	71.2	82.1	142.3	511.9	424.3	539.3	654.3	840.4	878.7	1086.8
60°	5.5	5.5	13.7	71.2	309.3	323.0	451.7	517.4	591.3	758.3
62.5°	0.0	2.7	5.5	10.9	49.3	172.5	227.2	271.0	355.9	490.0
65°	0.0	0.0	2.7	8.2	10.9	65.7	87.6	142.3	194.4	303.9
67.5°	0.0	0.0	2.7	5.5	8.2	16.4	30.1	52.0	104.0	172.5
70°	0.0	0.0	2.7	5.5	8.2	13.7	21.9	32.8	46.5	93.1
72.5°	0.0	0.0	2.7	2.7	5.5	13.7	16.4	21.9	32.8	46.5
75°	0.0	0.0	2.7	2.7	8.2	16.4	13.7	16.4	21.9	30.1
77.5°	0.0	0.0	2.7	5.5	8.2	16.4	13.7	16.4	16.4	19.2
80°	0.0	0.0	2.7	5.5	10.9	19.2	16.4	16.4	13.7	13.7
82.5°	0.0	0.0	2.7	8.2	10.9	24.6	24.6	21.9	10.9	8.2
85°	0.0	0.0	5.5	10.9	16.4	27.4	27.4	21.9	8.2	5.5
87.5°	0.0	0.0	5.5	8.2	13.7	19.2	27.4	21.9	8.2	2.7
90°	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°
14793.3	0°	14793.3	14793.3	14793.3	14793.3	14793.3	14793.3	14793.3	14793.3	14793.3
14746.8	2.5°	14820.7	14804.2	14859.0	14880.9	14911.0	14796.0	14724.9	14727.6	14596.2
14579.8	5°	14667.4	14670.1	14741.3	14735.8	14765.9	14703.0	14675.6	14629.0	14514.1
14369.0	7.5°	14473.0	14448.4	14516.8	14568.8	14492.2	14536.0	14473.0	14494.9	14426.5
14182.8	10°	14322.4	14265.0	14327.9	14363.5	14366.2	14322.4	14262.2	14204.7	14180.1
13892.7	12.5°	13988.5	13914.6	14021.3	14070.6	14062.4	13977.5	13909.1	13922.8	13843.4
13383.5	15°	13528.6	13531.3	13608.0	13654.5	13610.7	13591.5	13597.0	13564.2	13495.7
12680.0	17.5°	12825.1	12866.1	13068.7	13180.9	13205.6	13167.2	13148.1	13109.7	13041.3
11557.6	20°	11653.4	11899.8	12261.1	12608.8	12677.2	12666.3	12597.8	12581.4	12543.1
10446.2	22.5°	10624.1	10807.5	11226.4	11768.4	12047.6	12075.0	11992.9	11968.2	11927.2
9452.5	25°	9559.2	9756.3	10134.1	10722.7	11300.3	11418.0	11404.3	11330.4	11286.6
8571.0	27.5°	8661.4	8858.5	9200.6	9731.7	10350.4	10728.1	10763.7	10646.0	10643.3
7785.4	30°	7851.1	8122.1	8382.1	8814.7	9414.2	9980.8	10041.0	9958.9	9967.1
7065.4	32.5°	7216.0	7440.4	7662.2	7952.4	8450.6	9110.3	9345.7	9269.1	9239.0
6465.9	35°	6567.2	6720.5	6947.7	7213.2	7552.7	8206.9	8614.8	8557.3	8527.2
5655.6	37.5°	5828.1	6090.9	6255.1	6553.5	6819.0	7339.2	7914.0	7905.8	7842.9
4965.8	40°	5069.8	5346.3	5595.4	5896.5	6101.8	6515.2	7153.0	7150.3	7158.5
4251.3	42.5°	4382.7	4637.3	4938.4	5266.9	5464.0	5765.1	6449.5	6487.8	6534.3
3662.7	45°	3761.3	3991.2	4270.5	4670.1	4908.3	5080.7	5688.5	5863.7	5860.9
3137.1	47.5°	3202.8	3419.1	3654.5	4043.2	4347.1	4503.1	5006.8	5255.9	5239.5
2573.2	50°	2688.2	2879.8	3126.2	3408.2	3816.0	3952.9	4327.9	4656.4	4631.8
2050.4	52.5°	2162.6	2428.1	2636.2	2893.5	3323.3	3457.4	3747.6	4067.9	4048.7
1538.5	55°	1686.3	1943.6	2195.5	2417.2	2778.5	2978.4	3186.4	3514.9	3509.4
1204.5	57.5°	1275.7	1557.6	1795.8	2006.6	2294.0	2540.4	2707.4	3005.7	3044.1
824.0	60°	944.4	1160.7	1418.0	1653.4	1880.6	2135.2	2247.5	2540.4	2556.8
563.9	62.5°	643.3	881.5	1133.3	1346.8	1516.6	1779.4	1880.6	2121.5	2151.7
361.3	65°	446.2	599.5	886.9	1040.2	1248.3	1472.8	1574.0	1765.7	1825.9
208.0	67.5°	295.6	427.0	692.6	832.2	1037.5	1190.8	1319.5	1475.5	1541.2
131.4	70°	161.5	314.8	495.5	657.0	834.9	982.8	1108.7	1234.6	1292.1
60.2	72.5°	109.5	210.8	344.9	520.1	673.4	818.5	930.7	1023.8	1026.6
35.6	75°	54.7	142.3	262.8	402.4	525.6	667.9	769.2	824.0	758.3
21.9	77.5°	32.8	104.0	213.5	323.0	427.0	539.3	596.8	626.9	520.1
16.4	80°	19.2	73.9	167.0	257.3	295.6	396.9	451.7	459.9	347.7
10.9	82.5°	13.7	54.7	131.4	188.9	180.7	279.2	339.4	328.5	221.7
8.2	85°	8.2	38.3	82.1	117.7	109.5	183.4	197.1	202.6	128.7
5.5	87.5°	5.5	21.9	43.8	63.0	52.0	79.4	79.4	95.8	63.0
0.0	90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



180°
14793.3
14426.5
14486.7
14311.5
14070.6
13775.0
13427.3
13011.2
12455.5
11916.2
11240.1
10637.8
9926.1
9241.7
8486.2
7894.9
7158.5
6509.7
5866.4
5245.0
4653.7
4089.8
3523.1
3027.6
2581.4
2157.1
1812.2
1533.0
1270.2
1001.9
709.0
501.0
325.8
205.3
117.7
54.7
0.0

(END OF REPORT)