

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: P574899

Luminaire Tested: **EPH-VN-07-740-U-5MQ**

Issue Date: 10/19/2021



**Test Information**

Test Method: LM-79-08  
Report Number: P574899  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 10/19/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHEBUS  
Catalog Number: EPH-VN-07-740-U-5MQ  
Description: EPHEBUS LUMAVISION – Middle Tier Light Square Luminaire w/ 5MQ distribution lens  
Light Source: (112) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

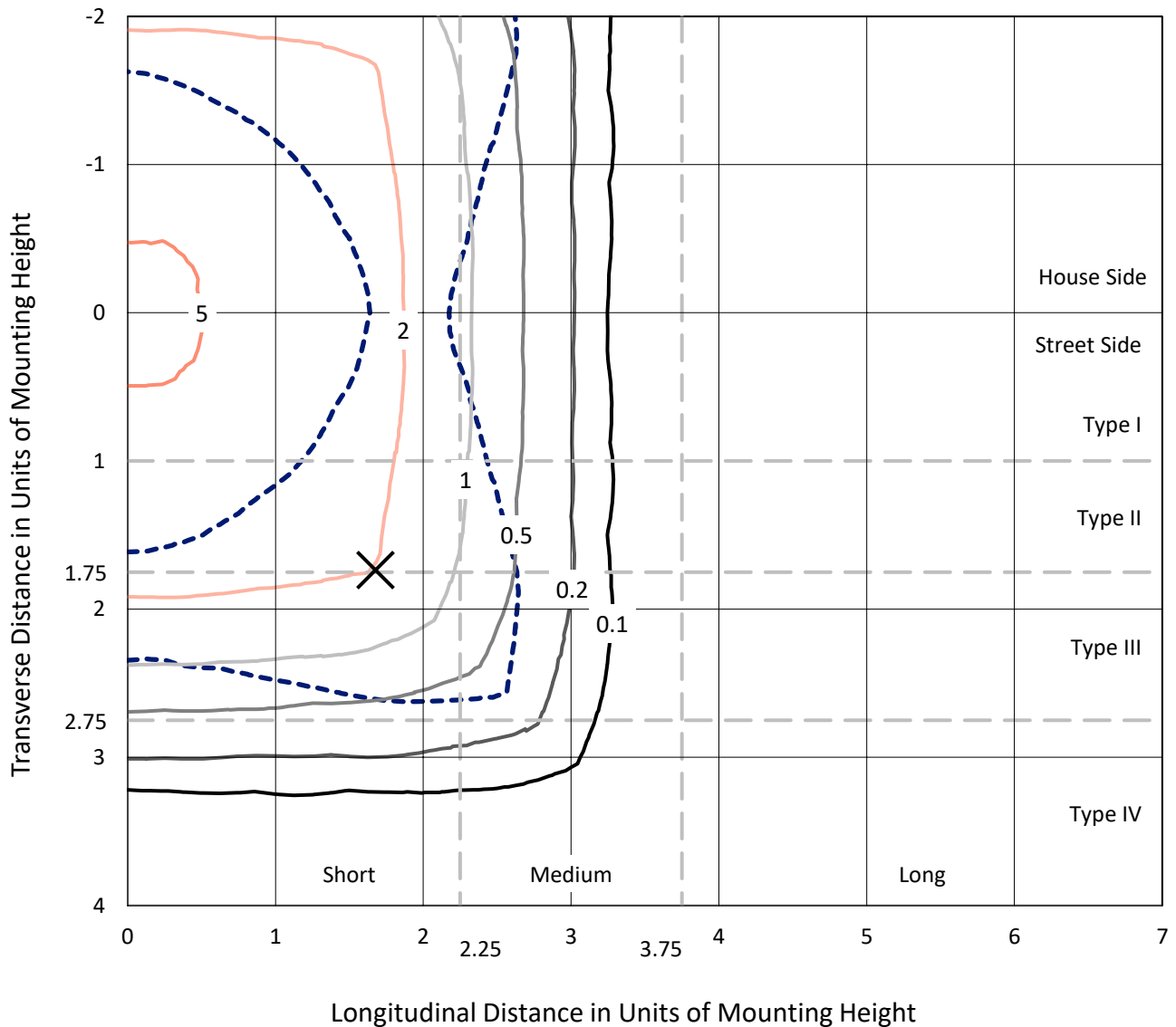
Lumens per Lamp: N/A  
Luminaire Lumens: 56982.6 lumens  
Efficiency: N/A  
Efficacy: 107.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G5

Input Watts (W): 532.7  
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: 24 FT

REPORT NUMBER: P574899  
 CATALOG NUMBER: EPH-VN-07-740-U-5MQ

### Iso-Footcandle Lines of Horizontal Illumination

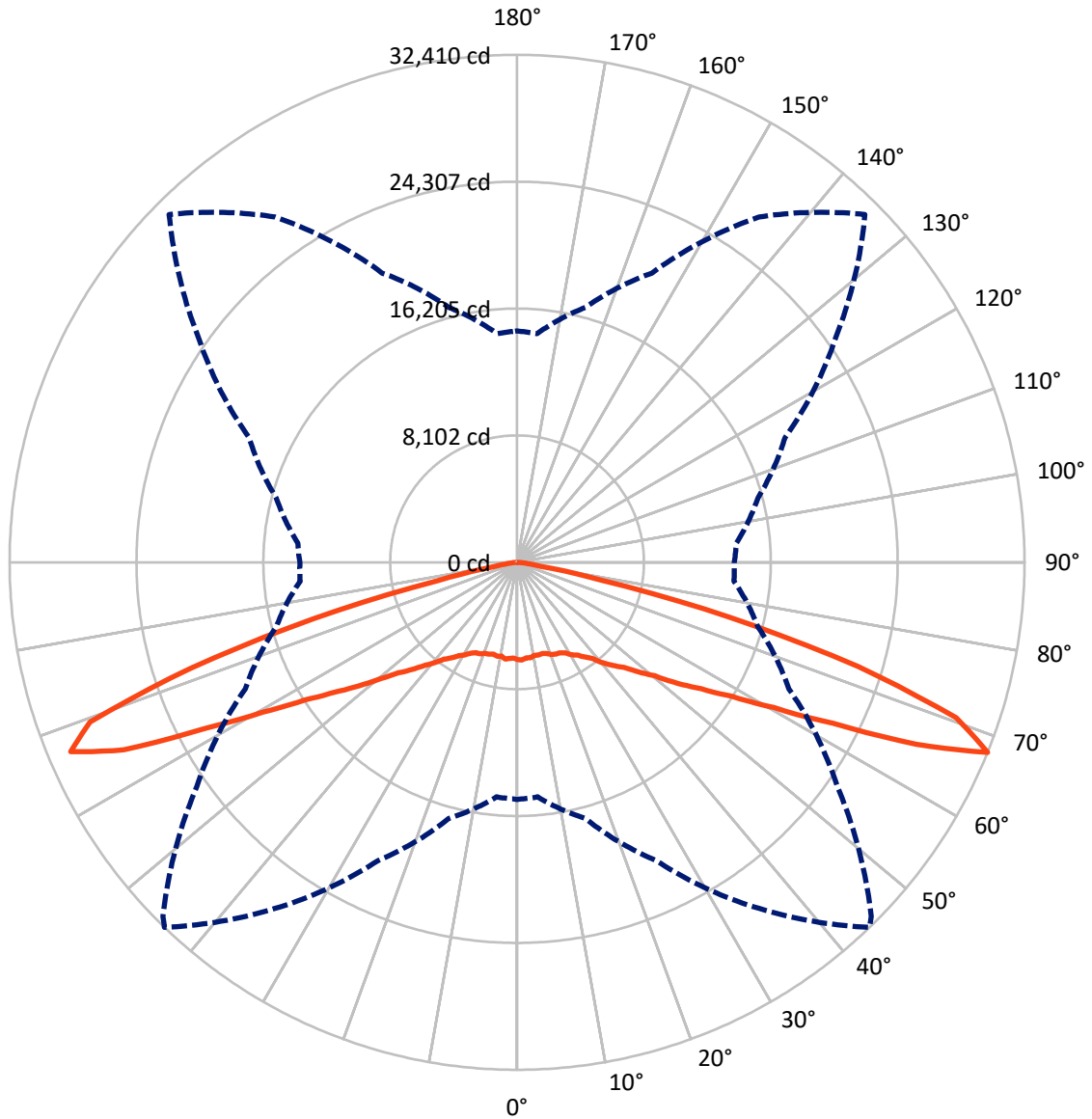
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.9 fc  
 Type V - Short - N/A

REPORT NUMBER: P574899  
CATALOG NUMBER: EPH-VN-07-740-U-5MQ

### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P574899  
 CATALOG NUMBER: EPH-VN-07-740-U-5MQ

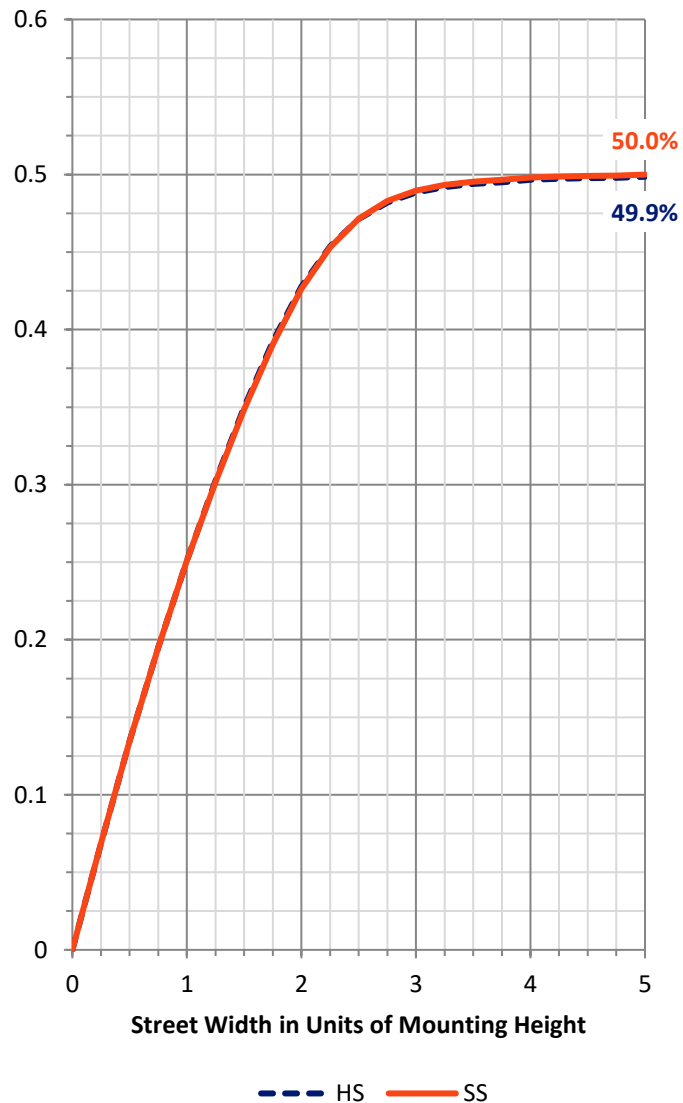
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	28418.3	0.0	28418.3
	% Fixture	49.9	0.0	49.9
<b>Street Side</b>	Lumens	28564.2	0.0	28564.2
	% Fixture	50.1	0.0	50.1
<b>Total</b>	Lumens	56982.6	0.0	56982.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	589.0	1.0
10°-20°	1720.8	3.0
20°-30°	2926.3	5.1
30°-40°	4639.7	8.1
40°-50°	7565.5	13.3
50°-60°	12920.8	22.7
60°-70°	19652.4	34.5
70°-80°	6624.1	11.6
80°-90°	343.9	0.6
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°	56982.6	100.0
0°-180°	56982.6	100.0

**Coefficient of Utilization**



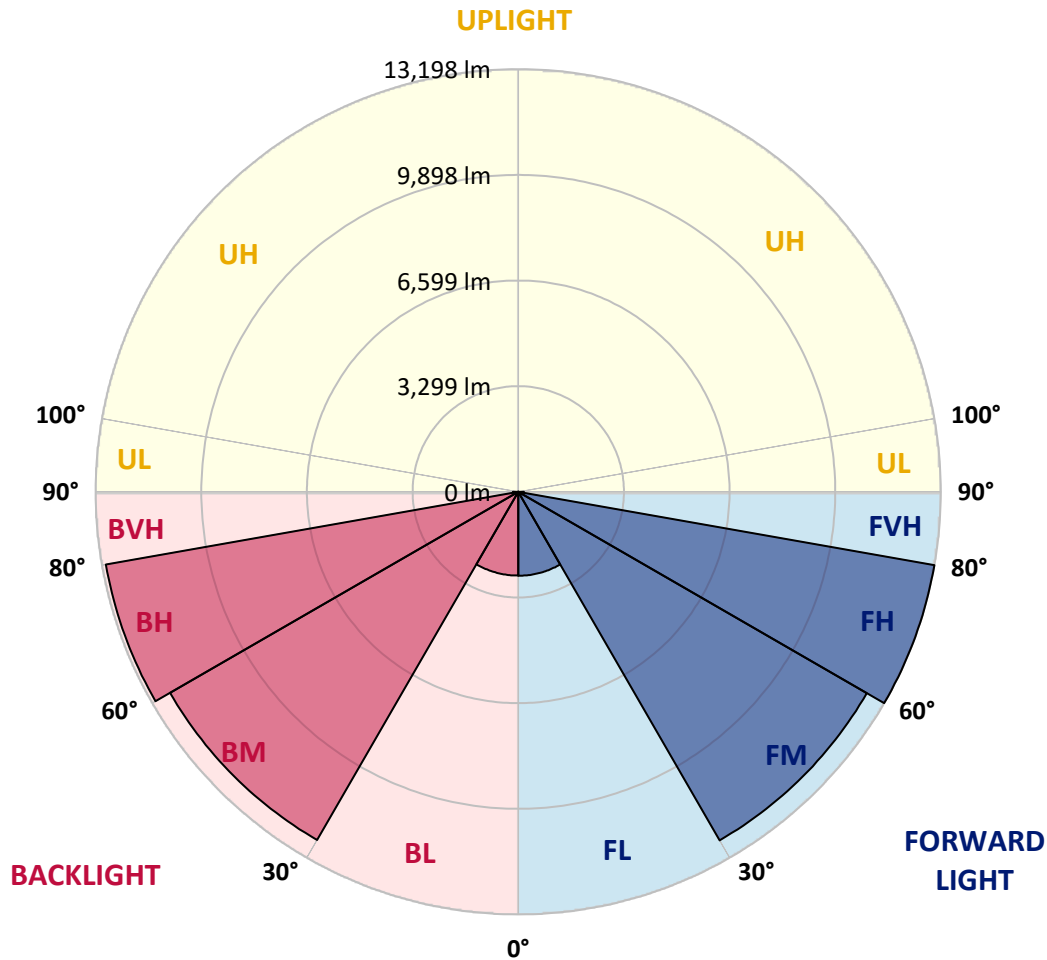
REPORT NUMBER: P574899  
 CATALOG NUMBER: EPH-VN-07-740-U-5MQ

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2620.7	4.6			
FM (30°-60°)	12569.8	22.1			
FH (60°-80°)	13197.8	23.2			G5
FVH (80°-90°)	175.9	0.3			G2/225
BL (0°-30°)	2615.3	4.6	B4/5000		
BM (30°-60°)	12556.2	22.0	B5		
BH (60°-80°)	13078.8	23.0	B5		G5
BVH (80°-90°)	168.0	0.3			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G5**

Type V Short





REPORT NUMBER: P574899  
 CATALOG NUMBER: EPH-VN-07-740-U-5MQ

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°
0°	6224.4	6224.4	6224.4	6224.4	6224.4	6224.4	6224.4	6224.4	6224.4	6224.4
2.5°	6081.3	6152.8	6204.9	6198.3	6217.9	6237.4	6211.4	6250.4	6224.4	6269.9
5°	6198.3	6178.8	6185.3	6146.3	6237.4	6133.3	6133.3	6185.3	6250.4	6172.3
7.5°	6126.8	6113.8	6081.3	6139.8	6159.3	6159.3	6211.4	6113.8	6224.4	6250.4
10°	6048.8	5977.2	6074.8	6133.3	6146.3	6042.3	6087.8	6113.8	6081.3	6113.8
12.5°	5983.7	6022.7	6022.7	6022.7	6003.2	6074.8	6120.3	6113.8	6048.8	6107.3
15°	5977.2	5957.7	6016.2	6068.3	6035.7	6048.8	6068.3	6126.8	6003.2	6029.2
17.5°	5970.7	5996.7	6016.2	6009.7	6120.3	6120.3	6100.8	6061.8	6159.3	6107.3
20°	5996.7	5977.2	6029.2	6048.8	6126.8	6282.9	6224.4	6191.8	6139.8	6074.8
22.5°	6029.2	6016.2	6087.8	6172.3	6321.9	6360.9	6354.4	6315.4	6224.4	6146.3
25°	6146.3	6029.2	6107.3	6269.9	6321.9	6400.0	6452.0	6400.0	6276.4	6295.9
27.5°	6321.9	6302.4	6406.5	6517.0	6471.5	6543.1	6497.5	6536.6	6543.1	6445.5
30°	6530.1	6471.5	6536.6	6751.2	6770.7	6848.8	6770.7	6666.6	6699.2	6614.6
32.5°	6829.2	6809.7	6933.3	7076.4	7102.4	7063.4	7024.4	7082.9	6946.3	6881.3
35°	7024.4	7108.9	7258.5	7369.1	7453.6	7414.6	7434.1	7375.6	7408.1	7271.5
37.5°	7603.2	7570.7	7603.2	7791.8	7811.3	7791.8	7811.3	7876.4	7830.9	7713.8
40°	8149.6	8097.5	8175.6	8390.2	8377.2	8442.2	8312.2	8383.7	8383.7	8162.6
42.5°	8559.3	8734.9	8826.0	9001.6	9066.6	9008.1	8982.1	8995.1	9138.2	8878.0
45°	9404.8	9398.3	9671.5	9769.1	9587.0	9573.9	9521.9	9678.0	9775.6	9626.0
47.5°	10321.9	10367.4	10523.5	10562.6	10673.1	10471.5	10471.5	10491.0	10835.7	10484.5
50°	11147.9	11206.5	11518.6	11824.3	11616.2	11401.6	11486.1	11590.2	11778.8	11447.1
52.5°	12149.5	12468.2	12676.4	12839.0	12988.6	12839.0	12643.8	12760.9	13131.7	12689.4
55°	13593.4	13847.1	14042.2	14341.4	14465.0	14263.4	14243.8	14230.8	14439.0	13970.7
57.5°	15206.4	15102.4	15414.6	15876.4	16325.1	16130.0	16071.5	16084.5	16136.5	15473.1
60°	17209.7	17326.8	17697.5	18100.7	18575.5	18848.7	18465.0	18243.8	18289.4	17385.3
62.5°	18354.4	18614.6	19453.6	20838.9	21795.0	22647.1	22705.6	21268.2	20305.6	18549.5
65°	17801.5	17762.5	19343.0	21905.6	25528.3	28006.4	27635.7	24149.5	20786.9	17996.7
67.5°	15141.4	15037.3	16949.5	21014.5	26998.3	32409.6	31986.9	24962.5	19160.9	15921.9
70°	9756.1	9730.0	11804.8	16019.4	24104.0	29756.0	29912.1	22673.1	15596.7	11661.7
72.5°	3544.7	3759.3	4962.6	8611.3	16370.7	22764.1	22861.7	16786.9	8969.1	5391.8
75°	1307.3	1346.3	1567.5	2796.7	7460.1	13977.2	14341.4	8143.1	3187.0	1756.1
77.5°	754.5	761.0	839.0	1040.6	2211.4	5456.9	5678.0	2471.5	1235.8	936.6
80°	513.8	507.3	591.9	676.4	884.5	1548.0	1645.5	1034.1	780.5	650.4
82.5°	299.2	318.7	435.8	481.3	539.8	682.9	695.9	643.9	585.4	481.3
85°	182.1	149.6	240.6	266.7	312.2	305.7	305.7	351.2	377.2	338.2
87.5°	45.5	45.5	58.5	65.0	84.6	65.0	71.5	136.6	182.1	169.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P574899

CATALOG NUMBER: EPH-VN-07-740-U-5MQ

**CANDELA DISTRIBUTION (continued):**

85°		90°	95°	105°	115°	125°	135°	145°	155°	165°	175°
6224.4	0°	6224.4	6224.4	6224.4	6224.4	6224.4	6224.4	6224.4	6224.4	6224.4	6224.4
6295.9	2.5°	6237.4	6217.9	6230.9	6302.4	6256.9	6120.3	6152.8	6224.4	6165.8	6133.3
6217.9	5°	6211.4	6250.4	6204.9	6217.9	6263.4	6152.8	6172.3	6263.4	6224.4	6237.4
6256.9	7.5°	6217.9	6237.4	6198.3	6139.8	6139.8	6230.9	6178.8	6191.8	6133.3	6230.9
6133.3	10°	6178.8	6126.8	6081.3	6113.8	6100.8	6074.8	6055.3	6094.3	6035.7	6120.3
6003.2	12.5°	6061.8	6074.8	6061.8	6048.8	6074.8	6139.8	6035.7	6048.8	5957.7	5970.7
6029.2	15°	6016.2	6055.3	6042.3	6113.8	6146.3	6048.8	6126.8	6048.8	5977.2	5938.2
6035.7	17.5°	6035.7	6094.3	6074.8	6126.8	6068.3	6139.8	6152.8	6120.3	6035.7	6003.2
6074.8	20°	6055.3	6035.7	6061.8	6152.8	6237.4	6165.8	6165.8	6146.3	6068.3	6022.7
6133.3	22.5°	6100.8	6068.3	6107.3	6178.8	6204.9	6315.4	6217.9	6172.3	6042.3	5925.2
6178.8	25°	6191.8	6211.4	6237.4	6211.4	6354.4	6341.4	6328.4	6295.9	6094.3	6100.8
6328.4	27.5°	6367.5	6256.9	6289.4	6445.5	6465.0	6517.0	6452.0	6510.5	6295.9	6302.4
6556.1	30°	6582.1	6465.0	6569.1	6705.7	6699.2	6796.7	6764.2	6777.2	6627.6	6543.1
6777.2	32.5°	6816.2	6803.2	6868.3	6952.8	6985.3	7037.4	7030.9	7030.9	6939.8	6718.7
7226.0	35°	7076.4	7167.4	7245.5	7336.6	7349.6	7414.6	7323.5	7336.6	7245.5	7082.9
7596.7	37.5°	7590.2	7583.7	7668.3	7778.8	7791.8	7739.8	7811.3	7778.8	7655.3	7544.7
8117.0	40°	8188.6	8058.5	8136.6	8396.7	8416.2	8325.2	8318.7	8312.2	8221.1	7980.5
8780.5	42.5°	8708.9	8878.0	8865.0	8949.6	8891.0	8845.5	9008.1	8917.0	8845.5	8591.8
9587.0	45°	9378.8	9430.9	9600.0	9873.1	9593.5	9593.5	9704.0	9632.5	9593.5	9404.8
10302.4	47.5°	10211.3	10256.9	10595.1	10614.6	10432.5	10308.9	10653.6	10666.6	10504.0	10360.9
11291.0	50°	11186.9	11206.5	11512.1	11824.3	11622.7	11388.6	11739.8	11876.4	11512.1	11317.0
12494.3	52.5°	12260.1	12201.6	12455.2	13040.6	12845.5	12773.9	13151.2	13183.7	12689.4	12383.7
13704.0	55°	13495.9	13417.8	14107.3	14504.0	14380.4	14250.3	14419.5	14497.5	14100.8	13599.9
15271.5	57.5°	15095.9	15134.9	15479.6	15869.9	16071.5	16104.0	16182.0	16104.0	15700.7	15193.4
17073.1	60°	16695.9	16812.9	17482.9	18217.8	18282.8	18855.2	18751.1	18360.9	17788.5	17066.6
17222.7	62.5°	17287.7	17190.2	18269.8	20065.0	21593.4	22640.6	22178.8	20793.4	19466.6	18152.8
16214.6	65°	16097.5	16338.1	17808.1	20617.8	23934.9	28077.9	25619.4	21788.5	19108.9	17411.3
13905.6	67.5°	13873.1	14055.2	15921.9	18887.7	24773.9	31421.0	26920.2	20383.7	16852.0	14653.6
9665.0	70°	9665.0	9756.1	11583.7	15473.1	22464.9	29651.9	24286.1	15655.2	11635.7	9274.8
3974.0	72.5°	3889.4	4110.6	5313.8	9320.3	16585.3	22530.0	16351.1	8214.6	4826.0	3590.2
1430.9	75°	1437.4	1443.9	1697.6	3206.5	7876.4	14159.3	7375.6	2640.6	1541.5	1261.8
865.0	77.5°	832.5	826.0	884.5	1157.7	2282.9	5528.4	2094.3	1034.1	839.0	754.5
546.3	80°	520.3	513.8	604.9	767.5	1001.6	1515.4	884.5	643.9	565.9	487.8
357.7	82.5°	331.7	338.2	474.8	565.9	611.4	669.9	513.8	455.3	422.8	279.7
201.6	85°	214.6	195.1	331.7	377.2	338.2	299.2	286.2	240.6	221.1	136.6
104.1	87.5°	97.6	104.1	169.1	188.6	123.6	71.5	71.5	52.0	52.0	32.5
0.0	90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END O





180°  
6224.4  
6126.8  
6165.8  
6100.8  
6029.2  
6016.2  
6009.7  
6035.7  
6022.7  
6035.7  
6081.3  
6172.3  
6367.5  
6751.2  
7134.9  
7460.1  
7928.4  
8546.3  
9229.2  
10146.3  
11050.4  
12455.2  
13775.6  
15030.8  
17099.1  
18250.3  
17222.7  
**14770.7**  
9404.8  
3258.5  
1203.2  
721.9  
487.8  
273.2  
149.6  
32.5  
0.0

F REPORT)