

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: P638787

Luminaire Tested: **EPH-VN-04-E-735-U-77-VI**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-08
Report Number: P638787
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-735-U-77-VI
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 7 distribution lens and Visor
Light Source: (64) 3500K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26533.4 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 0.5' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G3

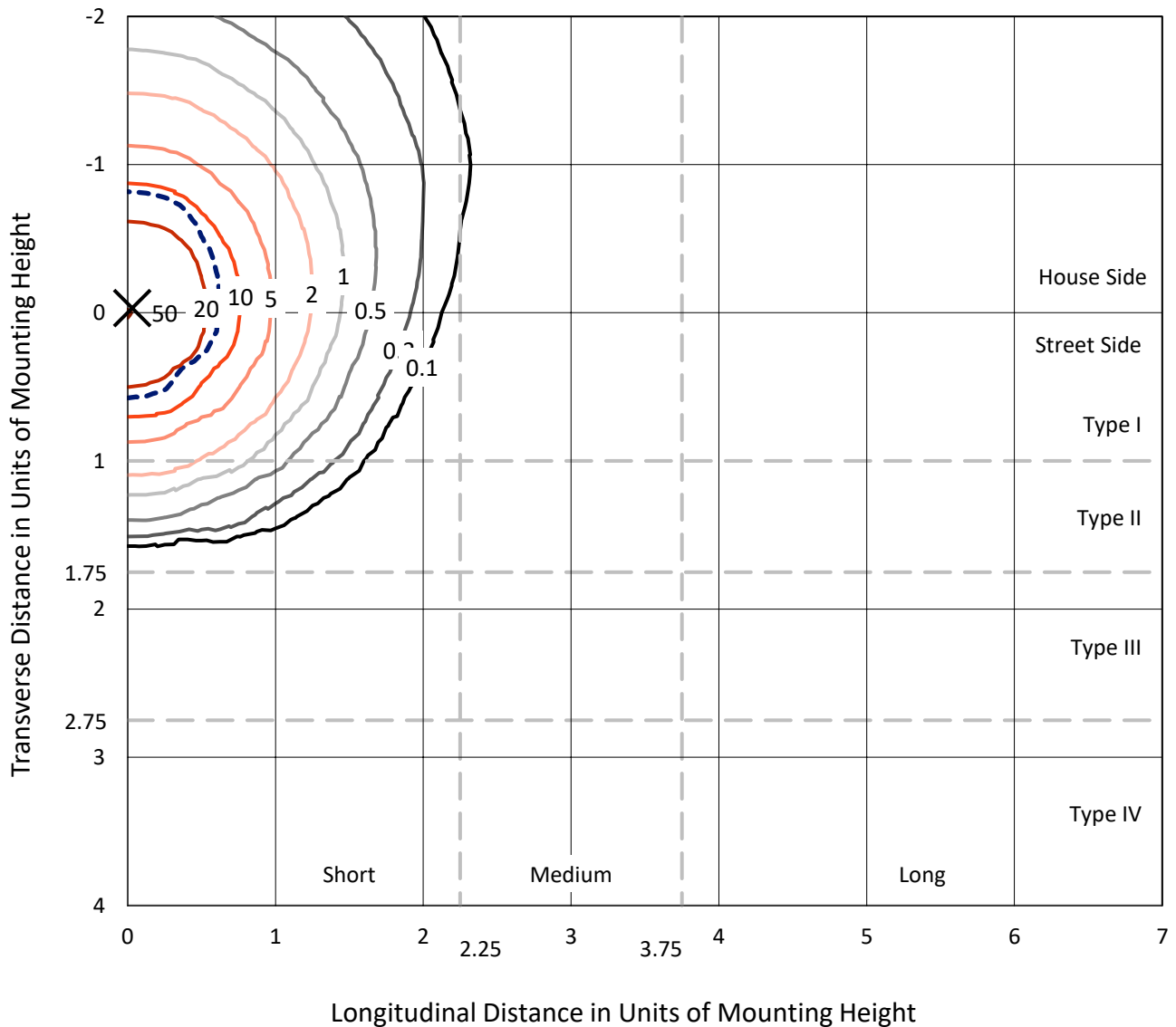
Input Watts (W): 303.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P638787
 CATALOG NUMBER: EPH-VN-04-E-735-U-77-VI

Iso-Footcandle Lines of Horizontal Illumination

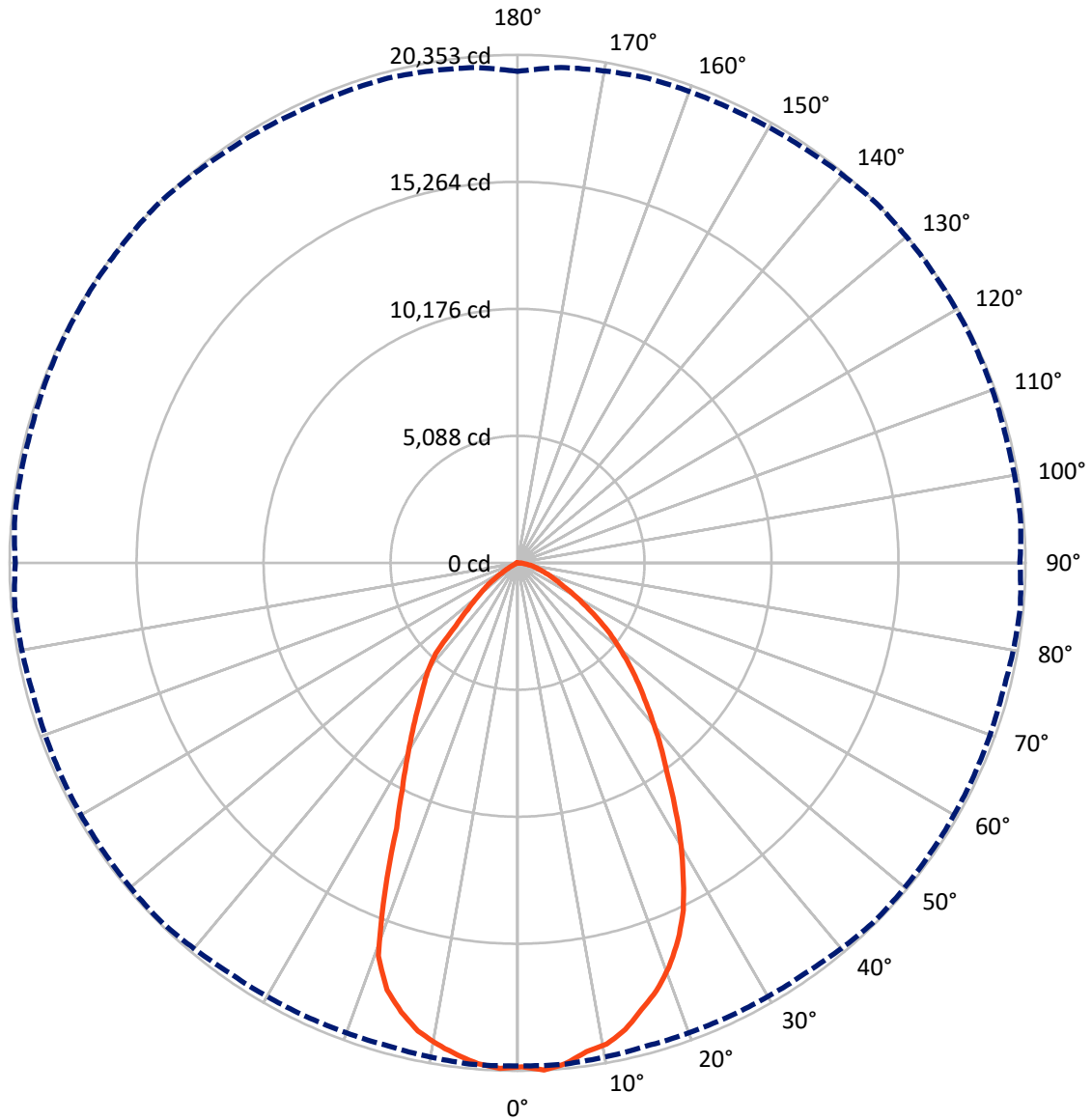
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 50.5 fc
 Type I - Short - N/A

REPORT NUMBER: P638787
CATALOG NUMBER: EPH-VN-04-E-735-U-77-VI

Luminous Intensity Polar Plot



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

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 CATALOG NUMBER: EPH-VN-04-E-735-U-77-VI

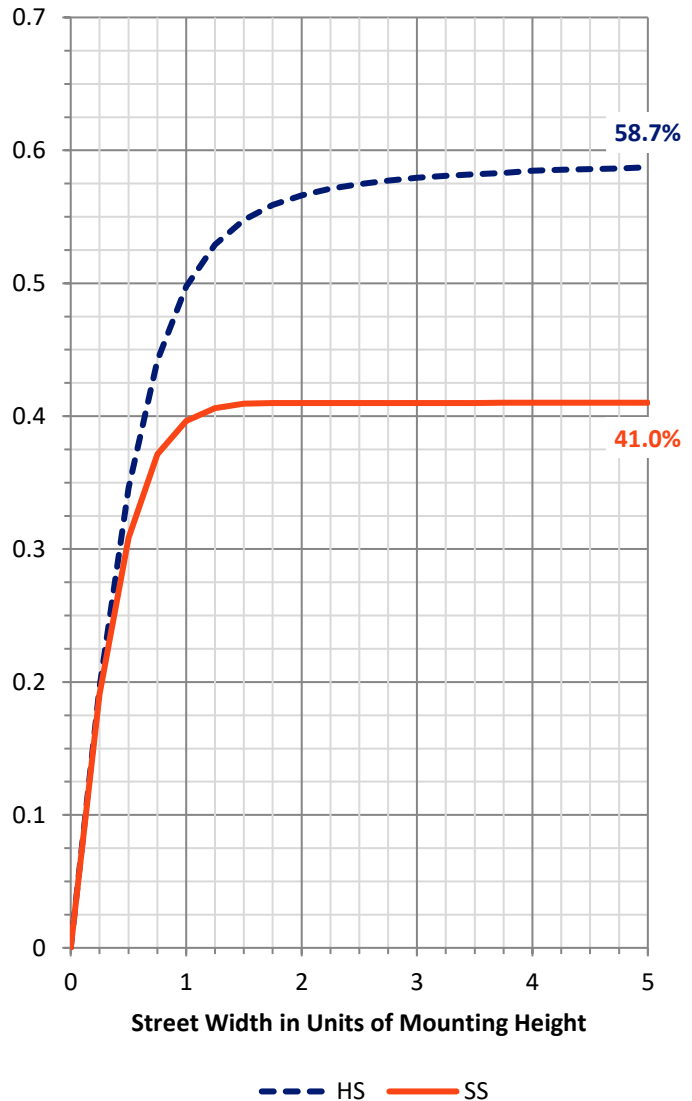
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15714.4	0.0	15714.4
	% Fixture	59.2	0.0	59.2
Street Side	Lumens	10819.0	0.0	10819.0
	% Fixture	40.8	0.0	40.8
Total	Lumens	26533.4	0.0	26533.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1893.7	7.1
10°-20°	5078.0	19.1
20°-30°	6192.9	23.3
30°-40°	5654.1	21.3
40°-50°	4086.1	15.4
50°-60°	2231.0	8.4
60°-70°	922.4	3.5
70°-80°	373.6	1.4
80°-90°	101.6	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°	26533.4	100.0
0°-180°	26533.4	100.0

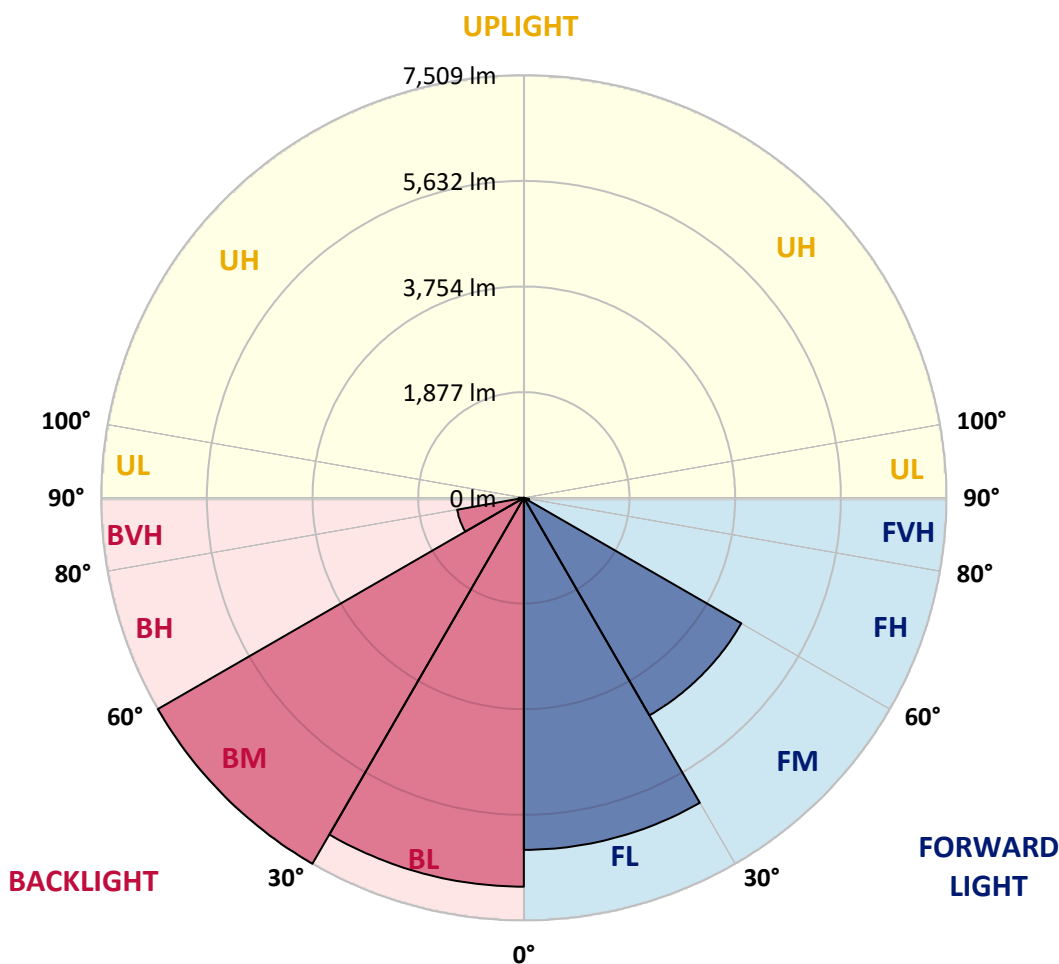


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6254.9	23.6			
FM (30°-60°)	4462.4	16.8			
FH (60°-80°)	93.5	0.4			G0/660
FVH (80°-90°)	8.1	0.0			G0/10
BL (0°-30°)	6909.7	26.0	B5		
BM (30°-60°)	7508.7	28.3	B4/8500		
BH (60°-80°)	1202.5	4.5	B3/2500		G3/2500
BVH (80°-90°)	93.5	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-G3
 Type I Short





REPORT NUMBER: P638787
 CATALOG NUMBER: EPH-VN-04-E-735-U-77-VI

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	20191.8	20191.8	20191.8	20191.8	20191.8	20191.8	20191.8	20191.8	20191.8	20191.8
2.5°	20154.5	20180.6	20038.6	20053.6	20079.7	20270.3	20221.7	20176.9	20113.4	20221.7
5°	20128.3	20143.3	19993.8	19941.5	19963.9	20135.8	19978.9	19978.9	19963.9	19945.2
7.5°	19926.6	19934.0	19818.2	19724.8	19784.6	19863.0	19747.2	19803.2	19721.0	19784.6
10°	19623.9	19575.3	19437.1	19410.9	19478.2	19552.9	19474.4	19526.8	19452.0	19500.6
12.5°	19179.3	19104.5	18992.4	18958.8	19074.6	19175.5	19112.0	19082.1	18985.0	19104.5
15°	17464.2	17408.2	17662.3	18106.9	18506.7	18592.6	18525.4	18555.3	18353.5	18387.1
17.5°	14374.2	14269.5	14542.3	15596.0	17098.1	17890.2	17830.4	17636.1	17337.2	17404.4
20°	13062.7	13032.8	13002.9	13253.2	14303.2	16705.7	16787.9	16294.7	15868.8	15775.3
22.5°	12322.9	12311.6	12281.8	12337.8	12614.3	14157.5	15099.0	14643.2	14359.2	14333.1
25°	11646.6	11627.9	11538.2	11609.2	11609.2	11698.9	12905.7	13182.2	12931.9	12902.0
27.5°	10959.0	10925.4	10910.5	10944.1	10772.2	10166.9	10473.3	11822.2	11691.4	11698.9
30°	10215.5	10204.3	10163.2	10234.2	9703.6	8952.6	8758.3	10589.1	10615.3	10607.8
32.5°	9109.5	9158.1	9344.9	9423.4	8549.0	7928.8	7603.7	9161.8	9696.1	9684.9
35°	6617.3	6617.3	7226.3	8358.5	7491.6	7024.5	6848.9	7768.1	8788.2	8825.5
37.5°	5440.3	5459.0	5578.5	6094.2	6464.1	6299.7	6247.4	6538.8	7622.4	7682.2
40°	4894.8	4894.8	4894.8	4681.8	4670.6	5675.7	5645.8	5552.4	6583.6	6714.4
42.5°	4397.8	4409.0	4416.5	3878.4	3579.5	4906.0	4838.7	4696.7	5653.3	5806.5
45°	3885.9	3904.6	3927.0	3243.2	3112.5	3531.0	4095.2	3938.2	4734.1	4932.1
47.5°	2372.7	2402.5	2910.7	2750.0	2765.0	2723.9	3340.4	3314.2	3882.2	4162.4
50°	1602.9	1614.2	1662.7	1744.9	2372.7	2141.0	2365.2	2742.6	2948.1	3374.0
52.5°	1345.1	1363.8	1244.2	1132.1	1558.1	1673.9	1651.5	2036.4	2118.6	2645.4
55°	945.3	1005.1	949.1	937.9	885.5	1300.3	1251.7	1565.6	1617.9	2010.2
57.5°	97.1	112.1	194.3	698.7	579.2	736.1	893.0	1147.1	1199.4	1483.4
60°	7.5	7.5	18.7	97.1	422.2	440.9	616.5	706.2	807.1	1035.0
62.5°	0.0	3.7	7.5	14.9	67.3	235.4	310.1	369.9	485.7	668.8
65°	0.0	0.0	3.7	11.2	14.9	89.7	119.6	194.3	265.3	414.7
67.5°	0.0	0.0	3.7	7.5	11.2	22.4	41.1	71.0	142.0	235.4
70°	0.0	0.0	3.7	7.5	11.2	18.7	29.9	44.8	63.5	127.0
72.5°	0.0	0.0	3.7	3.7	7.5	18.7	22.4	29.9	44.8	63.5
75°	0.0	0.0	3.7	3.7	11.2	22.4	18.7	22.4	29.9	41.1
77.5°	0.0	0.0	3.7	7.5	11.2	22.4	18.7	22.4	22.4	26.2
80°	0.0	0.0	3.7	7.5	14.9	26.2	22.4	22.4	18.7	18.7
82.5°	0.0	0.0	3.7	11.2	14.9	33.6	33.6	29.9	14.9	11.2
85°	0.0	0.0	7.5	14.9	22.4	37.4	37.4	29.9	11.2	7.5
87.5°	0.0	0.0	7.5	11.2	18.7	26.2	37.4	29.9	11.2	3.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P638787
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CANDELA DISTRIBUTION (continued):

90°		95°	105°	115°	125°	135°	145°	155°	165°	175°
20191.8	0°	20191.8	20191.8	20191.8	20191.8	20191.8	20191.8	20191.8	20191.8	20191.8
20128.3	2.5°	20229.2	20206.8	20281.5	20311.4	20352.5	20195.6	20098.4	20102.2	19922.8
19900.4	5°	20020.0	20023.7	20120.8	20113.4	20154.5	20068.5	20031.2	19967.7	19810.7
19612.7	7.5°	19754.7	19721.0	19814.5	19885.5	19780.8	19840.6	19754.7	19784.6	19691.2
19358.6	10°	19549.2	19470.7	19556.6	19605.2	19609.0	19549.2	19467.0	19388.5	19354.9
18962.5	12.5°	19093.3	18992.4	19138.2	19205.4	19194.2	19078.4	18985.0	19003.6	18895.3
18267.6	15°	18465.6	18469.3	18574.0	18637.5	18577.7	18551.5	18559.0	18514.2	18420.8
17307.3	17.5°	17505.3	17561.4	17837.9	17991.1	18024.7	17972.4	17946.2	17893.9	17800.5
15775.3	20°	15906.1	16242.4	16735.6	17210.1	17303.6	17288.6	17195.2	17172.8	17120.5
14258.3	22.5°	14501.2	14751.6	15323.2	16063.1	16444.2	16481.5	16369.4	16335.8	16279.8
12902.0	25°	13047.7	13316.8	13832.4	14635.7	15424.1	15584.8	15566.1	15465.2	15405.4
11698.9	27.5°	11822.2	12091.2	12558.2	13283.1	14127.6	14643.2	14691.8	14531.1	14527.4
10626.5	30°	10716.2	11086.1	11441.0	12031.4	12849.7	13623.1	13705.3	13593.2	13604.5
9643.8	32.5°	9849.3	10155.7	10458.4	10854.4	11534.5	12434.9	12756.3	12651.7	12610.6
8825.5	35°	8963.8	9173.0	9483.1	9845.6	10308.9	11201.9	11758.6	11680.2	11639.1
7719.5	37.5°	7954.9	8313.6	8537.8	8945.1	9307.5	10017.5	10802.1	10790.9	10705.0
6777.9	40°	6919.9	7297.3	7637.3	8048.3	8328.6	8892.8	9763.4	9759.6	9770.8
5802.7	42.5°	5982.1	6329.6	6740.6	7189.0	7458.0	7869.0	8803.1	8855.4	8918.9
4999.4	45°	5133.9	5447.8	5828.9	6374.4	6699.5	6934.9	7764.4	8003.5	7999.8
4282.0	47.5°	4371.7	4666.8	4988.2	5518.8	5933.5	6146.5	6834.0	7174.0	7151.6
3512.3	50°	3669.2	3930.8	4267.0	4651.9	5208.6	5395.5	5907.3	6355.7	6322.1
2798.6	52.5°	2951.8	3314.2	3598.2	3949.4	4536.1	4719.2	5115.2	5552.4	5526.2
2099.9	55°	2301.7	2652.9	2996.6	3299.3	3792.5	4065.3	4349.2	4797.6	4790.1
1644.0	57.5°	1741.2	2126.0	2451.1	2738.8	3131.2	3467.4	3695.4	4102.6	4154.9
1124.7	60°	1289.1	1584.3	1935.5	2256.8	2566.9	2914.4	3067.6	3467.4	3489.9
769.7	62.5°	878.1	1203.1	1546.9	1838.3	2070.0	2428.7	2566.9	2895.8	2936.9
493.2	65°	609.0	818.3	1210.6	1419.9	1703.8	2010.2	2148.5	2410.0	2492.2
284.0	67.5°	403.5	582.9	945.3	1135.9	1416.1	1625.4	1801.0	2014.0	2103.6
179.4	70°	220.5	429.7	676.3	896.8	1139.6	1341.4	1513.3	1685.1	1763.6
82.2	72.5°	149.5	287.7	470.8	709.9	919.2	1117.2	1270.4	1397.4	1401.2
48.6	75°	74.7	194.3	358.7	549.3	717.4	911.7	1049.9	1124.7	1035.0
29.9	77.5°	44.8	142.0	291.4	440.9	582.9	736.1	814.5	855.6	709.9
22.4	80°	26.2	100.9	227.9	351.2	403.5	541.8	616.5	627.7	474.5
14.9	82.5°	18.7	74.7	179.4	257.8	246.6	381.1	463.3	448.4	302.7
11.2	85°	11.2	52.3	112.1	160.7	149.5	250.3	269.0	276.5	175.6
7.5	87.5°	7.5	29.9	59.8	85.9	71.0	108.4	108.4	130.8	85.9
0.0	90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



180°
20191.8
19691.2
19773.4
19534.2
19205.4
18801.9
18327.3
17759.4
17000.9
16264.8
15341.9
14519.9
13548.4
12614.3
11583.0
10776.0
9770.8
8885.3
8007.2
7159.1
6352.0
5582.3
4808.8
4132.5
3523.5
2944.3
2473.5
2092.4
1733.7
1367.5
967.7
683.8
444.6
280.2
160.7
74.7
0.0

(END OF REPORT)