

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: P591313

Luminaire Tested: **CTN-CA10-630-730-U-T1-SSS-HM-EX90**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591313
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-630-730-U-T1-SSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE, 90D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 77007 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

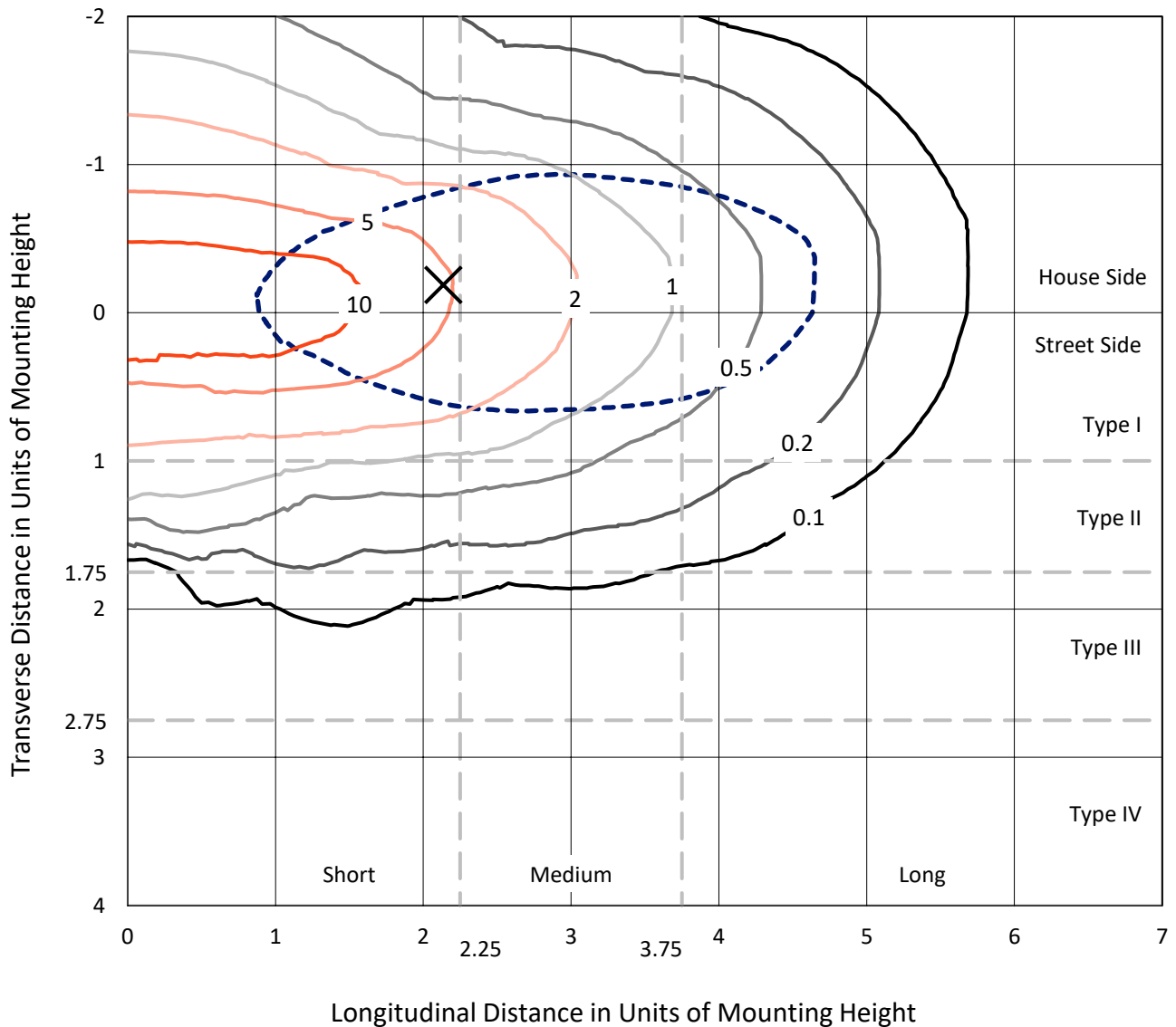
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

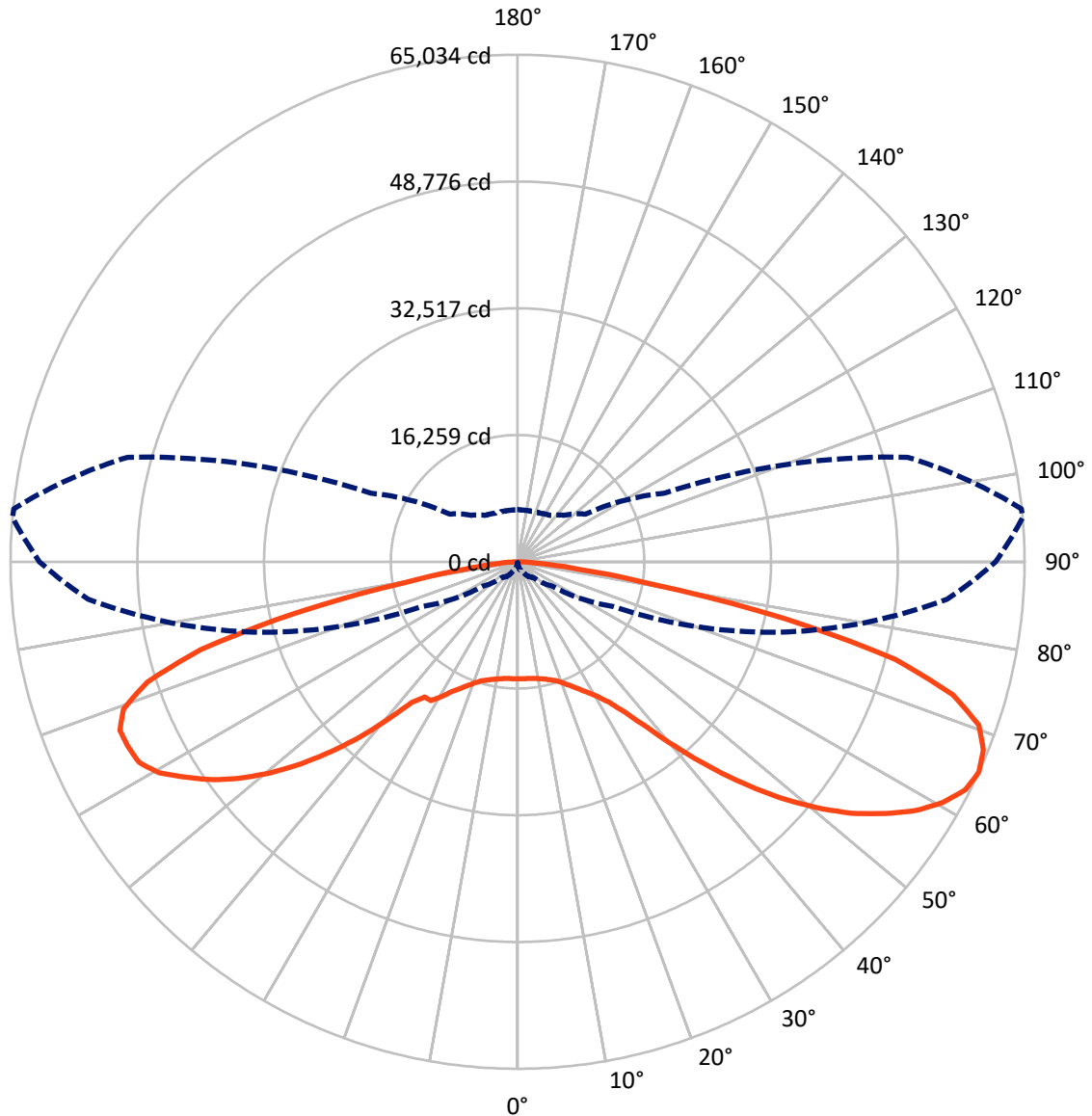
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 16.7 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 95-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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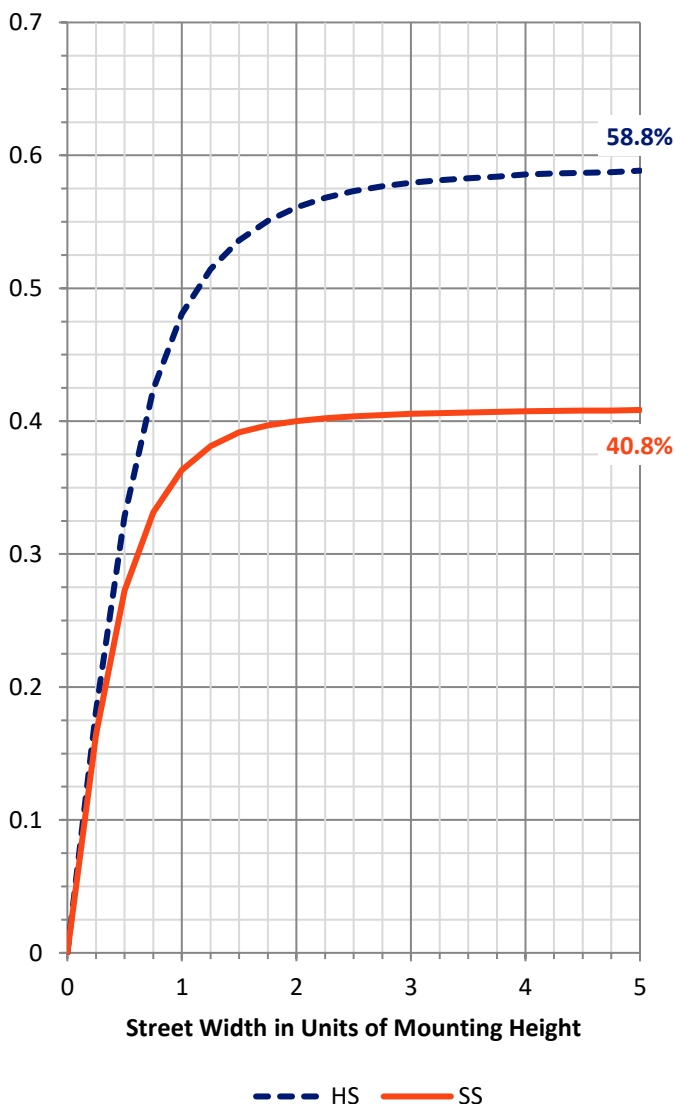
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	45660.6	0.0	45660.6
	% Fixture	59.3	0.0	59.3
Street Side	Lumens	31346.4	0.0	31346.4
	% Fixture	40.7	0.0	40.7
Total	Lumens	77007.0	0.0	77007.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1428.8	1.9
10°-20°	4114.4	5.3
20°-30°	6184.0	8.0
30°-40°	8622.0	11.2
40°-50°	12378.6	16.1
50°-60°	15779.5	20.5
60°-70°	16429.8	21.3
70°-80°	10579.9	13.7
80°-90°	1490.0	1.9
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°	77007.0	100.0
0°-180°	77007.0	100.0

Coefficient of Utilization

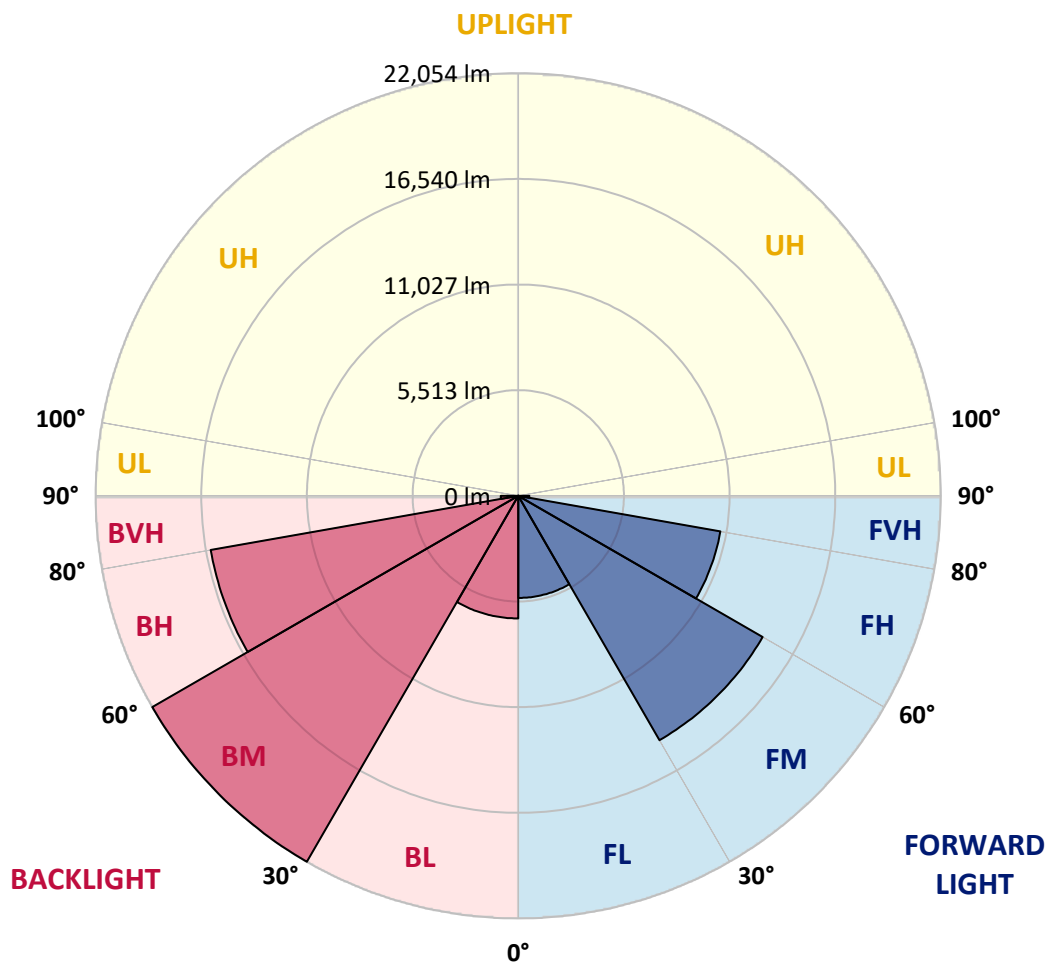


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5328.9	6.9			
FM (30°-60°)	14726.6	19.1			
FH (60°-80°)	10711.4	13.9			G4/12000
FVH (80°-90°)	579.4	0.8			G4/750
BL (0°-30°)	6398.2	8.3	B5		
BM (30°-60°)	22053.6	28.6	B5		
BH (60°-80°)	16298.2	21.2	B5		G5
BVH (80°-90°)	910.6	1.2			G5
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	15008.4	15008.4	15008.4	15008.4	15008.4	15008.4	15008.4	15008.4	15008.4	15008.4	15008.4
2.5°	15053.2	14930.0	14955.2	15075.6	14854.4	14974.8	14885.2	15030.8	14994.4	15005.6	15075.6
5°	14927.2	14801.2	14848.8	14997.2	14790.0	14935.6	14868.4	14988.8	14977.6	15019.6	15064.4
7.5°	14812.4	14677.9	14739.5	14848.8	14736.7	14862.8	14826.4	14977.6	14972.0	15095.2	15126.0
10°	14683.5	14560.3	14613.5	14747.9	14655.5	14806.8	14837.6	15016.8	15075.6	15243.6	15257.6
12.5°	14456.7	14336.3	14361.5	14532.3	14546.3	14776.0	14882.4	15165.2	15226.8	15420.0	15428.4
15°	13644.7	13616.7	13854.7	14129.1	14241.1	14582.7	14938.4	15324.8	15417.2	15660.8	15686.0
17.5°	11359.9	11079.9	10659.9	10993.1	11726.7	12670.3	14804.0	15562.8	15733.6	15977.2	16052.8
20°	7619.0	7873.8	8823.0	9248.6	9901.0	11491.5	14770.4	15820.4	16190.0	16484.0	16626.8
22.5°	6294.5	6280.5	7417.4	8851.0	9363.4	10094.2	13577.5	16125.6	16738.8	17122.4	17301.6
25°	5846.5	5852.1	6059.3	7871.0	9139.4	9912.2	12471.5	15725.2	17340.8	17889.6	18102.4
27.5°	5490.9	5513.3	5689.7	6302.9	8949.0	9873.0	12502.3	14579.9	17976.4	18710.0	18956.4
30°	5208.1	5196.9	5409.7	5922.1	7448.2	9887.0	12647.9	14809.6	17385.6	19874.9	20012.1
32.5°	4972.9	4942.1	5157.7	5672.9	6504.6	9777.8	12866.3	15453.6	16968.4	20994.9	21529.7
35°	4746.1	4734.9	4925.3	5432.1	6280.5	8120.2	13121.1	16251.6	18323.6	21031.3	23613.0
37.5°	4569.7	4561.3	4712.5	5191.3	6078.9	7397.8	13331.1	17256.8	20087.7	22585.3	25337.8
40°	4426.9	4404.5	4524.9	4978.5	5849.3	7277.4	11611.9	18306.8	22240.9	26211.4	29515.5
42.5°	4306.5	4275.7	4393.3	4768.5	5628.1	7143.0	10783.1	19365.3	24772.2	30249.1	33578.4
45°	4141.3	4138.5	4258.9	4608.9	5392.9	6947.0	10861.5	17598.4	27617.1	34113.2	37845.7
47.5°	4057.3	4037.7	4127.3	4460.5	5171.7	6650.2	10785.9	16842.4	29795.5	37991.3	42003.8
50°	3925.7	3908.9	3995.7	4289.7	4953.3	6274.9	10511.4	17307.2	28000.7	41665.0	45912.7
52.5°	3690.5	3038.1	3866.9	4146.9	4718.1	5868.9	9990.6	17564.8	28697.9	45069.9	49552.8
55°	1450.4	1946.0	3701.7	3967.7	4477.3	5488.1	9201.0	17492.0	31005.1	48119.1	52688.8
57.5°	1262.8	1268.4	2458.5	3312.5	4191.7	5090.5	8237.8	17077.6	33040.8	50728.8	55743.7
60°	179.2	182.0	1246.0	1394.4	2749.7	3617.7	7257.8	16335.6	34247.6	53338.5	58378.6
62.5°	120.4	126.0	1134.0	1265.6	2508.9	3208.9	6347.8	15016.8	34830.0	54923.3	60277.0
65°	86.8	89.6	1027.6	1145.2	2234.5	2847.7	5502.1	13583.1	34883.2	55290.1	61318.7
67.5°	81.2	84.0	946.4	1055.6	2032.8	2528.5	4771.3	12320.3	33413.2	55399.3	61276.7
70°	84.0	84.0	862.4	954.8	1803.2	2192.5	3959.3	11063.1	29705.9	53971.3	59899.0
72.5°	84.0	86.8	753.2	840.0	1554.0	1856.4	3245.3	8993.8	24058.2	49928.0	56572.5
75°	84.0	86.8	593.6	694.4	1290.8	1489.6	2662.9	7252.2	18528.0	42135.4	49496.8
77.5°	86.8	86.8	436.8	532.0	996.8	1120.0	2021.6	5572.1	13653.1	29207.5	34460.4
80°	86.8	92.4	308.0	392.0	736.4	809.2	1467.2	3556.1	7353.0	14812.4	17108.4
82.5°	89.6	92.4	229.6	294.0	509.6	582.4	896.0	1750.0	3399.3	6854.6	7764.6
85°	84.0	86.8	187.6	204.4	291.2	350.0	557.2	868.0	1195.6	2696.5	2802.9
87.5°	58.8	56.0	58.8	67.2	95.2	154.0	263.2	294.0	288.4	725.2	842.8
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):

	95°	96°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	15008.4	15008.4	15008.4	15008.4	15008.4	15008.4	15008.4	15008.4	15008.4	15008.4	15008.4
2.5°	15033.6	15039.2	15016.8	15103.6	15016.8	15064.4	14938.4	15134.4	15114.8	15061.6	15128.8
5°	15030.8	15044.8	15039.2	15117.6	15008.4	15047.6	14921.6	15128.8	15058.8	15011.2	15092.4
7.5°	15098.0	15117.6	15109.2	15162.4	15036.4	15033.6	14910.4	15064.4	14997.2	14896.4	14997.2
10°	15246.4	15246.4	15221.2	15252.0	15070.0	15050.4	14843.2	15019.6	14904.8	14815.2	14938.4
12.5°	15436.8	15453.6	15389.2	15383.6	15131.6	15072.8	14812.4	14899.2	14733.9	14649.9	14770.4
15°	15716.8	15728.0	15644.0	15590.8	15282.8	15154.0	14733.9	14717.1	14487.5	14406.3	14493.1
17.5°	16041.6	16038.8	15921.2	15898.8	15537.6	15238.0	14669.5	14495.9	14201.9	14109.5	14185.1
20°	16562.4	16531.6	16402.8	16274.0	15747.6	15291.2	14577.1	14213.1	13804.3	13672.7	13734.3
22.5°	17262.4	17251.2	17049.6	16677.2	15971.6	15341.6	14420.3	13868.7	13325.5	13087.5	13126.7
25°	18029.6	18021.2	17732.8	17175.6	16167.6	15378.0	14238.3	13482.3	12748.7	12387.5	12379.1
27.5°	18920.0	18897.6	18508.4	17713.2	16439.2	15389.2	14042.3	13073.5	12177.5	11726.7	11746.3
30°	20003.7	19964.5	19432.5	18309.6	16783.6	15422.8	13874.3	12614.3	11645.5	11166.7	11155.5
32.5°	21440.1	21384.1	20558.1	19093.7	17228.8	15506.8	13672.7	12160.7	11149.9	10668.3	10626.3
35°	23627.0	23512.2	22145.7	20096.1	17724.4	15562.8	13350.7	11729.5	10671.1	10217.4	10183.8
37.5°	26863.8	26670.6	24145.0	21148.9	18217.2	15551.6	12983.9	11264.7	10281.8	9842.2	9833.8
40°	31131.1	30828.7	26544.6	22277.3	18690.4	15490.0	12589.1	10850.3	9957.0	9579.0	9607.0
42.5°	35798.8	35479.6	29389.5	23425.4	19046.1	15299.6	12166.3	10458.2	9657.4	9355.0	9357.8
45°	40503.0	40206.2	32662.8	24506.2	19222.5	14941.2	11726.7	10085.8	9341.0	9077.8	9108.6
47.5°	45187.5	44969.1	35905.3	25419.0	19135.7	14378.3	11197.5	9733.0	9027.4	8811.8	8881.8
50°	49544.4	49312.0	39360.5	26175.0	18698.8	13594.3	10654.3	9385.8	8772.6	8585.0	8643.8
52.5°	53582.1	53271.3	43062.2	26611.8	17912.0	12768.3	10175.4	9080.6	8526.2	8338.6	8400.2
55°	57012.2	56998.2	46450.3	26648.2	16682.8	11922.7	9713.4	8727.8	8285.4	8131.4	8145.4
57.5°	60223.8	60349.8	49365.2	26205.8	15226.8	11138.7	9184.2	8363.8	8008.2	7848.6	7862.6
60°	62676.7	62833.5	51342.0	24917.8	13675.5	10273.4	8615.8	7977.4	7663.8	7512.6	7557.4
62.5°	64437.9	64236.3	52389.2	23069.7	12121.5	9343.8	7999.8	7484.6	7235.4	7143.0	7145.8
65°	65034.3	64969.9	51776.0	20793.3	10654.3	8428.2	7271.8	6871.4	6717.4	6653.0	6700.6
67.5°	64423.9	64463.1	49387.6	18858.4	9259.8	7395.0	6454.2	6196.5	6118.1	6115.3	6165.7
70°	62752.3	62444.3	44434.3	17312.8	7952.2	6246.9	5574.9	5451.7	5426.5	5488.1	5530.1
72.5°	58384.2	57936.2	36848.9	14851.6	6104.1	4594.9	4222.5	4390.5	4384.9	4418.5	4457.7
75°	50017.6	48838.8	28863.1	11824.7	4522.1	3250.9	2816.9	2811.3	2802.9	3088.5	3192.1
77.5°	35056.8	34270.0	21308.5	9005.0	3007.3	1946.0	1932.0	2083.2	2108.4	1920.8	1957.2
80°	17587.2	17931.6	12297.9	5563.7	1999.2	1372.0	1439.2	1416.8	1436.4	1458.8	1472.8
82.5°	8106.2	8279.8	5885.7	2710.5	1288.0	1041.6	985.6	1072.4	1111.6	1108.8	1100.4
85°	2875.7	2892.5	1862.0	1162.0	789.6	677.6	688.8	800.8	845.6	806.4	786.8
87.5°	834.4	792.4	380.8	344.4	364.0	361.2	372.4	394.8	425.6	420.0	389.2
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)