

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: P591133

Luminaire Tested: **CTN-CA10-760-722-U-T1-SSS-HM-EX90**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591133
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-CA10-760-722-U-T1-SSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE, 90D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 73796 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

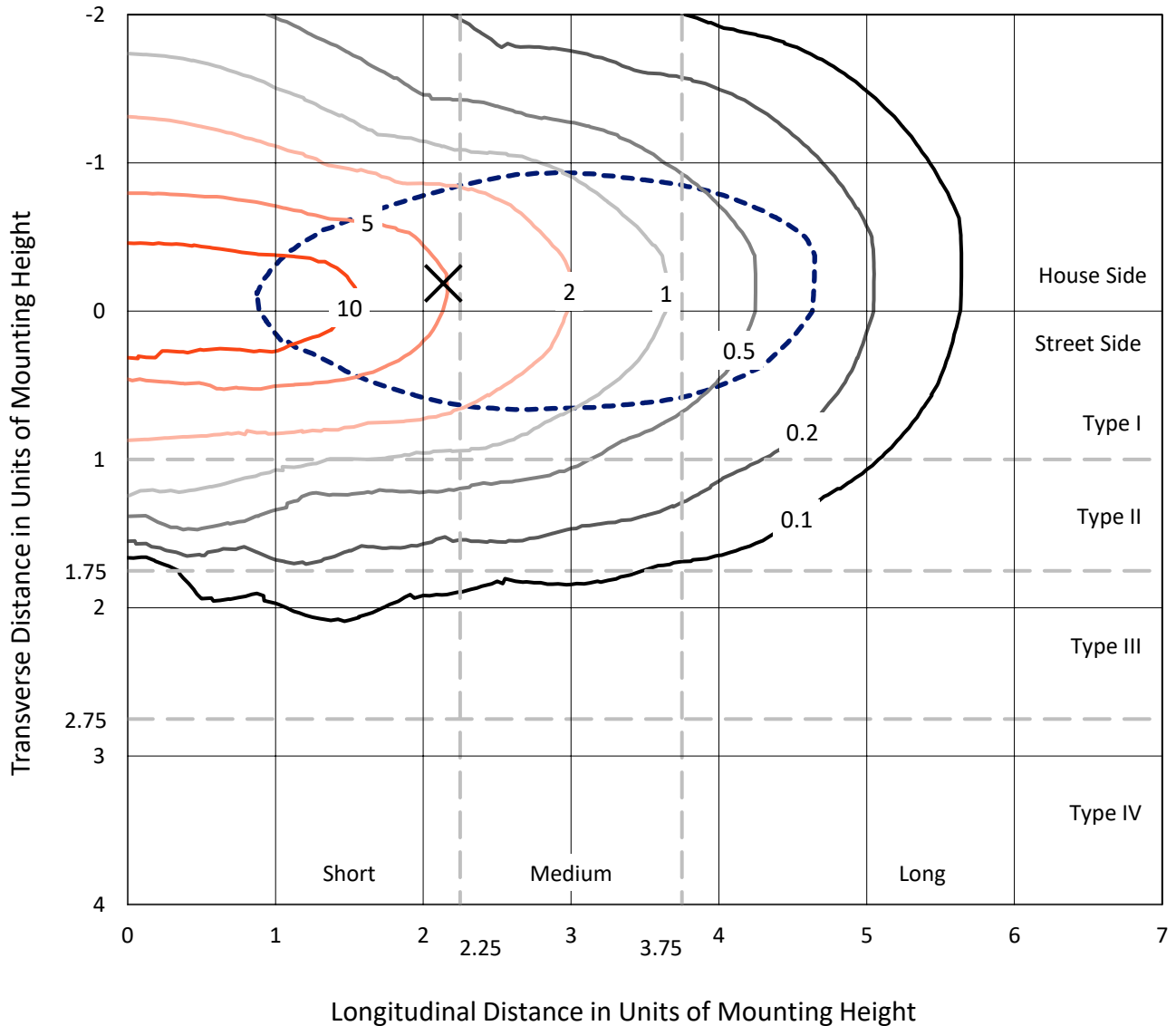
Input Watts (W): 761.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

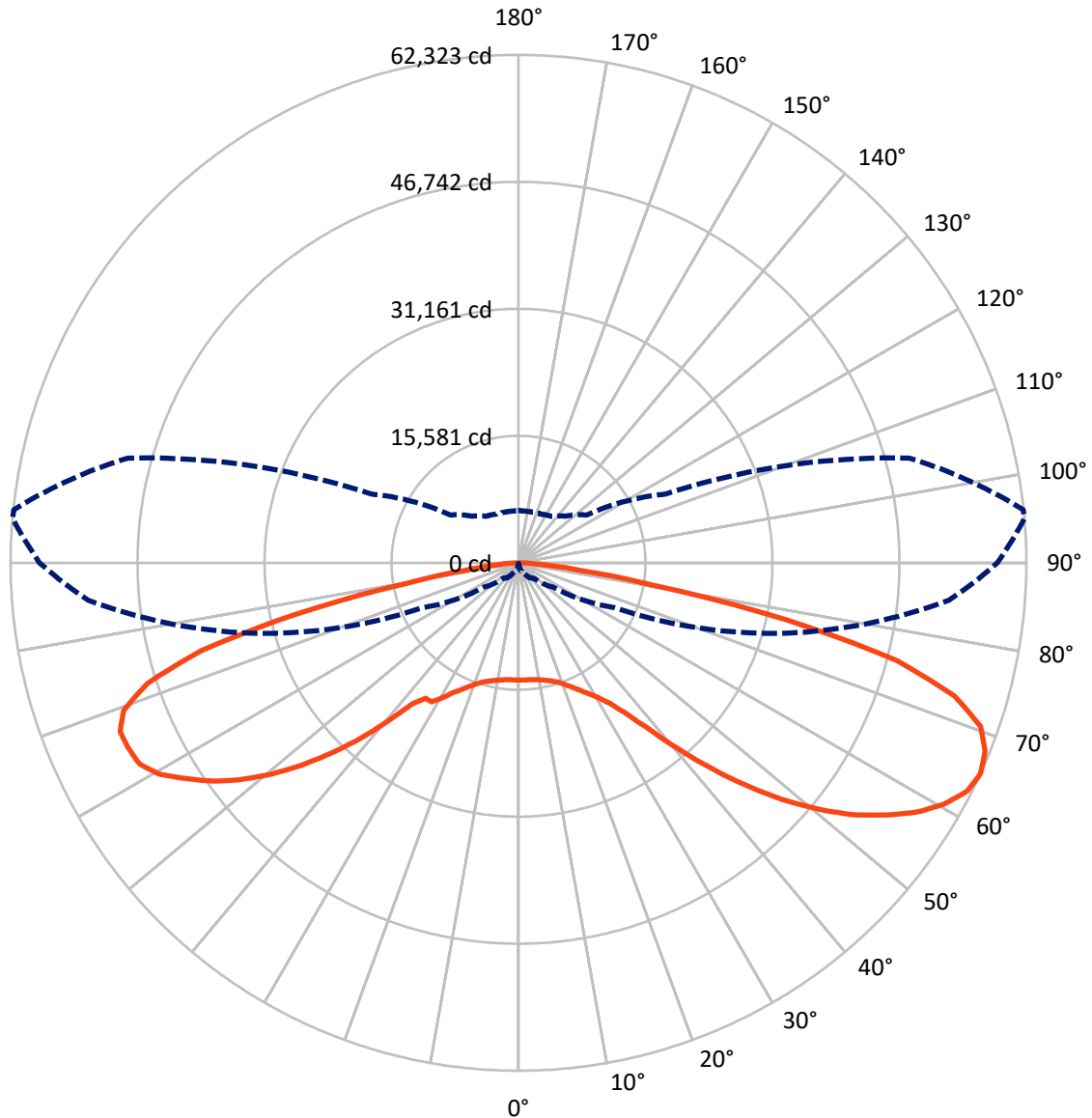
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 16 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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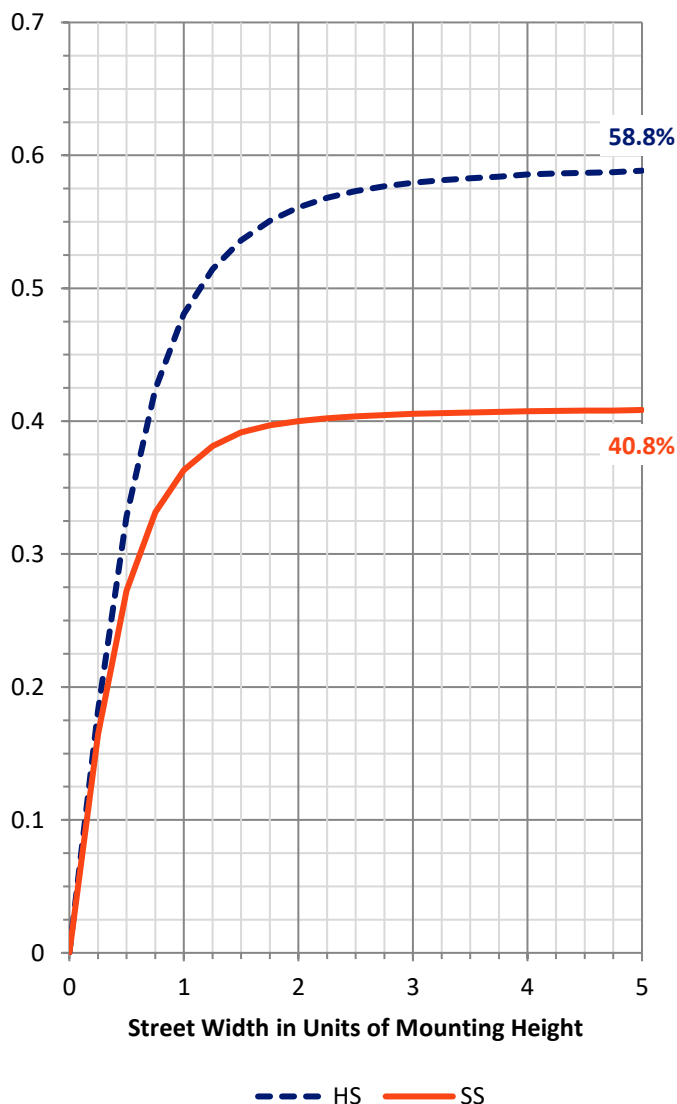
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	43756.7	0.0	43756.7
	% Fixture	59.3	0.0	59.3
Street Side	Lumens	30039.3	0.0	30039.3
	% Fixture	40.7	0.0	40.7
Total	Lumens	73796.0	0.0	73796.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1369.2	1.9
10°-20°	3942.8	5.3
20°-30°	5926.1	8.0
30°-40°	8262.5	11.2
40°-50°	11862.5	16.1
50°-60°	15121.6	20.5
60°-70°	15744.7	21.3
70°-80°	10138.7	13.7
80°-90°	1427.9	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°	73796.0	100.0
0°-180°	73796.0	100.0

Coefficient of Utilization

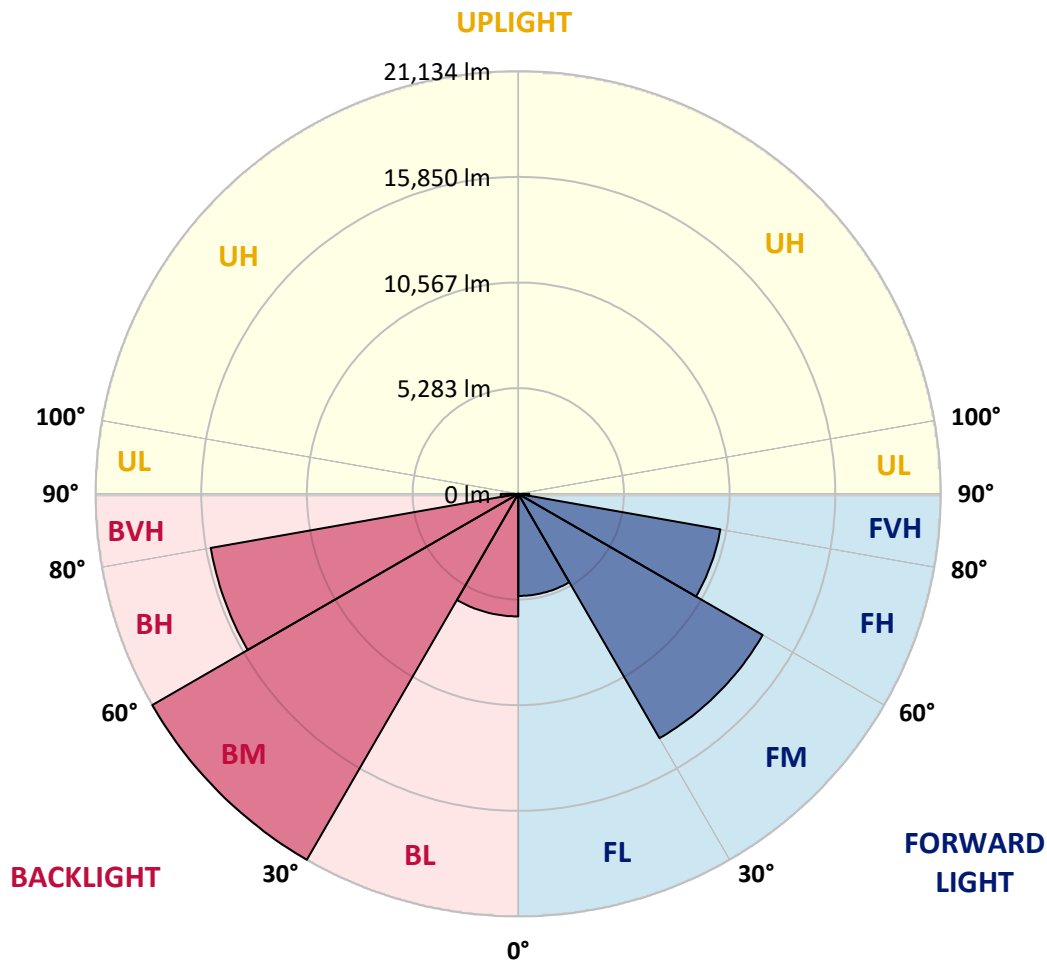


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5106.7	6.9			
FM (30°-60°)	14112.5	19.1			
FH (60°-80°)	10264.8	13.9			G4/12000
FVH (80°-90°)	555.3	0.8			G4/750
BL (0°-30°)	6131.4	8.3	B5		
BM (30°-60°)	21134.0	28.6	B5		
BH (60°-80°)	15618.7	21.2	B5		G5
BVH (80°-90°)	872.6	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°	14382.5	14382.5	14382.5	14382.5	14382.5	14382.5	14382.5	14382.5	14382.5	14382.5	14382.5
2.5°	14425.5	14307.4	14331.6	14446.9	14235.0	14350.3	14264.5	14404.0	14369.1	14379.9	14446.9
5°	14304.7	14184.0	14229.6	14371.8	14173.2	14312.8	14248.4	14363.8	14353.0	14393.3	14436.2
7.5°	14194.7	14065.9	14124.9	14229.6	14122.3	14243.0	14208.1	14353.0	14347.7	14465.7	14495.2
10°	14071.3	13953.2	14004.2	14133.0	14044.4	14189.3	14218.9	14390.6	14446.9	14607.9	14621.4
12.5°	13853.9	13738.6	13762.7	13926.4	13939.8	14159.8	14261.8	14532.8	14591.8	14777.0	14785.0
15°	13075.8	13048.9	13277.0	13540.0	13647.3	13974.7	14315.5	14685.8	14774.3	15007.8	15031.9
17.5°	10886.2	10617.9	10215.4	10534.7	11237.7	12142.0	14186.7	14913.8	15077.5	15311.0	15383.4
20°	7301.3	7545.5	8455.1	8863.0	9488.2	11012.3	14154.5	15160.7	15514.9	15796.6	15933.5
22.5°	6032.1	6018.7	7108.1	8481.9	8973.0	9673.3	13011.4	15453.2	16040.8	16408.4	16580.2
25°	5602.8	5608.1	5806.7	7542.8	8758.3	9498.9	11951.5	15069.5	16617.7	17143.7	17347.6
27.5°	5262.0	5283.4	5452.5	6040.1	8575.9	9461.4	11981.0	13972.0	17226.9	17929.9	18166.0
30°	4991.0	4980.2	5184.2	5675.2	7137.6	9474.8	12120.5	14192.0	16660.7	19046.1	19177.6
32.5°	4765.6	4736.0	4942.7	5436.4	6233.3	9370.1	12329.8	14809.2	16260.9	20119.5	20632.0
35°	4548.2	4537.5	4719.9	5205.6	6018.7	7781.6	12574.0	15573.9	17559.6	20154.3	22628.4
37.5°	4379.2	4371.1	4516.0	4974.9	5825.5	7089.3	12775.2	16537.2	19250.1	21643.6	24281.3
40°	4242.3	4220.8	4336.2	4770.9	5605.4	6973.9	11127.7	17543.5	21313.5	25118.5	28284.8
42.5°	4126.9	4097.4	4210.1	4569.7	5393.5	6845.1	10333.4	18557.8	23739.2	28987.8	32178.3
45°	3968.6	3965.9	4081.3	4416.7	5168.1	6657.3	10408.6	16864.6	26465.5	32690.8	36267.6
47.5°	3888.1	3869.3	3955.2	4274.5	4956.1	6372.9	10336.1	16140.1	28553.1	36407.2	40252.3
50°	3762.0	3745.9	3829.1	4110.8	4746.8	6013.3	10073.1	16585.5	26833.1	39927.7	43998.2
52.5°	3536.6	2911.4	3705.7	3974.0	4521.4	5624.2	9574.1	16832.4	27501.3	43190.6	47486.5
55°	1390.0	1864.9	3547.3	3802.3	4290.6	5259.3	8817.4	16762.6	29712.3	46112.7	50491.9
57.5°	1210.2	1215.5	2355.9	3174.4	4016.9	4878.3	7894.3	16365.5	31663.1	48613.5	53419.3
60°	171.7	174.4	1194.1	1336.3	2635.0	3466.8	6955.1	15654.4	32819.6	51114.4	55944.3
62.5°	115.4	120.7	1086.7	1212.9	2404.2	3075.1	6083.1	14390.6	33377.7	52633.1	57763.6
65°	83.2	85.9	984.8	1097.5	2141.3	2728.9	5272.7	13016.7	33428.7	52984.7	58761.8
67.5°	77.8	80.5	907.0	1011.6	1948.1	2423.0	4572.4	11806.6	32019.9	53089.3	58721.6
70°	80.5	80.5	826.5	915.0	1728.1	2101.0	3794.2	10601.8	28467.2	51720.8	57401.4
72.5°	80.5	83.2	721.8	805.0	1489.2	1779.0	3110.0	8618.8	23055.0	47846.1	54213.6
75°	80.5	83.2	568.9	665.5	1237.0	1427.5	2551.8	6949.8	17755.5	40378.5	47432.9
77.5°	83.2	83.2	418.6	509.8	955.3	1073.3	1937.4	5339.8	13083.8	27989.6	33023.5
80°	83.2	88.5	295.2	375.7	705.7	775.5	1406.1	3407.8	7046.4	14194.7	16395.0
82.5°	85.9	88.5	220.0	281.7	488.4	558.1	858.7	1677.1	3257.5	6568.7	7440.8
85°	80.5	83.2	179.8	195.9	279.1	335.4	534.0	831.8	1145.8	2584.0	2686.0
87.5°	56.3	53.7	56.3	64.4	91.2	147.6	252.2	281.7	276.4	695.0	807.7
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°	14382.5	14382.5	14382.5	14382.5	14382.5	14382.5	14382.5	14382.5	14382.5	14382.5	14382.5
2.5°	14406.7	14412.1	14390.6	14473.8	14390.6	14436.2	14315.5	14503.3	14484.5	14433.5	14497.9
5°	14404.0	14417.4	14412.1	14487.2	14382.5	14420.1	14299.4	14497.9	14430.8	14385.2	14463.0
7.5°	14468.4	14487.2	14479.1	14530.1	14409.4	14406.7	14288.6	14436.2	14371.8	14275.2	14371.8
10°	14610.6	14610.6	14586.5	14616.0	14441.6	14422.8	14224.2	14393.3	14283.3	14197.4	14315.5
12.5°	14793.1	14809.2	14747.5	14742.1	14500.6	14444.3	14194.7	14277.9	14119.6	14039.1	14154.5
15°	15061.4	15072.2	14991.7	14940.7	14645.5	14522.1	14119.6	14103.5	13883.4	13805.6	13888.8
17.5°	15372.7	15370.0	15257.3	15235.8	14889.7	14602.6	14057.9	13891.5	13609.8	13521.2	13593.7
20°	15871.8	15842.3	15718.8	15595.4	15090.9	14653.6	13969.3	13620.5	13228.7	13102.6	13161.6
22.5°	16542.6	16531.9	16338.7	15981.8	15305.6	14701.9	13819.0	13290.4	12769.9	12541.8	12579.4
25°	17277.8	17269.8	16993.4	16459.4	15493.4	14736.7	13644.6	12920.1	12217.1	11871.0	11862.9
27.5°	18131.1	18109.7	17736.7	16974.6	15753.7	14747.5	13456.8	12528.4	11669.7	11237.7	11256.5
30°	19169.6	19132.0	18622.2	17546.2	16083.8	14779.7	13295.8	12088.3	11159.9	10701.0	10690.3
32.5°	20546.1	20492.4	19700.9	18297.5	16510.4	14860.2	13102.6	11653.6	10684.9	10223.4	10183.2
35°	22641.8	22531.8	21222.3	19258.1	16985.4	14913.8	12794.0	11240.4	10226.1	9791.4	9759.2
37.5°	25743.7	25558.5	23138.2	20267.0	17457.6	14903.1	12442.5	10795.0	9853.1	9431.8	9423.8
40°	29833.0	29543.2	25437.8	21348.4	17911.1	14844.1	12064.2	10397.8	9541.9	9179.6	9206.4
42.5°	34306.1	34000.2	28164.0	22448.6	18251.9	14661.6	11659.0	10022.2	9254.7	8964.9	8967.6
45°	38814.1	38529.7	31300.8	23484.3	18420.9	14318.1	11237.7	9665.3	8951.5	8699.3	8728.8
47.5°	43303.3	43094.0	34408.1	24359.1	18337.7	13778.8	10730.6	9327.2	8651.0	8444.4	8511.5
50°	47478.5	47255.8	37719.3	25083.6	17919.1	13027.5	10210.0	8994.5	8406.8	8227.0	8283.4
52.5°	51347.8	51050.0	41266.6	25502.2	17165.1	12235.9	9751.2	8702.0	8170.7	7990.9	8049.9
55°	54634.9	54621.5	44513.4	25537.1	15987.2	11425.5	9308.4	8363.9	7939.9	7792.3	7805.8
57.5°	57712.6	57833.4	47306.8	25113.1	14591.8	10674.2	8801.3	8015.0	7674.3	7521.3	7534.7
60°	60063.2	60213.5	49201.2	23878.8	13105.3	9845.1	8256.5	7644.8	7344.2	7199.3	7242.3
62.5°	61751.0	61557.8	50204.7	22107.8	11616.1	8954.2	7666.2	7172.5	6933.7	6845.1	6847.8
65°	62322.6	62260.9	49617.1	19926.3	10210.0	8076.8	6968.6	6584.8	6437.3	6375.5	6421.2
67.5°	61737.6	61775.2	47328.2	18072.1	8873.7	7086.6	6185.0	5938.2	5863.0	5860.4	5908.6
70°	60135.7	59840.5	42581.5	16590.9	7620.6	5986.5	5342.5	5224.4	5200.3	5259.3	5299.5
72.5°	55949.7	55520.4	35312.4	14232.3	5849.6	4403.3	4046.4	4207.4	4202.1	4234.3	4271.8
75°	47932.0	46802.3	27659.6	11331.6	4333.5	3115.3	2699.4	2694.0	2686.0	2959.7	3059.0
77.5°	33595.0	32841.0	20420.0	8629.5	2881.9	1864.9	1851.5	1996.4	2020.5	1840.8	1875.6
80°	16853.9	17183.9	11785.1	5331.7	1915.9	1314.8	1379.2	1357.8	1376.5	1398.0	1411.4
82.5°	7768.2	7934.5	5640.3	2597.4	1234.3	998.2	944.5	1027.7	1065.3	1062.6	1054.5
85°	2755.8	2771.9	1784.4	1113.6	756.7	649.4	660.1	767.4	810.4	772.8	754.0
87.5°	799.6	759.4	364.9	330.0	348.8	346.1	356.9	378.3	407.9	402.5	373.0
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)