

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: P510560

Luminaire Tested: **CTN-CA10-630-750-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510560
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-630-750-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 83148 lumens
Efficiency: N/A
Efficacy: 131.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

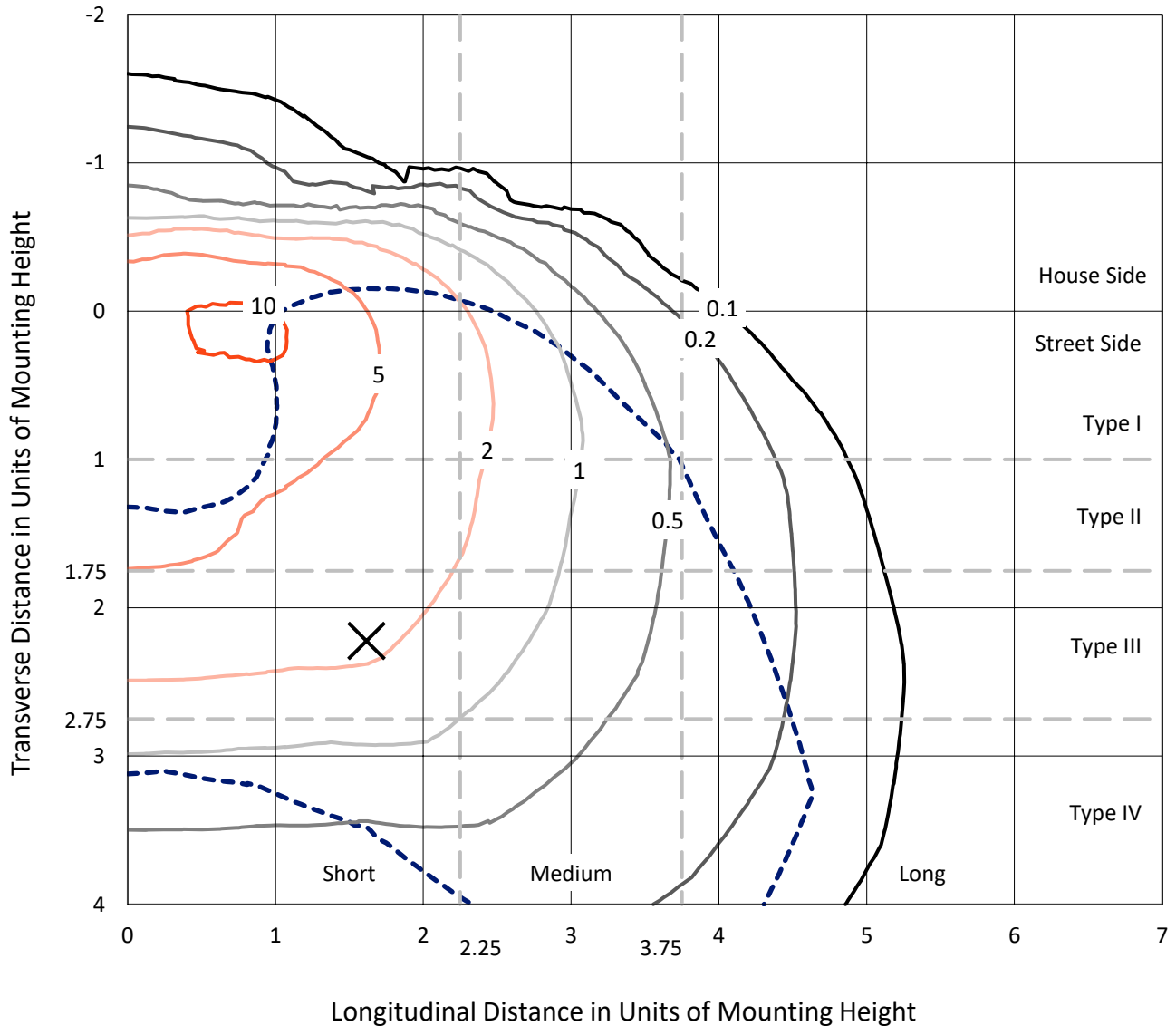
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

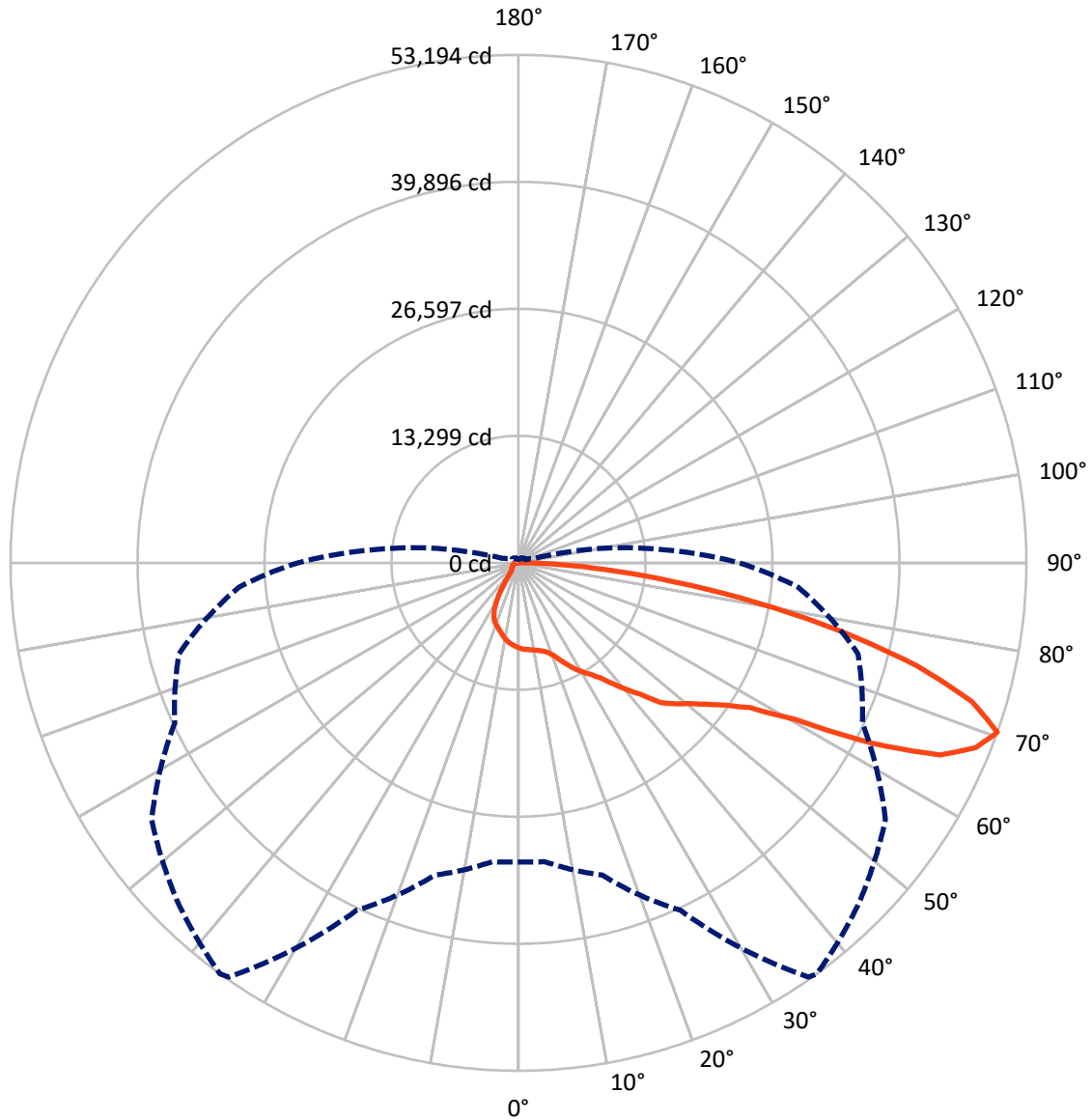
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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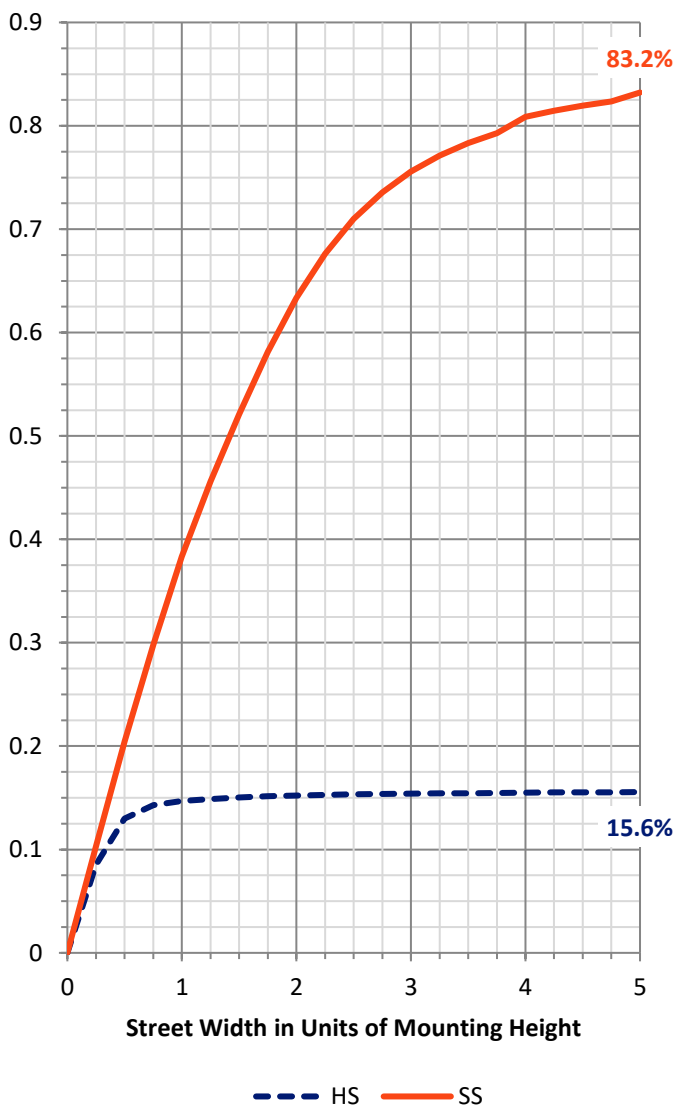
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13121.4	0.0	13121.4
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	70026.6	0.0	70026.6
	% Fixture	84.2	0.0	84.2
Total	Lumens	83148.0	0.0	83148.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	844.9	1.0
10°-20°	2512.7	3.0
20°-30°	4518.5	5.4
30°-40°	7150.4	8.6
40°-50°	11174.8	13.4
50°-60°	16046.8	19.3
60°-70°	21766.0	26.2
70°-80°	16109.2	19.4
80°-90°	3024.8	3.6
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°	83148.0	100.0
0°-180°	83148.0	100.0

Coefficient of Utilization

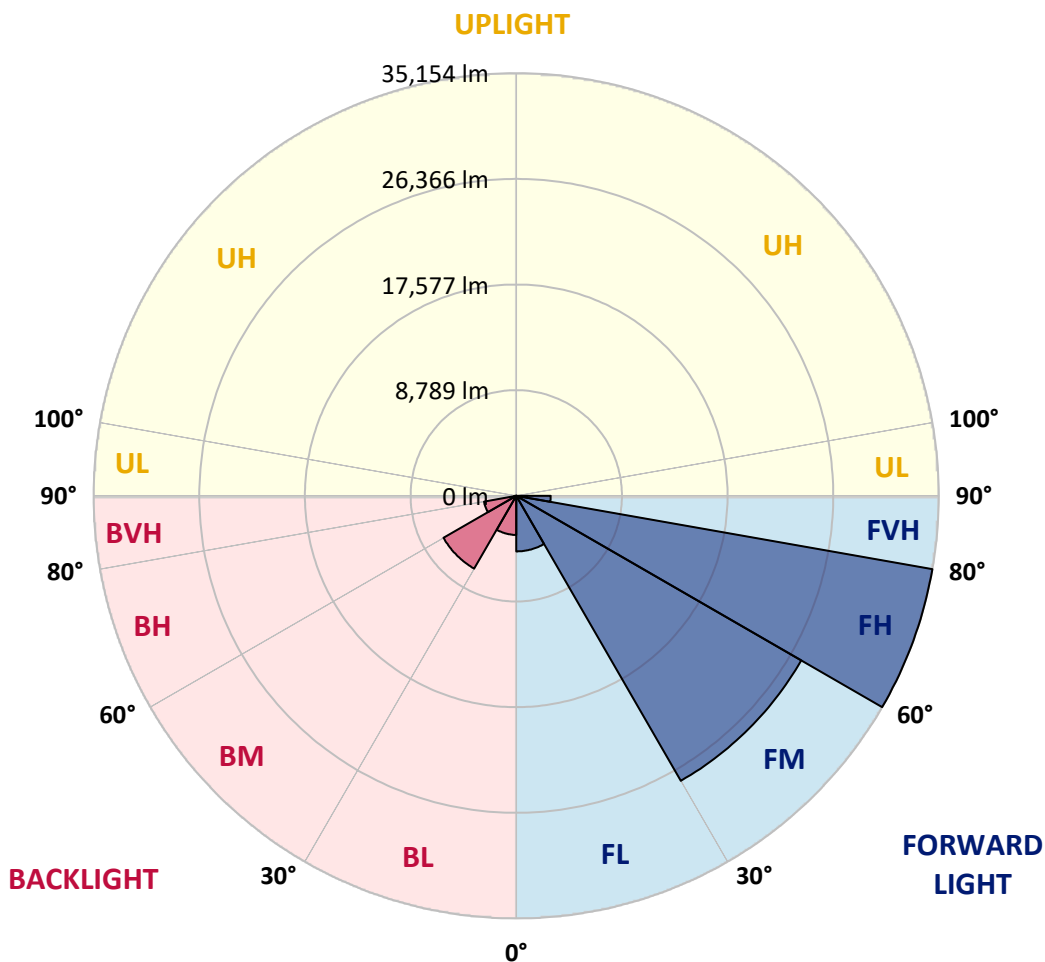


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4624.7	5.6			
FM (30°-60°)	27379.9	32.9			
FH (60°-80°)	35154.2	42.3			G5
FVH (80°-90°)	2867.9	3.4			G5
BL (0°-30°)	3251.4	3.9	B4/5000		
BM (30°-60°)	6992.1	8.4	B4/8500		
BH (60°-80°)	2721.0	3.3	B4/5000		G4/5000
BVH (80°-90°)	156.9	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	8908.9	8908.9	8908.9	8908.9	8908.9	8908.9	8908.9	8908.9	8908.9	8908.9	8908.9
2.5°	9089.3	9070.1	9054.8	9060.5	9049.0	9056.7	9039.4	9018.3	8968.4	8947.3	8937.7
5°	9170.0	9164.2	9148.8	9137.3	9116.2	9108.5	9089.3	9106.6	9079.7	9010.6	8970.3
7.5°	9218.0	9216.0	9198.8	9173.8	9185.3	9194.9	9214.1	9187.2	9152.7	9120.1	9037.5
10°	9239.1	9239.1	9218.0	9231.4	9290.9	9296.7	9306.3	9323.5	9290.9	9242.9	9160.4
12.5°	9292.8	9289.0	9296.7	9340.8	9402.2	9415.7	9463.7	9463.7	9467.5	9438.7	9342.7
15°	9427.2	9427.2	9444.5	9484.8	9590.4	9598.0	9669.1	9732.4	9740.1	9697.9	9624.9
17.5°	9738.2	9730.5	9720.9	9745.8	9859.1	9862.9	9985.8	10066.4	10087.5	10133.6	10122.1
20°	10329.4	10321.7	10319.8	10321.7	10314.0	10302.5	10423.5	10509.8	10617.3	10698.0	10738.3
22.5°	11175.9	11158.7	11158.7	11064.6	10991.7	11003.2	11022.4	11070.4	11212.4	11354.5	11506.1
25°	12087.8	12076.2	12085.8	11845.9	11748.0	11786.4	11761.4	11836.3	12022.5	12145.4	12306.6
27.5°	12832.6	12849.8	12796.1	12609.9	12546.5	12575.3	12517.8	12732.8	12938.1	13153.1	13396.9
30°	13759.7	13667.6	13535.1	13308.6	13285.6	13289.4	13285.6	13631.1	14057.3	14364.4	14702.3
32.5°	14971.0	14986.4	14688.8	14155.2	13959.4	13932.5	14009.3	14516.1	15091.9	15773.4	16218.8
35°	16195.7	16220.7	16003.8	15447.1	14888.5	14804.0	14690.7	15349.2	16180.4	17547.1	18219.0
37.5°	17495.3	17583.6	17326.4	16829.2	16166.9	16088.2	15552.7	16199.6	17428.1	19647.2	20528.3
40°	19234.5	19140.4	18829.4	18197.9	17581.7	17455.0	16833.0	17172.8	19032.9	22277.0	22916.3
42.5°	20516.8	20489.9	20226.9	19603.0	18983.0	18881.2	18380.2	18748.8	21054.2	24943.4	25229.4
45°	21534.1	21699.2	21693.5	21301.9	20952.5	20894.9	20599.3	21142.5	23497.9	27460.0	27319.8
47.5°	22438.3	22540.0	22376.9	22206.0	22042.8	22062.0	22280.9	23398.1	25995.3	29657.9	29037.9
50°	23918.3	23787.8	23056.4	22925.9	23156.2	23165.8	23831.9	25551.9	28746.1	31558.3	30492.9
52.5°	25891.7	25749.6	24246.5	24023.9	24569.0	24609.4	25717.0	27698.0	31583.3	33374.3	31940.3
55°	28828.7	28498.5	26887.9	25889.7	26139.3	26302.4	27644.3	29761.6	33804.3	34975.2	33036.4
57.5°	32435.6	32675.5	31850.1	29594.6	28556.1	28617.5	29849.9	31736.9	35764.2	36376.5	33677.6
60°	36247.9	36190.3	36535.9	35585.7	33597.0	33266.8	32639.1	33752.4	37282.6	37557.1	34337.9
62.5°	38336.5	38672.4	39824.2	40014.2	41809.0	41634.3	37355.5	36251.8	39037.1	38298.1	34518.4
65°	38324.9	38470.8	40615.0	42972.3	48579.5	48529.6	46540.9	39866.4	40344.4	38693.5	34157.5
67.5°	35848.7	36075.2	38582.2	43187.3	51708.4	51648.9	50274.5	44947.6	40755.2	38217.4	32474.0
70°	31333.7	31410.5	33856.1	40160.1	52965.8	53194.2	50403.1	46897.9	39733.9	36802.7	29404.5
72.5°	25849.4	25690.1	28081.9	34295.7	49763.9	49627.6	48272.3	44569.4	38014.0	34055.7	23981.6
75°	19032.9	19476.3	21622.4	27536.8	42607.6	43106.7	43707.5	41006.6	33762.0	28066.6	16583.5
77.5°	12567.7	13132.0	15301.2	20647.3	33731.3	34506.8	36063.6	34877.3	27465.7	20132.8	7897.3
80°	6494.0	6920.2	8872.4	13700.2	24181.3	25300.4	28154.9	26415.7	19472.5	9102.8	1768.0
82.5°	2457.1	2401.4	3975.5	7841.6	15504.7	16522.1	18597.1	15840.6	6929.8	1599.0	821.6
85°	1078.8	1142.2	1647.0	3576.2	8864.7	8997.2	10534.8	6175.4	1015.5	764.0	558.6
87.5°	466.5	535.6	691.1	1028.9	2990.7	3453.4	4273.0	1961.8	307.1	264.9	280.3
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8908.9	8908.9	8908.9	8908.9	8908.9	8908.9	8908.9	8908.9	8908.9	8908.9	8908.9
2.5°	8920.4	8908.9	8889.7	8841.7	8763.0	8753.4	8745.7	8738.0	8722.7	8730.4	8774.5
5°	8939.6	8918.5	8849.4	8780.3	8711.2	8649.7	8574.9	8546.1	8507.7	8482.7	8528.8
7.5°	9004.9	8960.7	8859.0	8764.9	8576.8	8486.6	8390.6	8277.3	8196.7	8144.9	8191.0
10°	9114.3	9058.6	8931.9	8738.0	8517.3	8269.7	8100.7	7912.6	7759.0	7716.8	7759.0
12.5°	9292.8	9210.3	9062.5	8799.5	8407.9	8083.5	7762.9	7515.3	7267.6	7196.6	7217.7
15°	9582.7	9517.4	9290.9	8928.1	8409.8	7914.5	7438.5	7039.2	6714.8	6601.5	6593.8
17.5°	10047.2	9978.1	9717.0	9183.4	8478.9	7782.1	7119.8	6511.3	6019.9	5770.3	5730.0
20°	10713.3	10617.3	10221.9	9559.6	8628.6	7724.5	6824.2	6006.4	5242.4	4774.1	4703.0
22.5°	11454.3	11352.6	10769.0	9849.5	8736.1	7611.2	6542.0	5447.8	4442.0	3869.9	3789.3
25°	12375.7	12153.0	11293.0	10124.0	8711.2	7373.2	6083.2	4689.6	3599.3	3104.0	3050.3
27.5°	13285.6	13003.4	11826.7	10268.0	8601.8	6995.0	5411.4	3802.7	2818.0	2466.7	2422.5
30°	14414.3	13869.2	12300.8	10335.2	8325.3	6428.8	4511.1	2890.9	2109.6	1867.8	1825.5
32.5°	15756.1	14930.7	12746.2	10260.3	7864.6	5564.9	3507.1	2117.3	1568.3	1416.7	1414.8
35°	17526.0	16232.2	13235.7	10014.6	7158.2	4633.9	2459.0	1447.4	1222.8	1171.0	1180.6
37.5°	19595.3	17994.4	13732.9	9611.5	6359.7	3545.5	1639.3	1115.3	1075.0	1076.9	1078.8
40°	21777.9	19940.9	14402.8	9045.2	5390.3	2566.5	1180.6	1002.0	1000.1	1019.3	1025.1
42.5°	23862.6	21831.7	15228.2	8290.8	4374.8	1696.9	1023.2	956.0	931.0	938.7	944.4
45°	25799.5	23453.8	15930.8	7555.6	3286.4	1211.3	1004.0	902.2	863.8	860.0	863.8
47.5°	27360.2	24753.3	16358.9	6691.7	2341.9	1005.9	963.6	852.3	798.6	787.0	781.3
50°	28548.4	25718.9	16514.4	5712.7	1583.7	959.8	909.9	794.7	729.5	731.4	731.4
52.5°	29707.8	26596.1	16333.9	4726.1	1165.2	919.5	873.4	748.6	679.5	716.0	725.6
55°	30542.9	26964.7	15808.0	3658.8	971.3	869.6	833.1	694.9	646.9	706.4	725.6
57.5°	31030.4	27254.6	14842.4	2641.4	890.7	821.6	781.3	645.0	600.8	616.2	625.8
60°	31333.7	26849.5	13565.9	1806.3	848.5	783.2	729.5	612.4	552.8	516.4	510.6
62.5°	31166.7	25836.0	11884.3	1242.0	804.3	741.0	685.3	581.6	502.9	454.9	451.1
65°	29805.7	23960.5	9123.9	1005.9	777.4	721.8	658.4	552.8	468.4	422.3	416.6
67.5°	27281.4	20589.7	5328.8	894.5	765.9	702.6	637.3	526.0	449.2	399.3	391.6
70°	23133.2	15487.4	1785.2	798.6	764.0	700.7	620.0	506.8	428.1	376.2	368.6
72.5°	16689.1	9344.6	869.6	702.6	714.1	671.9	606.6	491.4	414.6	349.4	335.9
75°	9484.8	3042.6	785.1	606.6	664.2	641.1	598.9	493.3	420.4	316.7	301.4
77.5°	2699.0	888.8	758.2	516.4	627.7	662.3	560.5	445.3	430.0	293.7	274.5
80°	911.8	790.9	731.4	401.2	506.8	547.1	485.7	391.6	433.8	266.8	247.6
82.5°	731.4	794.7	614.3	320.6	385.8	414.6	385.8	351.3	351.3	238.0	222.7
85°	585.5	737.1	389.7	255.3	287.9	318.7	272.6	263.0	245.7	199.6	193.9
87.5°	339.8	230.4	161.2	130.5	120.9	122.9	105.6	126.7	155.5	136.3	134.4
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)