

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: P510770

Luminaire Tested: **CTN-CA8-330-727-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510770
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-CA8-330-727-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36679 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

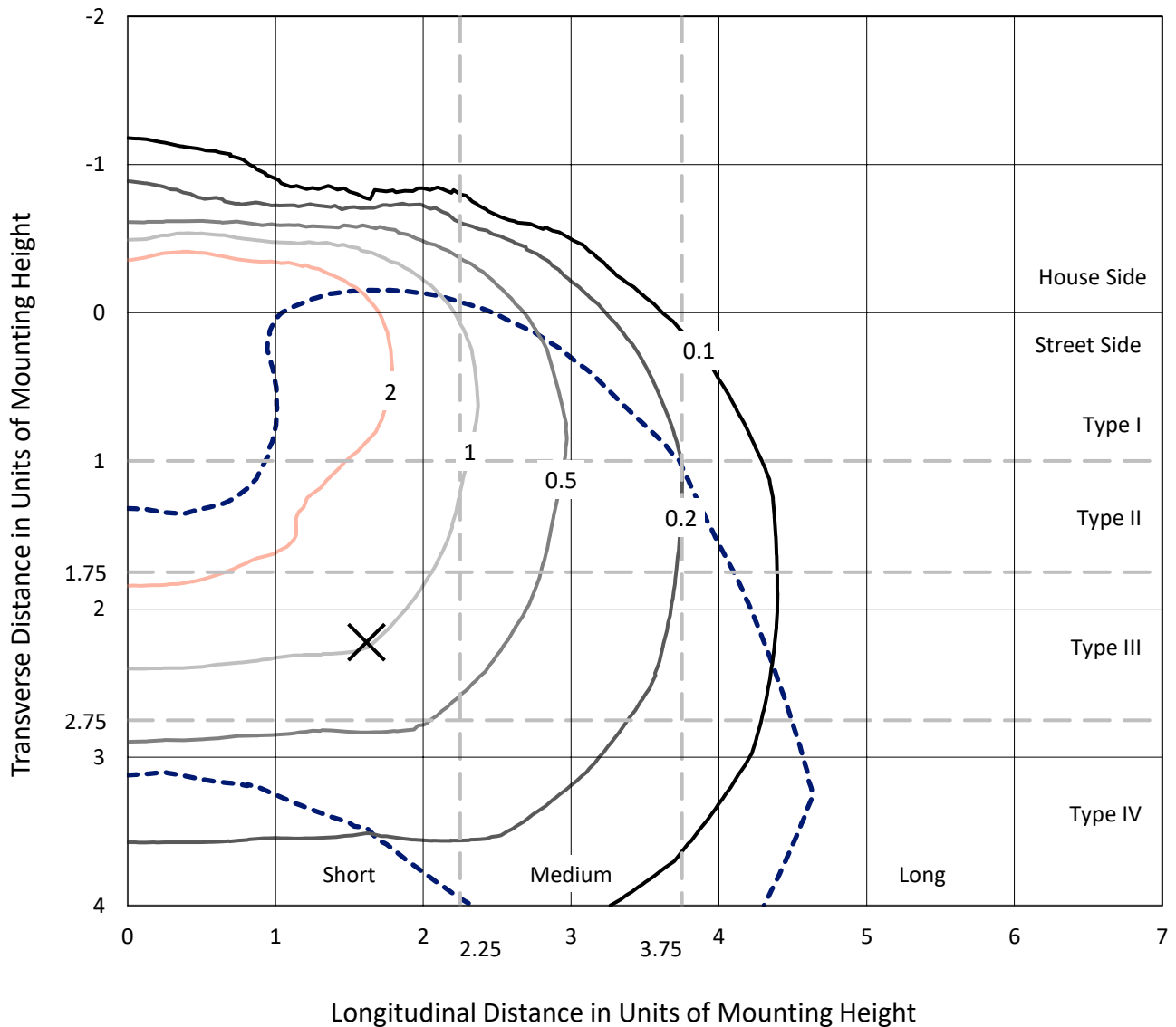
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

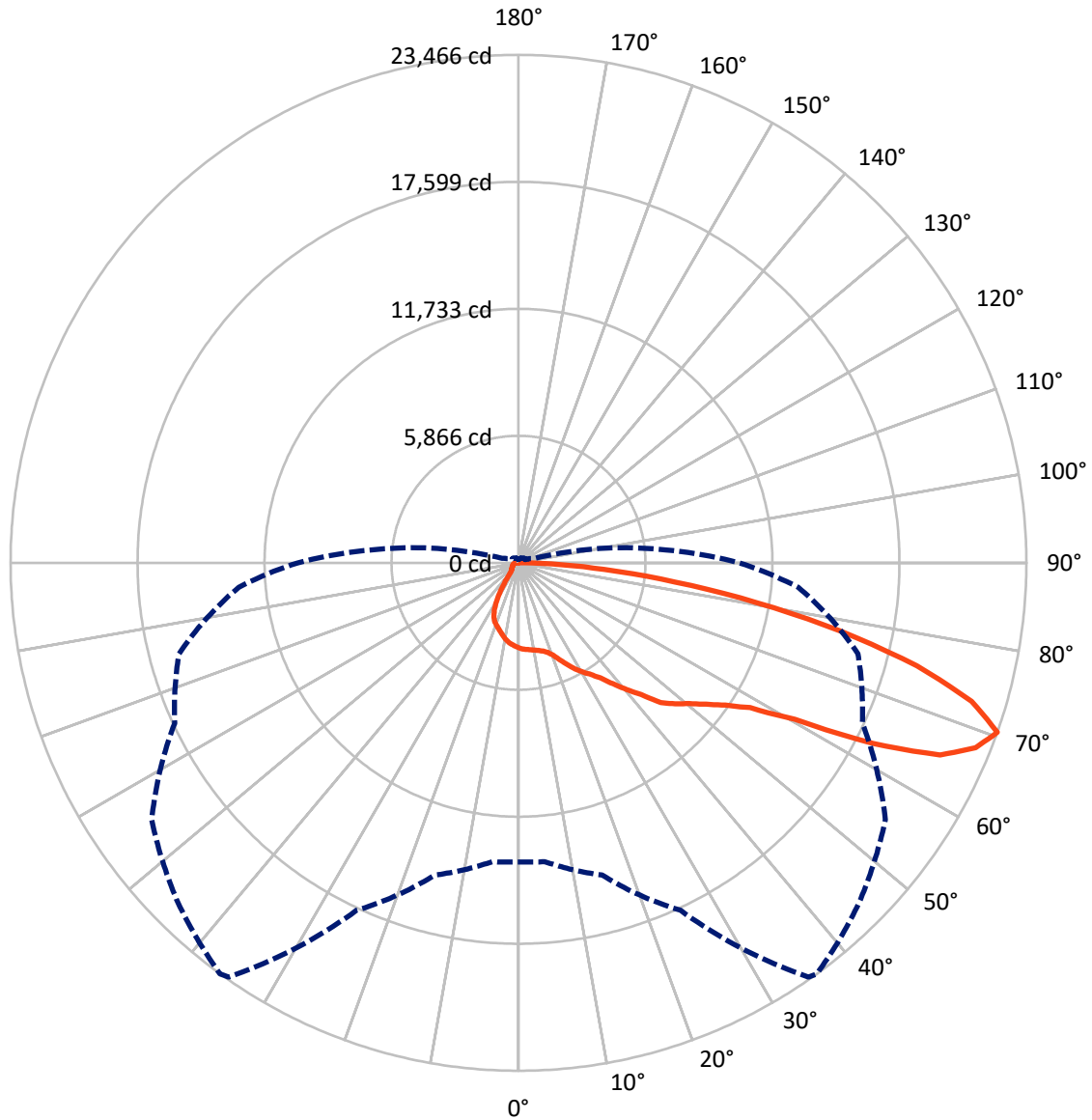
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5 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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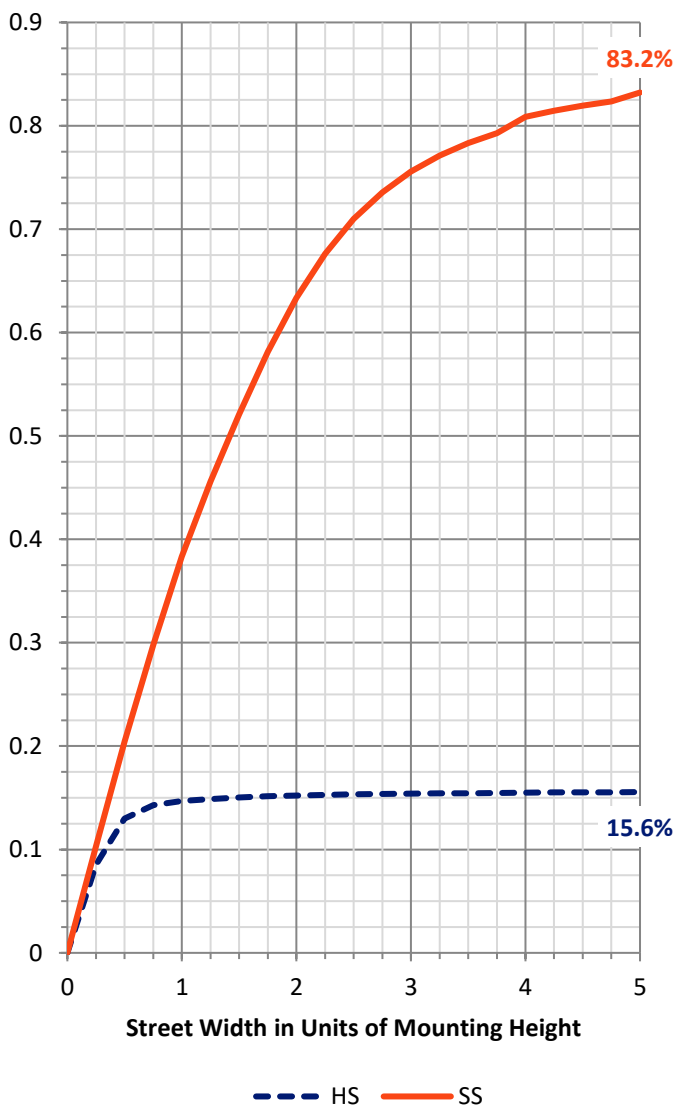
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5788.2	0.0	5788.2
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	30890.8	0.0	30890.8
	% Fixture	84.2	0.0	84.2
Total	Lumens	36679.0	0.0	36679.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	372.7	1.0
10°-20°	1108.4	3.0
20°-30°	1993.2	5.4
30°-40°	3154.2	8.6
40°-50°	4929.5	13.4
50°-60°	7078.7	19.3
60°-70°	9601.6	26.2
70°-80°	7106.2	19.4
80°-90°	1334.3	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°	36679.0	100.0
0°-180°	36679.0	100.0

Coefficient of Utilization



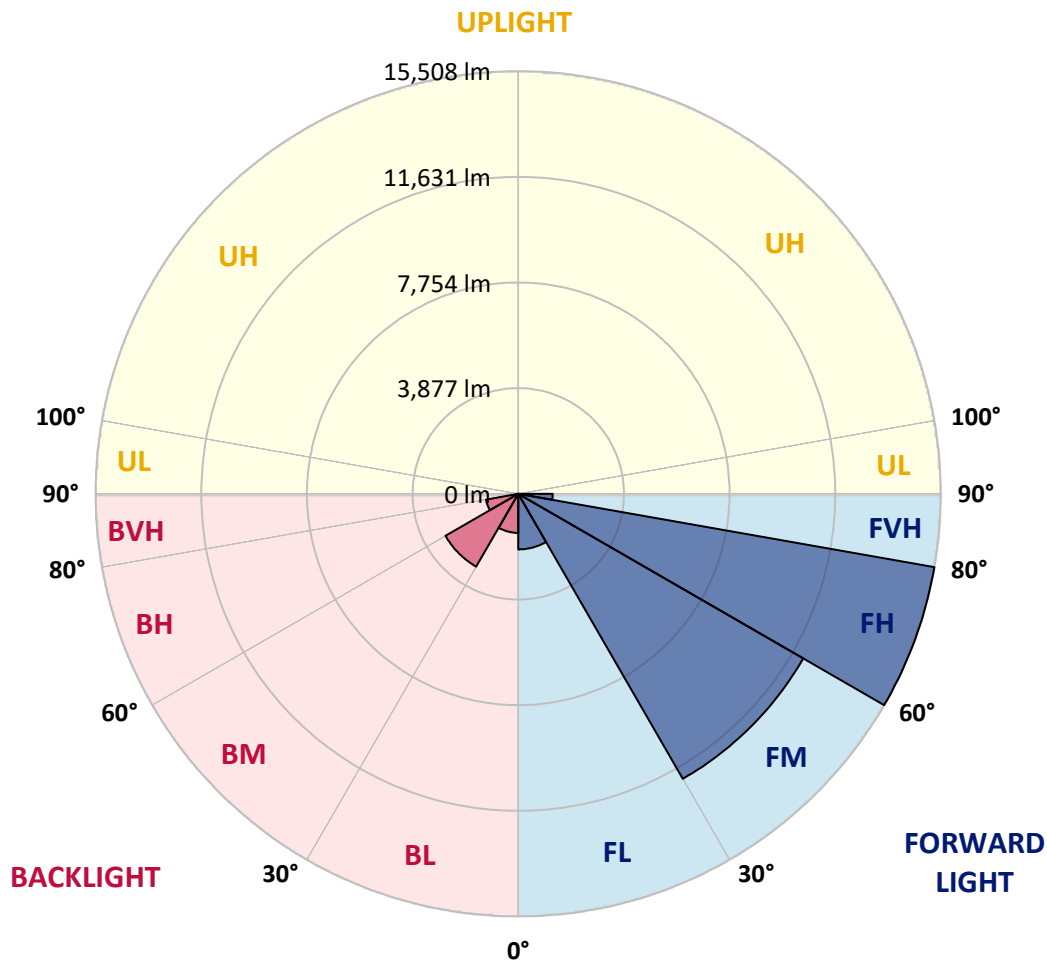
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2040.1	5.6			
FM	(30°-60°)	12078.1	32.9			
FH	(60°-80°)	15507.5	42.3			G5
FVH	(80°-90°)	1265.1	3.4			G5
BL	(0°-30°)	1434.3	3.9	B3/2500		
BM	(30°-60°)	3084.4	8.4	B3/5000		
BH	(60°-80°)	1200.3	3.3	B3/2500		G3/2500
BVH	(80°-90°)	69.2	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3930.0	3930.0	3930.0	3930.0	3930.0	3930.0	3930.0	3930.0	3930.0	3930.0	3930.0
2.5°	4009.6	4001.1	3994.3	3996.9	3991.8	3995.2	3987.6	3978.2	3956.2	3946.9	3942.7
5°	4045.1	4042.6	4035.8	4030.7	4021.4	4018.0	4009.6	4017.2	4005.3	3974.9	3957.1
7.5°	4066.3	4065.5	4057.8	4046.8	4051.9	4056.1	4064.6	4052.8	4037.5	4023.1	3986.7
10°	4075.6	4075.6	4066.3	4072.2	4098.5	4101.0	4105.3	4112.9	4098.5	4077.3	4040.9
12.5°	4099.3	4097.6	4101.0	4120.5	4147.6	4153.5	4174.7	4174.7	4176.4	4163.7	4121.3
15°	4158.6	4158.6	4166.2	4184.0	4230.6	4234.0	4265.3	4293.2	4296.6	4278.0	4245.8
17.5°	4295.8	4292.4	4288.2	4299.2	4349.1	4350.8	4405.0	4440.6	4449.9	4470.2	4465.1
20°	4556.6	4553.2	4552.4	4553.2	4549.8	4544.7	4598.1	4636.2	4683.6	4719.2	4737.0
22.5°	4930.0	4922.4	4922.4	4880.9	4848.7	4853.8	4862.3	4883.5	4946.1	5008.8	5075.7
25°	5332.3	5327.2	5331.4	5225.6	5182.4	5199.3	5188.3	5221.3	5303.5	5357.7	5428.8
27.5°	5660.8	5668.4	5644.7	5562.6	5534.6	5547.3	5521.9	5616.8	5707.4	5802.2	5909.8
30°	6069.8	6029.2	5970.7	5870.8	5860.7	5862.4	5860.7	6013.1	6201.1	6336.6	6485.6
32.5°	6604.1	6610.9	6479.7	6244.3	6157.9	6146.0	6179.9	6403.5	6657.5	6958.1	7154.6
35°	7144.4	7155.4	7059.7	6814.2	6567.7	6530.5	6480.5	6771.0	7137.6	7740.5	8036.9
37.5°	7717.7	7756.6	7643.2	7423.8	7131.7	7097.0	6860.7	7146.1	7688.0	8666.9	9055.6
40°	8484.9	8443.4	8306.2	8027.6	7755.8	7699.9	7425.5	7575.4	8396.0	9827.0	10109.0
42.5°	9050.5	9038.7	8922.7	8647.5	8373.9	8329.1	8108.1	8270.6	9287.6	11003.2	11129.4
45°	9499.3	9572.2	9569.6	9396.9	9242.8	9217.4	9086.9	9326.6	10365.6	12113.4	12051.6
47.5°	9898.2	9943.1	9871.1	9795.7	9723.7	9732.2	9828.7	10321.6	11467.3	13083.0	12809.5
50°	10551.1	10493.5	10170.8	10113.3	10214.9	10219.1	10513.0	11271.7	12680.7	13921.3	13451.3
52.5°	11421.6	11358.9	10695.9	10597.6	10838.1	10855.9	11344.5	12218.4	13932.3	14722.4	14089.8
55°	12717.2	12571.5	11861.0	11420.7	11530.8	11602.8	12194.7	13128.7	14912.0	15428.6	14573.3
57.5°	14308.3	14414.1	14050.0	13055.0	12596.9	12624.0	13167.7	14000.0	15776.6	16046.8	14856.2
60°	15990.0	15964.6	16117.0	15697.9	14820.6	14674.9	14398.0	14889.2	16446.4	16567.5	15147.5
62.5°	16911.3	17059.5	17567.6	17651.4	18443.2	18366.1	16478.6	15991.7	17220.4	16894.4	15227.1
65°	16906.2	16970.6	17916.5	18956.3	21429.8	21407.8	20530.5	17586.2	17797.1	17068.8	15067.9
67.5°	15813.9	15913.8	17019.7	19051.2	22810.1	22783.8	22177.5	19827.7	17978.3	16858.8	14325.2
70°	13822.2	13856.1	14934.9	17715.8	23364.7	23465.5	22234.3	20688.0	17527.8	16234.7	12971.2
72.5°	11402.9	11332.6	12387.8	15128.8	21952.3	21892.2	21294.3	19660.9	16769.1	15023.0	10579.0
75°	8396.0	8591.6	9538.3	12147.3	18795.4	19015.6	19280.7	18089.2	14893.4	12381.0	7315.5
77.5°	5544.0	5792.9	6749.8	9108.1	14879.9	15222.0	15908.7	15385.4	12115.9	8881.2	3483.7
80°	2864.7	3052.7	3913.9	6043.6	10667.1	11160.7	12419.9	11652.7	8589.9	4015.5	779.9
82.5°	1083.9	1059.3	1753.7	3459.2	6839.6	7288.4	8203.7	6987.7	3056.9	705.4	362.4
85°	475.9	503.8	726.5	1577.6	3910.5	3968.9	4647.2	2724.1	448.0	337.0	246.4
87.5°	205.8	236.3	304.8	453.9	1319.3	1523.4	1885.0	865.4	135.5	116.9	123.6
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°	3930.0	3930.0	3930.0	3930.0	3930.0	3930.0	3930.0	3930.0	3930.0	3930.0	3930.0
2.5°	3935.1	3930.0	3921.5	3900.3	3865.6	3861.4	3858.0	3854.6	3847.8	3851.2	3870.7
5°	3943.5	3934.2	3903.7	3873.2	3842.8	3815.7	3782.6	3769.9	3753.0	3742.0	3762.3
7.5°	3972.3	3952.8	3908.0	3866.5	3783.5	3743.7	3701.3	3651.4	3615.8	3592.9	3613.3
10°	4020.6	3996.0	3940.1	3854.6	3757.2	3648.0	3573.5	3490.5	3422.7	3404.1	3422.7
12.5°	4099.3	4062.9	3997.7	3881.7	3709.0	3565.9	3424.4	3315.2	3206.0	3174.6	3183.9
15°	4227.2	4198.4	4098.5	3938.4	3709.8	3491.3	3281.3	3105.2	2962.1	2912.1	2908.7
17.5°	4432.1	4401.6	4286.5	4051.1	3740.3	3432.9	3140.8	2872.3	2655.5	2545.5	2527.7
20°	4726.0	4683.6	4509.2	4217.0	3806.3	3407.5	3010.4	2649.6	2312.6	2106.0	2074.6
22.5°	5052.8	5007.9	4750.5	4344.9	3853.8	3357.5	2885.9	2403.2	1959.5	1707.1	1671.6
25°	5459.3	5361.1	4981.7	4466.0	3842.8	3252.5	2683.5	2068.7	1587.7	1369.3	1345.6
27.5°	5860.7	5736.2	5217.1	4529.5	3794.5	3085.7	2387.1	1677.5	1243.1	1088.1	1068.7
30°	6358.6	6118.1	5426.3	4559.1	3672.5	2835.9	1990.0	1275.3	930.6	823.9	805.3
32.5°	6950.5	6586.4	5622.7	4526.1	3469.3	2454.9	1547.1	934.0	691.8	624.9	624.1
35°	7731.2	7160.5	5838.6	4417.7	3157.7	2044.2	1084.7	638.5	539.4	516.5	520.8
37.5°	8644.1	7937.8	6058.0	4239.9	2805.4	1564.0	723.2	492.0	474.2	475.1	475.9
40°	9606.9	8796.5	6353.5	3990.1	2377.8	1132.2	520.8	442.0	441.2	449.6	452.2
42.5°	10526.5	9630.6	6717.6	3657.3	1929.8	748.6	451.3	421.7	410.7	414.1	416.6
45°	11380.9	10346.1	7027.5	3333.0	1449.7	534.3	442.9	398.0	381.1	379.4	381.1
47.5°	12069.4	10919.4	7216.4	2951.9	1033.1	443.7	425.1	376.0	352.3	347.2	344.6
50°	12593.5	11345.3	7285.0	2520.1	698.6	423.4	401.4	350.6	321.8	322.6	322.6
52.5°	13105.0	11732.3	7205.4	2084.8	514.0	405.6	385.3	330.2	299.8	315.9	320.1
55°	13473.3	11894.9	6973.4	1614.0	428.5	383.6	367.5	306.5	285.4	311.6	320.1
57.5°	13688.4	12022.8	6547.4	1165.2	392.9	362.4	344.6	284.5	265.0	271.8	276.1
60°	13822.2	11844.1	5984.3	796.8	374.3	345.5	321.8	270.1	243.9	227.8	225.2
62.5°	13748.6	11397.0	5242.5	547.9	354.8	326.9	302.3	256.6	221.9	200.7	199.0
65°	13148.2	10569.7	4024.8	443.7	343.0	318.4	290.5	243.9	206.6	186.3	183.8
67.5°	12034.6	9082.7	2350.7	394.6	337.9	309.9	281.1	232.0	198.1	176.1	172.7
70°	10204.7	6831.9	787.5	352.3	337.0	309.1	273.5	223.6	188.8	166.0	162.6
72.5°	7362.0	4122.2	383.6	309.9	315.0	296.4	267.6	216.8	182.9	154.1	148.2
75°	4184.0	1342.2	346.3	267.6	293.0	282.8	264.2	217.6	185.4	139.7	132.9
77.5°	1190.6	392.1	334.5	227.8	276.9	292.1	247.3	196.5	189.7	129.6	121.1
80°	402.2	348.9	322.6	177.0	223.6	241.3	214.2	172.7	191.4	117.7	109.2
82.5°	322.6	350.6	271.0	141.4	170.2	182.9	170.2	155.0	155.0	105.0	98.2
85°	258.3	325.2	171.9	112.6	127.0	140.6	120.2	116.0	108.4	88.1	85.5
87.5°	149.9	101.6	71.1	57.6	53.3	54.2	46.6	55.9	68.6	60.1	59.3
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)