

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: P591218

Luminaire Tested: **CTN-CA10-630-727-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591218
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-630-727-U-T2-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47855 lumens
Efficiency: N/A
Efficacy: 75.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

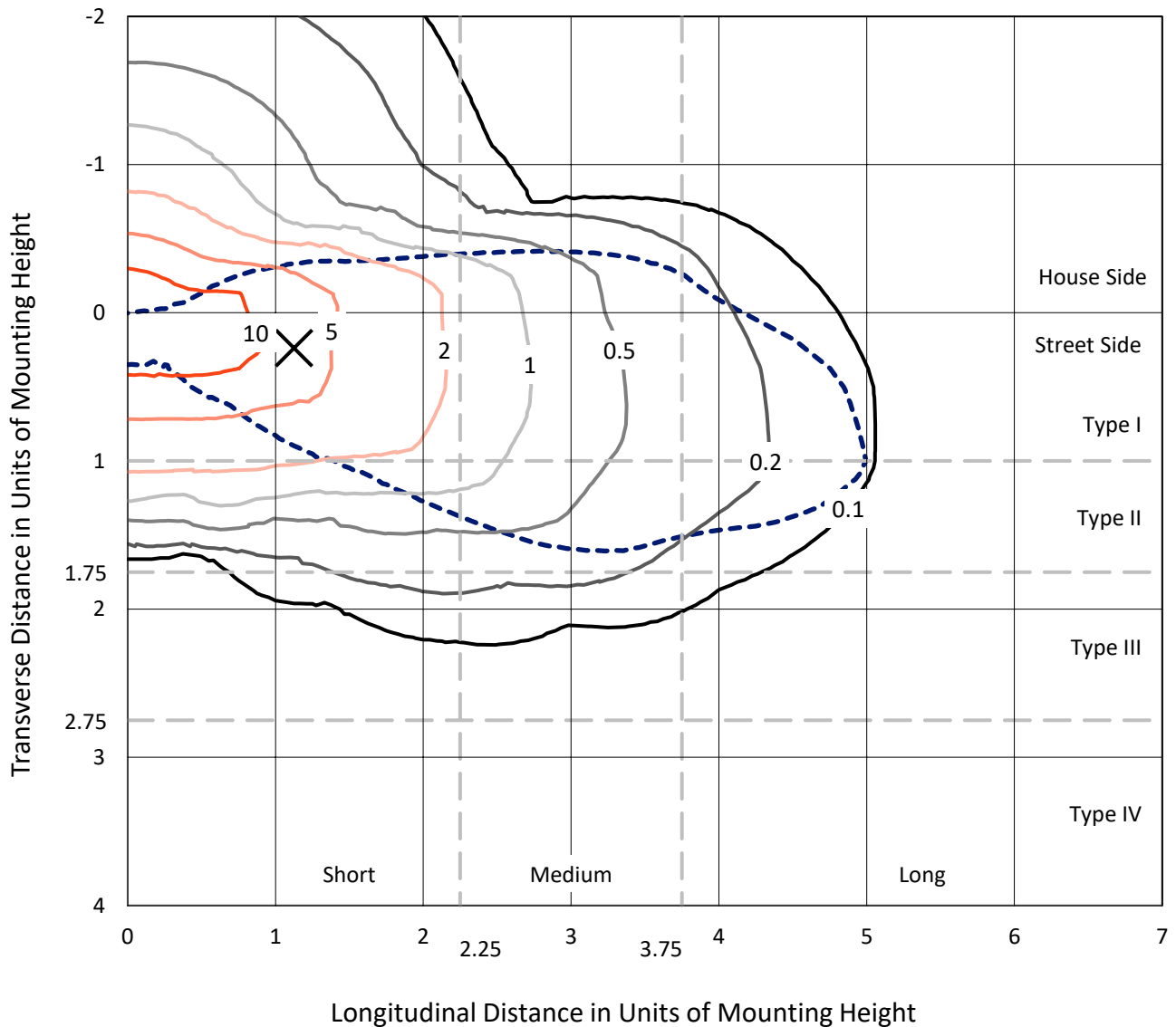
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

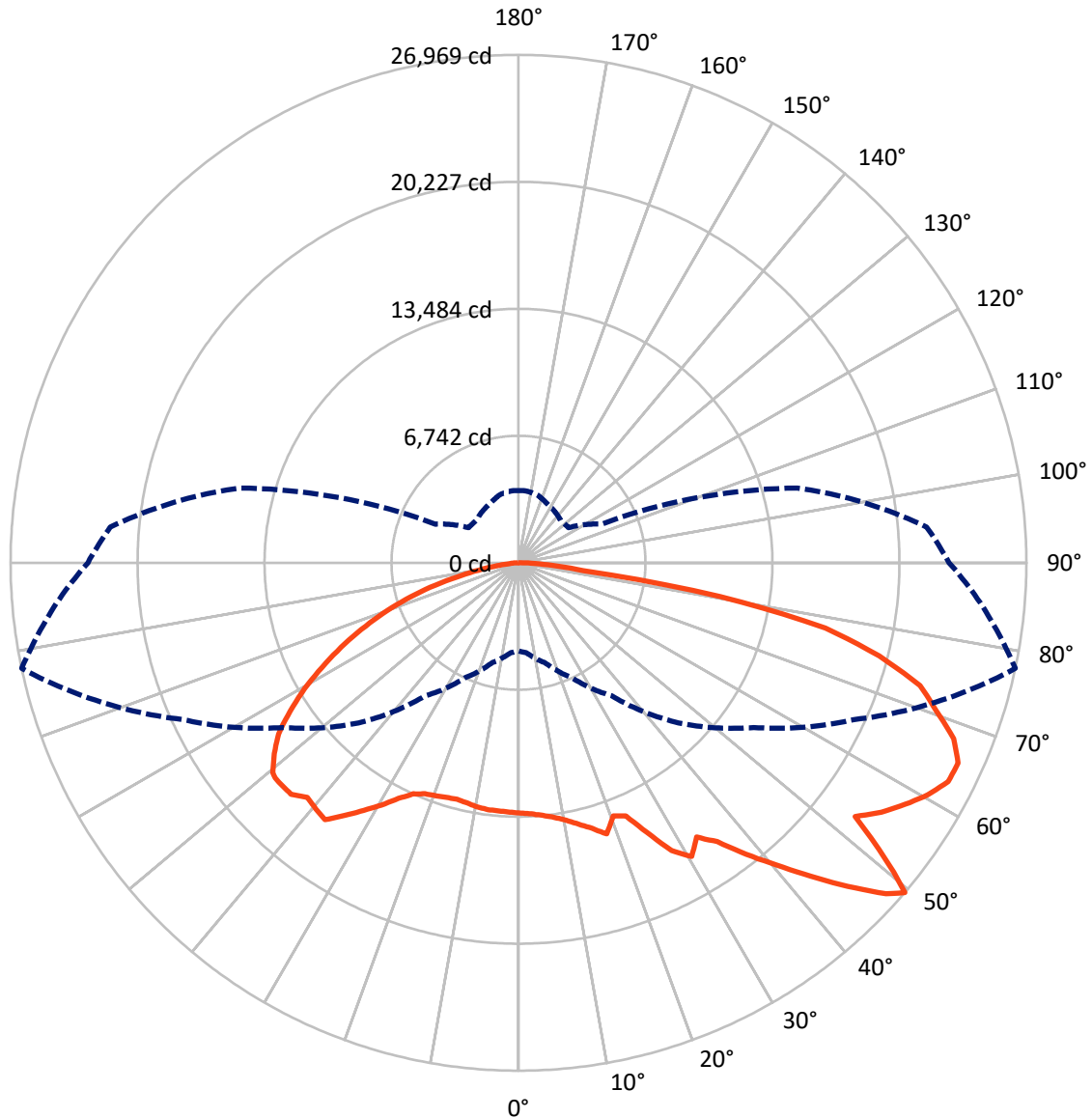
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 16.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 49-Deg Vertical

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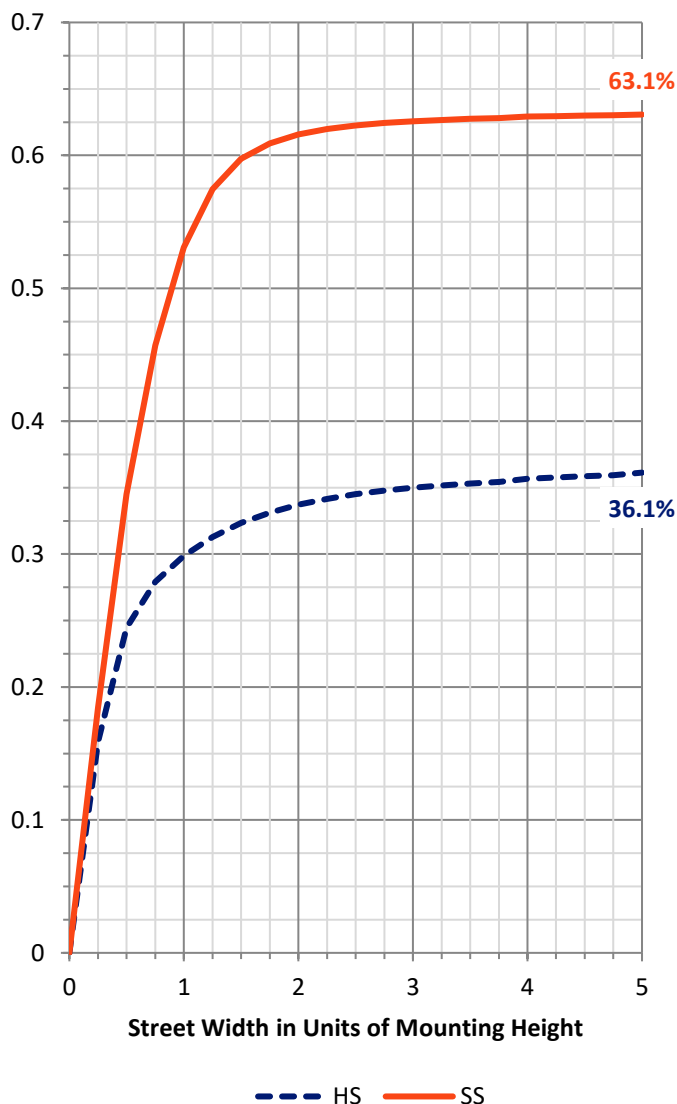
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17719.0	0.0	17719.0
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	30136.0	0.0	30136.0
	% Fixture	63.0	0.0	63.0
Total	Lumens	47855.0	0.0	47855.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1288.1	2.7
10°-20°	3790.8	7.9
20°-30°	5411.4	11.3
30°-40°	6966.2	14.6
40°-50°	8171.4	17.1
50°-60°	8429.8	17.6
60°-70°	7654.2	16.0
70°-80°	5083.3	10.6
80°-90°	1059.9	2.2
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°	47855.0	100.0
0°-180°	47855.0	100.0

Coefficient of Utilization

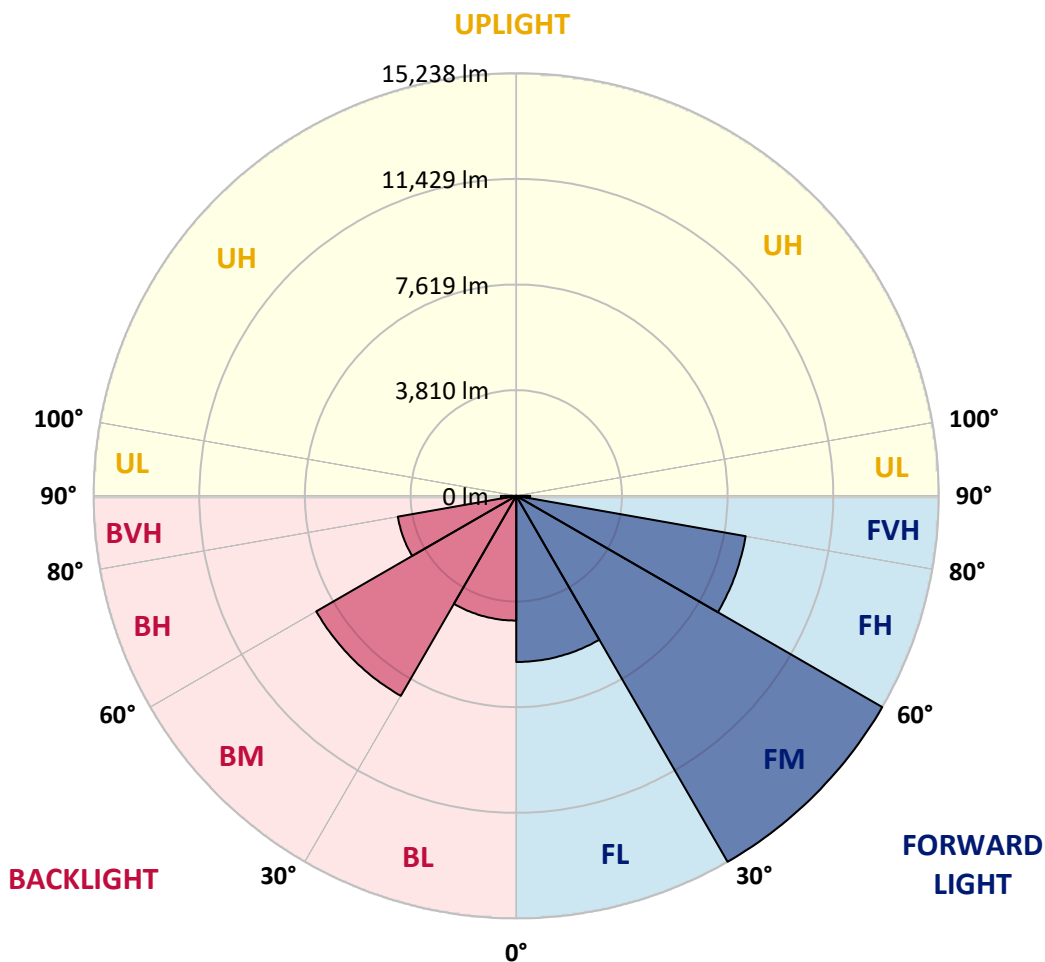


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5992.1	12.5			
FM (30°-60°)	15238.4	31.8			
FH (60°-80°)	8400.4	17.6			G4/12000
FVH (80°-90°)	505.2	1.1			G4/750
BL (0°-30°)	4498.1	9.4	B4/5000		
BM (30°-60°)	8328.9	17.4	B4/8500		
BH (60°-80°)	4337.1	9.1	B4/5000		G4/5000
BVH (80°-90°)	554.8	1.2			G4/750
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	13288.8	13288.8	13288.8	13288.8	13288.8	13288.8	13288.8	13288.8	13288.8	13288.8	13288.8
2.5°	13832.2	13725.9	13759.7	13817.7	13554.5	13612.4	13498.9	13544.8	13404.8	13351.6	13375.8
5°	14810.2	14696.7	14737.7	14757.1	14375.5	14221.0	13866.0	13791.1	13571.4	13474.8	13465.1
7.5°	15293.2	15170.0	15179.7	15191.7	14887.5	14909.2	14588.0	14204.1	13796.0	13648.7	13583.5
10°	16087.6	15916.2	15858.2	15834.1	15423.6	15252.1	14972.0	14761.9	14124.4	13902.2	13735.6
12.5°	16577.9	16452.3	16452.3	16428.1	15993.5	15860.6	15360.8	15138.6	14510.8	14247.5	13960.2
15°	16667.2	16582.7	16691.4	16669.6	16384.7	16230.1	16008.0	15544.3	14902.0	14629.1	14291.0
17.5°	15657.8	15433.2	15003.4	15068.6	15071.0	15384.9	15232.8	15551.5	15363.2	15141.0	14776.4
20°	12859.0	12936.3	13624.5	13457.9	13395.1	14061.6	14742.6	14761.9	14387.6	14351.4	14844.0
22.5°	11202.4	10927.1	11692.6	12805.9	12875.9	13767.0	14561.5	15517.7	14918.9	14597.7	14221.0
25°	9541.0	9642.4	10796.7	12238.4	13257.5	13455.5	14368.3	15894.5	16150.4	15853.4	15066.2
27.5°	9253.7	9248.8	9751.1	11349.7	13441.0	14184.8	14486.6	15681.9	17466.5	17299.9	16305.0
30°	9190.9	9152.2	9415.4	10743.6	12588.5	14841.6	15416.3	15843.7	17362.7	18104.0	17691.1
32.5°	8915.6	8881.8	9161.9	9857.4	11905.1	15322.1	16302.6	16940.1	17010.1	17360.3	19154.5
35°	8483.3	8509.9	8898.7	9654.5	10917.5	14167.8	17210.5	18174.1	18427.6	18186.1	18434.9
37.5°	8041.4	8070.4	8451.9	9309.2	10746.0	13684.9	17797.3	19367.0	19893.4	19635.0	18485.6
40°	7493.2	7539.1	7981.0	8944.6	10548.0	12595.8	16592.3	20721.7	21436.5	21098.4	19818.6
42.5°	6870.2	6889.5	7391.8	8389.1	10296.9	12661.0	15348.7	21972.6	22933.7	22747.8	21132.2
45°	6329.3	6329.3	6785.7	7674.4	9724.5	12537.8	14822.3	21040.5	24771.4	24508.2	22448.3
47.5°	5592.8	5658.0	6194.1	7075.5	9050.8	12252.9	15124.1	18946.8	26483.5	26263.8	23769.2
49°	4684.8	4795.9	5503.4	6747.1	8618.6	12016.2	15244.9	19685.7	25302.7	26968.9	24626.5
50°	4312.9	4370.9	4378.1	6512.8	8297.4	11801.3	15300.4	20253.2	23310.4	25831.5	25227.8
52.5°	3733.3	3368.7	2994.4	5863.2	7652.6	11006.8	15334.2	21793.9	22832.3	22380.7	24759.3
55°	1576.9	2064.7	2624.9	4795.9	6957.1	10024.0	15223.1	23486.7	23882.7	23385.3	21228.8
57.5°	1192.9	1270.2	1410.3	3721.3	4984.2	8903.5	14848.8	24558.9	24769.0	24203.9	22090.9
60°	173.9	178.7	251.1	1509.3	2854.3	6355.8	13501.4	24527.5	25428.2	24993.6	22834.7
62.5°	72.4	74.9	96.6	1236.4	2199.9	4892.5	12325.3	24117.0	26068.2	25602.1	23532.6
65°	12.1	14.5	41.1	1093.9	1818.4	4571.3	11035.8	24199.1	25841.2	25648.0	23803.0
67.5°	9.7	12.1	38.6	982.8	1499.6	4184.9	9763.2	22892.7	25012.9	24928.4	23081.0
70°	9.7	12.1	41.1	888.7	1296.8	3687.5	8191.1	21083.9	23493.9	23527.8	21868.8
72.5°	12.1	12.1	41.1	794.5	1127.7	3151.4	6481.4	18669.1	22115.1	22301.0	20144.6
75°	12.1	12.1	38.6	690.6	968.3	2627.3	4667.9	13728.3	19833.1	19777.5	17666.9
77.5°	12.1	12.1	38.6	548.2	804.1	2161.3	3040.3	7732.3	16423.3	16657.5	14771.6
80°	12.1	12.1	38.6	400.9	630.3	1620.4	1842.5	3957.9	8768.3	10854.7	10161.6
82.5°	12.1	12.1	38.6	270.5	432.3	934.5	1062.5	2004.3	3148.9	3450.8	4037.6
85°	9.7	9.7	29.0	161.8	222.2	330.8	511.9	1067.4	1721.8	1799.1	1755.6
87.5°	4.8	4.8	14.5	58.0	96.6	120.7	229.4	429.8	632.7	647.2	562.7
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	13288.8	13288.8	13288.8	13288.8	13288.8	13288.8	13288.8	13288.8	13288.8	13288.8	13288.8
2.5°	13375.8	13298.5	13228.5	13240.5	13090.8	13047.4	12880.7	12967.7	12883.2	12808.3	12878.3
5°	13397.5	13303.3	13175.3	13052.2	12709.3	12549.9	12349.5	12400.2	12286.7	12197.3	12274.6
7.5°	13460.3	13344.4	13146.4	12796.2	12388.1	12134.6	11907.6	12129.7	12103.2	12035.5	12115.2
10°	13489.3	13390.3	13049.8	12639.3	12069.4	11910.0	11704.7	11702.3	11709.5	11721.6	11801.3
12.5°	13566.6	13416.8	12878.3	12400.2	11871.3	11547.7	11398.0	11518.8	11301.4	11173.4	11229.0
15°	13750.1	13477.2	12762.4	12064.5	11564.7	11296.6	10818.5	10859.5	10813.6	10688.1	10743.6
17.5°	14112.3	13646.2	12757.6	11852.0	11173.4	10736.4	10318.6	10120.6	10057.8	10067.5	10115.8
20°	14556.6	13945.7	12767.2	11579.1	10765.3	10258.2	9613.5	9475.8	9268.1	9273.0	9285.0
22.5°	14274.1	14291.0	12772.1	11267.6	10255.8	9620.7	8937.3	8666.8	8507.5	8466.4	8526.8
25°	15039.6	14962.3	12846.9	11101.0	9719.7	8867.3	8152.5	7807.2	7568.1	7548.8	7616.4
27.5°	16058.7	15918.6	13233.3	10741.2	9152.2	7964.1	7189.0	6928.2	6722.9	6650.5	6698.8
30°	17297.5	17133.3	13767.0	10461.1	8386.7	6993.4	6329.3	6150.6	5947.7	5814.9	5827.0
32.5°	18591.8	18241.7	14315.2	10224.4	7601.9	6143.3	5575.9	5416.5	5177.4	5006.0	5047.0
35°	19895.8	19398.4	14926.1	9806.7	6643.2	5394.7	4935.9	4721.0	4525.4	4370.9	4344.3
37.5°	18864.7	20750.7	15517.7	9417.9	5892.2	4824.8	4305.7	4153.5	4037.6	3916.9	3914.5
40°	18949.2	19381.5	15867.9	8729.6	5054.3	4240.5	3718.8	3772.0	3820.3	3728.5	3728.5
42.5°	19787.2	19171.4	15727.8	7816.8	4431.2	3656.1	3417.0	3631.9	3784.0	3718.8	3716.4
45°	20968.0	20168.7	15966.9	6788.1	3825.1	3296.3	3332.5	3595.7	3793.7	3781.6	3776.8
47.5°	22221.3	21303.7	15508.1	5566.2	3407.3	3185.2	3332.5	3542.6	3779.2	3834.8	3822.7
49°	22866.1	21752.8	15324.6	4853.8	3240.7	3170.7	3337.3	3499.1	3752.7	3837.2	3825.1
50°	23259.7	21994.3	15087.9	4448.1	3151.4	3173.1	3347.0	3472.5	3728.5	3822.7	3815.4
52.5°	24146.0	22361.4	13914.3	3743.0	3006.5	3180.3	3409.7	3446.0	3639.2	3740.6	3793.7
55°	23242.8	23199.3	12417.1	3419.4	2929.2	3163.4	3436.3	3470.1	3564.3	3619.8	3660.9
57.5°	23102.7	23564.0	10531.1	3245.5	2861.6	3139.3	3404.9	3467.7	3523.2	3513.6	3496.7
60°	23547.1	23882.7	8587.2	3074.1	2784.3	3100.7	3301.1	3392.8	3409.7	3385.6	3347.0
62.5°	23617.1	23969.7	6599.7	2900.2	2699.8	3006.5	3148.9	3240.7	3240.7	3180.3	3165.9
65°	23291.1	23426.3	4863.5	2699.8	2598.4	2897.8	2970.2	3037.9	3069.3	2989.6	2994.4
67.5°	22356.6	21574.2	3692.3	2460.7	2475.2	2748.1	2798.8	2844.7	2851.9	2806.0	2801.2
70°	20477.8	19502.2	2639.4	2098.5	2250.6	2511.4	2588.7	2658.7	2634.6	2554.9	2542.8
72.5°	17645.2	16778.3	1794.2	1680.7	1980.2	2284.4	2332.7	2335.1	2286.9	2344.8	2385.9
75°	15179.7	13105.3	1337.8	1340.2	1586.5	1970.5	2120.2	2132.3	2154.0	2472.8	2538.0
77.5°	12062.1	8538.9	1139.8	1057.7	1217.1	1639.7	1876.3	1963.3	2605.6	2825.4	2796.4
80°	7408.7	5126.7	883.8	837.9	990.1	1260.5	1613.1	2006.7	2658.7	2499.4	2414.8
82.5°	3470.1	2340.0	637.5	642.3	736.5	920.1	1275.0	2335.1	2296.5	1895.6	1871.5
85°	1342.6	809.0	386.4	437.1	495.0	623.0	978.0	2303.8	1784.6	1605.9	1487.5
87.5°	345.3	157.0	169.0	178.7	219.8	328.4	533.7	1207.4	939.4	823.5	809.0
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)