

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: P591233

Luminaire Tested: **CTN-CA10-760-727-U-T3-SSS-HM-EX120**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591233  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-8)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/19/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-760-727-U-T3-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: 53944 lumens  
Efficiency: N/A  
Efficacy: 70.8 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type III - Medium  
BUG Rating: B5 - U0 - G4

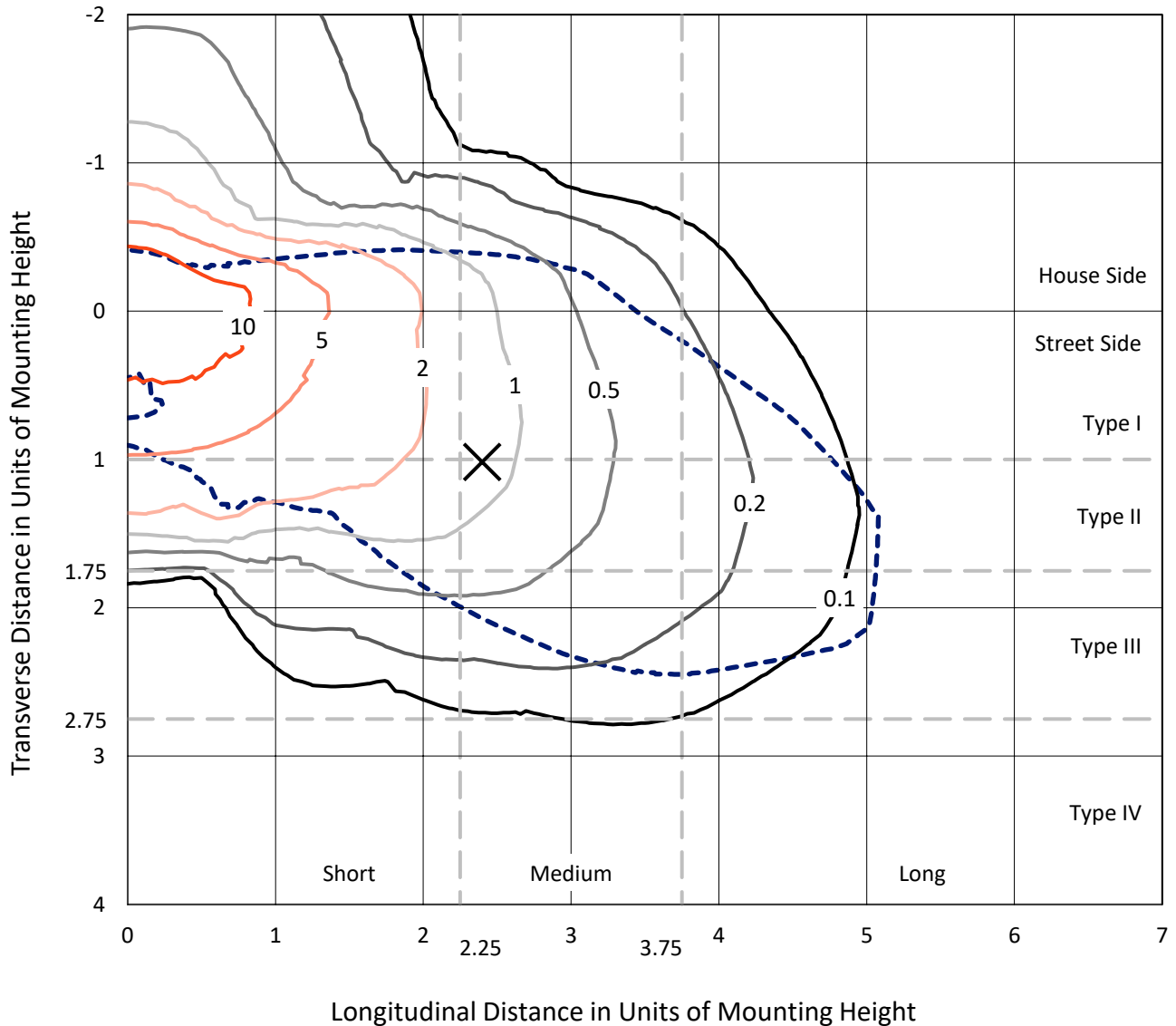
Input Watts (W): 761.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

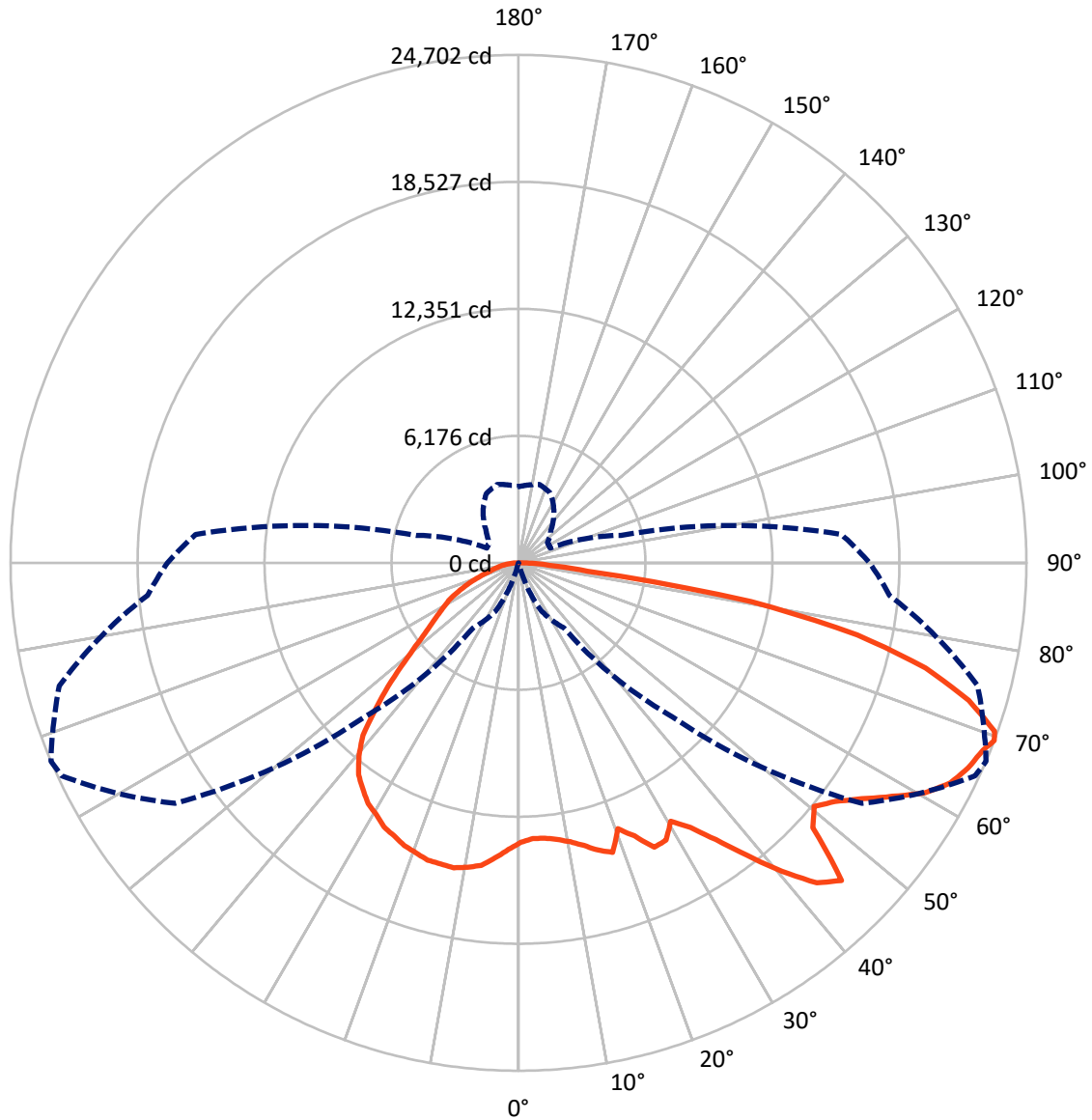
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 17 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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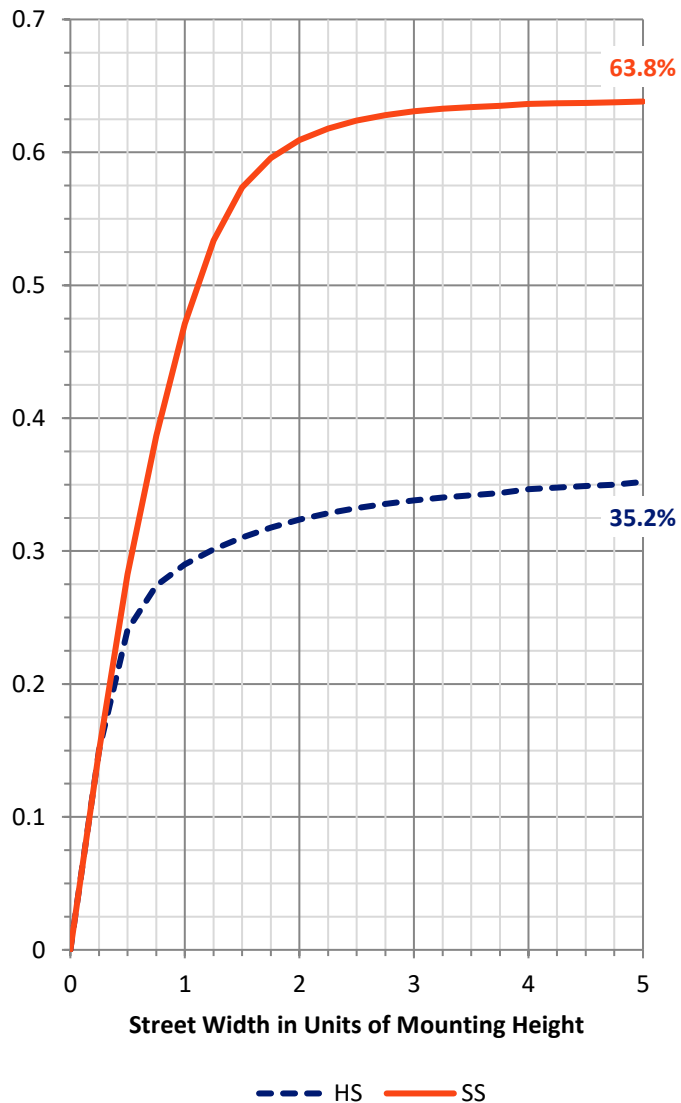
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	19515.4	0.0	19515.4
	% Fixture	36.2	0.0	36.2
<b>Street Side</b>	Lumens	34428.6	0.0	34428.6
	% Fixture	63.8	0.0	63.8
<b>Total</b>	Lumens	53944.0	0.0	53944.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1358.9	2.5
10°-20°	4195.5	7.8
20°-30°	6192.3	11.5
30°-40°	7780.2	14.4
40°-50°	9125.7	16.9
50°-60°	9549.4	17.7
60°-70°	8531.3	15.8
70°-80°	6004.5	11.1
80°-90°	1206.1	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°	53944.0	100.0
0°-180°	53944.0	100.0

**Coefficient of Utilization**

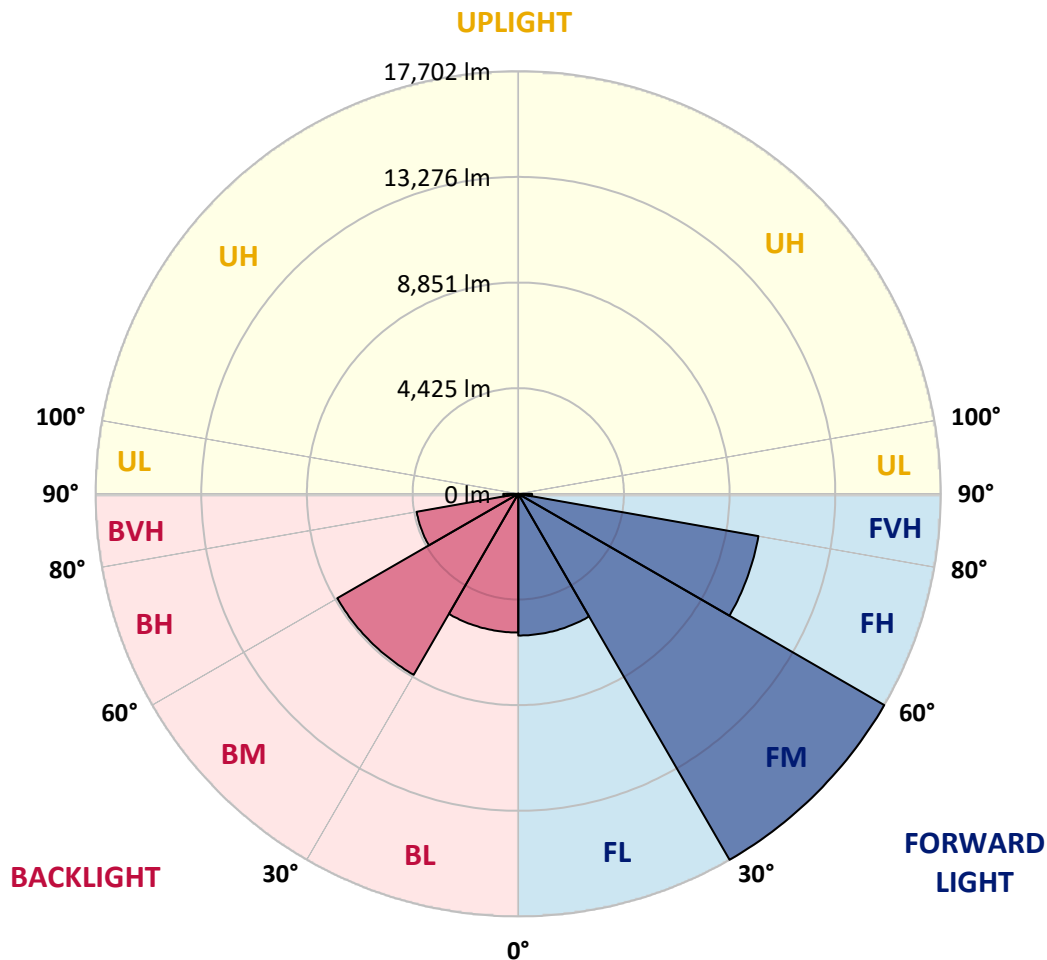


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5936.3	11.0			
FM (30°-60°)	17702.0	32.8			
FH (60°-80°)	10213.9	18.9			G4/12000
FVH (80°-90°)	576.3	1.1			G4/750
BL (0°-30°)	5810.4	10.8	B5		
BM (30°-60°)	8753.4	16.2	B5		
BH (60°-80°)	4321.9	8.0	B4/5000		G4/5000
BVH (80°-90°)	629.7	1.2			G4/750
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G4**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	13588.9	13588.9	13588.9	13588.9	13588.9	13588.9	13588.9	13588.9	13588.9	13588.9	13588.9
2.5°	13265.5	13187.5	13223.7	13326.9	13112.2	13265.5	13209.8	13365.9	13424.4	13416.1	13639.1
5°	13371.5	13285.0	13299.0	13377.1	13142.9	13262.7	13209.8	13382.6	13449.5	13430.0	13733.9
7.5°	13747.9	13653.1	13622.4	13647.5	13393.8	13485.8	13371.5	13510.9	13583.4	13583.4	13929.1
10°	14341.7	14227.4	14160.5	14157.7	13859.4	13817.6	13678.2	13742.3	13795.3	13839.9	14224.6
12.5°	14963.4	14868.7	14782.2	14734.8	14341.7	14244.1	14040.6	14088.0	14104.7	14166.1	14548.0
15°	15529.4	15434.6	15409.5	15334.3	14943.9	14782.2	14497.8	14475.5	14497.8	14534.1	14913.3
17.5°	15312.0	15317.5	15456.9	15470.9	14963.4	14589.9	14391.9	14768.3	14804.5	15091.7	15337.0
20°	14899.3	14695.8	13965.3	13566.6	13625.2	14110.3	13750.6	13733.9	13809.2	14319.4	15562.9
22.5°	12409.6	12298.1	12699.6	12827.8	13290.6	13474.6	14330.6	14352.9	14428.1	14428.1	14790.6
25°	10714.5	11291.6	12072.2	13466.3	13321.3	13357.5	13706.0	15186.5	15328.7	15325.9	15272.9
27.5°	11076.9	11004.4	12172.6	13048.1	14082.4	14018.3	13639.1	14645.6	15275.7	16357.5	16106.5
30°	11511.8	11458.9	11545.3	13025.8	14740.4	14826.8	14475.5	14372.4	14587.1	16859.3	17060.1
32.5°	11916.1	11852.0	11949.6	12175.4	13817.6	15660.5	15390.0	15264.6	15342.6	15799.9	18286.8
35°	12273.0	12267.4	12378.9	12646.6	14046.2	15950.4	16326.8	16318.4	16527.5	16920.7	18465.2
37.5°	12526.7	12523.9	12613.1	12925.4	13240.4	14732.0	17205.0	17704.1	18038.7	18621.4	18038.7
40°	12523.9	12568.5	12802.7	13204.2	13622.4	14071.3	17592.6	19332.3	19733.8	20149.2	19179.0
42.5°	12261.8	12286.9	12699.6	13444.0	13962.5	14350.1	16053.6	20829.5	21278.4	21247.7	20076.7
45°	12019.3	12030.4	12490.5	13404.9	14246.9	14946.7	15738.5	20823.9	22036.7	22226.3	20921.5
47.5°	11704.2	11704.2	12158.7	13179.1	14503.4	15618.6	16580.5	17988.5	19254.3	23073.9	21621.3
50°	11300.0	11350.1	10792.5	12944.9	14626.1	16257.1	17294.3	18454.1	18629.7	20634.3	22270.9
52.5°	10655.9	10628.0	8433.8	12685.6	14676.3	16719.9	18035.9	19181.8	19276.6	19075.8	21635.2
55°	6716.4	7488.7	7458.0	12381.7	14645.6	17018.2	18604.6	19981.9	20249.6	20004.2	18200.4
57.5°	4056.6	3872.6	6373.5	11511.8	11762.8	17249.6	19376.9	21197.5	21431.7	20863.0	18507.1
60°	1583.6	1494.4	1614.3	5238.7	8439.4	16048.0	20428.0	22488.4	22711.4	21679.9	18766.3
62.5°	198.0	170.1	145.0	3627.2	5364.2	11921.7	20985.6	23528.3	23570.2	22270.9	18816.5
65°	27.9	30.7	55.8	3234.1	4873.5	11718.2	21180.8	23952.1	24038.5	22697.5	18646.5
67.5°	11.2	13.9	44.6	2813.1	4276.9	11177.3	20698.5	24244.9	24345.2	23110.1	18482.0
69°	11.2	13.9	44.6	2528.8	3869.8	10580.6	20389.0	24504.1	24702.1	23118.5	18105.6
70°	11.2	13.9	41.8	2325.2	3552.0	10076.0	20090.7	24403.8	24562.7	22895.4	17687.4
72.5°	11.2	13.9	41.8	1789.9	2701.6	8090.9	18203.2	22981.9	22901.0	21490.3	16059.2
75°	13.9	13.9	41.8	1257.4	1873.6	5754.5	15362.1	20408.5	20444.8	19131.6	13508.1
77.5°	13.9	13.9	41.8	800.2	1182.1	3328.9	11124.3	16736.6	16839.8	15939.3	10115.0
80°	13.9	13.9	41.8	365.2	733.3	1739.7	5470.1	10906.8	11461.7	10700.5	5551.0
82.5°	13.9	13.9	39.0	228.6	401.5	783.4	2157.9	3420.9	3387.5	3334.5	1764.8
85°	11.2	11.2	30.7	161.7	267.7	454.5	1198.9	1533.4	1513.9	1341.1	911.7
87.5°	5.6	5.6	16.7	66.9	111.5	206.3	599.4	697.0	663.6	568.8	390.3
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°	13588.9	13588.9	13588.9	13588.9	13588.9	13588.9	13588.9	13588.9	13588.9	13588.9	13588.9
2.5°	13742.3	13761.8	13853.8	13973.7	14009.9	14166.1	14191.2	14447.7	14486.7	14550.8	14578.7
5°	13881.7	13957.0	14157.7	14439.3	14679.1	14924.4	14932.8	15245.0	15325.9	15309.2	15390.0
7.5°	14079.6	14205.1	14511.8	14902.1	14988.5	15306.4	15284.1	15593.5	15599.1	15554.5	15677.2
10°	14383.5	14539.7	14818.5	15058.2	15222.7	15429.1	15401.2	15693.9	15652.1	15604.7	15741.3
12.5°	14695.8	14776.7	14946.7	15214.4	15250.6	15323.1	15286.9	15557.3	15512.7	15454.1	15588.0
15°	14969.0	15008.1	15008.1	15153.0	15061.0	15119.6	14996.9	15214.4	15111.2	15083.3	15211.6
17.5°	15323.1	15259.0	15127.9	15116.8	14877.0	14787.8	14603.8	14662.3	14467.2	14486.7	14553.6
20°	15721.8	15579.6	15233.9	14888.2	14444.9	14233.0	13867.7	13839.9	13658.6	13625.2	13689.3
22.5°	15869.6	15995.0	15362.1	14693.0	13929.1	13455.1	13023.0	12816.7	12551.8	12381.7	12404.0
25°	16318.4	16544.3	15557.3	14344.5	13321.3	12540.6	11891.0	11419.8	11021.2	10817.6	10859.4
27.5°	16926.2	17294.3	15668.8	14101.9	12523.9	11503.5	10416.1	9797.2	9384.6	9172.7	9167.1
30°	17796.1	18258.9	15883.5	13594.5	11637.3	10140.1	8799.1	8068.6	7731.3	7591.9	7603.0
32.5°	18883.4	19441.1	16329.6	13170.7	10672.6	8682.0	7154.1	6515.7	6362.3	6337.2	6323.3
35°	20324.9	20876.9	16683.7	12518.3	9420.8	7028.7	5743.4	5291.7	5316.8	5311.2	5328.0
37.5°	20090.7	22184.5	17087.9	11879.9	7923.6	5509.2	4642.1	4388.4	4396.8	4494.3	4513.8
40°	19209.6	21041.4	17690.2	10823.2	6172.7	4232.3	3660.7	3602.2	3841.9	4056.6	4095.6
42.5°	19901.1	20352.7	17771.0	9682.9	4516.6	3245.3	3061.3	3303.8	3691.4	3939.5	3984.1
45°	20592.5	20957.8	17302.6	7976.6	3239.7	2776.9	2913.5	3262.0	3691.4	3956.2	3986.9
47.5°	21295.1	21292.3	16756.2	6395.8	2648.6	2654.2	2877.3	3264.8	3713.7	3981.3	3998.1
50°	21741.2	21562.8	15328.7	5010.1	2464.6	2581.7	2857.7	3281.5	3708.1	3903.3	3911.6
52.5°	21964.2	21699.4	14068.5	4003.6	2378.2	2523.2	2860.5	3320.6	3677.4	3786.2	3780.6
55°	21587.9	21624.1	13025.8	3328.9	2297.4	2475.8	2874.5	3348.4	3691.4	3802.9	3802.9
57.5°	21119.5	21127.8	12194.9	2818.7	2216.5	2436.8	2891.2	3390.3	3947.9	4157.0	4126.3
60°	20790.5	20414.1	11018.4	2498.1	2124.5	2400.5	2913.5	3571.5	4550.1	4762.0	4689.5
62.5°	20249.6	19739.4	9808.4	2275.0	2021.3	2372.6	2927.4	3825.2	4630.9	4642.1	4463.7
65°	19301.7	18571.2	7918.1	2054.8	1915.4	2333.6	2919.1	3920.0	4265.7	4098.4	4048.2
67.5°	17929.9	16976.4	6206.2	1834.5	1798.3	2275.0	2974.8	3747.1	4028.7	3892.1	3825.2
69°	17074.0	15766.4	5152.3	1703.5	1723.0	2230.4	3002.7	3713.7	3945.1	3777.8	3699.7
70°	16424.4	14718.1	4363.3	1617.1	1658.9	2191.4	2947.0	3694.2	3906.1	3699.7	3607.7
72.5°	13945.8	11832.5	2793.6	1416.3	1491.6	2093.8	2796.4	3571.5	3819.6	3680.2	3565.9
75°	10781.4	8690.3	1781.6	1232.3	1321.5	1948.8	2640.3	3485.1	3858.7	3607.7	3356.8
77.5°	7257.3	4854.0	1360.6	1034.4	1120.8	1759.3	2392.1	3242.5	3724.8	3504.6	3195.1
80°	3306.6	1851.3	1051.1	839.2	906.1	1416.3	2063.2	2868.9	3521.3	3518.5	3295.5
82.5°	1324.3	1237.9	780.7	641.3	713.7	1056.7	1633.8	2456.3	3105.9	3239.7	3460.0
85°	772.3	780.7	518.6	446.1	532.5	777.9	1165.4	1898.7	2526.0	2793.6	2980.4
87.5°	315.0	351.3	242.6	234.2	292.7	415.4	535.3	920.1	1360.6	1670.0	1784.4
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)