

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: P591422

Luminaire Tested: **CTN-CA10-760-740-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591422  
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-CA10-760-740-U-T2-SSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 65247 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type II - Short  
BUG Rating: B5 - U0 - G5

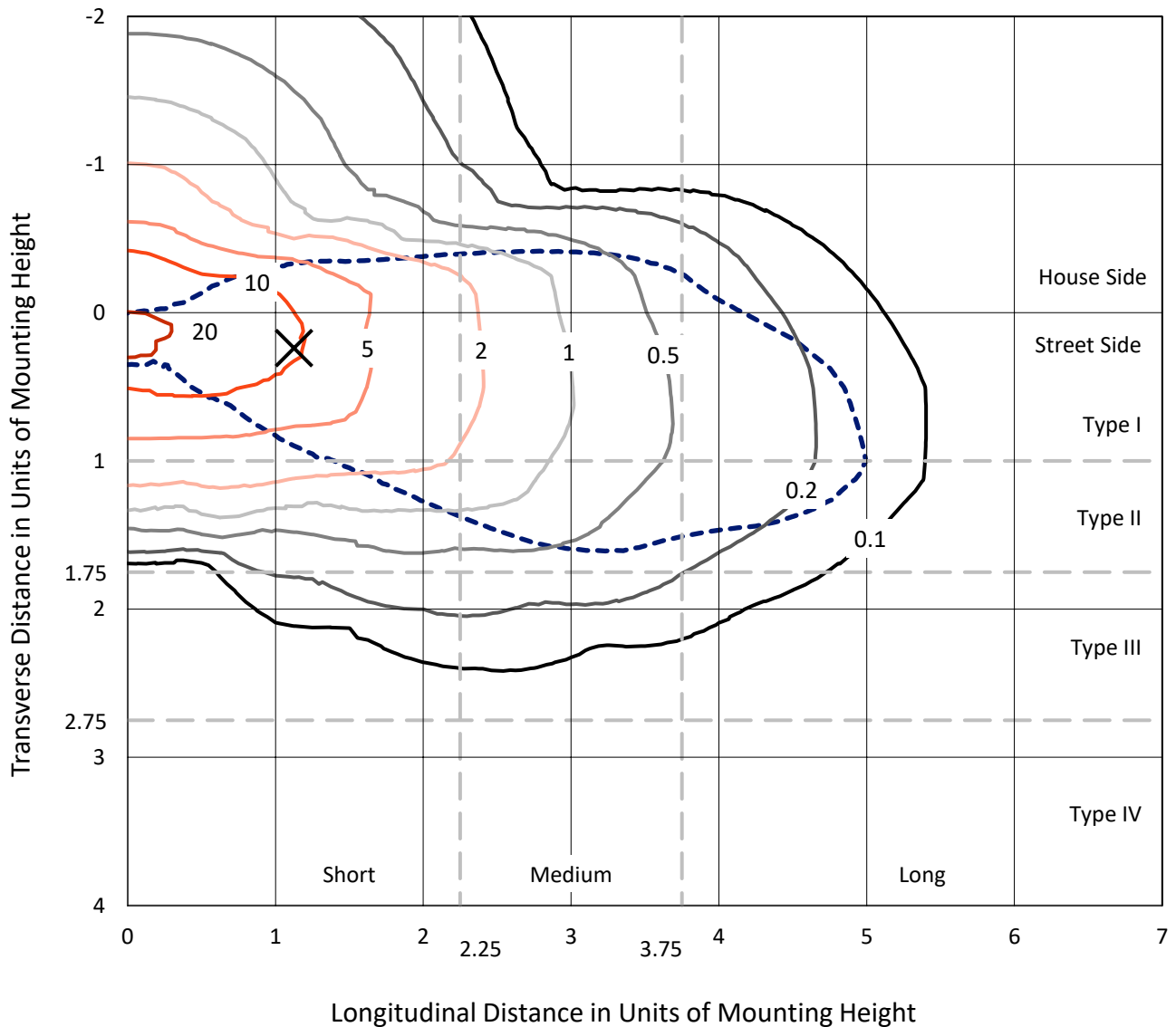
Input Watts (W): 761.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

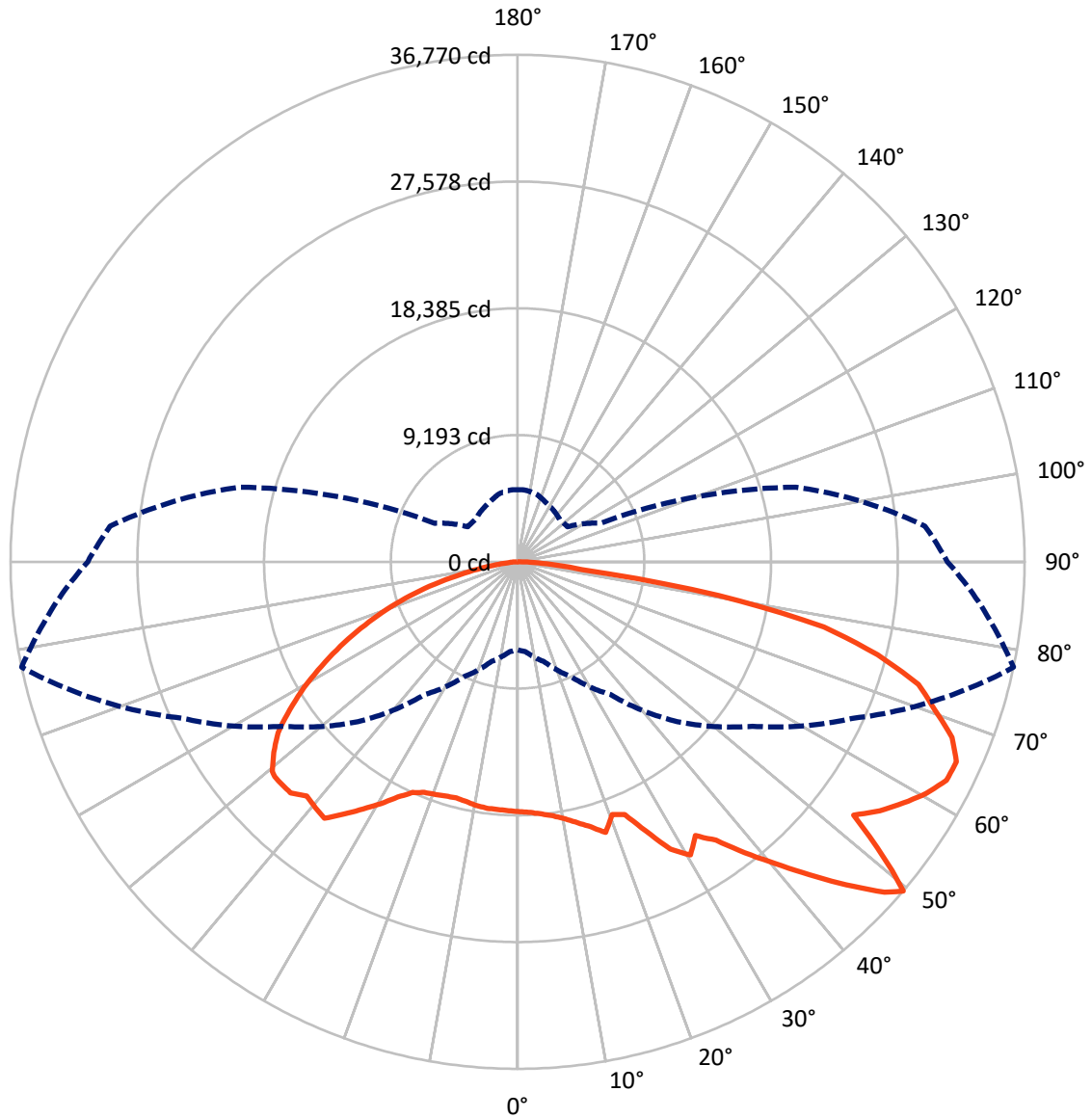
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 23 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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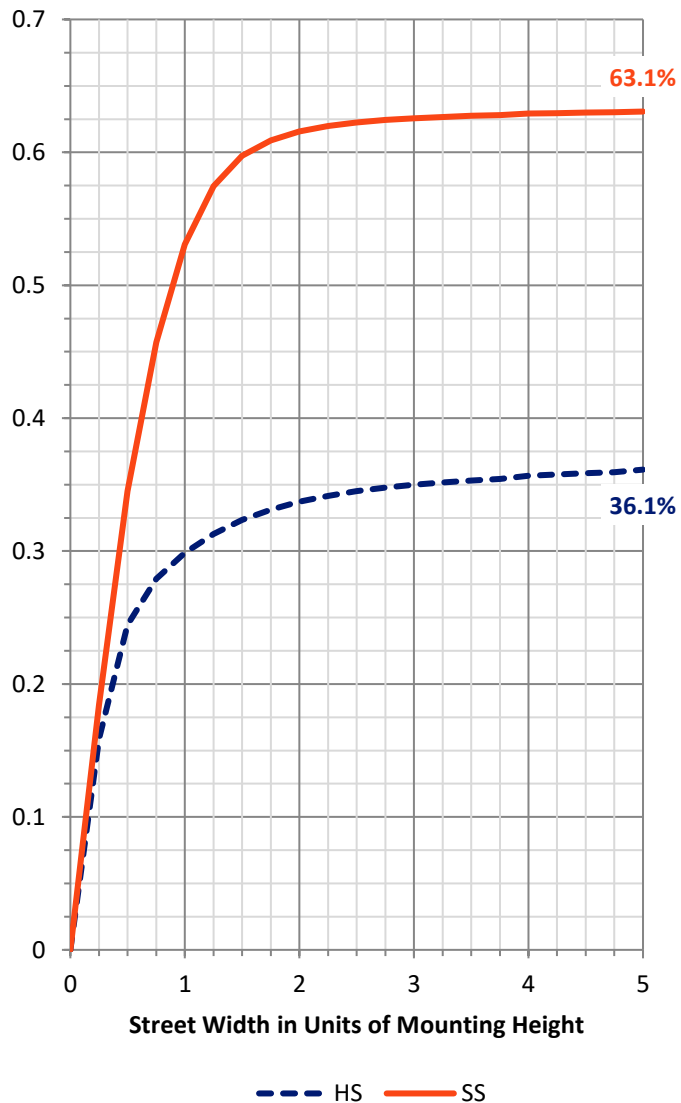
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	24158.6	0.0	24158.6
	% Fixture	37.0	0.0	37.0
<b>Street Side</b>	Lumens	41088.4	0.0	41088.4
	% Fixture	63.0	0.0	63.0
<b>Total</b>	Lumens	65247.0	0.0	65247.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1756.2	2.7
10°-20°	5168.4	7.9
20°-30°	7378.0	11.3
30°-40°	9497.9	14.6
40°-50°	11141.1	17.1
50°-60°	11493.5	17.6
60°-70°	10436.0	16.0
70°-80°	6930.7	10.6
80°-90°	1445.1	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°	65247.0	100.0
0°-180°	65247.0	100.0

**Coefficient of Utilization**

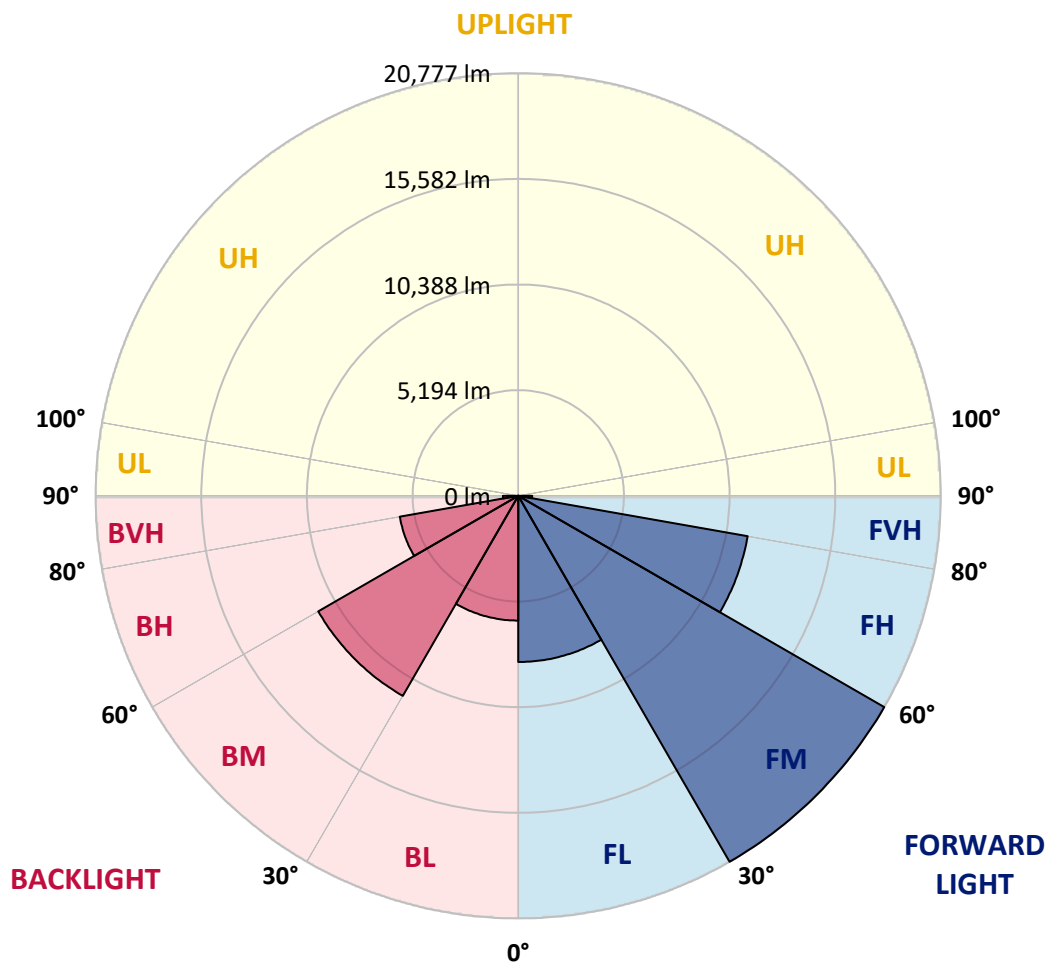


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	8169.8	12.5			
FM	(30°-60°)	20776.6	31.8			
FH	(60°-80°)	11453.3	17.6			G4/12000
FVH	(80°-90°)	688.8	1.1			G4/750
BL	(0°-30°)	6132.9	9.4	B5		
BM	(30°-60°)	11355.9	17.4	B5		
BH	(60°-80°)	5913.4	9.1	B5		G5
BVH	(80°-90°)	756.4	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	18118.4	18118.4	18118.4	18118.4	18118.4	18118.4	18118.4	18118.4	18118.4	18118.4	18118.4
2.5°	18859.2	18714.4	18760.5	18839.5	18480.6	18559.6	18404.9	18467.4	18276.5	18204.0	18237.0
5°	20192.7	20037.9	20093.9	20120.2	19600.0	19389.3	18905.3	18803.3	18503.6	18371.9	18358.8
7.5°	20851.2	20683.3	20696.4	20712.9	20298.0	20327.7	19889.8	19366.3	18809.8	18609.0	18520.1
10°	21934.4	21700.6	21621.6	21588.7	21029.0	20795.2	20413.3	20126.8	19257.6	18954.7	18727.5
12.5°	22602.8	22431.6	22431.6	22398.6	21806.0	21624.9	20943.4	20640.5	19784.4	19425.5	19033.7
15°	22724.6	22609.3	22757.5	22727.9	22339.4	22128.6	21825.7	21193.6	20317.8	19945.7	19484.8
17.5°	21348.3	21042.1	20456.1	20545.0	20548.3	20976.3	20768.9	21203.5	20946.7	20643.7	20146.6
20°	17532.4	17637.7	18576.1	18348.9	18263.3	19172.0	20100.5	20126.8	19616.5	19567.1	20238.8
22.5°	15273.7	14898.4	15942.1	17459.9	17555.4	18770.3	19853.6	21157.4	20340.8	19902.9	19389.3
25°	13008.5	13146.8	14720.6	16686.2	18075.6	18345.6	19590.2	21671.0	22020.0	21615.0	20541.7
27.5°	12616.7	12610.1	13295.0	15474.6	18325.9	19339.9	19751.5	21381.3	23814.4	23587.2	22230.7
30°	12531.1	12478.4	12837.3	14648.2	17163.6	20235.5	21019.1	21601.9	23672.8	24683.6	24120.6
32.5°	12155.8	12109.7	12491.6	13439.8	16231.8	20890.7	22227.4	23096.6	23192.1	23669.5	26115.8
35°	11566.4	11602.6	12132.7	13163.3	14885.2	19316.9	23465.4	24779.1	25124.8	24795.5	25134.7
37.5°	10963.9	11003.4	11523.6	12692.4	14651.5	18658.4	24265.5	26405.6	27123.3	26771.0	25203.8
40°	10216.5	10279.1	10881.6	12195.3	14381.5	17173.5	22622.5	28252.6	29227.2	28766.3	27021.2
42.5°	9367.1	9393.4	10078.2	11438.0	14039.1	17262.4	20926.9	29958.1	31268.5	31015.0	28812.3
45°	8629.5	8629.5	9251.8	10463.4	13258.8	17094.5	20209.1	28687.2	33774.1	33415.2	30606.7
47.5°	7625.3	7714.2	8445.2	9646.9	12340.2	16706.0	20620.7	25832.7	36108.4	35808.8	32407.7
49°	6387.4	6538.8	7503.5	9199.1	11750.8	16383.3	20785.3	26840.2	34498.4	36770.2	33576.5
50°	5880.3	5959.4	5969.2	8879.8	11312.9	16090.3	20861.0	27613.9	31782.2	35219.5	34396.4
52.5°	5090.1	4593.0	4082.7	7994.1	10433.8	15007.0	20907.1	29714.5	31130.2	30514.6	33757.6
55°	2150.0	2815.1	3578.9	6538.8	9485.6	13667.0	20755.7	32022.5	32562.5	31884.2	28944.0
57.5°	1626.5	1731.8	1922.8	5073.7	6795.6	12139.3	20245.4	33484.4	33770.8	33000.4	30119.5
60°	237.1	243.6	342.4	2057.8	3891.7	8665.8	18408.2	33441.6	34669.6	34077.0	31133.5
62.5°	98.8	102.1	131.7	1685.7	2999.4	6670.5	16804.7	32881.8	35542.1	34906.7	32085.1
65°	16.5	19.8	56.0	1491.5	2479.2	6232.6	15046.6	32993.8	35232.7	34969.3	32453.8
67.5°	13.2	16.5	52.7	1340.0	2044.6	5705.8	13311.4	31212.6	34103.3	33988.1	31469.4
70°	13.2	16.5	56.0	1211.6	1768.1	5027.6	11168.0	28746.5	32032.4	32078.5	29816.5
72.5°	16.5	16.5	56.0	1083.2	1537.6	4296.7	8837.0	25454.0	30152.4	30405.9	27465.7
75°	16.5	16.5	52.7	941.6	1320.3	3582.2	6364.3	18717.7	27041.0	26965.3	24087.7
77.5°	16.5	16.5	52.7	747.4	1096.4	2946.8	4145.2	10542.5	22392.0	22711.4	20140.0
80°	16.5	16.5	52.7	546.5	859.3	2209.2	2512.1	5396.3	11954.9	14799.6	13854.7
82.5°	16.5	16.5	52.7	368.8	589.4	1274.2	1448.7	2732.7	4293.4	4704.9	5505.0
85°	13.2	13.2	39.5	220.6	302.9	451.1	698.0	1455.3	2347.5	2452.9	2393.6
87.5°	6.6	6.6	19.8	79.0	131.7	164.6	312.8	586.1	862.6	882.4	767.1
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°	18118.4	18118.4	18118.4	18118.4	18118.4	18118.4	18118.4	18118.4	18118.4	18118.4	18118.4
2.5°	18237.0	18131.6	18036.1	18052.6	17848.4	17789.2	17562.0	17680.5	17565.3	17463.2	17558.7
5°	18266.6	18138.2	17963.7	17795.8	17328.2	17110.9	16837.7	16906.8	16752.1	16630.2	16735.6
7.5°	18352.2	18194.2	17924.2	17446.8	16890.3	16544.6	16235.1	16538.0	16501.8	16409.6	16518.3
10°	18391.7	18256.7	17792.5	17232.8	16455.7	16238.4	15958.6	15955.3	15965.2	15981.6	16090.3
12.5°	18497.1	18292.9	17558.7	16906.8	16185.8	15744.6	15540.4	15705.1	15408.7	15234.2	15310.0
15°	18747.3	18375.2	17400.7	16449.1	15767.6	15402.1	14750.2	14806.2	14743.7	14572.4	14648.2
17.5°	19241.2	18605.7	17394.1	16159.4	15234.2	14638.3	14068.7	13798.7	13713.1	13726.3	13792.1
20°	19847.0	19014.0	17407.3	15787.4	14677.8	13986.4	13107.3	12919.6	12636.5	12643.1	12659.5
22.5°	19461.8	19484.8	17413.8	15362.6	13983.1	13117.2	12185.4	11816.7	11599.3	11543.4	11625.7
25°	20505.5	20400.1	17515.9	15135.5	13252.2	12089.9	11115.4	10644.5	10318.6	10292.2	10384.4
27.5°	21894.9	21703.9	18042.7	14644.9	12478.4	10858.5	9801.7	9446.1	9166.2	9067.4	9133.3
30°	23583.9	23360.0	18770.3	14263.0	11434.7	9535.0	8629.5	8385.9	8109.3	7928.3	7944.7
32.5°	25348.7	24871.3	19517.7	13940.3	10364.7	8376.0	7602.3	7385.0	7059.0	6825.3	6881.2
35°	27126.6	26448.4	20350.7	13370.7	9057.6	7355.4	6729.8	6436.8	6170.1	5959.4	5923.1
37.5°	25720.7	28292.1	21157.4	12840.6	8033.6	6578.3	5870.5	5663.0	5505.0	5340.4	5337.1
40°	25836.0	26425.3	21634.8	11902.3	6891.1	5781.6	5070.4	5142.8	5208.7	5083.6	5083.6
42.5°	26978.4	26138.9	21443.8	10657.7	6041.7	4984.8	4658.8	4951.9	5159.3	5070.4	5067.1
45°	28588.5	27498.7	21769.8	9255.1	5215.3	4494.2	4543.6	4902.5	5172.5	5156.0	5149.4
47.5°	30297.2	29046.1	21144.2	7589.1	4645.7	4342.8	4543.6	4830.0	5152.7	5228.4	5212.0
49°	31176.3	29658.5	20894.0	6617.9	4418.5	4323.0	4550.2	4770.8	5116.5	5231.7	5215.3
50°	31713.0	29987.8	20571.3	6064.7	4296.7	4326.3	4563.4	4734.6	5083.6	5212.0	5202.1
52.5°	32921.3	30488.2	18971.2	5103.3	4099.1	4336.2	4649.0	4698.3	4961.7	5100.0	5172.5
55°	31690.0	31630.7	16929.8	4662.1	3993.8	4313.1	4685.2	4731.3	4859.7	4935.4	4991.4
57.5°	31499.0	32127.9	14358.4	4425.1	3901.6	4280.2	4642.4	4728.0	4803.7	4790.5	4767.5
60°	32104.8	32562.5	11708.0	4191.3	3796.2	4227.5	4500.8	4625.9	4649.0	4616.0	4563.4
62.5°	32200.3	32681.0	8998.3	3954.2	3681.0	4099.1	4293.4	4418.5	4418.5	4336.2	4316.4
65°	31755.8	31940.2	6631.0	3681.0	3542.7	3951.0	4049.7	4141.9	4184.7	4076.1	4082.7
67.5°	30481.6	29414.9	5034.2	3355.0	3374.8	3746.8	3816.0	3878.5	3888.4	3825.8	3819.3
70°	27920.1	26589.9	3598.7	2861.2	3068.6	3424.2	3529.5	3625.0	3592.1	3483.4	3467.0
72.5°	24058.0	22876.0	2446.3	2291.6	2699.8	3114.7	3180.5	3183.8	3118.0	3197.0	3253.0
75°	20696.4	17868.2	1824.0	1827.3	2163.1	2686.7	2890.8	2907.2	2936.9	3371.5	3460.4
77.5°	16445.9	11642.2	1554.0	1442.1	1659.4	2235.6	2558.2	2676.8	3552.6	3852.2	3812.7
80°	10101.3	6989.9	1205.0	1142.5	1349.9	1718.7	2199.4	2736.0	3625.0	3407.7	3292.5
82.5°	4731.3	3190.4	869.2	875.8	1004.2	1254.4	1738.4	3183.8	3131.1	2584.6	2551.7
85°	1830.6	1103.0	526.8	595.9	675.0	849.5	1333.4	3141.0	2433.1	2189.5	2028.2
87.5°	470.8	214.0	230.5	243.6	299.6	447.8	727.6	1646.2	1280.8	1122.7	1103.0
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)