

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: STREETWORKS

Report Number: P237523

Luminaire Tested: **CST-8-6-D-U-T4-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237523
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-27)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-8-6-D-U-T4-7050-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
(8) 70 CRI, 5000K LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55535 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

Input Watts (W): 477
Input Voltage (V): NR
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

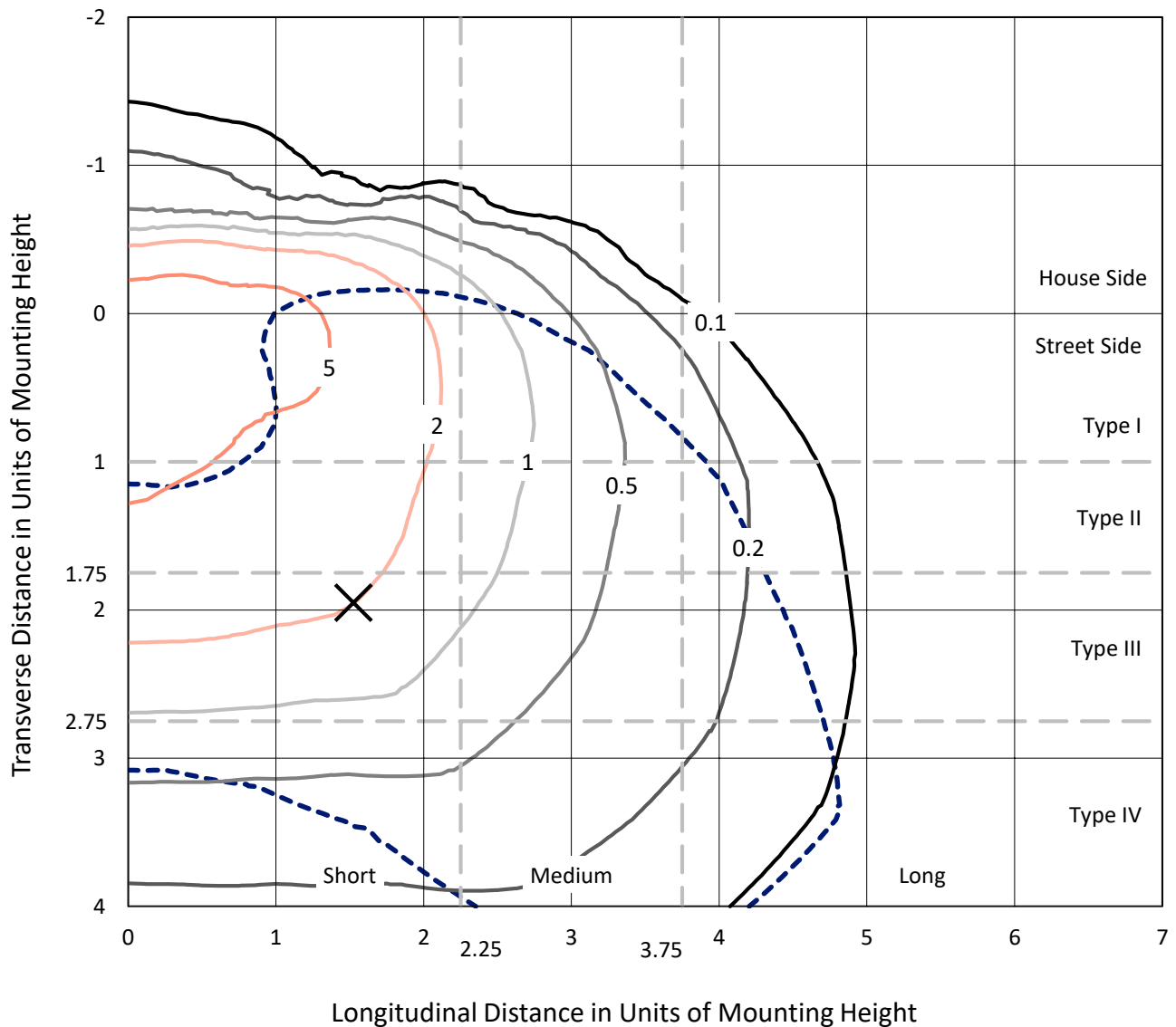


REPORT NUMBER: P237523

CATALOG NUMBER: CST-8-6-D-U-T4-7050-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

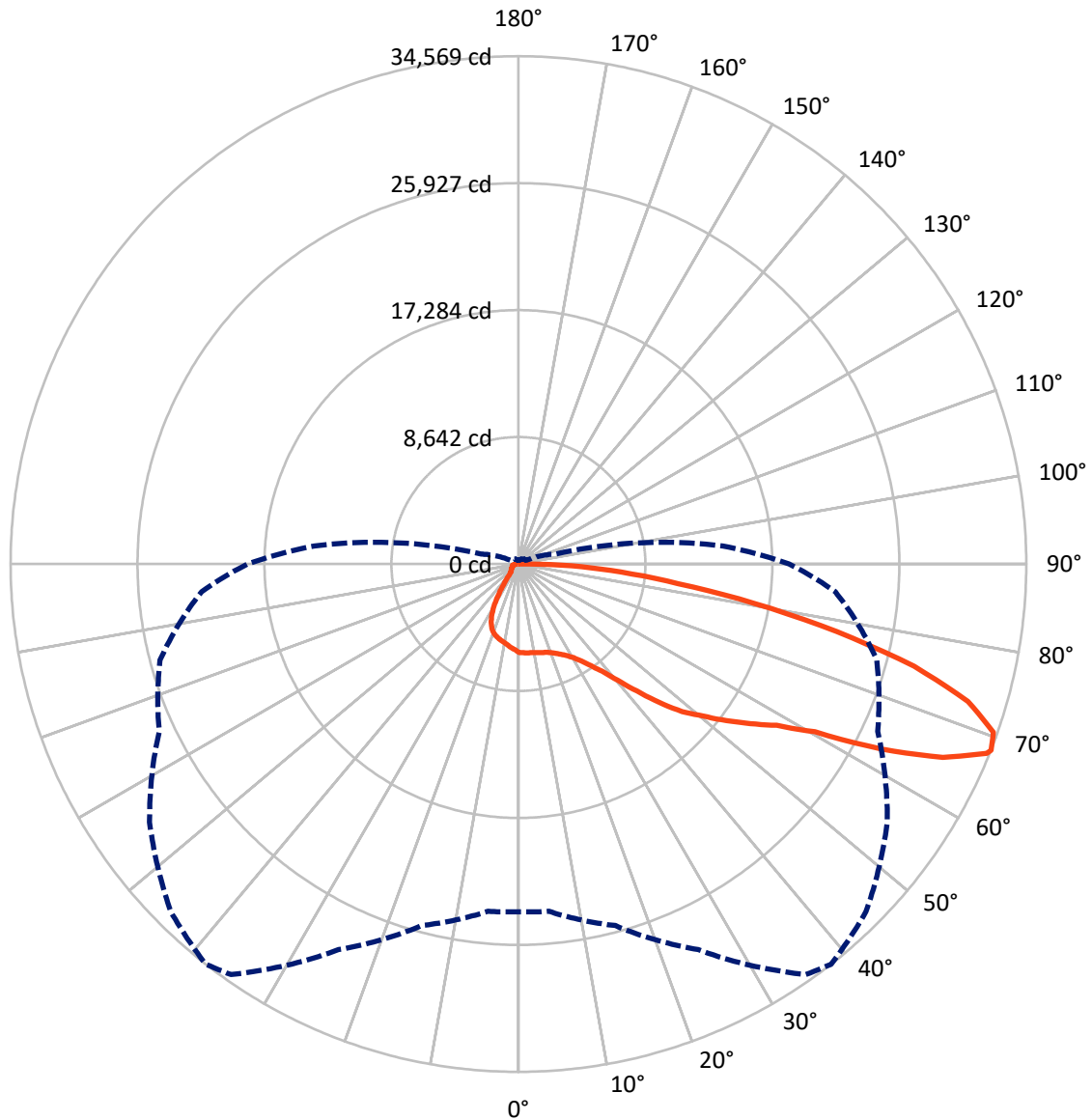


Based on 30 foot mounting height. Maximum calculated value = 7.6 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P237523

CATALOG NUMBER: CST-8-6-D-U-T4-7050-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P237523

CATALOG NUMBER: CST-8-6-D-U-T4-7050-HSS

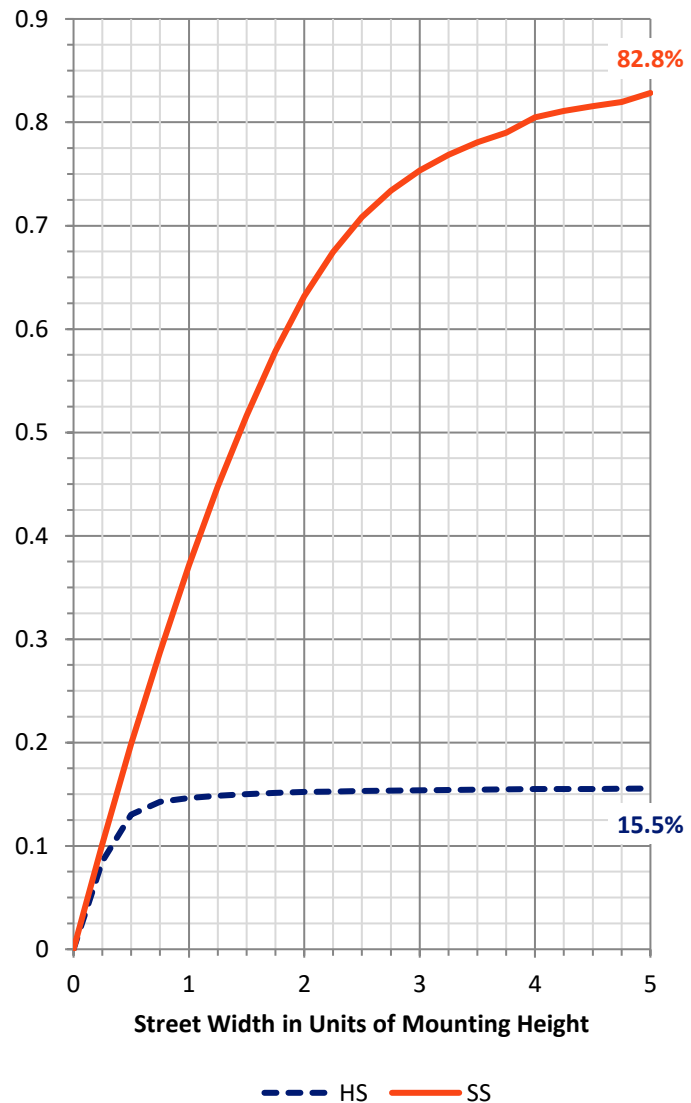
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8759.5	0.0	8759.5
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	46775.5	0.0	46775.5
	% Fixture	84.2	0.0	84.2
Total	Lumens	55535.0	0.0	55535.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	568.6	1.0
10°-20°	1688.7	3.0
20°-30°	2818.3	5.1
30°-40°	4322.9	7.8
40°-50°	7442.4	13.4
50°-60°	11060.4	19.9
60°-70°	14632.0	26.3
70°-80°	10745.9	19.3
80°-90°	2255.7	4.1
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°	55535.0	100.0
0°-180°	55535.0	100.0

Coefficient of Utilization



REPORT NUMBER: P237523

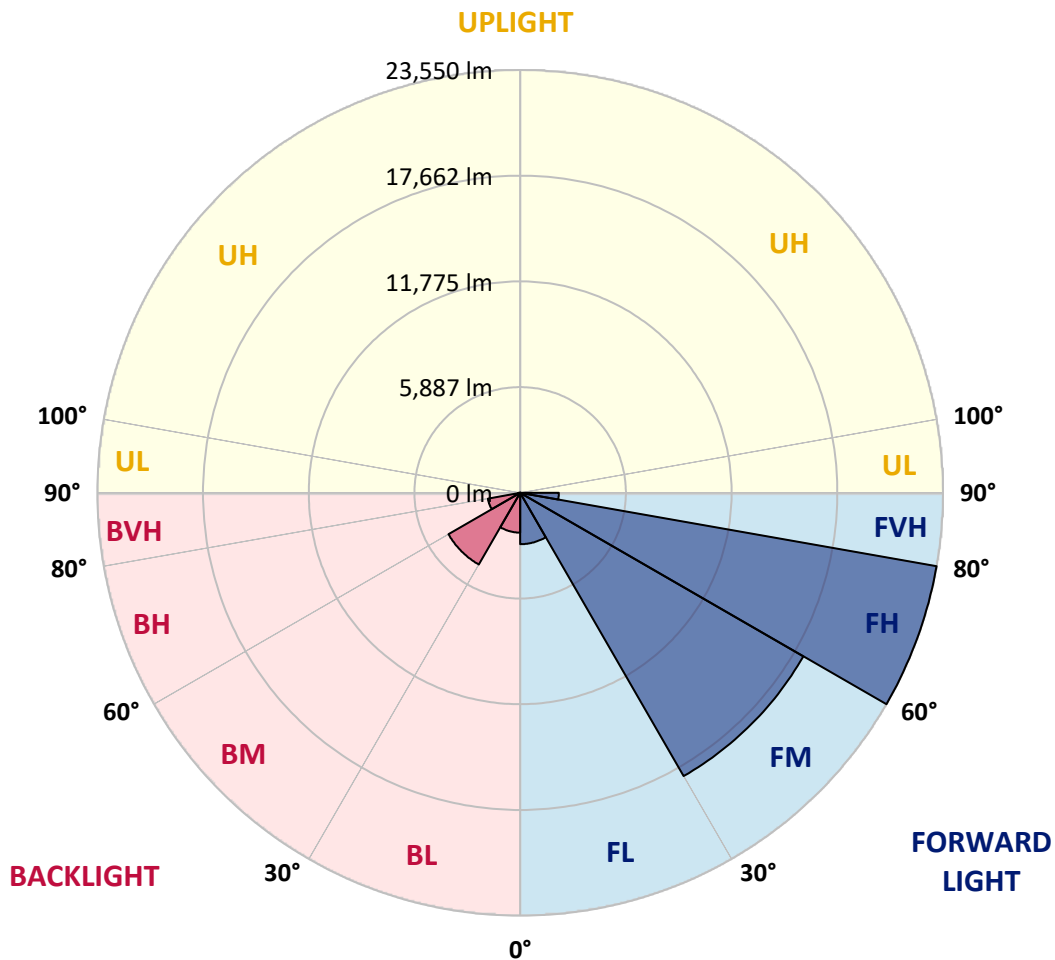
CATALOG NUMBER: CST-8-6-D-U-T4-7050-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2859.4	5.1			
FM	(30°-60°)	18214.6	32.8			
FH	(60°-80°)	23549.6	42.4			G5
FVH	(80°-90°)	2151.9	3.9			G5
BL	(0°-30°)	2216.3	4.0	B3/2500		
BM	(30°-60°)	4611.1	8.3	B3/5000		
BH	(60°-80°)	1828.3	3.3	B3/2500		G3/2500
BVH	(80°-90°)	103.7	0.2			G2/225
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





REPORT NUMBER: P237523

CATALOG NUMBER: CST-8-6-D-U-T4-7050-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	6031.1	6031.1	6031.1	6031.1	6031.1	6031.1	6031.1	6031.1	6031.1	6031.1	6031.1
2.5°	6159.0	6116.4	6124.5	6150.9	6043.3	6035.2	6069.7	6031.1	6081.9	6057.5	6059.5
5°	6175.3	6134.7	6150.9	6191.5	6090.0	6088.0	6126.5	6077.8	6116.4	6085.9	6077.8
7.5°	6161.0	6124.5	6136.7	6175.3	6088.0	6094.1	6144.8	6128.6	6185.4	6155.0	6132.6
10°	6155.0	6130.6	6132.6	6185.4	6116.4	6132.6	6197.6	6207.7	6299.1	6272.7	6262.5
12.5°	6100.1	6081.9	6100.1	6183.4	6161.0	6193.5	6280.8	6333.6	6441.2	6431.0	6451.3
15°	6067.7	6059.5	6073.8	6171.2	6197.6	6250.4	6366.1	6469.6	6599.5	6617.8	6664.5
17.5°	6106.2	6118.4	6144.8	6224.0	6260.5	6315.3	6445.2	6587.3	6772.1	6851.2	6906.0
20°	6268.6	6282.8	6307.2	6357.9	6398.5	6445.2	6560.9	6723.3	6969.0	7092.8	7180.1
22.5°	6504.1	6479.7	6514.3	6556.9	6569.1	6609.7	6727.4	6889.8	7167.9	7354.7	7476.5
25°	6686.8	6670.6	6705.1	6778.2	6776.1	6812.7	6928.4	7094.8	7395.3	7663.2	7878.4
27.5°	6877.6	6867.5	6881.7	6979.1	7017.7	7062.4	7163.9	7350.6	7689.6	8026.6	8365.6
30°	7153.7	7176.0	7151.7	7263.3	7346.6	7397.3	7500.8	7730.2	8093.6	8554.4	8982.7
32.5°	7582.0	7592.2	7551.6	7675.4	7795.2	7872.3	7971.8	8272.2	8670.1	9232.4	9784.6
35°	8495.5	8497.6	8331.1	8312.8	8379.8	8491.5	8637.6	9084.2	9677.0	10543.8	11169.0
37.5°	9880.0	9813.0	9654.7	9346.1	9246.6	9266.9	9476.0	10097.2	10996.5	12596.1	13195.0
40°	11467.5	11390.3	11112.2	10704.2	10411.9	10393.6	10464.6	11209.6	12525.1	14904.2	15206.7
42.5°	13180.8	13128.0	12677.3	12255.1	11881.6	11822.7	11662.3	12409.4	14210.0	16964.7	16962.7
45°	14762.1	14752.0	14201.9	13992.8	13596.9	13442.6	13251.8	13832.4	15941.6	18588.7	18393.8
47.5°	16246.1	16215.6	15631.0	15391.4	15089.0	15005.7	14780.4	15186.4	17421.4	20105.1	19619.9
50°	17821.3	17728.0	16859.1	16617.6	16319.1	16254.2	16136.4	16603.3	19033.2	21430.7	20626.8
52.5°	19652.4	19510.3	18324.8	17876.2	17663.0	17705.6	17630.5	18048.7	20835.9	22539.1	21451.0
55°	21818.4	21392.1	20259.4	19445.3	18972.3	19169.3	19023.1	19544.8	22565.4	23401.8	22051.9
57.5°	23407.9	23405.9	22945.1	21788.0	20716.1	20726.3	20431.9	21026.7	23964.1	24260.5	22403.0
60°	25226.8	25334.4	25492.7	24979.1	23714.4	23184.6	22149.3	22494.4	25088.7	24883.7	22559.4
62.5°	26808.1	26871.1	27571.4	27768.3	27865.8	27735.8	25433.8	24185.4	26008.3	25230.8	22604.0
65°	26751.3	26745.2	28259.6	29579.1	31629.4	31745.1	31081.3	26696.5	26720.8	25275.5	22372.6
67.5°	24140.7	24264.6	26290.5	29118.3	34008.5	34373.9	33458.4	30342.4	26984.7	25255.2	21820.4
68°	23673.8	23726.6	25478.5	28955.9	34110.0	34568.8	33462.5	30646.9	26976.6	25257.2	21649.9
70°	20699.9	20779.0	22821.2	26988.8	34138.5	34296.8	32961.1	30813.3	26708.7	25068.4	20419.7
72.5°	16341.5	16432.8	18294.3	22772.5	32011.0	32004.9	30713.9	29418.7	25801.3	23688.0	17322.0
75°	11838.9	12137.4	13765.4	17886.3	27402.9	27821.1	27654.6	27396.8	23219.1	20017.8	12224.6
77.5°	8300.7	8452.9	9985.6	13452.8	21534.2	22173.7	23296.2	23629.2	19356.0	14865.7	5505.4
80°	5235.4	5521.6	6790.3	9553.2	15687.8	16278.5	17638.6	18198.9	14287.1	7291.7	964.2
82.5°	3051.1	3221.6	4155.4	6187.4	10547.9	10960.0	11851.1	11163.0	5791.6	970.3	535.9
85°	1477.8	1634.1	2231.0	3520.0	6585.3	7001.5	7482.6	4867.9	958.2	381.6	361.3
87.5°	598.8	615.1	913.5	1563.1	3282.5	3639.8	3522.0	1597.6	249.7	138.0	113.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P237523

CATALOG NUMBER: CST-8-6-D-U-T4-7050-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6031.1	6031.1	6031.1	6031.1	6031.1	6031.1	6031.1	6031.1	6031.1	6031.1	6031.1
2.5°	6069.7	6039.2	6002.7	5990.5	5905.3	5901.2	5830.2	5933.7	5903.2	5905.3	5929.6
5°	6073.8	6039.2	5968.2	5935.7	5844.4	5820.0	5702.3	5767.2	5698.2	5692.1	5732.7
7.5°	6116.4	6077.8	5976.3	5925.6	5755.0	5673.8	5562.2	5619.0	5513.5	5491.1	5499.3
10°	6230.1	6181.3	6057.5	5937.7	5726.6	5608.9	5389.6	5407.9	5314.5	5284.1	5310.5
12.5°	6402.6	6343.7	6195.5	6018.9	5751.0	5543.9	5276.0	5168.4	5026.3	4979.6	4993.8
15°	6638.1	6569.1	6374.2	6169.2	5803.8	5513.5	5148.1	4924.8	4648.7	4571.6	4543.1
17.5°	6895.9	6822.8	6597.5	6339.7	5897.1	5479.0	5001.9	4646.7	4248.8	4074.2	4064.1
20°	7198.4	7119.2	6883.7	6538.6	5972.3	5436.3	4819.2	4309.7	3792.0	3499.7	3479.4
22.5°	7545.5	7476.5	7210.5	6715.2	6010.8	5324.7	4543.1	3879.3	3231.8	2866.4	2848.1
25°	7953.5	7888.6	7515.0	6839.1	5968.2	5127.8	4165.6	3351.5	2572.0	2206.6	2190.4
27.5°	8440.7	8339.2	7754.6	6875.6	5842.3	4805.0	3692.6	2673.5	1900.1	1622.0	1607.8
30°	8994.9	8814.2	7979.9	6865.4	5619.0	4392.9	3040.9	1971.1	1349.9	1163.2	1157.1
32.5°	9693.2	9376.6	8195.1	6784.2	5300.3	3852.9	2314.2	1368.2	970.3	879.0	877.0
35°	10858.5	10180.4	8430.6	6638.1	4867.9	3144.5	1603.7	931.8	789.7	771.4	771.4
37.5°	12596.1	11506.0	8765.5	6404.6	4307.7	2397.4	1055.6	740.9	743.0	753.1	755.2
40°	14380.5	13030.5	9250.7	6057.5	3654.0	1684.9	767.3	688.2	712.5	728.8	740.9
42.5°	16018.7	14410.9	9790.7	5582.5	2915.1	1112.4	686.1	661.8	674.0	686.1	698.3
45°	17393.0	15620.8	10300.2	5040.5	2159.9	791.7	680.0	631.3	625.2	633.4	641.5
47.5°	18552.1	16605.4	10657.5	4429.5	1469.7	678.0	663.8	598.8	578.5	580.6	584.6
50°	19437.2	17301.7	10815.8	3757.5	974.4	659.7	633.4	564.3	531.9	531.9	535.9
52.5°	20034.0	17738.1	10722.4	3000.3	700.3	649.6	609.0	527.8	489.2	495.3	499.4
55°	20476.6	17971.6	10355.0	2204.6	617.1	619.1	580.6	485.2	452.7	468.9	475.0
57.5°	20649.1	17965.5	9737.9	1522.5	613.1	572.5	540.0	448.6	422.2	444.6	454.7
60°	20586.2	17669.1	8840.6	1037.3	600.9	535.9	497.3	414.1	393.8	393.8	395.8
62.5°	20460.3	17252.9	7539.4	769.4	572.5	509.5	464.9	385.7	361.3	349.2	345.1
65°	19891.9	16244.0	5535.8	663.8	544.0	495.3	434.4	359.3	326.8	306.5	302.5
67.5°	18767.3	14508.4	3093.7	613.1	523.7	487.2	414.1	334.9	298.4	274.0	272.0
68°	18422.2	13966.4	2622.8	609.0	527.8	487.2	412.1	328.9	294.3	268.0	265.9
70°	16380.0	11266.5	1084.0	572.5	556.2	489.2	401.9	310.6	278.1	251.7	249.7
72.5°	12389.1	6526.4	572.5	497.3	542.0	481.1	406.0	296.4	263.9	233.4	229.4
75°	6826.9	1869.6	509.5	404.0	501.4	507.5	414.1	294.3	255.8	217.2	209.1
77.5°	1516.4	609.0	475.0	353.2	432.4	466.9	383.7	280.1	259.8	198.9	190.8
80°	580.6	495.3	450.7	272.0	343.1	395.8	318.7	249.7	265.9	186.8	176.6
82.5°	485.2	434.4	414.1	211.1	237.5	290.3	255.8	213.1	245.6	172.5	164.4
85°	357.3	420.2	292.3	166.5	174.6	178.6	178.6	166.5	211.1	152.2	144.1
87.5°	144.1	203.0	123.8	77.1	89.3	83.2	73.1	89.3	121.8	107.6	107.6
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)