

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: P591122

Luminaire Tested: **CTN-CA10-630-722-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591122
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-CA10-630-722-U-T2-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 46058 lumens
Efficiency: N/A
Efficacy: 72.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

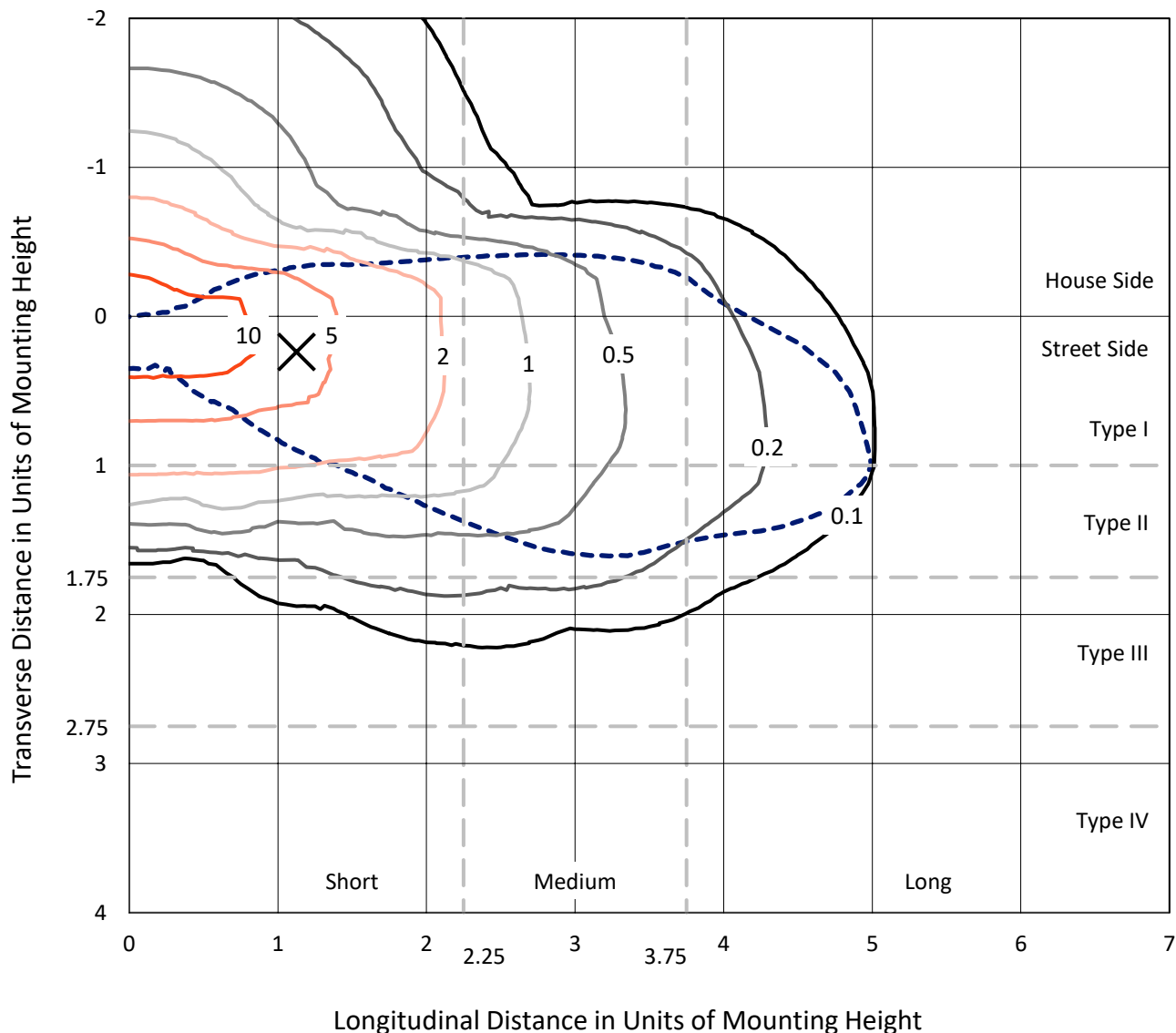
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P591122
 CATALOG NUMBER: CTN-CA10-630-722-U-T2-SSS-HM-EX120

Iso-Footcandle Lines of Horizontal Illumination

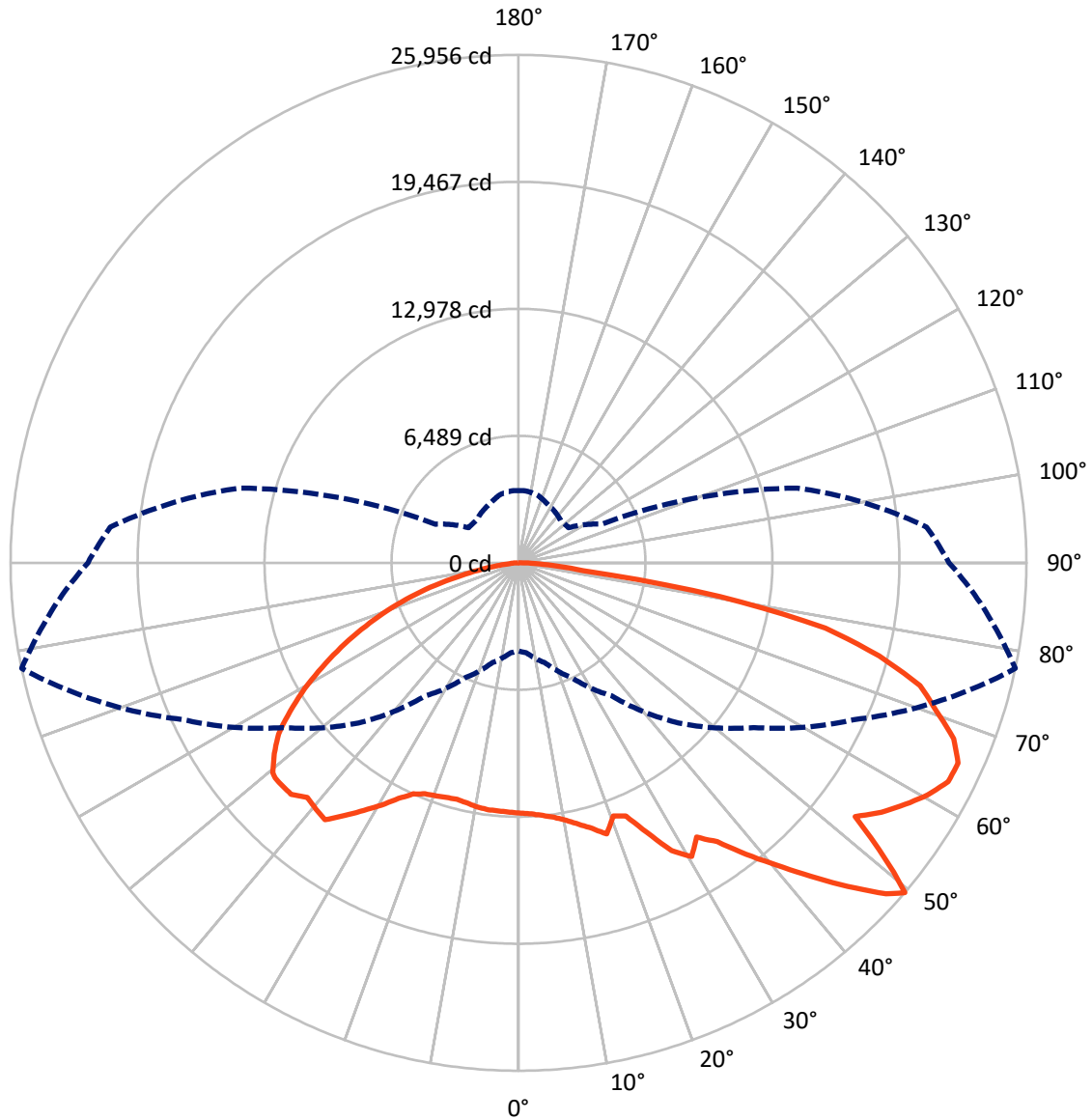
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 16.2 fc
 Type II - Short - N/A

REPORT NUMBER: P591122
CATALOG NUMBER: CTN-CA10-630-722-U-T2-SSS-HM-EX120

Luminous Intensity Polar Plot



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

REPORT NUMBER: P591122
 CATALOG NUMBER: CTN-CA10-630-722-U-T2-SSS-HM-EX120

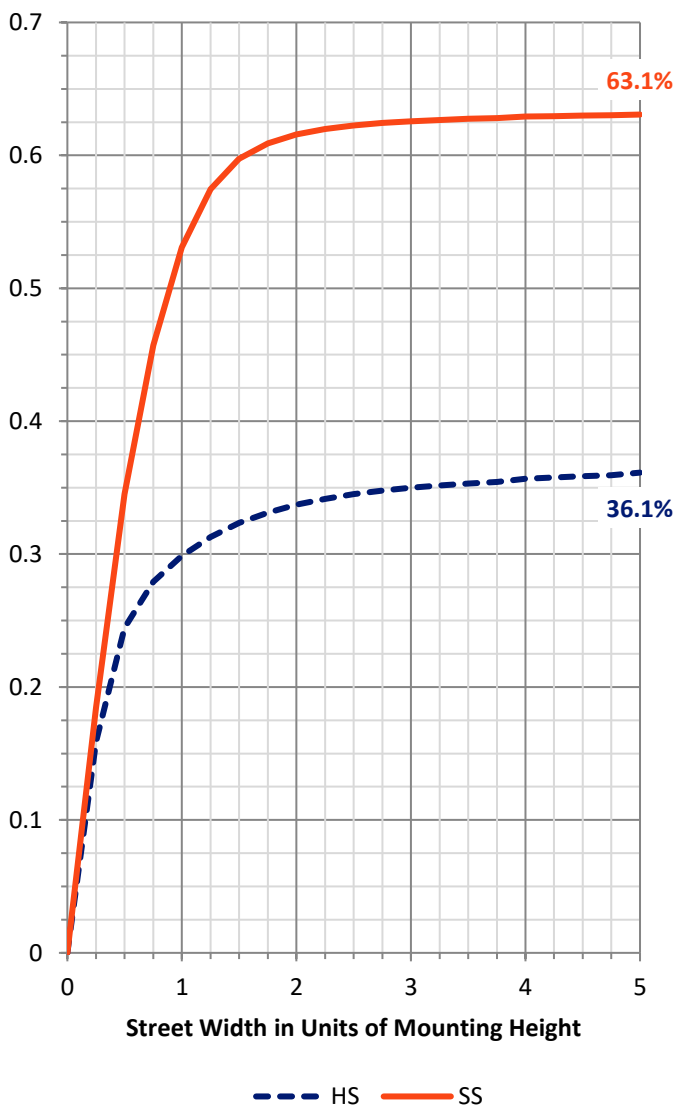
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17053.6	0.0	17053.6
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	29004.4	0.0	29004.4
	% Fixture	63.0	0.0	63.0
Total	Lumens	46058.0	0.0	46058.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1239.7	2.7
10°-20°	3648.4	7.9
20°-30°	5208.2	11.3
30°-40°	6704.6	14.6
40°-50°	7864.5	17.1
50°-60°	8113.3	17.6
60°-70°	7366.8	16.0
70°-80°	4892.4	10.6
80°-90°	1020.1	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°	46058.0	100.0
0°-180°	46058.0	100.0

Coefficient of Utilization



REPORT NUMBER: P591122

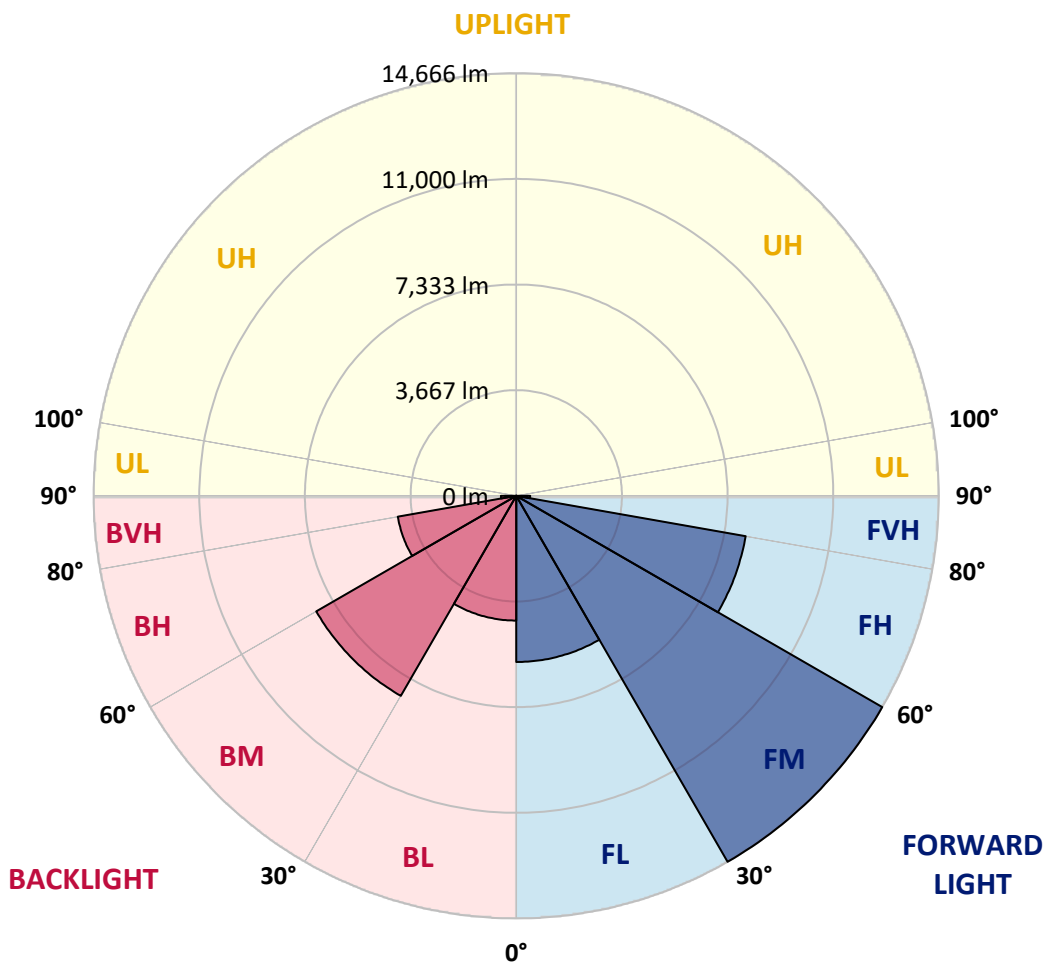
CATALOG NUMBER: CTN-CA10-630-722-U-T2-SSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5767.1	12.5			
FM (30°-60°)	14666.2	31.8			
FH (60°-80°)	8084.9	17.6			G4/12000
FVH (80°-90°)	486.2	1.1			G3/500
BL (0°-30°)	4329.2	9.4	B4/5000		
BM (30°-60°)	8016.2	17.4	B4/8500		
BH (60°-80°)	4174.3	9.1	B4/5000		G4/5000
BVH (80°-90°)	533.9	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





REPORT NUMBER: P591122

CATALOG NUMBER: CTN-CA10-630-722-U-T2-SSS-HM-EX120

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	12789.8	12789.8	12789.8	12789.8	12789.8	12789.8	12789.8	12789.8	12789.8	12789.8	12789.8
2.5°	13312.8	13210.5	13243.0	13298.8	13045.5	13101.3	12992.0	13036.2	12901.4	12850.3	12873.5
5°	14254.1	14144.8	14184.3	14202.9	13835.7	13687.0	13345.3	13273.3	13061.8	12968.8	12959.5
7.5°	14718.9	14600.4	14609.7	14621.3	14328.4	14349.3	14040.2	13670.7	13277.9	13136.1	13073.4
10°	15483.5	15318.5	15262.7	15239.5	14844.4	14679.4	14409.8	14207.6	13594.0	13380.2	13219.8
12.5°	15955.3	15834.5	15834.5	15811.2	15392.9	15265.1	14784.0	14570.1	13965.9	13712.5	13436.0
15°	16041.3	15960.0	16064.6	16043.7	15769.4	15620.7	15406.8	14960.6	14342.4	14079.7	13754.4
17.5°	15069.8	14853.7	14440.0	14502.7	14505.1	14807.2	14660.8	14967.6	14786.3	14572.5	14221.5
20°	12376.1	12450.5	13112.9	12952.5	12892.1	13533.6	14189.0	14207.6	13847.3	13812.5	14286.6
22.5°	10781.8	10516.8	11253.6	12325.0	12392.4	13250.0	14014.7	14935.0	14358.6	14049.5	13687.0
25°	9182.7	9280.4	10391.3	11778.8	12759.6	12950.2	13828.7	15297.6	15544.0	15258.1	14500.4
27.5°	8906.2	8901.5	9384.9	10923.5	12936.3	13652.1	13942.6	15093.1	16810.6	16650.3	15692.7
30°	8845.7	8808.6	9061.9	10340.2	12115.8	14284.3	14837.4	15248.8	16710.7	17424.2	17026.8
32.5°	8580.8	8548.3	8817.9	9487.2	11458.1	14746.8	15690.4	16304.0	16371.4	16708.4	18435.2
35°	8164.8	8190.3	8564.5	9292.0	10507.5	13635.8	16564.3	17491.6	17735.6	17503.2	17742.6
37.5°	7739.4	7767.3	8134.6	8959.6	10342.5	13171.0	17129.0	18639.7	19146.4	18897.7	17791.4
40°	7211.9	7256.0	7681.3	8608.7	10151.9	12122.8	15969.3	19943.6	20631.5	20306.2	19074.4
42.5°	6612.2	6630.8	7114.2	8074.1	9910.2	12185.6	14772.3	21147.5	22072.5	21893.6	20338.7
45°	6091.6	6091.6	6530.9	7386.2	9359.4	12067.0	14265.7	20250.4	23841.2	23587.9	21605.4
47.5°	5382.7	5445.5	5961.5	6809.8	8710.9	11792.8	14556.2	18235.3	25489.0	25277.5	22876.7
49°	4508.9	4615.8	5296.8	6493.7	8294.9	11565.0	14672.4	18946.5	24352.5	25956.2	23701.8
50°	4150.9	4206.7	4213.7	6268.3	7985.8	11358.2	14725.9	19492.7	22435.1	24861.5	24280.5
52.5°	3593.1	3242.2	2882.0	5643.1	7365.3	10593.5	14758.4	20975.5	21974.9	21540.3	23829.6
55°	1517.7	1987.2	2526.4	4615.8	6695.9	9647.6	14651.5	22604.8	22985.9	22507.1	20431.7
57.5°	1148.1	1222.5	1357.3	3581.5	4797.1	8569.2	14291.2	23636.7	23838.9	23295.0	21261.4
60°	167.3	172.0	241.7	1452.6	2747.2	6117.2	12994.4	23606.5	24473.4	24055.0	21977.2
62.5°	69.7	72.0	93.0	1190.0	2117.3	4708.7	11862.5	23211.4	25089.3	24640.7	22648.9
65°	11.6	13.9	39.5	1052.8	1750.1	4399.6	10621.4	23290.4	24870.8	24684.9	22909.2
67.5°	9.3	11.6	37.2	945.9	1443.3	4027.8	9396.6	22033.0	24073.6	23992.3	22214.3
70°	9.3	11.6	39.5	855.3	1248.1	3549.0	7883.5	20292.2	22611.7	22644.3	21047.6
72.5°	11.6	11.6	39.5	764.6	1085.4	3033.0	6238.0	17968.1	21284.6	21463.6	19388.1
75°	11.6	11.6	37.2	664.7	932.0	2528.7	4492.6	13212.8	19088.3	19034.8	17003.5
77.5°	11.6	11.6	37.2	527.6	773.9	2080.1	2926.1	7442.0	15806.6	16032.0	14216.9
80°	11.6	11.6	37.2	385.8	606.6	1559.5	1773.3	3809.3	8439.0	10447.1	9780.1
82.5°	11.6	11.6	37.2	260.3	416.0	899.4	1022.6	1929.1	3030.7	3321.2	3886.0
85°	9.3	9.3	27.9	155.7	213.8	318.4	492.7	1027.3	1657.1	1731.5	1689.7
87.5°	4.6	4.6	13.9	55.8	93.0	116.2	220.8	413.7	608.9	622.9	541.5
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: P591122

CATALOG NUMBER: CTN-CA10-630-722-U-T2-SSS-HM-EX120

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	12789.8	12789.8	12789.8	12789.8	12789.8	12789.8	12789.8	12789.8	12789.8	12789.8	12789.8
2.5°	12873.5	12799.1	12731.7	12743.4	12599.3	12557.4	12397.1	12480.7	12399.4	12327.3	12394.7
5°	12894.4	12803.8	12680.6	12562.1	12232.0	12078.6	11885.7	11934.5	11825.3	11739.3	11813.7
7.5°	12954.9	12843.3	12652.7	12315.7	11922.9	11678.9	11460.4	11674.2	11648.7	11583.6	11660.3
10°	12982.7	12887.5	12559.7	12164.6	11616.1	11462.7	11265.2	11262.9	11269.8	11281.5	11358.2
12.5°	13057.1	12913.0	12394.7	11934.5	11425.6	11114.1	10970.0	11086.2	10877.1	10753.9	10807.3
15°	13233.8	12971.1	12283.2	11611.5	11130.4	10872.4	10412.2	10451.7	10407.6	10286.7	10340.2
17.5°	13582.4	13133.8	12278.5	11407.0	10753.9	10333.2	9931.1	9740.5	9680.1	9689.4	9735.9
20°	14010.0	13422.0	12287.8	11144.3	10361.1	9873.0	9252.5	9120.0	8920.1	8924.8	8936.4
22.5°	13738.1	13754.4	12292.5	10844.5	9870.7	9259.4	8601.7	8341.4	8188.0	8148.5	8206.6
25°	14474.9	14400.5	12364.5	10684.2	9354.7	8534.3	7846.4	7514.0	7283.9	7265.3	7330.4
27.5°	15455.6	15320.8	12736.4	10337.9	8808.6	7665.1	6919.0	6668.0	6470.5	6400.7	6447.2
30°	16647.9	16489.9	13250.0	10068.2	8071.8	6730.8	6091.6	5919.6	5724.4	5596.6	5608.2
32.5°	17893.7	17556.7	13777.6	9840.5	7316.4	5912.7	5366.5	5213.1	4983.0	4818.0	4857.5
35°	19148.7	18670.0	14365.6	9438.4	6393.8	5192.2	4750.6	4543.7	4355.5	4206.7	4181.2
37.5°	18156.3	19971.5	14935.0	9064.2	5670.9	4643.7	4144.0	3997.6	3886.0	3769.8	3767.5
40°	18237.7	18653.7	15272.0	8401.8	4864.5	4081.2	3579.2	3630.3	3676.8	3588.5	3588.5
42.5°	19044.1	18451.5	15137.2	7523.3	4264.8	3518.8	3288.7	3495.5	3642.0	3579.2	3576.9
45°	20180.7	19411.4	15367.3	6533.2	3681.5	3172.5	3207.3	3460.7	3651.3	3639.6	3635.0
47.5°	21386.9	20503.7	14925.7	5357.2	3279.4	3065.6	3207.3	3409.5	3637.3	3690.8	3679.1
49°	22007.4	20936.0	14749.1	4671.6	3119.0	3051.6	3212.0	3367.7	3611.7	3693.1	3681.5
50°	22386.3	21168.4	14521.3	4281.1	3033.0	3053.9	3221.3	3342.1	3588.5	3679.1	3672.2
52.5°	23239.2	21521.7	13391.8	3602.4	2893.6	3060.9	3281.7	3316.6	3502.5	3600.1	3651.3
55°	22370.0	22328.2	11950.8	3291.0	2819.2	3044.6	3307.3	3339.8	3430.5	3483.9	3523.4
57.5°	22235.2	22679.1	10135.6	3123.7	2754.1	3021.4	3277.1	3337.5	3390.9	3381.6	3365.4
60°	22662.9	22985.9	8264.7	2958.7	2679.8	2984.2	3177.1	3265.4	3281.7	3258.5	3221.3
62.5°	22730.3	23069.6	6351.9	2791.3	2598.4	2893.6	3030.7	3119.0	3119.0	3060.9	3047.0
65°	22416.5	22546.6	4680.9	2598.4	2500.8	2789.0	2858.7	2923.8	2954.0	2877.3	2882.0
67.5°	21517.0	20764.0	3553.6	2368.3	2382.3	2644.9	2693.7	2737.9	2744.8	2700.7	2696.0
70°	19708.9	18769.9	2540.3	2019.7	2166.1	2417.1	2491.5	2558.9	2535.7	2459.0	2447.3
72.5°	16982.6	16148.2	1726.8	1617.6	1905.8	2198.7	2245.1	2247.5	2201.0	2256.8	2296.3
75°	14609.7	12613.2	1287.6	1289.9	1527.0	1896.5	2040.6	2052.2	2073.1	2379.9	2442.7
77.5°	11609.2	8218.2	1097.0	1018.0	1171.4	1578.1	1805.9	1889.5	2507.8	2719.3	2691.4
80°	7130.5	4934.2	850.6	806.5	952.9	1213.2	1552.5	1931.4	2558.9	2405.5	2324.2
82.5°	3339.8	2252.1	613.6	618.2	708.9	885.5	1227.2	2247.5	2210.3	1824.5	1801.2
85°	1292.2	778.6	371.9	420.7	476.5	599.6	941.3	2217.2	1717.6	1545.6	1431.7
87.5°	332.4	151.1	162.7	172.0	211.5	316.1	513.6	1162.1	904.1	792.5	778.6
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)