

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: P591230

Luminaire Tested: **CTN-CA10-760-727-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591230
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-CA10-760-727-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: 55251 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B5 - U0 - G5

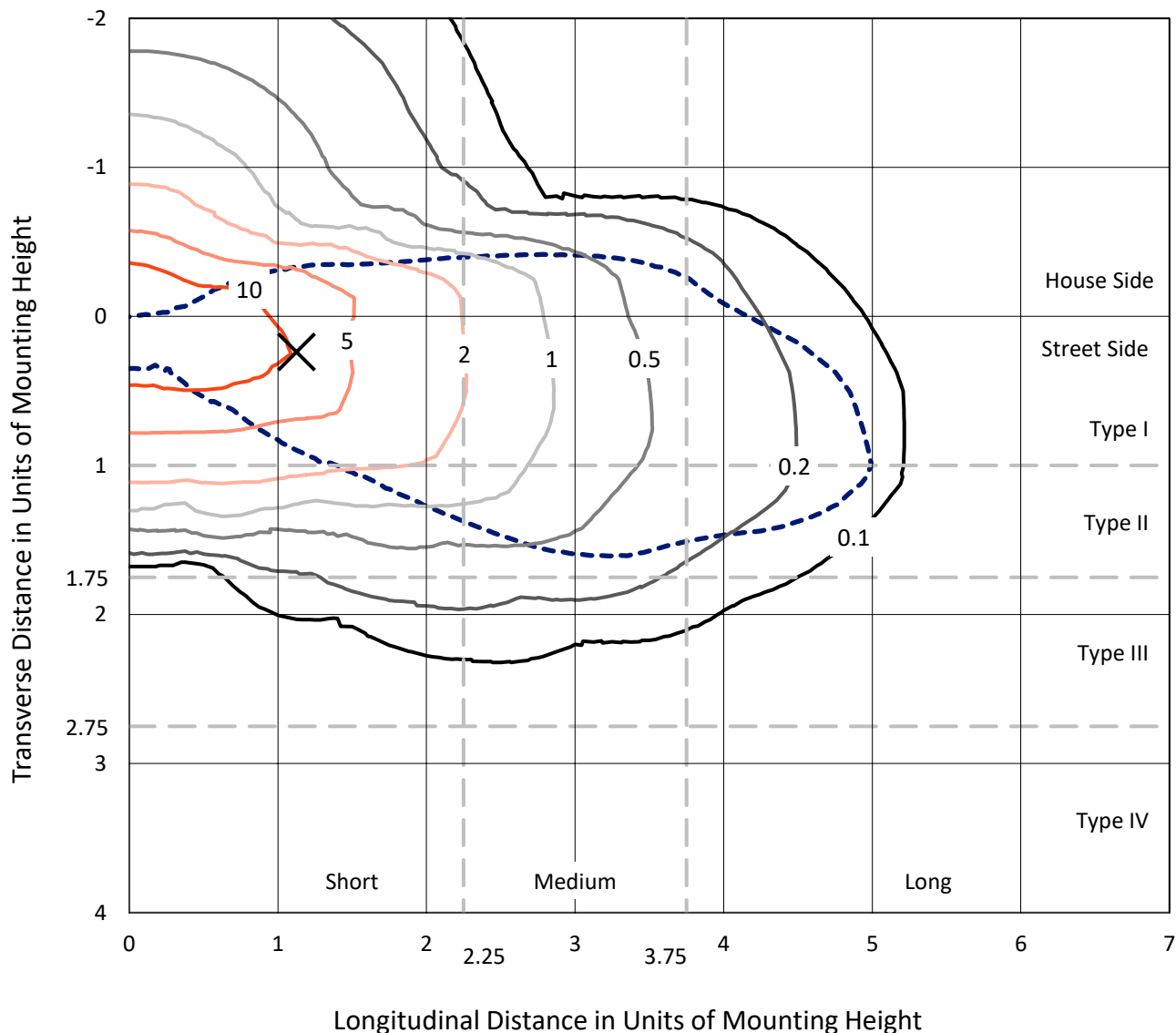
Input Watts (W): 761.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P591230
 CATALOG NUMBER: CTN-CA10-760-727-U-T2-SSS-HM-EX120

Iso-Footcandle Lines of Horizontal Illumination

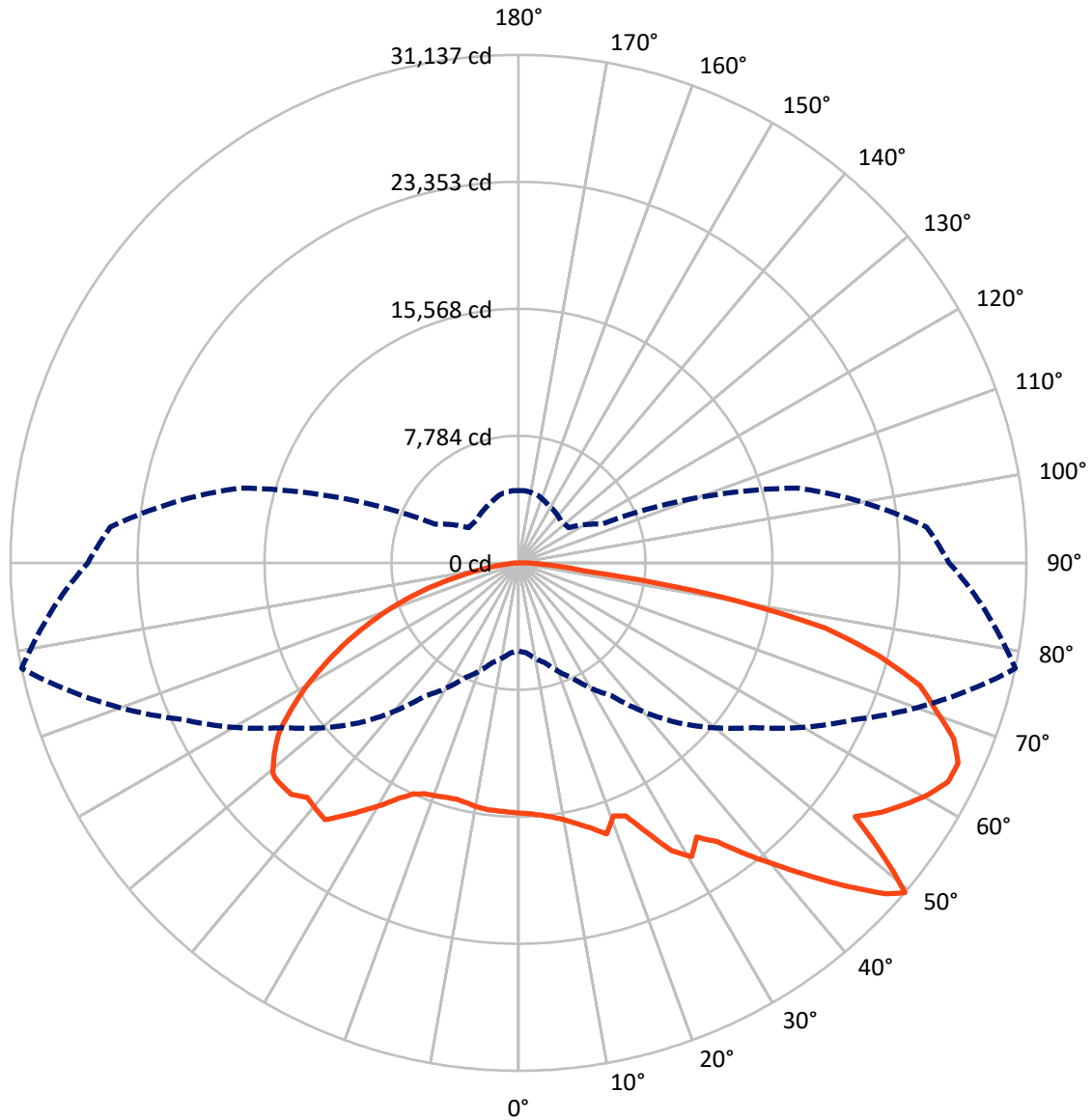
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 19.5 fc
 Type II - Short - N/A

REPORT NUMBER: P591230
CATALOG NUMBER: CTN-CA10-760-727-U-T2-SSS-HM-EX120

Luminous Intensity Polar Plot



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

REPORT NUMBER: P591230
 CATALOG NUMBER: CTN-CA10-760-727-U-T2-SSS-HM-EX120

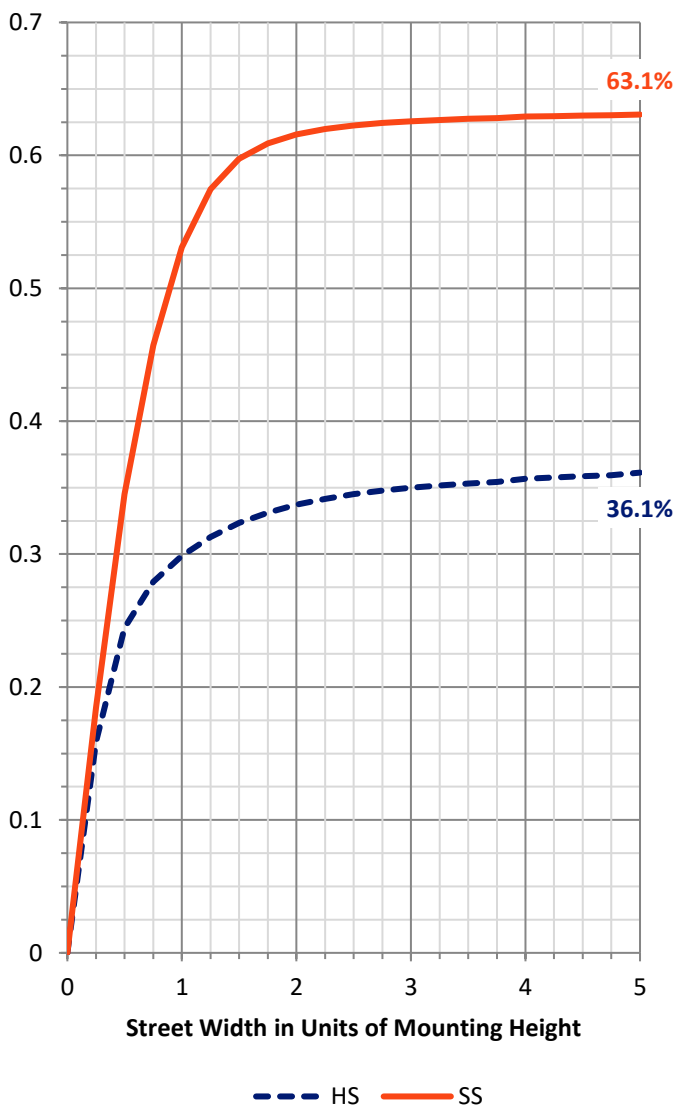
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	20457.4	0.0	20457.4
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	34793.6	0.0	34793.6
	% Fixture	63.0	0.0	63.0
Total	Lumens	55251.0	0.0	55251.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1487.2	2.7
10°-20°	4376.6	7.9
20°-30°	6247.7	11.3
30°-40°	8042.8	14.6
40°-50°	9434.2	17.1
50°-60°	9732.7	17.6
60°-70°	8837.1	16.0
70°-80°	5868.9	10.6
80°-90°	1223.7	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°	55251.0	100.0
0°-180°	55251.0	100.0

Coefficient of Utilization



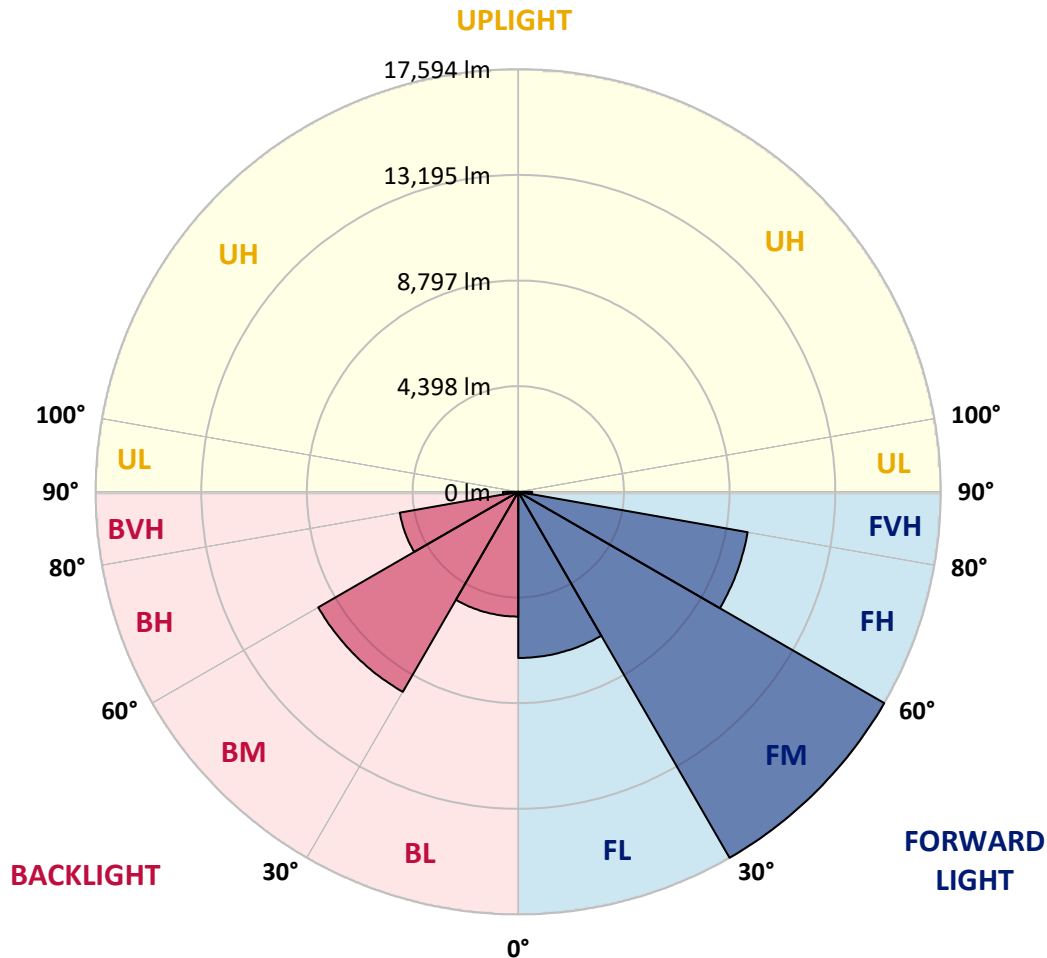
REPORT NUMBER: P591230
 CATALOG NUMBER: CTN-CA10-760-727-U-T2-SSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6918.2	12.5			
FM	(30°-60°)	17593.5	31.8			
FH	(60°-80°)	9698.6	17.6			G4/12000
FVH	(80°-90°)	583.2	1.1			G4/750
BL	(0°-30°)	5193.3	9.4	B5		
BM	(30°-60°)	9616.2	17.4	B5		
BH	(60°-80°)	5007.5	9.1	B5		G5
BVH	(80°-90°)	640.5	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-G5

Type II Short





REPORT NUMBER: P591230

CATALOG NUMBER: CTN-CA10-760-727-U-T2-SSS-HM-EX120

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	15342.6	15342.6	15342.6	15342.6	15342.6	15342.6	15342.6	15342.6	15342.6	15342.6	15342.6
2.5°	15970.0	15847.3	15886.3	15953.2	15649.3	15716.2	15585.2	15638.2	15476.5	15415.1	15443.0
5°	17099.1	16968.1	17015.5	17037.8	16597.3	16418.8	16009.0	15922.6	15668.8	15557.3	15546.2
7.5°	17656.7	17514.5	17525.7	17539.6	17188.3	17213.4	16842.6	16399.3	15928.1	15758.1	15682.8
10°	18574.0	18376.0	18309.1	18281.2	17807.3	17609.3	17285.9	17043.4	16307.3	16050.8	15858.4
12.5°	19140.0	18995.0	18995.0	18967.1	18465.3	18311.9	17734.8	17478.3	16753.4	16449.5	16117.7
15°	19243.1	19145.5	19271.0	19245.9	18916.9	18738.5	18482.0	17946.7	17205.1	16890.0	16499.7
17.5°	18077.7	17818.4	17322.2	17397.4	17400.2	17762.7	17587.0	17955.0	17737.6	17481.1	17060.1
20°	14846.4	14935.6	15730.2	15537.8	15465.3	16234.8	17021.0	17043.4	16611.2	16569.4	17138.1
22.5°	12933.8	12615.9	13499.7	14785.0	14865.9	15894.7	16811.9	17916.0	17224.6	16853.8	16418.8
25°	11015.6	11132.7	12465.4	14129.8	15306.4	15535.0	16588.9	18350.9	18646.5	18303.5	17394.6
27.5°	10683.8	10678.2	11258.1	13103.8	15518.3	16377.0	16725.5	18105.6	20166.0	19973.6	18824.9
30°	10611.3	10566.7	10870.6	12404.0	14534.1	17135.4	17798.9	18292.4	20046.1	20902.0	20425.3
32.5°	10293.5	10254.4	10577.9	11380.8	13745.1	17690.2	18822.1	19558.2	19639.0	20043.3	22114.8
35°	9794.4	9825.1	10274.0	11146.6	12604.8	16357.5	19870.4	20982.9	21275.6	20996.8	21284.0
37.5°	9284.2	9317.7	9758.2	10747.9	12406.8	15799.9	20547.9	22360.2	22968.0	22669.6	21342.5
40°	8651.3	8704.3	9214.5	10326.9	12178.2	14542.5	19156.7	23924.3	24749.5	24359.2	22881.5
42.5°	7932.0	7954.3	8534.2	9685.7	11888.2	14617.7	17720.8	25368.5	26478.1	26263.4	24398.2
45°	7307.5	7307.5	7834.4	8860.4	11227.5	14475.6	17113.1	24292.3	28599.8	28295.9	25917.7
47.5°	6457.1	6532.4	7151.3	8169.0	10449.6	14146.6	17461.6	21875.0	30576.5	30322.8	27442.8
49°	5408.8	5537.1	6354.0	7789.8	9950.6	13873.3	17601.0	22728.2	29213.2	31136.9	28432.5
50°	4979.5	5046.4	5054.7	7519.4	9579.7	13625.2	17665.1	23383.4	26913.0	29823.8	29126.8
52.5°	4310.3	3889.3	3457.2	6769.4	8835.3	12707.9	17704.1	25162.2	26361.0	25839.6	28585.9
55°	1820.6	2383.8	3030.6	5537.1	8032.4	11573.2	17575.9	27116.6	27573.8	26999.5	24509.7
57.5°	1377.3	1466.5	1628.2	4296.4	5754.5	10279.5	17143.7	28354.5	28597.0	27944.6	25505.1
60°	200.7	206.3	290.0	1742.5	3295.5	7338.1	15588.0	28318.2	29358.2	28856.3	26363.8
62.5°	83.6	86.4	111.5	1427.5	2539.9	5648.6	14230.2	27844.3	30097.0	29558.9	27169.5
65°	13.9	16.7	47.4	1263.0	2099.4	5277.8	12741.4	27939.0	29834.9	29611.9	27481.8
67.5°	11.2	13.9	44.6	1134.7	1731.4	4831.7	11272.1	26430.7	28878.6	28781.0	26648.2
70°	11.2	13.9	47.4	1026.0	1497.2	4257.4	9457.1	24342.5	27124.9	27164.0	25248.6
72.5°	13.9	13.9	47.4	917.3	1302.0	3638.4	7483.1	21554.4	25533.0	25747.6	23257.9
75°	13.9	13.9	44.6	797.4	1118.0	3033.4	5389.3	15850.1	22898.3	22834.1	20397.4
77.5°	13.9	13.9	44.6	632.9	928.4	2495.3	3510.2	8927.3	18961.5	19232.0	17054.5
80°	13.9	13.9	44.6	462.8	727.7	1870.8	2127.3	4569.6	10123.4	12532.3	11732.1
82.5°	13.9	13.9	44.6	312.3	499.1	1079.0	1226.7	2314.1	3635.6	3984.1	4661.6
85°	11.2	11.2	33.5	186.8	256.5	382.0	591.1	1232.3	1987.9	2077.1	2026.9
87.5°	5.6	5.6	16.7	66.9	111.5	139.4	264.9	496.3	730.5	747.2	649.6
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: P591230

CATALOG NUMBER: CTN-CA10-760-727-U-T2-SSS-HM-EX120

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	15342.6	15342.6	15342.6	15342.6	15342.6	15342.6	15342.6	15342.6	15342.6	15342.6	15342.6
2.5°	15443.0	15353.8	15272.9	15286.9	15114.0	15063.8	14871.5	14971.8	14874.2	14787.8	14868.7
5°	15468.1	15359.4	15211.6	15069.4	14673.5	14489.5	14258.1	14316.6	14185.6	14082.4	14171.7
7.5°	15540.6	15406.8	15178.1	14773.9	14302.7	14010.0	13747.9	14004.4	13973.7	13895.6	13987.6
10°	15574.0	15459.7	15066.6	14592.7	13934.7	13750.7	13513.7	13510.9	13519.3	13533.2	13625.2
12.5°	15663.3	15490.4	14868.7	14316.6	13706.1	13332.5	13159.6	13299.0	13048.1	12900.3	12964.4
15°	15875.2	15560.1	14734.8	13929.1	13352.0	13042.5	12490.5	12537.9	12484.9	12339.9	12404.0
17.5°	16293.4	15755.3	14729.3	13683.7	12900.3	12395.7	11913.3	11684.7	11612.2	11623.4	11679.1
20°	16806.4	16101.0	14740.4	13368.7	12429.1	11843.6	11099.2	10940.3	10700.5	10706.1	10720.1
22.5°	16480.2	16499.7	14746.0	13009.0	11840.8	11107.6	10318.6	10006.3	9822.3	9774.9	9844.6
25°	17364.0	17274.8	14832.4	12816.7	11221.9	10237.7	9412.5	9013.8	8737.7	8715.4	8793.5
27.5°	18540.5	18378.8	15278.5	12401.2	10566.7	9195.0	8300.0	7998.9	7761.9	7678.3	7734.1
30°	19970.8	19781.2	15894.7	12077.8	9682.9	8074.2	7307.5	7101.2	6867.0	6713.6	6727.6
32.5°	21465.2	21060.9	16527.6	11804.6	8776.8	7092.8	6437.6	6253.6	5977.6	5779.6	5827.0
35°	22970.7	22396.4	17232.9	11322.3	7669.9	6228.5	5698.8	5450.6	5224.8	5046.4	5015.7
37.5°	21780.2	23957.7	17916.0	10873.4	6802.8	5570.5	4971.1	4795.4	4661.6	4522.2	4519.4
40°	21877.8	22376.9	18320.3	10078.8	5835.4	4895.8	4293.6	4354.9	4410.7	4304.7	4304.7
42.5°	22845.3	22134.3	18158.6	9024.9	5116.1	4221.1	3945.1	4193.2	4368.9	4293.6	4290.8
45°	24208.6	23285.8	18434.6	7837.2	4416.3	3805.7	3847.5	4151.4	4380.0	4366.1	4360.5
47.5°	25655.6	24596.2	17904.9	6426.5	3933.9	3677.4	3847.5	4090.1	4363.3	4427.4	4413.5
49°	26400.0	25114.8	17693.0	5604.0	3741.6	3660.7	3853.1	4039.9	4332.6	4430.2	4416.3
50°	26854.5	25393.6	17419.7	5135.6	3638.4	3663.5	3864.2	4009.2	4304.7	4413.5	4405.1
52.5°	27877.7	25817.3	16064.7	4321.5	3471.1	3671.9	3936.7	3978.5	4201.6	4318.7	4380.0
55°	26835.0	26784.8	14336.2	3947.9	3381.9	3652.3	3967.4	4006.4	4115.2	4179.3	4226.7
57.5°	26673.3	27205.8	12158.7	3747.1	3303.8	3624.5	3931.2	4003.6	4067.8	4056.6	4037.1
60°	27186.3	27573.8	9914.3	3549.2	3214.6	3579.9	3811.3	3917.2	3936.7	3908.8	3864.2
62.5°	27267.1	27674.2	7619.7	3348.4	3117.0	3471.1	3635.6	3741.6	3741.6	3671.9	3655.1
65°	26890.7	27046.9	5615.1	3117.0	2999.9	3345.7	3429.3	3507.4	3543.6	3451.6	3457.2
67.5°	25811.8	24908.4	4262.9	2841.0	2857.8	3172.8	3231.4	3284.3	3292.7	3239.7	3234.1
70°	23642.7	22516.3	3047.3	2422.8	2598.5	2899.6	2988.8	3069.6	3041.8	2949.8	2935.8
72.5°	20372.3	19371.4	2071.5	1940.5	2286.2	2637.5	2693.3	2696.0	2640.3	2707.2	2754.6
75°	17525.7	15130.7	1544.6	1547.4	1831.7	2275.0	2447.9	2461.8	2486.9	2855.0	2930.2
77.5°	13926.3	9858.5	1316.0	1221.2	1405.2	1893.1	2166.3	2266.7	3008.3	3262.0	3228.6
80°	8553.7	5919.0	1020.4	967.5	1143.1	1455.4	1862.4	2316.9	3069.6	2885.6	2788.1
82.5°	4006.4	2701.6	736.0	741.6	850.4	1062.2	1472.1	2696.0	2651.4	2188.6	2160.7
85°	1550.2	934.0	446.1	504.6	571.6	719.3	1129.2	2659.8	2060.4	1854.1	1717.4
87.5°	398.7	181.2	195.2	206.3	253.7	379.2	616.2	1394.0	1084.6	950.7	934.0
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)