

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: P579462

Luminaire Tested: **CTN-CA8-330-730-U-T5-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579462
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-330-730-U-T5-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38801 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

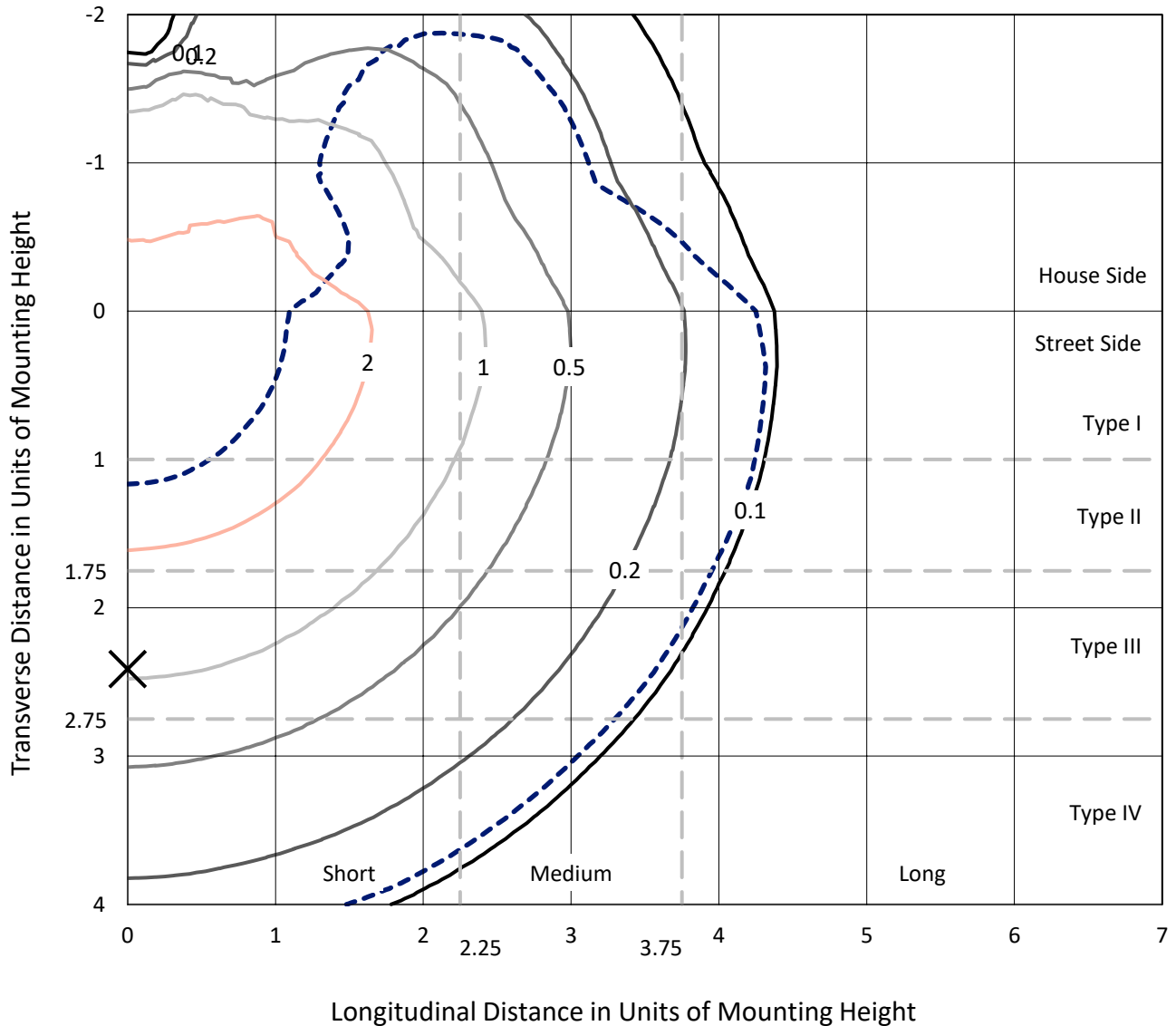
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P579462
 CATALOG NUMBER: CTN-CA8-330-730-U-T5-HSS-HM-EX90

Iso-Footcandle Lines of Horizontal Illumination

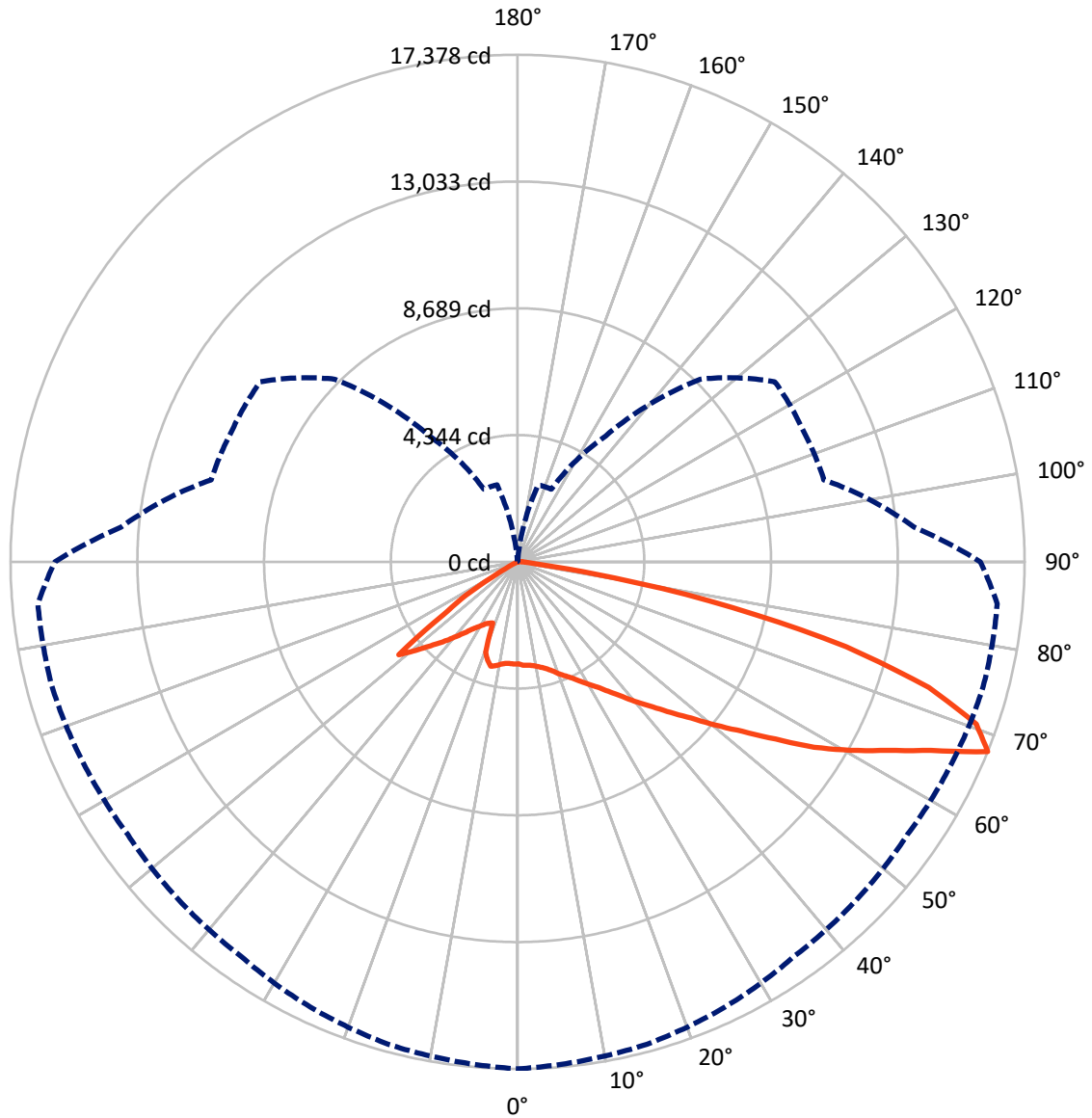
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.9 fc
 Type IV - Short - N/A

REPORT NUMBER: P579462
CATALOG NUMBER: CTN-CA8-330-730-U-T5-HSS-HM-EX90

Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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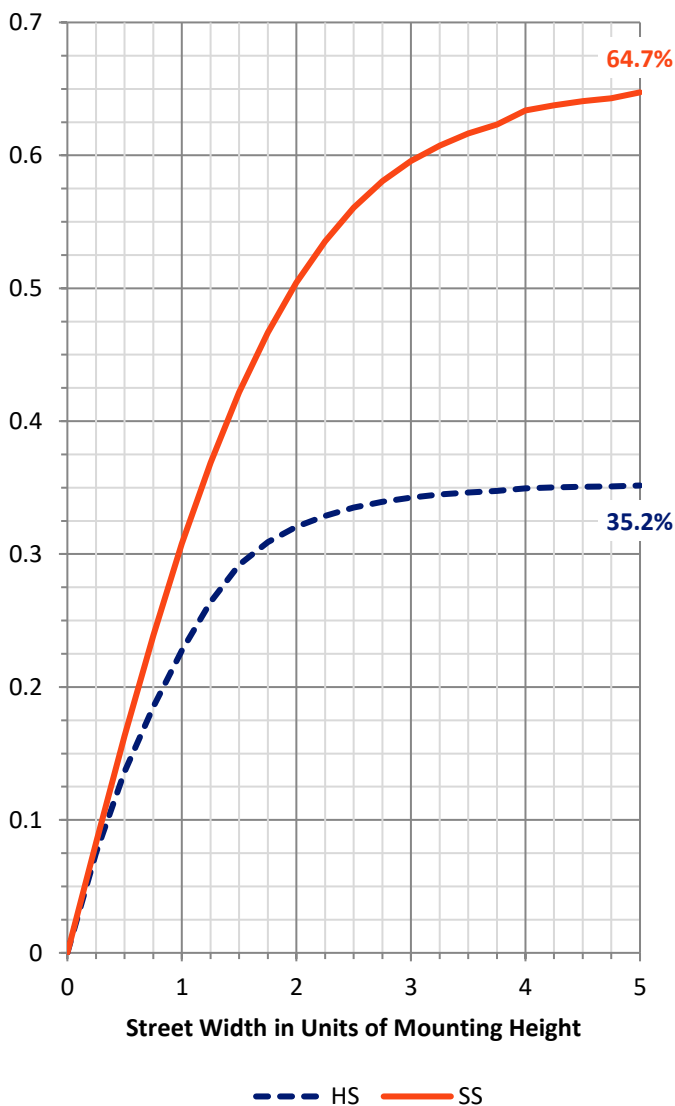
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13657.9	0.8	13658.7
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	25114.9	27.4	25142.3
	% Fixture	64.7	0.1	64.8
Total	Lumens	38772.8	28.2	38801.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	336.4	0.9
10°-20°	1045.0	2.7
20°-30°	1811.8	4.7
30°-40°	2972.9	7.7
40°-50°	4958.8	12.8
50°-60°	8025.1	20.7
60°-70°	11077.3	28.5
70°-80°	7991.8	20.6
80°-90°	553.9	1.4
90°-100°	24.0	0.1
100°-110°	4.0	0.0
110°-120°	0.1	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°	38772.8	99.9
0°-180°	38801.0	100.0

Coefficient of Utilization

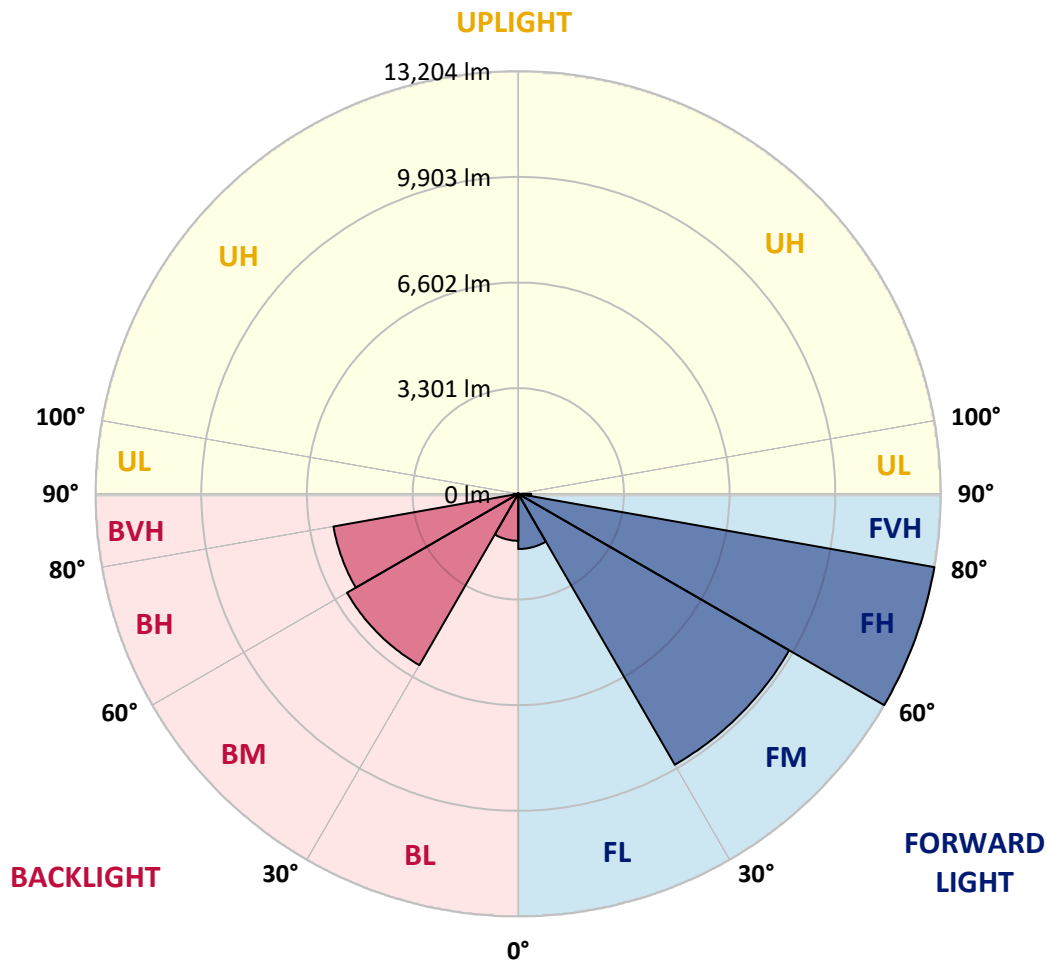


REPORT NUMBER: P579462
 CATALOG NUMBER: CTN-CA8-330-730-U-T5-HSS-HM-EX90

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1725.4	4.4			
FM (30°-60°)	9776.9	25.2			
FH (60°-80°)	13204.5	34.0			G5
FVH (80°-90°)	408.1	1.1			G3/500
BL (0°-30°)	1467.7	3.8	B3/2500		
BM (30°-60°)	6179.9	15.9	B4/8500		
BH (60°-80°)	5864.5	15.1	B5		G5
BVH (80°-90°)	145.8	0.4			G2/225
UL (90°-100°)	24.0	0.1		U2/50	
UH (100°-180°)	4.2	0.0		U1/10	

BUG Rating: B5-U2-G5
 Type IV Short





REPORT NUMBER: P579462

CATALOG NUMBER: CTN-CA8-330-730-U-T5-HSS-HM-EX90

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3496.6	3496.6	3496.6	3496.6	3496.6	3496.6	3496.6	3496.6	3496.6	3496.6	3496.6
2.5°	3550.1	3529.3	3530.8	3551.6	3495.2	3516.0	3492.2	3513.0	3502.6	3510.0	3518.9
5°	3560.5	3535.3	3538.2	3563.5	3518.9	3535.3	3507.0	3518.9	3510.0	3518.9	3520.4
7.5°	3587.3	3562.0	3563.5	3582.8	3536.8	3548.6	3521.9	3527.8	3513.0	3529.3	3524.9
10°	3643.7	3619.9	3611.0	3627.4	3587.3	3588.7	3557.6	3563.5	3541.2	3563.5	3554.6
12.5°	3719.5	3686.8	3689.8	3698.7	3649.6	3652.6	3615.5	3624.4	3587.3	3618.5	3608.1
15°	3811.6	3771.4	3775.9	3790.8	3743.2	3738.8	3704.6	3704.6	3671.9	3695.7	3685.3
17.5°	3939.3	3894.7	3891.8	3902.2	3863.5	3863.5	3824.9	3820.5	3787.8	3807.1	3804.1
20°	4105.7	4055.2	4046.2	4065.6	4016.5	4022.5	3973.5	3969.0	3933.4	3945.2	3946.7
22.5°	4255.7	4215.6	4214.1	4243.8	4185.9	4193.3	4148.7	4136.9	4107.2	4123.5	4127.9
25°	4428.0	4422.1	4417.6	4428.0	4370.1	4370.1	4338.9	4328.5	4309.2	4321.0	4332.9
27.5°	4644.9	4641.9	4630.0	4631.5	4582.5	4589.9	4555.7	4549.8	4540.9	4539.4	4533.5
30°	4884.0	4870.7	4854.3	4864.7	4842.4	4849.9	4820.1	4800.8	4797.9	4799.4	4790.4
32.5°	5149.9	5132.1	5121.7	5139.5	5148.4	5169.2	5167.7	5114.3	5114.3	5136.5	5096.4
35°	5479.7	5451.4	5460.4	5484.1	5501.9	5555.4	5546.5	5509.4	5521.3	5531.7	5484.1
37.5°	5867.4	5848.0	5888.2	5932.7	5934.2	6010.0	5992.1	6001.0	5999.6	5986.2	5955.0
40°	6332.3	6301.1	6342.7	6376.9	6356.1	6446.7	6443.7	6483.8	6510.5	6556.6	6538.8
42.5°	6794.3	6770.5	6810.6	6884.9	6873.0	6977.0	6991.8	7054.2	7091.3	7162.6	7121.0
45°	7363.2	7349.8	7386.9	7444.9	7485.0	7623.1	7678.1	7704.8	7798.4	7884.5	7788.0
47.5°	8000.4	8018.2	8012.3	8117.8	8206.9	8374.7	8397.0	8483.2	8564.9	8659.9	8566.3
50°	8793.6	8763.9	8790.6	8891.6	9037.2	9159.0	9273.4	9396.7	9476.9	9574.9	9402.6
52.5°	9647.7	9673.0	9732.4	9888.4	9995.3	10139.4	10243.4	10390.4	10469.2	10553.8	10329.5
55°	10724.6	10745.4	10810.8	10971.2	11047.0	11210.4	11281.7	11428.7	11504.5	11541.6	11254.9
57.5°	11987.2	11917.4	11970.9	12054.1	12171.4	12348.2	12367.5	12505.6	12505.6	12553.2	12187.8
60°	13114.7	13067.1	13123.6	13242.4	13288.5	13448.9	13432.5	13545.4	13575.1	13539.5	13102.8
62.5°	14225.7	14234.7	14307.4	14346.1	14328.2	14423.3	14461.9	14580.8	14531.7	14543.6	14040.1
65°	15574.5	15595.3	15587.9	15516.6	15356.1	15543.3	15532.9	15721.6	15733.4	15840.4	15255.1
67.5°	17377.8	17285.7	17117.8	16831.1	16513.3	16403.4	16306.8	16400.4	16520.7	16501.4	15859.7
70°	16676.7	16526.6	16439.0	16189.5	15764.6	15544.8	15344.3	15360.6	15535.9	15552.2	14895.7
72.5°	14742.7	14666.9	14329.7	14111.4	13820.2	13650.9	13408.8	13463.7	13692.5	13731.1	13208.2
75°	11629.3	11559.4	11254.9	11183.6	11039.5	11122.7	11063.3	11085.6	11269.8	11100.4	10787.0
77.5°	7526.6	7542.9	7495.4	7657.3	7651.3	7655.8	7872.7	7894.9	8074.7	7970.7	7667.7
80°	3374.8	3423.9	3539.7	3774.4	3631.8	3709.1	3792.2	3767.0	3948.2	3538.2	3685.3
82.5°	683.3	707.1	666.9	696.7	650.6	674.4	708.5	656.6	650.6	603.1	560.0
85°	352.0	356.5	355.0	347.6	306.0	282.2	271.8	228.8	206.5	202.0	187.2
87.5°	228.8	231.7	224.3	222.8	196.1	179.7	160.4	135.2	112.9	78.7	65.4
90°	139.6	139.6	132.2	124.8	111.4	99.5	80.2	57.9	34.2	13.4	7.4
92.5°	93.6	93.6	90.6	86.2	77.2	66.8	52.0	34.2	16.3	5.9	3.0
95°	59.4	59.4	57.9	56.4	50.5	43.1	32.7	20.8	10.4	4.5	1.5
97.5°	38.6	38.6	38.6	37.1	34.2	29.7	22.3	13.4	7.4	3.0	1.5
100°	23.8	25.3	23.8	23.8	22.3	19.3	14.9	8.9	5.9	3.0	1.5
102.5°	13.4	13.4	14.9	14.9	13.4	11.9	8.9	7.4	4.5	3.0	1.5
105°	5.9	5.9	7.4	7.4	7.4	5.9	5.9	4.5	3.0	3.0	1.5
107.5°	1.5	1.5	1.5	3.0	4.5	4.5	4.5	4.5	3.0	1.5	1.5
110°	0.0	0.0	0.0	1.5	1.5	3.0	3.0	3.0	3.0	1.5	1.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P579462

CATALOG NUMBER: CTN-CA8-330-730-U-T5-HSS-HM-EX90

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3496.6	3496.6	3496.6	3496.6	3496.6	3496.6	3496.6	3496.6	3496.6	3496.6
2.5°	3510.0	3492.2	3505.6	3483.3	3477.3	3458.0	3495.2	3501.1	3498.1	3504.1
5°	3513.0	3490.7	3507.0	3484.8	3483.3	3462.5	3501.1	3502.6	3492.2	3496.6
7.5°	3521.9	3501.1	3513.0	3487.7	3490.7	3465.5	3510.0	3508.5	3502.6	3513.0
10°	3554.6	3530.8	3535.3	3508.5	3516.0	3489.2	3544.2	3547.2	3541.2	3560.5
12.5°	3611.0	3578.3	3588.7	3557.6	3563.5	3536.8	3603.6	3608.1	3608.1	3639.2
15°	3688.3	3654.1	3676.4	3636.3	3637.8	3597.7	3648.2	3648.2	3654.1	3697.2
17.5°	3801.2	3759.6	3789.3	3752.1	3520.4	3432.8	3605.1	3710.5	3535.3	3520.4
20°	3940.8	3921.5	3937.8	3876.9	3501.1	3100.0	2788.1	2771.8	3117.9	3290.2
22.5°	4111.6	4092.3	4099.7	4022.5	3125.3	2843.1	2838.6	2808.9	2376.7	2257.8
25°	4312.1	4301.7	4285.4	3637.8	3230.8	2960.4	2924.8	2537.1	2289.0	2311.3
27.5°	4527.5	4496.3	3945.2	3778.9	3392.7	3077.8	2875.7	2369.2	2360.3	2381.1
30°	4768.2	4603.3	4038.8	3982.4	3581.3	3223.3	2502.9	2473.2	2473.2	2505.9
32.5°	5074.2	4298.8	4298.8	4269.1	3814.5	2829.7	2635.1	2617.3	2638.1	2651.5
35°	5028.1	4624.1	4671.6	4658.2	4130.9	2881.7	2847.5	2817.8	2822.3	2822.3
37.5°	5043.0	5059.3	5115.7	5057.8	3603.6	3107.5	3052.5	3046.6	3051.0	3061.4
40°	5509.4	5518.3	5539.1	5411.3	3872.5	3370.4	3294.6	3279.8	3294.6	3316.9
42.5°	6011.4	6036.7	6060.5	4921.2	4248.3	3669.0	3593.2	3565.0	3591.7	3615.5
45°	6605.6	6644.2	6280.3	5356.4	4673.1	4009.1	3928.9	3894.7	3911.1	3931.9
47.5°	7274.0	7334.9	5922.3	5910.4	5172.2	4411.7	4319.6	4254.2	4279.5	4278.0
50°	8028.6	7009.6	6543.2	6535.8	5729.2	4860.3	4765.2	4705.8	4725.1	4710.2
52.5°	8844.1	7201.3	7216.1	7214.6	6311.5	5343.0	5255.4	5181.1	5028.1	5169.2
55°	9678.9	7863.7	7920.2	7911.3	6922.0	5842.1	5748.5	5678.7	3710.5	3134.2
57.5°	10509.3	8555.9	8573.8	8594.6	7554.8	6323.4	5911.9	5430.6	2116.7	2106.3
60°	11329.2	9215.5	9251.1	9263.0	7896.4	5234.6	2416.8	2461.3	640.2	765.0
62.5°	12178.9	9866.1	9898.8	9888.4	8236.6	4867.7	2538.6	2488.1	59.4	55.0
65°	13263.2	10681.6	10635.5	10601.4	8772.8	5194.5	2727.2	2713.8	19.3	13.4
67.5°	13643.5	10867.2	10773.7	10761.8	8850.1	5264.3	2742.1	2731.7	19.3	13.4
70°	12781.9	10161.7	10001.2	10005.7	8235.1	4924.1	2557.9	2543.0	17.8	13.4
72.5°	11194.0	8974.8	8908.0	8554.5	7131.4	4331.4	2268.2	2211.8	17.8	11.9
75°	9190.2	7250.3	7101.7	6705.1	5675.7	3443.2	1781.0	1708.2	16.3	10.4
77.5°	6379.8	5084.5	4800.8	4396.8	3796.7	2283.1	1197.2	1103.7	14.9	10.4
80°	2892.1	2087.0	2097.4	1607.2	1287.8	773.9	380.3	344.6	13.4	8.9
82.5°	503.6	371.4	349.1	337.2	280.7	190.1	115.9	99.5	11.9	5.9
85°	175.3	141.1	156.0	184.2	163.4	114.4	71.3	68.3	7.4	3.0
87.5°	59.4	62.4	72.8	87.6	77.2	44.6	26.7	19.3	1.5	0.0
90°	5.9	7.4	7.4	7.4	4.5	0.0	0.0	0.0	0.0	0.0
92.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P579462
 CATALOG NUMBER: CTN-CA8-330-730-U-T5-HSS-HM-EX90

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)