

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: P579419

Luminaire Tested: **CTN-CA8-480-722-U-T5-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579419
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-480-722-U-T5-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 2200K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35718 lumens
Efficiency: N/A
Efficacy: 74.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G5

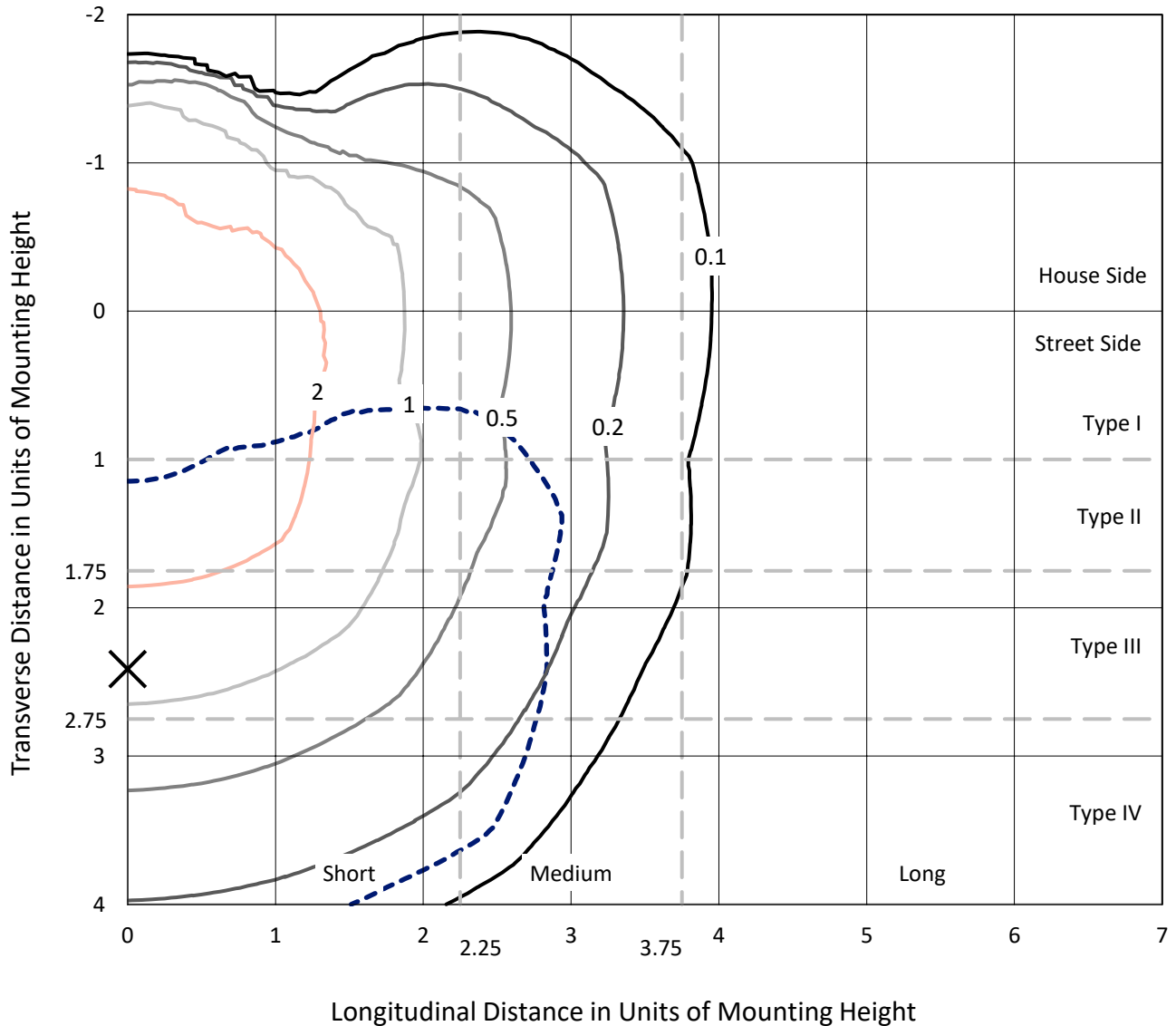
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P579419
 CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX180

Iso-Footcandle Lines of Horizontal Illumination

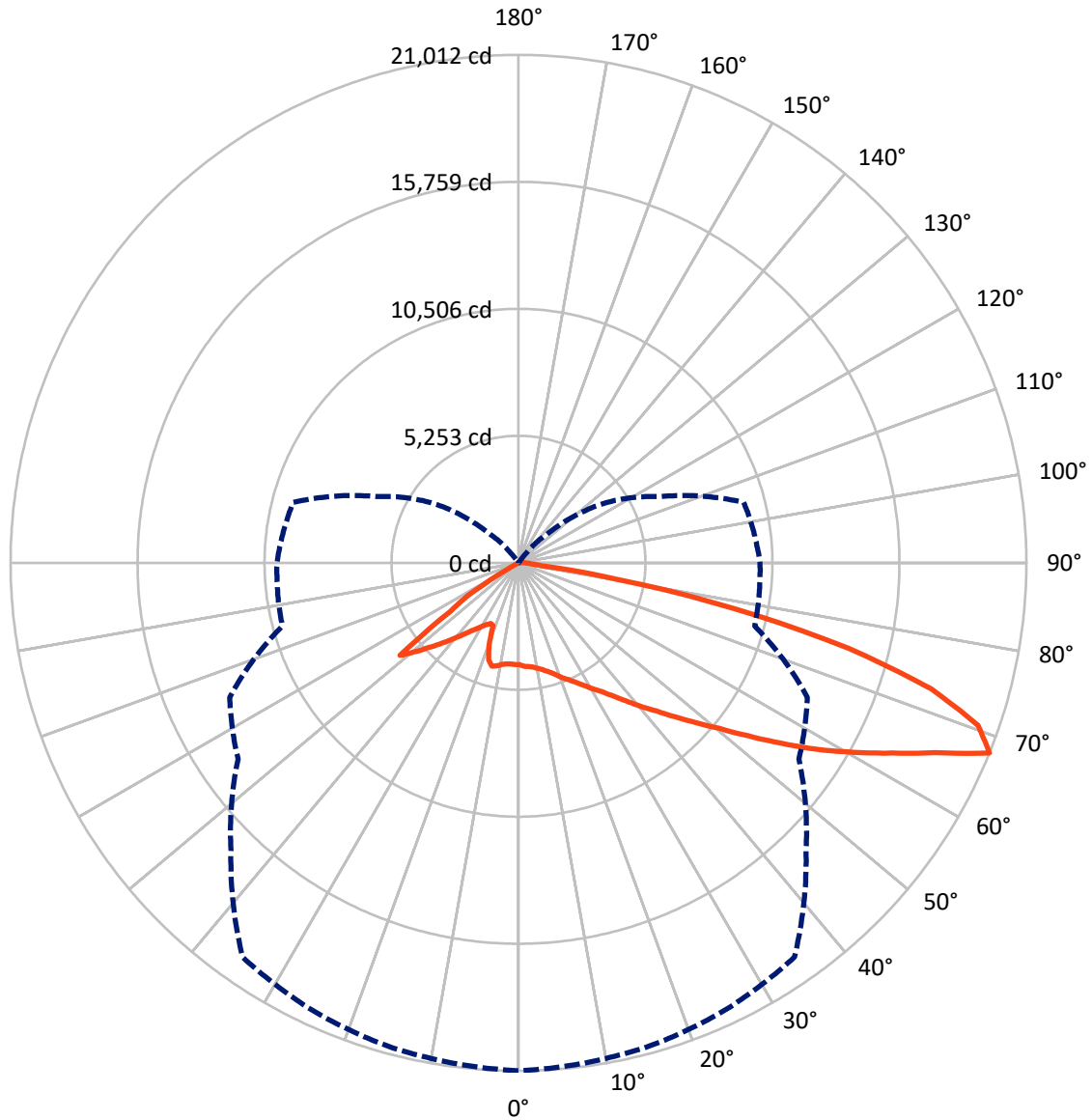
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P579419
CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX180

Luminous Intensity Polar Plot



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

REPORT NUMBER: P579419
 CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX180

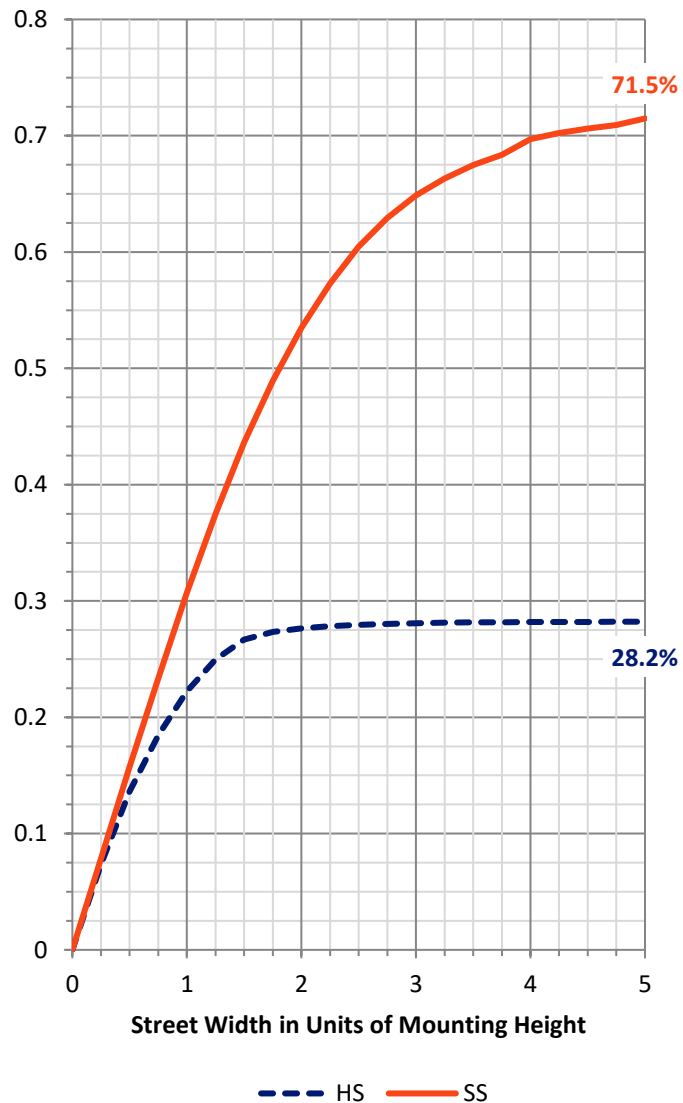
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10123.1	0.2	10123.3
	% Fixture	28.3	0.0	28.3
Street Side	Lumens	25549.2	45.5	25594.7
	% Fixture	71.5	0.1	71.7
Total	Lumens	35672.4	45.6	35718.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	405.7	1.1
10°-20°	1248.9	3.5
20°-30°	2067.9	5.8
30°-40°	3255.3	9.1
40°-50°	5094.5	14.3
50°-60°	7355.6	20.6
60°-70°	9112.4	25.5
70°-80°	6636.3	18.6
80°-90°	495.8	1.4
90°-100°	38.9	0.1
100°-110°	6.5	0.0
110°-120°	0.2	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°	35672.4	99.9
0°-180°	35718.0	100.0

Coefficient of Utilization



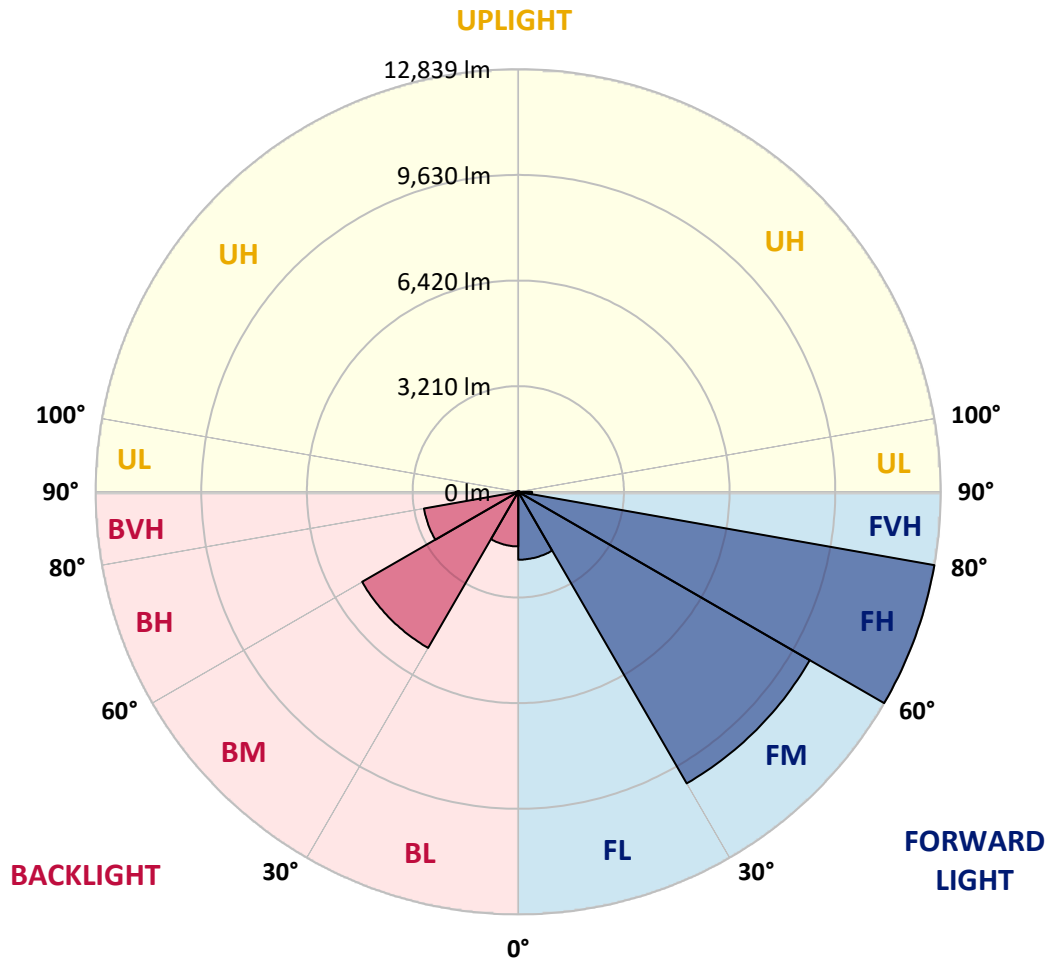
REPORT NUMBER: P579419
 CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX180

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2063.0	5.8			
FM (30°-60°)	10228.6	28.6			
FH (60°-80°)	12839.4	35.9			G5
FVH (80°-90°)	418.2	1.2			G3/500
BL (0°-30°)	1659.5	4.6	B3/2500		
BM (30°-60°)	5476.8	15.3	B4/8500		
BH (60°-80°)	2909.3	8.1	B4/5000		G4/5000
BVH (80°-90°)	77.6	0.2			G1/100
UL (90°-100°)	38.9	0.1		U2/50	
UH (100°-180°)	6.7	0.0		U1/10	

BUG Rating: B4-U2-G5

Type IV Short





REPORT NUMBER: P579419

CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX180

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4206.7	4206.7	4206.7	4206.7	4206.7	4206.7	4206.7	4206.7	4206.7	4206.7	4206.7
2.5°	4283.6	4260.4	4260.4	4285.4	4215.6	4237.1	4208.5	4233.5	4219.2	4226.4	4235.3
5°	4308.7	4281.8	4283.6	4314.1	4251.4	4269.3	4235.3	4247.8	4235.3	4240.7	4240.7
7.5°	4355.2	4332.0	4332.0	4349.9	4287.2	4292.6	4262.2	4262.2	4246.0	4258.6	4247.8
10°	4442.9	4417.9	4405.4	4414.3	4358.8	4351.7	4310.5	4310.5	4285.4	4305.1	4289.0
12.5°	4548.6	4512.8	4509.2	4511.0	4448.3	4435.8	4389.2	4391.0	4344.5	4371.3	4351.7
15°	4675.7	4630.9	4627.3	4634.5	4568.3	4545.0	4493.1	4493.1	4441.2	4455.5	4428.6
17.5°	4838.6	4786.6	4777.7	4790.2	4724.0	4702.5	4641.6	4630.9	4573.6	4562.9	4539.6
20°	5053.4	4994.3	4976.4	5003.2	4919.1	4899.4	4826.0	4802.8	4725.8	4598.7	4432.2
22.5°	5246.7	5200.1	5189.4	5207.3	5130.3	5110.6	5039.0	4990.7	4804.5	4548.6	4394.6
25°	5466.9	5449.0	5443.6	5432.9	5363.0	5329.0	5261.0	5193.0	4770.5	4419.7	4416.1
27.5°	5739.0	5730.0	5704.9	5696.0	5619.0	5597.5	5508.0	5069.5	4648.8	4623.7	4609.4
30°	6036.1	6018.2	5993.1	5994.9	5943.0	5903.6	5690.6	4960.3	4883.3	4883.3	4845.7
32.5°	6365.5	6345.8	6320.7	6326.1	6304.6	6270.6	5629.8	5248.5	5189.4	5205.5	5159.0
35°	6773.6	6741.4	6732.4	6753.9	6755.7	6535.5	5737.2	5640.5	5594.0	5583.2	5407.8
37.5°	7249.8	7222.9	7255.1	7305.3	7248.0	6603.6	6165.0	6134.6	6088.0	5828.5	5413.2
40°	7820.8	7772.5	7811.9	7844.1	7806.5	7008.1	6614.3	6625.0	6583.9	5814.1	5354.1
42.5°	8386.5	8339.9	8373.9	8454.5	8440.2	7509.3	7162.1	7185.3	6770.0	5848.2	5812.4
45°	9086.4	9070.3	9059.5	9125.8	9181.3	8109.0	7811.9	7810.1	6637.6	6388.8	6356.5
47.5°	9879.4	9857.9	9863.3	9947.4	10031.5	8825.0	8579.8	7860.2	6979.5	7004.5	6975.9
50°	10763.7	10740.4	10810.2	10931.9	10974.9	9628.8	9328.0	7724.1	7691.9	7718.8	7670.4
52.5°	11886.1	11834.1	11941.5	12072.2	12127.7	10579.3	9369.2	8527.9	8474.2	8479.6	8325.6
55°	13162.4	13121.2	13217.9	13364.7	13447.0	11640.8	10224.9	9310.1	9277.9	8365.0	7532.6
57.5°	14549.7	14503.1	14632.0	14675.0	14696.5	12738.1	11085.9	10158.6	8667.5	7638.2	7591.7
60°	15910.1	15860.0	16022.9	16030.1	16092.7	13833.6	11904.0	10976.7	8350.7	8214.6	8175.2
62.5°	17338.6	17276.0	17419.2	17413.8	17290.3	14836.1	12714.9	11762.5	8916.3	8808.9	8748.1
65°	18924.6	18878.1	18978.3	18817.2	18572.0	15872.5	13556.2	12618.2	9575.1	9555.4	9541.1
67.5°	21011.8	20920.5	20718.3	20374.6	19905.6	16823.1	14157.7	13182.1	10110.3	10019.0	9990.4
70°	20172.3	20064.9	19910.9	19533.2	19055.3	15929.8	13191.0	12330.0	9453.4	9456.9	9388.9
72.5°	17861.3	17675.1	17530.1	17000.3	16737.1	13912.4	11494.0	10701.0	8177.0	8329.2	8297.0
75°	14089.6	13899.9	13661.8	13454.2	13425.5	11284.6	9267.2	8696.2	6519.4	6630.4	6711.0
77.5°	9132.9	9063.1	9363.8	9166.9	9344.2	7770.7	6619.7	6129.2	4493.1	4774.1	4736.5
80°	4179.8	4099.3	4582.6	4446.5	4512.8	3816.4	3234.7	3107.6	2033.5	2047.8	2090.8
82.5°	945.2	912.9	946.9	870.0	848.5	717.8	631.9	572.8	359.8	381.3	401.0
85°	517.3	517.3	510.2	474.4	406.3	334.7	264.9	204.1	111.0	121.7	119.9
87.5°	363.4	354.4	352.6	315.1	270.3	229.1	182.6	130.7	62.7	43.0	39.4
90°	248.8	245.2	232.7	209.4	180.8	148.6	111.0	64.4	26.9	12.5	9.0
92.5°	180.8	177.2	168.3	148.6	123.5	100.2	73.4	43.0	21.5	9.0	1.8
95°	119.9	118.1	112.8	96.7	80.6	64.4	46.5	26.9	17.9	7.2	1.8
97.5°	82.3	80.6	75.2	64.4	51.9	41.2	28.6	19.7	14.3	5.4	1.8
100°	55.5	53.7	50.1	41.2	32.2	25.1	17.9	14.3	10.7	5.4	1.8
102.5°	35.8	34.0	30.4	25.1	17.9	14.3	12.5	10.7	7.2	3.6	1.8
105°	21.5	19.7	16.1	12.5	10.7	9.0	9.0	7.2	5.4	1.8	1.8
107.5°	10.7	9.0	7.2	7.2	7.2	5.4	5.4	5.4	3.6	1.8	0.0
110°	1.8	1.8	3.6	3.6	3.6	3.6	3.6	3.6	3.6	1.8	0.0



REPORT NUMBER: P579419
 CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX180

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: P579419

CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX180

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4206.7	4206.7	4206.7	4206.7	4206.7	4206.7	4206.7	4206.7	4206.7	4206.7
2.5°	4226.4	4197.7	4213.8	4188.8	4183.4	4156.5	4199.5	4204.9	4201.3	4208.5
5°	4231.7	4201.3	4219.2	4188.8	4188.8	4160.1	4201.3	4201.3	4190.6	4194.1
7.5°	4246.0	4215.6	4228.1	4194.1	4195.9	4161.9	4212.0	4206.7	4197.7	4210.2
10°	4287.2	4253.2	4251.4	4219.2	4226.4	4190.6	4253.2	4253.2	4244.3	4267.5
12.5°	4353.4	4303.3	4294.4	4255.0	4269.3	4238.9	4315.9	4319.4	4321.2	4358.8
15°	4423.3	4362.4	4371.3	4324.8	4319.4	4303.3	4373.1	4369.6	4367.8	4419.7
17.5°	4521.7	4235.3	4188.8	4156.5	4149.4	4110.0	4174.4	4298.0	4233.5	4197.7
20°	4366.0	4215.6	4031.2	3968.6	3956.1	3614.1	3343.8	3465.6	3630.3	3644.6
22.5°	4224.6	4170.9	4156.5	4058.1	3512.1	3397.5	3408.3	3363.5	2973.3	2803.2
25°	4400.0	4353.4	4292.6	3691.1	3562.2	3521.1	3508.5	3050.3	2742.4	2762.1
27.5°	4595.1	4543.2	4013.3	3700.1	3728.7	3671.4	3388.6	2846.2	2828.3	2862.3
30°	4838.6	4423.3	3916.7	3898.8	3925.6	3852.2	3010.9	2971.5	2966.1	3001.9
32.5°	5116.0	4265.7	4174.4	4174.4	4161.9	3368.9	3172.0	3145.2	3159.5	3197.1
35°	5012.2	4512.8	4502.0	4546.8	4246.0	3456.6	3429.8	3383.2	3394.0	3406.5
37.5°	4897.6	4919.1	4924.5	4901.2	3096.8	3707.2	3685.8	3676.8	3666.1	3669.6
40°	5323.7	5338.0	5332.6	5119.6	3342.1	3755.6	3975.7	3959.6	3957.8	3979.3
42.5°	5821.3	5860.7	5830.3	4516.3	3669.6	3157.7	4310.5	4301.5	4298.0	4342.7
45°	6381.6	6419.2	5780.1	4836.8	4018.7	3268.7	4333.8	4666.7	4693.6	4732.9
47.5°	6988.4	6981.3	5334.4	5329.0	4428.6	3576.6	3603.4	5103.5	5148.2	5162.6
50°	7686.6	6539.1	5841.0	5644.1	4892.3	3922.0	3820.0	4682.8	5670.9	5685.3
52.5°	7538.0	6469.3	6422.8	4951.3	5307.6	4303.3	4203.1	4176.2	5878.6	6224.1
55°	7026.0	7079.7	7013.5	5432.9	3891.6	4643.4	4580.8	4553.9	4373.1	3462.0
57.5°	7595.3	7611.4	7554.1	5875.0	3957.8	2894.5	4509.2	3868.3	2513.3	2500.7
60°	8186.0	8212.8	5626.2	4315.9	2536.5	968.4	230.9	243.4	694.5	610.4
62.5°	8749.9	8776.7	5955.6	3943.5	1602.1	71.6	46.5	32.2	35.8	35.8
65°	9485.6	9496.3	6374.4	4174.4	1664.8	17.9	5.4	0.0	0.0	0.0
67.5°	9866.9	9646.7	6480.0	4280.1	1709.5	10.7	3.6	0.0	0.0	0.0
70°	9290.5	9054.2	6032.5	4011.5	1593.2	9.0	1.8	0.0	0.0	0.0
72.5°	8186.0	8071.4	5415.0	3556.9	1410.6	5.4	1.8	0.0	0.0	0.0
75°	6784.4	6632.2	4489.5	2964.4	1167.1	3.6	0.0	0.0	0.0	0.0
77.5°	4826.0	4843.9	3129.0	2160.6	794.8	3.6	0.0	0.0	0.0	0.0
80°	2112.3	2160.6	1371.2	991.7	281.0	1.8	0.0	0.0	0.0	0.0
82.5°	402.8	370.5	179.0	141.4	35.8	0.0	0.0	0.0	0.0	0.0
85°	132.5	145.0	66.2	53.7	16.1	0.0	0.0	0.0	0.0	0.0
87.5°	46.5	59.1	19.7	16.1	3.6	0.0	0.0	0.0	0.0	0.0
90°	7.2	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P579419
 CATALOG NUMBER: CTN-CA8-480-722-U-T5-HSS-HM-EX180

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)