

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: P691398

Luminaire Tested: **CRTK2-C016-5TLD-U-T2-7050-RMARROA5**

Issue Date: 6/13/2023

Test Information

Test Method: LM-79-08
Report Number: P691398
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2301-903-7)
Test Lab: INNOVATION CENTER
Issue Date: 6/13/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CRTK2-C016-5TLD-U-T2-7050-RMARROA5
Description: CARETAKER AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 5000K LED WITH TYPE II OPTIC AND NEMA REFRACTOR
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5190 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.33' x H: 0.54')
IES Classification: Type I - Short
BUG Rating: B2 - U4 - G2

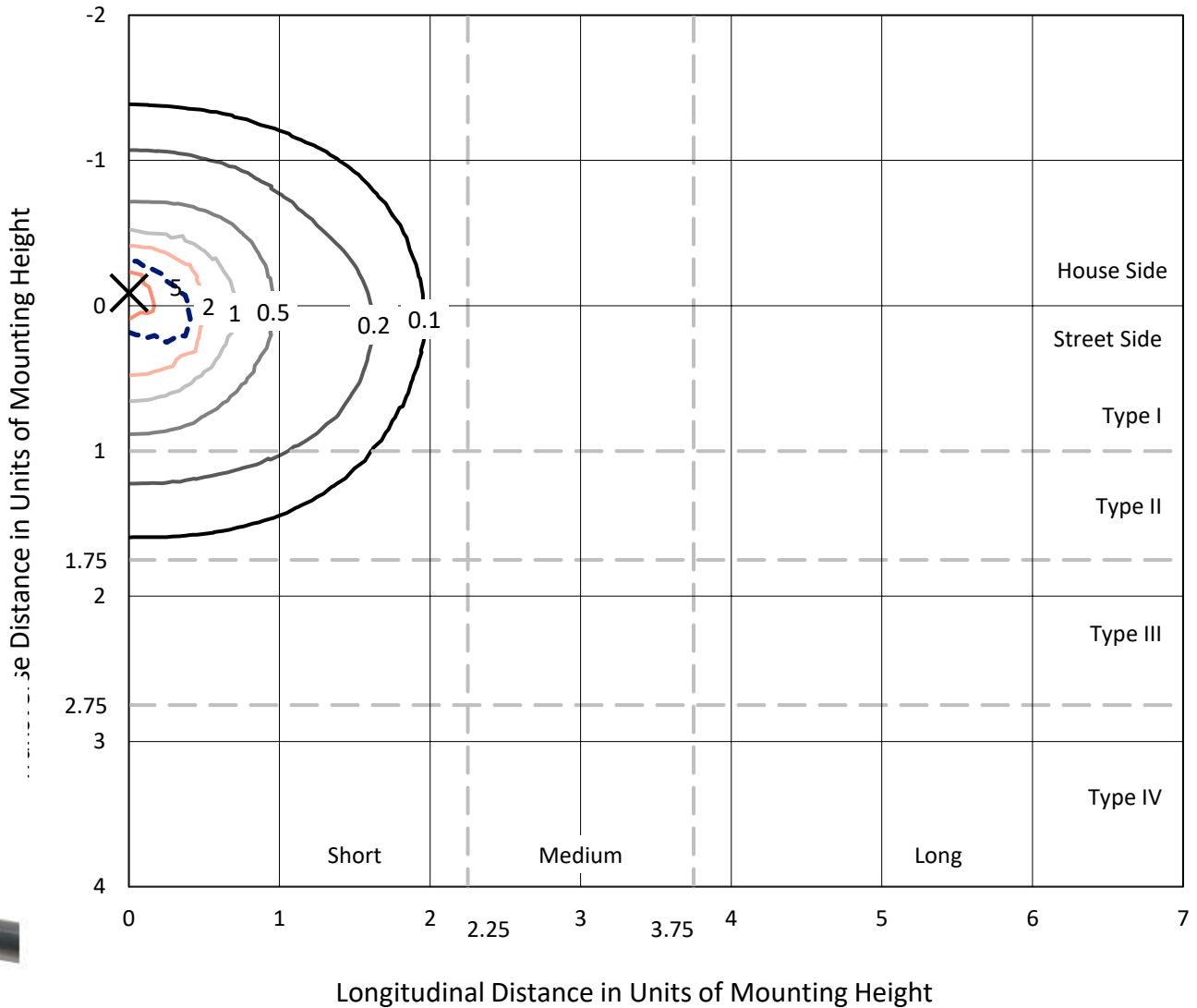
Input Watts (W): 42.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P691398
 CATALOG NUMBER: CRTK2-C016-5TLD-U-T2-7050-RMARROA5

Iso-Footcandle Lines of Horizontal Illumination

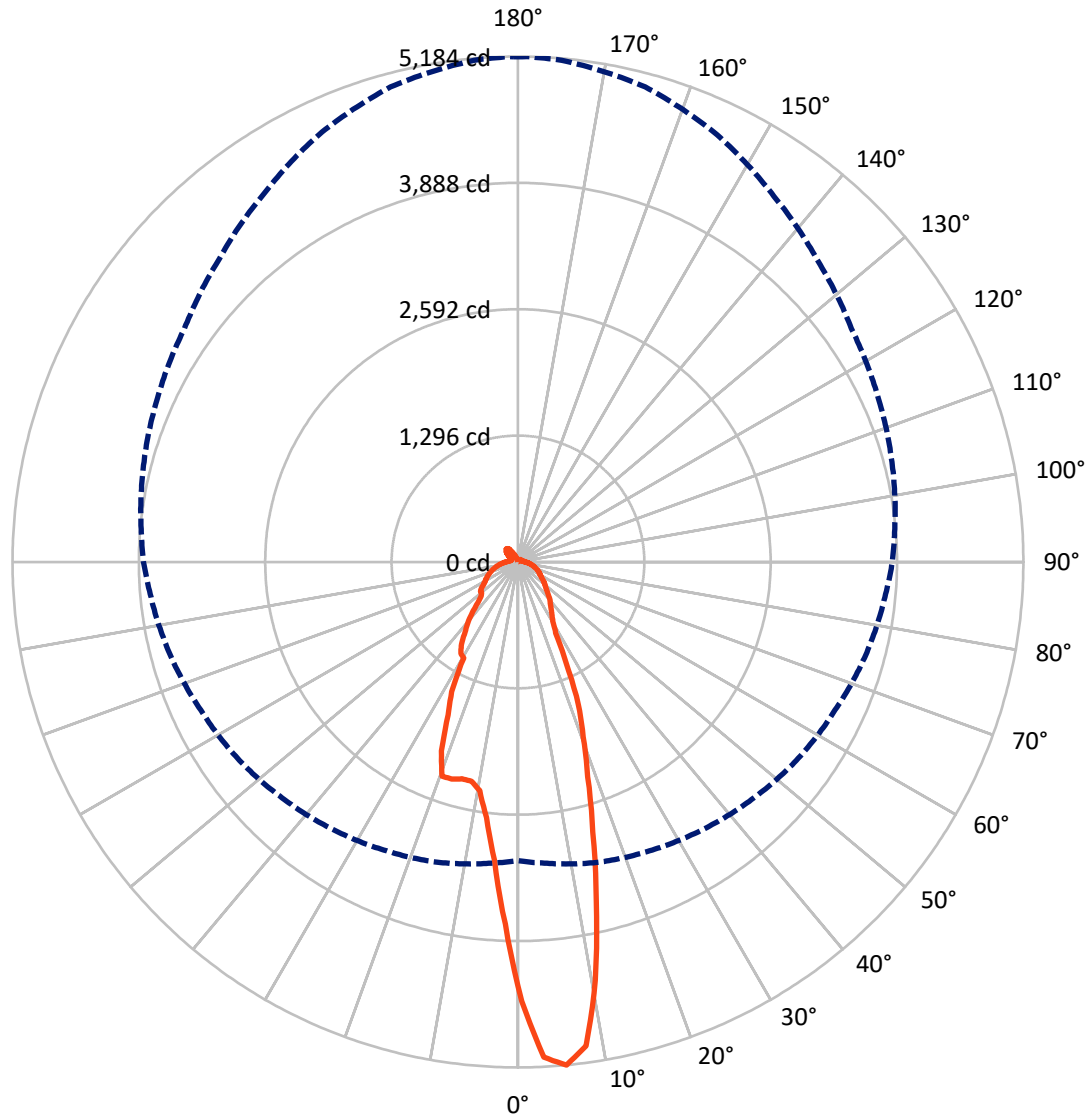
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
 Type I - Short - N/A

REPORT NUMBER: P691398
CATALOG NUMBER: CRTK2-C016-5TLD-U-T2-7050-RMARROA5

Luminous Intensity Polar Plot



— Vertical Plane Through 179-Deg Lateral - - - Horizontal Cone Through 5-Deg Vertical

REPORT NUMBER: P691398

CATALOG NUMBER: CRTK2-C016-5TLD-U-T2-7050-RMARROA5

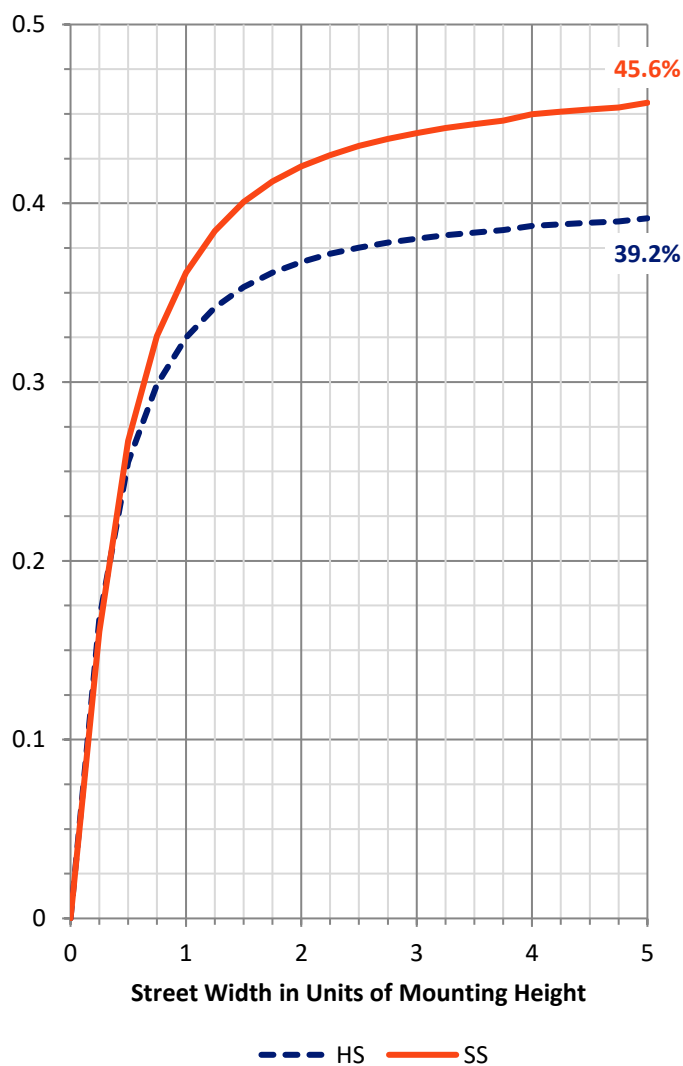
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2088.5	253.9	2342.5
	% Fixture	40.2	4.9	45.1
Street Side	Lumens	2424.1	423.4	2847.6
	% Fixture	46.7	8.2	54.9
Total	Lumens	4512.6	677.4	5190.0
	% Fixture	86.9	13.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.1	6.8
10°-20°	751.2	14.5
20°-30°	816.1	15.7
30°-40°	604.0	11.6
40°-50°	505.9	9.7
50°-60°	508.6	9.8
60°-70°	433.0	8.3
70°-80°	323.4	6.2
80°-90°	218.3	4.2
90°-100°	130.5	2.5
100°-110°	75.4	1.5
110°-120°	69.4	1.3
120°-130°	100.4	1.9
130°-140°	137.4	2.6
140°-150°	113.2	2.2
150°-160°	45.6	0.9
160°-170°	5.6	0.1
170°-180°	0.0	0.0
0°-90°	4512.6	86.9
0°-180°	5190.0	100.0

Coefficient of Utilization



REPORT NUMBER: P691398

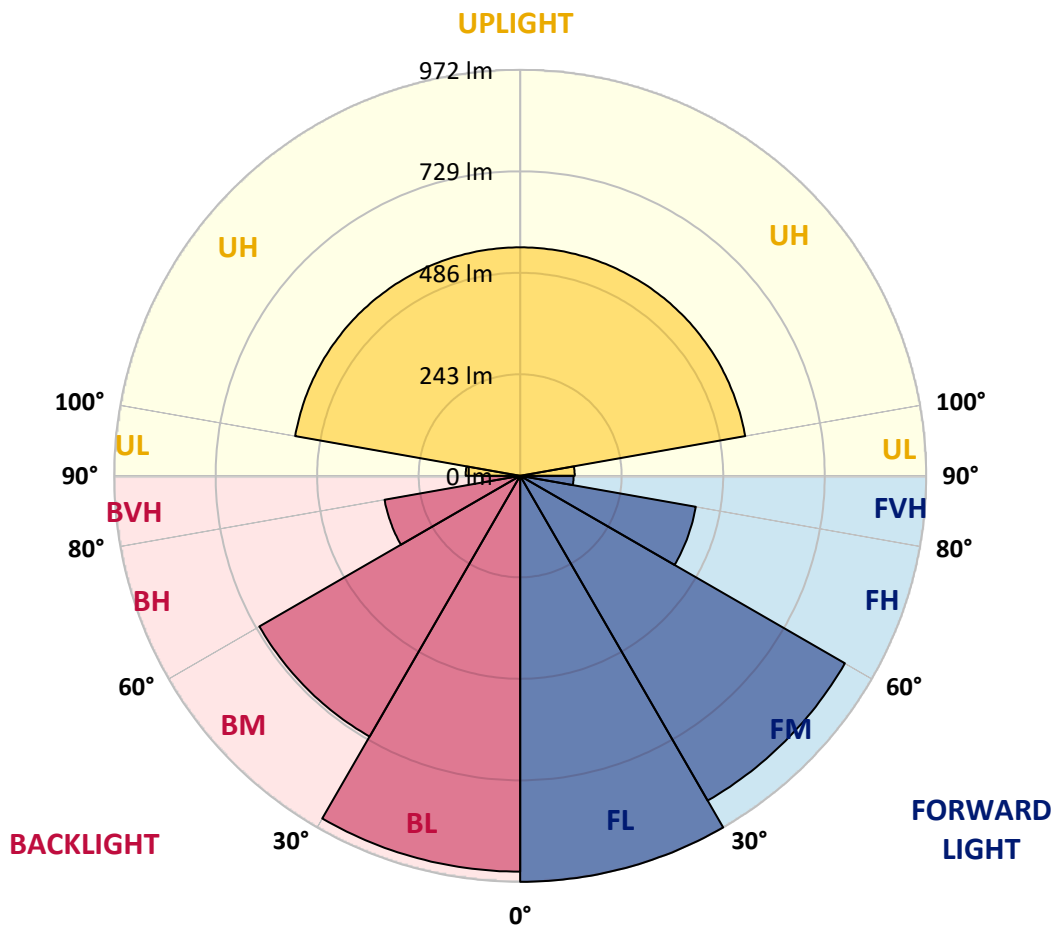
CATALOG NUMBER: CRTK2-C016-5TLD-U-T2-7050-RMARROA5

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	971.9	18.7			
FM (30°-60°)	897.5	17.3			
FH (60°-80°)	426.9	8.2			G0/660
FVH (80°-90°)	127.9	2.5			G2/225
BL (0°-30°)	947.5	18.3	B2/1000		
BM (30°-60°)	721.0	13.9	B1/1000		
BH (60°-80°)	329.5	6.3	B1/500		G1/500
BVH (80°-90°)	90.5	1.7			G1/100
UL (90°-100°)	130.5	2.5		U3/500	
UH (100°-180°)	546.9	10.5		U4/1000	

BUG Rating: B2-U4-G2

Type I Short





REPORT NUMBER: P691398

CATALOG NUMBER: CRTK2-C016-5TLD-U-T2-7050-RMARROA5

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4503.6	4503.6	4503.6	4503.6	4503.6	4503.6	4503.6	4503.6	4503.6	4503.6	4503.6
2.5°	3712.8	3733.6	3779.4	3802.3	3825.2	3854.3	3898.0	3931.3	4008.3	4079.1	4108.2
5°	3063.5	3100.9	3188.3	3259.1	3338.2	3421.4	3510.9	3590.0	3692.0	3785.6	3839.7
7.5°	2632.7	2663.9	2767.9	2905.3	3044.7	3161.3	3252.9	3313.2	3359.0	3396.5	3436.0
10°	2370.4	2397.5	2501.6	2624.3	2743.0	2851.2	2928.2	2986.5	3003.1	3040.6	3059.3
12.5°	2295.5	2308.0	2380.9	2466.2	2539.0	2645.2	2736.7	2799.2	2826.2	2859.5	2869.9
15°	2297.6	2297.6	2339.2	2393.3	2459.9	2541.1	2643.1	2718.0	2757.5	2776.3	2774.2
17.5°	2328.8	2326.7	2345.5	2389.2	2445.4	2526.5	2630.6	2707.6	2753.4	2759.6	2753.4
20°	2328.8	2330.9	2337.1	2387.1	2441.2	2514.0	2620.2	2684.7	2720.1	2701.4	2680.5
22.5°	2091.6	2089.5	2143.6	2249.7	2395.4	2547.3	2643.1	2722.2	2730.5	2661.8	2605.6
25°	1727.4	1712.8	1744.0	1791.9	1889.7	2066.6	2266.4	2566.1	2745.1	2705.5	2620.2
27.5°	1498.4	1479.7	1506.8	1486.0	1475.5	1463.1	1450.6	1415.2	1438.1	1458.9	1550.5
30°	1130.1	1134.2	1140.5	1153.0	1177.9	1227.9	1279.9	1311.1	1338.2	1392.3	1386.1
32.5°	1105.1	1103.0	1105.1	1117.6	1130.1	1161.3	1192.5	1209.2	1230.0	1282.0	1269.5
35°	1021.9	1017.7	1032.3	1038.5	1036.4	1044.7	1076.0	1094.7	1113.4	1146.7	1134.2
37.5°	899.1	903.2	934.4	951.1	957.3	976.1	1001.0	1017.7	1040.6	1065.6	1059.3
40°	807.5	805.4	838.7	861.6	876.2	905.3	942.8	967.7	1005.2	1026.0	1011.4
42.5°	695.1	703.4	728.4	751.3	755.5	770.0	803.3	832.5	878.3	909.5	901.1
45°	584.8	591.1	611.9	630.6	645.2	663.9	688.9	713.8	751.3	776.3	774.2
47.5°	516.1	522.4	539.0	561.9	582.7	609.8	634.8	659.7	695.1	713.8	707.6
50°	489.1	493.2	512.0	536.9	568.2	601.5	634.8	661.8	695.1	707.6	697.2
52.5°	487.0	487.0	509.9	547.3	591.1	636.8	680.5	718.0	749.2	749.2	728.4
55°	457.9	462.0	491.2	541.1	607.7	682.6	759.6	830.4	872.0	863.7	824.1
57.5°	416.2	418.3	449.5	497.4	568.2	659.7	763.8	853.3	903.2	913.6	872.0
60°	391.3	393.3	414.2	459.9	520.3	593.1	688.9	759.6	809.6	840.8	807.5
62.5°	370.4	370.4	391.3	422.5	472.4	526.5	580.6	628.5	668.1	690.9	672.2
65°	347.6	347.6	362.1	391.3	430.8	482.8	524.5	559.8	595.2	611.9	595.2
67.5°	324.7	324.7	339.2	366.3	401.7	445.4	487.0	520.3	555.7	568.2	555.7
70°	301.8	301.8	316.3	339.2	372.5	414.2	445.4	480.7	514.0	522.4	512.0
72.5°	278.9	278.9	293.4	314.3	343.4	382.9	412.1	439.1	470.3	476.6	466.2
75°	258.1	258.1	268.5	289.3	316.3	351.7	380.9	405.8	430.8	430.8	422.5
77.5°	235.2	237.3	245.6	264.3	289.3	322.6	349.6	372.5	393.3	393.3	382.9
80°	212.3	214.4	222.7	239.3	262.2	293.4	318.4	339.2	358.0	358.0	347.6
82.5°	189.4	191.5	199.8	214.4	235.2	264.3	289.3	310.1	326.7	324.7	314.3
85°	168.6	170.7	176.9	189.4	208.1	237.3	260.1	278.9	293.4	291.4	283.0
87.5°	147.8	149.8	156.1	166.5	183.1	210.2	233.1	249.7	262.2	260.1	251.8
90°	129.0	129.0	135.3	145.7	160.2	183.1	204.0	218.5	231.0	226.8	218.5
92.5°	112.4	114.5	118.6	127.0	139.4	160.2	179.0	191.5	204.0	201.9	193.5
95°	99.9	99.9	104.1	110.3	120.7	137.4	156.1	166.5	174.8	174.8	168.6
97.5°	87.4	89.5	91.6	95.7	104.1	116.5	131.1	141.5	147.8	147.8	143.6
100°	79.1	81.2	81.2	85.3	89.5	97.8	108.2	116.5	122.8	122.8	120.7
102.5°	74.9	74.9	74.9	77.0	79.1	83.2	89.5	93.7	97.8	99.9	97.8
105°	70.8	70.8	70.8	72.8	72.8	77.0	79.1	83.2	85.3	85.3	83.2
107.5°	68.7	68.7	70.8	70.8	70.8	72.8	77.0	77.0	79.1	77.0	77.0
110°	70.8	70.8	70.8	70.8	70.8	72.8	74.9	74.9	74.9	74.9	72.8



REPORT NUMBER: P691398
 CATALOG NUMBER: CRTK2-C016-5TLD-U-T2-7050-RMARROA5

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	72.8	72.8	72.8	72.8	74.9	74.9	74.9	77.0	77.0	74.9	74.9
115°	79.1	79.1	79.1	79.1	79.1	81.2	81.2	81.2	81.2	79.1	77.0
117.5°	85.3	85.3	85.3	87.4	87.4	89.5	87.4	89.5	87.4	85.3	85.3
120°	95.7	95.7	97.8	99.9	102.0	102.0	99.9	102.0	102.0	97.8	95.7
122.5°	108.2	108.2	110.3	116.5	118.6	120.7	118.6	118.6	118.6	114.5	112.4
125°	120.7	122.8	127.0	135.3	141.5	145.7	141.5	143.6	143.6	137.4	135.3
127.5°	135.3	137.4	145.7	158.2	168.6	172.7	170.7	172.7	174.8	164.4	160.2
130°	149.8	149.8	162.3	181.1	195.6	201.9	204.0	206.0	208.1	197.7	189.4
132.5°	162.3	162.3	179.0	201.9	220.6	231.0	235.2	239.3	243.5	228.9	218.5
135°	170.7	172.7	193.5	220.6	243.5	258.1	264.3	268.5	274.7	258.1	245.6
137.5°	176.9	181.1	201.9	231.0	256.0	276.8	289.3	295.5	299.7	283.0	266.4
140°	179.0	181.1	204.0	233.1	258.1	281.0	299.7	310.1	312.2	295.5	278.9
142.5°	172.7	176.9	197.7	226.8	251.8	276.8	297.6	308.0	310.1	295.5	278.9
145°	164.4	166.5	185.2	212.3	237.3	264.3	287.2	297.6	297.6	285.1	268.5
147.5°	149.8	151.9	168.6	191.5	216.4	243.5	266.4	276.8	278.9	266.4	251.8
150°	129.0	131.1	143.6	162.3	187.3	214.4	235.2	247.7	247.7	235.2	224.8
152.5°	104.1	106.1	116.5	131.1	151.9	176.9	195.6	208.1	208.1	199.8	187.3
155°	81.2	81.2	89.5	102.0	116.5	135.3	149.8	160.2	162.3	154.0	145.7
157.5°	58.3	58.3	64.5	74.9	87.4	102.0	112.4	120.7	120.7	114.5	110.3
160°	39.5	39.5	43.7	49.9	58.3	68.7	77.0	85.3	85.3	81.2	77.0
162.5°	20.8	20.8	25.0	29.1	35.4	43.7	47.9	54.1	54.1	52.0	49.9
165°	6.2	6.2	8.3	10.4	14.6	18.7	20.8	25.0	27.1	25.0	22.9
167.5°	0.0	0.0	2.1	2.1	2.1	2.1	4.2	6.2	6.2	6.2	6.2
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: P691398

CATALOG NUMBER: CRTK2-C016-5TLD-U-T2-7050-RMARROA5

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	179°	180°
0°	4503.6	4503.6	4503.6	4503.6	4503.6	4503.6	4503.6	4503.6	4503.6	4503.6	4503.6
2.5°	4139.4	4270.5	4389.2	4512.0	4663.9	4797.1	4940.7	5042.7	5086.4	5086.4	5103.0
5°	3879.3	3970.9	4066.6	4174.8	4355.9	4578.6	4834.5	5044.7	5165.4	5184.2	5182.1
7.5°	3448.5	3510.9	3608.7	3729.4	3895.9	4095.7	4424.6	4753.4	4971.9	5011.4	4996.9
10°	3069.7	3128.0	3186.3	3232.0	3350.7	3508.8	3750.3	4070.8	4322.6	4362.1	4330.9
12.5°	2876.2	2894.9	2892.8	2919.9	2967.7	3046.8	3169.6	3354.8	3527.6	3565.0	3538.0
15°	2774.2	2747.1	2705.5	2657.6	2653.5	2666.0	2697.2	2772.1	2845.0	2876.2	2855.4
17.5°	2732.6	2668.1	2582.7	2489.1	2426.6	2368.4	2328.8	2303.8	2314.3	2316.3	2299.7
20°	2634.8	2557.8	2420.4	2287.2	2187.3	2085.3	1997.9	1933.4	1923.0	1912.6	1900.1
22.5°	2524.5	2393.3	2228.9	2066.6	1918.8	1783.6	1685.7	1608.7	1579.6	1590.0	1583.8
25°	2501.6	2283.0	2083.2	1821.0	1633.7	1481.8	1298.6	1173.8	1117.6	1148.8	1128.0
27.5°	1500.5	1506.8	1394.4	1236.2	1100.9	1011.4	930.3	863.7	826.2	826.2	830.4
30°	1359.0	1298.6	1223.7	1125.9	1007.3	917.8	828.3	755.5	715.9	705.5	709.7
32.5°	1242.5	1200.8	1130.1	1036.4	928.2	836.6	743.0	676.4	638.9	636.8	634.8
35°	1117.6	1073.9	1015.6	934.4	840.8	755.5	674.3	616.0	582.7	584.8	584.8
37.5°	1032.3	992.7	940.7	863.7	778.4	693.0	620.2	566.1	539.0	539.0	536.9
40°	988.6	942.8	886.6	815.8	736.7	647.2	578.6	526.5	503.6	503.6	501.6
42.5°	892.8	853.3	815.8	743.0	663.9	591.1	526.5	480.7	457.9	457.9	457.9
45°	757.5	734.7	705.5	655.6	591.1	530.7	476.6	432.9	414.2	412.1	412.1
47.5°	699.3	674.3	638.9	593.1	541.1	484.9	432.9	401.7	382.9	382.9	382.9
50°	682.6	653.5	605.6	551.5	497.4	447.5	401.7	372.5	355.9	355.9	358.0
52.5°	705.5	657.6	593.1	526.5	470.3	414.2	374.6	345.5	333.0	333.0	330.9
55°	784.6	695.1	601.5	520.3	449.5	389.2	347.6	316.3	301.8	301.8	301.8
57.5°	828.3	722.2	607.7	512.0	430.8	370.4	326.7	293.4	278.9	278.9	278.9
60°	778.4	690.9	582.7	495.3	416.2	353.8	308.0	276.8	262.2	260.1	258.1
62.5°	651.4	597.3	520.3	447.5	385.0	330.9	293.4	262.2	247.7	247.7	245.6
65°	580.6	534.9	468.3	405.8	353.8	308.0	272.6	247.7	233.1	231.0	231.0
67.5°	541.1	499.5	432.9	374.6	326.7	285.1	251.8	228.9	218.5	214.4	214.4
70°	497.4	451.6	393.3	341.3	297.6	260.1	233.1	210.2	199.8	197.7	195.6
72.5°	453.7	412.1	358.0	308.0	268.5	237.3	212.3	191.5	181.1	179.0	179.0
75°	407.9	368.4	316.3	274.7	241.4	212.3	189.4	172.7	164.4	162.3	160.2
77.5°	370.4	335.1	285.1	245.6	214.4	191.5	170.7	156.1	147.8	147.8	145.7
80°	335.1	301.8	253.9	218.5	191.5	168.6	151.9	139.4	133.2	131.1	131.1
82.5°	301.8	268.5	224.8	193.5	168.6	149.8	133.2	122.8	116.5	116.5	116.5
85°	270.6	239.3	199.8	170.7	147.8	131.1	116.5	106.1	102.0	99.9	102.0
87.5°	239.3	210.2	176.9	149.8	129.0	112.4	99.9	91.6	87.4	87.4	87.4
90°	210.2	183.1	151.9	127.0	110.3	95.7	85.3	77.0	74.9	72.8	72.8
92.5°	185.2	162.3	135.3	114.5	97.8	87.4	77.0	70.8	66.6	66.6	66.6
95°	162.3	141.5	120.7	102.0	89.5	79.1	70.8	64.5	62.4	62.4	62.4
97.5°	139.4	122.8	106.1	91.6	81.2	72.8	64.5	60.4	58.3	56.2	58.3
100°	116.5	104.1	91.6	81.2	72.8	64.5	58.3	54.1	52.0	52.0	52.0
102.5°	93.7	87.4	77.0	68.7	62.4	58.3	52.0	47.9	45.8	45.8	45.8
105°	81.2	74.9	68.7	62.4	58.3	52.0	47.9	43.7	41.6	41.6	41.6
107.5°	74.9	70.8	64.5	60.4	54.1	49.9	45.8	39.5	37.5	37.5	37.5
110°	72.8	68.7	64.5	58.3	54.1	49.9	45.8	37.5	35.4	35.4	35.4



REPORT NUMBER: P691398

CATALOG NUMBER: CRTK2-C016-5TLD-U-T2-7050-RMARROA5

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	179°	180°
112.5°	72.8	68.7	64.5	60.4	56.2	49.9	45.8	37.5	33.3	33.3	33.3
115°	77.0	72.8	68.7	64.5	58.3	52.0	47.9	37.5	33.3	33.3	33.3
117.5°	83.2	79.1	74.9	68.7	62.4	56.2	47.9	37.5	35.4	35.4	35.4
120°	93.7	89.5	83.2	77.0	68.7	60.4	52.0	39.5	33.3	35.4	35.4
122.5°	108.2	104.1	95.7	85.3	77.0	66.6	54.1	41.6	31.2	35.4	35.4
125°	129.0	122.8	110.3	97.8	85.3	72.8	58.3	43.7	33.3	37.5	37.5
127.5°	151.9	143.6	127.0	110.3	95.7	79.1	62.4	45.8	35.4	37.5	37.5
130°	179.0	164.4	143.6	122.8	104.1	85.3	66.6	47.9	37.5	37.5	37.5
132.5°	206.0	185.2	158.2	135.3	112.4	89.5	68.7	47.9	37.5	37.5	37.5
135°	228.9	204.0	172.7	143.6	116.5	91.6	70.8	47.9	37.5	37.5	37.5
137.5°	249.7	216.4	181.1	147.8	118.6	91.6	68.7	47.9	35.4	35.4	35.4
140°	260.1	222.7	185.2	147.8	116.5	89.5	64.5	43.7	33.3	33.3	33.3
142.5°	260.1	220.6	181.1	143.6	112.4	85.3	60.4	41.6	29.1	31.2	31.2
145°	251.8	212.3	172.7	135.3	104.1	77.0	54.1	35.4	27.1	27.1	27.1
147.5°	233.1	195.6	158.2	122.8	93.7	66.6	47.9	31.2	22.9	20.8	22.9
150°	208.1	172.7	137.4	106.1	79.1	56.2	39.5	25.0	18.7	18.7	18.7
152.5°	174.8	143.6	114.5	87.4	62.4	43.7	29.1	18.7	14.6	14.6	14.6
155°	137.4	112.4	89.5	66.6	47.9	33.3	22.9	14.6	10.4	10.4	10.4
157.5°	104.1	85.3	66.6	47.9	35.4	25.0	16.6	10.4	8.3	8.3	8.3
160°	72.8	58.3	45.8	33.3	22.9	16.6	10.4	6.2	4.2	4.2	4.2
162.5°	45.8	37.5	29.1	18.7	14.6	10.4	6.2	4.2	2.1	2.1	2.1
165°	20.8	18.7	12.5	8.3	6.2	4.2	2.1	2.1	0.0	0.0	0.0
167.5°	6.2	4.2	4.2	2.1	2.1	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

(END OF REPORT)