

Scaled data based on original data using
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge
or Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: 769095

Luminaire Tested: **ARC85QL3C-C**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: 769095
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARC85QL3C-C
Description: Architectural Post Top Luminaire - TYPE III CUTOFF WITH CAGE
Light Source: 85 WATT PHILIPS QL INDUCTION LAMP
Ballast/Driver: -

Summary

Lumens per Lamp: 6000 (1 lamp)
Luminaire Lumens: 2214.5 lumens
Efficiency: 36.9%
Efficacy: 26.1 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type V - Short - Cutoff
BUG Rating: B1 - U1 - G1

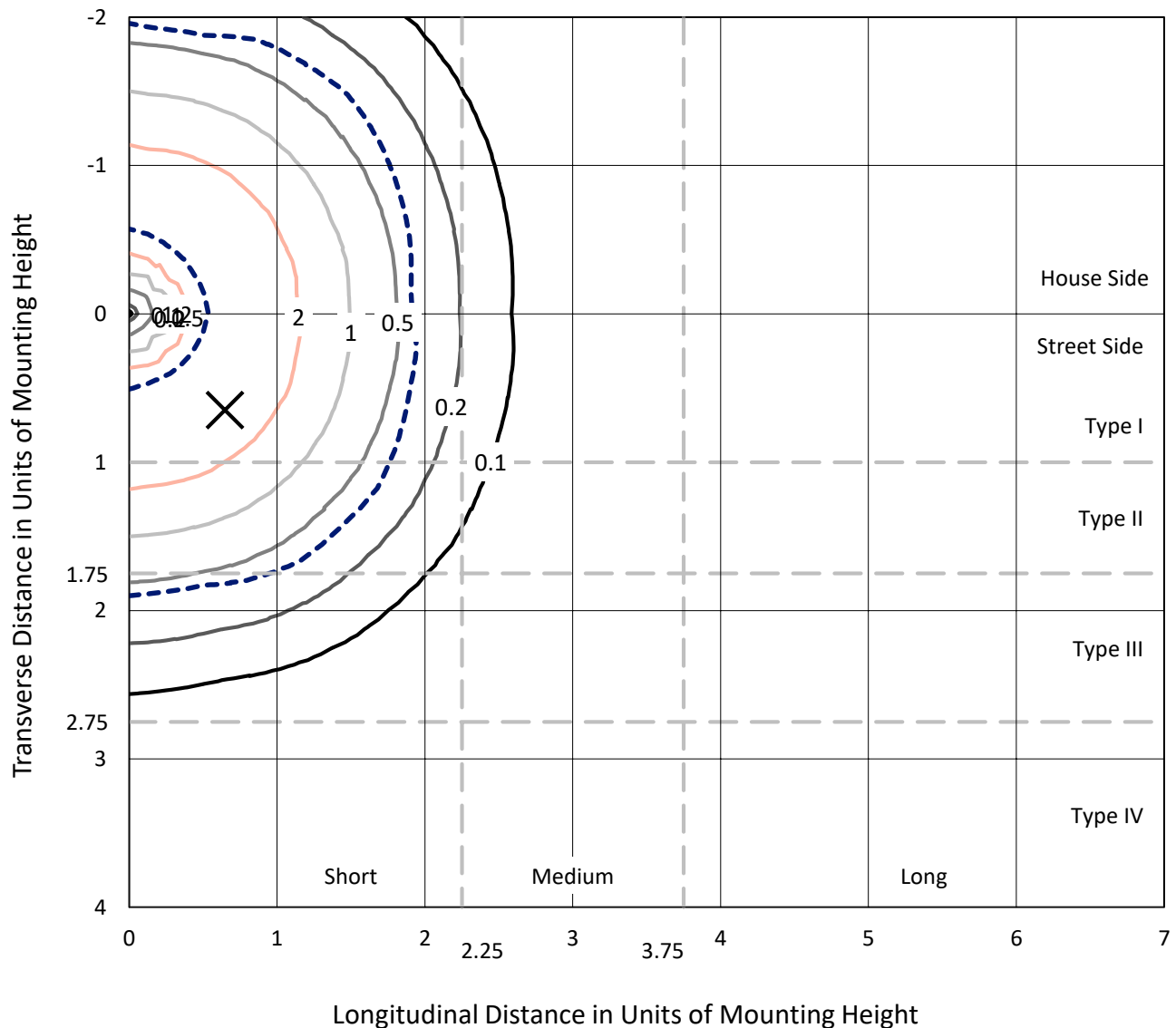
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

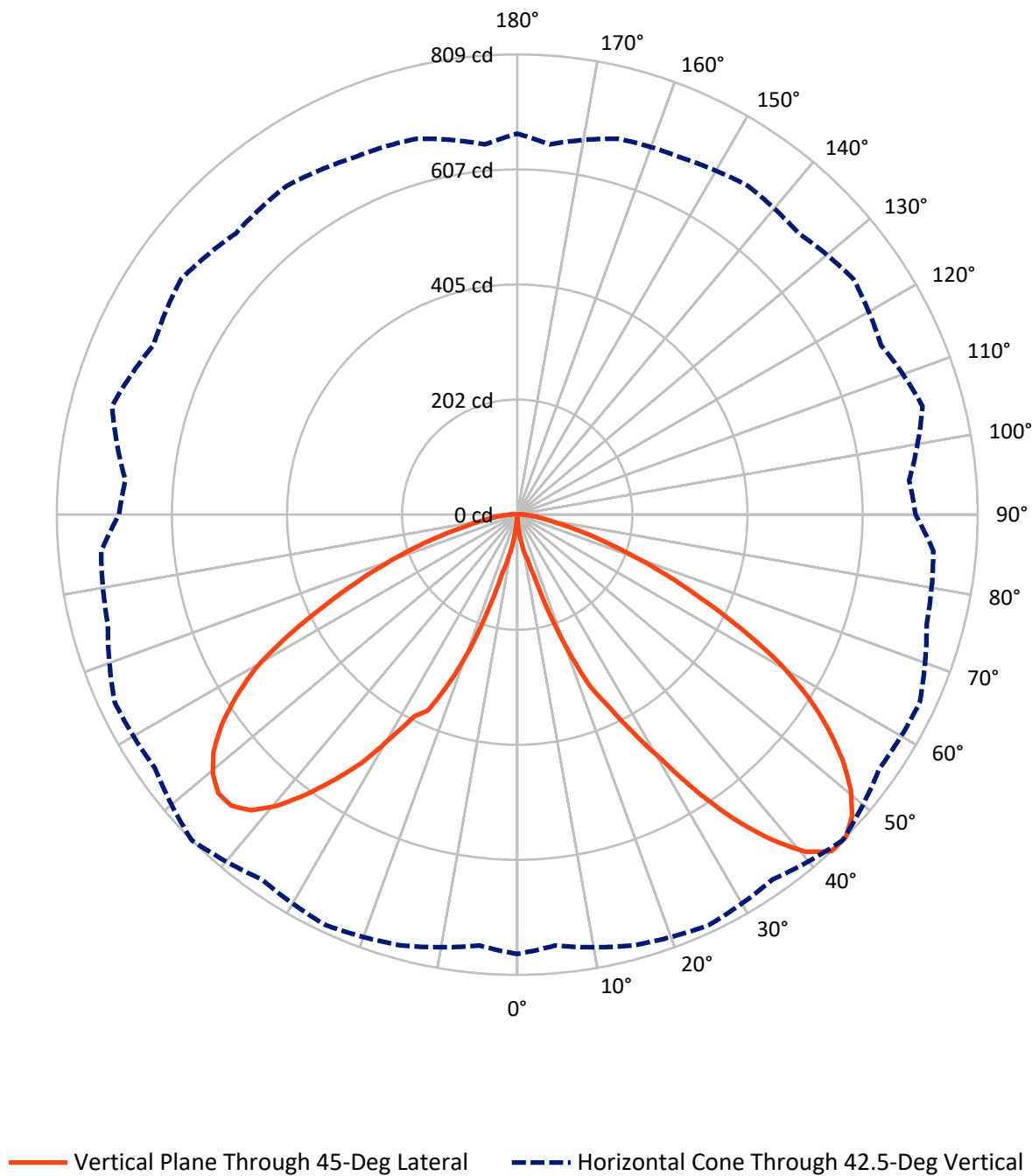
× Max cd
 --- 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.7 fc
 Type V - Short - Cutoff

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Luminous Intensity Polar Plot



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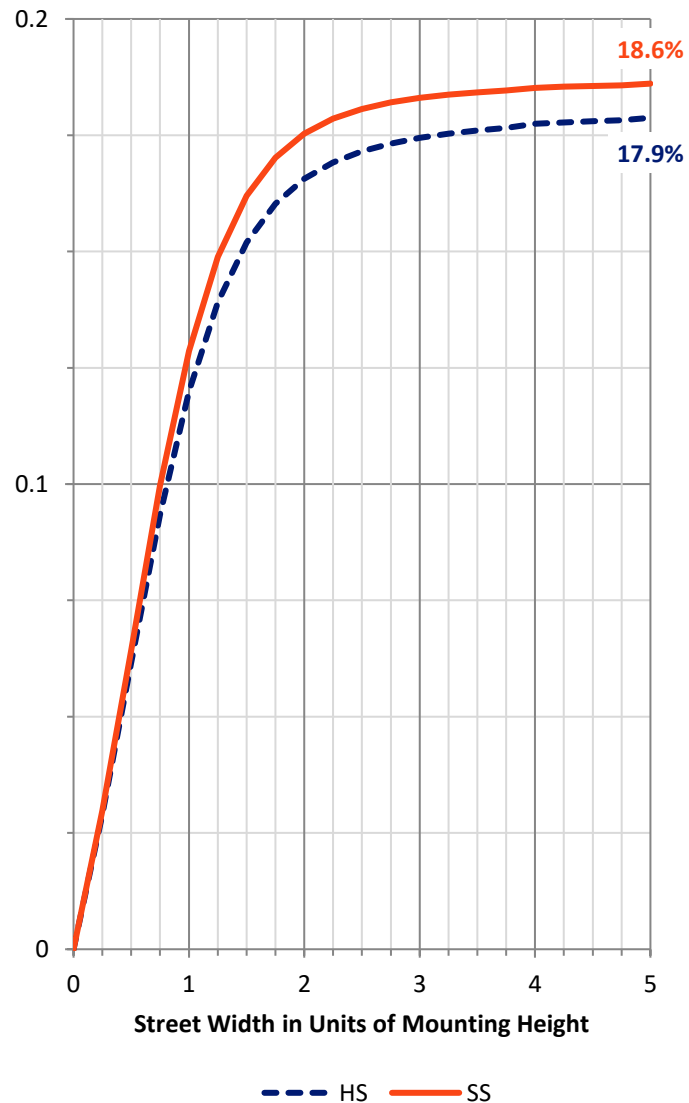
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1080.8	6.4	1087.3
	% Lamp	18.0	0.1	18.1
Street Side	Lumens	1122.2	5.1	1127.2
	% Lamp	18.7	0.1	18.8
Total	Lumens	2203.0	11.5	2214.5
	% Lamp	36.7	0.2	36.9

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	3.3	0.1	0.1
10°-20°	37.3	1.7	0.6
20°-30°	165.3	7.5	2.8
30°-40°	378.0	17.1	6.3
40°-50°	568.1	25.7	9.5
50°-60°	557.1	25.2	9.3
60°-70°	344.8	15.6	5.7
70°-80°	120.2	5.4	2.0
80°-90°	28.7	1.3	0.5
90°-100°	7.8	0.4	0.1
100°-110°	3.2	0.1	0.1
110°-120°	0.8	0.0	0.0
120°-130°	0.1	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	2203.0	99.5	36.7
0°-180°	2214.5	100.0	36.9

Coefficient of Utilization



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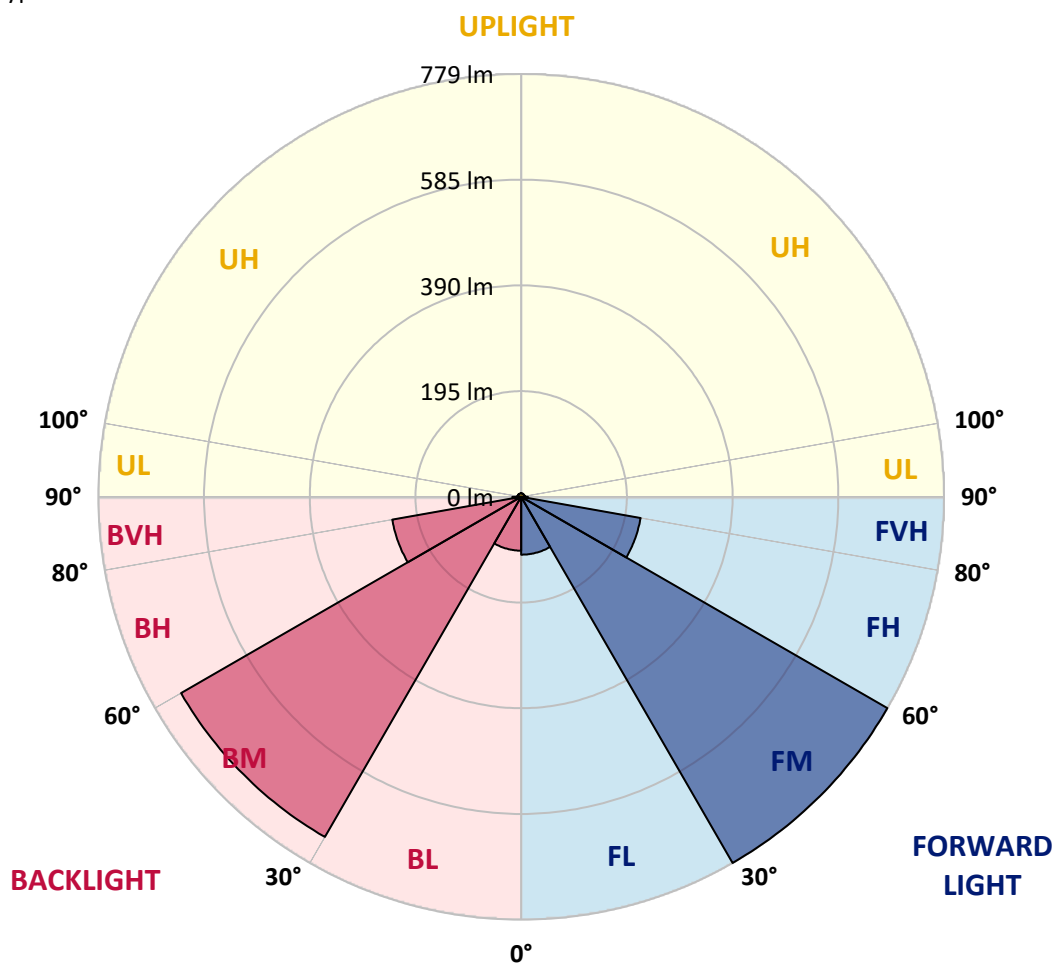
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	106.7	1.8			
FM	(30°-60°)	779.4	13.0			
FH	(60°-80°)	223.6	3.7			G0/660
FVH	(80°-90°)	12.4	0.2			G1/100
BL	(0°-30°)	99.2	1.7	B0/110		
BM	(30°-60°)	723.9	12.1	B1/1000		
BH	(60°-80°)	241.4	4.0	B1/500		G0/660
BVH	(80°-90°)	16.3	0.3			G1/100
UL	(90°-100°)	7.8	0.1		U1/10	
UH	(100°-180°)	6.4	0.1		U1/10	
Trapped Light		3785.5	63.1			

BUG Rating: B1-U1-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
2.5°	7.6	8.1	8.1	8.1	7.6	7.0	7.0	6.5	7.0	7.0	7.0
5°	31.4	30.8	31.4	30.3	27.6	26.0	22.7	21.1	22.2	21.1	21.6
7.5°	46.5	46.5	46.0	46.5	45.4	44.9	44.4	43.3	43.3	41.7	41.1
10°	73.6	72.5	69.2	66.5	67.6	69.2	68.2	61.7	59.0	61.1	62.8
12.5°	84.4	84.9	86.0	82.8	82.8	80.6	81.7	79.0	76.8	80.6	82.8
15°	120.1	118.5	109.8	103.9	112.0	114.2	107.7	99.0	100.1	108.7	110.4
17.5°	177.4	174.7	160.1	156.9	168.3	181.8	167.2	153.6	148.8	163.9	167.2
20°	243.4	242.4	231.0	234.3	245.1	254.3	239.1	221.3	219.1	222.4	225.1
22.5°	300.8	304.6	311.1	312.7	316.5	328.4	308.4	301.9	290.0	286.7	278.6
25°	349.5	352.7	372.2	372.2	371.1	374.4	358.1	358.1	348.9	330.6	332.2
27.5°	411.2	419.8	443.6	443.1	434.4	433.9	417.7	420.9	406.8	385.2	379.8
30°	485.8	500.4	524.2	526.9	502.6	499.3	487.4	492.3	475.0	451.2	439.3
32.5°	572.4	584.8	605.9	615.1	580.0	581.6	564.3	572.4	546.4	522.6	509.6
35°	641.6	649.7	671.4	683.3	653.5	658.4	639.5	646.5	610.8	587.5	577.8
37.5°	701.1	701.1	720.1	737.9	708.2	724.9	699.5	704.9	671.4	645.4	635.1
40°	745.5	734.1	760.1	773.6	750.9	779.6	744.4	748.7	714.1	698.4	671.4
42.5°	772.5	760.6	784.4	796.4	782.8	809.3	777.4	780.7	745.0	734.1	700.1
45°	779.0	765.5	784.4	799.6	789.9	809.3	785.5	787.7	754.2	743.3	716.3
47.5°	766.1	749.8	764.4	785.5	775.3	792.0	771.5	778.0	740.6	737.9	711.4
50°	736.8	718.4	729.8	749.8	746.0	759.6	743.3	751.4	712.5	717.9	689.8
52.5°	692.5	675.7	680.6	702.2	706.5	715.7	705.5	708.7	675.2	681.7	657.3
55°	626.5	616.2	619.4	643.8	653.0	662.7	654.1	652.4	622.1	628.1	607.0
57.5°	552.9	546.4	548.0	577.8	591.9	601.0	596.7	586.4	559.4	562.6	543.2
60°	475.0	468.0	471.8	505.8	525.3	529.1	530.7	511.8	493.9	492.8	473.9
62.5°	389.5	386.3	387.4	419.3	442.0	441.5	449.6	431.7	416.0	411.2	396.6
65°	308.4	306.2	304.6	335.4	355.4	355.4	363.0	350.0	335.4	330.0	317.6
67.5°	238.0	233.2	231.0	261.3	278.1	281.3	287.8	274.8	264.0	258.1	247.2
70°	172.0	167.2	167.2	193.1	209.9	213.2	219.1	206.7	199.1	192.6	182.3
72.5°	116.9	114.2	116.3	135.8	151.5	156.3	161.2	150.9	143.9	138.5	129.3
75°	73.6	72.5	75.7	90.9	102.8	110.4	109.8	103.3	96.8	93.1	86.6
77.5°	46.5	46.0	48.1	57.9	66.0	72.5	70.9	65.5	61.7	57.3	52.5
80°	33.5	34.6	34.6	41.1	46.5	49.8	50.3	43.8	41.1	39.0	36.8
82.5°	27.0	24.9	25.4	30.3	35.7	37.3	38.4	31.9	30.8	27.6	27.0
85°	16.2	15.7	16.8	19.5	22.7	23.8	25.4	20.6	20.6	17.9	18.4
87.5°	10.8	11.9	11.4	13.5	14.1	15.1	15.1	14.1	13.0	12.4	13.5
90°	8.7	9.2	9.2	9.7	10.8	10.8	10.8	9.7	9.7	8.7	9.7
95°	5.4	6.0	5.4	6.0	6.0	7.0	6.5	6.0	4.9	4.3	6.5
105°	2.2	2.7	2.2	2.2	2.7	2.2	2.7	2.7	2.2	2.2	3.2
115°	0.0	0.0	0.5	0.0	0.0	0.0	0.5	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
135°	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
155°	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



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CATALOG NUMBER: ARC85QL3C-C

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
175°	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: 769095

CATALOG NUMBER: ARC85QL3C-C

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
2.5°	6.5	6.0	5.4	6.0	5.4	6.0	5.4	5.4	5.4	5.4
5°	19.5	16.8	13.5	11.9	9.7	9.7	9.2	10.8	10.8	10.8
7.5°	40.0	40.0	39.0	37.9	35.7	35.2	35.7	38.4	39.0	40.0
10°	64.4	60.6	56.3	55.7	55.7	55.2	54.6	53.0	53.0	53.0
12.5°	82.2	81.1	76.8	77.4	82.2	79.5	74.1	73.0	76.8	76.8
15°	107.7	106.6	97.9	105.0	108.7	106.6	95.2	95.8	100.6	102.8
17.5°	163.4	154.7	150.9	167.2	178.0	165.5	148.8	147.2	156.9	159.1
20°	225.1	215.3	221.8	237.0	251.6	234.3	215.9	208.8	211.5	216.4
22.5°	280.8	290.5	289.4	305.7	319.2	299.2	278.6	272.1	264.5	258.6
25°	332.7	350.6	356.0	361.4	378.2	354.9	346.2	336.0	314.3	318.1
27.5°	379.2	394.4	400.3	389.0	397.6	379.8	387.9	371.7	353.8	345.2
30°	437.7	453.4	463.6	439.3	450.1	424.7	445.2	419.8	399.8	393.8
32.5°	507.5	524.2	531.8	509.1	513.9	491.8	506.4	481.5	460.4	459.8
35°	570.2	595.6	589.1	573.5	564.8	552.9	561.6	543.7	523.1	517.2
37.5°	623.8	651.4	642.2	633.0	615.7	614.0	616.2	602.1	577.2	574.5
40°	659.5	703.3	677.3	683.8	663.3	666.5	659.5	649.7	622.1	626.5
42.5°	691.4	737.4	705.5	721.7	699.5	706.0	690.9	684.4	653.5	669.8
45°	708.7	743.3	716.8	739.5	717.4	726.6	704.4	699.5	672.5	695.7
47.5°	703.3	735.8	713.6	735.8	718.4	723.3	704.9	697.3	675.2	701.1
50°	680.6	716.8	690.3	717.4	703.3	707.6	689.2	682.2	662.7	689.2
52.5°	653.0	681.1	661.1	684.9	677.3	680.0	663.8	654.1	638.9	664.3
55°	605.9	629.2	619.4	641.6	638.9	638.9	623.2	608.1	596.7	620.0
57.5°	542.6	567.0	565.3	589.7	590.2	589.1	570.8	550.7	540.5	557.2
60°	470.7	493.9	504.8	526.4	535.0	527.5	512.3	486.4	476.1	486.9
62.5°	394.4	414.9	430.6	447.4	460.4	449.6	441.5	407.9	402.0	411.2
65°	320.8	336.5	351.1	368.4	380.3	371.7	364.6	330.6	328.9	339.7
67.5°	253.7	268.3	283.5	301.3	310.5	304.0	297.5	265.6	262.4	274.8
70°	191.0	202.3	221.8	237.0	247.8	240.2	235.3	205.0	201.8	212.1
72.5°	135.8	146.6	166.1	181.2	191.0	184.5	179.1	153.1	149.9	155.8
75°	89.8	102.8	117.4	130.9	139.6	136.3	129.3	110.9	106.6	109.3
77.5°	55.2	67.1	76.8	88.2	95.8	92.5	84.9	73.0	68.7	68.2
80°	39.0	44.4	54.6	62.2	68.2	65.5	59.5	50.3	46.5	46.5
82.5°	29.8	31.4	40.6	44.4	49.2	46.5	43.3	35.7	32.5	33.5
85°	20.6	21.6	29.8	32.5	36.2	33.5	31.9	26.5	23.3	26.0
87.5°	13.5	15.1	18.4	21.1	23.3	21.6	21.1	17.9	16.2	17.3
90°	9.7	10.3	12.4	13.5	14.6	14.6	13.5	11.9	10.8	10.8
95°	6.0	6.0	7.6	7.6	8.1	8.1	7.6	6.5	6.0	5.4
105°	2.7	2.7	3.2	3.2	3.2	3.2	3.2	3.2	3.2	2.2
115°	1.1	0.5	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.0
125°	0.0	0.0	0.0	0.5	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
145°	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
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: 769095

CATALOG NUMBER: ARC85QL3C-C

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
175°	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)