

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: P314560

Luminaire Tested: **MPN-A4-D-U-ASYM-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P314560
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1906-378-14)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: MPN-A4-D-U-ASYM-7027
Description: NEW HAVEN POST TOP LUMINAIRE
(1) 70 CRI, 2700K LIGHT ENGINE. ASYMMETRIC DISTRIBUTION.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3498 lumens
Efficiency: N/A
Efficacy: 88.6 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1' x H: 0.58')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U4 - G3

Input Watts (W): 39.5
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

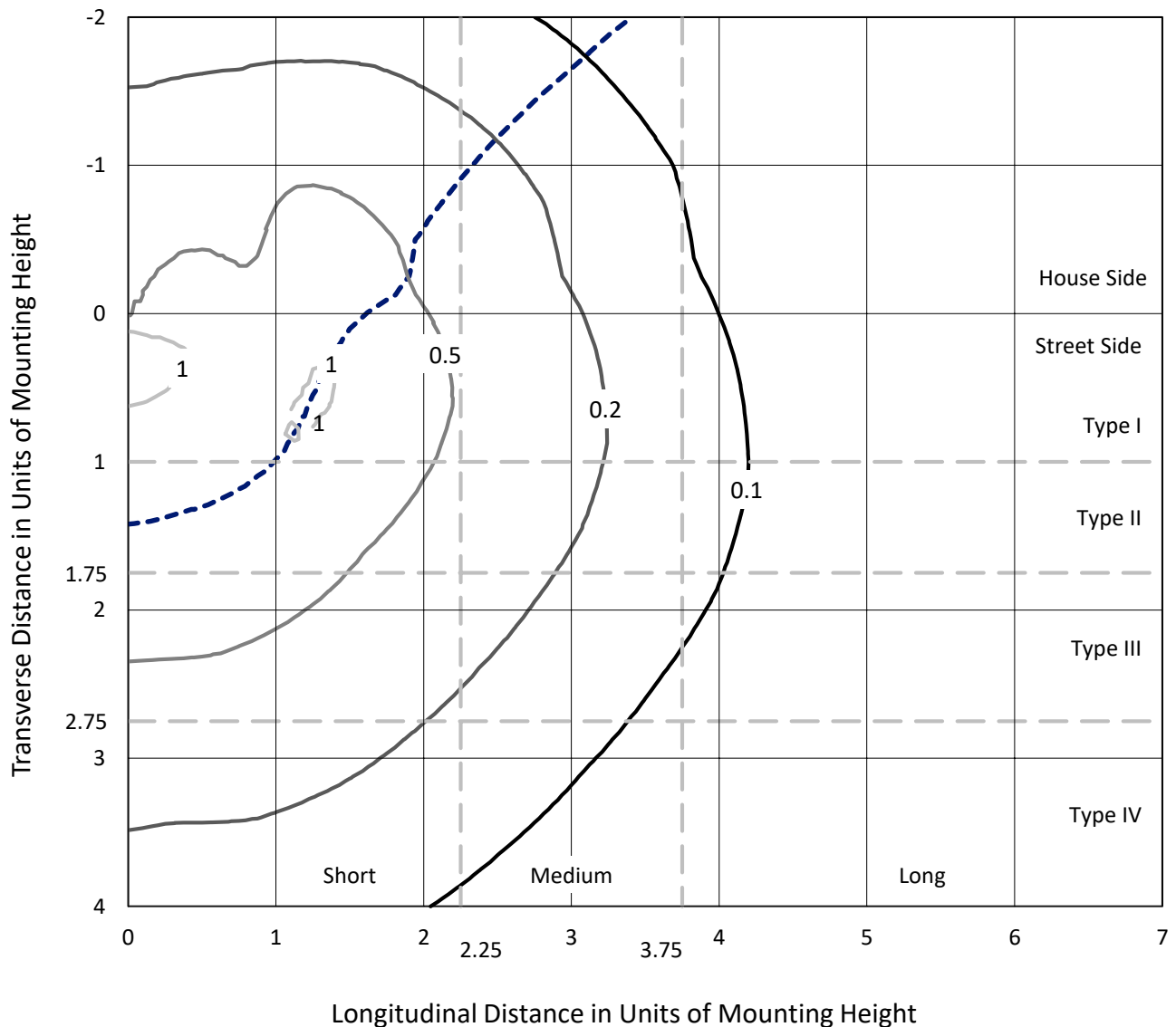


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

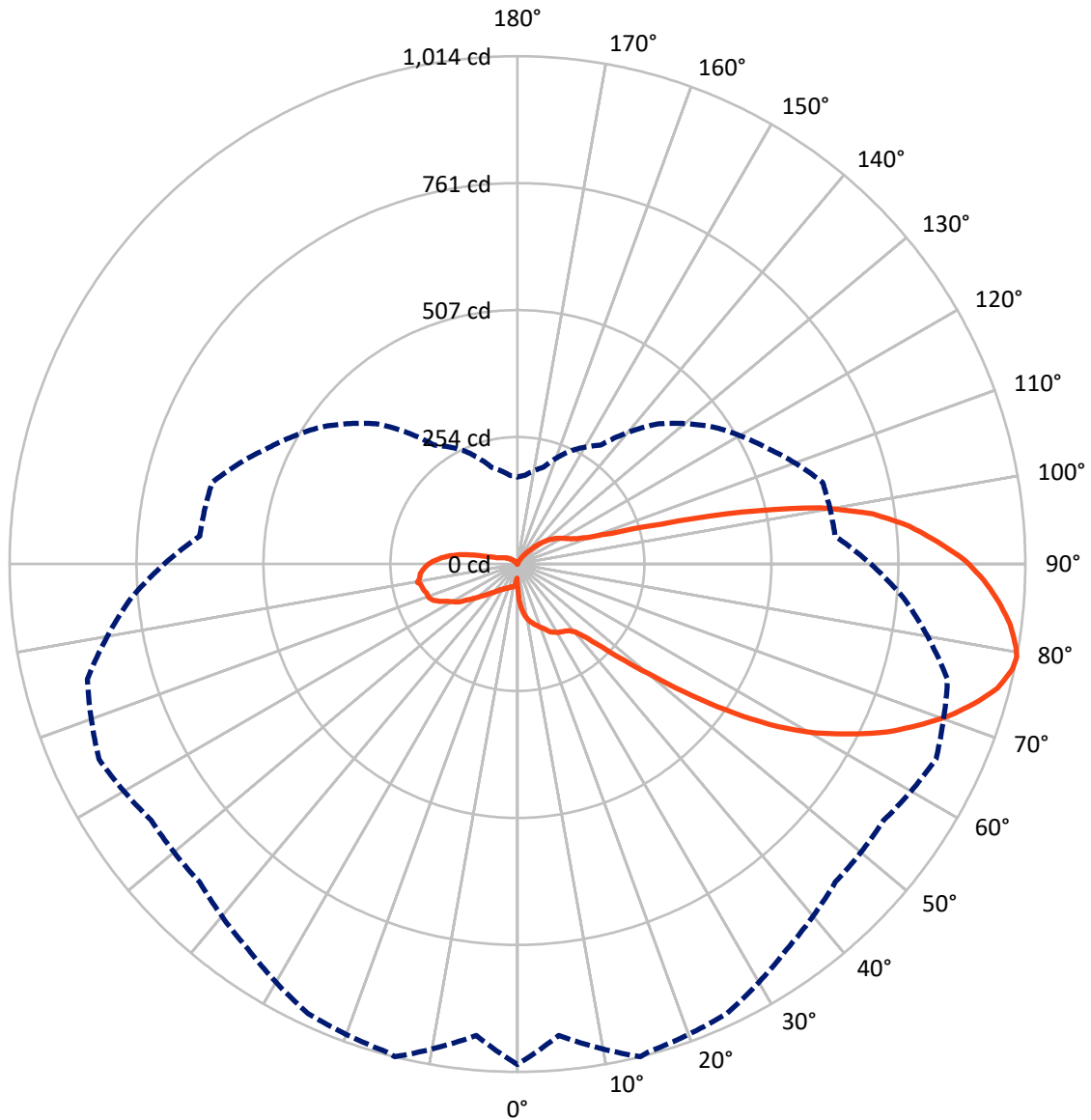


Based on 10 foot mounting height. Maximum calculated value = 1.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 14-Deg Lateral - - - Horizontal Cone Through 79-Deg Vertical

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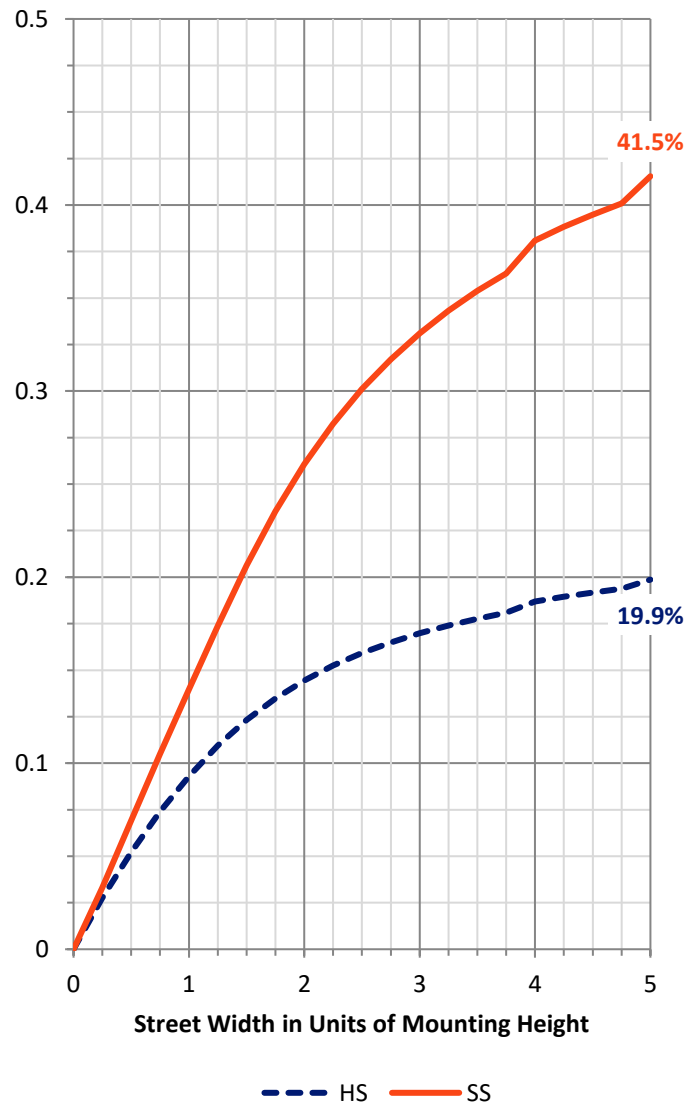
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	791.3	292.9	1084.3
	% Fixture	22.6	8.4	31.0
Street Side	Lumens	1742.8	671.0	2413.7
	% Fixture	49.8	19.2	69.0
Total	Lumens	2534.1	963.9	3498.0
	% Fixture	72.4	27.6	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.5	0.2
10°-20°	25.1	0.7
20°-30°	49.0	1.4
30°-40°	74.7	2.1
40°-50°	140.3	4.0
50°-60°	337.4	9.6
60°-70°	540.2	15.4
70°-80°	678.3	19.4
80°-90°	682.6	19.5
90°-100°	557.2	15.9
100°-110°	235.7	6.7
110°-120°	81.5	2.3
120°-130°	54.3	1.6
130°-140°	26.9	0.8
140°-150°	7.7	0.2
150°-160°	0.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2534.1	72.4
0°-180°	3498.0	100.0



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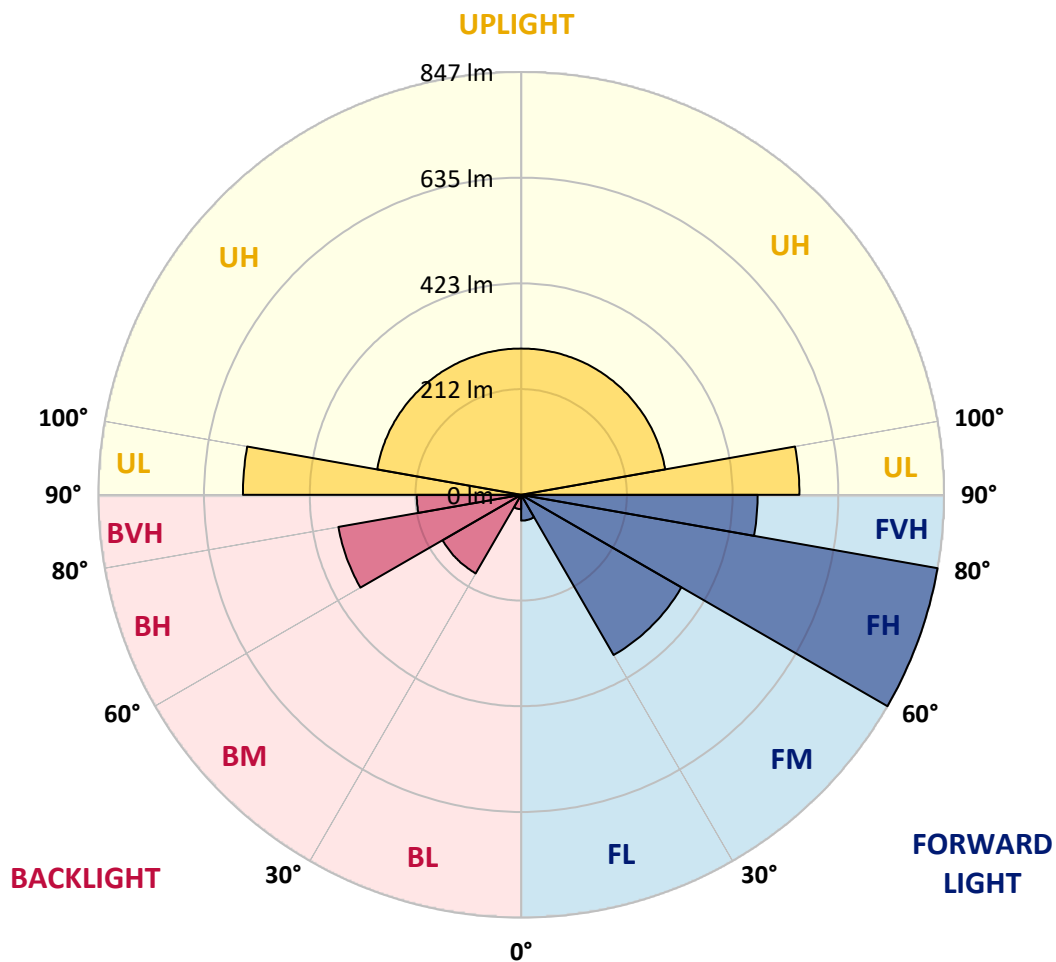
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	51.8	1.5			
FM (30°-60°)	370.5	10.6			
FH (60°-80°)	846.9	24.2			G1/1800
FVH (80°-90°)	473.6	13.5			G3/500
BL (0°-30°)	28.8	0.8	B0/110		
BM (30°-60°)	181.9	5.2	B0/220		
BH (60°-80°)	371.7	10.6	B1/500		G1/500
BVH (80°-90°)	209.0	6.0			G2/225
UL (90°-100°)	557.2	15.9		U4/1000	
UH (100°-180°)	292.9	8.4		U3/500	

BUG Rating: B1-U4-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	14°	15°	25°	35°	45°	55°	65°	75°	85°
0°	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6
2.5°	76.3	74.0	74.0	74.0	72.2	69.3	66.3	64.6	60.5	56.9	51.7
5°	92.7	91.6	90.4	90.4	88.6	88.0	85.1	80.4	75.7	71.0	65.2
7.5°	105.1	103.9	102.7	103.3	101.0	98.6	95.7	91.6	86.9	82.2	76.3
10°	113.3	112.7	112.1	112.1	109.2	106.2	102.7	99.2	93.9	88.6	82.2
12.5°	119.2	118.6	118.6	118.6	115.6	111.5	108.6	104.5	99.8	93.9	87.5
15°	125.0	125.0	124.4	123.9	120.9	117.4	114.5	110.9	106.2	99.8	93.3
17.5°	130.9	130.3	129.7	129.7	126.8	123.3	120.3	117.4	111.5	105.1	98.6
20°	137.9	136.8	135.6	135.6	132.7	128.6	126.2	123.3	117.4	110.9	103.9
22.5°	145.0	143.8	141.5	141.5	139.1	134.4	133.2	129.7	123.9	116.8	109.8
25°	152.6	152.0	149.7	149.1	146.2	140.3	139.1	136.2	129.7	122.7	115.6
27.5°	158.5	157.9	154.4	154.4	152.0	146.7	143.8	140.3	133.8	126.2	120.3
30°	162.6	162.0	158.5	157.9	155.0	151.4	147.9	142.6	136.2	128.6	123.3
32.5°	164.4	164.4	161.4	160.8	157.3	154.4	150.9	145.6	137.4	130.3	124.4
35°	167.9	167.3	164.4	163.8	159.7	157.3	152.6	146.2	138.5	131.5	125.6
37.5°	171.4	171.4	169.1	168.5	163.8	161.4	156.7	150.9	142.6	135.6	129.1
40°	179.6	180.2	178.4	177.9	173.2	172.0	167.9	163.8	157.9	150.9	139.7
42.5°	198.4	199.0	199.6	198.4	194.9	193.1	189.6	189.0	183.7	174.9	164.4
45°	230.7	234.2	236.0	234.2	229.5	228.9	226.0	227.2	223.1	214.3	200.8
47.5°	280.0	282.3	288.8	288.8	282.3	280.6	278.2	278.8	278.8	268.8	248.3
50°	342.2	346.9	351.6	355.1	352.2	347.5	344.6	350.4	355.1	341.0	313.5
52.5°	417.9	422.6	436.7	435.6	432.0	429.7	431.4	442.6	453.2	440.8	396.8
55°	506.6	513.0	525.9	528.9	521.8	518.9	517.1	533.6	551.2	538.3	479.0
57.5°	595.2	601.7	612.8	617.5	608.1	598.7	581.7	599.9	621.6	605.2	533.6
60°	669.2	672.7	685.0	690.3	680.3	666.8	635.7	653.9	678.0	660.4	580.0
62.5°	736.1	737.3	747.2	751.9	740.2	726.1	689.1	705.0	724.9	707.9	620.5
65°	788.9	788.3	809.5	811.2	793.0	773.7	738.4	753.1	769.0	750.8	653.9
67.5°	842.3	835.9	861.1	862.9	844.7	819.4	783.6	791.3	801.2	787.7	690.9
70°	886.4	878.1	911.6	914.5	887.5	854.1	825.3	830.0	844.7	823.6	721.4
72.5°	932.1	912.2	953.9	955.6	931.0	886.9	858.2	857.0	874.0	850.6	744.3
75°	969.1	930.4	990.3	987.9	965.0	915.7	884.0	881.7	904.0	875.8	761.3
77.5°	1003.2	947.4	1010.8	1008.5	987.3	933.3	898.1	895.8	919.8	889.9	776.6
79°	999.7	945.1	1014.3	1009.0	990.3	938.6	898.1	892.8	922.2	889.3	774.2
80°	1000.2	938.0	1009.6	1004.9	984.4	933.3	888.7	880.5	906.9	874.6	763.1
82.5°	976.8	921.6	991.4	984.4	968.5	921.6	877.0	870.5	905.7	869.9	758.4
85°	952.1	896.3	964.4	959.7	945.1	898.7	852.9	837.1	868.2	832.9	732.0
87.5°	913.4	864.6	932.1	928.6	914.5	873.4	825.3	814.2	847.0	815.3	713.8
90°	879.9	831.8	893.4	889.9	877.0	837.1	793.0	791.3	824.7	793.0	690.9
92.5°	828.8	783.6	840.6	836.5	827.1	793.0	752.5	747.2	774.8	739.6	646.9
95°	777.8	734.3	786.6	784.8	772.5	743.1	704.4	694.4	722.0	696.2	609.3
97.5°	710.3	669.2	717.3	716.7	707.9	680.3	647.5	643.3	672.1	645.7	567.6
100°	605.8	570.0	615.8	610.5	611.6	589.3	562.3	570.6	599.3	580.5	510.1
102.5°	450.2	432.6	460.2	462.6	464.3	449.1	439.1	437.9	465.5	448.5	392.1
105°	293.5	285.3	299.4	301.7	298.2	287.0	260.0	262.4	265.3	251.2	218.4
107.5°	196.1	192.5	198.4	199.6	196.6	187.3	171.4	169.6	170.8	163.2	143.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	14°	15°	25°	35°	45°	55°	65°	75°	85°
110°	150.3	148.5	152.0	152.6	150.3	141.5	132.7	132.1	133.2	128.0	114.5
112.5°	128.6	127.4	129.1	129.1	127.4	120.9	115.6	115.6	117.4	113.3	102.1
115°	117.4	116.2	116.8	117.4	115.1	109.2	105.1	106.2	108.0	104.5	94.5
117.5°	109.2	108.6	108.6	108.6	106.8	101.6	99.2	99.8	101.6	98.0	89.2
120°	102.1	102.1	101.6	101.6	99.8	95.7	93.9	95.1	96.3	93.3	85.1
122.5°	95.1	95.1	94.5	94.5	93.3	89.8	88.6	90.4	91.6	88.0	81.0
125°	87.5	87.5	86.3	86.3	85.1	83.4	82.8	84.5	85.7	82.8	75.7
127.5°	79.2	79.2	77.5	78.1	76.3	75.7	75.7	78.1	79.2	76.9	70.4
130°	70.4	69.9	67.5	68.1	66.9	66.9	68.1	69.9	71.0	68.7	63.4
132.5°	59.9	59.9	56.9	57.5	56.9	57.5	58.7	60.5	61.0	59.9	55.2
135°	49.3	49.3	47.0	47.5	47.0	47.0	48.7	49.9	51.1	49.9	45.8
137.5°	39.3	39.3	37.0	37.6	37.0	36.4	37.6	38.2	38.7	37.6	35.8
140°	30.5	30.5	29.3	29.3	28.2	27.6	28.2	28.8	28.8	28.2	27.0
142.5°	24.1	24.7	23.5	23.5	21.7	21.7	21.7	22.3	22.3	22.3	21.1
145°	18.2	18.8	17.6	17.6	16.4	16.4	16.4	17.0	17.0	17.0	15.8
147.5°	12.9	12.9	12.3	12.3	11.2	11.7	11.7	12.3	12.3	11.7	11.2
150°	6.5	6.5	6.5	6.5	6.5	6.5	7.0	7.0	7.0	7.0	6.5
152.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2
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	0.6	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.0	0.0
165°	0.0	0.0	0.0	0.6	0.0	0.6	0.6	0.6	0.6	0.0	0.0
167.5°	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
170°	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
172.5°	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
175°	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
177.5°	0.6	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
180°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6
2.5°	49.9	47.5	44.0	40.5	36.4	33.5	30.5	29.3	28.2	27.0	27.0
5°	61.6	58.7	54.0	48.7	45.8	41.7	39.3	37.0	35.8	35.8	35.8
7.5°	74.0	71.0	64.6	57.5	54.0	49.3	47.5	45.2	43.4	41.7	41.1
10°	79.2	76.3	70.4	64.6	59.9	55.2	51.1	48.7	45.8	44.0	44.0
12.5°	84.5	81.0	75.1	69.3	63.4	57.5	53.4	49.9	47.0	44.6	44.0
15°	89.8	86.3	79.8	73.4	66.3	59.9	55.2	51.1	47.5	45.2	44.6
17.5°	95.1	91.6	84.5	77.5	69.9	62.8	57.5	52.2	48.7	46.4	45.8
20°	100.4	96.3	89.2	81.6	73.4	66.3	59.3	54.0	50.5	48.1	47.5
22.5°	106.2	101.6	93.9	85.7	76.9	69.9	61.6	55.8	51.7	49.9	49.9
25°	112.1	106.2	98.6	89.2	81.0	73.4	64.0	57.5	53.4	52.2	52.8
27.5°	116.2	109.8	102.1	92.7	83.9	76.3	66.9	59.3	55.2	55.2	55.2
30°	118.6	113.3	105.1	95.7	87.5	79.2	69.3	61.6	57.5	57.5	57.5
32.5°	119.7	114.5	106.2	97.4	89.8	82.2	71.6	64.0	59.9	60.5	60.5
35°	120.9	116.2	108.0	99.2	92.2	83.9	74.5	66.9	63.4	64.0	63.4
37.5°	123.9	118.6	110.4	101.6	95.1	86.9	78.1	70.4	67.5	68.1	67.5
40°	133.2	126.8	118.0	107.4	101.0	91.6	82.8	74.5	72.8	72.8	72.2
42.5°	152.6	143.8	133.2	120.3	110.9	99.2	89.2	80.4	78.1	77.5	76.9
45°	185.5	171.4	160.2	141.5	126.8	111.5	98.6	87.5	84.5	83.4	82.8
47.5°	227.8	211.3	196.6	176.1	153.2	129.7	112.7	97.4	92.7	90.4	89.2
50°	289.4	261.8	242.4	217.2	187.8	155.0	130.3	110.4	102.1	96.9	95.7
52.5°	363.3	327.0	306.4	270.6	230.1	186.1	152.6	123.9	112.1	105.1	104.5
55°	439.7	393.9	369.8	329.3	274.7	223.1	178.4	140.9	124.4	115.1	113.9
57.5°	490.7	440.8	417.4	374.5	312.3	257.1	202.5	156.7	140.9	126.2	125.0
60°	529.5	476.1	454.3	402.7	338.1	283.5	219.5	172.0	149.7	135.6	133.2
62.5°	562.9	505.4	488.4	426.7	361.6	302.3	233.6	185.5	159.7	147.3	143.2
65°	596.4	537.7	517.1	453.7	380.4	321.1	247.1	201.3	174.9	157.3	157.3
67.5°	628.1	568.2	546.5	479.6	403.9	339.3	256.5	214.3	185.5	167.9	167.9
70°	656.8	590.5	573.5	503.1	426.7	354.0	255.9	226.6	191.4	175.5	168.5
72.5°	680.9	611.1	594.6	523.6	444.9	369.8	262.4	238.9	191.4	177.9	173.8
75°	693.8	625.7	615.2	535.9	464.9	382.7	273.0	240.1	196.1	177.3	174.3
77.5°	709.1	638.7	628.1	546.5	473.7	392.7	284.1	248.3	198.4	178.4	173.2
79°	705.6	636.9	631.0	548.8	477.2	395.6	290.0	248.9	200.2	177.9	173.8
80°	697.3	632.2	622.8	539.4	473.1	390.9	290.0	248.9	206.0	176.7	172.0
82.5°	690.3	626.3	618.1	536.5	466.1	382.7	290.6	248.3	199.6	173.2	169.1
85°	669.2	609.3	597.0	519.5	455.5	373.3	286.5	245.4	198.4	164.9	162.6
87.5°	648.6	590.5	581.7	504.8	440.8	361.6	281.2	238.3	190.8	159.1	157.3
90°	628.1	570.6	560.0	487.2	422.6	342.8	267.1	228.3	183.1	148.5	149.1
92.5°	588.8	537.1	525.9	458.4	396.2	322.3	250.6	213.1	170.8	140.9	137.9
95°	552.9	504.2	493.1	431.4	370.4	301.7	230.1	196.6	156.1	129.1	127.4
97.5°	517.1	469.0	457.3	400.3	340.5	276.5	207.2	176.7	137.9	115.1	111.5
100°	461.4	417.9	402.7	349.3	289.4	237.1	173.2	147.9	115.1	95.7	91.6
102.5°	349.3	314.0	298.2	260.6	205.4	169.6	125.6	109.2	84.5	72.2	69.9
105°	194.9	177.3	170.2	148.5	123.9	102.7	78.7	72.8	58.1	51.7	51.1
107.5°	130.3	119.7	114.5	103.9	86.9	72.8	56.9	53.4	44.0	39.3	38.7



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CATALOG NUMBER: MPN-A4-D-U-ASYM-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	105.7	98.0	93.3	84.5	71.6	59.9	47.5	44.6	37.0	33.5	32.9
112.5°	95.1	87.5	83.4	75.1	63.4	52.8	42.3	39.3	32.9	29.9	29.3
115°	88.0	81.6	76.9	69.3	58.1	48.1	38.7	35.8	30.5	27.0	26.4
117.5°	83.4	76.9	72.2	64.6	54.6	44.6	36.4	32.9	27.6	24.1	24.1
120°	79.2	73.4	68.7	61.0	51.1	41.7	33.5	29.3	24.7	21.1	21.1
122.5°	75.7	69.9	65.2	56.9	47.0	37.6	30.5	25.8	21.7	18.2	18.2
125°	71.6	66.3	61.0	52.8	42.9	34.0	27.0	22.3	18.2	15.3	15.3
127.5°	66.3	61.6	55.8	47.5	38.7	29.9	24.1	19.4	15.3	12.9	12.9
130°	60.5	55.2	49.3	41.7	33.5	25.8	20.0	16.4	12.9	11.2	10.6
132.5°	52.2	48.1	42.3	35.8	28.2	21.7	16.4	13.5	10.6	8.8	8.8
135°	44.0	39.9	35.2	28.8	22.9	17.0	12.9	10.6	8.8	7.0	7.0
137.5°	34.0	31.1	27.6	22.3	17.0	12.9	10.0	8.2	6.5	5.3	5.3
140°	25.8	24.1	21.1	16.4	12.9	10.0	7.6	6.5	5.3	4.1	3.5
142.5°	20.0	18.8	16.4	12.9	10.0	7.6	5.9	4.7	3.5	2.9	2.3
145°	15.3	14.1	12.3	9.4	7.0	5.3	4.1	2.9	2.3	1.8	1.2
147.5°	11.2	10.0	8.2	6.5	4.7	2.9	2.3	1.8	1.2	0.6	0.6
150°	5.9	5.3	4.7	3.5	2.3	1.2	0.6	0.6	0.0	0.0	0.0
152.5°	1.2	1.2	1.2	1.2	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	0.6	0.6	0.6	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	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

(END OF REPORT)